GROUP 12

CLUTCH

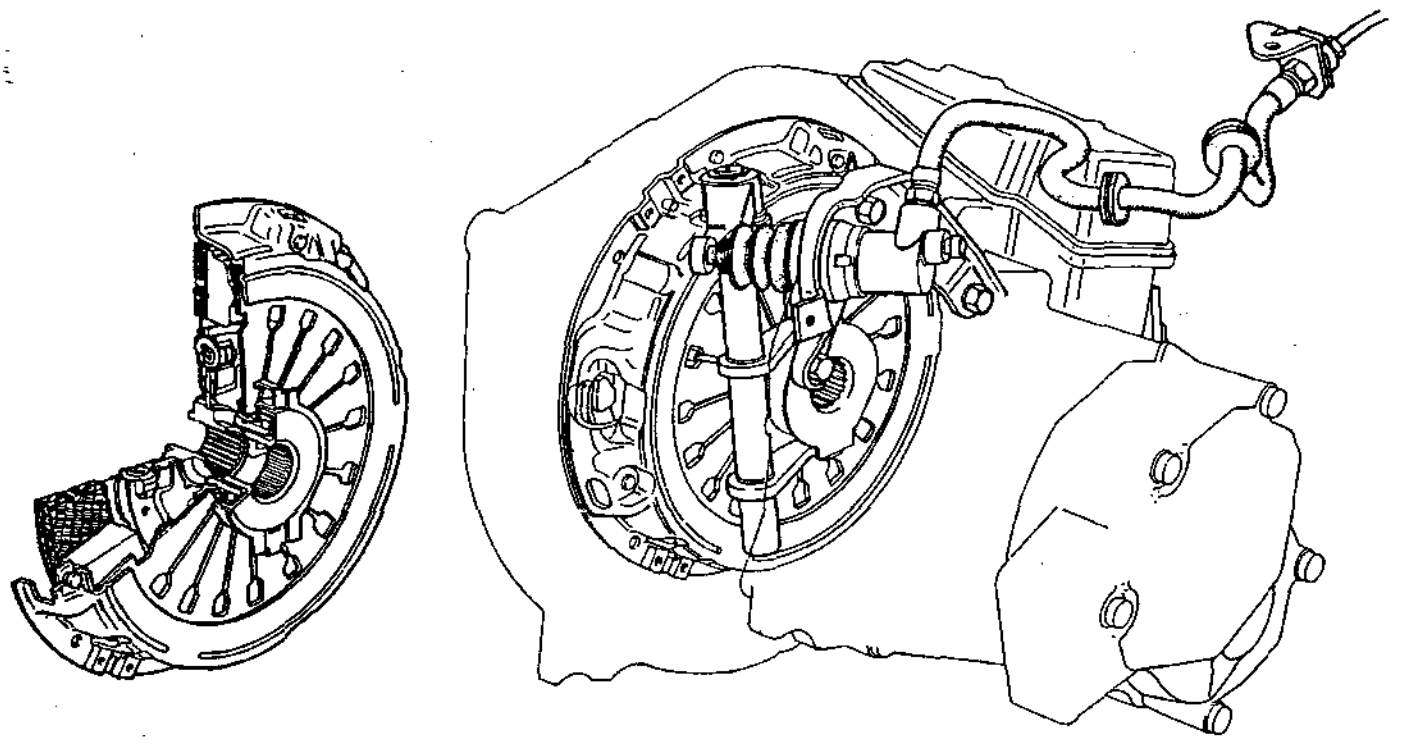
INDEX

For all parts not given here, refer to the corresponding Group in publication No. PA4655C1000000.

CLUTCH

DESCRIPTION

The clutch adopted for the four-wheel drive version in the 155 range is of the single dry disc type with hydraulic "pulled" action.



The hydraulically controlled single dry disc of the traditional type is fitted to reduce the effort required to depress the clutch pedal and is off the traction disengagement type. When the pedal is depressed the clutch is pulled by a thrust bearing of the hoooked type rather than pushed as in the traditional system. This type c clutch has been adopted because, having to transmit high torque, the overall dimensions of the cluch woul need to be increased in order to avoid variations in th action of the pedal.

