

PARTS CATALOG

FOR

ONAN ELECTRIC GENERATING PLANTS

MAJ SERIES

ALTERNATING CURRENT MODELS

BATTERY CHARGING MODELS

Price \$1.00



933-1

DIVISION OF
STUDEBAKER INDUSTRIES, INC.
2515 UNIVERSITY AVE. S.E.,
MINNEAPOLIS, MINN. 55414

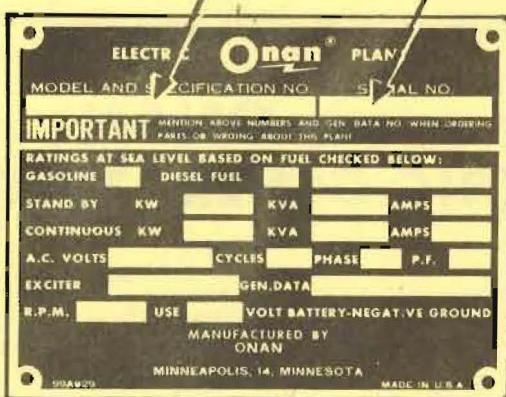
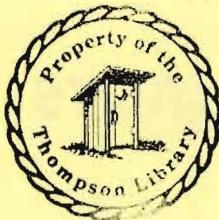
INSTRUCTIONS FOR ORDERING REPAIR PARTS

FOR 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 NAMEPLATE ON YOUR PLANT

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



For handy reference, copy YOUR plant nameplate information in the spaces above.

2. Do not order by reference number or group number, use part number and description.
3. Give the part number, description and quantity needed of each item. If an old part cannot be identified, return the part prepaid to your dealer or nearest AUTHORIZED SERVICE STATION. 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 propósito, ya que bastante confusión resultó de fluctuaciones de los precios, derechos aduanales, impuestos de venta, cambios extranjeros etc.

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

PARTS CATALOG

This parts catalog applies to the standard MAJ Generating Plants as listed in the Plant Data Table.

Parts are illustrated and identified by corresponding reference numbers in the Parts List. Parts illustrations represent typical items and do not necessarily portray a particular part number.

Compare your plant nameplate MODEL and SPEC. NO. with the Plant Data Table. Select the Parts Key No. (1, 2 etc. in the last column) that applies to your plant Model and Spec. No. This Parts Key No. appears in the description of parts that differ between models. Unless otherwise mentioned in the parts description, parts are interchangeable between the various models.

PLANT DATA TABLE

MODEL & SPEC NO.	ELECTRICAL DATA			PARTS KEY NO.
	WATTS	VOLTS *	CYCLES	
1MAJ-1R/1 *	1000	120	60	1
† 06MAJ-212R/1 *	600	12	DC	2
105MAJ-224R/1 *	1500	24	DC	3
105MAJ-232R/1 *	1500	32	DC	3
205MAJ-1R/ *	2500	120	60	4
205MAJ-3R/ *	2500	120/240	60	5
1MAJ-1R1330/ *	"Utility" (or "Mobile Communications") Models ----- See Special Group.			
1MAJ-2R1330/ *	"Utility" (or "Mobile Communications") Models ----- See Special Group.			

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

★ - Reference to 120, 240 and 120/240 volt also applies to 115, 230 and 115/230 volt.

† - Applies also to former 05MAJ-212R/ , 500 watt plant.

FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP

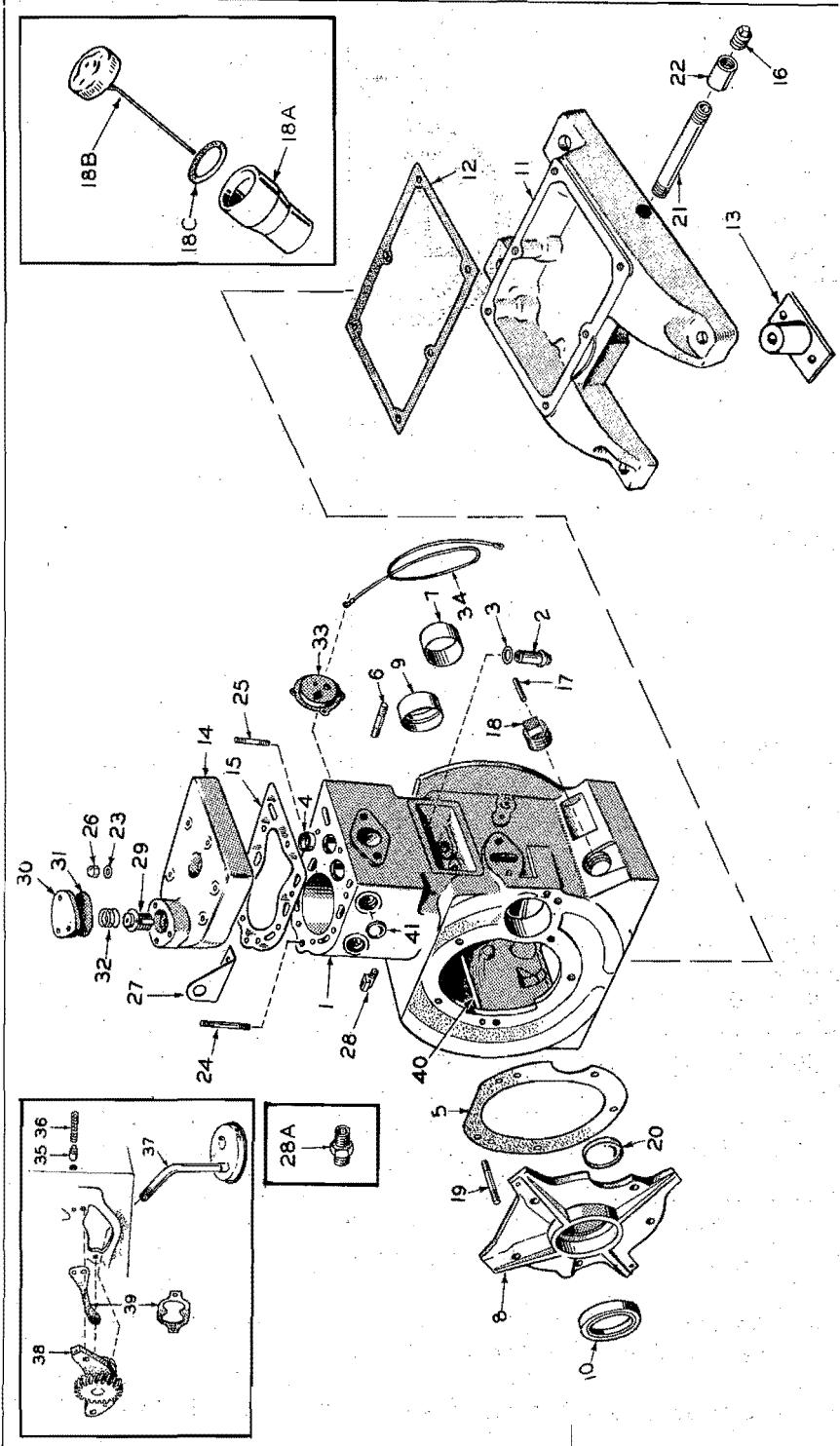


FIG. 3 - GEAR COVER & WATER PUMP GROUP

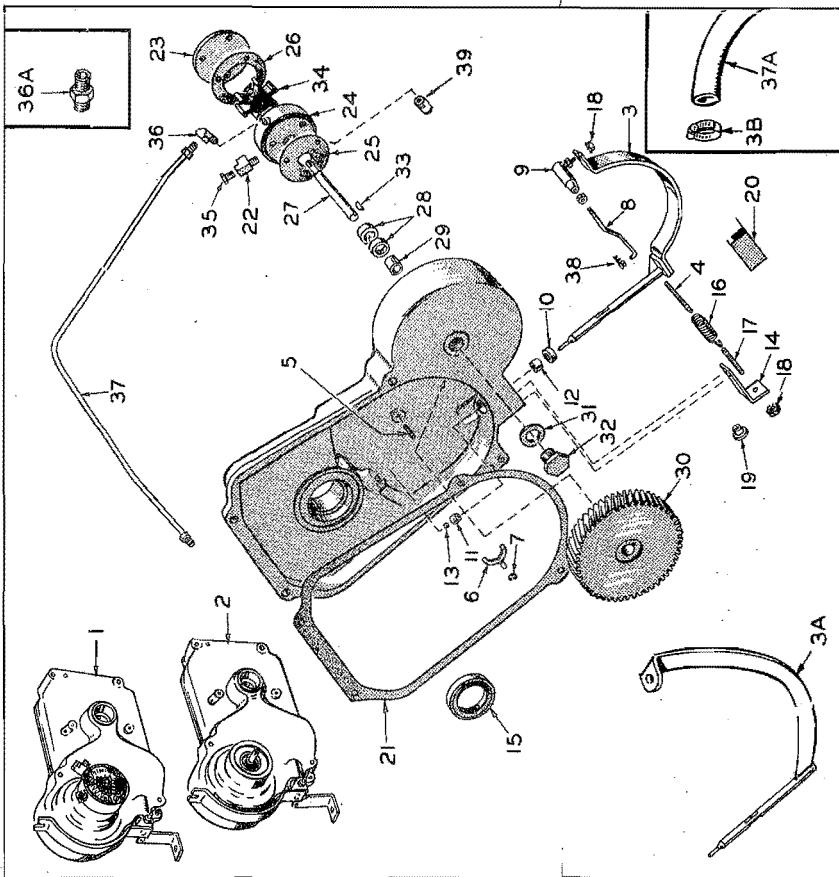
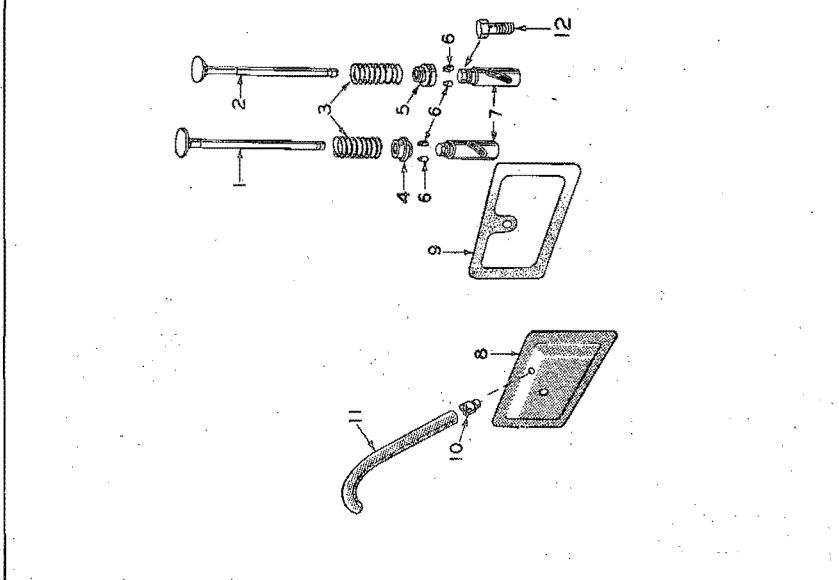


