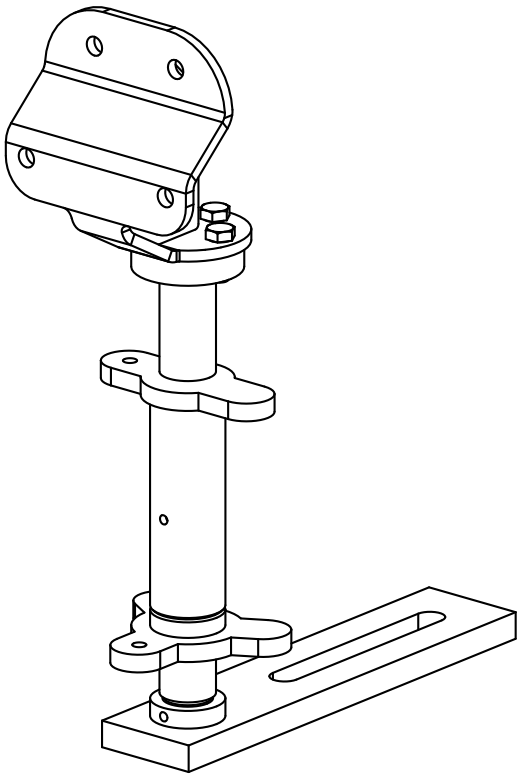
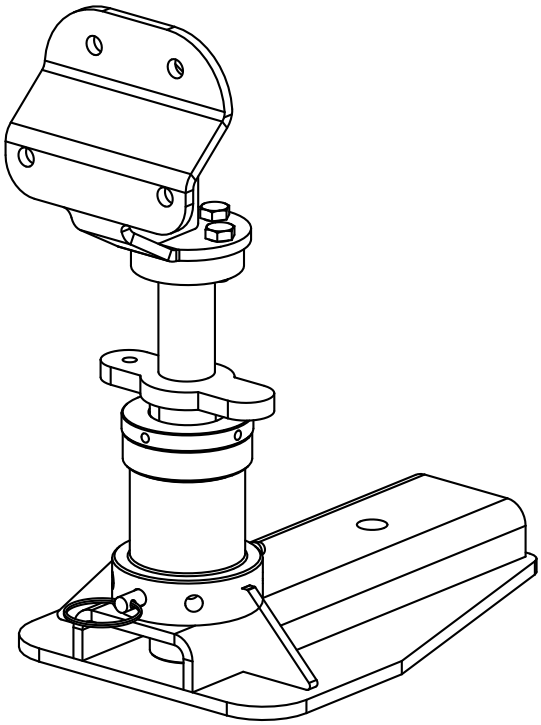
F-150 Structural Holding System

Users Manual





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CHIEF'S LIMITED ONE-YEAR

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This users manual is designed to assist operators with the safe and efficient use of the Chief F-150 Structural Holding System. When used with Chief Electronic Measuring, the parts holding system provides operators with the ability to accurately and securely hold replacement parts during vehicle repair.

IMPORTANT:
This manual only identifies basic usage procedures for the F-150 Structural Holding System, it must be used with the Chief Structural Holding System. The usage of the system is limited only by the imagination of the technician doing the work.

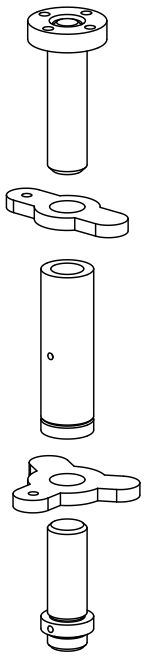
The Chief F-150 Structural Holding System is designed for the holding and positioning replacement parts. It is not designed as a replacement for Chief Anchoring. The F-150 Structural Holding System must not be subjected to heavy pulling forces. The Chief Universal Anchoring Stands provided with the rack will still serve as the primary vehicle anchoring.

Because Chief F-150 Structural Holding System works with Chief electronic measuring, special attention should be given to the replacement of the Structural Holding stands during setup. Best results will be achieved with the stands located on the perimeter of the vehicle being repaired to prevent shading of measuring targets.

