



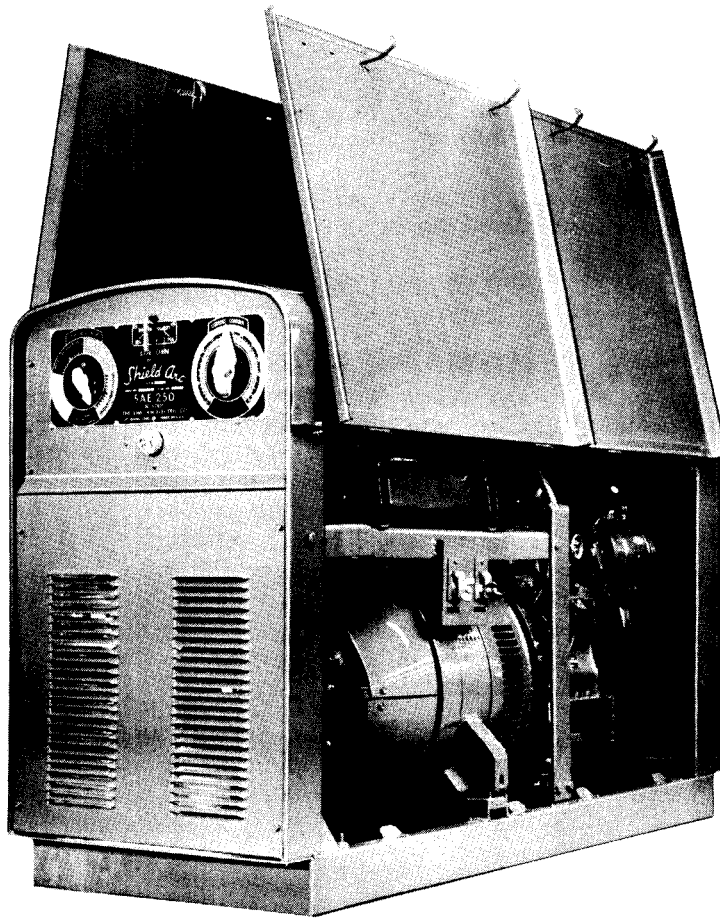
IM-204

IM204
Shield Arc SAE-250 Diesel
May, 1956
2847; 2957; 2963; 3143

PARTS LIST

Shield Arc SAE-250 Ampere Welder Powered by The Hercules DIX-4 D Diesel Engine

This manual covers equipment which is obsolete and no longer in production by The Lincoln Electric Co. Specifications and availability of optional features may have changed.



Type S-9660

THE LINCOLN ELECTRIC COMPANY

The World's Largest Manufacturer of Arc Welding Equipment

Cleveland 17, Ohio

PARTS LIST

for Shield Arc SAE-250 Ampere Welder Powered by The Hercules DIX-4D Diesel Engine

The following pages note the parts furnished by the Lincoln Electric Company for Model SAE-250 Engine Driven Welder, Type S-9660 driven by Hercules DIX-4D Engine. These include the generator parts and the engine parts furnished by Lincoln and which are not in the Hercules Parts List.

SERVICE

The Lincoln Electric Company has Authorized Field Service Shops in all industrial centers in the United States, Canada, Cuba and Hawaii. These shops stock GENUINE Lincoln Replacement Parts and have factory trained men to service your welder. They also offer Preventive Service and Welder Rental to "Keep Them Welding". The Lincoln FSS Exchange Plans, extended only through the FSS, give you factory built and guaranteed STATORS, ARMATURES and other parts at material savings over rewinding.

HOW TO ORDER REPLACEMENT PARTS

When referring to a particular machine, give complete generator nameplate information including the serial number, code number, size and name or model of welding machine. Order parts directly from your nearest Authorized Field Service Shop, Lincoln representative, or write the Service Department located at the factory in Cleveland. The Lincoln Service Directory which lists geographically all Authorized Field Service Shops is available on request.

Hercules Engine Parts with Lincoln Electric Part Numbers (those which are preceded by the letters (L, M, S, or T) are stocked and furnished by the Lincoln Electric Company and Lincoln Authorized Field Service Shops.

Other Hercules Engine Parts are available at Lincoln Field Service Shops, Hercules Motors Corporation of Canton, Ohio or their Authorized Distributors. Be sure to give serial number of Engine when ordering.

--BUY ONLY GENUINE LINCOLN REPLACEMENT PARTS--

REMANUFACTURING

After your welder has provided many years of trouble-free service, Lincoln provides a remanufacturing service whereby a welder may be returned to the factory and completely rebuilt. The unit is completely disassembled and rebuilt so that all important electrical and mechanical parts are returned to original new-welder performance standards, new parts being used wherever necessary.

"Lincolnditioning", as this service is called, enables you to choose the time when you want your welders to be overhauled. It avoids breakdowns and costly waiting for replacement or repair on the job.

A new welder guarantee is issued with each remanufactured welder. This assures you that you will receive another full service life from your welder at less than half the cost of a new unit. Contact your nearest Lincoln welding engineer for full details.

GUARANTEE

The Lincoln Electric Company, the Seller, warrants all new equipment except engines and accessories thereof against defects in workmanship and material for a period of one year from date of shipment, provided the equipment has been properly cared for, and operated under normal conditions. Engines and engine accessories are warranted free from defects for a period of ninety days from the date of shipment.

If the Buyer gives the Seller written notice of any defects in equipment or electrode within any period of warranty and the Seller's inspection confirms the existence of such defects, then the Seller shall correct the defect or defects at its option, either by repair or replacement F. O. B. its own factory or other place designated by the Seller.

No expense, liability or responsibility will be assumed by the Seller for repairs made outside of the Seller's factory without written authority from the Seller.

The Seller shall not be liable for any consequential damages in case of any failure to meet the conditions of any warranty. The liability of the Seller arising out of the supplying of said equipment or electrode or its use by the Buyer, whether on warranties or otherwise, shall not in any case exceed the cost of correcting defects in the equipment or replacing defective electrode in accordance with the above guarantee. Upon the expiration of any period of warranty, all such liability shall terminate.

The foregoing guarantees and remedies are exclusive and there are no other guarantees or warranties either expressed or implied.

PARTS LIST PROCEDURE

The following pages contain a complete description and identification of the various parts contained in units described in this manual. This description includes:

1. List of accessories available.
2. Code table index where the code number of your unit is listed. Each time a welder is modified so that parts are not interchangeable, the code number is changed. Consequently, to make certain that you get the proper part for your machine, you must give us the code number of your machine. The code table index gives the key whereby the proper column on the parts list is designated. The code table index also lists diagrams, coils, etc. which are not listed on the individual parts lists.
3. Photographs and drawings of the various sections of the unit with numbered arrows pointing to the specific parts.
4. Parts lists for each photograph and drawing which completely describes the parts and provides specific part number information.

