

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

1. General Description

A: SPECIFICATION

1. TORQUE CONVERTER

Model	2.5 L SOHC non-turbo
Type	Symmetric, 3-element, single stage, 2-phase torque converter
Stall torque ratio	2.07
Nominal mm (in)	236 (9.29)
Stall speed (at sea level)	2,400 — 3,100
One-way clutch	Sprague type one-way clutch

2. OIL PUMP

Type	Internal gear pump	
Driving method	Driven by chain	
Number of teeth	Inner rotor	8
	Outer rotor	9

3. TRANSMISSION CONTROL ELEMENT

Type	Forward continuously variable speed change, 1 reverse, planetary gear
Multi-plate clutch	1 sets
Multi-plate brake	1 sets

4. TRANSMISSION GEAR RATIO

Forward	3.525 — 0.558
Rev	2.358

5. PLATE

Number of input clutch drive plates	5
Number of forward clutch drive plates	6
Number of reverse brake drive plates	5

6. SELECTOR POSITION

P (Park)	Transmission neutral, output shaft locked, engine start enabled
R (Reverse)	Rev
N (Neutral)	Transmission neutral, engine start enabled
D (Drive)	Forward continuously variable speed change
M (manual mode) (paddle shift + side)	Manual gear change 1st → 2nd → 3rd → 4th → 5th → 6th
M (manual mode) (paddle shift — side)	Manual gear change 1st ← 2nd ← 3rd ← 4th ← 5th ← 6th

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7. HYDRAULIC CONTROL AND LUBRICATION

Type	Electronic hydraulic control (speed changed by signals of vehicle speed and accelerator opening angle)
Fluid	SUBARU CVT OIL FOR LINEARTRONIC (specified fluid) or equivalent CAUTION: Always use specified CVTF or equivalent. Using other fluid except for specified or equivalent will cause malfunction.
Fluid capacity ℓ (US qt, Imp qt)	12.0 — 12.5 (12.7 — 13.2, 10.6 — 11.0)
Lubrication system	Forced feed lubrication with oil pump

8. COOLING AND HARNESS

Cooling system	Liquid-cooler incorporated in radiator (except for OUTBACK) Liquid-cooler incorporated in radiator + air-cooler (OUTBACK)
Inhibitor switch harness	12 poles
Transmission harness	20 poles

9. TRANSFER

Transfer type	Multi-plate transfer (MP-T)
Number of transfer clutch drives & driven plates	6
Control method	Electronic hydraulic type
Reduction gear ratio	1.000 (37/37)

10. REDUCTION GEAR RATIO

Model	Except for OUTBACK	OUTBACK
Front final reduction gear ratio	3.700	3.900

11. RECOMMENDED GEAR OIL

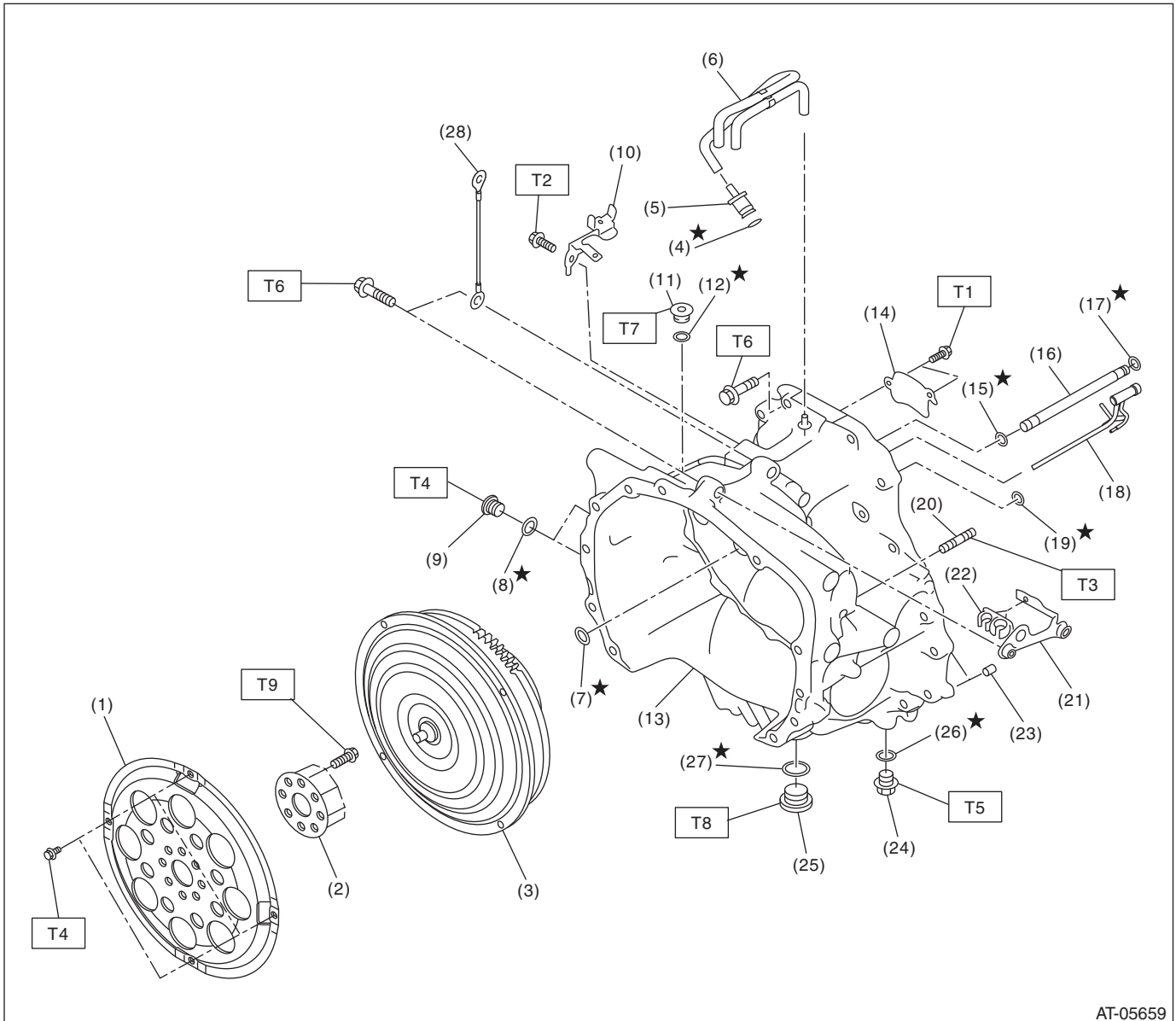
Lubrication oil	<p>(1) Item (2) Front differential gear oil (3) API standard (4) SAE viscosity No. and applicable temperature</p>
Front differential oil capacity ℓ (US qt, Imp qt)	1.3 — 1.5 (1.4 — 1.6, 1.1 — 1.3)

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B: COMPONENT

1. TORQUE CONVERTER ASSEMBLY AND CONVERTER CASE



AT-05659

General Description

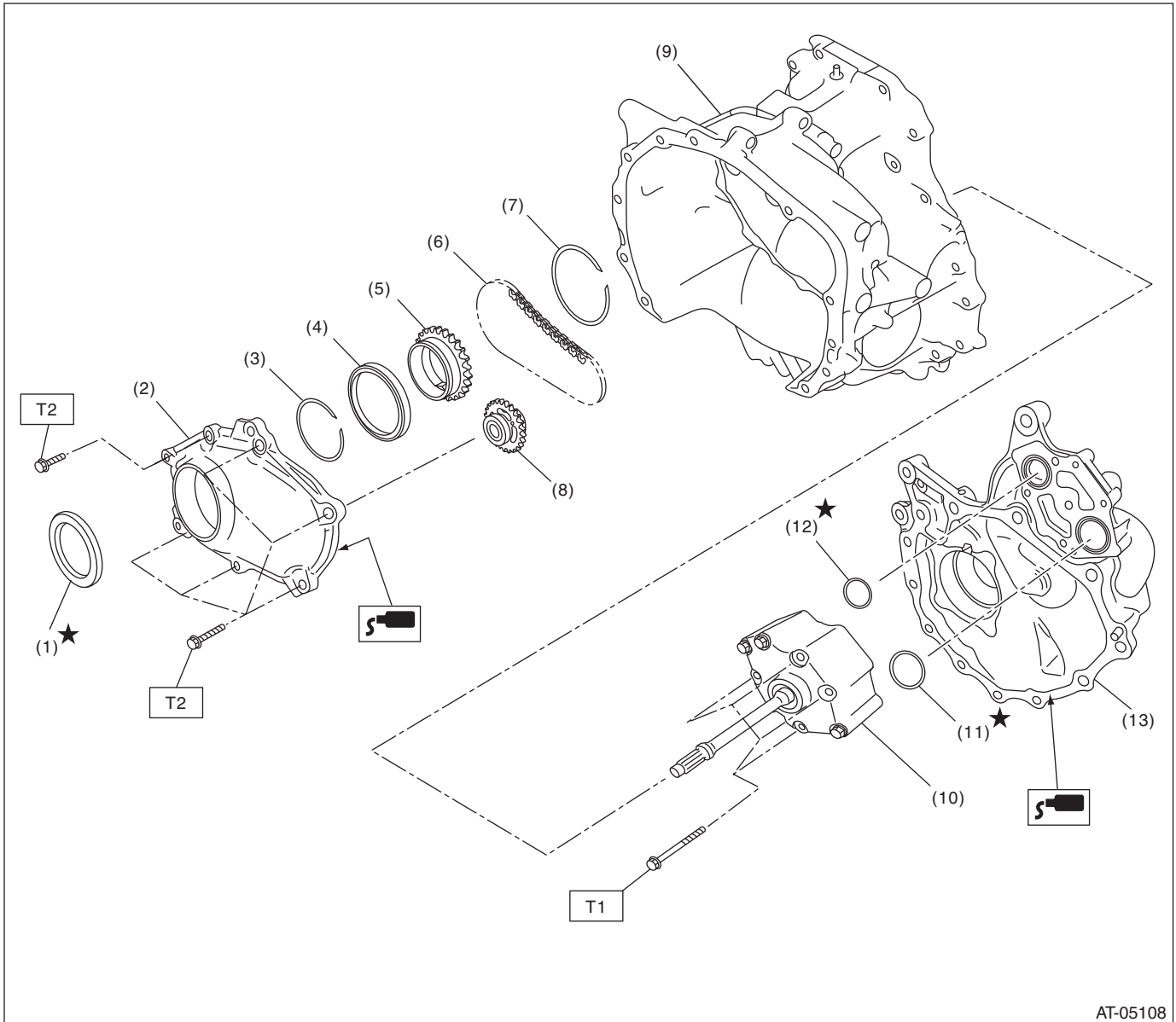
CONTINUOUSLY VARIABLE TRANSMISSION

(1) Drive plate	(14) Oil stopper plate	(27) Gasket
(2) Reinforcement drive plate	(15) O-ring	(28) Transmission radio ground cord
(3) Torque converter ASSY	(16) Lubrication pipe	
(4) O-ring	(17) O-ring	<hr/>
(5) Oil charge pipe cap	(18) Lubrication pipe	Tightening torque:N·m (kgf-m, ft-lb)
(6) Air breather hose ASSY	(19) O-ring	T1: 9 (0.9, 6.6)
(7) O-ring	(20) Stud bolt	T2: 16 (1.6, 11.8)
(8) O-ring	(21) Transmission hanger	T3: 18 (1.8, 13.3)
(9) PLUG	(22) Clip	T4: 25 (2.5, 18.4)
(10) Transmission harness stay	(23) Straight pin	T5: 35 (3.6, 25.8)
(11) Plug	(24) Overflow drain plug	T6: 41 (4.2, 30.2)
(12) O-ring	(25) Front differential gear oil drain plug	T7: 50 (5.1, 36.9)
(13) Converter case	(26) Gasket	T8: 70 (7.1, 51.6)
		T9: <Ref. to CVT-135, INSTALLATION, Drive Plate.>

