

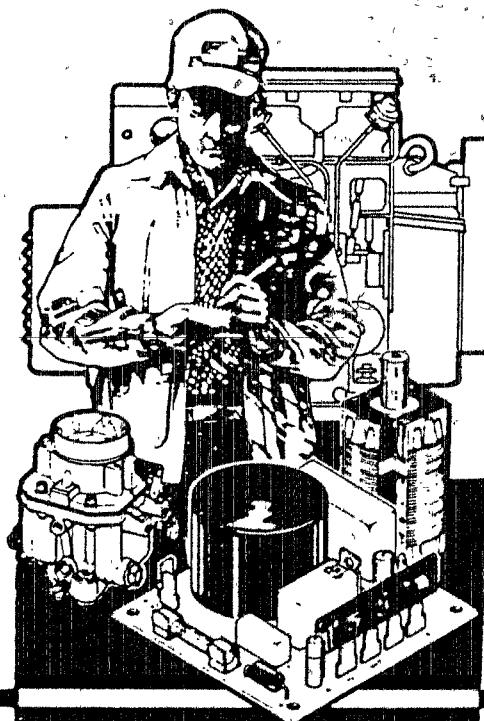
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has gaps in its page
numbers, or doesn't
have any numbers.
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order that Acrobat
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Onan

Parts Manual

YB

**Alternators
Single-Bearing**



Onan Service Parts

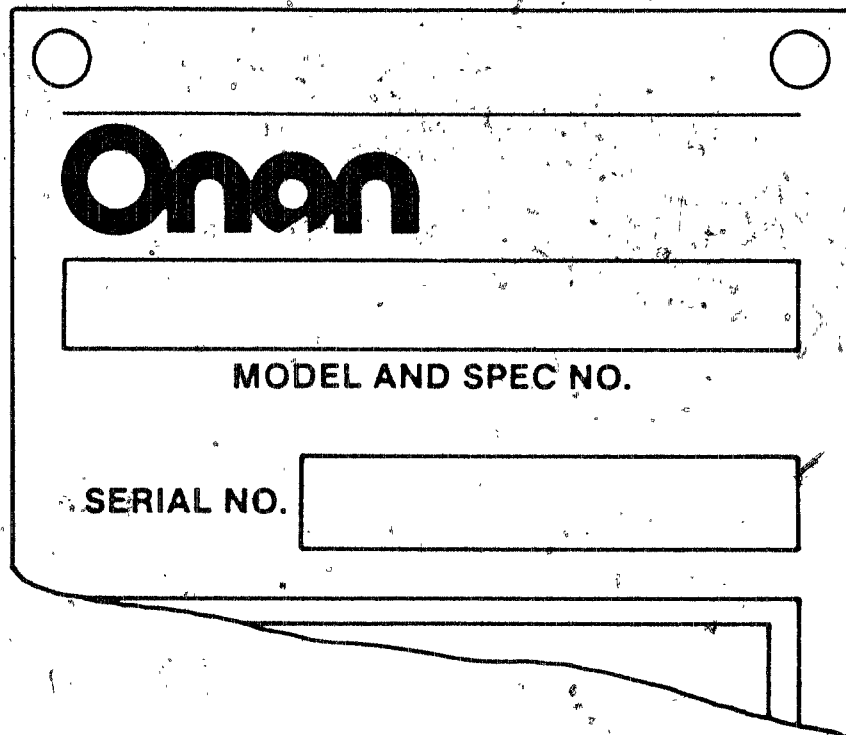
971-0220
3-86 SPEC (A)

Printed in U.S.A.

General Information

For parts or service, contact the dealer from whom you purchased this equipment or refer to your Nearest Authorized Onan Parts and Service Center.

To avoid errors or delay in filling your parts order, always give the MODEL, SPEC NO. and SERIAL NO. from the Onan nameplate.

A rectangular form with a black border, designed to look like a metal nameplate. It features two circular mounting holes at the top. The Onan logo is prominently displayed in the upper left. Below the logo is a horizontal rectangular box for the model and specification number. Further down is another horizontal rectangular box for the serial number, preceded by the text 'SERIAL NO.'. The bottom right corner of the form is folded over.

Onan

MODEL AND SPEC NO.

SERIAL NO.

M-1149

For handy reference, insert "YOUR" nameplate information in the spaces above.

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Introduction

This Parts Manual applies to the Standard Units Listed below. The illustrations are arranged in groups of related items, and each part or assembly is identified by a Reference Number. All parts illustrated are typical, and unless otherwise mentioned in the description column, the parts are interchangeable between models.

These typical illustrations are subject to change and reflect only the latest replacement parts arrangement. The Right and Left sides of the Unit are determined by FACING the FRONT or input end of the Unit. (Ref: Fan and Drive Disc).