To properly use this parts list section to best advantage:

- Procedure
1. Look up the code number, serial number and model of your welder. (If engine part, list engine serial number also.)
 2. Select the proper photograph or drawing where the part or parts involved appear.
 3. Select the numbered arrow which points to the part or parts involved.
 4. Look under Figure to find parts list specified for figure.
 5. Look in the code table index on page 3 to find which column in the parts list to read for the code number of your welder. (Assume you have code number 2957.)
 6. Look on the proper list under the number picked in Step 3 above and look across to the column found in Step 5.
 7. The items marked with X's in this column indicate use of the part listed. Those items marked by dots in this column do not use this part.
 8. When ordering part you have selected, specify:
 - a. Code number, serial number and name or model of the unit, all found on the unit's nameplate.
 - b. Part number and name of part you are ordering and number required.

Example

On nameplate.

Roof, Figure 1,
Page 4.
Arrow #6.

Parts List I, Page 4.
Column B

Item 6, Column B.

L-3099-4 is used.
L-3099-2 is not used.

Order:
One L-3099-4 Roof
for SAE-250 Hercules
Diesel Engine Welder
Serial No. 82512
Code No. 3143

ACCESSORIES										P-13-A																					
SAE - 250 Hercules Diesel Engine Welder										USE ONLY PARTS MARKED "X" IN COLUMNS BELOW UNDER LETTER CALLED FOR IN CODE TABLE INDEX																					
ITEM	PART NAME AND DESCRIPTION			PART No.	REQ'D.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
	Electrode Lead 35 Ft. Long #0			L-1343-30																											
	Ground Lead 30 Ft. Long #0			L-1343-13																											
	"INS" Electrode Holder			M-6327																											
	"GC-500" Ground Clamp			M-6552																											
	"LPH-2" Headshield			L-2673																											
	Non-Spatter Clear Lens			E-880																											
	#10 LSV Welding Lens			S-8623-10-S																											
	4 Wheel Undercarriage With Brakes - 15 PB			L-2315-66																											
	4 Wheel Undercarriage Without Brakes - 15 P			L-2315-67																											

CODE TABLE INDEX FOR PARTS LISTS, COILS, DIAGRAMS, ETC.										P-13-B																				
SAE - 250 HERCULES DIESEL ENGINE WELDER										LETTERS BELOW INDICATE PROPER PARTS LIST COLUMN TO USE FOR INDIVIDUAL UNIT'S CODE NUMBER.																				
CODE NUMBER	ARMATURE COIL	SERIES FIELD COIL	SHUNT FIELD COIL	EXCITER FIELD COIL SET	EXCITER ARMATURE COIL	EXCITER WIRING DIAGRAM	GENERATOR INTERNAL DIAGRAM	CONTROL WIRING DIAGRAM	IGNITION WIRING DIAGRAM	INTERPOLE COIL	PARTS LISTS																			
											I	II	III	IV	V	VI	VII	VIII	IX											
2847	37 4C	FKM-120	FKM-5E	FKM-5E	24 23	E-276-C	N-8348	L-2333-10	T-10617	S-10276-1	A	A	A	A	A	A	A	A	X	X										
2957	37 4C	FKM-120	FKM-5E	FKM-5E	24 23	E-276-C	N-8348	L-2333-10	T-10615	S-10276-1	B	A	A	B	A	A	A	A	X	X										
2963	37 3D	FKM-120	FKM-5E	FKM-5E	24 23	E-276-C	N-8348	L-2333-10	T-10615	S-10276-1	B	A	A	B	A	A	A	A	X	X										
3143	37 3D	FKM-120	FKM-5E	FKM-5E	24 23	E-276-C	N-8348	L-2333-10	T-10615	S-10276-1	C	A	A	B	A	A	A	A	X	X										

