DEXTER

E-Z FLEX® STS

STABILITY & RIDE CONTROL

INSTALLATION INSTRUCTIONS

E-Z FLEX STS

KITS:

STS-235-68: 35" Axle Spacing, Tandem, 68.5" Spring Center
STS-235-71: 35" Axle Spacing, Tandem, 71.5" Spring Center
STS-235-74: 35" Axle Spacing, Tandem, 74.5" Spring Center
STS-335-68: 35" Axle Spacing, Triple, 68.5" Spring Center
STS-335-71: 35" Axle Spacing, Triple, 71.5" Spring Center
STS-335-74: 35" Axle Spacing, Triple, 74.5" Spring Center

INTENT

To provide a procedure for installing a Dexter E-Z Flex STS kit on a trailer chassis for either tandem or triple axle configurations.

⚠ CAUTION

DO NOT LIFT OR SUPPORT THE TRAILER ON ANY PART OF THE AXLE OR SUSPENSION SYSTEM. NEVER GO UNDER ANY TRAILER UNLESS IT IS PROPERLY SUPPORTED ON JACK STANDS WHICH HAVE BEEN RATED FOR THE LOAD. IMPROPERLY SUPPORTED VEHICLES CAN FALL UNEXPECTEDLY AND CAUSE SERIOUS INJURY OR DEATH.

⚠ CAUTION

SAFETY GLASSES SHOULD BE WORN AT ALL TIMES WHEN ASSEMBLING OR DISASSEMBLING AXLES AND THEIR COMPONENTS. FAILURE TO COMPLY MAY RESULT IN SERIOUS EYE INJURY.

IMPORTANT SAFETY NOTICE

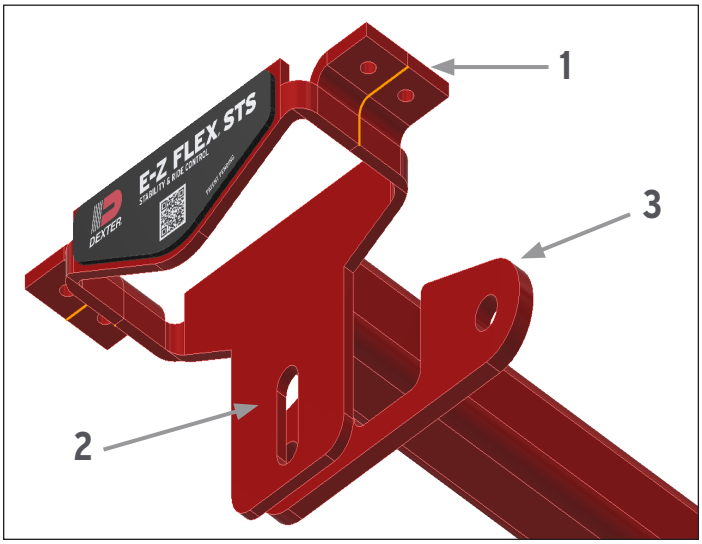
Before installing any suspension component parts to the trailer frame requiring the raising of the vehicle, make sure that the vehicle is properly supported on lift stands of sufficient capacity. Follow the vehicle manufacturer's recommendations for lifting and supporting the unit.

DO NOT lift with or place supports under any part of the suspension system unless specifically directed to do so during these installation steps.

Appropriate service methods and repair procedures are essential for the safe, reliable operation of all running gear as well as the personal safety of the individual doing the work. These are general directions for performing service and repair work with tested, effective techniques. Following these guidelines will help assure reliability.

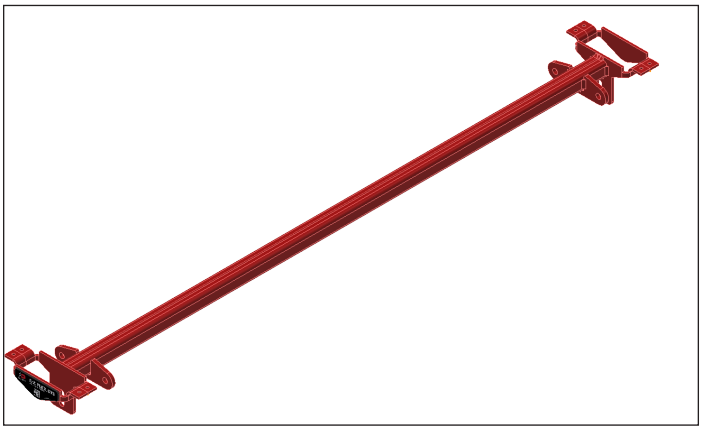
TERMINOLOGY

Figure 1



1. **Hanger Bracket Flange**
2. **Slotted Equalizer Hole**
3. **Upper Shock Bracket**

