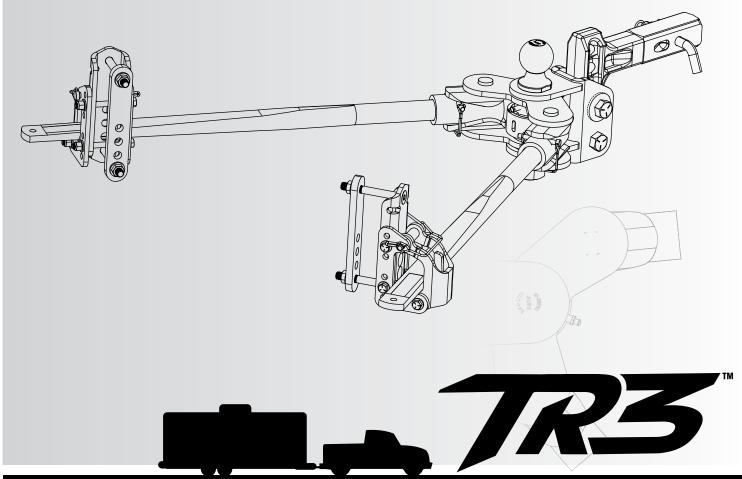


## WEIGHT DISTRIBUTING HITCH SYSTEM



## Rating when used as a weight distributing hitch with spring bars:

Part Number	Max Tongue Weight	Max Gross Trailer Weight
48903 <b>400 lb Hitch</b>	600 lb	6,000 lb
48901 <b>600 lb Hitch</b>	800 lb	8,000 lb
48904 <b>800 lb Hitch</b>	1,000 lb	10,000 lb
48900 <b>1,000 lb Hitch</b>	1,200 lb	12,000 lb
48902 <b>1,200 lb Hitch</b>	1,500 lb	15,000 lb

**CAUTION:** The tongue weight rating of the spring bars represents the capacity of a pair of bars, not an individual bar. Always use a pair of spring bars and be sure they are of the same weight rating.

**Dealer / Installer:** Be sure customer receives installation instructions after hitch has been installed.

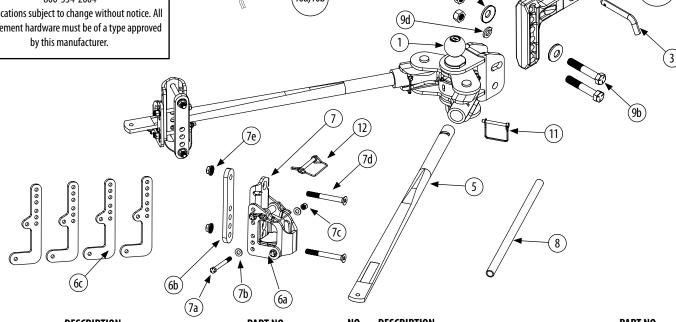
Do NOT exceed the towing vehicle manufacturer's load rating.
READ ALL INSTRUCTIONS AND CHECK PACKAGE CONTENTS BEFORE BEGINNING INSTALLATION



## **INSTALLATION INSTRUCTIONS PARTS LIST**

#### TOLL FREE SERVICE NUMBER 800-334-2004

Specifications subject to change without notice. All replacement hardware must be of a type approved