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

2. OIL PUMP ASSY



AT-05108

- | | | |
|--------------------------|---------------------|----------------------------|
| (1) Oil seal | (7) Snap ring | (13) Drive pinion retainer |
| (2) Oil pump chain cover | (8) Driven sprocket | |
| (3) Snap ring | (9) Converter case | |
| (4) Ball bearing | (10) Oil pump ASSY | |
| (5) Drive sprocket | (11) O-ring (large) | |
| (6) Oil pump chain | (12) O-ring (small) | |

Tightening torque: N·m (kgf·m, ft·lb)

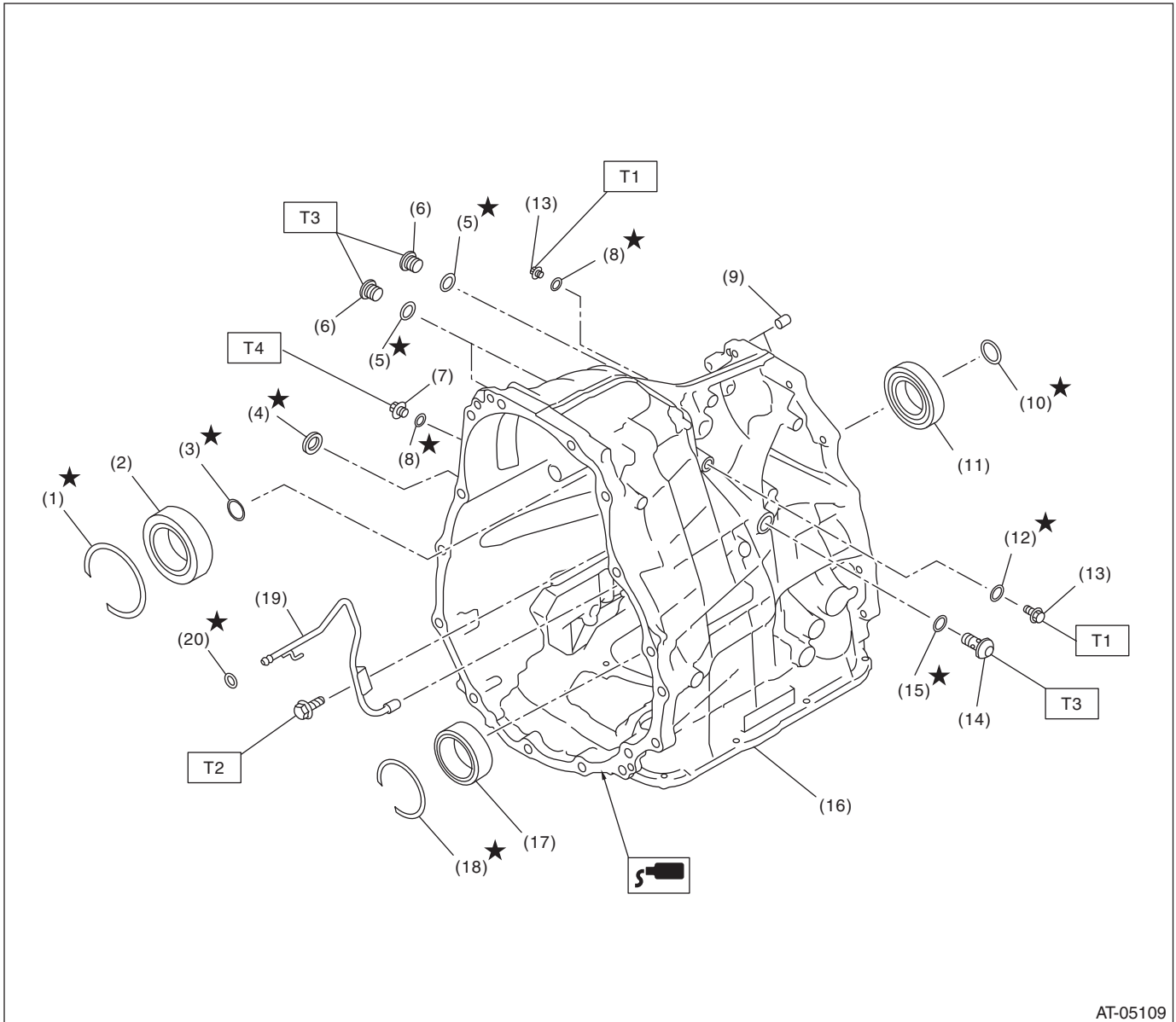
T1: 8.5 (0.9, 6.3)

T2: 24 (2.4, 17.7)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

3. TRANSMISSION CASE



AT-05109

- | | | |
|--------------------|------------------------|-----------------------|
| (1) Snap ring | (10) Seal ring | (19) Lubrication pipe |
| (2) Roller bearing | (11) Ball bearing | (20) O-ring |
| (3) Seal ring | (12) O-ring | |
| (4) Oil seal | (13) Plug | |
| (5) O-ring | (14) Plug | |
| (6) PLUG | (15) O-ring | |
| (7) PLUG | (16) Transmission case | |
| (8) O-ring | (17) Roller bearing | |
| (9) Straight pin | (18) Snap ring | |

Tightening torque: N·m (kgf-m, ft-lb)

T1: 13 (1.3, 9.6)

T2: 16 (1.6, 11.8)

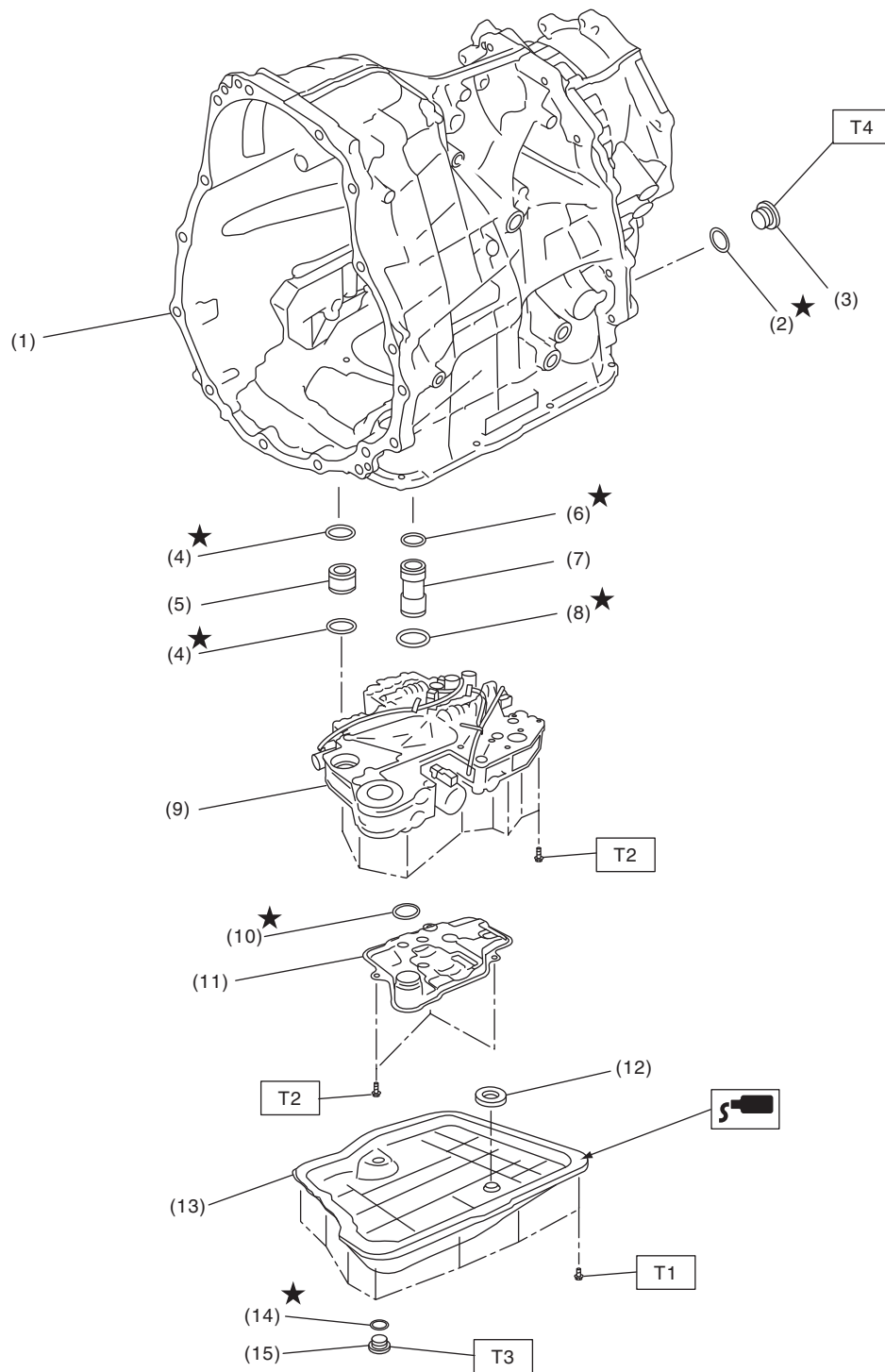
T3: 25 (2.5, 18.4)

T4: 35 (3.6, 25.8)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

4. CONTROL VALVE BODY



AT-05110

- (1) Transmission case
- (2) Gasket
- (3) Filler plug
- (4) O-ring
- (5) Pressure pipe
- (6) O-ring (small)
- (7) CVTF pipe

- (8) O-ring (large)
- (9) Control valve body
- (10) O-ring
- (11) Oil strainer
- (12) Magnet
- (13) Oil pan
- (14) Gasket

- (15) CVTF drain plug

Tightening torque: N·m (kgf·m, ft·lb)

T1: 5 (0.5, 3.7)

T2: 9 (0.9, 6.6)

T3: 20 (2.0, 14.8)

