



## **TRANSMISSION COOLER KIT**

**Fits 2011-2016 6.7L Ford Powerstroke Diesel Pickup Trucks**



## **Installation Guide**



**INSPECT CONTENTS OF THIS KIT  
THOROUGHLY **BEFORE** STARTING  
THE INSTALLATION PROCESS!**

**IF YOU FIND A PROBLEM WITH YOUR PACKAGE:**

- **KEEP ALL OF THE PARTS & PACKAGING TOGETHER**
- **DO **NOT** ATTEMPT INSTALLATION OF THE PRODUCT**
- **PROMPTLY NOTIFY YOUR **SELLING DEALER****
- **PROVIDE DEALER WITH PHOTOGRAPHS IF REQ'D\***
- **WAIT FOR FURTHER INSTRUCTIONS FROM DEALER**

**\*WE RESERVE THE RIGHT TO REQUEST  
PHOTOGRAPHS OF PACKAGING OR PARTS  
IN ORDER TO PROPERLY ADDRESS ANY  
SITUATION INVOLVING EITHER DAMAGED  
OR MISSING ITEMS.**

**THANK YOU FOR YOUR COOPERATION!**

**T**hank You for purchasing the Driven Diesel 2011-2016 6.7L Ford Powerstroke Transmission Cooler Kit! **Please read and familiarize yourself with this manual fully before proceeding with the installation of the kit.** Also, always work safely. Make sure that there is plenty of light and adequate ventilation, and allow yourself several hours to complete the installation. After reading these instructions, if you feel that the installation is beyond your capability, please have this kit installed by a qualified mechanic.

## Some of the Basic Tools that May be Needed for Installation:

1/4" Drive Metric Socket Set  
Hose Pinch Pliers  
Floor Jack

3/8" Drill Bit and Drill  
Channel Locks or Similar  
Safety Jack Stands

## TRANSMISSION COOLER KIT PARTS IDENTIFICATION

(not all parts pictured – see complete list below)



<b><u>Qty:</u></b>	<b><u>Part Number:</u></b>	<b><u>Description:</u></b>
1	Hardware Pack	Trans Cooler Hardware Pack (see below)
1	Cooler	Transmission Cooler with 1/2" Ports - <b>not shown</b>
2	Brackets	Transmission Cooler Mounting Brackets - <b>#1</b>
15'	Cooler Hose	1/2" Trans Cooler Hose - <b>not shown</b>
6'	Split Loom	Split Loom for Trans Cooler Hose - <b>not shown</b>

### Hardware Pack Contents:

6	M6-Nut	M6 Capture Nut - <b>#3</b>
6	M6-28	M6 x 28mm Bolt with 19mm Washer - <b>#4</b>
6	Hose Clamp	Constant Tension Hose Clamp - <b>#5</b>
2	08HB-08HB	1/2" Hose Barb to 1/2" Hose Barb Adapter - <b>#2</b>
12	Cable Tie	15" Cable Tie - <b>#6</b>

## LETS GET STARTED!

1. Using FIGURE 1, locate the (4) top grille mounting bolts and remove with a 10mm socket.
2. Using FIGURES 2 and 3 as a guide, locate the (5) retainer clips that secure the bottom of the grille. Starting at one side, depress each metal clip with a long screwdriver or socket extension while slightly pulling out on the grille. Once free, set the grille aside.
3. Locate the Transmission Cooler Mounting Brackets and loosely attach the long ear of each to the outer top mounting holes using the original grille mounting bolt. See FIGURES 4 and 7 for location. The bolts only need to be finger tight at this time.
4. Align the bottom of each bracket as shown in FIGURES 4 & 5, with the inside of the bend matching up with the back edge of the grille support (**see note on FIGURE 4!!**). Mark the drilling locations through the holes of the brackets. Loosen the top mounting bolts so you can move the bracket out of the way and drill a 3/8" hole in each marked location.
5. Install (2) of the provided Capture Nuts in the newly drilled locations, per FIGURE 6.
6. Position the bottoms of both brackets over the Capture Nuts and secure with (2) of the provided M6 bolts. **Before tightening the (4) Bracket Bolts, make sure that the brackets are held straight and pulled as far forward as possible.** Tighten completely.
7. Install the remaining Capture Nuts onto the Transmission Cooler Brackets, with the flat side facing forward and the threaded side on the back. See FIGURE 7.
8. Using the remaining M6 bolts, mount the Transmission Cooler to the Transmission Cooler Brackets. The inlet/outlet should be pointing up and on the back side of the mounting brackets. See FIGURE 8 for reference.
9. Measure and cut a 6.5' piece of Transmission Cooler Hose. The remaining section of hose should be 8.5' long. These will be referred to as the "Long" or "Short" hose going forward.
10. Using FIGURE 9 as a guide, feed both hoses through the opening next to the drivers side headlight. The hoses will point down toward the ground after going through the opening. We need the LONG hose to be on TOP of the short hose.
11. Install one of the Constant Tension Hose Clamps about 4" onto each hose end as shown.
12. Cut 2 short pieces of Plastic Split Loom (about 3-4" long each). If you have a broom handle or piece of pipe handy, slip the loom over it as shown in FIGURE 10. This makes installing the loom easier, particularly in tight spaces or when you need time to slide the loom on the hose.
13. Using FIGURES 11, 13 and 14, pull the LONG hose across the underside of the core support to the passenger side Transmission Cooler inlet. Connect the hose to the cooler and secure with the hose clamp as shown.
14. Using FIGURES 12 and 14, connect the SHORT hose to the driver side Transmission Cooler inlet and secure with the hose clamp as shown.

