**TECHNICAL MANUAL** 

# DEPOT PACKAGING, DEPRESERVATION AND FIELD PACKAGING INSTRUCTIONS FOR NONTACTICAL GENERATOR SETS AND POWER PLANTS

GENERATOR SET, 700 KW ELECTRIC (6115-00-596-3405) GENERATOR SET, 750 KW ELECTRIC (6115-00-559-1449) POWER PLANT, 1500 KW ELECTRIC (6115-00-250-4404) POWER PLANT, 2000 KW ELECTRIC (6115-00-250-4405) POWER PLANT, 3750 KW ELECTRIC (6115-00-250-4403) POWER PLANT, 4500 KW ELECTRIC (6115-00-250-4402)

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## DEPOT PACKAGING, DEPRESERVATION AND FIELD PACKAGING INSTRUCTIONS FOR NONTACTICAL GENERATOR SETS AND POWER PLANTS

GENERATOR SET, 700 KW ELECTRIC (6115-00-596-3405) GENERATOR SET, 750 KW ELECTRIC (6115-00-559-1449) POWER PLANT, 1500 KW ELECTRIC (6115-00-250-4404) POWER PLANT, 2000 KW ELECTRIC (6115-00-250-4405) POWER PLANT, 3750 KW ELECTRIC (6115-00-250-4403)

TM 43-1056, 22 April 1983, is changed as follows:

1. Title is changed as shown above.

2. Remove and insert pages as indicated below. New or changed text material is indicated by a vertical bar in the margin. An illustration change is Indicated by a miniature pointing hand.

Remove pages	Insert pages
i and ii	i and ii
1-1 and 1-2	1-1 and 1-2
B-1-3 through	B-1-8 B-1-3 through B-1-8
B-1-11 through	B-1-16 B-1-11 through B-1-16
B-1-21 through	B-1-32 B-1-21 through B-1-32
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B-3-61/B-3-62	B-3-61/B-3-62

3. Retain this sheet in front of manual for reference purposes.

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### HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, D.C., 22 April 1983

### DEPOT PACKAGING, DEPRESERVATION, AND FIELD PACKAGING INSTRUCTIONS FOR NONTACTICAL GENERATOR SETS AND POWER PLANTS

## REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), to: Commander, U. S. Army Troop Support Command, ATTN AMSTR-MPS, 4300 Goodfellow Boulevard, St. Louis, MO 63120. A reply will be furnished directly to you.

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### **CHAPTER 1**

### INTRODUCTION

#### 1-1. General

<u>a.</u>This technical manual (TM) provides the instructions and information necessary to provide a level A pack for nontactical generators listed in table 1-1.

<u>b.</u>This TM also establishes the instructions for a rapid method of preparing nontactical generator sets and power plants for field packaging. Certain conditions will necessitate removal of military equipment from one geographical area to another within a short time frame. Should these conditions occur, normal preservation and packing methods will not apply. Preservation instructions contained in appendix B will be followed to afford protection against corrosion and deterioration for appropriate mode of shipment and storage. Application of this manual will be as directed by the MACOM, Theater and/or Army Commander for equipment in their possession.

#### 1-2. Scope

These instructions prescribe the processing required to preserve and protect nontactical generator and power plants from damage, corrosion, and deterioration. The appendixes supply preservation instructions, depot packaging, depreservation, field packaging, and loading data.

#### 1-3. Safety Instructions

a.Observe safe operating procedures at all times, particularly when handling cleaning materials.

<u>b.</u>Gasoline for cleaning purposes is hazardous and must not be used. Adequate cleaning materials are prescribed herein.

c. Avoid skin contact with cleaning solvents. Use synthetic rubber gloves.

<u>d.</u>Observe fire regulations when using paint and lacquer thinners as both items are highly flammable.

<u>e</u>.Hydrocarbon solvents are destructive to natural rubber and some plastics, and must not be used on such material. These solvents are petroleum products such as gasoline, benzene, kerosene, Stoddard's solvent, and dry cleaning agents (naphthas).

<u>f.</u> Fire protection equipment must be adequately distributed throughout work areas.

<u>g</u>.Place rags and waste that have been saturated with solvents in a covered container.

## 1-4. Maintenance Forms and Records

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by PAM 738-750.

# 1-5. Depreservation Guides

The organization preserving the generator set and power plant for shipment will be responsible for writing the DA Form 2258 (Depreservation Guide for Vehicles and Equipment). Two copies of the DA Form 2258 will accompany the generator set and power plant. Place guides as specified in appendixes B-1 through B-3. Base depreservation guides upon the actual preservation applied and indicate clearly and simply each operation to be performed in the depreservation of the generator set and power plant.

# Table 1-1. Nontactical Generator Sets and Power Plants

Nomenclature	NSN	Man-hours for Processing	Appendix
Generator set, 700 KW, 0.8 power factor 60 hertz, 2400/4160 volts, capable of operating at 50 hertz, 2200/3600 volts, 525 KW, diesel engine driven, housed, skid mounted	6115-00-596-3405	200	B-1
Generator set, 750 KW, 0.8 power factor 60 hertz, 2400/4160 volts, capable of operating at 50 hertz, 2200/3600 volts, 525 KW, diesel engine driven, housed, skid mounted	6115-00-559-1449	200	B-1
Power plant, electric, diesel engine driven, skid mounted, 1500 KW, 3 phase, 4 wire, 4160 volts, 0.8 power factor, 60 hertz	6115-00-250-4404	480	B-2
Power plant, electric, diesel engine driven, skid mounted, 2000 KW , 3 phase, 4 wire, 0.8 power factor, 60 hertz	6115-00-250-4405	640	B-2
Power plant, electric, diesel engine driven, skid mounted, 3750 KW, 3 phase, 4 wire, 50 hertz, 4160 volts, 0.8 power factor, General Motors Electro- motive Division Model MV 45TBL	6115-00-250-4403	600	В-3
Power plant, electric, diesel engine driven, skid mounted, 4500 KW, 3 phase, 4 wire, 60 hertz, 4160 volts, 0.8 power factor. General Motors Electro- motive Division Model MP 36A-60	6115-00-250-4402	600	B-3

# CHAPTER 2

# PREPARATION INSTRUCTIONS FOR STORAGE AND SHIPMENT

#### 2-1. General

This chapter provides procedures for implementing the general policy on preservation and packing as it applies to depot packaging, depreservation, and field packaging. Prepare ion instructions described herein include cleaning, drying, preservative application, and the use of wrappings, cushioning, and containers as required. Cleaning, drying, application of preservatives, and sealing of barriers should progress in an uninterrupted series of operations. Each item will be processed according to the procedure outlined in the applicable preparation instructions provided in the appendixes. Each preparation instruction includes a table which lists the materials in national stock number (NSN) sequence required to process one unit of the item identified on the sheet.

### 2-2. Cleaning and Drying

<u>a.</u> <u>Cleaning.</u> Prior to application of preservation and packing materials, items

shall be cleaned to remove corrosion, soil, and grease. Disassembly of complex assemblies shall be limited to the degree necessary to assure that critical functioning surfaces are free of contamination. Pressure spray methods shall be used only for items of relatively simple construction, all surfaces of which can be reached by the spray. Cleaning will be accomplished by any process or combination of processes that will thoroughly clean without damaging the item. The walls and floors of vans and shelters will be wiped or swept clean of dust, sand, or other contaminants prior to cleaning installed equipment. Surfaces to which tape is to be applied will be thoroughly cleaned of dirt, grease, and oils as well as other contaminants.

<u>b.</u> <u>Drying</u>. Immediately after cleaning, thoroughly dry the items by using dry compressed air or by wiping with clean, dry, lint-free cloths.

### 2-3. Preservation Application

Apply preservative oils and greases by spraying, fogging, dipping, or brushing. When the dipping method is used, allow parts to drain dry; when spraying, fogging, or brushing procedures are used, apply a complete coating. Keep handling to a minimum after application to avoid disturbing the preservative coating. When preparation procedures do not stipulate the types of preservatives to be used, select compounds whose application, removal, or use will not damage the mechanism, structure, or function of the item.

### 2-4. Unit Pack

Items that are going to be placed in a container shall be wrapped, cushioned, blocked, or braced to prevent damage to the item or the container.

### 2-5. Exterior Pack

Pack preserved and unit-packed items as prescribed in the preparation Instructions in appendix B.

#### 2-6. Marking

Identification and address markings for packs, shipping containers, and equipment shall be according to appendix E. Special markings, if required, shall be as specified in the preparation instructions, appendix E, or as directed by appropriate authority.

### 2-7. Preparation for Quarantine Inspection

## WARNING

Personnel involved in removing diazinon dust, bait blocks, and/or dichloros strips will wear gloves, protective clothing, and respirators as recommended by the Post Surgeon or Safety Officer.

When preparation for quarantine inspection is required, the following steps will be taken:

a. All equipment and/or containers will be completely free of soil when loaded on ships.

<u>b.</u> Clear house unit and empty crates and containers of spilled grain, food stuff, or soil prior to loading component and ancillary equipment.

<u>c.</u> Inspect wood containers and packing material for termite, wood borer, or other insect infestation before packing in larger containers, or loading on ships. Under no circumstances will infested wood or packing material be used.

<u>d.</u> Inspect all housed units, containers, crates, and packing material immediately prior to packing to assure the absence of rodents, snakes, snails, other animals, or insects.

<u>e.</u> Use only authorized packing material. In no instance will native grasses or fibers be used. Store all packing material to prevent infestation by insects or rodents.

<u>f.</u> All open containers exceeding 10 cubic feet that will be shipped separately will be treated as follows:

(1) Apply diazinon dust 2 percent, 6840-00-753-5038, unit of issue 25 pound pall, to the interior of each container, at the rate of 4 pounds per 1,000 square feet; take precautions not to exceed this amount. Evenly apply the insecticide to the floor and the surface of the containers. Application directed toward the walls and upper corners will help reduce the possibility of quarantinable pest insects being transported. Dust can be applied with either a manually-operated, rotary fan duster, 3740-00-132-5935, or a manually-operated, tubular pump duster, 3740-00-132-5936. The latter is more satisfactory for smaller boxes.

(2) Use rodenticide, bait block diphacinona-paraffin, 8 ounce, 6840-00-0894664, unit of issue 20-pound box, in containers. Place one block near the center of each container or applicable container. The red tape attached to the block will be brought to the outside of the container and will be clearly visible when the container is closed. In a large container, van, etc., use one block for each 5 linear feet, evenly spaced throughout the length of the container. The block nearest the opening will have its red tape brought to the outside so it is clearly visible.

#### NOTE

In the event vans or larger containers are loaded with smaller containers that have already been treated, three bait blocks will be used, evenly spaced throughout the length of the container. The block nearest the door will have its red tape brought to the outside so it will be clearly visible.

g. All closed containers exceeding 10 cubic feet that will be shipped separately will be treated as follows:

(1) Attach insecticide dichlorvos strips, 6840-00-142-9438, 2-inch, unit of issue 144 per case, to the interior of each closed container at the rate of five linear strips per shipping container. Use equal or lesser amounts for smaller containers. Attach strips to the ceiling of shipping containers and to areas offering the greatest amount of open space in other containers.

(2) Use rodenticide bait blocks as indicated in f(2) above.

<u>h.</u> If these instructions are at variance with the Command regulations regarding shipment of nontactical generators, consult the Command Entomologist. Obtain technical assistance and advice regarding these instructions from the Command Entomologist.

i. Personnel involved in applying the dust strips and bait blocks will wear gloves, protective clothing, and respirators as recommended by the Post Surgeon or Safety Officer

# WARNING

Personnel involved in removing diazinon dust, bait blocks, and/or dichlorvos strips will wear gloves, protective clothing, and respirators as recommended by the Post Surgeon or Safety Officer.

<u>a.</u> <u>Material Prepared for Shipment</u>. Items prepared for shipment according to the appendixes provided in this manual will be deprocessed in the reverse order of processing.

<u>b</u> <u>Material Prepared for Quarantine Inspection</u>. Instructions deprocessing material prepared for quarantine inspection are outlined in this paragraph. Collection and disposal procedures of insecticides and rodenticides during unpacking operations are as follows:

(1) All containers that have a red tape extending from the container opening have been treated with 2 percent diazinon dust or dichlorvos strip insecticide and contain one or more blocks of rodenticide, dipnacinona paraffin. Removal of this material is necessary before individual items are unpacked or equipment is processed.

(2) Follow procedures below for removal of dust and bait blocks:

(a) On opening the container treated with diazinon dust and rodenticide, use a vacuum cleaner to collect the diazinon dust as the Individual items or packs are removed from the containers. Remove the dust from each pack.

(b) After the contents have been removed and cleaned, vacuum the inner surfaces of the container to remove remaining dust.

(c) Remove rodenticide bait blocks during the unpacking operation.

(d) Store all dust and bait blocks in separate closed containers for collection by the Post Engineer for proper disposal.

(e) Personnel involved in removing the dust and bait blocks will wear protective clothing and respirators, as recommended by the Post Surgeon or Safety Officer.

(3) For removal of dichlorvos strips and bait blocks, follow the procedures below:

(a) Remove dichlorvos strips and bait blocks during the unpacking operation.

(b) Store all strips and bait blocks in separate containers for collection by the Post Engineer for proper disposal.

(c) Personnel removing the strips and bait blocks will wear gloves, protective clothing, and respirators as recommended by the Post Surgeon or Safety Officer.

(4) The Post Engineer or Post Surgeon should be notified immediately of living or dead insects, rodents, or other animals that are found during unpacking operations.

# 2-9. Unit Responsibility

<u>a</u>. Certify that all items of equipment are free of all types of ammunition and explosives.

b. Assure that all equipment is clean and free of all types of contaminants including mud, dirt, and personal effects.

<u>c.</u> Assure logbook, preparation Instruction sheets, and other required forms, are placed inside a MIL-B-117 plastic bag and secured to the container as specified herein.

# CHAPTER 3

### STORAGE AND INSPECTION OF NONTACTICAL GENERATOR SETS AND POWER PLANTS

### 3-1. Storage

Generators and power plants and their component parts will be stored in a sheltered area, protecting them from the elements of the weather. If sheltered area is not available, every effort should be made to provide protection for the generators and power plants and their components.

### 3-2 Inspection

While in storage, the generators and power plants and their component parts will be inspected every 6 months using the checklist shown in table 3-1. Any items found unacceptable will be reported and corrected as soon as possible. Any consistent problems should be analyzed to have changes incorporated in the preservation of these items.

Table 3-1. Visual Characteristics Check	list Generator Component
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				-		Sheet 1 of 2 sheets
			Α.	Q.	С	
NSN:		700 AND 750 GENERATOR SETS	C.	C.	Α	DATE
SERI	IAL NUMBER:	1500, 2000, 3750 AND 4500 KW	R	A	Τ.	
		POWER PLANIS		C	of	
			J		R	
IN25	ECTED BY:	OPERATOR:				START
			Т	Т	F	REMARKS
					Ċ	
					T	
1.	Exterior damage.					
2.	Remove tape and u	unlock door.				
3.	Blocking and bracir	ng.				
4.	Covers.					
5.	Check for rodent da	amage.				
6.	Check fluid levels.					
	a. Coolant					
	b. Engine oli	.:.				
7	C. Governor d					
7. 2. Pu		overs.				
	Perrove air box in	spect covers (4 per side)				
0.	a Rust/corros	sion				
	h Coolant lea					
	c Pistons lin	ers turbo				
a	Leak check					
5.	a Coolant lea	iks				
	(1) Wa	ater numn				
	(2) Co	olant lines				
	b 0il leaks					
	(1) Oil	pump				
	(2) Se	epage under engine				
		be oil strainers				
	(0) Eu (4) Oi	l cooler				
	(1) Oi	Llines				
·	c. Fuel leaks					
·	(1) Fue	el pump				
·	(2) Fu	iel filters				
	(3) Fue	el lines				
	(4) Inie	ectors				
10.	Check for rust on fl	wheel. (750 KW and 700 KW only)-				
11.	Fan Room.					
	a. Fan					
·	b. Radiator					
·	c. Coolant line	es				
12.	For 700 and 750 K	W only.				
	a. Check cont	trol for exterior rust/corrosion, rodent dama	ade.			
13.	Control systems for	1500, 2000, 3750 and 4500 KW.				
	a. Check for crate of	Jamage				
	b. Check for seal fa	ailure on pack material				

Table 3-1. Visual Characteristics Checklist Generator Component--continued

Sheet 2 of 2 sheets С Α. Q. 700 AND 750 GENERATOR SETS C. C. А DATE NSN: SERIAL NUMBER: 1500, 2000, 3750 AND 4500 KW R Т. А POWER PLANTS Е С of J С R INSPECTED BY: OPERATOR: Е Е Е PERFORM TEST С Ρ J START т Т Е REMARKS С Т 14. Accessory packages. Box/crate damage

4-	-		
16.	Lock doors.		
15.	Reinstall all covers.		
	b.	Check seal on pack	
	a.	Box/crate damage	

17. Replace tape with new.

DEPRES For use of this form is	ERVATION GUIDE FO	R VEHICLES AND	D EQUIPMENT
FEDERAL STOCK NUMBER	NOMENCLATURE		SERIAL NUMBER
PRESERVED BY (Name)		DATE	
1 PREPARATION INSTRUCTIONS Complet	a ill'applicable entries	replacement and or	readjustment of any component or system which was
on the form to reflect the preservation applied	f and the depreservation	disassembled or had	I any adjustment disturbed during preservation
the appropriate block opposite the operation	performed Annotite the	2 DEPRESERVAT	ION INSTRUCTIONS This equipment has been pre-
grade of material used in the blank spaces pri	ovided. When similar com-	served and package	d and is not ready to operate until the necessary de-
nents by inserting the stem name in front of th	e operation performed le g	depreservation requ	tred appears on this form opposite the preservation
identify the two cooling systems on a truck m	ounted crane by the names	accomplished CAU	JTION If the grade of lubricant in a component does
to add special preservation requirements and	the applicable depreserva-	ture range drain the	out and refull the component with lubricant specified
tion instructions for those components when t	he preprinted information	by the applicable lu	brication order. The operator sitechnical manual
provided at the end of the form to annotate the	e preservation applied and	structions must be o	complied with and the before operating services and
the depreservation instructions for component	s not specifically identified	the required replace	ment or readjustment of components must be accom-
on the form Also use the blank spaces to in	clude instructions on the	plished prior to oper	rating this equipment
PRESERVATION			DEPRESERVATION
a Filled with 50% antifreeze conforming t	o FED O-A 548 and	a Check level o	mu I coolant If low add premixed solution of anti-
50% water b. Filled with arctic antifreeze conforming	10 MIL-C-11755	freeze as used	d in the initial fill f coolant. If low add antiferene of the same type
		used in the in	itial fill Do not dilute with water
c Preserved with compound conforming to	MIL-C-16173 Grade 3	c Clean cooling	system with compound conforming to MIL-C-10597, ufacturer's instructions furnished with the cleaning
		kit Fill cool	ing system in accordance with instructions con-
d Preserved with compound conforming to	MIL-C-16173, Grade 5	d Clean cooling	operator's manual system with low pressure steam. If steam is not
		available cle	an with hot water Fill cooling system in accord-
e Drained		e Fill cooling s	tructions contained in the operator s manual stem in accordance with instructions contained in
		the operator's	manual
t .		I	
g		g	
a Filled to operating level with engine pr	eservative oil	a Drain the syst the applicable	tem and refill to operating level with oil specified by the ubrication order
conforming to MIL-L-21260, Type b Filled to operating level with engine price of the second	eservative oil conform-i	b Check level o	f lubricant If low, add oil of the same type and
		grade used in	the initial fill. For operation of equipment in tem-
ing to MIL-L-21260 Type	Grade	peratures beio by the applica	w - 10°F drain and refill with lubricant specified (ble lubrication order)
c Filled to operating level with arctic lub	ricant conforming to	c Check level o	f lubricant If low add oil of the same type used in
d Filled to operating level with lubricatin	g oil conforming to	d Check level o	f lubricant 1f low add oil of the same type and
MIL-L-2104 Grade	[	grade used in temperatures t	the initial fill. For operation of equipment in below -10°F drain and refill with lubricant speci-
e Filled to operating level with lubricatin	g oil conforming to	fied by the app e Check level o	plicable lubrication order f lubricant If low, add oil of the same type used in
MIL-L-7808		the initial fill	lubricant If low add at at the
	B ou conorning (D	grade used in	the initial fill. For operation of equipment in tem-
MIL-L-45199 Grade		peratures beto by the applica	w -10°F drain and refill with lubricant specified ble lubrication order
g Drained		g Fill to operati	ng level with oil specified by the applicable lubri-
h Breathers sealed with tape		h Remove tape	
<ol> <li>Dipstick sealed with tape</li> <li>Air box drain tube sealed with can or tag</li> </ol>	De la	1 Remove tape	tape
k k		k k	
a Filled to operating level with engine ore	servative oil conform-	3 AIR CLEANERS a Check level of	Jubricant If low add oil as needed. For opera-
		tion of equipm	ient in temperatures below -10°F drain and refull
b Filled to operating level with lubrication	g oil conforming to	b Check level of	specified by the applicable lubrication order
		tion of equipm	nent in temperatures below 10°F drain and refill
c Filled to operating level with arctic lubr	teating oil conforming	Check level u	specified by the applicable lubrication order of lubricant. If low add oil of the same type used
to MIL-L-10295		in the initial	
a Removed and packaged		or install and fil	with our as specified by the upplicable lubrication
<ul> <li>Element removed and packaged</li> </ul>		e (nstall element	in air cleaner

DA , FORM, 2258

REPLACES DA FORM 2258 1 AUG 67 WHICH IS OBSOLFTE

PRESERVATION		DEPRESERVATION		
f Drøined		f Fill with oil as specified by the applicable lubrication order		
g Sealed with tape		g Remove tape		
h		h		
1				
4 DRIVE BELTS				
a 1468ion released		b Install and adjust tension		
		c		
d		d		
5 GOVERNORS		5 GOVERNORS		
<ul> <li>Filled to operating level with engine preservative oil conform-</li> </ul>		a Check level of lubricant. If low, add oil of the same type and grade		
		used in the initial fill. For operation of equipment in temperatures		
ing to MIL-L-21260, Type, Grade		below -10°F, drain and refill with jubricant specified by the appli-		
b. Eviled to operating level with inbricating oil conforming to		b Check level of lubricant, if low add oil of the same type and grade		
		used it the initial fill. For operation of equipment in temperatures		
MIL-L-2104, Grade		below -10°F, drain and refill with lubricant specified by the appli-		
		cable lubrication order		
c Filled to operating level with arctic lubricant conforming to		c Check level of lubricant. If low, add oil of the same type used in		
M1L-L-10295		the initial fill		
d Drained		d Fill with oil as specified by the applicable lubrication order		
e	$\vdash$			
6. FUEL TANK		6 FUEL TANK		
<ul> <li>Drain plug removed and secured to tank or placed in tool box</li> </ul>		a Install drain plug		
b Fuel cap vent sealed with tape		b Remove tape		
c		c		
d				
7. CLUICHES		/ CLUICHES		
b OIL TYPE (Operating in oil) Filled to operating level with		b Check level of lubricant. If low add oil of the same type and grade		
engine preservative oil conforming to MIL-L-21260		used in the initial fill. For operation of equipment in temperatures		
		below -10°F, drain and refill with lubricant specified by the appli-		
Type, Grade		cable lubrication order		
c OIL TYPE (Operating in oil) Filled to operating level with		c Check level of lubricant If low, add oil of the same type and grade		
historical sector in MIL 5, 2004, Gunda		used in the initial fill for operation of equipment in temperatures		
lubricating of conforming to MIL-C-2104, drade		opbic lubrication and relial with lubricant specified by the appli-		
d OIL TYPE (Operating in oil) Filled to operating level with		d Check level of lubricant If low, add oil of the same type used in		
arctic lubricant conforming to MIL-L-10295		the initial fill		
e OIL TYPE (Operating in oil) Drained		e Fill to operating level with oil specified by the applicable lubrica-		
	L	lion order		
f OIL TYPE (Operating in oil) Breather sealed with tape		f Remove tape		
g Drain plugs removed and placed in tool box		g install drain plugs		
1		1		
8 TORQUE CONVERTERS, FLUID COUPLINGS AND AUTO-		8 TORQUE CONVERTERS, FLUID COUPLINGS AND AUTOMATIC		
MATIC TRANSMISSIONS		TRANSMISSIONS		
Filled to operating level with preservative oil conforming to		a Drain and refill with lubricant specified by the applicable lubrication		
to FED VV L-800		order		
<ul> <li>a med to operating sever with engine preservative of conform-</li> </ul>	<b>i</b> '	used in the initial fill. For operation of aniionant in temperature		
ing to MIL-L-21260, Type , Grade		below -10°F drain and refull with lubricant apecified by the endi-		
		cable lubrication order		
c Filled to operating level with engine preservative oil conform-		c Drain and refill with oil specified by the applicable lubrication order		
ing to MIL-L-21260, Type, Grade	<u> </u>			
MIL-L-10295		concerning representation in the same type used in the initial fill		
e Filled to operating level with lubricating oil conforming to	<u>├</u>	e Check level of lubricant If low, add oil of the same type and grade		
	Į .	used in the initial fill. For operation of equipment in temperatures		
MIL-L-2104, Grade	]	below -10°F, drain and refill with lubricant specified by the appli-		
	ļ	cable lubrication order		
1 Breather sealed with lape		I Remove tape		
l <sup>u</sup>		ß		
h	1	h		
	<u>مىر م</u>			

-

PRESERVATION	DEPRESERVATION			
9 GEAR HOUSING	9 GEAR HUUSING a Drain and refull with lubricant specified by the applicable lubrication			
a Filled to operating level with engine preservative oil conform-	order EXCEPTION If OF 10 is specified for operation, the pre-			
ing to MIL-L-21260. Type Grade 10	servative oil may be used until the first required oil change For			
nig to mite-D-21200, Type, clude to	operation of equipment in temperatures below -10°F drain the pre-			
	servative oil and refill with lubricant specified by the applicable			
	lubrication order			
b Filled to operating level with engine preservative oil conform-	b Drain and refill with lubricant specified by the applicable lubrication			
• • • • • • • • • • • • • • • • • • •	order EXCEPTION If OE30 is specified for operation, the pre-			
ing to MIL-L-21260, Type , Grade 30	servative oil may be used until the first required oil change For			
	operation of equipment in temperatures below +10°F, drain the pre-			
	servative oil and refill with lubricant specified by the applicable			
	lubrication order			
c Filled to operating level with lubricating oil conforming to MIL-	c Check level of lubricant. If low, add oil of the same type and grade			
	used in the initial fill. For operation of equipment in temperatures			
L-2104, Grade	below -10°F, drain and refill with lubricant specified by the appli-			
	cable lubrication order			
d Filled to operating level with lubricating oil conforming to MIL-	d Check level of lubricant. If low, add oil of the same type and grade			
	used in the initial fill. For operation of equipment in temperatures			
L-45199, Grade	below -10°F drain and refill with lubricant specified by the appli-			
	cable lubrication order			
e Filled to operating level with lubricating oil conforming to MIL-	e Check level of lubricant. If low, add oil of the same type used in the			
L-7808	initial fill			
f Filled to operating level with lubricating oil conforming to MIL-	f Check level of lubricant If low add oil of the same type and grade			
	used in the initial fill. For operation of equipment in sub-zero tem-			
L-2105, Grade	peratures, drain and refill with lubricant specified by the applicable			
	lubrication order			
g Filled to operating level with lubrication oil conforming to MIL-	g Check level of lubricant li low add lubricant of the same type used			
G-10324	in the initial fill			
h Breathers sealed with tape				
1.				
J	J			
10. DRIVE CHAINS	10 DRIVE CHAINS			
Removed and packaged with OVM	a Install chains			
b	b			
c	c			
11, BRAKE SYSTEM	11 BRAKE SYSTEMS			
<ul> <li>Air tanks drained and drain cocks open</li> </ul>	a Close drain cocks			
b Air tanks drained and drain plugs removed and placed in tool	b Install drain pluga			
box	. Draw and sofull such huden he fluid received by the applicable lubra-			
c Filled with preservative fluid conforming to MIL-P-40040	cation order. EXCEPTION. The preservative fluid may be used			
	where the ambient temperature is not lower than $-10^{\circ}$ F drain the pre-			
	serveive fluid and refull with fluid specified by the applicable lubri-			
	cation order			
d Filled to operating level with fluid conforming to FFD VV-P-	d Check level of fluid If low, add fluid of the same type used in the			
680	initial fill			
e Filled to operating level with arctic fluid conforming to	e Check level of fluid If low, add fluid of the same type used in the			
MIL-H-13910	initial fill			
t Brakes (except emergency) not adjusted and brake pedal blocked	f Remove blocking and adjust brakes			
in the released (OFF) position				
g Brakes (except emergency) not adjusted	g Adjusi brakes			
h Exhaust port sealed with tape or plug	h Remove tape or plug			
<sup>i</sup>				
,				
12. HYDRAULIC CONTROL SYSTEMS (Except Hydraulic Burken)	12 HYDRAULIC CONTROL SYSTEMS (Except Hydrauly, Brakes)			
Filled to operating level with tubication all conforming to	a Check level of lubry unt. If low add out of the same time and and			
· · · · · · · · · · · · · · · · · · ·	used in the initial fill, but operation of equipment in temperatures			
WILL 2104 Grade	balan 100° decise and esful a shift to see the second to the			
mil-1-2104, Urade	uerow - turn, drain and result with lubricant specified by the appli-			
b. Bitled to operating level with profit literative of operating to the second seco	c tote moral atton order			
Mit_1_10295	initial ill			
mLG-D 10220				

3

PRESERVATION	DEPRESERVATION
c Filled to operating level with angine preservative oil conform-	c Check level of lubricant. If low, add oil of the same type and grade used in the initial fill. For operation of equipment in temperatures.
lng to MIL-L-21260, Type, Grade	below -10°F, drain and refill with lubricant specified by applicable lubrication order
d Exposed portions of piston rods and ramshafts costed with pre- servative conforming to MIL-C-11796, Class 3, and wrapped	d Remove barrier material and clean piston rods and ramshafts
with barrier material e Exposed portions of piston rods and ramshafts coated with	e Clean piston rods and ramshafts
engine preservative oil conforming to MIL-L-21260	{ Remove blocking
g Breather sealed with tape	g Remove tape
h.	h
1	1
13. MACHINED SURFACES	13. MACHINED SURFACES
<ul> <li>Conted with preservative conforming to MIL-C-11796, Class 3, and wrapped or covered with barrier material.</li> </ul>	a Remove barrier and clean surfaces
b Conted with preservative oil conforming to MIL-L-3150 or engine preservative oil conforming to MIL-L-21260	b Clean sufaces
c	c
d.	d
T4. AXLES AND BEARINGS	14. AXLES AND BEARINGS
a Wrapped and sealed	a Removed wrapping, clean and lubricate as specified by the applicable lubrication order
b	b
c.	c
15. TIRES	15. TIRES
a Inflated to 2/3 operating pressure	a Inflate to normal operating pressure
b Inflated to 10 PSI above operating pressure	c Check pressure. If low inflate to operating pressure
d	d
0	e
16. COMPRESSOR LUBRICATING SYSTEMS	16. COMPRESSOR LUBRICATING SYSTEMS
<ol> <li>Filled to operating level with engine preservative oil conform-</li> </ol>	a. Drain and refill with lubricant specified by the applicable lubrication order EXCEPTION If OE10 is specified for operation, the pre-
ing to MIL-L-21260, Type, Grade 10	servative oil may be used until the first required oil change. For operation of equipment in temperatures below -10°F, drain the pre-
	servative oil and refill with lubricant specified by the applicable lubrication order
b. Filled to operating level with engine preservative oil conform-	b. Drain and refill with lubricant specified by the applicable lubrication order EXCEPTION If OE30 is specified for operation, the pre-
ing to MIL-L-21260, Type, Grade 30	servative oil may be used until the first required oil change. For
	operation of equipment in temperatures below +10°F, drain the pre-
1	berverive on and renn with indificant specified by the applicable lubrication order
c Fill to operating level with lubricating oil conforming to MIL-	c Check level of lubricant If low, add oil of the same type and grade
L-2104, Grade	used in the initial fill. For operation of equipment in temperatures below -10°F, drain and refill with lubricant specified by the appli-
	cable lubrication order
d Filled to operating level with arctic lubricant conforming to MIL-L-10295	a Uneck level of lubricant. If low, add oil of the same type used in the initial fill
Drained	e. Fill to operating level with oil specified by the applicable lubrication order
f Breather sealed with tape	f Remove tape
g Dipstick sealed with tape	g Remove tape
h	h
1	1
17. AIR RECEIVER TANK	17 AIR RECEIVER TANK
Drain plugs removed and accured to tank     Drain cocks open	a Install plugs b Close drain cocks
c	k
d	d
	4

PRESERVATION	DEPRESERVATION			
18 COMPRESSOR DEHYDRATOR AND OIL FILTERS	18 COMPRESSOR DEHYDRATOR AND OIL FILTERS			
a Desiccant charges installed in dehydrator and or oil vapor	e. Remove desice and charges and install new ones before compressor			
filters	is operated			
b	b			
с — — — — — — — — — — — — — — — — — — —	L			
19 BATTERIES (Dr. Char <sub>F</sub> ed)	19 BATTERIES (Dry Charged)			
a Batteries installed in currier and filter caps sealed	a Remove seals from battery filter caps			
b. Cable terminals coated with preservative compound conform-	b. Remove barrier material and clear preservative from terminals			
ing to MIL-C-11796 Class 3 and ends of cables wrapped with				
barrier material				
с	C			
· · · · · · · · · · · · · · · · · · ·				
d	d			
20 ELECTROLYTE	20 ELECTROLTIE			
<ul> <li>Electrolyte packaged and secured to equipment or base of shipping container.</li> </ul>	the battery cables. Check specific gravity			
b	b			
c	c			
21 CRANE HOUSE	ZI. URANE HOUSE			
House swing lock secured in locked position	B Unlock			
• Anti-rotation devices installed	crane			
c	c			
22. LUBRICATION	22 LUBRICATION			
a This equipment has been lubricated in accordance with the	a Relubricate in accordance with the LO except as noted on this form			
lubrication order except as noted on this form	· · · · · · · · · · · · · · · · · · ·			
b	D			
c	c			
23 COMPONENTS REMOVED	23 COMPONENTS REMOVED			
a Placed in tool box	a Replace components on end item			
b Secured inside cab or engine compariment	b Replace components on end item			
c Packed in box	d			
	, ·			
e	e			
24 LOCKS AND KEYS	24 LOCKS AND KEYS			
Packaged	a Remove packaging			
ь	р			
c	c			
25 OPENINGS SEALED WITH TAPE	25 OPENINGS SEALED WITH TAPE			
a Generator or alternator	a Kemove tape			
b Engine exhaust	b Remove tape			
d Electric motors	d Remove tape			
Pressure regulating system	e Remove tape			
f Safety relief valve	f Remove tape			
g Light sockets	g Remove tope			
h	h			
	1			
26 PIIMP	26 PUMP			
a Diaphragm removed from eccentric arm and packaged	a Remove packaging and install diaphragm			
Eccentric arm secured				
b Rubber-faced suction and discharge valves removed and	b Remove packaging and install valves			
peckaged				
c Interior surfaces coated with preservative conforming to	<ul> <li>Clean interior surfaces with hot water and detergent followed by hot water a term</li> </ul>			
MIL-C-10382	wattrrinse			
d				
	<u> </u>			

27 FOOD CONTACTING SURFACES   Ferrous surfaces coaled with preservative conforming to MLI - C-10382  b  c	27 FOOD CONTACTING SURFACES a Remove all preservative and clean the surfaces with hol water and detergent followed by hot water rinse b
Ferrous surfaces coaled with preservative conforming to MII - C-10382     C	<ul> <li>FOUD CONTACTING SURFACES</li> <li>Remove all preservative and cle in the surfaces with hol water and detergent followed by hot water rinse</li> <li>b</li> </ul>
C-10382	<ul> <li>Remove all preservative and clean the surfaces with hol water and detergent followed by hot water rinse</li> </ul>
ь с	b
c	
c	
1	c .
28.	28.
29,	29
30	30.
31.	31
32.	32.
33.	33
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34	14
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35	35

#### **APPENDIX A**

#### REFERENCES

#### A-1. MILITARY SPECIFICATIONS

- MIL-C-104 CRATE, WOOD, LUMBER, AND PLYWOOD SHEATHED, NAILED AND BOLTED
- MIL-P-116 PRESERVATION, METHODS OF
- MIL-B-117 BAG, SLEEVE AND TUBING INTERIOR PACKAGING
- MIL-B-121 BARRIER MATERIAL, GREASEPROOFED, WATERPROOFED, FLEXIBLE
- MIL-B-131 BARRIER MATERIAL, WATERVAPORPROOF, FLEXIBLE, HEAT SEALABLE
- MIL-L-2104 LUBRICATING OIL, INTERNAL COMBUSTION ENGINE TACTICAL SERVICE
- MIL-D-3464 DESICCANTS, ACTIVATED, BAGGED, PACKAGING USE AND STATIC DEHUMIDIFACATION
- MIL-C-5501CAP AND PLUG, PROTECTIVE, DUST AND MOISTURE SEALMIL-S-8660SILICONE COMPOUND
- MIL-E-10062 ENGINE, PREPARATION FOR SHIPMENT AND STORAGE OF
- MIL-G-10924 GREASE, AUTOMOTIVE AND ARTILLERY
- MIL-C-16173 CORROSION PREVENTIVE COMPOUND, SOLVENT CUTBACK COLD APPLICATION
- MIL-L-21260 LUBRICATING OIL, INTERNAL COMBUSTION ENGINE, PRESERVATIVE AND BREAKIN
- MIL-T-22085 TAPE, ADHESIVE, PRESERVATION AND SEALING
- MIL-B-26195 BOX, WOOD-CLEATED, SKIDDED LOAD-BEARING BASE
- MIL-G-28554 GENERATOR SET, PACKAGING OF MOBILE ELECTRIC POWER AND SUPPLEMENTAL EQUIPMENT, PACKAGING OF
- MIL-A-46153 ANTIFREEZE, ETHYLENE GLYCOL, INHIBITED, HEAVY DUTY, SINGLE PACKAGE
- MIL-C-83360 CLEANING AND LUBRICATING COMPOUND, ELECTRICAL CONTACT

#### A-2. MILITARY STANDARDS

MS-20003-2 INDICATOR, HUMIDITY, CARD, THREE SPOT, IMPREGNATED AREAS (COBALTOUS CHLORIDE)

A-3. FEDERAL SPECIFICATIONS

- L-P-378 PLASTIC SHEET AND STRIP, THIN GAUGE POLYOLEFIN
- FF-B-561 BOLT, (SCREW), LAG
- FF-B-584 BOLTS, FINNED NECK, KEY HEAD, MACHINE, RIBBED NECK, SQUARE NECK, TEE HEAD
- FF-N-501 NAIL, BRADS, STAPLES AND SPIKES, WIRE, CUT AND WROUGHT
- FF-N-836 NUT, SQUARE, HEXAGON, CAP SLOTTED CASTLE, KNURLED WELD AND SINGLE BALL SEAT
- FF-W-92 WASHER, FLAT (PLAIN)
- HH-I-585 INSULATION, THERMAL (VERMICULITE)
- MM-L-751 LUMBER SOFTWOOD
- NN-P-530 PLYWOOD, FLAT PANEL
- QQ-S-741 STEEL, CARBON, STRUCTURAL SHAPE, PLATE AND BOX
- QQ-S-781 STRAPPING, STEEL AND SEALS
- QQ-W-461 WIRE, STEEL, CARBON (ROUND, BARE AND COATED)
- SS-R-501 ROOFING, FELT, ASPHALT, PREPARED SMOOTH SURFACE
- TT-I-1795 INK, MARKING, STENCIL, OPAQUE (POROUS AND NONPOROUS SURFACES)
- TT-P-664 PRIMER, COATING, SYNTHETIC, RUST INHIBITING LACQUER -RESISTING
- UU-S-625 STENCILBOARD
- UU-T-81 TAG, SHIPPING AND STOCK VV-F-800 FUEL OIL, DIESEL
- VV-L-800 LUBRICATING OIL, GENERAL PURPOSE, PRESERVATION (WATER-DISPLACING LOW TEMPERATURE)
- PPP-B-601 BOXES, WOOD, CLEATED PLYWOOD
- PPP-B-636BOX, SHIPPING, FIBERBOARDPPP-C-843CUSHIONING MATERIAL, CELLULOSIC

A-3. FEDERAL SPECIFICATIONS--Continued

- PPP-C-850 CUSHIONING MATERIAL, POLYSTYRENE EXPANDED, RESILIENT (FOR PACKAGING USES)
- PPP-C-1797 CUSHIONING MATERIAL, RESILIENT, LOW DENSITY, UNICEL-LULOR POLYPROPYLENE FOAM
- PPP-F-320 FIBERBOARD, CORRUGATED AND SOLID, SHEET STOCK (CONTAINER GRADE) AND CUT SHAPE
- PPP-T-60 TAPE, PACKAGING, WATERPROOF

PPP-T-76 TAPE, PACKAGING PAPER (FOR CARTON SEALING) A-4. TECHNICAL MANUALS

- TM 5-6115-456-15 OPERATOR'S, ORGANIZATIONAL, DIRECT AND GENERAL SUP-PORT AND DEPOT MAINTENANCE MANUAL: ELECTRIC POWER PLANTS, DED, SKID MOUNTED, 4500 KW, 4160 V, AC (ELECTROMOTIVE MODEL MP36A-60 HERTZ), NSN 6115-00-250-4402, 3750 KW, 4160 V, AC (ELECTROMOTIVE MODEL MP36A-50 HERTZ), NSN 6115-00-250-4403
- TM 5-6115-456-20P ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOL LISTS: ELECTRIC POWER PLANTS, DED, SKID MOUNTED, 4500 KW 4160 V, AC (ELECTROMOTIVE MODEL MP36A-60 HERTZ) NSN 6115-00-250-4402; 3750 KW, 4160V, AC (ELECTROMOTIVE MODEL MP36A-50 HERTZ) NSN 6115-00-250-4403
- TM 5-6115-456-34P DIRECT SUPPORT, GENERAL SUPPORT, AND DEPOT MAINTE-NANCE REPAIR PARTS AND SPECIAL TOOLS LIST: ELECTRIC POWER PLANTS, DED, SKID MOUNTED, 4500 KW, 4160 V, AC (ELECTROMOTIVE MODEL MP36A-60 HERTZ), NSN 6115-00-250-4402, 3750 KW, 4160 V, AC(ELECTROMOTIVE MODEL MP36A-50 HERTZ), NSN 6115-00-250-4403
- TM 5-6115-550-14 OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL: POWER PLANTS, ELECTRIC, DIESEL ENGINE, SKID MOUNTED, 3 UNIT, 1500 KW, 4160 V 60 HERTZ (A.G. SCHOONMAKER MODEL SM500-6800-3) FSN 6115-250-4404, 4 UNIT, 2000 KW, 4160 V, 60 HERTZ (A.G. SCHOONMAKER MODEL SM500-6800-4) FSN 6115-250-4405
- TM 5-6115-550-20P ORGANIZATIONAL, MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST: POWER PLANT, ELECTRIC, DIESEL ENGINE, SKID MOUNTED, 3 UNIT, 1500 KW, 4160 V, 60 HERTZ (A.G. SCHOONMAKER MODEL SM500-6800-3) FSN 6115-250-4404, 4 UNIT, 2000 KW, 4160 V, 60 HERTZ (A.G. SCHOONMAKER MODEL SM500-6800-4) FSN 6115-250-4405

#### A-4. TECHNICAL MANUALS--Continued

- TM 5-6115-550-35P DIRECT SUPPORT, GENERAL SUPPORT AND DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST: POWER PLANT, ELECTRIC, DIESEL ENGINE, SKID MOUNTED, 3 UNIT, 1500 KW, 4160 V, 60 HERTZ (A.G. SCHOONMAKER MODEL SM500-6800-3), FSN 6115-250-4404; 4 UNIT, 2000 KW, 4160 V, 60 HERTZ (A.G. SCHOONMAKER MODEL, SM500-6800-4), FSN 6115-250-4405
- TM 38-750 THE ARMY MAINTENANCE MANAGEMENT SYSTEM (TAMMS) FIELD COMMAND PROCEDURES

#### A-5. LUBRICATION ORDERS

- LO 5-6115-456-12 ELECTRIC POWER PLANTS, DED SKID MOUNTED, 4500 KW, 4160 AC (ELECTROMOTIVE MODEL MP36A-60 HERTZ) AND 3750 KW, 4160 AC (ELECTROMOTIVE MODEL MP36A-50 HERTZ) W/GMC ENGINE MODEL 16-576 E4
- LO 5-6115-550-12 POWER PLANTS: ELECTRIC, DIESEL ENGINE, SKID MOUNTED, 3 UNIT, 1500 KW, 4160 V, 60 HERTZ, (AG SCHOONMAKER MODEL SM500-6800-3) AND 4 UNIT, 2000 KW, 4160 V, 60 HERTZ (AG SCHOONMAKER MODEL SM500-6800-4) W/ENGINE CATERPILLAR MODEL D398

#### **APPENDIX B**

#### PACKAGING AND DEPRESERVATION

#### B-1. General

<u>a.</u> <u>General Requirements</u>. Generator sets and power plants, component parts, accessories, repair parts, and tools shall be cleaned, preserved, and packed as specified herein. All cleaning and preservation shall be in accordance with MIL-P-116. Pay special attention to coolant, hydraulic, and lubrication systems to eliminate the necessity for later major disassembly to remove contaminants which may congeal during storage or shipment.

<u>b.</u> <u>Processing Facilities.</u> Preservation-packing shall be accomplished within buildings which are rainproof and will prevent, substantially, all infiltration of wind-blown dust. The processing area shall be heated and equipped with adequate processing equipment such as spray booths, preservative tanks, etc. Equipment brought into processing areas shall be allowed to reach ambient temperature before processing. Field packaging facilities will be the best possible

c. <u>Materials</u>. Materials shall be as specified herein or as specified in the referenced packaging or material specifications. All materials shall be free of defects affecting serviceability.

