

TM 55-8145-221-14&P

TECHNICAL MANUAL

OPERATOR'S, UNIT, DIRECT SUPPORT

AND GENERAL SUPPORT

MAINTENANCE MANUAL

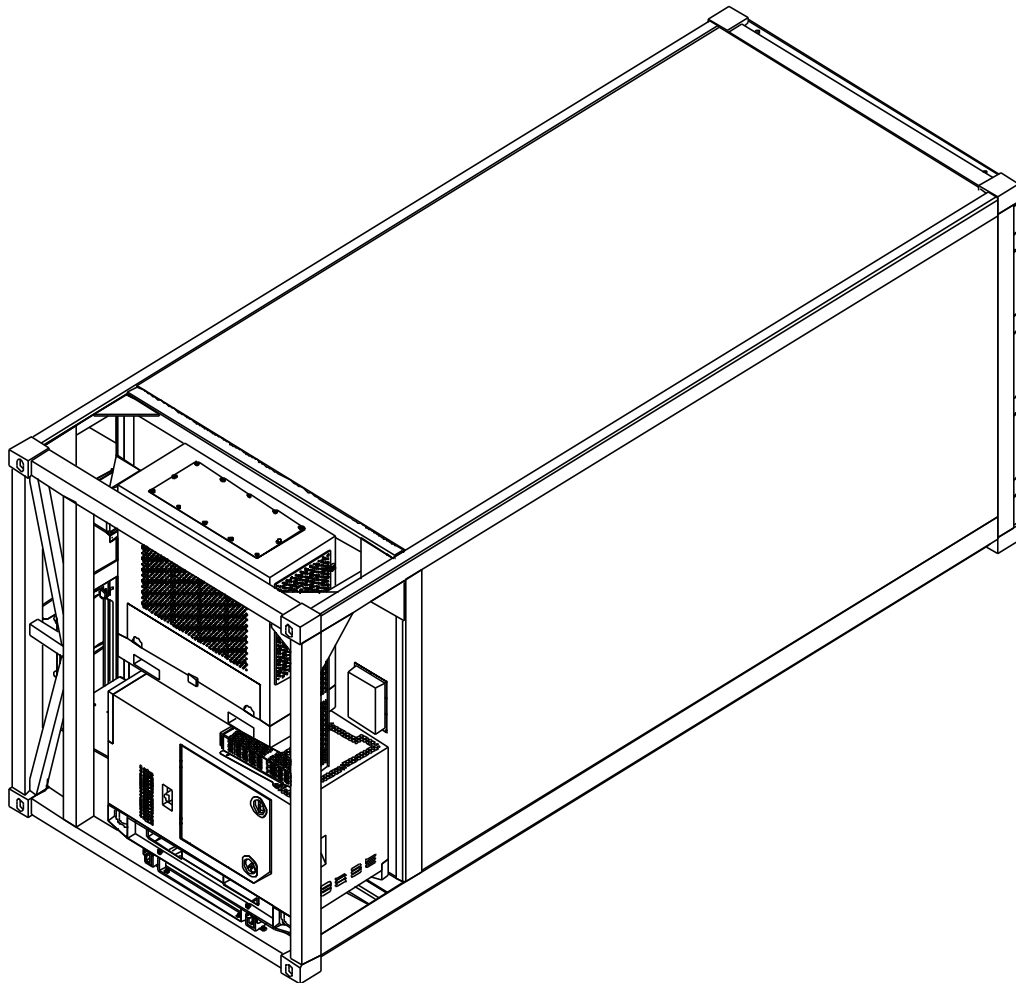
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)

FOR

REFRIGERATED CONTAINER SYSTEM

MODEL RCS800

NSN: 8145-01-471-3557



DISTRIBUTION STATEMENT Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

21 JUNE 2000

WARNING SUMMARY

This warning summary includes general safety precautions and instructions that must be understood and applied during the operation and maintenance of this system/equipment to ensure personnel against injury, death, or long-term health hazards. A summary of safety and hazardous material warnings that should be heeded in conduct of operation and maintenance is provided below.

WARNING

ELECTRICAL HAZARD

Never work on electrical equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technician is aided by operators, he must warn them about dangerous areas.

Be careful not to contact high-voltage connections of 115 VAC input connections when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through vital organs of the body.

Do not disconnect power cables when power is on or generator set or refrigeration unit is operating.

WARNING

SOLVENT HAZARD

Dry-cleaning solvent, P-D-680, Type III, which is used to clean parts, is potentially dangerous to personnel and property. Avoid repeated and prolonged skin contact by wearing rubber or nonporous gloves when handling dry-cleaning solvent or material wet with solvent. Wash hands immediately after exposure with soap and water and use a lanolin-based skin cream to prevent skin drying. Do not use near open flame or excessive heat. Do not work with solvent in a closed room. Be sure there is good ventilation, or the solvent vapors will build up in the air and become a poisonous mixture that can cause physical injury or even death. Store in approved metal safety containers.

WARNING

FUEL FILLING / FIRE HAZARD

To prevent injury to personnel and damage to equipment, do not fill fuel tank above white line marked on side of tank. Movement of refrigerated container system during transport will cause fuel to spill if tank is overfilled. Make sure a fire extinguisher is nearby when refueling the fuel tank or operating the generator set.

WARNING SUMMARY - Continued.

WARNING

HEAVY EQUIPMENT HAZARD

Lifting or moving heavy equipment incorrectly can cause serious injury. Do not try to lift or move more than 50 pounds by yourself. Get an assistant. Bend legs while lifting. Do not support heavy weight with your back.

Always use assistants during lifting operations. Use guide ropes to move hanging assemblies.

A lack of attention or being in an improper position during lifting operations can result in serious injury or death. Pay close attention to movements of assembly being lifted. Do not stand under lifted assembly or in a position where you could be pinned against another object. Watch your footing.

Make sure rear doors are secured to container frame when in the open position. A gust of wind can cause unsecured doors to slam shut with great force.

A loaded refrigerated container system is extremely heavy. Use a hoist and sling rated at a minimum capacity of 40 tons (80,000 pounds) when lifting a refrigerated container system.

To prevent slippage of hoisting slings during lifting operations, always use spreader bars.

Never lift, move, or push a refrigerated container system with a regular forklift. Refrigerated container systems can fall from regular forklift tines or cause forklift to flip over. Use only equipment designed for use with the Refrigerated Container System.

WARNING

RIVET HAZARD

Rivets can shatter during removal or installation and cause serious injury to eyes. Wear eye protection.

WARNING

FROSTBITE

Do not touch cold metal parts with bare hands when operating under extreme cold conditions. Frostbite can cause permanent injury.

WARNING

CARBON MONOXIDE (EXHAUST GAS) CAN KILL YOU

Carbon monoxide is without color or smell, but can kill you. Breathing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, a sleepy feeling, and coma. Brain damage or death can result from heavy exposure. Carbon monoxide occurs in the exhaust fumes of fuel-burning internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of no ventilation.

FIRST AID.

First Aid instructions are given in FM 21-11, "First Aid for Soldiers."

TM 55-8145-221-14&P

CHANGE
NO. 2

HEADQUARTERS, DEPARTMENT OF THE ARMY
WASHINGTON, DC, 31 JULY 2005

TECHNICAL MANUAL

OPERATOR'S, UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE
MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)
FOR
REFRIGERATED CONTAINER SYSTEM
MODEL RCS800
NSN: 8145-01-471-3557

DISTRIBUTION STATEMENT A: - Approved for public release; distribution is unlimited.

TM 55-8145-221-14&P, is changed as follows:

1. File this sheet in front of the manual for reference.
2. This change implements Army Maintenance Transformation and changes the Maintenance Allocation Chart (MAC) to support Field and Sustainment Maintenance.
3. New or updated change information is indicated by a vertical bar in the outer margin of the page.
4. Remove old pages and insert new pages as indicated below:

<u>Remove Pages</u>	<u>Insert Pages</u>
A/(B Blank)	A/(B Blank)
2028	2028/Reverse
2028	2028/Reverse
2028	2028/Reverse

5. Replace the following work packages with their revised version:


<u>Work Package</u>	<u>Work Package</u>	<u>Work Package</u>	<u>Work Package</u>
<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>

WP 0048 00

By Order of the Secretary of the Army:

PETER J. SCHOOMAKER
General, United States Army
Chief of Staff

Official:


SANDRA R. RILEY
*Administrative Assistant to the
Secretary of the Army*
0516411

Distribution: To be distributed in accordance with initial distribution number (IDN) 256614 requirements for TM 55-8145-221-14&P.

TM 55-8145-221-14&P

CHANGE
NO. 1

HEADQUARTERS, DEPARTMENT OF THE ARMY
WASHINGTON, DC, 31 JULY 2003

TECHNICAL MANUAL

OPERATOR'S, UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)
FOR
REFRIGERATED CONTAINER SYSTEM MODEL RCS800

NSN: 8145-01-471-3557

DISTRIBUTION STATEMENT A: - Approved for public release; distribution is unlimited.

TM 10-8145-221-14&P, 21 June 2000, is updated as follows:

1. File this sheet in front of the manual for reference.
2. This change is a result of unnecessary MWO kits for the roller slide and inconsistencies between callouts in Figures and Item No(s) and descriptions in the RPSTL.
3. New or updated change information is indicated by a vertical bar in the outer margin of the page.
4. Remove old pages and insert new pages as indicated below:

Remove Pages

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Title (Reverse Blank)
i-iii/iv blank
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Sample 2028
DA 2028(s)

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A/B Blank
i/ii Blank
iii-v/vi Blank
Electronic 2028 Instr
Sample 2028
DA 2028(s)

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<u>Work Package Number</u>	<u>Work Package Number</u>	<u>Work Package Number</u>	<u>Work Package Number</u>
WP 0001 00	WP 0027 00	WP 0056 00	WP 0077 00
WP 0002 00	WP 0030 00	WP 0059 00	WP 0078 00
WP 0004 00	WP 0048 00	WP 0061 00	
WP 0005 00	WP 0050 00	WP 0062 00	
WP 0006 00	WP 0051 00	WP 0063 00	
WP 0012 00	WP 0052 00	WP 0064 00	
WP 0017 00	WP 0053 00	WP 0067 00	
WP 0018 00	WP 0054 00	WP 0070 00	
WP 0021 00	WP 0055 00	WP 0073 00	

TM 55-8145-221-14&P
C1

By Order of the Secretary of the Army:

Official:



JOEL B. HUDSON
*Administrative Assistant to the
Secretary of the Army*
0318805

JOHN M. KEANE
*General, United States Army
Acting Chief of Staff*

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LIST OF EFFECTIVE PAGES/WORK PACKAGES

NOTE: The portion of text affected by the update is indicated by a vertical line in the outer margins of the page. Updates to illustrations are indicated by miniature pointing hands.

Dates of issue for original and changed pages / work packages are:

Original .. 0 .. 21 Jun 2000

Change .. 1 .. 31 July 2003

Change .. 2 .. 31 July 2005

Total number of pages for front and rear matter is 36. The total number of work packages is 82 consisting of the following:

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a-b	0	WP 0049 00	0
Title	1	WP 0057 00 – 0058 00	0
i-viii	1	WP 0059 00	1
WP 0001 00 - 0002 00	1	WP 0060 00	0
WP 0003 00	0	WP 0061 00 – 0064 00	1
WP 0004 00 - 0006 00	1	WP 0065 00 – 0066 00	0
WP 0007 00 – 0011 00	0	WP 0067 00	1
WP 0012 00	1	WP 0068 00 – 0069 00	0
WP 0013 00 – 0016 00	0	WP 0070 00	1
WP 0017 00 – 0018 00	1	WP 0071 00 – 0072 00	0
WP 0019 00 – 0020 00	0	WP 0073 00	1
WP 0021 00	1	WP 0074 00 – 0076 00	0
WP 0022 00 – 0026 00	0	WP 0077 00 – 0078 00	1
WP 0027 00	1	WP 0079 00 – 0082 00	0
WP 0028 00 – 0029 00	0		
WP 0030 00	1		
WP 0031 00 – 0047 00	0		

* Zero in this column indicates an original page or work package.

**HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 21 JUNE 2000**

TECHNICAL MANUAL

**OPERATORS, UNIT,
DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)
FOR
REFRIGERATED CONTAINER SYSTEM
MODEL RCS800
NSN 8145-01-471-3557**

Current as of 15 January 2000

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know.

Mail DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual, direct to: Commander, U.S. Army Soldier Biological and Chemical Command, ATTN: AMSSB-RIM-L(N), Kansas Street, Natick, MA 01760. You may also send in your recommended changes via electronic mail directly to amssbriml@natick.army.mil. A reply will be furnished directly to you. Instructions for sending electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited

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HOW TO USE THIS MANUAL

This manual is divided into Work Packages (WP). Each WP is an independent, task-oriented unit. Only essential information is provided. WPs cover the subjects of theory of operation, operating instructions, troubleshooting, preventative maintenance checks and maintenance instructions. The Table of Contents provides a complete list of chapters and WPs. The WPs are arranged in disassembly sequence. Each maintenance WP lists the tasks covered, initial set-up requirements, tools required, equipment conditions, reference materials and material/parts required. Maintenance procedures are integrated with illustrations.

To locate information, refer to the table of contents in the front of the TM or the Index in the rear of the TM. References to paragraphs, tables or figures within a TM are made by numbers, e.g. paragraph 7, table 2, or Figure 3. A reference to another WP merely includes the WP number, e.g. WP 0003 00. To find a particular procedure or topic, it is necessary to refer to that WP.

To find a particular part for replacement, it will be necessary to use the RPSTL section of the TM (also known as the Illustrated Parts Breakdown). Detailed instructions for use of the RPSTL are found in WP 0049 00.

CHAPTER 1

INTRODUCTORY INFORMATION
WITH
THEORY OF OPERATION

FOR

REFRIGERATED CONTAINER SYSTEM

**REFRIGERATED CONTAINER SYSTEM
GENERAL INFORMATION**

0001 00

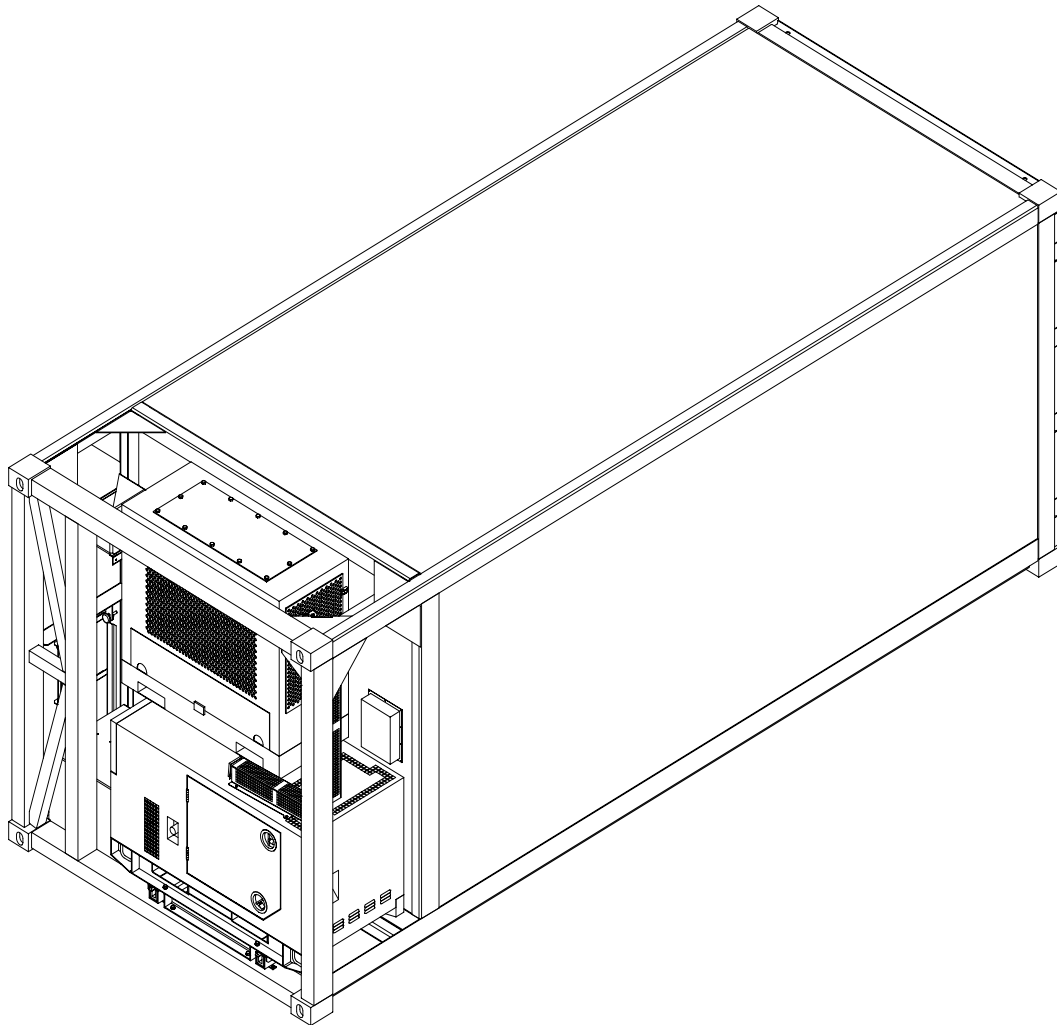
SCOPE.

This manual covers Operating Instructions and Unit, Direct Support, and General Support maintenance procedures required to operate and maintain the Refrigerated Container System, Model RCS800. The refrigerated container system is designed to be used with the Refrigeration Unit, Model F9000RE, and the Generator Set, Model MEP-803A, mounted on the container frame. Operation, service and limited maintenance for the generator set and refrigeration unit are also covered in this manual.

Type of Manual: Operator's, Unit, Direct Support Maintenance Manual.

Model Number and Equipment Names: Container System, Refrigerated, Model RCS800.

Purpose of Equipment: The refrigerated container system provides storage and transport of perishable material.

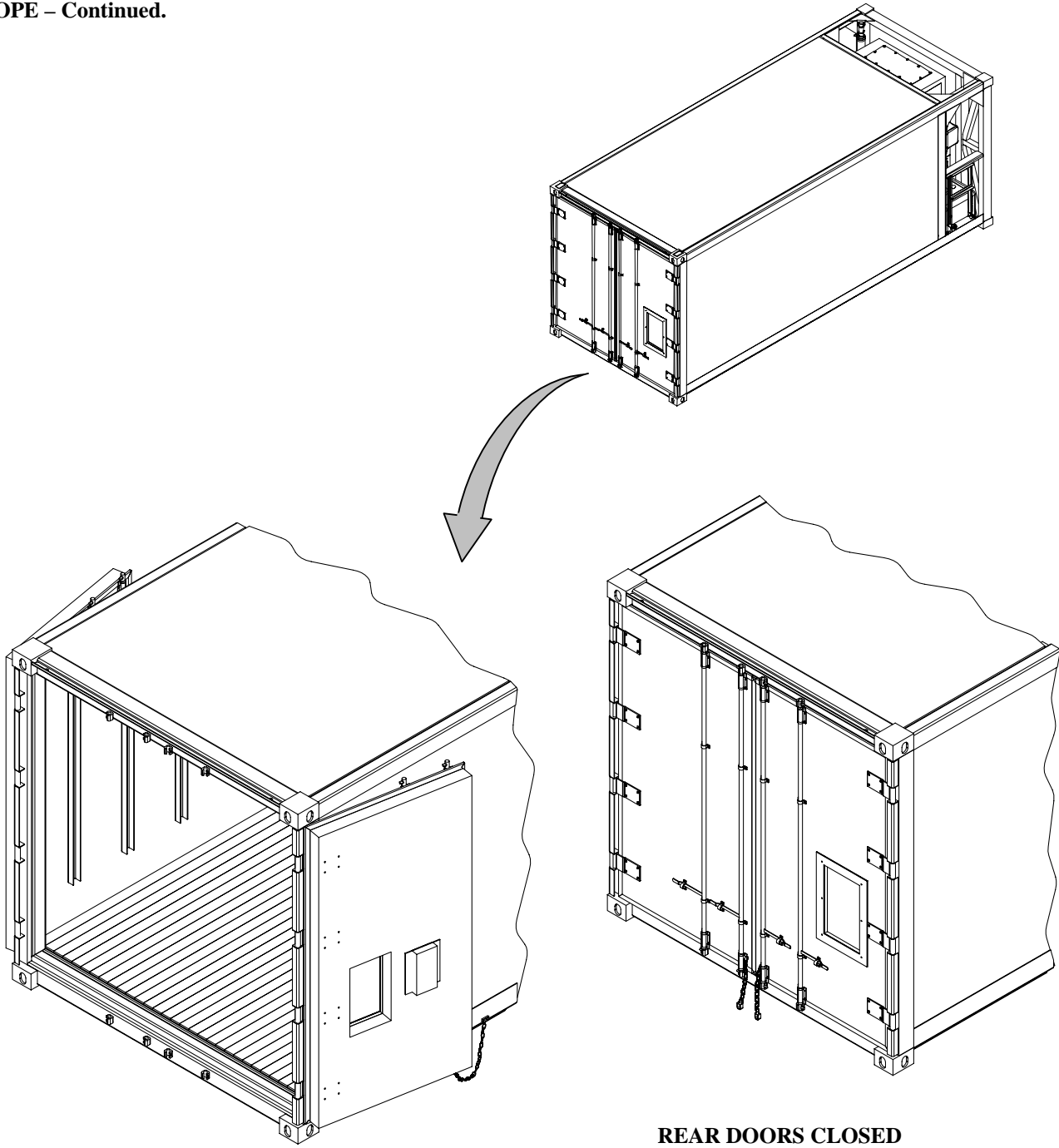


FRONT / ROAD SIDE VIEW

**REFRIGERATED CONTAINER SYSTEM
GENERAL INFORMATION – Continued**

0001 00

SCOPE – Continued.



REAR DOORS OPEN

REAR DOORS CLOSED

CURB SIDE VIEW

REFRIGERATED CONTAINER SYSTEM
GENERAL INFORMATION – Continued

0001 00

MAINTENANCE FORMS, RECORDS, AND REPORTS.

Department of the Army Forms and procedures used for equipment maintenance will be those prescribed by (AS APPLICABLE) DA Pam 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS); DA PAM 738-751, Functional Users Manual for the Army Maintenance Management System – Aviation (TAMMS-A); or AR 700-138, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR's).

If your container needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on a SF 368 (Quality Deficiency Report). Mail it directly to: Commander, U.S. Army Soldier and Biological Chemical Command, ATTN: AMSSB-RIM-E(N), Kansas Street, Natick, MA, 01760-5052. You may also send in your recommended changes by e-mail directly to <amssb-rim-e@natick.army.mil>. A reply will be furnished directly to you.

CORROSION PREVENTION AND CONTROL.

Corrosion Prevention and Control (CPC) of Army Material is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling or breaking of the materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using Standard Form 368, Product Quality Deficiency Report. Using key words such as "rust", "deterioration", or "cracking" will insure that the information is identified as a CPC problem.

The form should be submitted to the address specified in DA Pam 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS).

DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE.

Methods and procedures for destruction of Army material to prevent enemy use are covered in TM 750-244-3.

PREPARATION FOR STORAGE OR SHIPMENT.

Preparation for shipping or storage procedures, including packaging and administrative storage, is found in Unit Maintenance instructions work package WP 0017 00.

WARRANTY INFORMATION.

The Refrigerated Container is not warranted.

**REFRIGERATED CONTAINER SYSTEM
GENERAL INFORMATION – Continued**

0001 00

NOMENCLATURE CROSS-REFERENCE LIST.

Common Name	Official Nomenclature
Container	Container, Refrigerated, Model RCS800

LIST OF ABBREVIATIONS.

Abbreviation	Nomenclature
A/C	Air Conditioning
AR	As Required
BII	Basic Issue Items
Btu/Hr	British Thermal Units per Hour
Cum	Cumulative
°C	Degrees-Celsius
CAGEC	Cage Code
COEI	Components of End Item
Cont	Continued
D	Deep
ea	Each
°F	Degrees Fahrenheit
GL	Gallon
Hz	Hertz
in	Inches
Kg	Kilogram
kPa	Kilopascal
KW	Kilowatt
lbs	Pounds
RCS	Refrigerated Container System
oz	Ounce
■ NSN	National Stock Number
PMCS	Preventive Maintenance Checks and Services
psi	Pounds per square inch
Qty	Quantity
■ RPSTL	Repair Parts and Special Tools List
TMDE	Test, Measurement and Diagnostic Equipment
TM	Technical Manual
U/M	Unit of Measure
Vac	Vacuum
VAC	Volts Alternating Current
VDC	Volts Direct Current
v	Volts
WP	Work Package
W	Watt

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA**

0002 00

REFRIGERATED CONTAINER SYSTEM EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES (Figure 1).**CHARACTERISTICS.**

Easily transportable.

Equipped with a 10KW generator set for stand-alone operation.

Operates from on-board 10KW generator set or external electrical power sources.

Can be transported on flatbed truck, railway car or ship.

Can be stacked or connected in tandem for transporting or storage.

Operator controlled internal lighting.

Escape hatch permits emergency exit from container interior.

Equipped with a self-contained refrigeration/heating unit providing both heating and cooling capacity.

CAPABILITIES.

Will maintain internal temperatures of 0° to +40°F in ambient temperature from -40°F to +120°F.

Conforms to ISO 668 for handling, securing and storage of military container.

Provides 798 cu ft of storage capacity.

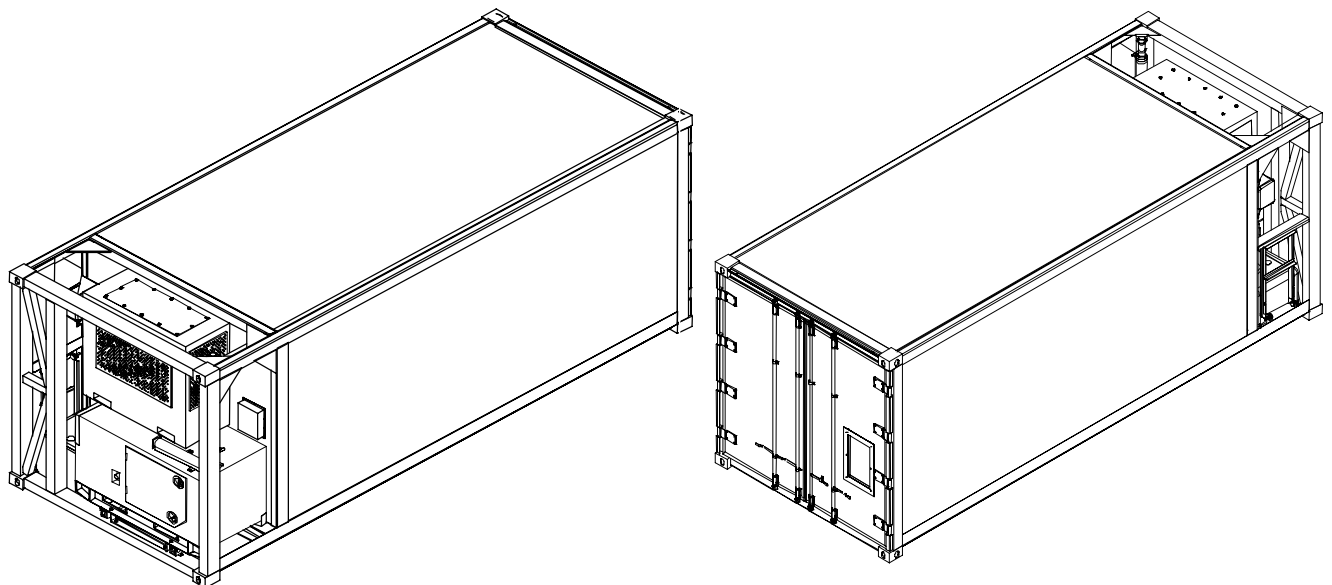


Figure 1. Refrigerated Container System

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.**REFRIGERATED CONTAINER SYSTEM (Figure 2).****CORNER FITTINGS (1).**

Four upper corner fittings provide hoist points during lifting operations. Four lower corner fittings mate with coupling hardware on transport vehicle. Corner fittings also allow stacking of refrigerated containers during shipment and storage.

REFRIGERATION UNIT (2).

Cools container interior. See characteristics, capabilities, and features in TM 9-4110-258-13 for additional information on the refrigeration unit.

GENERATOR SET (3).

Provides electrical power to operate refrigeration unit and container interior light. See equipment characteristics, capabilities, and features in TM 9-6115-642-10 for additional information on the generator set.

MANUAL HOLDER (4).

Provides waterproof storage for technical manual, temperature recorder paper charts and related documentation.

TEMPERATURE RECORDER (5).

Spring operated mechanical plotter records container interior temperature.

POWER CABLE (6).

Five-foot long cable connects 10KW generator set to refrigeration unit power cable.

AUXILIARY FUEL TANK (7).

Stores and supplies fuel to the generator set.

LADDER (8).

Permits personnel to access equipment. Ladder folds down during use and up for storage.

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – Continued.

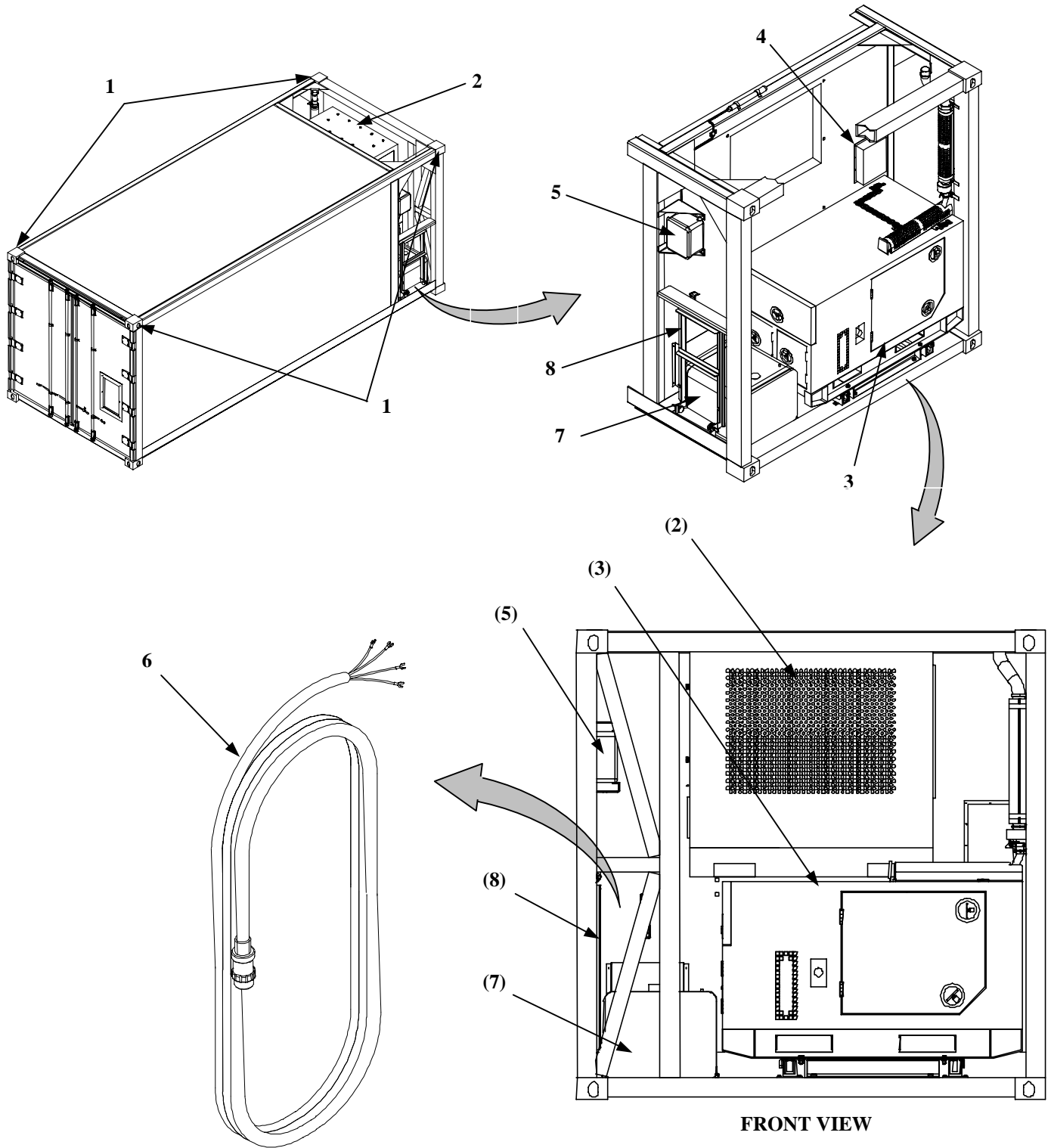


Figure 2. Refrigerated Container Major Components

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – Continued.**REFRIGERATED CONTAINER SYSTEM (Figure 3) – Continued.****LEFT DOOR (1).**

Provides access to container interior. Seals and secures cargo inside container.

RIGHT DOOR (2).

Provides access to container interior. Seals and secures cargo inside container.

EVAPORATOR COIL (3).

The evaporator coil is part of refrigeration unit that extends into the container. The coil provides cold air to cool container.

SENSING BULB (4).

The sensing bulb is part of the temperature recorder system. It is connected to the recorder by a small copper sensing line.

DOCUMENT HOLDER (5).

Provides storage for shipping, storage and related documents.

LIGHT (6).

Provides light inside container.

LIGHT SWITCH (7).

Hand operated switch on container wall turns light on or off.

RIBBED FLOOR (8).

Ribs built into the floor permit air circulation between floor and cargo and aid drainage of condensation.

SPACER/RETAINER STRIPS (9).

Prevent cargo from blocking air circulation along walls when container is full and provides for adhering cargo straps to wall.

FLOOR DRAINS (10).

Four self-closing floor drains allow water and condensation to drain from container interior. Plugs are provided to close drains during cleaning.

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – Continued.

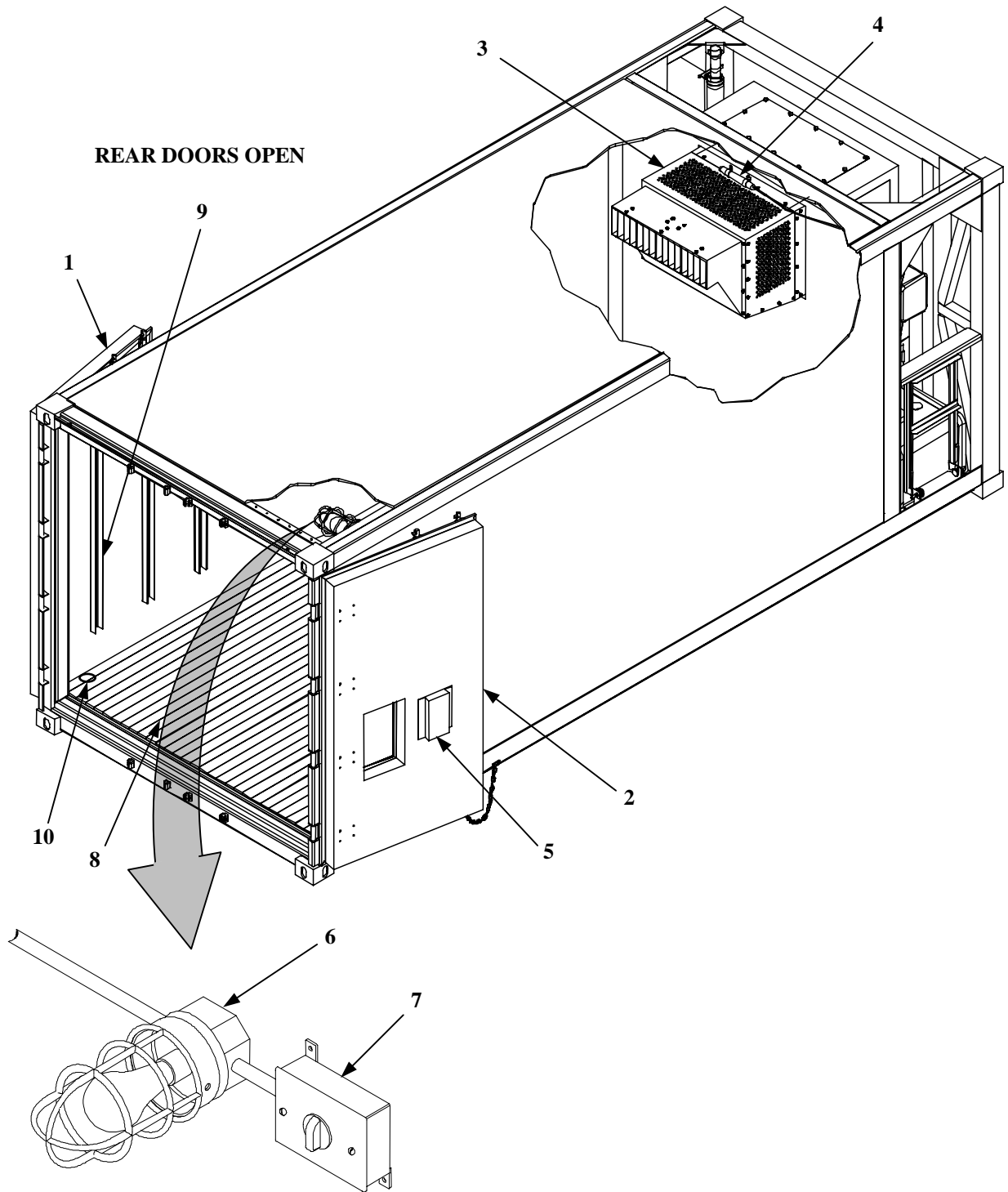


Figure 3. Refrigerated Container Major Components

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – Continued.

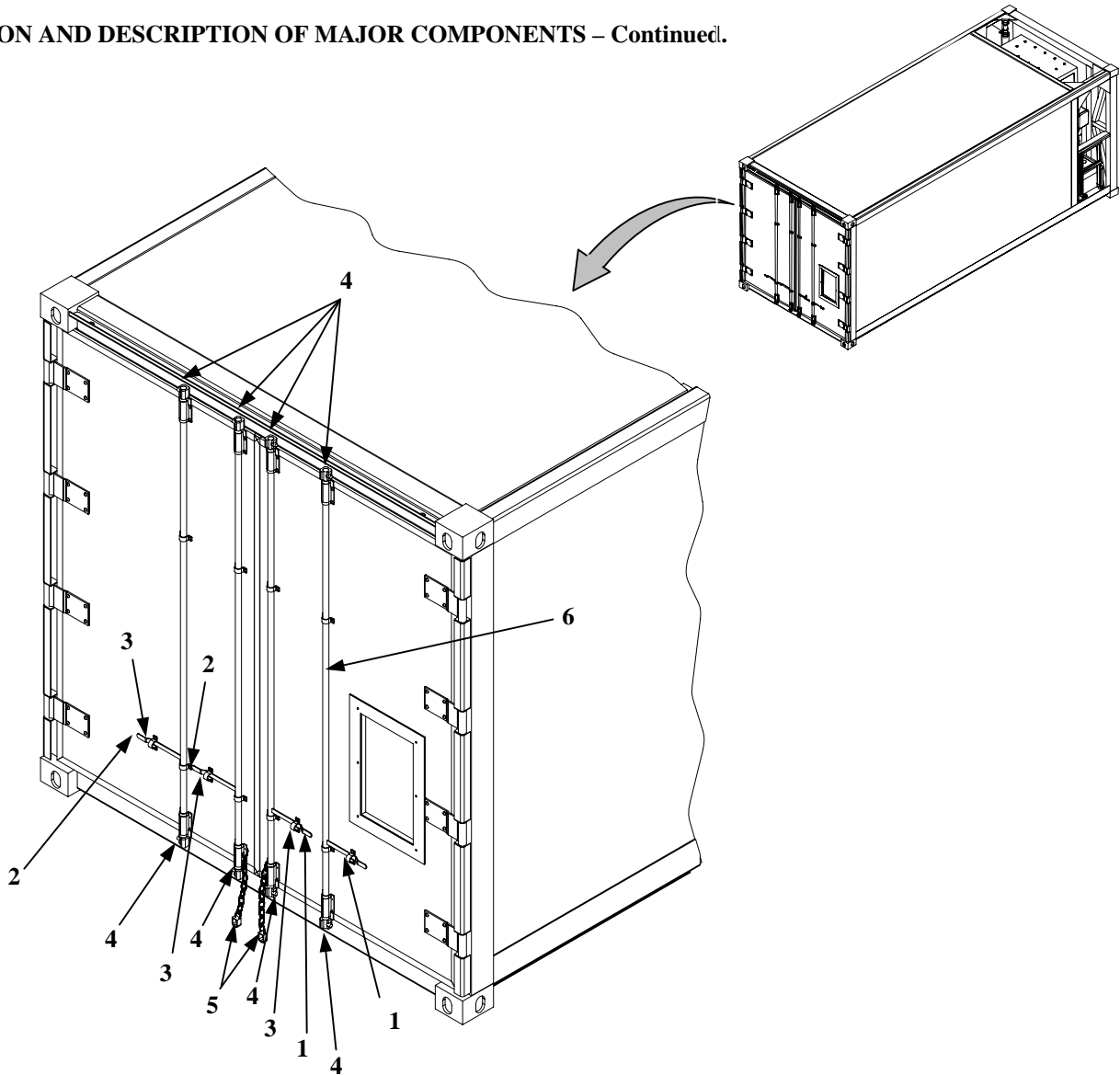


Figure 4. Container Doors

Right Door Release Handles (1, Figure 4). Control right door locking and unlocking. Manually lift handles and rotate left to unlock, or right to lock. Always open right rear door first, and close last.

Left Door Release Handles (2). Control left door locking and unlocking. Manually lift handles and rotate right to unlock, or left to lock.

Handle Locks (3). Secure left and right rear door release handles in locked position. Hole in top and bottom of lock permits installation of padlock, clasp or similar equipment.

Lock Keepers (4). Couple with container frame when door release handles are moved to lock position.

Door Chains and Hooks (5). Attach to container hook eyes to secure left and right doors when doors are fully open.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – Continued.

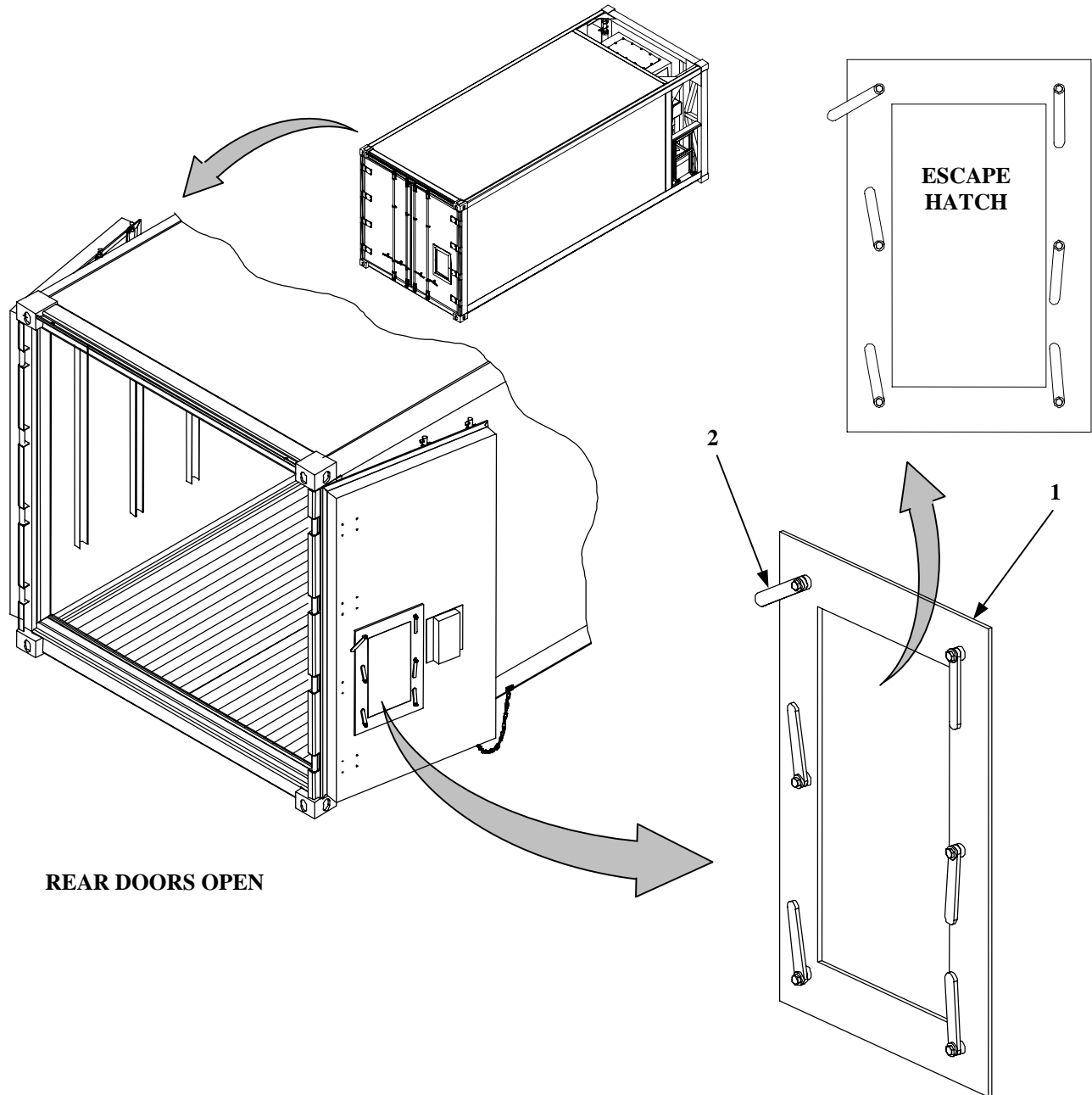


Figure 5. Container Emergency Escape Door

Escape Door (1, Figure 5). Provides emergency exit for personnel from inside refrigerated container.

Escape Door Handles (2). Threaded handles secure escape door onto right rear door. To remove escape door, unscrew and remove six door handles. Push escape door out from rear door.

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.**GENERATOR SET (1, Figure 6).**

The generator set, model MEP-803A, is a fully enclosed, self-contained skid-mounted unit. It is equipped with controls, instruments and accessories necessary for operation. The generator set consists of a diesel engine, brushless generator, excitation system, speed governing system, fuel system, 24 VDC starting system, control system, and fault system.

OIL FILTER (2).

The oil filter is located in the engine compartment on the left side. The filter removes impurities from the engine lubricating oil.

DIPSTICK (3).

The dipstick is located in the engine compartment on the left side. The dipstick shows the lubricating oil level in the engine crankcase.

FUEL FILTER/WATER SEPARATOR (4).

The fuel filter/water separator is located to the rear of the engine compartment on the left side. The element removes impurities and water from the diesel fuel.

AC GENERATOR (5).

The AC generator is a single bearing, drip-proof, synchronous, brushless, three phase, fan-cooled generator. The generator is coupled directly to the rear of the diesel engine.

DEAD CRANK SWITCH (6).

The Dead Crank switch is located in the engine compartment on the left side. For maintenance purposes the switch allows the engine to be cranked without starting.

ENGINE (7).

The generator is powered by a four cylinder, four cycle, fuel injected, naturally-aspirated, liquid-cooled, diesel engine which occupies the front half of the generator set. The engine is also equipped with a fuel filter/water separator, oil filter, and an air cleaner assembly. Protection devices automatically stop the engine during conditions of high coolant temperature, low oil pressure, no fuel, and/or over-voltage.

BATTERIES (8).

Two batteries are required, one on each side of the generator set. The batteries are maintenance free, lead acid, 12-volt type, connected in series. After starting, the generator set is capable of operating with batteries removed.

WATER PUMP (9).

The water pump is located in the engine compartment on the front of the engine. The pump circulates the engine coolant through the engine block and the radiator.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.

RADIATOR (10, Figure 6).

The radiator is located at the front of the generator set. It acts as a heat exchanger for the engine coolant.

FUEL TANK (11).

The 9-gallon (34-liter) fuel tank is located in the front of the generator set, below the engine and between the skid base side members. The fuel tank is a fuel reservoir and has sufficient capacity to enable the generator set to operate for at least 8 hours without refueling.

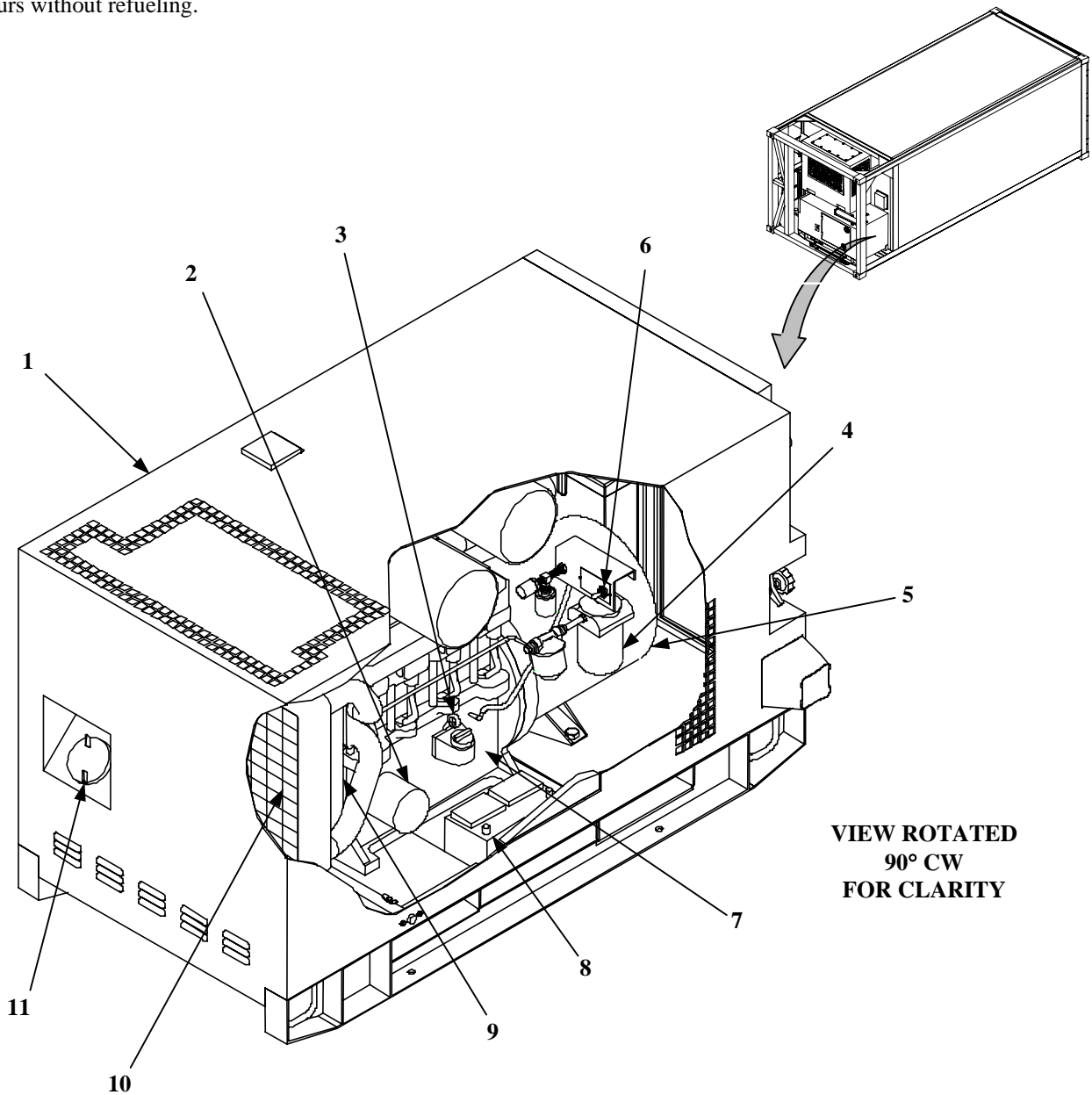


Figure 6. Generator Set Major Components

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.

AIR CLEANER ASSEMBLY (1, Figure 7).

The air cleaner assembly is located on the right side behind the engine. It consists of a dry-type, disposable air filter element made of paper and canister. The air cleaner assembly features a dust collector, which traps large dust particles. The air cleaner assembly has a restriction indicator that will indicate red when the air filter element requires servicing.

MUFFLER (2).

The muffler and exhaust tubing are connected to the exhaust manifold on the engine. The exhaust exits from the top of the generator set housing. Gases are exhausted upward.

FAN BELT (3).

The fan belt is located in the engine compartment on the front of the engine. The belt drives the fan, the water pump and the battery-charging alternator.

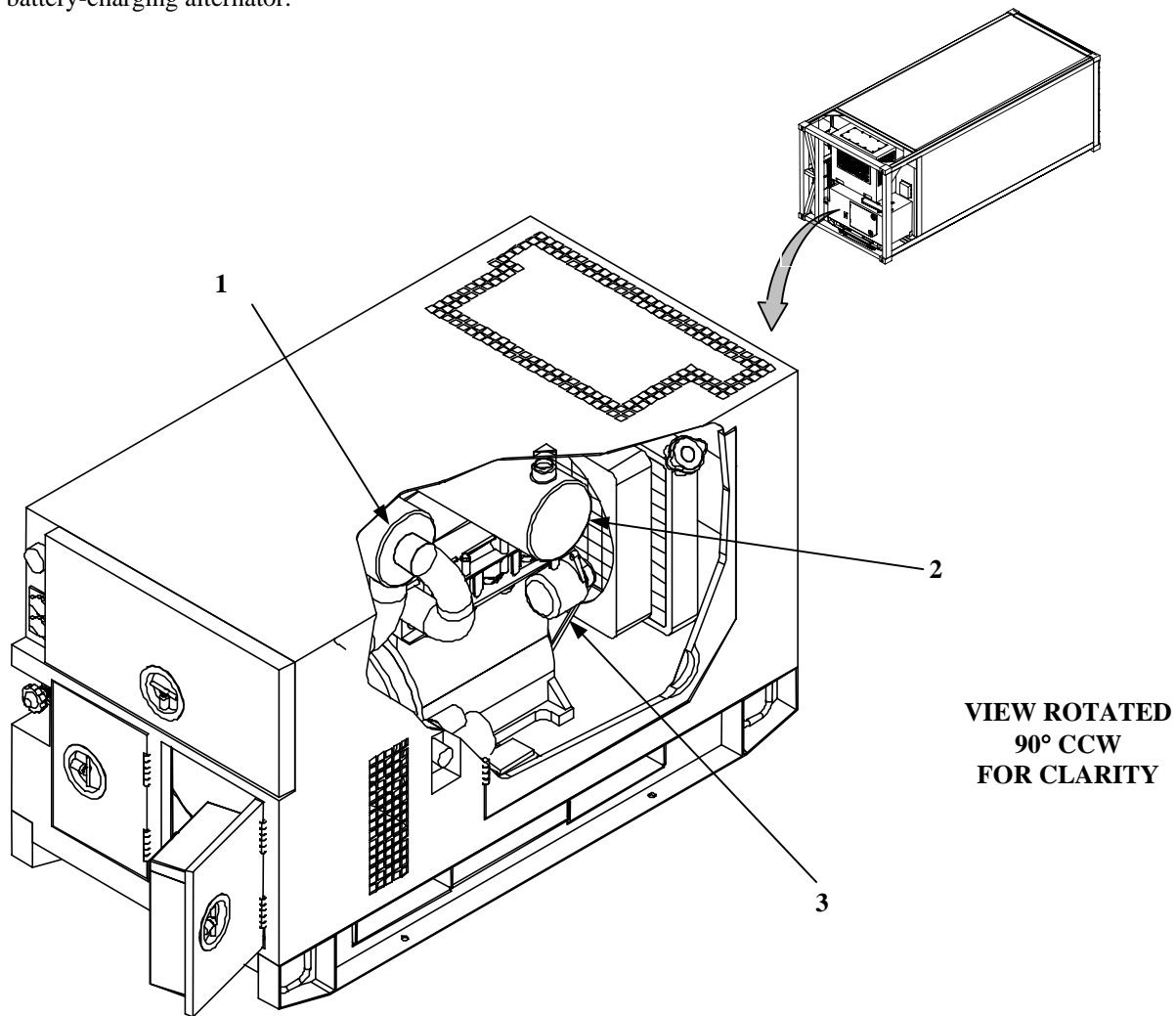


Figure 7. Generator Set Major Components

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.
BATTERY CHARGING ALTERNATOR (1, Figure 8).

The battery-charging alternator is located on the right side of the engine. It is capable of maintaining the batteries in a state of full charge in addition to providing the required 24 VDC control power.

STARTER (2).

The starter is located on the right side of the engine. The electric starter mechanically engages the engine flywheel in order to start the diesel engine.

NATO SLAVE RECEPTACLE (3).

The NATO slave receptacle is located on the right side (rear) of the generator set. It is used for slave starting.

SKID BASE (4).

The skid base supports the generator set. It has forklift access openings and cross members for short distance movement. The skid base has provisions in the bottom for installation of the generator set on a trailer.

LOAD OUTPUT TERMINAL BOARD (5).

The load output terminal board is located on the right side (rear) of the generator set. Four output terminals are located on the board. They are marked L1, L2, L3 and L0. A fifth terminal, marked GND, is located next to the output terminals and serves as equipment ground for the generator set. A removable, solid copper bar is connected between the L0 and GND terminals.

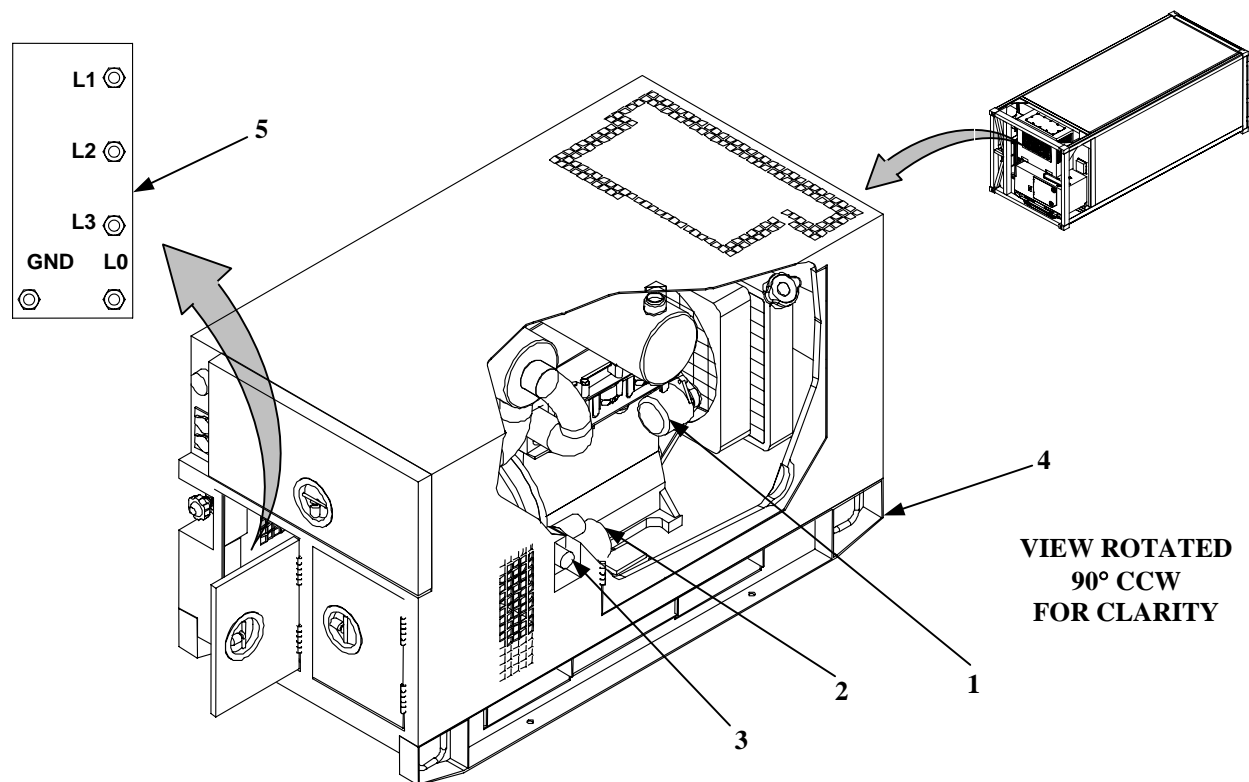


Figure 8. Generator Set Major Components

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.

FREQUENCY ADJUST CONTROL (1, Figure 9).

The frequency adjust control is located at the rear left side of generator set. It is used to adjust the generator frequency output.

MALFUNCTION INDICATOR PANEL (2).

The malfunction indicator panel is located to the left of the control panel assembly. It indicates malfunctions of the generator set components.

CONVENIENCE RECEPTACLE (3).

The convenience receptacle is a 120 VAC receptacle used to operate small plug-in type equipment.

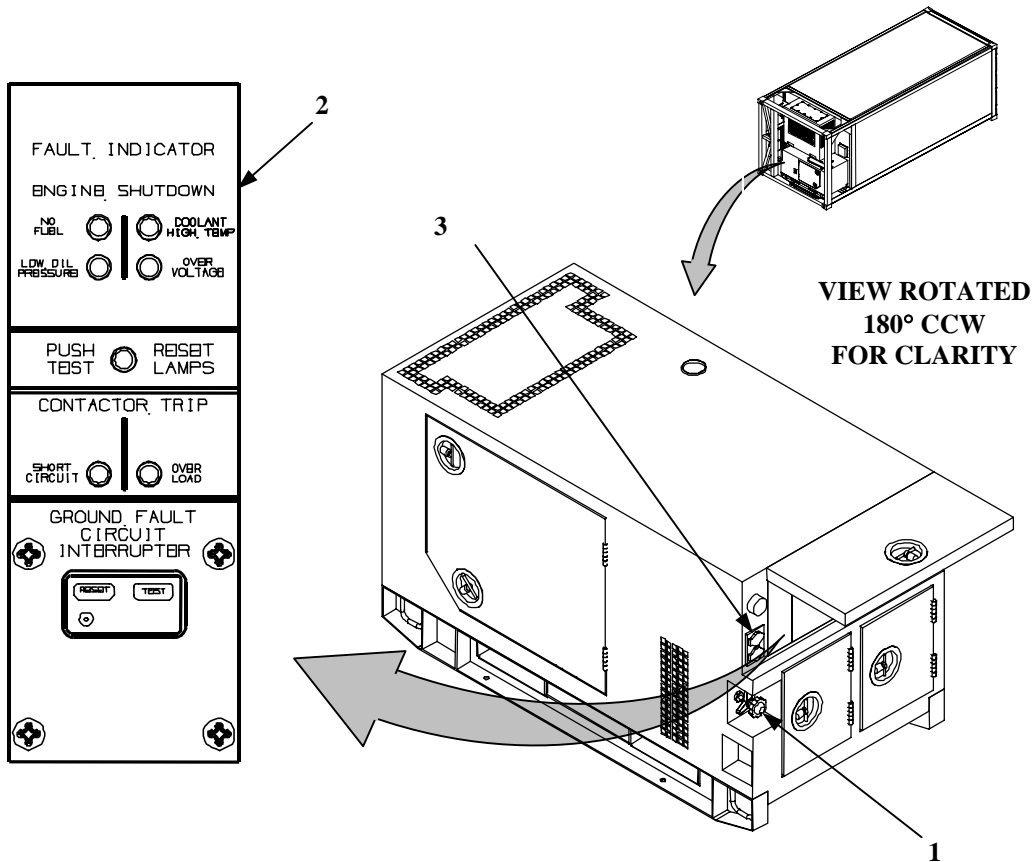


Figure 9. Generator Set Major Components

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.

CONTROL PANEL ASSEMBLY (1, Figure 10).

The generator set control panel assembly is located at the rear of the generator set and contains controls and instruments for operating the engine and the generator.

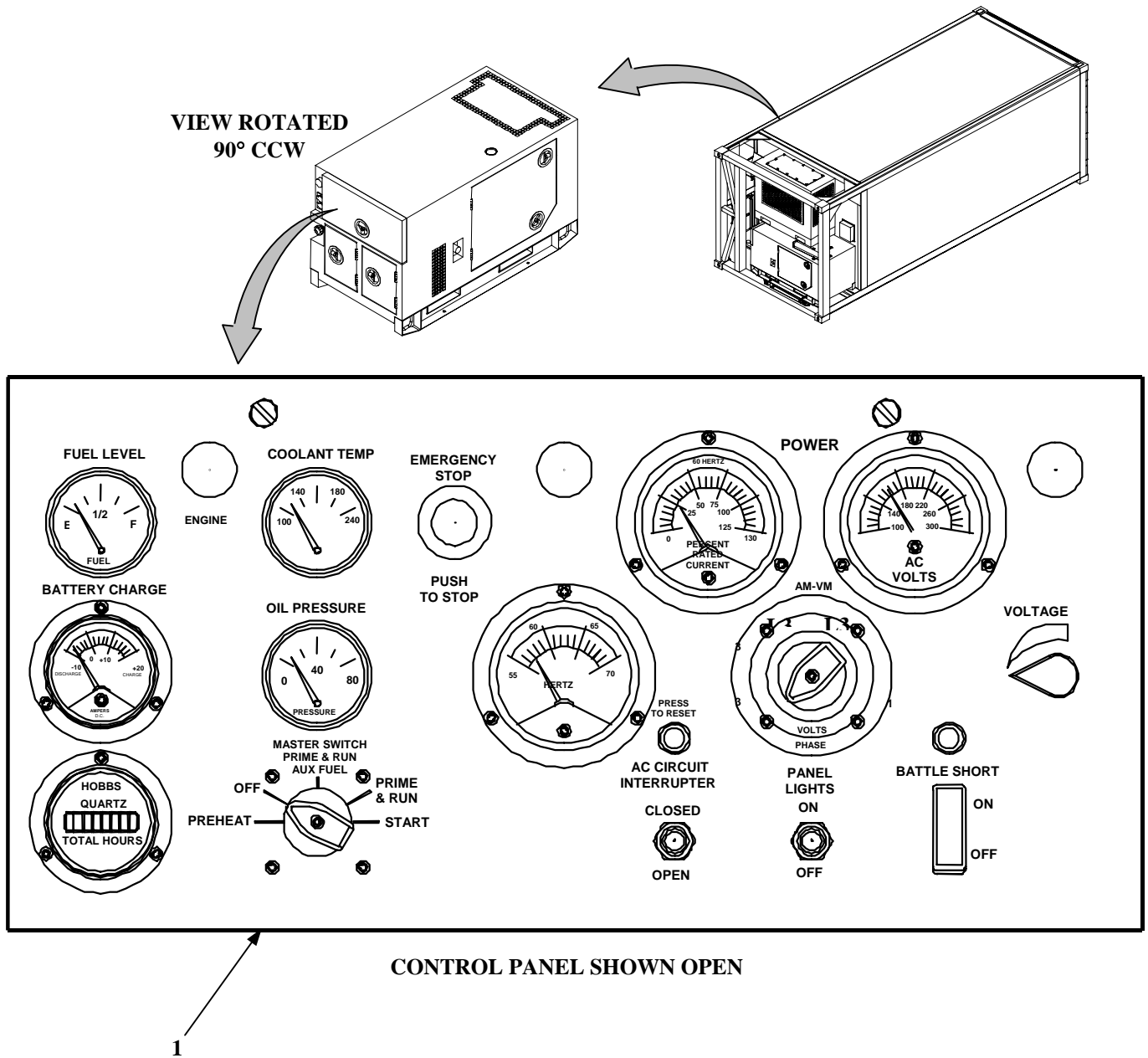


Figure 10. Generator Set Control Panel

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.

REFRIGERATION UNIT (1, Figure 11).

The KECO Model F9000RE, is a self-contained, refrigeration/heating unit for military van containers. The unit is designed to allow for starting and operating on a 10 KW, 60 hertz generator set.

CONTROL BOX ASSEMBLY (2).

Houses the automatic and manual electrical control components.

EVAPORATOR COIL (3).

Absorbs heat from the air being circulated through the refrigerator enclosure, causing the low pressure liquid refrigerant in the coil to evaporate.

COMPRESSOR (4).

Moves the refrigerant through the refrigeration system by raising the pressure of the incoming gas from the evaporator coil and discharging it as a high-pressure gas.

CONDENSER COIL (5).

Releases heat from the high-pressure gas coming from the compressor causing the gas to condense into a high-pressure liquid.

AC MOTOR (6).

Drives the air handling components.

EVAPORATOR FAN (7).

Circulates air through the refrigerator and across the evaporator coil.

CONDENSER FAN (8).

Circulates ambient, outside air across the condenser coil.

DUAL PRESSURE CONTROL SWITCH (9).

Provides over/under pressure protection for the refrigeration system. The switch has an automatic reset for overpressure conditions.

DIFFERENTIAL OIL PRESSURE SWITCH (10).

Provides protection against loss of lubricating oil in the compressor. The switch has a manual reset for low oil conditions.

ELECTRIC HEATER (11).

Heats the air being circulated through the refrigerator enclosure in low ambient temperature conditions.

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued.

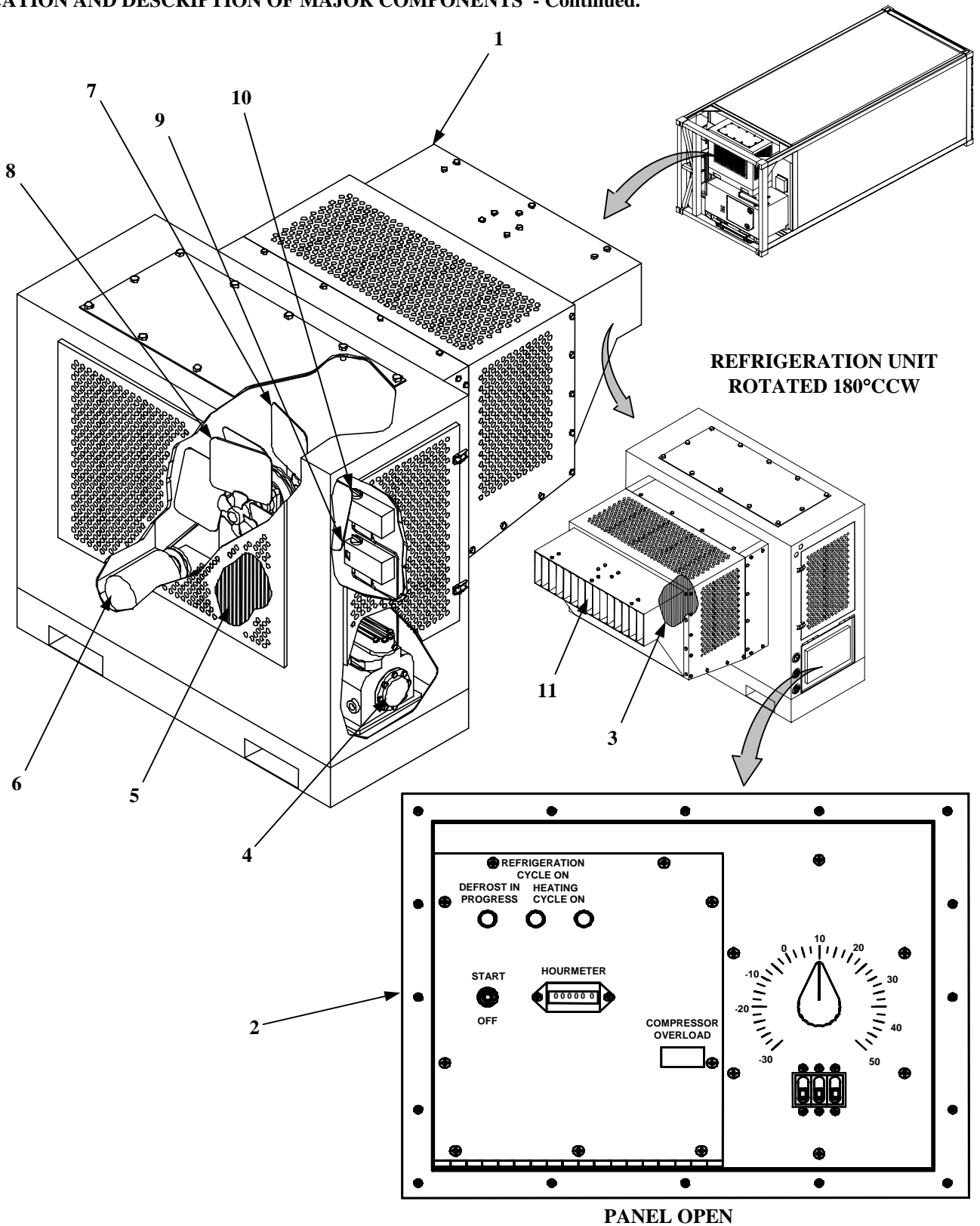


Figure 11. Refrigeration Unit Major Components

**REFRIGERATED CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

EQUIPMENT DATA

Table 1. Equipment Data

REFRIGERATED CONTAINER SYSTEM

CONTAINER

Model No.....	RCS-800
Manufacturer	Engineered Air Systems Inc.
Length.....	20 ft (6.10m)
Height	8 ft (2.44 m)
Width	8 ft (2-44 m)
Empty Weight (Tare).....	9,237 lbs. (4,197 kg)
Maximum Gross Weight.....	52,900 lbs. (24,471 kg)
Shipping Cube	1,280 cu ft (35.84cu m)
Interior Light.....	100 watts
Cargo Weight Capacity.....	43,663 lbs. (19,823 kg)

RECORDING THERMOMETER

Model No.....	TRDW
Manufacturer	Partlow West Co.
Drive Mechanism.....	Mechanical, spring driven, hand wound
Temperature range	-20°F to + 80°F
Recording Period	31 days

FUEL TANK

Capacity (To FULL line).....	26 Gallons (US)
------------------------------	-----------------

NOTE

Data for the refrigeration unit and generator set is provided for reference only.

GENERATOR SET

Refer to TM 9-6115-642-10 for equipment data on the generator set.

Model.....	MEP-803A
Manufacturer	Libby.
National Stock Number	6115-01-275-5061
Type.....	Diesel Powered, Tactical Quiet
Power	208 Vac, 3-phase, 60 Hz, 4-wire
Amperes.....	10 KW
Weight	1,242 lbs. (559 kg)

**CONTAINER SYSTEM
EQUIPMENT DESCRIPTION AND DATA – Continued**

0002 00

REFRIGERATION UNIT.

Refer to TM 9-4110-258-13 for specific equipment data on the Refrigeration Unit.

Model.....	F9000RE
Manufacturer.....	Keco.
National Stock Number.....	4110-01-394-6473
Type.....	Vapor Cycle, Electrically driven
Power.....	208 Vac, 3-phase, 60 Hz, 4-wire
Amperes.....	20 KW
Weight.....	1000 lbs. (454 kg)
Cooling Capacity.....	9,000 Btu/Hr
Heating Capacity.....	7,000 Btu/Hr
Refrigerant.....	Type R134A
Refrigerant Charge.....	14 lbs. (6.26 kg)

END OF WORK PACKAGE.

REFRIGERATED CONTAINER SYSTEM
THEORY OF OPERATION

0003 00

COMPONENT TECHNICAL THEORY OF OPERATION.

The diesel-powered generator set provides power for the Refrigeration Unit and a power source for the switch operated light. Fuel can be added manually to the generator set fuel tank by the operator. Another method to add fuel to the generator set is by attaching a flexible fuel line to the elbow port on the auxiliary fuel tank. The flexible fuel line is located on the door in the fuel line holder of the generator set. This is located near the loads cable door and control panel of the generator set.

Three-phase power received from the generator set provides the external power for the Refrigeration Unit. A power cable is attached from the Refrigeration Unit to the generator set. This is located in the back of the Refrigeration Unit in the stowage compartment. A cable located on the Container Unit is attached to the cable on the Refrigeration Unit. The five wires are then attached to the generator set on the loads panel.

Insulation is built into the walls, floor and ceiling which reduces the gain and/or loss of heat between the container interior and ambient conditions. The ribbed floor and wall spacer strips allow conditioned air to circulate around the cargo. Two doors provide access to the container interior. Each door is insulated and seals tightly against the container frame when closed. The right access door contains an emergency escape door to prevent entrapment of personnel. The emergency door can only be removed from inside the container. In an emergency condition, the escape door can allow exit of personnel by unscrewing all six holders, then pushing out the insulation plug to exit. Floor drains are located at each corner of the ribbed floor for escape of excess moisture.

The 100 watt interior light receives electrical power from the power cord plugged into the 110-volt receptacle on the generator set (refer to TM 9-6115-642-10). The receptacle is located as a convenience receptacle near the control panel. The light is controlled by a hand-operated switch mounted overhead near the right door and has an on/off position. This will provide continuous light in the container provided the generator set is operational.

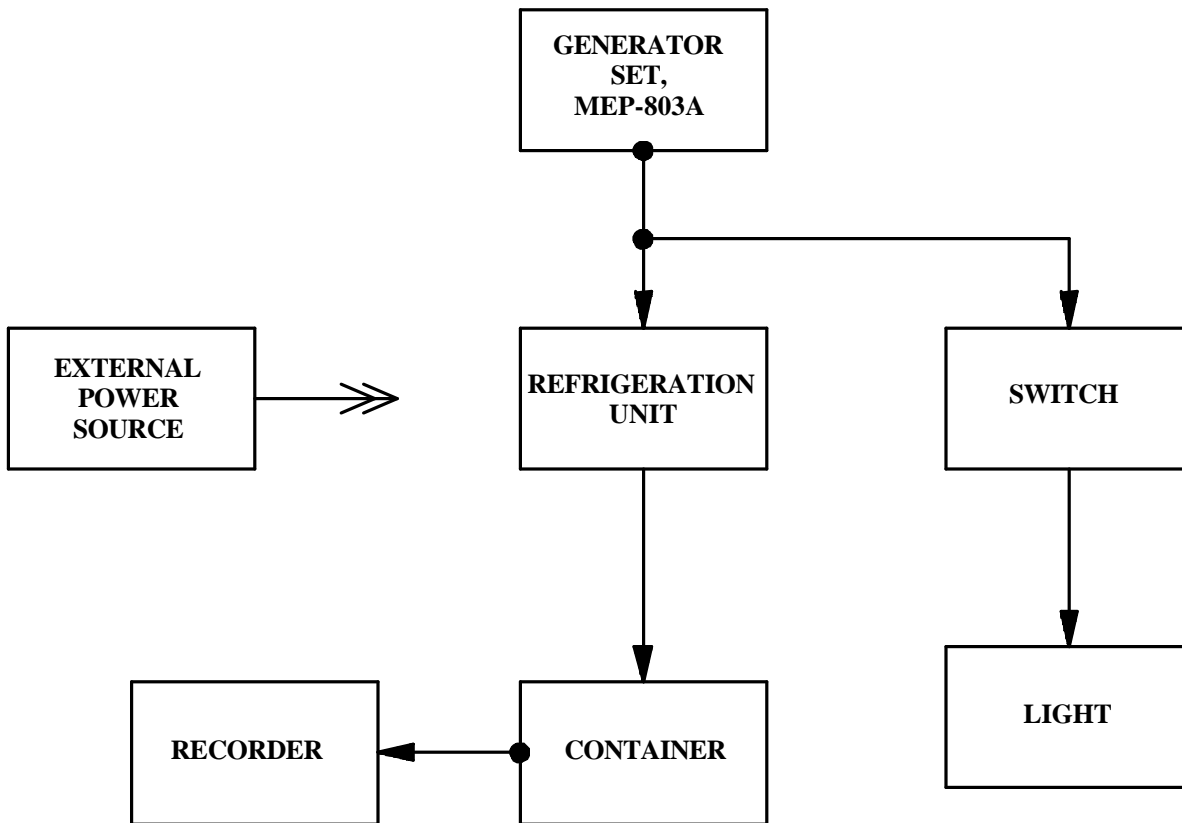
The metal 31-gallon auxiliary fuel tank stores fuel for the generator set. Fuel level is indicated by the float actuated fuel gauge. The fuel gauge has readings in 1/8 gallon increments. The fuel line from the tank provides fuel to the generator set engine and is located in the fuel line storage box.

The temperature recorder maintains a 24-hour record of the container's internal temperature. A sensing bulb, mounted on the inside container wall, causes the cartridge pen to move up or down on the paper chart. At the same time, a spring driven timer turns the chart paper. As the pen moves along the paper, a permanent 48-hour record of the time and temperature is made. The timer must be wound at least every 30 days by winding the key.

External power to the Refrigeration Container System can be achieved by connecting a NATO Slave compatible cable from the external power source to the NATO Slave receptacle on the diesel generator set. Once connected the operation for start up of the diesel generator set is the same. The diesel-powered generator set will then provide power for the Refrigeration Unit. The generator set will also be a power source for the switch-operated light by connecting a cable to the convenience receptacle located near the control panel. External fuel can be added manually or added from the flexible fuel line attached to the external fuel tank.

SYSTEM OPERATION.

REFRIGERATED CONTAINER SYSTEM



Container System Functional Diagram

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
REPAIR PARTS AND SPECIAL TOOLS LIST**

0004 00

COMMON TOOLS AND EQUIPMENT.

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE), CTA 50-970 or CTA 8-100, applicable to your unit.

SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.

Refer to the WP 0073 00 of this manual for special tools, and WP 0076 00 for the Figure and Item Number Index. ■

REPAIR PARTS.

Repair parts are listed and illustrated in WP 0049 00, covering Unit, Direct Support, and General Support maintenance of this equipment.

END OF WORK PACKAGE.

CHAPTER 2
OPERATOR INSTRUCTIONS
FOR
REFRIGERATED CONTAINER SYSTEM

**REFRIGERATED CONTAINER SYSTEM
CONTROLS AND INDICATORS**

0005 00

GENERAL.

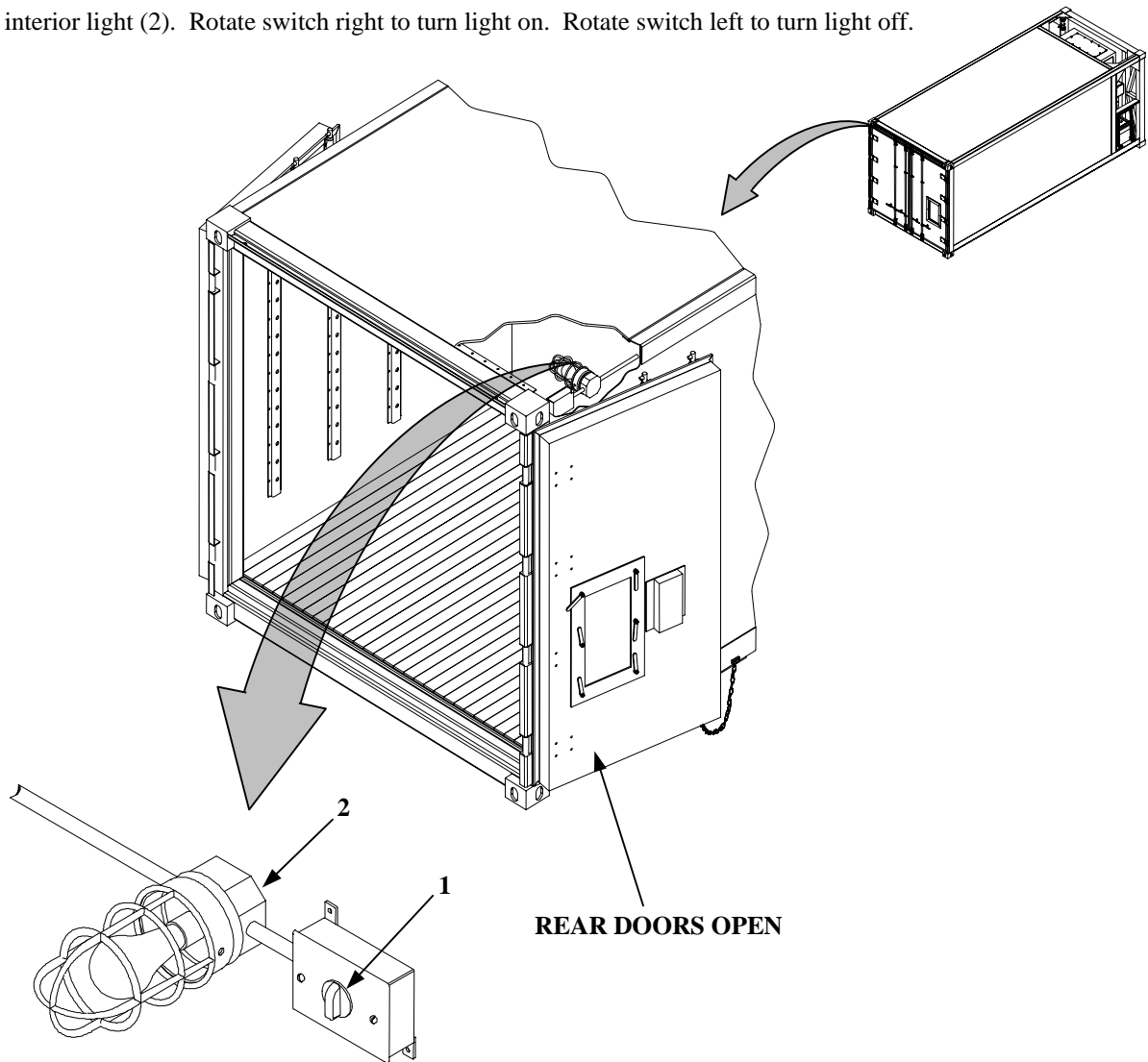
The following paragraphs contain illustrations that show the location of each control and indicator for the operation of the Refrigerated Container System. Each control and indicator is clearly labeled as it appears on the equipment. Find numbers on the illustrations are keyed to the tabular listing which contains the name, based on the panel markings, and at the functional description of each control and indicator.

This section provides the operator with information needed to locate, identify, and use the controls and indicators on the Refrigerated Container, Generator Set, and Refrigeration Unit.

REFRIGERATED CONTAINER.

LIGHT SWITCH (1, Figure 1).

Controls interior light (2). Rotate switch right to turn light on. Rotate switch left to turn light off.



ROTATED 90° CCW

Figure 1. Light Switch

TEMPERATURE RECORDER (Figure 2).

COVER (1).

Protects temperature recorder from damage.

CHART (2).

Pressure sensitive paper chart (2) indicates temperature of container interior and time readings were made.

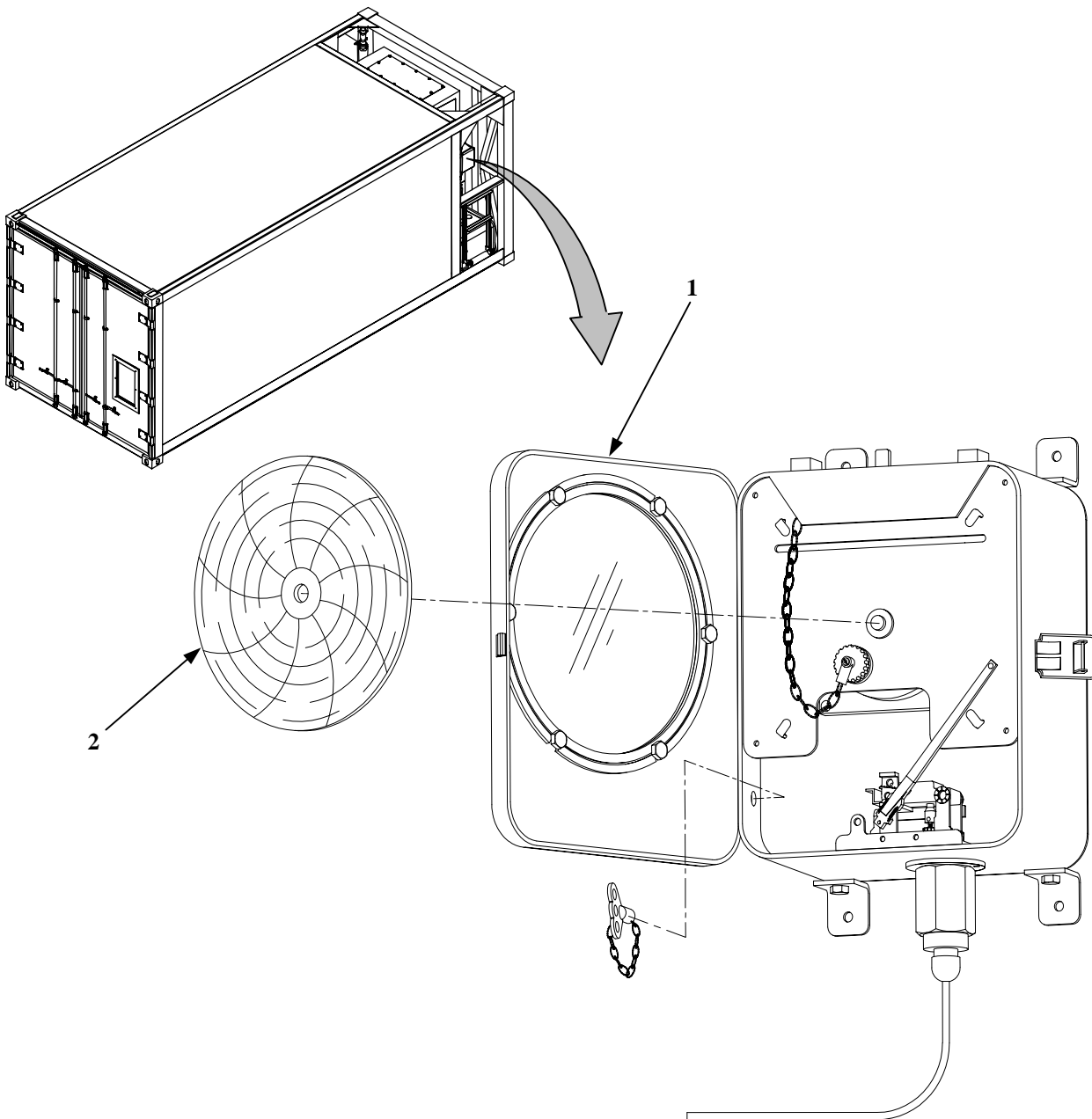


Figure 2. Temperature Recorder

AUXILIARY FUEL TANK (Figure 3).

FUEL GAUGE (1).

Indicates fuel level in fuel tank.

FILL LINE (2).

Line marked on outside of fuel tank, indicating maximum level of fuel.

FUEL CAP/FILL (3).

Covers fuel servicing port.

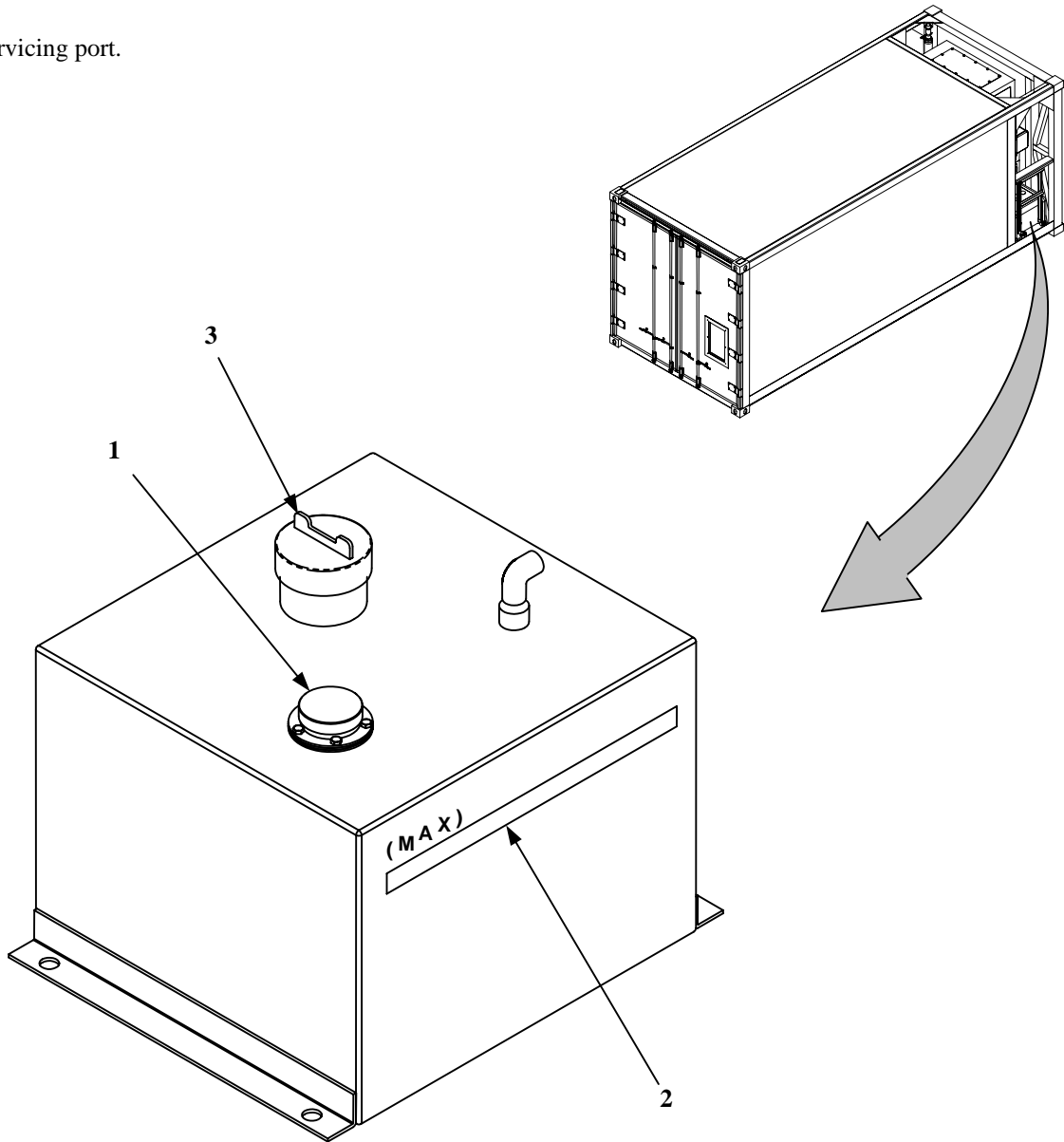


Figure 3. Auxiliary Fuel Tank

**REFRIGERATED CONTAINER SYSTEM
CONTROLS AND INDICATORS – Continued**

0005 00

GENERATOR SET CONTROL PANEL (Figure 4).

The control panel contains most of the operating controls and indicators for the generator set. To access the control panel, open the control panel access door (1).

CONTROL PANEL CONTROLS.

FUEL LEVEL INDICATOR (2).

Indicates fuel level.

PANEL LIGHTS (3).

Illuminates control panel.

COOLANT TEMP. INDICATOR (4).

Indicates engine coolant temperature.

OIL PRESSURE INDICATOR (5).

Indicates oil pressure.

EMERGENCY STOP PUSHBUTTON (6).

Shuts down generator set.

FREQUENCY METER (HERTZ) (7).

Indicates generator set output frequency.

Ammeter (PERCENT RATED CURRENT METER) (8).

Indicates generator set load current as a percent of rated current.

AM-VM TRANSFER SWITCH (9).

Allows selection of current and voltage readings between output load terminals as follows:

Switch Position	Voltage	Current
LI-L2 (3 Phase)	L1-L2	L1
L2-L3 (3 Phase)	L2-L3	L2
L3-L1 (3 Phase)	L3-L1	L3
L3-LO (3 Phase)	L3-LO	L3
L3-L1 (1 Phase)	L3-LO	L3
L3-LO (1 Phase)	L3-LO	L3

AC VOLTMETER (VOLTS AC) (10).

Indicates output voltage of generator set.

**REFRIGERATED CONTAINER SYSTEM
CONTROLS AND INDICATORS – Continued**

0005 00

GENERATOR SET CONTROL PANEL – Continued.

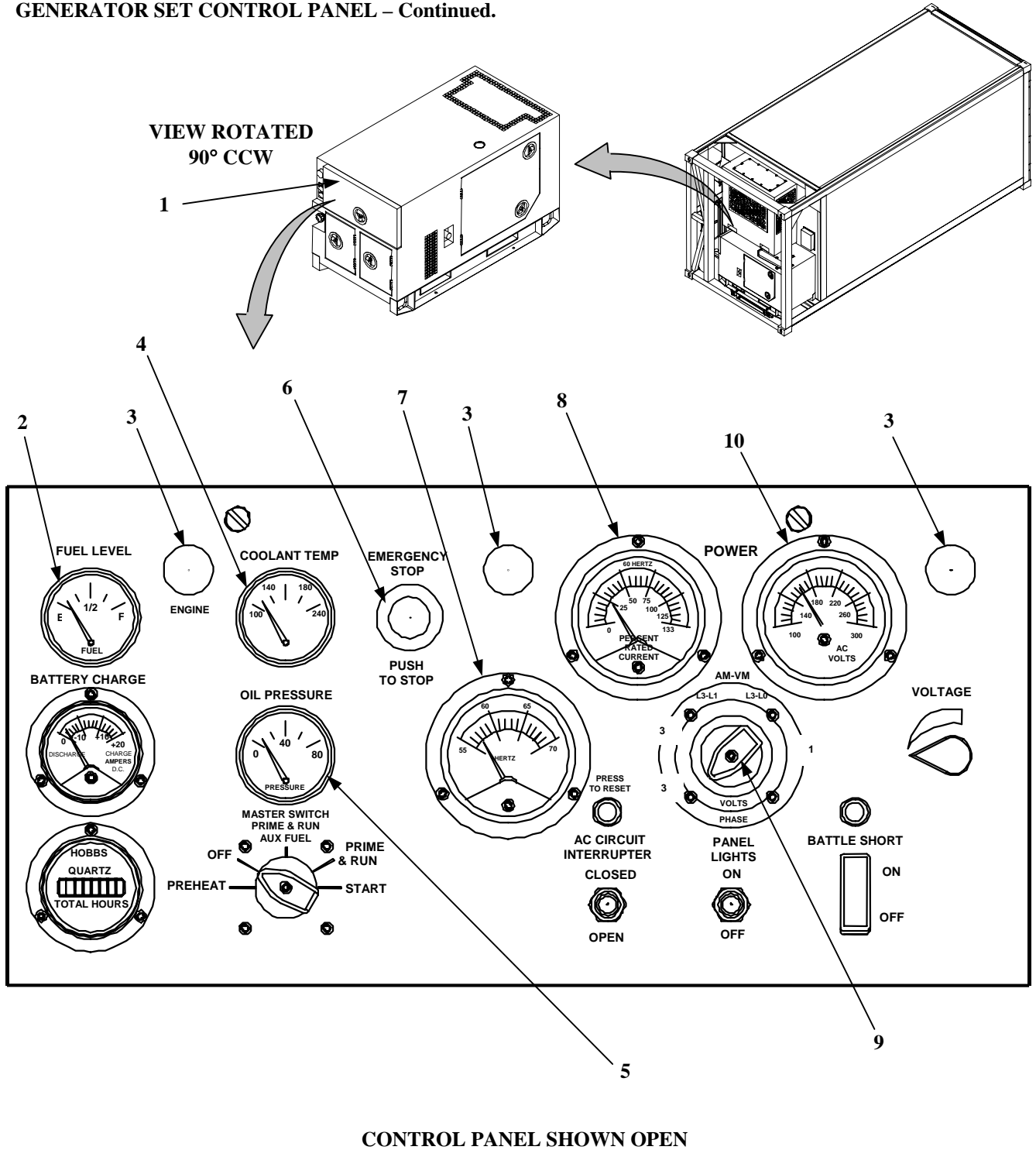


Figure 4. – Control Panel and Indicators (Sheet 1 of 2)

**REFRIGERATED CONTAINER SYSTEM
CONTROLS AND INDICATORS – Continued**

0005 00

GENERATOR CONTROL PANEL (Figure 4) – Continued.**VOLTAGE ADJUST POTENTIOMETER (11).**

Adjusts generator set voltage.

BATTLE SHORT LIGHT (12).

Amber light indicates battle short switch on.

BATTLE SHORT SWITCH (13).

Bypasses protective devices.

PANEL LIGHTS SWITCH (14).

ON –activates or deactivates panel lights.

AC CIRCUIT INTERRUPTER SWITCH (15).

Opens and closes AC circuit interrupter relay.

AC CIRCUIT INTERRUPTER LIGHT (16).

Green light indicates AC circuit interrupter relay is closed.

MASTER SWITCH (17).

PREHEAT - Energizes heater plugs.

OFF – De-energizes all circuits, except panel lights.

PRIME & RUN AUX. FUEL - Energizes generator set run circuits with fuel pump operating and with auxiliary fuel pump system activated.

PRIME & RUN - Energizes generator set run circuits with fuel pump operating and auxiliary fuel system de-energized.

START - Energizes starter.

TIME METER (TOTAL HOURS) (18).

Indicates total engine operating hours.

BATTERY CHARGE AMMETER (19).

Indicates charge/discharge rate of batteries.

DC CONTROL POWER CIRCUIT BREAKER (CB1) (Located Behind Control Panel) (20).

Energizes or de-energizes DC circuits.

AC VOLTAGE RECONNECTION SWITCH (Located Behind Control Panel) (21).

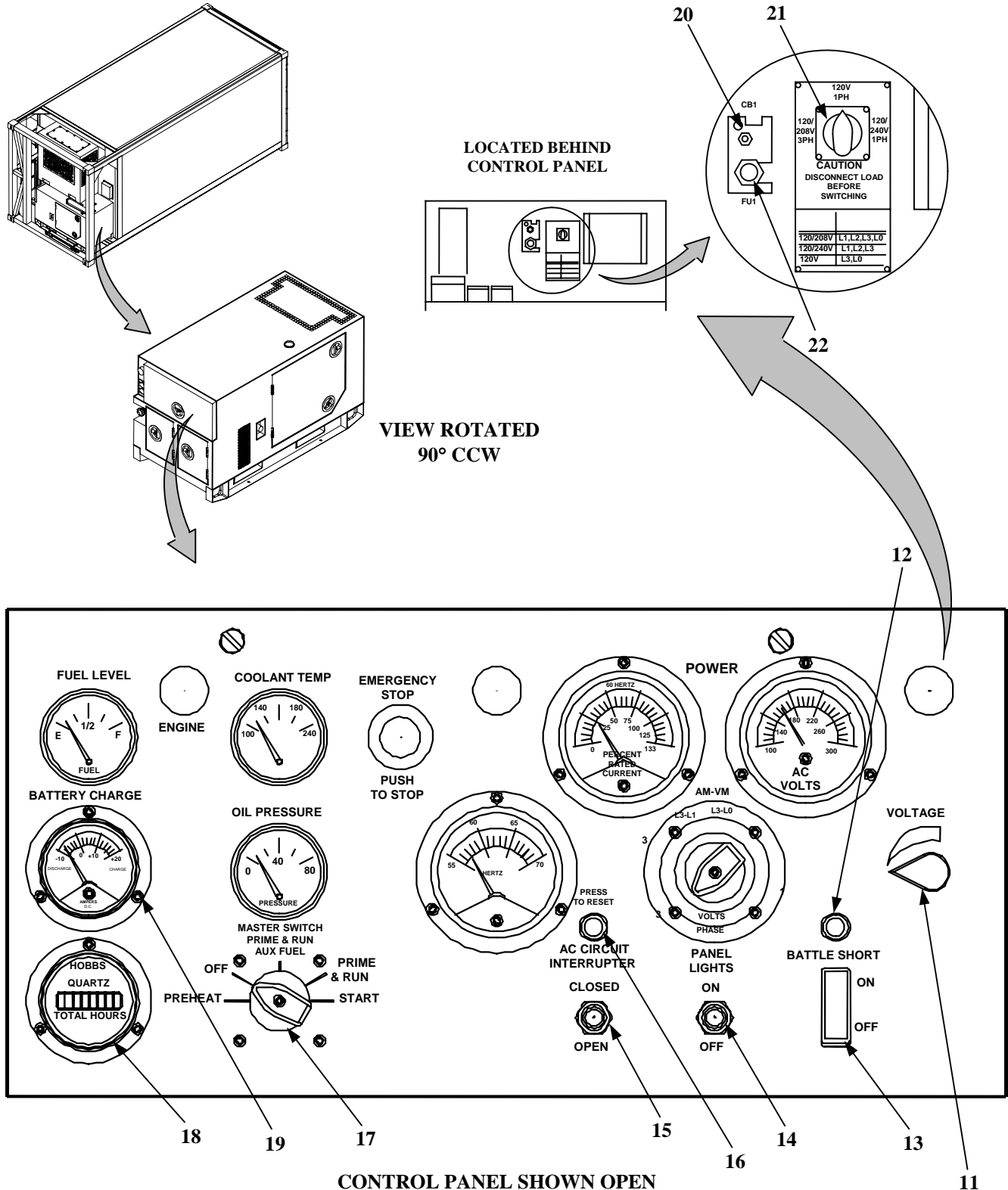
Selects 120/208 VAC, three-phase; 120 VAC, single phase; or 120/240 VAC, single phase output at load terminal board.

BATTERY CHARGER FUSE (FU1) (Located Behind Control Panel) (22).

Protects battery charging alternator.

**REFRIGERATED CONTAINER SYSTEM
CONTROLS AND INDICATORS – Continued**

0005 00



GENERATOR SET – MALFUNCTION INDICATOR PANEL (Figure 5).

The malfunction indicator panel is located to the left of the control panel. It contains a series of lights that indicate generator set failure due to abnormal operating conditions. To access the malfunction indicator panel, open the control panel access door (1).

NO FUEL INDICATOR (2).

Lights when fuel level in fuel tank is below preset level.

COOLANT HIGH TEMP INDICATOR (3).

Lights when engine coolant temperature exceeds $225^{\circ} + 5^{\circ}$ F ($107^{\circ} + 3^{\circ}$ C).

OVERVOLTAGE INDICATOR (4).

Lights when voltage in 120 volt generator coil winding exceeds $153 + 3$ volts.

PUSH TEST RESET LAMPS (5).

Tests and resets fault indicator lamps.

OVER LOAD INDICATOR (6).

Lights when current in any phase exceeds 110 percent of rated current.

GROUND FAULT CIRCUIT INTERRUPTER TEST PUSHBUTTON (7).

Tests ground fault circuit interrupter.

GROUND FAULT CIRCUIT INTERRUPTER INDICATOR (8).

Mechanically trips lights on, at ground fault condition in circuit of convenience receptacle.

GROUND FAULT CIRCUIT INTERRUPTER PUSH TO RESET PUSHBUTTON (9).

Depress to reset Ground Fault Circuit Interrupter after test or ground fault has occurred.

SHORT CIRCUIT INDICATOR (10).

Lights when generator set output in any phase exceeds $425 + 25$ percent of rated current.

LOW OIL PRESSURE INDICATOR (11).

Lights when engine lubrication systems pressure is less than $15 + 3$ psi ($103.4 + 20.7$ kPa) during engine operation.

