

THE ORIGINAL

Equal-i-zvi.

SWAY CONTROL HITCH

OWNER'S MANUAL

MADE IN THE U.S.A.



- 90-00-0600 600 lb. max tongue / 6,000 lb. max trailer weight
- ☐ 90-00-1000 1000 lb. max tongue / 10,000 lb. max trailer weight
- 90-00-1200 1200 lb. max tongue / 12,000 lb. max trailer weight
- 90-00-1400 1400 lb. max tongue / 14,000 lb. max trailer weight

A Product of



^{**} Your model # can be found on the stickers on either spring arm. Make a note of it here for future reference **

DEALERS: PLEASE PASS THIS MANUAL ON TO THE END USER AFTER HITCH INSTALLATION.

HITCH OWNER: PLEASE KEEP THIS MANUAL AS A REFERENCE FOR ADJUSTMENT AND MAINTENANCE.

Thank You for your purchase and welcome to the Equal-i-zer® family. We appreciate your business and constantly strive to exceed your expectations.

Read this owner's manual thoroughly to become familiar with proper set-up and maintenance procedures to ensure that your Equal-i-zer® hitch will give you maximum performance and years of service

Congratulations on your purchase of The Original Equal-i-zer® Sway Control Hitch.

Happy Towing,

The Employees of Progress Mfg. Inc.



Installation Steps

Step	Number	P	age
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TOOLS NEEDED FOR INSTALLATION

The following tools will allow you to install the hitch properly.

- 1 1/8" Box End Wrench (Shank Bolts)
- 1 1/8" Socket (Shank Bolts)
- (2) 3/4" wrenches (Link Plate Bolts)
- 5/8" wrench (Angle Set Bolt, Square Head Set Screw)

Measuring Tape

Torque Wrench capable of 320# of torque.

Recommended tools for installing the Hitch Ball:

1 7/8" Thin walled socket

Torque Wrench capable of 430# of torque (or higher if hitch ball manufacturer specifies).

Hitch Head Assembly

1 90-04-9131 3/4" x 5" Grade 8 Bolt 2 2 90-04-9115 3/4" Washer 4 3 90-04-9110 1/2" Hardened Washer 7 4 90-03-9105 Spacer Rivet 7 5 90-04-9120 3/4" Lock Washer 2 6 90-04-9126 3/4" Nut 2 7 90-03-9700 Angle Set Bolt 1 8 90-03-9700 Angle Set Bolt 1 9 90-04-9216 Socket Pin Clip 2	10 00	10 90					DD CA	ממ			* Each pa
	<u>۲</u>	7	4	7	1	2	7	2	1	2	
1 90-04-9131 2 90-04-9115 3 90-04-9110 4 90-03-9105 5 90-04-9126 6 90-04-9126 7 90-03-9212 8 90-03-9710 9 90-04-9216	Cocinoni	3/4" x 5" Grade 8 Bolt	3/4" Washer	1/2" Hardened Washer	Spacer Rivet	3/4" Lock Washer	3/4" Nut	Socket Pin	Angle Set Bolt	Socket Pin Clip	
- 1 1 1 1 4 V 0 L × 0		90-04-9131	90-04-9115	90-04-9110	90-03-9105	90-04-9120	90-04-9126	90-03-9212	90-03-9700	90-04-9216	
	ILCIIIII	1	7	3	4	2	9	7	∞	6	

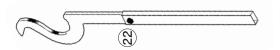
Sway Bracket Assembly

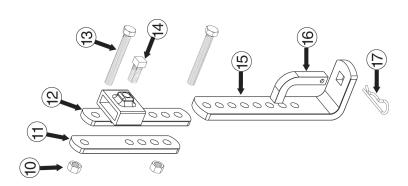
	,	•	
Item#	Item# Mfg. Part #	Description (Oty.
10-17	10-17 95-01-5500	Sway Bracket Kit	
		(entire kit as shown)	
10	90-04-9228	1/2" Nut	4
11	90-02-5200	Inside Link Plate 2	2
12	90-02-5300	Outside Link Plate 2	2
13	90-04-9232	1/2" x 4" Bolt 4	4
14	90-04-9236	5/8" Set Screw 2	2
15	90-02-5100	L-Bracket 2	2
16	90-03-9204	L-Pin 2	2
17	90-04-9208	L-Pin Clip 2	2

