2016-2019

Nissan Titan XD– 5.0 Cummins Diesel Tune & Delete



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Proprietary & Disclaimer Information Notice

Warning Regarding Emission Laws

Not legal for sale or use on pollution-controlled motor vehicles anywhere in the United States. Legal ONLY for off-road competition racing vehicles and cannot be used on vehicles that are operated on public roads, streets and/or highways.

WARNING!!!

ONLY install this kit if you are using a tuner that disables the EGR sensors & circuit system. Any product that requires the removal of ANY emissions control device is strictly prohibited and is intended for closed course racing only for non-registered vehicles.

Disclaimer.

By installing this or any portion of the products shown in this manual onto your vehicle, you assume all risk and liability associated with its use. It is your responsibility to make sure your vehicle complies with all federal, state and local emissions laws. Federal and many state and local laws prohibit the removal, modification or rendering inoperative of any part of the design affecting emissions or safety on motor vehicles used on a public street or highway. Violation may result in a fine of up to $32,500 per vehicle (or possibly higher depending on changes in the law). All civil penalties and fines for removing your vehicle's emissions equipment are the sole responsibility of the end user.

· Due to its high-performance nature, this or any product named and shown in this document may void the vehicle manufacturer's warranty. The author of this document, the parts supplier and the parts builder/manufacturer are not responsible for misuse of its products. By installing the products in this document, you release all parties associated with this document of any and all liability associated with its use Depending on where you live, restrictions may apply. Check all applicable laws before installing or using!

· The purchaser and end user releases, indemnifies, discharges and holds harmless the author and all parties in this document from any and all claims, damages, causes of action, injuries, or expenses resulting from or relating to the use or installation of this product that is in violation of the terms and conditions on this page, the product disclaimer, and/or the product installation instructions. The author, parts supplier and parts builder/manufacturer will not be liable for any direct, indirect, consequential, exemplary, punitive, statutory, or incidental damages or fines caused by the use or installation of this/these products in this document.

· The products shown in this document are for competition use only. All other uses are contrary to federal law. If you intend to use these products for highway or non-competition off-road purposes, DO NOT purchase or install the products.

Record of Revisions

REVISION NUMBER	REVISION DATE	PARAGRAPH(S) OR FORM(S) AFFECTED	REVISION DESCRIPTION
Original	11/10/2023	ALL	Initial Development



List of Effective Pages

NOTE:

All pages of each section maintain the same revision level and revision date. Substantive revisions are described in the Record of Revisions.

SECTION	STARTING PAGE	ENDING PAGE	REVISION NUMBER	REVISION DATE
Title Page	0	0	IR	11/10/2023
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Record of Revisions	3	3	IR	11/10/2023
List of Effective Pages	4	4	IR	11/10/2023
Introduction	5	5	IR	11/10/2023
Tuning Installation	6	10	IR	11/10/2023
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Factory Air Intake Charge Tube Removal	16	17	IR	11/10/2023
EGR Removal	18	20	IR	11/10/2023
EGR Bypass Tube Removal	21	21	IR	11/10/2023
Y-Transfer Tube Removal & Installation	22	22	IR	11/10/2023
Air Outlet Tube (Passenger Side) Installation	23	23	IR	11/10/2023
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Air Inlet Tube Removal & Installation	25	25	IR	11/10/2023
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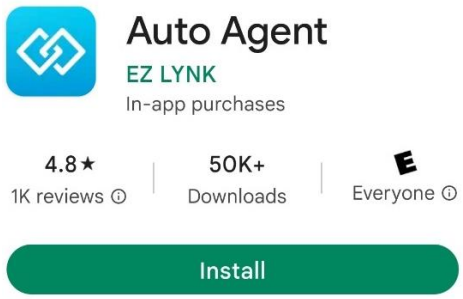
Introduction

1. General
   A. This manual provides complete installation instructions, parts listing & tooling listing for the vehicle 2016-2019 Nissan Titan XD, 5.0 Cummins Diesel.
   B. All reasonable attempts were made to make this manual as complete and accurate as possible. If you have questions, comments, corrections, or require clarification of information contained herein, please send your emails to TitanXDTuneDelete@gmail.com.
   C. Copyright Statement: The information, instructions and designs contained in this document are proprietary to TianXDTuneDelete, and will not, in whole or in part, be duplicated, disclosed, or used without the written consent. This document is protected as an unpublished work under the U.S. Copyright Act of 1976, as well as under all other pertinent domestic and international intellectual property provisions. Created 2023. All rights reserved.
   D. Established shop practices and safety precautions MUST be followed to prevent damage to equipment and/or injury to personnel.

2. Additional Information:
   A. YOU MAY NEED COOLANT. During the removal process of the EGR unit, coolant will be lost. Have some coolant on standby just in case. Have drain pans, shop towels or kitty litter ready. One way to limit the mess is to partially drain the coolant. Approximately 1-2 gallons.
   B. It is recommended to connect a battery tinder/charger to your vehicle prior to installation of the software. This is due to the length of time you may need in order to complete the process. Otherwise, ensure your batteries are fully charged.
   C. When performing the delete and tune set up, the tuning SHALL be installed before any work is performed. This is to ensure if any issues arise, it can get addressed prior to removing parts. This is a very important step. If you start removing parts and disconnecting sensors prior to the tuning, the truck may not start. With the tuner, you are flashing the ECM, turning sensors off and installing a or multiple tunes in the truck's computer.
   D. If you purchased the "SOTF" option, your screen on the ECU profiles will show multiple options. Install the "SOTF" option only. All the other tunes are combined into this option. You do NOT need to install each individual one.

Tuning Installation:

A. Go to the Apple or Google play store and download the latest version of Auto Agent 3 (EZ LYNK). You can scan the QR code on the back of the package of your Auto Agent for a Youtube video about the product.



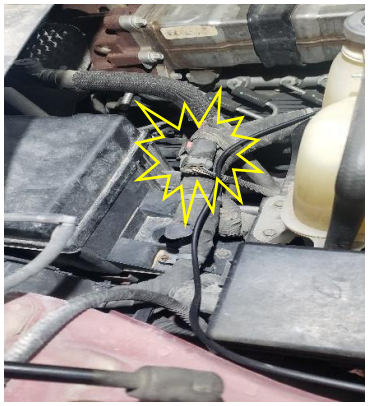
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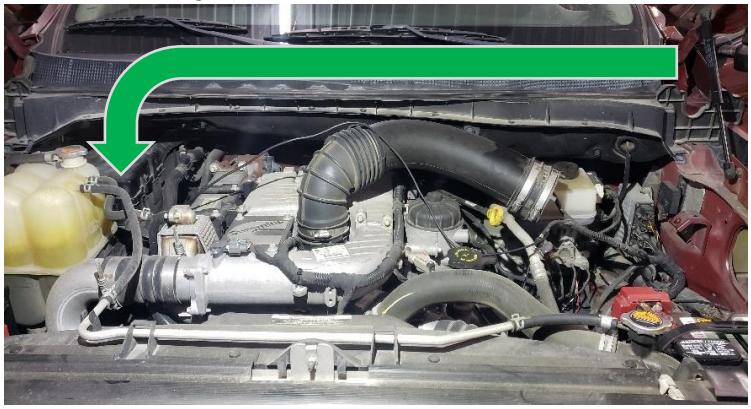
DO NOT CONNECT TO THE AUTO AGENT WITHOUT CONNECTING THE PROVIDED EZ LINK CABLE. THIS WILL ALLOW THE ECM TO BE UNLOCKED.

