

PARTS CATALOG

FOR



ELECTRIC GENERATING PLANTS

WB

SERIES

ONAN

1400 73RD AVENUE N.E. • MINNEAPOLIS, MINNESOTA 55432

A DIVISION OF ONAN CORPORATION

INTERNATIONAL OFFICE: EMPIRE STATE BUILDING, NEW YORK, N.Y.

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 Onan PLANT			
MODEL AND SPECIFICATION NO.	SERIAL NO.		
IMPORTANT MENTION ABOVE NUMBER AND GEN. DATA IN WHEN ORDERING PARTS OR WRITING ABOUT THIS PLANT			
RATINGS AT SEA LEVEL BASED ON FUEL CHECKED BELOW			
GASOLINE	DIESEL FUEL		
STAND BY KW	KVA	AMPS	
CONTINUOUS KW	KVA	AMPS	
A.C. VOLTS	CYCLES	PHASE	P.F.
EXCITER	GEN. DATA		
R.P.M.	USE	VOLT BATTERY-NEGATIVE GROUND	
MANUFACTURED BY ONAN DIVISION OF STURM, PETER & CO. CORPORATION MINNEAPOLIS, 14 MINNESOTA			
MADE IN U.S.A.			

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	SIZE
SERIAL	LOT
GOV'T'S SPEED	SET VALVES COLD INT
ON SPEC SAE NO. WINTER	SUMMER
SPARE ADV	DEC. AT
WAUKESHA MOTOR COMPANY WAUKESHA, WISCONSIN	
MADE IN U.S.A.	

MODEL, SIZE
AND
SERIAL NUMBER
shown on the engine nameplate

PARTS CATALOG

This catalog applies to the standard WB plants as listed below. Powered by a Waukesha F11976U 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.

