



INSTALLATION INSTRUCTIONS

'GOAT' BUMPER

These instructions cover installation for 73-79 FORD pickups & 78-79 FORD Bronco.

These instructions can also be used for the installation on 67-72 FORD trucks as the front frame is similar.

Part Number: 73-79 FORD GOAT

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:

Thank you for your purchase of the **Engineered Vintage 'GOAT' bumper**

Please read these instructions completely before installation of this kit.

These instructions are intended to convey information on how to best mount this kit onto your truck.

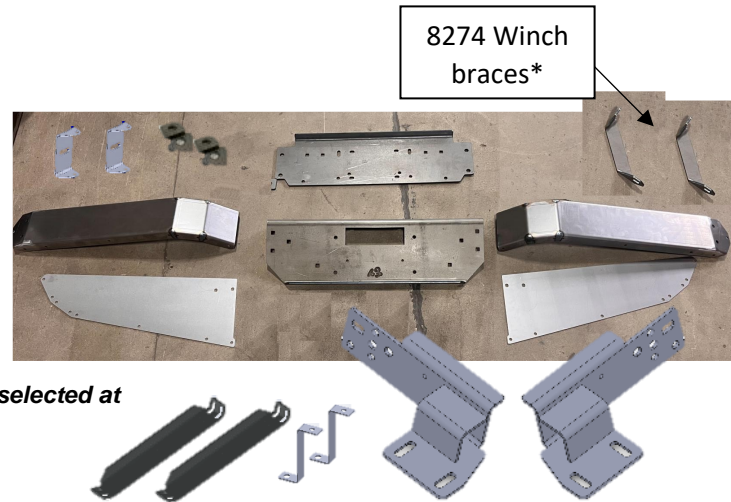
This kit is designed to bolt into 1973-79 FORD pickups & 1978-79 FORD Broncos. These instructions can also be used to install the 'GOAT' bumper on 67-72 FORD trucks.

This kit was designed to mount a variety of winch models onto these trucks.



'GOAT' Bumper PARTS LIST

| QTY | DESCRIPTION |
|-----|--|
| -1- | FRAME BRACKET, DRIVER (LH) |
| -1- | FRAME BRACKET, PASSENGER (RH) |
| -1- | CENTER WINCH BASE |
| -1- | CENTER WINCH FACE |
| -2- | BUMPER WINGS |
| -2- | BUMPER WING TOP PLATES |
| -4- | SPACER PLATES, 1/4" THICK |
| -2- | OUTER BUMPER BRACE |
| -2- | OUTER BUMPER BRACE BRACKET |
| -2- | TOP PLATE SUPPORT |
| -2- | 8274 WINCH BRACE* (<i>*not included unless selected at purchase – only used with WARN 8200 & 8274 winches</i>) |



HARDWARE LIST:

| ID | Qty | Description | Where Used |
|----|-----|---|---|
| A | 2 | 5/8-11 GR 8 BOLTS, 2" LONG | Use (2) to mount frame brackets to truck frame |
| B | 4 | 5/8" washers | Use (2) per 5/8" bolt |
| C | 2 | 5/8" nyloc nuts (or lock washers & nuts) | Use (1) per 5/8" bolt |
| D | 8 | 1/2-13 UNC GR 8 BOLTS, 2" LONG | 73 - 77 trucks: (4) used to mount frame brackets to truck frame 77.5 - 79 trucks: (2) used to mount frame brackets to truck frame 77.5 - 79 trucks: (2) used for outer bumper brace install to frame bracket (4) used to mount center winch base to frame brackets |
| E | 2 | 1/2-13 UNC GR 8 BOLTS, 1.5" LONG | (2) used to mount outer bumper braces to outer bumper brace brackets |
| F | 20 | 1/2" washers | Use (2) per 1/2" bolt |
| G | 10 | 1/2" nyloc nuts (or lock washers & nuts) | Use (1) per 1/2" bolt |
| H | 12 | 7/16 x 1" CARRIAGE BOLTS | (6) used to mount bumper wings to bumper face plate (4) used to mount 8274 bracket between bottom winch plate & bumper face plate (2) used to mount center winch face to center winch base |
| I | 8 | 7/16" washers | Use (1) per 7/16" bolt (washers are not used on 8274 bracket bolts) |
| J | 12 | 7/16" nyloc nuts (or lock washers & nuts) | Use (1) per 7/16" bolt |
| K | 20 | 5/16 BOLTS | (18) used to mount bumper wing tops to bumper wings (2) used to mount bumper stiffener bracket inside bumper wings |
| L | 20 | 5/16" washers | Use (1) per 5/16" bolt |
| M | 20 | 5/16" nyloc nuts (or lock washers & nuts) | Use (1) per 5/16" bolt |

