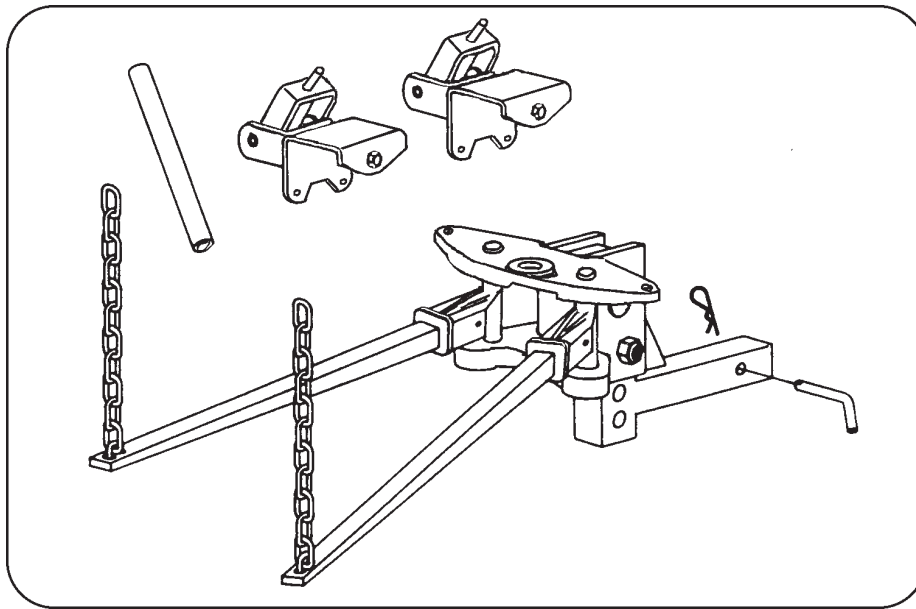


INSTALLATION INSTRUCTIONS

Bolt Together Weight Distributing Hitch System



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

Tongue Wt.	Max. Gross Trailer Wt.
801-1200 Lbs.	12,000 Lbs.

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.*

Rating when used as a weight carrying hitch without spring bars:

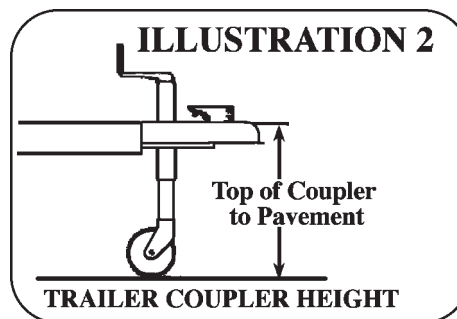
Max. Tongue Wt.	Max. Gross Trailer Wt.
500 Lbs	5,000 Lbs.

Do not exceed the towing vehicle manufacturer's load rating.

**READ ALL INSTRUCTIONS AND CHECK PACKAGE CONTENTS
BEFORE BEGINNING INSTALLATION.**

MEASURE TRAILER COUPLER HEIGHT

1. Line up the tow vehicle and trailer on level pavement, in a straight position. Use the trailer tongue jack to level the trailer. Measure the distance from pavement to the top of the coupler socket and record here. _____.



MEASURE THE TOW VEHICLE

2. For vehicles with air springs, air shocks or automatic leveling systems only: Check vehicle owners manual or other instructions on these items. Unless otherwise indicated, air springs and air shocks should be deflated to their minimum recommended pressure before assembling and adjusting the weight distributing hitch. Pick reference points on the front and rear bumper of towing vehicle. Measure and record height to pavement.