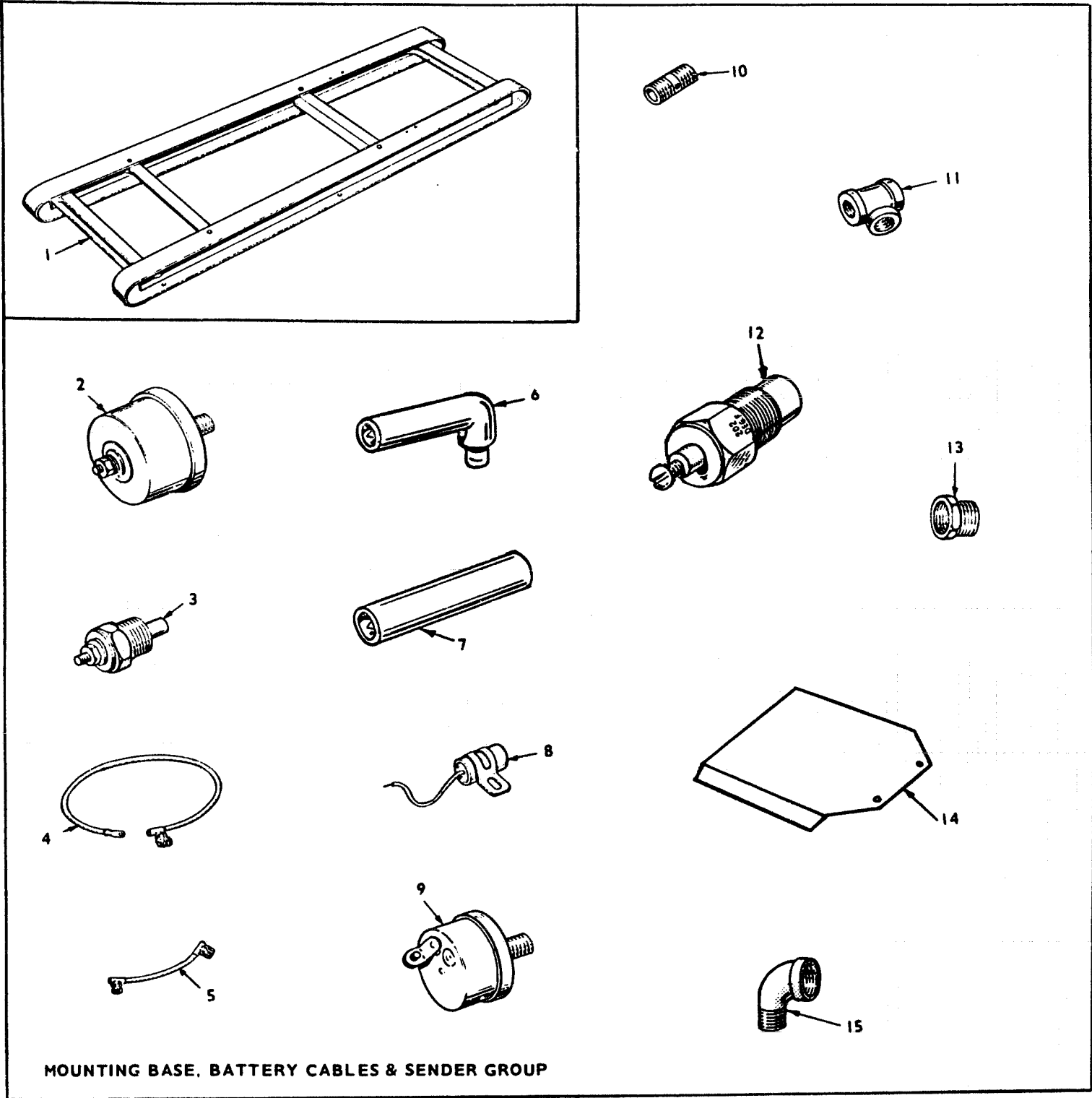
PLANT DATA TABLE

MODEL & SPEC. NO. *	ELECTRICAL DATA				
	WATTS**	VOLTS	CYCLES	PHASE	WIRE
140WB-3R/	140,000	120/240	60	1	3
140WB-4R/	140,000	120/208	60	3	4
140WB-4XR/	140,000	277/480	60	3	4
140WB-5DR/	140,000	120/240	60	3	4
140WB-6R/	140,000	480	60	3	3
140WB-9XR/	140,000	347/600	60	3	4
170WB-4R/	170,000	120/208	60	3	4
170WB-4XR/	170,000	277/480	60	3	4
170WB-5DR/	170,000	120/240	60	3	4
170WB-6R	170,000	480	60	3	3
170WB-9XR/	170,000	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.

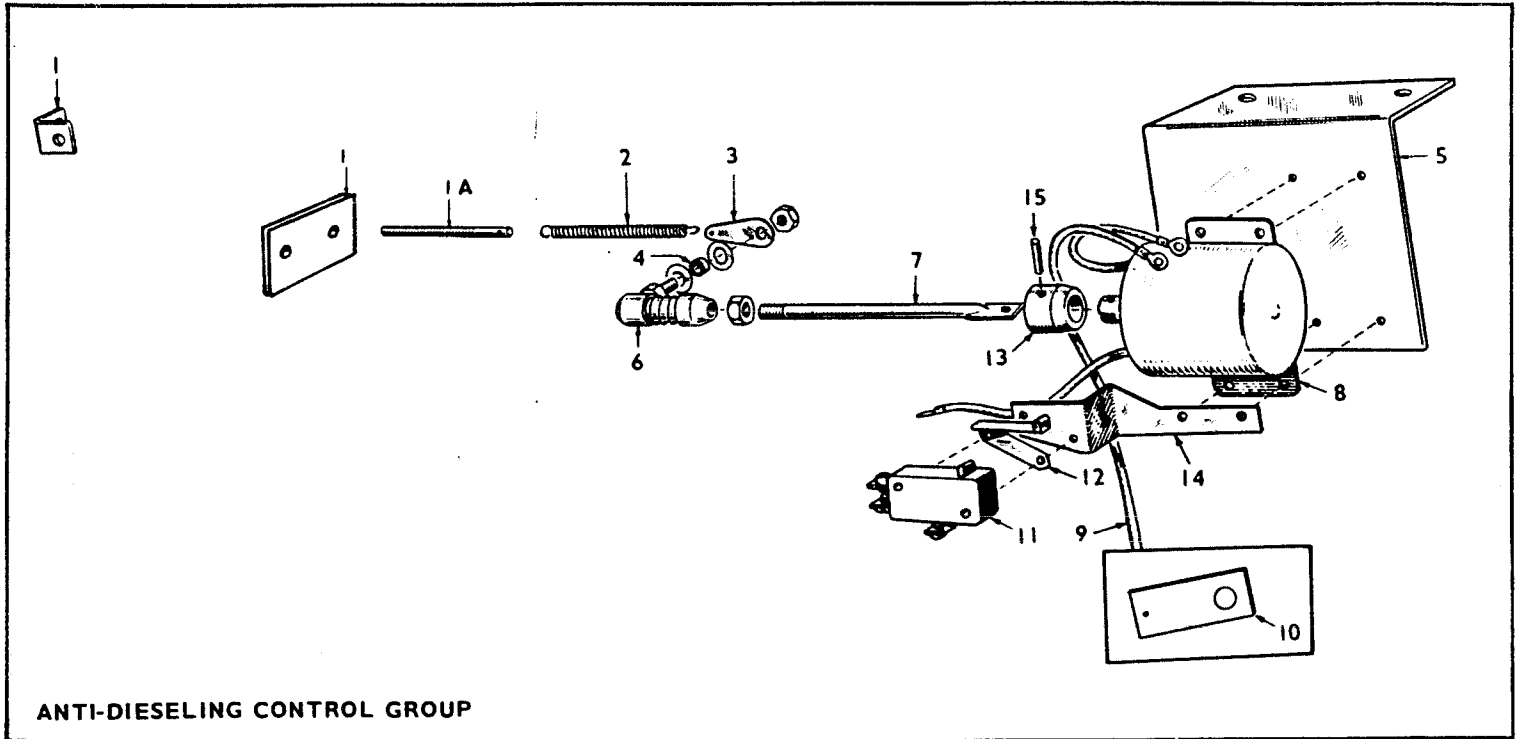
REPLACEMENT ENGINE — Refer to factory giving complete Model, Spec., and Serial number from plant (Onan) nameplate.



