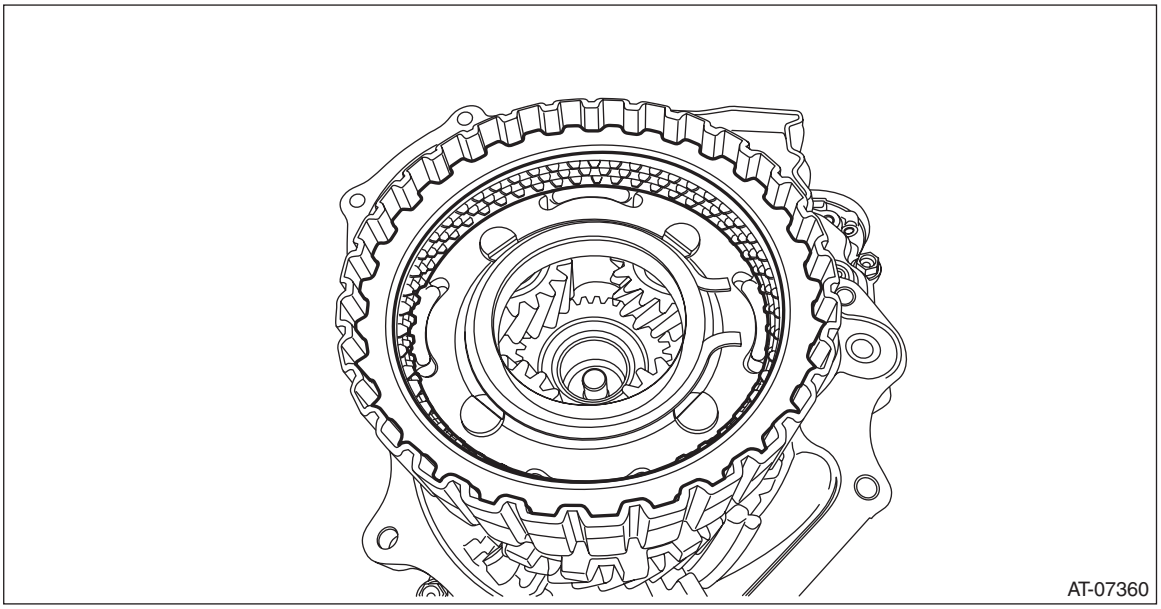
30.Transfer Clutch

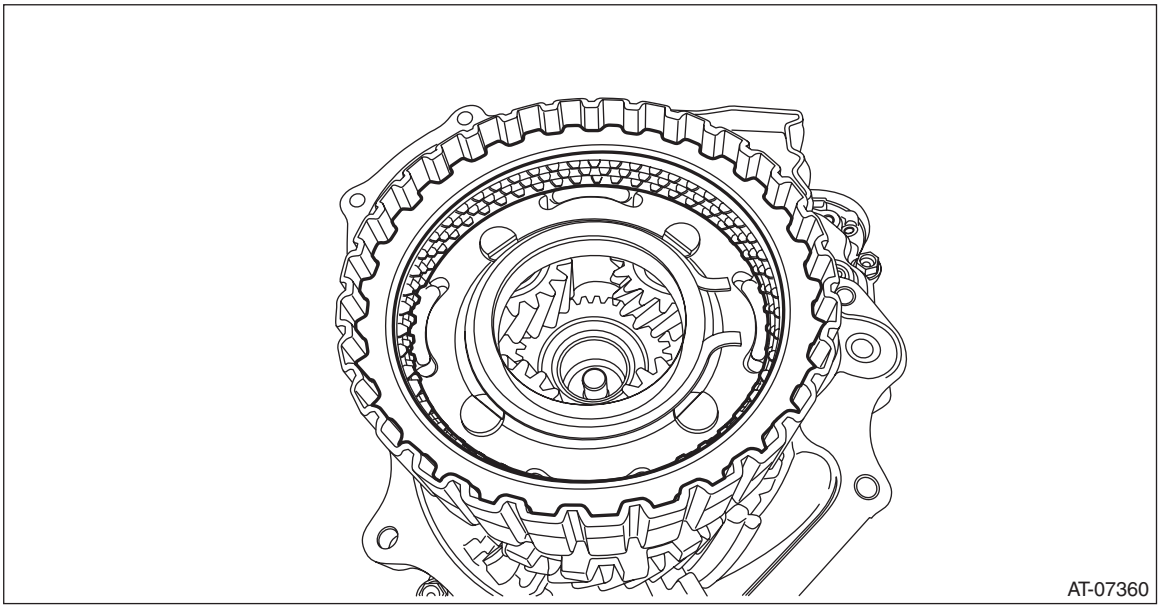
A: REMOVAL

1) Remove the transmission assembly from the vehicle. <Ref. to CVT(TR690)-56, REMOVAL, Automatic Transmission Assembly.>
2) Remove the extension case. <Ref. to CVT(TR690)-142, REMOVAL, Extension Case.>
3) Remove the rear drive shaft. <Ref. to CVT(TR690)-146, REMOVAL, Rear Drive Shaft.>
4) Remove the transfer clutch assembly.



B: INSTALLATION

1) Install the transfer clutch assembly.



