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Warnings

Failure to act in accordance with the following may result in death or personal injury.

The JT Strong Arm Stabilizer System is intended to eliminate chassis movement in travel trailers and fifth wheels. Its function should not be used for any other purpose. To use the system for any reason other than what it is designed for may result in damage to the coach and/or cause serious injury or even death.

Be sure to park the unit on solid, level ground. Clear all jack landing locations of debris and obstructions. Locations should also be free of depressions. When parking the unit on extremely soft surfaces, utilize load distribution pads under each jack. People and pets should be clear of coach while operating leveling system. Never lift the unit completely off the ground. Lifting the unit so the wheels are not touching the ground will create an unstable and unsafe condition.

Description

The JT Strong Arm Stabilizer System is a locking bracket system used to stabilize and eliminate chassis movement in travel trailers and fifth wheels using a triangulation system attached to the coach's landing gear or jacks and frame.



Prior to Installation

Tools Needed

1. Tape measure
2. Felt-tip black marker
3. Hammer
4. Center punch
5. Power drill
6. 1/8" drill bit (for pilot holes)
7. 5/16" drill bit
8. 3/8" drill bit
9. 1/2" "Uni-bit" or step bit- preferred or standard 1/2" drill bit
10. Counter-sink bit (for deburring)
11. 9/16" deep socket and ratchet
12. 9/16" box end wrench
13. 5/8" box end wrench
14. 1 1/16" box end wrench
15. Locking pliers
16. 3" -4" C-clamp
17. White grease
18. Safety glasses
19. Face shield

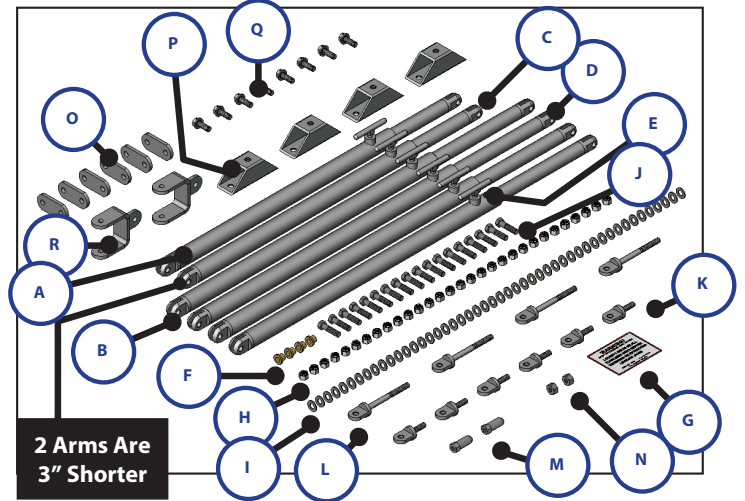
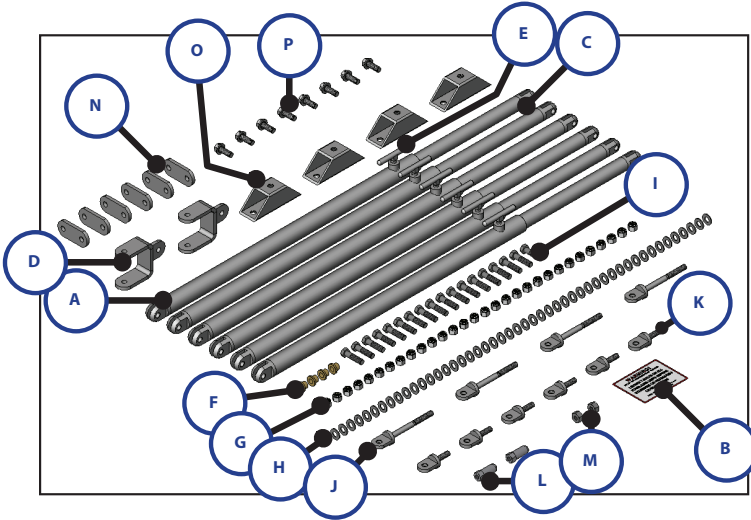


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JT Strong Arm 5th Wheel Install Manual

P/N 191023 - Jack Stabilizer, 5th Wheel - 66" or more between front jacks

P/N 191024 - Jack Stabilizer, 5th Wheel, Short - Less than 66" between front jacks.