NO.	DESCRIPTION	PART NO.		
1.	BALL MOUNT ASSEMBLY	48905		
	400, 600, 800, 1,000-1,200			
2a.	ADJUSTABLE 2" SQUARE SHANK HI-LOW			
	12" length (Included)	48650		
	14" length	48121		
	16" length	48122		
	18" length	48123		
2b.	ADJUSTABLE 2" SQUARE SHANK EXTRA HI-LOW (Additional 3.25" drop/rise)			
	12" length	48653		
	14" length	48131		
	16" length	48133		
2c.	ADJUSTABLE 2'' SQUARE SHANK EXTRA LOW			
	12" length 9" Drop	48132		
2d.	ADJUSTABLE 2.5" SQUARE SHANK			
	12" length	48651		
	ADJUSTABLE 2.5" SQUARE SHANK EXTRA HI-LOW (Additional 3.25" drop/rise)			
	12" length	48652		
	ADJUSTABLE 3" SQUARE SHANK EXTRA HI-LOW (Additional 3.25" drop/rise)			
	12" length	48654		
3.	HITCH PIN	48021		
4.	SPRING CLIPS (PAIR)	48028		
5.	SPRING BAR, TR3 - (Set of 2)			
	400 lb rating	48920		
	600 lb rating	48921		
	800 lb rating	48924		
	1,000 lb rating	48922		

1,200 lb rating

NO.	DESCRIPTION	PART NO.
6.	HOOK-UP HANGER KIT (Included)	48926
	a. hook-up bracket	
	b. hook-up back strap	
	c. bottom mount coupler side straps	
7.	BOLT PACKAGE - HOOK-UP, <b>TR3</b>	48925
	a. (3) each bolt 3/8"-16 x 4"	
	b. (6) each flat washer - 3/8"	
	c. (3) each nylon insert locknut 3/8"-16	
	d. (4) each flat head socket cap screw 1/2"-13 x 4-1/2"	
	e. (4) each serrated flange nut 1/2"-13	
8.	LEVER BAR	48031
9.	BOLT PACKAGE - TR3	48928
	a. (2) each nut, 3/4"-10 hex	
	b. (2) each bolt 3/4"-10 x 4-1/2"	
	c. (2) each lockwasher, 51mm O.D. sawtooth	
	d. (1) each split lock washer, heavy duty	
10a.	WRENCH, ALLEN, 8MM	48745
10b.	WRENCH, ALLEN, 10MM	48758
11.	8mm WIRELOCK PIN	48929
12.	10mm WIRFLOCK PIN	48935



48923

2a, 2b,

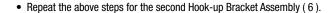
2c, 2d

## **HOOK-UP BRACKETS**



The Eaz-Lift TR3 can be installed on top-mount or bottom-mount coupler style trailers (See Fig.1). The included Hook-up Bracket Assemblies (6) are preassembled in the top-mount coupler configuration. If a bottom-mount coupler configuration is needed, the Side Straps can be exchanged with the included Bottom Mount Side Straps (6c) as instructed below.

- Prior to installing on the trailer frame, remove the Quick Release Pin and the three 3/8"-16 X 4" Hex Head Bolts (7a), 3/8" Flat washers (7b), and 3/8"-16 Lock Nuts (7c) from the Hook-up Bracket Assembly (See Fig.2).
- Remove the Side Straps and rotate the Hook-up Bracket 180 degrees (See Fig.3).
- Re-assemble using the same three 3/8"-16 X 4" Hex Head Bolts (7a), 3/8" Flat washers (7b), 3/8"-16 Lock Nuts (7c), and included Bottom Mount Side Straps (6c) as shown (See Fig.4,5).
- Torque the two 3/8"-16 X 4" Hex Head Bolts (7a) installed through the Hook-up Bracket to 25 ft lb. The third 3/8"-16 X 4" Hex Head Bolt (7a) installed through the Lift Bracket should be tightened to minimize clearance. Over tightening can prevent it from rotating properly (See Fig.5).