Directly below the foundation adapter is the turnbuckle adjustment mechanism. The foundation adapter threaded stud screws into the top of the turnbuckle center section while the Structural Holding lower adapter screws into the bottom. A two-ear wing nut is threaded on to the foundation adapter to lock the top half of the turnbuckle once correct vertical position is achieved. A three-ear wing nut is threaded on the lower adapter to lock that half of the turnbuckle.

Note: The long threaded portion of the Structural Holding lower adapter utilizes a left hand thread, which is compatible with the bottom of the turnbuckle center section (marked with a v-groove around the outside of the part) and the three-ear wing nut.

Turnbuckle Assembly



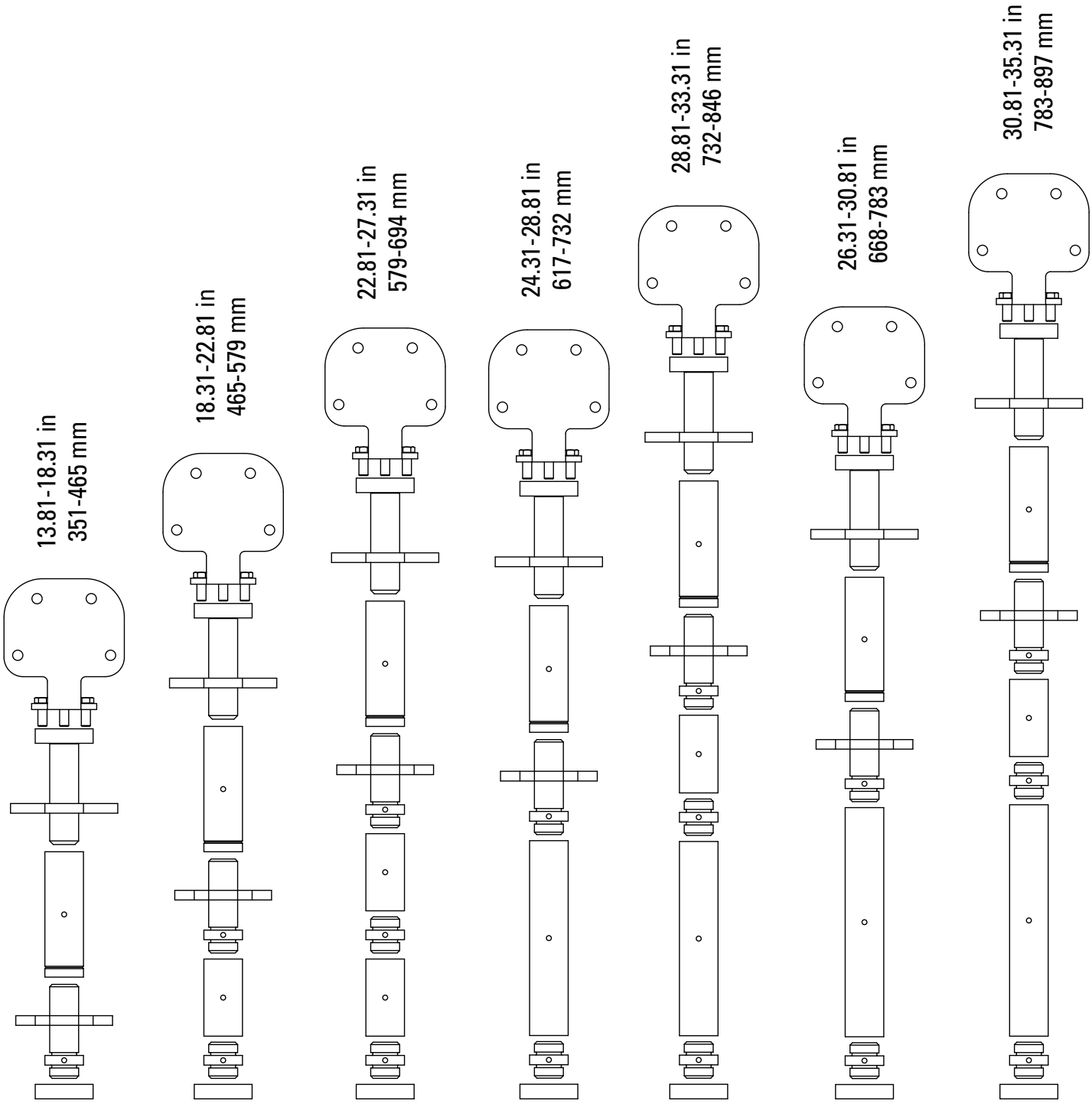
1. Completely thread two-ear wing nut onto foundation adapter threaded stud.
2. Thread non-grooved end of turnbuckle center section completely onto foundation adapter threaded stud.
3. Completely thread three-ear wing nut onto Parts Holding lower adapter.
4. Completely thread Structural Holding lower adapter three-ear wing nut assembly into grooved end of the turnbuckle center section.

