

TOOLS:

1. Sockets:6mm,8mm,10mm,E8,E12,T25,T30,5mm allen
2. 3/8 ratchet, 1/4 ratchet, 3/8 impact, 1/4 impact,1/4 air ratchet
3. Large pick for stubborn coolant hoses.
4. Medium flathead screw driver,small flathead screwdriver.

PROCESS:

- Start off by removing "Twin power turbo" engine cover. Loosen 6mm threaded clamp on rubber elbow of intake.
- Disconnect heating element on intake pipe for CCV. Remove plastic hose between valve cover and intake pipe using a small screw driver to pry up the 4 clips-be careful this pipe can be brittle.
- Remove T25 from intake pipe joining to lower intake pipe. Remove intake pipe.
- Remove 10mm bolt from cylinder head holding lower intake pipe to turbo inlet.
- Remove lower intake pipe from turbo inlet by sliding out.
- Remove charge pipe between turbo and intercooler by releasing quick disconnect clamps.
- Place coolant drain under vehicle to catch spillage.
- Now remove accessible quick disconnect hoses from thermostat.
- Raise vehicle, remove underside engine cover(several 8mm screws).
- Remove both under side engine cover brackets attached to sub frame (2-8mm screws).
- Remove 10mm screw holding power steering line to sub from.
- Disconnect thermostat connector, Remove 2-10mm bolts mounting thermostat to water pump.
- Thermostat can now be removed from top side of vehicle.
- Remove hoses from water pump by releasing the threaded 6mm clamps.
- Disconnect water pump connector.
- Remove the 3-E12 screws mounting the water pump. Remove water pump.

Now turbo and lines are visible.

- Remove 2-T30 bolts for turbo oil supply line and oil return lines on side of engine block.
- Remove T30 bolt for return coolant line from turbo.
- Remove 6mm threaded clamp for coolant inlet for turbo.
- Remove 2-5mm bolts mounting vacuum unit to turbo (Some may have to remove 3-E8 for coolant hose at rear of cylinder head for access).

Take note of orientation of turbo.

- Release 10mm clamp at center section of turbo. FULLY REMOVE CLAMP FROM TURBO CENTER.
- Remove turbo center section/compressor housing.
- Swap over BOV, coolant lines and oil lines to your new PURE turbo.
- Reinstall in reverse order.
- Fill and bleed engine coolant

Coolant bleed procedure:

Open the hood and remove the radiator cap
Key fob inserted, no brake pedal, press Start
Driver and Pass air temp controls all the way to max temp
Press the defrost button to turn it on
Manually adjust the fan speed to the slowest setting (not off)
then hold the gas pedal down all the way for 10 seconds.

The water pump will begin to pump water slowly at first and faster within a few seconds
The water will squirt from a very small opening just under the cap threads in the reservoir
If there was any air in the system, this will purge it and will show you that the pump is operational as well.
Top up the coolant as the system bleeds. Complete procedure should take under 15 minutes.

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