EXTERIOR-RADIATOR END

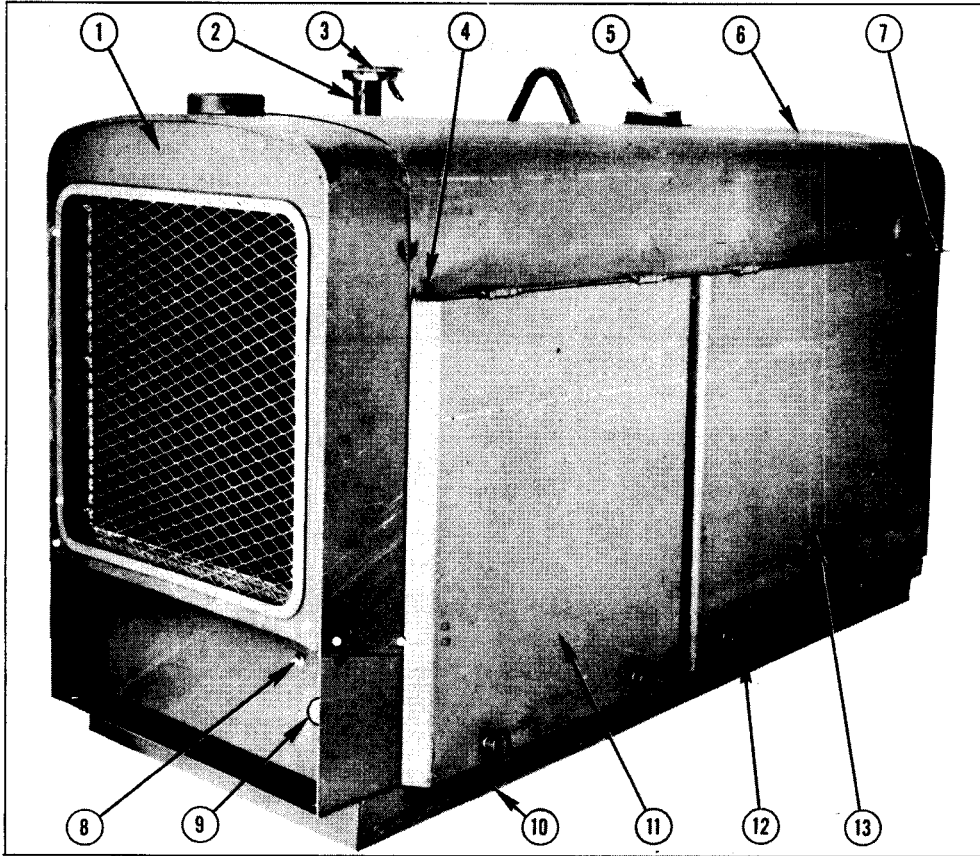


Figure 1

PARTS LIST 1 FOR FIG. 1 SHOWN ABOVE					P-13-C																									
EXTERIOR-RADIATOR END																														
SAE - 250 Hercules Diesel Engine Welder					USE ONLY PARTS MARKED "X" IN COLUMNS BELOW UNDER LETTER CALLED FOR IN CODE TABLE INDEX																									
ITEM	PART NAME AND DESCRIPTION	PART No.	REQ'D.		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	Radiator, Shell, and Screen Assembly	See Parts List IX	1		X	X	X																							
	Thread Cutting Screw-Radiator Assembly Mounting	S-9225-8	6		X	X	X																							
2	Exhaust Pipe	S-9893-2	1		X	X																								
	Clamp-Exhaust Pipe	S-10352	1		X	X																								
3	Rain Cap-Exhaust Pipe	S-10271	1		X	X	X																							
4	Short Roof Hook-Front	T-8818	2		X	X	X																							
	Lockwasher-Front Roof Hook	E-106-A-3	2		X	X	X																							
	Hex Nut-Front Roof Hook	5/16-18	2		X	X	X																							
5	Cap-Gas Tank	S-10149	1		X	X	X																							
	Collar-Gas Tank Neck	S-10437-A	1		X	X	X																							
6	Roof	L-3099-2	1		X	X																								
6	Roof	L-3099-4	1				X																							
7	Mounting Angle-Roof Rear	T-9428	2		X	X	X																							
	Hex Head Cap Screw-Rear Roof Mounting	5/16-18 x 3/4	2		X	X	X																							
	Lockwasher-Rear Roof Mounting	E-106-A-3	2		X	X	X																							
8	Starter Button	T-10481	1			X	X																							
9	Ammeter	S-7514	1		X	X	X																							
10	Base Assembly	L-3113	1		X	X	X																							
11	Door-Front	M-7535-E	2		X	X	X																							
12	Door Hook	S-8929-1	8		X	X	X																							
	Spring-Door Hook	T-9721-1	8		X	X	X																							
	Cotter Pin-Door Hook	T-10123-1	8		X	X	X																							
13	Door-Rear	M-7535-D	2		X	X	X																							
	Lincoln Decal	M-5249-1	2		X	X	X																							

EXTERIOR-CONTROL END

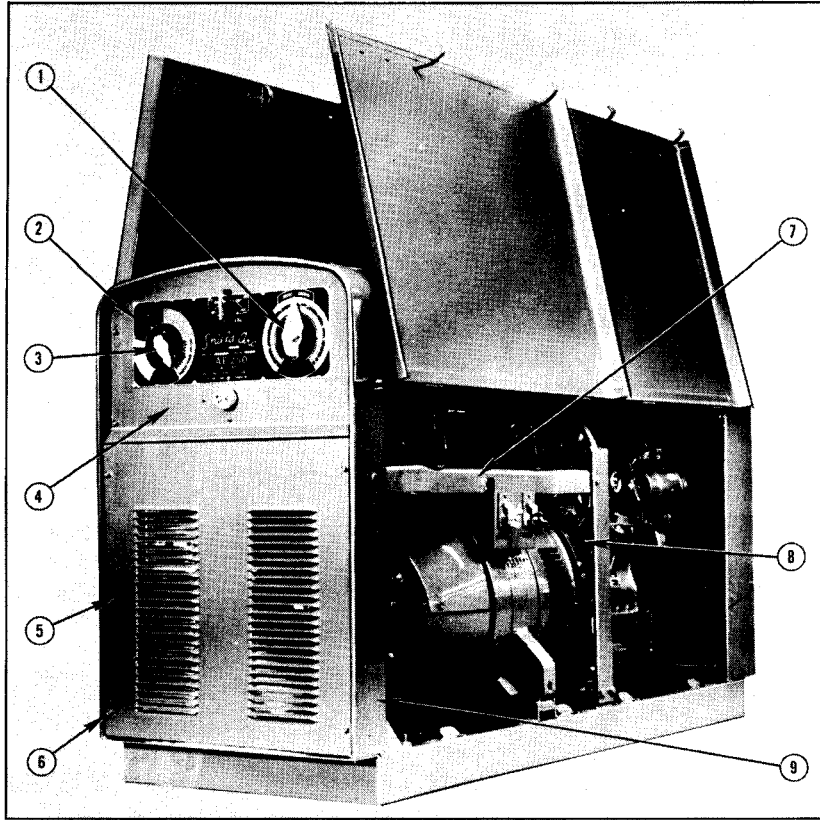


Figure 2

PARTS LIST II FOR FIG. II SHOWN ABOVE					P-13-D																									
EXTERIOR-CONTROL END					USE ONLY PARTS MARKED "X" IN COLUMNS BELOW																									
SAE - 250 Hercules Diesel Engine Welder					UNDER LETTER CALLED FOR IN CODE TABLE INDEX																									
ITEM	PART NAME AND DESCRIPTION	PART No.	REQ'D.		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	Reactor Handle	M-6869-1	1	X																										
	Set Screw, Hollow Half Dog Point-Handle Mounting	1/4-20 x 3/8	1	X																										
2	Nameplate	L-3143	1	X																										
	Self Tapping Screw-Nameplate Mounting	S-8025-37	8	X																										
3	Rheostat Handle	S-8158	1	X																										
	Set Screw, Hollow Cup Point-Handle Mounting	#10-24 x 3/16	1	X																										
4	Control Panel Assembly	See Parts List V	1	X																										
5	Rear Lower Panel	M-8250	1	X																										
6	Thread Cutting Screw-Panel Mountings	S-9225-8	8	X																										
7	Side Rail Assembly Includes:	L-3206-A	1	X																										
	Side Rail Welded Assembly	M-8264-2	1	X																										
	Insulation	T-10089	2	X																										
	Self Tapping Screw-Insulation Mounting	S-8025-3	2	X																										
	Connection Strap	T-8141	2	X																										
	"Electrode" Marker	T-3961	1	X																										
	"To Work" Marker	T-3862	1	X																										
	Hollow Rivet-Marker Mountings	T-8573	4	X																										
	Stud Assembly Includes:	T-8061	2	X																										
	Stud	T-6931-2	2	X																										
	Insulating Bushing	T-4122	2	X																										
	Insulating Washer	T-2719	2	X																										
	Plain Washer	S-9262-1	4	X																										
	Lockwasher	E-106-A-5	2	X																										
	Hex Jam Nut	1/2-13	2	X																										
	Wing Nut	T-3960	2	X																										
	Hex Head Cap Screw-Lead Connections	1/2-13 x 1	2	X																										
	Lockwasher-Lead Connections	E-106-A-5	2	X																										
	Hex Nut-Lead Connections	1/2-13	2	X																										
8	Rear End Plate-Engine to Welder	G-1028	1	X																										
9	Rear Upright	M-8237	1	X																										