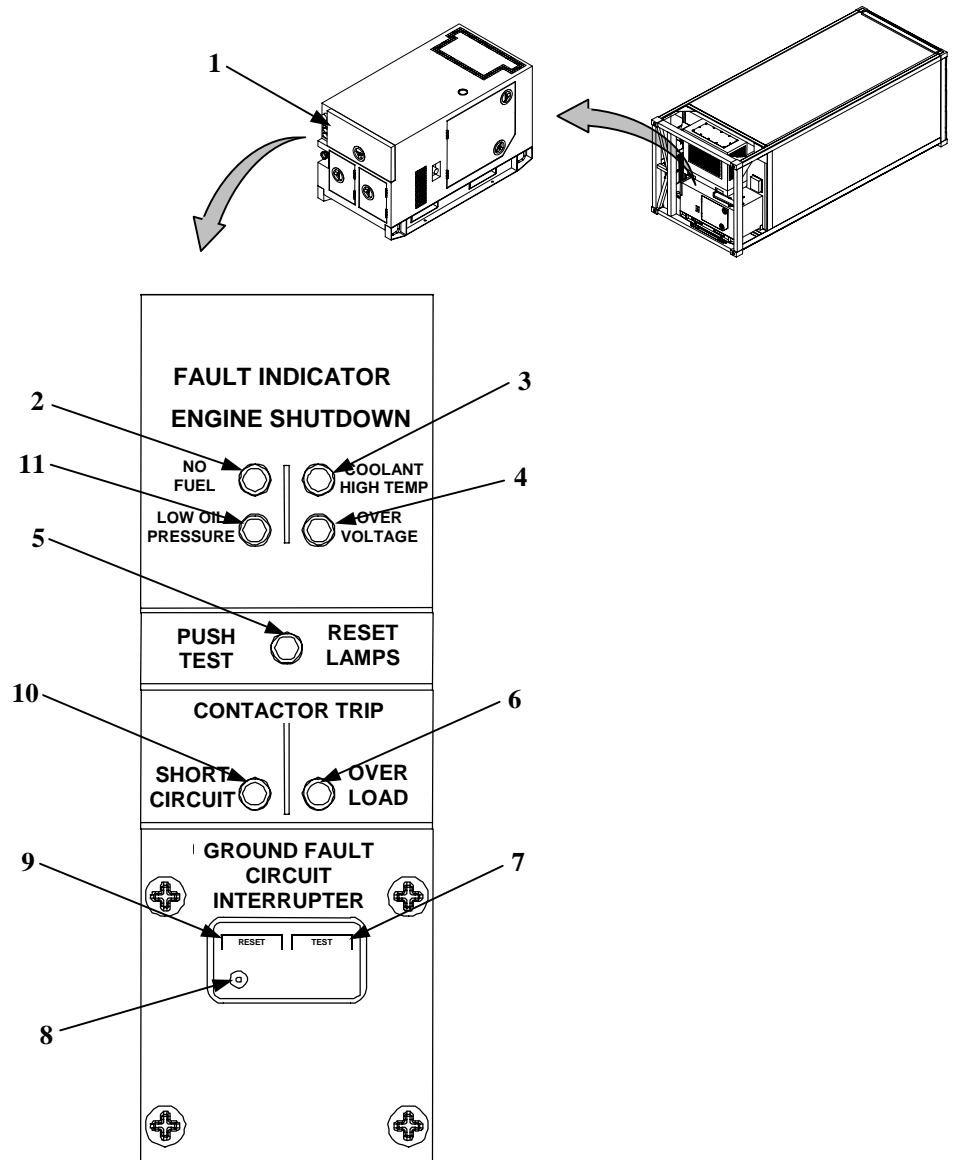


Figure 5. Malfunction Indicator Panel

GENERATOR SET - FREQUENCY ADJUST CONTROL (Figure 6).

The frequency adjust control is to the left and below the control panel.

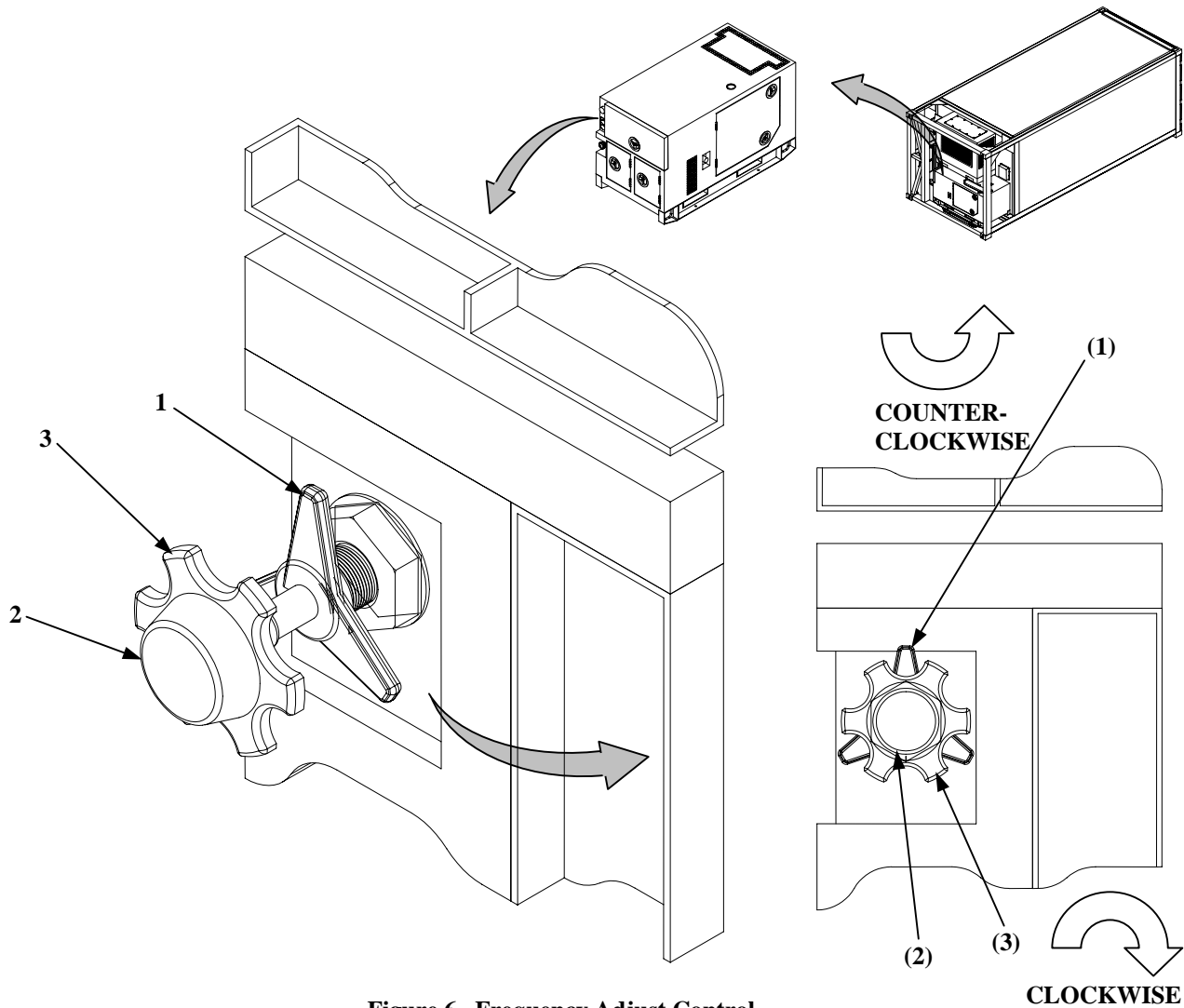


Figure 6. Frequency Adjust Control

LOCKING RING (1).

Turn locking ring counterclockwise to unlock frequency adjust control. Turn locking ring clockwise to lock frequency adjust control at desired setting.

FREQUENCY ADJUST BUTTON (2).

Press frequency adjust button and pull frequency adjust knob to increase frequency. Press frequency adjust button and push frequency adjust knob to decrease frequency. This enables a rapid adjustment of frequency.

FREQUENCY ADJUST KNOB (3).

Turn knob clockwise to increase frequency and counterclockwise to decrease frequency. This provides a fine adjustment in frequency.

GENERATOR SET – DEAD CRANK SWITCH (Figure 7).

The dead crank switch (1) is located in the engine compartment on the right side as viewed from the exhaust end of generator set. For maintenance purposes the switch allows the engine to be cranked without starting. During normal operations, the dead crank switch must be in the normal position for the generator set to start properly. If the dead crank switch is in the off position, the generator set will not start.

(CRANK position).

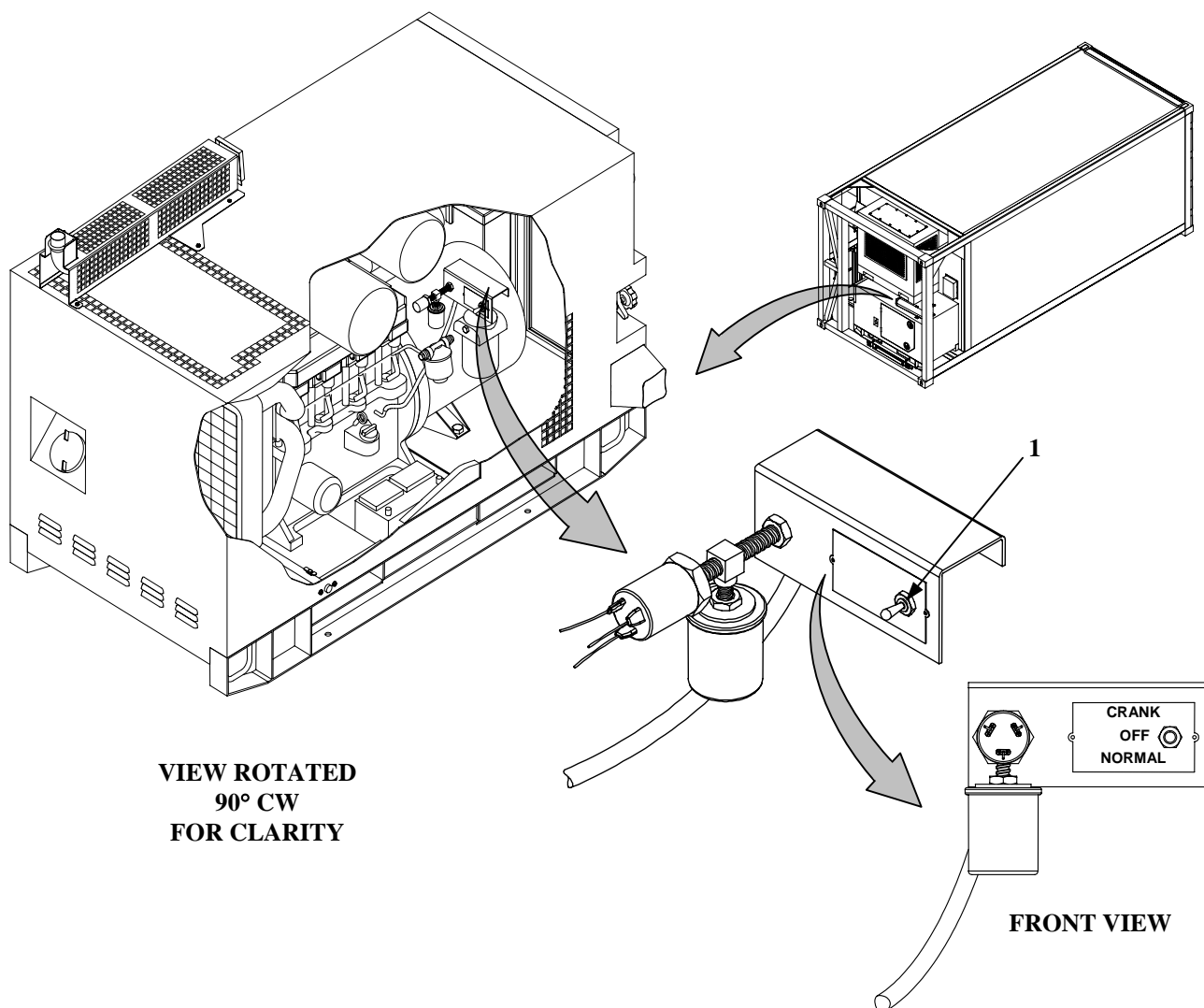
This position of the switch allows the engine to be cranked without starting.

(OFF position).

This position of the switch allows the engine to be shut down for maintenance purposes.

(NORMAL position).

This position of the switch allows the engine to be started properly for normal operations.



**VIEW ROTATED
90° CW
FOR CLARITY**

FRONT VIEW

Figure 7. Generator Set Dead Crank Switch

REFRIGERATION UNIT OPERATING CONTROLS AND INDICATORS (Figure 8).

The controls and indicators needed to operate and monitor the refrigeration unit are located on the control box assembly and inside the condenser frame.

CIRCUIT BREAKER (1) (MAIN CIRCUIT BREAKER).

Provides electrical circuit protection for the refrigeration unit. The circuit breaker handle should be in the ON position.

REMOTE BULB THERMOSTAT (2) (TEMPERATURE CONTROL).

Monitors and automatically controls the temperature inside the refrigerator enclosure. The remote bulb thermostat should be set to the desired refrigerator enclosure temperature.

TOGGLE SWITCH (3) (START/RUN, OFF).

Activates the refrigeration unit. The toggle switch should be in the START/RUN position.

THERMOMETER (4) (REFRIGERATION TEMPERATURE).

Indicates the refrigerator enclosure temperature. The thermometer should indicate within 15° F (7°C) of the temperature set on the remote bulb thermostat.

PRESSURE GAUGE (5) (DISCHARGE PRESSURE).

Indicates the pressure of the refrigerant gas leaving the compressor. The pressure gauge should generally indicate between 165 and 250 psi (1138 and 1725 kPa); at start up and/or operation in high temperatures, this range can go higher. The inner scale indicates the temperature of the refrigerant at any given pressure.

COMPOUND GAUGE (6) (SUCTION PRESSURE).

Indicates the pressure of the refrigerant gas entering the compressor. The compound gauge should generally indicate between 0 and 15 psi (0 and 103.5 kPa); at shutdown and/or operation in low temperatures, this range can go lower. The inner scale indicates the temperature of the refrigerant at any given pressure.

SIGHT INDICATOR (7) (REFRIGERANT SIGHT GLASS).

Provides a port through which the refrigerant may be observed as it passes through the liquid line of the refrigeration system. The center indicator changes color as it reacts to moisture in the refrigerant. The sight indicator port should be clear, indicating liquid refrigerant passing through it. An occasional flash of bubbles is normal as the refrigerant system automatically adjusts to changing conditions. The center indicator should be green or chartreuse in color.

SIGHT GLASS (8) (COMPRESSOR OIL SIGHT GLASS).

Provides a port through which the oil level in the compressor may be observed. The sight glass port should show an oil level between 1/4 and 1/2 up the port. Bubbles in or on the oil surface are normal.

HOUR METER (9) (HOUR METER).

Indicates the total number of hours the compressor has operated.

REFRIGERATED CONTAINER SYSTEM
CONTROLS AND INDICATORS – Continued

0005 00

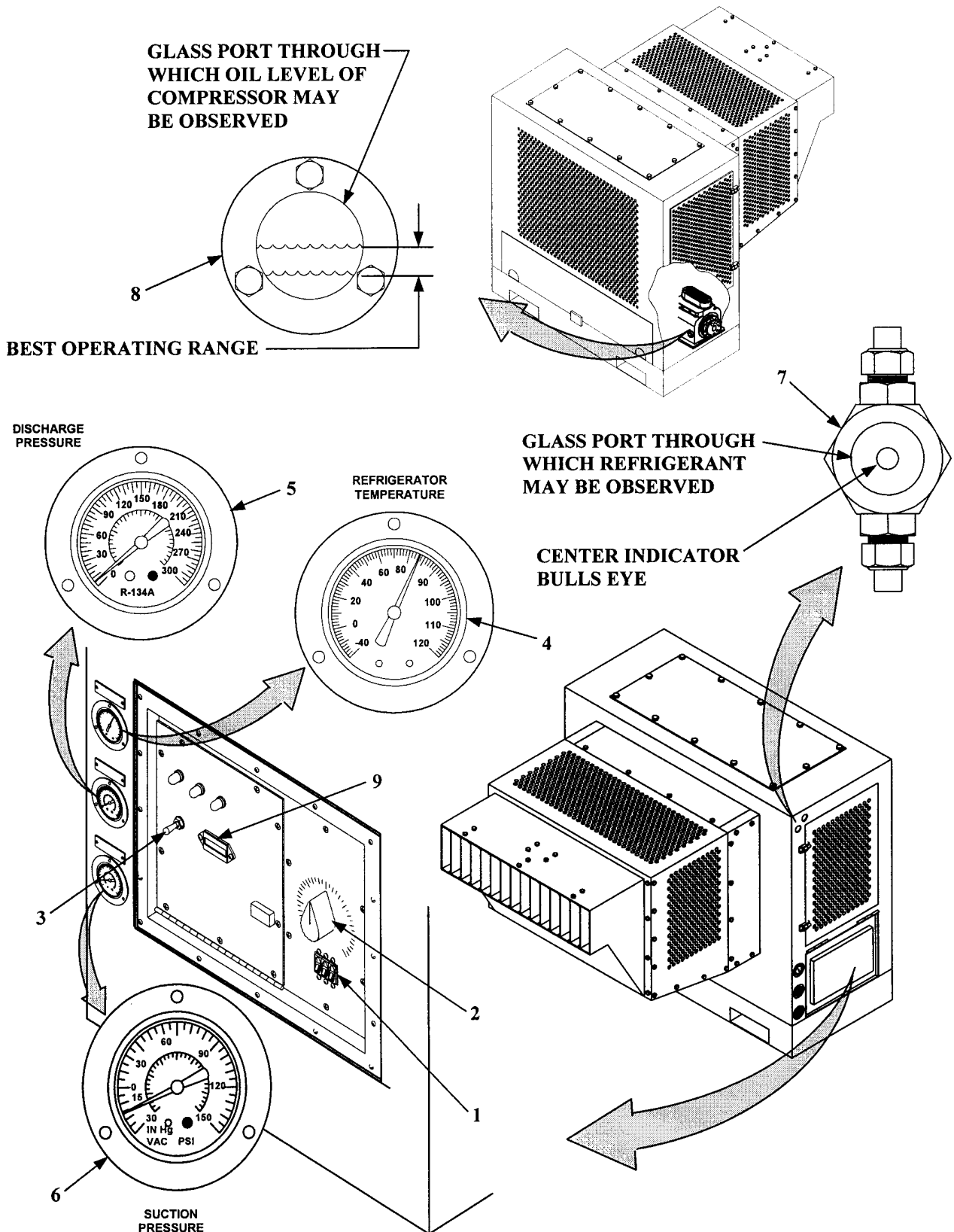


Figure 8. Operating Controls and Indicators (Sheet 1 of 2)

REFRIGERATION UNIT OPERATING CONTROLS AND INDICATORS (Figure 8) – Continued.**INDICATOR (10) (DEFROST IN PROGRESS).**

Indicates by illuminating when the refrigeration unit is operating in a defrost cycle.

INDICATOR (11) (REFRIGERATION CYCLE ON).

Indicates by illuminating when the refrigeration cycle is ON.

INDICATOR (12) (HEATING CYCLE ON).

Indicates by illuminating when the heating cycle is on.

RESET BUTTON (13) (COMPRESSOR OVERLOAD).

The reset button resets the motor starter if a fault has caused the compressor to overload. Reset button is pushed to reset the motor starter.

DUAL PRESSURE CONTROL SWITCH (14).

The dual pressure control switch will open the electrical control circuit if a fault in the refrigeration system causes the pressure of the refrigerant gas leaving the compressor to exceed 300 psi (2,070 kPa). The switch will automatically reset after a high pressure fault.

DIFFERENTIAL OIL PRESSURE SWITCH (15).

The differential oil pressure switch will open the electrical control circuit if a fault in the refrigeration system causes the compressor oil pressure to drop. The switch is reset by pushing the reset button.

**REFRIGERATED CONTAINER SYSTEM
CONTROLS AND INDICATORS – Continued**

0005 00

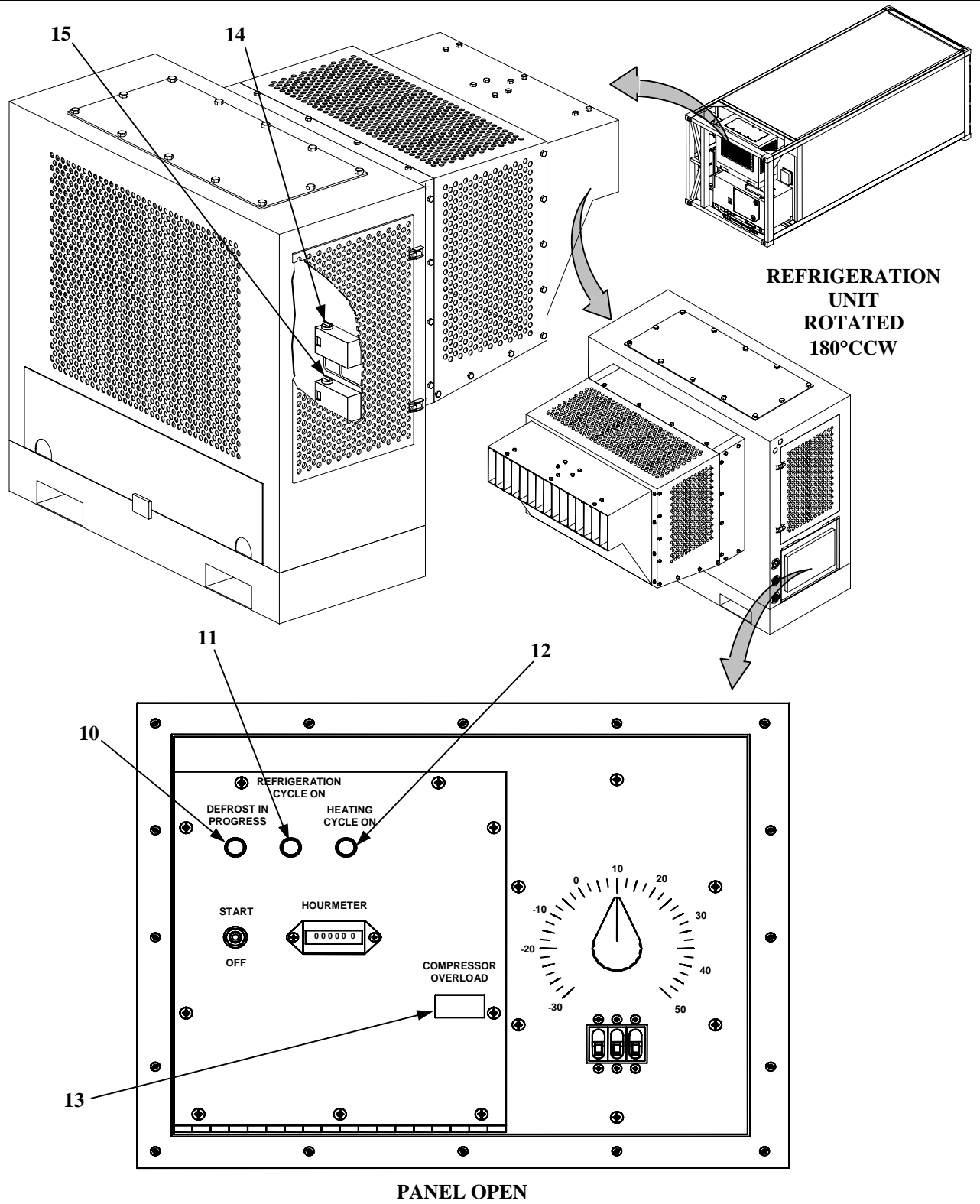


Figure 8. Operating Controls and Indicators (Sheet 2 of 2)

END OF WORK PACKAGE.

**REFRIGERATION CONTAINER SYSTEM
OPERATION UNDER USUAL CONDITIONS**

0006 00

INITIAL SETUP:**Maintenance Level**
Operator**Personnel Required**
Two**GENERAL.**

This equipment is normally shipped assembled. The assembly paragraph provides the data and procedures for the start up and operation of the generator set and refrigeration unit on the refrigerated container assembly.

SITING REQUIREMENTS.

No site preparation required.

PREPARATION FOR USE AND ASSEMBLY.

AUXILIARY FUEL TANK SERVICING (Figure 1).

1. Remove fuel tank filler cap (1).

WARNING

To prevent injury to personnel and damage to equipment, do not top off tank. Do not fill fuel tank above white line marked on side of tank. Movement of refrigerated container during transport will cause fuel to spill if tank is over filled.

CAUTION

To prevent damage to generator set, use only fuels specified in the generator set manual (TM 9-6115-642-10).

2. Fill fuel tank (2) to white line (3) marked on side of tank. Do not top off tank.
3. Install fuel tank filler cap (1).

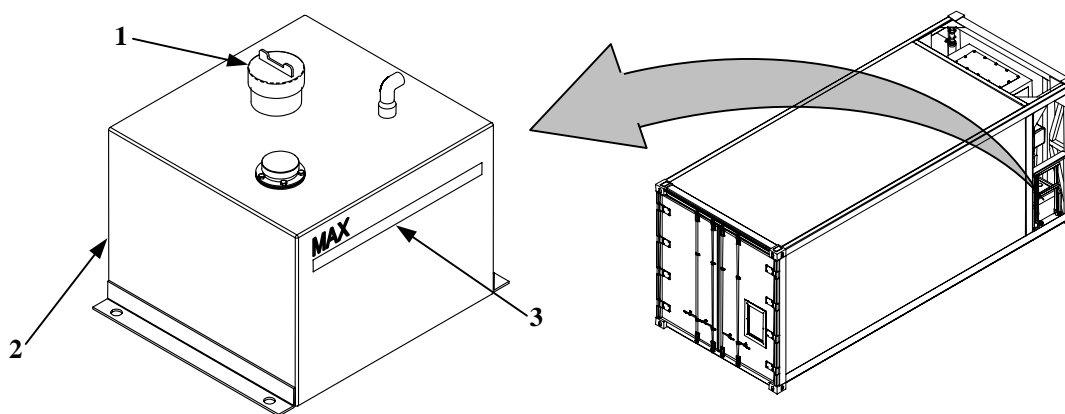


Figure 1. Auxiliary Fuel Tank

PREPARATION FOR USE AND ASSEMBLY – Continued.

TEMPERATURE RECORDER (Figure 2).

1. Unfasten latch (1) and open cover (2).
2. Lift stylus (3) until it stays out from paper chart (4).
3. Remove knurled knob (5).
4. If installed, remove old paper chart.

CAUTION

To prevent damage to temperature recorder, do not over wind timer movement.

5. Insert winding key (6) into winder hole (7) and wind timer movement clockwise until key stops. Be careful not to over wind. Replace key into storage clip (8).

NOTE

Spare charts are stored in the document holder.

6. Retrieve one new chart from the document holder. Position new chart (4), making sure chart fits under four retention tabs (9) on platen (10).
7. Rotate chart (4) so that correct day (1 to 31) and morning (M) or night (N) is aligned with STARTING TIME mark (11).
8. Install knurled knob (5).
9. Slowly lower stylus (3) so that stylus rests on chart (4).
10. Close cover (2) and fasten latch (1).

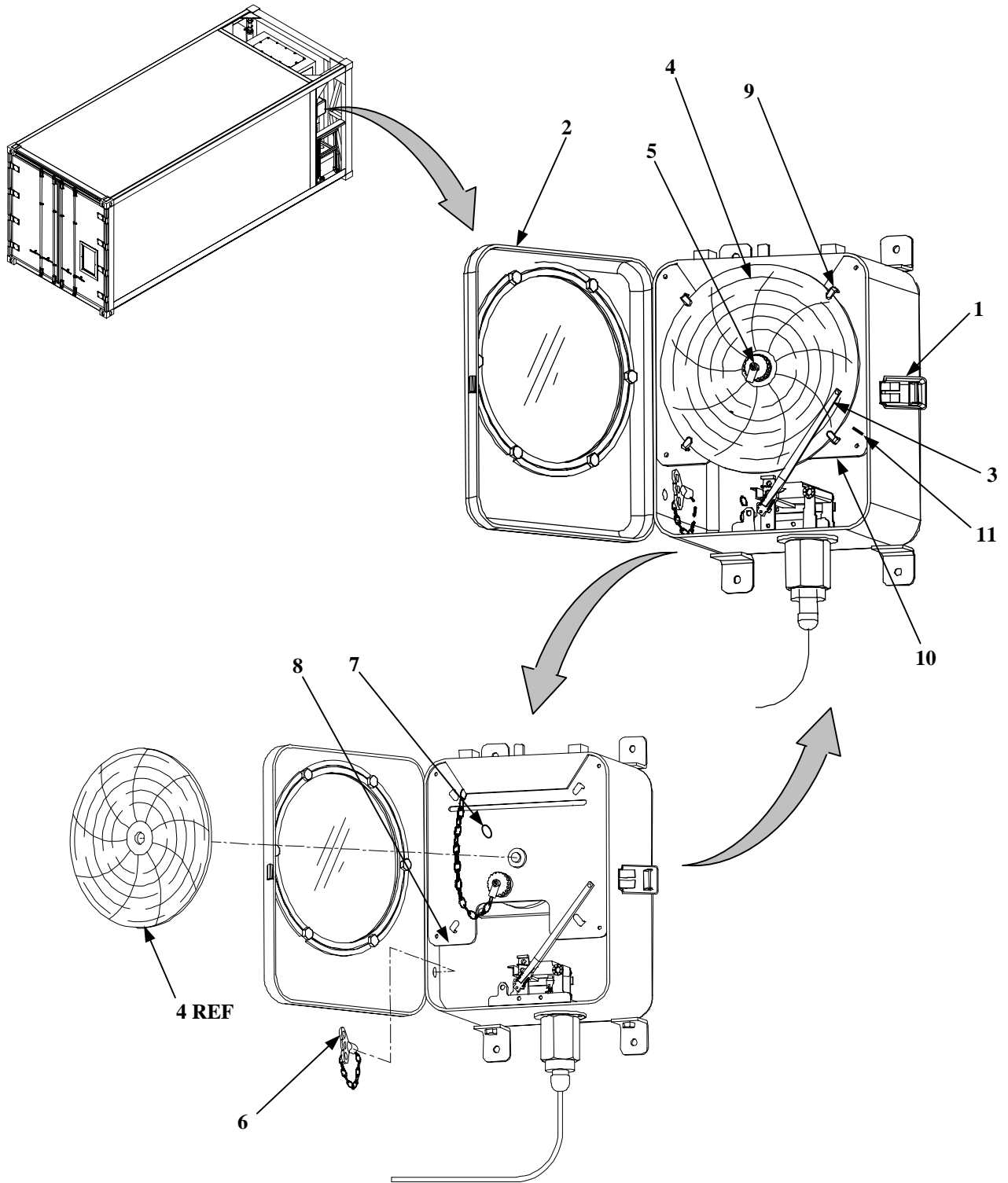


Figure 2. Temperature Recorder

PREPARATION FOR USE AND ASSEMBLY – Continued.

REFRIGERATION UNIT (Figure 3).

CAUTION

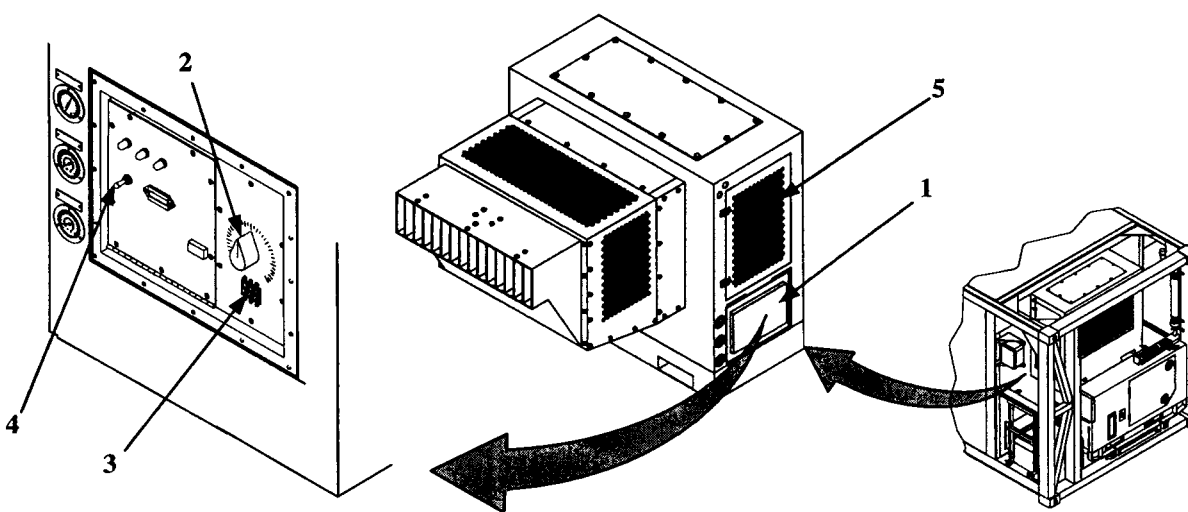
Operating the refrigeration unit with the service valves improperly set will damage the equipment. Do not operate unless you are sure it has been properly set up for operation. If you are not sure that service valves are properly set, notify Unit Maintenance.

1. Check for tag attached to control panel door indicating that all valves had been closed and unit was “pumped down”.
2. If tag is there, notify unit maintenance to service refrigeration unit and open all the necessary valves for operation.
3. If tag is not attached, then proceed with startup procedure.
 - a. Open Control Panel door (1) and secure in the upright position.
 - b. Adjust Temperature Controller (2) to desired temperature setting.
 - c. Position Circuit breaker (3) to OFF position.
 - d. Position START-RUN-OFF switch (4) to OFF.

NOTE

Push switches in the side condenser doorframes will prevent refrigeration unit from operating if the doors are open

- e. Ensure both condenser doors (5) are closed.
4. Verify the refrigeration unit is connected to an active source of 208/230 Vac, 3 phase, 50/60 Hz electric power.

**Figure 3. Refrigeration Unit**

PREPARATION FOR USE AND ASSEMBLY – Continued.**INITIAL ADJUSTMENT.**

REFRIGERATED CONTAINER (Figure 4).

1. Open right rear door (1) and left rear door (2). Remove four plugs (3) from floor drains (4).
2. Close left rear door (2) and right rear door (1).

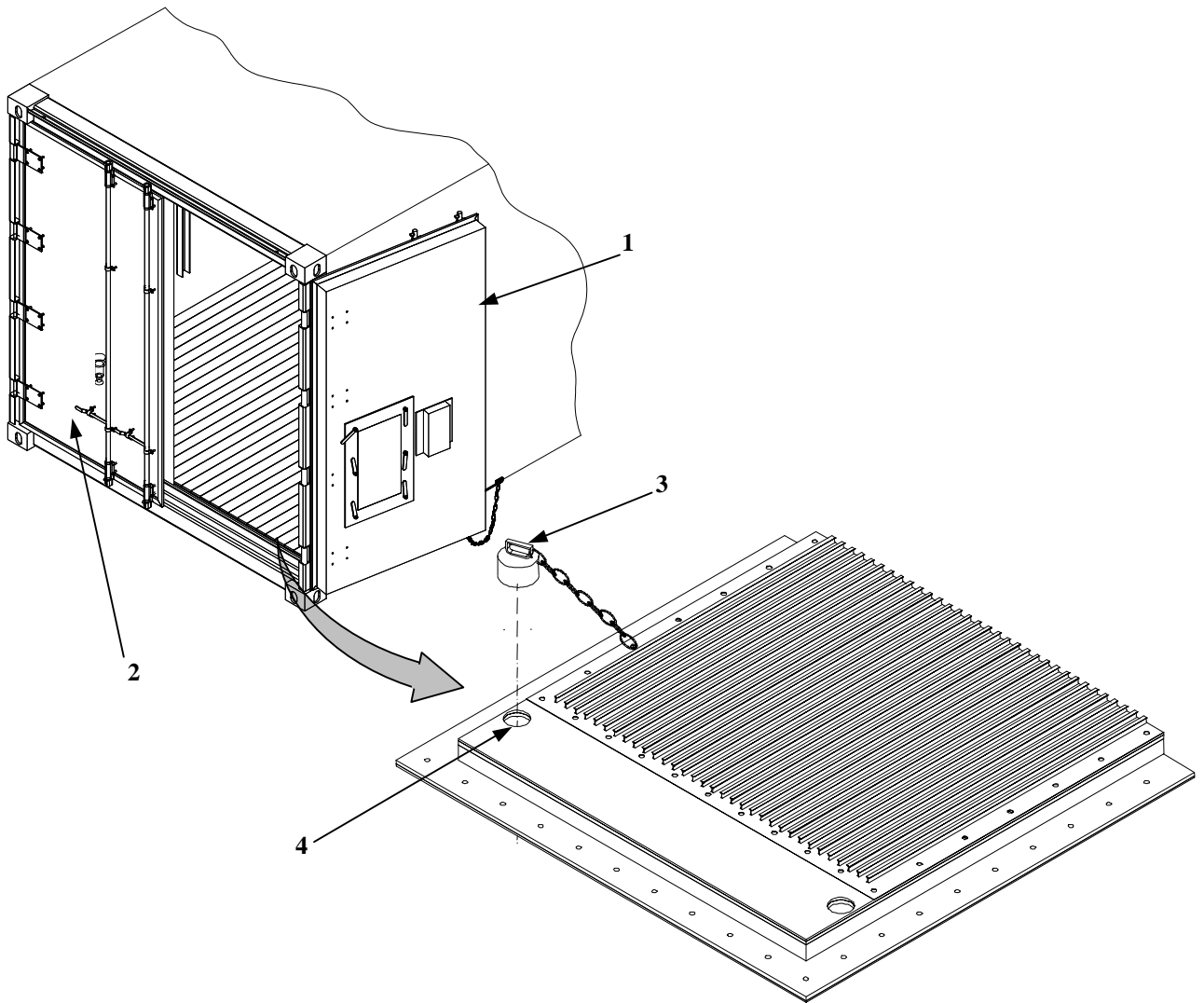


Figure 4. Refrigerated Container

PREPARATION FOR USE AND ASSEMBLY – Continued.

POWER SOURCE.

GENERATOR SET (Figure 5).

WARNING

Do not operate the generator set until it has been connected to a suitable ground. Serious injury or death can result from operating an ungrounded generator set (See WP 0017 00).

1. Pull generator set (1) out from its stored position as follows:
 - a. Remove generator set lock down bolts (2) from the extension rails (3).
 - b. With another person (one on each side), press down both extension rail retaining spring clips (4) and pull the generator set (1) away from the refrigerated container until it locks in the extended position.

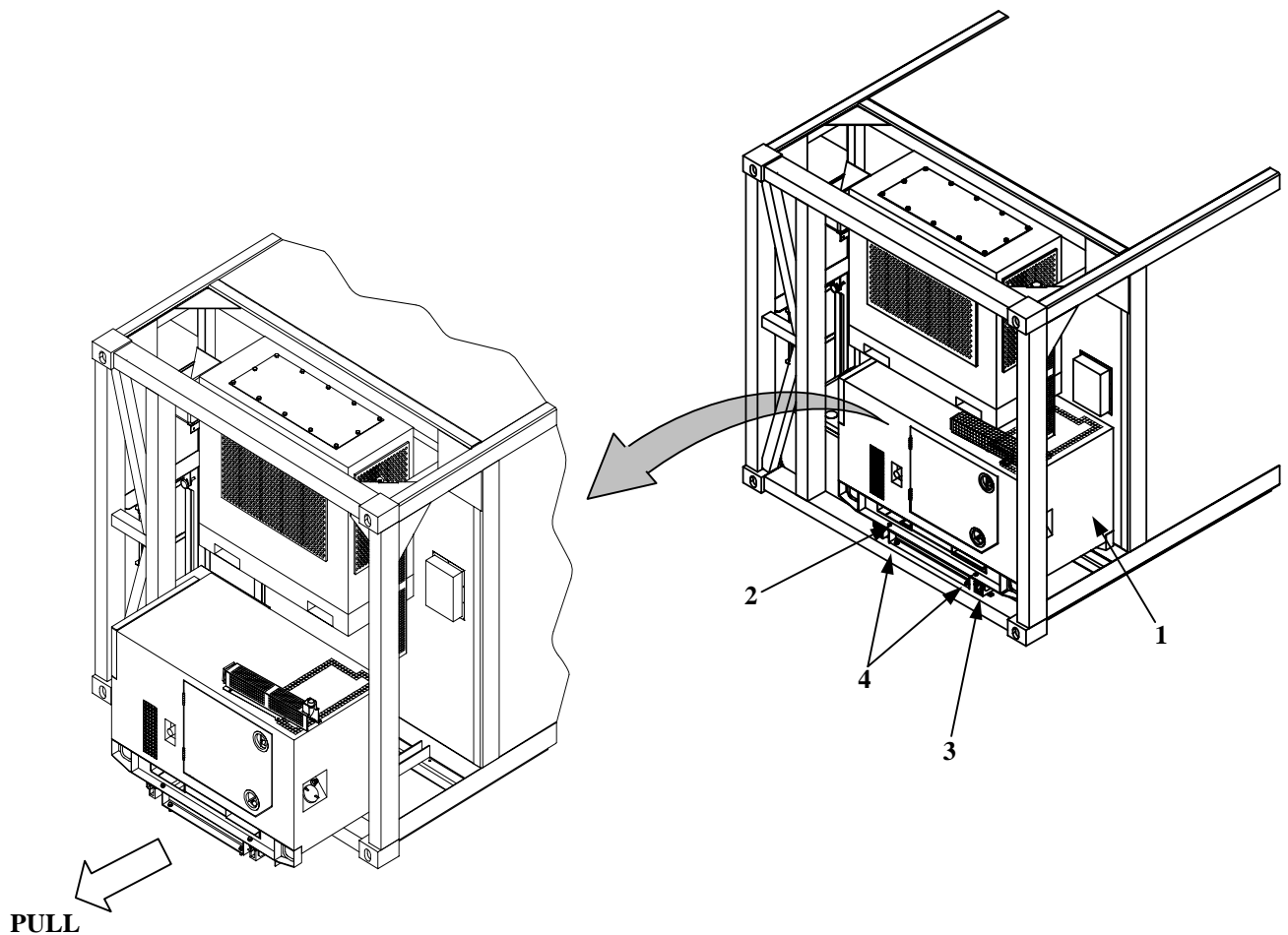


Figure 5. Generator Set

PREPARATION FOR USE AND ASSEMBLY – Continued.

- c. Open door (1, Figure 6) and place DEAD CRANK switch (2) in the normal position.

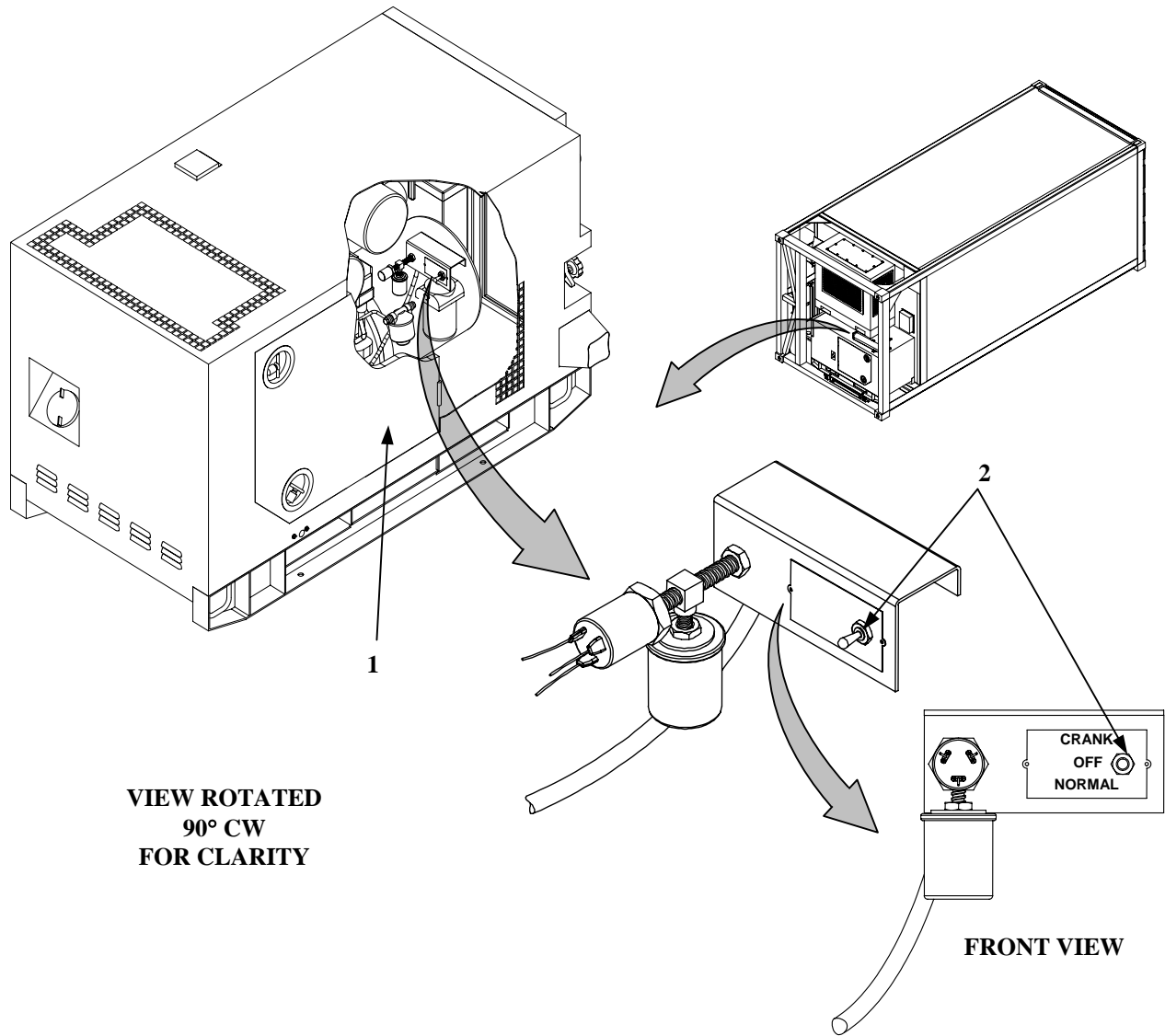


Figure 6. Generator Set Power Source (Sheet 1 of 2)

PREPARATION FOR USE AND ASSEMBLY – Continued.

CONTROL PANEL ASSEMBLY (3, Figure 6).

The generator set control panel assembly is located at the rear of the generator set and contains controls and instruments for operating the engine and the generator.

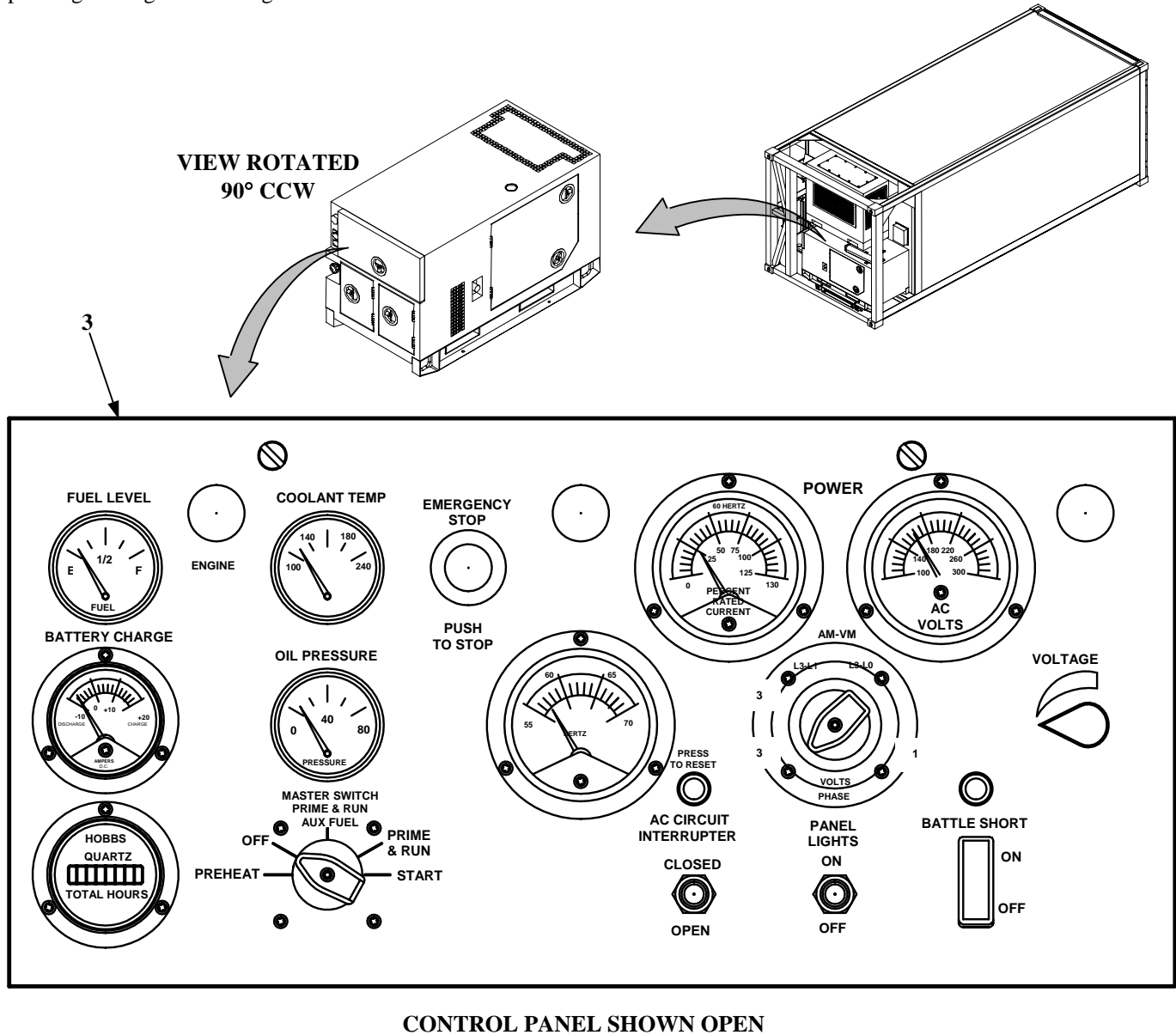


Figure 6. Generator Set Power Source (Sheet 2 of 2)

PREPARATION FOR USE AND ASSEMBLY – Continued.**EXTERNAL POWER SOURCE.**

1. Verify Generator Set power cable is disconnected and stored properly.
2. Verify external power cable is secure to its source and connected properly to the Refrigeration Unit power input connection.

OPERATING PROCEDURES – Continued.**GENERATOR STARTING PROCEDURE.****WARNING**

- High voltage is produced when generator set is in operation. Improper operation could result in personal injury or death by electrocution.
- Exhaust discharge contains deadly gases. Do not operate the generator set in enclosed areas unless exhaust discharge is properly vented outside. Severe personal injury or death due to carbon monoxide poisoning could result.
- Never attempt to start the generator set if it has not been properly grounded. Failure to observe this warning could result in serious injury or death by electrocution. Must be grounded IAW TM 9-6115-642-10.

CAUTION

Do not crank engine in excess of fifteen seconds. Allow starter to cool at least fifteen seconds between attempted starts. Failure to observe this caution could result in damage to the starter.

NOTE

Ensure all generator set access doors, except control panel access door, are closed.

OPERATING PROCEDURES – Continued.

GENERATOR STARTING PROCEDURE (Figure 7).

1. Rotate MASTER SWITCH (1) to START position.
2. Hold MASTER SWITCH (1) in START position until OIL PRESSURE GAUGE (2) reaches at least 25 psi (172 kPa), AC VOLT METER (3) has increased to its approximate rated value, and engine has reached stable operating speed.
3. Release MASTER SWITCH (1) to PRIME AND RUN position. If operating with an auxiliary fuel source, rotate MASTER SWITCH to PRIME AND RUN AUX FUEL position.
4. Check COOLANT TEMP (4) [170°-200°F (77°-93°C)] and OIL PRESSURE GAUGE (2) [25-60 psi (172-414kPa)] indicator readings.
5. Adjust VOLTAGE potentiometer (5) until AC voltmeter (3) indicates 208VAC.
6. Loosen frequency control locknut (6) and adjust the frequency adjust control knob (7) until frequency gauge (8) indicates 60HZ. Tighten locknut (6).
7. Place AC CIRCUIT INTERRUPT switch (9) to CLOSED position.
8. Ensure frequency and voltage are still at required values. Adjust if necessary.
9. Close generator control panel door (10).

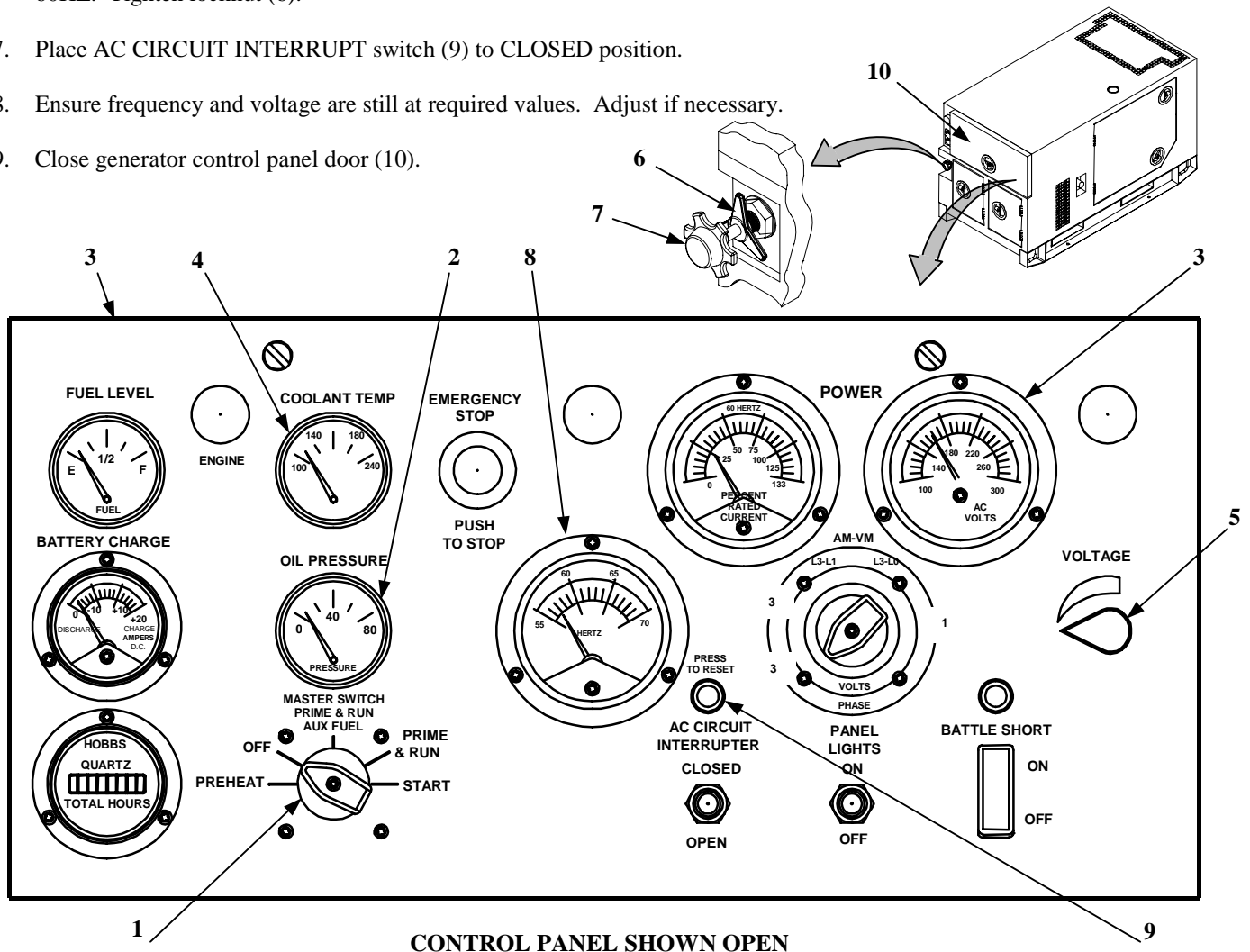


Figure 7. Generator Control Panel (Starting Procedure)

OPERATING PROCEDURES – Continued.**WARNING**

- High voltage is produced when this generator set is in operation. Improper operation could result in personal injury or death.
- With any access door open, the noise level of this generator set when operating could cause hearing damage. Hearing protection must be worn when working near the generator set while running.

10. Perform all DURING (D) OPERATION PMCS requirements in accordance with WP 0015 00 and WP 0018 00.

NATO SLAVE RECEPTACLES START OPERATION (Figure 8).

General. The NATO slave receptacle can be used to start the generator when batteries are discharged. (TM 9-6115-642-10).

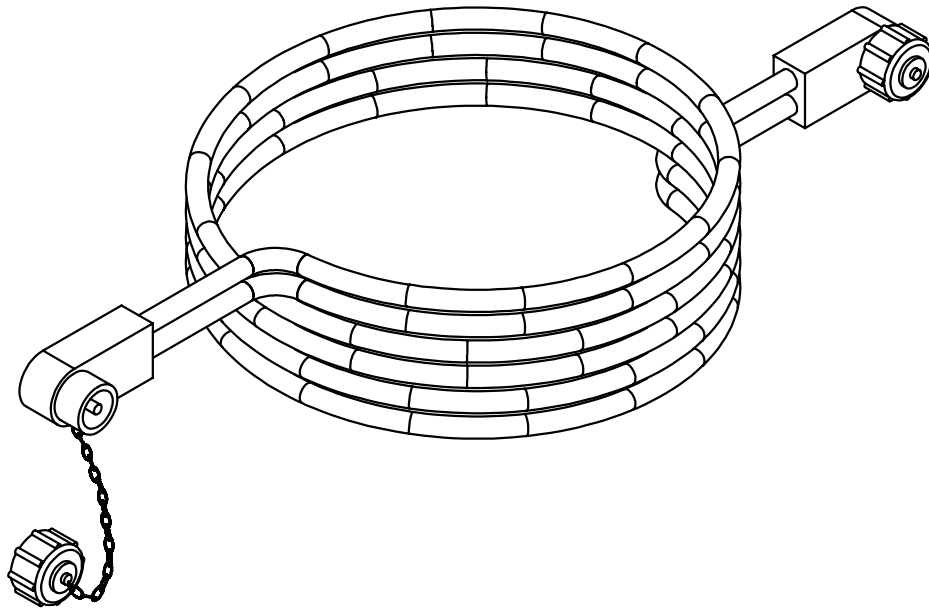


Figure 8. NATO Slave Cable

OPERATING PROCEDURES – Continued.**REFRIGERATION UNIT STARTING PROCEDURE (Figure 9).**

1. Place the circuit breaker handle (1) in the ON position.
2. Place the START/RUN, OFF switch (2) in the START/RUN position.

NOTE

Temperature inside the refrigerated container may take up to five hours to reach selected thermostat setting.

3. Close control panel access door (3).

CAUTION

Care should be taken that while generator set is being returned to its stored position, electrical cables and fuel hose are clear and not restricted.

4. With another person, release the Generator Set slide lock clamps (1, figure 9) and push unit (2) back into its stored position. Verify slide locks snap closed. Reinstall the two slide retaining bolts (3).

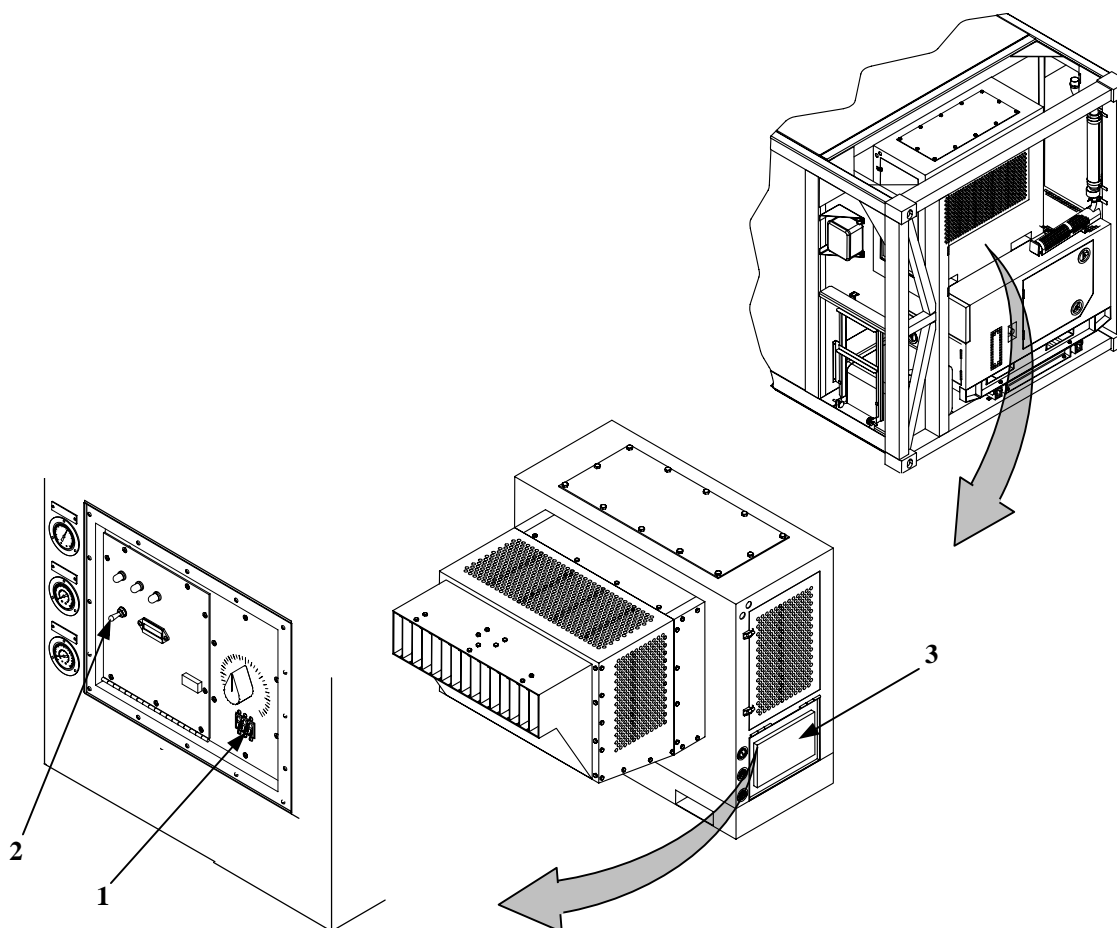


Figure 9. Refrigeration Unit Operation Procedures

OPERATING PROCEDURES – Continued.

CAUTION

When generator set is returned to the stowed position, fuel hose and power cable must be kept clear of the slides. Fuel hose and power cable could be damaged if pinched in slide.

1. Push generator set (1, Figure 10) in from its extended position as follows:
 - a. With another person (one on each side), press down the extension rail retaining spring clips (2) and push the generator set (1) towards the refrigerated container until it locks in the stored position.
 - b. Attach the generator set lock down bolts (2) to lock extension rails (3).

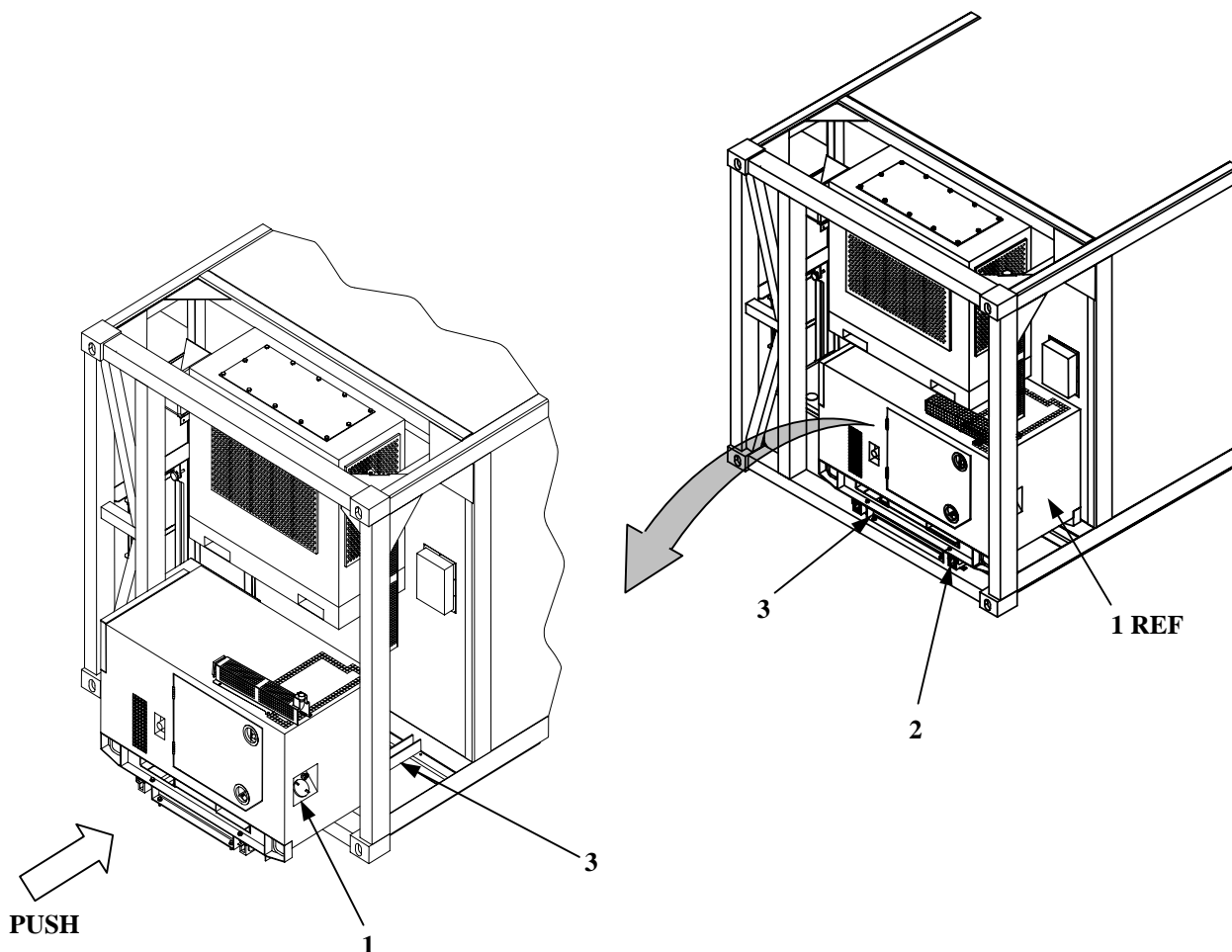


Figure 10. Generator Set

OPERATING PROCEDURES – Continued.

LOAD CONTAINER (Figure 11).

CAUTION

- To prevent heavy sweating and frosting of evaporator coils and container walls, shut down refrigeration unit if doors must be open for a long time.
- To ensure proper operation of the refrigerated container, airflow around cargo must be clear of obstructions.

1. Open right door (1) and then left door (2). Observe the following precautions when loading cargo in the container.
2. Leave a one foot space between the top of the cargo and the ceiling of the container.
3. Make sure the cargo does not block the refrigeration unit evaporator coil on container front wall.
4. Make sure that air from the refrigeration unit can flow under and around cargo.
5. Stack container with cargo. Refer to AR 700-15 (Packaging of Material) and AR 746-1 (Packaging of Army Material for Shipment and Storage).

WARNING

To prevent death or injury to personnel, make sure all personnel are clear of container before closing rear doors.

6. Inspect container interior. Verify that all personnel are out of container.

CAUTION

- Left rear door must be closed before right rear door. Failure to close left door first can result in damage to doorframes and will prevent proper sealing.

7. Close left door (2) and then right door (1).

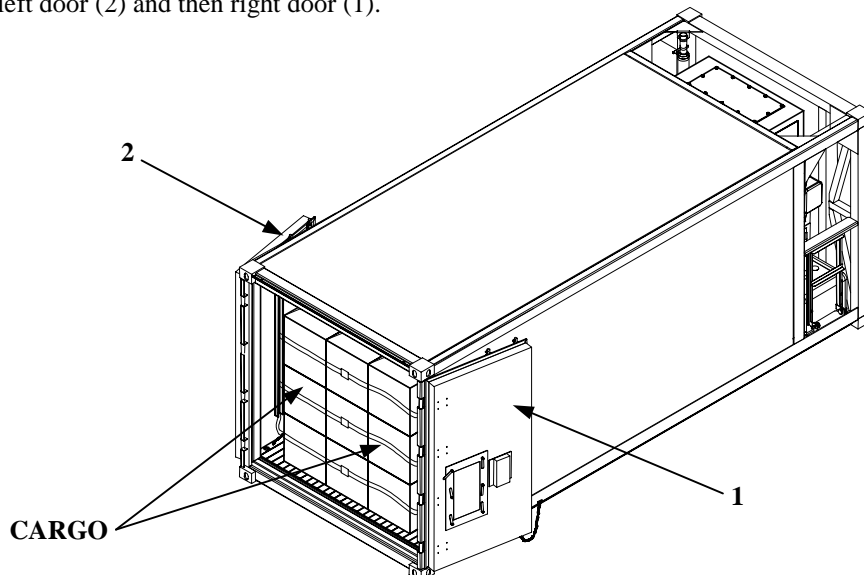


Figure 11. Refrigerated Container – Loading

OPERATING PROCEDURES – Continued.

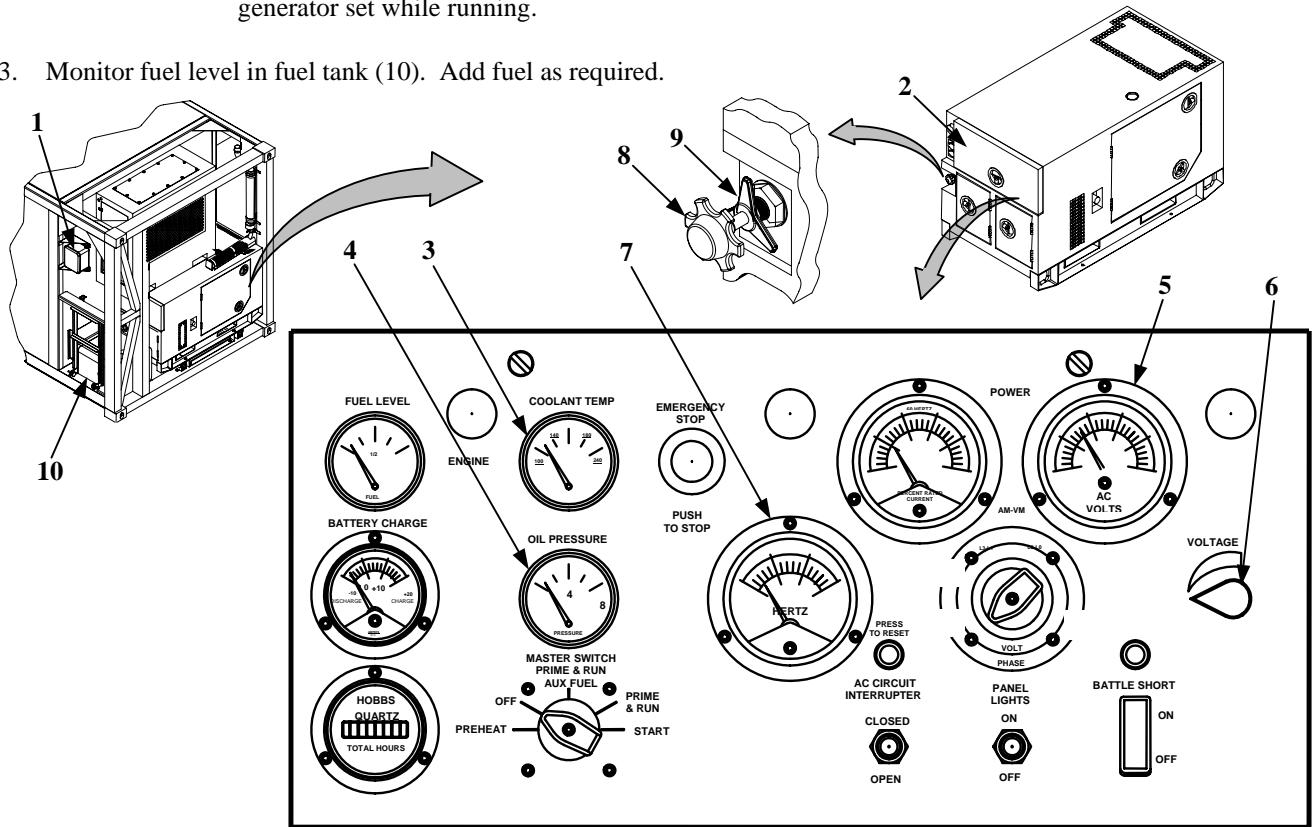
CONTINUOUS OPERATION – (Figure 12).

1. Monitor container temperature indication on recorder thermometer (1). Make sure temperature is correct for type of cargo being stored in container.
2. Check operation of generator set:
 - a. Open control panel door (2). Door will not lift completely open. Check COOLANT TEMP (3) [170°-200°F (77°-93°C)] and OIL PRESSURE (4) [25-60 psi (172-414pKa)] indicators for normal readings.
 - b. Check AC Voltmeter (5); should indicate 208VAC. Adjust VOLTAGE by adjusting potentiometer (6) if required.
 - c. Check frequency gauge (7); should indicate 60HZ. Adjust frequency control knob (8) if required by first loosening locknut (9). Tighten locknut when adjustment is complete.

WARNING

- High voltage is produced when this generator set is in operation. Improper operation could result in personal injury or death.
- With any access door open, the noise level of this generator set when operating could cause hearing damage. Hearing protection must be worn when working near the generator set while running.

3. Monitor fuel level in fuel tank (10). Add fuel as required.



CONTROL PANEL SHOWN OPEN

Figure 12. Generator Set Operations Check

CONTINUOUS OPERATION – Continued.

1. Check operation of refrigerated unit (Figure 13):

- a. Open control panel door (1) and secure in the upright position.
- b. Check the REFRIGERATION TEMPERATURE (2) periodically to be sure it is within 15°F (7°C) of the temperature set on the TEMPERATURE CONTROL (3).
- c. Check the pressure DISCHARGE PRESSURE gauge (4) periodically to be sure it is between 165 and 250 psi (1138.5 and 1725 kPa).
- d. Check the compound SUCTION PRESSURE gauge (5) periodically to be sure it is between 0 and 15 psi (0 and 103.5 kPa).

NOTE

An occasional flash of bubbles in the sight indicator (SIGHT GLASS) port is normal. The sight indicator can be viewed looking through the side condenser door.

- e. Check the SIGHT GLASS port (6) to be sure it is clear. The center indicator should be green or chartreuse in color.
- f. Check oil level (7).
- g. Close control panel door (1).

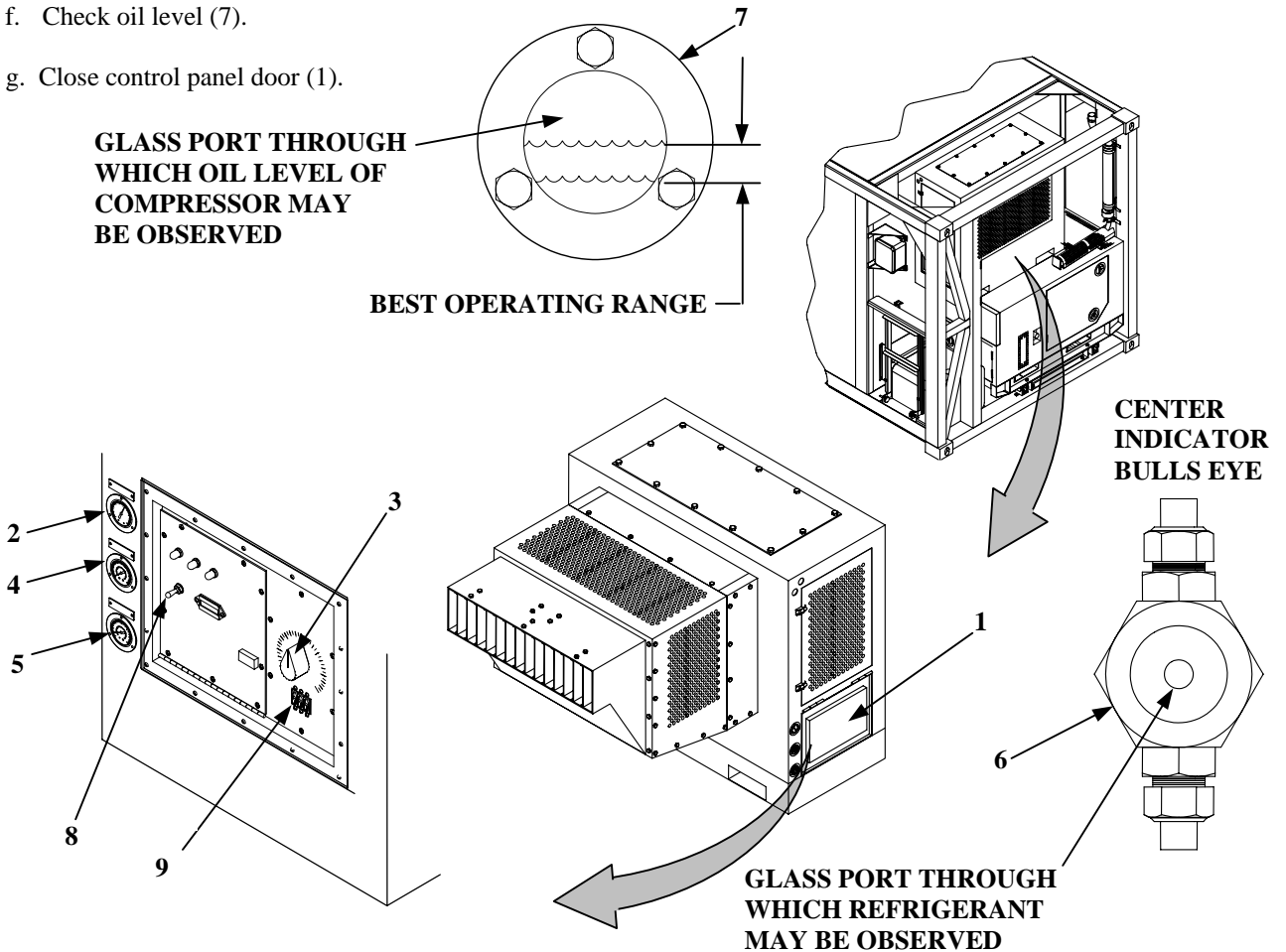


Figure 13. Refrigerated Container, Continuous Operation, Refrigeration Unit

OPERATING PROCEDURES – Continued.

SHUTDOWN.

NOTE

Refrigeration unit must be shut down first and then the generator set.

1. Shut down refrigeration unit (Figure 14).
 - a. Open control panel door (1) and secure in the upright position.
 - b. Place the START/RUN, OFF toggle switch (2) in the OFF position.
 - c. When the refrigeration unit stops running, place the circuit breaker (3) in the OFF position.

If the refrigeration unit is to be left off for several days, it must be pumped down. Notify Unit Maintenance.

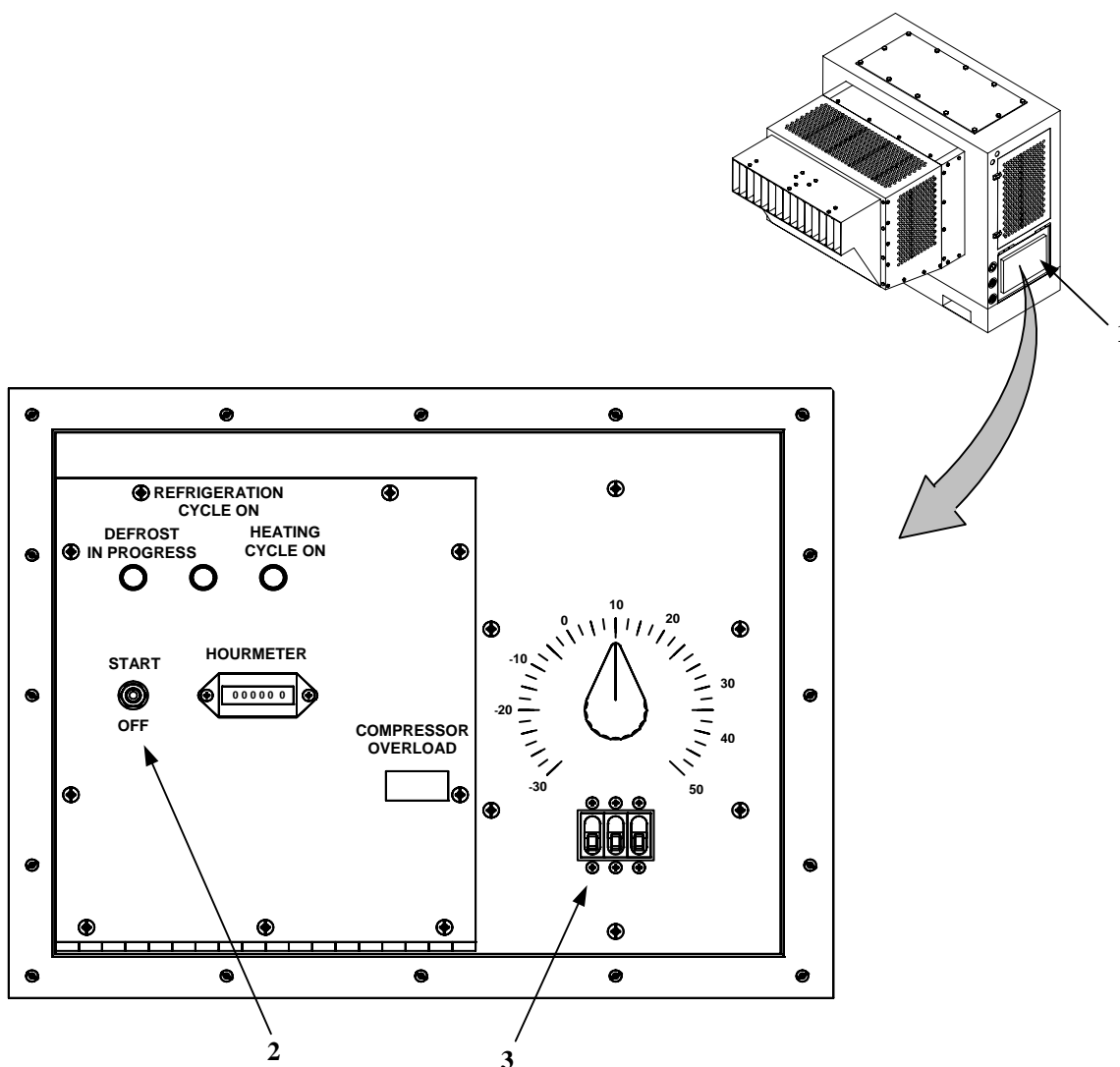


Figure 14. Refrigerated Container, Shutdown Operating Procedures, Refrigeration Unit

OPERATING PROCEDURES – Continued.

2. NORMAL Shutdown, generator set (Figure 15).
 - a. Open control panel door (1).
 - b. Place AC CIRCUIT INTERRUPTER switch (2) in OPEN position.
 - c. Allow generator set to operate five minutes with no load applied.
 - d. Place MASTER SWITCH (3) in OFF position.
 - e. Perform all AFTER OPERATION (A) PMCS requirements in accordance with TABLE 7.
3. EMERGENCY STOPPING GENERATOR SET. Depress EMERGENCY STOP pushbutton (4).

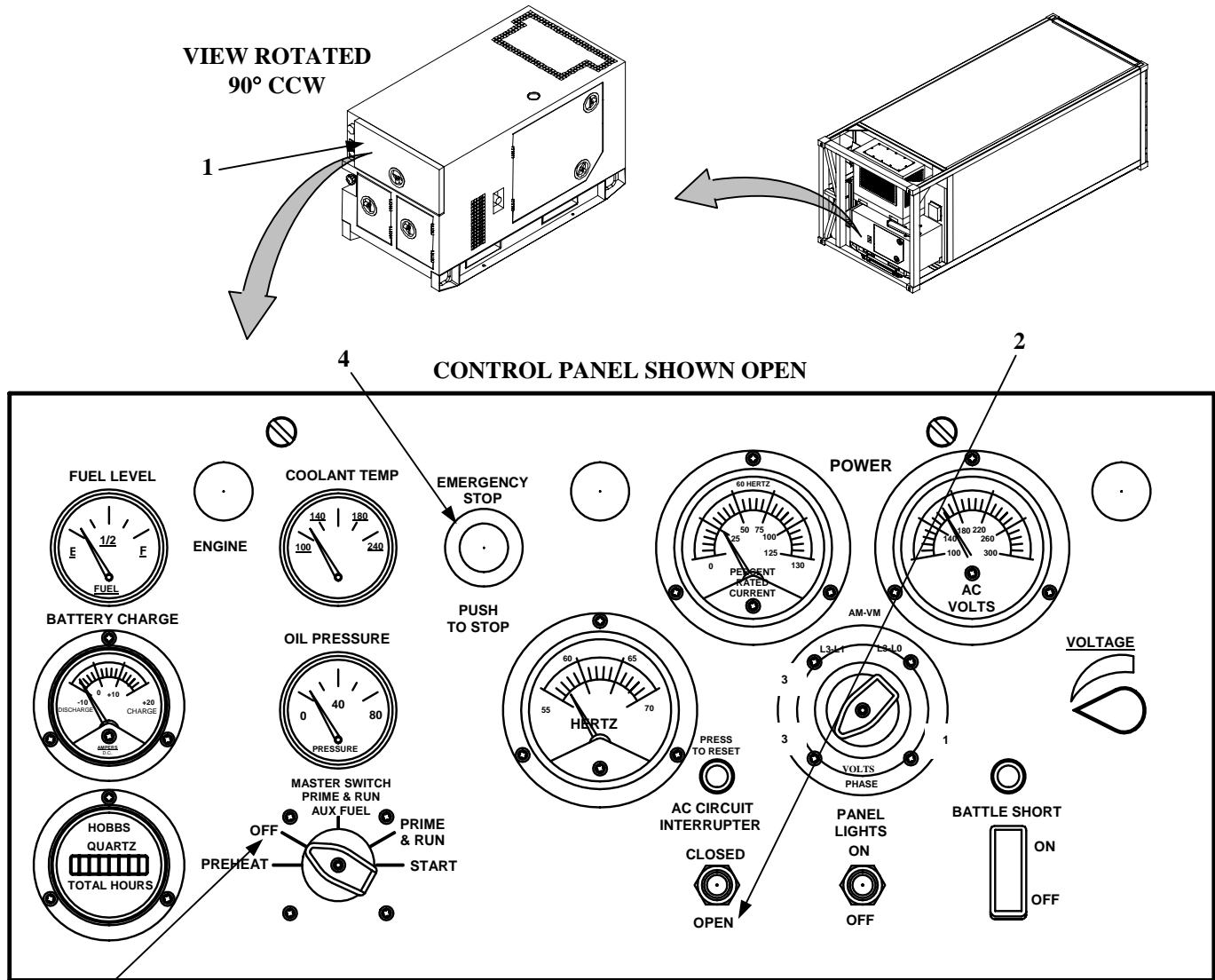
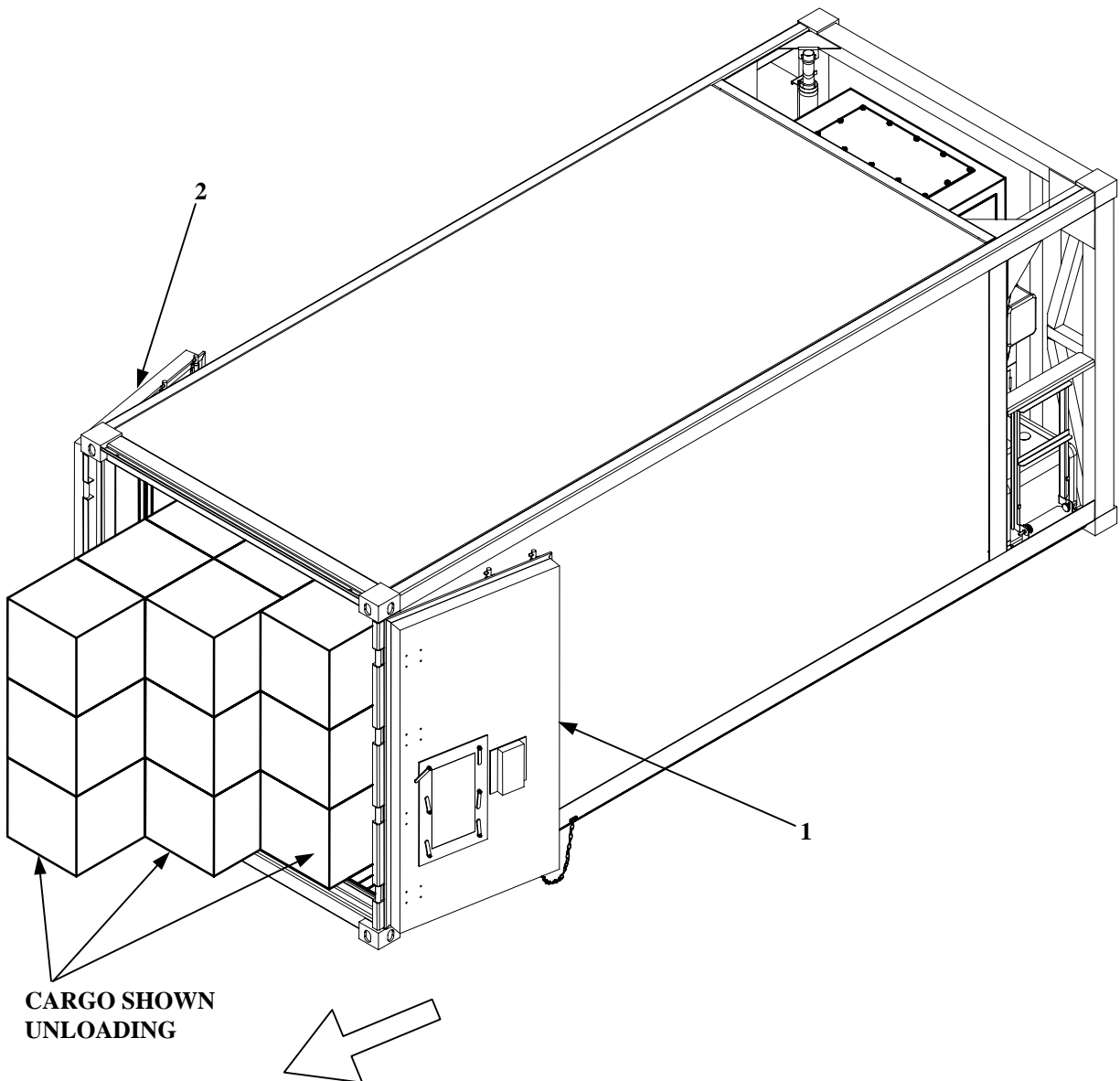


Figure 15. Refrigerated Container, Shutdown Operating Procedures, Generator Set

OPERATING PROCEDURES – Continued.**UNLOADING (Figure 16).**

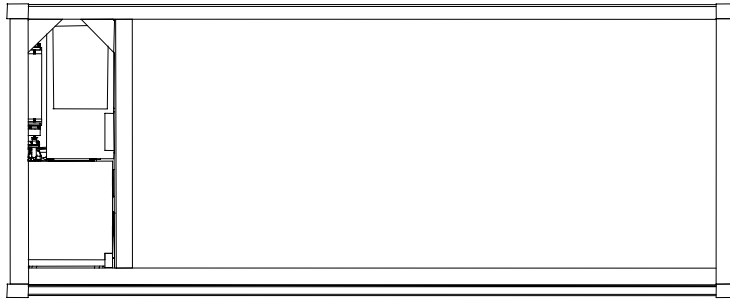
1. Open right door (1) and then left door (2).
2. Unload refrigerated container. Refer to: AR 700-15 (Packaging of Material) and AR 746-1 (Packaging of Army Material for Shipment and Storage).
3. Close left door (2) and then right door (1).

**Figure 16. Refrigerated Container - Unloading**

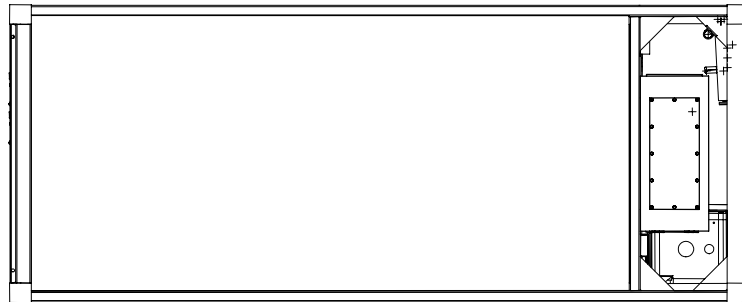
DECALS AND INSTRUCTION PLATES.

REFRIGERATED CONTAINER.

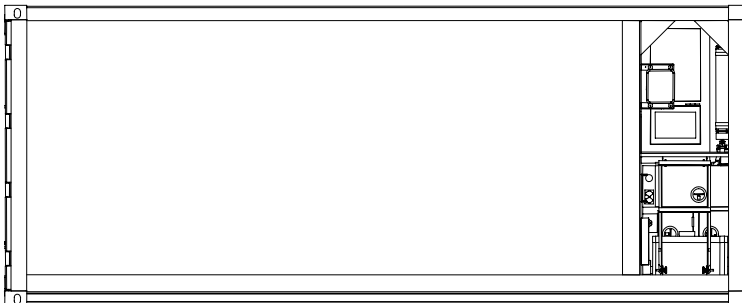
Instruction plates and stencils are used on the refrigerated container to advise the operator of proper operating procedures, additional operating information, and cautions to be observed during use of the equipment. The following illustrations show where identification plates and stencils are located on the container.



RIGHT SIDE VIEW



TOP VIEW



LEFT SIDE VIEW

Figure 17. Container Exterior View

DECALS AND INSTRUCTION PLATES – Continued.

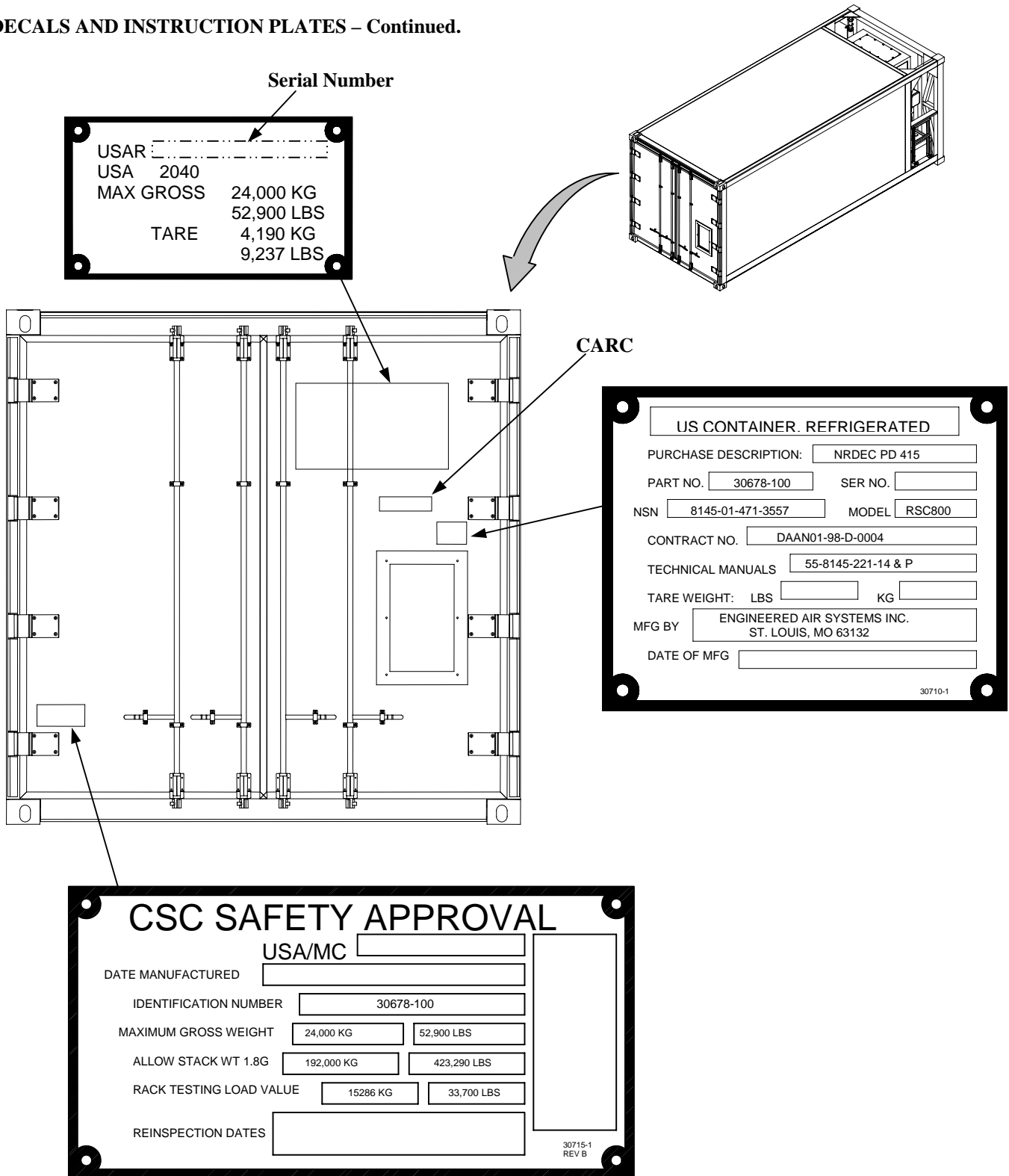


Figure 18. Container External View (Rear)

DECALS AND INSTRUCTION PLATES - Continued.

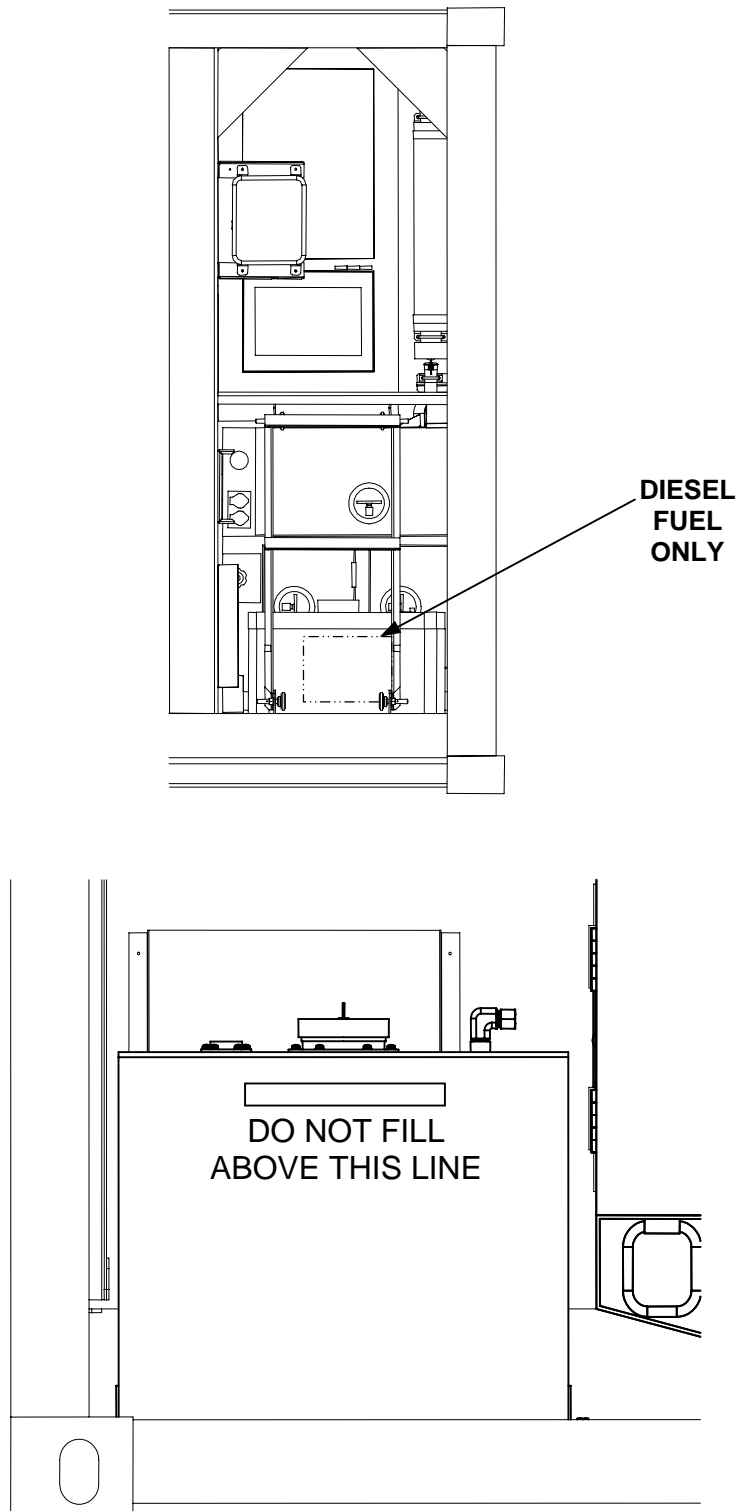


Figure 19. Container External View – Auxiliary Fuel Tank Markings

DECALS AND INSTRUCTION PLATES – Continued.

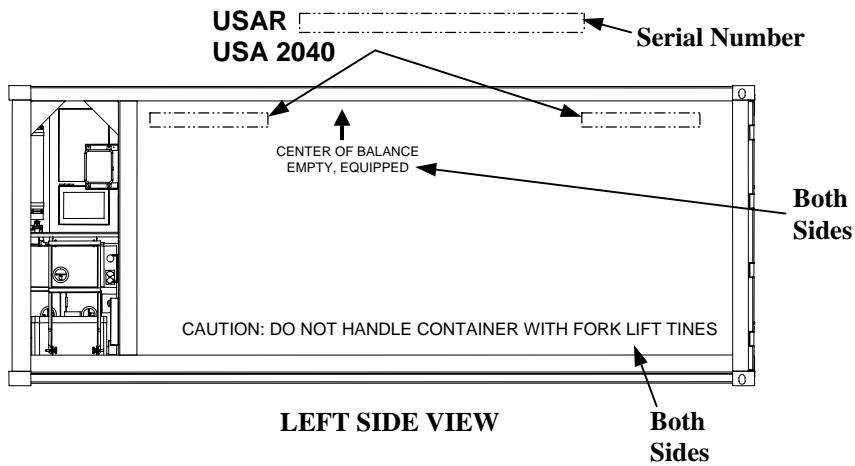
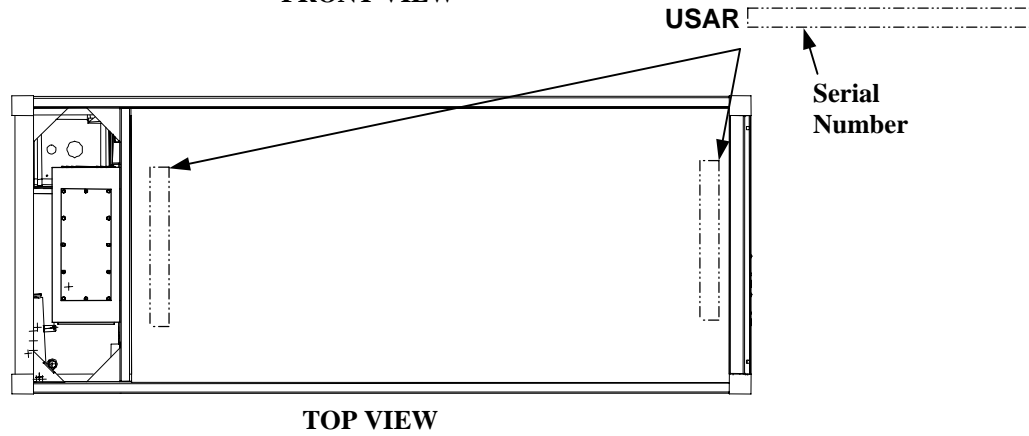
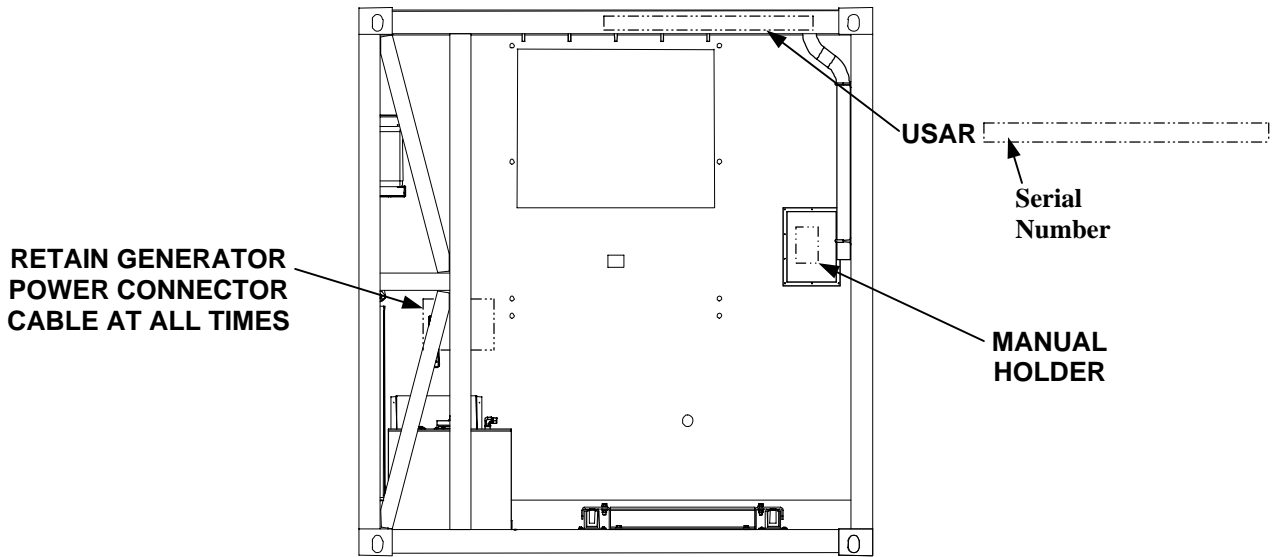


Figure 20. Container Exterior View – Decal Locations

DECALS AND INSTRUCTION PLATES – Continued.

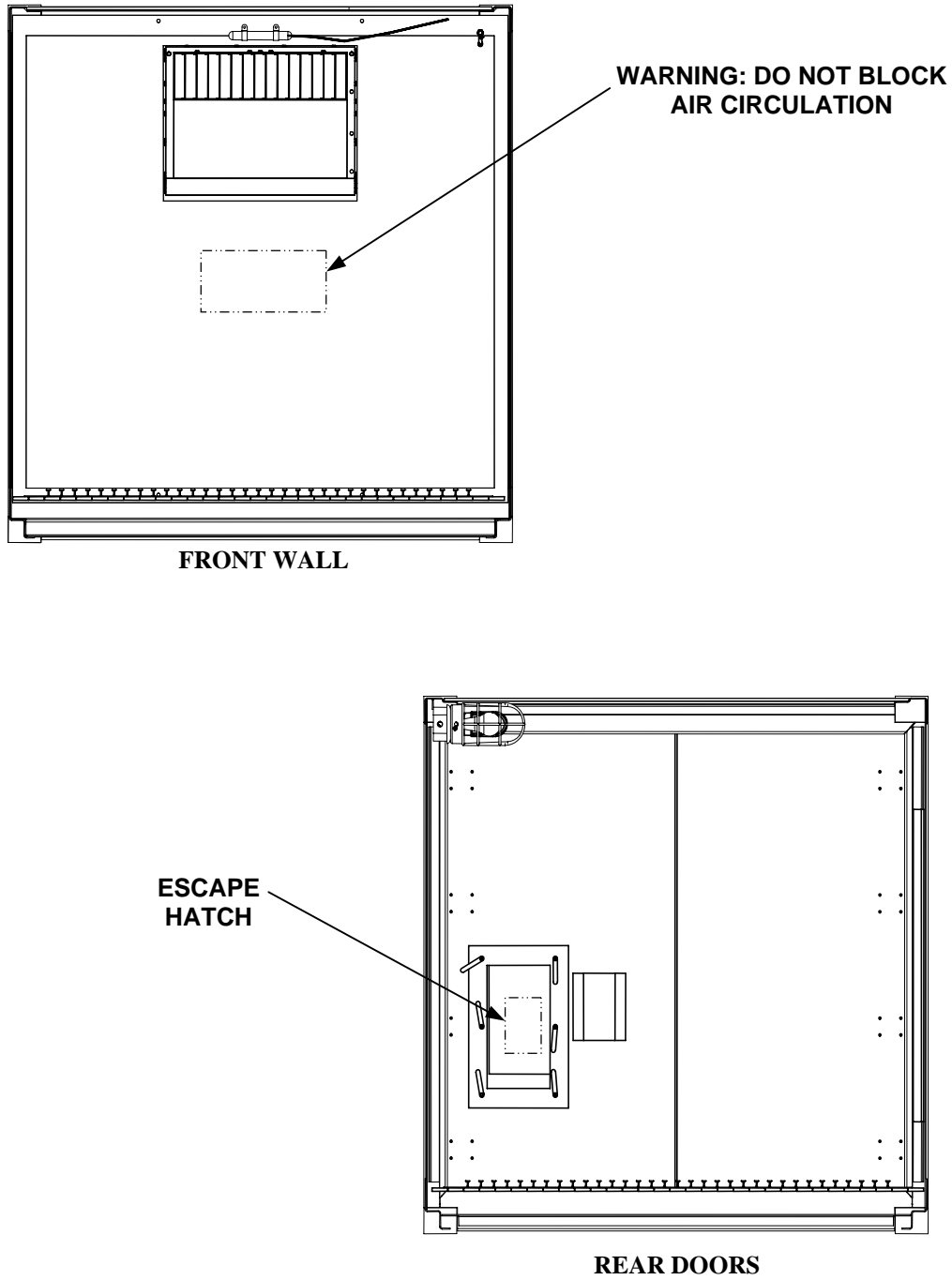


Figure 21. Container Interior View – Decal Locations

DECALS AND INSTRUCTION PLATES – Continued.

