28.Multi-plate Clutch

A: REMOVAL

Remove the multi-plate clutch in the same manner as with the extension case. <Ref. to AT-79, REMOVAL, Extension Case.>

B: INSTALLATION

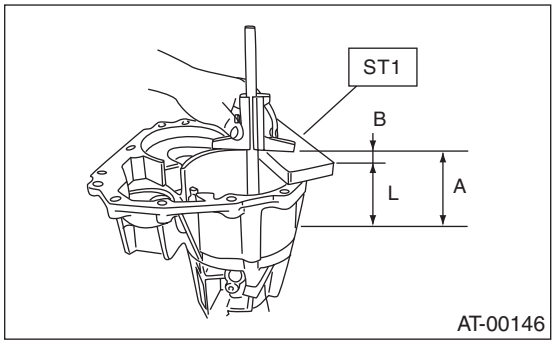
Install the multi-plate clutch in the same manner as with the extension case. <Ref. to AT-79, INSTALLATION, Extension Case.>

C: INSPECTION

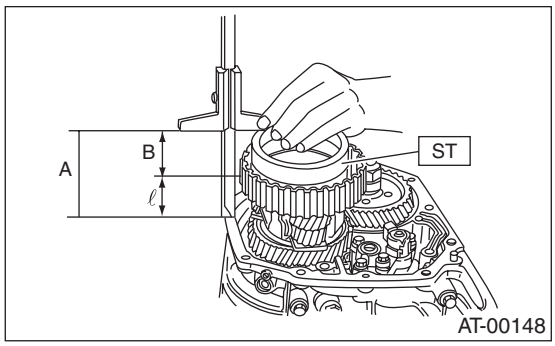
- Check the drive plate facing for wear and damage.
- Check the snap ring for wear, and the return spring for permanent set, breakage and deformation.
- Check the D ring for damage.
- Measure the mutli-plate clutch clearance and adjust to within specifications. <Ref. to AT-90, ADJUSTMENT, Multi-plate Clutch.>

D: ADJUSTMENT

1) Remove drive plates and driven plates from the center differential carrier.
2) Measure distance L from extension case mating surface to multi-plate clutch (LSD) piston with ST.
ST 398643600 GAUGE
L = Measured value − 15 mm
(L = Measured value − 0.59 in)



A: Measured value
B: ST thickness [15 mm (0.59 in)]
L: Distance from end of extension case to end of rear drive shaft
3) Measure the distance " ℓ " from the transmission case mating surface to the center differential clutch drum end surface with ST.
ST 398744300 GAUGE
ℓ = Measured value − 50 mm
(ℓ = Measured value − 1.97 in)
ST 398744300 GAUGE



A: Measured value
B: ST thickness [50 mm (1.97 in)]
ℓ: Measure distance from transmission case mating surface to multi-plate clutch (LSD) piston.
4) Calculation equation:
T = (L + 0.45 mm) − ℓ
[T = (L + 0.0177 in) − ℓ]
T: Distance from clutch drum to multi-plate clutch (LSD) piston
L: Distance from extension case mating surface to multi-plate clutch (LSD) piston
0.45: Gasket thickness
ℓ: Distance from transmission case mating surface to center differential clutch drum

NOTE:
Measure the thickness of drive and driven plates of the mutli-plate clutch (LSD) and obtain the clearance between the measured value and “T”.

Standard:
0.2 — 0.6 mm (0.008 — 0.024 in)

Service limit:
1.6 mm (0.063 in)

If out of specification, replace the plate set (drive and driven plates), and then select a side adjustment plate for the multi-plate clutch (LSD) piston so that the value becomes within specification.

Available driven plates	
Part No.	Thickness mm (in)
31589AA041	1.6 (0.063)
31589AA050	2.0 (0.079)
31589AA060	2.4 (0.094)
31589AA070	2.8 (0.110)