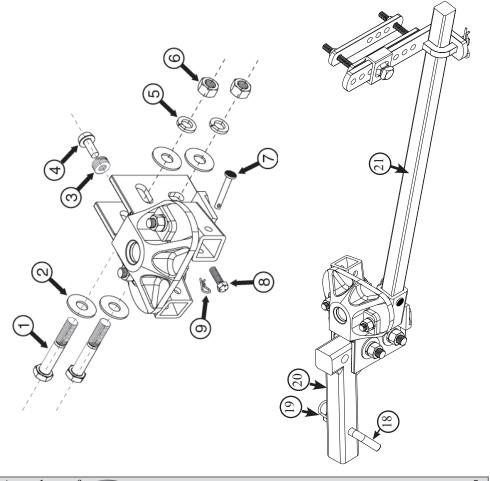
General Assembly

Oty.		1	_	2	1	1	$\overline{}$	
Description	5/8" Hitch Pin	Hitch Pin Clip	Standard Adjustable Shank	Spring Arm*	Snap-Up Lever	Hitch Owners Manual	Warranty Registration Card	
tem# Mfg. Part #	90-03-9220	90-04-9224	90-02-4100	90-02-##99*	8888-00-06	BD001	BD005	
Item#	18	19	20	21	22			

* Each package contains two (2) spring arms. These arms are specifically sized for your hitch head. Spring arms will not function with a hitch head of a different rating.







Cautions and Warnings



CAUTION: Never exceed your hitch's rated tongue weight or gross trailer weight rating. Doing so could cause immediate failure or fatigue resulting in premature failure.



CAUTION: Never exceed your tow vehicle's rated tongue weight or towing capacity when towing your trailer. Doing so could cause loss of vehicle control, excessive vehicle wear, and may void the manufacturer's warranty.



CAUTION: Weight Distribution Hitches, when in use, are in a tensioned state. Never loosen or remove any fastening hardware or pieces of the hitch while it is under load. L-Pins and Clips are acceptable to remove while unhitching.

Exercise caution when hitching and unhitching, and while loading or unloading the spring arms. Keep hands and feet away from pinch points and paths of travel during work on or operation of the hitch.



CAUTION: There are many causes of trailer sway, foreseen and unforeseen. There is no 100% qualitative measurement of trailer-sway, therefore no 100% qualitative method of eliminating trailer sway. All towing configurations are unique

and it is the driver's responsibility to make the necessary adjustments to their driving habits, trailer, tow vehicle, and towing equipment to avoid trailer sway.

A few causes of trailer sway might include, but not be limited to: trailer loading, tire pressure, driving techniques, speed, hard braking, passing vehicles, weather conditions, road conditions, and many others.

USERS MUST EXERCISE CAUTION AT ALL TIMES WHILE TOWING A TRAILER.

SAFETY FIRST: Hitch components are heavy; lift correctly. Seek help if necessary. Avoid pinch points. Do not try to remove spring arms while loaded and under tension. Use standard safety practices when installing and adjusting hitch.



CAUTION: Check and re-check all nuts and bolts on link plates, L-brackets, and hitch head, including the angle set bolt. Make sure hardware is properly tightened before towing your trailer.



CAUTION: Always remember to raise the jack completely and make sure all connections are secure before moving or towing trailer.



CAUTION: THIS PRODUCT IS NOT DESIGNED FOR OFF-ROAD USE



CAUTION: Secure trailer with wheel chocks and set tow vehicle parking brake before installing or adjusting your hitch



CAUTION: Never place the link plate centers farther than 32" from the center of the coupler. Doing so may result in damage to the sway bracket assembly or trailer.

A NOTE ON NOISE:

The Equal-i-zer® hitch's integrated sway control comes from the steel-on-steel friction generated at the connection between the spring arms and the L-brackets and in the hitch head assembly. In some cases this steel-on-steel friction also generates noise. This most commonly occurs during slow, tight turns where the tow vehicle and trailer are in a twist. This noise is normal, and indicates that the hitch is operating correctly. Trailer and tow vehicle loading may also influence hitch noise. Keeping friction surfaces clean and free of dirt and lubricating the hitch head as recommended can minimize the noise produced while towing.

1. SET UP LOCATION:

In order to set up the hitch so that it provides proper weight distribution and sway control, both tow vehicle and trailer need to be parked in line with one another and on flat ground.

- a. Make sure that none of the tow vehicle nor trailer wheels are resting in a dip or on a hill.
- b. Park the tow vehicle about 5 or 6 feet in front of the trailer to allow room to work.
- c. Use the trailer tongue jack to parallel the trailer to the ground. At front and rear of the trailer, use a tape measure from ground to the bottom of the frame to check for parallel in regard to the ground.



SECURE TRAILER AND TOW VEHICLE: Always secure trailer with wheel chocks and set tow vehicle parking brake before setting up or adjusting your hitch.

2. INSTALL THE HITCH BALL:

Remove the hitch head from the packaging and install a properly-sized hitch ball (not included). Ball diameter must match trailer coupler size.