Unit Data Table

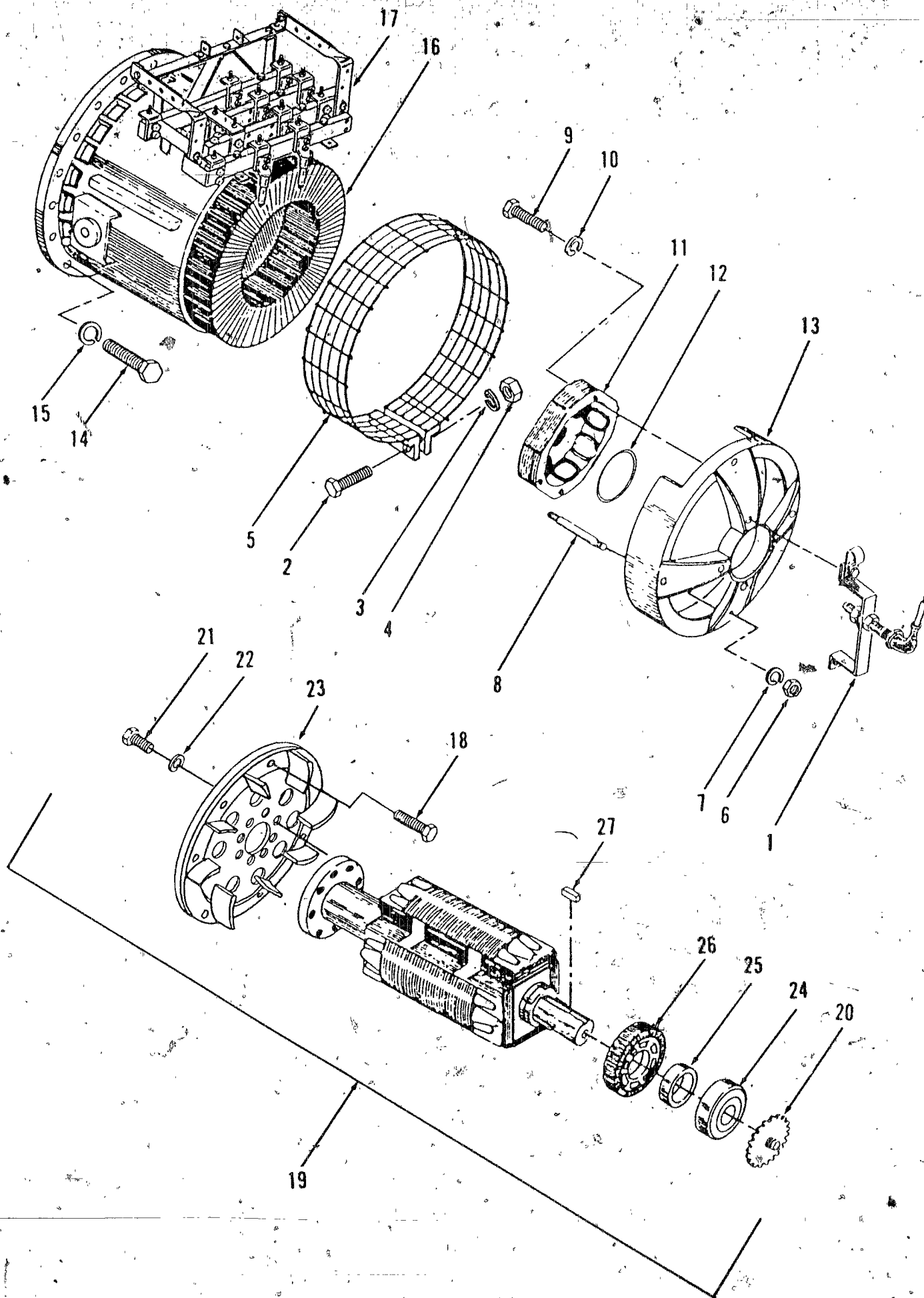
MODEL IDENTIFICATION	RATING	MODEL IDENTIFICATION	RATING
165.0 YB - */ # @	165,000 WATTS	200.0 YB - */ # @	200,000 WATTS
250.0 YB - */ # @	250,000 WATTS	300.0 YB - */ # @	300,000 WATTS
350.0 YB - */ # @	300,000 WATTS		

Electrical Data Table

*VOLTAGE CODE	VOLTS	HERTZ	WIRE	PHASE	NOTES
5D	120/240	60	4	3	
9X	347/600	60	4	3	
17	120/208	60	12	3	+
	127/220	60	12	3	
	139/240	60	12	3	
	240/416	60	12	3	
	254/440	60	12	3	
	277/480	60	12	3	
517	110/190	50	12	3	+
	115/200	50	12	3	
	120/208	50	12	3	
	127/220	50	12	3	
	220/380	50	12	3	
	230/400	50	12	3	
	240/416	50	12	3	
	254/440	50	12	3	

- * - Voltage Codes follow Model Letter designations.
- # - Specification Number: Number 1 is Standard, all other indicate variations.
- @ - Specification Letter: Letter advances (A to B, B to C, etc) with major manufacturing changes.
- + - The Stators are Reconnectible.

