

2019-2021 5.7L Tundra  
Setrab 15-Row Install Instructions

## Tools Required:

- Socket Set (metric)
- Wrench Set (metric)
- Pliers
- OBDII Reader w/ Application to Read ATF Temperatures
- Hose Cutters or Sharp Knife
- Allen Keys (metric)

## Recommended:

- Hydraulic Jack w/ Stands
- Shop Towels
- Gloves
- Torque Wrench (In/LB)
- Drain Pan

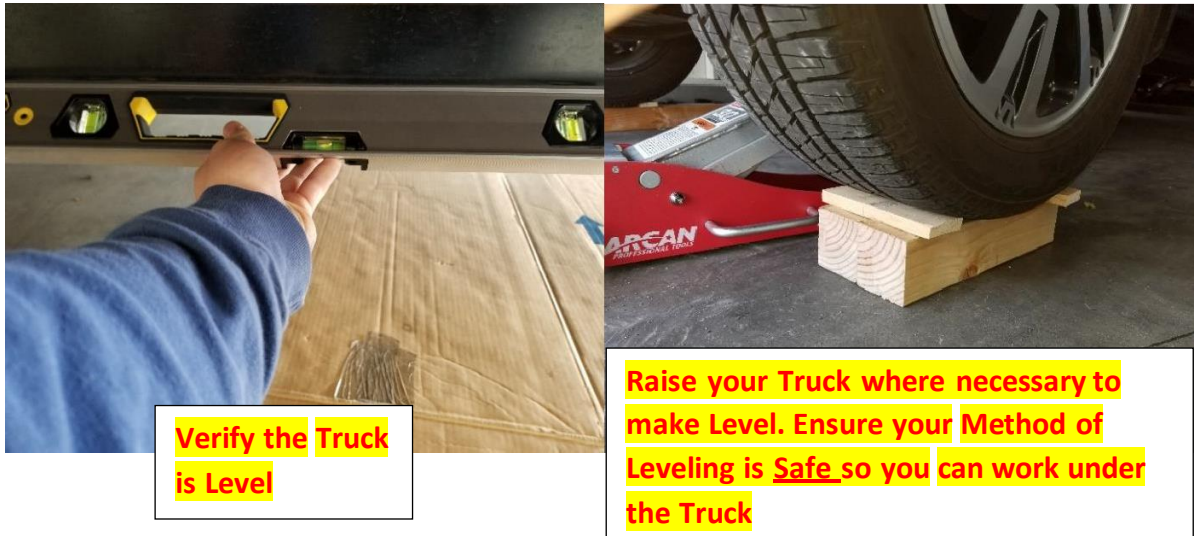
1. Verify Pan Temperature. Before you begin, verify you can read your pan temperature through the device of your choice. (We recommend a Bluetooth OBDII reader and the application OBD Fusion. See "How to monitor transmission temperatures" at [genuinecoolingsystems.com](http://genuinecoolingsystems.com))
2. Remove the grill from your truck. Remove the two tabs on top of the grill and the screws holding the grill in place. Remove the small panel on top of your grill and disconnect the radar (2018+ Tundra only). Remove the grill off the truck starting from the sides then pull the grill directly forward to release the remaining bottom tabs.
3. Remove Passenger Side Air Deflector. Remove the air deflector by removing the push lock tabs by prying the push cylinders open. Drill 1.25" holes in the same locations as the pictures below. Use the provided grommets to mark where the middle of the hole should be before you start drilling. Keep the holes parallel with each other and install the grommets. Once complete, re-install the air deflector on the truck.



4. Ensure your Truck is Level. You may use a straight level on your frame and use jack stands or 4x4s (similar to the photo below) under your tires to achieve this.

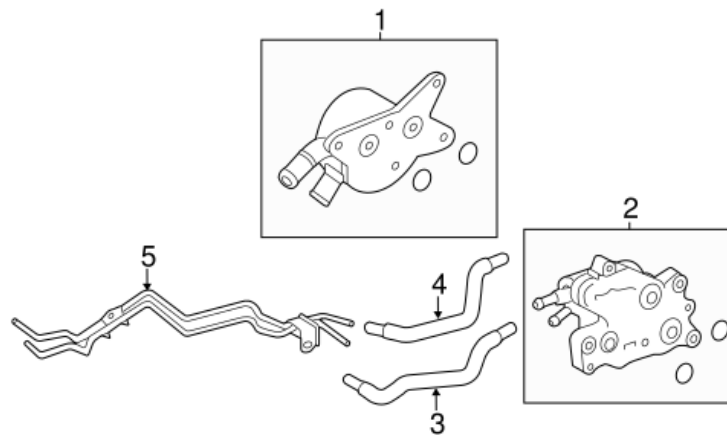
*Note: It will be easier to install the plumbing and thermostat the higher you raise your vehicle.*

*Important: Your truck must level not only from the front and rear but also side to side. You cannot perform the ATF level check until you confirm that your truck is level within **+/- 1 degree.***