**NOTE:** The Transmission Cooler inlet/outlet tubes can be **SLIGHTLY** reoriented if needed. **GENTLY** push the tube in the desired direction, making sure it doesn't come in contact with the cooler mounting tab or any other part of the truck. Make sure that the ears of the clamps are not rubbing on the transmission cooler mounting tab or the mounting bracket.



15. Using FIGURES 13 and 14 as a guide, install the previously cut pieces of split loom onto the LONG transmission cooler hose where it passes under the power steering cooler brackets. Using the provided cable ties, secure the long hose to the power steering cooler brackets and hood release cable as shown.

### **TIME TO GO UNDER THE TRUCK!**

In order to complete the next steps, you will need to jack up the front of your truck and place safety jack stands under it. You will need enough clearance to slide under the front of the truck and work on the transmission cooler lines that will be directly above your head. **PLEASE BE SAFE!**

16. Using FIGURE 15 as a guide, locate the OEM transmission cooler on the passenger side frame rail. The circled connection is the OUTLET, this will be the ONLY line we use in this installation.
17. Follow the OUTLET hose toward the back of the truck until you find the clip securing it to the inlet tube. Unclip the outlet hose from the plastic clip, push the protective netting back behind the location of the clip and then reattach the clip to the hose to hold the netting out of the way as shown in FIGURE 16.
18. Install a pair of Hose Pinch Pliers (or similar) as shown in FIGURE 17. This will prevent significant fluid loss when we cut this hose.
19. Cut the OUTLET hose in the middle between the hose pinch pliers. FIGURE 17 shows where to cut. Please make the cut as square and straight as possible.
20. Install a Constant Tension Hose Clamp about 3" onto each end of the cut outlet hose.
21. Install a Brass Hose Barb to Hose Barb Adapter into each end of the cut outlet hose.
22. Route the previously installed SHORT Transmission Cooler Hose above the large lower radiator hose to the Hose Barb that is pointing toward the front of the truck. Trim the SHORT Transmission Cooler Hose to length, install a Constant Tension Hose Clamp and connect to the front facing Hose Barb as shown in FIGURE 18. Position and secure both clamps as shown. When completed, this hose will look similar to the **RED** highlighted hose in FIGURE 19.
23. Route the previously installed LONG Transmission Cooler Hose above the large lower radiator hose as well. This hose will reach the passenger side and need to make a gentle loop as shown in **GREEN** in FIGURE 19. This hose will connect to the rear facing Hose Barb. Cut the hose to length, install a Constant Tension Hose Clamp and connect the Transmission Cooler hose to the rear facing hose barb as shown.
24. The LONG and SHORT hoses from the Transmission Cooler, as well as both of the hose ends where we cut the OEM cooler line should all be connected to Brass Hose Barbs and secured with Constant Tension Hose Clamps. If this is the case, proceed to the next step.

**REMOVE THE HOSE PINCH PLIERS NOW – DO NOT PROCEED UNTIL THEY ARE REMOVED!**

25. Using FIGURES 19 thru 22, install Split Loom onto the Transmission Cooler hose in any location where it is rubbing or needs protection. Secure the hoses with cable ties as well.

26. Return to the OEM plastic clip that is holding the protective netting back on the OEM transmission cooler hose. Remove the hose from the clip, pull the protective netting forward to once again cover the hose, and reinstall the hose into the clip over the top of the protective netting.
27. Add 1 Quart of **Mercon LV** transmission fluid to your truck, as this is approximately what the new cooler holds. Depending on how much fluid was lost during the installation, more may be necessary. We will do a final top-off in a later step.
28. Before we start the engine, go over EVERY hose clamp location and make sure that the hoses are fully seated on to the cooler or the barbs, and the clamps are correctly positioned. Adjust hoses or clamps if necessary.
29. Start the engine and allow it to run. Depending on the year of your truck, transmission modifications, etc...you may have to drive the truck to get it warm enough to flow through the cooler. If necessary, take the truck off the jack stands and drive it short distances until you feel the new transmission cooler start to feel warm.
30. Make one last check of all of the fluid connections to ensure that there are no leaks. Address any leaks if necessary, before proceeding.
31. Review the entire installation to ensure that there are no possible "rub" points that could present an issue with vehicle and road vibration. Adjust components to resolve any concerns.
32. Remove the (2) top mounting bolts for the Transmission Cooler Brackets.
33. Reinstall the grille by aligning the (5) lower mounting tabs with the clips in the lower core support and gently pressing inward until they "click" into place.
34. Position the top of the grille so that the (4) mounting holes line up with the mounting locations in the upper core support. **MAKE SURE THAT THE TRANSMISSION COOLER BRACKETS ARE LINED UP WITH THE OUTER HOLES.** Install the (4) OEM grille mounting bolts and tighten. **BEFORE TIGHTENING** the grille mounting bolts that capture the tops of the transmission cooler brackets, **MAKE SURE THE TRANSMISSION COOLER BRACKETS ARE PUSHED AS FAR FORWARD AS THE BOLTS WILL ALLOW.** NOTE: These bolts are threading into PLASTIC, do NOT overtighten!

