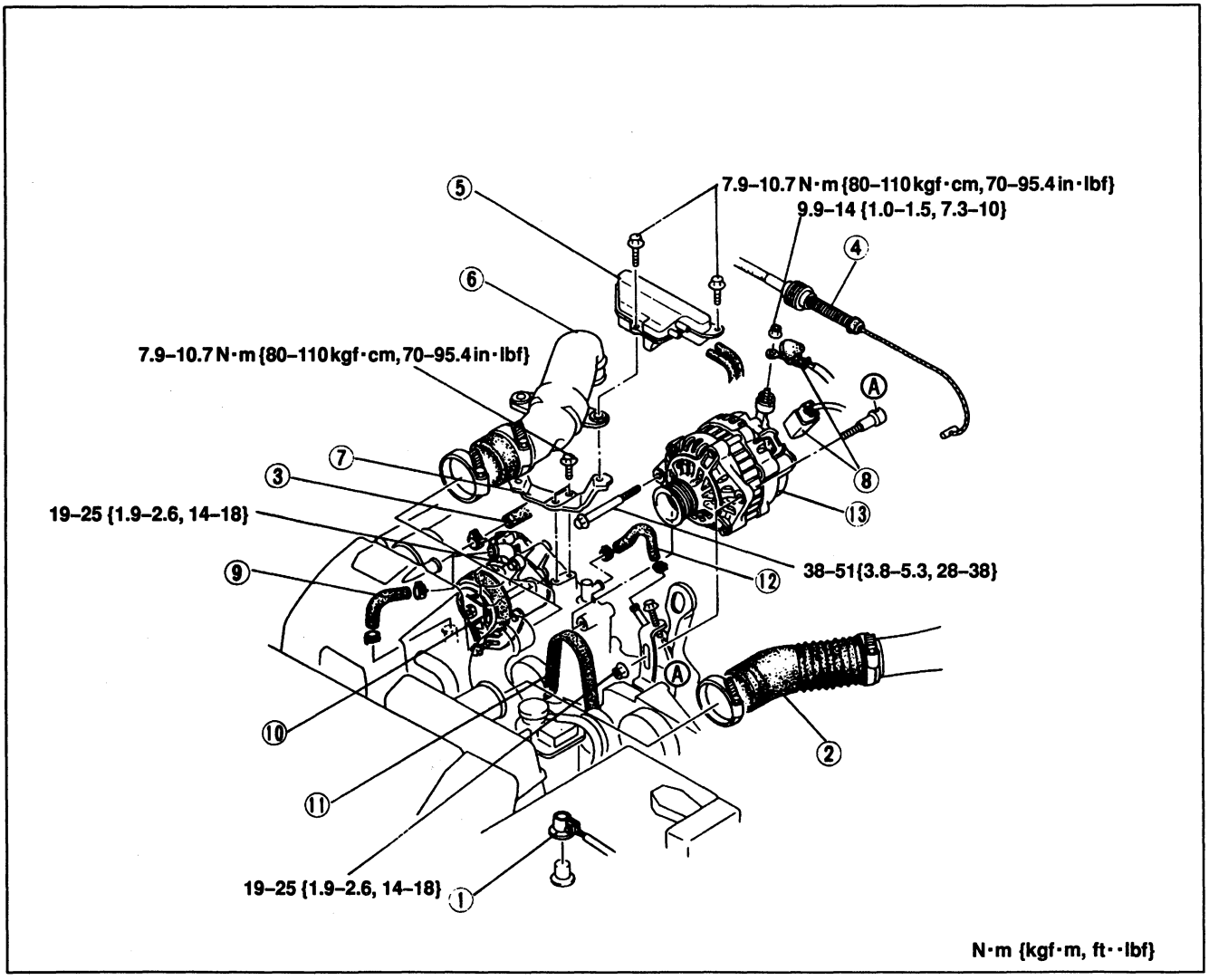
ALTERNATOR

Caution
- **Reversing the battery connections or using high-voltage testers will damage the rectifier.**

Caution
- **Do not start the engine while the connector is disconnected from terminals L and S. It can damage the alternator.**

Note
- Positive voltage is always present at alternator terminal B.

