

OWNER'S MANUAL REESE STEADI-FLEX Weight Distributing Kits

PART NUMBERS:

66559: 1,000lb.

66560: 1,200lb.

66561: 1,400lb.

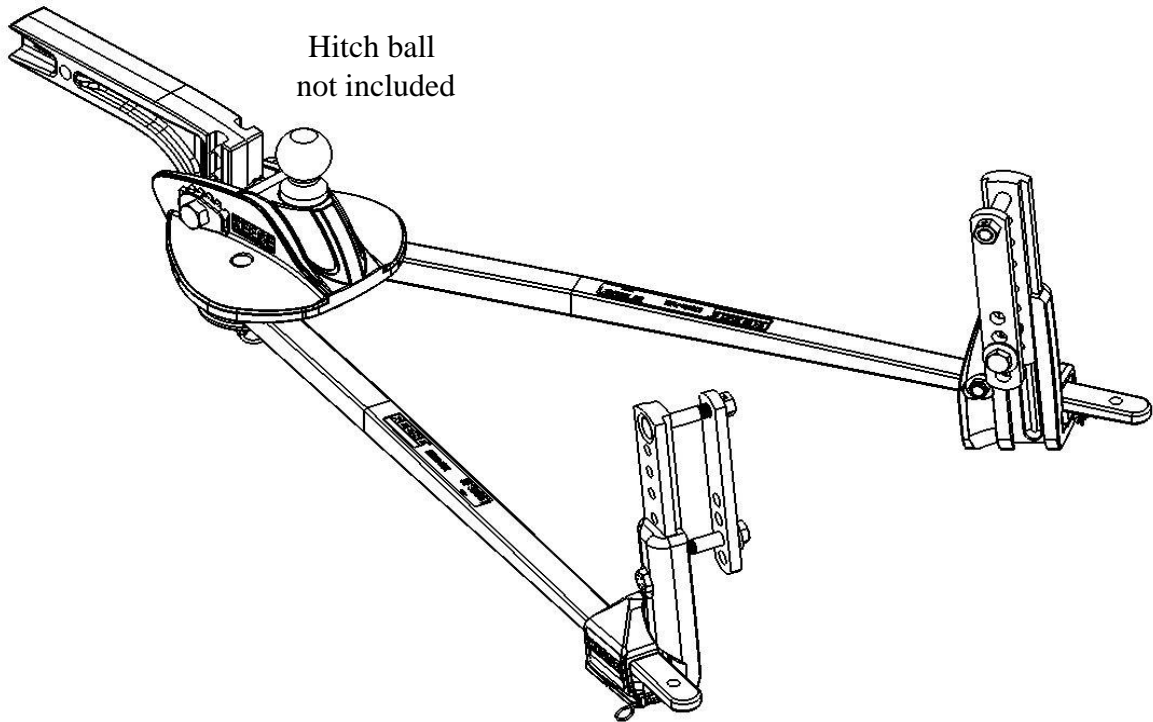


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REQUIRED TOOLS:

- Torque Wrench Capable of 300 ft.-lbs.
- Petroleum Based Lubricant (e.g. WD-40)
- 15/16" Socket and Wrench
- 1-1/8" Socket and Wrench
- Tape Measure
- Pencil
- Flat Head Screw Driver
- Hammer