FIG. 2 - VALVE & BREATHER GROUP



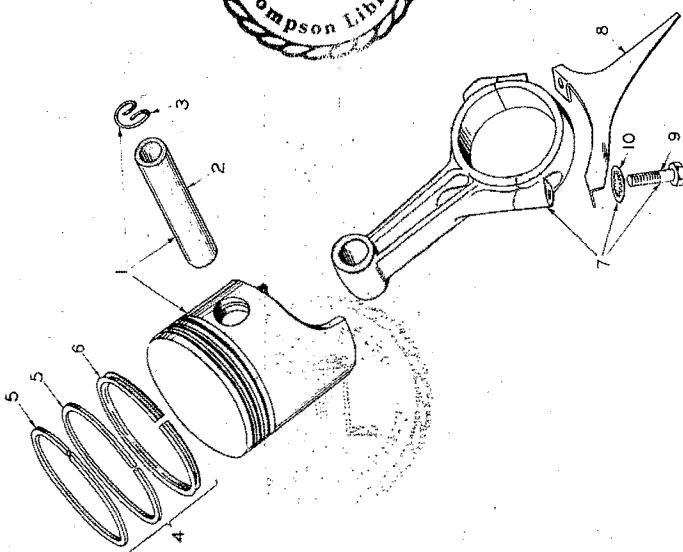
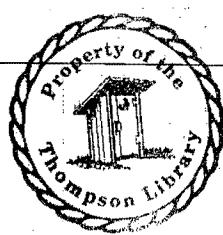


FIG. 5 - PISTON & CONNECTING ROD GROUP

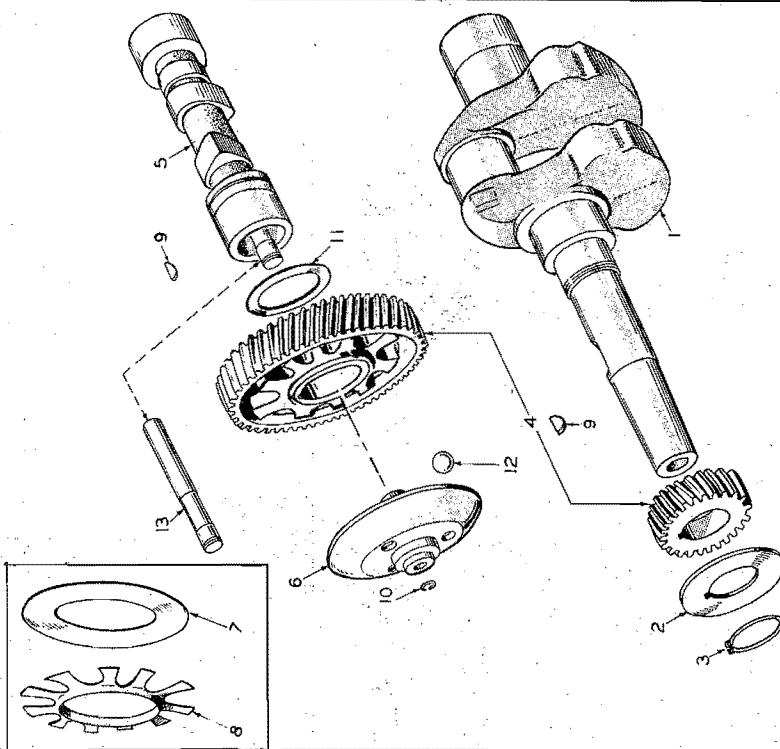


FIG. 4 - CRANKSHAFT, CAMSHAFT, & GOVERNOR CUP GROUP

FIG. 7 - FUEL SYSTEM GROUP

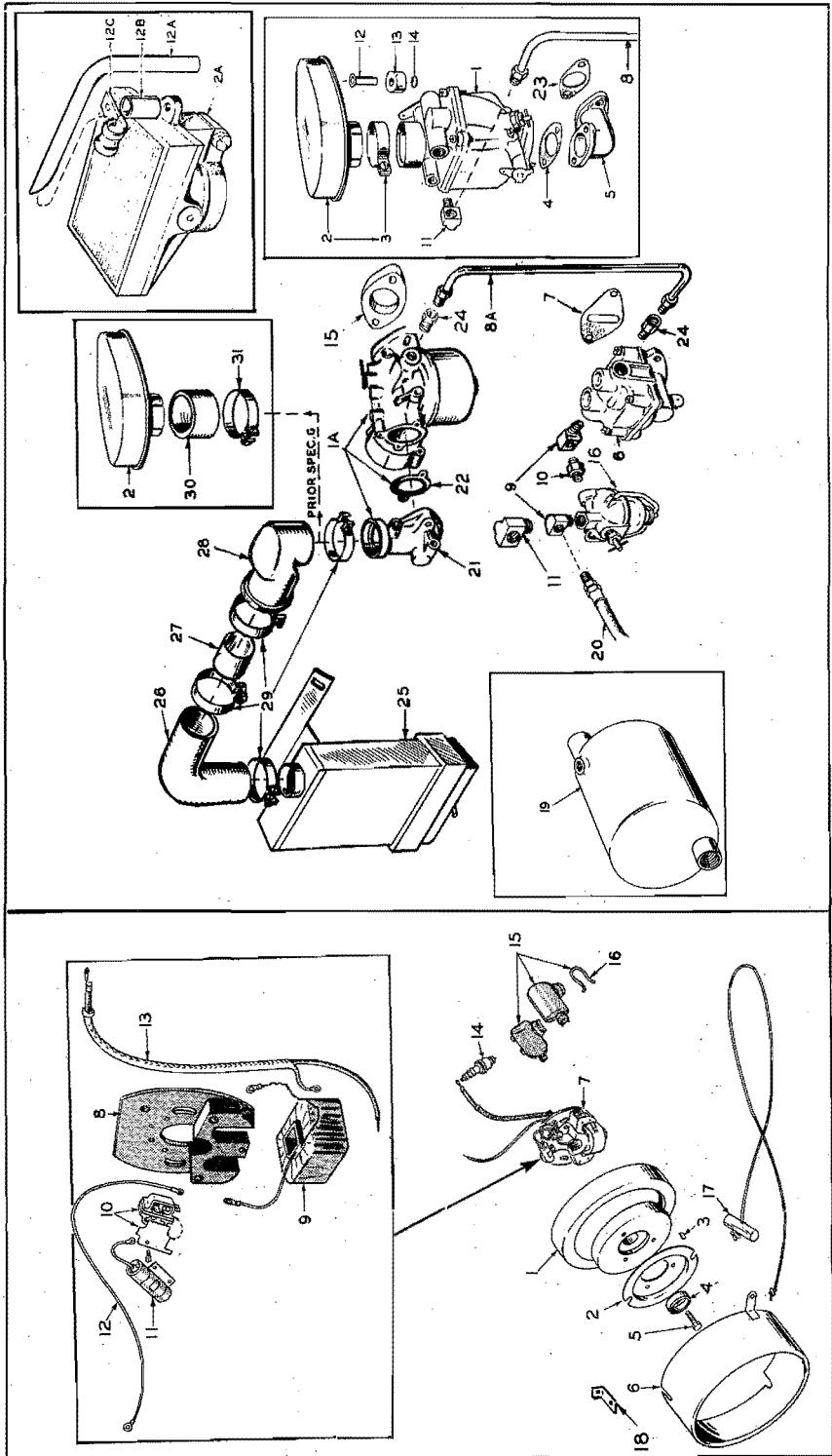


FIG. 6 - IGNITION GROUP

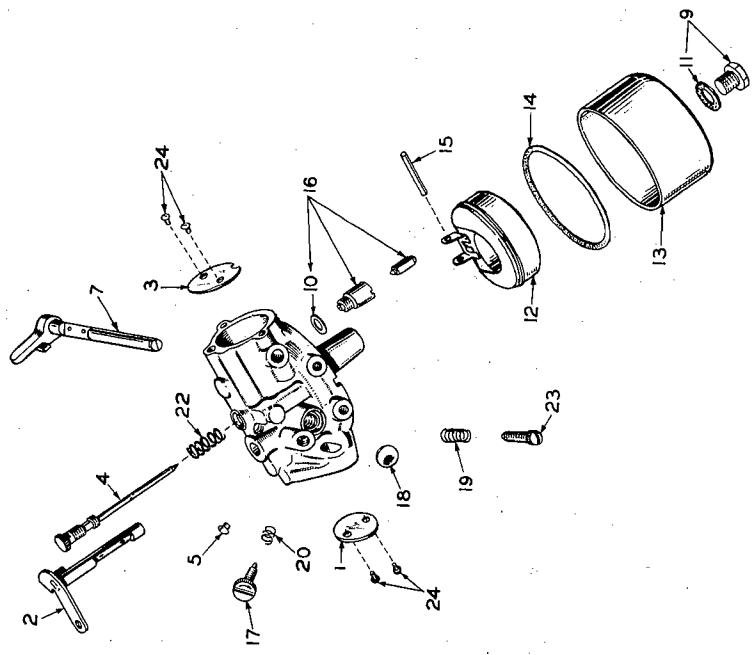


FIG. 8 - CARBURETOR PARTS GROUP
(PARTS KEY NOS. 1, 2, & 3)

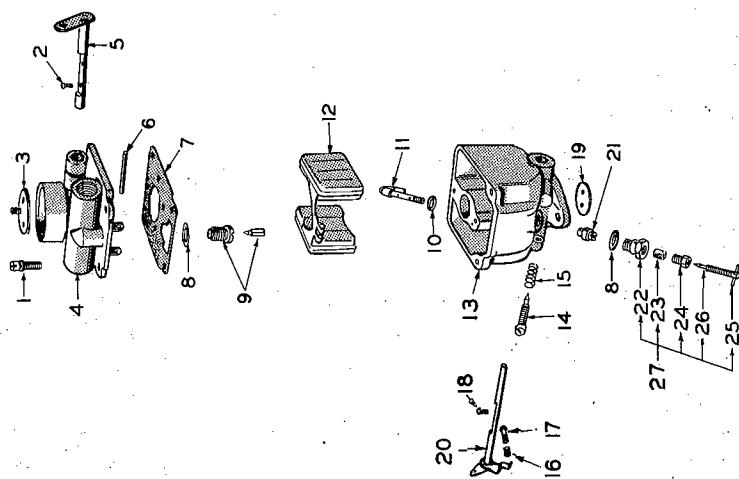


FIG. 9 - CARBURETOR PARTS GROUP (PARTS KEY NOS. 4, & 5)

