TM 5-4940-200-12

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL

SHOP EQUIPMENT, CONTACT MAINTENANCE, TRUCK MOUNTED, SET NO 3,

(SOUTHWEST MODEL SECM)

SERIAL NO. S-3-628 THROUGH S-3-720 AND (DAVEY MODEL CMU-5) SERIAL NO. 33343 THROUGH 33343-234 FSN 4940-294-9518

HEADQUARTERS, DEPARTMENT OF THE ARMY

TAGO 5672-A-August

AUGUST 1963

SAFETY PRECAUTIONS

BEFORE OPERATION

Do not connect an external power source or operate the generator-welder until it has been properly grounded. Electrical faults in the generator-welder, load lines, or equipment can cause death by electrocution from contact with an ungrounded system.

Be sure the truck shift lever and declutcher lever are in neutral position before starting the truck engine or when connecting the generator-welder.

When filling the fuel tank, do not smoke or use an open flame in the vicinity. Maintain a metal-to-metal contact between the filling container and the tank to prevent sparks from being generated as fuel flows over the metallic surface.

Lifting equipment must have a capacity of at least 5 tons.

Do not overload shop set with additional personnel, equipment, or parts. Failure to observe this warning will result in an overloaded condition, dangerous to personnel and equipment.

DURING OPERATION

To prevent eye burn, it is necessary that the eyes of the arc welder, as well as the eyes of personnel nearby, be shielded from the intense light of the electric are. Ordinary sunglasses or gas welding goggles do not provide sufficient protection.

Do not permit an energized electrode to touch the skin or damp clothing of the operator or nearby personnel.

The voltage produced by the generator-welder, when operating as an alternating current generator, is dangerous to persons coming in contact with any part of the electrical system. Severe, possibly fatal, shock may result. In the event of an accident from electric shock, SHUT DOWN the generator-welder at once. If the generator-welder cannot be shut down, free the victim from the live conductor. Avoid direct contact with the victim or live conductor. Use a dry board, dry ropes, or any nonconductor to free the victim. If the victim is unconscious, apply artificial respiration and send for medical help.

When operating in an enclosed area, the exhaust gases must be piped to the outside. The exhaust gases contain carbon monoxide, which is a colorless, odorless, and poisonous gas.

Be sure the truck shift lever and declutcher lever are in neutral position before stopping the truck engine.

AFTER OPERATION

Whcn filling the fuel tank, do not smoke or use an open flame in the vicinity. Maintain a metal-to-metal contact between the filling container and the tank to prevent sparks from being generated as fuel flows over the metallic surfaces.

Operator and Organizational Maintenance Manual

SHOP EQUIPMENT, CONTACT MAINTENANCE, TRUCK MOUNTED: SET NO. 3 (SOUTHWEST MODEL SECM) SERIAL NO. S-3-628 THROUGH S-3-720, AND (DAVEY MODEL CMU-5) SERIAL NO. 33343 THROUGH 33343-234 FSN 4940-294-9518

CHANGE
No. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 9 November 1964

TM 5–4940–200–12, 21 August 1963, is changed as follows:

Page 2, Paragraph 1. Delete subparagraph *d* and substitute the following:

d. The direct reporting by the individual user, of errors, omissions, and recommendations for improving this manual is authorized and encouraged. DA Form 2028 (Recommended Changes to DA Publications) will be used for reporting these improvements. This form will be completed in triplicate using pencil, pen, or typewriter. The original and one copy will be forwarded direct to Commanding General, U.S. Army Mobility Equipment Center, ATTN: SMOME–MMP, Post Office Drawer 58, St. Louis, Missouri 63166.

LUBRICATION ORDER

LO5-4940-200-12

7 AUGUST 1964 *Supersedes LO 5-4940-200-12, 25 October 1961*

SHOP EQUIPMENT, CONTACT MAINTENANCE, TRUCK MOUNTED: SET N0. 3 (SOUTHWEST TRUCK BODY CO. MODEL SECM) AND (DAVEY MODEL CMU-5)

Reference. C9100 - IL

Intervals are based on normal hours of operation. Reduce to compensate for abnormal operations and severe conditions. During inactive periods sufficient lubrication must be performed for adequate preservation.

Clean fittings before lubricating.

Relubricate after washing or fording.

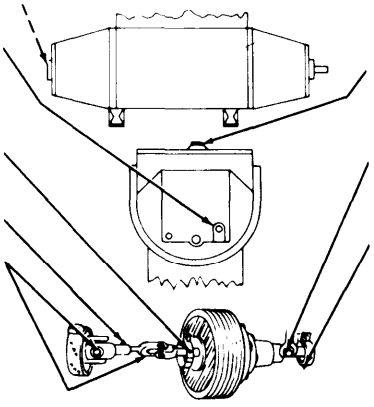
Clean parts with SOLVENT dry-cleaning, or with OIL fuel Diesel. Dry before lubricating.

Drain gearcase only when hot after operation: replenish and check level when cool,

Lubricate points indicated by dotted arrow shafts on both sides of the equipment.

FOLD FOLD

LUBRICANT	INTERVAL		INTERVAL	LUBRICANT	
Generator Welder Assembly Bearings (See Note 3)	GAA	500			
1 Engine Speed Governor Level Plug (Check level)		10			
2 Power Take-Off Front Pillow Block Bearing	GAA	50			
3 Stub Shaft Spline	GAA	50			
4 Stub Shaft Universal Joints (Remove plug, install fitting, lubricate and reinstall plug)	GAA	50			
			OE	Engine Speed Governor Fill Plug (See Key)	7
			50 GAA	Power Take-Off Clutch Collar (Sparingly)	8
			50 GAA	Power Take-Off Rear Pillow Block Bearing	9
5 Declutcher Assembly	GAA	50			
6 Propeller Shaft Spline	GAA	50	50 GAA	Propeller Shaft Universal Joint	10



MSC 4940-200-12 19(1)

Front

Figure 19 (Superseded). *Lubrication order.*

-KEY-

LUBRICANTS	CAPACITY	EXPECTED TEMPERATURES			INTERVALS
		Above-32°F	+40° to - 10°F	0°F to -65°F	
OE - OIL, Engine, Heavy Duly		OE 30 or 9250	OE 10 or 9110	OES	Intervals given are in hours of normal operation.
Engine Speed Governor	3/32 qt				
Oil Can Points					
OES- OIL, Engine, Sub-zero					
GAA- GREASE, Automotive and Artillery		ALL TEMPERATURES			

NOTES:

1. FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW -10°F. Remove lubricants prescribed in the key for temperatures above-10°F. Clean parts with SOLVENT, dry-cleaning. Relubricate with lubricants specified in the key for temperatures below -10°F.
2. OIL CAN POINTS. Every 50 hours lubricate the hinges, latches, linkage, and exposed adjusting threads with OE.
3. TO BE LUBRICATE BY 3RD ECHELON. Generator Welder Assembly Bearings.

Copy of this Lubrication Order will remain with the equipment at all times: Instructions contained herein are mandatory.

By Odor of the Secretary of the Army:

HAROLD K. JOHNSON,
General, United States Army,
Chief of Staff.

Official:
J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

FOLD

FOLD

MSC 4940-200-12/19 (2)

Back

Figure 19 (Superseded)—Continued.

Page 126. Paragraph. **Comments and Suggestions**
Rescinded

By Order of the Secretary of the Army:

HAROLD K. JOHNSON,
General, United States Army,
Chief of Staff.

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

Distribution:

To be distributed in accordance with DA Form 12-32, Section II (Unclas) requirements for Nike Ajax, Nike Hercules, Corporal, Redstone and Pershing—TM—Vehicles.

'i' U. S. GOVERNMENT PRINTING OFFICE: 1964—750577

TM 5-4940-200-12
C2

CHANGE
No. 2

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C. *10 October 1972*

Operator's and Organizational Maintenance Manual

SHOP EQUIPMENT, CONTACT MAINTENANCE: TRUCK MOUNTED; SET NO. 3; (SOUTHWEST MODEL SECM) FSN 4940-165-4026, SERIAL NUMBER S-3-628 THROUGH S-3-720 AND (DAVEY MODEL CMU-5) FSN 4940-165-4019, SERIAL NUMBER 33343-1 THROUGH 33343-623

TM 5-4940-200-12, 21 August 1963, is changed as follows:

Cover. The title is changed to read as shown above.

Page 1. The title is changed to read as shown above.

Page 2. Paragraph 1 is superseded as follows:

1. scope

This manual is for use in operating and maintaining the Southwest Model SECM and Davey Model CMU-5 Contact Maintenance Sets.

Page 2. Paragraph 2 is superseded as follows:

2. Maintenance Forms and Records

a. *Forms and Records*. Maintenance forms and records that are required are explained in TM 38-750.

b. Reporting of Equipment Publication Improvements. The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028. (Recommended Changes to Publications) and forwarded direct to: Commanding General, US Army Mobility Equipment Command, 4300 Good fellow Boulevard, St. Louis, MO 63120.

Page 2. Paragraph 3 is superseded as follows:

3. Description

The Southwest Shop Set Model SE CM, serial numbers S-3-628 through S-3-720 (fig. 1 and 2), and the Davey Shop Set Model CMU-5, serial numbers 33343-1 through 33343-623, each consists of 8 compartments. The set is mounted on a modified 4 by 4 truck chassis. The compartments provide storage space for all tools and equipment, both powered and nonpowered. The shop set is provided with a generator-welder that furnishes 110/220-volt, single-phase, alternating current for general power, and 200 amperes, 40-volt direct current for welding. The generator-welder can be driven either by the truck engine through the integral power takeoff

or by connecting to a 220-volt; *3* phase, external power source. The generator-welder can be used as a source of starting current, as an alternating current generator, as an arc welding machine, and as a battery charger.

Page 2. Paragraph 4. In line 4, the words, "logistic responsibility" are rescinded.

Page 3. Paragraphs 4 *b.* and 4 c, are rescinded.

Page 5. Table 1 is superseded as follows:

NOTE

Refer to SC 4940-97-CL-E05 for abbreviations used throughout table 1.

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
	SHOP EQUIPMENT, CONTACT MAINTENANCE, TRUCK MOUNTED: MIL-S-45855 (CE) w / amend 1		
1	ACETYLENE, TECHNICAL: 225 cu ft. cylinder	6830-264-6751	1
1	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTIONS: Inlet, 0.830-14, NGO, rh internal; outlet 0.885-14, NGO, lh internal.	8120-264-5530	1
1	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTIONS: Inlet, 0.880-14, NGO, lh external; outlet, 0.825-14, NGO, rh external,	8120-264-5531	1
1	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTIONS: Inlet, 0.628-20, NGO, rh internal; outlet, 0.885-14, NGO, lh internal,	8120-695-5867	1
1	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTIONS: Inlet, 0.628-20, NGO, rh internal; outlet, 0.895-18, NGO, rh external,	8120-695-6001	1
1	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTIONS: Inlet, 0.880-14, NGO, lh external; outlet, 0.625-20, NGO, rh external,	8120-695-6044	1
1	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTIONS: Inlet, 0.899-18, NGO, rh internal; outlet, 0.885-14, NGO, lh internal,	8120-695-5983	1
3	ADAPTER, CONNECTOR: 12.5 v, 15 amp	5936-545-3886	2
7	ADAPTER, SPINDLE, PORTABLE SANDER: 5/8 in,, 11 NC, rh	5130-293-2330	1
2	ADAPTER SET, ENGINE ELECTRICAL TEST: 24 v testing	4910-348-7600	1
	Consisting of:		
	ADAPTER : Generator testing	4910-092-9026	1
	ADAPTER : Regulator testing	4910-092-9025	1
	ADAPTER : Primary circuit	4910-356-7492	1
	ADAPTER : Spark plug	4910-356-7504	1
	ADAPTER : Ignition	4910-356-7508	1
	CASE: Adapter set	4910-348-7691	1
5	APRON, WELDER'S: Bib type, leather	8415-250-2531	1
1	ASBESTOS SHEET, COMPRESSED: 50 in. lg, 50 in. w, 1 /32 in, thk.	5330-641-1192	1
5	ASBESTOS SHEET, COMPRESSED: 50 in, lg, 10 in. w, 1 / l6 in. thk.	5330-233.5840	1
3	BLADE, HAND HACKSAW : High-speed steel	5110-243-0901	2
7	CABLE ASSEMBLY, POWER, ELECTRICAL: 2 conductors, 600 v, No, 16 AWG, 65 strands, No, 34 AWG.	6150-240-8024	1
7	CABLE ASSEMBLY, POWER, ELECTRICAL: 2 conductors, 600 v, No, 14 AWG, 41 strands, No, 30 AWG.	6150-866-2362	2
7	CABLE ASSEMBLY, POWER, ELECTRICAL: 3 conductors, 600 v, No, 14 AWG, 41 strands, No. 30 AWG.	6150-866-2358	1
5	CLAMP, C: Light service, 2 ¾ in. x 6 in.	5120-180-0909	2
5	CLAMP, C: Medium service, 2 ½ in. x 8 in.	5120-222-1613	2
6	CLAMP, ELECTRICAL: Copper, 500 amp, 0 to 00 cable accommodated.	5975-258-0126	1
Inside body,	CLAMP, ELECTRICAL: Bronze, No. 8 solid through No, 2 stranded cable to ¾ in. rod accommodated	5975-913-0883	1
3	CLAMP, HOSE: For oxyacetylene hose, ¾ in. id	4730-289-5911	6
3	CLAMP, HOSE: For water hose, adjustable, 3/8 in, to 1 in. id	4730-289-5909	6
3	CLAMP, HOSE: 1 in. to 3 in. id	4130-289-5910	6
3	CLAMP, PLIER: 2 5/8 in. w, 9 in.	5120-494-1895	1
1	CLEANER SET, WELDING AND CUTTING TIP: 9 cleaners, 0.076, 0,080, 0.085, 0.091,0.097, 0,105, 0.110, 0.115, and 0.123 in. dia.	3439-262-7556	1
1	CLEANER SET, WELDING AND CUTTING TIP: 12 tip cleaners, sizes A, B, C, D, E, F, G, H, J, K, Land M,	3439-383-3634	1
3	CLOTH, ABRASIVE : Aluminum oxide, grade 1 /0, 9 in. w, 11 in, lg	5350-102-5047	340

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	CLOTH, ABRASIVE: Aluminum oxide, grade 4 / 0, 9 in. w, 11 in. lg	5350-192-5050	340
4	COMPRESSOR, RECIPROCATING, POWER DRIVEN: Air; base mtd; elec motor ac, 115 v, single-phase, 60-cycle, 1/3 hp; 2.7 cfm free air delivered: 80 psi discharge pressure; air surge chamber.	4310-542-4111	1
3	CONNECTOR, PLUG, ELECTRICAL: 3 contacts, male, 125 v, 15 amp.	5935-578-0220	1
3	CORK SHEET: Granulated, 36 in. lg, 12 in, w, 1/32 in. thk	5330-291-1685	2
3	COUPLING, HOSE: Brass, 9/16 in., 18 NF internal thd; barbed male insert for ¼ to 5/16 in. oxygen hose.	4730-273-0668	2
3	COUPLING, HOSE: Brass, 9/16 in., 18 NF, lh terminal thd; barbed male insert for ¼ to 5/16 in, acetylene hose.	4730-273-0905	2
4	COUPLING ASSEMBLY, QUICK DISCONNECT: ¼ in., 18 NPT internal thd; male insert for ¼ in. air hose; w / check valve and locking device.	4730-203-9461	2
4	COUPLING ASSEMBLY, QUICK DISCONNECT: 3/8 in., 18 NPT internal thd; 3/8 in., 18 NPT external thd; for 3/8 in. air hose, w / check valve and locking device,	4730-203-9459	3
3	CRAYON, MARKING: White; 5 in, lg; ½ in, w; 3/16 in, thk	7510-223-6708	12
5	CROWBAR : 1 in. dia, 47 to 49 in. lg	5120-240-6040	1
3	CROWFOOT ATTACHMENT, SOCKET WRENCH: Nonratcheting; open end; 2 drive openings; 3/8 in. drive: 3/4 in. opening.	5120-184-8400	1
5	CUTTER, BOLT: Rigid head; angular cut; 9/16 in. dia, mild steel, 36 in, lg; FED GGG-C.740d w / amend 1, type II, class 1.	5110-224-7057	1
2	CUTTER AND FLARING TOOL KIT, TUBE, HAND: 1/8 to 1 in. od cutting range; w / case; imperial brass 125F or equal	5180-596-1038	1
	Consisting of:		
	BENDER, TUBE, HAND: ¼ in.	5120-234-8739	1
	BENDER, TUBE, HAND: 5/16 in.	5120-234-8740	1
	BENDER, TUBE, HAND: 3/8 in.	5120-234-8741	1
	BENDER, TUBE, HAND: ½ in.	5120-234-8743	1
	BENDER, TUBE, HAND: 5/8 in.	5120-234-8744	1
	CUTTER, TUBE: W /deburring tool	5120-223-1905	1
	FLARING TOOL, TUBE, HAND: Hinged dies	5120-251-2267	1
1	CUTTING ATTACHMENT, WELDING TORCH: Brass; hand operation, nickel-copper alloy head, 90 deg angle; cutting tips.	3433-542-0947	1
7	DRILL, ELECTRIC, PORTABLE: 3/8 in. straight drive; 1200 rpm no-load speed.	5130-293-0955	1
7	DRILL, ELECTRIC, PORTABLE: Heavy duty 115 v; 3/4 in.; Morse taper socket No. 3 ; straight drive; 500 rpm w / :	5130-203-6542	1
7	CHUCK DRILL: 3-jaw, 1/8 to 3/4 in capacity on a No. 3 Morse taper shank, ball bearing type w / arbor.	3460-187-1401	1
7	SOCKET, TAPER SHANK TOOL: No, 3 socket to No. 2 inside; reducing.	3460-227-7520	1
3	DRILL, TWIST: High speed steel; rh; Morse taper shank No. 1 ; 7/16 in. dia; 1 ¼ in. lg.	5133-189-9318	1
3	DRILL, TWIST: RH; Morse taper shank No. 2; 9/16 in. dia; 8 3/4 in. lg.	5133-189-9326	1
3	DRILL, TWIST: RH; Morse taper shank No, 2: 11/16 in. dia; 9¼ in. lg.	5133-228-1331	1
3	DRILL TWIST: RH; Morse taper shank No. 2; ¾ in. dia; 9¾ in. lg.	5133-228-1335	1
3	DRILL SET, TWIST: High speed steel, Rh; straight rd shank 1/16 through ½ in, by 64th; w/case.	5133-293-0983	1
1	DUPLEX HOSE, RUBBER: 9/ 16 in., 18 NF-3; ¼ in. id; 75 ft. lg.	4720-223-7381	1
5	ELECTRODE, WELDING: Steel; dc; 5/32 in, dia; 14 in. lg.	3439-262-2671	25
1	EXTINGUISHER, FIRE, DRY CHEMICAL, HAND TYPE: 2½ lb capacity; discharge by stored pressure, with 1 wall bracket,	4210-889-2221	1
3	EXTRACTOR SET, SCREW: Taper spiral flute; drill; carbon steel.	5120-595-8279	1
	Consisting of:		
	EXTRACTOR, SCREW : 0.164 to 0.190 in,	5120-240-5223	1
	EXTRACTOR, SCREW: .216 to ¼ in.	5120-240-5224	1
	EXTRACTOR, SCREW: ¼ to 5/16 in.	5120-240-5221	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	EXTRACTOR, SCREW: 5/16 to 7/16 in.	5120-240-5222	1
	EXTRACTOR, SCREW: ½ to 5/8 in.	5120-240-5219	1
3	FACE, HAMMER, INSERTED: Screw-in	5210-293-2997	4
3	FILE, THREAD RESTORER: 11, 12, 13, 14, 16, 18, 20, 24 thds per in.	5110-373-1691	1
2	FIRST AID KIT, GENERAL PURPOSE: 12 unit.	6545-922-1200	2
2	FITTING KIT, TUBE, PIPE, 281 items list of fittings:	4730-230-0398	1
	ADAPTER, STRAIGHT. PIPE TO TUBE: Brass; tube end male; u/w-1/8 in. od tube; 5/16-24 thd size; pipe end male, 1/8-27 thd size.	4730-273-8607	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass. tube end female, u/w 3/16 in. od tube, 3/8-24 thd size; pipe end male, 1/8-27 thd size.	4730-277-8764	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 3/16 in. od tube, 3/8-24 thd size; pipe end male, 1/8-27 thd size.	4730-289-0388	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end female, u/w 3/16 in. od tube, 3/8-24 thd size; pipe end male, 1/8 -27 thd size.	4730-278-8253	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/8-27 thd size.	4730-293-7884	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/4-18 thd size.	4730-278-4575	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/4-18 thd size.	4730-391-3771	2
	ADAPTER. STRAIGHT, PIPE TO TUBE: Copper alloy, tube end female, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/8-27 thd size.	4730-540-2612	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Copper alloy, tube end male, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/4-18 thd size.	4730-266-0532	3
	ADAPTER, STRAIGHT, PIPE TO TUBE: Copper alloy, tube end female, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/8-27 thd size.	4730-278-4357	4
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end female, u/w 5/16 in. od tube, 1/2-20 thd size; pipe end male, 1/8-27 thd size.	4730-277-8768	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end female, u/w 5/16 in. od tube, 1/2-20 thd size; pipe end male, 1/8-27 thd size.	4730-011-4919	2
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 5/16 in. od tube, 1/2-20 thd size : pipe end male, 1/8-27 thd size.	4730-266-0535	3
	ADAPTER, STRAIGHT, PIPE TO TUBE : Brass, tube end male, u/w 5/16 in. od tube, 1/2-24 thd size; pipe end male, 1/8-27 thd size.	4730-266-2417	3
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 5/16 in. od tube, 1/2-20 thd size; pipe end male, 1/4-18 thd size.	4730-266-0536	1
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 5/16 in. od tube, 1/2-24 thd size; pipe end male, 1/8-27 thd size.	4730-270-4613	3
	ADAPTER. STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 3/8 in. od tube, 5/8-18 thd size; pipe end male, 1/4-18 thd size.	4730-266-0538	3
	ADAPTER, STRAIGHT, PIPE TO TUBE: Brass, tube end male, u/w 3/8 in. od tube, 9/16-24 thd size; pipe end male, 1/4-18 thd size.	4730-273-8561	3
	BUSHING, PIPE: Brass, male end 1/4-18 thd size. female end 1/8-27 thd size.	4730-277-7051	3
	BUSHING, PIPE: Copper alloy, male end 3/8-18 thd size, female end 1/4-18 thd size.	4730-202-6491	3
	CABINET, SMALL PARTS: Storage	7125-286-4346	1
	COCK, DRAIN : Brass, 1/8 in. NPT	4820-555-9761	1
	COCK, DRAIN : Brass, 1/4 in. NPT/m, 250 psi.	4820-287-4268	1
	COCK, DRAIN : Brass, 1/4 in. NPTF, 150 psi	4820-849-1220	1
	COCK, DRAIN: Brass, 1/8 in. NPTF/m, 150 psi	4820-752-9040	1
	COCK, PLUG	4820-812-9029	1
	COCK, PLUG: 1/8 valve size	4820-274-3646	1
	COCK, PLUG	4820-286-7330	1
	COCK, PLUG : 5/16 in. valve size	4820-272-3360	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
	COCK, PLUG: 5/16 in. valve size	4820-430-5602	1
	COUPLING, PIPE: Brass, 1/8 NPT/f	4730-289-1086	3
	COUPLING, PIPE: Copper alloy, 1/4 in. NPT, 18 thd	4730-277-5736	3
	ELBOW, PIPE : Brass or bronze, 90 degree 1st end thd, female, 2 nd end thd. male; 1/8 NPT.	4730-277-5552	2
	ELBOW, PIPE: Copper, 45 degree 1st end thd, female, 2nd end thd, male, 1/4 NPT.	4730-277-5553	2
	ELBOW, PIPE TO TUBE: Brass, 90 degree .250 od tube, 7/16-24 thd to 1/4-18 male thd.	4730-254-6225	2
	ELBOW, PIPE TO TUBE: Brass, 1st end 1/4 in. od, 7/16, 20 thd to 1/8-27 thd. 90 degree.	4730-231-5632	3
	ELBOW, PIPE TO TUBE: Brass, 90 degree .188 in. od tube, 3/8-24 thd to 1/8-27 thd.	4730-277-8269	4
	ELBOW, PIPE TO TUBE : Brass, 90 degree, tube end male, u/w 1/8 in. od tube, 5/16-24 thd size; pipe end male, 1/8-27 thd size.	4730-263-4976	1
	ELBOW, PIPE TO TUBE: Brass, 90 degree, tube end male, u/w 3/16 in. od tube, 3/8-24 thd size: pipe end male, 1/8-27 thd size.	4730-278-0187	2
	ELBOW, PIPE TO TUBE : Copper, 90 degree, tube end female, u/w 3/16 in. od tube, 3/8-24 thd size; pipe end male, 1/8-27 thd size.	4730-278-3811	2
	ELBOW, PIPE TO TUBE : Brass, 90 degree, tube end female, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/8-27 thd size.	4730-277-8273	4
	ELBOW, PIPE TO TUBE: Brass, 90 degree, tube end female, u/w 1/4 in. od tube, 7/16-24 thd size ; pipe end male, 1/8-27 thd size.	4730-277-8837	2
	ELBOW, PIPE TO TUBE: Brass, 90 degree, tube end male, u/w 1/4 in. od tube. 7/16-24 thd size; pipe end male, 1/4-18 thd size.	4730-278-3825	2
	ELBOW, PIPE TO TUBE: Brass, 90 degree,.tube end male, u/w 1/4 in. od tube, 7/16-24 thd size; pipe end male, 1/8-27 thd size.	4730-287-1599	2
	ELBOW, PIPE TO TUBE : Brass, 90 degree, tube end male, u/w 5/16 in. od tube, 1/2-20 thd size; pipe end -male, 1/8-27 thd size.	4730-254-6226	1
	ELBOW, PIPE TO TUBE: Copper, 90 degree, tube end female, u/w 5/16 in. od tube, 1/2-20 thd size; pipe end male, 1/8-27 thd size.	4730-640-1051	2
	ELBOW, PIPE TO TUBE : Brass, 90 degree, tube end male, u/w 5/16 in. od tube. 1/2-24 thd size; pipe end male, 1/8-27 thd size.	4730-278-4740	2
	ELBOW, PIPE TO TUBE: Brass, 90 degree, tube end male, u/w 5/16 in. od tube. 1/2-24 thd size ; pipe end male, 1/4-18 thd size.	4730-278-4741	1
	ELBOW , PIPE TO TUBE : Brass, 90 degree, tube end male, u/w 5/16 in. od tube, 1/2-20 thd size, pipe end male, 1/8-27 thd size.	4730-288-9440	2
	ELBOW, PIPE TO TUBE : Brass, 90 degree, tube end male, u/w 5/16 in. od tube, 1/2-20 thd size; pipe end male, 1/8-27 thd size.	4730-430-4354	2
	ELBOW, PIPE TO TUBE: Brass, 90 degree, tube end male, u/w 3/8 in. od tube, 9/16-24 thd size; pipe end male, 1/4-18 thd size.	4730-278-3826	2
	ELBOW, PIPE TO TUBE : Brass, 90 degree, tube end male, u/w 3/8 in. od tube, 5/8-18 thd size; pipe end male, 1/4-18 thd size.	4730-639-9676	3
	INVERTED NUT, TUBE COUPLING: Brass, u/w 1/8 in. od tube, 5/16-24 thd size.	4730-278-5490	2
	INVERTED NUT, TUBE COUPLING: Brass, u/w 3/16 in. od tube, 3/8-24 thd size.	4730-278-5551	2
	INVERTED NUT, TUBE COUPLING: Brass, u/w 3/16 in. od tube, 3/8-24 thd size.	4730-288-8249	5
	INVERTED NUT, TUBE COUPLING: Brass, u/w 1/4 in. od tube, 7/16-24 thd size.	4730-142-1593	3
	INVERTED NUT, TUBE COUPLING: Brass, u/w 1/4 in. od tube, 7/16-24 thd size.	4730-288-8248	5
	lNVERTED NUT, TUBE COUPLING: Brass, u/w 1/4 in. od tube, 1/2-20 thd size.	4730-288-8567	3
	INVERTED NUT, TUBE: COUPLING: Brass, u/w 5/16 in. od tube, 1/2-20 thd size.	4730-288-8011	3

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
2	INVERTED NUT, TUBE COUPLING: Brass, u/w 5/16 in. od tube, 1/2-20 thd size.	4730-288-8250	5
	NIPPLE, PIPE: Brain 1/8-27x3/4 long	4730-230-1996	3
	NIPPLE, PIPE: Brass, 1/4-18x7/8 long	4730-222-1837	2
	NIPPLE, PIPE TO TUBE: Brass, u/w 3/16 in. od tube, 3/8-24 thd to 1/8-27 thd.	4730-278-3206	1
	NIPPLE, PIPE TO TUBE: Brass, u/w 1/4 in. od tube, 7/16-24 thd to 1/8-27 thd.	4730-278-8717	2
	NIPPLE, PIPE TO TUBE: Brass, u/w 5/16 in. od tube, 1/2-24 thd to 1/8-27 thd.	4730-278-3225	1
	NIPPLE, PIPE TO TUBE: Brass, u/w 3/8 in. od tube, 9/16-24 thd to 1/4-18 thd.	4730-278-3222	3
	NIPPLE, TUBE: Brass, u/w 1/4 in. od tube, 7/16-24 thd both ends.	4730-057-3833	2
	NIPPLE, TUBE: Brass, u/w 5/16 in. od tube, 1/2-24 thd both ends.	4730-265-6910	1
	NIPPLE, TUBE: Brass, u/w 3/8 in. od tube, 5/8-24 thd both ends.	4730-265-6911	1
	NUT, TUBE COUPLING: Brass, u/w 1/8 in. od tube, 5/16-24 thd	4730-067-9801	5
	NUT, TUBE COUPLING: Brass, u/w 3/16 in. od tube, 3/8-24 thd	4730-287-1536	5
	NUT, TUBE COUPLING: Brass, u/w 1/4 in. od tube, 7/16-24 thd	4730-011-4627	5
	NUT, TUBE COUPLING: Brass, u / w 1/4 in. od tube, 7/16-24 thd	4730-011-8537	5
	NUT, TUBE COUPLING: Brass, u/w 5/16 in. od tube, 1/2-24 thd	4730-278-8829	5
	NUT, TUBE COUPLING: Brass, u/w 5/16 in. od tube, 1/2-24 thd	4730-202-8831	3
	NUT, TUBE COUPLING: Brass, u/w 3/8 in. od tube, 9/16-24 thd	4730-287-1537	5
	NUT, TUBE COUPLING: Brass, u/w 3/8 in. od tube, 5/8-18 thd	4730-011-8539	5
	PLUG, PIPE: Brass or bronze, 1/8-27 thd size	4730-011-3175	3
	PLUG, PIPE: Brass or bronze, 1/4-18 thd size	4730-011-2578	2
	REDUCER, PIPE: Brass, 1/4 in. 18 NPT to 1/8 in. 27 NPT	4730-288-8260	2
	SLEEVE, COMPRESSION, TUBE-HOSE FITTING: For 1/8 in. od tube	4730-200-0272	15
	SLEEVE, COMPRESSION, TUBE-HOSE FITTING: For 5/16 in. od tube	4730-278-8764	15
	SLEEVE, COMPRESSION, TUBE-HOSE FITTING: .250 od tube	4730-278-8763	15
	SLEEVE, COMPRESSION, TUBE-HOSE FITTING : Brass, ,375 od tube	4730-287-4858	10
	SLEEVE, COMPRESSION, TUBE-HOSE FITTING: Brass, .1875 od tube	4730-278-8762	20
	TEE, PIPE TO TUBE: Copper alloy, 1st end, 1/8 NPTF/m, 2nd end, 1/8 UNS/m, 3rd end, .250, 7/16 NPT/f.	4730-274-9258	2
	TEE, PIPE TO TUBE: Copper alloy, 1st end, 1/8 NPTF/f, 2nd end, 1/8 NPTF/m, 3rd end, .125 5/16 UNF/m.	4730-288-9482	1
	TEE, PIPE TO TUBE: Copper alloy, 1st end, 1/8 NPTF/f, 2nd end, 1/8 NPTF/m, 3rd end, 3/8 UNF/m.	4730-288-9483	1
	TEE, TUBE: Copper alloy, used w/3/16 in. od tube, 3/8 in. UNF/m.	4730-287-1689	2
	TEE, TUBE: Aluminum, used w/l/4in. od tube, 7/16 NC/m.	4730-424-5864	2
1	FLINT TIP, FRICTION IGNITER: Sleeve, thd, 5-40-NC.	5120-254-9956	1
7	FLOODLIGHT, ELECTRIC: 120 v, 500 w.; 1 mogul screw base	6230-815-5022	2
3	FLUX, SOLDERING: Paste, 1/4 lb. can	3439-255-4566	1
1	FLUX, WELDING: Powder, 1 lb.	3439-255-4577	1
4	GAGE, TIRE PRESSURE, SELFCONTAINED: 10 to 50 lb.	4910-541-9740	1
4	GAGE, TIRE PRESSURE, SELFCONTAINED: 10 to 160 lb.	4910-244-4556	1
3	GASKET FORMING COMPOUND: Paste; nonhardening; 11 oz tube	5330-264-8455	1
5	GLOVES, LEATHER : Work; man's	8415-274-2433	2
3	GOGGLES, INDUSTRIAL: Single aperture frame, ventilated	4240-203-3810	2
3	GOGGLES, INDUSTRIAL: Welder's, ventilated eye cups; adjustable nose bridge; hardened glass filter lens, CO-bs shade 6; hardened glass cover lens,	4240-203-3804	2
5	GREASE GUN, HAND: Lever operated, 14 oz; 6,000 psi; 7 in. rigid	4930-253-2478	1
4	GUN, AIR BLOW : Button operated, removable tip, female thread coupling 1/4-18 NPT.	4940-274-3024	1
5	GUN, FLUID, DIRECT DELIVERY: 12 oz.	4930-277-3842	1
5	HAMMER, HAND: Blacksmith's, sledge; double-face; 12 lb.	5120-293-0887	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	HAMMER, HAND : Machinist's, ball-peen, 3 lb.	5120-187-1030	1
5	HAMMER-BRUSH, WELDER'S: Chisel head	5120-240-3090	1
3	HATCHET, HALF: 31/4 in. w/cutting edge; 14 in. handle; 1 lb. 2 oz to 1 lb. 10 oz head wt.	5110-228-3161	1
5	HELMET, WELDER'S: Plastic; one-piece molded; hinged cover	4240-540-0621	1
5	HOIST, CHAIN : 3-ton; 4 ft. 9 in. lift; hand driven; integral hook suspension; 2 load chains: lever and ratchet,	3950-292-9879	1
6	HOLDER. ELECTRODE, WELDING: Insulated; clamp; 1/16 through 1/4 in. dia metallic filler electrode; 300 amp.	3439-238-1638	1
4	HOSE, RUBBER: Pneumatic, braided, 5/16 in. id	4720-278-4887	25
1	IGNITER. FRICTION : Wire frame; rd file; single flint	5120-190-5540	2
4	INFLATOR GAGE, PNEUMATIC TIRE: inclosed cartridge indicator, 10 to 120 lb.	4910-204-2644	1
3	INSULATION TAPE, ELECTRICAL: Cotton; 3/4 in. w, 0.013 in. thk rubber coating; rubber impregnated,	5970-644-3167	2
3	INSULATION TAPE, ELECTRICAL: Polyvinylchloride, 3/4 in. w; 0.007 in. thk; 27 yd, roll.	5970-284-8410	4
8	JACK. HYDRAULIC, HAND: Single pump; screw extension; 12-ton	5120-224-7330	1
2	KIT, REPAIR, TUBELESS TIRE	4910-922-6921	1
8	KIT. TIRE REMOVER, HYDRAULIC: For earth moving equipment tires. Consisting of:	4910-773-9341	1/2 set
	FRAME ASSEMBLY TOOL: Tire removing, hydraulic	4910-676-2208	1
	HEAD ASSEMBLY TOOL: Tire removing, hydraulic	4910-676-2210	1
	HOSE, TIRE REMOVING TOOL: Hydraulic	4910-676-2213	1
	PUMP ASSEMBLY TOOL: Tire removing, hydraulic	4910-676-2209	1
	RAM ASSEMBLY TOOL: Tire removing, hydraulic	4910-676-2211	1
	WEDGE TOOL: Tire removing, hydraulic	4910-676-2212	6
2	LAMP, INCANDESCENT: 115 v, 50 w., medium screw base	6240-155-8634	4
2	LAMP, INCANDESCENT: 120 v, 300 w., mogul screw base	6240-553-1881	4
3	LEAD, ELECTRICAL: Stranded copper conductor, No. 0 AWG, rubber insulated.	6150-665-9799	2
6	LENS, GOGGLES, INDUSTRIAL: Glass; cover; clear	4240-262-7092	4
3	LENS, GOGGLES, INDUSTRIAL: Filter, 50-mm. dia; CO-bs shade 6	4240-262-7099	1
3	LENS, GOGGLES. INDUSTRIAL: Plastic; clear; special shape	4240-262-7106	2
3	LENS, HELMET, WELDER'S: Cover lens, glass	4240-203-7764	2
3	LENS. HELMET, WELDER'S: Filter lens, CO-bs shade 10 glass	4240-276-8940	6
7	LIGHT. EXTENSION :3 conductor, type SO, 16 AWG cable, 35 ft. lg.	6230-240-3759	2
2	LIGHT, IGNITION TIMING : 3 lead, 6-12- or 24-v battery required; xenon flash tube element.	4910-500-2135	1
2	MACHINE SCREW, NUT AND WASHER ASSORTMENT	5305-334-5175	1
5	MOISTURE STABILIZER, WELDING ELECTRODE: Ac-Dc, 1.7 amp, 117 v. 220 w.	3439-400-0090	1
2	MULTIMETER: 0 to 5,000 v dc in 7 steps, 0 to 1,000 v ac in 6 steps, 0 to 10 amp dc in 8 steps. 0 ohms to 10 megohms in 5 steps, 50 µ a sensitivity	6625-553-0142	1
3	NIPPLE, HOSE: Brass: hex center; 9/16 in., 18NF 3 external thd	4730-224-7324	1
3	NIPPLE, HOSE: Brass; hex center; 9/16 in., 18 NF 3 external thd.	4730-224-7323	1
1	OXYGEN, TECHNICAL: 220 to 240 cu. ft. cylinder	6830-292-0129	1
3	PACKING MATERIAL: Metal foil; twisted; 1/8 in. od; 1 lb. roll	5330-237-0510	1
5	PAIL, METAL : Steel, galvanized, 3½ gal.	7240-160-0455	1
3	PAPER, ABRASIVE: Flint, grade ½ to 1; 9 in. w, 10 in. lg	5350-264-3487	340
3	PAPER, ABRASIVE: Flint, grade 2/0 or 1/0; 9 in. w, 10 in. lg	5350-264-3486	340
5	PAPER, GASKET: Plant fiber; wog resistant; 36 in. w, 1/32 in. thk	5330-467-3615	2
5	PAPER, GASKET: Plant fiber. wog resistant; 36 in. w, 1/16 in. thk	5330-270-8470	2
8	PATCH, INNER TUBE REPAIR: Uncured rubber; 3¼ in. x 1 3/16 in.	2640-255-9349	25
8	PATCH, INNER TUBE REPAIR: Uncured rubber, rd; 2 3/8 in. dia	2640-052-0828	25
3	PLIERS: Lineman's side sutter, 8 in.	5120-239-8251	1
3	PULLER. MECHANICAL: Gear and bearing; 0 to 8 in.	5120-516-3120	1
3	PUNCH. ALINING: 5/32 in. dia point; 9/16 in. dia stock; 14 in.	5120-595-9485	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
1	REGULATOR, PRESSURE, COMPRESSED GAS: Acetylene; double stage, first-stage automatic, second-stage manual; 2½ in. dial, 0 to 400 psi cylinder gage: 2 ½ in. dial, 0 to 30 psi delivery gage, 15 psi delivery pressure; 0.880-14, NGO, 1 h inlet connection: 9/16-18 NF, 1 h outlet connection.	6685-281-8190	1
1	REGULATOR, PRESSURE, COMPRESSED GAS: Oxygen; double stage, first-stage automatic, second-stage manual; 2½ in. dial 0 to 3,000 psi cylinder gage; 2 ½ in. dial, 0 to 400 psi delivery gage; 110 psi delivery pressure; 0.908-14, NS, rh inlet connections; 9/16-18, NF, rh outlet connection.	6685-641-3519	1
Inside body	ROD, GROUND: Copperweld, 3/4 in. dia, 8 ft. lg	5975-234-6855	1
1	ROD, WELDING: Brass, gas welding, 1/8 in. dia, 36 in. lg	3439-244-4540	15
1	ROD, WELDING: Brass, gas welding. 3/16 in. dia, 36 in. lg	3439-244-4541	15
1	ROD, WELDING : Cast iron; gas welding; 1/8 in. dia, 24 in. lg	3439-247-2981	5
1	ROD, WELDING : Steel; copper coated; oxyacetylene welding; 1/8 in. dia, 36 in. lg	3439-246-0565	10
1	ROD, WELDING: Steel, plain or copper mated; oxyacetylene welding; 3 / 32 in. dia, 36 in. lg.	3439-246-0565	10
1	ROD, WELDING : Steel plain or copper coated; oxyacetylene welding; 3 / 16 in. dia, 36 in. lg.	3439-246-0568	10
7	SANDER, DISK, ELECTRIC, PORTABLE : Heavy duty; 115 v; 7 in. dia pad, w/3 disks:	5130-857-8526	1
3	DISK, ABRASIVE: Aluminum oxide; grit No. 24	5345-558-5928	1
3	DISK, ABRASIVE: Aluminum oxide; grit No. 36	5345-196-1692	1
3	DISK, ABRASIVE: Aluminum oxide; Grade 1/2	5345-196-1696	1
5	SLEEVE. WELDER'S: Leather, 18 in. Ig	8415-164-0513	1
3	SOCKET, TAPER SHANK TOOL: Steel; reducing type; No. 1 Morse taper inside No. 3 Morse taper outside; 3 15/16 in. lg.	3460-232-8117	1
3	SOLDER, LEAD ALLOY: Wire; acid-cored; 1/8 in. dia; 1 lb. spool	3439-184-8960	1
3	SOLDER, LEAD ALLOY: Wire; rosin-cored ; 1/8 in. dia; 1 lb. spool	3439-243-1882	1
3	SOLDERING IRON, ELECTRIC: 2 11/16 lb.; wedge shape tip; setscrew fastening; 7/8 in. dia; ac, dc, 115 v.	3439-222-1632	1
8	STRIPPER, HOSE COVER : 8 mandrels for 43/64 through 2¾ in. od hose.	5110-624-3214	1
2	TACHOMETER, MECHANICAL. HAND HELD: Centrifugal; 50 to 50,000 rpm.	6680-171-4584	1
2	TAPERED PIN ASSORTMENT: Plain, steel, No. 5/0x¾ through No. 6x2 in. lg.	5315-271-4128	1
5	TESTER, ANTIFREEZE SOLUTIONS: 60- to 180-deg F. thermometer; integral conversion table and instructional chart.	6630-247-2968	1
5	TESTER, BATTERY ELECTRLYTE SOLUTION: Integral correction chart; minus 65- to plus 165-deg F. thermometer; 1.150 to 1.350 sp gr range.	6630-171-5126	1
2	TESTER, CYLINDER, COMPRESSION: Direct, for gasoline engine	4910-250-2423	1
2	TESTER, INTEGRAL COMBUSTION ENGINE: Fuel pressure and vacuum ; 0- to 8-lb. pressure gage; 0- to 27-in. vacuum gage.	4910-255-8673	1
2	TEST SET, GENERATOR AND VOLTAGE REGULATOR, AUTOMOTIVE" : For measurement of voltage and current in 6-, 12- and 24-v low tension circuits; ammeter 0-to 120-amp dc, voltmeter 0- to 100-v dc.	4910-270-3780	1
8	TIRE REMOVING TOOL: Heavy duty; set of 2; 18 in.	5120-293-0871	2 sets
3	TOOL KIT, MASTER MECHANIC'S:	5180-699-5273	1
	BAR, PRY: 15 to 16 in.	5120-224-1389	1
	BRUSH, WIRE, SCRATCH : 1 1/4 in. clear of block	7920-291-5815	1
	CHISEL, CAP, HAND: 1/4 in. w cut	5110-554-7345	1
	CHISEL, COLD, HAND: 5 3/4 in. lg, 1/2 in. w cut	5110-186-7107	1
	CHISEL, COLD, HAND: 7 in. Ig, 3/4 in. w cut	5110-236-3272	1
	CHISEL, COLD, HAND: 8 in. Ig, 1 in. w cut	5110-234-1944	1
	CHISEL, DIAMOND POINT. HAND: 6 1/2 in. lg, 3/8 in. w cut	5110-223-1079	1
	CHISEL, RIVET BUSTER, HAND: 5/8 in. w cut	5110-293-0556	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	FILE, HAND: American; flat; 8 in.	5110-234-6534	1
	FILE, HAND: American, half rd; 8 in.	5110-241-9151	1
	FILE, HAND: American; rd, 6 in.; 15/64 in.	5110-234-6550	1
	FILE. HAND: American; rd, 8 in.; 5/16 in.	5110-234-6553	1
	FILE, HAND: American; rd. 10 in.; 3/8 in.	5110 -234-655.5	1
	FILE, HAND: Swiss; contact point, 5 1/4 in.	5110-595-8295	1
	FRAME, HAN I) HACKSAW: Adjustable, 8-10- 12-in. blade	5110-289-9657	1
	GAGE, GAP SETTING: 8 wires	5210-278-1248	1
	GAGE, THICKNESS: 0.001.5- to 0.025 -in., 26 blades	5210-221-1999	1
	HAMMER, HAND: Inserted plastic face; 2 lb.	5120-357-6076	1
	HAMMER, HAND: Machinist's; ball-peen; 2 oz	5120-250-3911	1
	HAMMER, HAND: Machinist's; ball-peen; 2 lb.	5120-224-4047	1
	HANDLE. FILE, WOOD: 1¼ in. dia. 4½ in. lg	5110-263-0349	1
	HANDLE, SOCKET, WRENCH: Sliding-T; ½ in. drive, 11 in. lg	5120-241-3142	1
	KEY SET, SOCKET HEAD SCREW : L type handles; w /case	5120-595-9245	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: .050 in. size	5120-198-5401	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 1/16 in. size	5120-198-5398	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 5/64 in. size	5120-224-2504	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 3/32 in. size	5120-242-7410	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 1/8 in. size	5120-240-5292	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 5/32 in. size	5120-198-5392	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 3/16 in. size	5120-240-5300	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 7/32 in. size	5120-242-7411	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 1/4 in. size	5120-224-4659	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 5/16 in. size	5120-240-5274	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 3/8 in. size	5120-198-5390	1
	KEY, SOCK ET HE AD SCREW, HEXAGONAL: 1/2 in. size	5120-198-5391	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 9/16 in. size	5120-240-5268	1
	KEY, SOCKET HEAD SCREW, HEXAGONAL: 5/8 in. size	5120-224-2510	1
	KNIFE, PUTTY: 3½ in. lg, 1¼ in. w blade	5120-221-1536	1
	PLIERS: Battery terminal: 7 in. size	5120-248-9407	1
	PLIERS, DIAGONAL CUTTING : 7½ in. size	5110-222-2708	1
	PLIERS, RETAINING RING: Snapring	5120-595-9551	1
	PLIERS, SLIP-JOINT: Angle, nose; 5 in. size	5120-278-0350	1
	PLIERS, SLIP-JOINT: Angle nose, 10 in. size	5120-278-0352	1
	PLIERS, SLIP-JOINT: Straight nose; 8 in. size	5120-223-7397	1
	PUNCH, CENTER, SOLID: 3/8 in. dia, 4 in. lg	5120-293-3509	1
	PUNCH, DRIVE PIN : 1/8 in. dia, 3/4 in. lg, point	5120-242-5966	1
	PUNCH, DRIVE PIN: 5/32 in. dia, 13/16 in. lg, point	5120-240-6104	1
	PUNCH, DRIVE PIN: 3/16 in. dia, 1 in. lg, point	5120-240-6106	1
	PUNCH. DRIVE PIN : 1/4 in. dia, 1 in. lg, point	5120-240-6083	1
	PUNCH, DRIVE PIN: 5/ 16 in. dia, 1 in. lg, point	5120-293-0793	1
	RULE, STEEL, MACHINIST'S: 6 in. lg	5210-234-5223	1
	SCRAPER, CARBON, FLEXIBLE: 9 in. lg overall w/1 in. w blade	5110-251-6481	1
	SCREWDRIVER, FLAT TIP: Plastic handle, 1 in. lg blade, 7/32 in. w tip.	5120-222-8866	1
	SCREWDRIVER, FLAT TIP: Plastic handle, 2 in. lg blade, 1/8 in. nom tip w.	5120-236-2140	1
	SCREWDRIVER, FLAT TIP: Plastic handle, 4 in. lg blade, 1/4 in. w tip.	5120-278-1282	1
	SCREWDRIVER, FLAT TIP: Plastic handle, 6 in. lg, 5/16 in. w tip.	5120-278-1283	1
	SCREW DRIVER, FLAT TIP : Plastic handle, 12 in. lg blade, 3/8 in. w tip.	5120-227-7362	1
	SCREWDRIVER. OFFSET: 1/4 in. w tip, 4½ in. lg	5120-287-2130	1
	SCREWDRIVER SET, CROSS TIP: Plastic handle; 4 pieces; sizes 1 through 4:	5120-596-0828	1
	SCREWDRIVER, CROSS TIP: No. 1 size, 3 in. blade lg	5120-240-8716	1
	SCREWDRIVER, CROSS TIP: No. 3 size, 6 in. blade lg	5120-234-8912	1
	SCREWDRIVER, CROSS TIP: No. 2 size, 4 in. blade lg	5120-234-8913	1
	SCREWDRIVER, CROSSTIP: No. 4 size, 8 in. blade lg	5120-223-7375	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	SOCKET, SOCKET WRENCH: Screwdriver pilot, 3/8 in.	5120-396-1976	1
	SOCKET, SOCKET WRENCH: 12 point, deep, 1/2 sq drive, 13/16 in.	5120-243-7345	1
	SOCKET, SOCKET WRENCH :12 point, deep, 1/2 sq drive, 7/8 in.	5120-243-7342	1
	SOCKET, SOCKET WRENCH: 12 point, deep, 1/2 sq drive, 15/16 in.	5120-243-7343	1
	SOCKET, SOCKET WRENCH: 12 point, deep, 1/2 sq drive, 1 in.	5120-243-7340	1
	SOCKET, SOCKET WRENCH :12 point, 1/2 sq drive, 1 1/8 in.	5120-243-7339	1
	STUD REMOVER AND SETTER: 1/2 in. sq female drive, 3/4 to 3/4 in. stud thd range,	5120-288-6578	1
	TAPE, MEASURING: Steel, 1/2 in. w, metric	5210-245-0301	1
	TOOL BOX, PORTABLE Steel, w/6 drawers: w/1 removable tray; panel front w/locking device, including integral key type, 26 in. 1, 14 in. w, 12 in, h.	5140-388-3416	1
	WRENCH, BOX: Double offset, double head, 12 point, half moon, 9/16 and 5/8 in.	5120-222-1596	1
	WRENCH, BOX: Double offset, double head, 12 point, short, 5/8 and 11/16 in,	5120-277-1443	1
	WRENCH, BOX: Double offset, double head, 12 point, 4 in. lg, 3/8 and 7/16 in.	5120.224-3153	1
	WRENCH, BOX: Double offset, double head, 12 point, 4 3/4 in. lg, 1/2 and 9/16 in,	5120-224-3154	1
	WRENCH, BOX: Double, 12 point 9 in. lg, 19/32 and 11/16 in.	5120-224-3149	1
	WRENCH, BOX: Double offset, double head, 12 point, 9 1/4 in. min. o/a lg. 5/8 and 11/16 in.	5120-224-3141	1
	WRENCH, OPEN END, ADJUSTABLE: Single head, 0 to 1 1/8 in., 10 in. lg.	5120-449-8083	
	WRENCH, OPEN END, FIXED: Double head type, 15 deg, tappet, 7 in. lg, 7/16 in. and 1/2 in.	5120-184-8620	2
	WRENCH, OPEN END, FIXED: Double head type, 15 deg, tappet, 7 3/4 in. lg. 1/2 and 9/16 in.	5120-277-4833	2
	WRENCH, OPEN END. FIXED: Double head type. 15 deg, tappet, 8 in. lg. 5/8 and 11/16 in.	5120-277-2327	2
	WRENCH, OPEN END, FIXED: Double head type, 15 deg, tappet, 8 in. lg, 3/4 and 7/8 in.	5120-473-6538	2
	WRENCH, OPEN END, FIXED : Double head type, 15 deg, 4 1/8 in. lg, 3/8 and 7/16 in.	5120-277-2342	1
	WRENCH, OPEN END, FIXED: Double head type, 15 deg, 5 3/8 in. lg, 1/2 and 9/16 in.	5120-187-7124	1
	WRENCH, OPEN END, FIXED: Double head type, 15 deg, 6 in. lg, 9/16 and 5/8 in.	5120-187-7126	1
	WRENCH. OPEN END, FIXED: Double head type, 15 deg, 7 in. lg, 19/32 and 25/32 in.	5120-277-1229	1
	WRENCH, OPEN END, FIXED: Double head type, 15 deg, 7½ in. lg, 11/16 and 13/16 in.	5120-277-8300	1
	WRENCH, OPEN END, FIXED : Double head type, 15 deg, 8 in. lg, 3/4 and 7/8 in.	5120-240-5609	1
	WRENCH, OPEN END, FIXED: Double head type, 15 deg, 10 in. lg, 15/16 and 1 l/16 in.	5120-277-2693	1
	WRENCH, OPEN END, FIXED: 15 deg, 10 3/4 in. lg, 1 and 1 1/8 in.	5120-187-7133	1
	WRENCH, OPEN EN D, FIXED: 15 and 75 or 80 deg, 3 in. lg, 13/64 in.	5120-184-8442	1
	WRENCH, OPEN END, FIXED: 15-and 75-or 80-deg, 3 in. lg, 7/32 in.	5120-184-8443	1
	WRENCH, OPEN END, FIXED: 15-and 75-or 80-deg, 3 in. lg, 15/64 in.	5120-184-8444	1
	WRENCH, OPEN END, FIXED: 15- and 75-or 80-deg, 3 in. lg, 1/4 in.	5120-184-8445	1
	WRENCH, OPEN EN D, FIXED: 15-and 75-or 80 deg, 3½ in. lg, 9/32 in.	5120-184-8446	1
	WRENCH, OPEN END, FIXED: 15-and 75-or 80-deg, 3½ in. lg, 5/16 in.	5120-184-8447	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	WRENCH, OPEN END, FIXED: 15- and 75- or 80-deg, 3 3/4 in. lg. 11/32 in. lg.	5120-184-8448	1
	WRENCH, OPEN END, FIXED: 15- and 75-or 80-deg, 3 3/4 in. lg, 3/8 in.	5120-293-0191	1
	WRENCH, OPEN END, FIXED: 15. and 75-or 80-deg, 4 in. lg, 7/16 in.	5120-184-8541	1
	WRENCH, PIPE: Adjustable jaw, 1/4 to 1 in., 10 in,	5120-277-1485	1
	WRENCH, PLIER: Curved jaw stylew/wire cutter; 8 1/2 in,	5120-494-1911	1
	WRENCH, PLIER: Straight jaw style, 10 in.	5120-423-6727	1
	WRENCH SET, BOX: Double offset, double head, 12 point, 45 degree offset, 3/8 to 1 in. openings.	5120-322-6086	1
	Consisting of:		
	WRENCH, BOX : One end 3/8 in. size, other end 7/16 in. size	5120-224-3135	1
	WRENCH, BOX : One end 1/2 in, size, other end 9/16 in. size	5120-224-3136	1
	WRENCH, BOX: One end 9/16 in. size, other end 5/8 in. size	5120-224-3140	1
	WRENCH, BOX: One end 3/4 in. size, other end 7/8 in, size	5120-224-3142	1
	WRENCH, BOX : One end 25/ 32 in. size, other end 13/16 in. size.	5120-224-3150	1
	WRENCH, BOX : One end 15 / 16 in. size, other end 1 in. size	5120-224-3143	1
	WRENCH SET, BOX : Ignition, midget, double offset, double end, 4 pieces in roll.	5120-554-7289	1
	Consisting of:		
	WRENCH, BOX : One end 3/16 in, size, other end 13/64 in. size	5120-264-5215	1
	WRENCH, BOX : One end 7/32 in. size, other end 15/64 in. size	5120-264-5216	1
	WRENCH, BOX : One end 1/4 in. size, other end 9/ 32 in. size	5120-293-0122	1
	WRENCH, BOX: One end 5/ 16 in. size, other end 11/32 in. size	5120-288-7684	1
	WRENCH SET, SOCKET: 1/4 in. sq drive, 6 and 8 point, w/handles, 3/16 to 7/16 in. 6 point, 1/4 to 3/8 in, 8 point openings, 16 pieces in box .	5120-203-9573	1
	Consisting of:		
	BAR: Extension, 2 in. lg	5120-227-8105	1
	BAR : Extension 6 in. lg	5120-243-7325	1
	BOX, SOCKET WRENCH SET: Steel	5140-357-5468	1
	HANDLE, HINGED: 5 7/16 in. lg	5120-221-7960	1
	HANDLE, RATCHET: 4 1/2 in. lg	5120-221-7957	1
	UNIVERSAL JOINT: 1 5/16 in.	5120-243-1686	1
	WRENCH: 3/16 in., 6 point	5120-236-2262	1
	WRENCH: 7/32 in., 6 point	5120-236-2263	1
	WRENCH: 1/4 in., 6 point	5120-236-2264	1
	WRENCH: 9/32 in., 6 point	5120-242-3345	1
	WRENCH: 5/16 in., 6 point	5120-232-5703	1
	WRENCH: 11/32 in., 6 point	5120-232-5704	1
	WRENCH: 3/8 in., 6 point	5120-241-3186	1
	WRENCH: 7/16 in., 6 point	5120-239-0016	1
	WRENCH: 1/4 in., 8 point	5120-189-7906	1
	WRENCH : 5/16 in., 8 point	5120-189-7907	1
	WRENCH : 3/8 in., 8 point	5120-189-7908	1
	WRENCH SET, SOCKET: 3/8 in. sq drive, 12 point, 5/ 16 to 7/8 in. openings, 29 pieces in case,	5120-322-6231	1
	Consisting of:		
	BIT, SCREWDRIVER: 1/2 in, tip w	5120-293-1470	1
	BIT, SCREWDRIVER: 11/16 in. w	5120-243-7332	1
	EXTENSION : 3/8 in, drive size, 5 in. lg	5120-273-9203	1
	EXTENSION : 3/8 in. drive size, 6 in. lg	5120-227-8107	1
	EXTENSION: 3/8 in. drive size, 12 in. lg	5120-243-1691	1
	HANDLE, HINGED: 3/8 in. drive size, 8½ in. lg	5120-240-5396	1
	HANDLE, RATCHET: 3/8 in, drive size, 6 in. lg	5120-240-5364	1
	HANDLE, SLIDING T: 3/8 in. drive size, 7 in. lg	5120-241-3143	1
	HANDLE, SPEEDER BRACE: 3/8 in. drive size, 16 in. lg	5120-237-4969	1
	UNIVERSAL JOINT: 3/8 in.	5120-224-9215	1
	UNIVERSAL JOINT: 1/2 in.	5120-242-3355	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	UNIVERSAL JOINT: 9/16 in.	5120-237-0978	1
	WRENCH: 5/16 in.	5120-232-5711	1
	WRENCH: 3/8 in.	5120-227-6702	1
	WRENCH: 7/16 in.	5120-227-6703	1
	WRENCH: 1/2 in.	5120-237-0977	1
	WRENCH: 9/16 in.	5120-227-6704	1
	WRENCH: 5/8 in.	5120-237-4973	1
	WRENCH: 11/16 in.	5120-232-5706	1
	WRENCH: 3/4 in.	5120-227-6705	1
	WRENCH: 13/16 in.	5120-235-5807	1
	WRENCH: Deep, 1/2 in.	5120-241-3185	1
	WRENCH: Deep, 9/16 in.	5120-239-0017	1
	WRENCH: Deep, 19/32 in.	5120-293-0092	1
	WRENCH: Deep, 5/8 in.	5120-239-0018	1
	WRENCH: Deep, 11/16 in.	5120-277-4252	1
	WRENCH: Deep. 3/4 in.	5120-235-5879	1
	WRENCH: Deep, 13/16 in.	5120-596-0836	1
	WRENCH: Deep, 7/8 in.	5120-235-5809	1
	WRENCH SET, SOCKET: 1/2 in. sq drive, 12 point, w/case	5120-596-1249	1
	Consisting of:		
	BIT, SCREWDRIVER: 3/4 in. blade	5120-223-6986	1
	EXTENSION, SOCKET WRENCH : 5 in.	5120-243-7326	1
	EXTENSION, SOCKET WRENCH : 10 in.	5120-227-8074	1
	HANDLE, SOCKET WRENCH: 9 1/2 in.	5120-230-6385	1
	HANDLE, SOCKET WRENCH : 11 in.	5120-241-3142	1
	HANDLE, SOCKET WRENCH: 12 15/16 in.	5120-221-7958	1
	HANDLE, SOCKET WRENCH: 18 in.	5120-230-6364	1
	SOCKET, SOCKET WRENCH: 7/16 in.	5120 -189-7924	1
	SOCKET, SOCKET WRENCH: 1/2 in.	5120-237-0984	1
	SOCKET, SOCKET WRENCH : 9/16 in.	5120-189-7932	1
	SOCKET, SOCKET WRENCH: 19/32 in.	5120-239-0019	1
	SOCKET, SOCKET WRENCH: 5/8 in.	5120-189-7946	1
	SOCKET, SOCKET WRENCH : 11\16 in.	5120-235-5870	1
	SOCKET, SOCKET WRENCH : 3/4 in.	5120-189-7985	1
	SOCKET, SOCKET WRENCH: 25/32 in.	5120-189-7915	1
	SOCKET, SOCKET WRENCH: 13/16 in.	5120-189-7933	1
	SOCKET, SOCKET WRENCH: 7/8 in.	5120-189-7934	1
	SOCKET, SOCKET WRENCH : 15/16 in.	5120-189 -7935	1
	SOCKET, SOCKET WRENCH: 1 in.	5120-189-7927	1
	SOCKET, SOCKET WRENCH: 1 1/16 in.	5120-189-7913	1
	UNIVERSAL JOINT, SOCKET WRENCH: 2 3/4 in.	5120-269-7971	1
1	TORCH WELDING: Brass, hand operation ; thd, male connection; welding tips.	3433-542-0948	1
Mounted on tailgate	VISE, BENCH AND PIPE, STATIONARY JAWS: 4 in. w jaws, 6 in. opening.	5120-293-1439	1
8	VULCANIZER,HOT PATCH: Bench mtd; 1 quick acting clamp, 1 sq ft.; tube roughing tool.	4910-243-3130	1
3	WHEEL, ABRASIVE: Special wheel, raised hub; aluminum oxide, 24 gr; medium gr spacing No. 5. resinoid bond grade U : 7 in. die. 7/16 in. thk; 1/4 in. w edge, 7/8 in. dia arbor hole.	5130-049-7912	6
Inside body	WIRE, ELECTRICAL: Bare; copper conductor: No. 6 AWG ; hard; solid.	6145-643-0956	15
2	WOODRUFF KEY ASSORTMENT: Steel, 100 pieces, all sizes mixed together in a single package.	5315-271-4251	1
3	WRENCH, OPEN END, ADJUSTABLE: Single head; 0 to 15/16 in. jaw opening; 8 in.	5120-240-5328	2
3	WRENCH, OPEN END, ADJUSTABLE: 0 to 1.322 in. jaw opening; 12 in.	5120-264-3796	1

Table 1. Contents of Shop Sets

Shop location	Description	FSN	Quantity
3	WRENCH, PIPE: Adjustable jaw (Stillson pattern); aluminum alloy; 1/4 to 1 in. ; 10 in. lg.	5120-277-1477	1
1	WRENCH, TORCH AND REGULATOR: 7/16, 11/16, 3/4, 7/8, 1 and 1 1/8 in. openings.	5120-494-1929	1
3	WRENCH, TORQUE: Rigid frame end drive; visual indicating mechanism ; 1/2 in. sq male drive; 150 ft.-lb.	5120-221-7950	1
2	WRENCH SET: SOCKET: 12 point; 3/4 in. sq drive; w/case	5120-640-6702	1
	Consisting of:		
	EXTENSION, SOCKET WRENCH: 3 in., 3/4 in. drive	5120-273-9208	1
	EXTENSION, SOCKET WRENCH: 8 in., 3/4 in. drive	5120-243-7328	1
	EXTENSION, SOCKET WRENCH: 16 in., 3/4 in. drive	5120-227-8079	1
	HANDLE, SOCKET WRENCH: 17 in., 3/4 in. drive end	5120-249-1076	1
	SLIDING THREAD:	5120-709-4072	1
	HANDLE, SOCKET WRENCH: 22 in., 3/4 in. drive end	5120-221-7959	1
	SOCKET, SOCKET WRENCH: 7/8 in. opening, 3/4 in. drive	5120-181-6816	1
	SOCKET, SOCKET WRENCH: 15/16 in. opening, 3/4 in. drive	5120-181-6813	1
	SOCKET, SOCKET WRENCH: 1 in., 3/4 in. drive	5120-237-0989	1
	SOCKET, SOCKET WRENCH: 11/16 in. opening, 3/4 in. drive	5120-189-7928	1
	SOCKET, SOCKET WRENCH: 1 1/8 in., 3/4 in. drive	5120-239-0021	1
	SOCKET, SOCKET WRENCH: 13/10 in. opening	5120-239-0022	1
	SOCKET, SOCKET WRENCH: 1 1/4 in. opening	5120-235-5871	1
	SOCKET, SOCKET WRENCH: 1 5/16 in. opening	5120-232-5681	1
	SOCKET, SOCKET WRENCH: 1 3/8 in. opening	5120-189-7930	1
	SOCKET, SOCKET WRENCH: 1 7/16 in. opening	5120-189-7931	1
	SOCKET, SOCKET WRENCH: 1 1/2 in. opening	5120-293-0094	1
	SOCKET, SOCKET WRENCH: 1 5/8 in. opening	5120-199-7765	1
	SOCKET, SOCKET WRENCH: 1 11/16 in. opening	5120-232-5685	1
	SOCKET, SOCKET WRENCH: 1 3/4 in. opening	5120-199-7767	1
	SOCKET, SOCKET WRENCH: 1 13/16 in. opening	5120-199-7768	1
	SOCKET, SOCKET WRENCH: 1 7/8 in. opening	5120-199-7769	1
	SOCKET, SOCKET WRENCH: 2 in. opening	5120-199-7770	1
	SOCKET, SOCKET WRENCH: 2 1/8 in. opening	5120-242-3373	1
	SOCKET, SOCKET WRENCH: 2 3/16 in. opening	5120-596-0834	1
	SOCKET, SOCKET WRENCH: 2 1/4 in. opening	5120-199-7771	1
	SOCKET, SOCKET WRENCH: 2 3/8 in. opening	5120-236-7643	1
	UNIVERSAL JOINT, SOCKET WRENCH: 4 3/16 in., 3/4 in.	5120-243-1687	1

NOTE: Initial issue of item is furnished by the U. S. Army Mobility Equipment Command, Requisitions for replacements must be submitted to the technical service as designated, under appropriated stock number.

