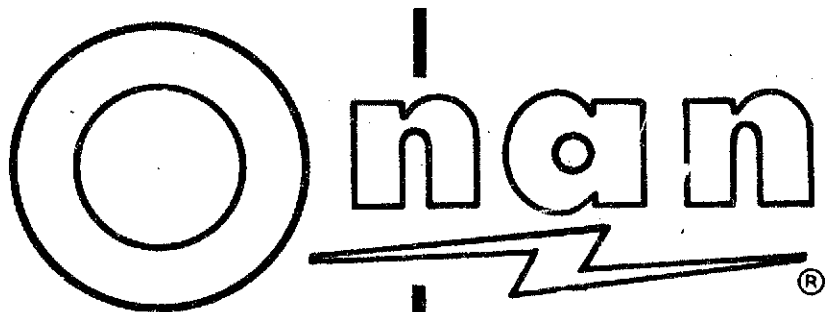


The following catalog has gaps in its page numbers, or doesn't have any numbers. We have chosen to leave the page numbering in the order that Acrobat assigns it.



PARTS CATALOG

FOR
DEF
SERIES

ELECTRIC GENERATING PLANTS

•

SPECIFICATIONS A, B, C

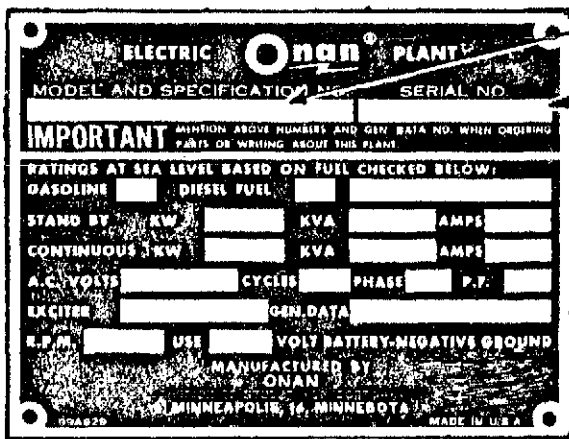
•

INSTRUCTIONS FOR ORDERING REPAIR PARTS

ONAN PARTS

All parts in this list are ONAN parts. For ONAN parts or service, contact the dealer from whom you purchased this equipment or refer to your nearest authorized service station. To avoid errors or delay in filling your parts order, please furnish all information requested. Refer to the ONAN Nameplate located on the Output Terminal Box Cover. Always give the complete:

MODEL & SPEC. NO.
and
SERIAL NO.



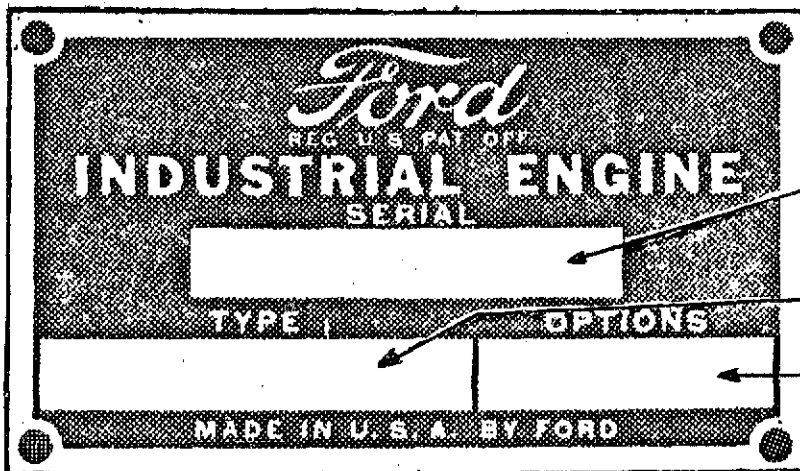
FORD PARTS

All Ford parts must be ordered from the Ford Motor Company of Detroit, Michigan or their nearest authorized distributor. Refer to the Ford Engine Nameplate located on the side of the crankcase. When ordering parts, supply Ford with the complete nameplate information. Be sure to include:

SERIAL NUMBER as shown on the engine nameplate.

TYPE

OPTIONS



PARTS CATALOG

DEF SERIES

This parts catalog applies to the standard ONAN DEF Series electric generating plants. They are powered by a Ford Model 2703EC6PY Engine, which is more completely described in the FORD manual. Basically, the engine is a 6 cylinder, water cooled, diesel (compression ignition) type. The cylinder bore is 3.937 inches, piston stroke is 4.524 inches, and displacement is 330 cubic inches. Ford engine parts must be selected from the appropriate Ford parts list and parts must be secured from the Ford Motor Company.

"Right" and "Left" sides of the Generator, Control and Housing are determined by FACING the Radiator (Front) end.

ONAN parts are illustrated in groups and have reference numbers which correspond to the like numbers in the list for that group. Parts illustrations are typical and do not necessarily portray a particular part number.

Compare your ONAN plant nameplate MODEL and SPEC. with the Plant Data Table. The Plant Data Table contains all descriptive information pertinent to this list such as voltage, phase, etc. which appears in the description of some parts that differ between basic models.

UNLESS OTHERWISE MENTIONED IN THE PARTS DESCRIPTION, PARTS ARE INTERCHANGEABLE BETWEEN ALL MODELS LISTED IN THE DATA TABLE.

