

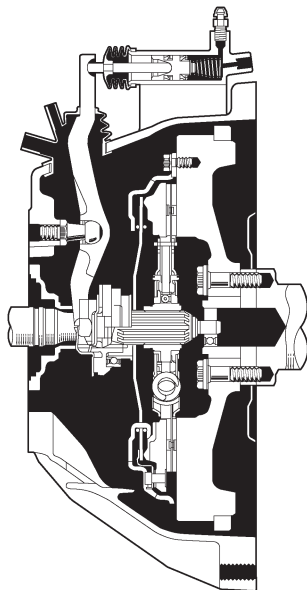
CHASSIS

CLUTCH

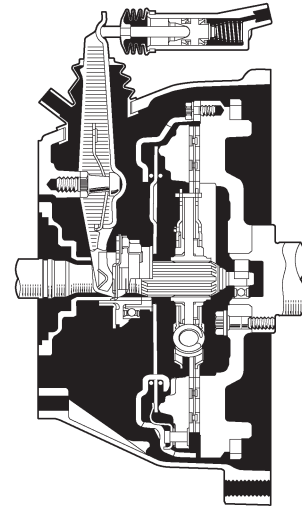
■ DESCRIPTION

The new Hilux has a clutch system with the following features.

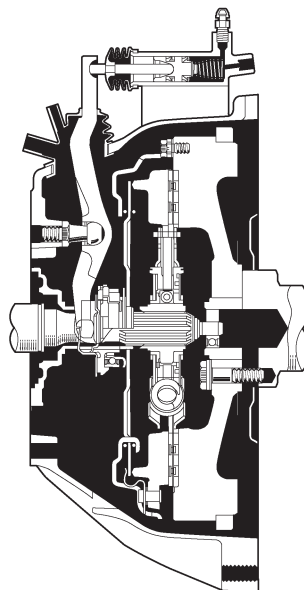
- A dry, single-plate clutch operated by hydraulic pressure is used, which is matched to the performance of each engine.
- A clutch master cylinder made of plastic has been adopted on except 1GR-FE engine models.
- A clutch disc that uses an organic solvent-free material has been adopted to help protect the environment. In addition, the components of the clutch damper have been optimized to realize wear resistance and reduce noise and vibration.
- A clutch accumulator is used to reduce the noise and vibration on the 1KD-FTV, 2KD-FTV, 2KD-FTV High Version and 1GR-FE engine models.
- A turnover mechanism, which reduces clutch pedal effort, is used on the 1KD-FTV, 2KD-FTV High Version and 1GR-FE engine models.



2KD-FTV and 1TR-FE



2TR-FE



**1GR-FE, 1KD-FTV and
2KD-FTV(High Version)**

► Specifications ◀

Engine		1TR-FE	2TR-FE	1GR-FE
Clutch	Type	Dry Type Single Plate Clutch Diaphragm Spring	←	←
	Operation	Hydraulic	←	←
Clutch Cover	Type	DST* ¹	←	←
	Size mm (in.)	236 (9.29)	250 (9.85)	260 (10.24)
	Installed Load N	4,900	5,880	7,850
Clutch Disc	Facing Size* ² mm (in.)	236 x 150 x 3.5 (9.29 x 5.91 x 0.14)	250 x 160 x 3.5 (9.29 x 6.30 x 0.14)	260 x 170 x 3.5 (10.24 x 6.69 x 0.14)
	Facing Area cm ² (in. ²)	260 (40.3)	289 (44.8)	303 (47.0)
Master Cylinder	Type	Plunger	←	Conventional
	Cylinder Dia. mm (in.)	15.87 (0.62)	←	19.05 (0.75)
Release Cylinder	Type	Non-Adjustable	←	←
	Cylinder Dia. mm (in.)	20.64 (0.81)	22.2 (0.87)	19.05 (0.75)
Clutch Accumulator		—	—	with
Clutch Pedal		Conventional	←	Turnover

*¹: DST (Diaphragm Spring Turnover) *²: Outer Diameter x Inner Diameter x Thickness

Engine		2KD-FTV	2KD-FTV High Version	1KD-FTV
Clutch	Type	Dry Type Single Plate Clutch Diaphragm Spring	←	←
	Operation	Hydraulic	←	←
Clutch Cover	Type	DST* ¹	←	←
	Size mm (in.)	236 (9.29)	260 (10.24)	←
	Installed Load N	4,900	7,350	←
Clutch Disc	Facing Size* ² mm (in.)	236 x 150 x 3.5 (9.29 x 5.91 x 0.14)	260 x 170 x 3.5 (10.24 x 6.69 x 0.14)	←
	Facing Area cm ² (in. ²)	260 (40.3)	303 (47.0)	303 (47.0)* ³ 298 (46.2)* ⁴
Master Cylinder	Type	Plunger	←	←
	Cylinder Dia. mm (in.)	15.87 (0.62)	←	←
Release Cylinder	Type	Non-Adjustable	←	←
	Cylinder Dia. mm (in.)	20.64 (0.81)	19.05 (0.75)	←
Clutch Accumulator		with	←	←
Clutch Pedal		Conventional	Turnover	←

*¹ : DST (Diaphragm Spring Turnover) *²: Outer Diameter x Inner Diameter x Thickness

*³ : Only for Thailand and Australia models. *⁴ : Only for Central and South America models.