The short threaded side of the Structural Holding lower adapter is a standard right hand thread that is compatible with the Structural Holding stand base and extension tubes.

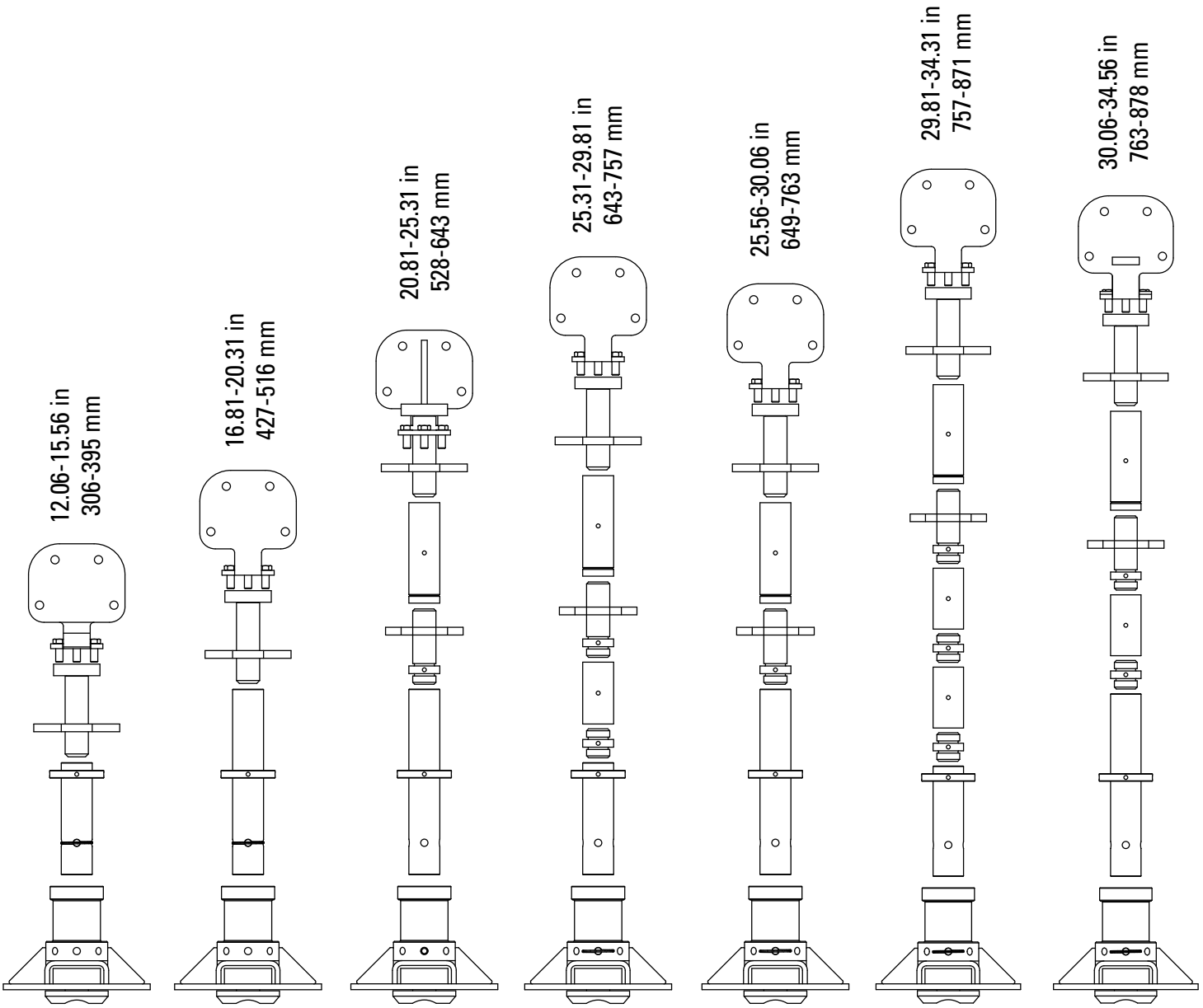
Note: It is not necessary to completely disassemble the turnbuckle section when changing setups or reconfiguring the stand. The fully assembled turnbuckle section can be unscrewed from the rest of the stand system using the included spanner wrenches.

