## **RPM X3 3" E-Valve Mid Pipe Installation**

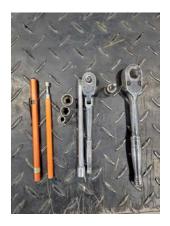
Installation of the mid pipe is fairly straight forward on all models. The most common mistake is not reusing the gasket on the turbo side. Link to video removing & installing a mid pipe can be found at: https://youtu.be/E2Fy-nMYH3c?t=80

We start by removing your stock mid-pipe. After this is removed you may follow the below steps removing and installing your new support bracket.

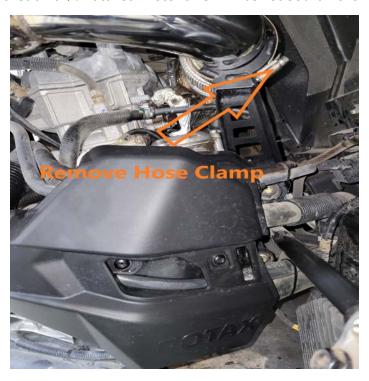
Removal of the exhaust support bracket and install of the RPM 3" support bracket

Tools Required:
8mm socket (¼" drive preferred)
10mm socket (¼" drive preferred)
13mm socket (¼" drive preferred)
½ drive 6" extensions

1/4" ratchet
T30 Torx bit
3/8" ratchet
Magnet (optional)
Flashlight (optional)



#1 Remove the worm gear clamp holding the OEM exhaust to the bracket using an 8mm socket on a ½" ratchet. note: this will be reused on the new RPM bracket and 3" exhaust



<sup>\*\*</sup>Tighten 2nd O2 Bung Bolt on RPM Mid Pipe if not utilizing.

<sup>\*\*</sup>Specifically Titanium 3" additional instructions on last page.

#2 Remove the 2 bolts holding the cover containing the coolant hoses using a T30 torx bit and 3/8" ratchet.



#3

Cut the 2 zip ties holding the lower coolant hose in place to access the lower bolt holding the assembly on.



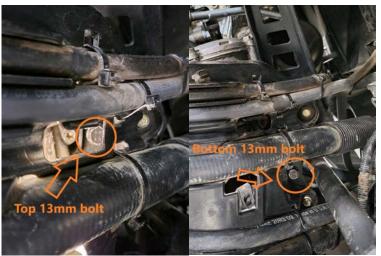
#4

Remove the 2 bolts holding the plastic assembly to the exhaust bracket using a 10mm socket and 1/4" ratchet with extensions.



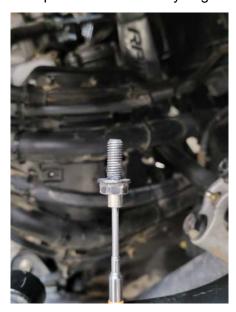
#5 Remove the 2 bolts holding the exhaust bracket to the engine using a 13mm socket and 1/4" ratchet with extensions. The top bolt is hidden behind the plastic piece that was loosened in the previous step.

We found it easiest to attach the socket onto the extension behind the cover and then push the cover out of the way to get lined up with the top bolt.



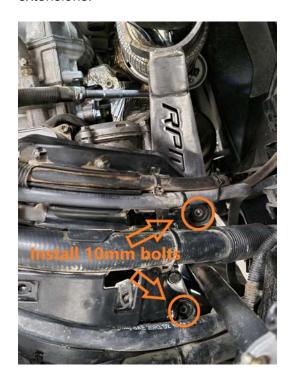


Remove the OEM exhaust bracket and install the new RPM 3" exhaust bracket. Reinstall the 2 bolts removed in the previous step. Loosely install the bottom bolt and then fully tighten the top bolt. After the top bolt is tight you can tighten the bottom bolt. We found it helpful to use a magnet to hold the top bolt as you run it back through the plastic assembly and set it in place, then use a 13mm socket and ½" ratchet with extensions to finish installing hardware. You may need to hold the bracket up and/or pull the plastic out of the way to get lined up with the top bolt again.