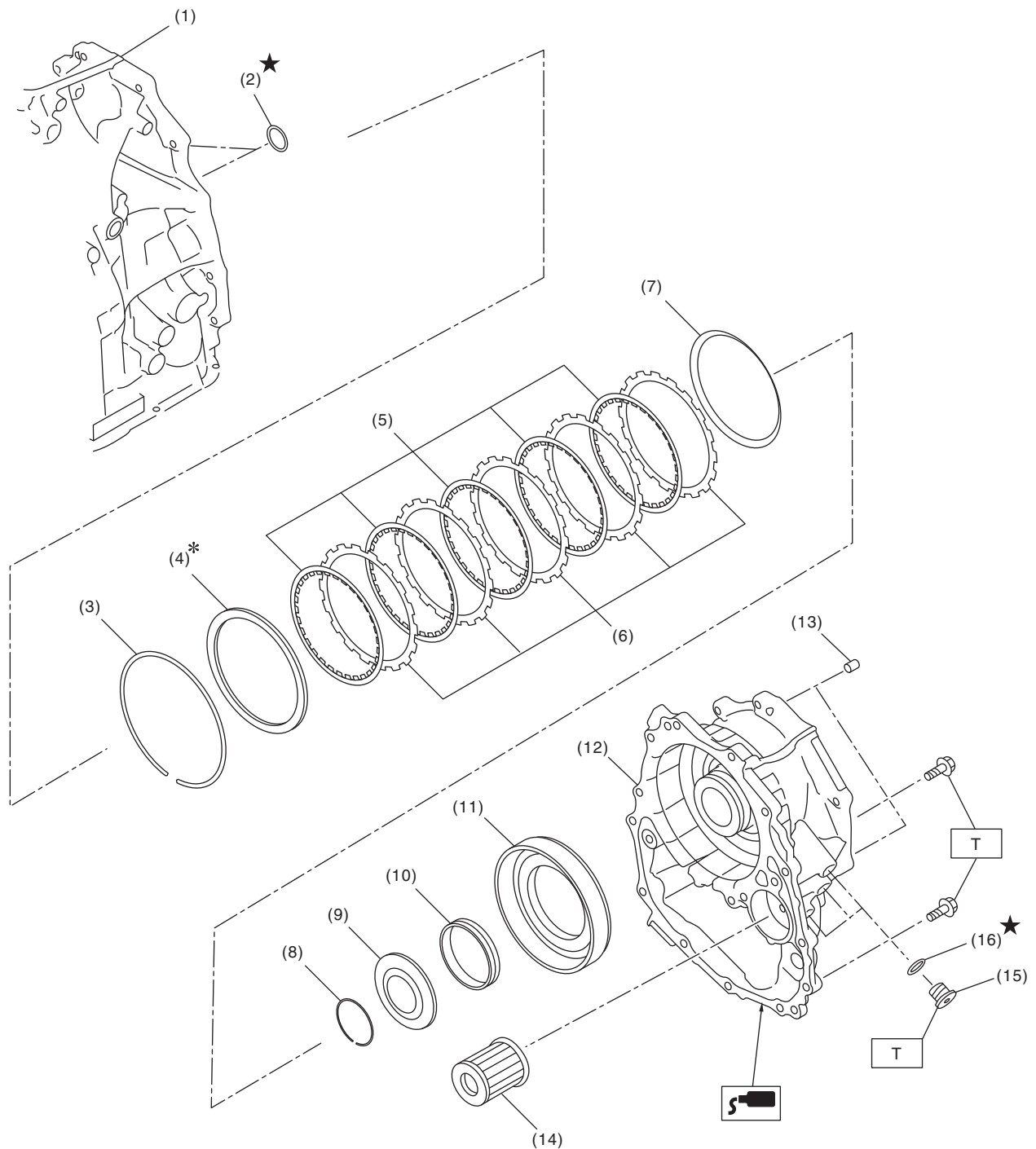
T4: 50 (5.1, 36.9)

CVT-9

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

5. REVERSE BRAKE ASSEMBLY AND INTERMEDIATE CASE



AT-05111

- (1) Transmission case
- (2) O-ring
- (3) Snap ring
- (4) Retaining plate
- (5) Drive plate
- (6) Driven plate
- (7) Dish plate

- (8) Snap ring
- (9) Spring retainer
- (10) Return spring
- (11) Reverse brake piston
- (12) Intermediate case
- (13) Straight pin

- (14) CVTF filter
- (15) PLUG
- (16) O-ring

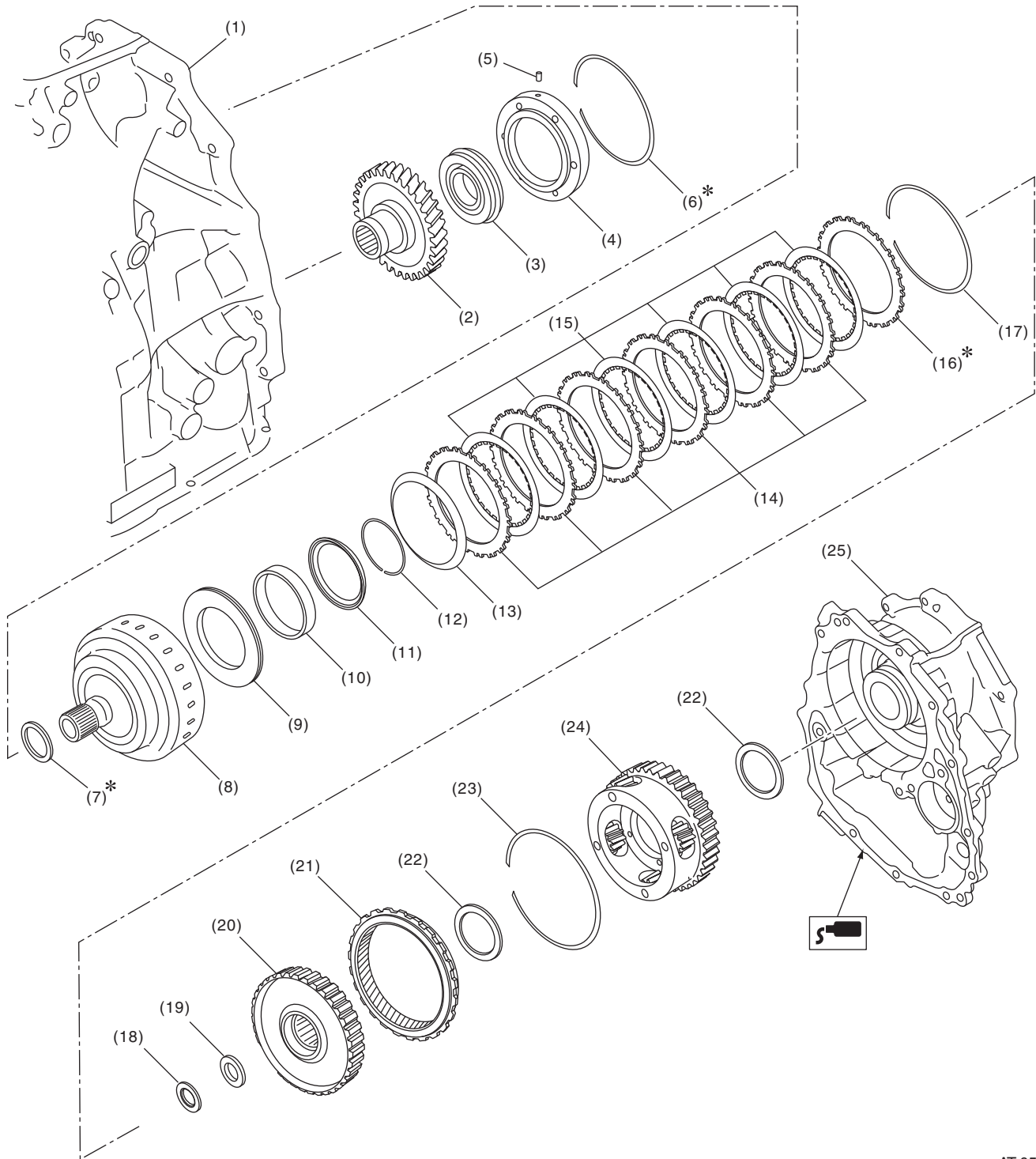
Tightening torque: N·m (kgf·m, ft·lb)

T: 25 (2.5, 18.4)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

6. FORWARD CLUTCH ASSEMBLY AND REDUCTION DRIVEN GEAR



AT-05497

General Description

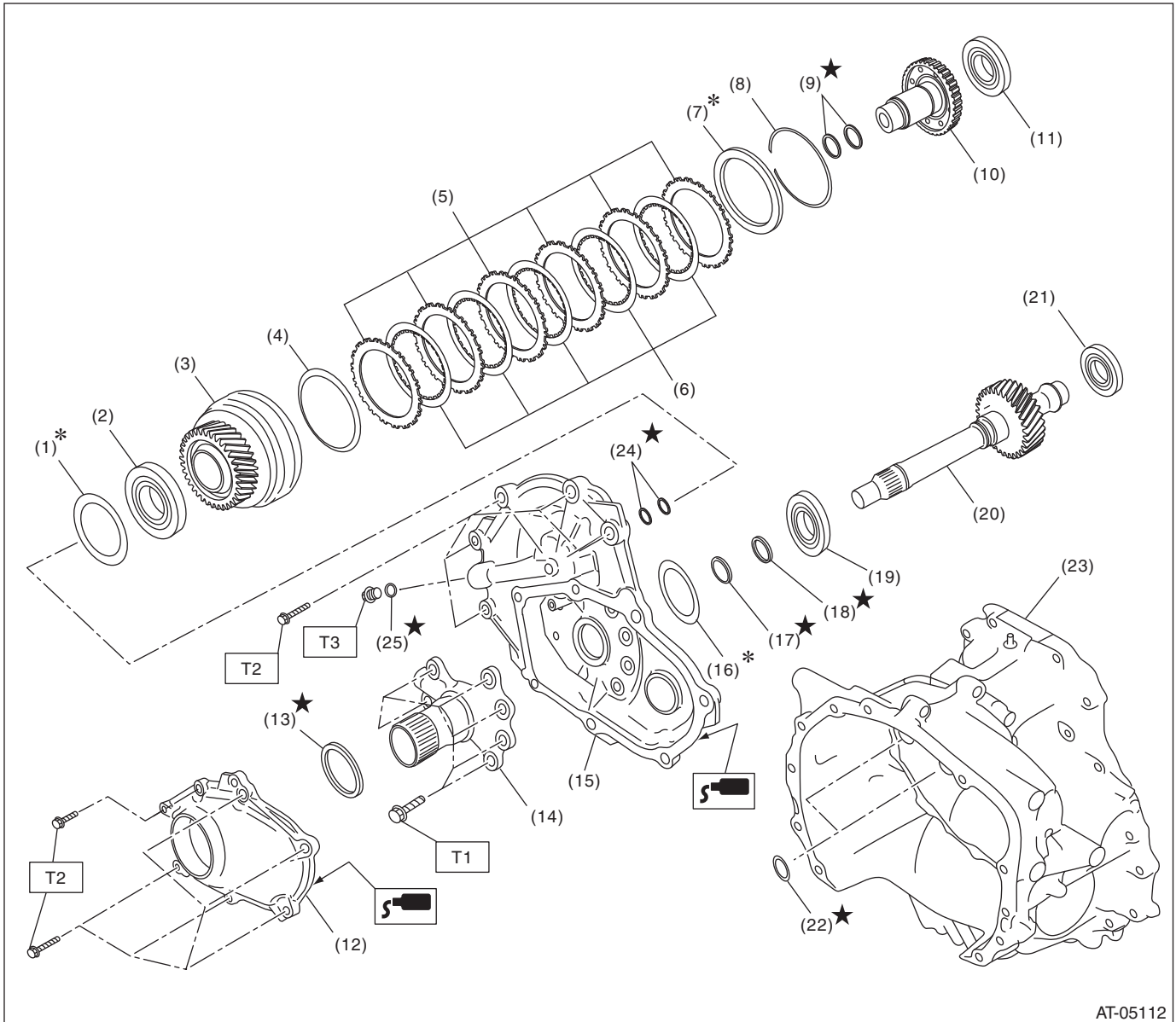
CONTINUOUSLY VARIABLE TRANSMISSION

- | | | |
|------------------------------------|-------------------------------------|-----------------------------|
| (1) Transmission case | (10) Return spring | (19) Washer |
| (2) Reduction driven gear | (11) Forward clutch piston retainer | (20) Sun gear ASSY |
| (3) Ball bearing | (12) Snap ring | (21) Internal gear |
| (4) Reduction driven gear retainer | (13) Dish plate | (22) Thrust needle bearing |
| (5) Straight pin | (14) Driven plate | (23) Snap ring |
| (6) Snap ring | (15) Drive plate | (24) Planetary carrier ASSY |
| (7) Washer | (16) Retaining plate | (25) Intermediate case |
| (8) Forward clutch drum | (17) Snap ring | |
| (9) Forward clutch piston | (18) Thrust needle bearing | |

