

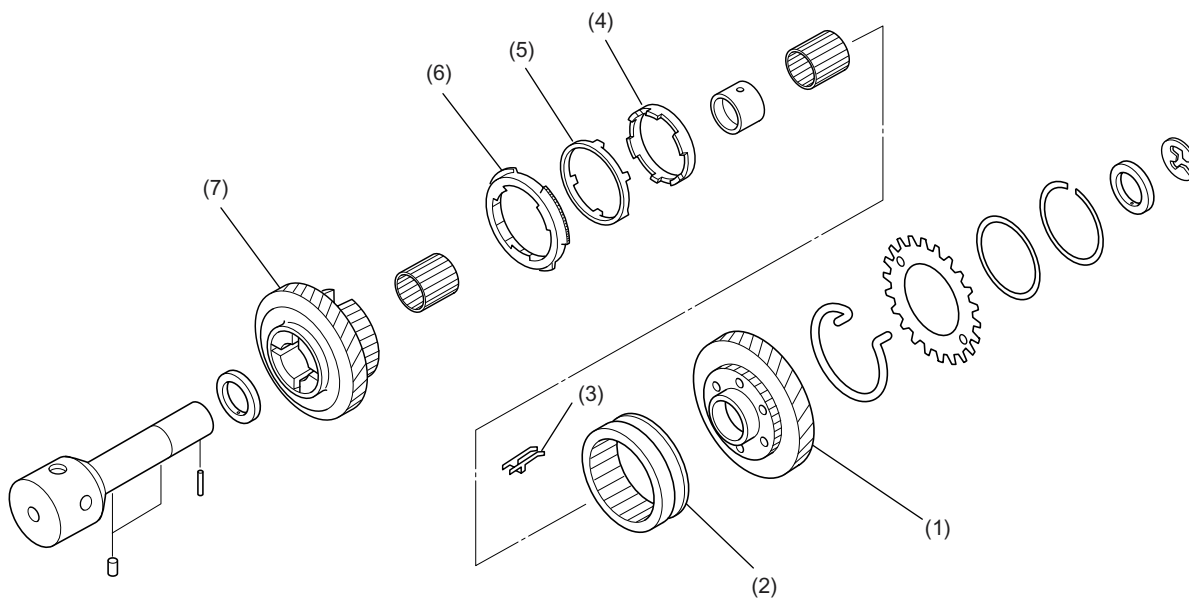
REVERSE IDLER GEAR ASSEMBLY (WITH SYNCHRONIZING MECHANISM)

MANUAL TRANSMISSION AND DIFFERENTIAL

4. Reverse Idler Gear Assembly (with Synchronizing Mechanism)

- A constant-mesh type reverse gearing is used in the six-speed manual transmission.
- The reverse idler gear assembly is provided with a double-cone synchronizer.

Soon after disengagement of the clutch, the reverse gear remains rotating by an inertial force. If the driver makes a shift while the reverse gear is still rotating, an undesirable “gear clash” would occur. The double-cone synchronizer prevents this by synchronizing the speed of the No. 2 reverse idler gear with that of the reverse sleeve. It also allows the driver to make a smooth shift into the reverse gear.



MT-00984

- (1) No. 1 reverse idler gear
- (2) Reverse sleeve
- (3) Insert key

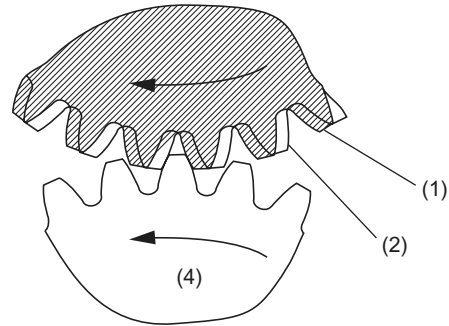
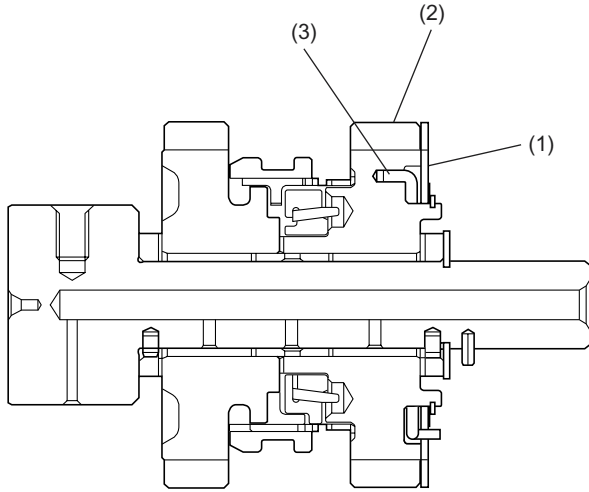
- (4) Inner balk ring
- (5) Synchronizer cone
- (6) Outer balk ring

- (7) No. 2 reverse idler gear

REVERSE IDLER GEAR ASSEMBLY (WITH SYNCHRONIZING MECHANISM)

MANUAL TRANSMISSION AND DIFFERENTIAL

● To prevent rattling noise that may occur with the constant-mesh type reverse gearing, No.1 reverse idler gear is fitted with a sub gear that has the same number of teeth as the No. 1 reverse idler gear. The sub gear is preloaded in the rotating direction by a spring so that it functions to reduce backlash between gear teeth and consequent rattling noise when the No. 1 reverse gear meshes with the reverse drive gear.



MT-00896

- (1) Sub gear
- (2) No. 1 reverse idler gear

- (3) Spring
- (4) Reverse drive gear