The last step, after complete reassembly, is to fully warm up the engine and transmission and then top-off the transmission fluid. Between the added capacity of the new transmission cooler and the fluid lost during the installation, you will need some additional fluid. Top off to the appropriate level on the dipstick, with the engine running, the transmission in park and the fluid at operating temperature.

**CONGRATULATIONS!**  
**You've just completed the installation of the**  
**Driven Diesel 2011-2016 6.7L Transmission Cooler Kit!**



FIGURE 1 – Grille Mounting Bolts



FIGURE 2 – Lower Grille Retention Clips (only 2 of 5 pictured)

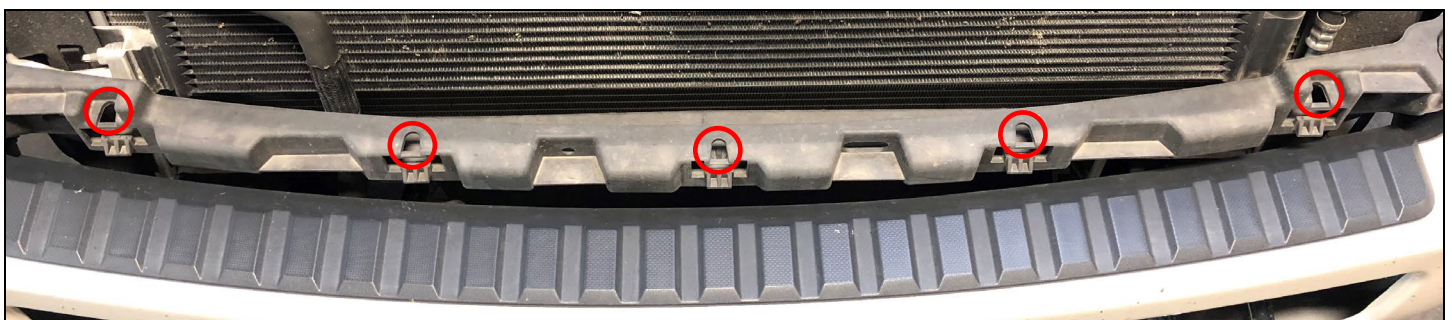


FIGURE 3 – Lower Grille Retention Clip Locations (grille removed for clarification)



