

GENERAL DESCRIPTION

Lubrication

1. General Description S108001

A: SPECIFICATIONS S108001E49

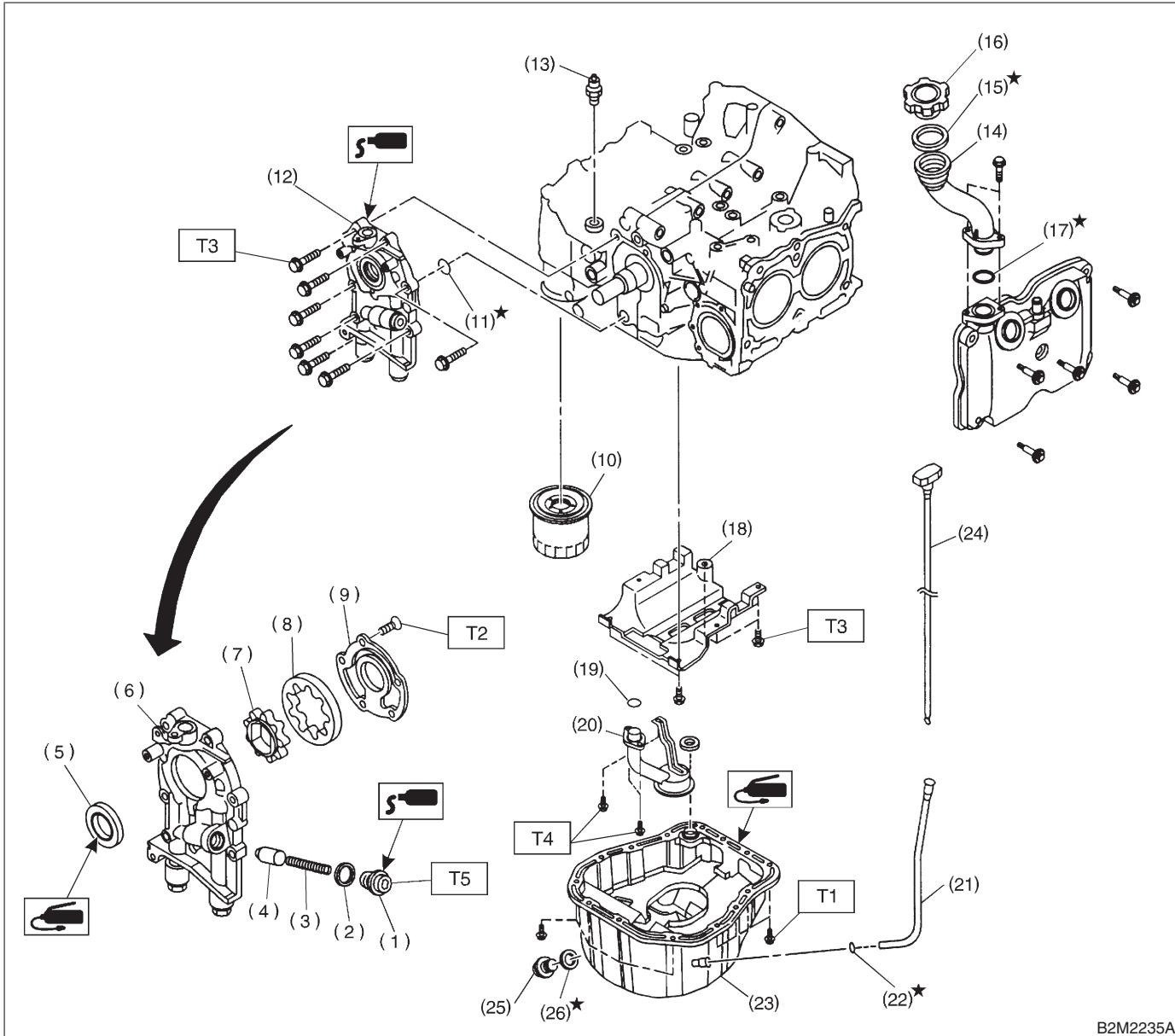
| Lubrication method | | | Forced lubrication | |
|---|-----------|---|-------------------------------------|--|
| Oil pump | | | Pump type Trochoid type | |
| | | | Number of teeth Inner rotor 9 | |
| | | | Outer rotor 10 | |
| Outer rotor diameter × thickness | | 78 × 9 mm (3.07 × 0.35 in) | | |
| Tip clearance between inner and outer rotor | | STANDARD 0.04 — 0.14 mm (0.0016 — 0.0055 in) | | |
| | | LIMIT 0.18 mm (0.0071 in) | | |
| Side clearance between inner rotor and pump case | | STANDARD 0.02 — 0.07 mm (0.0008 — 0.0028 in) | | |
| | | LIMIT 0.15 mm (0.0059 in) | | |
| Case clearance between outer rotor and pump case | | STANDARD 0.10 — 0.175 mm (0.0039 — 0.0069 in) | | |
| | | LIMIT 0.20 mm (0.0079 in) | | |
| Capacity at 80°C (176°F) | 700 rpm | - pressure 98 kPa (1.0 kg/cm ² , 14 psi) or more | | |
| | | - quantity 4.2 ℥ (4.4 US qt, 3.7 Imp qt)/min. | | |
| | 5,000 rpm | - pressure 294 kPa (3.0 kg/cm ² , 43 psi) or more | | |
| | | - quantity 42.0 ℥ (11.10 US gal, 9.24 Imp gal)/min. | | |
| | | Relief valve operation pressure | | |
| Oil filter | | Type Full-flow filter type | | |
| | | Filtration area 1,000 cm ² (155 sq in) | | |
| | | By-pass valve opening pressure 156 kPa (1.6 kg/cm ² , 23 psi) | | |
| | | Outer diameter × width 80 × 70 mm (3.15 × 2.76 in) | | |
| | | Oil filter to engine thread size M 20 × 1.5 | | |
| Relief valve (on rocker shaft) operation pressure 69 kPa (0.7 kg/cm ² , 10 psi) | | | | |
| Oil pressure switch | | Type Immersed contact point type | | |
| | | Working voltage — wattage 12 V — 3.4 W or less | | |
| | | Warning light activation pressure 14.7 kPa (0.15 kg/cm ² , 2.1 psi) | | |
| | | Proof pressure More than 981 kPa (10 kg/cm ² , 142 psi) | | |
| Oil capacity (at replacement) 4.5 ℥ (4.8 US qt, 4.0 Imp qt) | | | | |