:LUTCH PEDAL

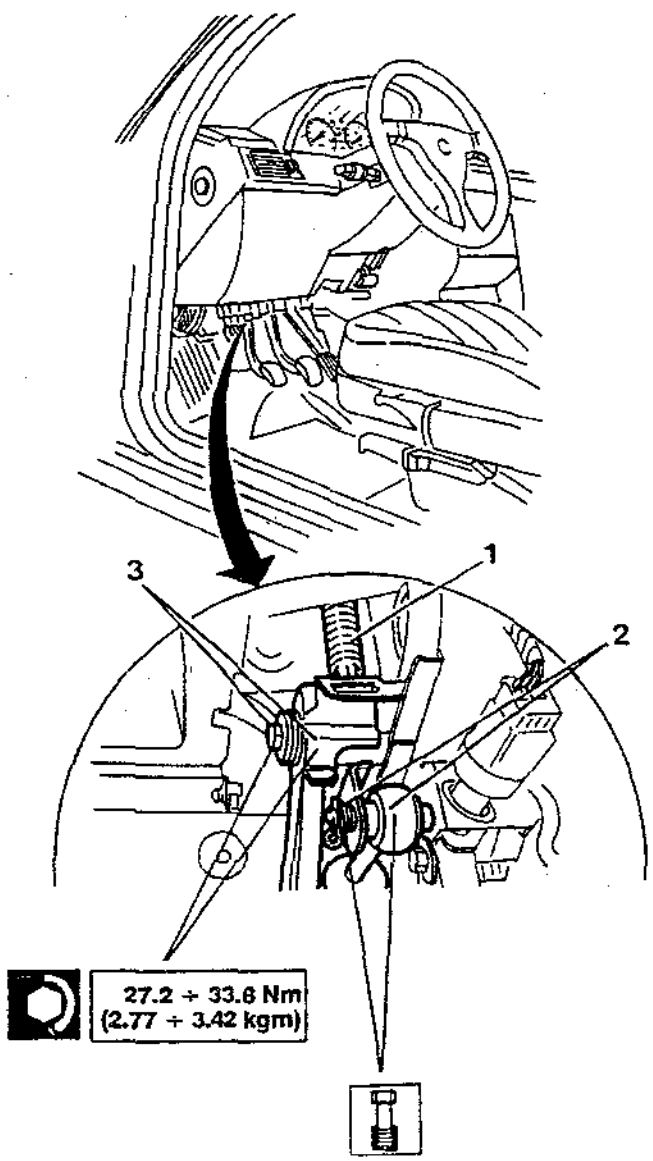
EMOVAL AND REFITTING

Disconnect the wiring from the ABS system wiring located on the clutch pedal.

- Disconnect the clutch pedal return spring.
- Remove the cotter pin and withdraw the pin connecting the pump to the clutch pedal.
- Loosen and remove the through screw on the clutch pedal together with the washers and spacers and then disconnect the clutch pedal.

Refit, by reversing the procedure followed for removal and tightening the through screw on the clutch pedal to the correct torque.

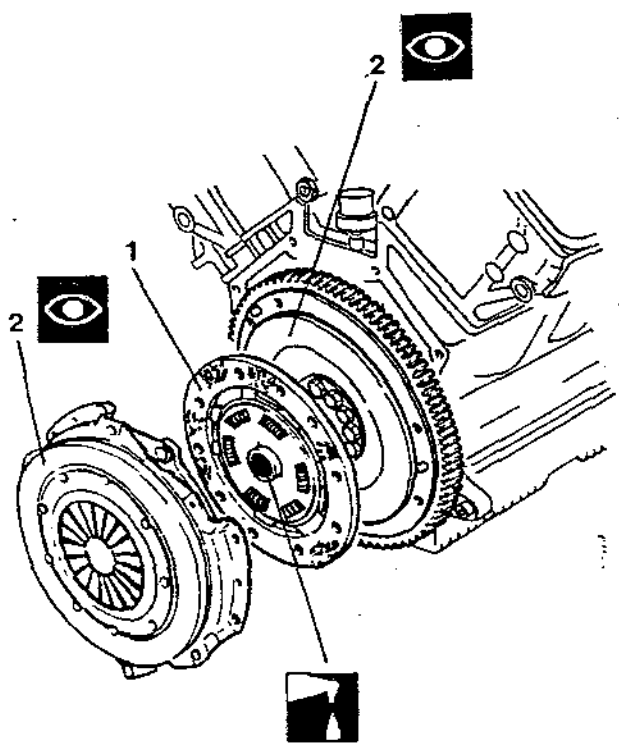
When refitting, grease the components securing the clutch pedal using the specified grease.