Page 16. **Paragraph 5b. (2), line 4, stock number 4940-294-9518 is changed to read 4940-165-4026.**

Page 16. **Paragraph 5b. (3). In line 4, stock number 4940-294-9.518 is changed to read 4940-10.5-4019.**

Page 17. Paragraph 5b. (9) the word, "Chassis" is added after the word, "Truck".

Page 17. **Paragraph 6. In line 5, the serial number range is changed to read 33343-1 through 33343-623.**

Page 40. **Paragraph 31. Line 2, TM 5-4940 - 200-20P is changed to read TM 5-4940-200-25P.**

Page 113. Paragraph 2, SB 5-111 is changed to read TB 5-4200-200-10.

Page 113. Paragraph 2. The reference to TM 9-1799 is rescinded.

Page 113. Paragraph 3 LO 9-8030 is changed to read LO 9-2320-212-12.

Page 113. **Paragraph 5 is superseded as follows :**

5. Painting and Preservation

AR 746-1	**Color, Marking, and Preparation of Equipment for Shipment.**
TB 746-93-1	**Color and Marking of Military Vehicles**

Page 113. Paragraph 6. All reference to TM 9-1870-1/1 and TM 9-1870-1 is rescinded. The following reference is added:

TM 9-2610-200-20	**Organizational Care. Maintenance and Repair of Pneumatic Tires and Inner Tubes.**

Page 114. **Paragraph 10. TM 5-4940-200-20P is changed to read TM 5-4940-200-25P and the words, "Direct Support, General Support and Depot"' are added after the word, "Organizational" and before the word, "Maintenance".**

Page **114. Paragraph 10. The following reference is added:**

SC 4940-97-CL-E05	**Sets, Kits, and Outifits Components List Shop Equipment Contact Maintenance, Truck Mounted.**

Page 125. Appendix III is superseded *as* follows :

APPENDIX III

BASIC ISSUE ITEMS LIST AND

ITEMS TROOP INSTALLED OR AUTHORIZED

Section I. INTRODUCTION

1. Scope

This appendix lists items required by the operator for operation of the shop equipment.

2. General

This list is divided into the following sections:

a. *Basic Issue Items List—Section II.* Not applicable.

b. *Items Troop Installed or Authorized List—Section III.* A list of items in alphabetical sequence which, at the discretion of the unit commander, may accompany the shop equipment. These items are not subject to turn-in with the shop equipment when it is evacuated.

3. Explanation of Columns

The following provides an explanation of columns in the tabular list of Items Troop Installed or Authorized, Section III.

a. *Source, Maintenance, and Recoverability Code(s) (SMR):*

(1). Source code. This code indicates the source for the listed item, Source codes are:

Code	Explanation
P	Repair parts, special tools, and test equipment supplied from GSA/DSA or Army supply system and authorized for use at the indicated maintenance levels.
P2	Repair parts, special tools, and test equipment which are procured and stocked for insurance purposes because the combat or military essentiality of the end item dictates that a minimum quantity be available in the supply system.

(2) *Maintenance code.* This code indicates the lowest level of maintenance authorized to install the listed item. The maintenance level code is:

Code	*Explanation*
C	**Crew / Operator**

(3) ***Recoverability code.*** This code indicates whether unserviceable items should be returned for recovery or salvage. Items not coded are nonrecoverable. Recoverability codes are:

Code	*Explanation*
R	**Applied to repair parts (assemblies and components). special tools, and test equipment which are considered economically reparable at direct support and general support maintenance levels.**
S	**Repair parts, special tools. test equipment and assemblies which are economically reparable at DSU and GSU activites and which normally are furnished by supply on an exchange basis.**

b. ***Federal Stock Number.*** This column indicates the Federal stock number assigned to the item and will be used for requisitioning purposes,

c. ***Description.*** This column indicates the Federal item name and any additional description of the item required,

d. ***Unit of Measure (U/M).*** A 2-character alphabetic abbreviation indicating the amount or quantity of the item upon which the allowances are based, e.g., ft., ea., etc.

e. ***Quantity Authorized,*** This column indicates the quantity of the item authorized to be used with the equipment,

Section III. ITEMS TROOP INSTALLED OR AUTHORIZED LIST

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REF NO. & MFG CODE / USABLE ON CODE	(4) UNIT OF MEAS.	(5) QTY AUTH
	7520-559-9618	CASE: Operation and maintenance manuals.	ea	1
	4210-893-1092	EXTINGUISHER: Fire	ea	1
	5120-223-7396	PLIERS: Slip-joint	ea	1
	5120-293-3169	SCREWDRIVER: Flat tip	ea	1
	5120-264-3796	WRENCH: Adjustable	ea	1

By Order of the Secretary of the Army:

BRUCE PALMER, JR.
General, U. S. Army
Acting Chief of Staff

Official:
VERNE L. BOWERS
Major General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25A (qty rqr block No. 261) Operator Maintenance Requirements for Shop Equipment Sets, Maintenance Set No. 3. Contact Maintenance.

*** U.S. GOVERNMENT PRINTING OFFICE: 1972—769-745/199**

TECHNICAL MANUAL
No. 5-4940-200-12

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 21 *August* 1963

OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL

SHOP EQUIPMENT, CONTACT MAINTENANCE, TRUCK MOUNTED, SET NO. 3, (SOUTHWEST MODEL SECM) SERIAL NO. S-3-628 THROUGH S-3-720 AND (DAVEY MODEL CUM-5) SERIAL NO. 33343 THROUGH 33343-234 FSN 4940-294-9518

*This manual supersedes TM 5-4940-200-12, 18 December 1961.

CHAPTER 1
INTRODUCTION

Section I. GENERAL

1. Scope

a. These instructions are published for the use of the personnel to whom the Southwest Model SECM and Davey Model CMU-5 Shop Equipment is issued. They provide information on the operation and organizational maintenance of the equipment. Also included are descriptions of main units and their functions in relationship to other components.

b. Appendix I contains a list of publications applicable to this manual. Appendix II contains the. maintenance allocation chart. Appendix III contains the basic issue items and maintenance and operating supplies authorized the operator of this equipment. The organizational maintenance repair parts and special tool lists are listed in TM 5-4940-200-20P.

c, Numbers in parentheses on illustrations indicate quantity. Numbers preceding nomenclature callouts on illustrations indicate the preferred maintenance sequence.

d. Report all deficiencies in this manual on DA Form 2028. Submit recommendations for changes, additions, or deletions to the Commanding Officer, U.S. Army Mobility Support Center, ATTN: SMOMS-MM, P.O. Box 119, Columbus, Ohio 43216. Direct communication is authorized.

e. Report all equipment improvement recommendations as prescribed by TM 38–750.

2. Record and Report Forms

a. DA Form 2258 (Depreservation Guide of Engineer Equipment).

b. For other record and report forms applicable to the operator and organizational maintenance, refer to TM 38-750.

Note. Applicable forms, excluding Standard Form 46 which is carried by the operator, will be kept in a canvas bag mounted on the equipment.

Section II. DESCRIPTION AND DATA

3. Description

The Southwest Shop Set Model SECM, serial No. S-3-628 through S-3-720, (figs. 1 and 2) and Davey Shop Set Model CMU-5, serial Nos. 33343 through 33343–234, consists of eight compartments. They are mounted on a modified 4 by 4 truck chassis. The compartments provide storage space for all tools and equipment, powered and nonpowered. The shop set is provided with a generator-welder which furnishes 110, 220-volt, single-phase alternating current, 220-volt, 3-phase alternating current, and 200 amperes, 40-volt direct current for welding, The generator-welder can be driven by the trunk engine through the intergrated power takeoff or by connecting to a 220-volt, 3-phase, external power source. The generator-welder can be used as a source of starting current, as an :determinating current generator, as an are welding machine, and as a battery charger.

4. Contents of Shop Set

a. General. Table I lists in alphabetical sequence, the tools and equipment of the shop set, their location as indicated in figure 3, logistic responsibility, and quantity. Do not add equipment to that listed for this shop set and do not change loading location from that shown in table 1. When the mission is known and additional personnel, parts, or equipment must be transported, remove the comparable weight in parts, equipment, or components that are not required to fulfill the mission. Adjust or locate all additional parts or equipment, when practical, in the same compartment or vicinity from which parts or components were removed.

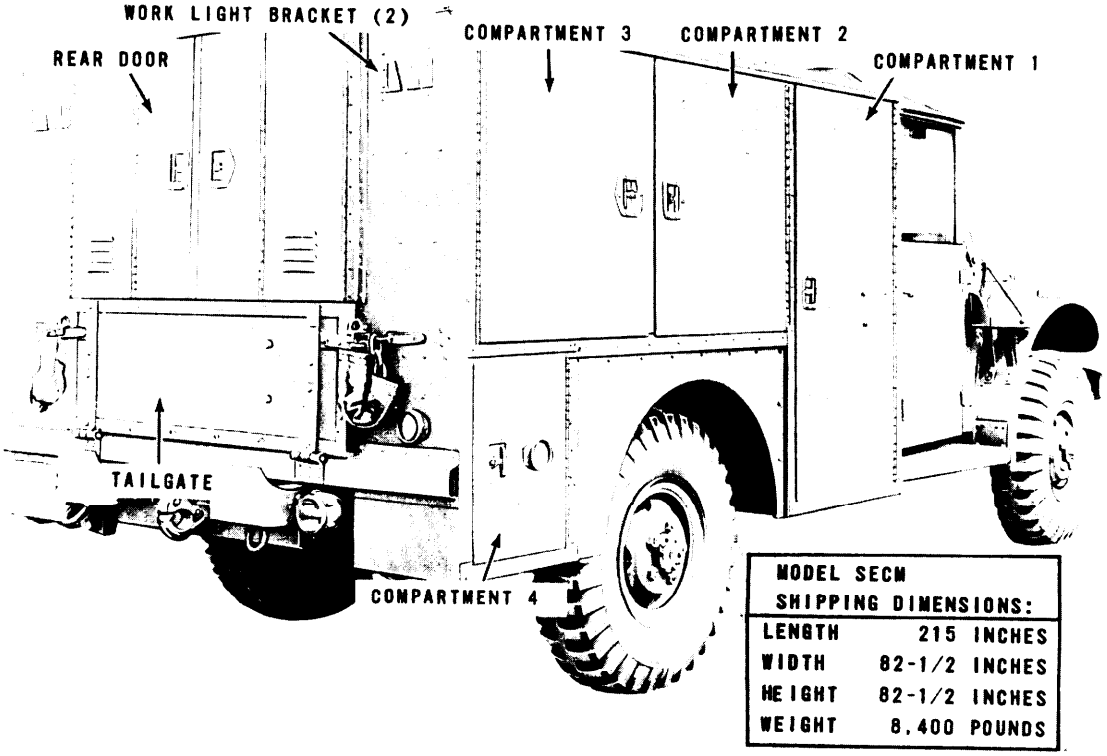


Figure 1. Shop set, right rear, three-quarter view, with shipping dimensions.

Warning: Do not overload shop set with additional personnel, equipment, or parts. Failure to observe this warning will result in an overloaded condition dangerous to personnel and equipment.

b. *Abbreviations.*

(1) Abbreviations used for logistic responsibility are—

ALL.....All services
CML.....Chemical Corps
GE.....General Engineer
MED.....Medical Corps
ORD.....Ordnance Corps
QM.....Quartermaster Corps

(2) Abbreviations used to identify stock or part numbers are--

FSN.....Federal stock number
MPN.....Manufacturer's part number

c. Notes A, B, C, and D, appear in table I where applicable. Definitions of these notes are as follows:

Note A. Initial issue of item is furnished by the Corps of Engineers. Requisitions for replacements must be submitted to the technical service as designated, under appropriate stock number.

Note B. Item is not initially issued with shop set. The indicated quanity must be separately requisitioned from the technical service indicated, under the appropriate stock number.

Note C. This item initially issued only to Sothwest Model CMU-5 Shop Sets.

Note D. This item initially issued only to Davey Model CMU-5 Shop Sets.

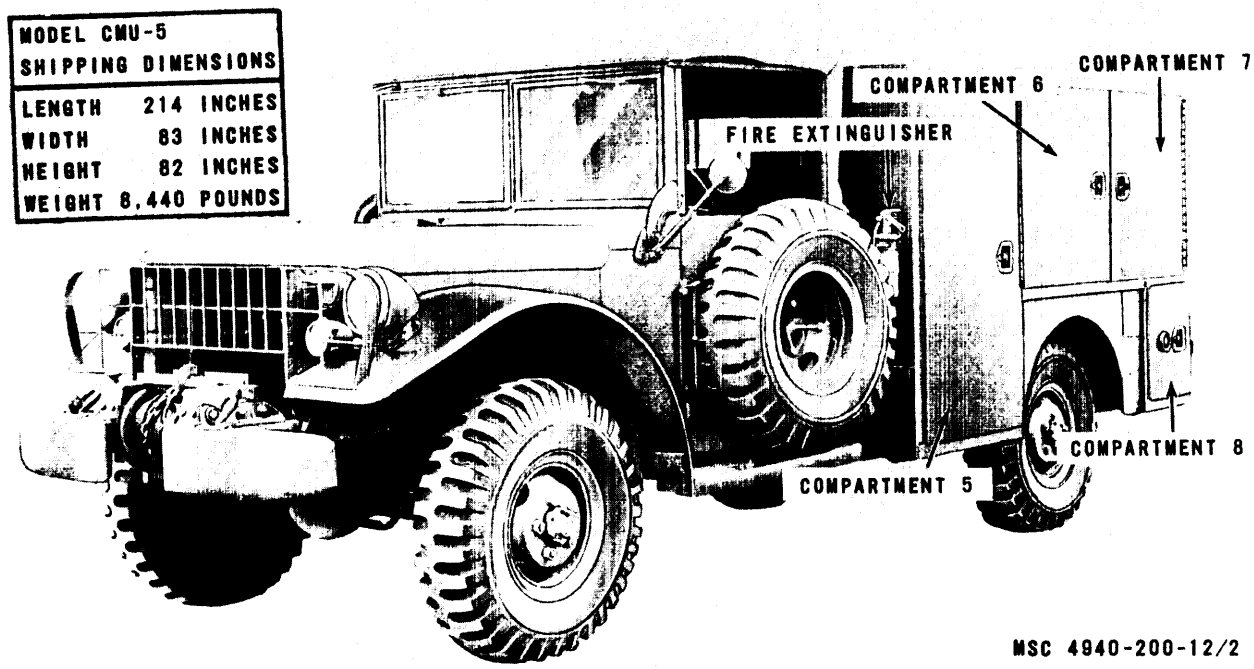


Figure 2. Shop set, left front, three-quarter view, with shipping dimensions.

LOADING DIAGRAM
SHOP EQUIPMENT,CONTACT MAINTENANCE,
TRUCK MOUNTED SET NO.3

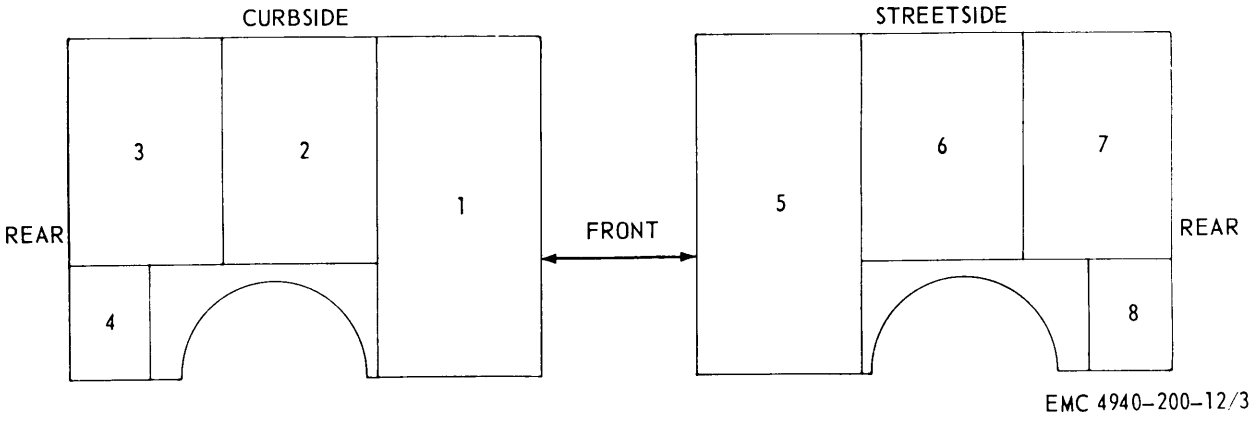


Figure 3. Shop set loading diagram..

Table I. Contents of Shop Set

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
1, fig. 3____	GE_ _ _ _ _	ACETYLENE, TECHNICAL: 225 cu ft cylinder	6830-264-6751	1
3, fig. 3____	GE _ _ _ _	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTION: inlet 0.628–20 NGO, rh internal, outlet 0.885–14 NGO, lh internal.	8120-264-5867	1
3, fig. 3___	GE_ _ _ _ _	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTION: inlet 0.628–20 NGO, rh internal, outlet 0.885–14 NGO, lh internal.	8120-695-6001	1
3, fig.3___	GE- - - - -	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTION: inlet 0.880-14 NGO, lh external, outlet 0.625–20 NGO, rh external.	8120-695-6044	
3 ,fig 3___	GE - - - - -	ADAPTER, COMPRESSED GAS CYLINDER VALVE CONNECTION: inlet 0.899–18 NGO, rh internal, outlet 0.885–14 NGO, lh internal.	8120-695-5983	1
3, fig.3___	GE - - - - -	ADAPTER, CONNECTOR: 125-v, 15-amp	5935-545-3386	2
3, fig. 3_____	GE- - - - - -	ADAPTER, REGULATOR TO CYLINDER: inlet, 0.875-14 NGO, lh, external, outlet 0.834–14 NGO, rh, external.	8120-408--2062	1
3, fig. 3____	GE- - - -	ADAPTER, REGULATOR TO CYLINDER: inlet, 0.830–14 NGO, rh, internal, outlet, 0.885–14 NGO, lh, internal.	8120-264-5530	1
2, fig. 3---	GE - - - -	ADAPTER, SPINDLE PORTABLE SANDER: 5/8–11, NC series, rh; w/wrench.	5130-293-2330	1
2, fig. 3----	ORD - - - - -	ADAPTER SET, ENGINE ELECTRICAL TEST: 24-v sealed elec systems.	4910-348-7600	1
	ORD - - - -	Adapter, spark plug testing	4910-356-7504	1
	ORD - - - - -	Adapter, primary circuit	4910-356-7492	1
	ORD- - - - -	Adapter assembly	2920-092-9025	1
	ORD - - - - -	Adapter, coil and distributor, ignition testing	491O-356-7508	1
	ORD- - - - - -	Adapter assembly	2920-092-9025	1
	ORD - - - -	Case, adapter set	4910-348-7691	1
6, fig. 3....	ORD- - - - -	APRON, WELDERS	8405-250-2531	1
6, fig. 3----		ASBESTOS SHEET, COMPRESSED: 50 in. lg, 10 in. w, 1/16 in. thk	5330-233-5840	1
3, fig. 3___	GE - - - - -	ADAPTER, REGULATOR TO CYLINDER: inlet, 0.875–14 NGO, lh, external, outlet, 0.834–14 NGO, rh, external.	8120-408-2062	1
3, fig 3___	GE - - - - - -	ADAPTER, REGULATOR TO CYLINDER: inlet, 0.830–14 NGO, rh, internal, outlet, 0.885–14 NGO, lh, internal.	8120-264-5530	1
2, fig,3____	GE - - - - -	ADAPTER, SPINDLE PORTABLE SANDER: 5/8–11, NC series, rh; w/wrench.	5130-293-2330	1
2, fig. 3__	ORD - - - - -	ADAPTER SET, ENGINE ELECTRICAL TEST: 24-v sealed elec systems.	4910-348-7600	1
	ORD- - - - - -	Adapter, spark plug, ignition testing	4910-356-7504	1
	ORD - - - - - -	Adapter, primary circuit	4910–356-7492	1
	ORD - - - -	Adapter assembly	2920-092-9026	1
	ORD - - - - - -	Adapter, coil and distributor, ignition testing	4910-356-7508	1
	ORD - - - - - -	Adapter assembly	2920-092-9025	1
6, fig. 3_____	QM- - - - - - -	APRON, WELDERS	8405-250-2531	1
6, fig. 3__	GE- - - - - - - -	ASBESTOS SHEET, COMPRESSED: 50 in. lg, 10 in. w, 1/16 in. thk	5330-233-5840	1
6, fig. 3__	GE- - - - - - - -	ASBESTOS SHEET, COMPRESSED: 50 in. lg, 10 in. w, 1/32 in. thk	5330-641-1191	1
3, fig. 3__	GE- - - - - - - -	CABLE ASSEMBLY, POWER, ELECTRICAL: 2 conductors, 600-v, No. 16 AWG, 65 strands No. 34 AWG.	6150-265-6496	1
3, fig. 3__	GE- - - - - - -	CABLE ASSEMBLY, POWER, ELECTRICAL: 3 conductors, 600-v, No. 14 AWG, 84 strands, No. 32 AWG.	6150-681-8399	2
7, fig. 3__	QM - - - - -	CLAMP, C, THROAT DEPTH: 2¾ in. x 6 in. (See Note A.)	5120–180–0909	2
7, fig. 3__	QM - - - -	CLAMP, C, THROAT DEPTH: 2½ in. x 8 in. (See Note A.)	5120-222-1613	2
6, fig. 3__	GE_____	CLAMP, ELECTRICAL: copper; 500 amp, 0 or 00 cable accomodated	5975-258-0126	1
7, fig. 3__	GE_____	CLAMP, HOSE: for oxyacetylene hose; ¾ in. id	4730-289-5911	6
8, fig. 3__	GE_____	CLAMP, HOSE: 1 in. to 3 in. id	4730-289-5910	6
7, fig. 3__	GE_____	CLAMP, HOSE: ⅜ in. to 1 in. id	4730-289-5909	6
7, fig. 3_____	QM_____	CLAMP, PLIER: 2 11/16 in. jaw width, 9 in. lg (See Note A.)	5120-039-5025	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
3, fig. 3	ORD	CLEANER SET, WELDING AND CUTTER TIPS: 12 cleaners; 0.020 in., 0.023 in. 0.027 in. 0.033 in. 0.035 in. 0.038 in. 0.041 in. 0.042 in. 0.045 in. 0.052 in. 0.060 in. 0.068 in. dia. (See Note A.)	3439-262-7557	1
3, fig. 3	ORD	CLEANER SET, WELDING AND CUTTER TIPS: 9 cleaners; 0.076 in. 0.080 in. 0.085 in. 0.091 in. 0.105 in. 0.110 in. 0.115 in. 0.123 in. dia (See Note A.)	3439-262-7556	1
7, fig. 3	ORD	CLOTH, ABRASIVE: 9 x 11 sheet, grit No. 150. (See Note B.)	5350-192-5050	1
7, fig. 3	ORD	CLOTH, ABRASIVE: 9 x 11 sheet, grit No. 80. (See Note B.)	5350-192-5047	1
2, fig. 3	GE	COMPRESSOR, RECIPROCATING, POWER DRIVEN: air; base mtd; elect motor ac, 115-v, single phase, 60 cycle, 1/3 hp; 2.7 cfm free air delivered; 80 psi discharge pressure; air surge chamber.	4310-542-4111	1
3, fig. 3	GE	CONNECTOR, PLUG, ELECTRICAL: two contacts	5935-578-0220	1
7, fig. 3	GE	CORK SHEET: granulated, 36 in. lg, 12 in. wide, 1/32 in. thk	5330-291-1685	2
3, fig. 3	GE	COUPLING ASSEMBLY, QUICK DISCONNECT: female, 3/8-18 thread size, male for 3/8 in. hose, with check valve. (See Note A.)	4730-203-9495	3
3, fig. 3	GE	COUPLING ASSEMBLY, QUICK DISCONNECT: female, 1/4-18 thread size, male or 1/4 in. air hose; with check valve. (See Note A.)	4730-203-9461	2
1, fig. 3	GE	COUPLING, HOSE, BRASS: 9/16 in.-18 NF internal thd; barbed male insert for 1/4 to 5/16 in. oxygen hose. (See Notes A and D.)	4730-272-0668	2
1, fig. 3	GE	COUPLING, HOSE, BRASS: 9/16 in.-18 NF lh internal thd; barbed male insert for 1/4 to 5/16 in. acetylene hose (See Notes A and D.)	4730-273-0905	2
3, fig. 3	QM	CRAYON, MARKING: white, 1/2 in. wide, 3/16 in. thk. (See Note B.)	7510-223-6708	1
1, fig. 3	QM	CROWBAR: 47 to 49 in. lg, 1 in. dia, stock. (See Note A.)	5120-240-6040	1
1, fig. 3	QM	CUTTER, BOLT: 1/2 in. dia, mild steel rod cutting capacity; 36 in. lg. (See Note A).	5110-224-7057	1
3, fig. 3	QM	CUTTER AND FLARING KIT: 1/8 to 1 in. od cutting range; w/case	5180-996-1038	1
	QM	Bender, tube, hand: 1/4 in.	5120-234-873!)	1
	QM	Bender, tube, hand: 5/16 in.	5120-234-8740	1
	QM	Bender, tube, hand: 3/8 in.	5120-234-8741	1
	QM	Bender, tube, hand: 1/2 in.	5 120-234-8743	1
	QM	Bender, tube, hand: 5/8 in.	5120-234-8744	1
	QM	Cutter, tube: w/deburring tool	5 110-223- 1905	1
	QM	Flaring tool, tube, hand: hinged dies	5120-251-2267	1
3, fig. 3	ORD	CUTTER ATTACHMENT: welding, brass, hand operation, nickel-copper alloy head, 90° angle; cutting tips. (See Note A.)	3433-542-0947	1
3, fig. 3	GE	DRILL, ELECTRIC, PORTABLE: 1/2 in. 650 rpm, straight drive	5130-293-0960	1
3, fig. 3	GE	DRILL SET, TWIST: 1/16 to 1/2 in.	5133-293-0983	1
1, fig. 3	GE	DUPLEX HOSE, RUBBER: 9/16-18 thd size, 1/4 in. id, 75 ft. lg	4730-223-7381	1
1, fig. 3	GE	ELECTRODE, WELDING: 5/32 in. (See Note A.)	3439-262-2671	25 lb.
8, fig. 3	QM	EXTRACTOR SET, SCREW: taper spiral flute; drill; carbon steel. (See Note A.)	5120-595-8279	1
	QM	Extractor, screw, taper type, drill style, 0.164 to 0.190 in.	5120-240-5223	1
	QM	Extractor, screw, taper type, drill style, 1/4 to 5/16 in.	5120-240-5224	1
	QM	Extractor, screw, taper type, drill style, 5/16 to 7/16 in.	5120-240-5221	1
	QM	Extractor, screw, taper type, drill style, 7/16 to 9/16 in.	5120-240-5222	1
	QM	Extractor, screw, taper type, drill style, 7/16 to 9/16 in.	5120-240-5219	1
7, fig. 3	QM	FACE, HAMMER, INSERTED. (See Notes A and D.)	5120-293-2997	4
8, fig. 3	QM	FILE, THREAD, RESTORER: 11, 12, 13, 14, 16, 18, 20 thds per in. (See Note A.)	51 10-373-1691	1
2, fig. 3	MED	FIRST AID KIT, MOTOR VEHICLE, 12 UNIT. (See Note A.)	6545-922-1200	2
7, fig. 3	GE	FITTING KIT, TUBE, PIPE: 219 items, list of fittings	4730-203-0398	1
	GE	Adapter, straight, pipe to tube: brass 1st end male, u/w 1/8 in. od tube, 5/16-24 thd size; 2d end male, 1/8-27 thd size.	4730-243-8607	2
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 3/16 in. od tube, 3/8-24 thd size; 2d end male, 1/8-27 thd size.	4730-288-9966	2
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 1/4 in. od tube, 7/16-24 thd size; 2d end male, 1/8-27 thd size.	4730-287-1791	4

Table I. Contents of Shop Set-Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 3/8 in. od tube, 9/16–24 thd size; 2d end male, 1/4–18 thd size.	4730-273-8560	3
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 3/8 in. od tube, 9/16–24 thd size; 2d end male, 1/4–18 thd size.	4730-273-8561	2
	GE	Adapter, straight, pipe to tube: brass; pipe end male, 1/4–18 thd size; tube end male, compression, 7/16–24 thd size.	4730-289-0387	2
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 5/16 in. od tube, 1/2–24 thd size; 2d end male, 1/4–18 thd size.	4730-288-9946	2
	GE	Adapter, straight, pipe to tube: brass; 1st end female, u/w 5/16 in. od tube, 3/8–24 thd size; 2d end male, 1/8–27 thd size.	4730-289-1930	2
	GE	Adapter, straight, pipe to tube: brass; 1st end female, u/w 1/4 in. od tube, 7/16–27 thd size; 2d end male, 1/8–27 thd size.	4730-289-1931	2
	GE	Adapter, straight, pipe to tube: brass; 1st end female, u/w 5/16 in. od tube, 1/2–20 thd size: 2d end male, 1/8–27 thd size.	4730-202-7473	2
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 1/4 in. od tube, 7/16–20 thd size; 2d male, 1/8–27 thd size.	4730-288-9962	2
	GE	Adapter, straight, pipe to tube: brass; pipe end female, 1/8–27 pipe thd; tube end male, 45° flare, 1/2–20 thd size.	4730-278-4619	3
	GE	Adapter, straight, pipe to tube: brass; pipe end male, 1/4–18 thd size; tube end male 45° flare, 7/16–20 thd size.	4730-277-8741	1
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 5/16 in. od tube, 1/2–20 thd size; 2d end male, 1/4–18 thd size.	4730-289-0390	1
	GE	Adapter, straight, pipe to tube: brass; 1st end male, u/w 3/8 in. tube, 5/8–18 thd size, 2d end male, 1/4–18 thd size.	4730-289-0391	2
	GE	Adapter, straight, pipe to tube: brass; 1st end male, 7/16–24 thd size; tube end female, 3/8–24 thd size, w/thd sleeve nut, for 3/8 in. od tube.	4730-289-0389	2
	GE	Adapter, straight, pipe to tube: brass; pipe end male, 1/8–27 thd size; tube end female, 7/16–24 thd size.	4730-293-7884	2
	GE	Adapter, straight, pipe to tube: brass; od tube	4730-293-7885	2
	GE	Bushing, pipe: brass or bronze, male end 1/4–18 thd size; female end, 1/8–27 thd size.	4730-277-7051	2
	GE	Bushing pipe: brass; male end, 3/8–18 thd size; female end, 1/4–18 thd size.	4730-277-7899	2
	QM	Cabinet, small parts, storage	7125-286-4346	1
	GE	Cock, drain: brass; male end, 1/8–27 thd size	4820-272-3344	1
	GE	Cock, drain: brass; male, 1/4–18 thd size	4820-272-3345	1
	GE	Cock, drain: brass; male, 1/8–27 thd size	4820-276-9039	1
	GE	Cock, drain: brass; male, 1/4–18 thd size	4820-276-9038	1
	GE	Cock, plug: brass; 1/8–27 thd size	4820-273-9677	1
	GE	Cock, plug: brass, 1/4 in. od tube, one end male, 7/16–24 thd size, other end male, 1/8–27 thd size.	4820-272-3362	1
	GE	Cock, plug: brass; 5/16 in. od tube, one end male, 1/2–24 thd size; other end male, 1/8–27 thd size.	4820-273-9941	1
	GE	Cock, plug: brass; 5/16 in. od tube, one end male, 1/2–20 thd size; other end male, 1/8–27 thd size.	4820-288-8944	1
	GE	Collar, compression control valve to standpipe	4730-200-0273	10
	GE	Coupling, pipe: brass; 1/8–27 thd size	4730-289-1086	3
	GE	Coupling, pipe: brass; 1/4–18 thd size	4730-289-1087	2
	GE	Elbow, pipe: brass or bronze; 1/8–27 thd size, street	4730-277-5552	2
	GE	Elbow, pipe: brass or bronze; 1/4–18 thd size, street	4730-277-3775	2
	GE	Elbow, pipe to tube: brass; 1st end, female, 3/8–24 thd size, 2d end, male, 1/8–27 thd size.	4730-287-1056	2
	GE	Elbow, pipe to tube: brass; one end, male, 1/8–27 thd size; 1/4 in. od tube, other end male, 7/16–24 thd size.	4730-278-3810	2
	GE	Elbow, pipe to tube: brass; 1st end, female, 1/2–20 thd size, 2d end, male, 1/8–27 thd size.	4730-278-4354	2

Table I. Contents of Shop Set-Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
	GE	Elbow, pipe to tube: brass; one end male, u/w 1/8 in. od tube, 5/16-24 thd size; other end, male, 1/8-27 thd size.	4730-278-0191	1
	GE	Elbow, pipe to tube: brass; 1st end male, u/w 1/4 in. od tube, 7/16-24 thd size; 2d end, male, 1/8-27 thd size.	4730-287-1599	2
	GE	Elbow, pipe to tube: brass; 1st end male, u/w 1/4 in. od tube, 1/4-18 thd size; 2d end male, 7/16-24 thd size.	4730-278-3825	1
	GE	Elbow, pipe to tube: brass; one end male, 1/8-27 thd size, other end male, 5/16 in. tube; 1/2-24 thd size.	4730-278-4740	2
	GE	Elbow, pipe to tube: brass; 1st end male, u/w 3/16 in. od tube, 3/8-24 thd size; 2d end, male, 1/8-27 thd size.	4730-278-0187	1
	GE	Elbow, pipe to tube: brass; 1st end, male, u/w 5/16 in. od tube, 1/2-24 thd size; 2d end, male, 1/4-18 thd size.	4730-278-4741	1
	GE	Elbow, pipe to tube: brass; 1st end, male, u/w 3/8 in. od tube, 9/16-24 thd size 2d end, male, 1/4-18 thd size.	4730-278-3826	2
	GE	Elbow, adapter: brass; 1st end, female, 7/16 thd size; 2d end, male, 1/8-27 thd size.	4730-221-3902	1
	GE	Elbow, pipe to tube: brass; 1st end male, u/w 1/4 in. od tube, 7/16-20 thd size; 2d end, male, 1/8-27 thd size.	4730-277-8261	2
	GE	Elbow, pipe to tube: brass, 1st end male, u/w 1/4 in. od tube, 7/16-20 thd size, 2d end, male 1/4-18 thd size.	4730-288-9443	1
	GE	Elbow, pipe to tube: brass; 1st end male, 1/8-27 thd size; 2nd end, male, u/w 5/16 in. tube, 1/2-20 thd size.	4730-288-9440	2
	GE	Elbow, pipe to tube: brass; one end, male 5/16 in. od tube, 1/2-20 thd size; other end, 1/4-18 thd size.	4730-277-8271	1
	GE	Elbow, pipe to tube: brass; one end male, 1/4-18 thd size; other end male, 3/8 in. tube, 5/8-18 thd size.	4730-639-9676	1
	GE	Elbow, pipe to tube: brass; one end, female, u/w 3/16 in. od tube, 3/4-24 thd size; other end, male, 1/8-27 thd size.	4730-277-8269	4
	GE	Elbow, pipe to tube: brass; 1st end female, u/w 1/4 in. od tube, 7/16-24 thd size; 2d end male, 1/8-27 thd size.	4730-277-8273	4
	GE	Elbow, pipe to tube: brass; one end female, u/w 5/16 in. od tube, 1/2-20 thd size; other end male.	4730-640-1051	2
	GE	Inverted nut, tube coupling: brass; u/w 1/4 in. od tube, 7/16-24 thd size.	4730-289-1959	1
	GE	Inverted nut, tube coupling: brass; 1/8 in. tube, 5/16-24 thd size	4730-595-4147	5
	GE	Inverted nut, tube coupling: brass; u/w 1/4 in. od tube, 7/16-24 thd size.	4730-288-8248	5
	GE	Inverted nut, tube coupling: brass; 45° flare, u/w 5/16 in. od tube, 1/2-20 thd size.	4730-288-8250	3
	GE	Inverted nut, tube coupling: brass; for 1/4 in. od tube, 1/2-20 thd size	4730-288-8567	3
	GE	Nipple, tube: brass; u/w 1/4 in. od tube, 7/16-20 thd size	4730-289-1072	1
	GE	Nipple, tube: brass; u/w 5/16 in. od tube, 1/2-20 thd size	4730-287-1571	1
	GE	Nipple, tube: brass; u/w 3/8 in. od tube, 5/8-18 thd size	4730-287-1571	1
	GE	Nipple, tube: brass; u/w 3/16 in. od tube, 3/8-24 thd size	4730-278-3206	1
	GE	Nipple, tube: brass; u/w 1/4 in. od tube, 7/16-24 thd size	4730-278-8717	1
	GE	Nipple, tube: brass; u/w 5/16 in. od tube, 1/2-24 thd size	4730-289-1621	1
	GE	Nipple, tube: brass; u/w 3/8 in. od tube, 9/16-24 thd size	4730-278-3222	1
	GE	Nipple, pipe: brass; 1/8-27 thd size; 3/4 in. lg	4730-230-1996	2
	GE	Nipple, pipe: brass; 1/4-18 thd size; 7/8 in. lg	4730-222-1837	2
	GE	Nut, tube coupling: brass; 1/8 in. od tube, 5/16-24 thd size	4730-278-8832	2
	GE	Nut, tube coupling: brass; 3/16 in. od tube; 3/8-24 thd size	4730-278-8833	2
	GE	Nut, tube coupling: brass; 1/4 in. od tube, 7/16-24 thd size	4730-278-8834	3
	GE	Nut, tube coupling: brass; 5/16 in. od tube, 1/2-20 thd size	4730-278-8838	3
	GE	Nut, tube coupling: brass; u/w 1/8 in. od tube, 5/16-24 thd size	4730-289-0191	3
	GE	Nut, tube coupling: brass; u/w 3/16 in. od tube, 3/8-24 thd size	4730-287-1536	5
	GE	Nut, tube coupling: brass; 1/4 in. od tube; 7/16-24 thd size	4730-526-0348	5
	GE	Nut, tube coupling: brass; u/w 5/16 in. od tube, 1/2-24 thd size	4730-278-8829	5
	GE	Nut, tube coupling: brass; u/w 3/8 in. od tube, 9/16-24 thd size	4730-287-1587	3

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility y	Description	FSN or MPN	Quantity
	GE	Nut, tube coupling: brass; ¼ in. od tube, 7/16–20 thd size	4730–289–1565	3
	GE	Nut, tube coupling: brass; u/w 5/16 in. od tube, ½–20 thd size	4730–202–8831	3
	GE	Nut, tube coupling: brass; u/w ⅜ in. od tube, 5/8–18 thd size	4730–289–1559	2
	GE	Plug, pipe: brass or bronze; ⅛–27 thd side	4730–011–3175	3
	GE	Plug, pipe: brass or bronze; ¼–18 thd size	4730–011–2578	2
	GE	Reducer, pipe: brass; female to male, ¼–18 thd size; ⅛–27 thd size	4730–288–6935	2
	GE	Sleeve, compression tube, hose fitting: u/w ⅛ in. od tube	4730–200–0272	5
	GE	Sleeve, compression, 3/16 in. od tube	4730–423–5518	10
	GE	Sleeve, compression, tube, hose fitting: brass, u/w ¼ in. tube	4730–200–0273	10
	GE	Sleeve, compression, tube, hose fitting: ⅜ tube size	4730–287–4858	8
	GE	Tee, pipe to tube: brass; 1st end, female, ⅛–27 thd size, 2d end, male, ⅛–27 thd size; 3d end, male, u/w ⅛ in. od tube, 5/16–24 thd size.	4730–288–9482	1
	GE	Tee, pipe to tube: forged brass; 1st end female, ⅛–27 thd size, 2d end, male, ⅛–27 thd size; 3d end, male, u/w ¼ in. od tube, 7/16–24 thd size.	4730-274-9258	1
	GE	Tee, tube: brass; 1st, 2d, and 3d ends, male, u/w 3/16 in. od tube, ⅜–24 thd size.	4730-287-1689	1
	GE	Tee, tube: brass; straight; for ¼ in. od tube; male, 7/16–24 thd size	4730-287-1690	2
2, fig. 3	GE	FIXTURE, LIGHTING: ac, dc, 115-v 300–W aluminum wired	6210-643-0411	2
3, fig. 3	QM	FLINT TIP, FRICTION IGNITER, SLEEVE TYPE, THREADED 5–40-SERIES. (See Note A.)	5120-254-9956	2
2, fig. 3	GE	FLOODLIGHT, ELECTRIC	6230-815-5022	2
7, fig. 3	ORD	FLUX, SOLDER: 4 oz can. (See Note A.)	3439-250-2633	1
1, fig. 3	ORD	FLUX, WELDING: 1 lb can. (See Note B.)	3439-242-7837	1
7, fig. 3	ORD	GAGE, TIRE PRESSURE, SELF-CONTAINED: 5 to 50 lb range	4910-277-9526	1
7, fig. 3	ORD	GAGE, TIRE PRESSURE, SELF-CONTAINED: 10 to 160-lb range	4910-244-4556	1
7, fig. 3	GE	GASKET FORMING COMPOUND: 11 oz tube. (See Note A.)	5330-264-8455	1
6, fig. 3	QM	GLOVES, LEATHER: horsehide or cowhide; large	8415-268-7877	2
3, fig. 3	CML	GOGGLES; INDUSTRIAL: w/one piece single aperature, plastic, clear; designed to be worn over personal spectacles. (See Note A.)	4240-276-7343	2
3, fig. 3	CML	GOGGLES, INDUSTRIAL: w/eye cups; plastic, ventilated, co-bs shade No. 6; w/glass cover lens, 50-mm dia, w/2 spare cover lenses. (See Note A.)	4240-268-9739	2
3, fig. 3	QM	GREASE GUN, HAND: 7 in. lg. (See Note A.)	4930-360-2801	1
7, fig. 3	GE	GUN, AIR BLOW: straight button operated, ⅜–18 internal thd coupling.	4940-255-8677	1
3, fig. 3	QM	GUN, FLUID, DIRECT DELIVERY: 12 oz capacity. (See Note A.)	4930-277-3842	1
8, fig. 3	QM	HAMMER, HAND machinist's ball peen 48 ounces. (See Note A.)	5120-187-1030	1
1, fig. 3	QM	HAMMER, HAND: sledge, blacksmith's; 12 pounds. (See Note A.)	5120-293-0887	1
6, fig. 3	QM	HAMMER, SLAG, CHIPPING. (See Notes A and D.)	5120-240-3096	1
7, fig. 3	QM	HANDLE, SOCKET WRENCH: hinged. (See Notes A and D.)	5120-221-7959	1
7, fig. 3	QM	HANDLE, SOCKET WRENCH: ratchet, reversible. (See Notes A and D)	5120-249-1076	1
3, fig. 3	QM	HATCHET, HALF: 18 to 26 oz weight of head, 3½ in. cutting width. (See Note A.)	5110-228-3161	1
6, fig. 3	CML	HELMET, WELDER: fiber body, w/hinged glass holder, 4½ in. lg by 2 in; w/glass. (See Note A.)	4240-640-6464	1
8, fig. 3	GE	HOIST, CHAIN: 3 ton; 4 ft 9 in. lift, hand driven; 2 load chains	3950-292-9879	1
6, fig. 3	ORD	HOLDER, ELECTRODE, WELDING: clamp type; w/o spare jaws. (See Note A.)	3432-238-1638	1
7, fig. 3	QM	HOLDER, FACE, HAMMER, INSERTED. (See Notes A and D.)	5120-554-7757	1
2, fig. 3	GE	HOSE, RUBBER: 5/16 in. id, ⅝ in. od. (See Note A.)	4720-278-4887	25 ft
7, fig. 3	GE	HYDROMETER, SYRINGE, BATTERY	6630-633-4915	1
7, fig. 3	GE	HYDROMETER, SYRINGE, ANTIFREEZE	6630-247-2968	1
3, fig. 3	QM	IGNITER, FRICTION, WIRE FRAME STYLE, FLAT FILE, SINGLE FLINT. (See Note A.)	5120-190-5540	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
7, fig. 3	ORD	INFLATOR GAGE, PNEUMATIC TIRES: 10 to 120 lbs; 2 lbs graduation 10 to 40 lbs, 5 lbs graduation 40 to 120 lbs. (See Note A.)	4910-204-2644	1
8, fig. 3	GE	INSULATION TAPE, ELECTRICAL: cloth; ¾ in. w, 0.017 in. thd; 82½ ft roll. (See Note B.)	5970-231-6213	2
8, fig. 3	GE	INSULATION TAPE, ELECTRICAL: ½ in. wide; 0.007 in. thk; 22 yards. (See Note B.)	5970-503-0174	4
8, fig. 3	QM	JACK, HYDRAULIC, HAND: single pump, 12 ton capacity. (See Note A.)	5120-224-7330	1
4, fig. 3	ORD	KIT, TIRE REMOVER, HYDRAULIC: for earth moving equipment tires.	4910-773-9341	1 9
		Frame assembly tool, tire removing, hydraulic	4910-676-2208	1
		Head assembly tool, tire removing, hydraulic	4910-676-2210	1
		Hose, tire removing tool, hydraulic	4910-676-2213	1
		Pump assembly tool, tire removing, hydraulic	4910-676-2209	1
		Ram assembly tool, tire removing, hydraulic	4910-676-2211	1
		Wedge tool, tire removing, hydraulic	4910-676-2212	6
2, fig. 3	GE	LAMP, INCANDESCENT: 20-v, 50-W. (See Note B.)	6240-115-8634	4
2, fig. 3	GE	LAMP, INCANDESCENT: 120-v, 50-W. (See Note B.)	6240-155-7772	3
6, fig. 3	GE	LEAD, ELECTRICAL: No. 0 AWG, stranded copper conductor	6150-665-9799	2
3, fig. 3	CML	LENS, GOGGLES: clear. (See Note A.)	4240-262-7106	2
3, fig. 3	CML	LENS, GOGGLES: 50 mm. (See Note A.)	4240-262-7092	4
3, fig. 3	CML	LENS, GOGGLES: shade 6. (See Note A.)	4240-262-7099	2
3, fig. 3	CML	LENS, HELMET: clear. (See Note A.)	4240-276-8938	6
3, fig. 3	CML	LENS, HELMET: filter. (See Note A.)	4240-276-8940	2
3, fig. 3	GE	LIGHT, EXTENSION: 3 conductors, No. 16 AWG cable, 35 foot long	6230-240-3759	2
2, fig. 3	ORD	LIGHT, IGNITION TIMING: 3 lead; 5 ft lg h tension lead, 10 ft lg pos lead, 10 ft lg neg lead. (See Note A.)	6625-500-2135	1 1
7, fig. 3	ORD	MACHINE SCREW AND NUT AND WASHER ASSORTMENT. (See Note A.)	5305-334-5175	1
6, fig. 3	ORD	MULTIMETER: model B. (See Note C.)	6625-242-5023	1
		Multimeter	6625-539-8755	1
		Multimeter kit	6625-390-6154	1
7, fig. 3	GE	MULTIMETER: 0 to 1,000 v dc in 6 steps, 0 to 5,000 v dc in 1 step, 0 to 1,000 v ac in 6 steps, 0 to 10 amp dc in 8 steps, 0 to 10 meg in 5 steps; 50 va sensitivity; w/multimeter kit, test leads.	6625-270-3777	1
4, fig. 3	GE	NIPPLE, HOSE: 9/16 in.-18 NF-3 external thd. (See Note D.)	4730-224-7324	1
4, fig. 3	GE	NIPPLE, HOSE: 9/16 in.-18 NF-3 lh external thd. (See Note D.)	4730-224-7323	1
1, fig. 3	GE	OXYGEN, TECHNICAL: 220 to 240 cu ft cylinder	6830-252-0129	1
8, fig. 3	GE	PACKING MATERIAL: metal foil, ⅛ in. od; twisted, 1 lb roll	5330-247-0510	1
6, fig. 3	QM	PAIL, METAL: 3½ gal. (See Note A.)	7240-160-0455	1
7, fig. 3	ORD	PAPER, ABRASIVE: grade ½ or 1 med. (See Note B.)	5350-271-7991	1
7, fig. 3	ORD	PAPER, ABRASIVE: grade 2/0 or 1/0 fine. (See Note B.)	5250-271-7997	1
7, fig. 3	ORD	PATCH, INNER TUBE REPAIR: w/heat unit, 3¼ in. lg by 13/16 in. wide. (See Note B.)	2640-255-9349	25
7, fig. 3	ORD	PATCH, INNER TUBE REPAIR: w/heat unit, 2⅜ in. dia. (See Note B.)	2640-052-0828	25
7, fig. 3	QM	PLIERS, LINEMANS: w/side cutter, 8 in. long. (See Note A.)	5120-239-8251	1
7, fig. 3	QM	PULLERS, MECHANICAL: gear and bearing, 0 to 8 in. spread, 6 in. reach. (See Note A.)	5120-516-3120	1
7, fig. 3	QM	PUNCH, ALIGNING. (See Notes A and D.)	4130-595-9485	1
1, fig. 3	GE	REGULATOR, PRESSURE, COMPRESSED GAS, ACETYLENE: double stage, first stage automatic, second stage manual; 0 to 400 psi dial cylinder gage; 0 to 30 psi dial delivery gage; 15 psi delivery pressure; 0.880–14, NGO, lh inlet connection; 9/16–18, NF, lh outlet connection.	6680-281-8190	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
1, fig. 3	GE	REGULATOR, PRESSURE, COMPRESSED GAS, OXYGEN: double stage, first stage automatic, second stage manual; 0 to 3,000 psi dial cylinder gage; 75 psi delivery pressure; 0.903–14 NGO, rh inlet connection; 9/16–18, NF, rh outlet connection; automatic relief valve.	6680-281-8191	1
1, fig. 3	ORD	ROD, WELDING: brass, 1/8 in. (See Note A.)	3439-244-4540	15
1, fig. 3	ORD	ROD, WELDING: brass, 3/16 in. dia. (See Note A.)	3439-244-4541	15
1, fig. 3	ORD	ROD, WELDING: cast iron, 1/8 in. dia. (See Note A.)	3439-542-4049	10
1, fig. 3	ORD	ROD, WELDING: steel, 3/32 in. dia. (See Note A.)	3439-246-0565	10
1, fig. 3	ORD	ROD, WELDING: steel, 1/8 in. dia. (See Note A.)	3439-246-0566	10
1, fig. 3	ORD	ROD, WELDING: steel, 3/16 in. dia. (See Note A.)	3439-246-0568	10
3, fig. 3	GE	SANDER, DISK, ELECTRIC, PORTABLE: heavy duty; ac, dc; 7 in. dia pad, w/3 disks.	5130-293-0872	1
	ORD	Disk, abrasive: No. 24 grit, 7 in. dia, 7/8 in. arbor hole	5345-196-1690	1
	ORD	Disk, abrasive: No. 36 grit, 7 in. dia, 7/8 in. arbor hole	5345-196-1692	1
	ORD	Disk, abrasive: No. 80 grit, 7 in, dia, 7/8 in. arbor hole	5345-196-1697	1
6, fig. 3	QM	SLEEVE, WELDER'S: leather; russet; 18 in. lg. (See Note A.)	8415-164-0513	1
7, fig. 3	ORD	SOLDER, ACID-CORE: 1/8 in. dia; 1 lb spool. (See Note B.)	3439-269-9614	1
7, fig. 3	ORD	SOLDER, ROSIN-CORE: 1/8 in. dia; 1 lb spool. (See Note B.)	3438-269-9611	1
7, fig. 3	ORD	SOLDERING IRON, ELECTRIC: 3 1/2 lb. (See Note A.)	3439-222-1632	1
2, fig. 3	QM	STRIPPER, HOSE COVER: for 43/64 through 2 3/4 in. outside diameter hose. (See Note A.)	5110-624-3214	1
2, fig. 3	GE	TACHOMETER, MECHANICAL, HAND HELD	6680-171-4584	1
8, fig. 3	ORD	TAPERED PIN ASSORTMENT: PLAIN: No. 5/0 by 3/4 in. lg through No. 6 by 2 in. lg. (See Note A.)	5315-271-4128	1
2, fig. 3	ORD	TESTER, CYLINDER COMPRESSION: direct type. (See Note A.)	4910-250-2423	1
2, fig. 3	ORD	TESTER, INTERNAL COMBUSTION ENGINE: fuel pressure, 0 to 10 lb pressure, 0 to 27 in. vacuum. (See Note A.)	4910-255-8673	1
2, fig. 3	ORD	TEST SET, GENERATOR AND VOLTAGE REGULATOR, AUTOMOTIVE: for measurement of voltage and current in 6, 12, 24-v low tension circuits. (See Note A.)	4910-270-3780	1
7, fig. 3	QM	TIRE REMOVING TOOL: 18 in. nominal overall length. (See Note A.)	5120-437-6328	2
5, fig. 3	ALL	TOOL SET, MASTER MECHANICS: list of tools follows:	5180-699-5273	1
	QM	Bar, pry: 17/32 in. dia, 15 to 16 in. lg	5120-224-1389	1
	QM	Bit, screwdriver: 0.735 in. w, 1/2 in. drive, 1 5/8 in. lg	5120-223-6898	1
	QM	Brush, wire, scratch	7920-223-7647	1
	QM	Chest, tool, mechanics	5140-338-3416	1
	QM	Chisel, cape, hand: 1/4 in. w, 8 in. lg	5110-554-7345	1
	QM	Chisel, cold, hand: 1/2 in. w, 5 3/4 in. lg	5110-186-7107	1
	QM	Chisel, cold, hand: 1 in. w, 8 in. lg	5110-234-1944	1
	QM	Chisel, cold, hand: 3/4 in. w, 6 1/2 in. lg	5110-236-3272	1
	QM	Chisel, diamond point: 3/8 in. w	5110-223-1079	1
	QM	Chisel, rivet buster, hand: 5/8 in. w	5110-293-0556	1
	QM	File, hand: flat, 8 in. lg	5110-234-6534	1
	QM	File, hand: flat, 6 in. lg	5110-234-6550	1
	QM	File, hand: rd, 3/8 in. dia, 10 in. lg	5110-234-6555	1
	QM	File, hand: half rd, 8 in. lg	5110-241-9151	1
	QM	File, hand: rd, point type, 5 1/4 in. lg	5110-595-8295	1
	QM	File, hand: rd, 5/16 in. dia, 8 in. lg	5110-234-6553	1
	QM	Frame, hand hacksaw; 8 to 12 in. blade lg	5110-223-4971	1
	ORD	Gage, gap setting	5210-221-1995	1
	ORD	Gage, thickness	5210-221-1999	1
	QM	Hammer, hand: 2 oz	5120-250-3911	1
	QM	Hammer, hand: 2 lbs	5120-224-4047	1
	QM	Hammer, hand: insert; 10 1/4 lb	5120-357-6076	1
	QM	Handle, socket wrench: T drive end 1/2 in. 11 in. lg, med	5120-241-3142	1
	QM	Handle, file, wood: 1 1/4 in. dia, 4 1/2 in. lg	5110-263-0349	1
	QM	Key set, socket head screw	5120-204-0972	1
	QM	Key socket head screw, hexagonal: .050 in. size	5120-198-5401	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
	QM	Key socket head screw, hexagonal: 1/16 in. size	5120-198-5398	1
	QM	Key socket head screw, hexagonal: 5/64 in. size	5120-224-2504	1
	QM	Key socket head screw, hexagonal: 3/32 in. size	5120-242-7410	1
	QM	Key socket head screw, hexagonal: 1/8 in. size	5120-240-5292	1
	QM	Key socket head screw, hexagonal: 5/32 in. size	5120-198-5392	1
	QM	Key socket head screw, hexagonal: 3/16 in. size	5120-240-5300	1
	QM	Key socket head screw, hexagonal: 7/32 in. size	5120-242-7411	1
	QM	Key socket head screw, hexagonal: 1/4 in. size	5120-224-4659	1
	QM	Key socket head screw, hexagonal: 5/16 in. size	5120-240-5274	1
	QM	Key socket head screw, hexagonal: 3/8 in. size	5120-198-5390	1
	QM	Key socket head screw, hexagonal: 1/2 in. size	5120-198-5391	1
	QM	Key socket head screw, hexagonal: 9/16 in. size	5120-240-5268	1
	QM	Knife, putty: 1 1/4 in. blade w	5120-221-1536	1
	QM	Pliers, diagonal cutting: 7 1/2 in. nom size	5110-222-2708	1
	QM	Pliers: battery terminal 7 in. nom size	5120-248-9407	1
	QM	Pliers, slip joint: 8 in. nom size	5120-223-7397	1
	QM	Pliers, slip joint: 5 in. nom size	5120-278-0350	1
	QM	Pliers, slip joint: 10 in. nom size	5120-278-0352	1
	QM	Pliers, retaining ring	5120-595-9551	1
	QM	Punch, center solid: 1/8 in. dia, 4 in. lg	5120-293-3509	1
	QM	Punch, drive pin: 5/32 in. dia, 13/16 in. lg	5120-240-6104	1
	QM	Punch, drive pin: 3/16 in. dia, 1 in. lg	5120-240-6106	1
	QM	Punch, drive pin: 1/8 in. dia, 3/4 in. lg	5120-242-5966	1
	QM	Punch, drive pin: 5/16 in. dia, 1 in. lg	5120-293-0793	1
	QM	Punch, drive pin: 1/4 in. dia, 1 in. lg	5120-595-9521	1
	QM	Rule, steel, machinists: 6 in. lg	5210-234-5223	1
	QM	Scraper, carbon, flexible: 1 in. blade w, 9 in. lg	5110-251-6481	1
	QM	Screwdriver, flat tip: 7/32 in. tip w, 1 in. blade lg	5120-222-8866	1
	QM	Screwdriver, flat tip: 3/8 in. blade w, 12 in. blade lg	5120-227-7362	1
	QM	Screwdriver, flat tip: 1/8 in. blade w, 2 in. blade lg	5120-236-2140	1
	QM	Screwdriver, flat tip: 1/4 in. blade w, 4 in. blade lg	5120-278-1282	1
	QM	Screwdriver, flat tip: 5/16 in. blade w, 6 in. lg	5120-278-1283	1
	QM	Screwdriver, offset: 1/4 in. blade, 4 1/4 in. lg	5120-287-2130	1
	QM	Screwdriver set, cross tip	5120-596-0828	1
	QM	Screwdriver cross tip: No. 1 tip size; 3 in. blade lg	5120-240-8716	1
	QM	Screwdriver cross tip: No. 2 tip size; 4 in. blade lg	5120-243-8913	1
	QM	Screwdriver cross tip: No. 3 tip size; 6 in. blade lg	5120-234-8912	1
	QM	Screwdriver cross tip: No. 4 tip size; 8 in. blade lg	5120-236-2128	1
	QM	Socket, socket wrench: drive 1/2 in., 1 1/16 in. wrench opening	5120-189-7913	1
	QM	Socket, socket wrench: drive 1/2 in., 1 1/8 in. wrench opening	5120-243-7339	1
	QM	Socket, socket wrench: drive 1/2 in., wrench opening, 1 in.	5120-243-7340	1
	QM	Socket, socket wrench: drive 1/2 in., wrench opening, 7/8 in.	5120-243-7342	1
	QM	Socket, socket wrench: drive 1/2 in., wrench opening 15/16 in.	5120-243-7343	1
	QM	Socket, socket wrench: drive 1/2 in., wrench opening 13/16 in.	5120-243-7345	1
	QM	Socket, socket wrench: drive 3/8 in., 1/2 in. capacity	5120-303-1168	1
	QM	Stud remover and setter	5120-288-6578	1
	ORD	Tape, measuring: 78 3/4 in. graduated lg	5210-245-0301	1
	QM	Wrench, box: 3/8 and 7/16 in., 4 in. lg	5120-184-8679	1
	QM	Wrench, box: 5/8 and 11/16 in., 9 in. lg	5120-224-3141	1
	QM	Wrench, box: 19/32 and 11/16 in., 9 in. lg	5120-224-3149	1
	QM	Wrench, box: 1/2 and 9/16 in. opening, 4 3/4 in. lg	5120-224-3154	1
	QM	Wrench, box: 5/8 and 11/16 opening, 5 1/2 in. lg	5120-277-1443	1
	QM	Wrench, box: 9/16 and 5/8 in. opening, 4 9/16 in. lg	5120-222-1596	1
	QM	Wrench, pipe: adjustable; 1/4 to 1 in. pipesize; 10 in. lg	5120-277-1485	1
	QM	Wrench, plier: 10 in. lg	5120-423-6727	1
	QM	Wrench, plier: curved 8 1/2 in. lg	5120-494-1911	1
	QM	Wrench, open end adjustable; 0 to 1.135 in. opening, 10 in. lg	5120-449-8083	1
	QM	Wrench, open end, set	(53800) 4306	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
	QM	Wrench, open end, fixed: both ends 13/64 in. wrench opening	5120-184-8442	1
	QM	Wrench, open end, fixed: both ends 7/32 in. wrench opening	5120-184-8443	1
	QM	Wrench, open end, fixed: both ends 15/64 in. wrench opening	5120-184-8444	1
	QM	Wrench, open end, fixed: both ends 1/4 in. wrench opening	5120-184-8445	1
	QM	Wrench, open end, fixed: both ends 9/32 in. wrench opening	5120-184-8446	1
	QM	Wrench, open end, fixed: both ends 5/16 in. wrench opening	5120-184-8447	1
	QM	Wrench, open end, fixed: both ends 11/32 in.	5120-184-8448	1
	QM	Wrench, open end, fixed both ends 3/8 in. wrench opening	5120-293-0191	1
	QM	Wrench, open end, fixed: both ends 7/16 in. wrench opening	5120-184-8541	1
	QM	Wrench, open end, fixed: 7/16 and 1/2 in. wrench opening, 7 in. lg, 3/16 in. hd thk.	5120-184-8620	2
	QM	Wrench, open end, fixed: 5/8 and 11/16 in. wrench opening, 8 in. lg, 13/64 in. hd thk.	5120-277-2327	2
	QM	Wrench, open end, fixed: 1/2 and 9/16 in. wrench opening, 7 3/4 in. lg, 3/16 in. hd thk.	5120-277-4833	2
	QM	Wrench, open end, fixed: tappet; 3/4 and 7/8 in. wrench opening, 8 in. lg, 7/32 in. hd thk.	5120-473-6538	2
	QM	Wrench, open end, fixed: 1/2 and 9/16 in. wrench opening, 5 1/2 in. lg, 17/64 in. hd thk.	5120-187-7124	1
	QM	Wrench, open end, fixed: 9/16 and 5/8 in. wrench opening, 6 in. lg, 19/64 in. hd thk.	5120-187-7126	1
	QM	Wrench, open end, fixed: 1 and 1 1/8 in. wrench opening, 11 1/2 in. lg, 1/2 in. hd thk.	5120-187-7133	1
	QM	Wrench, open end, fixed: 3/4 and 7/8 in. wrench opening, 8 3/8 in. lg, 3/8 in. hd thk.	5120-240-5609	1
	QM	Wrench, open end, fixed: 19/32 and 25/32 in. wrench opening, 7 in. lg. 11/32 in. hd thk.	5120-277-1229	1
	QM	Wrench, open end, fixed: 3/8 and 7/16 in. wrench opening, 4 1/8 in. lg, 7/32 in. hd thk.	5120-277-2342	1
	QM	Wrench, open end, fixed: 15/16 and 1 1/16 in. wrench opening, 10 1/2 in. lg, 7/16 in. hd thk.	5120-277-2693	1
	QM	Wrench, open end, fixed: 11/16 and 13/16 in. wrench opening, 8 3/8 in. lg, 3/8 in. hd thk.	5120-277-8300	1
	QM	Wrench set, ignition: midget, double offset, double end, 4 pieces	5120-554-1289	1
	QM	Wrench, box: one end 3/16 in. size; other end 13/64 in. size	5120-254-5215	1
	QM	Wrench, box: double hd, extra small, 7/32 in. x 5/64 in.	5120-264-5216	1
	QM	Wrench, box: one end 1/4 in. size; other end 9/32 in. size	5120-422-8592	1
	QM	Wrench, box: one end 5/16 in. size; other end 11/32 in. size	5120-264-5213	1
	QM	Wrench set, box: 3/8 to 1 in. wrench openings	5120-322-6086	1
	QM	Wrench, box: one end 3/8 in. size; other end 7/16 in. size	5120-224-3135	1
	QM	Wrench, box: one end 1/2 in. size; other end 9/16 in. size	5120-224-3136	1
	QM	Wrench, box: one end 9/16 in. size; other end 5/8 in. size	5120-224-3140	1
	QM	Wrench box: one end 3/4 in. size; other end 7/8 in. size	5120-224-3142	1
	QM	Wrench box	5120-224-5780	1
	QM	Wrench, box: one end 15/16 in. size; other end 1 in. size	5120-224-3143	1
	QM	Wrench set, socket: drive, 1/4 in.	5120-203-9573	1
	ORD	Box, socket wrench set	5120-357-5468	1
	QM	Extension, socket wrench: 1/4 in. w across flats, 2 in. lg	5120-227-8105	1
	QM	Extension, socket wrench: 1/4 in. w across flats, 6 in. lg	5120-243-7325	1
	QM	Handle, socket wrench: 1/4 in. size of drive end, 5 7/16 in. lg	5120-221-7960	1
	QM	Handle, socket wrench: 1/4 in. drive size, 4 1/4 in. lg	5120-221-7957	1
	QM	Socket, socket wrench: 1/4 in. drive size, 3/16 in. wrench opening	5120-236-2262	1
	QM	Socket, socket wrench: 1/4 in. drive size, 7/32 in. wrench opening	5120-236-2263	1
	QM	Socket, socket wrench: 1/4 in. drive size, 1/4 in. wrench opening	5120-236-2264	1
	QM	Socket, socket wrench: 1/4 in. drive size, 9/32 in. wrench opening	5120-242-3345	1
	QM	Socket, socket wrench: 1/4 in. drive size, 5/16 in. wrench opening	5120-232-5703	1
	QM	Socket, socket wrench: 1/4 in. drive size, 11/32 in. wrench opening	5120-232-5704	1
	QM	Socket, socket wrench: 1/4 in. drive size, 3/8 in. wrench opening	5120-241-3186	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
	QM	Socket, socket wrench: ¼ in. drive size, 7/16 in. wrench opening	5120-239-0016	1
	QM	Socket, socket wrench: ¼ in. drive size, ¼ in. wrench opening	5120-189-7906	1
	QM	Socket, socket wrench: ¼ in. drive size, 5/16 in. wrench opening	5120-189-7907	1
	QM	Socket, socket wrench: ¼ in. drive size, ⅜ in. wrench opening	5120-189-7908	1
	QM	Universal joint, socket wrench: ¼ in. end size	5120-243-1686	1
	QM	Wrench set, socket drive, ½ in	5120-289-8665	1
	QM	Extension, socket wrench: ½ in. w across flats, 5 in. lg	5120-243-7326	1
	QM	Extension, socket wrench: ½ in. w across flats, 10 in. lg	5120-227-8074	1
	QM	Handle, socket wrench: ½ in. size of drive end, 9½ in. lg	5120-230-6385	1
	QM	Handle, socket wrench: ½ in. size of drive end, 12 15/16 in lg	5120-221-7958	1
	QM	Handle, socket wrench: ½ in. size drive end, 18 in. lg	5120-230-6364	1
	QM	Socket, socket wrench: ½ in. drive size, 7/16 in. wrench opening	5120-189-7924	1
	QM	Socket, socket wrench: ½ in. drive size, ½ in. wrench opening	5120-237-0984	1
	QM	Socket, socket wrench: ½ in. drive size, 9/16 in. wrench opening	5120-189-7932	1
	QM	Socket, socket wrench: ½ in. drive size, 19/32 in. wrench opening	5120-239-0019	1
	QM	Socket, socket wrench: ½ in. drive size, 5/8 in. wrench opening	5120-189-7946	1
	QM	Socket, socket wrench: ½ in. drive size, 11/16 in. wrench opening	5120-235-5870	1
	QM	Socket, socket wrench: ½ in. drive size, ¾ in. wrench opening	5120-189-7985	1
	QM	Socket, socket wrench: ½ in. drive size, 25/32 in. wrench opening	5120-189-7915	1
	QM	Socket, socket wrench: ½ in. drive size, 13/16 in. wrench opening	5120-189-7933	1
	QM	Socket, socket wrench: ½ in. drive size, 7/8 in. wrench opening	5120-189-7934	1
	QM	Socket, socket wrench: ½ in. drive size, 15/16 in. wrench opening	5120-189-7935	1
	QM	Socket, socket wrench: ½ in. drive size, 1 in. wrench opening	5120-189-7927	1
	QM	Universal joint, socket wrench: ½ in. end size	5120-269-7971	1
	QM	Wrench set, socket: drive, ⅜ in	5120-293-1470	1
	QM	Bit, screwdriver: ½ in. tip w, ⅜ in. drive size, 2½ in. lg	5120-293-1470	1
	QM	Bit, screwdriver: 11/16 in. tip w, ⅜ in. drive size	5120-243-7332	1
	QM	Extension, socket wrench: ⅜ in. w across flats, 5 in. lg	5120-273-9203	1
	QM	Extension, socket wrench: ⅜ in. w across flats, 6 in. lg	5120-227-8107	1
	QM	Extension, socket wrench: ⅜ in. w across flats, 12 in. lg	5120-243-1691	1
	QM	Handle, socket wrench: ⅜ in. size of drive end, 6 in. lg	5120-240-5364	1
	QM	Handle, socket wrench: ⅜ in. size of drive end, 7 in. lg	5120-241-3143	1
	QM	Handle, socket wrench: ⅜ in. size of drive end, 8½ in. lg	5120-240-5396	1
	QM	Handle, socket wrench: ⅜ in. size of drive end, 16 in. lg	5120-237-4969	1
	QM	Socket, socket wrench: ⅜ in. drive, 12 pt, 5/16 in. opening	5120-227-6703	1
	QM	Socket, socket wrench: ⅜ in. drive size, ½ in. wrench opening	5120-237-0977	1
	QM	Socket, socket wrench: ⅜ in. drive size, ½ in. wrench opening	5120-241-3185	1
	QM	Socket, socket wrench: ⅜ in. drive size, ½ in. wrench opening	5120-242-3355	1
	QM	Socket, socket wrench: ⅜ in. drive size, 9/16 in. wrench opening	5120-227-6704	1
	QM	Socket, socket wrench: ⅜ in. drive size, 9/16 in. wrench opening	5120-239-0017	1
	QM	Socket, socket wrench: ⅜ in. drive size, 5/8 in. wrench opening	5120-237-4974	1
	QM	Socket, socket wrench: ⅜ in. sq drive, 19/32 in. opening	5120-180-0980	1
	QM	Socket, socket wrench: ⅜ in. drive size, 5/8 in. wrench opening	5120-237-4973	1
	QM	Socket, socket wrench: ⅜ in. drive size, 5/8 in. wrench opening	5120-239-0178	1
	QM	Socket, socket wrench: ⅜ in. drive size, 11/16 in. wrench opening	5120-232-5706	1
	QM	Socket, socket wrench: ⅜ in. sq drive, 11/16 in. wrench opening	5120-180-0983	1
	QM	Socket, socket wrench: ⅜ in. drive size, ¾ in. wrench opening	5120-227-6705	1
	QM	Socket, socket wrench: ⅜ in. drive size, ¾ in. wrench opening	5120-235-5879	1
	QM	Socket, socket wrench: ⅜ in. drive size, 13/16 in. wrench opening	5120-235-5807	1
	QM	Socket, socket wrench: ⅜ in. drive size, 13/16 in. wrench opening	5120-596-0836	1
	QM	Socket, socket wrench: ⅜ in. drive size, 7/8 in. wrench opening	5120-235-5809	1
	QM	Socket, socket wrench: ⅜ in. drive size, 5/16 in. wrench opening	5120-232-5711	1
	QM	Socket, socket wrench: ⅜ in. drive size, ⅜ in. wrench opening	5120-227-6702	1
	QM	Universal joint, socket wrench: ⅜ in. end size	5120-224-9215	1
1, fig. 3	ORD	TORCH, WELDING: 60°, brass; hand operation, thd male connections; welding tips. (See Note A.)	3433-542-0948	1
Mounted on tailgate.	QM	VISE, MACHINISTS: 4 in. w/6 in. opening. (See Note A.)	5120-293-1439	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
7, fig. 3	ORD	VULCANIZER, HOT PATCH: bench mtg. (See Note A.)	4910-243-3130	1
2, fig. 3	ORD	WHEEL, ABRASIVE: aluminum oxide; No. 24 grain, 7 in. dia, ¼ in. face, ⅞ in. arbor hole. (See Note A.)	5130-049-7912	6
8, fig. 3	ORD	WOODRUFF KEY ASSORTMENT: 1/16 in. dia by ½ in. lg thru ⅜ in. dia by 1½ in. lg. (See Note A.)	5315-271-4251	1
7, fig. 3	ORD	WRENCH, ADJUSTING: 1 5/16 x 8 in. lg. (See Note A.)	5120-240-5328	1
7, fig. 3	QM	WRENCH, OPEN END ADJUSTABLE: 0 to 1,322 in. jaw opening, 12 in. lg. (See Note A.)	5120-264-3796	1
7, fig. 3	ORD	WRENCH, PIPE: ¼ to 1 in. pipe cap. (See Note A.)	5120-240-5331	1
2, fig. 3	QM	WRENCH SET, SOCKET, SQUARE DRIVE: ¾ in. wide across flats, 12 point shape sockets; list follows:	5120-640-6702	1
	GE	Box, tool	5140-315-2743	1
	QM	Extension, socket wrench, ¾ in. width across flats, 3 in. lg	5120-273-9208	1
	QM	Extension, socket wrench, ¾ in. width across flats, 8 in. lg	5120-243-7328	1
	QM	Extension, socket wrench, ¾ in. width across flats, 16 in. lg	5120-227-8079	1
	QM	Handle, socket wrench, ¼ in. size of drive end, 20⅜ in. lg	5120-221-7959	1
	QM	Handle, socket wrench, ¾ in. size of drive end, 18 in. lg	5120-249-1076	1
	QM	Handle, socket wrench, ¾ in. size of drive end, 18½ in. lg	5120-240-5368	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size; ⅞ in. wrench opening.	5120-181-6816	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size; 5/16 in. wrench opening.	5120-180-6813	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1 in. wrench opening.	5120-237-0989	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1 1/16 in. wrench opening.	5120-189-7928	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1⅛ in. wrench opening.	5120-239-0021	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1¼ in. wrench opening.	5120-239-5871	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1 5/16 in. wrench opening.	5120-232-5681	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1⅜ in. wrench opening.	5120-239-7950	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1 7/16 in. wrench opening.	5120-189-7931	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1½ in. wrench opening.	5120-239-0025	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1⅝ in. wrench opening.	5120-199-7765	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. square drive, 1 11/16 in. wrench opening.	5120-232-5685	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. square drive, 1¾ in. wrench opening.	5120-199-7767	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1 13/16 in. wrench opening.	5120-199-7768	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 1⅞ in. wrench opening.	5120-199-7769	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 2 in. wrench opening.	5120-199-7770	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 2⅛ in. wrench opening.	5120-242-3373	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 2 3/16 in. wrench opening.	5120-235-5845	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 2¼ in. wrench opening.	5120-199-1771	1
	QM	Socket, socket wrench, square drive, 12 point shape, ¾ in. drive size, 2⅜ in. wrench opening.	5120-236-7643	1