### d. Disassembly and Matchmarking.

(1) Disassembly. Disassembly shall be the minimum necessary to safeguard parts vulnerable to damage, pilferage, and loss, and to the removal of protruding parts such as exhaust stacks, air cleaners, and standpipes that would otherwise increase cubage; however, disassembly shall be limited to those parts that can be removed and reinstalled without special tools. Removed bolts, nuts, pins, screws, and washers shall be reinstalled in mating parts or secured as specified herein.

(2) Matchmarking. Removed parts and mating parts shall be matchmarked when necessary to facilitate reassembly. Removed parts and mating parts shall be identified by cloth shipping tags conforming to UU-T-81, Type A, and the marked tags shall be attached to mating parts. The information on the tags shall be applied with waterproof ink.

<u>e.</u> <u>Preservatives.</u> Preservatives specified herein shall conform to the applicable specifications listed and shall be applied in accordance with MIL-P-116 or as specified herein.

<u>f.</u> <u>Measurements</u>. All sizes are inside dimensions and all measurements are in inches unless otherwise specified.

#### B-2. Procedures

Process each item according to the step-by-step procedures outlined in the preparation instructions (appendixes B-1 thru B-3).

# B-3. Depreservation

- <u>a.</u> Depreserve in accordance with DA Form 2258 and special instructions contained herein.
- b. A sample DA Form 2258 is included in this appendix.

B-2

# **APPENDIX B-1**

## 700 KW AND 750 KW GENERATOR SETS

NSN 6115-00-596-3405 6115-00-559-1449

### ITEM DESCRIPTION 700 KW ELECTRIC GENERATOR SETS 750 KW ELECTRIC GENERATOR SETS

Refer to table B-1-3 packaging materials list for identification and ordering data for items in this appendix.

Refer to table B-1-4 inventory list for individual components covered in this appendix.

STEP:	Establishes the recommended order in which the functions are accomplished.				
FUNCTION: shipment.	Relates to instructions to be accomplished in preparation of the equipment for				
MECH:	For initials of mechanic or responsible processing personnel to indicate function has been completed.				
INSP:	For initials of inspector certifying that function has been completed indicated by the mechanic or processing personnel.				

Step	Function	Mech	Insp
	DEPOT PACKAGING		
	NOTE		
	Cleaning, drying, application of preservatives, and sealing of barriers should progress in an uninterrupted series of operations.		
1	CLEANING AND DRYING		
	Thorough cleaning and drying shall be accomplished prior to the application of preservatives. Unless otherwise specified, all surfaces of the item(s) shall be cleaned by process C1, MIL-P-116, and drying shall be accomplished by one or more of the drying procedures also listed therein.		

Step	Function	Mech	Insp
2	PRESERVATION AND PACKING NOTE		
	Preservatives specified herein and the methods of application shall be in accordance with MIL-P-116. <u>a</u> . <u>Diesel Engine</u> .		
	(I) <u>Coolant System</u> .		
	<ul> <li>(a) Fill the coolant system to the proper level with equal parts (by volume) of MIL-A-46153 antifreeze and clean water.</li> </ul>		
	(b) Prepare a UU-T-81 tag to indicate "COOLANT SYSTEM CONTAINS WATER AND ANTIFREEZE IN EQUAL PARTS BY VOLUME DO NOT DRAIN CHECK COOLANT LEVEL IF COOLANT IS LOW, ADD COOLANT OF THE SAME MIXTURE."		
	(c) Attach the tag to the radiator sight glass.		
	(2) <u>Air Start System</u> .		
	NOTE		
	The power plant may contain either an air or electric starting system. No preservation is required for the electric start.		
	(a) Fill the oiler reservoir for the air starter with MIL-L-21260, type I, grade 30 preservative oil.		
	(b) Fully open the metering valve and run the air starter until oil can be detected at the exhaust.		
	(3) <u>Fuel System</u> .		
	(a) Remove fuel gage float assembly. Preserve assembly as follows:		
	<u>1</u> Wrap float assembly in MIL-B-121 barrier, cushion with PPP-C-843 cushioning, and place into a PPP-B-636 fiberboard box (18 x 6 x 4). Seal box with PPP-T-76 tape.		

Step	Function Mech	Insp
2 cont	<u>2</u> Mark box to indicate contents and secure box inside of engine control panel with MIL-T-22085 tape. PPP-T-60, type 4, 4 inch wide tape, nay be used as a substitute.	
	<u>3</u> Prepare a UU-T-81 tag to indicate "FUEL GAGE FLOAT ASSEMBLY STORED INSIDE ENGINE CONTROL PANEL".	
	<u>4</u> Attach the tag to the engine control panel.	
	<ul> <li>(b) Connect auxiliary fuel lines to a container of VV-L-800.</li> </ul>	
	(c) Start the engine on fuel and operate at fast idle until thoroughly warm, then accelerate to three-fourths speed.	
	(d) Switch the fuel supply to auxiliary.	
	<ul> <li>(e) Operate the engine until undiluted preservative oil is observed flowing through the fuel return sight glass.</li> </ul>	
	(f) Disconnect auxiliary fuel supply lines.	
	(g) Connect auxiliary 110 volts AC supply to the fuel transfer pump.	
	(h) Switch on pump and pump VV-L-800 preservative oil until the fuel tank begins to fill with preservative oil. Switch off pump.	
	(i) Disconnect 110 volts AC supply.	
	(j) Drain excess VV-L-800 from pump system.	
	(k) Remove fuel tank drain plug and drain tank.	
	(I) Replace drain plug.	
	<ul> <li>(m) Atomize spray the interior of the fuel tank with MIL-L-21260, type I, grade 30 preservative oil through the fuel gage float opening.</li> </ul>	
	<ul> <li>Seal fuel tank opening with MIL-T-22085 tape. PPP- T60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ul>	
	(4) <u>Crankcase.</u>	
	(a) Completely drain the crankcase.	
	Change 1 B-1-3	

Step		Function	Mech	Insp
2 cont	(b) (c)	Disconnect the oil line just prior to the manual lube pump and connect to a supply of MIL-L-21260, type I, grade 30 preservative oil. Pump the manual prelube pump until preservative oil is observed coming from the camshaft bearings 1 and 7 located on the top of the engine toward the radiator end.		
	(d)	Turn the engine over at least two full revolutions while preservative oil is being pumped through the oil system.		
	(e)	Connect the oil line back to the lube pump from where it was removed.		
	(f)	Open oil filter containers and remove the oil filters.		
	(g)	Atomize spray the oil filter containers with MIL-L-21260, type I, grade 30 preservative oil.		
	(h)	Replace the filters. Close and secure the containers.		
	(1)	Connect a portable pump to the piston cooling pump output.		
	(j)	Pump MIL-L-21260, type I, grade 30 preservative oil through the system.		
	(k)	Open access covers to the crankcase to observe when the preservative oil starts coming from the piston cooling tubes.		
	(1)	Turn the engine over two full revolutions while pumping preservative oil.		
	(m)	Disconnect the portable pump.		
	(n)	Open the access covers to the crankcase and atomize spray the underside of the pistons and rods.		
	(o)	Close and secure the access covers.		
	(p)	Allow time for the engine to drain (approx 20 min). Completely drain the crankcase of any oil that may have accumulated.		

Step		Function	Mech	Insp
2 cont	(q)	Fill the crankcase with MIL-L-2104, grade 40 lubricant oil.		
		CAUTION		
		Do not run engine after fill- ing crankcase. Running the engine will contaminate the oil and it will not be suitable for storage.		
	(5) <u>Cy</u>	linders and Air Boxes.		
	(a)	Remove the air box covers and open all cylinder test valves.		
	(b)	Manually crank the engine. When the piston in each cylinder is below the cylinder liner air intake ports, spray 4 ounces of MIL-L-21260, type I, grade 30 preservative oil into the open port. Do not exceed 25 psi.		
	(c)	Repeat the preservative cycle until all cylinders have been atomize sprayed with preservative oil.		
	(d)	Atomize spray the interior of each air box with MIL-L-21260, type I, grade 30 preservative oil.		
	(e)	Replace covers and close cylinder test valves. Check seals in covers for proper position.		
	(6)	<u>Top Deck</u> . Atomize spray parts under the engine top deck covers with MIL-L-21260, type I, grade 30 preservative oil.		
	(7) <u>F</u>	Radiator Fan Belts.		
	(a)	Remove the fan belts.		
	(b)	Paint unpainted surfaces of pulley grooves with TT-P-664 primer.		
	(c) (d)	Install fan belts but do not tighten. Prepare a UU-T-81 tag to indicate "RADIATOR FAN BELT TENSION RELIEVED ADJUST PRIOR TO STARTING ENGINE."		
	(e)	Attach the tag to the engine control panel.		
		B-1-5		
<ul> <li>(8) <u>Air Start Motor.</u></li> <li>(a) Fill the oiler with MIL-L-21260, type 1, grade 30 preservative oil and reset metering valve.</li> <li>(b) Seal all starting motor openings with MIL-T-22085 tape. PP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li>(9) Engine Air Filters (two).</li> <li>(a) Drain oil.</li> <li>(b) Remove filter element and atomize spray interior of air filter with MIL-L-21260, type 1, grade 30 preservative oil.</li> <li>(c) Install filter element. Close and secure covers and seal edges with MIL-T-22085 tape. PP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li>(d) Attach a UU-T-81 tag to the engine control panel indicating "ENGINE AIR FILTERS DRAINED."</li> <li>(e) Generator. Coat flywheel gear teeth and pinion gear of starter with MIL-G-10924 grease.</li> <li>(f) Attach a UU-T-21260, type 1, grade 30 preservative oil.</li> <li>(g) Drain normal lubrication oil.</li> <li>(h) Fill with MIL-L-21260, type 1, grade 30 preservative oil through spark plug.</li> <li>(g) Atomize spray 1-1/2 ounces of MIL-L-21260, type 1, grade 30 preservative oil through spark plug.</li> <li>(h) Atomize spray 1-1/2 ounces of MIL-L-21260, type 1, grade 30 preservative oil through spark plug.</li> <li>(i) Atomize spray 1-1/2 ounces of MIL-L-21260, type 1, grade 30 preservative oil through spark plug.</li> <li>(j) Atomize spray 1-1/2 ounces of MIL-L-21260, type 1, grade 30 preservative oil through spark plug.</li> <li>(j) Prepare a UU-T-81 tag indicating 'CRANKCASE FILLED TO OPERATING LEVEL WITH PROPER LUBRICATING UNTTL FIRST REQUIRED LUBRICATING OUNT DAIN CHECK OIL LEVEL IF LOW, FILL TO OPERATING LEVEL WITH PROPER LUBRICATING OIL."</li> <li>(g) Attach the tag to the engine.</li> </ul>	Step	Function	Mech	Insp
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(g) Attach the tag to the engine.	2 cont	<ul> <li>Function</li> <li>(8) <u>Air Start Motor</u>.</li> <li>(a) Fill the oiler with MIL-L-21260, type 1, grade 30 preservative oil and reset metering valve.</li> <li>(b) Seal all starting motor openings with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li>(9) Engine Air Filters (two).</li> <li>(a) Drain oil.</li> <li>(b) Remove filter element and atomize spray interior of air filter with MIL-L-21260, type 1, grade 30 preservative oil.</li> <li>(c) Install filter element, Close and secure covers and seal edges with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li>(d) Attach a UU-T-81 tag to the engine control panel indicating "ENGINE AIR FILTERS DRAINED."</li> <li>(d) Attach a UU-T-81 tag to the engine control panel indicating "ENGINE AIR FILTERS DRAINED."</li> <li>(d) Attach a UU-T-81 tag to the engine control panel indicating "ENGINE AIR FILTERS DRAINED."</li> <li>(d) Attach a UU-T-81 tag to the engine control panel indicating "ENGINE AIR FILTERS DRAINED."</li> <li>(e) Generator. Coat flywheel gear teeth and pinion gear of starter with MIL-G-10924 grease.</li> <li>(f) Atomize spray 1-1/2 ounces of MIL-L-21260, type 1, grade 30 preservative oil.</li> <li>(c) Remove spark plug.</li> <li>(d) Atomize spray 1-1/2 ounces of MIL-L-21260, type 1, grade 30 preservative oil through spark plug opening while manually cranking the engine.</li> <li>(e) Install spark plug.</li> <li>(f) Prepare a UU-T-81 tag indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESERVATIVE OIL GOOD FOR OPERATION UNTIL FIRST REQUIRED LUBRICANT CHANGE - DO NOT DRAIN CHECK OIL LEVEL IF LOW, FILL TO OPERATING LEVEL WITH PROPER LUBRICATING OIL."</li> </ul>	Mech	Insp
		(g) Attach the tag to the engine.		

Step		Function	Mech	Insp
2	(2)	Compressor		
cont	(a)	Drain normal lubrication oil from crankcase.		
	(b)	Fill crankcase with MIL-L-21260, type I, grade 30 preservative oil.		
	(c)	Remove the air cleaner element.		
	(d)	Atomize spray air intake with MIL-L-21260, type I, grade 30 preservative oil while manually cranking engine.		
	(e)	Atomize spray the interior surfaces of the air cleaner with MIL-L-21260, type I, grade 30 preservative oil.		
	(f) (g)	Drain excess preservative. Install the element. Wrap air filter with MIL-B-121 barrier and secure with PPP-T-60 tape.		
	(h)	Prepare a UU-T-81 tag indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESERVATIVE OIL GO OPERATION UNTIL FIRST REQUIRED LUBRICANT CH. DO NOT DRAIN CHECK OIL LEVEL IF LOW, FILL TO OPERATING LEVEL WITH PROPER LUBRICATING OIL	OD FOR ANGE - ."	
	(1)	Attach the tag to the compressor.		
	(3)	Drive Belts and Pulleys		
	(a) (b)	Remove drive belts. Paint unpainted surface of pulley grooves with TT-P-664 primer		
	(c) (d)	Install belts but do not tighten. Prepare a UU-T-81 tag indicating "BELT TENSION RELIEVED, ADJUST PRIOR TO STARTING."		
	(e)	Attach tag to compressor.		
	<u>d.</u>	<u>Air Tanks (two).</u>		
	(1)	Remove access floor panels.		
	(2)	Open drain valves.		
		B-1-7		

Step		Function	Mech	Insp
2 cont	(3)	Remove relief valves.		
oont	(4)	Atomize spray interior surfaces of tanks with MIL-L-21260, type I, grade 30 preservative oil.		
	(5)	Install relief valves.		
	(6)	Leave drain valves open.		
	<u>e. Ge</u>	enerator Control Cabinet and High Voltage Compartment		
	(1)	Remove relay covers and place MIL-B-121 barrier between disk and magnets. Set the protective relay time dial settings to zero. Install and secure the relay covers with QQ-W-461 wire.		
	(2)	If circuit breakers are Westinghouse, remove the arc chutes.		
	(a)	Fabricate PPP-B-601 boxes (37-3/4 x 21 x 32) For the arc chutes in accordance with appendix D-I. Refer to table B-I-I for list of materials.		
	(b)	Wrap the arc chutes with PPP-C-843 cushioning.		
	(c) (d)	Place three arc chutes into each box. Isolate the arc chutes from the sides of the box and each other with MM-L-751 lumber (21 x 2 x 4P).		
	(e) (3)	Seal box. Rack breakers into place. Block and brace to prevent movement.		
	(4) (a)	Pack fuses from each cabinet as follows: Wrap fuses with MIL-B-121 barrier and place in MIL-B-131 barrier bags according to rating. Heat seal bags. Mark bags with rating of fuses.		
	(b)	Place bagged fuses in a PPP-B-636 fiberboard box (12 x 12 x 4)		
	(c)	Secure box in cabinet with MIL-T-22085 tape. PPP- T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(5)	Coat electrical contacts and terminals with MIL-C-83360 coating compound.		

Table B-1-1. Material List for Arc Chutes Bo	х
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NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	END PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge Intermediate cleat Plywood sheet	33 x 1 x 4 13 7/8 x 1 x 4 13 7/8 x 1 x 4 33 x 21 x 1/2	4 4 2 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	25 1/2 x 1 x 4 25 7/8 x 1 x 4 25 1/2 x 33 x 1/2	4 4 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleat Skid23 1/2 x 3 x 4 Plywood sheet	23 1/2 x 1 x 4 18 3/8 x 1 x 4 16 3/8 x 1 x 4 2 25 1/2 x 23 1/2 x 1/2	4 4 2 2
	HARDWARE		
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1 lb

Step		Function	Mech	Insp
2 cont	<u>f</u> .	Batteries and Cables.		
		The batteries are on both sides of the engine under the decking on the electric start generator set. The batteries for the air start generator set are on one side only.		
	(1)	Coat the battery cable connectors with MIL-S-8660 silicone. Wrap with MIL-B-121 barrier and secure with PPP-T-60 tape. Secure these ends to prevent movement.		
	(2)	Moisture seal the filler openings of the batteries in such a manner that the batteries cannot be activated without destroying the seals. Place 10 dry-charged batteries into battery rack.		
	(4)	Install Jumper cables.		
	(5)	Coat battery connections with MIL-S-8660 silicone.		
	<u>g</u> .	Electrolyte. NOTE		
		Air start system requires 25 gallons of electrolyte. The electric start system requires 50 gallons of electrolyte.		
	(1)	Fabricate a PPP-B-601 box (56 x 29-3/4 x 21-1/2) in accordance with appendix D-1. Refer to table B-1-2 for list of materials.		
	(2)	Fill bottom of box with 3 inches of HH-I-585 thermal insulation.		
	(3)	Place the five, 5-gallon containers of electrolyte, spaced 3 inches between each container on top of the insulation.		
	(4)	Fill void with HH-I-585 thermal insulation to the level of the top edge of the wooden box.		
		B-1-10		

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NSN	ITEM DESCRIPTION	SIZE	USEQIY
	END PANELS		
5510-00-220-6078	Thru edge cleat	$21-1/2 \times 1 \times 4$	4
5510-00-220-6078	Filler edge cleat	$27 \frac{1}{2} \times 1 \times 4$	
5530-00-618-6958	Plywood sheet	$22-3/0 \times 1 \times 4$ 20-3/4 x 21-1/2 x 1/2	
3330-00-010-0938	Flywood Sheet	29-3/4 × 21-1/2 × 1/2	2
	SIDE PANELS		
5510-00-220-6078	Thru edge cleat	58-1/2 x 1 x 4	4
5510-00-220-6078	Filler edge cleat	$1/2 \times 1 \times 4$	
5510 00 220 6078	Intermediate cleat		
5510-00-220-0078		$14-3/6 \times 1 \times 4$	
5550-00-018-0958	Flywood sheet	50-1/2 X 21-1/2 X 1/2	2
	TOP AND BOTTOM PANEL		
5510-00-220-6078	Thru edge cleat	32-1/4 x 1 x 4	4
5510-00-220-6078	Filler edge cleat	51-3/8 x 1 x 4	4
5510-00-220-6078	Intermediate cleat	25-1/8 x 1 x 4	4
5510-00-220-6078	Skid filler cleat	25-1/8 x 1 x 4	2
5510-00-220-6214	Skid 32-1/4 x 3 x 4	2	
5530-00-618-6958	Plywood sheet		2
	,		
	HARDWARE		
5315-00-010-6503	Nails coment coated	1d	216
5315-00-010-0505	Nails, cement coated	40 8d	210
5315-00-010-0307 5215 00 010 6514	Noile compart coated		
5515-00-010-0511		Ibu	
			I
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Step	Function	Mech	Insp
2 cont	(5) Close and secure box lid.		
cont	(6) Block and brace box in air compressor room with MM-L-571 lumber as required to prevent movement,.		
	<u>h.</u> <u>Fire</u> <u>Extinguisher</u> . Lock fire extinguisher in bracket and secure with QQ-W-461 wire. i. Louvered Air Intake.		
	<ol> <li>Close louvers.</li> <li>Cover 'outside of levered opening with MIL-B-121 barrier and two (52-1/4 x 41-1/2) NN-P-530, 3/4inch plywood panels.</li> <li>Seal edges of plywood panel wth MIL-T-22085 tape. PRP T 60, type 4, 4 inch wide tape, may be used as</li> </ol>		
	<ul><li>(4) Remove one mounting bolt from each side of the canopy.</li></ul>		
	<ul> <li>(5) Place bolts into a MIL-B-131 barrier bag (5 x 5) and heat seal or staple bag.</li> <li>(6) Mark bag to indicate contents and secure to the inside of the access door with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li>(7) Coat the rubber door seals with MIL-S-8660 silicone</li> </ul>		
	<ul> <li>(8) Lock door.</li> <li>(9) Seal door with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li>(10) Cushion side panels of canopy with PPP-C-1797 cushioning and close canopy.</li> </ul>		
	<ul> <li>(11) Wrap MM-L-751 lumber (115 x 2 x 4) with MIL-B-121 barrier and secure with MIL-T-76 tape.</li> <li>(12) Place lumber across canopy and secure with FF-B584 bolts (3/8 x 4-1/2) and FF-W-92 flat washers.</li> </ul>		
	j Louvered Radiator Opening (front).		
	(1) Close louvers.		
	(2) Remove 16 bolts (evenly spaced) from around louvers to secure a plywood panel.		

Step		Function	Mech	Insp
2 cont	(3)	Cover louvers with MIL-B-131 barrier and NN-P-530, 5/16-inch plywood panel (104 x 103). Drill holes in panel in the location of missing mounting bolts. NN-P-530, 3/8-inch plywood, may be used as a substitute.		
	(4)	Secure plywood panel with removed bolts. Seal edges of plywood panel with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	<u>k.</u>	Louvered Radiator Openings (sides) (two).		
	(1)	Close louvers.		
	(2)	Remove 12 bolts (evenly spaced) from around louvers to secure a plywood panel.		
	(3)	Cover louvers with MIL-B-131 barrier and NN-P-530, 5/16-inch plywood panel (86-1/2 x 55-1/2. Drill holes in location of mounting bolts that were removed. NN-P-530, 3/8-inch plywood, may be used as a substitute.		
	(4)	Secure plywood panel with removed bolts.		
	(5)	Seal edges of plywood panel with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	<u>1.</u>	Catwalk, Clevises, Exhaust Stacks, Ground Rods, Wire, and Clamps.		
	(1) (2) (3)	Secure catwalk in its raised position. Secure exhaust clamps to exhaust stacks. Secure exhaust stacks, clevises, and ground rods to the catwalk using QQ-S-781 steel strapping. Isolate the steel strapping with fiberboard. Secure strapping with QQ-S-781 seals.		
	<u>m.</u>	Slings. Coat slings with MIL-C-16173, grade 1 corrosion preventive compound.		
	<u>n.</u>	Bracing for Shipment.		
	(1)	<u>Air Filter Compartment</u> . Place MM-L-751 lumber (36 x 2-7/8 x 4) between air filter compartments and the generator control cabinet.		
	(2)	<u>Control Cabinet</u> . Brace the generator control cabinet to the generator with QQ-S-741, 3-inch angle iron. Bolt brace in place with existing bolts and lifting eyes on generator.		

	Step	Function	Mech	Insp
		CAUTION		
	2 cont	Ensure floor mounting holes are drilled behind the fuel tanks.		
		(3) <u>Radia</u> tor. Brace radiator to the floor with QQ-S-741, 3-inch angle iron. Secure braces at 45° angle from approximately two-thirds up on the radiator to the floor. Drill and tap a hole in the floor for a FF-B-583 bolt (3/8 x 1) and FF-W-92 flat washer.		
		<ul> <li>(4) Control Panel Door. Brace door with MM-L-751 lumber</li> <li>(72 x 2 x 4) to prevent opening during shipment.</li> </ul>		
<u>o.</u>		<ul><li>(5) Lifting Dollies (two). Secure lifting dollies to the lifting beams with Q,-W-461 wire.</li><li>Depreservation Guide.</li></ul>		
		(1) Complete two DA Forms 2258 for the generator set and air compressor if applicable.		
		(2) Place one copy into a MIL-B-117 bag and heat seal or staple.		
		(3) Mark bag to indicate contents and secure to engine control panel.		
		(4) Place the other copy in the logbook.		
		p Logbook.		
		<ul> <li>Place the logbook. and one set of keys into a</li> <li>MIL-B-117 plastic bag and heat seal or staple.</li> </ul>		
		(2) Mark bag to indicate contents and secure to the control cabinet with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a sub- stitute		
		<u>q.</u> <u>Access Doors</u> .		
		<ol> <li>Coat the rubber door seals with MIL-S-8660 silicone.</li> <li>Tape inside of window with MIL-T-22085 tape. PPP-T 60, type 4, 4-inch wide tape, may be used as a substitute</li> <li>Cover outside of windows with MIL-B-131 barrier and NN-P-530, 5/15-inch plywood parel (21 1/2 x 21). NN-P-530, 3/8-inch plywood may be used as a substi- tute. Secure with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ol>		

Step		Function	Mech	Insp
2 cont	(4)	Lock outside access doors and seal with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(5)	Secure door retainers with MIL-T-22085 tape. PPP- T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(6)	Retain keys and forward under separate cover when power plant is issued.		
	<u>r</u> .	Openings.		
	(1)	Plug pipes and openings with MIL-C-5501 plugs or caps, or cover with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(2)	Close and secure exhaust rain caps. Seal rain caps with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(3)	Seal fuel fill door with MIL-T-22085 tape. PPPT-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(4)	Seal air compressor engine exhaust door with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	<u>s.</u>	Marking.		
	(1)	Mark unit in accordance with appendix E. Place markings on the plywood panel (radiator end of unit).		
	(2)	Mark containers and panels "REUSABLE CONTAINER - DO NOT DESTROY."		

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
5306-00-951-5699	Bolt, Carriage, FF-B-584, 3/8 x 4	2 ea
5310-00-833-3340	Washer, Flat, FF-W-92, 3/8 in.	2 ea
5315-00-010-6503	Nails, Cement Coated, FF-N-105, 4d	3 lb
5315-00-010-6507	Nails, Cement Coated, FF-N-105, 8d	3 lb
5315-00-010-6511	Nails, Cement Coated, FF-N-105, 16d	1-1/2 lb
5510-00-220-6078	Lumber, MM-L-751, 1 x 4	146 lf
5510-00-220-6194	Lumber, MM-L-751, 2 x 4	10 lf
5510-00-220-6214	Lumber, MM-L-751, 3 x 4	13 lf
5530-00-618-6955	Plywood, NN-P-530, 96 x 48 x 5/16	16 sf
5530-00-618-6956	Plywood, NN-P-530, 96 x 48 x 3/8	16 sf
5530-00-518-6958	Plywood, NN-P-530, 96 x 48 x 1/2	6 sh
5530-00-618-8073	Plywood, NN-P-530, 96 x 48 x 3/4	15 sf
5640-00-801-4176	Insulation, Thermal, HH-I-585, type II, class I	2 bg
6850-00-003-5295	Cleaning Compound, MIL-C-83360, type I, 6 oz	1 cn
6850-00-181-7940	Antifreeze, MIL-A-46153	95 gl
6850-00-295-7685	Compound, Silicone MIL-S-8660, 6 oz	3 cn
7510-00-161-0811	Ink, Stencil, TT-I-1795	1 cn
7510-00-266-6715	Tape, PPP-T-60, 2 in.	1 ro
7510-00-297-6655	Tape, PPP-T-76, 2 in.	2 ro
7510-00-916-9659	Tape, MIL-T-22085, 4 in., type II	5 ro
7510-00-890-9875	Tape, PPP-T-60, 4 in., type IV	5 ro
8010-00-292-1127	Primer, TT-P-664	1 pt
8105-00-269-4662	Bag, Plastic, MIL-B-117, type 1, 20 x 25	5 ea

# Table B-1-3. Packaging Materials List

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
8105-00-902-6508	Bag, Plastic, MIL-B-117, type 1, 18 x 12	6 ea
8135-00-226-3124	Barrier, MIL-B-121, type II, grade A, class 2 36 in. x 200 yd	60 yd
8135-00-239-5293	Seals, Steel Strapping, QQ-S-781, 3/4 in.	16 ea
8135-00-281-4113	Fiberboard, PPP-F-320, type CF, class weather resistant, 36 x 120	2 sh
8135-00-282-0565	Barrier, MIL-B-131, class I, 36 in. x 200 yd	5 ro
8135-00-283-0669	Strapping, Steel, QQ-S-781, 3/4 in.	50 ft
8135-00-291-0962	Edge, Protector, Strapping, 3/4 in.	12 ea
8135-00-292-2345	Tag, UU-T-81, type II, grade A	6 ea
8135-00-855-6969	Cushioning, PPP-C-843, 3/4 in.	5 yd
8150-00-902-6508	Bag, Plastic, MIL-B-117, type 1, 18 x 12	30 ea
9140-00-286-5294	Fuel, Diesel, VV-F-800	150 gl
9150-00-111-0209	Oil, Preservative, Lubricating MIL-L-21260, type I, grade 30	15 gl
9150-00-190-0905	Grease, Automotive and Artillery MIL-G-10924	1 lb
9150-00-281-2007	Oil, Preservative, Lubricating, VV-L-800	50 gl
9150-00-405-2987	Oil, Lubricating, MIL-L-2104, grade 40	150 gl
9310-00-160-7858	Stencilboard, type II, grade I, UU-S-625	2 sh
9505-00-222-3829	Wire, Steel, QQ-W-461, grade FS 1020, 0.135 diam	2 cl
9520-00-516-5810	Iron, Angle, 3 in.	12 lf

# Table B-1-3. Packaging Materials List--Continued

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
6115-00-559-1449	Generator set, 750 KW, 0.8 power factor 60 hertz, 2400/4160 volts, capable of operating at 50 hertz, 2200/3600 volts, 525 KW, diesel engine driven, housed, skid mounted	1 ea
	- OR -	
6115-00-596-3405	Generator set, 700 KW, 0.8 power factor 60 hertz, 2400/4160 volts, capable of operating at 50 hertz, 2200/3600 volts, 525 KW, diesel engine driven, housed, skid mounted	1 ea
2990-00-294-2435	Rope, starting for air compressor (if air start)	1 ea
4210-00-595-1779	Fire extinguisher, 15 lb, CO <sup>2</sup>	1 ea
5975-00-296-0621	Ground rods, 10 ft x 3/4 in. pointed on one end, copper clad, with ground clamps (see NOTE	4 ea
6140-00-057-2554	Battery, storage, lead acid, 6TN, with cables and terminals (for electric start engines)	10 ea
6140-00-191-8485	Battery, storage, lead acid, 8TN, with cables and terminals (for air start engines)	10 ea
6810-00-696-0487	Electrolyte, battery, 1.265 s.g. (6TN battery) (8TN battery) Shackle, open with 1-3/4 in. screw pin Ground wire, #6 AWG, bare stranded copper, 100 ft length	25 gl 50 gl 4 ea 1 ea
	Logbook Exhaust pipes with bolts, washers, nuts., and clamp rings	1 ea 2 ea

# Table B-1-4. Inventory for the 700 KW and 750 KW Generator Sets

NOTE:

If 6 ft steel ground rods are used, double the amount of rods and clamps.

Step	Function	Mech	Insp
	DEPRESERVATION		
1	Follow instructions given on DA Forms 2258.		
2	Follow instructions on tags attached to the engine control panel.		
3	Unpack, inspect, and assemble all components on the generator set.		
4	Fill dry-charged battery as follows:		
	NOTE		
	The battery you have received with the set is charged and dry. If the battery has been stored in a cool, dry place, you can expect it to deliver approximately 75 percent of its rated power when filled with electrolyte.		
	WARNING		
	If battery electrolyte is spilled on skin or clothing, immediately wash with cold water or a sodium bicarbonate solution to prevent severe skin burns or damage to clothing.		
	CAUTION		
	Avoid spilling battery electrolyte on painted surfaces. Damage to painted surfaces may result.		
	a. Remove the battery cell vent caps.		
	<u>b.</u> Remove and destroy the vent plugs which seal the holes below the vent caps.		

B-1-19

Step	Function	Mech	Insp
4 cont	WARNING		
	Do not add electrolyte solution to a battery that has been filled previously. Add only distilled water to a battery in service; add electrolyte only to a dry battery.		
	<u>c.</u> Fill each cell of a dry battery with electrolyte to the level indicated on the vent plug or cell cover.		
	<ol> <li>In temperate climates, use electrolyte of 1.280 specific gravity at 80°F (27°C).</li> </ol>		
	<ul> <li>(2) The battery and electrolyte must be 60°F (16°C) or higher and preferably below 100°F (38°C) for proper charging.</li> <li><u>d.</u> Let the battery stand for 30 minutes and then check the specific gravity of each cell with a hydrometer. Correct the reading to 80°F (27°C) by adding 0.004 for each 10°F above 80°F and subtracting 0.004 for each 10°F below 80°F.</li> </ul>		
	e. You should charge the battery if the specific gravity of any cell measures below 1.270 after correcting to 80°F (27°C).		
	NOTE		
	If any of the cells cannot be charged to a specific gravity of at least 1.270, the battery is not acceptable for this application.		
	<u>f.</u> Replace the vent caps when you have completed the above.		
5	Flush fuel lines with VV-F-800 diesel fuel prior to starting engine.		
6	RETAIN ALL SHIPPING CONTAINERS, BLOCKING, BRACING, AND PACKING MATERIALS FOR FUTURE USE.		

B-1-20

Step	Function	Mech	Insp
1			
	<u>a</u> . Certify that equipment is free of ammunition and explosives.		
	<ul> <li><u>b</u>. Assure to the maximum extent possible that items are in operating condition. Tag each item to indicate the degree of serviceability.</li> </ul>		
	<ul> <li><u>c.</u> Pack all items of equipment in the original containers. If the containers are not available, fabricate them in accordance with the instructions provided for Depot Packaging. Refer to procedures in Depot Packaging for packing instructions for Field Packaging.</li> </ul>		
2	CLEANING AND DRYING		
	NOTE		
	Cleaning, drying, application of preservatives, and sealing of barriers should progress in an uninterrupted series of operations.		
	Thoroughly clean and dry the equipment prior to the application of preservatives.		
3	PRESERVATION AND PACKING		
	a. <u>Diesel Engine.</u>		
	(1) Coolant System.		
	<ul> <li>(a) Fill the coolant system to the proper level with equal parts (by volume) of antifreeze (6850-00- 181-7940) and clean water.</li> </ul>		
	(b) Prepare tag (8135-00-292-2345) to indicate "COOLANT SYSTEM CONTAINS WATER AND ANTIFREEZE IN EQUAL PARTS BY VOLUME - DO NOT DRAIN - CHECK COOLANT LEVEL - IF COOLANT IS LOW, ADD COOLANT OF THE SAME MIXTURE."		
	(c) Attach the tag to the radiator sight glass		

Step	Function	Mech	Insp
3 cont	(2) Air Start System. NOTE		
	The power plant may contain either an air or electric starting system. No preservation is required for the electric start.		
	(a) Fill the oiler reservoir for the air starter with preservative oil (9150-00-111-0209).		
	(b) Fully open the metering valve and run the air starter until oil can be detected at the exhaust.		
	(3) Fuel System.		
	(a) Remove fuel gage float assembly. Preserve float assembly as follows:		
	1 Wrap float assembly in barrier (8135-00-226-3124), cushion with cushioning (8135-00-855-6969) and place into a fiberboard box (18 x 6 x 4). Seal		
	<ul> <li>box with tape (7510-00-297-6655).</li> <li>2 Secure box inside of engine control panel with tape (7510-00-916-9659). NSN 7510-00-890-9875</li> </ul>		
	may be used as a substitute. 3 Prepare tag (8135-00-292-2345) to indicate "FUEL GAGE FLOAT ASSEMBLY STORED INSIDE ENGINE CONTROL PANEL."		
	4 Attach the tag to the engine control panel.		
	(b) Connect auxiliary fuel lines to a container of preservative oil (9150-00-281-2007).		
	(c) Start the engine on fuel and operate at fast idle until thoroughly warm, then accelerate to three-fourths speed.		
	(d) Switch the fuel supply to auxiliary.		
	<ul> <li>(e) Operate the engine until undiluted preservative oil is observed flowing through the fuel return sight glass.</li> </ul>		
	(f) Disconnect auxiliary fuel supply lines.		

Step		Function	Mech	Insp
3 cont	(g)	Connect auxiliary 110 volts AC supply to the fuel transfer pump.		
	(h)	Switch on pump until preservative oil (9150-00- 281-2007) begins to fill fuel tank. Switch off		
	(i)	Disconnect 110 volts AC supply.		
	(j)	Drain excess preservative oil from pump system.		
	(k)	Remove fuel tank drain plug and drain tank.		
	(I)	Replace drain plug.		
	(m)	Atomize spray the interior of the fuel tank with preservative oil (9150-00-111-0209) through the fuel gage float opening.		
	(n)	Seal fuel tank opening with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.		
	(4) <u>C</u>	rankcase.		
	(a)	Completely drain the crankcase.		
	(b)	Disconnect the oil line just prior to the manual lube pump and connect to a supply of preservative oil (9150-00-111-0209).		
	(c)	Pump the manual prelube pump until preservative oil is observed coming from the camshaft bearings 1 and 7 located on the top of the engine toward the radiator end.		
	(d)	Turn the engine over at least two full revolutions while preservative oil is being pumped through the oil system.		
	(e)	Connect the oil line back to the lube pump from where it was removed.		
	(f)	Open oil filter containers and remove the oil filters.		
	(g)	Atomize spray the oil filter containers with pre- servative oil (9150-00-111-0209).		
	(h)	Close and secure the containers.		

Step		Function	Mech	Insp
3 cont	(i)	Connect a portable pump to the piston cooling pump output.		
	(j)	Pump preservative oil (9150-00-111-0209) through the system.		
	(k)	Open access covers to the crankcase to observe when the preservative oil starts coming from the piston cooling tubes.		
	(I)	Turn the engine over two full revolutions while pumping preservative oil.		
	(m)	Disconnect the portable pump.		
	(n)	Open the access covers to the crankcase and atomize spray the underside of the pistons and rods.		
	(o)	Close and secure the access covers.		
	(p)	Allow time for the engine to drain (approx 20 min). Completely drain the crankcase of any oil that may have accumulated.		
	(q)	Prepare tag (8135-00-292-2345) indicating "OIL HAS BEEN DRAINED FROM THE CRANKCASE. DO NOT START UNTIL OIL HAS BEEN ADDED." Attach tag to engine control panel.		
	(5) <u>C</u>	ylinders and Air Boxes.		
	(a)	Remove the air box covers and open all cylinder test valves.		
	(b)	Manually crank the engine. When the piston in each cylinder is below the cylinder liner air intake ports, spray 4 ounces of preservative oil (9150-00-111-0209) into the open port. Do not exceed 25 psi.		
	(c)	Repeat the preservative cycle until all cylinders have been atomize sprayed with preservative oil.		
	(d)	Atomize spray the interior of each air box with preservative oil (9150-00-111-0209).		
	(e)	Replace covers and close cylinder test valves. Check seals in covers for proper position.		

Step	Function	Mech	Insp
3 cont	(6) <u>Top Deck</u> . Atomize spray the parts under the engine top deck covers with preservative oil (9150-00-111-0209).		
	(7) <u>Radiator Fan Belts</u> .		
	(a) Remove the fan belts.		
	(b) Paint unpainted surfaces of pulley grooves with primer (8010-00-292-1127).		
	(c) Install fan belts but do not tighten.		
	(d) Prepare tag (8135-00-292-2345) to indicate "RADIATOF FAN BELT TENSION RELIEVED - ADJUST PRIOR TO STARTING ENGINE."	ર	
	(e) Attach the tag to the engine control panel.		
	(8) <u>Air Start Motor.</u>		
	(a) Fill the oiler with preservative oil (9150-00-111-0209) and reset metering valve.		
	<ul> <li>(b) Seal all starting motor openings with tape (7510-00-916 9659). NSN 7510-00-890-9875 may be used as a substitute.</li> </ul>	-	
	(9) Engine Air Filters (two).		
	(a) Drain oil.		
	(b) Remove filter element and atomize spray interior of air filter with preservative oil (9150-00-111-0209).		
	<ul> <li>(c) Install filter element. Close and secure covers and seal edges with tape (7510-00-916-9659). NSN 7510-00- 890-9875 may be used as a substitute.</li> </ul>		
	(d) Attach tag (8135-00-292-2345) to the engine con- trol panel indicating "ENGINE AIR FILTERS DRAINED."		
	<ul> <li><u>Generator</u>. Coat flywheel gear teeth and pinion gear of starter with grease (9150-00-190-0905).</li> </ul>		
	c. Air Compressor (air start model only).		
	(1) Engine.		
	(a) Drain normal lubrication oil.		

Step		Function	Mech	Insp
3	(b)	Fill with preservative oil (9150-00-111-0209).		
cont	(c)	Remove spark plug.		
	(d)	Atomize spray 1-1/2 ounces of preservative di (9150- 00-111-0209) through spark plug opening while manually cranking the engine.		
	(e)	Install spark plug.		
	(f)	Prepare tag (8135-00-292-2345) indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESERVATIVE OIL GOOD FOR OPERATION UNTIL FIRST REQUIRED LUBRICANT CHANGE - DO NOT DRAIN - CHECK OIL LEVEL - IF LOW, FILL TO OPERATING LEVEL WITH PROPER LUBRICATING OIL."		
	(g)	Attach the tag to the engine control panel.		
	(2) <u>C</u>	ompressor.		
	(a)	Drain normal lubrication oil from crankcase.		
	(b)	Fill crankcase with preservative oil (9150-00-111-0209)		
	(c)	Remove the air cleaner element.		
	(d)	Atomize spray air intake with preservative oil (9150-00-111-0209) while manually cranking engine.		
	(e)	Coat the interior surfaces of the air cleaner with preservative oil (9150-00-111-0209).		
	(f)	Drain excess preservative oil.		
	(g)	Install the air cleaner element. Wrap air filter with barrier (8135-00-226-3124) and secure with tape (7510-00-916-9659). NSN 7510-00-890-\$75 may be used as a substitute.		
	(h)	Prepare tag (8135-00-292-2345) indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESERVATIVE OIL GOOD FOR OPERATION UNTIL FIRST REQUIRED LUBRICANT CHANGE - DO NOT DRAIN - CHECK OIL LEVEL - IF LOW, FILL TO OPERATING LEVEL WITH PROPER LUBRICATING OIL."		
	(I)	Attach the tag to the compressor.		

Step	Function	Mech	Insp
3 cont	(3) <u>Drive Belts and Pulleys</u> .		
	(a) Remove drive belts.		
	<ul> <li>(b) Paint unpainted surface of pulley grooves with primer (8010-00-292-1127).</li> </ul>		
	(c) Install belts but do not tighten.		
	(d) Prepare tag (8135-00-292-2345) indicating "BELT TENSION RELIEVED, ADJUST PRIOR TO STARTING.'	,	
	(e) Attach tag to compressor.		
	<u>d</u> . <u>Air Tanks (two).</u>		
	(1) Remove access decking.		
	(2) Open drain valves.		
	(3) Remove pressure relief valves.		
	<ul><li>(4) Atomize spray interior surfaces of tanks with preservative oil (9150-00-111-0209).</li></ul>		
	(5) Install pressure relief valves.		
	(6) Leave drain valves open.		
	e. Generator Control Cabinet and High Voltage Compartment.		
	<ol> <li>Remove relay covers and place barrier (8135-00-226- 3124) between disk and magnets. Set the protective relay time dial settings to zero. Install and secure the relay covers with wire (9505-00-222-3829).</li> </ol>		
	(2) If circuit breakers are Westinghouse, remove and pack arc chutes in original containers.		
	(a) Wrap the arc chutes with cushioning (8135-00-855- 6969).		
	(b) Place three arc chutes into each box.		
	(c) Isolate the arc chutes from the sides of the box and each other with 2 x 4 lumber (5510-00-220-6194).		
	(d) Seal box.		
		I	I

Step	Function	Mech	Insp
3 cont	(3) Rack breakers into place. Block and brace to prevent movement.		
	(4) Pack fuses from each cabinet as follows:		
	<ul> <li>(a) Wrap fuses with barrier (8135-00-226-3124) and place in plastic bags (8105-00-902-6508) according to rating. Heat seal or staple bags. Mark bags with ratings of fuses.</li> <li>(b) Place bagged fuses in a fiberboard box (12 x 12 x 4).</li> </ul>		
	<ul> <li>(c) Secure each box to the bottom of each cabinet with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> </ul>		
	(5) Coat electrical contacts and terminals with coating compound (6850-00-003-5295).		
	f. Batteries and Cables.		
	NOTE		
	The batteries are on both sides of the engine under the decking on the electric start generator set. The batteries for the air start generator set are on one side only.		
	(1) Disconnect battery cables and remove the batteries.		
	(2) Clean and dry the batteries and battery holder.		
	<ul><li>(3) Install the batteries and connect jumper cables.</li><li>Preserve terminals with silicone (6850-00-295-7685).</li></ul>		
	<ul> <li>(4) Preserve the positive and ground cable connectors with silicone (6850-00-295-7685), cover with barrier (8135-00-224-8885), and seal with tape (7510-00-266-6715). Secure the cables to the frame with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used asa substitute for 7510-00-916-9659.</li> </ul>		
	g. <u>Fire Extinguisher.</u> Lock fire extinguisher in bracket and secure with wire (9505-00-222-3829).		
	Change 1 B-1-28 1		

Step	Function	Mech	Insp
3 cont	<ul> <li>h. Louvered Air Intake.</li> <li>(1) Close louvers.</li> <li>(2) Cover outside of louvered opening with barrier (8135-00-282-0565) and two 3/4-inch plywood papels</li> </ul>		
	<ul> <li>(52-1/4 x 41-1/2) (5530-00-618-8073).</li> <li>(3) Seal edges of plywood with tape (7510-00-916-9659). NSN 7510-00-890-9875 maybe used as a substitute.</li> <li>(4) Remove one mounting bolt from each side of the</li> </ul>		
	<ul> <li>canopy.</li> <li>(5) Place bolts into a bag fabricated from barrier</li> <li>(8135-00-282-0565) (5 x 5) and heat seal or staple bag.</li> <li>(6) Mark bag to indicate contents and secure to the inside</li> </ul>		
	<ul> <li>(c) Maint bag to indicate contents and cooled to the indicate of the access door with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> <li>(7) Coat the rubber door seals with silicone (6850-00-265-7685).</li> </ul>		
	<ul> <li>(8) Lock door.</li> <li>(9) Seal door with tape (7510-00-9169659). NSN 7510- 00-890-9875 may be used as a substitute.</li> </ul>		
	<ul> <li>(10) Cushion side panels of canopy with cushioning (8135-00-601-9212) and close canopy.</li> <li>(11) Wrap lumber (5510.00.220.6104) (115 x 2 x 4) with</li> </ul>		
	<ul> <li>(11) Whap lumber (5510-00-220-6194) (115 x 2 x 4) with barrier (8135-00-226-3124) and secure with tape (7510-00-297-6655).</li> <li>(12) Place lumber across canopy and secure with bolts</li> </ul>		
	<ul><li>(5506-00-951-5699) and flat washers (5310-00-833- 3340).</li><li>i. Louvered Radiator Opening (Front).</li></ul>		
	<ul><li>(1) Close louvers.</li><li>(2) Remove 16 bolts evenly spaced from around louvers to secure a plywood panel.</li></ul>		
	<ul> <li>(3) Cover louvers with barrier (8135-00-282-0565) and 5/16-inch plywood (5530-00-618-6955). Drill holes in the location of missing mounting bolts. Plywood, 3/8-inch (5530-00-618-6956) may be used as a substitute.</li> </ul>		

Step		Function	Mech	Insp
3 cont	j.	<ul> <li>(4) Secure plywood with removed bolts. Seal edges of plywood panel with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as asubstitute.</li> <li>Louvered Radiator Openings (sides) (two).</li> </ul>		
		(1) Close louvers.		
		(2) Remove 12 bolts evenly spaced from around louvers to secure a plywood panel.		
		<ul> <li>(3) Cover louvers with barrier (8135-00-282-0565) and 5/16-inch (86-1/2 x 55-1/2) plywood panel (5530-00- 618-6955). Drill holes in location of mounting bolts that were removed. Plywood, 3/8-inch (5530-00-618-6956) may be used as a substitute.</li> </ul>		
		(4) Secure plywood panel with removed bolts.		
		(5) Seal edges of plywood panel with tape (7510-00-916- 9659). NSN 7510-00-890-9875 may be used as a sub- stitute.		
	<u>k</u> .	Catwalk, Clevises, Exhaust Stacks, Ground Rods, Wire, and Clamps.		
		(1) Secure catwalk in its raised position.		
		(2) Secure exhaust clamps to exhaust stacks.		
		(3) Secure exhaust stacks, clevises, and ground rods to the catwalk with steel strapping (8135-00-283-0669). Isolate the steel strapping with fiber-board. Secure strapping with seals (8135-00-239-5293).		
	<u>l.</u>	Slings. Coat slings with corrosion preventive compound (8030-00-231-2345).		
	<u>m</u> .	Bracing for Shipment.		
		<ol> <li>Air Filter Compartment. Place lumber (5510-00-220- 6214) (36 x 2-7/8 x 4) between air filter compartments and the generator control cabinet.</li> </ol>		
		(2) <u>Control Cabinet</u> . Brace the generator control cabinet to the generator with 3-inch angle iron (9520-00-516- 5810). Bolt brace in place with existing bolts and lifting eyes on generator.		
		(3) <u>Radiator</u> . Brace radiator to the floor with 3-inch angle iron (9520-00-516-5810). Secure braces at a 45°angle from approximately two-thirds up on the radiator to the floor.		