MOUNTING BASE, BATTERY CABLES & SENDER GROUP

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	403C570	1	Base, Mounting
2	SENDER, OIL PRESSURE (Eng. Unit Only)		
	193A108	1	To Spec C
	193A98	1	Begin Spec C
3	SENDER, WATER TEMP. (Eng. Unit Only)		
	193A104	1	To Spec C
	193A100	1	Begin Spec C
4	CABLE, BATTERY		
	416A445	1	Negative
	416A444	1	Positive
5	416A446	1	Cable, Batt. Jumper
6	314-156	6	Suppressor, Spark Plug
7	314P6	1	Suppressor, Coil
8	312A58	3	Condenser, 0.1-Mfd. (1) Charge Reg. (1) Ign. Coil & (1) Charge Gen.

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
9	309B64	1	Switch, Oil Press. Cut-Off
10	505-98	1	Nipple, Close (1/8 x 3/4)
11	505-59	1	Oil Press. Switch Tee, Pipe (1/8) Oil Press. Switch
12	309A146	1	Switch, High Water Temp. Cut-Off
13	505-19	2	Bushing, Reducer (1/2x3/8) High Water Temp. Switch (1), Water Temp. Sender (1)
14	133B160	1	Baffle, Heat - Temp. Cut-Off Switch
15	505-49	1	Elbow, Street - Pipe (1/8) Oil Press. Switch

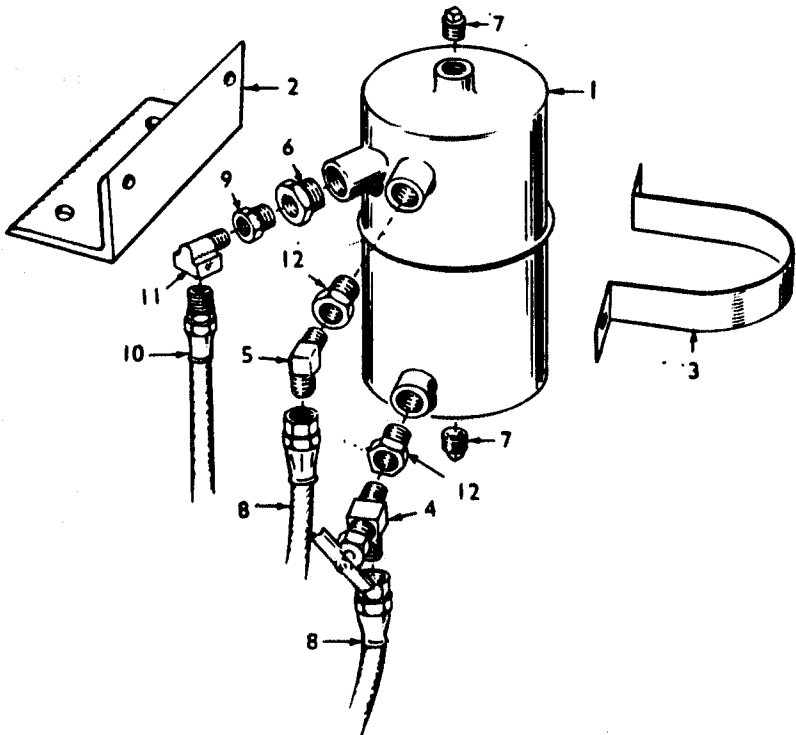


ANTI-DIESELING CONTROL GROUP

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	BRACKET, SPRING		
	145A200	1	Early Models Only
	145A343	1	Late Models Only
1A	150A147	1	Stud - Late Models Only
2	SPRING, THROTTLE		
	145A119	1	Early Models (4-1/4")
	145A158	1	Late Models (2-3/4")
3	145A118	1	Link, Throttle Spring
4	150A302	1	Spacer, Linkage
5	145C201	1	Bracket, Sol. Mtg.
6	150A638	1	Joint, Ball
7	145A124	1	Link, Sol. to Ball Joint
8	SOLENOID and LEAD ASSY.		
	307B277	1	To Spec C

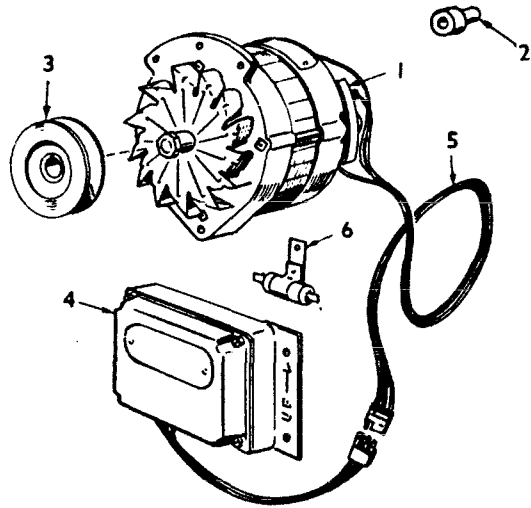
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	307B259	1	Begin Spec C
9	336A179	1	Lead, Sol. to Connector
10	191A214	1	Connector, Lead Term.
11	SWITCH, MICRO - Begin Spec C		
	309A42	1	Early Models (3 Term.)
	309A155	1	Late Models (2 Term)
12	309P133	1	Actuator, Micro Switch - Begin Spec C
13	309A132	1	Cam, Micro Switch - Begin Spec C
14	309A131	1	Bracket, Micro Switch - Begin Spec C
15	516-86	1	Pin, Roll, Cam - Begin Spec C

