

CLUTCH**0000-00****GENERAL****1. SPECIFICATIONS**

Description		Specification
Operating type		Hydraulic
Clutch pedal	Type	Suspended
	Maximum pedal stroke	Diesel engine equipped vehicle: 158 mm
		Gasoline engine equipped vehicle: 150 mm
Pedal free play	5 ~ 10 mm	
Clutch disc	Type	Single dry diaphragm
	Dimension of facing	240 X 155 X 4.0 mm
	Facing size/quantity	263 cm ² /2
	Thickness of disc	Free: 9.35 ~ 9.95 mm When loaded: 8.9 ± 0.2 mm
Clutch cover assembly setting force		9,600 N
Clutch master cylinder	Stroke	28.4 mm
	Inner diameter	ø15.87 mm
Concentric slave cylinder	Stroke	7.0 mm
	Sectional area	630 mm ²
Clutch fluid		DOT 3 or DOT 4

2. TIGHTENING TORQUE

Description	Tightening Torque	
	Clutch housing bolt (8 locations)	5.0 ~ 6.0 kgf•m
Clutch cover (pressure plate) bolt	2.1 ~ 2.7 kgf•m	21 ~ 27 Nm
Concentric slave cylinder bolt (3 locations)	1.0 ~ 1.6 kgf•m	10 ~ 16 Nm
Concentric slave cylinder flare nut	2.0 ~ 2.5 kgf•m	20 ~ 25 Nm
Adaptor flare nut	2.0 ~ 2.5 kgf•m	20 ~ 25 Nm
Clutch oil pipe flange nut	1.52 ~ 1.83 kgf•m	15 ~ 18 Nm
Master cylinder bolt	3.05 ~ 4.07 kgf•m	30 ~ 40 Nm
Fulcrum (clutch pedal bushing) bolt/nut	1.63 ~ 2.24 kgf•m	16 ~ 22 Nm
Clutch pedal bracket mounting bolt	0.81 ~ 1.83 kgf•m	8 ~ 18 Nm
Stopper bolt	1.63 ~ 2.24 kgf•m	16 ~ 22 Nm

Modification basis	
Application basis	
Affected VIN	

OVERVIEW AND OPERATION PROCESS

1. OVERVIEW

1) Driving Elements

The driving elements consist of two flat surfaces machined to a smooth finish. One of these is the rear face of the engine flywheel and the other is the clutch pressure plate. The clutch pressure plate is fitted into a steel cover, which is bolted to the flywheel.

2) Driven Elements

The driven element is the clutch disc with a splined hub which is free to slide lengthwise along the splines of the input shaft.

The driving and driven elements are held in contact by spring pressure. This pressure is exerted by a diaphragm spring in the clutch pressure plate assembly.