Step		Function	Mech	Insp
3 cont		<ul> <li>(4) <u>Control Panel Door.</u> Brace door with lumber (5510-00-220-6194) (72 x 2 x 4) to prevent opening during shipment.</li> </ul>		
		(5) <u>Lifting Dollies (two)</u> . Secure lifting dollies to the lifting beams with wire (9505-00-222-3829).		
	<u>n.</u>	Depreservation Guide.		
		<ol> <li>Complete two DA Forms 2258 for the generator set and air compressor if applicable.</li> </ol>		
		(2) Place one copy in a plastic bag (8105-00-269-4662), heat seal or staple bag, and mark the bag to indicate "DEPRESERVATION GUIDE."		
		(3) Secure the preserved guide to the control panel.		
		(4) Place the other copy in the logbook.		
	<u>o.</u>	Logbook.		
		(1) Place logbook into plastic bag (8105-00-269-4662).		
		(2) Pack one set of keys with the logbook.		
		(3) Heat seal or staple bag.		
		<ul> <li>(4) Mark bag to indicate contents and secure tothe control cabinet with tape (7510-00-916-9659). PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ul>		
	<u>p.</u>	Access Doors.		
		<ol> <li>Coat the rubber door seals with silicone (6850-00- 295-7685).</li> </ol>		
		(2) Tape inside of window with tape (7510-00-916-9659). PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
		<ul> <li>(3) Cover outside of windows with barrier (8135-00-282-8565), 5/16-inch plywood (5530-00-618-6955) (21-1/2 x 21), and secure with tape (7510-00-9169659).</li> <li>NN-P-530, 3/8-inch plywood (5530-00-618-6956), and PPP-T-60, type 4, 4-inch wide tape (7510-00-890-9875) may be used as substitutes.</li> </ul>		
		<ul> <li>(4) Lock outside access doors and seal with tape (7510- 00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> </ul>		

Step	Function	Mech	Insp
Step 3 cont	<ul> <li>Function</li> <li>(5) Secure door retainers with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> <li><u>q. Openings.</u></li> <li>(1) Seal pipes and openings with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> <li>(2) Close and secure exhaust rain caps. Seal rain caps with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> <li>(2) Close and secure exhaust rain caps. Seal rain caps with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> </ul>	Mech	Insp
	<ul> <li>(3) Seal fuel fill door with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> <li>(4) Seal air compressor engine exhaust door with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> </ul>		
	(5) Secure oil, water, and fuel valves in the closed position with wire (9505-00-222-3829).		
	<u>r.</u> <u>Marking</u> . Mark unit in accordance with appendix E. Place marking on the plywood panel (radiator end of unit).		

#### **APPENDIX B-2**

#### 1500 KW AND 2000 KW POWER PLANTS

NSN 6115-00-250-4404 6115-00-250-4405 ITEM DESCRIPTION 1500 KW ELECTRIC POWER PLANT 2000 KW ELECTRIC POWER PLANT

Refer to table B-2-20 packaging materials list for identification and ordering data for items in this appendix.

Refer to table B-2-21 inventory list for the 1500 KW and table B-2-22 for the 2000 KW generating plants for individual components covered in this appendix.

STEP: FUNCTION:	Establishes the recommended order in which the functions are accomplished. Relates to instructions to be accomplished in preparation of the equipment for shipment.
MECH:	For initials of mechanic or responsible processing personnel to indicate function has been completed.
INSP:	For initials of inspector certifying that function has been completed indicated by the mechanic or processing personnel.

Step	Function	Mech	Insp
	DEPOT PACKAGING		
	NOTE		
	<ul> <li>Refer to TM 5-6115-550-14, Operator's, Organizational, DS, and GS Maintenance Manual, for identification of components mentioned in this appendix.</li> </ul>		
	<ul> <li>Cleaning, drying, application of preservatives, and sealing of barriers should progress in an uninterrupted series of operations.</li> </ul>		

Step	Function	Mech	Insp
1	CLEANING AND DRYING		
	Thorough cleaning and drying shall be accomplished prior to the application of preservatives. Unless otherwise specified, all surfaces of the item(s) shall be cleaned by process C1, MIL-P-116, and drying shall be accomplished by one or more of the drying procedures also listed therein.		
2	PRESERVATION AND PACKING		
	NOTE		
	Preservatives specified herein and the methods of application shall be in accordance with MIL-P-116.		
	a. <u>Preservation of Diesel Generator (three for 1500 KW, four</u> for 2000 KW).		
	(1) <u>Radiator</u> .		
	<ul> <li>(a) Fill the coolant system to the proper level with equal parts (by volume) of MIL-A-46153 antifreeze and clean water.</li> </ul>		
	(b) Prepare a UU-T-81 tag indicating "COOLANT SYSTEM CONTAINS WATER AND ANTIFREEZE IN EQUAL PARTS BY VOLUME - DO NOT DRAIN - CHECK COOLANT LEVEL - IF COOLANT IS LOW, ADD COOLANT OF THE SAME MIXTURE." Attach the tag to the radiator neck fill cap.		
	(2) <u>Air Start System.</u>		
	<ul> <li>(a) Fill the oiler reservoir for the air starter with MIL-L-21260, type I, grade 30 preservative oil.</li> </ul>		
	(b) Fully open the metering valve and run the air starter until oil can be detected at the exhaust.		
	(3) <u>Fuel Lines</u> .		
	<ul> <li>(a) Disconnect the engine fuel intake line just in front of the fuel pump.</li> </ul>		
	(b) Connect a line from the fuel intake line to two containers. One container shall contain fuel conforming to VV-F-800 and the other container shall contain VV-L-800 preservative oil.		

Step	Function	Mech	Insp
2 cont	(c) Disconnect the injector fuel return line at the disconnect coupling and connect a transparent line to allow for draining into a recovery container.		
	(d) Start the engine using the container of diesel fuel as the fuel supply. Operate at fast idle until thoroughly warm.		
	<ul> <li>(e) Accelerate the engine to three-fourths speed. Switch the fuel supply to the container containing VV-L-800 preservative oil. Operate the engine at this speed until undiluted preservative oil is flowing into the recovery container. Stop the engine.</li> </ul>		
	(f) Disconnect the temporary fuel return line and re- connect the permanent fuel return line.		
	(g) Disconnect the line from the fuel intake and re- connect the engine fuel intake line.		
	<b>NOTE</b> The recovered fuel oil mixture shall not be used to preserve other fuel systems.		
	(4) Crankcase and Oil System.		
	NOTE		
	Allow sufficient time for engine to cool before processing ol system		
	<ul> <li>(a) Completely drain the crankcase.</li> <li>(b) Turn compression release to decompression (away from engine) on each side of engine.</li> </ul>		
	<ul> <li>(c) Remove valve covers.</li> <li>(d) Disconnect the intake hose of the electric prelube pump from the oil line and connect to a supply of MIL-L-21260, type I, grade 30 preservative oil.</li> </ul>		
	(e) Switch on the prelube pump.		
	1	I	I

Step		Function	Mech	Insp
2 cont	(f)	Pump preservative oil through the lubrication system until preservative oil is observed coming from the camshaft bearings.		
	(g)	Manually rotate the engine over at least two full revolutions while the preservative is being pumped through the oil system.		
	(h)	Switch off the prelube pump.		
	(i)	Connect the intake hose of the electric prelube pump back into the oil line from where it was removed.		
	(j)	Atomize spray the top of the engine with MIL-L-21260, type I, grade 30 preservative oil. Install the valve covers.		
	(k)	Remove access covers to the crankcase and atomize spray the underside of the engine with MIL-L-21260, type I, grade 30 preservative oil. Install covers.		
	(1)	Allow time for the engine to drain (approx 20 min). Completely drain the crankcase of any oil that may have accumulated.		
	(m)	Fill the crankcase with MIL-L-2104, grade 30 lubricating oil.		
		CAUTION		
	Do not run will contarr	engine after filling crankcase. Running the engine ninate the oil and it will not be suitable for storage.		
	(5) <u>C</u>	<u>ylinders</u> .		
	(a)	Disconnect fuel lines from injector nozzles.		
	(b)	Remove injector nozzles.		
	(c)	Atomize spray each cylinder with 1 ounce of MIL-L-21260, type I, grade 30 preservative oil.		
	(d)	Manually rotate engine crankshaft until all pistons have completed one full cycle.		

Step	Function	Mech	Insp
2	(e) Repeat (c) and (d) above.		
cont	(f) Do not rotate the crankshaft after spraying cylinders.		
	(g) Turn compression release to compression (toward the engine) on each side d the engine.		
	<ul> <li>(h) Replace gaskets if damaged and install injector nozzles.</li> </ul>		
	(i) Connect fuel lines.		
	(j) Prepare a UU-T-81 tag indicating "ENGINE PRESERVED - DO NOT CRANK UNTIL ISSUED TO USER."		
	(k) Attach the tag to the engine start controls.		
	(6) <u>Air Intake System</u> .		
	(a) Remove the air filter.		
	(b) Cover the turbocharger impeller and atomize spray the unpainted, uncoated interior metal surfaces of the air cleaner with MIL-L-21260, type I, grade 30 preservative oil.		
	(c) Cover air filter with MIL-B-121 barrier and install.		
	<ul> <li>(d) Seal the air cleaner with MIL-T-22085 tape. PPP-T- 60, type 4, 4-inch wide tape, may be used as a sub- stitute.</li> </ul>		
	(7) <u>Fuel Tank.</u>		
	(a) Completely drain fuel.		
	(b) Remove two float balls and rods. Wrap in MIL-B-121 barrier and secure with PPP-T-60 tape. Place in a PPP-B-636 fiberboard box (6 x 6 x 18) and seal with PPP-T-76 tape.		
	(c) Mark box to indicate contents and secure to the inside of the engine control cabinet with MIL-T- 22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(d) Prepare a UU-T-81 tag indicating "FLOAT BALLS AND RODS ARE LOCATED INSIDE ENGINE CONTROL CABINET."		
	(e) Attach the tag to the engine start control.		

Step		Function	Mech	Insp
2 cont	(f)	Atomize spray the interior of the tanks with MIL-L-21260, type I, grade 30 preservative oil using a flexible nozzle of sufficient length to assure coverage of all interior surfaces of the tanks.		
	(g)	Install float covers.		
	(h)	Allow the tanks to stand, with the drain plugs removed, until the preservative oil flow ceases.		
	(i)	Coat drain plugs with the same preservative oil and install.		
	(j)	Seal fuel tank vent hole with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(8) <u>E</u>	ngine Mounted Air Tank.		
	(a)	Open drain cocks.		
	(b)	Atomize spray interior surfaces with MIL-L-21260, type I, grade 30 preservative oil.		
	(c)	Allow excess preservative to drain and leave drain cocks open.		
	(9) <u>A</u>	ir Start Motor.		
	(a)	Fill the oiler with MIL-L-21260, type I, grade 30 preservative oil and reset metering valve.		
	(b)	Seal all starting motor openings with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	(10) <u>G</u>	overnor.		
	(a)	Coat linkages, pins, and other metallic devices not enclosed with MIL-G-10924 preservative grease.		
	(b)	Wrap or cover the governor with MIL-B-121 barrier and secure the barrier with PPP-T-60 tape.		
	(11) <u>I</u>	Fan Belt.		
	(a)	Remove the fan belt.		
	(b)	Coat unpainted surfaces of pulley grooves with TT-P-664 primer.		
		Change 1 B 2 C		

Step	Function	Mech	Insp
2 cont	(c) Install fan belts but do not tighten.		
	(d) Prepare a UU-T-81 tag indicating "RADIATOR FAN BELT TENSION RELIEVED - ADJUST PRIOR TO STARTING ENGINE."		
	(e) Attach the tag to the engine control panel.		
	(12) <u>Manual Prelube Pump Handle.</u> Place PPP-C-843 cushioning between handle and pump and secure handle with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.	8	
	(13) <u>Exhaust Stack</u> .		
	(a) Cover exhaust stack with MIL-B-121 barrier.		
	(b) Install NN-P-530, 5/16-inch plywood (16-1/4 diam) and secure with MIL-T-22084 tape. NN-P-530, 3/8-inch plywood and PPP-T-60, type 4, 4-inch wide tape, may be used as substitutes.		
	(14) <u>Thermometers.</u>		
	<ul> <li>(a) Remove thermometers (two) and plug openings with MIL-C-5501 plugs or seal with MIL-T-22085 tape.</li> <li>PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ul>		
	(b) Wrap thermometers with PPP-C-843 cushioning and secure with PPP-T-60 tape.		
	<ul> <li>(c) Place thermometers in a PPP-B-636 fiberboard box (18 x 9 x 2). Seal box with PPP-T-76 tape.</li> <li>Secure box inside engine control panel with PPP-T-60 tape. Mark box to identify contents.</li> </ul>		
	(d) Prepare a UU-T-81 tag indicating "THERMOMETERS LOCATED INSIDE ENGINE CONTROL PANEL. INSTALL BEFORE OPERATING."		
	(e) Attach tag to the engine control panel.		
	(15) Engine Control Panel.		
	(a) Remove batteries from tachometer power unit.		
	(b) Place batteries into a MIL-B-131 barrier bag and heat seal or staple bag.		

Step	Function	Mech	Insp
2 cont	<ul> <li>(c) Secure bag to the inside wall of the engine control panel using MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ul>		
	(d) Prepare a UU-T-81 tag indicating "BATTERIES RE- MOVED FROM TACHOMETER POWER UNIT AND STORED INSIDE ENGINE CONTROL PANEL."		
	(e) Secure tag to the engine control panel.		
	(f) Coat electrical contacts and terminals with MIL-C-83360 coating compound.		
	(g) Place PPP-C-1797 cushioning on the face of control panel and secure with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.		
	<ul> <li>(h) Place PPP-F-320 fiberboard over PPP-C-1797 cushioning and secure with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ul>		
	(16) <u>Engine Openings</u> . Seal the following with MIL-C-5501 caps or plugs, or with MIL-T-22085 tape (PPP-T-60 tape may be used):		
	(a) Crankcase breathers.		
	(b) Dipsticks (two).		
	(17) <u>Depreservation Guide.</u>		
	(a) Complete two DA Forms 2258 for the power plant.		
	(b) Place one copy In a MIL-B-117 bag and heat seal.		
	(c) Secure the guide to the control panel.		
	(d) Place the other copy in the logbook.		
	(18) <u>Warning Tag</u> .		
	<ul> <li>(a) Prepare a UU-T-81 tag indicating "DEPROCESS ENGINE IN ACCORDANCE WITH DA FORM 2258 (Attached to this equipment) - IN ADDITION, THE AIR CLEANERS, FILL PORTS, EXHAUST STACK, BREATHER TUBES, FUEL TANK VENT HOLE, AND BATTERY FILLER OPENINGS HAVE BEEN SEALED - REMOVE SEALS PRIOR TO CRANKING ENGINE."</li> <li>(b) Secure the tag to the engine control panel</li> </ul>		
	b. Packing for the Diesel Generator (three for 1500 KW,		
	TOUT TOT 2000 KW).		
	Change 1 B-2-8	ł	I

2 cont       NOTE         The diesel generator and control unit requires similar crates. Refer to the material lists for the generator and control unit prior to fabrication of crates to enable cutting of like sizes at the same time. <ul> <li>(1) Fabricate a MIL-C-104 crate (252-1/2 X 81 X 93-1/2) in accordance with appendix D-3. Refer to table B-2-1 for a list of materials.</li> <li>(2) Cover base with MIL-B-121 barrier.</li> <li>(3) Bolt on nesting frame. Refer to figure B-2-1 for location.</li> <li>(4) Install generator and block. Refer to figure B-2-1 for location of blocking.</li> <li>(5) Apply a light film of MIL-C-16173, grade 1 preservative compound to the slings.</li> <li>(6) Mount the lifting device and slings on cradle beside one of the generators. Refer to figure B-2-1 for location.</li> <li>(7) Place crate top over generator and secure to base with FF-B-561 lag bolts (1/2 x 4).</li> <li>(8) Mark containers in accordance with appendix E and the following:             <ul> <li>(9) Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CON-</li> <li>(10) Mark all four sides of the container with 2-inch minimum size</li> </ul></li></ul>	2 cont       NOTE         The diesel generator and control unit requires similar crates. Refer to the material lists for the generator and control unit prior to fabrication of crates to enable cutting of like sizes at the same time. <ul> <li>(1) Fabricate a MIL-C-104 crate (252-1/2 X 81 X 93-1/2) in accordance with appendix D-3. Refer to table B-2-1 for a list of materials.</li> <li>(2) Cover base with MIL-B-121 barrier.</li> <li>(3) Bolt on nesting frame. Refer to figure B-2-1 for location.</li> <li>(4) Install generator and block. Refer to figure B-2-1 for location of blocking.</li> <li>(5) Apply a light film of MIL-C-16173, grade 1 preservative compound to the slings.</li> <li>(6) Mount the lifting device and slings on cradle beside one of the generators. Refer to figure B-2-1 for location.</li> <li>(7) Place crate top over generator and secure to base with FF-B-561 lag bolts (1/2 x 4).</li> <li>(8) Mark containers in accordance with appendix E and the following:</li> <li>(a) Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> <li>(b) Mark the container in which the lifting device and slings are stored with 2-inch minimum size letters</li> <li>(c) Mark the container in which the lifting device and slings are stored with 2-inch minimum size letters</li> <li>(c) Mark the container in which the lifting device and slings are stored with 2-inch minimum size letters</li> <li>(c) Mark the container in which the lifting device and slings are stored with 2-inch minimum size letters</li> <li>(c) Mark the container in which the lifting device and slings are stored with 2-inch minimum size letters</li> <li>(c) Mark the container in which the lifting device and slings are stored with</li></ul>	Step	Function	Mech	Insp
TAINER - DO NOT DESTROY." (b) Mark the container in which the lifting device and	to indicate LIFTING DEVICE HERE.	2 cont	NOTE         NOTE         The diesel generator and control unit requires similar crates. Refer to the material lists for the generator and control unit prior to fabrication of crates to enable cutting of like sizes at the same time.         (1) Fabricate a MIL-C-104 crate (252-1/2 X 81 X 93-1/2) in accordance with appendix D-3. Refer to table B-2-1 for a list of materials.         (2) Cover base with MIL-B-121 barrier.         (3) Bolt on nesting frame. Refer to figure B-2-1 for location.         (4) Install generator and block. Refer to figure B-2-1 for location of blocking.         (5) Apply a light film of MIL-C-16173, grade 1 preservative compound to the slings.         (6) Mount the lifting device and slings on cradle beside one of the generators. Refer to figure B-2-1 for location.         (7) Place crate top over generator and secure to base with FF-B-561 lag bolts (1/2 x 4).         (8) Mark containers in accordance with appendix E and the following:         (a) Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CON- TAINER - DO NOT DESTROY."         (b) Mark the container in which the lifting device and slings are stored with 2-inch minimum size letters to indicate "LIFTING DEVICE HERE."	Mech	Insp
TAINER - DO NOT DESTROY." (b) Mark the container in which the lifting device and			<ul> <li>TAINER - DO NOT DESTROY."</li> <li>(b) Mark the container in which the lifting device and slings are stored with 2-inch minimum size letters to indicate "LIFTING DEVICE HERE."</li> </ul>		
			UNIT OF		
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NSN	ITEM DESCRIPTION	SIZE	USE QTY		
	BASE				
5510-00-220-6196	Filler	11-1/2 x 2 x 1-1/2	4		
5510-00-220-6202	Deck	84 x 2 x 12	2		
5510-00-220-6216	Rubbing strip	78-1/4 x 3 x 6	8		
5510-00-220-6216	Rubbing strip	16 x 3 x 6	4		
5510-00-220-6228	Header	84 x 4 x 6	2		
5510-00-220-6234	Deck	84 x 4 x 12	20		
5510-00-220-6825	Skid	256-1/2 x 6 x 6	4		
5530-00-618-6955	Plywood disc (exhaust)	16-1/8 x 5/16	1		
5530-00-618-6956	Plywood disc (exhaust)	16-1/8 x 3/8	1		
	BLOCKING				
5510-00-220-6194	Center block	80-1/4 x 2 x 4	2		
5510-00-220-6226	Center block	$54-1/4 \times 4 \times 4$	2		
5510-00-220-6226	Radiator end shift block	37 x 4 x 4	2		
5510-00-220-6226	Generator end shift block	54 x 4 x 4	2		
5510-00-220-6226	Side shift block	$24-1/2 \times 4 \times 4$	8		
5510-00-220-6228	Cross block	30-7/8 x 4 x 6	3		
0010 00 220 0220	END PANELS	00 110 x 1 x 0	0		
5510-00-220-6194	l ower member	84-1/4 x 2 x 4	2		
5510-00-220-6194	Strut	80-1/2 x 2 x 4	10		
5510-00-220-6194	Horizontal brace	$12 - 7/8 \times 2 \times 4$	8		
5510-00-220-6194	Horizontal brace	$20-1/2 \times 2 \times 4$	8		
5510-00-220-6198	Upper member	84-1/4 x 2 x 8	2		
5530-00-618-6958	Plywood sheet	$70 \times 48 \times 1/2$	2		
5530-00-618-6958	Plywood sheet	$30-1/2 \times 48 \times 1/2$	2		
5530-00-618-6958	Plywood sheet	64-1/2 x 18-5/8 x 1/2	2 4		
5530-00-618-6958	Plywood sheet	36 x 18-5/8 x 1/2	4		
	END BAFELE AND SCREE		Т		
	END BAITEE AND SCREE		l		
5335-00-598-6103	Screen	15 x 6	2		
5510-00-220-6194	Frame	$15 \times 1$ 1/2 x 1-1/2	2		
5510-00-220-6194	Frame	$4 \times 1 - 1/2 \times 1 - 1/2$	- 4		
5530-00-618-6955	Plywood sheet	$15 \times 6 \cdot 1/2 \times 5/16$	2		
5530-00-618-6956	Plywood sheet	$15 \times 6 \cdot 1/2 \times 3/8$	2		
0000-00-010-0300	i iywood sheet	10 A 0-1/2 A 3/0	4		

Change 1 B-2-10

Table B-2-1. Material List for Diesel Generator Crate (three for	r 1500 KW,	four for 2000 KW)	Continued
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	SIDE PANELS		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6198 5530-00-618-6958 5530-00-618-6958 5530-00-618-6958	Lower member Strut Horizontal brace Horizontal brace Horizontal brace Upper member Plywood sheet Plywood sheet Plywood sheet Plywood sheet	252-3/4 x 2 x 4 82-1/2 x 2 x 4 18-7/8 x 2 x 4 20-1/2 x 2 x 4 8-3/4 x 2 x 4 252-3/4 x 2 x 8 70 x 48 x 1/2 36 x 48 x 1/2 70 x 15-3/4 x 1/2 36 x 15-3/4 x 1/2	2 24 16 24 4 2 10 10 2 2
	DAFFLE (4 X 10 HOLE)		
5335-00-598-6103	Screen	15 x 6	2
5510-00-220-6194	Frame	15 x 1-1/2 x 1-1/2	2
5510-00-220-6194	Frame	4 x 1-1/2 x 1-1/2	4
5530-00-618-6955	Plywood sheet	15 x 6-1/2 x 5/16	2
5530-00-618-6956	plywood sheet	15 x 6-1/2 x 3/8	2
	TOP PANEL		
5510-00-220-6078	Header	255-3/4 x 1 x 4	2
5510-00-220-6194	End joist	82-3/4 x 2 x 4	2
5510-00-220-6226	Intermediate joist	82-3/4 x 4 x 4	10
5530-00-618-6958	Plywood sheet	85 x 48 x 1/2	5
5530-00-618-6958	Plywood sheet	85 x 16-1/2 x 1/2	1
	LIFTING DEVICES AND SLING CRADLE		
5510-00-220-6194	Block	3 x 2 x 4	8
5510-00-220-6226	Cradle top	11-3/4 x 4 x 4	2
5510-00-220-6232	Cradle base	11-3/4 x 4 x 10	2

Table B-2-1. Material List for Diese	I Generator Crate (three for	or 1500 KW, four for 200	0 KW)Continued
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		1	
	HARDWARE		
5306-00-062-4108	Bolt, carriage	1/2 x 12	8 ea
5306-00-089-1426	Bolt, carriage	1/2 x 7-1/2	29 ea
5306-00-089-1531	Bolt, carriage	1/2 x 6-1/2	8 ea
5306-00-248-8687	Bolt, carriage	1/2 x 10	48 ea
5306-00-248-8688	Bolt, carriage	1/2 x 11	16 ea
5306-00-260-4690	Bolt, carriage	1/2 x 10-1/2	6 ea
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	6 ea
5306-00-412-9789	Bolt, lag	1/2 x 4	38 ea
5306-00-993-6257	Bolt, carriage	3/8 x 3	8 ea
5310-00-198-3642	Washer, flat	1/2 in.	168 ea
5310-00-584-5272	Washer, lock	1/2 in.	22 ea
5310-00-720-8528	Nut, hexagon	3/8 in.	8 ea
5310-00-768-0318	Nut	1/2 in.	129 ea
5310-00-833-3340	Washer, flat	3/8 in.	8 ea
5315-00-010-4666	Nail, cement coated	40d	20 lb
5315-00-010-6507	Nail, cement coated	8d	20 lb
5315-00-010-6512	Nail, cement coated	20d	2 lb
5315-00-010-6513	Nail, cement coated	30d	15 lb
5315-00-161-8654	Nail, clout	3/4 in.	1 lb
5315-00-198-5625	Nail, roofing	1-1/4 in.	5 lb
5315-00-889-2741	Nail, drive screw	1 -1/4 in.	2 lb
5340-00-252-3014	Anchor plate	1-1/4 in.	10 ea
5650-00-514-4474	Roofing, felt	45 lb	75 sf
8135-00-239-5294	Seal, steel strapping	1-1/4 in.	20 ea
8135-00-283-0671	Strapping, steel	1-1/4 in.	85 ft
8135-00-283-0672	Strapping, steel	2 in.	56 ft
	Bolt, carriage	1/2 x 13-1/2	8 ea
	Lifting ring	16 x 1-1/4 x 1/4	4 ea
	Strapping, steel,	1-1/4 in.	45 ft
	perforated		
	Steel plate	9 x 3 x 1/4	8 ea



Figure B-2-1. Location of Blocking for the Generator.

Step	Function	Mech	Insp
2 cont	<ul> <li><u>Preservation of the Control Unit</u>.</li> <li>(1) Remove 21 arc chutes and phase barriers (2000 KW only) from the circuit breakers. The arc chutes will be packed separately (step <u>2d</u>).</li> </ul>		
	<b>NOTE</b> The arc chutes are to remain installed in the 1500 KW during shipment.		
	(2) Install phase barriers back onto breakers.		
	(3) Rack into place, block, and brace to prevent movement.		
	(4) Pack fuses from each cabinet as follows:		
	<ul> <li>Wrap fuses with MIL-B-121 barrier and place in MIL-B-131 bags according to rating. Heat seal bags and mark to indicate contents.</li> </ul>		
	<ul> <li>(b) Place bagged fuses in a PPP-B-636 fiberboard box (8 x 12 x 3). Seal box with PPP-T-76 tape and mark to indicate contents.</li> </ul>		
	<ul> <li>(c) Secure each box in cabinet with MIL-T-22085 tape.</li> <li>PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ul>		
	(5) Coat electrical contacts and terminals with MIL-C-83360 coating compound.		
	(6) Remove relay covers and place MIL-B-121 barrier between disk and magnets. Set the protective relay time dial settings to zero. Secure the relay covers with QQ-W-461 wire.		
	(7) Prepare a UU-T-81 tag indicating "BARRIER HAS BEEN PLACED BETWEEN DISK AND MAGNETS OF RELAYS - REMOVE BEFORE OPERATION."		
	(8) Attach tag to the start controls on the control unit.		
	(9) Remove retaining bolts from the doors of the control unit. Wrap with MIL-B-121 barrier and pack in a PPP-B- 636 fiberboard box (6 x 4 x 4). Seal box with PPP-T-76 tape. Secure box in tool box on the end of the control unit. Prepare a UU-T-81 tag indicating "RETAINING BOLTS ARE IN TOOL BOX." Secure tag to the door with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute for MIL-T-22085.		

Step		Function	Mech	Insp
2 cont	<ul> <li>(10) Place PPP-0 and secure may be used</li> <li>(11) Fabricate fra Refer to tabl holes to ena FF-B-584 box</li> </ul>	C-843 cushioning over relays and switches with MIL-T-22085 tape. PPP-T-60 tape d as a substitute. ame in accordance with figure B-2-2. le B-2-2 for list of materials. Drill ble securing frame to control unit with olts and FF-W-92 washers.		
	(12) Cover frame unit with MIL	where it comes in contact with the control -B-121 barrier.		
	(13) Secure frame FF-B-584 bo	e to control unit with 3/9 x 5-1/2 NC olts and FF-W-92 flat washers.		
	(14) Preserve an	d pack batteries as follows:		
	(a) Fabricate for the bat D-1. Refe Line box v	a PPP-B-601 box (57-1/2 x 22-1/2 x 12) teries in accordance with appendix r to table B-2-3 for list of materials. vith MIL-B-121 barrier.		
	(b) Coat batte Place eac (10-3/4 x 1	ery posts with MIL-S-8660 silicone. h battery into a PPP-B-636 fiberboard box I0-3/4 x 9).		
	(c) Place 10 c	dry-charged batteries into PPP-B-601 box.		
	(d) Secure bo strapping,	x to battery rack with QQ-S-781 steel edge protectors, and seals.		
	d. Arc Chutes (2000	<u>KW).</u>		
	(1) Fabricate PP arc chutes in to table B-2-4	P-B-601 boxes (37-3/4 x 21 x 32) for the accordance with appendix D-1. Refer for list of materials.		
	(2) Wrap the arc	chutes with PPP-C-843 cushioning.		
	(3) Place three a	rc chutes into the box.		
	<ul><li>(4) Isolate the ar each other by seal the box.</li></ul>	c chutes from the sides of the box and / using MM-L-751 (21 x 2 x 4) lumber and		
	e. Packing for the C	ontrol Unit.		
	(1) Fabricate a M in accordance B-2-5 for a lis	IIL-C-104 crate (252-1/2 x 81 x 93-1/2) e with appendix D-3. Refer to table tt of materials.		



Figure B-2-2. Control Unit Frame.

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	FRAME		
5510-00-220-6194	Гор	182 x 2 x 4	1
5510-00-220-6194	Post	58 x 2 x 4	6
5510-00-220-6194	Post	64 x 2 x 4	2
5510-00-220-6194	Spacer	24-3/8 x 2 X 4	7
5510-00-220-6194	Spacer	22-1/2 x 2 x 4	1
5530-00-618-6956	Plywood sheet	77-1/4 x 41 x 3/8	1
5530-00-618-6956	Plywood sheet	78 x 41 x 3/8	1
5530-00-618-6956	Plywood sheet	65-1/2 x 26-3/4 x 3/8	1
	HARDWARE		
5045 00 040 0544		40.1	4.11
5315-00-010-6511	Nail, cement coated	16d	1 ID

#### Table B-2-2. Material List for Control Unit Frame

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	1-1/2 x 1 x 4 15-1/8 x 1 x 4 22-1/4 x 9-1/2 x 1/2	4 4 2
	SIDE PANELS		
5510-00-220-6078 5530-00-618-6958 5530-00-618-8073	Thru edge cleat Plywood sheet Filler edge cleat (plywood)	58 x 1 x 4 58 x 9-1/2 x 1/2 2-1/4 x 3-1/2 x 3/4	4 2 8
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Skid filler cleat Skid Plywood sheet	24-3/4 x 1 x 4 50-7/8 x 1 x 4 17-5/8 x 1 x 4 17-5/8 x 1 x 4 24-3/4 x 3 x 4 58 x 24-3/4 x 1/2	4 4 2 2 2
	HARDWARE		
5315-00-010-6509 5315-00-010-6511	Nails, cement coated Nails, cement coated	10d 16d	1 lb 1 lb

Table B-2-3.	Material List for Battery Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	32 x 1 x 4 24-7/8 x 1 x 4 24-7/8 x 1 x 4 21 x 32 x 1/2	4 4 2 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	40-1/4 x 1 x 4 24-7/8 x 1 x 4 24-7/8 x 1 x 4 40-1/4 x 32 x 1/2	4 4 2 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Skid filler cleat Skid Plywood sheet	23-1/2 x 1 x 4 33-1/8 x 1 x 4 16-3/8 x 1 x 4 16-3/8 x 1 x 4 23-1/2 x 3 x 4 40-1/4 x 23-1/2 x 1/2	4 4 2 2 2 2 2
	HARDWARE		
5315-00-010-6509 5315-00-010-6511	Nails, cement coated Nails, cement coated	10d 16d	1 lb 1 lb

#### Table B-2-4. Material List for Arc Chutes Box

			l
			UNIT OF
NSN	ITEM DESCRIPTION	SIZE	USE QTY
	BASE		
5510-00-220-6196	Filler	11-1/2 x 2 x 1-1/2	4
5510-00-220-6202	Deck	84 x 2 x 12	2
5510-00-220-6216	Rubbing strip	78-1/4 x 3 x 6	8
5510-00-220-6216	Rubbing strip	16 x 3 x 6	4
5510-00-220-6228	Header	84 x 4 x 6	2
5510-00-220-6234	Deck	84 x 4 x 12	20
5510-00-220-6825	Skid	256-1/2 x 6 x 6	5
	BLOCKING		
5510-00-220-6216	Center block (battery end)	3 x 6 x 6	3
5510-00-220-6825	Cross block	54 x 6 x 6	4
5510-00-220-6825	Center block	13-1/2 x 6 x 6	3
	END PANELS		
	-		
5510-00-220-6194	Lower member	84-1/4 x 2 x 4	2
5510-00-220-6194	Strut	80-1/2 x 2 x 4	10
5510-00-220-6194	Horizontal brace	12-7/8 x 2 x 4	8
5510-00-220-6194	Horizontal brace	$20-1/2 \times 2 \times 4$	8
5510-00-220-6198	Upper member	84-1/4 x 2 x 8	2
5530-00-618-6958	Plywood sheet	70 x 48 x 1/2	2
5530-00-618-6958	Plywood sheet	$30-1/2 \times 48 \times 1/2$	2
5530-00-618-6958	Plywood sheet	64-1/2 x 18-5/8 x 1/2	4
5530-00-618-6958	Plywood sheet	36 x 18-5/8 x 1/2	4
	END BAFFLE AND		
	SCREEN		
5510-00-220-6194	Frame	15 x 1-1/2 x 1-1/2	2
5510-00-220-6194	Frame	$4 \ge 1 - 1/2 \ge 1 - 1/2$	4
5530-00-618-6955	Plywood sheet	15 x 6-1/2 x 5/16	2
5530-00-618-6956	Plywood sheet	$15 \times 6^{-1/2} \times 3/10$	2
5335-00-508 6102	Screen	15 x 0-1/2 x 3/0 15 x 6	2
2222-00-280-0102	JUEEN	13 8 0	۷

### Table B-2-5. Material List for Control Unit Crate

	SIDE PANELS		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6198 5530-00-618-6958 5530-00-618-6958	Lower member Strut Horizontal brace Horizontal brace Horizontal brace Upper member Plywood sheet Plywood sheet Plywood sheet	252-3/4 x 2 x 4 82-1/2 x 2 x 4 18-7/8 x 2 x 4 20-1/2 x 2 x 4 8-3/4 x 2 x 4 252-3/4 x 2 x 8 70 x 48 x 1/2 36 x 48 x 1/2 70 x 15-3/4 x 1/2	2 24 16 24 4 2 10 10 2
5530-00-618-6958	Plywood sheet	36 x 15-3/4 x 1/2	2
5510-00-220-6194 5510-00-220-6194 5530-00-618-6955 5530-00-618-6956 5335-00-59806103	BAFFLE (4 x 10 HOLE) Frame Frame Plywood sheet Plywood sheet Screen	15 x 1-1/2 x 1-1/2 4 x 1-1/2 x 1-1/2 15 x 16-1/2 x 5/16 15 x 6 15 x 16-1/2 x 3/8	2 4 2 2 2
	TOP PANEL		
5510-00-220-6078 5510-00-220-6194 5510-00-220-6226 5330-00-618-6958 5530-00-618-6958	Header End joist Intermediate joist Plywood sheet Plywood sheet	255-3/4 x 1 x 4 82-3/4 x 2 x 4 82-3/4 x 4 x 4 85 x 16-1/2 x 1/2 85 x 48 x 1/2	2 2 10 1 5

#### Table B-2-5. Material List for Control Unit Crate--Continued

	HARDWARE		
5306-00-089-1531	Bolt. carriage	1/2 x 6-1/2	20 ea
5306-00-248-8687	Bolt, carriage	1/2 x 10	60 ea
5306-00-248-8688	Bolt, carriage	1/2 x 11	16 ea
5306-00-260-4690	Bolt, carriage	1/2 x 10-1/2	6 ea
5306-00-412-9789	Bolt, lag	1/2 x 4	38 ea
5306-00-993-6257	Bolt, carriage	3/8 x 3	8 ea
5310-00-198-3642	Washer, flat	1/2 in.	160 ea
5310-00-584-5272	Washer, lock	1/2 in.	22 ea
5310-00-720-8528	Nut, hexagon	3/8 in.	8 ea
5310-00-768-0318	Nut, hexagon	1/2 in.	122 ea
5310-00-833-3340	Washer, flat	3/8 in.	8 ea
5315-00-010-4666	Nail, cement coated	40d	20 lb
5315-00-010-6507	Nail, cement coated	8d	20 lb
5315-00-010-6512	Nail, cement coated	20d	2 lb
5315-00-010-6513	Nail, cement coated	30d	15 lb
5315-00-161-8654	Nail, clout	3/4 in.	1 lb
5315-00-198-5625	Nail, roofing	1-1/4 in.	5 lb
5315-00-889-2741	Nail, drive screw	1-3/4 in.	2 lb
5340-00-252-3014	Anchor plate	1-1/4 in.	10 ea
5360-00-062-4108	Bolt, carriage	1/2 x 12	10 ea
5650-00-514-4474	Roofing felt	45 lb	175 sf
8135-00-239-5294	Seal, steel strapping	1-1/4 in.	20 ea
8135-00-283-0671	Strapping, steel	1-1/4 in.	85 ft
8135-00-283-0672	Strapping, steel perforated	2 in.	56 ft
	Bolt, carriage	1/2 x 16	10 ea
	Lifting ring	1-1/4 x 1/4	4 ea
	Steel plate	9 x 3 x 1/4	8 ea
	Strapping, steel perforated	1-1/4 in.	45 ft

### Table B-2-5. Material List for Control Unit Crate--Continued

Step		Function	Mech	Insp
2 cont		(2) Pack the control unit in a submethod lla floating bag. Refer to figure B-2-3 for location of nesting frame.		
		(a) Place 64, 16-unit bags of MIL-D-3464 desiccant with the control unit. Isolate the desiccant from the control unit with MIL-B-121 barrier and secure with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.		
		(b) Place a MS20003-2 humidity indicator and inspection window in the lower right hand corner of the tool box end of the control unit.		
		(3) Place crate top over control unit ensuring that inspection window is alined with the humidity indicator. Secure top to base with FF-B-561 lag bolts (3/8 x 4).		
		(4) Mark container in accordance with appendix E and the following: Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."		
	<u>f.</u>	Preservation of the Air Compressor.		
		(1) <u>Engine.</u>		
		(a) Drain normal lubrication oil.		
		(b) Fill with MIL-L-21260, type I, grade 30 preservative of	I.	
		(c) Remove spark plug.		
		(d) Atomize spray 1-1/2 ounces of MIL-L-21260, type I, grade 30 preservative oil through spark plug opening while manually cranking the engine.		
		(e) Install spark plug.		
		(f) Prepare a UU-T-81 tag indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESERVATIVE OIL GOOD FOR OPERATION UNTIL FIRST REQUIRED LUBRICANT CHANGE - DO NOT DRAIN - CHECK OIL LEVEL - IF LOW, FILI TO OPERATING LEVEL WITH OIL AS SPECIFIED IN LO 5-6115-550-12."	-	
		(g) Attach the tag to the engine.		



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Figure B-2-3. Location of Blocking for the Control Unit.

Step	Function	Mech	Insp
2	(2) <u>Compressor.</u>		
cont	(a) Drain normal lubrication oil from crankcase.		
	(b) Fill crankcase with MIL-L-21260, type I, grade 30 preservative oil.		
	(c) Remove the air cleaner element.		
	<ul> <li>(d) Atomize spray air intake with MIL-L-21260, type I, grade 30 preservative oil while manually cranking compressor.</li> </ul>		
	<ul> <li>(e) Atomize spray the interior surfaces of the air cleaner with MIL-L-21260, type I, grade 30 preservative oil.</li> </ul>		
	(f) Drain excess preservative.		
	(g) Install the element.		
	<ul> <li>(h) Wrap air filter with MIL-B-121 barrier and secure with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> </ul>		
	<ul> <li>(i) Prepare a UU-T-81 tag indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESER- VATIVE OIL GOOD FOR OPERATION UNTIL FIRST REQUIRED LUBRICANT CHANGE - DO NOT DRAIN - CHECK OIL LEVEL - IF LOW, FILL TO OPERATING LEVEL WITH OIL AS SPECIFIED IN LO 5-6115-550-12."</li> </ul>		
	(j) Attach the tag to the compressor.		
	<ul> <li>(k) Plug compressor output openings using MIL-C-5501 plugs or cover with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> </ul>		
	(3) Drive Belts and Pulleys.		
	(a) Remove drive belts.		
	(b) Paint unpainted surface of pulley grooves with TT-P-664 primer.		
	(c) Install belts but do not tighten.		
	(d) Prepare a UU-T-81 tag indicating "BELT TENSION RELIEVED, ADJUST PRIOR TO STARTING."		
	(e) Attach tag to belt guard.		

Step	Function	Mech	Insp
2	(4) <u>Depreservation</u> <u>Guides</u> .		
cont	(a) Complete two DA Forms 2258 for the compressor.		
	(b) Place one copy in a MIL-B-117 bag and heat seal, and mark the bag to indicate "DEPRESERVATION GUIDE." Secure the bags to the compressor.		
	(c) Place the other copy in the logbook.		
	g. Packing for the Air Compressors.		
	<ul> <li>(1) Fabricate a MIL-B-26195 box (73 x 46-1/2 x 43-1/2) in accordance with appendix D-2. Refer to table B-2-6 for a list of materials.</li> </ul>		
	(2) Cover base with MIL-B-121 barrier.		
	(3) Mount both compressors on base and secure with 1/2- x 4-1/2-inch FF-B-584 bolts, FF-W-92 washer and FF-N-836 nuts. Refer to figure B-2-4 for location and fabrication of blocking.		
	<ul> <li>(4) Place crate top over compressors and secure to base with FF-W-92 washer and FF-B-561 lag bolts (3/8 x 3-1/2).</li> </ul>		
	(5) Mark container in accordance with appendix E and the following' Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."		
	h. Preservation of the Air Receiver Tank.		
	(1) Open drain cock and remove side plug.		
	(2) Atomize spray interior surfaces of tank with MIL-L-21260, type I, grade 30 preservative oil.		
	(3) Allow excess preservative to drain.		
	(4) Install side plug.		
	(5) Leave drain cock open.		