RECOMMENDED TOOLS

- Torque Wrench Capable of 450 ft.-lbs.
- 1-7/8" Socket
- Safety Gloves



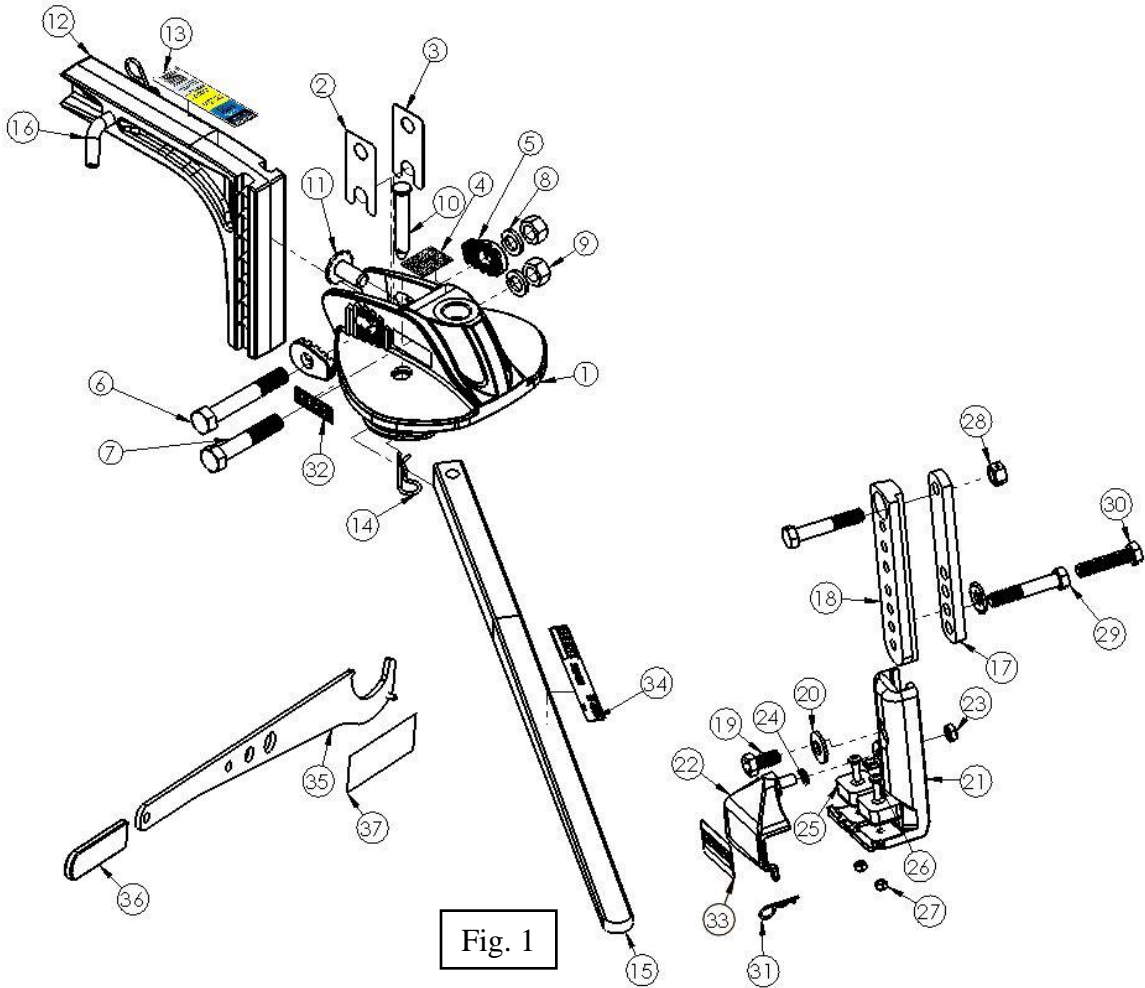


Fig. 1

ITEM NO.	DESCRIPTION	QTY.
1	BALL MOUNT	1
2	19 GA. BALL MOUNT SHIM	1
3	26 GA. BALL MOUNT SHIM	1
4	BALL MOUNT LABEL	1
5	TOOTHED WASHER	2
6	3/4-10X5 HEX BOLT	1
7	3/4-10X4 HEX BOLT	1
8	3/4 LOCK WASHER	2
9	3/4-10 GR5 HEX NUT	2
10	CLEVIS PIN	2
11	HEAD ADJUSTMENT BOLT	1
12	HITCH BAR	1
13	HITCH BAR LABEL	1
14	SPRING CLIP	3
15	1000LB. SPRING BAR 1200LB. SPRING BAR 1400LB. SPRING BAR	2
16	5/8 PULL PIN	1
17	CLAMPING BAR	2
18	T BAR	2
19	5/8-11X1.25 HEX BOLT	2

ITEM NO.	DESCRIPTION	QTY.
20	CONICAL WASHER, 5/8"	4
21	L.H./R.H. ADJUSTABLE BRACKET	1/1
22	L.H./R.H. SPRING BAR COVER	1/1
23	1/2-13 THIN NYLOCK NUT	2
24	1/2 NYLON WASHER	2
25	FRICTION PAD	4
26	5/16-18X1 PAN HEAD SCREW	4
27	5/16-18 NYLOCK NUT	4
28	5/8-11 LOCK NUT	2
29	5/8-11X3.5 GR 5 HEX BOLT	4
30	5/8-11X2.75 GR 5 HEX BOLT	2
31	SMALL SPRING CLIP	2
32	REESE LOGO LABEL 2	2
33	REESE LOGO LABEL 1	2
34	1000 LB. STEADi-FLEX LABEL 1200 LB. STEADi-FLEX LABEL 1400 LB. STEADi-FLEX LABEL	2
35	LIFT HANDLE	1
36	HANDLE GRIP	1
37	HANDLE LABEL	1

GENERAL TRAILERING SAFETY INFORMATION

DO NOT TOW MULTIPLE TRAILERS: Do not attempt to tow any type of trailer behind another trailer. Towing multiple trailers may cause severe instability, loss of control and/or structural failure, and may result in vehicle accident, property damage and personal injury. Towing multiple trailers is illegal in many jurisdictions.