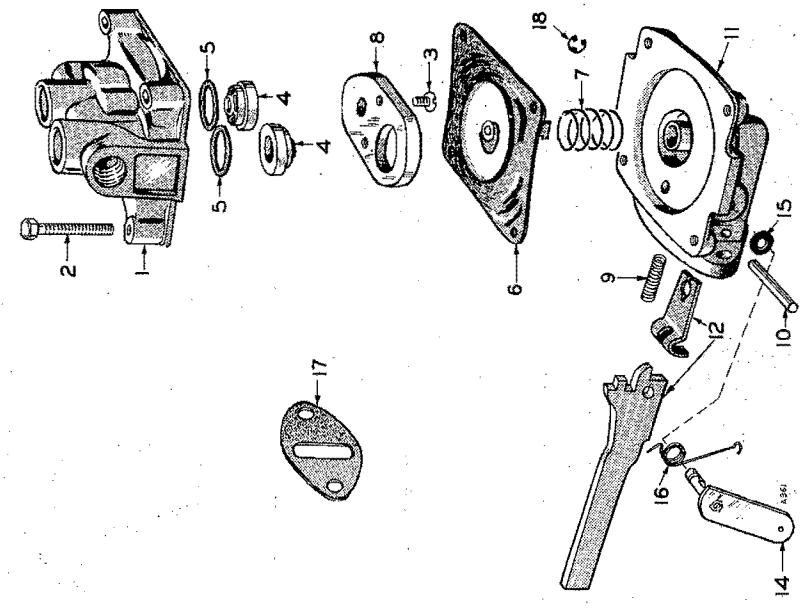


FIG. 10 - FUEL PUMP PARTS GROUP

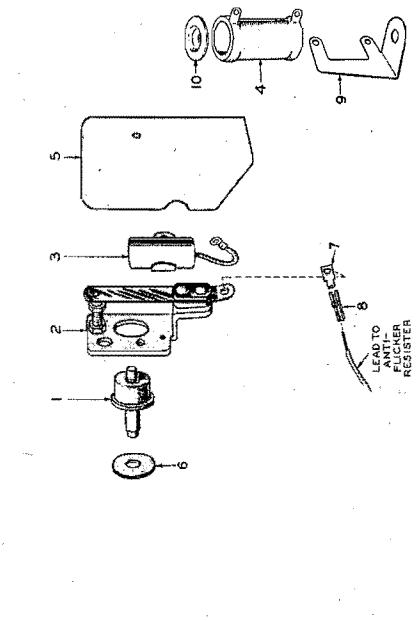


FIG. 11 - ELECTRIC CHOKE GROUP

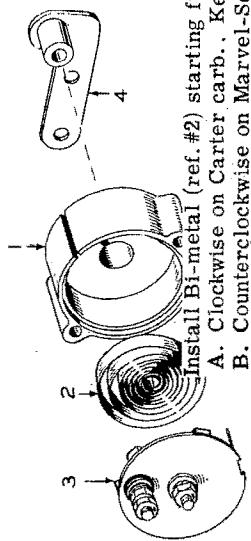


FIG. 12 - ANTI-FLICKER GROUP

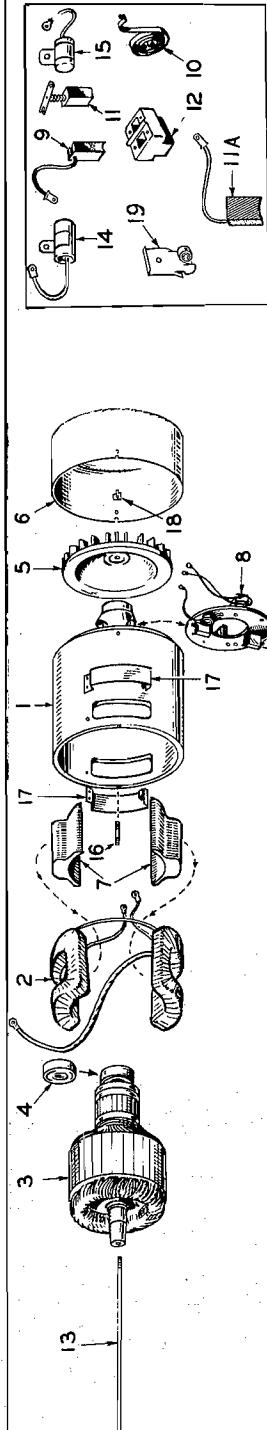


FIG. 13 - GENERATOR GROUP - 2 POLE TYPE (PARTS KEY NOS. 4 and 5)

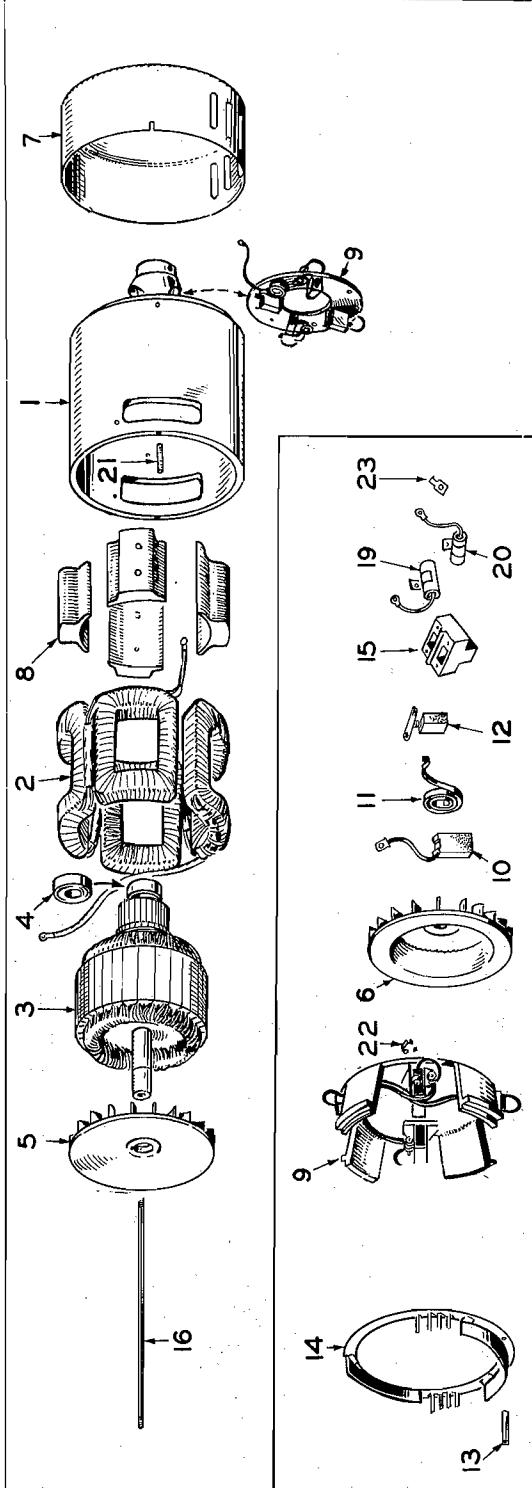


FIG. 14 - GENERATOR GROUP - 4 POLE TYPE (PARTS KEY NOS. 1, 2, and 3)

