



INSTALLATION INSTRUCTIONS

SHACKLE BRACKET TOW HOOK KIT

For 67-77 F-250 / F-350 ("Hi-Boy" Ford trucks)

CARELESS INSTALLATION AND OPERATION OF THIS PRODUCT CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages

WARNING, CAUTION, NOTICE, & Note are signal words that identify the level of hazard. These are outlined below:

WARNING signals a hazard that could cause serious injury or death if you do not follow recommendations.

CAUTION signals a hazard that may cause minor to moderate injury if you do not follow recommendations.

NOTICE signals to call attention to important information

Note: to emphasize general information worthy of special attention

CAUTION PLEASE WORK SAFELY

CAUTION BEFORE DRILLING INTO ANY VEHICLE CHECK THAT THE AREA TO BE DRILLED IS CLEAR OF ANY WATER LINES, FUEL LINES, ELECTRICAL WIRING, OR KEY MECHANICAL EQUIPMENT. ALWAYS USE CAUTION WHEN DRILLING OR CUTTING ON A VEHICLE.

WARNING FAILURE TO INSPECT THE AREA TO BE DRILLED MAY RESULT IN VEHICLE DAMAGE, OR PERSONAL INJURY.

WARNING WEAR APPROPRIATE PPE WHEN INSTALLING THIS KIT: GLOVES, HEARING PROTECTION, SAFETY GLASSES/GOGGLES.

Note:
Please read these instructions completely before installation of this kit.

WARNING As these trucks are 47 to 57+ years old, before installation of this kit the front frame rail ends should be inspected to ensure rigidity and ability to securely hold this product. If there are rust holes or there is other physical damage to frame then frame should be professionally repaired before installation of this product.

Thank you for your purchase of the **Engineered Vintage Shackle Bracket Kit**
 These shackle brackets are designed to bolt onto your 67-77 FORD Hi-boy truck frame behind the bumper and provide a solid tow point at the front of vehicle.

Kit includes:

(2) 67-77 Shackle Bracket Hooks

Hardware:

Identifier	Qty	Description	Where Used
A	2	5/8-11 UNC GR 8 BOLTS, 2" LONG	Used in center bolt hole to secure Shackle Brackets to frame
B	4	5/8" WASHER	Use (2) 5/8 washer with each 5/8 bolt
C	2	5/8" Nyloc NUT	Used with all 5/8" bolts (1 per bolt)
D	4	1/2-13 UNC GR 8 BOLTS, 2" LONG	Use to secure Shackle Brackets to frame
E	8	1/2" SAE WASHER (Yellow Zinc)	Use (2) SAE yellow washers with all 1/2" bolts except where noted
F	4	1/2" Nyloc NUT	Used with all 1/2" bolts except where noted (1 per bolt)
G	2	9/16-18 (Fine Thread) x 6" long GRADE 8 BOLT	Used in bottom bolt hole / replaces truck front leaf spring bolt
H	2	9/16" SAE Extra Thick Hardened Flat Washers	Used between Shackle Bracket hook & Frame **OR** use standard SAE washer (per installation instructions)
I	2	9/16" SAE Hardened Flat Washers Grade 8 Steel	Used between Shackle Bracket hook & Frame **OR** use Extra Thick SAE washer (per installation instructions)

Hardware from truck that should be reused (not included in hardware kit)

J	2	9/16 Suspension nut	Used to secure front leaf spring bolt to truck
---	---	---------------------	--



67-77 Ford Hi-Boy SHACKLE BRACKET Installation

Begin by noting bumper alignment between bottom of front sheet-metal and top of bumper on each side – take pictures during disassembly if needed to aid in re-assembly.

Remove bumper from front of truck by removing the four bolts that hold it on.

(Some customers have installed this kit without removing bumper – depending on individual mechanical skill)

Once bumper is removed, ascertain which frame rail you have on your truck -is it not rusty, bent, etc?

If truck has bumper brackets, remove them from frame also

The hardware supplied in our kit includes 1/2" bolts, 5/8" bolts, and a 9/16" suspension bolt – we recommend removing the 7/16" frame nuts on each side of frame horn for installation of the Shackle Bracket Tow Hooks.