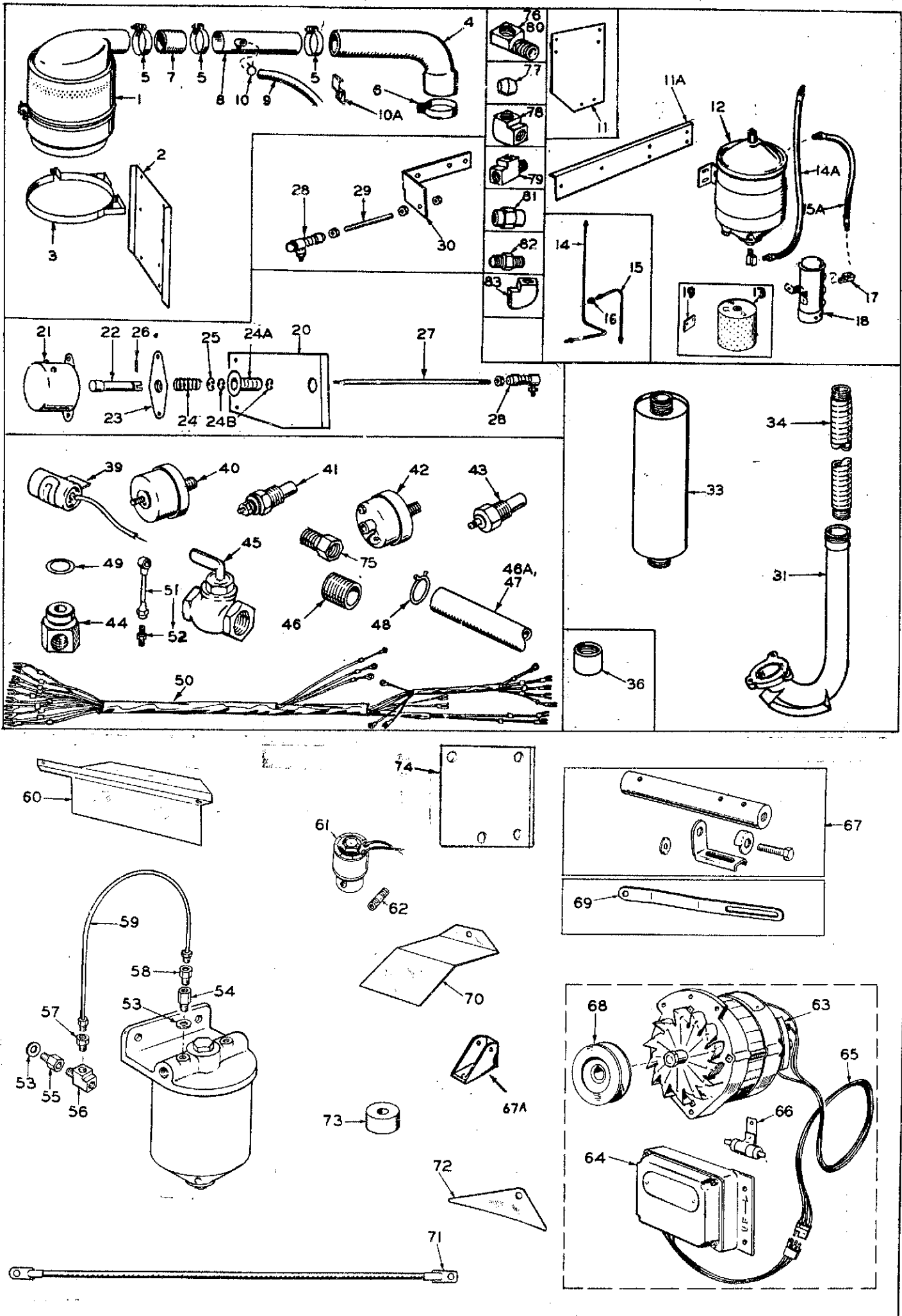
Plant Data Table

MODEL & SPEC NO. †		ELECTRICAL DATA				
HOUSED	UNHOUSED	WATTS*	VOLTS	CYCLES	PHASE	WIRE
37DEF-53R/	37DEF-53R8/	37,000	120/240	50	1	3
37DEF-54R/	37DEF-54R8/	37,000	120/208	50	3	4
37DEF-55DR/▲	37DEF-55DR8/▲	37,000	120/240	50	3	4
37DEF-57R/	37DEF-57R8/	37,000	220/380	50	3	4
45DEF-3R/	45DEF-3R8/	45,000	120/240	60	1	3
45DEF-4R/	45DEF-4R8/	45,000	120/208	60	3	4
45DEF-4XR/	45DEF-4XR8/	45,000	277/480	60	3	4
45DEF-5DR/▲	45DEF-5DR8/▲	45,000	120/240	60	3	4
45DEF-7R/	45DEF-7R8/	45,000	220/380	60	3	4
45DEF-9R/	45DEF-9R8/	45,000	600	60	3	3

† - The NUMBER after the diagonal line (/) signifies standard or optional features (1 is Standard). The LETTER ending the Model and Spec. No. is the Spec Letter and will advance with manufacturing changes (A to B, B to C, etc.).

▲ - This is a delta-wound 240 volt model with one phase center-tapped. A limited amount of 1 Phase, 120/240 volt power can be utilized together with 3 Phase power as long as no terminal current exceeds the rated nameplate current.

* Maximum rating is shown. Continuous rating also appears on nameplate.