INTERIOR-OUTPUT TERMINALS SIDE

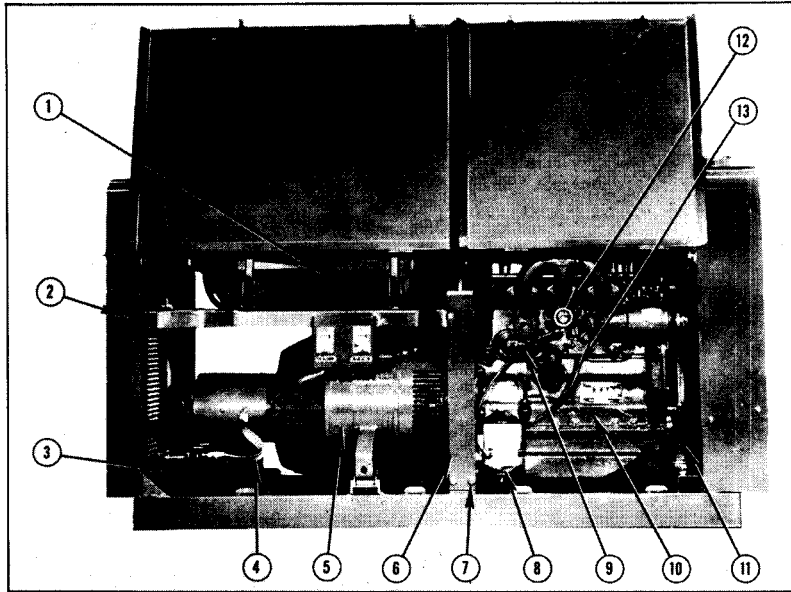


Figure 3

PARTS LIST III FOR FIG. III SHOWN ABOVE					P-13-E																									
INTERIOR-OUTPUT TERMINALS SIDE					USE ONLY PARTS MARKED "X" IN COLUMNS BELOW UNDER LETTER CALLED FOR IN CODE TABLE INDEX																									
SAE - 250 Hercules Diesel Engine Welder																														
ITEM	PART NAME AND DESCRIPTION	PART No.	REQ'D.		A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z		
1	Fuel Tank	L-2643-G-1	1	x																										
	Square Head Cap Screw-Tank Mounting	3/8-16 x 1	4	x																										
	Plain Washer	S-9262-4	4	x																										
	Lockwasher	E-106-A-4	4	x																										
	Square Nut	3/8-16	4	x																										
	Cable Clip	T-10696	2	x																										
2	Hex Head Cap Screw-Rail Mountings	1/2-13 x 1-1/2	4	x																										
	Plain Washer	S-9262-1	4	x																										
	Lockwasher	E-106-A-5	4	x																										
	Hex Nut	1/2-13	4	x																										
3	Battery (Export Only)	M-6583-1	2	x																										
3	Battery (Domestic Only)	M-6583-2	2	x																										
4	Ground Cable-Battery	S-8070	1	x																										
5	Welder, Complete Assembly	See Parts List VI	1	x																										
6	Lift Bale Welded Assembly	M-8293	1	x																										
	Seal-Lift Bale at Roof	T-9129-1	1	x																										
7	Hex Head Cap Screw-Lift Bale to Base	1/2-13 x 1-1/2	4	x																										
	Plain Washer	S-9262-1	4	x																										
	Lockwasher	E-106-A-5	4	x																										
	Hex Nut	1/2-13	4	x																										
8	Oil Filter	M-6980	1	x																										
	Hex Head Cap Screw-Filter Mounting	5/16-18 x 3/4	2	x																										
	Plain Washer	T-1093	2	x																										
	Lockwasher	E-106-A-3	2	x																										
9	Oil Line	S-8132-8	1	x																										
	Flare Ell	T-9134	1	x																										
	Street Ell	T-9958	1	x																										
10	Diesel Engine, Complete Assembly (For Separate Engine Parts See Hercules Parts Manual)	DIX-4D HERCULES DIX-4D	1 x	x																										
11	Front Engine Support	S-10165	2	x																										
	Hex Head Cap Screw-Support to Engine	1/2-13 x 1-1/4	4	x																										
	Lockstrip-Support to Engine	T-10756	2	x																										
	Hex Head Cap Screw-Engine Support to Base	1/2-13 x 2-1/4	2	x																										
	Plain Washer	S-9262-1	2	x																										
	Rubber Washer	T-8822	2	x																										
	Rubber Spacer	T-8823	2	x																										
	Huglock Nut	T-9187-4	2	x																										
12	Oil Gage	S-8163	1	x																										
13	Oil Line	S-8132-9	1	x																										
	Flare Ell	T-9134	1	x																										