Once frame nuts are removed, remove the 9/16" suspension nut (13/16" wrench size)

NOTE THAT THIS NUT WILL BE RE-USED – do not discard it

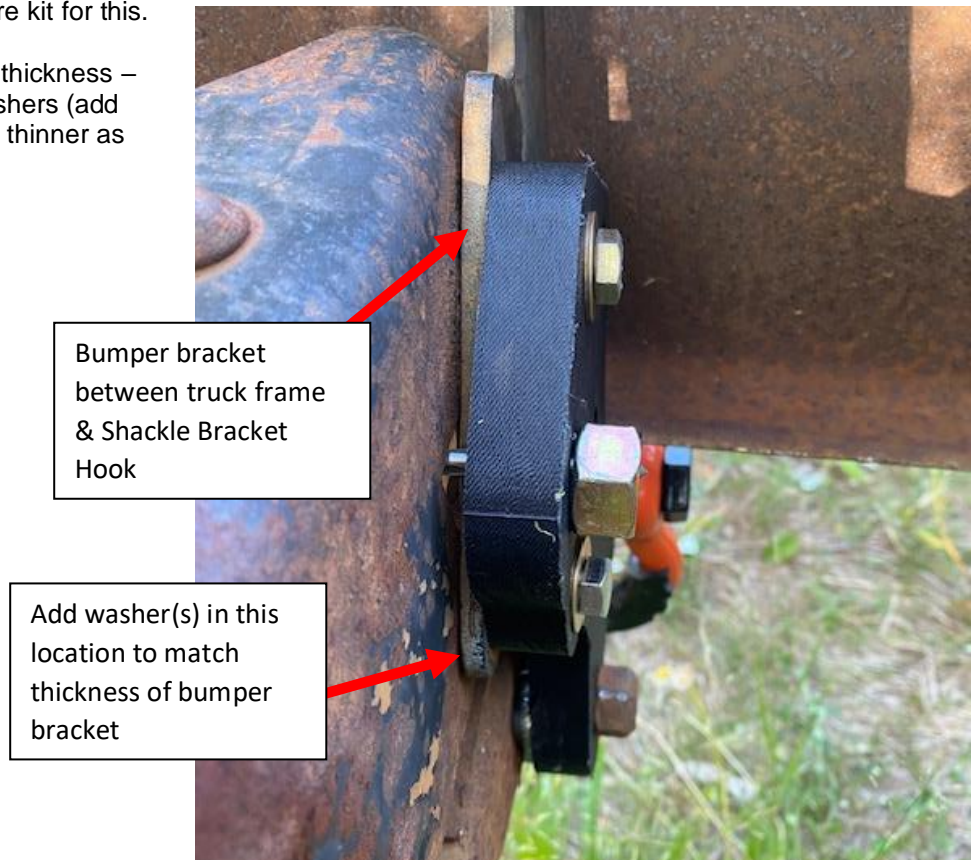
Once suspension nut is removed, take the large bolt provided in our kit and tap the original bolt towards center of truck – but not completely out – you want it far enough out that you can start to install the new bolt.

At this point, you are ready to install the Shackle Bracket Hooks



If your truck was equipped with bumper brackets, you will need to add a washer between the Shackle Bracket Hook and frame to account for the thickness of the bumper bracket. Multiple 9/16" washers are included in our hardware kit for this.

If your bumper bracket is a different thickness – you will need different thickness washers (add additional washers or grind washers thinner as needed)



Once correct washer thickness is established, you are ready to bolt Shackle Bracket onto truck

With a rubber mallet, tap the old suspension bolt out using the new 9/16 bolt

It may be necessary to jack up the truck and remove weight from suspension to get bolt out.



Take extra precaution when jacking up a vehicle. Use an appropriately weighted lifting device and use jack stands under frame rails in solid locations to ensure multiple areas of support for a vehicle. If you are not an experienced mechanic, take vehicle to professional mechanic shop for installation.

Next, install the 5/8" bolt in the rectangular frame hole

Finish by installing the two 1/2" bolts

Use 2 washers on each bolt, in all locations.

When completed, Shackle Bracket on truck should be like this (note that this picture does not have bumper bracket installed in photo)

Repeat installation for opposite side of truck

Check that bumper clears Shackle Bracket Hooks before tightening hardware.

Once you have checked clearance, torque all fasteners:

Torque specs

1/2 bolt 80 ft-lbs

9/16 bolt 115 ft-lbs

5/8 bolt 159 ft-lbs



Reinstall bumper & tighten all bumper hardware

Installation is complete



Recommended care:

Regular washing with fresh water and mild car wash detergents followed by rinsing and drying with a soft towel is the best minimum care. Beyond that, any cleaner/wax recommended for automotive finishes will work well to remove minor stains and scuffs, enhance the shine and provide protection.

Thank you and check out our other products at: ***Engineered Vintage.com***