**FIG.1-FUEL SYSTEM AND MISCELLANEOUS
A4**

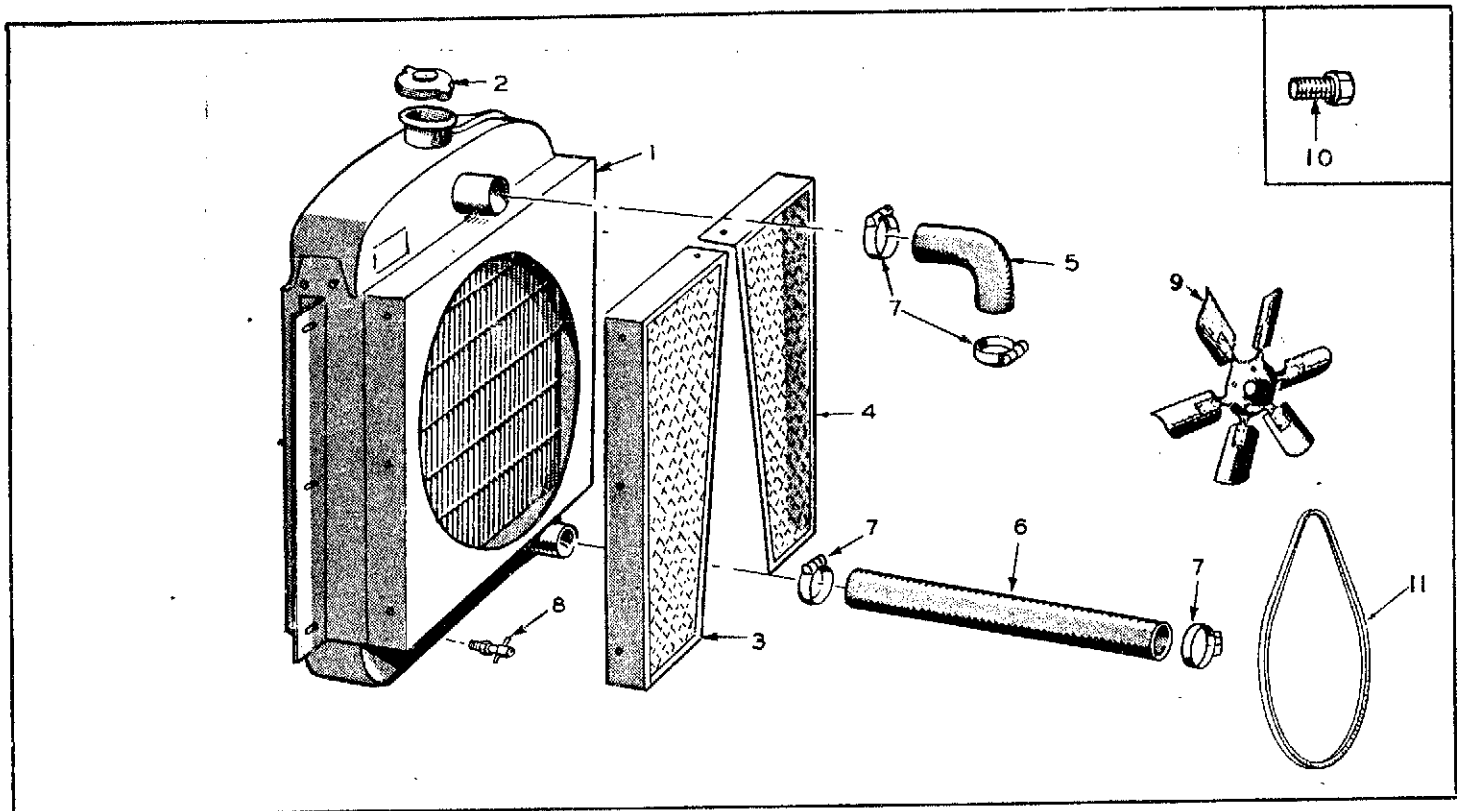


FIG.2-COOLING SYSTEM GROUP

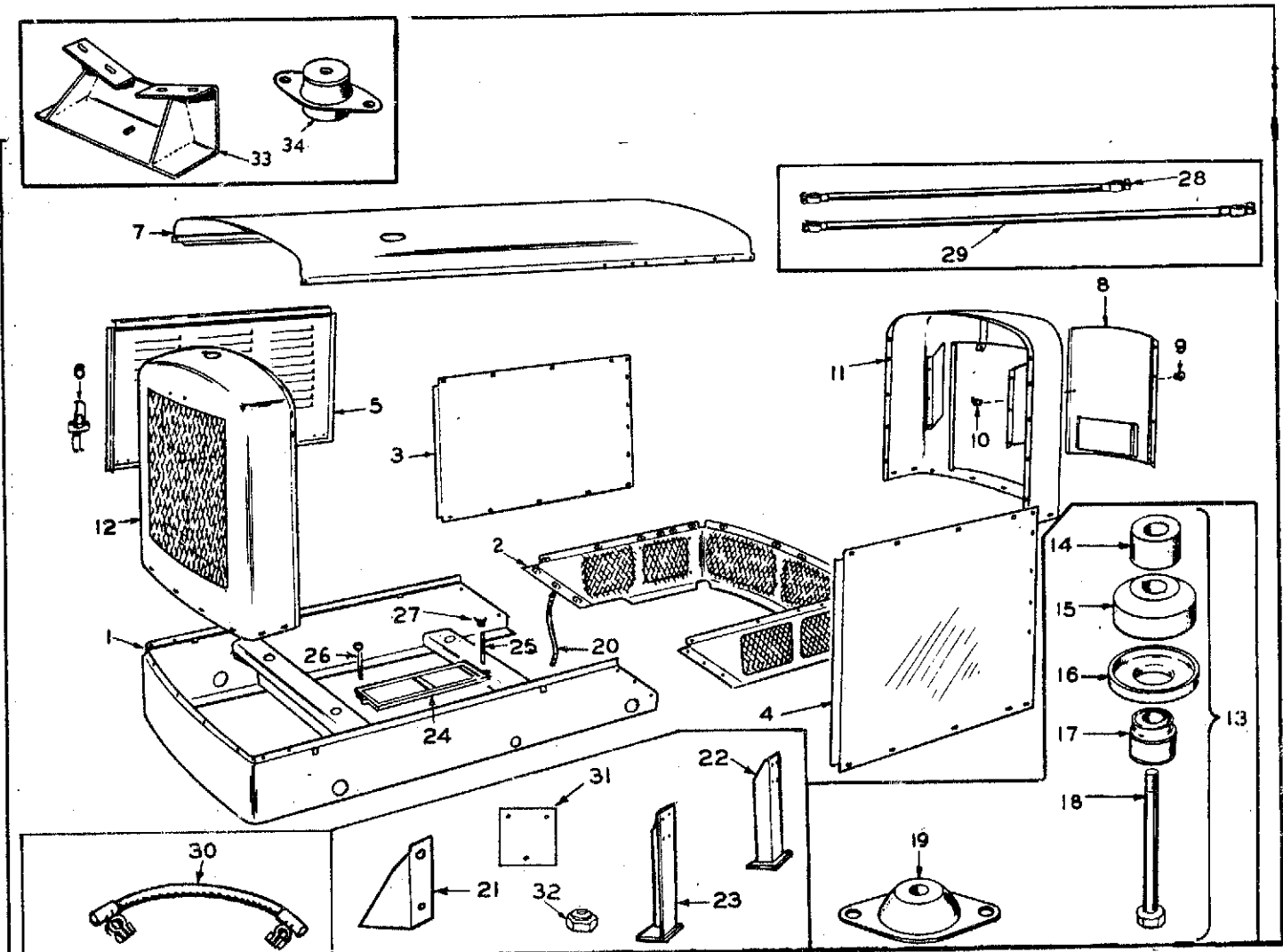


FIG.3-HOUSING GROUP (HOUSED PLANTS ONLY)

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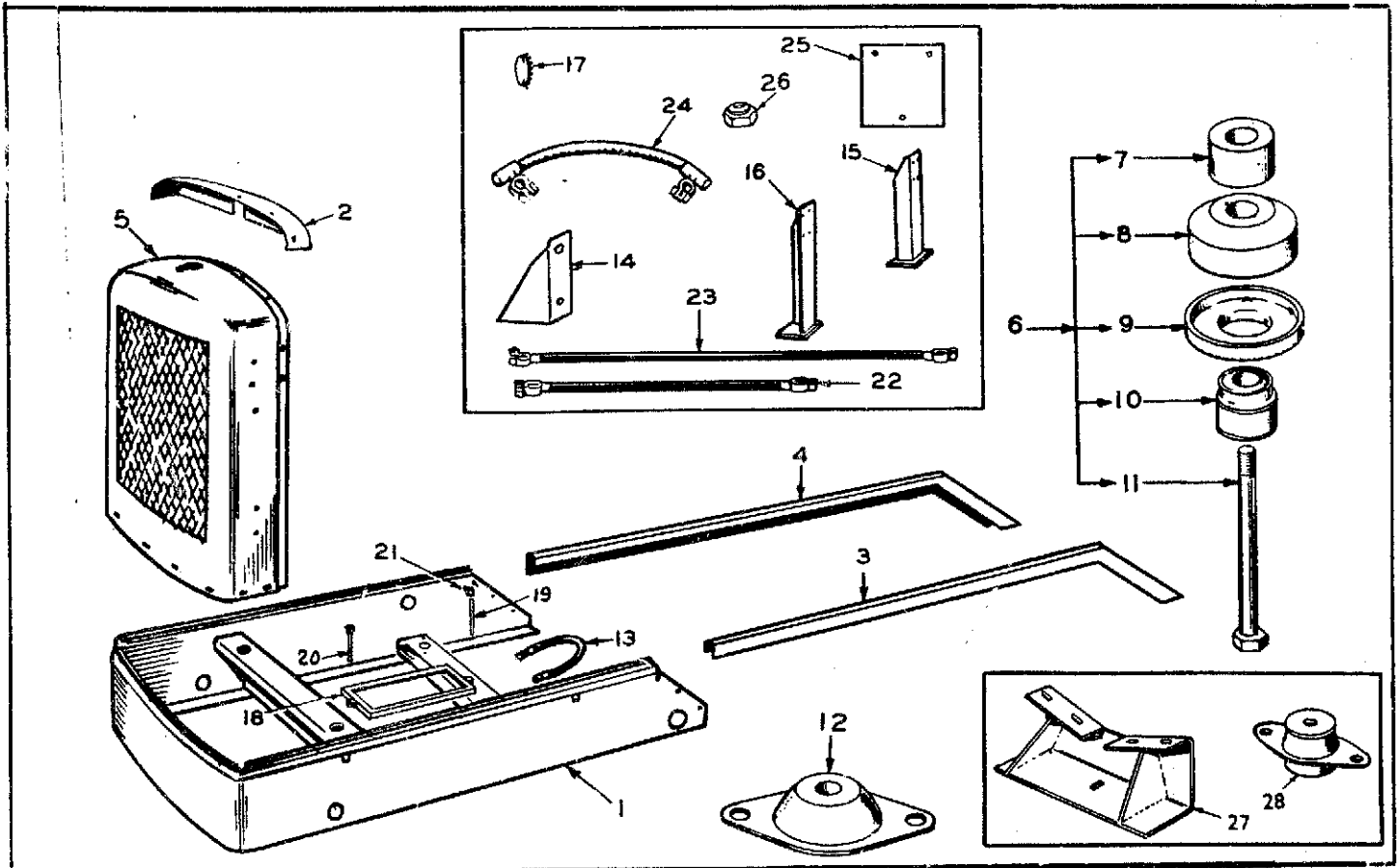


FIG.4-MOUNTING GROUP (UNHOUSED PLANTS ONLY)

