#BO-FORD Ford E-350 & E-450 Bolt On Bracket Kit

2008 and newer Ford cutaway chassis

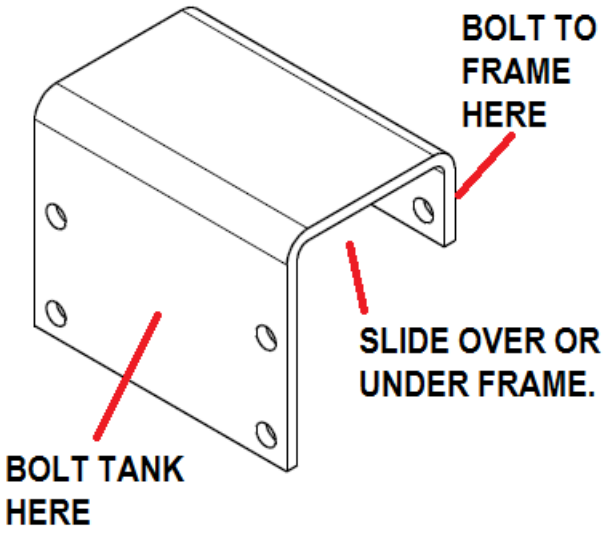
Previous year models will require additional frame drilling for the front brackets.

QUADRA BIGFOOT HYDRAULIC LEVELING SYSTEMS

800-752-9815

Front cylinder

FORD E-350/450 TANK MOUNT BRACKET



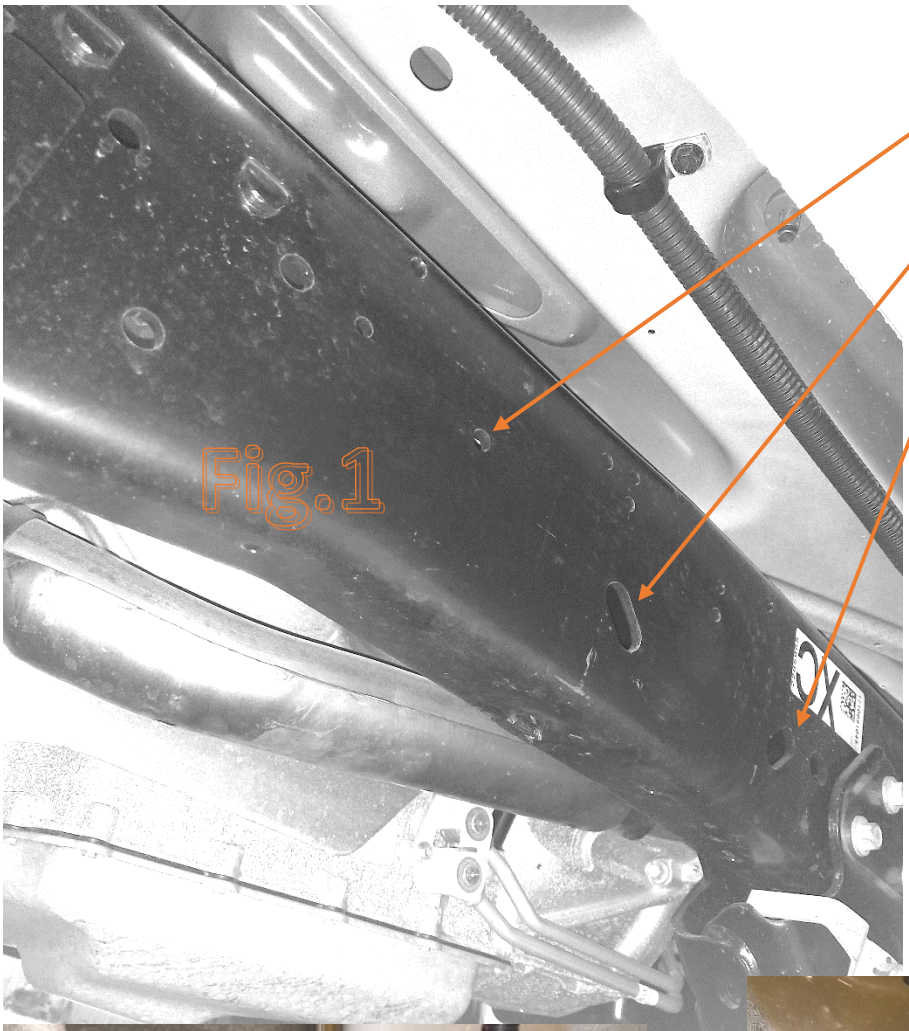
This #M29311 tank mount bracket (to the right) enables the tank assembly (quad pump or central pump assemblies) to mount in-between the frame rails on the Ford's channel frame. Typical open location is on the driver's side in front of the rear axle. For quad pump systems, maybe install both rear tanks or both front tanks. This brackets slides over the top or underneath the channel, allowing a vertical surface over the "open" area of the channel style frame where the cables and wiring are attached. Take care not to drill into the wiring when mounting this to the frame. Simply bolt the tank to the other side using a minimum of two bolts. You can mount the tank using just one side of the bracket to the tank (Ex. To left holes on bracket and tank), the tank body is strong enough to support the weight of the assembly (7/16" hardware and lockwasher required, torque to 70 ft/lbs.).