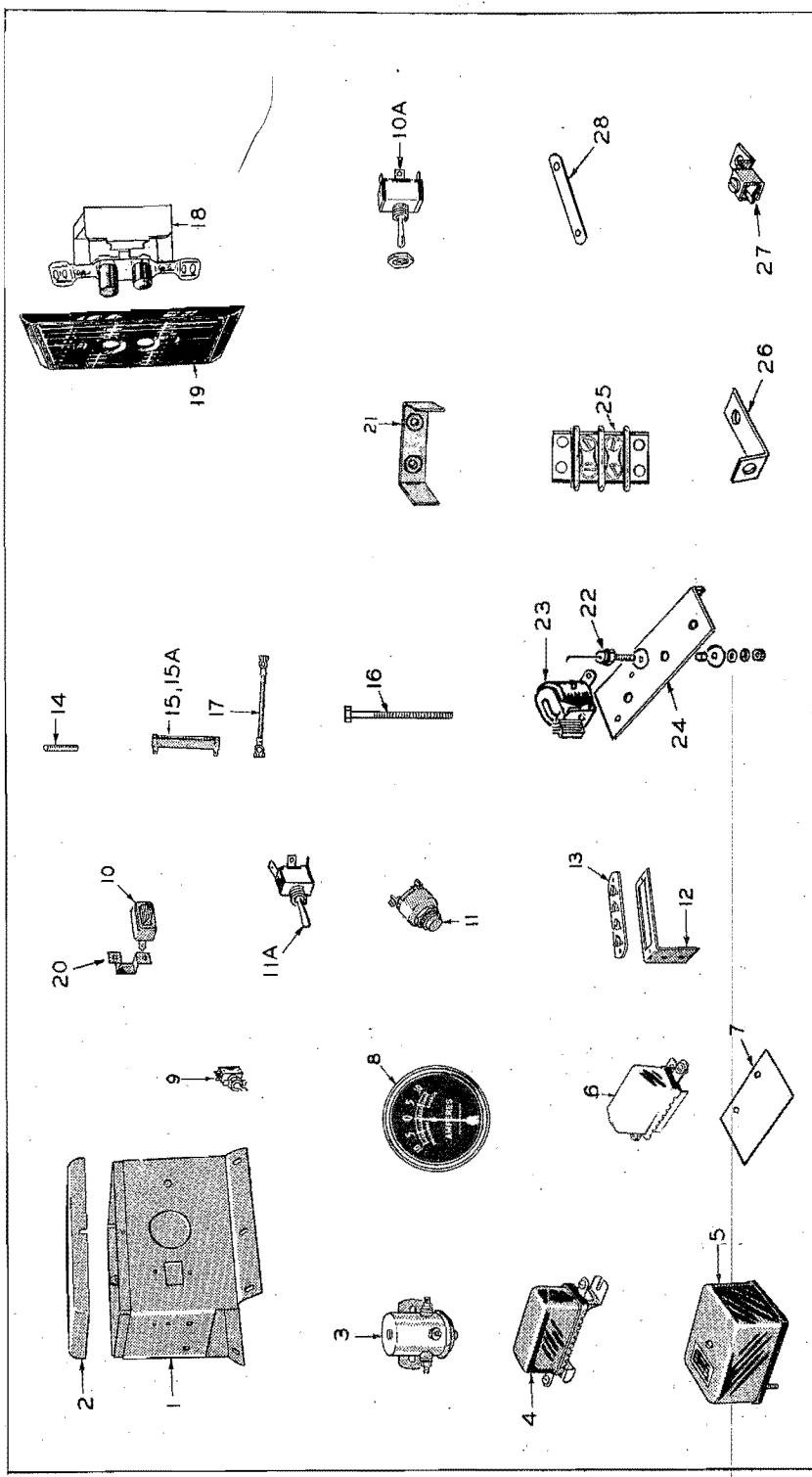


FIG. 15 - CONTROL GROUP

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
1	110K1053	1	Block Assembly Kit, Cylinder - Includes parts marked (†) -
	110A1257	1	Splash Lubrication - Parts Key Nos. 1, 2 and 3.
	110A441	2	Pressure Lubrication - Parts Key Nos. 4 and 5.
2	110A68	1	† Guide, Valve.
3	110A826	1	† Gasket, Valve Guide - Intake.
4	110A826	1	† Insert, Exhaust Valve Seat - Stellite.
5	101K257	1	† Gasket Kit, Bearing Plate to Engine (one .015", two .006").
6	520A24	2	Stud, Intake Manifold Mounting - Parts Key Nos. 1, 2 and 3.
6	520A363	2	Stud, Carburetor Mounting - Parts Key Nos. 4 and 5.
7	101A49	2	† Bearing, Camshaft.
8	101C233	1	† Plate, Rear Bearing and Generator to Engine - EXCLUDES Bearing -
	101C252	1	Splash Lubrication - Parts Key Nos. 1, 2 and 3.
9	101B290	2	Pressure Lubrication - Parts Key Nos. 4 and 5.
			† Bearing, Crankshaft - Front or Rear - Precision Type - Specify: Standard Size or .002" or .020" Undersize.
10	509A41	1	Seal, Oil - Crankshaft Rear - Replaces 509A1
11	102D439	1	Base, Oil - Replaces 102D314.
12	102B18	1	Gasket, Oil Base.
13	402P261	4	Damper, Vibration - Plant Mounting - Cone Shaped (To replace earlier bridge style order kit)
14	110C939	1	Head, Cylinder.
15	110B940	1	Gasket, Cylinder Head.
16	505-110	1	Plug, Square Head Pipe - 3/8" - Oil Drain.
17	516A12	2	† Pin, Dowel - Gear Cover Alignment.
18	505-130	1	Plug, Square Head Pipe - 3/4" - Oil Fill - For early model plants built prior to December 1, 1963.
18A	123A313	1	Tube, Oil Fill - For late model plants built beginning December 1, 1963.
18B	123A824	1	Indicator and Cap, Oil Level - For late model plants built beginning December 1, 1963.
18C	123A191	1	Gasket, Oil Fill Cap - For late model plants built beginning December 1, 1963.
19	520A526	5	† Stud, Rear Bearing Plate.
20	517-48	1	† Plug, Expansion - Rear Camshaft Bearing Opening.
21	505-76	1	Nipple, Pipe - 3/8" x 3" - Oil Drain Extension.

FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP

Block Assembly Kit, Cylinder - Includes parts marked (†) -	
Splash Lubrication - Parts Key Nos. 1, 2 and 3.	
Pressure Lubrication - Parts Key Nos. 4 and 5.	
† Guide, Valve.	
† Gasket, Valve Guide - Intake.	
† Insert, Exhaust Valve Seat - Stellite.	
† Gasket Kit, Bearing Plate to Engine (one .015", two .006").	
Stud, Intake Manifold Mounting - Parts Key Nos. 1, 2 and 3.	
Stud, Carburetor Mounting - Parts Key Nos. 4 and 5.	
† Bearing, Camshaft.	
† Plate, Rear Bearing and Generator to Engine - EXCLUDES Bearing -	
Splash Lubrication - Parts Key Nos. 1, 2 and 3.	
Pressure Lubrication - Parts Key Nos. 4 and 5.	
† Bearing, Crankshaft - Front or Rear - Precision Type - Specify: Standard Size or .002" or .020" Undersize.	
Seal, Oil - Crankshaft Rear - Replaces 509A1	
Base, Oil - Replaces 102D314.	
Gasket, Oil Base.	
Damper, Vibration - Plant Mounting - Cone Shaped (To replace earlier bridge style order kit)	
Head, Cylinder.	
Gasket, Cylinder Head.	
Plug, Square Head Pipe - 3/8" - Oil Drain.	
† Pin, Dowel - Gear Cover Alignment.	
Plug, Square Head Pipe - 3/4" - Oil Fill - For early model plants built prior to December 1, 1963.	
Tube, Oil Fill - For late model plants built beginning December 1, 1963.	
Indicator and Cap, Oil Level - For late model plants built beginning December 1, 1963.	
Gasket, Oil Fill Cap - For late model plants built beginning December 1, 1963.	
† Stud, Rear Bearing Plate.	
† Plug, Expansion - Rear Camshaft Bearing Opening.	
Nipple, Pipe - 3/8" x 3" - Oil Drain Extension.	

† - Parts in Cylinder Block Kit.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
22	505-28	1	Coupling, Pipe - 3/8" - Oil Drain Extension.
23	526-65	7	Washer, Cylinder Head - Flat (Copper).
24	520A144	2	Stud, Cylinder Head - 5/16" x 3-3/4".
25	520A143	5	Stud, Cylinder Head - 5/16" x 2-11/32".
26	869-2	7	Nut, Cylinder Head Stud Acorn - 5/16-24.
27	405A1039	1	Bracket, Lifting.
28	131A64	1	Elbow Assembly, Inverted Male - Water Inlet & Drain - Includes Hardware - For early model plants with copper waterline.
28	502-20	1	Elbow, Street - Water Inlet - For late model plants with rubber water line.
28A	502-82	1	Nipple, Hex - Water Inlet - For late model plants with rubber water line.
29	309B57	1	Thermostat - Cylinder Water Temperature Plate, Thermostat Cover.
30	309A3	1	Gasket, Thermostat Cover Plate.
31	309A4	1	Spring, Thermostat.
32	309A38	1	Switch, High Water Temperature Cut-Off.
33	309A2	1	Lead, Temperature Cut-Off Switch to Control Box.
34	336A1264	1	Plunger, Oil By-Pass - Parts Key Nos. 4 and 5.
35	120A12	1	Spring, Oil By-Pass Plunger - Parts Key Nos. 4 and 5.
36	120A140	1	Cap and Pipe, Oil Pump Intake - Includes Screen - Parts Key Nos. 4 and 5.
37	120A571	1	Pump, Oil - With 1/4 Pipe Thread Inlet - Parts Key Nos. 4 and 5.
38	120A394	1	Gasket Kit, Oil Pump - Parts Key Nos. 4 and 5.
39	120K161	1	fLine, Main Bearing Oil - Internal - Parts Key Nos. 4 and 5.
40	120A387	4	fPlug, Expansion - 1-1/8" - Water Jacket.
41	517-41	4	Dampener Kit, Vibration - Complete With Hardware.
	402K265	1	

FIG. 1 - CYLINDER BLOCK & OIL BASE GROUP (Cont.)

- Coupling, Pipe - 3/8" - Oil Drain Extension.
 Washer, Cylinder Head - Flat (Copper).
 Stud, Cylinder Head - 5/16" x 3-3/4".
 Stud, Cylinder Head - 5/16" x 2-11/32".
 Nut, Cylinder Head Stud Acorn - 5/16-24.
- Bracket, Lifting.
- Elbow Assembly, Inverted Male - Water Inlet & Drain - Includes Hardware - For early model plants with copper waterline.
- Elbow, Street - Water Inlet - For late model plants with rubber water line.
- Nipple, Hex - Water Inlet - For late model plants with rubber water line.
- Thermostat - Cylinder Water Temperature Plate, Thermostat Cover.
- Gasket, Thermostat Cover Plate.
- Spring, Thermostat.
- Switch, High Water Temperature Cut-Off.
- Lead, Temperature Cut-Off Switch to Control Box.
- Plunger, Oil By-Pass - Parts Key Nos. 4 and 5.
- Spring, Oil By-Pass Plunger - Parts Key Nos. 4 and 5.
- Cap and Pipe, Oil Pump Intake - Includes Screen - Parts Key Nos. 4 and 5.
- Pump, Oil - With 1/4 Pipe Thread Inlet - Parts Key Nos. 4 and 5.
- Gasket Kit, Oil Pump - Parts Key Nos. 4 and 5.
- fLine, Main Bearing Oil - Internal - Parts Key Nos. 4 and 5.
- fPlug, Expansion - 1-1/8" - Water Jacket.
- Dampener Kit, Vibration - Complete With Hardware.

† - Parts in Cylinder Block Kit.

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 2 - VALVE & BREATHER GROUP

1	110B828	1	Valve, Intake.
2	110B827	1	Valve, Exhaust - Stellite.
3	110A609	2	Spring, Valve.
4	110A558	1	Retainer, Valve Spring - Intake.
5	110A540	1	Rotocap, Valve - Exhaust.
6	110A8	4	Lock, Valve Spring Retainer.
7	115A6	2	Tappet, Valve.
8	110A942	1	Cover, Valve Compartment - With Baffle.
9	110AB32	1	Gasket, Valve Compartment Cover.
10	123A486	1	Valve, Breather - With 5/16" Ball.
11	503A299	1	Hose, Breather - 7/16" x 7-1/2" - Parts Key Nos. 1, 2 and 3.
	503A271	1	7/16" x 5-1/4" - Parts Key Nos. 4 and 5.
12	115-49	2	Screw, Valve Tappet.
	526-63	1	Washer, Flat-Copper - Valve Compartment Cover Screw.

FIG. 3 - GEAR COVER & WATER PUMP GROUP

1	131C108	1	Cover Assembly, Gear and Water Pump - Includes Parts Marked * -
	131C124	1	For Plants with Parts Key Nos. 1, 2 and 3.
			For Plants with Parts Key Nos. 4 and 5.
2	103C167	1	*Cover, Gear - Indudes Parts Marked † -
	103C211	1	For Plants with Parts Key Nos. 1, 2 and 3.
3	150A257	1	† Arm and Shaft Assembly, Governor - Includes Adjusting Stud and Hardware - Parts Key Nos. 1, 2 and 3.
3A	150B765	1	† Arm and Shaft, Governor - Excludes Adjusting Stud - Parts Key Nos. 4 and 5.
4	150A177	1	† Stud, Governor Sensitivity Adjusting.

* - Parts in Gear Cover and Water Pump Assembly.