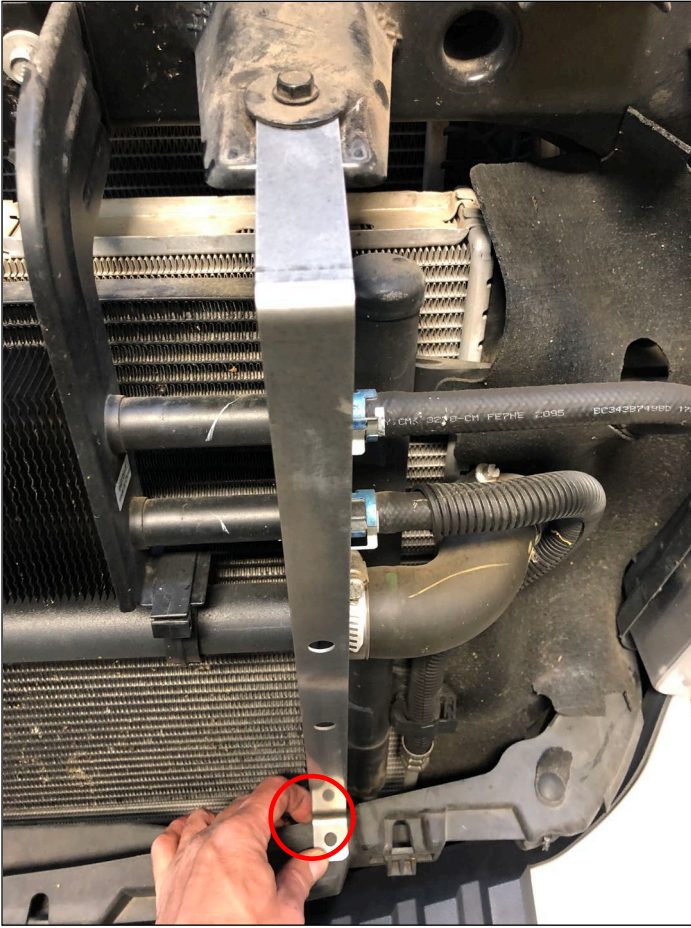


FIGURE 4 – Bracket Positioning



FIGURE 5 – Marking Hole Location

**IMPORTANT STEP: Finger Holding INSIDE Corner  
Flush With Back of Grille Support**



FIGURE 6 – Hole Drilled & Clip Capture Nut Installed

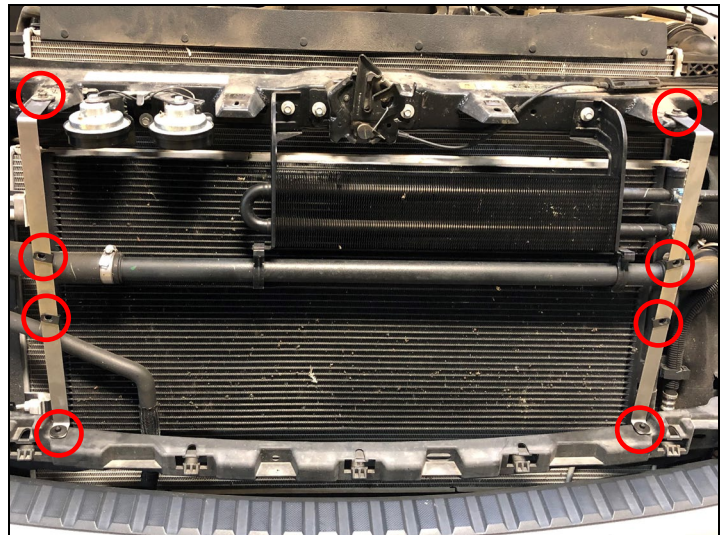


FIGURE 7 – Brackets Installed – Capture Nuts Installed





FIGURE 8 – Transmission Cooler Mounted





FIGURE 9 – Driver Side Hose Routing Location

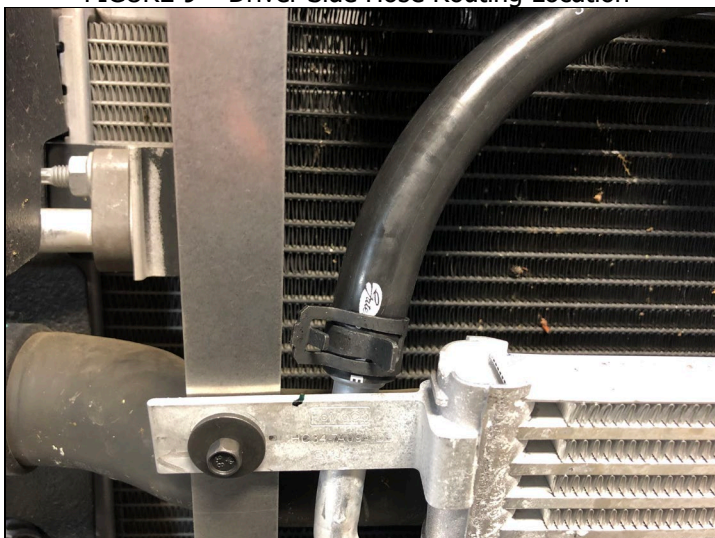


FIGURE 10 – Stretching The Loom Makes It Easier!