Callout	Description	Qty
A	Stabilizer Outer 1 1/4" O.D.	6
B	Label; Front Electric Landing Jacks "Warning Sticker"	1
C	Stabilizer Inner 1" O.D.	6
D	Clevis for Front Electric Landing Jacks	2
E	Bolt - 3/8 - 16 x 3/4 T-Bolt	6
F	Flanged Bushing; .375 I.d., .500 O.d.	4
G	Nut - 3/8 - 16; Nylon Insert Lock Nut Zinc	30
H	Washer - 3/8; SAE Flat Washer Zinc	48
I	Bolt - 3/8 - 16 x 1 1/2; Hex Cap Screw Gr5 Zinc	18
J	Bolt - 3/8-16 X 4" Swing Bolt	4
K	Bolt - 3/8-16 X 1-1/4 Swing Bolt	6
L	Nut - 3/8-16 "Silver Bullet" Lifting Handles	2
M	Nut - 3/8 - 16; Heavy Hex Nut Grade A Zinc	2
N	2.750 X 1.250 Stiffening Pad	6
O	Spacer Mount - 4.500 X 1.500 X 1.500	4
P	Bolt - 3/8-16 X 1; Hex Washer Head Thrd Cutting Slotted Zn	8

Callout	Description	Qty
A	Stabilizer Outer 1 1/4" O.D. - Short	2
B	Stabilizer Outer 1 1/4" O.D.	4
C	Stabilizer Inner 1" O.D.	2
D	Stabilizer Inner 1" O.D.	4
E	Bolt - 3/8 - 16 x 3/4 T-Bolt	6
F	Flanged Bushing; .375 I.D., .500 O.D. x .500	4
G	Label; Front Electric Landing Jacks "Warning Sticker"	1
H	Nut - 3/8 - 16; Nylon Insert Lock Nut Zinc	30
I	Washer - 3/8; SAE Flat Washer Zinc	48
J	Bolt - 3/8 - 16 x 1 1/2; Hex Cap Screw Gr5 Zinc	18
K	Bolt - 3/8-16 X 1-1/4 Swing Bolt	6
L	Bolt - 3/8-16 X 4 Swing Bolt	4
M	Nut - 3/8-16 "Silver Bullet" Lifting Handles	2
N	Nut - 3/8 - 16; Heavy Hex Nut Grade A Zinc	2
O	2.750 X 1.250 Stiffening Pad	6
P	Spacer Mount - 4.500 X 1.500 X 1.500	4
Q	Bolt - 3/8-16 X 1; Hex Washer Head Thrd Cutting Slotted Zn	8
R	Clevis for Front Electric Landing Jacks	2



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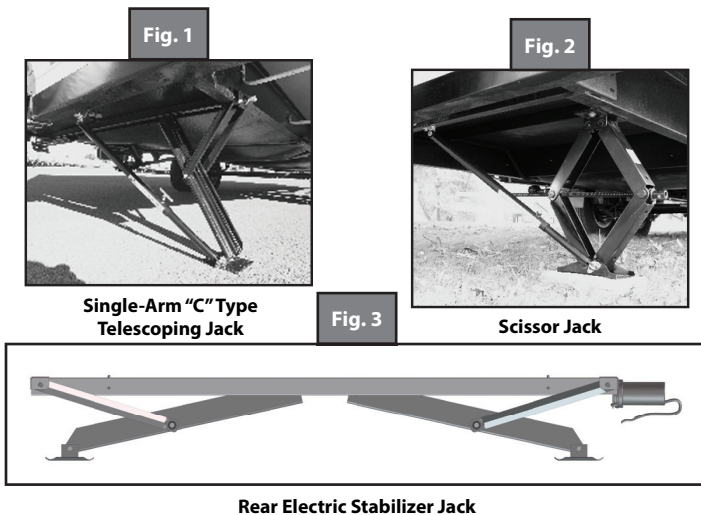
Installation

1. Determine what style of jacks is on the chassis by comparing the pictures with the rear jacks.

If the chassis has the electric stabilizer jacks, refer to page 7.

If the chassis has the hydraulic stabilizer jacks, refer to page 8.

NOTE: For 2006 or later telescoping jacks, replace existing $\frac{3}{8}$ " jack pad bolt with $\frac{3}{8}$ "-16 X 4 swing-bolt. Use $\frac{3}{8}$ "-16 nut (P/N 191019) to secure. Insert a $\frac{3}{8}$ " x 1 1/4" swing-bolt with the tab pointing to the rear of the chassis. Secure with a $\frac{3}{8}$ " washer and $\frac{3}{8}$ " locking nut. Prepare "T" bolts and stabilizer tubes as described in Step 12, except the inner tube should be set at 1" instead of 5". After fully retracting rear telescoping jacks, attach the clevis end of the stabilizer inner tube to the swing-bolt tab on the rear side of the jack using a $\frac{3}{8}$ "-16 x 1 1/2" bolt with a $\frac{3}{8}$ " washer on the top and bottom of the tab and a $\frac{3}{8}$ " locking nut. Tighten nut until tight. Repeat this step on the opposite side.



