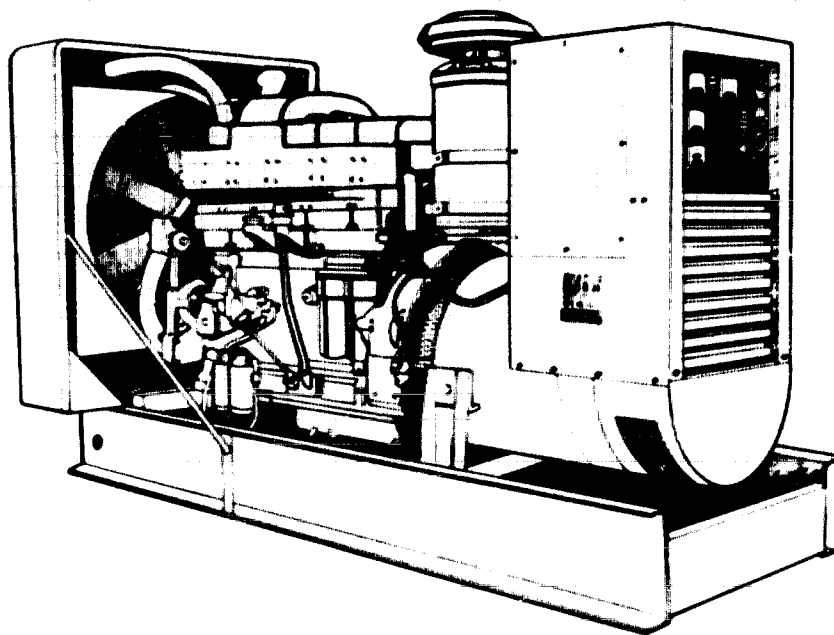


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has gaps in its page
numbers, or doesn't
have any numbers.
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leave the page
numbering in the
order that Acrobat
assigns it.

Parts Catalog

SERIES
DFS
GenSet



GENERAL INFORMATION

INSTRUCTIONS FOR ORDERING REPAIR PARTS

For parts or service, contact the dealer from whom you purchased this equipment or refer to your Nearest Authorized Onan Parts and Service Center.

To avoid errors or delay in filling your parts order, please furnish all information requested.

Always refer to the nameplate on your unit.

1. Always give the MODEL, SPEC NO. and SERIAL NO.

The diagram shows a rectangular nameplate with the Onan logo at the top. Below the logo is a large rectangular box labeled "MODEL AND SPEC NO.". Below that is a smaller rectangular box labeled "SERIAL NO.". The nameplate is shown with a tab at the bottom, indicating it can be inserted into a unit. The number "MB-1109" is printed at the bottom right of the nameplate.

For handy reference, insert "YOUR" nameplate information in the spaces above.

2. Do not order by reference number; always use part number and description.
3. Give the part number, description and quantity needed of each item. If an older part cannot be identified, return the part prepaid to your dealer or nearest Onan Parts and Service Center. Print your name and address plainly on the package. Write a letter to the same address stating the reason for returning the part.
4. State definite shipping instructions. Any claim for loss or damage to your unit in transit should be filed promptly against the transportation company making the delivery. Shipments are complete unless the packing list indicates items are back ordered.

Prices are purposely omitted from this Parts Catalog due to the confusion resulting from fluctuating costs, import duties, sales taxes, exchange rates, etc.

For current parts prices, consult your Onan Dealer, Distributor or Parts and Service Center.

"En esta lista de partes los precios se omiten de proposito, ya que bastante confusion resulto de fluctuaciones de los precios, derechos aduanales, impuestos de venta, cambios extrajeros, etc."

Consiga los precios vigentes de su distribuidor de productos "ONAN."

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This parts catalog applies to the standard generator sets listed below. Any engine parts modified or added by Onan will be listed in this catalog and have been assigned Onan part numbers for identification. These modified or added parts supersede similar parts listed in the Engine Manufacturer's manuals. The illustrations are arranged in groups of related items, and each part or assembly is identified by a reference number. All parts illustrated are typical, and unless otherwise mentioned, parts are interchangeable. These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The Right and Left generator set sides are determined by facing the front end of the engine.

DATA TABLE

MODEL AND SPEC NO. £	ELECTRICAL DATA				
	WATTS	VOLTS	HERTZ	WIRE	PHASE
300.0DFS 5DR/	300,000	120/240	60		3
300.0DFS 6DR/	300,000	240/480	60		3
300.0DFS 7R/	300,000	220/380	60		3
300.0DFS 9XR/	300,000	347/600	60		3
300.0DFS 17R/	300,000	‡	60	12	3
250.0DFS 517R/	250,000	‡	50	12	3

£ - The Specification letter advances (A to B, B to C, etc) with manufacturing changes.

‡ - These sets are reconnectible, refer to Specifications (Generator Details) in Operator's Manual for Electrical Data.

NOTE: Hertz is a unit of frequency equal to one cycle per second.

NOTICE!

ITEMS REFERENCED AS **OPTIONAL** INDICATE PART IS FACTORY INSTALLED AND MAY NOT BE APPLICABLE TO ALL MODELS. FOR FIELD CONVERSIONS ADDITIONAL PARTS ARE USUALLY REQUIRED.

REPLACEMENT ENGINE

ONAN PART NO.

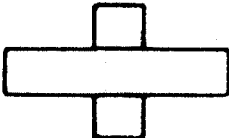
*Engine, Replacement

100-1432	1	Engine, Replacement - Begin Spec B
100-1360	1	Engine, Replacement - Spec A

Includes: Complete Cylinder Block, Fuel Pump, Governor, Starter, Fan Blade (pusher type), Fan Belt, Flywheel, Water Pump, Turbocharger, Fuel Filter, Oil Filter

Excludes: Alternator, Water Temperature Sender, Oil Pressure Sender, Radiator, Ammeter, Voltage Regulator, Carburetor, Air Cleaner

***NOTE:** This replacement engine is for Onan's Standard Spec 1 generator sets, for all other refer to the factory for replacement information.

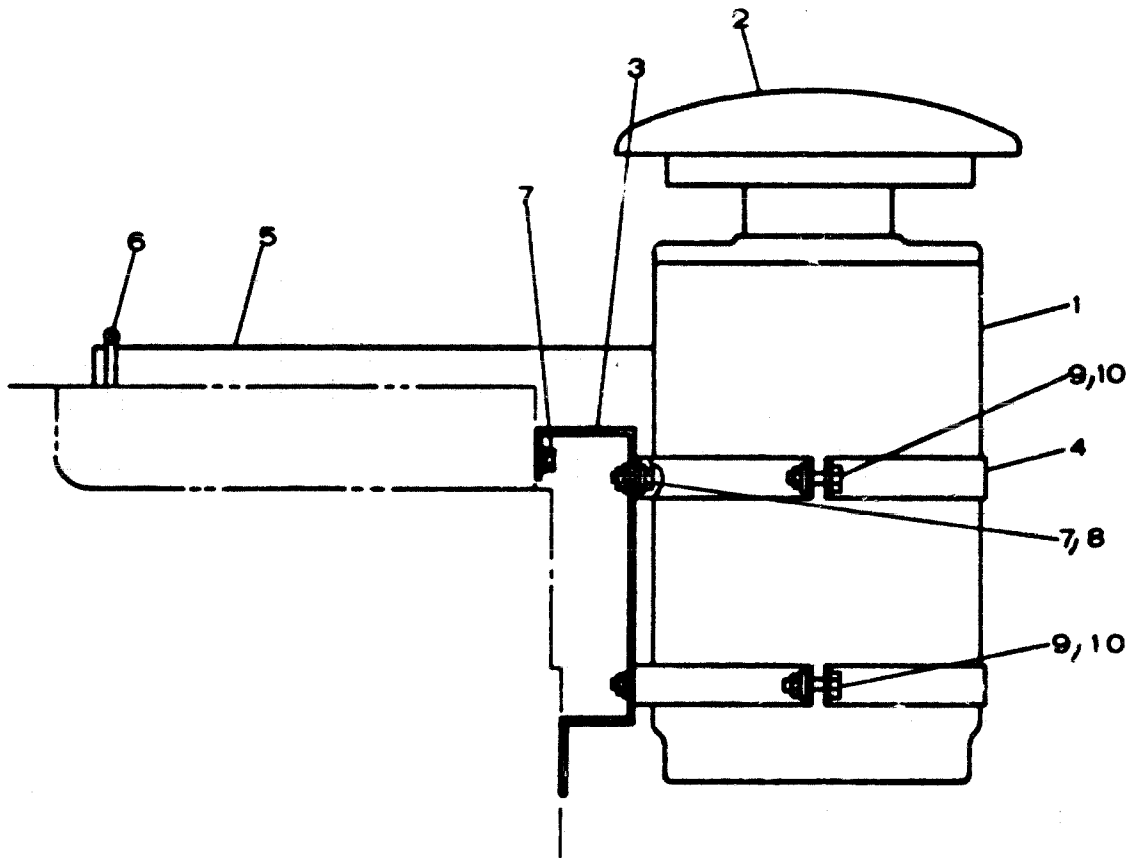
CUMMINS		CUMMINS ENGINE COMPANY, INC COLUMBUS INDIANA U S A					
SBM NO.		MODEL		ENG NO		OTHER REF NO	

For handy reference, insert "YOUR" nameplate information in the spaces above.

ENGINE REPLACEMENT PARTS

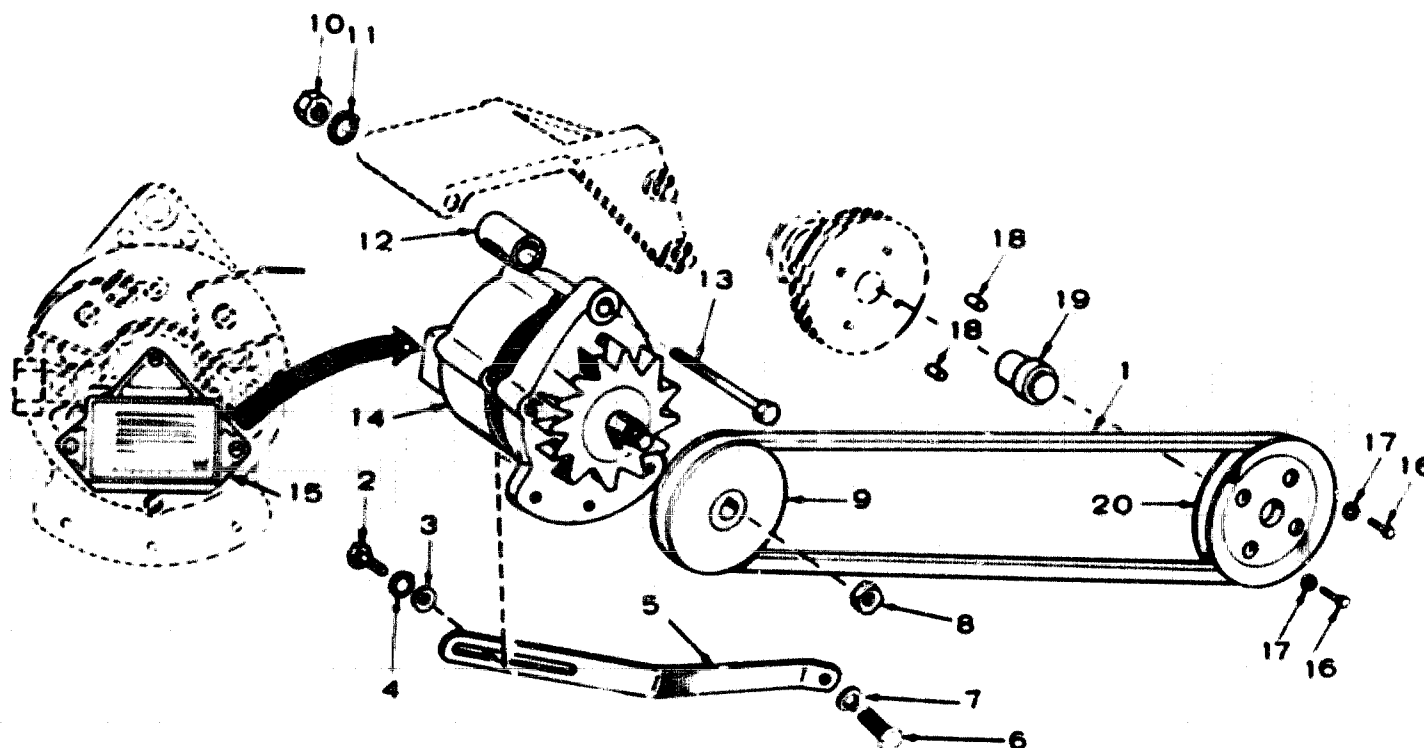
All engine replacement parts must be ordered from the engine manufacturer, except those modified or added by Onan. When ordering engine parts, refer to the manufacturer's nameplate and supply the Model, Spec, Serial numbers and other available information. Refer to the engine manufacturer's manuals for your nearest authorized distributor or parts center; or contact the Onan distributor from whom you purchased this set for assistance in ordering replacement parts.

AIR CLEANER



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	140-1346	1	Cleaner, Air
2	140-1347	1	Cap, Air Cleaner
3	140-1372	1	Bracket, Air Cleaner Mounting
4	140-1345	2	Band, Air Cleaner
5		1	Hose, Flexible Air Cleaner (Order by length 503-0641 Bulk)
6	503-0748	2	Clamp, Hose
7	821-0029	6	Screw, Cap - Locking Head (3/8-16 x 3/4" lg)
8	870-0281	4	Nut, Hex - Self Locking (3/8-16)
9	800-0032	2	Screw, Cap - Hex Head (5/16-18 x 1-3/4" lg)
10	870-0257	2	Nut, Hex - Self Locking (5/16-18)
11	800-0050	2	Screw, Cap - Hex Head - Air Cleaner Bracket Mounting (3/8-16 x 1" lg)
12	870-0281	2	Nut, Hex - Self Locking - Air Cleaner Bracket Mounting (3/8-16)
13	801-0097	2	Screw, Cap - Hex Head - Air Cleaner Bracket Mounting (5/8-18 x 1-1/4" lg)
14	850-0070	2	Washer, Lock - Spring - Air Cleaner Bracket Mounting (5/8")

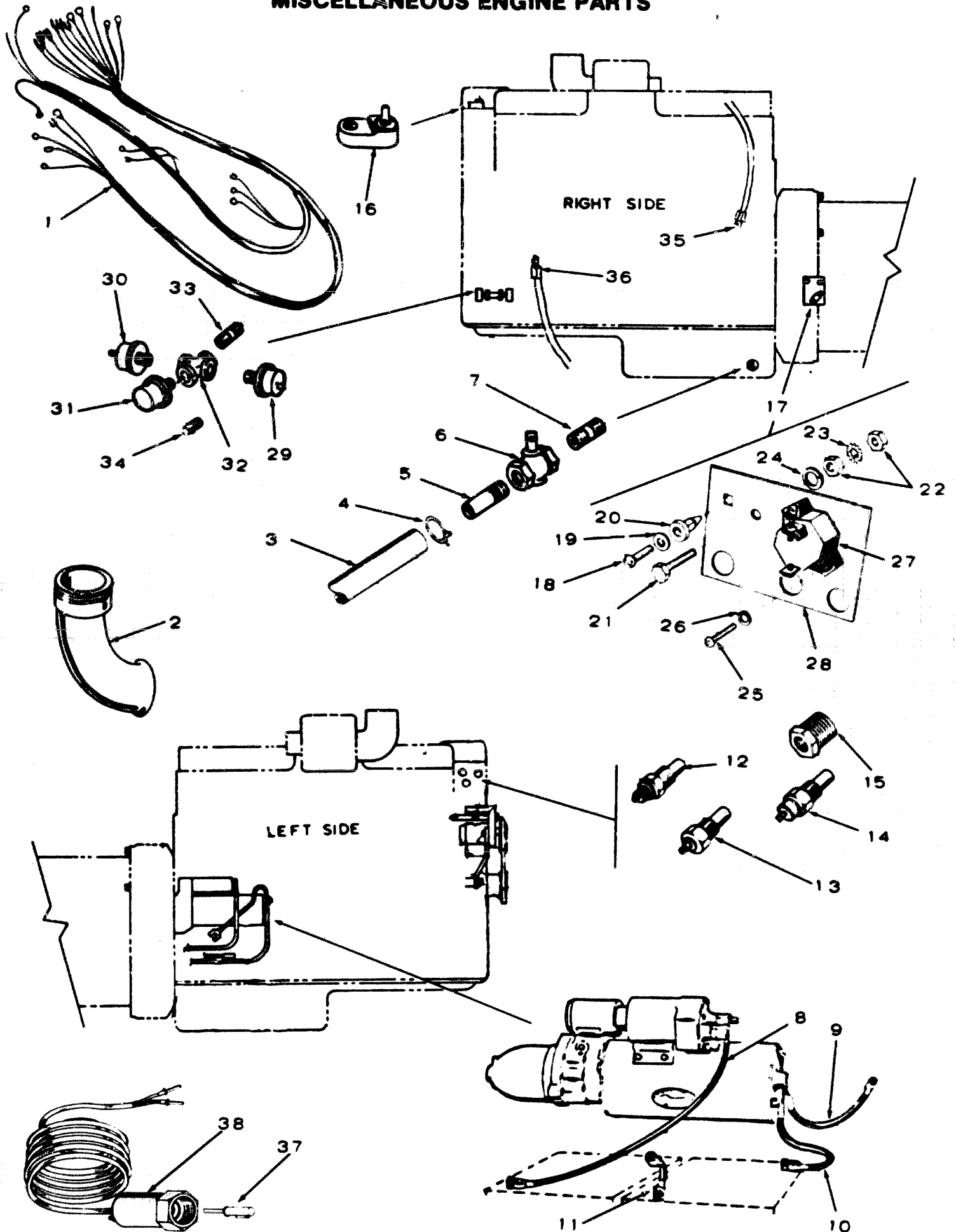
ALTERNATOR



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	511-0059	1	Belt, Drive
2	800-0028	1	Screw, Cap - Hex Head (5/16-18 x 1")
3	526-0022	1	Washer, Flat (21/64" ID x 9/16" OD x 1/16" Thk)
4	850-0045	1	Washer, Lock - Spring (5/16")
5	191-1152	1	Bracket, Adjusting - Alternator
6	800-0090	1	Screw, Cap - Hex Head (1/2-13 x 1")
7	850-0060	1	Washer, Lock - Spring (1/2")
8		1	Nut, Hex (5/8-18 NF-2A) Part of Alternator
9	191-0781	1	Pulley - Alternator Drive
10	862-0016	1	Nut, Hex (1/2-13)
11	850-0060	1	Washer, Lock - Spring (1/2")
12	191-1153	1	Spacer, Sleeve
13	800-0110	1	Screw, Cap - Hex Head (1/2-13 x 7-1/2")
14	191-0688	1	† Alternator - Includes Regulator (Motorola #70D44039B04)
15	191-0733	1	† Regulator, Voltage - Part of Alternator
16	800-0069	2	Screw, Cap - Hex Head (7/16-14 x 3/4")
17	850-0055	2	Washer, Lock - Spring (7/16")
18	191-1165	2	Spacer, Sleeve
19	191-1164	1	Adapter, Pulley
20	512-0063	1	Pulley

† - For components, contact your nearest Motorola Dealer or Motorola Automotive Products, Inc., 9401 W. Grand Ave., Franklin Park, Illinois 60131

MISCELLANEOUS ENGINE PARTS

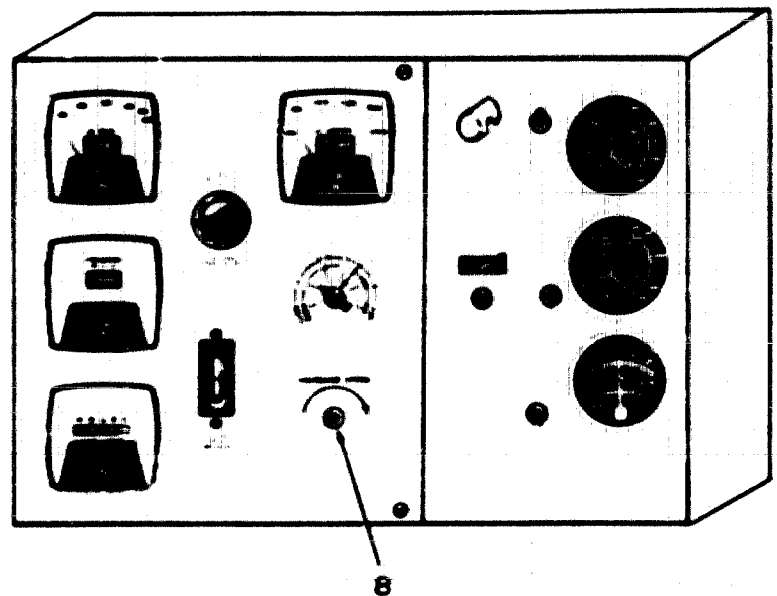
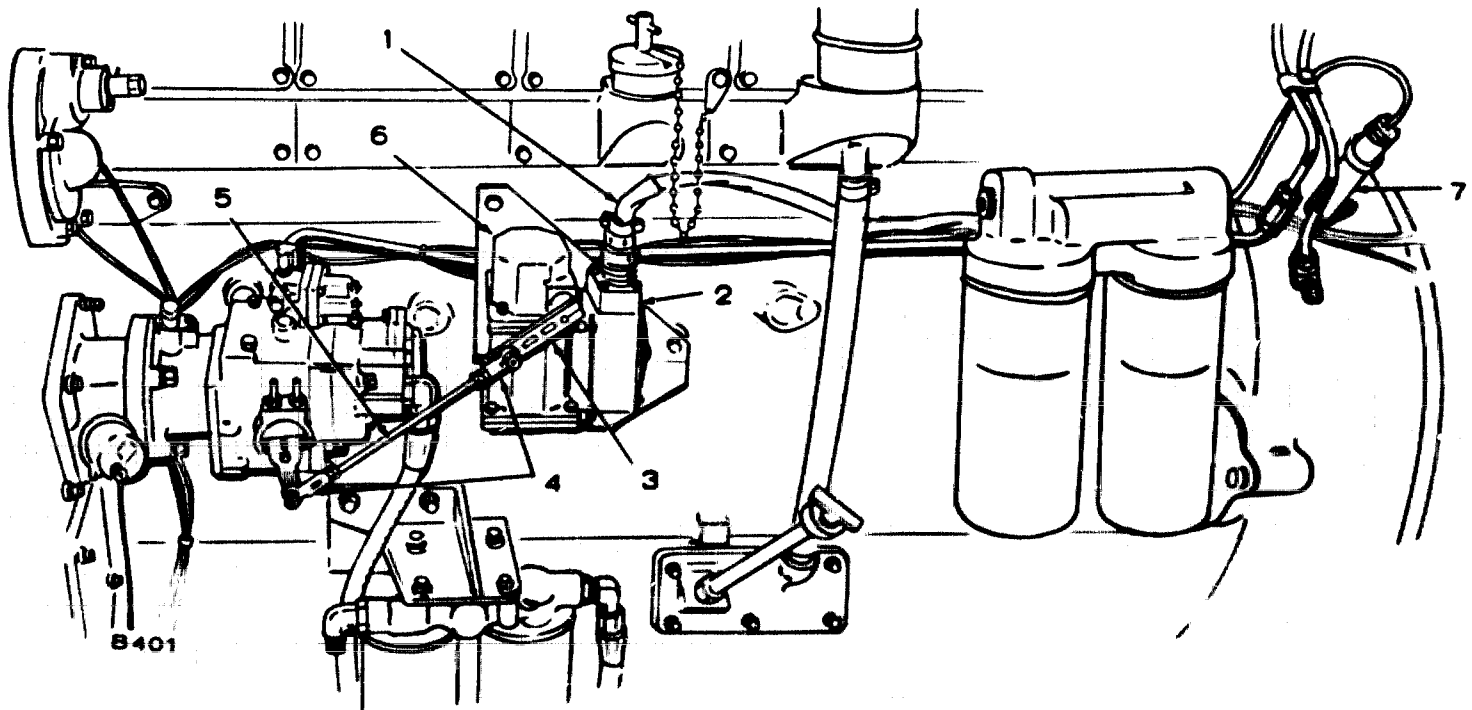