1. Connect the Auto Agent 3 to the cable shown in the picture below.

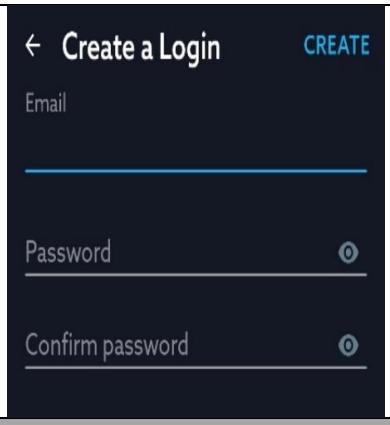
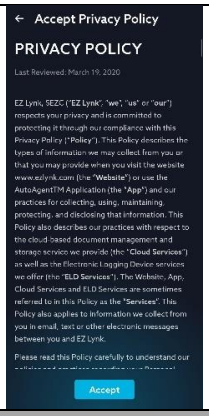
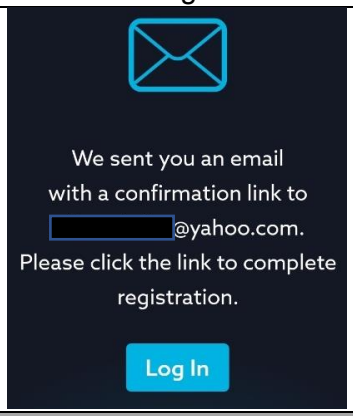
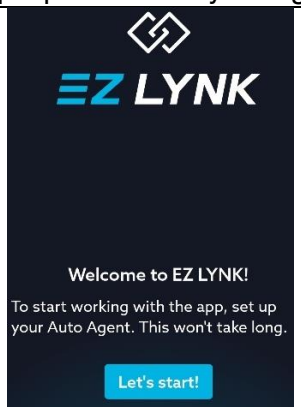
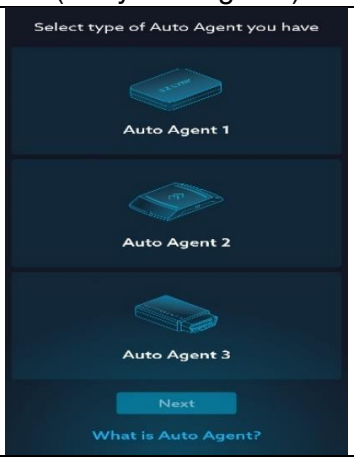
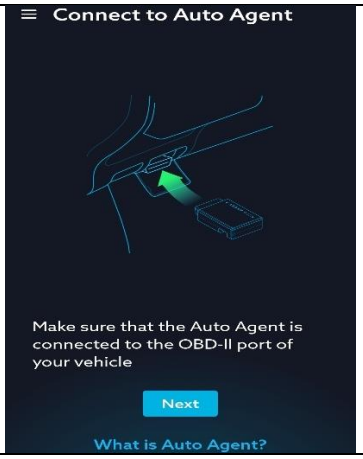


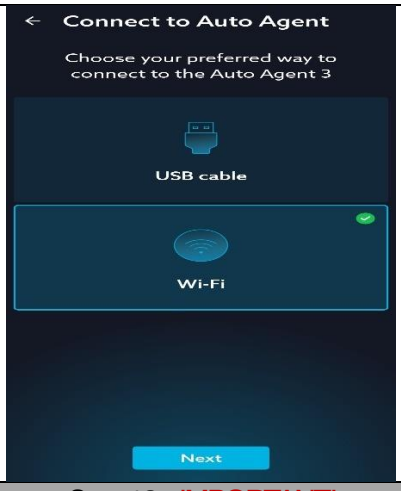
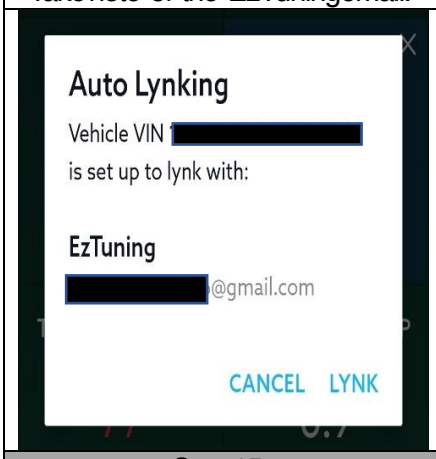
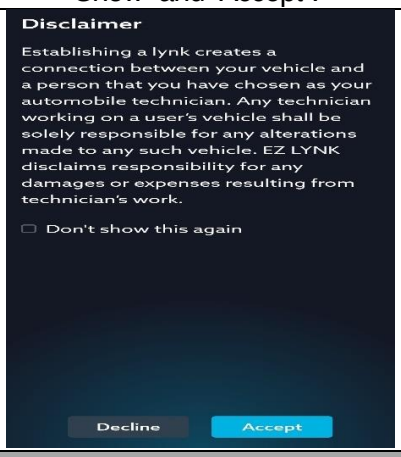
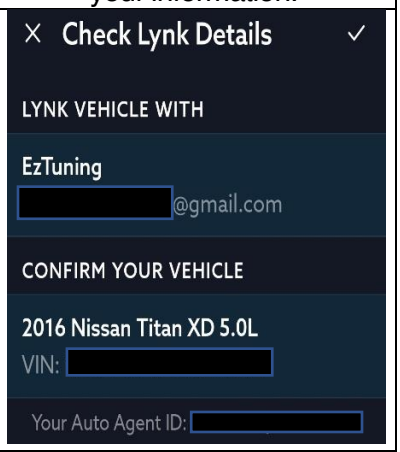
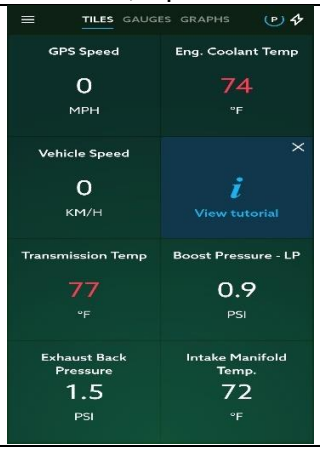
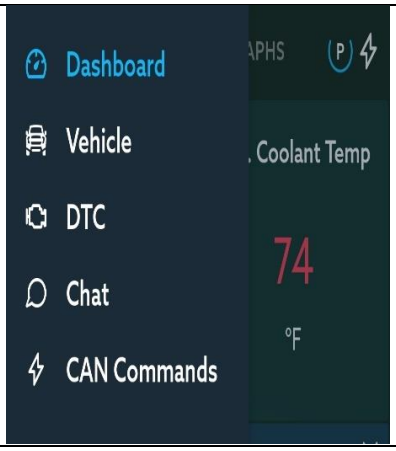
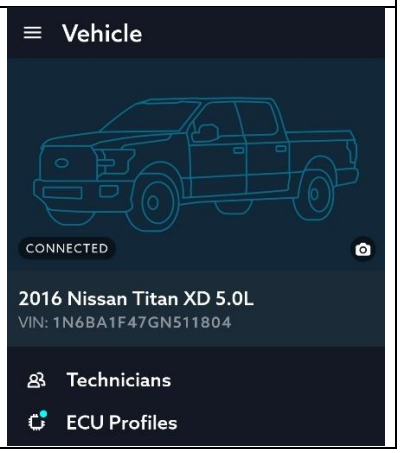
2. Connect the other end of the cable to the ECM, located under the dashboard of the driver side.
3. Temporarily connect the gray supplied Engine Diagnostic Connection cable to the Engine 3-Pin Diagnostic port, located on the far-left side of engine bay.

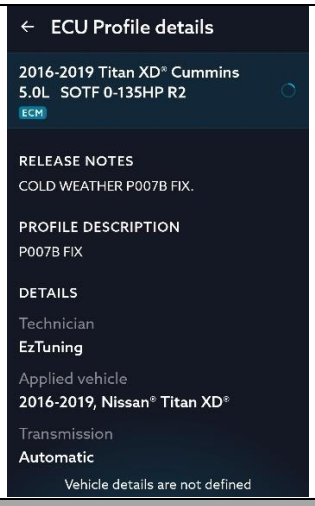
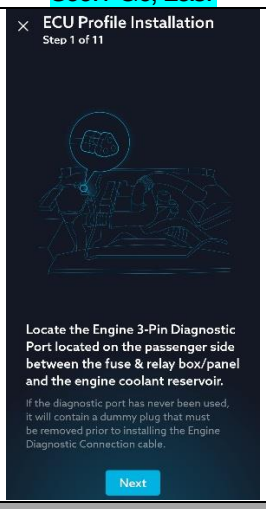
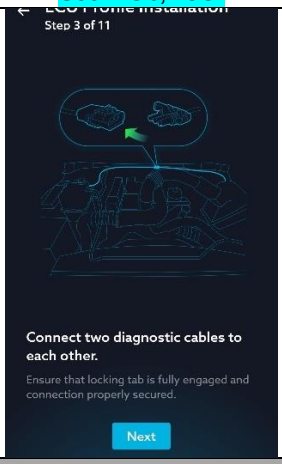
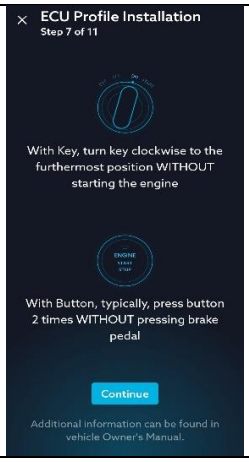