FORD E-350 & E-450 CHASSIS CAB

FRONT CYLINDER MOUNTING

Additional drilling to frame may be required on older model Ford frames, or to increase attachment strength to vehicle.

Shown in Fig.1, underneath the cab is the passenger side front jack location, just behind front axle…



Locate 3/8” hole towards rear of 2nd slot.
(Use this hole for the front bracket)

Locate 2nd slot after 1st slot towards rear.
(Use this slot for the front bracket)

Locate 1st slot after suspension bracket.
(For reference, Not using this slot)

Fig.2. Passenger front mounting bracket shown fastened with 3/8” hardware (perspective facing front of vehicle).
NOTE: Bracket surface is tight to bottom of Ford frame for proper lifting surface, and straight before tightening to 50 ft/lbs.

Fig.3. Passenger front mounting bracket Shown fastened with 5/8” hardware (perspective facing rear of vehicle).
NOTE: Bracket surface is tight to bottom of Ford frame for proper lifting surface, and straight before tightening to 80 ft/lbs.

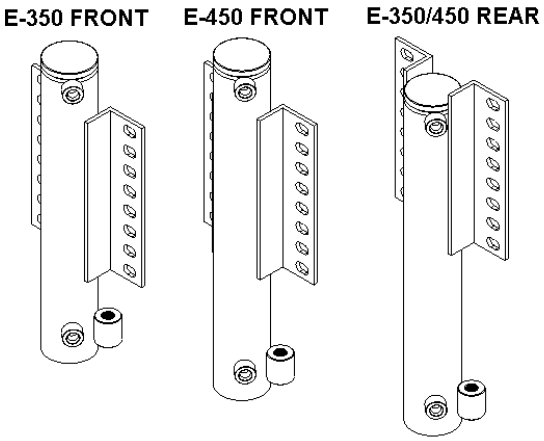
FORD E-350 & E-450 CHASSIS CAB

FRONT CYLINDER MOUNTING CONTINUED…

Passenger front shown with 8k13 #M0213F cylinder (perspective facing rear of vehicle). Note how cylinder is mounted above the frame in a “pocket” of the Ford body for higher ground clearance. Fasten cylinder to front mounting bracket with a minimum of four supplied 7/16” Grade-8 bolts 1.75” long with nuts and lockwashers. Make sure cylinder is straight and level, proceed to tighten bolts to 70 ft/lbs.

Front cylinder on Ford chassis: Angle bracket is 2.5” below to top of the cylinder.

Rear cylinder on Ford chassis: Angle bracket is ½” above the top of the cylinder.



