3. High Clutch

When the 3rd or 4th gear is selected, hydraulic pressures are applied to the high clutch from the shift valve and pressure regulator valve. The clutch's drive and driven plates are pressed together, thus transmitting the engine power from the input shaft to the front planetary carrier through the high clutch hub.

A cover is placed inside the piston, and the space between the piston and the cover is filled with ATF. When the high clutch is not in engagement, the centrifugal force generated in the ATF inside the cover cancels out the centrifugal force generated in the ATF remaining behind the high clutch piston, thus preventing incomplete disengagement of the clutch.

When the high clutch is engaged, the pressure pushing the clutch piston is much larger than the counteracting force of the ATF in the cover, so the clutch remains engaged.



- (1) High clutch drum
- (2) Lathe cut seal ring (outer)
- (3) Lathe cut seal ring (inner)
- (4) Reverse clutch piston
- (5) Lathe cut seal ring (outer)
- (6) Lathe cut seal ring (inner)
- (7) High clutch piston
- (8) Spring retainer
- (9) Cover
- (10) Snap ring
- (11) Driven plate
- (12) Drive plate

- S3H0225A
- (13) Retaining plate
- (14) Snap ring
- (15) Thrust needle bearing
- (16) High clutch hub