# 42.Reduction Drive Gear

# A: REMOVAL

1) Remove the transmission assembly from the vehicle. <Ref. to CVT(TH58A)-63, REMOVAL, Automatic Transmission Assembly.>

2) Remove the air breather hose. <Ref. to CVT(TH58A)-171, REMOVAL, Air Breather Hose.>

3) Remove the transmission harness. <Ref. to CVT(TH58A)-143, REMOVAL, Transmission Harness.>

4) Remove the main control valve body. <Ref. to CVT(TH58A)-115, REMOVAL, Control Valve Body.>

5) Remove the turbine speed sensor. < Ref. to CVT(TH58A)-104, REMOVAL, Turbine Speed Sensor. >

6) Remove the secondary speed sensor. <Ref. to CVT(TH58A)-106, REMOVAL, Secondary Speed Sensor.>

7) Remove the front wheel speed sensor. <Ref. to CVT(TH58A)-108, REMOVAL, Front Wheel Speed Sensor.>

8) Remove the inhibitor switch. <Ref. to CVT(TH58A)-101, REMOVAL, Inhibitor Switch.>

9) Remove the extension case. < Ref. to CVT(TH58A)-182, REMOVAL, Extension Case.>

10) Remove the transfer clutch assembly. < Ref. to CVT(TH58A)-186, REMOVAL, Transfer Clutch.>

11) Remove the transfer driven gear assembly. <Ref. to CVT(TH58A)-200, REMOVAL, Transfer Driven Gear.>

12) Remove the transfer drive gear assembly. < Ref. to CVT(TH58A)-203, REMOVAL, Transfer Drive Gear.>

13) Remove the parking pawl. <Ref. to CVT(TH58A)-208, REMOVAL, Parking Pawl.>

14) Remove the oil pan and oil strainer. < Ref. to CVT(TH58A)-112, REMOVAL, Oil Pan and Strainer.>

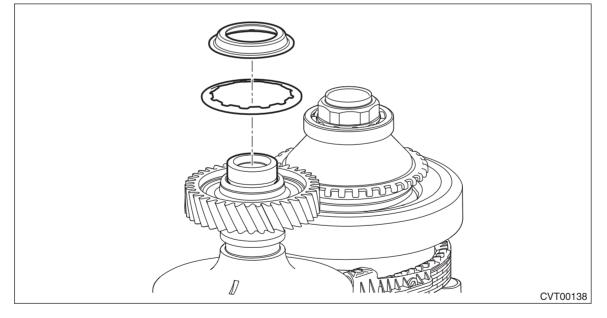
15) Remove the transmission control device. <Ref. to CVT(TH58A)-210, REMOVAL, Transmission Control Device.>

16) Remove the drive motor assembly. <Ref. to CVT(TH58A)-217, REMOVAL, Drive Motor Assembly.>

17) Remove the output clutch assembly. <Ref. to CVT(TH58A)-228, REMOVAL, Output Clutch Assembly.>

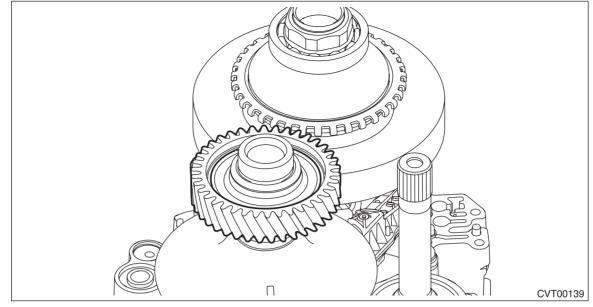
18) Remove the transmission case. < Ref. to CVT(TH58A)-245, REMOVAL, Transmission Case.>

19) Remove the reduction drive gear shims, spring retainers, and dish plates.



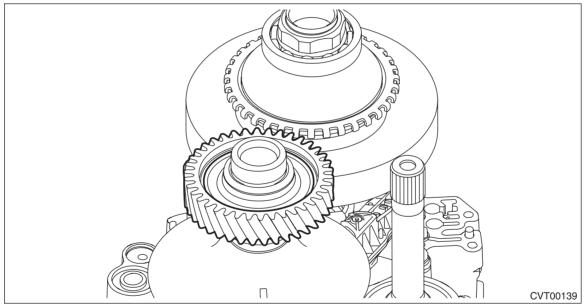
## **Reduction Drive Gear**

20) Remove the reduction drive gear.