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

7. FRONT REDUCTION DRIVE GEAR AND FRONT REDUCTION DRIVEN GEAR



- (1) Shim
- (2) Ball bearing
- (3) Front reduction driven gear
- (4) Dish plate
- (5) Driven plate
- (6) Drive plate
- (7) Retaining plate
- (8) Snap ring
- (9) Seal ring
- (10) Front reduction driven shaft

- (11) Ball bearing
- (12) Oil pump chain cover
- (13) Seal ring
- (14) Center support COMPL
- (15) Converter case cover
- (16) Shim
- (17) O-ring
- (18) Seal ring
- (19) Ball bearing
- (20) Front reduction drive gear

- (21) Ball bearing
- (22) O-ring
- (23) Converter case
- (24) Seal ring
- (25) O-ring

Tightening torque: N·m (kgf-m, ft-lb)

T1: 21.5 (2.2, 15.9)

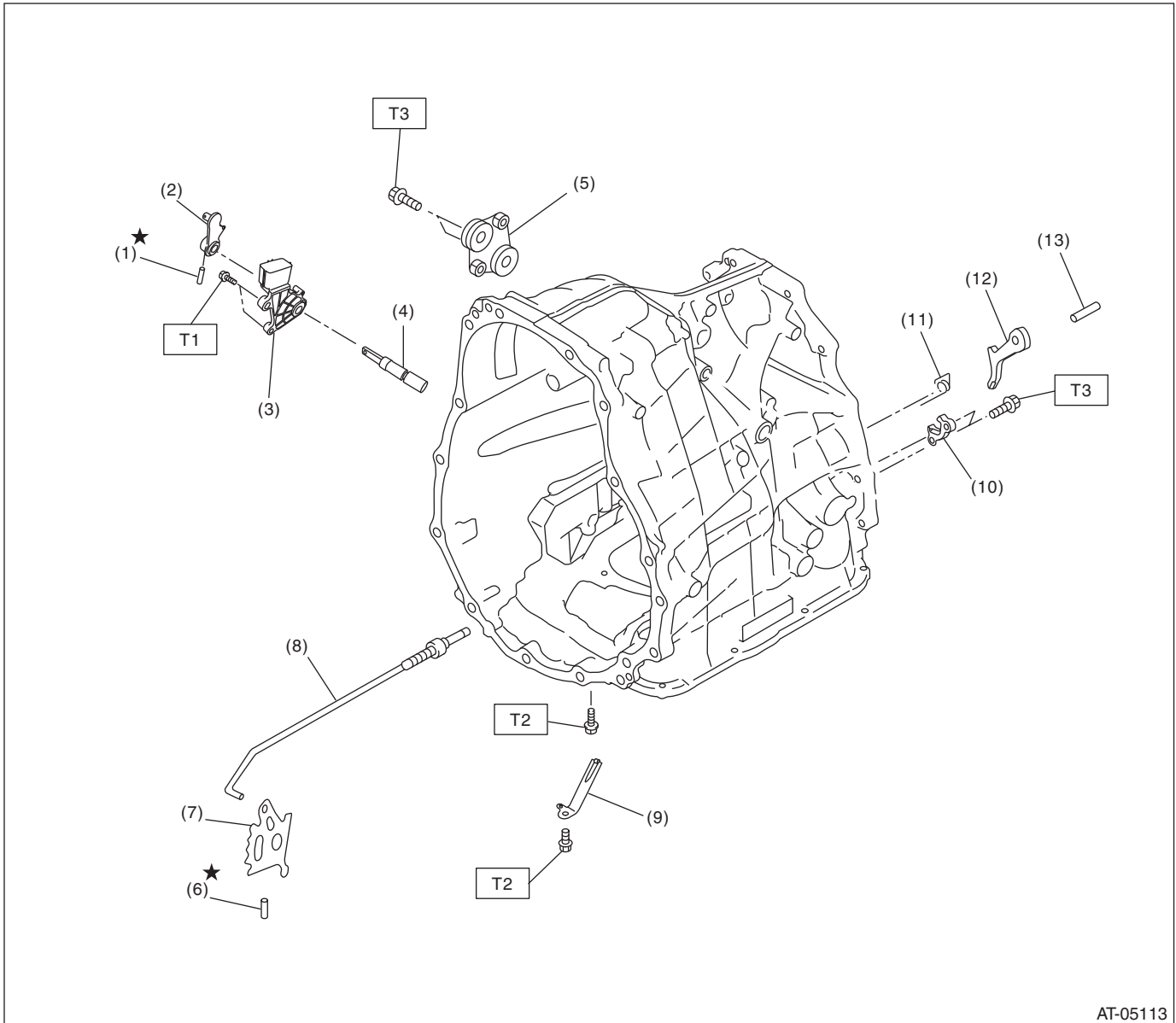
T2: 24 (2.4, 17.7)

T3: 25 (2.5, 18.4)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

8. TRANSMISSION CONTROL DEVICE



AT-05113

- | | |
|-----------------------|----------------------|
| (1) Spring pin | (8) Parking rod |
| (2) Shifter arm | (9) Detent spring |
| (3) Inhibitor switch | (10) Parking support |
| (4) Shifter arm shaft | (11) Return spring |
| (5) Plate ASSY | (12) Parking pawl |
| (6) Spring pin | (13) Shaft |
| (7) Manual plate | |

Tightening torque: N·m (kgf-m, ft-lb)

T1: 5 (0.5, 3.7)

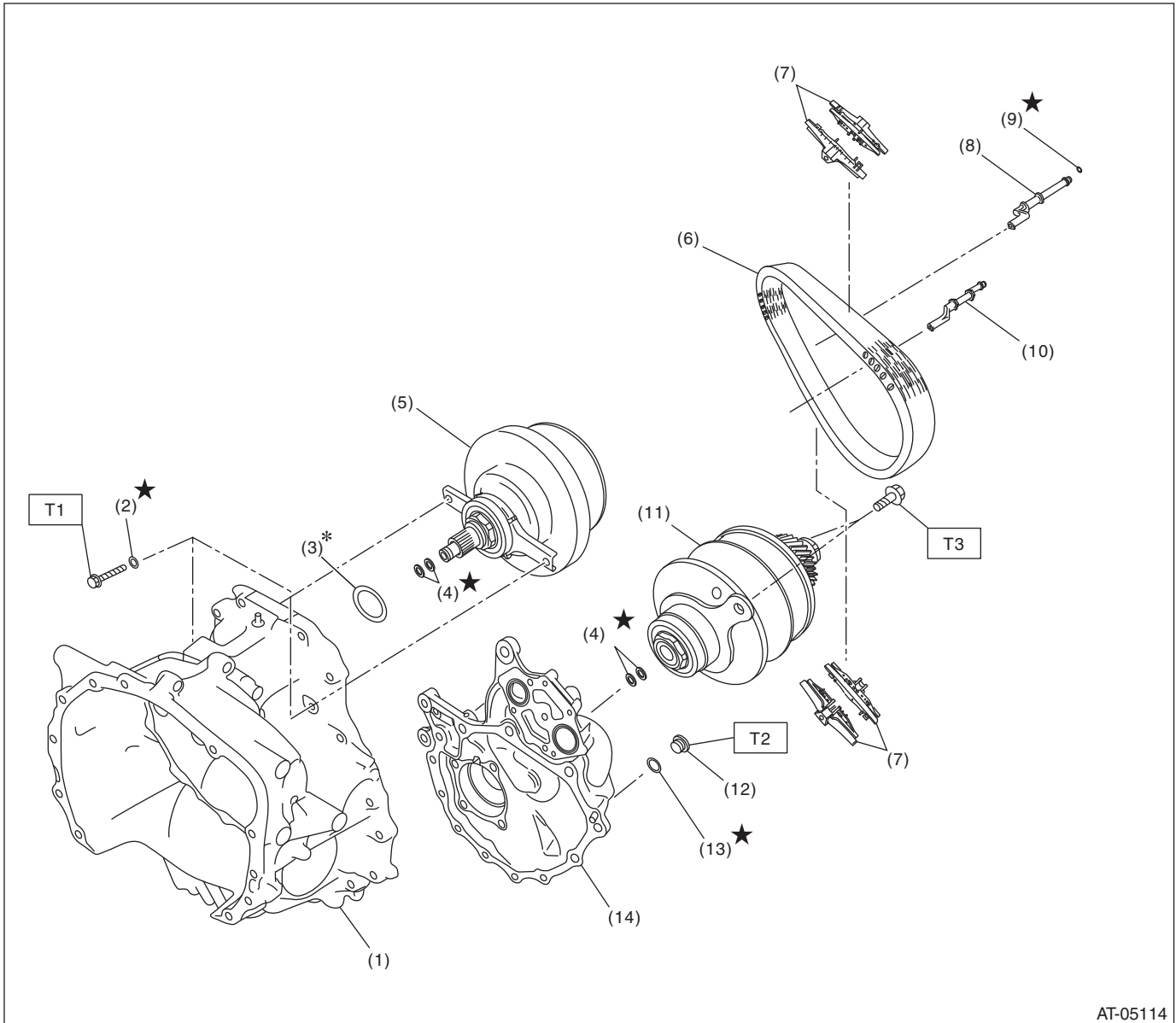
T2: 7 (0.7, 5.2)

T3: 25 (2.5, 18.4)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

9. PRIMARY PULLEY, SECONDARY PULLEY AND VARIATOR CHAIN



AT-05114

- | | |
|-------------------------|----------------------------|
| (1) Converter case | (8) Lubrication pipe |
| (2) Seal washer | (9) O-ring |
| (3) Shim | (10) Support rod |
| (4) Seal ring | (11) Secondary pulley ASSY |
| (5) Primary pulley ASSY | (12) PLUG |
| (6) Variator chain | (13) O-ring |
| (7) Chain guide | (14) Drive pinion retainer |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 21 (2.1, 15.5)