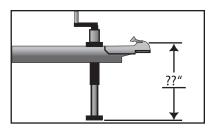
Select a ball with a 1-1/4" diameter threaded shank no longer than 2-3/8". Also make sure that the ball has a weight rating equal to or greater than your trailer's gross vehicle weight rating (GVWR). Always use a lock washer, unless otherwise specified by ball manufacturer. Torque nut to ball manufacturer's specifications.

Official Equal-i-zer® hitch balls are manufactured for a perfect fit and may be purchased from your local RV dealership or online at www.equalizerhitch.com. If another brand of hitch ball is used, make sure that it meets size requirements and meets or exceeds all weight ratings.

Hitch balls require a 1 7/8" thin walled socket for installation. Your nearest authorized Equal-i-zer dealership will have the tools needed and will usually install the hitch ball for a reasonable fee.

3. CALCULATE ADJUSTED HITCH BALL HEIGHT:

To compensate for the normal compression of the tow vehicle suspension introduced by the tongue weight of the trailer, the hitch ball must be set higher than the level trailer coupler height. Use the chart below to make the correct calculations.



Measure from the ground to the top of the trailer coupler, then calculate and add the appropriate amount of rise for the adjusted ball height. An ideal set up should bring the trailer back into level after the hitch is installed and weight distribution is set up correctly.

- Stiff suspensions (3/4 and 1 ton pickup trucks or larger) will sag approximately 1/8" per 100 lbs. of tongue weight applied.
- Average suspensions (1/2 ton pickups or large SUV's) will sag approximately 3/16" per 100 lbs. of tongue weight applied.
- Soft suspensions (cars, mini-vans, or small SUV's) will sag approximately 1/4" per 100 lbs. of tongue weight applied.

For example: Trailer coupler measures 18". Loaded tongue weight is 800 lbs. For installation on a $\frac{3}{4}$ ton pick-up truck, set the ball height to 19" because $\frac{1}{8}$ " X 8 = 1" above coupler height.

Use this table to calculate additional rise needed for hitch ball.		Loaded Tongue Weight in lbs.					
		400	500	600	700	800	900
Stiff	es	1/2	5/8	3/4	7/8	1	1-1/8
Average	Inches	3/4	15/16	1-1/8	1-5/16	1-1/2	1-11/16
Light	in I	1	1-1/4	1-1/2	1-3/4	2	2-1/4
ise			Loaded To	ongue Wei	ght in lbs.		
	al R	1,000	1,100	1,200	1,300	1,400	
Stiff	iona	1-1/4	1-3/8	1-1/2	1-5/8	1-3/4	
Average	Additional Rise	1-7/8	2-1/16	2-1/4	2-7/16	2-5/8	
Light	ď	2-1/2	2-3/4	3	3-1/4	3-1/2	

This chart is intended as a guide and works for most applications. Depending on your tow vehicle and trailer combination, further adjustment may be needed.

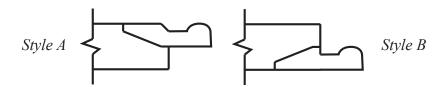
Record your towing configuration here:

	Level Coupler Height:	Adjusted Coupler Height:	
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4. DETERMINING THE INITIAL # OF SPACER WASHERS AND L-BRACKET POSITION:

The hitch head and link plates for the Equal-i-zer® must be set up for your trailer's specific coupler style. These are approximate placements and may be changed later if needed to gain the proper hitch head angle for optimal weight distribution. A range of 4-8 washers can be used to angle the hitch head down. Once these limits have been reached, any further adjustments should be made by moving the L-brackets up or down as needed.

Identify the coupler style that most closely matches that of your trailer



Style A: If your trailer coupler most resembles style "A", start your hitch set up by using 5 spacer washers (item #3) on the spacer rivet (item #4), and setting the L-brackets at the 5th hole from the top (see step 6).



Style B: If your trailer coupler most resembles style "B", start your hitch set up by using 5 spacer washers on the spacer rivet, **inverting the link plates** so that the rectangular tubing is near the bottom of the trailer frame, and setting the L-brackets at the 5th hole from the top (see step 6).



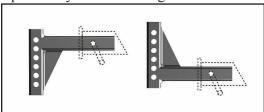
5. TEMPORARILY ATTACH HITCH HEAD TO SHANK:

Once the adjusted hitch ball height has been calculated, temporarily bolt the head to the adjustable shank.

NOTE: If your vehicle is equipped with an automatic leveling system, make sure that the system is disabled or the vehicle is turned off during the install process. Airbags should be deflated to minimum recommended pressure during install. In some vehicles the height adjustment in Step 3 is unnecessary. Check the vehicle owners manual for more information.