2. Locate a cross-member rearward of the rear jacks at a minimum of 6" to a maximum of 18". Under front half of chassis locate a cross-member or center compartment with a steel floor from 6"-18" from front of electric leveling jacks. If unable to locate a suitable mounting location at either front or rear of chassis, please call Customer Service at 1-574-537-8900 8 AM to 5 PM EST.

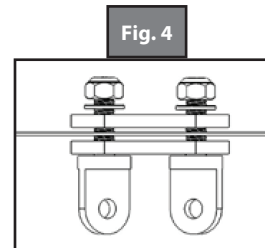
3. At the front of the chassis, measure the inside distance between the front electric leveling jacks just below the frame of the chassis.

NOTE: If measurement between front electric jacks is 58" to 66" and the chassis is insulated and has a center compartment with a steel floor located between the front jacks, refer to Step 4. If measurement between the front jacks is 58" to 66" and the chassis is uninsulated with a "C" channel cross-member, refer to Step 5. If the measurement between the front jacks is 66" or longer and the chassis is uninsulated with a "C" channel cross-member, refer to Step 6. If the measurement

between the front jacks is 66" or longer and the chassis is insulated and has a center compartment with a steel floor located between the front jacks, refer to Step 7. If the measurement between the front jacks is 66" or longer and the chassis is insulated and the cross-member is constructed of tubular steel, refer to Step 4. If the measurement between the front jacks is less than 58", use kit #191024.

4. Mark the bottom of the center compartment centered between the front electric jacks. Mark the center of one of the stiffening pads (P/N 191013) between the mounting holes. Align the center marks on the stiffening pad and the bottom of the center compartment and place the stiffening pad 1/4" from the front edge of the center compartment. Mark the center of each mounting hole in the stiffening pad on the bottom of the center compartment and center punch the marks. To prevent accidental damage to personal property, clear the center compartment of any valuables. Drill a 1/8" pilot hole at each mounting hole location. Drill both of the mounting holes out to $\frac{3}{8}$ " and using a counter-sink bit, deburr the inside of the holes. Sandwich the floor of the center compartment between two stiffening pads. Secure the pads using two $\frac{3}{8}$ " x 1 1/4" swing-bolts (P/N 191010), two $\frac{3}{8}$ " washers (P/N 135840), and two $\frac{3}{8}$ "-16 locking nuts (P/N 118044). Tighten nuts enough to ensure needing a screwdriver for leverage to pivot swing-bolts.

5. Mark the bottom of the cross-member centered between the front electric jacks. Mark the center of one of the stiffening pads (P/N 191013) between the mounting holes. Align the center marks on the stiffening pad and the bottom of the cross-member and clamp with a pair of locking pliers or "C" clamp. Drill both mounting holes with a $\frac{3}{8}$ " bit. Secure the stiffening pad to the bottom of the cross-member with two $\frac{3}{8}$ " x 1 1/4" swing-bolts (P/N 191010), two $\frac{3}{8}$ " washers (P/N 135840), and two $\frac{3}{8}$ "-16 locking nuts (P/N 118044). Tighten nuts enough to ensure needing a screwdriver for leverage to pivot swing-bolts (Fig. 4).



6. From the inside of both front jacks, measure toward the center of the cross-member 30" and place a mark. Mark the center of two of the stiffening pads (P/N 191013) between the mounting holes. Align the center marks on the stiffening pad and the bottom of the cross-member and clamp with a pair of locking pliers or "C" clamp. Drill the mounting holes with a $\frac{3}{8}$ " bit. Secure the stiffening pads to the bottom of the cross-member with two $\frac{3}{8}$ " x 1 1/4" swing-bolts (P/N 191010), two $\frac{3}{8}$ " x 1 1/2" bolt (P/N 155004), four $\frac{3}{8}$ " washers (P/N 135840), and four $\frac{3}{8}$ "-16 locking nuts (P/N 118044). The swing-bolts should be inserted into the mounting holes closest to the electric jacks. Tighten nuts enough to ensure needing a screwdriver for leverage to pivot swing-bolts.