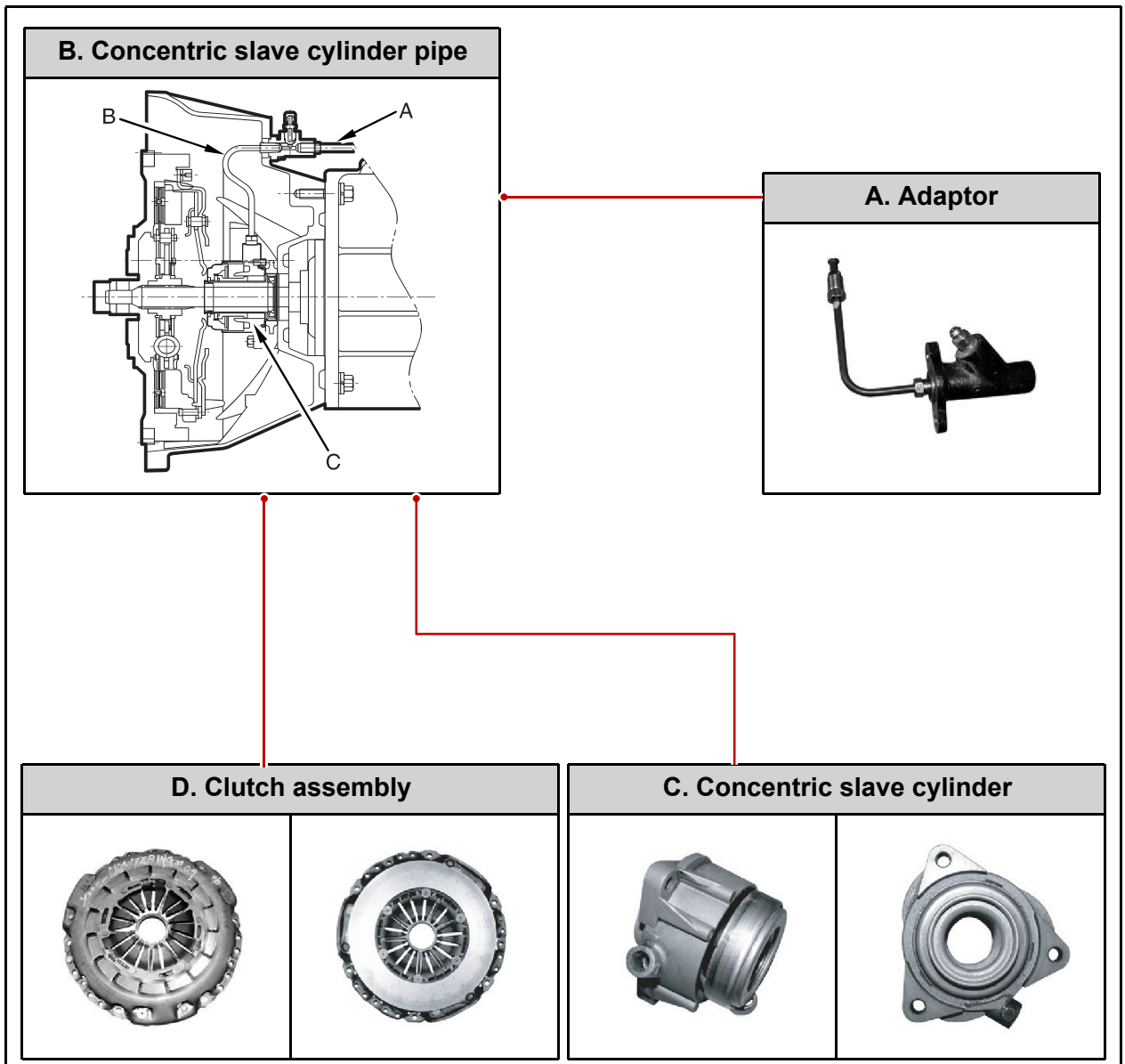
3) Operating Elements

The clutch release system consists of the clutch pedal and clutch release cylinder. This system directly releases the clutch by using hydraulic pressure while the conventional clutch system releases the clutch by using release lever and release fork. This system provides higher efficiency than conventional clutch system, and its durability is superior.

Clutch release cylinder pipe (mounted on transmission case)
Concentric slave cylinder pipe (mounted inside of transmission)
Concentric slave cylinder