MISCELLANEOUS ENGINE PARTS

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	WIRING HARNESS - ENGINE		
	338-0976	1	Standard
		1	Special (NOTE: Use Standard Wiring Harness and add electrical leads as required for optional sensors, switches per Gen Set wiring diagram)
2	155-1393	1	Elbow, Exhaust
3	503-0197	1	Clamp, Loop
4	503-0098	AR	Hose, Rubber (3/4" ID)
5	505-0185	1	Nipple, Pipe - Half (1/2" NPT x 1-1/2")
6	504-0011	1	Valve, Cock
7	505-0100	1	Nipple, Pipe - Close (1/2" NPT x 1-1/8")
8	416-0636	1	Cable, Battery - Positive
9	416-0632	1	Cable, Electrical - Starter to Ground
10	416-0639	1	Cable, Battery - Negative
11	416-0473	1	Cable, Jumper
12	SENDER, TEMPERATURE - ENGINE COOLANT		
	193-0109	1	Specs A
	193-0247	1	Begin Spec B
13	309-0178	1	+Switch, Thermostatic - High Coolant Temperature - Alarm
14	309-0179	1	+Switch, Thermostatic - High Coolant Temperature - Shut down
15	505-0117	AR	Bushing, Flush
16	309-0269	1	+Switch, Thermostatic - Low Engine Temperature
17	332-1383	1	Assembly - Circuit Breaker & Terminal (Includes items 18 thru 28)
18	809-0035	1	Screw, Tapping - Roundhead (#8-3/4")
19	508-0015	1	Washer, Insulating - Fiber
20	870-0196	1	Nut, Insulated
21	800-0007	1	Screw, Cap - Hex Head (1/4-20 x 1)
22	862-0001	2	Nut, Hex (1/4-20)
23	856-0006	1	Washer, Lock - EIT (1/4")
24	850-0040	1	Washer, Lock - Spring (1/4")
25	813-0103	2	Screw, Machine - Roundhead (#10-32 x 3/4")
26	850-0030	2	Washer, Lock - Spring (#10)
27	320-0240	1	Circuit Breaker
28	332-1382	1	Board, Mounting
29	309-0272	1	+Switch, Pressure - Oil
30	SENDER, OIL PRESSURE		
	193-0108	1	Specs A
	193-0244	1	Begin Spec B
31	309-0169	1	+Switch, Pressure - Oil
32	505-0763	1	Cross, Pipe (1/8" NPT)
33	505-0104	1	Nipple, Pipe - Close (1/8" NPT x 1-1/2")
34	505-0057	1	Plug, Pipe - Square Head (1/8" NPT)
35	501-0216	1	Line, Fuel - Flexible (Return)
36	501-0084	1	Line, Fuel - Flexible (Incoming)
37	302-0753	1	+Tang, Drive - Tachometer
38	302-0750	1	+Sender, Tachometer

† - Optional items, used with fault lights or gauges on Engine Control Panel

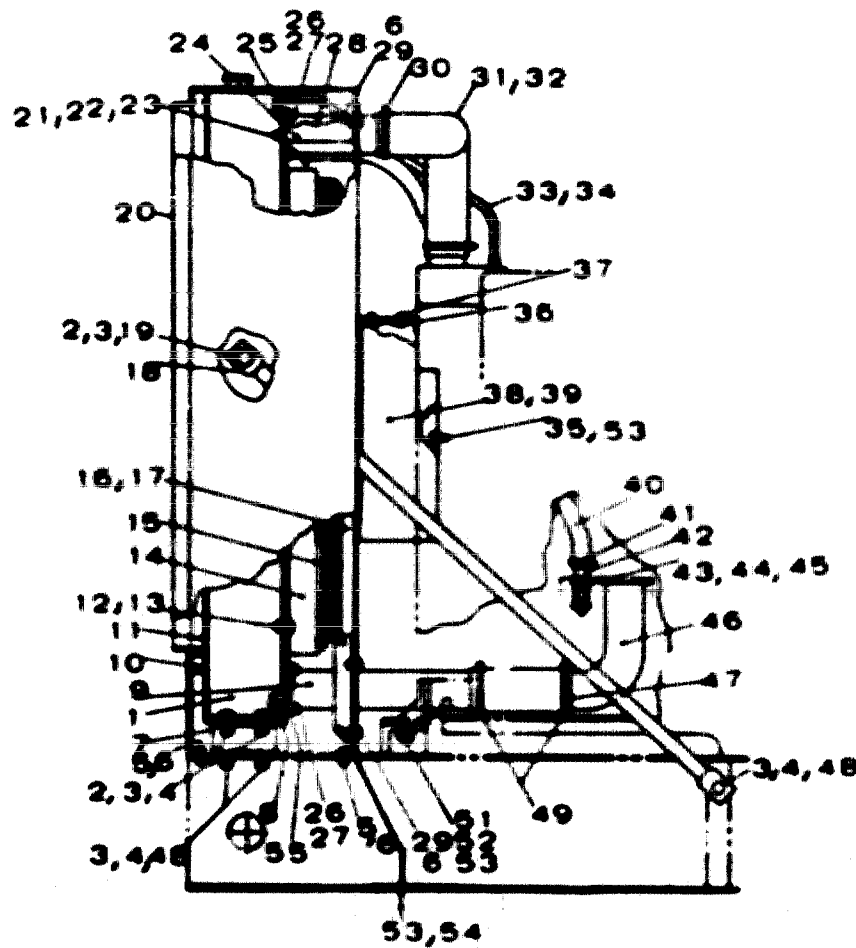
GOVERNOR



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	338-0989	1	Wiring Harness - Governor
2	151-0399	1	Control Unit (DYN-1000-2-0-24)
3	151-0441	1	Lever Actuator
4	151-0443	2	Rod End
5	151-0442	1	Rod Governor - Threaded
6	151-0423	1	Actuator Governor (DYNC-208)
7	151-0411	1	Pickup, Magnetic
8	151-0402	1	Potentiometer - Speed Control

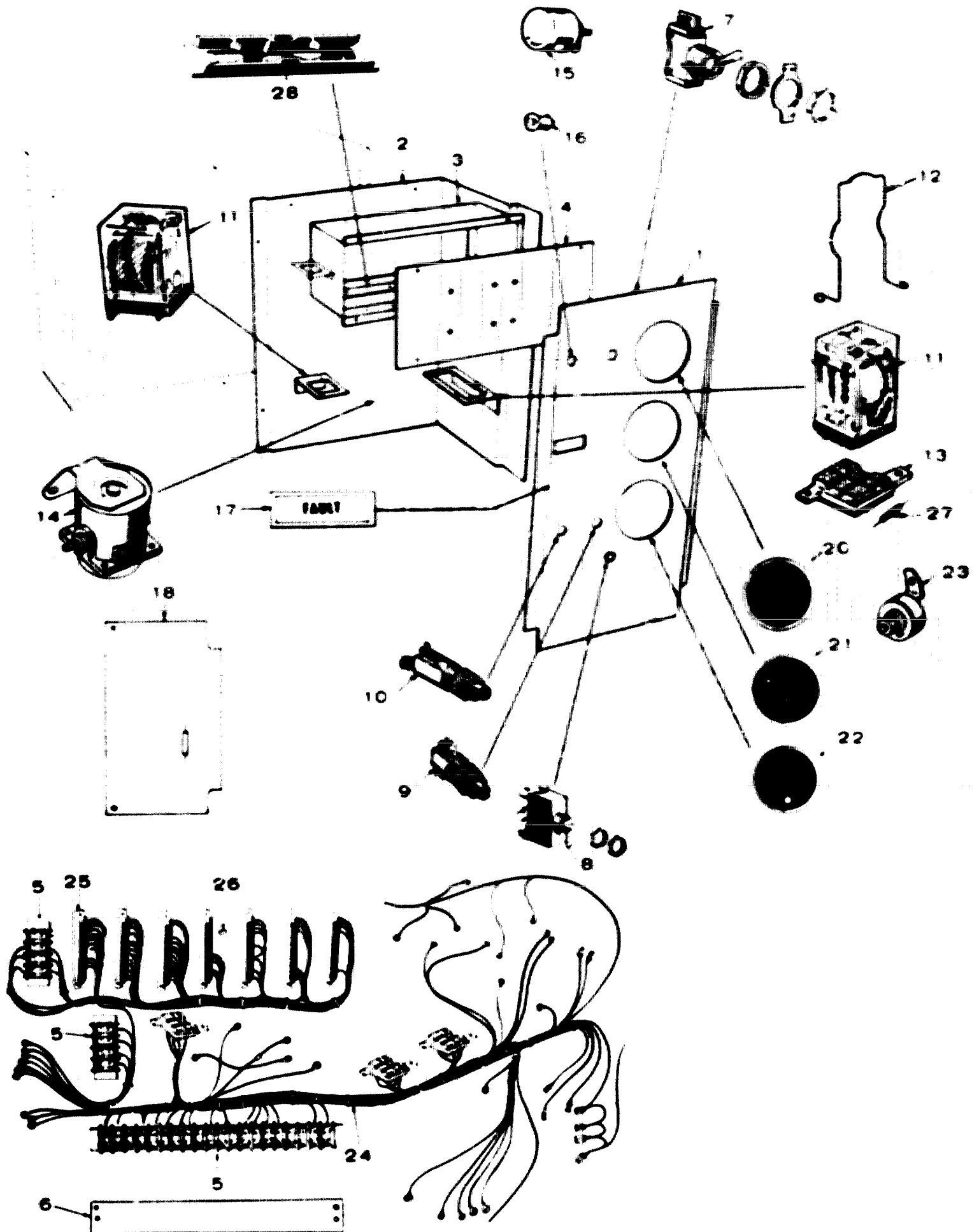
£ - Manufactured by Barber-Colman Company
Rockford, Illinois
For components or service contact your nearest
Barber-Colman Dealer

COOLING SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	130-1011	1	Radiator	27	800-0055	12	Washer, Lock - Spring (7/16")
2	800-0133	6	Screw, Cap - Hex Head (5/8-11 x 1-3/4" lg)	28	130-1002	2	Tube, Inlet
3	800-0070	12	Washer, Lock - Spring (5/8")	29	821-0018	6	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
4	828-0007	12	Nut, Hex (5/8-11)	30	900-0354	4	Clamp, Hose
5	800-0000	4	Screw, Cap - Hex Head (5/16-18 x 1-1/4" lg)	31	900-0829	1	Hose, Radiator
6	870-0257	10	Nut, Hex - Self Locking (5/16-18)	32	900-0816	1	Hose, Radiator
7	130-1004	2	Support, Radiator	33	901-0087	1	Line, Flexible
8	804-0003	1	Cock, Drain	34	902-0184	1	Connector, Male
9	130-1001	1	Tube, Outlet	35	800-0055	1	Washer, Lock - Spring (7/16")
10	130-1007	2	Foam, Insulation	36	191-1151	1	Bracket, Guard Mtg
11	130-1006	2	Foam, Insulation	37	821-0018	2	Screw, Cap - Locking Head (1/4-20 x 5/8" lg)
12	821-0029	10	Screw, Cap - Locking Head (3/8-16 x 3/4" lg)	38	191-1148	1	Guard, Belt (R/H)
13	870-0281	10	Nut, Hex - Self Locking (3/8-16)	39	191-1150	1	Guard, Belt (L/H)
14	130-1003	1	Shroud, Fan	40	900-0814	1	Hose
15	130-1013	1	Guard, Fan	41	900-0429	2	Clamp, Hose
16	821-0018	8	Screw, Cap - Locking Head (1/4-20 x 5/8" lg)	42	905-0750	1	Adapter, Pipe
17	828-0018	8	Washer, Flat (17/64" ID x 5/8" OD x 1/16" Thk)	43	905-0304	1	Tee, Pipe
18	130-0884	2	Brace, Radiator Support	44	905-0140	1	Plug, Square
19	828-0112	2	Washer, Flat (11/16" ID x 1-3/8" OD x 7/64" Thk)	45	905-0087	1	Nipple, Pipe
20	405-2228	1	Panel, Front End	46	130-1030	1	Inlet, Water
21	800-0080	2	Screw, Cap - Hex Head (1/2-13 x 1" lg)	47	903-0782	1	Hose
22	800-0080	2	Washer, Lock - Spring (1/2")	48	800-0131	6	Screw, Cap - Hex Head (5/8-11 x 1-1/4" lg)
23	882-0016	2	Nut, Hex (1/2-13)	49	903-0812	2	Clamp, Hose
24	130-0886	2	Brace, Radiator Support	50	800-0156	2	Screw, Cap - Hex Head (3/4-10 x 2-1/4" lg)
25	130-1194	2	Gasket, Radiator Inlet	51	860-0079	2	Washer, Lock - Spring (3/4")
26	800-0072	12	Screw, Cap - Hex Head (7/16-14 x 1-1/4" lg)	52	882-0020	2	Nut, Hex (3/4-10)
				53	405-2236	1	Bracket, Panel Mtg - (R/H)
				54	405-2237	1	Bracket, Panel Mtg - (L/H)
				55	130-1193	1	Gasket, Radiator (Outlet)
				56	800-0089	1	Screw, Cap - Hex Head (7/16-14 x 3/4" lg)

ONE FAULT LIGHT CONTROL (ENGINE PORTION)



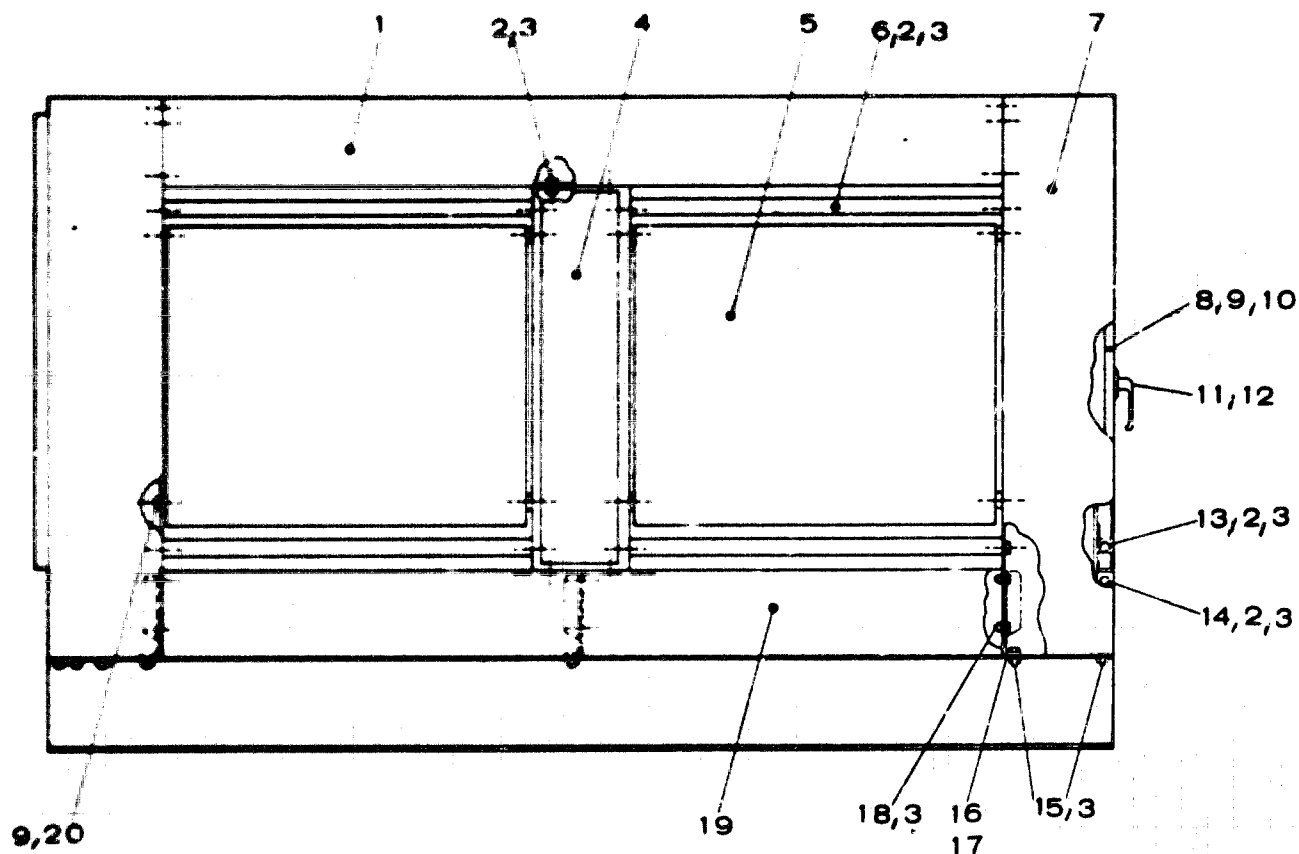
ONE FAULT LIGHT CONTROL (ENGINE PORTION)

REF. NO.	PART NO.	QTY USED	PART DESCRIPTION
1	301-3681	1	Panel, Engine Control
2	301-3621	1	Bracket, Engine Control Mounting
3	301-3554	1	Rack, Module
4	301-3635	1	Cover, Module Rack
5	*BLOCK TERMINAL		
	332-1005	1	20 Piece (21-40)
	332-0537	2	4 Piece (B- Remote Ground & Alarm) (1-4)
6	*STRIP TERMINAL BLOCK MARKER		
	332-1559	1	20 Piece (21-40)
	332-1200	1	4 Piece (B- Remote Ground & Alarm)
	332-1551	1	4 Piece (1-4)
7	308-0002	1	Switch, Panel Light
8	SWITCH SELECTOR		
	308-0220	1	Standard
	308-0347	1	Penn. State
9	308-0337	1	Switch, Lamp Test
10	308-0391	1	Switch, Reset
11	RELAY		
	307-1056	1	Start-Disconnect
	307-1051	1	Starter Protection
	307-1056	1	Ignition
12	307-1157	3	Spring, Relay Holddown
13	*SOCKET RELAY		
	323-0784	1	Starter Protection
	323-0785	2	Ignition, Start-Disconnect
14	307-0081	1	Solenoid, Start
15	322-0149	1	Holder, Lamp
16	322-0017	1	Lamp, Panel
17	322-0129	1	Lamp, Fault
18	MODULES (See Separate Parts Catalog #900-0234 For Components)		
	300-0877	1	Standard Crankier
	300-0854	1	Engine Shutdown
	300-0853	1	Engine Monitor
	300-0887	1	Bypass Plug (Includes Parts Marked E)
	300-0857	1	Over-speed Sensor
	300-0858	1	Starter-Disconnect
19	321-0168	1	(Fuses (1 1/4 Amp)
20	GUAGE, OIL PRESSURE		
	193-0243	1	Begin Spec B
	193-0194	1	Spec A
21	GUAGE, WATER TEMPERATURE		
	193-0245	1	Begin Spec B
	193-0106	1	Spec A
22	302-0051	1	Gauge, Ammeter (30-0-30)
23	RESISTOR GAUGE		
	193-0250	2	Begin Spec B
	193-0189	2	Spec A
24	338-0715	1	Harness, Wiring (Includes Parts Marked *)
25	332-1271	6	*Housing, Module Terminal
26	332-1276	As Req	*Plug, Keying
27	357-0004	2	*Diode
28	323-0814	12	Guide, Module
29	320-0240	1	Breaker, Circuit (12-5 Amp)

E - Parts Included in 300-0887 Bypass Plug Module

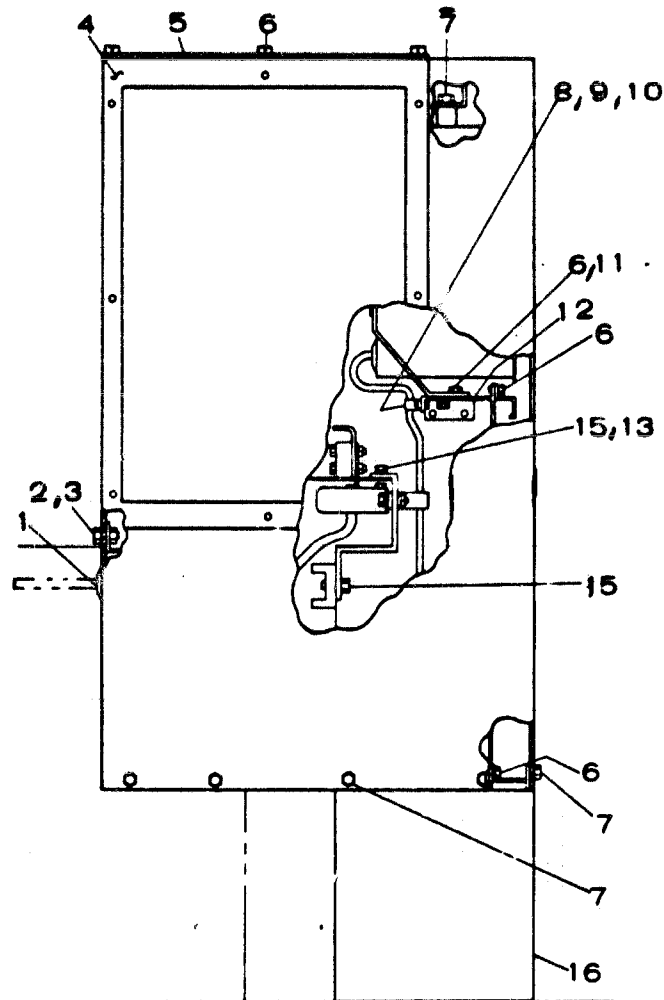
* - Parts Included in 338-0715 Wiring Harness

HOUSING



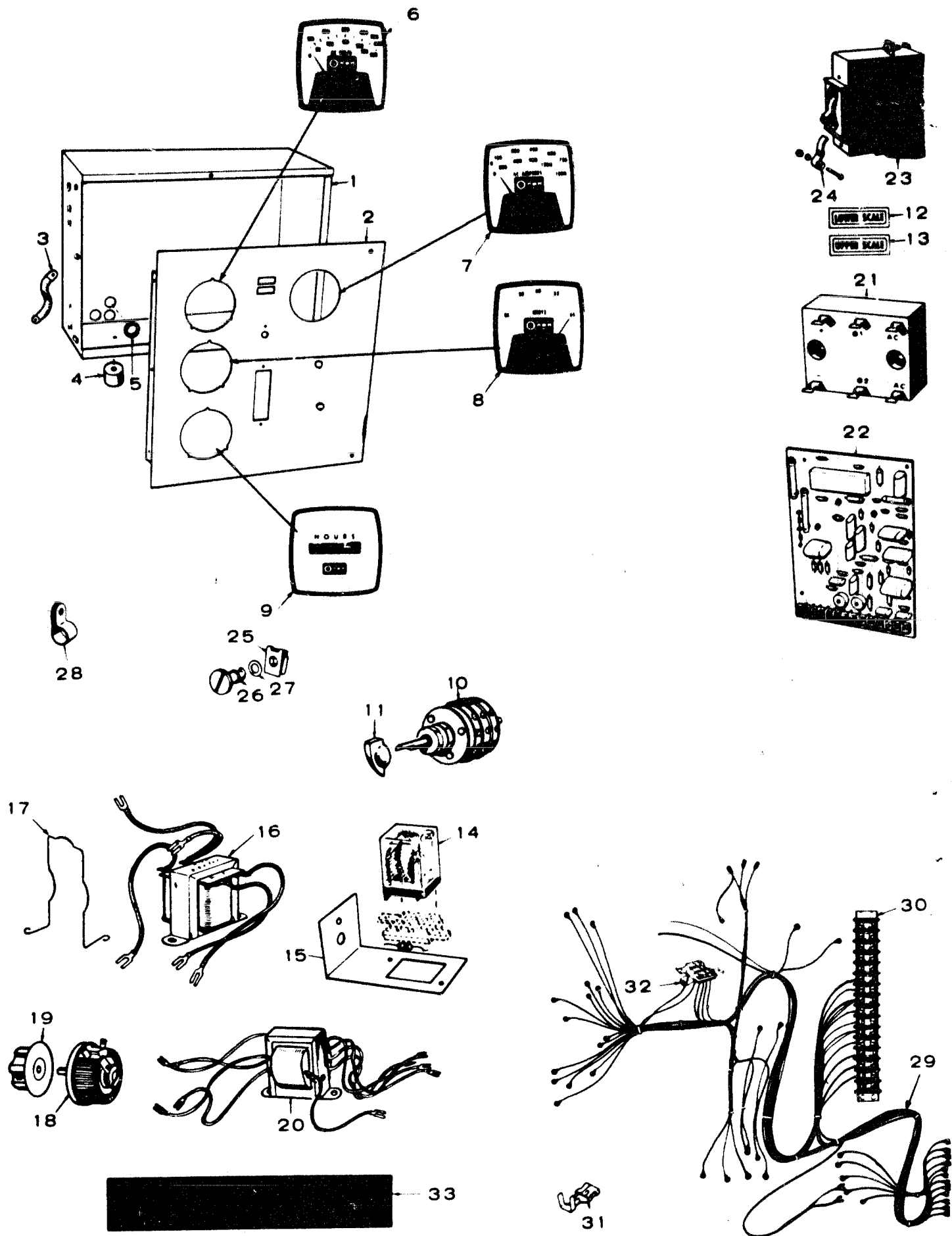
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	405-2229	1	Panel, Top Housing
2	821-0014	46	Screw, Cap - Locking Head (5/16-18 x 1/2" lg)
3	870-0257	60	Nut, Hex - Self Locking (5/16-18)
4	405-2220	2	Panel, Center
5	405-2011	4	Door, Housing
6	405-2014	8	Panel, Lower
7	405-2227	1	Panel, Rear End
8	405-1880	1	Door, Rear Housing
9	821-0010	20	Screw, Cap - Locking Head (1/4-20 x 1/2" lg)
10	870-0212	4	Nut, Hex - Self Locking (1/4-20)
11	406-0157	1	Handle, Lock
12	406-0089	1	Catch
13	405-1858	2	Panel, Rear Lower
14	405-1856	1	Panel, Lower Rear Housing
15	800-0030	6	Screw, Cap - Hex Head (5/16-18 x 1-1/4" lg)
16	405-2236	2	Bracket, Panel Mounting (R/H)
17	405-2237	2	Bracket, Panel Mounting (L/H)
18	821-0016	8	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
19	405-2221	2	Panel, Base
20	870-0258	16	Nut, Weld (1/4-20)