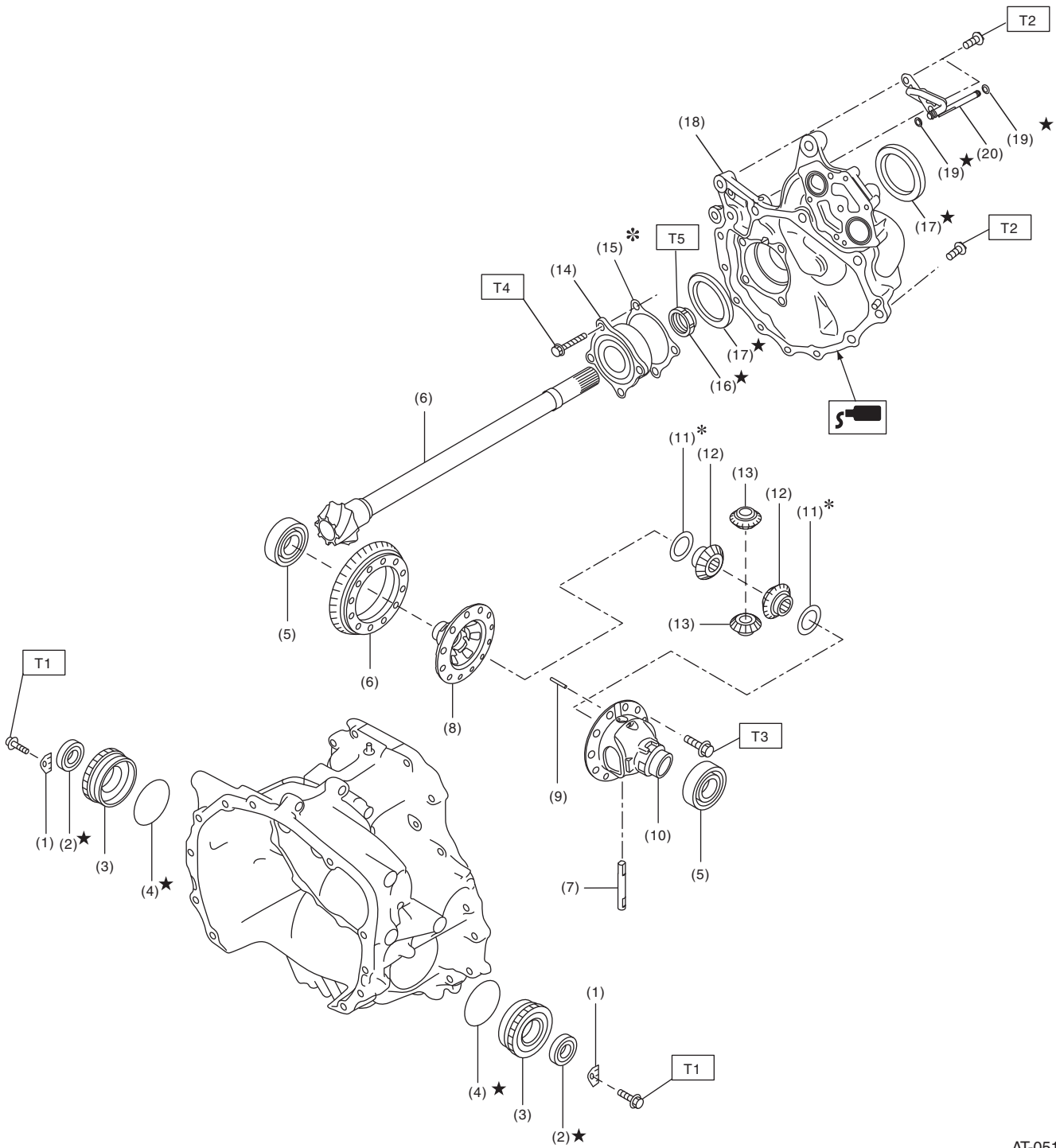
T2: 25 (2.5, 18.4)

T3: 33 (3.4, 24.3)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

10.FRONT DIFFERENTIAL GEAR



AT-05115

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

- (1) Lock plate
- (2) Oil seal
- (3) Differential side retainer
- (4) O-ring
- (5) Taper roller bearing
- (6) Drive pinion gear set
- (7) Pinion shaft
- (8) Differential case RH
- (9) Straight pin

- (10) Differential case LH
- (11) Washer
- (12) Differential bevel gear
- (13) Differential bevel pinion
- (14) Taper roller bearing
- (15) Shim
- (16) Lock nut
- (17) Oil seal
- (18) Drive pinion retainer

- (19) O-ring
- (20) Lubrication pipe

Tightening torque:N·m (kgf-m, ft-lb)

T1: 25 (2.5, 18.4)

T2: 43 (4.4, 31.7)

T3: 69 (7.0, 50.9)

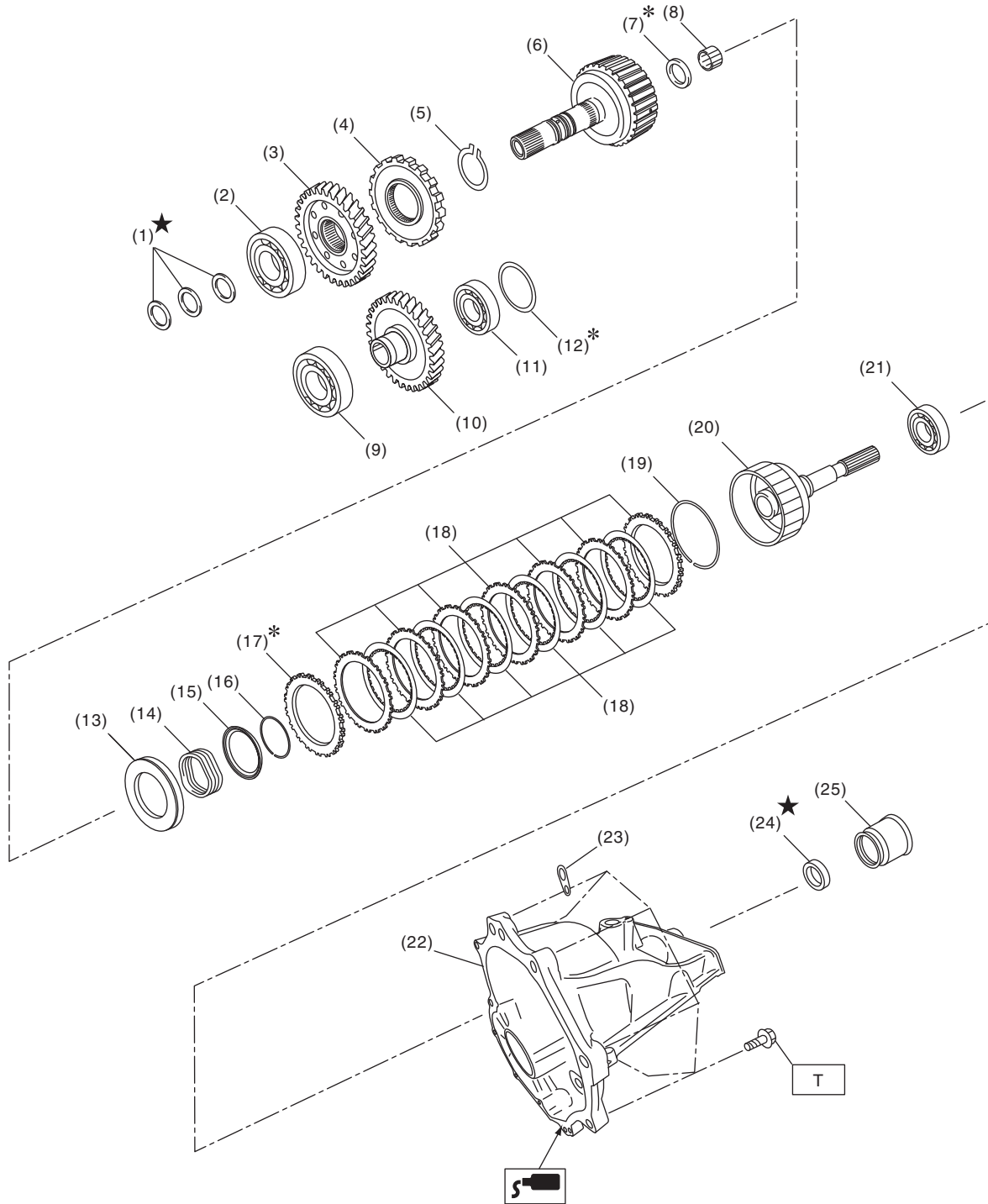
T4: 70 (7.1, 51.6)

T5: 130 (13.3, 95.9)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

11. TRANSFER AND EXTENSION CASE



AT-05116

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

(1) Seal ring	(11) Ball bearing	(21) Ball bearing
(2) Ball bearing	(12) Shim	(22) Extension case
(3) Transfer drive gear	(13) Transfer piston	(23) Transmission hanger
(4) Parking gear	(14) Return spring	(24) Oil seal
(5) Snap ring	(15) Transfer piston seal	(25) Dust cover
(6) Reduction drive gear shaft	(16) Snap ring	
(7) Thrust needle bearing	(17) Pressure plate	
(8) Needle bearing	(18) Transfer clutch plate set	
(9) Ball bearing	(19) Snap ring	
(10) Transfer reduction driven gear	(20) Rear drive shaft	

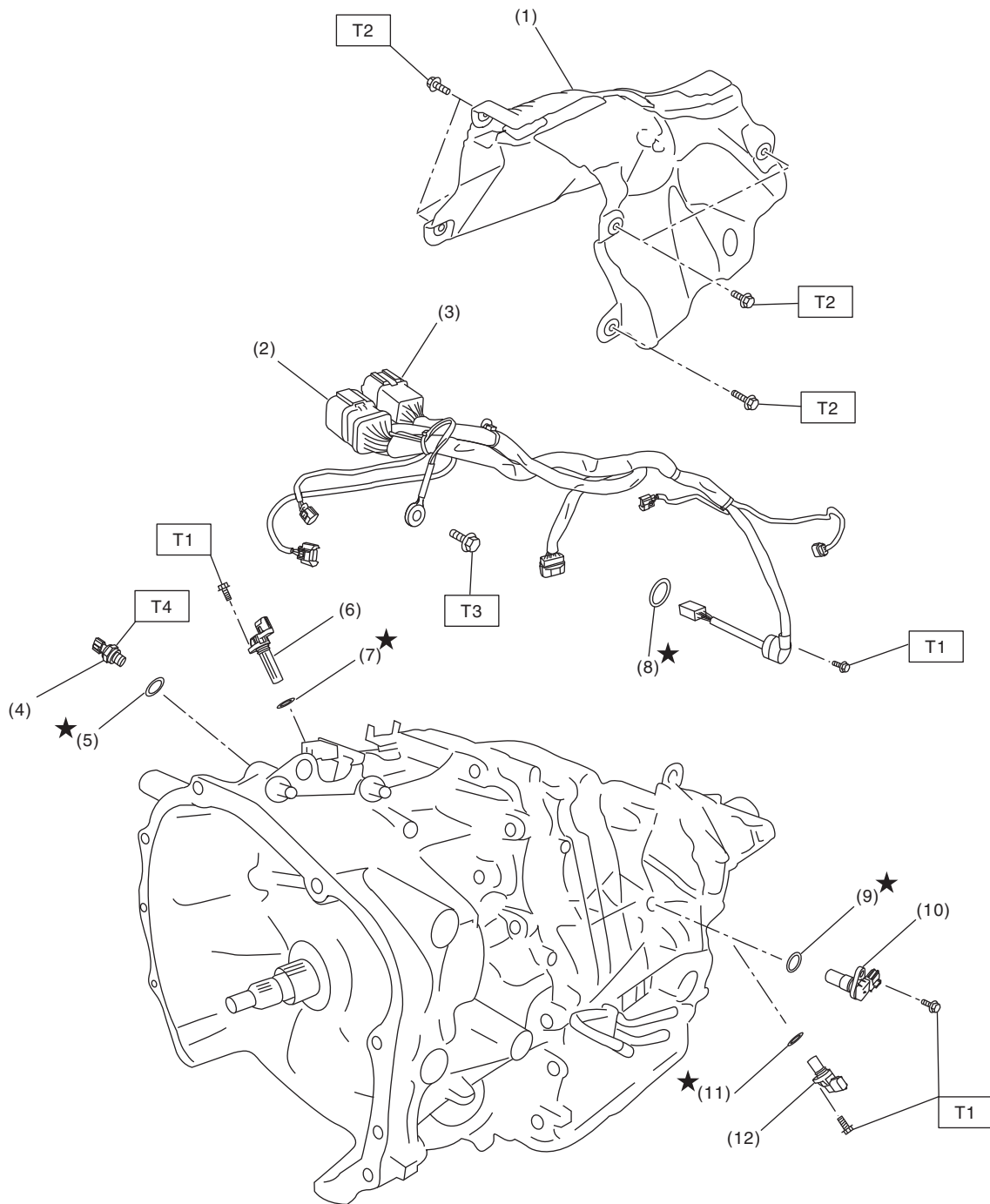
Tightening torque:N·m (kgf·m, ft·lb)