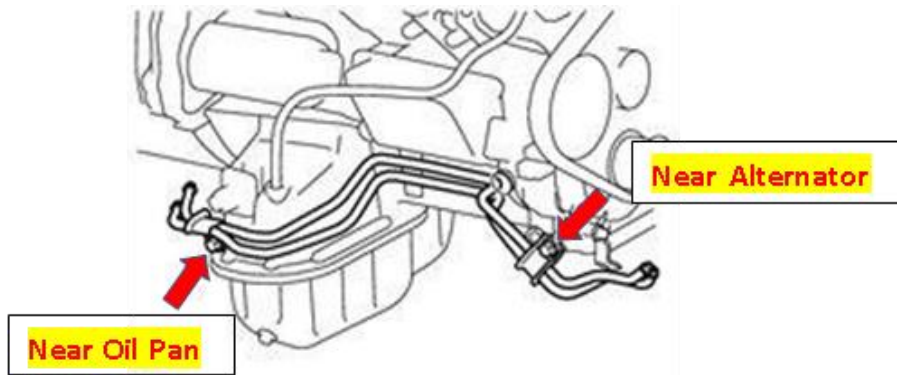


5. Remove the Engine Skid Plate. The OEM skid plate bolts require (13mm).

*Note: The Toyota parts required for this retrofit (see diagram below) consist of a transmission thermostat (Item 2, PN 32970-34030), cooler inlet hose (Item 3, PN 32941-0C030), cooler outlet hose (Item 4, PN 32942-0C040), transmission cooler-pipe-assembly (Item 5, PN 32907-0C020), plus two flange head bolts, PN 90080-10400, and eight hose clamps, PN 90466-16004. Item 1 is the existing transmission fluid warmer which remains unchanged.*

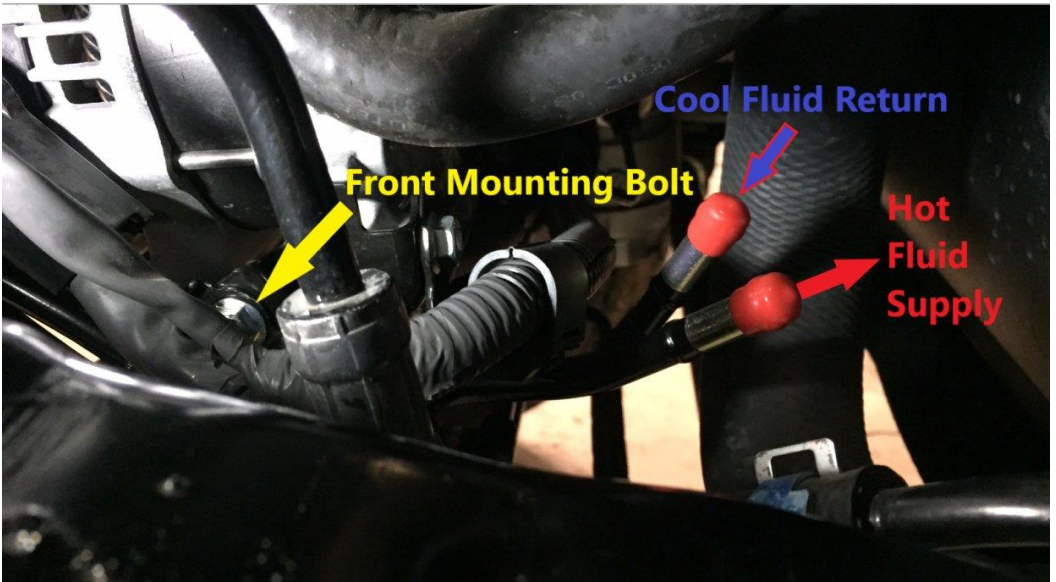
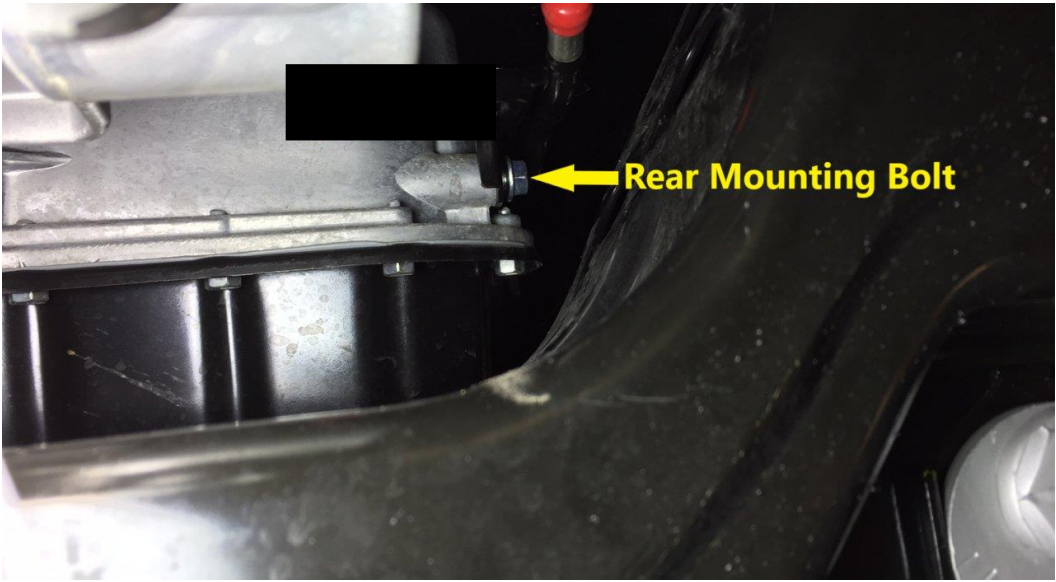
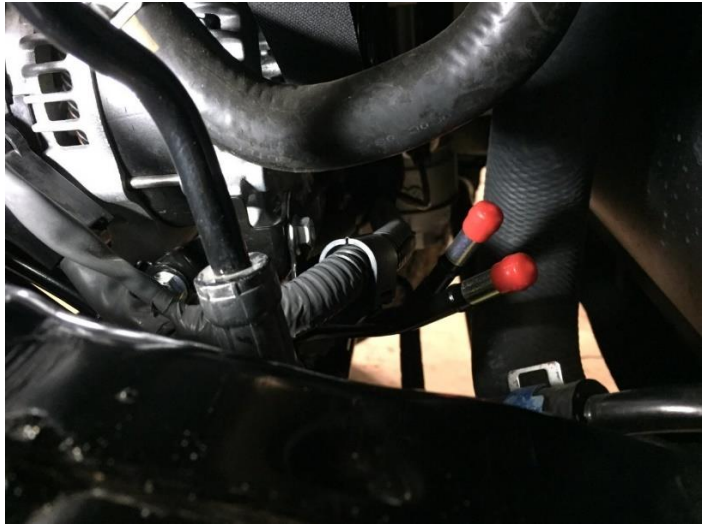