TOWING TIPS:

DRIVING: Good habits for normal driving need extra emphasis when towing. The additional weight affects acceleration and braking, and extra time should be allowed for passing, stopping, and changing lanes. Signal well in advance of a maneuver to let other drivers know your intentions. Severe bumps and badly undulating roads can damage your towing vehicle, hitch, and trailer, and should be negotiated at a slow steady speed. **IF ANY PART OF YOUR TOWING SYSTEM "BOTTOMS" OUT, OR IF YOU SUSPECT DAMAGE MAY HAVE OCCURED IN ANY OTHER WAY, PULL OVER AND MAKE A THOROUGH INSPECTION. CORRECT ANY PROBLEMS BEFORE RESUMING TRAVEL.**

CHECK YOUR EQUIPMENT: Routinely check the condition of all your towing equipment every time you tow, and keep it in top condition.

TRAILER LOADING: Proper trailer loading is important. Heavy items should be placed close to the floor near the trailer axle. The load should be balanced side-to-side and firmly secured to prevent shifting. Tongue weight should be about 10-15 percent of the gross trailer weight for most trailers. Too low a percentage of tongue weight will often produce a tendency to sway. Excess weight on the tongue can also lead to sway and damage hitch and / or tow vehicle.

SWAY CONTROLS: A sway control can help minimize the affects of sudden maneuvers, wind gusts, and buffeting caused by other vehicles. Use of a sway control is recommended for trailers with large surface areas, such as travel trailers.

TIRE INFLATION: Unless specified otherwise by the towing vehicle or trailer manufacturer, tires should be inflated to their maximum recommended pressure.

TOWING VEHICLE AND TRAILER MANUFACTURERS' RECOMMENDATIONS: Review the owners' manuals for your towing vehicle and trailer for specific recommendations, capacities, and requirements.

PASSENGERS IN TRAILERS: Trailers should NOT be occupied while being towed, under any circumstances.

TRAILER LIGHTS, TURN SIGNALS, AND ELECTRIC BRAKES: Always hook up and verify function of the trailer lights, turn signals, electric brakes and break-away switch connection (if so equipped) even for short trips.

REMOVE HITCH WHEN NOT TOWING: Remove hitch from towing vehicle receiver when not towing, to prevent contamination of head sockets, reduce chance of striking hitch on driveway ramps or other objects, and minimize damage in the event of a rear-end collision.

GENERAL WEIGHT DISTRIBUTING SAFETY INFORMATION

WARNINGS: LOADED BALL HEIGHT SHOULD NEVER BE GREATER THAN UNCOUPLED BALL HEIGHT:

Front wheel overload and loss of rear wheel traction can result, and can lead to unstable handling, reduced braking ability, and a tendency to "jackknife" when turning and braking at the same time. **IF LOADED BALL HEIGHT IS GREATER THAN UNCOUPLED HEIGHT, re-adjust head and re-measure until proper height is obtained.**

CHANGE OF VEHICLE AND/OR TRAILER: Moving a weight distributing system from one vehicle/trailer to another requires readjustment to fit new vehicle/trailer properly before using.

DISASSEMBLY: Never disassemble/remove any part of weight distributing system while hitch is under load.

HITCH INFORMATION:

This system is designed to distribute a portion of the trailers tongue weight onto the front axle of the tow vehicle and the trailer axles as well to provide superior resistance to sway. Without a system to distribute this weight, the tow vehicle/trailer set up may be unsafe as the rear axles of the tow vehicle can become overloaded, which makes a sway event more likely. This weight is distributed by loading the spring bars and using leverage to level the tow vehicle and trailer. This same load that is used to distribute the weight of the trailer tongue causes friction between the friction pads and the spring bars. This friction is what allows this system to provide superior sway control. **This system is designed to work with all 4"-7" tall trailer frames with bottom mount couplers. This system works with all 4" tall trailer frames with top mount couplers. For trailer frames 5"-7" tall, with top mount couplers, refer to Technical Bulletin TB17-01 for detailed coupler design fitment information.**

PRE-INSTALLATION:

Tools: Gather all tools listed on the cover sheet and organize them near the installation area. Open the hardware bag and organize the hardware for easy access.

Trailer:

For best results, install this system with the tow vehicle and trailer on level ground in the loaded condition. Failure to do so could result in improper system load, which could reduce the performance.

- Chock the tires and uncouple the trailer to allow the trailer to be stable for installation.
- Verify that the tire pressure is as specified in the trailer owner's manual.
- Lower the trailer jack and raise the trailer so that it is sitting level.

Note: Level can be checked with a level or by confirming that the measurements at the front and rear of the trailer are equal.

- Use a pencil to mark the center of the trailer coupler. This will be used to locate the A-Frame brackets later in the installation.

