

PARTS CATALOG

FOR



ELECTRIC GENERATING PLANTS

WA

SERIES

SPEC. A THROUGH E

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 your nearest authorized service station. To avoid errors or delay in filling your order, please refer to the *Onan nameplate* located on the upper right side of the flywheel housing and give the complete:

MODEL AND SPEC. NO.
AND
SERIAL NO.

ELECTRIC <i>Onan</i> PLANT	
MODEL AND SPECIFICATION NO.	SERIAL NO.
IMPORTANT <small>WRITE IN ABOVE NUMBERS AND LETTERS FOR ORDERING PARTS OR WRITING ABOUT THIS PLANT</small>	
RATINGS AT SEA LEVEL BASED ON FUEL CHECKED BELOW	
GASOLINE <input type="checkbox"/>	DIESEL FUEL <input type="checkbox"/>
STAND BY KW <input type="checkbox"/>	KVA <input type="checkbox"/> AMPS <input type="checkbox"/>
CONTINUOUS KW <input type="checkbox"/>	KVA <input type="checkbox"/> AMPS <input type="checkbox"/>
A.C. VOLTS <input type="checkbox"/>	CYCLES <input type="checkbox"/> PHASE <input type="checkbox"/> P.F. <input type="checkbox"/>
EXCITER <input type="checkbox"/>	GEN DATA <input type="checkbox"/>
R.P.M. <input type="checkbox"/>	USE <input type="checkbox"/> VOLT BATTERY-NEGATIVE GROUND
<small>MANUFACTURED BY ONAN DIVISION OF STUDEBAKER CORPORATION WINNEAPOLIS 14, MINNESOTA</small>	

WAUKESHA PARTS

All Waukesha parts must be ordered from the Waukesha Motor Company of Waukesha, Wisconsin, or their nearest authorized distributor. Refer to the Waukesha Engine flywheel housing. When ordering parts, always supply Waukesha with the following nameplate information:

GAS OR GASOLINE ENGINE	
	
MODEL <input type="text"/>	SIZE <input type="text"/>
SERIAL <input type="text"/>	GEN. <input type="text"/>
GOV'D SPEED <input type="text"/>	SIT VALVES COLD HOT <input type="checkbox"/> GEN <input type="checkbox"/>
ON SPEC SAE NO. WINTER <input type="checkbox"/>	SUMMER <input type="checkbox"/> SPARK ADV <input type="checkbox"/> DEG. AT <input type="text"/> R.P.M.
WAUKESHA MOTOR COMPANY WAUKESHA, WISCONSIN	
<small>MADE IN U.S.A.</small>	

MODEL, SIZE
AND
SERIAL NUMBER

shown on the engine nameplate

PARTS CATALOG

This catalog applies to the standard WA plants as listed below. Powered by a Waukesha F-817-GE engine (see Waukesha Manual). Engine parts modified or added by *Onan* will be in this list and have *Onan* part numbers. These supersede similar parts listed in the Waukesha manual. *Onan* parts are arranged in groups of related items and are identified by a reference. All parts illustrations are typical. Using the Model and Spec. No. from the *Onan* plant nameplate, select parts from this catalog that apply to your plant. Unless otherwise mentioned, parts are interchangeable. Right and left plant sides are determined by facing the front end of the engine.

PLANT DATA TABLE

MODEL & SPEC NO. *		ELECTRICAL DATA				
		WATTS**	VOLTS	CYCLES	PHASE	WIRE
HOUSED	UNHOUSED					
100WA-53R/	100WA-53R8/	100,000	120/240	50	1	3
100WA-54R/	100WA-54R8/	100,000	120/208	50	3	4
100WA-54XR/	100WA-54XR8/	100,000	277/480	50	3	4
100WA-55DR/	100WA-55DR8/	100,000	120/240	50	3	4
100WA-57R/	100WA-57R8/	100,000	220/380	50	3	4
100WA-59XR/	100WA-59XR8/	100,000	347/600	50	3	4
115WA-3R/	115WA-3R8/	115,000	120/240	60	1	3
115WA-4R/	115WA-4R8/	115,000	120/208	60	3	4
115WA-4XR/	115WA-4XR8/	115,000	277/480	60	3	4
115WA-5DR/	115WA-5DR8/	115,000	120/240	60	3	4
115WA-6R/	115WA-6R8/	115,000	480	60	3	3
115WA-9XR/	115WA-9XR8/	115,000	347/600	60	3	4

- * - The Specification Letter advances (A to B, B to C, etc.) with manufacturing changes.
- ** - Maximum Standby rating, continuous rating is also shown on Onan nameplate.

