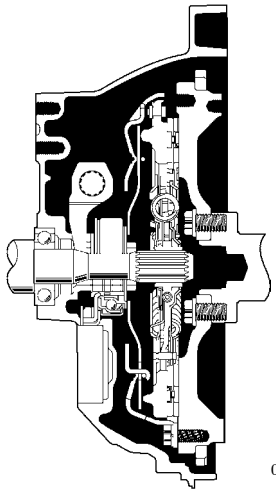
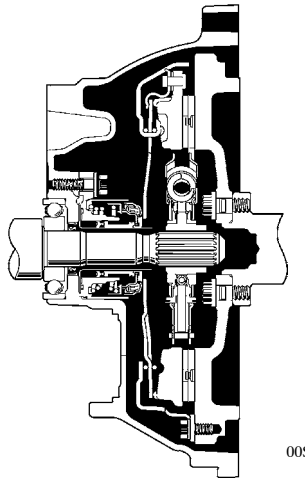
■CLUTCH

1. General

- The following clutch system is used on the models with the 1KR-FE (eco-model package) and 2ZR-FE engines.
- CSC (Concentric Slave Cylinder) is used in the clutch hydraulic pressure system on the models with the 2ZR-FE engine.



Models with 1KR-FE Engine (Eco-model Package)



Models with 2ZR-FE Engine

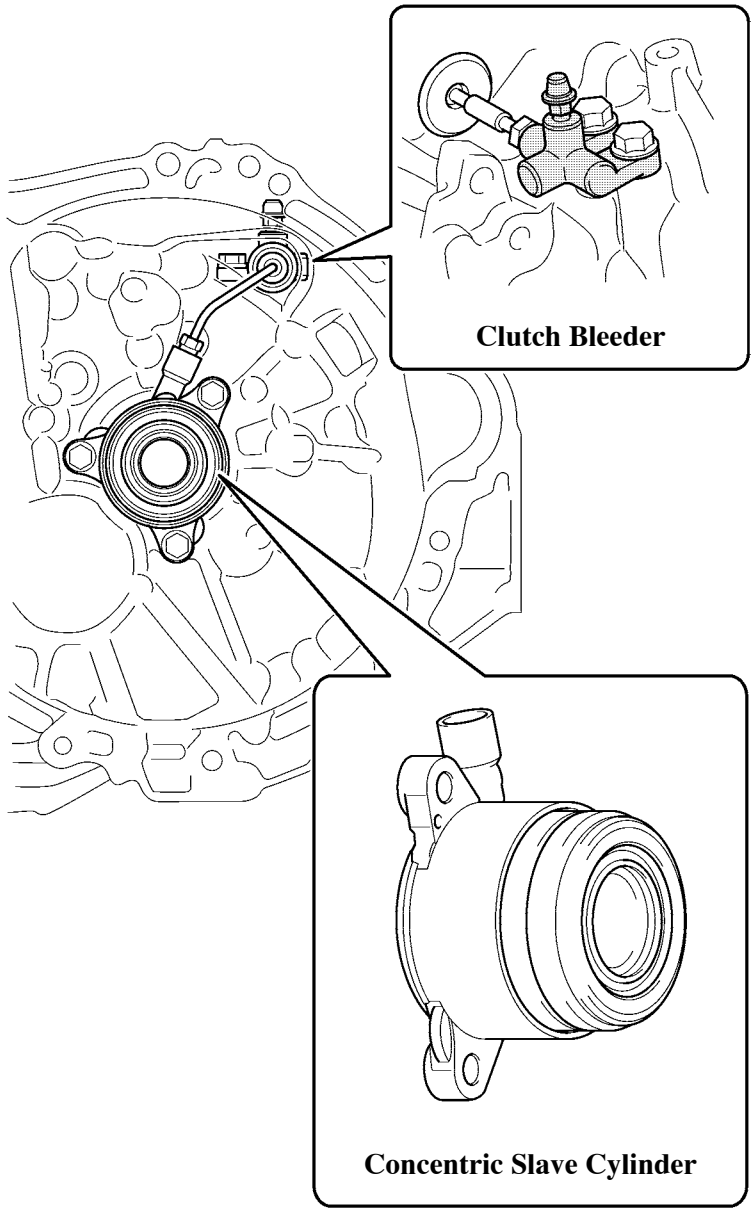
▶ Specifications ◀

Engine Type		1KR-FE (Eco-model Package)	2ZR-FE
Transaxle Type		C551	EC67
Clutch	Type	Dry Type Single Plate Clutch Diaphragm Spring	←
	Operation	Hydraulic	←
Clutch Cover	Type	Diaphragm Spring Turnover	←
	Size mm (in.)	200 (7.87)	212 (8.35)
	Installed Load N	3680	5400
Clutch Disc	Facing Size* mm (in.)	200 × 140 × 3.5 (7.87 × 5.51 × 0.14)	212 × 140 × 3.5 (8.35 × 5.51 × 0.14)
	Facing Area cm^2 ($in.^2$)	160 (24.8)	199 (30.8)
Master Cylinder	Type	Plunger	←
	Cylinder Diameter mm (in.)	15.87 (0.52)	←
Release Cylinder	Type	Non-adjustable	CSC
	Cylinder Diameter mm (in.)	20.64 (0.81)	—
Clutch Start System		Standard	←