Figure 2



4. **Shock Tower** (Figure 2)

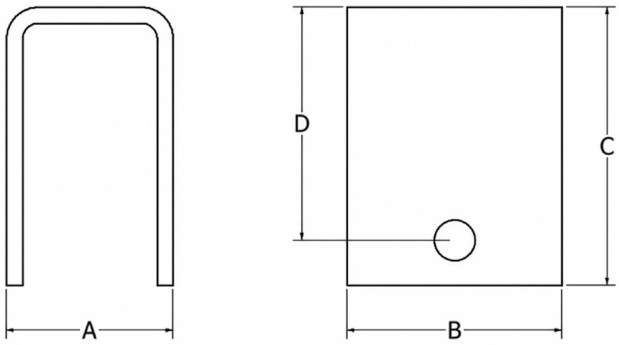
Socket Sizes

- 13/16" - Equalizer, shock bolts
- 7/8" - Equalizer, shock nuts
- 3/8" - Self-tapping screws

NOTE: All instructions are for both tandem and triple axles unless otherwise specified.

REQUIREMENTS / TOLERANCES:

The axle hanger brackets accommodating the E-Z Flex STS Shock Tower must be within the following dimensional tolerances:



HANGER DIMENSIONS		
LENGTH	MAX	MIN
A	2.40"	2.30"
B	3.50"	2.50"
C	–	3.875"
D	4.10"	3.125"

Before installing the E-Z Flex STS kit on a trailer chassis:

Ensure hangers meet the dimensional standards above. Ensure hanger spacing is 30.5" +/- 0.125" aft to rear.

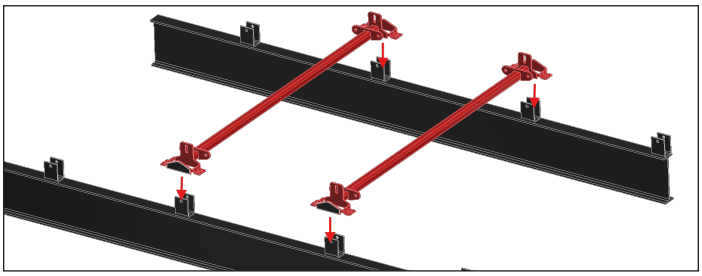
NOTE: Tolerance applies to all hanger spacing except the center hanger pairs in a triple configuration.

⚠ CAUTION

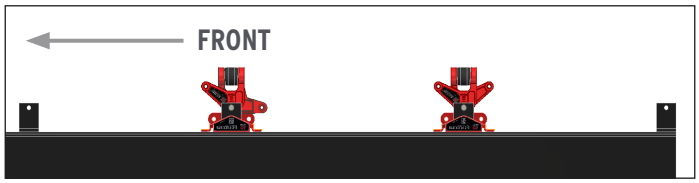
IT IS THE RESPONSIBILITY OF THE TRAILER MANUFACTURER TO ENSURE SAFE PRACTICES ARE ADHERED TO IN THE PROCEDURE LISTED HEREIN.

