

## Ram Fuel Fill Tube Kit

A fuel fill housing is included in box-off models and has been designed for easy installation (external flange mounted) and to insure proper fuel tube fill angle of 37°. Included in the kit are installation instructions, various fill and vapor hoses that can be cut and assembled per body applications, hose clamps, ground strap, and a hose connector. A DIESEL or GAS fuel label will also be included depending on application. The part numbers for the kits are:

**Box Off Diesel:** 52121252AA

**NOTE:** See page below for urea hose modifications

**Box Off Gas:** 68312861AA

**Chassis Cab:** 5221693AD

### Installation Suggestions

- Always mount the fuel fill housing as high as possible and route the fuel fill tube on a continuous downward slope (approx. 37°) to insure good fuel fill quality.
- Mount the fuel fill tube upper with the vent tube at the 9:00, 12:00 or 3:00 position.
- When routing the vent tube, make sure there are no dips or sags. It should have a downward slope from the "fuel filler tube upper" to the fuel tank vent nipple. Tie strap it to prevent any sags that may accumulate fuel in the hose.
- Always connect the ground strap from the fuel fill upper to the frame. This is a must! If the ground strap is not attached Electro static build up could occur during refueling.
- When Mounting the Fuel Filler and Hose Assembly directly to the Frame with Self Supporting Structure as typically used. On a Dump Body, it is recommended to use a minimum of 2" Angle or 2" Square Tube for structure.
- **Attention:** When installing Aux fuel fill hardware, or various body hardware, you must not trap debris, or water around the filler neck, fuel pump module, or rollover valve. Failure to do so can result in contaminated fuel leading to engine damage or performance loss.

Ensure that the upfitter installed body, or components, do not trap water or debris on the top of tank or around fuel filler inlet. Be aware of, and prevent attached components that may be directing, or trapping, water or debris on fuel tank inlets or top surface.

The fuel filler kit contains braided protective sleeves to help protect the fuel filler hose. If the braided protective sleeve must be cut to a shorter size, use a hot-knife or equivalent to cut the sleeve. This hot-knife process melts the ends of the nylon stand together preventing the sleeve from unraveling. If a hot-knife is not available, use a tiestrap on the end that is cut to ensure the protective sleeve does not come unraveled.

### Body Mount Guidelines for Ram (2500/3500)

The following section shows suggested guidelines for Body Mounts for Ram 2500/3500 applications.

**Caution:** *Use of proper safety equipment is recommended when performing any modification or alterations.*

These guidelines apply to second stage manufacturers who mount a body to the Ram Pickup Truck. This applies to trucks which have been ordered from the factory with the box deleted or those where the factory installed box is removed after delivery.

- The mounting location brackets on the chassis that are used for the pickup bed mounting should be utilized for installing the new body. On the short bed there are six mounting location brackets and on the long bed there are eight.
- Grade 10.9 M12 Fasteners (or equivalent) should be used. Torque to 60 ± ft-lbs.
- With the body in position the gap between the body mounting points and the chassis mounting brackets should be minimized to assure that there is no distortion of the chassis mounting brackets when the body mounting fasteners are torqued to specification. Metal spacers are recommended in cases where the gap exceeds 2 mm.

Since the guidelines might not be appropriate for every application of a body installation, following the guidelines listed above does not eliminate the responsibility of the second stage manufacturers to certify to compliance to FMVSS and CMVSS standards.

The final stage manufacturer who installs a second unit body on the chassis is responsible for compliance with FMVSS/CMVSS 204<sup>(1)</sup>, 208<sup>2</sup>, 212<sup>3</sup>, 214<sup>(3)(4)</sup>, 219<sup>(3)</sup>, and 301<sup>(3)</sup> Federal Regulations. Questions regarding compliance with FMVSS/CMVSS regulations should be directed to your legal counsel, the National Highway Traffic Safety Administration, or Transport Canada.

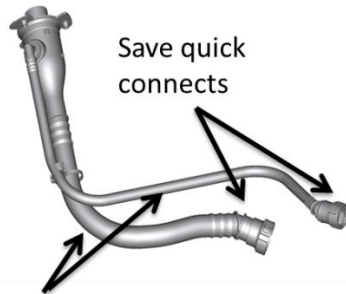
**If the final stage manufacturer modifies any portion of the fuel system, they assume the full system responsibility.**



## 2013 and Newer Ram 2500/3500 Diesel Box-off Urea Filler Relocation

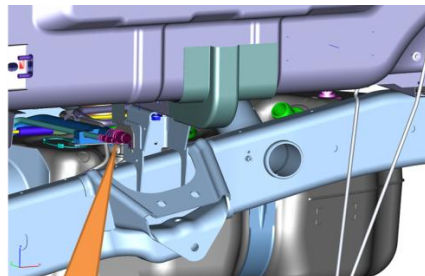
Obtain Ram Chassis Cab Urea filler neck p/n 68101174AA

- Remove the fill & vent hoses from the assembly, carefully not to damage the swedge ribs on the quick connect and the urea filler cup.



Remove hoses

- Fabricate a bracket to hold the urea filler to meet the attachment requirements below.
- Position the urea filler 30° from vertical. The vertical height between the urea tank inlet port and the urea filler cap need to be at least 10 inches. The small diameter recirculation vent port must be positioned between 9 & 3 o'clock.
- Replace the factory equipped pickup truck urea hoses with commercially available Tygon tubing.
- Insert quick connects into both the filler & vent Tygon hose, tighten the hose to the quick connects using the stainless steel clamps. Connect the hoses to the urea fill & vent lines on the truck at the frame box bracket



Attach quick connects with Tygon hose here

- Route the hoses in an upward slope to the mounted urea filler, careful not to leave any sumps in the hose route.
- Slide the stainless steel hose clamps on the hoses and push the hoses onto the urea filler.
- Confirm that the hose flows smoothly downhill and that there are no kinks or sumps in the hoses. Readjust if necessary and tighten the clamps.
- Add some urea to the tank and check for leaks.
- Install urea cap.