RESERVOIR TANK GROUP



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	159B668	1	Tank, Reservoir
2	159A700	1	Bracket, Tank Mtg.
3	159A121	1	Band, Tank
4	504-59	1	Valve, Shut-Off
5	502-183	1	Elbow, Male
6	505-19	1	Bushing, Reducer (1/2 x 3/8)
7	505-57	2	Plug, Pipe (1/8)
8	501A85	2	Line, Fuel (Flex.) - (1) Pump to Tank, (1) Tank to Carb.
9	159A705	1	Bushing, Reducer (Restricted)
10	501-9	1	Line, Fuel Return (Flex.)
11	502-2	1	Elbow, Inv. Male
12	505-17	2	Bushing, Reducer (3/8 x 1/4)

ALTERNATOR GROUP - Begin Spec F

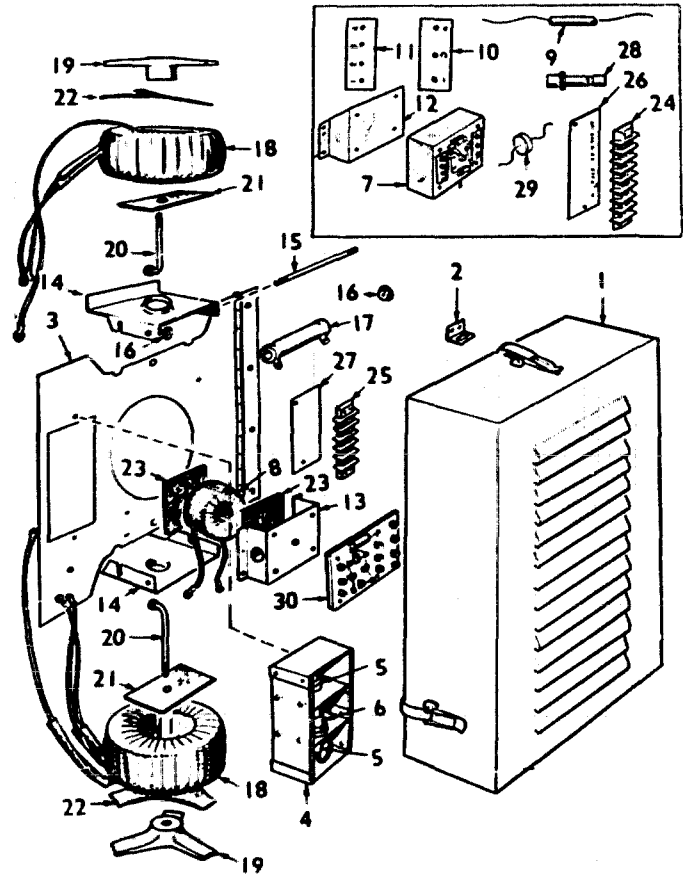


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	191D549	1	*Alternator, Charge (Motorola #70D41753A01)
2	232A1813	1	Spacer, Alternator Mtg.
3	191-649	1	Pulley, Alternator
4	191C548	1	*Regulator, Charge (Motorola #70C44081A02)
5	191-544	1	Cable, Alternator
6	191-550	1	Resistor, Alternator - 300-Ohm

