

# PARTS CATALOG

FOR



## ELECTRIC GENERATING PLANTS

# DYA

SERIES

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**ONAN**

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

A DIVISION OF ONAN CORPORATION

## 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.                      SERIAL NO.

<b>ELECTRIC  PLANT</b>	
MODEL AND SPECIFICATION NO.	SERIAL NO.
<b>IMPORTANT</b> <small>MENTION ABOVE NUMBER AND SERIAL NUMBER WHEN 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="text"/>	KVA <input type="text"/> AMPS <input type="text"/>
CONTINUOUS    KW <input type="text"/>	KVA <input type="text"/> AMPS <input type="text"/>
A.C. VOLTS <input type="text"/>	CYCLES <input type="text"/> PHASE <input type="text"/> P.F. <input type="text"/>
EXCITER: <input type="text"/>	GEN DATA <input type="text"/>
R.P.M. <input type="text"/>	USE <input type="checkbox"/> VOLT BATTERY NEGATIVE GROUND
<small>MANUFACTURED BY ONAN DIVISION OF STEUBBEN    HARVEY, ILL.    U.S.A. MINNEAPOLIS, MINN.    U.S.A.</small>	

### ALLIS-CHALMERS PARTS

All Allis-Chalmers parts must be ordered from the Allis Chalmers Company of Harvey, Illinois, or their nearest authorized distributor. Refer to the Engine nameplate located on left front side of the crankcase. When ordering parts, always supply Allis Chalmers with the following nameplate information:

**ENGINE MODEL**                      **ENGINE CATALOG NUMBER**

**ENGINE SERIAL NUMBER**

<b>ALLIS-CHALMERS</b>	
HARVEY, ILLINOIS • MADE IN U. S. A.	
ENGINE MODEL	ENG. CATALOG NO.
ENGINE SERIAL NO.	<input type="text"/>