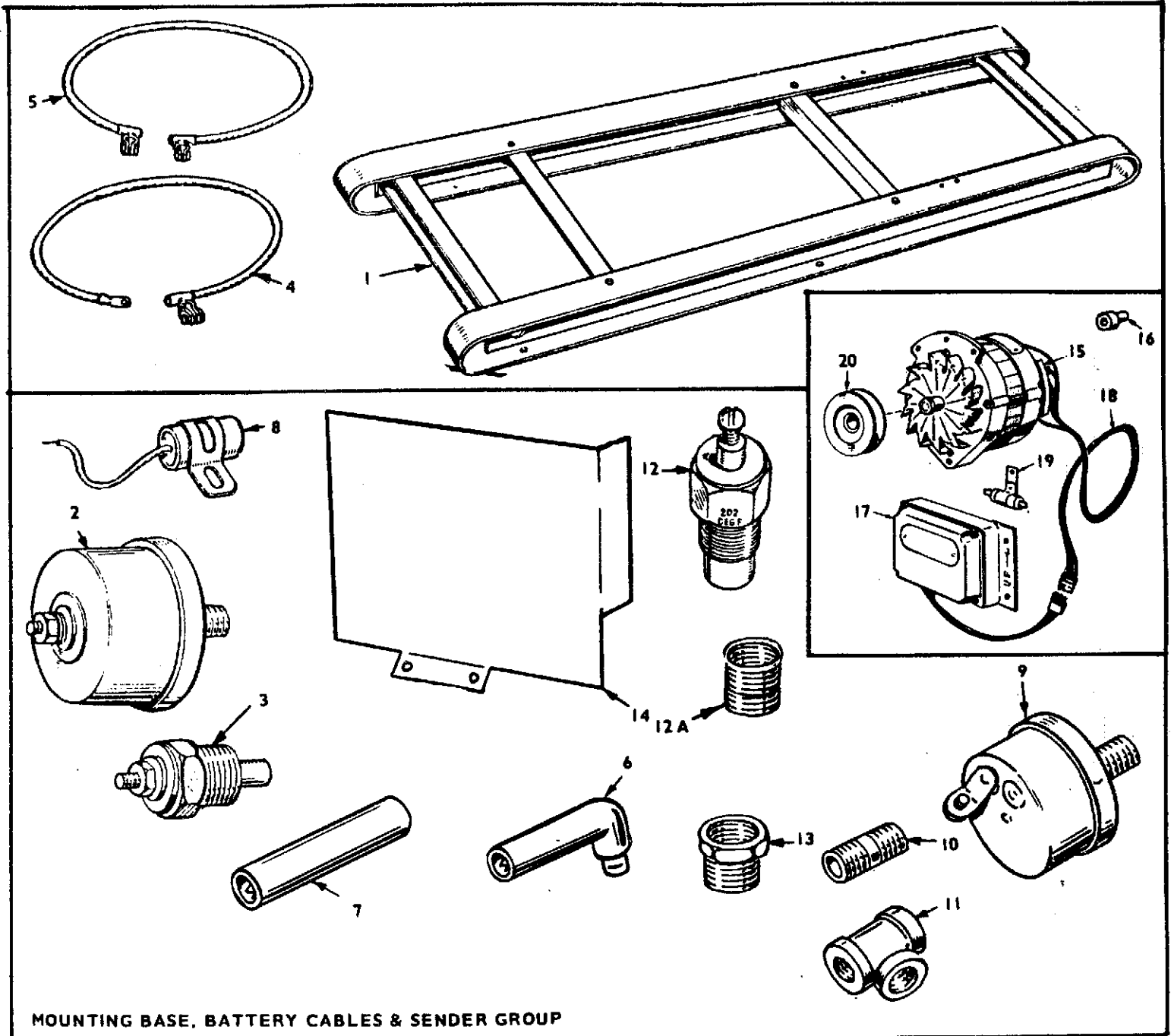
REPLACEMENT ENGINE

Refer to factory giving complete Model, Spec, and Serial Number from plant (Onan) nameplate.

General Description:

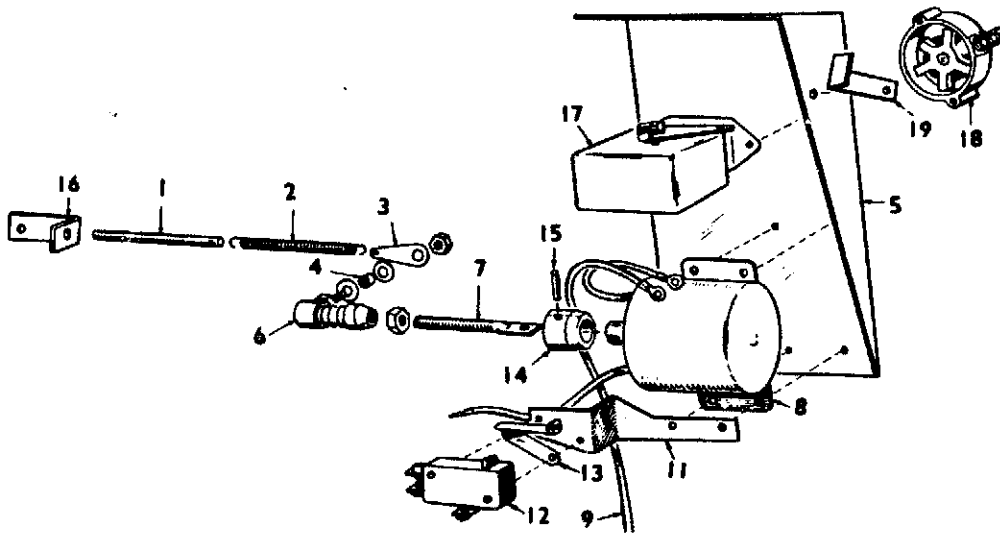
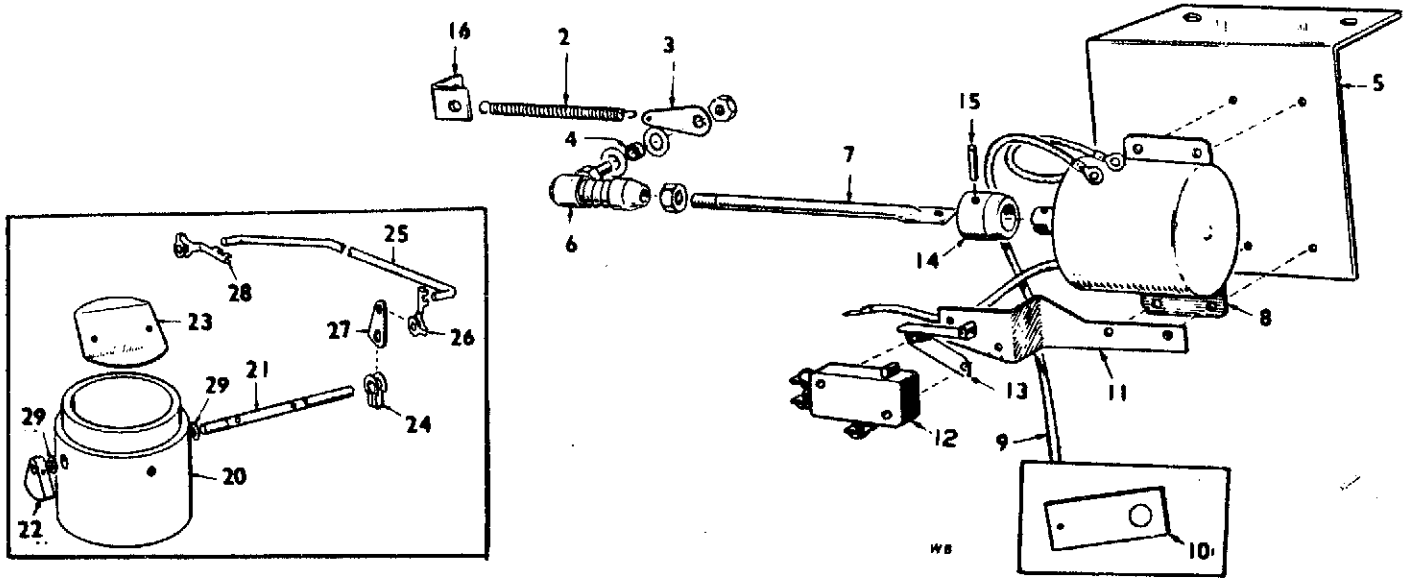
Includes - Complete Cylinder Block, Carburetor, Air Cleaner, Oil Filter, Starter Motor, Distributor, High Tension Leads, Coil, Spark Plugs, Governor Fan Blades and Belt, Flywheel and Flywheel Housing, Water Pump, Radiator, Fan Guard, Oil Pan, Vibration Damper, Exhaust Manifold, Intake Manifold, Alternator Adjusting Bracket, and Lifting Eyes.

