

Owner's Manual with Installation Instructions

Banks Techni-Cooler[®] System

**2013-18 Dodge 6.7L Cummins (24-valve)
ISB Pickup Trucks (2500/3500/4500/5500)**

USE WITH SYSTEM P/N 25987, 25989

Gale Banks Engineering
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bankspower.com

General Installation Practices

Dear Customer,

If you have any questions concerning the installation of your Banks Techni-Cooler, please call our Technical Service Hotline at (888) 839-2700 between 7:00 am and 4:00 pm (PT). If you have any questions relating to shipping or billing, please contact our Customer Service Department at (888) 839-5600.

Thank you.

1. Before starting work, familiarize yourself with the installation procedure by reading all of the instructions.
2. Throughout this manual, the left side of the vehicle refers to the driver's side, and the right side to the passenger's side.
3. Disconnect the negative (ground) cable from the battery (or batteries, if there are two) before beginning work.
4. Route and tie wires and hoses a minimum of 6" away from exhaust heat, moving parts and sharp edges. Clearance of 8" or more is recommended where possible.
5. When raising the vehicle, support it on properly weight-rated safety stands, ramps or a commercial hoist. Follow the manufacturer's safety precautions. Take care to balance the vehicle to prevent it from slipping or falling. When using ramps, be sure the front wheels are centered squarely on the topsides. When raising the front of the vehicle, put the transmission in park (automatic) or reverse (manual), set the parking brake, and block the rear wheels. When raising the back of the vehicle, be sure the vehicle is on level ground and the front wheels are blocked securely.

CAUTION! Do not use floor jacks to support the vehicle while working under it. Do not raise the vehicle onto concrete blocks, masonry or any other item not intended specifically for this use.

6. During installation, keep the work area clean. Do not allow anything to be dropped into intake, exhaust, or lubrication system components while performing the installation, as foreign objects will cause immediate engine damage upon start-up.

Tools Required:

- 3/8 Drive ratchet
- 3/8 Drive Ratchet extensions
- 3/8 Drive Inch and metric deep sockets
- Flat blade screwdriver
- Vehicle Lift and support stands or Floor Jack and Jack Stands (home install)

Highly recommended tools:

- Metric combination wrench set
- 3/8 Drive swivel attachment
- Panel clip removal tool, or needle nose pliers
- Hack Saw with fine tooth blade
- Tape measure
- Straight Edge or steel ruler
- 1/4 drive drill motor
- 1/4-inch drill bit
- Red or silver ink marker

Disclaimer of Liability & Warranty

Gale Banks Engineering Inc., and its distributors, employees, and dealers (hereafter "SELLER") shall in no way be responsible for the product's proper use and service. The BUYER hereby waives all liability claims.

The BUYER acknowledges that he/ she is not relying on the SELLER's skill or judgment to select or furnish goods suitable for any particular purpose and that there are no liabilities which extended beyond the description on the face hereof and the BUYER hereby waives all remedies or liabilities, expressed or implied, arising by law or otherwise, (including without any obligations of the SELLER with respect to fitness, merchantability, and consequential damages) whether or not occasioned by the SELLER's negligence. The BUYER is responsible to fully understand the capability and limitations of his/her vehicle according to manufacturer specifications and agrees to hold the SELLER harmless from any damage resulting from the failure to adhere to such specifications.

The SELLER disclaims any warranty and expressly disclaims any liability for personal injury or damages. The BUYER acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the BUYER agrees to indemnify the SELLER and to hold the SELLER harmless from any claim related to the item of the equipment purchased. Under no circumstances will the SELLER be liable for any damages or expenses by reason of the use or sale of any such equipment.

The BUYER is responsible to obey all applicable federal, state, and local laws, statutes, and ordinances when operating his/ her vehicle, and the BUYER agrees to hold SELLER harmless from any violation thereof.

The SELLER assumes no liability regarding the improper installation or misapplication of its products. It is the BUYER's responsibility to check for proper installation and if in doubt, contact the manufacturer. The BUYER is solely responsible for all warranty issues from the automotive manufacturer.

The use of this device signifies automatic approval of these conditions.