Insert the adjustable shank (item #20) into the receiver on the back of the tow vehicle. Do not pin it into place yet. Have someone hold the hitch head with the installed hitch ball so that the bolt channel straddles the adjustable shank and the top of the hitch ball is at the previously calculated height.

In some cases, the shank may need to be turned upward, or a specialty shank may be needed to achieve the correct hitch ball height.

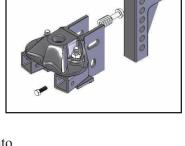


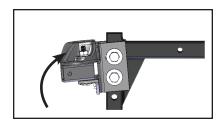
NOTE: Extended bumper guards, pick-up truck "caps," or rear mounted spare tires can limit turning radius unless a longer shank is used. Consult with your dealer to see if a specialty shank is needed for your set-up.

Insert the spacer rivet (item #4) and washers (item #3) into the hitch head between the bolt channel and into the spacer rivet hole just behind the hitch ball.

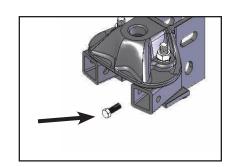
With the hitch head held so that the ball is at the adjusted height, slide the bottom 3/4" bolt (item #1) with washer (item #2) into place through the bottom holes in the shank channel and the closest shank hole. Slide a flat washer into place, followed by a lock washer (item #5) and thread the nut (item #6) onto the end of the bolt spinning it down to rest on the lock washer. At this point the nut should be only finger tight.

Tilt the hitch head upward until the spacer rivet comes into contact with the shank, and insert the 3/4" bolt with washers through the top holes and finger tighten the nut as you did with the bottom bolt.





Use a wrench to tighten the angle set bolt (item # 8) firmly. At this point the head should be held securely in place by the spacer rivets and the angle set bolt, and you should not be able to pivot the hitch head up or down by hand.



Secure the shank with the hitch pin (item # 18) and clip (item # 19).

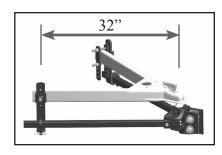
NOTE: The 3/4" shank bolts will be fully tightened at the end of the set-up and adjustment process.

6. INSTALL LINK PLATES:

The link plates (item #11, #12) included with your hitch will fit all standard 3", 4", 5", and 6" trailer frames. Link plates to accommodate up to 8" and 10" frames, and some specialty sized frames, can be purchased from your local RV dealership, or through Progress Mfg. online at: www.equalizerhitch.com

Measure from the center of the coupler back along the trailer frame 32" and mark with a pencil. Repeat for both sides. This is the *center* mark for the link plates.

Check around the inside and bottom of the trailer frame and make sure that there are no gas lines, brake lines, or electrical



wiring that could be affected by the installation of the link plates. If so, make sure these are re-routed or avoided and will not be disrupted or damaged by link plate installation.

Make sure that there is nothing above the frame (i.e. batteries, propane tanks) that will interfere with the height adjustment of the L-bracket. If so, link plates



CAUTION:

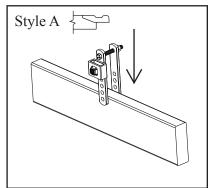
Never place the link plate centers farther than 32" from the center of the coupler. Doing so may result in damage to the sway bracket assembly or trailer.

may be moved forward to a minimum distance of 29" to the center of the L-Bracket from the center of the ball coupler.

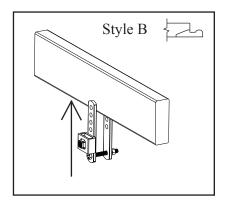
Thread bolt (item # 13) through the single hole of the outside and inside link

plates (item # 11 & 12), and thread nut (item # 10) onto end of bolt a few turns.

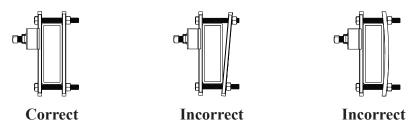
• Coupler Style A: Drop the link plates over the frame so that the L-bracket sleeve is toward the *top* of the frame and *facing outward*. Thread the bottom bolt through the hole on the outside link plate closest to the bottom of the trailer frame. Thread nut onto bottom bolt.



• Coupler Style B: Hold the link plates with the bolt on the bottom and lift the brackets up around the frame. The rectangular tubing should be toward the *bottom* of the frame and *facing outward*. Lift them up until the bottom bolt is tight to the bottom of the frame rail. Thread the top bolt through the hole on the outside link plate closest to the top of the trailer frame. Thread nut onto top bolt.