† - Parts in Gear Cover Assembly.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
5	516-117	1	† Pin, Roll - 3/16" x 13/16" - Governor Cup Stop.
6	150A620	1	† Yoke, Governor Shaft - Includes Retainer Ring.
7	518-129	1	† Ring, Governor Yoke Retainer.
8	150A663	1	Link, Governor Arm to Carburetor -
9	150A766	1	For Parts Key Nos. 1, 2 and 3.
10	150A639	1	For Parts Key Nos. 4 and 5.
11	509P8	1	Joint, Ball - Governor Link.
12	510-8	1	† Seal, Oil - Governor Shaft.
13	510-13	1	† Bearing, Governor Shaft - Lower.
14	510-14	1	† Bearing, Governor Shaft - Upper.
15	510A156	1	† Ball, Thrust - Governor Shaft.
16	509A12	1	† Bracket, Governor Spring.
17	150A98	1	Spring, Governor.
18	150A213	1	Stud, Governor Spring Tension Adjusting Nut, #10-32 - With Assembled Lock Washer -
19	870-131	1	Ball Joint Stud Mounting.
20	870-131	1	Governor Adjusting - For Plants with Parts Key No. 1 (Small) Replaces #150A39.
21	150A33	1	Nut, Governor Adjusting - For Plants with Parts Key Nos. 2 and 3 (Large).
22	150A198	1	Cover, Governor Spring - (When used).
23	103B13	1	Gasket, Gear Cover.
24	502-58	1	*Tee, Street - Water Pump Body.
25	131A42	1	*Cover, Water Pump.
26	131A45	1	*Body, Water Pump.
27	131A43	1	*Gasket, Water Pump Mounting - Neoprene.
28	131A44	1	*Gasket, Water Pump Cover.
	131A47	1	† Shaft, Drive - Water Pump.
	509-44	2	† Seal, Oil - Water Pump Drive Shaft.

* - Parts in Gear Cover and Water Pump Assembly.

† - Parts in Gear Cover Assembly.

FIG. 3 - GEAR COVER & WATER PUMP GROUP (Cont.)

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 3 - GEAR COVER & WATER PUMP GROUP (Cont.)

29	131A51	1	† Bearing, Water Pump Drive Shaft.
30	131A28	1	† Gear, Water Pump Drive Shaft.
31	131A35	1	† Gasket, Screw Plug.
32	131A41	1	† Plug, Screw - Water Pump - 1" Hex.
33	516A116	1	† Key, Drive Shaft Gear - Water Pump.
34	131A50	1	*Impeller Assembly, Water Pump - Includes Rolled Pin #516-142.
35	502-28	1	*Plug, Pipe - 1" 8" Brass - Water Pump Body Tee.
36	502-4	1	*Elbow, Inverted Male - Water Pump Body - For early model plants with copper water line.
36	502-20	1	*Elbow, Street - Water Pump Body - For late model plants with rubber water line.
36A	502-82	1	*Nipple, Hex - Water Pump Body - For late model plants with rubber water line.
37	131B113	1	Line, Water - Water Pump to Cylinder Block - For early model plants built prior to September 20, 1963.
37A	503A449	1	Hose, Water - 3/8" ID x 11/16" OD x 12-1/2" Long - For late model plants built beginning December 1, 1963.
37B	503-446	2	Clamp, Hose - For late model plants with rubber water line.
38	518-4	1	Clip, Governor Link to Carburetor End.
	811-105	3	Screw, Rd. Hd. Brass - #10-32 x 1" - Water Pump Assembly.
	526-71	3	Washer, Flat Copper - Water Pump Assembly.
	131K107	1	Repair Kit, Water Pump - Includes Body, Cover, Impeller, Oil Seals, Gaskets and Cover Mounting Hardware.
39	131A126	1	Tube, Water Pump Drain - Not Used Prior 1961.
	*		* - Parts in Gear Cover and Water Pump Assembly.
	†		† - Parts in Gear Cover Assembly.

FIG. 4 - CRANKSHAFT, CAMSHAFT & GOVERNOR CUP GROUP

1	104C236	1	Crankshaft - For Plants with Parts Key Nos. 1, 2 and 3.
	104C265	1	For Plants with Parts Key Nos. 4 and 5.
2	104A50	1	Washer, Crankshaft Gear.
3	518-12	1	Ring, Lock - Crankshaft Gear Washer.

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
4	105-235	1	Gear Set, Timing - Crankshaft and Camshaft - Camshaft Gear Includes Flyball Spacer and Plate, Replaces 105-71.
5	105A139	1	Camshaft and Pin Assembly.
6	150B612	1	Cup, Governor.
7	150A77	1	Plate, Governor Ball - Prior to Serial #668253.
8	150B85	1	Spacer, Governor Ball - Prior to Serial #668253.
9	515-1	2	Key, Gear.
10	150A78	1	Ring, Lock - Camshaft Center Pin.
11	105A4	1	Washer, Camshaft Thrust.
12	510P15	10	Ball, Governor Fly -
	510P5	5	Parts Key Nos. 1, 2 and 3.
	510P5	5	Parts Key Nos. 4 and 5.
13	150A75	1	Pin, Camshaft Center.

FIG. 4 - CRANKSHAFT, CAMSHAFT & GOVERNOR CUP GROUP (Cont.)

FIG. 5 - PISTON & CONNECTING ROD GROUP

1	112A74	1	Piston and Pin Assembly - Specify: Standard or .010", .020", .030" Oversize.
2	112A63	1	Pin, Piston - Specify: Standard or, .002" Oversize.
3	112A13	2	Ring, Piston Pin Retaining.
4	113-84	1	Ring Set, Piston - Specify: Standard or, .010", .020", .030" Oversize.
5		2	*Ring, Piston Compression.
6		1	*Ring, Piston Oil Control.
7	114C95	1	Rod, Connecting - Specify: Standard or, .020" Undersize (Replaces #114A85).
8	114A89	1	Dipper, Oil - Connecting Rod - Parts Key Nos. 1, 2 and 3.
9	114A23	2	Screw, Hex Head - Connecting Rod Cap (Hardened).
10	854-14	2	Washer, Lock - I.T. Shakeproof - Connecting Rod Cap Screw.

* Sold as Part Only.

PARTS LIST**FIG. 6 - IGNITION GROUP**

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
1	160C564		Flywheel, Magneto - Used Prior to Serial #581639 - For replacement, use Flywheel #160C604, Sheave #1192B261
	160C604	1	and Washer #526-141. Begin with Serial #581639.
2	160A233	1	Sheave, Rope - Prior to Serial #581639.
	192B261	1	Begin with Serial #581639.
3	515A113	1	Key, Flywheel Mounting.
4	104A304	1	Washer, Flywheel Mounting - Prior to Serial #581639.
	526-141	1	Begin with Serial #581639.
5	104A237	1	Screw, Hex Head - Pilot Center - Flywheel Mounting.
6	160C528	1	Guard, Magneto Flywheel.
7	160A487	1	Backplate Assembly, Magneto - Includes Parts Marked * (Replaces #160A559).
8	160A454	1	* Backplate and Foleshoe.
9	160B155	1	* Coil, Magneto.
10	160K540	1	* Point Set, Contact - Complete with Cover and Hardware.
11	312A33	1	* Condenser.
12	336A345	1	* Lead, Stop (Replaces #336A179).
13	167A1272	1	* Lead, Hi Tension - Spark Plug - (Replaces #167A1302).
14	167A28	1	Plug, Spark.
15	167A67	1	Shield and Clamp, Spark Plug.
16	167A64	1	Clamp Only, Spark Plug Shield.
17	192A23	1	Rope and Handle, Manual Starting.
18	160A237	1	Bracket, Support - Flywheel Guard to Gear Cover.
			* - Parts in Backplate Assembly.

FIG. 7 - FUEL SYSTEM GROUP

1	142A311	1	Carburetor Assembly - Parts Key Nos. 1, 2 and 3.
1A	143B75	1	Carburetor Assembly - Parts Key Nos. 4 and 5.
2	140B41	1	Cleaner, Air - Includes Clamp - Parts Key Nos. 1, 2 and 3 - Prior to Spec K.

FIG. 7 - FUEL SYSTEM GROUP (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
2	140B41	1	Cleaner, Air - Includes Clamp - Parts Key Nos. 4 and 5 - Prior to Spec G.
2A	145-263	1	Arrester Assembly, Flame (Coast Guard Approved) - Parts Key Nos. 1, 2 and 3 - Begin Spec K.
2A	145-82	1	Arrester Assembly, Flame (Coast Guard Approved) - Parts Key Nos. 4 and 5 - Begin Spec K.
3	503A19	1	Clamp, Air Cleaner to Carburetor - Parts Key Nos. 1, 2 and 3.
4	141A78	1	Gasket, Carburetor Mounting - Parts Key Nos. 1, 2 and 3.
5	142A310	1	Adapter, Carburetor - Parts Key Nos. 1, 2 and 3.
6	149D693	1	Pump Assembly, Fuel (Replaces #149C543).
7	149A3	1	Gasket, Fuel Pump Mounting.
8	149A677	1	Line, Fuel - Pump to Carburetor - Parts Key Nos. 1, 2 and 3.
8A	149A561	1	Line, Fuel - Pump to Carburetor - Parts Key Nos. 4 and 5.
9	502-20	1	Elbow, Street
	502-20	1	Fuel Filter Inlet - All Models.
10	502-82	1	Fuel Pump Inlet - Parts Key Nos. 4 and 5, Begin Spec G.
11	502-2	As Req.	Nipple, Hex - Fuel Filter Street Elbow to Pump or Filter to Pump.
			Elbow, Inverted Male - Fuel Filter Inlet, All Models; Fuel Pump Outlet and Carburetor Inlet,
			Parts Key Nos. 1, 2 and 3.
12	123A292	1	Adapter, Breather Tube - Air Cleaner - Parts Key Nos. 1, 2 and 3 - Prior to Spec K.
12A	145A346	1	Adapter, Breather Tube - Flame Arrestor - Parts Key Nos. 1, 2 and 3 - Begin Spec K..
12B	145A347	1	Spacer, Breather Tube to Flame Arrestor - Parts Key Nos. 1, 2 and 3 - Begin Spec K.
12C	332-50	1	Clip, Breather Tube to Flame Arrestor - Parts Key Nos. 1, 2 and 3 - Begin Spec K.
13	402A76	1	Bushing, Breather Adapter Rubber - Air Cleaner (Replaces #402A19) - Parts Key Nos. 1, 2 and 3 - Prior to Spec K.
14	851-9	1	Washer, Breather Adapter Retainer (Replaces #518-53) - Parts Key Nos. 1, 2, and 3 - Prior to Spec K.
15	145A110	1	Gasket, Carburetor Mounting - Parts Key Nos. 4 and 5.
16	149B282	1	Filter Assembly, Fuel.
19	155C84	1	Muffler, Water Cooled.
20	501A9	1	Line, Fuel - 36" - Supply to Pump - Flexible
21	140A446	1	Adapter, Air Cleaner - Parts Key Nos. 4 and 5 (Note - Use size 12 sheet metal screw to plug bottom hole) - Prior to Spec K.
22	145A111	1	Gasket, Air Cleaner Adapter to Carburetor - Parts Key Nos. 4 and 5 - Prior to Spec K.
23	145A63	1	Gasket, Carburetor Adapter - Parts Key Nos. 1, 2 and 3.

