

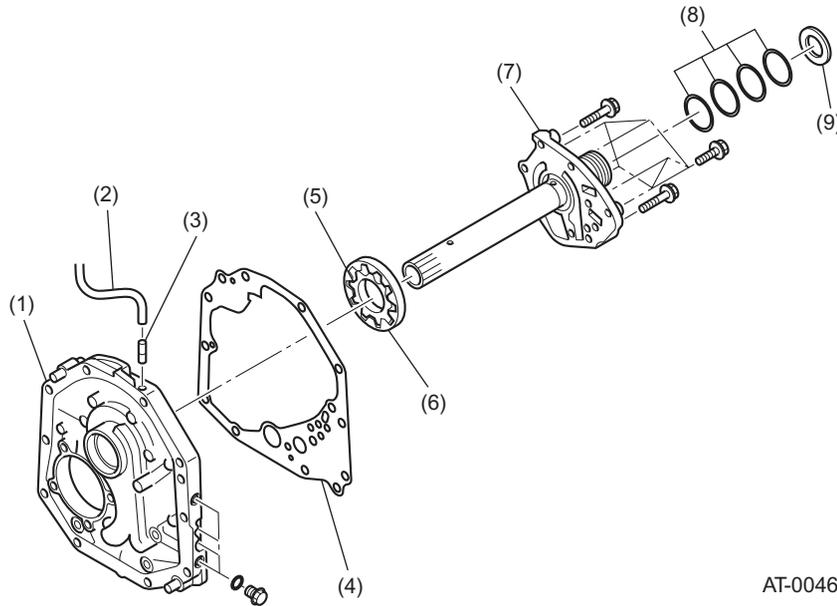
OIL PUMP

AUTOMATIC TRANSMISSION

1. Oil Pump

A: CONSTRUCTION

The pump consists of a paracoid rotor pair, a housing and a cover. The inner rotor has nine teeth and the outer rotor has ten teeth.



AT-00461

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|----------------------|-----------------|--------------------|
| (1) Oil pump housing | (4) Gasket | (7) Oil pump cover |
| (2) Hose | (5) Inner rotor | (8) Seal ring |
| (3) Nipple | (6) Outer rotor | (9) Thrust bearing |

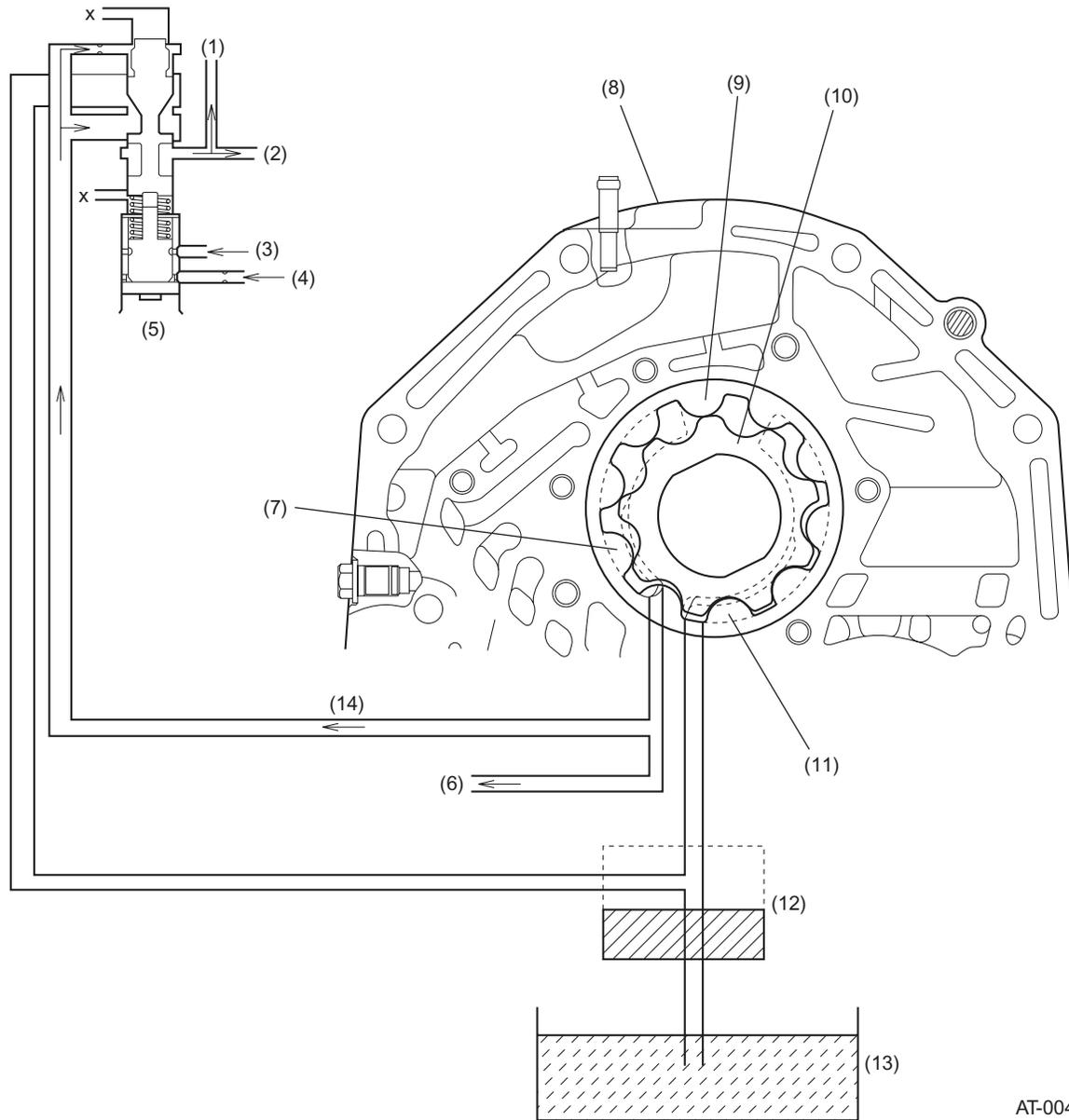
B: FUNCTION

- The pump draws automatic transmission fluid (ATF) from the oil pan through the oil strainer located under the hydraulic control valve assembly. The ATF then flows through a passage in the transmission case, and after passing through the oil pump housing and oil pump cover, it enters the suction port.
- As the inner rotor rotates, the outer rotor also rotates. This motion causes the ATF to be sucked up through the suction port and discharged from the discharged port.
- The discharged ATF flows through a passage in the oil pump cover and then a passage in the oil pump housing. It then goes through a passage in the transmission case to the pressure regulator valve in the control valve assembly, from which the ATF is directed to various clutches, brakes, and torque converter lockup clutch for acting as hydraulic fluid and lubricating oil. Part of the ATF also flows, directly and after passing through the regulator valve, to the manual valve, from where it is distributed to the circuit corresponding to the range selected by the selector lever.
- As engine speed increases, the delivery rate of the oil pump also increases.

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OIL PUMP

AUTOMATIC TRANSMISSION



AT-00462

- (1) To torque converter regulator valve
- (2) To manual valve
- (3) From reverse clutch
- (4) From pressure modifier valve
- (5) Pressure regulator valve
- (6) To manual valve
- (7) Delivery port

- (8) Oil pump housing
- (9) Outer rotor
- (10) Inner rotor
- (11) Suction port
- (12) Oil strainer
- (13) Oil pan
- (14) Line pressure

4AT-3