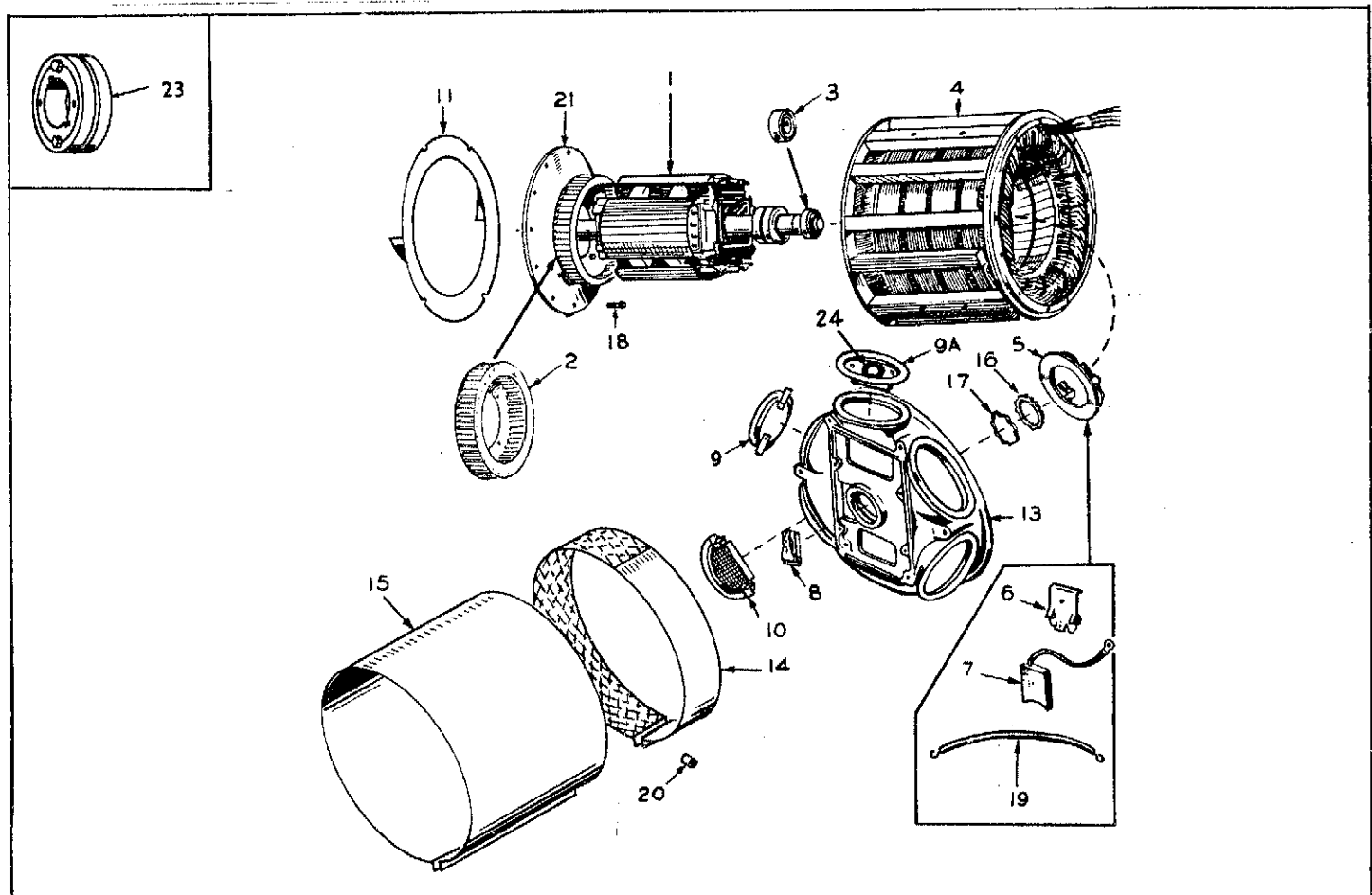
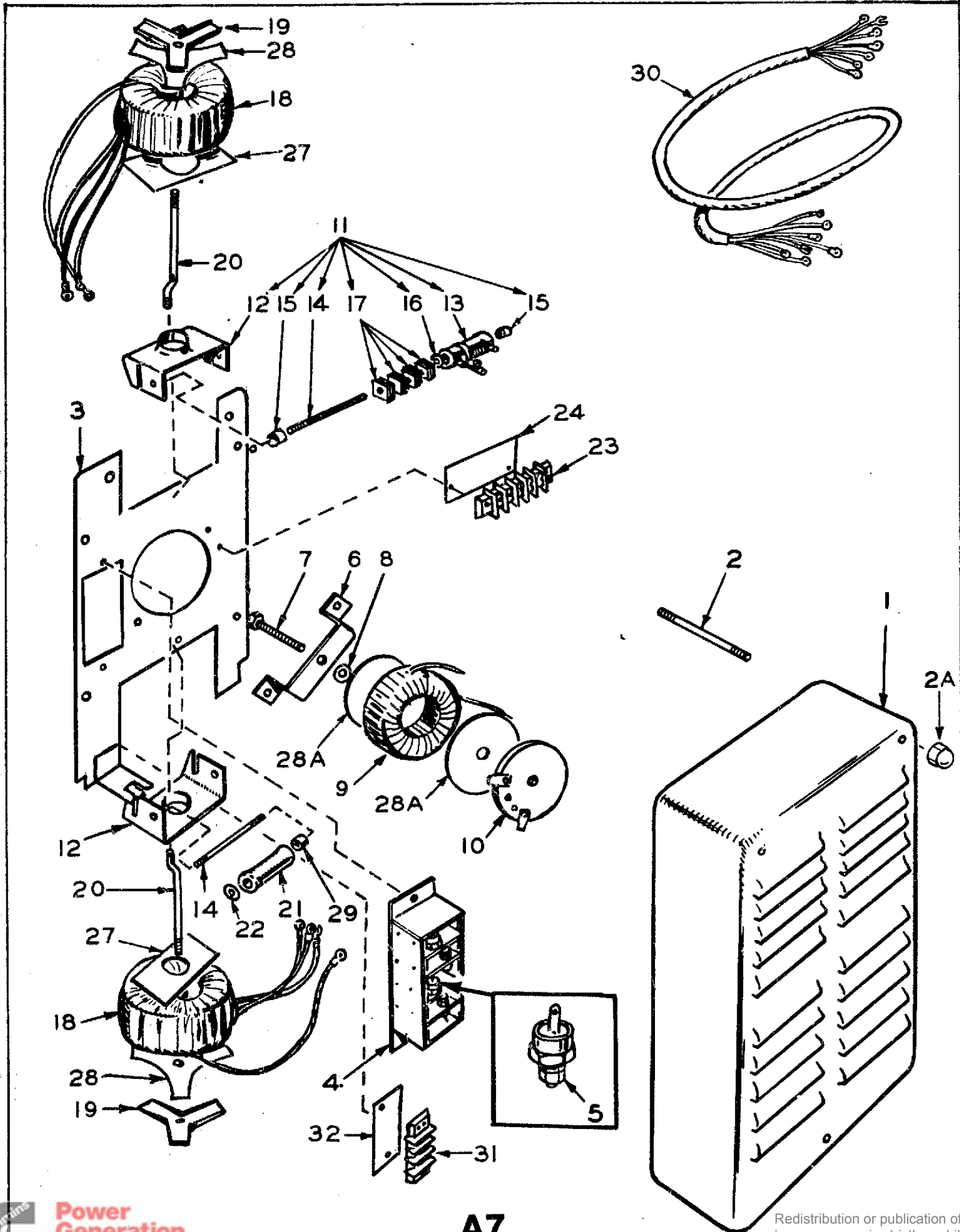


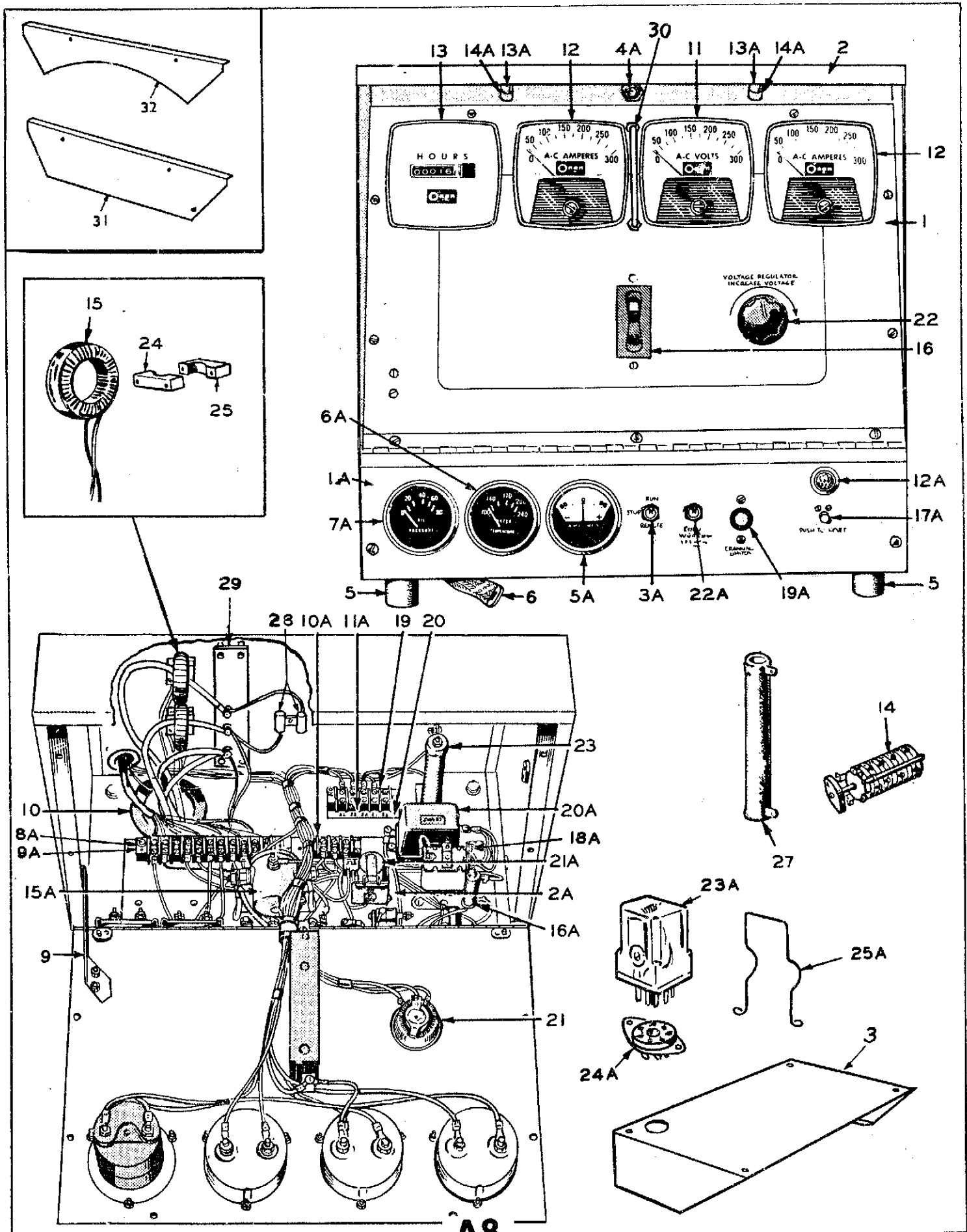
FIG.5-GENERATOR GROUP (AC ALTERNATOR PORTION)



