



High Performance Weight Distribution and Dual Cam HP





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Towing laws vary from state to state, province to province, please check
To confirm safety requirements of the state/province where you
Are located and towing.

WARNING

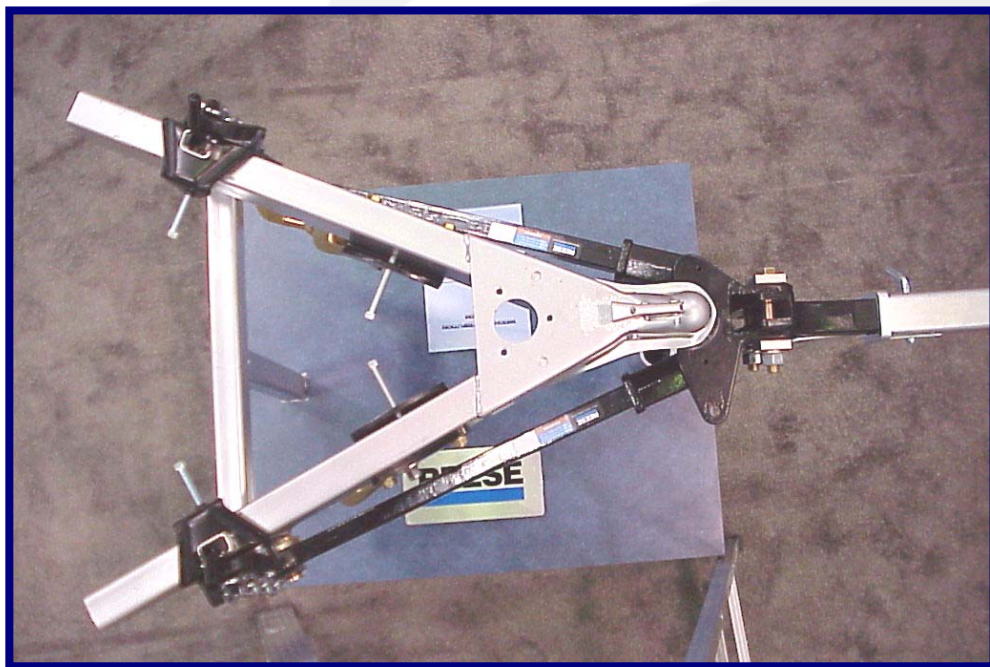
Cequent hitches are designed to safely carry the loads specified. Under no
Circumstances do we recommend exceeding the towing vehicle
Manufacturer's recommended vehicle towing capacity.

High Performance Weight Distribution and Dual Cam HP



- High performance design and function
- New dual cam HP provides easier installation and hook up
- Available in straight line hitch kit: one part number for high-performance WDH and dual cam HP

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- Provides weight distribution
- Provides sway control
- Provides enhanced steering control
- Provides towing geometry
- Has a center line memory to keep tow vehicle and trailer in a straight line

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- This presentation is NOT intended to replace the installation instructions.
- Installers must read and follow the installation instructions for your specific installation.
- Please be sure to pass instructions on to customer when installation completed

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- Tools needed for weight distribution installation:
- Torque wrench
- 1" socket
- Ratchet
- Measuring tape
- 1/2" open end wrench
- Tongue scale

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- Tools needed for dual cam HP installation:
- 7/16" drill bit
- Power drill
- Measuring tape
- 1/2" socket
- Ratchet

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- Weigh trailer tongue in level position with tongue scale to determine the proper spring bar application

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- Line up tow vehicle and trailer on level pavement in straight ahead position
- Level the trailer
- Measure from the ground to the top of the coupler

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- Select a hitch ball that matches the diameter of the coupler
- Attach ball to the ball mount
- Torque ball nut to 450 ft/lbs for 1 1/4" nut or 250 ft/lbs for 1" nut

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- Select the proper hitch bar/shank
- Install the hitch bar into the receiver tube
- Secure with pin and clip