Table I. Contents of Shop Set—Continued

Shop location	Logistic responsibility	Description	FSN or MPN	Quantity
	QM	Universal joint, socket wrench, square end, ¾ in. end size	5120-243-1687	1
1, fig. 3	QM	WRENCH, TORCH AND REGULATOR: 7/16, 11/16, ¾, 1, 1⅛ in. wrench opening. (See Note A.)	5120-494-1292	1
7, fig. 3	QM	WRENCH, TORQUE, SQUARE MALE DRIVE: ½ in. drive size, 150 foot-pounds, 2 spec size. (See Note A.)	5120-221-7950	1

5. Identification and Tabulated Data

a. Identification. The shop set has three identification plates.

(1) *Corps of Engineers plate A.* Located on the left front of the body housing and specifies the nomenclature, stock number, manufacturer, model, shipping dimensios and weight, cubic feet, engine manufacturer, and engine model. The information listed on this plate will be found in tabulated data.

(2) Welder identification plate. Located on the generator-welder housing and specifies the manufacturer, amperage, volts, model, duty cycle and specification number. The information listed on this plate will be found in tabulated data.

(3) Air compressor identification plate. Located on the compressor motor and specifies the manufacturer, model, horsepower, voltage, cycles, amperage, revolutions per minute, and temperature rise. The information listed on this plate will be found in tabulated data.

b. *Tabulated Data.*

(1) *General.*

Manufacturer- --- ----- ---	Southwest Truck Body Co.
Model ----------	SECM
Type ----------	Truck mounted M56B, 3/4 ton, 4x4.

(2) *Corps of Engineers plate A (Model SECM).*

Nomenclature- --------	Shop Equipment, Contact Maintenance, Truck Mounted.
Stock No----------	4940-294-9518
Manufacturer ----------	Southwest Truck Body Co.
Model----------	SECM
Length----------	215 in. (inches)
Width ----------	82 1/2 in.
Height ----------	82 1/2 in.
Shipping weight-- -------	8,400 lb (pounds)
Cube----------	847 ft (feet)
Engine manufacturer - - - - -	Dodge Division, Chrysler Motor Corp.
Engine model ----------	T-245
Engine serial No. --------	
Contract No----------	
Date manufactured- ------	
Registration No. ---------	
Serial No----------	

(3) *Corps of Enginers plate A (Model CMU-5).*

Nomcnclaturc- ---------	Shop Equipment, Contact Maintenance, Truck Mounted.
Stock No.----------	4940-294-9518
Manufacturer- - - - - -	Davey Compressor Co.
Model - - - - - - - - -	CMU-5
Length ----------	214 in.
Width ----------	83 in.
Height ----------	82 in.
Shipping weight --- --- --	8,440 lb
Cube ----------	847 ft
Engine Manufacturer.. _	Dodge Division, Chrysler Motor Corp.
Engine Model ---	
Engine Serial No. --------	
Contract No----------	88CF48254-30
Date Manufactured ------	
Registration No. ---	
Serial No----------	

(4) *Welder identification plate.*

Manufacturer- ----------	Hobart Brothers Co.
Generator:	
Amperage ----------	200
Volts ----------	40
Model ----------	SMR-200
Duty cycle----------	60 percent
Specifications:	
Model SECM ---	3408
Model CMU-5--	3741
Motor:	
Horsepower ---------	15
Revolutions per minute.	1,500-1,800
Phase ----------	3
Cycles ----------	50-60
volts:	
Model SECM -- _	208
Model CMU-5--	240
Amperage----------	38

(5) *Air compressor identification plate.*

Manufacturer -- ----------	Johnson Service Co.
Models----------	MM60083HT
	MM60528JT
Horsepower----------	1/3

Volts:
Model MM60083HT_ 110
Model MM60528JT- - - 115
Cycles ---------- 60
Amperage ---------- 7
Revolutions per minute--- 1,725
Temperature rise:
Model MM60083HT- 40°C.
Model MM60528JT- 55°C.
Code ----------
Serial No----------
Mfg.No.----------

(6) *Generator-welder assembly.*

Manufacturer- ---------- Hobart Brothers Co.
Generator:
Amperage---------- 200
volts ---------- 40
Duty cycle ---------- 60 percent
Model ---------- SMR-200
Specifications:
Model SECM___ 3408
Model CMU-5-- 3741
Motor:
Horsepower --------- 15
Phase-___--------- 3
Volts:
Model SECM--- 208
Model CMU-5-- 240
Amperes----------.-- 38
Cycles ---------- 50-60
Revolutions per minute--- 1,500-1,800
Brush spring tension--- --- 32 oz (ounces)

(7) Power takeoff.

Manufacturer ----- ------- Twin Disk Clutch Co.
Model---------- 19672
Type ---------- Belt driven

(8) Air compressor,

Manufacturer ---------- Johnson Service Co.
Models---------- MM60083HT
MM60528JT
Type ---------- Electrical motor driven, portable

(9) Truck. **Refer to TM 9-8030.**

Recommended tire pressure 40 psi (pounds per square inch)
crosscountry or highway.
Mud, sand, or snow ------ 15psi
Front axle turning angle 28°to 29°
(inside wheel).
Fuel and oil capacities:
Fuel tank capacity--- 24 gal (gallons)
Crankcase capacity_.. 5qt (quart)
Oilfilter capacity -------- lqt
Air cleaner capacity ------ 1 qt
Governor ---------- 3/32 qt

(10) *Wiring diagrams. See* figures **4** and 5.

Figure 4;. Wiring diagram, Model SECm
(Located in back of manual)

Figure 5. *Wiring diagram, Model CMU-5.*
(Located in back of manual)

6. Difference in Models

This manual covers the Shop Equipment, Contact Maintenance Set No. 3, Model SECM, serial No. range S–3–628 through S-3-720 and Model CMU-5, serial No. range 33343 through 33343–234. The differences between the two shop sets are the arc welding machine control panels, location of the overspeed safety relay, and the generator weldcr housing. Also, Model CMU-5 has front and rear turn signals and mounts the fire extinguisher on the floorboard of the truck cab. Differences in shop contents are noted in table I. Where differences exist, each model is covered separately in the applicable section of this manual,

CHAPTER 2
INSTALLATION AND OPERATION INSTRUCTIONS

Section 1. SERVICE UPON RECEIPT OF EQUIPMENT

7. Unloading the Equipment

a. Refer to figure G and remove all blocking and tiedowns that secure the shop set to the carrier.

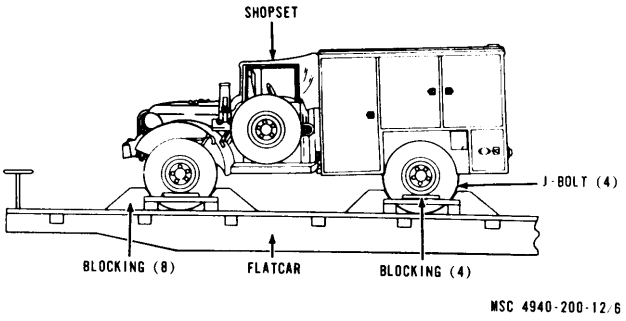


Figure 6. Shop set blocking and tiedowns, removal and installation.

b. If a suitable unloading ramp is not available, refer to figure 7 and construct an unloading ramp.

c. Position flatcar at end of ramp and securely block flatcar wheels.

d. Tow or drive the shop set from the flatcar. If the shop set is towed, use suitable snubbing device.

8. Unpacking the Equipment

a. The shop set is shipped assembled, except for the mirrors, windshield wipers, and blades which are packed in the tool box. These shall be unpacked and installed on the equipment.

b. The tool compartments shall be unlocked and the various boxed components removed from their containers, and replaced in their compartments.

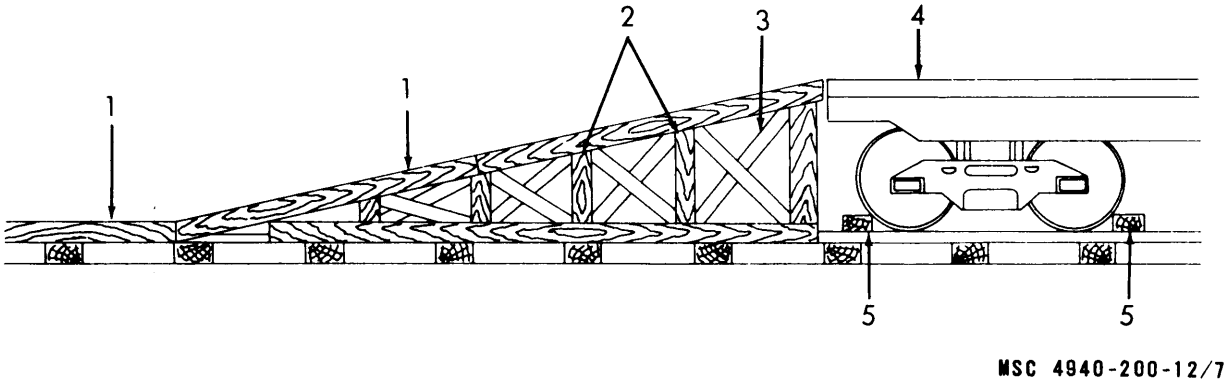
9. Inspecting and Servicing Equipment

a. Inspection.

(1) Prepare item for inspection and operation as outlined on DA Form 2258, attached on or near the operational controls.

(2) Make a complete inspection of the shop set and its components, visually checking for loss or damage which may have occurred in shipment. Refer to paragraph 4 for listing and location of components.

(3) Inspect the doors, tailgate, and other body members for dents, breaks, cracks, and loose and missing parts.



1 Ramp runners, 6 x 6 in.
2 Vertical supports, *6 x 6* in.
3 Cross supports, 2 x 2 x 4 in.
4 Flatcar
5 Wheel blocking

Figure 7. Typical unloading ramp.

(4) Inspect the generator-welder for loose or missing parts, dents, breaks, or other damage.
(5) Inspect the power takeoff for damage and loose or missing external components.
(6) Correct all deficiencies noted or report to field maintenance.

b. Servicing.
(1) Perform the daily preventive maintenance services (par. 35).
(2) Lubricate the shop set in accordance with the current lubrication order.
(3) Refer to TM 9-8030 for truck servicing.

10. Installation or Setting-Up instructions

a. Shop Set Contents. Install all shop set contents in their respective locations and secure with holddown straps and clamps. Refer to table I.

b. Grounding. The generator-welder must be grounded prior to operation. The ground can be, in order of preference, an underground metallic water piping system, a driven metal rod, or a buried metal plate. A ground rod must have a minimum diameter of 5/8 inch if solid or 3/4 inch if pipe, and be driven to a minimum depth of 8 feet. A ground plate must have a minimum area of 9 square feet and be buried at a minimum depth of 4 feet. The ground lead must be No. 6 AWG (American Wire Gage) copper wire and be bolted or clamped to the rod, plate, or piping system. Connect the other end of the ground lead to the truck frame on Model SECM shop sets. On Model CMU-5 shop sets, connect the other end of the ground lead to the ground terminal stud, located on the lower right hand corner of the generator-welder control panel.

Warning: **Do not connect an external power source or operate the generator-welder until it has been properly grounded. Electrical faults in the generator-welder, load lines, or equipment can cause death by electrocution from contact with an ungrounded system.**

Section II. MOVEMENT TO A NEW WORKSITE

11. Dismantling for Movement

a. Be sure the declutcher lever is securely locked in the NEUTRAL position.

b. Disconnect all welding cables and stow securely in the proper compartment.

c. Secure all portable accessories in proper location with holddown straps.

d. Make certain all compartments are securely latched and locked.

e. Make certain that the generator-welder is secure.

f. Close the tailgate and secure the rear doors.

g. The shop set may be moved for intermediate distances on its own power.

h. Do not add equipment to that listed for this shop set and do not change loading from that shown in table I. When the mission is known and additional personnel, parts, or equipment must be transported, remove the comparable weight in parts, equipment, or components that are not required to fulfill the mission. Locate the additional parts or equipment, when pratical, in the same compartment from which parts or components were removed.

12. Reinstallation After Movement

For setting-up instructions of the shop set after movement to a new worksite, refer to paragraph 10.

Section III. CONTROLS AND INSTRUMENTS

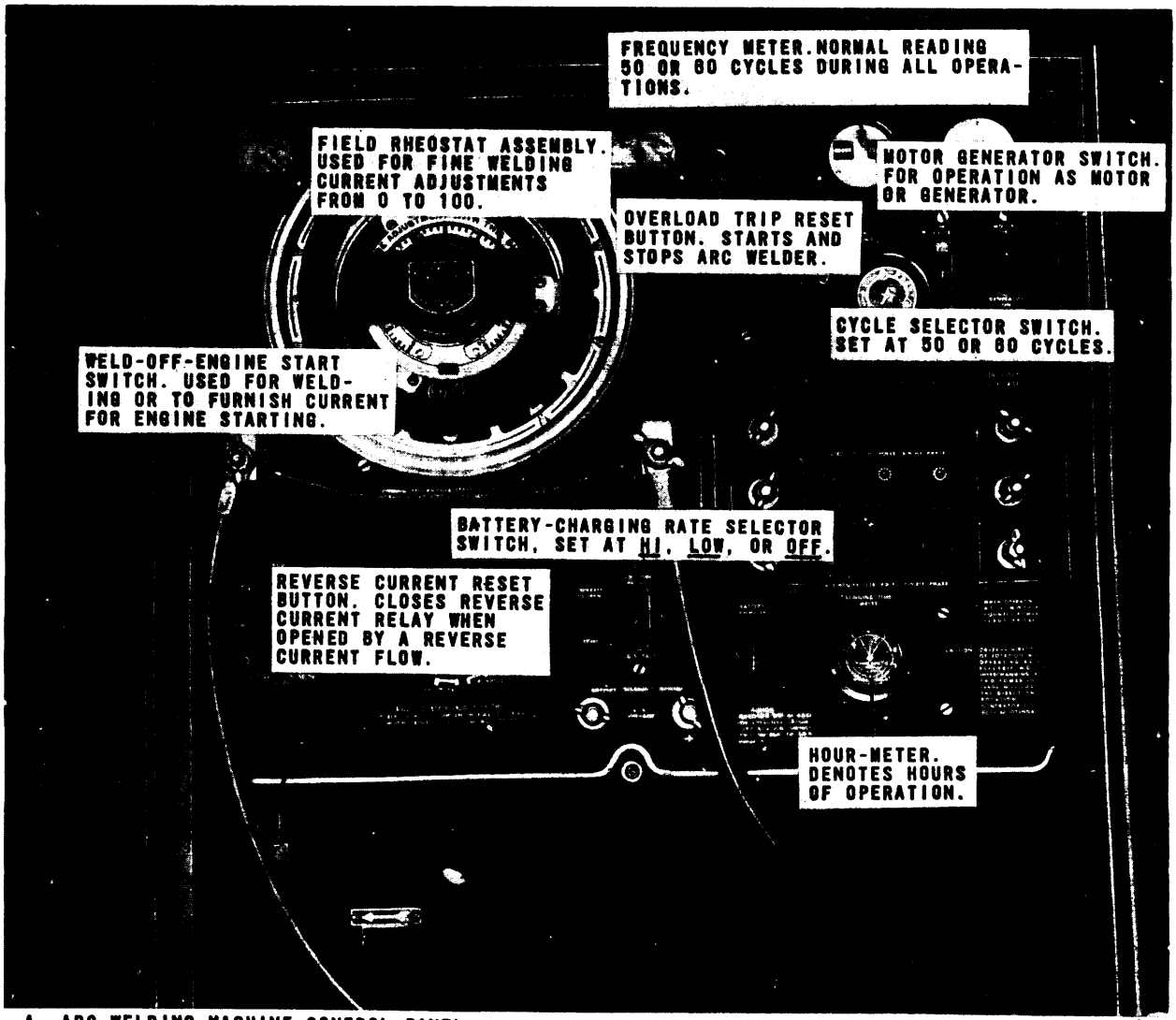
13. General

This section describes, locates, illustrates, and furnishes the operator and organizational maintenance personnel sufficient information about the various controls and instruments for proper operation of the shop set and its components. The controls and instruments pertaining to the truck chassis are covered in **TM 9-8030.**

14. Controls and Instruments

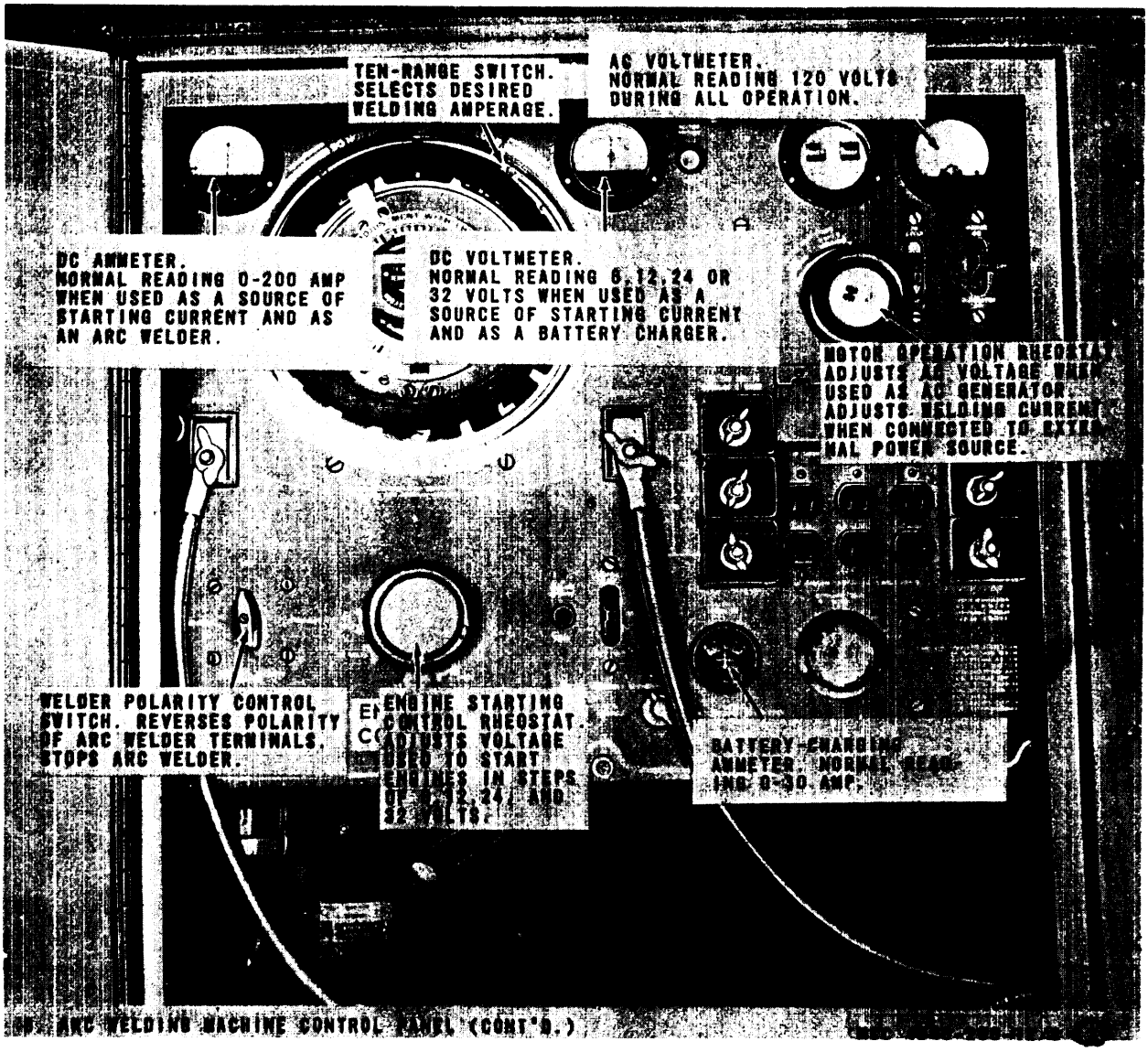
a. Model SECM. Refer to figure 8 for normal readings or positions of the controls and instruments of Model SECM shop set.

b. *Model CMU-5.* Refer to figure 9 for normal readings or position of the controls and instruments of Model CMU–5 shop set.



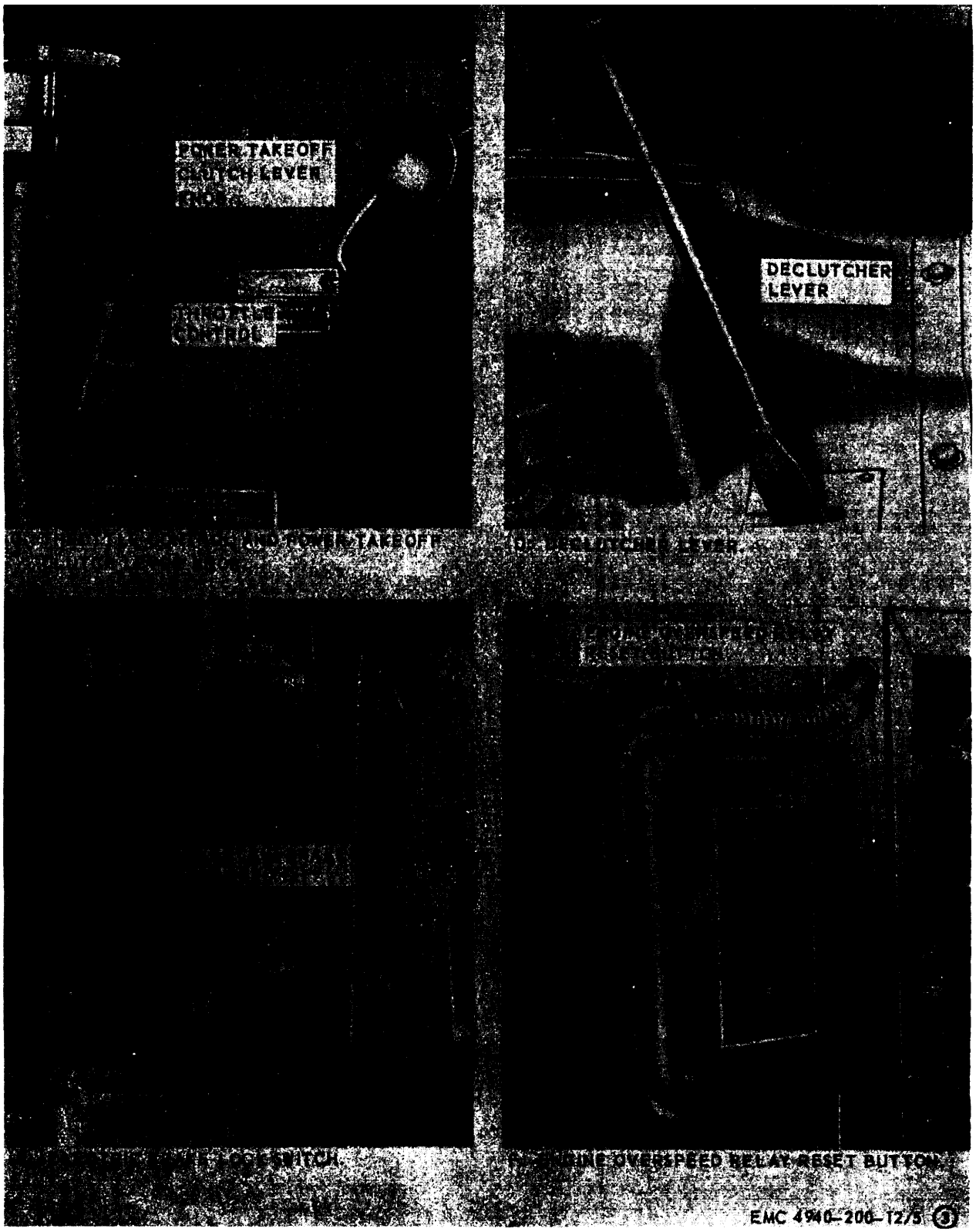
Reference A

Figure 8. Controls and instruments, Model SECM.

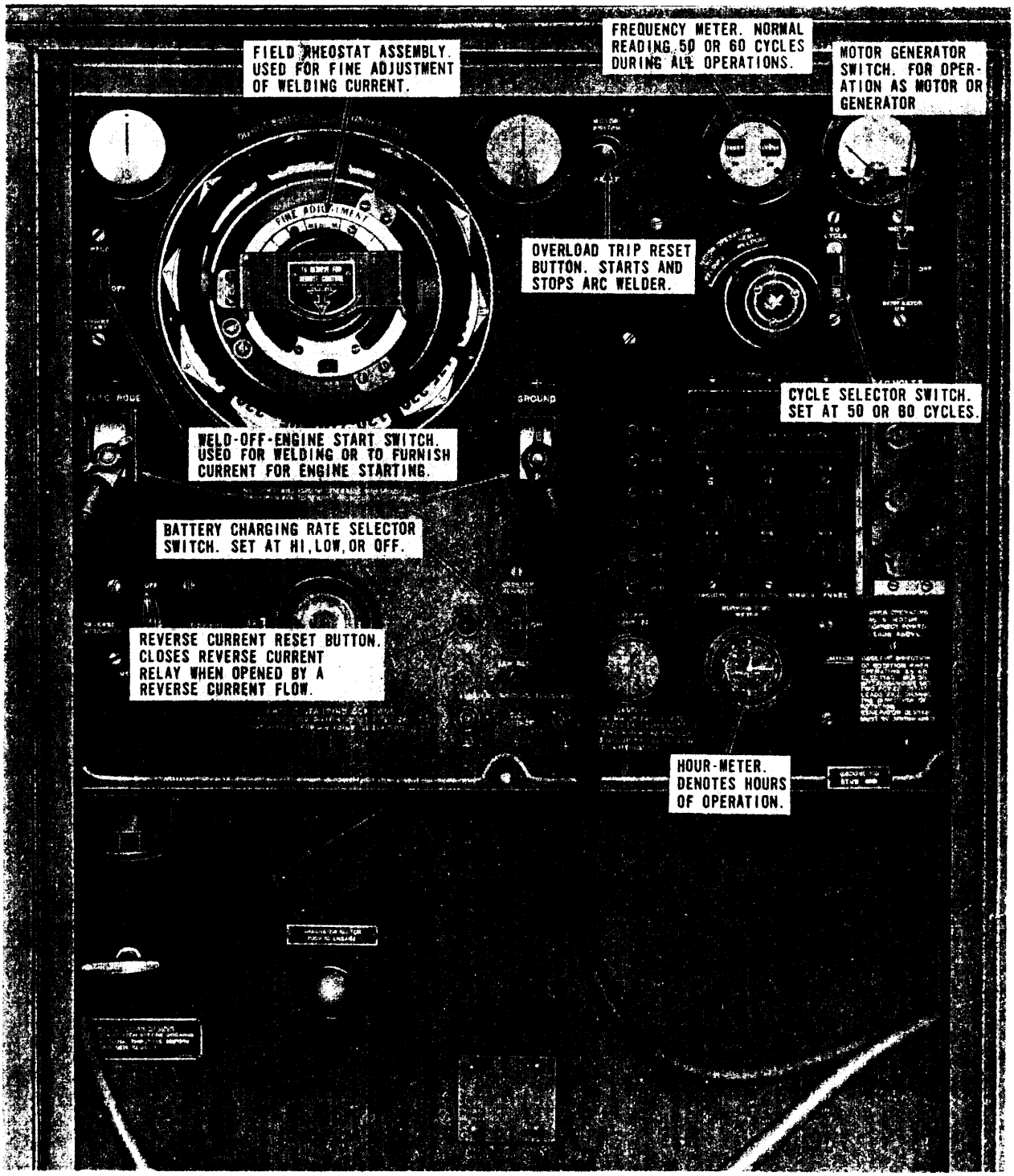


Reference B

Figure 8—Continued.



References C through F
Figure 8—Continued.

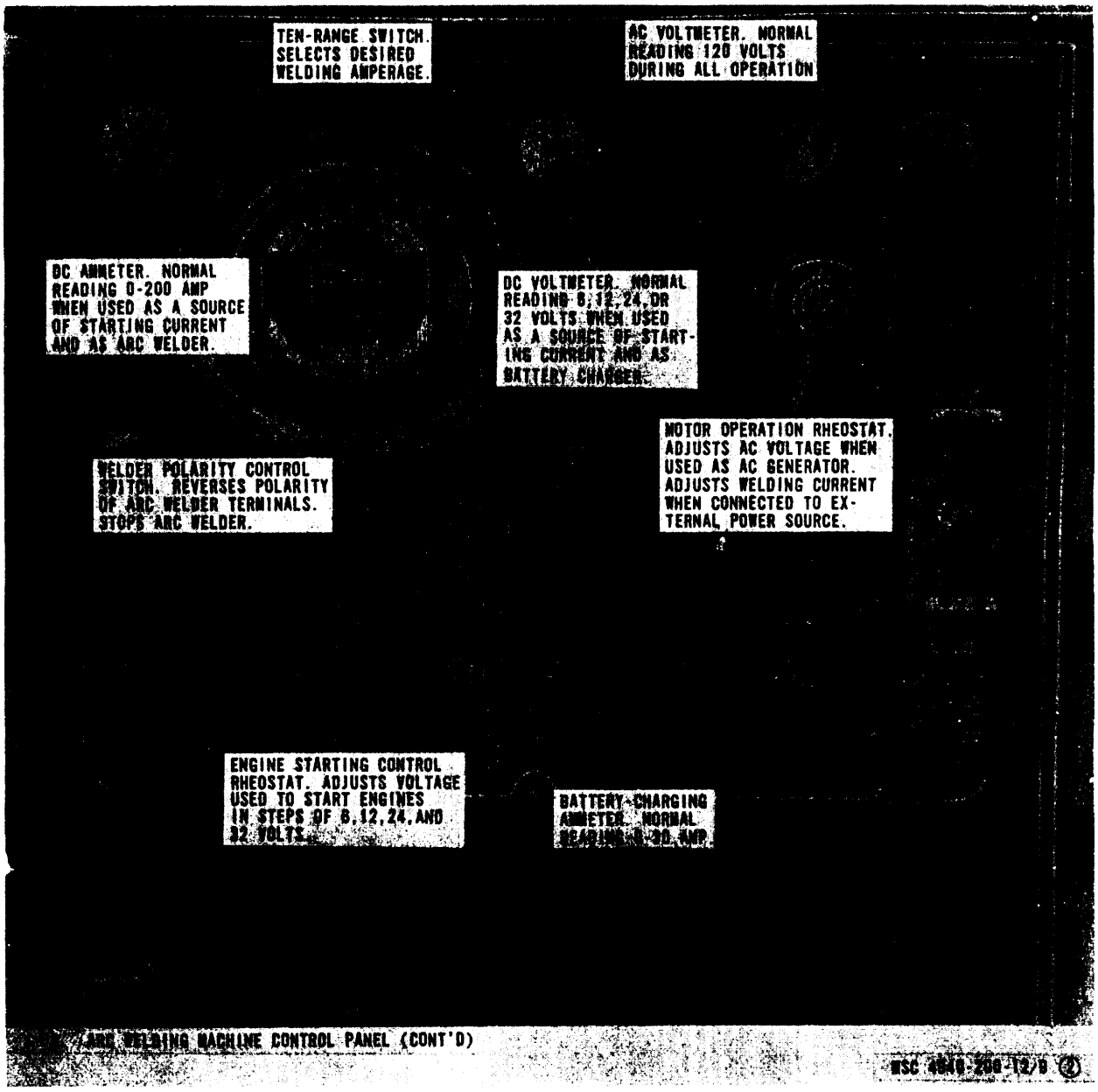


A. ARC WELOING MACHINE CONTROL PANEL.

MSC 4940-200-12/9 ①

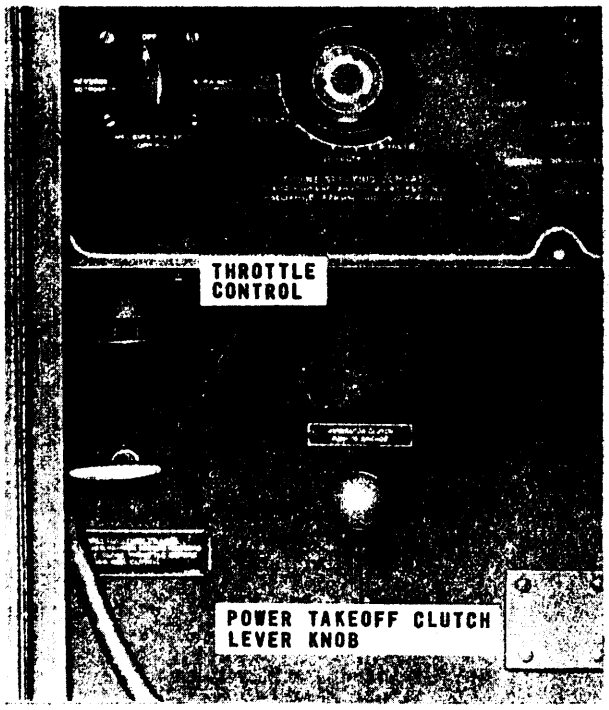
Reference A

Figure 9. Controls and instruments, Model CMU-5.



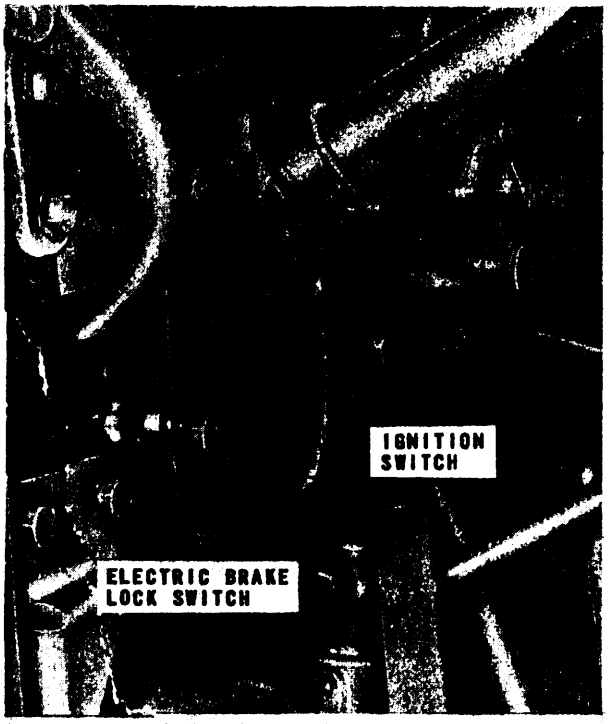
Reference B

Figure 9-Continued.



C. THROTTLE CONTROL AND POWER TAKEOFF CLUTCH LEVER KNOB.

D. DECLUTCHER LEVER.



E. ELECTRIC BRAKE LOCK SWITCH AND IGNITION SWITCH.

MSC 4940-200-12/9 (3)

References C through E
Figure *9-Continued.*

15. General

a. The instructions in this section are published for the information and guidance of the personnel responsible for the shop set.

b. The operator must know how to perform every operation of which the shop set is capable. This section gives instructions on starting and stopping the shop set and on coordinating the basics motions to perform the specific task for which the equipment is designed. Since nearly every job presents a diffcrcnt problem, the operator may have to vary given procedures to fit the individual job.

Warning: **Do not connect an external power source or operate the generator-welder until it has been properly grounded. Electrical faults in the generator-welder, load lines, or equipment can cause death by electrocution from contact with an ungrounded system.**

16. Starting Generator-Welder, Power Take-off Drive

a. *Preparation for Starting.*

(1) Perform the daily preventive maintenance services (par. 35).

(2) Lubricate the shop set as specified in the current lubrication order.

b. *Starting.Refer* to figure 10 and start the generator-welder.

17. Starting Generator-Welder, Electric Drive

a. Preparation for Starting.

(1) Perform the daily preventive maintenance services (par. 35).

(2) Lubricate the shop set as specified in the current lubrication order.

b. *Starling.* Refer to figure 11 and start the generator-welder.

Caution: **Observe direction of rotation of generator-welder when starting with electric drive. Correct rotation is counterclockwise when viewed from nondrive end. Interchanging any two power input leads will change direction of rotation. Power takeoff clutch must be disengaged.**

18. Stopping Generator-Welder, Power Take-off Drive

a. Refer to figure 12 and stop the generator-welder.

b. Perform the daily preventive maintenance services (par. 35).

19. Stopping Generator-Welder, Electric Drive

a. Refer to figure 13 and stop the gcnerator-welder.

b. Perform the daily preventive maintenance services (par. 35).

20. Operation of Generator-Welder

a. *General.* The gcnerator-weldler, by means of proper switching and controls, (can) be used as an arc weldcr or a remote controlled are welder, as a battery charger, as all alternating current generator, and as a source of starting cur-rent, for internal combustion engines.

b. As Arc *Welder.* Refer to figure 14 for operation instuctions.

c. As Remote *Controlled Are Welder.* Refer to figure 15 for operating instructions.

d. As a Battery *Charger.* Refer to figure 16 for operating instructions.

Caution: **When charging on HI-RATE watch for excessive battery gassing and heating. Should this occur, switch to LO-RATE immediately.**

c. As *an Alternating Current Generator.* Refer to figure 17 for operating instructions.

j. As A *Source of Starting Current.* Refer to figure 18 for operating instructions.

21. Operation in Extreme Cold (Below O°F.)

a. Truck *and Chassis.* Refer to TM 9-8030 for extreme cold weather operation.

b. *Gcn~rator-Ji'elder.* When operating the generator-welder (power takeoff drive) in extremely cold temperatures, allow for a warmup period until the engine reaches normal operating temperature before applying the load to the arc welder.

c. *Wiring.* Insulation may become brittle in extremely cold temperatures. Do not bend the wiring, as the insulation will crack and cause short circuits or grounds. Keep the wiring dry at all times.

d. *Lubrication.* Refer to the current lubrication for cold weather operation.

22. Operation in Extreme Heat

a. Lubrication. Refer to the current lubrication order for lubrication in extreme heat and lubricate only with specified lubricants.

b. *Fuel and Cooling System.* Refer to TM 9–8030 for maintenance and operation in extreme heat.

23. Operation in Dusty or Sandy Areas

a. Lubrication. observe all lubrication instructions in the current lubrication order.

b. *Protection.* Make sure that all weather seals are in good condition and properly seated. Clean all equipment carefully and frequently. Pay particular attention to the air filters, commutators, and linkages. Cover all exposed or partially exposed components when not in use.

24. Operation Under Rainy or Humid Conditions

a. Shop Set Location. If the shop set is outside, place the shop set on high ground so water will drain fast,

b. Protection. Keep the tools and equipment stored in the compartments provided for them. If tools are damp, they should be dried and a light coat of oil placed on them. During dry periods, open compartment doors to allow equipment to dry before operating.

c. *Cleaning and Painting Exposed Surfaces.* Give special care to the removal of moisture from all components. Clean and paint all surfaces that are not otherwise protected.

25. Operation in Salt Water Areas

a. Shop Set Location. If the shop set is being located near a body of salt water, park the unit as far from the salt water as possible.

b. Protection. Cover machined surfaces with approved corrosion preventive. Clean and paint all surfaces that are not otherwise protected.

26. Operation at High Altitudes

The generator is rated at 8.0 kilowatt up to 5,000 feet altitude and 6.6 kilowatt at 8,000 feet altitude. To calculate specific generator set output capability above 8,000 feet, use the following formula: (round the figures to the nearest tenth). Generator set ratings above 8,000 ft. (feet) (5 to 15 kw (kilowatt))

FORMULA:

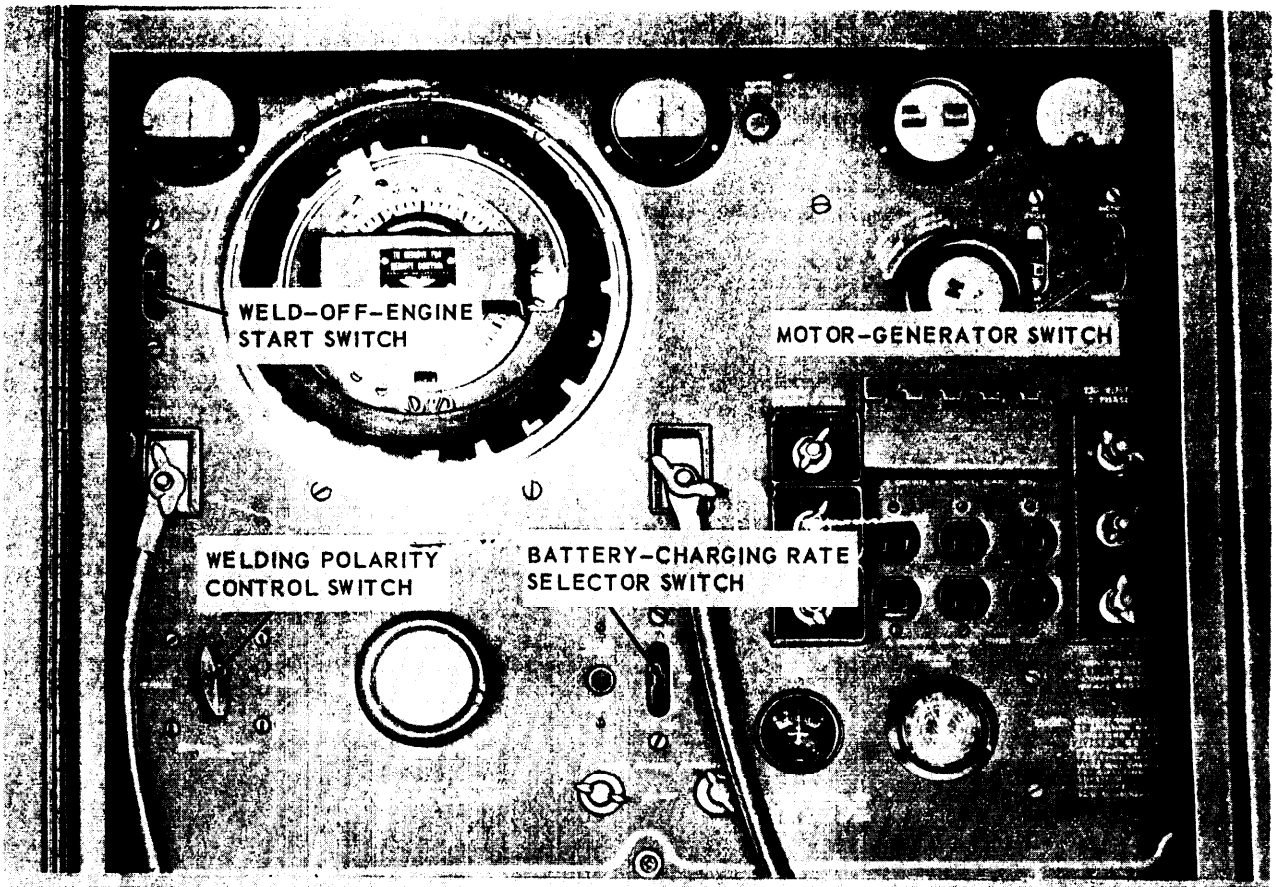
$$6\% \times \frac{\text{actual altitude} - 5{,}000}{1{,}000} \times 5{,}000 \text{ ft rating} = \text{derating factor}$$

EXAMPLE: SOLUTION FOR 9,000 FT :

$$0.06 \times \frac{9{,}000 - 5{,}000}{1{,}000} \times 8 \text{ KW} = \text{derating factor}$$

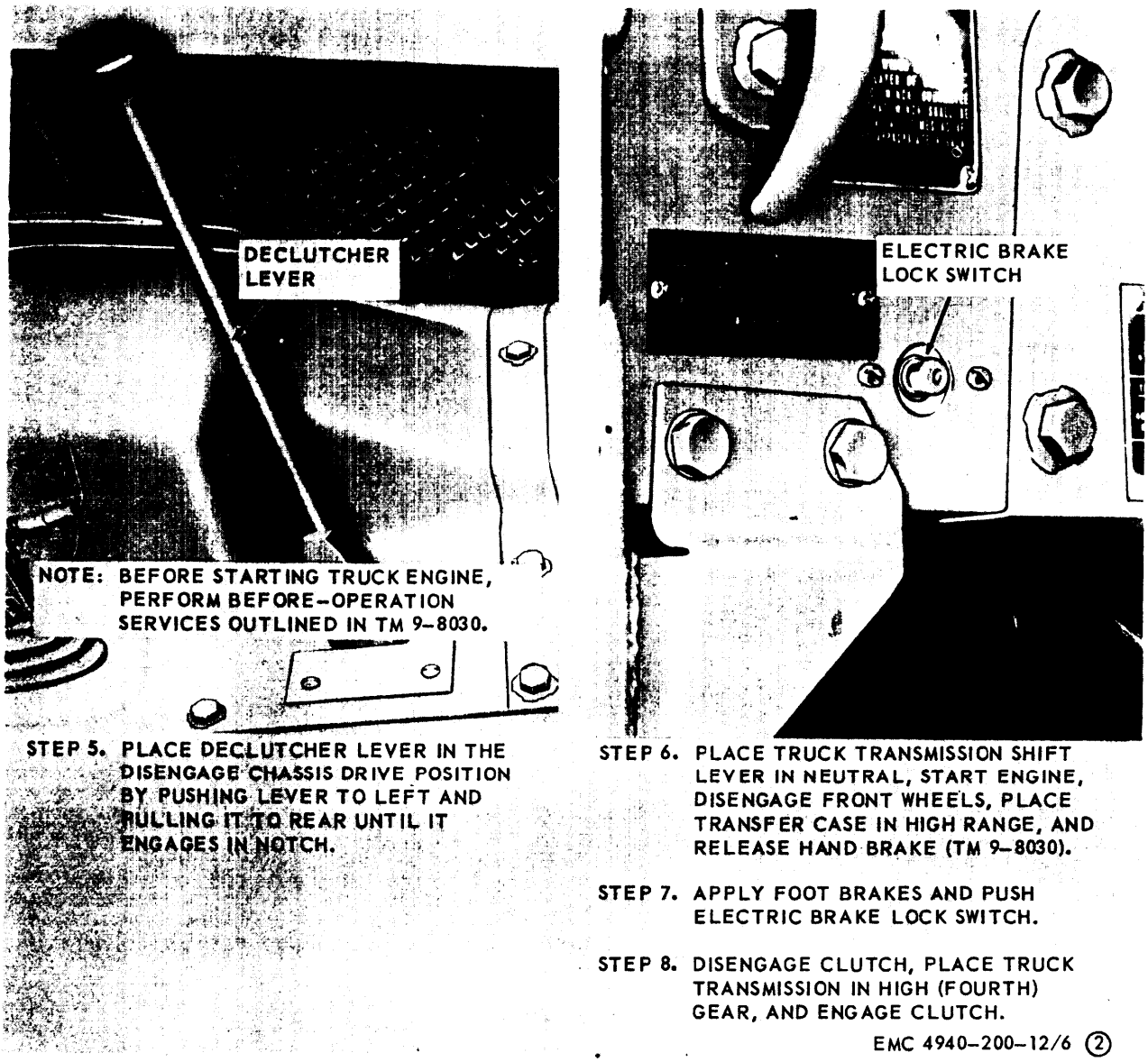
$$0.06 \times 4 \times 8 \text{ KW} = 1.9 \text{ KW derating factor}$$

$$8 \text{ KW} - 1.9 \text{ KW} = 6.1 \text{ KW (derated power at 9,000 ft).}$$



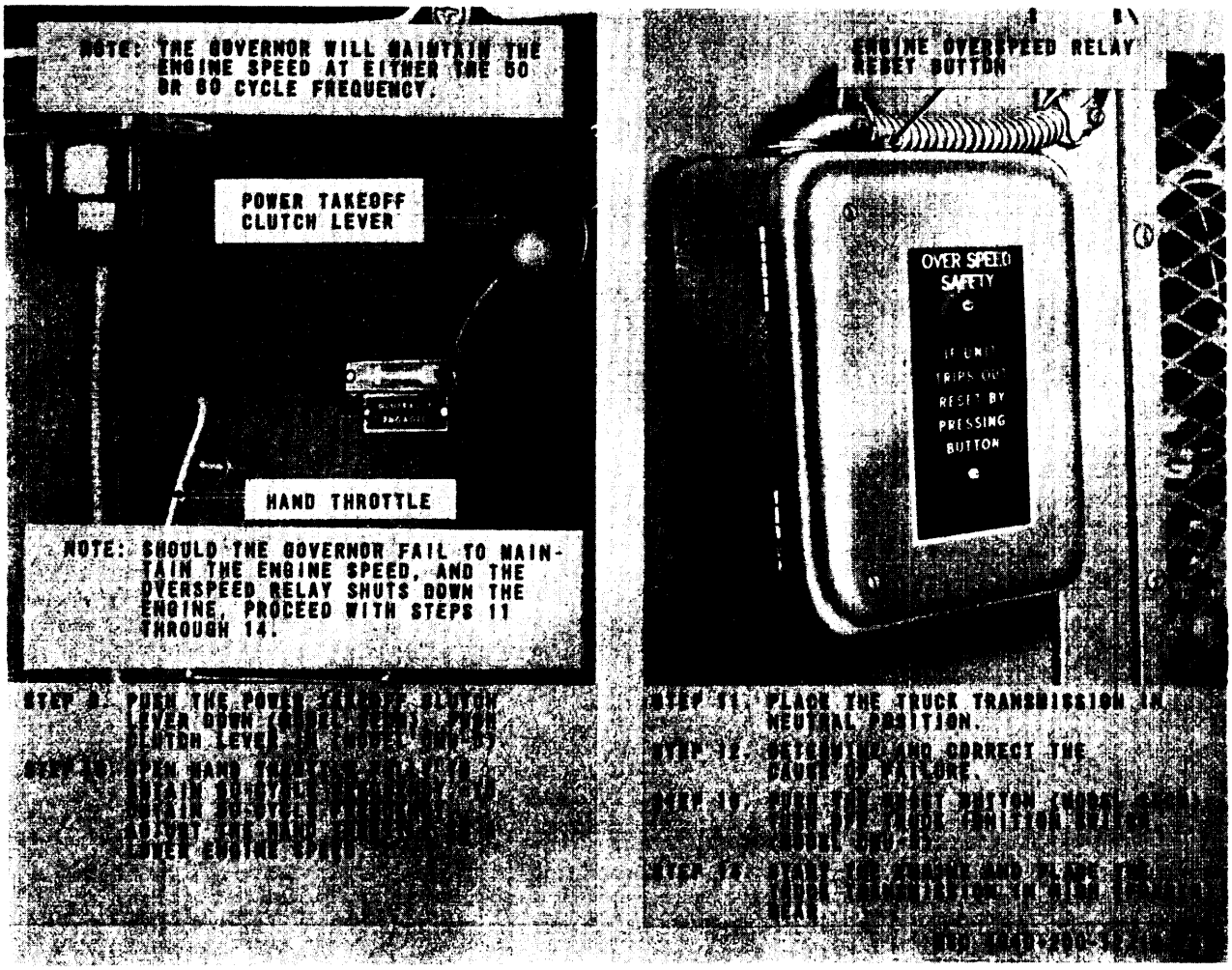
Steps 1 through 4

Figure 10. Starting the generator-welder, power takeoff drive.



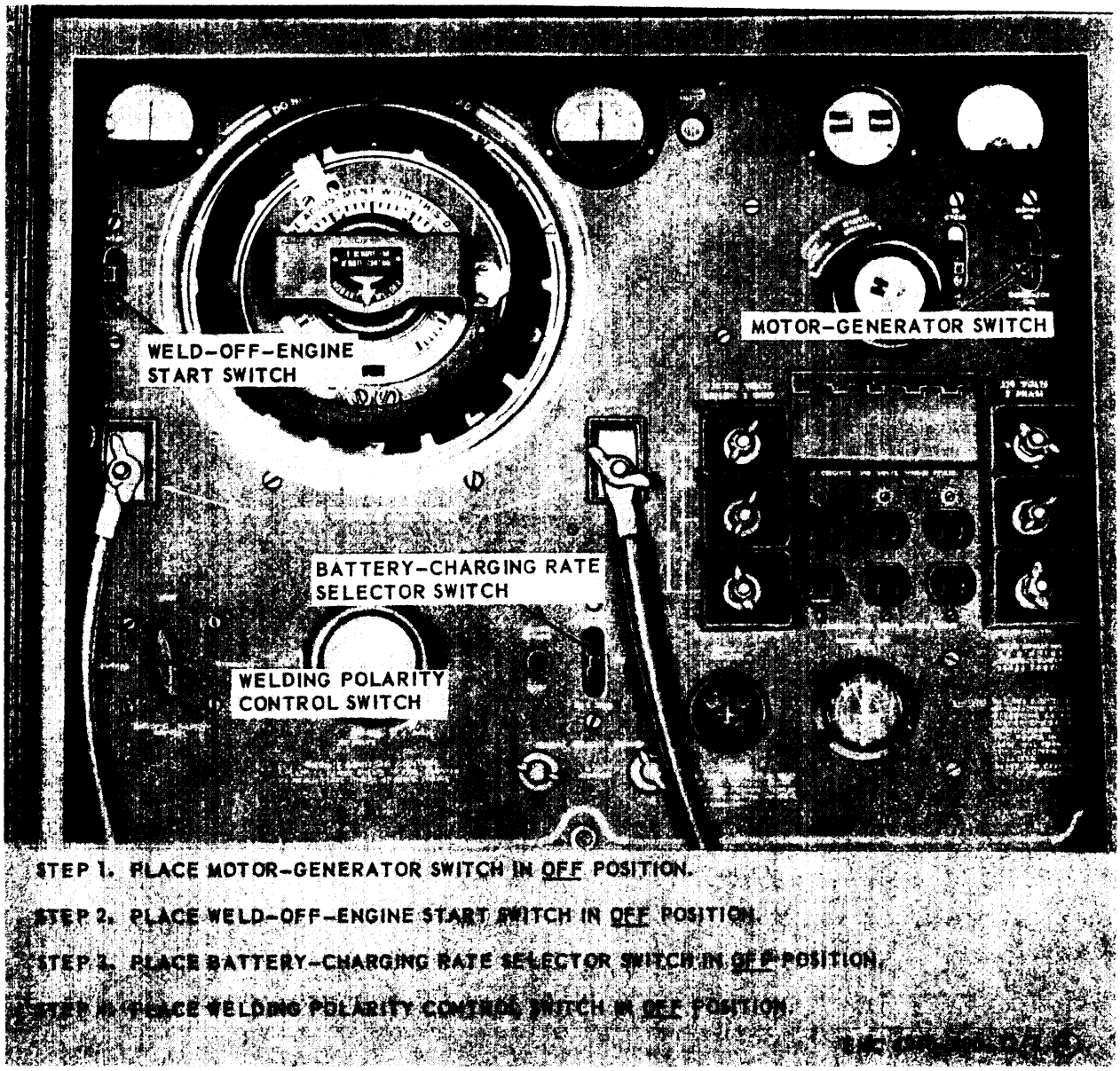
Steps 4 through 8

Figure 10-Continued.



Steps 9 through 14

Figure 10-Continued.



Steps 1 through 4

Figure 11. Starting the generator-welder, electric drive.

Steps 5 through 11

Figure 11-Continued.