A7

FIG.6-GENERATOR GROUP (EXCITER PORTION)

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A8

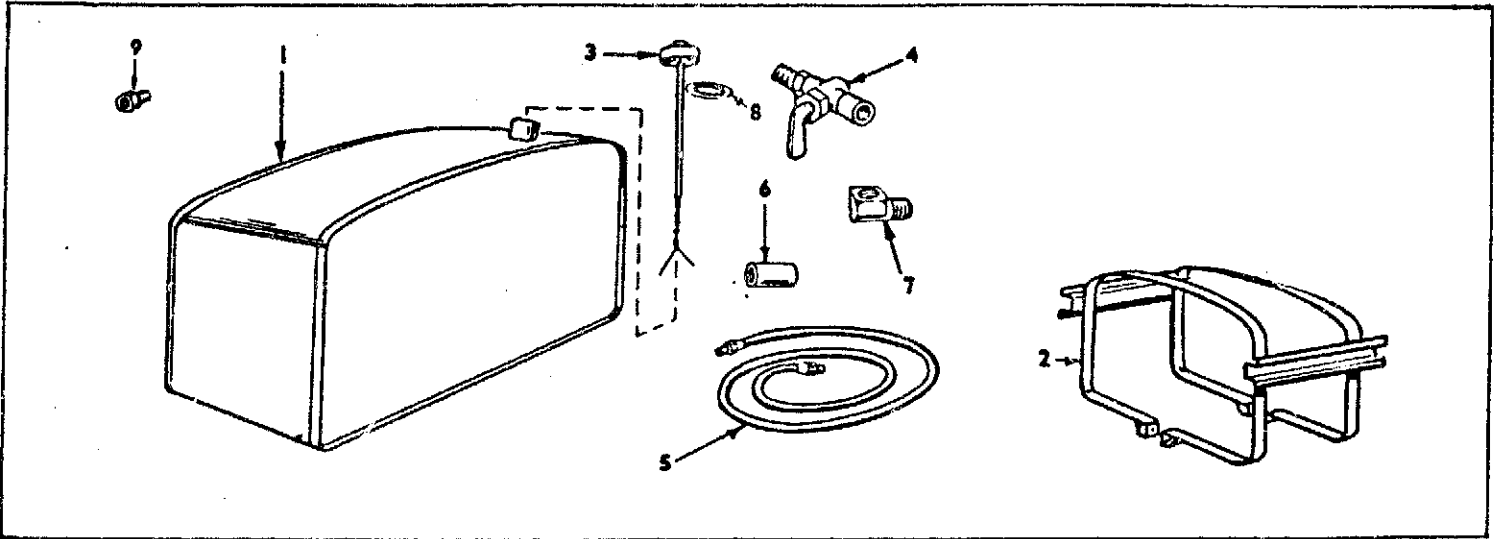


FIG. 8 - MOUNTED FUEL TANK GROUP (Optional Equipment)

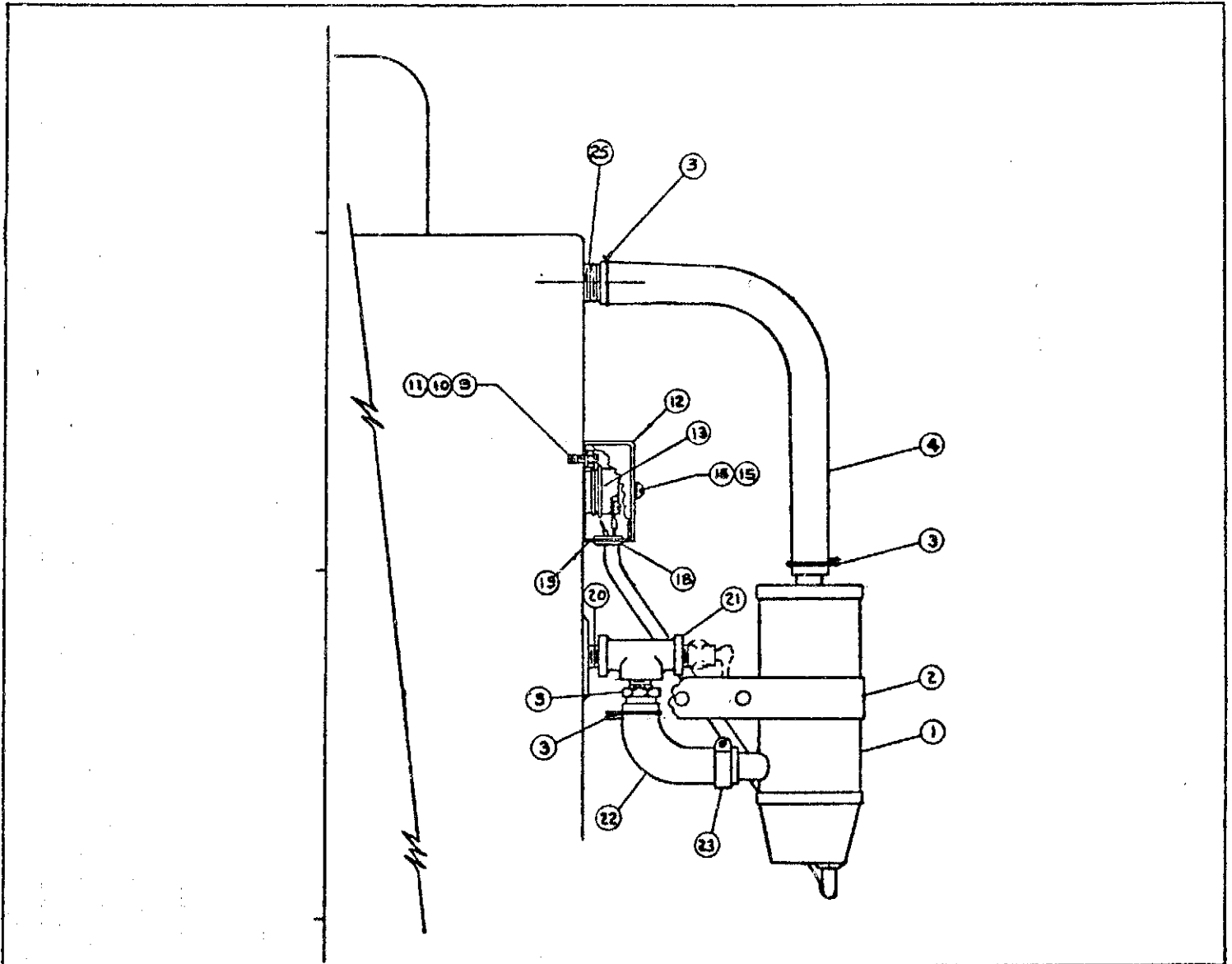


FIG. 9 - WATER HEATER GROUP (Optional Equipment)

A9

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
REPLACEMENT ENGINE			
Refer to Factory giving complete Model, Spec and Serial number.			
FIG. 1 - FUEL SYSTEM AND MISCELLANEOUS ENGINE PARTS GROUP.			
1	140B62	1	Cleaner, Air
2	140B764	1	Bracket, Air Cleaner Mounting
3	140A80	2	Band, Air Cleaner Mounting
4	503B456	1	Hose, Air Cleaner Connector to Manifold
5	503-465	3	Clamp, Air Cleaner Hose
6	503-354	1	Clamp, Air Cleaner Hose
7	503A510	1	Hose, Air Cleaner to Connector
8			Connector, Air Cleaner to Manifold -
	140A769	1	To Spec C
	140A968	1	Begin Spec C
9			Hose, Breather
	503-527	1	To Spec C (36")
	503A545	1	Begin Spec C (16")
10	503-197	2	Clamp, Breather Hose
10A	140A970	1	Clip, Breather Hose
11	149A985	1	Plate, Primary Fuel Filter Mtg. - To Spec C
11A	149B1114	1	Bracket, Primary Fuel Filter Mtg. - Begin Spec C
12			Filter, Fuel - Primary
	149C823	1	To Spec C
	149C1078	1	Begin Spec C
13	149P846	1	Cartridge, Fuel Filter
14	149C988	1	Line, Fuel - Primary to Sec. Filter - To Spec C
14A	501-4	1	Line, Fuel - Primary to Sec. Filter - Begin Spec C
15			Line, Fuel - Pump to Primary Filter
	149A987	1	Spec A Only
	149A1054	1	Begin Spec B Only
15A	501-3	1	Line, Fuel - Pump to Primary Filter - Begin Spec C
16	502-35	1	Connector, Primary, Fuel Filter
17	502-4	1	Elbow, Inverted Male - Fuel Pump - Spec A Only
18	149P554	1	Pump, Fuel - Electric - Spec A Plants only
19	149A986	1	Plate, Fuel Pump Hole Cover - Spec A Only
20			Bracket, Solenoid Mounting
	306B197	1	To Spec C
	306B214	1	Begin Spec C
21	307B628	1	Solenoid, Stopping (12-Volt)
22			Plunger, Stop Solenoid
	306A199	1	To Spec C
	306A222	1	Begin Spec C

