

## **AutoSpeed Performance 3" Down-Pipe Install by [Mark@AutoSpeedPerformance.com](http://Mark@AutoSpeedPerformance.com).**

Here is our method of removal/install.

1. Remove Wheels
2. Remove Catback
3. Remove Front Axle Shields (Use 6mm Hex Taped in 1/4" Socket) with long Extension ~18" IIRC
4. Remove Plastic Covers in Engine Compartment
5. Unplug MAF connector, Remove MAF Housing and Tube to Y-Pipe
6. Spray all nuts and O2 sensors with Wurth Rost-Off or PB Blaster Heavily Let it sit 5 minutes minimum.
7. Loosen PS EGT from Turbo and Route to Safety
8. Note Colors of O2 sensor plugs on firewall, then remove from plastic holder and disconnect each plug, route to safety
9. Leave Heat shields in place, Remove top bolt from DP (17mm Wrench, angled head in you have one) if you remove heat shield bolts first you will have a fun time getting to the top dp bolt. There is a cut out you'll see
10. Remove the O2 sensors with a slit socket and EXTRA long ~36" extension at an angle. Just break it loose and remove by hand, you do not want to spin the wiring and break a lead.
11. You can pull those O2 out and set aside, mark each one for good measure.
12. Remove two small socket head bolts holding heat shield on, **\*\*Tip\*\*** make sure to insert allen socket ALL the way into the bolt first, I suggest tapping it with a rubber mallet to seat it then in a quick jerk loosen the bolt, it will pop and loosen. Don't ask how I know, had one break before and game over, had to be drilled with a 12" long bit!
13. From above, trace O2 wiring and cut all ties holding the wiring to free the wiring
14. Gently try to pull the wiring by the jacket (not sensor) to lengthen the wiring, if they will not move find the ties on top of the trans (little metal clip and another tie towards front of trans, cut them) Route the two lower O2 sensors out of the way. Mark for good measure.  
**\*\*BE careful when cutting the ties to not cut the jacket and conductors themselves\*\***
15. From underneath the vehicle remove remaining three dp bolts (No advice here as we always have used our lift, I would imagine this will be difficult, but where there's a will there's a way.  
**\*\*TIP\*\*** you may be able to access the side nuts from the wheel well, not sure though.

16. Also you may want to drop the REAR sub frame only, meaning brace rear sub frame, remove stock tie bar, four 13mm bolts and 18mm long bolts, then slowly drop sub frame, do not worry it will drop about 1-2" max.

17. To remove stock dp's you will have to pull and twist and curse until they squirm out, again here is where I wonder how these things are done on the ground on jack stands.

\*\*\*7th Inning Stretch\*\*\*

Now Pat yourself on the back, you deserve it, grab a beer and stop wondering if you're actually going to pull this off.

18. Putting the new pipes in is easy.

19. Slide the new pipes into place and fasten by hand a couple of nuts.

20. Jack rear sub frame back up until it contacts and install tie bar and long 18mm bolts securing sub frame.

21. Now use the reverse of removal and you will be ok.

Things to check at final completion BEFORE Startup so no CEL...

-O2 wiring neatly routed and zip tied where needed away from high temp components

-MAF Plugged back in

-O2 Sensors plugged back in

-Triple check everything, not a job that you want to redo

Mark