FRONT BUMPER TO PAVEMENT _____

REAR BUMPER TO PAVEMENT _____

DETERMINE THE "TARGET" UNCOUPLED BALL HEIGHT FOR TOW VEHICLE

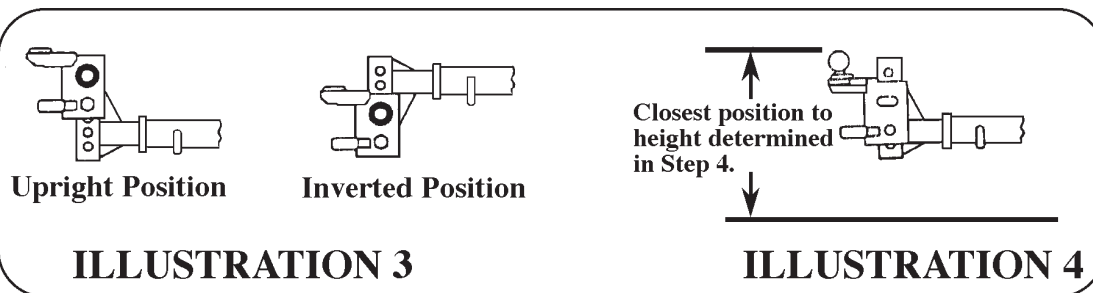
3. Tow vehicle uncoupled ball height will be set higher than coupler height measured in Step 2, to allow for vehicle squat when coupled to trailer.

For trucks or other stiffly sprung vehicles; add 1/16" to the height measured in Step 2, for each 100 lbs. of tongue weight. Record ball height _____

For passenger cars, add 1/8" for each 100 lbs. of tongue weight. Record ball height _____

INSTALL SHANK, HITCH HEAD AND BALL

4. Insert shank #1 into receiver on towing vehicle and secure with hitch pin and hair pin.



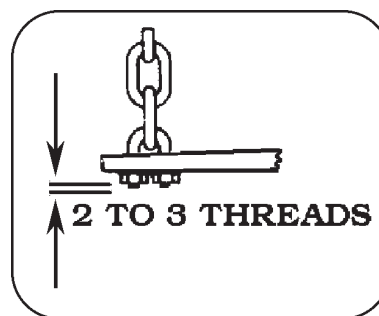
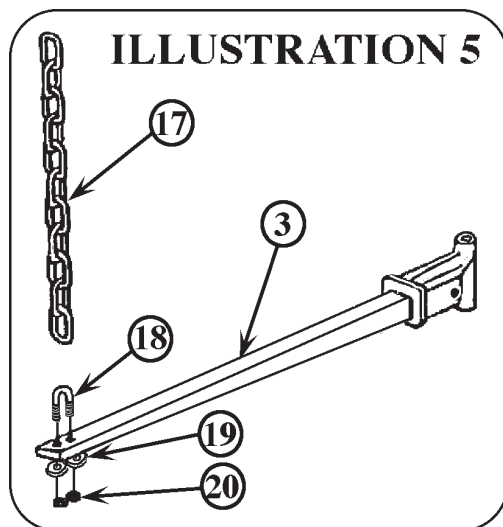
NOTE: To obtain proper ball height on high ground clearance vehicles, shank may be inverted as shown in Illustration 3. If shank is used in an inverted position, check for adequate ground clearance. Accessory shanks with greater height and length are available from your dealer.

5. Select a hitch ball to match the trailer coupler socket, having a 1" or 1-1/4" threaded shank and capacity exceeding the gross trailer weight. When using a ball with a 1" shank, the reducer bushing must be placed in the ball hole in the head assembly. Install ball, but do not tighten at this time.

6. Position head assembly on shank. Slide head up or down to the nearest bolt hole alignment position which corresponds with the "TARGET" ball height determined in Step 4. Mark position of the shank. See Illustration 4.
7. Place four hardened washers (15) on pin (14) and insert pin into the unthreaded hole in the upper portion of the head channel. The number of washers may have to be changed later.
8. Install head on shank at marked position. Insert the 3/4" x 4-1/2" hex bolt (11) through the lower hole in the head channel. Rotate the head forward as far as it will go. Ball should be vertical or tilted slightly back. If it is not, remove the 3/4" bolt, change the number of washers on the pin and re-assemble as before. Insert the remaining 3/4" x 4-1/2" bolt (11) with toothed washer (13) through the upper slotted hole. Install a second toothed washer on the upper bolt. Start locknuts (12) bolt only finger tight.
9. Hold head tight against the pin in the head channel. Tighten the 3/4" bolts (11) to 260 ft. lbs. torque.
10. Place head assembly back into hitch assembly on towing vehicle and tighten the trailer ball to torque specified by the ball manufacturer.

