8. Turbocharger

A: REMOVAL

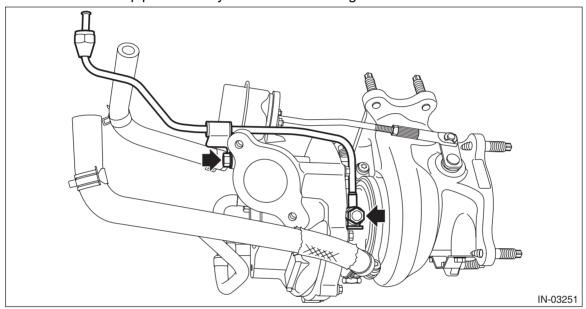
Remove the turbo charger and front exhaust pipe as a unit. Refer to "Front Exhaust Pipe" for the removal procedure. <Ref. to EX(w/o STI)-9, REMOVAL, Front Exhaust Pipe.> <Ref. to EX(w/o STI)-29, DISASSEMBLY, Front Exhaust Pipe.>

B: INSTALLATION

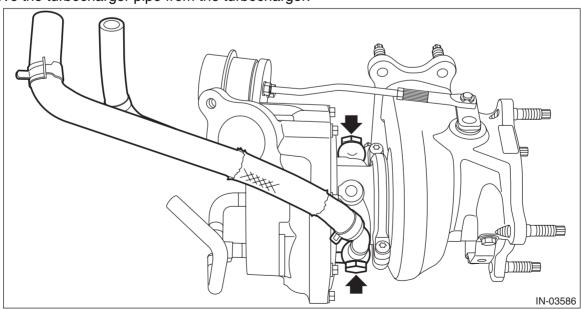
Refer to "Front Exhaust Pipe" for the installation procedure. <Ref. to EX(w/o STI)-19, INSTALLATION, Front Exhaust Pipe.> <Ref. to EX(w/o STI)-32, ASSEMBLY, Front Exhaust Pipe.>

C: DISASSEMBLY

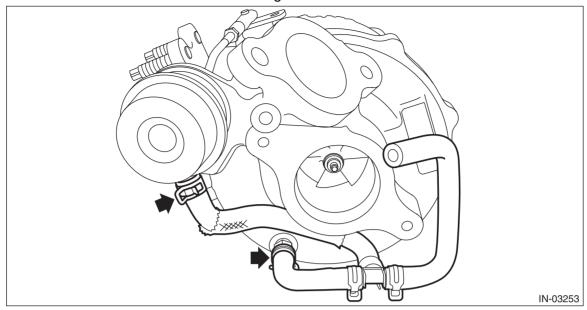
1) Remove the union screw pipe assembly from the turbocharger.



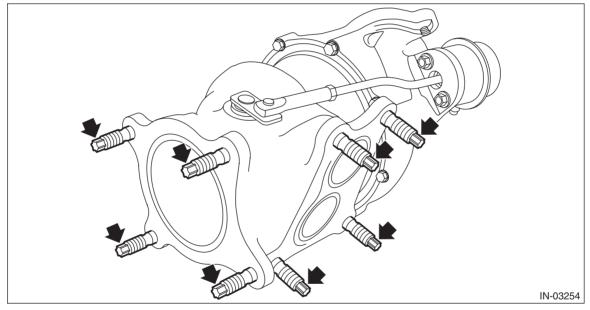
2) Remove the turbocharger pipe from the turbocharger.



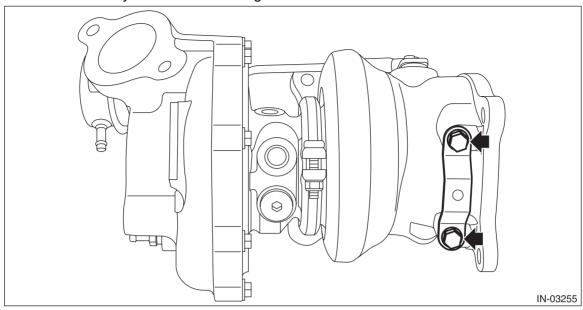
3) Remove the air control hose from the turbocharger.



4) Remove the stud bolt from the turbocharger.



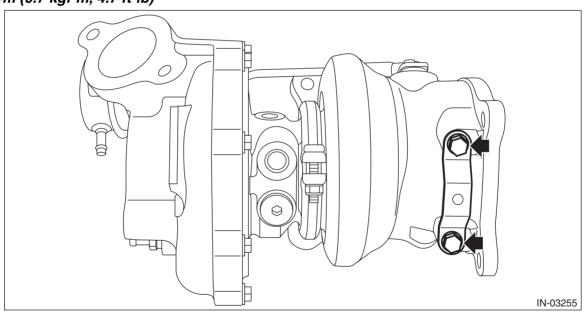
5) Remove the exhaust stay from the turbocharger.



D: ASSEMBLY

1) Install the exhaust stay to the turbocharger.