7. From the inside of both front jacks, measure toward the center of the center compartment 30" and place a 2" mark $\frac{1}{4}$ " from the front edge of the compartment. Mark the center of two of the stiffening pads (P/N 191013) between the mounting holes. Align the center marks on the stiffening pads and the bottom of the center compartment and place the stiffening pad $\frac{1}{4}$ " from the front edge of the compartment. Mark the center of each mounting hole in the stiffening pads on the bottom of the center compartment and center punch the marks. To prevent accidental damage to personal property, clear the center compartment of any valuables. Drill a $\frac{1}{8}$ " pilot hole at each mounting hole location. Drill the mounting holes out to $\frac{3}{8}$ " and using a counter-sink bit, deburr the inside of the holes. Sandwich the floor of the center compartment between the stiffening pads. Secure the pads using two $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " swing-bolts (P/N 191010), two $\frac{3}{8}$ " x 1 $\frac{1}{2}$ " bolts (P/N 155004), four $\frac{3}{8}$ " washers (P/N 135840), and four $\frac{3}{8}$ "-16 locking nuts (P/N 118044). The swing-bolts should be inserted into the mounting holes closest to the electric jacks. Tighten nuts enough to ensure needing a screwdriver for leverage to pivot swing-bolts.

8. Insert a $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " swing-bolt (P/N 191010) into a spacer mount (P/N 191013) and secure with a $\frac{3}{8}$ " washer (P/N 135840) and $\frac{3}{8}$ " locking nut (P/N 118044). From the inside of both front jacks, measure toward the center of the cross-member 27 $\frac{3}{4}$ " and place a mark. Align one of the short edges of the spacer mount with the mark keeping the swing-bolt toward the center of the chassis. Mark the center of the mounting holes and center punch them. Drill $\frac{1}{8}$ " pilot holes at the four mounting hole locations. Drill out the holes closest to the electric jacks to $\frac{5}{16}$ " on both sides of chassis. Tap the $\frac{5}{16}$ " holes with either a $\frac{3}{8}$ "-16 tap or a $\frac{3}{8}$ "-16 x 1" self-tapping bolt (P/N 191021). Lubricate as needed. Remove tap or bolt and secure spacer mount with a $\frac{3}{8}$ "-16 x 1" self-tapping bolt, taking care to keep the remaining pilot hole centered in the mounting hole of the spacer mount. Tighten bolt securely. Drill remaining pilot hole to $\frac{5}{16}$ " and insert a $\frac{3}{8}$ "-16 x 1" self-tapping bolt and tighten (Fig. 5). Repeat this step for opposite side.

Fig. 5



Fig. 6



9. Ensure the adjustment holes in the jack leg above the foot pad pin are $\frac{1}{2}$ ". If not, drill out the second from the bottom holes on each jack leg with a step bit or standard $\frac{1}{2}$ " bit and deburr holes with a counter-sink bit. Insert a $\frac{3}{8}$ " ID x $\frac{1}{2}$ " OD flanged bushing (P/N 191022) into the second from the bottom holes in each jack leg. Apply a thin layer of white grease to the shaft of a $\frac{3}{8}$ "-16 x 4" swing-bolt (P/N 191011) and the flanges of the bushings. Align the mounting holes of the electric jack clevis (P/N 191018) with the bushings from the rear of the jack leg and insert the swing-bolt through both sides with the shoulder and $\frac{3}{8}$ " washer on the inside of the jack leg. Apply a thin layer of grease to a $\frac{3}{8}$ " washer and place on outside of clevis over swing-bolt. Secure the swing-bolt and clevis with a $\frac{3}{8}$ "-16 extra heavy nut (P/N 191019). Tighten enough to eliminate side play (Fig. 6).

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10. Thread a "Sliver Bullet" lifting handle (P/N 191017) onto the outside of the swing-bolt and tighten against the $\frac{3}{8}$ " extra heavy nut (Fig. 7). Repeat Steps 5 and 6 for the opposite side.

NOTE: For chassis that are constructed with "I" or "H" beam main rails (front-to-back) and are uninsulated, refer to Step 11. For chassis that are constructed with "I" or "H" beam main rails or tubular frames and/or insulated, refer to Step 12.