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
24	502-3	2	Connector, Inverted Male - Carburetor Inlet, Parts Key Nos. 4 and 5; Fuel Pump Outlet, All Models.
25	140C557	1	Cleaner (Silencer), Air - To be used without oil - Parts Key Nos. 4 and 5 - Spec G Only.
26	140C586	1	Spec H through Spec J. Hose, Air Cleaner - Parts Key Nos. 4 and 5 - Spec G Only.
26	503A286	1	Spec H through Spec J - 503A286 will work by cutting vertical end shorter.
27	503A376	1	Sleeve, Air Cleaner Hose to Air Inlet - Parts Key Nos. 4 and 5, Spec G through Spec J.
27	140A211	1	Inlet, Carburetor Air - Rubber - Parts Key Nos. 4 and 5, Spec G through Spec J.
28	145B79	1	Clamp, Hose - Air Hose and Inlet - Parts Key Nos. 4 and 5, Spec G through Spec J.
29	503-280	4	Hose, Air Cleaner - 1-1/2 x 1-7/8 x 1-5/16" Long - Parts Key Nos. 4 and 5, Prior to Spec G
30	503A363	1	Clamp, Hose - Air Cleaner - 1-7/8" - Parts Key Nos. 4 and 5, Prior to Spec G
31	503-280	1	Tubing, Flexible Exhaust - Corrugated Stainless Steel - 10" - 3/4" Male Pipe Thread Both Ends - (OPTIONAL ACCESSORY).
	155B713	1	Tubing, Flexible Exhaust - Corrugated Stainless Steel - 24" - 3/4" Male Pipe Thread Both Ends - (OPTIONAL ACCESSORY).
	155P552	1	

FIG. 7 - FUEL SYSTEM GROUP (Cont.)

Connector, Inverted Male - Carburetor Inlet, Parts Key Nos. 4 and 5; Fuel Pump Outlet, All Models.
 Cleaner (Silencer), Air - To be used without oil - Parts Key Nos. 4 and 5 - Spec G Only.
 Spec H through Spec J.
 Hose, Air Cleaner - Parts Key Nos. 4 and 5 - Spec G Only.
 Spec H through Spec J - 503A286 will work by cutting vertical end shorter.
 Sleeve, Air Cleaner Hose to Air Inlet - Parts Key Nos. 4 and 5, Spec G through Spec J.
 Inlet, Carburetor Air - Rubber - Parts Key Nos. 4 and 5, Spec G through Spec J.
 Clamp, Hose - Air Hose and Inlet - Parts Key Nos. 4 and 5, Spec G through Spec J.
 Hose, Air Cleaner - 1-1/2 x 1-7/8 x 1-5/16" Long - Parts Key Nos. 4 and 5, Prior to Spec G
 Clamp, Hose - Air Cleaner - 1-7/8" - Parts Key Nos. 4 and 5, Prior to Spec G
 Tubing, Flexible Exhaust - Corrugated Stainless Steel - 10" - 3/4" Male Pipe Thread Both Ends - (OPTIONAL ACCESSORY).
 Tubing, Flexible Exhaust - Corrugated Stainless Steel - 24" - 3/4" Male Pipe Thread Both Ends - (OPTIONAL ACCESSORY).

FIG. 8 - CARBURETOR PARTS GROUP

NOTE: For Plants with Parts Key Nos. 1, 2 and 3.
Carburetor Assembly (Illustrated with Fuel System Group).
Screw, Bowl Cover.
†Screw, Choke Plate.
Plate, Choke.
Cover, Bowl.
Shaft, Choke.
†Shaft, Float.
Gasket, Cover to Bowl.
Gasket - (1) Fuel Valve,
(1) Main Adjusting.
†Valve Assembly, Fuel.
Gasket, Nozzle.
Nozzle, Discharge.
Float and Lever Assembly.
142A311
1
815-103
2
815-91
3
142-37
4
142-205
5
142-183
6
142-39
7
142-31
8
148A17
9
142-49
10
142-32
11
142-285
12
142-38

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
13		1	Body and Bowl Assembly - Not Sold Separately.
14	142-40	1	† Needle, Idle Adjusting.
15	142-282	1	Spring, Idle Needle Adjusting.
16	142-35	1	Spring, Throttle Stop Screw.
17	815-106	2	Screw, Throttle Stop.
18	142-26	2	†Screw, Throttle Plate.
19	142-25	1	Plate, Throttle.
20	142A316	1	†Shatt Assembly, Throttle.
21	142-290	1	Nut, Nozzle Retainer and Jet.
22	142-46	1	Retainer, Main Adjusting Needle.
23	142-206	1	Packing, Main Adjusting Needle.
24	142-45	1	Retainer, Main Adjusting Needle Packing.
25	516A27	1	Pin, Main Adjusting Needle.
26	142-41	1	Needle, Main Adjusting - With Pin.
27	142-42	1	Needle Assembly, Main Adjusting.
	142-33	1	†Gasket Kit, Carburetor.
	142K414	1	Repair Parts Kit, Carburetor - Includes Parts Marked †
			† Parts in Repair Kit.

FIG. 8 - CARBURETOR PARTS GROUP (Cont.)

13 Body and Bowl Assembly - Not Sold Separately.
 14 † Needle, Idle Adjusting.
 15 Spring, Idle Needle Adjusting.
 16 Spring, Throttle Stop Screw.
 17 Screw, Throttle Stop.
 18 †Screw, Throttle Plate.
 19 Plate, Throttle.
 20 †Shatt Assembly, Throttle.
 21 Nut, Nozzle Retainer and Jet.
 22 Retainer, Main Adjusting Needle.
 23 Packing, Main Adjusting Needle.
 24 Retainer, Main Adjusting Needle Packing.
 25 Pin, Main Adjusting Needle.
 26 Needle, Main Adjusting - With Pin.
 27 Needle Assembly, Main Adjusting.
 142-33 †Gasket Kit, Carburetor.
 142K414 Repair Parts Kit, Carburetor - Includes Parts Marked †

NOTE: For Plants with Parts Key Nos. 4 and 5.

143B75 1 Carburetor, Gasoline (Illustrated in Fuel System Group) - (Electric Choke, 5/8" venturi).
 143K81 1 Repair Parts Kit, Carburetor - Includes parts marked * and **.
 143K80 1 **Gasket Kit, Carburetor - Includes parts marked *.
 145A110 1 *Gasket, Spacing - Carburetor Flange (Illustrated in Fuel System Group).
 1 143-97 1 Valve, Throttle.
 2 143-98 1 Shaft and Lever, Throttle.

* - Parts in Gasket Kit.
 ** - Parts in Repair Kit.

FIG. 9 - CARBURETOR PARTS GROUP

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
3	143-99	1	Valve, Choke.
4	143-78	1	**Needle, Idle Jet and High Speed Adjusting.
5	143-30	1	Plug, Idle Passage.
7	143-100	1	Shaft and Weight, Choke.
9	143-118	1	Screw and Gasket, Bowl.
10	143A15	1	*Gasket, Fuel Inlet Valve.
11	143-36	1	*Gasket, Bowl Screw.
12	143-105	1	Float and Lever.
13	143-119	1	Bowl.
14	143-77	1	*Gasket, Bowl Ring.
15	143-107	1	Pin, Float Lever.
16	143-39	1	**Valve, Fuel Inlet.
17	143-109	1	Screw, Idle Adjustment.
18	143-110	1	Plug, Expansion.
19	143-111	1	Spring, Throttle Lever Adjusting Screw.
20	143-112	1	Spring, Idle Adjustment Screw.
22	143-114	1	Spring, High Speed Adjusting Needle.
23	143-115	1	Screw, Throttle Lever Adjusting.
24	812-14	4	**Screw, Round Head - #3-48 x 3/16 - Choke and Throttle Valve Attaching.

FIG. 9 - CARBURETOR PARTS GROUP (Cont.)

* - Parts in Gasket Kit.
** - Parts in Repair Kit.

FIG. 10 - FUEL PUMP PARTS GROUP

149D693	1	Pump Assembly, Fuel (Illustrated in Fuel System Group) Replaces #149C543.
149K526	1	Repair Parts Kit, Fuel Pump - Includes parts marked *.
1	1	Body, Upper - Not Sold Separately.
2	4	Screw, Hex Head - #8-32 x 7/8" - Pump Assembly.
3	2	Screw, Valve Retainer - Flat Head - #6-32 x 5/8".

FIG. 10 - FUEL PUMP PARTS GROUP (Cont.)

REF.	PART NO.	QUANT. USED	DESCRIPTION
4	149-96	2	*Valve and Cage.
5	149A95	2	*Gasket, Valve.
6	149A582	1	*Diaphragm Assembly.
7	149A672	1	*Spring, Diaphragm.
8	149A539	1	Retainer, Valve Cage.
9	149A675	1	*Spring, Rocker Arm.
10	516A113	1	Pin, Rocker Arm.
11		1	Body, Lower - Not Sold Separately.
12	149-710	1	Arm and Link Set.
14	149A551	1	Lever, Hand Primer.
15	509P65	2	Seal, "O" Ring - Priming Lever.
16	149A404	1	Spring, Priming Lever.
17	149A3	1	*Gasket, Pump Mounting (Listed also in Fuel System Group).
18	518-129	1	Ring, Retainer - Hand Primer Lever.

* - Included in Repair Kit.

FIG. 11 - ELECTRIC CHOKE GROUP

1	153A58	1	Bracket, Choke Housing.
2	153A17	1	Element, Choke Bimetal.
3			Cover Assembly, 'Choke - Includes Heating Element -
	153A124	1	For Plants with Parts Key No. 2 (12 Volt).
	153A114	1	For Plants with Parts Key Nos. 1 and 3 (24 Volt Only).
	153A116	1	For Plants with Parts Key No. 3 (32 Volt Ungrounded).
	153A330	1	For Plants With Parts Key Nos. 4 and 5 (Prior to Spec J) (40-Volt).
	153A115	1	For Plants With Parts Key Nos. 4 and 5 (Begin Spec J) (40-Volt).
4	153A196	1	Adapter, Electric Choke - Parts Key Nos. 4 and 5.

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 12 - ANTI-FLICKER GROUP

NOTE: This group used only on Plants with Parts Key No. 1.

