PART 3: Installing JHM Turbo Kit

1) Install the supplied line adapter for the turbo oil feed line on the top of the turbo. (#30)

2) Clean the surface of the cylinder head for the installation of the new exhaust gasket.

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UPDATE: The second to last turbo manifold wedge stud will need to be shortened for the updated turbine housings. Cut the excess stud exposed from the nut before proceeding to step 3.

UPDATE: Due to the variances in the OEM heat shielding below the turbo, you may need to remove some heat shield material to make room for the large turbo.

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3) Install the new exhaust manifold gasket. (#29)

4) Place the turbo kit onto the exhaust manifold wedges. (#26)

5) Install the four exhaust manifold nuts.

6) Install the turbo studs onto the JHM Adapter flange, and place the new test pipe gasket in between the turbo and test pipe. Reinstall test pipe (or HFC).

7) Tighten all four turbo stud nuts. (again, may need to go underneath for better access)

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8) Reinstall the primary and secondary o2 sensors.

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9) Install the turbo oil feed line (#18) onto the line adapter, on top of the turbo. Allow the line to hang off to the passenger side of the turbo.

10) Install the coolant feed line (#23) onto the passenger side of the turbo.
NOTE: Be sure to use the appropriately sized crush washers for each banjo bolt.

11) Install the coolant return line (#24) onto the driver side of the turbo and install the shorter supplied oil drain adapter (#21) onto the bottom of the turbo.

12) Install the taller supplied oil drain adapter (#21) onto the oil pan, and connect the oil drain line (#25). The OEM oil drain bolts are used for the adapter.

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13) Connect the oil drain line onto the oil drain adapter on the bottom of the turbo.

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14) Install the coolant feed line (Upper) and oil feed line (Lower) to the block. Be sure to use the appropriate supplied crush washers. (#22)

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15) Install the silicone adapter onto the barb of the coolant return line. (#11)

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16) Install the silicone adapter onto the coolant return pipe.

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17) Attach the JHM Turbo Bracket (#15) to the block using the OEM bracket bolt.

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18) Install the JHM Turbo Bracket onto the JHM Turbo using the supplied bolts for the waste gate bracket.

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19) Remove the N75 valve from the stock turbo, and set the OEM bolts aside for future use

20) Remove either of these bolts from the stock turbo, and set it aside for future use.
NOTE: These bolts will be used to secure the N75 and Cushion Clamp to the JHM Turbo Bracket.

21) Use the two OEM N75 bolts to attach the N75 onto the JHM Turbo Bracket.

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22) Use the supplied boost line (#16) to go from the N75 to the boost reference fitting on the front of the compressor housing. Cut the Boost Line to size and be sure to give yourself a little slack.

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23) Use the supplied boost line to connect the side of port of the N75 to the waste gate fitting. Cut the supplied boost line to size like on step 22.

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24) Take the JHM Inlet Hose (#12) and install the three supplied fittings in the above orientation. Note where the small (#8), medium (#8), and large (#7) fittings go.

25) Install the JHM Inlet hose onto the inlet of the turbo. Take the supplied metal sleeve (#10) and insert it half way into the large opening of the JHM inlet so the MAF hose can be installed onto it.

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26) Install the large valve cover hose (#6) onto the large inlet fitting. Install the small valve cover hose (#5) onto the medium inlet fitting. Install MAF hose.

27) Connect the last N75 port to the small inlet fitting using the boost line (Cut to size), and plug the N75 back into the harness.

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28) Install the JHM Intercooler Hose (#13) from the turbo to the intercooler pipe.

NOTE: Contact JHM if you do not have a JHM Front Mount Intercooler. This step may require some custom fitting. If you have OEM Style intercoolers, see the update at the end of this document.

29) Install the diverter valve (#28) in between the inlet and the intercooler hose in the orientation shown. Connect the remaining length of the supplied boost line to the fitting on the diverter.

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30) Connect the supplied resistor (#14) to the N249 Harness.

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31) Take the supplied rubber cushion clamp (#9) and give it a slight twist.

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32) Zip-tie the N249 Harness/resistor to the JHM Turbo Bracket, and use the remaining OEM bolt to attach the cushion clamp around the coolant return line. This will keep the line for getting worn on the metal bracket.

33)

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34) Install the boost tap into the manifold, and then reinstall the PCV or Catch Can System.

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35) Run the remaining length boost line from the Diverter up and around the engine bay. You canf follow the harness up to the AC lines and along the firewall behind the HPFP and behind the intake manifold until you get to the boost tap. Be sure to zip-tie the boost line along the reference points shown in the photo. Plug the boost line into the boost tap.

NOTE: If you have a boost gauge, you will need a "T" fitting so the DV and Boost Gauge can share the boost tap.

36) You can now wrap up the installation by reinstalling the air box, MAF, and snorkel.

*****Refill the oil and coolant before starting the vehicle! *****

IMPORTANT NOTE! Please read the "READ ME" file and reference the notes regarding first start up and logging to insure everything was installed correctly!

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UPDATE: OEM or direct replacement aftermarket side mount intercooler adapter addendum.

At this point you will already have the supplied intercooler hose install on the turbo. Take the supplied beaded sleeve and insert it into the intercooler hose, and take the supplied 90* silicone hose and insert it onto the other side of the beaded sleeve. From there you can take the 90* Silicone hose and install it onto the OEM intercooler. Be sure to use the supplied hose clamps and tighten securely to prevent boost leaks.

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