GENERATOR SET.

Reference TM 9-6115-642-10 for decals and instruction plates.

REFRIGERATION UNIT.

Reference TM 9-4110-285-13 for decals and instruction plates.

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER USUAL CONDITIONS – Continued**

0006 00

PREPARATION FOR MOVEMENT.**CAUTION**

To prevent damage to container cargo, make sure cargo is securely packed in container.

1. Check container cargo. Make sure all boxes and packages are properly secured. Refer to AR 746-1, Packaging of Army Material for Shipment and Storage.
2. Verify that no personnel are inside the container.
3. Verify that all doors and guards are installed and securely fastened.
4. Check temperature recorder indication. Verify container temperature is correct for type of cargo being stored. If required, allow refrigeration unit to operate until temperature has stabilized.

CAUTION

To prevent damage to cargo, make sure electrical power, external or generator set, is available at new work site. Refrigeration unit should only be shut down for short periods of time as required to load/unload container from transport vehicle.

5. Shut down refrigeration unit per REFRIGERATION UNIT OPERATION (Refer to WP 0006 00).
6. If generator set is not being used, shut down generator set per generator set shutdown procedures.
 - a. Shut down generator set. Refer to WP 0006 00.
 - b. Notify Unit Maintenance to disconnect ground cable and remove ground rod assembly. Store ground rod sections in holding clip on right side of skid base. Store cable and couplings in storage box.
 - c. Secure all generator set access doors and panels.
7. If external power is being used, shut down power source. Notify Unit Maintenance to disconnect refrigeration unit external power cable from power source.

WARNING

- A loaded refrigerated container is extremely heavy. To prevent injury to personnel and damage to equipment, use a hoist and sling rated at a minimum capacity of 40 tons (80,000 pounds).
- Commercial container handling equipment (cranes, top-lift devices, front and side loaders and self loading transporters) is suitable for handling the refrigerated container.
- Always use spreader frame when top lifting container.
- Containers must be lifted vertically from four corner fittings.
- Do not lift container with cable slings at an angle.
- Never use forklift to move, lift or push container unless forklift is designed for use with the Refrigerated Container System (MIL-VAN).

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER USUAL CONDITIONS – Continued**

0006 00

PREPARATION FOR MOVEMENT – Continued.

8. Have refrigerated container loaded onto trailer/chassis, railway car, or ship as required. **Do Not Stack** more than 9 (nine) containers high.
9. If container will be operated off external power, notify Unit Maintenance to connect refrigeration unit power cable to power source.
10. If container will be operated off generator set, start generator per GENERATOR SET OPERATION (Refer to WP 0006).
11. Start refrigeration unit per REFRIGERATION UNIT OPERATION (Refer to WP 0006).

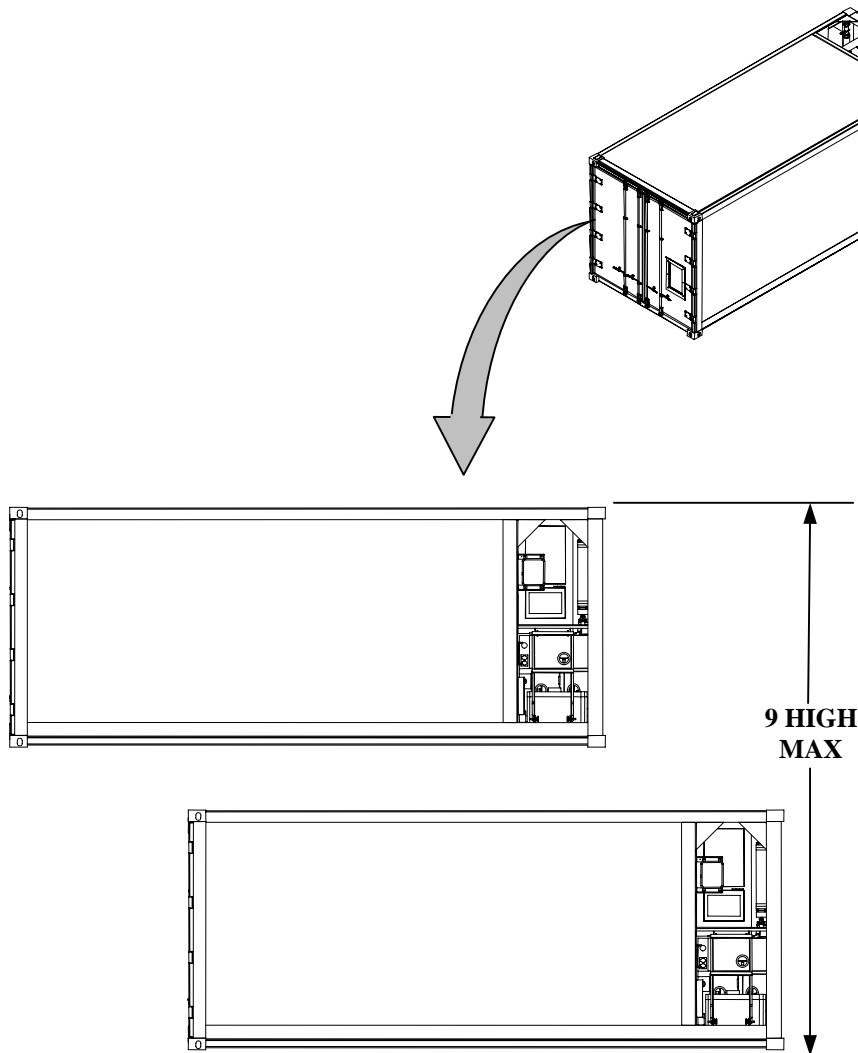


Figure 22. Refrigerated Container System

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS**

0007 00

INITIAL SET UP:

Maintenance Level
Operator

Personnel Required:
One

References:

TM 9-6115-642-10
TM 9-4110-258-13
FM 3-5
FM 3-3

GENERAL.

The equipment is designed to operate in ambient temperature ranging from +100° to -40°F. This Work Package covers operating of the Refrigerated Container System in extreme cold, extreme heat, rain or humid conditions, as well as operating in dusty, sandy and salty environments.

OPERATION IN EXTREME COLD (BELOW 0°F).

REFRIGERATED CONTAINER SYSTEM (Figure 1).

WARNING

FROSTBITE

Do not touch cold metal parts with bare hands when operating under extreme cold conditions. Frostbite can cause permanent injury.

CAUTION

In extremely cold weather, if the rear doors remain open for a long period of time, the door seals become hard and brittle. Do not close doors. The rear doors will be difficult to close and the seals will be damaged. Warm seals before closing rear doors.

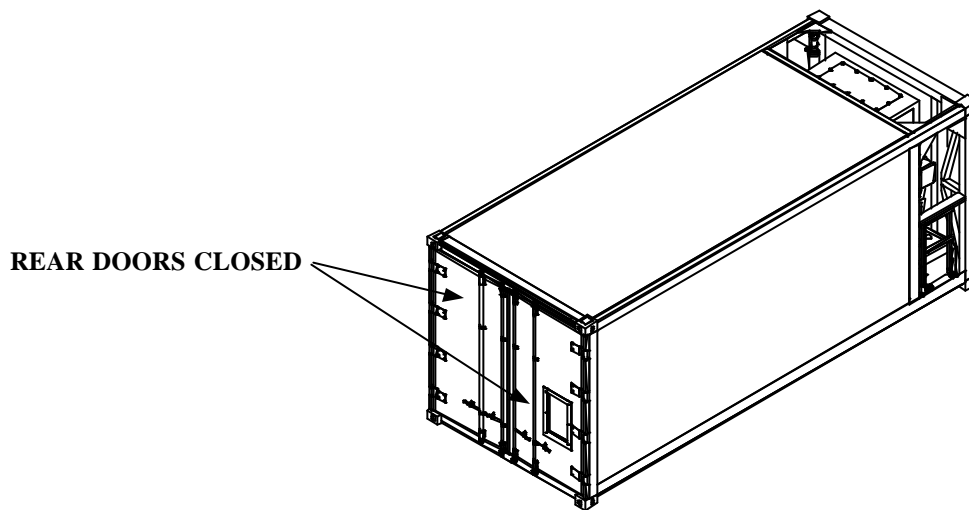


Figure 1 Refrigerated Container System Operations (Sheet 1 of 2)

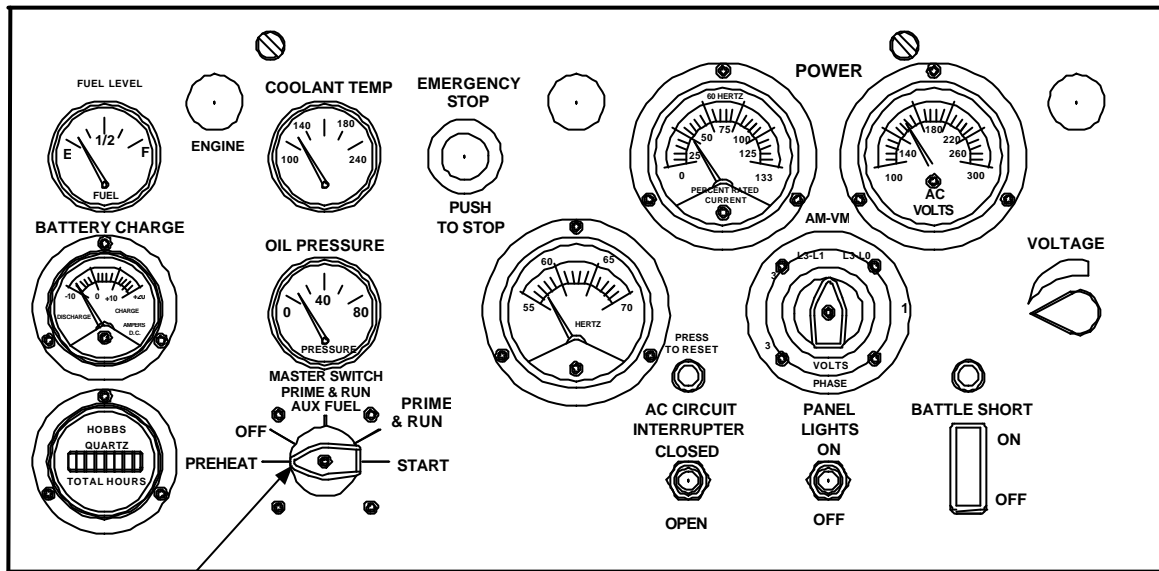
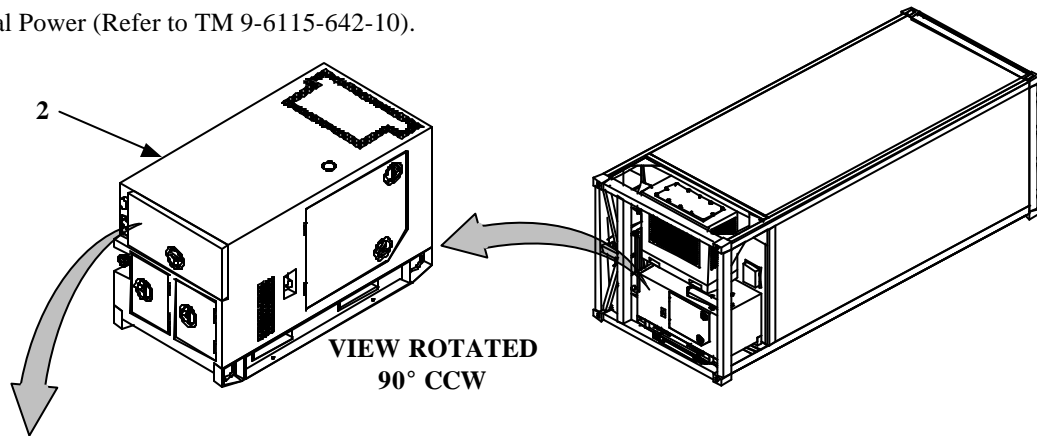
**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS – Continued**

0007 00

REFRIGERATED CONTAINER SYSTEM (Figure 1) – Continued.

To warm the rear doors seals during extremely cold weather, proceed as follows:

1. Apply power.
 - a. Generator Set:
 - 1) Turn MASTER SWITCH (1) to PREHEAT position for a maximum of 30 seconds prior to cranking engine to start up.
 - 2) Start Generator set (2) (Refer to WP 0006 00).
 - b. External Power (Refer to TM 9-6115-642-10).



CONTROL PANEL SHOWN OPEN

Figure 1. Refrigerated Container System Operations (Sheet 2 of 2)

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS – Continued**

0007 00

REFRIGERATED CONTAINER SYSTEM (Figure 2) – Continued.

2. Start refrigeration unit (4) and operate in heating mode at highest setting (refer to WP 0006 00).

CAUTION

In extremely cold weather, if the rear doors remain open for a long period of time, the door seals become hard and brittle. Do not close doors. The rear doors will be difficult to close and the seals will be damaged. Warm seals before closing rear doors.

3. Close rear doors (5) and (6) as much as possible without compressing door seals. Do not close door release handles.
4. Allow refrigeration unit (4) to operate in heating mode until door seals warm up. When warm, door seals will be soft and flexible.

CAUTION

To prevent damage to rear door seals, keep doors closed during extremely cold weather. Open only for loading or unloading.

5. After seals have warmed up, close left rear door (5) and right rear door (6).

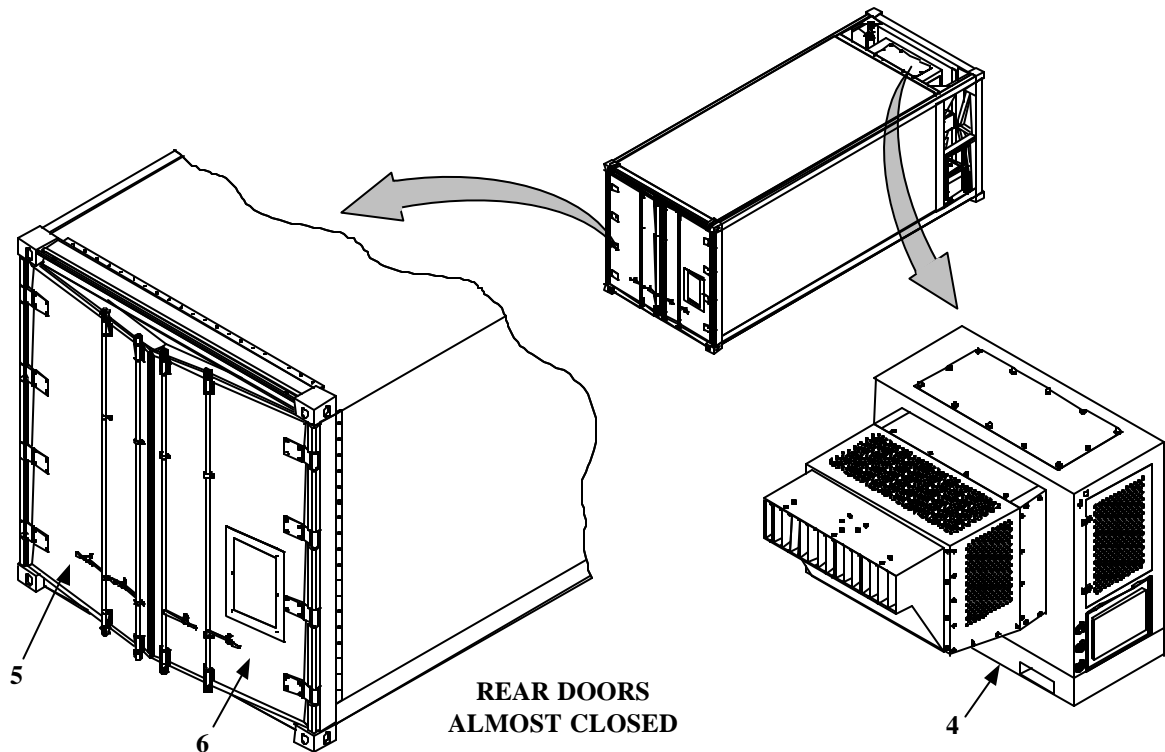


Figure 2 Refrigerated Container System Operations - Doors

REFRIGERATION UNIT (Figure 3).

The refrigeration unit is designed to operate under adverse conditions and does not require additional precaution procedures.

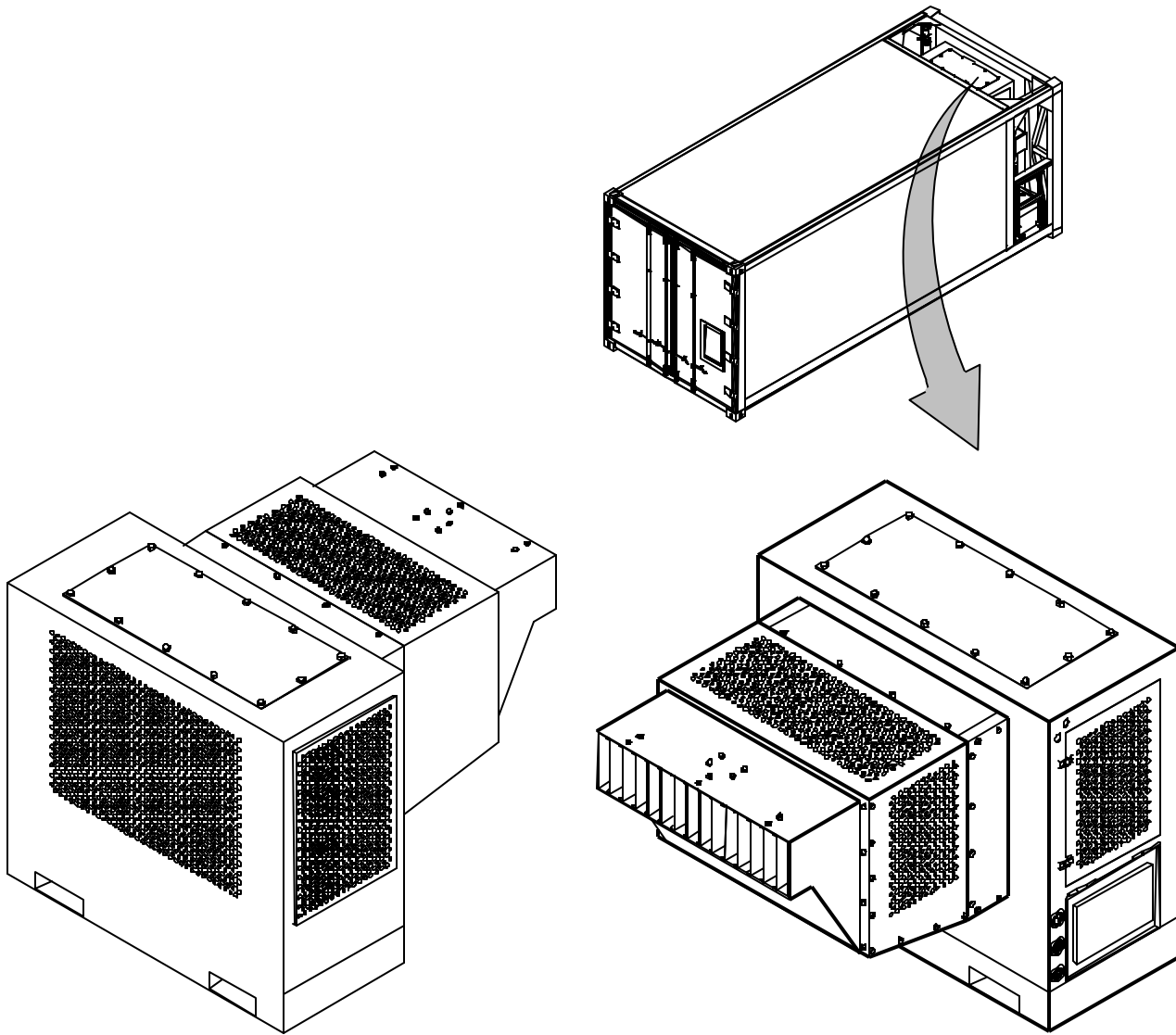


Figure 3. Refrigeration Unit Operations

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS – Continued**

0007 00

GENERATOR SET (Figure 4).

The generator set operates in ambient temperatures as low as -25°F (-31°C) without special winterization equipment. To ensure satisfactory operation under extreme cold weather the following steps must be taken:

1. Keep generator set and surrounding area as free of ice and snow as practical.
2. Keep fuel tank full to protect against moisture, condensation and accumulation of water.
3. Ensure that proper grade diesel fuel is used.
4. Keep batteries free from corrosion and in a well-charged condition.
5. Preheat engine prior to starting by placing Master Switch (1) in the preheat position for thirty seconds. Operate Generator Set (WP 0006 00).

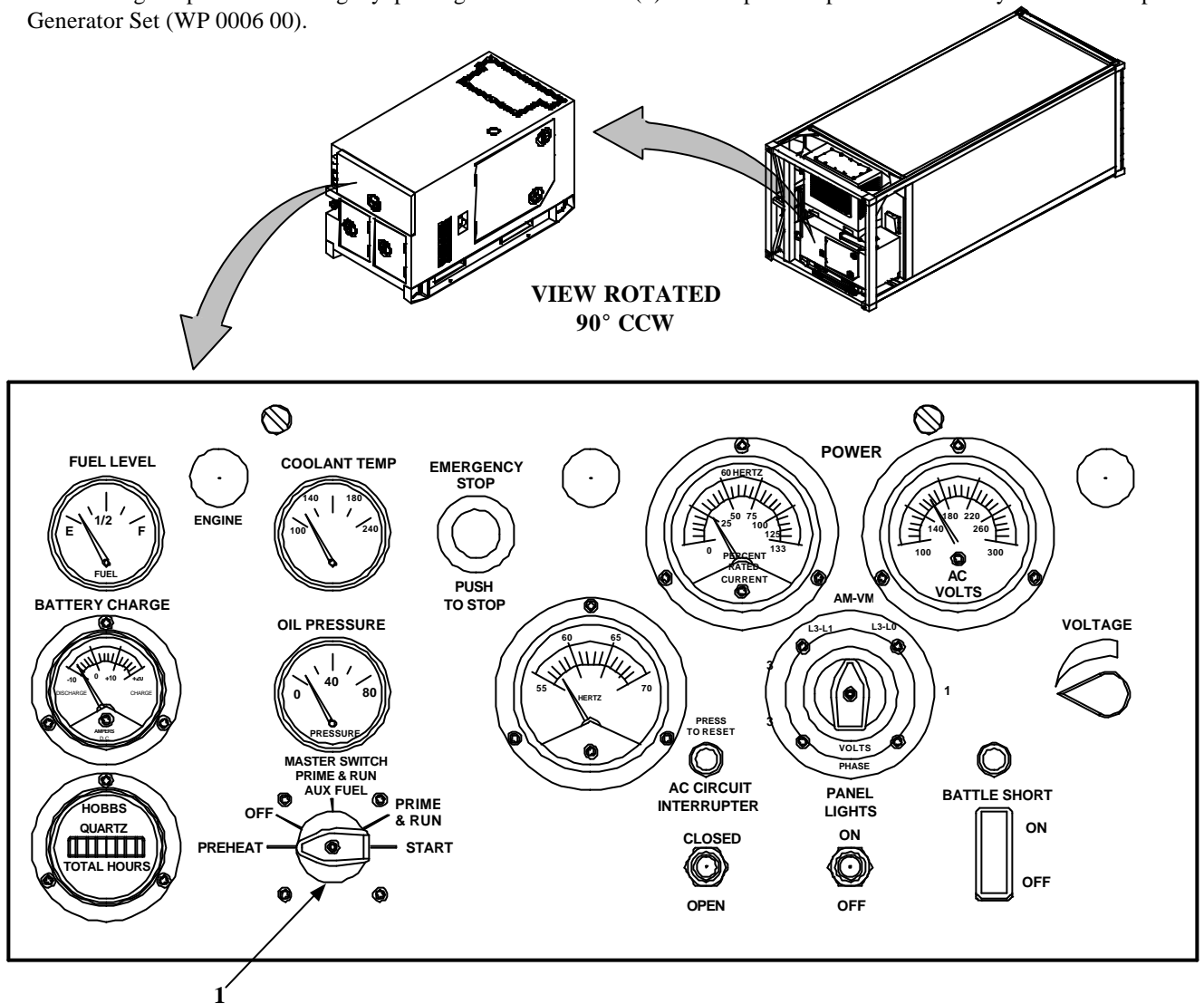


Figure 4. Generator Set Operations

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS – Continued**

0007 00

OPERATION IN EXTREME HEAT (Figure 5).

Observe the following precautions when operating the refrigerated container in extreme heat:

1. If possible, keep container out of direct sunlight. Shade container with a tarp or similar type cover.
2. Generator operation in extreme heat - above 120°F (49°C).
 - a. Check vents and radiator air passages frequently for obstructions.
 - b. Check coolant temperature indicator frequently for any indication of overheating.
 - c. Allow sufficient space for fuel expansion when filling fuel tank.
 - d. Keep generator clean and free of dirt. Clean obstructions from generator intake and outlet screens.
3. Do not block air circulation around refrigeration unit. Keep area clear of equipment and other obstructions.
4. Periodically inspect refrigeration unit condenser coils. Coils must be kept clean.
5. Periodically inspect refrigeration unit evaporator coils (inside container). If frost becomes 1/8 to 1/2 inch thick before unit defrosts, perform manual defrosting of refrigeration unit (TM 9-4110-258-13).

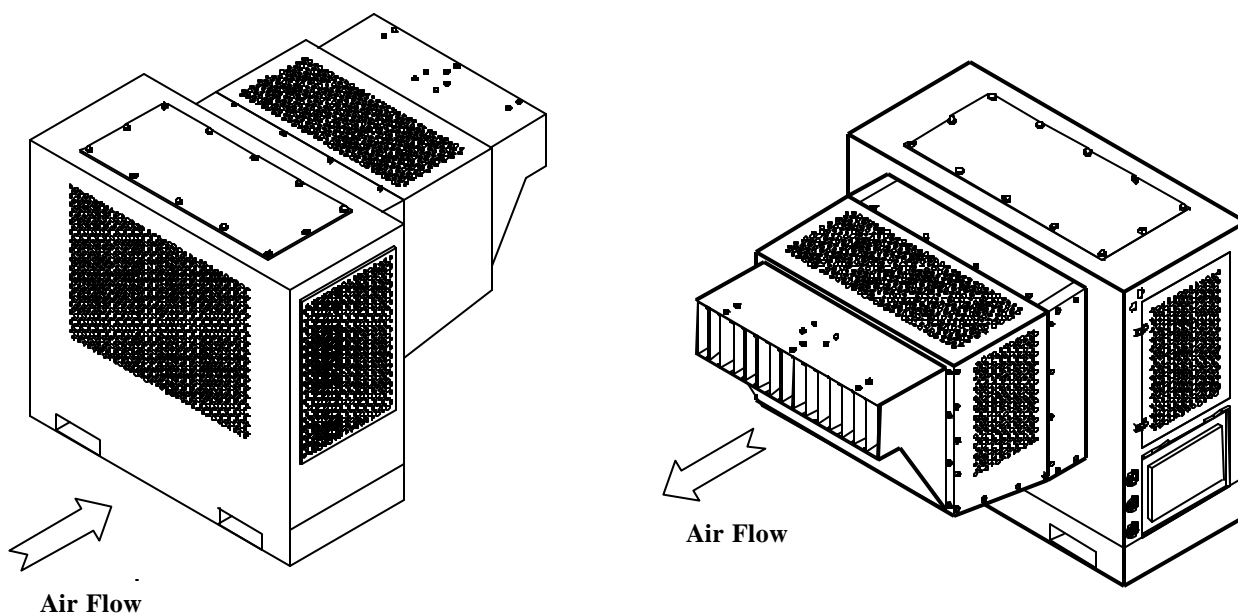


Figure 5. Extreme Heat Operations – Refrigeration Unit

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS – Continued**

0007 00

OPERATION IN RAINY OR HUMID CONDITIONS.

Observe the following precautions when operating the refrigerated container in rainy or humid conditions:

1. To prevent frosting of container interior, rear doors should be opened only for loading or unloading.
2. If possible, keep refrigeration unit and generator set sheltered from rain.
3. Make sure generator set is properly grounded to prevent electrical shock (See TM 9-6115-642-10).
4. Operation of the generator set:

CAUTION

Failure to remove waterproof material before operating generator set could result in equipment damage.

- a. If possible, provide a shelter for generator set. Cover generator set with canvas or other waterproof material when it is not being operated.
- b. Provide adequate drainage to prevent water from accumulating on operation site.
- c. Keep all generator set access doors closed, as much as possible, to prevent entry of water into housing assembly.
- d. Drain water frequently from fuel filter/water separator.

WARNING

DC voltages are present at generator set electrical, even with generator set shutdown. Avoid grounding yourself when touching any electrical components. Failure to follow this warning can result in personal injury.

- e. Remove moisture from generator set components before and after each operating period.
 - f. Keep fuel tank full to protect against moisture, condensation and accumulation of water.
5. Periodically inspect refrigeration unit evaporator coils (inside container). If frost becomes 1/8 to 1/2 inch thick before unit defrosts, perform manual defrosting of refrigeration unit (TM 9-4110-258-13).

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS – Continued**

0007 00

OPERATION IN SALT WATER AREAS.

Operation in salt-water areas accelerates corrosion on bare metal surface. Observe the following precautions when operating the refrigerated container in salt-water areas:

1. Carefully inspect container before use. If bare metal is found, notify Unit Maintenance to preserve or paint the metal as required.
2. Following operation in salt-water areas, rinse outside of refrigerated container with clean fresh water to remove salt spray and/or deposits. Use care not to get water in refrigeration unit, generator set, or wiring.
3. Operation of the generator set in salt-water areas:

CAUTION

Failure to remove waterproof material before operating generator set could result in equipment damage.

- a. If possible, provide a shelter for the generator set. Locate generator set so that radiator faces into prevailing winds. Use natural barriers or, if possible, construct a barrier to protect generator set from salt water. Cover generator set with canvas or other waterproof material when it is not being operated.
 - b. Keep all generator access doors closed, as much as possible, to prevent entry of salt water into housing assembly.
 - c. Wash exterior surfaces frequently with clean water when generator set is not operating.
 - d. Check wiring connections for corrosion and wire insulation for signs of deterioration.
4. The refrigeration unit is designed to operate under adverse conditions, including in salt-water areas, and does not require additional precaution procedures.

OPERATION IN HIGH ALTITUDES.

1. Elevations Up To 5,000 Feet. The refrigerated container and refrigeration unit are designed to operate at elevations up to 5,000 feet above sea level without special servicing or adjustments.
2. The generator set will operate at elevations up to 4000 feet (1219.1 meters) above sea level without special adjustment or reduction in load. At elevations greater than 4000 feet (1219.1 meters) above sea level, the kilowatt rating is reduced approximately 3.5 percent for each additional 1000 feet (304.8 meters).
3. Elevations Above 5,000 Feet. At elevations greater than 5,000 feet above sea level, output of the refrigeration unit will be reduced. The refrigeration unit will take longer to cool down the container during startup, and it will run longer during each cooling cycle.

**REFRIGERATED CONTAINER SYSTEM
OPERATION UNDER UNUSUAL CONDITIONS – Continued**

0007 00

OPERATION IN DUSTY OR SANDY AREAS.

1. Refrigerated Container: keep doors closed or access area covered when open.
2. Generator Set:
 - a. If possible, provide a shelter for generator set. Use available natural barriers to shield generator set from blowing dust or sand.
 - b. Wet down dusty and sandy surface areas around generator set frequently if water is available.
 - c. Keep all access doors closed, as much as possible, to prevent entry of dust and sand into housing assembly.
 - d. Wipe dust and sand frequently from the generator set external surface and components. When generator set is not operating, wash exterior surfaces frequently with clean water.
 - e. Service engine air cleaner assembly frequently to compensate for intake of additional dust or sand.
 - f. Drain sediment frequently from fuel filter/water separator. When servicing fuel tank, be careful to prevent dust or sand from entering fuel tank.
 - g. Change engine oil and oil filter frequently.
 - h. Store oil and fuel in dust-free containers.
 - i. Ensure that the generator set ground connections are free of dust and sand and connections are tight before starting the unit.
3. Refrigeration Unit: keep cooling coils clean and free of dust buildup.

GENERAL CLEANING AND DECONTAMINATION.

1. Wash the exterior of the refrigerated container with any suitable detergent. Thoroughly rinse with fresh water and allow to air dry.

NOTE

Each deck-stored container must be washed by using organization after each ocean voyage to retard deterioration.

2. For decontamination, procedures required by TM 743-200 and FM 3-5 shall apply.
3. Operation while in contaminated areas: refer to FM 3-3, FM 3-4 and FM 3-5.

END OF WORK PACKAGE.

CHAPTER 3
OPERATOR TROUBLESHOOTING PROCEDURES
FOR
REFRIGERATED CONTAINER SYSTEM

**REFRIGERATED CONTAINER SYSTEM
INTRODUCTION OPERATOR TROUBLESHOOTING PROCEDURES**

0008 00

This Work Package provides descriptive data that explains how to use the operator malfunction/system index and operator troubleshooting procedures Work Packages for the Refrigerated Container System at the Operator Maintenance level. It consists of the symptom index, listing the most common malfunction symptoms, and the troubleshooting table. This table repeats the malfunctions, and provides the procedural steps and corrective actions necessary to return the system to operational readiness. The table cannot list all the malfunctions that may occur, all the tests and inspections needed to find the fault, or all the corrective actions needed to correct the fault. If the equipment malfunction is not listed or actions listed do not correct the fault, notify your supervisor.

OPERATOR MALFUNCTION/SYSTEM INDEX.

The operator malfunction/system index (WP 0009 00) is a quick reference index for finding operator troubleshooting procedures. Associated with each system name is a Work Package sequence number representing the starting point in a troubleshooting sequence. Should any one system require more than one troubleshooting sequence to arrive at the most likely area of investigation, the additional starting point numbers are represented.

As the troubleshooting activity progresses through to the conclusion of a particular sequence, a reference is made to the next logical troubleshooting sequence by Work Package sequence number or by the referring to the operator malfunction/system index to locate the next failure system Work Package. This type of activity continues until successful fault isolation is achieved.

OPERATOR TROUBLESHOOTING PROCEDURES.

The operator troubleshooting Work Package (WP 0010 00) contains a table that lists the common malfunctions, tests or inspections, and corrective actions which you may find during operation of the refrigerated container system. You should perform the steps in the order they appear in the table.

Each Work Package is headed by an initial setup. The setup outlines what is needed as well as certain conditions which must be met before starting the task. **DON'T START A TASK UNTIL:**

- You understand the task.
- You understand what you are to do.
- You understand what is needed to do the work.
- You have the things you need.

This manual cannot list all the malfunctions that may occur, all the tests or inspections needed to find the fault, or all the corrective actions needed to correct the fault. If the equipment malfunction is not listed or actions listed do not correct the fault, notify your supervisor.

Refer to TM 9-4110-258-13 for troubleshooting malfunctions on the refrigeration unit if they are not listed.

Refer to TM 5-6115-642-10 for troubleshooting malfunctions on the generator set if they are not listed.

GENERAL INFORMATION.

For malfunctions beyond operator's capability, notify Unit Maintenance.

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
OPERATOR MALFUNCTION / SYSTEM INDEX**

0009 00

MALFUNCTION / SYSTEM

TROUBLESHOOTING PROCEDURE

REFRIGERATED CONTAINER:

- | | | |
|----|---|--------------|
| 1. | REAR DOORS will not close. | WP 0010 00-1 |
| 2. | Water will not drain from CONTAINER FLOOR. | WP 0010 00-2 |
| 3. | TEMPERATURE RECORDER does not record or does not record properly. | WP 0010 00-3 |
| 4. | TEMPERATURE INSIDE CONTAINER will not stabilize. | WP 0010 00-4 |

REFRIGERATION UNIT:

- | | | |
|----|------------------------------------|---------------------------|
| 1. | REFRIGERATION UNIT does not start. | WP 0010 00-6 |
| 2. | REFRIGERATION UNIT SYMPTOMS | Refer to TM 9-4110-258-13 |

GENERATOR SET:

- | | | |
|----|------------------------|---------------------------|
| 1. | ENGINE fails to crank. | WP 0010 00-7 |
| 2. | GENERATOR SET SYMPTOMS | Refer to TM 9-6115-642-10 |

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
OPERATOR TROUBLESHOOTING PROCEDURES**

0010 00

THIS WORK PACKAGE COVERS
Refrigerated Container System

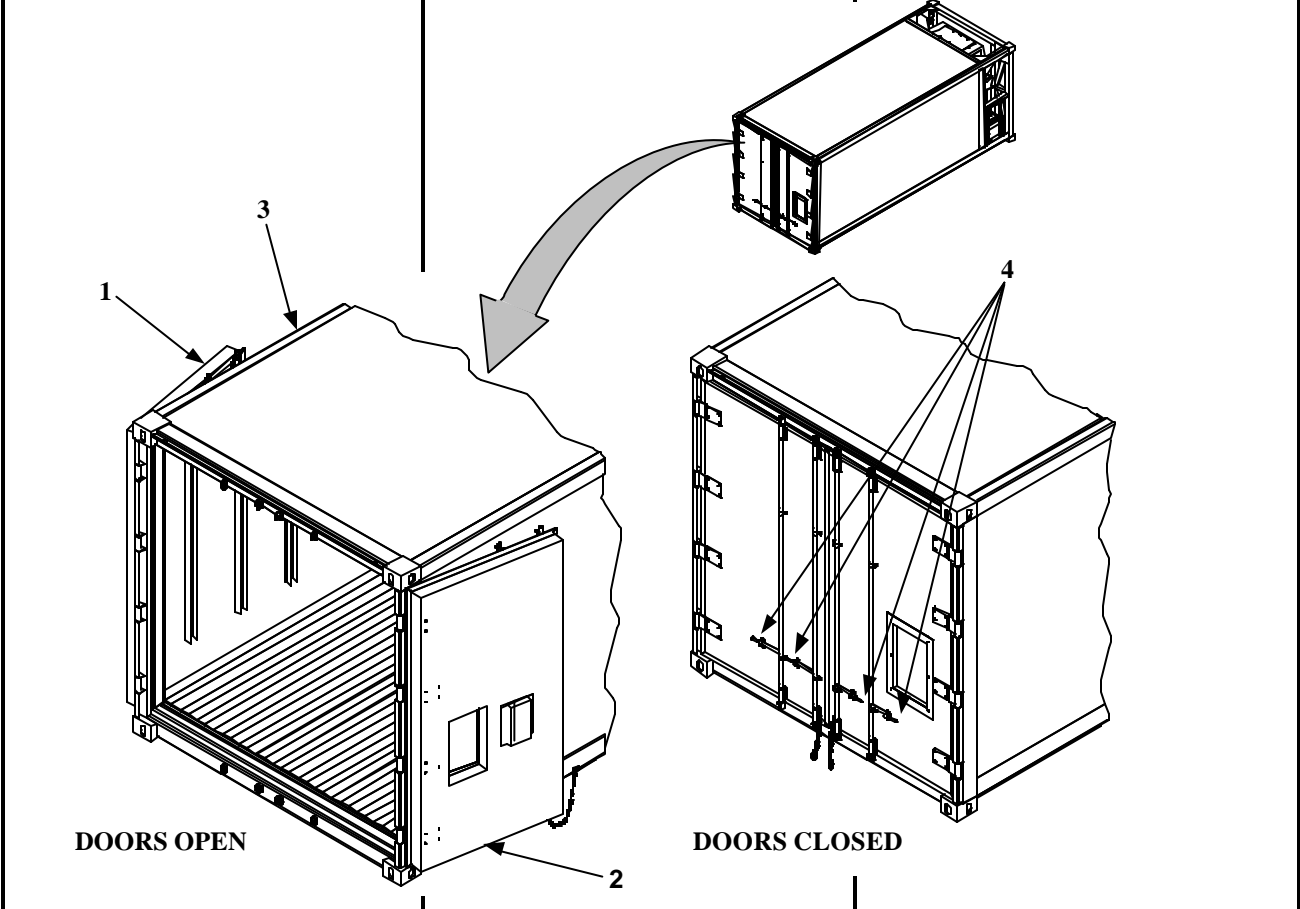
INITIAL SETUP:
Maintenance Level:
Operator

Materials/Parts:
Oil

REFRIGERATED CONTAINER TROUBLESHOOTING.

Table 1. Refrigerated Container Troubleshooting Procedures

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
<p>1. REAR DOORS WILL NOT CLOSE</p>	<p>1. Verify that left rear door (1) was closed before right door (2). 2. Inspect for cargo, rocks, or packaging material between doors and container frame (3). 3. Inspect for bent, broken, or twisted door latch hardware (4).</p>	<p>Close left door (1), then right door (2). Remove obstructions from container opening. If hardware is damaged or defective, notify Unit Maintenance.</p>



The diagram illustrates the troubleshooting steps for rear doors not closing. It shows two views of the container: 'DOORS OPEN' and 'DOORS CLOSED'. In the 'DOORS OPEN' view, point 1 is the left door, point 2 is the right door, and point 3 is the gap between the doors and the container frame. In the 'DOORS CLOSED' view, point 4 is the door latch hardware. A small inset shows the container from a distance, with an arrow pointing to the rear door area.

**REFRIGERATED CONTAINER SYSTEM
OPERATOR TROUBLESHOOTING PROCEDURES – Continued**

0010 00

REFRIGERATED CONTAINER TROUBLESHOOTING – Continued.

Table 1. Refrigerated Container Troubleshooting Procedures - Continued

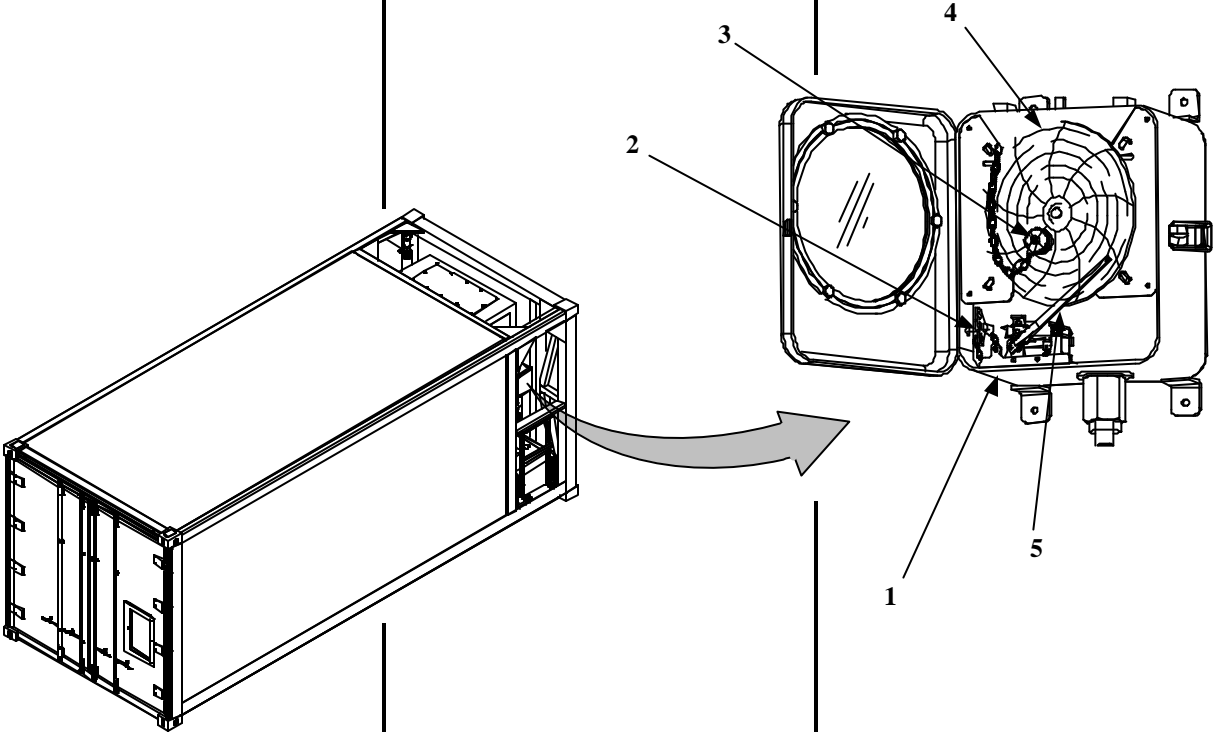
MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
<p>2. WATER WILL NOT DRAIN FROM CONTAINER FLOOR.</p>	<p>1. Check for clogged floor drain (1).</p> <p>2. Check for kinked, twisted or folded drain hoses under corners of container.</p>	<p>Clean floor drains.</p> <p>NOTE Drain hose is flat. Do not mistake flat hose for kinks.</p> <p>Straighten drain hose. Hose should hang straight down.</p>

The diagram illustrates the troubleshooting steps for a water drainage issue in a refrigerated container. It shows two views of the container: 'DOORS OPEN' on the left and 'DOORS CLOSED' on the right. In the 'DOORS OPEN' view, a floor drain is labeled with the number '1'. A curved arrow points from the drain area to a separate view of the drain hose. This view shows the hose in a kinked state and then in a straightened state, demonstrating the corrective action. The 'DOORS CLOSED' view shows the container with its doors shut, highlighting the location of the drain hoses under the corners.

REFRIGERATED CONTAINER TROUBLESHOOTING – Continued.

Table 1. Refrigerated Container Troubleshooting Procedures – Continued

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
<p>3. TEMPERATURE RECORDER DOES NOT RECORD OR DOES NOT RECORD PROPERLY.</p>	<ol style="list-style-type: none"> 1. Verify that temperature recorder (1) has been wound. 2. Check for loose knurled nut (3) securing paper chart (4) to recorder platen. 3. Check that stylus (5) is in contact with paper chart. 	<p>Wind temperature recorder (1) with key (2). Tighten knurled nut (3). If stylus (5) is bent, damaged or defective, notify Unit Maintenance.</p>



REFRIGERATED CONTAINER TROUBLESHOOTING - Continued.

Table 1. Refrigerated Container Troubleshooting Procedures - Continued

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
<p>4. TEMPERATURE INSIDE CONTAINER WILL NOT STABILIZE.</p>	<p>1. Check for improperly stacked cargo inside container.</p>	<p>Re-stack cargo as required so that:</p> <ul style="list-style-type: none"> a. Cargo does not block refrigeration unit evaporator coil (on container front wall). b. Cargo is at least one foot from top of container roof. c. Cargo does not contact doors when closing. d. Cargo does not block refrigeration unit evaporator coil (on container front wall). e. Air can circulate between cargo and container side walls.

**REFRIGERATED CONTAINER SYSTEM
OPERATOR TROUBLESHOOTING PROCEDURES – Continued**

0010 00

REFRIGERATED CONTAINER TROUBLESHOOTING – Continued.

Table 1. Refrigerated Container Troubleshooting Procedures - Continued

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
4. TEMPERATURE INSIDE CONTAINER WILL NOT STABILIZE (continued).	1. Check for open or unlatched rear doors (2). 2. Check for loose escape door (3). 3. Inspect rear doors for damaged or missing seals. 4. Check operation of refrigeration unit. 5. Check generator set for proper power output.	Close and latch doors. Open rear doors. Tighten escape door handles. If doors are damaged or defective, notify Unit Maintenance. Troubleshoot refrigeration unit malfunctions. Troubleshoot generator set malfunctions.

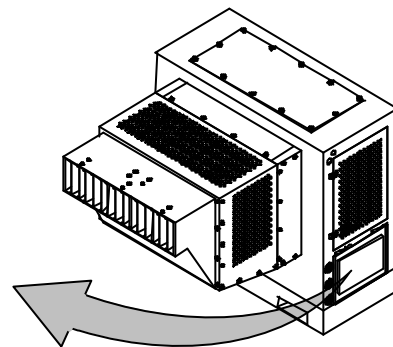
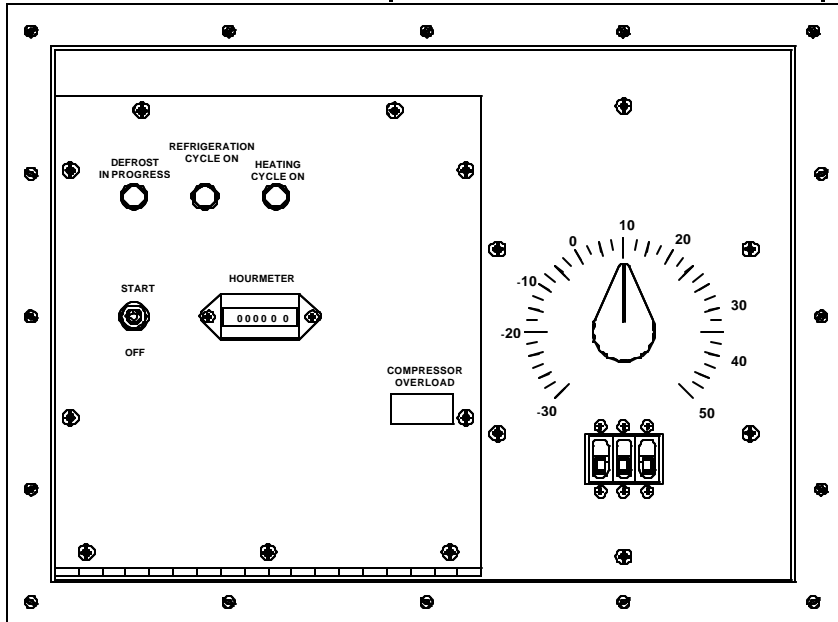
**REFRIGERATED CONTAINER SYSTEM
OPERATOR TROUBLESHOOTING PROCEDURES – Continued**

0010 00

REFRIGERATION UNIT TROUBLESHOOTING.

Table 2. Refrigeration Unit Troubleshooting Procedures.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
<p>1. REFRIGERATION UNIT DOES NOT START.</p>	<ol style="list-style-type: none"> 1. Is power source connected and active: NO. 2. Is power source connected and active: YES. 3. Circuit breaker tripped. 4. Reset button (Compressor Overload) tripped. 5. Open side doors and check Differential Oil Pressure Switch. 6. Open side doors and check Dual Pressure Control Switch. 	<ol style="list-style-type: none"> 1. Activate power source. 2. Notify Unit Maintenance to connect Refrigeration Unit to power source. 1. Place circuit breaker in ON position. 2. Toggle Switch (Start/Run, Off) in Start/Run position. 3. Press Reset button (Compressor Overload). 4. Verify both side doors are closed. 5. Notify Unit Maintenance. <p>Notify Unit Maintenance to test or replace as necessary.</p> <p>Notify Unit Maintenance to test or replace as necessary.</p> <p>If tripped notify Direct Support Maintenance to test or replace as necessary.</p> <p>If tripped notify Direct Support Maintenance to test or replace as necessary.</p>



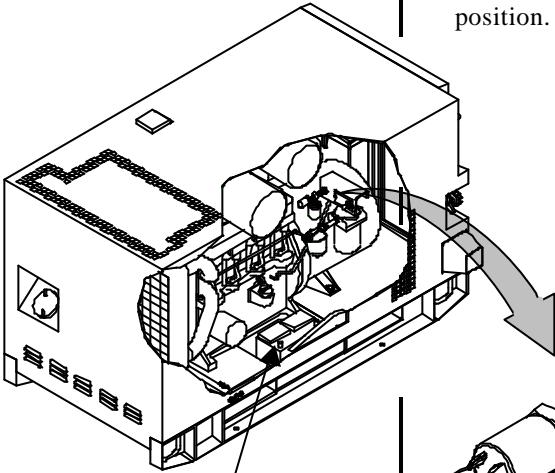
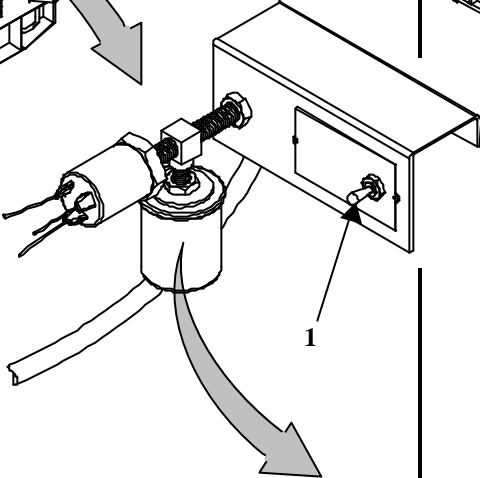
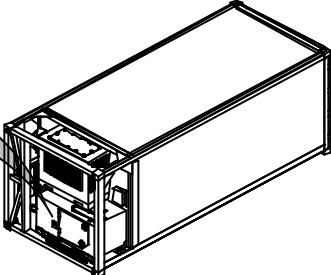
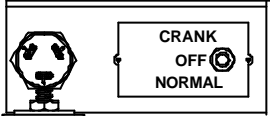
Note: For additional troubleshooting procedures refer to TM-9-4110-258-13

**REFRIGERATED CONTAINER SYSTEM
OPERATOR TROUBLESHOOTING PROCEDURES – Continued**

0010 00

GENERATOR SET TROUBLESHOOTING.

Table 3. Generator Set Troubleshooting Procedures.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
<p>1. ENGINE FAILS TO CRANK.</p>  <p>2</p> <p>Second battery is located on far side.</p>	<p>1. Check that DEAD CRANK switch is in the NORMAL position.</p>  <p>1</p> <p>2. Battery two (2) connected.</p>	<p>Place switch in NORMAL position.</p>   <p>FRONT VIEW</p> <p>Notify Unit Maintenance.</p>

Note: For additional troubleshooting procedures, refer to TM 9-6115-642-10.
For any other malfunctions, notify Unit Maintenance.

CHAPTER 4
OPERATOR MAINTENANCE INSTRUCTIONS
FOR
REFRIGERATED CONTAINER SYSTEM

**REFRIGERATED CONTAINER SYSTEM
PMCS, INCLUDING LUBRICATION INSTRUCTIONS**

0011 00

THIS WORK PACKAGE COVERS:

Introduction, PMCS Procedures

INITIAL SETUP:

Maintenance Level
Operator

Reference:
DA PAM 738-750.

INTRODUCTION.**General.**

Preventive Maintenance Checks and Services (PMCS) are performed to keep the Refrigerated Container System in operating condition. The checks are used to find, correct, or report problems. Crewmembers are to do the PMCS jobs as shown in the PMCS table. PMCS are done every day the Refrigerated Container System is operated, using the PMCS table. Pay attention to WARNING and CAUTION statements. A WARNING statement means someone could be hurt. A CAUTION statement means equipment could be damaged.

Before you begin operating vehicle equipment, do Before PMCS.

During operation, do During PMCS.

After operation, do After PMCS.

Once a week, do Weekly PMCS. If the Refrigerated Container System has not been operated in a week, also do Before PMCS at the same time.

Do Monthly PMCS once a month. If the Refrigerated Container System has not been operated in a month, also do After PMCS at the same time. PMCS should be done after a minimum amount of hours specified per Table 1 (WP 0015 00).

If you are operating the Refrigerated Container System for the first time, do your Weekly and Monthly PMCS the first time you do your Before PMCS.

If you find something wrong when performing PMCS, fix it if you can, using troubleshooting procedures and/or maintenance procedures.

The right-hand column of the PMCS table lists conditions that make the Refrigerated Container System not fully mission capable. Write up items not fixed on DA Form 2404 for Unit Maintenance. For further information on how to use this form, see DA PAM 738-750.

If tools are required for performing PMCS that are not listed, notify Unit Maintenance.

Leakage Definition.**CAUTION**

Equipment operation is allowable with minor leakage (Class I or II) except for fuel leaks. Of course, consideration must be given to the fluid capacity of the item or system being checked. When in doubt, ask your supervisor.

When operating with Class I or II leaks, continue to check fluid levels as required in your PMCS.

Class III leaks should be reported immediately to your supervisor.

**REFRIGERATED CONTAINER SYSTEM
PMCS, INCLUDING LUBRICATION INSTRUCTIONS – Continued**

0011 00

INTRODUCTION – Continued.

It is necessary to know how fluid leakage affects the status of the Refrigerated Container System. The following are definitions of the classes of leakage an operator or crew member needs to know to be able to determine the condition of the leak. Learn and then be familiar with them and REMEMBER - WHEN IN DOUBT, ASK YOUR SUPERVISOR.

Leakage Definitions for Crew/Operator PMCS.

CLASS I - Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.

CLASS II - Leakage of fluid great enough to form drops but not enough to cause drops to drip from item being checked.

CLASS III - Leakage of fluid great enough to form drops that fall from the item being checked.

INSPECTION.

Look for signs of a problem or trouble. Senses help here. You can feel, smell, hear, or see many problems. Be alert when operating the Refrigerated Container System.

Inspect to see if items are in good condition. Are they correctly assembled, stowed, and secured; excessively worn, leaking, corroded, or properly lubricated? Correct any problems found or notify Unit Maintenance.

There are some common items to check all over the Refrigerated Container System. These include the following:

1. Check bolts, clamps, nuts, and screws for looseness. Look for chipped paint, bare metal, rust, or corrosion around bolt and screw heads and nuts. Tighten them when you find them loose. If tools are not available, notify Unit Maintenance.
2. Welds: Many items on the Refrigerated Container System are welded. To check these welds, look for chipped paint, rust, corrosion, or gaps. When these conditions exist, notify Unit Maintenance on DA Form 2404.
3. Electrical wires, connectors, and harnesses: Tighten loose connectors. Look for cracked or broken insulation, bare wires, and broken connectors. If any are found, notify Unit Maintenance.
4. Hoses and fluid lines: Look for wear, damage and leaks, and make sure clamps and fittings are tight. Wet spots mean a leak. A stain by a fitting or connector can also mean a leak. When you find a leak, notify Unit Maintenance.

LUBRICATION SERVICE INTERVALS – NORMAL CONDITIONS.

For safer, more trouble free operations, make sure that the Refrigerated Container System is serviced when it needs it.

LUBRICATION SERVICE INTERVALS – UNUSUAL CONDITIONS.

The Refrigerated Container System will require extra service and care when you operate under unusual conditions. High or low temperatures, long periods of hard use, or continued use in sand, water, mud, or snow will break down the lubricant, requiring you to add or change lubricant more often.

CLEANING AND LUBRICATION.**CAUTION**

Follow all cleaning and lubricating instructions carefully. Failure to do so can result in damage to equipment.

Refer to TM 9-6115-642-10 for generator set cleaning and lubrication.

Refer to TM 9-4110-285-13 for refrigeration unit cleaning and lubrication.

Expose canvas covers and tarpaulins to fresh air during semiannual service. Reduce interval as required in a rainy climate. Do not stow canvas items wet.

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

0012 00

**THIS WORK PACKAGE COVERS:
PMCS Checks and Services**

INITIAL SETUP:

Maintenance Level
Operator

Table 1. Preventive Maintenance Checks and Services for Refrigeration Container System

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			<u>EXTERIOR</u>		
1.	Before	0.1	Door Hardware (Rear Doors)	Inspect for bent or broken door release handles.	Broken or bent handles.
2.	Before	0.1	Ladder	Check for security.	
3.	Before	0.1	Doors (Rear)	Inspect door exterior for obvious damage.	Door split or badly cracked.
4.	Before	0.1	REFRIGERATION UNIT	Check for security. Perform before PMCS on refrigeration unit per TM 9-4110-258-13.	Mount bolts loose or missing.
5.	Before	0.1	ELECTRICAL CABLE	Check for cuts, deep abrasions, burned or discolored wiring.	Cut or burned.
6.	Before	0.1	Auxiliary Fuel Tank	a. Check fuel level. Fill as required. b. Check tank, lines, and connections for leaks. c. Inspect gauge for damage or missing indicator.	No Fuel Any leak.

**RERIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENACE CHECKS AND SERVICES (PMCS) – Continued**

0012 00

Table 1. Preventive Maintenance Checks and Services for Refrigeration Container System – Continued

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
7.	Before	0.1	Recorder Thermometer	a. Inspect cover for damaged or missing latch. b. Inspect for cracked or missing cover glass. c. Inspect for loose sensing bulb connection at bottom of recorder.	Sensing bulb connection loose.
<u>INTERIOR</u>					
8.	Before	0.1	Rear Doors	a. Inspect for obvious damage. b. Check seals for damage.	Cracks and holes affecting serviceability. Door seals badly torn.
9.	Before	0.1	Light	Check for security of components.	
10.	Before	0.1	Floor	a. Inspect container floor for punctures and obvious damage. b. Inspect floor for blocked or clogged drains.	Drains are blocked or clogged.

**RERIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENACE CHECKS AND SERVICES (PMCS) – Continued**

0012 00

Table 1. Preventive Maintenance Checks and Services for Refrigeration Container System – Continued

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
11.	Before	0.1	Generator Assembly	<p style="text-align: center;">NOTE</p> <p>If the equipment must be kept in continuous operation, check and service only those items that can be checked and serviced without disrupting operations. Complete all checks and services when equipment is shut down.</p> <p style="text-align: center;"><u>WARNING</u></p> <ul style="list-style-type: none"> • With any access door open while the generator set is in operation, the noise level may cause hearing damage. To avoid hearing damage, hearing protection should be worn. • The fuels used in this generator set are highly explosive. DO NOT smoke or use open flame when performing maintenance. Flames and explosion can occur resulting in severe injury or death. <p>Check for security. Perform before PMCS on Generator Set per TM 9-6115-642-10.</p>	Mount loose or missing bolts.

**RERIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENACE CHECKS AND SERVICES (PMCS) – Continued**

0012 00

Table 2. Preventive Maintenance Checks and Services for Refrigeration Container System

NOTE

If the equipment must be kept in continuous operation, do only the procedures that can be done without disturbing operation. Make complete checks and services when the equipment is shut down.

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1.	During	0.1	<u>EXTERIOR</u> Refrigeration Unit	Perform During PMCS on refrigeration unit per TM 9-4110-258-13.	Refrigeration unit not operational.
2.	During	0.1	Generator Set	If required for operation, perform During PMCS on generator set per TM 9-6115-642-10.	Generator set not operational.
3.	During	0.1	Recorder Thermometer	Verify that recorder is operating.	Recorder not operating.
4.	During	0.1	Auxiliary Fuel Tank	a. Check fuel level. Refuel as required.	No Fuel
		0.1		b. Inspect fuel tank, fuel line and connections for leaks.	Fuel tank, lines, or connections leak.
5.	During	0.1	<u>INTERIOR</u> Container	Check free flow of air over cargo. There must be at least one foot of space between top of cargo and container ceiling. Make sure cargo does not block evaporator section of refrigeration unit on front container wall.	

**RERIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENACE CHECKS AND SERVICES (PMCS) – Continued**

0012 00

Table 3. Preventive Maintenance Checks and Services for Refrigeration Container System

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1.	After	0.5	REFRIGERATION UNIT	<p style="text-align: center;"><u>WARNING</u></p> <p>High voltage and exposed rotating parts are contained in the refrigeration unit. Personal injury can result if power is connected with doors open.</p> <p style="text-align: center;">NOTE</p> <p>If the refrigeration unit is not going to be used for several days, it must be pumped. Notify Unit Maintenance.</p> <p>Perform after PMCS on refrigeration unit per TM 9-4110-258-13.</p>	Not operational.
2.	After	0.5	GENERATOR SET	<p>Perform after PMCS on generator set per TM 9-6115-642-10.</p> <p style="text-align: center;">NOTE</p> <p>If the equipment must be kept in service for continuous operation, check only those items that can be checked and serviced without disrupting operations. Complete all checks and services when equipment is shut down.</p>	Not operational.
3.	After	0.1	Auxiliary Fuel Tank	Check fuel level and fill as required.	

**RERIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENACE CHECKS AND SERVICES (PMCS) – Continued**

0012 00

Table 4. Preventive Maintenance Checks and Services for Refrigeration Container System

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1.	Weekly	0.1	<u>EXTERIOR</u> Door Hardware (Rear Doors)	a. Inspect for broken or missing handle locks. b. Inspect for broken lock keepers.	Broken or badly bent handles. Broken keepers.
2.	Weekly	0.1	Door (Rear)	c. Inspect door hinges for cracked or broken hinges.	Door hinge cracked top to bottom.
3.	Weekly	1.0	REFRIGERATION UNIT	Perform weekly PMCS on refrigeration unit per TM 9-4110-258-13.	Refrigeration unit not operational.
4.	Weekly	1.0	GENERATOR SET	Perform weekly PMCS on Generator Set per TM 9-6115-642-10.	Generator set not operational.
5.	Weekly	0.1	Recorder Thermometer	Inspect the recorder thermometer for cracked or missing lens and loose or missing mounting hardware. If damaged or loose, notify Unit Maintenance to tighten or replace it as necessary.	Not operational.

**RERIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENACE CHECKS AND SERVICES (PMCS) – Continued**

0012 00

Table 5. Preventive Maintenance Checks and Services for Refrigeration Container System

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			<u>EXTERIOR</u>		
1.	Monthly	0.1	Door (rear)	a. Inspect Container frame around doors for cracks, splits and broken welds. b. Inspect seals for cracks and damage.	Container frame cracked. Torn and damaged.
2.	Monthly	0.1	Left Side Panel	Inspect container upper and lower sides for cracks, splits, and broken welds.	Container frame cracked.
3.	Monthly	0.1	Ladder	Inspect for cracked welds and bent frame.	
4.	Monthly	0.1	Roof Panel	Inspect for obvious damage, cracks, splits and delamination.	Cracked or punctured through interior.
5.	Monthly	1.0	Refrigeration Unit	Perform Monthly PMCS on refrigeration unit per TM 9-4110-258-13.	Refrigeration unit not operational.
6.	Monthly	0.1	Right Side Panel	Inspect container upper and lower sides for cracks, splits, and broken welds.	Container frame cracked.
7.	Monthly	0.1	Generator Set	Perform Monthly PMCS on Generator Set per TM 9-6115-642-10.	Generator set not operational.
8.	Monthly	0.1	Container	Inspect for corrosion and condition of paint.	
9.	Monthly	0.1	Name Plates	Inspect for missing, damaged or illegible name plates.	

**RERIGERATED CONTAINER SYSTEM
PREVENTIVE MAINTENACE CHECKS AND SERVICES (PMCS) – Continued**

0012 00

Table 5. Preventive Maintenance Checks and Services for Refrigeration Container System - Continued

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
10.	Monthly	0.1	<u>INTERIOR</u> Container	Check for damage, corrosion, and punctures.	Damage and punctures.
11.	Monthly	0.1	Escape door	Check for security, damage and missing hardware.	Damage and missing hardware

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
OPERATOR MAINTENANCE INSTRUCTIONS**

0013 00

THIS WORK PACKAGE COVERS:

Cleaning Instructions for Container, Generator Set and Refrigeration Unit

INITIAL SETUP:**Maintenance Level:**

Operator

Materials/Parts:

Detergent (Item 7, WP 0082 00)

Wiping Rags (Item 19, WP 0082 00)

Tools and Special Tools:

Brushes (Item 12, WP 0048 00)

Hose (Item 13, WP 0048 00)

Equipment Condition:

Refrigeration unit shut down (WP 0006 00)

Generator set shut down (WP 0006 00)

WARNING

HIGH VOLTAGE and **EXPOSED ROTATING PARTS** are contained in the Generator Set and Refrigeration Unit. Personal injury can result if power is connected.

GENERAL.

With the exception of service and inspection procedures noted in the PMCS Table 1 (WP 0015 00), the following maintenance procedure is the only one authorized to the operator.

CLEANING.

1. Mix a small quantity of detergent (Item 7, WP 0082 00) with clean water to make a wash solution.
2. Dampen a rag (Item 19, WP 0082 00) with wash solution and clean the equipment.
3. Dampen a rag (Item 19, WP 0082 00) with clean water and rinse the equipment. Rinse rag (Item 19, WP 0082 00) in clean water and continue until all detergent residue has been removed.
4. Wipe the equipment with a clean dry rag (Item 19, WP 0082 00) until thoroughly dry.
5. Wash with detergent (Item 7, WP 0082 00), soak, brush, and rinse the inside of the Refrigeration Container thoroughly after each use.

END OF WORK PACKAGE.

CHAPTER 5
UNIT MAINTENANCE
TROUBLESHOOTING PROCEDURES
FOR
REFRIGERATED CONTAINER SYSTEM

**REFRIGERATED CONTAINER SYSTEM
INTRODUCTION UNIT MAINTENANCE TROUBLESHOOTING PROCEDURES**

0014 00

This Work Package provides descriptive data that explains how to use the unit malfunction/system index and the unit troubleshooting procedures Work Packages for the Refrigerated Container System at the Unit Maintenance level. It consists of the symptom index, listing the most common malfunction symptoms, and the troubleshooting table. This table repeats the malfunctions, and provides the procedural steps and corrective actions necessary to return the system to operational readiness. The table cannot list all the malfunctions that may occur, all the tests and inspections needed to find the fault, or all the corrective actions needed to correct the fault. If the equipment malfunction is not listed or actions listed do not correct the fault, notify your supervisor.

UNIT MALFUNCTION/SYSTEM INDEX.

The unit malfunction/system index (WP 0012 00) is a quick reference index for finding troubleshooting procedures. Associated with each system name is a Work Package sequence number representing the starting point in a troubleshooting sequence. Should any one system require more than one troubleshooting sequence to arrive at the most likely area of investigation, the additional starting point numbers are represented.

As the troubleshooting activity progresses through to the conclusion of a particular sequence, a reference is made to the next logical troubleshooting sequence by Work Package sequence number or by referring to the unit malfunction/system index to locate the next failure system work package. This type of activity continues until successful fault isolation is achieved.

UNIT TROUBLESHOOTING PROCEDURES.

The unit troubleshooting Work Package (WP 0013 00) contains a table that lists the common malfunctions, tests or inspections, and corrective actions which you may find during operation of the refrigerated container system. You should perform the steps in the order they appear in the table.

Each work package is headed by an initial setup. The setup outlines what is needed as well as certain conditions which must be met before starting the task. **DON'T START A TASK UNTIL:**

- You understand the task.
- You understand what you are to do.
- You understand what is needed to do the work.
- You have the things you need.

This manual cannot list all the malfunctions that may occur, all the tests or inspections needed to find the fault, or all the corrective actions needed to correct the fault. If the equipment malfunction is not listed or actions listed do not correct the fault, notify your supervisor.

Refer to TM 9-4110-285-13 for troubleshooting malfunctions on the refrigeration unit.

Refer to TM 9-6115-642-10 for troubleshooting malfunctions on the generator set.

GENERAL INFORMATION.

When instructions to lubricate, grease, or oil appear in the troubleshooting Work Package, refer to LO 9-6665-376-12.

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
UNIT MAINTENANCE MALFUNCTION / SYSTEM INDEX**

0015 00

MALFUNCTION / SYSTEM

TROUBLESHOOTING PROCEDURE

REFRIGERATED CONTAINER SYMPTOMS.

- | | |
|--|------------|
| 1. REAR DOORS will not close. | WP 0013 00 |
| 2. TEMPERATURE RECORDER does not record or does not record properly. | WP 0013 00 |
| 3. TEMPERATURE INSIDE CONTAINER will not stabilize. | WP 0013 00 |

REFRIGERATION UNIT SYMPTOMS.

Refer to TM 9-4110-258-13

GENERATOR SET SYMPTOMS.

Refer to TM 9-6115-642-10

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
UNIT MAINTENANCE TROUBLESHOOTING PROCEDURES**

0016 00

THIS WORK PACKAGE COVERS

Refrigerated Container System

INITIAL SETUP:

Maintenance Level:
Unit

REFRIGERATED CONTAINER.

Table 1. Refrigerated Container Troubleshooting Procedures.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
1. REAR DOORS WILL NOT CLOSE	1. Inspect for bent, broken, or twisted door latch hardware.	1. Replace defective parts.
2. TEMPERATURE RECORDER DOES NOT RECORD OR DOES NOT RECORD PROPERLY.	1. Check that stylus is in contact with paper chart.	1. If stylus is bent, damaged or defective, replace defective parts.
3. TEMPERATURE INSIDE CONTAINER WILL NOT STABILIZE.	1. Inspect rear doors for damaged or missing seals.	1. If doors are damaged or defective, replace defective parts.

REFRIGERATION UNIT TROUBLESHOOTING.

For Refrigeration Unit Troubleshooting Procedures, refer to TM 9-4110-258-13.

GENERATOR SET TROUBLESHOOTING.

For Generator Set Unit Troubleshooting Procedures, refer to TM 9-6115-642-10.

END OF WORK PACKAGE.

CHAPTER 6
UNIT MAINTENANCE INSTRUCTIONS
FOR
REFRIGERATED CONTAINER SYSTEM

**REFRIGERATED CONTAINER SYSTEM
SERVICE UPON RECEIPT**

0017 00

SITE AND SHELTER REQUIREMENTS.**SITING.**

1. Transport. The refrigerated container system is designed for highway, railway and water transport of perishable materials. Load and transport the refrigerated container system only on equipment compatible with MIL-VAN transport requirements.
2. Fixed Site. When operating the refrigerated container at a fixed site, select an area that is flat and level, and provides good water drainage away from container. If the refrigeration unit will be powered by an external electrical source, the refrigerated container must be located within 20 feet of the electrical source.

SHELTER REQUIREMENTS.

The refrigerated container does not require special sheltering. If shelter is available, storing the container under cover will minimize routine maintenance.

SERVICE UPON RECEIPT OF MATERIAL.**CHECKING UNPACKED EQUIPMENT.**

1. Inspect container frame, corner posts, and upper and lower fittings for damage. Containers damaged in these areas should not be used.
2. Inspect container exterior wall panels and roof for punctures, tears, cracks, delamination of panels, and loose or missing fasteners.
3. Inspect for loose, missing, or broken door hardware.
4. Inspect container interior for punctures tears, cracks, and delamination of wall and ceiling panels.
5. Inspect container stencils, markings and information plates. All items should be clear and readable.
6. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 364, Report of Discrepancy.
7. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions of DA Pam 738-750 or DA Pam 738-751 as applicable. Retain a copy of the packing slip and/or hand receipt in the manual holder.
8. Check to see if the equipment has been modified.
9. Check to insure the following items are present:
 - a. BII (WP 0077 00-2)
 - b. Tie-down Straps
 - c. Weatherproof Cover
 - d. Temperature Recording Charts
 - e. Padlock

INSTALLATION INSTRUCTIONS.**GENERAL.****WARNING**

To prevent injury to personnel and damage to the equipment, make sure generator set is not operating when connecting or disconnecting power cable from terminal box. Refer to WP 0006 00 for generator set shutdown instructions.

1. Electrical power required to operate the refrigeration unit can be supplied by the generator set or an external power source. Conversion of the refrigeration unit from one power source to the other is accomplished by changing power cable connections.
2. A five-foot long cable is supplied with the refrigerated container to connect to the generator set or external power.
3. The five foot power cable is wired into the Generator Set terminal post and the other end is connected to the Refrigeration Unit power cable connector.

GENERATOR SET PREPARATION.

1. Remove two bolts (1, Figure 1) from refrigerated container frame generator set slides (2).
2. Using two men, release the retention latches (3) simultaneously and pull from both sides on the generator set, lifting rings (4) until generator set unit slides uniformly out.

NOTE

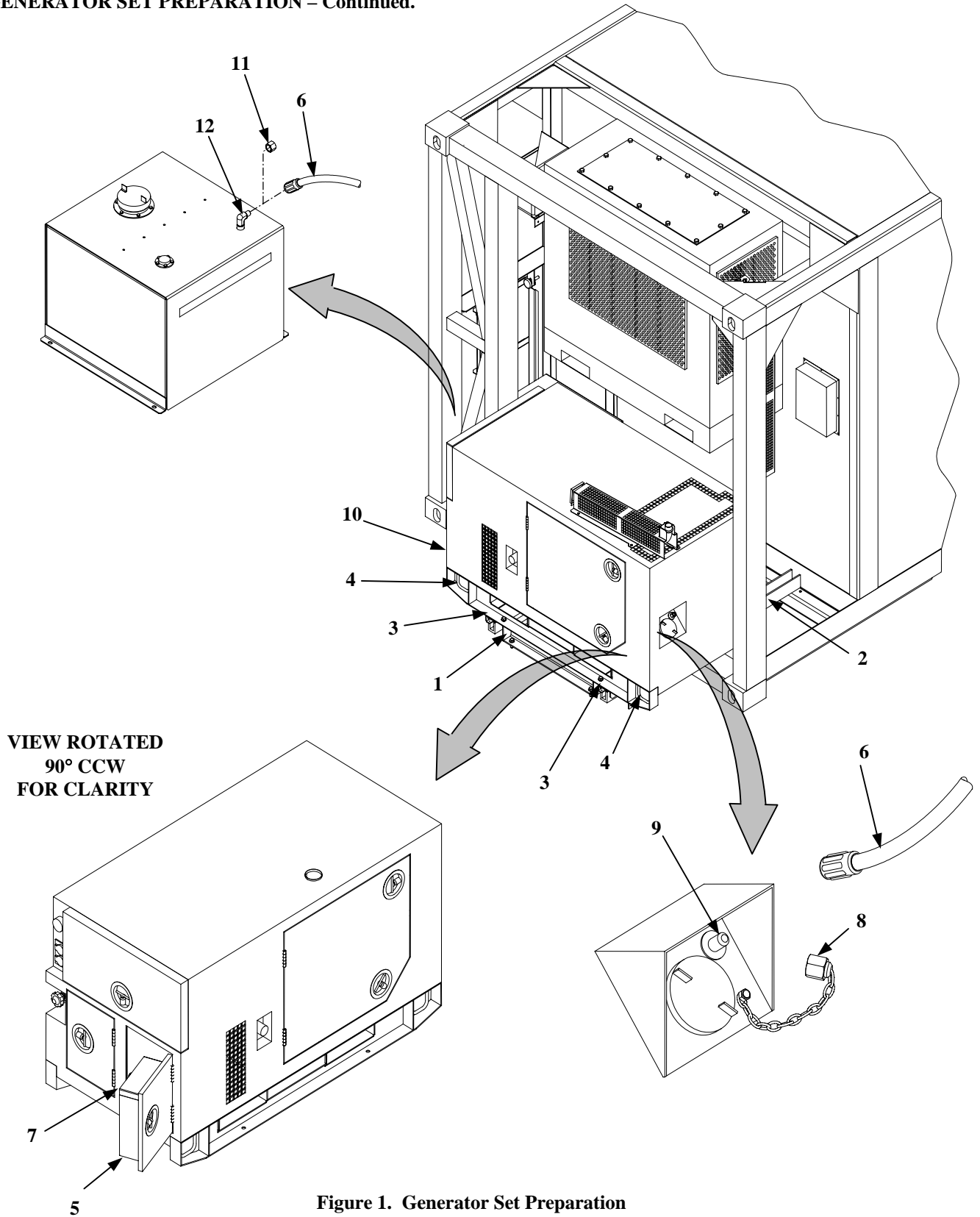
Steps 3 through 4 are not necessary after the auxiliary fuel line assembly MWO has been applied.

3. Open door (5) and remove the fuel line (6) from the storage compartment (7).
4. Remove cap (8) from fitting (9) on generator set (10) and cap (11) from fuel tank elbow (12). Store cap (11) in storage compartment (7) and close door (5).
5. Connect auxiliary fuel line (6) to auxiliary fuel tank elbow (12) and to fitting (9) on generator set (10).

**REFRIGERATED CONTAINER SYSTEM
SERVICE UPON RECEIPT – Continued**

0017 00

GENERATOR SET PREPARATION – Continued.



**REFRIGERATED CONTAINER SYSTEM
SERVICE UPON RECEIPT – Continued**

0017 00

GENERATOR SET PREPARATION – Continued.

6. Set the A/C Voltage reconnection switch.
 - a. Remove fasteners (1, Figure 2) on control panel (2) and pull forward.
 - b. Set A/C voltage switch (3) to the 120/208 VAC, three phase position.
 - c. Verify DC Control circuit breaker (4) is energized.
 - d. Replace control panel (2) and reinstall fasteners (1).

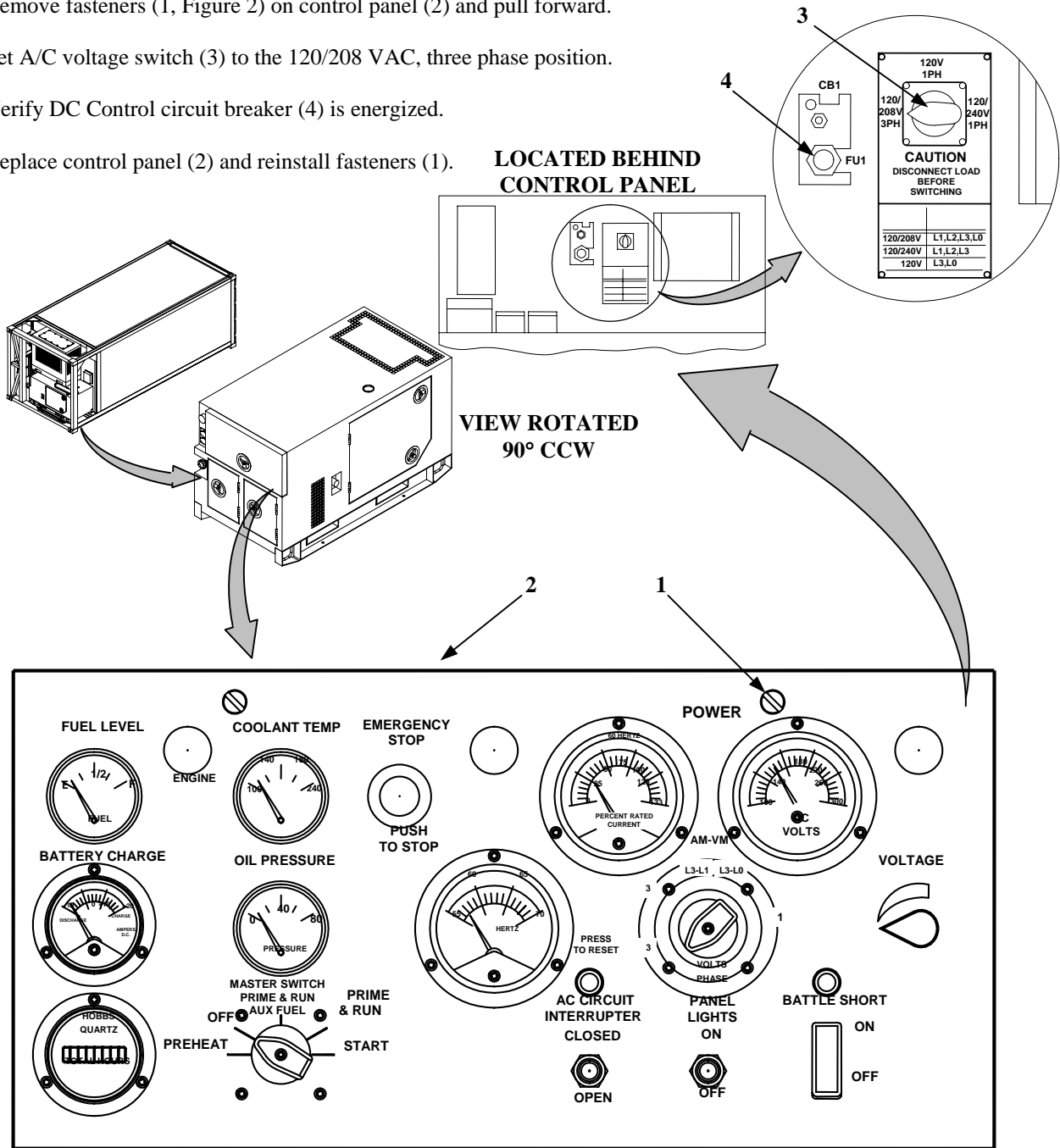


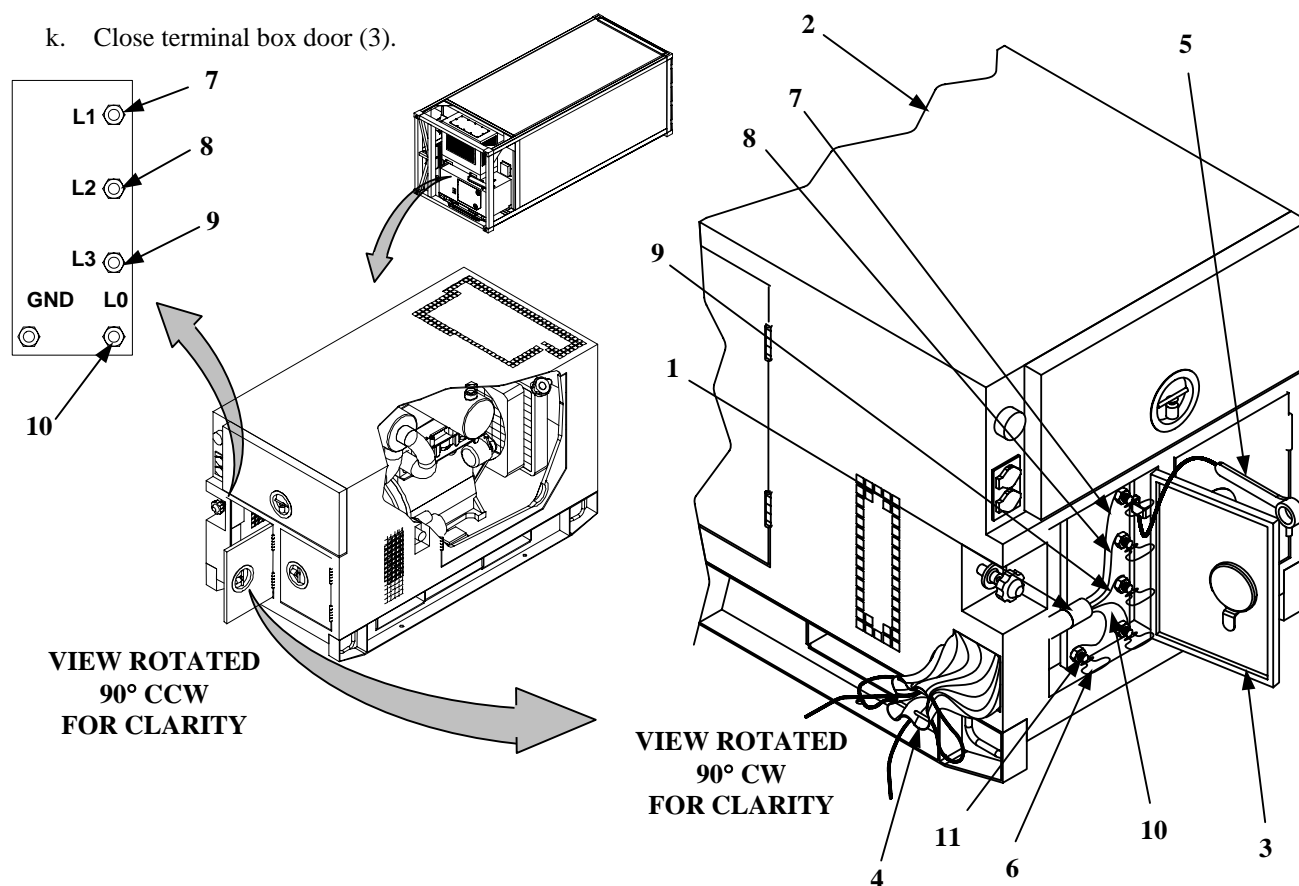
Figure 2. Generator Set Preparation

**REFRIGERATED CONTAINER SYSTEM
SERVICE UPON RECEIPT – Continued**

0017 00

GENERATOR SET PREPARATION – Continued.

7. Connect five-foot power cable (1, Figure 3) to generator set (2) as follows:
 - a. Open terminal box cover (3).
 - b. Insert the power cable (1) through the weather boot (4) into the terminal compartment.
 - c. Remove fastener tool (5).
 - d. Raise retention clips (6) from each terminal.
 - e. Connect black wire to terminal L1 (7).
 - f. Connect white wire to terminal L 2 (8).
 - g. Connect red wire to terminal L3 (9).
 - h. Connect green wire to terminal L0 (10).
 - i. Use tool (5) to tighten nut (11) on each terminal.
 - j. Lower retention clip (6) over each terminal and return tool to storage position.
 - k. Close terminal box door (3).


Figure 3. Power Cable

REFRIGERATION UNIT PREPARATION.

1. Connect generator power cable (1, Figure 4) to refrigeration unit power cable (2) as follows:

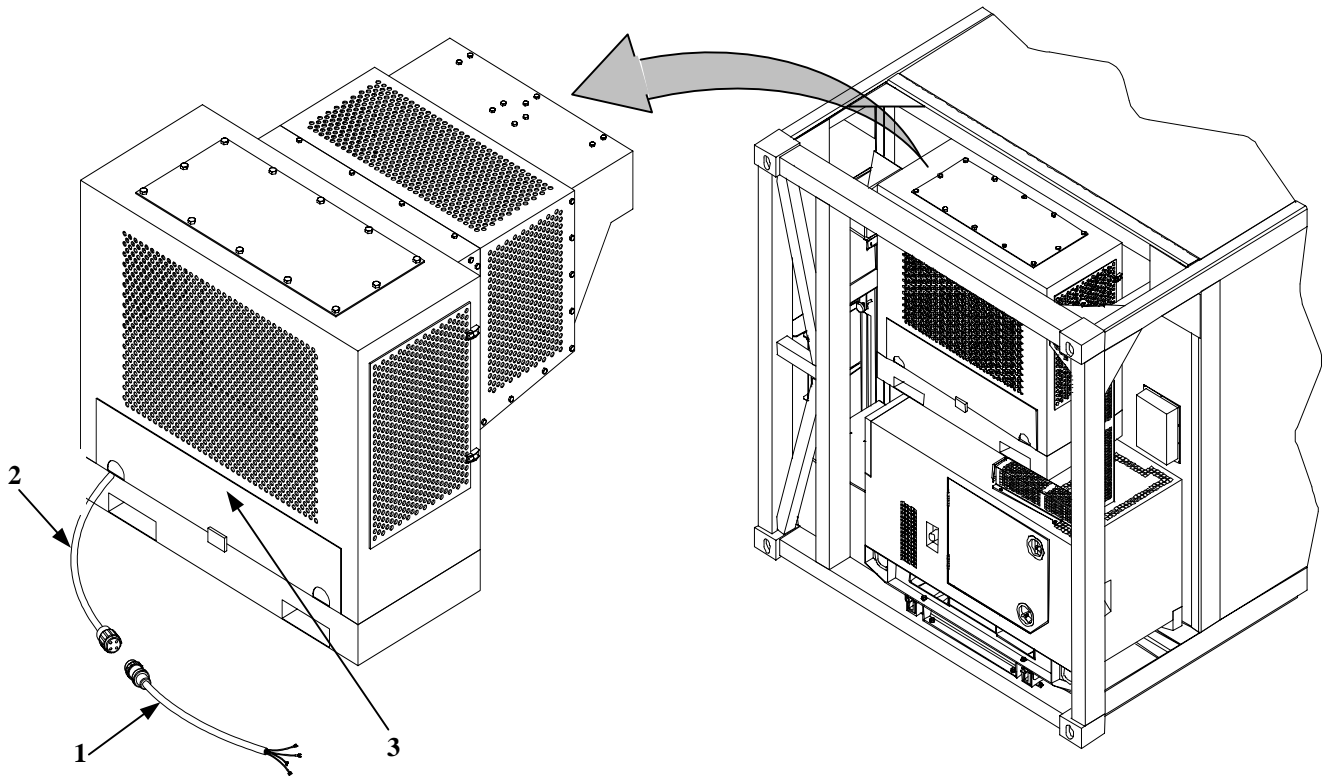


Figure 4. Air Conditioner Input Power Cable

- a. Open cable storage compartment door (3).
- b. Uncoil power cable (2), (approximate six feet) from stowage compartment.
- c. Connect generator cable (1) to refrigeration power cable (2).
- d. Secure excess cable (2) back in stowage compartment after connection is made.
- e. Position power cable (2) through cutouts provided on door (3), being careful not to pinch cable when door is closed.
- f. Close stowage compartment door (3).

**REFRIGERATED CONTAINER SYSTEM
SERVICE UPON RECEIPT – Continued**

0017 00

REFRIGERATION UNIT PREPARATION – Continued.

2. Connect interior light cable (1, Figure 5) to 110 VAC receptacle (2) on generator set.
3. Verify the Ground Fault Interrupt circuit breaker (3) has been reset.

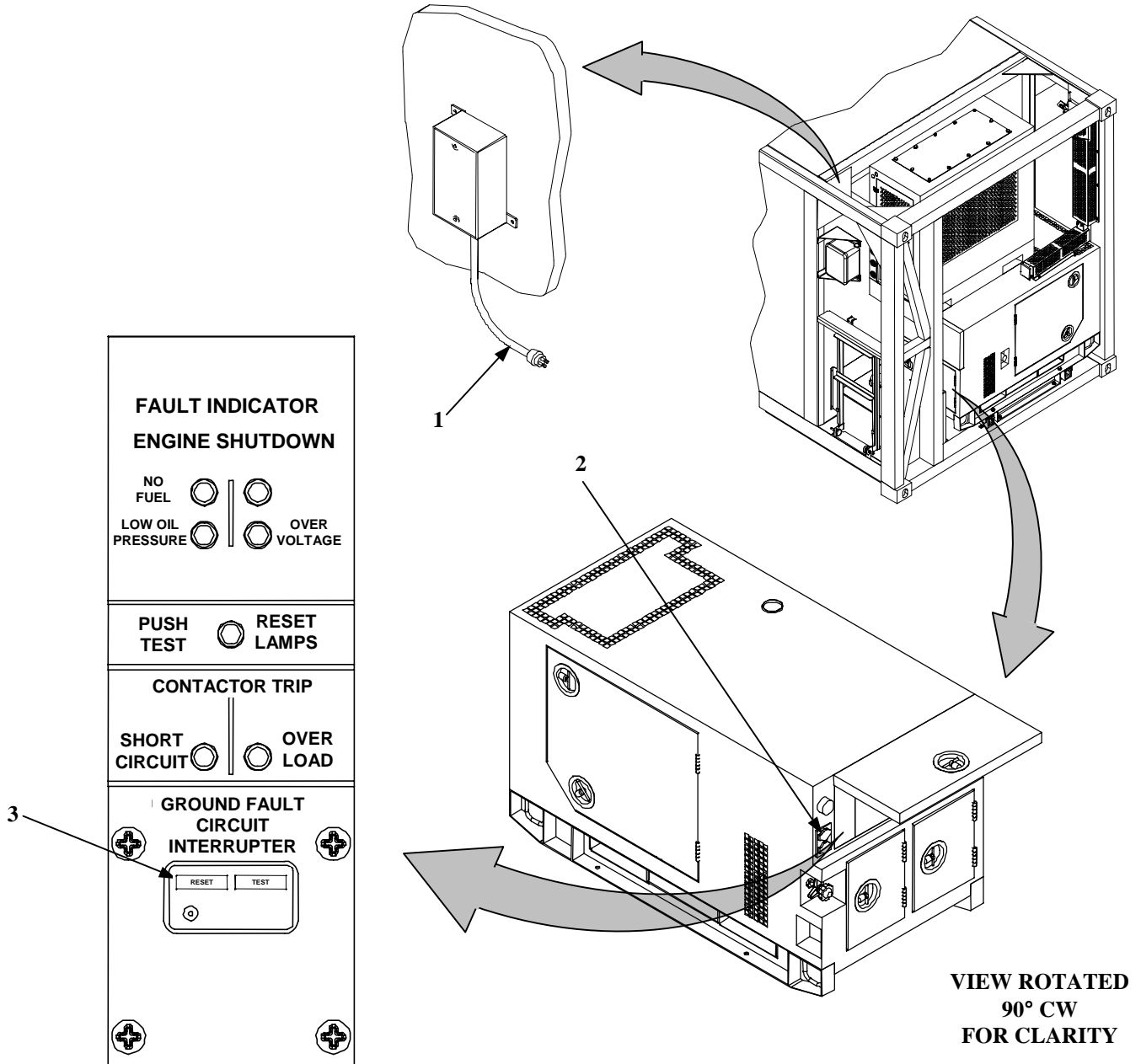


Figure 5. Light Cable and Ground Fault Interrupt Circuit Breaker

REFRIGERATION UNIT PREPARATION – Continued.

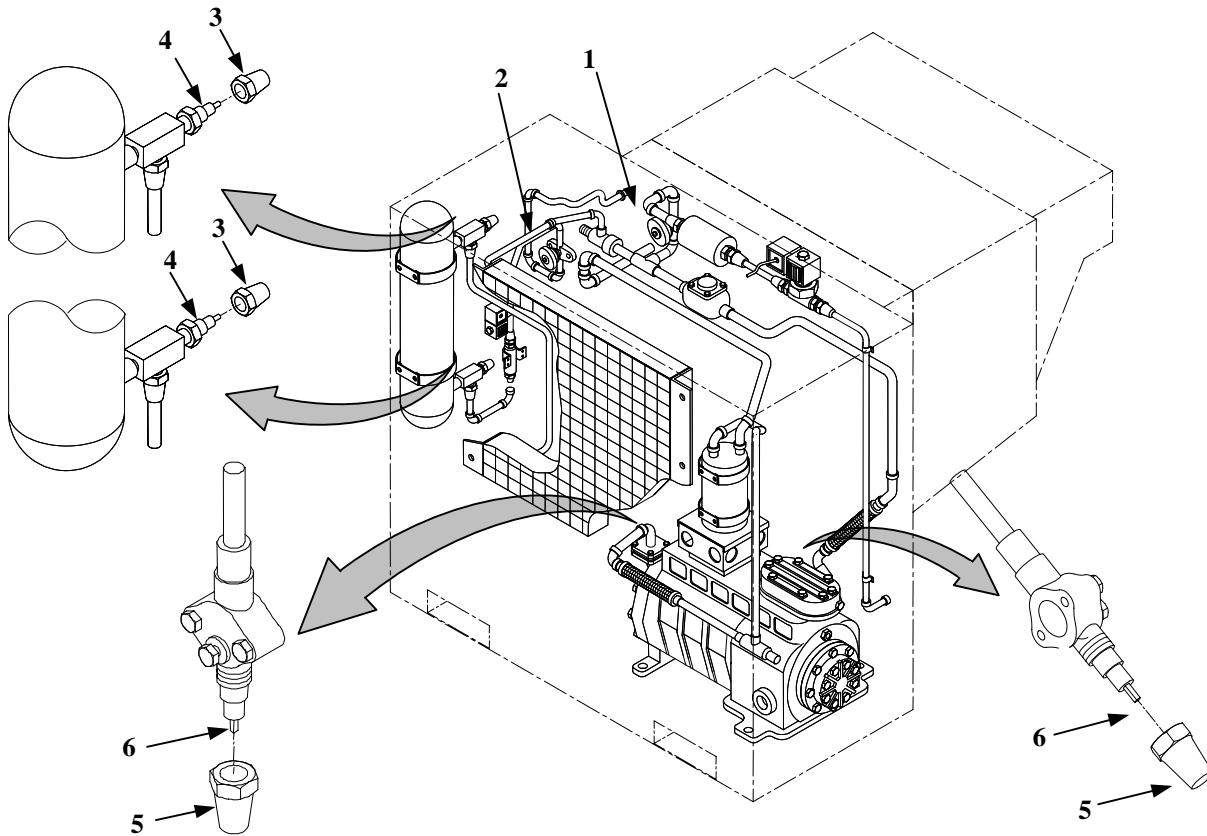
4. Position refrigeration unit valves (open) as follows:

- a. Open both side condenser doors.

CAUTION

Using excessive force when opening or closing valves can cause damage to the valve seats.

- b. Fully open both stop valves (1 and 2, figure 6).



99-6082-F5-WP0017

Figure 6. Refrigeration Valve Setting for Normal Operation

- c. Remove two caps (3) and fully open two isolation valves (4). Install two caps.

NOTE

The compressor shut off valves can be adjusted to three positions: fully closed to block the refrigerant tubes and isolate the compressor and service ports, fully open to allow flow from piping to compressor but not the service port, or cracked (one turn closed from fully open) to allow flow from piping to compressor and service port on valve

- d. Remove two caps (5) and fully open two shut off valves (6). Install two caps.

REFRIGERATION UNIT PREPARATION – Continued.

5. Loosen four compressor mount locknuts (1, Figure 7) until proper operating space of 1.5 in. (3.81 cm) is reached.
6. Close both side condenser doors.

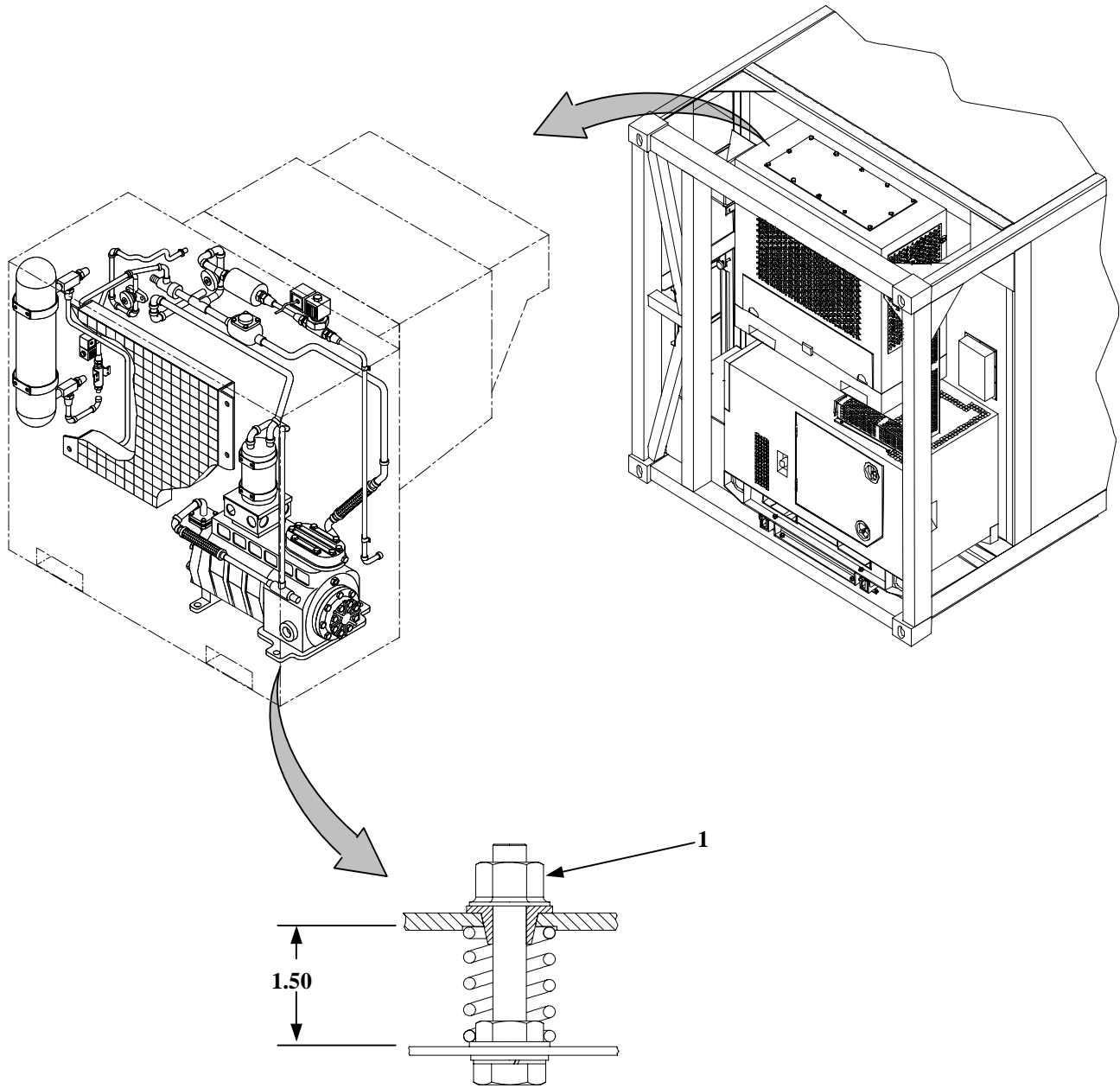


Figure 7. Compressor Mount

**REFRIGERATED CONTAINER SYSTEM
SERVICE UPON RECEIPT – Continued**

0017 00**REFRIGERATION UNIT PREPARATION – Continued.**

7. Open control box cover (1, Figure 8) and secure open with door holder clips.
8. Adjust refrigeration unit controls follows:
 - a. Remove six screws (2). Open the control box panel (3).

NOTE

- The defrost timer controls are marked T1 and T2. Control T1 adjusts the length of time the Refrigeration Unit will operate continuously before initiating a defrost cycle. Control T2 adjust the maximum length of time the Refrigeration Unit will remain in the defrost cycle.
 - The time scales indicate an approximate percentage of time based on 24 hours. For example, to set the time for 6 hours, adjust the control to 25% (6 hours is 25% of 24 hours).
 - The time controls have a minimum setting of 14 minutes when set at 0%.
- b. Adjust the defrost timer (4) control T1 to approximately 25% (6 hours) and control T2 to approximately 2% (30 minutes). This is the recommended factory setting, however, the controls can be set as desired to best suit the operating conditions.
 - c. Adjust dual pressure control switch (5) HIGH PRESSURE CUTOFF to 305, low pressure CUT IN to 0, and low pressure CUTOFF to 15 IN VAC.
 - d. Close the control box panel (3). Install six screws (2).
 - e. Close and secure the control box cover (1).
9. Service, start, and operate Refrigeration Container System (WP 0006 00).

REFRIGERATION UNIT PREPARATION – Continued.

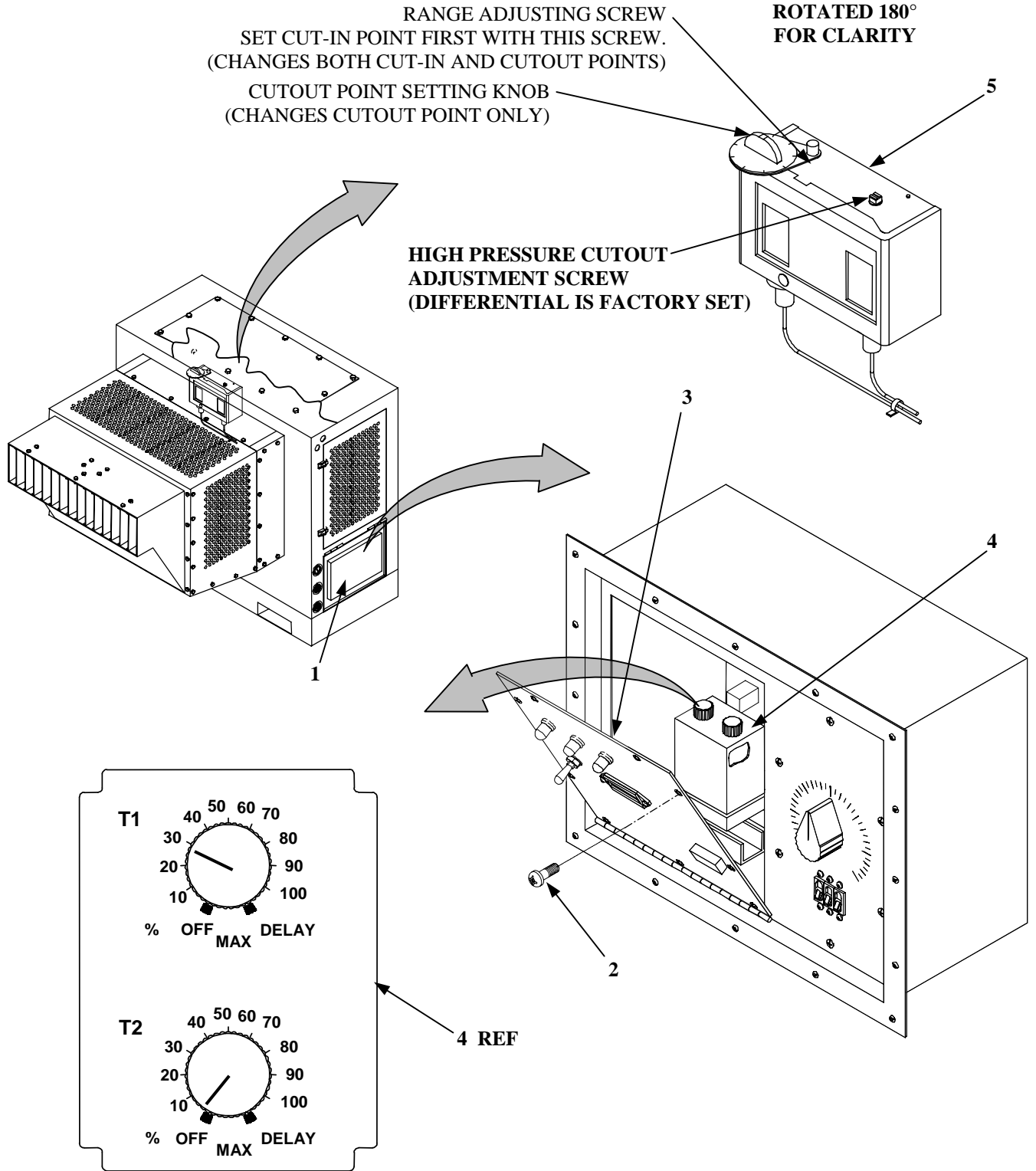


Figure 8. Preliminary Adjustment.