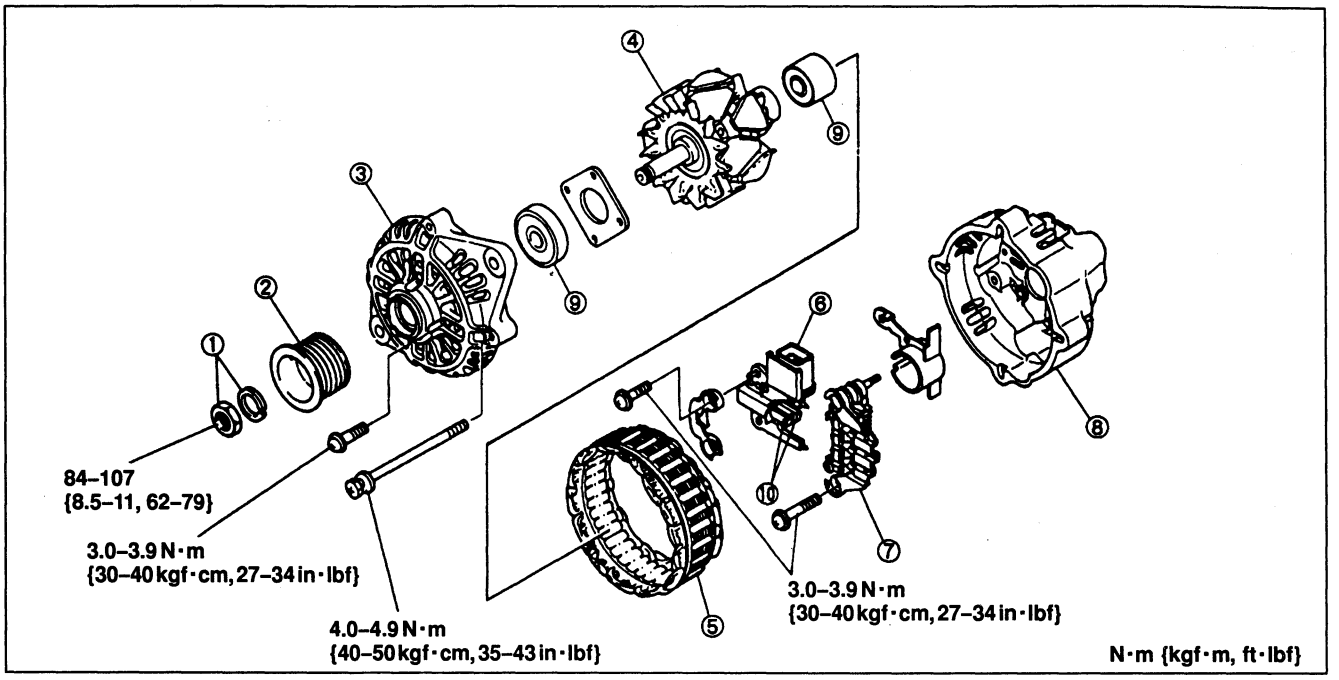
Removal / Installation
1. Remove in the order shown in the figure.
2. Install in the reverse order of removal.



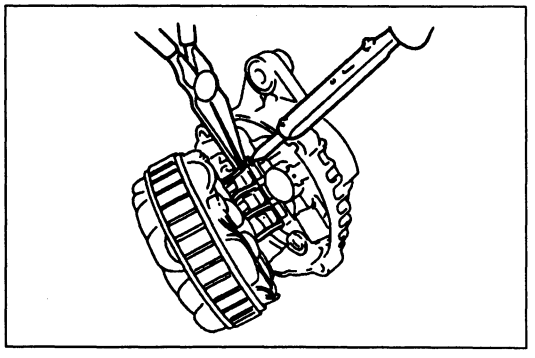
1. Battery negative cable
2. Air-intake hose
3. Air-relief hose
4. Accelerator cable
5. Pressure chamber
6. Air pipe
7. Bracket
8. Terminal B and connector
9. Air pump hose
10. Air pump
11. Drive belt
    Inspection .... page G–15
    Adjustment ... page G–15
12. Water hose
13. Alternator
    Disassembly / Assembly
    ..... page G–13
    Inspection .... page G–14

Disassembly / Assembly

1. Disassemble in the order shown in the figure, referring to **Disassembly Note.**
2. Inspect all parts and repair or replace as necessary.
3. Assembly in the reverse order of disassembly, referring to **Assembly Note.**



