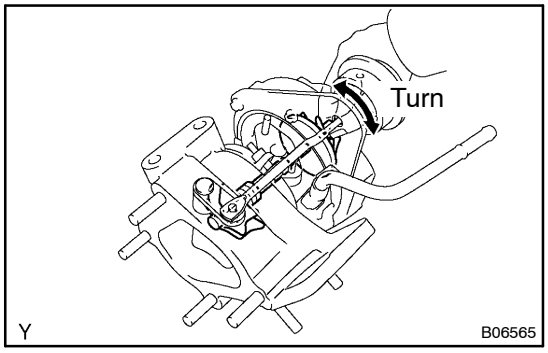
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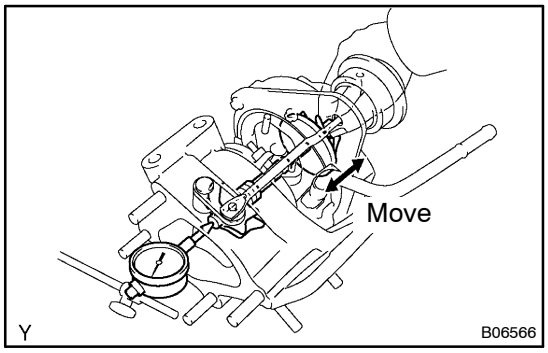
DISASSEMBLY



1. INSPECT TURBINE SHAFT ROTATION

Grasp the edge of the turbine shaft, and turn it. Check that the turbine shaft turns smoothly.

If the turbine shaft turns remarkably heavily or is stuck, replace the bearing housing. At that time, check also the interference with the turbine housing and compressor housing.



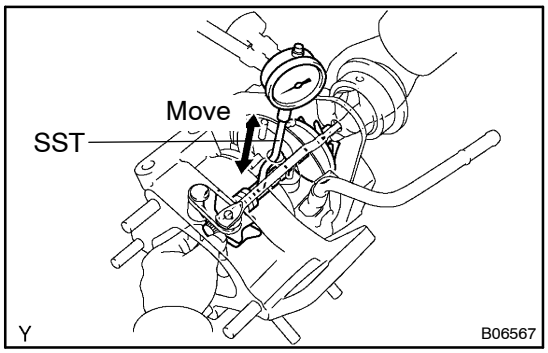
2. INSPECT AXIAL PLAY OF TURBINE SHAFT

(a) Using a dial indicator, insert the needle of the dial indicator into the exhaust side.

(b) Move the turbine shaft in an axial direction, measure the axial play of the turbine shaft.

Maximum axial play: 0.09 mm (0.0035 in.)

If the axial play is greater than maximum, replace the bearing housing. At that time, check also the interference with the turbine housing and compressor housing.



3. INSPECT RADIAL PLAY OF TURBINE SHAFT

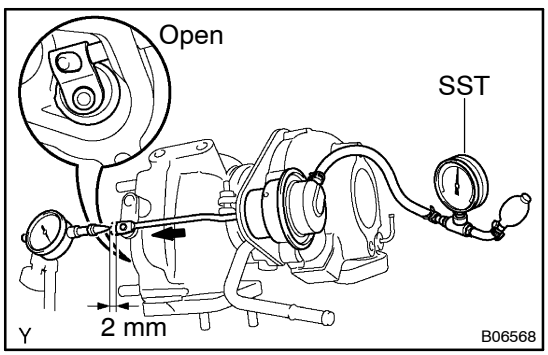
(a) Using SST and a dial indicator, insert the needle of the dial indicator into the oil outlet hole, and set it in the center of the turbine shaft.

SST 09992–00243

(b) Move the turbine shaft in a radial direction, measure the radial play of the turbine shaft.

Maximum radial play: 0.17 mm (0.0067 in.)

If the radial play is greater than maximum, replace the bearing housing. At that time, check also the interference with the turbine housing and compressor housing.



4. INSPECT ACTUATOR AND WASTE GATE VALVE OPERATION

(a) Disconnect the actuator hose from the compressor housing.

(b) Using SST and a dial indicator, read the graduation of SST when the actuator push rod moved 2 mm (0.079 in.).

Standard pressure:

152 – 165 kPa (1.55 – 1.68 kgf/cm^2, 22 – 23.9 psi)

(c) Move the actuator push rod, and check that the waste gate valve is open.

If operation is not as specified, replace the actuator and/or turbine housing.