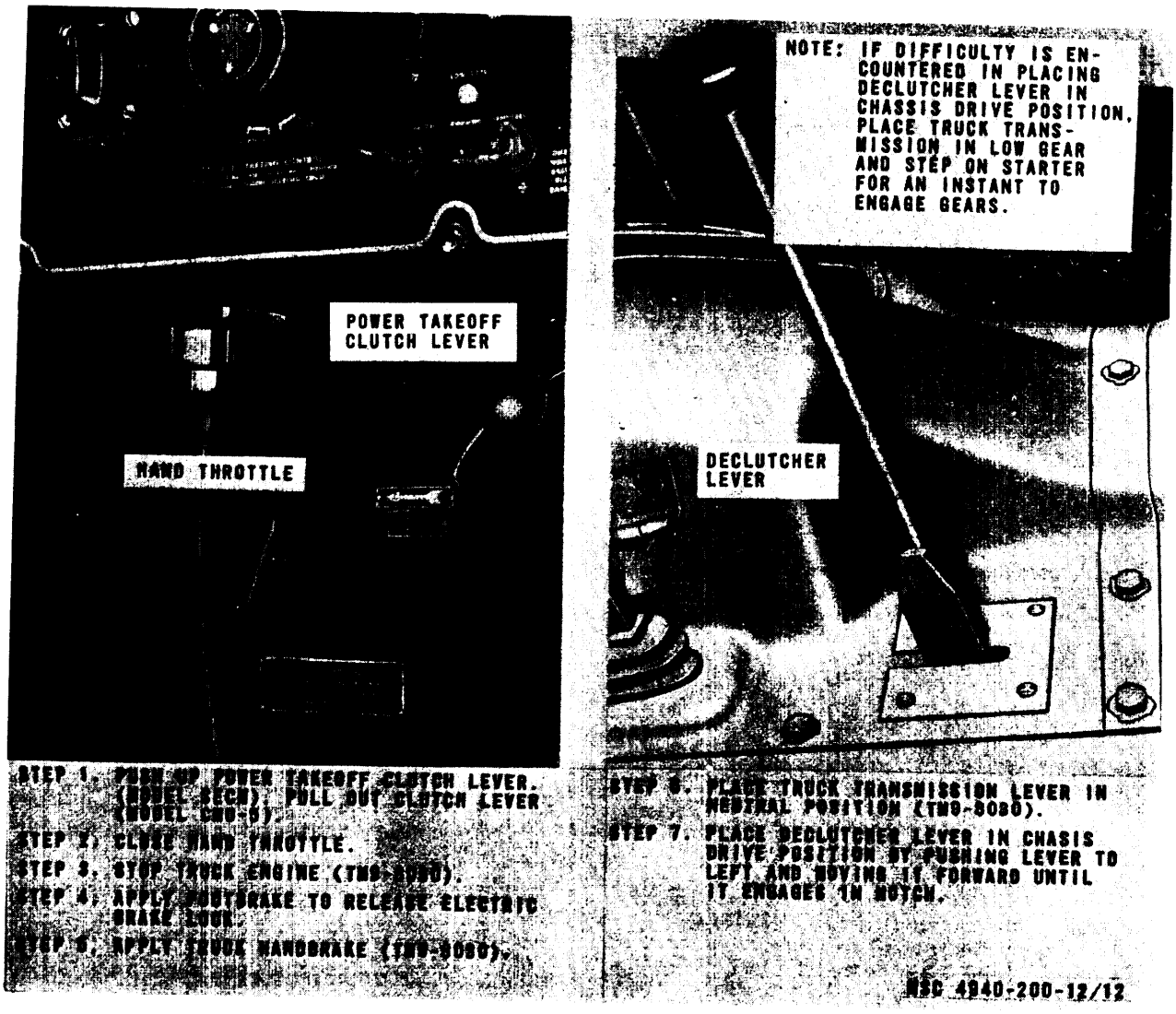


Figure 12. Slopping the generator-welder, power takeoff drive

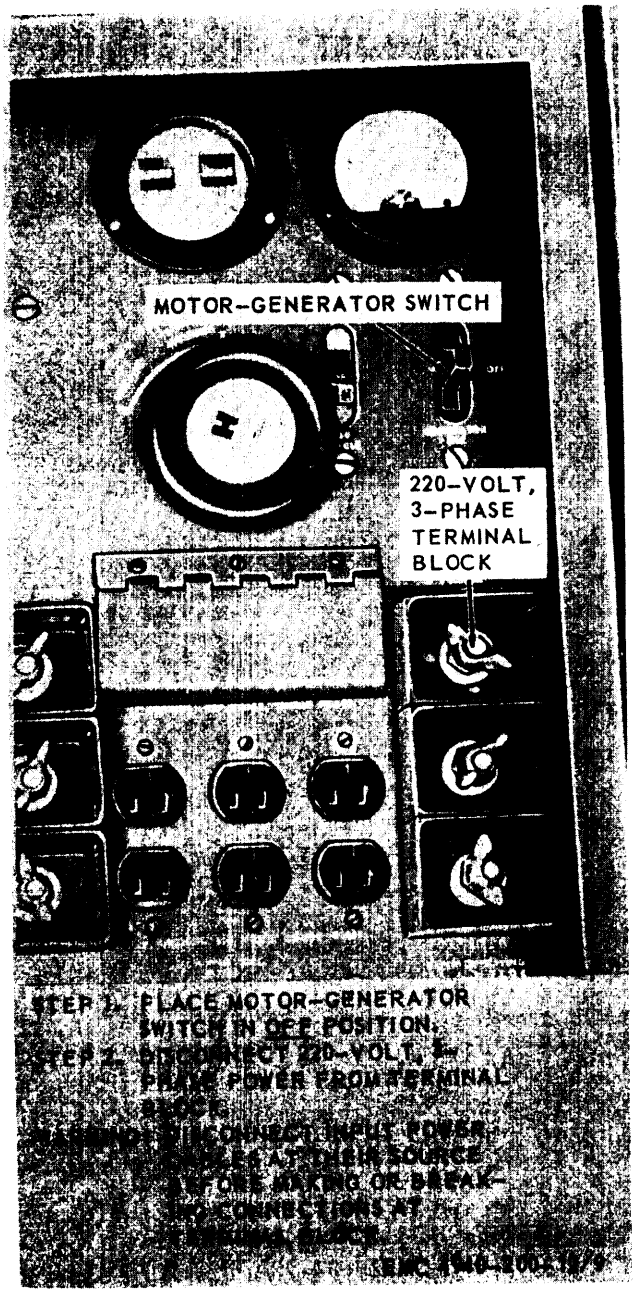


Figure 13. Stopping the generator-welder, electric drive.

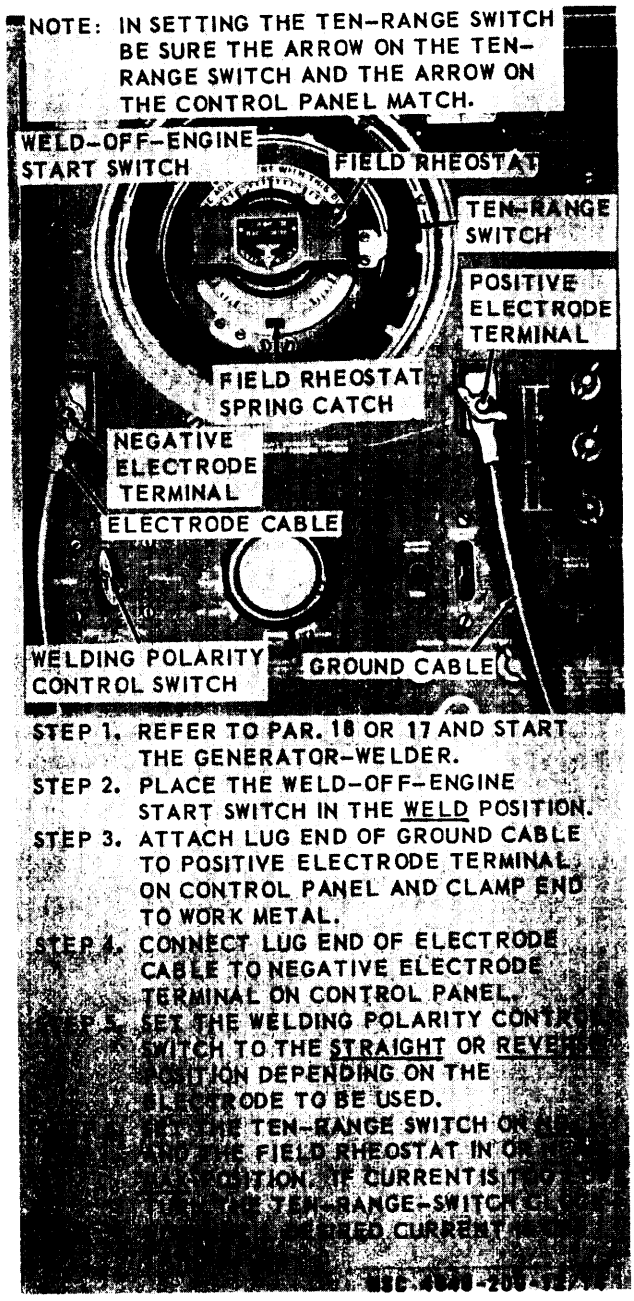


Figure 14. Operation of generator-welder as an are welder.

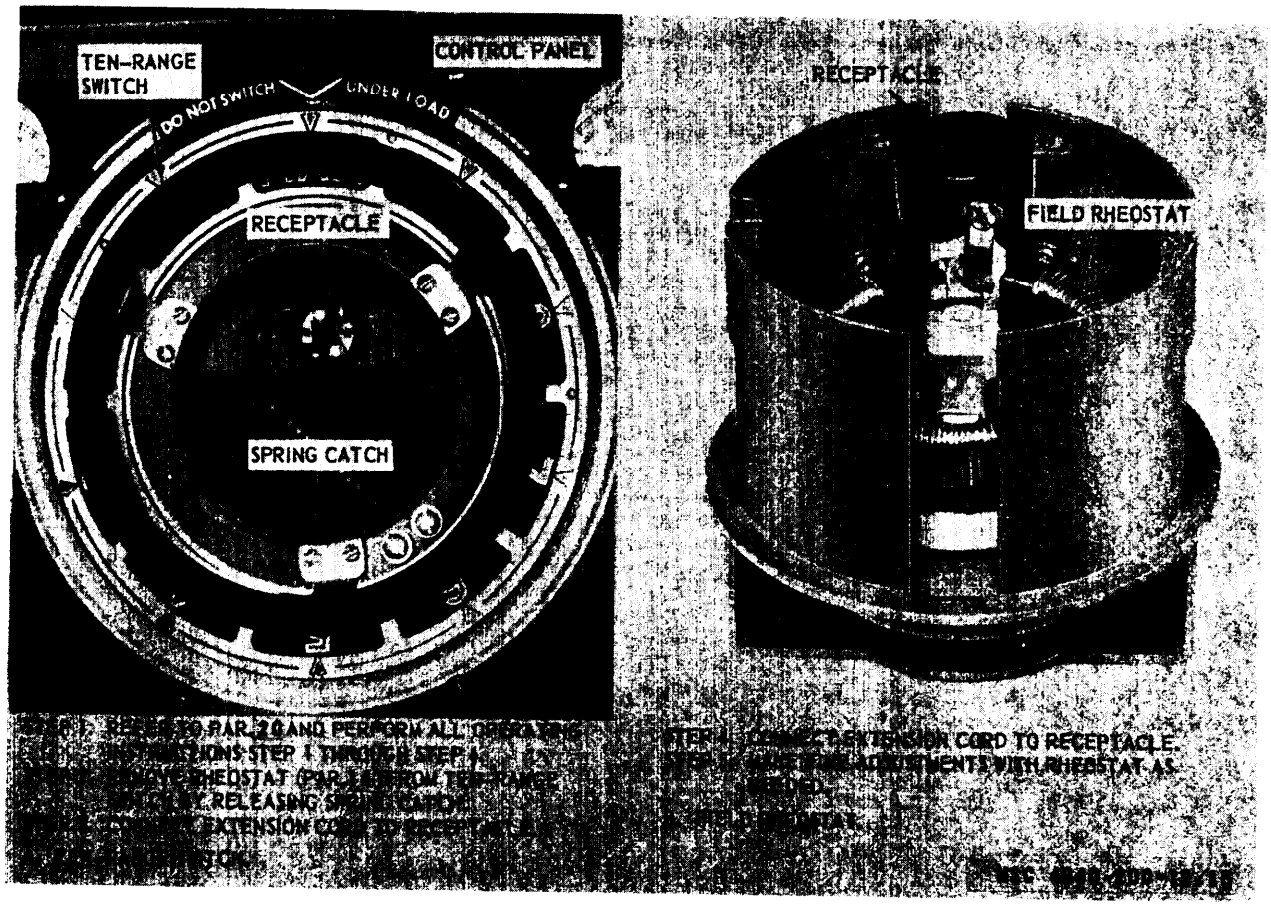


Figure 16. Operation of the generator-welder as a remote controlled arc welder.

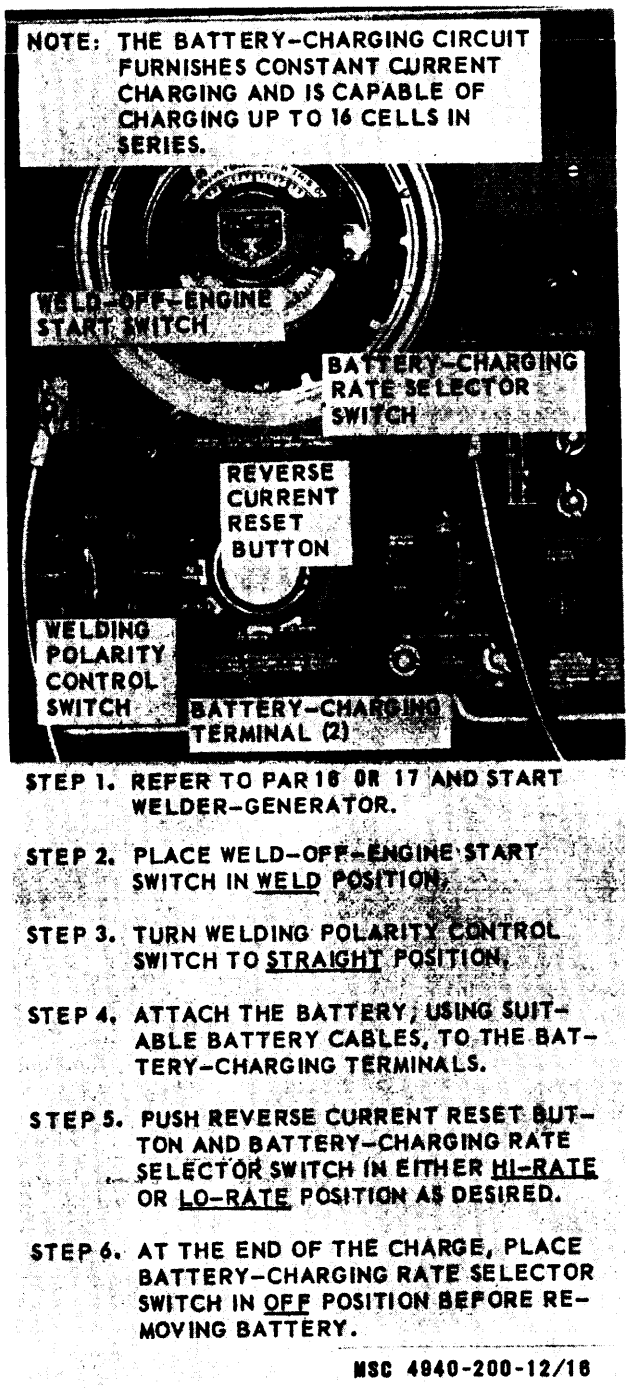
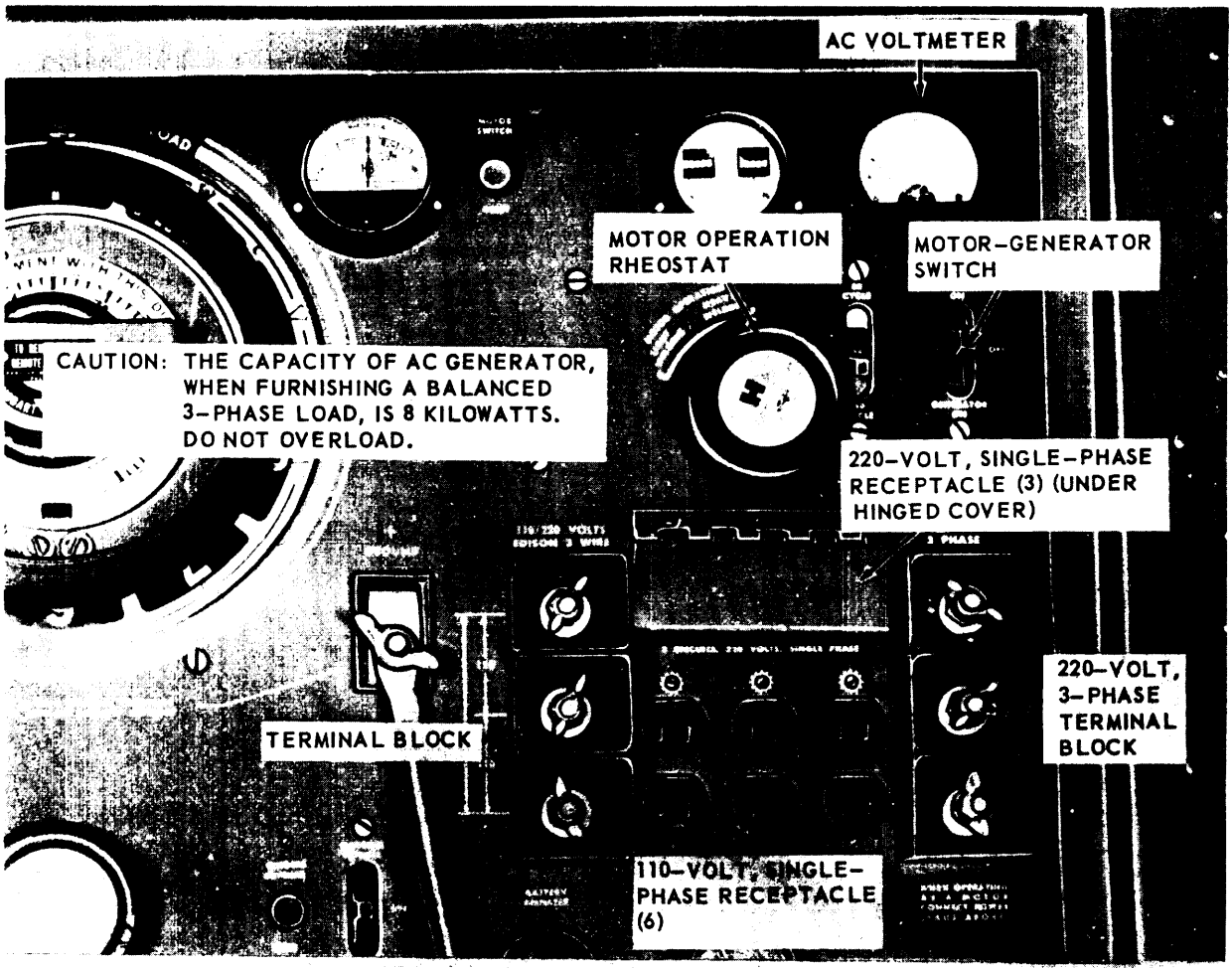


Figure 16. Operation of the generator-welder us a battery charger.



STEP 1. REFER TO PAR. 16 OR 17 AND START GENERATOR-WELDER.

STEP 2. PLACE MOTOR-GENERATOR SWITCH IN GENERATOR ON POSITION.

STEP 3. ADJUST MOTOR OPERATION RHEOSTAT TO 220 VOLTS AS INDICATED ON AC VOLTMETER.

STEP 4. FOR 3.75-KW, 110-VOLT, SINGLE-PHASE CURRENT, CONNECT ONE LEAD TO MIDDLE TERMINAL BLOCK AND OTHER LEAD TO EITHER TOP OR BOTTOM TERMINAL BLOCK.

STEP 5. FOR 2.5-KW, 220-VOLT, SINGLE-PHASE CURRENT, PLUG IN LEADS TO ANY OF THE 220-VOLT, SINGLE-PHASE RECEPTACLES.

STEP 6. FOR 1.25-KW, 110-VOLT, SINGLE-PHASE CURRENT, PLUG IN LEADS TO ANY OF THE 110-VOLT, SINGLE-PHASE RECEPTACLES.

STEP 7. FOR 220-VOLT, 3-PHASE CURRENT, CONNECT LEADS TO ALL THREE TERMINALS ON THE 220-VOLT, 3-PHASE TERMINAL BLOCK.

MSC 4940-200-12/17

Figure 17. Operation of the generator-welder as an alternating current generator.

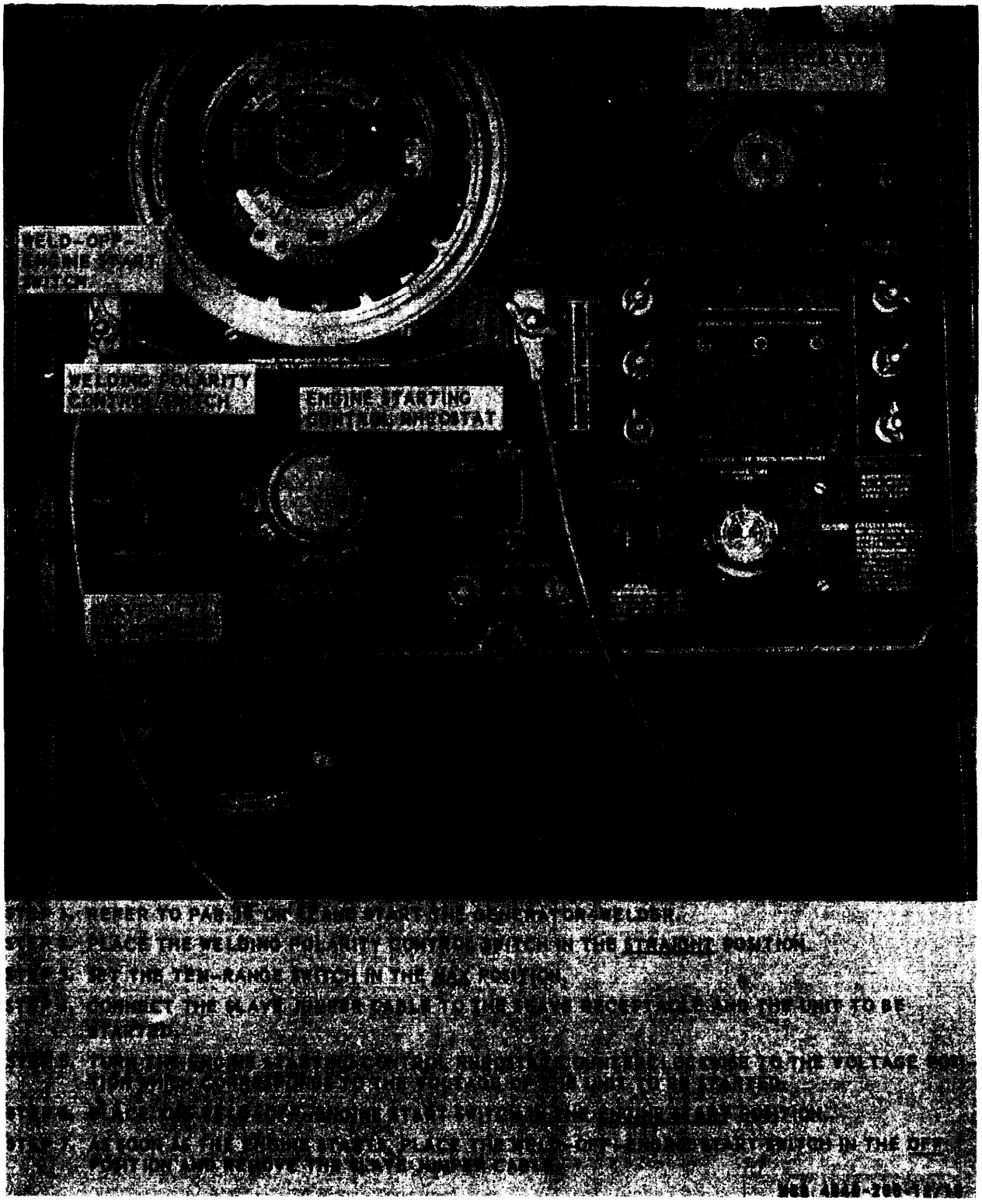


Figure 18. Operation of the generator-welder as a source of starting current.

Section V. OPERATION OF AUXILIARY MATERIEL USED IN CONJUNCTION WITH THE SHOP SET

27. General

The fire extinguisher is mounted on the left front truck body on shop set Model SECM. Shop set Model CMU-5 fire extinguisher is mounted on the floorboard of the cab.

28. Fire Extinguisher (Dry Chemical Type)

a. Description. The dry chemical type fire extinguisher is suitable for use on all types of fire and pounds. is effective in areas where ambient temperature is −25°F and above. If winterized, (pressurized with nitrogen) the fire extinguisher may be used in temperatures below – 25°F. The fire extinguisher is a 2 1/2-pound, stored pressure, lever-operated extinguisher.

b). *Operation.* Remove the extinguisher from its location, lift the handle, press the lever, and direct the powder at the base of the flame, using a side-to-side sweeping motion.

c. Maintenance. Weigh the fire extinguisher every 6 months and replace the extinguisher if weight is less than 4 1/2-pounds or if pressure is below 125-pounds. Refer to SB 5-111. The dry chemical fire extinguisher will be serviced at installion level through repair and utilities facil]ities, with the filling agent supplied by local procurement through troop supply channels.

CHAPTER 3
OPERATING AND ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

Section 1. OPERATOR AND ORGANIZATIONAL MAINTENANCE TOOLS AND EQUIPMENT

29. Special Tools and Equipment

No special tools or equipment arc required by the operator or organizational maintenance personnel for the maintenance of this shop set.

30. Basic Issue Tools and Equipment

Tools and repair parts issued with or authorized for the shop set fire listed in the basic issue itcms list, appendix III of this manual.

31. Organizational Maintenance Repair Parts

The organizational maintcnance repair parts are listed and illustrated in TM 5-4940-200-20P.

Section II. LUBRICATION

32. General Lubrication Information

a. This section contains a reproduction of the lubrication order and lubrication instructions which are supplemental to, and not specifically covered in the lubrication order.

b. The lubrication order shown in figure 19 is an exact reproduction] of the approved lubrication order for the shop set, For the current lubrication order, refer to DA Pam 310–4,

33. Detailed Lubrication Information

a. Care of lubricants and of Lubrication Equipment . Keep all Iubricants in closed containers and store in a clean, dry area away from heat. Do not allow dirt, dust, water, or other foreign material to come in contact with the lubricants. Keep all lubrication equipment clean and ready for use.

b. Points of Application. Follow the detailed lubrication instructions given beneath each lubrication point illustration, indicating procedures to be followed at each point. Apply the lubricant indicated on the lubrication order.

LUBRICATION ORDER

LO 5-4940-200-12

SHOP EQUIPMENT, CONTACT MAINTENANCE, TRUCK MOUNTED: SET NO. 3 (SOUTHWEST TRUCK BODY CO. MODEL SECM)

Reference: SM 10-1-C4-1

Intervals are based on normal operation. Reduce to compensate for abnormal operations and severe conditions. During inactive periods sufficient lubrication must be performed for adequate preservation.

Clean fittings before lubricating.

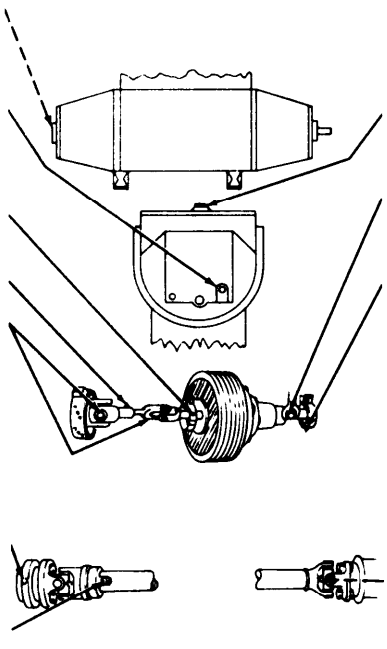
Relubricate after washing or fording.

Clean parts with SOLVENT, dry-cleaning, or with OIL, fuel, Diesel. Dry before lubricating.

Drain gearcase only when hot after operation; replenish and check level when cool.

Lubricate points indicated by dotted arrow shafts on both sides of the equipment.

LUBRICANT	INTERVAL		INTERVAL	LUBRICANT	
Generator Welder Assembly Bearings (See Note 3)	GAA	500			
Engine Speed Governor Level Plug (Check level)		10	OE	Engine Speed Governor Fill Plug (See Key)	
Power Take-Off Front Pillow Block Bearing	GAA	50	50	GAA	Power Take-Off Clutch Collar (Sparingly)
Stub Shaft Spline	GAA	50	50	GAA	Power Take-Off Rear Pillow Block Bearing
Stub Shaft Universal Joints (Remove plug, install fitting, lubricate and reinstall plug)	GAA	50			
Declutcher Assembly	GAA	50	50	GAA	Propeller Shaft Universal Joint
Propeller Shaft Spline	GAA	50			



CONTINUED ON FOLLOWING PAGE

EMC 4940-200-12/15 ①

Front

Figure 19. Lubrication order, LO 5-4940-200-12.

CONTINUED FROM
PRECEDING PAGE

— KEY —

LUBRICANTS	CAPACITY	EXPECTED TEMPERATURES			INTERVALS
		Above +32°F	+40°F to −10°F	0°F to −65°F	
OE—OIL, Engine, Heavy Duty		**OE** 30 or **9250**	**OE** 10 or **9110**	**OES**	Intervals given are in hours of normal operation.
Engine Speed Governor	3/32 qt				
Oil Can Points					
OES—OIL, Engine, Sub-zero					
GAA—GREASE, Automotive and Artillery		All Temperatures			

NOTES:

1. FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW −10°F. Remove lubricants prescribed in the key for temperatures above −10°F. Clean parts with SOLVENT, dry-cleaning. Relubricate with lubricants specified in the key for temperatures below −10°F.

2. OIL CAN POINTS. Every 50 hours lubricate the hinges, latches, linkage, and exposed adjusting threads with OE.

3. TO BE LUBRICATED BY 3RD ECHELON. Generator Welder Assembly Bearings.

Copy of this Lubrication Order will remain with the equipment at all times; instructions contained herein are mandatory.

BY ORDER OF THE
SECRETARY OF THE ARMY:

G. H. DECKER,
General, United States Army,
Chief of Staff.

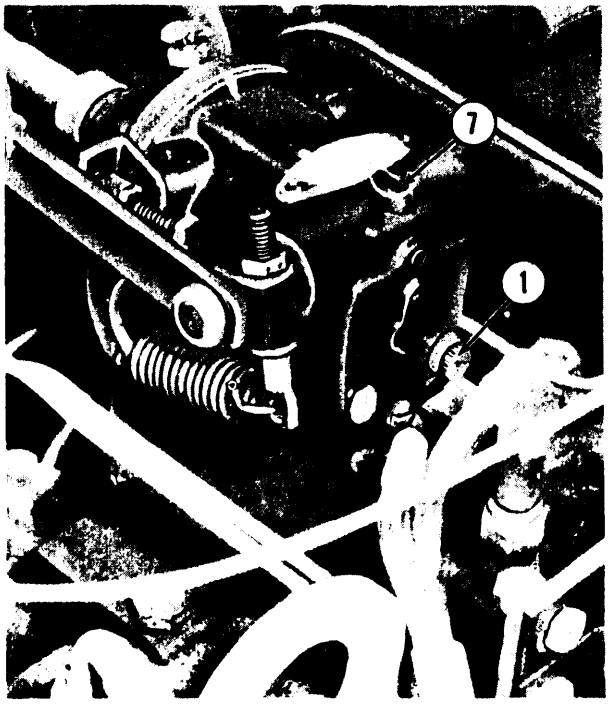
OFFICIAL:

R. V. LEE,
Major General, United States Army,
The Adjutant General.

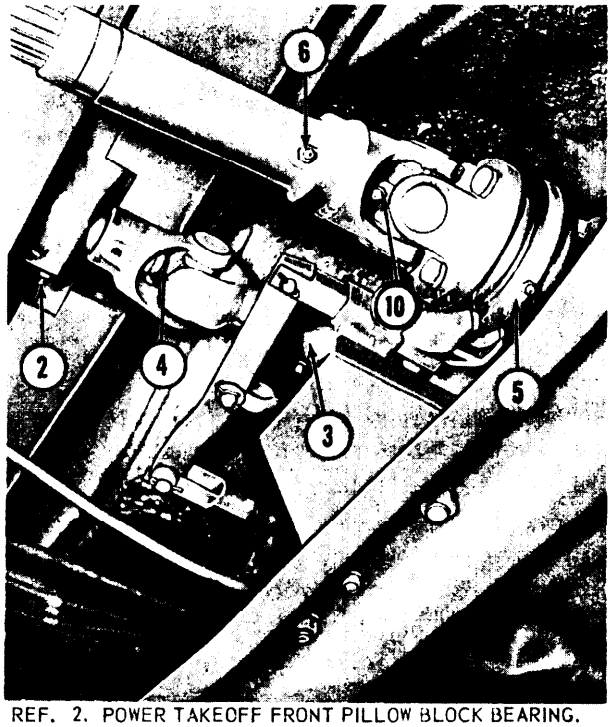
EMC 4940-200-12/15 (2)

Back

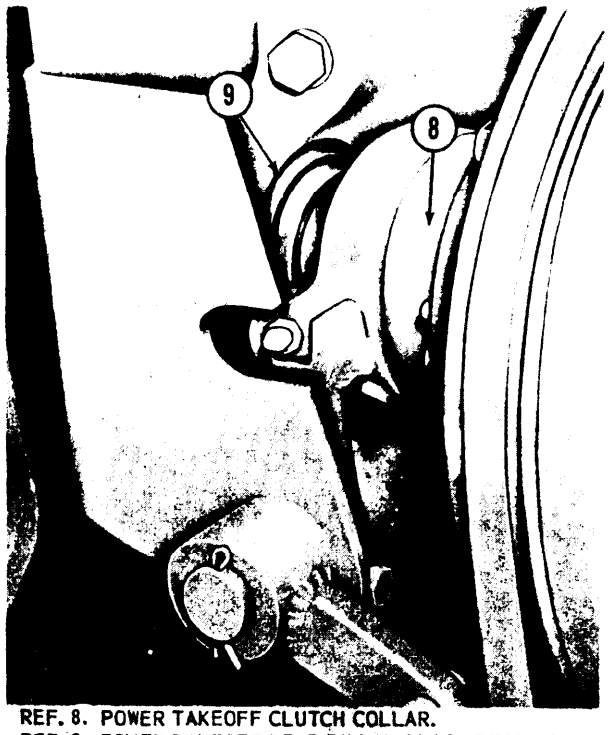
Figure 19—Continued.



REF. 1. ENGINE SPEED GOVERNOR LEVEL PLUG.
REF. 7. ENGINE SPEED GOVERNOR FILL PLUG.



REF. 2. POWER TAKEOFF FRONT PILLOW BLOCK BEARING.
REF. 3. STUB SHAFT SPLINE.
REF. 4. STUB SHAFT UNIVERSAL JOINTS.
REF. 5. DECLUTCHER ASSEMBLY.
REF. 6. PROPELLER SHAFT SPLINE.
REF. 10. PROPELLER SHAFT UNIVERSAL JOINT.



REF. 8. POWER TAKEOFF CLUTCH COLLAR.
REF. 9. POWER TAKEOFF REAR PILLOW BLOCK BEARING.

EMC 4940-200-12/15 ③

References 1 through 10

Figure 19—Continued.

Section III. PREVENTIVE MAINTENANCE SERVICES

34. General

To insure that the equipment is ready for operation at all times, it must be inspected systematically, so that defects may be discovered and corrected before they result in serious damage or failure. The necessary preventive maintenance services to be performed are listed and described in paragraphs 35 and 36. The item numbers indicate the sequence of minimum inspection requirements. Defects discovered during operation of the unit will be noted for future correct ion, to be made as soon as operation has ceased. Stop operation immediately if a deficiency is noted during operation which would damage the equipment if operation were continued. All deficiencies and shortcomings will be recorded, together with the corrective action taken, on DA Form 2404 (Equipment Inspection and Maintenance Worksheet) at the earliest possible opportunity.

35. Daily Preventive Maintenance Services

This paragraph contains an illustrated tabulated listing of preventive maintenance services which must be performed by the operator. The item numhers are listed consecutively and indicate the sequence of minimum requirements. Refer to figure 20 for the daily preventive maintenance services.

36. Quarterly Preventive Maintenance Services

a. This paragraph contains an illustrated tabulated listing of preventive maintenance services which must be performed by organizational maintenance personnel at quarterly intervals. A quarterly interval is equal to 3 calendar months, or 250 hours of operation whichever occurs first.

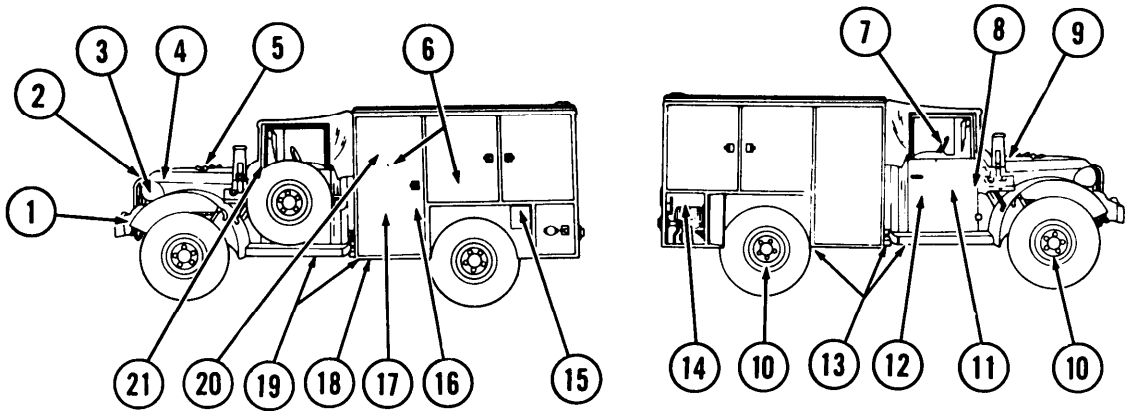
b. The item numbers are listed consecutively and indicate the sequence of minimum requirements. Refer to figure 21 for the quarterly preventive maintenance services.

PREVENTIVE MAINTENANCE SERVICES

DAILY

TM5-4940-200-12 SHOP EOUIPMENT

SOUTHWEST MODEL SECM
DAVEY MODEL CMU-5



LUBRICATE IN ACCORDANCE WITH CURRENT LUBRICATION ORDER

ITEM		PAR REF
1	WINCH. Add oil as indicated by level plug. Reference current L09-8030. Check for worn or frayed cable. (Weekly)	
2	RADIATOR. Proper coolant level is 2 1/4 inches below filler neck.	
3	LIGHTS. Check for burned-out lamps and units. (Weekly.) Reference TM9-8030,par. 171.	
4	FAN BELT. Proper adjustment is a deflection of 1/2 inch midway between fan pulley and generator pulley. (Weekly). Reference TM9-8030, par.152.	
5	OIL LEVEL GAGE. Add oil as indicated by level gage. Reference current L09-8030.	
6	GENERATOR-WELDER AIR FILTERS. Clean a dirty filter. (Weekly)	38
7	STEERING. Add oil as indicated by level plug. Reference current L09-8030. (Weekly)	
8	BRAKES. Fill master cylinder. (Weekly) Reference TM9-8030.	
9	FUEL FILTER. Tighten blind nut if gasket is leaking. (Clean weekly.) Reference TM9-8030.	

MSC 4940-200-12/20 (1)

Figure 20. Daily preventive maintenance services.

ITEM		PAR REF
10	TIRES AND WHEELS. Inflate tires to 40 psi. Remove imbedded foreign matter. Check for worn, cut, or broken tires. Replace missing valve caps. (Weekly) Reference TM9-8030.	
11	FIRE EXTINGUISHER. Inspect for broken seal.	
12	BATTERIES. Tighten loose cables and mountings. Remove corrosion. Inspect for cracks and leaks. Fill to 3/8 inch above the plates. Clean venthole in filler cap before installing. In freezing weather run engine a minimum of 1 hour after adding water. (Weekly)	
13	TRANSMISSION, TRANSFER CASE, AND DIFFERENTIALS. Add oil as indicated by filler plugs. Reference current L09-8030. Clean dirty vents. Check for leaks. (Weekly)	
14	COMPRESSOR FILTER PAD, Clean a dirty filter pad. (Weekly)	
15	FUEL TANK. Add fuel as required.	
16	GROUND TERMINAL. Check for proper ground. A proper ground will consist of a 3/4-inch-dia. hollow rod or 5/8-inch-dia. solid rod, 9 feet long. The cable will be No. 6 AWG copper wire bolted or clamped to the rod and attached to the ground terminal of the generator-welder set.	
17	WELDER BELTS. Check for worn, frayed, or cracked belt. (Weekly)	
18	POWER TAKEOFF. Lubricate in accordance with current L.O. Check for worn or damaged power takeoff assembly. (Weekly)	
19	PROPELLER SHAFTS AND U-JOINTS. Lubricate in accordance with current LO 9-8030. (Weekly)	
20	WELDER CONTROLS AND INSTRUMENTS. Inspect for damage and loose mounting. With unit operating, check for proper operation. Normal operating readings for instruments are as follows: Dc ammeter — Welding current not to exceed 200 amperes Dc voltmeter — a. As starting current or as battery charger, 6,12, 24,or 32 volts. b. Open circuit voltage - 80 volts maximum c. Welding voltage - 40 volts maximum. Frequency meter — 50 or 60 cycle Ac voltmeter — a. 240 volts maximum phase voltage on top scale. b. 120 volts maximum on lower scale. Battery ammeter — Slight charge	14
21	TRUCK CONTROLS AND INSTRUMENTS. Inspect for damage and loose mounting. With unit operating, check for proper operation. Normal operating readings for instruments are as follows:	

USC 4940-200-12/20 (2)

Figure 20-Continued.

ITEM		PAR REF
	a. Battery-generator indicator — Green section b. Oil pressure gage — 40 psi at idling speed c. Water temperature gage — 160° to 165°F d. Ammeter — Slight charge. Reference TM9-8030, pars.13 thru 50-	
	NOTE 1. OPERATION. During operation observe for any unusual noise or vibration.	

MSC 490-200-12/203

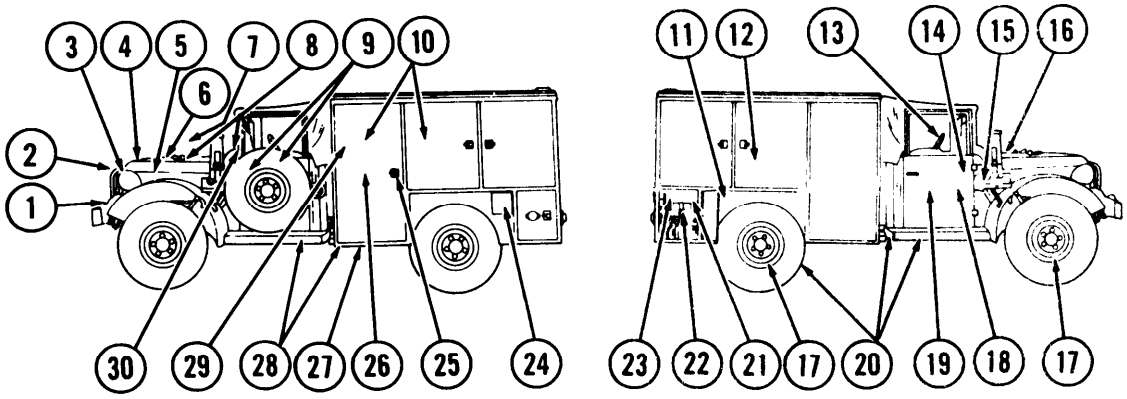
Figure 20-Continued.

PREVENTIVE MAINTENANCE SERVICES

QUARTERLY

TM5-4940-200-12 SHOP EQUIPMENT

SOUTHWEST MODEL SECM
DAVEY MODEL CMU-5



LUBRICATE IN ACCORDANCE WITH CURRENT LUBRICATION ORDER

ITEM		PAR REF
1	WINCH. Add oil as indicated by level plug. Reference current L09-8030. Tighten loose mountings. Replace worn or frayed cable. Reference TM9-8030, pars. 184 and 185.	
2	RADIATOR. Proper coolant level is 2 1/4 inches below filler neck. Replace cracked or frayed hose. Replace defective radiator. Remove obstructions in the air passages. Tighten all mpunting and leaking connections. Correct cap pressure rating is 4 lbs. Reference TM9-8030,pars. 148 and 153.	
3	LIGHTS. Replace burned-out lamps and units. Tighten loose mounting and electrical connections. Replace worn or frayed wiring. Reference TM9-6030, par. 171.	
4	FAN BELT proPer adjustment IS a deflection of 1/2 inch midway between generator pulley and fan pulley. Replace worn, frayed, or cracked belt. Reference TM9-8030, par. 152.	
5	DISTRIBUTOR. Replace pitted or burned distributor points. Proper gap adjustment is 0.020 inch. (Check adjustment every 500 hours.) Reference TM9-8030, par.129.	

MSC 4940-200-12/21 (1)

Figure 21. Quartterly preventive maintenance services.

ITEM		PAR REF
6	SPARK PLUGS. Replace spark plugs that have cracked insulators and burned electrodes. Clean and set spark plug gaps for 0.028 to 0.033 inch. Torque spark plugs to 30 foot-pounds. Replace leads which are frayed or broken. Clean and tighten lead connections. Reference TM9-8030, par. 124.	
7	OIL LEVEL GAGE. Add oil as indicated by level gage. Reference current L. O.9-8030.	
8	HORN, MIRRORS, WIPERS, AND BLADES. Tighten loose mounting and electrical connections. Replace worn or damaged horn, mirrors, wipers, and blades. Reference TM9-8030, par.179 and 269.	
9	TURN SIGNAL AND BRAKE LOCK SWITCHES. Tighten loose mounting and electrical connections. Replace worn or frayed wiring and damaged or defective switches.	68 123
10	GENERATOR-WELDER AIR FILTERS. Clean a dirty filter. Replace a defective filter.	
11	TRUCK FUEL TANK FUEL FILTER. Tighten fuel tank cover if gasket is leaking. Clean a dirty filter element. Reference TM9-8030, par. 139.	
12	ARMATURE, COMMUTATOR, SLIPRINGS, AND BRUSHES. Check for worn or frayed wi ring. Tighten loose mounting and electrical connections. Clean dirty commutator and slipring surfaces. Replace exciter brushes if worn to less than 3/4 inch in length. Replace ac generator brushes if worn to less than 7/8 inch in length. Correct brush spring tension for all brushes is 32 ounces	79
13	STEERING. Add oil as indicated by level plug; reference L09-8030. Check steering for free-play, bind, wander, shimmy, or side pull. Adjust steering as necessary. Replace defective steering components. Reference TM9-8030, pars.230 thru 237.	
14	CLUTCH. Proper clutch pedal free travel is 1 inch. Check clutch for drag, noise, chatter, grab, or slip. Reference TM9-8030,pars. 186 thru 189.	
15	BRAKES (SERVICE AND HAND). Proper brake pedal free travel is 3/4 to 1 inch. Check brakes for side pull, noise, chatter, or grabbing. Fill brake master cylinder. The pawl of the handbrake lever should be engaged in the third to fifth notch of the sector for full application of the brake. Replace worn or defective brake system components. Reference TM9-8030, pars.213 thru 224.	
16	FUEL FILTER. Tighten blind nut if gasket is leaking. Clean a dirty filter element. Reference TM9-8030.	
17	TIRES AND WHEELS. Inflate tires to 40 psi. Remove imbedded foreign matter. Replace worn, cut, or broken tires. Replace missing valve caps. Tighten wheel capnuts to between 200 and 225 foot-pounds. Check front wheel bearing adjustment. Rotate tires. Reference TM9-8030, pars.225 thru 229.	

USC 4940-200-12/2(2)

Figure 2l—Continued.

ITEM		PAR REF
8	FIRE EXTINGUISHER. Inspect for broken seal. Inspect for full charge by shaking for sound or weight. Reference TM9-8030, par.62.	
19	BATTERIES. Tighten loose cables and mountings. Remove corrosion. Fill to 3/8 inch above the plates. Clean venthole in filler cap before installing. In freezing weather run engine minimum of 1 hour after adding water. Replace a cracked or leaking battery. Reference TM9-8030, par. 167.	
20	TRANSMISSION, TRANSFER CASE, AND DIFFERENTIALS. Add oil as indicated by filler plugs. Reference current L.O.9-8030. Check for oil leaks. Tighten loose mountings. Clean dirty vents. Reference TM9-8030, pars. 194,198,208, 211, and 212.	
21	ELECTRIC MOTOR. Tighten loose mountings and electrical connections. Replace a worn or damaged electric motor.	85
22	AIR COMPRESSOR. Tighten loose mounting and connections. Replace or repair a worn or damaged air compressor.	85
23	COMPRESSOR FILTER PAD. Clean a dirty filter pad. Replace a defective filter pad.	37
24	FUEL TANK. Add fuel as required. Tighten loose mounting. Replace leaking fuel tank. Replace defective cap gasket. Clean cap vent. Reference TM9-8030, par. 142.	
25	GROUND TERMINAL. Check for proper ground. A proper ground will consist of a 3/4-inch-dia. hollow rod or 5/8-inch-dia. solid rod, 9 feet long. The cable will be No. 6 AWG copper wire, bolted or clamped to the rod and attached to the ground terminal of the generator-welder set.	
26	WELDER BELTS. Proper adjustment is a deflection of 1/2 to 3/4 inch midway between power takeoff pulley and welder pulley. Check for worn, frayed, or cracked belts.	74
27	POWER TAKEOFF. Lubricate in 'accordance with current L.O. Tighten loose mounting. Replace or repair worn or damaged power takeoff assembly.	58
28	PROPELLER SHAFTS AND U-JOINTS. Lubricate in accordance with current L09-8030. Tighten loose mounting. Replace worn or damaged shafts and joints. Reference TM9-8030, pars. 200 and 201.	
Z9	WELDER CONTROLS AND INSTRUMENTS. Check for damaged instruments. Tighten loose mounting. With the unit operating, check for proper operation. Normal operating readings for instruments are as follows:	14

MSC 4940-200-12/21 (3)

Figure21-Continued.

ITEM		PAR REF
	Dc ammeter — Welding current not to exceed 200 amperes. Dc voltmeter — a. As starting current or as battery charger, 6,12, 24,or 32 volts. b. Open circuit voltage - 80 volts maximum. c. Welding voltage - 40 volts maximum. Frequency meter — 50 or 60 cycle Ac voltmeter — a. 24 0 volts maximum phase voltage on top scale. b. 120 volts maximum on lower scale. Battery ammeter — Slight charge Check overall voltage and frequency response.	
30	TRUCK CONTROLS AND INSTRUMENTS. Replace damaged instruments. Tighten loose mounting. With the unit operating, check for proper operation. Normal operating readings for instruments are as follows: a. Battery generator indicator — Green section b. Oil pressure gage — 40 psi at idling speed. c. Water temperature gage — 160° to 165°F d. Ammeter — Slight charge. Reference TM9-8030, pars.13 thru 50.	
	NOTE 1. OPERATIONAL TEST. During operation observe for any unusual noise or vibration.	
	NOTE 2. ADJUSTMENTS. Make all necessary adjustments during operational test.	

NSC 4940-200-12/21

Figure 21—Continued.

37. Air Compressor Filter Pad, Model SECM, Service

Refer to figure 22 and service the filter pad.

38. Generator-Welder Air Filters Service

Refer to figure 23 and service the air filter.

39. Arc Welder Control Panel, Model CMU-5, Fuse Replacement

Refer to figure 24 and replace the fuses.

40. Turn Signal Lamp, Model CMU-5, Replacement

Refer to figure 25 and replace the front and rear turn signal lamps.

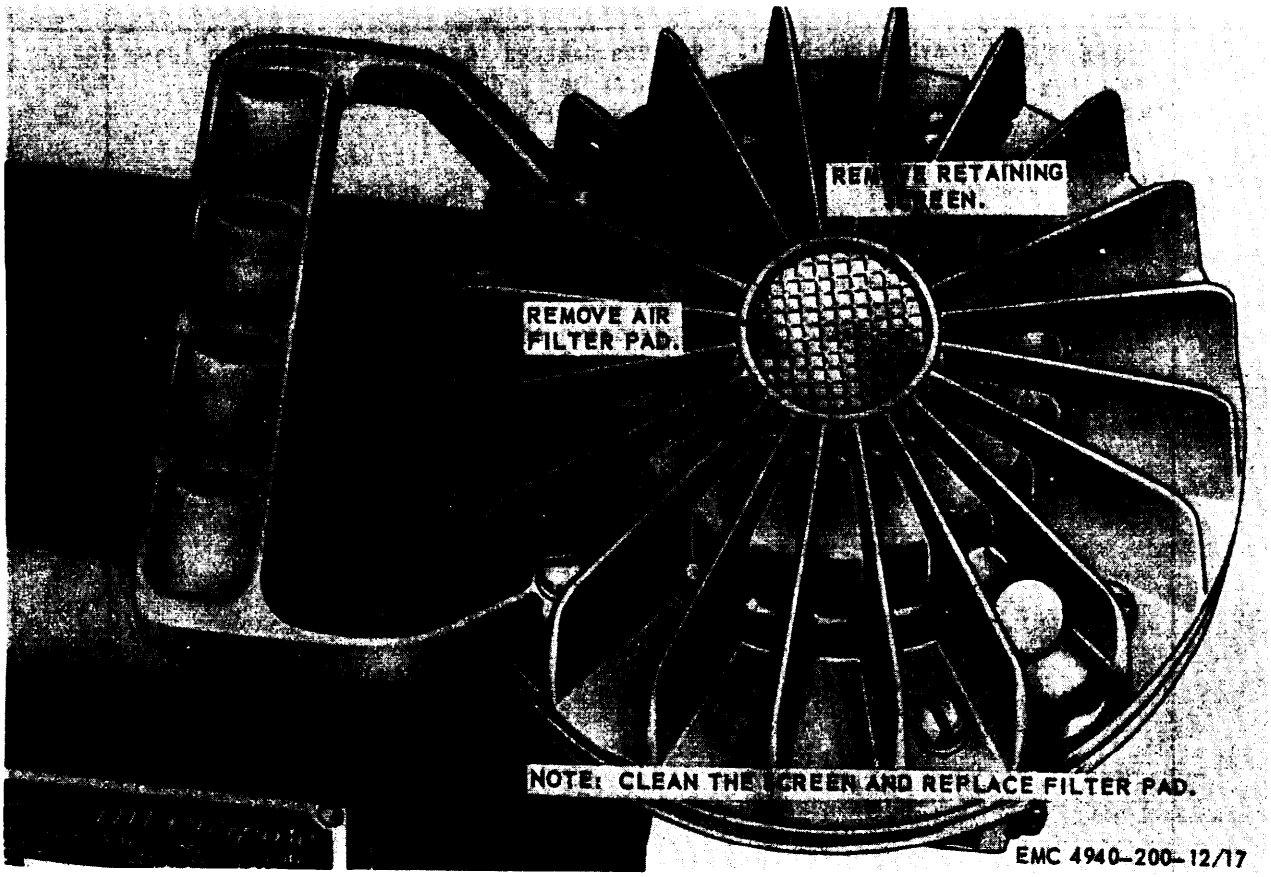


Figure 22. Air compressor jilter pad, Model SECM, service.

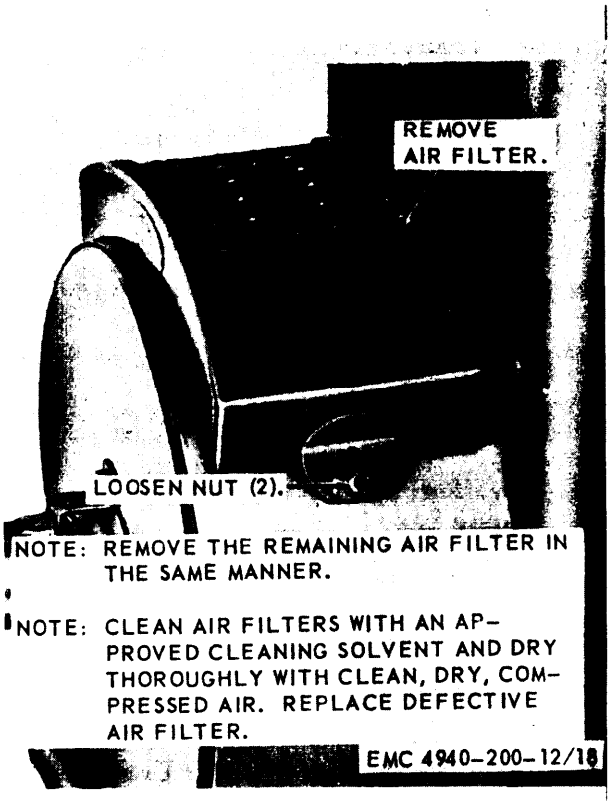


Figure 23. Generator-welder air filter, service.

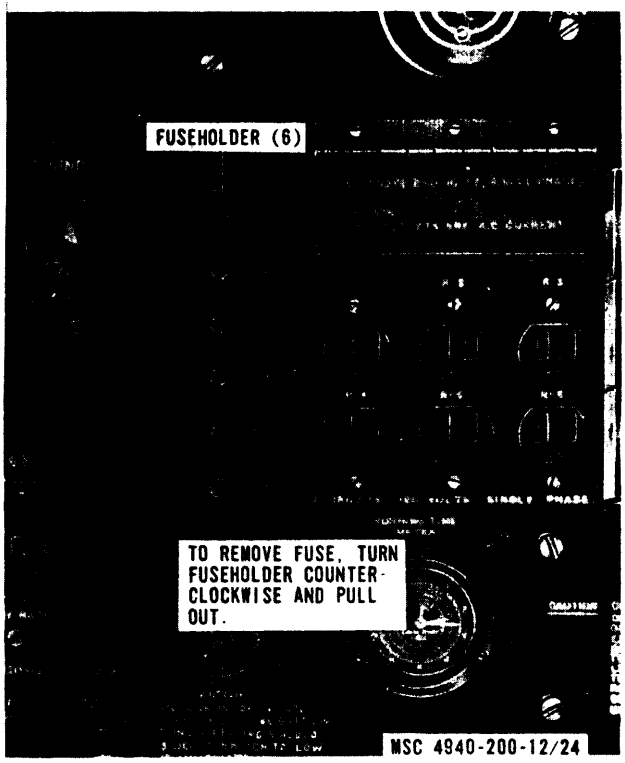


Figure 24. Fuses, Model CMU-5, removal and installation.

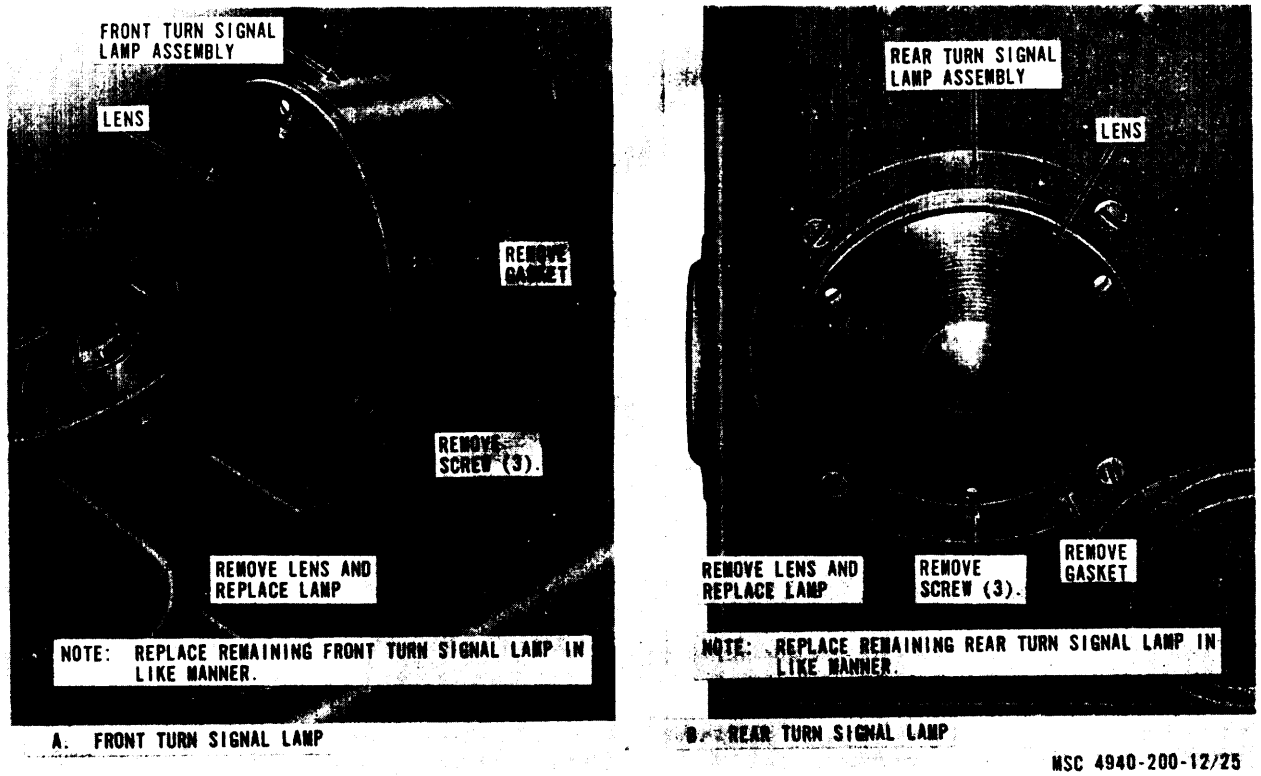


Figure 25. Turn signal lamps, Model CMU-5, removal and installation.

41. General

This section provides information useful in diagnosing and correcting unsatisfactory operation or failure of the shop set and its components. Each trouble symptom stated is followed by a list of probable causes of the trouble. The possible remedy recommended is described opposite the probable cause. Any trouble beyond the scope of organizational maintenance will be reported to field maintenance, third echelon.

42. Generator-Welder Will Not Start (Power Takeoff Drive)

Probable cause	Possible remedy
Power takeoff not engaged.	Engage power takeoff (par. 16).
Power takeoff shift lever or linkage defective.	Repair or replace the power takeoff lever and/or linkage (par. 59).
Power takeoff clutch slipping.	Adjust power takeoff clutch (par. 60).

43. Generator-Welder Will Not Start (Electric Drive)

Probable cause	Possible remedy
No line voltage ___ _	Check line voltage.
Motor-generator switch not in MOTOR ON position.	Position motor-generator switch (par. 17).
Overload trip reset button tripped.	Press overload trip reset button (par, 17).
Declutcher lever not disengaged.	Disengage declutcher lever (par. 17).

44. Generator-Welder Has No Output

Probable causee	Possible remedy
Weld-off-engine start switch in wrong position.	Put weld-off-engine start switch in proper position (pars. 16 and 17).
Burned or excessively worn brushes.	Replace brushes (par. 79).
Welding cables loose. -----	Tighten welding cables (par. 20).
Brushes improperly seated _	Seat brushes (par. 79).
Commutators rough or dirty.	Clean and polish commutators (par. 79).
Improper brush spring tension.	Adjust brush spring tension (par. 79).
Loss of residual magnetism-	Magnetize exciter field (par. 8 0) .

45. Generator-Welder Output Too Low

Probable cause	Possible remedy
Cycle selector switch in wrong position.	Place cycle selector switch in correct position (par. 17).
Burned or worn brushes---	Replace brushes (par. 79).
Improper brush spring tension.	Adjust brush spring tension (par. 79).
Ten-range switch incorrectly adjusted.	Adjust ten-range switch (par. 20).
Brushes improperly seated _	Seat brushes (par. 79).
Commutators rough or dirty.	Clean and polish commutators (par. 79).
Field rheostat incorrectly adjusted or defective.	Adjust or replace a defective field rheostat (par. 20).

46. Generator-Welder Output Too High

Probable cause	Possible remcdy
Ten-range switch incorrectly adjusted.	Adjust ten-range switch correctly (par. 20).
Cycle selector switch in wrong position.	Place cycle selector switch in correct position (par. 17).

47. Governor Does Not Maintain Constant Engine Speed

Probable cause	Possible remedy
Drive V-belt improperly adjusted.	Adjust drive V-belt (par. 64).
Linkage out of adjustment_	Adjust linkage (par. 62).
Engine surging -----	Adjust governor (par. 62).
Governor adapter drive cable sticking in shield.	Remove adapter drive cable, clean and install (par. 64)..

48. Generator-Welder Will Not Come Up To Speed

Probable cause	Possible remedy
Power takeoff not engaged _	Engage power takeoff (par. 20).
Governor adapter drive V-belts improperly adjusted.	Adjust governor adapter drive V-belts (par. 64).
Power takeoff clutch slipping.	Adjust power takeoff clutch (par. 60).

49. Alternating Current Power From Generator-Welder Lacking

Probable cause	Possible remedy
Brushes not seated properly.	Reseat brushes (par. 79).
Brushes sticking in brush holders.	Clean brush holders (par. 79).
Improper brush spring tension.	Adjust brush spring tension (par. 79).
Commutator dirty or rough.	Clean and polish commutator (par. 79).
Motor generator switch not in GENERATOR ON position.	Properly position motor generator switch (par. 20).
Overload trip reset button tripped.	Press overload trip reset button (par. 17).
Brushes sticking in brush holders.	Clean brushes and brush holders (par. 79).
Field rheostat defective ---	Replace field rheostat (par. 20).

