# TFI 70GAL XB ADJUSTABLE OVER THE BED RAIL TOOL BOX REFUELING SYSTEM

Installation Instructions-889





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#### **FOREWORD**

Thank you for a purchasing a Transfer Flow Inc. 70gal XB adjustable over the bed rail tool box refueling tank system. This manual provides the necessary information for the installation of the TFI Fuel System onto your vehicle. All of the information and instructions contained in this document are based on our annual model year sign offs. We update our instructions sheets based on information obtained during this model year sign-off or/and on information provided by OEM companies and our customers. Changes to installation instructions may be made at any time without notice. If you find something we missed or require any additional information, please feel free to contact us and let us know.

Transfer Flow fuel systems and parts are intended to be used in conjunction with original manufacturer's equipment or Transfer Flow systems and components.

Our systems and components are not intended to be used in conjunction with other after-market systems. Attempting to use our products inappropriately may lead to malfunction and voids the warranty.

Before completing the steps below it is important that you follow the supplied supplemental instruction found in your Transfer flow refueling instructions. These instructions will guide you through the electrical and operation of your new system.

#### **Supplemental Instruction:**

IS # 841



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### **NOTICE**

This product is protected by state common law, copyright and/or patent. All legal rights therein are reserved. The design, layout, dimensions, geometry, and engineering features shown in this product are the exclusive property of Transfer Flow, Inc. This product may not be copied or duplicated in whole or part, abstractly or fundamentally, intentionally or fortuitously, nor shall any design, dimension, or other information be incorporated into any product or apparatus without prior written consent of Transfer Flow, Inc.

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## **SAFETY NOTES**

- Installation of the TFI Fuel System requires general automotive and mechanic knowledge.
- Please read installation instructions before beginning the installation of the TFI Fuel System.
- If you would prefer to have a professional installer install your fuel system, please contact your local dealer or you can find a list of local dealers in your area on our website; www.transferflow.com
- TFI Fuel Systems are designed for use on stock OEM vehicles, we do our best to foresee how our customers will use and modify their vehicles, but unfortunately we cannot verify all aftermarket modifications. If your vehicle has had any modifications to the chassis, suspension, fuel system, truck bed, or wheel/tire size is different than OEM, please call Transfer Flow, Inc. before installing one of our fuel systems.
- Work in a well ventilated area.
- Always wear safety glasses.
- TFI tank is heavy, use proper lifting techniques when handling tank.



DO NOT HAVE ANY OPEN FLAME OR HEAT SOURCE CLOSE TO THE INSTALLATION AREA.

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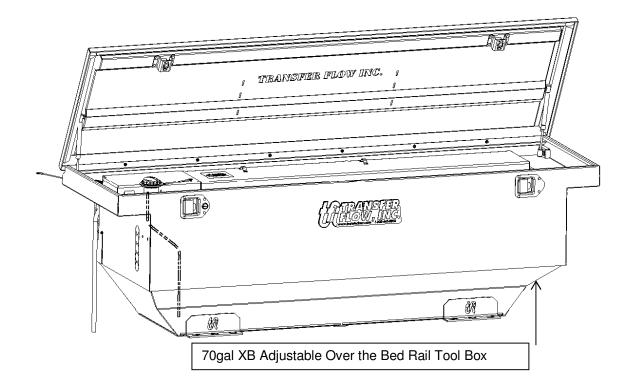
## **TOOLS & SUPPLY REQUIREMENTS**

Before starting the installation process, review the entire installation instructions. If you have any questions regarding the fuel system or the installation process, please contact Transfer Flow, Inc.

- Safety Glasses
- Shop Light
- Ratchets
- 5/16" Socket
- 7mm Socket
- ¾" Socket
- Socket Extensions
- Torque Wrench
- Drill
- 1 ¼" Hole-Saw
- 1/8" Drill Bit
- 9/16" Drill Bit
- Sharpie
- Pipe Wrench
- Adjustable End Wrench
- Tape Measure
- Hose Cutter
- 9/16" Wrench
- 7/16" Wrench

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### PARTS LIST/DIAGRAM



\*Before beginning installation, verify all parts shown in diagram and listed below are included in the installation kit. If there are any missing or damaged parts, please contact Transfer Flow, Inc.