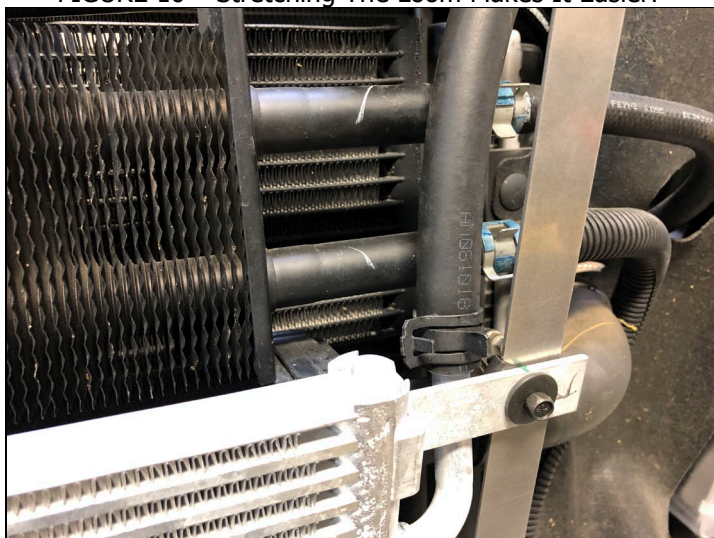


FIGURE 11 – Passenger Side Hose and Clamp Installed

FIGURE 12 – Driver Side Hose and Clamp Installed

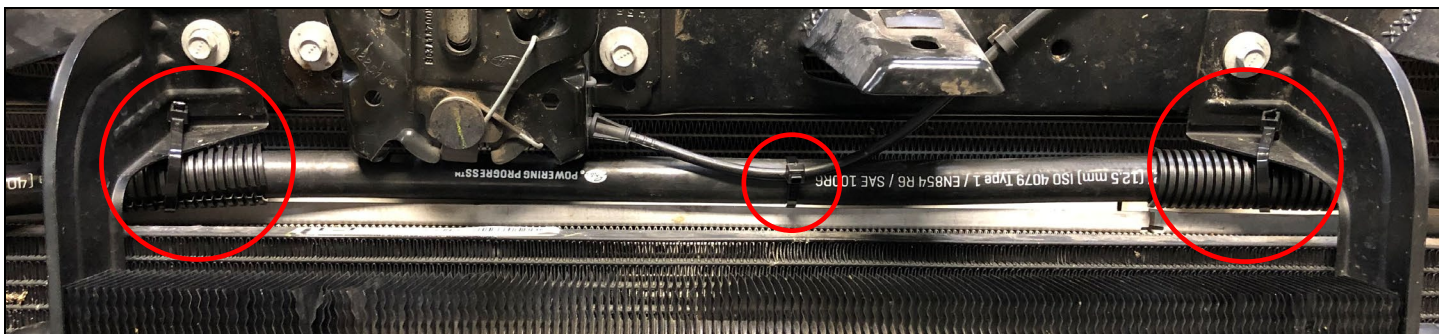


FIGURE 13 – Protective Loom and Cable Ties Securing Passenger Side Hose

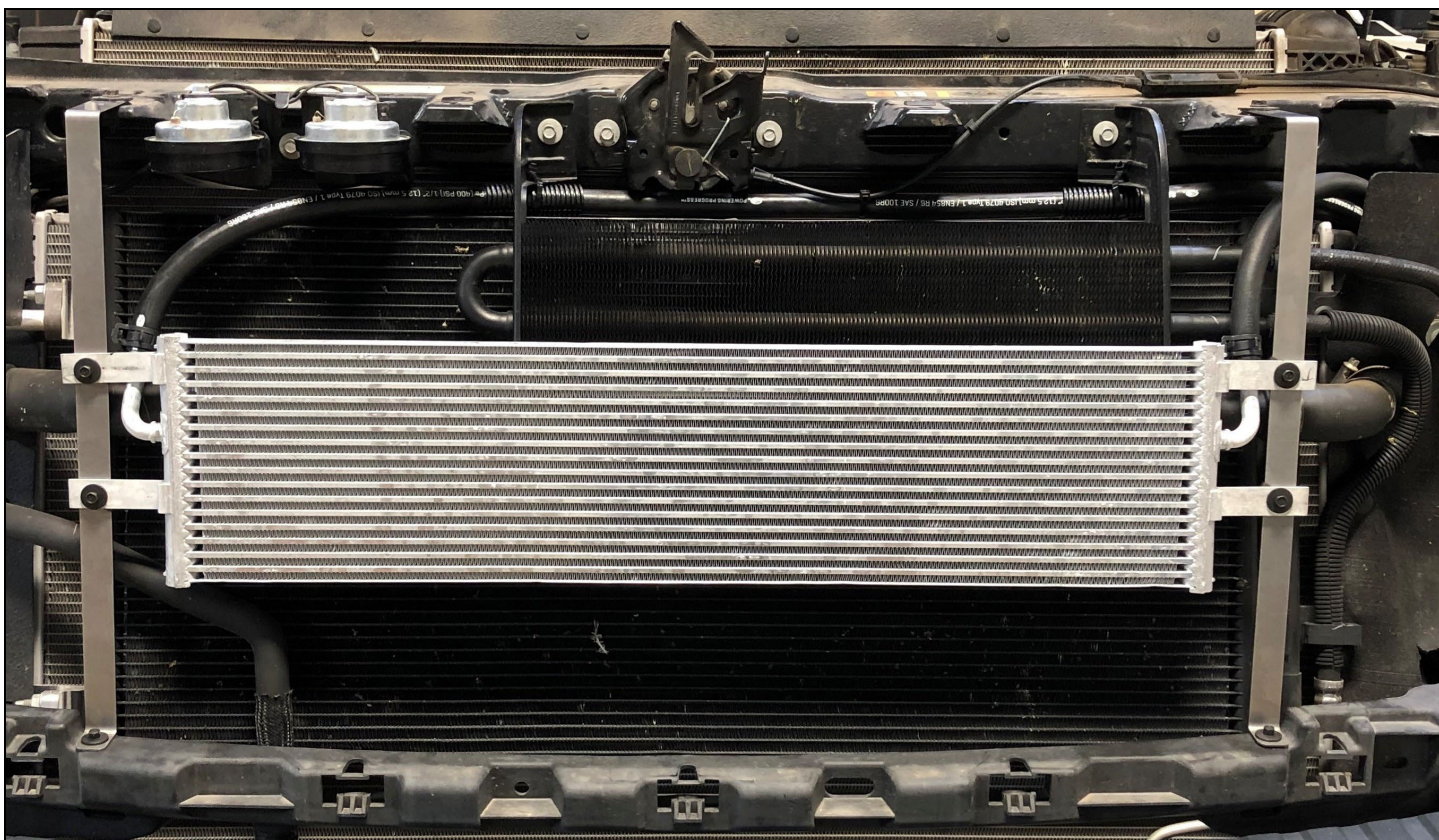


FIGURE 14 – Cooler and Hoses Installed, Routed and Secured





FIGURE 15 – Stock Trans Cooler – Outlet Marked