50. Welding Voltage Too Low

Probable cause	Possible remedy
Brushes worn ----------	Replace brushes (par. 79).
Brush connections loose .	Tighten brush connections (par. 79).

Probable cause	*Possible remedy*
Improper brush spring tension.	Adjust brush spring tension (par. 79).

51. Alternating Current Voltage Erratic

Probable cause	*Possible remedy*
Poor brush contact.	Adjust brush spring tension (par. 79).
Brushes sticking in brush holders.	Clean brushes and brush holders (par. 79).
Sliprings or exciter commutator rough or dirty.	Clean and polish sliprings and exciter commutator (par. 79).

52. Alternating Current Output Frequency Erratic

Probable cause	*Possible cause*
Governor does not maintain constant speed.	Adjust or replace government (par. 62).
Brushes sticking in brush holders.	Clean brushes and brush holders (par. 79).
Governor defective or improperly adjusted.	Adjust or replace governor (par. 62).

Section VI. RADIO INTERFERENCE SUPPRESSION

53. General Methods Used to Attain Proper Suppression

Essentially, suppression is attained by providing a low resistance path-to-ground for the stray currents. The methods used include shielding the ignition and high frequency wires, grounding the frame with bonding straps, and using capacitors and resistors. For general information on radio interference suppression, see TM 11-483.

54. Location and Replacement of Suppression Components

a. Replace radio interference suppression components of the same size, type, and rating. The capacity, voltage, and polarity of capacitors are extremely important. Insure good metal-to-metal contact by using internal threaded, external threaded, or internal-external threaded lockwashers.

b. Refer to figure 26 for the location, description, and replacement of suppression components.

55. Testing of Radio Interference Suppression Components

Test capacitors for leaks and shorts on a capacitor tester; replace defective capacitors. If test equipment is not available and interference is indicated, isolate the cause of interference by the trial-and-error method of replacing each capacitor in turn until the cause of interference is located and eliminated.

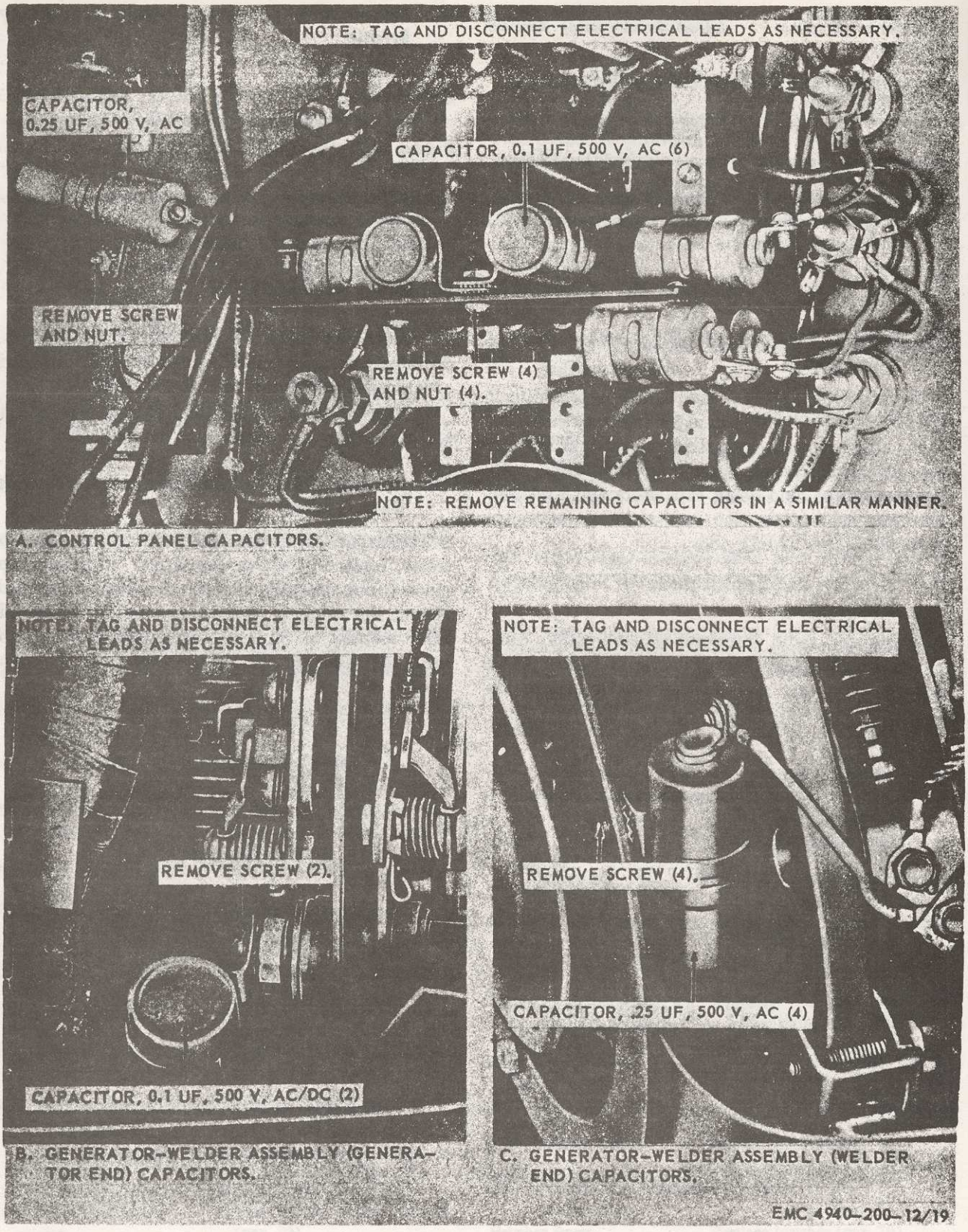


Figure 26. Radio interference suppression components, removal and installation.

Section VII. POWER TAKEOFF AND DECLUTCHER

56. General

The power takeoff is an integrated component of the shop set. Through its use, the motive power for the operation of the generator-welder is furnished by the engine. The power takeoff is operated by means of a declutcher lever which, by the use of linkage and a shifting arm, engages or disengages the gears of the power takeoff.

57. Declutcher Lever and Linkage

a. Removal. Refer to figure 27 and remove the declutcher lever and linkage from the truck body.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the declutcher lever and linkage for cracks, breaks, and worn or missing hardware. Replace a damaged or defective declutcher lever and linkage, Replace worn or missing mounting hardware.

c. *Installation.* Refer to figure 27 and instal the declutcher lever and linkage to the truck body.

d. Adjustment. Refer to figure 28 and adjust the declutcher lever linkage.

58. Power Takeoff Access Door and Guard

a. *Removal.* Refer to figure 29 and rcmove the power takeoff access door and guard from the truck frame.

b. Cleaning and Inspection.

(1) Clean the power takeoff access door and guard with all approved cleaning solvent and dry thoroughly.

(2) Inspect the guard for cracks, breaks, or other damage.

(3) Inspect the mounting hardware for worn or damaged threads. Replace as necessary.

c. Installation. Refer to figure 29 and install the power takeoff access door and guard to the truck frame,

59. Power Takeoff Linkage

a. Removal.

(1) Remove the power takeoff access door and guard (par. 58).

(2) Refer to figure 30 and remove the power takeoff linkage from the Model SECM shop set body.

(3) Refer to figure 31 and rcmove the power takeoff linkage from the Model CMU-5 shop set body.

b. *Cleaning and Inspection.*

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the linkage components for cracks, breaks, or other damage. Replace defective components.

(3) Inspect the threaded parts of the linkage for worn or damaged threads, Rechase damaged threads or replace damaged parts.

c. *Installation.*

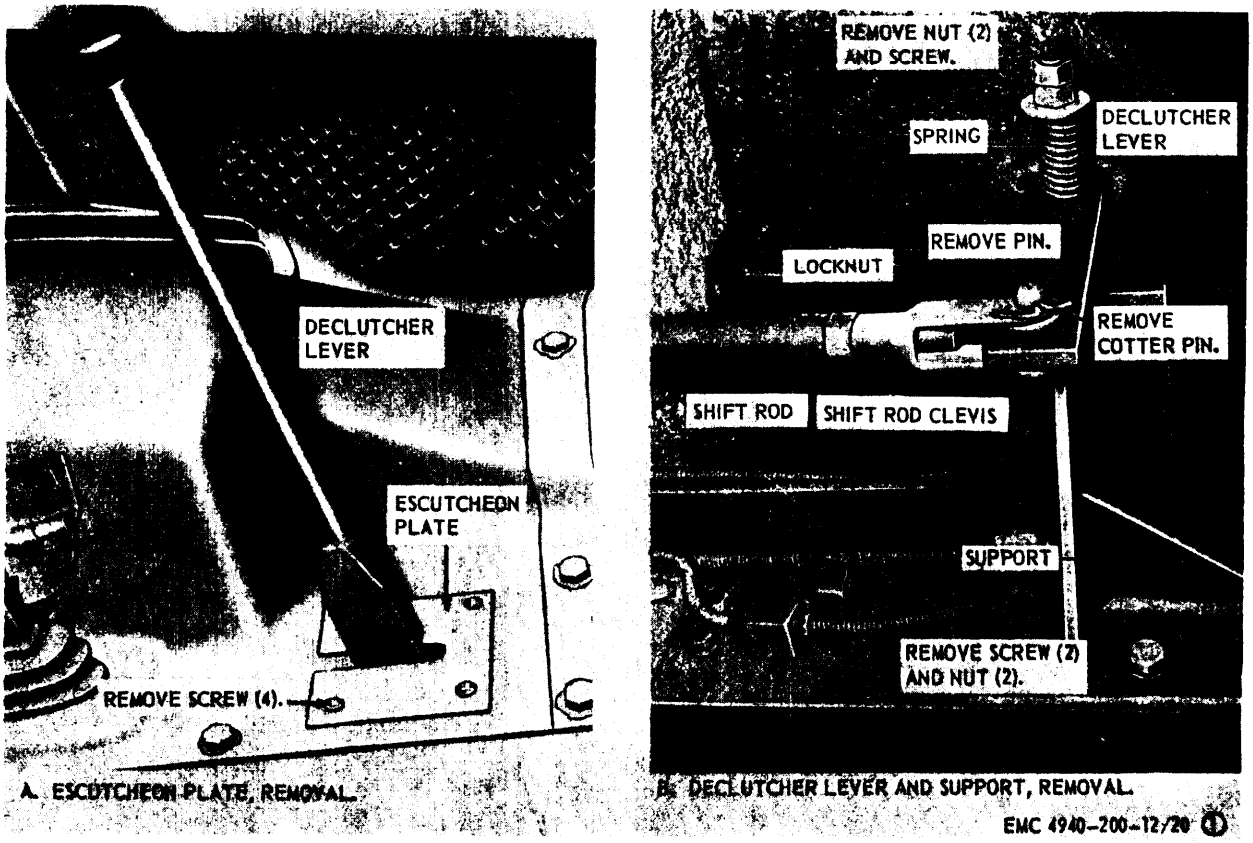
(1) Refer to figure 30 and install the power takeoff linkage on the Model SECM shop set body.

(2) Refer to figure 31 and install the power takeoff linkage on the Model CMU--5 shop set body.

(3) Install the power takeoff access door and guard (par. 58).

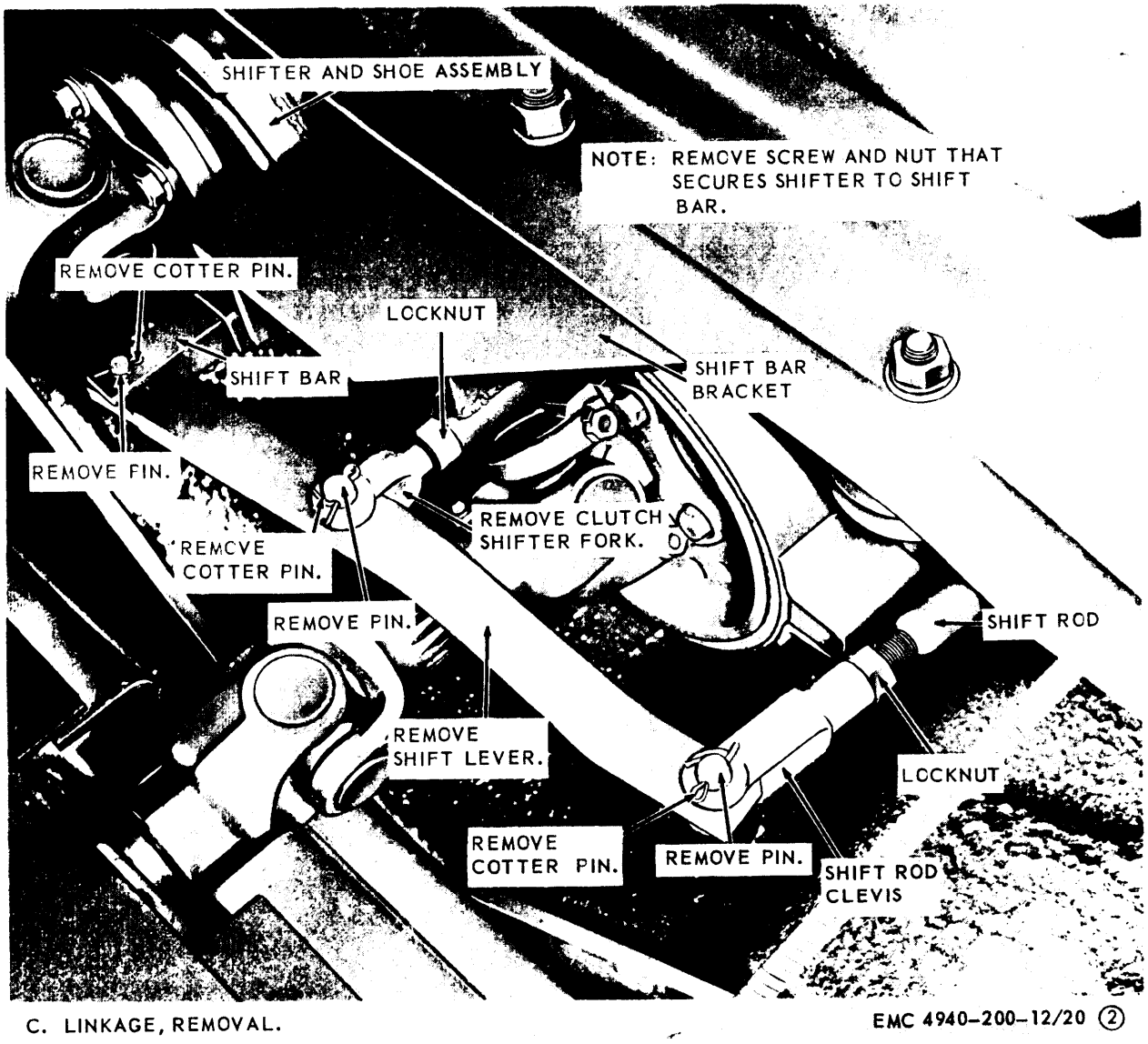
60. Power Takeoff Clutch Adjustment

Refer to figure 32 and adjust the power takeoff clutch.



1 References A and B

Figure 27. Declutcher lever and linkage, removal and installation.



2 Reference C

Figure 27—Continued.

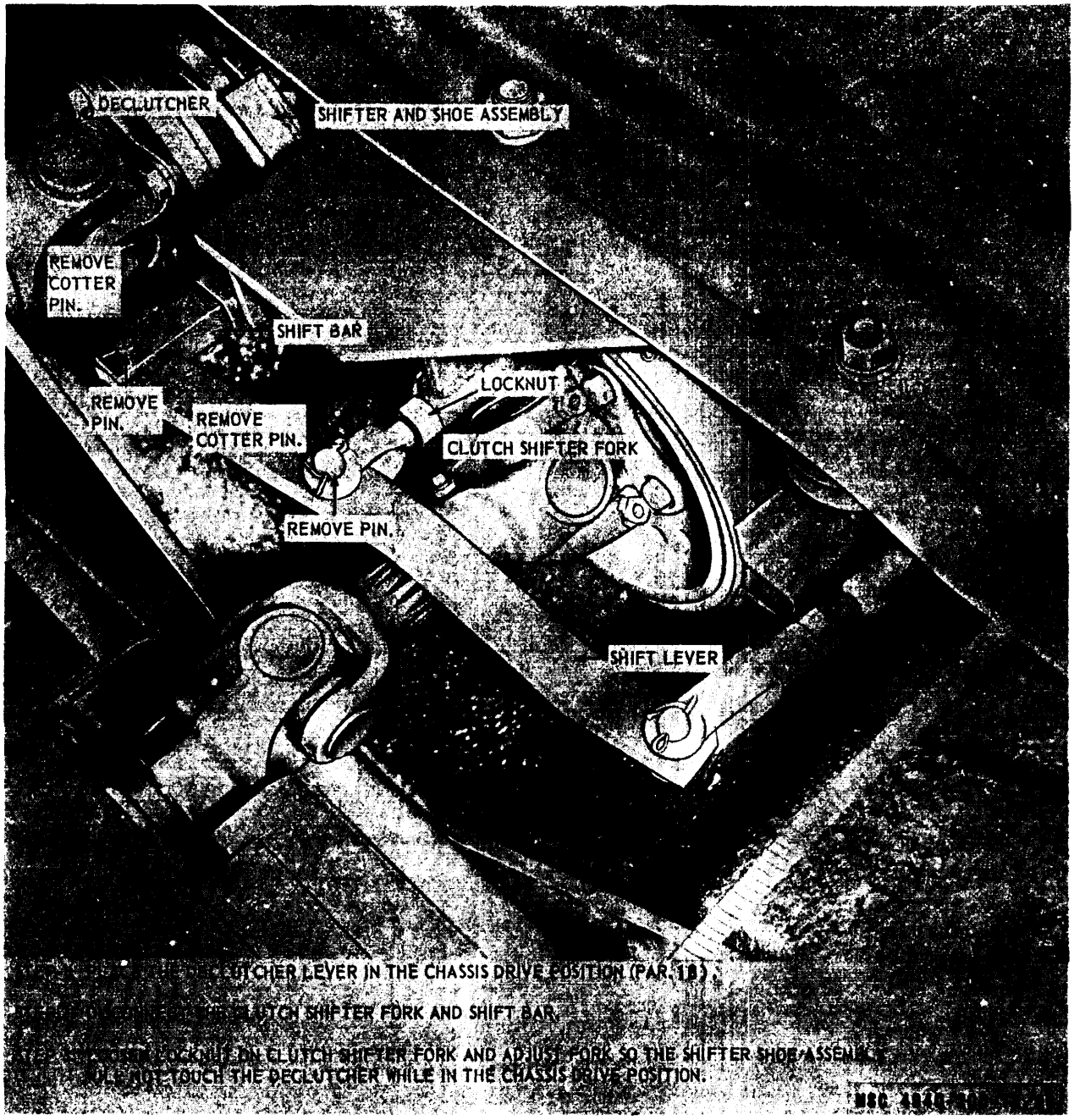


Figure 28. Declutcher lever linkage, adjustment.

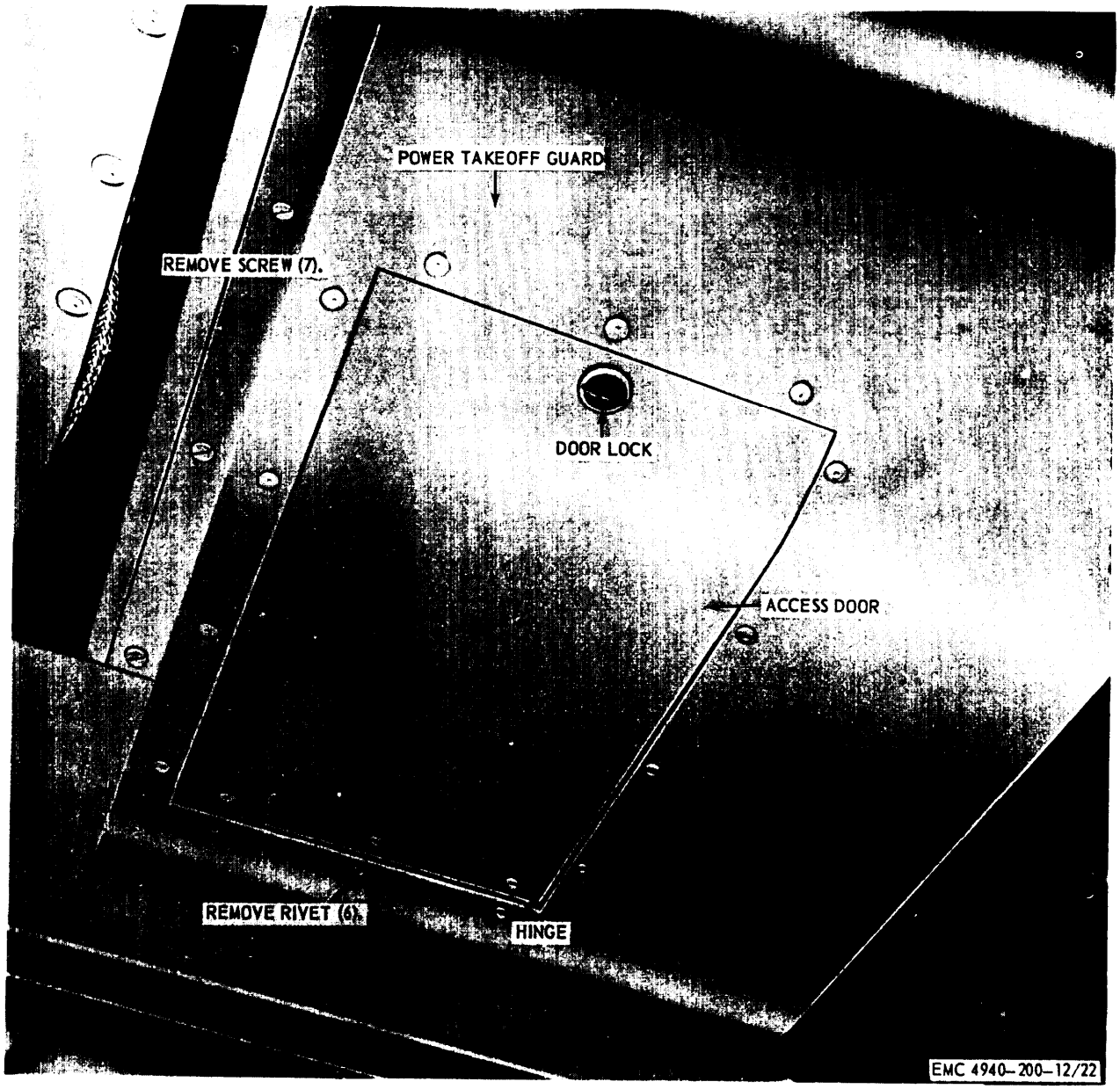


Figure 29. Power takeoff access door and guard, removal and installation.

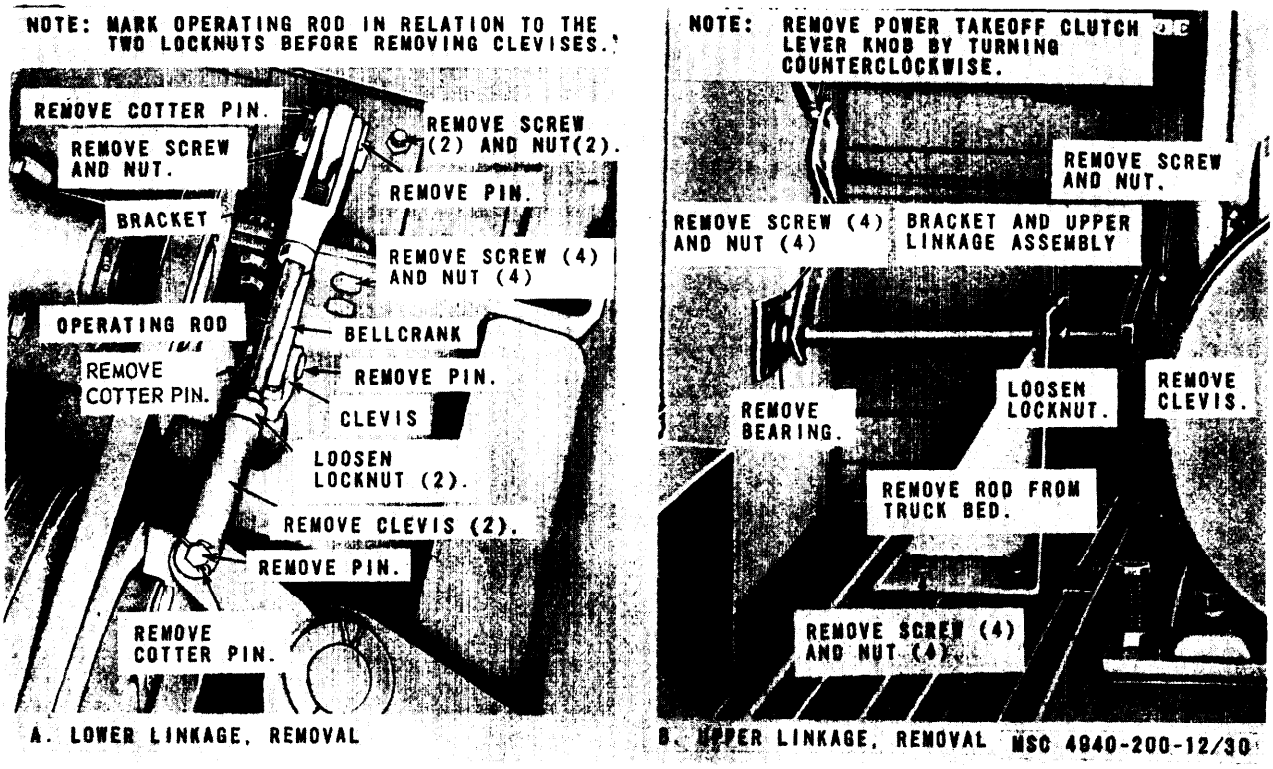


Figure 30. Power takeoff linkage, Model SECM, removal and installation,

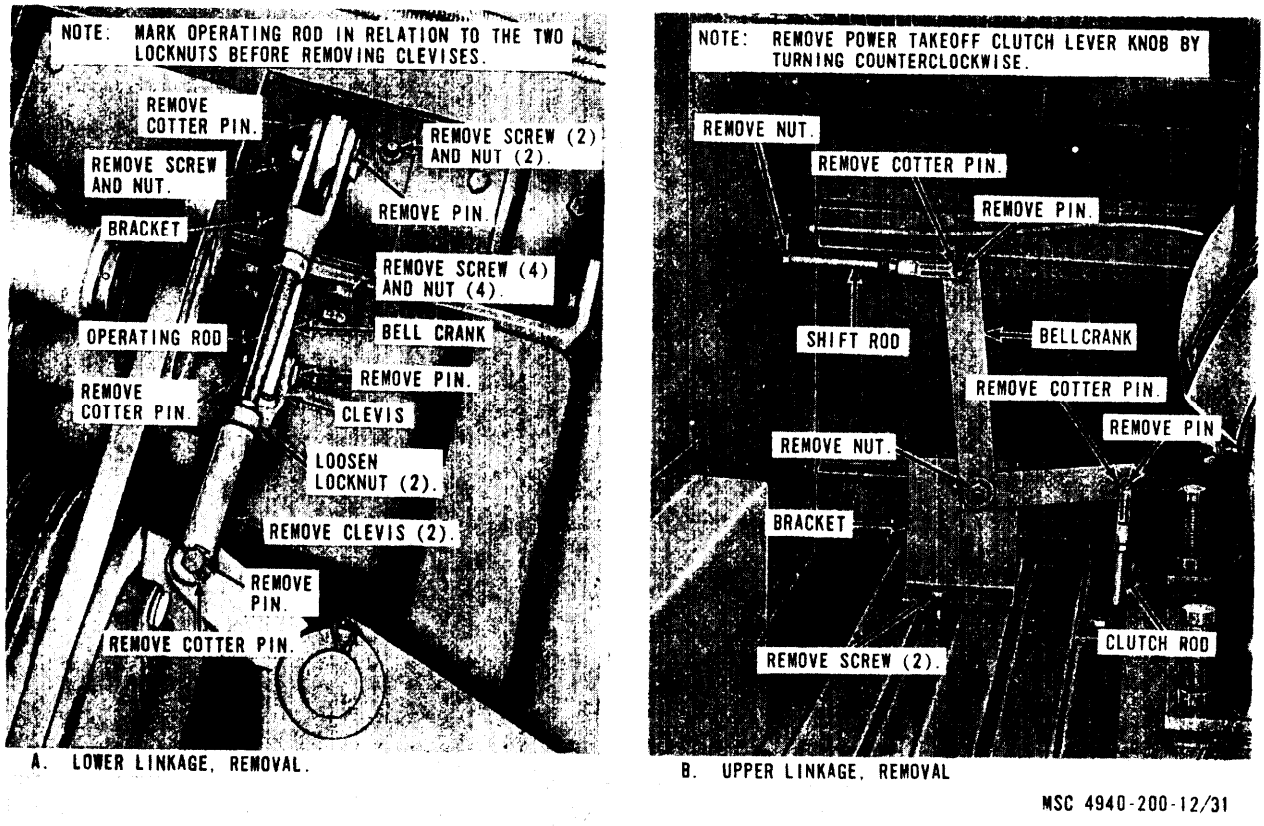


Figure 31. Power takeoff linkage, Model CM U-5, removal and installation.

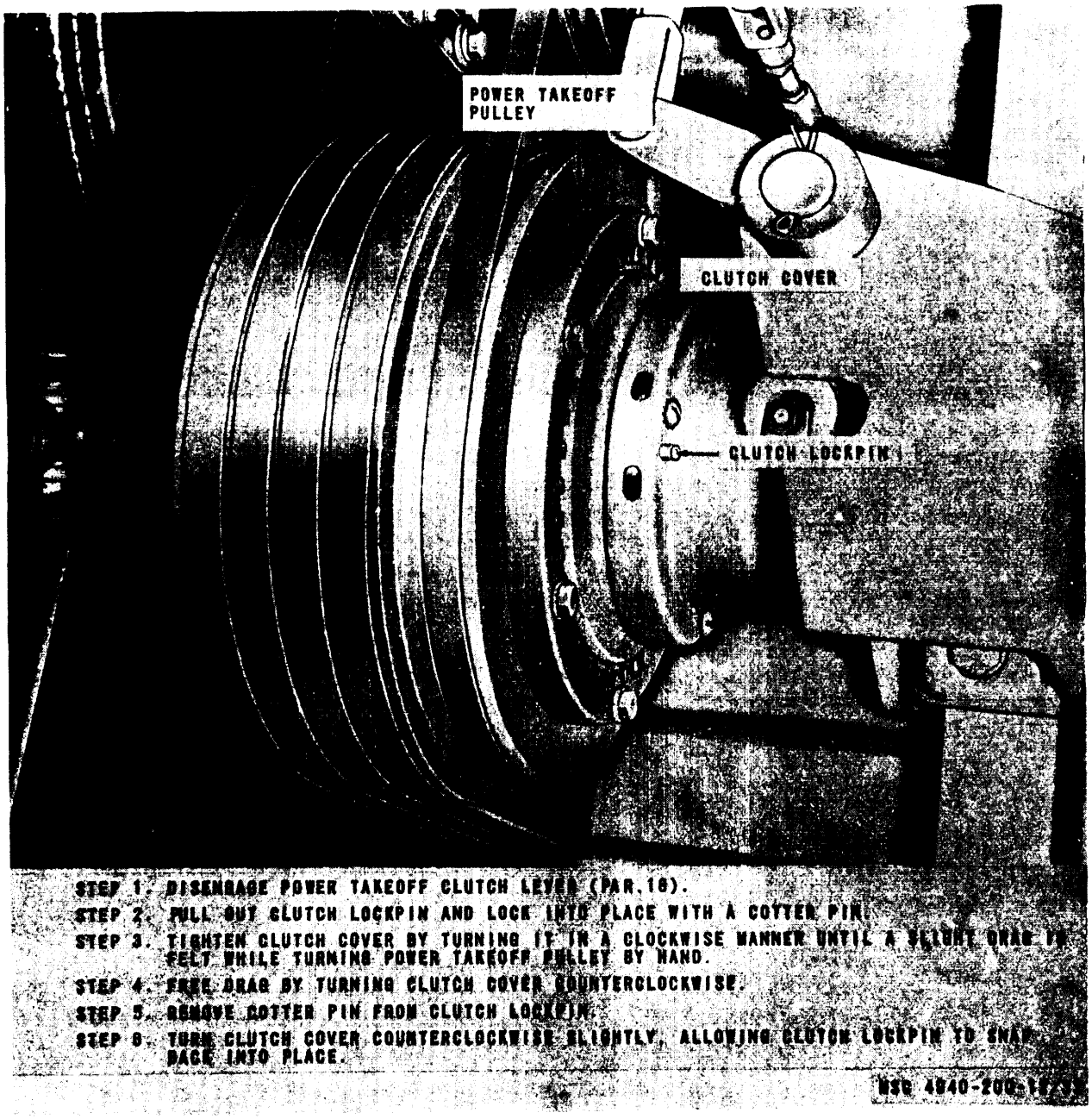


Figure 32. Power takeoff clutch adjustment.

61. General

The governor is a flyweight-type unit, consisting of a governor and linkage, which operates in conjunction with the generator-welder. The governor is driven by the generator-welder power takeoff through an adapter and flexible drive cable and is bracket mounted on the top of the cylinder head of the truck engine. The govcrnor opens and closes a valve in the carburetor, through the Iinkage, to control the engine fuel-air intake. The govcrnor maintains a steady engine speed during the operational of the generator-welder.

62. Governor

a. Removal. Refer to figure 33 and remove the governor from the engine.

b. *Disassembly.* Refer to figure 34 and disassemble the governor linkage assembly.

c. *Cleaning, Inspection, and Repair.*

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the component parts of the governor linkage for cracks, breaks, or other damage. Replace a damaged or defective part,

d. *Reassembly.* Refer to figure 34 and reassemble the governor linkage in reverse order.

e. *Installation,* Refer to figure 33 and install the governor on the engine,

j. *Adjustment.* Refer to figure 35 and adjust the governor.

63. Governor Adapter Drive Pulley

a. Removal.

(1) Remove the power takeoff access door and guard (par. 58).

(2) Refer to figure 36 and remove the governor adapter drive pulley from the governor adapter drive.

b. Cleaning and Inspection.

(1) Clean the metal parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the governor adapter drive pulley for cracks, breaks, or other damage. Replace a damaged pulley.

(3) Inspect threaded parts for worn or damaged threads. Replace as necessary.

c. *Installation.*

(1) Refer to figure 36 and install the adapter drive pulley to the governor adapter drive.

(2) Refer to paragraph 64 and adjust the governor adapter drive V-belt.

(3) Install the power takeoff access door and guard (par. 58).

64. Governor Adapter Drive

a. Removal.

(1) Remove power takeoff access door and guard (par. 58).

(2) Remove governor adapter drive pulley (par. 63).

(3) Refer to figure 37 and remove the governor adapter drive from the shop set body.

b. Cleaning and Inspection.

(1) Clean all metal parts with a cloth dampened with an approved cleaning solvent and dry thoroughly.

(2) Inspect the governor adapter drive for cracks, breaks, or other damage. Replace a damaged governor adapter drive. Replace worn or damaged mounting hardware.

c. Illstration.

(1) Refer to figure 37 and install the governor adapter drive to the shop set body.

(2) Install the governor adapter drive pulley (par. 63).

(3) Refer to figure 38 and adjust the governor adapter drive V-belt.

(4) Install power takeoff access door and guard (par. 58).

65. Throttle Control

a. Removal. Refer to figure 39 and remove the throttle control from the shop set body.

b. *Cleaning and Inspection.*

(1) Clean the parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the throttle cable for breaks or kinks and for lack of freedom of operation. Replace a damaged or defective throttle control.

(3) Inspect all parts for cracks, breaks, or other damage. Replace a defective part.

(4) Inspect the hardware for worn or damaged threads,

c. *Installation.* Refer to figure 39 and install the throttle control to the shop set body.

66. Throttle Control Linkage

a. Removal. Refer to figure 40 and remove throttle control linkage from the engine.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect all parts for wear, cracks, breaks, or other damage.

(3) Inspect the hardware for worn or damaged threads.

(4) Replace all defective parts.

c. Installation. Refer to figure 40 and install throttle control linkage to the engine.

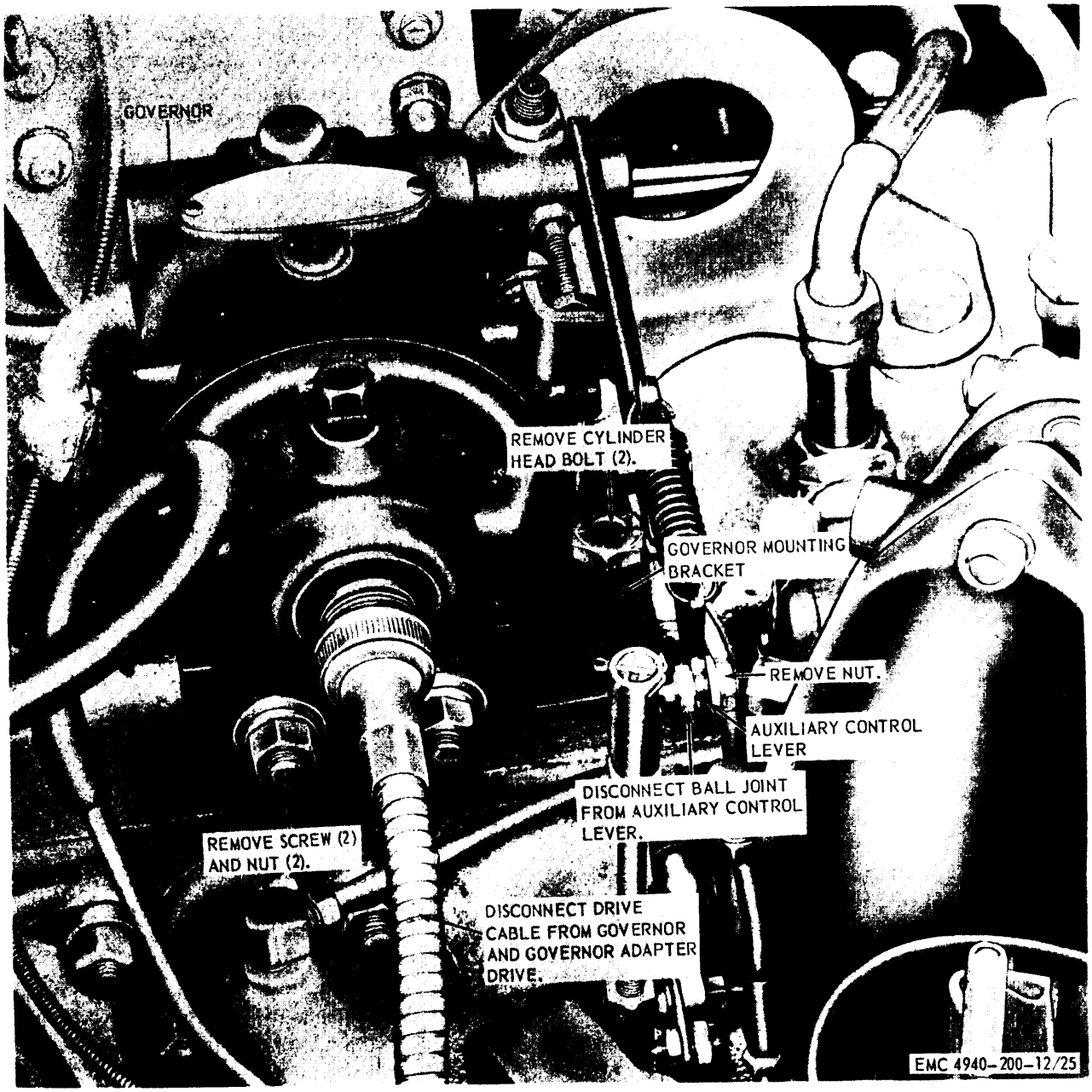
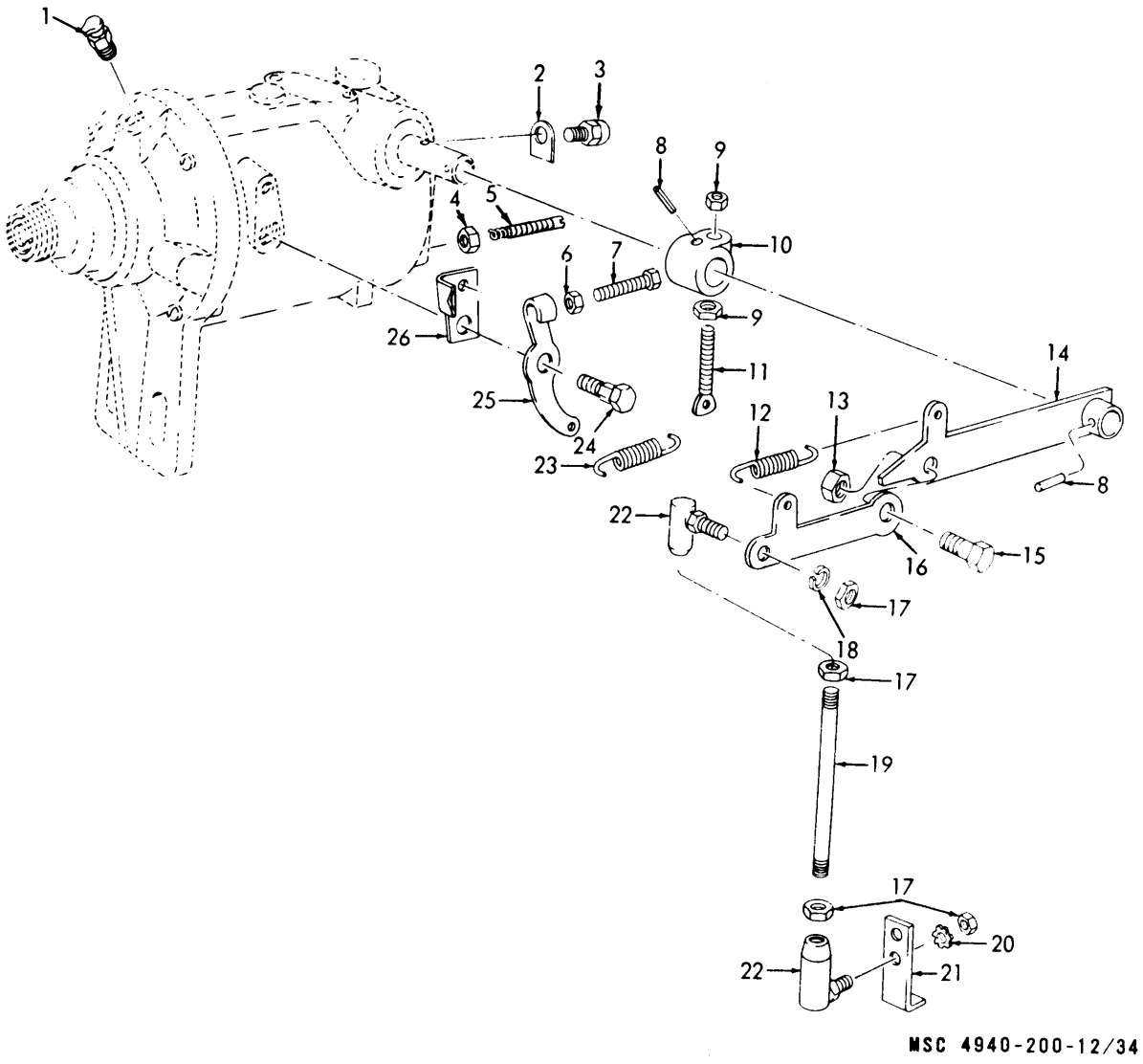


Figure 33. Governor, removal and installation.



1 Oilcup
2 Tag
3 Oiler assembly
4 Nut, plain, hex, ¼–28
5 Pressure relief screw (spec)
6 Nut, plain, hex, No. 12–24
7 Screw, cap, No. 12–24 x 1½ in.
8 Pin, spring, 3/16 x ¾ in. (2 rqr)
9 Nut, plain, hex, 5/16–24 (2 rqr)
10 Adjusting screw bracket
11 Control weight
12 Helical extension spring
13 Nut, self-locking, hex, ¼–28
14 Throttle lever hub
15 Screw, cap, hex, ¼–28 x ¾ in.
16 Throttle lever arm
17 Nut, plain, hex, ¼–28 (4 rqr)
18 Washer, lock, 0.225 id
19 Throttle rod
20 Washer, lock, 0.262 id, ET
21 Arm extension
22 Ball joint (2 rqr)
23 Extension spring
24 Bolt, shoulder, 3/8–16 x 27/32 in.
25 Spring adjusting lever
26 Governor stop bracket

Figure 34. Governor linkage, disassembly and reassembly.

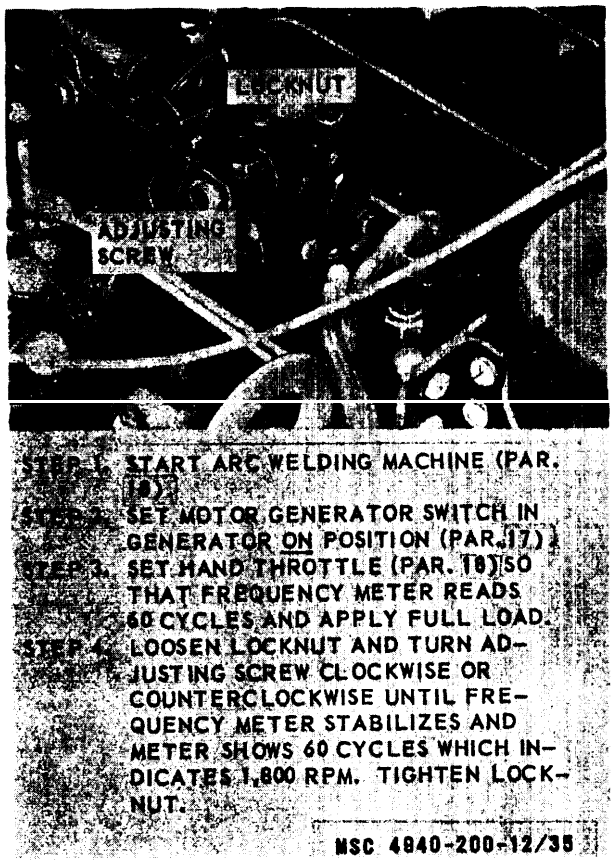


Figure 35. Govenor, adjustment.

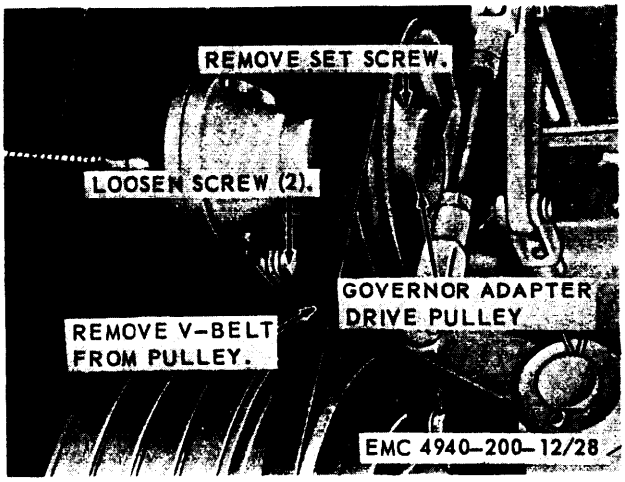


Figure 36. Governor adapter drive pulley, removal and installation.

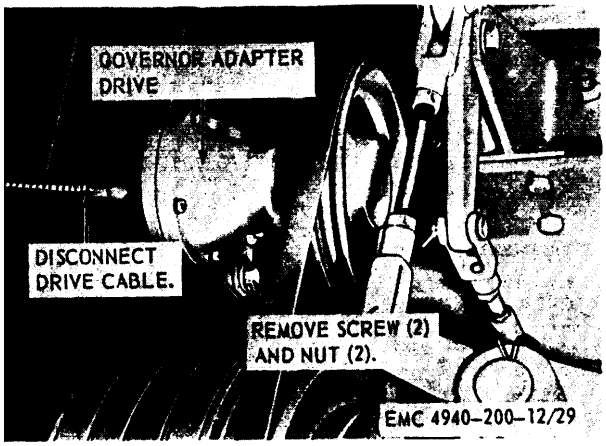


Figure 37. Governor adapter drive, removal and installation.

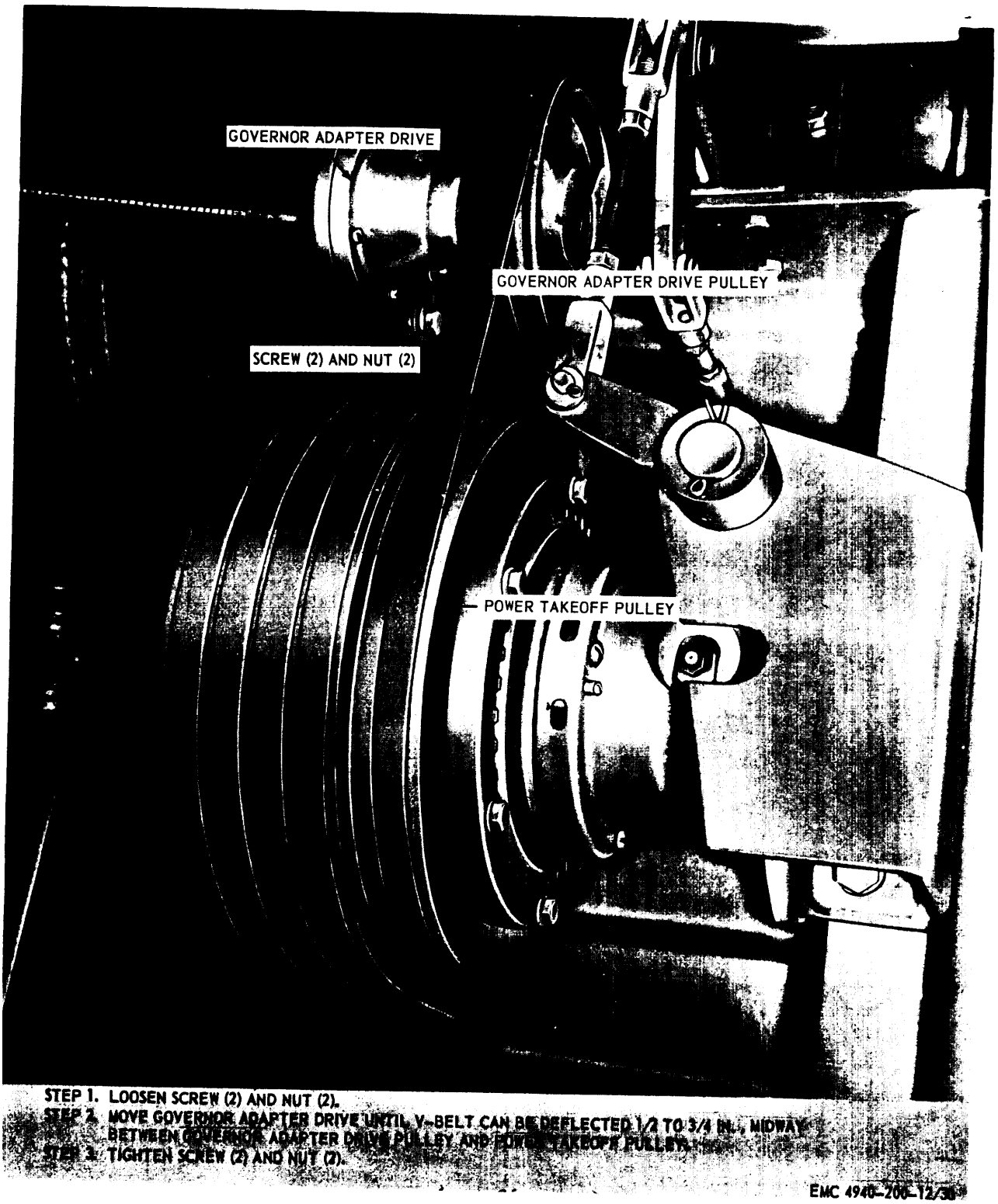
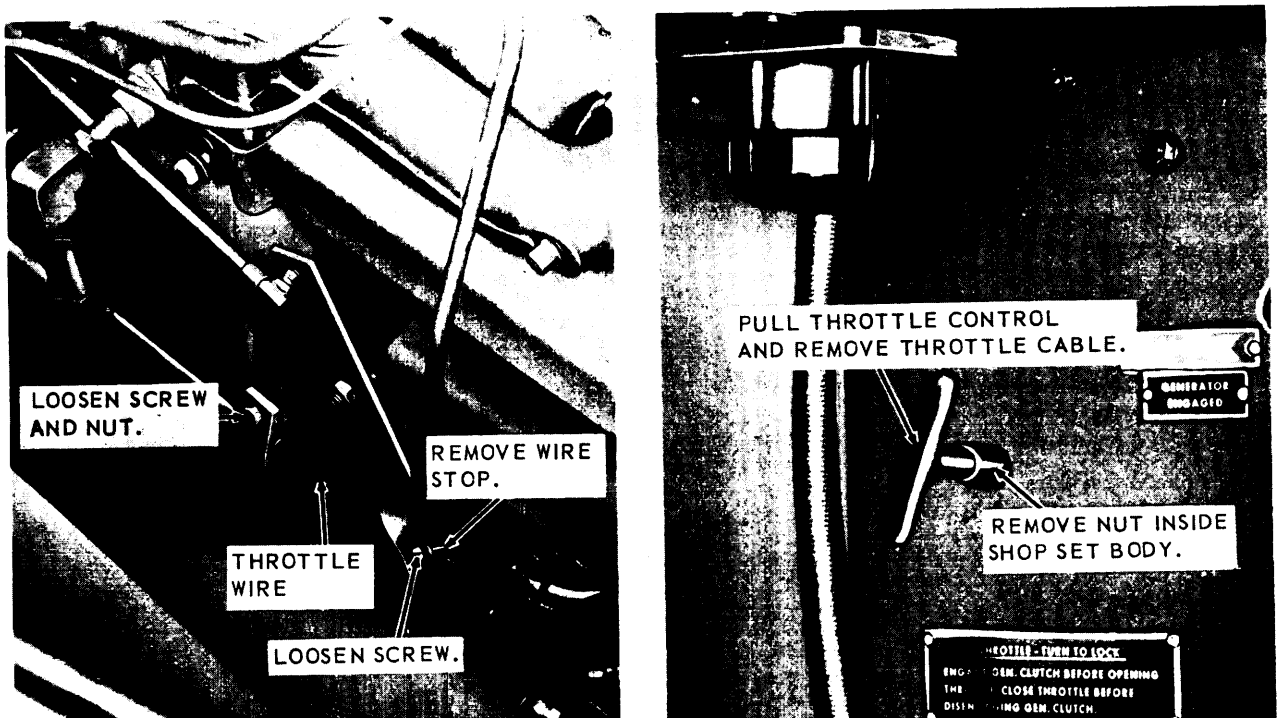


Figure 98. Governor adapter drive V-belt, adjustment.



A. THROTTLE WIRE, REMOVAL.

B. THROTTLE CABLE, REMOVAL.

EMC 4940-200-12/31

Figure 39. Throttle control, removal and installation.

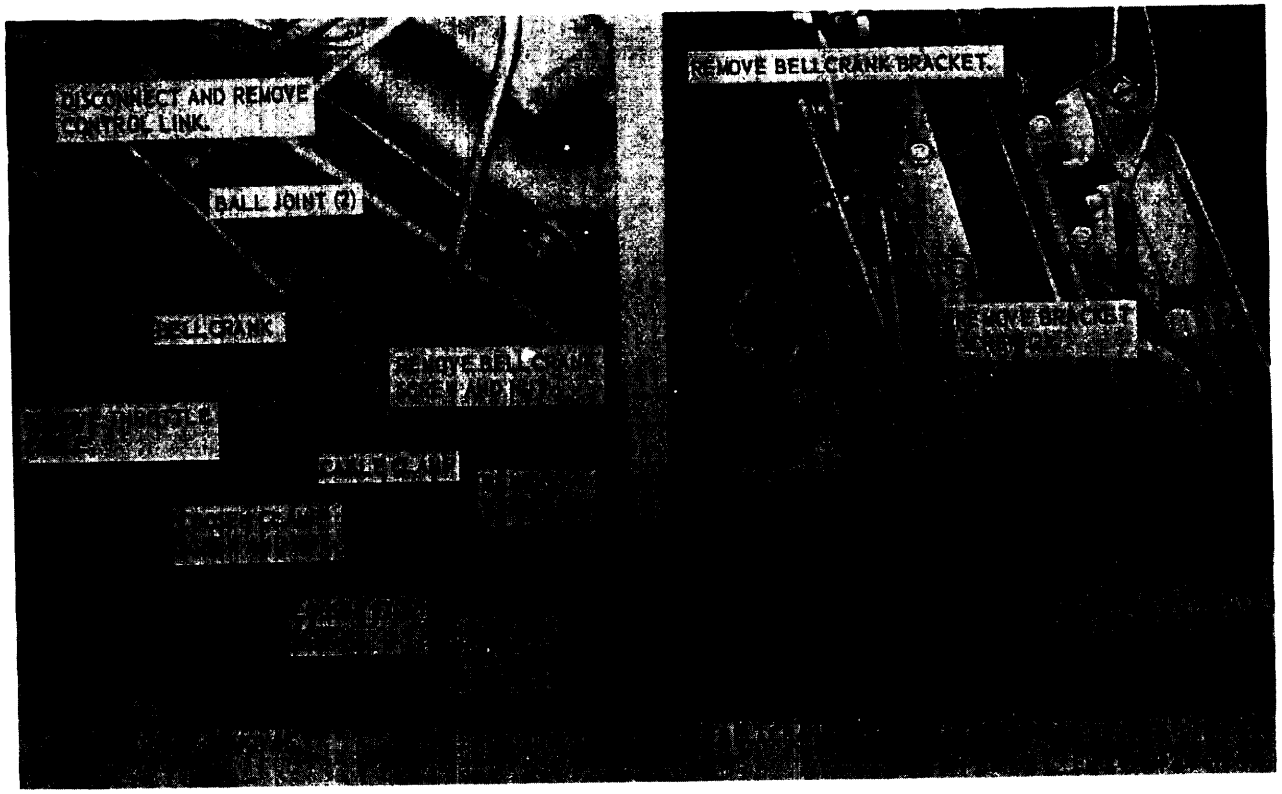


Figure 40. Throttle control linkage, removal and installation.

67. General

The electric brake lock switch, located on the truck dashboard, the slave rcceptaclc and field rheostat connectors, located on the control panel, and the 1 lo-volt receptacle and overspeed relay assembly (Model SECM) located on the street side of the shop set, are needed for the proper operation of the electrical components of the shop set. On Model CMU-5 the overspeed relay resistor and switches are located on the interior of the generator-welder housing and an additional 110-volt rcccptacle is mounted on the upper right front of the truck body.

68. Electric Brake Lock Switch

a. Removal.

(1) Refer to figure 41 and remove the electric brake lock switch from the Model SECM truck control panel.

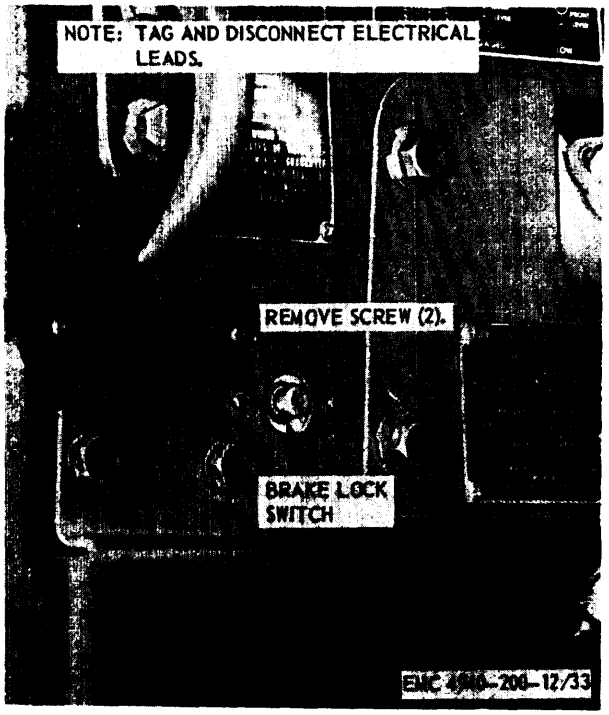


Figure 41. Electric brake lock switch, Model SECM, removal and instillation.

(2) Refer to figure 42 and remove the electric brake lock switch from the Model CMU-5 truck control panel.

b. ***Cleaning and Inspection.***

(1) Clean the parts with a cloth dampened with an approved cleaning solvent and dry thoroughly.

(2) Inspect the wire leads for frayed or damaged insulation. Replace damaged leads and make certain that all connections are clean and tight.

(3) Inspect the switch for cracks, breaks, or other damagc. Replace a damaged or defective switch.

(4) Inspect the hardware for worn or damaged threads. Replace as necessary.

c. ***Installalion.***

(1) Refer to figure 41 and install the electric brake switch on the Model SECM truck control panel.

(2) Refer to figure 42 and install the electric brakc switch on the Model CMU-5 truck control panel.

69. 110-Volt Receptacles

a. Removal.

(1) Refer to figure 43 and remove the 110-volt receptacle from the street side of the shop set body.

(2) Removc the 110-volt recepticle mounted on the upper right front of Model CMU-5 shop set body in a similar manncr.

b. Cleaning and Inspection,

(1) Clean the parts with a cloth dampened with an approved cleaning solvcnt and dry thoroughly.

(2) Inspect the receptacle and cover plate for cracks, breaks, or other damage. Replace a damaged part.

(3) Inspect the receptacle for damaged hardware and loose electrical connections. Replace all damaged hardware. Makc certain that all electrical connections are clean and secure.

c. ***Installation.***

(1) Refer to figure 43 and install the 110-volt receptacle to the street side of the shop set body.

(2) Install the 110-volt receptacle, mounted on the upper right front of Model CMU–5 shop set body in a similar manner.

70. Slave Receptacle and Slave Cable Assembly

a. Removal. Refer to figure 44 and remove the slave receptacle and slave cable assembly from the control panel.

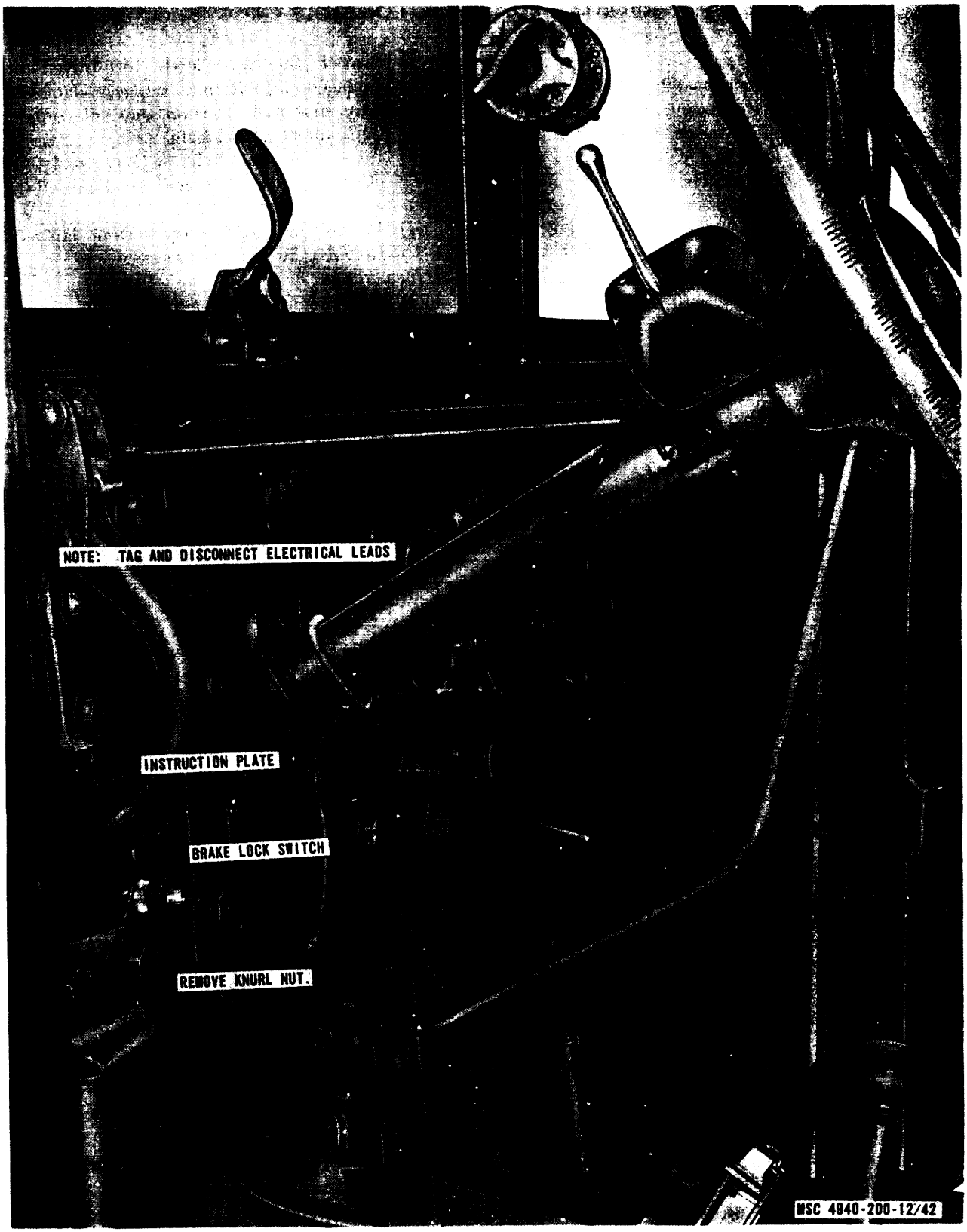


Figure 42. Electric brake leek switch, Model CMU–5, removal and installation.