Cylinder Identification

FORD E-350/E-450

MOUNTING REAR CYLINDERS

Can be bolted directly to frame or welded

Drilling to the Ford frame (not on the frame extension)

Fig.1. Locate the first Ford cross-member (between the frame rails) after the rear axle's rear leaf spring perch bracket. Hold the rear inside mount bracket (#M29352) up to the frame as shown. Ensure the bracket is tight to the flanges of the Ford frame for structural support. Rear cylinders should always be within 60" from the rear axle. Care to not interrupt departure angles when placing rear cylinders. Departure angle, imagine placing string from center of rear tire making contact with the ground and the furthest and lowest point of the vehicle (typically hitch receiver or bottom of rear bumper). Always position as close to rear axle as possible and up high enough to not interfere with departure angle.

Fig.2. Mark the holes as shown on the frame rail. Four holes are required per bracket. Do this for both sides.

Fig.3. After all eight holes (four on each side) are marked, set brackets aside. Using a center punch and smaller drill bits to start, proceed to drill all holes through the Ford frame up to a minimum diameter of 7/16" (.44") or maximum diameter of 31/64" (.48") for the supplied 7/16" Grade-8 hardware.

Attach the rear cylinder to the inside mount bracket using the supplied 7/16 x 1.5" bolts, lockwashers and nuts (two per leg) use the bottom holes of the bracket and whichever cylinder holes near the bottom you believe will work for your vehicle height (you can hold both up to check ground clearance and departure angles). Tighten the 7/16" x 1.75" bolts down to 70 ft/lbs. Now place the assembly up to the frame and insert the four supplied 7/16" x 5" bolts through the frame holes and into the bracket and cylinder assembly. When cylinder is straight and level and ground clearance is checked, tighten to 70 ft/lbs. Do the same to both sides.

If mounting the rear cylinders directly to the outside of the frame, follow same basic procedure and mark holes in the frame though the cylinder's holes at correct height and position, drill holes and utilize at minimum four 7/16" Grade-8 bolts per cylinder and tighten to 70 ft/lbs. Make sure the supplied cross-brace is used when mounting the cylinders between the frame rails.

Welding to the Ford frame (not on the frame extension)

Locate the proper bracket location on the frame for test fit. Bolt the cylinder to the weld-on bracket (70 ft/lbs.) and test fit again, verify proper ground clearance, take care not to interfere with departure angle and place cylinder as high as possible for best ground clearance. Recommended to mount the cylinder to the bracket prior to welding the bracket to the frame. When it is time to weld, use floor jack or a partner to hold the jack in place, at the proper height, and straight and level before welding. Put as much vertical surface weld on as possible (Ford recommends not to weld to horizontal flanges to avoid any new model frame warranty issues). Make sure cross-brace is installed when mounting between the frame rails.

Attention:

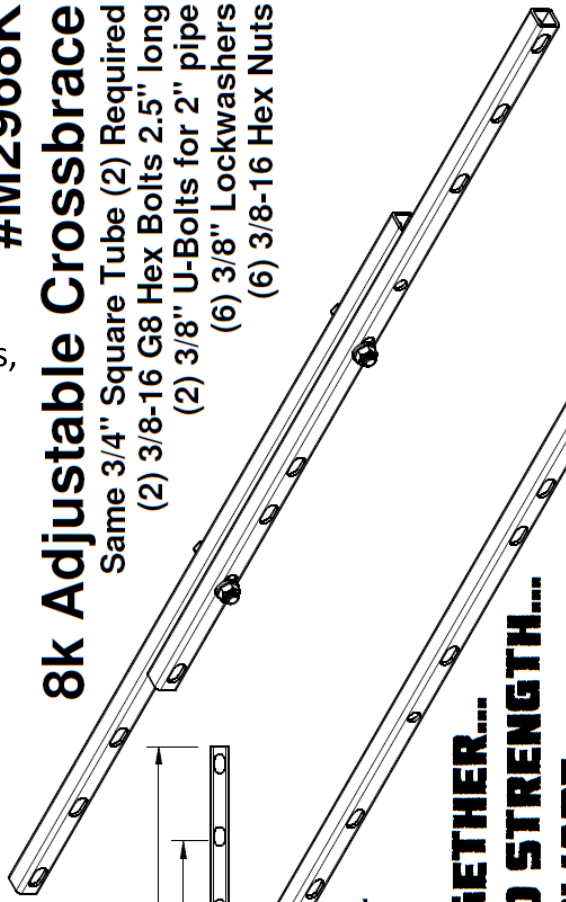
Modification to your RV or vehicle's storage boxes, body, floor, exhaust, interior, relocation of components, etc., may be required for the system installation. Longer or shorter hose lengths, extension of wiring, additional hardware, modifications or custom brackets or methods of attachment to the vehicle frame may be required for your particular installation…