## **B: INSTALLATION**

1) Install the reduction drive gear to secondary pulley.

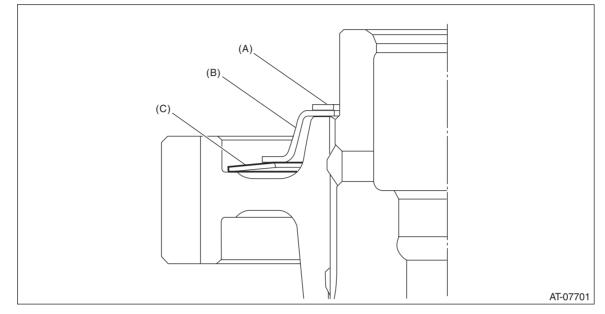


2) Select the reduction drive gear shim. <Ref. to CVT(TH58A)-261, ADJUSTMENT, Reduction Drive Gear.>

3) Install the dish plates, spring retainers, and selected reduction drive gear shims.

### NOTE:

Install the dish plate in the correct direction.



(A) Reduction drive gear shim

- (B) Spring retainer
- (C) Dish plate

4) Install the transmission case. < Ref. to CVT(TH58A)-248, INSTALLATION, Transmission Case.>

5) Install the output clutch assembly. < Ref. to CVT(TH58A)-229, INSTALLATION, Output Clutch Assembly.>

6) Install the drive motor assembly. < Ref. to CVT(TH58A)-221, INSTALLATION, Drive Motor Assembly.>

7) Install the transmission control device. <Ref. to CVT(TH58A)-213, INSTALLATION, Transmission Control Device.>

8) Install the oil strainer and oil pan. <Ref. to CVT(TH58A)-114, INSTALLATION, Oil Pan and Strainer.>

9) Install the parking pawl. <Ref. to CVT(TH58A)-208, INSTALLATION, Parking Pawl.>

10) Install the transfer drive gear assembly. <Ref. to CVT(TH58A)-204, INSTALLATION, Transfer Drive Gear.>

11) Install the transfer driven gear assembly. <Ref. to CVT(TH58A)-201, INSTALLATION, Transfer Driven Gear.>

12) Install the transfer clutch assembly. <Ref. to CVT(TH58A)-188, INSTALLATION, Transfer Clutch.>

13) Install the extension case. <Ref. to CVT(TH58A)-183, INSTALLATION, Extension Case.>

14) Install the inhibitor switch. <Ref. to CVT(TH58A)-102, INSTALLATION, Inhibitor Switch.>

15) Install the secondary speed sensor. <Ref. to CVT(TH58A)-106, INSTALLATION, Secondary Speed Sensor.>

16) Install the front wheel speed sensor. <Ref. to CVT(TH58A)-108, INSTALLATION, Front Wheel Speed Sensor.>

17) Install the turbine speed sensor. <Ref. to CVT(TH58A)-104, INSTALLATION, Turbine Speed Sensor.>

18) Install the main control valve body. <Ref. to CVT(TH58A)-123, INSTALLATION, Control Valve Body.>

19) Install the transmission harness. < Ref. to CVT(TH58A)-151, INSTALLATION, Transmission Harness.>

20) Install the air breather hose. < Ref. to CVT(TH58A)-173, INSTALLATION, Air Breather Hose. >

21) Install the transmission assembly to the vehicle. <Ref. to CVT(TH58A)-77, INSTALLATION, Automatic Transmission Assembly.>

# C: INSPECTION

Check the reduction drive gear for breakage or damage.

# CVT(TH58A)-260

### **D: ADJUSTMENT**

1) Remove the spring retainers and reduction drive gear shims.