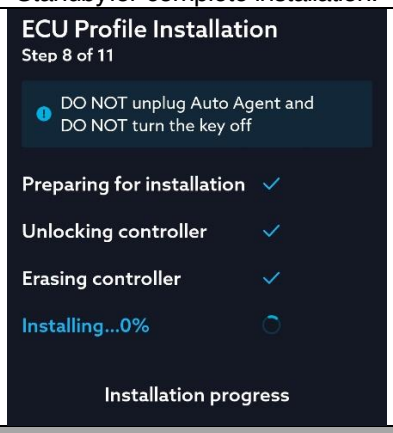
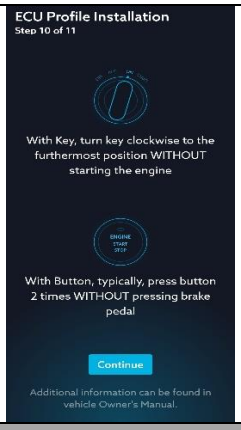
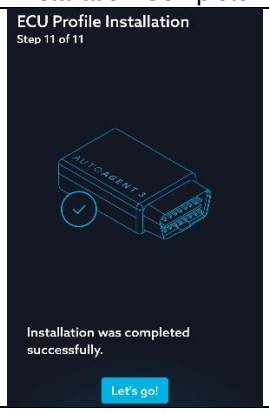


The following is a walkthrough of the Auto Agent 3 process. See:PG5, 2.B. for note.

Step 1:	Step 2:	Step 3:
Open Auto Agent 3 after download to phone/tablet.	Create login information.	Read& accept the terms of service.
		
Step 4:	**Step 5:**	**Step 6:**
Read& accept the privacy policy.	Go to your email to confirm account registration.	After confirmation, go to the app & proceed with your login.
		
Step 7:	**Step 8:**	**Step 9:**
Select the Auto Agent you have. (Likely Auto Agent 3)	Put in your account information (Name, Phone # & Birthday)	Ensure the Auto Agent is connected to the vehicle.
		

Step 10:	Step 11:	Step 12:
Select connection type Wi-Fi.	Go to your device and connect via Wi-Fi (EZLYNK_XX…..)	Proceed with Firmware Update.
		
Step 12: IMPORTANT!	**Step 13:**	**Step 14: IMPORTANT!**
Make sure the VIN is your VIN. Take note of the EzTuning email.	Read Disclaimer. Select "Don't Show" and "Accept".	Last opportunity to VERIFY your information.
		
Step 15:	**Step 16:**	**Step 17:**
If your screen has the gauges, select tiles, top left corner.	Select Vehicle.	Ensure screen states, "Connected". Select ECU Profiles.
		

Step 18:	Step 19:	Step 20:
Select "SOTF0-135HP R2" option if purchased. See: PG5, 2.D. for note.	Confirm details selected.	ECUProfile Installation Step 1. See: PG6, 2&3.
		
Step 21:	**Step 22:**	**Step 23:**
ECUProfile Installation Step 2. See: PG6, 2&3.	ECUProfile Installation Step 3. See: PG6, 2&3.	ECUProfile Installation Step 4. See: PG6, 2.
		
Step 24:	**Step 25:**	**Step 26:**
ECUProfile Installation Step 5. Standbyfor transferring profile.	ECUProfile Installation Step 6. Ignition "OFF", press "CONTINUE".	ECUProfile Installation Step 7. Push "ON" button TWICE.
		

Step 27:	Step 28:	Step 29:
ECUProfile Installation Step 8. Standbyfor complete installation.	ECUProfile Installation Step 9. Pushbutton for “OFF”.	ECUProfile Installation Step 10. Push“ON” button TWICE.
		
Step 30:	**Step 31:**	**Step 32:**
ECUProfile Installation Step 11. Installation Complete.	If battery charger/tinder was installed, Removeat this time.	Currently, start the truck and confirm the vehicle has accepted the software. The truck should run smoothly. If issuesarise, install the stock tune and investigate issues.
		

If you wish to prepare the vehicle for lifting, now is the time to do it. If you are working with 2 ramps, drive the truck up now prior to disconnectingthe batteries. All work will then be done in this position until the job is completed.



ATTENTION:

Before moving forward, disconnect both batteries. This will help to ensure the batteries do not drain while work is being carried out.

Cable Routing:

Removal of Stock Air Filter Housing Process:

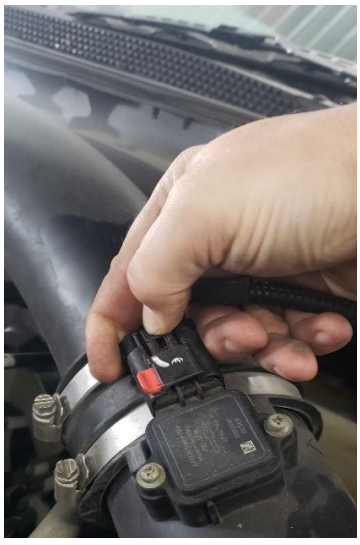


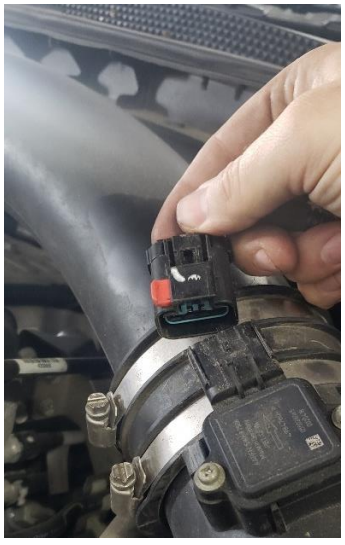
1. Use Flathead screwdriver to slide red tab on black connector to the unlock position by placing Flathead on red tab and gently twist. The red tab should move approximately ¼ of an inch. DO NOT FORCE FURTHER.



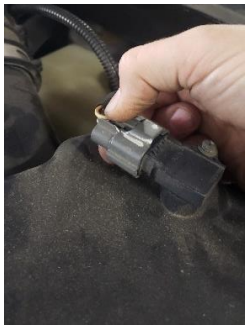
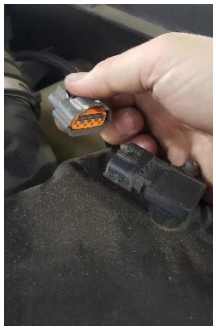


2. Use thumb and press down on back tab of connector, then pull out to disconnect.

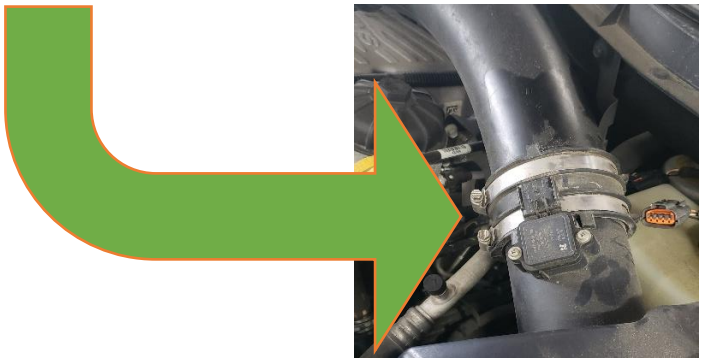




3. Use thumb on back of gray connector located on top of filter housing, then pull to disconnect.

4. Use a Flathead or 11/32 socket to loosen 2 silver hose clamps to back of air filter housing.

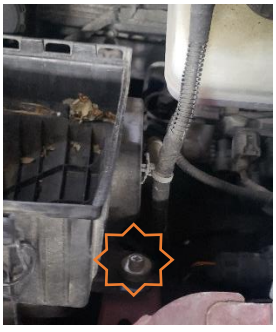


5. Undo 2 black spring clamps on top of air filter housing, near driver side hood strut. Lift filter housing and remove.

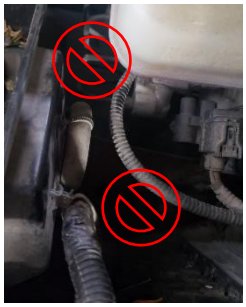




6. Remove old air filter and dispose if replacing with new filter or upgraded cold air intake. Use a 10mm socket to loosen 2 bolts at bottom of inside air filter housing box. (Bolts stay in rubber grommet in box). Use a 10mm socket to remove 1 bolt near top, backside of air box.