PREPARATION FOR MOVEMENT.

CAUTION

To prevent damage to container cargo, make sure cargo is securely packed in container.

1. Check container to make sure all boxes and packages are properly secured. Refer to AR 746-1, packaging of Army Material for Shipment and Storage.
2. Verify that no personnel are inside the container.
3. Verify that all doors are closed and securely fastened.
4. Check recorder thermometer chart. Verify container temperature is correct for type of cargo being stored. If required, allow refrigeration unit to operate until temperature has stabilized.

CAUTION

To prevent damage to cargo, make sure electrical power, external or generator set is available at next work site. Refrigeration should only be shut down for short periods of time as required to load/unload container from transportation vehicle.

5. Shut down Refrigeration Unit (WP 0006 00).
6. If generator set is not being used, shut down generator (WP 0006 00). Retrieve and store grounding rod assembly. For tactical moves, leave grounding cable attached to generator ground lug. Coil cable and stow behind generator.
7. If external power is not being used, shut down power source, (power source manual). Disconnect Refrigeration Unit power cable from power source.

MOVEMENT.

WARNING

- Loaded refrigerated container is extremely heavy. To prevent injury to personnel and damage to equipment, use a hoist and sling rated at a minimum capacity of 26.45 tons (52,900 lbs./ 24,000 kg).
- Commercial container handling equipment (cranes, top lift devices, front and side lift loaders and self-loading transporters) are suitable for handling the refrigeration unit.
- Always use spreader frame when top lifting container.
- Container must be lifted vertically from all four corners.
- Do not lift container with cable slings at an angle.
- Never use forklift to move, lift and or push container unless forklift is designed for use with container (MIL-VAN).

**REFRIGERATED CONTAINER SYSTEM
SERVICE UPON RECEIPT – Continued**

0017 00

MOVEMENT – Continued.

1. Have refrigerated container loaded onto trailer/chassis, railway car, or ship as required.
2. If refrigerated container will be operated off external power, connect refrigerated unit power cable to power source.
3. If refrigerated container will be operated off generator set, start generator and refrigeration unit per WP 0006 00.

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES**

0018 00

GENERAL.

- a. The Preventive Maintenance Checks and Services presented in Table 1 lists the inspections and care of your equipment required to keep it in good operating condition and ready for its primary mission.
- b. When a check and service procedure is required for both weekly and monthly intervals, it is not necessary to do the procedure twice if the equipment is operated during the weekly period.

WARNINGS AND CAUTIONS.

Always observe the WARNINGS and CAUTIONS appearing in the PMCS table. Warnings and cautions appear before applicable procedures. You must observe WARNINGS and CAUTIONS to prevent serious injury to yourself and others or prevent your equipment from being damaged.

PMCS TABLE.

Refer to Table 1 for Preventive Maintenance Checks and Services.

NOTE

Be sure to observe all special information and notes that appear in your table.

- a. Item Number Column. Numbers in this column are for reference. When completing DA Form 2404 (Equipment Maintenance and Inspection Worksheet), include the item number for the check/service indicating a fault. Item numbers also appear in the order that you must do checks and services for the intervals listed.
- b. Interval Columns. This column tells you when you must do the procedure in the procedure column. WEEKLY procedures must be done during the seven day operating period. MONTHLY procedures must be done during the time you are operating or using the equipment for its intended mission.
- c. Location, Check/Service Column. This column provides the location and the item to be checked or serviced. The item location is underlined.
- d. Procedure Column. This column gives the procedure you must do to check or service the item listed in the Check/Service column to know if the equipment is ready or available for its intended mission or for operation. You must do the procedure at the time stated in the interval column.
- e. Not Fully Mission Capable If: Column. Information in this column tells you what faults will keep your equipment from being capable of performing its mission. If you make check and service procedures that show faults listed in this column, do not operate the equipment. Follow standard operating procedures for maintaining the equipment or reporting equipment failure.

**REFRIGERATED CONTAINER SYSTEM
UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES – Continued**

0018 00

Table 1. Unit Preventive Maintenance Checks and Services to be performed WEEKLY while operating the Refrigerated Container System.

NOTE

If the equipment must be kept in continuous operation, do only the procedures that can be done without disturbing operation. Make complete checks and services when the equipment is shut down.

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1.	Weekly	0.1	<u>EXTERIOR</u> Refrigeration Unit	a. Check for loose mounting hardware.	Mounting bolts damaged or missing.
		0.1		b. Check security of power cable connection. b. Perform Weekly PMCS on Refrigeration Unit (TM 9-4110-258-13).	
2.	Weekly	0.1	Generator Set	a. Check for loose, missing or damaged mounting hardware. b. Perform Weekly PMCS on generator set (TM 9-6115-642-10).	Mounting bolts damaged, loose or missing.
3.	Weekly	0.1	Auxiliary Fuel Tank	a. Check fuel tank for loose or missing attaching hardware.	Mounting bolts loose, cracked or missing.
		0.1		b. Inspect fuel tank for corrosion.	Fuel tank leaks.
		0.1		c. Inspect fuel lines for deterioration and leakage.	Fuel lines cracked, split or leaking
4.	Weekly	0.1	Temperature	a. Inspect temperature-sensing tube for dents, kinks and punctures.	Sensing line kinked or punctured.
		0.1		b. Check for loose mounting hardware.	

**REFRIGERATED CONTAINER SYSTEM
UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES – Continued**

0018 00

Table 1. Unit Preventive Maintenance Checks and Services for Model RCS800 – Continued.

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
5.	Weekly	0.1	Temperature Recorder Sensing Bulb	a. Inspect sensing bulb for dents, kinks in sensing line, and obvious damage.	Sensing bulb damaged.
		0.1		b. Check security of mounting hardware.	Missing mounting screws.
6.	Monthly	0.1	<u>EXTERIOR</u>	Inspect for cracked, bent or broken corner fittings and frame members.	Frame or welds cracked.
			Container Frame		
7.	Monthly	1.0	<u>INTERIOR</u>	Perform Monthly PMCS on Refrigeration Unit (TM 9-4110-258-13).	Not Operational.
			Refrigeration Unit		
8.	Monthly	1.0	Generator Set	Perform Monthly PMCS on Generator Set (TM 9-6115-642-10).	
9.	Monthly	0.1	Container frame	Inspect for bare metal and corrosion.	
10.	Annually	1.0	<u>EXTERIOR</u>	Perform Annual PMCS on Refrigeration Unit (TM 9-4110-258-13).	
			Refrigeration Unit		
11.	Annually	1.0	Generator Set	Perform Annual PMCS on Generator Set (TM 9-6115-642-10).	

END OF WORK PACKAGE.

THIS WORK PACKAGE COVERS:

Care, Personnel Safety and Proper Equipment

GENERAL.

This Work Package contains instructions for performing unit level maintenance on the refrigerated container.

PERSONNEL SAFETY.

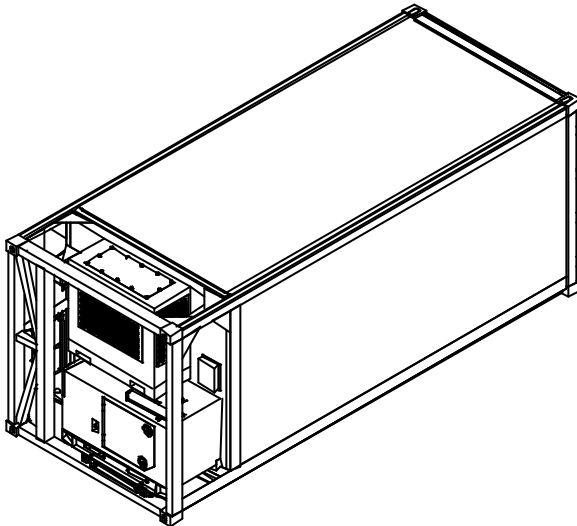
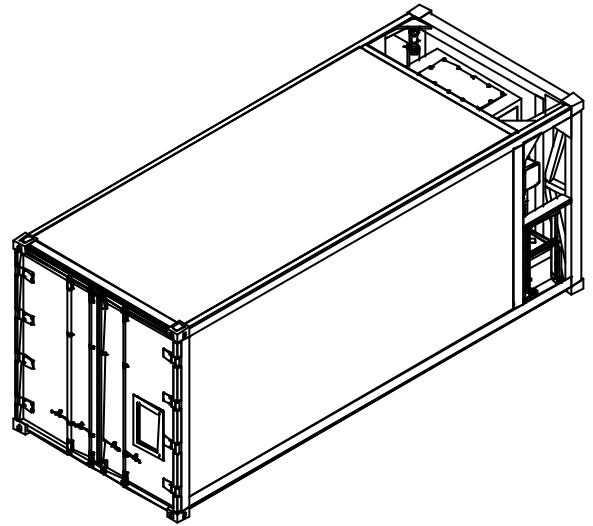
To ensure safety of personnel, proper care should be used when handling assemblies and parts. Many assemblies are heavy. The assistance of another person, lifting device or other support equipment may be required to move or position heavy items.

Personnel must remove all items of jewelry (rings, bracelets, watches, necklaces, etc.) and loose clothing before working on the equipment. Jewelry and loose clothing can get caught in moving equipment and result in injury to personnel. Jewelry can cause electrical shorts or severe injury when working around electrical equipment.

When performing maintenance on the refrigerated container, keep in mind that the purpose of the equipment is to store and transport perishable material, such as food. Cleaning fluids, lubricants, preservatives, paint or other chemicals must not be allowed to contaminate the container. Clean container interior only with approved materials. Operate the refrigerated container after performing maintenance. Make sure corrective action has been performed correctly.

PROPER EQUIPMENT.

Obtain proper equipment before beginning maintenance. This includes hand tools and/or special tools, receptacles for storing small parts, and expendable materials required by the maintenance task.

**FRONT / ROAD SIDE VIEW****CURB SIDE VIEW****END OF WORK PACKAGE.**

EXHAUST PIPE REPLACEMENT

0020 00

THIS WORK PACKAGE COVERS:

Removal and Installation

INITIAL SET-UP:**Maintenance Level:**

Unit

Tools:

General Mechanics Toot Kit (Section III, Item 1, WP 0048 00)

Materials/Parts:

Lock Washers (Item 27, WP 0081 00)

Anti-seize Compound (Item 10, WP 0078 00)

Personnel Required:

Two

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)

Generator Set shut down (WP 0006 00)

REMOVAL.**WARNING**

To prevent injury to personnel, allow generator set and exhaust lines to cool before removal.

1. Remove nine screws (1), lock washers (2), flat washers (3) and vertical exhaust shield (4).
2. Loosen nut (5) and remove rain cap (6).
3. Remove six nuts and lock washers (7), U-Clamps (8) and vertical exhaust pipe (9).
4. Remove two generator locking bolts (10).
5. Using two personnel, release retention latches (11) simultaneously and pull from both sides on the generator lifting rings (12) until generator (13) slides out and retention latches lock.
6. Remove two nuts and lock washers (14), U-Clamp (15) and spacer (16) from horizontal exhaust shield (17).
7. Remove five screws (18) and horizontal exhaust shield (17).
8. Remove exhaust pipe (19).

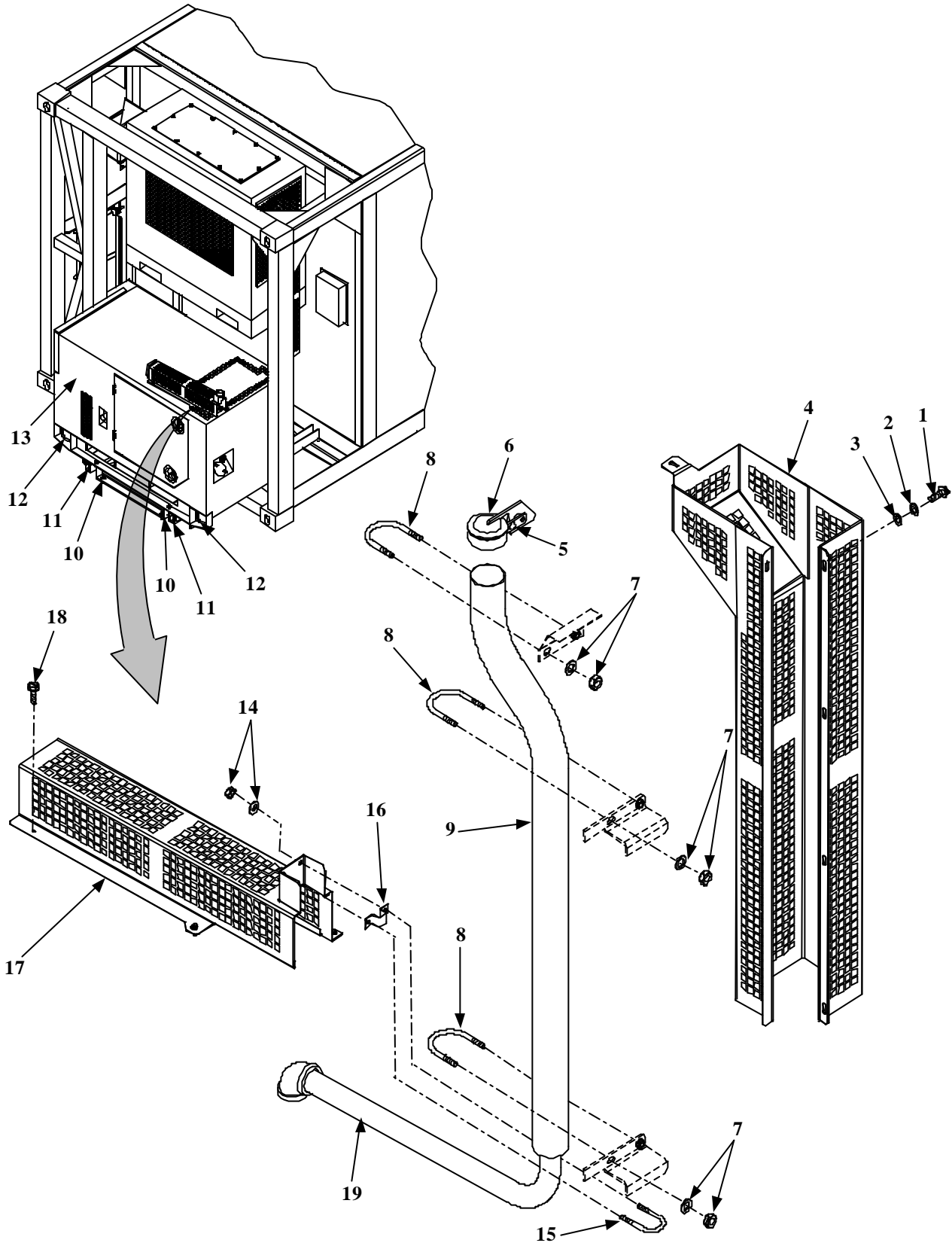
INSTALLATION.

1. Apply anti-seize compound (Item 10, WP 0078 00) to threads and install horizontal exhaust pipe (19). Final positioning will be accomplished when shield and clamp are installed.
2. Install horizontal exhaust shield (17) on generator set (13) and secure with five screws (18).
3. Install spacer (16) and U-Clamp (15) on horizontal exhaust shield (17) and secure with two nuts and lock washers (14). It may be necessary to move exhaust pipe to align the clamp, pipe and shield.

INSTALLATION – Continued.**CAUTION**

When the generator set is returned to the stowed position, fuel hose and power cable must be kept clear of slides. Fuel hose and power could be damaged if pinched by slide.

4. Using two personnel, release retention latches (11) simultaneously, carefully push generator set (13) back into the stowed position until retention latches lock.
5. Install vertical exhaust pipe (9) and secure with three U-Clamps (8) and six nuts and lock washers (7). Bottom of exhaust pipe should be ¼ inch above horizontal exhaust pipe (19).
6. Install rain cap (6) and tighten nut (5).
7. Install vertical exhaust shield (4) with nine flat washers (3), lock washers (2) (Item 27, WP 0081 00), and screws (1).
8. Horizontal exhaust pipe must be able to clear through the vertical exhaust shield (4). If it does not, loosen nuts (14) and U-Clamp (15) and push pipe down and secure by tightening nuts (14).



Exhaust Pipe Assemblies

END OF WORK PACKAGE.

GENERATOR SET REPLACEMENT**0021 00****THIS WORK PACKAGE COVERS:**

Removal, Disassembly, Assembly and Installation

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)
 Forklift (Section III, Item 15, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)

Personnel Required:

Three (including forklift operator)

Material/Parts:

Lock Washers (Item 31, WP 0081 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)
 Generator Set shut down (WP 0006 00)

REMOVAL.

1. Remove two generator locking bolts (1, Figure 1) from the generator set (2).
2. Using two personnel, release retention latches (3) simultaneously and pull both sides on the generator lifting rings (4) until generator set (2) slides out and retention latches lock.
3. Disconnect auxiliary fuel supply hose (5) from fitting (6) and elbow (7).
4. Drain any fuel in hose (5) into a suitable container.
5. Open storage door (8) and remove dust cap (9) from storage compartment. Store hose (5) in storage compartment, close door (8).
6. Install dust cap (9) on elbow (7) and dust cap (10) on fitting (6).
7. Tag and disconnect power cable (11) as follows:
 - a. Open terminal back door (12).
 - b. Remove fastener tool (13).
 - c. Raise retention clips (14) from each terminal.
 - d. Using fastener tool (13), loosen terminal nuts (15) on each terminal.
 - e. Remove wires terminals including ground wire.
 - f. Replace fastener tool (13).
8. Loosen weather boot (16) and remove power cable (11) from generator set (2). Close terminal door (12).
9. Remove four nuts (17), lock washers (18), bolts (19) and eight flat washers (20). Discard lock washers.
10. Using forklift, remove generator set (2) from slick rails (21).

REMOVAL – Continued.

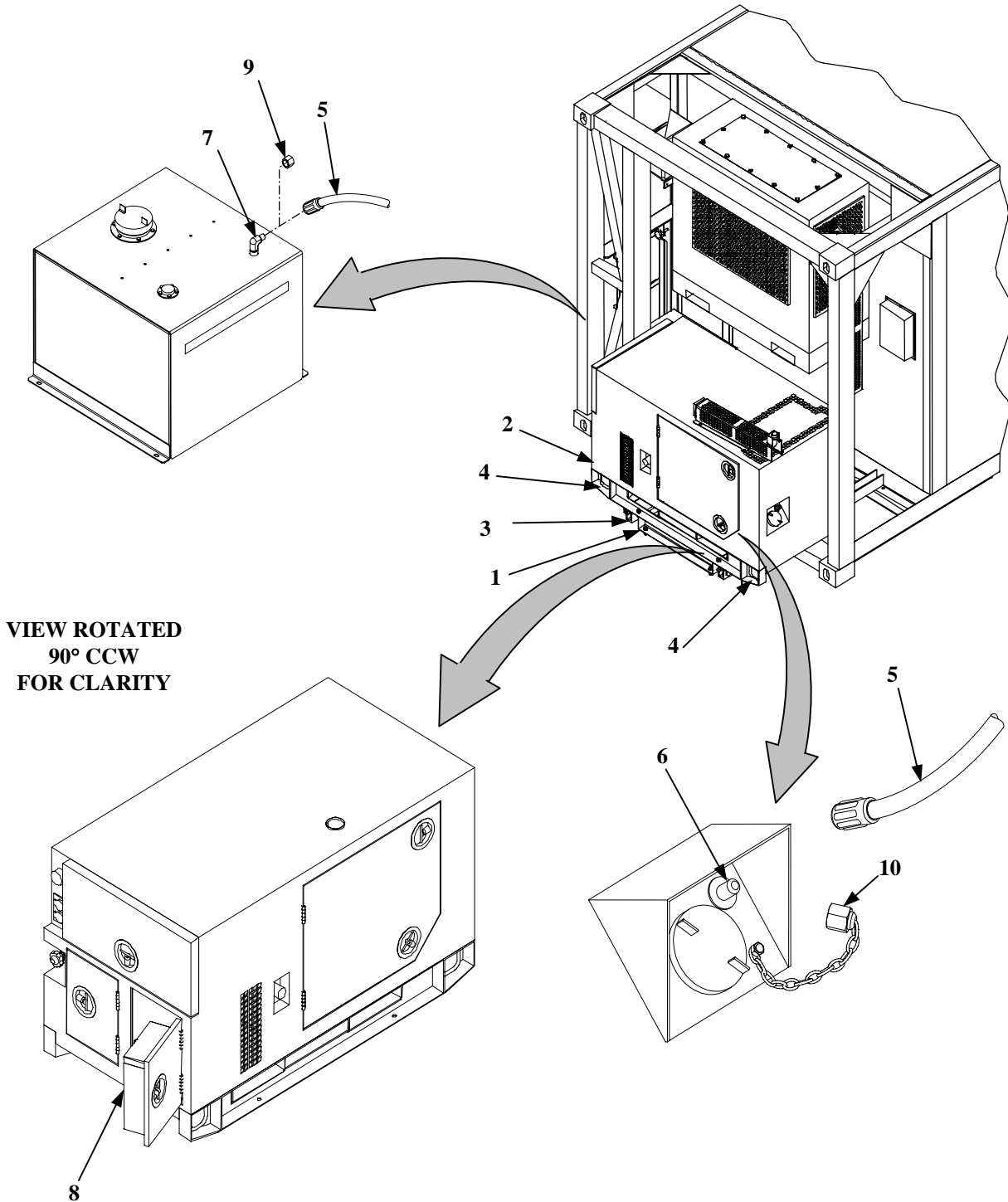


Figure 1. Generator Set Removal / Installation (Sheet 1 of 2)

REMOVAL – Continued.

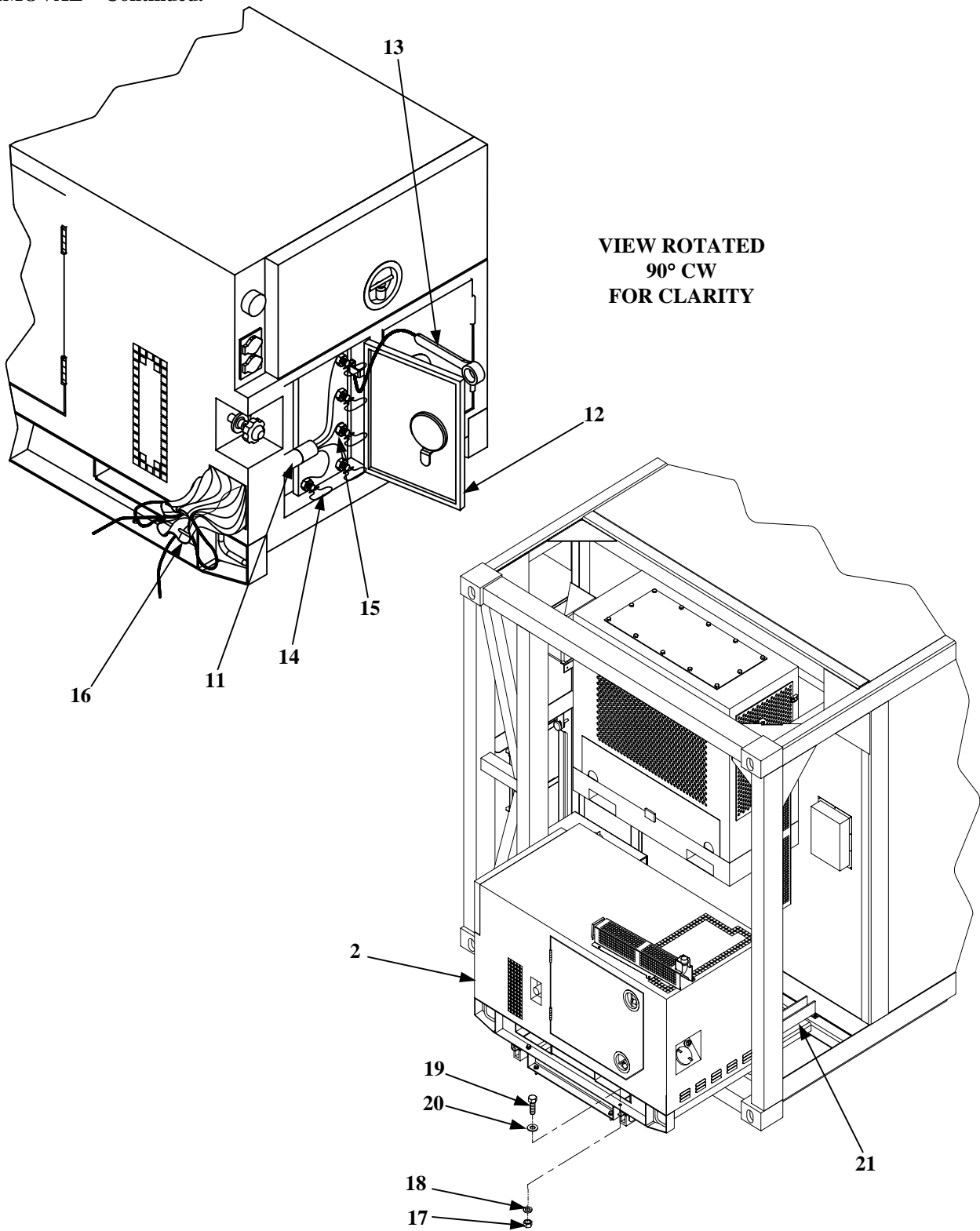


Figure 1. Generator Set Removal / Installation (Sheet 2 of 2)

DISASSEMBLY.

1. Remove two nuts (1), two lock washers (2), U-clamp (3), and spacer (4).
2. Remove five screws (5) and horizontal shield (6).
3. Reinstall five screws (5).
4. Remove horizontal exhaust pipe (7).

ASSEMBLY.

1. Install horizontal exhaust pipe (7, Figure 2). Final position will be accomplished when shield and clamp are installed.
2. Remove two screws (5) from generator set at positions (A and B).
3. Position horizontal exhaust shield (6) over exhaust pipe (7) and install two screws (5) in position (A and B).
4. Install spacer (4) and exhaust U-clamp (3) on exhaust pipe (7) secure with two lock washers (2) and two nuts (1). It may be necessary to move exhaust pipe to align clamp, pipe and shield.
5. Using horizontal exhaust shield (6) as a template, drill three .125 diameter holes in top panel of generator set (8).
6. Install three screws (5) to secure horizontal exhaust shield (6) to generator set (8).
7. Loosen two nuts (1) on U-clamp (3) to allow for adjustment of pipe (7) when generator set (8) is moved to stowed position.

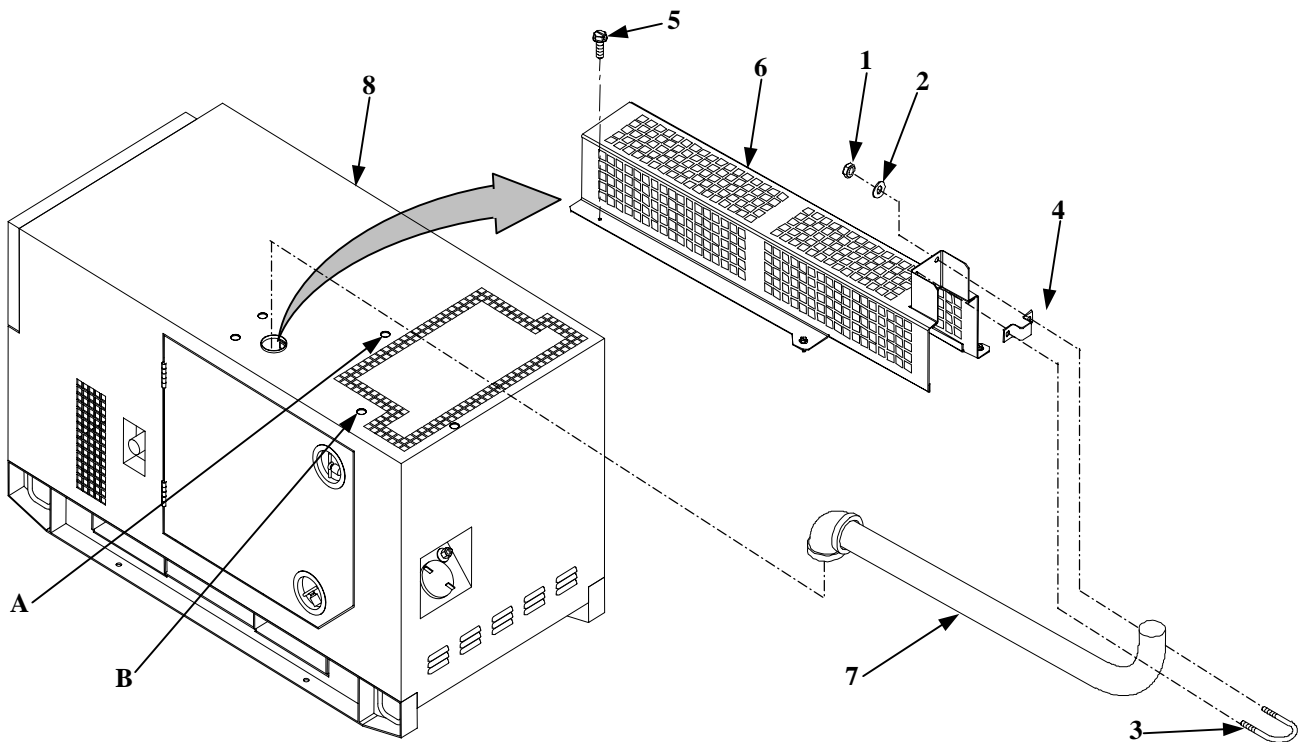


Figure 2. Generator Set Disassembly / Assembly

INSTALLATION.

1. Using a forklift, position generator set (1, Figure 3) on frame slide rails (2).
2. Align mount holes in generator set (1) with mounting holes in generator set slide (2).
3. Install eight flat washers (3), four lock washers (4) (Item 31, WP 0081 00), bolts (5) and nuts (6) to secure generator set (1) to slide rails (2).

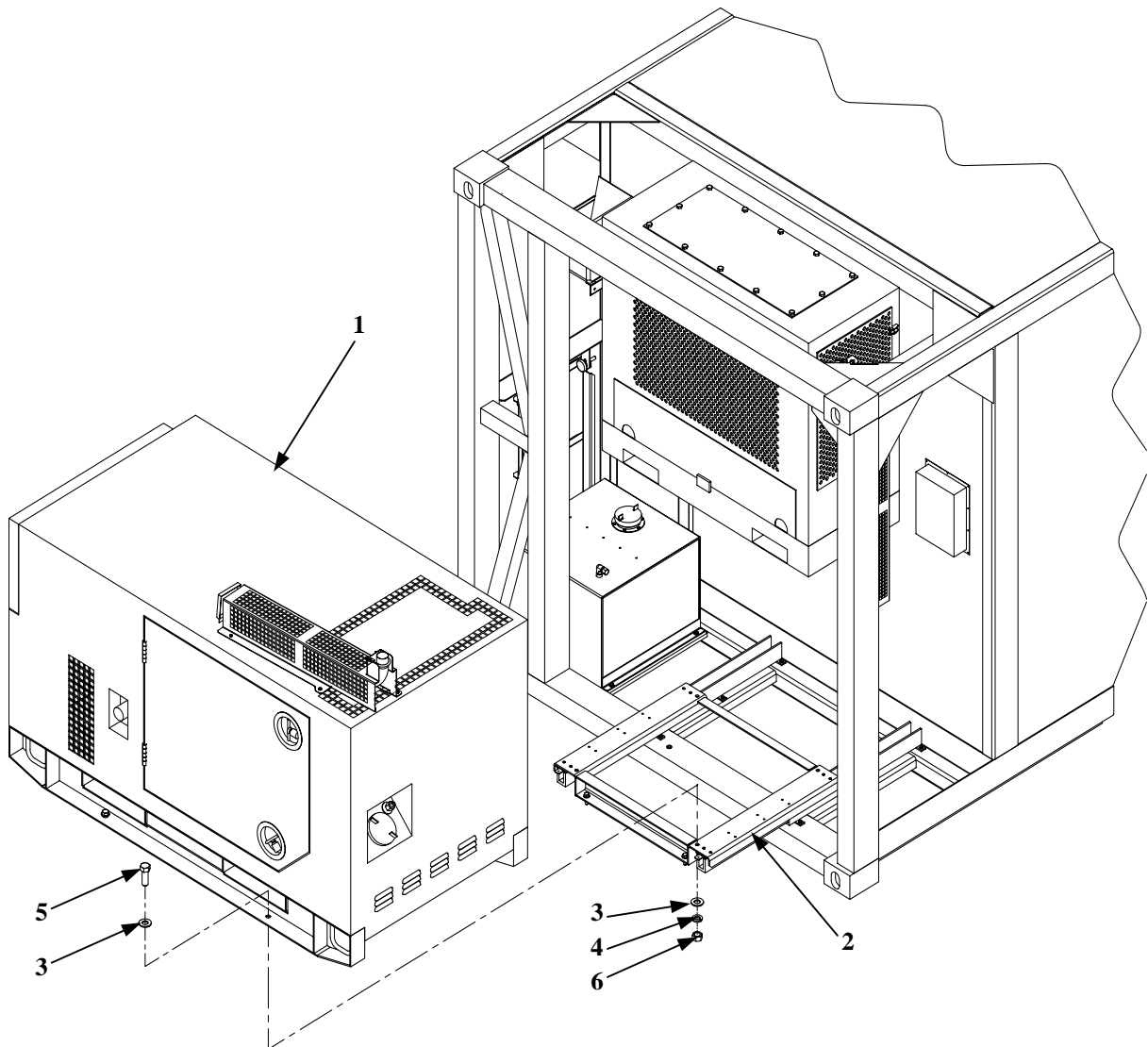


Figure 3. Generator Set Installation (Sheet 1 of 4)

INSTALLATION – Continued.

4. Connect power cable (7, Figure 3) to generator set (1) as follows:
 - a. Open terminal door (8). Insert power cable (7) through weather boot (9) into terminal compartment.
 - b. Remove fastener tool (10). Raise retention clips (11) on each terminal.
 - c. Connect black wire to terminal L1.
 - d. Connect white wire to terminal L2.
 - e. Connect red wire to terminal L3.
 - f. Connect green wire to terminal L0.
 - g. Use fastener tool (10) to tighten nuts on each terminal.
 - h. Clip retention clip (11) over each terminal and return fastener tool (10) to storage position.
 - i. Close terminal box door. (8). Secure weather boot (9) around cable (7).

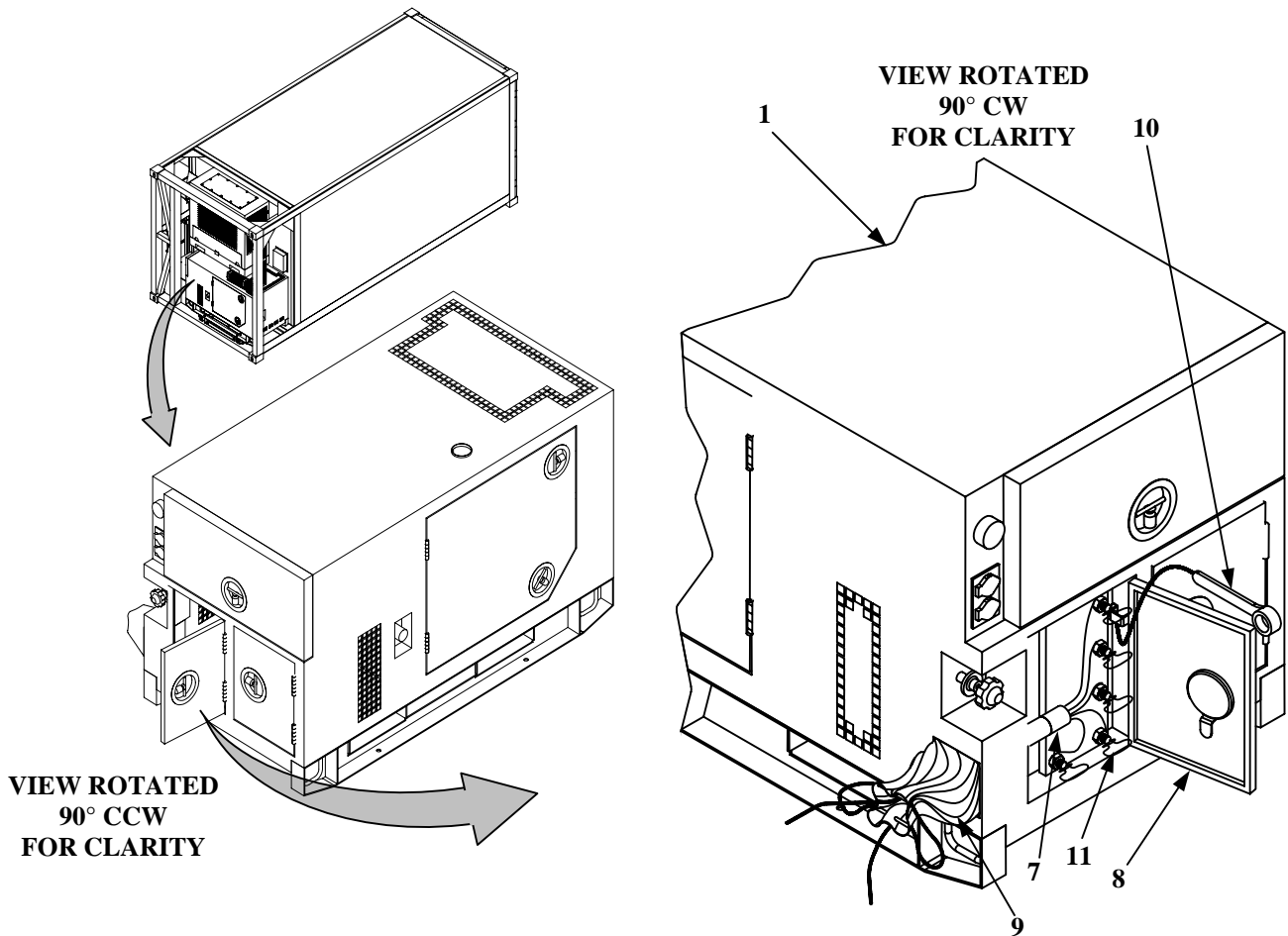


Figure 3. Generator Set Installation (Sheet 2 of 4)

INSTALLATION – Continued.

5. Open storage door (12, Figure 3) and remove fuel hose (13) from storage box (14).
6. Remove dust cap (15) and connect auxiliary fuel hose (13) to elbow (16).
7. Remove dust cap (17) and connect fuel hose (13) to external fuel fitting (18).
8. Stow dust cap (15) in storage box (14), close lid and door (12).

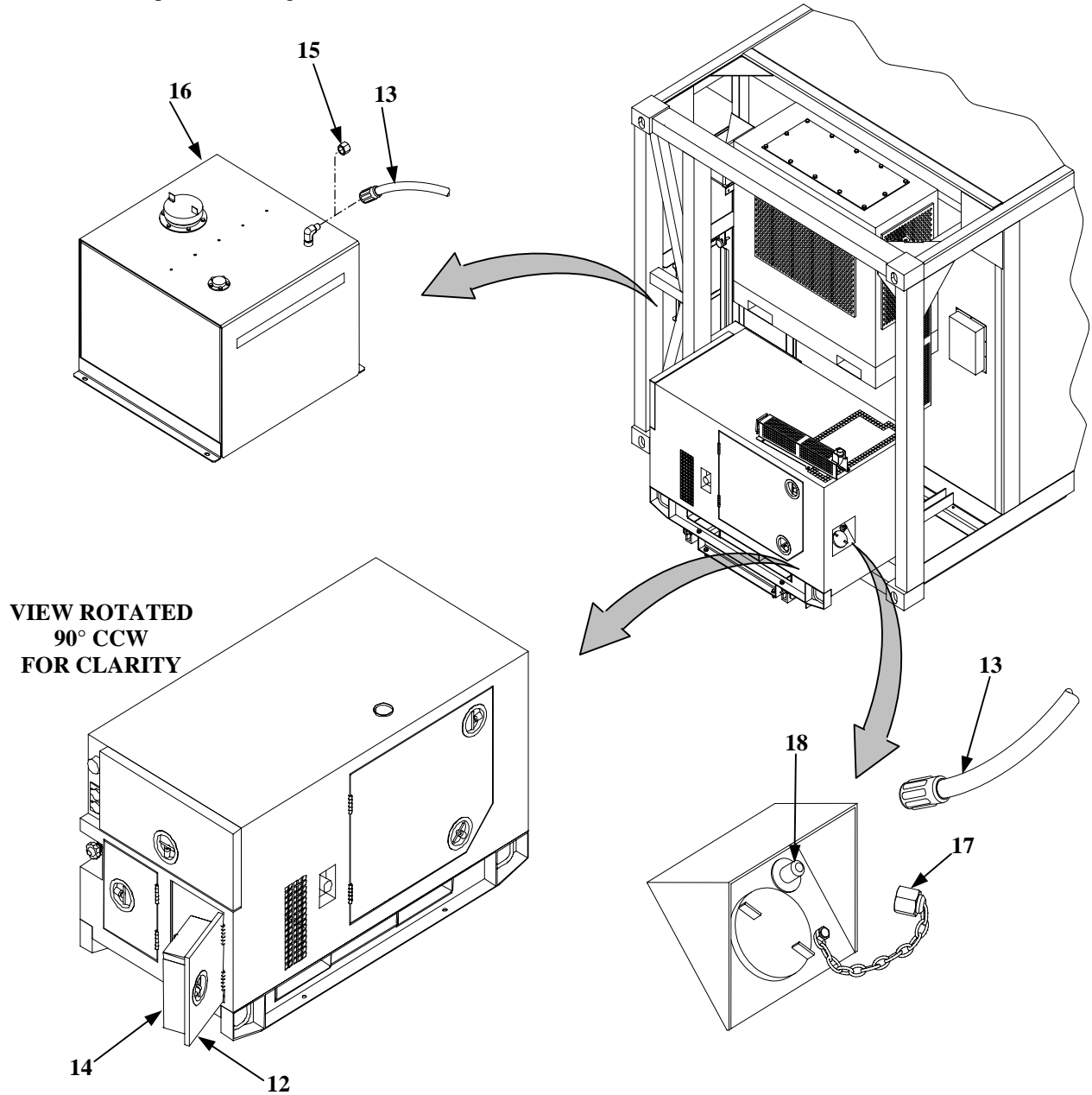


Figure 3. Generator Set Installation (Sheet 3 of 4)

INSTALLATION – Continued.**CAUTION**

When generator set is returned to the stowed position, fuel hose and power cable must be kept clear of the slides. Fuel hose and power cable could be damaged if pinched in slide.

9. Using two personnel, release retention latches (19) simultaneously and carefully push generator set (1) back into stowed position until retention latches lock. If exhaust pipe (20) makes contact with vertical exhaust shield (21), perform the following steps:
 - a. Hold horizontal exhaust pipe (20) down far enough to clear vertical shield (21) and tighten exhaust nuts (22).
 - b. Push generator set (1) into stowed position until retention latches (19) lock.
10. Install two generator locking bolts (23).

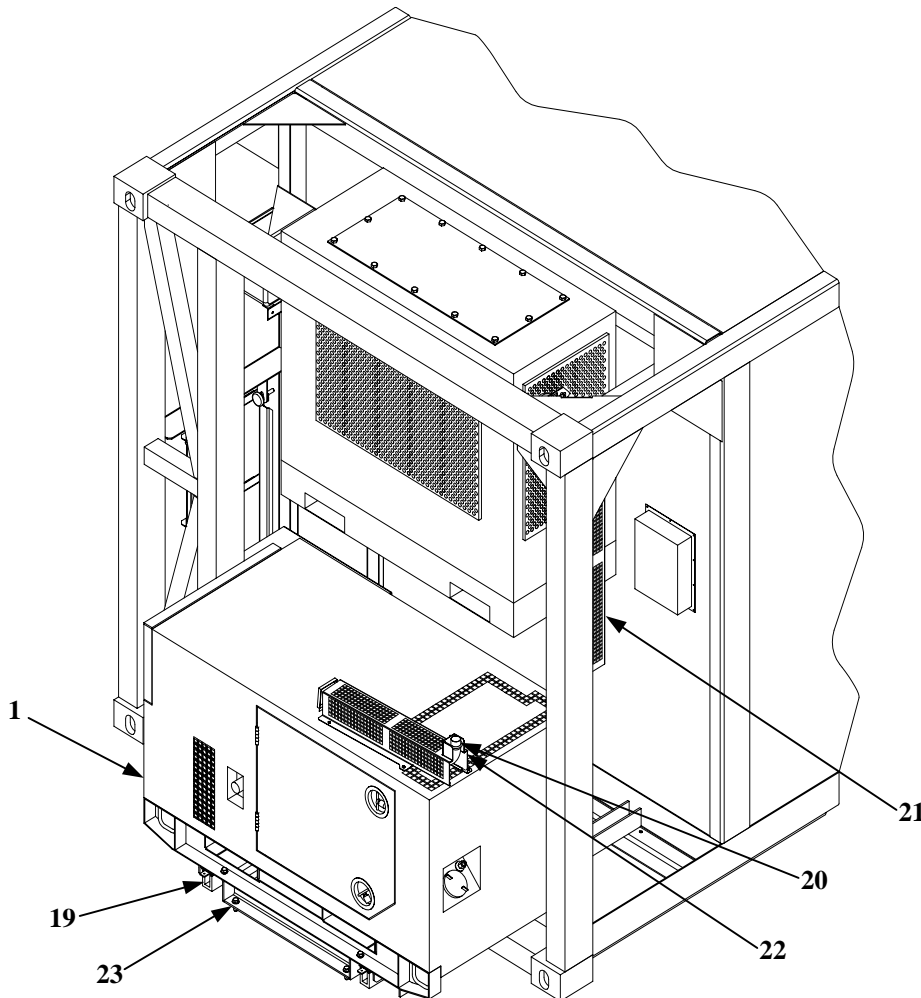


Figure 3. Generator Set Installation (Sheet 4 of 4)

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
GENERATOR SET SLIDES**

0022 00

THIS WORK PACKAGE COVERS:

Removal / Installation

INITIAL SET-UP:

Maintenance Level:

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Equipment Condition:

Generator Set removed (WP 0021 00)

Personnel Required:

Two

Material/Parts:

Lock Washers (Item 28, WP 0081 00)

Lock Washers (Item 29, WP 0081 00)

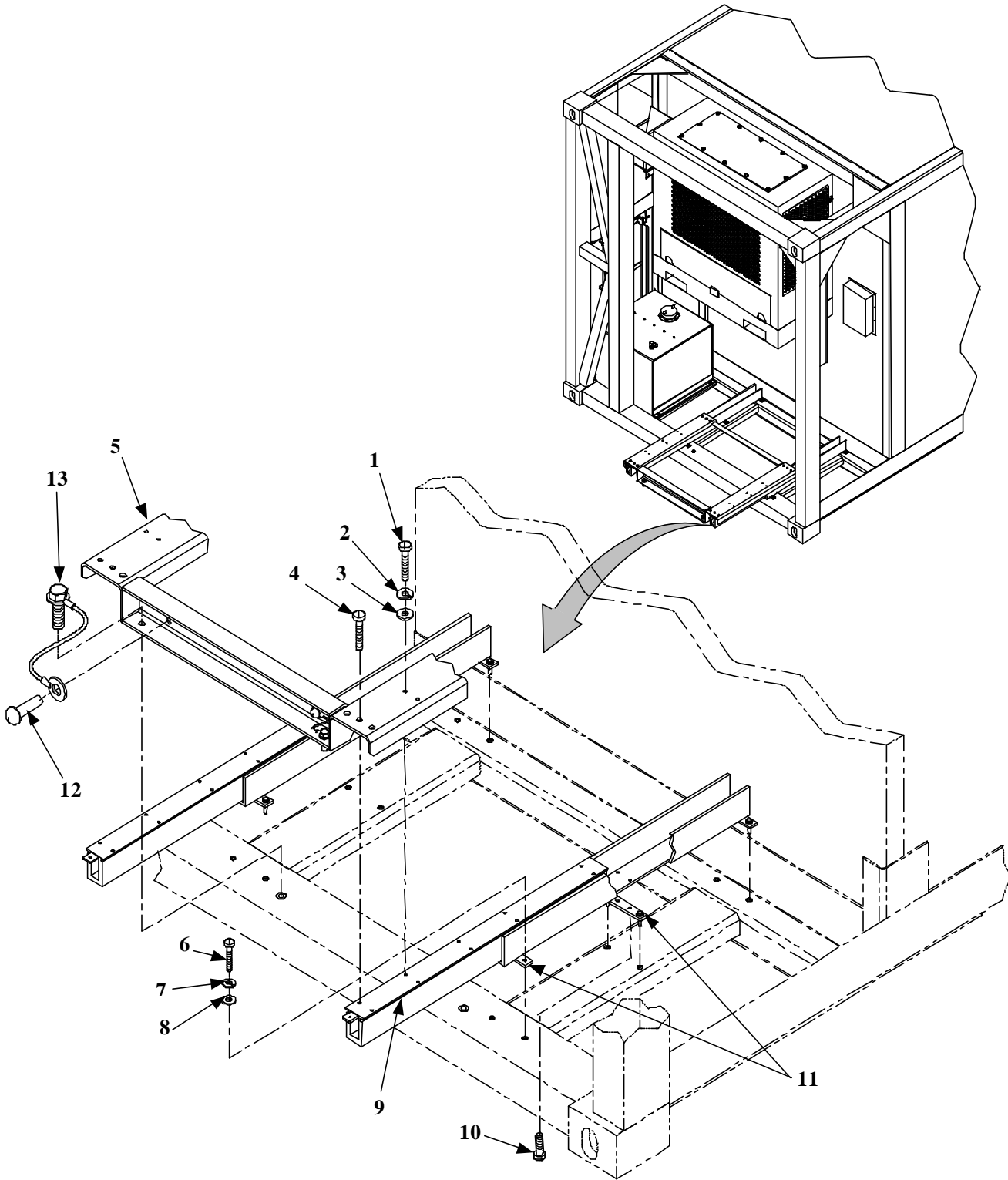
Rivets (Item 12, WP 0081 00)

REMOVAL.

1. Remove twelve screws (1), lock washers (2), flat washers (3), eight screws (4) and generator mount plate (5). Discard lock washers (2).
2. Remove six screws (6), lock washers (7), and flat washers (8), from each of the two slides (9). Discard lock washers (7).
3. Remove six screws (10) and three slide mounts (11) from each slide (9).
4. Drill out two rivets (12) and remove two generator locking bolt lanyards (13).

INSTALLATION.

1. Install three slide mounts (11) on bottom of each slide (9) and secure with six screws (10).
2. Install two slides (9) on frame (14) and secure with six flat washers (8), new lock washers (Item 29, WP 0081 00) (7), and screws (6). Hand Tight Only.
3. Position generator mount on both slides (9) and secure with twelve flat washers (3), new lock washers (Item 28, WP 0081 00) (2), and screws (1).
4. Tighten six screws (6) installed in step 2.
5. Secure two generator locking bolt lanyards (13) to generator mounting plate (5) with two rivets (Item 12, WP 0081 00) (12).



Generator Set Slides

END OF WORK PACKAGE.

REFRIGERATION UNIT REPLACEMENT**0023 00****THIS WORK PACKAGE COVERS:**

Removal, Inspection, Repair and Installation

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Forklift (Section III, Item 15, WP 0048 00)

Personnel Required:

Three (including forklift operator)

Material/Parts:

Silastic Sealant (Item 3, WP 0078 00)

Lock Washers (Item 32, WP 0078 00)

Equipment Condition:

Generator Set Removed (WP 0021 00)

REMOVAL.

1. Disconnect Refrigeration Unit power cable (1) from generator power cable (2).
2. Open cable storage compartment door (3) and stow power cable (1). Close door (3).

CAUTION

Do not try to lift Refrigeration Unit with forklift while mounting hardware is still attached. Do not extend forklift tines too far into Refrigeration Unit tine guides. Refrigeration Unit and Container will be damaged.

3. Position forklift tines in Refrigeration Unit (4) tine guides (5) so they can support the unit's weight when the mounting hardware is removed.
4. Open both side doors (6).
5. Remove four nuts (7), lock washers (8) and flat washers (9). Discard lock washers.
6. Raise the Refrigeration Unit (4) with the forklift just enough to take the weight off the mounting studs (10).
7. Open right rear door (11).
8. While pushing the Refrigeration Unit (4) from inside the container (12), remove the Refrigeration Unit from the front panel (13).
9. If the Refrigeration Unit (4) is not replaced immediately, install the cover plate (14) over the opening in front panel (13) and secure with four flat washers (9), lock washers (8) and nuts (7). Cover plate is stored inside container when not in use.

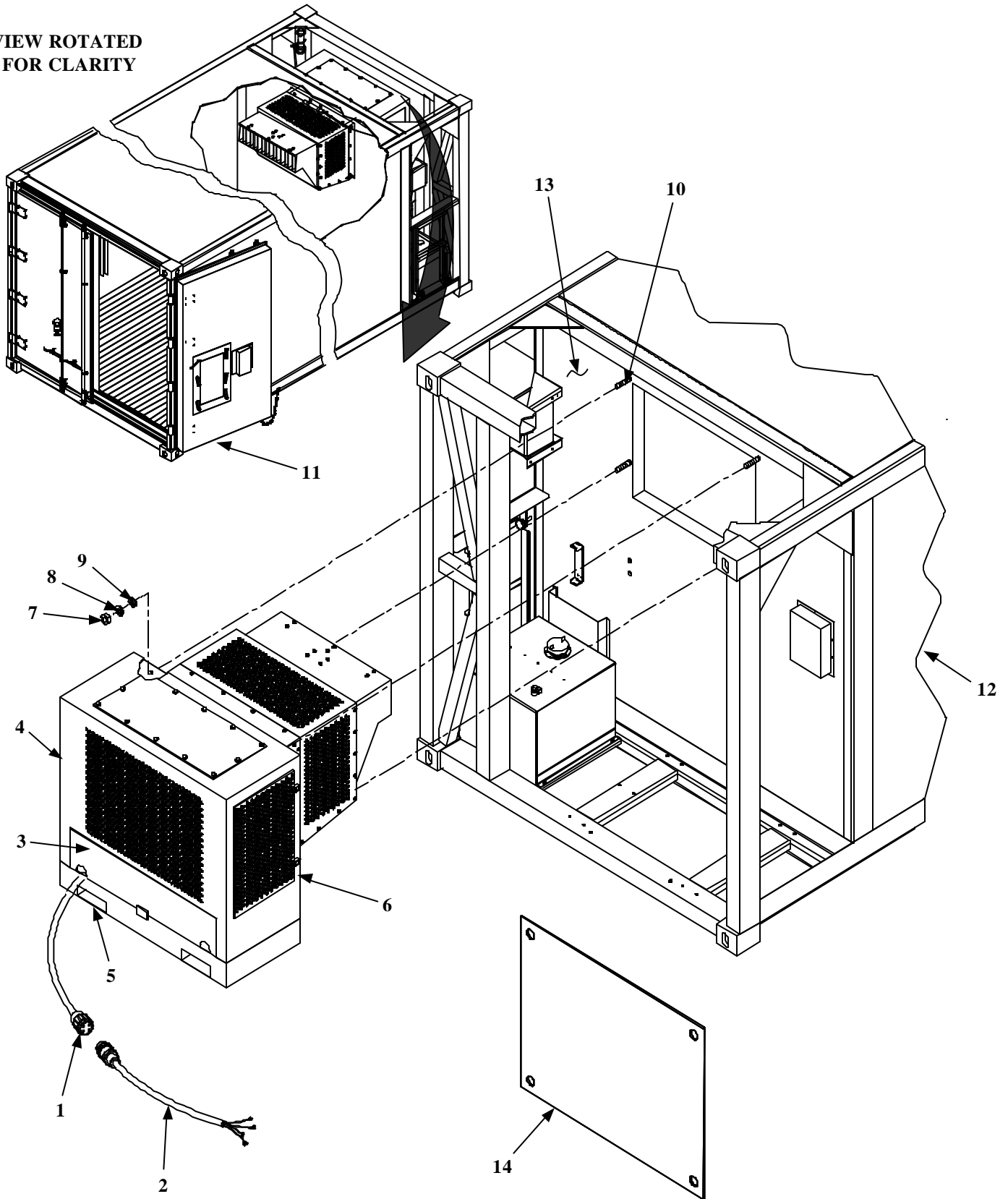
INSPECTION.

1. Inspect mounting studs (1) for damaged threads.
2. Inspect framing (2) around opening in front panel (3) for damage.

REPAIR.

1. Replace damaged studs.
2. Replace damaged framing (WP 0038 00).

VIEW ROTATED
FOR CLARITY



Refrigeration Unit Assembly Removal and Installation

INSTALLATION.

1. Open right rear door (1).

CAUTION

- Position personnel inside and outside container to guide Refrigeration Unit into position on front panel. Damage to front panel of Refrigeration Unit can result if unit strikes front panel.
 - Forklift tines must not protrude beyond tine guides on Refrigeration Unit. Front panel will be damaged if tines contact panel.
2. If cover plate (2) is installed on front panel (3), remove four nuts (4), lock washers (5), and flat washers (6). Stow plate inside container (7). Discard lock washers (5).
 3. Apply a bead of sealant (Item 3, WP 0078 00) on outside surface opening of frame (8) just prior to installing Refrigeration Unit (9).
 4. Using forklift, carefully guide Refrigeration Unit (9) into position on front panel (3) and studs (10).
 5. Open both side doors (11).
 6. Install four flat washers (6), lock washers (5) (Item 32, WP 0078 00) and nuts (4).
 7. Remove forklift from Refrigeration Unit (9).
 8. Close both side doors (11).
 9. Open cable storage compartment door (12), remove cable (13) (approx. six feet) and close door.
 10. Connect refrigeration power cable (13) to generator power cable (14).
 11. Close right rear door (1).

END OF WORK PACKAGE.

THIS WORK PACKAGE COVERS:

Removal, Disassembly, Inspection, Repair, Assembly, and Installation

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)
 Rivet Tool (Section III, Item 10, WP 0048 00)

Material/Parts:

Drive rivets (Item 18, WP 0081 00)
 Rivets, Blind (Item 16, WP 0081 00)
 Gasket (Item 3, WP 0079 00)
 Adhesive (Item 1, WP 0078 00)
 Sealant (Item 3, WP 0078 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)
 Generator Set shut down (WP 0006 00)

REMOVAL.**NOTE**

Manual holders are similar and are repaired the same way. Manual holder on front panel is shown being repaired. There is no lanyard on the manual holder mounted on the right rear door.

1. Unfasten two latches (1) and remove cover (2) from box (3).
2. Drill out ten rivets (4) and remove box (3) from front panel (5).
3. Remove sealant from mounting surfaces of box (3) and front panel (5).

DISASSEMBLY.**NOTE**

Disassemble components only to the level required to perform repair.

1. Drill out two rivets (6) and remove lanyard (7).
2. Drill out four rivets (8) and remove two latches (1) from box (3).
3. Drill out four rivets (8) and remove two latch hooks (9) from cover (2).
4. Remove gasket (10) from cover (2).

INSPECTION.

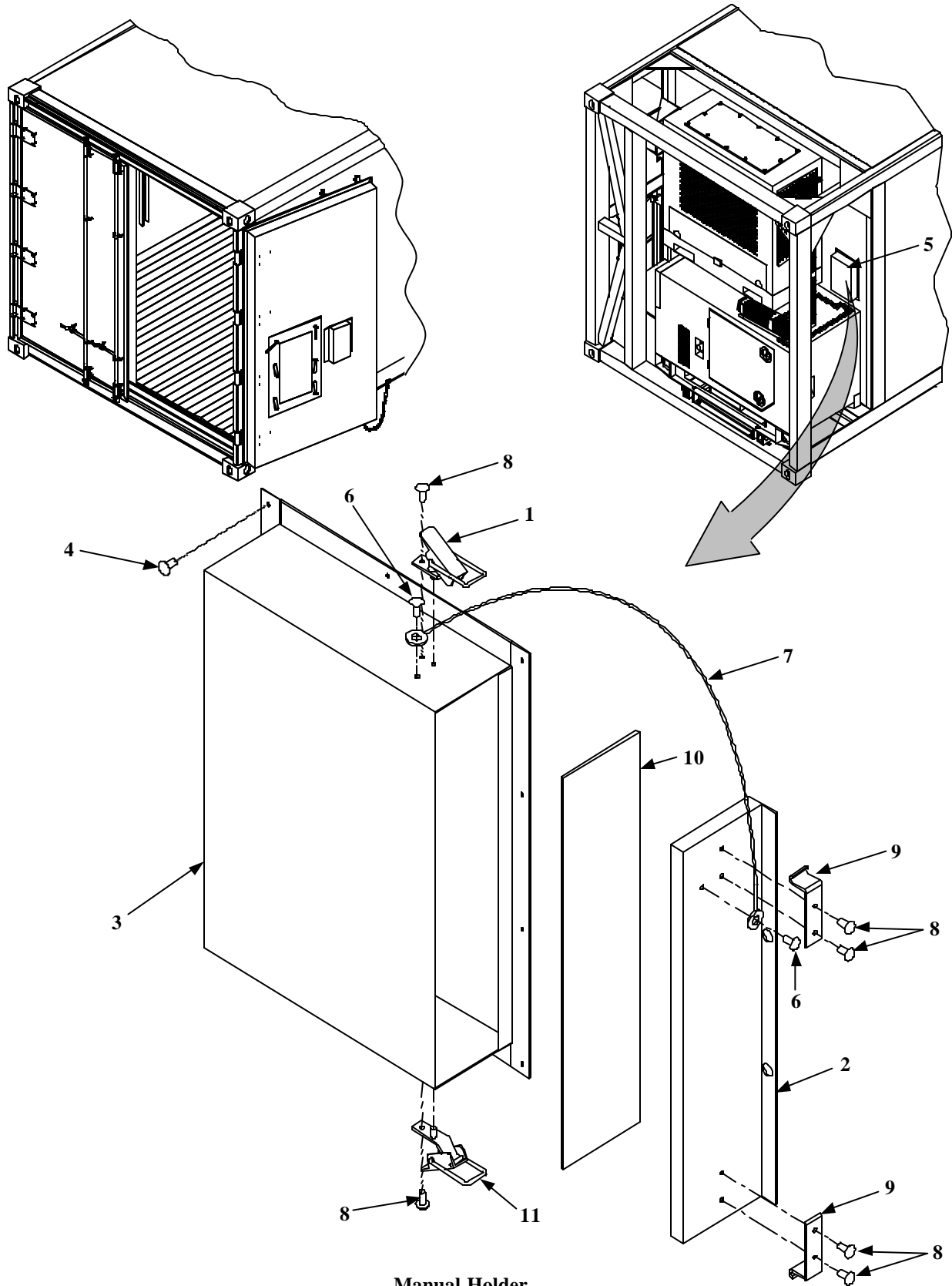
1. Inspect box (3) and cover (2) for cracks.
2. Inspect latches (1) for cracks or broken springs.

REPAIR.

1. Replace defective components.

ASSEMBLY.

1. Apply adhesive (Item 1, WP 0078 00) to inside surface of cover (2).
2. When adhesive (Item 1, WP 0078 00) becomes tacky, press gasket (10) (Item 3, WP 0079 00) in place on cover (2).



Manual Holder

ASSEMBLY – Continued.

3. Using rivet tool, install two latch hooks (9) on cover (2) with four rivets (8) (Item 21, WP 0081 00).
4. Using rivet tool, install two latches (1) on box (3) with four rivets (8) (Item 21, WP 0081 00).
5. Using rivet tool, install lanyard (7) on box (3) and cover (2) with two rivets (6) (Item 16, WP 0081 00)

INSTALLATION.

1. Apply a bead of sealant (Item 3, WP 0078 00) on mounting surface of box (3).
2. Install box (3) with ten drive rivets (4) (Item 18, WP 0081 00) front panel (5).
3. Position cover (2) on box (3) and fasten two latches (1).

END OF WORK PACKAGE.

RECORDING THERMOMETER TESTING AND ADJUSTMENT

0025 00

THIS WORK PACKAGE COVERS:Testing and Adjustment

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Test Thermometer Probe (Section III, Item 8, WP 0048 00)

Equipment Condition:

Refrigerated Container System shut down (WP 0006 00)

TESTING.

1. Open right container door (1).
2. Position test thermometer probe (2) (Item 8, WP 0048 00) next to thermometer element bulb (3).
3. Close right container door (1).
4. Operate the Refrigerated Container system (WP 0006 00) and allow time for temperature to stabilize inside container (4).
5. Compare indication on recording thermometer paper chart (5) with temperature indicated by test thermometer probe (2).
6. If temperature indications on test thermometer probe (2) and recording thermometer (6) are not the same, recording thermometer (6) must be adjusted.

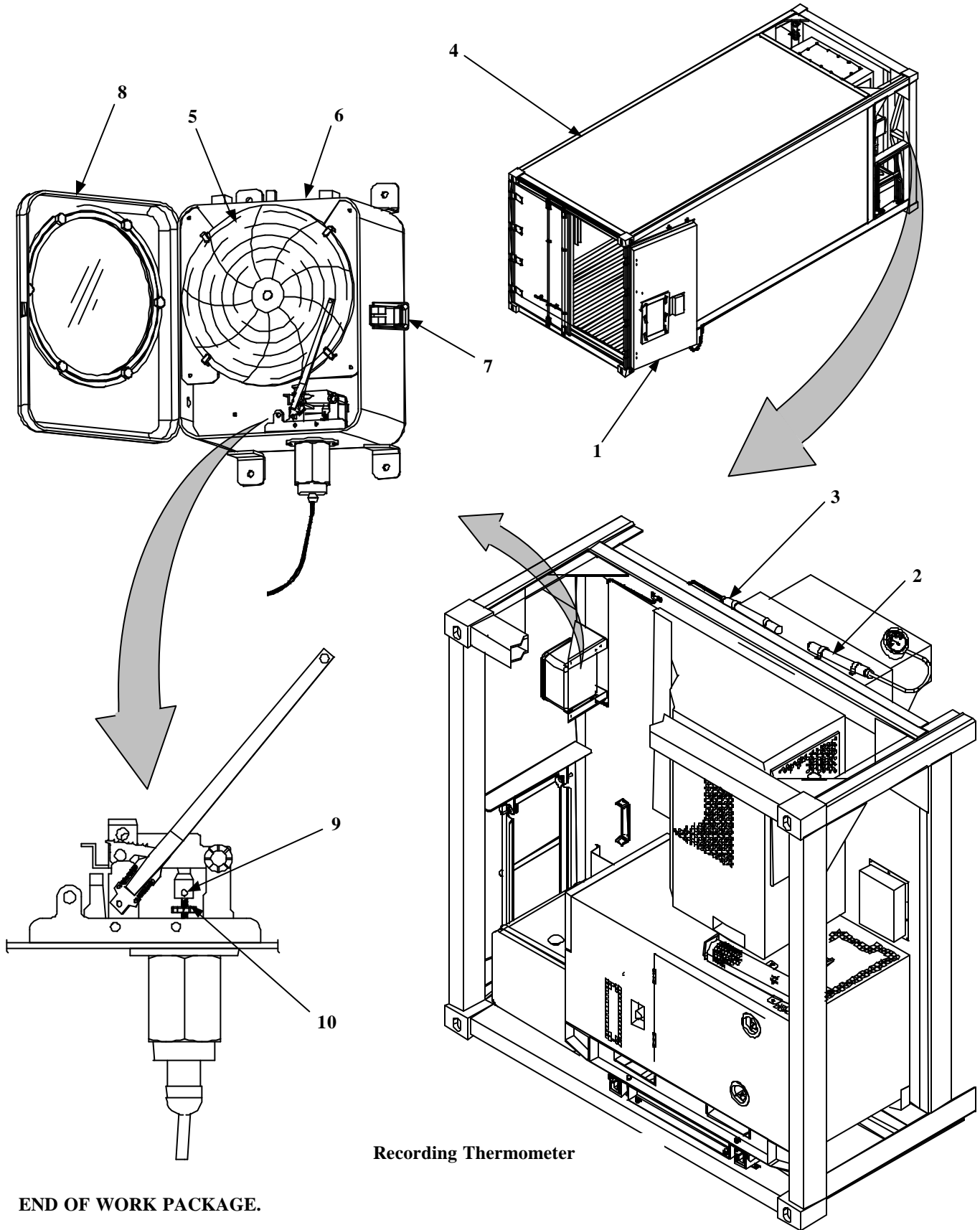
ADJUSTMENT.

1. Unfasten latch (7) and open cover (8).
2. Loosen set screw (9).

NOTE

Turning pinion shaft left (counterclockwise) raises temperature indication. Turning pinion shaft right (clockwise) lowers temperature indication.

3. Turn pinion shaft (10) as required to match recording thermometer indication with test thermometer indication.
4. Tighten set screw (9).
5. Close cover (8) and fasten latch (7).
6. Open right container door (1) and remove test thermometer probe (2).
7. Close right container door (1).
8. Shut down Refrigerated Container system (WP 0006 00).



Recording Thermometer

END OF WORK PACKAGE.

RECORDER THERMOMETER REPLACEMENT

0026 00**THIS WORK PACKAGE COVERS:**Removal and Installation

INITIAL SET-UP:**MAINTENANCE LEVEL**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:Washer, Lock (Item 26, WP 0081 00)

REMOVAL.

1. Remove two screws (1) from sensing element (2).

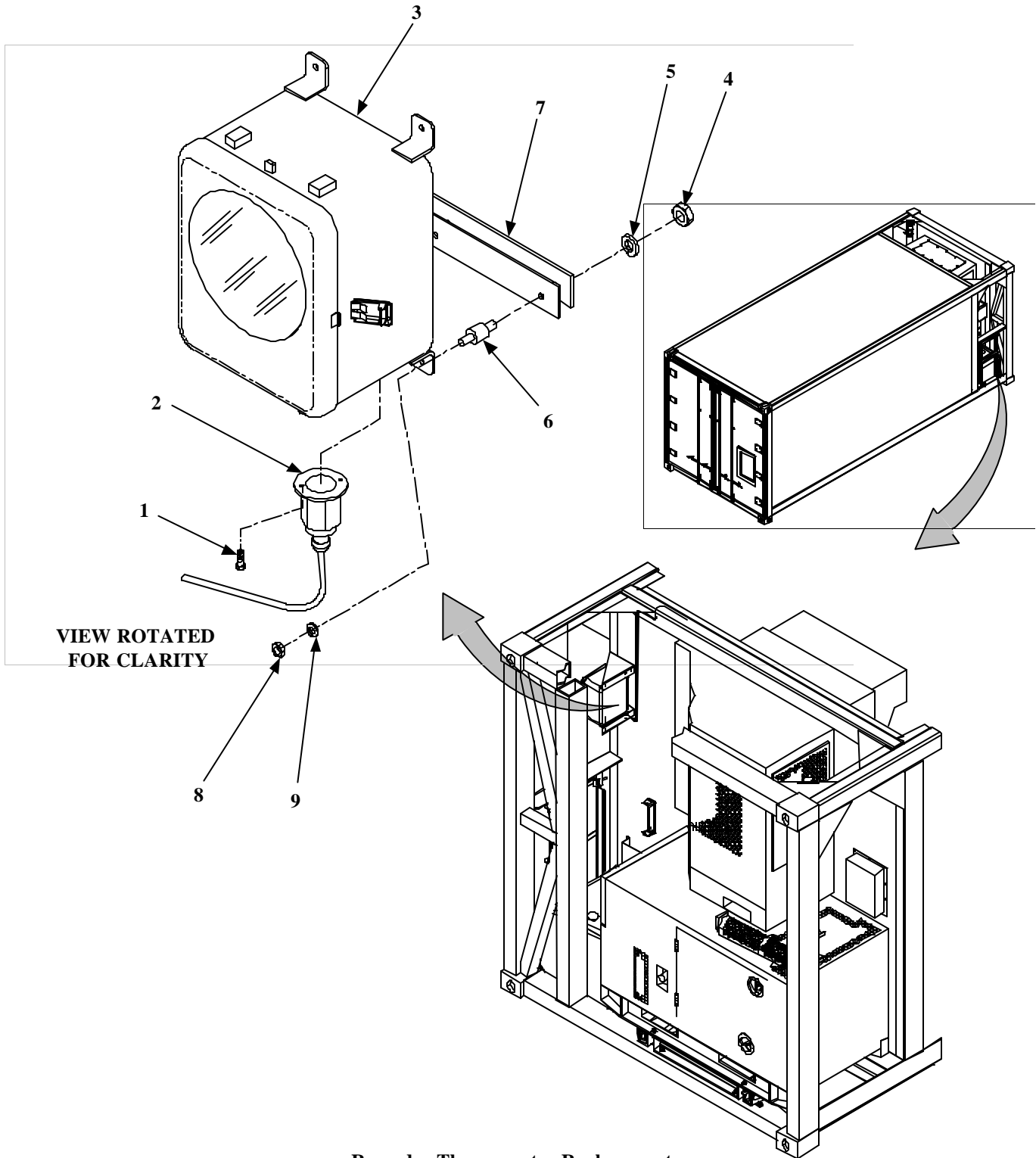
CAUTION

To prevent damage to sensing element, do not bend or kink element tubing.

2. Separate sensing element (2) from recording thermometer (3).
3. Remove four nuts (4) and star washers (5) from back of shock mounts (6).
4. Remove recording thermometer (3) from frame (7).
5. Remove four nuts (8), star washers (9), and shock mounts (6) from recording thermometer (3).

INSTALLATION.

1. Install four shock mounts (6), star washers (9), and nuts (8) on recording thermometer (3).
2. Install recording thermometer (3) on frame (7) and secure with four star washers (5) (Item 26, WP 0081 00) and nuts (4).
3. Position sensing element (2) on recording thermometer (3) and install two screws (1).
4. Adjust recording thermometer (3) (WP 0025 00).



Recorder Thermometer Replacement

END OF WORK PACKAGE.

RECORDING THERMOMETER ELEMENT REPLACEMENT

0027 00

THIS WORK PACKAGE COVERS:Removal and Installation

INITIAL SET-UP:**Maintenance Level:**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
Portable Drill (Item 2, WP 0048 00)
Drill Bit Set (item 2, WP 0048 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)
Generator Set shut down (WP 0006 00)

Material/Parts:

Drive Rivets (5) (Item 17, WP 0081 00)
Sealant (Item 15, WP 0078 00)
Grommets (Item 7, WP 0081 00)
Wire Ties (Item 20, WP 0078 00)

REMOVAL.

1. Remove two screws (1, Figure 1) from recording thermometer element (2).

CAUTION

To prevent damage to the thermometer element, do not bend or kink element tubing.

2. Separate thermometer element housing (2) from recording thermometer (3).
3. Drill out three drive rivets (4) and remove clamps (5) from thermometer element tubing (6).
4. Remove sealant from around grommet (7) and remove grommet. Discard grommet.

REMOVAL - Continued.

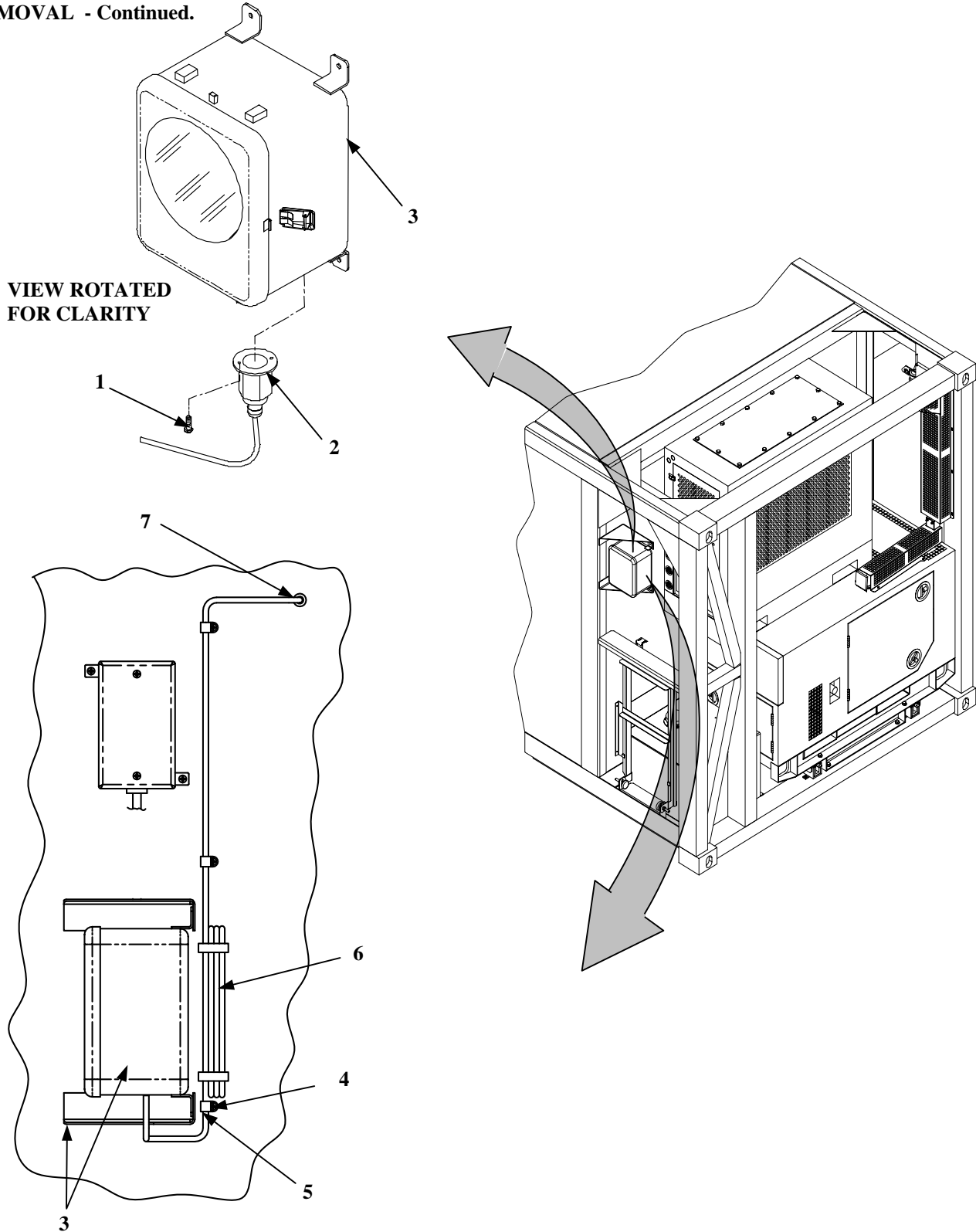


Figure 1. Recording Thermometer Element, Removal (Sheet 1 of 2)

REMOVAL – continued.**NOTE**

Element bulb must be pushed through wall grommet to remove thermometer element.

5. Open right door (8).
6. Working from inside the container, remove element bulb (9) and tube (6) from two brackets (10) on front wall (11).
7. Remove sealant from second grommet (7) and remove grommet from front wall (11).
8. Working from outside the container, remove tube (6) and bulb (9) through hole in the wall (11).

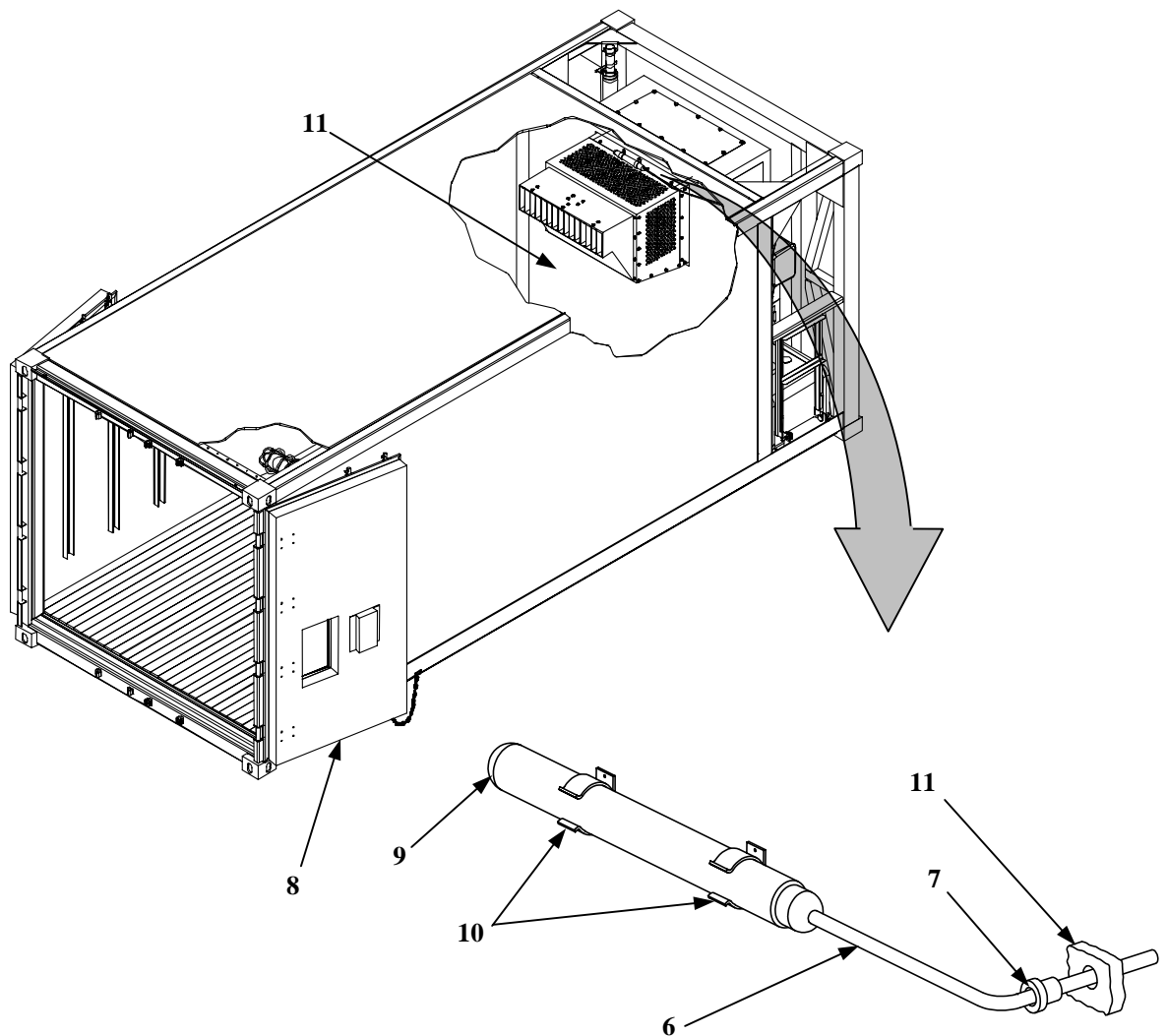


Figure 1. Recording Thermometer Element, Removal (Sheet 2 of 2)

INSTALLATION.

CAUTION

To prevent damage to thermometer, do not bend or kink element tubing

1. Carefully uncoil enough tubing (1, Figure 2) to allow bulb (2) to be passed through the front wall (3) to inside of the container.
2. From inside of the container, install bulb (2) and tube (1) into two supports (4).

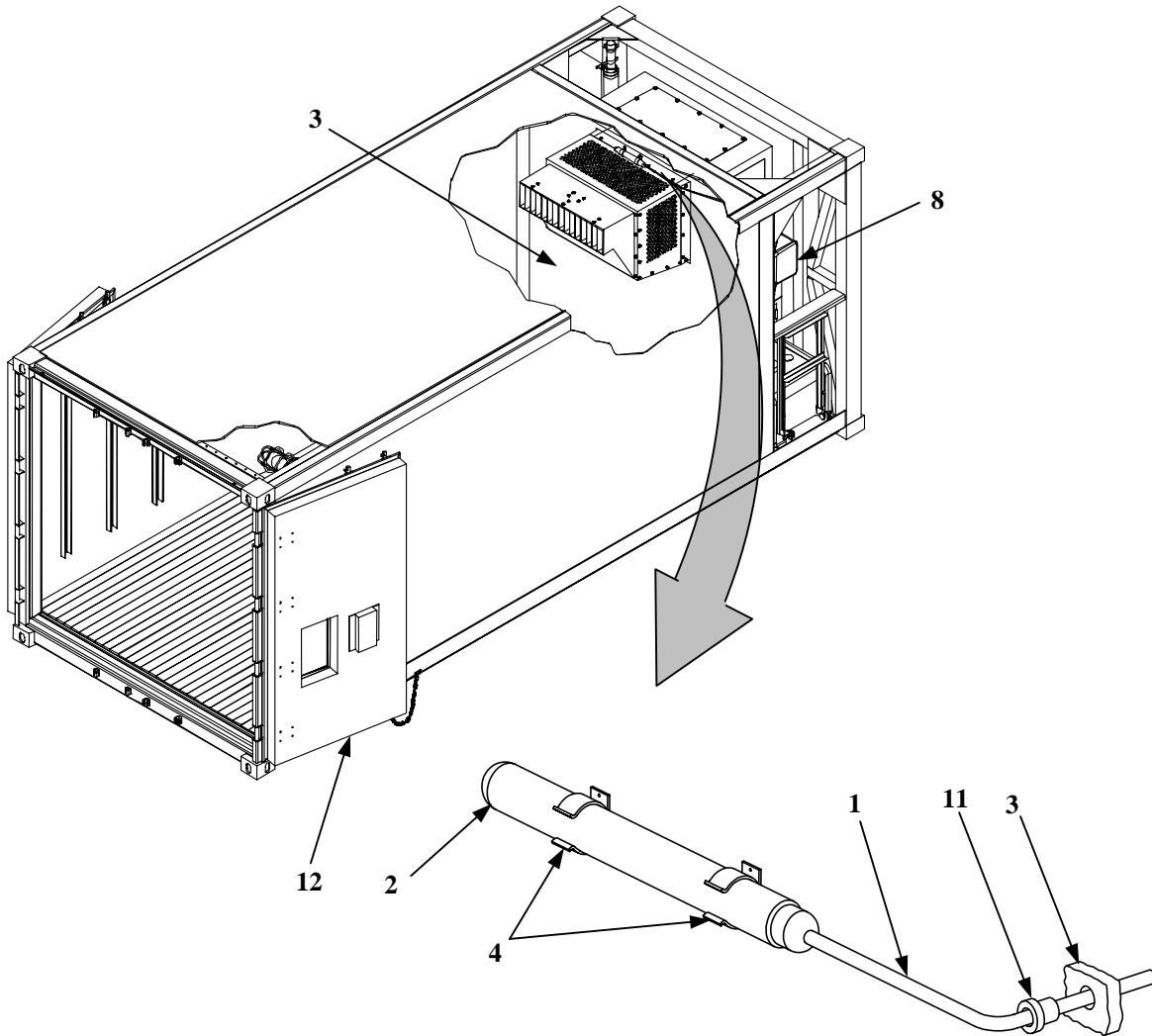


Figure 2. Recording Thermometer Element, Installation (Sheet 1 of 2)

INSTALLATION - Continued.**CAUTION**

To prevent damage to thermometer, do not bend or kink element tubing

3. From outside of container, install top two clamps (5) on tube (1) and secure to wall (3) with drive rivets (6) (Item 17, WP 0081 00).
4. Carefully uncoil enough tubing to allow thermometer element (7) to be attached to bottom of recording thermometer (8).
5. Install thermometer (7) on recording thermometer (8) and secure with two screws (9).
6. Install remaining bottom clamp (5) on tube (1) and secure to wall (3) with drive rivet (6) (Item 17, WP 0081 00), with coiled tube between bottom two clamps.
7. Install two tie-down straps (10) (Item 20, WP 0078 00) on coiled tube (1).
8. From outside of container, install one grommet (11) (Item 7, WP 0078 00) on tube (1) and insert grommet into wall (3); seal around grommet and tube with sealant (Item 15, WP 0078 00).
9. From inside of the container, install a second grommet (11) (Item 7, WP 0078 00) on tube (1) and insert grommet into wall (3); seal grommet and tube with sealant (Item 15, WP 0078 00).
10. Close right door (12).
11. Adjust recorder thermometer (8) (WP 0025 00).

INSTALLATION - Continued.

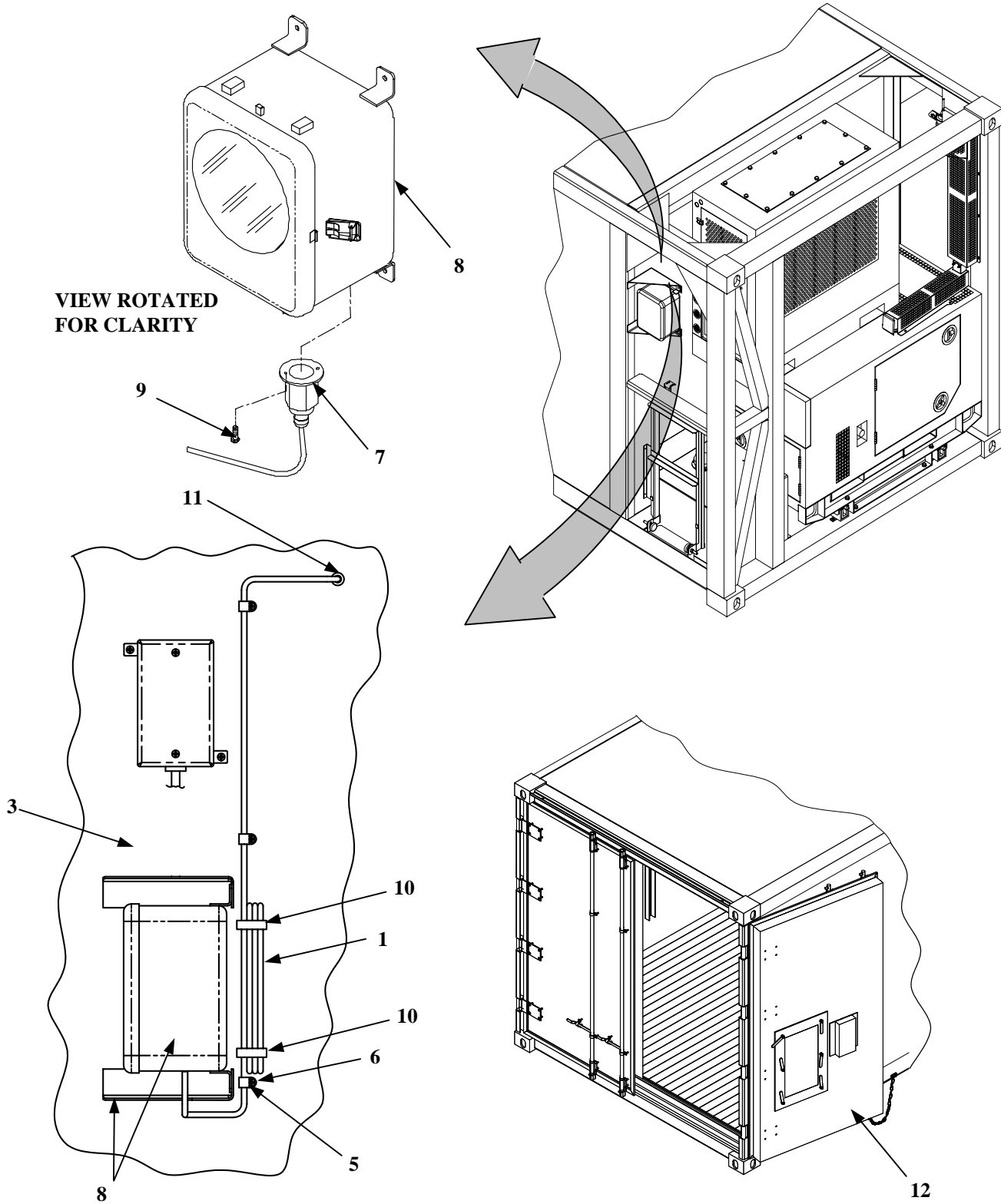


Figure 2. Recording Thermometer Element, Removal (Sheet 2 of 2)

END OF WORK PACKAGE.

POWER CORD

0028 00

THIS WORK PACKAGE COVERS:

Disassembly, Inspection, Repair, and Assembly

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Electrical Repair Kit (Item 5, WP 0048 00)

Material/Parts:

Wire Tags (Item 19, WP 0078 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)

Generator Set shut down (WP 0006 00)

Power cable disconnected (WP 0006 00)

DISASSEMBLY.

1. Loosen two screws (1) securing clamp (2).
2. Loosen locking screw (3) and remove compression nut (4).
3. Remove rubber grommet (5).
4. Remove four screws (6), lock washers (7), three flat washers (8), cap retaining clip (9), four nuts (10) and rear housing (11).
5. Remove two screws (12).
6. Push terminal block (13) out of front housing (14).
7. Tag wires (15), loosen four screws (16) and disconnect wires from terminal block (13).

INSPECTION.

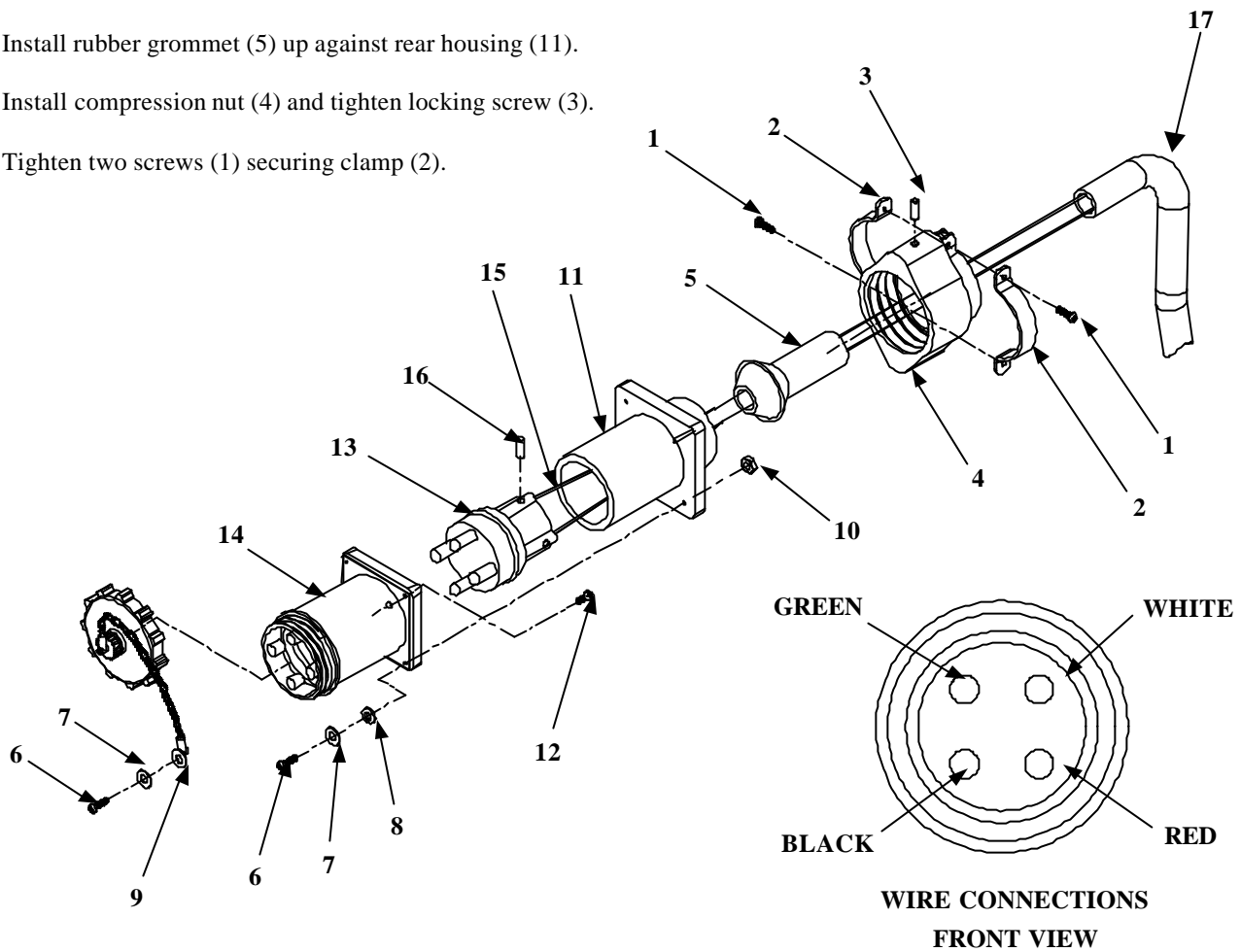
1. Inspect cable (17) insulation for cuts, tears, cracks, and deep scratches.
2. Inspect wiring (15) for cuts and signs of overheating.
3. Inspect housings (11 and 14) and compression nut (4) for cracks or corrosion.
4. Inspect terminal block (13) for cracks, corrosion and missing terminal screws.
5. Inspect grommet (5) for cracks, tears and deterioration.

REPAIR.

Replace defective components.

ASSEMBLY.

1. Connect wires (15) to terminal block (13). Tighten four screws (16). Remove tags.
2. Align guide pin on terminal (13) with slot on front housing (14) and push block into housing.
3. Install two screws (12).
4. Install rear housing (11) and secure with four nuts (10), three flat washers (8), cap retaining clip (9), four lock washers (7), and four screws (6).
5. Install rubber grommet (5) up against rear housing (11).
6. Install compression nut (4) and tighten locking screw (3).
7. Tighten two screws (1) securing clamp (2).



END OF WORK PACKAGE.

LADDER ASSEMBLY

0029 00

THIS WORK PACKAGE COVERS:
Removal, Installation, and Cleaning

INITIAL SET-UP:

Maintenance Level

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:

Spring Pins (Item 11, WP 0081 00)

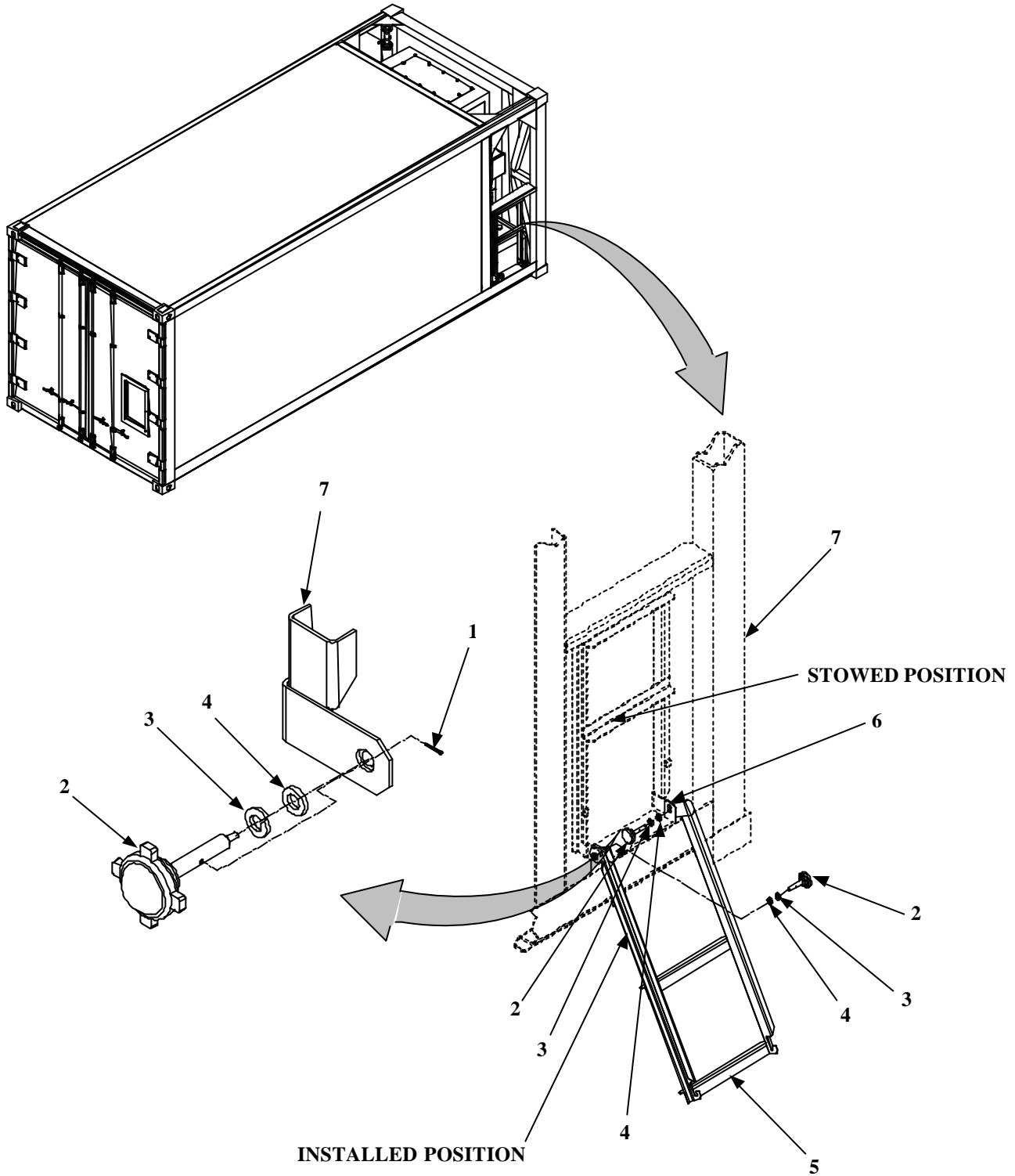
Lock Washers (Item 31, WP 0081 00)

REMOVAL.

1. Remove two spring pins (1), two clamping knobs (2) lock washers (3) and flat washers (4). Discard spring pins and lock washers.
2. Lift ladder (5) from brackets (6) and remove from container (7).
3. Inspect and repair as required.

INSTALLATION.

1. Position ladder (5) on brackets (6).
2. Attach ladder on container (7) with two flat washers (4), lock washers (3) (Item 31, WP 0081 00), and knobs (2).
3. Install two spring pins (1) (Item 11, WP 0081 00).



Ladder Assembly

END OF WORK PACKAGE.

THIS WORK PACKAGE COVERS:

Removal, Disassembly, Cleaning, Repair and Installation

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:

Lock Washer (Item 30, WP 0081 00)

Lock Washer (Item 33, WP 0081 00)

Dry Cleaning Solvent (Item 14, WP 0078 00)

Sealing Compound (Item 12, WP 0078 00)

Wiping Rags (Item 18, WP 0078 00)

Gasket (Item 6, WP 0081 00)

Sealing Compound (Item 17, WP 0078 00)

Silicone, RTV (Item 15, WP 0078 00)

REMOVAL.**NOTE**

Remove fuel tank only if tank requires repair. All attached components can be repaired with tank installed.

1. Loosen two knobs (1, Figure 1); lift ladder (2) and move to down position.
2. Remove cap (3) and strainer (4) from fuel tank (5).
3. Pump fuel into a suitable container.
4. Remove fuel hose (6) from elbow (7).
5. Remove four nuts (8), lock washers (9), eight flat washers (10), and four screws (11). Discard lock washers.
6. Remove tank (5).

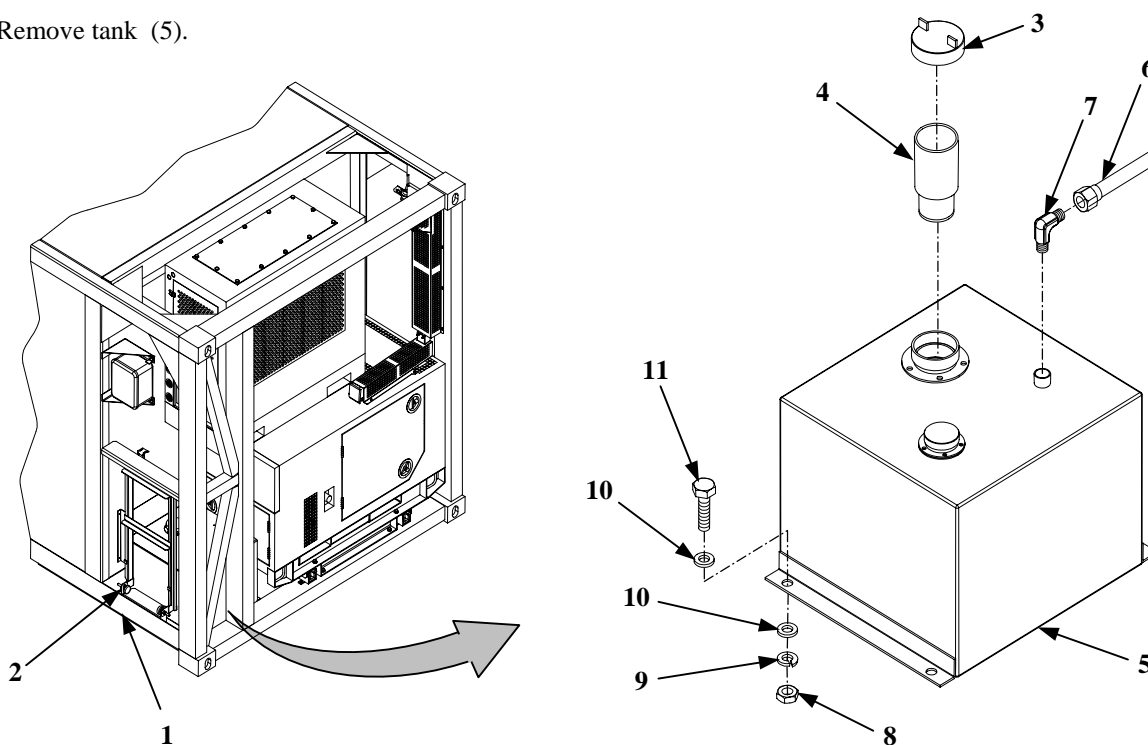


Figure 1. Auxiliary Fuel Tank Removal

DISASSEMBLY.

NOTE

Disassemble components only to the level required to perform repair.

1. Remove elbow (1, Figure 2) from fuel tank (2).
2. Remove five screws (3), lock washers (4) and flat washers (5) from fuel gauge (6). Discard lock washers.
3. Carefully remove fuel gauge (6) and gasket (7) from fuel tank (2).
4. Remove six screws (8), lock washers (9), flat washers (10) and filler neck (11). Discard lock washers.
5. Remove drain plug (12).

CLEANING.

1. Remove sealant from fuel tank fill opening and filler neck (11).

WARNING

To prevent injury to personnel and damage to equipment, use dry cleaning solvent only in well-ventilated areas. Avoid repeated or prolonged contact with skin. Do not use near sparks, open flame or excessive heat.

2. Clean components with dry cleaning solvent (Item 14, WP 0078 00) and wiping rag (Item 18, WP 0078 00). Pay close attention to inside of tank.
3. Dry components with wiping rag (Item 18, WP 0078 00).

INSPECTION.

1. Inspect fuel tank (2, Figure 2) for cracks, punctures, and pinholes caused by corrosion.
2. Inspect elbow (1) and plug (12) for stripped threads or cracks.
3. Inspect fuel gauge (6) for cracks, deformed, or worn components.

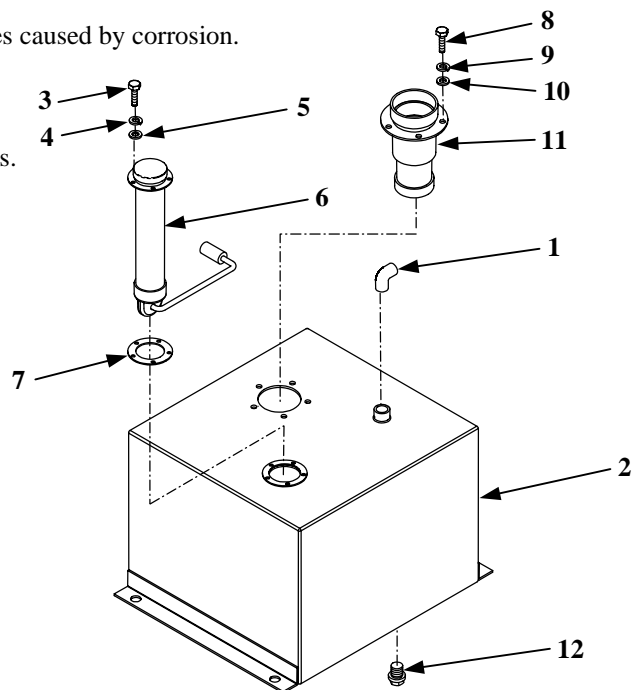


Figure 2. Fuel Tank Disassembly

REPAIR.