6. Install the Toyota Hard Lines. The hard lines require the two hex flange bolts. Locate the two threaded points where the lines are secured (*see pictures below*). The first bolt will go above the rear passenger corner of the oil pan (*pictures to the left*). The next bolt will be attached to the block of the engine next to the alternator (*pictures to the right*). Taping the ends of the tubes closed, or installing plastic caps on the tube ends before starting, would be advised to prevent dirt and debris from entering the tubes during installation.

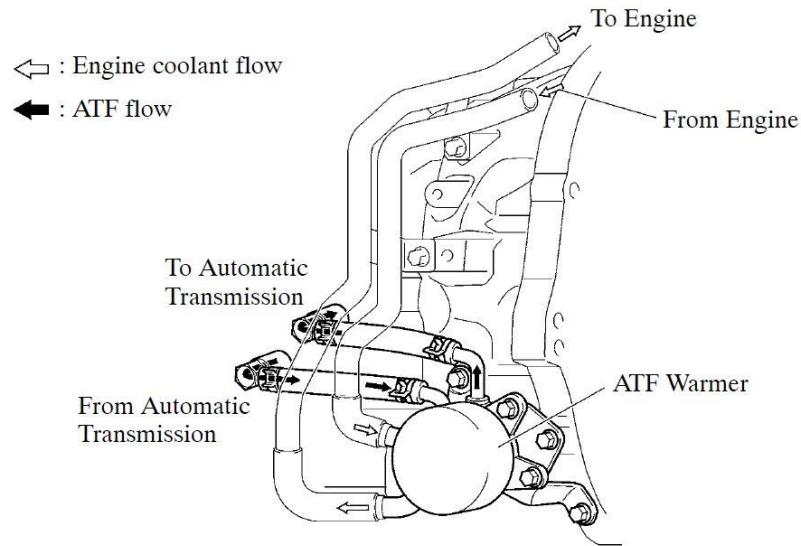


*(Continued)* Once these threaded locations are identified you will have an understanding of how the hard lines must be routed. The cooler-pipe-assembly installation will be easier by having the truck on jack stands at the four corners. Begin by feeding the assembly over the top of the frame cross-member, and into the void nearest the passenger-side of the engine. Stay below the front upper suspension components.

*(Continued)* Keep feeding the tube assembly forward until an obstruction is encountered. Rotate the assembly, and/or withdraw slightly and change direction, until the obstruction is cleared. Advance the assembly, and continue this method with each obstruction until the cooler-pipe-assembly emerges at the front of the engine just above the power steering hoses and below the alternator harness. Install the provided M8 flanged bolts. (*See pictures below/next page*).

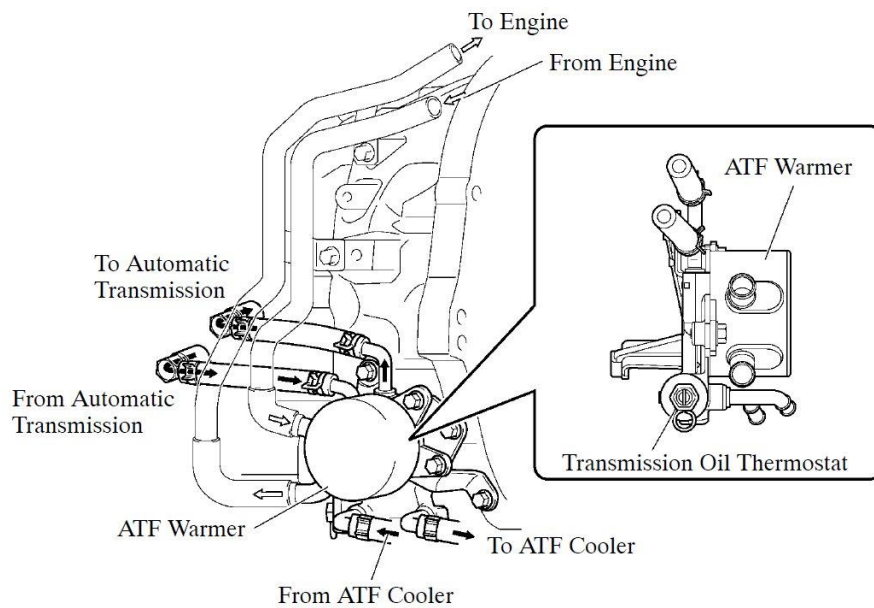


7. Remove Spacer Adapter Plate. 2014-2019 A760 Tundra transmissions have an adapter-spacer plate mounted to the transmission near the front bell housing with an original equipment fluid warmer attached. The purpose of the fluid warmer is to quickly heat the transmission fluid to engine coolant temperature in order to reduce friction inside the transmission for improved fuel economy.