Note: For best results, always have foundation adapter and the lower Structural Holding adapter threaded into the turnbuckle center section equal amounts before starting up.

Vertical positioning of the F-150 Structural Holding System, when used in conjunction with the Structural Holding System, uses a turnbuckle style adjustment over a 4.5" (115mm) range. Additional height can be achieved by using the extension tubes and extension adapters included with the system. Compare the approximate height required to the table below to determine how to configure the extension tubes and adapters.

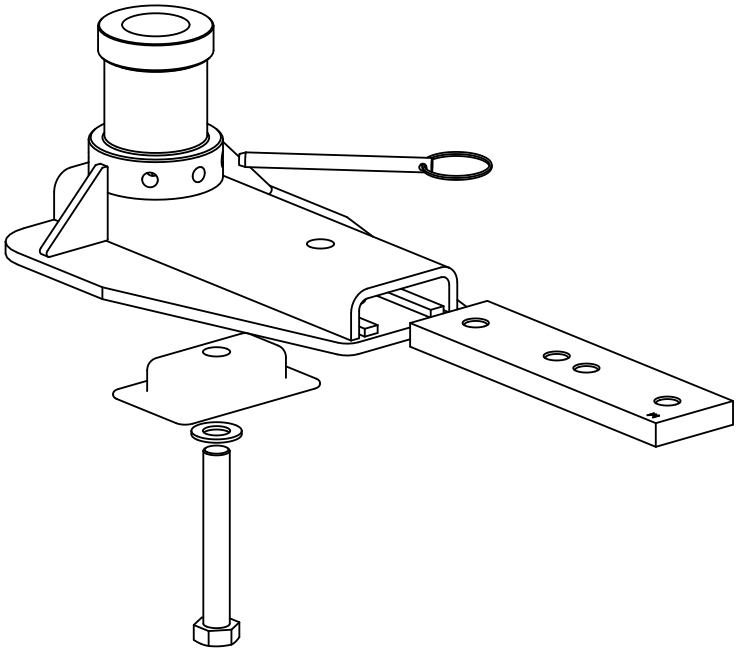


All min/max dimensions are taken from bottom of running boards mounting holes. All components shown above, except running board adapter, are from the Chief Structural Holding System.



All min/max dimensions are taken from bottom of running boards mounting holes. All components shown above, except running board adapter, are from the Chief Structural Holding System.

Once the proper configuration has been determined, assemble the required Structural Holding components on the base stand. The base stand should be loosely secured to the frame machine deck using M20x2.5 hardware and a UAS fastener plate. The M20x2.5 hardware will be fully tightened after the Structural Holding stand is located properly. Once the Structural Holding components are assembled, they can be fully tightened using the included spanner wrenches.