CONTROL HOUSING



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	508-0203	1	Bushing
2	821-0016	2	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
3	870-0257	2	Nut, Hex - Self Locking (5/16-18)
4	301-3605	1	Housing, Control Box
5	301-3731	2	Plate, Control Box Side
6	821-0010	12	Screw, Cap - Locking Head (1/4-20 x 1/2" lg)
7	821-0014	12	Screw, Cap - Locking Head (5/16-18 x 1/2" lg)
8	850-0030	1	Washer, Lock - Spring (#10)
9	813-0102	1	Screw, Machine - Round Head (#10-32 x 5/8" lg)
10	332-0052	2	Clip, Wire
11	856-0006	2	Washer, Lock - External/ Internal (1/4")
12	301-3604	1	Shelf, Control Box
13	870-0281	2	Nut, Hex - Self-Locking (3/8-16)
15	821-0029	4	Screw, Cap - Locking Head (3/8-16 x 3/4" lg)
16	234-0489	1	Cover, End Bell

CONTROL (AC PORTION)



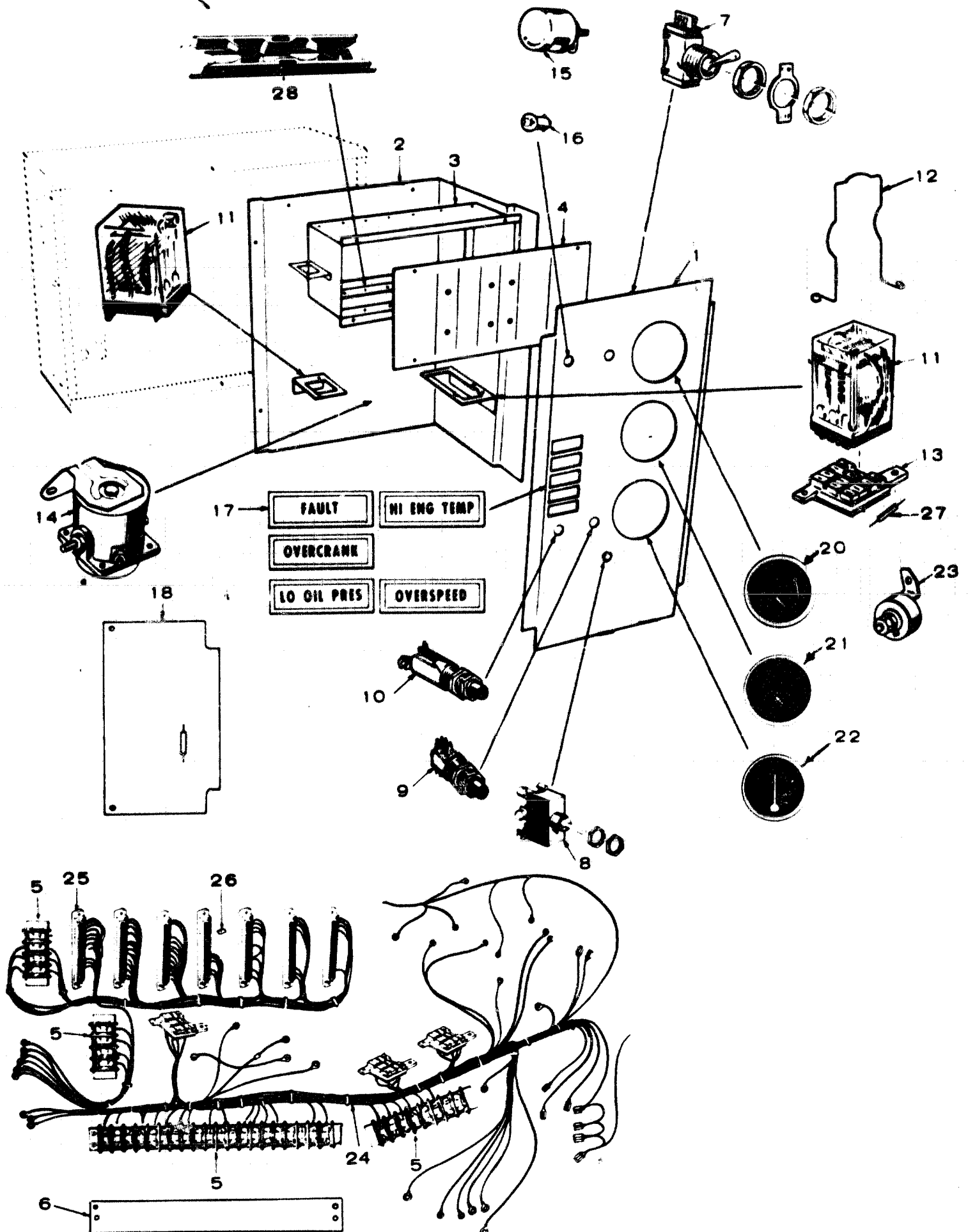
CONTROL (AC PORTION)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-3158	1	Box, Control
2	PANEL, CONTROL BOX		
	301-3342	1	5DR, 6DR, 7R and 9XR Sets
	301-3170	1	17R and 517R Sets
3	337-0049	1	Strap, Electrical Ground
4	402-0078	4	Dampener, Vibration
5	508-0001	4	Grommet, Rubber (1-1/16")
6	VOLTMETER, AC		
	302-0421	1	5DR Sets (0-300 Volt)
	302-0422	1	6DR Sets (0-600 Volt)
	302-0612	1	7R Sets (0-500 Volt)
	302-0423	1	9XR Sets (0-750 Volt)
	302-0718	1	17R and 517R Sets (Dual Scale 0-300/0-600)
7	AMMETER, AC		
	302-0840	1	5DR Sets
	302-0415	1	6DR, 7R Sets
	302-0414	1	9XR Sets
	302-0880	1	17R Sets
	302-0879	1	517R Sets
8	METER, FREQUENCY		
	302-0811	1	5DR, 6DR and 9XR Sets
	302-0810	1	7R and 17R Sets
	302-0894	1	517R Sets
9	METER, RUNNING		
	302-0466	1	5DR, 6DR, 7R, 9XR and 17R Sets
	302-0469	1	517R Sets
10	308-0284	1	Switch, Voltage & Ammeter
11	303-0076	1	Knob
12	322-0131	1	Light, Upper Scale - 517R and 17R Sets
13	322-0130	1	Light, Lower Scale - 517R and 17R Sets
14	307-1061	1	Relay, Voltage Selector - 517R and 17R Sets

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
15	301-3244	1	Bracket, Relay Mounting - 517R and 17R Sets
16	307-1157	1	Spring, Relay Holddown - 517R and 17R Sets
17	315-0364	1	Reactor Assembly, Commutator
18	303-0170	1	Rheostat, Voltage Adjusting
19	303-0032	1	Knob, Rheostat
20	TRANSFORMER, VOLTAGE		
	315-0431	1	Begin Spec B
	315-0342	1	Spec A
21	305-0524	1	Bridge, Rectifier
22	REGULATOR BOARD, VOLTAGE		
	332-1956	1	Begin Spec B
	332-1268	1	Spec A
23	320-0455	1	Breaker, Circuit - 3 Amp
24	320-0307	1	Lock, Circuit Breaker Handle - Penn State
25	406-0332	2	Receptacle, Fastener
26	406-0333	2	Stud, Fastener
27	406-0334	2	Washer, Stud Fastener
28	332-0050	1	Clip, Tinnerman
29	HARNESS, WIRING (Includes Parts Marked *)		
	338-0759	1	5DR & 6DR Sets
	338-0916	1	7R and 9XR Sets
	338-0730	1	15R and 517R Sets
30	332-0795	1	*Block, Terminal (16 Place)
31	332-1280	As Req	*Terminal, Crimp
32	350-0556	1	*Resistor (47,000-Ohm, 1/2 Watt)
33	332-1242	1	Strip, Terminal Block Marker
34	323-0764	1	*Socket, Relay (17R and 517R Sets)

* - Parts Included in Wiring Harness Assembly.

FIVE FAULT LIGHT CONTROL (ENGINE PORTION)



FIVE FAULT LIGHT CONTROL (ENGINE PORTION)

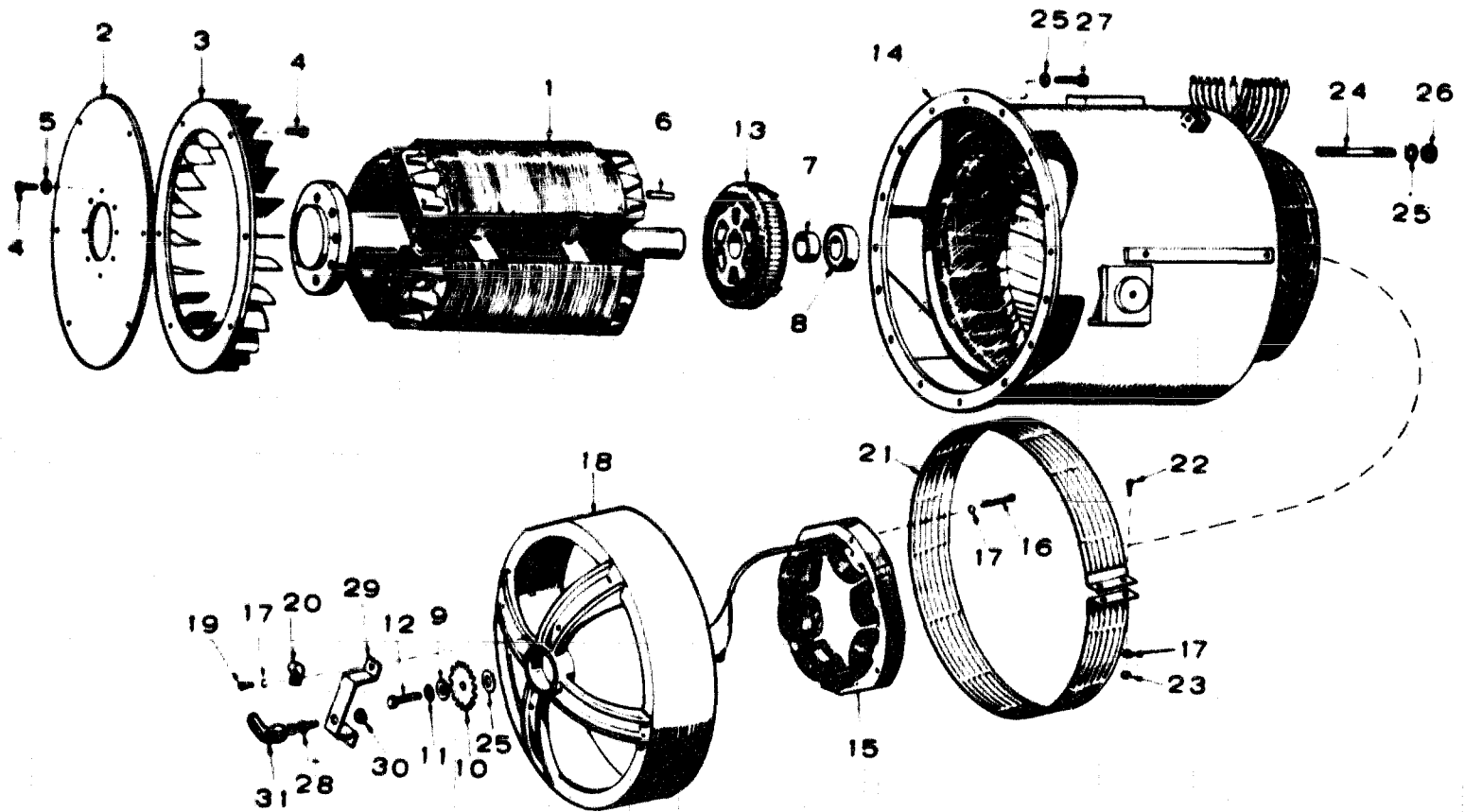
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	301-3629	1	Panel, Engine Control
2	301-3621	1	Bracket, Engine Control Mounting
3	301-3568	1	Rack, Module
4	301-3535	1	Cover, Module Rack
5	*BLOCK, TERMINAL		
	332-1005	1	20 Place (21-40)
	332-0537	2	4 Place (B+, Remote, Ground & Alarm)
	332-0899	1	6 Place (53-58)
6	*STRIP, TERMINAL BLOCK MARKER		
	332-1559	1	20 Place (21-40)
	332-1239	1	4 Place (B+, Remote, Ground & Alarm)
	332-1561	1	4 Place (1-4)
	332-1560	1	6 Place (53-58)
7	308-0002	1	Switch, Panel Light
8	SWITCH, SELECTOR		
	308-0220	1	Standard
	308-0347	1	Penn State
9	308-0337	1	Switch, Lamp Test
10	308-0091	1	Switch, Reset
11	RELAY		
	307-1056	1	Start-Disconnect
	307-1061	1	Starter Protection
	307-1056	1	Ignition
12	307-1157	3	Spring, Relay Holddown
13	*SOCKET, RELAY		
	323-0764	1	Starter Protection
	323-0765	2	Ignition, Start-Disconnect
14	307-0061	1	Solenoid, Start
15	322-0149	1	Holder, Lamp
16	322-0017	1	Lamp, Panel
17	LAMP, FAULT		
	322-0119	1	Overcrank
	322-0120	1	Low Oil Pressure
	322-0121	1	High Engine Temperature
	322-0122	1	Low Engine Temperature
	322-0123	1	Overspeed
18	MODULES (See Separate Parts Catalog #900-0234 For Components)		
	300-0977	1	Standard Cranker
	300-0954	1	Engine Shutdown
	300-0953	1	Engine Monitor
	300-0955	1	Remote Indicator
	300-0987	1	Bypass Plug (Includes Parts Marked £)
	300-0957	1	Overspeed Sensor
	300-0958	1	Starter-Disconnect
19	321-0168	1	£Fuses (1/4 Amp)
20	GAUGE, OIL PRESSURE		
	193-0243	1	Begin Spec B
	193-0194	1	Spec A
21	GAUGE, WATER TEMPERATURE		
	193-0245	1	Begin Spec B
	193-0106	1	Spec A
22	302-0061	1	Gauge, Ammeter (30-0-30)
23	RESISTOR, GAUGE		
	193-0250	2	Begin Spec B
	193-0189	2	Spec A
24	338-0705	1	Harness, Wiring (Includes Parts Marked *)
25	332-1271	7	*Housing, Module Terminal
26	332-1276	As Req	*Plug, Keying
27	357-0004	2	*Diode
28	323-0814	14	Guide, Module
29	320-0240	1	Breaker, Circuit (12-5 Amp)

£ - Parts Included in 300-0987 Bypass Plug Module.

* - Parts Included in 338-0705 Wiring Harness.

GENERATOR

NOTE: See separate group for bus bar and exciter rotor parts.

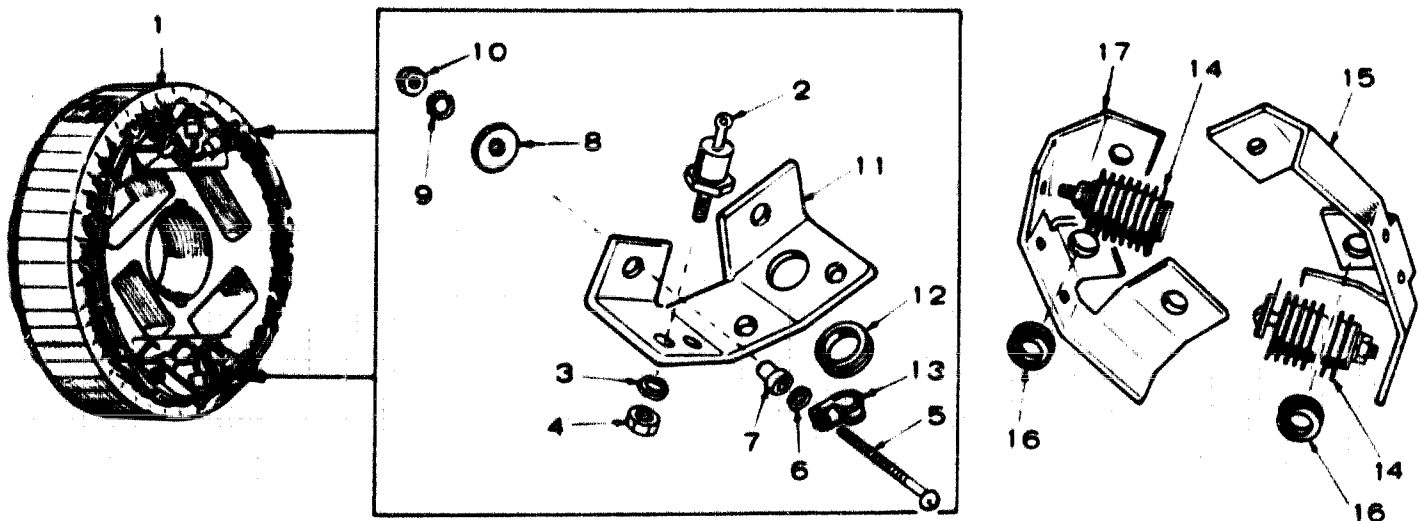


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	201-1949	1	Rotor Assembly, Wound (Includes Parts Marked *)
2	232-2309	1	*Disc, Generator Drive
3	205-0103	1	*Fan, Generator
4	805-0035	14	*Bolt, Plate (5/8-11 x 1-1/2")
5	526-0259	8	*Washer, Flat - Steel (11/16" ID x 1-3/8" OD x 12 Ga.)
6	515-0145	1	*Key, Exciter Rotor
7	232-2317	1	*Spacer, Bearing
8	510-0106	1	*Bearing
9	526-0252	1	*Washer, Flat - Steel (13/16" ID x 2-3/8" OD x 5/32" Thk)
10	150-1405	1	*Wheel, Speed Sensor
11	850-0060	1	*Washer, Spring Lock (1/2")
12	800-0092	1	*Screw, Hex Cap - Steel (1/2-13 x 1-1/2")
13	201-1902	1	*Rotor Assembly, Wound - Exciter (See Separate Group for Components)
14	STATOR ASSEMBLY, WOUND (Includes Bus Bars)		
	220-2345	1	5DR Sets
	220-2351	1	6DR Sets
	220-2447	1	7R Sets
	220-2321	1	9XR Sets
	220-1916	1	17R Sets
	220-2139	1	517R Sets (50 Hertz)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
15	220-1920	1	Stator Assembly, Wound - Exciter
16	800-0009	4	Screw, Hex Cap - Steel (1/4-20 x 1-1/2")
17	850-0040	12	Washer, Spring Lock (1/4")
18	211-0214	1	Bell, End
19	800-0005	2	Screw, Hex Cap - Steel (1/4-20 x 3/4")
20	332-1554	1	Clamp, Loop
21	234-0455	1	Screen, Fan
22	800-0008	2	Screw, Hex Cap - Steel (1/4-20 x 1-1/4")
23	862-0001	2	Nut, Hex - Steel (1/4-20)
24	520-0780	4	Stud, End Bell Mounting (1/2 x 6-1/2")
25	850-0060	20	Washer, Spring Lock (1/2")
26	862-0016	4	Nut, Hex - Steel (1/2-13)
27	800-0092	16	Screw, Hex Cap - Steel (1/2-13 x 1-1/2")
28	150-1406	1	Sensor, Speed
29	150-1407	1	Bracket, Speed Sensor
30	868-0011	1	Nut, Hex - Steel (3/4-16)
31	150-1410	1	Cap, Insulator
32	509-0151	1	Seal, "O" Ring

* - Parts Included in 201-1949 Rotor Assembly

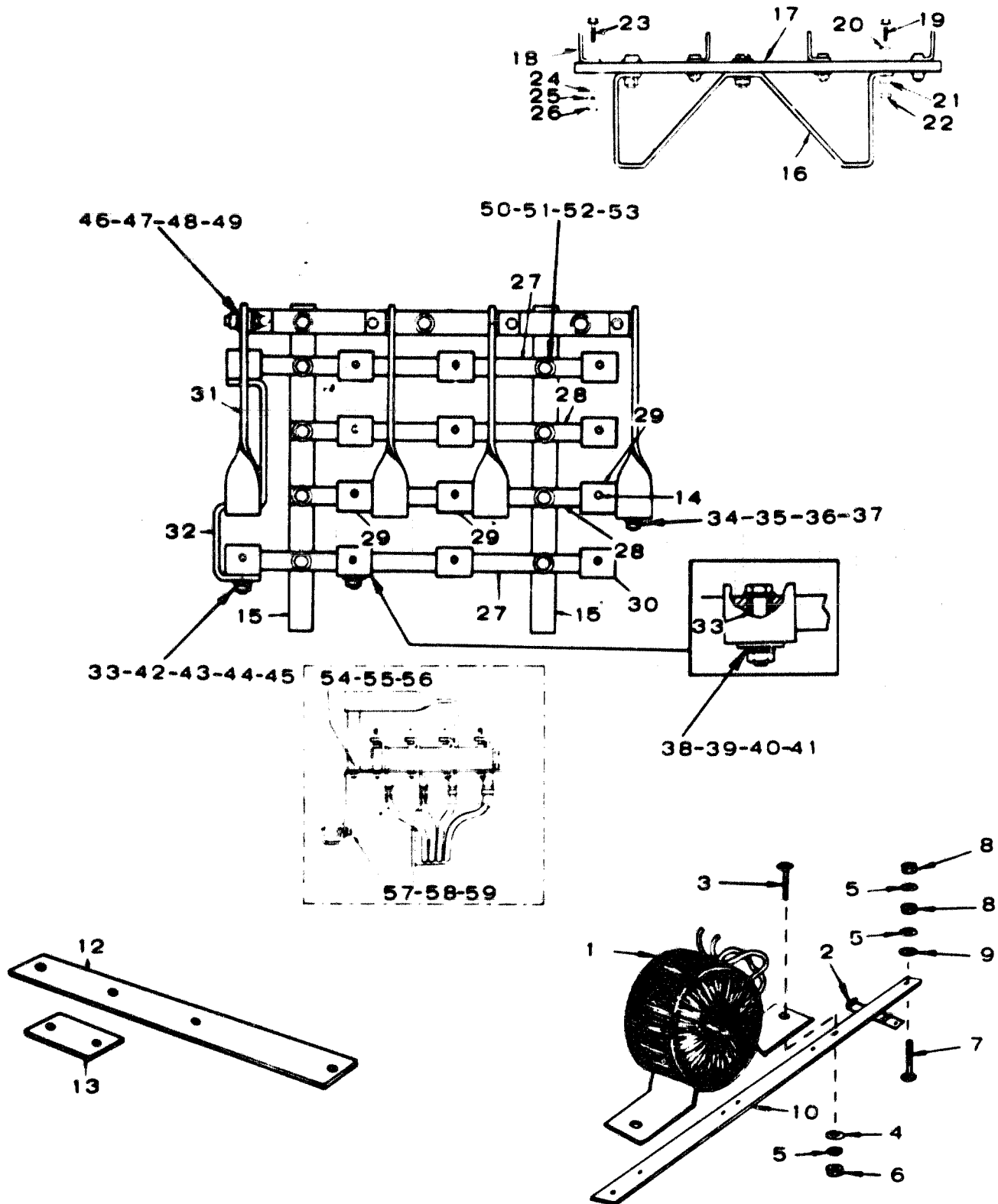
EXCITER ROTOR



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	201-1902	1	Rotor Assembly, Exciter
2	RECTIFIER, DIODE		
	358-0011	3	Positive
	358-0012	3	Negative
3	850-0040	6	Washer, Spring Lock (1/4")
4	868-0001	6	Nut, Hex - Stud (1/4-20)
5	813-0110	4	Screw, Round Head Steel (#10-32 x 2")
6	526-0009	4	Washer, Flat - Steel (7/32" ID x 1/2" OD x 1/16" Thk)
7	508-0124	4	Bushing, Insulating
8	508-0156	4	Washer, Insulating
9	850-0030	4	Washer, Spring Lock (#10)
10	870-0053	4	Nut, Hex Steel (#10-32)
11	SINK, HEAT		
	363-0049	1	Positive
	363-0050	1	Negative
12	508-0093	2	Grommet, Rubber
13	332-0050	2	Clip, Wire
14	305-0526	2	*Suppressor, Voltage (Optional)
15	363-0054	1	*Heat Sink, Rectifier - Positive (Optional)
16	508-0093	2	*Grommet, Rubber (Optional)
17	363-0055	1	*Heat Sink, Rectifier - Negative (Optional)