T: 25 (2.5, 18.4)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

12. TRANSMISSION HARNESS AND SENSOR



AT-05512

- | | |
|-------------------------------|-------------------------------|
| (1) Transmission cover | (7) O-ring |
| (2) Transmission harness | (8) O-ring |
| (3) Inhibitor harness | (9) O-ring |
| (4) Secondary pressure sensor | (10) Secondary speed sensor |
| (5) O-ring | (11) O-ring |
| (6) Primary speed sensor | (12) Front wheel speed sensor |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 5 (0.5, 3.7)

T2: 8 (0.8, 5.9)

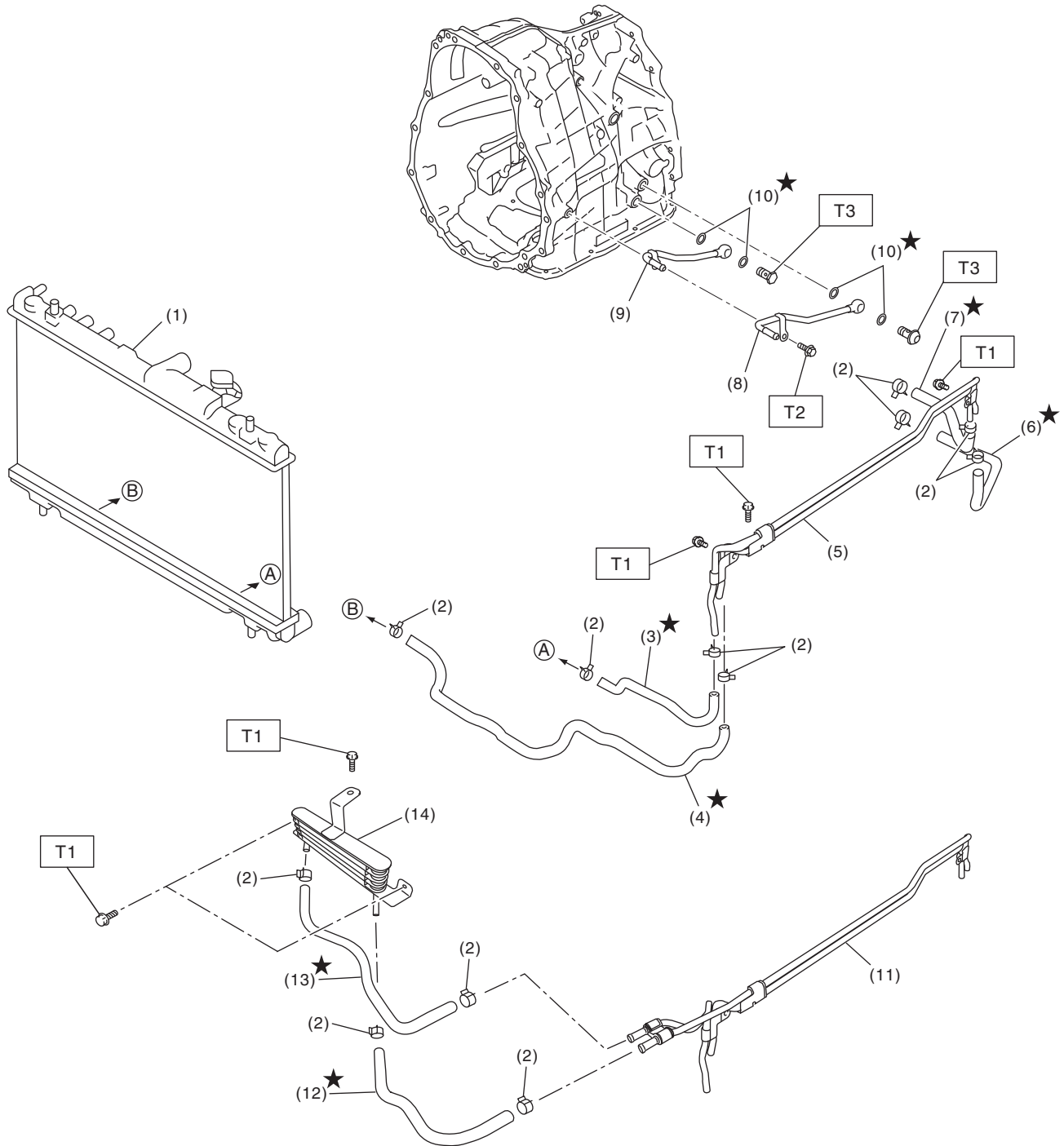
T3: 16 (1.6, 11.8)

T4: 39 (4.0, 28.8)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

13. CVTF COOLER PIPE AND HOSE



AT-05613

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

- | | |
|--|--|
| (1) Radiator | (8) CVTF outlet pipe |
| (2) Clip | (9) CVTF inlet pipe |
| (3) Outlet hose | (10) Gasket |
| (4) Inlet hose | (11) CVTF cooler pipe ASSY (OUTBACK model) |
| (5) CVTF cooler pipe ASSY (except for OUTBACK) | (12) Outlet hose (OUTBACK model) |
| (6) CVTF outlet hose | (13) Inlet hose (OUTBACK model) |
| (7) CVTF inlet hose | (14) CVTF oil cooler (OUTBACK model) |

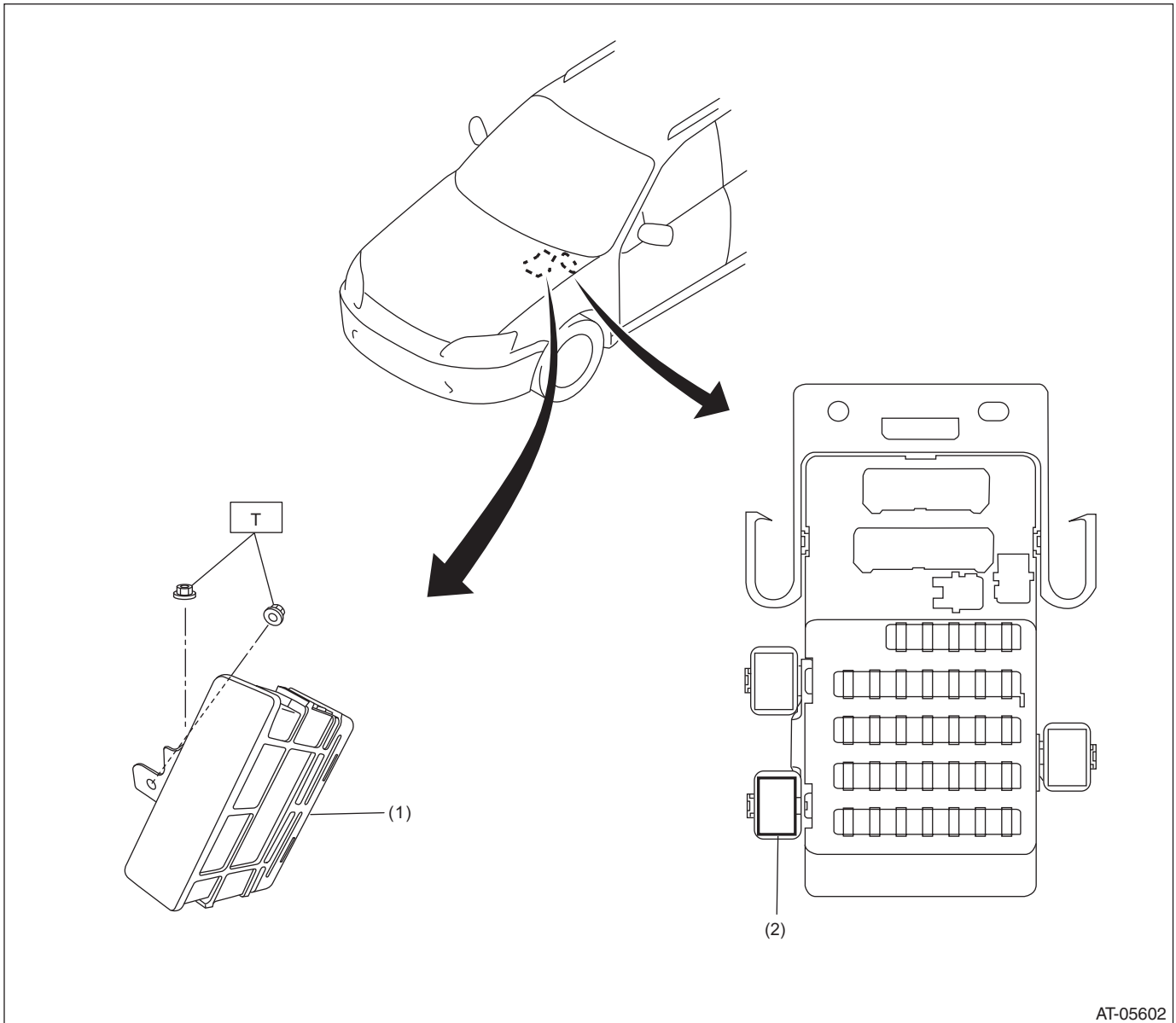
Tightening torque:N·m (kgf-m, ft-lb)

T1: 7.5 (0.76, 5.5)

T2: 16 (1.6, 11.8)

T3: 40 (4.1, 29.5)

14.TRANSMISSION CONTROL MODULE



AT-05602

- (1) Transmission control module (TCM)