Securing New Part

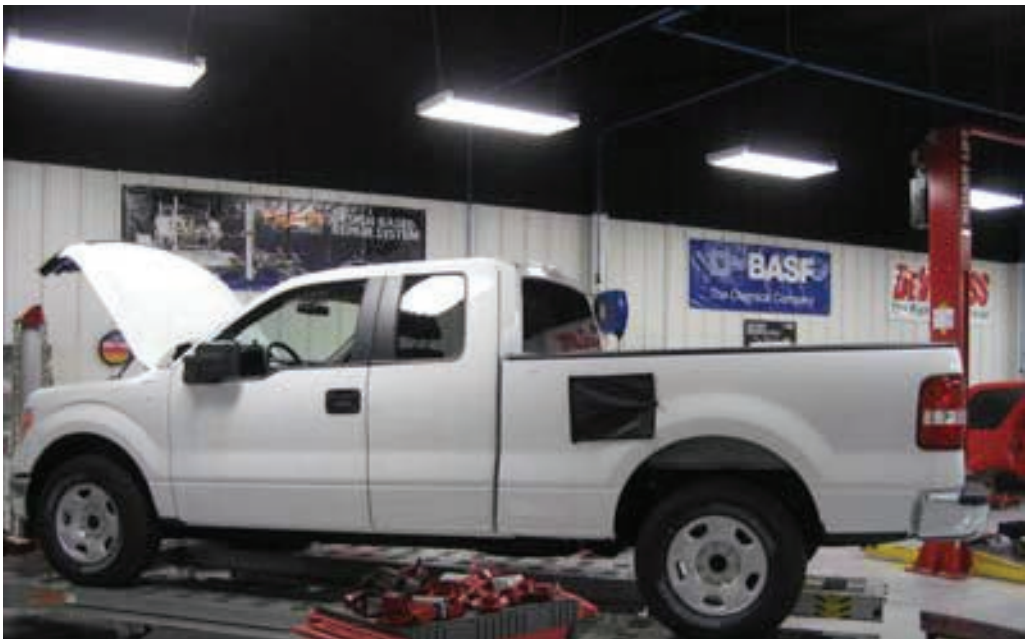
Secure the replacement part to the Structural Holding stand using the foundation adapter and fixtures. Horizontal adjustment of the part can be made by lightly tapping on the stand base. Once the part is located correctly in both horizontal directions, torque down the stand base using a 30 mm wrench or socket. Vertical adjustment of the parts is achieved by turning the clockwise rotation will raise the stand. The turnbuckle section should turn easily by hand, but there is a provision to use a spanner wrench if necessary. Once the part is at the proper vertical position, tighten the top and bottom wing nuts to lock the turnbuckle center section in place and insert the release pin into one of the three hole positions.

Note: For best results, the two-ear and three-ear wing nuts should be threaded away from the turnbuckle center section when making vertical position adjustments.

2015 F-150 Cab-On Repair System Users Guide

The F-150 Structural Holding for the 2015 Ford F-150 has been specifically designed to work in conjunction with Chief's F.A.S.T. Anchoring System and 300000 Structural Holding System. If your shop already has a F.A.S.T. system you need only purchase the F-150 Structural Holding components to have a fully functional repair system for this vehicle.

Positioning of the vehicle on the pulling system is very important, and the vehicle should be carefully located on the frame machine based on the type, severity and location of the damage. Once positioned, refer to your F.A.S.T. Manual for proper installation and set-up procedures.