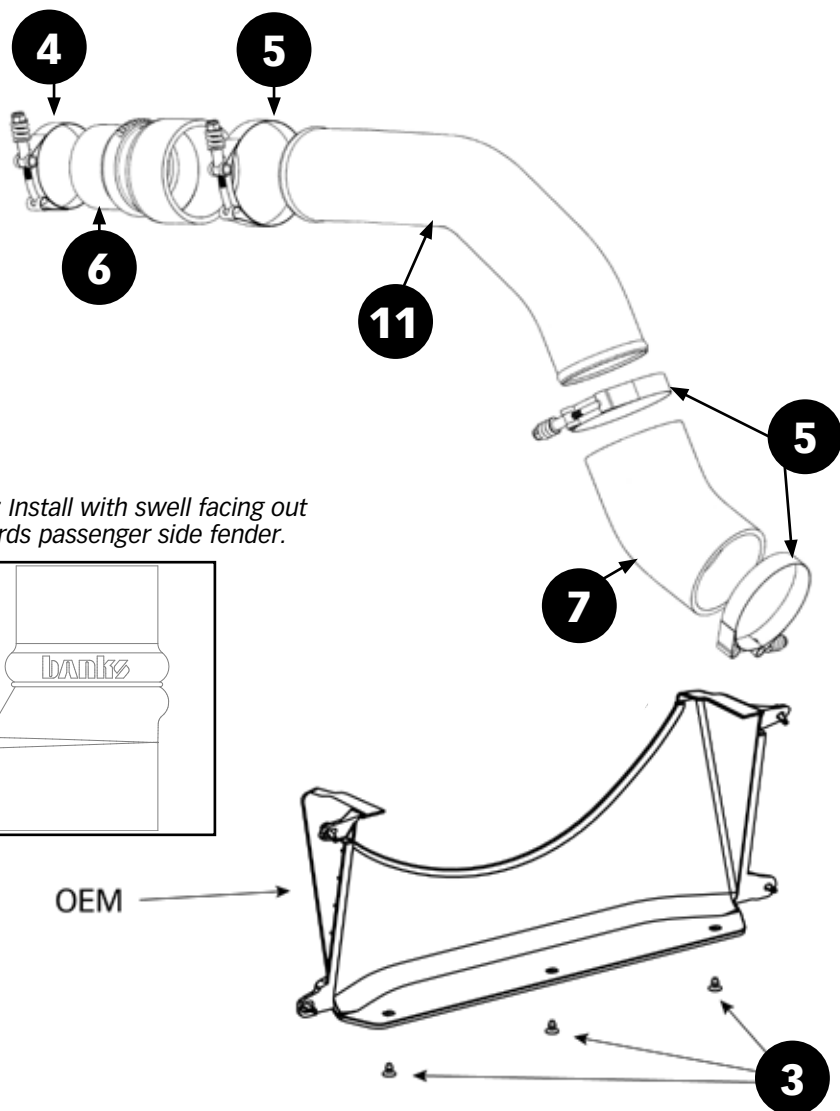
GALE BANKS ENGINEERING LIMITED WARRANTY

Please see enclosed warranty information card, or go to www.bankspower.com/support/warranty, for warranty information regarding your product. THIS WARRANTY APPLIES ONLY TO THE ORIGINAL CONSUMER PURCHASER OF THIS PRODUCT.

In the event of a defect, GBE will, at its discretion, repair or replace the hardware product with a product of like kind or quality, which may be new or reconditioned, with no charge to the purchaser for parts or labor. GBE's limit of liability under this limited warranty shall be the actual cash value of the product at the time the purchaser returns the product to GBE for repair less a reasonable amount for usage, as determined by GBE in its sole discretion. The repaired or replaced product will be warranted for 90 days from the date of return shipment, or for the balance of the original warranty, whichever is longer.