Excludes - Alternator, Voltage Regulator, Oil Pressure and Water Temperature Gauge and Ammeter.



MOUNTING BASE, BATTERY CABLES & SENDER GROUP

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	403C547	1	Base, Mounting	12	309A178	1	Switch, Water Temperature Cut-Off - Non Adjustable
	403C604	1	Housed Plants	12A	505-117	1	Bushing, Face - Water Temperature Switch
2	193A108	1	Sender, Oil Pressure Gauge	13	505-19	1	Bushing, Pipe Reducer (1/2 x 3/8") - Water Temperature Gauge Sender
3	193A104	1	Sender, Water Temperature Gauge	14	133B150	1	Baffle, Heat - Temperature Cut-off Switch
4	CABLE, BATTERY			15	191-543	1	Alternator, Battery Charging (with fan) - Begin Spec D
	416A443	1	Negative	16	232A1813	1	Spacer, Alternator Mounting - Begin Spec D
	416A442	1	Positive	17	191-542	1	Regulator, Charging - Begin Spec D
	416A446	1	Cable, Battery Jumper	18	191-544	1	Harness, Wiring - Alternator to Regulator - Begin Spec D
6	314-156	6	Suppressor, Spark Plug	19	191-545	1	Resistor, Alternator (75-Ohm) - Begin Spec D
7	314P6	1	Suppressor, Coil	20	191-623	1	Pulley, Alternator - Begin Spec D
8	312A15	3	Condenser - 0.1 Mfd. - (1) Charge Generator, (1) Charge Regulator (1) Ignition Coil				
9	309B10	1	Switch, Oil Pressure				
10	505-98	1	Nipple, Close (1/8 x 3/4") Oil Pressure Tee to Crankcase				
11	505-59	1	Tee, Pipe (1/8") Oil Pressure Switch & Sender Mounting				