INTERIOR-FUEL SYSTEM SIDE

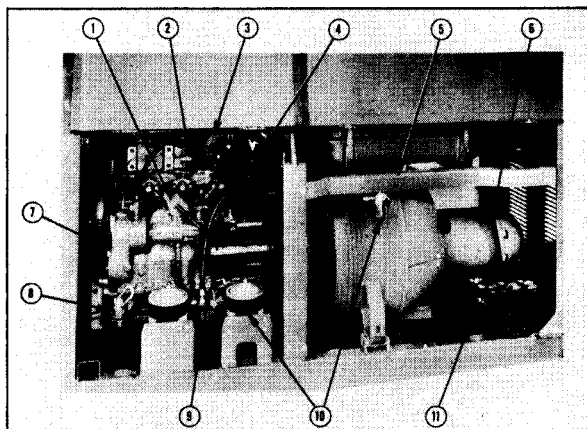


Figure 4

PARTS LIST IV FOR FIG. IV SHOWN ABOVE					P-13-F																									
INTERIOR-FUEL SYSTEM SIDE																														
SAE - 250 Hercules Diesel Engine Welder					USE ONLY PARTS MARKED "X" IN COLUMNS BELOW UNDER LETTER CALLED FOR IN CODE TABLE INDEX																									
ITEM	PART NAME AND DESCRIPTION	PART No.	REQ'D.		A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z	
1	Pump Lever Assembly Includes:	S-10573	1		X	X																								
	Plate	S-10550	1		X	X																								
	Spring-Connects Idle Lever to Starter	S-10376	1		X	X																								
	Operating Lever Pin	T-10802	1		X	X																								
	Bushing-Brass	T-10804	1		X	X																								
	Bushing-Brass	T-10680	1		X	X																								
	Socket Head Cap Screw-Shut-Off Handle	#8-32 x 1-1/2	1		X	X																								
	Hex Nut-Shut-Off Handle	#8-32	1		X	X																								
	Spring-Shut-Off Handle to Fuel Injector	T-9284	2		X	X																								
2	Air Inlet Flange	S-10092	1		X																									
	Air Inlet Flange	S-10476	1			X																								
	Oil Cup-Air Inlet Flange	T-10492	1		X																									
	Hex Head Cap Screw-Flange Mounting	7/16-14 x 1	2		X	X																								
	Lockwasher-Flange Mounting	E-106-A-4	2		X	X																								
3	Air Cleaner Hose	S-10703	1		X	X																								
	Clamp-Hose	T-8629	2		X	X																								
4	Air Cleaner	M-8437	1		X	X																								
	Hex Head Cap Screw-Cleaner Mounting	1/4-20 x 3/4	2		X	X																								
	Lockwasher	E-106-A-2	2		X	X																								
	Hex Nut	1/4-20	2		X	X																								
5	Side Rail	M-8263-2	1		X	X																								
	Hex Head Cap Screw-Rail Mounting	1/2-13 x 1-1/2	2		X	X																								
	Plain Washer	S-9262-1	2		X	X																								
	Lockwasher	E-106-A-5	2		X	X																								
	Hex Nut	1/2-13	2		X	X																								
6	Starter Cable-Battery	S-5936-D	1		X	X																								
	Square Head Bolt-Cable Mounting	5/16-18 x 1-1/4	2		X	X																								
	Hex Nut-Cable Mounting	5/16-18	1		X	X																								
	Jumper Cable-Battery	S-6190-E	1		X	X																								
7	Square Head Bolt-Cable Mounting	5/16-18 x 1-3/4	2		X	X																								
	Hex Nut-Cable Mounting	5/16-18	2		X	X																								
8	Lower Hose	S-10194	1		X	X																								
	Clamp-Hose	T-8633	2		X	X																								
9	Starting Aid Bracket	S-10474	1		X																									
	Pressure Primer	S-10475	1		X																									
	Nozzle Assembly	T-10758	1		X																									
	Male Connector Assembly	T-10759	2		X																									
	Rubber Washer	T-10760	1		X																									
	Seamless Tubing	T-10777	1		X																									
9	Lead Clip-Mounted With Pan Screws	T-9402	2		X																									
10	Fuel System, Complete	See Parts List VIII	1		X	X																								
11	Clamp Bracket-Battery	M-8223	2		X	X																								
	Hook-Battery Clamp	T-8813-3	4		X	X																								
	Hex Nut-Battery Clamp	5/16-18	4		X	X																								
	Top Hose	S-10193	1		X	X																								
	Clamp-Hose to Radiator	T-8633	1		X	X																								
	Clamp-Hose to Block	T-8917	1		X	X																								
	Starter Lever Assembly	S-10382	1		X																									
	Socket Head Cap Screw	3/8-16 x 5/8	2		X																									

CONTROL-PANEL

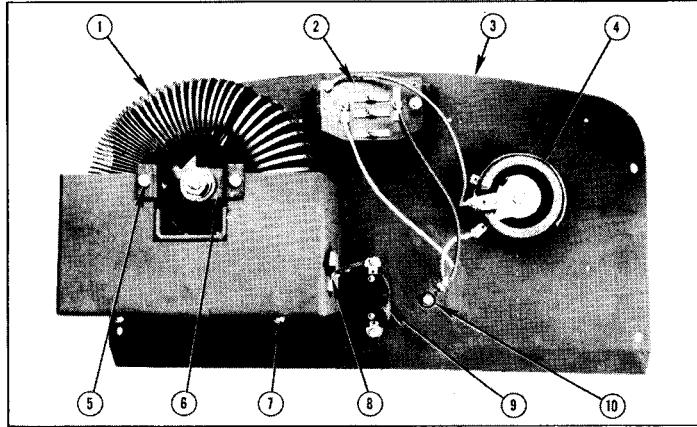


Figure 5

PARTS LIST V FOR FIG. V SHOWN ABOVE				P-13-G																									
CONTROL-PANEL																													
SAE - 250 Hercules Diesel Engine Welder				USE ONLY PARTS MARKED "X" IN COLUMNS BELOW UNDER LETTER CALLED FOR IN CODE TABLE INDEX																									
ITEM	PART NAME AND DESCRIPTION	PART No.	REQ'D.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z		
	Control Panel, Complete Assembly	L-3171	1	x																									
1	Reactor Coil	L-3139	1	x																									
	Reactor Brush Holder Assembly	M-6277	1	x																									
	Spring Clip-Reactor	S-7297	1	x																									
	Spring-Reactor	T-8236	1	x																									
	Washer-Reactor	T-6367	1	x																									
2	Reversing Switch Assembly Includes:	M-7057	1	x																									
	Contact Panel	S-8209	1	x																									
	Moving Contact	S-8210	1	x																									
	Switch Shaft	S-8211	1	x																									
	Spring	T-8278	1	x																									
	Round Head Cap Screw	#10-24 x 1-1/4	2	x																									
	Plain Washer	T-1094	4	x																									
	Spacer	T-8189	2	x																									
	Lockwasher	E-106-A-1	2	x																									
	Hex Nut	#10-24	2	x																									
	Self Tapping Screw-Switch Mounting	S-8025-13	2	x																									
3	Panel	M-8257	1	x																									
4	Rheostat	M-5090-C	1	x																									
	Round Head Cap Screw-Rheostat Mounting	#10-24 x 1/4	2	x																									
	Round Head Cap Screw, Brass-Rheostat Lead																												
	Connection	#8-32 x 1/2	2	x																									
	Lockwasher	T-9695-3	4	x																									
	Hex Nut, Brass	#8-32	4	x																									
5	Self Tapping Screw-B.H. Bracket Mounting	S-8025-17	2	x																									
6	Brush Holder Bracket Assembly Includes:	T-7852	1	x																									
	Fiber Bushing	T-5411	1	x																									
	Insulating Washer	T-2719	2	x																									
	Plain Washer	S-9262-1	1	x																									
	Lockwasher	E-106-A-5	1	x																									
	Hex Jam Nut	T-10114	1	x																									
	Plain Washer	T-8485	1	x																									
	Bracket Welded Assembly	T-7850	1	x																									
7	Kantlink Round Head Cap Screw-Reactor Mounting	T-10107-2	4	x																									
8	Reactor Lead Insulation	T-10576	1	x																									
	Lead Clip	T-9053	1	x																									
	Self Tapping Screw-Insulation Mounting	S-8025-22	2	x																									
	Hex Head Cap Screw-Reactor Lead Connection	1/2-13 x 1	1	x																									
	Lockwasher	E-106-A-5	1	x																									
	Hex Nut	1/2-13	1	x																									
9	Receptacle	S-10571	1	x																									
	Round Head Cap Screw-Receptacle Mounting	#10-24 x 1/2	2	x																									
	Lockwasher	E-106-A-1	2	x																									
	Hex Nut	#10-24	2	x																									
10	Resistor	T-8280	1	x																									
	Round Head Cap Screw-Resistor Mounting	#10-24 x 4-1/2	1	x																									
	Lockwasher	E-106-A-1	1	x																									
	Hex Nut	#10-24	1	x																									
	Round Head Cap Screw, Brass-Resistor Lead																												
	Connection	#8-32 x 1/2	2	x																									
	Hex Nut, Brass	#8-32	4	x																									