ASSEMBLE, LUBRICATE AND INSTALL SPRING BARS:

1. Assemble the lift chains (17) to the tapered ends of each spring bar (3) using the 3/8" u-bolts (18), 3/8 flat-washers (19) and the 3/8" hex locknuts (20) as show below in Illustration 5. Let 2 or 3 threads of the u-bolts extend out through the bottom of each locknut. The chain must be free to move in the u-bolt.



2. Apply a heavy fibrous grease to the clevis pin and hole in the trunnion and head assembly.
3. Connect the spring bars (3) to the head assembly (2) by placing the trunnion between the upper and lower flange on the head assembly so that holes in flange will line up with hole in trunnion. Drop the clevis pin (4) down through flange and trunnion. Insert hair pin (10) in bottom of clevis pin (4) to secure.

ATTACHING TRAILER TO BALL

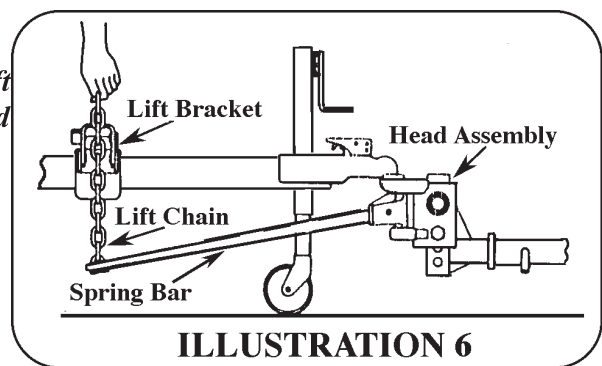
1. Using the trailer tongue jack, lower the coupler onto the ball and close coupler latch. Do not retract jack fully at this time. Allow the jack to support some of the tongue weight.
2. Raise the front of the trailer and back of the tow vehicle approximately 3" with tongue jack. This will allow easier installation of the lift brackets.

INSTALLING THE CHAIN LIFT BRACKETS

The following directions apply to trailers with an "A" frame tongue. If your trailer is made up with a straight tongue, you will need to obtain a "Pole Tongue Adapter" to finish the installation. The Valley 75210 Pole Tongue Adapter is available as an extra cost accessory from your local dealer.

1. Position the spring bar, which has been attached to the hitch head, parallel with the trailer tongue. Hold the lift chain vertical up alongside the trailer tongue. Position the lift bracket on the trailer tongue so that the chain is centered between the lift bracket as shown on Illustration 6 below.

CAUTION: *If chain is angled fore or aft at the top within the lift bracket, it may catch on the bracket when turning. This could damage the lift bracket or pry it open.*



2. Mark the location of the lift bracket on the trailer tongue.
3. Install the 1/2" x 3-1/2" bolt (7) into the threaded hole in the lift bracket. Turn the bolt in until it contacts the trailer tongue, then tighten 1/4 turn with a wrench. DO NOT OVERTIGHTEN.

HOOKING UP SPRING BARS

The amount of leveling is adjusted by engaging different spring bar chain links with the lift unit. Before proceeding, read the "LIFT UNIT OPERATION" section on following page.

1. With the lift bracket in the raised and locked position, pull straight up firmly on the spring bar lift chain. Note which link is closest to the lift bracket hook. Mark the next lower chain link.
2. Lower the lift bracket and slip the marked link over the hook. Be sure that the chain is not twisted.
3. Raise the lift bracket and secure with the locking pin. Repeat procedure on opposite side of trailer using the same number of chain links as the first side. See Illustration 7.
4. Retract the trailer tongue jack so the hitch is now carrying the full trailer tongue weight.