HT-53188

## PARTS CATALOG

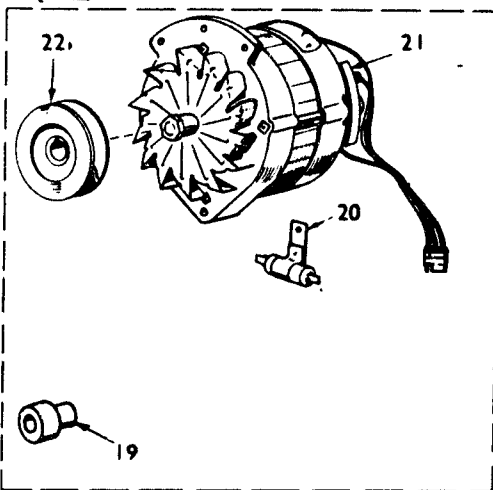
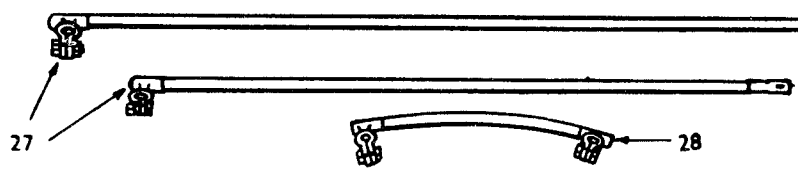
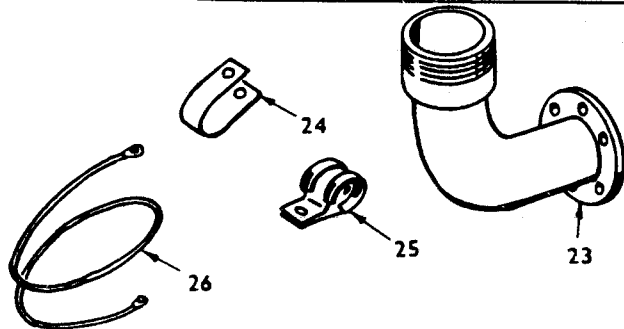
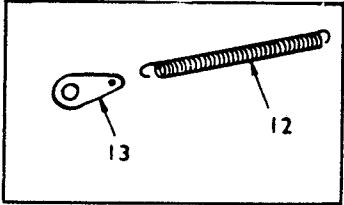
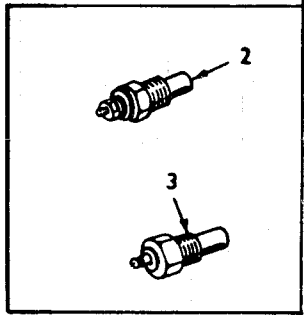
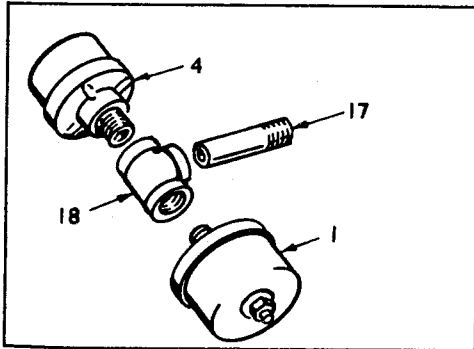
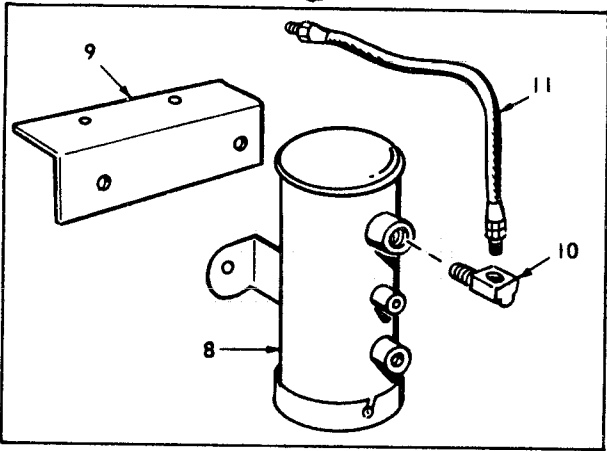
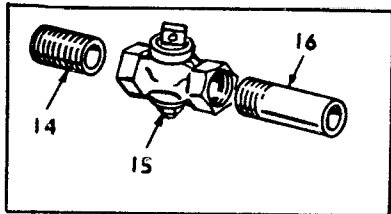
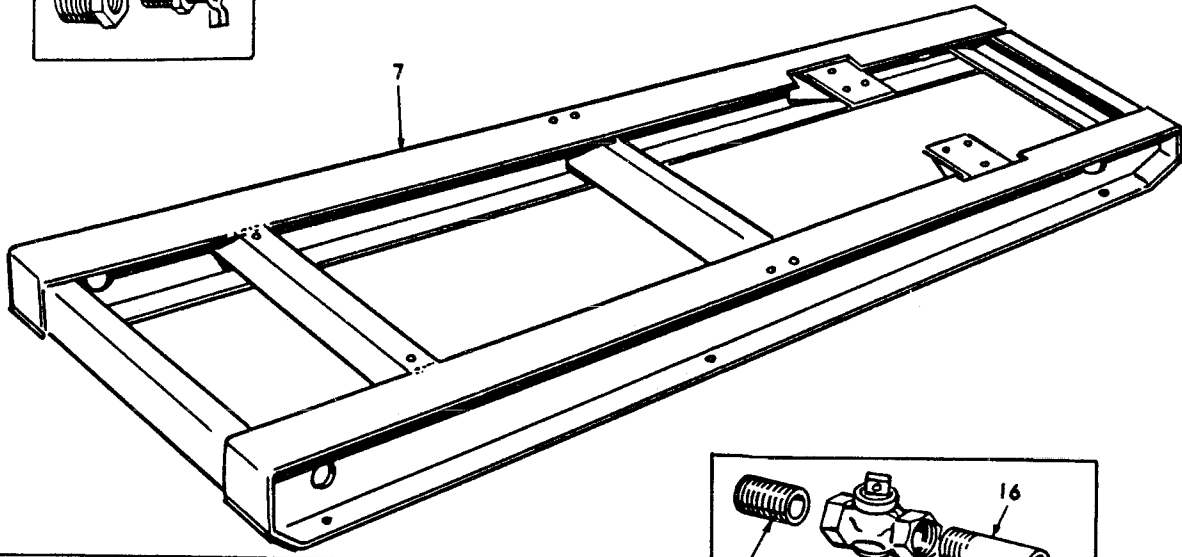
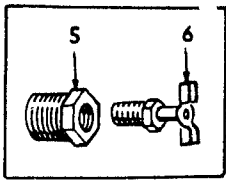
This catalog applies to the standard DYA plants as listed below. Powered by a Allis-Chalmers 2900 engine (see Allis-Chalmers Manual). Engine parts modified or added by *Onan* will be in this list and have *Onan* part numbers. These supersede similar parts listed in the Allis-Chalmers Manual. *Onan* parts are arranged in groups of related items and are identified by a reference. All parts illustrations are typical. 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 AND SPEC NO. *	ELECTRICAL DATA				
	WATTS***	VOLTS	CYCLES	PHASE	WIRE
60DYA-3R8/	60,000	120/240	60	1	3
60DYA-3UR8/**	60,000	120/240	60	1	3
60DYA-4R8/	60,000	120/208	60	3	4
60DYA-4XR8/	60,000	277/480	60	3	4
60DYA-5DR8/**	60,000	120/240	60	3	4
60DYA-7R8/	60,000	220/380	60	3	4
60DYA-9R8/	60,000	600	60	3	3