**Models without ATF Cooler**

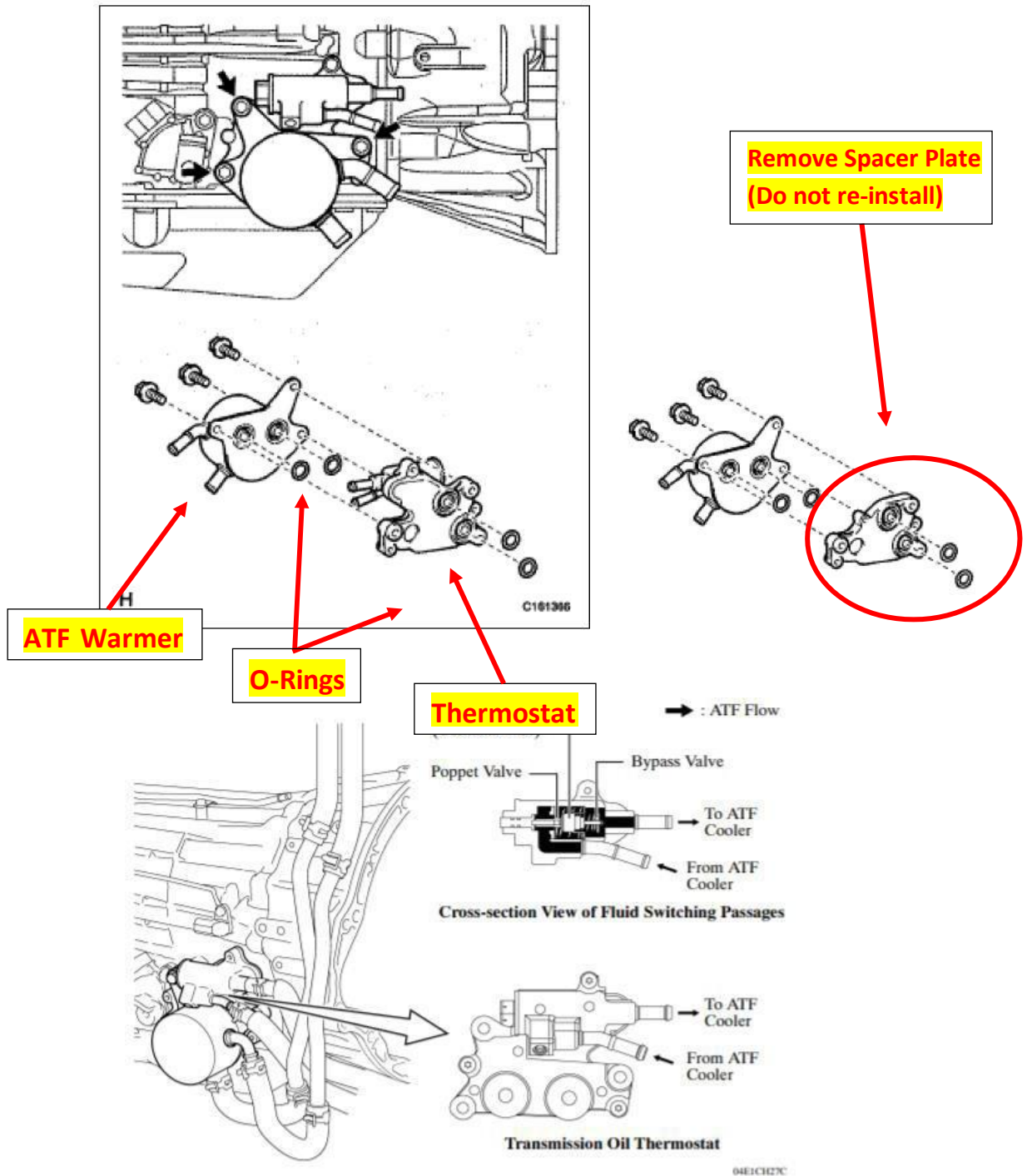
12DCH006Y



**Models with ATF Cooler**

12DCH007Y

(Continued). Installation of the transmission thermostat begins by first removing the adapter-spacer plate. Remove the three (12mm) bolts attaching the warmer to the adapter, and gently separate the warmer from the adapter. You can expect a few ounces of transmission fluid to leak out of the warmer when the joint is separated so towels will come in handy.



8. Install the Thermostat. Inspect the mating contact surfaces of the thermostat and fluid warmer to ensure mating surfaces are clean of any foreign matter, and that the two sealing O-rings are still correctly positioned in the O-ring grooves. Position the warmer against the transmission thermostat, and install the three warmer bolts finger-tight. The torque spec for the three (12mm) thermostat housing bolts are 180 lb-in/15 lb-ft.
9. Install Thermostat Inlet and Outlet Hose. The port "To ATF Cooler" on the thermostat will attach to the outlet hose (see diagram on previous page). The port "From ATF Cooler" on the thermostat will attach to the inlet hose (hoses labeled "inlet" and "outlet" on the Toyota packaging).

(Continued) Route both hoses through the metal bracket near the transmission. The inlet hose will be routed through the bottom portion of the bracket and the outlet hose will be routed through the upper portion of the bracket (see picture below).

(Continued) The inlet hose will attach to lower hose connection on the hard lines while the outlet hose will attach to the upper connection of the hard lines. Seat hoses fully against the hose stops, then release and properly position the hose clamps. You won't need to come back here, except to visually inspect for leaks and to remove the bypass pin.