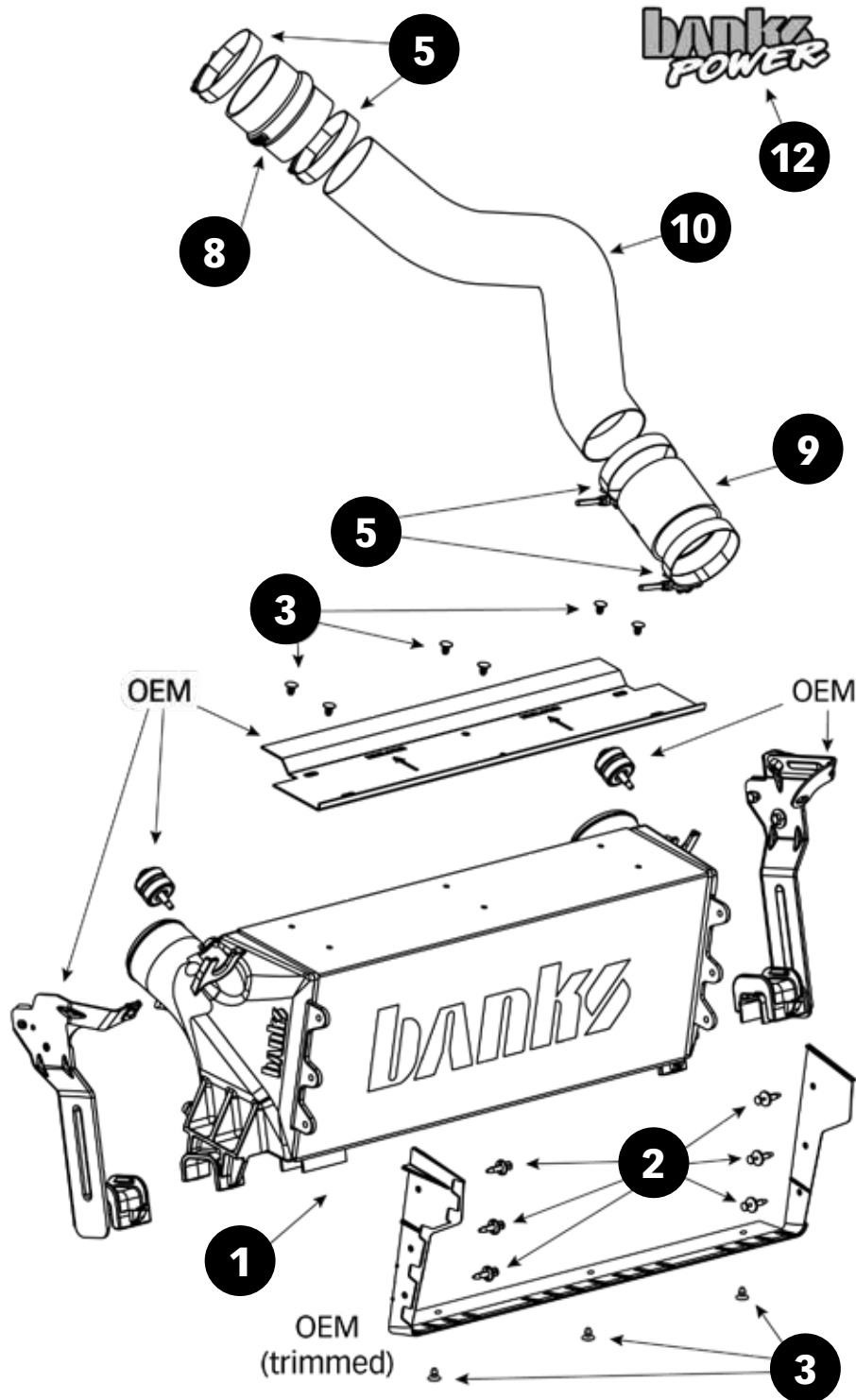
GBE warrants that the software included in hardware product will be free from defects in the media for a period of 30 days from the date of shipment and will substantially conform to the then current user documentation provided with the hardware products (including updates thereto). GBE's sole obligation shall be the correction or replacement of the media or the software so that it will substantially conform to the then-current user documentation. GBE does not warrant the software will meet purchaser's requirements or that its operation will be uninterrupted, error-free or virus-free. The purchaser assumes the entire risk of using the software.

