CHASSIS

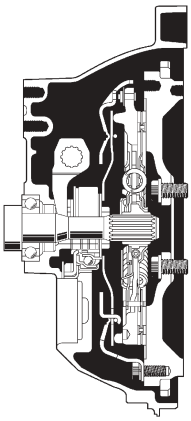
CLUTCH

■ DESCRIPTION

New Yaris has a clutch system with the following features.

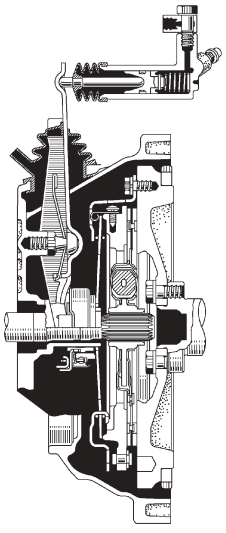
- A dry type single plate clutch which is operated by hydraulic pressure is used.
- A clutch master cylinder made of plastic is used.
- To prevent the transaxle from making gear lash noise as a result of a fluctuation in engine speed, the clutch disc is provided with a pre-damper for the TMMF models.
- A clutch pedal made of plastic is used on the LHD models.
- The clutch systems of C53A and C551A multi-mode manual transmission models have following features.

Outline
● A clutch disc that uses lead-free material is used to help protect the environment. ● Instead of a hydraulic type clutch system, a clutch actuator that operates the clutch electrically is used. For details, see page CH-20. ● An LCC (Load Controlled Clutch cover) mechanism is used in the clutch cover to mechanically adjust the pressure plate height which changes with the wear of the clutch disc facing. For details, see page CH-22.



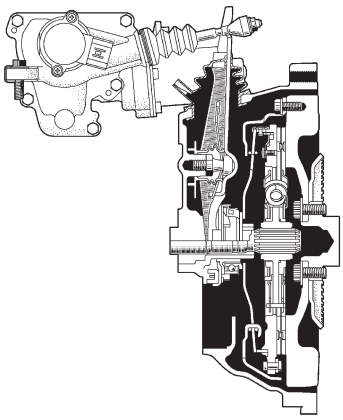
287CH01

For 2SZ-FE & 1KR-FE Engine Models



171CH01

For 1NZ-FE & 2NZ-FE Engine Models



00SCH10Y

For 1ND-TV Engine Model with LCC Mechanism

▶ Specifications ◀

Engine Type		1KR-FE		2SZ-FE	
Transaxle Type		C551	C551A*1	C551	C551A*1
Clutch	Type	Dry Type Single Plate Clutch Diaphragm Spring	←	←	←
	Operation	Hydraulic	Electric Motor	Hydraulic	Electric Motor
Clutch Cover	Type	DST*2	DST*2 with LCC Mechanism	DST*2	DST*2 with LCC Mechanism
	Size mm (in.)	190 (7.48)	←	200 (7.87)	←
Clutch Disc	Facing Size*3 mm (in.)	190 x 134 x 3.5 (7.48 x 5.27 x 0.13)	190 x 132 x 3.5 (7.48 x 5.19 x 0.13)	200 x 140 x 3.5 (7.87 x 5.51 x 0.13)	←
	Facing Area cm^2 ($in.^2$)	147 (23.5)	146 (23.3)	160 (25.6)	←
Master Cylinder	Type	Plunger	—	Plunger	—
	Cylinder Diameter mm (in.)	15.87 (0.52)	—	15.87 (0.52)	—
Release Cylinder	Type	Non-adjustable	—	Non-adjustable	—
	Cylinder Diameter mm (in.)	20.64 (0.81)	—	20.64 (0.81)	—
Clutch Start System		Standard	—	Standard	—

Engine Type		1NZ-FE	2NZ-FE	1ND-TV	
Transaxle Type		C54	C54	C53	C53A*1
Clutch	Type	Dry Type Single Plate Clutch Diaphragm Spring	←	←	←
	Operation	Hydraulic	←	←	Electric Motor
Clutch Cover	Type	DST*2	←	←	DST*2 with LCC Mechanism
	Size mm (in.)	212 (8.35)	200 (7.87)	212 (8.35)	←
Clutch Disc	Facing Size*3 mm (in.)	212 x 140 x 3.5 (8.35 x 5.51 x 0.13)	200 x 140 x 3.5 (7.87 x 5.51 x 0.13)	212 x 140 x 3.5 (8.35 x 5.51 x 0.13)	←
	Facing Area cm^2 (in.2)	199 (30.8)	160 (25.6)	199 (30.8)	←
Master Cylinder	Type	Plunger	←	←	—
	Cylinder Diameter mm (in.)	15.87 (0.52)	←	←	—
Release Cylinder	Type	Non-adjustable	←	←	—
	Cylinder Diameter mm (in.)	20.64 (0.81)	19.05 (0.75)	←	—
Clutch Start System		Standard	←	←	—

*1: With Multi-mode Manual Transmission System *2: DST (Diaphragm Spring Turnover)
*3: Outer Diameter x Inner Diameter x Thickness

CH