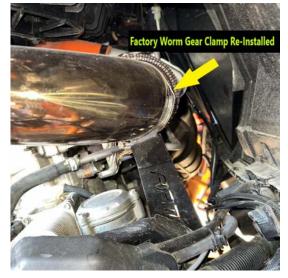


#7 Reinstall the 2 bolts removed in step 4 using a 10mm socket and ½" ratchet with extensions.



#8 Install new zip ties to hold the coolant hoses, reinstall the 2 cover bolts using a T30 torx bit and  $\frac{3}{8}$ " ratchet. At this time the bracket should be completely installed and ready for the mid-pipe install. note: re installation of the worm gear clamp removed in step 1 is

crucial to your warranty.



Now you may install the Mid-pipe. Remember to reuse the OEM gasket on the exhaust side of the turbo. Make use of an exhaust spring puller tool to install the springs connecting the mid-pipe to the muffler. <u>Tighten 2nd O2 bung if not using.</u>

You may refer to a video for installing a Mid-Pipe on an X3 here: https://youtu.be/E2Fy-nMYH3c?t=80

#1 Remove Passenger seat, remove the access panel to the center column, and loosen the panel in front of the access panel following the main wiring harness.



#2 Route the switch side of the harness to the prefered toggle location. Push the harness and plug through the back side, then install the switch. With the switch plugged into the harness you may now push the switch into place.

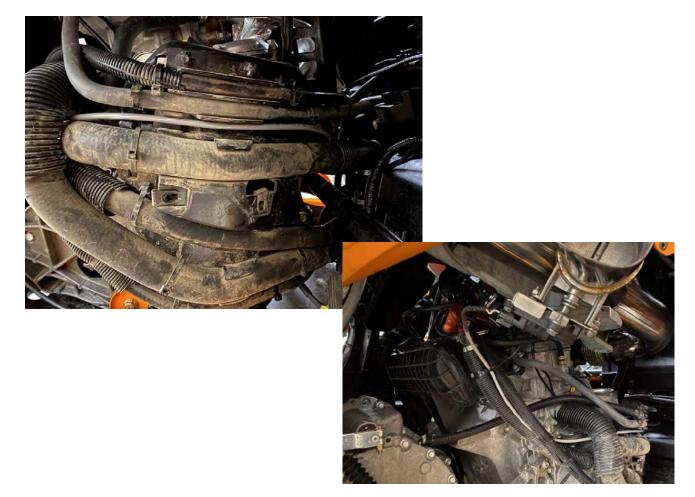




#3 Remove the cover to the buss bar gaining access to your positive and negative terminals. Red goes on the bottom 12v keyed ignition terminal, and black to the top ground terminal. At this time you can verify you have a 10amp mini bus fuse installed in the fuse holder. With the wires. Place the busbar cover back on the busbar.



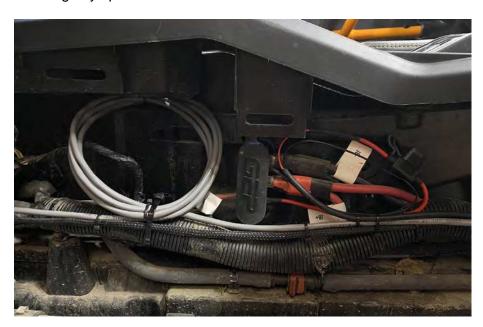
#4 You can now route the gray shielded wire harness towards the back of the car through the coolant line access cover, and plug it into your E-Valves valve's body. Be sure to secure the line with slack in them starting from the back, and working your way forward.



#5 Included is a PVC coated wire clamp. This clamp will mount to your E-Valve exhaust's valve body **UNDER** the 10mm bolt. This will secure, stabilize, and keep your harness from tugging on the valve motor's plug.



#7 Our harness is built to suit 2 and 4 seat X3's. Any extra slack can be coiled, and secured behind the center console access panel neatly and securely. Carefully check all wiring and securing any spots where there is slack.



#8 With the key on, you can test your exhaust valve to ensure it is opening and closing properly.

\*\*\* **3" Titanium E-Valve** You will use the supplied exhaust bracket to replace the OEM bracket. The lower spring will go over the bracket. As pictured, attach the empty spring hook to the hook on the new bracket, securing the exhaust to the bracket.



\*\*\* **3" Titanium E-Valve** After first Full Heat Cycle re-torque the steel clamping nut to 65(lb-ft).