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 1 - FUEL SYSTEM AND MISCELLANEOUS ENGINE PARTS GROUP (Cont).			
23	306A162	1	Retainer, Stop Solenoid Plunger
24			Spring, Stop Solenoid Plunger
	306A198	1	To Spec C
	306A161	1	Begin Spec C
24A	306A193	1	Cover, Solenoid Plunger - Begin Spec C
24B	518-218	2	Ring, Retaining - Solenoid Plunger Cover - Begin Spec C
25	518-203	1	Ring, Snap - Spring Retaining
26			Pin, Roll - Spring Retaining
	516P103	1	To Spec C (1/8 x 1/2")
	516-86	1	Begin Spec C (1/8 x 3/4")
27			Rod, Stop Solenoid to Injection Pump Joint
	306A200	1	To Spec C
	306A218	1	Begin Spec C
28	150A638	1	Joint, (1) Rod to Injection Pump, (1) Governor Adjusting Stud - To Spec C
29	151B284	1	Stud, Governor Adjusting - To Spec C
30	151B286	1	Bracket, Governor Adjusting Stud - To Spec C
31	155C864	1	Elbow, Exhaust Outlet
33	155B917	1	Muffler, Exhaust - Replaces 155C608
34	155A633	1	Tube, Exhaust - Flexible
36	505-203	1	Coupling, Exhaust Tube Connection
39	312A58	2	Condenser (1) Voltage Regulator (1) Charge Gen.
40	193A108	1	Sender, Oil Pressure
41	193A104	1	Sender, Water Temperature
42	309B10	1	Switch, Low Oil Pressure
43	309A179	1	Switch, Hi-Temperature Cut-Off-Replaces 309B146
44			Adapter, Oil Drain
	102A553	1	To Spec C
	102A619	1	Begin Spec C
45	504-30	1	Valve, Oil Drain
46	505A135	1	Nipple, Close - Oil Drain
46A	505-224	1	Hose, Oil Drain (3/8 x 4-1/2")
47	503-262	1	Hose, Oil Drain
48	503-131	1	Clamp, Oil Drain Hose
49	102P532	1	Gasket, Oil Drain
50			Harness, Engine Control
	338C316	1	To Spec C
	338C379	1	Begin Spec C
51		1	Connection Assembly, Fuel Return - Includes Male Connector (Used on some early models) - Order 149A1050 - Spec A Only.
52		1	Connector, Male - Fuel Return (Used on some early models) - Order 149A1050 - Spec A Only.

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PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 1 - FUEL SYSTEM AND MISCELLANEOUS ENGINE PARTS GROUP(Cont.)			
53	526-65	2	Washer, Copper - Fuel Return Fittings - Spec A Only
54	502A307	1	Adapter, Secondary Filter - Fuel Return - Spec A Only
55	502A306	1	Adapter, Fuel Return - Spec A Only
56	502-58	1	Tee, Fuel Return - Spec A Only
57	502-30	1	Connector, Fuel Return - Spec A Only
58	502-235	1	Connector, Restricted, - Fuel Return- Spec A Only
59	149A1049	1	Line, Fuel Return - Spec A Only
60	151B292	1	Guard, Governor Shaft - To Spec C
61	307B565	1	Valve, Fuel Solenoid - Spec A Only
62	505-61	1	Nipple, Pipe (1/8 x 2") Fuel Valve - Spec A Only
63	191-543	1	Alternator, Charge - Spec B Only
63	191B665	1	Alternator, Charge (Includes Reg.) - Begin Spec C
64	191-542	1	Regulator, Charge Alternator - Spec B Only
65	191-544	1	Cable, Alternator to Regulator - Spec B Only
66	191-545	1	Resistor, Charge Alternator - Spec B Only
67	191-546	1	Bracket, Alternator Mounting - Spec B Only
67A	191B679	1	Bracket, Alternator Mounting - Begin Spec C
68			Pulley, Charge Alternator
	191-624	1	Spec B Only
	191-649	1	Begin Spec C
69	191A101	1	Bracket Alternator - Adjusting - Begin Spec B
70	191B619	1	Shield, Heat - Alternator - Begin Spec B
71	416A532	1	Cable, Starter Motor Ground
72	191A516	1	Cover, Starter Motor Mounting Hole
73	403A315	2	Spacer, Air Cleaner Mounting Bracket
74	305A315	1	Plate, Voltage Regulator Mtg. - Spec B Only
75	505-7	2	Bushing, Reducer (1) Oil Sender (1) Oil Switch- To Spec C
76	502-42	1	Elbow, Inverted Male - Fuel Filter - To Spec C
77	502-114	1	Ferrall, Fuel Line - To Spec C
78	502-55	1	Elbow, Pipe -Secondary Filter - Begin Spec C
79	502-254	1	Tee, Engine Fuel Return - Begin Spec C
80	502-41	2	Elbow, Inverted Male - Primary Filter - Begin Spec C
81	502-51	1	Coupling, Pipe - Begin Spec C
82	502-193	2	Connector, Male - Fuel Pump and Secondary Filter
83	502-5	1	Elbow, Fuel Pump

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 2 - COOLING SYSTEM GROUP

1			Radiator
	130D604	1	To Spec C
	130D713	1	Begin Spec C
2	130B449	1	Cap, Radiator
3	130C352	1	Guard, Fan - Right Hand Side
4	130C351	1	Guard, Fan - Left Hand Side
5	503A441	2	Hose, Radiator - Upper & Lower - Begin Spec C (Upper only to Spec C)
6	503P439	1	Hose, Radiator - Lower - To Spec C
7	503P311	4	Clamp, Radiator Hose
8	504-28	1	Valve, Radiator Drain
9	130C605	1	Blade, Fan
10	801-24	4	Screw, Hex - 5/16-24 x 1/2" - Fan Blade Mounting
			Mounting
11	511P79	1	Belt, Fan

FIG. 3 - HOUSING GROUP (Housed Plants Only)

1			Chassis, Mounting
	403D698	1	To Spec C
	403D814	1	Begin Spec C
2	403D697	1	Chassis, Mounting - Rear Section
3	405C1378	1	Panel, Housing - Left Side
4	405C1379	1	Panel, Housing - Right Side
5	405C1383	2	Panel, Door
6	406A105	4	Clamp, Door
7	405D1380	1	Panel, Top
8	405D932	1	Door, Rear Panel
9	406-2	1	Knob, Door
10	406A88	1	Catch, Panel Door
11	405D1381	1	Panel, Rear End - Excludes Door
12	405D1382	1	Panel, Front End
13	402A253	2	Mounting Assembly, Front Engine - Includes Parts Marked * Plus Washer and Nuts - To Spec C
14	403A633	2	*Spacer, Front Engine Mounting - To Spec C
15	402A10	2	*Mount, Rubber - Upper - To Spec C
16	402A12	2	*Cup, Rubber, Mount Retainer - To Spec C
17	402A11	2	*Mount, Rubber - Lower - To Spec C
18	801-81	2	*Screw, Cap - Engine Mounting - To Spec C
19	402P209	2	Mount, Vibration - Generator to Chassis
20	336A476	1	Cable, Ground - Generator to Chassis
21	403B695	2	Bracket, Support - Engine Front - To Spec C
22	403B694	1	Bracket, Support - Engine Rear - Left Side - To Spec C

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 3 - HOUSING GROUP (Housed Plants Only)			
23	403B693	1	Bracket, Support - Engine Rear - Right Side - To Spec C
24	416C480	1	Frame, Battery Hold-Down
25	520A656	1	Stud, Battery Hold-Down
26	800-31	1	Screw, Cap - Battery Hold - Down
27	865-7	1	Nut, Wing - Battery Hold-Down
28	416A530	1	Cable, Battery - 16" Long
29	416A531	1	Cable, Battery - 24" Long
30	416A446	1	Cable, Battery - 9 " Long
31	305A317	1	Plate, Voltage Regulator Mounting - To Spec C
32	870-68	2	*Nut, Huglock Engine Mounting - To Spec C
33	403C785	1	Support, Engine Front - Begin Spec C
34	402B190	1	Mount, Engine Front - Begin Spec C

* - Included in 402A253 Mounting Assembly (Front Engine).