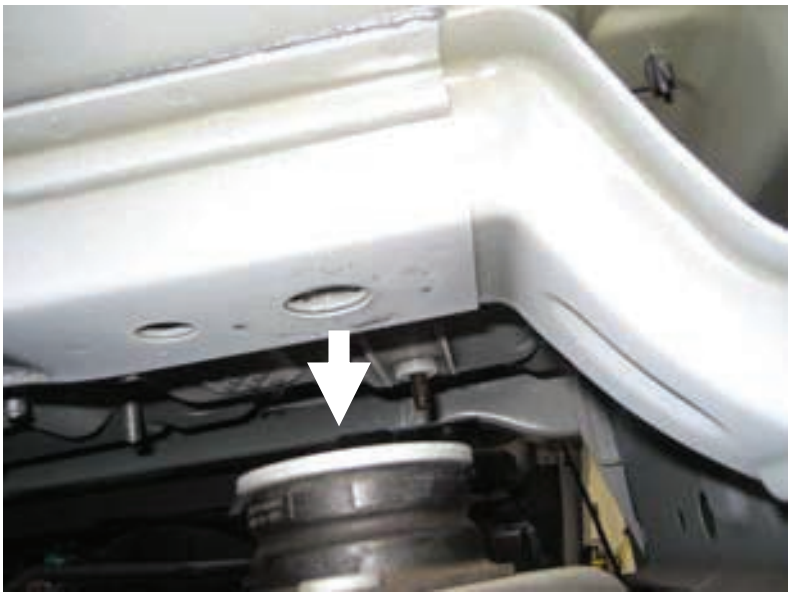
NOTE: Marking the F.A.S.T. cross-member every six inches from the outer edge inward will help maintain the center of the bar during the F.A.S.T. set-up procedure.

Once the vehicle is properly positioned and the cross-members are in place, you will need to remove all of the cab mount bolts and nuts.

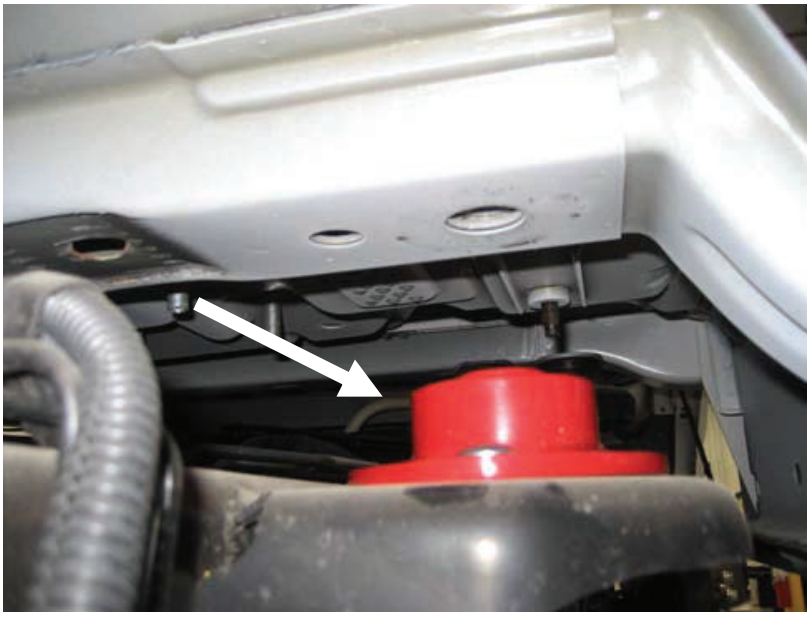
To remove the rubber cab mounts you will need to use an auxiliary ram and base with extension tubes up to the seat bolt that extrude through the floor in order to raise the cab.

NOTE: If the body cage nuts come loose during the removal process, refer to Section 502-02 (Frame and Body Mounting) of the 2009 F-150 Ford Workshop Manual.

Then raise the cab to a level that allows you to gain enough clearance for the removal of all of the rubber cab mounts on that side of the vehicle.



Once the rubber cab mounts have been removed replace them with the Rigid Cab Mounts included with the Cab-On Repair System.



Then position the pressure plates at the correct angle for the brace or cross-member.

Lower the cab onto the Rigid Cab Mounts and start threading the cab mount bolts that are included with the Cab-On Repair System.

Then repeat the process for the opposite side until all of the rubber cab mounts have been replaced. Then tighten all Cab Mount nuts and bolts.