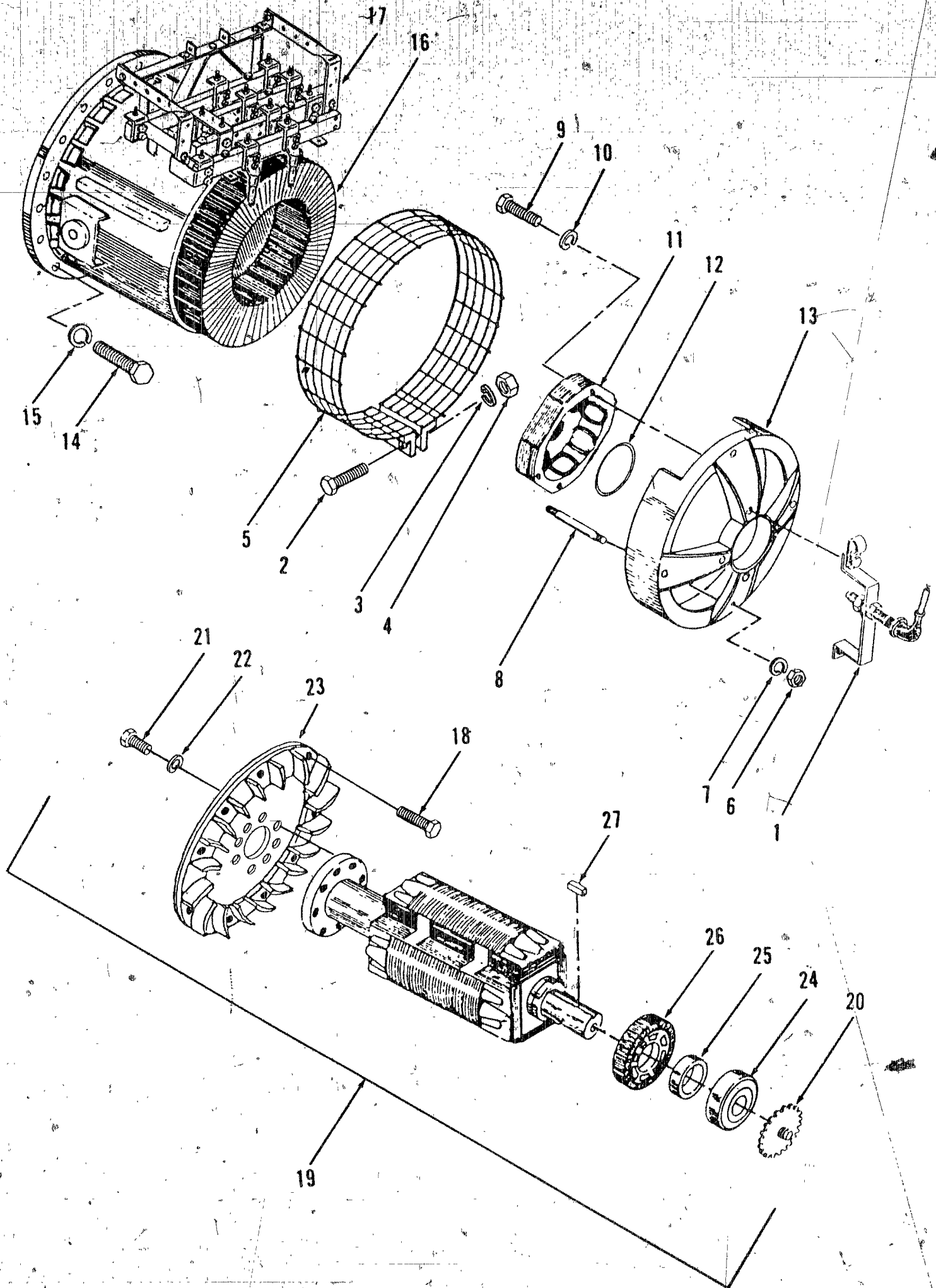
Alternator
SAE #1



Alternator SAE#1

REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1		1	Sensor Assembly, Overspeed (See Separate Page for Components)	17		1	Bus Bar Assembly (See Separate Page for Components)
2	114-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-1/4")	18	805-0032	8	Bolt, Cap - Hex Head (1/2-13 x 1-1/4")
3	850-0040	2	Washer, Lock - Spring (1/4")	19			Rotor Assembly (Includes Fan, Disk Assembly, Bearing, Exciter Rotor, and Speed Sensor Wheel)
4	862-0001	2	Nut, Hex (1/4-20)				
5	234-0455	1	Screen, Air				
6	862-0016	4	Nut, Hex (1/2-13)		201-1940	1	165 kW, Code 517
7	850-0060	4	Washer, Lock - Spring (1/2")		201-1940	1	200 kW, Code 9X, 17
8	520-0780	4	Stud (1/2-13 x 6-1/2" LG)		201-1942	1	200 kW, Code 517
9	800-0009	4	Screw, Cap - Hex Head (1/4-20 x 1-1/2")		201-1942	1	250 kW, Code 9X, 17
10	850-0040	4	Washer, Lock - Spring (1/4")	20			Overspeed Sensor Wheel Assembly (See Separate Page For Components)
11			Stator, Exciter				
	220-1920	1	Standard				
	220-2607	1	Environmental Protected	21	805-0035	8	Bolt, Cap - Hex Head (5/8-11 x 1-1/2")
12	509-0151	1	Seal, O-Ring	22	526-0259	8	Washer, Flat - Hardened
13	211-0214	1	End Bell	23	232-2898	1	Fan and Disk Assembly (Matched Pair)
14	800-0063	12	Screw, Cap - Hex Head (7/16-14 x 1-1/2")	24	51Q-0106	1	Bearing
15	850-0065	12	Washer, Lock - Spring (7/16")	25	232-2317	1	Spacer, Sleeve
16			Stator (Includes Bus Bar Assembly)	26			Rotor Assembly, Exciter (See Separate Page for Components)
	220-2135	1	165 kW, Code 517				
	220-2317	1	200 kW, Code 9X				
	220-1912	1	200 kW, Code 17		201-1902	1	Standard
	220-2137	1	200 kW, Code 517		201-2453	1	Environmental Protected
	220-2319	1	250 kW, Code 9X	27	515-0145	1	Key, Rectangular
	220-1914	1	250 kW, Code 17				

