

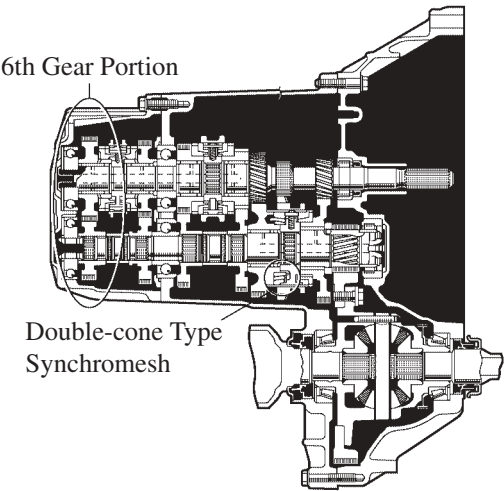
MANUAL TRANSAXLE

1. General

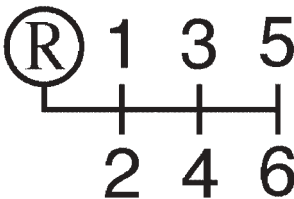
The Europe model of the new MR2 has been changed from the C52 5-speed manual transaxle to the C66 6-speed manual transaxle. This manual transaxle is based on the C52 type with a 6th gear added.

- The 6th gear reduces noise when driving at high speed and increases fuel economy.
- With the adoption of the 6th gear, the shift pattern has changed, and a reverse mis-shift prevention mechanism in the shift and select mechanism is used. Also, a warning buzzer (built into the combination meter) sounds when the shift lever shifts into reverse. This buzzer detects the reverse position using the back-up light switch.
- The helical gear type TORSEN* LSD (Limited Slip Differential) has changed from optional equipment to standard equipment. (*: TORSEN is ZEXEL’s registered trademark.)
- The following items are used to increase shift feeling.

Mechanism	Item	C66	C52
Shift and Select	<ul style="list-style-type: none">• Mass damper on the shift and select shaft• Teflon bushings in support portion for shift and select shaft• Rolling type lock ball assembly	○	○
Gear Train	Double-cone type synchromesh mechanism for 2nd gear	○	○

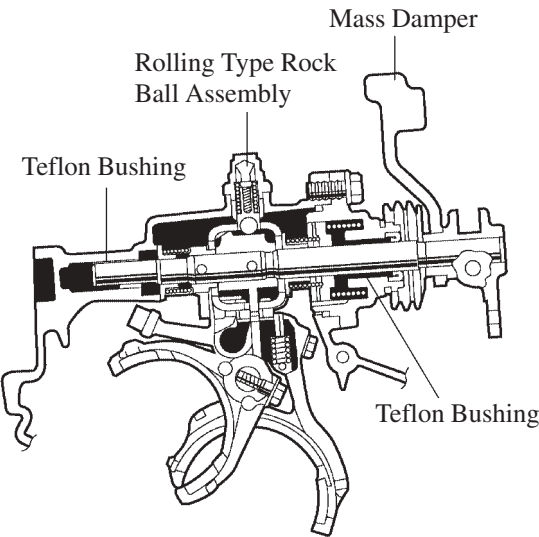


229MR13

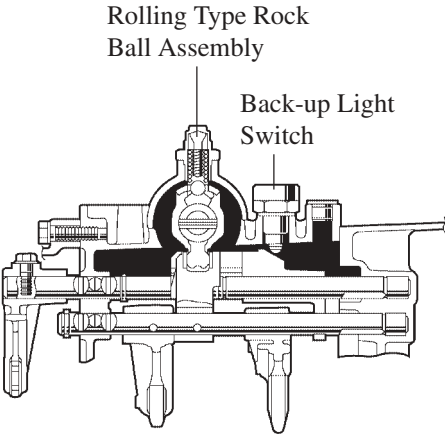


Shift Pattern

169CH08



229MR14



229MR15

► Specification ◀

Model		New	Previous
Type		C66 (6-speed)	C52 (5-speed)
Gear Ratio	1st	3.166	←
	2nd	1.904	←
	3rd	1.310	←
	4th	0.969	←
	5th	0.815	←
	6th	0.725	—
	Reverse	3.250	←
Differential Gear Ratio		3.941	←
Oil Capacity Liters (US qts, Imp. qts)	without LSD	—	1.9 (2.0, 1.7)
	with LSD	2.1 (2.2, 1.9)	1.8 (1.9, 1.6)
Oil Viscosity		SAE 75W-90	←
Oil Grade		API GL-4 or GL-5	←
Weight (Reference)* kg (lb)	without LSD	—	39.0 (86.0)
	with LSD	43.5 (95.9)	40.5 (89.3)

*: Weight shows the figure with the oil fully filled.

2. Reverse Mis-Shift Prevention Mechanism

When an attempt is made to select 1st or 2nd from neutral, the select spring for the 1st and 2nd gear is activated. If a further effort is made to select in the reverse direction, the lock ball applies a load to overcome the protrusion of the No.1 shift inner lever and a load to push the reverse select spring.

As a result, the select operation load towards reverse becomes greater than the select operation load towards 1st or 2nd, thus preventing from miss shifting and facilitating the correct gear selection.