11. Measure from the rear side of the electric jack leg 30" and place a mark on the bottom of the main rails. Measure the bottom flange of the main rails and divide by 4 for center of mounting hole. Center punch at the intersection of the lines and drill a $\frac{1}{8}$ " pilot hole. Drill out the pilot hole to $\frac{3}{8}$ " and deburr. Secure a stiffening pad to bottom of the main rail flange using a $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " swing-bolt, a $\frac{3}{8}$ " washer, and a $\frac{3}{8}$ " locking nut. The edge of the stiffening pad should be parallel to the edge of the main rail flange. Drill remaining mounting hole and secure with a $\frac{3}{8}$ "-16 x 1 $\frac{1}{2}$ " bolt, $\frac{3}{8}$ " washer, and $\frac{3}{8}$ " locking nut (Fig. 8). Repeat this step for opposite side.

Fig. 7

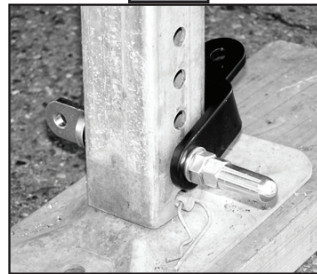


Fig. 8



12. Measure from the rear side of the electric jack leg 27 $\frac{3}{4}$ " and place a mark on the bottom of the main rails. Assemble a spacer mount as in Step 8. Using the spacer mount as a template, mark the mounting holes by aligning one short edge with the 27 $\frac{3}{4}$ " mark. Ensure the spacer mount is parallel to the outside of the main rail flange. Center punch and drill an $\frac{1}{8}$ " pilot holes at each mounting hole location. Drill out the hole closest to the front jacks to $\frac{5}{16}$ " and tap using either a $\frac{3}{8}$ "-16 tap or $\frac{3}{8}$ "-16 x 1" self-tapping bolt. Lubricate as needed. Secure spacer mount to bottom of main rail flange with a $\frac{3}{8}$ "-16 x 1" self-tapping bolt, taking care to keep the remaining pilot hole centered in the mounting of the spacer mount. Tighten bolt securely. Drill the remaining pilot hole out to $\frac{5}{16}$ " and insert a $\frac{3}{8}$ "-16 x 1" self-tapping bolt and tighten (Fig. 9). Repeat this step for opposite side.

13. Apply white grease to the threads of two "T"-bolts (P/N 191012) and partially thread them into the top holes of the outer stabilizer tubes. Remove inner stabilizer tube from assembly and discard the plastic shipping bag. Reassemble stabilizer tubes with the inner tube sticking out past the end of the outer tube by 5". Tighten "T"-bolts until snug (Fig. 10).



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14. To ensure proper installation, make sure the warning labels are facing outward and right-side up. The "T"-bolts should also be on the top side of the stabilizers. Apply a thin layer of white grease to the swing-bolt tabs. Attach clevis of outer stabilizer tube to the swing-bolt tab under center of chassis with a $\frac{3}{8}$ " x $1\frac{1}{2}$ " bolt, $\frac{3}{8}$ " washer, and $\frac{3}{8}$ "-16 locking nut. Tighten nut until the stabilizer tubes will swing to the ground with resistance. Attach clevis of inner stabilizer tube to swing-bolt tab on jack leg with a $\frac{3}{8}$ " x $1\frac{1}{2}$ " bolt, $\frac{3}{8}$ " washer, and $\frac{3}{8}$ "-16 locking nut. Loosen "T" bolt if needed. Repeat this step for opposite side.

Fig. 9

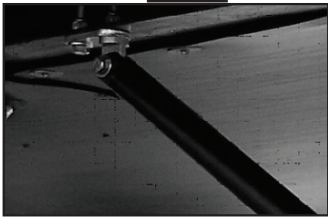


Fig. 10



15. Prepare stabilizer tube as described in Step 13. To ensure proper installation, make sure the warning labels are facing outward and right-side up. The "T"-bolts should also be on the top side of the stabilizers. Apply a thin layer of white grease to the swing-bolt tabs. Attach clevis of outer stabilizer tube to the swing-bolt tab under main rail of chassis with a $\frac{3}{8}$ " x $1\frac{1}{2}$ " bolt, $\frac{3}{8}$ " washer, and $\frac{3}{8}$ "-16 locking nut. Tighten nut until the stabilizer tubes will swing to the ground with resistance. Attach clevis of inner stabilizer tube to tab on electric jack clevis with a $\frac{3}{8}$ " x $1\frac{1}{2}$ " bolt, $\frac{3}{8}$ " washer, and $\frac{3}{8}$ "-16 locking nut. Loosen "T"-bolt if needed. Repeat this step for opposite side.

NOTE: For chassis with rear scissor jacks, refer to Step 16. For chassis with telescoping rear jacks, refer to Step 17.

NOTE: For chassis with electric stabilizing jacks, refer to page 7. For chassis with hydraulic stabilizing jacks, refer to page 8.