Alternator
SAE #0

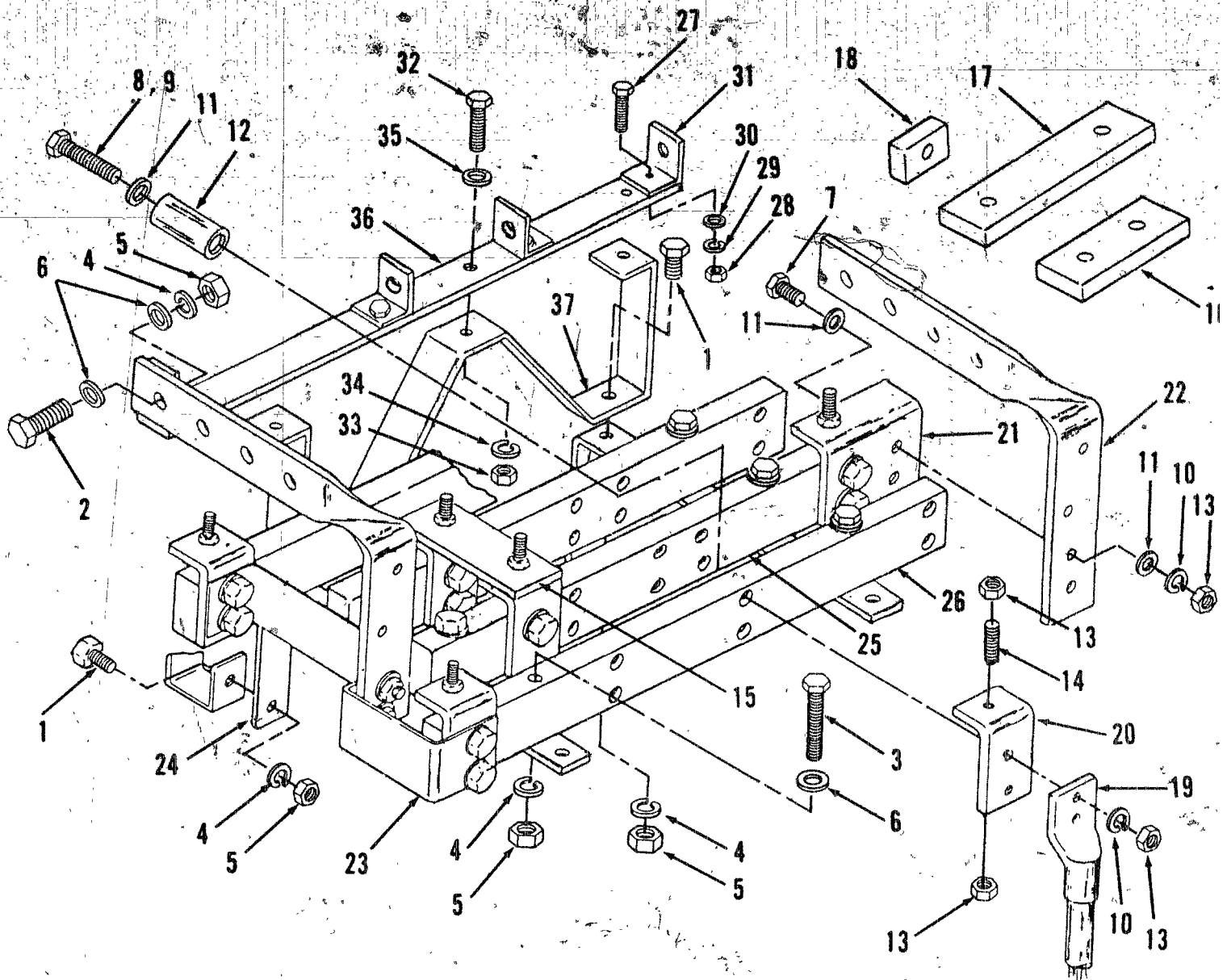


Alternator

SAE #0

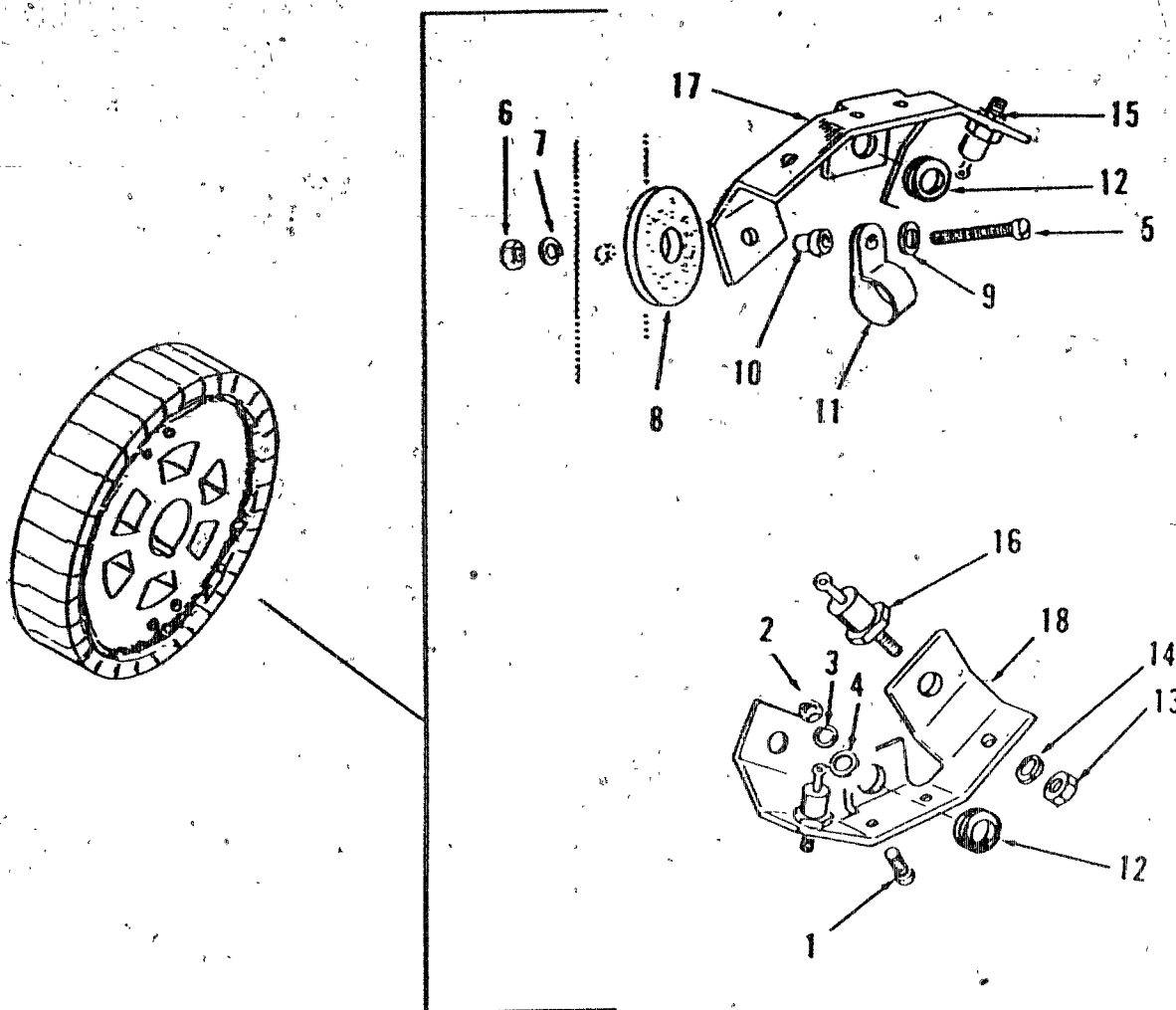
REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1		1	Sensor Assembly, Overspeed (See Separate Page for Components)	17		1	Bus Bar Assembly (See Separate Page for Components)
2	114-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-1/4")	18	805-0035	6	Bolt, Cap - Hex Head (5/8-11 x 1-1/2")
3	850-0040	2	Washer, Lock - Spring (1/4")	19			Rotor Assembly (Includes Fan Disk Assembly, Bearing, Exciter Rotor, and Speed Sensor Wheel)
4	862-0001	2	Nut, Hex (1/4-20)		201-1949	1	250 kW, Code 517
5	234-0455	1	Screen, Air		201-1948	1	250 kW, Code 17
6	862-0016	4	Nut, Hex (1/2-13)		201-3030	1	300 kW, Code 5D
7	850-0060	4	Washer, Lock - Spring (1/2")		201-1950	1	300 kW, Code 517
8	520-0780	4	Stud (1/2-13 x 6-1/2" LG)		201-1950	1	350 kW, Code 9X, 17
9	800-0009	4	Screw, Cap - Hex Head (1/4-20 x 1-1/2")				Overspeed Sensor Wheel Assembly (See Separate Page for Components)
10	850-0040	4	Washer, Lock - Spring (1/4")	20			
11			Stator, Exciter				
	220-1920	1	Standard				
	220-2607	1	Environmental Protected				
12	509-0151	1	Seal, O-Ring	21	805-0035	8	Bolt, Cap - Hex Head (5/8-11 x 1-1/2")
13	211-0214	1	End Bell	22	526-0259	8	Washer, Flat - Hardened
14	800-0092	16	Screw, Cap - Hex Head (1/2-13 x 1-1/2")	23	232-2899	1	Fan and Disk Assembly (Matched Pair)
15	850-0060	16	Washer, Lock - Spring (1/2")	24	510-0106	1	Bearing
16			Stator (Includes Bus Bar Assembly)	25	232-2317	1	Spacer, Sleeve
	220-1915	1	250 kW, Code 17	26			Rotor Assembly, Exciter (See Separate Page for Components)
	220-2139	1	250 kW, Code 517		201-1902	1	Standard
	220-2345	1	300 kW, Code 5D		201-2453	1	Environmental Protected
	220-2140	1	300 kW, Code 517	27	515-0145	1	Key, Rectangular
	220-2322	1	350 kW, Code 9X				
	220-1917	1	350 kW, Code 17				