- \* - The Specification Letter advances (A to B, B to C, etc.) with manufacturing changes.
- \*\* - 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.
- \*\*\*\* - U designates unity power factor.

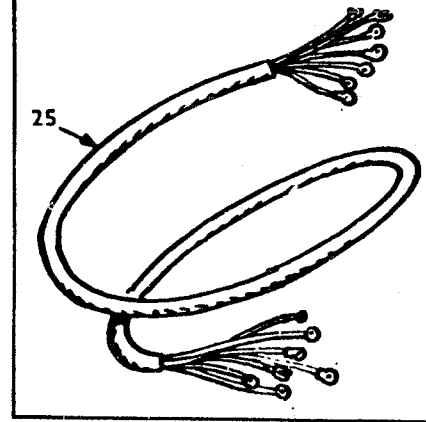
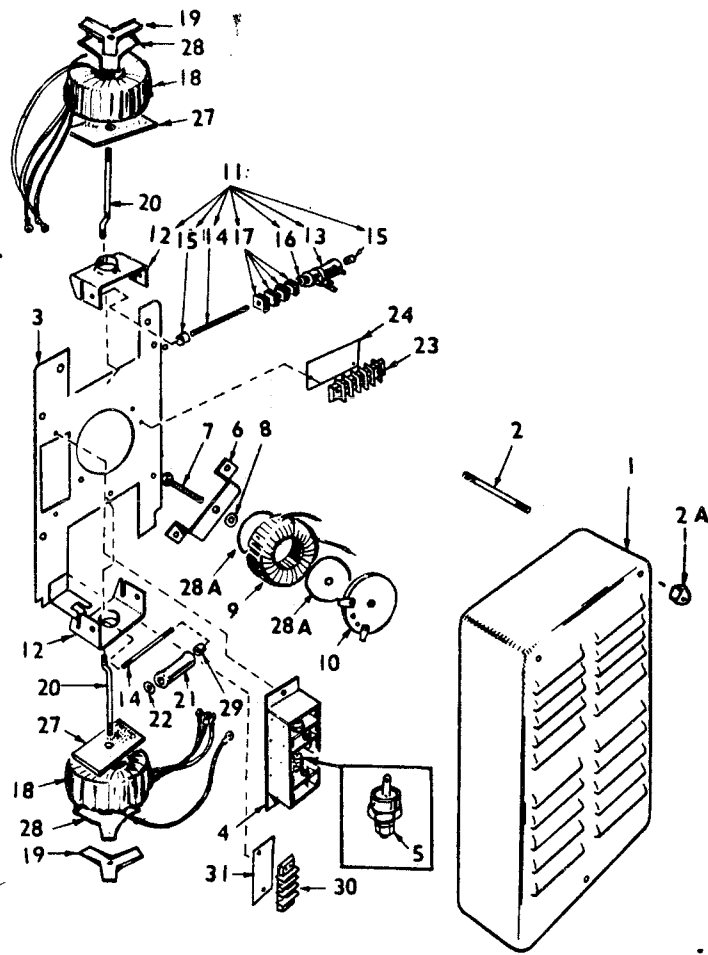
REPLACEMENT ENGINE: Refer to factory giving complete Model, Specification, and Serial Number from ONAN nameplate.