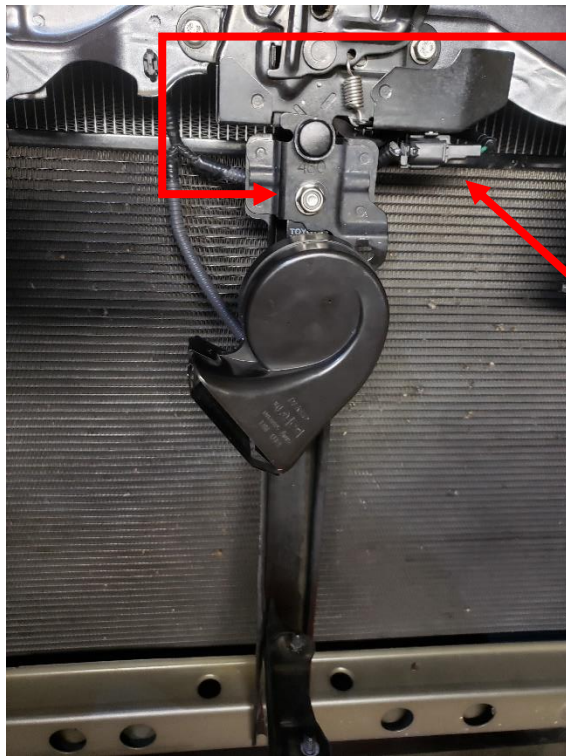


Route hoses through the metal bracket on the transmission.

Bracket



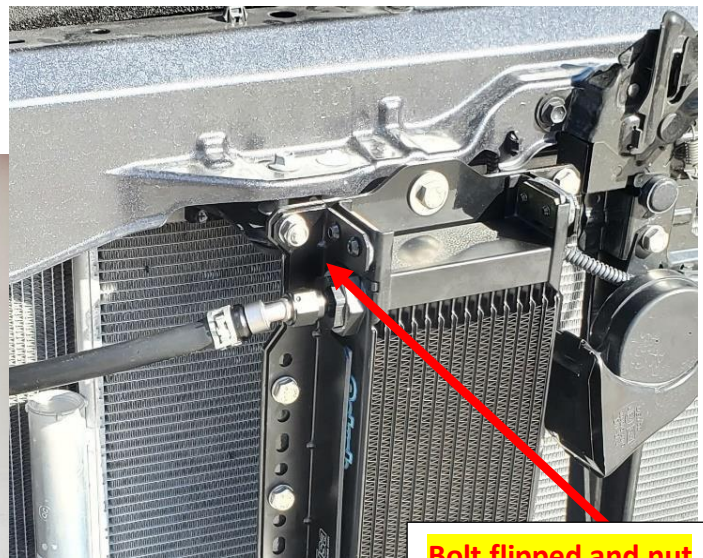
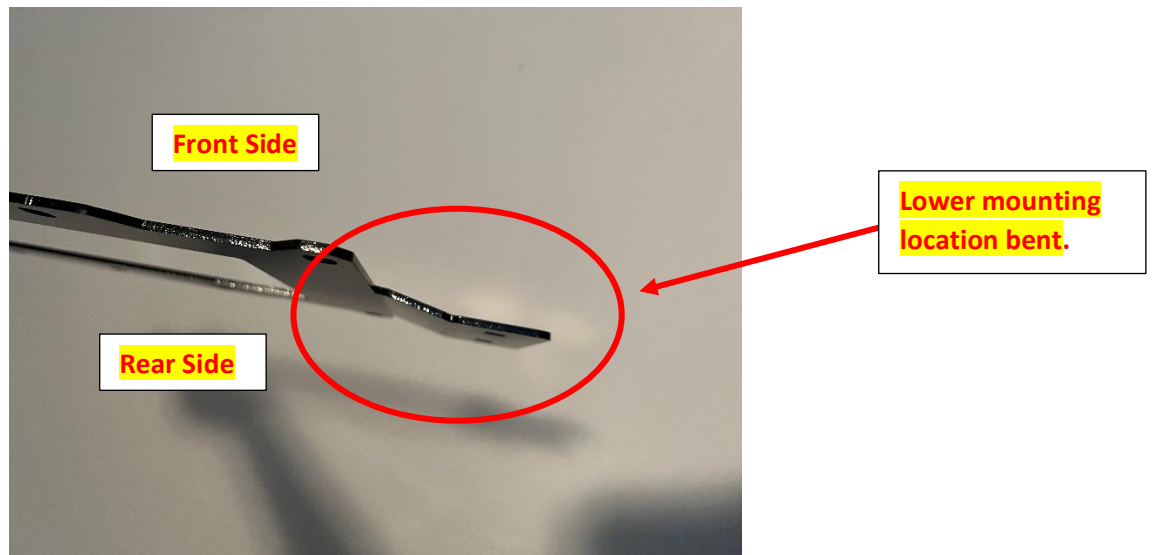
10. Relocate Passenger Side Horn (12mm). Disconnect both connections on the horn and remove the horn. Pry the pins on the horn cable to release the cable from the truck (see *picture below*). Relocate the horn cable to the oval opening above. Secure the horn with the provided (13mm) hex bolt, washers, and lock nut (13mm). (*The horn bolt will have a white dot on the head to easily identify*).



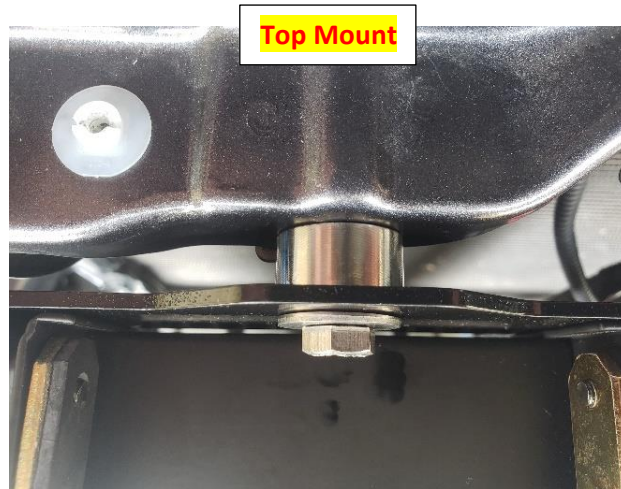
Secure the horn bracket with the 16mm hex bolt, washers, and lock nut.