LIFT BRACKET OPERATION

Before raising or lowering the lift bracket, raise the front of the trailer to reduce the spring bar chain tension. This will make the lift bracket operation easier and safer.

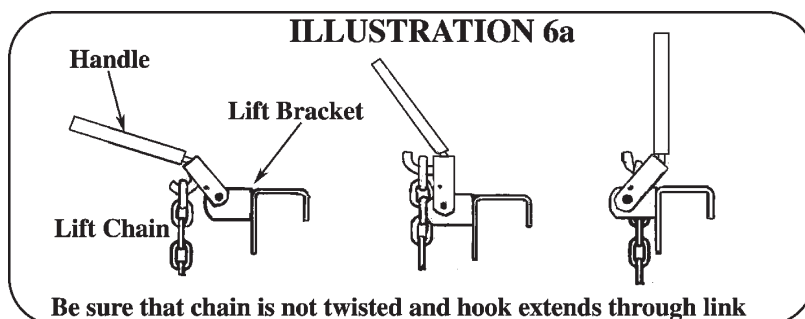
WARNING: Keep clear of the pivot path of all moving parts when there is tension on the spring bar chain. Maintain control of the lift handle at all times when raising or lowering the spring bar. Be sure that the locking hair pin is in place once lift bracket is in the up position.

TO LOWER FROM FULLY RAISED AND LOCKED POSITION

1. Remove the locking hair pin from lift bracket.
2. Insert lift handle onto the rod above the lift chain attachment.
3. Carefully lower bracket with handle. It will require effort to bring the bracket over center and then to resist the chain tension as the bracket rotates downward.

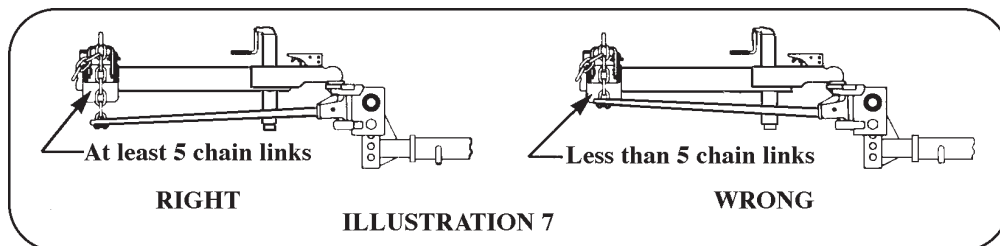
TO RAISE LIFT BRACKET

1. Slip the marked chain link over hook on lift bracket.
2. Insert lift handle onto heavier rod above lift chain attachment.
3. Using the handle, raise the lift bracket up and over center so that it is fully seated against the mounting bracket.
4. Secure by inserting hair pin through the lift bracket and mounting bracket.