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- Level the vehicle as it will sit when towing (including any on board cargo) before setting ball height and attaching trailer

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- Measure the front and rear of the tow vehicle
- Record the measurements

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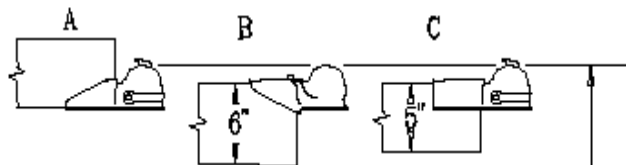


- Attach ball mount to hitch bar using top bolt only; do not tighten
- Measure the ball height
- Adjust head up or down as needed:
- Allow for 1" to 3" of suspension squat (drop) on light duty vehicles
- Allow for 3/4" to 1" of suspension squat (drop) on heavy duty vehicles such as 3/4 and 1 ton vehicles

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PRELIMINARY BALLMOUNT ADJUSTMENT

1. Install hardware in lower hole of ballmount as shown. Tighten nut enough to prevent easy rotation of ballmount.
2. Determine spring bar height "Y" using table below. Insert spring bar and trunnion into the ball mount. Swing bar outward to the same angle as when connected to trailer. Lift up on bar to remove slack. Tilt ball mount for proper "Y" dimension at end of spring bar.



SPRING BAR HEIGHT (Y)

COUPLER HEIGHT X	COUPLER STYLE		
	A	B	C
15" TO 18"	7"	4-1/2"	5-1/2"
18" TO 20"	8"	5-1/2"	6-1/2"
20" TO 22"	9"	6-1/2"	7-1/2"
22" TO 24"	10"	7-1/2"	8-1/2"
24" TO 26"	11"	8-1/2"	9-1/2"

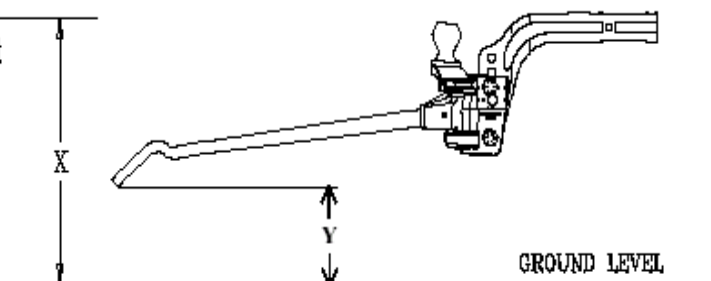


Fig.1

* ADD 1" TO Y DIMENSION FOR NON-INTEGRATED CAM SPRING BARS.

- Refer to instructions for detailed preliminary ball mount adjustments

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- Preliminary ball mount adjustment:
- Install hardware in lower hole of ball mount
- Tighten nut enough to prevent easy rotation of the ball mount; nut should be snugged but not torqued

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- The ball mount is adjustable in eight positions through A 15 degree angle
- Each position change results in approximately 1" height change at end of spring bar
- 8" of total adjustment