1. Replace defective components.

ASSEMBLY.

1. Apply thin coat of sealing compound (Item 12, WP 0078 00) to male threads of plug (1, Figure 3) and install in bottom of fuel tank (2).
2. Carefully install gasket (3) (Item 6, WP 0081 00) and fuel gauge (4) on fuel tank (2).
3. Apply thin coat of sealing compound (Item 17, WP 0078 00) on screws (5) and install five flat washers (6), lock washers (7) (Item 33, WP 0081 00) and screws (5).
4. Apply a thin coat of sealing compound (Item 12, WP 0078 00) on male threads of elbow (8) and install on fuel tank (2).
5. Apply a thin bead of silicone (Item 15, WP 0078 00) on mating surfaces of filler neck flange (9) and fuel tank (2). Install filler neck on fuel tank.
6. Apply a thin coat of sealing compound (Item 17, WP 0078 00) on screws (10) and install six flat washers (11), lock washers (12) (Item 33, WP 0081 00), and screws (10).

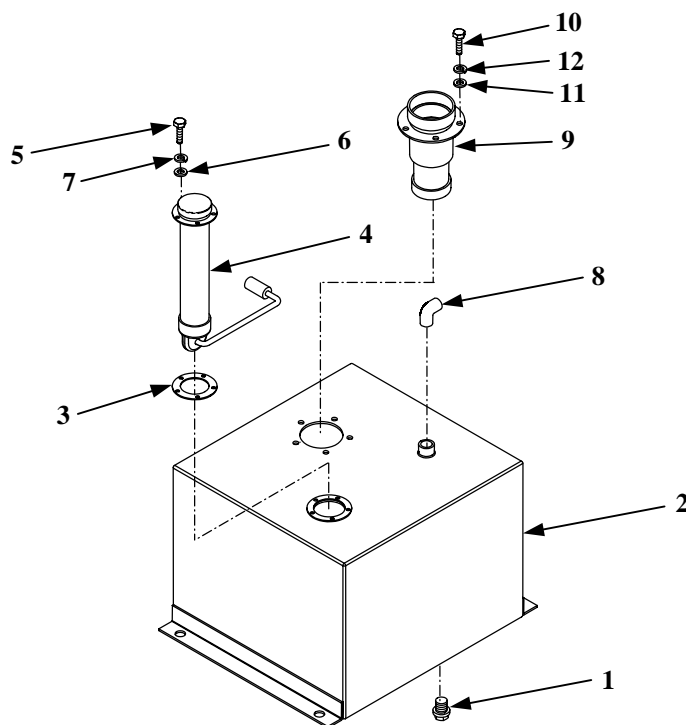
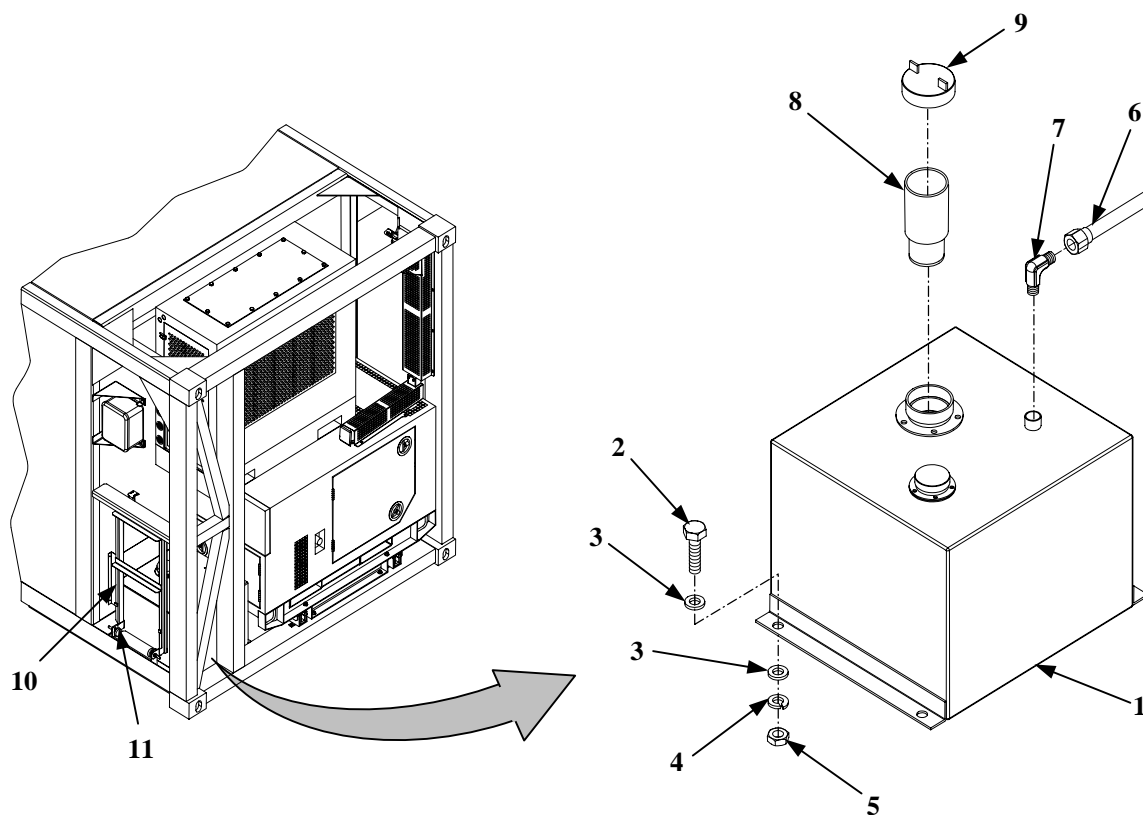


Figure 3. Auxiliary Fuel Tank Assembly

INSTALLATION.

1. Install fuel tank (1, Figure 4) and secure with four screws (2), eight flat washers (3), four lock washers (4) (Item 30, WP 0081 00) and nuts (5).
2. Attach fuel hose (6) to elbow (7).
3. Install fuel strainer (8) in fuel tank (1).
4. Service fuel tank (1) as required.
5. Install fuel cap (9).
6. Raise ladder (10) into stowed position and tighten two knobs (11).

**Figure 4. Auxiliary Fuel Tank Installation****END OF WORK PACKAGE.**

THIS WORK PACKAGE COVERS:

Removal, Disassembly, Cleaning, Inspection, Repair, Assembly, and Installation

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:

Tags, Wire (Item 19, WP 0078 00)

Adhesive Sealant (Item 3, WP 0078 00)

Wiping Rag (Item 18, WP 0078 00)

Lock Washer (Item 27, WP 0081 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00).

Generator Set shut down (WP 0006 00)

REMOVAL.

1. Disconnect power cable (1, Figure 1) from generator set (2).
2. Remove nut (3), lock washers (4), screw (5), and clamp (6) from bracket (7).
3. Remove two screws (8), cover (9) and gasket (10) from box (11).
4. Tag wiring (12) with wire tags (Item 20, WP 0078 00) and remove three wire nuts (13).
5. Loosen bushing (14) and pull power cable (1) out of box (11) and through bushing.

DISASSEMBLY.**CAUTION**

To prevent damage to the equipment, do not attempt to remove adapter from container wall unless defective. Adapter is glued in place.

1. Remove two screws (15) from box (11).
2. Unscrew box (11) from adapter (16) on container wall (17).
3. Remove bushing (14) from box (11).

CLEANING.

1. Clean components with wiping rag (Item 18, WP 0078 00). Remove all grease, dirt, and contaminants.

INSPECTION.

1. Inspect cable (1) for cuts, tears and deterioration of insulation.
2. Inspect plug on cable (1) for bent, burnt, or broken spades.
3. Inspect bushing (14) and adapter (16) for cracks.

REPAIR.

1. Replace defective components.

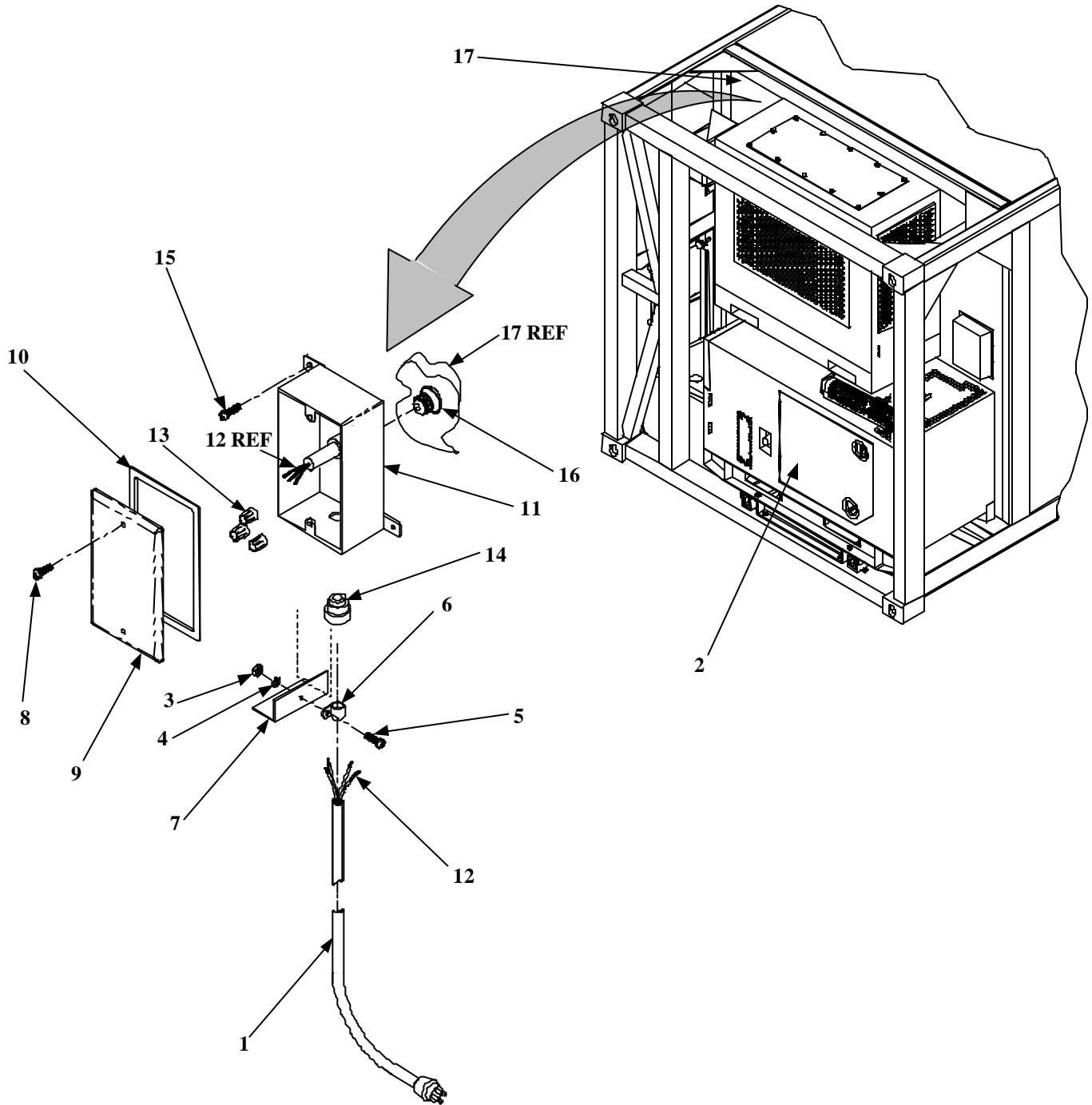


Figure 1. Light Assembly, Exterior

ASSEMBLY.

1. Install bushing (14, Figure 1) in box (11).
2. Apply sealant (Item 3, WP 0078 00) to threads of adapter (16).
3. Screw box (11) onto adapter (16).
4. Install box (11) on container wall (17) with two screws (15).

INSTALLATION.

1. Push wiring (12) through bushing (14) and into box (11).
2. Remove tags and connect wiring (12) as shown, and install three wire nuts (13) (reference Wiring Schematic, Figure 2).
3. Tighten bushing (14, Figure 1).
4. Install gasket (10, Figure 1), cover (9), and two screws (8) on box (11).
5. Install clamp (6) on power cable (1) and secure clamp to bracket (7) with screw (5), lock washer (4) (Item 27, WP 0078 00) and nut (3).

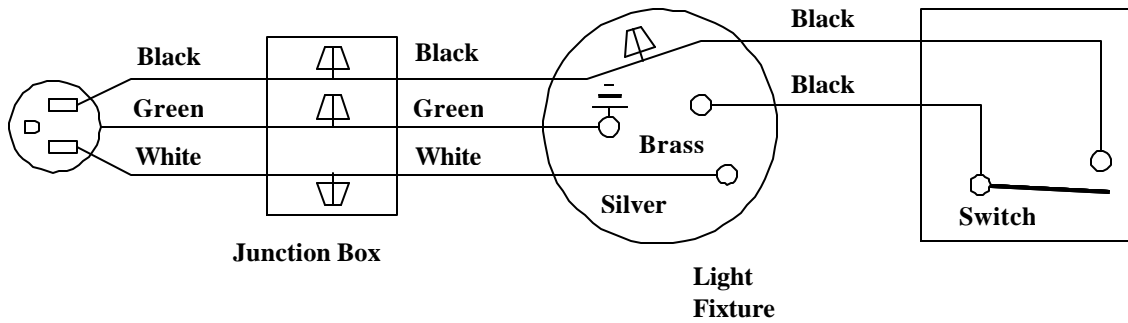


Figure 2. Wiring Schematic

END OF WORK PACKAGE.

THIS WORK PACKAGE COVERS:

Removal, Disassembly, Inspection, Repair, Assembly, and Installation

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:

Tags, Wire (Item 20, WP 0078 00)

Equipment Condition:

Generator Set shut down (WP 0006 00)

Refrigeration Unit shut down (WP 0006 00)

REMOVAL.

1. Open right rear door (1, Figure 1).
2. Loosen screw (2) and remove guard (3) from fixture (4).
3. Remove globe (5) and bulb (6) from fixture (4).

DISASSEMBLY.**NOTE**

Disassemble components only to the level required to perform repair.

1. From outside container (7), remove two screws (8), cover (9) and gasket (10) from box (11) on front panel (12).
2. Tag wiring (13) with wire tags (Item 20, WP 0078 00) and remove three wire nuts (14).
3. From inside container (7), remove two screws (15) and fixture (4) from electrical box (16).
4. Tag wiring (17 and 18) with wire tags (Item 20, WP 0078 00) and remove three wire nuts (19).
5. Remove two screws (20), switch (21) and gasket (22) from switch box (23).
6. Tag wiring with wire tags (Item 20, WP 0078 00) and disconnect wiring (18) from switch (21).
7. Remove conduit nut (24) from adapter (25) and slide nut along conduit.
8. Remove two screws (26) from switch box (23) and two screws (27) from electrical box (16), and remove both boxes from container (7).
9. Remove adapter (25) from electrical box (16).
10. Loosen two conduit locking nuts (28) and remove boxes (16 and 23) from conduit (29).
11. Remove conduit nut (30) from adapter (31) and slide it along conduit (32).
12. Remove seven screws (33) and clamps (34) and remove conduit (32 and 35) from container (7).
13. Remove wiring (17) from conduit (32 and 35).
14. Remove two conduit nuts (36) and separate conduit (32 and 35) and union (37).

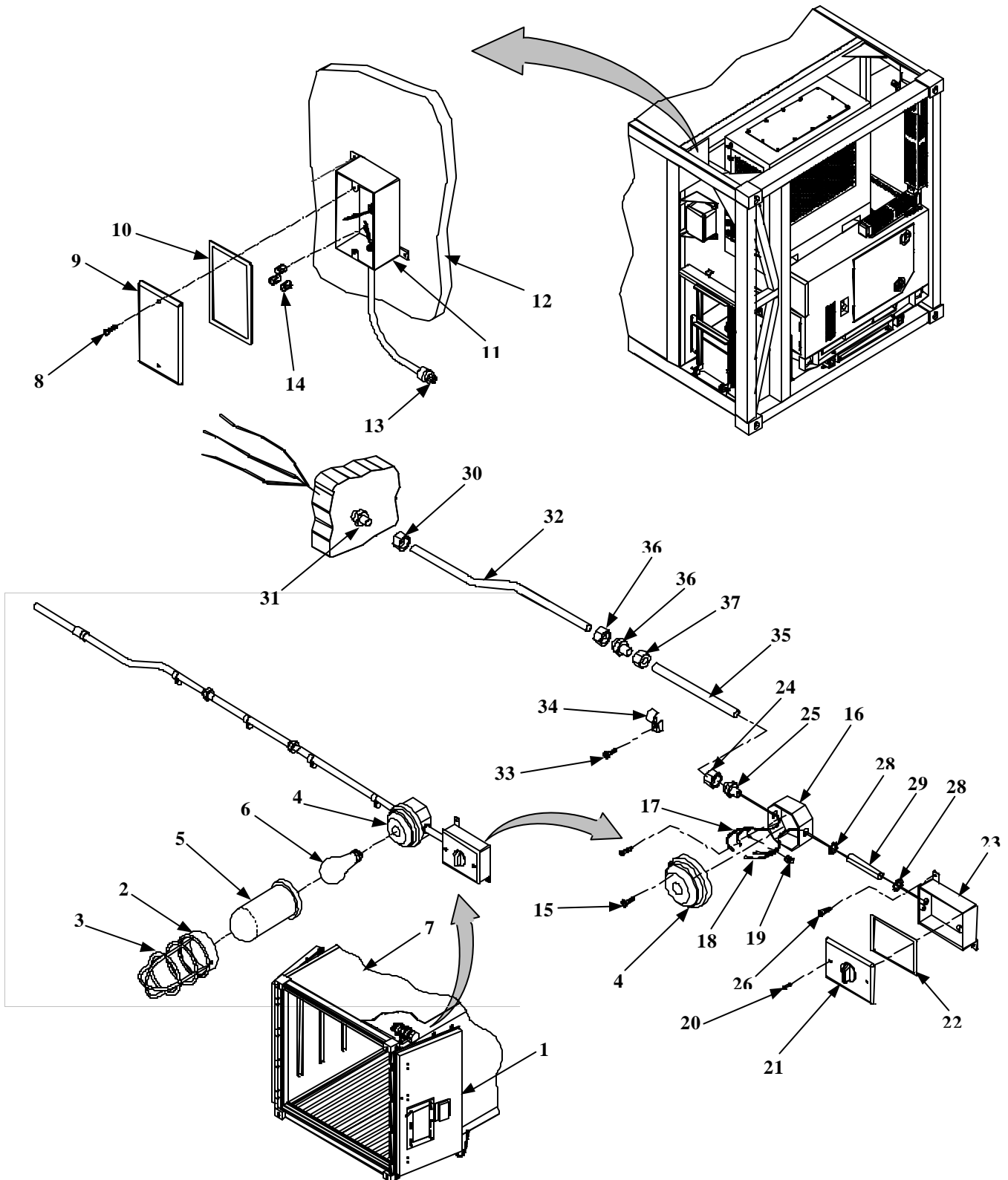


Figure 1. Disassembly

INSPECTION.

1. Inspect globe (5, Figure 1) for cracked or broken glass.
2. Inspect switch (21) for signs of overheating, shorting and corrosion.
3. Inspect wiring (17 and 18) for cut, burned, or deteriorated insulation.
4. Inspect conduit (31 and 34) for corrosion.

REPAIR.

Replace defective components.

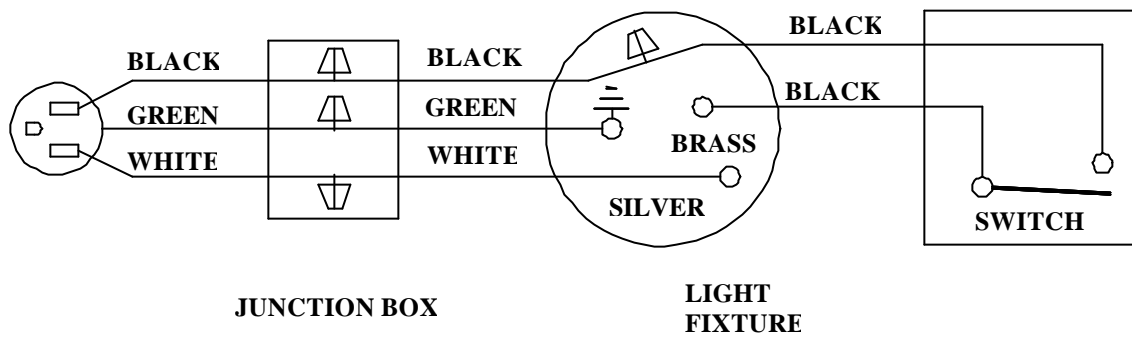


Figure 2. Wiring Schematic

ASSEMBLY.

1. Slide two conduit nuts (1, Figure 3) over conduit (2 and 3).
2. Install conduits (2 and 3) into union (4) and secure with two conduit nuts (1).
3. Route wiring (5) through conduits (2 and 3).
4. Slide conduit nut (6) over conduit (2).
5. Route wiring (5) protruding from conduit (2) through front panel (7), install conduit (2) into adapter (8) and tighten conduit nut (6).
6. Install seven clamps (9) and screws (10) to secure conduits (2 and 3).
7. Slide conduit nut (11) over conduit (3).
8. Install two conduit lock nuts (12) on conduit (13).
9. Install conduit (13) on electrical box (14) and switch box (15).
10. Install adapter (16) in electrical box (14).
11. Align electrical box (14) and switch box (15) with mounting holes on container (7). Adjust boxes until they align with mounting holes; tighten two conduit locking nuts (12).
12. Route wiring (5) into electrical box (14); install electrical box on conduit (3) and tighten conduit nut (11).
13. Install two screws (18) to secure electrical box (14) and two screws (19) to secure switch box (15).
14. Route wiring (20) through electrical box (14) into switch box (15).
15. Connect wiring (20) to switch (21) (reference Wiring Schematic, figure 2).
16. Install gasket (22), switch (21) and two screws (23).
17. Connect wiring (5 and 20) and fixture (24) using three wire nuts (25) (reference Wiring Schematic, figure 2).
18. Install fixture (24, figure 3) and two screws (26).
19. From outside the container (17), connect wiring (5) using three wire nuts (27) (reference Wiring Schematic, figure 2).
20. Install gasket (28, figure 3), cover (29) and two screws (30).

INSTALLATION.

1. Install bulb (31) into fixture (24).
2. Install globe (32) and guard (33) on fixture (24) and tighten screw (34).
3. Close right rear door (35).

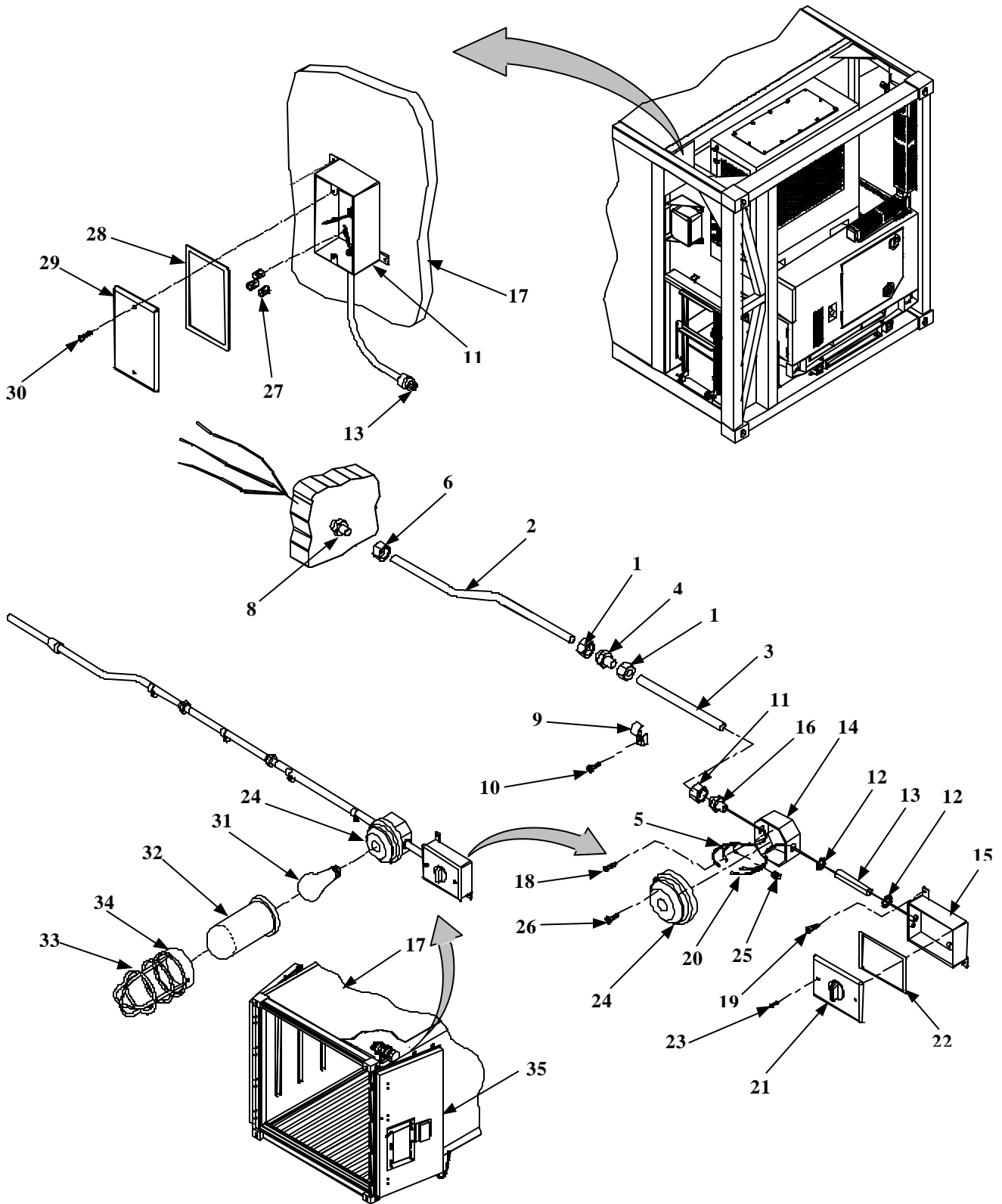


Figure 3. Assembly and Installation

END OF WORK PACKAGE.

ESCAPE DOOR

0033 00**THIS WORK PACKAGE COVERS:**

Removal, Disassembly, Cleaning, Inspection, Repair, Assembly, and Installation

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:

Wiping Rag (Item 18, WP 0078 00)

Detergent (Item 6, WP 0078 00)

Gaskets (Item 9, WP 0079 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)

Generator Set shut down (WP 0006 00)

REMOVAL.

1. Open right rear door (1).
2. Remove six handles (2), flat washers (3), and interior frame (4) from right door (1).
3. Push escape panel (5) and exterior frame (6) from right door (1).

DISASSEMBLY.

1. Remove two gasket strips (7) from interior frame (4) and two from exterior frame (6).
2. Remove two gasket strips (8) from exterior frame (6) and two from interior frame (4).

CLEANING.

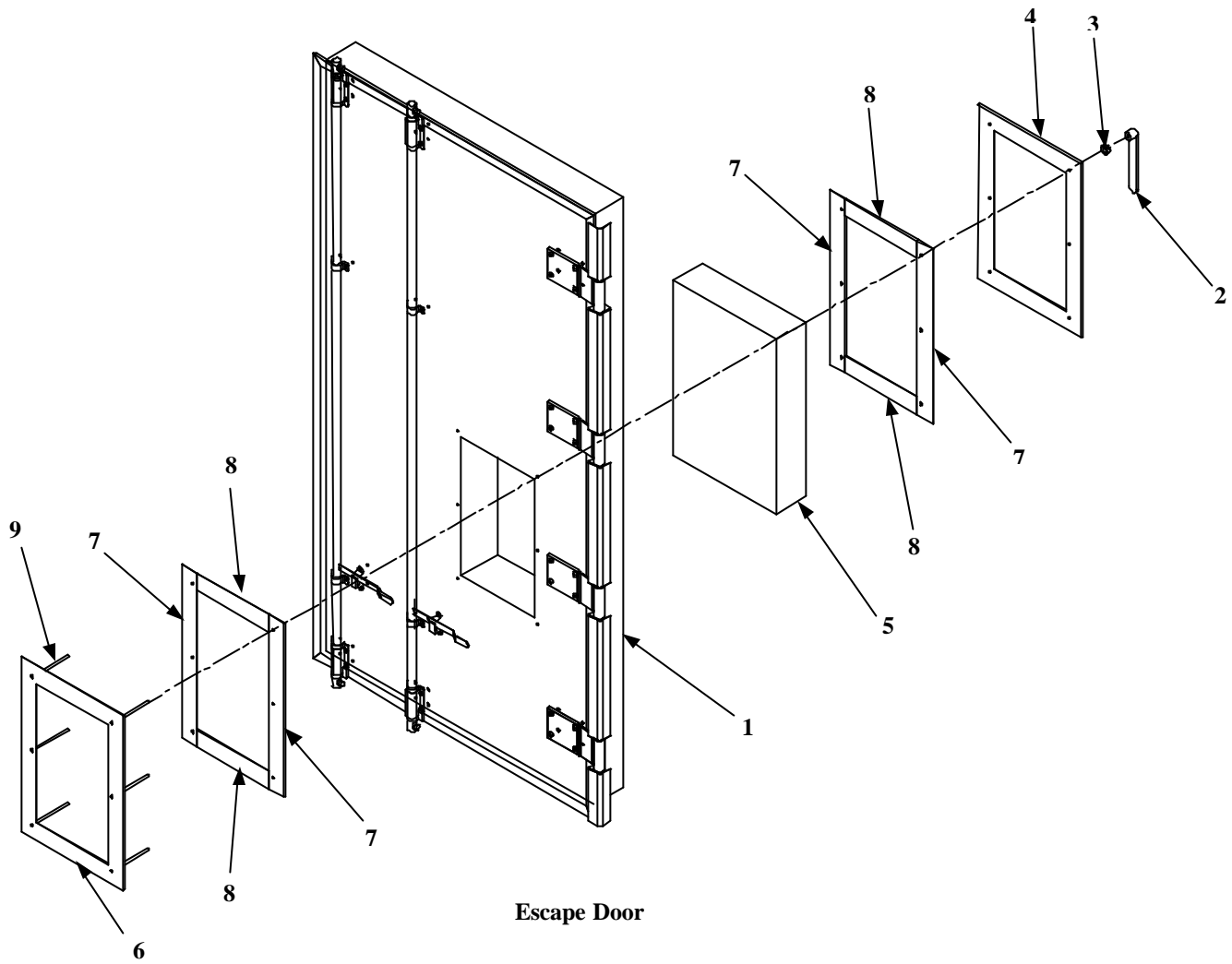
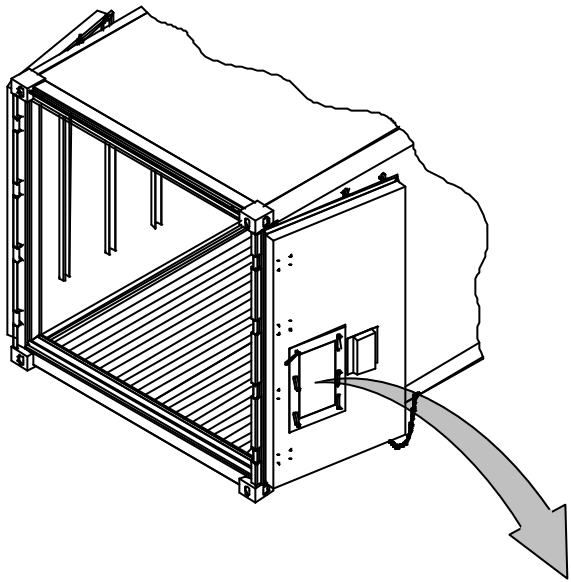
1. Wash components with fresh water and detergent (Item 18, WP 0078 00).
2. Rinse components with clean water.
3. Dry components with wiping rag (Item 19, WP 0078 00).

INSPECTION.

1. Inspect interior frame (4) for cracks and corrosion.
2. Inspect exterior frame (6) for cracks, corrosion, and stripped threads on studs (9).
3. Inspect handles (2) for cracks and stripped threads.
4. Inspect escape panel (5) for cracks, tears, and punctures.

REPAIR.

Replace defective components.



Escape Door

ASSEMBLY.

1. Position two each gasket strips (7) (Item 9, WP 0079 00) and (8) (Item 9, WP 0079 00) over studs (9) on exterior frame (6). Mark location of studs on gaskets. Cut holes in gaskets to match location of studs.
2. Remove protective backing from gasket strips (7 and 8). Install gasket strips on exterior frame (6).
3. Position two each gasket strips (7) (Item 9, WP 0079 00) and (8) (Item 9, WP 0079 00) over interior frame (4). Cut gaskets to match location of holes in frame.
4. Remove protective backing from gaskets (7 and 8). Install gaskets on interior frame (4).

INSTALLATION.

1. Align studs (9) with holes in right door (1) and push exterior frame (6) into door.
2. Install escape panel (5) over studs (9) on exterior frame (6).
3. Install interior frame (4) over escape panel (5). Make sure gasket strips (7 and 8) are facing escape panel.
4. Install six flat washers (3) and handles (2).
5. Close right door (1).

END OF WORK PACKAGE.

THIS WORK PACKAGE COVERS:

Disassembly, Cleaning, Inspection, Repair, and Assembly

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)
 Rivet Tool (Section III, Item 10, WP 0048 00)
 Torx Socket (Section III, Item 7, WP 0048 00)
 Torx Bit (Section III, Item 6, WP 0048 00)
 Hoist (Section III, Item 14, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)
 Forklift (Section III, Item 15, WP 0048 00)

Personnel Required:

Three

Material/Parts:

Adhesive, Silastic (Item 3, WP 0078 00)
 Adhesive, Contact (Item 2, WP 0078 00)
 Blind Rivet (Item 22, WP 0081 00)
 Bolt, Camtainer (Item 6, WP 008100)
 Detergent (Item 6, WP 0081 00)
 Foam, Urethane (Item 9, 0078 00)
 Wiping Rag (Item 18, WP0078 00)
 Nut, Camtainer (Item 9, WP 0081 00)
 Solvent, Dry Cleaning (Item 11, WP 0078 00)

Equipment Condition:

Generator Set shut down (WP 0006 00)
 Refrigeration Unit shut down (WP 0006 00)
 Escape Door removed (WP 0033 00)

NOTE

Disassemble rear doors only to the extent required to replace defective components.

DISASSEMBLY.

1. Drill out 60 rivets (1, Figure 1) from back sheet (2).
2. Carefully remove back sheet (2) from door seal (3) and insulation (4).

NOTE

Only insulation directly over brace levers and hinge mounting hardware needs to be removed. Do not remove entire sheet of insulation unless damaged.

3. Cut out and remove insulation (4) from mounting hardware, securing brace levers (5) and hinge (6) to door (7).
4. Drill out 24 rivets (8) and remove two retaining strips (9).
5. Drill out 42 rivets (8), and remove two retaining strips (10).
6. Remove door seal (3).
7. Remove 51 screws (11) and insulation retainer frames (12, 13, 14 and 15).

DISASSEMBLY – Continued.

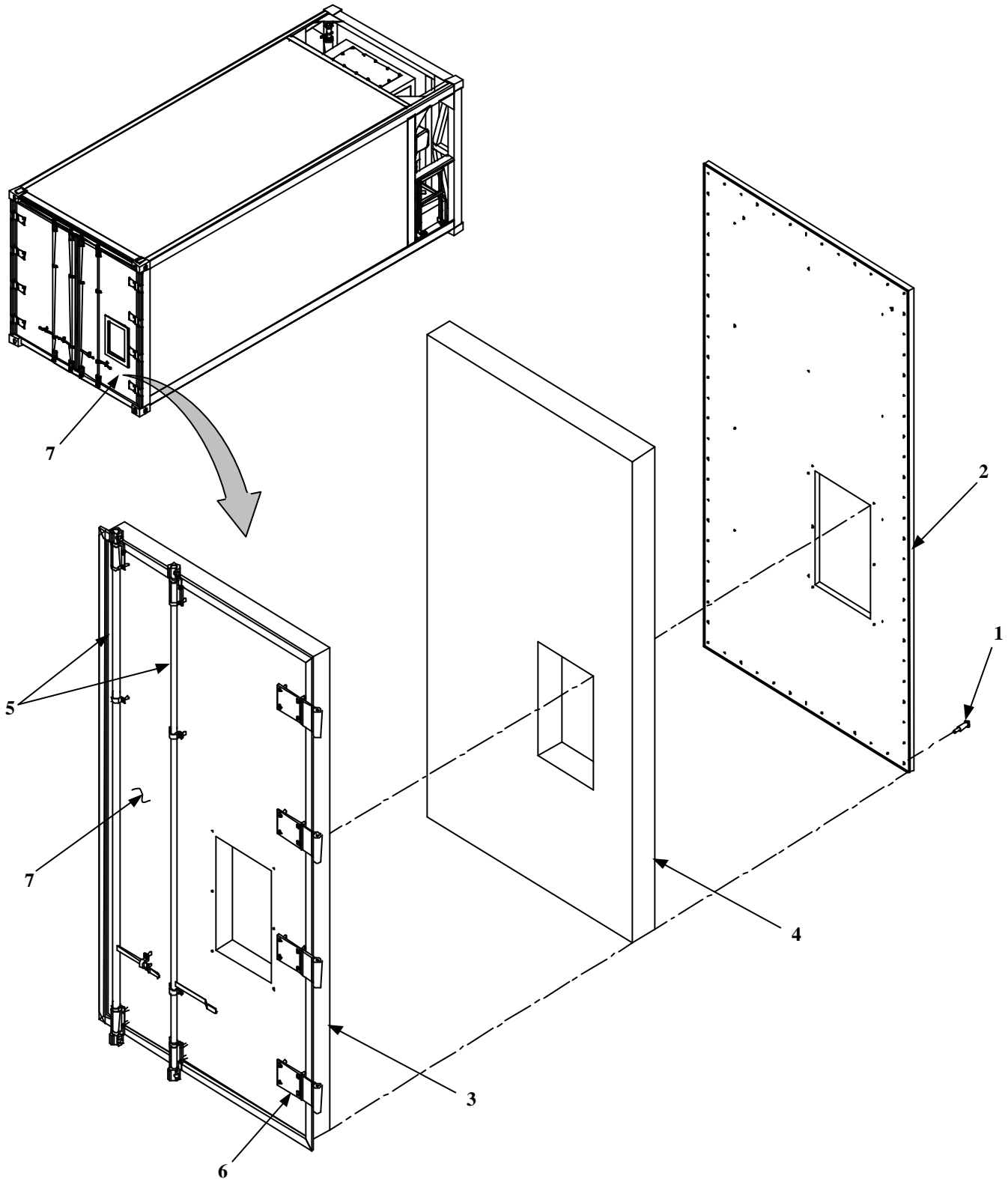


Figure 1. Disassembly (Sheet 1 of 3)

DISASSEMBLY – Continued.

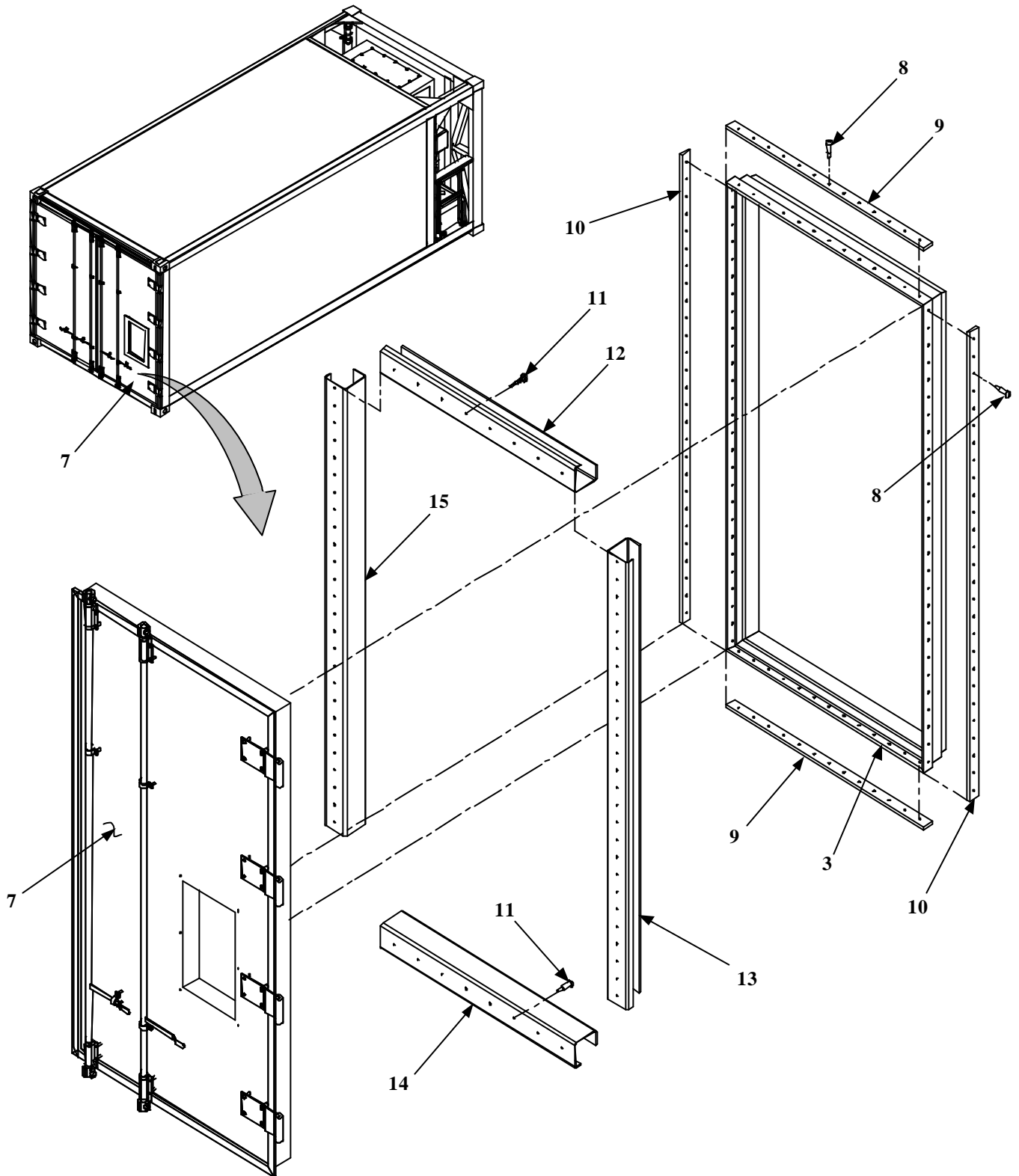


Figure 1. Disassembly (Sheet 2 of 3)

DISASSEMBLY – Continued.

8. Remove brace levers (5) as follows:
 - a. Remove self-locking nut (16), two flat washers (17) and bolt (18) from top mounting hole latch (19).
 - b. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), remove camtainer nut (20) and camtainer bolt (21) and latch (19).
 - c. Using torx bit and socket, remove eight camtainer nuts (22) and camtainer bolt (23), securing top and bottom plates (24) and chain (25).
 - d. Using torx bit and socket, remove four camtainer nuts (26) and camtainer bolt (27), securing two guides (28) and remove brace lever from door (7).
 - e. Follow above steps a. through d. to remove remaining brace lever (5).

WARNING

Door is heavy/difficult to handle; use two personnel when positioning door.

9. Support door assembly (7) with sling (Section III, Item 9, WP 0048 00) and hoist (Section III, Item 14, WP 0048 00).
10. Using torx bit and socket, remove twenty camtainer nuts (29), camtainer bolts (30) and four hinges (6).
11. Remove four rivets (31) and plate (32).

CLEANING.**WARNING**

To prevent injury to personnel and damage to equipment, use dry cleaning solvent only in well ventilated areas. Avoid repeated or prolonged contact with skin. Do not use near sparks, open flame or excessive heat.

1. Clean brace levers with wiping rag (Item 18, WP 0078 00) and with dry cleaning solvent (Item 11, WP 0078 00). Dry with wiping rag.
2. Wash door panel seal and backing sheet with fresh water and detergent (Item 6, WP 0081 00). Rinse panel with fresh water and dry with wiping rag (Item 18, WP 0078 00).

INSPECTION.

1. Inspect door panel for cracks, punctures and delamination. Check door edge seal for tears.
2. Inspect braces levers for cracks, broken welds and corrosion.
3. Inspect seal for tears, punctures and deterioration.
4. Inspect backing sheet (3) for cracks, holes and delamination.

REPAIR.

1. Repair holes and punctures in door panel (reference WP 0036 00).
2. Replace all other defective components.

DISASSEMBLY – Continued.

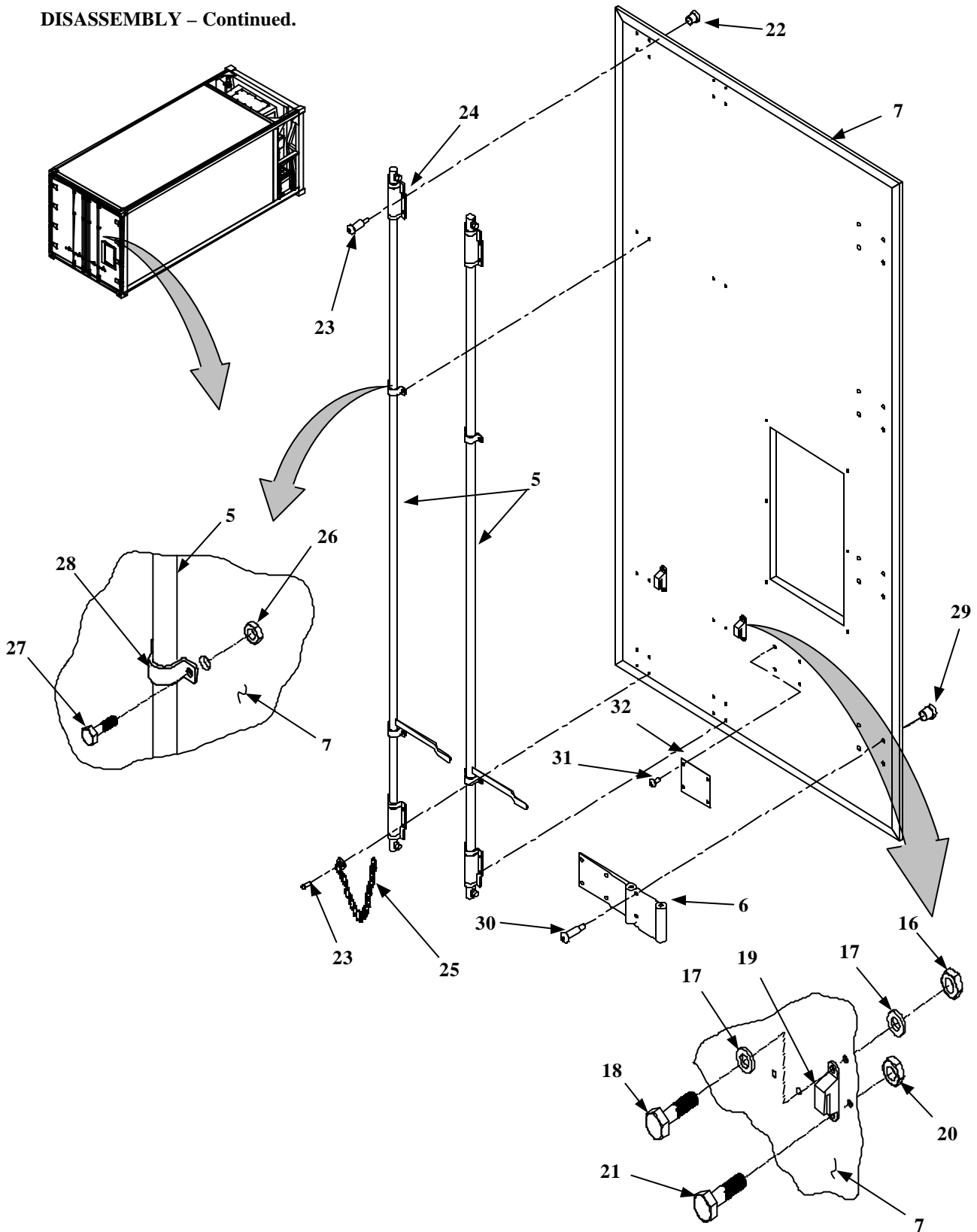


Figure 1. Disassembly (Sheet 3 of 3)

ASSEMBLY.

1. Apply a bead of sealant (Item 3, WP 0078 00) around holes on door panel (1, Figure 2) inside surface.

WARNING

Door is heavy/difficult to handle; use two personnel when positioning door.

2. Using a sling (Section III, Item 9, WP 0048 00) and hoist (Section III, Item 14, WP 0048 00), align door panel (1) with hinges (2).
3. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), install four hinges (2), twenty camtainer bolts (3) (Item 6, WP 0081 00) and camtainer nuts (4) (Item 9, WP 0081 00) on door panel (1).

NOTE

Both brace levers attach the same way

4. Install brace levers as follows:
 - a. Apply a bead of sealant (Item 3, WP 0078 00) around holes in door panel (1) prior to installing hardware.
 - b. Position brace lever (5) on door panel (1).
 - c. Using torx bit and socket, install eight camtainer bolts (6) (Item 6, WP 0081 00), camtainer nuts (7) (Item 9, WP 0081 00) and chain (8) to secure top and bottom plates (9) to door panel (1).
 - d. Position two Guides (10) on door panel (1) and using torx bit and socket, install four camtainer bolts (6) (Item 6, WP 0081 00) and camtainer nuts (7) (Item 9, WP 0081 00).
 - e. Position latch (11) on door panel (1) and using torx bit and socket, install four camtainer bolts (12) (Item 3, WP 0081 00) and camtainer nuts (13) (Item 9, WP 0081 00).
 - f. Install bolt (14), two flat washers (15) and self-locking nut (16) in the top mounting hole in latch (11).
 - g. Follow above steps a. through f. to install remaining brace lever (5).
5. Install plate (17) with four rivets (18) (Item 22, WP 0081 00).
6. Apply a bead of sealant (Item 3, WP 0078 00) along edges of insulation retainer frames (19, 20, 21 and 22) making contact with door panel (1). Install retainers on door panel; secure with 51 screws (23).
7. Install door seal (24) in insulation retainers (19, 20, 21 and 22) with seam of seal over edge of retainer.
8. Install two retaining strips (25) with 42 rivets (26) (Item 22, WP 0081 00).
9. Install two retaining clips (27) with 24 rivets (26) (Item 22, WP 0081 00).

NOTE

If only a small area of insulation was removed, insulation maybe repaired by cutting, fitting and then gluing a block of insulation into the repaired area. Do not replace entire sheet of insulation unless damaged.

ASSEMBLY – Continued.

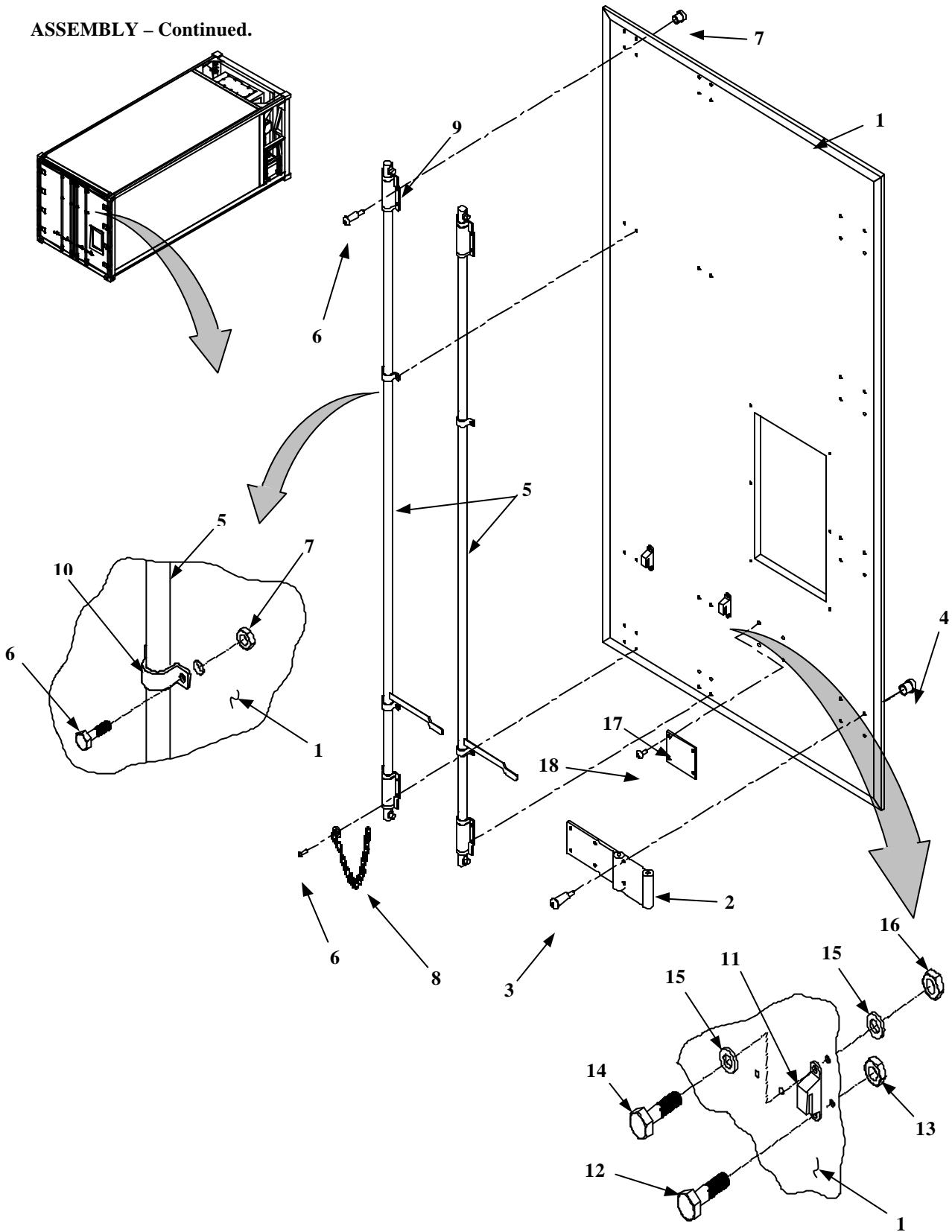


Figure 2. Assembly (Sheet 1 of 3)

ASSEMBLY – Continued.

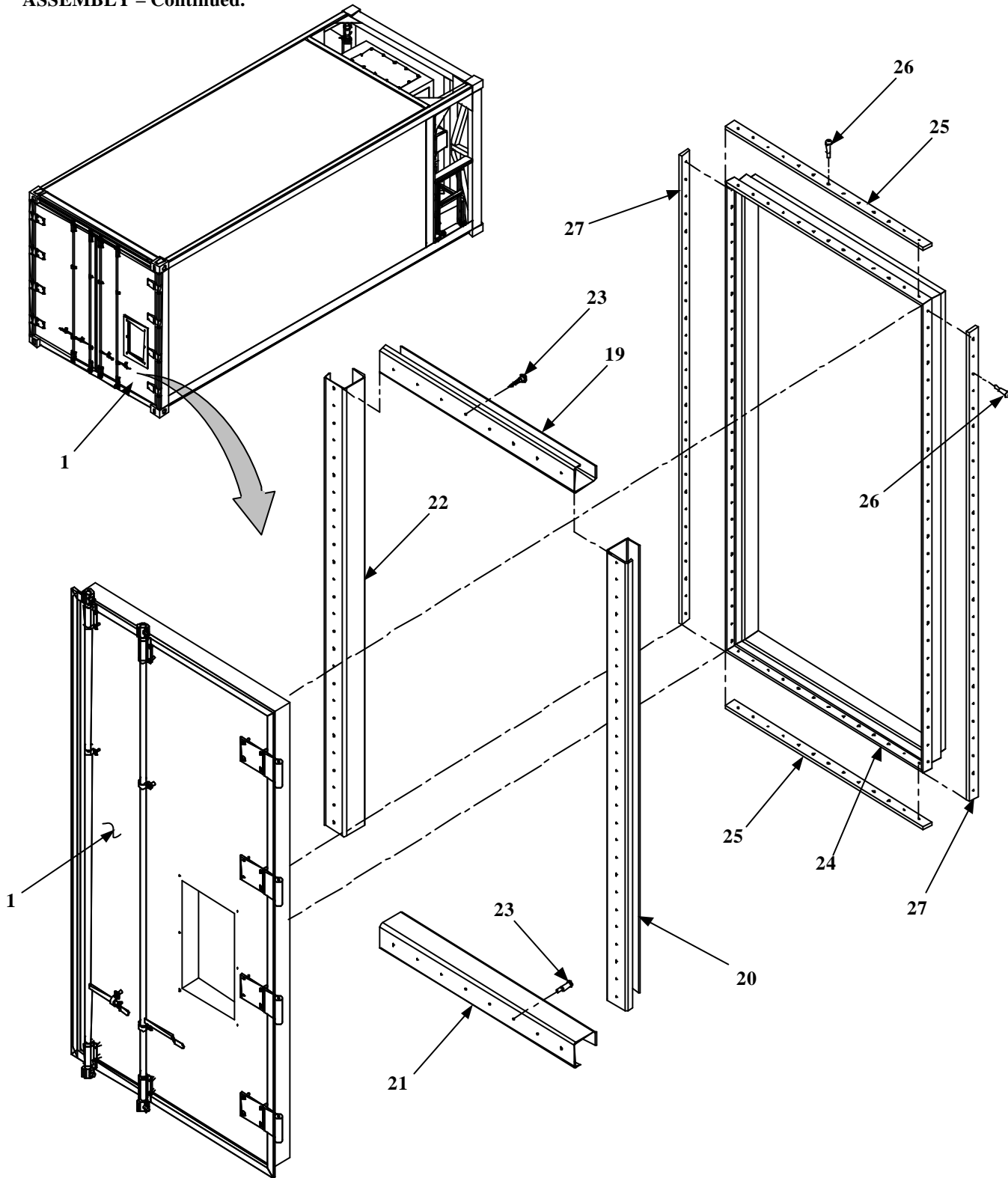


Figure 2. Assembly (Sheet 2 of 3)

ASSEMBLY – Continued.

10. Apply adhesive (Item 2, WP 0078 00) to door panel (1) and allow to dry until tacky.
11. Cut to fit and press insulation (28) onto door panel (1).
12. Apply a coat of adhesive (Item 2, WP 0078 00) to insulation (28) and allow to dry until tacky.
13. Apply a bead of sealant (Item 3, WP 0078 00) along edge of back sheet (29) making contact with retainer frames (19, 20, 21 and 22) and around holes in retainer frames.
14. Align back sheet (29) on insulation retainer frames (19, 20, 21 and 22). Secure with 60 rivets (26) (Item 22, WP 0081 00).

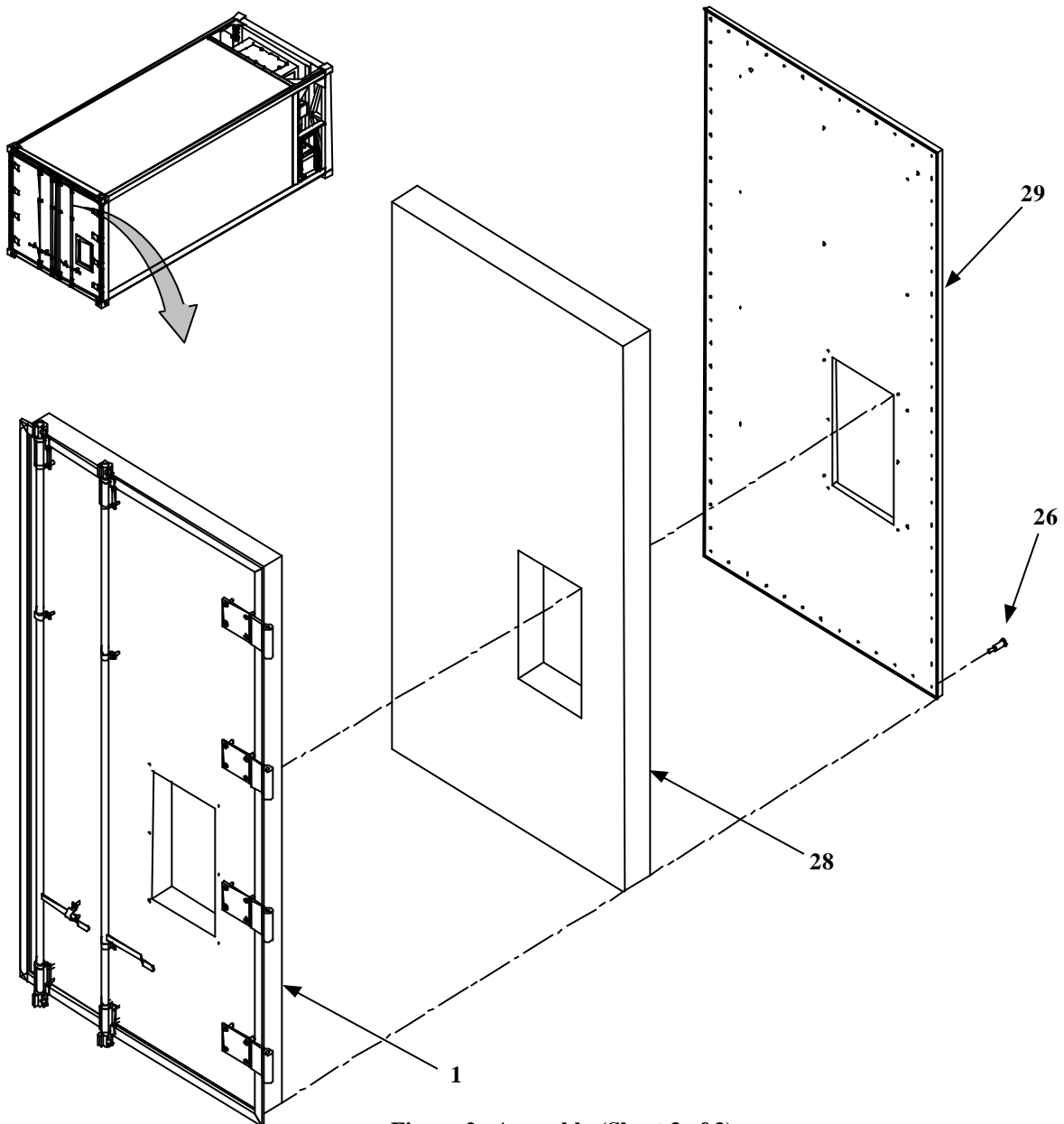


Figure 2. Assembly (Sheet 3 of 3)

END OF WORK PACKAGE.

REAR DOOR, LEFT**0035 00****THIS WORK PACKAGE COVERS:**

Disassembly, Cleaning, Inspection, Repair, and Assembly

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)
 Hoist (Section III, Item 14, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)
 Rivet Tool (Section III, Item 10, WP 0048 00)
 Torx Bit (Section III, Item 6, WP 0048 00)
 Torx Socket (Section III, Item 7, WP 0048 00)

Material/Parts:

Adhesive, Contact (Item 2, WP 0078 00)
 Rivet, Pop (Item 22, WP 0081 00)
 Rivet, Blind (Item 14, WP 0081 00)
 Camtainer Nut (Item 9, WP 0081 00)
 Camtainer Bolt (Item 3, WP 0081 00)
 Camtainer Bolt (Item 5, WP 0081 00)
 Solvent, Dry Cleaning (Item 11, WP 0032 00)
 Foam, Urethane (Item 9, WP 0078 00)
 Detergent (Item 6, WP 0078 00)
 Wiping rag (Item 18, WP 0078 00)
 Adhesive, Silastic, Sealant (Item 3, WP 0078 00)
 Adhesive Tape (Item 16, WP 0078 00)

Equipment Condition:

Generator Set shut down (WP 0006 00)
 Refrigeration Unit shut down (WP 0006 00)

Personnel Required:

Three

NOTE

Disassemble rear doors only to the extent required to replace defective components.

DISASSEMBLY.

1. Drill out 41 rivets (1, Figure 1) and 21 rivets (2).
2. Carefully remove back sheet (3) from door panel (4) and insulation (5).

NOTE

Only insulation directly over brace levers and hinge mounting hardware needs to be removed. Do not remove entire sheet of insulation.

3. Cut out and remove insulation (5) from mounting hardware, securing brace levers (6) and hinge (7) to door panel (4).
4. Drill out twenty rivets (8) and remove two retaining strips (9).
5. Drill out 21 rivets (8) and remove retaining strip (10).
6. Drill out four rivets (8) and remove two retainers (11).
7. Remove door seal (12).
8. Remove 34 screws (13) and insulation retainer frames (14, 15 and 16).
9. Remove sixteen screws (13) and center frame (17).

DISASSEMBLY – Continued.

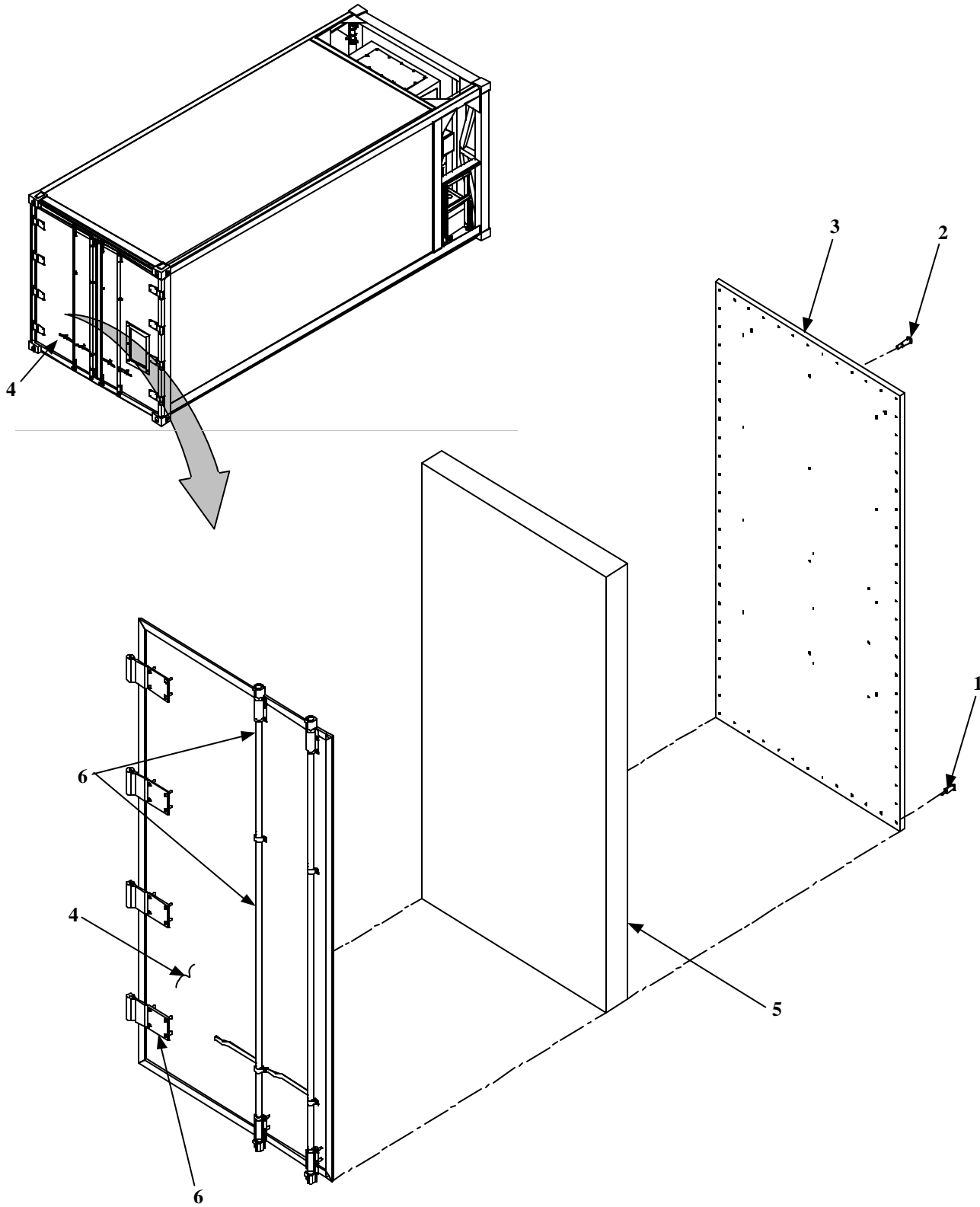


Figure 1. Rear Door, Left – Disassembly (Sheet 1 of 3)

DISASSEMBLY – Continued.

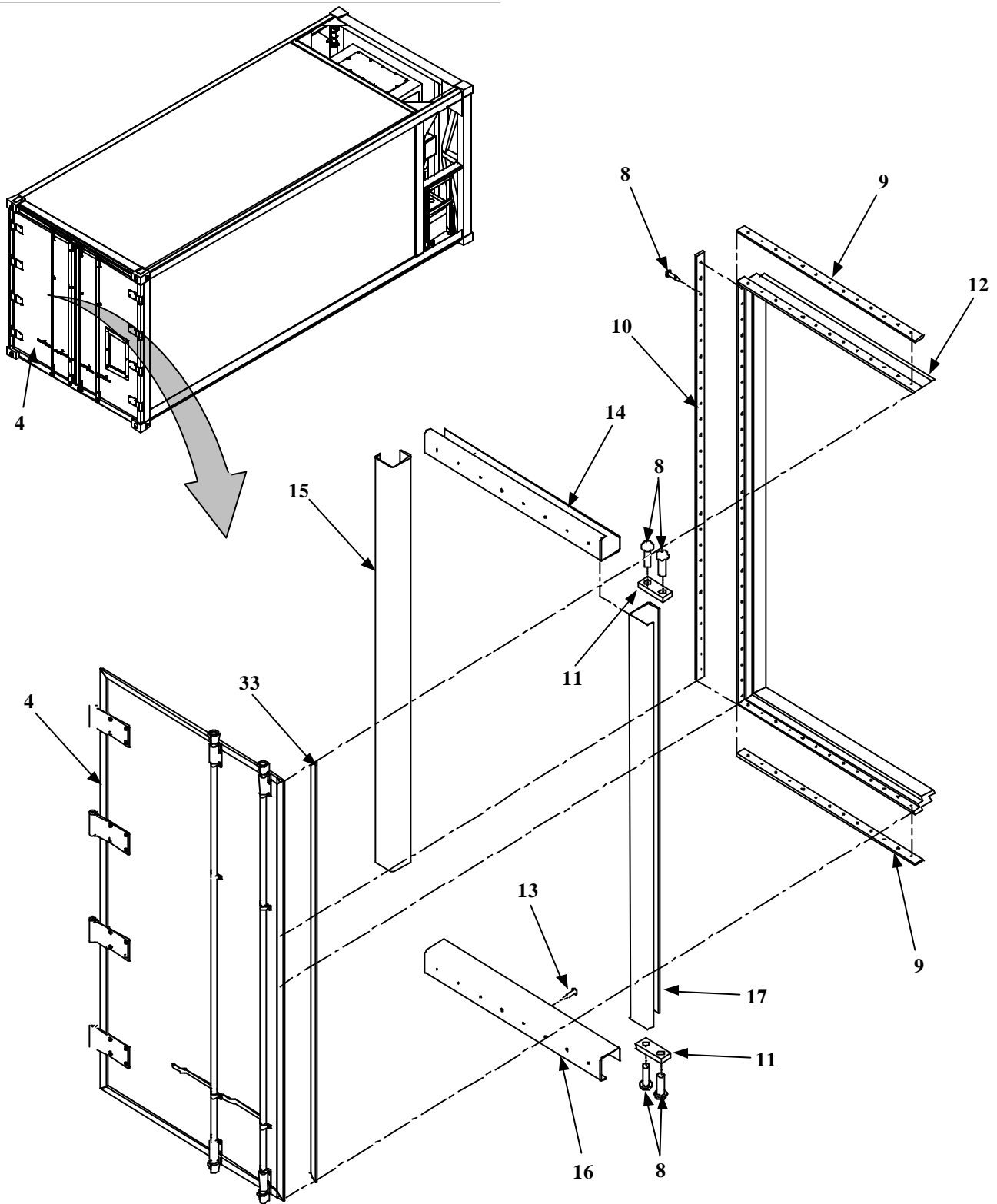


Figure 1. Rear Door, Left – Disassembly (Sheet 2 of 3)

DISASSEMBLY – Continued.

10. Remove brace levers (6) as follows:
 - a. Remove self-locking nut (18), two flat washers (19) and bolt (20) from top mounting hole latch (21).
 - b. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), remove camtainer nut (22) and camtainer bolt (23) and latch (21).
 - c. Using torx bit and socket, remove eight camtainer nuts (24) and camtainer bolt (25), securing top and bottom plates (26) and chain (27).
 - d. Using torx bit and socket, remove four camtainer nuts (28) and camtainer bolt (29), securing two guides (30), and remove brace lever from door (4).
 - e. Follow above steps a. through d. to remove remaining brace lever (6)

WARNING

Door is very heavy/difficult to handle. Use two personnel when removing door.

11. Support door assembly (4) with sling and hoist.
12. Using torx bit and socket, remove twenty camtainer nuts (31), bolts (32), four hinges (7) and door panel (4).
13. Remove sealant tape (33) from door panel (4).

CLEANING.**WARNING**

To prevent injury to personnel and damage to equipment, use dry cleaning solvent only in well ventilated areas. Avoid repeated or prolonged contact with skin. Do not use near sparks, open flame or excessive heat.

1. Clean brace levers with wiping rag (Item 18, WP 0078 00) and dry-cleaning solvent (Item 11, WP 0081 00). Dry with wiping rag.
2. Wash door panel seal and backing sheet with fresh water and detergent (Item 6, WP 0078 00). Rinse panel with fresh water and dry with wiping rag (Item 18, WP 0078 00).

INSPECTION.

1. Inspect door panel for cracks, punctures and delamination. Check door edge seal for tears.
2. Inspect braces levers for cracks, broken welds and corrosion.
3. Inspect seal for tears, punctures and deterioration.
4. Inspect backing sheet for cracks, holes and delamination.

REPAIR.

1. Repair holes and punctures in door panel (reference WP 0039 00).
2. Replace all other defective components.

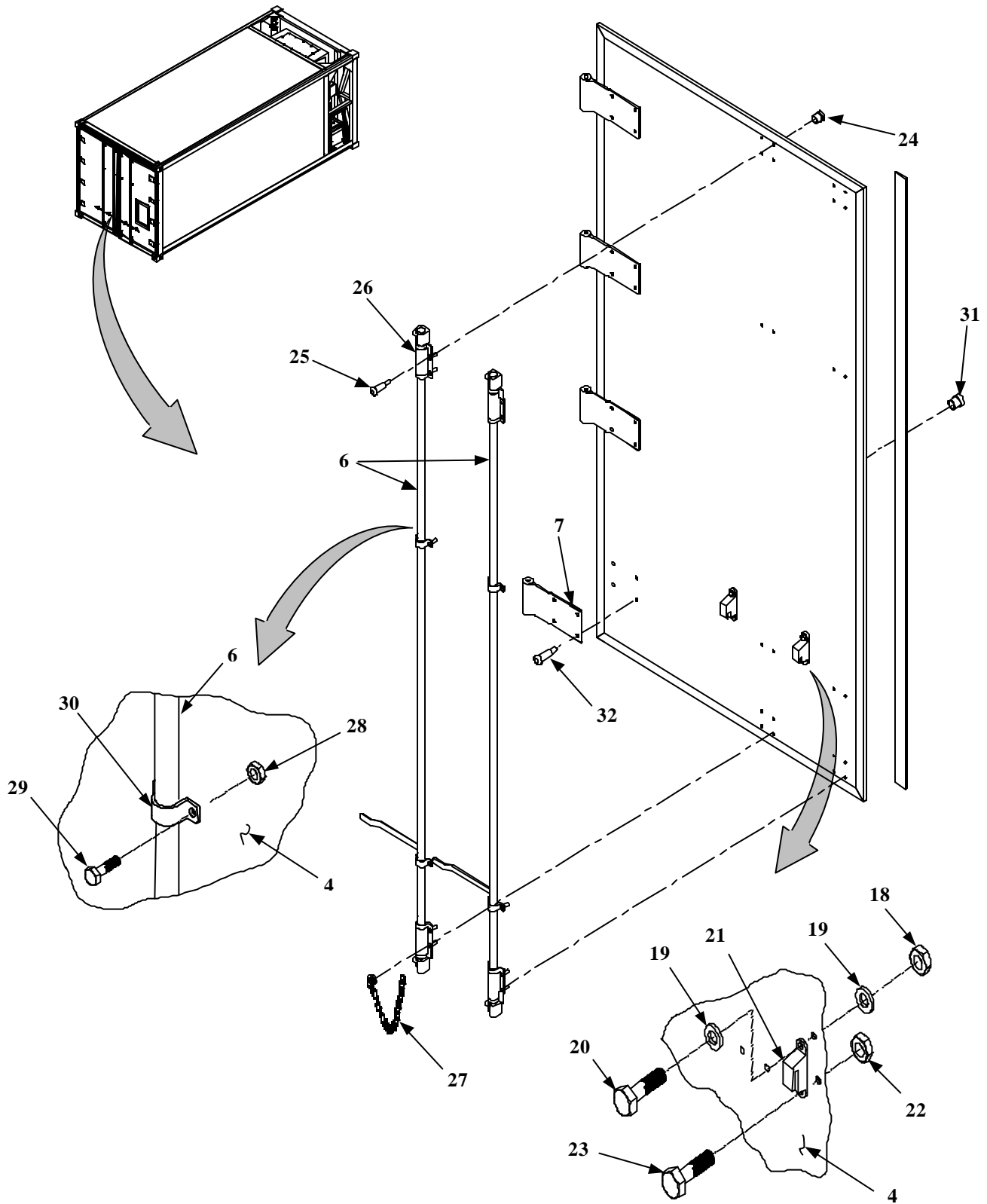


Figure 1. Rear Door, Left - Disassembly (Sheet 3 of 3)

ASSEMBLY.

1. Apply sealant tape (1, Figure 2) (Item 16, WP 0078 00) along edge of door panel (2) (inside surface).

WARNING

Door is heavy/difficult to handle. Use two personnel when positioning door.

2. Using a sling (Section III, Item 9, WP 0048 00) and hoist (Section III, Item 14, WP 0048 00), align door panel (2) with hinges (3).
3. Using a torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 6, WP 0048 00), install four hinges (3), twenty camtainer bolts (4) and camtainer nuts (5) (Item 14, WP 0081 00) on door panel (2).

NOTE

Both brace levers attach the same way

4. Install brace levers as follows:
 - a. Apply a bead of sealant (Item 3, WP 0078 00) around holes in door panel (2) prior to installing hardware (inside surface).
 - b. Position brace lever (6) on door panel (2).
 - c. Using torx bit and socket, install eight camtainer bolts (7) (Item 5, WP 0081 00), camtainer nuts (8) (Item 9, WP 0081 00) and chain (9) to secure top and bottom plates (10) to door panel (2).
 - d. Position two guides (11) on door panel (2) and using torx bit and socket, install four camtainer bolts (12) (Item 6, WP 0081 00) and camtainer nuts (13) (Item 9, WP 0081 00).
 - e. Position latch (14) on door panel (2), and using torx bit and socket, install four camtainer bolts (12) (Item 3, WP 0081 00) and camtainer nuts (13) (Item 9, WP 0081 00).
 - f. Install bolt (15), two flat washers (16) and self-locking nut (17) in the top mounting hole in latch (14).
 - g. Follow above steps a. through f. to install remaining brace lever (6).

ASSEMBLY – Continued.

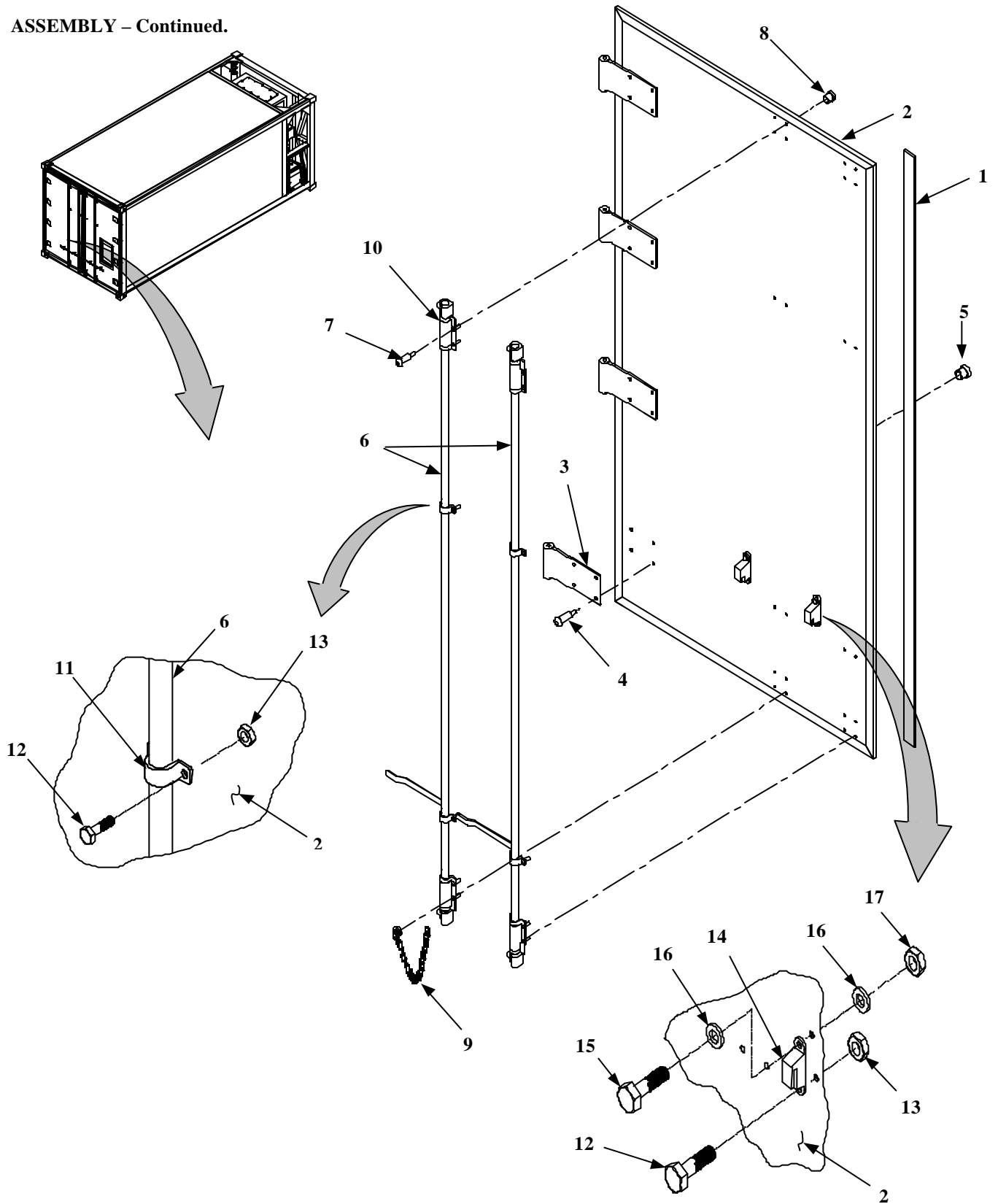


Figure 2. Rear Door, Left – Assembly (Sheet 1 of 3)

ASSEMBLY – Continued.

5. Apply a bead of sealant (Item 3, WP 0078 00) along edges of insulation retainer frames (18, 19 and 20), making contact with door panel (2). Install retainer frames on door panel; secure with 34 screws (21).
6. Apply a bead of sealant (Item 3, WP 0078 00) along edge of center frame (22), making contact with door panel (2). Install center frame with sixteen screws (21).
7. Install door seal (23) in insulation retainer frames (18, 19 and 20) with seam of seal over edge of retainers.
8. Install two retaining strips (24) with 24 rivets (25) (Item 22, WP 0081 00).
9. Install retaining clip (26) with 21 rivets (25) (Item 22, WP 0081 00).

ASSEMBLY – Continued.

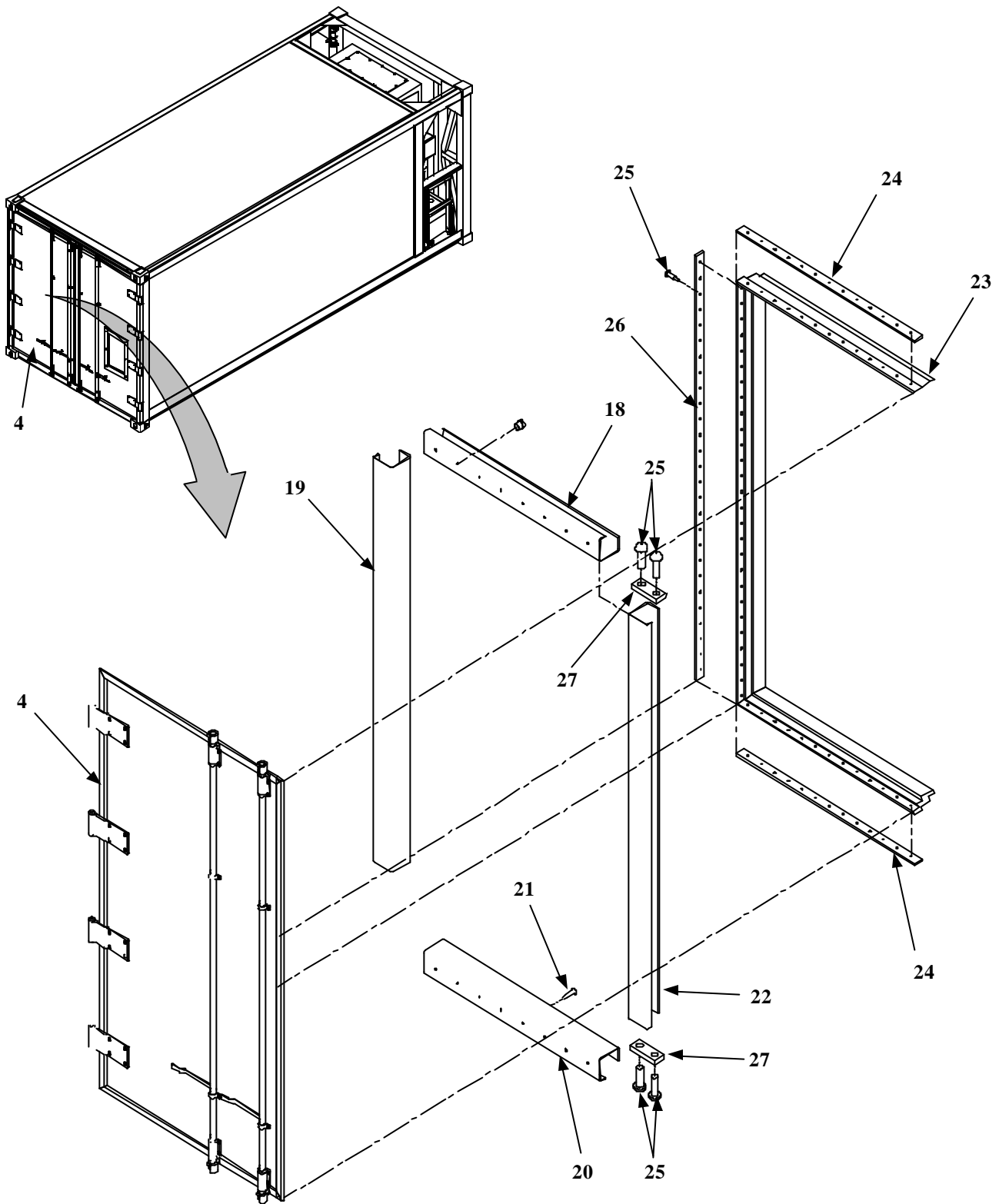


Figure 2. Rear Door, Left – Assembly (Sheet 2 of 3)

ASSEMBLY – Continued.

10. Install two retainers (27) with four rivets (25) (Item 22, WP 0081 00). Apply adhesive (Item 9, WP 0078 00) to inside of door panel (2) and allow to dry until tacky.

NOTE

If only a small area of insulation was removed, insulation may be repaired by cutting, fitting, and then gluing a block of insulation into the repaired area (Item 9, WP 0078 00). Do not replace entire sheet of insulation unless damaged.

11. Cut to fit and press insulation (28) onto door panel (2).
12. Apply a coat of adhesive (Item 2, WP 0078 00) to insulation (28) and allow to dry until tacky.
13. Apply a bead of sealant (Item 3, WP 0078 00) along edge of back sheet (29), making contact with door seal insulation frames (18, 19 and 20) and center frame (22). Apply a bead of sealant around holes in door seal insulation frames and center frame.
14. Align back sheet (29) on door seal insulation frames (18, 19 and 20) and center frame (22).
15. Secure back sheet (29) to insulation frames (18, 19 and 20) with 41 rivets (25) (Item 22, WP 0078 00). Secure back sheet to center frame (22) with 21 rivets (30) (Item 14, WP 0081 00).

ASSEMBLY – Continued.

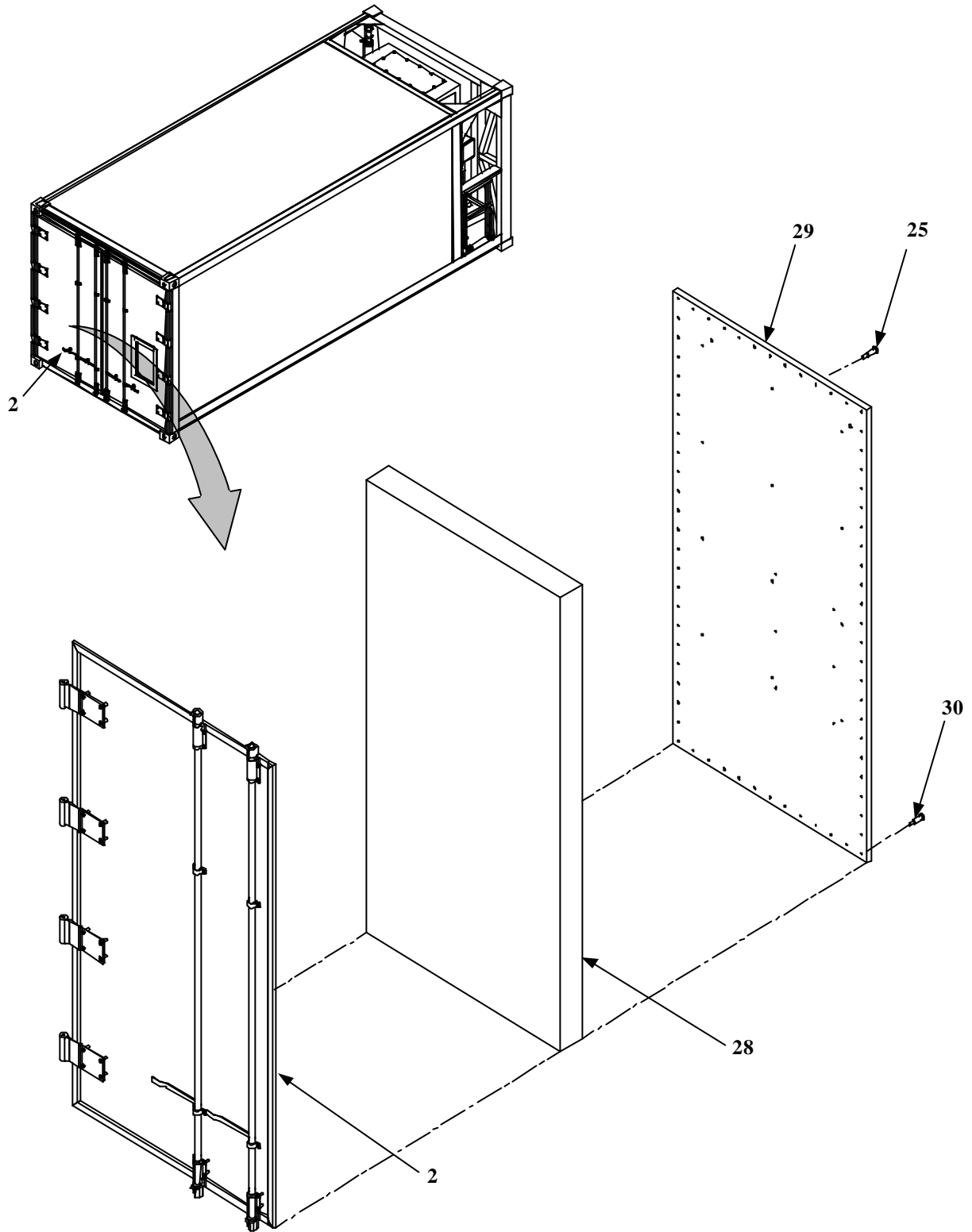


Figure 2. Rear Door, Left – Assembly (Sheet 3 of 3)

END OF WORK PACKAGE.

INSULATED PANEL REPAIR

0036 00

THIS WORK PACKAGE COVERS:

Cleaning, Inspection, and Repair

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
Saw (Section III, Item 13, WP 0048 00)

Materials/Parts:

Repair Kit (Item 8, WP 0048 00)

References:

TM 9-213
TM 43-0139

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)
Generator Set shut down (WP 0006 00)

NOTE

Repair of one insulated panel is shown. Repair of other insulated panels is similar.

CLEANING.

1. Wash damaged area of insulated panel (1) with detergent and clean water.
2. Rinse insulated panel (1) with clean water and allow panel to air dry.
3. Remove pieces of loose glass cloth (2), interior plywood (3), exterior plywood (4) and insulation (5) from damaged area of insulated panel (1).

INSPECTION.

1. Inspect interior and exterior surface of insulated panel (1) to determine extent of damage.
2. Inspect glass cloth (2), interior plywood (3) and exterior plywood (4) for damage.

REPAIR.

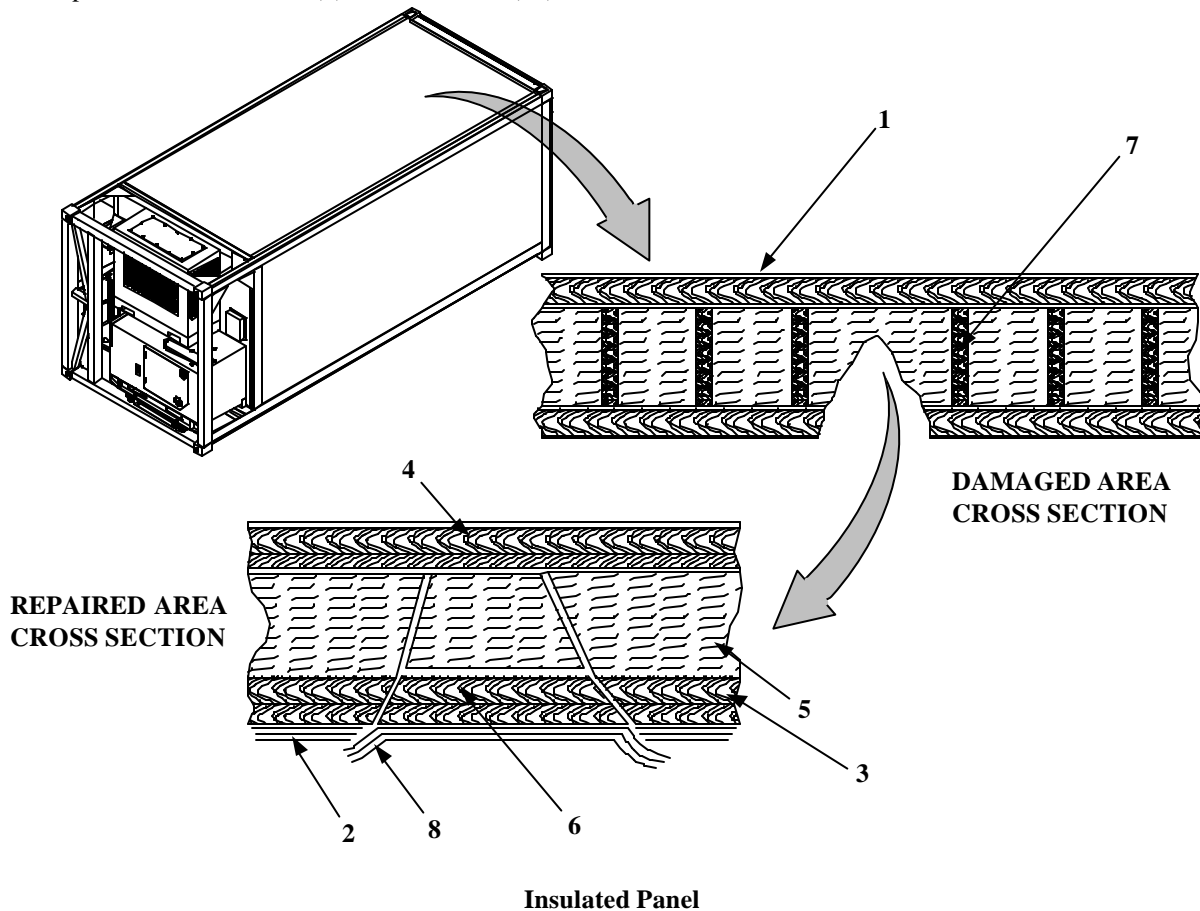
1. Surface scrapes and cuts (that do not puncture plywood).
2. Repair damaged gelcoat and glass cloth in accordance with the instructions supplied with the repair kit.
3. Punctures and ruptures.

NOTE

- The following instructions apply to panel damage that goes through the interior/ exterior plywood.
- Inner and outer plywood panels are repaired the same. Outer plywood is thicker than inner plywood.

REPAIR – Continued.

4. To aid repair, outline damaged area in a square, circle, or rectangle so that replacement plywood (6) and insulation (5) can be easily measured and fitted into place.
5. Using a hole saw, cut damaged area from insulated panel (1). Angle saw blade so that edges of cut are beveled into the damaged area, as shown.
6. Cut and remove damaged insulation (5) from insulated panel (1).
7. If required, cut and remove damaged rib section (7) from insulated panel (1).
8. Replace damaged rib section (7) with the same size and type of material (3/4 inch thick plywood). Cut rib material to length and glue in place using glass cloth and resin (see instructions in repair kit).
9. Cut and fit replacement insulation (5) into damaged area of panel (1).
10. Cut replacement plywood (6) to fit into damaged area of panel (1). Angle saw blade so that plywood edges are beveled to match repair area of panel.
11. Glue replacement plywood (6) in place with three layers of glass cloth (8) and resin (see instructions in repair kit). Repair surfaces must overlap undamaged glass cloth (2).
12. Paint repaired areas. Refer to (9) TM 9-213 and (10) TM 43-0139.



END OF WORK PACKAGE.

SIDE PANEL MAINTENANCE

0037 00**THIS WORK PACKAGE COVERS:**

Disassembly, Cleaning, Inspection, Repair and Assembly

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0049 00)

Material/Parts:

Detergent (Item 6, WP 0078 00)

Wiping Rag (Item 18, WP 0078 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)

Generator Set shut down (WP 0006 00)

NOTE

Maintenance of one side panel is shown. Maintenance of the other side panel is similar.

DISASSEMBLY.

1. Open right rear door (1) and then left rear door (2).
2. Remove 28 screws (3) and spacers/retainers (4) from side panel (5).
3. Repeat step 2 for the remaining seven spacers/retainers (4), if required.

CLEANING.

1. Wash spacers/retainers (4) and side panel (5) with detergent (Item 6, WP 0078 00) and clean water.
2. Allow parts (4 and 5) to air dry.

INSPECTION.

1. Inspect spacers/retainers (4) for cracks, bends and scrapes.
2. Inspect interior and exterior surfaces of side panel (5) for deep scratches, cracks, punctures and delamination.

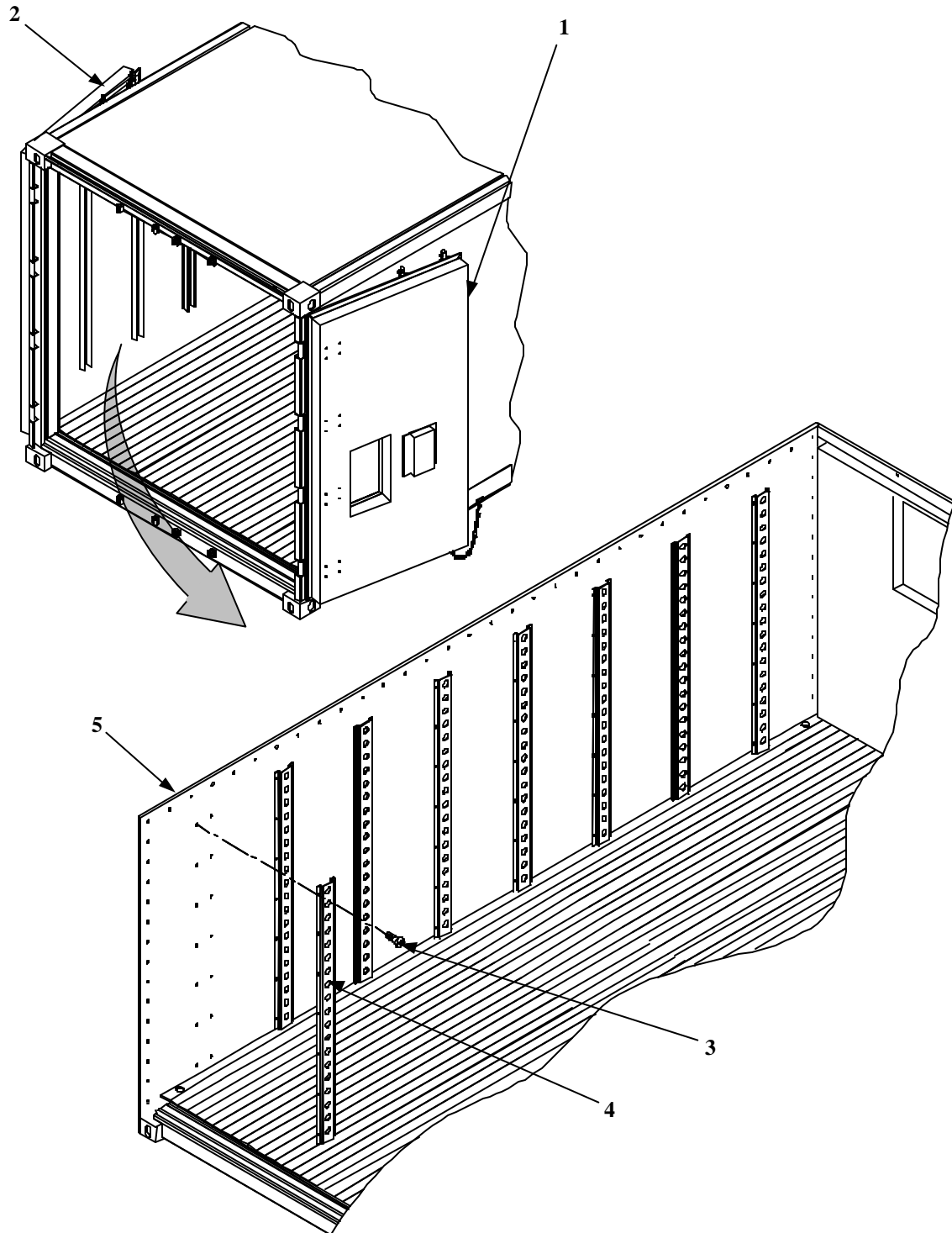
REPAIR.

Replace defective spacers/retainers (4).

1. If damaged, repair side panel (5) (per WP 0036 00).

ASSEMBLY.

1. Install spacers/retainers (4) and 28 screws (3) on side panel (5).
2. Repeat step 1 for the remaining seven spacers / retainers (4), if required.
3. Close left rear door (2) and then right rear door (1).



END OF WORK PACKAGE.

FRONT PANEL MAINTENANCE

0038 00

THIS WORK PACKAGE COVERS:

Disassembly, Repair, and Assembly

INITIAL SET-UP:**Maintenance Level**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)

Materials/Parts:

Adhesive Sealant (Item 3, WP 0078 00)
 Drive Rivet (Item 12, WP 0081 00)
 Drive Rivet (Item 17, WP 0081 00)
 PVC Conduit (Item 4, WP 0079 00)
 Female Adapter (Item 1, WP 0081 00)
 Terminal Adapter (Item 24, WP 0081 00)
 Cement, PVC Adhesive (Item 4, WP 0078 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)
 Generator Set shut down (WP 0006 00)
 Refrigeration Unit removed (WP 0023 00)

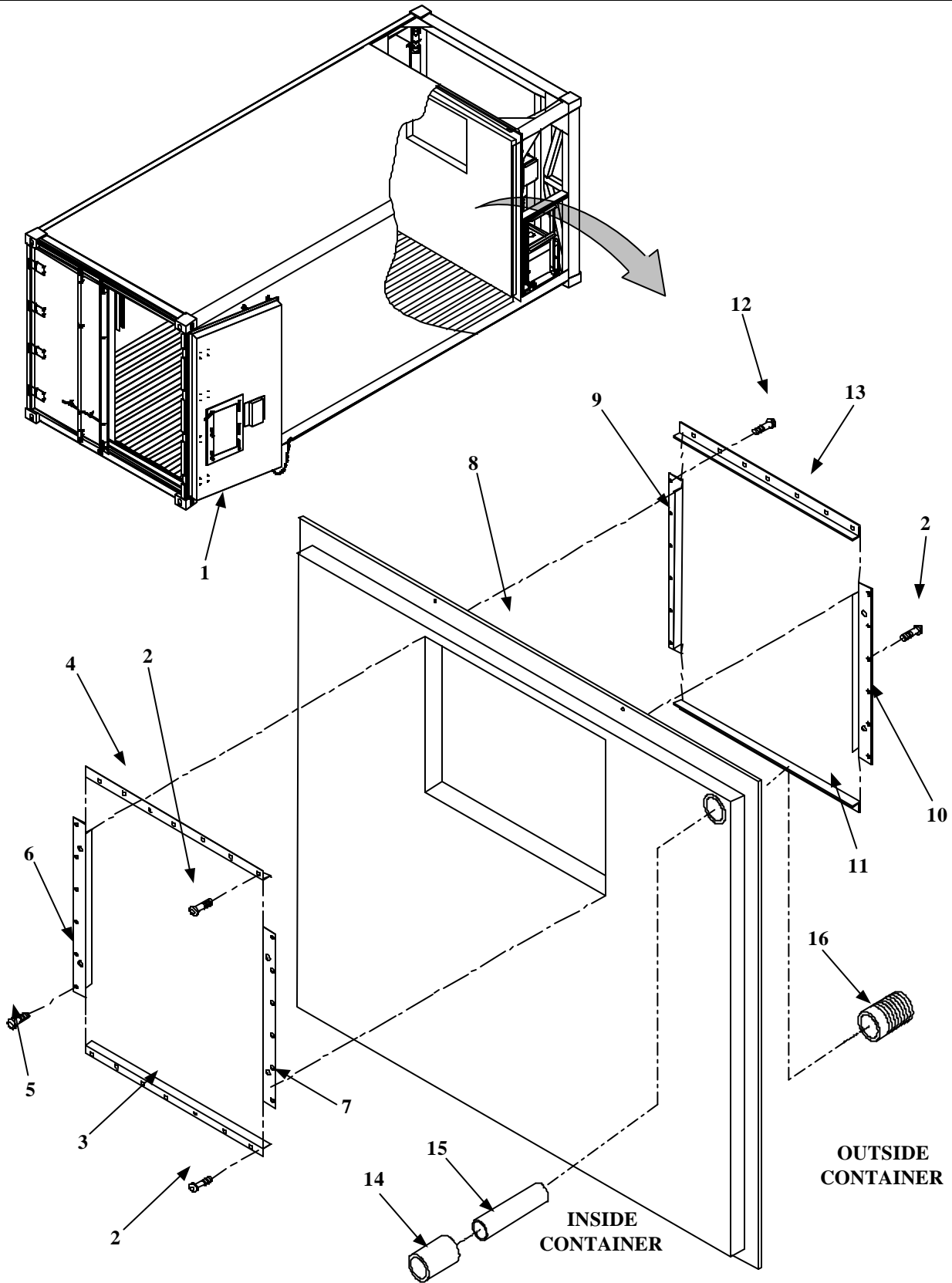
DISASSEMBLY.