PROCEDURE

1. Place the shock tower(s) over the center hangers with the frame-mounting ears facing towards the frame.

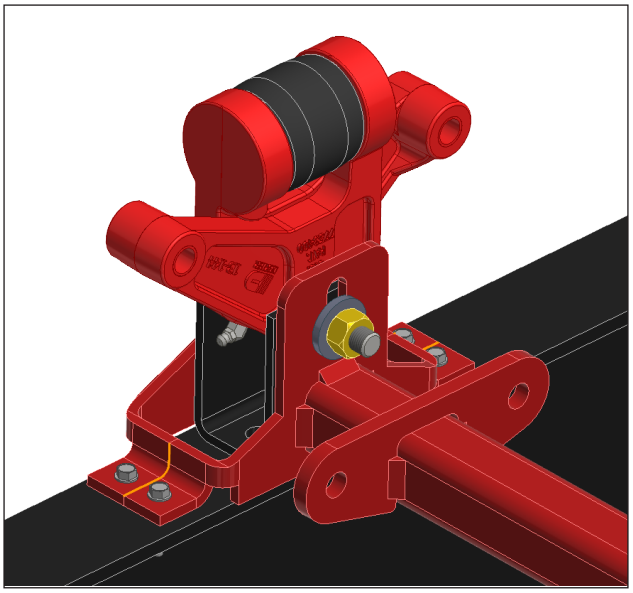


2. Insert the equalizers onto the center hangers. **FOR TANDEM AXLES**: ensure the logo badge of the equalizer (013-144-06) is facing outboard on the hangers. **FOR TRIPLE AXLES**: install the front equalizers with the yoke ends (013-146-06) on the front center hangers with the yoke end facing towards the rear. For rear equalizers, ensure the logo plate is facing outboard on the hangers.



3. Apply grease (088-008-00) on the equalizer bolts (007-726-00) prior to install. Insert each 9/16" equalizer bolt from outboard to inboard through the hanger, equalizer and slotted hole on the inboard face of the shock tower hanger brackets.

4. Place washers (005-080-00) and locknuts (006-007-01) on the inboard side of each bolt and torque to 118-122 ft-lbs using a 7/8" socket. Ensure head of bolt does not rotate by using 13/16" wrench.

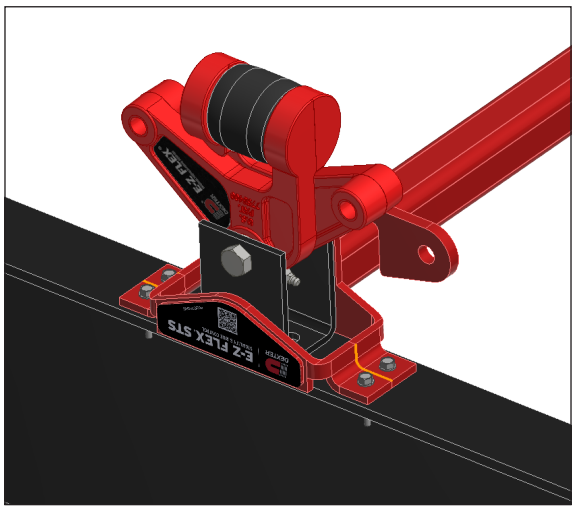


5. Using a 3/8" socket, install the 1/4" self-tapping screws (007-727-00) on the shock tower(s). There are four screws for each hanger, they are to be drilled through the flange holes on the hanger brackets and into the frame to be flush with the lower flange face.

   Equalizers can be tilted out of the way for this step.

⚠ CAUTION

DO NOT OVERTIGHTEN SELF-TAPPING SCREWS – JUST ENOUGH TO SIT FLUSH WITH FLANGES

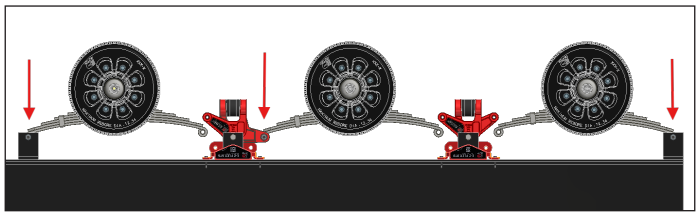


6. Place axles in position around the frame hangers.

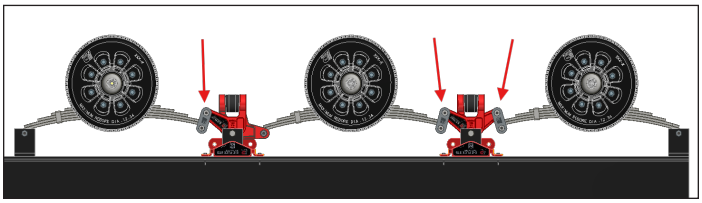
⚠ CAUTION

IT IS THE RESPONSIBILITY OF THE TRAILER MANUFACTURER TO ENSURE SAFE HANDLING OF AXLES DURING INSTALLATION.