* - Parts Included in 232-2444 Heat Sink and Suppressor Assembly

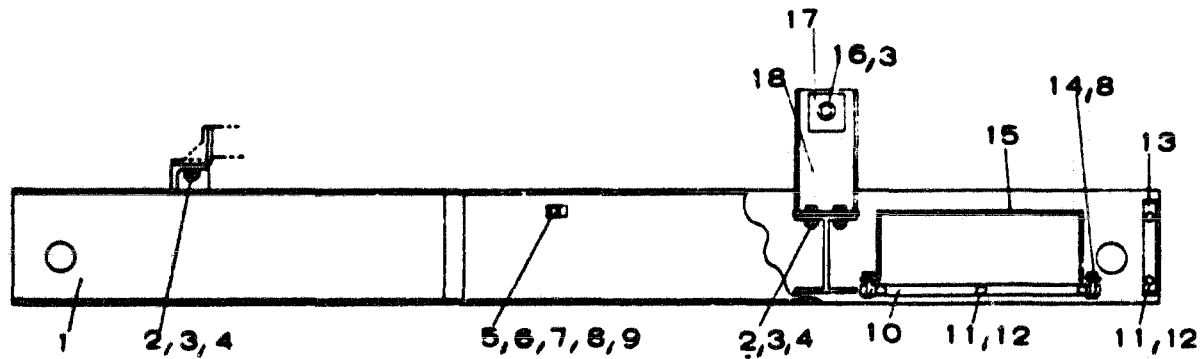
BUS BAR



BUS BAR

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	TRANSFORMER, CURRENT			26	232-2242	2	Board, Insulating
	302-0547	3	517R Sets	27	232-2343	3	Bar, Bus
	302-0963	3	5DR Sets	28	232-2241	11	Bar, Bus
	302-0438	3	6DR Sets	29	232-2240	4	Bar, Bus
	302-0471	3	7R Sets	30	232-2238	1	Bracket, Bus Bar
	302-0608	3	9XR Sets	31	232-2344	32	Spacer, Terminal Connection
	302-0876	3	17R Sets	32	800-0028	4	Screw, Hex Cap - Steel (5/16-18 x 1")
2	232-2342	2	Bracket, Terminal Board Mounting	33	526-0115	8	Washer, Flat - Steel (11/32" ID x 11/16" OD x 1/16" Thk)
3	SCREW, MACHINE - ROUND HEAD			34	850-0045	4	Washer, Spring Lock (5/16")
	813-0100	4	#10-32 x 1/2" lg	35	862-0015	4	Nut, Hex - Steel (5/16-18)
	813-0103	2	#10-32 x 3/4" lg	36	800-0032	24	Screw, Hex Cap - Steel (5/16-18 x 1-3/4")
4	526-0008	6	Washer, Flat (13/64" ID x 7/16" OD x 1/32" Thk)	37	526-0115	24	Washer, Flat - Steel (11/32" ID x 11/16" OD x 1/16" Thk)
5	856-0003	8	Washer, Lock - External/Internal (#10)	38	850-0045	24	Washer, Spring Lock (5/16")
6	870-0053	6	Nut, Hex (#10-32)	39	862-0015	24	Nut, Hex - Steel (5/16-18)
7	815-0203	1	Screw, Machine - Round Head (#10-32 x 7/8" lg)	40	800-0033	8	Screw, Hex Head - Steel (5/16-18 x 2")
8	871-0010	2	Nut, Hex (#10-32)	41	526-0115	16	Washer, Flat - Steel (11/32" ID x 11/16" OD x 1/16" Thk)
9	526-0049	1	Washer, Flat (.200" ID x 7/16" OD x 1/32" Thk)	42	850-0045	8	Washer, Spring Lock (5/16")
10	315-0389	1	Plate, Transformer Mounting	43	862-0015	8	Nut, Hex - Steel (5/16-18)
11	JUMPER, BUS BAR			44	800-0051	4	Screw, Hex Cap - Steel (3/8-16 x 1-1/4")
	232-2248	6	5DR, 6DR Sets	45	526-0029	8	Washer, Flat - Steel (25/64" ID x 7/8" OD x 1/16" Thk)
	232-2582	1	5DR, 6DR Sets	46	850-0050	4	Washer, Spring Lock (3/8")
	232-2246	1	7R, 9XR Sets	47	862-0003	4	Nut, Hex - Steel (3/8-16)
	232-2248	3	7R Sets	48	800-0056	8	Screw, Hex Cap - Steel (3/8-16 x 2-1/2")
	232-2246	2	17R, 517 Sets	49	526-0029	8	Washer, Flat - Steel (25/64" ID x 7/8" OD x 1/16" Thk)
	232-2248	3	17R, 517 Sets	50	850-0050	8	Washer, Spring Lock (3/8")
12	STUD			51	862-0003	4	Nut, Hex - Steel (3/8-16 x 1")
	520-0142	14	7R, 9XR, 517R & 17R Sets - 5/16 x 1-1/4"	52	800-0050	2	Screw, Hex Head - Steel (3/8-16 x 1")
	520-0142	12	5DR & 6DR Sets - 5/16 x 1-1/4"	53	850-0050	2	Washer, Spring Lock (3/8")
13	232-2249	2	Bracket, Terminal Board Mounting	54	862-0003	2	Nut, Hex - Steel (3/8-16)
14	232-2237	1	Bracket, Bus Bar Support	55	800-0050	2	Screw, Hex Head - Steel (3/8-16 x 1")
15	232-2245	1	Board, Insulating - Bus Bar	56	850-0050	2	Washer, Spring Lock (3/8")
16	232-2387	4	Bracket, Bus Bar	57	862-0003	2	Nut, Hex - Steel (3/8-16)
17	800-0051	4	Screw, Hex Cap - Steel (3/8-16 x 1-1/4")	58	520-0844	2	Stud (5/16-18 x 1-1/2" lg)
18	526-0029	3	Washer, Flat - Steel (25/64" ID x 7/8" OD x 1/16" Thk)	59	232-2583	1	Spacer, Bus Bar - (5DR & 6DR Sets)
19	850-0050	3	Washer, Spring Lock (3/8")	60	302-1086	6	Clamp, Transformer Mounting (5DR & 6DR Sets)
20	862-0003	3	Nut, Hex - Steel (3/8-16)				
21	800-0007	4	Screw, Hex Cap - Steel (1/4-20 x 1")				
22	526-0018	4	Washer, Flat (21/64" ID x 3/4" OD x 1/16" Thk)				
23	850-0040	4	Washer, Spring Lock (1/4")				
24	862-0001	4	Nut, Hex - Steel (1/4-20)				
25	232-2243	2	Board, Insulating				

CHASSIS



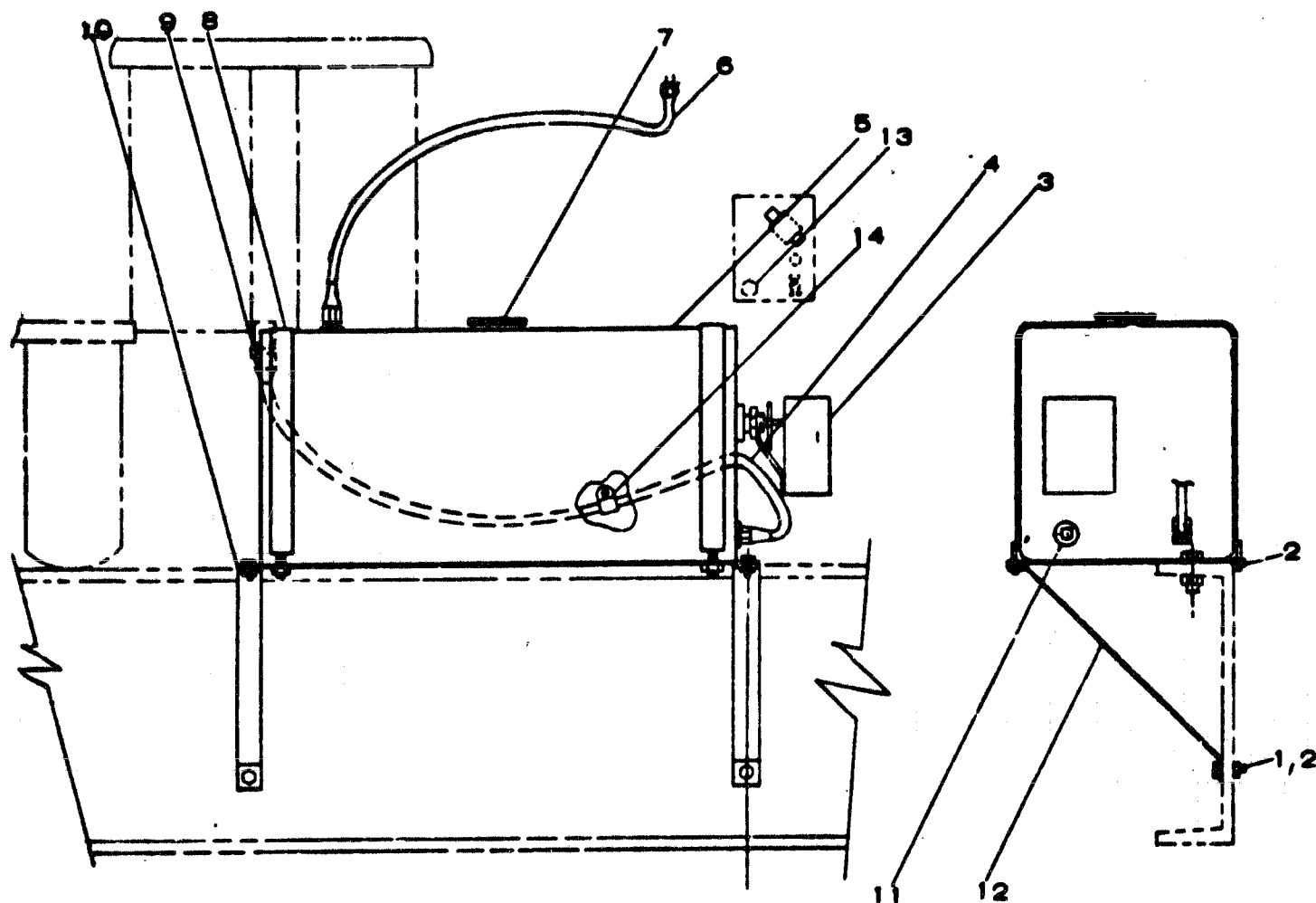
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	403-1218	1	Base, Skid
2	800-0156	6	Screw, Cap - Hex Head (3/4-10 x 2-1/4" lg)
3	850-0079	8	Washer, Lock - Spring (3/4")
4	862-0020	6	Nut, Hex (3/4-10)
5	800-0028	1	Screw, Cap - Hex Head (5/16-18 x 1" lg)
6	856-0008	1	Washer, Lock - External/ Internal (5/16")
7	332-1473	1	Lug, Solderless
8	850-0045	5	Washer, Lock - Spring (5/16")
9	862-0015	1	Nut, Hex (5/16-18)
10	416-0674	1	Tray, Battery
11	821-0016	10	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
12	870-0257	10	Nut, Hex - Self Locking (5/16-18)
13	403-1200	1	Panel, Base
14	800-0035	4	Screw, Cap - Hex Head (5/16-18 x 2-1/2" lg)
15	416-0635	2	Strap, Battery Holddown
16	800-0153	2	Screw, Cap - Hex Head (3/4-10 x 1-1/2" lg)
17	232-2385	2	Plate, Generator Mounting Retainer
18	232-2389	2	Bracket, Generator Mounting

OPTIONAL EQUIPMENT SECTION

This section contains parts listing of factory installed options.
NOTE: options may not be applicable to all models; for field installations, additional parts are usually required.

DAY (FUEL) TANK

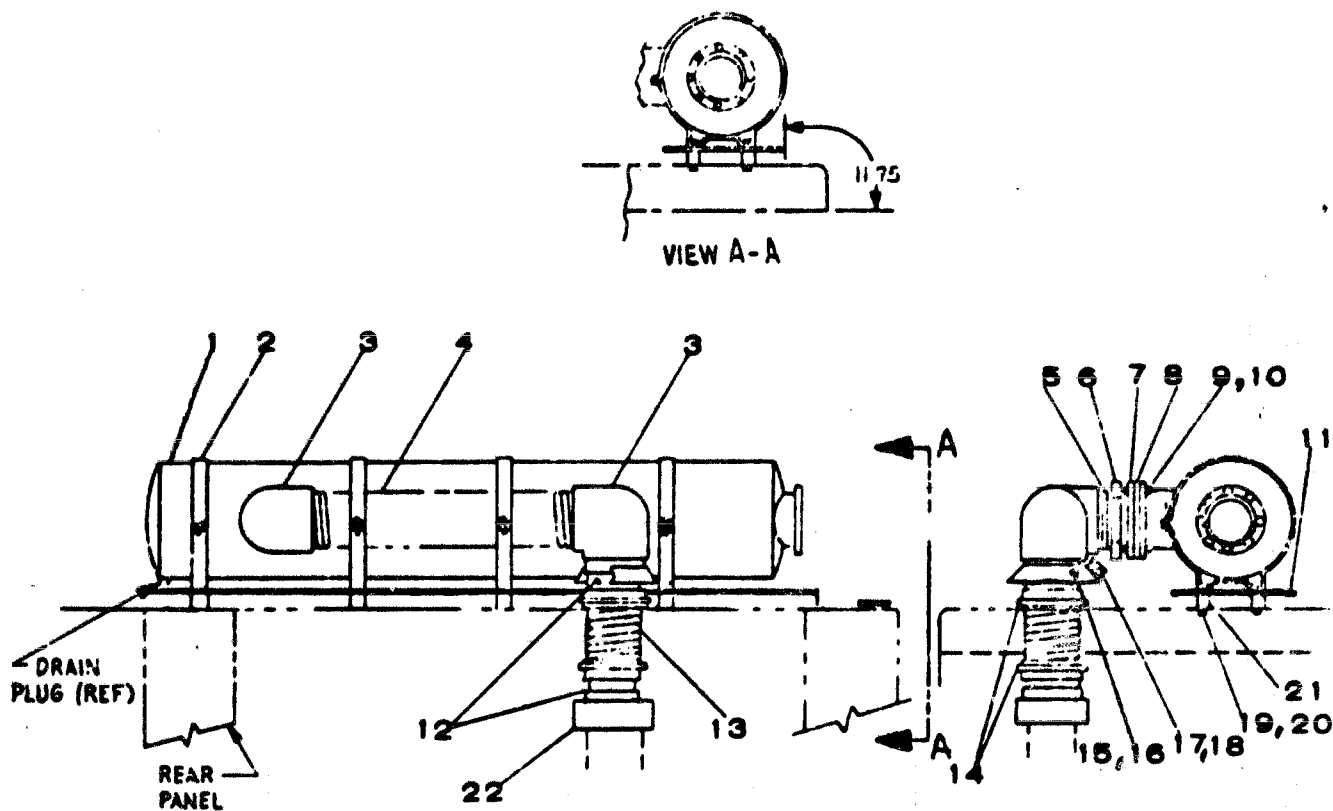
179-0471



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-0471	1	Day (Fuel) Tank - Complete
1	821-0013	6	Screw, Cap - Locking Head (1/4-20 x 1" lg)
2	870-0212	10	Nut, Hex - Self Locking (1/4-20)
3	415-0170	1	Switch, Float
4	501-0194	1	Line, Flex
5	415-0322	1	Tank, Fuel
6	501-0216	1	Line, Flex
7	159-0020	1	Cap, Fuel
8	415-0331	2	Strap, Tank Mounting
9	505-0056	1	Plug, Square Head (1/2)
10	415-0330	1	Plate, Day Tank
11	505-0110	1	Plug, Square Head (3/8")
12	415-0329	2	Brace, Day Tank
13	415-0337	1	Spacer
14	148-0274	1	Bracket, Carb to Regulator Hose

EXHAUST MUFFLER INSTALLATION

179-1533

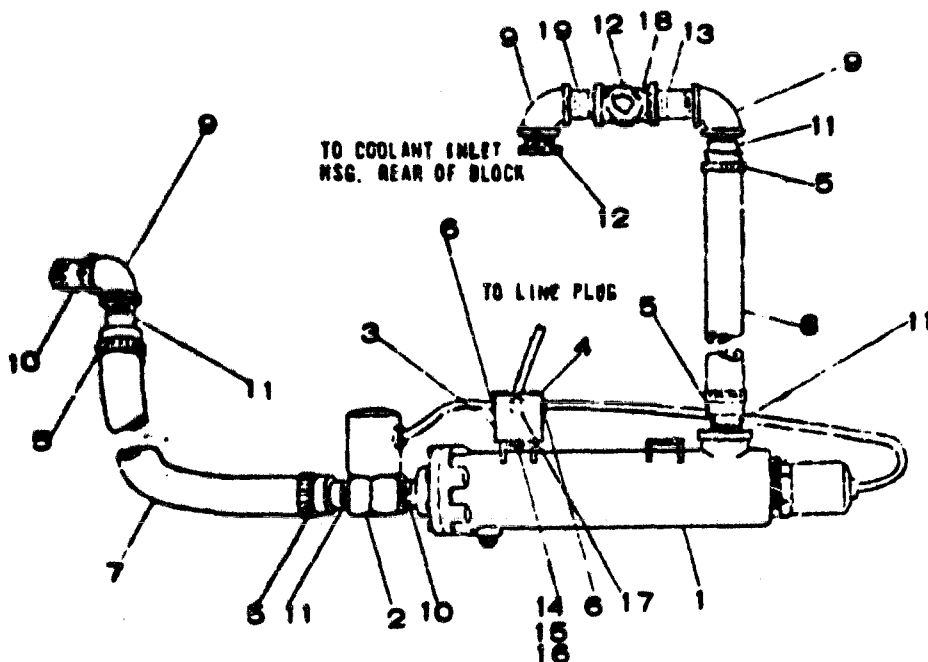


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-1533	1	Exhaust Muffler Installation
1	155-1433	1	Muffler, Exhaust
2	155-1310	4	Band, Muffler Mounting
3	505-0665	2	Elbow (90°)
4	155-1431	1	Tube, Exhaust
5	505-0664	1	Nipple, Pipe
6	505-0695	1	Bushing, Reducer
7	505-1219	1	Flange, Reducing
8	155-0677	1	Gasket, Asbestos
9	800-0160	8	Screw, Cap - Hex Head (3/4-10 x 3-1/4")
10	862-0008	8	Nut, Hex (3/4-10)
11	155-1434	1	Shield, Muffler Heat
12	155-1275	2	Connector, Exhaust
13	155-1143	1	Tubing, Flexible
14	503-0605	2	Clamp, Hose
15	155-1425	1	Shield, Rain
16	895-0007	1	Asbestos (21" x 2" x 1/16")
17	813-0105	2	Screw, Machine - Round Head (#10-32 x 1" lg)
18	870-0189	1	Nut, Lock (#10-32)
19	800-0508	8	Screw, Cap - Hex Head (5/16-18 x 2-3/4" lg)
20	870-0048	8	Nut, Hex - Self Locking (5/16-18)
21	155-1430	8	Spacer, Muffler
22	505-0784	1	Coupling, Pipe

960-0223 (DECEMBER 1980)

WATER JACKET HEATER INSTALLATION

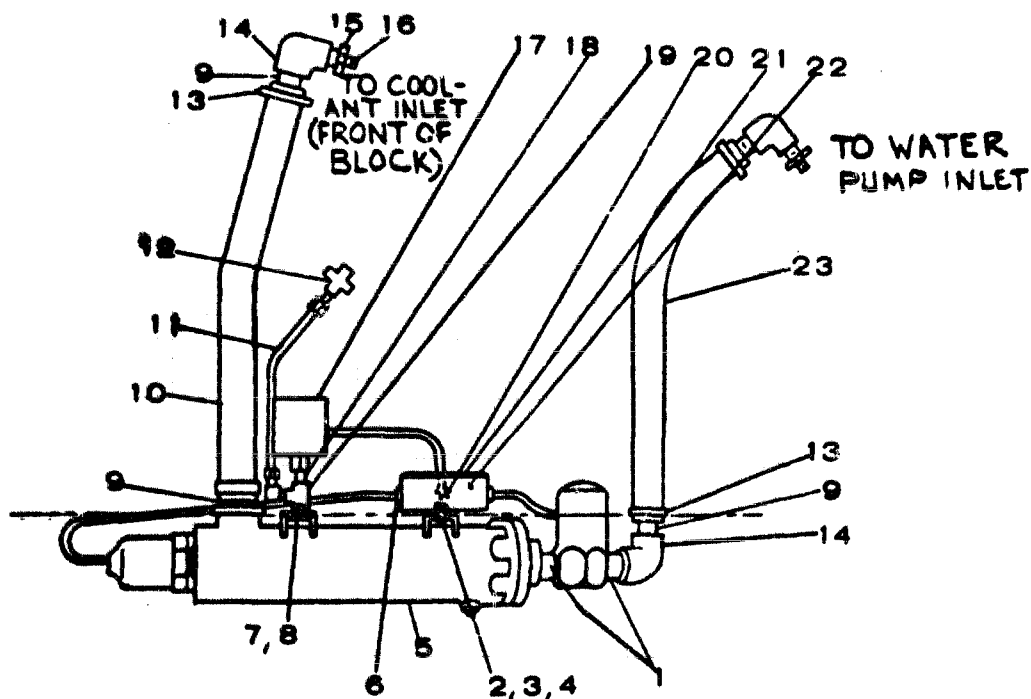
179-2001



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-2001	1	Heater, Water Jacket - Complete
1	333-0143	1	Heater, Water (4000 Watts - 208 Volts)
2	309-0253	1	Thermostat
3	330-0005	1	Box, Outlet
4	330-0004	1	Cover, Box
5	503-0429	4	Clamp, Hose
6	508-0008	2	Grommet, Rubber
7		1	Hose, Rubber (Order 27" of Bulk Hose #503-0249)
8		1	Hose, Rubber (Order 95" of Bulk Hose #503-0249)
9	505-0041	3	Elbow
10	505-0107	2	Nipple
11	505-0759	4	Adapter, Pipe
12	505-0129	3	Bushing, Reducer
13	505-0086	1	Nipple, Pipe
14	813-0103	2	Screw, Machine - Round Head (#10-32 x 3/4" lg)
15	850-0030	2	Washer, Lock - Spring (#10)
16	870-0053	2	Nut, Hex (#10-32)
17	331-0027	1	Connector
18	505-0719	1	Cross, Pipe
19	505-0004	1	Nipple, Pipe