Tow Vehicle:

- Verify that the tow vehicle, hitch and all hitch components are capable of towing the trailer by referring to the owners manual.
- Inspect the vehicle to ensure that it is in condition to tow.
- Refer to the owners manual for towing recommendations.

Hitch Ball Installation:

- Choose a hitch ball with a rating that meets or exceeds the rating of the kit.

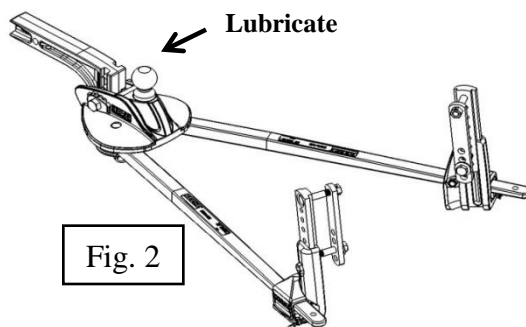
Note: Hitch balls with weight ratings above 1,000 lbs. typically have 1-1/4" shafts, if a 1" shaft is used, a bushing (sold separately) is required for use with this ball mount.

- The hitch ball must be the same size as what is required for the coupler that is on the trailer.
- Install the hitch ball and torque to the manufacturers specified torque, typically 400ft.-lbs for a 1-1/4" hitch ball. A locking feature is required, e.g., a lock washer/nylock nut.

Note: 1-7/8" socket and torque wrench capable of manufacturers specified torque needed for assembly. If needed, your nearest Reese or RV dealer will have tools necessary for hitch ball assembly. A fee may be applicable.

Lubrication:

- Lubricate the hitch ball with automotive grease to prevent unnecessary wear (See Fig. 2)
- Remove excess grease and dirt whenever the trailer is uncoupled.
- Do not lubricate the friction pads



FRAME BRACKET INSTALLATION:

Item No.	Qty.	Description
1	4	Hex Bolt 5/8"-11 x 3-1/2" GR5
2	2	5/8"-11 Lock Nut
3	4	5/8" Conical Washer
4	2	Hex Bolt 5/8"-11 x 1-1/4" GR5
5	2	Hex Bolt (For 1.5" Wide Frames) 5/8"-11 x 2-3/4" GR5

1. Use the tape measure to locate a point between 27"-32" along the A-Frame from the center of the coupler. Mark this location with a pencil on both sides of the A-Frame (See Fig. 3)
2. Insert a 3-1/2" long 5/8" bolt (1) through the large hole in the **T-Bar** and single hole in the **Clamping Bar**.
3. Secure with a 5/8" lock nut (2) and hand tighten.
4. Slide the **T-Bar** and **Clamping Bar** over the frame where the mark is located from step 1. The **T-Bar** must be located on the outside of the A-Frame with the large hole facing outward (See Fig. 4). Allow 1" of clearance on either side of the **T-Bar**.
5. Insert a second 5/8" bolt *from the inside* through a conical washer and the **Clamping Bar** and thread into the **T-Bar**. Use the highest holes not obstructed by the bottom of the frame (See Fig. 4).
Note: 1-1/2" wide frames require the 2-3/4" long 5/8" bolts (5) to fasten the bottom of the T-Bar and Clamping Bar.
6. Snug the 5/8" nuts and confirm that the brackets are installed correctly (See Fig. 5).
7. Repeat steps 1-6 for the other side of the A-Frame.
8. **Snug all 5/8" hardware (do not torque at this time).**