Modification basis	
Application basis	
Affected VIN	

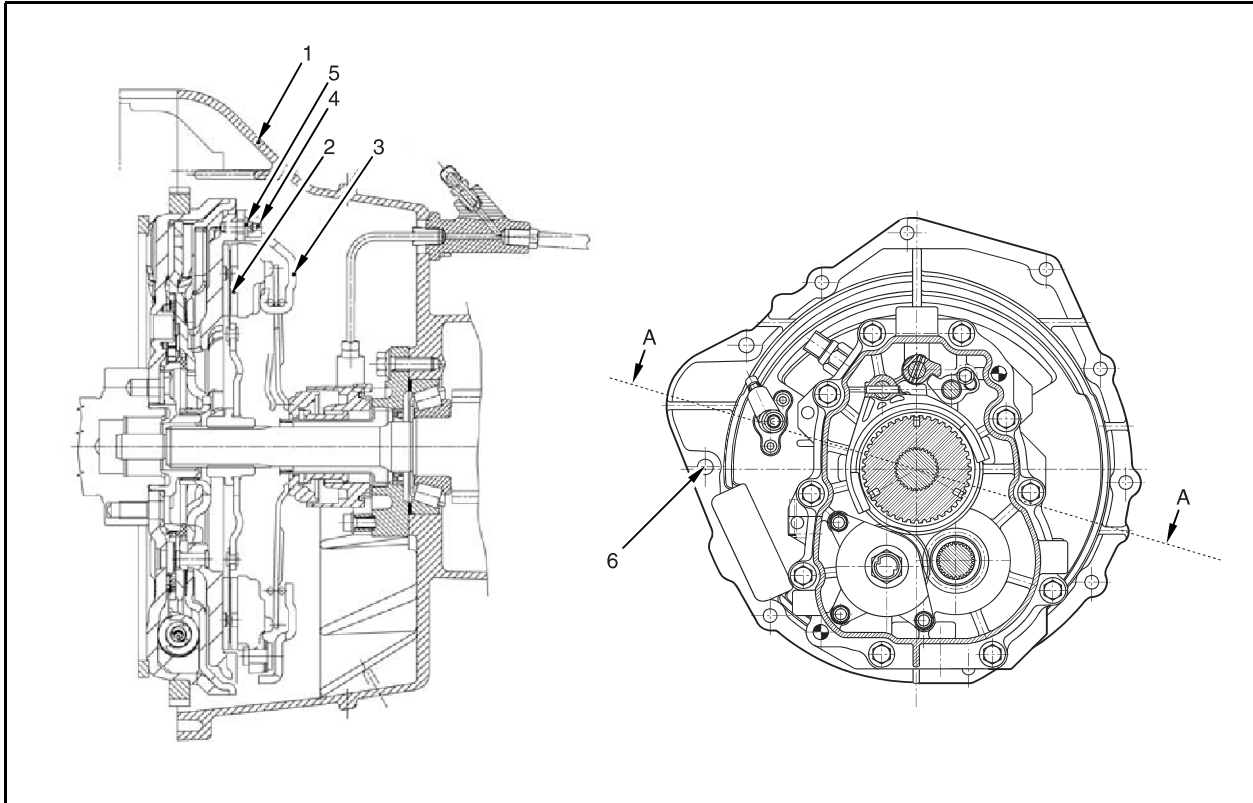
2. COMPONENTS AND LOCATIONS



Modification basis	
Application basis	
Affected VIN	

- DC 5-SPEED
- TGS LEVER
- MANUAL TRANSMISSION
- CLUTCH**
- PART TIME
- TORQUE ON
- ALL WHEEL
- IWE
- AXLE
- IO/IRDA AXLE
- PROPELLER
- STEERING
- SUSPENSION
- IRS SUSPENSION
- ELECTRONIC
- BRAKE SYSTEM
- ANTI-BRAKE