179-2041

WATER JACKET HEATER **PRIOR TO SERIAL #A780294766 DURING SPEC B**

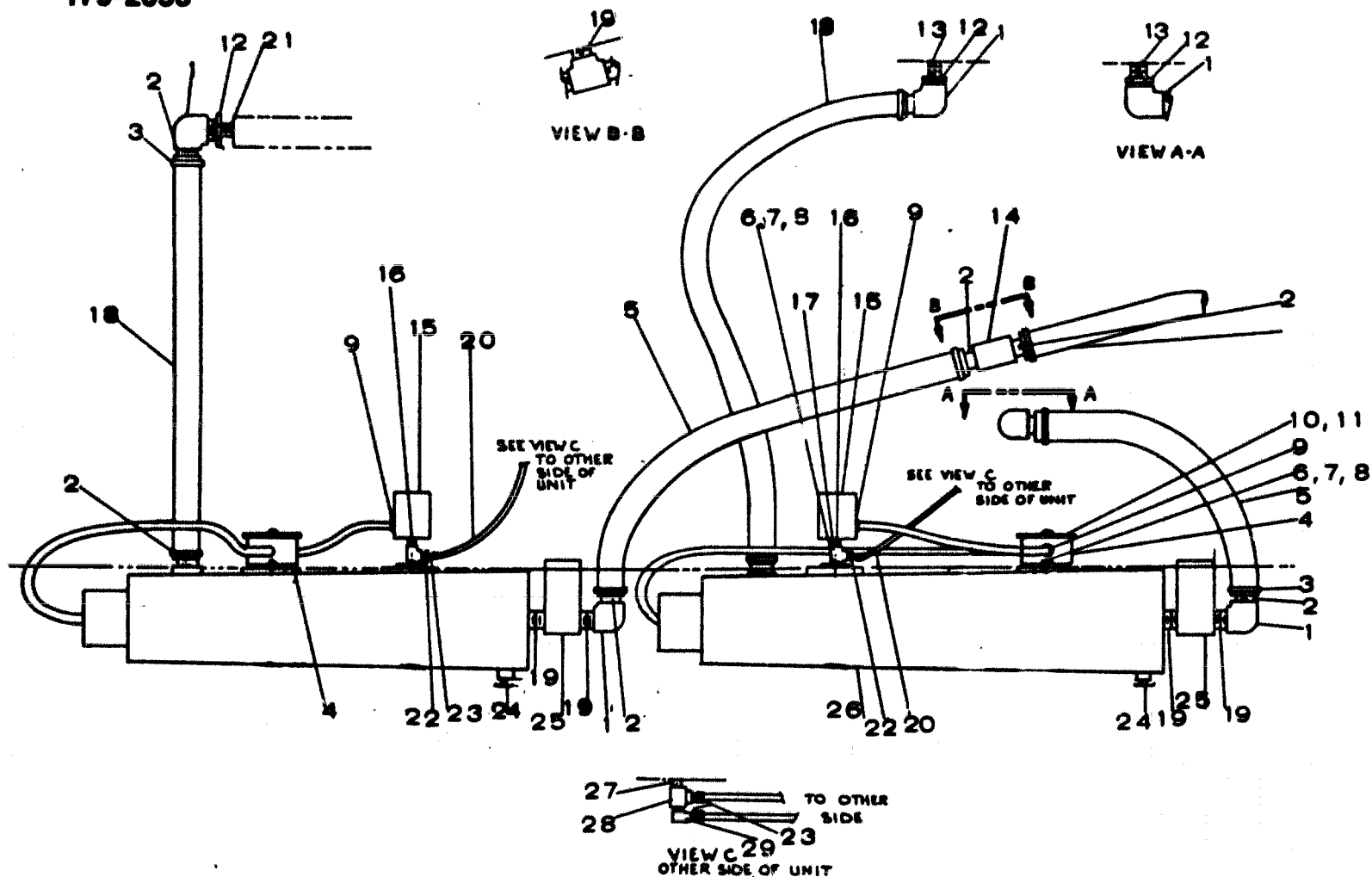


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-2041	1	Heater, Water Jacket - Complete
1	505-0107	2	Nipple, Close
2	815-0103	2	Screw, Machine - Round Head (#10-32 x 3/4" lg)
3	850-0030	2	Washer, Lock - Spring (#10)
4	870-0053	2	Nut, Hex (#10-32)
5	333-0138	1	Heater, Engine
6	508-0008	2	Grommet, Rubber
7	800-0008	2	Screw, Cap - Hex Head (1/4-20 x 1-1/8" lg)
8	870-0212	2	Nut, Hex - Locking Head (1/4-20)
9	505-0759	4	Adapter, Pipe
10		1	Hose (Order 60' of Bulk Hose #503-0249)
11	501-0199	1	Line, Flexible
12	505-0059	1	Tee, Pipe
13	503-0429	4	Clamp, Hose
14	505-0041	2	Elbow
15	505-0129	2	Bushing, Reducer
16	505-0165	2	Nipple, Pipe
17	309-0271	1	Switch, Oil Pressure
18	505-0099	1	Nipple, Closed
19	333-0142	1	Support, Pressure Switch
20	331-0027	1	Connector
21	330-0004	1	Cover, Box
22	330-0005	1	Box, Outlet
23		1	Hose (Order 22' of Bulk Hose #503-0249)
24	309-0253	1	Thermostat

960-0223 (DECEMBER 1980)

WATER JACKET HEATER INSTALLATION (DUAL)

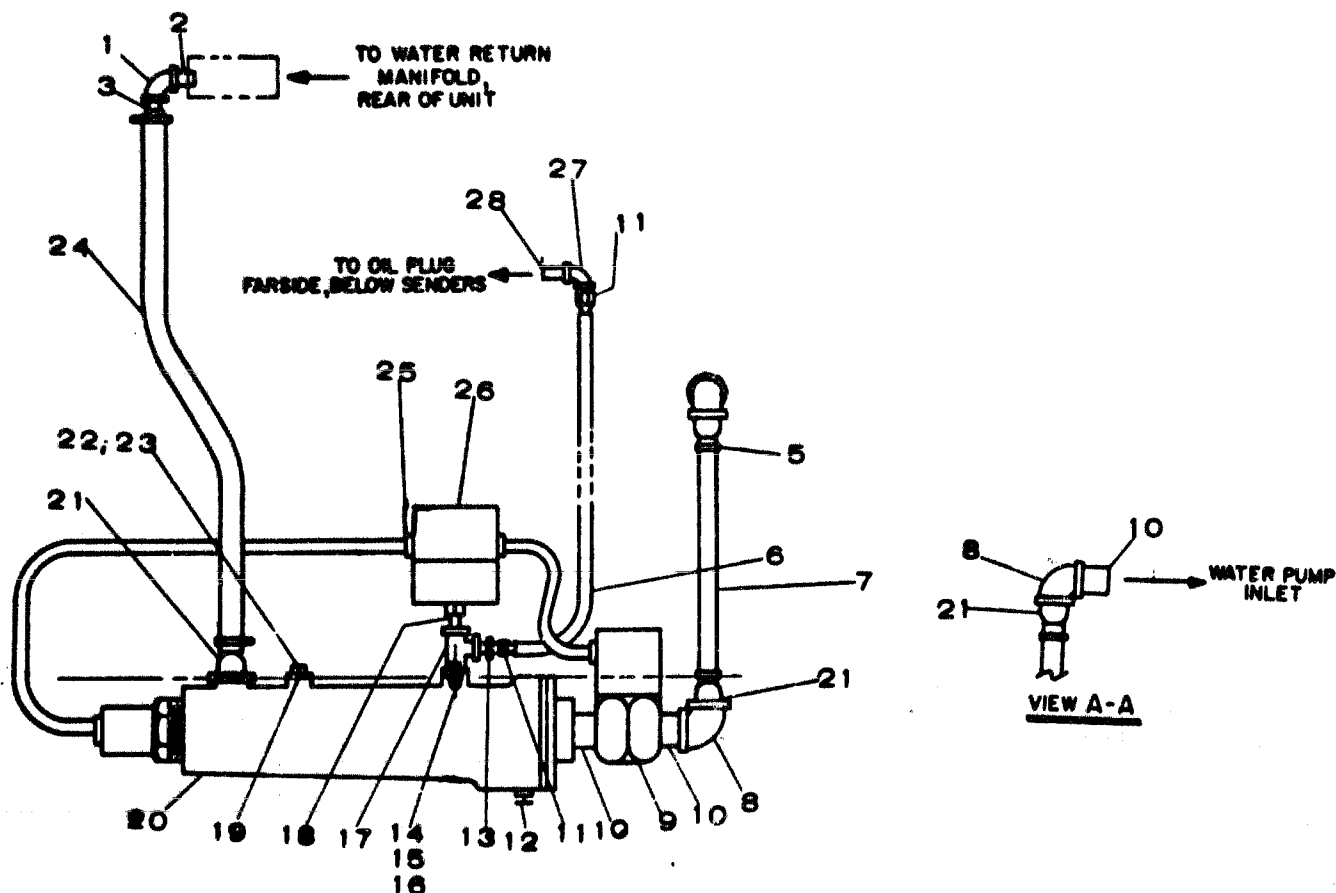
179-2055



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-2055	1	Heater, Water Jacket - Complete
1	505-0041	5	Elbow, Pipe
2	505-0759	7	Adapter, Pipe
3	503-0189	8	Clamp, Hose
4	330-0005	2	Box, Outlet
5	503-0838	2	Hose
6	800-0009	12	Screw, Cap - Hex Head (1/4-20 x 1-1/2" lg)
7	850-0040	12	Washer, Lock - Spring (1/4")
8	862-0001	12	Nut, Hex (1/4-20)
9	331-0027	8	Connector
10	330-0004	2	Cover, Outlet Box
11	332-0614	4	Connector (2 Inside Each Box)
12	505-0129	3	Bushing, Reducer
13	505-0165	2	Nipple, Pipe
14	505-0304	1	Tee, Pipe
15	309-0271	2	Switch, Oil Pressure
16	505-0099	2	Nipple, Close
17	332-0142	2	Support, Pressure Switch
18	503-0839	2	Hose
19	505-0004	5	Nipple, Close
20	501-0199	2	Line, Flex
21	505-0102	1	Nipple, Close
22	505-0007	2	Bushing, Reducer
23	502-0193	4	Connector, Male
24	504-0003	2	Cock, Drain
25	309-0253	2	Thermostat
26	338-0138	2	Heater, Engine (4000 Watt-240 Volt) (3500 Watt, 208 Volt)
27	505-0098	1	Nipple, Close
28	505-0763	1	Cross, Pipe
29	502-0020	1	Elbow, Street

980-0223 (DECEMBER 1980)

179-2066

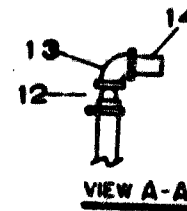
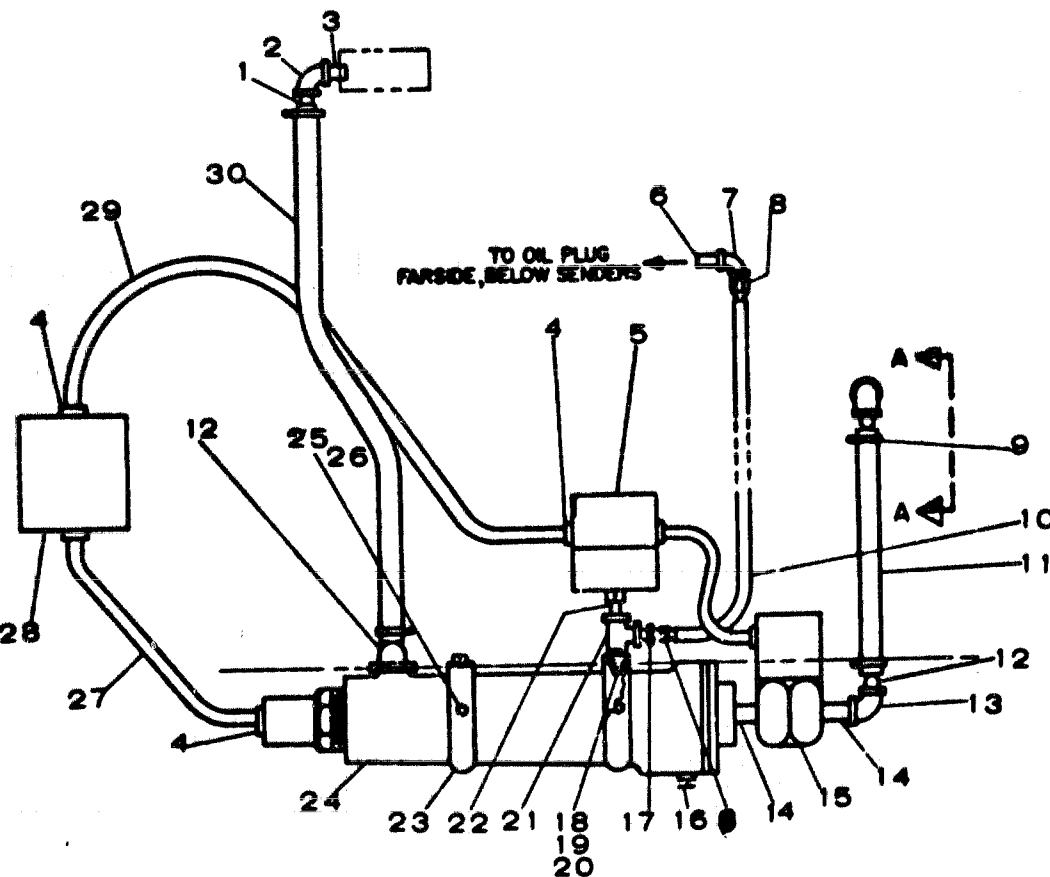
WATER JACKET HEATER INSTALLATION**Begin Serial #A780294766 During Spec B**

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-2066	1	Heater, Water Jacket - Complete
1	505-0132	1	Elbow, Pipe
2	505-0102	1	Nipple, Close
3	505-0324	1	Nipple, Half
4	505-0341	1	Nipple, Pipe
5	503-0429	4	Clamp, Hose
6	501-0199	1	Line, Flex
7	503-0792	1	Hose
8	505-0041	2	Elbow, Pipe
9	309-0304	1	Switch, Thermostat
10	505-0004	3	Nipple, Close
11	502-0193	2	Connector
12	504-0003	1	Cock, Drain
13	505-0007	1	Bushing, Reducer
14		4	Screw, Cap - Hex Head (1/4-20 x 1" lg) - Supplied with Heater
15		4	Washer, Lock (1/4") - Supplied with Heater

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
16		4	Nut, Hex (1/4-20) - Supplied with Heater
17	333-0142	1	Support, Pressure Switch
18	505-0099	1	Nipple, Close
19	130-1191	2	Bracket, Heater Mounting
20	338-0138	1	Heater, Water (4000 Watt - 230 Volt)
21	505-0759	3	Adapter, Pipe
22	821-0016	2	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
23	870-0257	2	Nut, Hex - Self Locking (5/16-18)
24	503-0796	1	Hose
25	331-0027	2	Connector
26	309-0307	1	Switch, Oil Pressure
27	505-0037	1	Elbow, Pipe
28	505-0098	1	Nipple, Close
29	332-0149	2	Terminal
30	323-0957	2	Connector

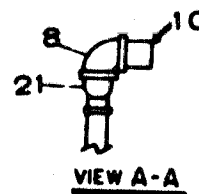
WATER JACKET HEATER INSTALLATION

179-2074



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-2074	1	Heater, Water Jacket - Complete	18		4	Screw, Cap - Hex Head (1/4-20 x 1" lg) - Supplied with Heater
1	505-0324	1	Nipple, Half	19		4	Washer, Lock (1/4") - Supplied with Heater
2	505-0132	1	Elbow, Pipe	20		4	Nut, Hex (1/4-20) - Supplied with Heater
3	505-0102	1	Nipple, Close	21	333-0142	1	Support, Pressure Switch
4	331-0027	6	Connector	22	505-0099	1	Nipple, Close
5	309-0307	1	Switch, Oil Pressure	23	130-1191	2	Bracket, Water Heater Mounting
6	505-0098	1	Nipple, Close	24	333-0181	1	Heater, Water (4000 Watt - 480 Volt)
7	505-0037	1	Elbow, Pipe	25	821-0018	2	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
8	502-0193	2	Connector	26	870-0257	2	Nut, Hex - Self Locking (5/16-18)
9	503-0429	4	Clamp, Hose	27	334-0142	1	Cable
10	501-0199	1	Line, Flex	28	307-1164	1	Contactor
11	503-0792	1	Hose	29	334-0130	1	Cord
12	505-0759	3	Adapter, Pipe	30	503-0796	1	Hose
13	505-0041	2	Elbow, Pipe	31	332-0014	6	Terminal
14	505-0004	3	Nipple, Close	32	332-0149	6	Terminal
15	309-0304	1	Switch, Thermostat				
16	504-0003	1	Cock, Drain				
17	505-0007	1	Bushing, Reducer				

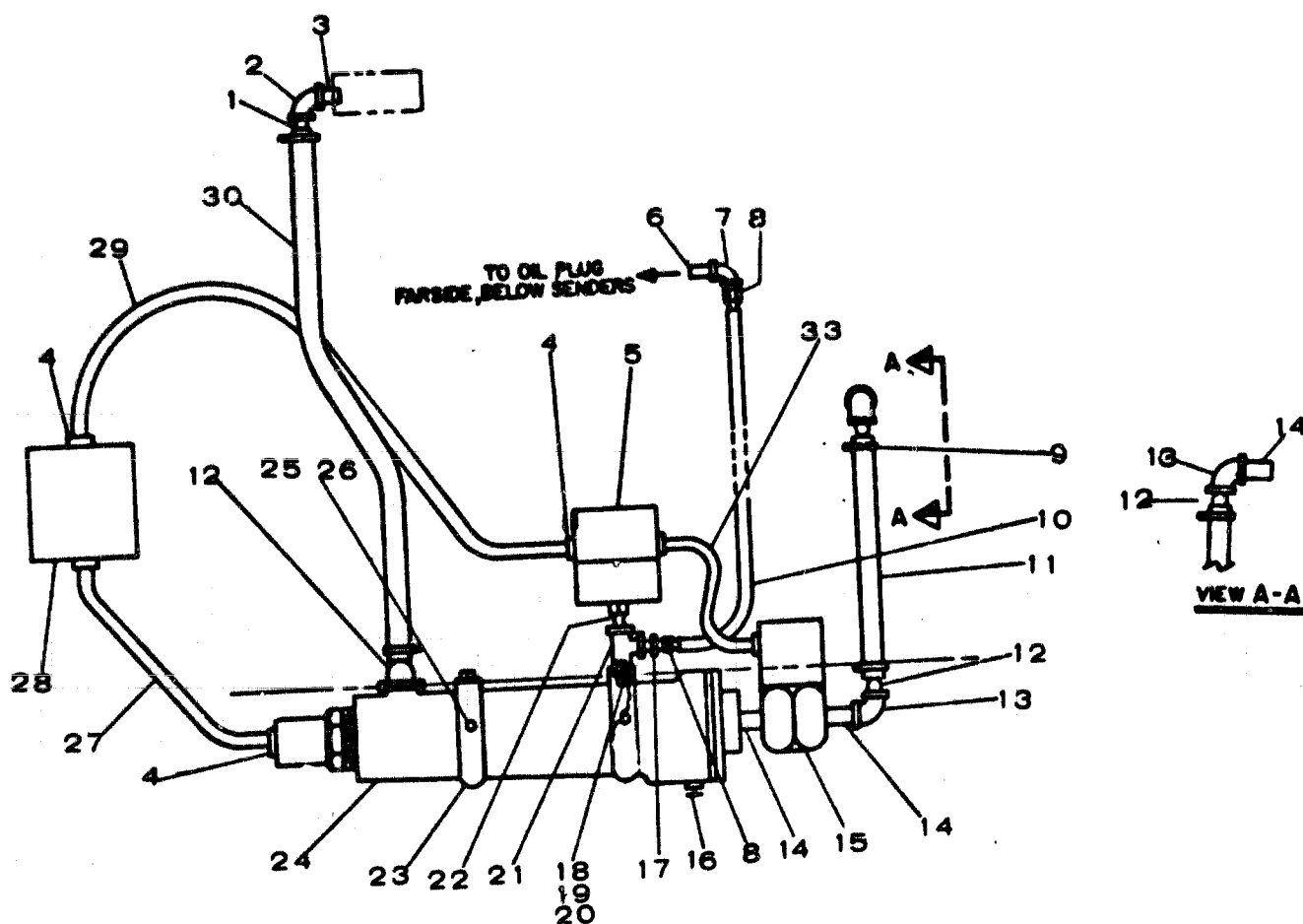
179-2000



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
16		4	Nut, Hex (1/4-20) - Supplied with Heater
17	333-0142	1	Support, Pressure Switch
18	505-0099	1	Nipple, Close
19	130-1191	2	Bracket, Water Heater Mounting
20	333-0143	1	Heater, Water (4000 Watt, 208 Volt)
21	505-0759	3	Adapter, Pipe
22	821-0061	2	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
23	870-0257	2	Nut, Hex - Self Locking (5/16-18)
24	503-0796	1	Hose
25	331-0027	2	Connector
26	309-0307	1	Switch, Oil Pressure
27	505-0037	1	Elbow, Pipe
28	505-0098	1	Nipple, Close
29	332-0149	2	Terminal
30	323-0957	2	Connector

WATER JACKET HEATER INSTALLATION

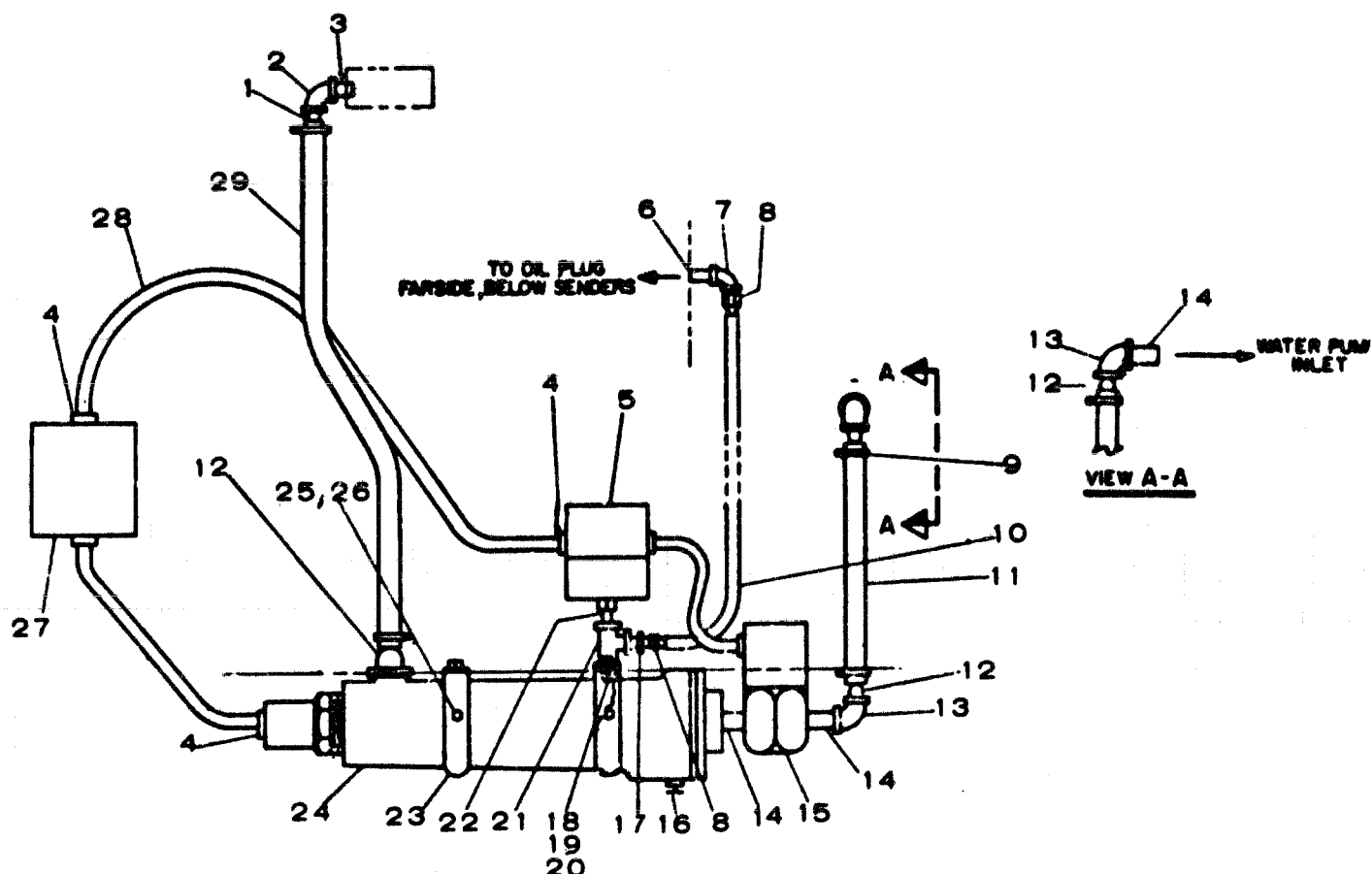
179-2107



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	179-2107	1	Heater, Water Jacket - Complete
1	505-0324	1	Nipple, Half
2	505-0132	1	Elbow, Pipe
3	505-0102	1	Nipple, Close
4	331-0027	6	Connector
5	309-0307	1	Switch, Oil Pressure
6	505-0098	1	Nipple, Close
7	505-0037	1	Elbow, Pipe
8	502-0193	2	Connector
9	503-0429	4	Clamp, Hose
10	501-0199	1	Line, Flex
11	503-0792	1	Hose
12	505-0759	3	Adapter, Pipe
13	505-0041	2	Elbow, Pipe
14	505-0004	3	Nipple, Close
15	309-0304	1	Switch, Thermostat
16	504-0003	1	Cock, Drain
17	505-0007	1	Bushing, Reducer