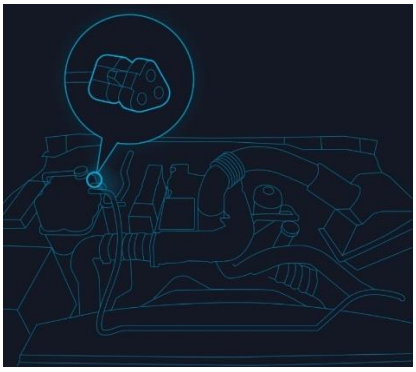
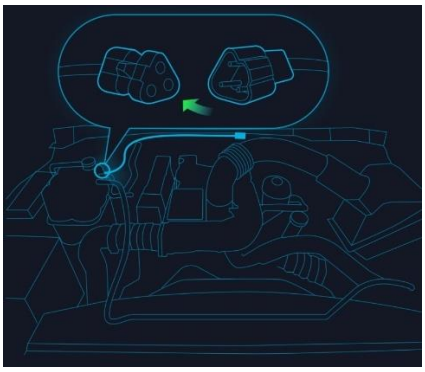
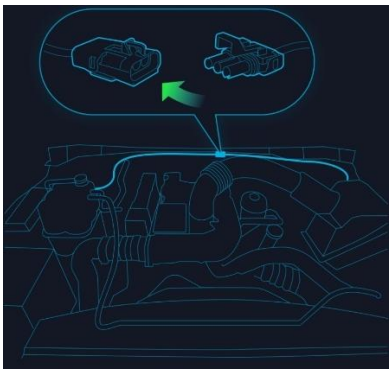
7. Cut 2 zip ties holding wire loom and hose to side of box, near firewall. Lift up air cleaner housing box and remove. Be careful of the AC line. May need to wiggle back and forth to remove.



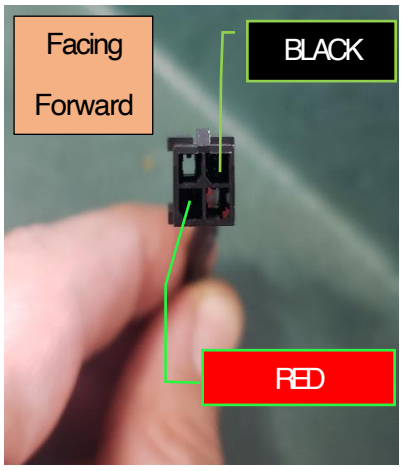


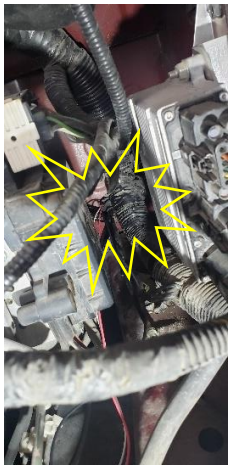
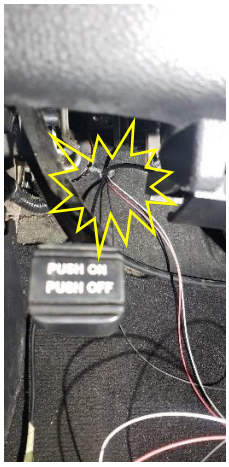
Running Wires:

It is a recommendation to run the wires through the hood latch cable grommet located on the firewall. Pictures below show the ideal route under the hood from the driver side to passenger side.

Proceed with caution to ensure you do not puncture the other side of your grommet. If you do, might as well use that hole to plug it in with the wires. You DO NOT need to de-pin the harness cable. Spray Windex at both ends of the hood latch grommet. Use a super long screwdriver (Or an electrical fish tape) to go through the hood latch grommet starting from inside of the cab and push into the engine bay. It will be tough, but it is possible. Use strong tape (duct tape, 3M heavy duty, ect) and wrap the black connector to the end of the screwdriver (or fish tape). Make it in the form of a gradual step up. Then slowly pull back.

Remove the black cover on the black triangle connector to the truck wire loom located behind the radiator overflow. The connector will have 2 wires (Green/Yellow). Connect your new gray triangle into the black triangle connector. Use zip ties to secure excess wire along the wire loom, up to the firewall, then over to the hood latch grommet. Make sure you stay away from any hot spot around the engine.



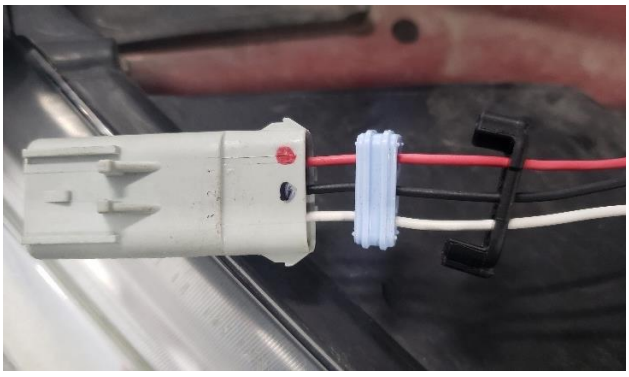


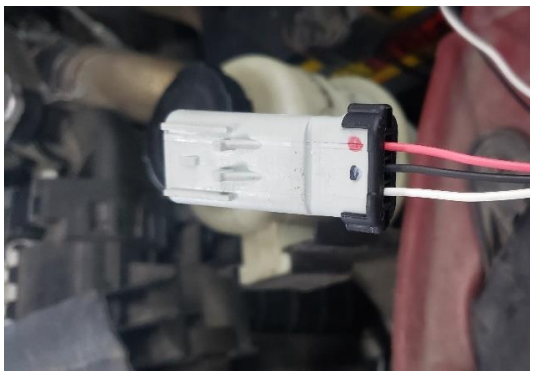
SOTF Wire Routing:

Take the SOTF (Switch on The Fly) and feed the 3 wires (Red, White & Black) through the same hood latch grommet inside the cab. Feed the chosen wire tool from the engine bay and go into the cab. Tape the wires to the tool and pull through.

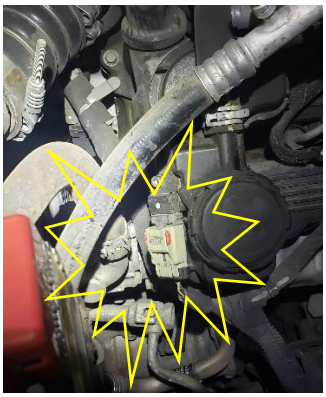


The 3 wires that are currently exposed for the switch (Red, White & Black), you can now put them in the plug. Slot 1 = Red. Slot 2 = Black. Slot 3 = White. To do so, you must remove the black rear cover of the gray plug. Remove the blue weather seal inside the plug. Insert the 3 wires through the black cover. Run the wires through the blue weather protector. Insert the wires into the correct spot. Slide the blue weather protector back in the connector. Move the black cover up to hear a snap.





Disconnectthe connector leading to the front of the engine, below the oil fill port.





Connect the new connector you made (SOTF)tothe connector just disconnected from the side of motor. Install provided black wire protector as needed. Securewiring to loom up to hood latch grommet.





Insert blank grey plug P/N:38150-6to the empty connector on the side of engine.