1. Open right rear door (1).
2. Using a punch and hammer, drive out center of twenty liner rivets (2) from angle plates (3 and 4).
3. Drill out twenty liner rivets (2) from angle plates (3 and 4).
4. Drill out twelve rivets (5) from angle plates (6 and 7).
5. Carefully pry angle plates (3, 4, 6 and 7) from front panel (8).
6. Using punch and hammer, drive out center of 22 liner rivets (2) from angle plates (9, 10 and 11).
7. Drill out 22 liner rivets (2) from angle plates (9, 10 and 11).
8. Remove twelve screws (12) from angle plate (13).
9. Carefully pry plates (9, 10, 11 and 13) from front panel (8).
10. Remove sealant from front panel (8) and angle plates (3, 4, 6, 7, 9, 10, 11 and 13).

NOTE

PVC conduit and adapters should only be removed if they are being replaced.

11. Remove adapter (14), conduit (15) and terminal adapter (16). Discard all three parts.



Front Panel

REPAIR.

1. Replace defective components.
2. If damaged, repair front panel (reference WP 0038 00).

ASSEMBLY.

1. Apply a bead of sealant (Item 3, WP 0078 00) along the mating surfaces and around each hole of each angle plate before installation.
2. Position angle plates (9, 10, 11 and 13) on outside of front panel (8).
3. Install 22 liner rivets (2) (Item 12, WP 0081 00) to secure angle plates (9, 10 and 11) to front panel (8).
4. Install twelve screws (12) to secure angle plate (13).
5. Position angle plates (3, 4, 6 and 7) on inside of front panel (8).
6. Install twenty liner rivets (2) (Item 12, WP 0081 00) to secure angle plates (3 and 4) to front panel (8).
7. Install twelve liner rivets (5) (Item 17, WP 0081 00) to secure angle plates (6 and 7) to front panel (8).
8. Apply sealant (Item 3, WP 0078 00) along edges and seams of angle plates (3, 4, 6, 7, 9, 10, 11 and 13).
9. Install adapter (14) (Item 1, WP 0081 00) on conduit (15) (Item 4, WP 0079 00) using PVC cement (Item 4, WP 0078 00).
10. Install adapter (14) and conduit (15) into wall (8) from inside the container. Seal around adapter with sealant (Item 3, WP 0078 00).
11. Install terminal adapter (16) (Item 24, WP 0081 00) on conduit (15) using PVC cement (Item 4, WP 0078 00). Seal around terminal adapter with sealant (Item 3, WP 0078 00).

END OF WORK PACKAGE.

FLOOR DRAIN REPLACEMENT

0039 00

THIS WORK PACKAGE COVERS:

Removal and Installation

INITIAL SET-UP:**Maintenance**

Unit

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:

Sealant (Item 3, WP 0078 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)

Generator Set shut down (WP 0006 00)

NOTE

There are four drains in the container floor. Removal of one drain is shown; the others are similar.

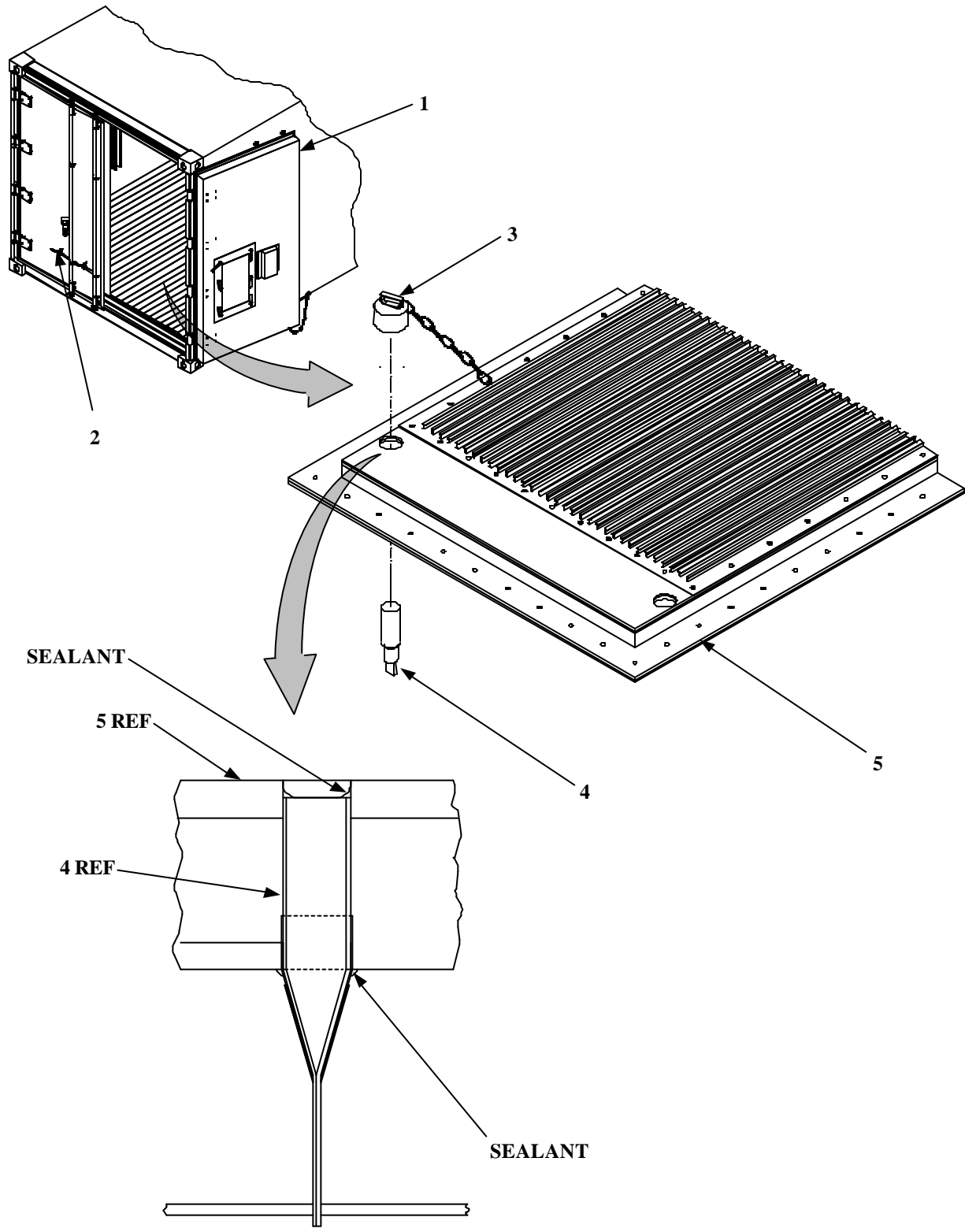
REMOVAL.

1. Open right rear door (1) and then left rear door (2).
2. Remove drain plug (3) from floor drain (4).
3. Remove sealant from around floor drain (4) both inside the container and under the container.
4. Push floor drain (4) through the bottom of floor assembly (5).
5. Clean any residue sealant from floor assembly (5).

INSTALLATION.**NOTE**

There are four drains in the container floor. Installation of one drain is shown; the others are similar.

1. Install floor drain (4) into floor assembly (5) until drain is .25 inch below the surface.
2. Apply a bead of sealant (Item 3, WP 0078 00) around top and bottom edge of floor drain (4).
3. Allow sealant to dry.
4. Install drain plug (3).
5. Close left rear door (2) and right rear door (1).



Floor Drain

FLOOR BOARD REPLACEMENT

0040 00

THIS WORK PACKAGE COVERS:

Removal and Installation

INITIAL SET-UP :**Maintenance Level**

General Support

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)

Material/Parts:

Adhesive Sealant (Item 3, WP 0078 00)

Equipment Condition:

Refrigeration Unit shut down (WP 0006 00)

Generator Set shut down (WP 0006 00)

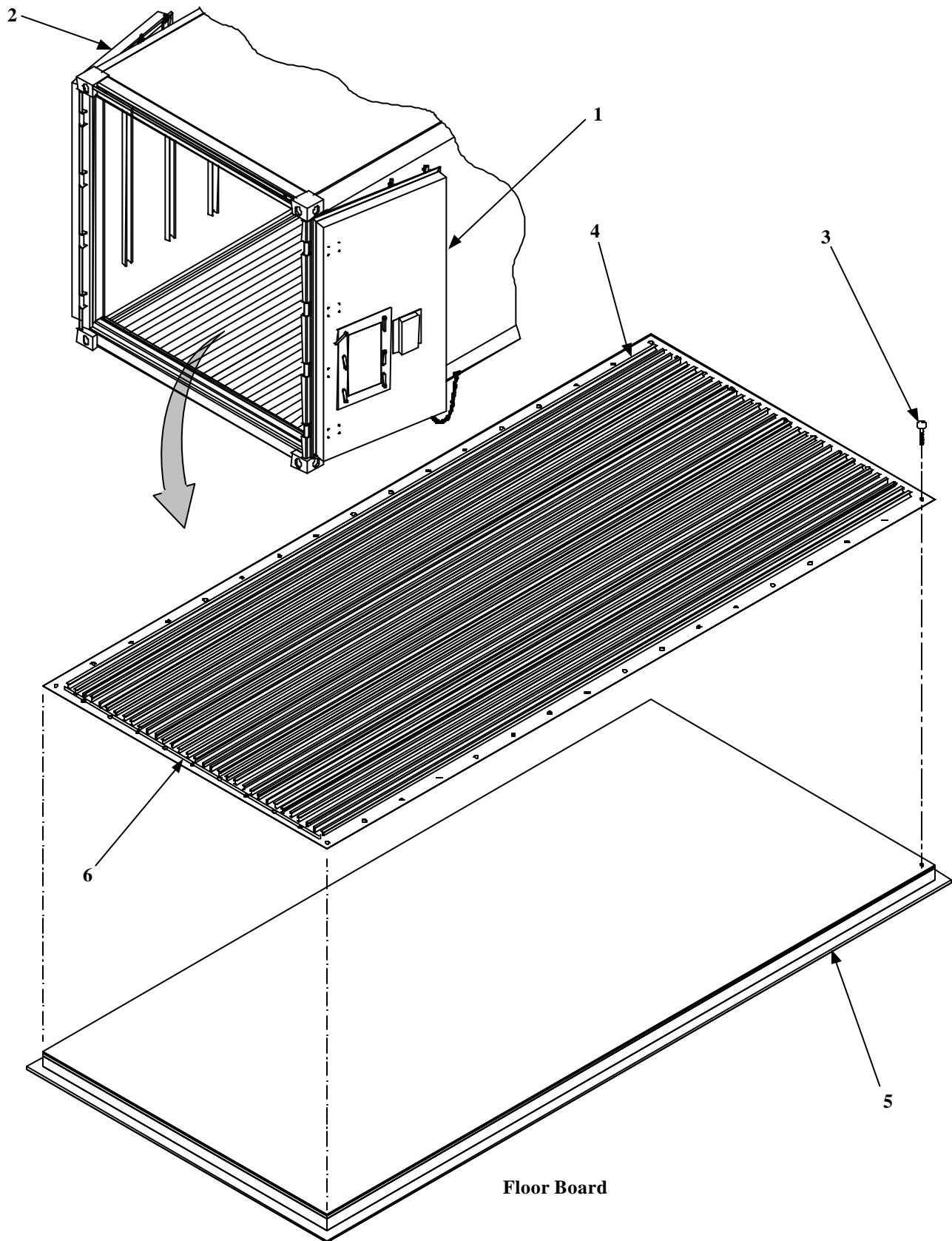
REMOVAL.

1. Open right rear door (1), then left rear door (2) of container.
2. Remove 64 screws (3) from floorboard (4).
3. Lift and remove floorboard (4) from floor panel (5).
4. Remove old sealant from floor panel (5).

INSTALLATION.**NOTE**

Floorboard must be installed so that brace is toward door opening.

1. Apply a bead of sealant (Item 3, WP 0078 00) along floor panel (5) where outer edge of floorboard (4) rests and two beads down the center where screw hole patterns run. Apply sealant around each floorboard mounting hole in the floor panel.
2. Position replacement floorboard (4) on floor panel (5). Make sure brace (6) is toward door opening.
3. Install 64 screws (3) in floorboard (4).
4. Close left rear door (2) first, then right rear door (1).



END OF WORK PACKAGE.

CHAPTER 7
DIRECT SUPPORT
MAINTENANCE INSTRUCTIONS
FOR
REFRIGERATED CONTAINER SYSTEM

REAR DOOR REPAIR / REPLACEMENT

0041 00

THIS WORK PACKAGE COVERS:

Removal and Installation

INITIAL SET-UP:**Maintenance Level:**

Direct Support

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Welding Shop (Section III, Item 3, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)
 Hoist (Section III, Item 14, WP 0048 00)

Material/Parts:

Hinge Pin (Item 10, WP 0081 00)
 Hinge Bearing (Item 2, WP 0081 00)
 Hinge Washer (Item 25, WP 0081 00)

Personnel Required:

Three

References:

TM 9-213
 TM 9-237

Equipment Condition:

Generator Set shut down (WP 0006 00)
 Refrigeration Unit shut down (WP 0006 00)

NOTE

Replacement of right rear door is shown. Replacement of left rear door is similar.

REMOVAL.

1. Open right rear door (1) and then left rear door (2) on container (3).
2. Using cutting torch or grinder, remove weld, securing hinge pin (4) to hinge brackets (5 and 6). Repeat for three other hinges.

WARNING

Door is heavy/difficult to handle (approximate weight is 400 lbs.). Use appropriate hoist and sling when removing.

3. While supporting rear door (1) with hoist, drive out hinge pins (4) from four door hinges (7). Discard hinge pins.
4. Remove rear door (1) from hinge brackets (5 and 6).
5. Remove two hinge washers (8) and bearings (9) from door hinges (7). Discard hinge washers and bearings.

INSTALLATION.

1. Install new bearings (9) (Item 2, WP 0081 00) in door hinges (7).

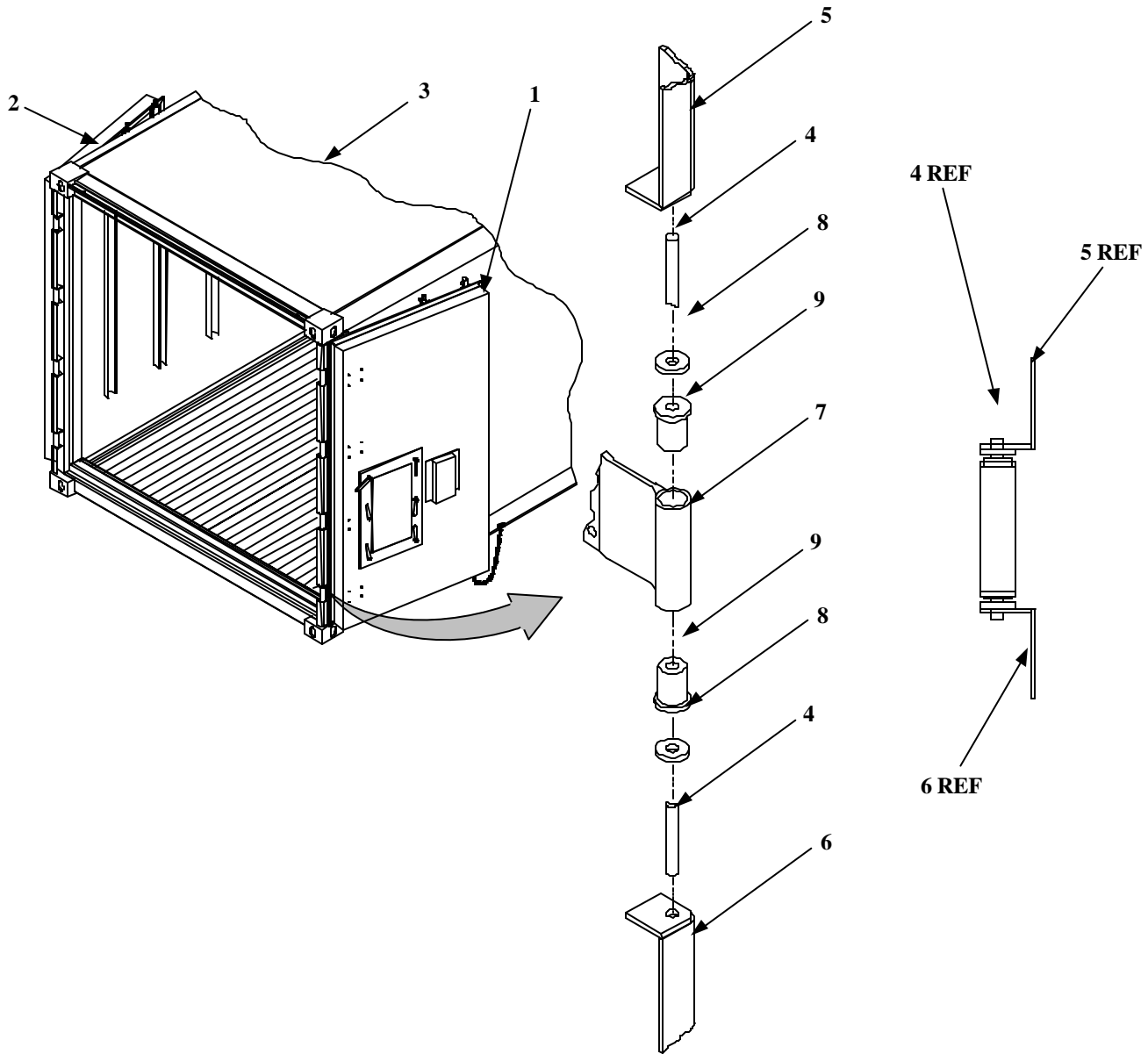
WARNING

Door is heavy/difficult to handle (approximate weight is 400 lbs.). Use appropriate hoist and sling when removing.

2. Hoist rear door (1) into position on hinge brackets (5 and 6).
3. Position hinge washers (8) (Item 25, WP 0081 00) between hinge bearings (9) and hinge brackets (5 and 6) as shown.

INSTALLATION – Continued.

4. Install hinge pins (4) (Item 10, WP 0081 00) through hinge brackets (5 and 6) and door hinges (7).
5. Weld top end of hinge pins (4) (Item 10, WP 0081 00) to hinge bracket (5) (reference TM 9-237).
6. Clean and paint bare metal surfaces (reference TM 9-213).
7. Close left rear door (2) and then right rear door (1).



Rear Door

END OF WORK PACKAGE.

ROOF PANEL REPLACEMENT**0042 00****THIS WORK PACKAGE COVERS:**

Removal and Installation

INITIAL SET-UP:**Maintenance Level**

Direct Support

Tools:

General Mechanics Tool Kit (Section III, Item 4, WP 004800)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)
 Torx Bit (Section III, Item 6, WP 0048 00)
 Torx Socket (Section III, Item 7, WP 0048 00)
 Hoist (Section III, Item 14, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)
 Rivet Tool (Section III, Item 10, WP 0048 00)

Material / Parts:

Pop Rivet (Item 23, WP 0081 00)
 Filler Rope (Item 7, WP 0078 00)
 Liner Rivets (Item 12, WP 0081 00)
 Foam Urethane (Item 8, WP 0078 00)
 Primer (Item 11, WP 0078 00)
 Camtainer Nut (Item 9, WP 0081 00)
 Camtainer Bolt (Item 4, WP 0081 00)
 Sealant Tape (Item 16, WP 0078 00)
 Sealant (Item 3, WP 0078 00)
 Sealing Compound (Item 13, WP 0078 00)

Personnel Required:

Two

Equipment Condition:

Refrigerated Container shut down (WP 0006 00)
 Recorder Thermometer Element removed (WP 0026 00)

REMOVAL.

1. Mark and record location of five angle plates (1, 2, 3, 4 and 5, Figure 1).
2. Using a pin punch and hammer, drive out center of 158 liner rivets (6) from five angle plates (1, 2, 3, 4 and 5).
3. Drill out 158 liner rivets (6) from five angle plates (1, 2, 3, 4 and 5).
4. Drill out two pop rivets (7) from each angle plate (2, 3 and 4).
5. Remove thirteen bolts (8) and fourteen screws (9) from roof angle plate (10).
6. Drill out two pop rivets (7) from roof angle plate (10).
7. Carefully pry six angle plates (1, 2, 3, 4, 5 and 10) from roof panel (11), front panel (12) and side panels (13).
8. Remove insulation (14) from space between front panel (12) and roof panel (11).
9. Remove insulation (14) from space between side panels (13) and roof panel (11).
10. Remove insulation and filler rope (15) from edges of roof panel (11). Discard rope.
11. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), remove 138 camtainer nuts (16) and bolts (17). Discard nuts and bolts.

WARNING

Roof panel is heavy/difficult to handle (approximate weight is 450 lbs.). Use appropriate hoist and sling to remove roof panel.

12. Push up on roof panel (11) to break seal between panel and container frame (18).

REMOVAL – Continued.

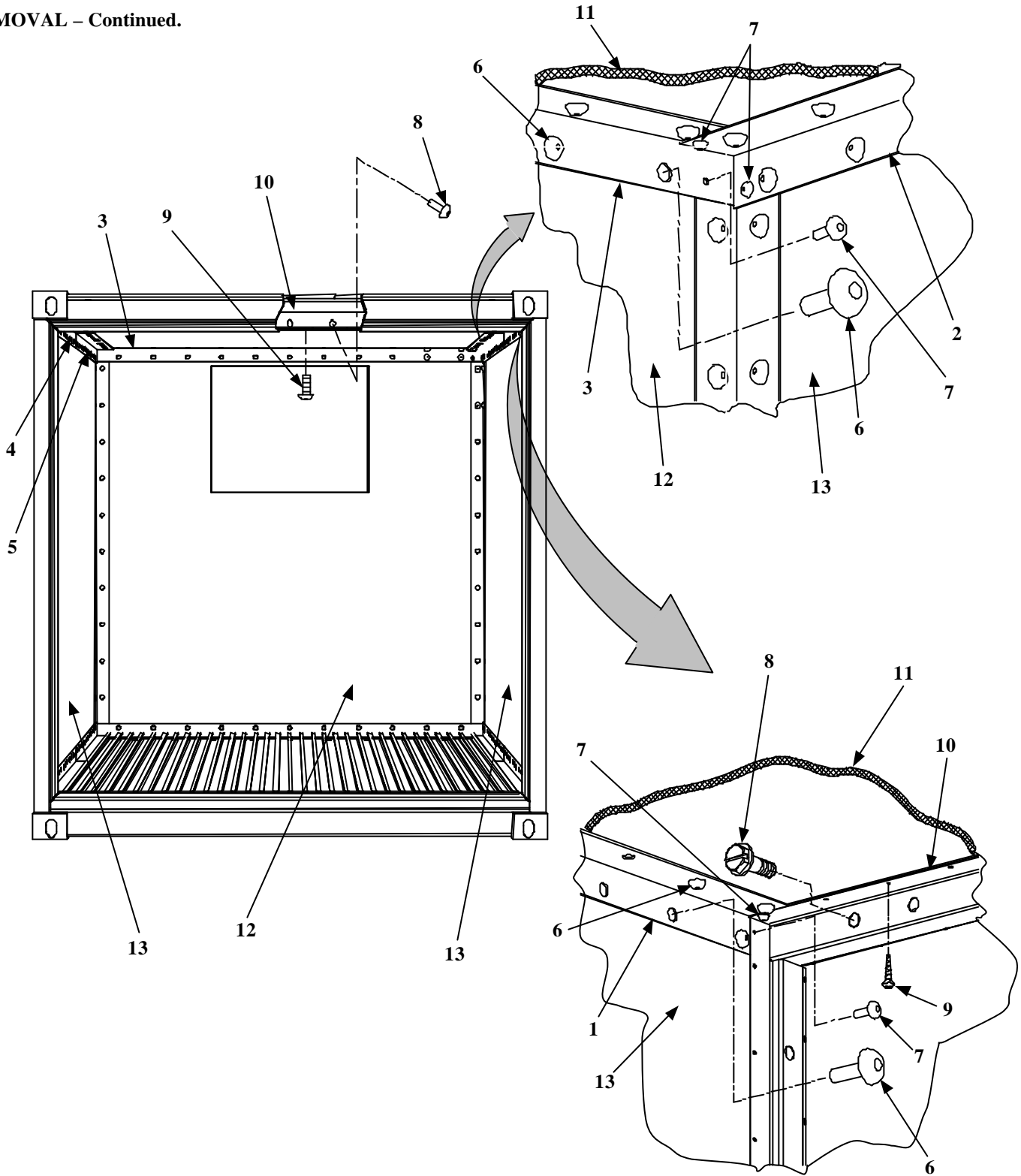


Figure 1. Roof Panel Removal (Sheet 1 of 2)

REMOVAL – Continued.

13. Using hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00), remove roof panel (11) from container frame (18).
14. Remove sealant tape (19) from edges of frame (18).

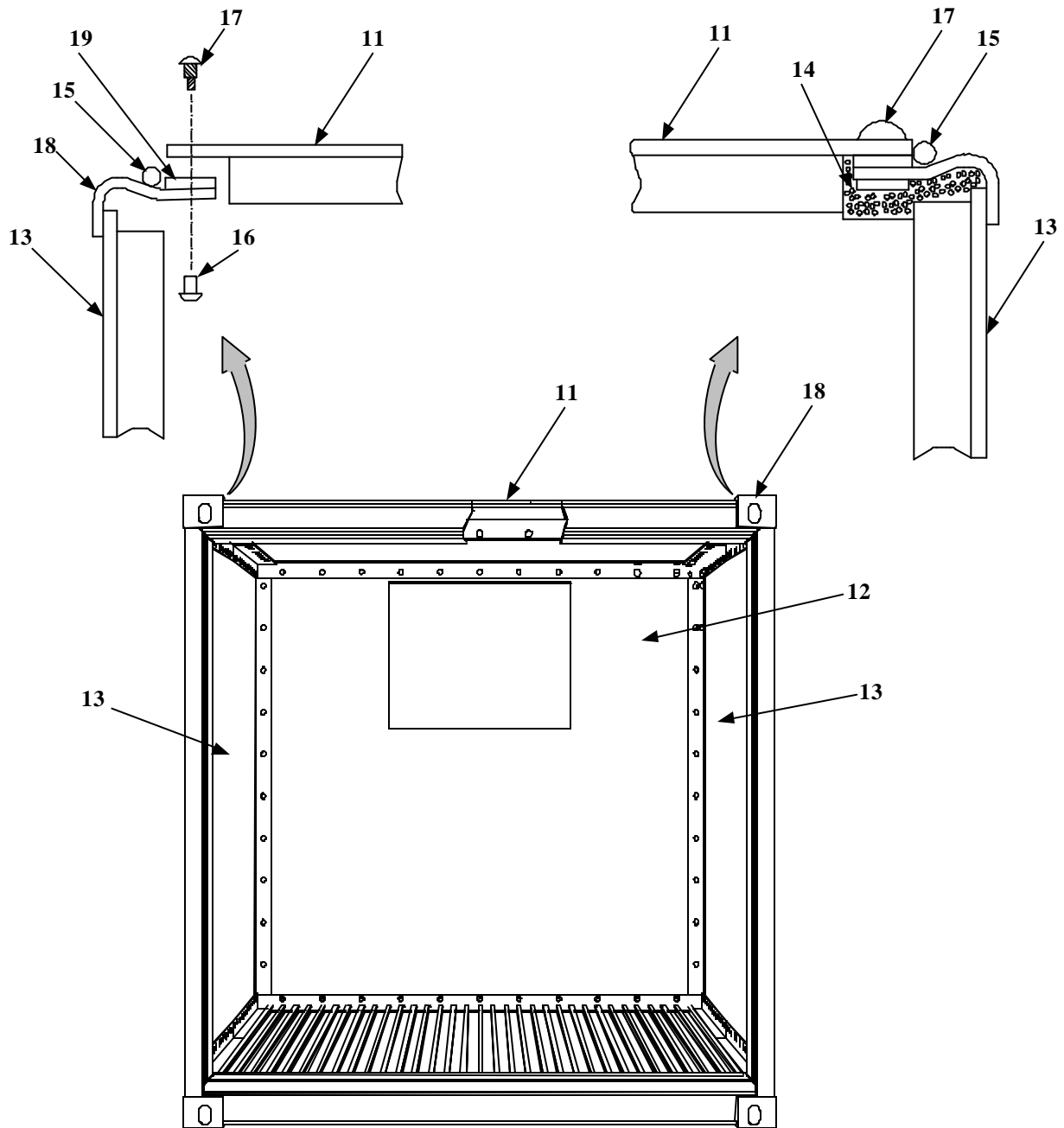


Figure 1. Roof Panel Removal (Sheet 2 of 2)

INSTALLATION.

1. Peel backing from sealant tape (1, Figure 2) (Item 15, WP 0078 00) and apply along container frame (2) where roof panel (3) mates with frame.

WARNING

Roof panel is heavy/difficult to handle (approximate weight is 450 lbs.). Use appropriate hoist and sling to remove roof panel.

2. Using hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00), position replacement roof panel (3) on container frame (2).
3. Center roof panel (3) on container frame (2).

NOTE

- Replacement roof panel is supplied without holes for mounting hardware. Panel must be drilled during installation.
 - To aid alignment of roof panel mounting holes with container frame, install one fastener in each side of roof panel before drilling remaining mounting holes.
4. Drill one 13/32 - inch hole through each side of the roof panel (3). Use existing holes in container frame (2) as a template.

CAUTION

To prevent water leaks, camtainer bolts must be installed so that bolt head is on outside of container.

5. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), install four camtainer bolts (4) (Item 4, WP 0081 00) and camtainer nuts (5) (Item 9, WP 0081 00), one in each side.
6. Using container frame (2) as a template, drill remaining mounting holes up through roof panel (3).
7. Install 134 camtainer bolts (4) (Item 4, WP 0081 00) and camtainer nuts (5) (Item 9, WP 0081 00).
8. Apply a thin coat of primer (Item 22, WP 0078 00) around top perimeter. Allow to dry, 60-90 minutes.
9. Install filler rope (6) (Item 7, WP 0078 00) along all four sides of roof panel (3). Make sure rope is pushed in tight against panel edges.
10. Apply sealant (Item 13, WP 0078 00) over filler rope (6) so that gap between roof panel (3) edge and top surface of container frame (2) is filled flush.

INSTALLATION – Continued.

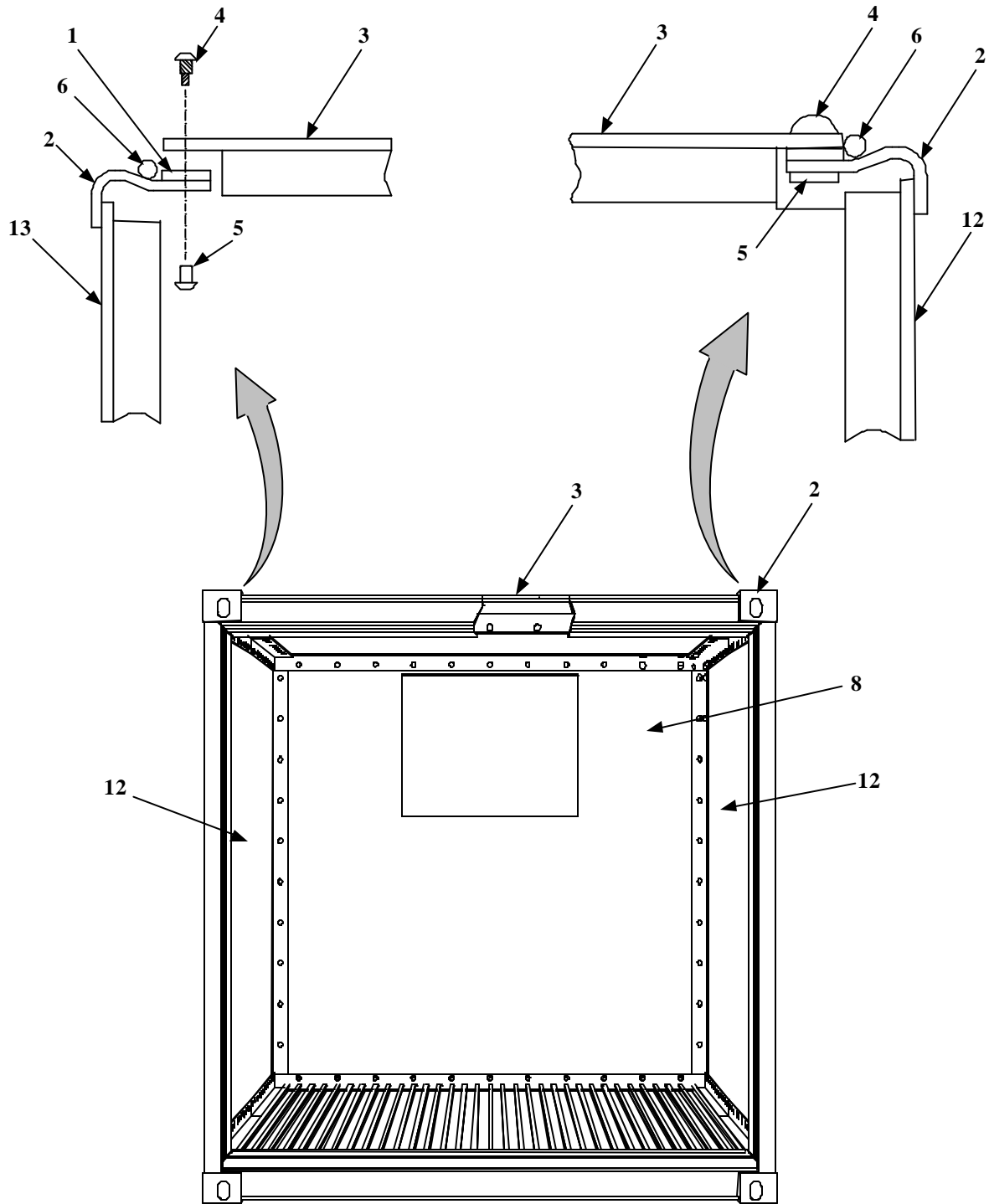


Figure 2. Roof Panel Installation (Sheet 1 of 2)

INSTALLATION – Continued.**NOTE**

- Sealant (Item 3, WP 0078 00) is to be applied to each angle plate before installation.
 - Angle plates are positioned as marked during removal.
11. Position angle plate (7) against front panel (8), install two pop rivets (9) (Item 23, WP 0081 00) and thirteen liner rivets (10) (Item 12, WP 0081 00) in bottom holes of angle plate. Do not install rivets in holes 3 and 4 from the right side of angle plate.
 12. Position angle plate (11) against right side of panel (12); install pop rivet (9) (Item 23, WP 0081 00) and seventeen liner rivets (10) (Item 12, WP 0081 00) in bottom holes of angle plate. Repeat step for installing angle plate (13) on left side of panel (12).
 13. Position roof angle plate (14) against roof (3) and doorjamb (15) and install fourteen screws (16) into plate and jamb.
 14. Drill one .197 diameter hole in each corner [use angle plate (14) as a template] and install two pop rivets (9) (Item 23, WP 0081 00).
 15. Position angle plates (17 and 18) against side panels (12) and roof panel (3) as marked during removal, and install 32 rivets (10) (Item 12, WP 0081 00) in bottom holes of angle plates.
 16. Using portable drill and No. 9 drill bit, drill holes into roof panel (3) using top holes in angle plates (7, 11, 13, 14, 17 and 18) as a template.
 17. Using rivet tool (Item 10, WP 0048 00), install rivets (10) (Item 12, WP 0081 00) in top holes of six angle plates (7, 11, 13, 17 and 18).
 18. Install fourteen screws (19) in top holes of angle plate (14).
 19. Remove button plugs (20) from angle plates (7, 11, 13, 17 and 18) and fill voids with urethane foam (Item 8, WP 0078 00). Install button plugs; seal around each plug with sealant (Item 3, WP 0078 00).
 20. Apply a bead of sealant (Item 3, WP 0078 00) along edges and seams of angle plates (7, 11, 13, 14, 17 and 18).

INSTALLATION – Continued.

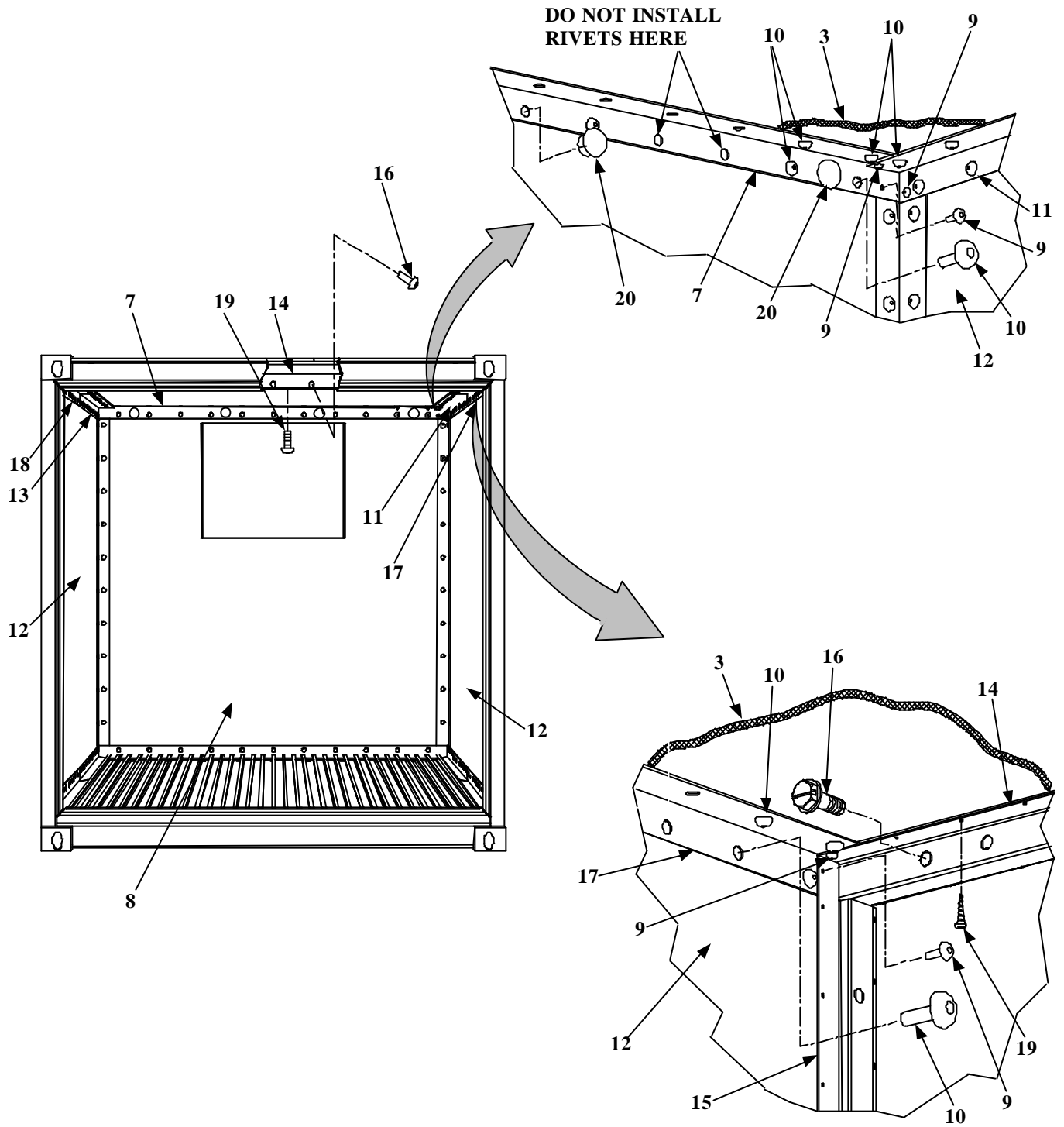


Figure 2. Roof Panel Installation (Sheet 2 of 2)

END OF WORK PACKAGE.

SIDE PANEL REPLACEMENT

0043 00

THIS WORK PACKAGE COVERS:

Removal and Installation

INITIAL SET-UP:

Maintenance Level:

Direct Support

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)
 Torx Bit (Section III, Item 6, WP 0048 00)
 Torx Socket (Section III, Item 7, WP 0048 00)
 Hoist (Section III, Item 14, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)
 Rivet Tool (Section III, Item 10, WP 0048 00)

Material / Parts:

Pop Rivet (Item 23, WP 0081 00)
 Liner Rivets (Item 12, WP 0081 00)

Material / Parts – Continued:

Sealant (Item 3, WP 0078 00)
 Sealant Tape (Item 17, WP 0078 00)
 Camtainer Bolt (Item 5, WP 0081 00)
 Camtainer Nut (Item 8, WP 0081 00)
 Foam, Urethane (Item 8, WP 0078 00)

Personnel Required:

Three

Equipment Condition:

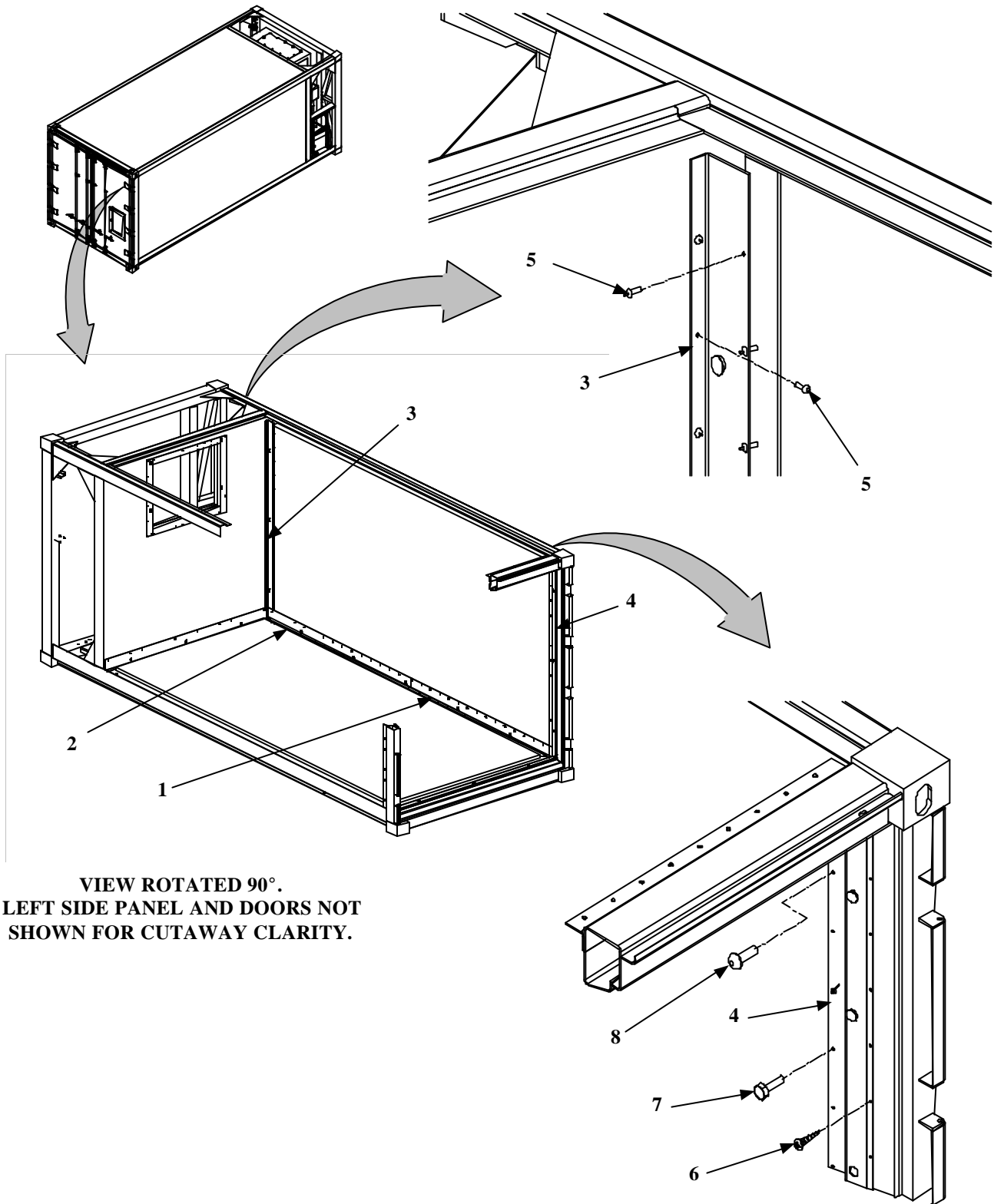
Roof Panel removed (WP 0042 00)

NOTE

Replacement of the right side panel is shown. Replacement of the left side panel is similar.

REMOVAL.

1. Mark and record location of four angle plates (1, 2, 3 and 4, Figure 1).
2. Using a punch and hammer, drive out center of 28 liner rivets (5) from angle plate (3).
3. Drill out rivets (5) from angle plate (3).
4. Remove fourteen screws (6) and thirteen bolts (7) from angle plate (4).
5. Drill out two pop rivets (8) from angle plate (4).
6. Remove 60 screws (9) from two floor angle plates (1 and 2).
7. Drill out two pop rivets (8) from angle plate (2) and remove drain plug chain (10).
8. Drill out two pop rivets (8) from angle plate (1) and remove drain plug chain (10).
9. Carefully pry four angle plates (1, 2, 3 and 4) from side panel (11), front panel (12) and floor panel (13).



VIEW ROTATED 90°.
LEFT SIDE PANEL AND DOORS NOT
SHOWN FOR CUTAWAY CLARITY.

Figure 1. Panel Removal (Sheet 1 of 4)

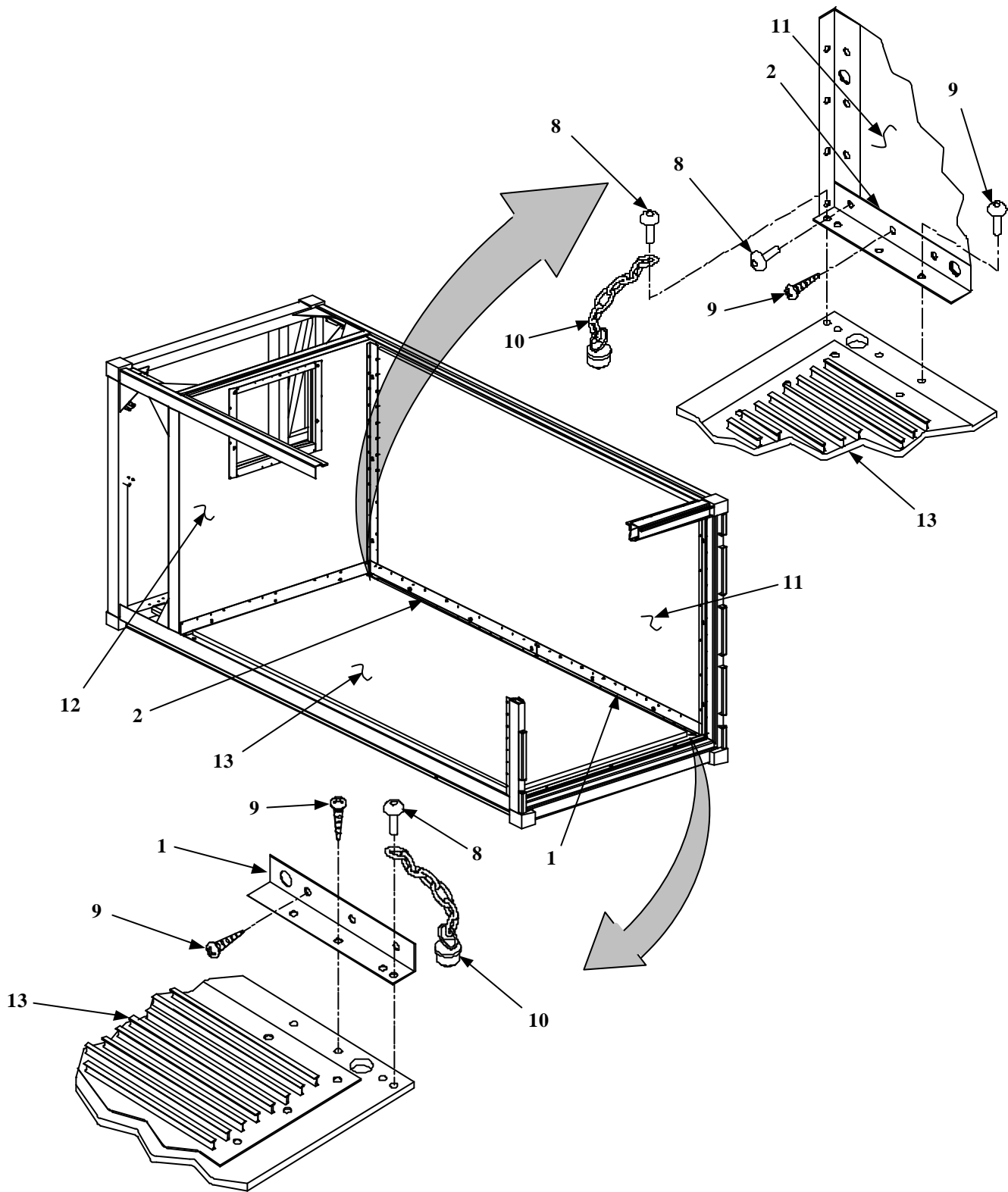


Figure 1. Panel Removal (Sheet 2 of 4)

REMOVAL – Continued.

10. Remove light assembly (reference WP 0032 00), right panel only.
11. Remove insulation (14, Figure 1) from space between side panel (11), front panel (12) and floor panel (13).
12. Remove sealant tape (15) from edges of floor panel (13).
13. Using torx bit and socket, remove 122 camtainer nuts (16) and bolts (17) from top, bottom, and sides of side panel (11).

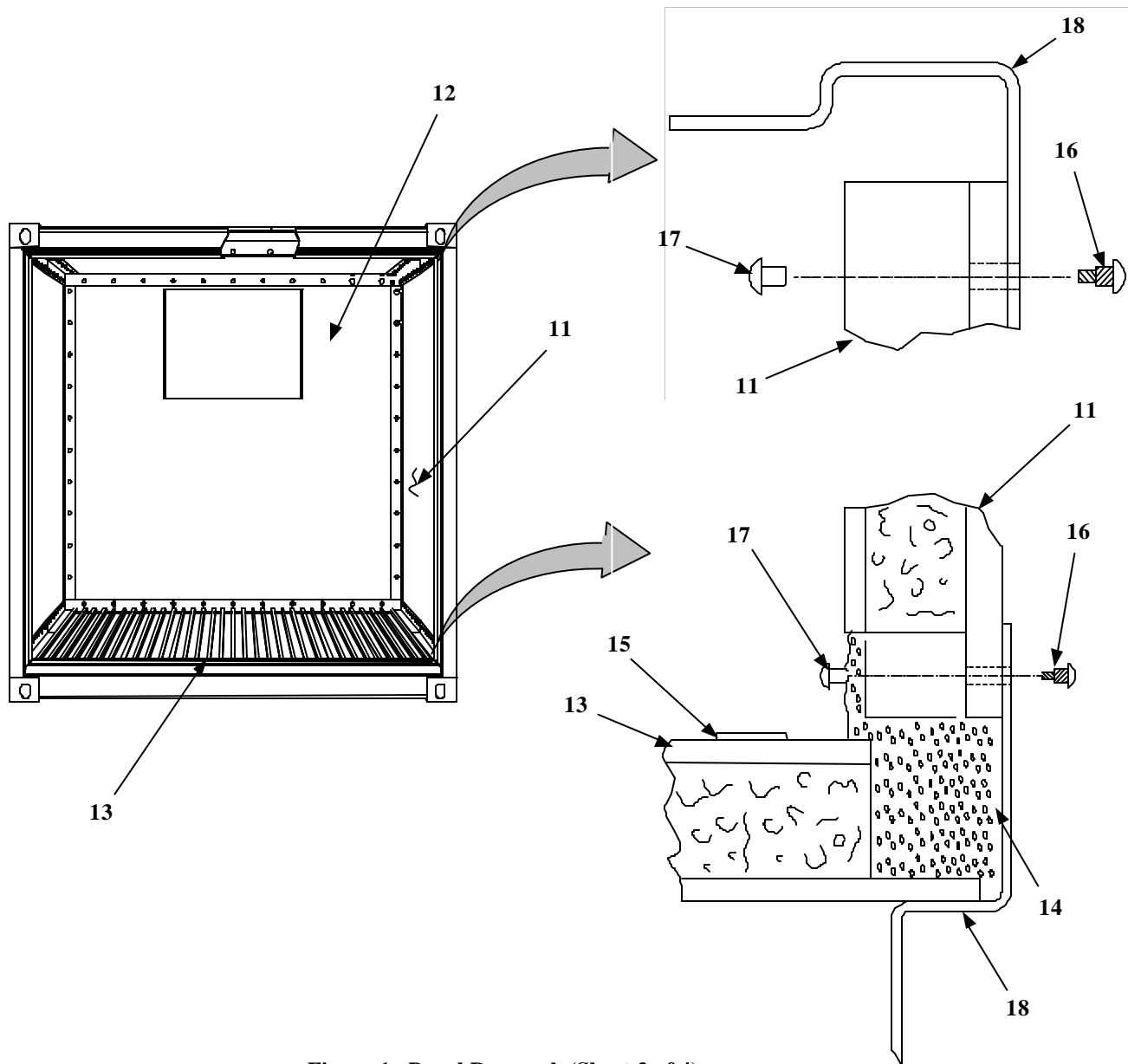


Figure 1. Panel Removal (Sheet 3 of 4)

REMOVAL – Continued.**WARNING**

Side panel is heavy/difficult to handle (approximate weight is 400 lbs.). Use appropriate hoist and sling when removing side panel.

14. Connect hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00) to side panel (11, Figure 1).
15. Push in on side panel (11) to break seal between panel and container frame (18).
16. Using hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00), remove side panel (11) through opening in top of container frame (18).
17. Remove old sealant from container frame (18) sealing surfaces. Remove old sealant from side panel (11) if the panel is to be reinstalled.

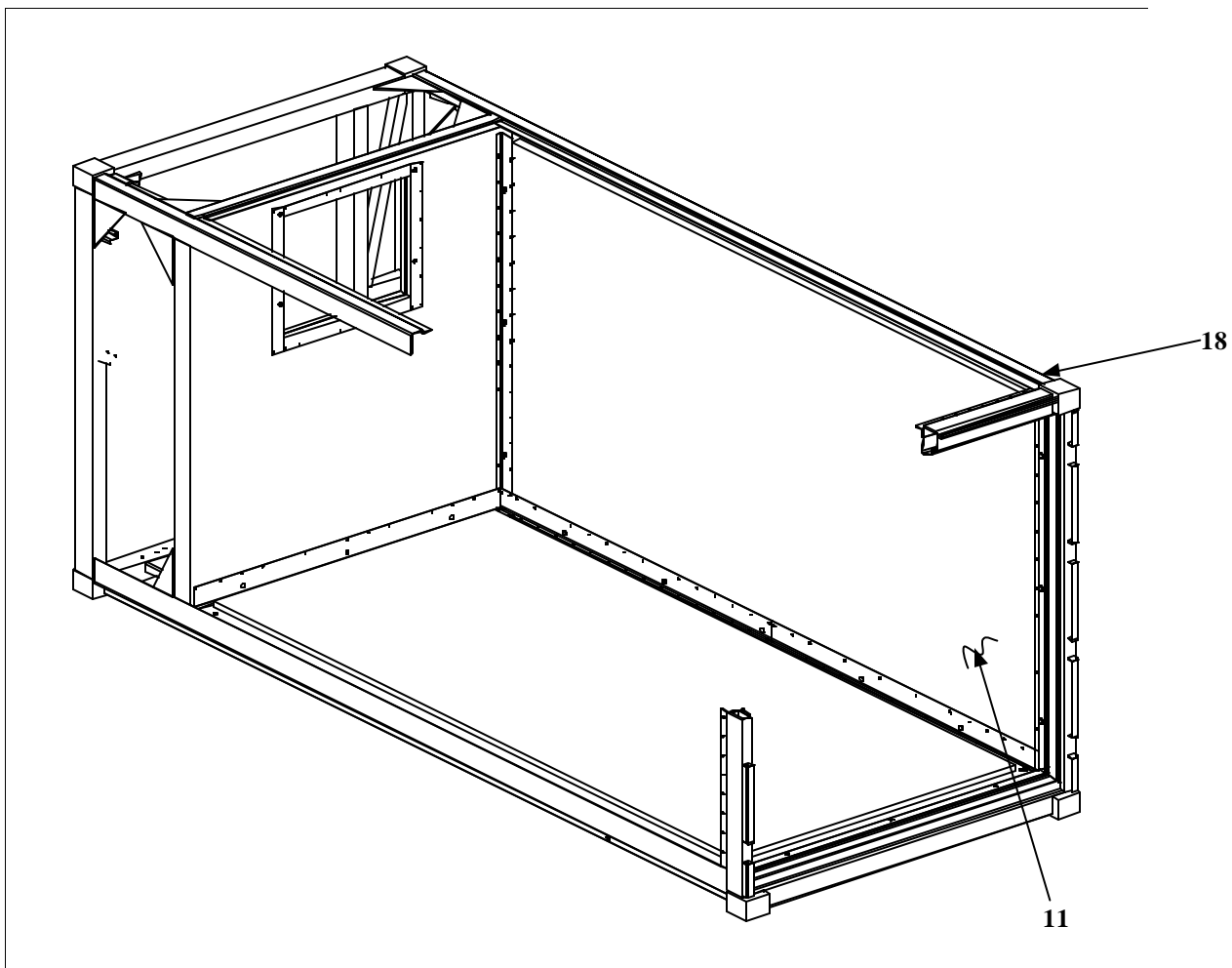


Figure 1. Panel Removal (Sheet 4 of 4)

INSTALLATION.

1. Using hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00), lower replacement side panel (1, Figure 2) through opening in top of container frame (2).

WARNING

Side panel is heavy/difficult to handle (approximate weight is 400 lbs.). Use appropriate hoist and sling when installing side panel.

2. Apply sealant (Item 3, WP 0078 00) along container frame (2) and side panel (1) mating surfaces.
3. Position side panel (1) on container frame (2).

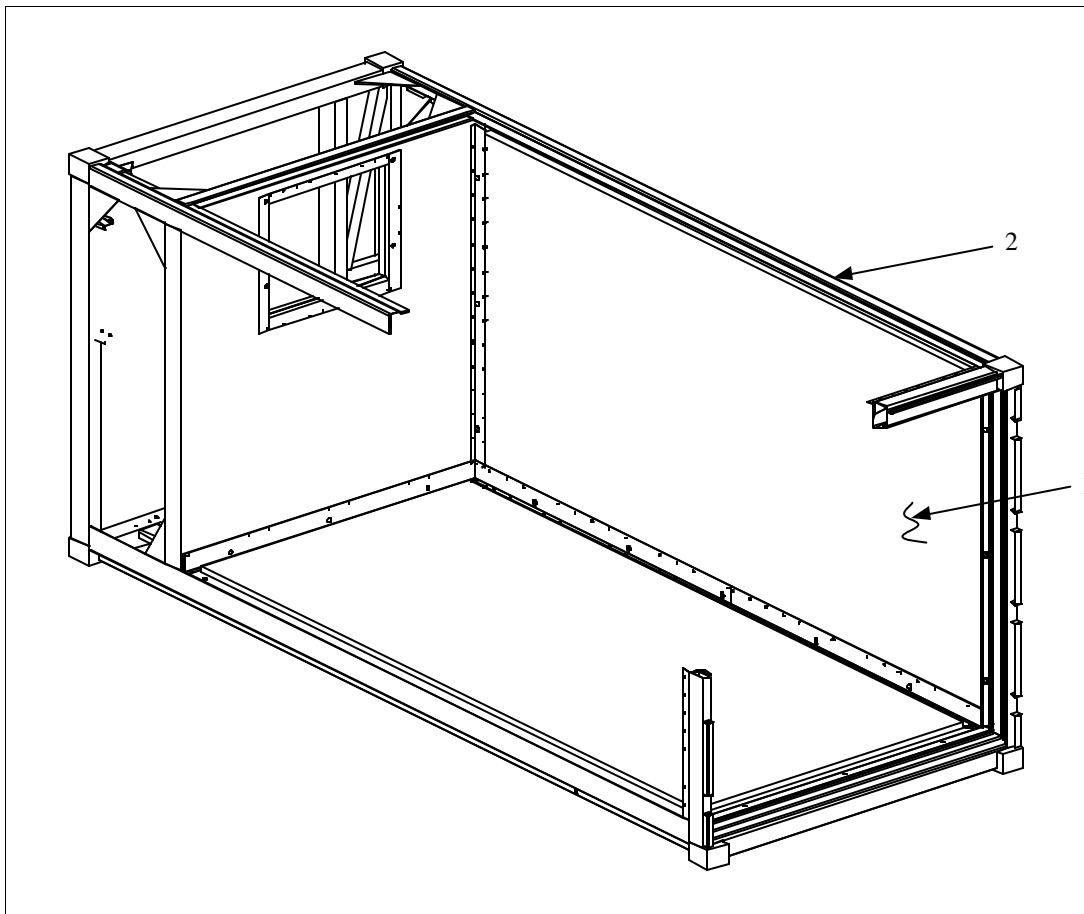


Figure 2. Panel Installation (Sheet 1 of 4)

INSTALLATION – Continued.

NOTE

- Replacement side panel is supplied without holes for mounting hardware. Panel must be drilled during installation.
 - To hold side panel in position for drilling mounting holes, drill panel and install one fastener in each side of side panel before drilling remaining mounting holes.
4. Using portable drill (Section III, Item 2, WP 0048 00) and 13/32-inch drill bit (Section III, Item 2, WP 0048 00), drill one hole through top, bottom and sides of the side panel (1, Figure 2). Use existing holes in container frame as a template.

CAUTION

To prevent water leaks, camtainer bolts must be installed so that bolt head is on outside of container.

5. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), install four camtainer bolts (3) (Item 5, WP 0081 00) and nuts (4) (Item 8, WP 0081 00), one in each side of side panel (1).
6. Using container frame (2) as a template, drill remaining mounting holes through side panel (1).
7. Install remaining camtainer bolts (3) (Item 5, WP 0081 00) and nuts (4) (Item 8, WP 0081 00).
8. Peel backing from sealant tape (5) (Item 17, WP 0078 00) and apply along floor panel (6) where angle plates fasten to floor.

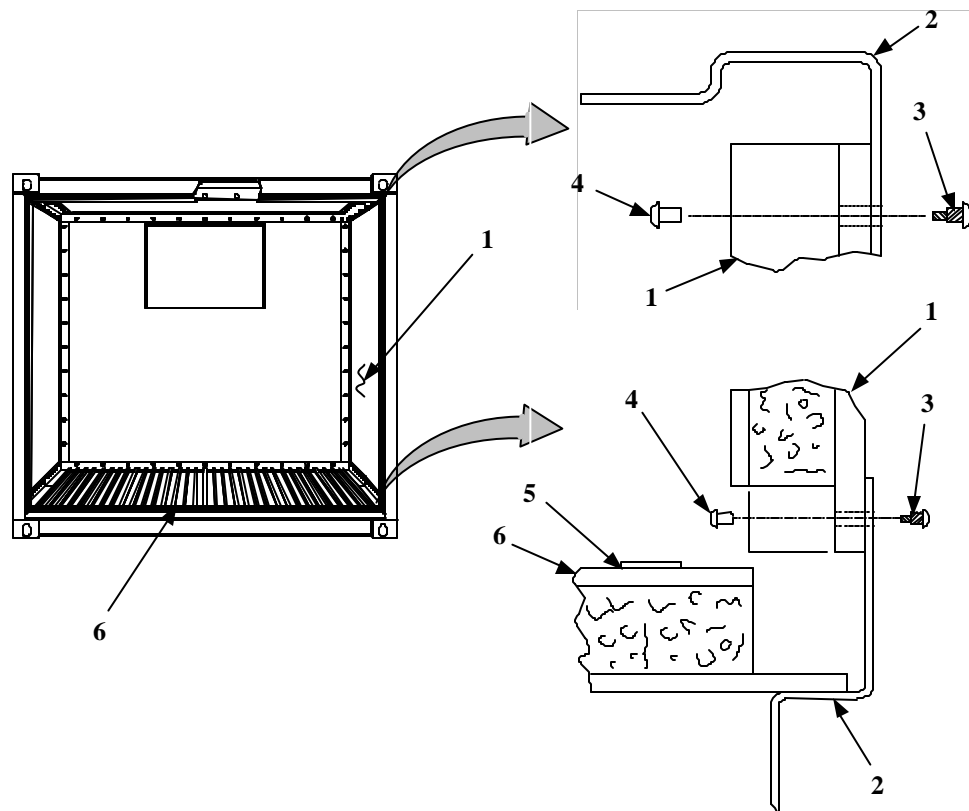


Figure 2. Panel Installation (Sheet 2 of 4)

INSTALLATION – Continued.**NOTE**

Sealant (Item 3, WP 0078 00) is to be applied to each angle plate before installation.

9. Apply sealant (Item 3, WP 0078 00) around inside surface of screw and rivet holes on four angle plates (7, 8, 9 and 10, Figure 2).

NOTE

Angle plates are positioned as marked during removal.

10. Position angle plates (7 and 8) against side panel (1), floor panel (6) and install 32 screws (11) in bottom holes of angle plates.
11. Attach two drain plug chains (12) with pop rivets (13) (Item 23, WP 0081 00) to bottom flange of angle plates (7 and 8).
12. Using angle plate (8) as a template, drill .197 diameter hole in side panel (1) and install pop rivet (13) (Item 23, WP 0081 00).
13. Using angle plates (7 and 8) as a template, drill .125 diameter holes in side panel (1) and install 30 screws (11).

INSTALLATION – Continued.

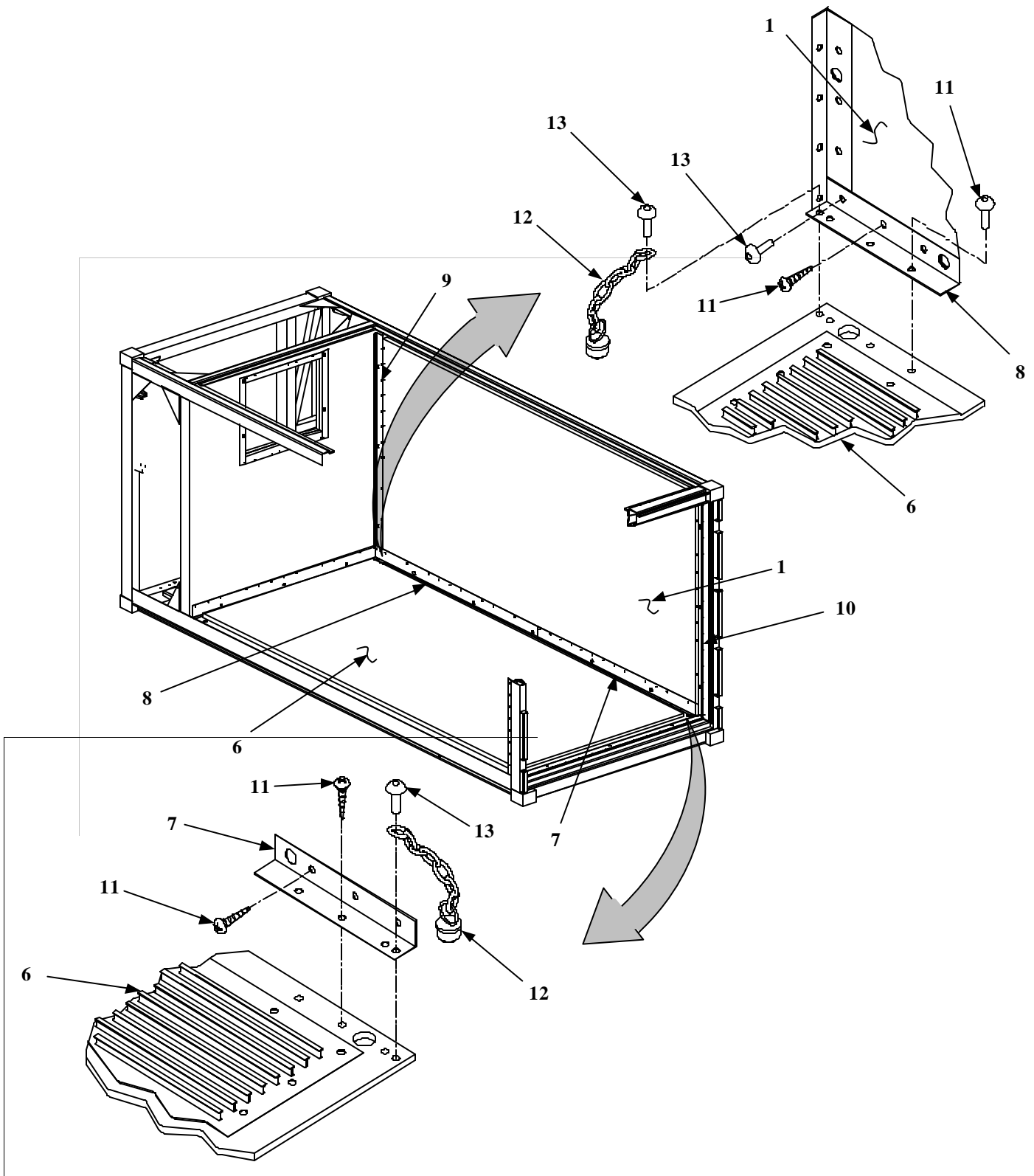
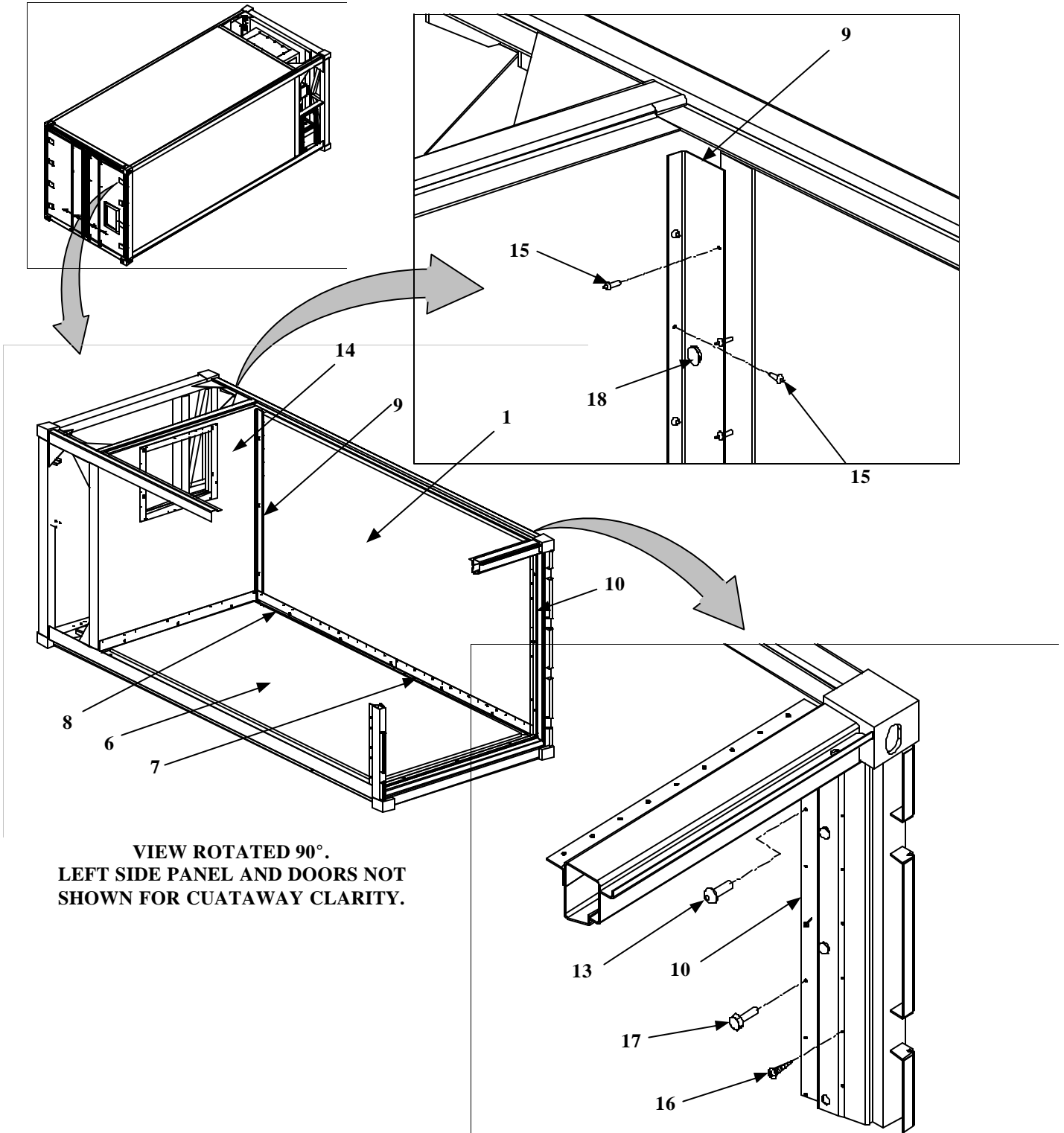


Figure 2. Panel Installation (Sheet 3 of 4)

INSTALLATION – Continued.

14. Position angle plate (9, figure 2) against side panel (1) and front panel (14) and install seven liner rivets (15) (Item 12, WP 0081 00), securing angle plate to front panel.
15. Using angle plate (9) as a template, drill seven .187 diameter holes into side panel (1)
16. Install seven liner rivets (15) (Item 12, WP 0081 00) in angle plate (9).
17. Position angle plate (10) against side panel (1) and install fourteen screws (16).
18. Using angle plate (10) as a template, drill two .197 diameter holes in side panel (1) and install two pop rivets (13) (Item 23, WP 0081 00).
19. Using angle plate (10) as a template, drill thirteen .172 diameter holes into side panel (1).
20. Install thirteen bolts (17) in angle plate (10).
21. Apply a bead of sealant (Item 3, WP 0078 00) along edges and seams of angle plates (7, 8, 9 and 10).
22. Install roof panel (reference WP 0045 00).
23. Remove eleven button plugs (18) from angle plates (7, 8, 9 and 10) and fill voids between side panels (1) and front panel (14) and floor panel (6) with urethane foam (Item 8, WP 0078 00). Install button plugs; seal around each plug with sealant (Item 3, WP 0078 00).



**VIEW ROTATED 90°.
LEFT SIDE PANEL AND DOORS NOT
SHOWN FOR CUATAWAY CLARITY.**

Figure 2. Panel Installation (Sheet 4 of 4)

END OF WORK PACKAGE.

FRONT PANEL REPLACEMENT**0044 00****THIS WORK PACKAGE COVERS:**

Removal and Installation

INITIAL SET-UP:**Maintenance Level:**

Direct Support

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Torx Bit (Section III, Item 6, WP 0048 00)
 Torx Socket (Section III, Item 7, WP 0048 00)
 Hoist (Section III, Item 14, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)

Personnel Required:

Three

Material/Parts:

Camtainer Bolt (Item 5, WP 0081 00)
 Foam, Urethane (Item 8, WP 0078 00)
 Sealant (Item 3, WP 0078 00)
 Camtainer Nut (Item 8, WP 0081 00)
 Sealant Tape (Item 17, WP 0078 00)

Equipment Condition:

Refrigeration Unit removed (WP 0023 00)
 Generator Set slides removed (WP 0022 00)
 Fuel Tank removed (WP 0023 00)
 Recorder Thermometer removed (WP 0025 00)
 External Light Assembly removed (WP 0031 00)
 Side Panels removed (WP 0043 00)

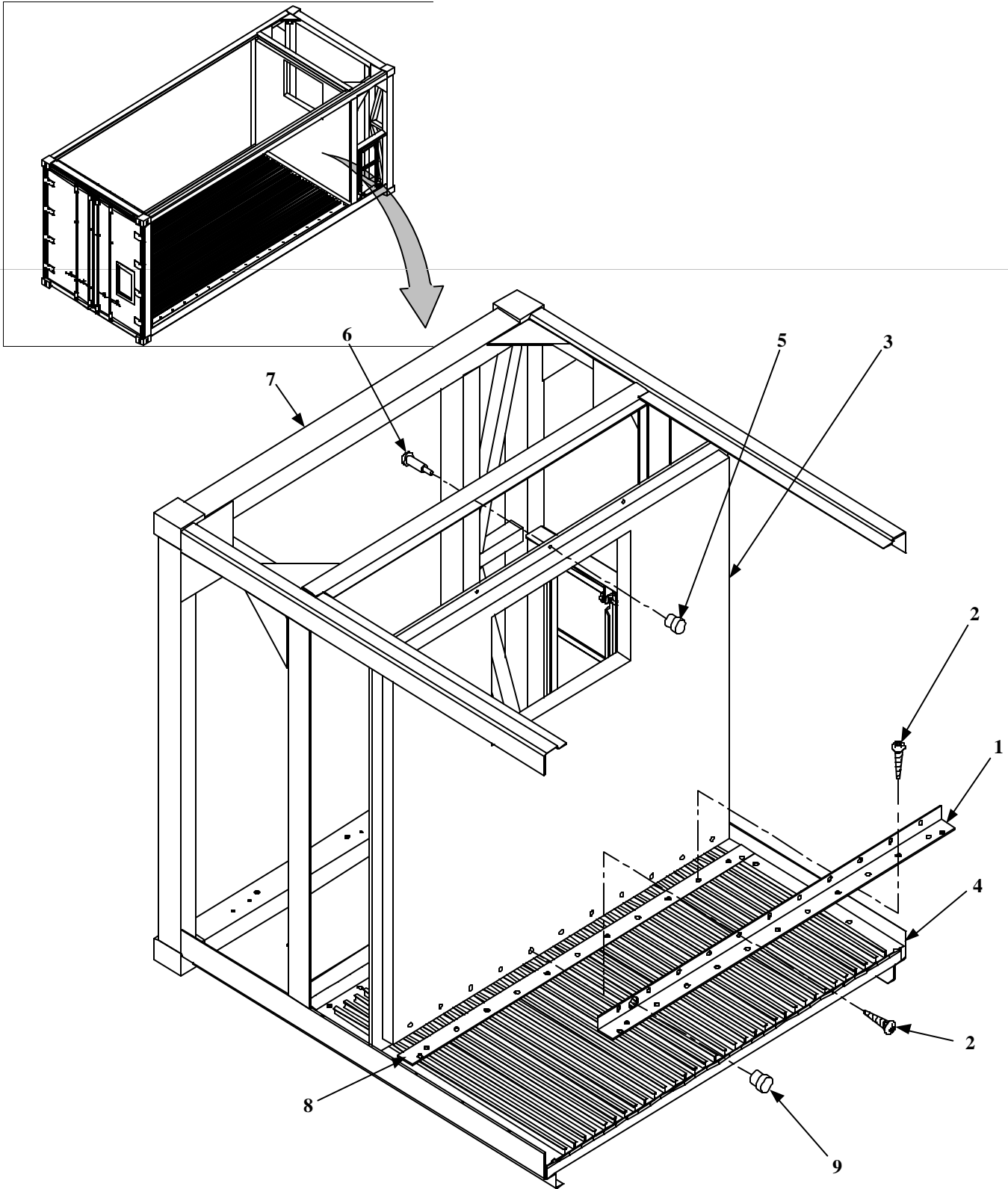
REMOVAL.

1. Mark and record location of angle plate (1).
2. Remove 32 screws (2) from angle plate (1).
3. Carefully pry angle plate (1) from front panel (3) and floor panel (4).
4. Remove insulation from space between front panel (3) and floor panel (4).
5. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), remove 76 camtainer nuts (5) and bolts (6) from top, bottom and sides of front panel (3).

WARNING

Front panel is heavy/difficult to handle (approximate weight is 250 lbs.). Use appropriate hoist and sling when removing front panel.

6. Connect hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00) to front panel (3).
7. Push in on front panel (3) to break seal between panel and container frame (7).
8. Using hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00), remove front panel (3) from container frame (7).
9. Remove old sealant from container frame (7) mounting surfaces. Remove old sealant from front panel (3) if the panel is to be reinstalled.
10. Remove sealant tape (8) from floor panel (4).



Front Panel

INSTALLATION.

1. Using hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00), lower replacement front panel (3) through opening in top of container frame (7).

WARNING

Front panel is heavy/difficult to handle (approximate weight is 250 lbs.). Use appropriate hoist and sling when installing front panel.

2. Apply sealant (Item 3, WP 0078 00) along container frame (7) and front panel (3) mating surfaces.
3. Position front panel (3) on container frame (7).

NOTE

- Replacement front panel is supplied without holes for mounting hardware. Panel must be drilled during installation.
 - To hold front panel in position for drilling mounting holes, drill panel and install one fastener in each side of front panel before drilling remaining mounting holes.
4. Drill one 13/32-inch hole through top, bottom, and sides of the front panel (3). Use existing holes in container frame (7) as a template.

CAUTION

To prevent water leaks, camtainer bolts must be installed so that bolt head is on outside of container frame.

5. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), install four camtainer bolts (6) (Item 5, WP 0081 00) and nuts (5) (Item 8, WP 0081 00), one in each side of front panel (3).
6. Using container frame (7) as a template, drill remaining mounting holes through front panel (3).
7. Install remaining camtainer bolts (6) (Item 5, WP 0081 00) and nuts (5) (Item 8, WP 0081 00).
8. Peel backing from sealant tape (8) (Item 17, WP 0078 00); apply along floor panel (4) where angle plate fastens to floor.
9. Apply sealant (Item 3, WP 0078 00) around inside surface of screw holes on angle plate (1).
10. Position angle plate (1) against front panel (3) and floor panel (4) as marked during removal.
11. Install fifteen screws (2) through angle plate (1). Install screws into floor only.
12. Using portable drill (Section III, Item 2, WP 0048 00) and drill bit (Section III, Item 2, WP 0048 00), drill screw holes into front panel (3), using existing holes in angle plate (1) as a template.
13. Install seventeen screws (2) in angle plate (1).

INSTALLATION – Continued.

14. Install side panels (reference WP 0043 00).
15. Install roof panel (reference WP 0042 00).
16. Remove three button plugs (9) from angle plate (1), and fill voids between front panel (3) and floor panel (4) with urethane foam (Item 8, WP 0078 00). Install button plugs and seal around each plug with sealant.
17. Apply bead of sealant (Item 3, WP 0078 00) along edges and seams of angle plate (1).

END OF WORK PACKAGE.

FLOOR PANEL REPLACEMENT

0045 00

THIS WORK PACKAGE COVERS:

Removal and Installation

INITIAL SET-UP:**Maintenance Level:**

Direct Support

Tools:

General Mechanics Tool Kit (Section III, Item 1, WP 0048 00)
 Portable Drill (Section III, Item 2, WP 0048 00)
 Drill Bit Set (Section III, Item 2, WP 0048 00)
 Torx Bit (Section III, Item 6, WP 0048 00)
 Torx Socket (Section III, Item 7, WP 0048 00)
 Hoist (Section III, Item 14, WP 0048 00)
 Sling (Section III, Item 9, WP 0048 00)

Material/Parts:

Sealant Tape (Item 16, WP 0078 00)
 Sealant (Item 3, WP 0078 00)
 Sealant Tape (Item 17, WP 0078 00)
 Camtainer Bolt (Item 5, WP 0081 00)
 Foam, Urethane (Item 8, WP 0078 00)
 Camtainer Nut (Item 8, WP 0081 00)

Personnel Required:

Three

Equipment Condition:

Front Panel removed (WP 0044 00)
 Drain removed (WP 0039 00)
 Floorboard removed (WP 0040 00)

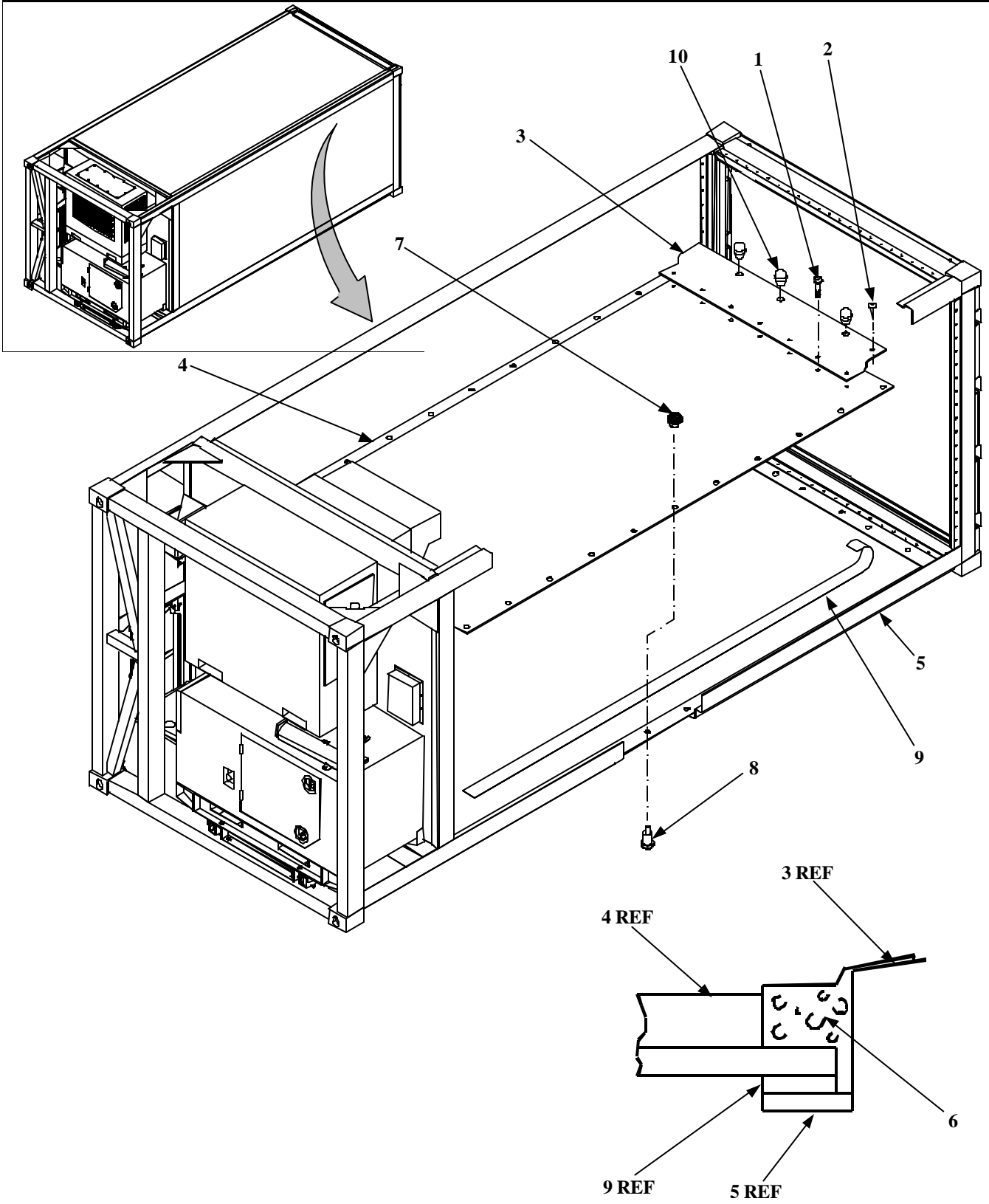
REMOVAL.

1. Remove 23 bolts (1), fourteen screws (2), and zee plate (3) from floor panel (4) and container frame (5).
2. Carefully pry zee plate (3) from container frame (5) and floor panel (4).
3. Remove insulation (6) from space between floor panel (4) and container frame (5) at door opening.
4. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III Item 7, WP 0048 00), remove 138 camtainer nuts (7) and bolts (8) from floor panel (4).
5. Push up on floor panel (4) to break seal between panel and container frame (5).

WARNING

Floor panel is heavy / difficult to handle (approximate weight is 450 lbs.). Use appropriate hoist and sling when removing floor panel.

6. Connect hoist (Section III, Item 14, WP 0048 00) and sling (Section III, Item 9, WP 0048 00) to floor panel (4).
7. Remove floor panel (4) from container frame (5).
8. Scrape old sealant tape (9) and sealant from container frame (5) and floor panel (4) sealing surfaces.



Floor Panel

INSTALLATION.

1. Peel backing from sealant tape (9) (Item 16, WP 0078 00), and apply along settling surfaces of container frame (5) and floor panel (4).

WARNING

Floor panel is heavy / difficult to handle (approximate weight is 450 lbs.). Use appropriate hoist and sling when installing floor panel.

2. Using hoist and sling, lower replacement floor panel (4) into container frame (5).
3. Center floor panel (4) on container frame (5).

NOTE

- Replacement floor panel is supplied without holes for mounting hardware. Panel must be drilled during installation.
 - To aid alignment of floor panel mounting holes with container frame, install one fastener in each side of floor panel before drilling remaining mounting holes.
4. Drill one 13/32-inch hole up through each side of the floor panel (4). Use existing holes in container frame (5) as a template.

CAUTION

To prevent water leaks, camtainer bolts must be installed so that bolt head is on outside of container frame.

5. Using torx bit (Section III, Item 6, WP 0048 00) and socket (Section III, Item 7, WP 0048 00), install four camtainer bolts (8) (Item 5, WP 0081 00) and nuts (7) (Item 8, WP 0081 00), one in each side floor panel (4).
6. Using container frame (5) as a template, drill remaining mounting holes up through floor panel (4).
7. Install remaining 134 camtainer bolts (8) (Item 5, WP 0081 00) and nuts (7) (Item 8, WP 0081 00) in floor panel (4).
8. Apply sealant (Item 3, WP 0078 00) around inside surface of screw holes on zee plate (3).
9. Position zee plate (3) against floor panel (4) and container frame (5).
10. Install fourteen screws (2) through zee plate (3) into container frame (5).
11. Using portable drill (Section III, Item 2, WP 0048 00) and No. 9 drill bit (Section III, Item 2, WP 0048 00), drill screw holes into floor panel (4), using existing holes in zee plate (3) as a template.
12. Install 23 bolts (1) through zee plate (3) and into floor panel (4).
13. Install front panel (reference WP 0046 00).

INSTALLATION – Continued.

14. Install side panels (reference WP 0045 00).
15. Remove three button plugs (10) and fill voids between floor panel (4) and container frame (5) and zee plate (3) with urethane foam (Item 8, WP 0078 00).
16. Install three button plugs (10) and apply sealant (Item 3, WP 0078 00) around edges of plugs.

END OF WORK PACKAGE.

FRAME REPAIR

0046 00

THIS WORK PACKAGE COVERS:

Repair

INITIAL SET-UP:**Maintenance Level:**

Direct Support

Tools:

General Mechanics Tool Kit (Section III, Item 4, WP 0048 00)

Weld Shop (Section III, Item 5, WP 0048 00)

References:

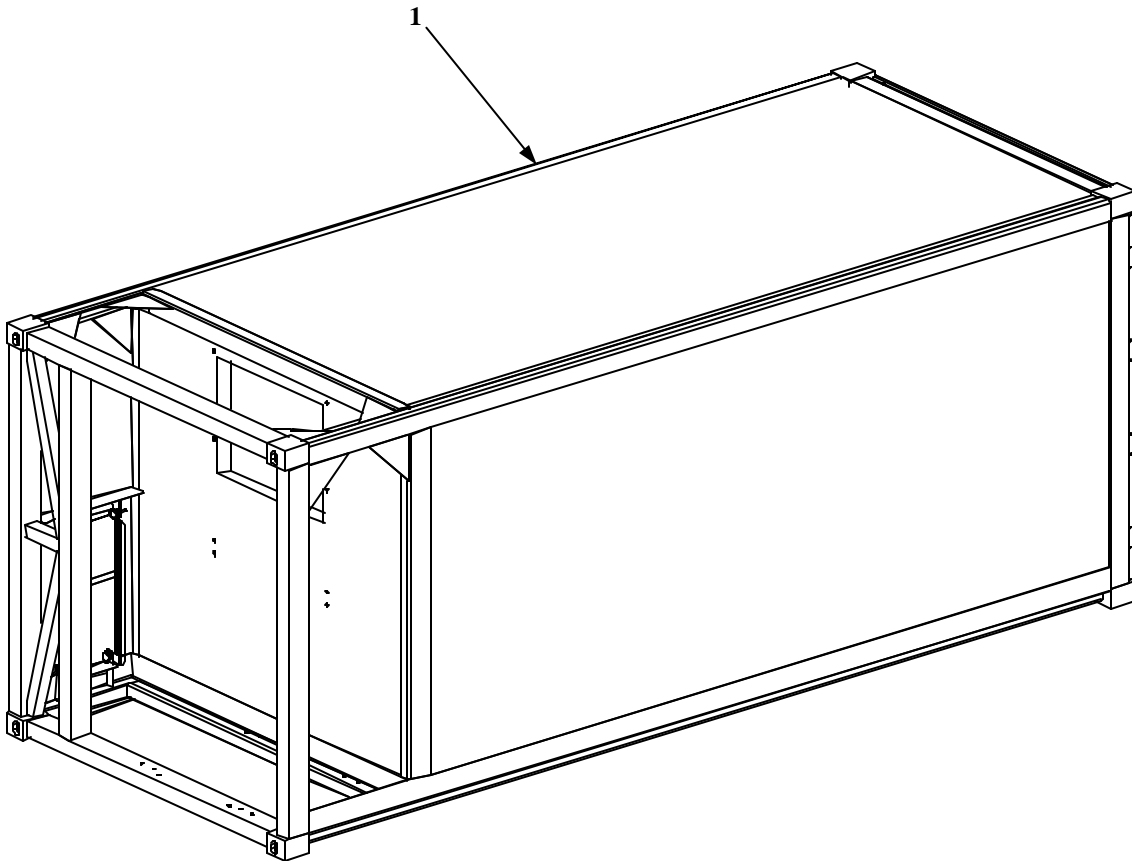
TM 9-237

TM 9-450

TM 9-213

REPAIR.

1. Repair minor bends and dents in container frame (1) in accordance with TM 9-450.
2. Weld minor cracks in container frame in accordance with TM 9-237.
3. Remove corrosion and paint bare metal surfaces of frame components in accordance with TM 9-213.

**END OF WORK PACKAGE.**

**REFRIGERATED CONTAINER SYSTEM
REFERENCES**

0047 00

SCOPE.

This appendix contains all forms, pamphlets, technical manuals and miscellaneous publications referenced in this manual.

FORMS.

Discrepancy in Shipment Report	Form SF 361
Equipment Inspection and Maintenance Worksheet	DA Form 2404
Recommended Changes to Publications and Blank Forms	DA Form 2028
Maintenance Request	DA Form 2407
Modification Work Order	DA Form 2408-5
Packaging Improvement Report	DD Form 6
Recommended Changes to Equipment Technical Manuals	DA Form 2028-2
Report of Discrepancy	Form SF 364
Quality Deficiency Report	Form SF 368

TECHNICAL MANUALS.

Destruction of Army Material to Prevent Enemy Use	TM 750-244-3
Equipment Records Procedures	TM 4700-15/1
Metal Body Repair and Related Operations	TM 9-450
Operator's and Organizational Maintenance Manual for Generator Set, Diesel Engine Driven, Tactical Skid MTD, 10 KW, 1 Phase, 2 Wire; 1 Phase, 3 Wire; 3 Phase, 4 Wire; 120/240 and 120/208 V, 60 Hz, and 400 Hz	TM 9-6115-642-10
Operator's, Unit, Direct Support and General Support Maintenance Manual for Refrigeration Unit, Model CII-609-32	TM 9-4110-258-13
Painting Instructions for Field Use	TM 9-213
Painting Instructions for Army Material	TM 43-0139
Painting, Preservation, and Waterproofing Instructions	TM 740-90-1
Preservation, Packaging and Packing of Military Supplies and Equipment	TM 38-230-1/-2
Storage and Materials Handling	TM 743-200

**REFRIGERATED CONTAINER SYSTEM
REFERENCES – Continued**

0047 00

MISCELLANEOUS.

Camouflage of Vehicles FM 5-20B

First Aid for Soldiers FM 21-11

Nuclear, Biological and Chemical Decontamination FM 3-5

Packing of Army Material for Shipment and Storage AR 246-1

Packing of Material AR 700-15

Packaging Improvement Reporting AR 735-11-2

Report of Item and Packaging Discrepancy MCO 4430.3

Report of Item and Packaging Discrepancy NAVMATINST 4355.73B

Reporting of Transportation Discrepancies in Shipment AR 55-38

Security Procedures AR 190-11, AR 190-13

The Army Maintenance Management System (TAMMS) DA Pam 738-750

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
INTRODUCTION FOR MAINTENANCE ALLOCATION CHART (MAC)**

0048 00

INTRODUCTION**The Army Maintenance System MAC**

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance System concept.

The MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field - includes two columns, Unit maintenance and Direct Support maintenance. The Unit maintenance column is divided again into two more subcolumns, C for Operator or Crew and O for Unit maintenance.

Sustainment – includes two subcolumns, General Support (H) and Depot (D)

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

Maintenance Functions

Maintenance functions are limited to and defined as follows:

1. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel.) This includes scheduled inspection and gagings and evaluation of cannon tubes.
2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.
3. Service. Operations required periodically to keep an item in proper operating condition, e.g. to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:
 - a. Unpack. To remove from packing box for service or when required for the performance of maintenance operations.
 - b. Repack. To return item to packing box after service and other maintenance operations.
 - c. Clean. To rid the item of contamination.

REFRIGERATED CONTAINER SYSTEM
INTRODUCTION FOR MAINTENANCE ALLOCATION CHART (MAC) - Continued

0048 00

- d. Touch up. To spot paint scratched or blistered surfaces.
- e. Mark. To restore obliterated identification.
- 4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper or position, or by setting the operating characteristics to specified parameters.
- 5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance
- 6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.
- 7. Remove/install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
- 8. Paint. To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.
- 9. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance and Recoverability (SMR) code.
- 10. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

NOTE

The following definitions are applicable to the "repair" maintenance function:

Services. Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting. The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

Disassembly/assembly. The step by step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e. identified as maintenance significant).

Actions. Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

REFRIGERATED CONTAINER SYSTEM**INTRODUCTION FOR MAINTENANCE ALLOCATION CHART (MAC) - Continued****0048 00**

11. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
12. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

Explanation of Columns in the MAC

Column (1) Group Number. Column (1) lists Functional Group Code (FGC) numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) Component/Assembly. Column (2) contains the item names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above).

Column (4) Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as manhours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

Field:

- C Operator or Crew maintenance
- O Unit maintenance
- F Direct Support maintenance

Sustainment:

- L Specialized Repair Activity
- H General Support maintenance
- D Depot maintenance

REFRIGERATED CONTAINER SYSTEM**INTRODUCTION FOR MAINTENANCE ALLOCATION CHART (MAC) - Continued****0048 00****NOTE**

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE, and support special equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) Remarks Code. When applicable, this column contains a letter code, in alphabetic order, which is keyed to the remarks table entries.

Explanation of Columns in the Tools and Test Equipment Requirements

Column (1) – Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) – Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) – Nomenclature. Name or identification of the tool or test equipment.

Column (4) – National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) – Tool Number. The manufacturer's part number.

Explanation of Columns in Remarks

Column (1) – Remarks Code. The code recorded in column (6) of the MAC.

Column (2) – Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

**REFRIGERATED CONTAINER SYSTEM
MAINTENANCE ALLOCATION CHART (MAC)**

0048 00

**Table 1. MAINTENANCE ALLOCATION CHART
FOR
REFRIGERATED CONTAINER SYSTEM**

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT	DIRECT SUPPORT	GENERAL SUPPORT	DEPOT			
			C	O	F	H	D		
00	REFRIGERATED CONTAINER SYSTEM								
01	EXHAUST SHIELD AND PIPES	Inspect Replace Repair							
0101	EXHAUST SHIELDS	Inspect Replace Repair	0.1	1.0			2,4		
0102	EXHAUST PIPES	Inspect Replace Repair	0.1	1.0			2,4		
02	GENERATOR	Inspect Replace Repair	0.1	2.0			2,4	H	
03	GENERATOR SLIDES AND MOUNTS	Inspect Replace Repair	0.1	1.0			2,4		
04	REFRIGERATION UNIT AND PANEL	Inspect Replace Repair					2,4		
0401	REFRIGERATION UNIT	Inspect Replace Repair	0.1	2.0			2,4	G	
0402	BLOCKAGE PANEL	Inspect Replace Repair	0.1	0.3 0.5			2 4		
05	CONTAINER ASSEMBLY	Inspect Replace Repair							

**REFRIGERATED CONTAINER SYSTEM
MAINTENANCE ALLOCATION CHART (MAC) - Continued**

0048 00

**Table 1. MAINTENANCE ALLOCATION CHART
FOR
REFRIGERATED CONTAINER SYSTEM – Continued.**

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
0501	PLATE, IDENTIFICATION	Inspect Replace Repair	.1	.5				2,4	
0502	COVER ASSEMBLIES	Inspect Replace Repair	.1	1.0				2,4	
0503	BOX ASSEMBLIES	Inspect Replace Repair	.1	1.0				2,4	
0504	THERMOMETER RECORDER	Inspect Replace Repair							
050401	THERMOMETER RECORDER	Inspect Replace Repair	.1	4.0				2,4	
050402	ELEMENT	Test Replace Repair		2.0 4.0 2.0				2 4 4	
0505	POWER CABLE ASSEMBLY	Inspect Replace Repair	.1	1.0				2	
0506	LADDER ASSEMBLY	Inspect Replace Repair	.1	.5	1.0			4 5	
0507	AUXILIARY FUEL TANK ASSEMBLY	Inspect Replace Repair							

**REFRIGERATED CONTAINER SYSTEM
MAINTENANCE ALLOCATION CHART (MAC) - Continued**

0048 00

**Table 1. MAINTENANCE ALLOCATION CHART
FOR
REFRIGERATED CONTAINER SYSTEM – Continued.**

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE	
			FIELD		SUSTAINMENT					
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT			
			C	O	F	H	D			
050701	FUEL TANK	Inspect	.1							
		Replace		.5				2,4		
		Repair		1.5				2,4		
050702	FUEL GAUGE	Inspect	.1							
		Replace		.5				2,4		
		Repair		1.0				2,4		
0508	POWER CORD AND CONNECTORS	Inspect Replace Repair	.1		1.0			2,4		
0509	LIGHT ASSEMBLY	Inspect	.1							
		Replace		1.5				2,4		
		Repair		.5				2,4		
0510	STRAP AND TRACK	Inspect Replace Repair	.1		.5			2,4		
0511	BOX ASSEMBLY	Inspect Replace Repair								
051101	RIGHT DOOR	Inspect Replace Repair	.1			1.0		4,5 1,2,3,4 E		
0501102	LEFT DOOR	Inspect Replace Repair	.1			1.0		4,5 1,3,4 E		

**REFRIGERATED CONTAINER SYSTEM
MAINTENANCE ALLOCATION CHART (MAC) - Continued**

0048 00

**Table 1. MAINTENANCE ALLOCATION CHART
FOR
REFRIGERATED CONTAINER SYSTEM – Continued.**

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE	
			FIELD		SUSTAINMENT					
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT			
			C	O	F	H	D			
051103	ZEES AND ANGLES	Inspect	.1					4,5 1,3,4	B	
		Replace			1.0					
		Repair								
051104	ROOF PANEL	Inspect	.1					1,2,3,4 2,4	D C	
		Replace			6.0					
		Repair		2.0						
051105	SIDE PANELS	Inspect	.1					4,5 1,2,3,4	D C	
		Replace		.5						
		Repair		1.0						
051106	FRONT PANEL ASSEMBLY	Inspect	.1					4,5 1,2,3,4	D C	
		Replace			6.0					
		Repair		2.0						
051107	DRAIN ASSEMBLY	Inspect	.1					2,4 2,4		
		Replace			8.0					
		Repair		2.0						
051108	FLOOR PANEL	Inspect	.1					1,2,3,4 4	D C	
		Replace			8.0					
		Repair		2.0						
051109	CONTAINER	Inspect	.2					2,4,5	B	
		Replace			8.0					
		Repair		1.0						

**REFRIGERATED CONTAINER SYSTEM
MAINTENANCE ALLOCATION CHART (MAC) - Continued**

0048 00

**Table 2. TOOLS AND TEST EQUIPMENT
FOR
REFRIGERATED CONTAINER SYSTEM.**

(1) TOOL OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL STOCK NUMBER	(5) TOOL NUMBER
1	O	Tool Kit, General Mechanics	5180-00-177-7033	SC-5180-90-CL-N26
2	O	Shop Equipment, Automotive Maintenance and Repair: Organizational Maintenance Common No. 1	4910-00-754-0654	SC-4910-95-CL-A72
3	F	Welding Shop, Trailer Mounted	3431-01-090-1231	SC-3431-95-CL-A04
4	O	Tool Kit, Refrigeration	5180-00-596-1474	SC-5180-90-CL-N18
5	O	Electric Repair Kit	4940-00-294-9517	SC-4940-95-CL-B05
6	O	Bit, Torx	5310-01-091-3750	T55
7	O	Socket, Torx	5130-01-088-8833	E16
8	O	Thermometer	6685-01-262-8644	3879K63 or equivalent.
9	O	Sling		
10	O	Rivet Tool	5120-01-289-9310	200 or equivalent (10054)
11	O	Brush		3A321
12	O	Hose	4720-01-346-9746	2P098
13	O	Saw		4A684
14	O	Hoist, 2 ton		
15	O	Forklift		

**Table 3. REMARKS
FOR
REFRIGERATED CONTAINER SYSTEM.**

(1) REMARKS CODE	(2) REMARKS
A	Repair limited to sealing leaks.
B	Repair limited to straightening and welding frame components.
C	Repair limited to patching.
D	Replacement of panel requires special tool for removal of fasteners.
E	Replacement of door and hardware requires special tool for removal of fasteners.
F	Repair limited to welding.
G	Reference TM 9-4110-258-13 for refrigeration unit.
H	Reference TM 9-6115-642-24 for 10kw generator set.

**REFRIGERATED CONTAINER SYSTEM
REPAIR PARTS AND SPECIAL TOOLS LIST**

0049 00

**UNIT, DIRECT SUPPORT AND GENERAL SUPPORT
MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST**

SECTION 1. INTRODUCTION

1. SCOPE. This Repair Parts and Special Tools List (RPSTL) lists and authorizes spares and repair parts; special tools; special Test, Measurement and Diagnostic Equipment (TMDE); and other special support equipment required for performance of Organizational, Direct Support and General Support Maintenance of the Refrigerated Container Unit Model RCS800. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the Source, Maintenance and Recoverability (SMR) codes.

2. GENERAL. In addition to this section (Introduction), this Repair Parts and Special Tools List is divided into the following work packages:

a. **Repair Parts List Work Package.** A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also includes parts that must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed in item name FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package. Repair parts for repairable special tools are also listed in a separate work package. Items listed are shown on the associated illustration(s) (figure(s)).

b. **Special Tools List Work Package.** Work Packages containing lists of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

c. **Cross-referenced indexes Work Packages.** A list, in National Item Identification Number (NIIN) sequence, of all National Stock Numbered (NSN) items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National Stock Numbers and part numbers are cross-referenced to each illustration figure and item number appearance. The figure and item number index lists figures and item numbers in alphanumeric sequence and cross-references NSN, Contractor and Government Entity Code (CAGEC) and part number.

3. EXPLANATION OF COLUMNS IN THE REPAIR PARTS LISTS AND SPECIAL TOOLS LIST.

ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.