Relocate the horn cable here. Push the pins on the cable through the oval opening.

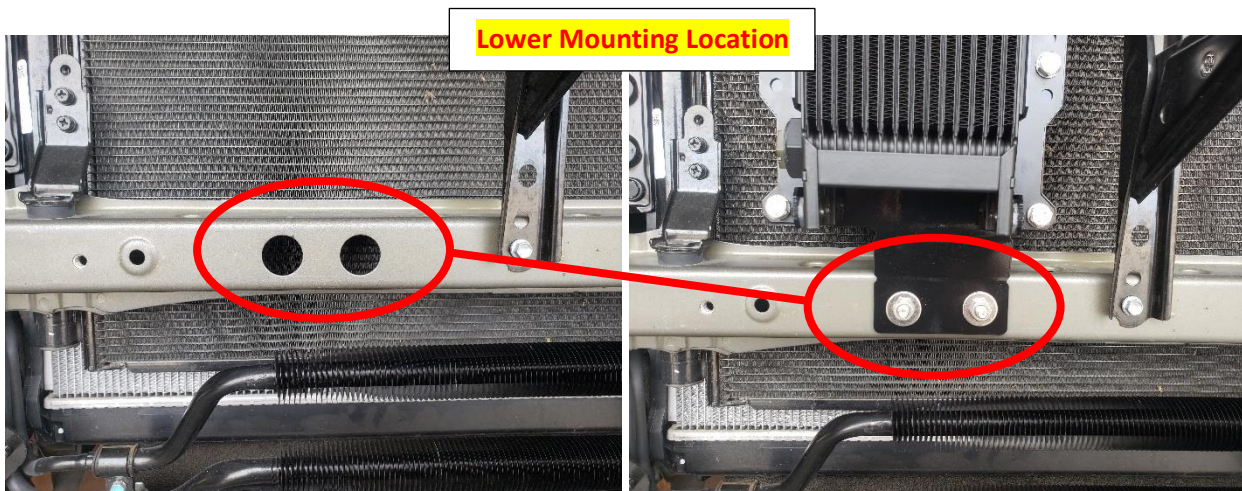
11. Install the Setrab 15-Row Cooler on the Bracket. You will notice on the cooler bracket that it is bent. The Setrab cooler will need to be mounted on the front side of the bracket (*as pictured below*) so the lower mounting point of the cooler will push out the Setrab cooler when mounted. Secure both Setrab anti-vibration brackets to the cooler utilizing the provided hardware in the kit. Install the cooler on the bracket utilizing the M8-18m bolts, washers, and lock nuts (**13mm**). The top left (*when facing the cooler*) bolt will need to be flipped with the nut facing the front of the vehicle to provide additional clearance from the condenser bracket. (*See pictures below*).



12. Install the Bracket/Cooler to the Truck. Secure the top of the bracket utilizing the 40mm hex bolt (12mm), fender washer, and stainless 3/8-inch stainless spacer. The lock nut attached to the 40mm hex bolt will thread on the back of the bolt once installed. (See picture below).