MISCELLANEOUS ENGINE PARTS GROUP

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1	193A108	1	Sender, Oil Press. Gage
2	193A109	1	Sender, Water Temp. Gage
3	309A179	1	Switch, High Water Temp.
4	309A10	1	Switch, Low Oil Press.
5	505-117	2	Bushing, Rod. (1/2 x 3/8")
6	504-28	2	Valve, Drain (1) Rad. (1) Block
7	403D842	1	Base, Mounting
8	149P554	1	Pump, Fuel - Electric
9	149B116?	1	Bracket, Fuel pump Mtg.
10	502-2	1	Elbow, Inv. Male - Pump Inlet
11	501A2	1	Line, Flexible - Fuel (7")
12	149A738	1	Spring, Throttle Return
13	145A118	1	Link, Return Sprg.
14	505-100	1	Nipple, Close (1/2") Oil Drain
15	504-11	1	Valve, Oil Drain
16	505-185	1	Nipple, Half - Oil Drain

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTIONS</u>
17	505-326	1	Nipple, Oil Sender & Switch (1/8 x 1-1/8")
18	505-59	1	Tee, Oil Sender & Switch (1/8")
19	232A1813	1	Spacer, Alternator Mtg.
20	312A58	1	Condenser, Alternator
21	191B665	1	Alternator, Charge (Incl. Fan)
22	191-649	1	Pulley, Alternator
23	155C996	1	Elbow, Exhaust
24	416A96	2	Clip, Harness
25	332-51	1	Clip, Harness
26	336A1415	1	Lead Assy., Reg. to Gen.
27	CABLE, BATTERY		
	416A444	1	Positive
	416A445	1	Negative
28	416A446	1	Cable, Battery Jumper