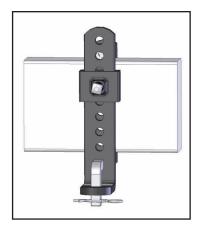


Pinch link plates tight to the trailer frame with one hand so that both inside and outside lay flat against frame. Hand tighten top and bottom nuts evenly so that link plates stay in full contact with the sides of the trailer frame. After both are hand tightened, use a wrench to alternately snug top and bottom nuts and bolts evenly and securely. It is important that both link plates sit flat against the frame rail to prevent the bracket from 'walking' along the frame.



7. INSTALL L-BRACKETS:

Start the 5/8" set screw (item # 14) into the threaded nut on the outside link plate. Slide the L-bracket (item # 15) up through the rectangular tubing sleeve on the outside of the link plate so that the "L" portion of the bracket is facing outward. For both style A and B couplers the initial L-bracket position should be set with the set screw in the 5th hole down from the top.



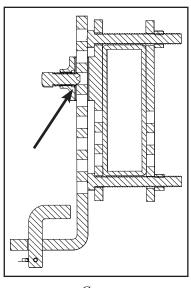


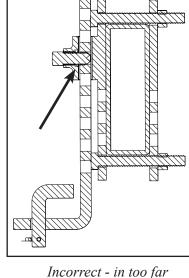
Coupler Style A

Coupler Style B

Tighten the set screw so that the beveled nose of the screw enters into the correct hole on the L-bracket and pushes it back to pin it in place back against the outside link plate and bolt heads.

NOTE: The set screw should only be tightened until it holds the L-bracket snugly in place. Do not over-tighten.

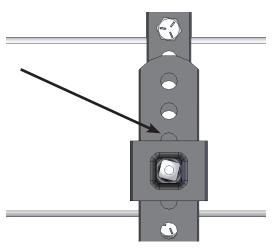




Correct

About 1/2 a hole will be showing just above the rectangular tubing when the L-bracket is positioned correctly.

Each hole in the L-bracket provides nearly the same weight distribution adjustment as does adding or removing one spacer washer from the hitch head. We recommend that all adjustments made during the initial set up of the hitch be done by adding or removing spacer washers on



the spacer rivet until the maximum or minimum number of washers is used. Once those limits are reached, final adjustments can be made by moving the Lbrackets up or down as needed to achieve proper weight distribution.

Final Leveling - Weight Distribution Set-up

Vehicle and trailer should be loaded as they would be for a typical outing while setting up the hitch for proper weight distribution. This should include things like full propane and water tanks on the trailer, fuel in the tow vehicle, and ATV's (toys) loaded into a toy hauler.

8. RECORD INITIAL MEASUREMENTS:

To properly set up the weight distribution capabilities of your Equal-i-zer® hitch, you need to take some preliminary measurements and compare them to measurements at the same locations after the spring arms are tensioned. This will determine if any adjustments to the hitch set up are needed to gain proper weight distribution.

Measure from the ground, through the center line of the wheel, to the fender (see graphic on page 18). With tow vehicle alone (no trailer) measure both the front and back axle and record on page 18 line A.

9. COUPLE TOW VEHICLE AND TRAILER:

Extend the tongue jack and back the tow vehicle under the coupler. Lower the trailer and engage and lock the coupler so that tow vehicle and trailer are securely coupled together. Re-set parking brake and check wheel chocks. Take another set of measurements now and record on page 18 line B

10. INSERT SPRING ARMS:

The Equal-i-zer® spring arms are capable of being used in either side of the hitch head. Simply place the end of the bar with the notch and hole into the hitch head socket and pin into place.

NOTE: The spring arms for the Equal-i-zer® 90-00-1400 model are notched off center. If the spring arm is difficult to insert try the opposite side of the hitch head. The label should face out.

11. TENSION SPRING ARMS:

The easiest way to move the spring arms into place and tension them is to use the trailer tongue jack. Ensure the tow vehicle and trailer are connected and the coupler is securely latched. Extend the tongue jack down and raise the tow vehicle and trailer as far as necessary (approximately 4" - 8") to be able to swivel the spring arms into place over the L-brackets. A stable block may be used under the foot of the jack to gain more height if needed.

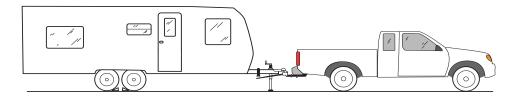
The snap-up lever (item # 22) supplied with your hitch can be used to lift the spring arms onto the L-brackets if needed. This is especially useful when you have extended the trailer jack and are still not able to move the bars into place; or when the trailer and tow vehicle are parked unevenly where one bar will move into place, but the other is still too low.