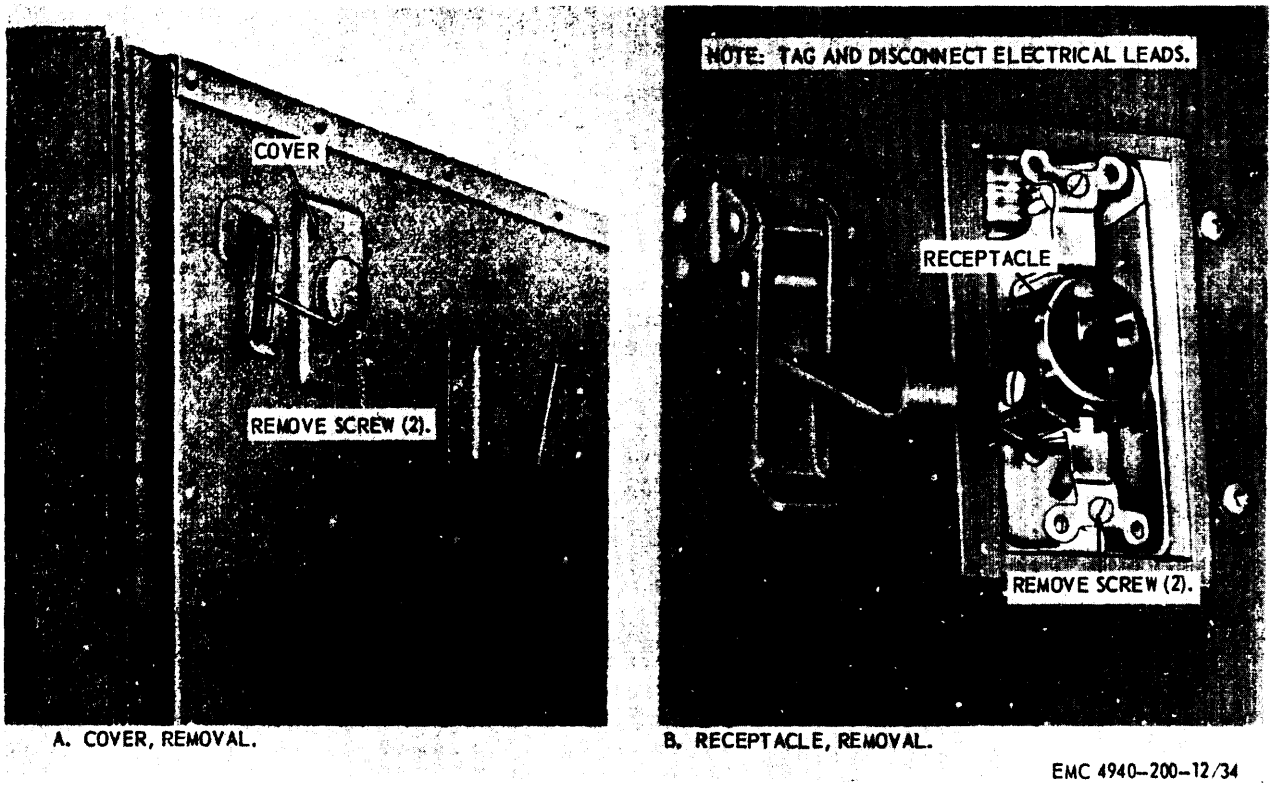


Figure 43. 110-volt receptacle, removal and installation.

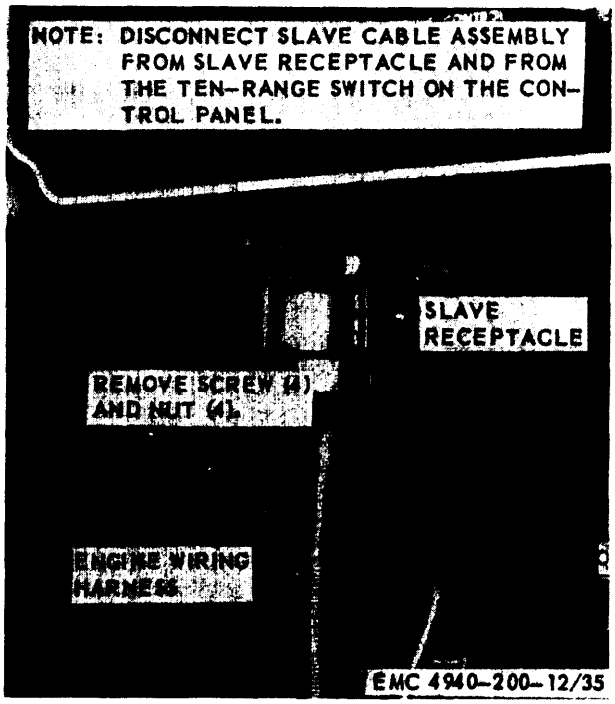


Figure 44. Slave receptacle and slave cable assembly, removal and installation.

b. Cleaning and Inspection.

(1) Clean the parts with a cloth dampened with an approved cleaning solvent and dry with a clean, dry cloth.

(2) Inspect the slave receptacle and slave cable assembly for cracks, breaks, or damage. Replace a damaged slave receptacle or slave cable assembly.

(3) Inspect the slave receptacle for worn or damaged hardware and loose electrical connections. Replace all worn or damaged hardware. Make certain that all electrical connections are clean and secure.

c. *Installation* Refer to figure 44 and install the slave receptacle and slave cable assembly to the control panel.

71. Overspeed Relay Assembly, Resistor, Switches and Engine Wiring Harness

a. Removal.

(1) Refer to figure 45 and remove the overspeed relay assembly from the street side of Model SECM shop set body.

(2) Remove generator-welder housing top cover (par. 75). Refer to figure 44 and remove

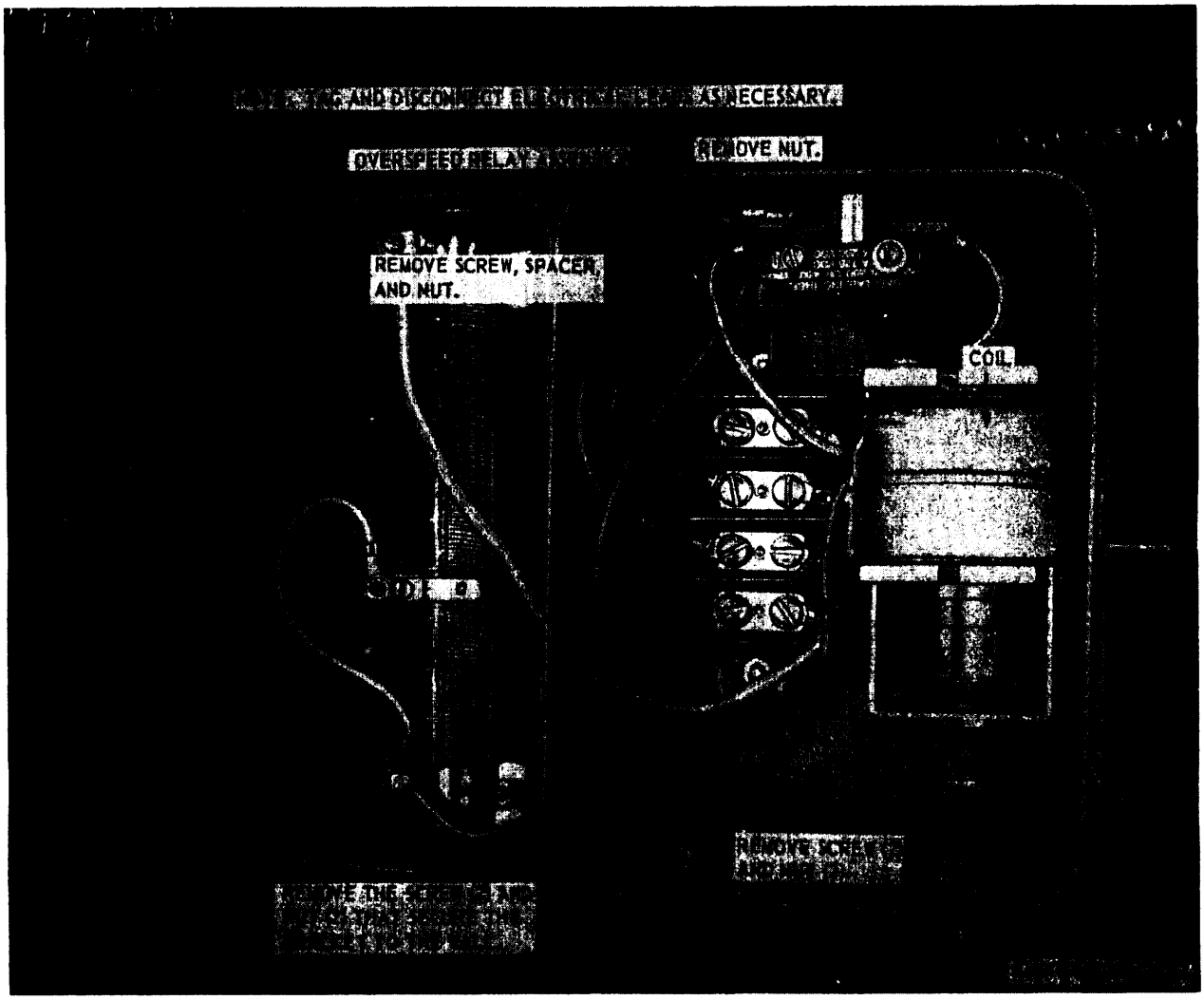


Figure 46. Overspeed relay assembly, Model SECM, removal and installation.

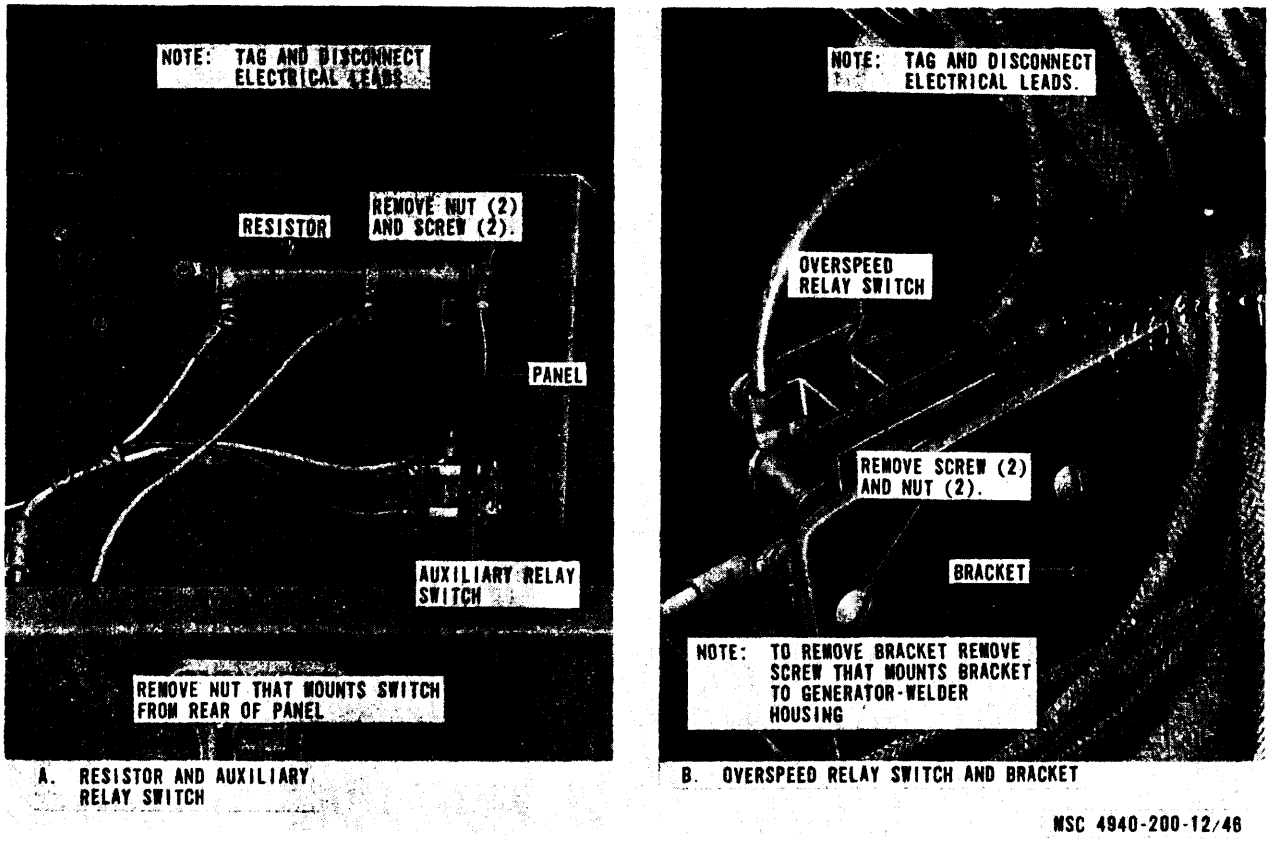


Figure 46. Resistor, auxiliary relay switch, overspeed relay switch and bracket, Model CMU-5, removal and installation.

the resistor, auxiliary relay switch and overspeed relay switch from inside the generator-welder housing on Model CMU–5 shop set.

(3) Disconnect the engine wiring harness (fig. 44) from the engine ignition switch and from the two connectors located at rear of Control panel.

b. ***Cleaning and Inspection.***

(1) Clean the parts with a cloth dampened with an approved cleaning solvent and dry thoroughly.

(2) Inspect the overspeed relay assembly, resistor, and switches for dents, cracks, breaks, damaged insulation, and other damage. Replace a damaged or defective overspeed relay assembly, resistor or switches.

(3) Inspect the overspeed relay assembly, resistor, and switches for worn or damaged hardware and loose electrical connections. Replace worn or damaged hardware and make certain that all electrical connections are clean and secure.

(4) Inspect the engine wiring harness for damaged insulation, broken wires, cracks, or breaks. Repair a damaged wiring harness.

c. *Installation.*

(1) Connect the engine wiring harness (fig. 44) to the two connectors located at the rear of control panel and to the engine ignition switch.

(2) Refer to figure 45 and install the ovrspeed relay assembly to the street side of Model SECM shop set body.

(3) Refer to figure 46 and install the resistor, auxiliary relay switch, and overspeed relay switch inside the generator-welder housing of Model CMU–5 shop sets. Install generator-welder housing top cover (par. 75).

72. Field Rheostat Assembly and Receptacles

a. Rcmoual.

(1) Remove the field rheostat (par. 20).

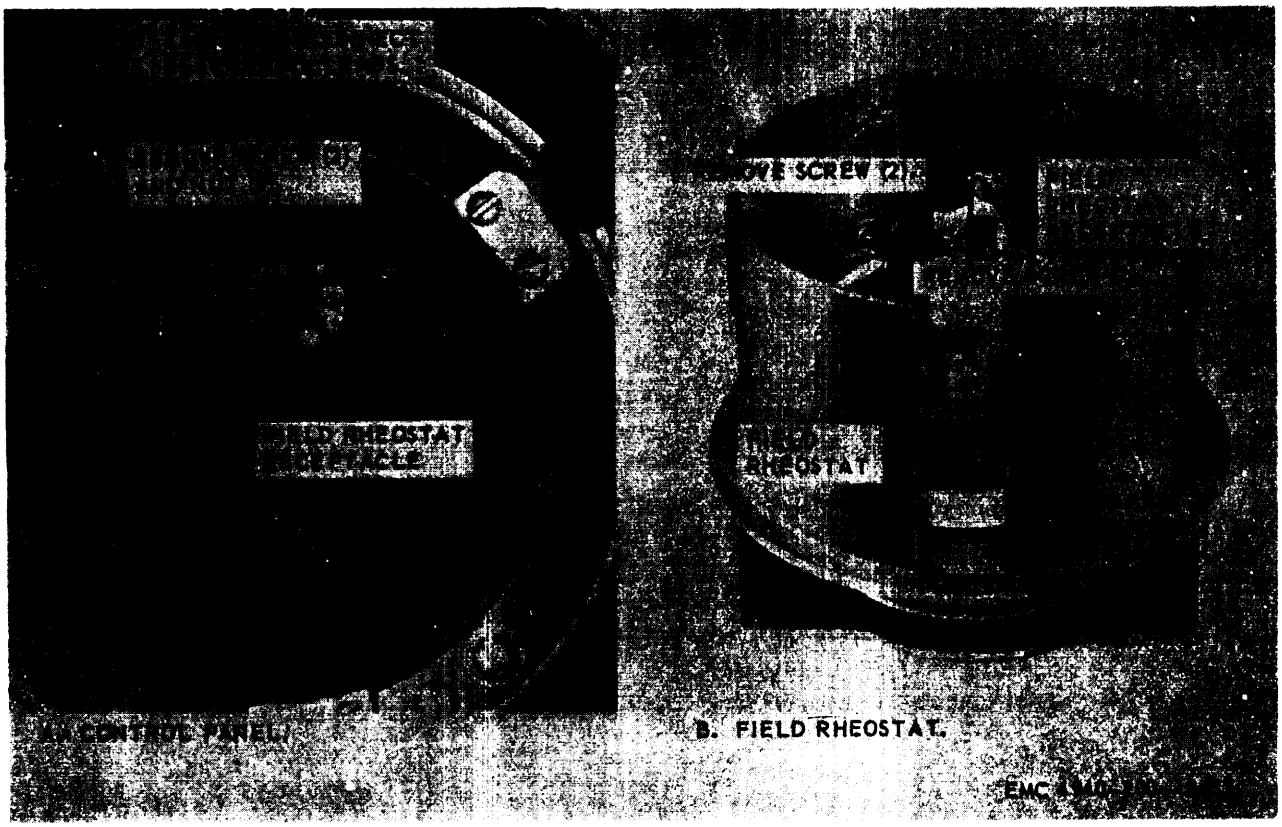


Figure 47. Field rheostat receptacles, removal and installation.

(2) Refer to figure 47 and remove the field rheostat receptacles from the generator-welder control panel and the field rheostat.

b. Cleaning and Inspection.

(1) Clean the field rheostat assembly and receptacles with a cloth dampened with an approved cleaning solvent and dry with a clean, dry cloth.

(2) Inspect the field rheostat assembly and receptacles for cracks, breaks, or other damage. Replace as necessary.

c. Installation.

(1) Refer to figure 47 and install the field rheostat assembly and receptacles to the generator-welder control panel and the field rheostat.

(2) Install the field rheostat (par. 20).

Section X. GENERATOR-WELDER

73. General

The generator-welder is a self-contained machine powered by a synchronous-type electric motor. Operating power may be furnished either by the truck engine by means of an integrated power takeoff or from a 220-volt, 3-phase outside current source.

74. Generator-Welder V-Belts Adjustment

Refer to figure 48 and adjust the generator-welder v-belts.

75. Lifting Eye and Generator-Welder Top Cover

a. Removal.

(1) Refer to figure 49 and remove the lifting eye and generator-welder top cover (Model SECM).

(2) Refer to figure 50 and remove the generator-welder top cover and lifting eye (Model CMU-5).

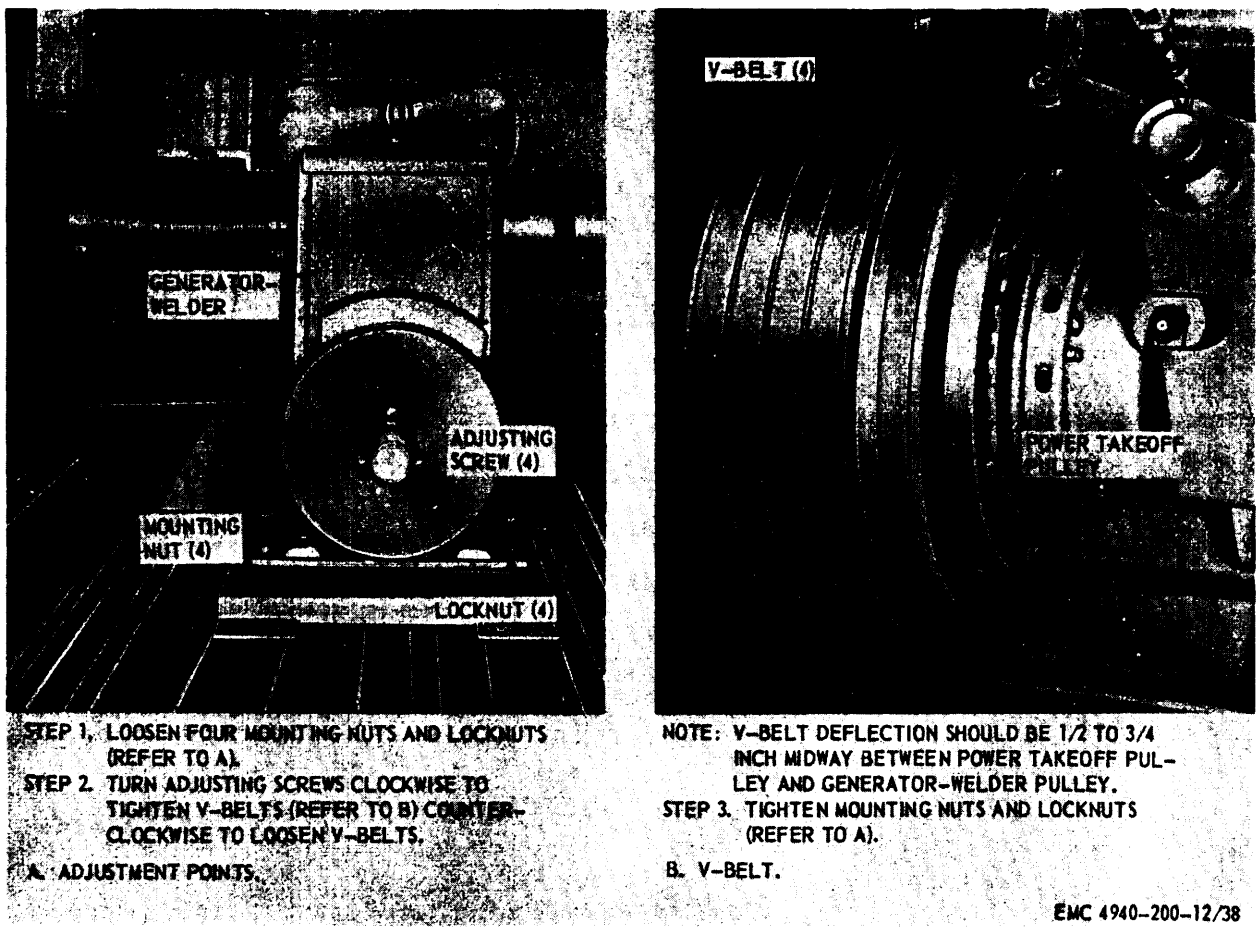


Figure 48. Generator-welder V-belts, adjustment.

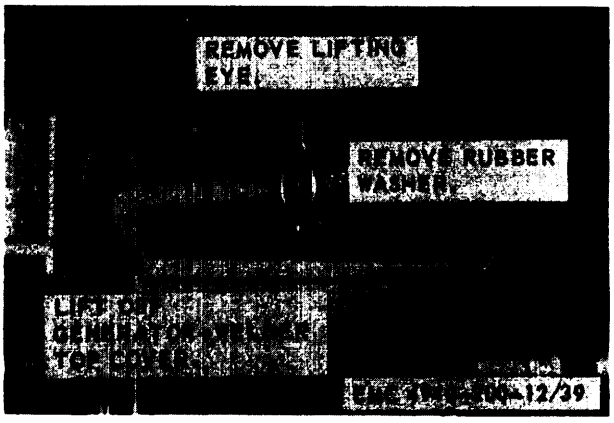


Figure 49. *Lifting eye and generator-welder top cover, Model SECM, removal and installation.*

b. Cleaning and Inspection.

(1) Clean the parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the lifting eye and top cover for dents, cracks, or damaged threads. Replace a damaged cover or lifting eye.

c. *Installation.*

(1) Refer to figure 49 and install the generator-welder top cover and lifting eye (Modcl SECM).

(2) Refer to figure 50 and install the lifting eye and generator-welcler top cover (Model CMU-5).

76. Ventilating Fan Guard

a Removal.

(1) Refer to figure 51 and remove the ventilating fan guard from the generator-welder (Modcl SECM).

(2) Refer to figure 52 and remove the ventilating fan guard from the generator-welder (Model CMU-5).

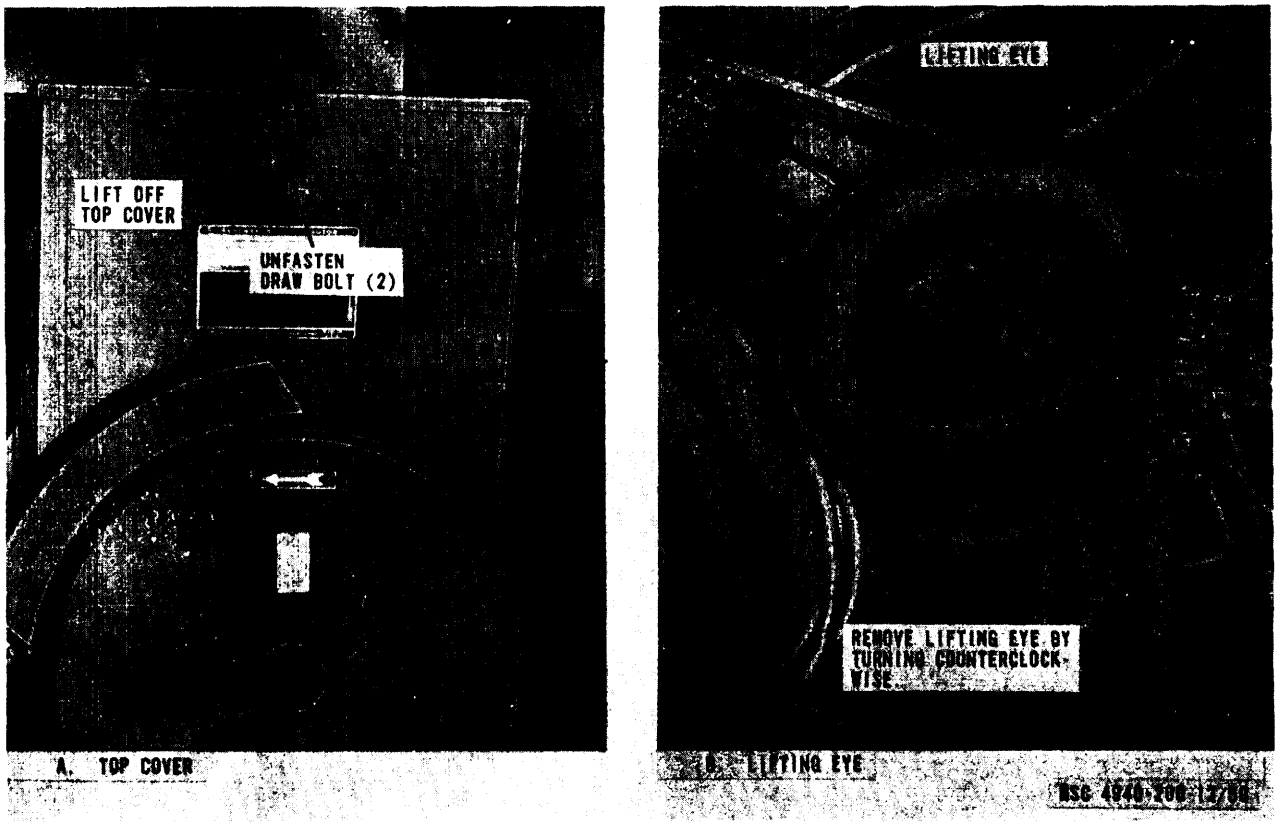


Figure 50. Generator-welder top cover and lifting eye, Model CMU05, removal and installation.

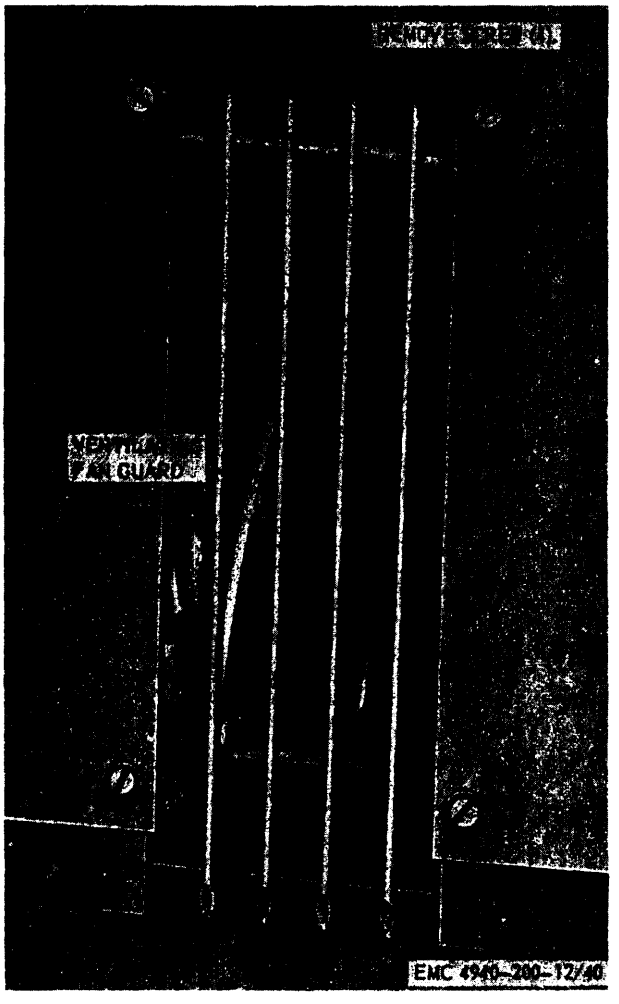


Figure 61. Ventilating fan guard, Model SECM, removal and installation.

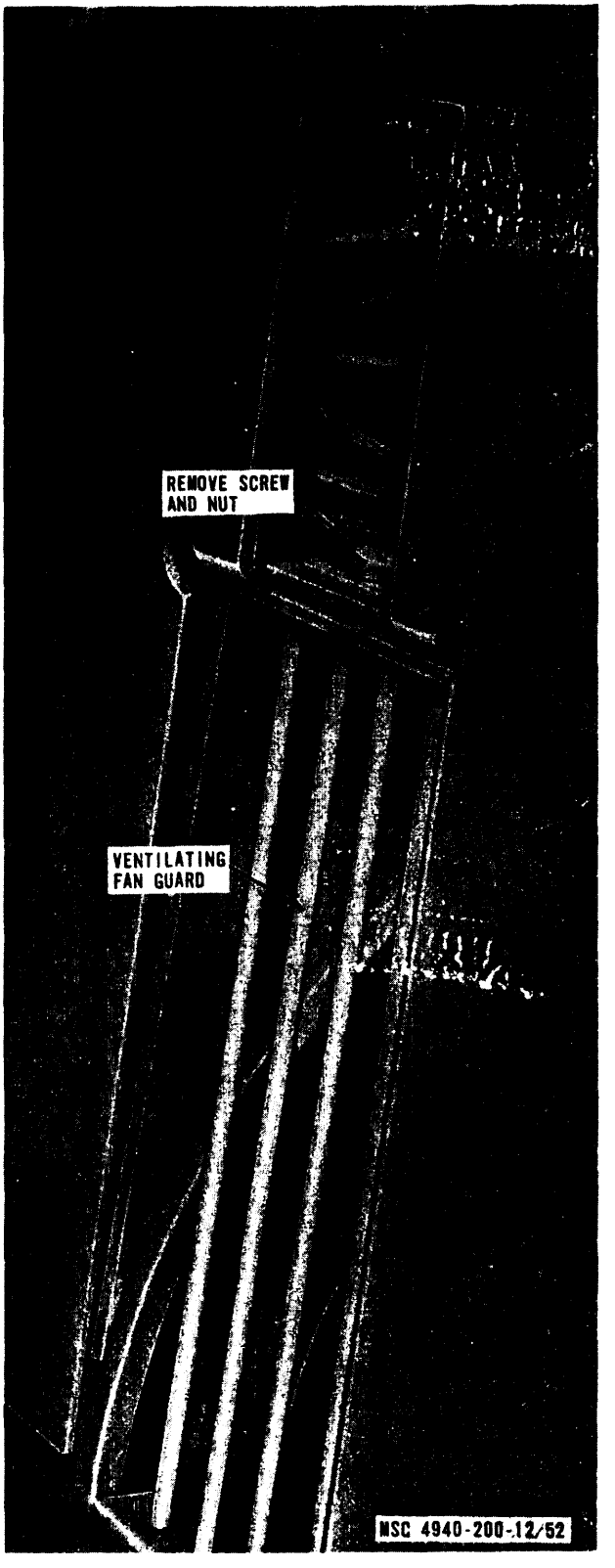


Figure 62. Ventilating fan guard, Model CMU-5, removal and instllation.

b. Cleaning and Inspection.

(1) Clean ventilating fan guard with an approved cleaning solvent and dry thoroughly.

(2) Inspect the fan guard for cracks, breaks, and broken welds. Weld all cracks or breaks and straighten dents.

(3) Inspect the hardware for worn or damaged threads. Replace as necessary.

c. Installation.

(1) Refer to figure **51** and install the ventilating fan guard to the generator-welder (Model SECM).

(2) Refer to figure 52 and install the ventilating fan guard to the generator-welder (Model CMU-5).

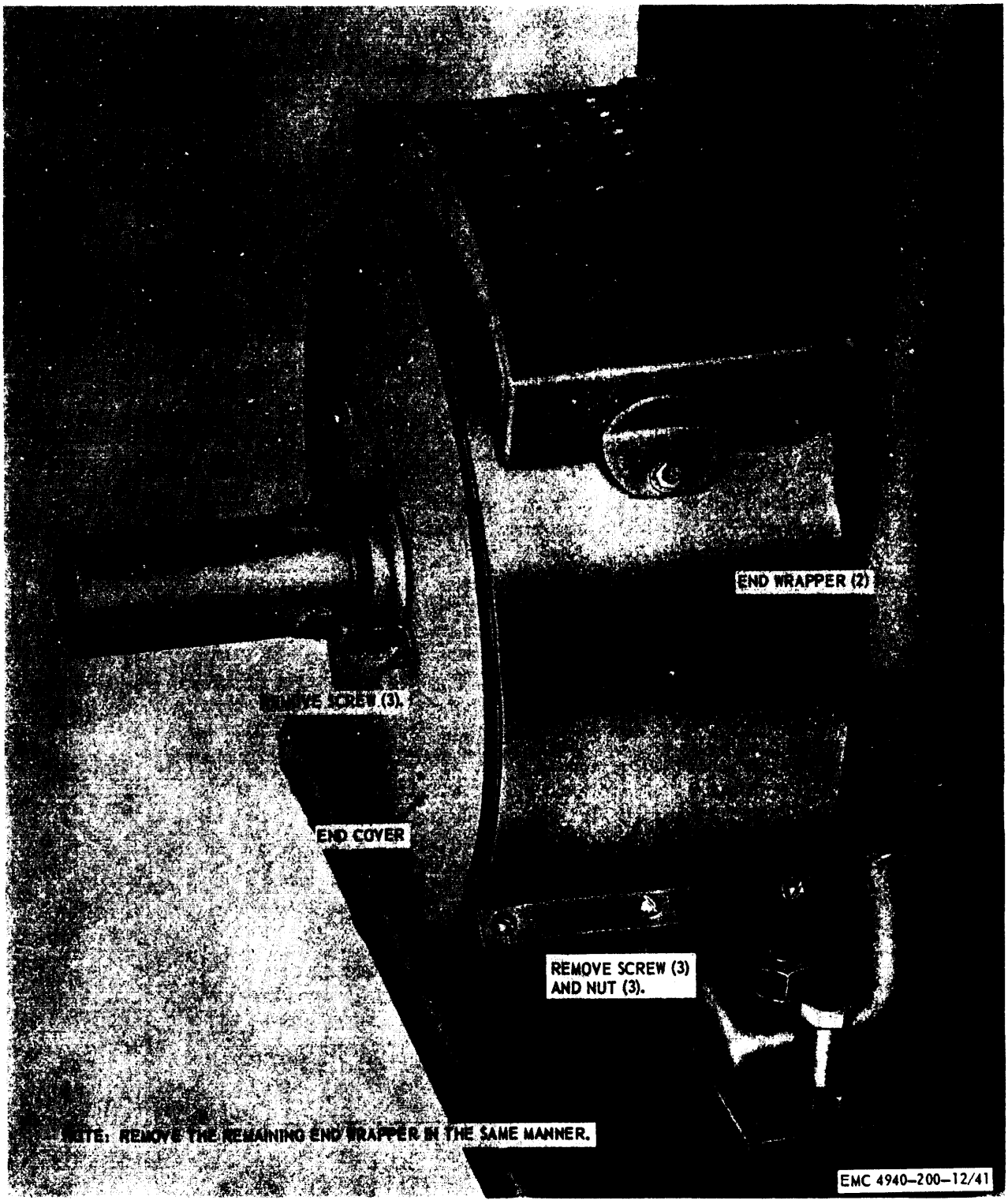


Figure 63. End wrappers, shaft guard, and end cover, Model SECM, removal and installation.

77. End Wrappers, Shaft Guard, and End Cover

a. ***Removal.***

(1) Remove the air filter (par. 38).

(2) Refer to figure 53 and remove the end wrappers, shaft guard, and end cover from the generator-welder (Model SECM).

(3) Refer to figure 53 and remove the Model CMIJ–5 end wrappers and end cover in a similar manner.

b. ***Cleaning and Inspection.***

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the end wrappers, shaft guard, and end cover for cracks, breaks, and broken welds. Weld all cracks or breaks. Replace a defective end wrapper, shaft guard, or end cover.

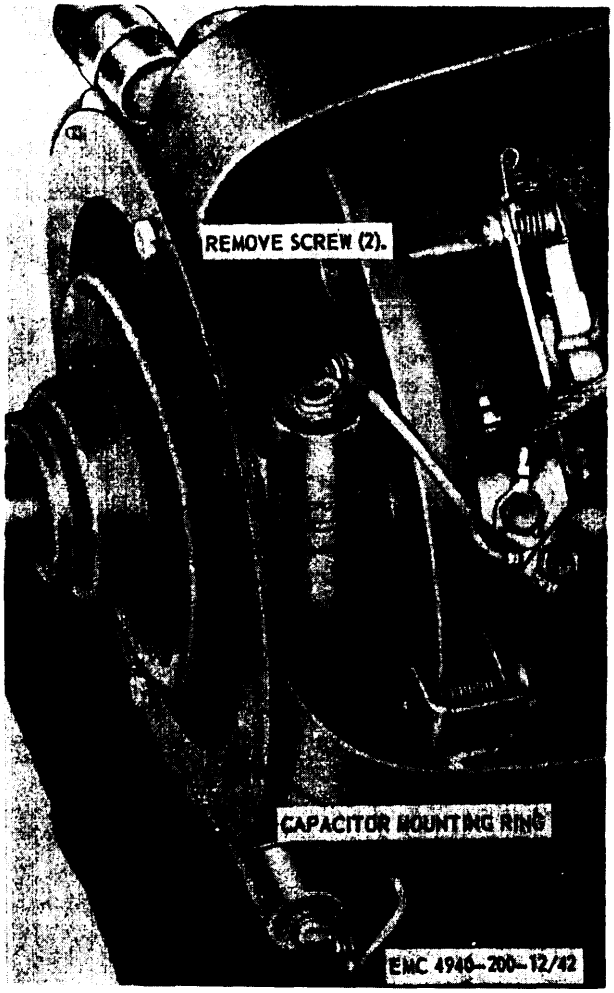


Figure 64. Capacitor mounting ring, removal and installation.

(3) Inspect all hardware for worn or damaged threads. Replace as neccessary.

c. ***Installation.***

(1) Refer to figure 53 and install the Model SECM end cover, shaft guard, and end wrappers to the generator-welder

(2) Refer to figure 53 and install the Model CMU-5 end cover and end wrappers to the generator-welder in a similar manner.

(3) Install the air filter (par. 38).

78. Capacitor Mounting Ring

a. Removal.

(1) Remove the end wrapper, shaft guard, and end cover (par. 77).

(2) Remove the capacitors (par. 54).

(3) Refer to figure 54 and remove the capacitor mounting ring from the generator-welder.

b, Cleaning and Inspection,

(1) Clean all parts with an approved solvent and dry thoroughly.

(2) Inspect the capacitor mounting ring for dents, cracks, or other damage. Weld all cracks or breaks, straighten **dents, or** replace a defective capacitor mounting ring.

(3) Inspect all hardware for worn or damaged threads. Replace as necessary.

c. Installation.

(1) Refer to figure 54 and install the capacitor mounting ring to the generator-welder.

(2) Install the capacitors (par. 54),

(3) Install the end cover, shaft guard, and end wrappers (par. 77).

79. Generator-Welder Brushes

a. Removal.

(1) Remove the end wrappers (par. 77).

(2) Refer to figure 55 and remove the generator-welder brushes from the generator-welder.

b. Cleaning and Inspection.

(1) Remove dirt and dust from the brushes and brush holders with low pressure, com pressed air.

(2) Inspect the brushes for breaks, nicks, or damage to the commutator wearing surfaces. Replace the exciter brushes if worm to less than 3/4 inch, Replace the generator brushes if worn to less than 7/8 inch.

(3) Clean and polish the commutator, refer to TM 5–764.

(4) Inspect mounting hardware for worn or damaged threads. Replace as necessary.

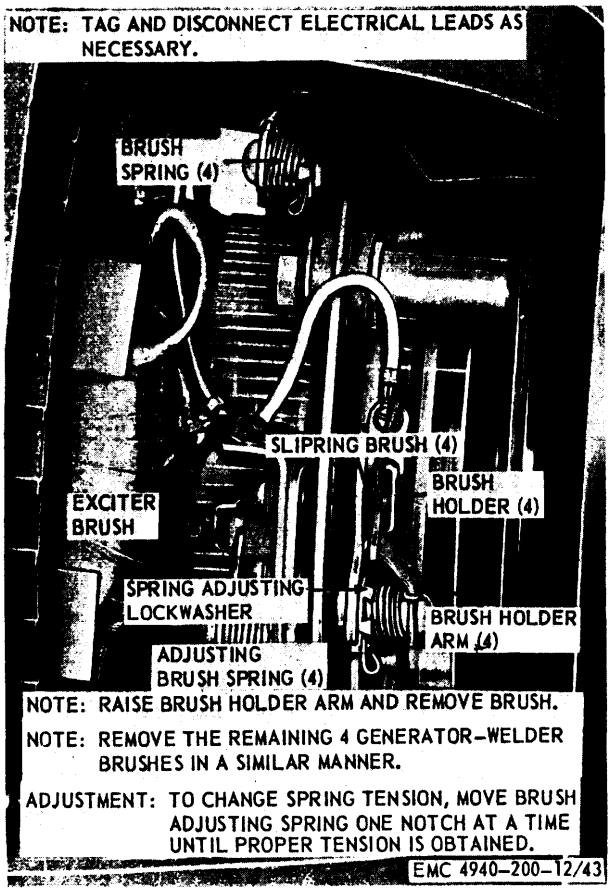


Figure 66. Generator-welder brushes, removal, installation, and adjustment.

c. Brush Seating. Refer to TM 5-764.

Note. To avoid wastage of brush material, sand only until radius of commutator is obtained. Blow out carbon dust with low-pressure, dry, compressed air.

d. Installation.

(1) Refer to figure 55 and install the generator-welder brushes to the generator-welder.

Note. Use a spring scale to check brush spring tension. Correct tension is 32 ounces.

(2) Install end wrappers (par. 77).

80. Loss of Residual Magnetism

a. General. Loss of residual magnetism in the exciter field frame can be caused by long periods of idleness, a short circuit, or a sudden surge of current from an outside power source. Loss of magnetism will cause the generator-welder to fail to build up voltage in any of its components. To magnetize the exciter field frame follow the instructions in b below.

b. Magnetizing Exciter Field.

(1) Remove the end wrappers (par. 77).
(2) Raise the exciter brushes from the commutator (par. 79).
(3) Using an outside source of direct current (a storage battery is satisfactory), apply the current to two adjacent exciter brushes for a few seconds and remove the current source.
(4) Lower the exciter brushes to the commutator (par. 79).
(5) Install the end wrapper (par. 77).
(6) Start the generator-welder (pars. 16 and 17).
(7) Place the welding polarity control switch in the STRAIGHT position (par. 16).
(8) If the exciter fields are properly magnetized, the direct current voltmeter will indicate voltage on the right side of the scale,
(9) If the direct current voltmcter indicates voltagc on the left sick of the scale, stop the generator-welder (pars. 18 and 19) and repeat steps (1) and (2) above.
(lo) Repeat steps (4) through (8) above and stop the generator-welder (pars. 18 and 19).

Section XI. AIR COMPRESSOR

81. General

The air compressor (Model SECM shop set) is a portable, diaphragm-type (Compressor with a direct drive to a 110-volt, split-phase motor. Mounted above the motor is the compressor head equipped with a carrying handle. This model is designed to start under normal or light loads.

82. Handle

a. Removal. Refer to figure 56 and remove the compressor handle from the compressor head.

b. *Cleaning and Inspection.*

(1) Clean the handle with an approved cleaning solvent and dry thoroughly.
(2) Inspect the handle for dents, cracks, breaks, or other damage. Replace a damaged handle.
(3) Inspect the mounting hardware for worn or damaged threads. Replace as required.

c. *Installation.* Refer to figure 56 and install the handle to the compressor head.

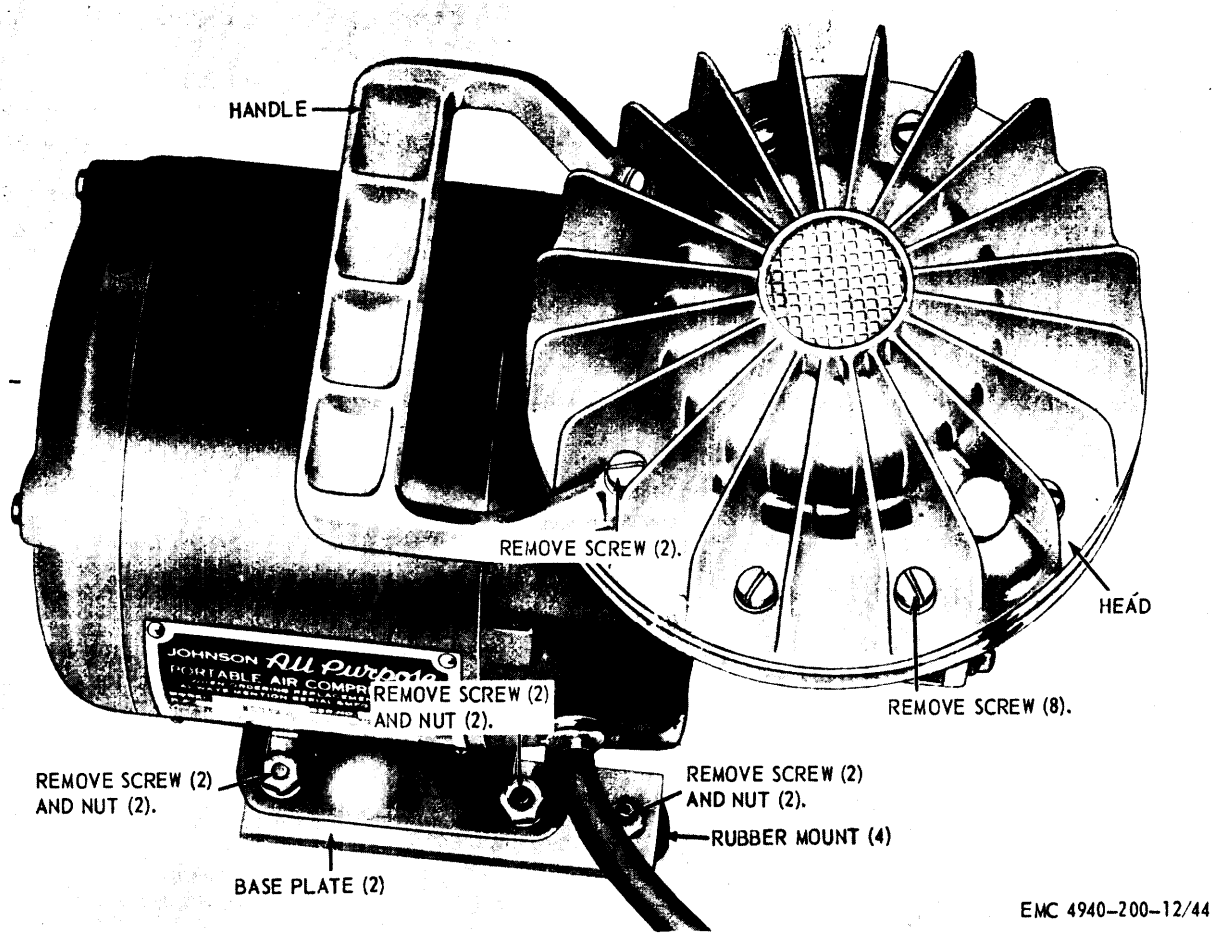


Figure 56. Head, handle, base plates, and rubber mounts, removal and installation.

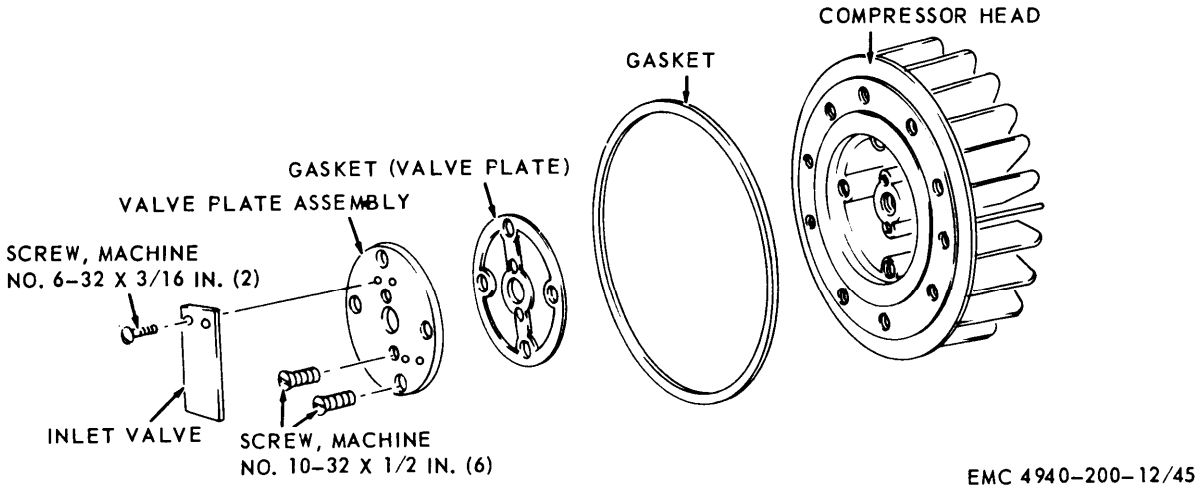


Figure 57. Compressor head, disassembly and reassembly.

83. Base Plates and Rubber Mounts

a. Removal. Refer to figure 56 and remove the base plates and rubber mounts from the compressor motor.

b. Cleaning and Inspection.

(1) Clean the metal parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the base plates for cracks, breaks, or other damage. Replace a damaged base plate.

(3) Inspect the rubber mounts for cracks, breaks, and wear. Replace damaged or worn rubber mounts.

(4) Inspect the mounting hardware for worn or damaged threads. Replace as required.

c. *Installation.* Refer to figure 56 and install the base plates and rubber mounts to the compressor motor.

84. Compressor Head

a, Removal. Refer to figure 56 and remove the compressor handle and the compressor head from the compressor housing.

b. Disassembly.

(1) Remove the filter pad (par. 37).

(2) Refer to figure **57** and disassemble the head.

c. Cleaning, Inspection and Repair.

(1) Clean the metal parts with an approved - cleaning solvent and dry thoroughly.

(2) Inspect the compressor head for dents, cracks, breaks, or other damage. Replace a damaged compressor head.

(3) Inspect the inlet valve for improper operation. Replace a defective inlet valve.

(4) Inspect all hardware for worn or damaged threads. Replace as necessary.

d. Reassembly.

(1) Refer to figure 57 and reassemble compressor head in reverse order.

(2) Install the filter pad (par. 37).

e. *Installation.* Refer to figure **56** and install the compressor head and compressor handle to the compressor housing.

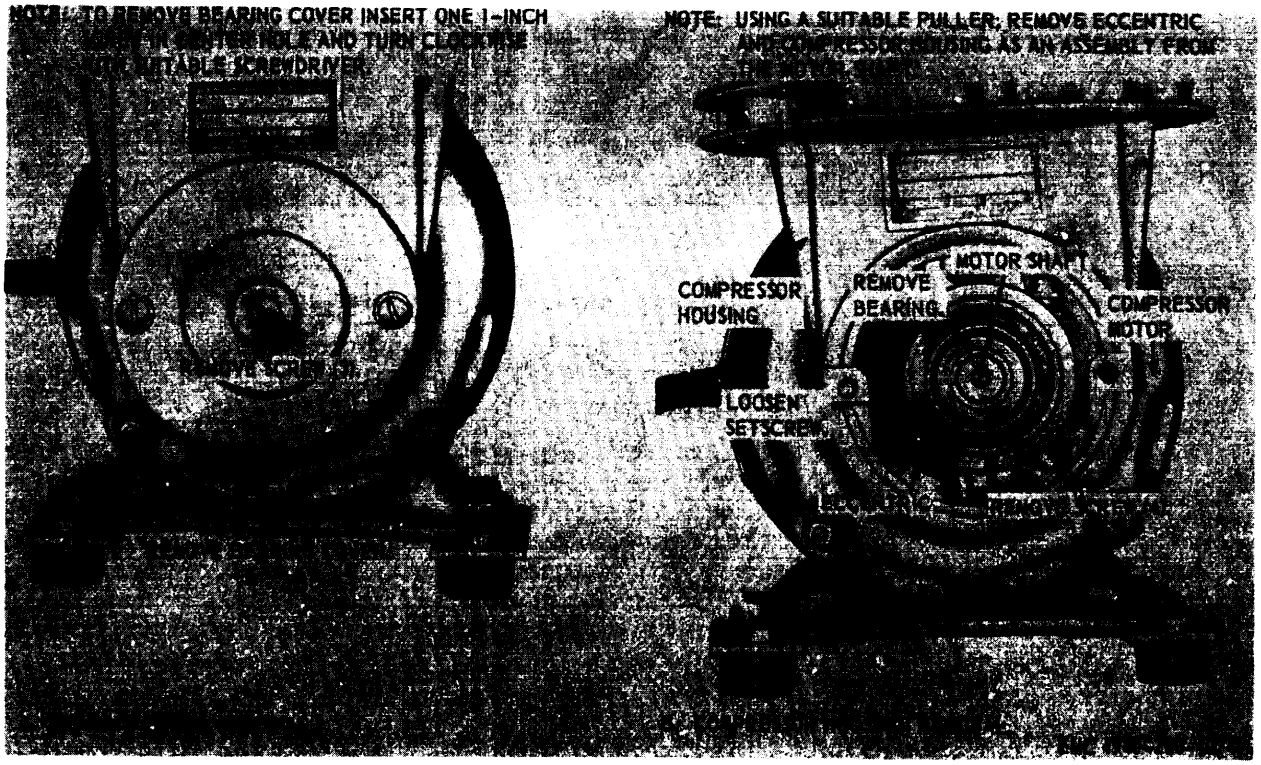


Figure 58. Compressor housing and motor, removal and installation.

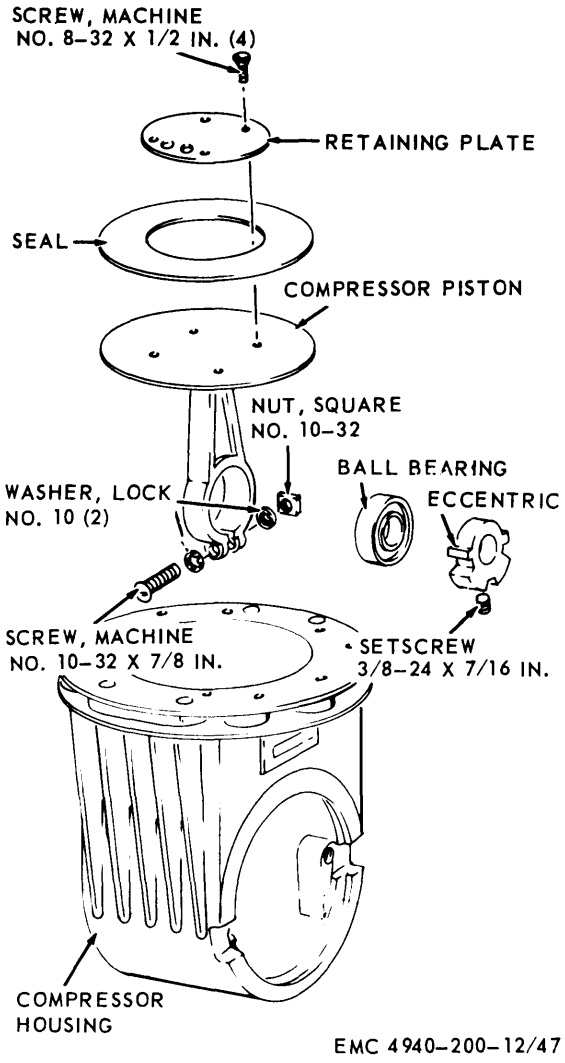


Figure 59. Compressor homing, disassembly and reassembly.

85. Compressor Housing and Compressor Motor

a. ***Removal.***

(1) Remove base plates and rubber mounts (par. 83).

(2) Remove compressor head (par. 84).

(3) Refer to figure 58 and remove the bearing cover, bearing, and compressor housing from the compressor mot or.

b. Disassembly. Refer to figure 59 and disassemble the compressor housing.

c. *Cleaning, Inspection, and Repair.*

(1) Clean all metal parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect th housing for cracks, breaks, or other damage. Replace a damaged housing,

(3) Inspect the bearings, piston, and eccentric for scoring, nicks, and wear. Replace damaged bearings, piston, or eccentric.

(4) Inspect all hardware for worn or damaged threads. Replace as necessary.

(5) Connect motor to outside power source and inspect for proper operation. Replace a defective motor.

d. *Reassembly.* Refer to figure 59 and reassemble the compressor housing in reverse order.

c. *Installation.*

(1) Refer to figure 58 and install the bearing, bearing cover, and compressor housing to the compressor motor.

(2) Install the compressor head (par. 84).

(3) Install the rubber mounts and base plates (par. *83).*

Section X11. SHOP SET BODY

86. General

The shop set body is a riveted structure containing eight watertight compartments and is mounted on a modified 4 by 4 truck chassis. The shop set body includes tool clips, safety and mounting straps, doors, lock and latch assemblies, brackets and braces, tailgate and fasteners, oxygen cylinder rack, and electrical receptacles.

87. Fire Extinguisher Bracket

a. Removal.

(1) Remove the fire extinguisher (par. 27).

(2) Refer to figure 60 and remove the fire extinguisher bracket from the Model SECM shop set body.

(3) Refer to figure 60 and remove the fire extinguisher bracket in a like manner from the floorboard of the cab on Model CMU-5 shop set.

b. Cleaning *and Inspection.*

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the fire extinguisher bracket for dents, cracks, or breaks. Straighten all dents and replace a defective bracket.

(3) Inspect the hardware for worn or damaged threads. Replace as necessary.

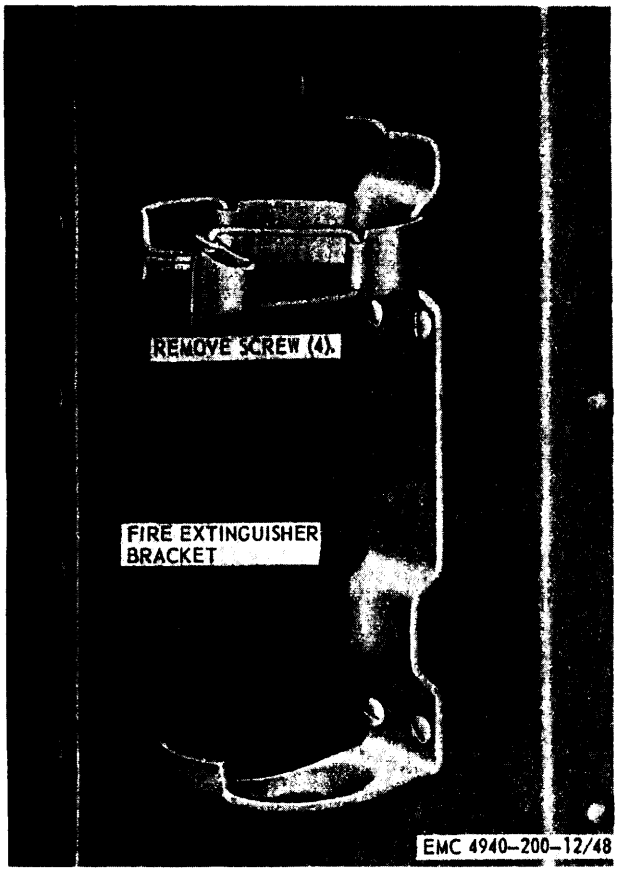


Figure **60.** *Fire extinguisher back-et, Model SECM, removal and installation.*

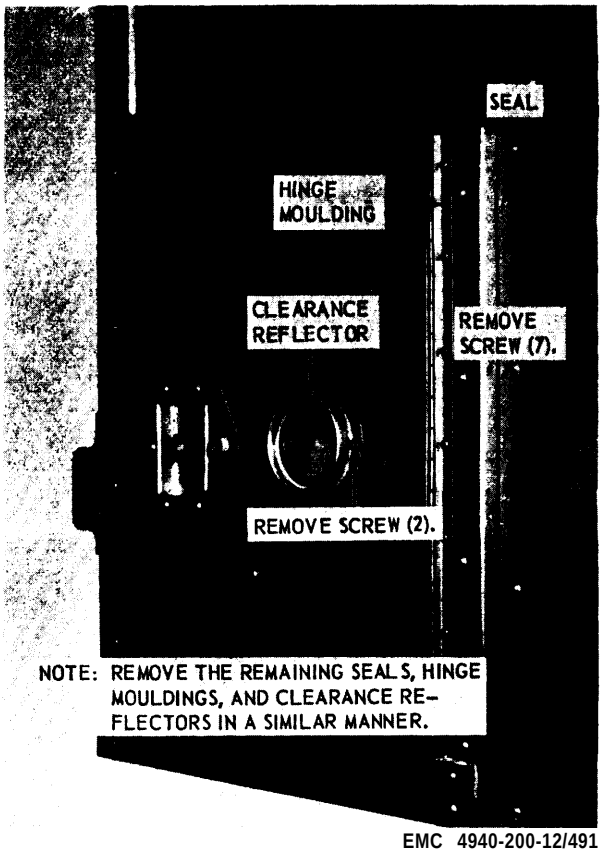


Figure **61.** *Hinge moulding, seal, and clearance reflector, removal and installation.*

c. Installation.

(1) Refer to figure 60 and install the fire extinguisher bracket to the Model SECM shop set body.

(2) Refer to figure 60 and in like manner install the fire extinguisher bracket to the floorboard of the cab on Model CMU-5 shop set.

(3) Install the fire extinguisher.

88. Hinge Moulding and Seal

a. Removal. Refer to figure 61 and remove the hinge moulding and seal from the door of the shop set body.

b. Cleaning and Inspection.

(1) Clean all metal parts in an approved cleaning solvent and dry thoroughly.

(2) Inspect hinge moulding for dents, cracks, or other damage. Replace damaged moulding,

(3) Inspect mounting hardware for worn or damagcd threads. Replace as necessary.

c. Installation, Refer to figure 61 and install the hinge moulding and seal to the door of the body shop.

89. Clearance Reflectors

a. Removal. Refer to figure 61 and remove the clearance reflector from the shop set body.

b. *Cleaning and Inspection.*

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the clearance reflectors for dents, cracks, and cracked or broken glass. Replace cracked or broken glass and replace a damaged reflector.

(3) Inspect mounting hardware for worn or damaged threads. Replace as necessary.

c. *Installation.* Refer to figure 61 and install clearance reflector on the door of the shop set body.

90. Fuel Access Door

a. Removal. Refer to figure 62 and remove the fuel access door from the shop set body.