PURCHASER'S EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT, AT GBE'S OPTION, OF ANY DEFECTIVE PART OF THE UNIVERSAL iDash OR ACCESSORIES WHICH ARE COVERED BY THIS WARRANTY. REPAIRS UNDER THIS WARRANTY SHALL ONLY BE MADE BY GBE AT ITS FACILITY. ANY REPAIRS BY ANYONE OTHER THAN GBE WILL VOID THIS WARRANTY



Item #	Description	Part #	QTY
1	Techni-Cooler Assembly	25550	1
2	Retainer, Push-Type, Black - 11/16 Head X 1/4, Nylon 6	92020	6
3	Ratchet Fastener	92021	12
4	Hose Clamp, 3" Spring Loaded	96860	1
5	Hose Clamp, 3.5" Spring Loaded	92901	7
6	Hose, 2.75" to 3.5" x 6" long, Centerline offset	94328	1
7	Hose, 3.5" to 3.5", 35 degree Elbow	94331	1
8	Hump Hose, 3.5" X 3.5", Black	94293	1
9	Hose, 3.5 x 3.25, Black	94215	1
10	Boost Tube, Left	41338-R, 41338-N	1
11	Boost Tube, Right	42465-R, 42465-N	1
12	Urocal, Banks Power, Small	96009	2

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Section 2

INTERCOOLER ASSEMBLY INSTALLATION

Figure 1



1. On the 2013-up Ram 2500, 3500, 4500, and 5500 the Intercooler is located behind the front bumper, underneath the radiator. To begin, remove the front bumper air dam. This requires removing the two bolts and 15 retainer clips that attach the air dam to the bumper. These can be accessed from the back of the bumper. This requires a 10mm wrench or socket and a body clip removal tool.

Figure 1

2. Remove the air intake shroud from the front of the intercooler. First, remove the two, lower, 10mm bolts, one on each side, that secure the intake shroud to the intercooler. Next, remove the three push pins that secure the shroud to the bottom of the intercooler. Remove the two upper 10mm bolts, one on each side. The intercooler shroud can now be dropped out the bottom. Set the shroud aside, it will be trimmed and reused when you install your new Banks Techni-Cooler. **Figure 2 & 3**

Figure 2



Figure 3



3. Before removing the OEM intercooler, first loosen the passenger and driver's side boost tube clamps, using an 11mm wrench. Ensure that the boost tubes can freely be pulled off the intercooler inlet and outlet. Be sure to take note of the clamp orientation, as you will reinstall the new lower clamps with the same clamp positioning.

4. Loosen the four (two per side) intercooler mounting bolts. **DO NOT** remove them at this time. **Figure 4**

5. While supporting the factory intercooler, ensure that the left and right intercooler boost tube hoses are loose and will easily slip off. Then remove the four loosened mounting bolts and slide the intercooler down and out. **Figure 5**

Figure 4



Figure 5



6. Loosen the upper clamp bolts on the right and left boost tubes and remove them from the vehicle. These will be replaced by the new clamps in your Banks Techni-Cooler kit. **Figure 6**

7. Due to the increased core thickness of the Banks Techni-Cooler, the OEM intercooler front air intake shroud will need to be trimmed. Mark the rear inside of the two side surfaces, 1-inch in from the back edge. A red or silver permanent marker works well for this task. **Figure 7**

8. Where the marked line meets the sides on the front air intake shroud, drill a 1/4-inch hole in the two corners. This will help prevent cracking of the front air intake shroud due to the stresses of road vibration. Cut the shroud along the marked lines, removing the portion of the shroud that was used to mount to the OEM intercooler. **Figure 8**

Figure 6



Figure 7



Figure 8



Figure 9



9. Place the front air intake shroud for the intercooler on your new Banks Techni-Cooler. Mark and drill the sides of the shroud using a 1/4-inch drill bit so you have three mounting holes on each side. Take care not to drill these holes too big, as the push pins that mount the shroud require a tight fit in the hole to be secure. Do not attach the front shroud to the intercooler at this time. **Figure 9**

10. Transfer the left and right upper rubber grommets, lower rubber isolators, left and right mounting brackets, rear intercooler shroud, and plastic intercooler seal from your original intercooler to your new Banks Techni-Cooler. Replace the OEM plastic clips with the supplied ratchet fasteners to secure the rear intercooler shroud and plastic intercooler seal. **Figure 10**