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B: COMPONENT

S108001A05



B2M2235A

- (1) Plug
- (2) Washer
- (3) Relief valve spring
- (4) Relief valve
- (5) Oil seal
- (6) Oil pump case
- (7) Inner rotor
- (8) Outer rotor
- (9) Oil pump cover
- (10) Oil filter
- (11) O-ring
- (12) Oil pump ASSY

- (13) Oil pressure switch
- (14) Oil filler duct
- (15) O-ring
- (16) Oil filler cap
- (17) O-ring
- (18) Baffle plate
- (19) O-ring
- (20) Oil strainer
- (21) Oil level gauge guide
- (22) O-ring
- (23) Oil pan
- (24) Oil level gauge

- (25) Drain plug
- (26) Metal gasket

Tightening torque: N·m (kgf·m, ft·lb)

- T1: 5 (0.5, 3.6)
- T2: 5 (0.5, 3.6)
- T3: 6.4 (0.65, 4.7)
- T4: 10 (1.0, 7.2)
- T5: 44.1 (4.5, 32.5)

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C: CAUTION S108001A03

- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly, and replacement.
- Be careful not to burn your hands, because each part in the vehicle is hot after running.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or safety stands at the specified points.
- Before disconnecting electrical connectors of sensors or units, be sure to disconnect negative terminal from battery.