RENAULT

R-5
R-12
R-17

DESCRIPTION

Clutch system is single disc dry plate type. Main components are: Disc, diaphragm spring operated pressure plate, ball bearing type clutch release bearing, release fork, and pilot bearing. Clutch operation is mechanical through cable actuation.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

Removal, Exc. R-5 – 1) Disconnect and remove battery with bracket. Remove air filter and starter. Disconnect clutch cable and remove bracket. Remove camshaft and water pump pulley. Slide alternator inward as far as possible.

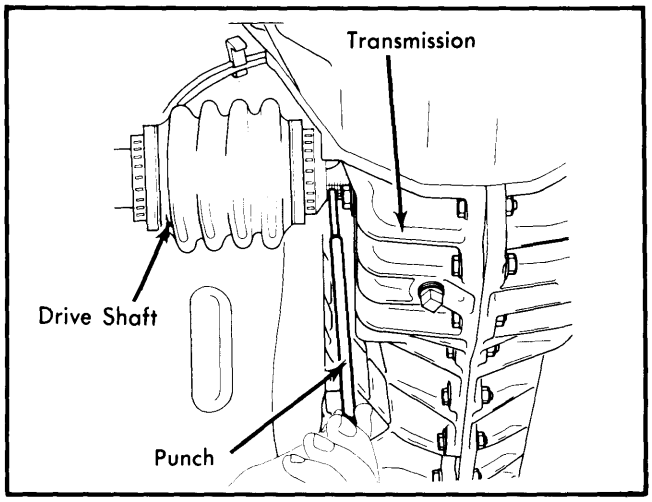

Fig. 1 View Showing Removal of Drive Shaft Roll Pin

2) Install retaining tool (T. Av. 509) between shock absorber lower mounting and lower suspension arm hinge pins. Suitably support front of vehicle. Drain transmission fluid.

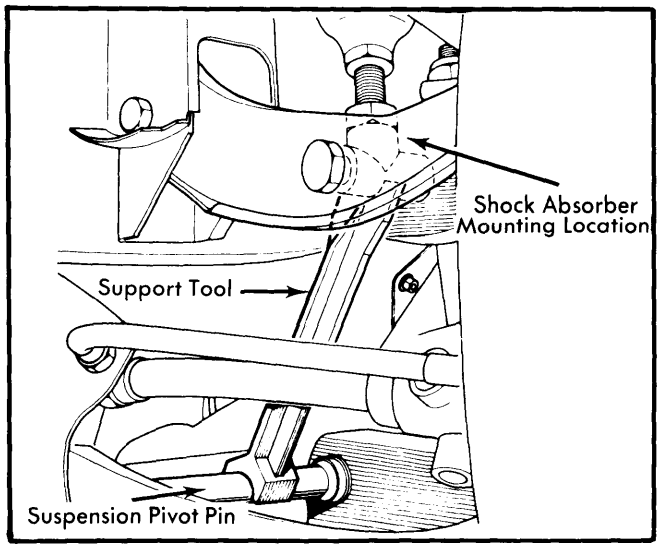

Fig. 2 Installed Position of Support Tool Av. 509

3) Using a suitable drift (B. Vi. 31 B), punch out drive shaft roll pins and disengage from transmission drive flanges. Using a suitable extractor (T. Av. 476) detach upper ball joint and steering arm ball joint from each front wheel.

4) Disconnect speedometer cable, gear shift lever, and back-up light switch. Remove tubular crossmember, exhaust pipe (if necessary), and transmission crossmember. Using a suitable jack, support rear of transmission. NOTE – *It may be necessary to raise rear of transmission to remove crossmember.*

5) Tilt engine and transmission assembly. Remove clutch shield and bolts securing transmission to engine, and remove transmission. Mark pressure plate and flywheel for reassembly reference, and remove clutch assembly.

Installation – 1) To install, reverse removal procedure and note the following: Lightly lubricate clutch disc splines with Molykote BR 2 grease. When installing drive shafts, lightly lubricate drive shaft splines and drive flange splines with Molykote BR 2 lubricant, align splines and slide together. Use a suitable elbow drift (B. Vi. 31B) to align roll pin holes. Make sure new roll pins are used.

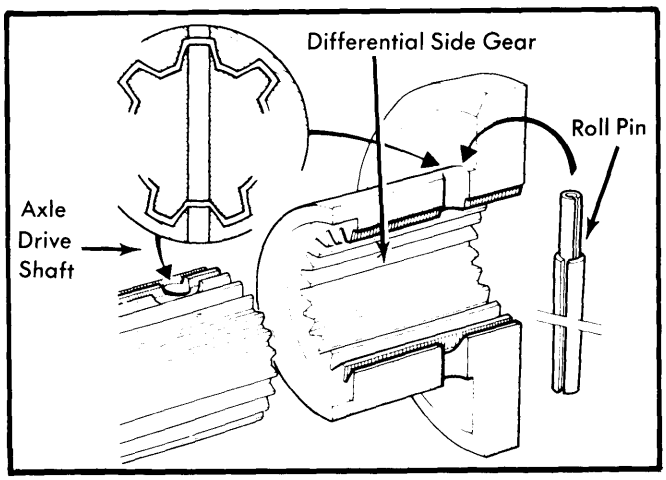

Fig. 3 Axle Drive Shaft Alignment Using New Roll Pin Assembly

2) To adjust transmission gearshift lever, place transmission and shift lever in fourth gear and, without holding lever, tighten gearshift control lever link bolt. Adjust clutch free play, and refill transmission with EP 80 grade oil.