- (2) Relay

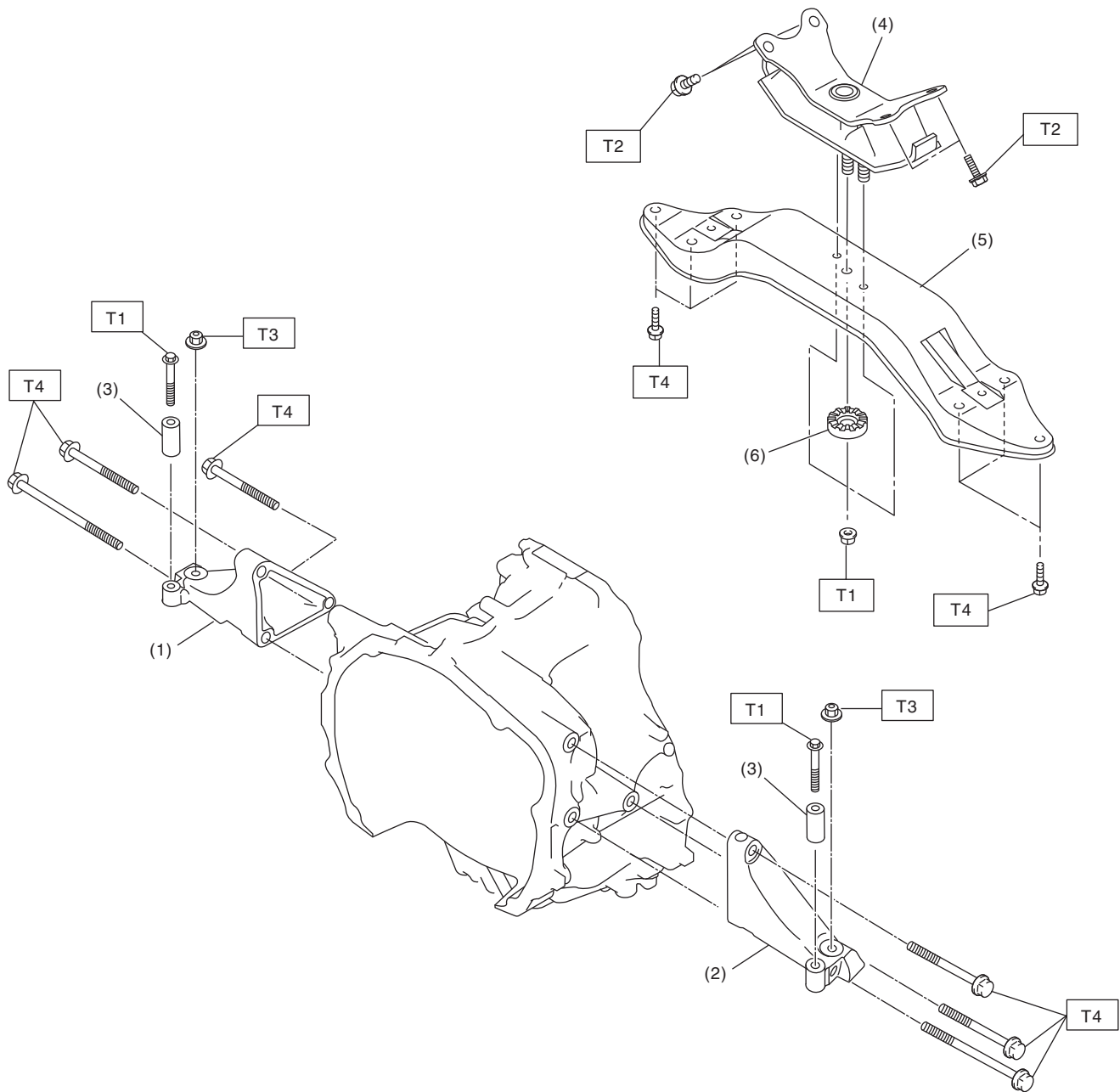
Tightening torque:N·m (kgf-m, ft-lb)

T: 7.5 (0.75, 5.5)

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

15. TRANSMISSION MOUNTING



AT-05603

- | | |
|--|-----------------------------------|
| (1) Transmission mounting bracket (RH) | (4) Rear cushion rubber |
| (2) Transmission mounting bracket (LH) | (5) Transmission rear crossmember |
| (3) Collar | (6) Stopper |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 35 (3.6, 25.8)

T2: 40 (4.1, 33.2)

T3: 45 (4.6, 51.6)

T4: 75 (7.6, 55.3)

General Description

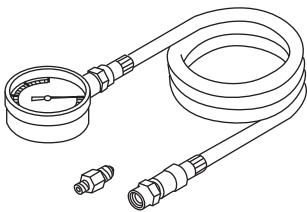
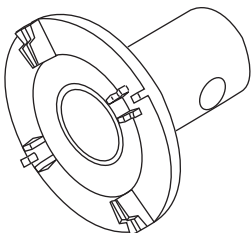
CONTINUOUSLY VARIABLE TRANSMISSION

C: CAUTION

- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust and dirt.
- Do not place the oil pan with its inner side facing up until it is installed, to prevent intrusion of foreign matter into the control valve body.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- When disassembling the case and other light alloy parts, use a plastic hammer to force it apart. Do not pry apart with screwdrivers or other tools.
- Vehicle components are extremely hot after driving. Be wary of receiving burns from heated parts.
- Use SUBARU genuine CVTF and recommended grease. Do not mix CVTF, grease etc. of different grades or manufacturers.
- Be sure to tighten bolts and nuts to the specified torque.
- Place lifts, shop jacks or rigid racks at specified locations.
- Apply CVTF onto sliding or revolving surfaces before installation.
- Replace deformed or damaged snap rings with new parts.
- Before installing O-rings or oil seals, apply sufficient amount of CVTF to avoid damage and deformation.
- Be careful not to incorrectly install or fail to install O-rings, snap rings and other such parts.
- Before securing a part on a vise, place cushioning material such as wood blocks, aluminum plate, or cloth between the part and the vise.
- Avoid damaging the mating surface of the case.
- Before applying liquid gasket, completely remove the old liquid gasket.
- After removing the sensors, breather hose and plugs, plug the holes to avoid foreign materials intruding as necessary.

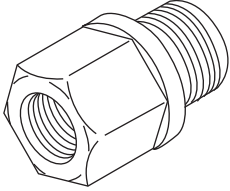
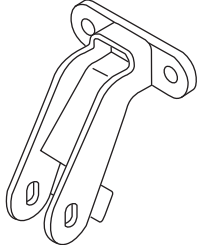
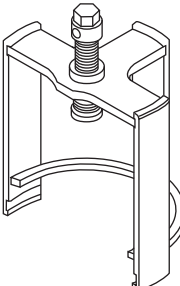
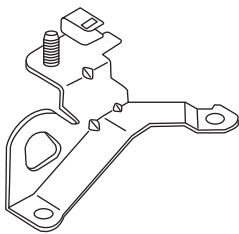
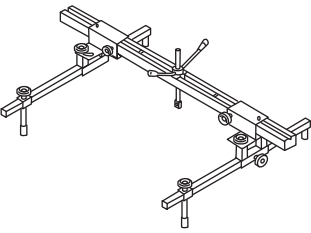
D: PREPARATION TOOL

1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST18801AA000</p>	<p style="text-align: center;">18801AA000 (Newly adopted tool)</p>	<p style="text-align: center;">OIL PRESSURE GAUGE ASSY</p>	<p>Used for measuring the secondary hydraulic pressure (line pressure).</p>
 <p style="text-align: center;">ST18658AA020</p>	<p style="text-align: center;">18658AA020 (Newly adopted tool)</p>	<p style="text-align: center;">WRENCH COMPL RETAINER</p>	<p>Used for removing and installing the differential side retainer.</p>

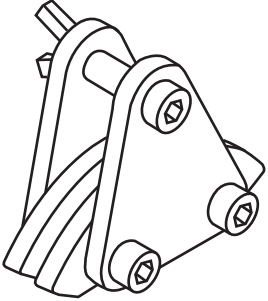
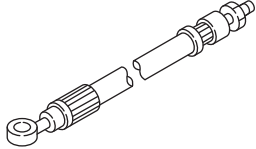
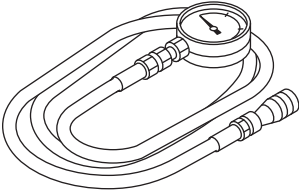
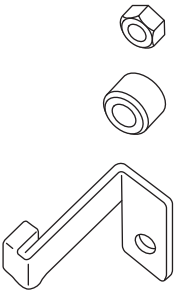
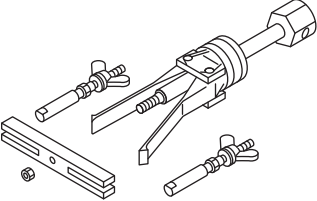
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ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST18681AA000</p>	18681AA000 (Newly adopted tool)	PRESSURE GAUGE ADAPTER	Used for measuring oil pressure. NOTE: Used together with the genuine O-ring (part No. 806911080).
 <p>ST41099AJ000</p>	41099AJ000 (Newly adopted tool)	FRONT MOUNT- ING H4	Used for holding and balancing the engine unit.
 <p>ST18769AA000</p>	18769AA000 (Newly adopted tool)	EXPANDER PULLER	Used for removing and installing the secondary pulley assembly.
 <p>ST10004AA180</p>	10004AA180 (SUBARU genuine part)	ENGINE HANGER REAR	Used for removing and installing the automatic transmission assembly. (ENGINE HANGER REAR for turbo model)
 <p>ST99099AJ000</p>	99099AJ000 (Newly adopted tool)	ENGINE HANGER	<ul style="list-style-type: none"> • Used for removing and installing the automatic transmission assembly. • Used together with CHAIN BALANCER (99099AJ010).

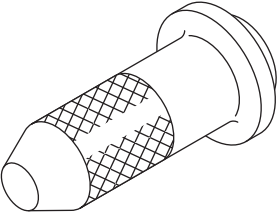
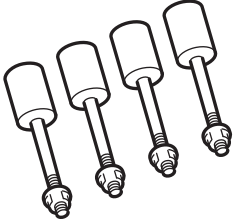
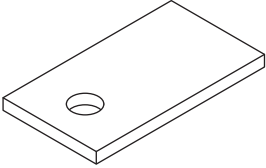
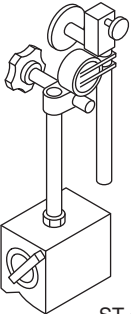
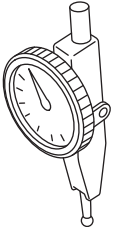
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST99099AJ010</p>	99099AJ010 (Newly adopted tool)	CHAIN BALANCER	<ul style="list-style-type: none"> Used for removing and installing the automatic transmission assembly. Used together with ENGINE HANGER (99099AJ000).
 <p>ST-498897700</p>	498897700	OIL PRESSURE ADAPTER SET	Used for measuring the secondary pressure (line pressure) and transfer clutch hydraulic pressure.
 <p>ST-498575400</p>	498575400	OIL PRESSURE GAUGE ASSY	Used for measuring the transfer clutch hydraulic pressure.
 <p>ST-498277200</p>	498277200	STOPPER SET	<ul style="list-style-type: none"> Used for removing and installing automatic transmission assembly to engine. Used for preventing the torque converter from dropping off.
 <p>ST-398527700</p>	398527700	PULLER ASSY	<ul style="list-style-type: none"> Used for removing the extension case oil seal. Used for removing the roller bearing of the primary pulley and secondary pulley. Used for removing the bearing of reduction driven gear. Used for removing the differential side retainer bearing outer race.