			UNIT OF
NSN	ITEM DESCRIPTION	SIZE	USE QTY
	BASE		
5510-00-220-6196	Shift block	42 x 2 x 6	1
5510-00-220-6198	Skid	75-5/8 x 2 x 8	3
5510-00-220-6198	Deck	49-1/2 x 2 x 8	1
5510-00-220-6202	Deck	49-1/2 x 2 x 12	5
5510-00-220-6216	Rub strip	16 x 3 x 8	3
5510-00-220-6216	Rub strip	13-3/4 x 3 x 8	6
5510-00-220-6226	Header	49-1/2 x 4 x 4	2
	SIDE PANELS		
FF10 00 000 0070		75 2/4 × 4 × 4	4
5510-00-220-6078	Filler edge cleat	75-3/4 X 1 X 4	4
5510-00-220-6078	Filler edge cleat	20-7/8 X I X 4	4
5510-00-220-6076		20-1/0 X I X 4	4
5510-00-220-6194	Venical Joist support	29-1/2 X 2 X 4	4
5510-00-220-0194	Dist support	$0 \times 2 \times 4$ 75 2/4 × 24 × 1/2	0
5550-00-616-6958	Flywood sheet	75-5/4 X 54 X 1/2	2
	LIND FAILLES		
5510-00-220-6078	Thru edge cleat	32-1/2 x 1 x 4	4
5510-00-220-6078	Filler edge cleat	$42-1/2 \times 1 \times 4$	4
5510-00-220-6078	Intermediate cleat	25-3/8 x 1 x 4	2
5530-00-618-6958	Plywood sheet	49-5/8 x 32-1/2 x 1/2	2
	TOP PANEL		
5510-00-220-6078	Thru edge cleat	52-1/8 x 1 x 4	2
5510-00-220-6078	Filler edge cleat	68-5/8 x 1 x 4	2
5510-00-220-6078	Intermediate cleat	45 x 1 x 4	2
5510-00-220-6194	Joist	49-5/8 x 2 x 4	2
5530-00-618-6958	Plywood sheet	52-1/8 x 25-1/4 x 1/2	3

Table B-2-6.	Material	List for Air	r Com	pressor	Box

	HARDWARE			
5306-00-089-1425	Bolt, carriage	1/2 x 5	2 ea	
5306-00-248-8680	Bolt, carriage	1/2 x 4-1/2	16 ea	
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	6 ea	
5306-00-406-9225	Bolt, lag	3/8 x 3-1/2	84 ea	
5310-00-198-3642	Washer, flat	1/2 in.	16 ea	
5310-00-584-5272	Washer, lock	1/2 in.	8 ea	
5310-00-768-0318	Nut, hexagon	1/2 in.	16 ea	
5310-00-833-3340	Washer, flat	3/8 in.	24 ea	
5315-00-010-4665	Nail, cement coated	30d	8 lb	
5315-00-010-6503	Nail, cement coated	4d	1 lb	
5315-00-010-6507	Nail, cement coated	8d	1 lb	
5315-00-010-6509	Nail, cement coated	10d	1 lb	
5315-00-010-6511	Nail, cement coated	16d	8 lb	
	Strapping, steel	3/4 in.	10 ft	
	perforated			

## Table B-2-6. Material List for Air Compressor Box--Continued

NOTE: LOCATION OF MOUNTING HOLES OR SHAPE OF SHIFT BLOCK MAY VARY WITH DIFFERENT MODELS



Figure B-2-4. Location of Blocking for the Air Compressor.

Step	Function	Mech	Insp
2 cont	<ul> <li><u>Packing for the Air Receiver Tank.</u></li> <li>(1) Fabricate a MIL-B-26195 box (70-1/2 x 46 x 43-1/2) in accordance with appendix D-2. Refer to table B-2-7 for a list of materials.</li> </ul>		
	<ul> <li>(2) Cover base with MIL-B-121 barrier.</li> <li>(3) Mount air receiver tank on base and secure with 1/2- x 4-1/2-inch FF-B-584 bolts, NN-W-902 washer, and FF-N-92 nuts. Refer to figure B-2-5 for location of blocking.</li> <li>(4) Place crate top over air receiver tank and secure to base with FF-W-92 washer and FF-B-561 lag bolts (3/8 x 3-1/2).</li> <li>(5) Mark container in accordance with appendix E and the</li> </ul>		
	<ul> <li>(b) Mark container in accordance with appendix E and the following: Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> <li>j. Battery Jumper Cables.</li> <li>(1) Coat cable connectors with MIL-S-8660 silicone. Wrap with MIL-B-121 barrier and secure with PPP-T-60 tape.</li> <li>(2) Place in a PPP-B-636 fiberboard box (16 x 6 x 4). Seal box with PPP-T-76 tape.</li> <li>(3) Pack with the power and control cables.</li> </ul>		
	<ul> <li><u>k.</u> Preservation of the Exhaust Pipes, Elbows, and Silencers.</li> <li>(1) Atomize spray interior surfaces of exhaust pipes, elbows, and silencers with MIL-L-21260, type I, grade 30 preservative oil.</li> <li>(2) Tape off ends with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> </ul>		
	<ol> <li>Packing for the Exhaust Pipes for 1500 KW.</li> <li>(1) Fabricate a MIL-C-104 crate (158 x 55 x 45) and cradles in accordance with appendix D-3 and figure B-2-6. Refer to table B-2-8 for a list of materials.</li> </ol>		

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE OTY
	BASE		
5510-00-220-6194	Skid	70-1/2 x 2 x 4	1
5510-00-220-6194	Deck	46 x 2 x 4	1
5510-00-220-6196	Skid	70-1/2 x 2 x 6	2
5510-00-220-6196	Shift block	42 x 2 x 6	2
5510-00-220-6200	Deck	46 x 2 x 10	6
5510-00-220-6214	Rub strip	11-1/4 x 3 x 4	2
5510-00-220-6214	Rub strip	16 x 3 x 4	1
5510-00-220-6216	Rub strip	11-1/4 x 3 x 6	4
5510-00-220-6216	Rub strip	16 x 3 x 6	2
5510-00-220-6226	Header	46 x 4 x 4	2
	SIDE FAINELS		
5510-00-220-6078	Thru edge cleat	70-5/8 x 1 x 4	4
5510-00-220-6078	Filler edge cleat	40-7/8 x 1 x 4	4
5510-00-220-6078	Intermediate cleat	40-7/8 x 1 x 4	4
5510-00-220-6198	Vertical Joist support	43-1/2 x 2 x 4	4
5510-00-220-6198	Lateral joist support	6 x 2 x 4	8
5530-00-618-6958	Plywood sheet	70-5/8 x 48 x 1/2	2
	END PANELS		
5510-00-220-6078	Thru edge cleat	46-1/2 x 1 x 4	4
5510-00-220-6078	Filler edge cleat	39 x 1 x 4	4
5510-00-220-6078	Intermediate cleat	39 x 1 x 4	2
5530-00-618-6958	Plywood sheet	46-1/2 x 46-1/8 x 1/2	2
	TOP PANEL		
5510 00 220 6078	Thru adaa alaat	19 5/9 v 1 v 1	2
5510-00-220-0070	Filler edge cleat	40-0/0 X T X 4 63-1/2 v 1 v <i>I</i>	2
5510-00-220-6078	Intermediate cleat	$1/2 \times 1 \times 4$ $1/2 \times 1 \times 4$	2
5510-00-220-6076	Inist	46-1/8 x 2 x 4	2
5510-00-618-6958	Plywood sheet	48-5/8 x 46-1/2 x 1/2	1
5510-00-618-6958	Plywood sheet	48-5/8 x 24-1/8 x 1/2	1
0010 00 010 0000	1.19.1000 011000	10 0,0 X 21 1,0 X 1,2	•

#### Table B-2-7. Material List for Receiver Tank Box

	HARDWARE		
5306-00-248-8680	Bolt, carriage	1/2 x 4	4 ea
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	6 ea
5306-00-406-9225	Bolt, lag	3/8 x 3-1/2	22 ea
5306-00-702-2821	Bolt, carriage	1/2 x 3-1/2	8 ea
5310-00-010-6503	Nail, cement coated	4d	2 lb
5310-00-010-6511	Nail, cement coated	16d	3 lb
5310-00-198-3642	Washer, lock	1/2 in.	4 ea
5310-00-584-5272	Washer, flat	1/2 in.	18 ea
5310-00-768-0318	Nut, hexagon	1/2 in.	18 ea
5310-00-833-3340	Washer, flat	3/8 in.	22 ea
5315-00-010-6509	Nail, cement coated	10d	2 lb
5315-00-010-6513	Nail, cement coated	30d	2 lb
	Strapping steel, perforated	3/4 in.	8 Ft

### Table B-2-7. Material List for Receiver Tank Box--Continued



Figure B-2-5. Location of Blocking for the Air Receiver Tank.



Figure B-2-6. Location of Blocking for the Exhaust Pipes (1500 KW).

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	BASE		
5510-00-220-6086 5510-00-220-6194 5510-00-220-6194 5510-00-220-6202 5510-00-220-6214 5510-00-220-6214 5510-00-220-6226 5510-00-220-6226	Deck Filler pad Sleeper Deck Rub strip Rub strip Skid Header	55 x 1 x 12 34-1/2 x 1-1/2 x 3/4 156 x 2 x 4 55 x 2 x 12 16 x 3 x 4 51 x 3 x 4 158 x 4 x 4 55 x 4 x 4	6 4 2 7 3 6 3 2
	CRADLE		
5510-00-220-6078 5510-00-220-6194 5510-00-220-6226 5510-00-220-6228	Hold-down Base Hold-down Base	53-1/2 x 1 x 4 53-1/2 x 2 x 4 53-1/2 x 4 x 4 53-1/2 x 4 x 6	3 6 3 6
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6194 5510-00-220-6196 5530-00-618-6956 5530-00-618-6956	Lower member Strut Upper member Post Band strut Plywood sheet Plywood sheet	155-7/8 x 1 x 4 32 x 1 x 4 155-7/8 x 2 x 4 32 x 2 x 4 32 x 2 x 6 45-1/2 x 48 x 3/8 45-1/2 x 13-3/8 x 3/8	2 8 2 4 4 6 2
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6956 5530-00-618-6956	Upper and lower member Strut Plywood sheet Plywood sheet	55-1/8 x 1 x 4 30 x 1 x 4 42 x 36-1/2 x 3/8 42 x 19-3/8 x 3/8	4 8 2 2
	BAFFLE AND SCREEN 2 x 7 HOLE		
5335-00-598-6103 5510-00-220-6194 5510-00-220-6194 5530-00-618-6955 5530-00-618-6956	Screen Frame Frame Plywood sheet Plywood sheet	12 x 4 12 x 1-1/2 x 1-1/2 2 x 1-1/2 x 1-1/2 12 x 4-1/2 x 5/16 12 x 4-1/2 x 3/8	2 2 4 2 2

## Table B-2-8. Material List for Exhaust Pipes Crate (1500 KW)

	TOP PANEL		
5510-00-220-6078	Header	157-3/8 x 1-1/2 x 3/4	2
5510-00-220-6194	End joist	53-5/8 x 2 x 4	2
5510-00-220-6196	Joist	53-5/8 x 2 x 6	6
5530-00-618-6958	Plywood sheet	55-7/8 x 48 x 1/2	3
5530-00-618-6958	Plywood sheet	55-7/8 x 13-7/8 x 1/2	1
	HARDWARE		
5306-00-089-1426	Bolt, carriage	1/2 x 7-1/2	6 ea
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	14 ea
5306-00-412-9789	Bolt, lag	1/2 x 4	26 ea
5306-00-951-5699	Bolt, carriage	3/8 x 4	6 ea
5310-00-198-3642	Washer, flat	1/2 in.	70 ea
5310-00-720-8528	Nut, hexagon	3/8 in.	6 ea
5310-00-768-0318	Nut, hexagon	1/2 in.	44 ea
5310-00-833-3340	Washer, flat	3/8 in.	6 ea
5315-00-010-6503	Nail, cement coated	4d	2 lb
5315-00-010-6507	Nail, cement coated	8d	8 lb
5315-00-010-6511	Nail, cement coated	16d	4 lb
5315-00-010-6513	Nail, cement coated	30d	3 lb
5315-00-198-5625	Nail, roofing	1-1/4 in.	4 lb
5315-00-616-8654	Nail, clout	3/4 in.	1 lb
5315-00-889-2741	Nail, drive, screw	1/4 in.	3 lb
5335-00-598-6103	Screen, mesh	12 x 8	1 ea
5340-00-252-3014	Anchor plate	1-1/4 in.	8 ea
5650-00-514-4474	Roofing, felt	45 lb	75 sf
8135-00-281-4069	Strapping, steel	3/4 in.	50 ft
8135-00-283-0672	Strapping, steel	2 in.	36 ft
8135-00-290-1081	Seal, steel strapping	3/4 in.	16 ft
	Strapping, steel, perforated	3/4 in.	32 ft
	Threaded rod	1/2 x 37	6 ea
	Threaded rod	1/2 x 39	6 ea

## Table B-2-8. Material List for Exhaust Pipes Crate (1500 KW)--Continued

<ul> <li>2 cont</li> <li>(2) Place exhaust pipes into cradles and secure with FF-W-92 washer and FF-N-836 nuts.</li> <li>(3) Place crate top over exhaust pipes and secure to base with FF-W-92 washer and FF-B-561 lag bolts (1/2 x 4).</li> <li>(4) Mark container in accordance with appendix E and the following: Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> <li>m. Packing for the Exhaust Pipes for 2000 KW.</li> <li>(1) Fabricate a MIL-C-104 crate (158 x 70-1/4 x 45) and cradles in accordance with appendix D-3 and figure B-2-7. Refer to table B-2-9 for a list of materials.</li> <li>(2) Place exhaust pipes into cradles and secure with FF-W-92 flat washer and FF-N-836 nuts.</li> <li>(3) Place crate top over exhaust pipes and secure to base with FF-W-92 washer and FF-B-561 lag bolts (1/2 x 4).</li> <li>(4) Mark container in accordance with appendix E and the following. Mark all four sides of the container</li> </ul>	Step	Function	Mech	Insp
<ul> <li>with 2-inch minimum size letters to indicate</li> <li>"REUSABLE CONTAINER - DO NOT DESTROY."</li> <li><u>Packing for the Silencers, Elbows, Gaskets, and Exhaust</u> <u>Supports for the 1500 KW.</u></li> <li>(1) Fabricate a MIL-C-104 crate (133-1/2 x 82-1/2 x 51-1/2) and cradles in accordance with appendixD-3 and figure B-2-8. Refer to table B-2-10 for a list of materials.</li> <li>(2) Secure flat piece of the exhaust support to the base with FF-W-92 washer and FF-N-836 nuts.</li> <li>(3) Place silencers into cradle and secure with threaded rod and FF-N-836 nuts.</li> <li>(4) Bolt elbows to base and upright panels with FF-B-584 bolt (1/2 x 4).</li> </ul>	2 cont	<ul> <li>(2) Place exhaust pipes into cradles and secure with FF-W-92 washer and FF-N-836 nuts.</li> <li>(3) Place crate top over exhaust pipes and secure to base with FF-W-92 washer and FF-B-561 lag bolts (1/2 x 4).</li> <li>(4) Mark container in accordance with appendix E and the following: Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> <li>m. Packing for the Exhaust Pipes for 2000 KW.</li> <li>(1) Fabricate a MIL-C-104 crate (158 x 70-1/4 x 45) and cradles in accordance with appendix D-3 and figure B-2-7. Refer to table B-2-9 for a list of materials.</li> <li>(2) Place exhaust pipes into cradles and secure with FF-W-92 flat washer and FF-N-836 nuts.</li> <li>(3) Place crate top over exhaust pipes and secure to base with FF-W-92 washer and FF-B-561 lag bolts (1/2 x 4).</li> <li>(4) Mark container in accordance with appendix E and the following: Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> <li>n. Packing for the Silencers, Elbows, Gaskets, and Exhaust Supports for the 1500 KW.</li> <li>(1) Fabricate a MIL-C-104 crate (133-1/2 x 82-1/2 x 51-1/2) and cradles in accordance with appendixD-3 and figure B-2-8. Refer to table B-2-10 for a list of materials.</li> <li>(2) Secure flat piece of the exhaust support to the base with FF-W-92 washer and FF-N-836 nuts.</li> <li>(3) Place silencers into cradle and secure with threaded rod and FF-N-836 nuts.</li> <li>(4) Bolt elbows to base and upright panels with FF-B-584 bolt (1/2 x 4).</li> </ul>		



Figure B-2-7. Location of Blocking for the Exhaust Pipes (2000 KW).

Table B-2-9. Material List for Exhaust F	ipes Crate	(2000 KW)	
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NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
5510-00-220-6078	BASE Filler	34-1/2 x 1-1/2 x 3/4	
5510-00-220-6086	Deck	71-3/4 x 1 x 12	4
5510-00-220-6194	Sleeper	155 x 2 x 4	6
5510-00-220-6206	Deck	71-3/4 x 2 x 12	2
5510-00-220-6214	Rub strip	16 x 3 x 4	7
5510-00-220-6214	Rub strip	51 x 3 x 4	3
5510-00-220-6226	Skid	158 x 4 x 4	6
5510-00-220-6226	Header	71-3/4 x 4 x 4	3
	CRADLE		2
5510-00-220-6078 5510-00-220-6194	Hold-down Intermediate	70-1/4 x 1 x 4 70-1/4 x 2 x 4	
5510-00-220-6226	Hold-down	70-1/4 x 4 x 4	6
5510-00-220-6228	Base	70-1/4 x 4 x 6	3
5510-00-220-6228	Intermediate	70-1/4 x 4 x 6	3
	SIDE PANELS		3
5510-00-220-6078	Lower member	155-7/8 x 1 x 4	2
5510-00-220-6078	Strut	32 x 1 x 4	8
5510-00-220-6194	Upper member	155-7/8 x 2 x 4	2
5510-00-220-6194	Corner post	32 x 2 x 4	4
5510-00-220-6196	Tension strap strut	32 x 2 x 6	4
5530-00-618-6956	Plywood sheet	47-1/2 x 48 x 3/8	6
5530-00-618-6956	Plywood sheet	47-1/2 x 13-3/8 x 3/8	2
5510-00-220-6078	END PANELS Upper and lower members	71-7/8 x 1 x 4	
5510-00-220-6078	Struts	30 x 1 x 4	4
5530-00-618-6956	Plywood sheet	44 x 48 x 3/8	8
5530-00-618-6956	Plywood sheet	44 x 24-5/8 x 3/8	2
	BAFFLE AND SCREEN 2 x 7 HOLE		2
5510-00-220-6194	Frame	12 x 1-1/2 x 1-1/2	2
5510-00-220-6194	Frame	2 x 1-1/2 x 1-1/2	4
5530-00-618-6955	Plywood sheet	12 x 4-1/2 x 5/16	2
5530-00-618-6956	Plywood sheet	12 x 4-1/2 x 3/8	2
5335-00-618-6956	Screen, mesh	12 x 4	2

	TOP PANEL		
5510-00-220-6078 5510-00-220-6194 5510-00-220-6214 5530-00-618-6958 5530-00-618-6958	Header End joist Joist Plywood sheet Plywood sheet	157-5/8 x 1 x 4 70-3/8 x 2 x 4 70-3/8 x 3 x 4 72-3/8 x 48 x 1/2 72-3/8 x 13-7/8 x 1/2	2 2 6 3 1
	SIDE PANELS		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6198 5530-00-618-6956 5530-00-618-6958 5530-00-618-6958 5530-00-618-6958	Lower member Strut Horizontal brace Horizontal brace Upper member Plywood sheet Plywood sheet Plywood sheet Plywood sheet	252-3/4 x 2 x 4 82-1/2 x 2 x 4 18-7/8 x 2 x 4 20-1/2 x 2 x 4 8-3/4 x 2 x 4 252-3/4 x 2 x 8 36 x 48 x 1/2 70 x 48 x 1/2 70 x 15-3/4 x 1/2 36 x 15-3/4 x 1/2	2 24 16 24 4 2 10 6 2 2
	SIDE BAFFLE AND SCREEN 4 x 10 HOLE		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6955 5530-00-618-6956 5335-00-598-6103	Frame Frame Plywood sheet Plywood sheet Screen, mesh	15 x 1-1/2 x 1-1/2 4 x 1-1/2 x 1-1/2 15 x 6-1/2 x 5/16 15 x 6-1/2 x 3/8 15 x 6	2 4 2 2 2

# Table B-2-9. Material List for Exhaust Pipes Crate (2000 KW)--Continued

	HARDWARE			
5306-00-089-1426 5306-00-260-7533 5306-00-412-9789 5306-00-951-5699 5310-00-198-3642 5310-00-720-8528 5310-00-768-0318 5310-00-768-0318 5315-00-010-6503 5315-00-010-6503 5315-00-010-6511 5315-00-010-6513 5315-00-101-6513 5315-00-161-8654 5315-00-198-5625 5315-00-889-2741 5335-00-598-6103 5340-00-252-3014 5650-00-514-4474	HARDWARE Bolt, carriage Bolt, carriage Bolt, lag Bolt, carriage Washer, flat Nut, hexagon Nut, hexagon Nut, hexagon Washer, flat Nail, cement coated Nail, screw drive Screen, mesh Anchor plate Roofing, felt	1/2 x 7-1/2 1/2 x 5-1/2 1/2 x 4 3/8 x 4 1/2 in. 3/8 in. 1/2 in. 3/8 in. 4d 8d 16d 30d 3/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 45 lb 2/4 in	6 14 28 6 76 50 6 2 8 5 3 1 4 2 1 8 95 50	ea ea ea ea ea ea ea lb lb lb lb lb lb lb lb sf t
8135-00-281-4069 8135-00-283-0672	Strapping, steel Strapping, steel	2 in.	50 40	ft
8135-00-290-1081	Seal, steel strapping Strapping steel, perforated	3/4 in. 3/4 in.	16 36	ea ft
	Threaded rod Threaded rod	1/2 x 37 1/2 x 39	6 9	ea ea

Table B-2-9. Material List, for Exhaust Pipes Crate (2000 KW)--Continued



Figure B-2-8. Location of Blocking for the Silencers and Accessories (1500 KW).

## Table B-2-10. Material List for Silencers and Accessories Crate (1500 KW)

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	BASE		
5510-00-220-6194 5510-00-220-6202 5510-00-220-6214 5510-00-220-6214 5510-00-220-6226 5510-00-220-6226	Deck Deck Rub strip Rub strip Skid Header	82-3/4 x 2 x 4 82-3/4 x 2 x 12 39-1/2 x 3 x 4 16 x 3 x 4 135 x 4 x 4 82-3/4 x 4 x 4	1 10 8 4 4 2
	SILENCER CRADLE		
5510-00-220-6216 5510-00-220-6226 5510-00-220-6228 5510-00-220-6228 5530-00-618-6958	End shift block End shift block Base Hold-down Plywood disc	79-3/4 x 3 x 6 33-1/2 x 4 x 4 81-1/4 x 4 x 6 81-1/4 x 4 x 6 16-1/8 diam. x 1/2	1 3 4 2 3
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6194 5510-00-220-6196 5530-00-618-6956 5530-00-618-6956	Lower member Strut Upper member Corner post Center strut Plywood sheet Plywood sheet	133-7/8 x 1 x 4 36 x 1 x 4 133-7/8 x 2 x 4 36 x 2 x 4 36 x 2 x 6 51-1/2 x 48 x 3/8 51-1/2 x 38-3/8 x 3/8	2 8 2 4 2 4 2
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6956 5530-00-618-6956	Upper and lower member Strut Plywood sheet Plywood sheet	82-7/8 x 1 x 4 34 x 1 x 4 47-7/8 x 48 x 3/8 47-7/8 x 17-13/16 x 3/8	4 10 2 4
	BAFFLE AND SCREEN 3 x 9 HOLE		
5510-00-618-6194 5510-00-618-6194 5530-00-618-6955 5530-00-618-6956 5335-00-598-6103	Frame Frame Plywood sheet Plywood sheet Screen, mesh	14 x 1-1/2 x 1-1/2 3 x 1-1/2 x 1-1/2 14 x 5-1/2 x 5/16 14 x 5-1/2 x 3/8 14 x 5	2 4 2 2 2

	TOP PANEL		
5510-00-220-6078 5510-00-220-6194 5510-00-220-6226 5530-00-618-6958 5530-00-618-6958	Header End joist Joist Plywood sheathing Plywood sheathing	134-3/8 x 1 x 4 81-3/8 x 2 x 4 81-3/8 x 4 x 4 83-3/8 x 48 x 1/2 83-3/8 x 38-7/8 x 1/2	2 2 5 2 1
	"Y" FRAME BLOCKING		
5510-00-220-6169 5510-00-220-6169 5510-00-220-6169 5510-00-220-6194 5510-00-220-6196 5510-00-220-6228	Shift block Shift block Shift block Shift block Shift block Shift block	13-1/2 x 2 x 6 30 x 2 x 6 57-1/2 x 2 x 6 25 x 2 x 4 11 x 2 x 6 4-3/4 x 4 x 6	2 1 4 1 2 4
	SUPPORT BAR BLOCKING		
5510-00-220-6078 5510-00-220-6194 5510-00-220-6214	Shift block Shift block Shift block	30 x 1 x 4 30 x 2 x 4 4-3/8 x 3-1/2 x 2-1/4	2 2 4
	ELBOW SUPPORT BRACING (1 ea.)		
5510-00-220-6114 5510-00-220-6194 5530-00-618-6958 5530-00-618-8073	Spacer Hold-down block Plywood sheet Plywood base	13-1/2 x 2 x 1-1/2 15 x 2 x 4 35-1/2 x 15 x 1/2 16-1/2 x 16-1/2 x 3/4	2 1 1 1
	ELBOW SUPPORT BRACING (2 ea.)		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6958 5530-00-618-8073	Spacer Hold-down block Plywood sheet Plywood base	13-1/2 x 2 x 1-1/2 30-1/2 x 2 x 4 35-1/2 x 30-1/2 x 1/2 33 x 16-1/2 x <sup>3</sup> ⁄ <sub>4</sub>	4 1 1 1

## Table B-2-10. Material List for Silencers and Accessories C,rate (1500 KW)--Continued

Table B-2-10.	Material List for Silencers and Accessories (	Crate (1500 KW)		
Continued				

	HARDWARE			
5305-00-089-1426	Bolt, carriage	1/2 x 7-1/2	8	ea.
5306-00-089-1427	Bolt, carriage	1/2 x 9	8	ea.
5306-00-248-8680	Bolt, carriage	1/2 x 4	12	ea.
5306-00-248-8688	Bolt, carriage	1/2 x 11	4	ea.
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	28	ea.
5306-00-412-9789	Bolt, lag	1/2 x 4	28	ea.
5306-00-951-5699	Bolt, carriage	3/8 x 4	8	ea.
5310-00-198-3642	Washer, flat	1/2 in.	96	ea.
5310-00-584-5272	Washer, lock	1/2 in.	12	ea.
5310-00-720-8528	Nut, hexagon	3/8 in.	8	ea.
5310-00-768-0318	Nut, hexagon	1/2 in.	68	ea.
5310-00-833-3340	Washer, flat	3/8 in.	8	ea.
5315-00-010-6503	Nail, cement coated	4d	4	lb
5315-00-010-6507	Nail, cement coated	8d	5	lb
5315-00-010-6511	Nail, cement coated	16d	6	lb
5315-00-010-6513	Nail, cement coated	30d	5	lb
5315-00-161-8654	Nail, clout	3/4 in.	1	lb
5315-00-198-5625	Nail, roofing	1-1/4 in.	4	lb
5315-00-889-2741	Nail, screw drive	1-1/4 in.	1	lb
5335-00-598-6103	Screen mesh	14 x 10	1	ea.
5340-00-252-3014	Anchor plate	1-1/4 in.	6	ea.
5530-00-618-6958	Plywood sheet	96 x 48 x 1/2	1	sh
5650-00-514-4474	Roofing, felt	45 lb	120	sf
8135-00-281-4069	Strapping, steel	3/4 in.	60	ft
8135-00-283-0672	Strapping, steel	2 in.	36	ft
8135-00-290-1081	Seal, steel strapping	3/4 in.	6	ea.
	Strapping, steel, perforated	3/4 in.	30	ft
	Threaded rod	1/2 x 34	4	ea.
	Threaded rod	1/2 x 45-1/2	4	ea.
Step	Function	Mech	Insp	
------------	--	------	------	
2 cont.	<ul> <li>(5) Place gaskets in a PPP-B-636 fiberboard box (15-1/2 x 15-1/2 x 2) and seal box lid with PPP-T-76 tape. Secure to upright panel which supports the elbows with QQ-S-781 steel strapping, edge protector and seals.</li> <li>(6) Place the "Y" braces and bars of the exhaust support in the top cradle and secure with FF-N-836 nuts.</li> <li>(7) Install blocking and bracing. Refer to figure B-2-8 for fabrication and location details.</li> <li>(8) Place crate top over base and secure with FF-W-92 washer and FF-B-561 lag bolts (1/2 x 4).</li> <li>(9) Mark container in accordance with appendix E and the following: Mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> <li><u>0</u> Packing for the Silencers, Elbows, Gaskets, and Exhaust Supports for the 2000 KW.</li> <li>(1) Fabricate a MIL-C-104 crate (133-1/2 x 109-1/4 x 51-1/2) and cradles in accordance with appendix D-3 and figure B-2-9. Refer to table B-2-11 for a list of materials.</li> <li>(2) Secure flat piece of the exhaust support to the base with FF-W-82 flat washer and FF-t-836 nuts.</li> <li>(3) Place silencers into cradle and secure with FF-N-836 nuts.</li> <li>(3) Place gaskets in a PPP-B-636 fiberboard box (15-1/2 x 15-1/2 x 2). Seal box lid with PPP-T-76 tape. Secure to upright panels which support the elbows with QQ-S-781 steel strapping, edge protectors, and seals.</li> <li>(6) Place bars of the exhaust support and the "Y" braces in the top cradle and secure with FF-W-92 washer and FF-N-92 nuts.</li> <li>(7) Install blocking and bracing. Refer to figure B-2-9 for fabrication and location details.</li> </ul>			



Figure B-2-9. Location of Blocking for the Silencers and Accessories (2000 KW).

#### Fable B-2-11. Material List for Silencers and Accessories Crate (2000 KW)

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	BASE		
5510-00-220-6084 5510-00-220-6194 5510-00-220-6202 5510-00-220-6214 5510-00-220-6214 5510-00-220-6226 5510-00-220-6226	Deck Deck Deck Rub strip Rub strip Skid Header	108-1/2 x 2 x 10 108-1/2 x 2 x 4 108-1/2 x 2 x 12 39-1/2 x 3 x 4 16 x 3 x 4 135 x 4 x 4 108-1/2 x 4 x 4	1 10 10 5 5 2
	SILENCER CRADLE		
5510-00-220-6216 5510-00-220-6226 5510-00-220-6228 5510-00-220-6228 5530-00-618-8073	End shift block End shift block Base and hold-down Hold-down Plywood disc	105-1/2 x 3 x 6 33-1/2 x 4 x 4 107 x 4 x 6 107 x 4 x 6 16-1/8 x 1/2	1 4 2 2 4
	"Y" FRAME BLOCKING		
5510-00-220-6194 5510-00-220-6196 5510-00-220-6196 5510-00-220-6196 5510-00-220-6196 5510-00-220-6228	Shift block Shift block Shift block Shift block Shift block Shift block	25 x 2 x 4 11 x 2 x 6 13-1/2 x 2 x 6 30 x 2 x 6 57-1/2 x 2 x 6 5 x 4 x 6	1 2 1 1 4
	SUPPORT BAR BLOCKING		
5510-00-220-6078 5510-00-220-6194 5510-00-220-6228	Shift block Shift block Shift block	30 x 1 x 4 30 x 2 x 4 7-7/8 x 3-1/2 x 4-5/8	2 2 4
	ELBOW SUPPORT BRACING		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6958 5530-00-618-8073	Spacer Hold-down block Plywood sheet Plywood base	13-1/2 x 2 x 1-1/2 30-1/2 x 2 x 4 35-1/2 x 30-1/2 x 1/2 33 x 16-1/2 x 3/4	4 1 2 1

	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6194 5510-00-220-6196 5530-00-618-6956 5530-00-618-6956	Lower member Strut Upper member Corner post Center strut Plywood sheet Plywood sheet	133-7/8 x 1 x 4 38 x 1 x 4 133-7/8 x 2 x 4 38 x 2 x 4 38 x 2 x 6 55-3/4 x 48 x 3/8 55-3/4 x 38-3/8 x 3/8	2 8 2 4 2 4 2
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6956 5530-00-618-6956	Upper and lower member Strut Plywood sheet Plywood sheet	108-5/8 x 1 x 4 36 x 1 x 4 52-1/4 x 48 x 3/8 52-1/4 x 13-3/8 x 3/8	4 12 4 2
	BAFFLE AND SCREEN 9 x 3 HOLE		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6955 5530-00-618-6956 5335-00-598-6103	Frame Frame Plywood sheet Plywood sheet Screen	14 x 1-1/2 x 1-1/2 3 x 1-1/2 x 1-1/2 14 x 5-1/2 x 5/16 14 x 5-1/2 x 3/8 14 x 5	2 4 2 2 2
	TOP PANEL		
5510-00-220-6080 5510-00-220-6080 5510-00-220-6084 5510-00-220-6196 5510-00-220-6216 5530-00-618-6955 5530-00-618-6956 5530-00-618-6956	Header Lumber Lumber End joist Joist Plywood sheet Plywood sheet Plywood sheet Plywood sheet	134-3/8 x 1 x 6 134-7/8 x 1 x 6 134-7/8 x 1 x 10 107-1/8 x 2 x 6 107-1/8 x 3 x 6 108-5/8 x 48 x 5/16 108-5/8 x 38-3/8 x 5/16 108-5/8 x 48 x 3/8 108-5/8 x 38-3/8 x 3/8	2 1 11 2 5 2 1 2 1 2 1

## Table B-2-11. Material List for Silencers and Accessories Crate (2000 KW)--Continued

	1			
	HARDWARE			
5306-00-089-1426	Bolt, carriage	1/2 x 7-1/2	10	ea.
5306-00-089-1427	Bolt, carriage	1/2 x 9	8	ea.
5306-00-248-8680	Bolt, carriage	1/2 x 4	16	ea.
5306-00-248-8688	Bolt, carriage	1/2 x 11	5	ea.
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	33	ea.
5306-00-412-9789	Bolt, lag	1/2 x 4	30	ea.
5306-00-951-5699	Bolt, carriage	3/8 x 4	10	ea.
5310-00-198-3642	Washer, flat	1/2 in.	106	ea.
5310-00-584-5272	Washer, lock	1/2 in.	16	ea.
5310-00-720-8528	Nut, hexagon	3/8 in.	10	ea.
5310-00-768-0318	Nut, hexagon	1/2 in.	76	ea.
5310-00-833-3340	Washer, flat	3/8 in.	8	ea.
5315-00-010-6503	Nail, cement coated	4d	4	lb
5315-00-010-6507	Nail, cement coated	8d	5	lb
5315-00-010-6511	Nail, cement coated	16d	6	lb
5315-00-161-8654	Nail, clout	3/4 in.	1	lb
5315-00-198-5625	Nail, roofing	1-1/4 in.	4	11
5315-00-889-2741	Nail, drive, screw	1-1/4 in.	1	lb
5335-00-598-6103	Screen mesh	14 x 10 in.	1	ea.
5340-00-252-3014	Anchor plate	1-1/4 in.	6	ea.
5650-00-514-4474	Roofing, felt	45 lb	140	sf
8135-00-281-4069	Strapping, steel	3/4 in.	75	ft
8135-00-283-0672	Strapping, steel	2 in.	40	ft
8135-00-290-1081	Seal, steel strapping	3/4 in.	6	ea
	Strapping, steel, perforated	3/4 in.	30	ft
	Threaded rod	1/2 x 34	6	ea.
	Threaded rod	1/2 x 49	4	ea.

## Table B-2-11. Material List for Silencers and Accessories (Crate (2000 KW)--Continued

Step	Function	Mech	Insp
2.	(8) Place crate top on base and secure with FF-W-92		
cont	Washer and FF-B-561 lag bolts (1/2 X 4).		
	the following: Mark all four sides of the container		
	with 2-inch minimum size letters to indicate		
	"REUSABLE CONTAINER - DO NOT DESTROY."		
3.	CONSOLIDATED PACKING		
	a. <u>Preservation of the Bolts, Nuts, Lockwashers and</u>		
	(1) Coat bolts puts and lockwashers with MII -I -21260		
	type I, grade 30 preservative oil.		
	(2) Wrap in MIL-B-121 barrier and place in individual		
	bags fabricated from MIL-B-131 barrier. Heat seal		
	bags.		
	(3) Mark each bag indicating nomenciature and quantity. (4) Place bags in a PPP-B-636 fiberboard box (12 x 12 x		
	12). Seal box lid with PPP-T-76 tape.		
	(5) Mark box to indicate contents.		
	(6) Pack with the power and control cables.		
	b. Packing for the Ground Rods		
	(1) Fabricate a PPP-B-601 box $(74-1/4 \times 4-1/4 \times 3-1/4 \times 3-1/4)$		
	table B-2-12 (1500 KW) or table B-2-13 (2000 KW) for		
	list of materials.		
	(2) Place the ground rods into the box, and close.		
	c. Preservation of the Power Cables (675 ft), Control		
	<u>Cables (three), and Ground Wire (200 ft)</u> .		
	(1) Wrap the ends of the cables with MIL-B-121 barrier		
	(2) Coil cables and secure with four evenly spaced		
	pieces of MIL-B-121 barrier and PPP-T-60 tape.		

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
5510-00-220-6078 5510-00-220-6194 5530-00-618-6958 5530-00-618-6958	Sides Ends Top (plywood) Bottom (plywood)	75-1/2 x 1-3/8 x 3/4 1-7/8 x 1-3/8 x 1-1/2 75-1/2 x 3-3/8 x 1/2 75-1/2 x 3-3/8 x 1/2	2 2 1 1
5315-00-010-6509	Nails, cement coated	8d	1/2 lb

Table B-2-12. Material List for Ground Rod Box (1500 KW)

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
5510-00-220-6078 5510-00-220-6194 5530-00-618-6958 5530-00-618-6958	Sides Ends Top (plywood) Bottom (plywood)	75-1/2 x 1-3/8 x 3/4 2-5/8 x 1-3/8 x 1-1/2 75-1/2 x 4-1/8 x 1/2 75-1/2 x 4-1/8 x 1/2	2 2 1 1
5315-00-010-6507	Nails, cement coated	8d	1/2 lb

# Table B-2-13. Material List for Ground Rod Box (2000 KW)

Step	Function	Mech	Insp
3 Cont.	<ul> <li>d. Preservation of the Technical Manuals and Logbooks.</li> <li>(1) Place technical manuals and logbooks into a MIL-B-117 bag and seal.</li> <li>(2) Place the technical manuals and logbooks into the box with the control and power cables.</li> <li>(3) Mark bag to indicate contents.</li> </ul>		
	<ul> <li>e. Packing for the Power Cable (675 ft for 1500 KW, 900ft for 2000 KW), Ground Wire (200 ft), Control Cable (three for 1500 KW, four for 2000 KW), Neutral Conductor (four for 2000 KW), Battery Jumper Cables, Bolt, Nuts, Lock-washers, and Ground Rod Clamp Box and Technical Manual, and Logbooks</li> <li>(1) Fabricate a PPP-B-601 box (44 x 44 x 20 for the 1500 KW) (44 x 44 x 26 for the 2000 KW) in accordance with appendix D-1. Refer to tables B-2-14 (1500 KW) or B-2-15 (2000 KW) for list of materials.</li> <li>(2) Place the power cables in box. Place the control cables inside the power cables.</li> <li>(3) Place the ground cable into a PPP-B-636 fiberboard box (11 x 11 x 4), seal box with PPP-T-76 tape, and place the box in the center of the power cables.</li> <li>(4) Place the box containing bolts, nuts, lockwashers, and ground rod clamps and the box containing battery Jumper cables on top of the ground cable box.</li> <li>(5) Place the bag containing technical manuals and logbooks on top of box containing bolts, nuts, lockwashers, washers, and ground clamps.</li> <li>(6) Mark the box to identify nomenclature and quantity of contents.</li> <li><u>f. Preservation of the Fuel Transfer Pump (two)</u>.</li> <li>(1) Atomize spray the inlet and outlet of the pump with MIL-L-212360 grade 30, type I, preservative oil and allow to drain.</li> <li>(2) Seal off the inlet and outlet of the pump with MIL-C-5501 caps on PPP-T-60 tape.</li> </ul>		

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	END PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	20 x 1 x 4 36-7/8 x 1 x 4 12-7/8 x 1 x 4 44 x 20 x 1/2	4 4 2 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	46-1/2 x 1 x 4 36-7/8 x 1 x 4 12-7/8 x 1 x 4 46-1/2 x 20 x 1/2	4 4 2 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleat Intermediate cleat Skid Plywood sheet	46-1/2 x 1 x 4 39-3/8 x 1 x 4 39-3/8 x 1 x 4 39-3/8 x 1 x 4 46-1/2 x 3 x 4 46-1/2 x 46-1/2 x 1/2	4 4 2 2 2 2 2
	HARDWARE		
5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated	8d 16d	2 lb 1 lb

# Table B-2-14. Material List for Cables and Accessory Box (1500 KW)

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	26 x 1 x 4 36-7/8 x 1 x 4 18-7/8 x 1 x 4 44 x 26 x 1/2	4 4 2 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	46-1/2 x 1 x 4 18-7/8 x 1 x 4 18-7/8 x 1 x 4 46-1/2 x 26 x 1/2	4 4 2 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleat Intermediate cleat Skid Plywood sheet	46-1/2 x 1 x 4 18-7/8 x 1 x 4 39-3/8 x 1 x 4 39-3/8 x 1 x 4 46-1/2 x 3 x 4 46-1/2 x 26 x 1/2	4 4 8 2 2 2 2
	HARDWARE		
5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated	8d 16d	2 lb 1 lb

Step	Function	Mech	Insp
Step 3 cont.	<ul> <li>Function</li> <li>(3) Wrap seal fuel transfer pump In MIL-B-121 barrier and secure with PPP-T-60 tape.</li> <li>(4) Place each pump into a PPP-B-636 fiberboard box (21 x 8-1/2 x 11-1/4) and seal box with PPP-T-76 tape.</li> <li>(5) Place both boxes containing fuel transfer pumps into a PPP-B-601 box (21-3/8 x 18 x 12) fabricated in ac- cordance with appendix D-1. Refer to table B-2-16 for list of materials. Close and secure box lid.</li> <li>g. Packing for the Electrolyte (25 gal).</li> <li>(1) Fabricate a PPP-B-601 box (56 x 29-3/4 x 21-1/2) in accordance with appendix D-1. Refer to table B-2-17 for list of materials required.</li> <li>(2) Fill bottom of box with 3 inches of HH-I-585 thermal insulation.</li> <li>(3) Place the five containers (5 gal) of electrolyte, spaced 3 inches between each container on top of the insulation.</li> <li>(4) Fill void with HH-I-585 thermal insulation to the level of the top edge of the wooden box.</li> <li>(5) Close and secure box lid.</li> <li>h. CONSOLIDATED PACKING CRATE.</li> <li>(1) Fabricate a MIL-C-104 crate (86-3/4 x 55-3/4 x 44-1/2) in accordance with appendix D-3. Refer to figure B-2-10 and table B-2-18 (1500 KW) and figure B-2-11 and table B-2-19 (2000 KW) for list of materials.</li> <li>(2) Place items on base in accordance with figure B-2-10 or B-2-11</li> </ul>	Mech	Insp
	<ul> <li>B-2-10 or B-2-11.</li> <li>(3) Secure with QQ-S-781 steel strapping, edge protectors, and seals.</li> <li>(4) Place crate top on base and secure with FF-W-92 washer and FF-B-561 lag bolts (1/2 x 4).</li> <li>(5) Mark containers in accordance with appendix E and mark all four sides of the container with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> </ul>		

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	12 x 1 x 4 10-7/8 x 1 x 4 18 x 12 x 1/2	4 4 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	23-7/8 x 1 x 4 4-7/8 x 1 x 4 23-7/8 x 12 x 1/2	4 4 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	20-1/2 x 1 x 4 16-3/4 x 1 x 4 23-7/8 x 20-1/2 x 1/2	4 4 2
	HARDWARE		
5315-00-010-6507	Nails, cement coated	8d	1 lb

# Table B-2-16. Material List for Fuel Transfer Pump (two) Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	21-1/2 x 1 x 4 22-5/8 x 1 x 4 29-3/4 x 21-1/2 x 1/2	4 4 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	46-1/2 x 1 x 4 14-3/8 x 1 x 4 46-1/2 x 21-1/2 x 1/2	4 6 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleat Intermediate cleat Skid Plywood sheet	32-1/4 x 1 x 4 39-3/8 x 1 x 4 25-1/8 x 1 x 4 25-1/8 x 1 x 4 32-1/4 x 3 x 4 46-1/2 x 32-1/4 x 1/2	4 4 2 2 2 2 2
	HARDWARE		
5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated	8d 16d	2 lb 1 lb

## Table B-2-17. Material List for Electrolyte Box



Figure B-2-10. Location of Items for Consolidated Packing (1500 KW).