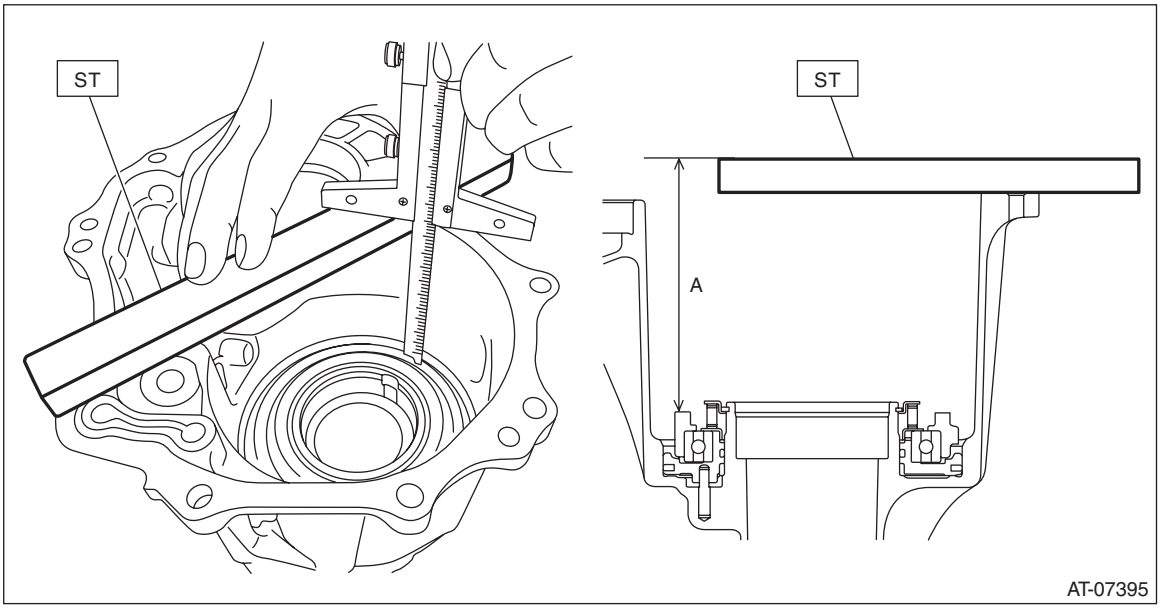
2) Select driven plate No. 3. <Ref. to CVT(TR690)-149, ADJUSTMENT, Rear Drive Shaft.>
3) Attach the selected driven plate No. 3 to the center differential assembly.
4) Install the rear drive shaft. <Ref. to CVT(TR690)-146, INSTALLATION, Rear Drive Shaft.>
5) Install the extension case. <Ref. to CVT(TR690)-143, INSTALLATION, Extension Case.>
6) Install the transmission assembly to the vehicle. <Ref. to CVT(TR690)-69, INSTALLATION, Automatic Transmission Assembly.>