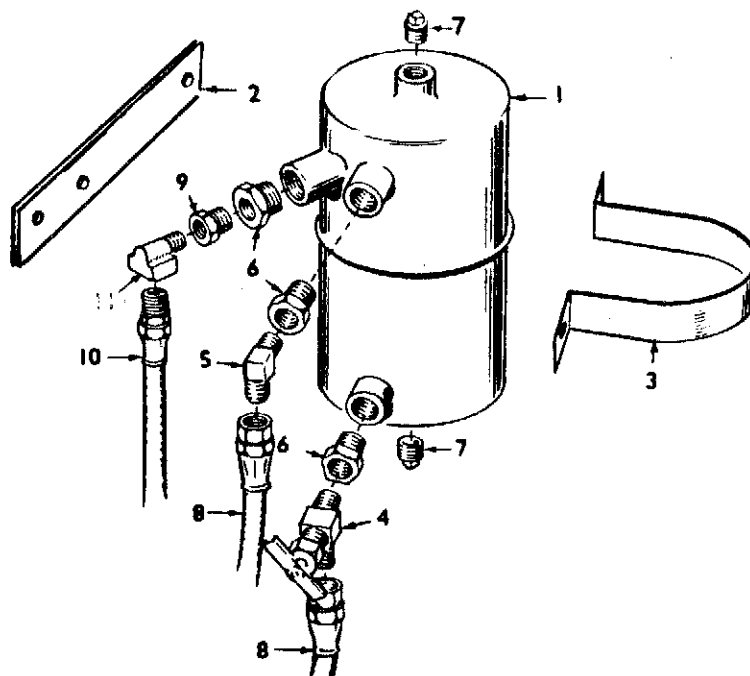


ANTI-DIESELING CONTROL GROUP

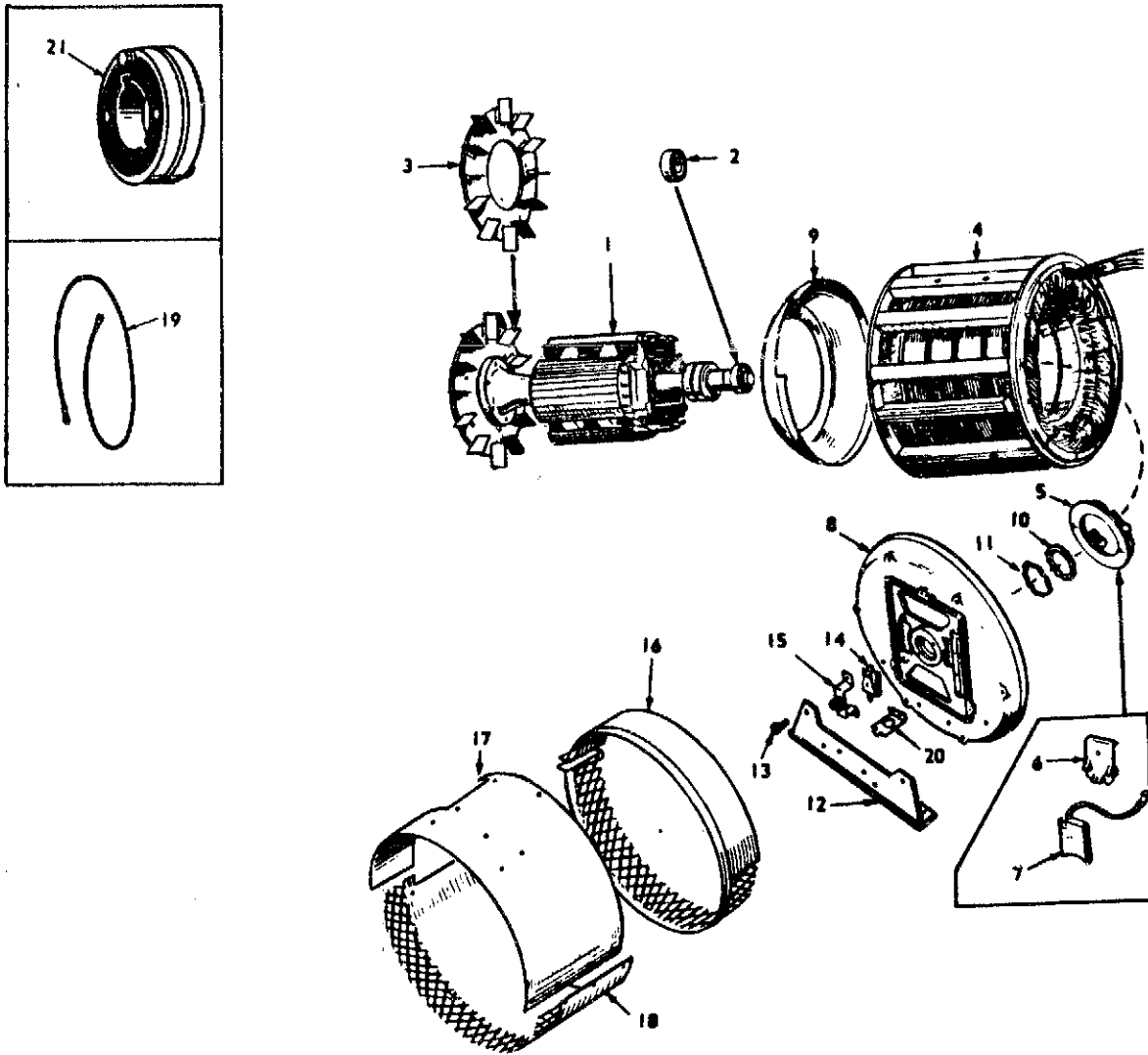
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	STUD, ADJUSTING 150A146 150A213	1 1	Gasoline Plants Gas-Gasoline & LPG-Gasoline Plants	11	309A131	1	Bracket, Micro Switch Mtg. - Begin Spec C
2	145A119	1	Spring, Throttle	12	309A155	1	Switch, Micro - Begin Spec C
3	145A118	1	Link, Throttle Spring	13	309P133	1	Actuator, Micro Switch - Begin Spec C
4	150A302	1	Spacer, Linkage - Ball joint to Throttle Spring Link	14	309A132	1	Cam, Micro Switch - Begin Spec C
5	BRACKET, SOLENOID & CHOKE MOUNTING 145A217 145A242	1 1	Gasoline Plants Gas-Gasoline & LPG-Gasoline Plants	15	516-86	1	Pin, Roll (1/8 x 3/4") - Cam - Begin Spec C
6	150A638	1	Joint, Ball - Solenoid Link to Throttle Spring Link	16	145A221	1	Bracket, Throttle Spring
7	LINK, SOLENOID TO BALL JOINT 145A124 145A241	1 1	Gasoline Plants Gas-Gasoline & LPG-Gasoline Plants	17	153P213	1	Choke, Auto. (Sisson) - Gas-Gasoline & LPG-Gasoline Plants
8	307B259	1	Solenoid & Lead Assembly	18	153A49	1	Cover Assy, Choke - Gas-Gasoline & LPG-Gasoline Plants
9	336A179	1	Lead, Solenoid to Connector	19	153A285	1	Arm, Choke Lock - Gas-Gasoline & LPG-Gasoline Plants
10	191A214	1	Connector, Lead Terminal	20	153A207	1	Adapter, Choke - Gas-Gasoline, LPG-Gasoline & Gas Only Plants

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
21	153A286	1	Shaft, Choke - Gas-Gasoline, LPG-Gasoline & Gas Only Plants	26	518-47	1	Clip, Rod End (Adapter End) - Gas-Gasoline & LPG-Gasoline Plants
22	COUNTERWEIGHT, CHOKE SHAFT 148A317	1	Gas-Gasoline & LPG-Gasoline Plants	27	153A283	1	Arm, Choke Over-Ride - Gas-Gasoline & LPG-Gasoline Plants
	148A430	1	Gas Only Plants	28	518-5	1	Clip, Rod End (Choke End) - Gas-Gasoline & LPG-Gasoline Plants
23	153A206	1	Plate, Choke - Gas-Gasoline, LPG-Gasoline, & Gas Only Plants	29	508-7	2	Washer, Choke Shaft Seal - Gas-Gasoline & LPG-Gasoline Plants
24	153A282	1	Arm, Choke - Gas-Gasoline & LPG-Gasoline Plants				
25	153A284	1	Rod, Choke - Gas-Gasoline & LPG-Gasoline Plants				

RESERVOIR TANK GROUP



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	159B668	1	Tank, Reservoir	7	505-57	2	Plug, Pipe - Square Head (1/8)
2	159A523	1	Bracket, Tank Mounting	8	501A85	2	Line, Fuel - Flexible - (1) Pump to Reservoir Tank, (1) Reservoir Tank to Carburetor
3	159A121	1	Band, Tank	9	159A705	1	Bushing, Reducer - Restricted
4	504-59	1	Valve, Tank Shut-Off	10	501-9	1	Line, Fuel Return - Flexible
5	502-183	1	Elbow, Compression Male - Brass	11	502-2	1	Elbow, Inverted Male - Return Line to Tank
6	BUSHING, PIPE REDUCER						
	505-19	1	1/2" to 3/8"				
	505-17	2	3/8" to 1/4"				



GENERATOR GROUP (Alternator Portion)

NOTE: Output Terminal Box, Cover & Internal Parts listed in the AC Output Control Group (Mounts in side of generator).