16. Starting with one of the rear scissor jacks, remove the existing lower, outside pivot bolt; replacing with a $\frac{3}{8}$ " x 4" swing-bolt. Install swing-bolt from back-to-front with the shoulder of the swing-bolt to the rear side of jack. Place $\frac{3}{8}$ " washer and $\frac{3}{8}$ "-16 locking nut on threaded end of swing-bolt. Tighten enough so that the swing-bolt will only pivot by using a screwdriver for leverage. Ensure swing-bolt tab is positioned horizontally. Prepare "T" bolts and stabilizer tubes as described in Step 13, except the inner tube should be set at 1" instead of 5". After fully retracting rear scissor jacks, attach the clevis end of the stabilizer inner tube to the swing-bolt tab on the rear side of the jack using a $\frac{3}{8}$ "-16 x $1\frac{1}{2}$ " bolt with a $\frac{3}{8}$ " washer on the top and bottom of the tab and a $\frac{3}{8}$ " locking nut. Tighten nut until tight (Fig. 8). Repeat this step on the opposite side.

NOTE: If scissor jacks are less than 2" wide, washers will be necessary on the swing bolt because the threads may not be long enough.

17. Drill a $\frac{3}{8}$ " hole centered in telescoping channel and 1" up from the end (Fig. 12).

NOTE: For 2006 or later telescoping jacks, replace existing $\frac{3}{8}$ " jack pad bolt with $\frac{3}{8}$ "-16 X 4 swing-bolt. Use $\frac{3}{8}$ "-16 nut (P/N 191019) to secure. Insert a $\frac{3}{8}$ " x $1\frac{1}{4}$ " swing-bolt with the tab pointing to the rear of the chassis. Secure with a $\frac{3}{8}$ " washer and $\frac{3}{8}$ " locking nut. Tighten as described in Step 11. Prepare "T" bolts and stabilizer tubes as described in Steps 8, except the inner tube should be set at 1" instead of 5". After fully retracting rear telescoping jacks, attach the clevis end of the stabilizer inner tube to the swing-bolt tab on the rear side of the jack using a $\frac{3}{8}$ "-16 x $1\frac{1}{2}$ " bolt with a $\frac{3}{8}$ " washer on the top and bottom of the tab and a $\frac{3}{8}$ " locking nut. Tighten nut until tight. Repeat this step on the opposite side.

Fig. 11

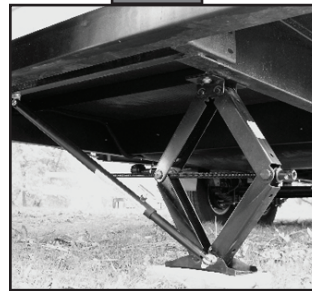


Fig. 12



NOTE: For chassis that are constructed with "C" channel rear cross-members and uninsulated, refer to Step 18. For chassis that are constructed with "C" channel rear cross-members or tubular frames and/or insulated, refer to Step 19.

18. Attach a $\frac{3}{8}$ " x $1\frac{1}{4}$ " swing-bolt to the clevis end of the stabilizer outer tube with a $\frac{3}{8}$ "-16 locking nut and $\frac{3}{8}$ " washers. Tighten nut enough to allow the swing-bolt to point upwards. Rotate stabilizer tube toward center of chassis and up to cross-member identified in Step 2. Mark where center of swing-bolt meets the center of the cross-member front-to-back on the bottom of the cross-member. Align a stiffening pad with the outer hole centered on the mark for the center of the swing-bolt. Clamp the stiffening pad to the cross-member with a pair of locking pliers and drill mounting holes with a $\frac{3}{8}$ " bit. Secure stiffening pad to the cross-member with a $\frac{3}{8}$ " x $1\frac{1}{4}$ " bolt, $\frac{3}{8}$ "-16 locking nut, and $\frac{3}{8}$ " washer in the inside mounting hole. After removing the locking pliers, attach swing-bolt to remaining mounting hole with a $\frac{3}{8}$ " locking nut and washer (Fig. 13). Repeat step for opposite side.