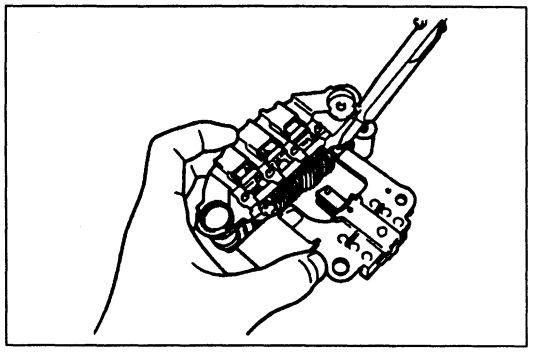
1. Nut, washer
2. Pulley
3. Front bracket
4. Rotor
   Inspection .... page G–14
5. Stator
   Disassembly / Assembly
   Note ..... page G–13
   Inspection .... page G–14
6. Regulator
   Disassembly / Assembly
   Note ..... page G–13
7. Rectifier
   Disassembly / Assembly
   Note ..... page G–13
   Inspection .... page G–14
8. Rear bracket
   Disassembly / Assembly
   Note ..... page G–13
9. Bearing
   Inspection .... page G–14
10. Brush
    Inspection .... page G–14



Disassembly / Assembly Note

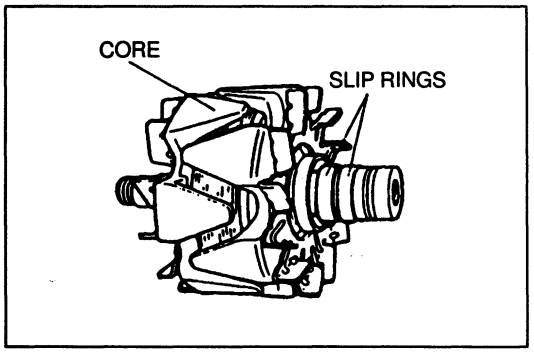
Rear bracket, stator wire

Melt the solder quickly, the diodes (rectifier) and regulator will be damaged by excessive heat.



Brush holder, regulator assembly and rectifier

Melt the solder quickly, the diodes (rectifier) and regulator will be damaged by excessive heat.

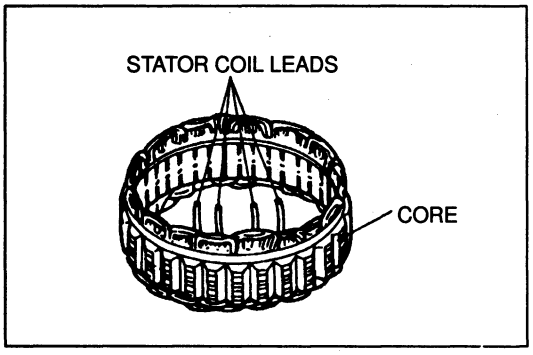


Inspection

Rotor

Check the continuity as shown.

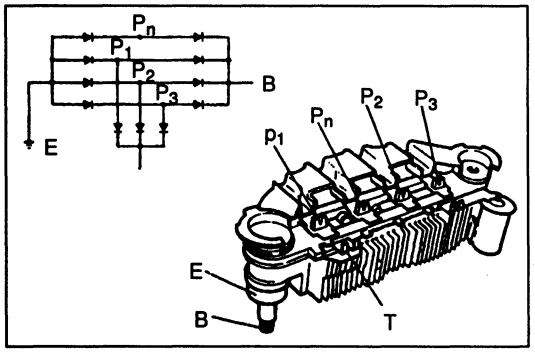
Inspection point	Continuity
Core–Slip ring	No
Slip ring–Slip ring	Yes



Stator

Check the continuity as shown.

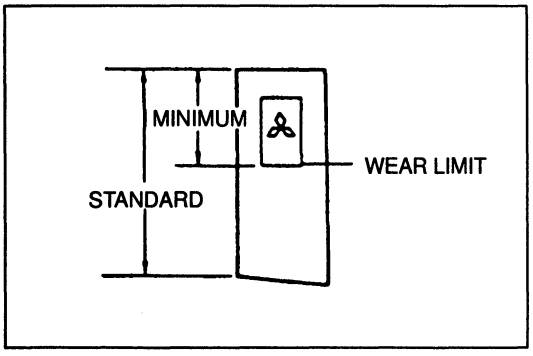
Inspection point	Continuity
Core–Stator coil leads	No
Between leads	Yes



Rectifier

Check the continuity as shown.