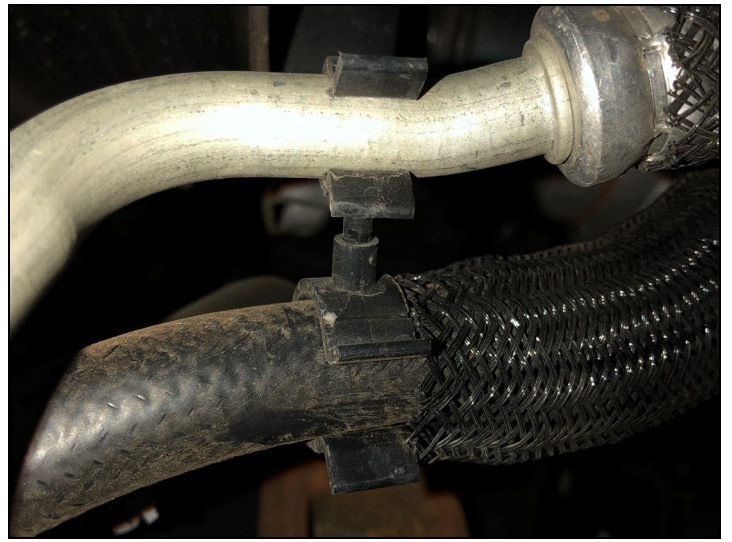


FIGURE 16 – Protective Covering Held Back By Clip

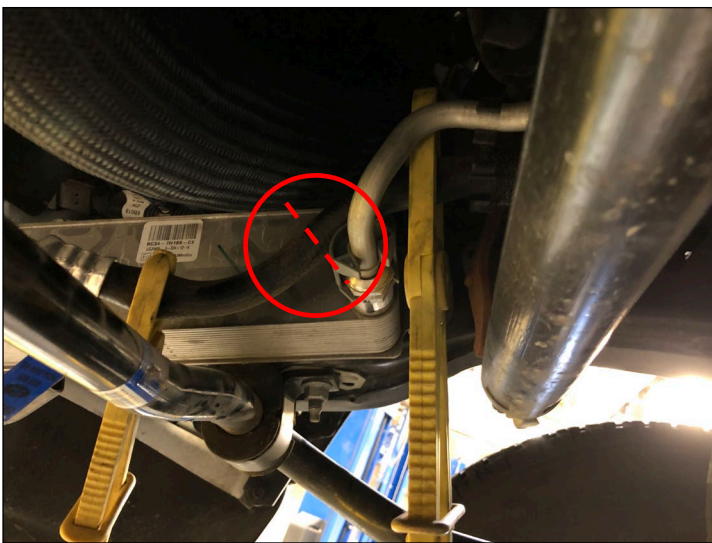


FIGURE 17 – Hose Pinch Pliers Installed On Outlet Hose



FIGURE 18 – Hose Coupler Installed with Clamps

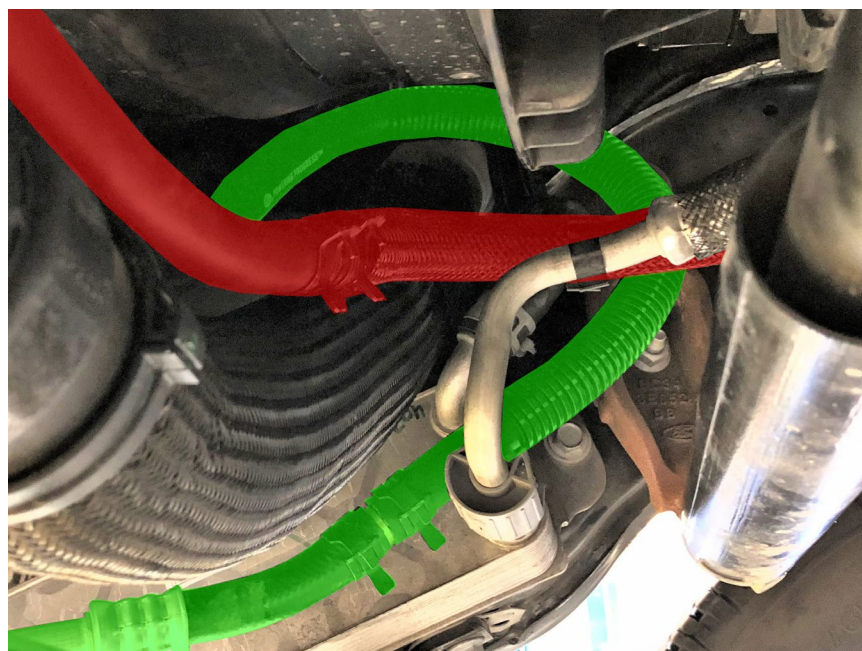


FIGURE 19 – Short Hose to Transmission (**RED**) / Long Hose Loops to OEM Cooler (**GREEN**)