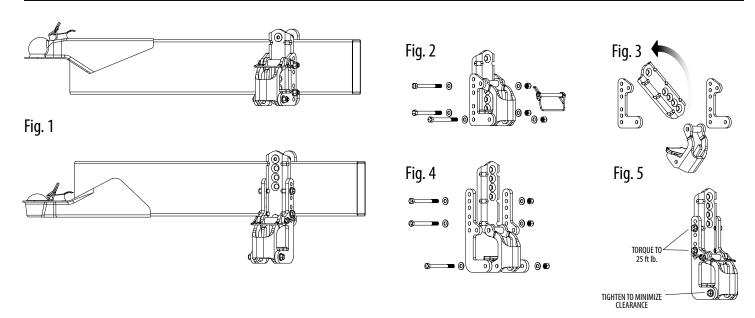


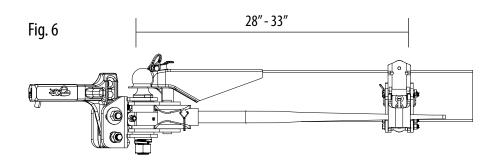


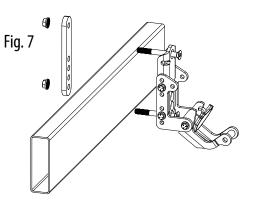
The recommended Hook-up Bracket Assembly centerline location is 32" from the center of the coupler ball socket. This location can be adjusted from 28"-33" along the trailer frame to avoid interference with any items such as battery boxes or propane tanks (See Fig.6).



Once the correct location is determined, place the Hook-up Bracket Assembly on the trailer frame at the pre-determined location and install the supplied  $\frac{1}{2}$ "-13 X 4  $\frac{1}{2}$ " Flat Head Screws (7d) into the corresponding holes of the Hook-up Bracket Assembly determined by the height of the trailer frame. Place the Hook-up Strap on the opposing side of the trailer frame and align the corresponding holes with the  $\frac{1}{2}$ "-13 X 4  $\frac{1}{2}$ " Flat Head Screws (7d). Install the supplied  $\frac{1}{2}$ "-13 Serrated Flange Nuts (7e) and tighten to secure the Hook-up Bracket Assembly to the trailer frame. Tighten the nuts in an alternating pattern to ensure the Hook-up Bracket Assembly and Hook-up Strap are squarely clamped on the trailer frame (See Fig.7).







### **BALL MOUNT**

WARNING: By towing a trailer you change the handling characteristics of the tow vehicle. Conditions you may encounter can cause sudden trailer sway. When used properly, the Eaz-Lift TR3 Weight Distributing Hitch with Sway Control dampens and reduces trailer sway and by distributing trailer tongue weight reduces unsafe towing vehicle handling. IMPORTANT: Short wheel base vehicles may induce sway when towing a trailer. USE EXTREME CAUTION.

D

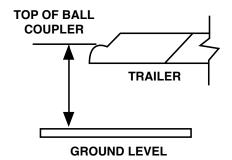
The height of the ball must be determined before any assembly work can begin. The TR3 hitch comes supplied with a pre-installed hitch ball. To measure ball height, measure trailer from ground level to top of ball coupler. Be sure trailer is parallel to ground.

For all tow vehicles add approximately 1/8" for each 100 lb tongue weight. This will compensate for vehicle "squat."

EXAMPLE: If measured top of coupler height is 17" and trailer tongue weight (weight coupler would impose on ball) is 600 lb (6 x 1/8", = 3/4"). Therefore, 17"+ 3/4"= 17-3/4" hitch setting height (to top of ball; assembled.)

2

After ball height has been determined: write down the ascertained height. Slide shank into sleeve receiver; insert hitch pin (48021) and spring clip (42028). Slide ball mount up or down shank (shank may be used in the up or down position) until nearest dimension is obtained and holes line up with shank. Insert bolt (9b) lock washer (9c), and nut (9a) in bottom hole, do not tighten (rest hitch head).

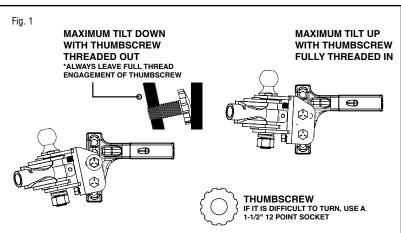


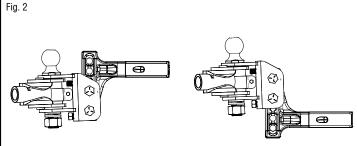
To determine whether or not a particular tow vehicle and trailer combination is suitable, you should always refer to the driver's manual or user's manual provided by the vehicle and trailer manufacturers and seek the recommendations and advice of the trailer dealer.