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QTY
	BASE		
5510-00-220-6200 5510-00-220-6202 5510-00-220-6214 5510-00-220-6214 5510-00-220-6214 5510-00-220-6214	Deck Deck Skid Header Rub strip Rub strip	55-7/8 x 2 x 10 55-7/8 x 2 x 12 86-1/2 x 3 x 4 55-7/8 x 3 x 4 16 x 3 x 4 15-1/4 x 3 x 4	1 6 3 2 3 6
	BLOCKING		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194	Strap cleat Strap cleat Ground rods end block Pump box block Pump box block Strap cleat Strap cleat	46-3/8 x 1 x 4 23-3/4 x 1 x 4 3-1/4 x 2 x 4 11-1/4 x 2 x 4 23-3/4 x 2 x 4 24 x 2 x 4 22-1/2 x 2 x 4	3 1 2 1 1 2
	END PANELS		
5510-00-618-6956 5510-00-618-6956 5530-00-220-6078 5530-00-220-6078	Plywood sheet Plywood sheet Upper and lower member Strut	44-1/2 x 19-5/8 x 3/8 44-1/2 x 37-1/8 x 3/8 56 x 1 x 4 33-1/2 x 1 x 4	2 2 4 8
	SCREEN AND BAFFLE, 2 x 5 HOLE		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6956 5335-00-598-6103	Frame Frame Plywood sheet Screen	10 x 1-1/2 x 1-1/2 2 x 1-1/2 x 1-1/2 10 x 4-1/2 x 3/8 10 x 4	2 4 2 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6194 5510-00-220-6196 5530-00-618-6956	SIDE PANELS Lower member Strut Upper member Post Band strut Plywood sheet	84-3/4 x 1 x 4 34-1/2 x 1 x 4 84-3/8 x 2 x 4 34-1/2 x 2 x 4 34-1/2 x 2 x 6 47 x 42-15/16 x 3/8	2 4 2 4 2 4

## Table B-2-18. Material List for Consolidated Pack Crate (1500 KW)

	TOP PANEL		
5530-00-220-6078	Header	85-7/8 x 1-1/2 x 3/4	2
5530-00-220-6194	End Joist	54-1/2 x 2 x 4	2
5530-00-220-6196	JOIST	54-1/2 X 2 X 6	3
5530-00-618-6958	Plywood sheet	56-1/2 X 43-3/16 X 1/2	2
	HARDWARE		
5306-00-089-1424	Bolt, carriage	1/2 x 4-1/2	7 ea.
5306-00-248-8680	Bolt, carriage	3/8 x 4	6 ea.
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	6 ea.
5306-00-412-1789	Bolt, lag	1/2 x 4	20 ea.
5310-00-198-3642	Washer, flat	1/2 in.	13 ea.
5310-00-720-8528	Nut, hexagon	3/8 in.	6 ea.
5310-00-768-0318	Nut, hexagon	1/2 in.	13 ea.
5310-00-833-3340	Washer, flat	3/8 in.	26 ea.
5315-00-010-6503	Nail, cement coated	4d	2 lb
5315-00-010-6506	Nail, cement coated	7d	2 lb
5315-00-010-6507	Nail, cement coated	8d	3 lb
5315-00-010-6511	Nail, cement coated	16d	3 lb
5315-00-010-6513	Nail, cement coated	30d	3 lb
5315-00-161-8654	Nail, clout	3/4 in.	1 lb
5315-00-198-5625	Nail, roofing	1-1/4 in.	2 lb
5315-00-290-7139	Nail, drive screw	1-3/4 in.	2 lb
5335-00-598-6103	Screen, mesh	10 x 4 in.	2 ea.
5340-00-252-3014	Anchor plate	1-1/4 in.	14 ea.
5605-00-514-4474	Roofing, felt	45 lb	40 st
8135-00-239-5288	Seal, strapping	3/4 in.	14 ea.
8135-00-281-4069	Strapping, steel	3/4 in.	100 ft
	Strapping, steel, perforated	3/4 IN.	36 ft
	Strapping, steel, perforated	1-1/4 IN.	25 ft

## Table B-2-18. Material List for Consolidated Pack Crate (1500 KW)--Continued



Figure B-2-11. Location of Items for Consolidated Packing (2000 KW).

NSN	NOMENCLATURE	SIZE	QTY
	BASE		
5510-00-220-6202 5510-00-220-6214 5510-00-220-6214 5510-00-220-6226 5510-00-220-6226	Deck Rub strip Rub strip Skid Header	55 x 2 x 12 55 x 3 x 4 16 x 3 x 4 157-3/4 x 4 x 4 55 x 4 x 4	13 6 3 3 2
	BLOCKING		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6214 5510-00-220-6214	Side shift block End shift block End shift block End shift block Band post Band post	23 x 2 x 4 12-1/2 x 2 x 4 11-3/8 x 2 x 4 As required x 2 x 4 22-1/4 x 2-3/8 x 1-1/2 26-3/4 x 2-3/8 x 1-1/2	1 4 4 3 1 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6196 5530-00-618-6956 5530-00-618-6956	Upper and lower member Strut Corner post Band cleat Plywood sheet Plywood sheet	155-5/8 x 1 x 4 34-1/2 x 1 x 4 34-1/2 x 2 x 4 20 x 2 x 6 72 x 48 x 3/8 13-1/8 x 48 x 3/8	4 12 4 4 4 2
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6959	Upper and lower member Strut Plywood sheet	55-1/8 x 1 x 4 32-1/2 x 1 x 4 55-7/8 x 44-1/2 x 3/8	4 8 2
	SCREEN AND BAFFLE, 7 X 2 HOLE		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6956 5335-00-598-6103	Lumber Lumber Plywood sheet Screen mesh	12 x 1-1/2 x 1-1/2' 2 x 1-1/2 x 1-1/2 7 x 4-1/2 x 3/8 7 x 12	2 4 2 2

# Table B-2-19. Material List for Consolidated Packing (2000 KW)

5510-00-220-6078 5510-00-220-6194 5510-00-220-6196 5530-00-618-6958 5530-00-618-6958 5530-00-618-6958	TOP PANEL Header End joist Joist Plywood sheet Plywood sheet Plywood sheet	157-1/8 x 1-1/2 x 3/4 53-5/8 x 2 x 4 53-5/8 x 2 x 6 55-5/8 x 48 x 1/2 55-5/8 x 23-7/8 x 1/2 55-5/8 x 13-7/8 x 1/2		2 2 6 2 2 1
	HARDWARE			
5306-00-089-1421	Bolt, carriage	3/8 x 3-1/2	00	6
5306-00-089-1426	Bolt, carriage	1/2 x 7-1/2	ea.	6
5306-00-260-7553	Bolt, carriage	1/2 x 5-1/2	ea.	8
5306-00-412-1789	Bolt, lag	1/2 x 4	ea.	26
5310-00-198-3642	Washer, flat	1/2 in.	ea.	40
5310-00-720-8528	Nut, hexagon	3/8 in.	ea.	6
5310-00-768-0318	Nut, hexagon	1/2 in.	ea.	14
5310-00-833-3340	Washer, flat	3/8 in.	ea.	6
5315-00-010-6503	Nail, cement coated	4d	lb	10
5315-00-010-6507	Nail, cement coated	8d	lb	10
5315-00-010-6511 5315-00-010-6513 5315-00-198-5625 5315-00-290-7139 5315-00-664-7032 5335-00-598-6103	Nail, cement coated Nail, cement coated Nail, roofing Nail, anchor Nail, clout Screen, mesh	16d 30d 1-1/4 in. 1-3/4 in. 7/8 in. 4 x 12 in.		8 lb 4 lb 2 lb 1 lb 1 lb 2
5340-00-252-3014	Anchor plate	2 in.	ea.	20
5650-00-514-4474	Roofing, felt	45 lb	ea.	27
8135-00-239-5288	Seal, steel strapping	3/4 in.	sf	10
8135-00-239-5294	Seal, steel strapping	1-1/4 in.	ea.	12
8135-00-281-4069	Strapping, steel	3/4 i n.	ea.	85
8135-00-281-4080	Strapping, steel, perforated	2 in.	ft	35
8135-00-283-0671	Strapping, steel	1-1/4 in.	11 4	75
	Strapping, steel, perforated	3/4 in.	ft	30

Table B-2-19. Material List for Consolidated Packing (2000 KW)--Continued

#### Table B-2-20. Packaging Materials List

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
5306-00-062-4108	Bolt, Carriage, FF-B-584, 1/2 x 12	18 ea.
5306-00-089-1421	Bolt, Carriage, FF-B-584, 3/8 x 3-1/2	6 ea.
5306-00-089-1425	Bolt, Carriage, FF-B-584, 1/2 x 5	2 ea.
5306-00-089-1426	Bolt, Carriage, FF-B-584, 1/2 x 7-1/2	65 ea.
5306-00-089-1427	Bolt, Carriage, FF-B-584, 1/2 x 9	16 ea.
5306-00-089-1531	Bolt, Carriage, FF-B-584, 1/2 x 6-1/2	28 ea.
5306-00-248-8680	Bolt, Carriage, FF-B-584, 1/2 x 4	54 ea.
5306-00-248-8687	Bolt, Carriage, FF-B-584 1/2 x 10	108 ea.
5306-00-248-8688	Bolt, Carriage, FF-B-584, 1/2 x 11	9 ea.
5306-00-260-4690	Bolt, Carriage, FF-B-584, 1/2 x 10-1/2	13 ea.
5306-00-260-7553	Bolt, Carriage, FF-B-584, 1/2 x 5-1/2	182 ea.
5306-00-282-4281	Bolt, Carriage, FF-B-584, 3/8 x 4-1/2	16 ea.
5306-00-406-9225	Bolt, Lag, FF-B-561, 3/8 x 3-1/2	106 ea.
5306-00-412-9789	Bolt, Lag, FF-B-561, 1/2 x 4	202 ea.
5306-00-702-2821	Bolt, Carriage, FF-B-584, 1/2 x 3-1/2	8 ea.
5306-00-951-5699	Bolt, Carriage, FF-B-584, 3/8 x 4	22 ea.
5306-00-951-5699	Bolt, Carriage, NN-B-584, 3/8 x 4	46 ea.
5306-00-993-6257	Bolt, Carriage, FF-B-584, 3/8 x 3	16 ea.
5310-00-198-3642	Washer, Flat, FF-W-92, 1/2 in.	643 ea.
5310-00-584-5272	Washer, Lock, FF-W-84, 1/2 in.	82 ea.

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NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
5310-00-720-8528	Nut, Hexagon, FF-N-836, 3/8 in.	48 ea.
5310-00-768-0318	Nut, Hexagon, FF-N-836, 1/2 in.	474 ea.
5310-00-833-3340	Washer, Flat, FF-W-92, 3/8 in.	130 ea.
5315-00-010-4665	Nail, Cement Coated, FF-N-105, 30d	3 lb
5315-00-010-4666	Nail, Cement Coated, FF-N-105, 40d	40 lb
5315-00-010-6503	Nail, Cement Coated, FF-N-105, 4d	23 lb
5315-00-010-6506	Nail, Cement Coated, FF-N-105, 7d	2 lb
5315-00-010-6507	Nail, Cement Coated, FF-N-105, 8d	82 lb
5315-00-010-6509	Nail, Cement Coated, FF-N-1055 10d	4 lb
5315-00-010-6511	Nail, Cement Coated, FF-N-105, 16d	15 lb
5315-00-010-6512	Nail, Cement Coated, FF-N-105, 20d	4 lb
5315-00-010-6513	Nail, Cement Coated, FF-N-105, 30d	50 lb
5315-00-161-8654	Nail, Clout, FF-N-105, 3/4 in.	6 lb
5315-00-198-5625	Nail, Roofing, FF-N-105, 1-1/4 in.	26 lb
5315-00-290-7139	Nail, Drive Screw, FF-N-105, 1-3/4 in.	3 lb
5315-00-664-7032	Nail, Clout, FF-N-105, 7/8 in.	1 lb
5315-00-889-2741	Nail, Drive Screw, FF-N-105, 1-1/4 in.	10 lb
5335-00-598-6103	Screen, Mesh, RR-W-365, 3/6 in. wide	4 ft
5340-00-252-3014	Anchor Plate, 1-1/4 in.	22 ea.

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
5510-00-0220-6080	Lumber, MM-L-751, 1 x 6	36 lf
5510-00-220-6078	Lumber, MM-L-751, 1 x 4	1267 lf
5510-00-220-6084	Lumber, MM-L-751, 1 x 10	46 lf
5510-00-220-6086	Lumber MM-L-751, 1 x 12	66 lf
5510-00-220-6194	Lumber, MM-L-751, 2 x 4	729 lf
5510-00-220-6196	Lumber, MM-L-751, 2 x 6	154 lf
5510-00-220-6198	Lumber, MM-L-751, 2 x 8	100 lf
5510-00-220-6200	Lumber, MM-L-751, 2 x 10	7 lf
5510-00-220-6202	Lumber, MM-L-751, 2 x 12	336 lf
5510-00-220-6214	Lumber, MM-L-751, 3 x 4	269 lf
5510-00-220-6226	Lumber, MM-L-751, 4 x 4	191 lf
5510-00-220-6228	Lumber, MM-L-751, 4 x 6	177 lf
5510-00-220-6234	Lumber, MM-L-751, 4 x 12	120 lf
5510-00-220-6825	Lumber, MM-L-751, 6 x 6	220 lf
5530-00-618-6955	Plywood, NN-P-530, 96 x 48 x 5/16	8 sh
5530-00-618-6956	Plywood, NN-P-530, 96 x 48 x 3/8	8 sh
5530-00-618-6956	Plywood, NN-P-530, 96 x 48 x 3/8	41 sh
5530-00-618-6958	Plywood, NN-P-530, 96 x 48 x 1/2	82 sh
5530-00-618-8073	Plywood, NN-P-530, 96 x 48 x ¾	2-1/2 sh
5640-00-801-4176	Insulation, Thermal, HH-I-585, Type II, Class I	2 bg
5650-00-514-4474	Roofing, Felt, SS-R-601, 45 lb, 36 in. wide	26 sf
6685-00-752-8240	Indicator, Humidity, MS 20003-2	2 cn

Change 1

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NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
6850-00-003-5295	Cleaning Compound, MIL-C-83360, Type I, 603	2 cn
6850-00-181-7940	Antifreeze, MIL-A-46153, (1500 KW)	168 al
6850-00-181-7940	Antifreeze, MIL-A-46153, (200 KW)	224 gl
6850-00-264-6572	Desiccant, MIL-D-3464, 16-Unit bag	65 bg
6850-00-295-7685	Compound, Silicone MIL-S-8660, 6 oz	2 cn
7510-00-161-0811	Ink, Stencil, TT-I-1795, 6 oz	1 cn
7510-00-266-6715	Tape, PPP-T-60, 2 in.	2 ro
7510-00-297-6655	Tape, PPP-T-76, 2 in.	2 ro
7510-00-916-9659	Tape, MIL-T-22085, Type II, 4 in.	5 ro
7510-00-890-9875	Tape, PPP-T-60, Type IV, 4 in.	5 ro
8010-00-292-1127	Primer, TT-P-664	2 pt
8030-00-231-2345	Corrosion, Preventive Compound, MIL-C-16173, Grade 1	1 gl
8030-00-5626-1605	Corrosion, Preventive Compound, MIL-C-16173, Grade 4	1 cn
8105-00-269-4662	Bag, Plastic, MIL-B-117, Type 1, 20 x 25	1 ea
8105-00-902-6508	Bag, Plastic, MIL-B-117, Type 1, 18 x 12, 36 in. x 200 yd	30 ea
8135-00-226-3124	Barrier, MIL-B-121, Type II, Grade A, Class 2	2 ro
8135-00-239-5288	Seal, Steel, Strapping, QQ-S-781, 3/4 in.	24 ea
8135-00-239-5293	Seal, Steel, Strapping, QQ-S-781, 3/4 in.	25 ea
8135-00-239-5294	Seal, Steel, Strapping, QQ-S-781, 1-1/4 in.	52 ea
8135-00-281-4069	Steel, Strapping, QQ-S-781, 3/4 in.	345 ft

Table D-2-20. Packading Materials ListContinued	Table B-2-20.	Packaging	Materials	ListContinued
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NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
8135-00-281-4080	Strapping, Steel, Perforated, QQ-S-781, 2 in.	36 ft
8135-00-281-4113	Fiberboard, PPP-F-320, Type CF, Class Weather Resistant	12 sh
8135-00-282-0565	Barrier, MIL-B-131, Class I, 36 in. x 200 yd	1 ro
8135-00-283-0669	Strapping, Steel, QQ-S-781, 3/4 in.	200 lf
8135-00-283-0671	Strapping, Steel, QQ-S-781, 1-1/4 in.	245 ft
8135-00-283-0672	Strapping, Steel, QQ-S-781, 2 in.	224 ft
8135-00-290-1081	Seal, Steel, Strapping, QQ-S-781, 3/4 in.	74 ea.
8135-00-291-0962	Edge, Protector, Strapping	24 ea.
8135-00-292-2345	Tag, UU-T-81, Type II, Grade A	42 ea.
8135-00-601-9219	Cushioning, MIL-C-1797, 1/8 in.	102 sf
8135-00-855-6969	Cushioning, PPP-C-843, 3/4 in.	1 ro
9140-00-286-5294	Fuel, Diesel, VV-F-800	150 gl
9140-00-286-5294	Fuel, Diesel, VV-F-800	150 gl
9150-00-111-0208	Oil, Preservative, Lubricating, MIL-L-21260, Type I, Grade 10	2 gl
9150-00-111-0209	Oil, Preservative, Lubricating, MIL-L-21260 Type I, Grade 30	5 gl
9150-00-190-0905	Grease, Automotive and Artillery, MIL-G-10924	2 lb
9150-00-281-2007	Oil, Preservative, Lubricating, VV-L-800	50 gl
9150-00-405-2987	Oil, Lubricating, MIL-L-2104, Grade 40 (1500 KW)	210 gl
9150-00-405-2987	Oil, Lubricating, MIL-L-2104, Grade 40 (2000 KW)	280 gl

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
9310-00-160-7858	Stencilboard, Type II, Grade I, UU-S-625	5 sh
9505-00-222-3829	Wire, QQ-W-461	12 ft
	Bolt, Carriage, FF-B-584, 1/2 x 13-1/2	8 ea.
	Bolt, Carriage, FF B-584, 1/2 x 15	10 ea.
	Lifting Ring, 16 x 1-1/4 x 1/4	8 ea.
	Steel Plate, 9 x 3 x 1/4	48 ea.
	Strapping, Steel, Perforated, QQ-S-781, 3/4 in.	146 ft
	Strapping, Steel, Perforated, QQ-S-781, 1-1/4 in.	115 ft

#### Table B-2-21. Inventory List 1500 KW Schoonmaker Generating Plant

NSN	DESCRIPTION	QTY
6115-00-250-4404	Power plant, electric, diesel engine driven, skid mounted, 1500 KW, 3 phase, 4 wire, 4160 volts, 0.8 power factor, 60 hertz. Consists of:	1 ea.
2895-00-470-6675	Tank receiver, air, 22.5 cu ft capacity with one ea. 300 psi safety valve, six ea. air outlet globe valves, one ea. drain valve, two ea. check valve and one ea. pressure gage	1 ea.
2910-00-689-5668	Fuel transfer pump	2 ea.
2990-00-478-8815	Silencer, exhaust, 10 in. diam, side inlet, type ARTX, make: Kittell, vertical mount	3 ea.
5306-00-423-8069	Bolts, 3/4-10 thread, 2 in. long	144 ea.
5310-00-275-0327	Nut, 3/4-10 thread	144 ea.
5310-00-846-9213	Washer, lock, 3/4 in.	144 ea.
5975-00-296-0621	Ground rods, 10 ft x 3/4 in., pointed on one end, copper clad with ground clamps (see NOTE)	11 ea.
6115-00-195-7751	Switch gear unit	1 ea.
6115-00-400-7590	Diesel generator	3 ea.
6140-00-057-2554	Battery, storage, lead acid, 6 TN with cables and terminals	10 ea.
6810-00-696-0487	Electrolyte, battery, 1.265 s.g.	25 gl
7510-00-889-3494	Logbooks	1 se
	TM 5-6115-550-14 TM 5-6115-550-20P TM 5-6115-550-35P TM 43-0156 LO 5-6115-550-12 Air compressor, dual drive, (elec and GED) 250 psi, 17.5 CFM, Quincy Mdl D-325-S with	2 ea. 2 ea. 2 ea. 1 ea. 2 ea. 2 ea.

NOTE: If 6 ft steel ground rods are used, double the amount of rods and clamps.

NSN	DESCRIPTION	QTY
	Elbow 90, long radius; exhaust, 10 h. diam, flanged both ends, 12-hole bolt circle with convoluted flexible expansion section, part of P/N 8593-1 (15373)	3 ea
	Pipe, exhaust, straight, 10 in. diam, flanged both ends, 12-hole bolt circle, 12-1/2 ft long, Part of P/N 8593-1 (15373)	6 ea
	Gaskets, exhaust mounting	12 ea
	<ul> <li>Exhaust silencer support stand <ol> <li>2 in. steel pipe, 106 in. Long for vertical legs, 3 ea per set</li> <li>1/4 x 2, 1.7 lb/ft, flat, 50 in. long for vertical braces, 3 ea per set</li> <li>3 x 3 angle, 4.9 lb/ft, 37 in. long for welded base plate assembly, 3 ea per set</li> <li>Bolts, 5/8-11 x 3-3/4 long, 18 ea per set</li> <li>Washer, lock, 18 ea per set</li> </ol> </li> </ul>	3 se
	Lifting device (spreader bar) switch gear (Bill of Material #1112)	1 ea
	Lifting sling, 7/8 in. diam steel cable, eye on one end, basket type open socket on opposite end, 8 ft 6 in. long with four ea clevises	2 ea
	Lifting sling, 7/8 in. diam steel cable, eye on one end, basket type open socket on opposite end, 8 ft 10 in. Long	2 ea
	Control cable, 26 conductor, #14 AWG MTW insula- tion, rubber jacket, 100 ft with terminals BRONCO 66	3 ea
	Ground wire, #6 AWG, bare stranded copper, 200-ft length	1 ea
	Power cable, #1 AWG, 5KV insulation, stranded copper, with terminals GE P/N SI-58224 (100 ft)	9 ea

# Table B-2-21. Inventory List 1500 KW Schoonmaker Generating Plant--Continued

#### Table B-2-22. Inventory List 2000 KW Schoonmaker Generating Plant

NSN	DESCRIPTION	QTY
6115-00-250-4405	Power plant, electric, diesel engine driven, skid mounted, 2000 KW, 3 phase, 4 wire., 0.8 power factor, 60 hertz, consisting of:	1 ea
5975-00-296-0621	Ground rod, 10 ft x 3/4 in., pointed on one end, copper clad, with ground clamps (see NOTE)	14 ea
2895-00-470-6675	Tank, receiver, air, 22.5 cu ft capacity, with one ea 300 psi safety relief valve, six each air outlet glove valves, one ea drain valve, two ea check valve, and one ea pressure gage	1 ea
2910-00-689-5668	Fuel transfer pump	2 ea
2990-00-478-8815	Silencer, exhaust, 10 in. diam side inlet, type ARTX, make: Kittell, vertical mount	4 ea
5306-00-423-8069	Bolts, 3/4-10 thread, 2 in. long	192 ea
5310-00-275-0327	Nut, 3/4-10 thread	192 ea
5310-00-846-9213	Washer, lock, 3/4 in.	192 ea
6110-00-195-7769	Switch gear unit	1 ea
6115-00-400-7590	Diesel generator	4 ea
6140-00-057-2254	Battery, storage, lead acid, 6 TN, with cables and terminals	10 ea
6810-00-696-0487	Electrolyte, 1.265 s.g.	25 gl
7510-00-889-3494	Logbooks TM 5-6115-550-15 TM 5-6115-550-20P TM 5-6115-550-35P TM 43-0156 LO 5-6115-550-12 Air compressor, dual drive, (elec and GED) 250	1 se 2 ea 2 ea 2 ea 1 ea 2 ea 2 ea
	rope	

NOTE: If 6 ft steel ground rods are used, double the amount of rods and clamps.

NSN	DESCRIPTION	QTY
	Power Cable, #1 AWG, 5KV insulation, stranded copper, 100-ft length with terminals GE P/N SI-58224	12 ea
	Ground wire, #6 AWG, bare, stranded copper	200 ft
	Control cable, 26 conductor, #14 AWG MTW insulation, rubber jacket, 100-ft length with terminals BRONCO 66	4 ea
	Elbow, 90, long radius, exhaust, 10 in. diam, flanged both ends, 12-hole bolt circle with con- volutea flexible expansion sections, part of P/N 8593-1 (15373)	4 ea
	Pipe, exhaust, straight, 10 ft diam, flanged both ends, 12-hole bolt circle, 12-1/2-ft long, part of P/N 8593-1 (15373)	8 ea
	Gaskets, exhaust, pipe mounting	16 ea
	<ul> <li>Exhaust silencer support stands</li> <li>2 ft steel pipe, approx 106 ft long for vertical legs, 3 ea per set</li> <li>1-4 x 2, 1.7 lb/ft, flat, 50 in. long for horizontal braces, 3 ea per set</li> <li>Bolt, 5/8-11 x 3-3/4 18 ea per set</li> <li>Nut, 5/8-11, 18 ea per set</li> <li>3 x 3 angle, 4.9 lb/ft, 37 in. long for welded base plate assembly - 3 ea per set</li> <li>Washer, lock</li> </ul>	4 se
	Lifting device switch gear (spreader bar)	1 ea
	Lifting slings, 7/8 in. diam steel cable, eye on one end, basket type, open socket on opposite end, 8 ft 6 in. long with four ea clevises	2 ea
	Lifting slings, 7/8 in. diam steel cable, eye on one end, basket type, open socket on opposite end, 8 ft 10 in. Long	2 ea

# Table B-2-22. Inventory List 2000 KW Schoonmaker Generating Plant--Continued

Step	Function	Mech	Insp
1 3 4	<ul> <li>DEPRESERVATION</li> <li>Follow instructions given on DA Forms 2258.</li> <li>Follow instructions on tags attached to the engine start controls Unpack, inspect, and assemble components.</li> <li>Fill dry-charged battery as follows:</li> <li>The battery you have received with the set is charged and dry. If the battery has been stored in a cool, dry place, you can expect it to deliver approximately 75 percent of its rated power when filled with electrolyte. Perform the following steps to fill a new battery.</li> <li>WARNING</li> <li>If battery electrolyte is spilled on skin or clothing, immediately wash with cold water or a sodium bicarbonate solution to prevent severe skin burns or damage to clothing.</li> <li>Avoid spilling battery electrolyte on painted surfaces. Damage to painted surfaces. Damage to painted surfaces may result.</li> <li>a. Remove the battery cell vent caps.</li> <li>c. Fill each cell of a dry battery with electrolyte to the level indicated on the vent plug or cell cover.</li> <li>(1) In temperate climates, use electrolyte of 1.280 specific gravity at 800F (27°C).</li> <li>(2) The battery and electrolyte must be 60°F (160C) or higher and preferably below 100°F (38°C) for proper charging.</li> </ul>		

Step	Function	Mech	Insp
4 cont.	d. Let the battery stand for 30 minutes and then check the specific gravity of each cell with a hydrometer. Correct the reading to 800F (27°C) by adding 0.004 for each 10°F above 80°F and subtracting 0.004 for each 10°F below 80°F.		
	<ul> <li>e. You should charge the battery if the specific gravity of any cell measures below 1.270 after correcting to 80°F (27°C).</li> </ul>		
	NOTE		
	If any of the cells cannot be charged to a specific gravity of at least 1,270		
	the battery is not accept- able for this application.		
	f. Replace the vent caps when you have completed the above.		
5	Flush fuel lines with VV-F-800 diesel fuel prior to starting engine.		
6	RETAIN ALL SHIPPING CONTAINERS FOR RETURN SHIPMENTS.		

Step	Function	Mech	Insp
1	<ul> <li>FIELD PACKAGING</li> <li>UNIT RESPONSIBILITY         <ul> <li>a. Certify that equipment is free of ammunition and explosives</li> <li>b. Assure to the maximum extent possible that items are in operating condition. Tag each item to indicate the degree of serviceability.</li> <li>c. Pack all items of equipment in the original containers. If the containers are not available, fabricate them in accordance with the instructions provided for Depot</li> </ul> </li> </ul>		
2	packaging. Refer to procedures in Depot Packaging for packing instructions for Field Packaging. CLEANING AND DRYING <b>NOTE</b>		
3	Cleaning, drying, applica- tion of preservatives, and sealing of barriers should progress in an uninterrupt- ed series of operations. Thorough cleaning and drying shall be accomplished prior to preservation. PRESERVATION <u>a. Diesel Generator (three for 1500 KW, four for 2000 KW)</u> . (1) <u>Radiator</u> . (a) Drain radiator. (b) Fill the coolant system to the proper level with equal parts (by volume) of antifreeze (6850-00- 181-7940) and clean water. (c) Prepare a tag (8135-00-292-2345) indicating "COOLANT SYSTEM CONTAINS WATER AND ANTIFREEZE EQUAL PARTS BY VOLUME - DO NOT DRAIN - CHECK COOLANT LEVEL - IF COOLANT IS LOW, ADD COOLANT OF THE SAME MIXTURE."		

Step	Function	Mech	Insp
3 cont.	<ul> <li>(d) Attach the tag to the radiator neck fill cap.</li> <li>(2) <u>Air Start System.</u> <ul> <li>(a) Fill the oiler reservoir for the air starter with preservative oil (9150-00-111-0209).</li> <li>(b) Fully open the metering valve and run the air starter until oil can be detected at the exhaust.</li> </ul> </li> <li>(3) <u>Fuel Lines.</u> <ul> <li>(a) Disconnect the engine fuel intake line just in front of the fuel pump.</li> <li>(b) Connect a line from the fuel intake line to two containers. One container shall contain diesel fuel (9140-00-286-5294) and the other container shall contain preservative oil (9150-00-281-2007).</li> <li>(c) Disconnect the injector fuel return line at the disconnect coupling and connet a transparent line to allow for draining into a recovery container.</li> <li>(d) Start the engine using the container of diesel fuel as the fuel supply. Operate at fast idle until thoroughly warm.</li> <li>(e) Accelerate the engine to three-fourth speed. Switch the fuel supply to the container containing preservative oil. Operate the engine at this speed until undiluted preservative oil is flowing into the recovery container. Stop the engine.</li> <li>(f) Disconnect the line from the fuel intake and reconnect the permanent fuel return line.</li> <li>(g) Disconnect the line from the fuel intake and reconnect the engine fuel intake line.</li> </ul> </li> </ul>		

Step	Function	Mech	Insp
Step 3 Cont.	<ul> <li>Function</li> <li>(4) <u>Crankcase and Oil System</u>.</li> <li><b>NOTE</b> <ul> <li>Allow suffient time for engine to cool before processing oil system.</li> <li>(a) Completely drain the crankcase.</li> <li>(b) Turn compression release to decompression (away form each oids of exprise)</li> </ul> </li> </ul>	Mech	Insp
	<ul> <li>from engine) on each side of engine.</li> <li>(c) Remove valve covers.</li> <li>(d) Disconnect the intake hose of the electric prelube pump from the oil line and connect to a supply of preservative oil (9150-00-111-0209).</li> <li>(e) Switch on the prelube pump.</li> <li>(f) Pump preservative oil thoughout the entire lubrication system until preservative oil is observed coming from the camshaft bearings.</li> <li>(g) Manually rotate the engine over at least two full revolutions while the preservative is being pumped through the oil system.</li> <li>(h) Switch off the prelube pump.</li> <li>(i) Connect the intake hose of the electric prelube pump back into the oil line from where it was removed.</li> <li>(j) Atomize spray the top of the engine with preservative oil (9150-00-111-0209). Install the valve covers.</li> <li>(k) Remove access covers to the crankcase and atomize spray the underside of the engine with preservative oil (9150-00-111-0209). Install covers.</li> </ul>		
	<ul> <li>(I) Allow time for the engine to drain (approx 20 min). Completely drain the crankcase of any oil that may have accumulated.</li> <li>(m) Prepare tag (8135-00-292-2345) indicating "OIL HAS BEEN DRAINED FROM THE CRANKCASE. DO NOT START UNTIL OIL HAS BEEN ADDED." Attach tag to engine control panel.</li> </ul>		

Step	Function	Fu	Mech	Insp
3 Cont.	<ul> <li>(5) <u>Cylinders.</u></li> <li>(a) Disconnect fuel lines from injector nozzles.</li> <li>(b) Remove injector nozzles.</li> <li>(c) Atomize spray each cylinder with 1 ounce of preservative oil (9150-00-111-0209).</li> <li>(d) Manually rotate engine crankshaft until all pistons have completed one full cycle.</li> <li>(e) Repeat (c) and (d) above.</li> <li>(f) Do not rotate the crankshaft after spraying cylinders</li> <li>(g) Turn compression release to compression (toward the engine) on each side of the engine.</li> <li>(h) Replace gaskets if damaged and install injector nozzles.</li> <li>(i) Connect fuel lines.</li> <li>(6) <u>Air Intake System.</u></li> <li>(a) Remove the air filter.</li> <li>(b) Cover the turbocharger impeller and atomize spray the unpainted, uncoated interior metal surfaces of the air cleaner with preservative oil (9150-00-111-209)</li> <li>(c) Cover air filter with barrier (8135-00-226-3124) and install.</li> <li>(d) Seal the air cleaner with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> <li>(7) <u>Fuel Tank.</u></li> <li>(a) Completely drain fuel.</li> <li>(b) Remove two float balls and rods. Wrap in barrier (8135-00-266-3124) and secure with tape (7510-00-266-6715). Place in a fiberboard box (6 x 6 x 18) and seal with tape (7510-00-226-6715).</li> </ul>	. (5		
	<ul> <li>(i) Connect fuel lines.</li> <li>(i) Air Intake System.</li> <li>(a) Remove the air filter.</li> <li>(b) Cover the turbocharger impeller and atomize spray the unpainted, uncoated interior metal surfaces of the air cleaner with preservative oil (9150-00-111-209)</li> <li>(c) Cover air filter with barrier (8135-00-226-3124) and install.</li> <li>(d) Seal the air cleaner with tape (7510-00-916-9659). NSN 7510-00-890-9875 may be used as a substitute.</li> <li>(7) Fuel Tank.</li> <li>(a) Completely drain fuel.</li> <li>(b) Remove two float balls and rods. Wrap in barrier (8135-00-266-3124) and secure with tape (7510-00-266-6715). Place in a fiberboard box (6 x 6 x 18) and seal with tape (7510-00-226-6715).</li> </ul>	(6		
Step	Function	Mech	Insp	
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3 cont.	<ul> <li>(c) Mark box as to contents and secure with tape (7510-00-266-6715). Place in a fiberboard box (6 x 6 x 18) and seal with tape (7510-00-226-6715).</li> <li>(d) Prepare a tag (8135-00-292-2345) Indicating "FLOAT BALLS AND RODS ARE LOCATED INSIDE ENGINE CONTROL CABINET."</li> <li>(e) Attach the tag to the engine start controls.</li> <li>(f) Atomize spray the interior of the tanks with preservative oil (9150-00-111-0209) using a flexible nozzle of sufficient length to assure coverage of all interior surfaces of the tanks.</li> <li>(g) Install float covers.</li> <li>(h) Allow the tanks to stand, with the drain plugs removed, until the preservative oil flow ceases.</li> <li>(i) Coat drain plugs with the same preservative oil and install.</li> <li>(j) Seal fuel tank vent hole with tape (7510-00-916-99659). NSN 7510-00-890-9875 may be used as a as a substitute.</li> <li>(g) Atomize spray interior surfaces with preservative oil (9150-00-111-0209).</li> <li>(c) Allow excess preservative to drain and leave drain cocks open.</li> <li>(g) Air Start Motor.</li> <li>(a) Fill the oiler with the preservative oil (9150-00-111-0209) and reset metering valve.</li> <li>(b) Seal all starting motor openings with tape (7510-00-266-6715).</li> <li>(10) Governor.</li> <li>(a) Coat linkages, pins, and other metallic devices not enclosed with preservative grease (9150-00-190-0905)</li> </ul>			



Step	Function	Mech	Insp
3 cont	<ul> <li>(b) Wrap or cover the governor with barrier (8135-00-224-8885) and secure the barrier with tape (7510-00-266-6715).</li> <li>(11) Fan Belt. <ul> <li>(a) Remove the fan belt.</li> <li>(b) Coat unpainted surfaces of pulley grooves with primer (8010-00-292-1127).</li> <li>(c) Install fan belts but do not tighten.</li> <li>(d) Prepare a tag (8135-00-292-2345) indicating</li> </ul> </li> <li>"RADIATOR FAN BELT TENSION RELIEVED - ADJUST PRIOR TO STARTING ENGINE." <ul> <li>(e) Attach the tag to the engine control panel.</li> </ul> </li> <li>(12) Manual Prelube Pump Handle. Place cushioning (8135-00-855-6969) between handle and pump and secure handle with tape (7510-00-916-9659). Tape 751000-890-9875 may be used as a substitute.</li> </ul> <li>(13) Exhaust Stack. <ul> <li>(a) Cover exhaust stack with barrier (8135-00-224-8885).</li> <li>(b) Install 5/16-inch plywood (5530-00-618-6955) (16-1/4 diam) and secure with tape (7510-00-916-9659). Plywood (5530-00-618-6956) and tape (7510-00-890-9875) may be used as substitutes.</li> </ul> </li> <li>(14) Thermometers. <ul> <li>(a) Remove thermometers (two) (one) and seal openings with tape (7510-00-266-6715).</li> <li>(b) Wrap thermometers with cushioning (8135-00-855-6969) and secure with tape (7510-00-266-6715).</li> <li>(c) Place thermometers in a fiberboard box (18 x 9 x 2). Seal box with tape (7510-00-266-6655). Secure box inside engine control panel with tape (7510-00-890-9875 may be used as a substitute.</li> </ul></li>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(d) Prepare a tag (8135-00-292-2345) indicating "THERMOMETERS REMOVED, INSTALL BEFORE OPERATING THERMOMETERS LOCATED INSIDE ENGINE CONTROL PANEL."</li> <li>(e) Attach tag to engine control panel.</li> <li>(15) Engine Control Panel.</li> <li>(a) Remove and discard batteries from tachometer power unit.</li> <li>(b) Coat electrical contacts and terminals with coat- ing compound (6850-00-003-5295).</li> <li>(c) Prepare tag (8135-00-292-2345) indicating "BAT- TER[ES REMOVED FROM TACHOMETER POWER UNIT."</li> <li>(d) Secure tag below the engine control panel.</li> <li>(e) Place cushioning (8135-00-855-6969) on the face of control panel and secure with tape(7510-00-916- substitute.</li> <li>(f) Place fiberboard (8135-00-281-4113) over cushion- ing (8135-00-855-6969) and secure with tape (7510- 00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(16) Engine Openings. Seal the following with tape (7510- 00-916-9659) or tape 7510-00-890-9875:</li> <li>(a) Crankcase breathers.</li> <li>(b) Dipsticks (two).</li> <li>(17) Depreservation Guide.</li> <li>(a) Complete two DA Forms 2258 for the power plant.</li> <li>(b) Place one copy in a plastic bag (8105-00-269- 4662), heat seal or staple bag.</li> <li>(c) Secure the preserved guide to the control panel.</li> <li>(d) Place the other copy in the logbook.</li> </ul>		

Step	Function	Mech	Insp
Step 3 cont	Function (18) Warning Tag. (a) Prepare a tag (8135-00-292-2345) indicating "DE- PROCESS ENGINE IN ACCORDANCE WITH DA FORM 2258 (Attached to this equipment) - IN ADDITION, THE AIR CLEANERS, FILL PORTS, EXHAUST STACK, BREATHER TUBES, AND FUEL TANK VENT HOLE HAVE BEEN SEALED REMOVE SEALS PRIOR TO CRANKING ENGINE." (b) Secure the tag to the engine control panel. b. Preservation of the Control Unit.	Mech	Insp
	<ul> <li><u>Cheve 21 arc chutes and phase barriers</u> (2000 KW only) from the circuit breakers. The arc chutes will be packed separately (step 3c). NOTE</li> <li>The arc chutes are to remain installed in the 1500 KW during shipment.</li> <li>(2) Install phase barriers back onto breakers.</li> <li>(3) Rack into place, block, and brace to prevent move-</li> </ul>		
	<ul> <li>(4) Pack fuses from each cabinet as follows: <ul> <li>(a) Wrap fuses with barrier (8135-00-226-3124) and place in bags (8105-00-902-6508) according to rating. Heat seal or staple bags.</li> <li>(b) Place bagged fuses in a fiberboard box (8 x 12 x 3). Seal box with tape (7510-00-297-6655) and mark to identify contents.</li> <li>(c) Secure each box in cabinet with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> </ul> </li> <li>(5) Coat electrical contacts and terminals with coating compound (6850-00-003-5295).</li> <li>(6) Remove relay covers and place barrier (8135-00-225-3124) between disk and magnets. Set the protective relay time dial settings to zero. Secure the relay covers with wire (9505-00-222-3829).</li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(7) Prepare a tag (8135-00-292-2345) indicating "BARRIER HAS BEEN PLACED BETWEEN DISK AND MAGNETS OF RELAYS, REMOVE BEFORE OPERATION."</li> <li>(8) Attach tag to the start controls on the control unit.</li> <li>(9) Remove retaining bolts from the doors of the control unit. Wrap with barrier (8135-00-226-3124) and pack in a fiberboard box (6 x 4 x 4). Seal box with tape (7510-00-297-6655). Secure box in tool box on the end of the control unit. Prepare a tag (8135- 00-292-2345) indicating "RETAINING BOLTS ARE IN TOOL BOX." Secure tag to the door with tape (7510-00- 916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(10) Place cushioning (8135-00-855-6969) over relays and switches and secure with tape (751000-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(11) Cover frame where it comes in contact with the control unit with barrier (8135-00-226-3124).</li> <li>(12) Cover frame where it comes in contact with the control unit with barrier (8135-00-226-3124).</li> <li>(13) Secure frame to control unit with 3-1/2 in. bolts (5306-00-282-4281) and washers (5510-00-833-3340).</li> <li>(14) Preserve batteries as follows: <ul> <li>(a) Disconnect the battery positive and negative cables which run to the battery knife switch of the battery end only.</li> <li>(b) Coat cable ends with silicone compound (6850-00- 295-7685) and wrap with barrier (8135-00-226- 3124), secure with tape (7510-00-266-6716).</li> <li>(c) Apply a coating of silicone compound (6850-00- 295-7685) to battery terminals.</li> <li>(d) Secure cover batteries with lumber strips (5510- 00-220-6078) and steel strapping (8135-00-283- 0669) and strapping seals (8135-00-239-5293).</li> </ul> </li> </ul>		

Step	Function	Mech	Insp
Step 3 cont	Function         c. Arc Chutes (2000 KW).         (1) Wrap the arc chutes with cushioning (8135-00-855-6969).         (2) Pack three arc chutes into a wooden box (37-3/4 x 21 x 32) (table B-2-4).         (3) Isolate the arc chutes from the sides of the box and each other by using 21 x 2 x 4 lumber blocks (5510-00-220-6194).         (4) Seal box.         (5) Preservation of Air Compressor.         (1) Engine.         (a) Drain normal lubrication oil.         (b) Fill preservative oil (9150-00-111-0209).         (c) Remove spark plug.         (d) Atomize spray 1-1/2 ounces of preservative oil (9150-00-111-0209) through spark plug opening while manually cranking the engine.         (e) Install spark plug.         (f) Prepare a tag (8135-00-292-2345) indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESERVATIVE OIL GOOD FOR OPERATION UNTIL FIRST REQUIRED LUBRICANT CHANGE - DO NOT DRAIN - CHECK OIL LEVEL - IF LOW, FILL TO OPERATING LEVEL WITH OIL AS SPECIFIED IN LO 5-6115-550-12."         (g) Attach the tag to the engine.         (2) Compressor.         (a) Drain normal lubrication oil from crankcase.         (b) Fill crankcase with preservative oil (9150-00-111-0209).         (c) Remove the air cleaner element.	Mech	Insp

Step	Function	Mech	Insp
3 cont	<ul> <li>(d) Atomize spray air intake with preservative oil (9150-00-111-0209) while manually cranking compressor.</li> <li>(e) Coat the interior surfaces of the air cleaner with preservative oil (9150-00-111-0209).</li> <li>(f) Drain excess preservative.</li> <li>(g) Install the element.</li> <li>(h) Wrap air filter with barrier (8135-00-226-3124) and secure with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(i) Prepare a tag (8135-00-292-2345) indicating "CRANKCASE FILLED TO OPERATING LEVEL WITH PRESERVATIVE OIL GOOD FOR OPERATION UNTIL FIRST REQUIRED LUBRICANT CHANGE - DO NOT DRAIN - CHECK OIL LEVEL - IF LOW, FILL TO OPERATING LEVEL WITH OIL AS SPECIFIED IN LO 5-6115-550-12."</li> <li>(j) Attach the tag to the compressor.</li> <li>(k) Cover compressor output openings with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(3) Drive Belts and Pulleys.</li> <li>(a) Remove drive belts.</li> <li>(b) Paint unpainted surface of pulley grooves with primer (8010-00-292-1127).</li> <li>(c) Install belts but do not tighten.</li> <li>(d) Prepare at ag (8135-00-292-2345) indicating "BELT TENSION RELIEVED, ADJUST PRIOR TO STARTING."</li> <li>(e) Attach tag to belt guard.</li> <li>(4) Depreservation Guides.</li> <li>(a) Complete two DA Forms 2258 for the compressor.</li> <li>(b) Place one copy in a plastic bag (8105-00-259- 4662), heat seal or staple bag. Secure the bag to the compressor.</li> <li>(c) Place the other copy in the logbook.</li> </ul>		

3 conte.Preservation of Air Receiver Tank.(1)Open drain cock and remove side plug. (2)Atomize spray interior surfaces of tank with preservative oil (9150-00-111-0209). (3)(3)Allow excess preservative to drain. (4)Install side plug. (5)(5)Leave drain cocks open. f.(1)Preservation of Exhaust Pipes, Elbows, and Silencers. elbows, and silencers with preservative oil (9150- 00-111-0209).(2)Seal ends with tape (7510-00-916-9659). Tape 7510- 00-890-9875 may be used as a substitute.
<ul> <li><u>9. Preservation of Bolts, Nuts, Lockwashers and Ground Rod</u> <u>Clamps</u></li> <li>(1) Coat bolts, nuts, and lockwashers with preservative oil (9150-00-111-0209).</li> <li>(2) Place bolts, nuts, lockwashers, and ground rod clamps in individual bags (8105-00-902-6508). Heat seal or staple bags.</li> <li>(3) Mark each bag indicating nomenclature and quantity.</li> <li>(4) Place bags in a fiberboard box (12 x 12 x 12). Seal box lid with tape (7510-00-297-6655).</li> <li>(5) Mark box to identify contents.</li> <li>(6) Pack box with the power and control cables. h. <u>Preservation of Lifting Device and Slings.</u> Apply a light film of corrosion preventive compound (8030-00- 231-2345) to the slings.</li> <li>i. <u>Preservation of Power Cables (675 ft), Control Cables</u> (three), and Ground Wire (200 ft).</li> <li>(1) Wrap the ends of the cables with barrier (8135-00- 224-8885) and secure with tape (7510-00-266-6715).</li> </ul>

Step	Function	Mech	Insp
3 cont	<ul> <li>(2) Coil cables and secure with four evenly spaced pieces of barrier (8135-00-244-8885) and tape (7510-00-266-6715).</li> <li>j. Preservation of Technical Manuals and Logbooks. Place technical manuals and logbooks into a plastic bag (8105-00-269-4662). Heat seal or staple bags.</li> <li>k. Packing for Power Cable (675 ft for 1500 KW, 900 ft for 2000 KW), Ground Wire (200 ft), Control Cable (three for 1500 KW, four for 2000 KW). Neutral Conductor (four for 2000 KW), Battery Jumper Cables, Bolt, Nuts, Lock-washers, Ground Rod Clamp Box, Technical Manuals, and Logbooks.</li> <li>(1) Place the power cables into the wooden box (44 x 44 x 20 for 1500 KW) (44 x 44 x 26 for 2000 KW). Place the control cables inside the power cables.</li> <li>(2) Place the ground cable into center of the power cables.</li> <li>(3) Place the box containing bolts, nuts, lockwashers, and ground rod clamps on top of the ground cable box.</li> <li>(4) Place the box containing technical manuals and logbooks on top of the box containing bolts, nuts, lockwashers, and ground rod clamps.</li> <li>(5) Mark the PPP-B-601 box indicating nomenclature and quantity of contents.</li> <li>1. Preservation of Fuel Transfer Pump (two).</li> <li>(1) Atomize spray the inlet and outlet of the pump with preservative oil (9150-00-111-0209) and allow to drain.</li> <li>(2) Seal off the inlet and outlet of the pump with tape (7510-00-266-6715).</li> <li>m. Marking.</li> <li>(1) Mark boxes and units in accordance with appendix E.</li> <li>(2) Mark four sides of the containers with 2-inch minimum size letters to indicate "REUSABLE CONTAINER - DO NOT DESTROY."</li> </ul>		

#### **APPENDIX B-3**

### 3750 KW AND 4500 KW POWER PLANTS

NSN 6115-00-250-4403 6115-00-250-4402 ITEM DESCRIPTION 3750 KW ELECTRIC POWER PLANT 4500 KW ELECTRIC POWER PLANT

Refer to table B-3-16 packaging materials list for identification and ordering data for items in this appendix.