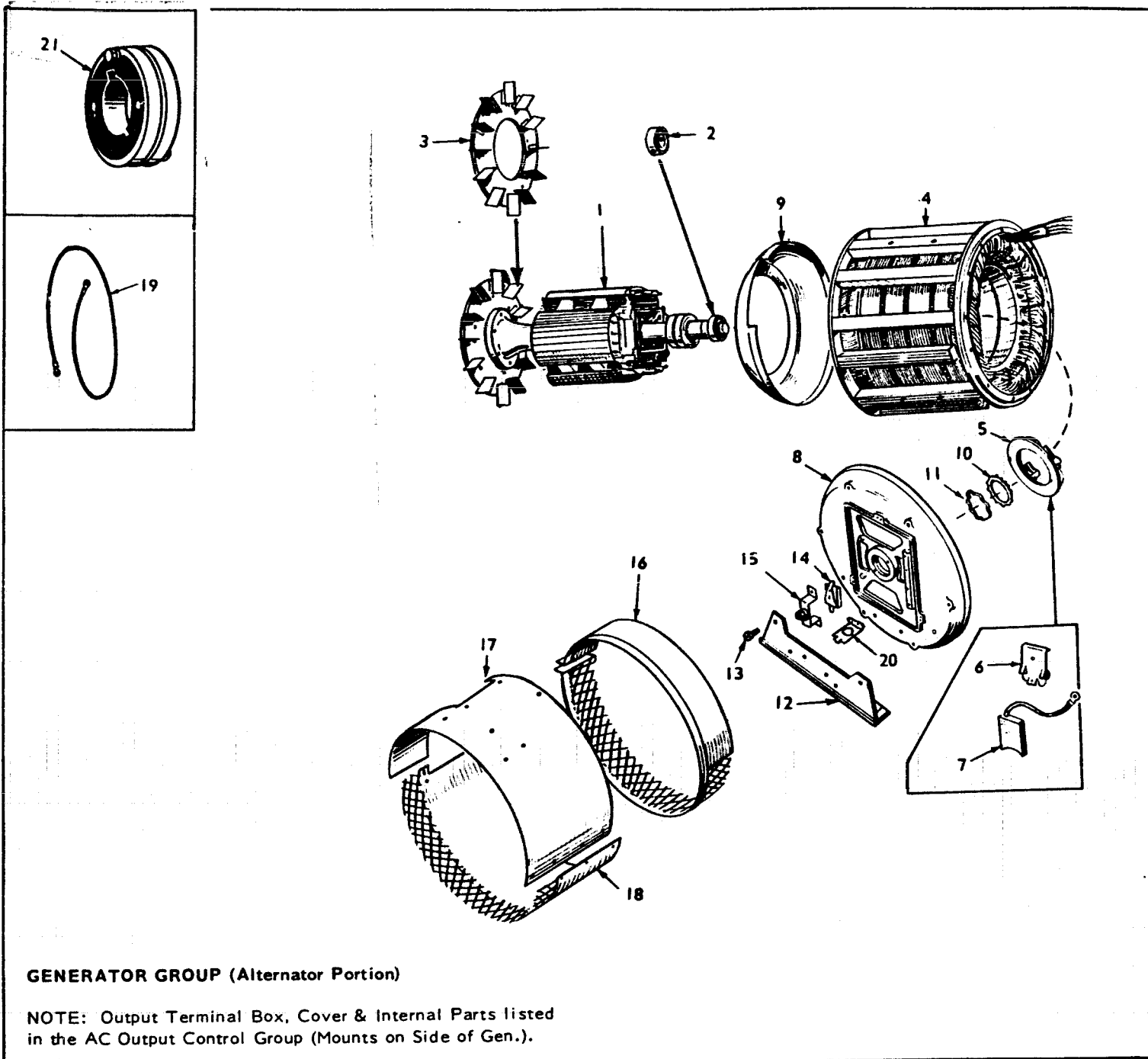
* - For Components contact your nearest Motorola dealer, or Motorola Automotive Products Inc., 9401 W. Grand Ave., Franklin Park, Illinois 60131.

GENERATOR GROUP (Exciter Portion)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	209-24	1	Magneciter Assy., Complete - Spec A Only
	209-25	1	Magneciter Assy., Complete - Begin Spec B
1	COVER, EXCITER		
	234D73	1	Spec A Only
	234D116	1	Begin Spec B
2	232A1376	3	Bracket, Fastening, Cover to Alt. End Bell
3	234D74	1	Panel Only, Exciter
4	RECTIFIER ASSY., POWER - COMPLETE		
	305B206	1	Spec A Only (Incl. (4) #305-205 Rect. plus wire and hardware)
	305B228	1	Begin Spec B (Incl. (2) #305P233 & (2) #305P234 Rect. plus wire and hardware)
5	RECTIFIER ONLY, POWER (Field)		
	305-205	4	Spec A Only (Incl. in Rect. Assy. #305B206)
	305P233	2	Lower Two, Neg. (Incl. in Rect. Assy. #305B228) - Begin Spec B
6	305P234	2	Upper Two, Pos. (Incl. in Rect. Assy. #305B228) - Begin Spec B
	REACTOR, VOLTAGE CONTROL		
7	315B53	1	Spec A Only (Incl. #304-443 Resistor and (4) #305B203 Rect.)
8	315A78	1	Begin Spec B
9	RESISTOR, VOLTAGE CONTROL REACTOR		
	304-443	1	Spec A Only (Incl. in Reactor Assy. #315B53)
	304P476	1	Begin Spec B (Incl. 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 Ctrg.
17	304-442	1	Resistor, Fixed, Mts. to Gate Reactor Bracket
18	315A51	2	Reactor, Gate



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
19	232A1389	2	Retainer, Gate Reactor
20	232A1403	2	Stud, Gate Reactor Mtg.
21	232B1388	2	Gasket, Gate Reactor Mtg.
22	232B1387	2	Gasket, Gate Reactor to Ret.
23	232A1548	2	Gasket, Cont. React. Coil Mtg. 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 (Incl. in #315B53)
29	305P218	4	Begin Spec B (Incl. in #305B227)
30	305B227	1	Resistor Assy., Rect. (Incl. 304P476 Resistor & (4) Rect. 305P218) - Begin Spec C



GENERATOR GROUP (Alternator Portion)