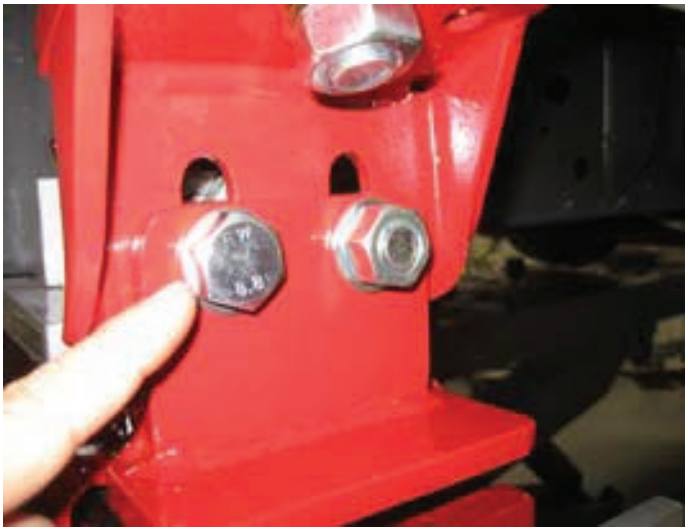
Once all Cab Mounts have been positioned and tightened, place the Rocker Clamp Bracket into position on the F.A.S.T. cross- member as shown as left.

Then place the rocker clamp into position along the rocker so all bolting holes align.

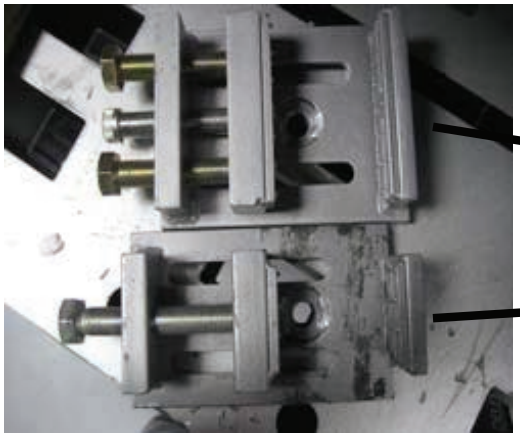
NOTE: If shims or a riser bar are used during the set-up of the F.A.S.T. clamps, the rocker clamp bracket can be shimmed as well.

The positioning of both the F.A.S.T. cross-member and the Cab-On Repair System Rocker Clamp are important depending on the clamp and bolt clearance.

NOTE: The bolts attaching the Rocker Clamp to the bracket can be placed either coming from the inside/out or the outside/in.

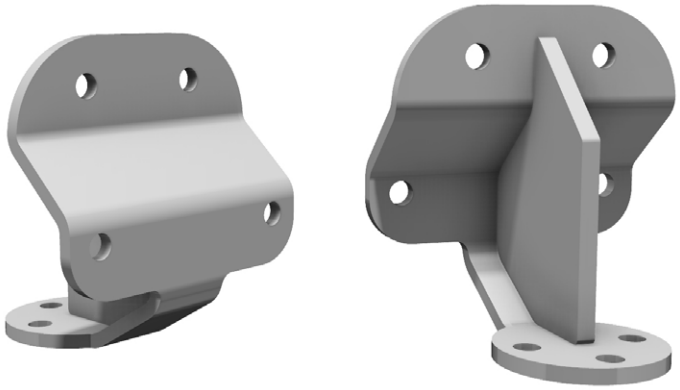


You can also use different clamps, if available:



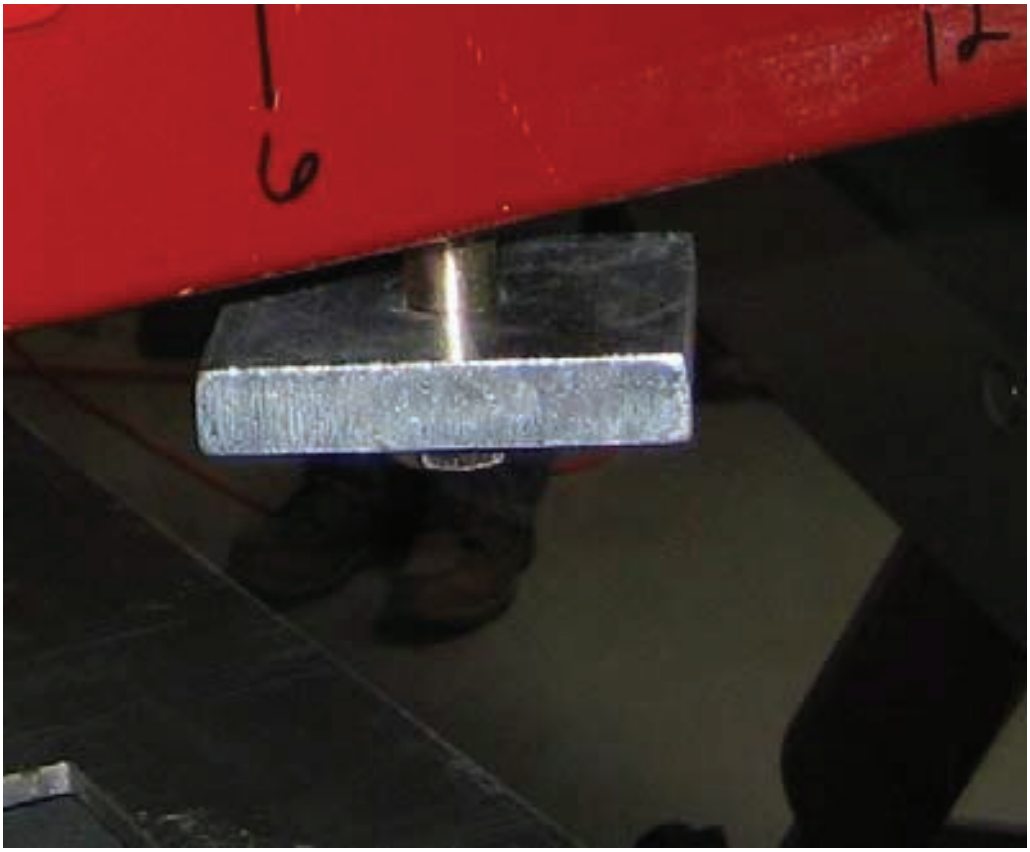
Standard Rail Vise (4" wide with 2 bolts) Part # 539444

Narrow Rail Vise (3" wide with 1 bolt) Part #539337

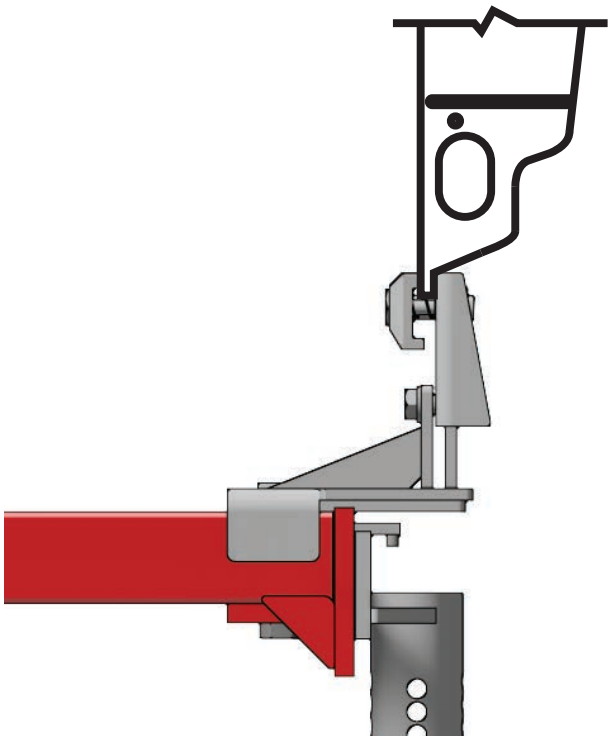


Running board bracket assembly Part #640114

Securely fasten all clamp brackets to the F.A.S.T. cross-members before beginning any repairs.



Once all repairs have been completed, remove all clamps and Rigid Cab Mounts and then reinstall all original rubber mounts and tighten into position.



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