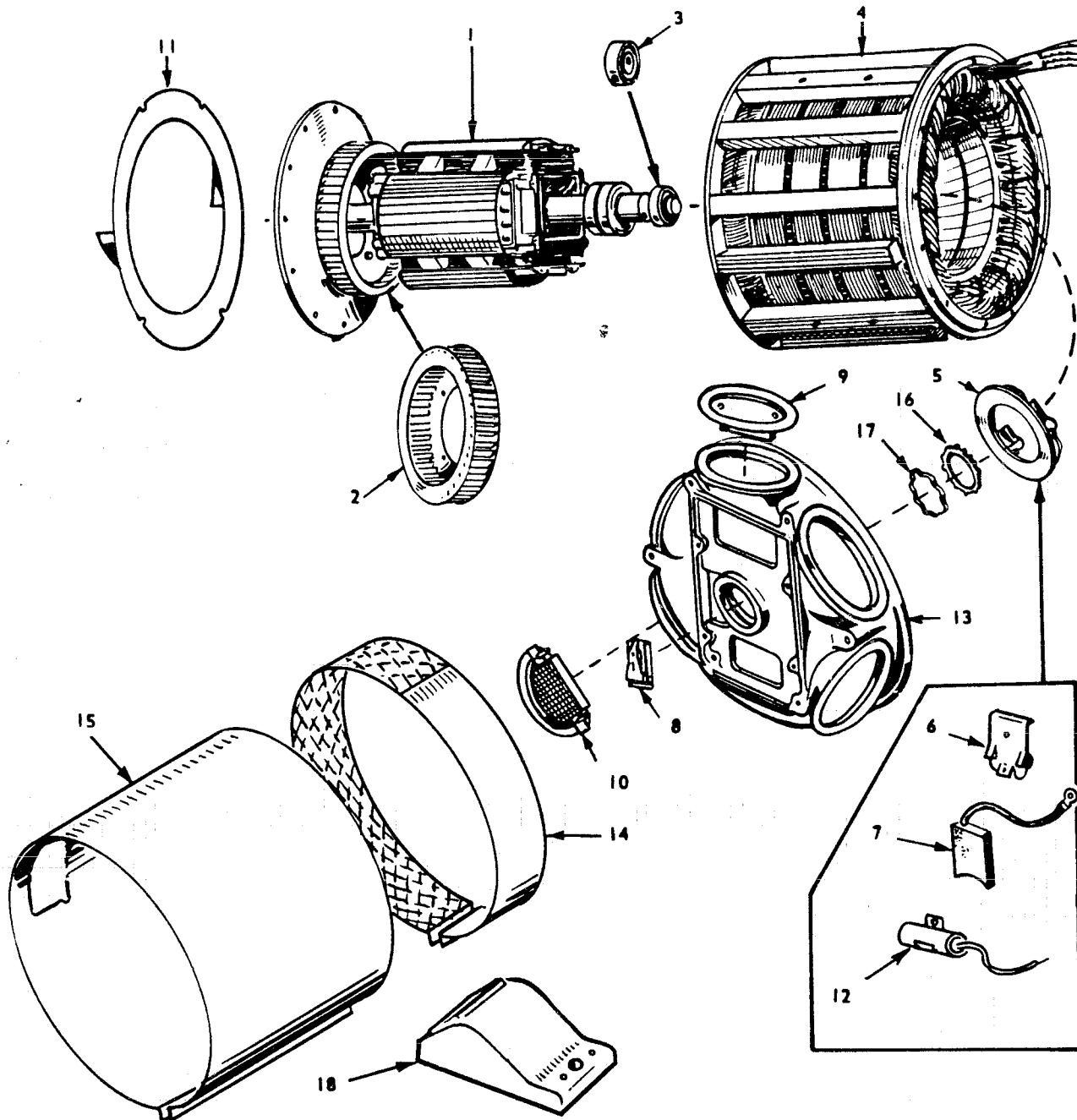


STATIC EXCITER GROUP

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	209-21 234D106	1	Exciter Complete-Less Cover Cover, Exciter
2	520A575	2	Stud, Exc. Cover Mtg.
2A	866-1	3	Nut, Acorn - Exc. Cover Mtg.
3	234D105	1	Panel Only, Exciter
4	305B212	1	Rectifier Assy. Power (Complete) Incl four #305P244 plus wire & hdw.
5	305P244	4	Rectifier Only, Power (Field) Incl. in #305B212 Assy.
6	150B733	1	Bracket, Overspeed Switch
7	150A772	1	Stud & Contact Point Assy., Volt. Cont. Reactor Mtg.
8	WASHER, FIBER INSUL - VOLT. CONT. REACTOR STUD MOUNTING		
	508-18	2	1/4" x 3/4" x 1/16"
	508-29	1	1/4" x 3/8" x 1/32"
9	315A74	1	Reactor, Volt. Cont. - Does not incl. Term. Blk.
10	332A687	1	Block, Term. - Volt. Cont. Reactor
11	305B202	1	Rectifier & Resistor Assy. (Incl. Parts marked * plus wire & hdw.)
12	234B60	2	*Bracket, Gate Reactor Mtg. (Note: 1 only incl. with #305B202 Assy.)
13	304A5	1	*Resistor, Cont. - Adjustable (150-Ohm, 25-Watt) 9/16" x 2"
14	520A579	2	*Stud, Resistor & Rect. Mtg. (Note: 1 only incl. with #305B202 Assy.)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTIONS
15	232A1743	2	*Spacer, Adjust. Resistor & Rect. to Stud (3/8" O.D. x 3/16" I.D. x 7/32" long)
16	304A14	2	*Washer, Cent. - Adjust. Resistor Mtg.
17	305P208	4	*Rectifier, Control
18	315A57	2	Reactor, Gate
19	234B62	2	Retainer, Gate Reactor
20	232A1361	2	Stud, Gate Reactor Mtg.
21	304A21	1	Resistor, Fixed - Alt. Field (Damping) 3/4" x 4" (200- Ohm, 50-Watt)
22	304A15	2	Washer, Centering - Fixed Res Resistor Mtg.
23	332A604	1	Block, Term. - 5-Pl.
24	332A678	1	Strip, Blk. Marker - 5-Pl.
25	338B238	1	Harness, Wiring - Excit. to Cont.
27	332A1547	2	Gasket, Coil Ret. - Inner
28	232A1546	2	Gasket, Coil Ret. - Outer
28A	232A1548	2	Gasket, Control Reactor
29	232A1474	2	Spacer, Fixed Resistor to Stud (3/8" O.D. x 3/16" I.D. x 11/32" long)
30	332A537	1	Block, Term. - 4 Pl.
31	332A686	1	Strip, Blk. Marker - For 4- Pl. Blk.

\* - Included in #305B202 Rect. Assy.