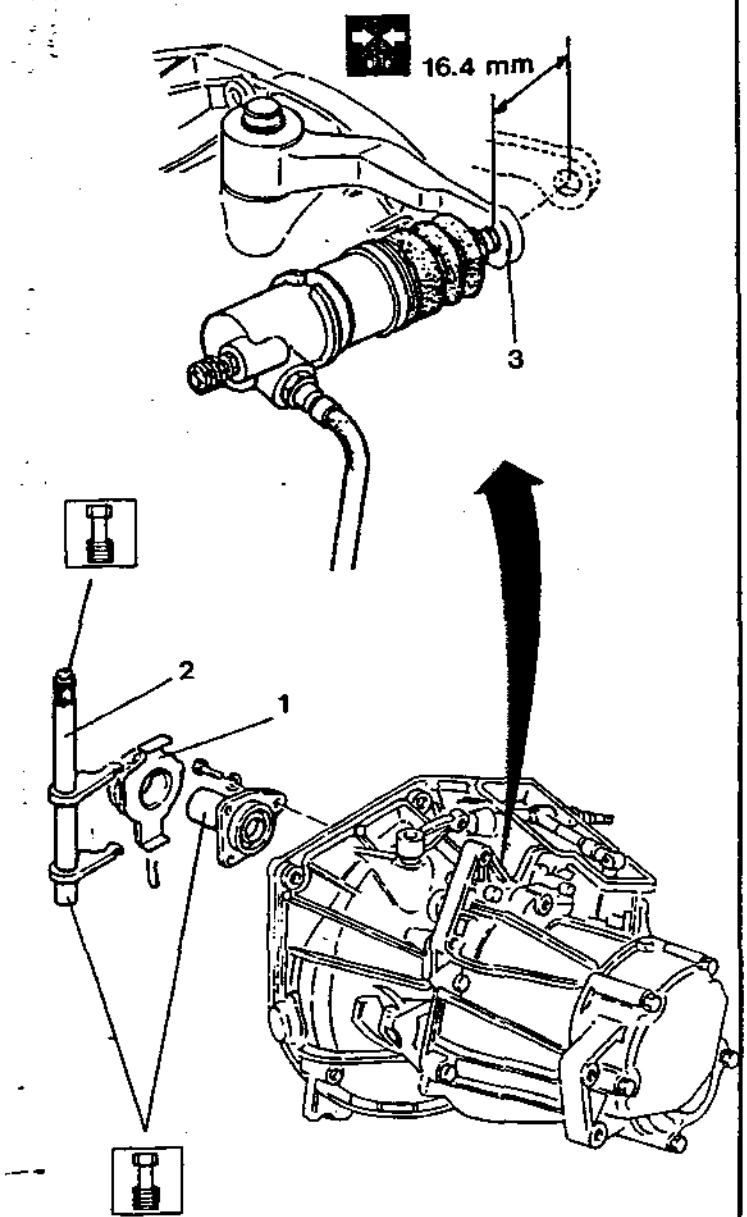
27.2 ÷ 33.6 Nm (2.77 ÷ 3.42 kgm)

CHECKS AND INSPECTIONS

1. Check the clutch plate for even wear of the gaskets and their minimum thickness.
   Check for signs of burning or vitrification and the correct installation and integrity of the springs of the flexible coupling.
   Check the clutch plate hub for damage, freedom of movement and limited play on the power take-off shaft coupling.
2. Check the working surfaces of the flywheel and disc pressure plate for signs of overheating, irregular wear, nicks or parts missing. If necessary replace the disc pressure plate and/or grind the engine flywheel (See: REPAIR MANUAL - ENGINES - GR. 01).