*: Outer diameter × Inner diameter × Thickness

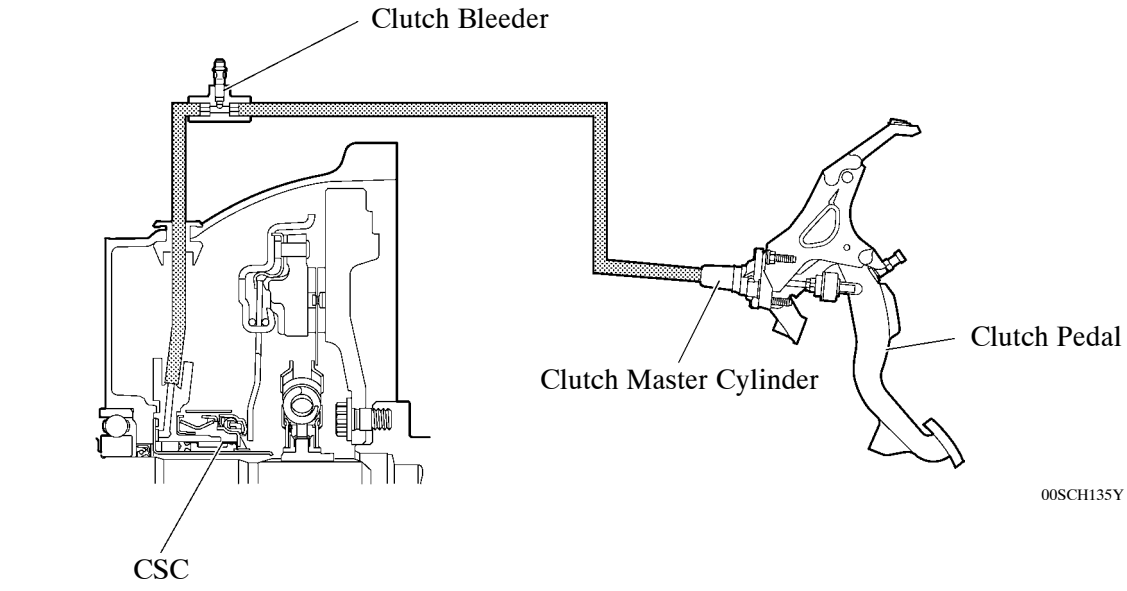
2. CSC (Concentric Slave Cylinder)

- The release cylinder and the release bearing have been combined into one unit. Because of this, the conventional fork and fork support have been discontinued and it is now possible to directly push the bearing with fluid pressure, thus achieving excellent clutch operation feeling and weight reduction.
- A clutch bleeder for deflation is on the transaxle to ensure serviceability.

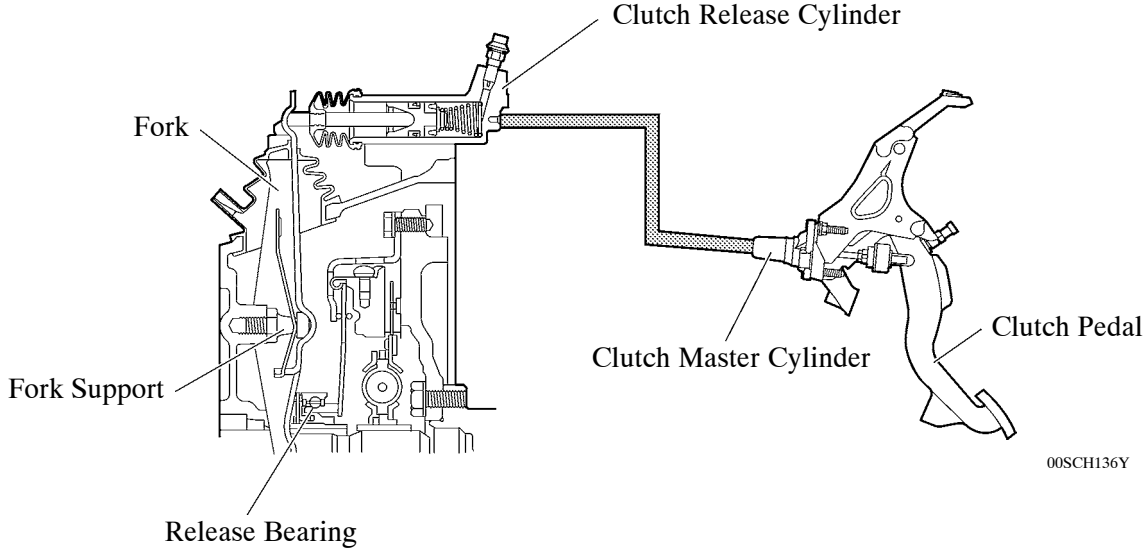


00SCH132I

▶ CSC System ◀



▶ Previous System ◀



Service Tip

- The CSC (Concentric Slave Cylinder) can not be disassembled.
- When the transaxle is removed from the engine, the piston and piston seal will move to the engine side and the piston seal may be damaged by foreign matter on the sliding surface. When the transaxle is removed from the engine, replace the CSC with a new one.
- The bolts that fasten the CSC to the transaxle are seal bolts. When the bolts are removed, replace them with new ones.
- The clutch fluid should be replaced or inspected according to the Maintenance Schedule and Owner's Manual.

For details of the CSC replacement procedure, refer to the YARIS Repair Manual.