7. Install self-lubricating shoulder bolts (007-187-00) through the outside hangers and spring eyes that do not interface with equalizers. To ensure that the grease circles in the bolts are installed at 3 or 9 o'clock and the grease zerks face outboard. **FOR TRIPLE AXLES**: Also install the same shoulder bolts through the yoke end of the front equalizer and spring eye at this stage, with the grease circles and zerks in the same location. Tighten nuts (006-092-01) to end of shoulder.



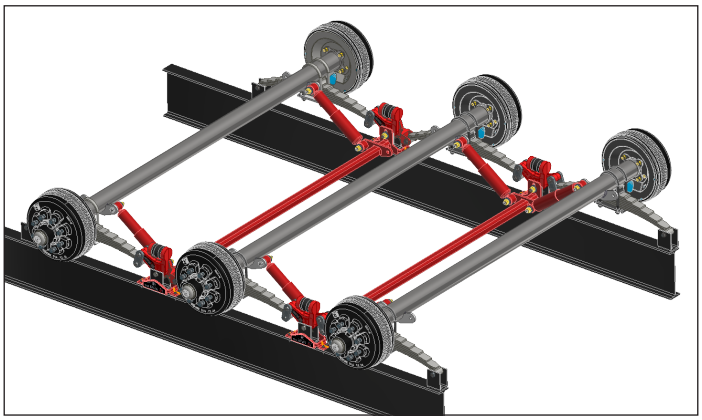
8. Install shackle bolt assemblies (018-026-05 and 018-024-01) with the grease zerks facing outboard and the Dexter logo oriented at the positive angle. Tighten nuts (006-092-01) to end of shoulder.



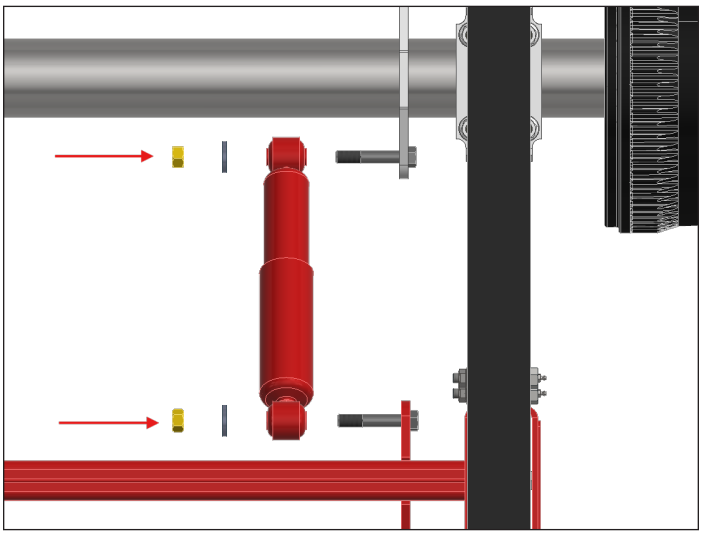
9. Grease equalizers and all shoulder and shackle bolts using a grease gun.

10. Place 9/16" shock absorber bolts (007-327-00) through the upper and lower brackets located on the shock tower(s) and axles respectively. Install bolts from outboard to inboard (with threads facing inboard).

11. Insert shock absorbers inboard of the shock brackets on the bolts. The side of the shock absorber with the larger diameter tube should be installed on the upper (shock tower) bracket. **FOR TRIPLE AXLES**: Place one pair of shocks on the front shock tower connecting to the front axle. Place the other two pairs of shocks on either side of the rear shock tower to connect to the other two axles.



12. Install washers (005-080-00) and 7/8" lock nuts (006-007-01) on the end of the bolts, torquing each fastener to 118-122 ft-lbs.



13. Check that all fasteners are properly tightened, and all wet-bolts and equalizers are greased. **The installation is now complete**.