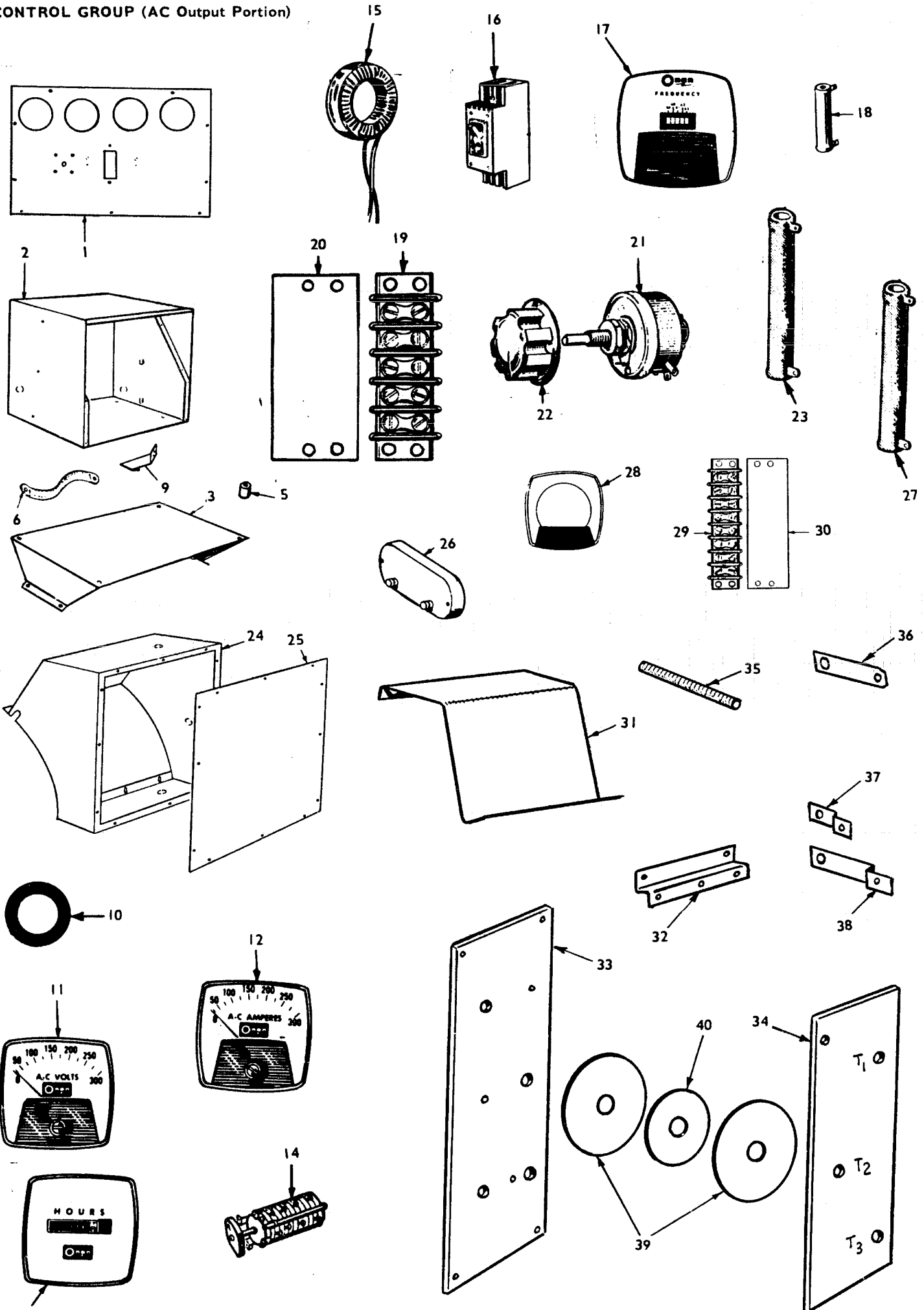
NOTE: Output Terminal Box, Cover & Internal Parts listed in the AC Output Control Group (Mounts on Side of Gen.).

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

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
11	SPRING, BEARING HOLDER 232A1187 232A1808	1 1	To Spec E Begin Spec E
12	232D1396	1	Support, Gen. Mtg.
13	805-35	4	Bolt, Place, Gen. Mtg.
14	150A717	1	Switch Assy., Overspeed
15	150A713	1	Bracket, Overspeed Switch, Incl. Contact Point
16	234D70	1	Band, Gen., Frt. Port. (Narrow)
17	*	1	Band, Gen., Rr. Port., Upper Half (Wide)
18	*	1	Band, Gen., Rr. 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 & Serial Number (ONAN Nameplate).

CONTROL GROUP (AC Output Portion)