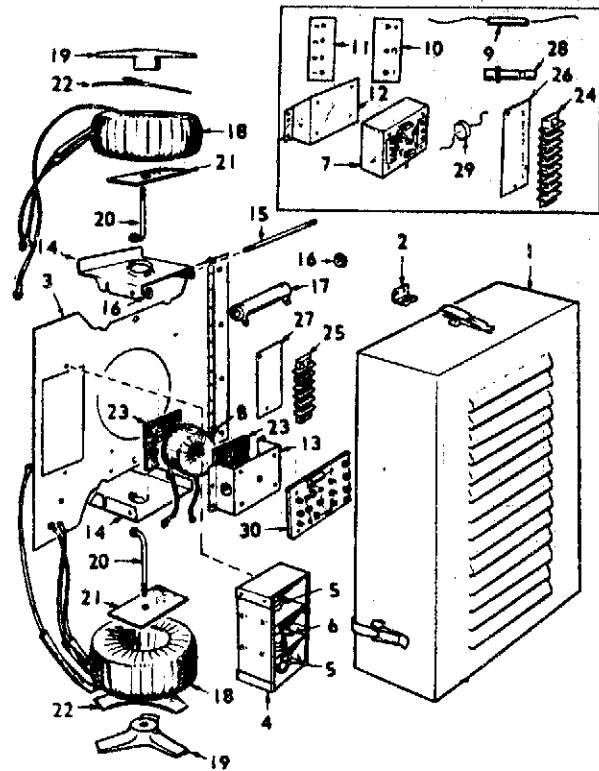
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	*	1	Rotor Assy., Wound, Includes Bearing, Blower & Drive Assy.
2	BEARING 510P63	1	Prior to Spec E
	510P88	1	Begin Spec E
3	205C61	1	Blower
4	*	1	Stator Assembly, Wound
5	212C248	1	Rig Assy., Brush, Includes Brushes & Springs
6	212B1105	4	Spring, Brush
7	214A56	4	Brush
8	211D153	1	Bell, End, Alternator to Exciter - NOTE: Prior to Spec E also order #232A1807 Holder, #232A1808 Spring, #510P88 Bearing, #526A17 Spacer & #812-192 Screw.
9	234D69	1	Baffle, Air
10	HOLDER, BEARING 232A1186	1	Prior to Spec E
	232A1807	1	Begin Spec E

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
11	SPRING, BEARING HOLDER 232A1187	1	Prior to Spec E
	232A1808	1	Begin Spec E
12	232D1396	1	Support, Generator Mounting
13	805-35	4	Bolt, Place, Gen. Mounting
14	150A717	1	Switch Assy., Overspeed
15	150A713	1	Bracket, Overspeed Switch Includes Contact Point
16	234D70	1	Band, Gen., Frt. Port. (Narrow)
17	*	1	Band, Gen., Rear Port. Upper Half (Wide)
18	*	1	Band, Gen., Rear Port. Lower Half (Wide)
19	336A1213	1	Lead Assy., Overspeed Switch
20	234A107	1	Bracket, Conduit Connector
21	204A83	1	Ring, Collector