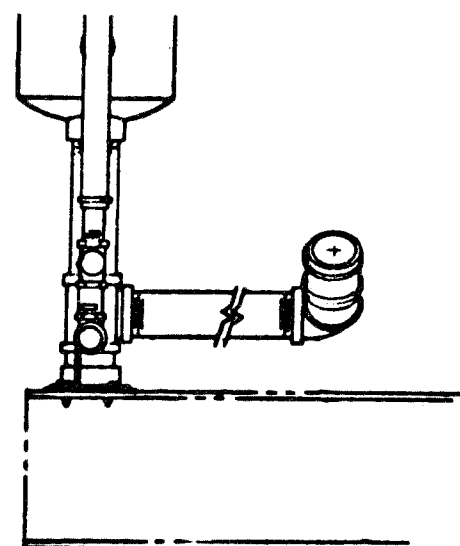
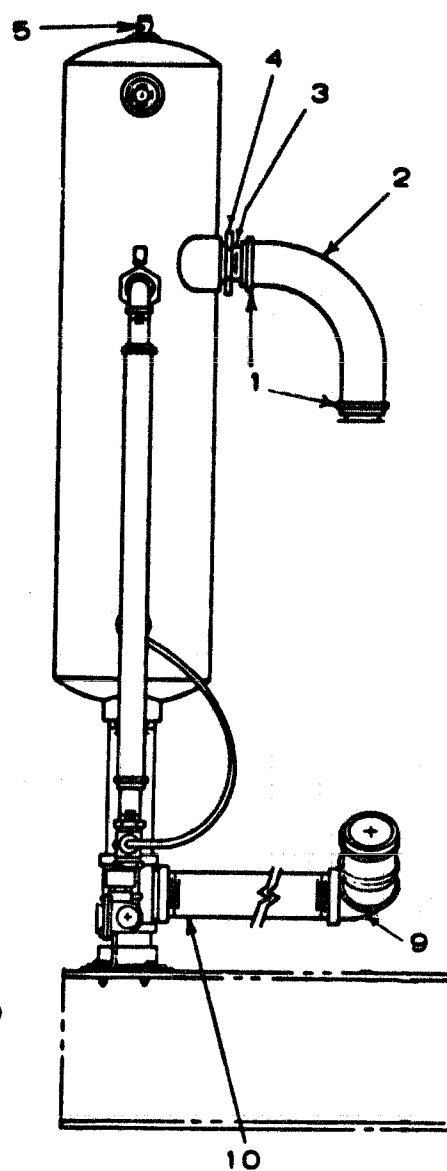
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
18		4	Screw, Cap - Hex Head (1/4-20 x 1" lg) - Supplied with Heater
19		4	Washer, Lock (1/4") - Supplied with Heater
20		4	Nut, Hex (1/4-20) - Supplied with Heater
21	333-0142	1	Support, Pressure Switch
22	505-0099	1	Nipple, Close
23	130-1191	2	Bracket, Heater Mounting
24	333-0144	1	Heater, Water (4000 Watt, 480 Volt)
25	821-0016	2	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
26	870-0257	2	Nut, Hex - Self Locking (5/16-18)
27	335-0119	1	Cable
28	307-1164	1	Contactor
29	335-0120	1	Cord
30	503-0796	1	Hose
31	332-0014	6	Terminal
32	332-0149	6	Terminal
33	335-0121	1	Cord

179-2115



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	179-2115	1	Heater, Water Jacket - Complete	18		4	Screw, Cap - Hex Head (1/4-20 x 1" lg) - Supplied with Heater
1	505-0324	1	Nipple, Half	19		4	Washer, Lock (1/4") - Supplied with Heater
2	505-0132	1	Elbow, Pipe	20		4	Nut, Hex (1/4-20) - Supplied with Heater
3	505-0102	1	Nipple, Close	21	333-0142	1	Support, Pressure Switch
4	331-0027	6	Connector	22	505-0099	1	Nipple, Close
5	309-0307	1	Switch, Oil Pressure	23	130-1191	2	Bracket, Water Heater Mounting
6	505-0098	1	Nipple, Close	24	333-0164	1	Heater, Water (4000 W, - 208 Volt)
7	505-0037	1	Elbow, Pipe	25	821-0016	2	Screw, Cap - Locking Head (5/16-18 x 3/4" lg)
8	502-0193	2	Connector	26	870-0257	2	Nut, Hex - Self Locking (5/16-18)
9	503-0429	4	Clamp, Hose	27	307-1460	1	Contacto
10	501-0199	1	Line, Flex	28	335-0120	1	Cord
11	503-0792	1	Hose	29	503-0796	1	Hose
12	505-0759	3	Adapter, Pipe	30	332-0014	6	Terminal
13	505-0041	2	Elbow, Pipe	31	332-0149	6	Terminal
14	505-0004	3	Nipple, Close				
15	309-0304	1	Switch, Thermostat				
16	504-0003	1	Cock, Drain				
17	505-0007	1	Bushing, Reducer				

179-1046
179-1048



OPTIONAL COOLING SYSTEM WITH STANDPIPE

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
STANDPIPE COOLING SYSTEM INSTALLATION PACKAGE (All Parts Common Except As Marked)				18	504-0051	1	Valve, Globe - Part of 179-1048 Package
	179-1048	1	Without Coolant Temperature Regulator	19	505-0140	1	Plug, Pipe (1" NPT) - Part of 179-1048 Package
	179-1046	1	With Coolant Temperature Regulator	20	505-0129	1	Bushing, Reducer (1" NPT x 3/4" NPT)
1	503-0059	4	Clamp, Hose	21	505-0042	2	Elbow, Pipe - 90 Deg (1-1/4" NPT)
2	503-0334	2	Hose, Rubber (2-1/4" ID x 19-1/8" Lg)	22	505-0258	2	Nipple, Pipe - Close (1-1/4" NPT x 3")
3	505-0204	2	Nipple, Pipe - Half (2" NPT x 4")	23	505-0270	1	Bushing, Reducer (2" NPT x 1-1/4" NPT)
4	505-0207	2	Bushing, Reducer (2-1/2" NPT x 2" NPT)	24	800-0006	2	Screw, Cap - Hex Head (1/4-20 x 7/8")
5	504-0062	1	Valve, Vacuum Relief	25	850-0040	2	Washer, Lock - Spring (1/4")
6	503-0622	2	Clamp, Hose	26	862-0001	2	Nut, Hex (1/4-20)
7	503-0815	1	Hose, Rubber (3-1/2" ID x 5" Lg)	27	110-1168	1	Nipple, Support Assembly
8	505-0603	1	Nipple, Pipe (3" NPT x 8")	28	130-1169	1	Tank, Standpipe
9	505-0453	1	Elbow, Pipe - 90 Deg (3" NPT)	29	505-0679	1	Nipple, Pipe (3" NPT x 12")
10	505-0842	1	Nipple, Pipe (3" NPT x 27-1/2")	30	505-0669	1	Tee, Pipe (3" NPT)
11	505-0453	1	Elbow, Pipe - 90 Deg (3" NPT)	31	505-0382	1	Nipple, Pipe - Close (3" NPT x 2-5/8")
12	505-0832	1	Nipple, Pipe (3" NPT x 3-1/2")	32	505-0006	1	Cock, Drain
13	503-0011	2	Clamp, Hose	33	800-0091	4	Screw, Cap - Hex Head (1/2-13 x 1-1/4")
14	503-0359	1	Hose, Rubber (1-5/8" ID x 36" Lg)	34	850-0060	4	Washer, Lock - Spring (1/2")
15	505-0437	2	Nipple, Pipe - Half (1-1/4" NPT x 4")	35	862-0005	4	Nut, Hex (1/2-13)
16	309-0243	1	Valve, Control - Temperature Regulating - Part of 179-1046 Package	36	130-0740	1	Base, Standpipe
17	307-0839	1	Valve, Control - Solenoid	37	800-0092	4	Screw, Cap - Hex Head (1/2-13 x 1-1/2")
				38	850-0060	4	Washer, Lock - Spring (1/2")
				39	862-0005	4	Nut, Hex (1/2-13)
				40	130-1168	1	Support, Mounting - Standpipe

960-1010 (8-79)

SUPPLEMENTARY PARTS LIST

This Supplementary Parts List Applies to the Standard LDFS Models listed below. Use these parts in place of/or in addition to those listed in Main Parts Catalog, 960-0223.

ELECTRIC GENERATING SET DATA TABLE

MODEL AND SPEC NO	ELECTRICAL DATA			
	WATTS	VOLT	HERTZ	PHASE
246.0 LDFS-517R/*	246,000	#	50	3
280.0 LDFS-17R/*	280,000	#	60	3

* - The Specification Letter Advances (A to B, B to C, etc.) with Manufacturing Changes.

- These sets are Broad Range Reconnectable; Refer to Connection Diagram inside Control Box Cover.

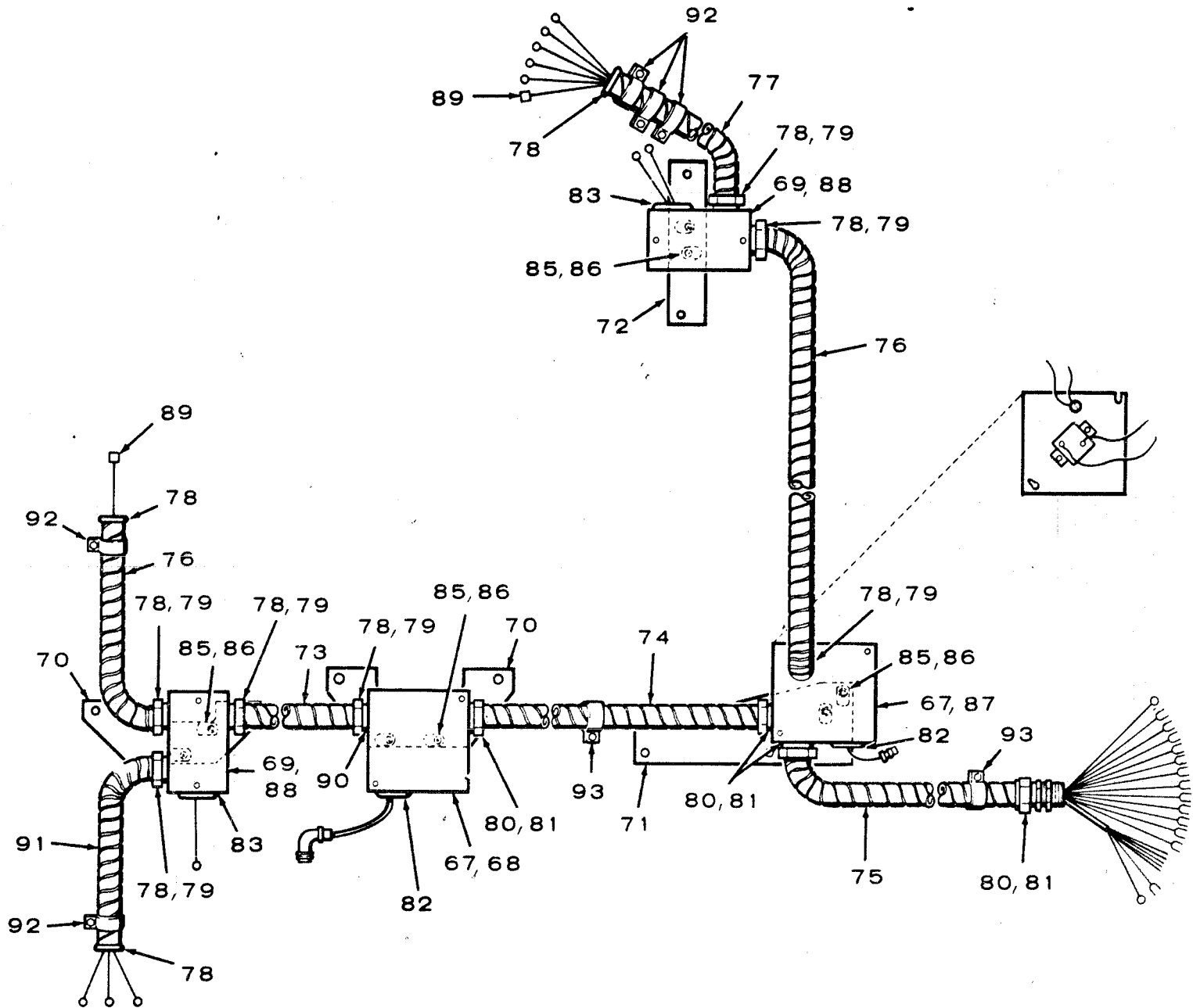
REPLACEMENT ENGINE

100-1432 1 Engine, Replacement

MISCELLANEOUS ENGINE PARTS

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
65	505-0057	1	Plug, Square Head
66	338-1166	1	Harness, Engine Wiring (Includes Parts Marked *)
67	330-0093	2	* Box, Outlet
68	330-0006	1	* Cover, Outlet Box
69	330-0094	2	* Box, Outlet
70	330-0104	2	* Bracket, Jct. Box Mtg.
71	330-0108	1	* Bracket, Jct. Box Mtg.
72	330-0103	1	* Bracket, Jct. Box Mtg.
73	331-0177	1	* Conduit Flex
74	331-0175	1	* Conduit Flex

MISCELLANEOUS ENGINE PARTS



MISCELLANEOUS ENGINE PARTS

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
75	331-0174	1	* Conduit, Flex
76	331-0178	2	* Conduit, Flex
77	331-0171	1	* Conduit, Flex
78	508-0201	10	* Bushing
79	331-0149	7	* Connector
80	508-0202	4	* Bushing
81	331-0150	4	* Connector
82	508-0009	2	* Grommet
83	508-0001	2	* Grommet
84	813-0098	8	* Screw, Machine-Round Head (#10-32 X 3/8" Long)
85	853-0008	8	* Washer, Lock - External (#10)
86	338-1141	1	* Harness, Governor Wiring
87	330-0099	1	* Cover, Outlet Box
88	330-0004	2	* Cover
89	332-0819	2	* Housing, Fasten Terminal
90	331-0153	2	* Washer, Reducing
91	331-0145	1	* Conduit Flex
92	331-0180	5	* Strap, Half
93	331-0181	2	* Strap, Half
	151-0423	1	# Actuator, Governor (B.C. # 11003-0-0-24)
	151-0399	1	# Control (Includes Mtg. Screws) (B.C. # DYN1 1000-2-0-24)
	151-0441	1	# Lever, Actuator (B.C. # DYNC-208)
	151-0442	1	# Rod, Threaded (B.C. # GYRF-43-1)
	151-0443	2	# Bearing, Rod End (B.C. # GYNZ-47-2)
	151-0441	1	# Pickup, Magnetic (B.C. # DYNT 10200)
			# Bracket, Actuator Mtg. (B.C. # DYNZ-68)

- Check for Barber-Colman numbers when ordering parts.

* - Parts Included in 338-1166 Wiring Harness.

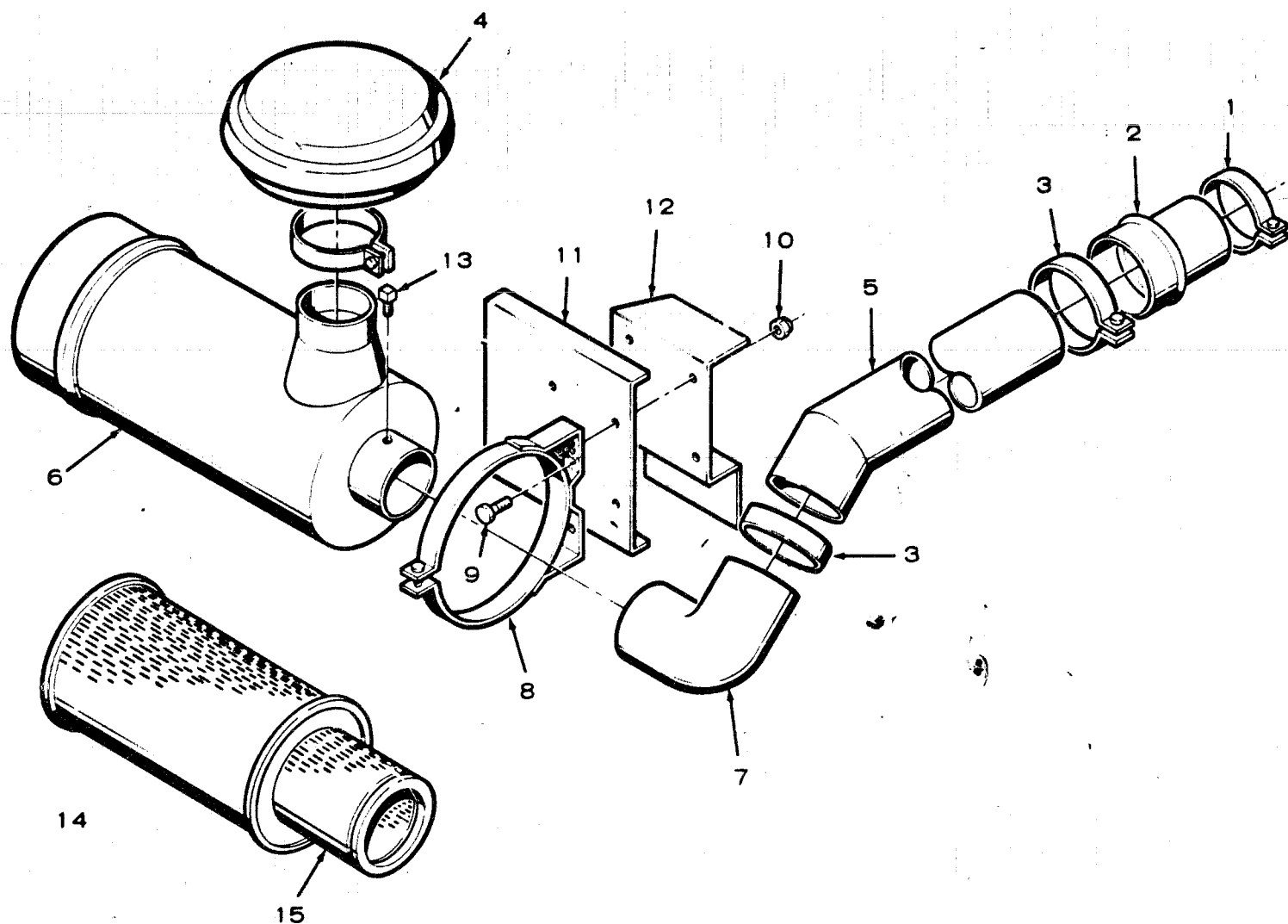
GENERATOR

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1	201-1950	1	Rotor Assembly, Wound
14	220-1917	1	Stator Assembly (Includes Bus Bars)

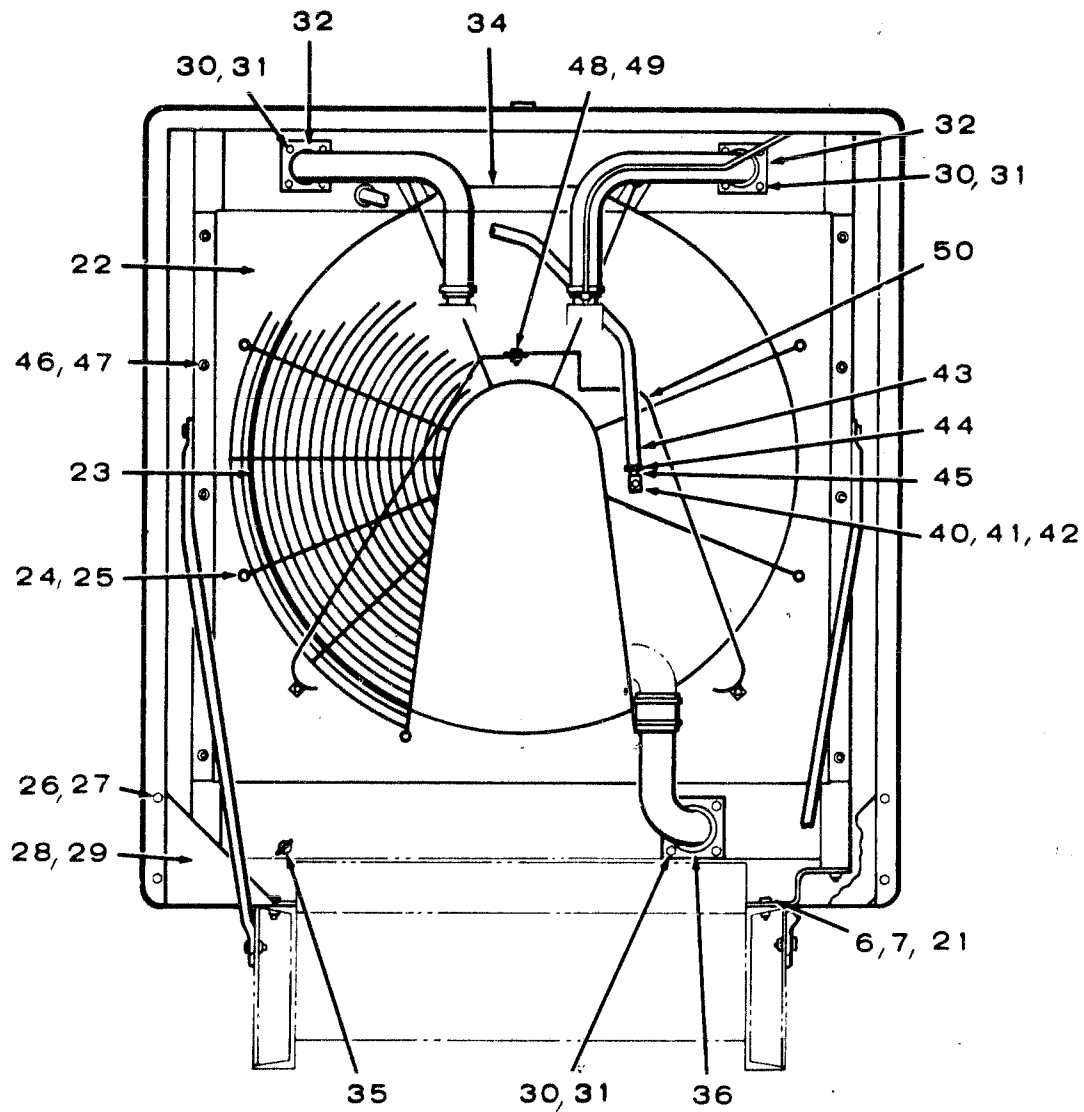
AIR CLEANER PARTS

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1	503-0863	1	Clamp, Hose
2	503-0862	1	Reducer, Tube
3	503-0864	3	Clamp, Hose
4	140-1545	1	Hood, Air Inlet
5	140-1606	1	Tube, Air Cleaner
6	140-1537	1	Cleaner, Air (Includes Elements)
7	503-0861	1	Elbow
8	140-0757	2	Clamp, Air Cleaner
9	821-0029	10	Screw, Cap-Locking Head (3/8-16 X 3/4" LG)
10	870-0281	8	Nut, Hex - Self Locking - (3/8-16)
11	140-1608	1	Plate, Air Cleaner Mtg.
12	140-1372	1	Bracket, Air Cleaner Mtg.
13	140-1548	1	Indicator, Service
14	140-1631	1	Element, Primary
15	140-1630	1	Element, Safety