Installation prep



As these trucks are 40-50 years old, before installation of this kit the front frame rail ends should be inspected to ensure rigidity and ability to securely hold this winch mount. If there are rust holes or there is other physical damage to frame then frame should be professionally repaired before installation of this product.

If holes outlined in installation instructions are not present in your truck frame, it may be necessary to drill holes in truck frame.



Drilling operations can cause flying chips. **WEAR SAFETY GOGGLES.** Flying chips can cause eye injury.

Recommend spraying all bumper hardware, tow hook bolts (if equipped), with penetrating oil or “bolt loosening spray” the night before installation to ease bumper removal from truck. Bumper hardware can be difficult to remove with rust, road grime, etc accumulated over time on truck.

Remove the front bumper from truck.

If your truck is equipped with bumper brackets, remove them from truck



Once bumper is removed, it is recommended to clean inner frame of grease and debris with pressure washer and/or degreaser.

Once stock bumper is removed & frame is clean – you are ready to install the ‘GOAT’ bumper.

Frame Bracket Install



IT IS CRITICAL THAT THERE ARE THREE BOLTS HOLDING EACH FRAME BRACKET TO THE FRAME (3 EACH SIDE, 6 TOTAL)

Note that there are several variations in frame ends and suspensions on these trucks from 1967 to 1979. The frame brackets provided have bolt patterns to accommodate the broadest range of these year trucks.

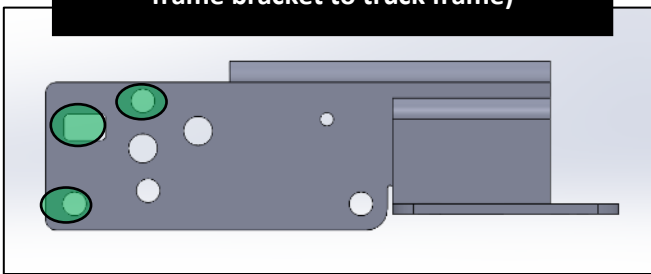
It is imperative that there are at least 3 bolts holding each frame bracket to the frame rail.

Install the frame brackets on the outside of the truck frame rails using the correct hole pattern as outlined below based on the year of your truck – the frame brackets should be facing in towards each other – use the appropriate bolts to attach frame brackets to truck as detailed above – install using a washer on each side of bolt and lock nuts

- leave all bolts loose until bumper is completely installed on truck

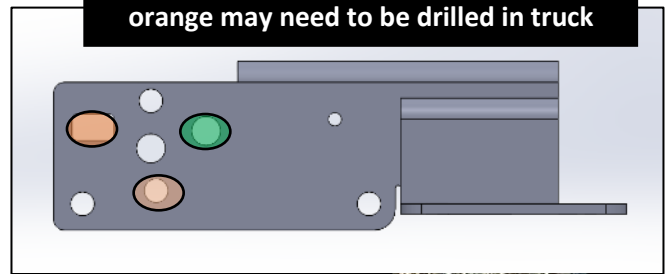
67 - early '77 FORD

(You will likely use these holes to mount frame bracket to truck frame)



77.5-79 FORD

(You will likely use these holes to mount frame bracket to truck frame) holes in orange may need to be drilled in truck



Remove this suspension bolt and replace with 1/2" grade 8 bolt through frame-rail

If your truck does not have (3) holes in the frame that correspond to holes in frame bracket, you will need to drill your truck frame.

