Installation Manual P/N 0507-1220-TFK P/N 0507-1014-TFK



2005-2007 Dodge Ram

<u>Standard & Severe Service</u> <u>Twin Filter System</u>

Installation Instructions

P/N 0507-1220-TFK P/N 0507-1014-TFK

GDP Twin Filter Kit Installation

PLEASE READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

Safety Guidelines!

WARNING! Always secure the vehicle from rolling.

WARNING! Always disconnect vehicle batteries before working on electrical components.

WARNING! Always wear safety glasses when operating power tools such as drills and

grinders or using punches and chisels.

WARNING! Always properly secure fuel lines and wiring to prevent chaffing.

WARNING! Always have a fire extinguisher available when working with fuel systems.

PLEASE WORK SAFELY!

Twin Filter System Contents



Qt Y 1 Twin Filter Mounting Bracket 1 1/2" NPT Close Nipple

- 2 1/2" NPT to -6 JIC Filter Head Adapters
- 2 -6an x 3/8" Push Lock Swivel Fittings
- 8 3/8" x 1" Mounting Bolts & Lock Washers
- 4 5/16" x 1 Self Tapping Bolts
- 1 Fuel Filter
- 1 Fuel/Water Separator
- 1 -6 AN x 12mm Stainless Adapter Fitting
- 1 Cummins Sealing Washer
- 1 -6 AN x 3/8" Push Lock 90° Fitting
- 1 3/8" Dorman Tank Connector
- 1 3/8" Hose Clamp
- 20 3/8" Push Lock Fuel Hose

Please check your parts inventory against the above parts list before beginning your installation.

Preparation

- 1) Secure vehicle from rolling.
- 2) Disconnect both batteries.
- 3) Raise vehicle and support safely if needed.
- 4) Drain fuel filter housing into an approved container via the water/fuel separator.

Filter Assembly and Mounting

A Note on Fitting Types:

Pipe threads require thread tape or PTFE pipe dope for proper sealing. Pipe threads are tapered and as such seal on the taper. Proper pipe threads will only screw in 2-3 turns before they begin to get tight. Usually 1/2 to 1 full turn beyond this is all that is needed to achieve proper sealing. **DO NOT** try to force the fittings all the way in until no threads are exposed. Damage will occur!

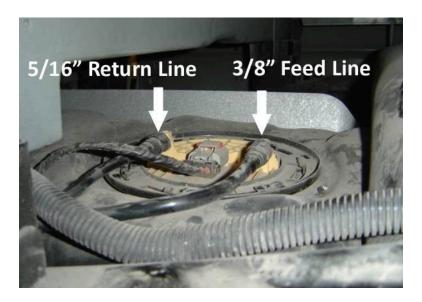
JIC or -AN threads seal on the tapered 37° nose cone and DO NOT require any type of sealant.

- 5) Begin by assembling the filter heads. Apply sealant to both sides of the close nipple and screw the filter heads together. Make sure that the flow direction arrows both face the same direction (not at each other). Check the heads on a flat surface as you tighten them to make sure that they will sit flat against the mounting bracket.
- 6) Install one 1/2" NPT x -6 JIC adapter into the inlet and outlet of the now joined filter heads after applying sealant to the threads.
- 7) Choose your mounting location for the filters (inside or outside of the frame rail). This will determine which way the heads must be attached to the mounting bracket. Either way the flow direction arrows on the filter heads MUST face the front of the truck when the bracket is installed.
- 8) Using the mounting bracket as a template carefully mark out the location of the 4 mounting holes on the frame rail. The four mounting holes must be pre-drilled to 9/32" (**no larger**) for the self-threading bolts.
- 9) Bolt the filter head combination to the mounting bracket with the flow direction arrows facing forward based on your mounting location.

- 10) Using the four self-threading bolts mount the bracket/head combination to the frame rail. Do not overtighten the frame mounting bolts. You don't want to strip the newly cut threads.
- 11) If you so choose you can install the filters at this time or wait until you have completed the plumbing portion of the installation. **Please note** that the fuel water separator (filter with the drain valve) must be first in line and always <u>ahead</u> of the fuel filter.
- 12) The filter portion of your installation is now complete.

Tank to Filter Plumbing

In this section you will be disconnecting the factory feed line from the tank and attaching the new feed line. To access the fuel line connections at the top of the tank we recommend backing off the tank mounting strap nuts to the end of the studs. This will allow the tank to sag down a few inches and make access easier.



- 13) Disconnect the feed line from the top of the sending unit. The feed line is the larger of the two lines. To release the Dorman connector pinch in on the tabs while rolling your fingers forward. The connector should pop free leaving just the locking tabs.
- 14) Locate the new Dorman connector and the hose clamp in the kit. Attach the Dorman connector to the supplied fuel hose using the hose clamp. We have included a replacement Dorman retainer clip in case yours has become brittle due to age.
- 15) Route the new hose and connector up to the sending unit and make the connection. Make sure that the Dorman connector clicks fully into place.