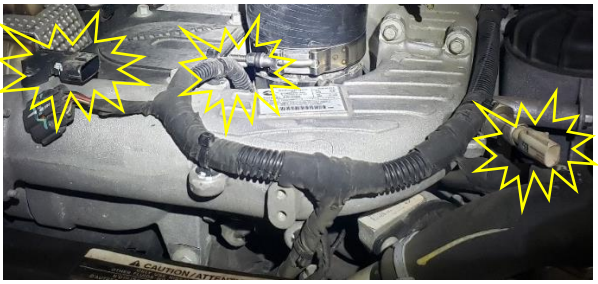
Factory Air Intake Charge Tube Removal:

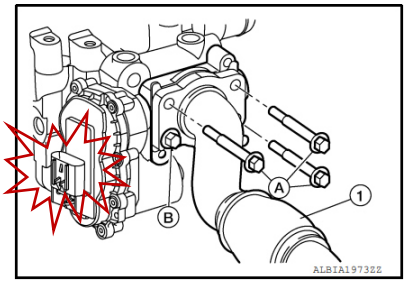
Disconnect engine charge-air cooler outlet pressure/temperature sensor on top.

Disconnect EGR bypass connector near EGR bypass tube.

Disconnect intake manifold air temperature sensor on right side.

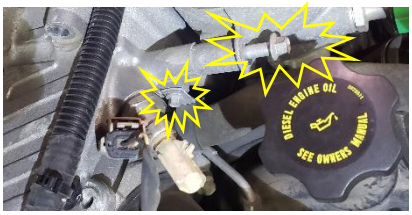
Either cut the zip ties securing wire loom or pop the clips from the charge tube.

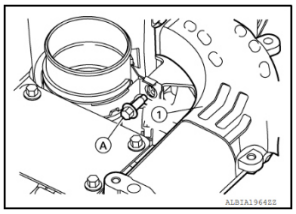




Use an 8mm socket to remove bolt secure breather tube clamp to lower, right hand charge tube.

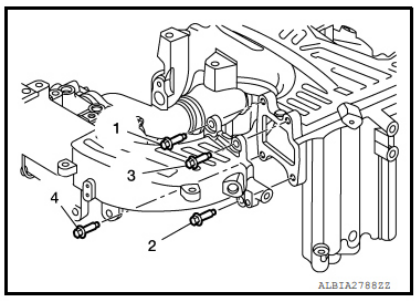
Use a 10mm socket to remove 1 bolt securing fuel filter housing, then 1 bolt to air inlet connection.





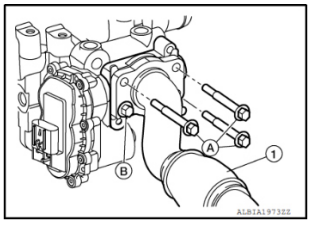
Use a 10mm socket to remove 4 bolts securing air charge tube to intake manifold.

Use a 10mm socket to remove 1 bolt under air charge tube secured adapter to engine block.





Use a 10mm socket and/or 10mm ratchet wrench to remove 4 bolts from the EGR bypass tube to the EGR bypass valve. Located behind the air charge tube and under the intake manifold.





Pull up on factory air intake charge tube. It will be tough because of the black small tube underneath the charge tube. Be careful as one more sensor is still connected under the tube. Once the tube is free, rotate the tube towards you and disconnect the EGR temperature sensor.

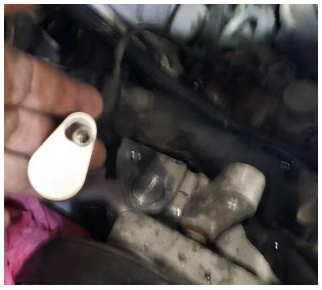




Use an 8mm socket to remove black tube going into charge tube. See above, left picture for reference.

Use a 5mm hex socket to install provided new O-ring, round blocker & blocker plate that replaces tube.



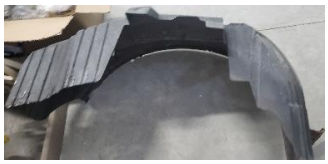




EGR Removal:

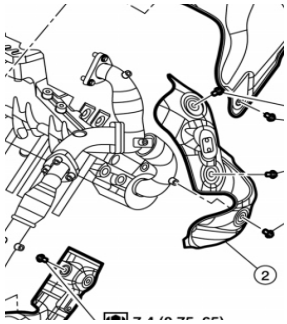
See PG 5, 2.A. for note.

Removed Passenger side fender well. Phillips and flat head will be needed. 7 screws and 2 plastic push rivets (yours may have, depending on if any have been lost over time). By removing the well, this will make it easier to get to necessary components for the job.

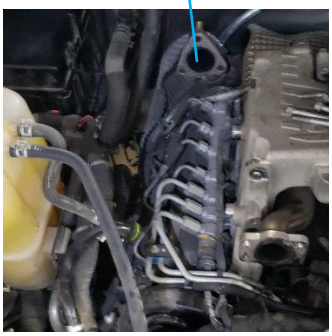


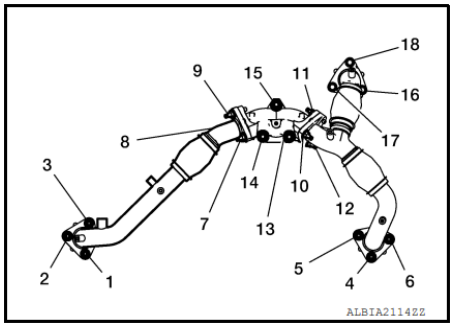
Use an 8mm socket or 8mm ratcheting wrench to remove 3 bolts from the heat shield on the downpipe.



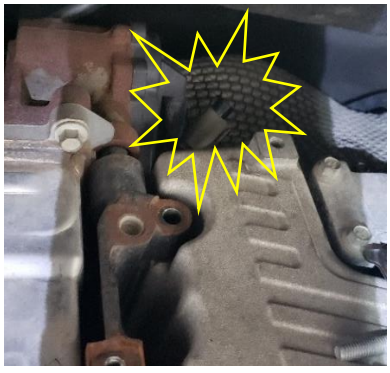


Use a 10mm socket to remove 3 bolts on the back of the EGR connecting to the Y down pipe.





Disconnect rear plug to EGR unit. Place black empty plug in the plug to the truck. This will not be used later.





Use a 11mm deep well socket to loosen the top 2 band clamps on rubber tubing connecting to air outlet tub. Then loosen bottom 2 band clamps connecting to the charge air cooler. An O-ring spoon or pick maybe needed to separate tubing. Remove tube.

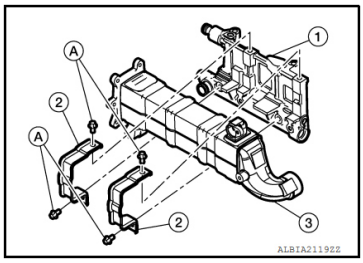




Use a 10mm socket to remove 4 bolts to Cummins black emblem on intake manifold.



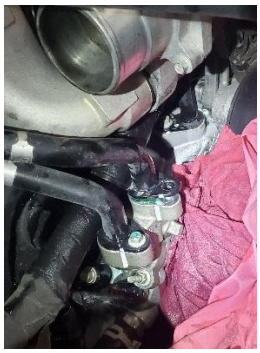
Use a 10mm socket to remove 4 bolts from the EGR cooler mounting straps to intake manifold.

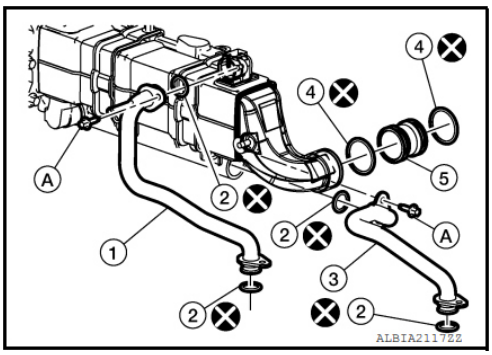




Use an 8mm socket to remove 4 bolts connecting both ends of the EGR cooler supply and return lines. Rotate supply lines out of the way for now to remove the EGR cooler (if you can).