Frame bracket install on trucks from 1967 - early '77

Install frame bracket as shown, using (1) 5/8 x 2" long bolt in the top corner hole & (2) 1/2 x 2" long bolts in locations shown.

Note highlighted bolt (green circle) will be used to install outer bumper brace as well as bolt frame bracket to truck frame

Repeat for opposite side of truck



Frame bracket install on leaf spring trucks from 1977.5 & up

Install frame bracket as shown, using (1) 5/8 x 2" long bolt in hole shown and (1) 1/2 x 2" long bolts in bottom hole (replace stock leaf spring hanger bolt)

*****Note that you should install a 1/4" thick spacer plate or (3) 5/8 washers between truck frame & frame bracket on the 77.5 & up trucks with leaf springs*****

You will need to also drill and install additional 1/2 or 5/8 bolt at location shown (red circle)



Note that highlighted bolt out of picture (green circle) will be used to install outer bumper brace

Repeat for opposite side of truck

Frame bracket install on coil spring trucks from 1977.5 & up

Install frame bracket as shown, using (1) 5/8 x 2" long bolt in hole as shown

Drill truck frame in the two locations highlighted in red

Repeat for opposite side of truck

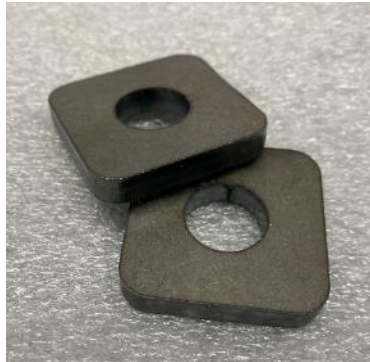
Leave all bolts loose until later



Next, install the Center Winch Base

Place the Center Winch Base plate onto the frame bracket bottom flanges.

Install a spacer plate (one on each side) between each frame bracket and center winch base – use ½” bolts to secure (recommend bolts installed up from bottom for ground clearance)



Install the front winch plate – should be under bottom winch plate and on top of frame bracket – use ½” bolts to secure – use washers on each side of bolts and lock nuts (or lock washers & nuts)



Install the highlighted carriage bolts shown at right:



Install the top support plate as shown on both sides (bumper wings will be installed next)

Once center winch assembly is on truck, it is time to install bumper wings



Bumper wings are installed behind Center Winch Face and attach with (3) 7/16" carriage bolts on each side.

Bumper wings are symmetrical and can be installed on driver or passenger side of truck.



Once wings are bolted to center winch assembly, install bumper wing tops

Bumper wing tops should be installed under the flange on the wings with (9) 5/16" bolts on each side – make sure all bolts are installed before tightening.

Check that hole in center (highlighted) is lined up with top plate support and install 5/16" bolt on each side – install washers and lock nuts as necessary.



Once tops are installed, install outer bumper braces on frame brackets in bottom rear hole and line up outer holes with outer bumper brace bracket. Bumper bracket can also be installed in different holes if that lines up better with your truck