Refer to table B-3-17 inventory list for individual components covered in this appendix.

STEP:Establishes the recommended order in which the functions are accomplished.FUNCTION:Relates to instruction to be accomplished in preparation of the equipment for shipment.MECH:For initials of mechanic or responsible processing personnel to indicate function has been completed.INSP:For initials of inspector certifying that function has been completed as indicated by the mechanic or processing personnel.

Step	Function	Mech	Insp
	DEPOT PACKAGING		
	NOTE		
	Refer to TM 5-6115-456-15 for identification of items mentioned in these procedures.		
	Cleaning, drying, application of preservatives, and sealing of barriers should progress in an uninterrupted series of operations.		
1	CLEANING AND DRYING		
	Thorough cleaning and drying shall be accomplished prior to the application of preservatives. Unless otherwise speci- fied, all surfaces of the item(s) shall be cleaned by pro- cess C1, MIL-P-116, and drying shall be accomplished by one or more of the drying procedures also listed therein.		

<ul> <li>PRESERVATION AND PACKING NOTE</li> <li>Preservatives specified herein and the methods of application shall be in accordance with MIL-P-116.</li> <li><u>a. Power Unit (three).</u> <ul> <li>(1) <u>Dissel Engine.</u></li> <li>(a) <u>Coolant System.</u></li> <li>1 Fill the coolant system to the proper level with equal parts (by volume) of MIL-A-46153 antifreeze and clean water.</li> <li>2 Prepare a UU-T-81 tag to indicate "COOLANT SYSTEM CONTAINS WATER AND ANTIFREEZE IN EQUAL PARTS BY VOLUME - DO NOT DRAIN - CHECK COOLANT OF THE SAME MIXTURE."</li> <li>3 Attach the tag to the radiator sight glass.</li> <li>(b) <u>Fuel System.</u> NOTE</li> </ul> </li> <li>At least one of the three power units will contain a fuel transfer pump.</li> <li>1 Remove fuel filters from fuel transfer pump and seal chambers.</li> <li>2 Connect auxiliary 110 volts AC supply to pump.</li> <li>3 Switch on pump and pump VV-L-800 preservative oil unit the fuel tank begins to fill with preserva- tive oil. Then switch off pump.</li> <li>4 Disconnect 110 volts AC supply.</li> <li>5 Drain excess VV-L-800 from pump system and fuel tank.</li> <li>6 Open fuel filter chambers and atomize spray with MIL-L-21260, type I, grade 30 preservative oil.</li> </ul>	Step	Function	Mech	Insp
	2	PRESERVATION AND PACKING NOTE Preservatives specified herein and the methods of application shall be in accordance with MIL-P-116. <u>a. Power Unit (three).</u> (1) <u>Diesel Engine.</u> (a) <u>Coolant System.</u> 1 Fill the coolant system to the proper level with equal parts (by volume) of MIL-A-46153 antifreeze and clean water. 2 Prepare a UU-T-81 tag to indicate "COOLANT SYSTEM CONTAINS WATER AND ANTIFREZE IN EQUAL PARTS BY VOLUME - DO NOT DRAIN - CHECK COOLANT LEVEL - IF COOLANT IS LOW, ADD COOLANT OF THE SAME MIXTURE." 3 Attach the tag to the radiator sight glass. (b) <u>Fuel System.</u> NOTE At least one of the three power units will contain a fuel transfer pump. 1 Remove fuel filters from fuel transfer pump and seal chambers. 2 Connect auxiliary 110 volts AC supply to pump. 3 Switch on pump and pump VV-L-800 preservative oil until the fuel tank begins to fill with preserva- tive oil. Then switch off pump. 4 Disconnect 110 volts AC supply. 5 Drain excess VV-L-800 from pump system and fuel tank. 6 Open fuel filter chambers and atomize spray with MIL-L-21260, type I, grade 30 preservative oil.		

Step	Function	Mech	Insp
2	7 Install fuel filters and seal chambers.		
cont	<ul> <li><u>8</u> Remove fuel gage float assembly. Preserve assembly as follows:</li> <li>(a) Wrap fuel gage assembly in MIL-B-121 barrier and PPP-C-843 cushioning. Place fuel gage assembly into a PPP-B-636 fiberboard box (18 x 6 x 4). Seal box with PPP-T-76 tape.</li> <li>(b) Mark box to indicate contents.</li> <li>(c) Secure box to fuel tank with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li><u>CAUTION</u></li> <li>Prelube unit before starting if unit has not been running during the last 24 hours.</li> <li><u>9</u> Ensure that there is only sufficient fuel (approx 30 gal) in the fuel tank to warm engine.</li> <li><u>10</u> Start the engine on fuel and operate at fast idle until thoroughly warm, then accelerate to three-fourths speed. When the sight glass shows foam, add VV-L-800 preservative oil to the fuel tank.</li> <li><u>11</u> Operate the engine until undiluted preservative oil is observed flowing through the fuel return sight glass.</li> <li><u>12</u> Open drain valve and drain the preservative oil from the fuel tank.</li> <li><u>13</u> Close drain valve.</li> <li><u>14</u> Atomize spray the interior of the fuel lank with MIL-L-21260, type I, grade 30 preservative oil and seal opening with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>(c) <u>Crankcase and Oil System.</u> NOTE</li> </ul>		

Step	Function	Mech	Insp
2 cont	<ol> <li>Completely drain the crankcase, oil filters, and lube oil strainer.</li> <li>Remove oil filter elements.</li> <li>Connect a portable pump to the output of the scavenging oil pump.</li> <li>Pump MIL-L-21260, type I, grade 30 preservative oil until preservative oil is observed in the lube strainer.</li> <li>Disconnect pump from the scavenging pump.</li> <li>Connect portable pump to the lube pump output.</li> <li>Pump MIL-L-21260, type I, grade 30 preservative oil through the lubrication system until preserva- tive oil is seen coming from the camshaft bearings 1 and 9 (located on top of the engine toward the radiator end).</li> <li>Turn the engine over at least two full revolutions while pumping preservative oil through the oil system.</li> <li>Disconnect the portable pump.</li> <li>Connect a portable pump to the piston cooling pump output.</li> <li>Pump MIL-L-21260, type I, grade 30 preservative oil though the system.</li> <li>Qoen access covers to the crankcase to observe when the preservation oil starts coming from the piston cooling tubes.</li> <li>Turn the engine over two full revolutions while pumping preservative oil.</li> <li>Disconnect the portable pump.</li> <li>Goen access covers to the crankcase to observe when the preservation oil starts coming from the piston cooling tubes.</li> <li>Turn the engine over two full revolutions while pumping preservative oil.</li> <li>Disconnect the portable pump.</li> <li>Glose and secure the access covers.</li> <li>Close and secure the access covers.</li> <li>Allow time for the engine to drain (approx 20 min). Completely drain the crankcase oil filters and lube oil strainer of any oil.</li> </ol>		

Step	Function	Mech	Insp
2 cont	<ul> <li><u>18</u> Install oil filter elements.</li> <li><u>19</u> Fill the crankcase with MIL-L-2104, grade 40 lubricating oil.</li> <li><u>CAUTION</u></li> <li>Do not run engine after filling crankcase. Running the engine will contaminate the oil and it will not be suitable for storage.</li> <li>(d) <u>Cylinders and Air Boxes.</u> <ol> <li>Remove the air box covers and open all cylinder test valves.</li> <li>Manually crank the engine until the piston in each cylinder is below the cylinder liner air intake ports.</li> <li>Atomize 4 ounces of MIL-L-21260, type I, grade 30 preservative oil into the open port. Do not exceed 25 psi.</li> <li>Repeat the preservative cycle until all cylinders have been atomize sprayed with preservative oil.</li> <li>Atomize spray the interior of each air box with MIL-L-21260, type I, grade 30 preservative oil.</li> <li>Replace air box covers and close cylinder test valves. Check seals in covers for proper position.</li> </ol> </li> <li>(e) <u>Top Deck</u>. Atomize spray all parts under the engine top deck covers with MIL-L-21260, type I, grade 30 preservative oil.</li> <li>f. Radiator Fan Belts.</li> <li>1. Remove the fan belts.</li> <li>2. Coat unpainted surfaces of pulley grooves with TT-P-664 primer.</li> <li>3. Install fan belts but do not tighten.</li> </ul>		

Step	Function	Mech	Insp
2 cont	<ul> <li>4 Prepare a UU-T-81 tag to indicate "RADIATOR FAN BELT TENSION RELIEVED - ADJUST PRIOR TO STARTING ENGINE."</li> <li>5 Attach the tag to the engine control panel.</li> <li>(g) Generator.</li> <li>1 Coat flywheel gear and pinion gear of starter with MIL-G-10924 grease.</li> <li>2 Remove ventilation grills.</li> <li>3 Raise the brushes and place a strip of MIL-B-121 barrier between them and the slip rings.</li> <li>4 Seal the ventilation grills with MIL-B-131 barrier and MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape may be used as a substitute.</li> <li>5 Prepare a UU-T-81 tag to indicate "BARRIER HAS BEEN PLACED INSIDE THE GENERATOR BETWEEN THE BRUSHES AND THE SLIP RINGS. GENERATOR VENTILATION GRILLS HAVE BEEN SEALED. REMOVE BEFORE OPERATION."</li> <li>(h) Engine Air Filters.</li> <li>1 Drain oil.</li> <li>2 Remove filter elements and atomize spray interior of air filter with MIL-L-21260, type I, grade 30 preservative oil.</li> <li>3 Install filter elements and seal intake opening used as a substitute.</li> <li>4 Attach a UU-T-81 tag to the engine control panel indicating "ENGINE AIR FILTERS DRAINED."</li> <li>(1) Outside Air Intake Filters (sides).</li> <li>1 Open filter retainers.</li> <li>2 Remove fiberglass filter element.</li> <li>3 Remove wire grate.</li> <li>4 Cover an NN-P-530, 5/16-inch plywood panel (78 x 16-1/2) with MIL-B-131 barrier and place over fil- ter openings. NN-P-530; 3/8-inch plywood may be used as a substitute.</li> </ul>		

Step	Function	Mech	Insp
2 cont	<ul> <li>§ Seal edges with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>§ Install wire grate.</li> <li>7 Install filter elements and secure retainer.</li> <li>(i) Outside Air Intake Filter (door).</li> <li>1 Open filter retainer.</li> <li>2 Remove fiberglass filter element, roll it up, and place in a bag fabricated from MIL-B-131 barrier (24 x 12). Heat seal or staple bag. Mark the bag "AIR FILTER."</li> <li>3 Close filter retainer. Cover the filter opening with MIL-B-131 barrier and NN-P-530, 5/16-inch plywood panel (78 x 18). NN-P-530, 3/8-inch plywood may be used as a substitute.</li> <li>4 Seal edges with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> <li>(k) Power Unit Openings.</li> <li>1 Cover front of fan shroud with MIL-B-131 barrier and NN-P-530, 1/2-inch plywood (108 x 113). Secure with 30 "J" bolts fabricated from FF-B-584 bolts (3/8-3 NC), FF-W-92 flat washers, and FF-N-836 nuts.</li> <li>2 Fill in space between shroud and unit with strips of PPP-C-850 cushioning wrapped with MIL-B-121 barrier.</li> <li>3 Seal cushioning with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>4 Plug holes except the two bottom drain holes with MIL-C-5501 caps or with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>§ Cap or plug openings in bottom of unit with MIL-C-5501 caps or seal with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>§ Cap or plug openings in bottom of unit with MIL-C-5501 caps or seal with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>§ Cap or plug openings in bottom of unit with MIL-C-5501 caps or seal with MIL-T-22085 tape.</li> <li>PPP-T-60 tape may be used as a substitute.</li> <li>§ Cap or plug openings in bottom of unit with MIL-C-5501 caps or seal with MIL-T-22085 tape.</li> <li>PPP-T-60 tape may be used as a substitute.</li> <li>§ Cap or plug openings in bottom of unit with MIL-C-5501 caps or seal with MIL-T-22085 tape.</li> <li>POD-T-60</li></ul>		

Step	Function	Mech	Insp
2 cont	<ul> <li>9 Seal edges of plywood with MIL-T-22085 tape. PPP - T-60, type 4, 4-inch wide tape may be used as a substitute.</li> <li><u>10</u> Seal exhaust stack on engine with MIL-T-22085 tape PPP-T-60 tape may be used as a substitute.</li> <li><u>11</u> Cover exhaust opening with MIL-B-131 barrier and NN-P-530 plywood (32-1/4 x 32-1/4 x 1/2). Secure with aspirator bolts and seal edges with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>(1) <u>Catwalk, Steps, and Ladder</u>.</li> <li><u>1</u> Secure catwalk in its raised position.</li> <li><u>2</u> Secure ladder and steps wot the catwalk with 3 "J" bolts fabricated from FF-B-584 bolts (3/8-3 NC), FF-W-92 flat washers, and FF-N-836 nuts.</li> <li>(m) <u>Access Doors</u>.</li> <li><u>1</u> Coat the rubber door seals with MIL-S-8660 sili- cone.</li> <li><u>2</u> Securely lock all outside access doors and seal with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li><u>3</u> Place the keys with logbook.</li> <li>(n) <u>Marking</u>. Mark power unit in accordance with appendix E. Place markings on plywood cover (fan shroud end).</li> <li>(o) <u>Depreservation Guide</u>.</li> <li><u>1</u> Complete two DA Forms 2258.</li> <li><u>2</u> Place one copy into a MIL-B-117 bag, heat seal or staple.</li> <li><u>3</u> Mark bag to indicate contents and secure to engine control panel.</li> <li><u>4</u> Place the other copy in logbook.</li> <li><u>Main Air Circuit Breakers</u>.</li> <li>(a) Remove the arc chutes (nine) and phase barriers.</li> </ul>		

Step	Function	Mech	Insp
Step 2 cont	<ul> <li>Function</li> <li>(b) Install phase barriers back onto the breakers.</li> <li>(c) Fabricate PPP-B-601 boxes (23 x 21 x 33) for the arc chutes in accordance with appendix D-1. Refer to table B-3-1 for list of materials.</li> <li>(d) Wrap the arc chutes with PPP-C-843 cushioning.</li> <li>(e) Place arc chutes into the box, three chutes per box.</li> <li>(f) Isolate the arc chutes from the sides of the box and each other by using MM-L-751 lumber (21 x 2 x 4).</li> <li>(g) Seal box and mark the containers to identify contents.</li> <li>(h) Remove relay covers and place MIL-B-121 barrier between disk and magnets. Set the protective relay time dial settings to zero. Secure the relay covers with QQ-W-461 wire.</li> <li>(i) Rack breakers into place, and block with MM-L-751 lumber (25-1/2 x 2 x 4) (17 x 2 x 4) (5-3/4 x 2 x 4) to prevent movement.</li> <li>(j) Pack fuses from each cabinet as follows:</li> <li>1 Wrap fuses with MIL-B-121 barrier (18 x 12) and place in MIL-B-117 bags according to rating. Heat seal bags. Mark bags with rating of fuses.</li> <li>2 Place bagged fuses in a PPP-B-636 fiberboard box (12 x 12 x 4).</li> <li>3 Secure each box in cabinet with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape may be used as a substitute.</li> <li>(2) Coat electrical contacts and terminals with MIL-C-83360 coating compound.</li> <li>(3) Electrical Cabinet Doors. Secure breaker cabinet doors with frame (item A, fig. B-3-1). Refer to table B-3-2 for a list of materials.</li> </ul>	Mech	Insp
	<ul> <li>table B-3-2 for a list of materials.</li> <li>(4) <u>Exhaust Fans.</u></li> <li>(a) Remove a bolt from each side of the exhaust fan louvers.</li> <li>(b) Place bolts into a bag fabricated from MIL-B-131 barrier. Heat seal and mark to identify contents.</li> </ul>		

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	33 x 1 x 4 13-7/8 x 1 x 4 13-7/8 x 1 x 4 33 x 21 x 1/2	4 4 2 2
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	SIDE PANELS Thru edge cleat Filler edge cleat Plywood sheet	25-1/2 x 1 x 4 25-7/8 x 1 x 4 25-1/2 x 33 x 1/2	4 4 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleat Skid Plywood sheet	23-1/2 x 1 x 4 18-3/8 x 1 x 4 16-3/8 x 1 x 4 23-1/2 x 3 x 4 25-1/2 x 23-1/2 x 1/2	4 4 2 2 2
	HARDWARE		
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1 lb

Table B-3-1. Material List for Arc Chutes Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6196 5510-00-220-6196 5510-00-220-6196 5510-00-220-6196 5510-00-220-6198	A-frame A-frame B-frame C-frame C-frame C-frame D-frame D-frame Bracing, frame C Bracing, frame D End shift block, container D End shift block, container E End shift block, container G Shift block, container H End shift block, container F	$102 \times 2 \times 4$ $35 \times 2 \times 4$ $98 \times 2 \times 4$ $29 2/2 \times 2 \times 4$ $56 \times 2 \times 4$ $29 \times 2 \times 8 (Rip to 6 in.)$ $96 \times 2 \times 4$ $45 \times 2 \times 4$ $60 \times 2 \times 4$ $72 \times 2 \times 4$ $34 \times 2 \times 6$ $20 \times 2 \times 6$ $46 \times 2 \times 6$ Length as rqr x 2 x 6 $16 \times 2 \times 6$	2 5 2 5 2 3 2 5 5 4 8 1 1 1 1 1 1
5315-00-010-6511	HARDWARE Nails, cement coated	16d	4 lb

# Table B-3-2. Material List for Control Unit Bracing

Step	Function	Mech	Insp
2 cont	<ul> <li>(c) Secure bag to the inside of the control unit with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape may be used as a substitute.</li> <li>(d) Cover louvers with MIL-B-131 barrier and NN-P-530 5/16-inch plywood (20 x 20) and secure with FF-B-584 machine bolts (1/4 x 3 NC). NN-P-530, 3/8-inch plywood may be used as a substitute.</li> <li>(e) Seal edges with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>(f) <u>Air Intake.</u></li> <li>(a) Wrap filter with MIL-B-131 barrier, install and lock metal door.</li> <li>(b) Seal edges with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>(f) <u>Batteries and Cables.</u></li> <li>(a) Coat the battery cable connectors with MIL-S-8660 silicone. Wrap with MIL-B-121 barrier and secure with PPP-T-60 tape.</li> <li>(b) Secure cables to frame.</li> <li>(c) Place 14 dry-charged batteries into battery rack. Place NN-P-530 plywood shims (10-1/2 x 8-1/2) between batteries to prevent movement.</li> <li>(d) Install Jumper cables and coat battery posts with MIL-S-8660 silicone.</li> <li>(7) <u>Relay Room and Fuse Panel.</u></li> <li>(a) Fuses.</li> <li>(b) Renove fuses from fuse panel and battery charger.</li> <li>2 Wrap fuses with MIL-B-121 barrier and place in MIL-8-117 plastic bags according to rating. Heat seal bag. Mark bag to indicate contents.</li> <li>3 Place bagged fuses in a PPP-B-636 fiberboard box (12 x 12 x 12) and seal with PPP-T-76 tape. Mark box to indicate contents.</li> <li>4 Place box in the relay room and secure with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> </ul>		

<ul> <li>2 (8) Fire Extinguisher. Lock fire extinguisher in bracket and secure with QQ-W-461 wire.</li> <li>(9) Control Unit Openings. <ul> <li>(a) Seal openings with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape may be used as a substitute.</li> <li>(b) Cap off the cable penetrations underneath the control unit with MIL-C-5501 caps.</li> <li>(c) Cover the battery vent, located on top of shelter, with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> <li>c. Accessories (shipped inside control unit) (refer to fig. B-3-1 for location of items).</li> </ul> </li> <li>(1) Conduit (24 x 4), 24 each. <ul> <li>(a) Coat the threaded end of the conduit with MIL-C-16173, grade 4 preservative and allow to dry.</li> <li>(b) Place the conduit in a PPP-B-601 box (27 x 18 x 24) fabricated in accordance with appendix D-1. Refer to table B-3-3 for a list of materials. Mark box to identify contents.</li> </ul> </li> <li>(2) Flexible Metal Fuel Hose, Universal (three, 1-inch and one, 2-inch). <ul> <li>(a) Dip hoses in VV-L-800 preservative oil, allow to drain, wrap hoses in MIL-B-121 barrier.</li> <li>(b) Place into a PPP-B-636 fiberboard box (24-1/2 x 7 x 5). Seal box with PPP-T-76 tape. Mark box to identify contents.</li> </ul> </li> <li>(3) Cables and Ground Wire. <ul> <li>(a) Cover exposed ends of electrical cables with</li> </ul></li></ul>	Step	Function	Mech	Insp
<ul> <li>MIL-B-121 barrier. Secure barrier with PPP-T-60 tape.</li> <li>(b) Coil cables and secure in four places with</li> <li>MIL-B-121 barrier and PPP-T-60 tape.</li> <li>(c) Place flexible hose, cables, and spool of ground</li> <li>wire in a PPP-B-601 box (24 x 24 x 24) fabricated</li> <li>in accordance with appendix D-1. Refer to table</li> <li>B-3-4 for list of materials. Mark box to identify contents.</li> </ul>	2 cont	<ul> <li>(8) Fire Extinguisher. Lock fire extinguisher in bracket and secure with QQ-W-461 wire.</li> <li>(9) Control Unit Openings. <ul> <li>(a) Seal openings with MIL-T-22085 tape. PPP-T-60, type 4, 4-inch wide tape may be used as a substitute.</li> <li>(b) Cap off the cable penetrations underneath the control unit with MIL-C-5501 caps.</li> <li>(c) Cover the battery vent, located on top of shelter, with MIL-T-22085 tape. PPP-T-60 tape may be used as a substitute.</li> </ul> </li> <li>c. Accessories (shipped inside control unit) (refer to fig. B-3-1 for location of items).</li> <li>(1) Conduit (24 x 4), 24 each. <ul> <li>(a) Coat the threaded end of the conduit with MIL-C-16173, grade 4 preservative and allow to dry.</li> <li>(b) Place the conduit in a PPP-B-601 box (27 x 18 x 24) fabricated in accordance with appendix D-1. Refer to table B-3-3 for a list of materials. Mark box to identify contents.</li> </ul> </li> <li>(2) Flexible Metal Fuel Hose, Universal (three, 1-inch and one, 2-inch). <ul> <li>(a) Dip hoses in VV-L-800 preservative oil, allow to drain, wrap hoses in MIL-B-121 barrier.</li> <li>(b) Place into a PPP-B-636 fiberboard box (24-1/2 x 7 x 5). Seal box with PPP-T-76 tape. Mark box to identify contents.</li> </ul> </li> <li>(3) Cables and Ground Wire. <ul> <li>(a) Cover exposed ends of electrical cables with MIL-B-121 barrier and PPP-T-60 tape.</li> <li>(c) Place flexible hose, cables, and spool of ground wire in a PPP-B-601 box (24 x 24 x 24) fabricated in accordance with appendix D-1. Refer to table B-3-4 for list of materials. Mark box to identify contents.</li> </ul></li></ul>		



NOMENCLATURE	CONTAINER NO,	OVER-ALL DIM
ARC CHUTE	1 2,3,4	25 1/2 X 23 1/2 X 38
WIRE 1900 FT COIL, (9)	5	44 3/4 X 18 1/4 X 32 1/2
WIRE, 400 FT SPOOLS (4)	6	38 1/2 X 18 1/2 X 21
	STRAP ON TOP OF	
	CONTAINER NO 5	
ELECTROLYTE	7	58 1/2 X 32 1/4 X 28 1/2
FLEX HOSE CABLES	8	26 1/2 X 26 1/2 X 29
CONDUIT	9	29 1/2 X 20 1/2 X 29 1/
CABLE WIRE 500 FT COILS	10	25 1/2 X 25 1/2 X 28
	STRAP ON TOP OF	
	CONTAINER NO B	
ELECTRICAL FITTINGS	11	19 1/2 X 19 1/2 X 12 1/
	STRAP ON TOP OF	
	CONTAINER NO 9	
GROUND RODS	12	75 1'2 X 4 1/4 X 4 1/4
	STRAP ON TOP OF	
	CONTAINERS NO 1,2 3	
ASPIRATOR GASKETS	STRAP ALL CARTONS	32 1/4 × 32 1/2 × 2
AND MANUALS	ON TOP OF	48 X 9 X 6
	CONTAINER NO 7	

Figure B-3-1. Location of Items Within Control Unit.

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	END PANELS Thru edge cleat Filler edge cleat Plywood sheet	24-1/2 x 1 x 4 10-7/8 x 1 x 4 18 x 24-1/4 x 1/2	4 4 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	29-1/2 x 1 x 4 17-1/8 x 1 x 4 29-1/2 x 24-1/4 x 1/2	4 4 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleat Skid Plywood sheet	20-1/2 x 1 x 4 22-3/8 x 1 x 4 13-3/8 x 1 x 4 20-1/2 x 3 x 4 29-1/2 x 20-1/2 x 1/2	4 4 2 2 2
5315-00-010-6503 5315-00-010-6507	HARDWARE Nails, cement coated Nails, cement coated	4d 8d	1 lb 1 lb
5315-00-010-6511	Nails, cement coated	16d	1/2 lb

Table B-3-3. Material List for Conduit Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	END PANELS Thru edge cleat Filler edge cleat Plywood sheet	24 x 1 x 4 16-7/8 x 1 x 4 24 x 24 x 1/2	4 4 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	26-1/2 x 1 x 4 16-7/8 x 1 x 4 26-1/2 x 24 x 1/2	4 4 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6514 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleat Skid Plywood sheet	26-1/2 x 1 x 4 19-3/8 x 1 x 4 19-3/8 x 1 x 4 26-1/2 x 3 x 4 26-1/2 x 26-1/2 x 1/2	4 4 2 2 2
	HARDWARE		
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1/2 lb

Table B-3-4. Material List for Flex Hose, Cable, and Wire Box

Step	Function	Mech	Insp
2 cont	<ul> <li>(4) <u>Ground Rods.</u> Place ground rods in a PPP-B-601 box (75-1/2 x 4-1/4 x 4-1/4) fabricated in accordance with appendix D-1. Refer to table B-3-5 for a list of materials. Mark box to identify contents.</li> <li>(5) <u>Aspirator Gaskets.</u> Tape each gasket to a piece of PPP-F-320 fiberboard (32 x 32). Place gaskets in a fiberboard box (32-1/4 x 32-1/4 x 2). Seal box with PPP-T-76 tape. Mark box to identify contents.</li> <li>(6) <u>Fluorescent Lamps.</u> Cushion lamps with PPP-C-843 cushioning and secure in place with PPP-T-60 tape.</li> <li>(7) <u>Electrolyte.</u> <ul> <li>(a) Fabricate a PPP-B-601 box (58-1/2 x 32-1/4 x 21-1/4) in accordance with appendix D-1. Refer to table B-3-6 for list of materials.</li> <li>(b) Fill bottom of box with 3 inches of HH-I-585 thermal insulation.</li> <li>(c) Place the containers of electrolyte, spaced 3 inches between each container on top of the insulation.</li> <li>(d) Fill void with HH-I-585 thermal insulation to the level of the top edge of the wooden box.</li> <li>(e) Close and secure box lid and mark box to identify contents.</li> <li>(g) Place the 12 bolt-on terminals in a MIL-B-131 barrier bag (12 x 12) and heat seal. Mark bag to identify contents.</li> <li>(c) Place the 30 lugs with blank tongue in a MIL-B-131 barrier bag (12 x 20) and heat seal. Mark bag to identify contents.</li> <li>(d) Place the 500 nylon female quick disconnect terminals in a MIL-B-131 barrier bag (20 x 25) and heat seal. Mark bag to identify contents.</li> </ul></li></ul>		

5510-00-220-6078 5510-00-220-6194         Side panels End panels Top and bottom panels         75-1/2 x 1-3/8 x 3/4 2-7/8 x 1-3/8 x 1-1/2 75-1/2 x 4-1/8 x 1/2         2           HARDWARE         Bd         1/2 lb	NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
5310-00-010-6507     Nails, cement coated     8d     1/2 lb	5510-00-220-6078 5510-00-220-6194 5530-00-618-6958	Side panels End panels Top and bottom panels	75-1/2 x 1-3/8 x 3/4 2-7/8 x 1-3/8 x 1-1/2 75-1/2 x 4-1/8 x 1/2	2 2 2
5310-00-010-6507       Nails, cement coated       8d       1/2 lb         Image: state sta		HARDWARE		
	5310-00-010-6507	Nails, cement coated	8d	1/2 lb

### Table B-3-5. Material List for Ground Rod Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	END PANELS Thru edge cleat Filler edge cleat Plywood sheet	21-1/2 x 1 x 4 22-5/8 x 1 x 4 29-3/4 x 21 1/2 x 1/2	4 4 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	58-1/2 x 1 x 4 14-3/8 x 1 x 4 14-3/8 x 1 x 4 58-1/2 x 21-1/2 x 1/2	4 4 4 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Skid filler cleat Skid Plywood sheet	32-1/4 x 1 x 4 51-3/8 x 1 x 4 26-1/8 x 1 x 4 26-1/8 x 1 x 4 32-1/8 x 1 x 4 32-1/4 x 3 x 4 58-1/2 x 32-1/4 x 1/2	4 4 2 2 2
	HARDWARE		
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	2 1D 2 lb 1/2 lb

Table B-3-6.	Material I	List for	Electrolyte	Box
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2 (e) Place the 25, 12 AWG terminal in a MIL-B-131 cont barrier bag (12 x 8) and heat seal. Mark bag to identify contents. (f) Pack items (a) through (e) in a PPP-B-601 box (17 x 17 x 10) fabricated in accordance with appendix	Step	Function	Mech	Insp
<ul> <li>D-1. Refer to table B-3-7 for list of materials. Cushion with PPP-C-843 cushioning. Mark box to identify contents.</li> <li>(9) Wire 1900 ff (nine coils), Place wire in a PPP-B-601 box (44-3/4 x 16-1/4 x 32-1/2) fabricated in accordance with appendix D-1. Refer to table B-3-8 for list of materials. Mark box to identify contents.</li> <li>(10) Cable and Wire (500-ft coil each), Place cable and wire in a PPP-B-601 box (25-1/2 x 25-1/2 x 28) fabricated in accordance with appendix D-1. Refer to table B-3-9 for list of materials. Mark box to identify contents.</li> <li>(11) <u>Wire 400 ft (four spools)</u>, Place wire in a PPP-B-601 box (38-1/2 x 18-1/2 x 21) fabricated in accordance with appendix D-1. Refer to table B-3-9 for list of materials. Mark box to identify contents.</li> <li>(11) <u>Wire 400 ft (four spools)</u>, Place wire in a PPP-B-601 box (38-1/2 x 18-1/2 x 21) fabricated in accordance with appendix D-1. Refer to table E;-3-10 for list of materials. Mark box to identify contents.</li> <li>(12) Depreservation Guide.</li> <li>(a) Prepare two DA forms 2258.</li> <li>(b) Place one copy in a MIL-B-117 plastic bag and heat seal. Mark the bag to indicate "DEPRESERVATION GUIDE."</li> <li>(c) Secure the guide to the control panel.</li> <li>(d) Place the other copy in the logbook.</li> <li>(13) Technical Manuals and Logbooks, and one set of keys into a MIL-B-117 plastic bag and heat seal.</li> <li>(b) Mark bag to identify contents.</li> <li>(c) Place bag inside control unit as specified in figure B-3-1.</li> </ul>	2 cont	<ul> <li>(e) Place the 25, 12 AWG terminal in a MIL-B-131 barrier bag (12 x 8) and heat seal. Mark bag to identify contents.</li> <li>(f) Pack items (a) through (e) in a PPP-B-601 box (17 x 17 x 10) fabricated in accordance with appendix D-1. Refer to table B-3-7 for list of materials. Cushion with PPP-C-843 cushioning. Mark box to identify contents.</li> <li>(9) Wire 1900 ft (nine coils). Place wire in a PPP-B-601 box (44-3/4 x 16-1/4 x 32-1/2) fabricated in accordance with appendix D-1. Refer to table B-3-8 for list of materials. Mark box to identify contents.</li> <li>(10) Cable and Wire (500-ft coil each). Place cable and wire in a PPP-B-601 box (25-1/2 x 25-1/2 x 28) fabricated in accordance with appendix D-1. Refer to table B-3-9 for list of materials. Mark box to identify contents.</li> <li>(11) Wire 400 ft (four spools). Place wire in a PPP-B-601 box (38-1/2 x 18-1/2 x 21) fabricated in accordance with appendix D-1. Refer to table E-3-10 for list of materials. Mark box to identify contents.</li> <li>(12) Depreservation Guide. <ul> <li>(a) Prepare two DA forms 2258.</li> <li>(b) Place one copy in a MIL-B-117 plastic bag and heat seal. Mark the bag to indicate "DEPRESERVATION GUIDE."</li> <li>(c) Secure the guide to the control panel.</li> <li>(d) Place the other copy in the logbook.</li> </ul> </li> <li>(13) Technical Manuals and Logbooks, and one set of keys into a MIL-B-117 plastic bag and heat seal. (b) Mark bag to identify contents.</li> <li>(c) Place bag inside control unit as specified in figure B-3-1.</li> </ul>		

NSN	ITEM DESCRIPTION	SIZE	
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	END PANELS Thru edge cleat Filler edge cleat Plywood sheet	10 x 1 x 4 9-7/8 x 1 x 4 17 x 10 x 1/2	4 4 2
5510-00-220-6078 5530-00-618-6958 5530-00-618-8073	SIDES PANEL Thru edge cleat Plywood sheet Filler edge cleat	19-1/2 x 1 x 4 19-1/2 x 10 x 1/2 3 x 3-1/2 x 3/4	4 2 4
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	TOP AND BOTTOM PANEL Thru edge cleat Filler edge cleat Plywood sheet	19-1/2 x 1 x 4 12-3/8 x 1 x 4 19-1/2 x 19-1/2 x 1/2	4 4 2
5315-00-010-6503 5315-00-010-6507	HARDWARE Nails, cement coated Nails, cement coated	4d 8d	1/2 1u 1/2 lb

# Table B-3-7. Material List for Electrical Fittings Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	END PANELS Thru edge cleat Filler edge cleat Plywood sheet	27-1/2 x 1 x 4 6-5/8 x 1 x 4 13-3/4 x 27-1/2 x 1/2	4 4 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	SIDE PANELS Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	44-3/4 x 1 x 4 20-3/8 x 1 x 4 20-3/8 x 1 x 4 44-3/4 x 27-1/2 x 1/2	4 4 2 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	TOP AND BOTTOM PANEL Thru edge cleat Filler edge cleat Intermediate cleat Skid filler cleat Skid Plywood sheet	16-1/4 x 1 x 4 37-5/8 x 1 x 4 37-5/8 x 1 x 4 9-1/8 x 1 x 4 16-1/4 x 3 x 4 44-3/4 x 16-1/4 x 1/2	4 4 2 4 2 2
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	HARDWARE Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1/2 lb

Table B-3-8. Material List for Wire (1900 ft coil) Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	END PANELS Thru edge cleat Filler edge cleat Plywood sheet	23 x 1 x 4 15-7/8 x 1 x 4 23 x 23 x 1/2	4 4 2
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	SIDE PANELS Thru edge cleat Filler edge cleat Plywood sheet	25-1/2 x 1 x 4 15-7/8 x 1 x 4 25-1/2 x 23 x 1/2	4 4 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6058	TOP AND BOTTOM PANEL Thru edge cleat Filler edge cleat Skid filler cleat Skid Plywood sheet	25-1/2 x 1 x 4 18-3/8 x 1 x 4 18-3/8 x 1 x 4 25-1/2 x 3 x 4 25-1/2 x 25-1/2 x 1/2	4 4 2 2 2 2
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	HARDWARE Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1/2 lb

Table B-3-9. Material List for Cable and Wire (500 ft coil) Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	END PANELS Thru edge cleat Filler edge cleat Plywood sheet	16 x 1 x 4 8-7/8 x 1 x 4 16 x 16 x 1/2	4 4 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	SIDE PANELS Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	38-1/2 x 1 x 4 8-7/8 x 1 x 4 8-7/8 x 1 x 4 38-1/2 x 16 x 1/2	4 4 2 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6058	TOP AND BOTTOM PANEL Thru edge cleat Filler edge cleat Intermediate cleat Skid filler cleat Skid Plywood sheet	18-1/2 x 1 x 4 31-3/8 x 1 x 4 11-3/8 x 1 x 4 11-3/8 x 1 x 4 11-3/8 x 1 x 4 18-1/2 x 3 x 4 38-1/2 x 18-1/2 x 1/2	4 4 2 2 2 2 2
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	HARDWARE Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1/2 lb

# Table B-3-10. Material List for Wire (400 ft spool) Box

Step	Function	Mech	Insp
2 cont	<ul> <li>d. <u>Spreader Bars, Aspirators, and Shrouds</u>. Fabricate a MIL-C-104 crate (modified) in accordance with appendix D-3. Refer to table B-3-11 for a list of materials. Refer to figure B-3-2 for location of items. Mark to identify contents.</li> <li>(1) <u>Exhaust Aspirators and Shrouds</u>.</li> <li>(a) Disassemble shrouds. Place hardware in a PPP-B-636 fiberboard box (6 x 6 x 6). Mark box to identify contents.</li> <li>(b) Place the curved parts of the shrouds inside each other and band together with QQ-S-781 steel strapping, edge protectors, and seals.</li> <li>(c) Secure shrouds to skid with QQ-S-781 steel strapping, edge protectors, and seals.</li> <li>(d) Strap aspirators together and secure to skid with QQ-S-781 steel strapping, edge protectors, and seals.</li> <li>(a) Coat slings with MIL-C-16173, grade 1 preservative and allow to dry.</li> <li>(b) Place cover over cradle and secure.</li> <li>(c) Place cover over cradle and secure.</li> <li>(c) Place cover over cradle and secure with 12 FF-S-111 No. 8 wood screws 2 in. long.</li> <li>e. Load Tie Breaker and Cables. Fabricate a MIL-C-104 crate (95 x 110 x 125) in accordance with appendix D-3. Refer to table B-3-12 for list of materials. Refer to figure B-3-3 for location of items.</li> <li>(1) Load Tie Breaker.</li> <li>(a) Remove the three arc chutes and reinstall the phase barriers.</li> <li>(b) Rack air circuit breaker into place with MM-L-751 lumber (25-1/2 x 2 x 4) (17 x 2 x 4) (5-3/4 x 2 x 4) and block to prevent movement.</li> <li>(c) Fabricate PPP-B-601 box (23 x 21 x 33) for the arc chutes in accordance with appendix D-1. Refer to table B-3-1 for list of materials.</li> </ul>		

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	BASE		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6198 5510-00-220-6202 5510-00-220-6214 5510-00-220-6214 5510-00-220-6228	Sleeper (aspirators) Sleeper (spreader bar) Deck Deck Rub strip Rub strip Header Skid	120 x 2 x 4 36 x 2 x 4 95 x 2 x 8 95 x 2 x 12 16 x 3 x 4 66 x 3 x 4 95 x 4 x 4 188 x 4 x 6	2 4 1 15 4 8 2 4
	BLOCKING		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6214	Shift block (aspirator) Shift block (aspirator) Hold-down (shroud) Strap, cleat (aspirator) Strap, cleat (panels) Shift block Shift block Shift block	96 x 2 x 4 32 x 2 x 4 38 x 2 x 4 31-1/4 x 2 x 4 28 x 2 x 4 6-3/4 x 2 x 4 As rqr x 2 x 4 180 x 3 x 4	2 2 3 4 4 2 1
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6226 5510-00-220-6230	CRADLE AND BLOCKING FOR SPREADER BAR Frame Frame Block Hold-down Cradle	22 x 2 x 2 138-3/4 x 2 x 4 3 x 2 x 4 22 x 4 x 4 22 x 4 x 8	2 2 10 2 3
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6955 5530-00-618-6956	COVER FOR SPREADER BARS CRADLE END PANELS Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet Plywood sheet	38-1/2 x 1 x 4 15 x 1 x 4 15 x 1 x 4 38-1/2 x 22-1/8 x 5/16 138-1/2 x 22-1/8 x 3/8	4 4 2 2 2 2

Table B-3-11. Material List for Spreader Bars, Aspirators, ana Shrouds Crate

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6955 5530-00-618-6955 5530-00-618-6956 5530-00-618-6956	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet Plywood sheet Plywood sheet Plywood sheet	144 x 1 x 4 31-3/8 x 1 x 4 31-3/8 x 1 x 4 96 x 38-1/2 x 5/16 48 x 38-1/2 x 5/16 96 x 38-1/2 x 3/8 48 x 38-1/2 x 3/8	4 4 10 2 2 2 2 2
	TOP PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6955 5530-00-618-6956	Thru edge cleat Intermediate cleat Filler edge cleat Plywood sheet Plywood sheet	24-1/4 x 1 x 4 17-1/8 x 1 x 4 136-7/8 x 1 x 4 72 x 24-1/4 x 5/16 72 x 24-1/4 x 3/8	2 5 2 2 2
	COVER FOR ASPIRATORS AND SHROUDS		
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5330-00-618-6956 5330-00-618-6956	Upper and lower member Strut Horizontal brace Horizontal brace Plywood sheet Plywood sheet	62-1/4 x 1 x 4 55 x 1 x 4 9-3/8 x 1 x 4 19-1/2 x 1 x 4 69 x 48 x 3/8 69 x 15 x 3/8	4 8 2 4 2 2
	SCREEN AND BAFFLE 4 x 10 HOLE		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6956	Plywood sheet Plywood block Plywood sheet	15 x 2 x 2 4 x 2 x 2 15 x 6-1/2 x 3/8	2 4 2

Table B-3-11. Material List for Spreader Bars, Aspirators, and Shrouds Crate-Continued
NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	INNER SIDE PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6194 5510-00-220-6196 5530-00-618-6956 5530-00-618-6956	Lower member Strut Horizontal brace Horizontal brace Upper member Post Strap strut Plywood sheet Plywood sheet	186 x 1 x 4 43-1/2 x 1 x 4 15-3/4 x 1 x 4 20 x 1 x 4 19-1/2 x 1 x 4 186 x 2 x 4 53-1/2 x 2 x 4 53 x 2 x 6 67-1/2 x 48 x 3/8 67-1/2 x 21-3/8 x 3/8	1 5 2 4 2 1 2 2 3 2
	OUTER SIDE PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6194 5510-00-220-6194 5510-00-220-6196 5530-00-618-6956 5530-00-618-6956	Lower member Strut Horizontal brace Horizontal brace Upper member Post Strap strut Plywood sheet Plywood sheet	186 x 1 x 4 57 x 1 x 4 15-3/4 x 1 x 4 20 x 1 x 4 19-1/2 x 1 x 4 186 x 2 x 4 57 x 2 x 4 57 x 2 x 6 74-1/2 x 48 x 3/8 74-1/2 x 21-3/4 x 3/8	1 5 2 4 2 1 2 2 3 2
5510-00-220-6078 5510-00-220-6194 5530-00-618-6958 5530-00-618-6958	TOP PANEL Header Joist Plywood sheet Plywood sheet	187-1/2 x 1 x 4 60-3/4 x 2 x 4 63 x 48 x 1/2 63 x 22-1/8 x 1/2	2 9 3 2

Table B-3-11. Material List for Spreader Bars, Aspirators, and Shrouds Crate-Continued

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
5305-00-010-1925 5306-00-089-1424 5306-00-089-1426 5306-00-951-5699 5310-00-198-3642 5310-00-584-5272 5310-00-732-0558 5310-00-768-0318 5310-00-833-3340 5315-00-010-6503 5315-00-010-6507 5315-00-010-6511 5315-00-101-8654 5315-00-290-7139	HARDWARE Screw, wood Bolt, carriage Bolt, carriage Bolt, carriage Bolt, carriage Washer, flat Washer, lock Nut, hexagon Nut, hexagon Nut, hexagon Washer, flat Nail, cement coated Nail, cement coated	#8 x 2 in. 1/2 x 4-1/2 1/2 x 7-1/2 1/2 x 9-1/2 3/8 x 4 1/2 in. 1/2 in. 3/8 in. 1/2 in. 3/8 in. 1/2 in. 3/8 in. 4d 8d 16d 20d 1-3/4 in	12 ea 12 ea 12 ea 48 ea 8 ea 72 ea 12 ea 8 ea 72 ea 8 ea 72 ea 8 ea 72 ea 8 ea 72 ea 8 ea 72 ea 10 b 1 lb 10 lb 1 lb 2 lb
5315-00-290-7139 5335-00-598-6103 5340-00-252-3014 5650-00-514-4474 8135-00-239-5288 8135-00-281-4069 8135-00-281-4080	Nail, screw drive Screen, mesh Anchor plate Roofing, felt Seal, strapping steel Strapping, steel Strapping, steel, perforated Strapping, steel, perforated Bolt, carriage	1-3/4 in. 1/4 in. 1-1/4 in. 45 lb 3/4 in. 3/4 in. 2 in. 3/4 in. 1/2 x 26-1/2	2 lb 2 sf 26 ea 32 sf 9 ea 254 ft 44 ft 28 ft 4 ea

Table B-3-11. Material List for Spreader Bars, Aspirators, ana Shrouds Crate-Continued



Figure B-3-2. Location of Items for Aspirators and Spreader Bar Crate.