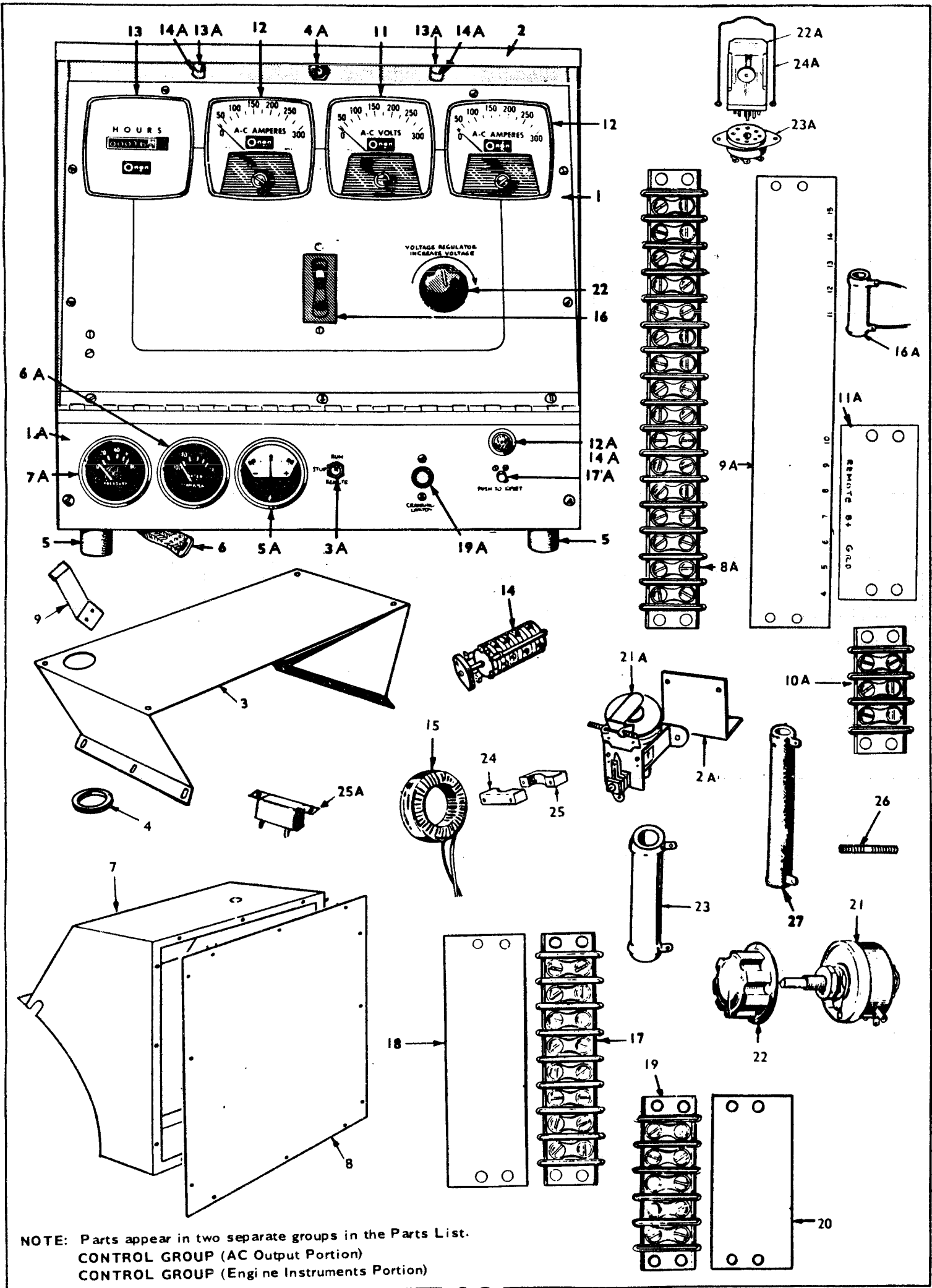


**GENERATOR GROUP**

NOTE: Output Terminal Box Cover & Internal Parts are listed with the AC Output Control Group (Mounts on Side of Generator)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTIONS
1	*	1	Rotor Assy., Incl. Brg., Blower & Drive Assy.	11	234C84	1	Scroll, Air
2	205C55	1	Blower	12	312A17	1	Condenser - .5 Mfd.
3	510P63	1	Bearing	13	211E131	1	Bell, End - Alt. to Exciter
4	*	1	Stator Assy.	14	234C83	1	Band, Gen.-Front (Narrow)
5	212C248	1	Rig Assy. Brush - Incl. Brushes Sprgs.	15	BAND.GENERATOR-REAR (WIDE)		
6	212B1105	4	Spring, Brush		234D81	1	1-Phase
7	214A46	4	Brush		234D82	1	3-Phase
8	150A717	1	Switch Assy., Overspeed	16	232A1186	1	Holder, Brg. - Anti-Rotation
9	232B1254	2	COVER, END BELL OPENING - INCL. LATCH&BRKT. Plain	17	232A1187	1	Spring, Brg. Holder
10	232B1253	2	COVER, END BELL OPENING - INCL. LATCH&BRKT. Screened	18	232C1556	2	Pad, Gen. Mtg.

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



NOTE: Parts appear in two separate groups in the Parts List.  
 CONTROL GROUP (AC Output Portion)  
 CONTROL GROUP (Engine Instruments Portion)



**CONTROL GROUP (AC Output Portion)**

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1	PANEL ONLY, UPPER CONTROL		
	301C1810	1	Single Phase
	301C1814	1	Three Phase
2	301D2115		Box Only, Control
3	301C2539	1	Bracket, Cont. Box Mtg.
4	508P63	2	Grommet, Cont. Box Brkt.
5	402-78	4	Rubber, Mtg. - Cont. Box to Mtg. Brkt.
6	337A44	1	Strap, Ground
7	301D1209	1	Box, Only, Output Term. - Mts. on Side of Gen.
8	301B1190	1	Cover, Output Term. Box
9	301A1914	1	Bracket, Panel Stop
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) -		
	302P408	1	Scale 0-100
	302P410	1	Scale 0-150
	302P411	1	Scale 0-200
	302P412	1	Scale 0-250
	302P413	1	Scale 0-300 (Qty. is 2 for 1-Ph.)
	302P414	1	Scale 0-500 (Qty. is 2 for 1-Ph.)
13	METER, RUNNING TIME (CHECK METER FACE FOR PART NO.)		
	302P465	1	120-Volt, 60-Cycle
	302P466	1	220-Volt, 60-Cycle
	302P467	1	480-Volt, 60-Cycle
	302P468	1	120-Volt, 50-Cycle
	302P469	1	220-Volt, 50-Cycle
14	308B22	1	Switch, Volt. & Current Sel.- 3-Phase Only