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19. Prepare spacer mounts as described in Step 8. Rotate stabilizer tubes toward center of chassis and upward to cross-member identified in Step 2. Using the spacer mount as a template, mark the mounting holes by aligning one short edge with the center of the cross-member. Ensure the spacer mount is parallel to the edge of the rear cross-member. Center punch and drill a 1/8" pilot holes at each mounting hole location. Drill out the hole closest to the rear jacks to 5/16" and tap using either a 3/8"-16 tap or 3/8"-16 x 1" self-tapping bolt. Lubricate as needed. Secure spacer mount to bottom of rear cross-member with a 3/8"-16 x 1" self-tapping bolt, taking care to keep the remaining pilot hole centered in the mounting of the spacer mount. Tighten bolt securely. Drill the remaining pilot hole out to 5/16" and insert a 3/8"-16 x 1" self-tapping bolt and tighten. Repeat this step for opposite side.

20. Place Warning Label (P/N 191016) in any available location that is visible while operating electric leveling jack switch. Clean mounting surface thoroughly. Remove backing from label and adhere to mounting surface using a squeegee or similar tool (Fig. 14).

Fig. 13



Fig. 14

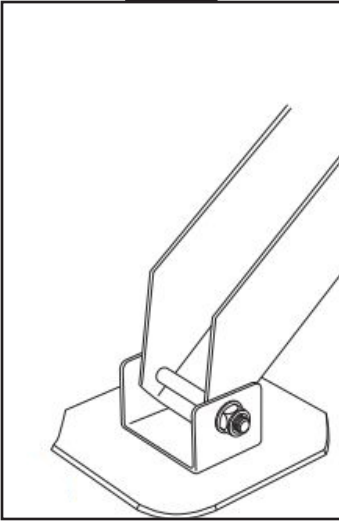


**P/N 314597 - Electric Stabilizer
Jack Pad Adapter kit (4/pkg).**

This optional kit is used to attach stabilizers to LCI Electric Stabilizer Jack foot pads. One plate goes on each side of the jack pad to allow electric Jack to fully retract.

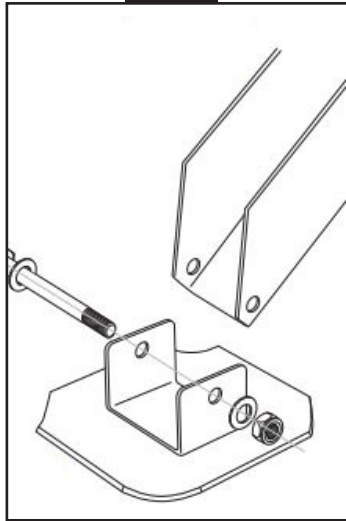
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Fig. 15



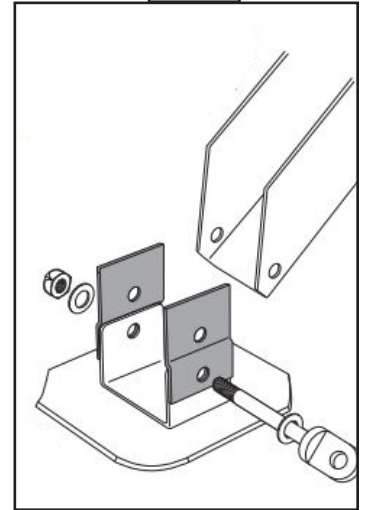
1. Existing foot pad (Fig. 15)

Fig. 16



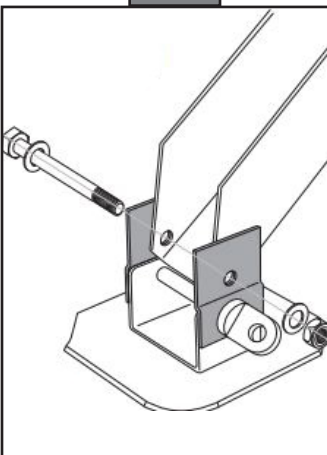
2. Remove the bolt that holds the foot pad onto the jack (Fig. 16).

Fig. 17



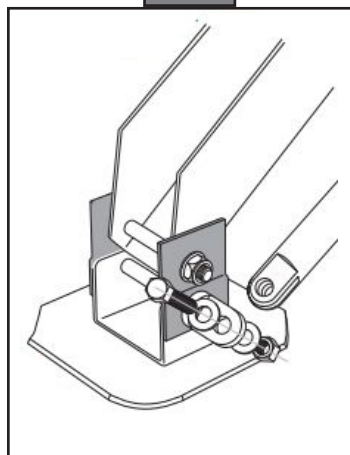
3. Align adapter plates to holes in foot pad. Place the smaller half down and on the outside of brackets (Fig. 17).