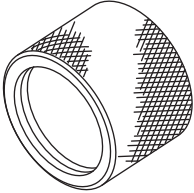
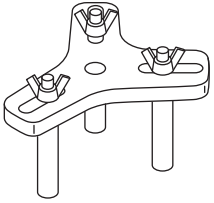
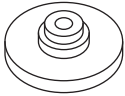
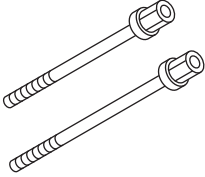
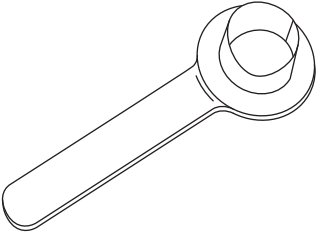
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="337 520 467 543">ST-498057300</p>	498057300	INSTALLER	Used for installing the extension case oil seal.
 <p data-bbox="326 869 467 892">ST18632AA000</p>	18632AA000	TRANSMISSION STAND	Used for disassembling and assembling the transmission.
 <p data-bbox="337 1220 467 1243">ST-498255400</p>	498255400	PLATE	Used for measuring the backlash of hypoid gear.
 <p data-bbox="337 1572 467 1596">ST-498247001</p>	498247001	MAGNET BASE	<ul style="list-style-type: none"> • Used for measuring the backlash of hypoid gear. • Used together with DIAL GAUGE (498247100).
 <p data-bbox="337 1925 467 1948">ST-498247100</p>	498247100	DIAL GAUGE	<ul style="list-style-type: none"> • Used for measuring the backlash of hypoid gear. • Used together with DIAL GAUGE (498247101).

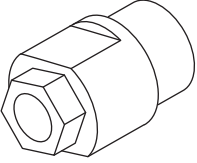
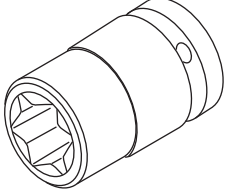
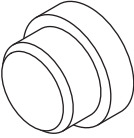
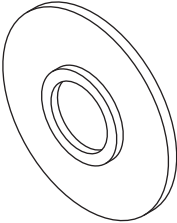
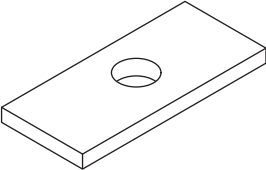
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST18675AA000</p>	18675AA000	DIFFERENTIAL SIDE OIL SEAL INSTALLER	Used for installing the differential side retainer oil seal.
 <p style="text-align: center;">ST18762AA000</p>	18762AA000	COMPRESSOR SPECIAL TOOL	Used for disassembling multi-plate clutch for shift transmission.
 <p style="text-align: center;">ST18765AA000</p>	18765AA000	COMPRESSOR SUPPORT	Used for disassembling multi-plate clutch for shift transmission.
 <p style="text-align: center;">ST18763AA000</p>	18763AA000	COMPRESSOR SHAFT	Used for disassembling multi-plate clutch for shift transmission.
 <p style="text-align: center;">ST28399SA010</p>	28399SA010	OIL SEAL PROTEC- TOR	Used for protecting oil seal when installing front drive shaft.

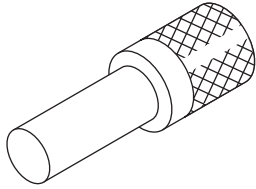
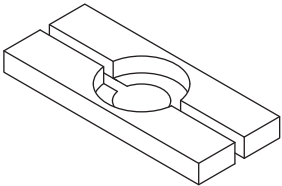
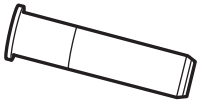

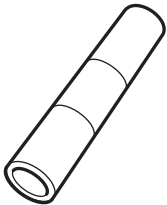
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="321 516 467 537">ST18667AA010</p>	18667AA010	HOLDER	<ul style="list-style-type: none"> • Used for removing and installing the drive pinion lock nut. • Used as a handle to rotate gear when checking tooth contact.
 <p data-bbox="321 869 467 890">ST18270KA020</p>	18270KA020	SOCKET (E20)	<ul style="list-style-type: none"> • Used for removing and installing the hypoid driven gear. • Used for removing and installing the drive pinion shaft retainer.
 <p data-bbox="337 1222 467 1243">ST-398497701</p>	398497701	SEAT	Used for removing and installing the ball bearing.
 <p data-bbox="337 1575 467 1596">ST-398177700</p>	398177700	INSTALLER	Used for removing and installing the ball bearing and tapered roller bearing.
 <p data-bbox="337 1921 467 1942">ST-398643600</p>	398643600	GAUGE	Used for measuring the total end play, extension end play and drive pinion height.


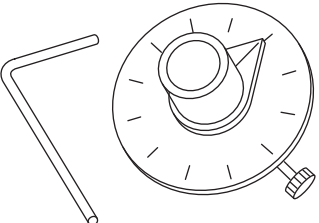
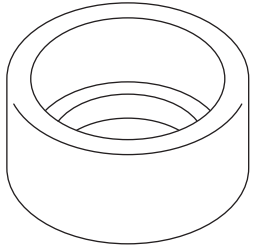
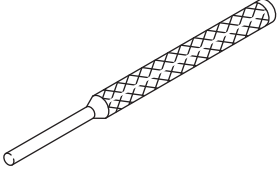
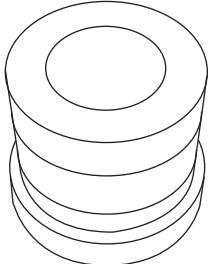
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST-899864100</p>	899864100	REMOVER	Used for removing and installing the ball bearing.
 <p style="text-align: center;">ST-498077000</p>	498077000	REMOVER	Used for removing the differential taper roller bearing.
 <p style="text-align: center;">ST18657AA010</p>	18657AA010	INSTALLER	Used for installing the oil seal of inhibitor switch.
 <p style="text-align: center;">ST18620AA000</p>	18620AA000	ADAPTER WRENCH	Used for removing and installing the drive pinion shaft lock nut.
 <p style="text-align: center;">ST18651AA000</p>	18651AA000	INSTALLER	Used for installing the differential taper roller bearing.

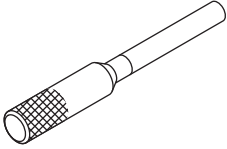
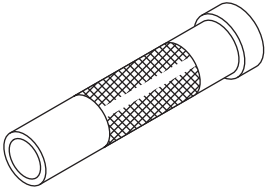
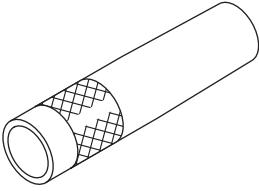
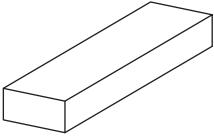
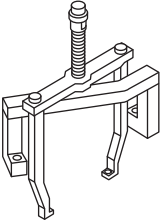
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="324 514 462 535">ST18720AA000</p>	18720AA000	REMOVER	Used for removing ball bearing of reduction driven gear.
 <p data-bbox="324 871 462 892">ST18854AA000</p>	18854AA000	ANGLE GAUGE	Used for installing the drive plate.
 <p data-bbox="324 1218 462 1239">ST20299AG010</p>	20299AG010	PRESS SNAP RING	Used for installing the bearing of reduction driven gear.
 <p data-bbox="332 1564 462 1585">ST-398791600</p>	398791600	REMOVER	Used for removing and installing the shifter arm spring pin.
 <p data-bbox="332 1921 462 1942">ST-399513600</p>	399513600	INSTALLER	Used for removing the bearing of the oil pump chain sprocket.

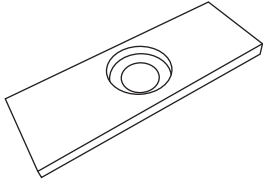
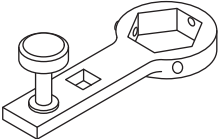
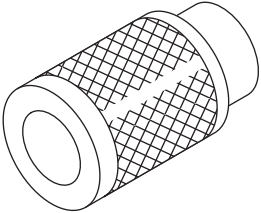
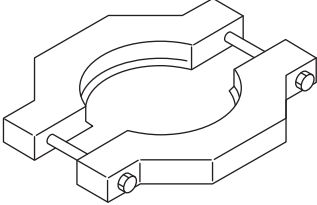
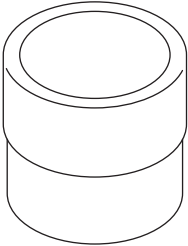
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p style="text-align: center;">ST-499267300</p>	499267300	STOPPER PIN	Used for adjusting the inhibitor switch.
 <p style="text-align: center;">ST-499277100</p>	499277100	BUSHING 1-2 INSTALLER	Used for removing the transfer reduction driven gear.
 <p style="text-align: center;">ST-499277200</p>	499277200	INSTALLER	Used for removing the transfer reduction driven gear.
 <p style="text-align: center;">ST-499575400</p>	499575400	GAUGE	Used for measuring height of end play.
 <p style="text-align: center;">ST-499737100</p>	499737100	PULLER SET	<ul style="list-style-type: none"> • Used for measuring the transfer end play. • Use the rack only.

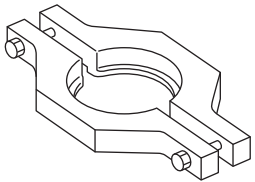
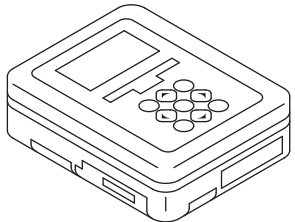
General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p data-bbox="331 516 461 537">ST-499575600</p>	499575600	GAUGE	Used for measuring height of end play.
 <p data-bbox="337 869 467 890">ST-499787700</p>	499787700	WRENCH	Used for measuring the differential pinion shaft backlash.
 <p data-bbox="337 1222 467 1243">ST-499757002</p>	499757002	INSTALLER	Used for removing the transfer reduction driven gear.
 <p data-bbox="326 1575 467 1596">ST18767AA000</p>	18767AA000	REMOVER	Used for removing the transfer reduction driven gear.
 <p data-bbox="337 1927 467 1948">ST-499755602</p>	499755602	PRESS SNAP RING	Used for installing the ball bearing, roller bearing and oil seal.

General Description

CONTINUOUSLY VARIABLE TRANSMISSION

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST-498077600</p>	498077600	REMOVER	Used for removing the ball bearing of the rear drive shaft.
 <p>ST1B022XU0</p>	1B022XU0	SUBARU SELECT MONITOR III KIT	Used for troubleshooting the electrical system.

2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance and voltage.
Thickness gauge	Used for the clearance in reverse brake, forward clutch, transfer clutch and input clutch.
Caliper	Used for measuring the clearance at the parts.
Spring scale	Used for measuring the starting torque of the drive pinion.
TORX® bit T70	Used for removing and installing differential gear oil drain plug.
TORX® bit E16	Used for removing and installing the center support COMPL.
Straight pin remover	Used for removing and installing transmission gear oil drain plug.
Deep socket	Used for removing and installing the secondary pressure sensor. NOTE: Use Ko-ken 3/8 12-point 27 mm (manufacturer product No. 3305M-27).
Push/pull gauge	Used for measuring clutch clearance.
Chain sling	Used for removing and installing transmission. <ul style="list-style-type: none"> • Length: 0.8 — 1 m (2.6 — 3.3 ft) • Load capacity: 1.2 t (2646 lb) or more • Diameter: 6 mm (0.24 in) or 6.3 mm (0.25 in) • Chain external width: 23.5 mm (0.93 in) or less • Chain internal width: 8.5 mm (0.33 in) or more
Screw shackle	Used for removing and installing transmission. <ul style="list-style-type: none"> • Load capacity: 250 kg (551 lb) or more • Use two pieces.