FIG. 4 - MOUNTING GROUP (Unhoused Plants Only)

1			Chassis, Mounting
	403D698	1	To Spec C
	403D814	1	Begin Spec C
2	405C1409	1	Extension, Radiator Hood
3	403C702	1	Trim, Chassis - Right Side
4	403C703	1	Trim, Chassis - Left Side
5	405D1382	1	Panel, Front End
6	402A253	2	Mounting Assembly, Front Engine - Includes Parts Marked * Plus Washers and Nuts - To Spec C
7	403A633	2	*Spacer, Front Engine Mounting - To Spec C
8	402A10	2	*Mount, Rubber - Upper - To Spec C
9	402A12	2	*Cup, Rubber Mount Retainer - To Spec C
10	402A11	2	*Mount, Rubber - Lower - To Spec C
11	801-81	2	*Screw, Cap - Engine Mounting - 7/16-20 x 3-1/2" - To Spec C
12	402P209	2	Mount, Vibration - Generator End
13	336A476	1	Cable, Ground - Generator to Chassis
14	403B695	2	Bracket, Support - Engine Front - To Spec C
15	403B694	1	Bracket, Support - Engine Rear - Left Side - To Spec C
16	403B693	1	Bracket, Support - Engine Rear - Right Side - To Spec C
17	517-19	2	Plug, Dot Button, Radiator Trim
18	416C480	1	Frame, Battery Hold-Down
19	520A656	1	Stud, Battery Hold-Down
20	800-31	1	Screw, Cap - Battery Hold-Down
21	865-7	1	Nut, Wing - Battery Hold-Down
22	416A530	1	Cable, Battery - 16" Long
23	416A531	1	Cable, Battery - 24" Long

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 4 - MOUNTING GROUP (Unhoused Plants Only) - Cont.			
24	416A446	1	Cable, Battery - 9" Long
25	305A317	1	Plate, Voltage Regulator Mounting - To Spec C
26	870-68	2	*Nut, Huglock - Engine Mounting - To Spec C
27	403C785	1	Bracket, Support - Engine Front - Begin Spec C
28	402B190	1	Mount, Engine Front - Begin Spec C
* - Included in 402A253 Mounting Assembly (Front Engine).			
FIG. 5 - GENERATOR GROUP (Alternator Portion)			
1	★	1	Rotor Assembly, Wound - Includes Bearing, Blower and Drive Assembly
2	205B68	1	Blower
3	510P63	1	Bearing
4	★	1	Stator Assembly, Wound
5	212C248	1	Rig Assembly, Brush - Includes Brushes & Springs
6	212B1105	4	Spring, Brush
7	214A46	4	Brush
8	150A717	1	Switch Assembly, Overspeed
9	232B1254	2	Cover, End Bell Opening (Includes Latch and Bracket) - Plain
9A			Cover, End Bell Opening (Includes Latch and Bracket) - With Grommet -
	234C226	1	1-Phase Plants
	234B20	1	3-Phase Plants
10	232B1253	2	Cover, End Bell Opening (Includes Latch and Bracket) - Screened
11	234C175	1	Scroll, Air
13	211E131	1	Bell, End - Alternator to Exciter
14	234C174	1	Band, Generator - Front - Narrow
15			Band, Generator - Rear - Wide
	234C201	1	1-Phase Plants
	234C178	1	3-Phase Plants
16	232A1186	1	Holder, Bearing - Anti-Rotation
17	232A1187	1	Spring, Bearing Holder - Anti-Rotation
18	815A292	6	Bolt, Shoulder - 5/16-18" - Drive Disc to Engine Flywheel
19	336A943	1	Jumper, Brush Rig
20	232A1615	1	Spacer, Air Outlet Band
21	232B1820	1	Disc Drive

★ - Order by description, giving complete Model, Spec., and Serial Number (Onan Nameplate).



PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
			Magneciter Assembly - Complete
	209-21	1	60-Cycle Plants
	209-23	1	50-Cycle Plants
1	234D106	1	Cover, Exciter
2	520A575	3	Stud, Exciter Cover Mounting
2A	866-1	3	Nut, Acorn - Exciter Cover Mounting
3	234D105	1	Panel Only - Exciter
4	305B212	1	Rectifier Assembly, Power (Complete) - Includes Four #305P244 Plus Wire and Hardware
5	305P244	4	Rectifier Only, Power (Field - Included in #305P212 Assembly)
6	150B733	1	Bracket Only, Overspeed Switch
7	150A772	1	Stud and Contact Point Assembly, Voltage Control
8			Washer, Fibre Insulating - Voltage Control Re-actor Mounting
	508-18	2	1/4" x 3/4" x 1/16"
	508-29	1	1/4" x 3/8" x 1/32"
9			Reactor, Voltage Control (does not include terminal block)
	315A73	1	50-Cycle Plants
	315A74	1	60-Cycle Plants
10	332A687	1	Block, Terminal - Voltage Control Reactor
11	305B202	1	Rectifier Assembly, Resistor and (Includes Parts Marked * Plus Wire and Hardware)
12	234B60	2	*Bracket, Gate Reactor Mounting (NOTE: 1 Only Included in #305B202 Assembly)
13	304A5	1	*Resistor, Control - Adjustable (150-Ohm, 25-Watt - 9/16 x 2")
14	520A579	2	*Stud, Resistor and Rectifier Mounting (NOTE: 1 Only Included in #305B202 Assembly)
15	232A1473	2	*Spacer, Adjustable Resistor and Rectifier to Stud (3/8"O.D. x 3/16" I.D. x 7/32")
16	304A14	2	*Washer, Centering - Adjustable Resistor Mounting
17	305P208	4	*Rectifier, Regulator Control
18			Reactor, Gate
	315A63	2	50-Cycle Plants
	315A57	2	60-Cycle Plants
19	234B62	2	Retainer, Gate Reactor
20	232A1361	2	Stud, Gate Reactor Mounting
21	304A21	1	Resistor, Fixed - Alternator Field (200-Ohm, 50-Watt - 3/4 x 4")
22	304A15	2	Washer, Centering - Fixed Resistor Mounting
23	332A604	1	Block, Terminal - 5-Place
24	332A678	1	Strip, Block Marker - 5-Place (Marked AF1, AF2, E1, E2)

B2

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 6 - GENERATOR GROUP (Exciter Portion) Models 102SX1N1B and 102SX51N1B (Cont.)			
27	232A1547	2	Insulation - Gate Reactor to Mounting Bracket
28	232A1546	2	Insulation - Gate Reactor to Retainer
28A	232A1548	2	Insulation - Voltage Center Reactor Mounting
29	232A1474	2	Spacer, Fixed Resistor to Stud (3/8" O.D. x 3/16" I.D. x 11/32")
30	338B237	1	Harness, Wiring - Exciter to Control
31	332A537	1	Block, Terminal - 4-Place
32	332A686	1	Strip, Block Marker (Marked 31, 32, 33, 34)

FIG. 7 - CONTROL GROUP (AC Output Portion)

NOTE: Unhoused plants WITH OPTIONAL Meter Panel, use parts marked (†) as listed for Housed Plants.