CHECK VEHICLE HEIGHT AND ADJUST SPRING BARS IF NECESSARY

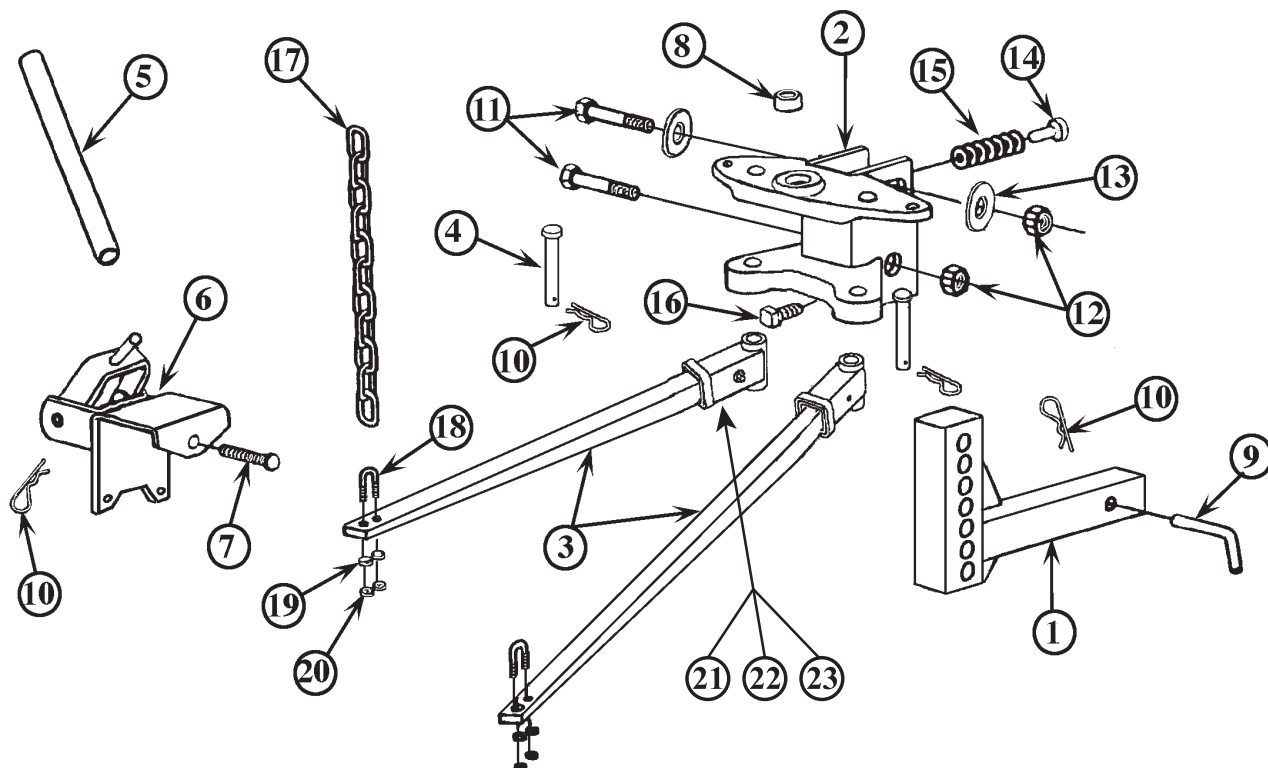
1. Vehicle should settle evenly, within 1/2". Re-measure the front and rear bumper reference points. If the front has settled much more than the rear, increase the number of chain links between the lift bracket and the spring bar. The spring bars should be nearly horizontal when correct height is achieved.



2. When even settling and correct spring bar position have been achieved, mark the spring bar chain at the hooked position, with paint, for future hook up reference.

NOTE: Illustration 7, shows the correct and incorrect hook-up position of the spring bars. To allow movement when turning, there should be at least 5 links between the lift bracket and the spring bar. The number of links should be the same on both bars. Adjust head tilt to accomplish correct chain length.

3. Insert the locking pin through the lift bracket and mounting bracket.



Bill of Materials

ITEM	QTY.	DESCRIPTION	PART NO.
1	1	Shank Assembly	
2	1	Head Assembly	
3	2	1200 Spring Bar Set	
4	2	Clevis Pin 1202-02	
5	1	Lift Handle 1543-05	
6	2	Lift Bracket Assembly	
7	2	1/2 x 3-1/2 Hex Bolt	
8	1	Reducer Bushing	
9	1	Hitch Pin	
10	5	Hair Pin	
11	2	3/4 x 4-1/2 Hex Bolt	
12	2	3/4 Locknut	
13	2	3/4 Conical Washer	
14	1	Pin	
15	7	Hardened Washer	
16	1	5/8 x 1-1/2 Hex Screw	
17	2	Lift Chain	
18	2	3/8 U-Bolt	
19	4	3/8 Flatwasher	
20	4	3/8 Locknut	
21	2	Bolt, 1/4" x 2-1/2"	
22	2	Split Washer	
23	2	Nut w/Nylon Insert	

TOWING TIPS

DRIVING A TOW VEHICLE

Good habits for normal driving need extra emphasis when towing a trailer. The additional weight of the trailer affects acceleration and braking. 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. Sever 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 occurred in any other way, pull over and make a thorough inspection. Correct any problems before resuming travel.