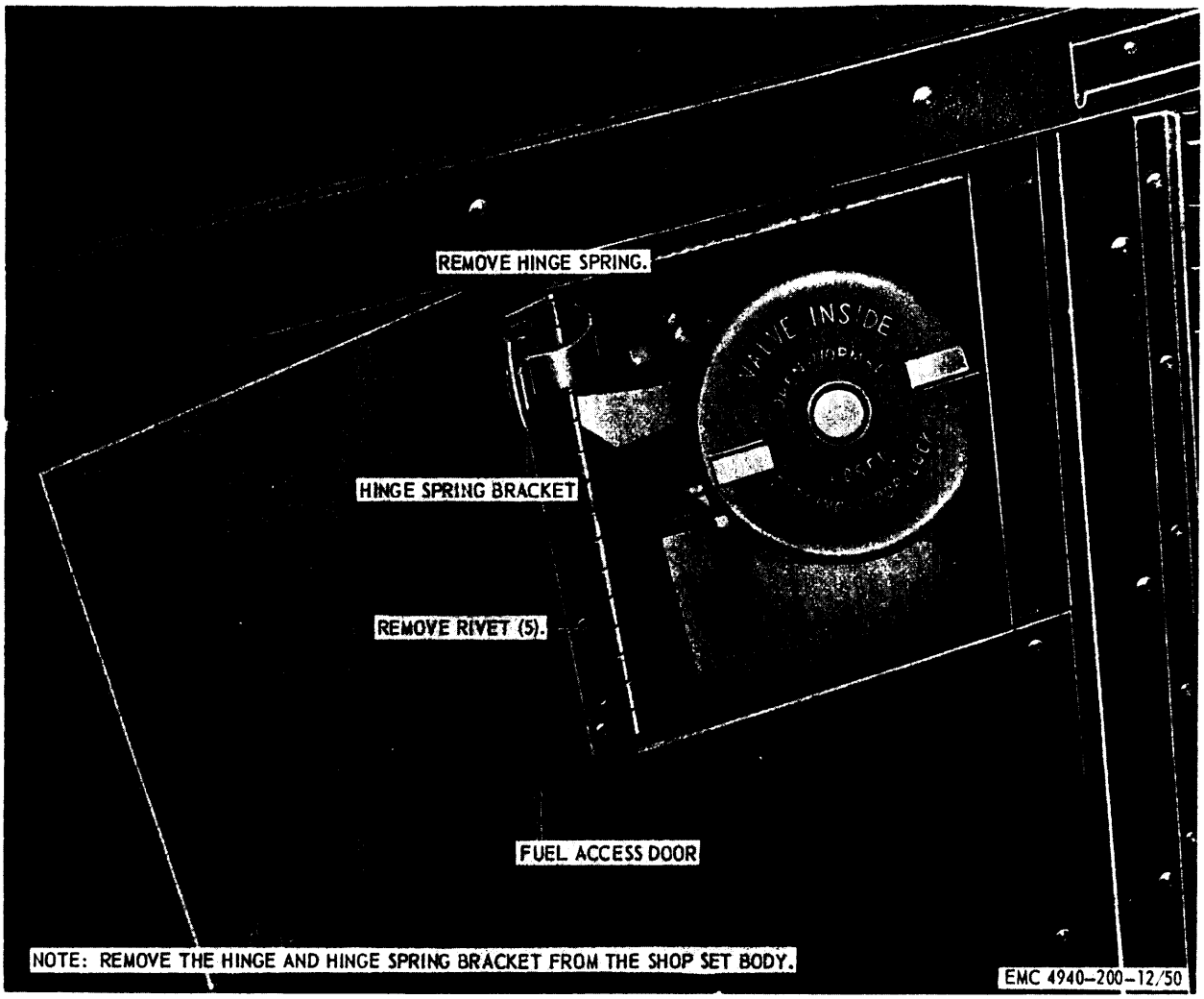


Figure 62. Fuel access door, removal and installation.

b. CIeaning and Inspection.

(1) Clean all metal parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect, the fuel access door for dents, cracks, breaks, weaks springs, or other damage. Straighten all dcnts and replace a damaged door. Rcplace a weak spring.

c. Installation. Refer to figure *62* and install the fuel access door to the shop set body.

91. Compartment Doors, Rear Doors, and Hinged Roof Panel

u. *Removal.* Refer to figure *63* and rcmove the compartment doors, rear doors, and hinged roof panel from the shop set body.

b. *Cleaning and Inspection.*

(1) Clean all parts I with all approved cleaning solvent and dry thoroughly.

(2) Inspect the compartment doors for dents, cracks, or other damage. Replace as required.

(3) Inspect the rear doors and hinged panel for dents, cracks, or other damage. Straighten all dents. Replace damaged doors and panels.

(4) Inspect mounting hardware for worn and damaged threads. Replace as required.

c. *Installation.* Refer to figure 63 and install the compartment doors, rear doors, and hinged roof" panel to the shop set body.

92. Compartment Door Brace

a. Removal. Refer to figure 63 and remove the compartment door brace from the door of the shop set body.

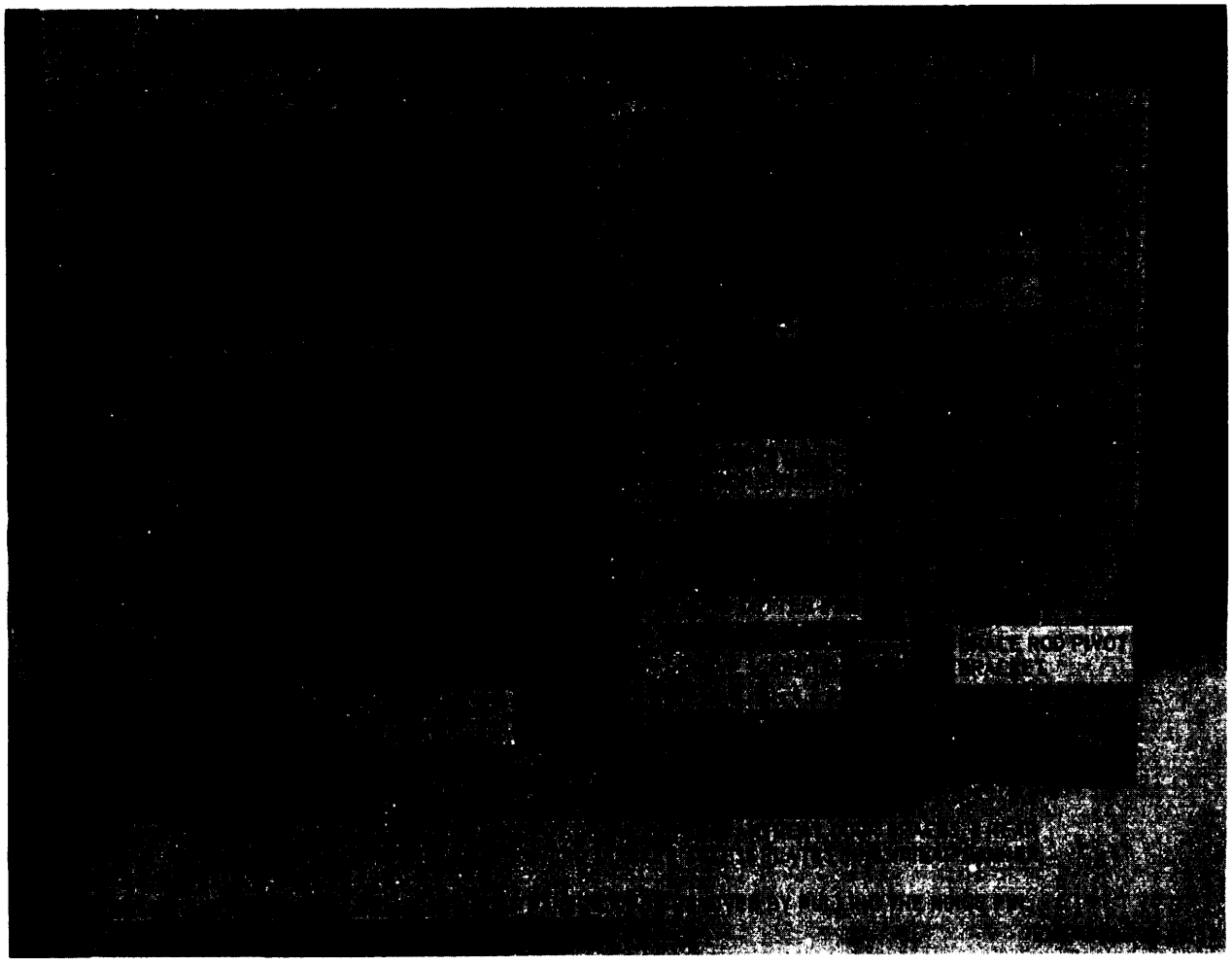


Figure 63. Compartment doors, compartment door brace, rear doors, hinged roof panel, and spring shackle access plate, removal and installation.

b, Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the compartment door brace for cracks, breaks, or other damage. Replace a damaged brace.

(3) Inspect all hardware for worn or damaged t breads. Replace as required.

c. ***Installation.*** Refer to figure 63 and install compartment door brace to the door of the shop set body.

93. Spring Shackle Access Plate

a. Removal. Refer to figure 63 and remove the spring shackle access plate from the shop set body.

b. ***Cleaning and Inspection.***

(1) Clean all metal parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the spring shackle plate for dents, cracks, or other damage. Straighten all dents. Replace a damaged plate.

(3) Inspect the mounting hardware for worn or damaged threads. Replace as required,

c. ***Installation.*** Refer to figure 63 and install the spring shackle access plate to the shop set body.

94. Door Lock and Latch Assemblies

a. Removal. Refer to figure G4 and remove the door lock and latch assemblies from the door of the shop set body.

b. ***Cleaning and Inspection.***

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the rear door mounting angle for cracks, breaks, and other damage. Replace a damaged or defective mounting angle.

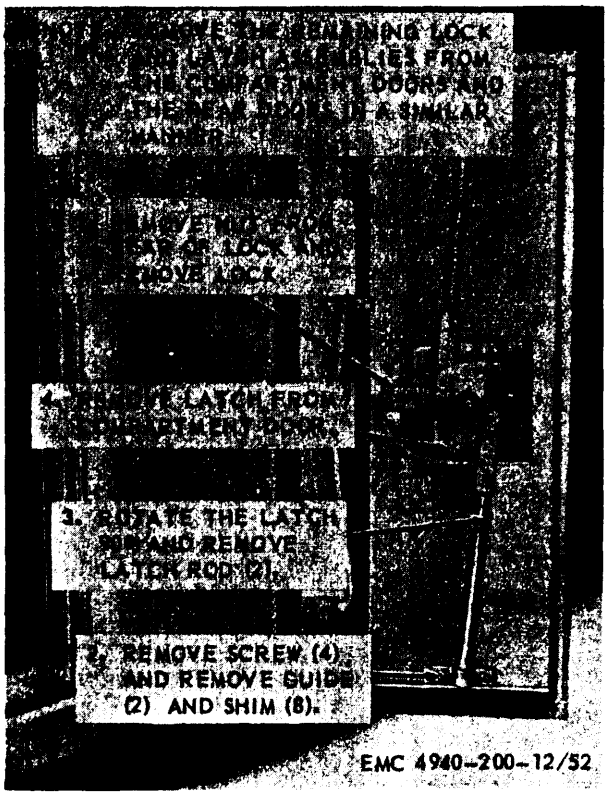


Figure 64. Door lock and latch assemblies, removal and installation.

c. Intstallation. Refer to figure 64 and install the door lock and latch assembly to the door of the shop set body .

95. Rear Door Mounting Angle

a. Removal. Refer to figure 65 and remove the mounting angle from the rear door of the shop set body .

b. ***Cleaning and Inspection.***

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the rear door mounting angle for cracks, breaks, and other damage. Replace a damaged or defective mounting angle.

c. Installation. Refer to figure 65 and install the mounting angle on the rear door of the truck body.

96. Rear Door Retaining Bracket

a. Removal, Refer to figure 65 and remove the retaining bracket from the rear door of the shop set.

b. ***Cleaning and Inspection.***

(1) Clean all metal parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the rear door retaining brackets for dents, cracks, or other damage. Replace a damaged bracket.

c. ***Installation.*** Refer to figure 65 and install the retaining bracket to the rear door of the shop set body.

97. Worklight Brackets

a. Removal. Refer to figure 65 and remove the worklight brackets from the rear door of Model SECM shop set body.

b. ***Cleaning and Inspection.***

(1) Clean the parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the worklight brackets for dents, cracks, breaks, or other damage. Straighten all dents and replace a damaged bracket.

c. ***Installation.*** Refer to figure 65 and install the worklight brackets to the rear door of the Model SECM shop set body.

98. Hinged Roof Panel Latch

a. Removal. Refer to figure 66 and remove the hinged roof panel latch from the shop set body.

b. ***Cleaning and Inspection.***

(1) Clean all parts with an approval cleaning solvent and dry thoroughly.

(2) Inspect the hinged roof panel latch for dents, cracks, or breaks. Straighten all dents and replace a damaged latch.

c. ***Installation.*** Refer to figure 66 and install the hinged roof panel latch to the shop set body.

99. Door Striker Plates

a. Removal. Refer to figure 66 and remove the door striker plates from the hinged roof panel.

b. Cleaning and Inspection.

(1) Clean the parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the door striker plates for dents, cracks, or other damage. Replace a damaged striker plate.

c. ***Installation.*** Refer to figure 66 and install the door striker plates to the hinged roof panel.

100. Tailgate and Tailgate Latch

a. Removal. Refer to figure 67 and remove the tailgate and the tailgate latch from. the shop set body.

b. ***Disassembly.*** Refer to figure 68 and disassemble the tailgate and tailgate latch.

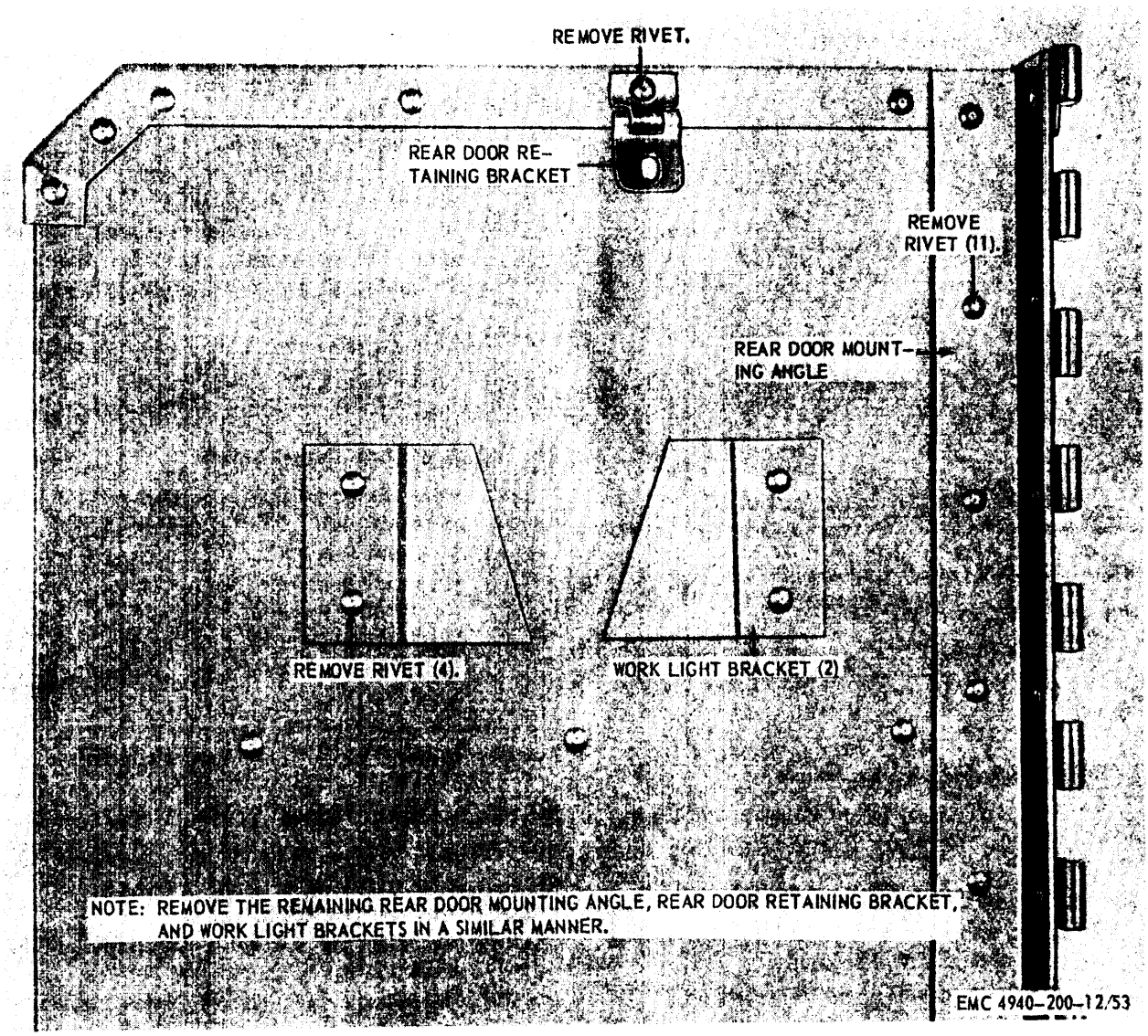


Figure 65. Rear door mounting angle, war door retaining bracket, and worklight brackets, removal and installation.

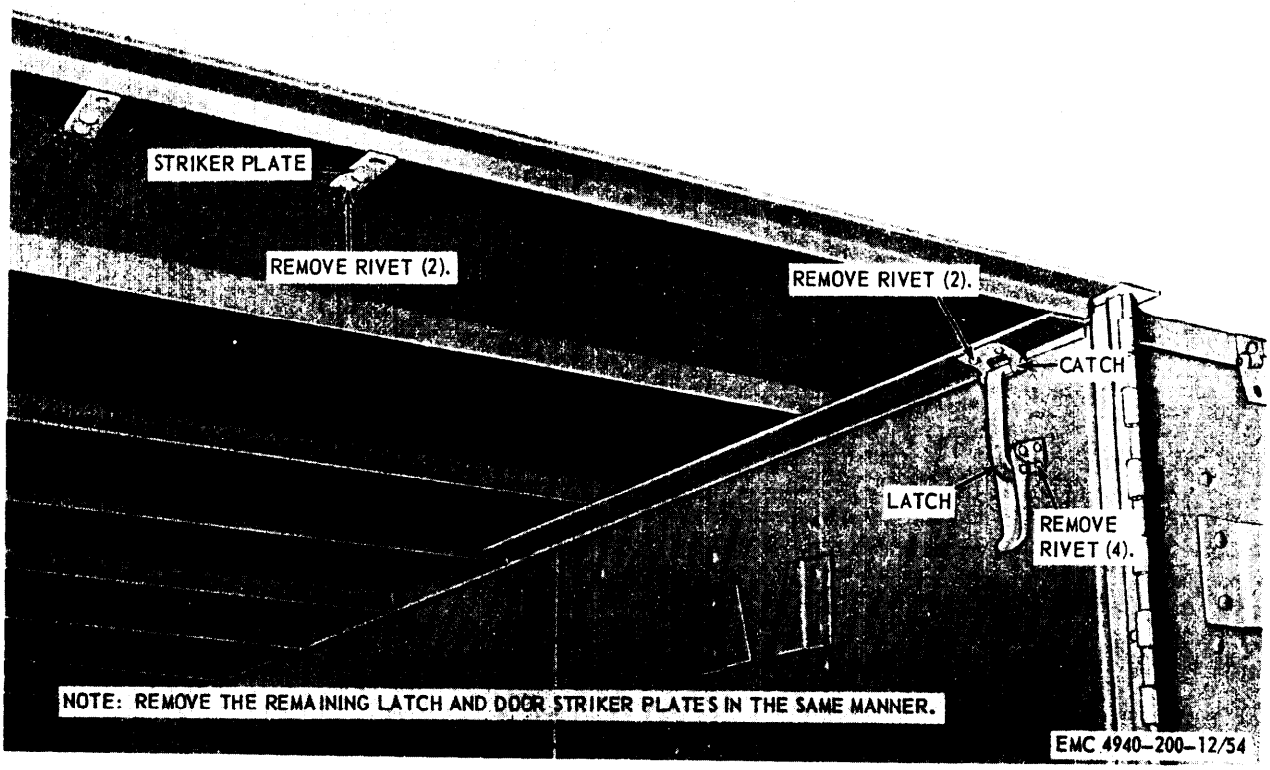
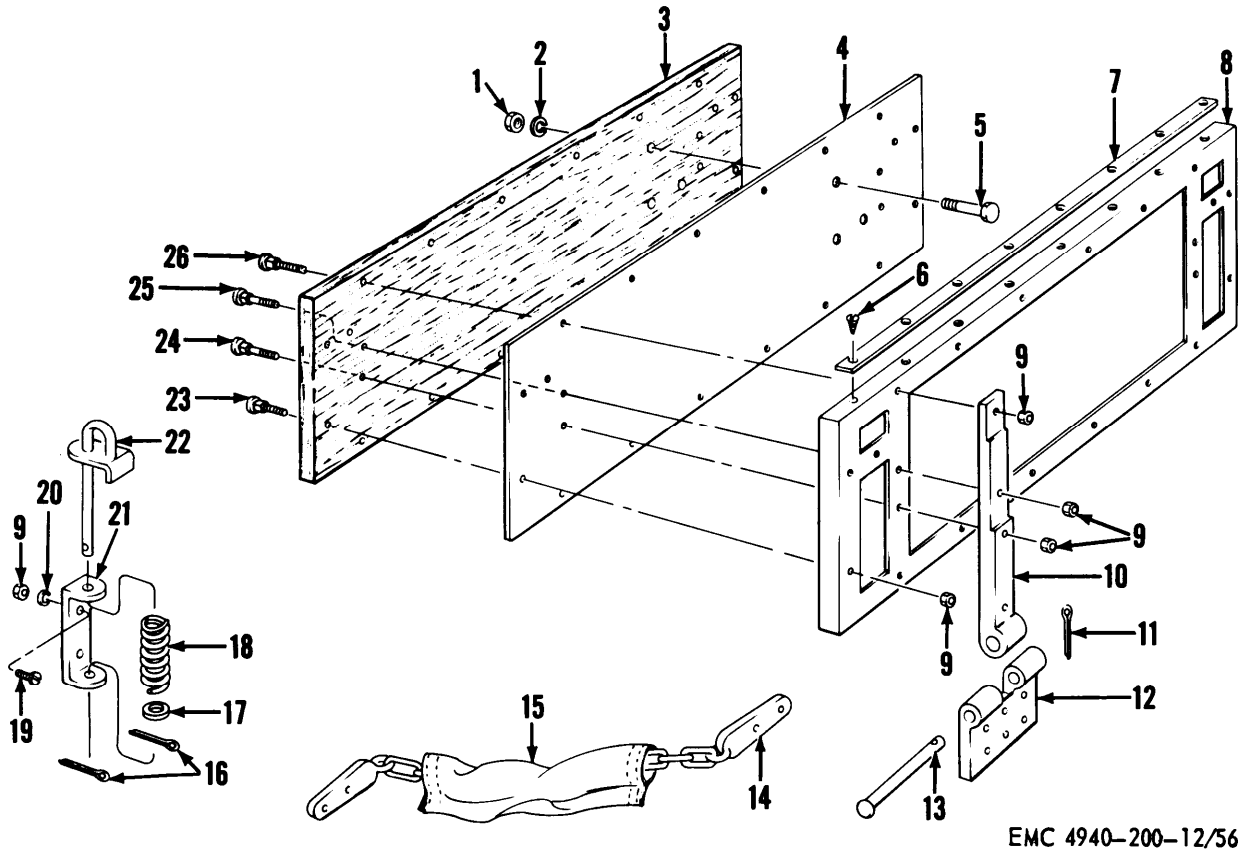


Figure 66. *Hinged roof panel latch and door striker plates, removal and installation.*

Figure 67. Tailgate and tailgate latch, removal and installation.



1 Nut, plain, hex, ½-20 (2 rqr)
2 Washer, lock, ½ in. (3 rqr)
3 Hardwood board
4 Tailgate skin
5 Screw, cap, hex, ½-20 x 2½ in. (3 rqr)
6 Screw, tapping, thd-forming, No. 8-18 x ½ in. (8 rqr)
7 Top strip
8 Tailgate frame
9 Nut, plain, hex, ¼-20 (14 rqr)
10 Tailgate strap (2 rqr)
11 Pin, cotter, ⅛ x 2 in. (2 rqr)
12 Tailgate hinge (2 rqr)
13 Hinge pin (2 rqr)
14 Bracket and chain assembly (2 rqr)
15 Chain cover (2 rqr)
16 Pin, cotter, 3/32 x ¾ in. (4 rqr)
17 Washer, flat, 7/16 in. (2 rqr)
18 Latch spring (2 rqr)
19 Screw, machine, ¼-20 x ¾ in. (4 rqr)
20 Washer, lock, ¼ in. (4 rqr)
21 Latch bracket (2 rqr)
22 Tailgate latch (2 rqr)
23 Bolt, sq-neck, ¼-20 x 1¾ in. (2 rqr)
24 Bolt, sq-neck, ¼-20 x 2¼ in. (4 rqr)
25 Bolt, sq-neck, ¼-20 x 2⅛ in. (2 rqr)
26 Bolt, sq-neck, ¼-20 x 2 in. (2 rqr)

Figure 68. ***Tailgate and tailgate latch, disassembly and reassembly.***

c. Cleaning, Inspection, and Repair.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the tailgate and tailgate latch for cracks, dents, breaks, or other damaged. Straighten all dents and replace a damaged tailgate and tailgate latch.

(3) Inspect fill mounting hardware for worn or damaged threads. Replace as required.

d. *Reassembly.* Refer to figure 68 and reassemble the tailgate and tailgate latch in reverse order.

c. *Installation.* Refer to figure 67 and install the tailgate and tailgate latch to the shop set body.

101. Lifting Access Door

a. Removal. Refer to figure 69 and remove the lifting access door from the floor of the shop set body.

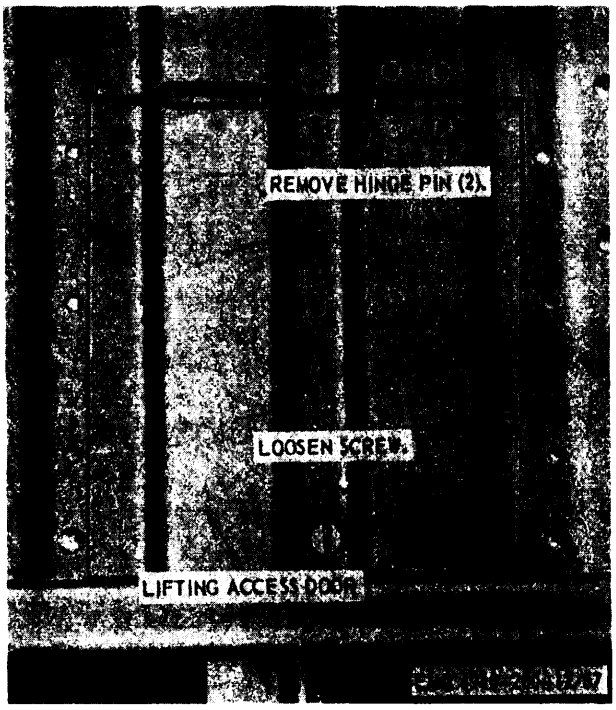


Figure 69. Lifting access door, removal and installation.

b. Cleaning and Inspection.

(1) Clean the parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the lifting access door for dents and cracks. Straighten all dents. Replace a damaged door.

c. *Installation.* Refer to figure 69 and install the lifting access door to the floor of the shop set body.

102. Fuel Tank Inspection Plate

a. Removal. Refer to figure 70 and remove the fuel tank inspection plate from the floor of the shop set body.

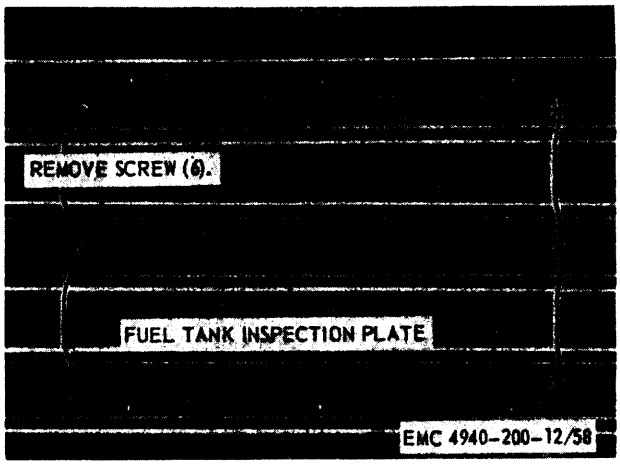


Figure 70. Fuel tank inspection plate, removal and installation.

b. Cleaninq and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the fuel tank inspection plate for dents or cracks. Replace a damaged inspection plate.

c. *Installation.* Refer to figure 70 and install the fuel tank inspection plate.

103. Oxygen Cylinder Retaining Plate and Bracket

a. Removal. Refer to figure 71 and remove the oxygen cylinder retaining plate and bracket from the shop set body.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the retaining plate and bracket for dents and cracks. Replace damaged parts.

c. *Installation.* Refer to figure **71** and install the oxygen cylinder retaining plate and bracket to the shop set body.

104. Hanger Bracket

a. Removal. Refer to figure **71** and remove the hanger bracket and hanger bracket clip from the shop set body.

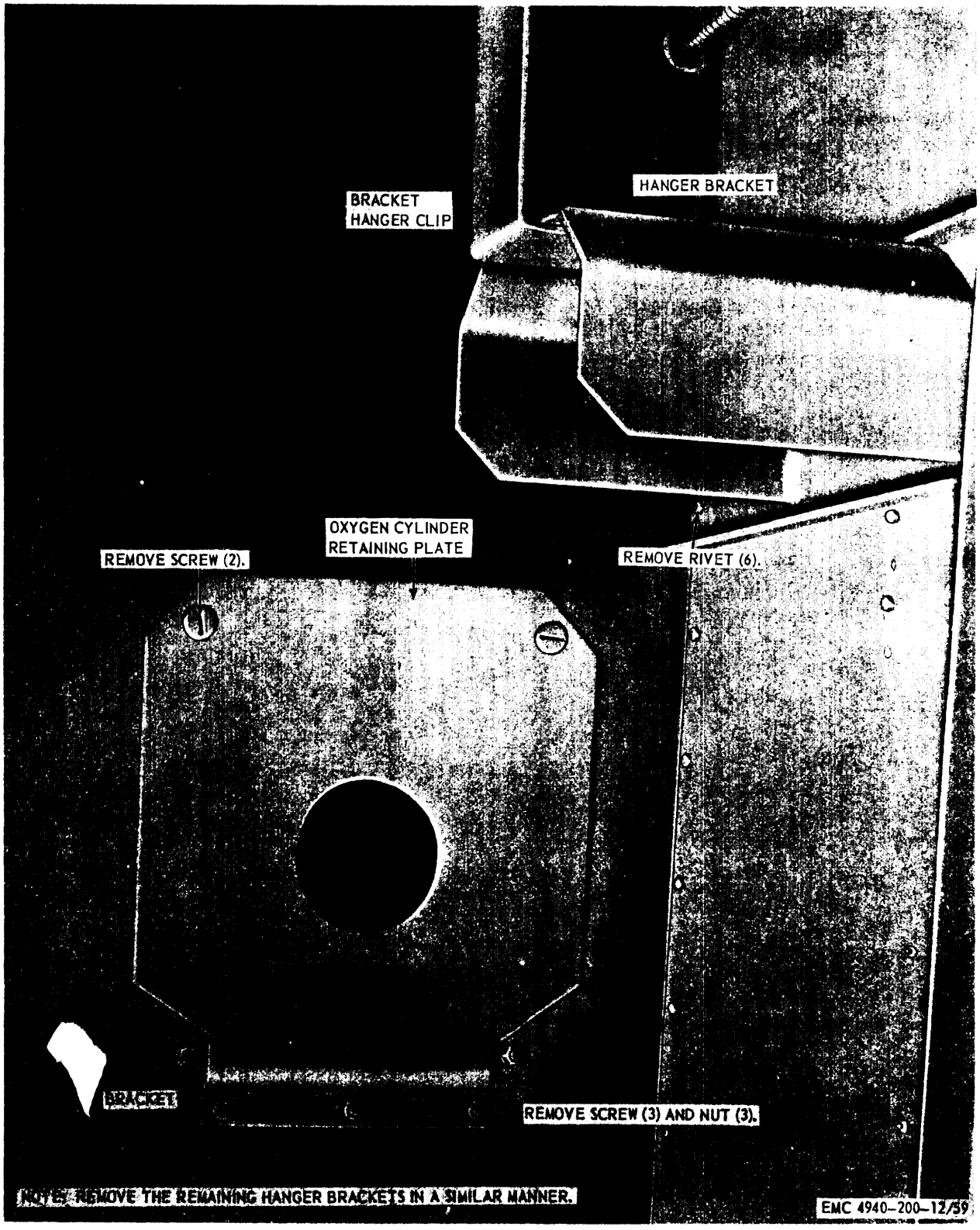


Figure 71. Oxygen cylinder retaining plate and bracket, hanger clip, and hanger bracket, removal and installation.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the hanger bracket and clip for dents and cracks. Replace damaged parts,

c. Installation. Refer to figure *71* **and** install the hanger bracket and hanger bracket clip to the shop set body.

105. Oxygen Cylinder Rack

a. Removal.

(1) Remove the oxygen cylinder retaining plate and bracket (par. 103).

(2) Refer to figure *72 and* remove the Oxgen cylinder rack from the shop set body.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the oxygen cylinder rack for dents or cracks, Replace damaged rack,

c. Installation,

(1) Refer to figure 72 and install the oxygen cylinder rack to the shop set body.

(2) Install the oxygen cylinder retaining plate and bracket (par. 103).

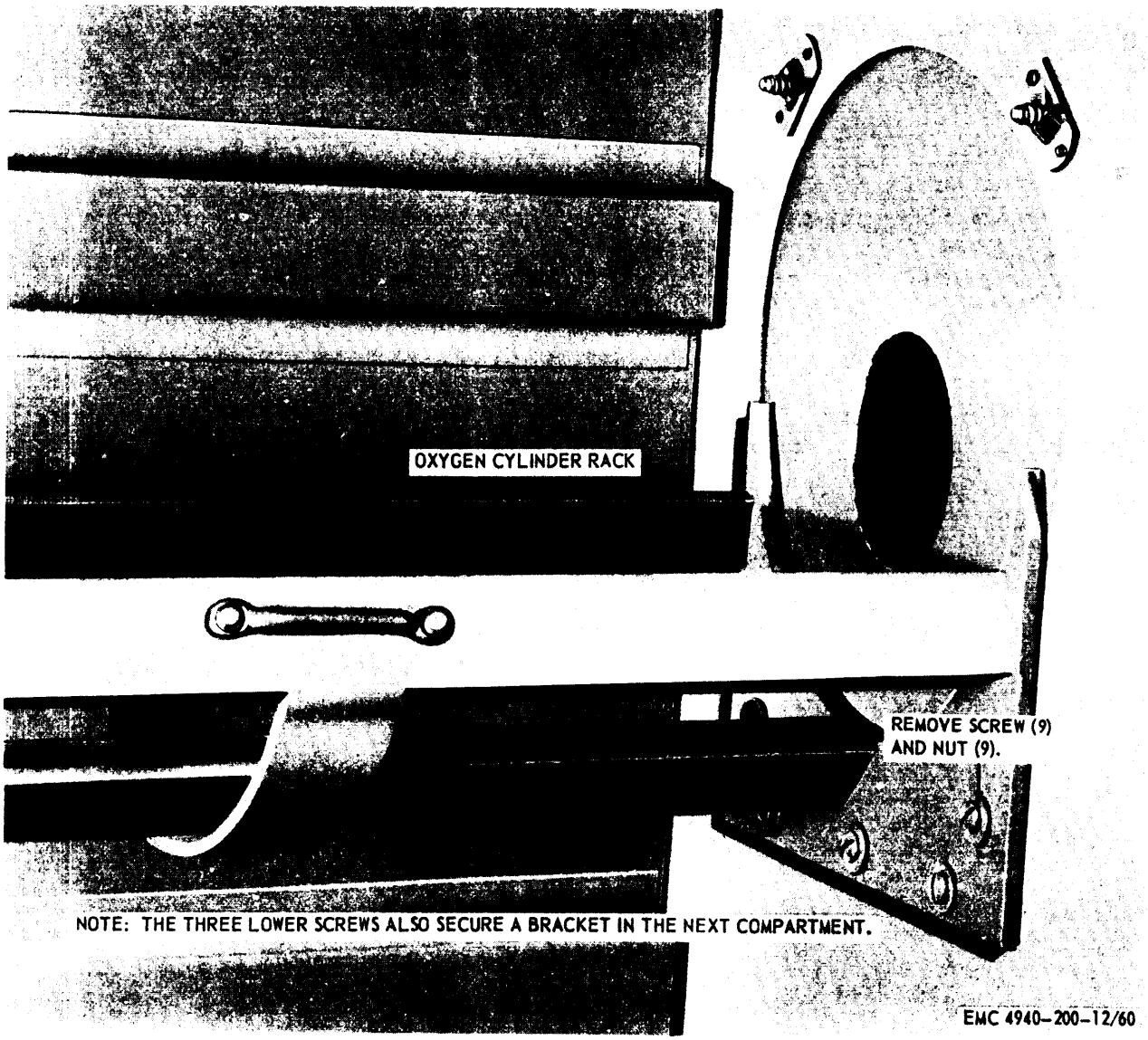


Figure 72, Oxygen cylinder rack, removal and installation.

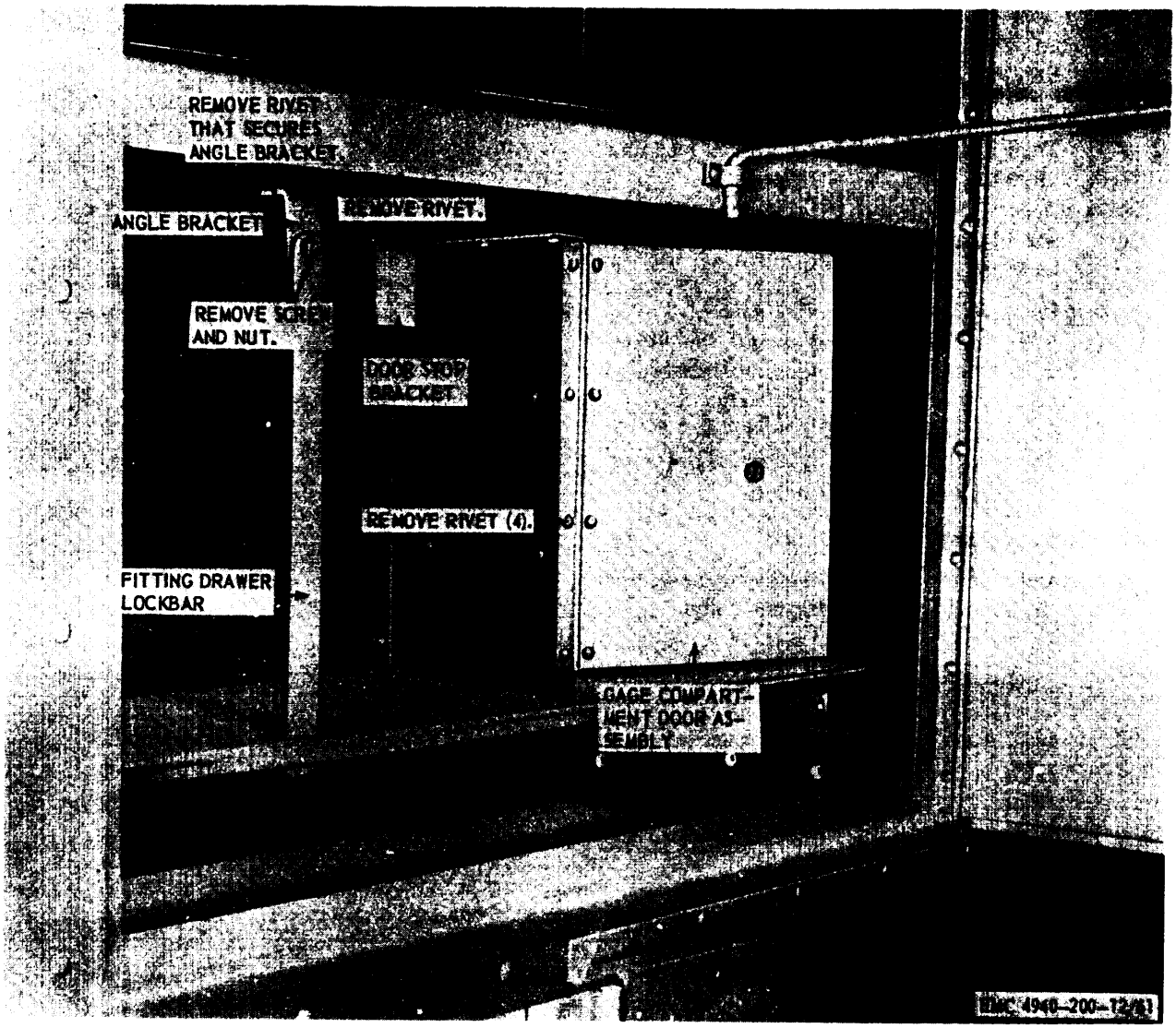


Figure 73. Gage compartment door, door stop bracket, and fitting drawer lockbar, Model SECM, removal and installation.

106. Gage Compartment Door

a. Removal.

(1) Refer to figure 73 and remove the gage compartment door from Model SECM shop set body.

(2) Refer to figure 73 and remove the gage compartment t from Model CMU-5 shop set body in a similar manner.

b. *Cleaning and Inspection.*

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the door, hinges and moulding for cracks, or breaks, Inspect the door latch for wear or damage. Repair or replace the parts, if necessary.

c. *Installation.*

(1) Refer to figure 73 and install the gage compartment door to the Model SECM shop set body.

(2) Refer to figure 73 and install the gage compartment to the Model CMU-5 shop set body in a similar manner.

107. Fitting Drawer Lockbar and Door Stop Bracket

a. Removal.

(1) Refer to figure 73 and remove the fitting drawer lockbar and door stop bracket from the Model SECM shop set body,

(2) Refer to figure 73 and remove the fitting drawer lockbar from the Model CMU-5 shop set body in a similar manner.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the fitting drawer lockbar and door stop bracket for dents or cracks. Replace damaged parts.

c, *Installation.*

(1) Refer to figure 73 and install the fitting drawer lockbar and door stop bracket to the Model SECM shop set body.

(2) Refer to figure 73 and install the fitting drawer lockbar to the Model CMU-5 shop set body in a similar manner.

108. Control Panel Screen

a. Removal. Refer to figure 74 and remove the control panel screen from the shop set body,

Figure 74. Control panel screen, removal and installation.

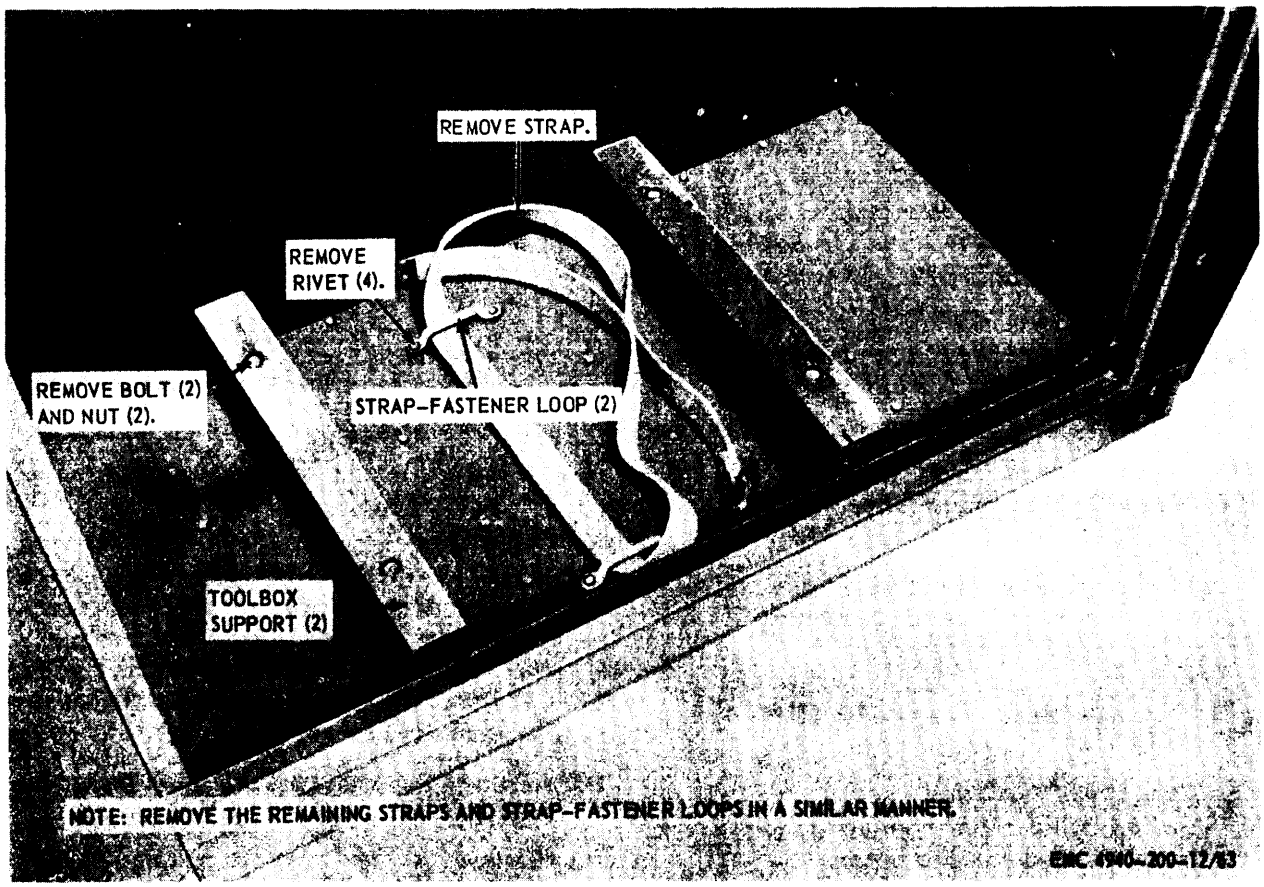


Figure 75. Toolbox supports, strap, and strap-fastener loops, removal and installation.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the control panel screen for holes, dents, and cracks. Replace a damaged screen.

c. *Installation.* Refer to figure 74 and install the control panel screen to the shop set body.

109. Toolbox Supports

a. Removal. Refer to figure 75 and remove the toolbox supports from the shop set body.

b. *Cleaning and Inspection.*

(1) Clean the supports with a cloth dampened with an approved cleanling solvent and dry thoroughly.

(2) Inspect the toolbox supports for splits and cracks. Replace damaged supports.

c. *Installation.* Refer to figure 75 and install the toolbox supports to the shop set body.

110. Straps and Strap-Fastener Loops

a. Removal. Refer to figure 75 and remove the straps and strap-fastener loops from the shop set body.

b. Cleaning and Inspection.

(1) Clean all parts with a cloth dampened with an approved cleaning solvent dry dry thoroughly.

(2) Inspect the straps for wear and the strap-fastener loops for cracks. Replace worn or damaged parts.

c. *Installation.* Refer to figure 75 and install the straps and strap-fastener loops to the shop set body.

111. Tool Brackets

c. *Removal.* Refer to figure 76 and remove the tool brackets from the shop set body.

h. *Cleaning and Inspection.*

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect tool brackets for dents and cracks. Replace damaged brackets.

c. *Installation.* Refer to figure 76 and install the tool brackets to the shop set body.

112. Tool Clips

a. Removal. Refer to figure 76 and remove the tool clip from the shop set body.

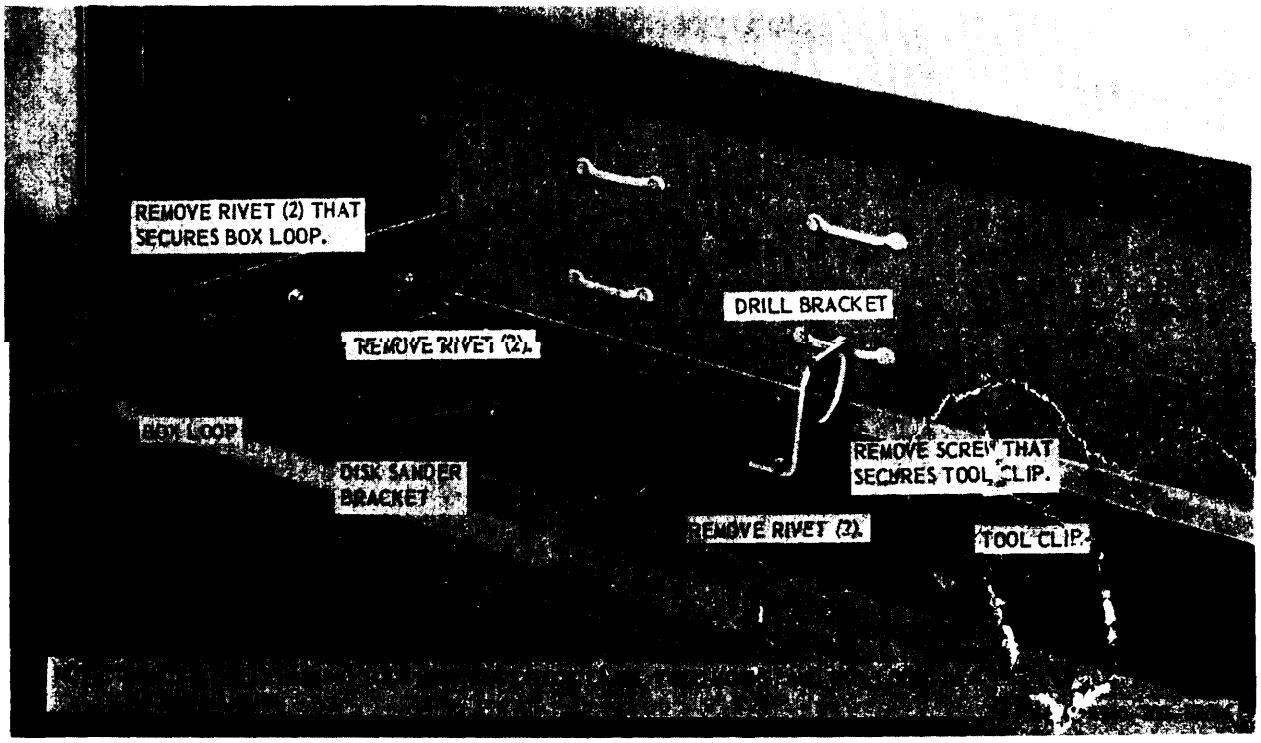


Figure 76. Tool brackets, tool clips, tool hooks, and box loop, removal and installation.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect tool clips for cracks and dents. Replace damaged clips.

c. ***Installation.*** Refer to figure 76 and install the tool clip to the shop set body.

113. Box LOOPS

a. Removal. Refer to figure 76 and remove the box loop from the shop set body.

b. ***Cleaning and Inspection.***

(1) Clean all parts with an approved cleaning solvent. and dry thoroughly.

(2) Inspect the box loop for cracks and dents. Replace damaged box loops.

c. ***Installation.*** Refer to figure 76 and install the box loop to the shop set body.

114. Front Glass and Grommet

a. Removal. Refer to figure 77 and remove the front glass and grommet from the shop set body.

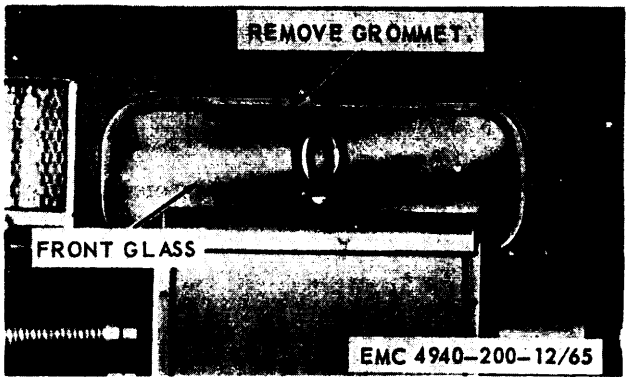


Figure 77. Front glass and grommet, removal and installation.

b. Cleaning and Inspection.

(1) Clean the parts with a cloth dampened with an approved cleaning solvent and dry thoroughly.

(2) Inspect the front glass for cracks. Replace the grommet and glass when necessary.

c. ***Installation.*** Refer to figure 77 and install the front glass and grommet to the shop set body.

Section XIII. FUEL TANK FILLER TUBE, FILLER TUBE SUPPORT, HORN BRACKET, TAILLIGHT BRACKET, TURN SIGNAL LAMP ASSEMBLIES, AND DIRECTIONAL SIGNAL CONTROL AND FLASHER

115. General

The fuel tank filler tube and filler tube support are located on the left side at the rear of the shop set body. The horn bracket is located under the engine hood on the left side of the engine. The taillight brackets are located at the rear and on the left and right sides of the truck chassis. The taillight bracket on the left side has a lower bracket that contains a power receptacle. The turn signal lamp assemblies are located on the front and rear of the Model CMU-5 shop set. The directional signal control is located on the steering post and the flasher is located under the dash on Model CMU-5 shop set.

116. Fuel Tank Filler Tube

a. Removal. Refer to figure 78 and remove the fuel tank filler tube from the shop set body.

b. Cleaning and Inspection.

(1) Clean the parts with an approved cleaning solvent. and dry thoroughly.

(2) Inspect the fuel tank filler tube for cracks, holes, and dents. Replace a defective filler tube.

c. Installation. Refer to figure 78 and install the fuel tank filler tube to the shop set body.

117. Filler Tube Support

a. Removal.

(1) Remove the fuel tank filler tube (par. 116).

(2) Refer to figure 79 and remove the filler tube support from the shop set body.

b. Cleaning and Inspection.

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the filler tube support for cracks and dents. Replace a defectivc filler tube support.

c. Installation.

(1) Refer to figure 79 and install the filler tube support to the shop set body.

(2) Install the fuel tank filler tube (pm. **116).**

118. Splash Shield Spring and Bracket

a. Removal.

(1) Remove the filler tube support (par. **117).**

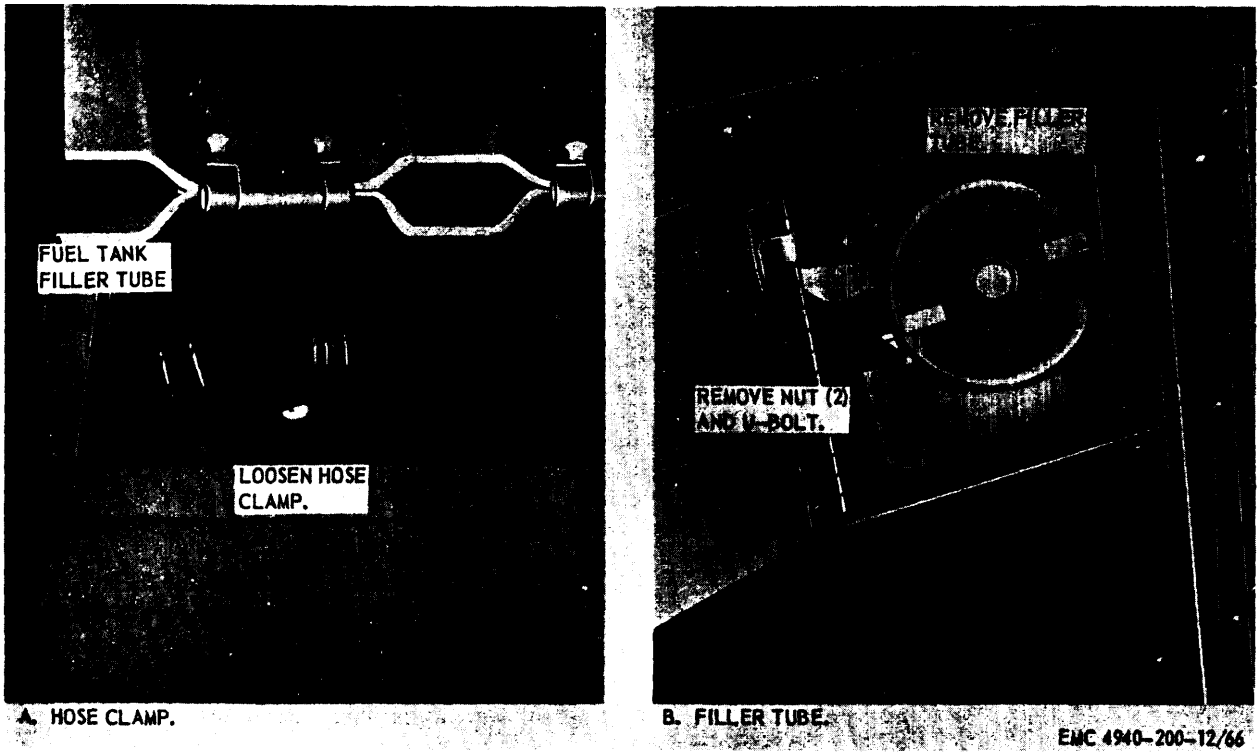


Figure 78. Fuel tank filler tube, removal and installation.

('2) Refer to figure 79 and remove the splash shield spring and bracket from the shop set body.

b. ***Cleaning and Inspection.***

(1) Clean all parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the splash shield spring for wear and the bracket for dents and cracks. Replace worn or damaged parts.

c. ***Installation,***

(1) Refer to figure ***79*** and install the splash field spring and bracket.

(2) Install the filler tube support (par. 117).

119. Horn Bracket

a. Removal. Refer to figure 80 and remove the horn bracket from the truck body.

b. Cleaning and Inspection.

(1) Clean the parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the horn bracket for dents and cracks. Replace a damaged horn bracket.

c. ***Installation.*** Refer to figure ***80*** and install the horn bracket to the truck body.

120. Taillight Bracket

a. *Removal.* Refer to figure 81 and remove the taillight bracket from the truck chassis.

h. ***Cleaning and Inspection.***

(1) Clean all metal parts with an approval cleaning solvent and dry thoroughly.

(2) Inspect the taillight bracket for dents and cracks. Replace a damaged taillight bracket.

c. ***Installation.*** Refer to figure 81 and install the taillight bracket to the truck chassis.

121. Front Turn Signal Lamp Assemblies, Model CMU-5

a. Removal. Refer to figure 82 and remove the front turn signal lamp assemblies from the shop set.

b. ***Disassembly.*** Refer to figure 83 and disassembly the front turn signal lamp assemblies.

c. ***Cleaning, Inspection, and Repair.***

(1) Clean metal and glass parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the body and lenses for dents, cracks, and chips.

(3) Inspect the electrical wire for frayed, worn, or broken places. Replace all damage parts.

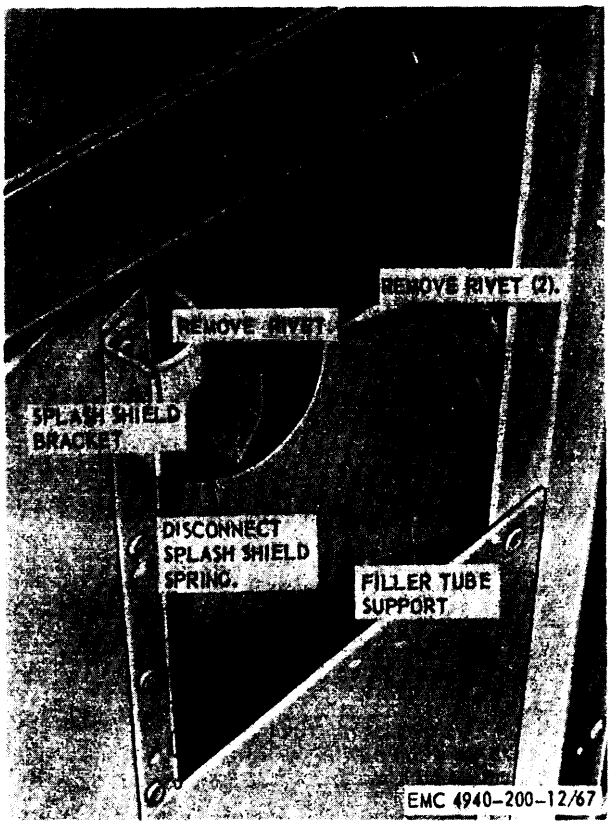


Figure 79. Filler tube support, removal and installation.

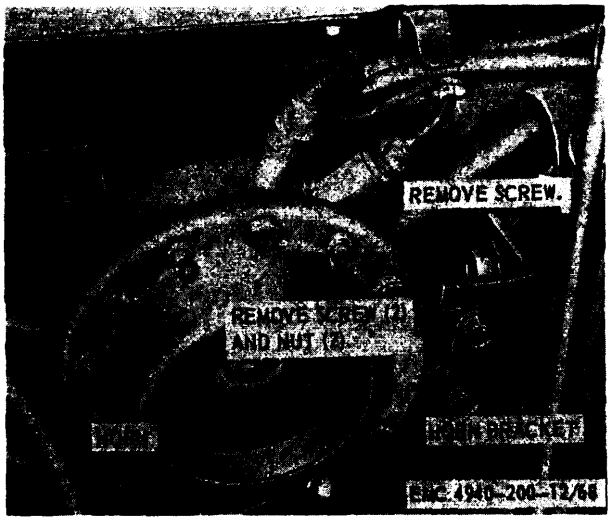


Figure 80. Horn bracket, removal and installation.

d. Reassembly. Refer to figure 83 and reassemble the front turn signal lamp assemblies.

c. ***Installation.*** Refer to figure 82 and install the front turn signal lamp assemblies.

122. Rear Turn Signal Lamp Assemblies, Model CMU-5

a. ***Removal,*** Refer to figure 84 and remove the rear turn signal lamp assemblies from the shop set.

b, ***Disassembly.*** Refer to figure 85 and disassembly the rear turn signal lamp assemblies.

c. Cleaning, Inspection, and Repair.

(1) Clean metal and glass parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect the body and lenses for dents, cracks, and chips.

(3) Inspect the electrical wire for frayed, worn, or broken places. Replace all damaged parts.

d. Reassembly. Refer to figure 85 and reassemble the rear turn signal lamp assemblies.

e. ***Installation.*** Refer to figure 84 and install the rear turn signal lamp assemblies.

123. Directional Light Control and Flasher, Model CMU-5

a. ***Remova/.*** Refer to figure 86 and remove the directional light control and flasher from the shop set.

b. Disassembly. Refer to figure 87 and disassemble the directional light control.

c. ***Cleaning, Inspection, and Repair.***

(1) Clean all metal parts with an approved cleaning solvent and dry thoroughly.

(2) Inspect all metal parts for cracks, breaks, or other damage.

(3) Inspect the wiring assemblies for breaks and frayed insulation.

(4) Inspect the hardware for damaged threads.

(5) Replace all defective parts.

d. Reassembly. Refer to figure 87 and reassemble the directional light control and flasher.

e. ***Installation.*** Refer to figure 86 and install the directional light control and flasher.

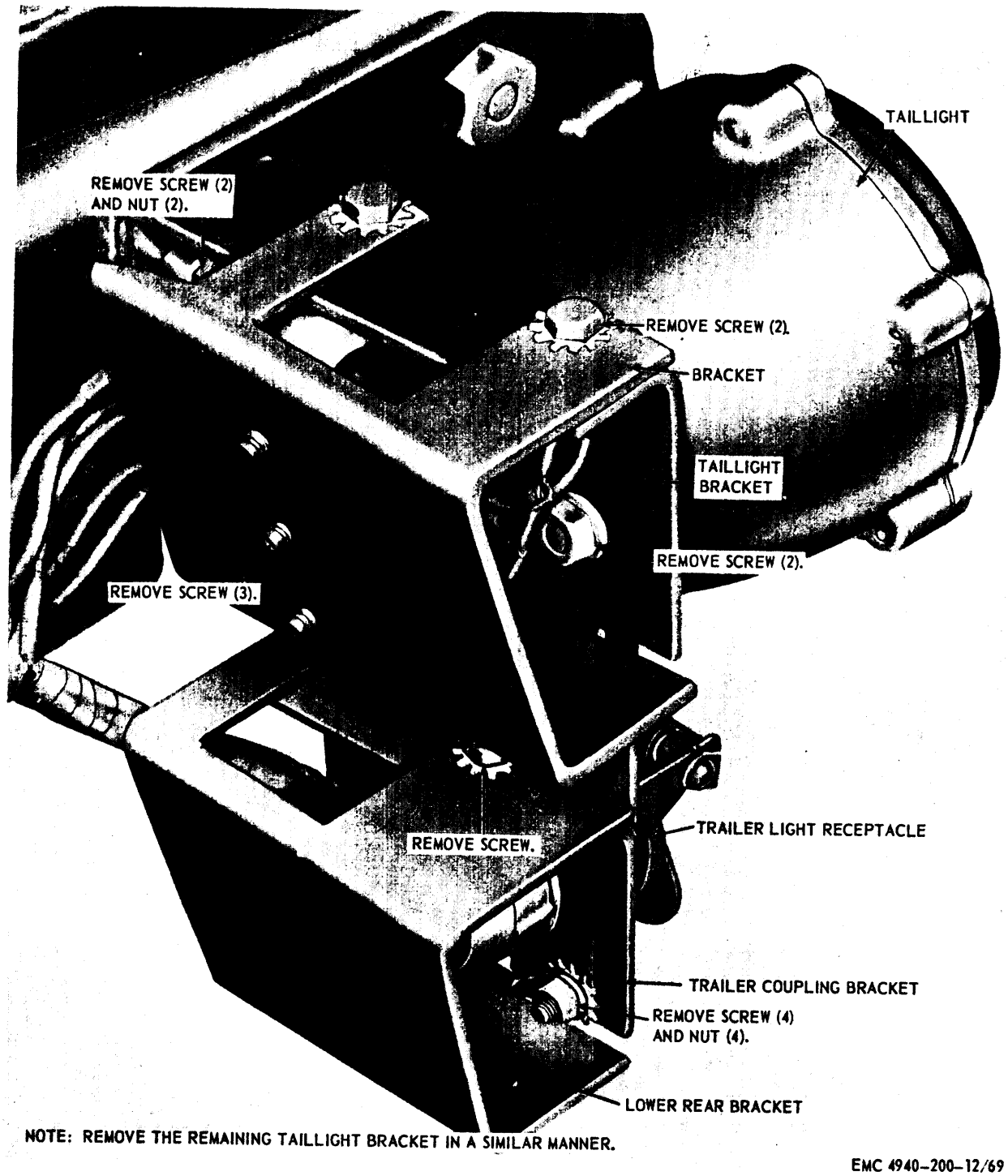


Figure 81. Taillight bracket, removal and installation.