Removal, R-5 – 1) Disconnect battery. Separate speedometer. Remove water pump belt, camshaft belt, and A.I.R. components. Remove both upper starter bolts (it may be necessary to use special wrench ele 565).

2) Remove clutch housing mounting bolts. Take off calipers and support out of way. Disconnect tie rods at steering rack end. Disconnect upper ball joints. Separate axle drive shafts by pulling stub axle out and down. NOTE – *Be careful not to damage oil seal lips on differential adjusting ring nuts.*

RENAULT (Cont.)

3) Remove bolts from support tab on underside of transaxle. Disconnect and free clutch cable lever. Remove tubular crossmember bolts and slide crossmember out rearward. Use a jack and support front of transaxle. Remove front mount. Remove lower starter bolt. Remove clutch cover and any side reinforcement bolts. Remove transaxle from vehicle. Mark pressure plate assembly for installation reference and remove entire clutch assembly.

Installation – To install, reverse removal procedure and note following: Larger end of clutch disc hub should face engine. Use centering tool to align pressure plate and disc. Lightly grease input shaft and axle drive shaft splines. Make sure axle drive shafts fully seat into side gears.

CLUTCH CABLE

Removal – 1) Disconnect cable from lever on transmission. Remove the bolt securing mounting pad (if equipped). From inside vehicle, remove pedal shaft retaining clip, push shaft to the right, and disconnect clutch pedal.

2) Disconnect clutch pedal return spring from pin retaining cable end-to-pedal, remove pin, and disconnect cable end from pedal. Free cable from sleeve stop on pedal assembly bracket, and remove cable.

Installation – To install, reverse removal procedure and note the following: Lubricate pedal bores and retaining pins with Molykote BR 2 lubricant. Adjust clutch free play.

CLUTCH RELEASE BEARING & FORK

Removal – With transmission removed, disconnect return spring from release bearing and fork, and slide bearing off transmission input shaft. Using a suitable tool (Emb. 384), extract fork retaining roll pins. Remove fork shaft, fork, and return spring.

Installation – 1) Lubricate fork shaft with Molykote BR 2 grease, and slide shaft into transmission housing (fitted with rubber seal), and through release fork and return spring.

2) Align holes in shaft with those in fork and install roll pins, making sure that pins protrude 1/32" on forward side of fork. Lubricate bearing sleeve and fork fingers with Molykote BR 2 grease, and slide bearing onto transmission input shaft.

3) Install return spring, placing ends in holes of release bearing support and in fork. Lubricate bearing face and portion of clutch diaphragm spring which bearing contacts with Molykote BR 2 grease. Install transmission and adjust clutch free play.

PILOT BEARING

Removal – Remove transmission, clutch assembly, and flywheel. Using a suitable tool (Mot. 11), extract bearing from crankshaft.

Installation – Using a suitable driver, install pilot bearing into crankshaft. **NOTE** – *Bearing is pre-greased, do not clean.* Install flywheel, clutch assembly, and transmission. Adjust clutch free play.

OIL SEAL

Removal – Remove transmission from vehicle. Remove clutch housing attaching bolts and separate clutch housing from transmission. Using a suitable tool, remove oil seal from clutch housing.

Installation – Fit oil seal into place over special tool B. Vi. 526 or 488. Coat paper gasket with sealer. Place tool inside clutch release bearing guide to spread seal lip. Refit clutch housing on transaxle and slide tool along clutch shaft, then remove tool. Tighten clutch housing nuts.

ADJUSTMENT

CLUTCH FREE PLAY

Loosen lock nut. Turn adjusting nut to obtain free travel at end of release lever.

Clutch Free Play Adjustment

Application	Measurement
R-5	1/8-5/32"
R-12	7/64-9/64"
R-17	5/64-1/8"

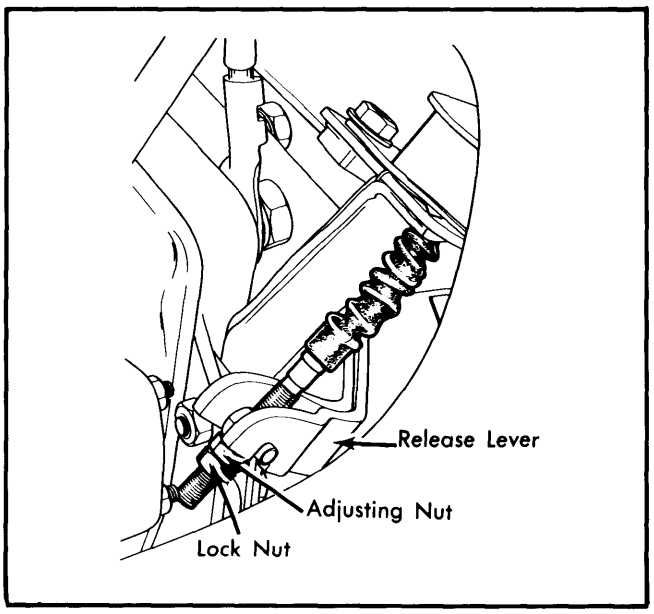

Fig. 4 Adjustment Point for Clutch Cable (R-17 Shown)

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Flywheel-to-Crankshaft	35 (4.8)
Clutch Housing-to-Transmission	
8 mm Bolts	15 (2.0)
10 mm Bolts	30 (4.1)