1	160A447	1	Plunger Assembly - Includes plunger, guide and diaphragm. Does not include gasket #160A461.
2	160B478	1	Point Set, Contact.
3	312A19	1	Condenser - 0.5 Mfd.
4			Resistor, Fixed (Mounts in Generator) -
	304A321	1	2.5 Ohm, 25 Watt, 9/16 x 2" - Prior to Spec H.
	304A168	1	1.5 Ohm, 25 Watt, 9/16 x 2" - Begin Spec H.
5	166A254	1	Cover, Contact Points.
6	160A461	1	Gasket, Plunger Guide.
7	332A527	1	Terminal, Solderless - Male Only - Lead Connection.
8	332P529	1	Terminal, Solderless - Female Only - Fastens to Lead.
9	304A304	1	Bracket, Resistor Mounting (Located in Generator).
10	304A14	2	Washer, Resistor Centering - 9/16" O.D. (Located in Generator).

FIG. 13 - GENERATOR GROUP - 2 POLE TYPE - For Parts Key Nos. 4 and 5

NOTE: Generator Parts are arranged in sub groups according to Parts Key Number. For Plants with Parts Key No. 4.

1			Frame and Bearing Support - Machined & Drilled - Less Coils & Poleshoes -
	210B1704	1	Prior to Spec H.
	210B1719	1	Begin Spec H.
2	222A1561	1	Coil Assembly, Field - Set of 2 Coils wired together -
	222A1598	1	Prior to Spec J.
			Begin Spec J.
3	201A1044	1	Armature Assembly - Includes Bearing - 120 Volt - 60 Cycle -
	201A1141	1	Prior to Spec J.
4	510A47	1	Begin Spec J.
5	205B56	1	Bearing, Ball - Armature.
			Blower, Armature (Mounts at Brush Rig End).

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 13 - GENERATOR GROUP - 2 POLE TYPE (Cont.)

For Plants with Parts Key No. 4 (Cont.)			
6	234C34	1	Cover, Generator End - Prior to Spec H.
	234C127	1	Begin Spec H.
7	221B135	2	Shoe, Pole.
8	212C277	1	Rig Assembly, Brush - Includes Brushes and Springs - Replaces 212C262.
9	214A70	2	Brush, Commutator.
10	212A1011	2	Spring, Commutator Brush Brush, Collector Ring -
11	214A59	4	Spring Attached - Prior to Spec J.
11A	214A72	2	Spring Not Included - Begin Spec J (This brush is part of Brush Rig Assy 212C277).
12	212A1064	2	Guide, Slip Ring Brush - Prior to Spec J.
13	520A285	1	Stud, Armature Through.
14	312A27	1	Condenser, DC - 0.5 Mfd. - Prior Spec H.
	312A17	1	Begin Spec H.
15	312A58	1	Condenser, AC-0.1 Mfd. - Replaces 312A15.
16	520A363	4	Stud, Generator Frame to Engine (Listed also in Cylinder Block Group)
17	234B124	2	Cover, Generator Frame Air Opening - Prior to Spec H.
	234B119	2	Begin Spec H.
18	232A1557	2	Clip, Generator End Cover (Key Washer).
	115A25	4	Nut, Hex - 1/4-28 - Generator Mounting - Not Illustrated
19	212B1105	2	Spring and Support Assembly, AC Brush - Begin Spec J
For Plants with Parts Key No. 5.			
1	210B1701	1	Frame and Bearing Support - Machined and Drilled - Less Coils and Poleshoes - Prior to Spec H.
	210B1720	1	Begin Spec H.

PARTS LIST

FIG. 13 - GENERATOR GROUP - 2 POLE TYPE (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
For Plants with Parts Key No. 5 (Cont.)			
2	222A1561	1	Coil Assembly, Field - Set of 2 Coils wired together - Prior to Spec J.
	222A1598	1	Begin Spec J
3	201A1043	1	Armature Assembly - Includes Bearing - 120/240 Volt - 60 Cycle - Prior to Spec J.
	201A1140	1	Begin Spec J.
4	510A47	1	Bearing, Ball - Armature.
5	205B56	1	Blower, Armature (Mounts at Brush Rig End).
6	234C31	1	Cover, Generator End - Prior to Spec H.
7	221B135	1	Shoe, Pole.
8	212C273	1	Rig Assembly, Brush - Includes Brushes and Springs - Replaces 212C261
9	214A70	2	Brush, Commutator.
10	212A1011	2	Spring, Commutator Brush.
11	214A59	6	Brush, Collector Ring - Spring Attached - Prior to Spec J.
11A	214A72	3	Spring Not Included - Begin Spec J (This brush is part of Brush Rig Assy 212C273).
12	212A1162	2	Guide, Slip Ring Brush - Prior to Spec J.
13	520A563	1	Stud, Armature Through.
14	312A17	1	Condenser, DC - 0.5 Mfd.
15	312A58	2	Condenser, AC - 0.1 Mfd.
16	520A363	4	Stud, Generator Frame to Engine (Listed also in Cylinder Block Group). Cover, Generator Frame Air Opening - Prior to Spec H.
17	234B124	2	Begin Spec H.
	234B119	2	Clip, Generator End Cover (Key Washer).
18	232A1557	2	Nut, Hex - 1/4-28 - Generator Mounting - Not Illustrated.
	115A25	4	Spring and Support Assembly, AC Brush - Begin Spec J
19	212B1105	2	

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 14 - GENERATOR GROUP - FOUR POLE TYPE - For Parts Key Nos. 1, 2 and 3.

1	210B1449 210C1739 210C254 210C382 210C240 210C279 210B1638 210C336	1 1 1 1 1 1 1 1	Frame Generator - Machined & Drilled - Less Coils & Poleshoes - For Plants with Parts Key No. 1 (Includes Bearing Support) --- Prior to Spec H. For Plants with Parts Key No. 1 (Includes Bearing Support) --- Begin Spec H. For Plants with Parts Key No. 2, Prior to Spec H. For Plants with Parts Key No. 2, Begin Spec H. For Plants with Parts Key No. 3, Prior to Spec E (32 Volt Only). For Plants with Parts Key No. 3, Spec E, Spec F and Spec G (32 Volt Only). For Plants with Parts Key No. 3, Begin Spec H (32 Volt Only). For Plants with Parts Key No. 3, Begin Spec H (24 Volt Only).
2	222A1400 222A1573 222A1408 222A1411 222-1605	1 1 1 1 1	Coil Assembly, Field - Set of 4 Coils, Wired Together. For Plants with Parts Key No. 1, Prior to Spec H. For Plants with Parts Key No. 1, Begin Spec H. For Plants with Parts Key No. 2. For Plants with Parts Key No. 3 (32 Volt Only). For Plants with Parts Key No. 3 (24 Volt Only).
3	201A677 201A1072 201A794 201A693 201A1093 201-1189 510A47	1 1 1 1 1 1 1	Armature Assembly - For Plants with Parts Key No. 1 (Includes Blower and Bearing) - Prior to Spec H. For Plants with Parts Key No. 1 - Begin Spec H. For Plants with Parts Key No. 2 For Plants with Parts Key No. 3 (Includes Blower and Bearing) - Prior to Spec H (32 Volt Only) For Plants with Parts Key No. 3- Begin Spec H (32 Volt Only) For Plants with Parts Key No. 3- Begin Spec H (24 Volt Only) Bearing, Ball - Armature - For Plants with Parts Key Nos. 1 and 3.
4	205B47	1	Blower, Armature - (Mounts at Engine End) - For Plants with Parts Key No. 3, Prior to Spec H
5	205B47	1	For Plants with Parts Key No. 1, Prior to Spec H
6	205B56 205B56 205B56	1 1 1	Blower, Armature - (Mounts at Brush Rig End) - For Plants with Parts Key No. 2. For Plants with Parts Key No. 1, Begin Spec H. For Plants with Parts Key No. 3- Begin Spec H

PARTS LIST

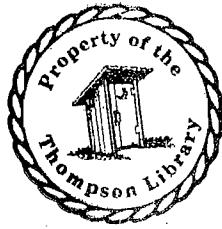


FIG. 14 - GENERATOR GROUP - FOUR POLE TYPE - For Parts Key Nos. 1, 2 and 3 (Cont.)

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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7	232C1214	1	Cover, Generator End - For Plants with Parts Key No. 1, Prior to Spec H.
	232C1214	1	For Plants with Parts Key No. 3, Prior to Spec E.
	234C125	1	For Plants with Parts Key No. 3, Spec E through Spec G.
8	234C4	1	For Plants with Parts Key No. 2, Prior to Spec H.
	234C127	1	For Plants with Parts Key Nos. 1, 2, and 3, Begin Spec H Shoe, Pole -
	221B110	4	For Plants with Parts Key No. 1. For Plants with Parts Key No. 2. For Plants with Parts Key No. 3.
9	221A111	4	Rig Assembly, Brush - Includes Brushes and Springs - For Plants with Parts Key No. 1. For Plants with Parts Key No. 2, Prior to Spec H.
	221B114	4	For Plants with Parts Key No. 2. For Plants with Parts Key No. 2, Begin Spec H.
	212C209	1	For Plants with Parts Key No. 1. For Plants with Parts Key No. 2, Prior to Spec H.
10	212C228	1	For Plants with Parts Key No. 2. For Plants with Parts Key No. 3, Prior to Spec H
	212C253	1	For Plants with Parts Key No. 2. For Plants with Parts Key No. 3, Prior to Spec H
	212C221	1	For Plants with Parts Key No. 3, Prior to Spec H
11	212C251	1	For Plants with Parts Key No. 3, Begin Spec H Brush, Commutator - For Plants with Parts Key No. 1.
	214A41	4	For Plants with Parts Key No. 2.
	214A44	4	For Plants with Parts Key No. 3, Prior to Spec H
11	214A47	4	For Plants with Parts Key No. 3, Begin Spec H
	214A9	4	For Plants with Parts Key No. 3, Spring, Commutator Brush - For Plants with Parts Key No. 1.
	212A1003	4	For Plants with Parts Key No. 3, Begin Spec H
11	212A1003	4	For Plants with Parts Key No. 2.
	212B1105	4	For Plants with Parts Key No. 3, Prior to Spec H
	212A1106	4	

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 14 - GENERATOR GROUP - FOUR POLE TYPE - For Parts Key Nos. 1, 2 and 3 (Cont.)

12	214A59	4	Brush and Spring, Collector Ring - For Plants with Parts Key No. 1.
13	232A1197	2	Spacer - 3/8" O.D. Tubing - Mounting Scroll - For Plants with Keys 1 and 3, Prior to Spec H.
14	234B7	1	Scroll, Air - Generator Ventilating - For Plants with Parts Key Nos. 1 and 3, Prior to Spec H.
15	212A1064	2	Guide, Collector Ring Brush - For Plants with Parts Key No. 1.
16			Stud, Armature Through -
	520A274	1	For Plants with Parts Key No. 1, Prior to Spec H.
	520A56	1	For Plants with Parts Key No. 1, Begin Spec H.
	520A529	1	For Plants with Parts Key No. 2, Prior to Spec H.
	520A571	1	For Plants with Parts Key No. 2, Begin Spec H.
	520A275	1	For Plants with Parts Key No. 3, Prior to Spec H.
	520A279	1	For Plants with Parts Key No. 3, Begin Spec H.
19	312A17	1	Condenser - 0.5 Mfd. - DC Brush.
20	312A58	1	Condenser - 0.1 Mfd. - AC Brush - For Plants with Parts Key No. 1. (Replaces 312A15).
21	520A363	2	Stud, Generator Frame to Engine.
22	232A596	1	Clip, Bearing Stop - For Plants with Parts Key No. 3, Prior to Spec H
23	232A1362	2	Clip, Generator End Cover (Key Washer).
	115A25	2	Nut, Hex - 1/4-28, hardened - Generator to Engine.