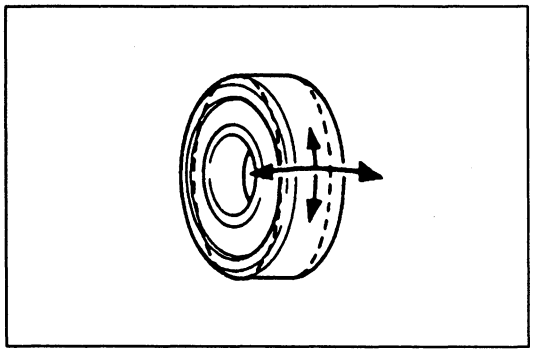
Negative	Positive	Continuity
E	P_n, P_1, P_2, P_3	Yes
B		No
T		No
P_n, P_1, P_2, P_3	E	No
	B	Yes
P_1, P_2, P_3	T	Yes
Pn		No



Brush

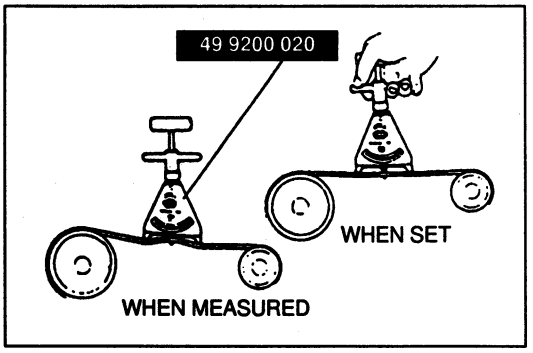
If a brush is worn almost to or beyond the limit, replace the brushes.

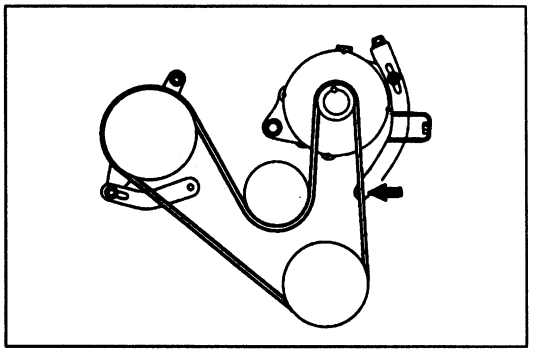
Standard : 21.5 mm {0.846 in}
Minimum : 8.0 mm {0.32in}

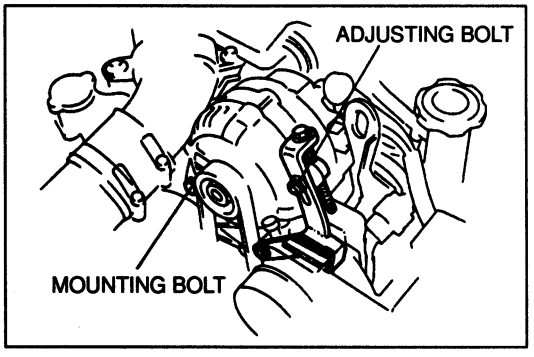


Bearing

1. Check for abnormal noise, looseness, and sticking.
2. Replace the bearing(s) as necessary.







DRIVE BELT

Inspection

1. Check the drive belts and pulleys for wear, cracks and fraying. Replace as necessary.
2. Measure the drive belt tension by using a tension gauge, and measure the deflection by applying moderate pressure midway between the pulleys. Adjust the belt if necessary.

Specification

Tension

N {kgf, lbf}

Drive belt	New	Used	Limit
Alternator	690–780 {70–80, 160–170}	590–680 {60–70, 140–150}	320 {33–73}

Deflection

mm {in}

Drive belt	New	Used	Limit
Alternator	6.0–7.0 {0.24–0.27}	7.0–7.5 {0.28–0.29}	9.0 {0.35}

Adjustment

1. Loosen the alternator mounting bolts and turn the adjusting bolt.
2. Move the alternator to set the specified deflection.
3. Tighten all bolts and recheck the tension.

Tightening torque:
Mounting bolt:
38–51 N·m {3.8–5.3 kgf·m, 28–38 ft·lbf}
Adjusting bolt:
19–25 N·m {1.9–2.6 kgf·m, 14–18 ft·lbf}