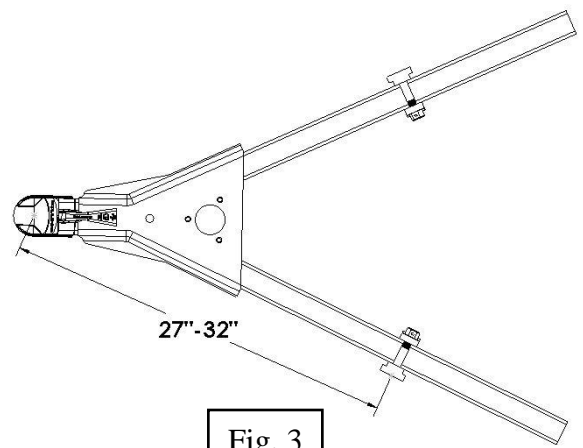


Fig. 3

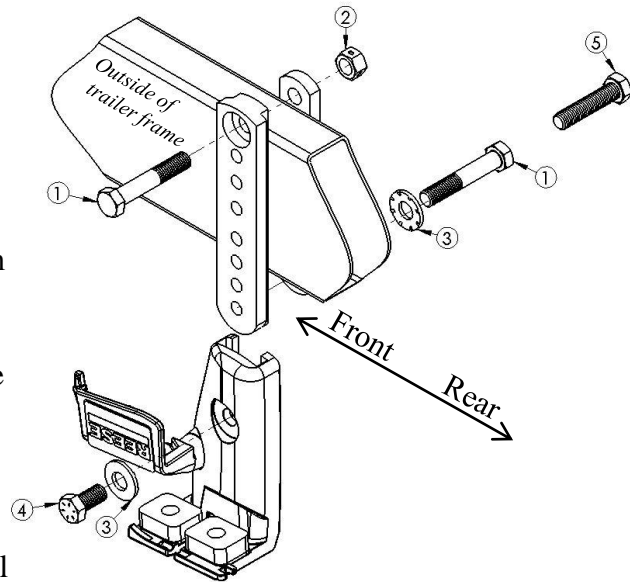


Fig. 4

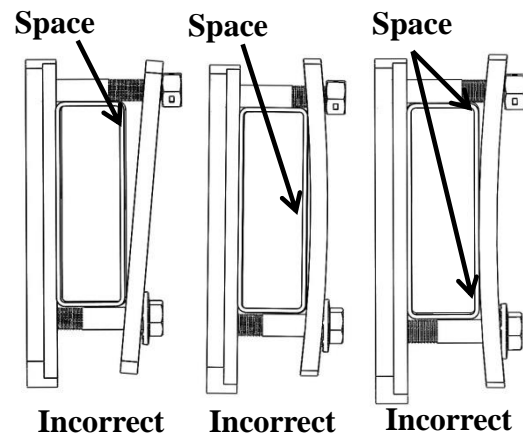
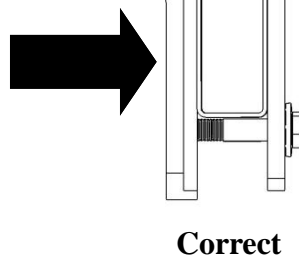


Fig. 5



Correct

9. Slide the **Adjustable Frame Bracket** onto the **T-Bar** to the corresponding height for top/bottom mounted coupler. For top mounted couplers, one threaded hole should be visible above the **Adjustable Frame Bracket**. For bottom mounted couplers, the **Adjustable Frame Bracket** mounting bolt should be fastened one bolt hole below the bottom bolt on the frame bracket (See Fig. 6).

TOP MOUNTED COUPLER

BOTTOM MOUNTED COUPLER

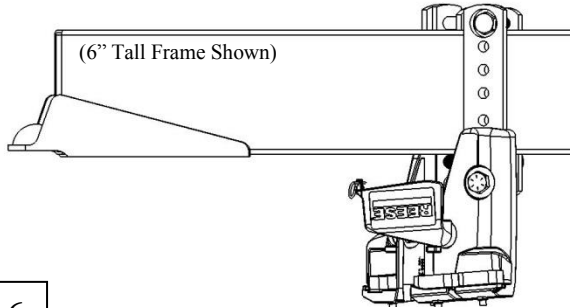
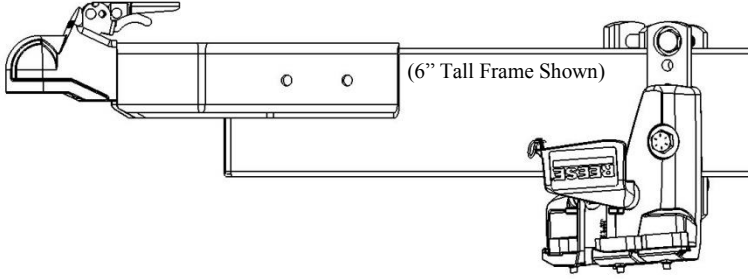


Fig. 6

- 10. Insert the short 5/8" bolt through a conical washer, **Adjustable Frame Bracket** mounting hole and into the **T-Bar**. Hand tighten the bolt. (See Fig. 7)
- 11. Repeat steps 9 and 10 for the other side of the A-Frame.
- 12. Snug all 5/8" hardware (do not torque at this time).