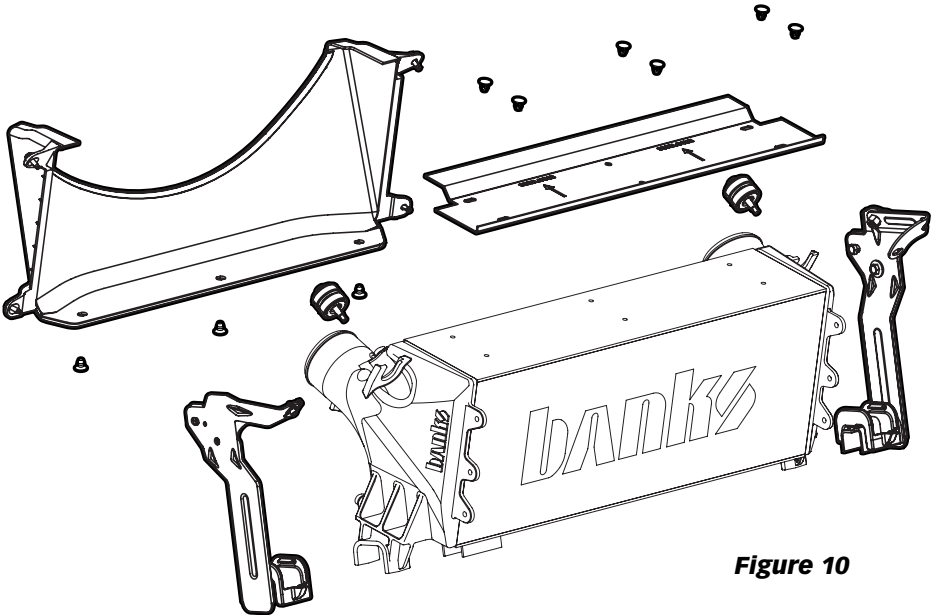


Figure 10

11. NOTE: Removing the wheelhouse splash shields is not required but may ease the installation of the boost tubes. If the installation of the boost tubes is difficult, the wheelhouse splash shields can be removed to make the installation of the boost tubes easier.

Assemble your new Banks boost tubes and clamp assemblies before installing them in the truck. These will be installed from underneath the vehicle. The boost tube connection at the intercooler end will be made from underneath the vehicle and the connections at the other end will be made under the hood. Note that using the orientation of the clamps listed below will greatly ease the installation process.

Drivers Side Upper: Both clamps are on the firewall end of the tube, with the nut/bolt facing out to the fender.

Figure 11a

Passenger Side Upper: Top/outer clamp is on the near side of the passenger wheel well, with the bolt facing up. Lower/inside clamp faces outward from the bottom of the tube.

Figure 11b

Both Sides, Lower: Both clamps are on the lower side, with the bolts facing inward. **Figure 11c**