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

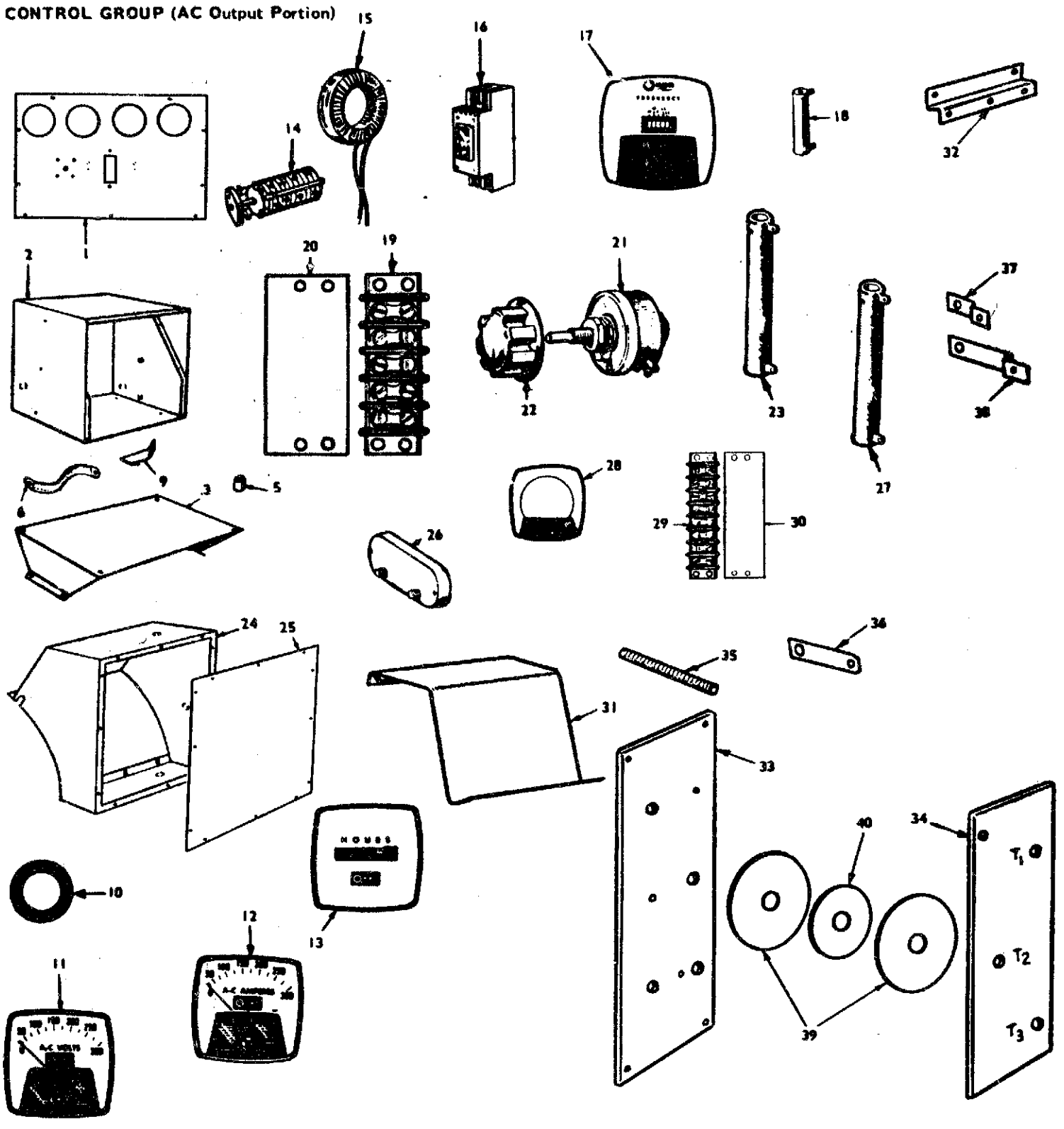
GENERATOR GROUP (Exciter Portion)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	209-24	1	Magneciter Assembly, Complete - Spec A Only
	209-25	1	Magneciter Assembly, Complete - Begin Spec B
1	COVER, EXCITER		
	234D73	1	Spec A Only
	234D116	1	Begin Spec B
2	232A1376	3	Bracket, Fastening, Cover to Alternator End Bell
3	234D74	1	Panel Only, Exciter
4	RECTIFIER ASSEMBLY, POWER - COMPLETE		
	305B206	1	Spec A Only (Includes (4) #305-205 Rectifier Plus Wire & Hardware)
	305B228	1	Begin Spec B (Includes (2) #305P233 & (2) #305P234 Rectifier Plus Wire & Hdwe.)
	RECTIFIER ONLY, POWER (Field)		
5	305-205	4	Spec A Only (Included in Rectifier Assy. #305B206)
5	305P233	2	Lower Two, Neg. (Included in Rectifier Assy. #305B228) - Begin Spec B
6	305P234	2	Upper Two, Positive (Included in Rectifier Assy. #305B228) - Begin Spec B
	REACTOR, VOLTAGE CONTROL		
7	315B53	1	Spec A Only (Includes #304-443 Resistor & (4) #305B203 Rectifier)
8	315A78	1	Begin Spec B
9	RESISTOR, VOLTAGE CONTROL REACTOR		
	304-443	1	Spec A Only (included in Reactor Assembly #315B53)
	304P476	1	Begin Spec B (Included in Rectifier & Resistor Assy. #305B227)
	STRIP, MARKER - VOLTAGE CONTROL REACTOR		
	Spec A Only		
10	332A644	1	Marked +, C, -
11	332A645	1	Marked 1, 2, 3, 4
	BRACKET, MOUNTING - VOLTAGE CONTROL REACTOR		
12	232B1404	1	Spec A Only
13	234B115	1	Begin Spec B
14	234B75	2	Bracket, Gate Reactor Mtg.
15	520A190	1	Stud, Resistor Mtg.
16	304A15	2	Washer, Resistor Centering
17	304-442	1	Resistor, Fixed, Mounts to Gate Reactor Bracket
18	315A51	2	Reactor, Gate
19	232A1389	2	Retainer, Gate Reactor
20	232A1403	2	Stud, Gate Reactor Mounting
21	232B1388	2	Gasket, Gate Reactor Mtg.
22	232B1387	2	Gasket, Gate Reactor to Retainer
23	232A1548	2	Gasket, Control Reactor Coil Mtg.



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	BLOCK, TERMINAL		
24	232A503	1	Spec A Only (8-Place)
25	232A532	1	Begin Spec B (5-Place)
	STRIP, TERMINAL BLOCK MARKER		
26	332A643	1	Spec A Only (8-Place)
27	332A693	1	Begin Spec B (5-Place)
	RECTIFIER, VOLTAGE CONTROL REACTOR		
28	305-203	4	Spec A Only (Included in #315B53)
29	305P218	4	Begin Spec B (Included in #305B227)
30	305B227	1	Resistor Assy., Rectifier (Includes #304P476 Resistor & (4) Rectifier #305P218) - Begin Spec C

CONTROL GROUP (AC Output Portion)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	*	1	Panel Only, Upper Control
2	BOX ONLY, CONTROL		
	301D1537	1	Prior to Spec C
	301D2115	1	Begin Spec C
3	301C1830	1	Bracket, Control Box Mtg.
5	402-78	4	Mount, Rubber, Control Box Mounting
6	337A44	1	Strap, Ground
9	301A1914	1	Bracket, Panel Stop - Begin Spec C
10	508-63	1	Grommet (2-3/4" Hole) - Begin Spec D