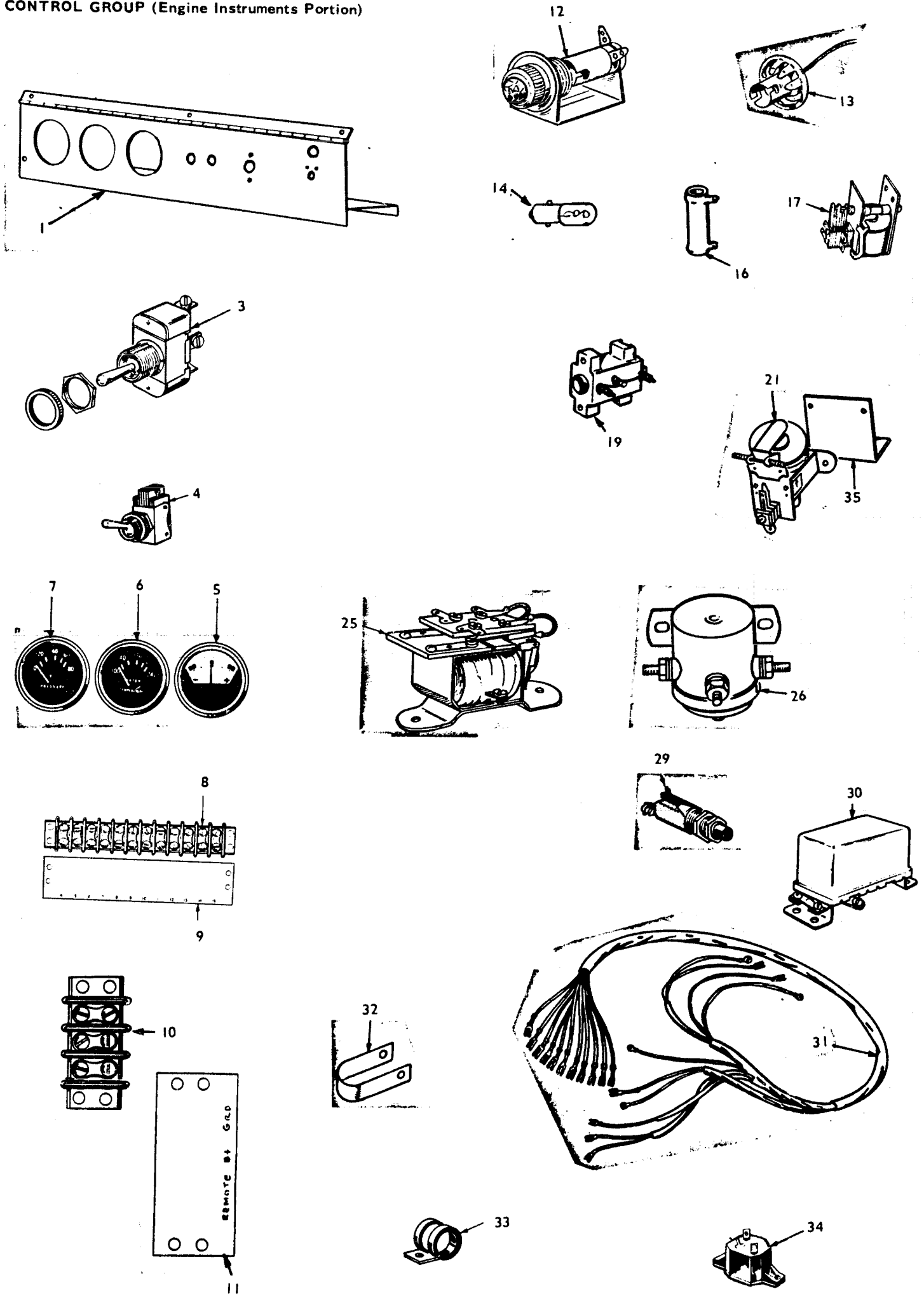


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	*	1	Panel Only, Upper Cont.
2	BOX ONLY, CONTROL		
	301D1537	1	To Spec D
	301D2115	1	Begin Spec D
3	301C1830	1	Bracket, Cont. Box Mtg.
5	402-78	4	Mount, Rubber, Cont. Box Mtg.
6	337A44	1	Strap, Grd.
9	301A1914	1	Bracket, Panel Stop - Begin Spec D
10	508-63	1	Grommet (2-3/4" Hole) - Begin Spec D
11	VOLTMETER, AC (Check Scale & Select according to Rating)		
	302P421	1	Voltmeter - Scale 0-300
	302P422	1	Voltmeter - Scale 0-600
12	AMMETER, AC (Check Scale & Select according to Rating) NOTE: 1-Phase use 2		
	302P413	1	Ammeter - Scale 0-300
	302P414	1	Ammeter - Scale 0-500
	302P415	1	Ammeter - Scale 0-750
	302-395	2	Ammeter - Scale 0-1000
13	METER, RUNNING TIME		
	302-212	1	60-Cycle Plants - To Spec D (To replace #302-387 Meter req. Resistor, also order #304A125 Resistor for 480-V plants & #304A99 Resistor for 120/240-V, 3-phase plants)
	302P465	1	60-Cycle Plants - Begin Spec D
	302P467	1	60-Cycle Plants - Begin Spec D - 277/480-V 3-phase
	302-102	1	50-cycle Plants
14	308-22	1	Switch, Volt & Current Sel. (3-phase Only)
15	TRANSFORMER, CURRENT (Check Transformer Nameplate, Select according to Rating)		
	302B107	3	Nameplate Ratio 300/5 (Use with 0-300 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
	302B394	2	Nameplate Ratio 1000/5 (Use with 0-1000 AC Ammeter)
16	BREAKER, CIRCUIT		
	320B18	1	1-Phase Plants - 20-Amp.
	320B170	1	3-Phase Plants - 18-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 (15,000-Ohm, 10-Watt)
	304A125	1	For 120/240-V, 3-Phase Plants (15,000-Ohm, 25-Watt)
19	332A604	1	Block, Terminal (5 Place) - Begin Spec B