- 16) If you have loosened the tank mounting straps they can be retightened at this time. Make sure that the new feed line is clear of pinch points while tightening the tank mounting straps.
- 17) Route the new feed line to your filter kits inlet. Cut the hose to length making sure that you have left enough slack to secure the hose as needed along the inside of the frame rail.

A Note on Push-Lock Fittings: To make insertion of push-lock fitting into hose easier there are a couple of tricks. 1) Heat a cup of water in the microwave. Stick the end of the hose into the hot water for 15-30 seconds. This will soften the hose and make insertion MUCH easier. 2) A tiny dab of oil on the fitting itself will also aid insertion into the hose end. 3) Push the fitting against a hard surface such as a workbench or the inside of the frame rail to aid in pushing the hose over the barbs.

18) Insert one of the straight push-lock fittings into the cut end of the new feed line coming from the tank and connect it to the twin filter kits inlet. Tighten the fitting.

Filter to Injection Pump Plumbing

- 19) Completely remove the stock feed line and banjos from the stock filter housing to the injection pump inlet.
- 20) Insert a straight push-lock fitting into the end of the remaining hose. Attach this fitting to the new twin filters outlet and tighten.
- 21) Route the hose up to the engine bay and towards the injection pump inlet.
- 22) Install the stainless adapters in the injection pump inlet as shown. Use the Cummins sealing washer on adapter making sure that the sealing washer is seated on the shoulder of the adapter.
- 23) Loosely install the 90° push-lock fitting to the adapter. Measure the hose coming from the new twin filter kit and cut it to length.
- 24) Remove the 90° fitting and insert it into the end of the hose coming from the twin filter kit.



25) At this point we recommend purging the system of air before making the final connection to the injection pump.

- 26) If you did not install the filters in a previous step do so before priming the system.
- 27) To prime the system and purge it of air hang the new line going to the injection pump down into a catch container. Prime the system by bumping the starter but do not allow the vehicle to start. Wait 20 seconds or until the in-tank pump shuts off. Repeat this step until you have fuel running into your catch container.
- 28) Make the final connection of the new feed line to the injection pump and tighten the fitting.

Finishing Up

- 29) Start the engine.
- 30) Check all connections for leaks and make sure all hoses are clear of moving parts.
- 31) Test drive the vehicle.

If you have any questions please contact GDP at 866-895-0437.

Thank you for your business and we look forward to helping you with your future accessory needs.

Sincerely,

Glacier Diesel Power

GLACIER DIESEL POWER

DISCLAIMER OF LIABILITY

Other than as expressly set forth herein, Glacier Diesel Power (hereafter collectively, "SELLER") shall in no way be responsible for the PRODUCT'S proper use and service. In no event shall SELLER be liable for any special, incidental, indirect or consequential damages of any kind or nature, whether or not BUYER was advised of the possibility of damage, arising or resulting from the use or performance of the PRODUCT, and BUYER hereby waives any and all such claims.

BUYER acknowledges that he/she/it is not relying on SELLER'S skill or judgment to select or furnish goods suitable for any particular purpose and that SELLER has no liability that will extend beyond the scope of the limited warranty contained herein, and BUYER hereby waives all remedies or liabilities, expressed or implied, arising by operation of law or otherwise, (including, without limitation, any obligations of SELLER with respect to fitness for any particular purpose; merchantability; and special, incidental, indirect or consequential damages) or whether or not occasioned by SELLER'S negligence.

SELLER disclaims any warranty and expressly disclaims any liability for personal injury or damages related to BUYER'S use of the PRODUCT. BUYER acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and BUYER agrees to indemnify SELLER and hold SELLER harmless from any claim related to the PRODUCT and its use or performance. Under no circumstances will SELLER be liable for any damages, liabilities, costs or expenses incurred as a result of or by reason of the use, performance or sale of the PRODUCT, including, without limitation, any damages, liabilities, costs or expenses incurred by reason of BUYER'S negligence related to those uses of the PRODUCT.

SELLER assumes no liability regarding the improper installation or misapplication of the PRODUCT. It is the installer's responsibility to check for proper installation, and, if in doubt, contact the manufacturer.

LIMITATION OF WARRANTY

SELLER hereby provides the following limited warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of SELLER'S product sold herewith. The SELLER shall be in no way responsible for the product's open use and service and the BUYER hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by SELLER and BUYER.

The Warranty is Limited to one (1) year from the date of sale and limited solely to the parts contained within the product's kit. All products that are in question of Warranty must be returned shipping prepaid to the SELLER and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by Glacier Diesel Power.

Under no circumstances shall the SELLER be liable for any labor charged or travel time incurred in diagnosis for defects, removal, or reinstallation of this product, or any other contingent expenses.

Under no circumstances will the SELLER be liable for any damage or expenses insured by reason of the use or sale of any such equipment.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT: THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND. THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.