AIR CLEANER PARTS



COOLING SYSTEM - FRONT VIEW



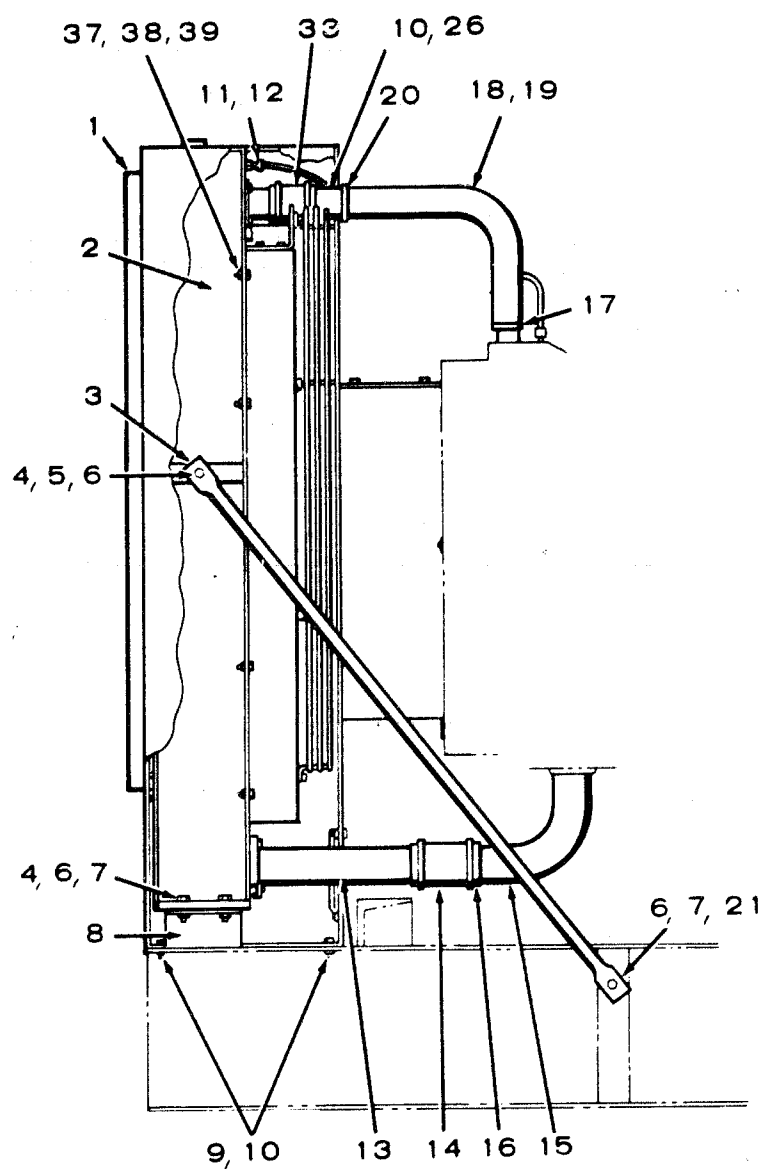
COOLING SYSTEM

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1	405-2228	1	Panel, Front End
2	130-1239	1	Radiator (Includes Cap)
3	130-0994	2	Brace, Radiator Support
4	800-0133	6	Screw, Cap-Hex Head - (5/8-11 X 1" Long)
5	526-0112	18	Washer, Flat (11/16" ID X 1-3/8" OD X 7/64" Thick)
6	850-0070	8	Washer, Lock - Spring - (5/8")
7	862-0007	6	Nut, Hex - (5/8-11)
8	130-1004	2	Bracket, Radiator Support
9	800-0029	4	Screw, Cap-Hex Head - (5/16-18 X 1-1/8" LG)
10	870-0257	4	Nut, Hex - Self Locking - (5/16-18)
11	502-0184	1	Connector
12	501-0087	1	Hose, Flex
13	130-1001	1	Tube, Outlet
14	503-0782	1	Hose
15	130-1030	1	Inlet, Water
16	503-0612	2	Clamp, Hose
17	503-0354	4	Clamp Hose
18	503-0616	1	Hose, Radiator
19	503-0629	1	Hose, Radiator
20	130-1002	2	Tube, Inlet
21	800-0131	6	Screw, Cap-Hex Head - (5/8-11 X 1 1/4" Long)
22	130-1003	1	Shroud, Fan
23	130-1013	1	Guard, Fan
24	821-0011	12	Screw, Cap - Locking Head - (1/4-20 X 7/8" Long)
25	526-0005	12	Washer, Flat (9/32" ID X 1-3/4" OD X 3/16" Thick)
26	821-0016	4	Screw, Cap - Locking Head - (5/16-18 X 3/4" Long)
27	870-0257	4	Nut, Hex - Self Locking - (5/16-18)
28	405-2236	1	Bracket, Panel Mtg. (R.H.)
29	405-2237	1	Bracket, Panel Mtg. (L.H.)
30	800-0072	12	Screw, Cap-Hex Head - (7/16-14 X 1 1/4" Long)
31	850-0055	12	Washer, Lock - Spring (7/16")
32	130-1194	2	Gasket, Radiator Inlet
33	130-0996	2	Brace, Radiator Support
35	504-0003	1	Valve, Drain
36	130-1193	1	Gasket, Radiator Outlet
37	800-0090	2	Screw, Cap-Hex Head - (1/2-13 X 1" Long)
38	850-0060	2	Washer, Lock Spring - (1/2")
39	862-0016	2	Nut, Hex - (1/2-13)
40	505-0304	1	Tee, Pipe
41	505-0140	1	Plug, Square
42	505-0004	1	Nipple, Pipe
43	503-0914	1	Hose
44	503-0429	2	Clamp, Hose
45	505-0759	1	Adapter, Pipe
46	821-0029	10	Screw, Cap - Locking Head - (3/8-16 X 3/4" Long)
47	870-0281	10	Nut, Hex - Self Locking - (3/8-16)
48	821-0010	2	Screw, Cap - Locking Head - (1/4-20 X 1/2" LG)

COOLING SYSTEM

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
50	191-1150	1	Guard, Belt - (L.H.)
51	191-1149	1	Guard, Belt - (R.H.)
52	505-0129	1	Bushing, Reducer .
53	130-1007	2	Foam, Insulation
54	130-1006	2	Foam, Insulation

COOLING SYSTEM - SIDE VIEW



MOUNTING AND HOUSING

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
8	234-0370	1	Grille, Generator Air Inlet

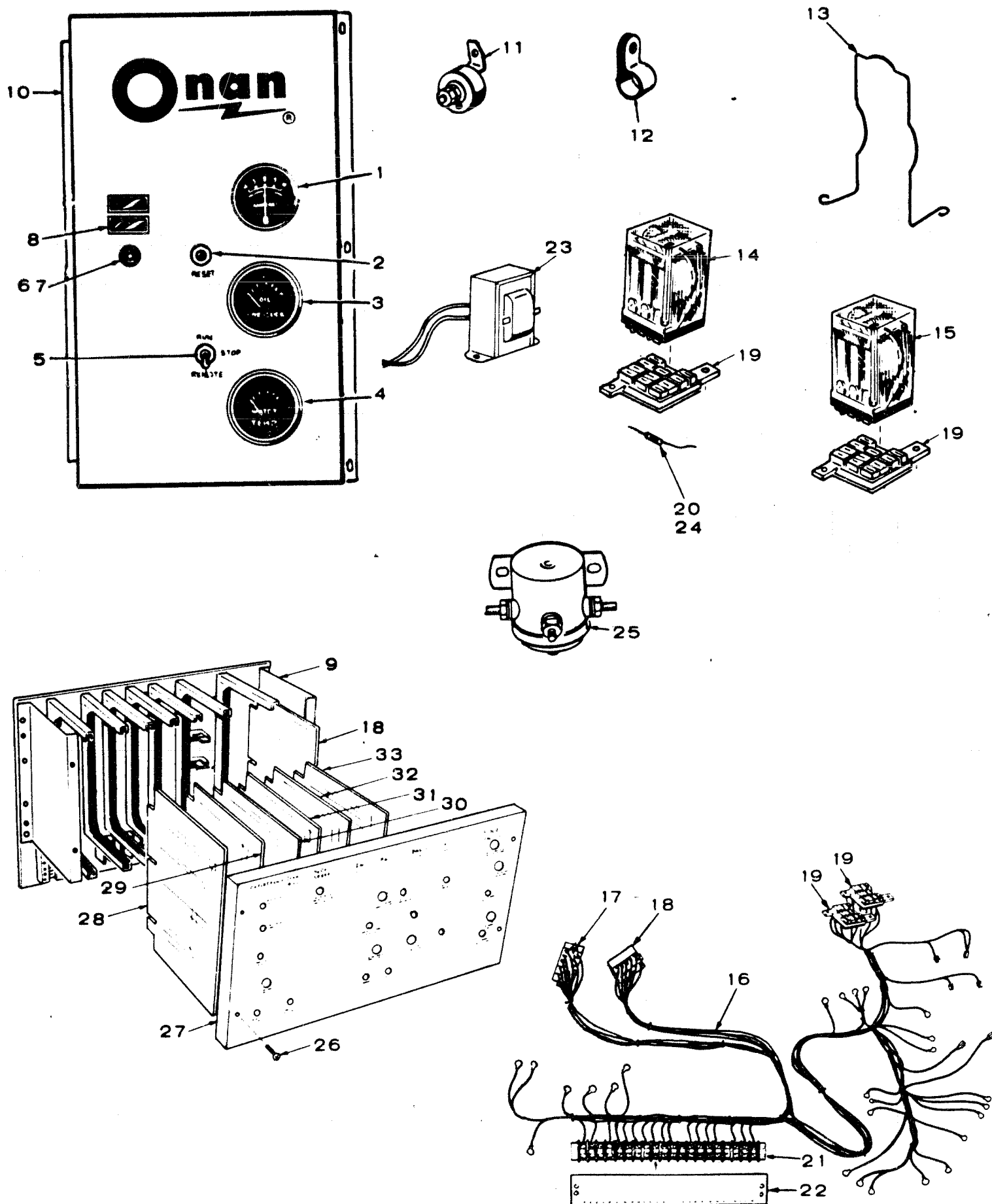
GENERATOR

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1	201-1950	1	Rotor Assembly, Wound
14	Stator Assembly, Wound (Includes Bus Bars)		
	220-2140	1	50 Hertz - 517R Sets
	220-1917	1	60 Hertz - 17R Sets

CONTROL (AC PORTION)

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1	301-4668	1	Box, Control
2	301-3170	1	Panel, Control
35	321-0223	5	Fuse - 15 Ampere
36	321-0177	1	Block, Fuse
37	321-0176	1	Block, Fuse
38	338-1104	1	Harness, Wiring
39	151-0402	1	Potentiometer, Governor Adj.
40	332-2044	1	Regulator Board, Voltage -, (See Separate, Group For Components)

CONTROL (ENGINE SECTION)



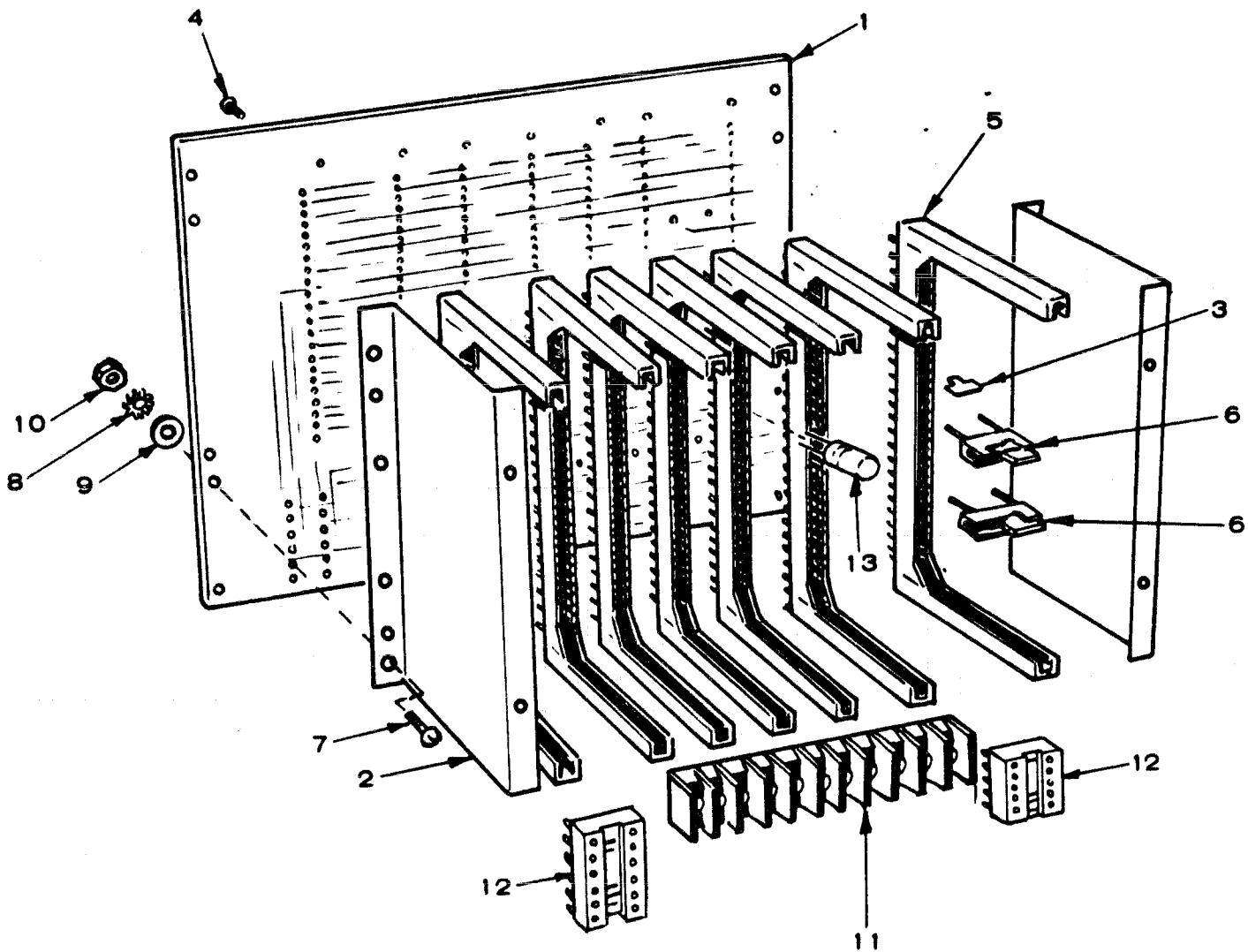
CONTROL (ENGINE SECTION)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	302-0061	1	Ammeter (30-0-30)	16	338-1016	1	Harness, Wiring (Includes Parts Marked †)
2	308-0410	1	Switch, Push	17	332-0984	2	†Connector, Plug, Electrical (12 Pin)
3	193-0243	1	Gauge, Oil Pressure (0-80)	18	300-1579	1	*Module, Time Delay Start-Stop
4	193-0245	1	Gauge, Water Temperature	19	323-0765	2	†Socket, Relay
5	SWITCH, TOGGLE			20	357-0004	1	†Diode
	308-0220	1	Standard Sets	21	332-1005	1	†Board, Terminal (20 Place)
	308-0347	1	Penn State Sets	22	332-1559	1	Strip, Marker
6	321-0147	1	Fuse - 5 Amp	23	315-0361	1	Transformer, Step-down
7	321-0217	1	Fuseholder	24	357-0004	2	Diode
8	LIGHT, INDICATOR			25	307-0061	1	Relay - Start Solenoid
	322-0119	1	Overcrank	26	815-0387	4	Screw, Machine - Pan Head, Cross-Recessed Drive (#6-32 x 1/4")
	322-0120	1	Low Oil Pressure	27	301-4015	1	Cover, Access - Control Modules
	322-0121	1	High Engine Temperature	28	300-1573	1	*Module, Cycle Cranker
	322-0122	1	Low Engine Temperature	29	300-1574	1	*Module, Start-Disconnect
	322-0123	1	Overspeed	30	300-1575	1	*Module, Overspeed Control
	322-0135	1	Over Voltage	31	300-1576	1	*Module, Monitor No. 1
9	300-1572	1	*Chassis, Control	32	300-1577	1	*Module, Monitor No. 2
10	301-4692	1	Panel, Control	33	300-1578	1	*Module, Engine Shutdown
11	193-0250	2	Resistor, Gauge				
12	332-0052	1	Clamp, Loop				
13	307-1157	2	Spring, Hold-down - Relay				
14	307-1061	1	Relay, Armature - Starter Protection				
15	307-1056	1	Relay, Armature - Start Disconnect				

* - See Separate Group for Components.

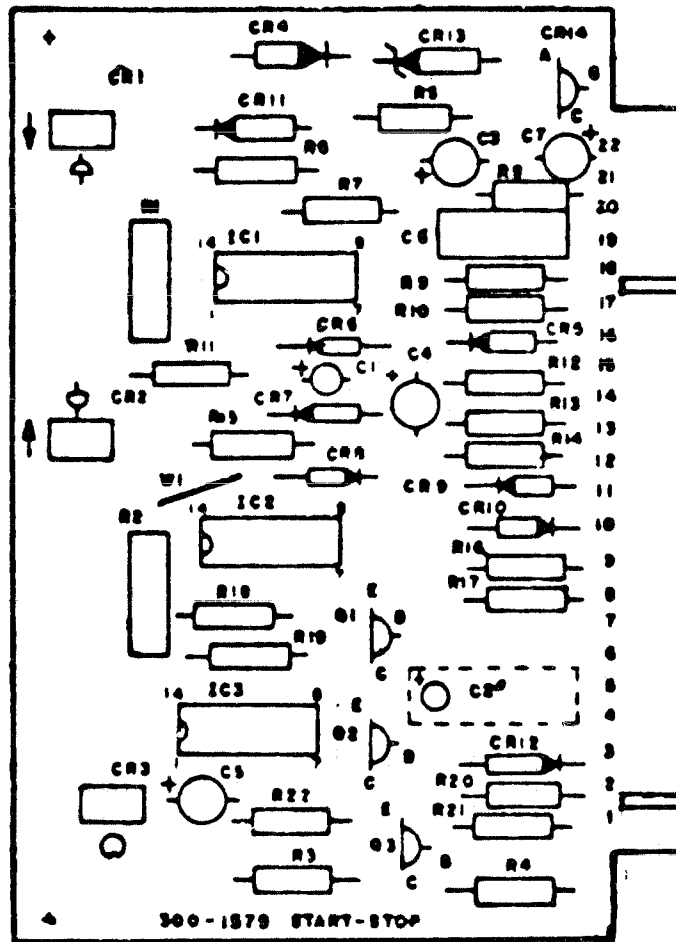
† - Included in Wiring Harness.

CONTROL CHASSIS



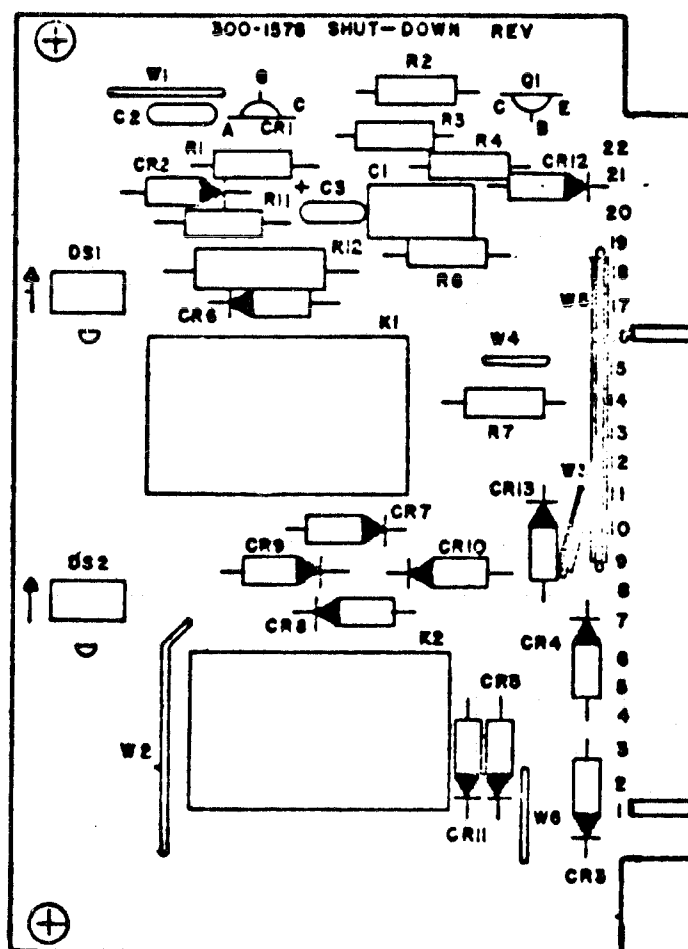
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	300-1572	1	Chassis, Control (Complete)
1	332-1884	1	Board, Printed Circuit
2	301-3880	2	Bracket, Module Cover Mtg.
3	332-1917	14	Plug, Keying
4	812-0029	14	Screw, Machine - Roundhead (#4-40 x 3/8" long)
5	332-1887	7	Socket Plug In Module
6	308-0324	2	Switch, Slide
7	812-0059	4	Screw, Machine - Roundhead (#6-32 x 1/4" long)
8	853-0003	4	Washer, Lock - External (#6)
9	526-0047	4	Washer, Flat (.147" ID x 5/16" OD x 1/32" Thk)
10	860-0006	4	Nut, Hex (#6-32)
11	332-1909	1	Block, Terminal (11 Place)
12	323-0983	2	Connector, Receptacle Electrical (12 Pin)
13	356-0068	1	Capacitor, Electrolytic (180 MFD - 40 Volt)

TIME DELAY START-STOP MODULE (300-1579)



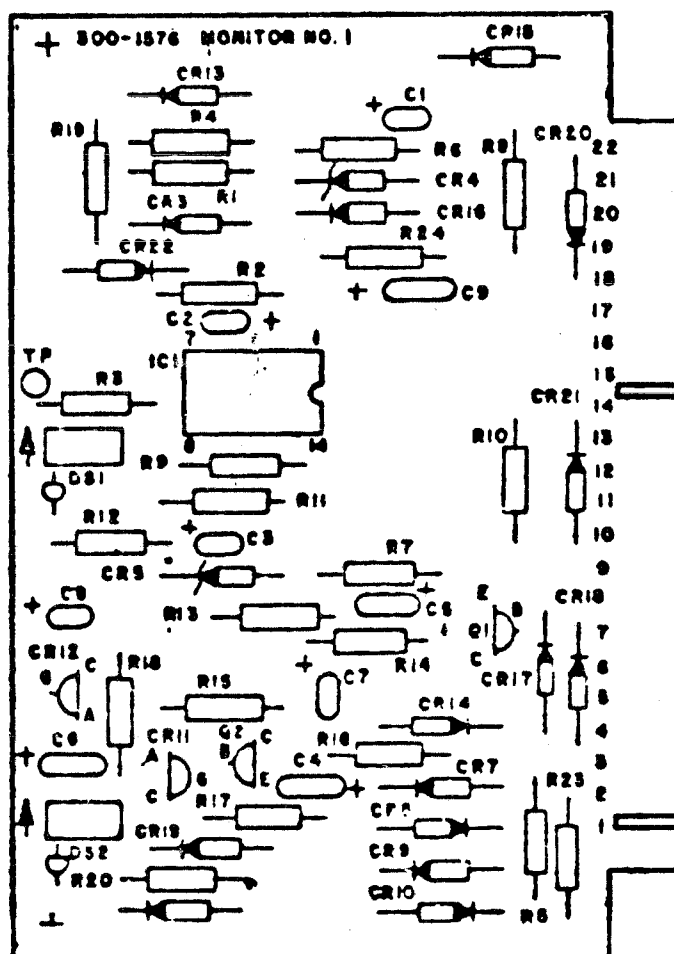
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	300-1579	1	Module, Time Delay Start-Stop (Complete)	1C3	367-0017	1	Integrated Circuit, Counter 7 Stage
C1,2	356-0059	2	Capacitor, Electrolytic (2.2 Mfd., 35 Volt)	Q1,2,3	362-0011	3	Transistor, Signal
C3,4,5	356-0051	3	Capacitor, Electrolytic (6.8 Mfd., 35 Volt)	R1,2	303-0169	2	Potentiometer (3.5 Megohm)
C6	355-0062	1	Capacitor, Composition (1 Mfd., 100 Volt)	R3,19	350-0418	2	Resistor (20,000-Ohm, 2 Watt)
C7	356-0053	1	Capacitor, Tantalum (1.0 Mfd., 35 Volt)	R7	350-0370	1	Resistor (200-Ohm, 1/2 Watt)
CR1	322-0172	1	Lamp, Indicator (Green)	R5,11,15,18	350-0548	4	Resistor (10,000-Ohm, 2 Watt)
CR2	322-0157	1	Lamp, Indicator (Red)	R6	350-0373	1	Resistor (470-Ohm, 1/2 Watt)
CR3	322-0171	1	Lamp, Indicator (Red-Green)	R8	350-0505	1	Resistor (2.7-Ohm, 1/2 Watt)
CR4-12	357-0004	9	Receptacle, Lamp	R10,14,16,22	350-0394	4	Resistor (2,000-Ohm, 1/2 Watt)
CR13	359-0002	1	Diode, Zener (13 Volt, 400 MW)	R12	350-0443	1	Resistor (220,000-Ohm, 1/2 Watt)
CR14	364-0011	1	Rectifier, Gate Control	R13,17,20,21	350-0537	4	Resistor (12,000-Ohm, 2 Watt)
1C1,2	367-0016	2	Integrated Circuit, Timing	R4	350-0376	1	Resistor (360-Ohm, 1/2 Watt)
				R9	350-0524	1	Resistor (100-Ohm, 1/2 Watt)

SHUTDOWN MODULE (300-1578)