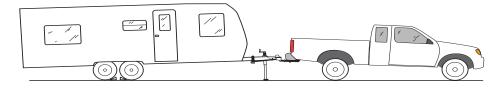
Pin the spring arms into place with the L-pin and clip (item # 16 & 17). Retract the tongue jack slowly until the jack foot comes off the ground slightly and all trailer weight is resting on the tow vehicle. Check weight distribution set-up (Step 12).

UNHITCHING THE TRAILER

To <u>unhitch</u> the trailer, simply follow Step 11 in reverse. Extend the trailer jack to raise the coupled trailer and tow vehicle and take the weight off of the spring arms. Remove the L-Pins and swing the arms away from the L-brackets. Retract the jack until the trailer is resting fully on the hitch and you are able to unlock the coupler. Extend jack again to lift coupler off the hitch ball.



Coupled with sway arms hanging below bracket.



Jack used to raise vehicles and swing arms into place over brackets.

NOTE: Lubricating the joint between the spring arm and L-bracket is optional. Maximum sway control is achieved with a bare metal to metal connection at this joint.

RECORD MEASUREMENTS HERE:

Measure from ground to fender through the center-line of the axle.

Rear Fender



A: Tow Vehicle (TV) Alone: _____Inches ____Inches

B: TV with Trailer on ball no WD: _____Inches ____Inches
(Rear fender will drop and front fender will rise compared to A. [WD=weight distribution])

C: TV With Trailer and WD: _____Inches _____Inches

(Front fender should be at or below original height A, rear fender should be below original height A, and have raised from the loaded height in B [WD=weight distribution]).

12. CHECK WEIGHT DISTRIBUTION SET-UP:

The concept behind weight distribution is that the spring arms are used as a lever to lift the rear of the tow vehicle and force the front suspension to carry more of the load, similar to lifting the arms of a wheelbarrow to carry the weight over the front wheel. Keeping this in mind will make setting up the weight distribution characteristics of the Equal-i-zer® hitch easier to visualize.

When set up correctly, the Equal-i-zer® hitch will lift the tow vehicle and trailer at the coupler, moving some of this weight forward to the front suspension of the tow vehicle and backward to the trailer suspension.

To check the weight distribution set-up, re-measure the tow vehicle at the same reference points and record them at the bottom of the page on line (C).

In an ideal set-up, the front fender of the tow vehicle will settle (C) to about the same measurement or below when the vehicle was resting without a trailer.(A) The coupler or rear fender (C) will should settle higher than it did without weight distribution (B) but not higher than the tow vehicle alone (A).

The next 3 pages will discuss Ideal, Under, and Over adjustment and the actions to take for each situation.

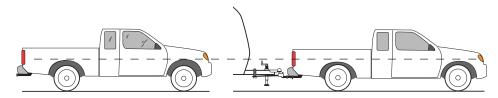
IDEAL ADJUSTMENT:

There is no way to call any one setup correct as weights are constantly changing (gas tank full/empty, water tanks, packing habits). The most ideal assumption of correct weight distribution setup is to follow the rule that weight distribution is achieved when fender height measurement (C) approaches original fender height (A)

The rear of the tow vehicle will not often return to its original height measurement. This is normal as most tow vehicles are engineered to handle a payload in the rear. At this point, the additional height calculated into the hitch head placement should compensate for the compression in the rear of the tow vehicle and should allow the trailer to rest parallel to the ground. If proper weight distribution is achieved and the trailer is still significantly out of level you may need to change the height of the hitch head. To do so:

- i. Unhitch the trailer from the tow vehicle.
- ii. Loosen the angle set bolt,
- iii. Remove the 3/4" bolts and slide the hitch head up or down the shank as needed.
- iv. Then reinsert the 3/4" shank bolts, and re-tighten the angle set bolt. **Do not** change the number of spacer washers or the L-bracket position.
- v. Re-couple the trailer and move the spring bars into position (steps 9-11).

Check the measurements again at your reference points using the chart on page 18 to make sure you still have a correct weight distribution set up. Go on to step 13.



<u>Figure 2</u> - If the front fender settles to near the same as the original measurements, and the rear end rises from compressed state; vehicle is correctly adjusted.

UNDER-ADJUSTMENT:

With the spring arms in place on the L-Brackets, if the front end does not compress from measurement (B) or begin to approach original tow vehicle measurement (A), you are under adjusted. In this case you need to add more downward pitch to the hitch assembly, or raise the L-brackets, as outlined below.

These steps apply to any towing configuration that is experiencing sway.