1. Check the thrust bearing for noise, excessive play and freedom of movement in the sheath.
2. Check the fork for cracks, deformation, freedom of movement and excessive wear of the working surfaces.
3. Check that the disengagement stroke of the clutch control lever is 16.4 mm; if the stroke is below this figure, check the efficiency of the hydraulic circuit.



TECHNICAL CHARACTERISTICS AND SPECIFICATIONS

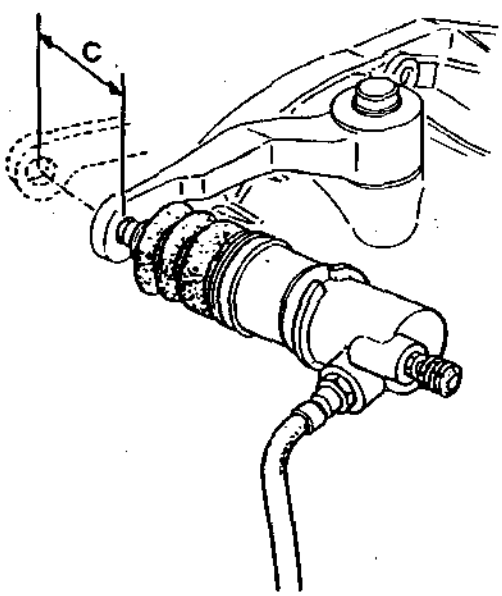
GENERAL INDICATIONS

FLUIDS AND LUBRICANTS

APPLICATION	TYPE	NAME
Thrust bearing seat and clutch control lever shaft rod	GREASE	TUTELA MR3
Clutch control cylinder pushrod		
Lubrication of pump inner components and hydraulic system filling	FLUID Class: DOT 4 SAE J170 3F	ALFA ROMEO BRAKE FLUID SUPER DOT 4

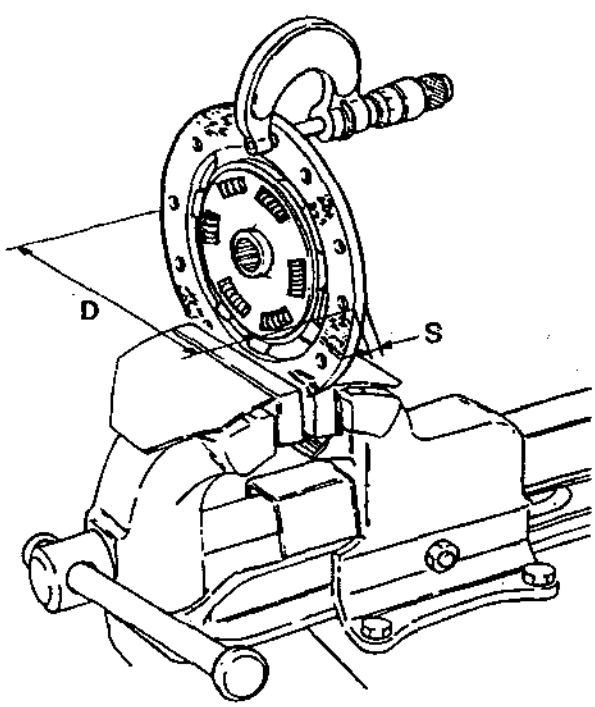
CHECKS AND ADJUSTMENTS

CLUTCH CONTROL LEVER



Clutch control lever disengagement travel .....C = 16.4 mm

CLUTCH DISK



Clutch disk thickness ..... S = 7.1 ÷ 7.7 mm
Clutch disk diameter .....D = 229 mm

TIGHTENING TORQUES

Description	N·m	kg·m
Cylindrical screw with hexagon for fixing clutch mechanism	17.85 - 22.05	1.82 - 2.25
Union for connection of pipe to hose - pump and cylinder sides	17.1 - 18.9	1.74 - 1.92
Hexagonal-head screw for securing intermediate anchoring bracket on clutch control hose	11.9 - 14.7	1.21 - 1.49
Hexagonal-head screw securing clutch control cylinder bracket to gearbox	11.9 - 14.7	1.21 - 1.49

SPECIAL TOOLS

TOOL NUMBER	DESCRIPTION
1.820.126.000	Clutch disk centering spindle
1.821.215.000	Thrust bearing puller (only for clutch version with tie-rods)