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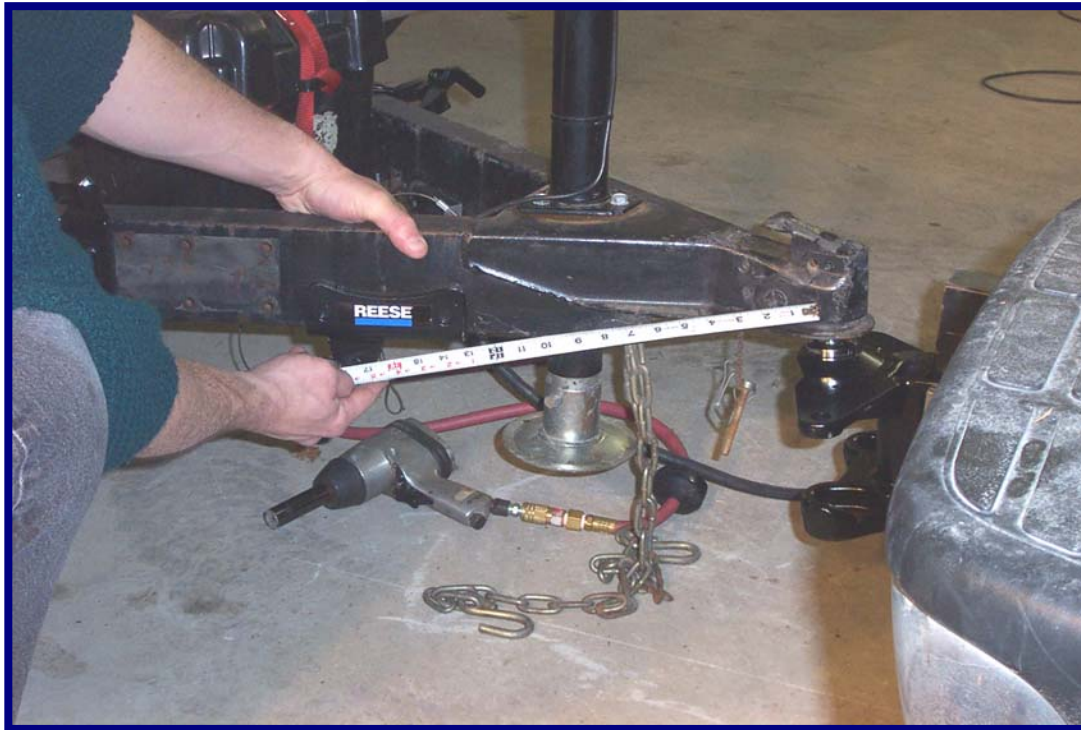
- Connect trailer to tow vehicle
- Install spring bars into head assembly

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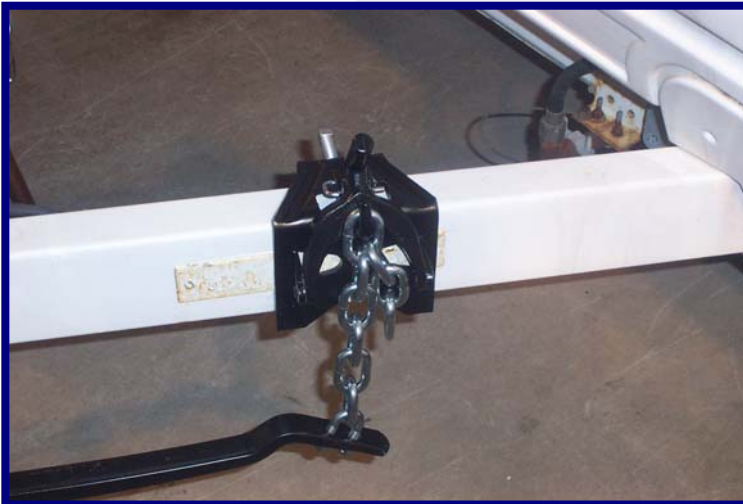
- Once proper ball angle has been established, torque the two nuts to 300ft/lbs
- **CAUTION:** be sure washer teeth are properly meshed with head teeth before torquing

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- Position frame plate on frame approximately 18" from the center of the coupler to the arm bolt in frame plate.
- This measurement is for preliminary locating only. Bracket can be moved fore or aft to accommodate existing obstructions. (See next slide for **hint**)

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HINT – temporarily install the weight distribution snap-up brackets and bars, then center cam arm nuts to find exact location of dual cam frame plate.



