DUCELLIER & PARIS-RHONE

Peugeot
504
505
604

Renault
Le Car
18i

DESCRIPTION

Starter is a conventional 12 volt, 4 pole unit with solenoid assembly mounted on starter case. Starters have an overrunning clutch connected by a shift lever to the solenoid plunger.

APPLICATION

Model	①Part No.
Peugeot	
504 & 505 Diesel	5802.04②
505	5802.20
604	5802.17③
Renault	
Le Car	77 00 671 608
18i	D10 E 79④

① — Vehicle manufacturer part number.
② — Ducellier No. 6109, Paris-Rhone No. D11 E159.
③ — Ducellier No. 6237, Paris-Rohne No. D9 E 14.
④ — Paris-Rhone number.

TESTING

Lock Test (Le Car) — Follow instructions and procedures outlined in manual furnished with tester. Use a fully charged battery and carry out the test at a temperature of 77°F. Starter torque should be 9 ft. lbs. at 400 amps.

Operational Test (Peugeot) — Disconnect coil high tension wire (except diesel) and connect tachometer to engine. Connect ammeter between battery and starter and energize starter for maximum of 15 seconds. Gasoline engine should turn at 120 RPM with a maximum draw of 250 amperes. Diesel engine should turn at 120 RPM with a maximum draw of 350 amperes.

NOTE — *Further test procedures not furnished by manufacturer.*

OVERHAUL

DISASSEMBLY

Remove nuts on through bolts and remove rear shield. Lift out brushes and retaining shaft for connecting fork between solenoid and pinion. Remove bolts securing solenoid and remove solenoid. Remove starter body and armature.

PARTS REPLACEMENT & TESTING

Brushes — Inspect brushes. If damaged or less than 5/16" (8 mm) long, install new brushes.

Commutator — Check commutator surface for burns, pits, scoring or out-of-round. Dress with a lathe if required and polish with fine sandpaper. Check segment insulators undercut to depth of .020" (.5 mm).

Armature — Check armature for open, shorted or grounded circuits. Inspect armature shaft for bend and core for scoring or loose windings.

NOTE — *Do not attempt to straighten a bent shaft. Replace armature if shaft is bent or core is damaged.*

Bearings — Inspect front and rear bearings for wear and excessive clearance with armature shaft. Replace if damaged or in case of excess clearance.

REASSEMBLY

1) Clean all parts and coat sliding surfaces with multi-purpose grease. Assemble in reverse order of disassembly and check pinion clearance.

2) Disconnect starter field terminal from solenoid and energize solenoid with 12 volt battery. Measure clearance of pinion gear to stop collar. Clearance should be .02-.10" (.5-2.5 mm). Adjust to proper clearance by screwing plunger fork or adjusting screw in or out.

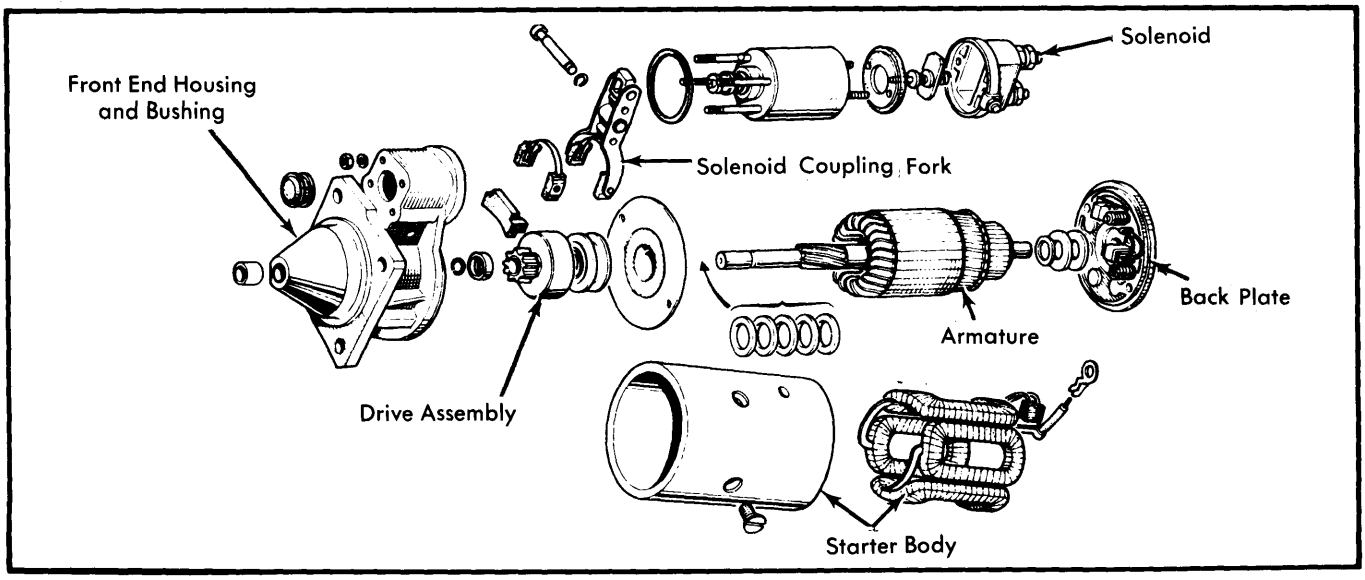

Fig. 1 Disassembled View of Typical Paris-Rhone Starter