GENERATOR

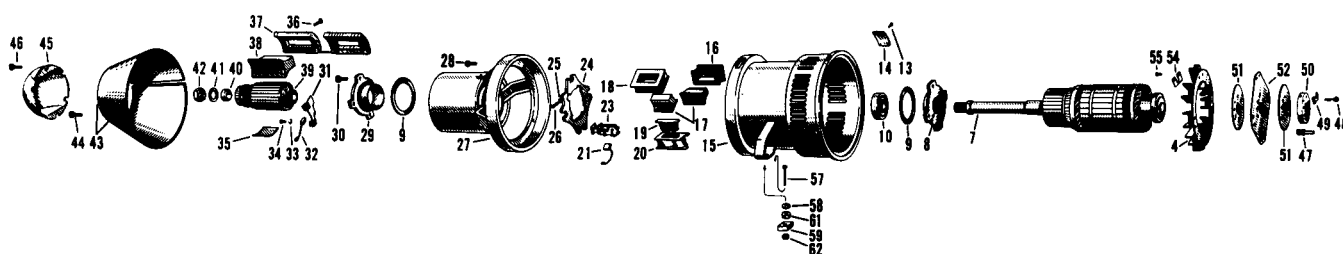


Figure 6

PARTS LIST VI FOR FIG. VI SHOWN ABOVE GENERATOR SAE - 250 Hercules Diesel Engine Welder				P-13-H USE ONLY PARTS MARKED "X" IN COLUMNS BELOW UNDER LETTER CALLED FOR IN CODE TABLE INDEX																							
ITEM	PART NAME AND DESCRIPTION	PART No.	REQ'D.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z
4	Blower Fan	M-6729	1			X																					
7	Armature Assembly Includes: Armature Coil Set	L-2667-20 See Code Table Index	1			X																					
	Shaft	M-8360	1			X																					
	Commutator	M-6985-1	1			X																					
8	Inner Dust Cap	S-7800	1			X																					
9	Gasket-Dust Cap	T-3633-1	2			X																					
10	Ball Bearing	#310	1			X																					
13	Drive Screw	S-8025-8	2			X																					
14	Name Plate	T-8293	1			X																					
15	Generator Frame	M-6528-5	1			X																					
16	Series Field Coil	See Code Table Index	2			X																					
17	Main Pole Piece	T-472	4			X																					
18	Shunt Field Coil	See Code Table Index	2			X																					
	Interpole Coil & Pole Assembly Includes:	See Code Table Index	4			X																					
19	Interpole Piece	S-10270	4			X																					
20	Interpole Piece	S-10251	4			X																					
21	Brush-Generator	See Code Table Index	4			X																					
22	Brush Holder-Generator	T-6085	4			X																					
23	Brush Holder-Generator	See Parts List VII	4			X																					
24	Rocker	S-5960	1			X																					
25	Lockwasher	E-106-A-2	1			X																					
26	Round Head Cap Screw	5/16-18 x 2	1			X																					
27	End Bracket	M-5585-1	1			X																					
28	Hex Head Cap Screw	1/2-13 x 1-3/4	4			X																					
29	Outer Dust Cap	S-7799	1			X																					
30	Hex Head Cap Screw	5/16-18 x 3-1/2	2			X																					
31	Exciter Brush Holder Assembly Includes:	S-6531-A	2			X																					
	Spring	T-6887	2			X																					
	Insulation Tube	T-8167	4			X																					
	Insulation Washer	T-7626	8			X																					
	Hex Nut	#10-24	2			X																					
	Cup Washer	T-5130	2			X																					
32	Brush-Exciter	T-6968	2			X																					
33	Plain Washer	T-1095	4			X																					
34	Thread Cutting Screw-Brush Holder Mounting	S-9225-1	4			X																					
35	Lead Shield	T-9100	1			X																					
36	Hex Head Cap Screw	5/16-18 x 1-1/4	4			X																					
37	Exciter Field Coil Set	See Code Table Index	1			X																					
38	Exciter Pole Piece	T-3980-1	2			X																					
39	Exciter Armature Assembly Includes: Exciter Armature Coil Set	M-4047 See Code Table Index	1			X																					
40	Exciter Sleeve Collar	T-5345	1			X																					
41	Exciter Washer	T-7090-1	1			X																					
42	Exciter Nut	T-6225-1	1			X																					
43	Bracket Cover	M-5583	2			X																					
44	Thread Cutting Screw	S-9225-2	6			X																					
45	Exciter Cover	L-2594	1			X																					
46	Thread Cutting Screw	S-9225-2	2			X																					
47	Stud-In Flywheel	T-8906	4			X																					
48	Screw-Disc to Hub	T-8833-2	8			X																					
49	Locking Clip-Inner	T-9450	4			X																					
50	Clamping Ring	S-7803	1			X																					
51	Disc Backing Plate	S-8042	2			X																					
52	Coupling Disc	M-6730	1			X																					
54	Locking Clip-Outer	T-9049	4			X																					
55	Screw-Disc to Flywheel	T-8833-1	8			X																					
57	Hex Head Cap Screw	1/2-13 x 2-1/4	2			X																					
58	Plain Washer	S-9262-1	2			X																					
59	Rubber Spacer	T-8823	2			X																					
61	Rubber Washer	T-8822	2			X																					
62	Hex Jam Nut	1/2-13	2			X																					
	Lead Insulation Block	T-6999	1			X																					
	Self Tapping Screw-Block Mounting	S-8025-7	4			X																					
	Hex Head Cap Screw-Generator to Engine	1/2-13 x 2-1/4	4			X																					
	Lockwasher-Generator to Engine	E-106-A-5	4			X																					
	Pipe Plug-Grease Hole	1/8 Std.	1			X																					