To correct under-adjustment:

- i. Extend the tongue jack and raise the weight off of the spring arms.
- ii. Remove the spring arms from the hitch head, uncouple the trailer and pull the tow vehicle forward again.
- iii. Loosen the angle set bolt, remove hitch head from shank, and add one washer to the spacer rivet. (The spacer rivet will usually hold 7-8 washers, depending on the washer used)
- iv. Re-tighten the angle set bolt, re-couple the trailer, re-install the spring arms, seat them on the L-brackets and pin them into place.
- v. Retract the tongue jack again so that it clears the ground, and re-measure at your reference points.
- vi. Repeat as necessary to achieve correct weight distribution.

If you have as many spacer washers that can fit on the spacer rivet and still not enough weight is being transferred forward you should now begin raising the L-bracket position one hole at a time, re-coupling the trailer, and re-checking the measurements until correct weight distribution is achieved. Go on to step 13.

NOTE: If the front of the tow vehicle *raises* more than one inch when the trailer is coupled and the spring bars are tensioned (see *figure 1*), you are *not* transferring enough weight forward and the set-up is under-adjusted. Follow the correct procedure to add more spacer washers or raise the L-bracket as necessary.

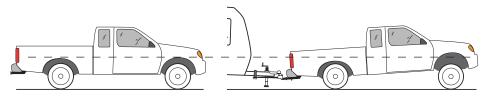


Figure 1 - Front end does not compress or rear does not rise; hitch is

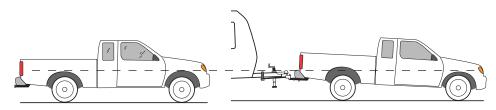
OVER-ADJUSTMENT: (Rare)

Over adjustment is indicated in the rear axle measurements. If the rear axle after adjustment (C) measures at a higher measurement than the original height (A) you have un-weighted the rear end of the tow vehicle. This is an incorrect setup. This can cause a loss of traction at the rear of the vehicle, and is a jack-knife hazard, especially when driving in wet or slippery road conditions.

To correct over-adjustment:

- i. Extend the tongue jack and raise the weight off of the spring arms.
- ii. Remove the spring arms from the hitch head, uncouple the trailer and pull the tow vehicle forward again.
- iii. Loosen the angle set bolt and remove one washer from the spacer rivet (minimum of 4 washers may be used).
- iv. Re-tighten the angle set bolt, re-couple the trailer, re-install the spring arms, seat them on the L-brackets and pin them into place.
- v. Retract the tongue jack again so that it clears the ground, and remeasure at your reference points.

If you have reached the minimum of 4 spacer washers and still too much weight is being transferred forward, you should now begin lowering the L-bracket position one hole at a time, re-coupling the trailer, and re-checking the measurements until correct weight distribution is achieved. Go on to step 13.



<u>Figure 3</u> - If the rear fender rises above the original measurement, the hitch is over adjusted.

13. FINAL TIGHTENING:

Once you have achieved the correct weight distribution set-up, the angle set bolt and the 3/4" bolts that hold the hitch head to the adjustable shank should be tightened securely. This should be done while the hitch is attached and distributing weight to take any play out of the assembly.

First, tighten the angle set bolt securely and then tighten the 3/4" shank bolts with a torque wrench to 320 ft/lbs of torque. DO NOT over-tighten these bolts.

THE ANGLE SET BOLT MUST BE TIGHT.



CAUTION: Check and re-check all nuts and bolts on link plates, L-brackets, and hitch head (including angle set bolt) and make sure they are properly tightened before towing trailer.



CAUTION: Always remember to retract the jack completely and make sure all connections are secure before moving or towing trailer.



CAUTION: Always make sure the coupler is fully engaged around ball and latched securely to ball before moving or towing trailer.

14. RE-ADJUSTMENTS WHEN NECESSARY:

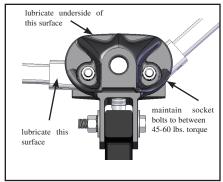
Before each trip, check your set up. Doing so will ensure that you are getting the best performance possible from The Original Equal-i-zer® Sway Control Hitch with 4-Point Sway ControlTM.

In some cases slight re-adjustments to the weight distribution may be necessary. For example, if you planned on traveling with your toy hauler without ATV's (toys) the tongue weight applied to your tow vehicle would change significantly. The number of spacer washers may need to be changed, or the L-brackets may need to be repositioned in order to properly compensate for this new tongue weight.