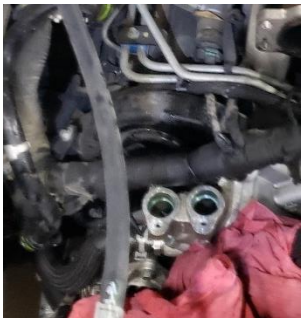
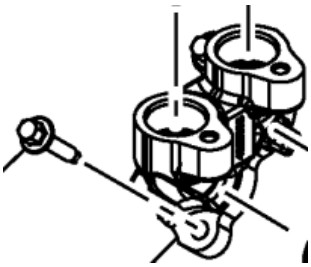
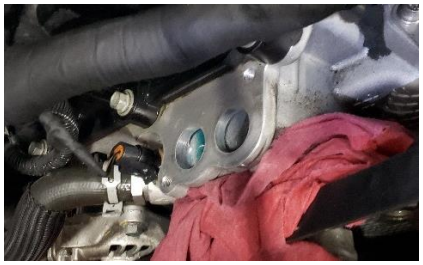
Use a pry bar and a rubber mallet to pop the EGR cooler away from the intake manifold and factory air intake charge tube. You will have to find the sweet spot that will allow the unit to be removed. The EGR cooler will be heavy. Having a second hand during this step would be very helpful. If you are having trouble separating the unit from the charge tube, proceed with the removal process of the charge tube and come back to complete the removal process.




This is when it gets messy. See: PG5, 2.A. Completely remove EGR supply lines.

Remove old tubing to the reservoir.

Use an 8mm socket to remove 2 bolts securing the water transfer connection. If you have a syringe, you could draw the coolant out. Thoroughly clean the area.

Install new water transfer connection. Make sure the 2 O-rings are seated properly. Use 2 new bolts, lock washers and washers. Use a 5mm hex socket to tighten it down.

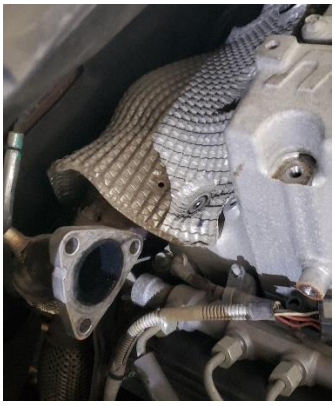


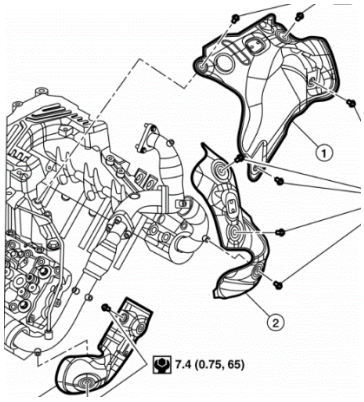


Install new hose with 2 hose clamps connecting to the new water transfer connection and coolant reservoir. Use a 1/4in socket to tighten.

EGR Bypass Tube Removal:

Use an 8mm socket or 8mm ratcheting wrench and remove 3 of the 4 bolts securing the large heat shield on the back of engine. If you can reach the last bolt, you may need to just loosen it. Grab the heat shield and rotate until it is out of the way.







Reach under the intake manifold and use 10mm socket to remove 3 bolts securing the EGR bypass tube.

Remove EGR bypass tube from under the intake manifold.





Use a 13mm socket to install block off plate with 3 bolts and nylon nuts provided in kit. If you are replacing the gasket because the gasket was damaged during removal, use gasket P/N: 73090.







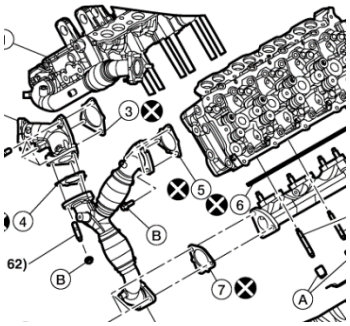


Y-Transfer Tube Removal & Installation:

Use a 13mm socket to remove 3 nuts securing top Y-transfer tube to exhaust manifold collector pipe.

Use a 13mm socket to remove 3 nuts securing lower Y-transfer tube to passenger side exhaust manifold.

Remove tube. (You may need to use a pry bar and pop the bottom out; it will come out).



Install new transfer tube.

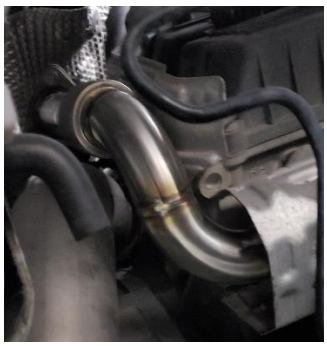


Use a 13mm socket to install 5 out of the 6 old nuts.

Use a 13mm socket for bolt and nylon nut to tighten top of new tube to exhaust manifold collector pipe.

Bend down the large heat shield behind engine bay. Re-install 3 bolts using 8mm socket or 8mm ratchet wrench. Ensure all 4 bolts are tightened.





Air Outlet Tube (PassengerSide) Installation:

Grab the new big SAir Outlet Tube.




Install the 45-degree2.5 to 3in black rubber tube on the Sair outlet tube. It does not matter what side.

Install 75/67 on the 2.5in rubber pipe to truck inlet. DO NOT TIGHTEN. Adjustments will be made.

Install 87/79 band clamp on 3in hose. DO NOT TIGHTEN. Adjustments will be made.

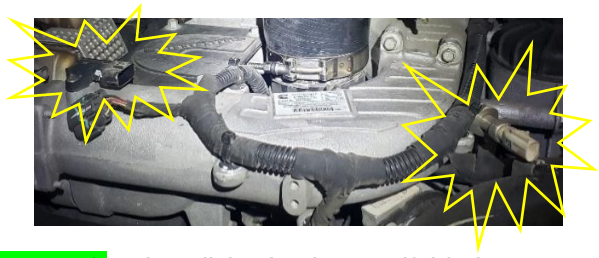





Use a T-15-star bit to remove the engine charge-air cooler outlet pressure/temperature sensor.

Use a 1in wrench to remove the intake manifold air temperature sensor P/N: 2872658.

Be gentle when deciding to clean.




Use a 1in wrench to install the intake manifold air temperature sensor P/N: 2872658.

Use 7mm socket to install provided hardware for the installation of the engine charge-air cooler outlet pressure/temperature sensor. DO NOT USE THE T-15 star bit. The stock hardware is too long.

Install the big O-ring into the end of the new air intake charge tube. The O-ring will initially be round and must be formed/pressed into the end.




New Air Intake Charge Tube Installation:

Install the 3in silicone coupler P/N: 131-07603-0401.



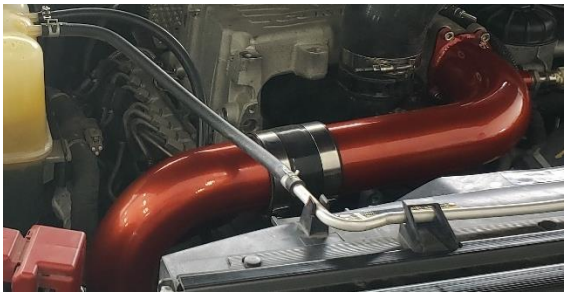


Install the air outlet tube to the lower end of the charge air cooler. Spray some Windex on the inside to aid in a smoother installation. DO NOT TIGHTEN BAND CLAMPS.

Install 2 87/79 band clamps on the 3in silicone coupler. DO NOT TIGHTEN BAND CLAMPS.

Spray Windex on the end of the 3in silicone coupler and install by twisting onto the installed air outlet tube. Align as necessary to allow the opposite end to align with the intake manifold.

Use a 6mm hex socket to install the provided 4 bolts to secure air outlet tube to intake manifold.





Use a 10mm socket to tighten and lock in the position of the installed tubes. Make sure the band clamps are not sitting on any lip of the tubes.

Remove oil filler cap to clear installing connector. Re-connect to both connectors.

Install 2 black dead caps to the 2 remaining unused connectors and zip tie away to harness.

At this point, tighten down remainder bolts or clamps to secure set up. Tie any loose ends up.

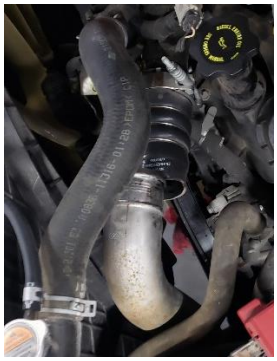
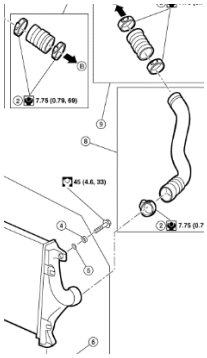




Air Inlet Tube Removal& Installation:

Use an 11mm deep well socket to loosen 3 band clamps on the air inlet hose.

