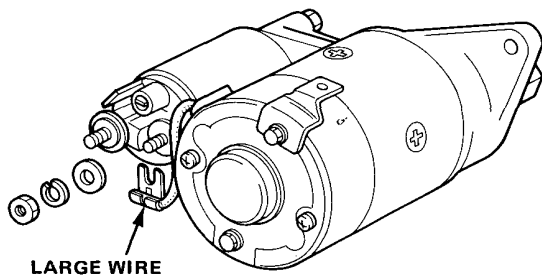




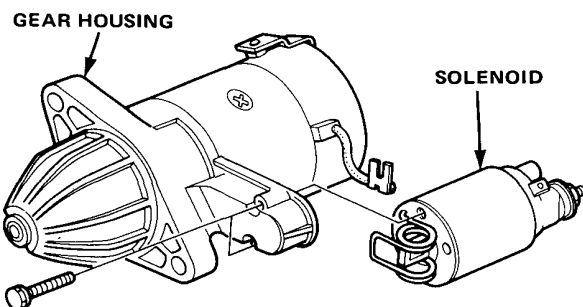
Starter Disassembly

Direct Type:

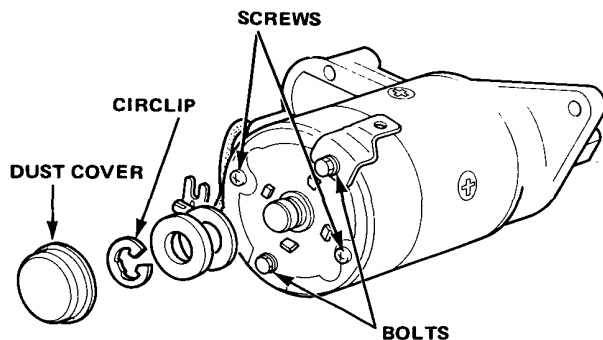
1. Disconnect the large wire that goes from the solenoid to the motor.



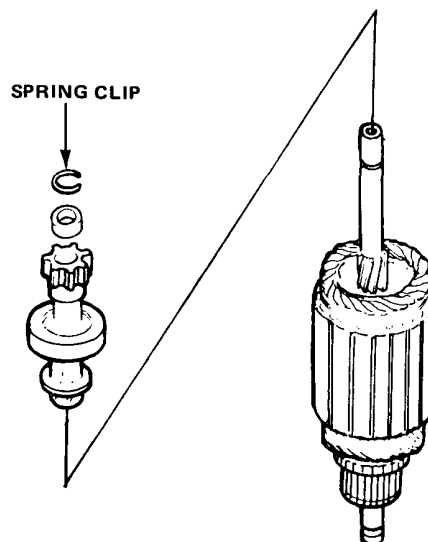
2. Remove the 2 nuts (for NIPPONDENSO), or the 2 screws (for HITACHI), and remove the starter solenoid from the gear housing.



3. Remove the dust cover, and the lock plate (for NIPPONDENSO), or the circlip (for HITACHI), then remove the 2 bolts and 2 screws, and take out the armature and brushes.

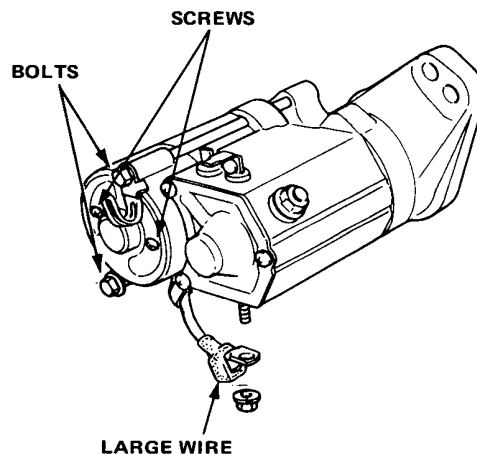


4. Remove the spring clip from the shaft on the armature, then slide the clutch assembly off the shaft.



Reduction Type:

1. Disconnect the large wire that goes from solenoid to the motor.



2. Remove the bolts and screws from the end cover. Remove the end cover. Then, take out the armature and brushes.

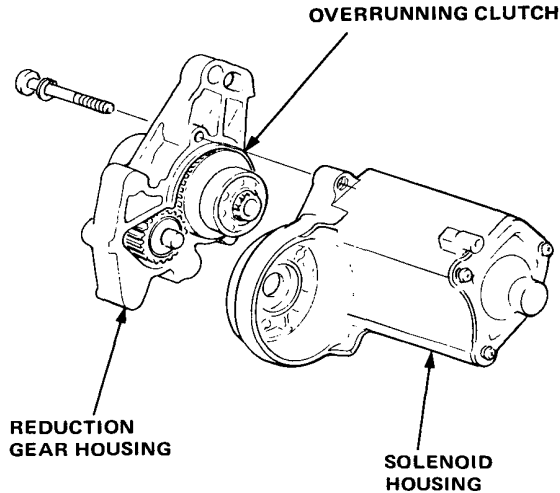
(cont'd)

Starting

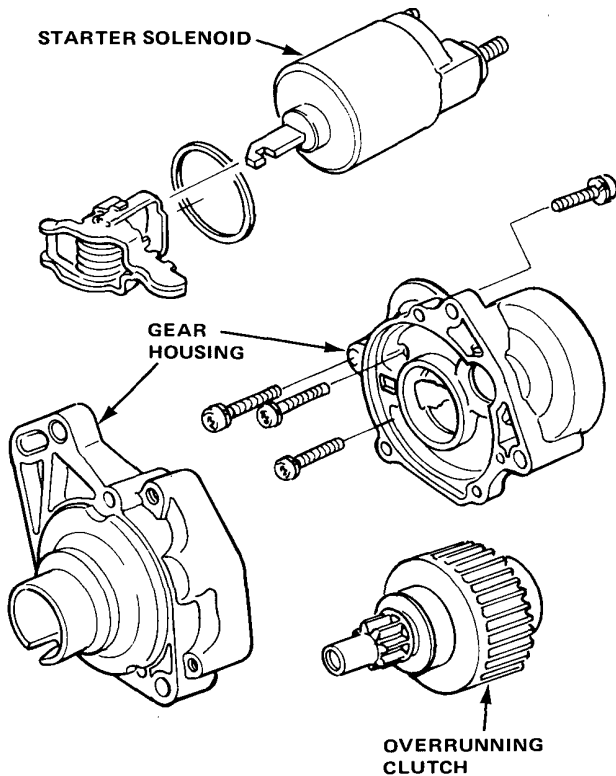
Starter Disassembly (cont'd)

3. Remove the screws from the gear housing, then separate the solenoid and overrunning clutch.

NIPPONDENSO:



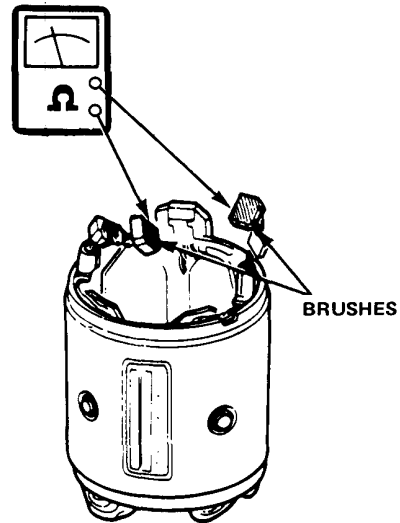
MITSUBA:



Starter Field Winding Test

1. Using an ohmmeter, check that continuity exists between brushes.

If no continuity, replace armature housing.



2. With ohmmeter, check that no continuity exists between field coil and armature housing.

If continuity exists, replace armature housing.