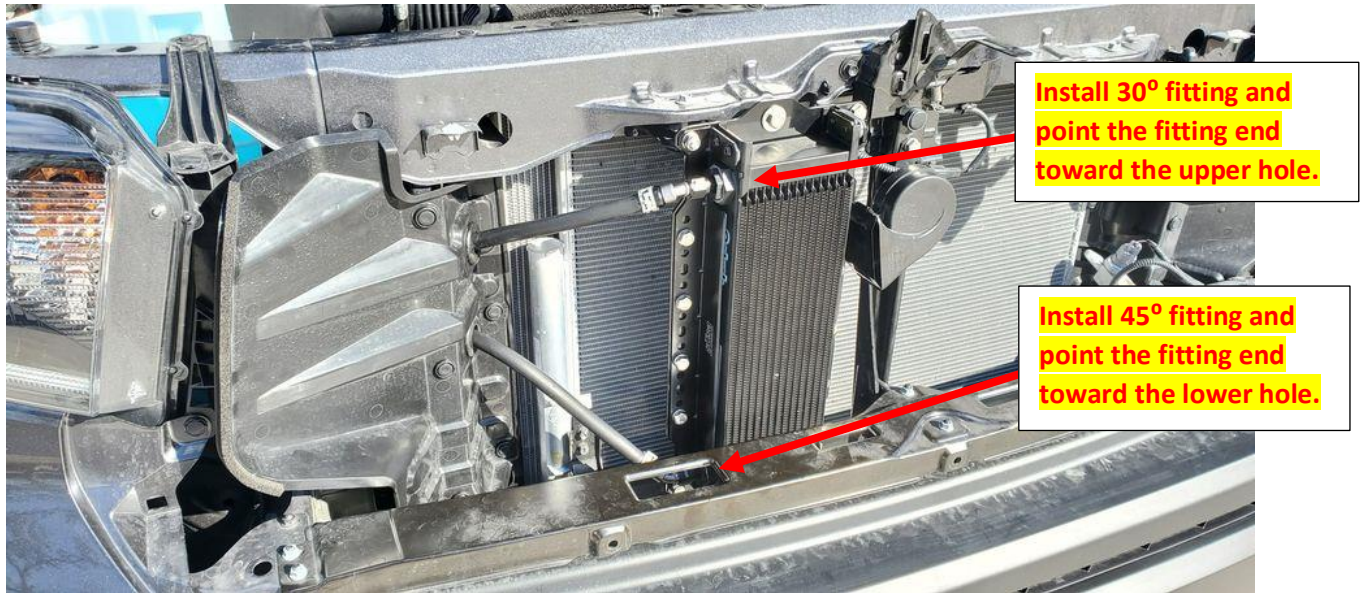


(Continued) Secure the bottom of the cooler by placing the back-plate bracket behind the holes identified below (picture to the left). Work a carriage bolt behind the frame and through the back-plate bracket and the bracket securing the cooler. Place a fender washer on each bolt then tighten the carriage bolts utilizing the provided lock nuts. (See pictures below).



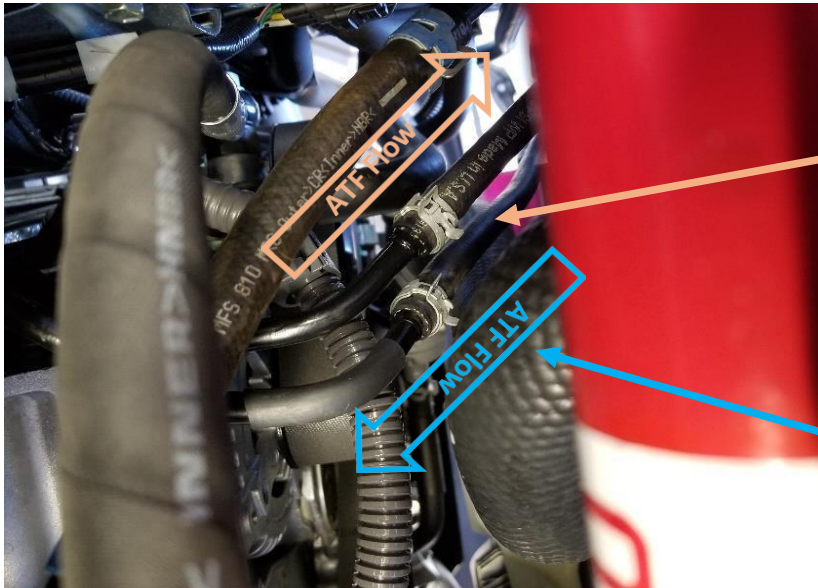
13. Install the M22 to 6AN fittings on the cooler. Install the M22 to 6AN adapters on each port of the cooler ensuring the O-ring is fully seated in each port on the cooler and is not visible (tape on your wrench ends will help prevent damage to the aluminum fittings).

14. Install the 30° and 45° push lock fittings. The 30° push lock fitting will be secured to the top port of the cooler and the fitting end will point towards the upper hole you made in your air deflector. The 45° push lock fitting will be secured to the bottom port of the cooler and the fitting end will point towards the lower hole you put in your air deflector. (See picture below).



15. Route 3/8" Hose. Route both 3/8" hose through the air deflector grommets to the hard lines. The hose routed through the upper grommet on the wind deflector will attach to the hard line that has the rubber sleeve (*this will be the ATF flow from cooler*). The hose routed through the lower grommet on the wind deflector will attach to the hard line without the rubber sleeve (*this will be ATF flow to cooler*). Both soft hoses will be extremely hard to slip on the hard lines. To help with this, put a coat of ATF in the hose before you attempt to install them on the hard lines. (*Install a hose clamp on each hose before attempting to install the hose onto the hard lines*). Once the hose covers most of the unpainted portion of the hard lines, snap a hose clamp on each end (*see picture on next page*).

Important: There is approximately 3-6 inches of extra hose per side than required. Ensure each hose has the proper slack and it can reach the connections on the cooler before you cut any additional hose and secure on push lock fittings.

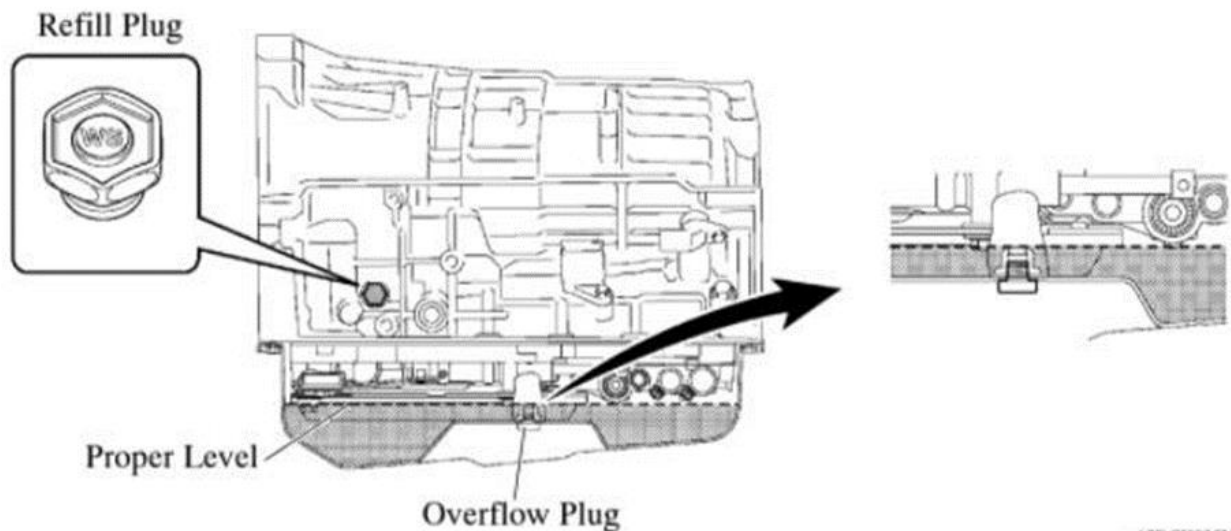


Hose connection for hose routed through LOWER grommet/hole.