Figure 11a Clamp Assembly Positions
Driver Side Upper

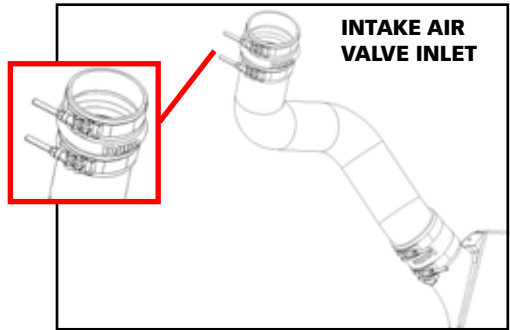


Figure 11b Clamp Assembly Positions
Passenger Side Upper

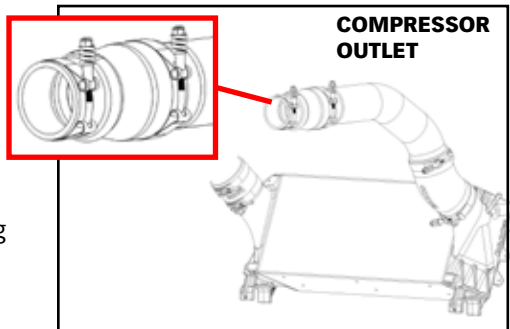
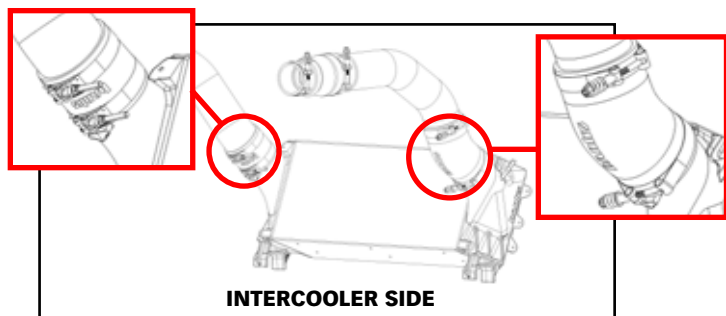


Figure 11c Clamp Assembly Positions
Both Sides Lower



12. Once your new boost tubes are pre assembled, they can be loosely installed in the truck. **Figure 12**

13. With the boost tubes in place, the new Banks Techni-Cooler can be installed. Support the intercooler and install the boost tube hoses over the Techni-Cooler inlet and outlet ports. Loosely install the four intercooler mounting bolts removed in steps 4&5. Do not tighten at this time. **Figure 13**

14. With the Banks Techni-Cooler and boost tubes installed loosely, adjust the position of the intercooler in the vehicle to ensure that there is no contact with other components on the vehicle. The intercooler will rotate slightly around the four intercooler mounting bolts. Careful inspection should be made on the driver's side around the intercooler outlet port to ensure the intercooler boost hose has adequate clearance to the radiator, along with clearance between the boost tube and frame rail. Once all clearances are verified and any necessary adjustments are made, tighten the four intercooler mounting bolts and the eight hose clamps retaining the boost tubes.

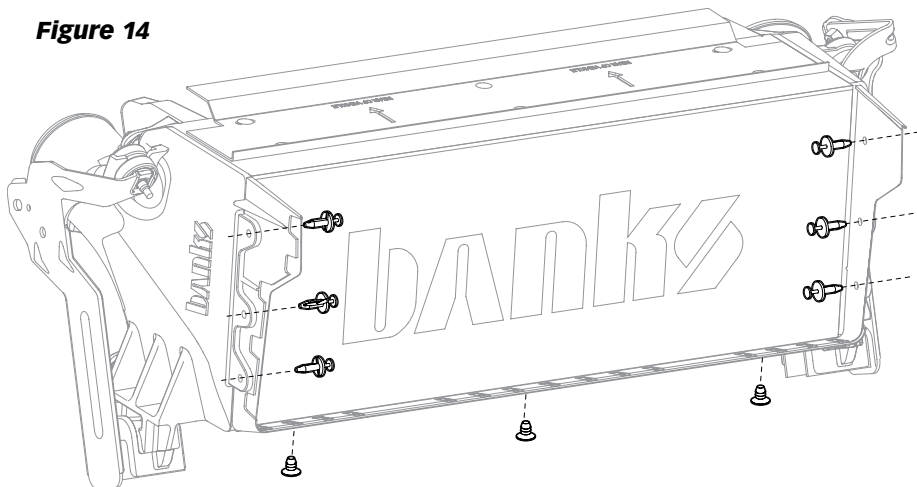
Figure 12



Figure 13



Figure 14



15. Install the trimmed front air intake shroud onto your Banks Techni-Cooler, using the six supplied push pins, and ratchet fasteners. **Figure 14**

16. Reinstall the air dam on the front bumper. **Figure 15**

17. Your system contains a CARB EO label for emissions purposes. This label should be placed on the grill/radiator cross member inside the engine compartment, so that it is easily seen by an emissions technician.

Figure 15



18. Go over all hose clamp connections and fasteners installed and ensure they are tight. Road test the truck ensuring there are no leaks. Be sure to recheck all the connections and retighten everything at least twice in the first three days or 100 miles.

19. Your system includes two (2) Banks Power decals designed to complement the Dodge Cummins Turbo Diesel emblem on your truck. Use the provided measurements to position the logos for a clean factory look. **Figure 16**

Figure 16



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