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTIONS</u>
15	TRANSFORMER, CURRENT (MTS. IN OUTPUT TERM. BOX) CHECK TRANSFORMER NAMEPLATE - SELECT ACCORDING TO RATING		
	302B78	3	Nameplate "Ratio 100/5" (Use with 0-100 AC Ammeter)
	302B79	3	Nameplate "Ratio 150/5" (Use with 0-150 AC Ammeter)
	302B106	3	Nameplate "Ratio 200/5" (Use with 0-200 AC Ammeter)
	302B209	3	Nameplate "Ratio 250/5" (Use with 0-250 AC Ammeter)
	302B107	2	Nameplate "Ratio 300/5" (Use with 0-300 AC Ammeter)
	302B372	2	Nameplate "Ratio 500/5" (Use with 0-500 AC Ammeter)
16	320B2	1	Breaker, Circuit - 15-Amp.
17	332A503	1	Block, Term. - 8-PI.
18	332A601	1	Strip, Block Marker (15 through 22)
19	332A604	1	Block, Term. - 5-Place
20	332A689	1	Strip, Block Marker - (32, 33, 34, E1, E2)
21	303-97	1	Rheostat, Voltage Reg. - 75-Ohm, 50-Watt, Mdl. H
22	303-32	1	Knob, Rheostat
23	304A479	1	Resistor, Rheo. (425-Ohm, 50-Watt)
	CLAMP, CURRENT TRANSF.		
24	302A235	3	Inside Half - (Note: Qty. is 2 for Single-phase plants)
25	302A236	3	Outside Half - (Note: Qty. is 2 for Single-phase plants)
26	332A56	1	Stud, Ground
27	304A536	1	Resistor, Fixed (9000-Ohm, 50-Watt) Off Running Time Meter 600-Volt plants

**CONTROL GROUP (Engine Instrument Portion)**

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTION</u>
1A	301C2124	1	Panel, Control
2A	301A1685	1	Bracket, Time Delay Relay Mtg.
3A	308P138	1	Switch, Run-Stop-Remote
4A	308-2	1	Switch, Panel Light
5A	302-61	1	Ammeter, Charge (30-0-30)
6A	193B106	1	Gauge, Water Temp.
7A	193B107	1	Gauge, Oil Pressure
8A	332A795	1	Block, Terminal - 16 PI.
9A	332A862	1	Strip, Marker (4 through 19)
10A	332A611	1	Block, Term. - 3-Place
11A	332A1009	1	Strip, Marker (GND, B+, Remote)
12A	332P69	1	Light, Emerg. Latch Relay

<u>REF. NO.</u>	<u>PART NO.</u>	<u>QTY. USED</u>	<u>PART DESCRIPTIONS</u>
13A	322P72	2	Light, Panel
14A	322-4	3	Lamp, Panel & Relay
16A	304A192	1	Resistor, Cranking Limiter Circuit
17A	307A655	1	Relay, Emergency Latch
19A	320A104	1	Limiter, Cranking
21A	307A388	1	Relay, Time Delay - Low Oil Press. Switch Circuit
22A	307P819	2	Relay, Start-Disconnect
23A	323-52	2	Socket, Start-Disconnect Relay
24A	307P778	2	Hold-down, Start Disc. Relay
25A	320P240	1	Breaker, Circuit