CHECK YOUR EQUIPMENT

Periodically check the condition of all your towing equipment and keep in top condition.

TRAILER LOADING

Proper trailer loading is very important. Heavy items should be placed close to the floor near the trailer axle centerline. the load should be balanced side to side and firmly secured in the trailer to prevent shifting. Tongue weight should be 10-15% of the gross trailer weight for most trailers. To low a tongue weight often produces tendency to sway.

SWAY CONTROL

A sway control device is recommended as it can help minimize the effects of sudden maneuvers, wind gusts and buffeting caused by passing vehicles. Use of a sway control device is recommended for trailers with a large surface area, such as travel trailers. This head assembly will accept two sway control attachment balls.

TIRE INFLATION

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

TOWING VEHICLE AND TRAILER MANUFACTURERS RECOMMENDATIONS

Review the owners manual for your towing vehicle and trailer for specific recommendations, capacities and requirements.

POLE TONGUE TRAILER

If your trailer has a straight (pole) tongue, instead of the A-frame tongue shown on the illustrations in this instructions manual, it will be necessary to use the POLE TONGUE ADAPTER for hook up of the weight distributing hitch lift brackets. A Valley 75210 is such an adapter.

PASSENGERS IN TRAILERS

Trailers should not be occupied while being towed. Most states enforce this regulation.

TRAILER LIGHTS, TURN SIGNALS, ELECTRIC BRAKES

Always hook up all of the trailer lights, electric brakes and break-away switch connection, whenever trailer is being towed.

REMOVE HITCH WHEN NOT TOWING

Remove hitch from receiver on towing vehicle, when not towing a trailer, to prevent contamination of spring bar sockets, reduce chances of striking hitch on driveway or other objects, and reduce the chance of parts being stolen.

MAINTENANCE

Keep the trunnion ends free from dirt and the clevis pins well lubricated. Excessive wear in this area may indicate an overload or inadequate lubrication.

Keep hitch parts painted to prevent rust and maintain good appearance. Do not paint over labels.

Keep lift brackets clean and lubricated to insure ease of operation.

AT THE BEGINNING OF EVERY TOWING DAY:

Coat the trunnion clevis pins with a fibrous grease.

Clean ball and coupler socket and coat ball lightly with grease.

Check spring bar chains and U-bolts for wear and security. Replace before they become worn.

Check to see that all hitch bolts are properly tightened and that the locking pins in the lift brackets are securely in place. Also, check that the hitch pin is in place and secure.

Check to see that all electrical hook-ups are in working order and that the safety chains are securely connected.

CHECK ALL TRAILER TO TOWING VEHICLE CONNECTIONS FOR SECURITY AND OPERATION

NOTE: Surge brakes usually require a small amount of fore and aft movement for their actuating mechanism to function. To avoid restricting movement, it may be necessary to increase the number of chain links between the lift brackets and spring bars, by tilting the head down. Tighten the two 3/4" bolts to 260 ft. lbs. torque once head angle is set. Those surge brake actuators not designed for use with a weight distributing hitch, may bind and not operate freely. Check your surge brake operating instructions for any specific requirements regarding their use with weight distributing hitches.

WARNINGS

Loaded ball height should never be greater than the uncoupled ball height. Front wheel overload and loss of rear wheel traction can result and can lead to unstable handling. It can reduce braking ability and create a tendency to "jackknife when turning or braking at the same time.

If the loaded ball height is greater than the uncoupled height, reduce take up on the spring bar chains and remeasure and adjust until the proper height is obtained.

CAUTION: If the lift chain is angled fore or aft at the top within the lift bracket, it may catch on the bracket when turning. This could damage the lift bracket or pry it open.

FRONT WHEEL DRIVE VEHICLES:

Do not attempt to hook-up or tow with the rear tires of the towing vehicle removed. Severe structural damage to the towing vehicle, hitch and trailer may result. A towing vehicle/trailer combination cannot be controlled adequately unless the towing vehicles rear wheels are carrying their share of the load.