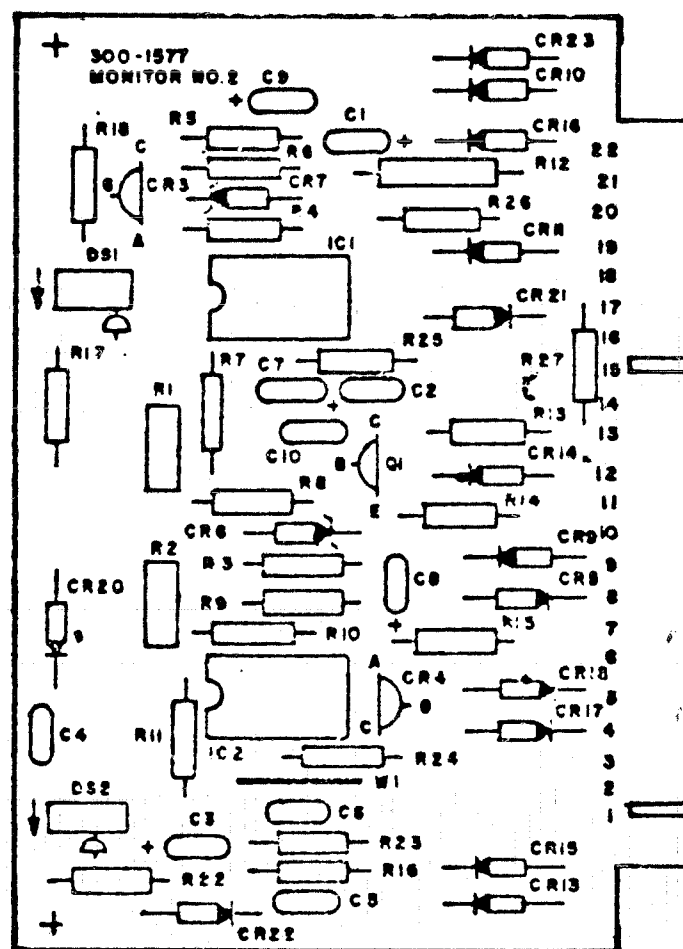
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	300-1578	1	Module, Shut Down (Complete)
C1	355-0045	1	Capacitor, Composition (1 Mfd., 200 Volt)
	322-0175	2	Receptacle, Lamp
DS1	322-0157	1	Lamp, Indicator (Red)
DS2	322-0172	1	Lamp, Indicator (Green)
C2	355-0041	1	Capacitor, Ceramic (.22 Mfd., 35 Volt)
C3	356-0051	1	Capacitor, Tantalum (6.8 Mfd., 35 Volt)
CR1	364-0011	1	Rectifier, Gate Control
CR2-13	357-0004	12	Rectifier, Diode (400 Volt, 400 MA)
K1,2	307-1076	2	Relay
Q1	362-0026	1	Transistor, Signal
R2	350-0398	1	Resistor (3,000-Ohm, 1/2 Watt)
R1	350-0505	1	Resistor (2.7-Ohm, 1/2 Watt)
R7	350-0533	1	Resistor (560-Ohm, 1/2 Watt)
R3	350-0529	1	Resistor (270-Ohm, 1/2 Watt)
R4	350-0540	1	Resistor (2,200-Ohm, 1/2 Watt)
R6	350-0379	1	Resistor (470-Ohm, 1/2 Watt)
R11,12	350-0393	2	Resistor (1,800-Ohm, 1/2 Watt)

MONITOR NUMBER ONE MODULE (300-1576)



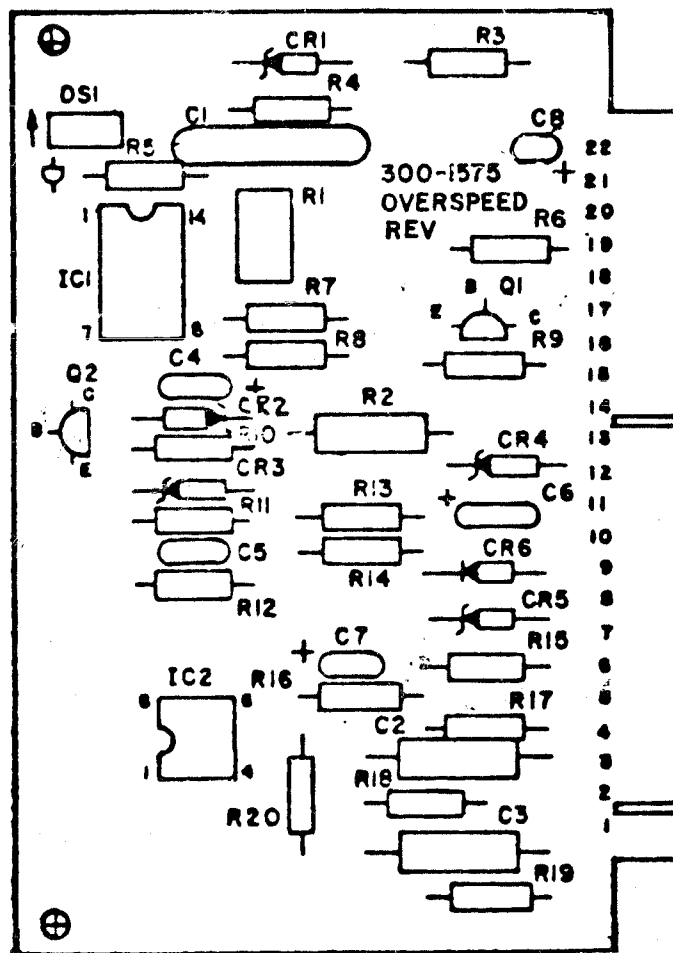
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	300-1576	1	Module, Monitor Number One (Complete)	R1	350-0397	1	Resistor (2,700-Ohm, 1/2 Watt)
C1,2,3	356-0051	5	Capacitor, Electrolytic (6.8 Mfd., 35 Volt)	R2	350-0446	1	Resistor (300,000-Ohm, 1/2 Watt)
C4	356-0053	1	Capacitor, Tantalum (1 Mfd., 35 Volt)	R3	350-0584	1	Resistor (10 Megohm, 1/2 Watt)
C5,6,9	355-0041	3	Capacitor, Ceramic (.22 Mfd., 35 Volt)	R4,6	350-0536	2	Resistor (1,000-Ohm, 1/2 Watt)
CR3,7-10, 13-23	357-0004	16	Rectifier, Diode (400 Volt, 400 MA)	R5,23	350-0404	2	Resistor (5,100-Ohm, 1/2 Watt)
CR4	359-0026	1	Diode, Zener (18 Volt, 400 MW)	R7,18	350-0505	2	Resistor (2.7-Ohm, 1/2 Watt)
CR5	359-0002	1	Diode, Zener (13 Volt, 400 MW)	R8	350-0544	1	Resistor (4,700-Ohm, 1/2 Watt)
CR11,12	364-0011	2	Rectifier, Gate Control	R9	350-0548	1	Resistor (10,000-Ohm, 1/2 Watt)
DS1,2	322-0157	2	Lamp, Indicator (Red)	R10,17	350-0529	2	Resistor (270-Ohm, 1/2 Watt)
IC1	367-0016	1	Integrated Circuit, Timing	R11,15	350-0398	2	Resistor (3,000-Ohm, 1/2 Watt)
Q1,2	362-0026	2	Transistor, Signal	R12	350-0380	1	Resistor (510-Ohm, 1/2 Watt)
				R13,14	350-0379	2	Resistor (470-Ohm, 1/2 Watt)
				R16	350-0540	1	Resistor (2,200-Ohm, 1/2 Watt)
				R19,20	350-0393	2	Resistor (18,000-Ohm, 1/2 Watt)
				R24	350-0451	1	Resistor (470,000-Ohm, 1/2 Watt)
					322-0175	2	Receptacle, Lamp

MONITOR NUMBER TWO MODULE (300-1577)



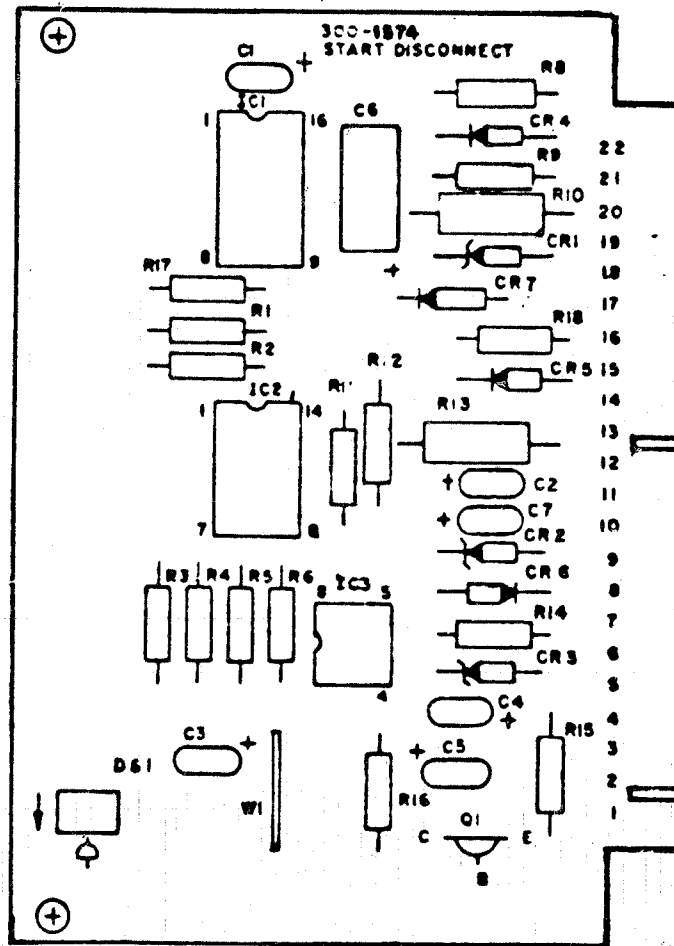
REF. NO.	PART NO.	QTY. used	PART DESCRIPTION
	300-1577	1	Module, Monitor Number Two
C1	356-0066	1	Capacitor, Electrolytic (47 Mfd.)
C2	356-0059	1	Capacitor, Electrolytic (2.2 Mfd., 35 Volt)
C3,8,9	356-0051	3	Capacitor, Electrolytic (6.8 Mfd., 35 Volt)
C4,5,6,7,10	355-0041	5	Capacitor, Ceramic (.22 Mfd.)
CR3,4	364-0011	2	Rectifier, Gate Control
CR5-9,13-18,20-23	357-0004	14	Rectifier, Diode (400 Volt, 400 MA)
CR6	359-0016	1	Diode, Zener (6.8 Volt, 400 MW)
CR7	359-0033	1	Diode, Zener (14 Volt, 5 W)
IC1,2	367-0016	2	Integrated Circuit, Timing
DS1,2	322-0157	2	Lamp, Indicator (Red)
	322-0175	2	Receptacle, Lamp
Q1	362-0011	1	Transistor, Signal
R1,2	303-0169	2	Potentiometer (3.5 Megohm)
R3	350-0420	1	Resistor (24,000-Ohm, 1/2 Watt)
R4,7,10,13,16	350-0548	5	Resistor (10,000-Ohm, 1/2 Watt)
R5,15	350-0379	2	Resistor (470-Ohm, 1/2 Watt)
R6,9	350-0398	2	Resistor (3,000-Ohm, 1/2 Watt)
R8	350-0418	1	Resistor (20,000-Ohm, 1/2 Watt)
R11	350-0466	1	Resistor (2 Megohm, 1/2 Watt)
R12	350-0672	1	Resistor (240-Ohm, 1/2 Watt)
R14	350-0389	1	Resistor (1,200-Ohm, 1/2 Watt)
R17,18	350-0393	2	Resistor (1,800-Ohm, 1/2 Watt)
R22,23	350-0505	2	Resistor (2,700-Ohm, 1/2 Watt)
R24,25,27	350-0451	3	Resistor (470,000-Ohm, 1/2 Watt)
R26	350-0421	1	Resistor (27,000-Ohm, 1/2 Watt)

OVERSPEED MODULE (300-1575)



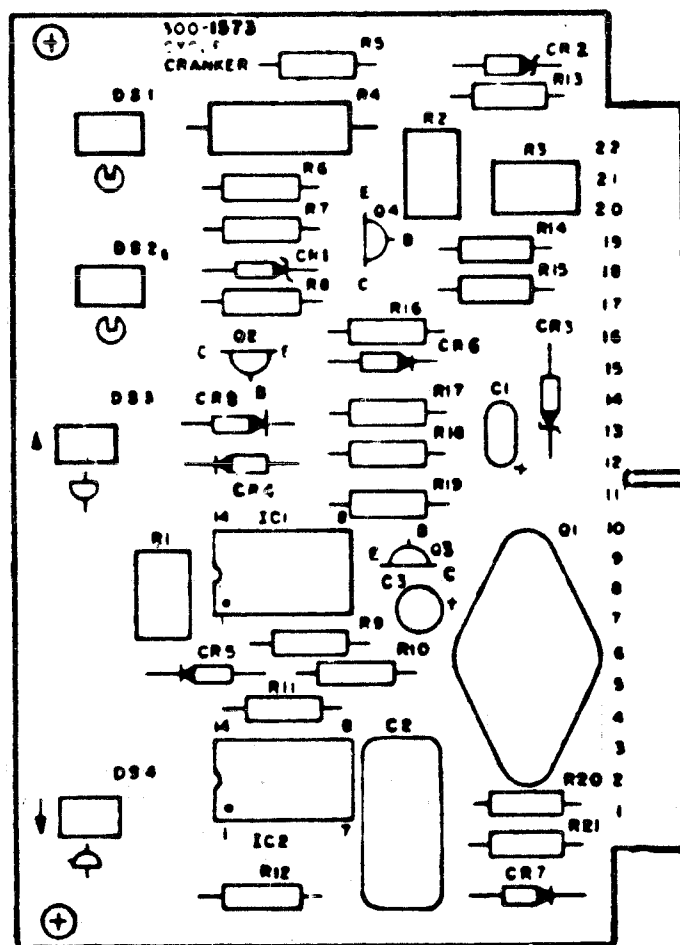
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	300-1575	1	Module, Overspeed (Complete)	CR6	357-0004	1	Rectifier, Diode (400 Volt, 400 MA)
C1	355-0043	1	Capacitor, Composition (22 Mfd., 200 Volt)	DS1	322-0172	1	Lamp, Indicator (Green)
C2,3	355-0010	2	Capacitor, Composition (.0022 Mfd., 100 Volt)		322-0175	1	Receptacle, Lamp
C4,8	356-0051	2	Capacitor, Electrolytic (6.8 Mfd., 35 Volt)	1C1	367-0002	1	Integrated Circuit
C5	355-0049	1	Capacitor, Ceramic (22 Mfd., 1000 Volt)	1C2	367-0001	1	Integrated Circuit
C6,7	356-0066	2	Capacitor, Tantalum (47 Mfd., 20 Volt)	Q1,2	362-0011	2	Transistor, Signal
CR1,3	359-0016	2	Diode, Zener (6.8 Volt, 400,000 Watt)	R1	303-0191	1	Potentiometer (5,000-Ohm, 4 Watt)
CR2	359-0017	1	Diode, Zener (5.1 Volt, 400 MW)	R2	350-0683	1	Resistor (680-Ohm, 1 Watt)
CR4	359-0032	1	Diode, Zener (8.2 Volt, 400 MW)	R3	350-0379	1	Resistor (470-Ohm, 2 Watt)
CR5	359-0002	1	Diode, Zener (13 Volt, 400 MW)	R4,6,7	350-0411	7	Resistor (10,000-Ohm, 1/2 Watt)
				8,10,17,19			
				R5	350-0414	1	Resistor (13,000-Ohm, 1/2 Watt)
				R9	350-0427	1	Resistor (47,000-Ohm, 1/2 Watt)
				R11,13	350-0394	2	Resistor (2,000-Ohm, 1/2 Watt)
				R14	350-0380	1	Resistor (510-Ohm, 1/2 Watt)
				R15,18	350-0536	2	Resistor (1,000-Ohm, 2 Watt)
				R12,16,20	350-0451	3	Resistor (470,000-Ohm, 1/2 Watt)

START DISCONNECT MODULE (300-1574)



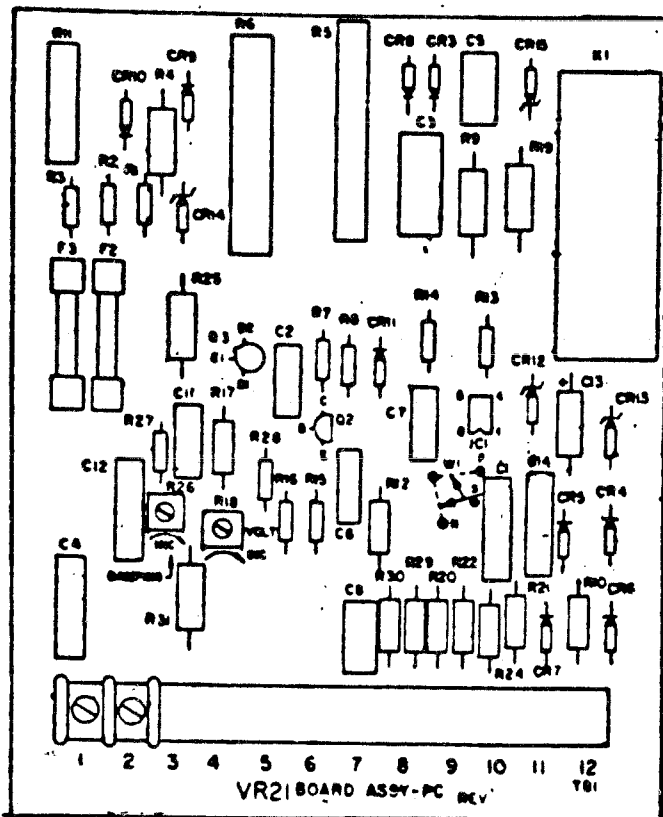
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	300-1574	1	Module, Start Disconnect (Complete)
C1,2,3	355-0051	3	Capacitor, Electrolytic (6.8 Mfd., 35 Volt)
C4,7	356-0066	2	Capacitor, Tantalum (.47 Mfd.)
C5	356-0059	1	Capacitor, Electrolytic (2.2 Mfd)
C6	355-0045	1	Capacitor, Composition (.1 Mfd)
DS1	322-0172	1	Lamp, Indicator
CR1,2	359-0033	2	Diode, Zener (14 Volt, 5 Watt)
CR3	359-0032	1	Diode, Zener (8.2 Volt)
CR4,5,6,7	357-0004	4	Rectifier, Diode (400 Volt, 400 Milliampere)
IC1	367-0014	1	Integrated Circuit (Multivibrator)
IC2	367-0013	1	Integrated Circuit (Dual, 2 Input, and Gate)
IC3	367-0001	1	Integrated Circuit (Oral Amp)
Q1	362-0011	1	Transistor, Signal
R1,2,5,6	350-0418	1	Resistor (20,000-Ohm, 1/2 Watt)
R3,11,12,15,16	350-0548	5	Resistor (10,000-Ohm, 1/2 Watt)
R4,8	350-0422	2	Resistor (30,000-Ohm, 1/2 Watt)
R9	350-0435	1	Resistor (100,000-Ohm, 1/2 Watt)
R10,13	350-0672	2	Resistor (240-Ohm, 1 Watt)
R14	350-0404	1	Resistor (1,000-Ohm, 1/2 Watt)
R18	350-0536	1	Resistor (1,000-Ohm, 1/2 Watt)
R17	350-0459	1	Resistor (1 Megohm, 1/2 Watt)
	322-0175	1	Receptacle, Lamp

CYCLE CRANKER MODULE (300-1573)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	300-1573	1	Module, Cycle Cranker (Complete)	R1	303-0171	1	Potentiometer (100,000-Ohm)
C1	356-0066	1	Capacitor, Tantalum (47 Mfd., 20 Volt)	R2,3	303-0191	2	Potentiometer (5000-Ohm)
C2	355-0042	1	Capacitor (.47 Mfd., 250 Volt)	R4	350-1132	1	Resistor (470-Ohm, 2 Watt)
DS1,2	322-0171	2	Lamp, Indicator (Red-Green)	R5,18	350-0532	2	Resistor (470-Ohm, 1/2 Watt)
DS3	322-0157	1	Lamp, Indicator, (Red)	R6,8	350-0537	2	Resistor (1200-Ohm, 1/2 Watt)
DS4	322-0172	1	Lamp, Indicator (Green)	R7	350-0382	1	Resistor (620-Ohm, 1/2 Watt)
CR1	359-0032	1	Diode, Zener - 8.2 Volt	R9	350-0394	1	Resistor (2000-Ohm, 1/2 Watt)
CR2	359-0016	1	Diode, Zener - 6.8 Volt	R10	350-0418	1	Resistor (20,000-Ohm, 1/2 Watt)
CR3	359-0002	1	Diode, Zener - 13 Volt	R11,13,16	350-0548	5	Resistor (10,000-Ohm, 1/2 Watt)
CR4-8	357-0004	5	Rectifier, Diode - 400 Volt 400 MA	17,21			
1C1	367-0017	1	Integrated Circuit, Counter	R12	350-0437	1	Resistor (120,000-Ohm, 1/2 Watt)
1C2	367-0016	1	Integrated Circuit, Timing	R14,15	350-0538	2	Resistor (1,000-Ohm, 1/2 Watt)
Q1	362-0038	1	Transistor, Power	R19	350-0380	1	Resistor (510-Ohm, 1/2 Watt)
Q2,3,4	362-0011	3	Transistor, Signal	R20	350-0387	1	Resistor (1,000-Ohm, 1/2 Watt)
				C3	356-0051	1	Capacitor, Electrolytic (6.8 Mfd., 35 Volt)
					322-0175	4	Receptacle, Lamp

VOLTAGE REGULATOR BOARD ASSEMBLY



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	332-1954	1	Printed Circuit Board
C1,14	355-0042	2	Capacitor - .47 Mfd., 250 Volt
C2,7	355-0043	2	Capacitor - .22 Mfd, 250 Volt
C3	355-0047	1	Capacitor - .47 Mfd, 400 Volt
C4,12	355-0044	2	Capacitor - .47 Mfd, 250 Volt
C5,8	355-0046	2	Capacitor - 1 Mfd, 100 Volt
C6	355-0056	1	Capacitor - .33 Mfd, 250 Volt
C11	355-0048	1	Capacitor - .1 Mfd, 400 Volt
C13	356-0039	1	Capacitor - Electrolytic, 100 Mfd, 10 Volt
CR3 thru 11	357-0014	9	Rectifier - Silicon
CR12	359-0036	1	Diode, Zener - 5.6 Volt
CR13	359-0025	1	Diode, Zener - 20 Volt
CR14	359-0026	1	Diode, Zener - 18 Volt
F1,2,3	321-0204	3	Fuse - 1.4 Amp
IC1	367-0005	1	Integrated Circuit
Q2	362-0017	1	Transistor - Silicon (NPN)
Q3	361-0004	1	Transistor - Unijunction
R1	350-0355	1	Resistor - 1/2 Watt, 47-Ohm
R2,3	350-0351	2	Resistor - 1/2 Watt, 33-Ohm
R4	350-1075	1	Resistor - 2 Watt, 4,700,000-Ohm
R5	353-0040	1	Resistor, Fixed - 10 Watt, 270-Ohm
R6	353-0039	1	Resistor, Fixed - 15 Watt, 5,000-Ohm
R7	350-0398	1	Resistor - 1/2 Watt, 3,000-Ohm
R8,16	350-0447	2	Resistor - 1/2 Watt, 330,000-Ohm
R10	351-0885	1	Resistor - 1/2 Watt, 51,000-Ohm
R11	352-0151	1	Resistor, Fixed - 5 Watt, 15,000-Ohm
R12	351-0909	1	Resistor - 1/2 Watt, 90,900-Ohm
R13	350-0411	1	Resistor - 1/2 Watt, 10,000-Ohm
R14	350-0443	1	Resistor - 1/2 Watt, 220,000-Ohm
R15,27	350-0435	2	Resistor - 1/2 Watt, 100,000-Ohm
R17	351-0293	1	Resistor - Metal Film - 1/4 Watt, 11,000-Ohm
R18	303-0210	1	Potentiometer - 1/2 Watt, 5,000-Ohm
R20,22,29 & 30	351-0520	4	Resistor - 1/4 Watt, 28,000-Ohm
R21	351-0522	1	Resistor, Metal Film - 1/4 Watt, 5,110,000-Ohm
R24	351-0523	1	Resistor, Metal Film - 1/4 Watt, 8,870,000-Ohm
R25,31	350-1011	2	Resistor - 2 Watt, 10,000-Ohm
R26	303-0211	1	Potentiometer - 1/2 Watt, 100,000-Ohm
R28	350-0568	1	Resistor - 1/2 Watt
TB1	332-1252	1	Terminal Block
CR15	359-0015	1	Diode, Zener - 24 Volt
	321-0163	6	Clip - Fuse
K1	307-1063	1	Relay - Magnetic Reed
R9	350-1014	1	Resistor - 2 Watt, 13,000-Ohm
R19	350-1007	1	Resistor - 2 Watt, 6,800-Ohm