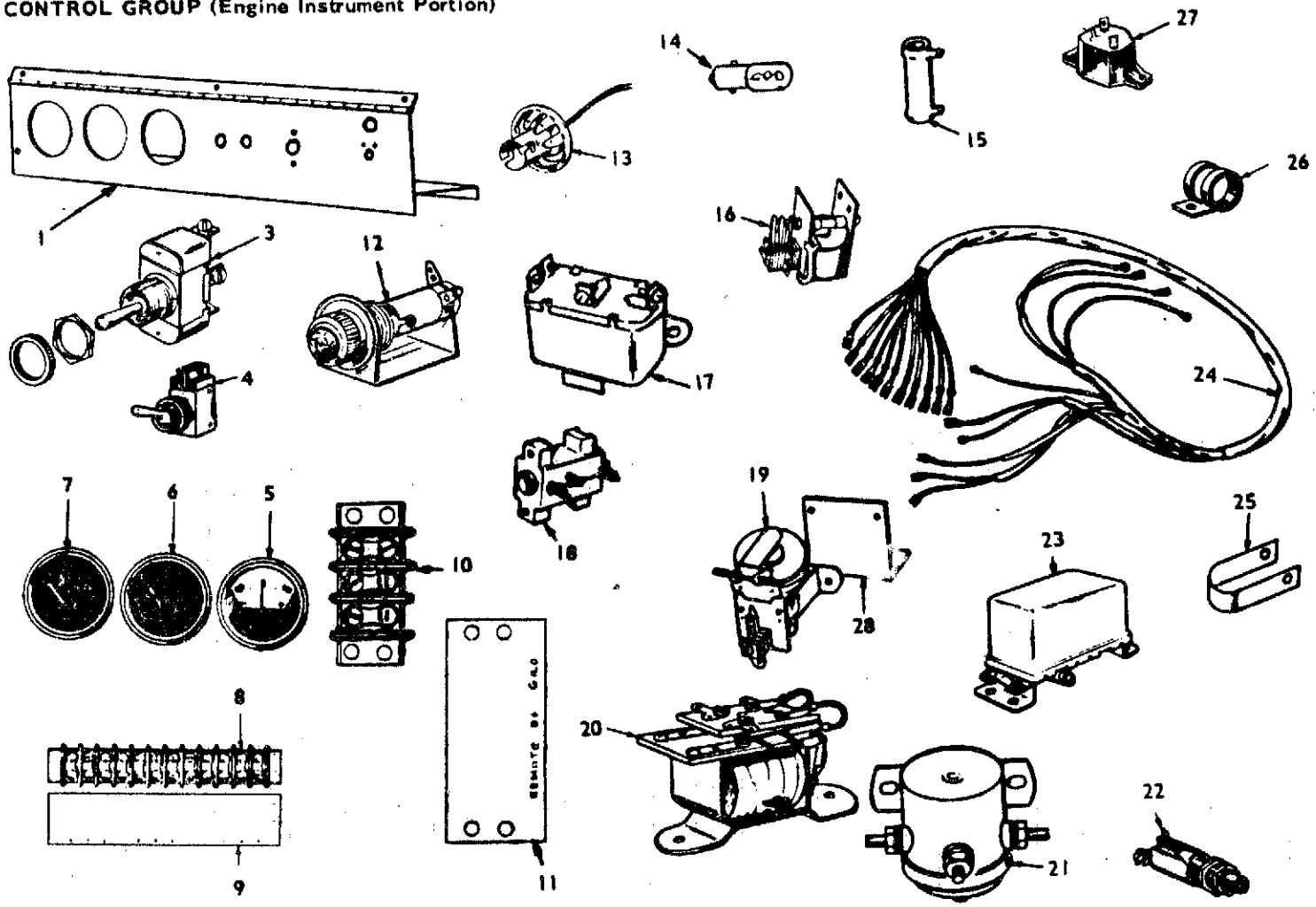
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTIONS
11	VOLTMETER, AC (Check Scale & Select According to Rating)		
	302P421	1	Scale 0-300
	302P422	1	Scale 0-600
	302P423	1	Scale 0-750
12	AMMETER, AC (Check Scale & Select According to Rating) NOTE: 1-Phase Use 2.		
	302P411	1	Scale 0-200
	302P412	1	Scale 0-250
	302P414	1	Scale 0-500
	302P415	1	Scale 0-750

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
13	METER, RUNNING TIME 302-212	1	60 Cycle Plants - Prior to Spec C (To replace #302-387 Meter req. Resistor, also order #304A125 Resistor for 480 V Plants & #304A99 Resistor for 120/240 V, 3 phase plants)
	302-102	1	50 Cycle Plants - Prior to Spec C
	302P465	1	120/240 Volt, 1 Phase, 60 Cycle, 120-208, 120/240, 600, and 347/600 Volt, 3 Phase, 60 Cycle Plants - Begin Spec C
	302P466	1	220/380 Volt, 3 Phase, 60 Cycle Plants - Begin Spec C
	302P467	1	277/480 Volt, 3 Phase, 60 Cycle Plants - Begin Spec C
	302P469	1	220/380 Volt, 3 Phase, 50 Cycle Plants - Begin Spec C
	302P468	1	120/208 Volt, 120/240 Volt, 600 Volt, and 347/600 Volt, 3 Phase, 50 Cycle Plants - Begin Spec C
	302P470	1	277/480 Volt, 3 Phase, 50 Cycle Plants - Begin Spec C
14	308-22	1	Switch, Volt & Current Selector (3 Phase Only)
15	TRANSFORMER, CURRENT (Check Transformer Nameplate, Select According to Rating)		
	302B106	3	Nameplate Ratio 200/5 (Use with 0-200 AC Ammeter)
	302B209	2	Nameplate Ratio 250/5 (Use with 0-250 AC Ammeter)
	302B372	3	Nameplate Ratio 500/5 (Use with 0-500 AC Ammeter)
	302B385	3	Nameplate Ratio 750/5 (Use with 0-750 AC Ammeter) NOTE: 1-phase use 2.
16	BREAKER, CIRCUIT		
	320B18	1	1 Phase Plants - 20 Amp.
	320B2	1	3 Phase Plants - 15 Amp.
17	METER, FREQUENCY		
	302-213	1	60 Cycle Plants
	302-234	1	50 Cycle Plants
18	RESISTOR, FREQUENCY METER		
	304A305	1	For 480 V & 277/480 V, 3 Phase Plants (45,000-Ohm, 10-Watt)
	304A125	1	For 120/240 V, 3 Phase Plants Spec A Only and 220/380 Volt 3 Phase Plants - Begin Spec C (15,000-Ohm, 25-Watt)
	304A402	1	For 600 Volt, 3 Phase Plants - Begin Spec C (60,000-Ohm, 10-Watt)
19	332A604	1	Block, Terminal (5 Place) - Begin Spec B
20	332A690	1	Strip, Marker (5 Place) - Begin Spec B
21	303-111	1	Rheostat, Voltage Regulator - Begin Spec B
22	303-32	1	Knob, Rheostat - Begin Spec B
23	304A484	1	Resistor, Voltage Regulator 825-Ohm, 75-Watt) - Begin Spec B