Fig. 18



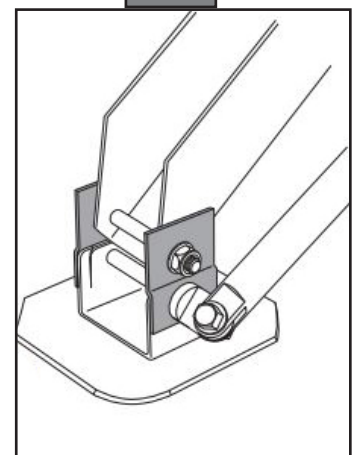
4. Loosely attach 4" swing bolt and adapter plates to foot pad. Adapter plate holes may need to be enlarged using either a 3/8" or 25/64" drill bit (Fig. 18).

Fig. 19



5. Attach the removed bolt to the top hole of the adapter plate through the jack arm (Fig. 19). Tighten all bolts.

Fig. 20



6. Attach JT Strong Arm stabilizer to the swing bolt and tighten (Fig. 20).



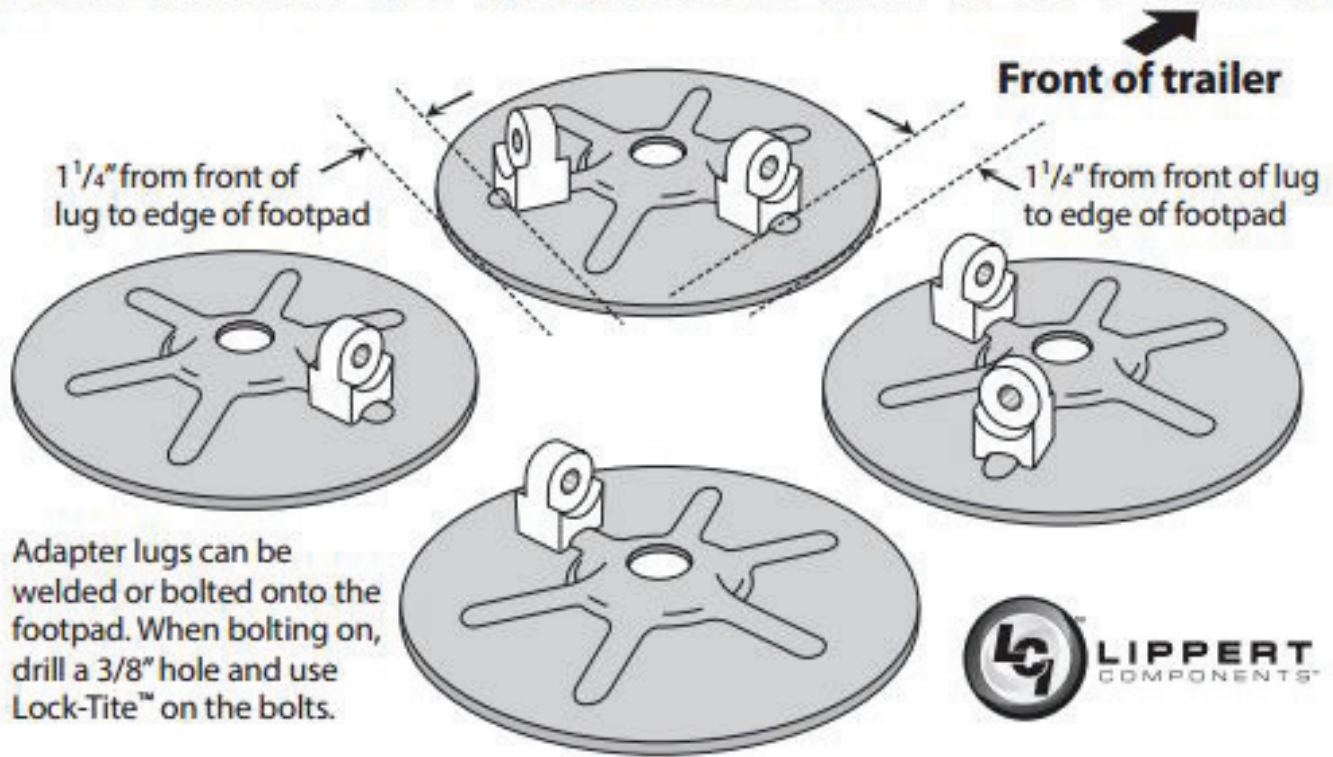
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P/N 314592 - Hydraulic Jack Adapter Lugs (2/pkg)

This optional kit is to be used when installing JT Strong Arm kits to units with hydraulic jacks.

JT Strong Arm WELDING POSITIONS FOR HYDRAULIC JACK ADAPTER LUGS.



For more information on all of our RV enhancement products, visit our web site, lippertcomponents.com