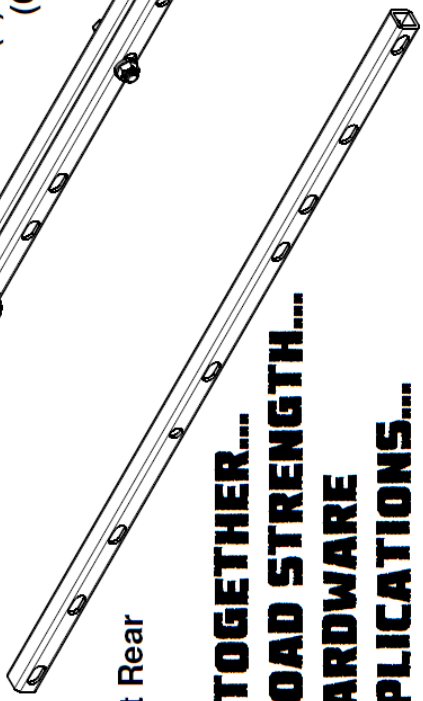
Not all RV's are manufactured equally.

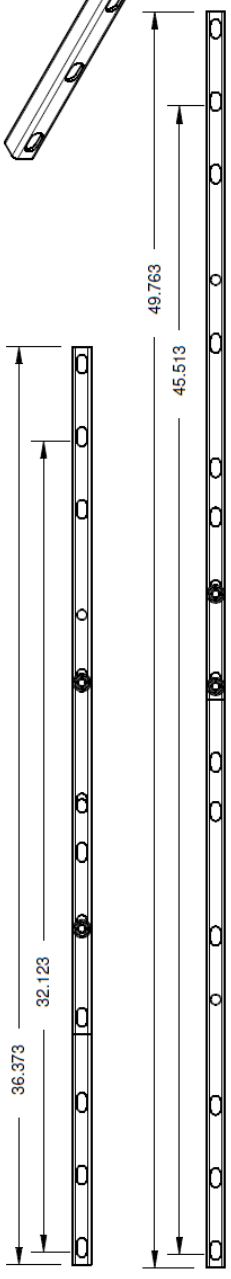
#M2968K

8k Adjustable Crossbrace

Same 3/4" Square Tube (2) Required
(2) 3/8-16 G8 Hex Bolts 2.5" long
(2) 3/8" U-Bolts for 2" pipe
(6) 3/8" Lockwashers
(6) 3/8-16 Hex Nuts







Applications:
Ford E-450 Inside Mount Rear, Chevy 4500 Inside Mount Rear,
Sprinter Channel Front, Sprinter Channel Staggered/Inside Mount Rear
Sprinter Universal 4pt 8k15 Rear (replaces crossplate)

-BOLTS PASSENGER & DRIVER CYLINDERS TOGETHER…
-ADDS STABILITY AND ADDITIONAL SIDE LOAD STRENGTH…
-DRILLING MODIFICATION OR DIFFERENT HARDWARE MAY BE REQUIRED BASED ON CERTAIN APPLICATIONS…

Ford E-350/E-450

Possible Cylinder Locations (Blue)

Possible Pump Locations (Orange)

Primary pump location with ✦