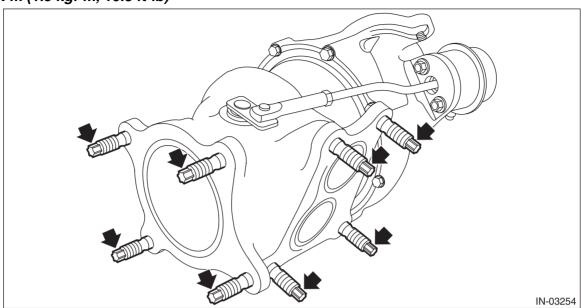
Tightening torque: 6.4 N⋅m (0.7 kgf-m, 4.7 ft-lb)



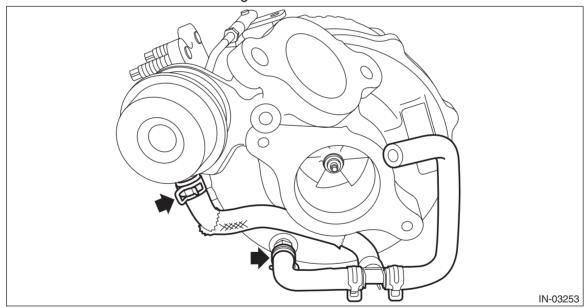
2) Attach the stud bolts to the turbocharger.

Tightening torque:

14.7 N·m (1.5 kgf-m, 10.8 ft-lb)



3) Install the air control hose to the turbocharger.



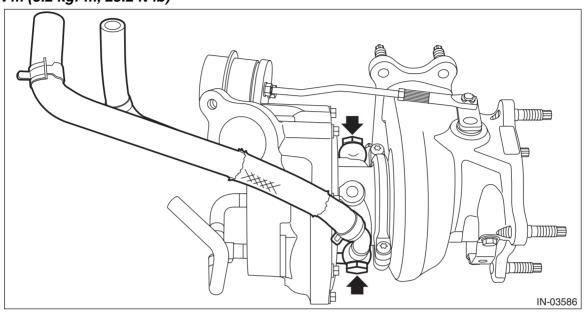
4) Install the turbocharger pipe to the turbocharger.

NOTE:

Use a new gasket.

Tightening torque:

31.5 N·m (3.2 kgf-m, 23.2 ft-lb)



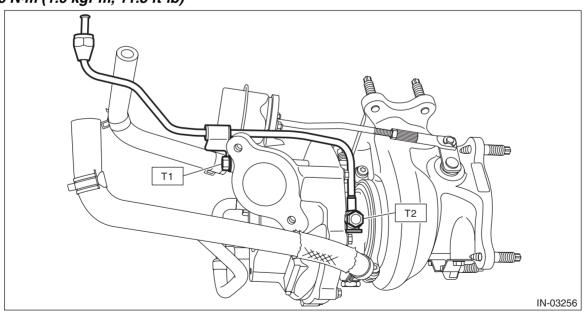
5) Install the union screw pipe assembly to the turbocharger.

NOTE:

Use a new gasket.

Tightening torque:

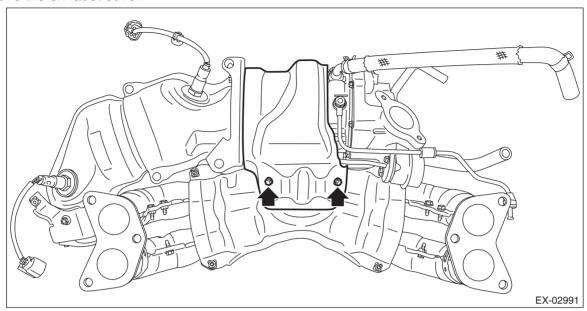
T1: 6.4 N·m (0.7 kgf-m, 4.7 ft-lb) T2: 16 N·m (1.6 kgf-m, 11.8 ft-lb)



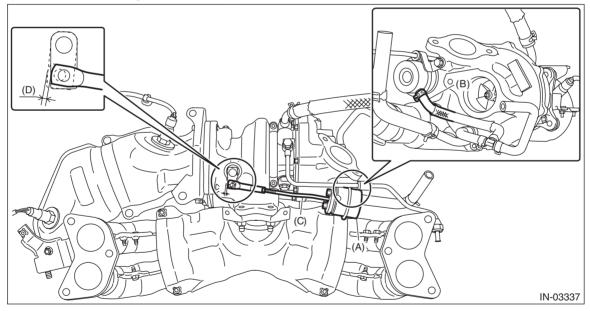
E: INSPECTION

1. WASTE GATE ACTUATOR

- 1) Remove the front exhaust pipe. <Ref. to EX(w/o STI)-9, REMOVAL, Front Exhaust Pipe.>
- 2) Remove the exhaust cover.



3) Remove the vacuum control hose (B) from the waste gate actuator (A) of the turbocharger, and connect the Mighty Vac to the waste gate actuator (A).



- (A) Waste gate actuator
- (C) Control rod

(D) Control rod stroke

(B) Vacuum control hose

4) Pressurize slowly with the Mighty Vac, and check the pressure when the control rod stroke (D) becomes 1±0.15 mm (0.0394±0.0059 in). If it is not within the standard, replace the turbocharger assembly.

CAUTION:

Do not pressurize over 112.7 kPa (1.15 kg/cm², 16.34 psi) to prevent damaging the waste gate actuator.

Operating pressure (control rod stroke 1 ± 0.15 mm (0.0394 ± 0.0059 in)): Standard

 $84.0 - 88.0 \text{ kPa} (0.86 - 0.90 \text{ kg/cm}^2, 12.18 - 12.76 \text{ psi})$

5) After inspection, install the related parts in the reverse order of removal.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

2. OTHER INSPECTIONS

- 1) Check that the turbocharger and pipe have no deformation, cracks or other damages.
- 2) Check that the hose has no cracks, damage or loose part.
- 3) Check that there are no oil leakage or water leakage from the pipe attachment section.