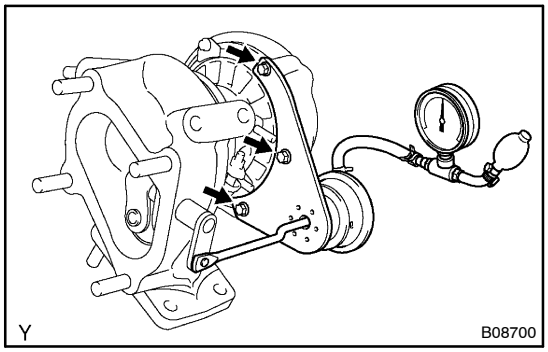
NOTICE:

Never apply more than 185 kPa (1.89 kgf/cm^2, 26.9 psi) of pressure of the actuator.

(d) Reconnect the actuator hose to the compressor hosing.

5. REMOVE No.2 TURBO WATER PIPE FROM TURBOCHARGER

Remove the union bolt, water pipe and gasket.



6. REMOVE ACTUATOR

(a) Disconnect the actuator hose from the compressor housing.

(b) Using SST, move the actuator push rod.

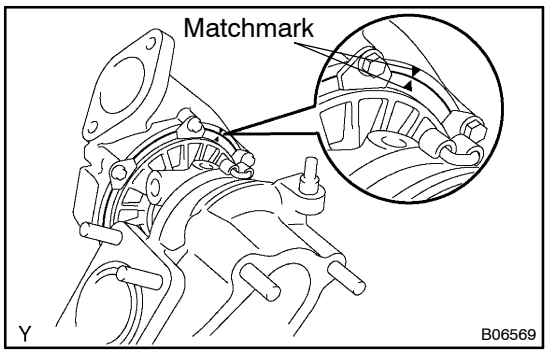
NOTICE:

Never apply more than 185 kPa (1.89 kgf/cm^2, 26.9 psi) of pressure of the actuator.

(c) Remove the 3 bolts holding the actuator to the compressor housing.

(d) Remove the E–ring holding the actuator push rod to the waste gate valve link, and remove the actuator.

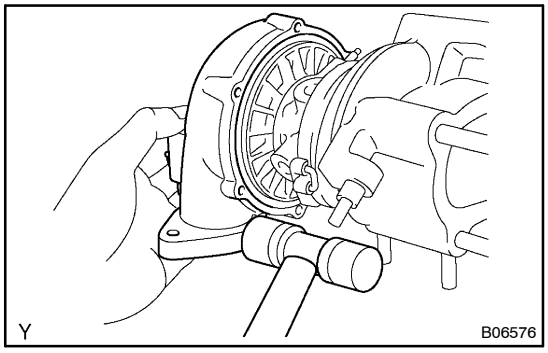
(e) Remove the actuator hose.



7. REMOVE COMPRESSOR HOUSING

(a) Place the matchmarks on the compressor housing and bearing housing.

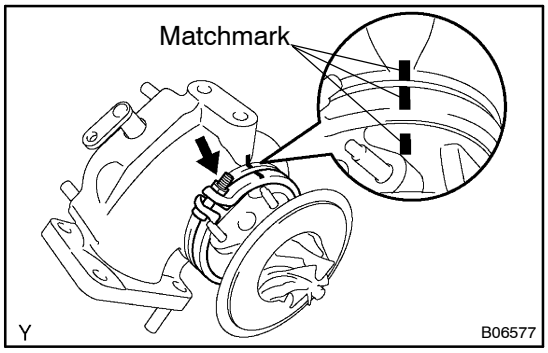
(b) Remove the 3 bolts and 3 clamp plates.



(c) Using a plastic–faced hammer, tap out the compressor housing.

NOTICE:

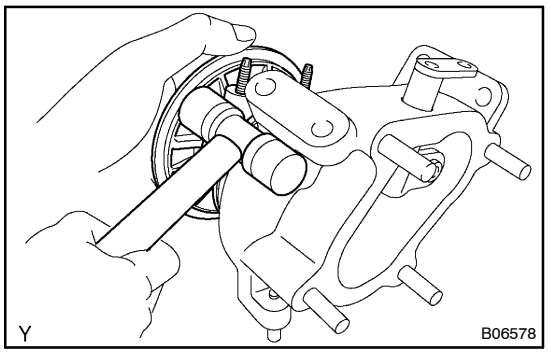
Remove the compressor housing as straight as possible and do not make the impeller wheel interfere with the compressor housing.



8. REMOVE BEARING HOUSING

(a) Place the matchmarks on the V–band, turbine housing and bearing housing.

(b) Remove the nut, bolt and V–band.



(c) Using a plastic–faced hammer, tap out the bearing housing.

NOTICE:

Remove the bearing housing as straight as possible and do not make the turbine wheel interfere with the turbine housing.