Remove old pipe, clamps and silicon coupler.

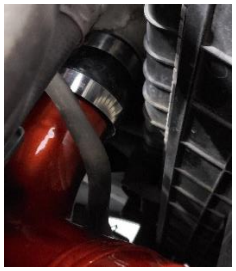

Install P/N: 131-06376-3401 2.5in to 3in silicone reducer on bottom end of the air inlet tube first. Spray Windex to aid.

Install P/N: 131-06376-3401 2.5in to 3in silicone reducer on the engine side next. Spray Windex to aid.

Install P/N: 75/67 band clamp first, then P/N: 87/79 on the reducer engine side. DO NOT TIGHTEN.

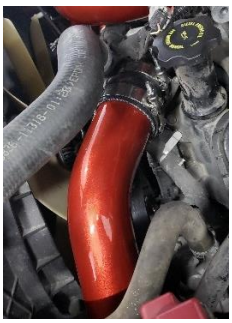
Install banding clamp P/N: 87/79 on silicone reducer on tube on bottom, followed by P/N: 75/67. DO NOT TIGHTEN AT THIS TIME.



When installing the new air inlet tube, the 90-degree bend goes on the bottom of the charge air cooler. Work the tube down the engine bay. Align the top end FIRST. DO NOT try and attach the bottom first. After you slide the top on, then align the bottom and secure the reducer on the end fitting. Now slide the top reducer over the top of the air inlet tube.

Use a 10mm deep well socket and tighten/secure all 4 clamps.



Cold Air Intake Installation:

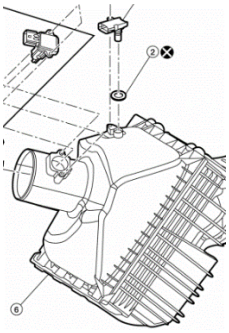
Use a 11/32 socket to remove clamp securing air duct to the air inlet connection that goes under the intake manifold.



Remove 2 screws securing Mass Air Flow sensor from the lid of the old air housing. Remove 1 screw securing turbocharger compressor intake pressure/temperature sensor.







Install both sensors into the new air duct. Install large 90-degree black rubber elbow on opposite end of the sensor. Install band clamp P/N: 115/107 first, followed by clamp P/N: 100/92. DO NOT TIGHTEN.





Install the AFE Power Filter to the new air duct prior to installation. Put the new band clamp provided with the kit on, but do not tighten yet. Adjustments will be made.



Install the air duct tube and filter assembly onto the air inlet collection that runs under the intake manifold. Align the air duct tubing so the bracket is facing the firewall.

Remove bolt and align bracket so the bolt can be installed.





Use a 10mm socket to secure band clamp P/N: 115/107 & P/N: 100/92.

Use a 5/16in socket to tighten clamp on AFE power filter.

Install the 2 loose connectors to the sensors on the new air duct. Picture below is under hood completion.



MAKE SURE TO LOOK OVER THE COMPLETE ENGINE FOR ANY LOOSE PARTS, TOOLS or HARDWARE.

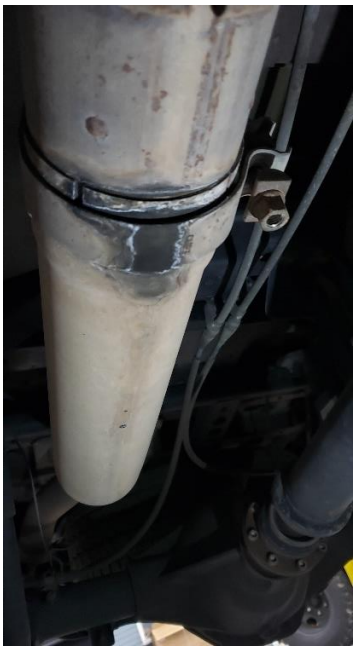
Start vehicle and verify any leakage for air or coolant.

At this time use 2 ramps and put them on the passenger side. Set truck in 4-wheel drive and drive on ramps. This is to help ensure the ramps do not slide.

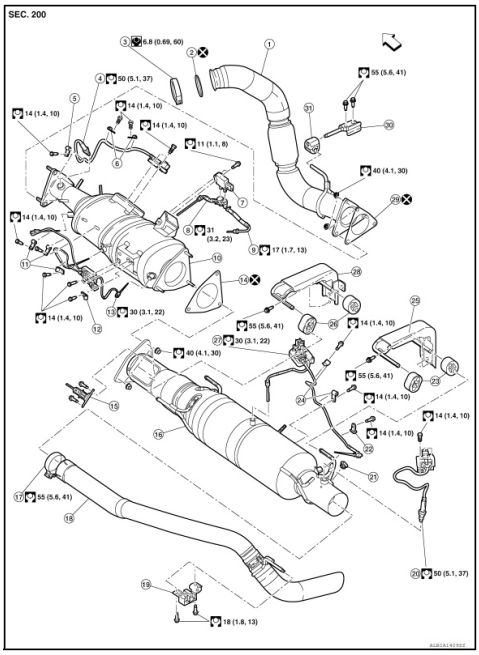


Exhaust Removal:

Start at the rear of the exhaust system. Use a 15mm socket to remove exhaust clamp. If needed, use a rubber and a wooden block to separate the exhaust tailpipe. Once loose, pull out the tailpipe out of the hanger bracket and over the rear axle.

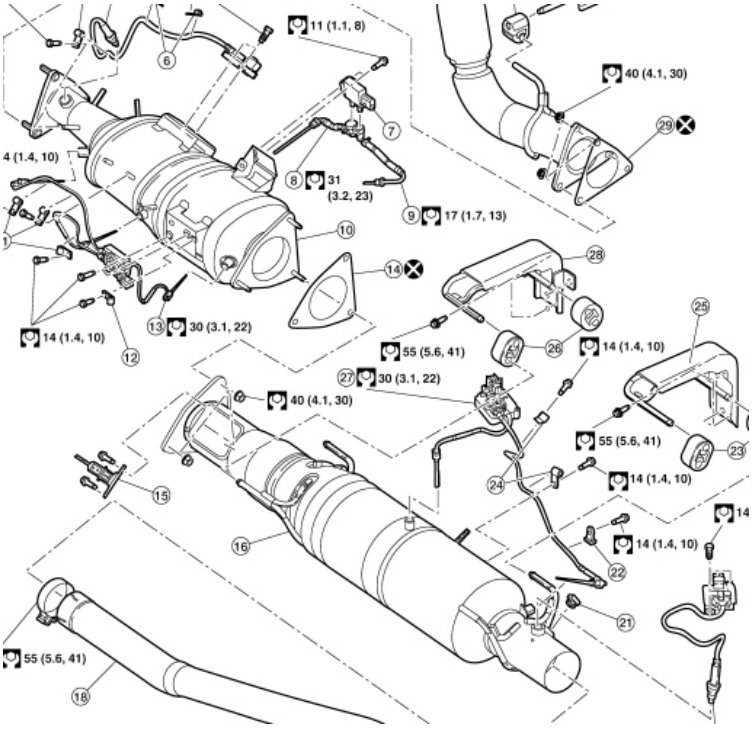






Use a 12mm socket to remove the plates from the frame.

Disconnect all plugs. Use the diagram below as a guide.