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
20	332A690	1	Strip, Marker (5 Place) - Begin Spec B
21	303-111	1	Rheostat, Volt. Reg. - Begin Spec B
22	303-32	1	Knob, Rheostat - Begin Spec B
23	304A484	1	Resistor, Volt. Reg. (825-Ohm, 75-Watt) - Begin Spec B
24	*	1	Box, Output Term. (Side of Gen.)
25	*	1	Cover, Output Term. Box
26	302-157	1	Multiplier, Meter (Used only with Early 0-500 Scale Voltmeter)
27	RESISTOR, RUNNING TIME METER		
	304A99	1	5000-Ohm, 10-Watt (For #302-212 Meter on 120/240-V, 3-Phase Plants - Spec A Only) - 5DR
	304A125	1	15,000-Ohm, 25-Watt (For #302-212 Meter on 480-V Plants) - 6R
	304A444	1	2500-Ohm, 10-Watt (For #302-387 Meter on early 120/240-V, 3-Phase Plants - Spec A Only) - 5DR
	304A445	1	6500-Ohm, 25-Watt (For #302-387 Meter on early 480-V Plants - Spec A Only) - 6R
28	302B448	1	Plate, Meter Face
29	332A503	1	Block, Term. (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 TERM. (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 TERM. - 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 TERM. - 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 TERM. - 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 MTG. (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 MTG. (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 Instruments Portion)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PANEL ONLY - LOWER CONTROL		
	301C1672	1	To Spec D
	301D2115	1	Spec D and E
	301D2124	1	Begin Spec F
3	SWITCH, TOGGLE		
	308P2	1	To Spec D (Run, Stop, Auto)
	308P138	1	Begin Spec D (Run, Stop, Remote)
4	308P2	1	Switch, Panel Light - Begin Spec F
5	302A61	1	Ammeter, Charge (30-0-30)
6	GAGE, WATER TEMP.		
	193B106	1	To Spec C
	193B112	1	Begin Spec C
7	GAGE, OIL PRESSURE		
	193B107	1	To Spec C
	193B111	1	Begin Spec C
8	332A607	1	Block, Term. (12-Place)
9	332A608	1	Strip, Marker (4 through 15)
10	BLOCK, TERMINAL		
	332A604	1	Remote (5-Place) - To Spec D
	332A611	1	Remote (3-Place) - Begin Spec D
11	STRIP, MARKER		
	332A679	1	Remote (CL1, CL2, B+, GND, START) - To Spec D
	332A762	1	Remote (GND, B+, REMOTE) - Begin Spec D
12	332P69	1	Receptacle Assy., Pilot Light - Begin Spec D
13	332P72	1	Receptacle, Panel Light - Begin Spec F
14	BULB		
	322-17	1	Spec D and E
	322-17	3	Begin Spec F
16	RESISTOR, FIXED		
			TO SPEC C
	304A32	1	Start-Disconnect to Ign. Relay (15-Ohm, 10-Watt)
	304A45	1	Off Anti-Dieseling Relay (4-Ohm, 50-Watt)
	304A192	1	Cranking Limiter to Anti-Dieseling Relay (3-Ohm, 10-Watt) SPEC C and D
	304A248	1	Time Delay Relay to Start-Disconnect Relay (100-Ohm, 10-Watt)
	304A262	1	Start-Disconnect Relay to Time Delay Relay (50-Ohm, 10-Watt) BEGIN SPEC C
	304A446	2	Off Water Temp. Gage & Oil Press. Gage (150-Ohm, 10-Watt)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	304A496	1	No. 8 to No. 13 Eng. Connection Blk. (10-Ohm, 75-Watt) BEGIN SPEC D
	304A276	1	Ign. Relay to Emerg. Latch Relay (75-Ohm, 10-Watt)
	304A62	1	Starter Pilot Relay (25-Ohm, 25-Watt)
17	307A655	1	Relay, Emergency Latch - Begin Spec D
18	RELAY, START-DISCONNECT		
	307B52	1	To Spec F
	307P820	1	Begin Spec F
19	320A104	1	Limiter, Cranking
21	RELAY, TIME DELAY		
	307A388	1	To Spec E
	307A899	1	Begin Spec E
23	307P778	2	Spring, Relay Hold-down
24	SOCKET, CYCLE CRANKING RELAY		
	323P52	1	Begin Spec C
	323P52	2	Begin Spec D
	323P52	3	Begin Spec F
25	RELAY, EMERGENCY STOP		
	307B299	1	To Spec C
	307B617	1	Spec D Only
26	RELAY, PILOT		
	307B514	1	To Spec C
	307B61	1	Begin Spec C
27	RELAY, CYCLE CRANKING		
	307A509	1	Spec C Only
	307A753	1	Begin Spec D (5-Sec.)
	307A697	1	Begin Spec D (10-Sec.)
28	RESISTOR, ADJUSTABLE		
	304A194	1	Start-Disc. Relay to Ign. Relay (50-Ohm, 25-Watt) - Spec C Only
	304A66	1	Start-Disc. Relay to Cranking Limiter (10-Ohm, 50-Watt) - Begin Spec C
29	308-91	1	Button, Emerg. Stop Reset - To Spec D
30	RELAY		
	307B4	1	Ignition - To Spec D
	307B597	1	Ignition - Begin Spec D
	307B4	1	Anti-Dieseling Solenoid Start - To Spec C
31	*	1	Harness Assy. - Engine to Control
32	416A96	1	Clip, Harness ("U" Shaped)
33	332-49	1	Clip, Harness ("O" Shaped)
34	320P165	1	Breaker, Starter Protection - To Spec C
35	301A1685	1	Bracket, Relay Mtg. - Begin Spec D

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