Note: Use this vertical mounting location as a starting point. For system adjustment, see pg. 9

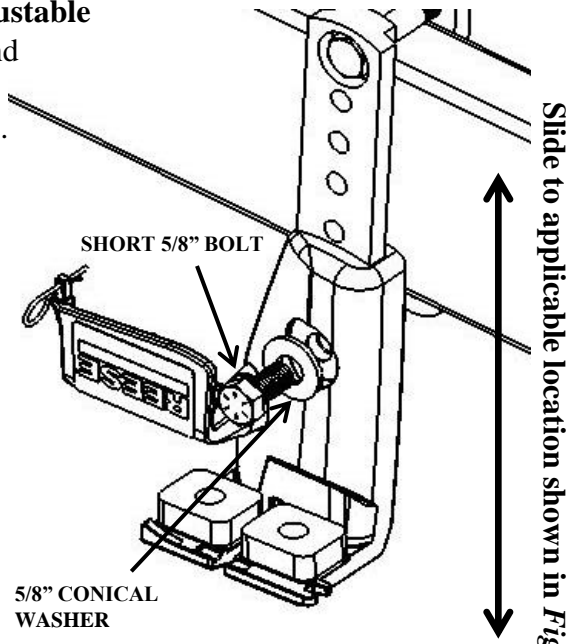


Fig. 7

BALL MOUNT INSTALLATION:

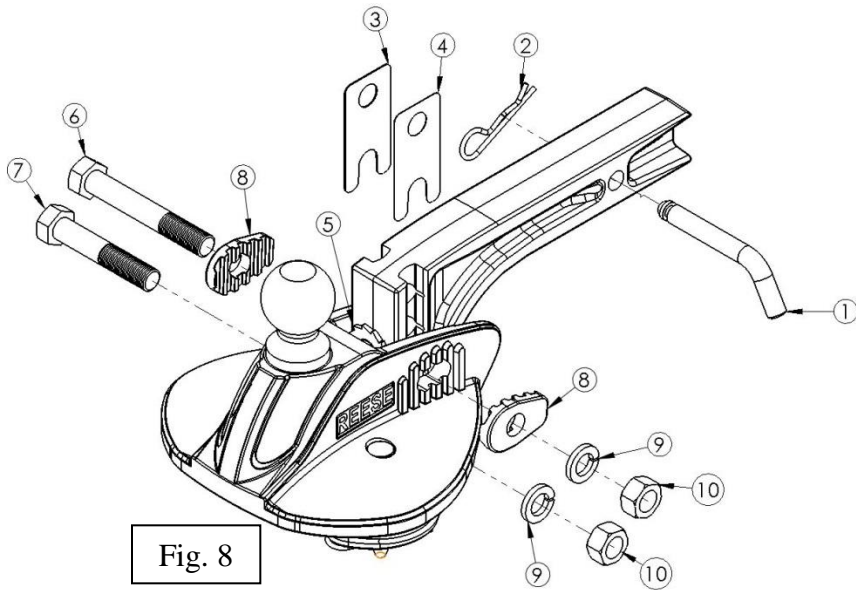


Fig. 8

Item No.	Qty.	Description
1	1	5/8" Pull Pin
2	1	Spring Clip
3	1	Ball Mount Shim
4	1	Thin Ball Mount Shim
5	1	Adjustment Bolt
6	1	Hex Bolt 3/4"-10x5 GR8
7	1	Hex Bolt 3/4"-10x4 GR8
8	2	Toothed Washer
9	2	Lock Washer 3/4"
10	2	Hex Nut 3/4"-10

13. With the trailer level, measure from the top of the coupler to the ground.
14. Install the hitch bar into the tow vehicle's receiver and secure with pull pin and spring clip.
15. Insert the short 3/4" bolt through bottom hole of the ball mount and a hole in the hitch bar that will position the top of the ball 1/2"-1" above the top of the coupler (See Fig. 8 & 8A).
16. Assemble the ball mount using the rest of the hardware
BOTH 3/4" BOLTS ARE REQUIRED.

Note: One or both shims may be required for a tight fit between the ball mount and hitch bar.

13. Set the ball mount angle by aligning the toothed washer with the grooves on the ball mount as shown in Fig. 9 and Fig. 8a.
Note: Use this ball mount angle as a starting point. To adjust the head angle, position the toothed washer in the grooves that will allow the desired head angle. See page 9 for the Adjustment Guide.
14. Torque the 3/4" ball mount bolts to 300 ft.-lbs.
15. Secure the ball mount position by turning the adjustment bolt counter clock-wise with a hammer and flat head screw driver. Once snug, turn an additional 1/4-1/2 turn (See Fig. 10).