Bus Bar Assembly



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	800-0050	4	Screw, Cap - Hex Head (3/8-16 x 1")	18	232-2583	1	Spacer, Bus Bar
2	800-0051	4	Screw, Cap - Hex Head (3/8-16 x 1-1/4")	19	332-1152	12	Terminal, Lug
3	800-0056	8	Screw, Cap - Hex Head (3/8-16 x 2-1/2")	20	232-2241	11	Bar, Bus
4	850-0050	16	Washer, Lock - Spring (3/8")	21	232-2343	3	Bar, Bus
5	862-0003	16	Nut, Hex (3/8-16)	22	232-2240	4	Bar, Bus
6	526-0029	16	Washer, Flat (25/64"ID x 7/8"OD x 1/16"THK)	23	232-2238	1	Bar, Bus
7	800-0028	4	Screw, Cap - Hex Head (5/16-18 x 1")	24	232-2249	2	Bracket, Mounting - Bus B
8	114-0022	24	Screw, Cap - Hex Head (5/16-18 x 1-3/4")	25	232-2242	2	Board, Insulator - Center
9	800-0033	8	Screw, Cap - Hex Head (5/16-18 x 2")	26	232-2243	2	Board, Insulator - Front/
10	850-0045	36	Washer, Lock - Spring (5/16")	27	800-0007	4	Screw, Cap - Hex Head (1/4-20 x 1")
11	526-0115	48	Washer, Flat (11/32"ID x 11/16"OD x 1/16"THK)	28	862-0001	4	Nut, Hex (1/4-20)
12	232-2344	32	Spacer, Sleeve	29	850-0040	4	Washer, Lock - Spring (1/
13	862-0015	50	Nut, Hex (5/16-18)	30	526-0018	4	Washer, Flat (21/64"ID x 3/4"OD x 1/16"THK)
14	520-0142	14	Stud (5/16-18 x 1-1/4"LG)	31	232-2387	4	Bracket, Angle
15	232-2246	2	Bar, Reconnection - Long	32	800-0051	3	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
16	232-2248	2	Bar, reconnection - Short	33	862-0003	3	Nut, Hex (3/8-16)
17	232-2582	1	Jumper, Bus Bar	34	850-0050	3	Washer, Lock - Spring (3/
				35	526-0029	3	Washer, Flat (25/64"ID x 7/8"OD x 1/16"THK)
				36	232-2245	1	Board, Insulator
				37	232-2237	1	Bracket, Support