The United States Department of Transportation, the American Automobile Association, and various recreational vehicle associations and RV magazines also offer good advice on trailer towing practices.



Thumbscrew (48037) is supplied in order to gain correct downward angle of spring bars. The thumbscrew is threaded into the 5/8" threaded hole in the "U" on ball mount. Begin with the top plate of the ball mount level with the ground as a starting point to determine spring bar angle. The spring bar angle will determine the weight distributing load transferred to the ballmount. Depending on angle or slope of bars that must be achieved, thread thumbscrew to the position necessary to establish correct angle for proper distribution of the tongue weight. (See Fig. 1, 2, and 3 below.) Angling the spring bars down will produce more preload on the spring bars, thus distributing more of the tongue weight to the front axle of the tow vehicle. Conversely, angling the spring bars upward away from the ground will reduce the spring bar preload resulting in less of the tongue weight distributed to the front axle of the tow vehicle. The proper spring bar angle is achieved when both the tow vehicle and trailer are level with the ground. Applying excessive spring bar preload will result in an unbalanced load on the tow vehicle axles by distributing too much of the tongue weight to the front axle. Applying an insufficient amount of spring bar preload will result in an unbalanced load on the tow vehicle axles by applying too much of the tongue weight to the rear axle. Use thumbscrew and jack screw to temporarily secure ball mount while determining spring bar angle.

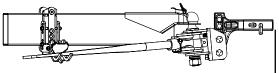




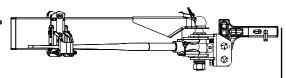
BOLT-TOGETHER BALL MOUNT HAS 7-3/4" ADJUSTMENT, EACH ADJUSTMENT 1-1/4" EXTRA HI-LOW SHANKS AVAILABLE IF NEEDED

Fig. 3

**BEFORE HOOKING UP** Spring bars should slope on the angle determined by the thumbscrew. See Step 3.



AFTER HOOKING UP Spring bar should be parallel with trailer frame.



### **HOOK-UP**



The Spring Bars can be inserted into either side of Ball Mount (there is no right or left bar). To lock, insert Spring Bar into trunnion and slide the Wire Lock Pin (11) through the trunnion and groove of Spring Bar (See Fig.1). Latch safety loop onto wire lock pin after inserted.



With the tow vehicle coupled to the ball mount and the sway control turned off, position the Spring Bars alongside the trailer frame. Remove the Quick Release Pin from the Hook-up Bracket Assembly and connect Lever Bar (8) to the center post of the Lift Bracket. Lower the Lift Bracket by rotating the Lever Bar outward. Place the Spring Bar in the cradle of the Lift Bracket and rotate the Lever Bar up and inward to load. Re-install the Push Button Quick Release Pin and remove Lever Bar. (See Fig.2)



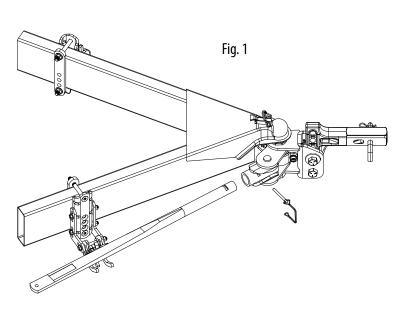
To confirm the tongue weight is distributed evenly, measure the front and rear bumper heights prior to applying the trailer tongue weight and then again after the tongue weight has been applied with spring bars loaded. Both the front and rear dimensions should decrease approximately the same amount for a properly distributed load. If the difference in the bumper height change is greater than the 1", the spring bar pre-load should be adjusted accordingly. To make hooking up easier and saferraise front of trailer and back of towing vehicle above level using trailer tongue jack. This removes some of the load by reducing the distance between Spring Bar and Hook-Up Hanger.