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	BASE		
5510-00-220-6194 5510-00-220-6200 5510-00-220-6202 5510-00-220-6214 5510-00-220-6214 5510-00-220-6226 5510-00-220-6226	Sleeper Deck Deck Rub strip Rub strip Skid Header	108 x 2 x 4 95 x 2 x 10 95 x 2 x 12 38-3/8 x 3 x 4 16 x 3 x 4 132-3/4 x 4 x 4 95 x 4 x 4	2 1 10 10 5 5 2
	BLOCKING		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6226 5510-00-220-6226	Shift block Shift block Shift block Shift block	44-1/2 x 2 x 4 32-1/2 x 2 x 4 124-3/4 x 4 x 4 26-1/2 x 4 x 4	1 1 2 2
	SIDE PANELS		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5530-00-618-6956 5530-00-618-6956 5530-00-618-6956 5530-00-618-6956	Upper and lower member Strut Horizontal brace Horizontal brace Plywood sheet Plywood sheet Plywood sheet Plywood sheet	129-1/4 x 2 x 4 100 x 2 x 4 18-7/8 x 2 x 4 14-5/8 x 2 x 4 75-3/4 x 48 x 3/8 41-3/4 x 48 x 3/8 75-3/4 x 36-1/4 x 3/8 41-3/4 x 36-1/4 x 3/8	4 14 16 8 4 4 2 2
	BAFFLE 3 x 11 HOLE		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6955 5530-00-618-6956	Frame Frame Plywood sheet Plywood sheet	16 x 1-1/2 x 1-1/2 3 x 1-1/2 x 1-1/2 16 x 5-1/2 x 5/16 16 x 5-1/2 x 3/8	2 4 2 2
	END PANELS		
5510-00-220-6194 5510-00-220-6194 5510-00-220-6194 5530-00-618-6956 5530-00-618-6956	Upper and lower member Strut Horizontal brace Plywood sheet Plywood sheet	95-1/4 x 2 x 4 98 x 2 x 4 19-7/16 x 2 x 4 72-1/4 x 48 x 3/8 41-3/4 x 48 x 3/8	4 10 16 4 4

Table B-3-12. Material List for Load Tie Breaker and Cable Skid

<b>T</b> / / <b>D</b> 0 / 0	
Table B-3-12.	Material List for Tie Breaker and Cable SkidContinued

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	BAFFLE 3 x 11 HOLE		
5510-00-220-6194 5510-00-220-6194 5530-00-618-6955 5530-00-618-6956	Frame Frame Plywood sheet Plywood sheet	16 x 1-1/2 x 1-1/2 3 x 1-1/2 x 1-1/2 16 x 5-1/2 x 5/16 16 x 5-1/2 x 3/8	2 4 2 2
	TOP PANEL		
5310-00-220-6080 5510-00-220-6196 5530-00-618-6958 5530-00-618-6958	Header Joist Plywood sheet Plywood sheet	132-1/4 x 1 x 6 93-3/4 x 2 x 6 96 x 48 x 1/2 96 x 37 x 1/2	2 7 2 1
	HARDWARE		
5306-00-089-1426 5306-00-089-1427 5306-00-089-1531 5306-00-412-9789 5306-00-852-7068 5306-00-951-5699 5310-00-788-3642 5310-00-732-0558 5310-00-768-0318 5310-00-768-0318 5315-00-010-6506 5315-00-010-6507 5315-00-010-6512 5315-00-010-6512 5315-00-108-5625 5315-00-161-8654 5315-00-198-5625 5315-00-598-6103 5340-00-252-3014 5530-00-618-6958 5650-00-514-4474 8135-00-283-0671	Bolt, carriage Bolt, carriage Bolt, carriage Bolt, lag Bolt, carriage Bolt, carriage Washer, flat Washer, lock Nut, hexagon Nut, hexagon Washer, flat Nail, cement coated Nail, cement coated Nail, cement coated Nail, cement coated Nail, cement coated Nail, cement coated Nail, cooting Screw, drive Sceen, mesh Anchor plate Plywood Roofing felt Seal, strapping steel Strapping, steel Strapping, steel	1/2 x 7-1/2 1/2 x 9 1/2 x 6-1/2 1/2 x 4 1/2 x 7 3/8 x 4 1/2 in. 1/2 in. 3/8 in. 1/2 in. 3/8 in. 1/2 in. 3/8 in. 7d 8d 16d 20d 3/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 96 x 48 x 3/8 96 x 48 x 1/2 45 lb 1-1/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in. 1-1/4 in.	10 ea 4 ea 4 ea 36 ea 8 ea 10 ea 62 ea 4 ea 10 ea 26 ea 10 ea 15 lb 4 lb 12 lb 2 lb 1 lb 2 lb 1 lb 2 lb 1 lb 1 sf 24 ea 15 sh 3 sh 36 sf 18 ea 200 ft 40 ft 45 ft
5315-00-130-3023 5315-00-889-2741 5335-00-598-6103 5340-00-252-3014 5530-00-618-6956 5530-00-618-6958 5650-00-514-4474 8135-00-239-5294 8135-00-283-0671 8135-00-283-0672	Screw, drive Sceen, mesh Anchor plate Plywood Roofing felt Seal, strapping steel Strapping, steel Strapping, steel Strapping steel, perforated	1-1/4 in. 1/4 in. 1-1/4 in. 96 x 48 x 3/8 96 x 48 x 1/2 45 lb 1-1/4 in. 1-1/4 in. 2 in. 1-1/4 in.	2 ib 1 lb 1 sf 24 e 15 s 3 sh 36 s 18 e 200 40 ft 45 ft



#### NOTE: BAND BOXES TOGETHER.

Figure B-3-3. Location of Items for Load Tie Breaker and Cables Crate.

Step	Function	Mech	Insp
2 cont	(d) Wrap the arc chutes with PPP-C-843 cushioning.		
com	(e) Place arc chutes into the box		
	(f) Isolate the arc chutes from the sides of the box		
	and each other by using MM-L-751 lumber (21 x 2 x		
	4) and seal the box.		
	(g) Mark box to indicate contents.		
	(h) Secure the relay covers with QQ-W-461 wire.		
	(i) Coat electrical contacts and terminals with		
	MIL-C-83360 coating compound.		
	() Secure circuit breaker control door with QQ-W-461 wire.		
	(x) install protective blocking MM-2-751 fulliber (25-1/2 x 2 x 4) (17 x 2 x 4) (5-3/4 x 2 x 4)		
	inside the switch gear cubicle between the relay		
	panel and exterior access door.		
	(I) Remove plastic vents from doors. Put screws back		
	into holes.		
	(m) Wrap vents in PPP-C-843 cushioning and place into		
	a PPP-B-636 fiberboard box (12 x 8 x 6). Seal box		
	IID WITH PPP-1-76 tape.		
	(II) Secure box inside cabinet with MiL-1-22085 tape.		
	as a substitute		
	(o) Secure the door handles with a positive locking device.		
	(p) Seal openings with MIL-T-22085 tape. PPP-T-60		
	tape may be used as a substitute.		
	(2) <u>Cable Reels.</u> Place each cable reel900-ft control		
	cable, 900-ft power cable, and 300-ft ground cable		
	into a PPP-B-601 box fabricated in accordance with		
	appendix D-1. Refer to tables B-3-13, B-3-14, and		
	B-3-15 IOF A LIST OF MATERIALS. MARK DOX TO		
	f Marking		
	(1) Mark boxes and units in accordance with appendix F		
	(2) Mark four sides of the containers with 2-inch		
	minimum size letters to indicate "REUSABLE CONTAINER		
	- DO NOT DESTROY."	I	I

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	27-1/2 x 1 x 4 34-7/8 x 1 x 4 20-3/8 x 1 x 4 42 x 27-1/2 x 1/2	4 4 2 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	44-1/2 x 1 x 4 20-3/8 x 1 x 4 20-3/8 x 1 x 4 44-1/2 x 27-1/2 x 1/2	4 4 2 2
	TOP AND BOTTOM PANEL		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	Thru edge cleat Filler edge cleat Skid filler cleats Intermediate cleat Skid Plywood sheet	44-1/2 x 1 x 4 37-3/8 x 1 x 4 37-3/8 x 1 x 4 37-3/8 x 1 x 4 44-1/2 x 3 x 4 44-1/2 x 44-1/2 x 1/2	4 4 3 2 3 2
	BLOCKING		
5530-00-618-8073	Plywood corner shift block	11-7/8 x 11-7/8 x ¾	8
	HARDWARE		
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1 lb

Table D 2 12	Matariallistfor	Control Cobla	1000 ft maal	
Table B-3-13.	Material List Ior	Control Cable	(900 it reei	) вох

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	32 x 1 x 4 37-7/8 x 1 x 4 24-7/8 x 1 x 4 45 x 32 x 1/2	4 4 2 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	SIDE PANELS Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	47-1/2 x 1 x 4 24-7/8 x 1 x 4 24-7/8 x 1 x 4 47-1/2 x 32 x 1/2	4 4 2 2
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214 5530-00-618-6958	TOP AND BOTTOM PANEL Thru edge cleat Filler edge cleat Skid filler cleat Intermediate cleat Skid Plywood sheet	47-1/2 x 1 x 4 40-3/8 x 1 x 4 40-3/8 x 1 x 4 40-3/8 x 1 x 4 40-3/8 x 1 x 4 47-1/2 x 3 x 4 47-1/2 x 47-1/2 x 1/2	4 4 3 2 3 2
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	HARDWARE Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	l lb 1 lb 1 lb

Table B-3-14. Material List for Power Cable (900 ft reel) Box

# Table B-3-15. Material List for Ground Cable (300 ft reel) Box

NSN	ITEM DESCRIPTION	SIZE	UNIT OF USE QUANTITY
	END PANELS		
5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Plywood sheet	18-1/2 x 1 x 4 22-7/8 x 1 x 4 30 x 18-1/2 x 1/2	4 4 2
	SIDE PANELS		
5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5530-00-618-6958	Thru edge cleat Filler edge cleat Intermediate cleat Plywood sheet	32-1/2 x 1 x 4 11-3/8 x 1 x 4 11-3/8 x 1 x 4 32-1/2 x 18-1/2	4 4 2 2
	TOP AND BOTTOM PANEL		
5530-00-618-6958 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6078 5510-00-220-6214	Plywood sheet Thru edge cleat Filler edge cleat Skid filler cleat Intermediate cleat Skid	32 x 32-1/2 x 1/2 32 x 1 x 4 25-3/8 x 1 x 4 25-3/8 x 1 x 4 25-3/8 x 1 x 4 32-1/2 x 3 x 4	2 4 4 2 2 2
	BLOCKING		
5530-00-618-6958	Plywood corner shift block	8 x 8 x ¾	8
	HARDWARE		
5315-00-010-6503 5315-00-010-6507 5315-00-010-6511	Nails, cement coated Nails, cement coated Nails, cement coated	4d 8d 16d	1 lb 1 lb 1 lb

Step	Function	Mech	Insp
2 cont	<ul> <li>g. Exterior Doors.</li> <li>(1) Coat the rubber door seals with MIL-S-8660 silicone.</li> <li>(2) Securely lock all outside access doors and tape door seals with MIL-T-22085 tape. PPP-T-60, type 4 4-inch wide tape, may be used as a substitute.</li> <li>(3) One set of keys will be retained and forwarded under separate cover when power plant is issued.</li> </ul>		

# Table B-3-16. Packaging Materials List

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
5305-00-010-1925	Screw, Wood, FF-S-111, #8 x 2 in.	12 ea
5306-00-089-1424	Bolt, Carriage, FF-B-584, 1/2 x 4-1/2	12 ea
5306-00-089-1426	Bolt, Carriage, FF-B-584, 1/2 x 7-1/2	58 ea
5306-00-089-1427	Bolt, Carriage, FF-B-584, 1/2 x 9	4 ea
5306-00-089-1531	Bolt, Carriage, FF-B-584, 1/2 x 6-1/2	4 ea
5306-00-232-4281	Bolt, Carriage, FF-B-584, 3/8 x 3	74 ea
5306-00-260-7557	Bolt, Carriage, FF-B-584, 1/2 x 9-1/2	16 ea
5306-00-412-9789	Bolt, Lag, FF-B-561, 1/2 x 4	96 ea
5306-00-852-7068	Bolt, Carriage, FF-B-584, 1/2 x 7	8 ea
5306-00-951-5699	Bolt, Carriage, FF-B-584, 3/8 x 4	18 ea
5310-00-198-3642	Washer, Flat, FF-W-92, 1/2 in.	194 ea
5310-00-584-5272	Washer, Lock, FF-W-92, 1/2 in.	16 ea
5310-00-720-5228	Nut, Hexagon, FF-N-836, 3/8 in.	74 ea
5310-00-732-0558	Nut, Hexagon, FF-N-836, 3/8 in.	18 ea
5310-00-768-0318	Nut, Hexagon, FF-N-836, 1/2 in.	98 ea
5310-00-833-3340	Washer, Flat, FF-W-92, 3/8 in.	92 ea
5315-00-010-6503	Nail, Cement Coated, FF-N-105, 4d	23 lb
5315-00-010-6506	Nail, Cement Coated, FF-N-105, 7d	21 lb
5315-00-010-6507	Nail, Cement Coated, FF-N-105, 8d	22 lb
5315-00-010-6511	Nail, Cement Coated, FF-N-105, 16d	35 lb
5315-00-010-6512	Nail, Cement Coated, FF-N-105, 20d	2 lb
5315-00-161-8654	Nail, Clout, FF-N-105, 3/4 in.	3 lb
5315-00-198-5625	Nail, Roofing, FF-N-105, 1-1/4 in.	6 lb
5315-00-290-7139	Nail, Drive Screw, FF-N-105, 1-3/4 in.	4 lb

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
5315-00-889-2741	Nail, Drive Screw, FF-N-105, 1-1/4 in.	3 lb
5335-00-598-6103	Sceen, Mesh, RR-W-365, 1/4 in.	1 sf
5340-00-252-3014	Anchor Plate, 1-1/4 in.	58 ea
5510-00-220-6078	Lumber, MM-L-751, 1 x 4	1291 lf
5510-00-220-6080	Lumber, MM-L-751, 1 x 6	24 lf
5510-00-220-6194	Lumber, MM-L-751, 2 x 4	770 lf
5510-00-220-6196	Lumber, MM-L-751, 2 x 6	96 lf
5510-00-220-6198	Lumber, MM-L-751, 2 x 8	8 lf
5510-00-220-6200	Lumber, MM-L-751, 2 x 10	8 lf
5510-00-220-6202	Lumber, MM-L-751, 2 x 12	200 lf
5510-00-220-6214	Lumber, MM-L-751, 3 x 4	185 lf
5510-00-220-6226	Lumber, MM-L-751, 4 x 4	120 lf
5510-00-220-6228	Lumber, MM-L-751, 4 x 6	64 lf
5510-00-220-6230	Lumber, MM-L-751, 4 x 8	6 lf
5530-00-618-6955 5530-00-618-6956 5530-00-618-6956	Plywood, NN-P-530, 96 x 48 x 5/16 Plywood, NN-P-530, 96 x 48 x 3/8 Plywood, NN-P-530, 96 x 48 x 3/8	19 sh 19 sh 26 sh
5530-00-618-6958	Plywood, NN-P-530, 96 x 48 x 1/2	46 sh
5530-00-618-6959	Plywood, NN-P-530, 3/8 in.	11 lf
5530-00-618-8073	Plywood, NN-P-530, 96 x 48 x 3/4	1 sh
5640-00-801-4176	Insulation, Thermal, HH-I-585, Type II, Class 1	6 bg
5650-00-514-4474	Roofing, Felt, SS-R-501, 45 lb	100 ft
6850-00-003-5295	Cleaning Compound, MIL-C-83360, Type I, 6 oz	2 cn
6850-00-181-7940	Antifreeze, MIL-A-46153	960 gl
6850-00-295-7685	Compound, Silicone, MIL-S-8660, 6 oz	5 cn

Table B-3-16. Packaging Materials List--Continued

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
7510-00-161-0811	Ink, Stencil, TT-I-1795	1 cn
7510-00-266-6715	Tape, PPP-T-60, 2 in.	2 ro
7510-00-297-6655	Tape, PPP-T-76, 2 in.	3 ro
7510-00-916-9659 7510-00-890-9875 8010-00-292-1127	Tape, MIL-T-22085, Type II, 4 in. Tape, PPP-T-60, Type IV, 4 in. Primer, TT-P-664	6 ro 6 ro 2 pt
8030-00-231-2345	Corrosion Preventive Compound, MIL-C-16173, Grade 1	2 gl
8030-00-526-1605	Corrosion Preventive Compound, MIL-C-16173, Grade 4	1 gl
8105-00-269-4662	Bag, Plastic, MIL-B-117, Type 1, 20 x 25	4 ea
8105-00-902-6508	Bag, Plastic, MIL-B-117, Type 1, 18 x 12	25 ea
8135-00-226-3124	Barrier, MIL-B-121, Type II, Grade A, Class 2	1 ro
8135-00-239-5288	Seal, Strapping, Steel, QQ-S-781, 3/4 in.	17 ea
8135-00-239-5293	Seal, Strapping, Steel, QQ-S-781, 3/4 in.	20 ea
8135-00-239-5294	Seal, Strapping, Steel, QQ-S-781, 1-1/4 in.	18 ea
8135-00-281-4069	Strapping, Steel, QQ-S-781, 3/4 in.	308 ft
8135-00-281-4080	Strapping, Steel Perforated, QQ-S-781, 2 in.	88 ft
8135-00-281-4113	Fiberboard, PPP-F-320, Type CF, Class Weather resistant	4 sh
8135-00-282-0565	Barrier, MIL-B-131, Class I, 36 in. x 200 yd 36 in. x 200 yd	4 ro
8135-00-283-0669	Strapping, Steel, QQ-S-781, 3/4 in.	100 ft
8135-00-283-0671	Strapping, Steel, QQ-S-781, 1-1/4 in.	200 ft
8135-00-283-0672	Strapping, Steel, QQ-S-781, 2 in.	40 ft
8135-00-291-0962	Edge, Protector, Strapping	24 ea
8135-00-292-2345	Tag, UU-T-81, Type II, Grade A	25 ea

Table B-3-16. Packaging Materials List--Continued

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
8135-00-855-6969	Cushioning, PPP-C-843	2 ro
9150-00-111-0208	Oil, Preservative Lubricating, MIL-L-21260, Type I, Grade 10	10 gl
9150-00-111-0209	Oil, Preservative Lubricating, MIL-L-21260, Type I, Grade 30	30 gl
9150-00-190-0905	Grease, Automotive and Artillery, MIL-G-10924	1 lb
9150-00-281-2007	Oil, Preservative, Lubricating, VV-L-800	60 gl
9150-00-405-2987	Oil, Lubricating, MIL-L-2104, Grade 40	1120 gl
9310-00-160-7858	Stencilboard, Type II, Grade I, UU-S-625	2 sh
9505-00-222-3829	Wire, Steel, QQ-W-461, FS 1020, 0.135 diam	2 lb
	Fuel, Diesel, VV-F-800	150 gl
	Bolt, Carriage, FF-B-584, 1/2 x 26-1/2	4 ea
	Strapping, Steel, Perforated, QQ-S-781, 1-1/4 in.	45 ft
	Strapping, Steel, Perforated, QQ-S-781, 3/4 in.	56 ft

Table B-3-16. Packaging Materials List--Continued

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
6115-00-250-4402	Power plant, electric, diesel engine driven, skid mounted, 4500 KW, 3 phase, 4 wire, 50 hertz, 4160 volt, 0.8 power factor. General Motors Electromotive Division Model MP 36A-60 consisting of:	1 ea
6115-00-250-4403	Power plant, electric, diesel engine driven, skid mounted, 3750 KW, 3 phase, 4 wire, 50 hertz, 4160 volt, 0.8 power factor. General Motor Electromotive Division Model MU 45TBL.	1 ea
4210-00-595-1779	Fire extinguisher, C02, 15 lb	4 ea
5305-00-082-6766	Cap screw, 3/4 in10 thread, 2-3/4 in. long. (Aspirator to engine)	65 ea
5305-00-637-4616	Bolts, 1/2 x 1-1/2 (steps)	40 ea
5310-00-515-9957	Washer, lock, 1/2 in. (shroud)	114 ea
5310-00-579-2072	Washer, flat, 3/4 in. (aspirator)	66 ea
5975-00-296-0621	Ground rods, 10 ft long x 3/4 in. diam, pointed on one end, copper end, with/ground clamps (see NOTE)	16 ea
5975-00-956-1365	Nut, lock, 4 in. (conduit)	24 ea
6110-00-452-9148	Control unit	1 ea
5115-00-158-5397	Diesel generator, with auxiliaries	1 ea
6115-00-452-9112	Diesel, generator	2 ea
6140-00-135-0261	Battery, storage, dry-charged with cables and terminals	14 ea
6145-00-138-4641	Control cable, 14 AWG, 100 ft with terminations	1 ea
6810-00-696-0487	Electrolyte, 1.26 s.g.	70 gl
Located in control van:	Key, for voltmeter Key, for amp meter Racking lever for circuit breaker Dolly wheel for circuit breaker Control cable 24 conductor, 14 AWG 100 ft long	1 ea 1 ea 1 ea 1 ea 9 ea

Table B-3-17. Inventory for 3750 KW or 4500 KW Electric Power Plant

NOTE: If 6 ft steel ground rods are used, use double the amount of rods and clamps.

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
	Control cable, three conductor, #12 AWG, 100 ft (EMD P/N 8252769) (cir pump)	3 ea
	Control cable, two conductor, #12 AWG 100 ft (EMD P/N 8005429) (fuel transfer pump)	1 ea
	Control cable, one conductor, #2/0 AWG, 100 ft (EMD P/N 8187786)	6 ea
	Control cable, one conductor, 36,400 CM, 100 ft (EMD P/N 8433437)	23 ea
	Ground cable, one conductor, 500 MCM, 275 ft	1 ea
	Power cable, one conductor, 600 MCM, 5KV insulation, direct burial, 100 ft	9 ea
	Switch gear, metal clad, 5KV, outdoor	1 ea
	Breaker, circuit, 250 MVA (part of switch gear) Siemens-Allis Co. (EMD P/N 8332804)	1 ea
	Aspirator assembly, exhaust (EMD PIN 8282499)	3 ea
	Shroud assembly, exhaust (EMD P/N 8282305)	3 ea
	Cap screw, 1/2 in 13 thread, 7/8 in. long (shroud) (EMD P/N 179880)	114 ea
	Terminal, bolt on for #2/0 AWG cable	12 ea
	Terminal, female, quick disconnect, ETC 16-14 wire size	500 ea
	Terminal, for #12 AWG control cables	25 ea
	Steps for diesel engine	10 ea
	Ladders for diesel engine	3 ea
	Bolts, 1/2 x 1-7/8	12 ea

NSN	ITEM DESCRIPTION	UNIT OF USE QUANTITY
	Aerial bushing nuts for control van power cable connections to tie breaker 1-3/4 - 12, 3 - 3-1/8 OD, 1/2 to 5/8 thick	3 ea
	Adapter plates for control van power connections to tie breaker, 4 x 7 bus bar flat stock, drilled for 1-3/4 hole	6 ea
	Spreader bar, EMD P/N 8380334 with eye and four ea shackles and four ea cables	2 ea
	Washers, flat, 1/2 in.	52 ea
	Washers, lock, 1/2 in.	52 ea
	Wire markers, 1-45 NEMA color code	2 ea 2 ea
	Logbooks	1 se
	TM 5-6115-456-15 TM 5-6115-456-20P TM 5-6115-456-34P LO 5-6115-456-12 Hose, fuel supply, metal, universal, 1 in. ID, 24 in. long UC3CSSMUF (1 in.) Hose, fuel return, metal, universal, 2 in. ID, 24 in. long UC3CSSMUF (2 in.)	1 ea 1 ea 1 ea 1 ea 4 ea 1 ea
	Connector, split bolt for 500 MCM ground wire	16 ea
	Lugs, with blank tongue for wire size 500 MCM to 750 MCM with head screws	30 ea
	Conduit, 4 x 24, with chase nipple	24 ea

Table B-3-17. Inventory for 3750 KW or 4500 KW Electric Power Plant--Continued

Step	Function	Mech	Insp
	DEPRESERVATION		
1	Follow instructions given on DA Form 2258.		
2	Follow instructions on tags attached to the engine control		
	panel.		
3	Unpack, inspect, and assemble all components.		
4	Fill dry-charged battery as follows:		
	The battery you have received with the set is charged and		
	dry. If the battery has been stored in a cool, dry		
	place, you can expect it to deliver approximately 75 per-		
	Perform the following steps to fill a new battery		
	WARNING		
	If battery electrolyte is spilled on skin or clothing immediately wa	sh with	
	cold water or a sodium bicarbonate solution to prevent severe sk	in burns	
	or damage to clothing.		
	<u>CAUTION</u>		
	Avoid spilling battery electrolyte on painted surfaces. Damage to	painted	
	surfaces may result.		
	<u>a.</u> Remove the battery cell vent caps.		
	<u>b.</u> Remove and destroy the vent plugs which seal tile holes		
	VARINING	, viouch (	
	Add only distilled water to a battery in service: add electrolyte only	to a dry	
	battery.		

Step	Function	Mech	Insp
4	<ul> <li><u>c.</u> Fill each cell of a dry battery with electrolyte to the cont level indicated on the vent plug or cell cover.</li> <li>(1) In temperate climates, use electrolyte of 1.280 specific gravity at 80°F (27°C).</li> <li>(2) The battery and electrolyte must be 60°F (16°C) or higher and preferably below 100°F (380C) for proper charging.</li> <li><u>d.</u> Let the battery stand for 30 minutes and then check the specific gravity of each cell with a hydrometer. Correct the reading to 80°F (27°C) by adding 0.004 for each 10°F below 80°F.</li> <li><u>e.</u> You should charge the battery if the specific gravity of any cell measures below 1.270 after correcting to 80°F (27°C). NOTE If any of the cells cannot be charged to a specific gravity of at leas the battery is not acceptable for this application.</li> <li><u>f.</u> Replace the vent caps when you have completed the above. Flush fuel lines with VV-F-800 diesel fuel prior to starting engine.</li> <li>KEEP ALL SHIPPING CONTAINERS FOR FUTURE USE.</li> </ul>	ıt 1.270,	

Step	Function	Mech	Insp
	FIELD PACKAGING NOTE Refer to TM 5-6115-456-15 for identification of items mentioned procedures. Cleaning, drying, application of preservatives, and s barriers should progress in an uninterrupted series of operations.	in these ealing on	
1	<ul> <li>UNIT RESPONSIBILITY</li> <li><u>a.</u> Certify that equipment is free of ammunition and explosives.</li> <li><u>b.</u> Assure to the maximum extent possible that items are in operating condition. Tag each item to indicate the degree of serviceability.</li> <li><u>c.</u> Pack all items of equipment in the original containers. If the containers are not available, fabricate them in accordance with the instructions provided for Depot Packaging. Refer to procedures in Depot Packaging for packaging for packaging.</li> </ul>		
2	CLEANING AND DRYING NOTE Cleaning, drving, application of preservatives, and sealing of	barriers	
3	<ul> <li>should progress in an uninterrupted series of operations.</li> <li>Thoroughly clean and dry prior to applying preservatives.</li> <li>PRESERVATION <ul> <li><u>a. Power Unit.</u></li> </ul> </li> <li>(1) <u>Diesel Engine.</u> <ul> <li>(a) <u>Coolant System.</u></li> <li><u>1</u> Fill the coolant system to the proper level with equal parts (by volume) of antifreeze (6850-00-181-7940) and clean water.</li> </ul> </li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>2 Prepare a tag (8135-00-292-2345) to indicate "COOLANT SYSTEM CONTAINS WATER AND ANTI- FREEZE IN EQUAL PARTS BY VOLUME - DO NOT DRAIN - CHECK COOLANT LEVEL - IF COOLANT IS LOW, ADD COOLANT OF THE SAME MIXTURE." 3 Attach the tag to the radiator sight glass.</li> <li>(b) Fuel System. NOTE</li> <li>At least one of the three power units will contain a fuel transfer pum 1 Remove fuel filters from fuel transfer pump and seal chambers.</li> <li>2 Connect auxiliary 110 volts AC supply to pump.</li> <li>3 Switch on pump and pump preservative oil (9150-00- 281-2007) until the fuel tank begins to fill with preservative oil. Then switch off pump.</li> <li>4 Disconnect 110 volts AC supply.</li> <li>5 Drain excess preservative oil from pump system and fuel tank.</li> <li>6 Open fuel filter chambers and atomize spray with preservative oil (9150-00-111-0209).</li> <li>7 Install fuel filters and seal chambers.</li> <li>8 Remove fuel gage float assembly. Preserve assem- bly as follows:     <ul> <li>(a) Wrap fuel gage assembly in barrier (8135-00- 226-3124) and cushioning (8135-00-855-6969).</li> <li>Place fuel gage assembly into a fiberboard box (18 × 6 × 4). Seal box with tape</li> <li>(7510-00-297-6655). Mark box to identify contents.</li> <li>(b) Secure box to fuel tank with tape (7510-00- 916-9659). PP-T-60, type 4, 4-inch wide tape, may be used as a substitute.</li> </ul> </li> </ul>	p.	

Step	Function	Mech	Insp
3 cont	CAUTION Prelube unit before starting if unit has not been run during the last 2	4 hours.	
	<ul> <li>Prelidbe drift before starting it drift has not been full during the last 2</li> <li><u>9</u> Ensure that there is only sufficient fuel (approx 30 gl) in the fuel tank to warm the engine.</li> <li><u>10</u> Start the engine on fuel and operate at fast idle until thoroughly warm, then accelerate to three-fourths speed. When the sight glass snows foam, add preservative oil (9150-00-281-2007) to the fuel tank.</li> <li><u>11</u> Operate the engine until undiluted preservative oil is observed flowing through the fuel return sight glass.</li> <li><u>12</u> Open drain valve and drain the preservative oil from the fuel tank.</li> <li><u>13</u> Close drain valve.</li> <li><u>14</u> Atomize spray the interior of the fuel tank with preservative oil (9150-00-111-0209) and seal opening with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(c) Crankcase and Oil System.</li> <li>NOTE</li> </ul> Allow sufficient time for engine to cool before processing oil system <u>1</u> Completely drain the crankcase, oil filters, and lube oil strainer.	. Hours.	
	<ul> <li><u>2</u> Remove oil filter elements.</li> <li><u>3</u> Connect a portable pump to the output of the scavenging oil pump.</li> <li><u>4</u> Pump preservative oil (9150-00-111-0209) until preservative oil is observed in the lube strainer.</li> <li><u>5</u> Disconnect pump from the scavenging pump.</li> <li><u>6</u> Connect portable pump to the lube pump output.</li> </ul>		

Step	Function	Mech	Insp
Step 3 cont	7       Pump preservative oil (9150-00-111-0209)         through the lubrication system until preservative       oil is seen coming from the camshaft bearings 1         and 9 (located on top of the engine toward the radiator end).       8         8       Turn the engine over at least two full revolutions while pumping preservative oil through the oil system.         9       Disconnect the portable pump.         10       Connect a portable pump to the piston cooling pump output.         11       Pump preservative oil (9150-00-111-0909) through the system.         12       Open access covers to the crankcase to observe when the preservative oil starts coming from the piston cooling tubes.         13       Turn the engine over two full revolutions while pumping preservative oil.         14       Disconnect the portable pump.         15       Atomize spray the underside of the pistons and rods.         16       Close and secure the access covers.         17       Allow time for the engine to drain (approx 20 min). Completely drain the crankcase oil filters and lube oil strainer of any oil.         18       Install oil filter elements.         19       Prepare tag (8135-00-292-2345) indicating "OIL HAS BEEN DRAINED FROM THE CRANKCASE. DO NOT START UNTIL OIL HAS BEEN ADDED." Attach tag to engine control panel.         (d)       Cylinders and Air Boxes.       1         1       Peropy the air box covers and open all cylin	Mech	Insp
	test valves. <u>2</u> Manually crank the engine until the piston in each cylinder is below the cylinder liner air intake ports		

Step	Function	Mech	Insp
3 cont	<ul> <li>3 Atomize spray 4 ounces of preservative oil (9150-00-111-0209) into the open port. Do not exceed 25 psi.</li> <li>4 Repeat the preservative cycle until all cylinders have been atomize sprayed with preservative oil.</li> <li>5 Atomize spray the interior of each air box with preservative oil (9150-00-111-0209).</li> <li>6 Replace air box covers and close cylinder test valves. Check seals in covers for proper position.</li> <li>(e) <u>Top Deck</u>. Atomize spray all parts under the engine top deck covers with preservative oil (9150-00-111-0209).</li> <li>(f) <u>Radiator Fan Belts</u>.</li> <li>1 Remove the fan belts.</li> <li>2 Coat unpainted surfaces of pulley grooves with primer (8010-00-292-1127).</li> <li>3 Install fan belts but do not tighten.</li> <li>4 Prepare tag (8135-00-292-2345) to indicate "RADIATOR FAN BELT TENSION RELIEVED - ADJUST PRIOR TO STARTING ENGINE."</li> <li>5 Attach the tag to the engine control panel.</li> <li>(g) Generator.</li> <li>1 Coat flywheel gear and pinion gear of starter with grease (9150-00-190-0905).</li> <li>2 Remove ventilation grills.</li> <li>3 Raise the brushes and place a strip of barrier (8135-00-226-3124) between them and the slip rings.</li> <li>4 Seal the ventilation grills with barrier (8135-00- 282-0565) and tape (7510-00-916-9659). Tape 7510- 00-880-9875 may be used as a substitute.</li> <li>5 Prepare tag (8135-00-292-2345) to indicate "BAR- RIER HAS BEEN PLACED INSIDE THE GENERATOR BETWEEN THE BRUSHES AND THE SLIP RINGS. GENERATOR VENTILATION GRILLS HAVE BEEN SEALED. REMOVE BEFORE OPERATION."</li> </ul>		

Step	Function	Mech	Insp
Step 3 cont	<ul> <li>Function</li> <li>(h) Engine Air Filters.</li> <li>1 Drain oil.</li> <li>2 Remove filter elements and atomize spray interior of air filter with preservative oil (9150-00-111-0209).</li> <li>3 Install filter elements and seal intake opening with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>4 Attach a tag (8135-00-292-2345) to the engine control panel indicating "ENGINE AIR FILTERS DRAINED".</li> <li>(1) Outside Air Intake Filters (sides).</li> <li>1 Open filter retainers.</li> <li>2 Remove fiberglass filter element.</li> <li>3 Remove wire grate.</li> <li>4 Cover a 5/16-inch plywood panel (5530-00-618-6955) (78 x 16-1/2) with barrier (8135-00-282-0565) and place over filter openings. Plywood, 3/8-inch (5530-00-618-6956) may be used as a substitute.</li> <li>5 Seal edges with tape (7510-00-916-9659). Tape 7510-00-890-9875 maybe used as a substitute.</li> <li>6 Install filter elements and secure filter retainer.</li> <li>(1) Outside Air Intake Filter (door).</li> <li>1 Open filter retainer.</li> <li>2 Remove fiberglass filter element, roll it up, and place in a bag fabricated from barrier (8135-00-282-8885) (24 x 12). Heat seal or staple bag. Mark the bag "AIR FILTER."</li> <li>3 Close filter retainer. Cover the filter opening with barrier (8135-00-282-0565) and 5/16-inch plywood panel (5530-00-618-6956)(78 x 18). Plywood, 3/8-inch (5530-00-618-6956)(78 x 18). Plywood, 3/8-inch (5530-00-618-6956) may be used as a substitute.</li> </ul>	Mech	Insp

Step	Function	Mech	Insp
3 Cont	<ul> <li>(k) Power Unit Openings.</li> <li>1 Cover front of fan shroud with barrier (8135-00-282-0565) and a 1/2-inch plywood (5530-00-618-6958) (108 x 113) panel. Secure with 30 "J" bolts fabricated from bolts (5306-00-232-4281),flat washers (5310-00-833-8340), and nuts (5310-00-720-8528 2 Fill in space between shroud and unit with strips of cushioning (8135-00-892-3917) wrapped with barrier (8135-00-224-8885).</li> <li>3 Seal cushioning with tape (7510-00-916-9659). PPP-T-60, type 4, 4-inch wide tape (7510-00-890-9875) may be used as a substitute.</li> <li>4 Seal holes except the two bottom drain holes with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>5 Seal openings in bottom of unit with tape (7510-00-916-9659). Tape 7510-00-916-9659). Tape 7510-00-916-9659). Tape 7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>6 Seal fuel tank vent with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>7 Cover both radiator openings with barrier (8135-00-282-0565) and 1/2-inch plywood (5530-00-618-6958) (157-1/2 x 59) (2 ea).</li> <li>8 Secure plywood with 40 "J" bolts fabricated from bolts (5306-00-282-4281), flat washers (5310-00-833-3340), and nuts (5310-00-720-8528).</li> <li>9 Seal edges of plywood with tape (7510-00-916-9659). Tape 7510-00-880-9875 may be used as a substitute.</li> <li>10 Seal exhaust stack on engine with tape (7510-00-916-9659). Tape 7510-00-880-9875 may be used as a substitute.</li> <li>11 Cover exhaust opening with barrier (8135-00-282-0565) and plywood (5530-00-618-6958) 32-1/4 x 32-1// x 1/2). Secure with aspirator bolts and seal edges with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>11 Cover exhaust opening with barrier (8135-00-282-0565) and plywood (5530-00-618-6958) 32-1/4 x 32-1// x 1/2). Secure with aspirator bolts and seal edges with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>11 Catwalk, Steps, and Ladd</li></ul>		
	· ·	,	

Step	Function	Mech	Insp
3 cont	<ul> <li>2 Secure ladder and steps to the catwalk with "J" bolts fabricated from flat washers (5310-00-833-3340), nuts (5310-00-720-8528), and bolts (5300-00-3282-4281).</li> <li>(m) Access Doors. <ol> <li>1 Coat the rubber door seals with silicone (6850-00-295-7685).</li> <li>2 Securely lock all outside access doors and seal with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>3 Place the keys with logbook.</li> <li>(n) Marking. Mark power unit in accordance with appendix E. Place markings on plywood cover (fan shroud end).</li> <li>(o) Depreservation Guide.</li> <li>1 Complete two DA Forms 2258.</li> <li>2 Place one copy in a plastic bag (8105-00-902-6508), heat seal or staple bag, and mark the bag to indicate "DEPRESERVATION GUIDE."</li> <li>3 Secure the preserved guide to the control panel in the control unit.</li> <li>4 Place the other copy in the logbooks.</li> </ol> </li> <li>(a) Remove the arc chutes (nine) and phase barriers.</li> <li>(b) Install phase barriers back onto the breakers.</li> <li>(c) Wrap the arc chutes from the sides of the box and each other by using 21 x 2 x 4 block (5510-00-220-6194). Seal box.</li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(f) Remove relay covers and place barrier (8135-00-226-3124) between disk and magnets. Set the protective relay time dial settings to zero. Secure the relay covers with wire (9505-00-222-3829).</li> <li>(g) Rack breakers into place and secure with blocks (25-1/2 x 2 x 4) (17 x 2 x 4) (5-3/4 x 2 x 4) to prevent movement.</li> <li>(h) Pack fuses from each cabinet as follows: <ol> <li>1 Wrap fuses with barrier (8135-00-226-3124) and place in plastic bags (8105-00-902-6508) according to rating. Heat seal or staple bags. Mark bags with rating of fuses.</li> <li>2 Place bagged fuses in a fiberboard box (12 x 12 x 4).</li> <li>3 Secure each box in each cabinet with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(i) Coat electrical contacts and terminals with coating compound (6850-00-003-5295).</li> </ol> </li> <li>(2) Electrical Cabinet Doors. Secure breaker cabinet doors with frame (item A, fig. B-3-1). Refer to table B-3-2 for a list of materials.</li> <li>(a) Remove a bolt from each side of the exhaust fan louvers.</li> <li>(b) Place bolts into a plastic bag (8105-00-902-6508). Heat seal or staple and mark to identify contents.</li> <li>(c) Secure bag to the inside of the control unit with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(d) Cover louvers with barrier (8135-00-282-0565) and 5/16-inch plywood (5530-00-618-6955) (20 x 20) and secure with machine bolts (5305-00-071-2233) (1/4 x 3 NC). Plywood 3/8-inch (5530-00-618-6955). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(e) Seal edges with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(4) <u>Air Intake.</u> Wrap filter with barrier (8135-00-282- 0565), install and lock metal door. Seal edges with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> </ul>		
	<ul> <li>(5) Batteries and Cables.</li> <li>(a) Coat the battery cable connectors with silicone (6850-00-295-7685). Wrap with barrier (8135-00- 226-3124) and secure with tape (7510-00-266-6715).</li> <li>(b) Secure cables to frame with tape (7510-00-916- 9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(c) Coat battery terminals with silicone (6850-00-295- 7685).</li> </ul>		
	<ul> <li>(6) <u>Relay Room and Fuse Panel.</u> <ul> <li>(a) <u>Fuses.</u></li> <li><u>1</u> Remove fuses from fuse panel and battery charger.</li> <li><u>2</u> Wrap fuses with barrier (8135-00-226-3124) and place in plastic bags (8105-00-902-6508) according to rating. Heat seal or staple bag. Mark bag to indicate contents.</li> <li><u>3</u> Place bagged fuses in a fiberboard box (12 x 12 x 12). Secure with tape (7510-00-297-6655). Mark box to indicate contents.</li> <li><u>4</u> Place box in the relay room and secure with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(b) <u>Electrical Contacts.</u> Coat electrical contacts and terminals with coating compound (6850-00-003-5295).</li> </ul> </li> <li>(7) <u>Fire Extinguisher.</u> Lock fire extinguisher in bracket and secure with wire (9505-00-222-3829).</li> <li>(8) <u>Control Unit Openings.</u> <ul> <li>(a) Seal openings with tape (7510-00-916-9659). Tape</li> </ul> </li> </ul>		
	<ul> <li>7510-00-890-9875 may be used as a substitute.</li> <li>(b) Seal the cable penetrations underneath the control unit with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(c) Cover the battery vent, located on top of shelter, with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>c. Accessories (shipped inside control unit) (refer to fig. B-3-1 for location of items).</li> <li>(1) Conduit (24 x 4) 24 each. <ul> <li>(a) Coat the threaded end of the conduit with preservative (8030-00-526-1605) and allow to dry.</li> <li>(b) Place the conduit in a plywood box (27 x 18 x 24) marked "CONDUITS."</li> </ul> </li> <li>(2) Flexible Metal Fuel Hose, Universal (three, 1-inch and one, 2-inch). <ul> <li>(a) Dip hoses in preservative oil (9150-00-281-2007) and allow to drain.</li> <li>(b) Wrap hoses in barrier (8135-00-226-3124).</li> <li>(c) Place into a fiberboard box (24-1/2 x 7 x 5). Seal box with tape (7510-00-297-6655). Mark box to identify contents.</li> </ul> </li> <li>(3) Cables. <ul> <li>(a) Cover exposed ends of electrical cables with barrier (8135-00-226-3124). Secure barrier with tape (7510-00-266-6715).</li> <li>(b) Coil cables and secure in four places with barrier (8135-00-226-3124) and tape (7510-00-266-6715).</li> <li>(c) Place flexible hose and cables in a plywood box (24 x 24 x 24) marked "FIRE HOSE AND CABLES."</li> </ul> </li> <li>(4) Ground Rods. Place ground rods in a PPP-B-601 box (75-1/2 x 4-1/4 x 4-1/4).</li> <li>(5) Aspirator Gaskets. Tape each gasket to fiberboard. Place gaskets in a fiberboard box (32 x 32 x 2). Seal box with tape (7510-00-297-6655). Mark box to identify contents.</li> <li>(6) Fluorescent Lamps. Cushion lamps with cushioning (8135-00-855-6969) and secure in place with tape (7510-00-266-6715).</li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(7) <u>Depreservation Guide.</u></li> <li>(a) Prepare two DA forms 2258.</li> <li>(b) Place one copy in a plastic bag (8105-00-902-6508), heat seal or staple bag, and mark the bag to indicate "DEPRESERVATION GUIDE."</li> <li>(c) Secure the preserved guide to the control panel.</li> <li>(d) Place the other copy in the logbook.</li> <li>(a) Place the manuals, logbooks, and one set of keys into a plastic bag (8105-00-269-4662) and heat seal or staple.</li> <li>(b) Mark bag to indicate contents.</li> <li>(c) Place bag inside control unit as shown in figure B-3-1.</li> <li>(d) <u>Place the manuals, logbooks</u>.</li> <li>(a) Place the manuals, logbooks.</li> <li>(b) Mark bag to indicate contents.</li> <li>(c) Place bag inside control unit as shown in figure B-3-1.</li> <li>(d) <u>Exhaust Aspirators and Shrouds</u>.</li> <li>(a) Disassemble shrouds. Place hardware in a fiberboard box (6 x 6 x 6). Mark box to identify contents. Seal box with tape (7510-00-297-6655).</li> <li>(b) Place the curved parts of the shrouds inside each other and band together with steel strapping (8135-00-283-0669), edge protectors (8135-00-291-0962), and seals (8135-00-239-5293).</li> <li>(c) Secure shrouds to skid with steel strapping (8135-00-283-0669), edge protectors (8135-00-291-0962), and seals (8135-00-283-0669), edge protectors (8135-00-239-5293).</li> <li>(d) Strap aspirators together and secure to skid with steel strapping (8135-00-291-0962), and seals (8135-00-283-0669), edge protectors (8135-00-239-5293).</li> <li>(d) Strap aspirators together and secure to skid with steel strapping (8135-00-291-0962), and seals (8135-00-239-5293).</li> <li>(d) Strap aspirators together and secure to skid with steel strapping (8135-00-239-5293).</li> <li>(d) Strap aspirators together and secure to skid with steel strapping (8135-00-239-5293).</li> <li>(d) Strap aspirators together and secure to skid with steel strapping (8135-00-239-5293).</li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(2) Spreader bars, slings, and devises.</li> <li>(a) Coat slings with preservative (8030-00-231-2345) and allow to dry.</li> <li>(b) Place spreader bars, slings, and devises into cradle built on accessory skid and secure.</li> <li>(c) Place cover over cradle and secure with 12 wood screws (No.8, 2-in.).</li> <li><u>Load Tie Breaker and Cables</u>. Refer to figure B-3-3.</li> <li>(1) Load Tie Breaker.</li> <li>(a) Remove the three arc chutes and reinstall the phase barriers.</li> <li>(b) Rack air circuit breaker into place and secure with blocks (5510-00-220-6194) (25-1/2 x 2 x 4) (17 x 2 x 4) (5-3/4 x 2 x 4) to prevent movement.</li> <li>(c) Wrap the arc chutes with cushioning (8135-00-855-6969).</li> <li>(d) Place arc chutes into a plywood box (37-3/4 x 21 x 32) marked "ARC CHUTES."</li> <li>(e) Isolate the arc chutes from the sides of the box and each other by using (21 x 2 x 4) block (5510-00-220-6194) and seal the box.</li> <li>(f) Secure the relay covers with wire (9505-00-222-3829).</li> <li>(g) Coat electrical contacts and terminals with coating compound (6850-00-003-5295).</li> <li>(h) Secure circuit breakers control door with wire (9505-00-222-3829).</li> <li>(i) Install protective blocking (5510-00-220-6194) (25-1/2 x 2 x 4) (17 x 2 x 4) (5-3/4 x 2 x 4)</li> <li>inside the switch gear cubicle between the relay panel and exterior access door.</li> <li>(j) Wrap vents in cushioning (8135-00-855-6969) and place into a fiberboard box (12 x 8 x 6). Seal box lid with tape (7510-00-297-6655).</li> </ul>		

Step	Function	Mech	Insp
3 cont	<ul> <li>(k) Secure box inside cabinet with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(l) Secure the door handles with a positive locking device.</li> <li>(m) Seal openings with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(2) <u>Cable Reels (three)</u>. Place each cable reel into a plywood box marked "CABLE REEL" and secure on skid with the breaker.</li> <li><u>f. Marking</u>. Mark all boxes and units in accordance with appendix E using stencilboard (9310-00-160-7858) and ink (7510-00-161-0811).</li> <li><u>g. Exterior Doors</u>.</li> <li>(1) Coat the rubber door seals with silicone (6850-00-295-7685).</li> <li>(2) Securely lock outside access doors and seal with tape (7510-00-916-9659). Tape 7510-00-890-9875 may be used as a substitute.</li> <li>(3) One set of keys will be retained and forwarded under separate cover when power plant is shipped.</li> </ul>		

## TRANSPORTABILITY DATA

Loading, blocking, bracing, and transportation of nontactical generators and power plants will be accomplished in accordance with AR-55-355, Transportation and Travel, Military Traffic Management Regulation. Refer to table C-1 for transportability data.