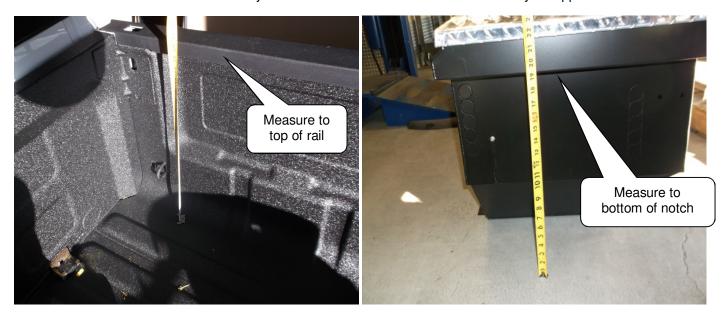
- Installation Instructions (IS-841)
- Installation Instructions (IS-484)
- ½" x 5" Carriage Bolt (4)
- ½" x 2" Carriage Bolt (2)
- ½" Serrated Flange Nut (6)
- 3" x 3" Shim/Washer (4)

- 1-1/2" x 2-1/2" Shim (12)
- 2" Foam Strips (60in)
- Cross the Bed Grommets (4)
- Refueling Hose (1)
- Refueling Nozzle (1)

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#### TFI FUEL TANK PREPARATION

1. Measure the height of your bed rails from the bed of the truck to the top of the rail. You will also want to measure from the bed to the bottom of the bed rail so you can determine the knockouts suitable for your application.



2. After verifying the height of the bed rail loosen the 5/16 nuts (8) securing the toolbox to the tank. Raise the toolbox body to the desired height.



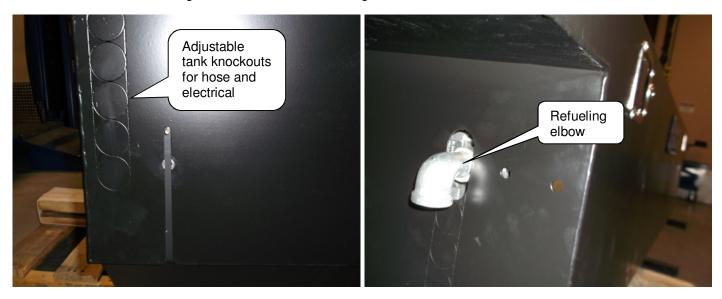
3. Once you have the height set and confirmed tighten the 5/16 flange nuts using the torque specs in IS #484 to make the toolbox stationary on the tank. Take a measurement from the ground to the knock outs to be used comparing to the measurements you took earlier.



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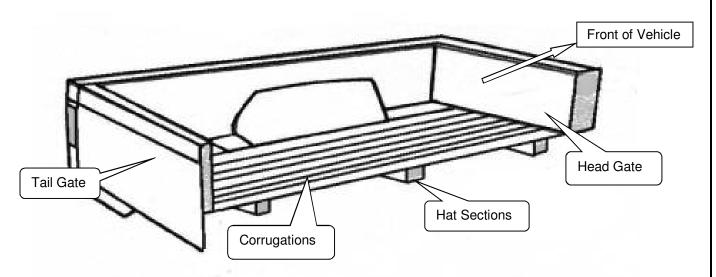
4. Remove the proper knockouts for your application. The knock outs used will vary by vehicle. It may be necessary to remove more than one to gain clearance for the refueling elbow.



- 5. With the knockout removed for your refueling pump you can now install the 90 degree street elbow (pictured above) using the fuel safe sealant supplied in your kit.
- 6. If the pump is between two knock outs its ok to remove two. The extra space will allow room for the refueling harness. If only one knockout is required you will need to remove a second for the harness.