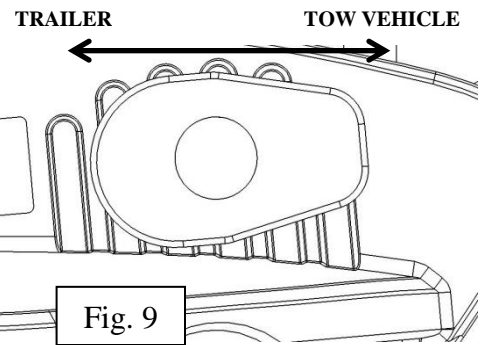


Fig. 9

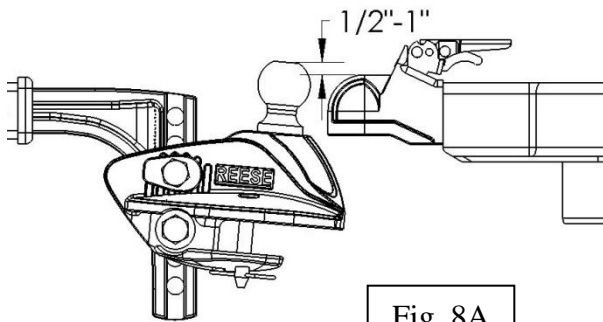


Fig. 8A

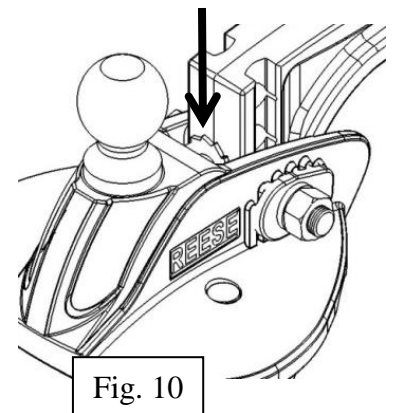
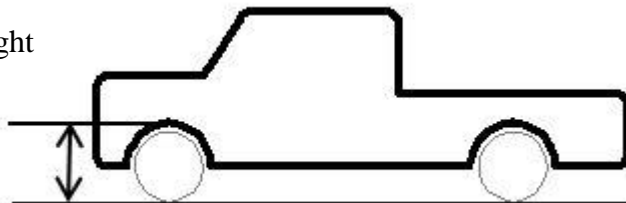


Fig. 10

BEFORE HITCHING: Measure the front wheel well height of the tow vehicle before hitching or installing this weight distributing system. Record this measurement.



FRONT WHEEL WELL HEIGHT BEFORE INSTALLATION: H1= _____

SPRING BAR/FINAL INSTALLATION:

20. Use the trailer jack to lift the trailer coupler above the hitch ball.
21. Back the tow vehicle so that the hitch ball is directly under the trailer coupler.
22. Lower the trailer and attach the trailer to the hitch ball. Lock the coupler before proceeding.
23. Lubricate contact surfaces of spring bar to ball mount (approx. first 7in) with petroleum based lubricant (e.g. WD-40) before initial use.
24. Insert spring bar (**label/taper up, flat side down**) into ball mount and secure with clevis pin and spring clip (see Fig. 11).
25. Swing the spring bar so that it is positioned slightly outboard of the adjustable bracket.
26. Repeat steps 23- 25 for the other side.
27. Extend the trailer jack and raise the front of the trailer and the back of the tow vehicle approx. 4" above level or until the spring bars are clear of the friction pads.
28. Open spring bar cover and use the lift handle to place the spring bars onto the friction pads (See Fig. 12).
29. Remove the lift handle and swing the spring bar cover down over the spring bar. Secure by inserting the spring clip into the hole in spring bar cover.
30. Verify that movement of spring bars will not cause contact with the trailer. There should be at least 4" clearance past the end of the bars.

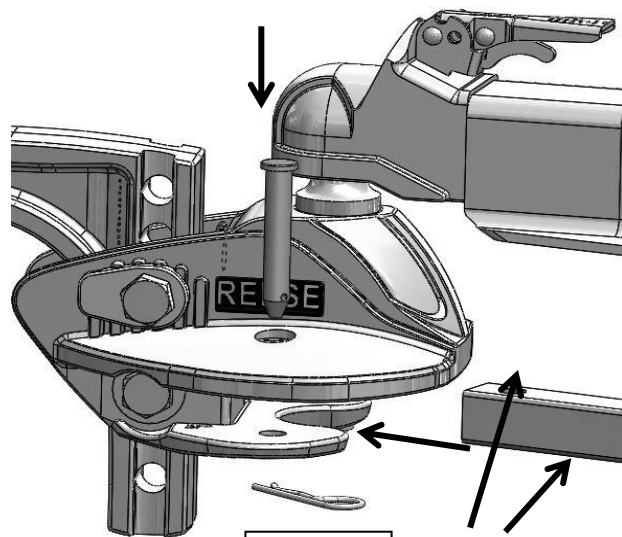


Fig. 11 Lubricate

31. Important! Retract jack, then loosen clamping bar bolts and adjust/angle friction pads to settle flat against spring bars. Once flush, torque all 5/8" nuts and bolts to 130 ft-lbs.