BRUSH HOLDER

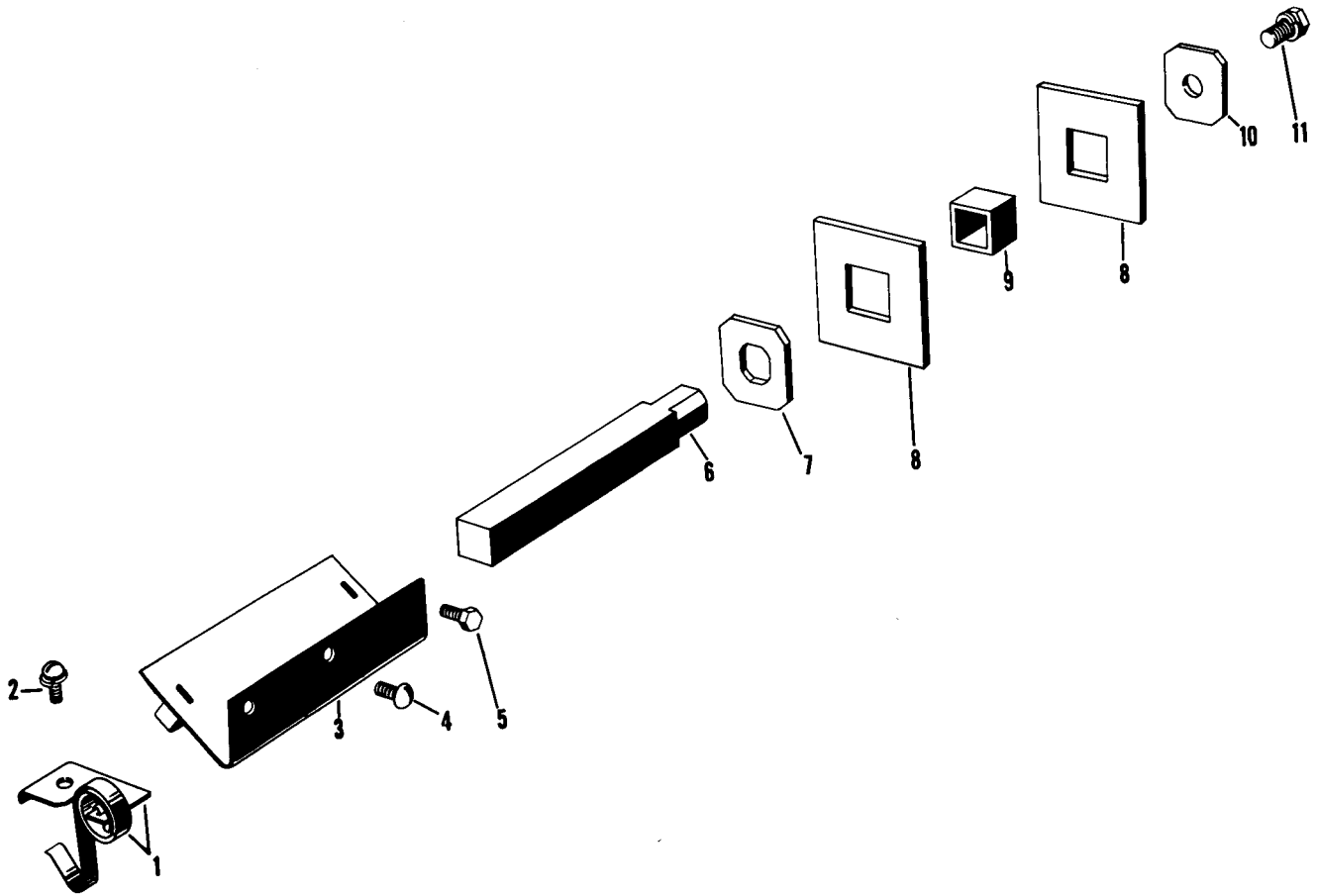
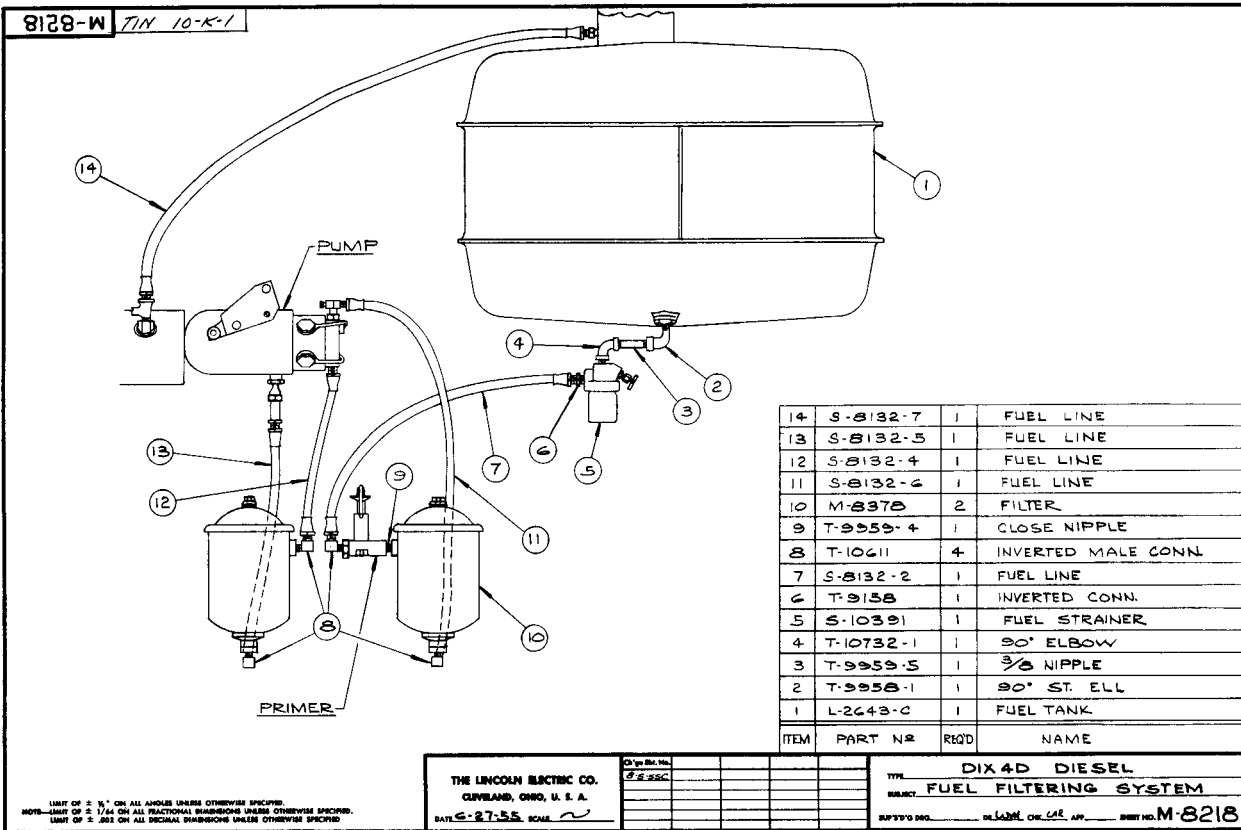


