



Field Replacement Instructions

These instructions address assembly and disassembly of alternator as well as replacement of N7460 Drive End Housing on N1511-1.

Remove alternator from vehicle according to vehicle manufacturer's instructions.

Alternator Disassembly:

Anti-Drive End (ADE):

1. Remove regulator and save hardware for reassembly.
2. Remove fan guard and save hardware for reassembly. Remove fan nut, washer, and fan.
3. Scribe marks on side of shell and ADE housing for reassembly. Remove 9 retaining nuts and remove ADE housing from shell/stator/field coil assembly.
4. Remove rotor screws and save for reassembly. Remove rotor.

Drive End (DE):

1. Remove pulley nut, washer, and pulley. Save hardware for reassembly.
2. Remove screws holding front cover and save for reassembly. Remove front cover.
3. Remove woodruff key and pulley bushing and save for reassembly.
4. Disconnect phase leads and field coil leads from DE housing. Note wire locations for reassembly.
5. Scribe marks on shell and DE housing. Remove 9 retaining nuts and remove housing with shaft attached from shell/stator/field coil assembly.
6. Press shaft out of bearing bore.
7. Transfer scribe marks on existing DE housing to new DE housing for reassembly.

Alternator Assembly:

Drive End:

1. Press new DE housing on shaft. Press on inner race of bearing.
2. Align new housing and shell scribe marks and install housing on shell.
3. Guide phase and field coil leads through appropriate slots in DE housing and lower housing on shell assembly, guiding through-studs through DE housing. Apply Loctite® 222 or equivalent on threaded end of studs. Follow manufacturer's instructions. Install housing retaining nuts. Torque to 45 lb. in.
4. Place phase leads on diode studs and install hardware (insulator, flat washer, phase terminal, nut). Torque to 30 lb. in.
5. Connect field coil leads and torque to 30 lb. in.

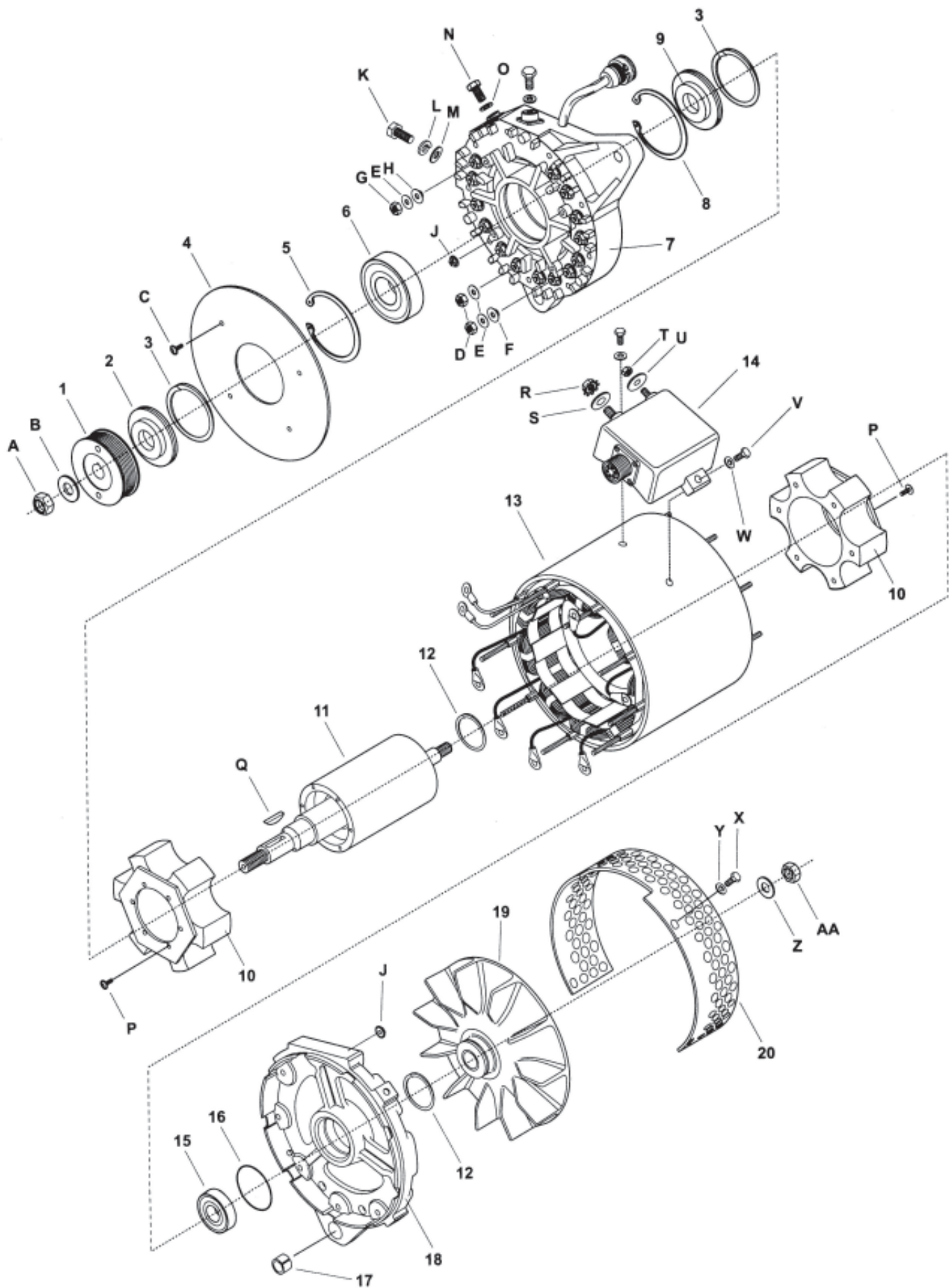
Anti-Drive End:

1. Center rotor on shaft and install screws, using suitable adhesive, such as Loctite® 222. Follow manufacturer's instructions. Torque to 75 lb. in.
2. Align ADE housing and shell scribe marks and install housing on shell. Apply Loctite® 222 or equivalent on threaded end of studs. Follow manufacturer's instructions. Install housing retaining nuts. Torque to 45 lb. in.
3. Install fan and hardware. Torque to 50 lb. ft.
4. Install fan guard and hardware, using suitable adhesive, such as Loctite® 222. Torque to 45 lb. in.

Drive End:

1. Coat phase and field connections with Dow Corning® 1-2577 Low VOC RTV coating or equivalent. Do not use coating containing acetic acid (vinegar smell) on electrical components. Allow to set.
2. Install cover and apply Loctite® 222 or equivalent on threaded end of screws. Follow manufacturer's instructions. Install screws and torque to 30 lb. in.
3. Install pulley and fasten with washer and nut. Torque hardware to 120 lb. ft.
4. Install regulator, making sure harness is securely plugged into receptacle. Torque mounting hardware to 75 lb. in.

Re-install alternator in vehicle according to vehicle manufacturer's instructions.



Item No.	Part No.	Qty.*	Description	Item No.	Part No.	Qty.*	Description **
1	—	1	Pulley	A	N9416	1	Locknut (3/4-16 UNJF-3B)
2	N9623	1	Pulley Bushing	B	N9393	1	Flat Washer (.77" ID x 1.31" OD x .09" T)
3	N9550	2	Spiral Ring	C	N9186	4	Screw TXT-20 PAN 8-32X 375
4	N9493	1	Diode Cover Plate	D	N9343	12	Hex Nut (1/4-28 UNF-2B x .16)
5	N9494	1	Beveled Retaining Ring	E	N9062	14	Flat Washer (.26" ID x .56" OD x .04" T)
6	N9486	1	DE Bearing	F	N9334	9	Insulator (.27" ID x .63" OD x .032" T)
7	N7460	1	DE Housing (Includes D-O)	G	N9378	2	Hex Nut (1/4-20 UNC-2B)
8	N9256	1	Retaining Ring	H	N9619	2	Insulator (.25" ID x .75" OD x .080" T)
9	N9624	1	Ring Carrier	J	N9099	18	Flange Locknut (8-32 S-Grip)
10	N7431	2	Rotor Assy. (Includes P)	K	N9014	1	Bolt (5/16-18UNC-2A x .75" L)
11	N7461	1	Shaft & Core Assy. (Includes P)	L	N9015	1	Lock washer (.32" ID x .60" OD x .08" T)
12	N9582	2	Spiral Ring	M	N9544	1	Flat Washer (.875" ID x .312" OD x .062" T)
13	N7458	1	Shell/Stator/Field Coil Assy.	N	N9627	2	Hex Cap Screw (3/8-16UNC-2A x .875)
14	N3207	1	Regulator (Includes R-W)	O	N9607	2	Spring Washer (.4" ID x .79" OD x .059" T)
15	N9129	1	ADE Bearing	P	N9587	12	Torx Taptite Screw (10-32 x .5" L)
16	N9569	1	O-Ring	Q	N9451	1	Woodruff Key #15 (1/4" x 1.00")
17	N9571	1	Tension Bushing	R	N9410	1	Keps Nut (1/4-20 UNC-2B)
18	N7344	1	ADE Housing (Includes 17)	S	N9466	1	Flat Washer (.265" ID x .75" OD x .062" T)
19	N9491	1	Fan (Includes 12)	T	N9467	1	Elastic Stop Nut (10/24 UNC-2B)
20	N9558	1	Fan Guard (Includes X,Y)	U	N9465	1	Flat Washer (.219" ID x .75" OD x .062" T)
Not Shown	N7459	1	Core/Shaft/Rotor Assy. (Includes P)	V	N9457	2	Bolt (1/4-28UNF-2A .87"L)
Not Shown	N1511	1	Alternator	W	N9459	2	Lock Washer (.256" ID x .472" OD x .056" T)
Not shown	N8050	—	Small Parts Package (Includes A-AA, 3, 5, 8, 12, 16)	X	N9495	4	Hex Cap Screw (1/4-20UNC-2A x .75)
* Quantities Required for Assembly				Y	N9338	4	Flat Washer (.265" ID x .62" OD x .032" T)
** Contact C.E.Niehoff & Co. for complete hardware specifications.				Z	N9063	1	Flat Washer (.53" ID x 1.06" OD x .09" T)
				AA	N9092	1	Lock Nut (1/2-20 UNF-2B)