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- Clamp frame plate with side that has two holes to the outside of the frame with A clamp
- Make sure bottom of frame plate is in contact with the bottom of the frame
- Leaving plate on frame, center punch two holes
- Drill two 7/16" holes to accept self tapping mounting bolts

**For Trailers With Tubular Frames, See Instructions On Right
For Trailers With "C" Channel Frames, A Nut And Lock Washer
(Torque to 85 ft./lbs) Will Be Needed To Attach Bracket**

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- Install two self threading screws and torque to 50 ft/lbs
- Install jam nut in long set screw
- Install long set screw in frame bracket, then tighten screw until it contacts the frame: then tighten 1/4 turn more

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- Hook up procedure :
- Make sure both cam arm adjustment nuts are backed off sufficiently away from the yoke to allow the cam arm to slide freely through the majority of its adjustment range

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- Install chain to chain hanger:
- Put the u-bolt through the last chain link and insert u-bolt ends through the two holes in chain bracket
- Install nuts and tighten

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- Position snap up brackets on the trailer frame so that the chains are vertical
- Turn the 1/2 x 3-1/2" set screw until it touches the frame and then tighten 1/4 turn with wrench

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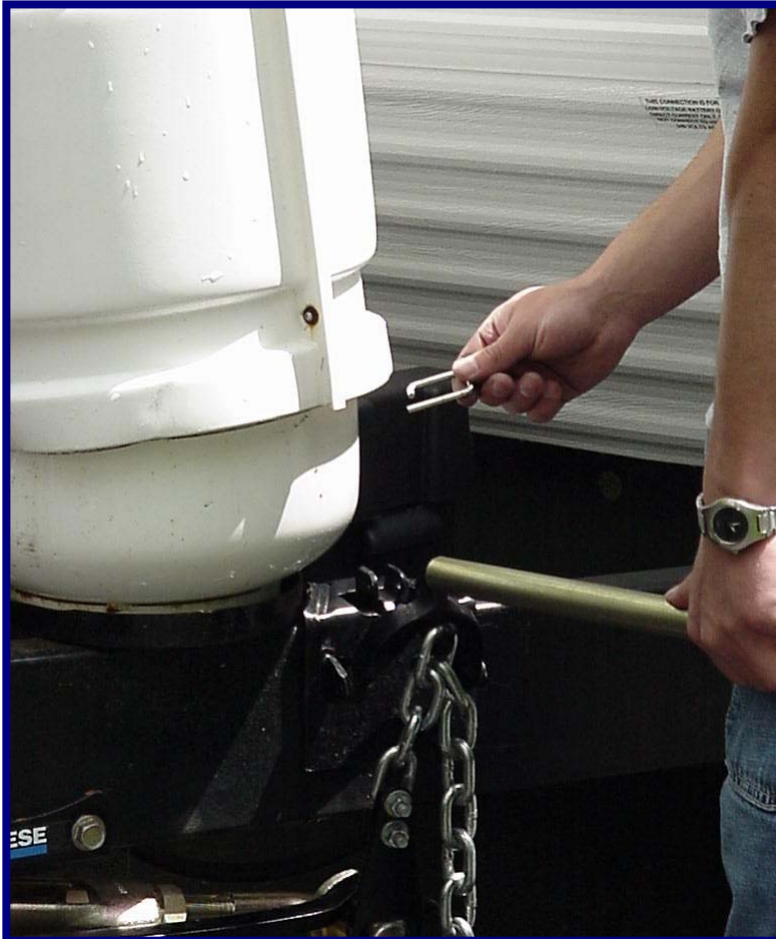
- Raise trailer tongue and rear of tow vehicle with jack to take off tension
- Install spring bar trunnion in ball mount head
- Slip keyed slot of chain hanger over button on end of cam arm (be sure ends of u-bolts are facing inward).