FIGURE 20 – Cooler Hoses Tucked Above Core Support



FIGURE 21 – Protective Loom and Cable Tie on Hoses

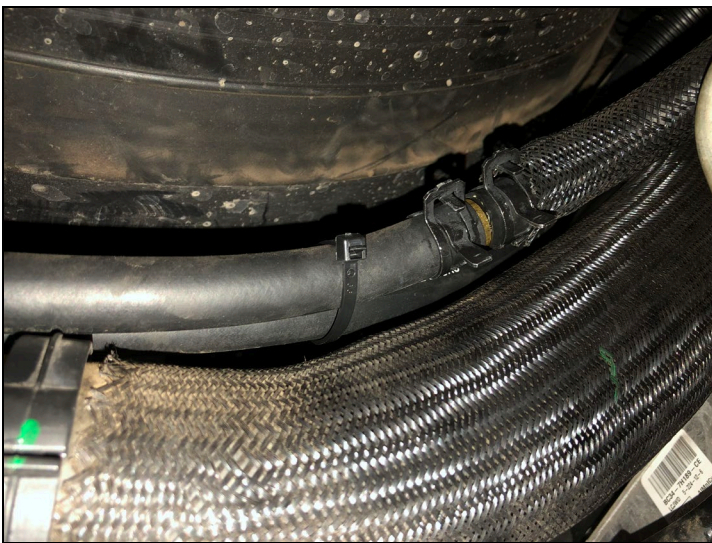


FIGURE 22 – Cooler Hoses Cable Tied Above Radiator Hose

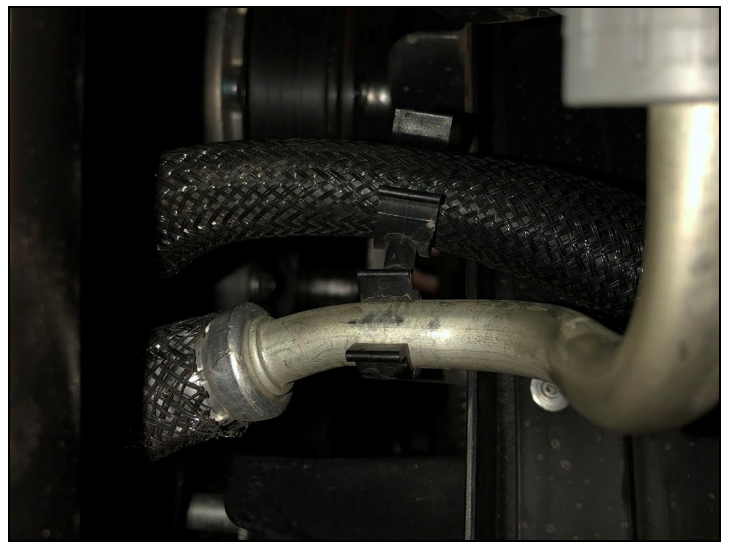


FIGURE 23 – OEM Covering and OEM Clip

**MANY OF THE PRODUCTS SOLD BY S DIESEL, LLC, ARE DESIGNED TO INCREASE VEHICLE PERFORMANCE...USE AT YOUR OWN RISK!**

**Do not install or use any product(s) purchased from S DIESEL, LLC ("S DIESEL") until you have carefully read the following Warranty and Liability Policy (the "Warranty").**

#### **PRODUCT WARRANTY POLICY**

Subject to the limitations, exclusions, and qualifications set forth below, the product or the products made and sold by S DIESEL (the "S Diesel Product" or "S Diesel Products") are warranted to Buyer as set forth in this Warranty. The installation of the S Diesel Products indicates that Buyer has read, understands and agrees to the terms and conditions of this Warranty. Any warranty on products that are made by another manufacturer which are resold by S DIESEL to Buyer is made to Buyer by the manufacturer of such products in accordance with and subject to all conditions and limitations of the manufacturer's warranty in effect on the date of the purchase by Buyer. S DIESEL makes no warranties to Buyer, express or implied, with respect to such products that are made by another manufacturer.

#### **LIMITED WARRANTY**

The S Diesel Products (except S Diesel Products specified to have different warranty terms) are warranted to be free from defects in material and workmanship, under normal use and service for a period (the "Product Warranty Period") of one (1) year from date of delivery to Buyer, unless S DIESEL performs the work installing the S Diesel Products, in which case the Product Warranty Period shall be extended to equal the Service Warranty Period (as defined below under "SERVICE WARRANTY POLICY"). S DIESEL's liability under this Warranty is limited to repair or replacement at its option, subject to the provisions set forth herein, of any S Diesel Products which upon examination S DIESEL are found to be defective. Buyer shall prepay cost of transportation of defective S Diesel Products to S DIESEL for inspection.

S DIESEL shall not have any responsibility under this Warranty unless (1) the defect in an S Diesel Product results in a claim arising within the Product Warranty Period, measured from the date of delivery to Buyer, (2) the S Diesel Product, if installed by an installer other than S DIESEL, was properly installed, (3) the S Diesel Product was normally maintained and not subject to misuse, negligence or accident, and (4) the S Diesel Product, system components and/or accessories were not repaired or altered in such a way that in the judgment of S DIESEL the S Diesel Product's performance or reliability was adversely affected.

#### **EXCLUSIONS**

Any of the above warranties by S DIESEL shall not apply if Buyer's vehicle is in an accident, misused, neglected, altered from the S Diesel Product's manufacturer original designs or specifications or serviced in connection with a warranty claim hereunder without prior written approval of S DIESEL.

#### **REMEDIES EXCLUSIVE**

Repair or replacement of defective S Diesel Products in accordance with the Limited Warranty above shall be Buyer's exclusive remedy for and shall constitute satisfaction of any and all liabilities of S DIESEL with respect to any defect in any S Diesel Product whether based in warranty, contract, tort, negligence, strict liability or otherwise.