SMR CODE (Column (2)). The Source, Maintenance and Recoverability (SMR) Code is a 5-position code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

<u>Source Code</u>	<u>Maintenance Code</u>	<u>Recoverability Code</u>
<u>XX</u>	<u>XX</u>	<u>XX</u>
1 st two positions: How to get an item	3 rd position: Who can install, replace, or use the item	4 th position: Who can do complete repair* on the item
		5 th position: Who determines disposition action on user-serviceable items

*Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

**REFRIGERATED CONTAINER SYSTEM
REPAIR PARTS AND SPECIAL TOOLS LIST – Continued**

0049 00

(1) **Source Code.** The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follows:

<u>Source Code</u>	<u>Application / Explanation</u>
PA	Stocked items; use the applicable NSN to request / requisition Items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the, SMR code.
PB	
PC**	
PD	
PE	
PF	
PG	**NOTE: Items coded PC are subject to deterioration.
KD	
KF	
KB	Items with these codes are not to be requested / requisitioned individually. They are part of a kit that is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.
	Explanation
MO - (Made at org. AVUM Level)	Items with these codes are not to be requested / requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts listed in the RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
MF - (Made at DS/AVUM Level)	
MH - (Made at GS Level)	
ML - (Made at Specialized Repair Activity (SRA))	
MD - (Made at Depot)	
	Explanation
AO - (Assembled by org/AVUM Level)	Items with these codes are not to be requested / requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position code of the SMR code authorizes you to replace the item, but the source code indicates the items are assembled at a higher level, order the item from the higher level of maintenance.
AF - (Assembled by DS/AVIM Level)	
AH - (Assembled by GS Category)	
AL - (Assembled by. SRA)	
AD - (Assembled by Depot)	
XA	Do not requisition an "XA"-coded item. Order its next higher assembly. (Also, refer to the NOTE located on next page.)
XB	If an "XB" item is not available from salvage, order it using the CAGEC and part number given.
XC	Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
XD	Item is not stocked. Order an "XD"-coded item through normal supply channels using the CAGEC and part number given, if no NSN is available.

**REFRIGERATED CONTAINER SYSTEM
REPAIR PARTS AND SPECIAL TOOLS LIST – Continued**

0049 00

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

(2) **Maintenance Code.** Maintenance codes tell you the level(s) of the maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

(a) **Third Position.** The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance.

**Maintenance
Code**

Application / Explanation

- C - Crew or operator maintenance done within organizational or aviation unit maintenance.
- O - Organizational or aviation unit category can remove, replace, and use, the item.
- F - Direct support or aviation intermediate level can remove, replace, and use the item.
- H - General support level can remove, replace, and use the item.
- L - Specialized repair activity can remove, replace, and use the item.
- D - Depot level can remove, replace, and use the item.

(b) **Fourth Position.** The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i. e., perform all authorized repair functions).

NOTE

Some limited repair may be done, on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes. This position will contain one of the following maintenance codes:

**Maintenance
Code**

Application/Explanation

- O - Organizational or aviation unit is the lowest level that can do complete repair of the item.
- F - Direct support or aviation intermediate level is the, lowest level that can do complete repair of the item.
- H - General support is the lowest level that can do complete repair of the, item.
- L - Specialized repair activity is the lowest level that can do complete repair of the item.
- D - Depot is the lowest level that can do complete repair of the, item.
- Z - Non-repairable. No repair is authorized.
- B - No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B" coded item.) However, the item may be reconditioned by adjusting, lubricating, etc., at the user level move, replace, and use the item.

**REFRIGERATED CONTAINER SYSTEM
REPAIR PARTS AND SPECIAL TOOLS LIST – Continued**

0049 00

(3) **Recoverability Code.** Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the, fifth position of the SMR Code as follows:

Recoverability Code	Application / Explanation
Z -	Non-repairable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3rd position of SMR Code.
O -	Repairable item. When uneconomically repairable, condemn and dispose of the item at organizational or aviation unit level.
F -	Repairable item. When uneconomically repairable, condemn and dispose of the item at the direct support or aviation intermediate level.
H -	Repairable item. When uneconomically repairable, condemn and dispose of the item at the general support level.
D -	Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L -	Repairable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A -	Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals / directives for specific instructions.

c. NSN (Column 3). The NSN for the item is listed in this column.

d. CAGEC (Column 4). The Contractor and Government Entity Code (CAGEC) is a 5-digit numeric code, which is used to identify the manufacturer, distributor, Government agency, etc., that supplies the item.

e. PART NUMBER (Column 5). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), that controls the design and characteristics of the item by means of its engineering drawings, specification standards, and specification requirements to identify an item or range of items.

NOTE

When you use an NSN to requisition an item, the item you receive may have a different part number from the part ordered.

- f. DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)). This column includes the following information:
- (1) The Federal item name and, when required, a minimum description to identify the item.
 - (2) The physical security classification of the item is indicated by the parenthetical entry, e.g., Phy Sec C1 - Confidential, Phy Sec C1 (S) - Secret. Phy Sec C1 (T) - Top Secret.
 - (3) Items that are included in kits and sets are listed below the name of the kit or set.
 - (4) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.

**REFRIGERATED CONTAINER SYSTEM
REPAIR PARTS AND SPECIAL TOOLS LIST – Continued**

0049 00

- (2) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured /fabricated.
- (6) When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the last line(s) of the description (before UOC).
- (7) The usable on code, when applicable (see paragraph 5, Special Information).
- (8) In the Special Tools List section, the Basis of Issue (BOI) appears as the last line(s) in the entry for each special tool, special TMDE, and other special support equipment. When density of equipment's supported exceeds density spread indicated in the basis of issue, the total authorization is increased proportionately.
- (4) The statement "END OF FIGURE" appears just below the last item description in Column 5 for a given figure in both Section II and Section III.
- (10) The indenture, shown as dots appearing before the repair part, indicates that the item is a repair part of the next higher assembly.

f. QTY (Column 7). The QTY (quantity per figure column) indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, sub-functional group, or assembly. A "V" appearing in this column in lieu of a quantity indicates that the quantity is variable and may vary from application to application.

4. EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS.

a. NATIONAL STOCK NUMBER (NSN) INDEX

- (1) STOCK NUMBER COLUMN. This column lists the NSN by National Item Identification Number (NIIN) sequence. The NIIN consist of the last nine digits of the NSN:

NSN
 (e.g. 5385-01-574-1476)
NIIN

When using this column to locate an item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

- (2) FIG. column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts lists and special tools list work packages.

- (3) ITEM column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

b. PART NUMBER INDEX. Part numbers in this index are listed by part number in ascending alphanumeric sequence (i.e. vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).

- (1) CAGEC column. The Contractor and Government Entity Code (CAGEC) is a 5-digit numeric code used to identify the manufacturer, distributor, Government agency, etc., that supplies the item.

- (2) PART NUMBER column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

**REFRIGERATED CONTAINER SYSTEM
REPAIR PARTS AND SPECIAL TOOLS LIST – Continued**

0049 00

(3) STOCK NUMBER column. This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and CAGEC columns to the left.

(4) FIG. column. This column lists the number of the figure where the item is identified/located in repair parts lists and special tools list work packages.

(5) ITEM column. The item number is that number assigned to the item as it appears in the figure referenced in adjacent figure number column.

c. FIGURE AND ITEM NUMBER INDEX.

(1) FIG. column. The column lists the number of the figure where the item is identified/located in repair parts lists and special tools list work packages.

(2) ITEM column. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

(3) STOCK NUMBER column. This column lists the NSN for the item.

(4) CAGEC column. The Contractor and Government Entity Code (CAGEC) is a 5-digit numeric code used to identify the manufacturer, distributor, Government agency, etc., that supplies the item.

(5) PART NUMBER column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

5. SPECIAL INFORMATION.

a. USABLE ON CODE. The usable on code appears in the lower left corner of the Description column heading. Usable on codes are shown as “U/C:...” in the Description Column (justified left) on the last line applicable item description/nomenclature. Uncoded items are applicable to all models.

b. ASSOCIATED PUBLICATIONS. The publications listed below pertain to the Refrigerated Container and its components:

<u>Publication</u>	<u>Short Title</u>
TM 9-4110-258-13	Operator, Unit and Direct Support Maintenance Manual for Refrigeration Unit Mechanical, 9K BTU, Electric, Model F9000RE.
TM 9-4110-258-23P	Unit and Direct Support Maintenance Repair Parts and Special Tools List for Refrigeration Unit Mechanical, 9K BTU, Electric, Model F9000RE.
TM 9-6115-642-10	Operators Maintenance for Generator Set, Skid Mounted, Tactical Quiet 10 Kw.
TM 9-6115-642-24	Unit, Direct Support and General Support Maintenance Manual for Generator Set, Skid Mounted, Tactical Quiet 10 Kw.
TM 9-6115-642-24P	Unit, Direct Support and General Support Repair Parts and Special Tools List for Generator Set, Skid Mounted, Tactical Quiet 10 Kw.

6. HOW TO LOCATE REPAIR PARTS.

- a. When National Stock Number (NSN) or Part Number is NOT known:
 - (1) First. Using the table of contents, determine the assembly group for subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.
 - (2) Second. Find the figure covering the assembly group or subassembly group to which the item belongs.
 - (3) Third. Identify the item on the figure and note the item number.
 - (4) Fourth. Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.
 - (5) Fifth. Refer to the Part Number Index to find the NSN, if assigned.
- b. When National Stock Number or Part Number is known:
 - (1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National Stock Number (NSN) or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence. The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see paragraph 4b). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.
 - (2) Second. After finding the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.

7. ABBREVIATIONS. Abbreviations used in this manual are listed in MIL-STD-12D.

END OF WORK PACKAGE.

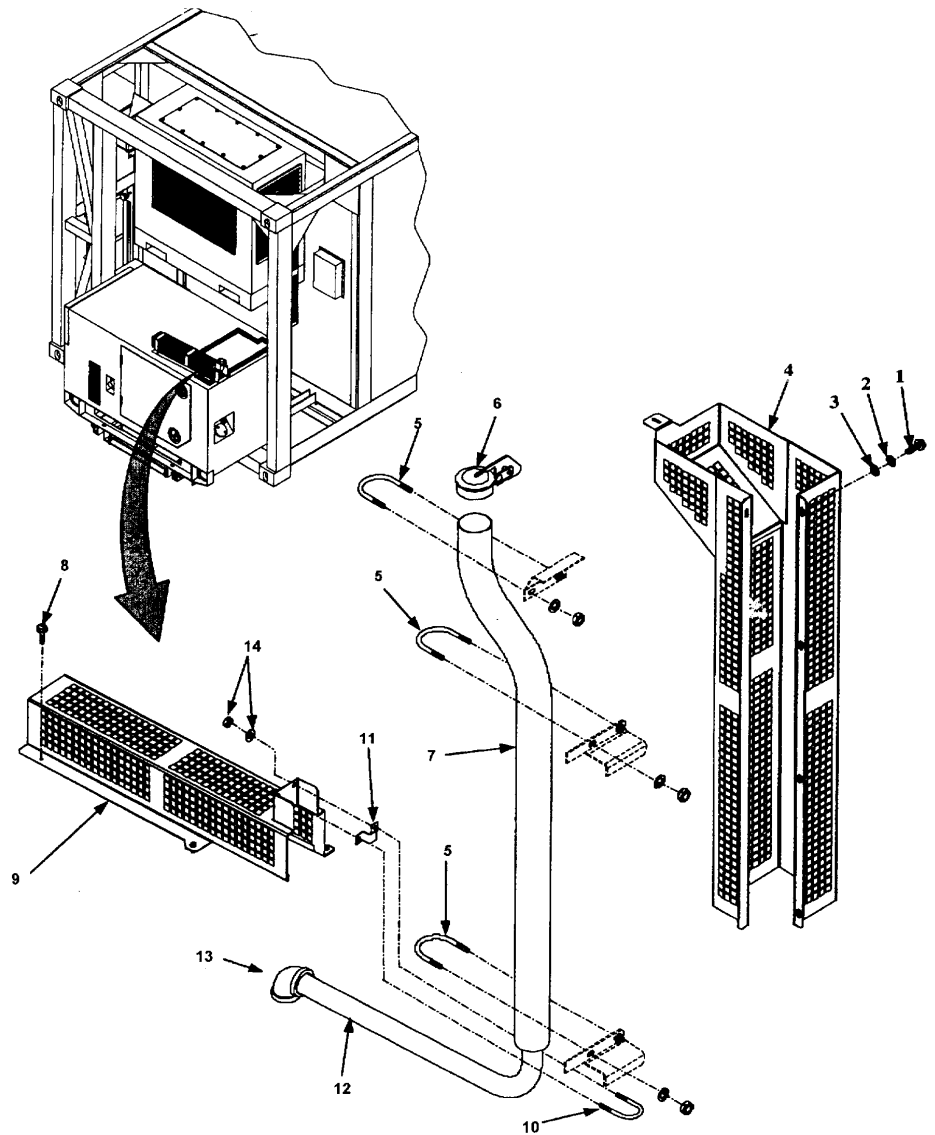


Figure 1. Exhaust Pipe Assemblies

GROUP 01 EXHAUST SHIELD AND PIPES – Continued

0050 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 01 EXHAUST SHIELD AND PIPES FIG. 1 EXHAUST PIPE ASSEMBLIES						
1	PAOZZ	5305-00-984-6212	96906	MS35206-265	SCREW,MACHINE	009
2	PAOZZ	5310-00-045-3296	96906	MS35338-43	WASHER,LOCK	009
3	PAOZZ	5310-00-014-5850	96906	MS27183-42	WASHER,FLAT	009
4	XBOZZ		90598	30741-100	SHIELD ASSEMBLY, VERTICAL	001
5	PAOZZ	5306-00-234-9731	39428	3043T32	U-BOLT,2.50 ID	003
6	XBOZZ		10066	22-250	CAP,RAIN	001
7	XBOZZ		90598	30697-1	PIPE,EXHAUST VERTICAL	001
8	XBOZZ		39428	91324A430	SCREW,SELF-DRILLING	003
9	XBOZZ		90598	30711-100	SHIELD,EXHAUST HORIZONTAL	001
10	PAOZZ	5306-01-244-8868	39428	3043T18	U-BOLT,1.50 ID	001
11	XBOZZ		90598	30747-1	SPACER EXHAUST	001
12	XBOZZ		90598	30696-1	PIPE,EXHAUST HORIZONTAL	001
13	XBOZZ		39428	44605K117	ELBOW,90DEG-1.25NPT	001
14	PAOZZ		90598	30749-100	KIT, EXHAUST ASSY	001
END OF FIGURE						

END OF WORK PACKAGE

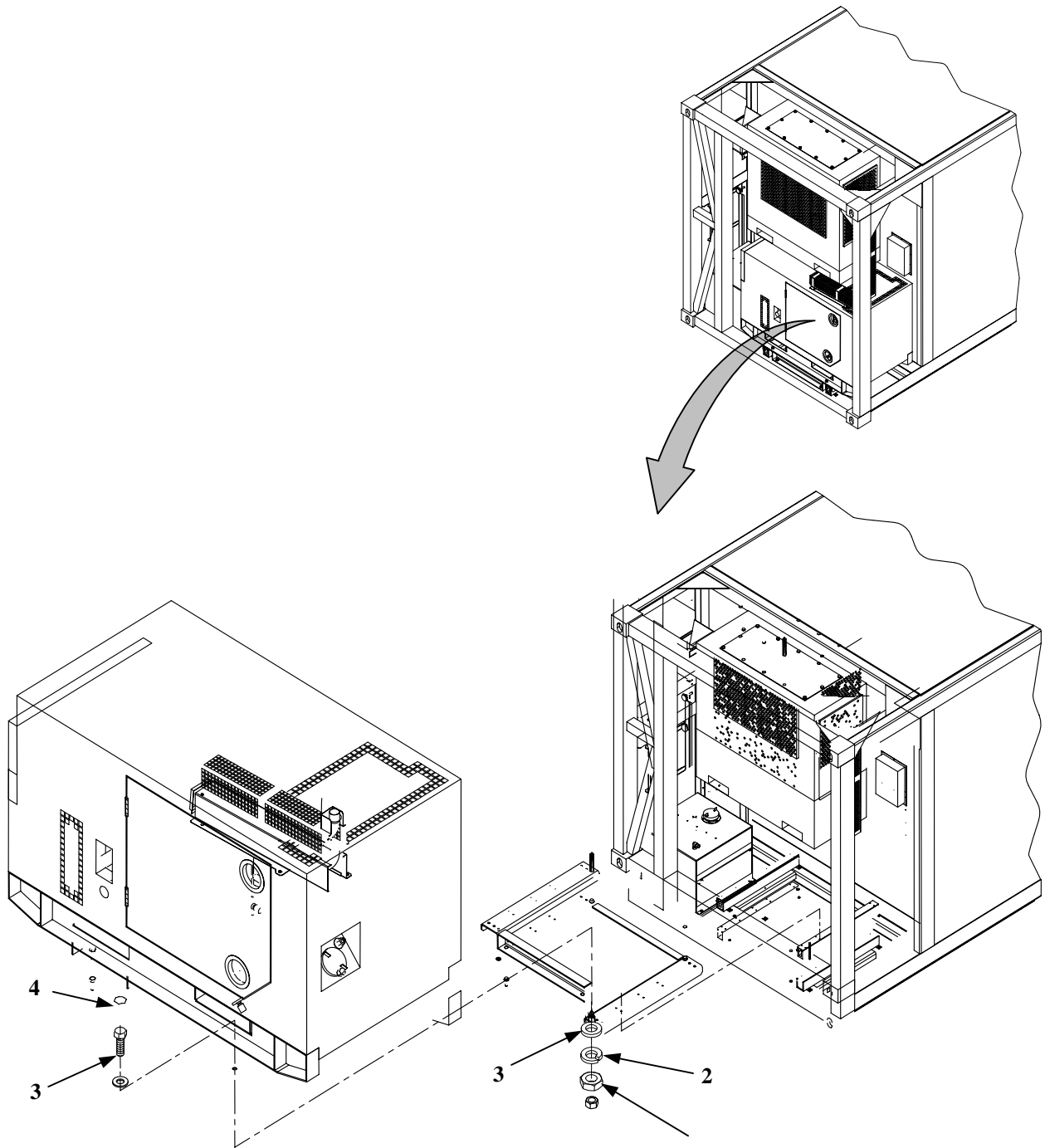


Figure 2. Generator Set and Mounting Hardware

GROUP 02 GENERATOR – Continued

0051 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP: 02 GENERATOR FIG. 2 GENERATOR SET AND MOUNTING HARDWARE	
1	PAOZZ	5310-01-270-1731	96906	MS51967-14	NUT,PLAIN,HEXAGON	004
2	PAOZZ	5310-01-335-4901	96906	MS35338-48	WASHER,LOCK	004
3	PAOZZ	5310-00-809-5998	96906	MS27183-18	WASHER,FLAT	008
4	PAOZZ	5305-01-325-8388	96906	MS90725-113	SCREW,CAP,HEXAGON	004
END OF FIGURE						

END OF WORK PACKAGE.

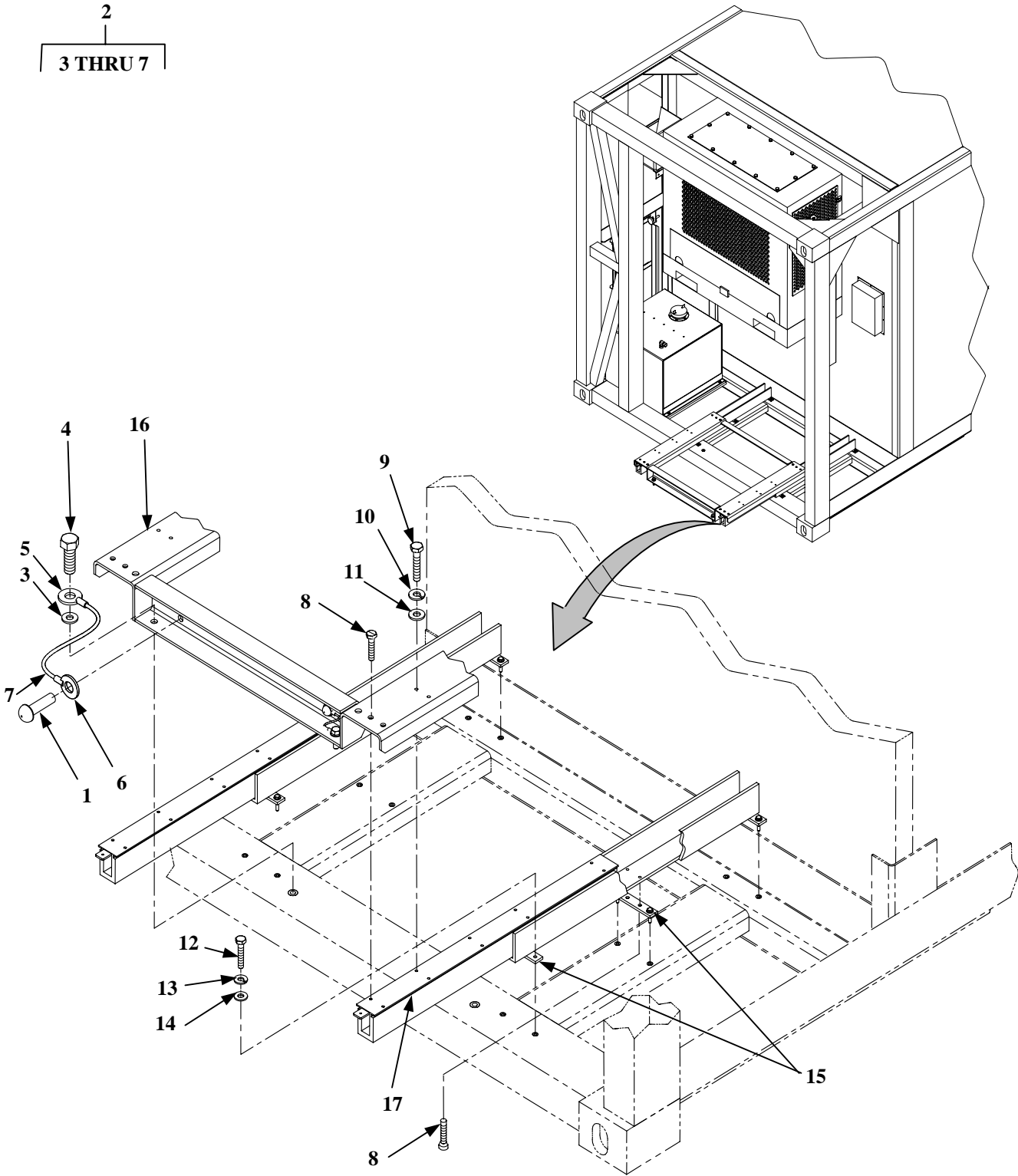


Figure 3. Generator Set Slide Unit and Mounting Hardware

GROUP 03 SLIDE ASSEMBLY AND MOUNTING HARDWARE – Continued

0052 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 03 SLIDE ASSEMBLY AND MOUNTING HARDWARE FIG. 3 SLIDE ASEMBLY AND MOUNTING HARDWARE						
1	PAOZZ	5320-00-882-8385	81348	M24243/6A-606H	RIVET,BLIND,CLOSED	002
2	AOOOO		90598	30695-100	BOLT,LOCKING GENERATOR	002
3	PAOZZ	5310-00-809-5997	96906	MS27183-17	.WASHER,FLAT	001
4	PAOZZ	5305-00-782-9494	96906	MS90725-114	.SCREW,CAP,HEXAGON	001
5	PAOZZ	5940-00-682-2445	96906	MS25036-158	.TERMINAL,LUG .50	001
6	PAOZZ	5940-00-143-4794	96906	MS25036-112	.TERMINAL,LUG NO.10	001
7	MOOZZ		90598	30695-5	.ROPE,WIRE .06DIA,7 INCHES (MAKE FROM P/N M83420/3- 001,CAGE 81349)	001
8	PAOZZ	5305-00-954-4295	96906	MS35190-287	SCREW,MACHINE	020
9	PAOZZ	5305-00-068-0501	96906	MS90725-5	SCREW,CAP,HEX HEAD	012
10	PAOZZ	5310-00-582-5965	96906	MS35338-44	WASHER,LOCK	012
11	PAOZZ	5310-00-809-4058	96906	MS27183-10	WASHER,FLAT	012
12	PAOZZ	5306-00-225-8501	96906	MS90725-37	BOLT,HEX HEAD	012
13	PAOZZ	5310-01-338-7338	96906	MS35338-45	WASHER,LOCK	012
14	PAOZZ	5310-00-081-4219	96906	MS27183-12	WASHER,FLAT	012
15	XBOZZ		90598	30670-1	MOUNT,SLIDE	006
16	XBOZZ		90598	30669-100	MOUNT,GENERATOR	001
17	XBOZZ		06666	CD5601-00-0320	SLIDE ASSEMBLY	002
END OF FIGURE						

END OF WORK PACKAGE.

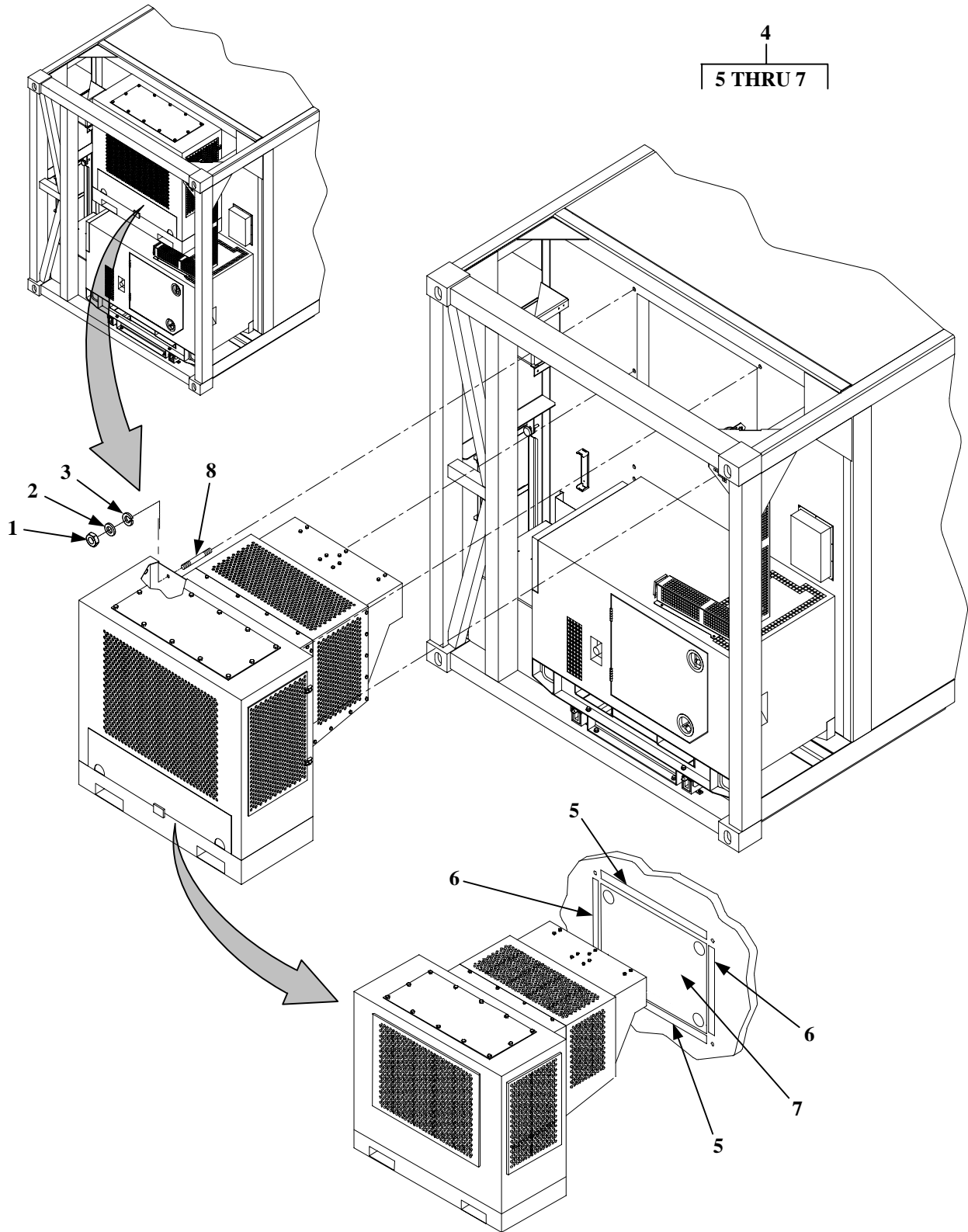


Figure 4. Refrigeration Unit and Mounting Hardware

GROUP 04 REFRIGERATION UNIT AND PANEL – Continued

0053 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 04 REFRIGERATION UNIT AND PANEL FIG. 4 REFRIGERATION UNIT AND MOUNTING HARDWARE						
1	PAOZZ	5310-00-763-8921	96906	MS51967-23	NUT,HEX .750-10UNC	004
2	PAOZZ	5310-01-339-6531	96906	MS35338-51	WASHER,LOCK	004
3	PAOZZ	5310-00-809-8533	96906	MS27183-23	WASHER,FLAT	004
4	AOOOO		90598	30742-100	PANEL,BLOCKAGE (INSTALLED WHEN REFRIGERATION UNIT IS REMOVED)	001
5	MOOZZ		90598	30742-3	.GASKET,36.3LG (MAKE FROM ASTM D1056- 91TY2,CLC,GRI,CAGE 81346)	002
6	MOOZZ		90598	30742-2	.GASKET,22.9LG (MAKE FROM ASTM D1056- 91TY2,CLC,GRI,CAGE 81346)	002
7	MOOZZ		90598	30742-1	.PANEL,WOOD,43.0 IN X 33.0 IN (MAKE FROM PS1-66,CAGE 24054)	001
8	XBOZZ		39428	91563A349	STUD	004
END OF FIGURE						

END OF WORK PACKAGE.

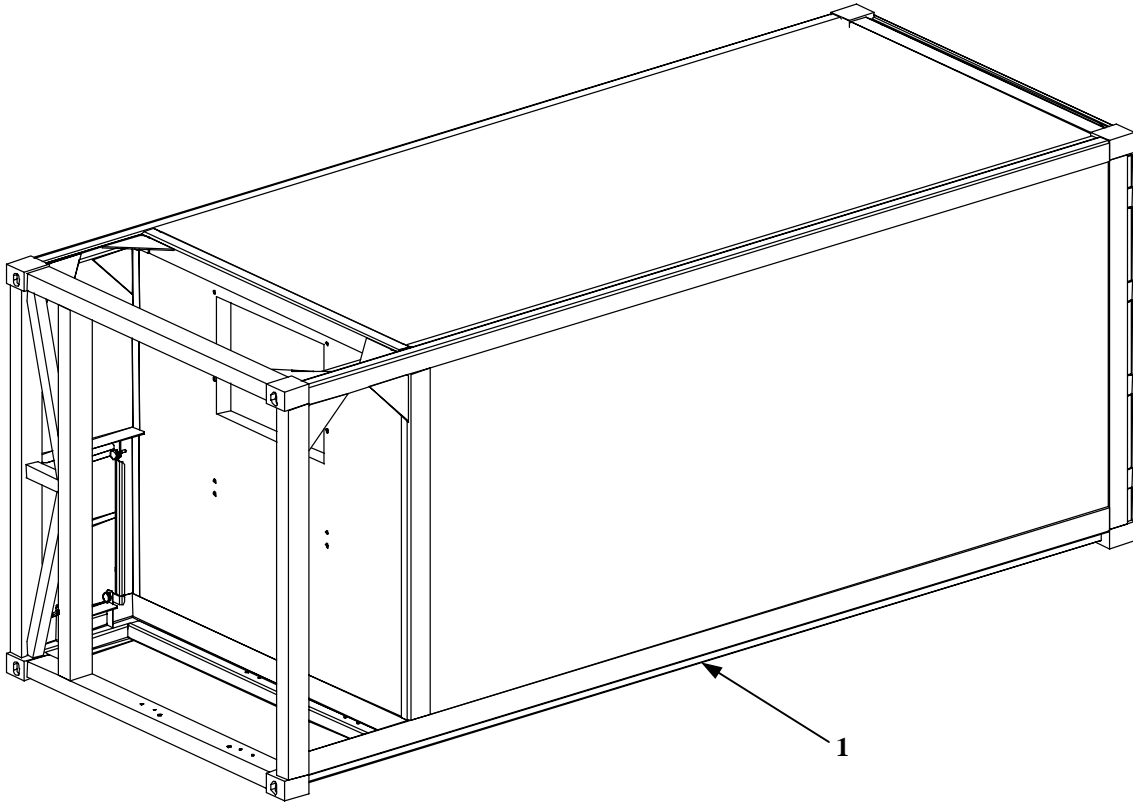


Figure 5. Container Assembly

GROUP 05 CONTAINER ASSEMBLY – Continued

0054 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 5 CONTAINER ASSEMBLY						
1	AOOFF	8145-01-337-9997	90598	30676-200	CONTAINER ASSEMBLY	001
END OF FIGURE						

END OF WORK PACKAGE.

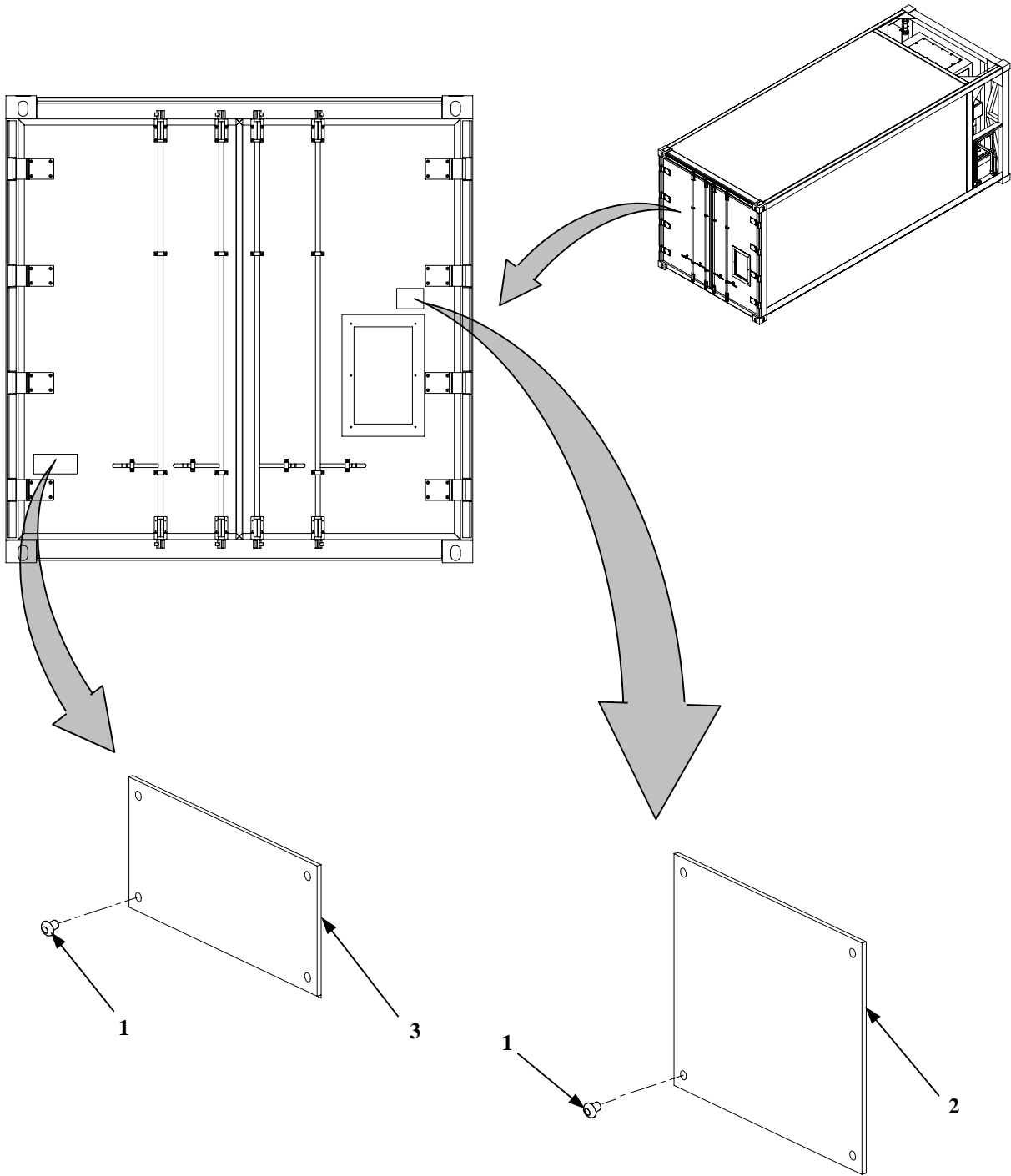


Figure 6. Identification Plates and Document Holder (Sheet 1 of 3)

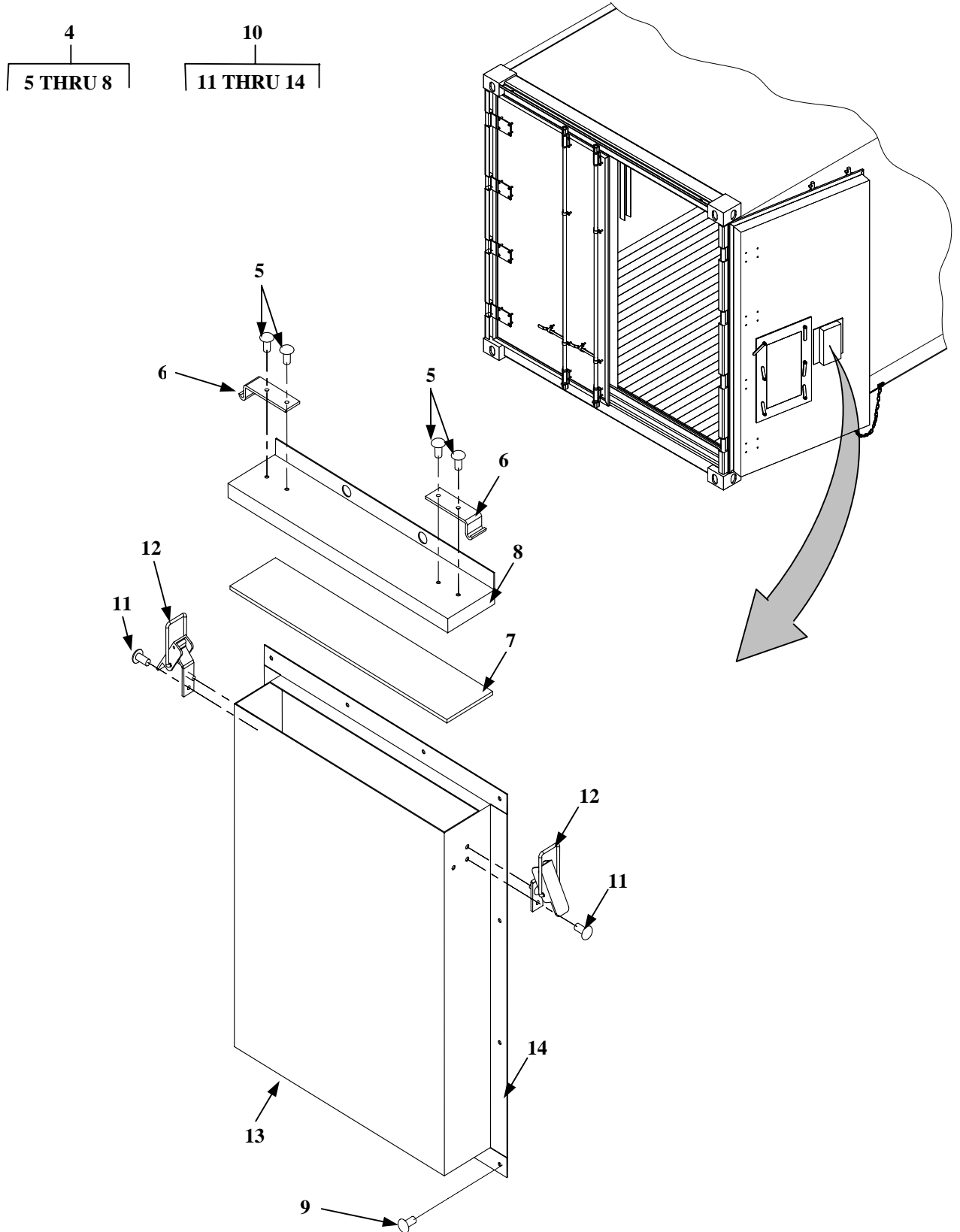


Figure 6. Document Holder and Identification Plate (Sheet 2 of 3)

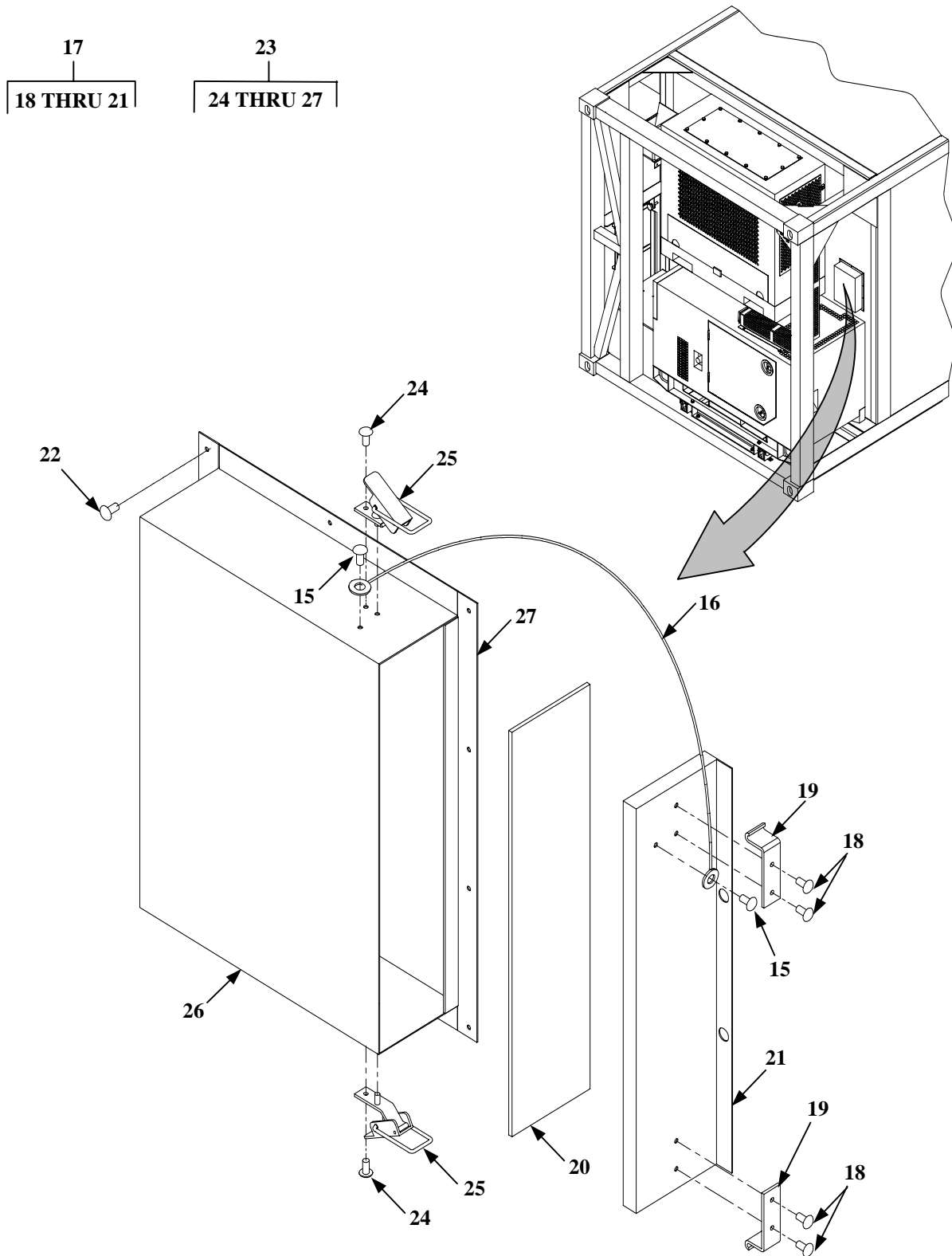


Figure 6. Identification Plates and Document Holder (Sheet 3 of 3)

GROUP 05 CONTAINER ASSEMBLY – Continued

0055 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 6 IDENTIFICATION PLATES AND DOCUMENT HOLDER						
1	XBOZZ		94222	38-104-05-13	.RIVET,BLIND	008
2	XBOZZ		90598	30710-1	.PLATE,IDENTIFICATIO	001
3	XBOZZ		90598	30715-1	.PLATE,IDENTIFICATIO	001
4	XBOOO		90598	30405-100	.COVER ASSEMBLY	001
5	XBOZZ		94222	AD42BSH	..RIVET,BLIND	004
6	XBOZZ		98003	SC-D20650-14-ZE	..LATCH,HOOK	001
7	MOOZZ		90598	30405-2	..GASKET (MAKE FROM P/N 411D 1/8X2X12 1/2,CAGE 59502)	002
8	XBOZZ		90598	30408-1	..COVER ,20.0 IN LG (MAKE FROM P/N 4111 NWPSA,CAGE 59502)	001
9	XBOZZ		94222	AD44BS	.RIVET,POPPET	010
10	XBOOO		90598	30407-100	.BOX ASSEMBLY	001
11	PAOZZ	5320-00-932-1972	81349	M24243/6-A402H	..RIVET,BLIND	004
12	XBOZZ		98003	SC-D20648-ZE	..LATCH,LOOP	002
13	XBOZZ		90598	30406-1	..BOX FORMED	001
14	XBOZZ		90598	30403-1	..END FORMED	001
15	XBOZZ		54402	38-104-12-13	.RIVET,BLIND	010
16	XBOZZ	4010-00-181-9353	84256	52305A06-4	.LANYARD	001
17	XBOOO		90598	30408-100	.COVER ASSEMBLY	001
18	PAOZZ	5320-00-932-1972	81349	M24243/6-A402H	..RIVET,BLIND	004
19	PAOZZ		98003	SC-D20650-14-ZE	..LATCH,HOOK	002
						001

GROUP 05 CONTAINER ASSEMBLY – Continued

0055 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 6 IDENTIFICATION PLATES AND DOCUMENT HOLDER						
20	MOOZZ		90598	30408-2	..GASKET ,3IN W X 12 1/2 LG (MAKE FROM P/N 4111NPSA CAGE 86730)	
21	XBOZZ		90598	30408-1	..COVER	001
22	PAOZZA		94222	AD44BS	..RIVET,POPPET	001
23	XBOOO		90598	30404-100	..BOX ASSEMBY,DOCUMENT	001
24	XBOZZ		94222	AD42H	..RIVET,POPPET	004
25	PAOZZ		98003	SC-D-20648-ZE	..LATCH,LOOP	001
26	XBOZZ		90598	30402-1	..BOX,FORMED	001
27	XBOZZ		90598	30403-1	..END FORMED	001
END OF FIGURE						

END OF WORK PACKAGE.

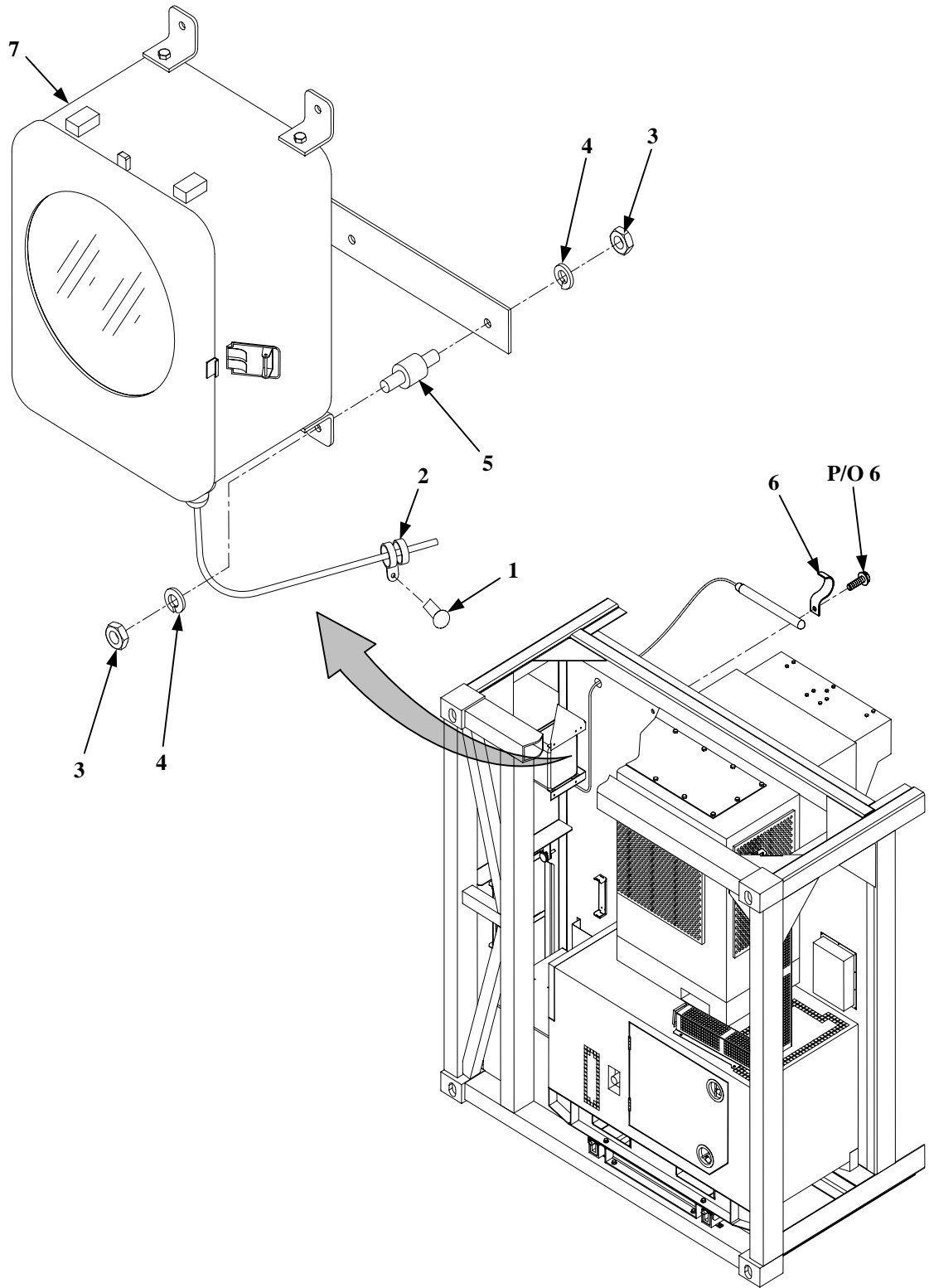


Figure 7. Temperature Recorder (Sheet 1 of 2)

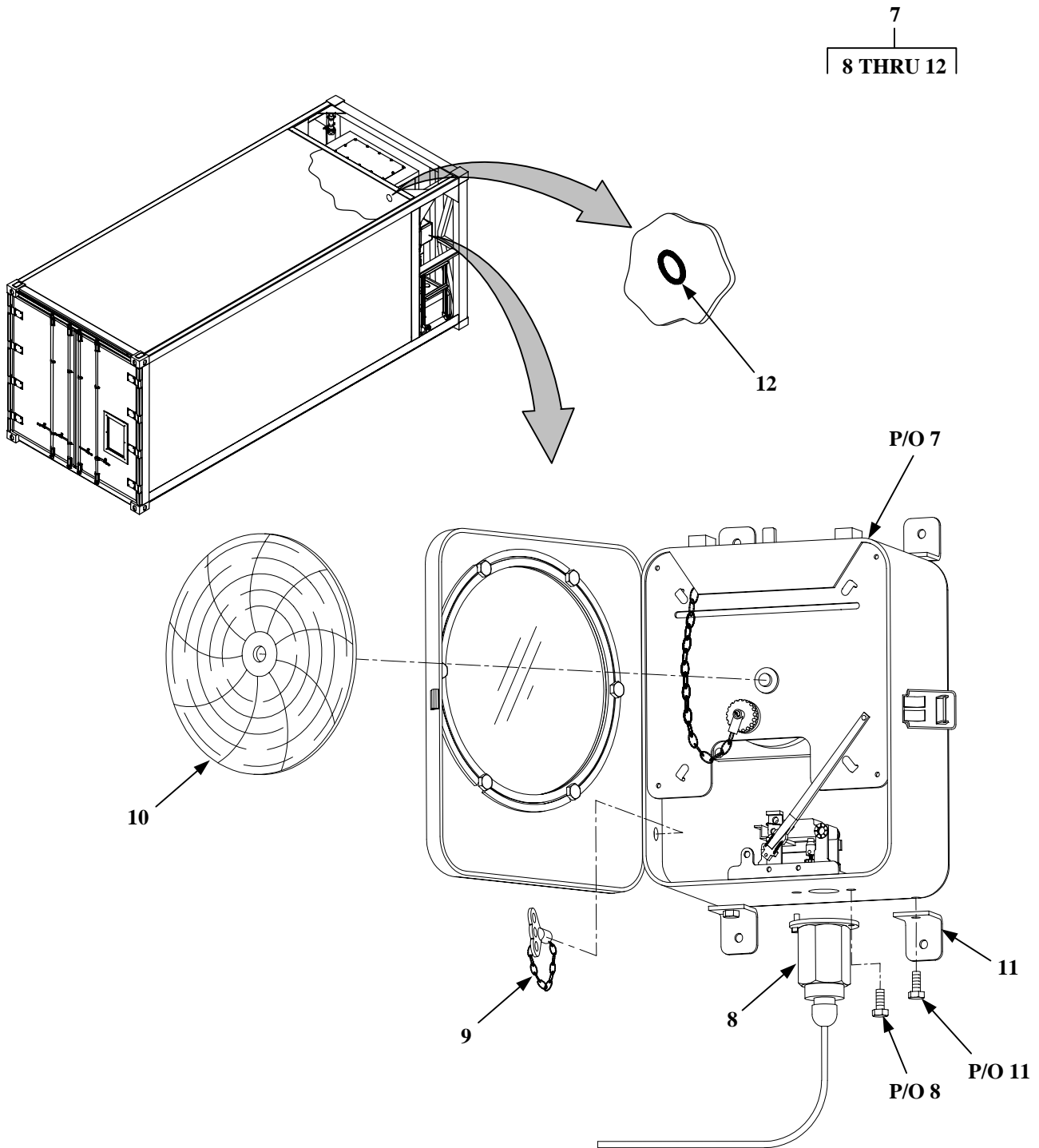


Figure 7. Temperature Recorder (Sheet 2 of 2)

GROUP 05 CONTAINER ASSEMBLY – Continued

0056 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 7 TEMPERATURE RECORDER						
1	PAOZZ	5320-01-074-1543	94222	38-106-12-16	RIVET,BLIND	003
2	PAOZZ	5340-01-134-6261	96906	MS21333-65	.CLAMP,LOOP	003
3	PAOZZ	5310-00-761-6882	96906	MS51967-2	.NUT,PLAIN,HEXAGON	008
4	PAOZZ	5310-00-550-1130	96906	MS35333-40	.WASHER,LOCK	008
5	XBOZZ		39428	9376K115	.MOUNT,SHOCK	004
6	XBOZZ		45809	133	..SUPPORT,SENSING ELE	002
7	PAOOO	6685-01-072-0480	90598	30416	.TEMPERATURE RECORD	001
8	XBOZZ		45809	94521020	..ELEMENT,SENSING	001
9	PAOZZ		45809	60101102	..KEY WINDING	001
10	PAOZZ	6685-01-475-0126	45809	150603	..CHART	001
11	XBOZZ		90598	64400101	..BRACKET	004
12	PAOZZ	5325-01-074-3927	77969	3885	.GROMMET	002
END OF FIGURE						

END OF WORK PACKAGE.

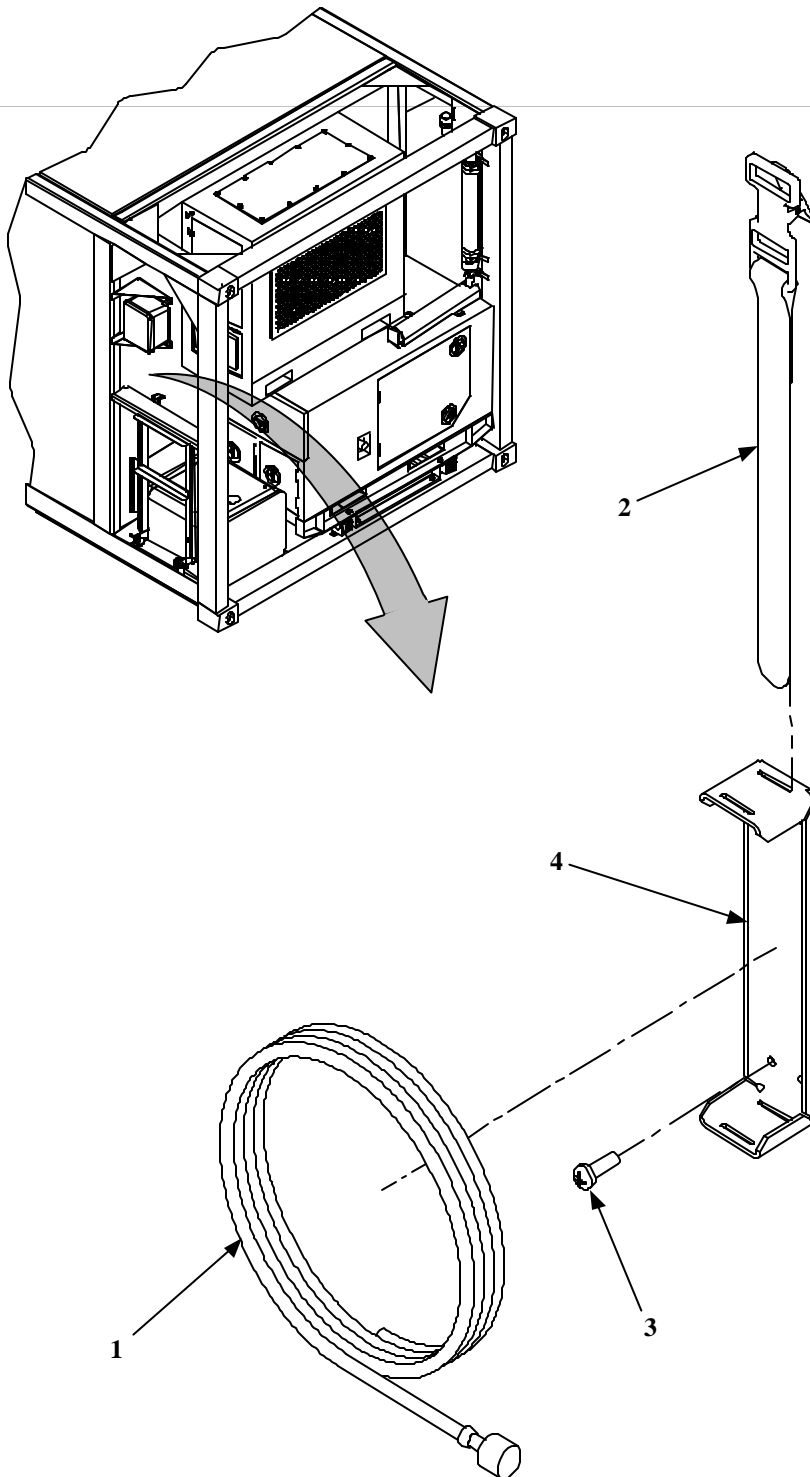


Figure 8. Power Cable Assembly

GROUP 05 CONTAINER ASSEMBLY – Continued

0057 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 8 POWER CABLE ASSEMBLY						
1	PAOZZ		90598	30734-100	.CABLE ASSEMBLY	001
2	XBOZZ		39428	3706T13	.STRAP	001
3	PAOZZ	5305-00-014-9921	96906	MS35493-74	.SCREW, WOOD	004
4	XBOZZ		90598	30441-1	.BRACKET	001
END OF FIGURE						

END OF WORK PACKAGE.

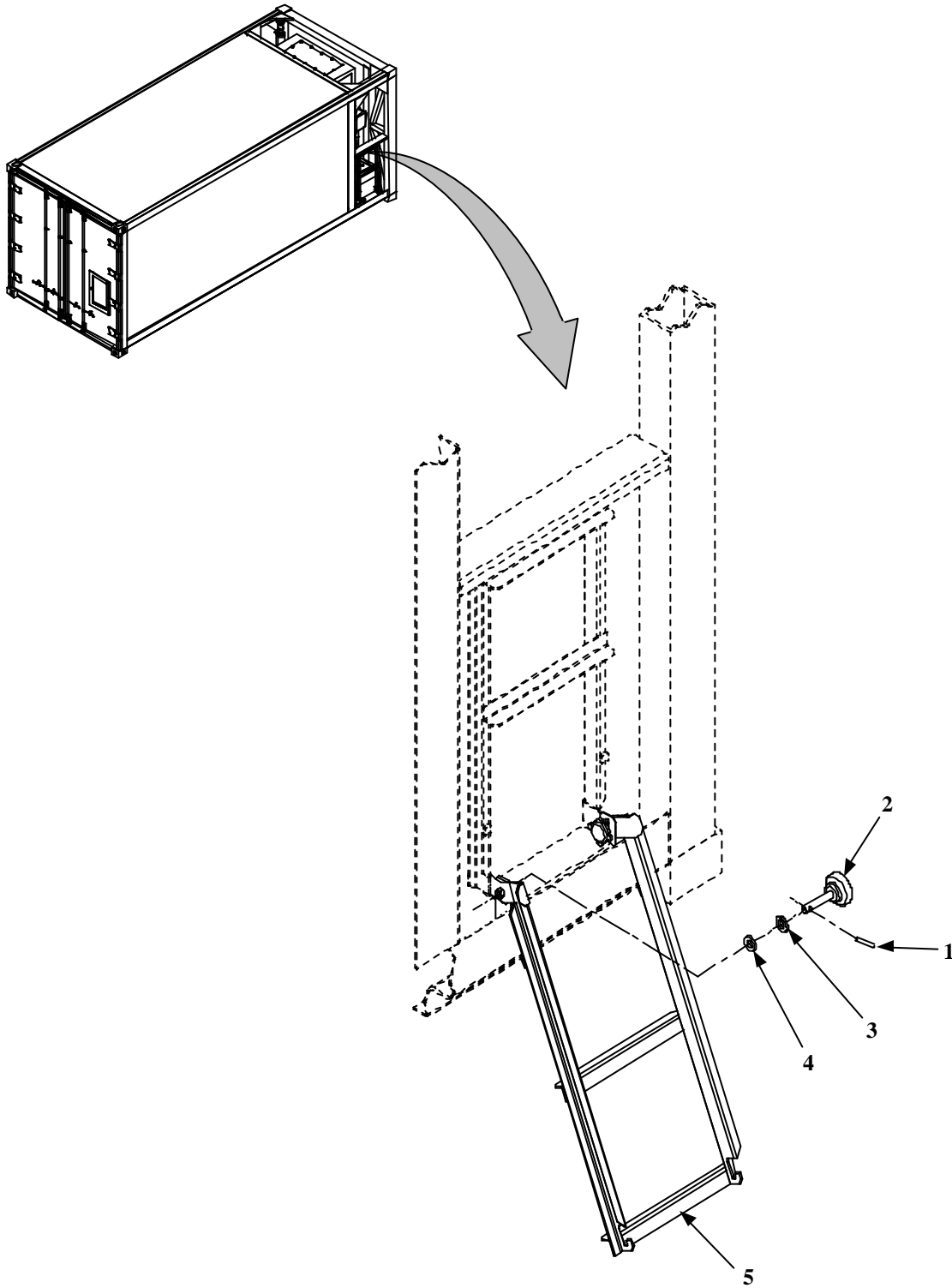


Figure 9. Ladder Assembly

GROUP 05 CONTAINER ASSEMBLY – Continued

0058 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 9 LADDER ASSEMBLY						
1	XBOZZ	5315-00-682-2051	96906	MS9048-104	.PIN,SPRING	002
2	XBOZZ		90598	30399-2	.KNOB ASSEMBLY	002
3	PAOZZ	5310-00-584-5272	96906	MS35338-48	.WASHER,LOCK	002
4	PAOZZ	5310-00-809-5998	96906	MS27183-18	.WASHER,FLAT	002
5	XBOZZ		90598	30680-100	.LADDER ASSEMBLY	001
END OF FIGURE						

END OF WORK PACKAGE.

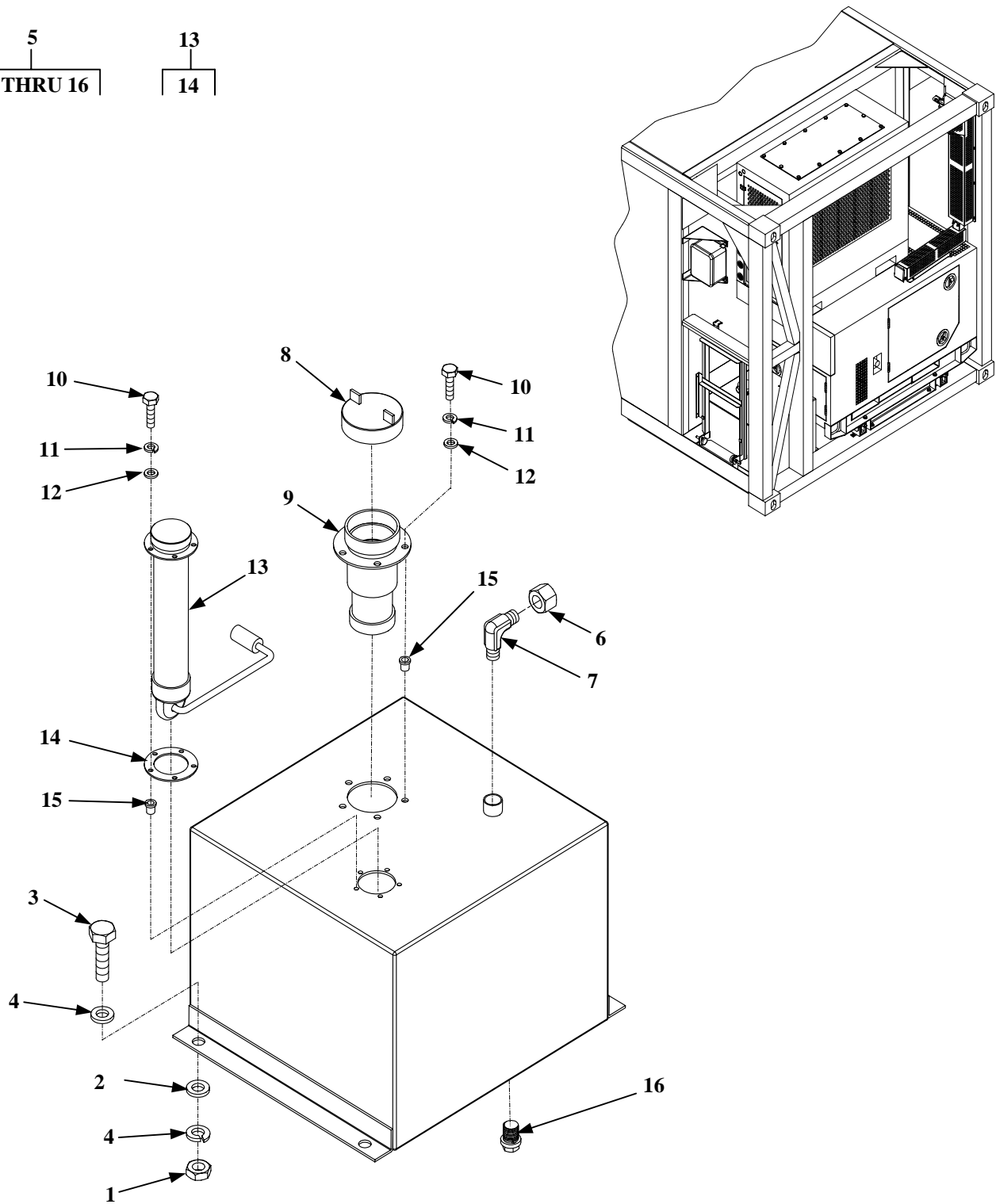
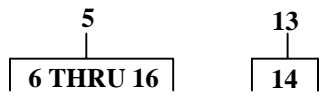


Figure 10. Auxiliary Fuel Tank Assembly and Mounting Hardware

GROUP 05 CONTAINER ASSEMBLY – Continued

0059 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 10 AUXILIARY FUEL TANK ASSEMBLY AND MOUNTING HARDWARE						
1	PAOZZ	5310-00-056-3395	96906	MS35649-2382	.NUT,PLAIN HEXAGON	004
2	PAOZZ	5310-01-334-4710	96906	MS35338-46	.WASHER,LOCK	004
3	PAOZZ	5305-01-210-4595	96906	MS90725-60	.SCREW,CAP	004
4	PAOZZ	5310-00-462-9122	96906	MS27183-14	.WASHER,FLAT	008
5	PAOOO		90598	30672-100	AUXILIARY FUEL TANK ASSEMBLY	001
6	XBOZZ		1H408	830FS-06	..CAP,STEEL	001
7	PAOZZ		0ZP24	C5404X6X8	..ELBOW,MALE 90DEG	001
8	PAOZZ		19147	MM297	..CAP,VENTED,FUEL	001
9	XBOZZ		96906	MS90908-1	..STRAINER	001
10	PAOZZ	5305-01-006-2051	96906	MS51849-66	..SCREW,MACHINE	005
11	PAOZZ	5310-00-576-5752	96906	MS35333-39	..WASHER,LOCK,INTERNA	005
12	PAOZZ	5310-00-809-8546	96906	MS27183-8	..WASHER,FLAT	005
13	PAOOO		09393	6781-9-8 1/4	..GAUGE,FUEL	001
14	PAOZZ	5330-00-107-4386	09393	15-423	...GASKET	001
15	XBOZZ		5G589	1TR10-130ST	..RIVNUT,THINHEAD	005
16	XBOZZ		39428	44705K83	..PLUG,,500-14NPT	001
END OF FIGURE						

END OF WORK PACKAGE.

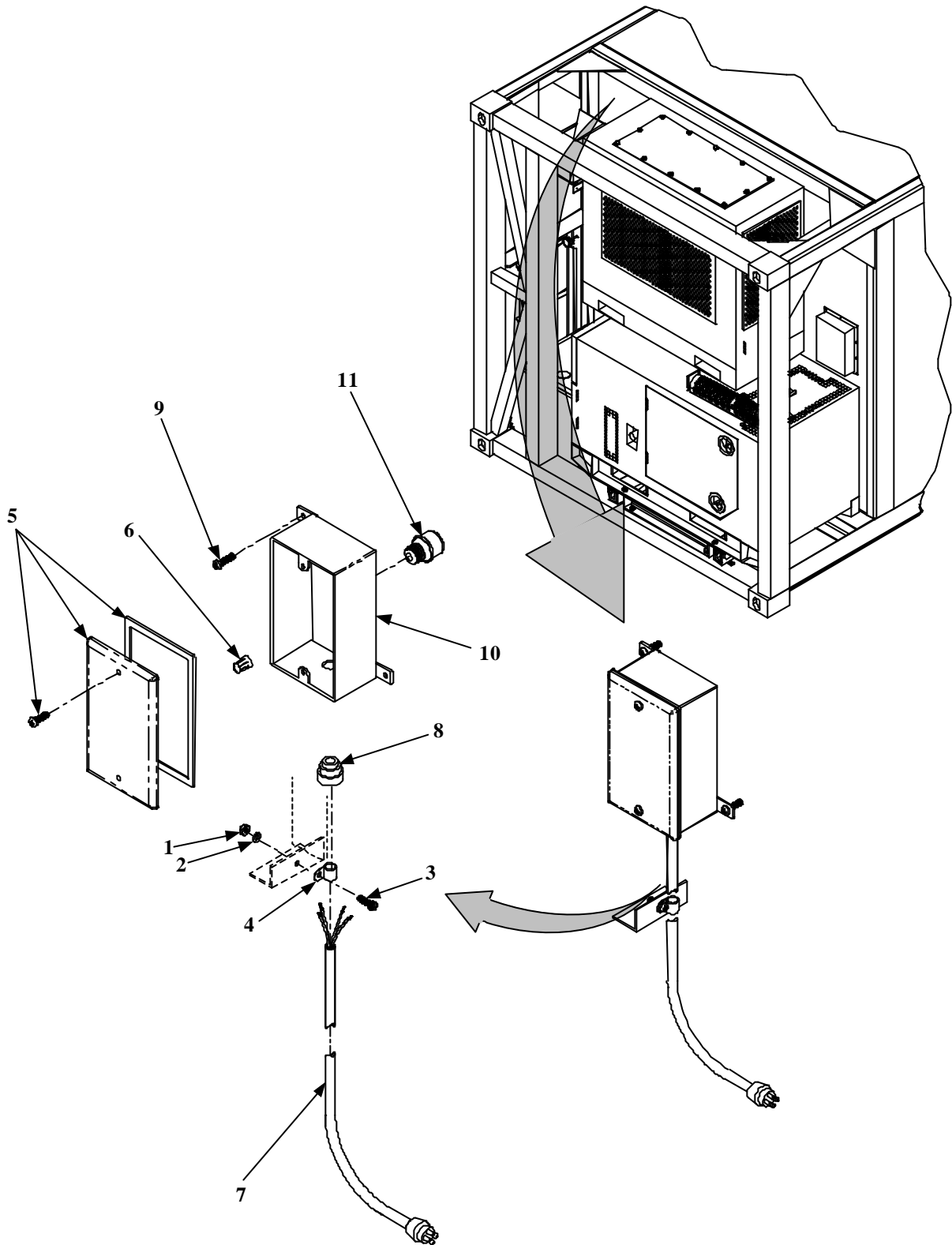


Figure 11. Power Cord and Connectors

GROUP 05 CONTAINER ASSEMBLY – Continued

0060 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 11 POWER CORD AND CONNECTORS						
1	PAOZZ	5310-00-934-9751	96906	MS35650-302	.NUT,PLAIN,HEXAGON	001
2	PAOZZ	5310-00-045-3296	96906	MS35338-43	.WASHER,LOCK	001
3	PAOZZ	5305-00-993-2459	96906	MS35207-283	.SCREW,MACHINE	001
4	XBOZZ		39428	8876T37	.CLAMP,LOOP	001
5	PAOZZ	5975-00-497-5410	08556	240-AL	.COVER AND GASKET	001
6	XBOZZ		83209	30676	.WIRE NUT	003
7	PAOZZ	5995-01-014-5202	2W733	17409	.POWER CORD 3 CONDUCTOR,5.0 NEOPRENE	001
8	PAOZZ	5975-00-296-1669	59730	2521	.CONNECTOR	001
9	PAOZZ	5305-00-180-1991	96906	MS35493-78	.SCREW,WOOD	002
10	XBOZZ		OERT1	270-L	.BOX,CONDUIT,OUTLET	001
11	PAOZZ	5975-01-055-5630	93908	E943D	.ADAPTER	001
END OF FIGURE						

END OF WORK PACKAGE.

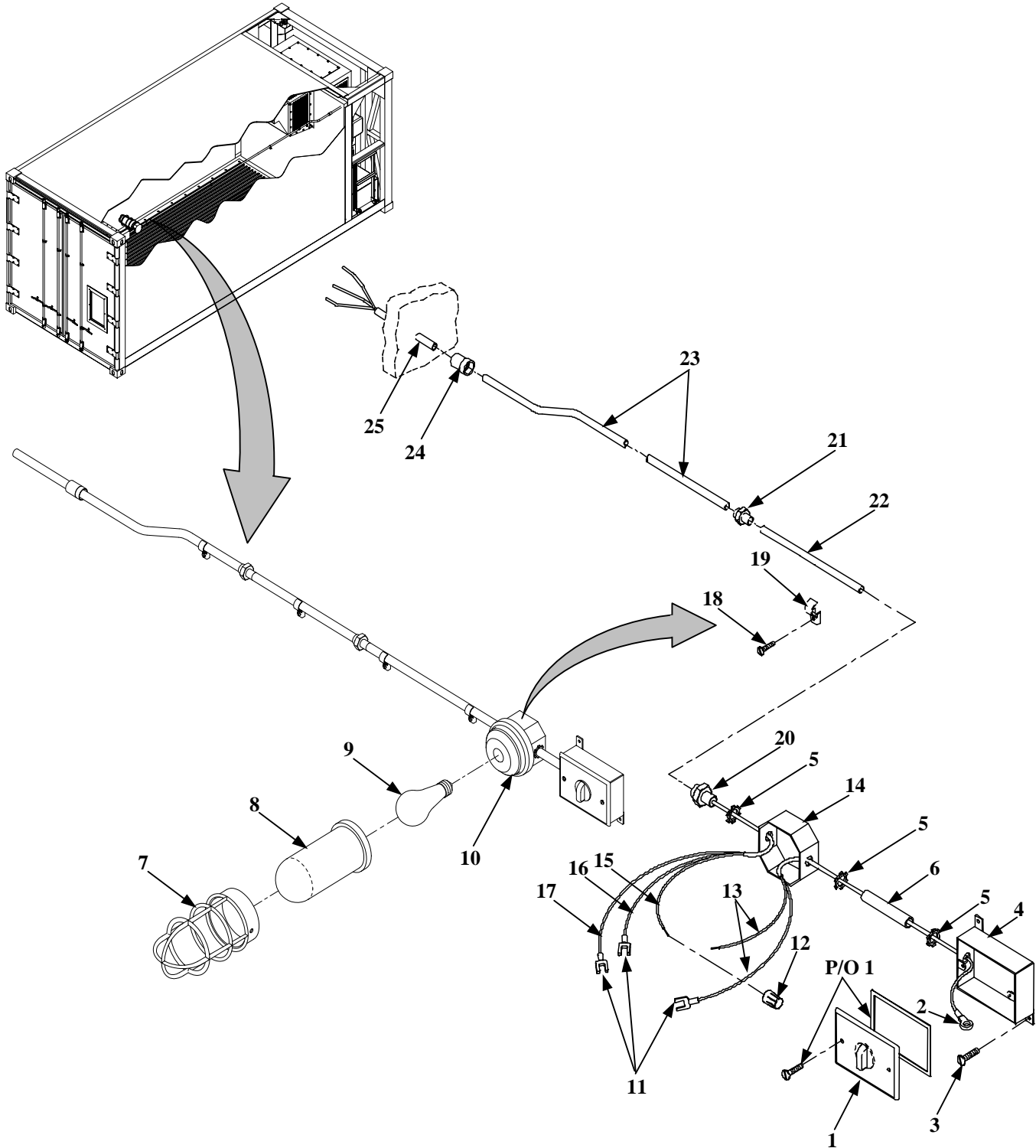


Figure 12. Light Assembly and Connectors

GROUP 05 CONTAINER ASSEMBLY – Continued

0061 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 12 LIGHT ASSEMBLY AND CONNECTORS						
1	XDOZZ			216	.COVER, WITH SWITCH	001
2	PAOZZ	5940-00-143-4774	96906	MS25036-153	TERMINAL, LUG	002
3	PAOZZ	5305-00-180-1991	96906	MS35493-78	.SCREW, WOOD	002
4	XBOZZ		OERT1	270-L	.BOX, CONDUIT, OUTLET	001
5	PAOZZ	5975-00-956-1366	59730	151	.LOCKNUT	003
6	XBOZZ		39428	4549K575	.NIPPLE, PIPE (.500 X 3.0 LONG)	001
7	XBOZZ		75282	VCG-15	.GUARD	001
8	XBOZZ		75282	VF-151	.GLOBE	001
9	PAOZZ	6240-00-143-3127	08805	100A	.LAMP, INCANDESCENT (100 WATTS, 120VAC)	001
10	XBOZZ		75282	VP151	.FIXTURE	001
11	PAOZZ	5940-01-078-2936	59730	RB-2237	.TERMINAL, LUG	003
12	XBOZZ		83209	30-076	.WIRE NUT	001
13	MOOZZ		90598	300676-39	.WIRE, BLACK, 14GA, 14 IN (MAKE FROM P/N 14 GA BLK TYPE THNN STR, CAGE 2B441)	002
14	XBOZZ		90598	30411-1	.HOLDER, LAMP	001
15	MOOZZ		90598	30676-38	.WIRE, BLACK, 14GA, 14 IN (MAKE FROM 14GA BLK TYPE THNN STR, CAGE 2B441)	001
16	MOOZZ		90598	30676-40	.WIRE, GREEN, 14GA, 204 IN (MAKE FROM 14GA GRN TYPE THNN STR, CAGE 2B441)	001
17	MOOZZ		90598	30676-41	.WIRE, WHITE, 14GA, 204 IN (MAKE FROM 14GA WHT TYPE THNN STR, CAGE 2B441)	001
18	PAOZZ	5305-00-180-1991	96906	MS35493-78	.SCREW, WOOD	009
19	XBOZZ		39428	K9435-T63	.CLAMP	007

GROUP 05 CONTAINER ASSEMBLY – Continued

0061 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 12 LIGHT ASSEMBLY AND CONNECTORS						
20	PAOZZ	5975-01-080-2598	39428	96T050	.CONNECTOR,OFFSET	002
21	XBOZZ	5975-00-179-0098	03743	95T050	.COUPLING	001
22	MOOZZ		90598	30676-25	.CONDUIT, .50DIA , 120 IN LG (MAKE FROM P/N 1/2 EMT THWL, CAGE 2B411)	001
23	MOOZZ		90598	30676-24	.CONDUIT,FORMED , 53.4 IN LG (MAKE FROM P/N 1/2 EMT THWL, CAGE 2B411)	001
24	XBOZZ		83209	E942D	.ADAPTER,FEMALE	001
25	MOOZZ		90598	30676-21	.CONDUIT,PVC,.50DIA , 4.08 IN (MAKE FROM 49005, CAGE 93908)	001
END OF FIGURE						

END OF WORK PACKAGE.

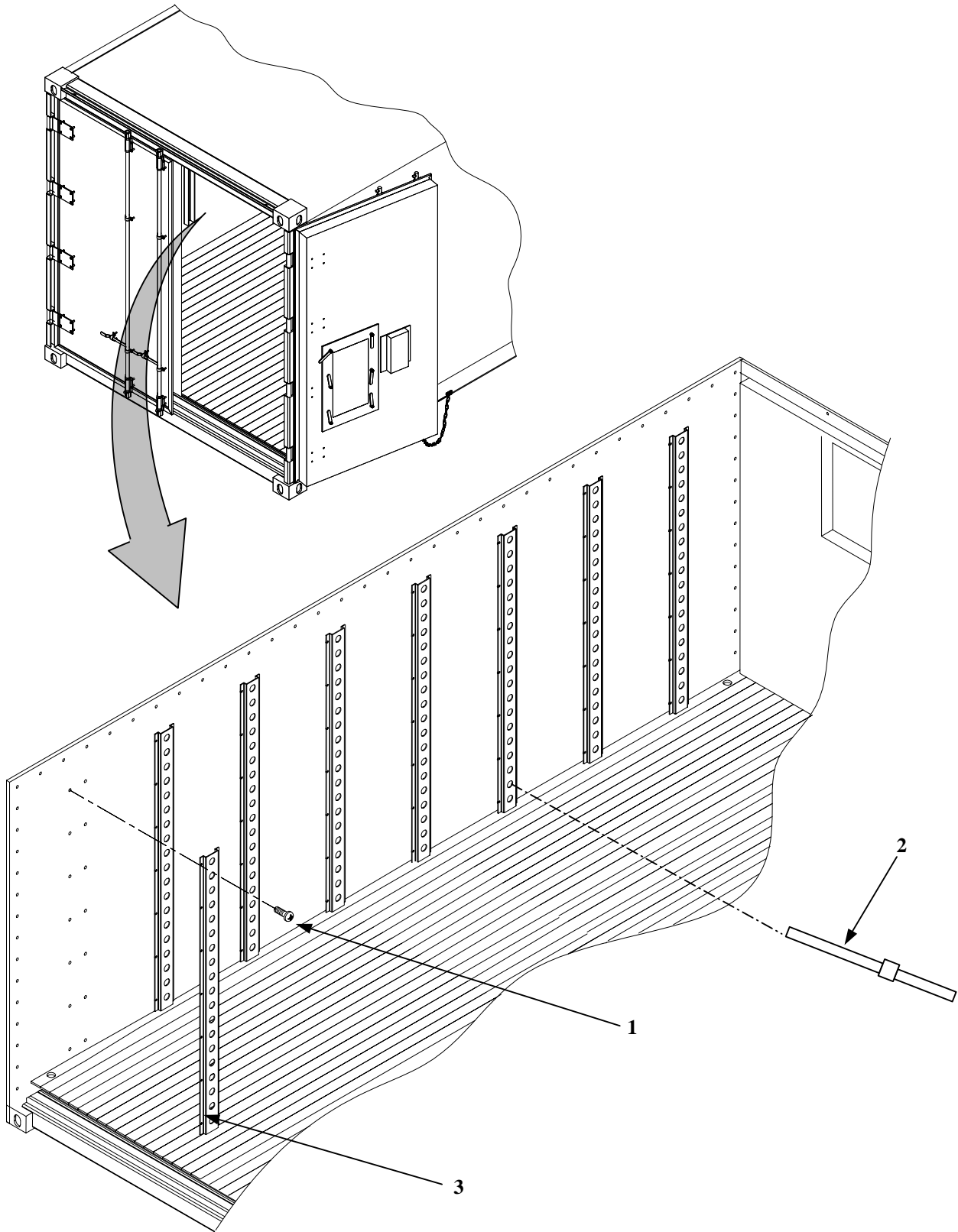


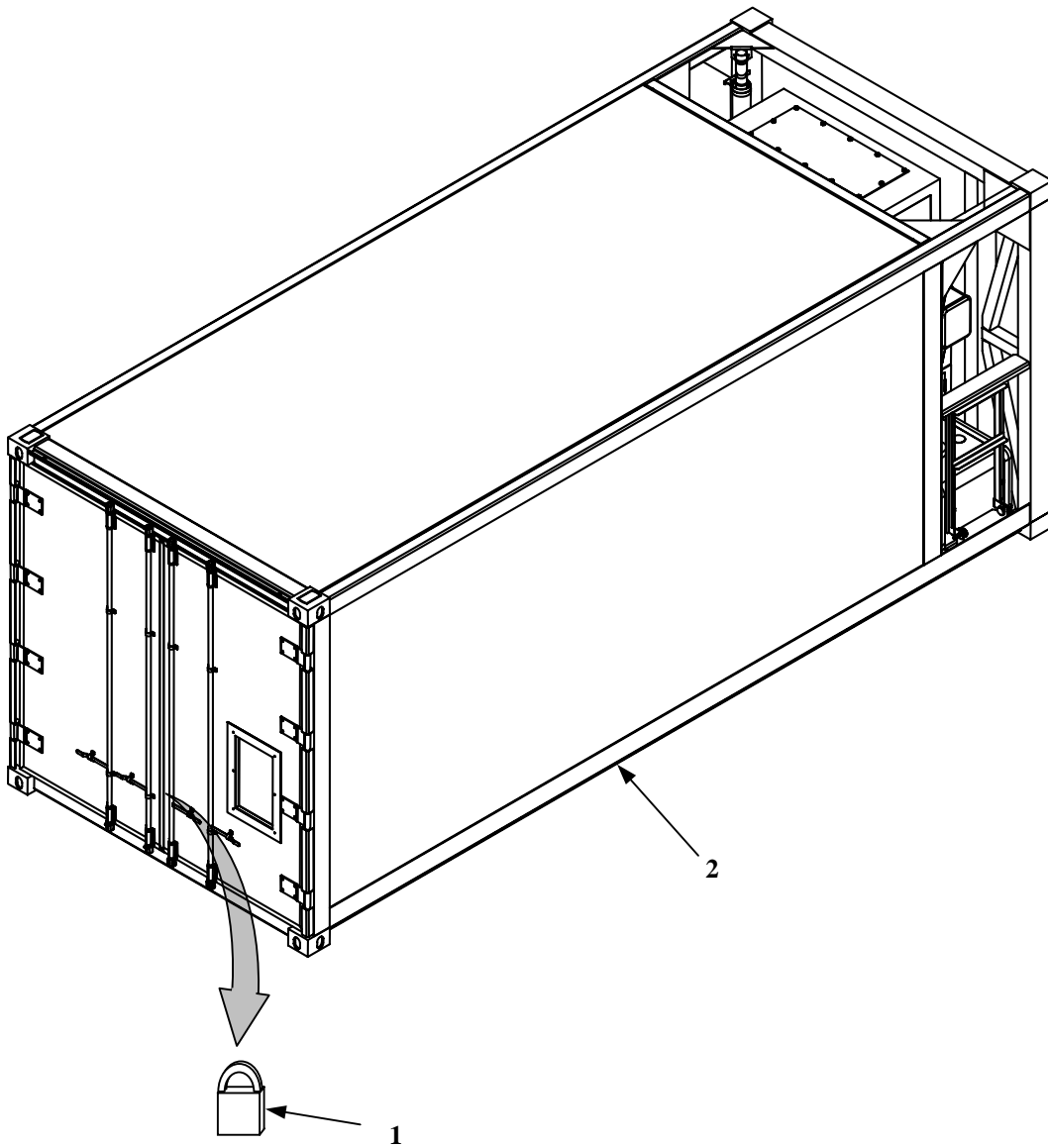
Figure 13. Vertical Tracks

GROUP 05 CONTAINER ASSEMBLY – Continued

0062 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 13 VERTICAL TRACKS						
1	PAOZZ	5305-00-180-1991	96906	MS35493-78	.SCREW, WOOD	488
2	PAOZZ	3990-01-204-3009	19200	MIL-PRF-71224	TIE DOWN, CARGO	008
3	XBOZZ		0KH26	2005-065	.TRACK, VERTICAL	016
END OF FIGURE						

END OF WORK PACKAGE.



14 Figure. Box Assembly

GROUP 05 CONTAINER ASSEMBLY - Continued

0063 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP: 05 CONTAINER ASSEMBLY FIG. 14 BOX ASSEMBLY	
1	XBOZZ		38797	312KA	.PADLOCK	001
2	PBOFFA		90598	30677-100	.BOX ASSEMBLY	001
					END OF FIGURE	

END OF WORK PACKAGE.

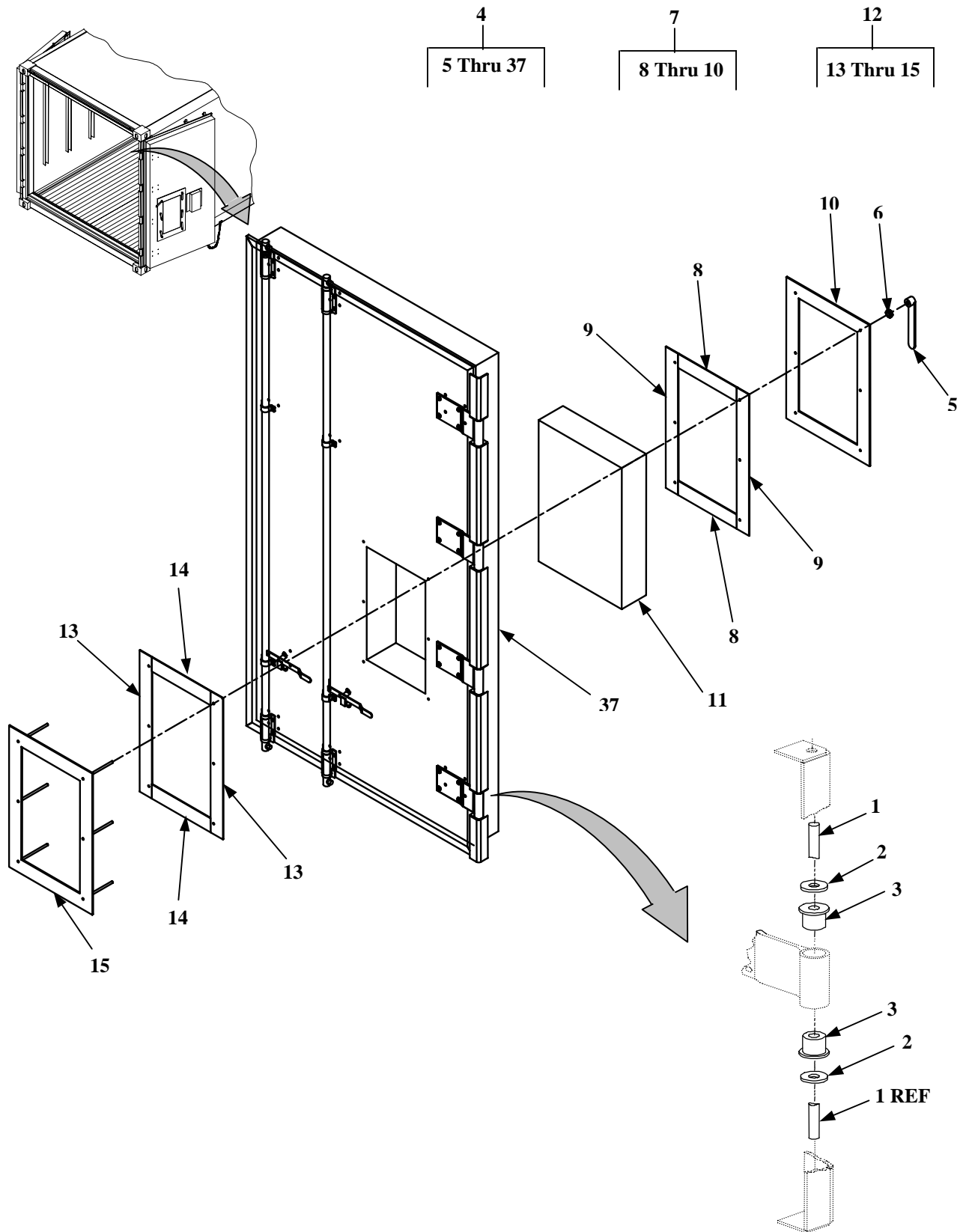


Figure 15. Right Hand Door Assembly (Sheet 1 of 4)

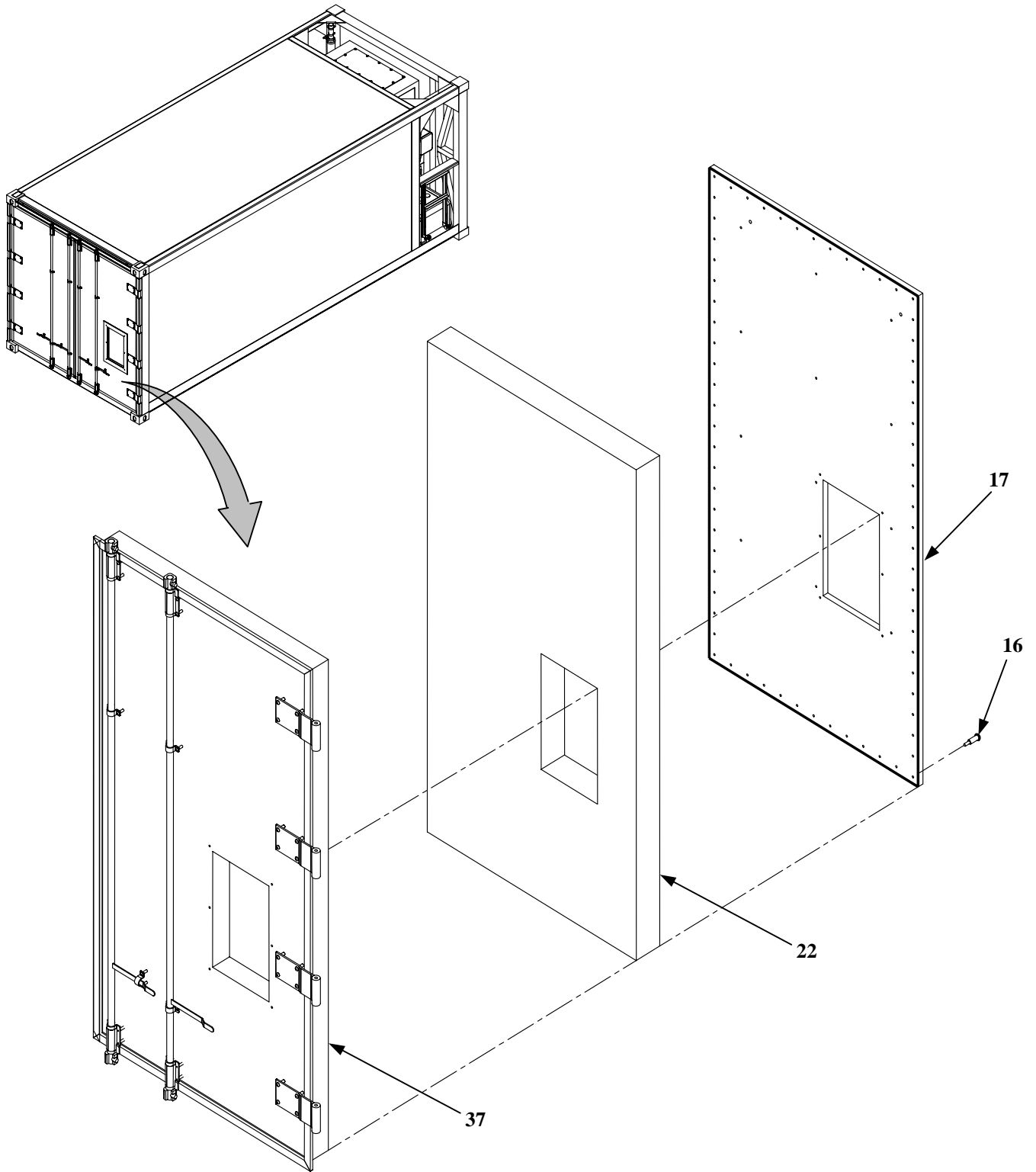


Figure 15. Right Hand Door Assembly (Sheet 2 of 4)

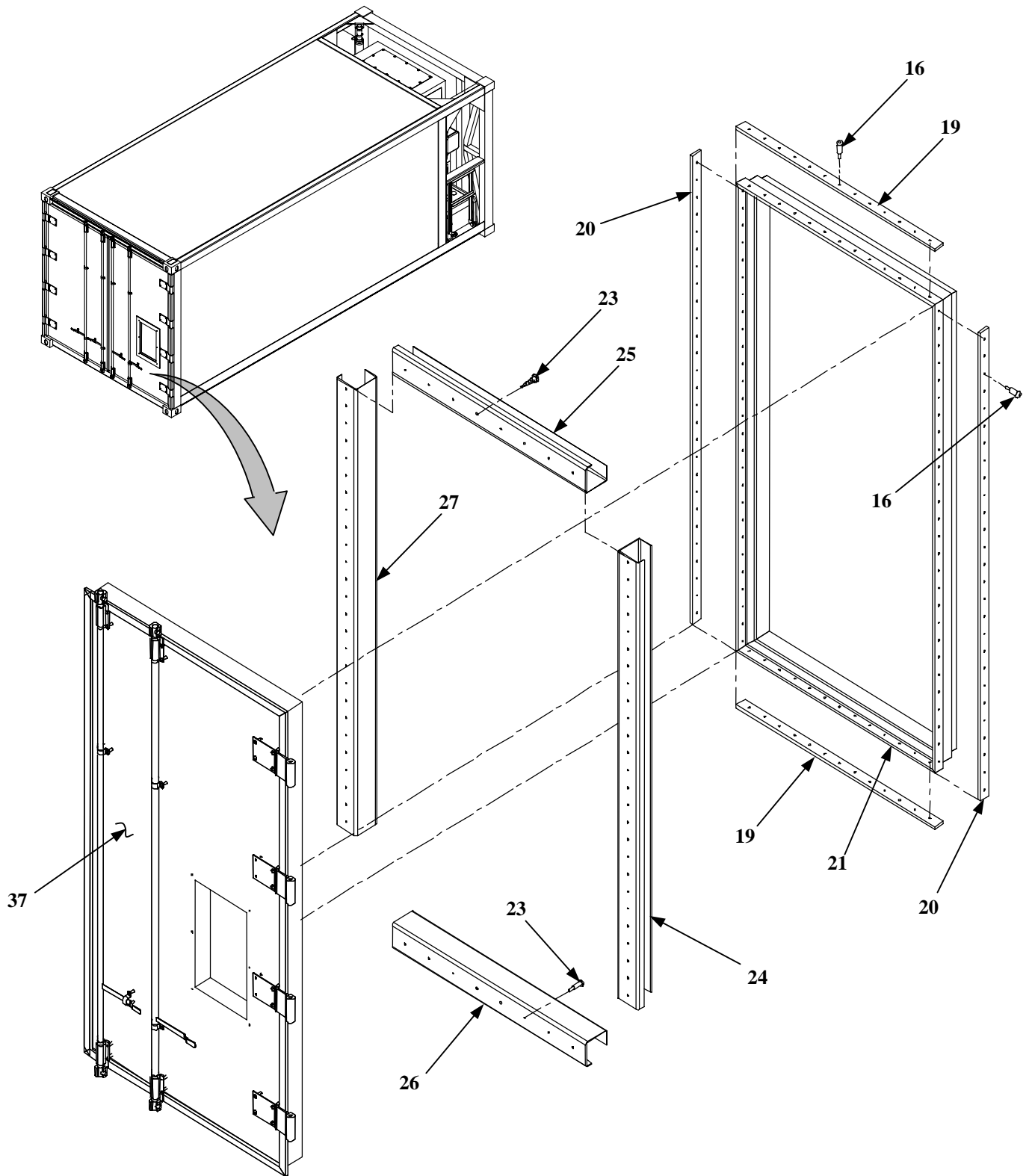


Figure 15. Right Hand Door Assembly (Sheet 3 of 4)

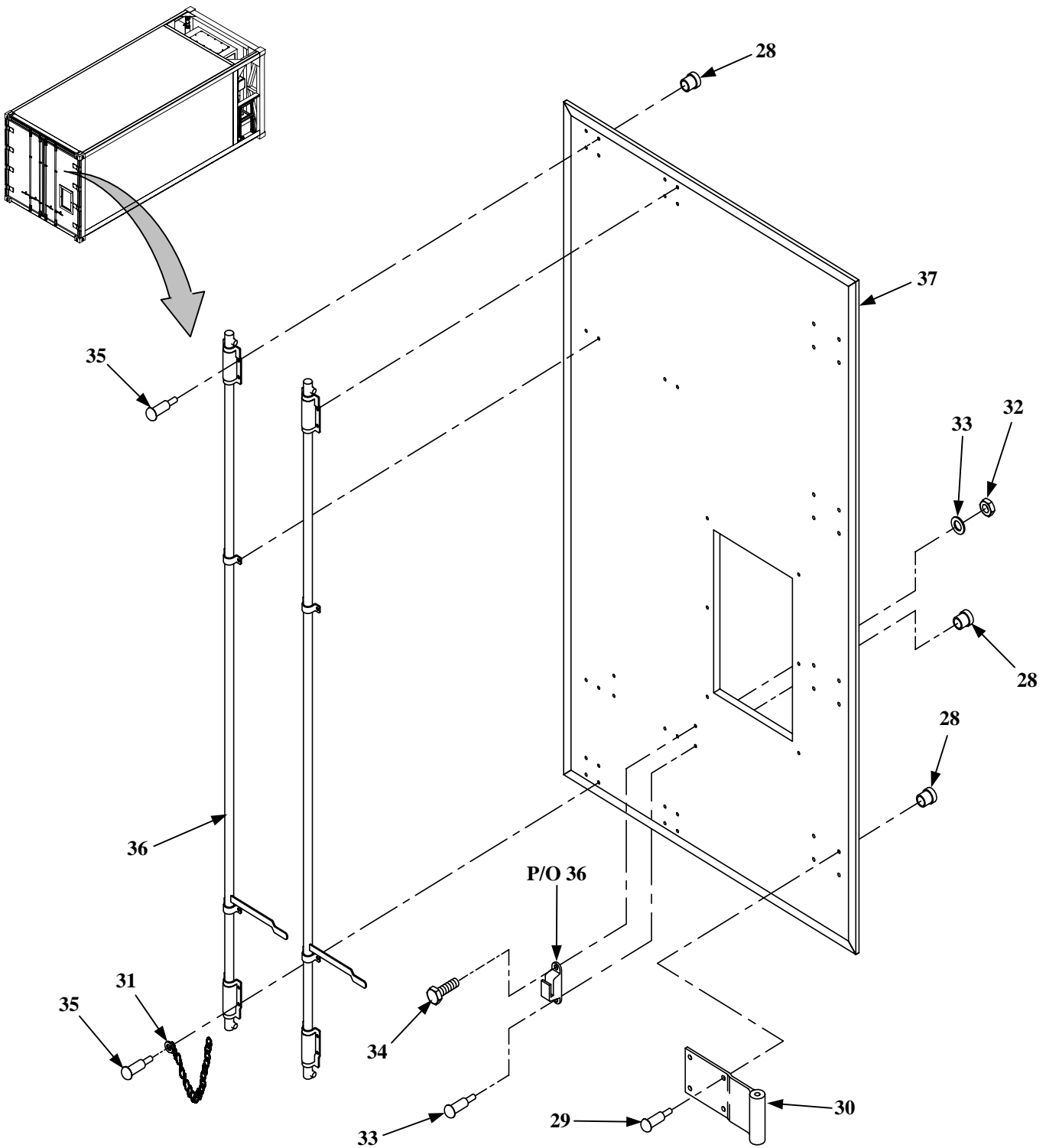


Figure 15. Right Hand Door Assembly (Sheet 4 of 4)

GROUP 05 CONTAINER ASSEMBLY – Continued

0064 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 15 RIGHT HAND DOOR ASSEMBLY						
1	XBFZZ		57877	P1054097	..PIN,HINGE	004
2	XBFZZ		57877	P105483	..WASHER,HINGE	008
3	XBFZZ		57877	P106241	..BUSHING	008
4	PBOFF		90598	30705-100	..DOOR ASSY,RIGHT	001
5	PAOZZ		90598	30707-100	...HANDLE,ESCAPE DOOR	006
6	PAOZZ	5310-00-945-0528	96906	MS9321-11	...WASHER,FLAT	006
7	XBOOO		90598	30704-100	...FRAME INSIDE ESCAPE	001
8	MOOZZ		90598	30704-2	....GASKET, 20.0 IN LG (MAKE FROM P/N 4111NWPSA,CAGE 59502)	002
9	MOOZZ		90598	30704-3	....GASKET, 17.0 IN LG (MAKE FROM P/N 4111NWPSA,CAGE 59502)	002
10	XBOZZ		90598	30723-1	....FRAME,INNER	001
11	XBOZZ		90598	30703-100	...DOOR ASSY,ESCAPE	001
12	XBOOO		90598	30704-100	...FRAME ASSY,ESCAPE	001
13	MOOZZ		90598	30704-2	....GASKET, 20.0 IN LG (MAKE FROM P/N 4111NWPSA,CAGE 59502)	002
14	MOOZZ		90598	30704-3	....GASKET, 17.0 IN LG (MAKE FROM P/N 4111NWPSA, CAGE 59502)	002
15	XBOZZ		90598	30722-1	....FRAME,OUTER ESCAPE	001
16	PAFZZ	5320-01-277-5883	07707	AD44BS	...RIVET,POP	128
17	XBOZZ		90598	30708-1	...SHEET,BACK RIGHT	001
18	PAOZZ	5340-00-663-2428	83058	SS48143K1611	...PLUG,BUTTON	006
19	PAOZZ	9515-01-081-1397	90598	30387-1	...STRIP,RETAINING	002

GROUP 05 CONTAINER ASSEMBLY – Continued

0064 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 15 RIGHT HAND DOOR ASSEMBLY						
20	PAOZZ	9515-01-081-9610	90598	30388-1	...STRIP,RETAINING	002
21	PAOZZ	5330-01-074-3530	90598	30385-1	...SEAL DOOR	001
22	MOOZZ		90598	30705-10	...INSULATION,FOAM (MAKE FROM 30K415,CAGE 54577,LIQUID FOAM USE A/R)	001
23	XBOZZ		70519	A34N-1902	...SCREW,SHEETMETAL	051
24	XBOZZ		90598	30368-1	...FRAME,RETAINER	001
25	XBOZZ		90598	30369-1	...FRAME,RETAINER	001
26	XBOZZ		90598	30369-2	...FRAME,RETAINER	001
27	XBOZZ		90598	30486-1	...FRAME,RETAINER	001
28	XBOZZ		93907	890-60008-100	...NUT,CAMTAINER	042
29	XBOZZ		93907	880-84165-100	...BOLT,CAMTAINER	034
30	XBOZZ		57877	P107855	...HINGE	004
31	PAOZZ	4010-01-074-2004	90598	30436-100	...CHAIN ASSY,DOOR	001
32	PAOZZ	5310-00-087-4652	96906	MS51922-17	...NUT,SELF LOCKING	004
33	PAOZZ	5310-00-080-6004	96906	MS27183-14	...WASHER,FLAT	004
34	PAOZZ	5305-00-269-3216	96906	MS90725-66	...SCREW,CAP	004
35	XBOZZ		93907	880-82920-100	...BOLT,CAMTAINER	008
36	XBOZZ		57877	OL-1104-RH	...POWER BRACE ASSY	002
37	XBOZZ		90598	30709-1	...DOOR,RIGHT HAND	001
END OF FIGURE						

END OF WORK PACKAGE.