#### TFI FUEL TANK INSTALLATION

7. Place the tank in the bed of the truck. The tank should be spaced about 1" away from the head gate (If installing a Transfer Flow headache rack you may need to add an extra 1/4" for lid clearance) and centered from side to side. Make sure there is ample room to open the lid. The fill opening should always be on the driver's side.



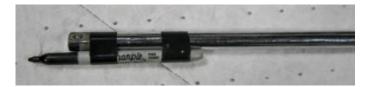
This cutaway drawing shows the head gate and bed corrugations.



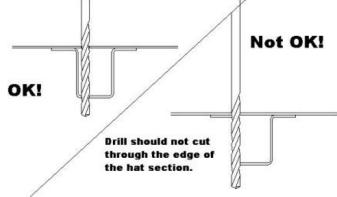
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8. Mark the mounting holes with a Sharpie®. If you cannot reach the mounting tabs near the cab, attach a Sharpie® to a long stick with some electrical tape.



- 9. Remove the tank so proper measurements can be taken from the marks to insure an accurate installation.
- 10. Look at the marks you have created and make sure that a 1/2" bolt with large shims will fit in the area you have marked. It is OK to drill through the hat section of the bed, but you don't want to be drilling through the tall edge of the hat section. Make sure that your drilled hole will pierce through the flat area of the hat section.



- 11. Move any wires, hoses or obstructions that may be scarred by a drill bit.
- 12. Double check your measurements and move the tank if needed. If you move the tank you will need to remark the holes on the underside and double check your measurements once again.
- 13. Drill pilot holes with a long 1/8" drill bit. Did the pilot hole come through the bottom where you expected?
- 14. Drill one 1/8" pilot hole for the wiring harness in the box side panel. This hole will be enlarged with a hole-saw later. Place the hole in the side of the bed about 2" up from the bed floor. The hole locations relative to the head gate will be different depending on the model year of the vehicle. Before drilling the pilot hole make sure you are not drilling into anything valuable such as the outside of the bed, wiring, hoses or other brackets you will be drilling from the top down. **Do not drill this hole in the head gate**.

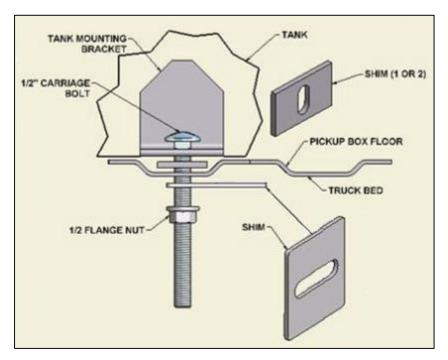


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- 15. Enlarge the hole for the wiring harness with a 1 1/4" hole-saw. Insert the provided rubber grommet into the hole.
- 16. Enlarge the tank mounting holes with a 9/16" drill.
- 17. Before mounting the tank in the final resting position you will need to install the refueling hose for easier access.
- 18. Cut the 60" strip of foam into three strips and attach the strips to the bottom of the tank or truck bed. Position one strip next to each mounting bracket and one strip under the middle of the tank. These strips will prevent the tank from rubbing directly on the bed. Cut off any excess foam.

**NOTE:** If the bed of the truck has a sprayed on or plastic bed liner the rubber strips may not be required.

19. Place shims under the mounting brackets to prevent the corrugations from collapsing. See drawing below.



- 20. Insert the 1/2" carriage head bolts through the mounting brackets and bed.
- 21. Secure fasteners with shims/washers and nuts and torque the nuts. Refer to Instruction Sheet #484 for proper torque specifications.

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The orientation of the supply hose and valve going to the refueling pump may be changed to fit the customers preference. Make sure the supply line the pump does not kink.

22. Refer back to the supplemental instructions used during the electrical to guide you through the plumbing porting and to finalize your fuel system installation.

#### **Supplemental Instructions:**

- IS # 841

6/01/2017

Congratulations on a successful installation!



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