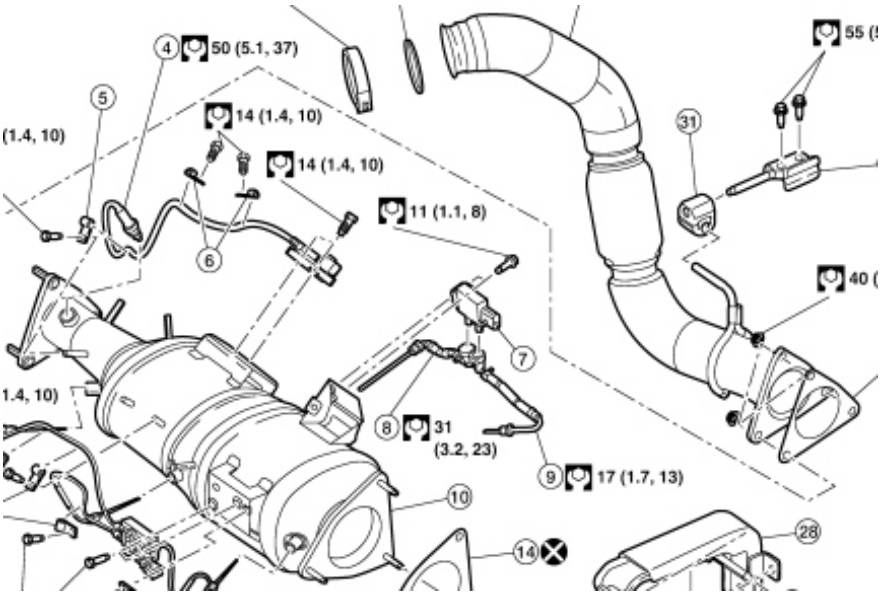
Use a 15mm socket to remove 3 bolts from the next portion of exhaust to separate the catalyst assembly.



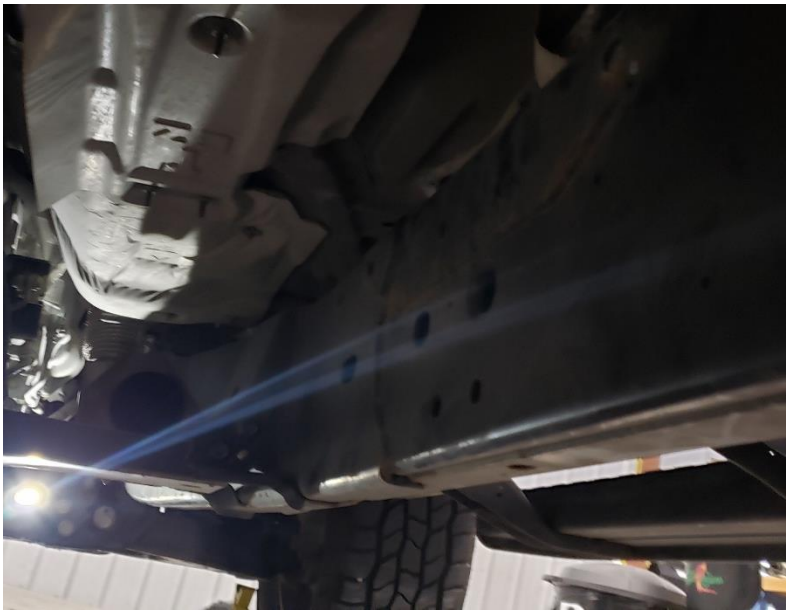
Remove the catalyst assembly from the hangers above.



Use a 15mm socket to remove 3 bolts securing the DOC/DPF assembly to the exhaust downpipe.



Remove DOC/DPFassembly unit.



Dressup underneath by putting the black dead capson the plugs. Takezip lock bagsand wrap the connectors. Zip tie them to the wire harnesson top of the frame.









Exhaust Installation:

When installing your new exhaust, do not tighten anything down. You will make a lot of adjustments to put it in its right position. The only exception is the very first piece that connects to the exhaust downpipe.

Use 5/8 socket and 17mm socket to install 3 bolts, washers and nuts securing straight pipe. Ensure the provided gasket is in good shape. Align and connect to the exhaust downpipe.







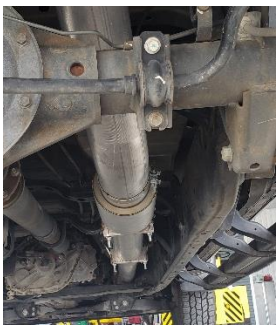
Before adding other pieces, it is easier to install the hanger brackets now when the exhaust is not in place. This allows you to set it on the bracket and helps with alignment.

You will need to go back and forth to set the proper alignment and distance.

Use a 15mm socket when locking in the exhaust or snuggling down to hold pieces in place.

Use a 14mm socket to tighten U-bolts.

It may be easier to slide the clamps on first.





Finishing Steps:

Turn truck on and back off ramps. Ensure no leaks are coming from any part of the exhaust, the replacement of the transfer tube, air intake tubes, both charge tubes and coolant system.

Run truck on idle for approximately 10-15 minutes to gently heat in parts. This also allows the computer to begin adjusting as it needs. It's not uncommon for possible DTC codes to pop up. Use your new device to monitor any trouble shooting codes that arise. Reset as needed. Turn truck off after 10-15 minutes. Let the truck cool.

Install the fender well that was removed earlier in the process.



Take this time to DOUBLECHECK all unused plugs are capped and SECURED. Use zip ties as needed to secure loose ends. Use flush cuts to cut extra ends off zip ties.

SOTF switch installation:

The placement of the SOTF switch is up to you. Some have drilled a hole in the dash to the right side of the knee. Others have removed the light figure under the dash and installed at this location. Relocating the light by zip tying to a different location. This example with be shown on the left-hand side of the dash. You will need to remove the 2 bottom screws and pop the lower section out. Once removed, remove the screws to take out the lower empty spaces. Center your drill marks. On the back side, you will need to trim the square portion to only the face plate. The round switch will be pressed into the plastic cage like. It will stay in place. On the 3rd picture below, you will see the switch up against the edges.







Tools:

Electrical Fish Tape	Long Screwdriver	Flathead Screwdriver	Flush Cut Pliers
			
¼ Socket	11/32 Socket	7mm Socket	8mm Socket
			
10mm Socket	11mm Deep Well Socket	11mm Socket	13mm Socket
			
5mm Hex Socket	15T Torx Bit	Extensions	Ratchet
			
6mm Hex Socket	Pry Bar	O-ring spoon (OR) Pick	Rubber Mallet
			
8mm Ratchet Wrench	5/16in Socket	10mm Ratchet Wrench	1in Wrench
			

Car Ramp	12mm Socket	15mm Socket	14mm Socket
			
5/8in Socket	**17mm Socket**		
			

Parts List Picture:

















Parts List by Items:

Item	Nomenclature	Part Number	Quantity
	AFEPower Air Filter W/Clamp	21-40035	1 Pack
	Air Duct	N/A	1 Ea.
	Air Intake Charge Tube	N/A	1 Ea.
	Air Outlet Tube	N/A	1 Ea.
	Air Inlet Tube	N/A	1 Ea.
	Transfer Tube	N/A	1 Ea.

	Water Transfer Connection W/hose to coolant reservoir	N/A	1 Ea.
	90-Degree Black Rubber Elbow	N/A	1 Ea.
	45-Degree Black Rubber Elbow	N/A	1 Ea.
	2.5in to 3in High Temp 4-Ply Reinforced Silicone Reducer	131-06376-34D1	2 Ea.
	3in ID High Temp 4-Ply Reinforced Straight Silicone Coupler	131-07603-0401	1 Ea.
	Additional Hardware Required by CFT	N/A	1 Kit

	Band Clamp	87/79	5 Ea.
	Band Clamp	75/67	3 Ea.
	Band Clamp	115/107	1 Ea.
	Band Clamp	100/92	1 Ea.
	Block Off Plate Kit: Bolts – 11 Lock Washers – 3 Washers – 3 Hose Clamp – 2 O-Rings – 4 Block Off Plates – 2 Plug – 1	N/A	1 Kit

	Electrical Block Plugs: Square Plugs – 5 Rectangle Plugs – 5 Round – 1	N/A	1 Kit
	SOFTKit: Plastic Wire Cover – 1 Connector – 1 Switch (Wired) – 1 Knob – 1 Number Backing – 1 Drill Template – 1 Allen Key – 1	N/A	1 Kit
	Part of SOFTKit Above	N/A	N/A

	Exhaust Install: Straight Tubes – 2 S Shape – 1 Exit Pipe – 1 Muffler Replacement – 1	N/A	1 Kit
	Exhaust Install Hardware: Clamps – 4 Hanger Clamps – 2 Bolts – 3 Washers – 3 Nuts – 3	N/A	1 Kit
	Exhaust Gasket	N/A	1 Ea.
	Bonus (Optional) Purchased separately Gaskets	61802 61803 73090	1 Ea.

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