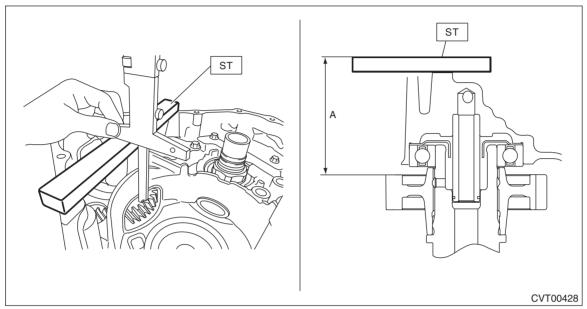
2) Install the transmission case, and secure it with four or five bolts.

### Tightening torque:

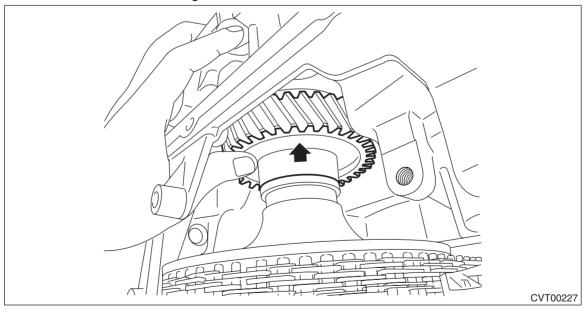
22 N⋅m (2.2 kgf-m, 16.2 ft-lb)

3) Measure depth "A" from the ST upper face to the reduction drive gear end face.

ST 499575400 GAUGE



4) Raise and hold the reduction drive gear.

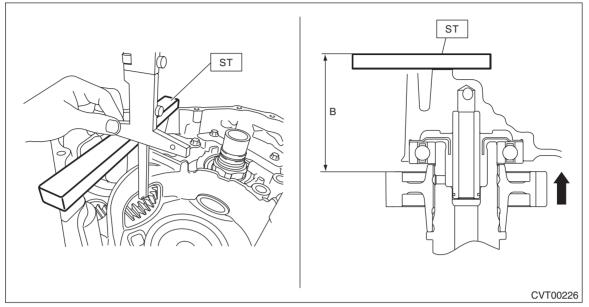


### **Reduction Drive Gear**

#### CONTINUOUSLY VARIABLE TRANSMISSION

#### 5) Measure depth "B" from the ST upper face to the reduction drive gear end face.

ST 499575400 GAUGE



6) Calculate the following formula.

T mm = A - B - 1.0

[T in = A - B - 0.039]

T: Moving distance of reduction drive gear

A: Depth from the ST upper face to the reduction drive gear end surface

B: Depth from the ST upper face to the reduction drive gear end surface (with the gear raised)

1.0 mm (0.039 in): Thickness of spring retainer

Moving distance of transfer drive gear [T]	Total shim thickness mm (in)
0.420 — 0.519(0.0165 — 0.0204)	0.3 (0.012)
0.520 — 0.619(0.0205 — 0.0242)	0.4 (0.016)
0.620 — 0.719(0.0244 — 0.0283)	0.5 (0.020)
0.720 — 0.819(0.0283 — 0.0322)	0.6 (0.024)
0.820 — 0.919(0.0323 — 0.0362)	0.7 (0.028)
0.920 — 1.019(0.0362 — 0.0401)	0.8 (0.031)
1.020 — 1.119(0.0402 — 0.0441)	0.9 (0.035)
1.120 — 1.219(0.0441 — 0.0480)	1.0 (0.039)
1.220 — 1.319(0.0480 — 0.0519)	1.1 (0.043)
1.320 — 1.419(0.0520 — 0.0559)	1.2 (0.047)
1.420 — 1.519(0.0559 — 0.0598)	1.3 (0.051)
1.520 — 1.619(0.0598 — 0.0637)	1.4 (0.055)
1.620 — 1.719(0.0638 — 0.0677)	1.5 (0.059)
1.720 — 1.819(0.0677 — 0.0716)	1.6 (0.063)
1.820 — 1.920(0.0717 — 0.0756)	1.7 (0.067)

7) Select one to three reduction drive gear shims so that the total thickness meets the value obtained from step 6).

Part No.	Reduction drive gear shim thickness mm (in)
31288AA260	0.3 (0.012)
31288AA270	0.4 (0.016)
31288AA280	0.5 (0.020)
31288AA290	0.6 (0.024)

# CVT(TH58A)-262