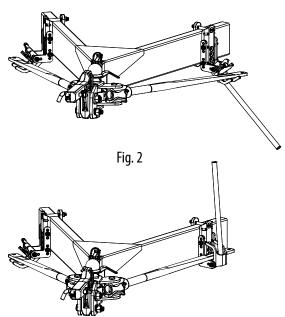
Once the desired spring bar angle has been achieved, insert top bolt (9b) with serrated washer (9c). Install second serrated washer and nut (9a) to secure unit in correct position. Before tightening bolts, lock set screw. Tighten the 3/4" top bolt to 260 ft. Ib torque once head angle is set. Tighten lower bolt to 260 ft. Ib torque. After first day of towing, check set screw for tightness.

**CAUTION:** Do not adjust air shocks or air bags to support any of the tongue weight of trailer. Air shocks or air bags should only be used to support the added weight you load in the rear of tow vehicle.



To release load on Spring Bars, raise front of trailer and rear of tow vehicle above level (approximately 3") using trailer tongue jack. Remove Quick Release Pin. Connect Lever Bar (8) to the center post of the Lift Bracket and lower the Lift Bracket by rotating the Lever Bar outward. (See Fig.2)





## **HOOK-UP BRACKET ADJUSTMENT**



If adjustment is needed to weight distribution after initial setup due to slight changes in tow vehicle or trailer tongue weight, the Eaz-Lift TR3 Hook-up Bracket Assembly can be adjusted ¾" up or down to compensate accordingly.



If the changes in towing setup are greater than the resulting adjustment can accommodate, an angle adjustment to the Ball Mount is required.

- To adjust, unload and remove Spring Bars from Hookup Bracket Assembly. (See Fig. 1)
- Remove the two 3/8-16 X 4" Bolts (7a), 3/8" Flat washers (7b), and 3/8"-16 Lock Nuts (7c) installed through the Hook-up Bracket. (See Fig.2)
- Slide the two Side Straps and Lift Bracket upward for more weight distribution (See Fig. 3) or downward for less weight distribution (See Fig. 4) and align with the corresponding holes through the Hook-up Bracket.
- Re-install the two 3/8"-16 X 4" Bolts (7a), 3/8" Flat washers (7b), 3/8"-16 Lock Nuts (7c) and torque to 25 ft. lb.

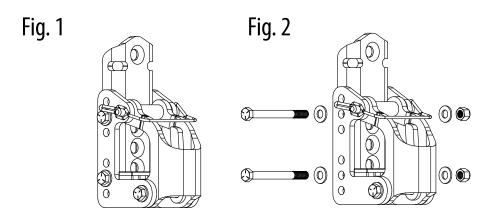


Fig. 3

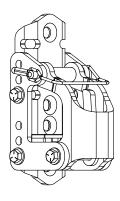
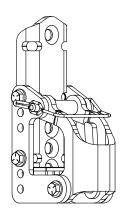


Fig. 4



# Eaz-Lift TR3 with Sway Control Weight Distributing Hitch



The Eaz-Lift TR3 uses an Adjustable Sway Control System to improve the safety and handling characteristics of your trailer and tow vehicle combination.

The Eaz-Lift TR3 provides constant sway resistance through an entire range of angular rotation. The consistent sway resistance is achieved by the sway control clamp which allows the user to determine the magnitude of the sway resistance required. Unlike other sway control weight distribution hitches, the TR3 sway resistance is achieved independently of the trailer tongue weight - allowing the user infinite adjustment between zero sway control and the factory preset maximum sway resistance. The axis of rotation of the sway control clamp is the same axis as the hitch ball which allows for a direct application of the sway resistance rather than relying on the transmission of resistive forces by external components.

With the Eaz-Lift TR3 you also have the option to disengage the sway control function to prevent any unsafe maneuvering situations in adverse weather conditions which may produce slippery road surfaces.