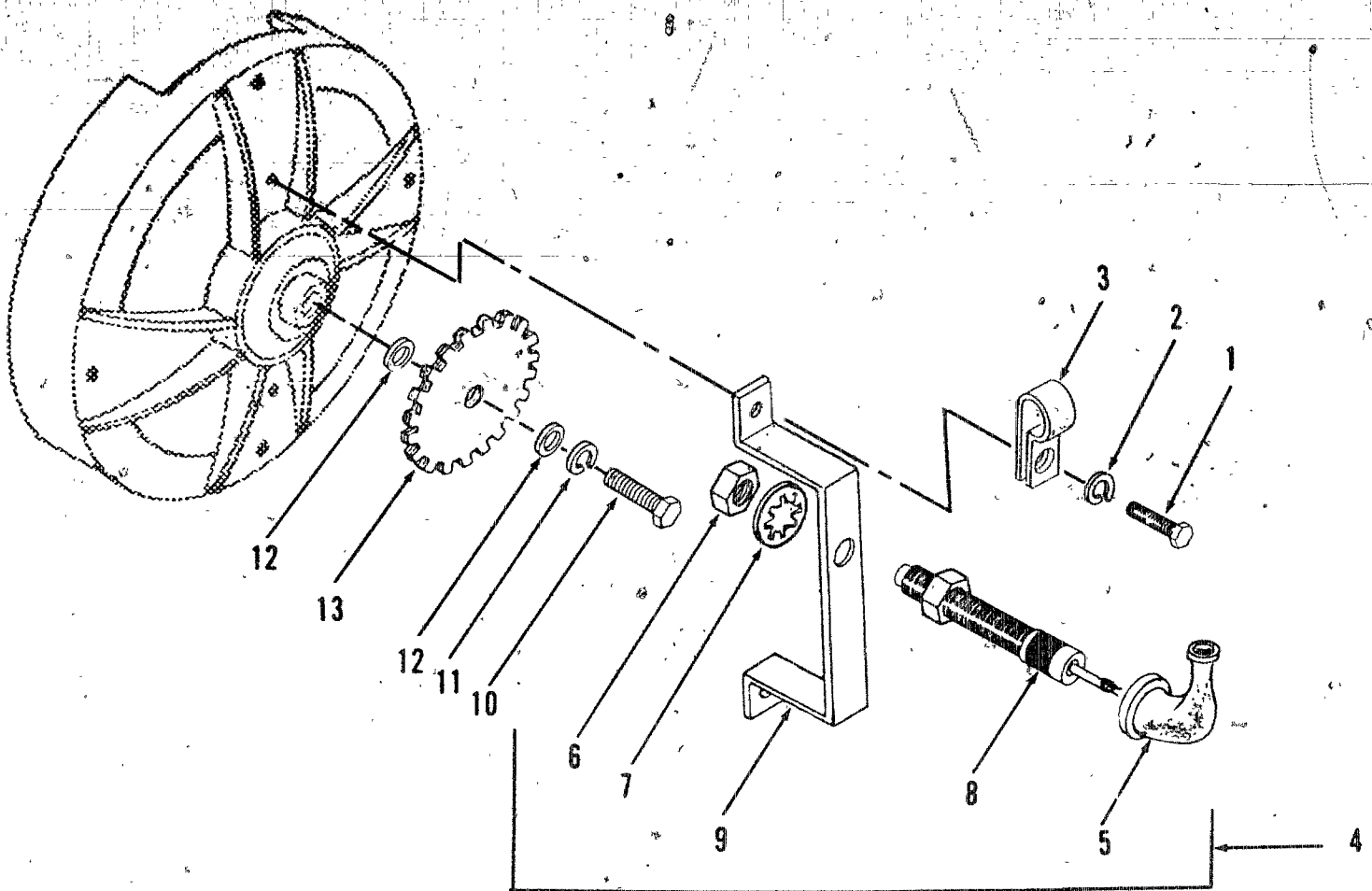
Exciter Rotor Assembly



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	813-0100	2	Screw, Machine - Round Head (#10-32 x 1/2")
2	870-0053	2	Nut, Hex (#10-32)
3	850-0030	2	Washer, Lock - Spring (#10)
4	526-0008	2	Washer, Flat (13/64"ID x 7/16"OD x 1/32"THK)
5	813-0110	4	Screw, Machine - Round Head (#10-32 x 2")
6	870-0053	4	Nut, Hex (#10-32)
7	850-0030	4	Washer, Lock - Spring (#10)
8	508-0156	4	Washer, Insulating
9	526-0009	4	Washer, Flat (7/32"ID x 1/2"OD x 1/16"THK)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
10	508-0187	4	Spacer, Stepped
11	332-0050	2	Clamp, Loop
12	508-0093	2	Grommet, Rubber
13	868-0001	6	Nut, Hex (1/4-28)
14	850-0040	6	Washer, Lock - Spring (1/4")
15	358-0011	3	Rectifier, Diode - Positive (CR1, CR2, CR3)
16	358-0012	3	Rectifier, Diode - Negative (CR4, CR5, CR6)
17	363-0049	1	Heatsink - Positive Diodes
18	363-0050	1	Heatsink - Negative Diodes