TROUBLE SHOOTING							
Problem	Cause	Correction					
Trailer Sway	Not enough Weight Distributed.	Raise L-Brackets or add spacer washers to the spacer rivet.					
Remember, trailer sway is not caused by the hitch assembly.	Socket Bolts Loose	Tighten to at least 45ft-lbs torque.					
It is caused by the trailer configuration or outside forces. If you are unsure what may be causing your sway issues, contact your dealer or a hitch specialist for assistance.	Light Tongue Weight	Assure trailer tongue weight is between 10-15% of Gross Trailer Weight. Try repositioning load in trailer					
Tow Vehicle High in the Front.	Not enough Weight Distributed.	Raise L-Brackets or add spacer washers to the spacer rivet.					
Hitch Noise	Dirty Hitch	Clean the underside of the hitch head and re-lube.					
	Hitch Break In	Some noise is normal during hitch break in and will normally subside after some time.					
	Some noise is normal.	This is a general consequence of positive sway control and the moving parts of the hitch.					
Front end feels "floaty"	Not enough Weight Distributed.	Raise L-Brackets or add spacer washers to the spacer rivet.					
Metal Shavings	Hitch Break In	Some metal shavings are normal during the break-in period of the hitch.					
	Dirty or Un-Lubed Hitch	Clean and Re-Lubricate the hitch.					
Trailer is low or high in the front.	Improper hitch height	Adjust the hitch height on the shank. If necessary use shank with more rise or drop.					
Shifting or Moving Link Plates	Bent link plate	Turn inside link plate around so bend faces inward creating a more positive contact.					
	Mounted too far back	Check to insure that link plate center is not further than 32" from center of the coupler.					

RECOMMENDED MAINTENANCE:

- a. Lubricate top outside surface of arm socket and bottom surface of hitch head with Equal-i-zer High Performance Lube. (mfg. part # 91-00-4250) Keep this area clean and lubricated. Some wear is normal as sockets 'seat in'. Irregular wear in this area may indicate overload or inadequate lubrication.
- b. Maintain the socket bolts tight to between 45-60 ft.lbs. torque.
- Keep the hitch clean and free of dirt and road grit.
- d. Paint as needed to prevent rust.
- e. Lubrication between the L-Bracket (item #15) and the spring arm is optional.



Lubricating the Equal-i-zer L-Bracket will likely lessen or decrease your sway control by a small degree.

CUSTOMER SERVICE:

For customer service, replacement parts, and accessories, we recommend that you use a local dealership that is familiar with our products whenever possible. If at any time you need customer service or support and are unable to reach a dealership, please call our toll free customer support line:

(800) 478-5578

or visit us online at

http://www.equalizerhitch.com

or send us an e-mail at

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Warranty Information

Limited Lifetime Warranty: Progress MFG, Inc. warrants its products against defects in materials and workmanship under normal use and service, ordinary wear and tear is excepted, from the first date of purchase at retail for the ownership life of the original purchaser. If any of these products are defective they will be replaced or repaired when a proper return authorization is obtained and the product is returned with transportation charges prepaid to the Progress MFG, Inc. manufacturing plant. Progress MFG, Inc. shall not be required to replace or repair any products damaged as a result of improper installation, alteration or unreasonable use including loading the product beyond the factory rated load capacity. This warranty does not include labor charges nor does it include transportation charges for returning the product to the customer. To the extent allowed by law, Progress MFG, Inc. shall not be liable for any incidental or consequential damages or breach of any implied warranty of any Equal-i-zer product.



CAUTION: Weight Distribution Hitches, when in use, present a large amount of force. Never loosen or remove any fastening hardware or pieces of the hitch while it is under load.

L-Pins and Clips are acceptable to remove while unhitching. Exercise caution when hitching and unhitching, and while loading or unloading the spring arms. Keep hands and feet away from pinch points and paths of travel during work on or operation of the hitch.



CAUTION: There are many causes of trailer sway, foreseen and unforeseen. There is no 100% qualitative measurement of trailer-sway therefore no 100% qualitative method of eliminating trailer sway. All towing configurations are unique

and it is the drivers responsibility to make the necessary adjustments to their driving habits, trailer, tow vehicle, and towing equipment to avoid trailer sway.

A few causes of trailer sway might include, but not be limited to: trailer loading, tire pressure, driving techniques, speed, hard braking, passing vehicles, weather conditions, road conditions, and many others.

USERS MUST EXERCISE CAUTION WHILE TOWING A TRAILER.

Progress Mfg. Products and Accessories



Pins & Clips

OEM replacement pins and clips come in a convenient clamshell package making it easy to keep an extra on hand just in case.

Parts available include: L-pins, Socket pins, hitch pins, and clips.

High Performance Lubricant

Easy application tube lets you put just the right amount of lubricant right where you need it without making a mess. Great for the hitch ball and lots of other applications.



Equal-i-zer® Hitch Balls

Beautiful chrome plated forged chromoly steel hitch balls are sized to fit The Original Equal-i-zer® hitches perfectly. Available in 8K, 10K, 12K and 14K lb. weight capacities.

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