Hose connection for hose routed through UPPER grommet/hole.

16. Add 1.5-Quart of ATF to Transmission. The transmission should be pre-filled with 1.5 quarts of ATF WS fluid. Assuming the transmission fluid level was correct to begin with, 1.5 quarts should be enough fluid to fill the additional system volume that's been added, plus some minimal fluid loss during the test.

*Note: The Refill Port will be located on the driver side of the transfer case adapter near the transmission rear flange. The Refill Port bolt will be identified with the headstamp "WS", an abbreviation for World Standard, Toyota's ATF type.*



(Continued) ATF will need to be pumped into the Refill Port (23mm) opening using a pump/syring. After one quart of ATF WS has been added to the transmission, torque the Refill Port to 29 ft/lbs.

17. Verify Your Transmission Pan Temperature. Identify the overflow plug on the transmission pan (see diagram on previous page). The overflow plug is the only plug on the pan that you open with a (5mm) Allen key. Use your application to read the ATF pan temperature (OBDFusion App, Scanguage etc.) Your trucks auxiliary power will need to be ON with the (Engine OFF) in order to read the temperature. Keep Auxiliary Power ON and your device reading the transmission pan temperature until level check completion.

*Note: It is required that your pan temperature is below 80°F to proceed to the next step. This will give time for the transmission cooler and lines to purge air and be replaced with ATF prior to the ATF level verification.*

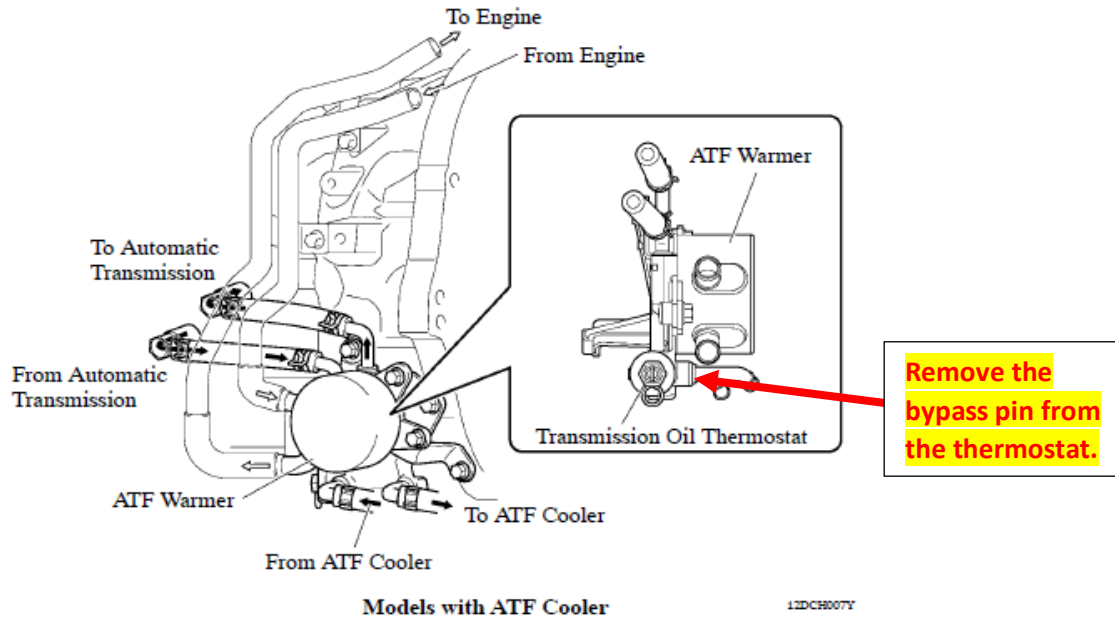
*Note: The ATF pan temperature must be between (99 and 111°F) for the A760 transmission to accurately check the ATF level.*

(Continued) Start the truck (Engine ON) and run through all the gears utilizing the sequential "S" mode. Shift through gears 1-6 and reverse before temps reach 99°F. Just as your pan temperature reaches 99°F (Keep Engine ON and Truck in Park), Remove the overflow plug on the transmission with your Allen key (5mm) and wait until the ATF flow coming out of the pan begins to turn to a trickle. Once you see the ATF starting to trickle, re-install/tighten the overflow plug back onto the pan before the transmission pan temperature reaches 111°F (do not wait until the trickle turns to drips or the pan temperature to reach beyond 111°F to re-install the overflow plug). The torque spec for the overflow plug is 180 lb-in/15 lb-ft.

*Note: If you do not see fluid coming out of the overflow port at 99°F, you will need to turn off the vehicle's engine and re-verify your truck is level (add remaining ATF if necessary).*

Once you are done, turn off the truck (Engine OFF, Aux Power OFF).

18. Verifying Connections and Check for Leaks. Keep the grill off the vehicle and go on a test drive to check for leaks. It may be necessary to use a Q-Tip to work around each connection as ATF will be easily identifiable this way. If no leaks are detected, re-install the grill and remove the bypass pin from the thermostat (*see picture below*).



**Questions?** Contact Genuine Cooling Systems  
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