NOTE

Any variance from transportation regulations will have to be approved through the Quality Control of the transportation mode used.

Nomenclature	NSN	Weight	Cube	Length	Width	Height
		(lb)	(ft)	(in)	(in)	(in)
700 KW diesel generator set	6115-00-596-3405	90750	4532	469	121	138
750 KW diesel generator set	6115-00-559-1449	88000	4532	469	121	138
1500 KW electric power plant Engine generator (3 ea) Control unit (1 ea)	6115-00-250-4404	25000 14000	968 545	240 206.5	69 60	101 76
2000 KW electric power plant Engine generator (4 ea) Control unit (1 ea)	6115-00-250-4405	25000 15000	968 614	240 232.5	69 60	101 76
3750 KW electric power plant Engine generator (3 ea) Control van (1 ea) Spreader bars, aspirators, and shroud skid Load tie breaker and cables skid	6115-00-250-4403	111500 39700	4724 3123	484 288	124 124	136 140
4500 KW electric power plant Engine generator (3 ea) Control van (1 ea) Spreader bars, aspirators, and shroud crate (modified) Load tie breaker and cables crate	6115-00-250-4402	111500 39700	4724 3123	484 288	124 124	136 140

$Table O^{-1}$ . $Table Dollar filling Date$	Table C-1.	Transportability Data
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NOTE: These weights are dry shipment only.

### APPENDIX D

## **GUIDANCE FOR THE FABRICATION**

#### **OF BOXES AND CRATES**

Boxes and crates are required for packing some items. These are prescribed by the appropriate specification number and by size, as required in the pertinent preparation instructions for shipment. Guidance in building these boxes is given in appendixes D-1, D-2, D-3, and D-4.
# APPENDIX D-1 FABRICATION OF BOX, WOOD, CLEATED-PLYWOOD, PPP-B-601, OS TYPE, STYLE A

## D-1-1. General

Unless stated otherwise, all box dimensions specified in the instructions for shipment are inside dimensions.

# D-1-2. Construction of Boxes

<u>a.</u> <u>Panels, Cleats, and Skids</u>. For weights up to 500 pounds, use 1/4-inch plywood for panels. For weights exceeding 500 pounds up to 1,000 pounds, use 1/2-inch plywood. All cleats will be 1- by 3-inch lumber. Skids will be 3 by 4 inches.

<u>b.</u> <u>Arrangement of Edge Cleats</u>. Each panel has two through-cleats and two filler-cleats. Position the throughcleats opposite each other at the edge of the plywood, with the filler-cleats between the through-cleats at the edges.

<u>c.</u> <u>Fastening Plywood to Cleats</u>. Fasten cleats to plywood using 4d, cement-coated nails. Stagger nails in two parallel rows with maximum spacing alternately 3 inches from center to center. Nail through the cleat and the plywood; then, clinch 1/8-inch minimum.

<u>d.</u> Intermediate Cleats. Use an additional 1- by 3-inch wood cleat when an unframed area exceeds 24 inches in any dimension; secure cleat in the same manner as the edge cleats.

e. <u>Assembly of Box Panels</u>. Arrange panels so that one through-cleat and one filler-cleat form each edge of the box. Arrange the cleats to form a standard box corner (fig. D-1). The top and bottom panels will overlap sides and ends. Nail all panels to each other by single-line nailing; use 6d, cement-coated nails with 5-inch spacing between nails.

<u>f.</u> <u>Application of Skids</u>. Provide two skids, made of 3- by 4-inch lumber laid flat and secure crosswise, i.e., across the width of the box, when gross weight exceeds 200 pounds. From the bottom side, bevel each end at a 450 angle one-half the thickness of the lumber. Notch the skids at the appropriate locations to allow the passing of 3/4-inch steel strapping between the bottom panel and the skid. Provide additional skid when the distance between inside edges of skids exceeds 48 inches. Use 1- by 3-inch filler-cleats between the bottom panel and the skid, thereby filling the void and adding support to the bottom panel, the filler-cleats, and into the skid. Use two rows of nails in a staggered pattern. Spacing between nails in each row should not exceed 6 inches.

g. Strapping. Apply 3/4-inch, QQ-S-781, steel strapping, as shown in figure D-1. Strapping will not be stapled.





Figure D-1. Fabrication of Cleated-Plywood Box.

# APPENDIX D-2 FABRICATION OF BOX, WOOD-CLEATED, SKIDDED, LOAD-BEARING BASE, MIL-B-26195, STYLE A

# D-2-1. General

Unless stated otherwise, all box dimensions specified in the instructions for shipment are inside dimensions.

## D-2-2. Construction of Boxes

<u>a.</u> <u>Base Components.</u> The base components are illustrated in figure D-2-1. The dimensions of skids are as given in table D-2-1. Skids with rectangular cross sections are to be used flatwise. Two skids are required for boxes whose outside width does not exceed 36 inches. When the outside width exceeds 36 inches, place a third skid equidistant between and parallel with the other skids. Bevel the lower one-third of the ends of each skid and the adjacent corner of the side panel 45°. Select lumber used for load-bearing floor members according to table D-2-2.



Figure D-2-1. Base Components.

Weight of	Load	Nominal sizes						
contents	condition1/	2 x 4	2 x 6	2 x 8	4 x 4	4 x 6	6 x 6	
(pounds)	_			Maximum length	of skid (feet)	)		
0 - 100	A B C	15 16 16	- - -	- -	- - -	- - -	- - -	
	DF	16 16	-	-	-	-	-	
101 200		16						
101 - 200	R R	16		-	_	-		
	C	16	-	-	-	-	-	
	D	16	-	-	-	-	-	
	Ē	16	-	-	-	-	-	
201 400	Δ	11	15	16				
201 - 400	R	13	10	10	-	-	-	
	C C	8	10	16	_	-	_	
	D	10	15	16	-	-	-	
	Ē	13	16	-	-	-	-	
401 - 600	A	8	11	14	16	-	-	
	В	9	14	16	-	-	-	
	С	5	8	11	16	-	-	
	D	7	10	14	16	-	-	
	E	9	14	16	-	-	-	
601 - 800	А	7	9	11	16	-	-	
	В	7	10	14	16	-	-	
	С	4	6	8	16	-	-	
	D	5	8	10	16	-	-	
	E	7	10	14	16	-	-	
801 - 1000	А	6	8	10	16	-	-	
	В	5	8	11	16	-	-	
	C	3	5	7	16	-	-	
	D	4	6	8	16	-	-	
	E	5	8	11	16	-	-	

Table D-2-1. Nominal Sizes and Maximum Lengths of Skids

1/See footnote at end of table.

Weight of	Load	Nominal sizes						
contents	condition <u>1</u> /	2 x 4	2 x 6	4 x 6	6 x 6			
(pounds)	_		Maximum length of skid (feet)					
1001 - 1200	A B C D E	6 4 3 3 4	7 7 4 5 7	8 9 5 7 9	16 16 13 16 16	- - 16 -	- - - - -	
1201 -1400	A B C D E	5 5 0 3 5	7 6 4 6	8 8 5 6 8	14 16 11 14 16	16 - 16 16 -	- - - -	
1401 - 1600	A B C D E	5 3 0 3 3	6 5 3 4 5	7 7 4 5 7	13 16 18 12 16	16 - 15 16 -	- - 16 - -	
1601 - 1800	A B C D E	5 3 0 0 3	6 5 3 3 5	7 6 4 4 6	12 15 9 11 15	16 16 14 16 16	- - 16 - -	
1801 - 2000	A B C D E	4 3 0 0 3	5 4 0 3 4	6 5 3 4 5	11 13 8 10 13	15 16 12 15 16	16 - 16 16 -	
2001 - 2200	A B C D E	4 0 0 0 0	5 4 0 3 4	6 5 3 4 5	10 12 7 9 12	14 16 11 14 16	16 - 16 16 -	

Table D-2-1. Nominal Sizes and Maximum Lengths of Skids-Continued

1/See footnote at end of table.

Weight of	Load	Nominal sizes						
contents (pounds)	condition1/	2 x 4	2 x 6	2 x 8 Maximum length	4 x 4 of skid (feet)	4 x 6	6 x 6	
				<u>_</u>			1	
2201 - 2400	А	4	5	6	10	13	16	
	В	0	3	4	11	16	16	
	С	0	0	3	7	10	16	
	D	0	0	3	8	13	16	
	E	0	3	4	11	16	-	
2401 - 2500	A	4	5	6	9	13	16	
	В	0	3	1	10	16	-	
	С	0	0	3	6	10	16	
	D	0	0	3	8	12	16	
	E	0	3	4	10	16	-	

# Table D-2-1. Nominal Sizes and Maximum Lengths of Skids- Continued

1/The load condition is determined by the manner in which the load is applied to the skids.

Table D-2-2.	Allowable Load	(Pounds) p	per Inch of Width of	f Load-Bearing	Floor Members (	Group	I and II Woods)	1/

Length between outside of skids (inches)	Nominal 1-inch thick boards (Ib per inch)	Nominal 2-inch thick boards (lb per inch)	Nominal 3-inch thick boards (lb per inch)	
12	38	176	459	
18	26	118	306	
24	19	88	230	
30	15	70	183	
36	13	58	154	
42	11	52	131	
48	10	44	115	
54	9	39	102	
60	7	35	92	

1/If group III or IV woods are used, the above allowable loads may be in by 20 percent.

- (1) <u>Lumber-Floored Base.</u> Floorboards shall not be less than 1 by 4 inches.
- (2) <u>Plywood Base</u>. Thickness of plywood shall be 3/8-inch minimum.

(3) <u>Headers.</u> Place end headers at the ends of all bases. Build headers of nominal size lumber, unspliced. When the container width is 36 inches or less, use 2- by 4-inch headers. When container width exceeds 36 inches, use 4- by 4-inch headers.

(4) <u>Rubbing Strips for Skids.</u> When specified, apply rubbing strips to skids to provide 3-inch forklift opening height. Rubbing strips shall be the same width as the skids, except as permitted herein. Apply 3-inch rubbing strips with two staggered rows of thirty-penny nails spaced 12 inches apart in each row, with a minimum of five nails for each rubbing strip. Each rubbing strip may be built up from two pieces of nominal 2-inch lumber, by nailing the first piece to the skid and the second piece to the first piece with either twelve-penny nails or pallet nails conforming to FF-N-105, type II, style 18, 3 inches long. When rubbing strips are used, do not bevel skids. Half bevel all rubbing strip ends at 45°. To allow for sling placement, set rubbing strips at ends of all skids back 2-1/2 to 4 inches from end of skid. Make forklift access openings a minimum 12 inches wide and 28 inches center to center, and position to straddle the center of gravity of the loaded container. Make center pieces of rubbing strips 16 inches long. When crate length is less than 60 inches, forklift openings will serve as sling openings.

(5) <u>Superstructure Components</u>. Build sides, tops, and ends of cleated panels. Panels shall be plywood, fiberboard, or paper-overlaid veneer, as specified.

(a) <u>Cleats.</u> Cleat arrangement on top, side, and end panels (fig. D-2-2 and D-2-3) as well as filler cleat tolerance and drain provisions shall be according to appendix D-1-2.

(b) <u>Joists.</u> Unless otherwise specified, provide joists for all boxes in excess of 26 by 16 inches. Apply joists with their broad surfaces in contact with the panel of the top, and space equal distances apart along the length of the box, not to exceed 24 inches apart (center to center). Joist sizes shall be according to table D-2-3. When Joists are required, they shall be supported vertically and laterally.



Figure D-2-2. Superstructure (style B).

- b. Fabrication Requirements.
  - (1) Base Fabrication.

(a) <u>Plywood Flooring to Skids.</u> Plywood may be the full length and width of the container base, or it may be a centrally located square piece with each side equal to the base width, figure D-2-3. Arrange plywood flooring so that the grain direction of face plies is perpendicular to skid length. If more than one plywood panel is used, leave one-fourth of an inch between panels for drainage. Nail plywood to skids according to figure D-2-4. Make lateral edges of all plywood flooring flush with the outer edges of the outside skids. When plywood flooring is full length of the base, place end headers and load-bearing floor members on top of plywood and bolt to skids. Drill a 1/2-inch diameter drainage hole in each corner of full length plywood bases. Place an additional drainage hole along the sides of the base for each 3 feet of inside length. When load-bearing floor members are placed over plywood panels, drill at least one drainage hole on each side of the base between the load-bearing floor members.



Figure D-2-3. Superstructure (style C).

Table D-2-3.	Selection of Joists
--------------	---------------------

Nominal joist size (inches)	Outside width of box (inches)
None required	0-16
1 x 2	17-24
1 x 4	25-36
2 x 4	37-60



#### LUMBER FLOORING

Figure D-2-4. Nailing Pattern for Base.

(b) <u>Lumber Flooring to Skids.</u> Nail lumber flooring to skids as illustrated in figure D-2-4. Lay lumber at right angles to the skids. Separate the edges of adjacent boards one-eighth to one-fourth of an inch to allow for swelling and drainage. Place end of boards flush with the outer edges of the skids.

(c) Load-Bearing Floor Members to Skids. Bolt load-bearing floor members over 2 inches thick and up to 4 inches in width to each skid, with one carriage bolt. Bolt load-bearing floor members over 2 inches thick and 4 inches wide to each skid with two carriage bolts. Fasten the load-bearing floor members to the skids with 1/2-inch carriage bolts. Make bolt holes the same diameter as the shank of the bolt. Place plain washers under the nuts of all bolts. After tightening, to prevent nuts from turning, apply unthinned lead paint to projecting threads or equivalent locking means. Nail load-bearing members less than 2 inches in thickness to the skids. Nails shall be as large as possible without splitting the piece. Place load-bearing floor members flush with the outer edges of the skids.

(d) <u>End Headers to Skids.</u> Fasten end headers to the skids with 1/2-inch carriage bolts. Place headers back from the ends of skids a distance equal to the thickness of the end panels, flush with the outer edges of the skids. When plywood is used full length of the base, place headers on the plywood.

(2) <u>Superstructure Fabrication</u>. Fabrication of cleated plywood, cleated fiberboard, and cleated paperoverlaid veneer panels, which form the superstructure, shall conform to requirements of appendix D-1.

(a) <u>Joist Supports.</u> When top bracing joists are used, affix vertical and lateral joist supports to the side panels. The vertical and lateral supports shall conform to material requirements for cleat stock except that the thickness shall not be less than 1-inch nominal for container loads of 1,000 pounds and under, nor less than 2-inch nominal for loads in excess of 1,000 pounds.

(b) <u>Vertical Joist Supports.</u> Fasten the vertical Joist supports to the side panels with nails spaced not greater than 3 inches on centers (fig. D-2-5). Stagger the nails as shown. Use nails that are long enough to pass through the joist support, the panel, the intermediate cleat of the side panel when matching occurs, and permit a 1/8-inch minimum clinch when group II, III, or IV woods are used, and 1/4-inch minimum clinch when group I woods are used. Use supports long enough to extend from the under surface of the joist to the upper surface of the base decking or floor boards.

(c) <u>Lateral Joist Supports.</u> Fasten the lateral joist supports to the side panels with not less than two nails. Use nails long enough to pass through the support block, panel, the longitudinal cleat of the side panel, and permit a 1/8-inch minimum clinch when group II, III, or IV woods are used, and 1/4-inch minimum clinch when group I woods are used. Support blocks shall not be less than 3-1/2 inches long.

## c. Assembly Requirements.

(1) <u>Assembly of Superstructure Panels</u>. Assembly of cleated plywood, cleated fiberboard, and cleated paper-overlaid veneer superstructures shall comply with requirements of appendix D-1.

(2) <u>Assembly of Superstructure to Base</u>. Assemble the end and side panels to the base with lag bolts. Do not extend side panels below the bottom of the skids. When specified, boxes may be furnished assembled.





(a) <u>Side to Skid.</u> Place a lag bolt not less than 3 inches from the end of the cleat through each end of the lower longitudinal cleat of the side panel and into the skid. Equally space additional bolts between the two end bolts, with no distance exceeding 12 inches.

(b) <u>End to Header</u>. Place a lag bolt through each end of the lower filler cleat and into the end header not less that 2 inches nor more than 3 inches from the end of the filler cleat. Equally space additional bolts between the end bolts, with no distance exceeding 12 inches. Two lag bolts are required through each end filler cleat.

(c) <u>Size and Placement of Lag Bolts.</u> Lag bolts shall be 3/8-inch diameter and 3 inches long. Make lag bolt entry holes 3/8-inch diameter. Lead holes shall be 1/4-inch diameter for groups I, II, and III woods, and 5/16-inch diameter for group IV woods. The combined depth of the entry and lead holes shall equal the total length of the shank and threaded portions. Turn lag bolts in their holes the full distance. Do not drive bolts by hammer. If for any reason the threads in the holes are stripped, remove the lag bolt and place in a new hole near the old position. Place a washer under the head of each lag bolt. Countersinking for lag bolts is not permitted.

# APPENDIX D-3 FABRICATION OF CRATE, WOOD, PLYWOOD SHEATHED, BOLTED, MIL-C-104, TYPE II CLASS 2, STYLE A, MODIFIED

# D-3-1. General

Unless stated otherwise, all crate dimensions specified in the preparation instructions for shipment are inside dimensions. (Maximum exterior dimensions for the crate are 30 feet long by 9 feet wide by 10 feet high.)

# **D-3-2.** Fabrication Instructions

<u>a.</u> <u>Plywood Sheathing</u>. Use NN-P-530 1/2-inch plywood, for sheathing on side, end, and top panels. Apply sheathing vertically for the side and end panels and extend to the bottoms of the skids on the side panels and to the tops of the skids on the end panels.

b. Skid Base. The base consists of longitudinal skids and rubbing strips, headers, load-bearing floorboards, and flooring. For net loads up to 10,000 pounds and crate length up to 32 feet, use 4- by 4-inch skids. For net loads up to 30,000 pounds and crate length up to 20 feet, use 4- by 6-inch skids (on edge). Maximum space between skids is 48 inches, center to center. Use 2-inch lumber the same width as skids for the rubbing strips. Attach strips to skids with two staggered rows of 12d nails spaced 12 inches apart in each row. Provide 12-inch openings in the rubbing strips, 28 inches center to center, for forklift access. Place center pieces to straddle the center of balance. Center pieces must be at least 18 inches long (fig. D-3-1). Provide sling openings not less than 4 inches in length (preferably 8 inches) at the ends of the rubbing strips. Bevel ends of all rubbing strips at a 45° angle. Bolt a 4- by 4-inch header to each end of the base, placed back from the ends of the skids to the thickness of the end sheathing. Notch the ends of the headers to equal the thickness of the lower frame members of the crate sides. Bolt two additional 4- by 4-inch forklift headers, spaced 20 and 40 inches (on center) from each end of the skids, and notch the same as the end headers (fig. D-3-1). Use bolts 1/2 inch in diameter for all headers. When the crate is short or narrow, or when the form of the item to be crated dictates, 2- by 6-inch lumber will be used in the 42-inch end areas instead of 4- by 4-inch forklift headers. When 2-inch lumber is used and intermediate skids are required, bolt the 2-inch members to the intermediate skids and nail to the outside skids with 12d nails (fig. D-3-2). Place load-bearing members (4- by 4-inch minimum) where concentrated loads of contents occur. Notch and bolt as prescribed for headers, except secure to each skid with two bolts when member is over 4 inches wide. Lumber used for floorboards will be at least 1 by 4 inches and will be spaced 1/4-inch apart for drainage. When 1-inch flooring is used with 2-inch flooring, nail 1- by 2-inch filler strips along each side of the thinner flooring (fig. D-3-2).



Figure D-3-1. Skid-Type Base (Forklift Headers).



Figure D-3-2. Skid-Type Base (2-inch Forklift Flooring).

<u>c. Side Panels.</u> Figure D-3-3 depicts the fabrication characteristics of side panels. Place vertical struts on 24-inch centers. Use one horizontal brace when crate height exceeds 60 inches through 96 inches. Use two horizontal braces when crate height is over 96 inches through 120 inches. Fit horizontal braces between vertical struts. Upper and lower frame members, vertical struts, and vertical end struts are 2- by 4-inch lumber for net loads to 10,000 pounds, 2- by 6-inch lumber for loads over 10,000 to 20,000 pounds and 2- by 8-inch lumber for loads over 20,000 pounds. Use 6d nails to secure plywood sheathing to frame members. Clinch nails on the framing.



Figure D-3-3. Fabrication of Side Panels.

d. End Panels. Figure D-3-4 depicts the fabrication characteristics of end panels. Place vertical struts on 24-inch centers. Requirements for frame members are identical to those for the side panels.



Figure D-3-4. Fabrication of End Panels.

e. <u>Top Panel.</u> Figure D-3-5 depicts the fabrication characteristics of top panels. For panels with widths up to 54 inches, position frame members flat for plywood sheathing nailing; for panels with widths exceeding 54 inches, position frame members on edge. Place intermediate Joists used for panels on 24-inch centers from the outer edge of the end joist. Use 2- by 4-inch frame members.



Figure D-3-5. Fabrication of Crate Top (1 of 2).









#### CROSS SECTION

WIDTH - OVER 60 INCHES THROUGH 120 INCHES JOISTS (SPACE 24 INCHES 0. C )

OVER OVER OVER	60 66 78	INCHES INCHES INCHES	THRU THRU THRU	66 78 90	INCHES INCHES INCHES	2 2 2	X X -	4 4 2	PLUS X 4	1	X	4	OR OR	3 4	X X	4≟⁄ 4≟∕
OVER OVER	90 102	INCHES	THRU S THRU	102 J 12	INCHES	2 2	X X	6 6	PLUS	۱	X	6	OR	3	X	6 <u>1</u> /

SIZE

 $\pm\!\!\!/$  end joist to be single 2 inch member and same depth as joists

HEADERS - 3/4 INCH THICK AND SAME DEPTH AS JOISTS

Figure D-3-5. Fabrication of Crate Top (2 of 2).

## f. Crate Assembly.

(1) <u>General.</u> Type II (bolted) crates shall be assembled with lag bolts.

(2) Lag Screw Reinforcing Strap for Bolted Crates. Reinforcing strap shall be used on side and end panels of all demountable crates as shown in figure D-3-6. Galvanized steel strap, punched or drilled, 1-1/4 inches by 0.035 inch for 3/8-inch lag screws, and 2 inches by 0.050 inch for 1/2- and 5/8-inch lag screws, shall be nailed to the inner face of the sheathing between the lower edge of the bottom frame member and the bottom of the sheathing as shown in figure D-3-6. The strap shall be located to coincide with the center of the skid or header and shall be nailed on maximum 2-inch centers to the sheathing with clout or similar nails. Nails shall be clinched at least 3/8 inch.



Figure D-3-6. Lag Bolt Reinforcing Strap.

(3) <u>Fastening Sides to Top</u>. Lag bolts, 3/8-inch diameter by 3-1/2 inches long, shall be used to fasten the sides to the top. These lag bolts shall be placed so that there is one in the end of each Joist at the approximate center (fig. D-3-9). For tops without joists, lag bolts shall be placed at the approximate center of the side frame member of the top and spaced no greater than 24 inches apart.

(4) <u>Fastening Ends to Top and Sides</u>. Lag bolts for fastening ends to tops shall be 3/8-inch diameter by 2-1/2 inches long. Lag bolts for fastening ends to sides shall be 3/8-inch diameter by 3-1/2 inches long. Placement and other assembly details shall be as shown in figures D-3-7 and D-3-9.

(5) Fastening Sides to Base. The sides shall be secured to the skids with lag bolts. For 3- by 3-inch or 3- by 4-inch skids, 3/8-inch diameter by 3-inch long lag bolts shall be used; for 4- by 4-inch skids, 1/2-inch diameter by 4-inch long lag bolts shall be used; and for 4- by 6-inch skids, 5/8-inch diameter by 4-inch long lag bolts shall be used; and for 4- by 6-inch skids, 5/8-inch diameter by 4-inch long lag bolts shall be used; and for 4- by 6-inch skids, 5/8-inch diameter by 4-inch long lag bolts shall be used; and for 4- by 6-inch skids, 5/8-inch diameter by 4-inch long lag bolts shall be used. The number of lag bolts shall be as specified in table D-3-1. One-half the number shall be used on each side and the spacing shall be uniform along the skid. Maximum spacing shall be 16 inches for 3/8-inch lag bolts and 20 inches for 1/2-inch lag bolts. Lead holes shall conform to table D-3-2 in size and shall be drilled in line with and through the center of the metal reinforcing strap as well as through the sheathing and into the skid. Assembly and placement details shall be as shown in figures D-3-7 and D-3-8.



Figure D-3-7. Assembly of bolted Crate (Lumber or Plywood Sheathed).



Figure D-3-8. Assembly of Bolted Crate.



Figure D-3-9. Assembly of Bolted Crate.

 Table D-3-1. Lag Bolts Required to Assemble Sides to Base of Bolted Crates Using Lag Bolt Reinforcing Strap (Skids to be Group II, III, or IV Woods)1/

		Size of lag bolt	
Weight of crate and contents (lb)	3/8 x 3 (3 x 3 or 3 x 4 skids) (inch)	1/2 x 4 (4 x 4 skids) (inch)	5/8 x 4 (4 x 6 skids) (inch)
2,000	6	6	6
3,000	10	6	6
4,000	14	8	6
6,000	20	12	8
8,000		16	10
10,000		18	12
12,000		22	14
14,000		26	16
16,000		30	18
18,000		32	22
20,000		36	24
24,000			28
28,000			32
32.000			36
36.000			42
40,000			46

1/ Use one-half the number on each side: Maximum spacing- 3/8 x 3-16

Minimum number

3/8 x 3-16 inches on center 1/2 x 4-20 inches on center 5/8 x 4-20 inches on center 3 per side, 2 per end

Table D-3-2. Lag Bolt Lead Hole Sizes

Diameter of	Diameter o		
of lag bolt	Groups I, II, and III woods	Group IV woods	
(inch)	(inch)	(inch)	
1/4	3/16	3/16	
5/16	1/4	1/4	
3/8	1/4	5/16	
1/2	3/8	7/16	
5/8	3/8	1/2	
3/4	1/2	5/8	

<u>g.</u> <u>Nail Pattern and Strapping</u> Figure D-3-10 depicts the proper nail pattern for securing plywood sheathing to panel Frame members. Requirements are also shown for corner and top steel strapping of the assembled crate. Use 1-1/4-inch QQ-S-781 strapping secured with 1-1/2-inch roofing nails. Two-inch anchor plates are supplied to secure the strapping to the crate sides.



Figure D-3-10. Plywood Nailing and Strapping.

#### D-3-13

<u>h.</u> <u>Splicing.</u> When member splicing is necessary, figure D-3-11 gives instructions for splicing, and proper nail sizes used during assembly nailing of crate panel components.



Figure D-3-11. Splicing of Members (1 of 2).

D-3-14



Figure D-3-11. Splicing of Members (2 of 2).

<u>i.</u> <u>Ventilation.</u> All crates shall be provided with ventilating holes or slots which shall be located at each end or at ends and sides of lumber and plywood sheathed crates, or around the perimeter of plywood and lumber-sheathed crates. These ventilating holes or slots shall be located immediately below the top frame member and be provided with a baffle as shown in figure D-3-12 when slots are used in plywood sheathed crates or when holes are in clusters in lumber-sheathed crates. Single holes drilled without baffles shall be sloped at 450 to drain outward. No holes or slots shall be cut in any frame member.



NOTE ALL DIMENSIONS ARE IN INCHES

Figure D-3-12. Crate Ventilation (Inside View).

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j. Inspection Doors. When specified, one or more inspection or access doors shaT1l be provided. Doors shall be of the size and in the location specified by the procuring agency and will be used for interim inspection or servicing of contents. Doors shall be built without cutting the frame members and shall be hinged at the top and fastened by lag screws at the sides and bottom as shown in figure D-3-13. Cleats and stops shall be made of 1-inch material. Doors shall be made of the same type and thickness material used for sheathing. Holes shall be provided through the door and an adjacent frame member for a seal wire and lead seal bearing inspectors' stamp. When hinges with exposed screws are used, the hinge side of the door shall also be sealed.



Figure D-3-13. Inspection Door (Inside View).

#### MARKING FOR SHIPMENT AND STORAGE

# E-1. General

Marking of interior packs (unit and intermediate packs), exterior packs (boxes, crates, palletized loads, etc.), and unpacked items shall be by use of labels, tags, or stencils. Marking materials shall be as specified herein. All surfaces to be marked shall be free of oil and grease; remove any marks not applicable to the shipment. Lettering for all markings shall be capital letters of equal height and proportioned to the space available for marking. Required markings on labels and tags shall be printed or typed, and shall benonfading and durable. All markings shall be black, except when applied on surfaces on which black is not legible, then the color used shall provide a definite contrast.

# E-2. Marking Materials

<u>a.</u> <u>Waterproofing Varnish or Coating Compound</u> Spar varnish or a clear acrylic coating compound for protecting and waterproofing markings shall conform to TT-V-121 or MIL-C-17504, 8010-00-160-5852 or 8010-00-290-6159, respectively.

<u>b</u>. <u>Label Adhesive</u>. Label adhesive or cement shall conform to MMM-A-178 or MMMA-179, 8040-00-656-0814 or 8040-00-053-8452, respectively.

<u>c</u>. <u>Stencil lnk</u>. Stencil ink for marking shall conform to TT-I-1795, 7510-00-161-0811.

d. Obliterating Paint. Obliterating paint shall conform to TT-L-40, 8010-00-527-3196.

e. Tags. Shipping tags shall be white or manila color and conform to UU-T-81, 8135-00-178-9193.

<u>f.</u> <u>Water-Resistant Envelopes</u>. Envelopes for packing lists and material release/receipt documents shall conform to PPP-E-540, 8105-00-559-6134.

g. <u>Labels</u>. Labels shall be made of sized white paper stock having a minimum basic weight of 20 pounds and a smooth finish.

h. Tape. Tape used for securing and protecting labels shall conform to PPP-T-60, 7510-00-266-6715.

i. Envelope Protectors. Envelope protectors shall conform to PPP-P-700, 8105-00-926-2260.

# E-3. Interior Pack Marking

a. Apply the following markings on interior packs in the order listed (fig. E-1):

(1) National stock number.

- (2) Item description.
- (3) Quantity and unit of issue.

<u>b.</u> Do not make the words "national stock number, item description, and quantity and unit of issue" a part of the markings. In addition, apply a precautionary label, 7540-00-139-4734 or 7540-00-139-4752, to method II packages (fig. E-2), except that when space is not available, place the words, "METHOD II PACKAGE - DO NOT OPEN UNTIL READY FOR USE," in as large letters as possible adjacent to the identification markings. For an item assigned a serial number, the number shall be applied below the identification marking preceded by the words "SERIAL NO." (fig. E-3).



Figure E-1. Unit and Intermediate Container Identification Markings.



Figure E-2. Method II Marking.

# E-4. Exterior Container Identification Marking

- <u>a</u>. <u>Identification Markings</u>. Compose identification markings of the following information, as applicable:
  - (1) National stock number.
  - (2) Item description.
  - (3) Quantity and unit of issue.

(4) Gross weight and cube. The capital letters "WT" will precede weight numerals which will be indicated in pounds to the nearest whole number. The letters "CU" will precede the cube numerals which will be shown to the nearest one-tenth of a cubic foot.



Figure E-3. Serial Number Markings.

(5) Proper DOT shipping name (for hazardous and dangerous items only).

(6) When packs of unrelated items are consolidated into a shipping container, apply the word "MULTIPACK" to the shipping container in lieu of markings in subparagraphs a (1), (2), and (3), above.

(7) When the contents of a single stock numbered item are packed in two or more shipping containers, the stock number shown on each container will be that of the complete set and will be prefixed with P/O (part of). The component will be shown under the set nomenclature. For example (fig. E-4):

P/O 5820-00-543-0118 RADIO SET OA-1387/GRC 1 EA TRANSMITTER RADIO-T-302A/GRC WT 50 CU 1.2



Figure E-4. Single Stock Numbered Set Markings.

<u>b</u>. <u>Positioning of Identification Markings (fig. E-5)</u>. On boxes and crates under 10 cubic feet, stencil or print the markings directly on the left, upper two-thirds of the side of the container. On boxes and crates 10 cubic feet and over, the markings are also required in the upper two-thirds of one end of the container. Boards constructed of 1/4-inch plywood (standard sheet with exterior glue) may be used for marking unsheathed crates (fig. E-6).



Figure E-5. Exterior Container Markings.



E-6. Marking Unsheathed Crates Using Marking Boards.

#### E-5. Exterior Container Special Markings

<u>a</u>. Set or Assembly Markings (fig. E-7). When a set or assembly is placed in two or more containers, each container shall bear its own number within the set (the total number of containers make up the set) and the number of the set within each shipment. Place a 2-inch black disc above these numbers on each container. If the set or assembly has a serial number, include it in the markings. When a disassembled item does not have a serial number, show a date (month, day, and year) followed by a capital letter to identify a set or assembly. Each set shall bear a different letter. Place the markings in the lower right-hand corner on the surfaces containing the identification markings.

<u>b.</u> <u>Serial Numbers.</u> Mark containers holding items having serial numbers with the numbers preceded by the words "SERIAL NO." directly below the identification marking. When interior packs bearing consecutive serial numbers are packed in exterior containers, show only the first and last number of the series (fig. E-6). If serial numbers are not in sequence, list each number.

<u>c</u>. <u>Outside Dimensions</u>. Show outside dimensions on all shipping containers that have any single dimension of 72 inches or more. Show dimensions in the order of length, width, and height to the nearest inch and locate beneath the identification data (fig. E-6).

<u>d.</u> <u>Restrictive Markings</u>. When shipping classified materiel, place no markings on the outside of the container which indicate the classified nature of the materiel, its manufacturer, or its security classification.

e. <u>Ammunition, Explosives, and Explosive Components.</u> Mark containers as specified by appropriate general and specific type marking and sealing drawings.
<u>f.</u> Lot, Control, or Batch Number. Precede lot, control, or batch numbers by the proper designation, e.g., Lot No. 5, and show below the identification marking. Mark palletized loads of ammunition comprised of more than one lot with the appropriate lot number to maintain integrity. Identify each lot on a plain white label or tag, and place as near as possible to the address marking.



Figure E-7. Set or Assembly Markings.

g. <u>Precautionary Markings</u>. Mark and label explosives and other dangerous items as defined in 14 CFR 103, 46 CFR 146-149, 49 CFR 170-199, Official Air Transport Restricted Articles Tariff No. 6-D, and TM 38-250 according to the requirements thereof, regardless of the initial mode of transportation or shipment. Mark and label each shipping container, as required, regardless of the quantity shipped or location of the first destination. Apply eligible-for-air-shipment labels to all containers qualifying for air shipment. Mark the proper shipping name according to paragraph E-4a(5), herein. Markings required for any purpose by statute or regulation shall neither obscure nor be obscured by other markings.

<u>h. Military Aircraft Shipment Markings.</u> Label all packs scheduled for transportation by military aircraft containing dangerous and hazardous materiel, classified materiel, and any other materiel requiring special handling with a DD Form 1387-2 (fig. E-8). The form must bear certification that the shipment complies with TM 38-250, including applicable paragraph and page number. When classified or sensitive cargo, or items requiring special handling during transit are shipped by military aircraft, the shipper shall prepare DD Form 1387-2 and note in the supplemental information block "Signature Service Required" as stated in i below. Using magnetic caution label 7540-00-139-4757 or 7540-00-139-4758, mark on two sides all packs and items containing magnetized material.

<u>i.</u> <u>Security Service Markings</u>. Provide signature security service, protective security service, armed surveillance or armed guard service, as applicable, on shipments identified as classified or sensitive cargo, or items requiring special handling during transit. When required by the applicable carrier's tariff, label each exterior container on the side with identification marking in the lower right-hand corner, or tag to indicate service requested (fig. E-8).

<u>j.</u> <u>Center of Balance Markings</u>. Extend a 1-inch wide vertical line not less than 3 inches long locating center of balance up from the bottom edge of both sides of containers over 10 feet in length, or those which are unbalanced. Identify this line by stenciling or printing in 1-inch letters the words "CENTER OF BALANCE" (fig. E-6).

<u>k</u>. <u>Method II Markings</u>. Method II packs which are shipping containers will bear a precautionary label, 7540-00-139-4734 or 7540-00-139-4752, on the identification-marked side (fig. E-2).

<u>I. Palletized Unit Loads</u>. Mark individual containers comprising the palletized load, with the markings required in paragraph E-3. Build the load on tile pallet so that the markings on the individual containers do not show on two adjacent sides of the load. For palletized loads with smooth surfaces, stencil the identification markings on two surfaces of the load; extend the markings from one container to another, if necessary (fig. E-9). If the palletized load does not provide smooth marking surfaces, apply the markings on weather-resistant panels or use labels or tags on two adjacent sides. Gross weight for palletized loads shall include the weight of the pallet.

## E-6. Address Marking

<u>a.</u> Address Label and Tag Apply address markings to shipping containers and unpacked materiel by means of labels (DD Form 1387) or tags (DD Form 1387-1). Mark the address for transportation priority 1 (TP1) shipments on red-bordered labels, or tags, and for TP2 shipments on blue-bordered labels, or tags. Mark shipments to be moved under TP3 on the plain DD Form 1387 or 1387-1. Apply the address to the identification-marked side of the container in the lower two-thirds of the side (fig. E-5).

b. Domestic Shipment Address. Compose the domestic address as follows:

(1) TCN: Show the TCN with a space between each of the data elements, e.g., A25TBB 2310 0010 XAX.



SPECIAL HANDLING DATA/CERTIFICATION -- DD FORM 1387-2

Figure E-8. Special Handling Data/Certification and Security and Service Markings.

- (2) RDD or expedited handling code.
- (3) Project code: When specified.
- (4) From: Name and address of the consignor (coded and in the clear).
- (5) Transportation priority.
- (6) To: Name and address of consignee (coded and in the clear).

(7) Piece number and total pieces: Not required on full carload and truck-load shipments of homogeneous items to a CONUS activity.



# Figure E-9. Identification and Address Markings - Palletized Loads.

- (8) Weight: Gross weight of each piece, container, MILVAN, etc.
- (9) Cube: Each piece.
- c. Oversea Shipment Address. Compose the oversea address as follows:
  - (1) TCN.
  - (2) RDD or expedited handling code.
  - (3) Project code: When specified.
  - (4) Consignor: Coded and in the clear.
  - (5) Transportation priority.

- (6) POE/APOE: Coded and in the clear.
- (7) POD/APOD: Coded and in the clear.
- (8) Consignee: Coded and in the clear.
- (9) Piece number.
- (10) Total pieces.
- (11) Weight: Gross weight of each piece, container, MILVAN etc.
- (12) Cube: Each piece.

<u>d</u>. <u>Palletized Unit Loads</u>. Provided that a smooth surface is available, apply the address to the lower onethird of an identification-marked surface of the load (fig. E-9). If the load does not provide a smooth surface, place the label on a weather-resistant panel or place a tag on any suitable space of an identification marked surface.

e. <u>Unpacked Vehicles</u>. Place the address on the rear or the right side near the rear of the vehicle. Apply it to a weather-resistant, 1/4-inch plywood panel, or secure it with PPP-T-60 tape directly on the vehicle surface.

<u>f.</u> <u>SEAVAN/MILVAN</u>. The address for SEAVANs/MILVANs shall be on DD Form 1387-1 attached to the seal or at the rear of the van. Shipping containers, palletized unit loads, and unpacked items consolidated into a full van load by the origin shipper for delivery as a unit to the ultimate consignee do not require address marking.

### E-7. DD Form 1750 (Packing List) and DD Form 1348-1 (DOD Single Line Item Release Document).

<u>a.</u> Packing List. For containers or unitized loads packed with unlike items, or a single stock numbered item comprised of unlike items, where full description of the contents is not authorized or cannot be shown on the container, prepare separate packing lists, as required for each box or container. Place one copy of the list loose inside of the container on top of the contents, and place a second copy in a water-resistant envelope and securely attach to the outside of the container in the most protected location. Foroversea shipments, further protect the packing list with an envelope protector marked with the words "Packing List." Exterior containers holding unlike items identified by a single stock number, in addition to the item description on each packed item in the container, shall include packing lists listing each of the items in the container. When a single stock numbered set, kit, or assembly is packed in more than one shipping container, in addition to the packing list for each container, furnish a master packing list which can be made of duplicates of each of the individual lists or the master may be a compiled correlated listing. Packing lists shall not be affixed to the outside of containers holding classified items.

<u>b.</u> <u>DOD Single Line Item Release Document.</u> Attach two copies of DD Form 1348-1 to the materiel in the No. 1 shipping container. Inclose one copy in a water-resistant envelope, and attach the envelope in a protected location on the No. 1 container. When the storage container is used as the shipping container, inclose the two copies with the one copy attached to the No. 1 container. Foroversea shipments, further protect the envelope with an envelope protector marked with the words "Materiel Release/Receipt Documents."

<u>c</u>. <u>Shipment Units of Multiple Line Items</u>. Two copies of the DD Form 1348-1 applicable to each item shall be placed in a PPP-E-540 water-resistant envelope and attached to the package applicable to each requisition by means of tape. One copy for each requisition shall be placed in a PPP-E-540 water-resistant envelope and attached in a protected location on eachmultipack container.

### E-8. Securing and Protecting Labels

Securely stick labels in place with water-resistant adhesive or with PPP-T-60 tape, over the entire surface of the label. When pressure-sensitive labels are used, water-resistant adhesive is not required. Unless covered with PPP-T-60 tape, coat labels with varnish or clear, acrylic-coating compound.

	GLUG	JOANT	
AA	250		
ba	ball	jr	Jar
bc	block	ke	keg
bd	bundle	kt	kit
be	bale	lb	pound
bf	board feet	lf	linear feet
bg	bag	lg	length
bk	book	MX	1000
bl	barrel	mtd	mounted
bo	bolt	od	outside
br	bar	diameter	
bt	bottle	0Z	ounce
bx	box	рс	piece
са	cartridge	pd	pad
се	cone	pg	package
ck	cake	pk	pack
cl	coil	pl	pail
cn	can	pr	pair
со	container	pt	pint
CS	case	qr	quire
ct	carton	qt	quart
dr	drum	rl	reel
dz	dozen	rm	ream
ea	each	ro	roll
en	envelope	sa	sack
fd	fold	sd	skid
ft	foot	se	set
gl	gallon	sf	square foot
gr	gross	tn	ton
HD	100	tu	tube
hf	100 feet	XV	fifteen
hk	hank	XX	twenty
in	inch	VI	vial
		yd	yard

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# 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 decigram = .035 ounce
- 1 decagram = 10 grams = .35 ounce
- 1 hectogram = 10 decagrams = 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 milliters = .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 cu. feet

## **Approximate Conversion Factors**

To change	То	Multiply by	To change	То	Multiply by
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		5/9 (after	Celsius	°C
	temperature	subtracting 32)	temperature	

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