1			Panel Only - Upper Control
	301C1810	1	† 1-Phase - HOUSED PLANTS
	301C1814	1	† 3-Phase - HOUSED PLANTS
	301C1809	1	ALL UNHOUSED PLANTS
2	301D2115	1	Box Only, Control
3	301C2984	1	Bracket (One Piece) Control Box Mounting (Replaces Two Pieces) - UNHOUSED PLANTS
5	402-78	As Req.	Mount, Rubber - Control Box Mounting - (4) UNHOUSED PLANTS, (6) HOUSED PLANTS
6	337A44	1	Strap, Ground
9	301A1914	1	Bracket, Panel Stop
10	508P63	As Req.	Grommet, Rubber - For 2-3/4" Hole
11			Voltmeter, AC (Check VOLTMETER Scale - Select according to Rating) -
	302P421	1	Voltmeter Scale Reads 0-300
	302P422	1	Voltmeter Scale Reads 0-600
	302P423	1	Voltmeter Scale Reads 0-750
12			Ammeter, AC - HOUSED PLANTS - (Check AMMETER Scale - Select according to Rating)
	302P406	1	Ammeter Scale Reads 0-75
	302P408	1	Ammeter Scale Reads 0-100
	302P410	1	Ammeter Scale Reads 0-150
	302P411	1	Ammeter Scale Reads 0-200
	302P412	1	Ammeter Scale Reads 0-250

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 7 - CONTROL GROUP (AC Output Portion) - Cont.			
NOTE: Unhoused plants WITH OPTIONAL Meter Panel, use parts marked (†) as listed for Housed Plants.			
13			† Meter, Running Time - HOUSING PLANTS - 60-Cycle Plants -
	302P465	1	120/240-Volt 1-Phase, 120/208-Volt 3-Phase, 120/240-Volt 3-Phase and 600-Volt 3-Phase
	302P466	1	220/380-Volt 3-Phase
	302P467	1	277/480-Volt 3-Phase
			50-Cycle Plants -
	302P468	1	120/208-Volt 3-Phase, and 120/240 Volt 3-Phase
	302P469	1	220/280-Volt 3-Phase
14	308-22	1	† Switch, Voltage and Current Selector - HOUSED PLANTS - 3-Phase
15			† Transformer, Current - HOUSED PLANTS - (Check TRANSFORMER Nameplate - Select according to rating) -
	302B76	3	Transformer Nameplate Reads "Ratio 75/5" (Use with 0-75 AC Ammeter)
	302B78	3	Transformer Nameplate Reads "Ratio 100/5" (Use with 0-100 AC Ammeter)
	302B79	3	Transformer Nameplate Reads "Ratio 150/5" (Use with 0-150 AC Ammeter)
	302B106	3	Transformer Nameplate Reads "Ratio 200/5" (Use with 0-200 AC Ammeter)
	302B209	2	Transformer Nameplate Reads "Ratio 250/5" (Use with 0-250 AC Ammeter)
16			Breaker, Circuit -
	320B170	1	1-Phase Plants - 18-Amp
	320B2	1	3-Phase Plants - 15-Amp
19	332A604	1	Block, Terminal - 5-Place
20			Strip, Terminal Block Marker -
	332A689	1	Marked 32, 33, 34, E1, E2 - For 120/240-Volt 1-Phase, 120/208-Volt 3-Phase and 120/240 Volt 3-Phase Plants
	332A690	1	Marked 32, 33, 34, 35, 36 - For 277/480-Volt 3-Phase, 220/380-Volt 3-Phase and 600- Volt 3-Phase Plants
21	303-97	1	Rheostat, Voltage Regulator
22	303-32	1	Knob, Rheostat
23	304A479	1	Resistor, Voltage Regulator
24	302A235	3	† Clamp, Current Transformer Mounting - Inside Half (NOTE: Use 2 for 1-phase plants) - HOUSED PLANTS

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 7 - CONTROL GROUP (AC Output Portion) Cont.			
25	302A236	3	† Clamp, Current Transformer Mounting - Outside Half (NOTE: Use 2 for 1-phase plants) - HOUSED PLANTS
27	304A536	1	† Resistor, Fixed (9000-Ohm, 50-Watt) - Off Running Time Meter - 600-Volt 3-Phase - HOUSED PLANTS
28			Condenser, Output Terminal Suppression -
	312A58	2	120/240-Volt 1-Phase Plants
	312A58	3	120/208-Volt 3-Phase Plants
	312A58	4	120/240-Volt 3-Phase Plants
	312A145	3	277/480-Volt 3-Phase, and 220/380-Volt 3-Phase Plants
29	332A513	1	Block, Terminal - Output
30	301A2727	1	Handle, Control Panel
31	301B2985	1	Cover, Lead - Gen. End (Not used on early Models)
32	301B2986	1	Cover, Lead - Eng. End (Not used on early Models)

FIG. 7A - CONTROL GROUP (Engine Instruments Portion)

1A	301C2124	1	Panel Only, Lower Control
2A	301A1685	1	Bracket, Time Delay Relay Mounting
3A	308P138	1	Switch, Run-Stop-Remote
4A	308-2	1	Switch, Panel Light
5A	302A61	1	Ammeter, Charge (30-0-30)
6A	193B106	1	Gage, Water Temperature (Panel Unit Only)
7A	193B107	1	Gage, Oil Pressure (Panel Unit Only)
8A	332A607	1	Block, Terminal - 12-Place
9A	332A608	1	Strip, Block Marker (Marked 4 through 15)
10A	332A611	1	Block, Terminal - 3-Place
11A	332A1009	1	Strip, Marker (Marked - Ground, B+, Remote)
12A	322P69	1	Receptacle Assembly, Pilot Light
13A	322P72	2	Receptacle, Panel Light
14A	322-4	3	Bulb, (2) Panel Light (1) Pilot Light
15A			Relay, Starter Pilot (Models with Optional Manifold Heater use 2)
	307B367	1	Spec A Only (Mtd. in Control)
	307B514	1	Begin Spec B (Mtd. on Gen. Adapter)
16A	304A192	1	Resistor, Fixed - 3-Ohm, 10-Watt
17A	307A655	1	Relay, Emergency Latch
18A	307B52	1	Relay, Start-Disconnect - Spec A Only
19A	320A104	1	Limiter, Cranking
20A	307B597	1	Relay, Fuel Solenoid
21A	307A388	1	Relay, Time Delay - Low Oil Pressure Switch Circuit
22A	308-37	1	Switch, Manifold Heater (Optional)
23A	307P819	1	Relay, Start Disconnect - Begin Spec B
24A	323-52	1	Socket, Start Disconnect Relay - Begin Spec B
25A	307P778	1	Spring, Start Disconnect Relay Holdown - Begin Spec B

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 8 - MOUNTED FUEL TANK GROUP (Optional Equipment)			
1	159D490	1	Tank, Fuel
2	159D489	1	Strap Assy., Fuel Tank Mounting
3	159D512	1	Cap and Indicator, Fuel Tank
4			Valve, Shut-Off
	504-13	1	Fuel Supply - With Screen
	504A75	1	Fuel Supply - With Screen - Three-Way
	504-7	1	Fuel Return
	504-4	1	Fuel Return - Three-Way
5			Line, Fuel
	501A89	1	Fuel Supply - 39"
	501A88	1	Fuel Return - 28"
6	505-26	1	Coupling, Pipe 1/8"
7	502-20	1	Elbow, Street
8	159P751	1	Gasket, Gas Tank Filler Neck
9	502-3	1	Connector, Inverted Male - Use with Three-Way Valve

FIG. 9 - WATER HEATER GROUP (Optional Equipment)

1	333P52	1	Heater, Tank Type (1500 W.) - Includes Bracket, Hose Adapter and Cord
2		1	Clamp, Heater Mounting - NOT SOLD SEPARATELY (Included with tank assembly)
3	503-197	3	Clamp, Hose
4		As Req.	Hose 5/8" I.D. x 61/64" O.D. x 20" (Bulk #503P386)
5		1	Adapter, Hose - NOT SOLD SEPARATELY (Included with tank assembly)
9	520A446	2	Stud, Thermostat Box Mounting
10	850-30	2	Lockwasher (#10), Thermostat Box Mounting
11	870-53	2	Nut, Hex (#10-32) - Thermostat Box Mounting
12	333A13	1	Cover, Thermostat Mounting Box
13	309P29	1	Thermostat, Heater Control
14	850-25	2	Lockwasher (#8), Thermostat Box Cover
15	812-76	2	Screw, RHS (#8-32) Thermostat Box Cover
18	508-8	1	Grommet, Thermostat Box
19	333A12	1	Box, Thermostat Mounting
20	505-71	1	Nipple, Pipe 1/4 x 2"
21	505-184	1	Tee, Pipe 1/4"
22		As Req.	Hose 5/8" I.D. x 61/64" O.D. x 16" (Bulk #503P386)
23	503-183	1	Clamp, Hose (Lower Tank Fitting)
25	505-135	1	Nipple, Half - Pipe 3/8 x 1-1/2"