#### **DISCLAIMERS AND LIMITATIONS**

**THE EXPRESS WARRANTIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS AND TERMS AS TO QUALITY OR FITNESS OF ALL PRODUCTS SUPPLIED BY S DIESEL TO BUYER, WHETHER WRITTEN, ORAL OR IMPLIED, STATUTORY OR OTHERWISE, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES, CONDITIONS AND TERMS ARE HEREBY DISCLAIMED AND EXCLUDED BY S DIESEL. IN NO EVENT SHALL S DIESEL BE LIABLE FOR ANY LOSS OF ACTUAL OR ANTICIPATED PROFITS, LOSS OF ANTICIPATED BUSINESS, COST OF SUBSTITUTE PRODUCTS, LOSS OF USE OR DOWNTIME COSTS OR DELAY CLAIMS (WHETHER DIRECT OR INDIRECT) NOR FOR ANY OTHER SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATING TO THIS WARRANTY OR THE SUPPLY OF S DIESEL PRODUCTS TO BUYER, WHETHER BASED IN WARRANTY, CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. BUYER ACKNOWLEDGES THAT (A) THE PRODUCTS PURCHASED FROM S DIESEL WILL BE USED IN CONNECTION WITH ACTIVITIES, UNDER EXTREME CONDITIONS AND/OR SUBJECT TO MODIFICATIONS REQUESTED BY BUYER FOR WHICH THE PRODUCTS MAY OR MAY NOT BE SUITABLE; (B) THE WARRANTY OF SUCH PRODUCTS FOR PERFORMANCE IN CONNECTION WITH SUCH ACTIVITIES, UNDER SUCH EXTREME CONDITIONS AND/OR SUBJECT TO SUCH MODIFICATIONS REQUESTED BY BUYER IS NOT POSSIBLE; AND (C) ANY MANUFACTURER'S WARRANTY MAY BE VOIDED BY USE OF THE PRODUCTS IN CONNECTION WITH SUCH ACTIVITIES, UNDER SUCH EXTREME CONDITIONS AND/OR SUBJECT TO SUCH MODIFICATIONS REQUESTED BY BUYER. BUYER ACKNOWLEDGES THAT THE INSTALLATION OF ANY S DIESEL PRODUCTS THAT ARE NOT LEGAL FOR USE ON POLLUTION CONTROLLED MOTOR VEHICLES IS DONE SOLELY AT THE REQUEST OF BUYER AND ALL RESPONSIBILITY FOR ANY EFFECTS ON THE ORIGINAL VEHICLE MANUFACTURERS WARRANTY, ABILITY TO PASS ANY EMISSIONS INSPECTIONS OR FOR ANY FINES THAT MAY OCCUR DUE TO THE REMOVAL OF FEDERALLY MANDATED EMISSION CONTROL EQUIPMENT IS ON BUYER.** No employee or representative of S Diesel has the authority to make any representation, promise or agreement which in any way varies from the terms and conditions of this Warranty. No suit or claim based on any cause of action, regardless of form, arising out of or relating to this Warranty or any of the S Diesel Products supplied by S DIESEL may be brought by Buyer or anyone claiming by, through or under Buyer against S DIESEL more than one year after the date that such cause of action arose.

**IN THE EVENT BUYER DOES NOT AGREE WITH THE TERMS AND CONDITIONS OF THIS WARRANTY, BUYER MAY PROMPTLY RETURN THE PRODUCT TO S DIESEL FOR A FULL REFUND. THE PRODUCT MUST BE IN NEW, UNUSED AND RESELLABLE CONDITION, BE RECEIVED WITHIN FIFTEEN (15) DAYS OF THE ORIGINAL PURCHASE AND BE ACCOMPANIED BY A DATED PROOF OF PURCHASE (RECEIPT). PRODUCTS RETURNED IN NEW, UNUSED AND RESELLABLE CONDITION MAY STILL BE SUBJECT TO RESTOCKING/REPACKAGING FEES.**

**THE INSTALLATION OR USE OF ANY PRODUCT PURCHASED FROM S DIESEL INDICATES THAT BUYER HAS READ, UNDERSTANDS AND AGREES TO THE TERMS AND CONDITIONS OF THIS WARRANTY.**

#### **ASSIGNABILITY OF WARRANTY**

This Warranty is for the exclusive benefit of Buyer and is not assignable.

#### **WARRANTY CLAIMS PROCEDURE**

Warranty claim forms can be printed from the company websites (<http://www.drivendiesel.com> (Products) and <http://www.strictlydiesel.com> (Services)). A properly completed warranty claim form and a copy of the invoice for any defective Product or Service must be received by the Seller within the earlier of 30 days after the expiration of the Warranty Period or the incident giving rise to the claim. To qualify for an adjustment under this Warranty a defective Product must be returned prepaid to the Seller for inspection and must be accompanied by a dated proof of purchase receipt. In addition, the serial number of the defective Product, if any, must match the serial number on Buyer's invoice. All Warranty claims are subject to approval by the Seller and/or the Product's manufacturer. Buyer must pay all applicable service charges and taxes. Defective Products accepted for warranty compensation become the property of the Seller. To qualify for an adjustment under this Warranty a vehicle upon which S Diesel Services have been performed must be delivered to the Seller during Seller's hours of operation for inspection and must be accompanied by a dated proof of purchase receipt.

#### **WAIVER**

Any failure of the part of S Diesel to insist on strict compliance with the Warranty Provisions shall no way constitute a waiver of such right. No claim or rights arising out of a breach of the Warranty Provisions by Buyer may be discharged in whole or in part by a waiver of the claim or right, unless the waiver is in writing signed by an authorized representative of S Diesel. S Diesel's waiver or acceptance of any breach by Buyer of any provisions of the Warranty Provisions shall not constitute a waiver of or an excuse for nonperformance as to any other provision of the Warranty Provisions nor as to any prior or subsequent breach of the same provision.

#### **APPLICABLE LAW**

The Warranty shall be governed by the laws of the State of Arizona (excluding Arizona law with respect to conflicts of law).

\* Driven Diesel was formerly known as ITP Diesel, LLC and Sinister Diesel, LLC.