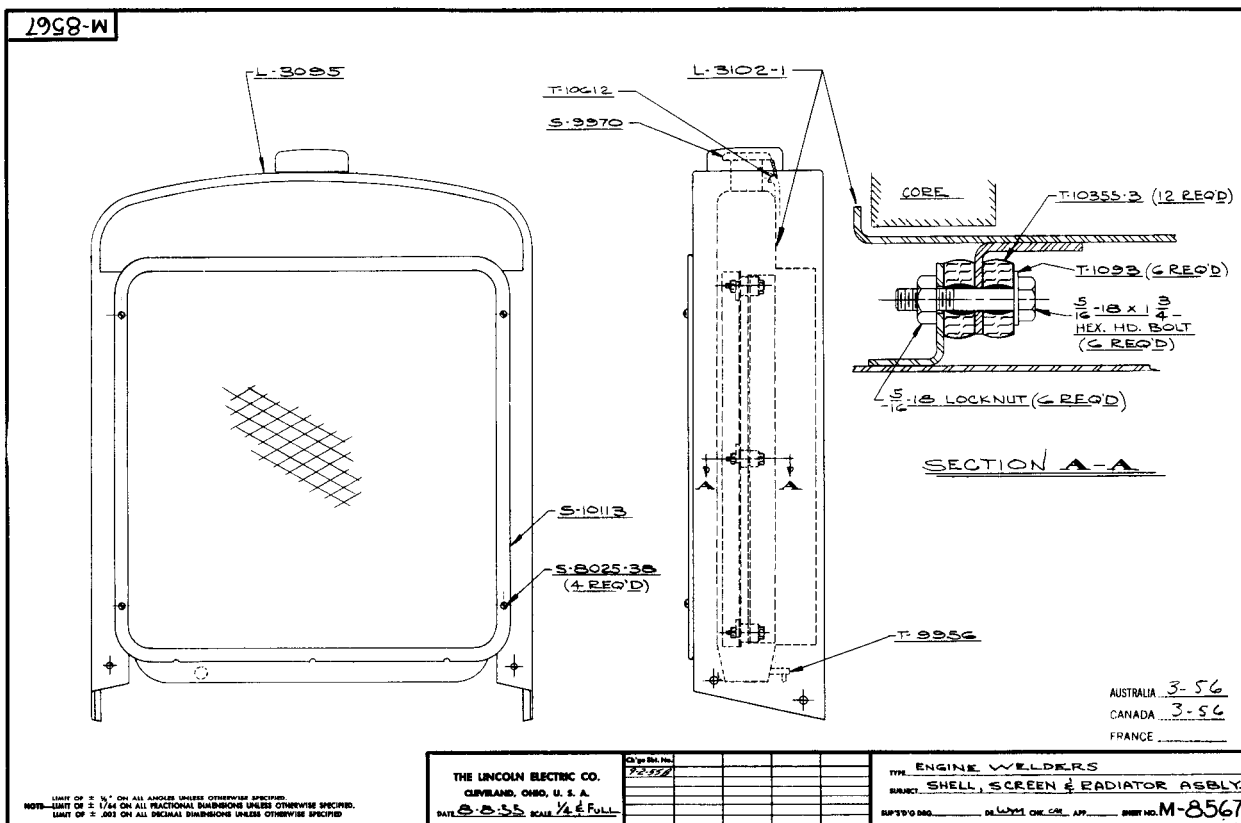
Figure 7

PARTS LIST VII FOR FIG. VII SHOWN ABOVE				P-13-J																									
BRUSH HOLDER																													
SAE - 250 Hercules Diesel Engine Welder				USE ONLY PARTS MARKED "X" IN COLUMNS BELOW UNDER LETTER CALLED FOR IN CODE TABLE INDEX																									
ITEM	PART NAME AND DESCRIPTION	PART No.	REQ'D.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X	Y	Z		
	Brush Holder Assembly Includes:	M-6964-14-A	4	x																									
1	Spring & Clip Assembly	T-8495	4	x																									
2	Round Head Cap Screw, Sems Kantlink	T-10107-1	4	x																									
3	Plate and Retainer Assembly	M-6304-4-B	4	x																									
4	Round Head Cap Screw	5/16-18 x 1/2	4	x																									
5	Hex Head Cap Screw	5/16-18 x 1/2	4	x																									
6	Stud	M-6963-3	4	x																									
7	Washer	T-9020	4	x																									
8	Insulating Washer	T-9244	8	x																									
9	Insulating Tube	T-1450	4	x																									
10	Washer	T-2414	4	x																									
11	Hex Head Cap Screw, Sems Kantlink	T-10106-1	4	x																									



PARTS LIST & FIG. VIII

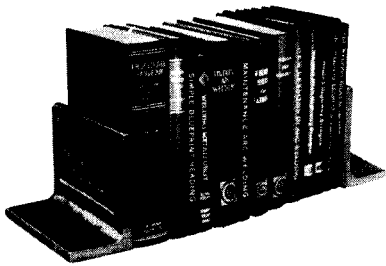
P-13-K



PARTS LIST & FIG. IX

P-13-L

LEADING BOOKS ON ARC WELDING



As a service to its users, the Lincoln Electric Company publishes the following books. Order directly from The Lincoln Electric Company, Cleveland 17, Ohio.

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Electrode and Ground Cables for use on every size welding unit.

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