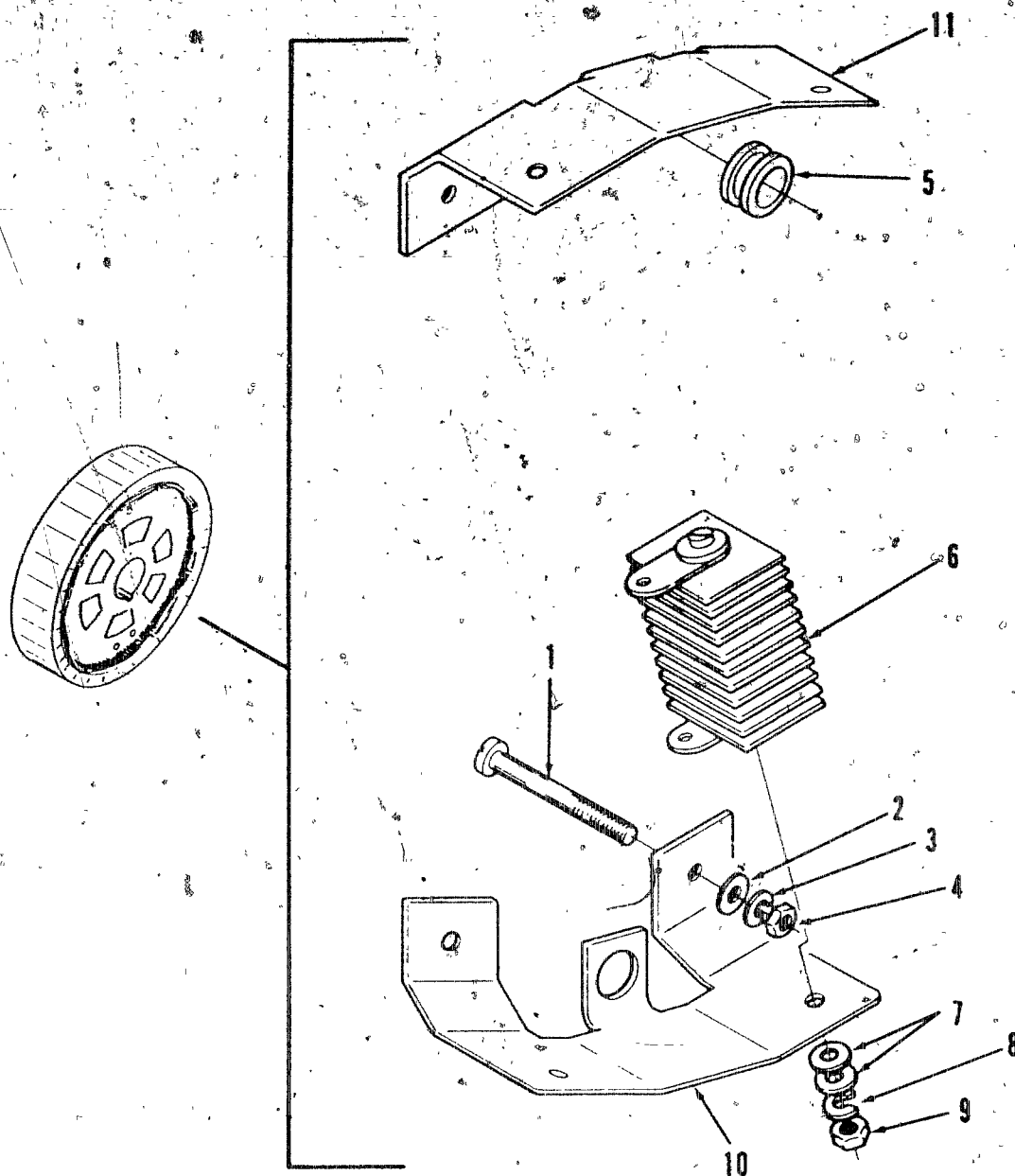
Overspeed Sensor Assembly



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1	800-0005	2	Screw, Cap - Hex Head (1/4-20 x 1-1/2")	6	868-0011	2	Nut, Hex (3/4-16 UNF)
2	850-0040	2	Washer, Lock Spring (1/4")	7	854-0031	1	Washer, Lock - II (3/4")
3	332-1554	1	Clamp, Loop	8	150-1406	1	Pickup, Magnetic (Sensor)
4	150-1411	1	Sensor Assembly, Overspeed (Includes Cap, Sensor and Mounting Bracket)	9	150-1407	1	Bracket, Mounting
5	150-1410	1	Cap, Insulating	10	800-0092	1	*Screw, Cap - Hex Head (1/2-13 x 1-1/2")
				11	850-0060	1	*Washer, Lock - Spring (1/2)
				12	526-0252	2	*Washer, Flat (1/2")
				13	150-1405	1	*Wheel, Sensor - Overspeed

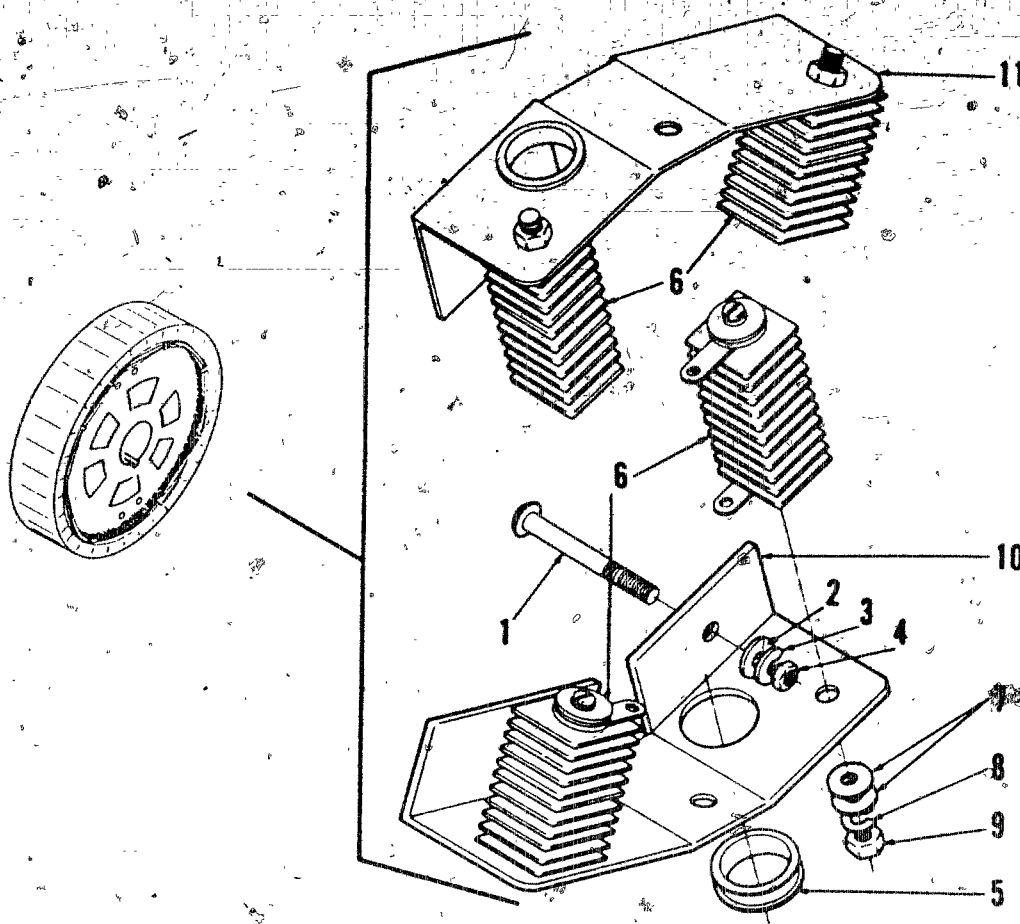
* - Parts included with Alternator Rotor Assembly.