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
24	*	1	Box, Output Terminal (Side of Generator)
25	*	1	Cover, Output Terminal Box
26	302-157	1	Multiplier, Meter (Used only with Early 0-500 Scale Voltmeter)
27	RESISTOR, RUNNING TIME METER		
	304A99	1	5,000-Ohm, 10-Watt (For #302-212 Meter on 120/240 V, 3 Phase, 60 Cycle Plants - Spec A Only)
	304A125	1	15,000-Ohm, 25-Watt (For #302-212 Meter on 480 V Plants) - Prior to Spec C
	304A444	1	2,500-Ohm, 10-Watt (For #302-387 Meter on early 120/240 V, 3 Phase, 60 Cycle Plants - Spec A Only)
	304A445	1	6,500-Ohm, 25-Watt (For #302-387 Meter on early 480 V, 3 Phase, 60 Cycle Plants - Spec A Only)
	304A536	1	9,000-Ohm, 50 Watt (Use on 600 Volt, 3-Phase, 60 Cycle Plants) - Begin Spec C (For 302P465 Meter)
28	302B448	As Req.	Plate, Meter Face
29	332A503	1	Block, Terminal (8-Place)
30	332A601	1	Strip, Marker (15 through 22)
	BRACKET, CURRENT TRANSFORMER		
31	232B1391	1	Upper (large)
32	232C1390	1	Lower (small)
33	*	1	Panel, Current Transformer Mtg. (Bottom) - Spec A Only
34	*	1	Panel, Current Transformer Retaining (Top) - Spec A Only
35	STUD, OUTPUT TERMINAL (As Req.) - Spec A Only		
	232A1420	4	7/8-14 x 6-1/2" (1 Phase use 3)
	232A1400	4	5/8-18 x 6"
36	STRAP, OUTPUT TERMINAL - STUD TO GRD. (As Req.) - Spec A Only		
	337A58	1	3-3/8" x 1-1/2"
	337A57	1	3-1/4" x 1"
37	STRAP, OUTPUT TERMINAL - GRD STUD TO MACH. SCREW (As Req.) - Spec A Only		
	232A1416	1	2-3/4" x 1-1/2"
	232A1397	1	2-1/4" x 1"
38	STRAP, OUTPUT TERMINAL - UNGRD. STUD TO MACH. SCREW (As Req.) - Spec A Only		
	232A1415	3	4-1/4" x 1-1/2" (1 Phase use 2)
	232A1398	3	3-3/8" x 1"
39	WASHER, NEOPRENE INSULATING - TRANSFORMER MOUNTING (As Req.) - Spec A Only		
	508A81	6	2-1/2" I.D. x 4-1/2" O.D. (1 Phase use 4)
	508A79	6	1-3/4" I.D. x 3" O.D.
40	WASHER, FIBER - TRANSFORMER MOUNTING (As Req.) - Spec A Only		
	508A83	3	7/8" I.D. x 2-1/4" O.D. (1 Phase use 2)
	508A82	3	5/8" I.D. x 1-1/2" O.D.

* - Order by description, giving Model, Spec & Serial Number (Onan Nameplate).

CONTROL GROUP (Engine Instrument Portion)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PANEL ONLY - LOWER CONTROL 301C1672 301D2124	1 1 1	Prior to Spec C Begin Spec C
3	SWITCH, TOGGLE 308P2 308P138	1 1	Prior to Spec C (Run, Stop, Auto) Begin Spec C (Run, Stop, Remote)
4	308P2	1	Switch, Panel Light - Begin Spec F
5	302A61	1	Ammeter, Charge (30-0-30)
6	193B106	1	Gauge, Water Temperature
7	193B107	1	Gauge, Oil Pressure
8	332A607	1	Block, Terminal (12-Place)
9	332A608	1	Strip, Marker (4 through 15)
10	BLOCK, TERMINAL 332A604 332A611	1 1 1	Remote (5-Place) - Prior to Spec C Remote (5-Place) - Begin Spec C
11	STRIP, MARKER 332A679 332A762	1 1 1	Remote (CL1, CL2, B+, GND, START) - Prior to Spec C Remote (GND, B+, REMOTE) - Begin Spec C
12	332P69	1	Receptacle Assy., Pilot Light - Begin Spec C
13	332P72	2	Receptacle, Panel Light - Begin Spec C
14	322-4	3	Bulb, Begin Spec C
15	RESISTOR, FIXED 304A32	1	Start-Disconnect to Ignition Relay (15-Ohm, 10-Watt) - Prior to Spec C

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	304A45	1	Off Anti-Dieseling Relay (4-Ohm, 50-Watt)
	304A192	1	Cranking Limiter to Anti-Dieseling Relay (3-Ohm, 10-Watt)
16	307A655	1	Relay, Emergency Latch - Begin Spec C
17	307B52	1	Relay, Start-Disconnect
18	320A104	1	Limiter, Cranking
19	307A388	1	Relay, Time Delay
20	307B299	1	Relay, Emergency Stop - Prior to Spec C
21	307B514	1	Relay, Pilot
22	308-91	1	Button, Emergency Stop Reset - Prior to Spec C
23	RELAY 307B1046 307B597 307B1046	1 1 1	Ignition - Prior to Spec C Ignition - Begin Spec C Anti-Dieseling Solenoid Start - Prior to Spec C
24	*	1	Harness Assembly - Engine to Control
25	416A96	1	Clip, Harness ("U" Shaped)
26	332-49	1	Clip, Harness ("O" Shaped)
27	320P165	1	Breaker, Starter Protection
28	301A1685	1	Bracket, Relay Mounting

* - Order by description, giving Model, Spec & Serial Number (Onan Nameplate).