C: INSPECTION

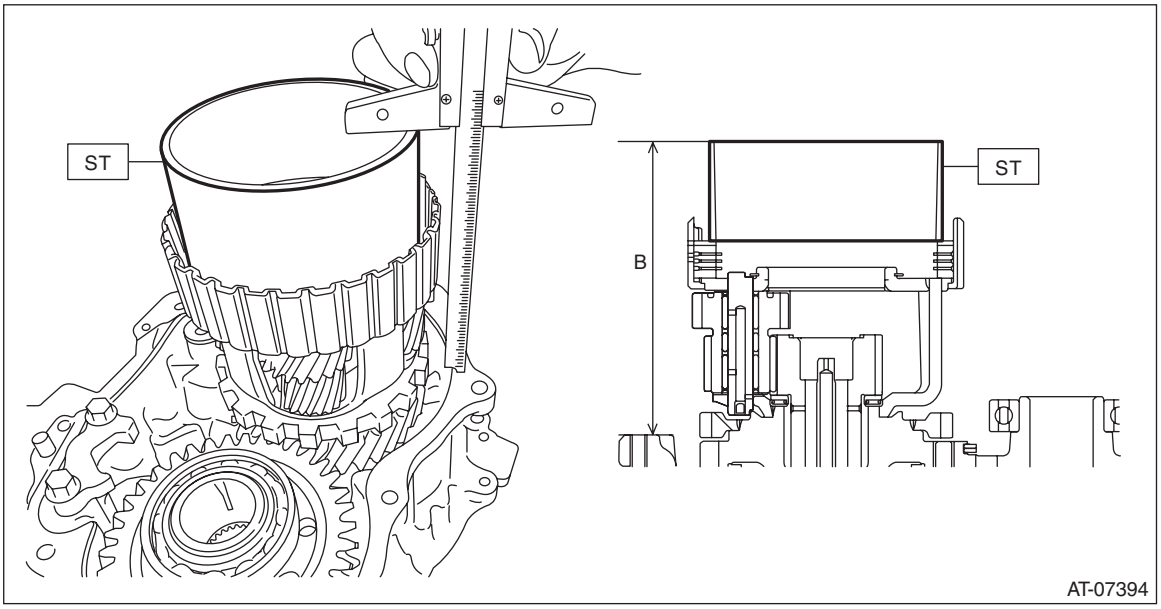
- Inspect the drive plate facing for wear and damage.
- Driven plate for discoloration (burned color)
- Make sure the snap ring is not worn and the return spring has no permanent distortion, damage, or deformation.
- Check the lip seal for damage.
- Inspect the extension end play, and adjust it to within the standard value. <Ref. to CVT(TR690)-152, ADJUSTMENT, Transfer Clutch.>

D: ADJUSTMENT

1) Install the drive plate and driven plate to the center differential carrier.
2) Using the ST, measure depth “A” from the end surface of ST to the transfer clutch piston.
ST 499575400 GAUGE



3) Using the ST, measure the height “B” from the mating surface of intermediate case to the end surface of ST.
ST 398744300 PISTON GUIDE



4) Obtain the thickness of driven plate No. 3 using the following formula to select one driven plate No. 3.
T mm = (A – 15) – (B – 50) + 0.38 – (0.05 — 0.25)
[T in = (A – 0.591) – (B – 1.97) + 0.0149 – (0.002 — 0.01)]
T: Rear drive shaft shim thickness
A: Depth from the ST end surface to the transfer clutch piston
B: Height from the mating surface of the intermediate case to the ST end face
0.38 mm (0.0149 in): Thickness of gasket
15 mm (0.591 in): Thickness of ST
50 mm (1.97 in): Thickness of ST
0.05 — 0.25 mm (0.002 — 0.01 in): Clearance

Driven plate No. 3	
Part No.	Thickness mm (in)
31589AA150	1.6 (0.063)
31589AA160	2.0 (0.079)
31589AA170	2.4 (0.094)
31589AA180	2.8 (0.110)