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- Rotate chain hanger bracket to vertical position
- Ensuring that at least five links of chain separate spring bar end from lift up bracket hook, place link of chain on hook of snap-up bracket
- Raise snap-up into the up position and secure with safety pin

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- Slide safety pin through the small hole to lock the yoke in place
- Caution:** never let go of the lift handle until the safety pin is in place

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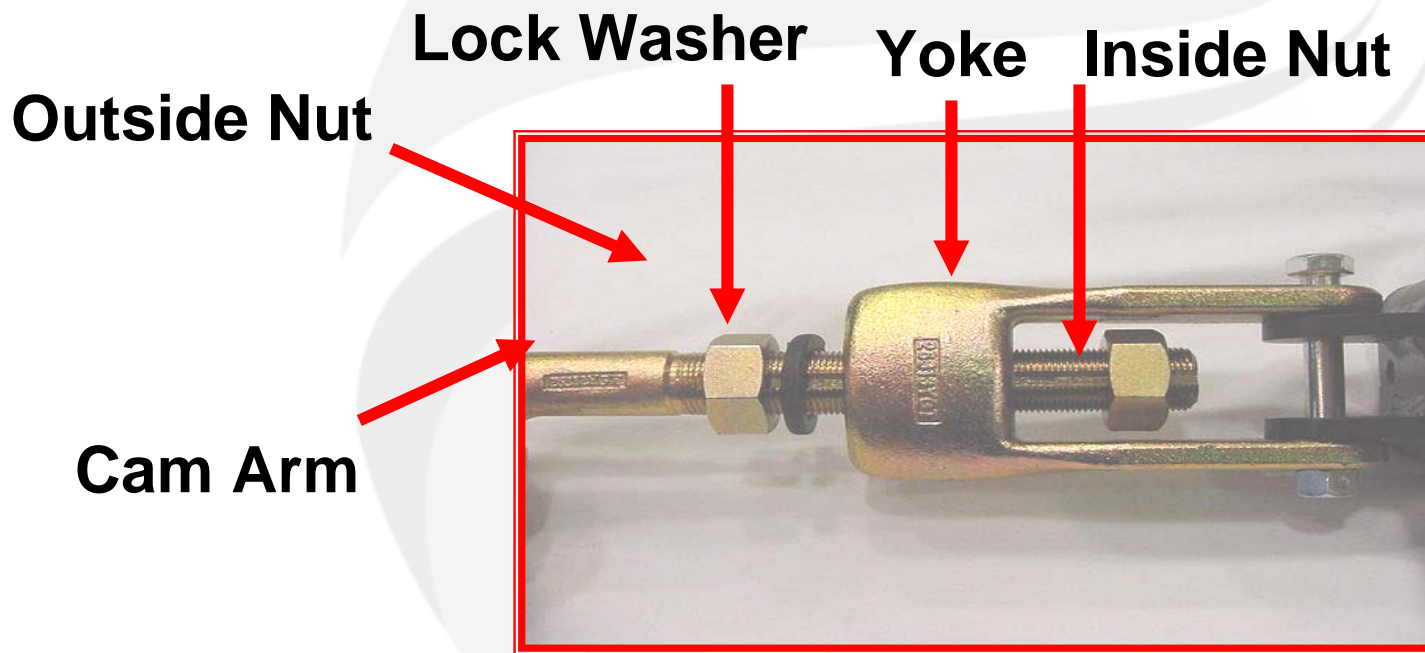
- Lower jack and re-measure front and rear wheel well reference points
- Vehicle should settle within 1/2 " of original measurement

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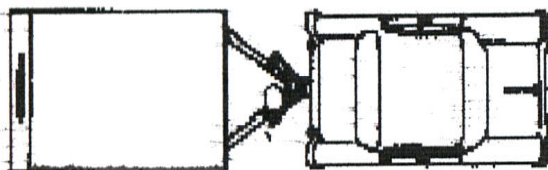


- If front has settled more than rear, increase the amount of chain links between snap up bracket hook and spring bar
- If rear has settled more than front, reduce the number of links

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1. Start out towing slowly in a straight line. Make an approximate 20° turn one way, then a 20° turn the other way. Straighten out and drive approximately 100 ft. toward a distant point while sighting down the center of the hood.



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- Completed installation shows level tow vehicle and trailer
- Proper setup will provide superior towing and tracking performance



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