► CROSS SECTIONAL VIEW OF CLUTCH ASSEMBLY

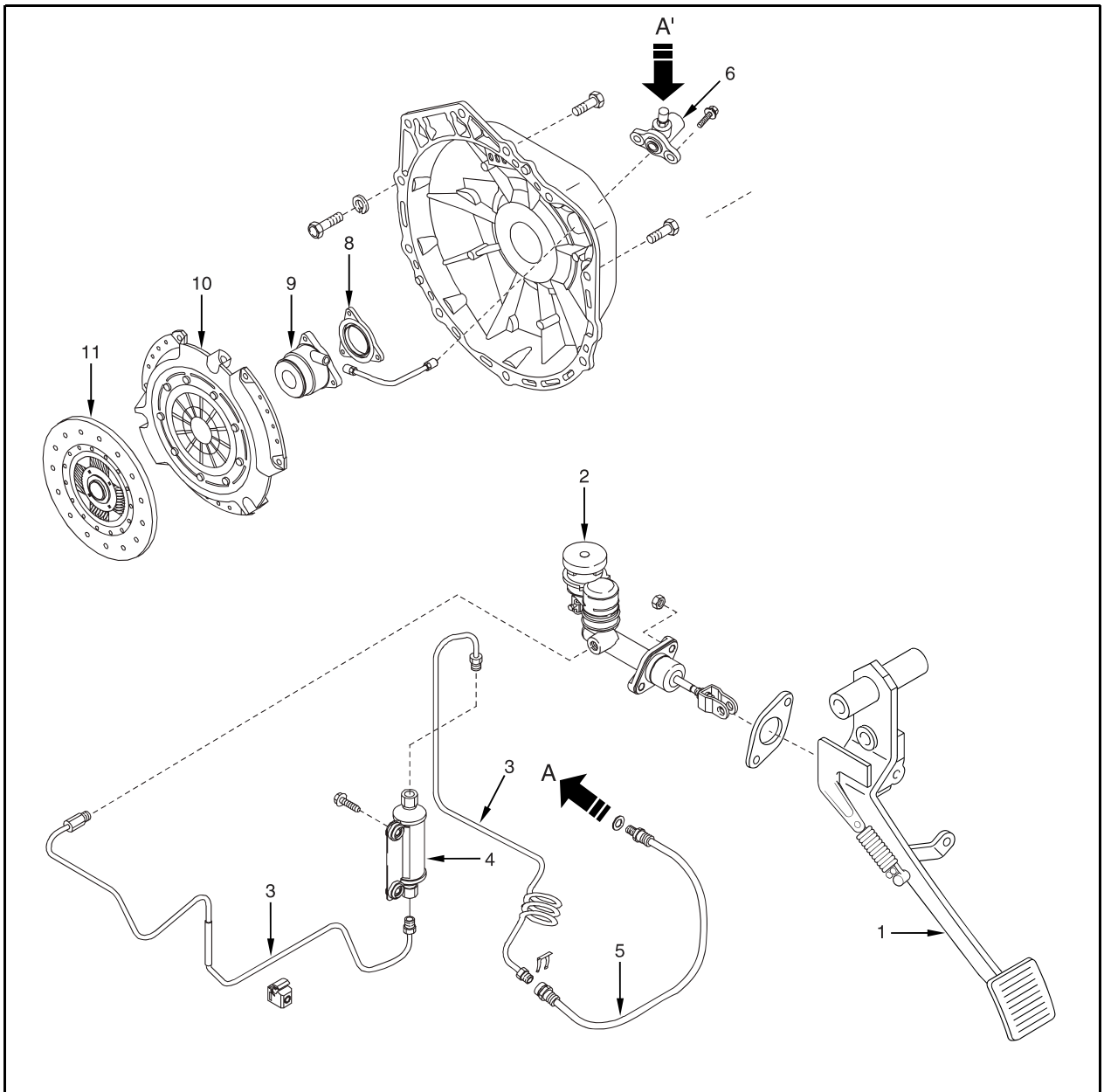


1. Transmission housing
2. Clutch disc assembly
3. Clutch disc cover assembly

4. Bolt
5. Washer
6. Bolt

Modification basis	
Application basis	
Affected VIN	

► CLUTCH COMPONENTS



- 1. Clutch pedal
- 2. Clutch master cylinder
- 3. Clutch hydraulic line
- 4. Clutch fluid chamber
- 5. Clutch fluid hose
- 6. Adaptor

- 7. Clutch housing
- 8. Concentric slave cylinder cover
- 9. Concentric slave cylinder
- 10. Clutch cover
- 11. Clutch disc

Modification basis	
Application basis	
Affected VIN	

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