# INSTALLATION INSTRUCTIONS HOW-TO-USE



Activating the Sway Control System

Activation of the sway control is easy - simply tighten

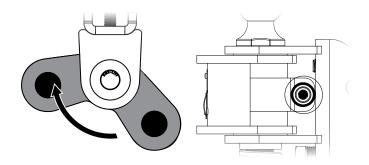
the activation bolt until the desired sway resistance is achieved.

Disengaging the Sway Control System for hook up and travel in adverse road conditions

To disengage the sway control function - Loosen the activation bolt until the clamp force is removed.

Storage of the Eaz-Lift TR3 Hitch

It is recommended that the hitch be stored in an area protected from environmental elements when not in use. The Eaz-Lift TR3 should also be stored with the preload removed from the sway control system. To remove the preload repeat the disengagement steps outlined above.



## $\triangle$

### **TR3 Maintenance**

The Eaz-Lift TR3 Hitch requires lubrication of the trunnion spindle. The trunnion spindle is easily serviceable using the factory installed grease fitting. Prior to each use ensure this critical area has been sufficiently lubricated with a suitable wheel bearing grease.



#### LIMITED WARRANTY

This Warranty applies solely to the Weight Distributing Hitch (the "Product") manufactured by Camco Manufacturing, Inc. ("Camco")

- Warranty and Warranty Period. Camco warrants to the Product's original purchaser or consumer (the "Purchaser") that the Product will be free of defects in manufacture and workmanship for a period of 5 Years from the date of consumer purchase or Camco will replace the Product free of charge (the "Warranty"). This Warranty is non-transferrable and applies only to the original vehicle on which the Product was installed.
- 2. Limitations on the Warranty. This Warranty does not cover the following: (a) normal wear and tear; (b) service or labor charges which are incurred in removing or replacing any Product; (c) the finish placed on the Product; (d) Product damage or failure which occurs as a result of abuse, neglect or misuse in any manner; and (e) damage which occurs to a Product that is misapplied, overloaded, improperly installed, or altered in any manner by anyone other than Camco.
- 3. Obligation of Purchaser. To obtain the benefits of this Warranty, the Purchaser must complete the following steps: (a) fill out online Warranty Registration within 10 days of purchase at www.camco. net/warranty; (b) promptly present the defective Product together with the proof of purchase to Camco located at 121 Landmark Drive, Greensboro, NC 27409 and (c) pay all handling, transportation, and shipping charges incurred for the return of the defective Product. Any defective Product returned to Camco shall become the property of Camco.
- 4. Obligations of Camco. Subject to the terms and limitations set forth in this Warranty, Camco's sole obligation will be to replace for the original Purchaser free of charge any Product that is found to be defective.
- 5. Legal Rights. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. CAMCO MAKES NO EXPRESSED OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. CAMCO ASSUMES NO LIABILITY OR RESPONSIBILITY FOR BODILY INJURY THAT MAY BE INFLICTED ON THE PURCHASER, OPERATOR, SPECTATOR OR GENERAL PUBLIC WHO IS THE IN THE GENERAL AREA WHILE THIS EQUIPMENT IS IN USE, FOR THE LOSS OF THE USE OF ANY VEHICLE, LOSS OF TIME, RENTAL OF VEHICLES, LOSS OR DAMAGE TO PERSONAL PROPERTY, EXPENSES SUCH AS GASOLINE, TELEPHONE, LODGING, OR TOWING, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES INCURRED AS A RESULT OF THE USE OR OWNERSHIP OF ANY PRODUCT. SOME STATES DO NOT ALLOW THE EXCLUSION OF A LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE EXCLUSION OR LIMITATION SET FORTH MAY NOT APPLY TO YOU. REPLACEMENT OF THE PRODUCT IN THE MANNER PROVIDED ABOVE SHALL CONSTITUTE FULFILLMENT OF ALL LIABILITIES OF CAMCO TO THE PURCHASER WHETHER BASED ON CONTRACT OR OTHERWISE.

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