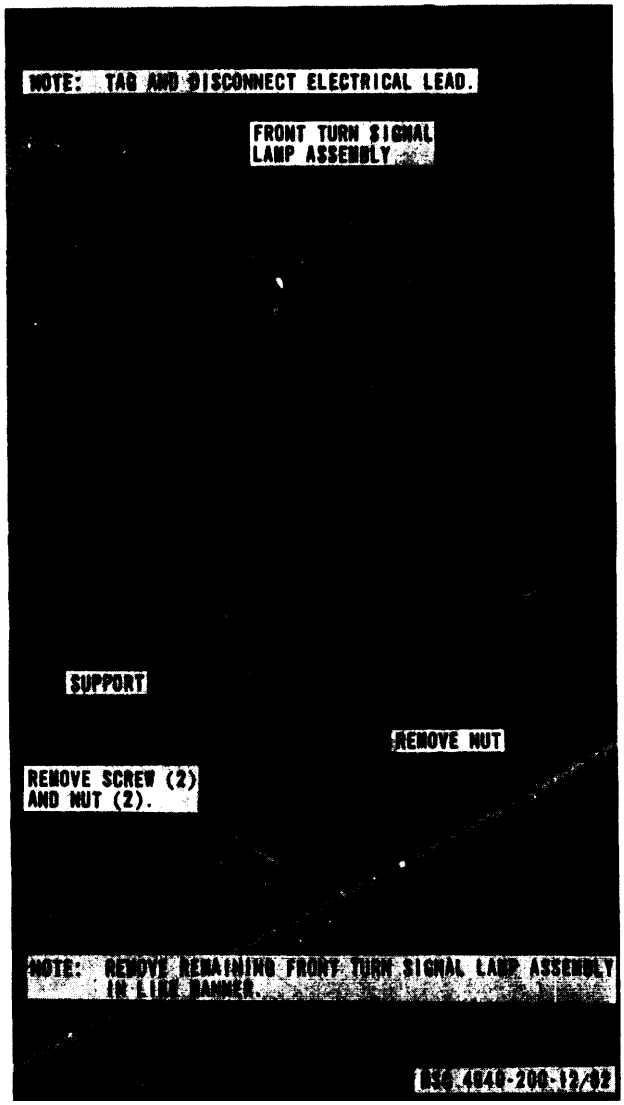
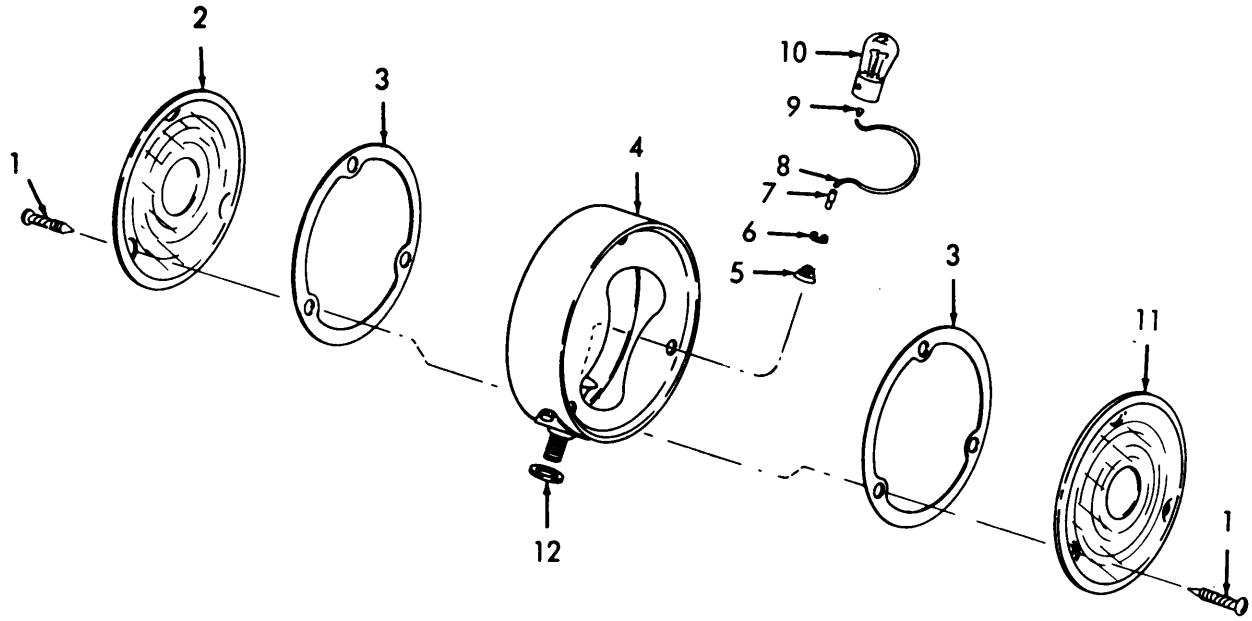


Figure 82, Front turn signal lamp amemblies, Model CMU-5, removal and **installation.**



MSC 4940-200-12/83

1 Screw (spec) (6 rqr)
2 Red lens
3 Preformed felt (2 rqr)
4 Body
5 Helical compression spring
6 Washer, nonmetallic (spec)
7 Terminal
8 Electrical wire
9 Contact
10 Incandescent lamp
11 Amber lens
12 Washer, rubber, 3/8 in. id, 1 3/8 od, 3/32 in. thk

Figure 83. Front turn signal lamp assemblies, disassembly and reassembly.

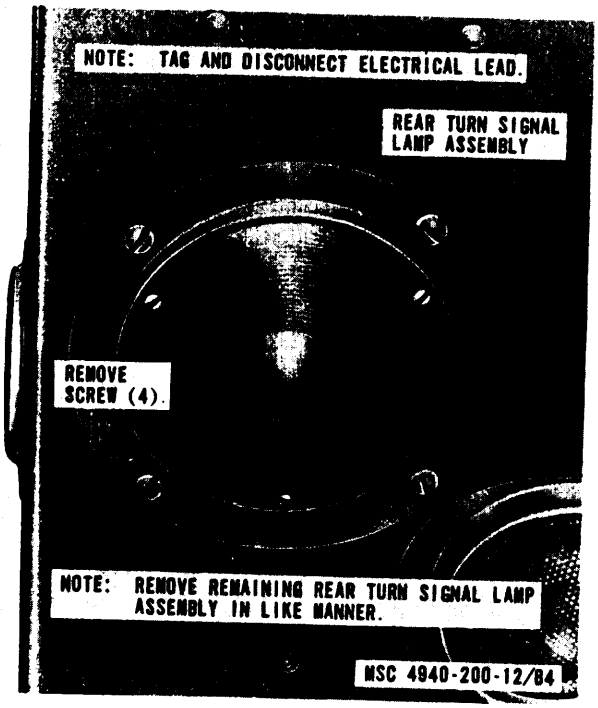
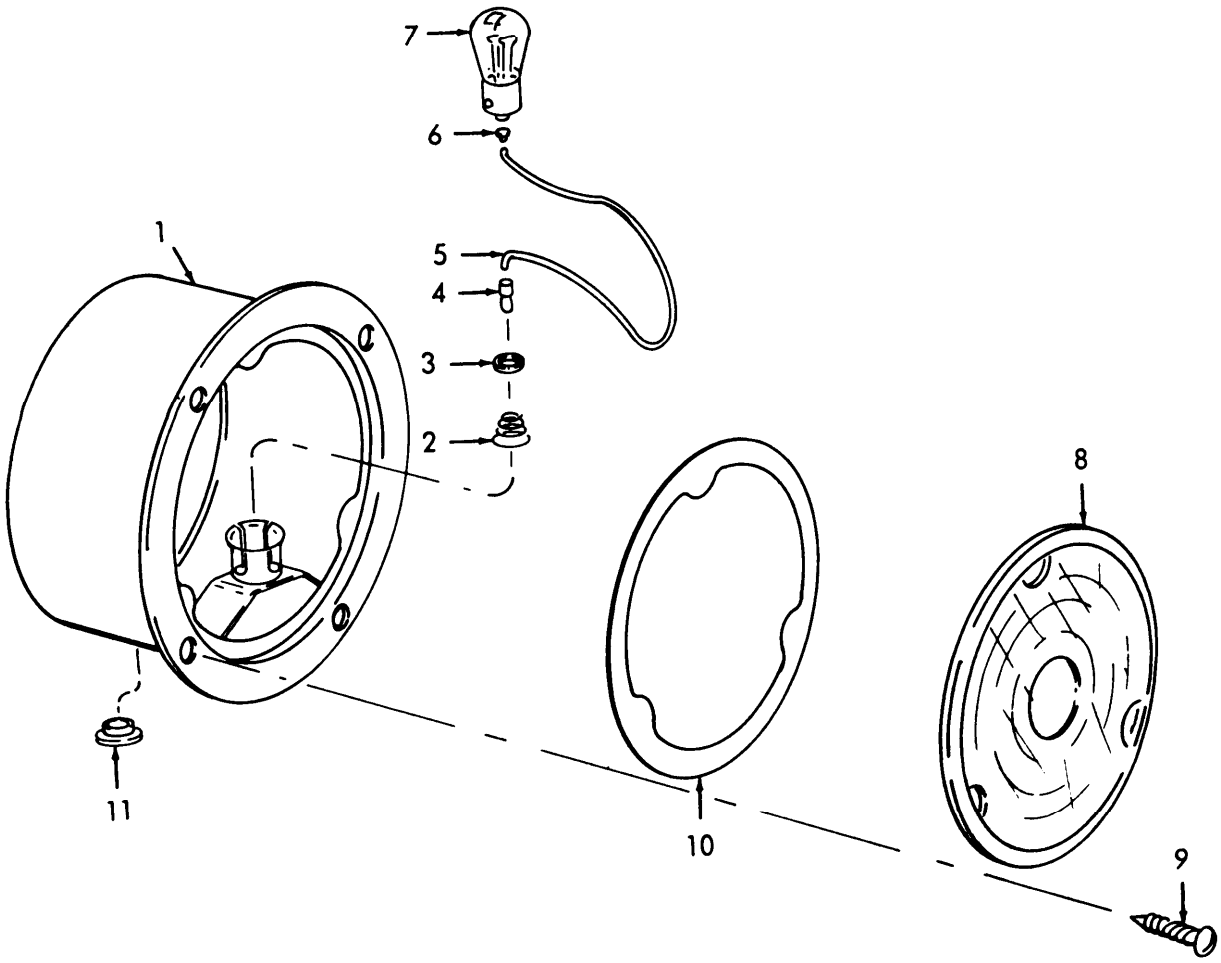


Figure 84. ***Rear turn signal lamp** assemblies, Model CMU-6, removal and installation.*



1 Body
2 Helical compression spring
3 Washer, nonmetallic (spec)
4 Terminal
5 Electrical wire
6 Contact
7 Incandescent lamp
8 Red lens
9 Screw (spec) (3 rqr)
10 Preformed felt
11 Grommet

Figure 85. Rear turn signal lamp assemblies, Model CMU-5, disassembly and reassembly.

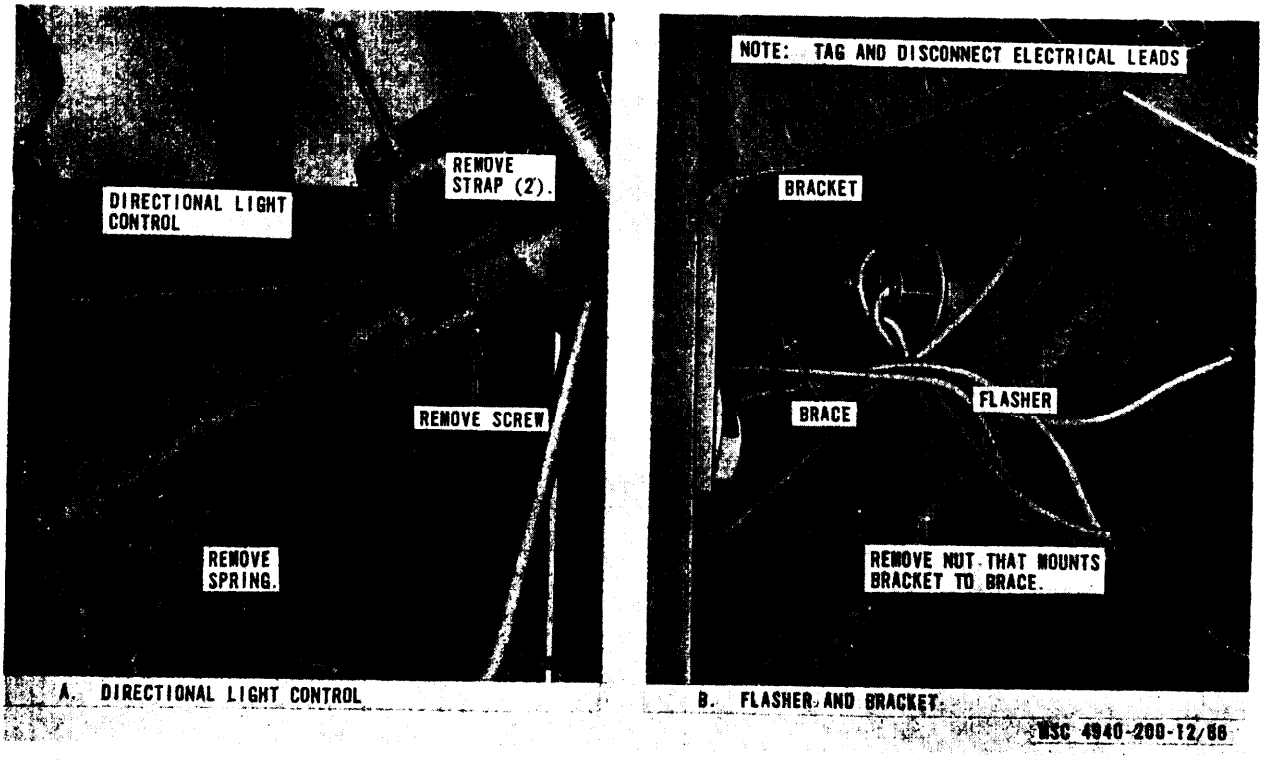
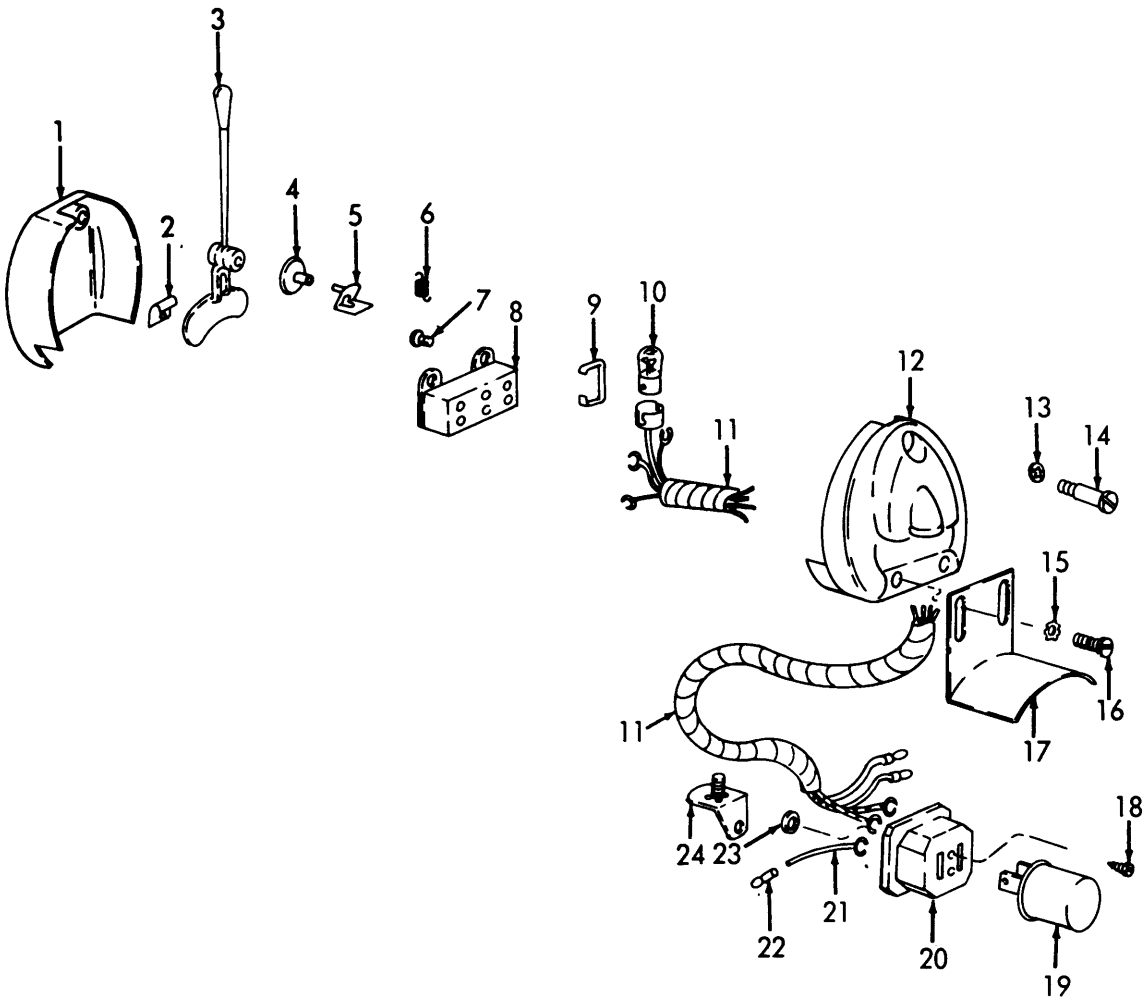


Figure 86. Directional light control and flasher, Model CMU-5, removal and installation.



1 Cover
2 Clip
3 Lever
4 Roller
5 Plate
6 Helical compression spring
7 Screw, flat-hd, countersunk, 3/8–24 x 1/4 (2 rqr)
8 Switch
9 Wiring harness clamp
10 Incandescent lamp
11 Wiring harness
12 Housing
13 Washer, lock, IT, 3/16 in.
14 Screw (spec)
15 Washer, lock, ET, 3/8 in. (2 rqr)
16 Screw, pan-hd, 3/8–24 x 3/8 (2 rqr)
17 Bracket
18 Screw, pan-hd, No. 6 x 1/2 in.
19 Flasher
20 Connector body
21 Electrical wire
22 Terminal
23 Washer, nonmetallic, 5/32 in.
24 Bracket

Figure 87. Directional light control, Model CMU–5, disassembly and reassembly.

CHAPTER 4
DEMOLITION OF MATERIEL TO PREVENT ENEMY USE

124. General

When capture or abandonment of the shop set to an enemy is imminent, the responsible unit commander must make the decision either to destroy the equipment or to render it inoperative. Based on this decision, orders are issued which cover the desired extent of destruction, Whatever method of demolition is employed, it is essential to destroy the same vital parts of all shop sets and all corresponding parts.

125. Demolition To Render the Equipment Inoperative

a. Demolition By Mechanical Means. Use sledge hammers, crowbars, picks, axes, and other heavy tools which may be available to destory the following:

(1) *Engine and governor.*
(2) Generator-welder.
(3) Generator-welder control panel.
(4) *Power takeoff.*
(5) *Engine overspeed relay.*
(6) *Battery-charging resistor.*
(7) *Air compressor.*
(8) *Sander, electric drill, and testing instruments.*
(9) *A 11 accessories and handtools.*
(10) *Engine block, cylinder head, and clutch housing.*

Note. The above steps are minimum requirements for this method.

b. Demolition By Misuse.

(1) Start the generator-welder and other power tools and jam mechanisms so that the motors will burn out.

(2) Cut all electrical leads on the control panel. Cut all cables and air, fuel, hydraulic, and lubrication lines.

Note. The above steps are minimum requirement for this method.

126. Demolition By Explosives or Weapons' Fire

a. Demolition By Explosives. Refer to figure 88 and place as many of the following charges as the situation permits. Detonate these charges simultaneously with detonating cord and a suitable detonator.

(1) Two ½-pound charges against block under manifold.
(2) One ½-pound charge under generator-welder assembly,
(3) One ½-pound charge on prover takeoff.
(4) One ½-pound charge inside control panel.
(5) One ½-pound charge behind each front wheel.
(6) One ½-pound charge behind each rear wheel.

b. Demolition By Weapons Fire. **Fire** on **the** shop set with the heaviest weapons available.

127. Other Demolition Methods

a. Scattering and Concealment. Remove all easily accessible vital parts such as the remote control rheostat, brushes, tool sets, and power tools and scatter them through dense foliage, bury them in dirt or sand, or throw them in a lake, stream, or other body of water.

b. Burning. Pack rags, clothing, or canvas under and around the major components. Saturate this ,packing with gasoline, oil, or diesel fuel and ignite.

c. *Submersion.* Submerge the shop set in a body of water to provide water damage and concealment, Salt water will do the greater damage to metal parts.

128. Training

All operators should receive thorough training in the destruction of the shop set. Refer to FM 5–25. Simulated destruction, using all of the methods listed above, should be included in the operator training

program. If must be emphasized in training, that demolition operations are usually necessitated by critical situations when time available for carrying out destruction is limited. For this reason, it is necessary that operators be thoroughly familiar with all methods of destruction of equipment, and be able to carry out demolition instructions without reference to this or any other manual.

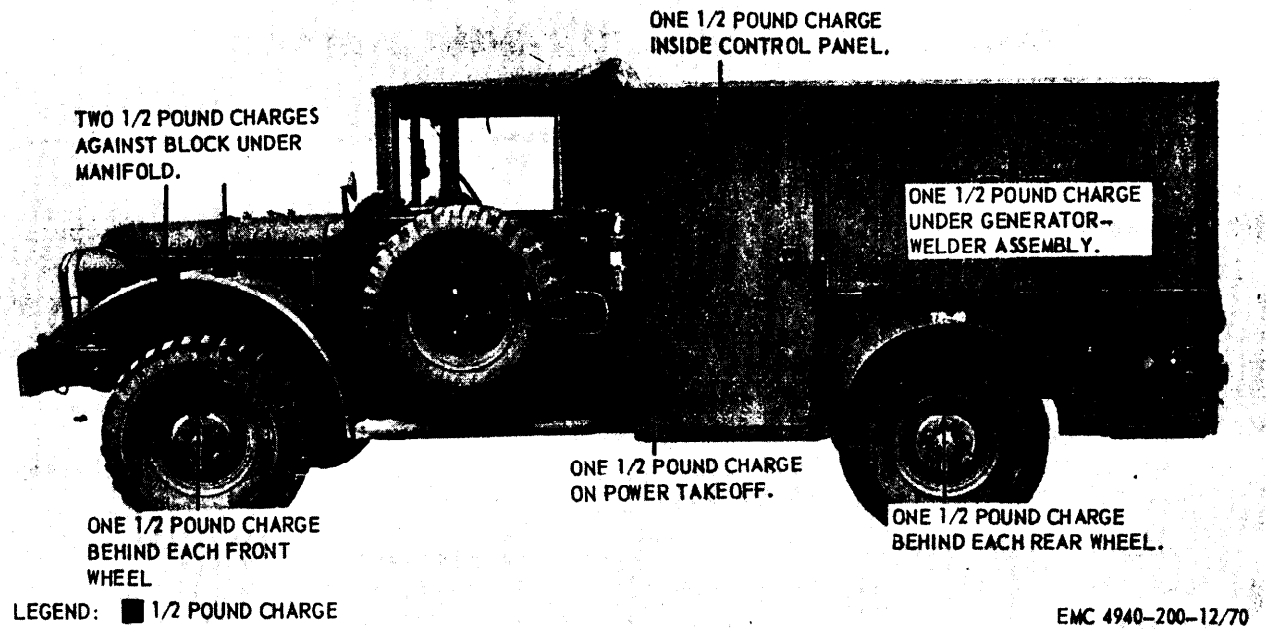


Figure 88. Placement of charges,

CHAPTER 5
SHIPMENT AND LIMITED STORAGE

Section 1. SHIPMENT WITHIN ZONE OF INTERIOR

129. Preparation of Equipment for Shipment

a. General Detailed instructions for the preparation of the shop set for domestic shipment are outlined within this paragraph. Preservation will be accomplished in sequence that will not require the operation of previously preserved components.

b. ***Inspection.*** The shop set will be inspected for any unusual condition such as damage, rusting, accumulation of water, or pilferage. Inspect in accordance with the steps outined in the quarterly preventive maintenance services (par. 36).

c. ***Cleaning and Drying.*** Thoroughly clean and dry the unit and components by the most applicable approved method. Approved methods of cleaning, drying, types of preservatives, and methods of application are described in TM 3S–230.

d. ***Painting.*** Paint all surfaces when the paint has been removed or damaged. Refer to TB ENG 60 for detailed cleaning and painting instructions.

e. ***Depreservat ion Guide.*** A properly annotated DA Form 2258, will be completed concurrently with preservation for each item of mechanical equipment with any peculiar requirements outlined in blocks 27 through 33. The completed depreservation guide will be placed with the equipment in a waterproof envelope marked "Depreservation Guide") and fastened in a conspicuous location on or near the operator's controls.

f. ***Cooling System, Mobile.*** Determine that cooling system is filled to the proper leve1 with a clean solution of 50 percent water and 50 percent ethyleneglycol conforming to Specification O-A–548, type I.

Note. If temperatures below – 25°F. are expected, antifreeze conforming to Specification MIL-C-1 1755 shall be used in its undiluted form.

g. ***Scaling of Openings.*** Openings that will permit the direct entry of water into the interior of the engine shall be sealed with pressure-sensitive tape conforming the Specification PPP-T-60, type 111, class 1.

h. Fuel Tank, Mobile. If fuel tank is empty, it will be fogged with type P–10, grade 2, engine preservative oil, conforming to MIL–L–21260. Otherwise, it is not necessary to drain or preserve the fuel tank.

i. Air Cleaners. Drain the air cleaner and seal all openings that permit the direct entry. of water. Use type III, class 1, waterproof, pressure-sensitive, adhesive tape conforming to PPP–T–60.

j. Exterior Surfaces. Coat exposed machined ferrous metal surfaces with preservative (P–6) conforming with Specification MIL–C–11796, class 3. If preservative is not available, GAA–Grease automotive and artillery may be used.

k. Windshield Wipers, Blades, and Mirrors. Windshield wipers, blades, and mirrors shall be removed, packaged together, and placed in the toolbox to prevent pilferage.

l. Batteries and Cables. Batteries shall be secured in the battery compartment. Battery shall be filled and fully charged. Disconnect battery cables and secure in a manner that will prevent contact with battery terminals.

m. Pneumatic Tires. Tire shall be inflated to their normal required operating pressure.

n. Air Receivers. Remove the pipe plugs from tanks and spray the tank interior with type P–10, grade 2, engine preservative oil and reinstall. Open draincock to allow excess preservative oil to drain. Leave draincock open to allow condensation to drain.

o. Basic Issue Items. Tools and equipment of the shop set shall be packed in containers and replaced in the same compartment or vicinity from which they were removed. For container selection and fabrication refer to TM 38–230.

p. Marking. Mark the shop set for shipment in accordance with the requirements of Standard MIL-STD-129.

130. Loading Equipment for Shipment

Refer to paragraph 7 and reverse the procedure.

Section II. LIMITED STORAGE

131. Preparation of Equipment for Storage

a. ***General.*** Detailed instructions for preserving and maintaining equipment in limited storage are outlined in this paragraph. Limited storage is defined as storage not to exceed 6 months. Refer to AR 743-505.

b. Inspection. Refer to paragraph 129b.

c. ***Cleaning and Drying.*** Refer to paragraph 129c.

d. Painting. Refer to paragraph 129d.

e. ***Depreservafion Guide.*** Refer to paragraph 129e.

f. Cooling System. Refer to paragraph 129f.

g. ***Sealing of Openings.*** Refer to paragraph 129g.

h. Fuel Tank, Mobile. Tanks will be drained or fogged with type P–10, grade 2, engine preservative oil, conforming to Specification MIL-L-21260.

i. ***Air Cleaner.*** Service air cleaner and seal all openings that will permit the direct entry of water with pressure-sensitive tape conforming to type 111, class 1 of Specification PPP–T–60.

j. ***Exterior Surfaces.*** Refer to paragraph 129j.

k. Pneumatic Tires. Pneumatic tires standing in storage under load will be inflated to the proper pressure. When the equipment is blocked and all weight is removed from the tires, deflate tires to two-thirds normal tire pressure.

L Batteries and Cables. Refer to paragraph 129l.

m. Basic Issue Items. Refer to paragraph 1290.

n. Air Receiver. Refer to paragraph 129n.

o. ***Weatherproofing.*** When suitable shelter is not available, select a firm, level, well-drained storage location, protected from prevailing winds. Position the equipment on heavy planking or other solid surfaces. Block the equipment in a manner to remove all weight from the tires. Cover the equipment with a paulin or other suitable waterproof covering and tie down securely.

132. Inspection and Maintenance- of Equipment in storage

a. Inspection and ***Maintenance.*** Perform the preventive maintenance services every 90 days to make sure that the shop set is mechanically sound. All deficiencies and shortages or short comings will be recorded on DA Form 2404 together with corrective action taken.

b. Exercising. At time of inspection and maintenance, operate shop set long enough to bring it up to operating temperature and insure complete lubrication of all bearings, gears, etc. After each exercising period, the shop set will be preserved as outlined in paragraph 131.

APPENDIX I

REFERENCES

1. Dictionaries of Terms and Abbreviations

AR 320-5	Dictionary of United States Army Terms.
AR 320-50	Authorized Abbreviations and Brevity Codes.

2. Fire Protection

SB 5-111	Extinguisher, Fire, Monobromotrifluoromethane (CF_3Br) charged FSN 4210-555-8837.
TM 5-687	Repairs and Utilities: Fire Protection Equipment and Appliances; Inspections, Operations, and Preventive Maintenance.
TM 9-1799	Ordnance Maintenance: Fire Extinguishers.

3. Lubrication

LO 5-4940-200-12	Shop Equipment, Contact Maintenance, Truck Mounted: Set No. 3 (Southwest Truck Body Co., Model SECM).
LO 9-8030	Truck, ¾-Ton, 4 X 4, M37, M42, M43, V-41/GT.

4. Organizational Maintenance

TM 5-764	Electric Motor and Generator Repair.
TM9-8030	Operation and Organizational Maintenance: ¾-Ton 4 X 4 Cargo Truck M37, ¾-Ton 4 X 4 Command Truck M42, ¾-Ton 4 X 4 Ambulance Truck, M43, and ¾-Ton 4 X 4 Telephone Installation Light Maintenance and Cable Splicing Truck V-41/GT.

5. Painting and Preservation

TB ENG 60	Preservation and Painting of Serviceable Corps of Engineer Equipment.

6. Preventive Maintenance

AR 750-5	Organization, Policies, and Responsibilities for Maintenance Operations Care and Maintenance of Pneumatic Tires; New Type Valve Assemblies for Inner Tubes.
TM 9-1870-1/1	**Care** and Maintenance of Pneumatic Tires; New Type Valve Assemblies for Inner Tubes.
TM 9-1870-1	Care and Maintenance of Pneumatic Tires.
TM 9-237	Welding, Theory and Application.
TM 9-6140-200-15	Storage Batteries: Lead Acid Type
TM 38-750	The Army Equipment Record System and Procedures.

7. Publication Indexes

	Index of Army Motion Pictures, Film Strips, Slides, and Phono-Recordings.
DA Pam 310-1	Index of Administrative Publications.
DA Pam 310-2	Index of Blank Forms.
DA Pam 310-3	Index of Doctrinal, Training, and Organizational Publications.

DA Pam 310-4	Index of Technical Manuals, Technical Bulletins, Supply Manuals (types 4, 6, 7, 8, and 9) Supply Bulletins, Lubrication Orders, and Modification Work Orders.
DA Pam 310-5	Index of Graphic Training Aids and Devices.
DA Pam 310-25	Index of Supply Manuals-Corps of Engineers.

8. Radio Interference Suppression

TM 11-483	Radio Interference Suppression.

9. Shipment and Limited Storage

AR 743-505	Limited Storage of Corps of Engineer Mechanical Equipment.
TM 38-230	Preservation, Packaging, and Packing of Military Supplies and Equipment.

10. Supply Publications

1OC91OO-SL	Petroleum, Petroleum-Base Products, and Related Materiel.
TM 5-4940-200-20P	Organizational Maintenance Repair Parts and Special Tool Lists. Shop Equipment, Contact Maintenance, Truck Mounted: Set No. 3 (Southwest Model SECM) Serial No. S-3-628 through S-3-720, and (Davey Model CM U- 5) Serial No. 33343 through 33343-234, FSN 4940-294-9518.

11. Training Aids

FM 5-25	Explosives and Demolition.
FM 21–5	Military Training.
FM 21-6	Techniques of Military Instruction.
FM 21-30	Military Symbols.

APPENDIX II
MAINTENANCE ALLOCATION CHART

Section 1. INTRODUCTION

1. General

This appendix contains explanations of all maintenance and repair functions authorized the various echelons, Section II contains the maintenance allocation chart.

2. Maintenance

Maintenance is any action taken to keep materiel in a serviceable condition or to restore it to serviceability when it is unserviceable. Maintenance of materiel includes the following:

a. Service. To clean, preserve, and replenish fuel and lubricants.

b. ***Adjust.*** To regulate periodically to prevent malfunction.

c. ***Inspect.*** To verify serviceability and detect incipient electrical or mechanical failure by scrutiny.

d. Test. To verify serviceability and detect incipient electrical or mechanical failure by use of special equipment such as gages, meters, and the like.

e. ***Replace.*** To substitute serviceable assemblies, subassemblies, and parts for unserviceable components.

j. ***Repair.*** To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This function includes, but is not limited to, inspecting, cleaning, preserving, adjusting, replacing, welding, riveting, and straightening.

g. ***Aline.*** To adjust two or more components of an electrical system so that their functions are properly synchronized.

h. Calibrate. To determine, check, or rectify the graduation of an instrument, weapon, or weapons system, or components of a weapons system.

i. ***Overhaul.*** To restore an item to completely serviceable condition as prescribed by serviceability standards developed and published by heads of technical services. This is accomplished through employment of "Inspect and Repair Only as Necessary" (IROAN). Maximum utilization of diagnostic and test equipment is combined with minimum disassembly of the item during the overhaul process.

3. Explanation of Columns

a. Functional Group, The functional group is a numerical group set up on a functional basis. The applicable Functional Grouping Indexes (obtained from the Corps of Engineers Functional Grouping Indexes) are listed in the MAC in the appropriate numerical sequence, These indexes are normally set up in accordance with their function and proximity to each other.

b. Components and Related Operation. This column contains the functional grouping index heading, subgroup headings, and a brief description of the part, starting with the noun name. It also designates the operations to be performed, such as service, adjust, inspect, test, replace, repair, and overhaul.

c. ***Echelons of Maintenance.*** This column contains the various echelons of maintenance by number designation. An X placed in the appropriate echelon column in line with an indicated maintenance function authorizes that echelon to perform the function. The X indicates the lowest echelon responsible for performing the function, but does not necessarily indicate repair parts stockage at that level. Higher echelons are authorized to perform the indicated functions of lower echelons.

d. Remarks. This column lists specific maintenance functions, special tools, cross-references, instructions, and the like pertinent to the operation being performed.

Functional group	Components and related operation	Echelons of maintenance 1	2	3	4	5	Remarks
03	FUEL SYSTEM						
0306	TANKS, LINES, FITTINGS						
	Tube, Filler						
	Replace	---	X				
0308	ENGINE SPEED GOVERNOR						
	Governor Assembly, Engine						
	service	X					
	Adjust	---	X				
	Replace	---	X				
	Repair	---	---	---	X		
	Rod, Throttle						
	Replace	---	---	X			
	Lever Assembly, Throttle						
	Replace	---	---	X			
	Rod Assembly, Governor						
	Replace	---	---	X			
	Repair	---	---	X			
	Adapter, Governor Drive						
	Replace	---	X				
	Repair	---	---	X			
	Cable, Flexible, Governor Drive						
	Replace	---	X				
	Repair	---	X				
	Belt "V" Drive						
	Adjust	---	X				
	Replace	---	---	X			
	Pulley, Adapter Drive						
	Replace	---	X				
0312	ACCELERATOR, THROTTLE OR CHOKE CONTROLS						
	Rod Assembly, Governor						
	Replace	---	---	X			
	Repair	---	---	X			
	Rod, Throttle						
	Replace	---	---	X			
	Wire Assembly, Throttle						
	Replace	---	X				
	Bellcrank, Throttle						
	Replace	---	X				
	Bracket, Bellcrank						
	Replace	---	X				
	Spring, Throttle Return						
	Replace	---	X				
06	ELECTRICAL SYSTEM						
0606	ENGINE SAFETY CONTROLS						
	Relay Assembly, Overspeed						
	Replace	---	X				
	Repair	---	---	X			
	Harness Wiring, Overspeed Relay and Relay to Generator						
	Replace	---	X				
	Repair	---	X				
	MISCELLANEOUS ITEMS						
	Control, Directional Signal Light, Automotive						
	Replace	---	X				
	Repair	---	X				

Functional group	Components and related operation	Echelons of maintenance 1	2	3	4	5	Remarks
	Switch, Brake Lock						
	Replace		X				
	Brake Lock, Electric						
	Replace		---	X			
	Wiring Harness, Brake Lock						
	Replace		X				
	Repair		X				
	Lamp, Incandescent, Turn Signal Control						
	Replace		X				
0609	LIGHTS						
	Lamp Assembly, Turn Signal						
	Replace		X				
	Repair		X				
	Lamp, Incandescent						
	Replace	X					
	Wiring Harness, Turn Signal						
	Replace		X				
	Repair		X				
0611	HORN						
	Bracket, Horn						
	Replace		X				
0613	HULL OR CHASSIS WIRING HARNESS						
	Bracket, Receptacle, Trailer						
	Replace		X				
08	POWER TRANSFER						
0802	CLUTCH AND CLUTCH CONTROLS						
	Declutcher Assembly, Transfer Case						
	Adjust		X				
	Replace		---	X			
	Repair		---	X			
0803	GEAR SHIFT CONTROLS						
	Shift Lever Assembly, Declutcher						
	Replace		X				
	Bracket, Shift Bar						
	Adjust		X				
	Replace		X				
	Repair		X				
	Shifter and Shoe Assembly Declutcher						
	Replace		X				Replace linings.
	Repair		---	X			
09	PROPELLER SHAFT						
0900	PROPELLER SHAFTS						
	Universal Joint and Shaft Assembly, Slip						
	Replace			X			
	Repair		---	X			
	ShaftAssembly, Drive						
	Replace		---	X			
	Repair		---	X			
15	FRAME						
1501	FRAME ASSEMBLY						
	Bracket, Tail						
	Replace		---	X			
	Base,Generator						
	Replace		---	X			
	Extension, Frame						
	Replace-		---	X			
	Member, Frame Extension and Body Support						
	Replace		---	X			

Functional group	Components and related operation	Echelons of maintenance 1			4	5	Remarks
17	BODY; CAB; HOOD; HULL						
1708	sTRAPS						
	Clips, Retaining						
	Replace		X				
	Spring, Pail Retaining						
	Replace		X				
	Straps, Webbing						
	Replace		X				Fabricate
1712	SPECIAL PURPOSE BODIES						
	Harness, Wiring						
	Replace		X				
	Repair		X				
	Receptacle, Body Outlet						
	Replace		X				
	Box, Receptacle						
	Replace			X			
	Body Assembly						
	Service	X					
	Inspect	X					
	Replace				X		
	Repair			X			
	Overhaul					X	
	Door Assembly, Rear						
	Replace		X				
	Repair		X				
	Hinges, Door						
	Replace		X				
	Panels, Interior and Exterior						
	Replace			X			
	Repair			X			
	LockAssembly, Door						
	Replace		X				
	Repair		X				
	Support, Door						
	Replace		X				
	Plate, Interior and Exterior						
	Replace			X			
	Repair			X			
	Panel Assembly, Roof						
	Replace		X				
	Repair		X				
	PanelAssembly, Front						
	Replace				X		
	Repair			X			
	Panel Assembly, Head						
	Replace				X		
	Repair				X		
	Tailgate Assembly						
	Replace		X				
	Repair		X				
	Bracket and Chair Assembly						
	Replace		X				
	Lumber, Hardwood						
	Replace		X				Fabricate
	Skin, Aluminum						
	Replace		X				Fabricate
	Latch Assembly						
	Replace		X				

Functional group	Components and related operation	Echelons of maintenance					Remarks
		1	2	3	4	5	
	Channel						
	Replace	---	---	X			
	Compartment Assembly						
	Service	X					
	Inspect	X					
	Replace	---	---	---	X		
	Repair	---	---	X			
	Overhaul	---	---	---	---	X	
	Door Assembly, Center						
	Replace	---	X				
	Repair	---	X				
	Brace Assembly, Door						
	Replace	---	X				
	Rod, Brace						
	Replace	---	X				
	Door Assembly, Rear						
	Replace	---	X				
	Repair	---	X				
	Hanger Assembly, Hose						
	Replace	---	X				
	Retainer, Cylinder						
	Replace	---	X				
	Bracket, Floodlight						
	Replace	---	X				
	Container, Disc						
	Replace	---	X				
	Shelf, Flanged						
	Replace	---	X				
	Bracket, Drill						
	Replace	---	X				
	Bracket, Box						
	Replace	---	X				
	Channel, Tailgate						
	Replace	---	---	X			
	Stiffener, Floor						
	Replace	---	---	X			
	Floor, Lower						
	Replace	---	---	X			
	Plate, Access						
	Replace	---	X				
	Panel, Lower						
	Replace	---	---	X			
	Mullion, Lower						
	Replace	---	---	X			
	Support, Floor						
	Replace	---	---	X			
	Wheelwell						
	Replace	---	---	X			
	Panel, Wheel						
	Replace	---	---	X			
	Sill, Compartment						
	Replace	---	X				
	Panel, Center						
	Replace	---	X				
	Shelf, Rear						
	Replace	---	X				
	Floor, Front						
	Replace	---	---	X			

Functional group	Components and related operation	Echelons of maintenance					Remarks
		1	2	3	4	5	
	Ledge, Drip						
	Replace			X			
	Cap, Roof						
	Replace			X			
	Panel, Roof-Forward-Rear						
	Replace			X			
	Repair			X			
	Bulkhead, Rear						
	Replace			X			
	Rack Assembly, Cylinder						
	Replace		X				
	Door Assembly, Center						
	Replace			X			
	Repair			X			
	Door Assembly, Front						
	Replace		X				
	Repair		X				
	Door Assembly, Rear						
	Replace		X				
	Repair		X				
	Door Assembly, Fuel						
	Replace		X				
	Shield Assembly						
	Replace			X			
	Repair			X			
	Screen Assembly						
	Replace		X				
	Mount, Panel						
	Replace		X				
	Rails						
	Replace				X		
	Member, Rear						
	Replace				X		
	Crossmember						
	Replace				X		
	Floor						
	Replace				X		
20	POWER TAKEOFF						
2004	POWER TAKEOFF ASSEMBLY						
	Power Divider Assembly						
	Replace			X			
	Repair			X			
	Bearing, Thro-out						
	Replace			X			
	Bracket Assembly, Clutch Operating						
	Replace			X			
	Repair			X			
	Linkage Assembly, Upper						
	Replace			X			
	Repair		X				
	Shaft, Power Takeoff						
	Replace			X			
	Pillow Block Assemblies						
	Replace			X			
	Bearing, Main Shaft						
	Replace			X			

Functional group	Components and related operation	Echelons of maintenance					Remarks
		1	2	3	4	5	
	Clutch Assembly, Power Takeoff						
	Adjust		X				
	Replace			X			
	Repair			X			
	Plates, Floating and Drive						
	Replace			X			
	Plate, Hub Back						
	Replace			X			
	Repair			X			
	Pulley, Power Takeoff						
	Replace			X			
22	MISCELLANEOUS BODY, CHASSIS OR HULL, AND ACCESSORY ITEMS						
2202	ACCESSORY ITEMS						
	Reflectors, Indicating, Clearance						
	Replace		X				
2210	DATA PLATES						
	Plates, Instruction						
	Replace		X				
	Plates,Name						
	Replace		X				
	Plate, Serial						
	Replace		X				
	Plate, Identification						
	Replace		X				
	Plate, C.O.E.						
	Replace			X			
40	ELECTRIC MOTORS						
4000	MOTOR ASSEMBLY						
	Motor Electric, Air Compressor Drive (1/3 h p)						Southwest Model SECM only.
	Replace		X				
	Bumper, Rubber, Plate Mounting						Southwest Model SECM only.
	Replace		X				
4006	STARTING AND PROTECTIVE DEVICES						
	Switch, Air Compressor						Southwest Model SECM only.
	Replace		X				
42	ELECTRICAL EQUIPMENT						
4216	MISCELLANEOUS WIRING; FITTINGS; FORMED CABLE ASSEMBLIES						
	Cord,W/Plug,ElectricMotor						Southwest Model SECM only.
	Replace		X				
	Receptacle Assembly, Slave						
	Replace		X				
	Cable Assembly, Slave						
	Repace		X				Fabricate
44	WELDING						
4400	ARC WELDERS						
	Generator, Welder						
	Service	X					
	Inspect	X					
	Test			X			
	Replace			X			
	Repair			X			
	Overhaul				X		

Functional group	Components and related operation	Echelons of aintenancc					Remarks
		1	2	3	4	5	
	Bar, Generator Tie						
	Replace----------	---	---	X			
	Bar, Generator, Adjusting						
	Replace ----------	---	---	X			
	Eye, Lifting						
	Replace ----------	---	X				
4401	ROTORASSEMBLY						
	Armature Assembly						
	Test----------	---	---	---	X		
	Replace----------	---	---	---	X		
	Repair----------	---	---	---	X		
	Overhaul----------	---	---	---	---	X	
	Ring, Electrical Contact						
	Replace----------	---	---	---	X		
4402	STATOR ASSEMBLY						
	Stator, Generator						
	Test----------	---	---	---	X		
	Replace----------	---	---	---	X		
	Repair----------	---	---	---	X		
	Overhaul----------	---	---	---	---	X	
4403	BRUSH HOLDER ASSEMBLY						
	Holder Assembly						
	Adjust----------	---	X				
	Replace----------	---	---	X			
	Repair----------	---	---	X			
	Brush, ac,dc						
	Replace----------	---	X				
4404	DRIVE COMPONENTS						
	Belts, “V” (Matched Set)						
	Adjust----------	---	X				
	Replace----------	---	---	X			
	Pulley, Generator Drive						
	Replace----------	---	---	X			
4405	FRAME SUPPORT, HOUSING, CARRIER						
	Housing Assembly, Exciter						
	Replace----------	---	---	---	X		
	Housing Assembly, Generator						
	Replace----------	---	---	---	X		
	Bearing, Ball, Annular						
	Replace----------	---	---	X			
4406	VENTILATING, COOLING SYSTEM						
	Filter, Air, Generator						
	Service----------	X					
	Replace----------	X					
	Guard Assembly, Fan						
	Replace----------	---	X				
	Fan, Generator Cooling						
4407	Replace----------	---	---	---	X		
	CONTROL PANELS, HOUSINGS, CUBICLES						
	Panel Assembly, Control						
	Servie----------	X					
	Inspect---------- ----------	X					
	Replace ----------	---	---	X			
	Repair ----------	---	---	X			
	overhaul----------	---	---	---	X		
	Voltmeter, Ac						
	Replace----------	---	---	X			
	Meter, Frequency						
	Replace----------	---	---	X			

Functional group	Components and related operation	Echelons of maintenance					Remarks
		1	2	3	4	5	
	Voltmeter, DC						
	Replace			X			
	Ammeter, DC						
	Replace			X			
	Switch Assembly, Resistor						
	Replace			X			
	Shield Assembly, Heat						
	Replace			X			
	Panel, Control						
	Replace			X			
	Wiring Harness						
	Replace			X			
	Repair			X			
	Shunt, Ammeter						
	Replace			X			
4408	CONNECTING DEVICES						
	Connector, Receptacle, Electrical						
	Replace			X			
	Board, Terminal						
	Replace			X			
	Block, Terminal						
	Replace			X			
4409	PROTECTIVE DEVICES, ELECTRICAL						
	Fuse, Cartridge						
	Replace	X					
4410	SWITCHING, TIMING AND SPEED CONTROL						
	Switch Assembly						
	Replace			X			
	Switch, Rotary						
	Replace			X			
	Repair			X			
	Relay Assembly						
	Replace			X			
	Switch, Toggle						
	Replace			X			
	Relay, Cutout						
	Replace			X			
4411	RESISTOR COMPONENTS						
	Resistor, Adjustable						
	Adjust			X			
	Test			X			
	Replace			X			
	Resistor, Fixed						
	Test			X			
	Replace			X			
	Resistor, Variable (Rheostat)						
	Test			X			
	Replace			X			
4414	RADIO INTERFERENCE SUPPRESSION						
	Capacitor, Fixed, Paper Dielectric						
	Test		X				
	Replace		X				
	Strap, Ground						
	Replace		X				
47	GAGES (NONELECTRICAL); WEIGHING AND MEASURING DEVICES						
4703	TIME METER						
	Meter, Time Totalizing						
	Replace			X			

Functional group	Components and related operation	Echelons of maintenance					Remarks
		1	2	3	4	5	
50	PNEUMATIC EQUIPMENT						
5000	AIR COMPRESSOR ASSEMBLY						
	Compressor, Reciprocating, Power Drive						Southwest Model SECM only.
	Inspect	X					
	Replace		X				
	Repair		X				
5001	CRANKCASE, BLOCK, CYLINDER HEAD						
	Head, Compressor						Southwest Model SECM only.
	Replace		X				
	Housing, Compressor Lifting						Southwest Model SECM only.
	Replace		X				
5002	CRANKSHAFT						
	Eccentric, Piston Driving						Southwest Model SECM only.
	Replace		X				
	Bearing, Ball, Annular, Outboard						Southwest Model SECM only.
	Replace		X				
5004	PISTONS, CONNECTING RODS AND ROTORS						
	Piston, Compressor						Southwest Model SECM only.
	Replace		X				
	Repair		X				
	Seal, Plain						Southwest Model SECM only.
	Replace		X				
	Bearing Sleeve, Piston to Eccentric						Southwest Model SECM only.
	Replace		X				
5005	VALVES, CAMSHAFT AND TIMING MECHANISM						
	Plate Assembly, Valve						Southwest Model SECM only.
	Replace		X				
	Valve, Inlet						
	Replace		X				
5008	AIR INTAKE						
	Pad, Filter						Southwest Model SECM only.
	Service	X					
	Replace	X					
76	FIRE FIGHTING EQUIPMENT						
7603	FIRE EXTINGUISHERS						
	Extinguisher, Fire						
	Replace	X					

APPENDIX Ill

BASIC ISSUE ITEMS LIST AND MAINTENANCE AND OPERATING SUPPLIES

Section L INTRODUCTION

1. General

Section H lists the accessories, tools, and publications required in 1st echelon maintenance and operation, initially issued with, or authorized for the shop set. Section 111 lists the maintenance and operating supplies required for initial operation.

2. Explanation of Columns Contained in Section II

a. Source Codes. The information provided in each column is as follows:

(1) Technical service. This column lists the basic number (or symbol) of the technical service assigned supply responsibility for the part. Blank spaces denote Corps of Engineers supply responsibility. General Engineer supply parts are identified by the letters GE in parentheses, following the nomenclature in the description column. Other technical services basic numbers (or symbols) are—

10-Quartermaster Corps

12—Adjutant General's Corps

(2) Source. The selection status and source of supply for each part are indicated by one of the following code symbols:

(a) P—applied to high-mortality repair parts are stocked in or supplied from the technical service depot system, and authorized for use at indicated maintenance echelons.

(b) Pi—applied to repair parts which are low-mortality parts, stocked on or supplied from technical service depots, and authorized for installation at indicated maintenance echelons.

(c) M—applied to repair parts which are not procured or stocked but are to be manufactured at indicated maintenance echelons.

(d) X2—applied to repair parts which are not stocked. The indicated maintenance echelon requiring such repair parts will attempt to obtain them through cannibalization; if not obtainable through cannibalization, such repair parts will be requisitioned with supporting justification through normal supply channels.

(3) Maintenance. The lowest maintenance echelon authorized to use, stock, install, or manufacture the part is indicated by the following code symbol:

O—Organizational Maintenance (1st and 2nd echelon).

(4) Recoverability. Repair parts and/or tool and equipment items that are recoverable are indicated by one of the following code symbols:

(a) R—applied to repair parts and assemblies which are economically repairable at field maintenance facilities (3d and 4th echelons) and normally are funrished by supply on an exchange basis.

(b) T—applied to high-dollar value recoverable repair parts which are subject to special handling and are issued on an exchange basis. Such repair parts normally are repaired or overhauled at depot maintenance facilities.

(c) U—applied to repair parts specifically selected for salvage by reclamation units because of precious metal contact, critical materials, high-dollar value reusable castings, castings, and the like.

Note. When no code is shown in the recoverability column the part is considered expendable.

b. Federal Stock Numbers. The Federal stock number will be shown in this column and will be used for requisitioning purposes.

c. Description.

(1) The item name and a brief description of the part arc shown.

(2) A five-digit Federal supply code for manufacturers and/or other technical services is shown in parentheses followed by the manufacturer's part number. This number will be used for requisitioning purposes when no Federal stock number is indicated in the Federal stock number column.

Example: (08645) 86453.

(3) The letters GE, shown in parentheses immediately following the description, indicate General Engineer responsibility for the part.

d. *Unit of Issue.* If no abbreviation is shown in this column, the unit of issue is "each".

e. *Quantity Authorized.* This column lists the quantities of repair parts, accessories, tools, or publications authorized for issue to the equipment operator or crew as required.

j. *Quantity Issued with Equipment.* This column lists the quantities of repair parts, accessories, tools, or publications that are initially issued with each item of equipment. Those indicated by all asterisk are to be requisitioned through normal supply channels as required.

g. *Illustrations.* This column is subdivided into two columns which provide the following information:

(1) *Figure number.* Provides the identifying number of the illustration.

(2) *Item number.* Provides the referenced number for the parts shown in the illustration.

3. Explanation of Columns Contained in Section III

a. Item. This column contains numerical sequenced item numbers, assigned to each component application, to facilitate reference.

b, Component Application. This **column identifies** the component application of each maintenance or operating supply item.

c, *Source of Supply.* This column lists the basic number of the technical service assigned supply responsibility for the item. Blank spaces denote Corps of Engineers supply responsibility.

d. Federal Stock Number. The Federal stock number will be shown in this column and will be used for requisitioning purposes.

e. *Description.* The item name and a brief description are shown.

j. *Quantity Required for Initial Operation.* This column lists the quantity of each maintenance or operating supply item required for initial operation of the equipment.

g. *Quantity Required for 8 Hours Operation.* Quantities listed represent the estimated requirements for an average 8 hours of operation.

h. Notes, This column contains informative notes keyed to data appearing in the preceding columns.

4. Comments and Suggestions

Suggestions and recommendations for changes to the basic issue items list will be submitted on DA Form 2028 to the Commanding Officer, U. S. Army Mobility Support Center, ATTN: SMOMS-MM, P.O. Box 119, Columbus, Ohio 43216. Direct communication is authorized.

Section II. BASIC ISSUE ITEMS LIST

Source codes				Federal stock No.	Description	Unit of issue	Expendability	Quantity authorized	Quantity issued with equipment	Illustration	
Technical service	Source	Maintenance	Recoverability							Fig.	Item
					GROUP 26—ACCESSORIES PUBLICATIONS, TEST EQUIPMENT AND TOOLS						
					2602—ACCESSORIES						
10	P	O	------	7520-559-9618	CASE, MAINTENANCE AND OPERATIONAL MANUALS: cotton duck, water-repellent and mildew-resistant. (GE)	------	------	1	*		
	P1	O	------	5975-642-8937	ROD, GROUND: 9 ft lg, 5/8 in. dia, cone point 3 sections. (GE)	------	------	1	*		

Technical service	Source codes: Source	Source codes: Maintenance	Source codes: Recoverability	Federal stock NO.	Description	Unit of issue	Expendability	Quantity authorized	Quantity issuing with Equipment	Illustration: Fig	Illustration: Item
	P1	O		5970-243-586	CLAMP, ELECTRICAL: ½ to 1 in id. (GE)			1	*		
	M	O			WIRE, ELECTRICAL						
	P	O		6145-189-669(	Manufacture from: WIRE, ELECTRICAL: NO. 6 AWG (10 ft required). (GE)	Ft	..	10	*		
					2603—COMMON TOOLS						
10	P	O		5120-264-3796	WRENCH, ADJUSTABLE: single head, O to 1 5/8 in. jaw opening, 12 in. lg.	.....	..	1	*		
10	P	O	—	5120-293-3169	SCREWDRIVER: flat tip, 5/16 in. W, 6 in. lg blade.		....	1	*		
10	p	O	..	5120-223-7396	PLIERS, SLIP JOINT: straight nose, combination w/cutter 6 in.	...	....	1	*		
					2605—PUBLICATIONS						
12	...	-	-	----- -----	DEPARTMENT OF THE ARMY OPERATOR ORGANIZATIONAL MAINTENANCE MANUAL TM 5-4940-200-12.	...	.....	2	2		
12		....			DEPARTMENT OF THE ARMY LUBRICATION ORDER LO 5-4940-200-12.		....	2	2		
12	...		...	-----	DEPARTMENT OF THE ARMY ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOL LISTS TM 5-4940-200-20P.		....	2	2		
12					DEPARTMENT OF THE ARMY TECHNICAL MANUAL TM 9-9030-3.	....	.... ..	2	2		
12	....		....	....	DEPARTMENT OF THE ARMY TECHNICAL MANUAL TM 9-9015-1.	....	.... ..	2	2		
12	....	....	....	....	DEPARTMENT OF THE ARMY TECHNICAL MANUAL TM 9-8030.	.....	.... ..	2	2		
12	.....	.....	....	....	DEPARTMENT OF THE ARMY LUBRICATION ORDER LO 9-8030.	.....	.....	2	2		
					GROUP 76—FIRE FIGHTING EQUIPMENT						
					7603-FIRE EXTINGUISHERS						
	P1	O	....	4210-893-1092	EXTINGUISHER, FIRE DRY CHEMICAL: charged hand; class 4-B, with universal bracket, 2½ lb. (GE)	.....	.... .	1	1		

Section Ill. MAINTENANCE AND OPERATING SUPPLIES

Item	Component application	Source of supply	Federnal stock No.	Description	Quantity required for initial operation	Quantity required for 8 hours operation	Notes
1	0101 CRANKCASE (1)			OIL LUBRICATING: 5-gal pails, as follows:			(1) Includes quantity of oil to fill engine oil system as follows: Crankcase 5 qt; Oil filter 1 qt; Governor 3/32 qt; Air cleaner 1 qt
		10	9150-231-6653	Grade 9250 or	7 3/32 qt	(2)	
		10	9150-265-9435	OE-30	7 3/32 qt	(2)	
		10	9150-231-9037	Grade 9110 or	7 3/32 qt	(2)	
		10	9150-265-9428	OE-10	7 3/32 qt	(2)	
		10	9150-242-7603	OES	7 3/32 qtl	(2)	
2	0304 AIR CLEANER (2)			OIL, LUBRICATING (3).			(2) See current LO for grade application and replenishment intervals.
3	0306 TANK	10	9130-160-1818	GASOLINE: automotive, bulk 91A,	24 gal (4)	40 gal (5)	
4	0308 GOVERNOR (3)	10		OIL, LUBRICATING (3).		(2)	(3) Use oil prescribed in item 1 above.
5	4100 GENERATOR ASSEMBLY, WELDER			GREASE, AUTOMOTIVE:			(4) Tank capacity.
		10	9150-1904904	GAA, 1 lb can			(5) Average fuel consumption is 5 gph of continuous operation.

INDEX

By Order of the Secretary of the Army:

EARLE G. WHEELER,
General, United States Army,
Chief of Staff

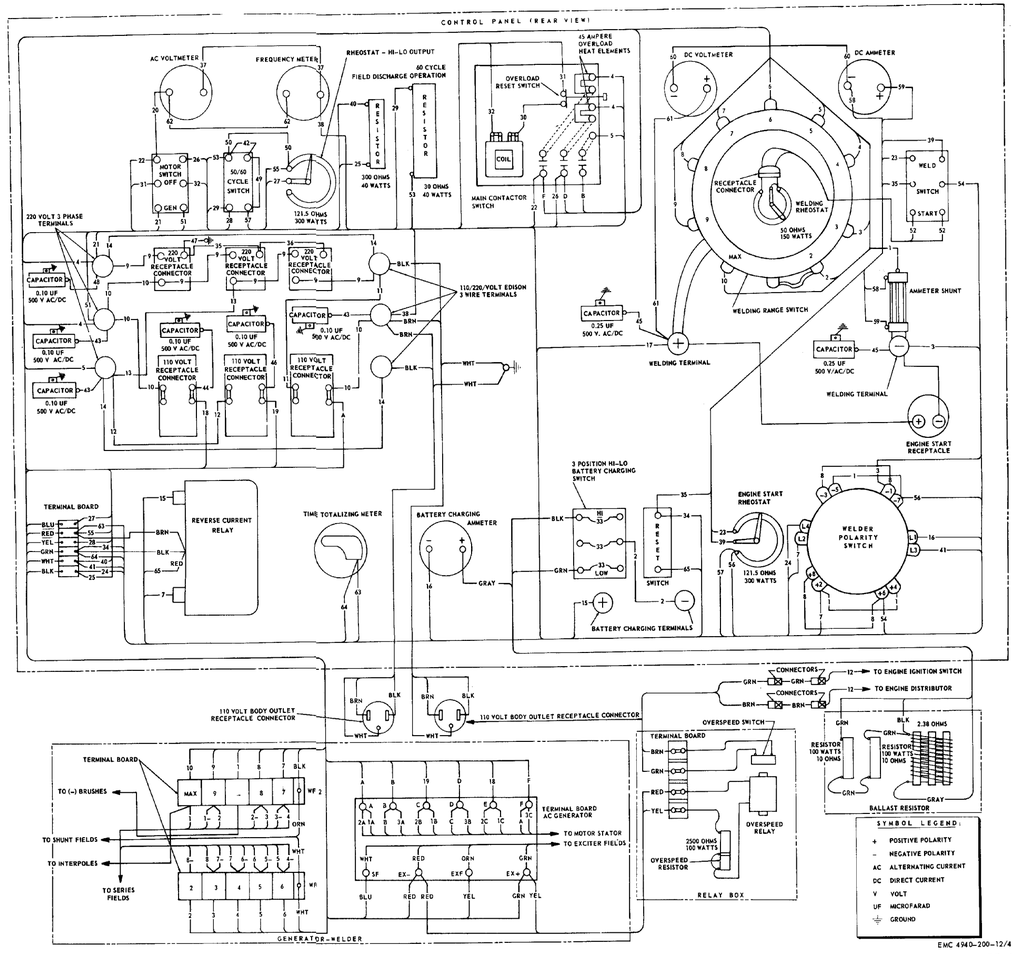
Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

Distribution:

To redistributed inaccordance with DA Form 12-32, Section II (Unclas) requirements for **REDSTONE, CORPORAL, PERSHING, NIKE-AJAX and NIKE-HERCULES—TM—Vehicles.**

☆ U.S. Government Printing Office: 1963-700502



EMC 4940-200-12/4

Figure 4. Wiring diagram, Model SECM.

FIGURE 4

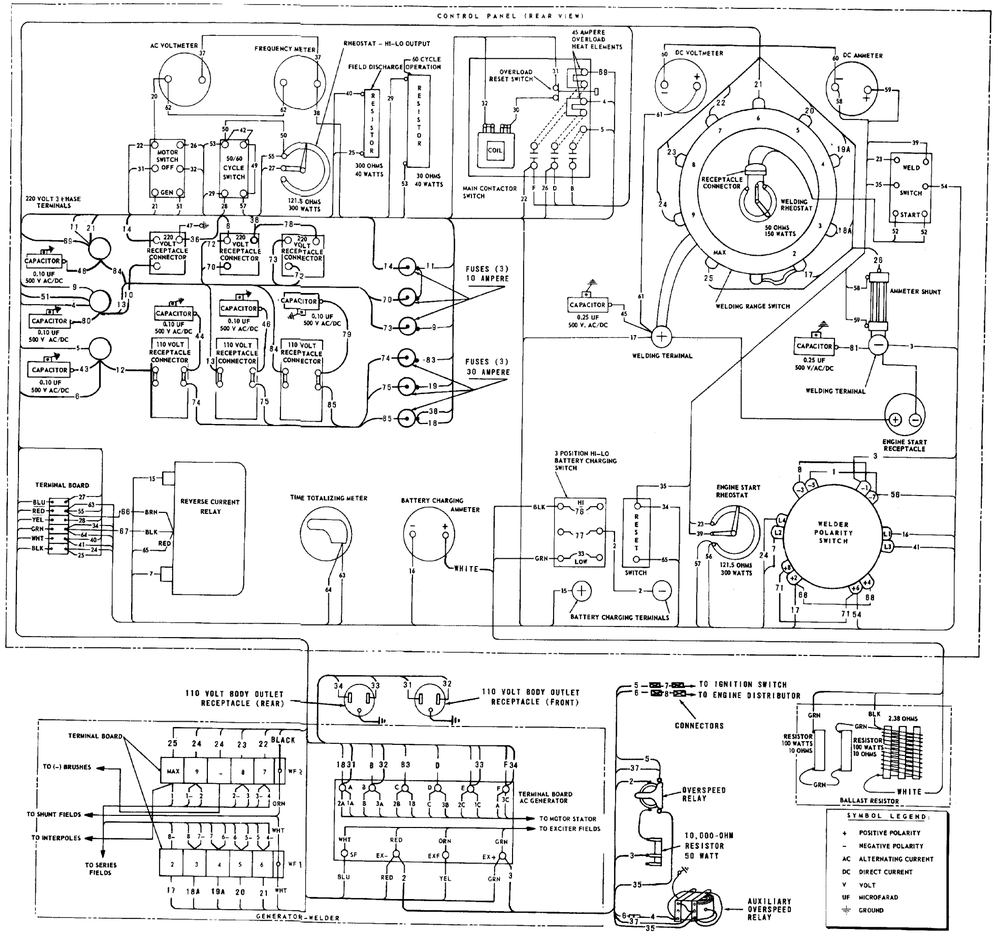


Figure 5. Wiring diagram, Model CMU-6.

MSC 4940-200-12/5

FIGURE 5

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = . 39 inch
1 decimenter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = . 15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigrams = . 035 ounce
1 dekagram = 10 grams = . 35 ounce
1 hectogram = 10 dekagrams = 3.52 ounces
1 kilogram = 10 hectograms = 2.2 pounds
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliters = . 34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. ounces
1 liter = 10 deciliters = 38.82 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. decimenter = 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	*To*	*Multiply by*	*To change*	*To*	*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	1.365	metric tons	short tons	1 102
pound-inches	newton-meters	.11375			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

PIN: 005971-000