NOTE: Resistor mounted in generator for Parts Key No. 1 appears in Anti-Flicker Group.

FIG. 15 - CONTROL GROUP

1	301D1059	1	Box Only, Control -
	301D1859	1	For Plants with Parts Key No. 1, Prior to Spec H.
	301D1127	1	For Plants with Parts Key No. 1, Begin Spec H.
	301D1127	1	For Plants with Parts Key No. 2, Prior to Spec H.
	301D1128	1	For Plants with Parts Key No. 3, Prior to Spec F. (32 Volt Only).
	301D1868	1	For Plants with Parts Key Nos. 2 and 3, Spec F and Spec G. (32 Volt Only).
	301D2104	1	For Plants with Parts Key No. 3, Begin Spec H. (32 Volt Only).
	301D1823	1	For Plants with Parts Key Nos. 4 and 5, Prior to Spec H.
	301D1867	1	For Plants with Parts Key Nos. 4 and 5, Spec H.
	301D2082	1	For Plants with Parts Key Nos. 4 and 5, Begin Spec J.

PARTS LIST

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
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FIG. 15 - CONTROL GROUP (Cont.)

2	301B1060 301C1858	1 1	Cover, Control Box - Prior to Spec H. Begin Spec H.
3	307B40 307B61	1 1	Switch, Start Solenoid - For Plants with Parts Key Nos. 1, 2, 4 and 5. For Plants with Parts Key No. 3.
4,5,6	307B180 307B144 307B495	1 1 1	Relay, Reverse Current - For Plants with Parts Key No. 1. For Plants with Parts Key No. 2, Prior to Spec H. For Plants with Parts Key No. 2, Begin Spec H.
5	307B185	1	For Plants with Parts Key No. 3, Prior to Spec F. (32 Volt Only).
6	307B496	1	For Plants with Parts Key No. 3, Begin Spec F. (32 Volt Only).
5	307B77	1	For Plants with Parts Key No. 3, Begin Spec H (24 Volt Only).
7	301A592 301A592	1 1	Insulator, Reverse Current Relay Mounting - For Plants with Parts Key No. 3, Begin Spec F. For Plants with Parts Key No. 2, Begin Spec H.
8	302A58 302A62 302A63	1 1 1	Ammeter, Charge - For Plants with Parts Key No. 1. For Plants with Parts Key Nos. 2 and 3 (12 and 32 Volt Only). For Plants with Parts Key No. 3 (24 Volt Only).
9	308P2	1	Switch, High-Low Charge Rate - For Plants with Parts Key No. 1.
10	308-90	1	Switch, Start-Stop - For Plants with Parts Key Nos. 1, 4 and 5, Prior to Spec H.
10A	308P154	1	Switch, Start-Stop - For Plants with Parts Key Nos. 1, 4 and 5, Begin Spec H.
11	308A29	2	Switch, Start or Stop - For Plants with Parts Key Nos. 2 and 3, Prior to Spec H.
11A	308P155	2	Switch, Start or Stop - For Plants with Parts Key Nos. 2 and 3, Begin Spec H.
12	332A198	1	Bracket, Terminal Block.
13	332A222	1	Block, Terminal - 4 Post.
14	332A125	1	Stud, Brass - 1/4"-20 x 1-3/4" - For Plants with Parts Key Nos. 2 and 3.
15	304A268	1	Resistor, Charge - Adjustable - 10 Ohm, 50 Watt - 3/4 x 4" - For Plants with Parts Key No. 1.
15A	304P2	1	Resistor, Charge - Fixed - For Plants with Parts Key Nos 4 and 5
	304A46	1	15 Ohm, 50 Watt - Prior to Spec J.
			10 Ohm, 50 Watt - Begin Spec J.

PARTS LIST

29

REF. NO.	PART NO.	QUANT. USED	DESCRIPTION
FIG. 15 - CONTROL GROUP (Cont.) Screw, Charge Resistor Mounting - Special - 1/4-20 x 4-1/2" - For Plants with Parts Key Nos. 1, 4 and 5.			
16	812-165	1	Screw, Charge Resistor Mounting - Special - 1/4-20 x 4-1/2" - For Plants with Parts Key Nos. 1, 4 and 5.
17	416A77	2	Cable, Battery - 28" Long - For Plants with Parts Key Nos. 1, 4 and 5.
18	308A53	1	Switch, Remote Start-Stop.
19	308-41	1	Plate, Remote Start-Stop Switch.
20	301A974	1	Bracket, Start-Stop Switch Mounting - Parts Key Nos. 1, 4 and 5 - Prior to Spec H.
21	302P270	1	Bracket, Ammeter Mounting - Parts Key No. 1.
22	305A235	1	Rectifier - 10 Amp - 100 Volt Peak - Parts Key Nos. 4 and 5 - Prior to Spec J.
23	307A566	1	Relay, Start-Disconnect - Parts Key Nos. 4 and 5 - Prior to Spec J.
	307B642	1	Prior to Spec J.
24	301A1829	1	Begin Spec J.
25	332A609	1	Bracket, Relay and Rectifier - Parts Key Nos. 4 and 5 - Prior to Spec J.
	332A609	1	Block, Terminal - 2 Place - Parts Key Nos. 4 and 5 - Used with 305A235 Rectifier from Serial No. 634772 thru Spec H.
26	332A523	1	Strip, Solenoid Terminal Jumper - 1/16 x 5/8" Copper Strip - Parts Key Nos. 1, 4, and 5 - Prior to Spec H.
27	332-142	1	Terminal, Ground - Parts Key Nos. 4 and 5.
28	332A592	1	Jumper, Ground - Parts Key No. 1.
	336A144	1	Lead, Start Solenoid Switch to Electric Choke.
SPECIAL PARTS GROUP FOR MODEL 1MAJ-1R1330/ 1MAJ-2R1330/ ("UTILITY" or "MOBILE COMMUNICATIONS" Purpose Plant)			

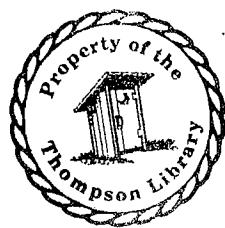
NOTE: For Parts not listed in this group, use Parts Key No. 1 in the Standard Group.

Armature Assembly, Generator - Includes Blower and Bearing -

Describe	1	For Model 1MAJ-2R1330/ 201A946
	1	For Model 1MAJ-1R1330/ 201A1074
	1	For Model 1MAJ-1R1330/ 222A1532
	1	Coil Assembly, Generator Field - Set of 4 Coils.
	1	Cover Assembly, Electric Choke - Includes 12 Volt Heating Element
	1	Relay, Reverse Current.
	1	307B495

PARTS LIST

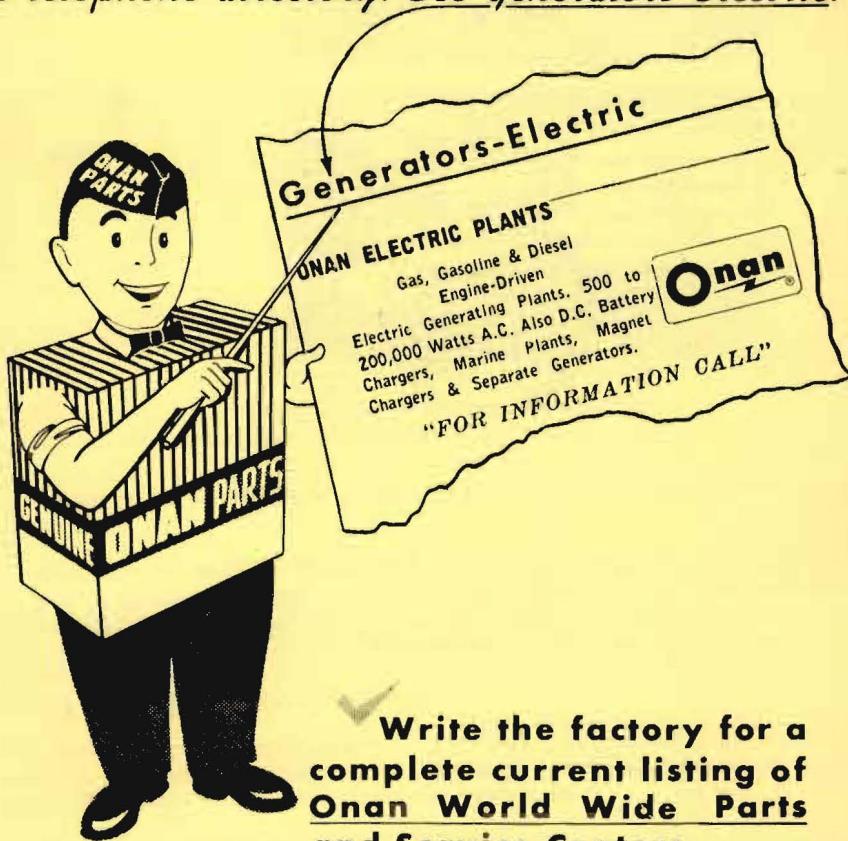
REF. NO.	PART NO.	QUANT. USED	DESCRIPTION	SPECIAL PARTS GROUP FOR MODELS 1MAJ-1R1330/ 1MAJ-2R1330/	(Cont.)
	307B454	1	Relay, Charge Disconnect.		
	302A62	1	Ammeter, Charge 45-0-45.		
	320A158	1	Breaker, Circuit.		
	304-132	1	Resistor - 1 Ohm, 25 Watt - Anti-flicker.		
	301D1628	1	Box Only, Control - Prior to Spec H.		
	301D1874	1	Begin Spec H.		
				SERVICE KITS AND MISCELLANEOUS	
				For other service kits refer to the group for the part in question.	
	168K69	1	Gasket Kit, Plant		
	525P90		Paint, Touch-up Enamel.		
	525P137		Mouse Grey, 12 Ounce Pressurized Can.		
			Green, 16 Ounce Pressurized Can.		





6AK64

For Genuine Onan Parts and Service, see your
Onan Parts and Service Center. In most major
cities they are listed in the classified section of
the telephone directory. See Generators-Electric.



Write the factory for a
complete current listing of
Onan World Wide Parts
and Service Centers.