Voltage Suppressor Assembly



REF NO.	PART NO.	QTY USED	PART DESCRIPTION	REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	232-2444	1	Suppressor Assembly, Voltage	6	305-0526	1	Suppressor Set, Voltage (Consists of Two Matched Suppressors)
1	813-0112	4	Screw, Machine - Round Head (#10-32 x 2-1/2")	7	526-0140	4	Washer, Flat (7/32" ID x 3/8" OD x 3/64" THK)
2	526-0140	4	Washer, Flat (7/32" ID x 3/8" OD x 3/64" THK)	8	850-0030	4	Washer, Lock - Spring (#10)
3	850-0030	4	Washer, Lock - Spring (#10)	9	870-0053	4	Nut, Hex (#10-32)
4	870-0053	4	Nut, Hex (#10-32)	10	363-0054	1	Heatsink - Positive Diodes
5	508-0093	2	Grommet, Rubber	11	363-0055	1	Heatsink - Negative Diodes

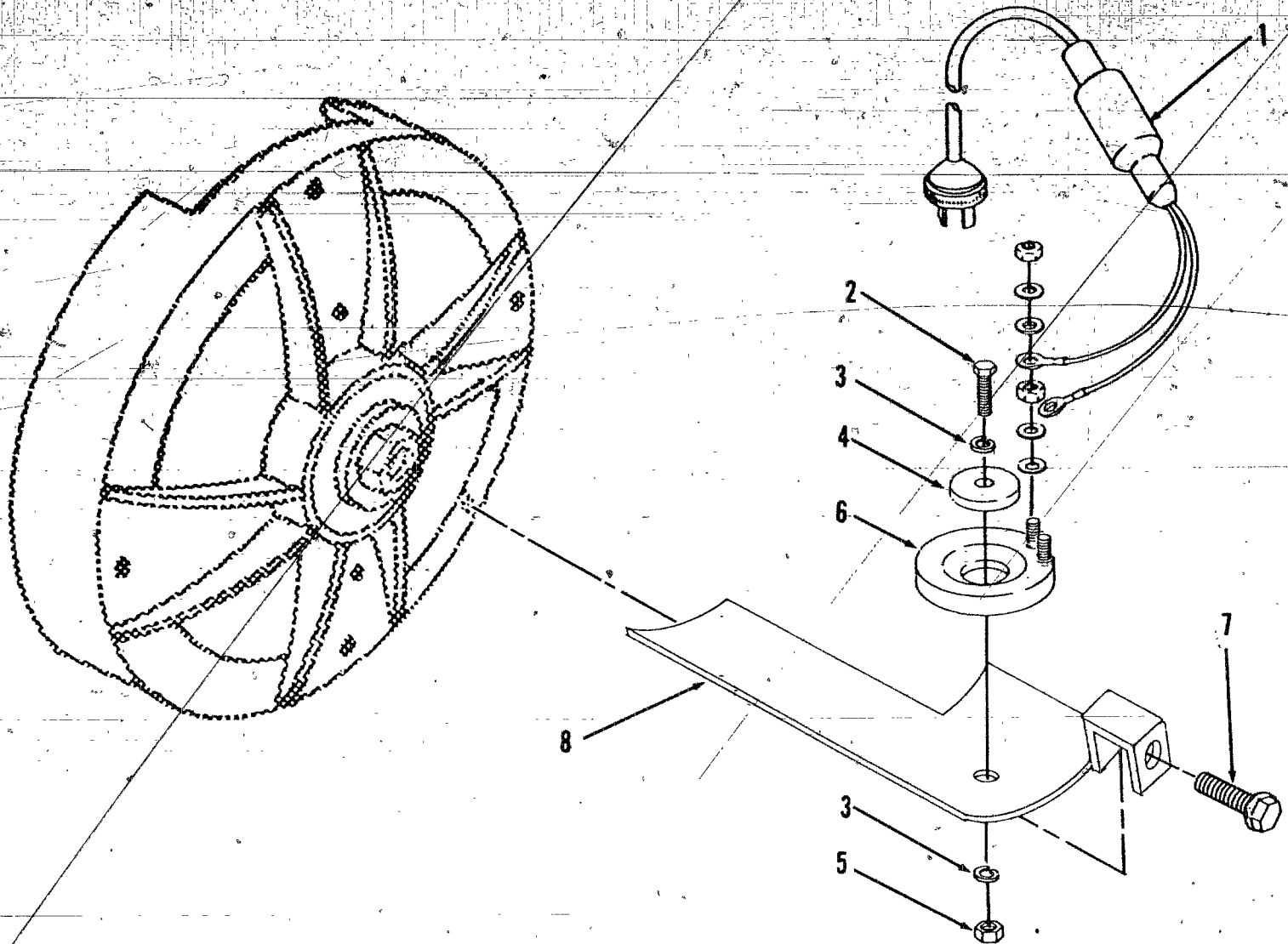
Dual Voltage Suppressor Assembly



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
	232-2639	1	Suppressor Assembly, Dual Voltage
1	813-0112	8	Screw, Machine - Round Head (#10-32 x 2-1/2")
2	526-0140	8	Washer, Flat (7/32" ID x 3/8" OD x 3/64" THK)
3	850-0030	8	Washer, Lock - Spring (#10)
4	870-0053	8	Nut, Hex (#10-32)
5	508-0093	2	Grommet, Rubber

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6	305-0526	2	Suppressor Set, Dual Voltage (Consists of four Matched Suppressors)
7	526-0140	8	Washer, Flat (7/32" ID x 3/8" OD x 3/64" THK)
8	850-0030	8	Washer, Lock - Spring (#10)
9	870-0053	8	Nut, Hex (#10-32)
10	363-0025	1	Heatsink - Positive Diodes
11	363-0033	1	Heatsink - Negative Diodes

Heater Electrical



REF NO.	PART NO.	QTY USED	PART DESCRIPTION
1			Cable, Electrical (Includes Thermostat)
	335-0146	1	120 VAC
	335-0147	1	240 VAC
2	800-0004	1	Screw, Cap - Hex Head (1/4-20 x 5/8")
3	850-0038	2	Washer, Lock - Spring (1/4")
4	526-0158	1	Washer, Flat (17/64" ID x 1" OD x 1/8" THK)
5	862-0001	1	Nut, Hex (1/4-20)

REF NO.	PART NO.	QTY USED	PART DESCRIPTION
6			Heater, Electrical
	333-0059	1	125 W, 120 VAC
	333-0192	1	200 W, 240 VAC
7	821-0014	1	Screw, Self-Locking Hex Washer Head (5/16-18 x 1/2")
8			Bracket, Mounting
	232-2446	1	Used with 120 VAC Heater
	232-2832	1	Used with 240 VAC Heater