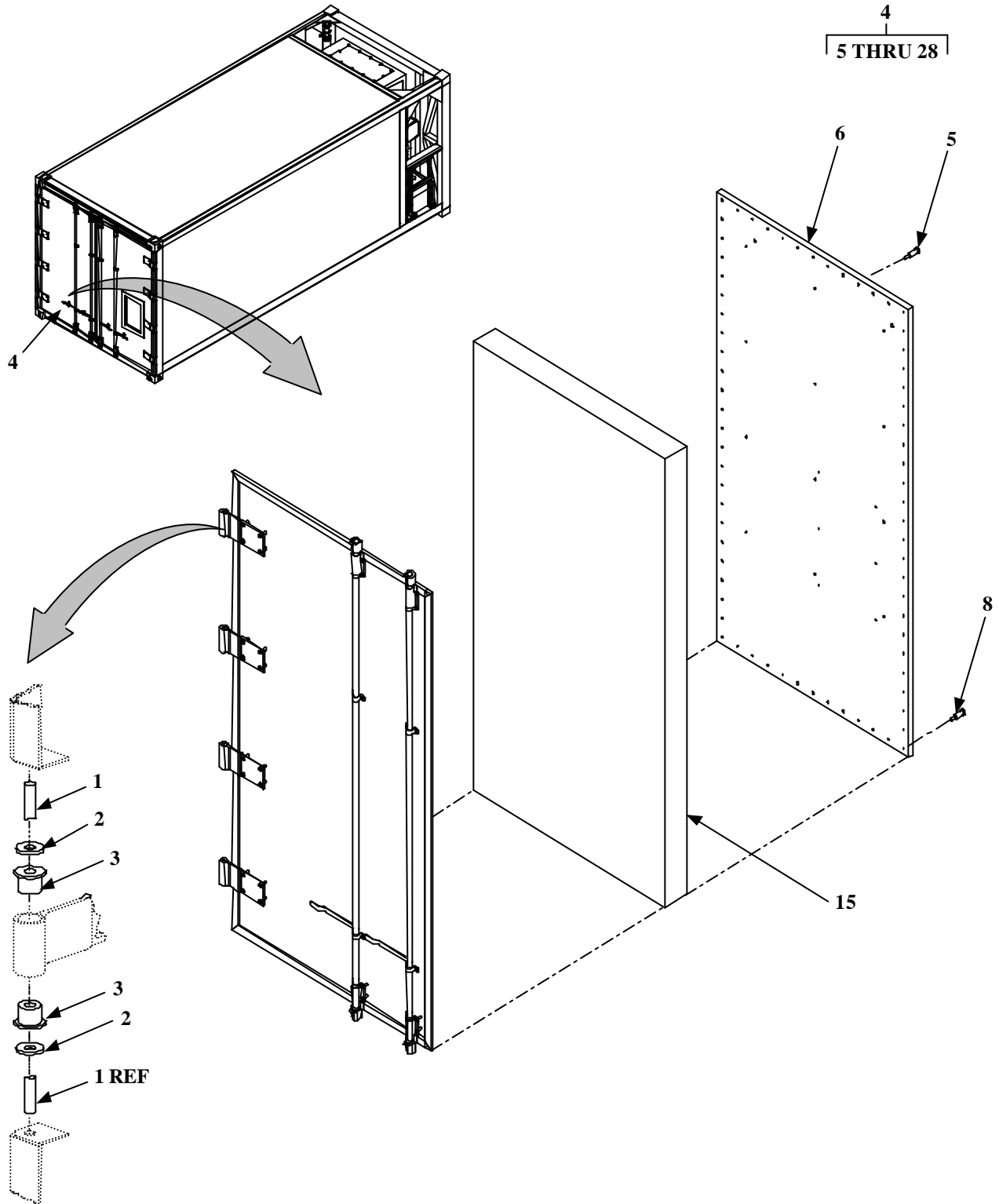


Figure 16. Left Hand Door Assembly (Sheet 1 of 3)

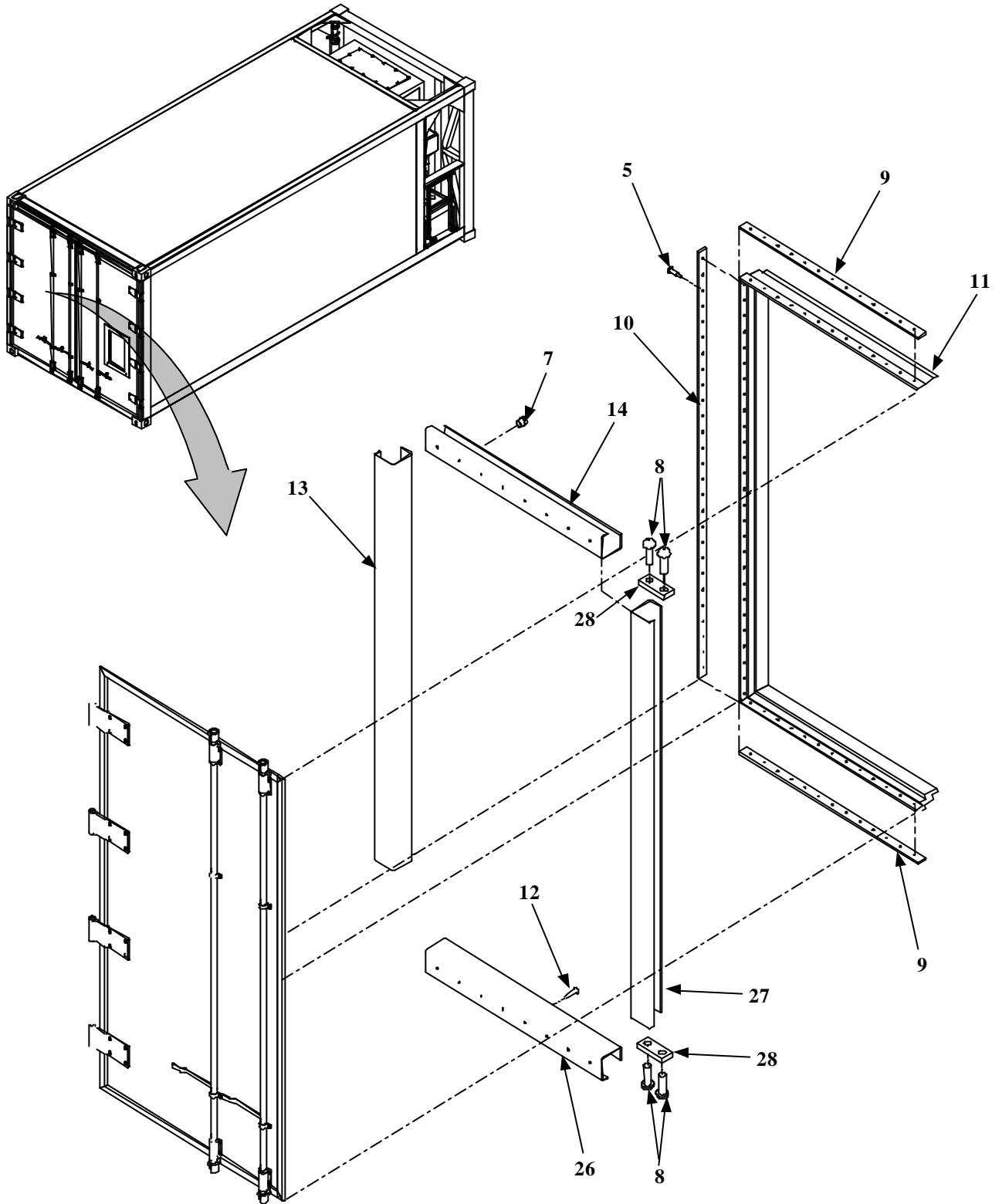


Figure 16. Left Hand Door Assembly (Sheet 2 of 3)

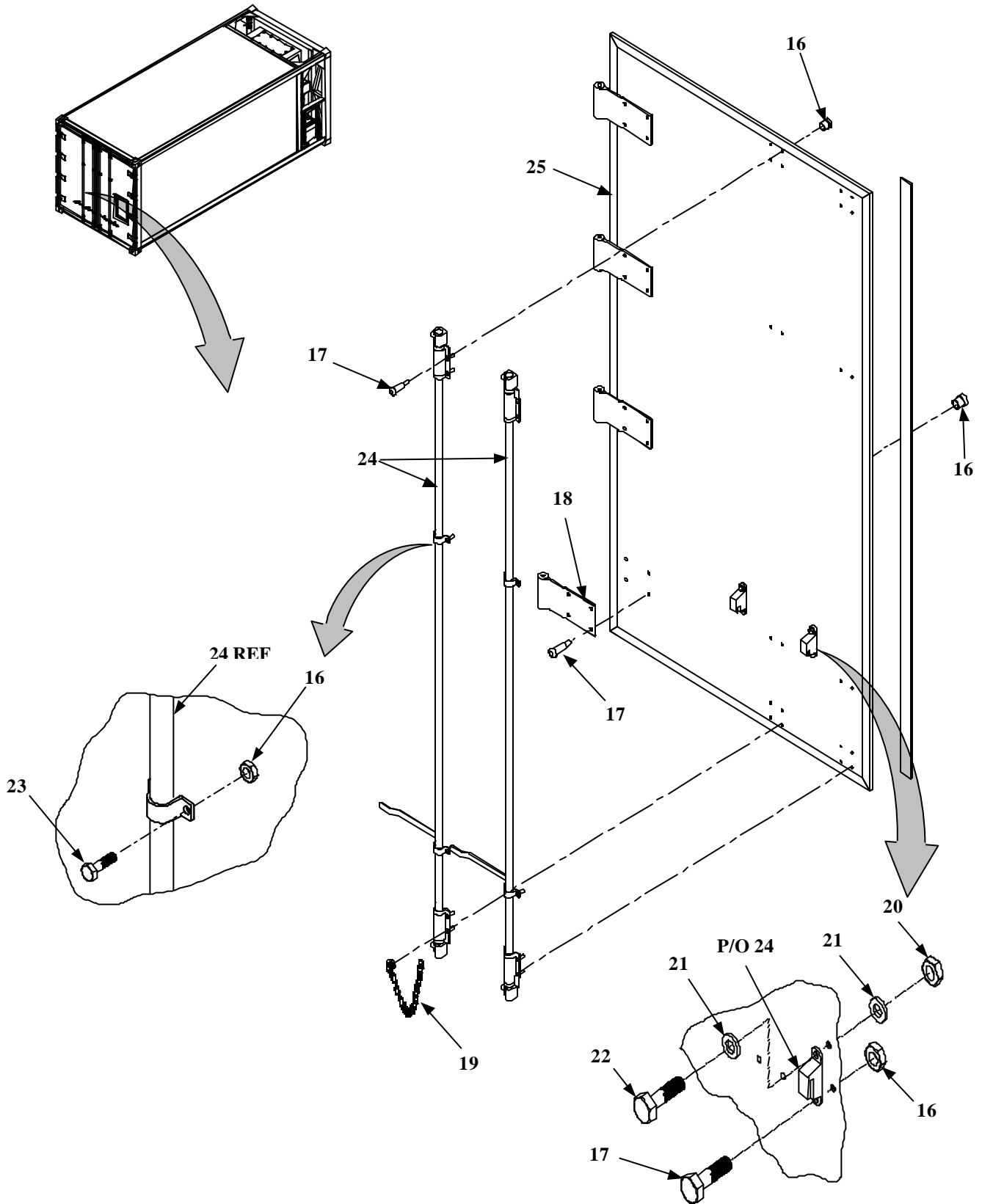


Figure 16. Left Hand Door Assembly (Sheet 3 of 3)

GROUP 05 CONTAINER ASSEMBLY – Continued

0065 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 16 LEFT HAND DOOR ASSEMBLY						
1	XBOZZ		57877	P1054097	..PIN,HINGE	004
2	XBOZZ		57877	P105483	..WASHER,HINGE	008
3	XBOZZ		57877	P106241	..BUSHING,SLEEVE	008
4	PBOFF		90598	30706-100	..DOOR ASSY,LEFT HAND	001
5	XBOZZ		07707	AD44BS	...RIVET,POPPET	086
6	XBOZZ		90598	30374-1	...SHEET,BACK	001
7	PAOZZ	5340-00-663-2428	83058	SS48143K1611	...PLUG,BUTTON	005
8	PAOZZ	5320-00-275-8344	07707	AD45BS	...RIVET,BLIND	023
9	PAOZZ	9150-01-078-6042	90598	30391-1	...STRIP,RETAINER	002
10	PAOZZ	9150-01-081-9610	90598	30388-1	...STRIP,RETAINER	002
11	PAOZZ	5330-01-074-1890	90598	30386-1	...SEAL,DOOR	001
12	XBOZZ		70519	A34N-1902	...SCREW,SHEETMETAL	050
13	XBOZZ		90598	30368-2	...FRAME,RETAINER	002
14	XBOZZ		90598	30370-1	...FRAME,RETAINER	002
15	MOOZZ		90598	30706-10	...INSULATION,FOAM (MAKE FROM 30K451,CAGE 54577, LIQUID FOAM USE A/R)	001
16	XBOZZ		93907	890-60008-100	...NUT,CAMTAINER	042
17	XBOZZ		93907	880-84165-100	...BOLT,CAMTAINER	034
18	XBOZZ		57877	P107855	...HINGE	004
19	PAOZZ	4010-01-074-2004	90598	30436-100	...CHAIN ASSY,DOOR	001
20	PAOZZ	5310-00-087-4652	96906	MS51922-17	...NUT,SELF LOCKING	002
21	PAOZZ	5310-00-080-6004	96906	MS27183-14	...WASHER,FLAT	004
22	PAOZZ	5305-00-269-3216	96906	MS90725-66	...SCREW,CAP	002

GROUP 05 CONTAINER ASSEMBLY – Continued

0065 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 16 LEFT HAND DOOR ASSEMBLY						
23	XBOZZ		93907	821-82920-100	...BOLT,CAMTAINER	008
24	XBOZZ		57877	DL-1104-LH	...POWER BRACE ASSY	002
25	XBOZZ		90598	30488-1	...DOOR,LEFT HAND	001
26	XBOZZ		90598	30367-2	...FRAME,RETAINER	001
27	XBOZZ		90598	30370-2	...FRAME,RETAINER	001
28	XBOZZ		90598	30733-1	...PLATE,BACKUP,CAP	002
END OF FIGURE						

END OF WORK PACKAGE.

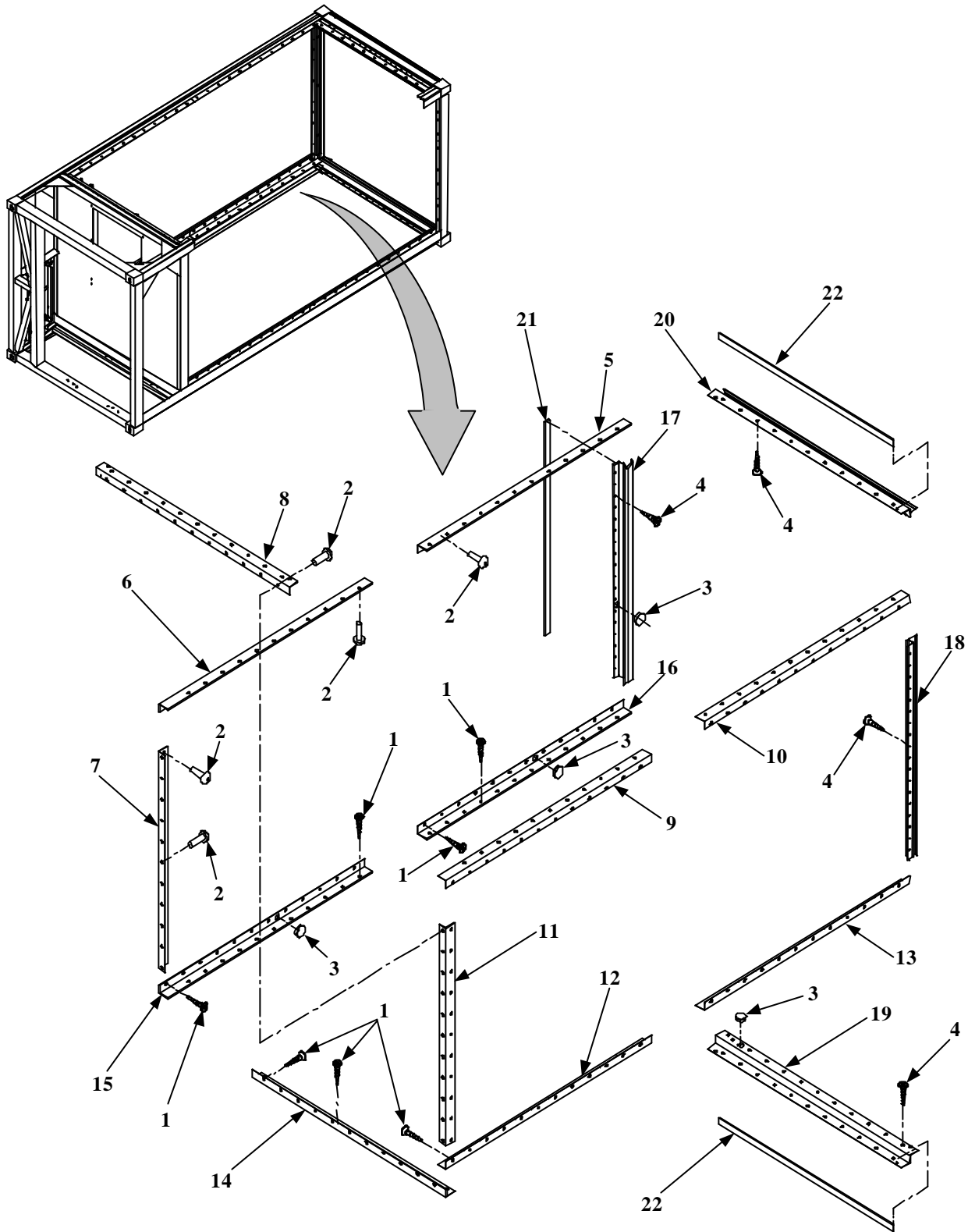


Figure 17. Angles and Zee's

GROUP 05 CONTAINER ASSEMBLY – Continued

0066 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 17 ANGLES AND ZEE'S						
1	XBOZZ		70519	A1N-1904	..SCREW, SHEETMETAL	224
2	XBOZZ		94222	10-15-706-13	..RIVET, 3G LINER	012
3	PAOZZ	5340-00-663-2428	83058	SS48143K1611	..PLUG, BOTTOM	044
4	XBOZZ		BU495	30677-48	..SCREW, THD CUTTING (#82CSK, CROSS HEAD, 10- 24THD, T-410 CRES, TY F, 3/4 IN)	056
5	XBOZZ		90598	30471-1	..ANGLE, TOP, REAR HALF	001
6	XBOZZ		90598	30470-1	..ANGLE, TOP FRONT	001
7	XBOZZ		90598	30467-2	..ANGLE, VERTICAL	001
8	XBOZZ		90598	30468-1	..ANGLE, FRONT TOP	001
9	XBOZZ		90598	30470-2	..ANGLE, TOP FRONT	001
10	XBOZZ		90598	30471-2	..ANGLE, TOP, REAR	001
11	XBOZZ		90598	30467-1	..ANGLE, VERTICAL	001
12	XBOZZ		90598	30472-2	..ANGLE, BOTTOM FRONT	001
13	XBOZZ		90598	30473-2	..ANGLE, BOTTOM REAR	001
14	XBOZZ		90598	30469-1	..ANGLE, FRONT BOTTOM	001
15	XBOZZ		90598	30472-1	..ANGLE, BOTTOM FRONT	001
16	XBOZZ		90598	30473-1	..ANGLE, BOTTOM REAR	001
17	XBOZZ		90598	30476-1	..ZEE, WALL	001
18	XBOZZ		90598	30476-2	..ZEE, WALL	001
19	XBOZZ		90598	30743-1	..ZEE, FLOOR	001
20	XBOZZ		90598	30475-1	..ZEE, ROOF	001
21	XBOZZ		90598	30478-1	..INSULATOR, VERTICAL	002

TM 55-8145-221-14&P

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
22	XBOZZ		90598	30477-1	..INSULATOR, HORIZONTAL	002
END OF FIGURE						

END OF WORK PACKAGE.

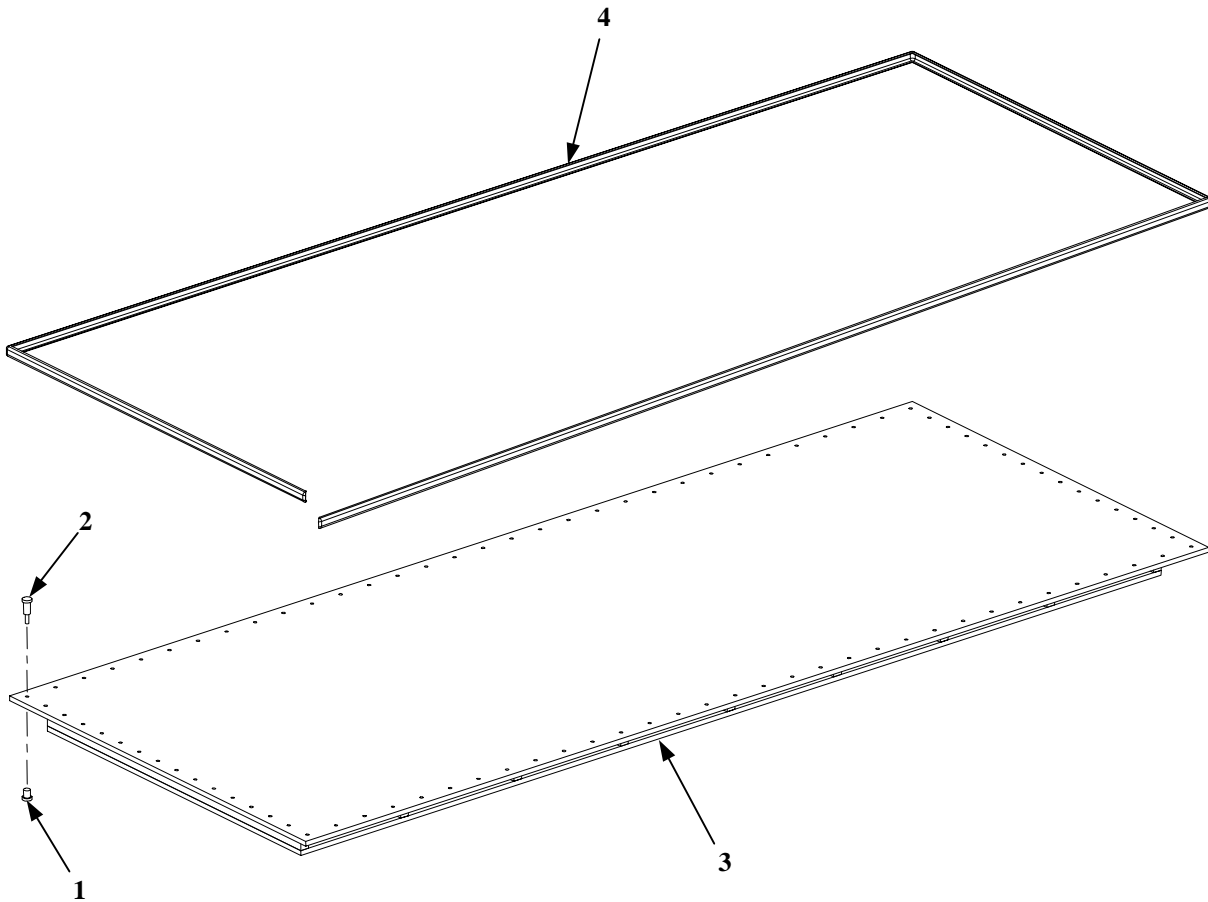


Figure 18. Roof Assembly

GROUP 05 CONTAINER ASSEMBLY – Continued

0067 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 18 ROOF ASSEMBLY						
1	XBFZZ		93907	890-60008-100	..NUT,CAMTAINER	138
2	XBFZZ		93907	890-82120-100	..BOLT,CAMTAINER	138
3	XBFZZ		90598	30340-1	..ROOF	001
4	MFFZZ		90598	30677-28	..ROPE,FILLER (MAKE FROM P/N 23010101,CAGE 12820, 47 FT)	001
END OF FIGURE						

END OF WORK PACKAGE.

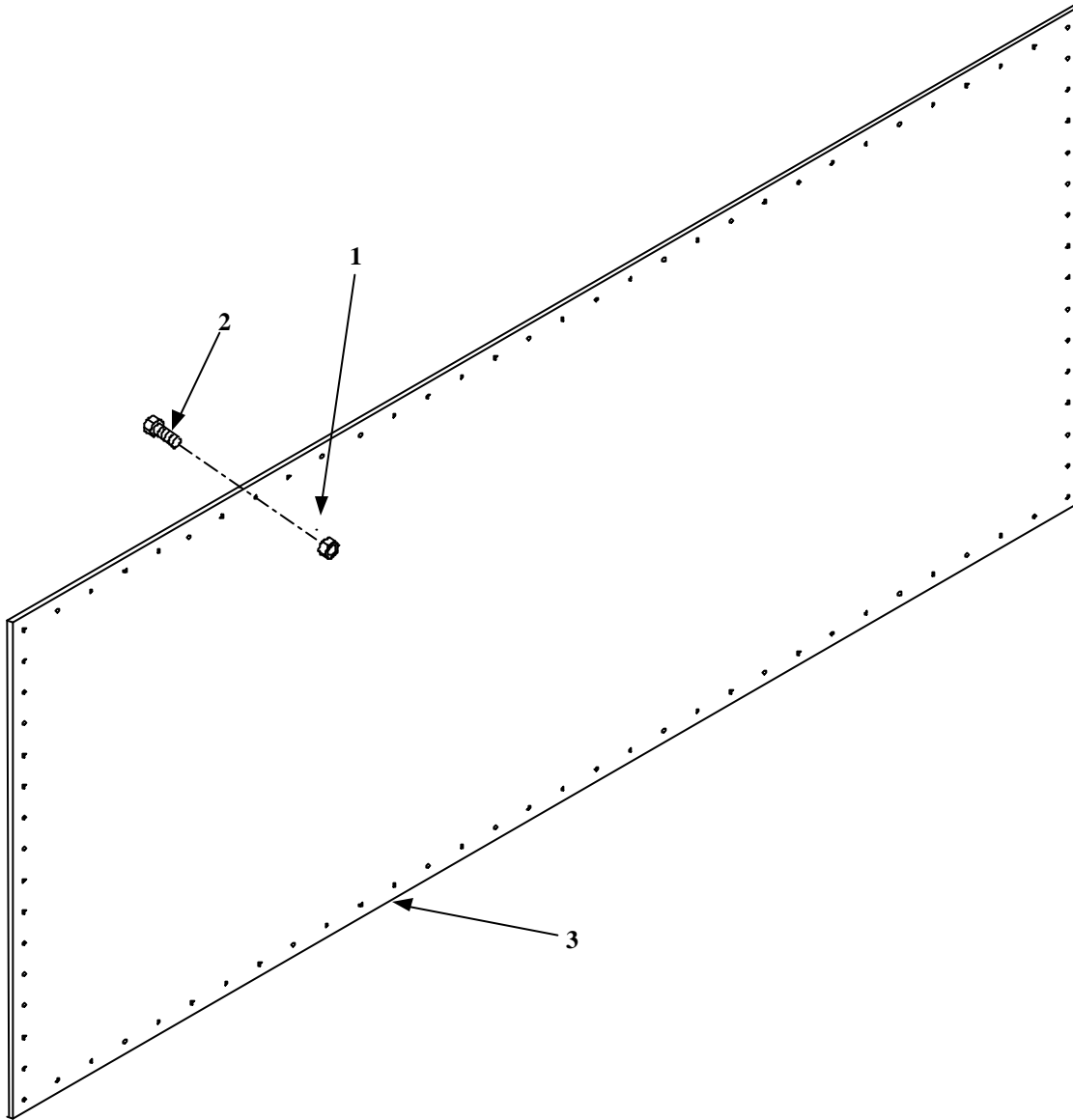


Figure 19. Side Panels

GROUP 05 CONTAINER ASSEMBLY – Continued

0068 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 19 SIDE PANELS						
1	XBFZZ		93907	890-58000-100	..NUT,CAMTAINER	244
2	XBFZZ		93907	880-84165-100	..BOLT,CAMTAINER	244
3	XBFZZ		90598	30341-1	..SIDE PANELS	002
END OF FIGURE						

END OF WORK PACKAGE.

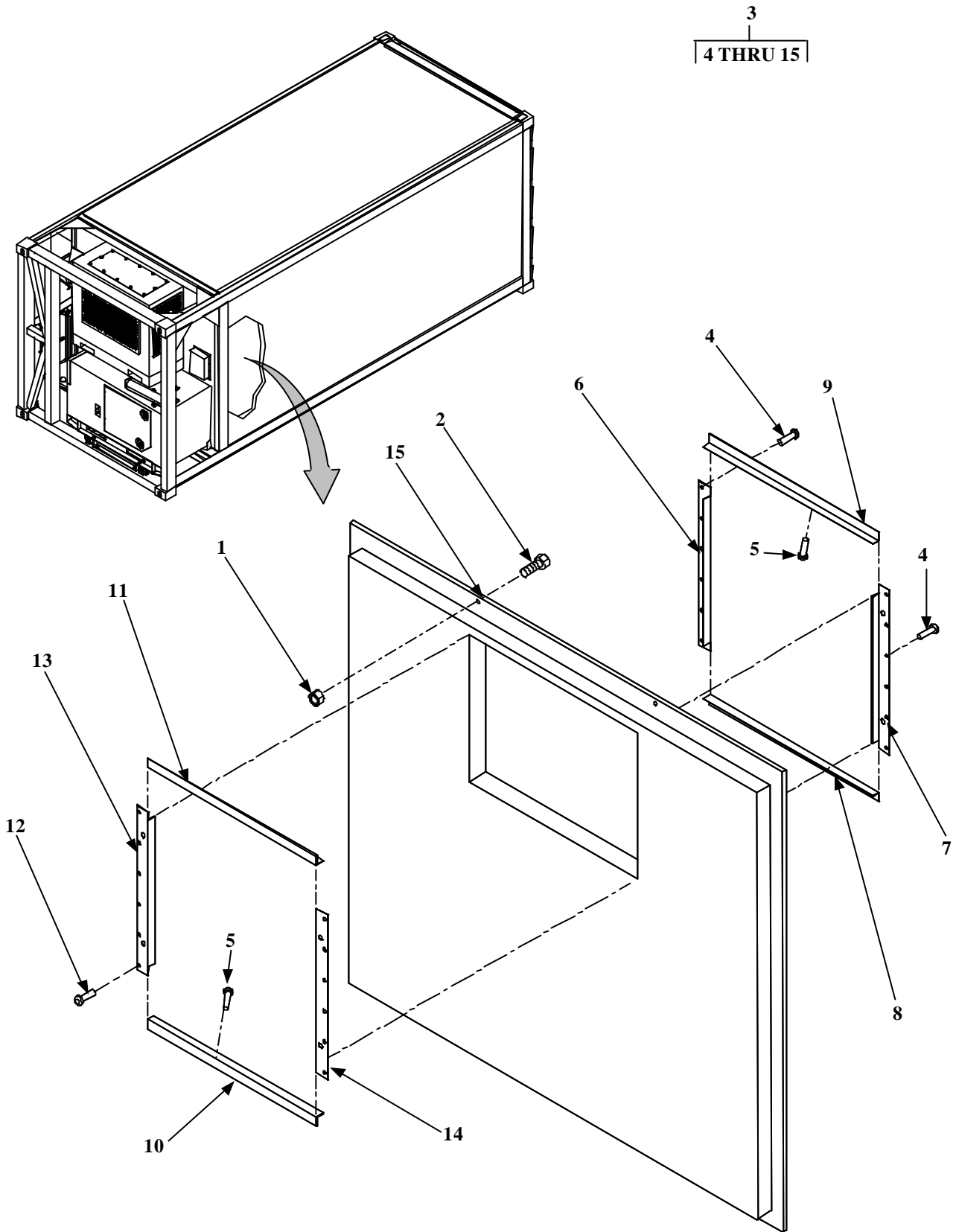


Figure 20. Front End Panel

GROUP 05 CONTAINER ASSEMBLY – Continued

0069 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 20 FRONT END PANEL						
1	XBFZZ		93907	890-60008-100	..NUT,CAMTAINER	045
2	XBFZZ		93907	880-82120-100	..BOLT,CAMTAINER	138
3	XBFFF		90598	30737-100	..PANEL ASSY,FRONT	001
4	XBFZZ		94222	10-15-706-13	...RIVET,3G LINER	042
5	PAFZZ		39428	90031A315	...SCREW,WOOD	008
6	XBFZZ		90598	30739-1	...ANGLE,OUTSIDE VERT	001
7	XBFZZ		90598	30739-2	...ANGLE,OUTSIDE VERT	001
8	XBFZZ		90598	30461-1	...ANGLE,BOTTOM	001
9	XBFZZ		90598	30738-1	...ANGLE,TOP OUTSIDE	001
10	XBFZZ		90598	30464-1	...ANGLE,BOTTOM INSIDE	001
11	XBFZZ		90598	30465-1	...ANGLE,TOP INSIDE	001
12	PAFZZ	5320-01-074-1543	94222	38-106-12-16	...RIVET,BLIND	012
13	XBFZZ		90598	30463-1	...ANGLE,INSIDE VERTIC	001
14	XBFZZ		90598	30463-2	...ANGLE,INSIDE VERTIC	001
15	XBFZZ		90598	30735-1	...FRONT PANEL	001
END OF FIGURE						

END OF WORK PACKAGE.

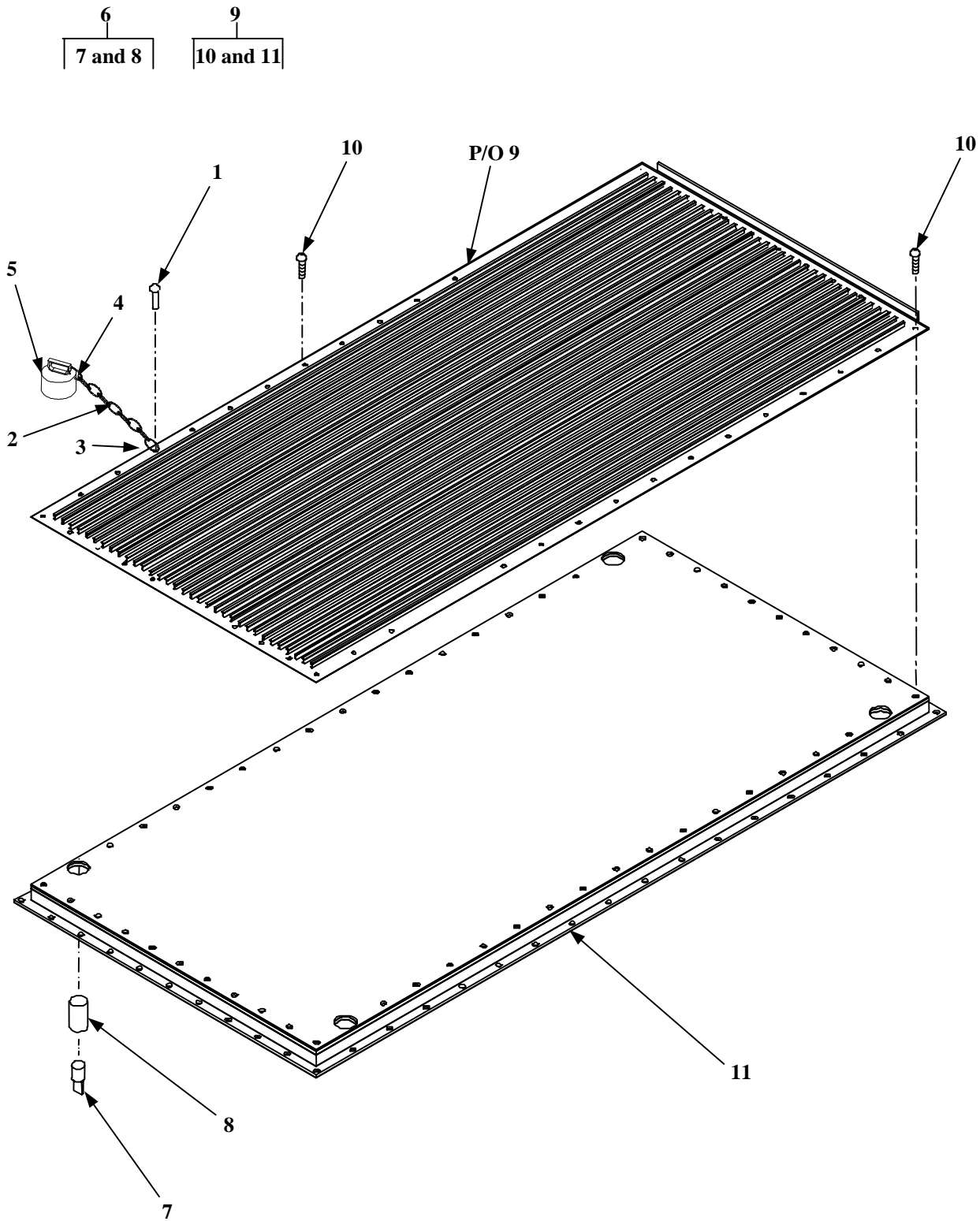


Figure 21. Floor Panel

GROUP 05 CONTAINER ASSEMBLY – Continued**0070 00**

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 21 FLOOR PANEL						
1	PAFZZ	5320-01-277-5883	13932	AD44BS	..RIVET,BLIND	004
2	MOOZZ		90598	30677-53	..CHAIN,BEAD SIZE 10 ,6.0 IN LG (MAKE FROM P/N 3606T19,CAGE 39428)	004
3	PAOZZ	4030-01-285-2882	39428	3606T33	..COUPLING END (100 PER BOX)	008
4	XBOZZ		39428	86805T35	..RING,KEY	004
5	XBOZZ		39428	2598K28	..PLUG,QUICK SNAP	004
6	XBOOO		90598	30308-100	..DRAIN,FLOOR	004
7	MOOZZ		90598	30308-2	...HOSE,NEOPRENE ,4.44 IN LG (MAKE FROM P/N 00370143, CAGE 87585)	001
8	MOOZZ		90598	30308-1	...PIPE,PVC,3.19 IN LG (MAKE FROM P/N 4880K12,CAGE 39428)	001
9	XBFFF		90598	30327-100	..FLOOR ASSEMBLY	001
10	XBFZZ		70519	A2N-1905	...SCREW,SHEETMETAL	064
11	XBFZZ		90598	30347-1	...FLOOR,PANEL	001
END OF FIGURE						

END OF WORK PACKAGE.

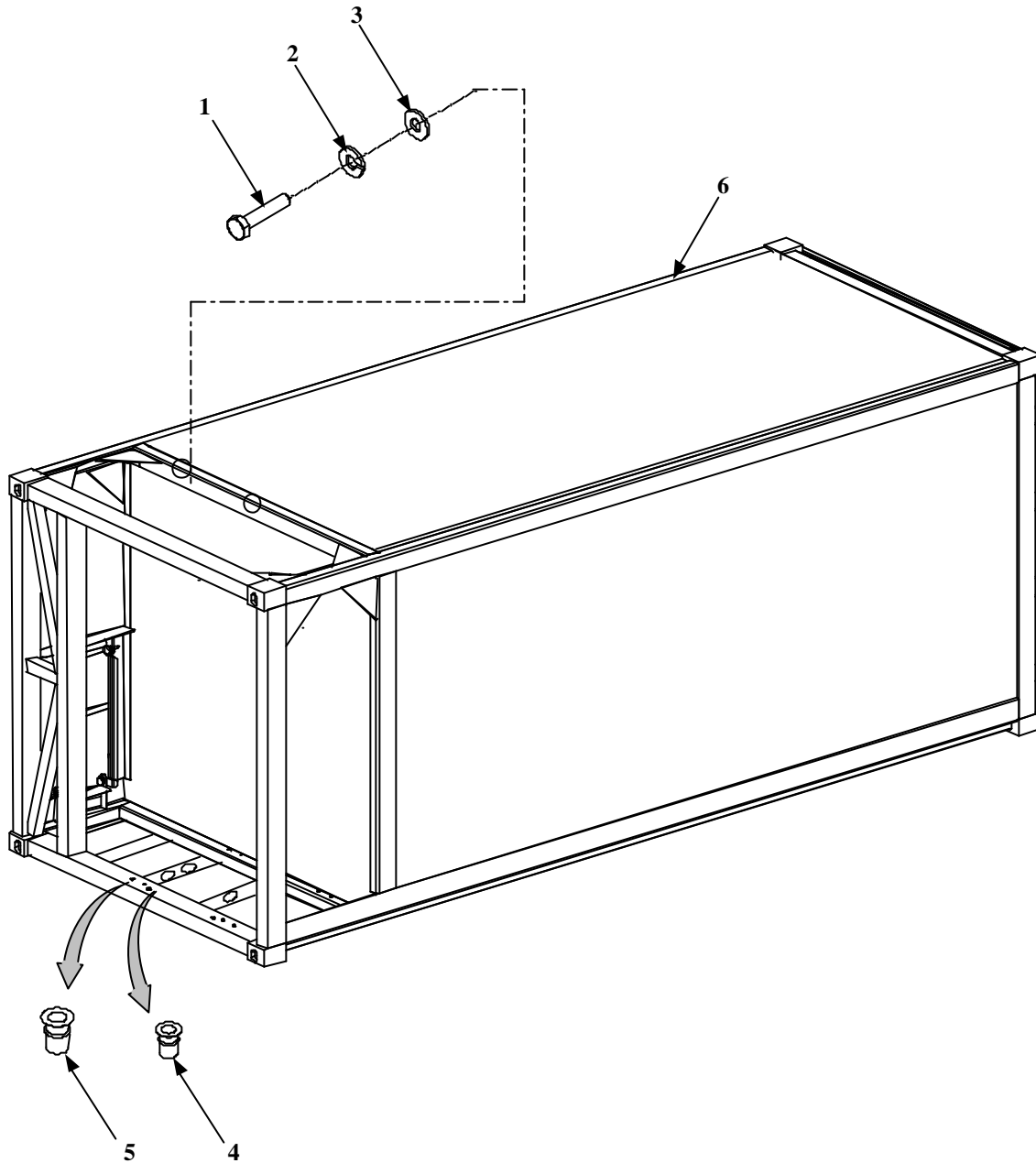


Figure 22. Container Weldment Assembly

GROUP 05 CONTAINER ASSEMBLY – Continued

0071 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 05 CONTAINER ASSEMBLY FIG. 22 CONTAINER WELDMENT ASSEMBLY						
1	PAOZZ	5305-01-417-8927	96906	MS90725-116	..SCREW,CAP,HEX HD	004
2	PAOZZ	5310-00-003-4094	96906	MS35338-48	..WASHER,LOCK	004
3	PAOZZ	5310-00-809-5998	96906	MS27183-18	..WASHER,FLAT	004
4	XBFZZ		0VK23	S50K526	..RIVNUT,COUNTERSUNK	002
5	XBFZZ	5310-01-219-7200	0VK23	S31K331	..RIVNUT,COUNTERSUNK	012
6	XBFZZ		90598	30675-100	..CONTAINER,WELDMENT	001
END OF FIGURE						

END OF WORK PACKAGE.

GROUP 06 BULK ITEMS

0072 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 06 BULK ITEMS FIG. BULK						
1	PAOZZ	9320-01-311-8832	86730	4111NPSA0125X 05	TAPE,ADHESIVE RUBBER	V
2	PAOZZ	4010-01-005-4775	81349	M83420/3-001	ROPE,WIRE .06DIA	V
3	PAOZZ	9320-01-311-8832	86730	411D1/8X2X12 1/2	RUBBER,GASKET	001
4	PAOZZ		2B411	14GA BLK TYPE THHN S	WIRE,BLACK,14GA (STRANDED,COPPER,600VOLTS ,PVC INSUL, NYLON JACK, 500 FT)	V
5	PAOZZ		2B411	14GA GRN TYPE THHN S	WIRE,GREEN,14GA (STRANDED,COPPER,600VOLTS ,PVC INSUL, NYLON JACK, 500 FT)	V
6	PAOZZ		2B411	14GA WHT TYPE THHN S	.WIRE,WHITE,14GA (STRANDED,COPPER,600VOLTS ,PVC INSUL, NYLON JACK, 500 FT)	V
7	PAOZZ		2B411	1/2 EMT THWL	CONDUIT,.50DIA (1/2 THINWALL,GALV STL,.706 OD,ENAMELED INTER COATING)	001
8	PAOZZ	5975-01-123-8811	93908	49005	CONDUIT,PVC,.50DIA	001
9	PAOZZ	9320-01-214-3617	59502	4111NWPSA	TAPE,ADHESIVE RUBBE	001
10	PAOZZ		87585	370143	HOSE,RUBBER (3/4 FLAT COLLAPSIBLE, NEOPRENE, 3/64 WALL)	V
11	PAOZZ		39428	3603T19	CHAIN	V

GROUP 06 BULK ITEMS – Continued

0072 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP: 06 BULK ITEMS FIG. BULK						
12	PAFZZ		12820	23010101	FILLER ROPE,1/2 DIA (100 FT,.50 POLYETHLENE ETHAFOAM SEALANT ROD 2 LB)	001
13	PAFZZA		54577	30FK451	FOAM,URETHANE (1.75 DENSITY 1M GL EQUALS 300 LBS)	V
14	PAFZZ	9320-00-812-4218	76381	PF5423	TAPE,ADHESIVE (100 FT PER ROLL)	V
15	PAOZZ	4010-01-128-0940	39428	3606T19	CHAIN (500 FT PER SPOOL)	V
16	PAOZZ	4710-01-315-1654	39428	4880K12	PIPE,PVC,PLASTIC (3/4 NOMINAL,1.05 OD X .824 ID)	001
17	PAOZZ	5330-01-325-3506	81346	ASTM D1056- 91TY2,CLC	GASKET	001
18	PAOZZ		90598	30351-1	PLYWOOD,5/8TH	001
19	PAOZZ		81346	ASTM D1056- 91TY2,CLC	GASKETS (2.50W X .25THK)	V
20	PAOZZ	5530-00-051-0545	24054	PS1-66	PLYWOOD,5/8 THK	001
END OF FIGURE						

END OF WORK PACKAGE.

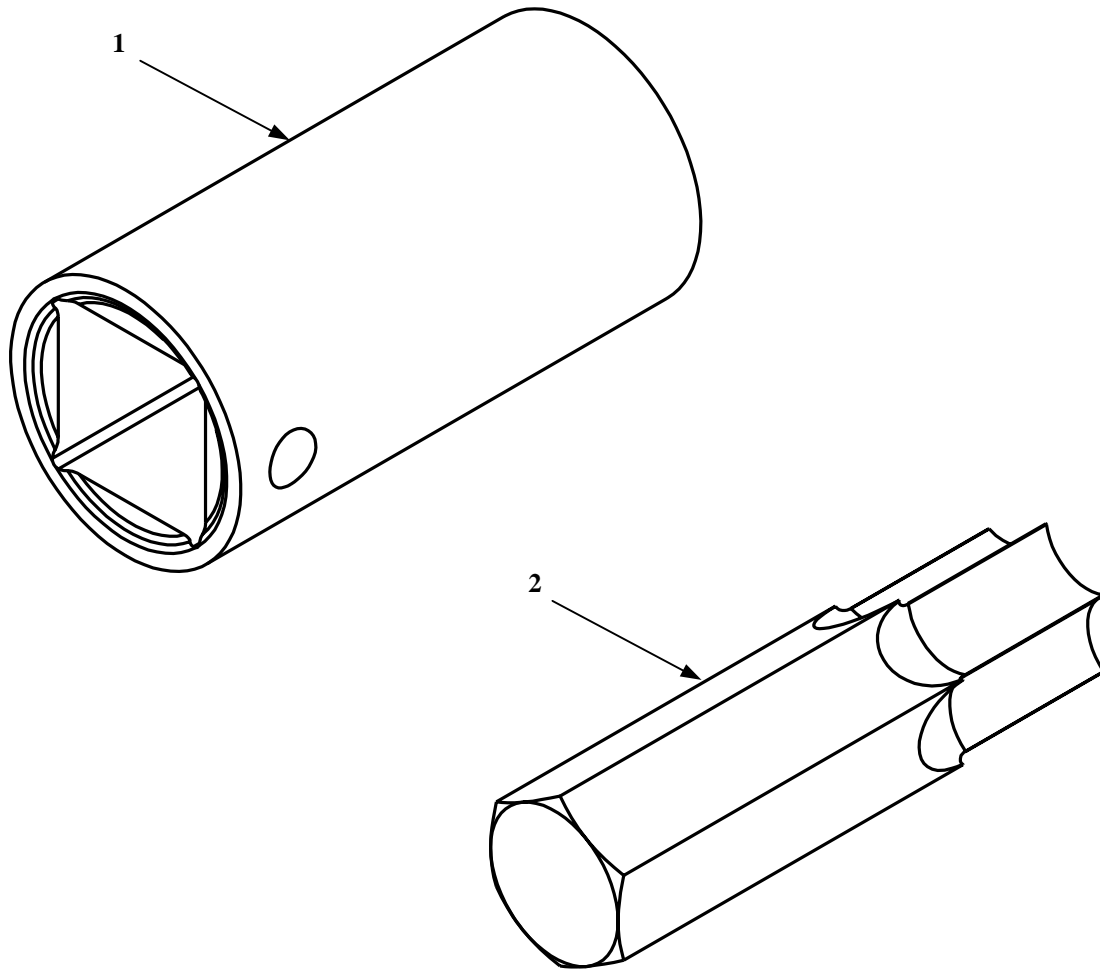


Figure 23. Special Tools

GROUP 07 SPECIAL TOOLS – Continued

0073 00

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP: 07 SPECIAL TOOLS FIG. 23 SPECIAL TOOLS	
1	PAOZZ	5310-01-091-3750	93907	375-05502-01	BIT, SCREWDRIVER	001
2	PAOZZ	5120-01-088-8833	93907	TX-5416	TOOL,DRIVE SOCKET	001
					END OF FIGURE	

END OF WORK PACKAGE.

TM 55-8145-221-14&P

WP 0074 00
NATIONAL STOCK NUMBER (NSN) INDEX
FOR
REFRIGERATED CONTAINER SYSTEM

NATIONAL STOCK NUMBER INDEX

0074 00

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5310-00-003-4094	22	2	5320-00-932-1972	6	18
5310-00-014-5850	1	3	5310-00-934-9751	11	1
5305-00-014-9921	8	3	5310-00-945-0528	15	6
5310-00-045-3296	1	2	5305-00-954-4295	3	8
5310-00-045-3296	11	2	5975-00-956-1366	12	5
5530-00-051-0545	BULK	20	5305-00-984-6212	1	1
5310-00-056-3395	10	1	5305-00-993-2459	11	3
5305-00-068-0501	3	9	4010-01-005-4775	BULK	2
5310-00-080-6004	15	33	5305-01-006-2051	10	10
5310-00-080-6004	16	21	5995-01-014-5202	11	7
5310-00-081-4219	3	14	5975-01-055-5630	11	11
5310-00-087-4652	15	32	6685-01-072-0480	7	7
5310-00-087-4652	16	20	5320-01-074-1543	20	12
5330-00-107-4386	10	14	5320-01-074-1543	7	1
6240-00-143-3127	12	9	5330-01-074-1890	16	11
5940-00-143-4774	12	2	4010-01-074-2004	15	31
5940-00-143-4794	3	6	4010-01-074-2004	16	19
5975-00-179-0098	12	21	5330-01-074-3530	15	21
5305-00-180-1991	11	9	5325-01-074-3927	7	12
5305-00-180-1991	12	3	5940-01-078-2936	12	11
5305-00-180-1991	12	18	9150-01-078-6042	16	9
5305-00-180-1991	13	1	5975-01-080-2598	12	20
4010-00-181-9353	6	16	9515-01-081-1397	15	19
5306-00-225-8501	3	12	9515-01-081-9610	15	20
5306-00-234-9731	1	5	9150-01-081-9610	16	10
5305-00-269-3216	15	34	5120-01-088-8833	23	2
5305-00-269-3216	16	22	5310-01-091-3750	23	1
5320-00-275-8344	16	8	5975-01-123-8811	BULK	8
5975-00-296-1669	11	8	4010-01-128-0940	BULK	15
5310-00-462-9122	10	4	5340-01-134-6261	7	2
5975-00-497-5410	11	5	5305-01-210-4595	10	3
5310-00-550-1130	7	4	9320-01-214-3617	BULK	9
5310-00-576-5752	10	11	5310-01-219-7200	22	5
5310-00-582-5965	3	10	5306-01-244-8868	1	10
5310-00-584-5272	9	3	5310-01-270-1731	2	1
5340-00-663-2428	15	18	6115-01-275-5061	2	5
5340-00-663-2428	16	7	5320-01-277-5883	15	16
5340-00-663-2428	17	3	5320-01-277-5883	21	1
5315-00-682-2051	9	1	4030-01-285-2882	21	3
5940-00-682-2445	3	5	5430-01-303-2775	12	1
5310-00-761-6882	7	3	9320-01-311-8832	BULK	1
5310-00-763-8921	4	1	9320-01-311-8832	BULK	3
5305-00-782-9494	3	4	4710-01-315-1654	BULK	16
5310-00-809-4058	3	11	5330-01-325-3506	BULK	17
5310-00-809-5997	3	3	5305-01-325-8388	2	4
5310-00-809-5998	2	3	5310-01-334-4710	10	2
5310-00-809-5998	22	3	5310-01-335-4901	2	2
5310-00-809-5998	9	4	5310-01-338-7338	3	13
5310-00-809-8533	4	3	5310-01-339-6531	4	2
5310-00-809-8546	10	12	4110-01-394-6473	4	4
9320-00-812-4218	BULK	14	5305-01-417-8927	22	1
5320-00-882-8385	3	1			
5320-00-932-1972	6	11			

PART NUMBER INDEX

0075 00

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
A1N-1904	17	1	MS35338-46	10	2
A2N-1905	21	10	MS35338-48	2	2
A34N-1902	15	23	MS35338-48	22	2
A34N-1902	16	12	MS35338-48	9	3
AD42BSH	6	5	MS35338-51	4	2
AD42H	6	24	MS35493-74	8	3
AD44BS	15	16	MS35493-78	11	9
AD44BS	16	5	MS35493-78	12	3
AD44BS	21	1	MS35493-78	12	18
AD44BS	6	9	MS35493-78	13	1
AD44BS	6	22	MS35649-2382	10	1
AD45BS	16	8	MS35650-302	11	1
ASTM D1056-91TY2,CLC	BULK	17	MS51849-66	10	10
ASTM D1056-91TY2,CLC	BULK	19	MS51922-17	15	32
C5404X6X8	10	7	MS51922-17	16	20
CD5601-00-0320	3	17	MS51967-14	2	1
DL-1104-LH	16	24	MS51967-2	7	3
E942D	12	24	MS51967-23	4	1
E943D	11	11	MS9048-104	9	1
F9000RE	4	4	MS90725-113	2	4
K9435-T63	12	19	MS90725-114	3	4
M24243/6-A402H	6	11	MS90725-116	22	1
M24243/6-A402H	6	18	MS90725-37	3	12
M24243/6A-606H	3	1	MS90725-5	3	9
M83420/3-001	BULK	2	MS90725-60	10	3
MEP 803A	2	5	MS90725-66	15	34
MM297	10	8	MS90725-66	16	22
MS21333-65	7	2	MS90908-1	10	9
MS25036-112	3	6	MS9321-11	15	6
MS25036-153	12	2	OL-1104-RH	15	36
MS25036-158	3	5	P1054097	15	1
MS27183-10	3	11	P1054097	16	1
MS27183-12	3	14	P105483	15	2
MS27183-14	10	4	P105483	16	2
MS27183-14	15	33	P106241	15	3
MS27183-14	16	21	P106241	16	3
MS27183-17	3	3	P107855	15	30
MS27183-18	2	3	P107855	16	18
MS27183-18	22	3	PF5423	BULK	14
MS27183-18	9	4	PS1-66	BULK	20
MS27183-23	4	3	RB-2237	12	11
MS27183-42	1	3	S31K331	22	5
MS27183-8	10	12	S50K526	22	4
MS35190-287	3	8	SC-D20648-ZE	6	12
MS35206-265	1	1	SC-D-20648-ZE	6	25
MS35207-283	11	3	SC-D20650-14-ZE	6	6
MS35333-39	10	11	SC-D20650-14-ZE	6	19
MS35333-40	7	4	SS48143K1611	15	18
MS35338-43	1	2	SS48143K1611	16	7
MS35338-43	11	2	SS48143K1611	17	3
MS35338-44	3	10	TX-5416	23	2
MS35338-45	3	13	VCG-15	12	7

PART NUMBER INDEX – Continued

0075 00

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
VF-151	12	8	30403-1	6	14
VP151	12	10	30403-1	6	27
00150603	7	10	30404-100	6	23
00370143	BULK	10	30405-100	6	4
094521020	7	8	30405-2	6	7
1/2 EMT THWL	BULK	7	30406-1	6	13
100A	12	9	30407-100	6	10
10-15-706-13	17	2	30408-1	6	8
10-15-706-13	20	4	30408-1	6	21
133	7	6	30408-100	6	17
14GA BLK TYPE THHN S	BULK	4	30408-2	6	20
14GA GRN TYPE THHN S	BULK	5	30411-1	12	14
14GA WHT TYPE THHN S	BULK	6	30416	7	7
151	12	5	30436-100	15	31
15-423	10	14	30436-100	16	19
17409	11	7	3043T18	1	10
1TR10-130ST	10	15	3043T32	1	5
2005-065	13	3	30441-1	8	4
216	12	1	30461-1	20	8
22-250	1	6	30463-1	20	13
23010101	BULK	12	30463-2	20	14
240-AL	11	5	30464-1	20	10
2521	11	8	30465-1	20	11
2598K28	21	5	30467-1	17	11
270-L	11	10	30467-2	17	7
270-L	12	4	30468-1	17	8
300676-39	12	13	30469-1	17	14
30-076	12	12	30470-1	17	6
30308-1	21	8	30470-2	17	9
30308-100	21	6	30471-1	17	5
30308-2	21	7	30471-2	17	10
30327-100	21	9	30472-1	17	15
30340-1	18	3	30472-2	17	12
30341-1	19	3	30473-1	17	16
30347-1	21	11	30473-2	17	13
30351-1	BULK	18	30475-1	17	20
30367-2	16	26	30476-1	17	17
30368-1	15	24	30476-2	17	18
30368-2	16	13	30477-1	17	22
30369-1	15	25	30478-1	17	21
30369-2	15	26	30486-1	15	27
30370-1	16	14	30488-1	16	25
30370-2	16	27	30669-100	3	16
30374-1	16	6	30670-1	3	15
30385-1	15	21	30672-100	10	5
30386-1	16	11	30675-100	22	6
30387-1	15	19	30676	11	6
30388-1	15	20	30676-200	5	1
30388-1	16	10	30676-21	12	25
30391-1	16	9	30676-24	12	23
30399-2	9	2	30676-25	12	22
30402-1	6	26	30676-38	12	15

PART NUMBER INDEX – Continued

0075 00

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
30676-40	12	16	3706T13	8	2
30676-41	12	17	38-104-05-13	6	1
30677-100	14	2	38-104-12-13	6	15
30677-28	18	4	38-106-12-16	20	12
30677-48	17	4	38-106-12-16	7	1
30677-53	21	2	3885	7	12
30680-100	9	5	4111NPSA0125X05	BULK	1
30695-100	3	2	4111NWPSA	BULK	9
30695-5	3	7	411D1/8X2X12 1/2	BULK	3
30696-1	1	12	44605K117	1	13
30697-1	1	7	44705K83	10	16
30703-100	15	11	4549K575	12	6
30704-100	15	7	4880K12	BULK	16
30704-100	15	12	49005	BULK	8
30704-2	15	8	52305A06-4	6	16
30704-2	15	13	60101102	7	9
30704-3	15	9	64400101	7	11
30704-3	15	14	651203	13	2
30705-10	15	22	6781-9-8 1/4	10	13
30705-100	15	4	80-TX55	23	1
30706-10	16	15	821-82920-100	16	23
30706-100	16	4	830FS-06	10	6
30707-100	15	5	86805T35	21	4
30708-1	15	17	880-82120-100	20	2
30709-1	15	37	880-82920-100	15	35
30710-1	6	2	880-84165-100	15	29
30711-100	1	9	880-84165-100	16	17
30715-1	6	3	880-84165-100	19	2
30722-1	15	15	8876T37	11	4
30723-1	15	10	890-58000-100	19	1
30733-1	16	28	890-60008-100	15	28
30734-100	8	1	890-60008-100	16	16
30735-1	20	15	890-60008-100	18	1
30737-100	20	3	890-60008-100	20	1
30738-1	20	9	890-82120-100	18	2
30739-1	20	6	90031A315	20	5
30739-2	20	7	91324A430	1	8
30741-100	1	4	91563A349	4	9
30742-1	4	8	9376K115	7	5
30742-100	4	5	95T050	12	21
30742-2	4	7	96T050	12	20
30742-3	4	6			
30743-1	17	19			
30747-1	1	11			
30749-100	1	14			
30750-100	2	6			
30750-100	3	18			
30FK451	BULK	13			
312KA	14	1			
3603T19	BULK	11			
3606T19	BULK	15			
3606T33	21	3			

WP 0076 00
FIGURE AND ITEM NUMBER (FIG) INDEX
FOR
REFRIGERATED CONTAINER SYSTEM

FIGURE AND ITEM NUMBER INDEX

0076 00

FIG.	ITEM	PART NUMBER	FIG.	ITEM	PART NUMBER
BULK	1	4111NPSA0125X05	3	13	MS35338-45
BULK	2	M83420/3-001	3	14	MS27183-12
BULK	3	411D1/8X2X12 1/2	3	15	30670-1
BULK	4	14GA BLK TYPE THHN S	3	16	30669-100
BULK	5	14GA GRN TYPE THHN S	3	17	CD5601-00-0320
BULK	6	14GA WHT TYPE THHN S	3	18	30750-100
BULK	7	1/2 EMT THWL	4	1	MS51967-23
BULK	8	49005	4	2	MS35338-51
BULK	9	4111NWPSA	4	3	MS27183-23
BULK	10	00370143	4	4	F9000RE
BULK	11	3603T19	4	5	30742-100
BULK	12	23010101	4	6	30742-3
BULK	13	30FK451	4	7	30742-2
BULK	14	PF5423	4	8	30742-1
BULK	15	3606T19	4	9	91563A349
BULK	16	4880K12	5	1	30676-200
BULK	17	ASTM D1056-91TY2,CLC	6	1	38-104-05-13
BULK	18	30351-1	6	2	30710-1
BULK	19	ASTM D1056-91TY2,CLC	6	3	30715-1
BULK	20	PS1-66	6	4	30405-100
1	1	MS35206-265	6	5	AD42BSH
1	2	MS35338-43	6	6	SC-D20650-14-ZE
1	3	MS27183-42	6	7	30405-2
1	4	30741-100	6	8	30408-1
1	5	3043T32	6	9	AD44BS
1	6	22-250	6	10	30407-100
1	7	30697-1	6	11	M24243/6-A402H
1	8	91324A430	6	12	SC-D20648-ZE
1	9	30711-100	6	13	30406-1
1	10	3043T18	6	14	30403-1
1	11	30747-1	6	15	38-104-12-13
1	12	30696-1	6	16	52305A06-4
1	13	44605K117	6	17	30408-100
1	14	30749-100	6	18	M24243/6-A402H
2	1	MS51967-14	6	19	SC-D20650-14-ZE
2	2	MS35338-48	6	20	30408-2
2	3	MS27183-18	6	21	30408-1
2	4	MS90725-113	6	22	AD44BS
2	5	MEP 803A	6	23	30404-100
2	6	30750-100	6	24	AD42H
3	1	M24243/6A-606H	6	25	SC-D-20648-ZE
3	2	30695-100	6	26	30402-1
3	3	MS27183-17	6	27	30403-1
3	4	MS90725-114	7	1	38-106-12-16
3	5	MS25036-158	7	2	MS21333-65
3	6	MS25036-112	7	3	MS51967-2
3	7	30695-5	7	4	MS35333-40
3	8	MS35190-287	7	5	9376K115
3	9	MS90725-5	7	6	133
3	10	MS35338-44	7	7	30416
3	11	MS27183-10	7	8	094521020
3	12	MS90725-37	7	9	60101102

FIGURE AND ITEM NUMBER INDEX – Continued

0076 00

FIG.	ITEM	PART NUMBER	FIG.	ITEM	PART NUMBER
7	10	00150603	12	14	30411-1
7	11	64400101	12	15	30676-38
7	12	3885	12	16	30676-40
8	1	30734-100	12	17	30676-41
8	2	3706T13	12	18	MS35493-78
8	3	MS35493-74	12	19	K9435-T63
8	4	30441-1	12	20	96T050
9	1	MS9048-104	12	21	95T050
9	2	30399-2	12	22	30676-25
9	3	MS35338-48	12	23	30676-24
9	4	MS27183-18	12	24	E942D
9	5	30680-100	12	25	30676-21
10	1	MS35649-2382	13	1	MS35493-78
10	2	MS35338-46	13	2	651203
10	3	MS90725-60	13	3	2005-065
10	4	MS27183-14	14	1	312KA
10	5	30672-100	14	2	30677-100
10	6	830FS-06	15	1	P1054097
10	7	C5404X6X8	15	2	P105483
10	8	MM297	15	3	P106241
10	9	MS90908-1	15	4	30705-100
10	10	MS51849-66	15	5	30707-100
10	11	MS35333-39	15	6	MS9321-11
10	12	MS27183-8	15	7	30704-100
10	13	6781-9-8 1/4	15	8	30704-2
10	14	15-423	15	9	30704-3
10	15	1TR10-130ST	15	10	30723-1
10	16	44705K83	15	11	30703-100
11	1	MS35650-302	15	12	30704-100
11	2	MS35338-43	15	13	30704-2
11	3	MS35207-283	15	14	30704-3
11	4	8876T37	15	15	30722-1
11	5	240-AL	15	16	AD44BS
11	6	30676	15	17	30708-1
11	7	17409	15	18	SS48143K1611
11	8	2521	15	19	30387-1
11	9	MS35493-78	15	20	30388-1
11	10	270-L	15	21	30385-1
11	11	E943D	15	22	30705-10
12	1	216	15	23	A34N-1902
12	2	MS25036-153	15	24	30368-1
12	3	MS35493-78	15	25	30369-1
12	4	270-L	15	26	30369-2
12	5	151	15	27	30486-1
12	6	4549K575	15	28	890-60008-100
12	7	VCG-15	15	29	880-84165-100
12	8	VF-151	15	30	P107855
12	9	100A	15	31	30436-100
12	10	VP151	15	32	MS51922-17
12	11	RB-2237	15	33	MS27183-14
12	12	30-076	15	34	MS90725-66
12	13	300676-39	15	35	880-82920-100

FIGURE AND ITEM NUMBER INDEX – Continued

0076 00

FIG.	ITEM	PART NUMBER	FIG.	ITEM	PART NUMBER
15	36	OL-1104-RH	18	1	890-60008-100
15	37	30709-1	18	2	890-82120-100
16	1	P1054097	18	3	30340-1
16	2	P105483	18	4	30677-28
16	3	P106241	19	1	890-58000-100
16	4	30706-100	19	2	880-84165-100
16	5	AD44BS	19	3	30341-1
16	6	30374-1	20	1	890-60008-100
16	7	SS48143K1611	20	2	880-82120-100
16	8	AD45BS	20	3	30737-100
16	9	30391-1	20	4	10-15-706-13
16	10	30388-1	20	5	90031A315
16	11	30386-1	20	6	30739-1
16	12	A34N-1902	20	7	30739-2
16	13	30368-2	20	8	30461-1
16	14	30370-1	20	9	30738-1
16	15	30706-10	20	10	30464-1
16	16	890-60008-100	20	11	30465-1
16	17	880-84165-100	20	12	38-106-12-16
16	18	P107855	20	13	30463-1
16	19	30436-100	20	14	30463-2
16	20	MS51922-17	20	15	30735-1
16	21	MS27183-14	21	1	AD44BS
16	22	MS90725-66	21	2	30677-53
16	23	821-82920-100	21	3	3606T33
16	24	DL-1104-LH	21	4	86805T35
16	25	30488-1	21	5	2598K28
16	26	30367-2	21	6	30308-100
16	27	30370-2	21	7	30308-2
16	28	30733-1	21	8	30308-1
17	1	A1N-1904	21	9	30327-100
17	2	10-15-706-13	21	10	A2N-1905
17	3	SS48143K1611	21	11	30347-1
17	4	30677-48	22	1	MS90725-116
17	5	30471-1	22	2	MS35338-48
17	6	30470-1	22	3	MS27183-18
17	7	30467-2	22	4	S50K526
17	8	30468-1	22	5	S31K331
17	9	30470-2	22	6	30675-100
17	10	30471-2	23	1	80-TX55
17	11	30467-1	23	2	TX-5416
17	12	30472-2			
17	13	30473-2			
17	14	30469-1			
17	15	30472-1			
17	16	30473-1			
17	17	30476-1			
17	18	30476-2			
17	19	30743-1			
17	20	30475-1			
17	21	30478-1			
17	22	30477-1			

**REFRIGERATED CONTAINER SYSTEM
COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LIST**

0077 00

INTRODUCTION.

Scope.

This work package lists COEI and BII for the refrigerated container to help you inventory items for safe and efficient operation of the equipment.

General.

The COEI and BII information is divided into the following lists:

Components of End Item (COEI) This list is for information purposes only and is not authority to requisition replacements. These items are part of the refrigerated container system. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII) These essential items required to place the refrigerated container in operation, operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the refrigerated container during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE / MTOE. Illustrations are furnished to help you find and identify these items.

Explanation of Columns in the COEI List and BII List.

Column (1), Illus Number, gives you the number of the item illustrated.

Column (2), National Stock Number, identifies the stock number of item to be used for requisitioning purposes.

Column (3), Description, CAGEC, and Part Number, identifies the Federal item name in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (commercial and Government entity code) (in parentheses) and the part number.

Column (4), Useable on Code, gives you a code if the item you need is not the same for different models of equipment. These codes are identified below:

<u>Code</u>	<u>Used on</u>
-------------	----------------

Column (5), U/M (unit of measure), indicates how the item is issued for the National Stock Number shown in column (2).

Column (6), Qty Rqr, indicates the quantity required.

**REFRIGERATED CONTAINER SYSTEM
COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LIST – Continued**

0077 00

COMPONENTS OF END ITEM (COEI) LIST.

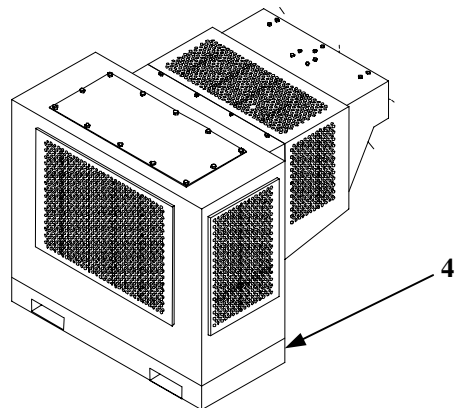
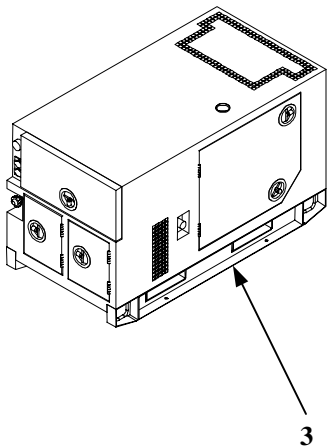
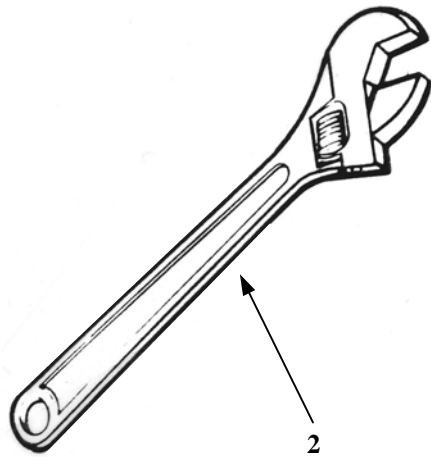
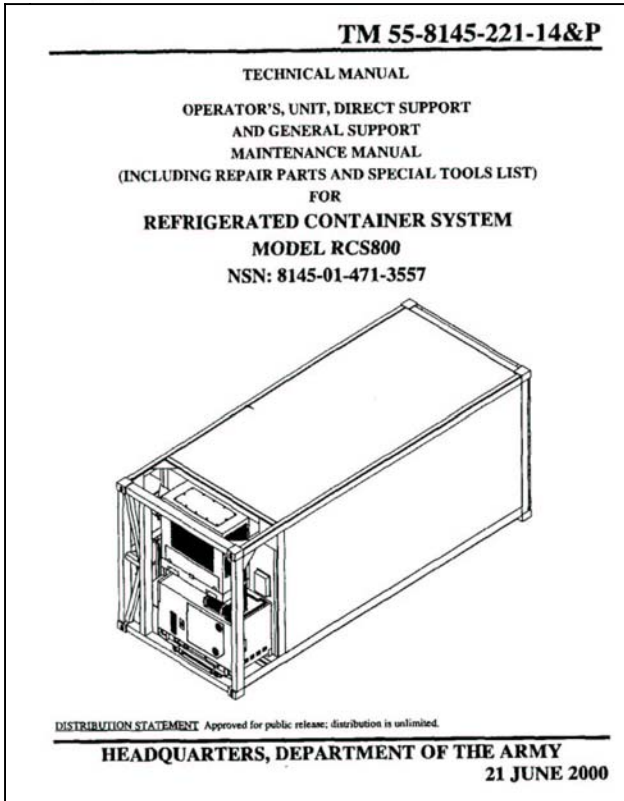
There are no components of end item.

BASIC ISSUE ITEMS (BII) LIST.

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION, CAGEC and PART NUMBER	(4) USABLE ON CODE	(5) U/M	(6) QTY RQR
1		Technical Manual (TM 55-8145-221-14&P): Operator's, Unit, Direct Support and General Support Maintenance Manual for Refrigerated Container System Model RCS800, NSN 8145-01-471-3557		EA	1
2	5120-00-264-3796	Wrench, Adjustable: 0 to 1.322" Jaw opening: 12" long, 3/4" thick Handle: Chrome plated handle		EA	1
3	6115-01-275-5061	Generator Set, Diesel Engine (Refer to TM 9-6115-642-24P For Repair Parts); 30554; MEP 803A		EA	1
4	4110-01-394-6973	Refrigeration Unit, Mechanical (Refer to TM 9-4110-258-24P For Breakdown); 94833; F9000RE		EA	1

**REFRIGERATED CONTAINER SYSTEM
COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LIST – Continued**

0077 00



END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
EXPENDABLE / DURABLE SUPPLIES AND MATERIALS LIST**

0078 00

INTRODUCTION.**Scope.**

This work package lists expendable and durable items that you will need to operate and maintain the Refrigerated Container System. This list is for information only and is not authority to requisition the items. These items are authorized to you by CTA 50-970, Expendable/Durable items (Except Medical, Class V Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in the Expendable/Durable Supplies and Material List.

The following provides an explanation of columns found in the tabular listing:

Column (1) - Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use brake fluid (item 5, WP 0098 00)).

Column (2) -. Level. This column identifies the lowest level of maintenance that requires the listed item (*include as applicable: C = Operator/Crew, O = Unit/AVUM, F = Direct Support/AVIM, H = General Support, D = Depot*).

Column (3) - National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) -. Item Name, Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5) - Unit of Measure (U/M). This code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

**REFRIGERATED CONTAINER SYSTEM
EXPENDABLE / DURABLE SUPPLIES AND MATERIALS LIST – Continued**

0078 00

EXPENDABLE/DURABLE SUPPLIES AND MATERIALS.

(1) ITEM NUMBER	(2) LEVEL	(3) NSN	(4) ITEM NAME, DESCRIPTION, CAGEC and P/N	(5) U/M
1	O	8040-00-844-9707	Adhesive (1A9T3) 1357	CN
2	O		Adhesive (25999) 2672-5	TU
3	O	8040-00-078-9774	Adhesive, Silastic (71984) 732 RTV	TU
4	F	8040-01-126-1422	Cement, PVC Adhesive (04963) 1099	TU
5	C		Chart (45809) PS217F31D2DEG.DIV	EA
6	O		Detergent	GL
7	F		Filler Rope, ½ Dia (100 Ft .50 Polyethylene Ethafoam Sealant Rod 2lb) (12820) 23010101	RL
8	O		Foam, Urethane (Make From MISTAFROTH S810X823H, As Required) (90598) 30378	CN
9	O		Insulation, Closed Cell Polyurethane (90598) 30392	SH
10	O		Graphite Anti-seize Lubricant (61078) 1287K31	TU
11	O		Primer, Adhesive #1200 Primer	CN
12	O	8030-01-329-6338	Sealing Compound (61078) LH-150	TU
13	F	8030-01-381-0617	Sealing Compound (OPMN) S1KAFLEX221	TU
14	O	8030-01-014-5869	Sealing Compound	BT
15	O		Silicone, RTV (39428) 7600A21	TU

**REFRIGERATED CONTAINER SYSTEM
EXPENDABLE / DURABLE SUPPLIES AND MATERIALS LIST – Continued**

0078 00

EXPENDABLE/DURABLE SUPPLIES AND MATERIALS – Continued.

(1) ITEM NUMBER	(2) LEVEL	(3) NSN	(4) ITEM NAME, DESCRIPTION, CAGEC and P/N	(5) U/M
16	O	9320-01-422-3598	Tape, Adhesive, 1/8" X 2" wide (50 Ft Per Roll) (76381) PF5422	RL
17	O	9320-00-812-4218	Tape, Adhesive, 1/8" x 1" wide (100 Ft Per Roll) (76381) PF5423	RL
18	O	7920-00-205-1711	Wiping Rags	EA
19	O	9905-00-537-8954	Wire Tags	BX
20	O	5975-01-273-8133	Strap, Tiedown, Electrical Component	BX
21	O	6850-00-281-1985	Solvent, Dry Cleaning	GL

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
MANUFACTURED ITEMS LIST**

0079 00

INTRODUCTION.

Scope.

This work package includes complete instructions for making items authorized to be manufactured or fabricated at the direct support maintenance level.

How to Use the Index of Manufactured Items

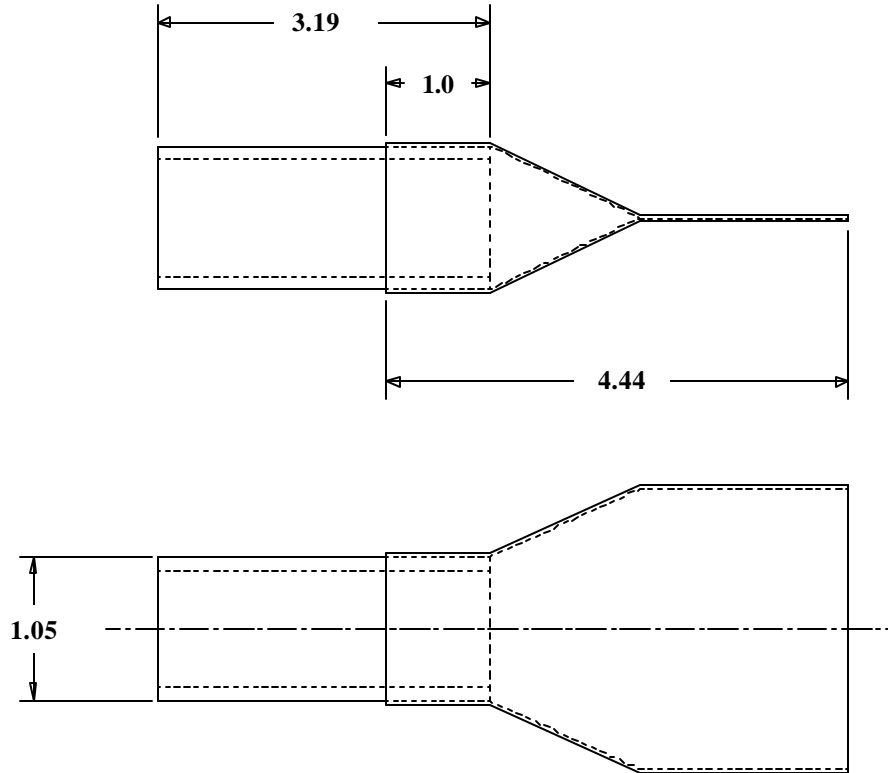
A part number index in alphanumeric order is provided for cross-referencing the part number of the item to be manufactured to the figure which covers the fabrication criteria.

Explanation of Illustrations of Manufactured Items.

All instructions needed by maintenance personnel to manufacture the item are included on the illustrations. Refer to the RPSTL work package 0049 00 for further information on all manufactured items. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list on the illustration.

INDEX OF MANUFACTURED ITEMS

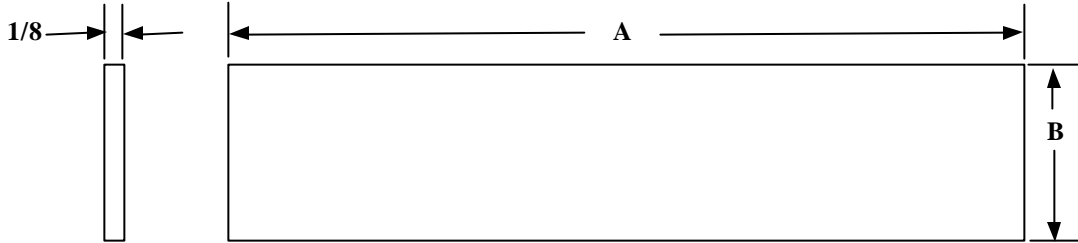
<u>Part Number</u>	<u>Figure Number</u>	<u>Description</u>
30308-100	1	Floor Drain
30408-2	2	Gasket, Cover, Forms Box, Front Panel
30405-2	2	Gasket, Cover, Form Box, Door
30436-2	3	Chain, Door
30676-21	4	Conduit, PVC
30676-24	5	Conduit, Shaped, Steel
30676-25	6	Conduit, Straight, Steel
30677-53	7	Chain, Drain Plug
30695-5	8	Lock Bolts, Generator Slide
30704-2	9	Escape Door Gasket
30704-3	9	Escape Door Gasket
30742-1	10	Panel, Block Off
30742-2	10	Gasket, Panel, Block Off
30742-3	10	Gasket, Panel, Block Off
30676-38	11	Wire, Electrical
30676-39	11	Wire, Electrical
30676-40	11	Wire, Electrical
30676-41	11	Wire, Electrical



NOTES:

1. All measurements in inches.
2. 30308-1, Item 1, make from 3/4" Nominal PVC Pipe, 1.05 O.D. x .824 ID.
3. 30308-2, Item 2, make from Hose, 3/4" Flat, Collapsible, Neoprene, 3/64 min. wall, Stockwell Rubber Co., Philadelphia, PA.
4. Adhesive, Part Number 3M EC800. Apply to mating surfaces.

Figure 1. Drain

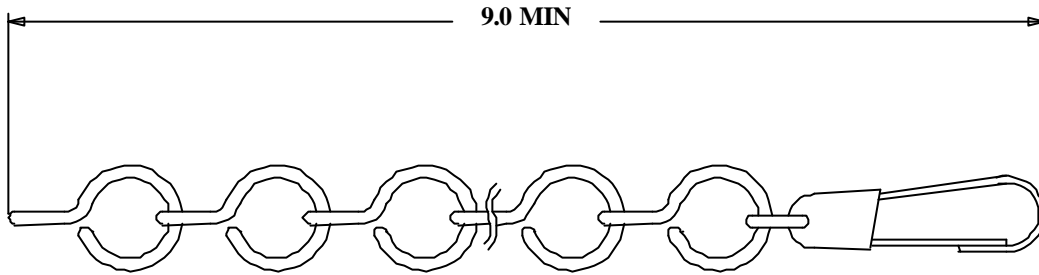


Part Number	A	B
30405-2	12 ½	2
30408-2	12 ½	3

NOTES:

1. All measurements are in inches.
2. Make from gasket sheet ½” thick.
3. Source: Reed Rubber Co., St. Louis, MO, 63103. Part Number 411D.
4. Adhesive, Part umber 1357, 3M Company. Apply adhesive to gasket and mating surface.

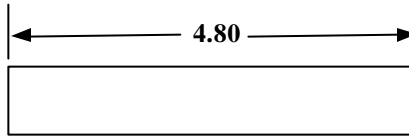
Figure 2. Gasket Forms Boxes



NOTES:

1. All measurements in inches.
2. Make from Chain, Part Number 3603W19, and Swivel Eye, Part Number 3929T14, McMaster Carr Supply Co.
3. Open end loop , attach swivel eye, close loop.

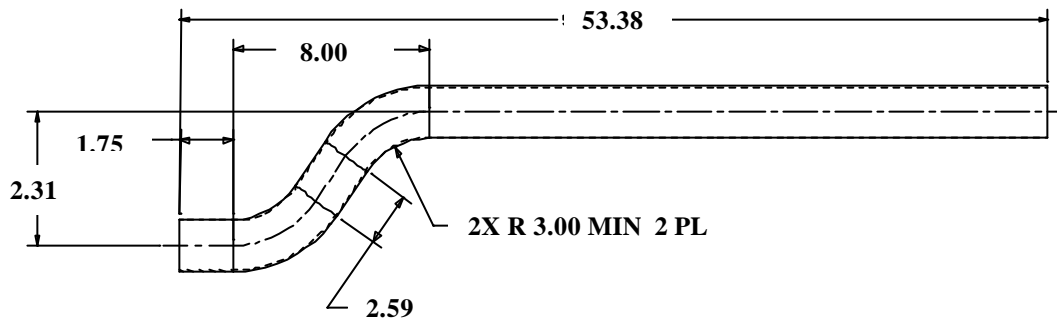
Figure 3. Chain, Door



NOTES:

1. All measurements in inches.
2. Make from .500 dia. PVC Conduit.

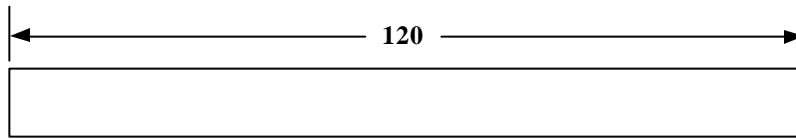
Figure 4. Conduit, PVC



NOTES:

1. Thin wall conduit, electro galvanized steel, 1/2", Glasco Electric Co, St.Louis, MO.

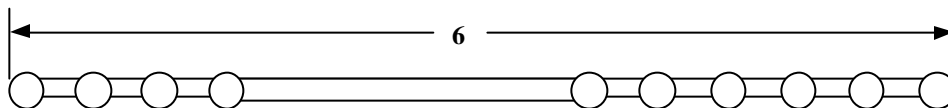
Figure 5. Conduit



NOTES:

1. All measurements in inches.
2. Make from thin wall conduit, electro galvanized steel, ½", Glassco Electric Co., St. Louis, MO.

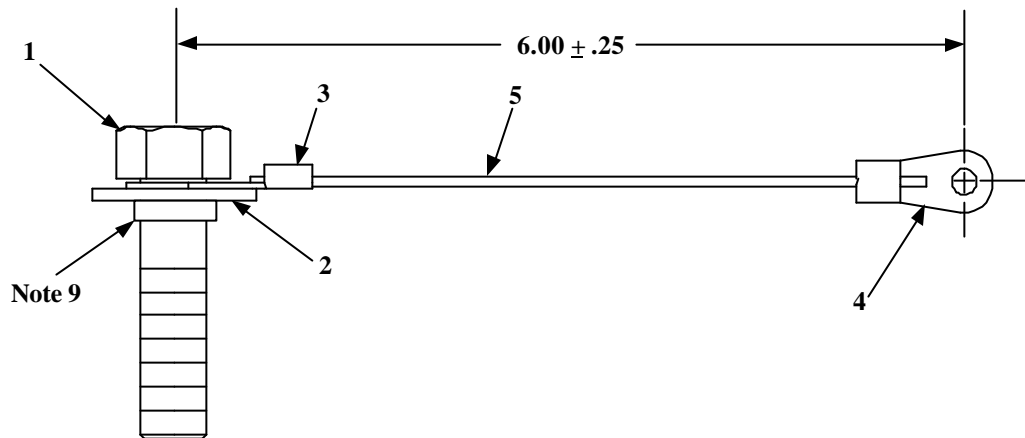
Figure 6. Conduit, Straight, Steel



NOTES:

1. All measurements in inches.
2. Make from Bead Chain, size 10, type 304 55, Part Number 3606T19 (39428).
3. Cut chain to length.

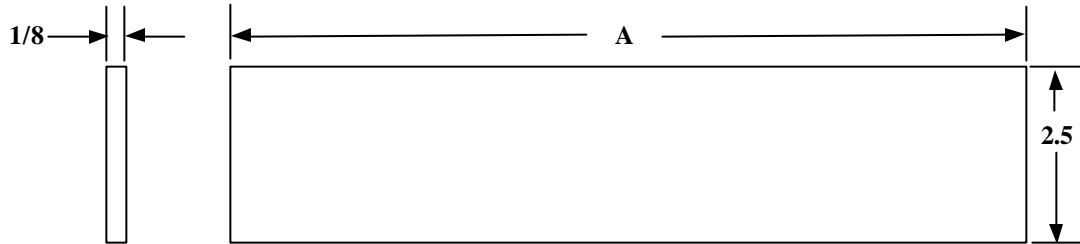
Figure 7. Chain, Drain Plug



NOTES:

4. All measurements in inches.
5. Item 1, Screw, Hex Head, .500-13UNC-2A, 1.75L, MS90725-114.
6. Item 2, Washer, Flat, .500 ID x 1.25, MS27183-17.
7. Item 3, Terminal, .50 Stud, MS25036-158.
8. Item 4, Terminal, NO 10 Stud, MS25036-112.
9. Item 5, Rope, make from Rope Wire 7 x 7, .06 dia., M83420/3-001.
10. Install Items 3 and 4 on item 5 and crimp.
11. Slide Items 3 and 2 onto Item 1.
12. Stake or crimp Item 2 in three places minimum, approximately equally spaced to retain washer on screw; washer will turn freely.

Figure 8. Locking Bolt, Generator Slide

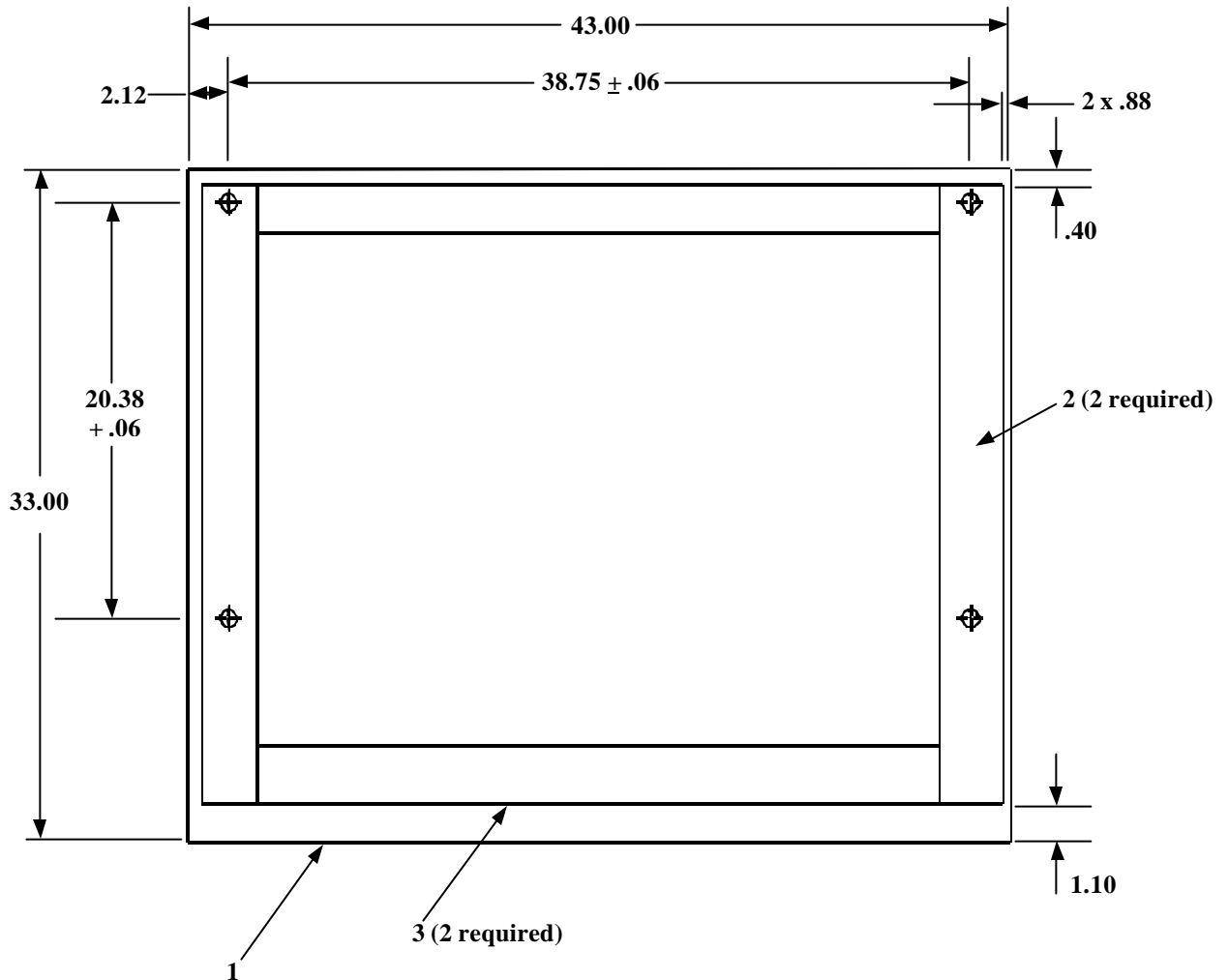


Part Number	A
30704-2	20 in.
30704-3	17 in.

NOTES:

1. All measurements are in inches.
2. Make from Gasket, Driback adhesive, 1/8" thick.
3. Source: Reed Rubber Company.
4. Adhesive, Part Number 1357, 3M Company.
Apply adhesive to Gasket and mating surface.

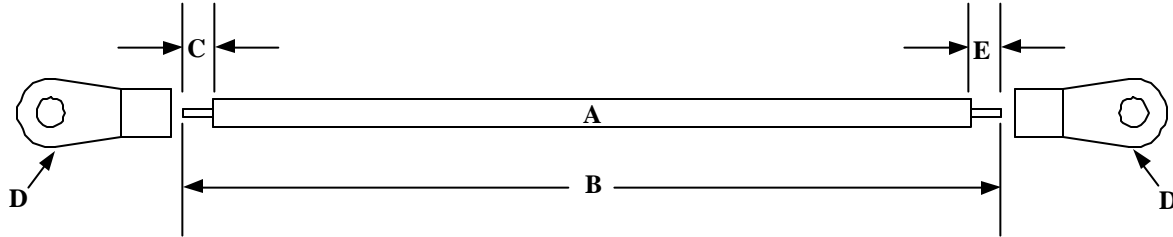
Figure 9. Escape Door Gasket



NOTES:

1. All measurements are in inches.
2. Item 1, make from 5/8 thick plywood.
 - a. Group 1C-D with exterior glue, P&TS and APA grade trademarked shall be used.
 - b. Surfaces, clad with 24 oz. Woven roving fiberglass molded to the surface under heat pressure. Laminate to conform to MIL-P-17549 Grade W.
3. Coat inside of holes and edges with resin before painting. Finish per specification 3050.
4. Item 2, make from .25 thick x 2.50 wide adhesive back Gasket, 31.50 long. ASTM D1056-91, Type 2, Class C, Grade 1.
5. Item 3, make from .25 thick x 2.50 wide adhesive back Gasket 36.25 long. ASTM D1056-91, Type 2, Class C, Grade 1.
6. Remove backing from Items 2 and 3 and attach to panel Item 1.

Figure 10. Panel, Block Off



NOTES:

1. All measurements are in inches.
2. Make from parts lists. Cut to length. Cut strip length.
3. Attach terminals.

Wire Number	Wire Index A	Wire Length B	Strip Length C	Terminal Index D	Strip Length E	Terminal Index F
30676-38	1	189	.37		.37	
30676-39	1	12	.37		.25	4
30676-39	1	12	.25	5	.25	4
30676-40	2	189	.37		.25	5
30637-41	3	189	.37		.25	5

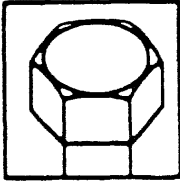
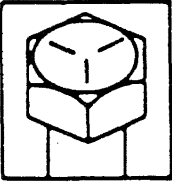
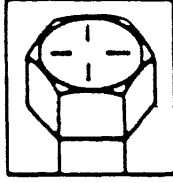
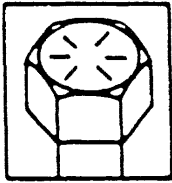
Index No.	Nomenclature or Description	Part Number
1	Wire, Black, Insulated, 14 GA, Stranded, Type THW	
2	Wire, Green, Insulated, 14 GA, Stranded, Type THW	
3	Wire, White, Insulated, 14 GA, Stranded, Type THW	
4	Terminal No. 8	MS25036-153
5	Terminal, Fork	RB-2237

Figure 11. Wire List

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
TORQUE LIMITS**

0080 00

USAGE	MUCH USED	MUCH USED	USED AT TIMES	USED AT TIMES				
CAPSCREW DIAMETER AND MINIMUM TENSILE STRENGTH psi (KG/SQ CM)	To ½ - 69,000 (4850.7000) To ¾ - 64,000 (4499.2000) To 1 - 55,000 (3865.5000)	To ¾ - 120,000 (8436.0000) To 1 - 115,000 (8084.5000)	To 5/8 - 140,000 (9842.0000) To ¾ - 133,000 (9349.9000)	150,000 (10545.0000)				
QUALITY OF MATERIAL	INDETERMINATE	MINIMUM COMMERCIAL	MEDIUM COMMERCIAL	BEST COMMERCIAL				
SAE GRADE NUMBER	1 or 2	5	6 or 7	8				
CAPSCREW HEAD MARKINGS Manufacturer's marks may vary. These are all SAE Grade S (34ine)								
CAPSCREW BODY SIZE	TORQUE		TORQUE		TORQUE		TORQUE	
(INCHES)-(THREAD)	FT-LB	(KG M)	FT-LB	(KG M)	FT-LB	(KG M)	FT-LB	(KG M)
1/4-20	5	(0.6915)	8	(1.1064)	10	(1.3830)	12	(1.6596)
-28	6	(0.8293)	10	(1.3830)			14	(1.9362)
5/16-18	11	(1.5213)	17	(2.3511)	19	(2.6277)	24	(3.3192)
-24	13	(1.7979)	19	(2.6277)			27	(3.7341)
3/8-16	18	(2.4894)	31	(4.2873)	34	(4.7022)	44	(6.0852)
-24	20	(2.7660)	35	(4.8405)			49	(6.7767)
7/16-14	28	(3.8132)	49	(6.7767)	55	(7.6065)	70	(9.6810)
-20	30	(4.1490)	55	(7.6065)			78	(10.7874)
1/2-13	39	(5.3937)	75	(10.3725)	85	(11.7555)	10S	(14.5215)
-20	41	(5.6703)	85	(11.7555)			120	(16.5960)
9/16-12	S1	(7.0533)	110	(15.2120)	120	(16.5960)	155	(21.4365)
-18	55	(7.6065)	120	(16.5960)			170	(23.5110)
5/8-11	83	(11.4769)	150	(20.7450)	167	(23.0961)	210	(29.0430)
-18	95	(13.1385)	170	(23.5110)			240	(33.1920)
3/4-10	105	(14.5215)	270	(37.3410)	280	(38.7240)	375	(51.6625)
-16	115	(15.9045)	295	(40.7985)			420	(58.0860)
7/8-9	160	(22.1280)	295	(54.6285)	44.0	(60.8520)	605	(83.6715)
-14	175	(24.2025)	435	(60.1605)			675	(93.3525)
1-8	235	(32.5005)	590	(81.5970)	660	(91.2780)	910	(125.8530)
-14	250	(34.5750)	660	(91.2780)			990	(136.9170)

1. Always use the torque values listed above when specific specifications are not available.

NOTE

Do not use above values in place of those specified in this manual. Special attention should be observed in case of SAE Grade 6, 7 and 8 capscrews.

2. The above is based on use of clean and dry threads.

REFRIGERATED CONTAINER SYSTEM
TORQUE LIMITS – Continued

0080 00

3. Reduce torque by 10% when oil is used as a lubricant.
4. Reduce torque by 20% if new plated capscrews are used.

CAUTION

Capscrews threaded into aluminum may require reductions in torque of 30% or more, unless inserts are used.

END OF WORK PACKAGE.

**REFRIGERATED CONTAINER SYSTEM
MANDATORY REPLACEMENT PARTS**

0081 00

INTRODUCTION.

Scope.

This work package includes a list of all mandatory replacement parts referenced in the task initial setups and procedures. These are items that must be replaced during maintenance whether they have failed or not. This includes items based on usage intervals such as miles, time, etc.

Table 1. Mandatory Replacement Parts List

ITEM NO.	PART NUMBER	NSN	NOMENCLATURE	QTY
1	E942D		ADAPTER, FEMALE	1
2	P106241		BEARING, HINGE	8
3	821-82920-100		BOLT, CAMTAINER	16
4	880-82120-100		BOLT, CAMTAINER	276
5	880-84165-100		BOLT, CAMTAINER	516
6	15-423	5330-01-074-3866	GASKET, FUEL TANK	1
7	3885	5325-01-074-3927	GROMMET	2
8	890-58000-100		NUT, CAMTAINER	448
9	890-60008-100		NUT, CAMTAINER	267
10	P0154097		PIN, HINGE	8
11	MS9048-104	5315-00-682-2051	PIN, SPRING	2
12	10-15-706-13		RIVET, 3G LINER	257
13	38-106-12-91	5320-01-074-1543	RIVET, BLIND	3
14	AD45BS	5320-00-275-8344	RIVET, BLIND	23
15	AD4BS		RIVET, BLIND	4
16	M24243/6A-401H	5320-00-417-5827	RIVET, BLIND	4
17	38-106-12-16		RIVET, DRIVE	12
18	38-104-12-13		RIVET, DRIVE	20
19	38-104-05-13		RIVET, DRIVE	8
20	AD4465		RIVET, POP	136
21	AD42H		RIVET, POP	16
22	AD44BS	5320-01-023-2529	RIVET, POP	212
23	AD64H	5320-00-956-7355	RIVET, POP	12
24	E943D		TERMINAL ADAPTER	1
25	P105483		WASHER, HINGE	16
26	MS35333-40	5310-00-550-1130	WASHER, LOCK	8
27	MS35338-43	5310-00-045-3296	WASHER, LOCK	10
28	MS35338-44	5310-00-585-5965	WASHER, LOCK	12
29	MS35338-45	5310-00-407-9566	WASHER, LOCK	12
30	MS35338-46	5310-00-004-5033	WASHER, LOCK	4
31	MS35338-48	5310-00-003-4094	WASHER, LOCK	10
32	MS35338-51	5310-00-584-7888	WASHER, LOCK	4
33	MS35333-39	5310-00-576-5752	WASHER, LOCK, INTERNA	11

END OF WORK PACKAGE.

TM 55-8145-221-14&P

WP 0082 00
ALPHABETICAL INDEX
FOR
REFRIGERATED CONTAINER SYSTEM

**REFRIGERATED CONTAINER SYSTEM
ALPHABETICAL INDEX**

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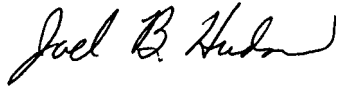
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-X, Y, Z-

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

Official:



JOEL B. HUDSON
Administrative Assistant to the
Secretary of the Army
0017201

DISTRIBUTION:

To be distributed in accordance with initial distribution (IDN 256614), requirements for TM 55-8145-221-14&P.

These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil>

To: amssbriml@natick.army.mil

Subject: DA Form 2028

1. **From:** Joe Smith
2. **Unit:** home
3. **Address:** 4300 Park
4. **City:** Hometown
5. **St:** MO
6. **Zip:** 77777
7. **Date Sent:** 19-OCT-93
8. **Pub no:** 55-2840-229-23
9. **Pub Title:** TM
10. **Publication Date:** 04-JUL-85
11. **Change Number:** 7
12. **Submitter Rank:** MSG
13. **Submitter FName:** Joe
14. **Submitter MName:** T
15. **Submitter LName:** Smith
16. **Submitter Phone:** 123-123-1234
17. **Problem:** 1
18. **Page:** 2
19. **Paragraph:** 3
20. **Line:** 4
21. **NSN:** 5
22. **Reference:** 6
23. **Figure:** 7
24. **Table:** 8
25. **Item:** 9
26. **Total:** 123
27. **Text:**

This is the text for the problem below line 27.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (<i>reverse</i>) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE 21 October 2003
TO: (<i>Forward to proponent of publication or form</i>) (<i>Include ZIP Code</i>) COMMANDER U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND ATTN: AMSSB-RIM-L KANSAS STREET NATICK, MA 01760-5052						FROM: (<i>Activity and location</i>) (<i>Include ZIP Code</i>) <i>PFC Jane Doe</i> <i>CO A 3rd Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TM 10-1670-296-23&P				DATE 30 October 2002	TITLE Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems		
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
	0036 00-2				1	<i>In table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MD ZZ not MD 22.</i> <i>Change the manual to show Sewing Machine, Industrial: Zig-Zag; 308 stitch; medium-duty; NSN 3530-01-181-1421 as a MD ZZ code symbol.</i>	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE Jane Doe, PFC				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION 508-233-4141		SIGNATURE Jane Doe <i>Jane Doe</i>	

TO: <i>(Forward direct to addressee listed in publication)</i> COMMANDER U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND ATTN: AMSSB-RIM-L KANSAS STREET NATICK, MA 01760-5052	FROM: <i>(Activity and location) (Include ZIP Code)</i> <i>PFC Jane Doe</i> <i>CO A 3rd Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	DATE 21 October 2003
--	---	--------------------------------

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TM 10-1670-296-23&P	DATE 30 October 2002	TITLE Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems
--	--------------------------------	---

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
0066 00-1					4			<i>Callout 16 in figure 4 is pointed to a <u>D-Ring</u>. In the Repair Parts List key for figure 4, item 16 is called a <u>Snap Hook</u>. Please correct one or the other.</i>

SAMPLE

PART III – REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
For use of this form, see AR 25-30; the proponent agency is ODISC4.							
TO: (Forward to proponent of publication or form) (Include ZIP Code) Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.						FROM: (Activity and location) (Include ZIP Code)	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TM 55-8145-221-14&P				DATE 21 June 2000		TITLE OPERATOR'S, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR REFRIGERATED CONTAINER SYSTEM MODEL RCS800 NSN: 8145-01-471-3557	
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

TO: <i>(Forward direct to addressee listed in publication)</i> Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.	FROM: <i>(Activity and location) (Include ZIP Code)</i>	DATE
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PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TM 55-8145-221-14&P	DATE 21 June 2000	TITLE OPERATOR'S, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR REFRIGERATED CONTAINER SYSTEM MODEL RCS800 NSN: 8145-01-471-3557
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

--

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
----------------------------	--	-----------

<p align="center">RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</p> <p>For use of this form, see AR 25-30; the proponent agency is ODISC4.</p>						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
TO: (Forward to proponent of publication or form) (Include ZIP Code) Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.						FROM: (Activity and location) (Include ZIP Code)	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
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ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
*Reference to line numbers within the paragraph or subparagraph.							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

TO: <i>(Forward direct to addressee listed in publication)</i> Commander U.S. Army Tank-automotive and Armament Command ATTN: AMSTA-LC-CECT Kansas Street, Natick, MA 01760-5052.	FROM: <i>(Activity and location) (Include ZIP Code)</i>	DATE
--	--	-------------

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TM 55-8145-221-14&P	DATE 21 June 2000	TITLE OPERATOR'S, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR REFRIGERATED CONTAINER SYSTEM MODEL RCS800 NSN: 8145-01-471-3557
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

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TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
----------------------------	--	-----------

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 feet

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

_F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	_C
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PIN: 078209-000