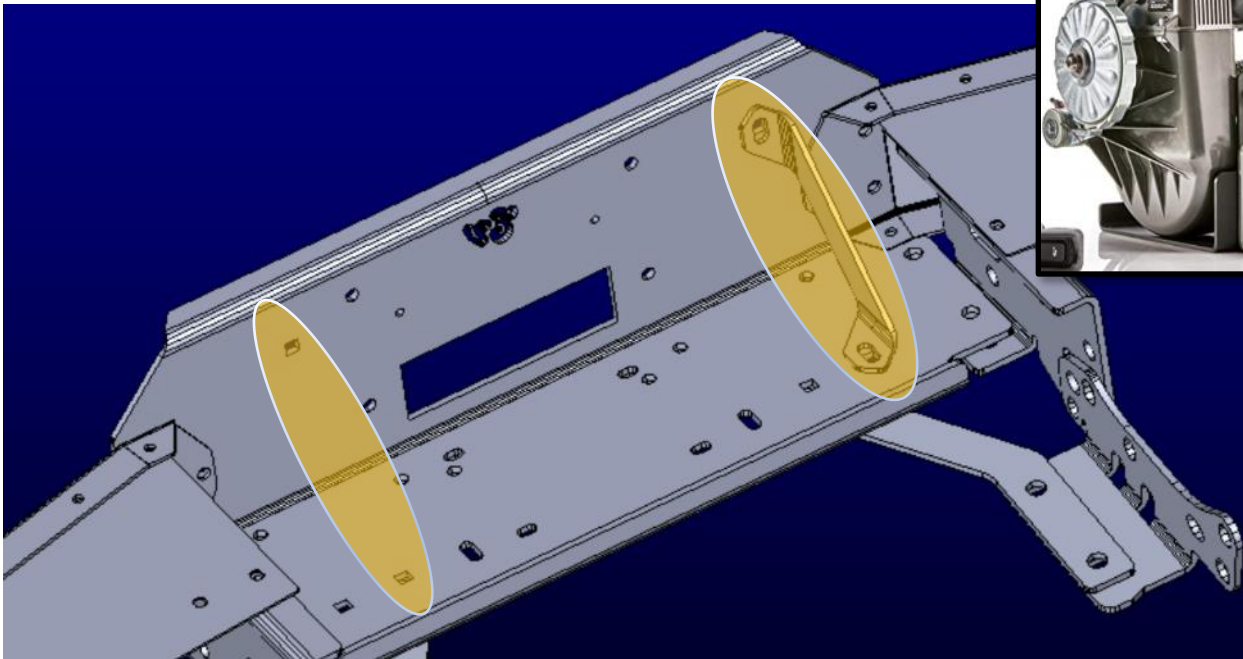


Install outer bumper brace bracket in each bumper wing in appropriate hole that lines up with stock bumper outer brace – this may take some trial & error with bracket to line up. Use a 1/2" bolt to attach 'GOAT' bumper brace to stock outer bumper brace.

'GOAT' bumper braces can be flipped around and moved to different holes to align. Install a 5/16" bolt in appropriate bottom bumper wing hole to attach bottom of bumper brace



If your winch is a WARN 8200 or 8274, now install the 8274 winch braces on both sides using 7/16 carriage bolts in highlighted locations – tighten these bolts



Once these are installed – it is time to tighten all of the hardware.

Check that bumper is level with truck side to side & front to back.

Once bumper is leveled – tighten all hardware, starting with the frame bracket bolts, then winch assembly bolts, then bumper ends, then outer bumper stiffener bolts.

Tighten to these specs:

| Torque Specs | | | Wrench Size |
|--------------|-----|--------|----------------|
| 1/4" bolts | 7 | ft-lbs | 7/16 |
| 5/16" bolts | 15 | ft-lbs | 1/2 |
| 3/8" bolts | 28 | ft-lbs | 9/16 |
| 7/16" bolts | 37 | ft-lbs | 5/8 |
| 1/2" bolts | 80 | ft-lbs | 3/4 |
| 5/8" bolts | 120 | ft-lbs | 15/16 |

Once all bolts are tightened, assembly is complete and winch can be installed per winch manufacturer instructions.



'GOAT' bumper installed on 1977
Powder coated bumper shown
FORD F250 Crew Cab ¾ ton 4x4 with WARN 8274

NOTICE

If your state requires your vehicle to have a front license plate, check out our License Plate Flip kit or license plate mouting bracket (both sold separately) on our website.

Recommended care:
Regular washing with fresh water and mild car wash detergent 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 and provide protection.

Thank you and check out our other products at:

Engineered Vintage.com