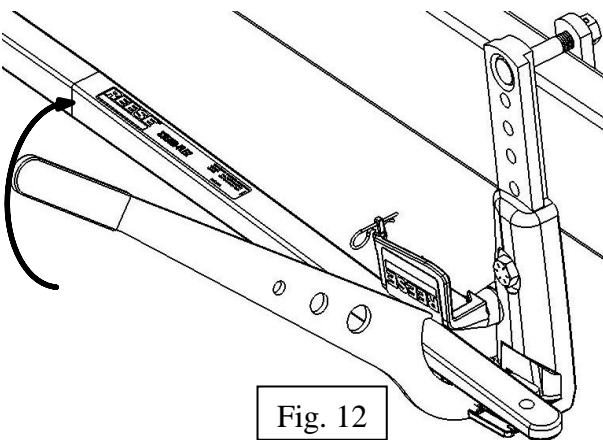


Fig. 12

AFTER HITCHING: Retract the trailer jack and measure the front wheel well height with the weight distributing system installed. Record this measurement.

Note: -H2 should never be less than H1

-H2 should be within 1/2" of H1

FRONT WHEEL WELL HEIGHT AFTER INSTALLATION: H2= _____

SEE PAGE 9 FOR ADJUSTMENT BASED ON H1 & H2 MEASUREMENTS,

UNHITCHING:

1. Place the truck in park and apply the emergency brake.
2. Chock (block) the trailer tires to ensure that the trailer does not roll once it is released from the tow vehicle.
3. Use the jack to lift the nose of the trailer slightly above level to remove the load on the spring bars.
4. Use the lift handle to remove the spring bars from the friction pads and swing the bars outward so they do not interfere with any part of the truck, trailer or WD system.
5. Lower the trailer to unlatch the trailer coupler.
6. Use the trailer jack to lift the trailer high enough so that that top of the ball is below the bottom of the trailer coupler.
7. Remove the clevis pin and spring clips from the ball mount and remove the spring bars.
8. Drive the tow vehicle forward about 4 feet.
9. Remove the hitch bar and ball mount from the tow vehicle receiver.

ADJUSTMENT GUIDE

Issue	Possible Cause	Recommendation
Trailer Sway	Tow capacity exceeded	<u>DO NOT TOW</u> . You must not exceed your tow vehicle manufacturers rating, Hitch or tow system ratings at any time.
	Tongue weight too light	Loaded tongue weight below 10% of the loaded trailer rating can be the cause of trailer sway at speed. Without exceeding trailer manufacturers recommendation or overloading the rear axle of the tow vehicle rearrange weight in the trailer forward to increase tongue weight to 10-15% of gross trailer rating.
	Not enough Weight Distributing	Adjust the A-Frame bracket up one hole or adjust the head angle downward.
	Hitch undersize or deflecting before Spring bars can be fully loaded	Make sure your Hitch rating exceeds your trailer rating and tongue weight rating. If your hitch still bends before your spring bars get to load <u>DO NOT USE</u>
	Incorrect tire pressure	Be sure all tires are filled to tire manufacturers recommendations.
A-Frame bracket moving on frame	Clamping bar under tightened or over tightened.	Review proper clamping instructions on page 5
Trailer tongue too low (<1.5") or H2 greater than H1+1/4"	Initial ball height not set properly	Readjust head height up one hole
	Not enough Weight Distributing	Adjust the A-Frame bracket up one hole or adjust the head angle downward.
	Hitch is undersize or flexing	Replace hitch with the appropriate Reese WD system.
Trailer tongue too high (> 1.5") or H2 is less than H1	Initial ball height not set properly	Readjust head height down one hole
	Too much Weight Distributing	Adjust A-Frame bracket down one hole or adjust the head angle upward.
Severe Noise*	Improperly attached system	Inspect all components and hardware of system to ensure all parts are fastened appropriately. Tighten or replace components/hardware where necessary.
	Extended non-use	System may need to go through break-in phase again. Remove spring bars and apply petroleum based lubricant (e.g. WD-40) to top and bottom surfaces of spring bars only where they contact the ball mount (Approx. first 7 in., not friction pads)

*Due to the friction aspects of the Steadi-Flex system, some noise during use is normal, especially in slow, tight turning maneuvers. During break-in, it is common for noise to be more severe, but will usually subside after system is used a few times.

BEFORE EACH TRIP:

- Check to see that all bolts are properly tightened and hitch pin and clip are securely in place
- Check to see that electrical hookups are in working order, and that safety chains are connected

MAINTENANCE:

- Store this system out of the elements
- Always wear hand protection when handling any part of the weight distributing system.
- Touch up the paint if necessary to prevent rust
 - **Do not paint over the warning labels**
- Keep these areas free of debris
 - Hitch ball (**lubricate each use**)
 - Inside the trailer coupler
 - Spring bar contact surfaces in the ball mount
 - Spring bar contact surfaces on the friction pads
- Lubricate spring bars contact surfaces to ball mount when necessary
 - Severe noise
 - Extended non-use