



CENTER LINE™ WD with Sway

Center Line Head Assembly Kit, P/N 31390

Includes head assembly, spring bar brackets, 10" shank and hardware kit.
Spring bars, not included, required to complete hitch.

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

Part Number	Max. Tongue Weight	Max. Gross Trailer Weight
31390	600 lbs.	6,000 lbs.

Do not exceed the towing vehicle manufacturer's load rating or receiver load rating or which ever is lower.

Center Line Spring Bar sets, P/N 31511, 31512, 31513

matched with a 31390 Center Line head assembly make a complete kit.

Complete kit ratings are listed below.

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

Part Number	Max. Tongue Weight	Max. Gross Trailer Weight
31511	500 – 800 lbs.	*4,000 lbs. to 8,000 lbs.
31512	801 – 1,200 lbs.	Up to 12,000 lbs.
31513	1,001 – 1,400 lbs.	Up to 14,000 lbs.

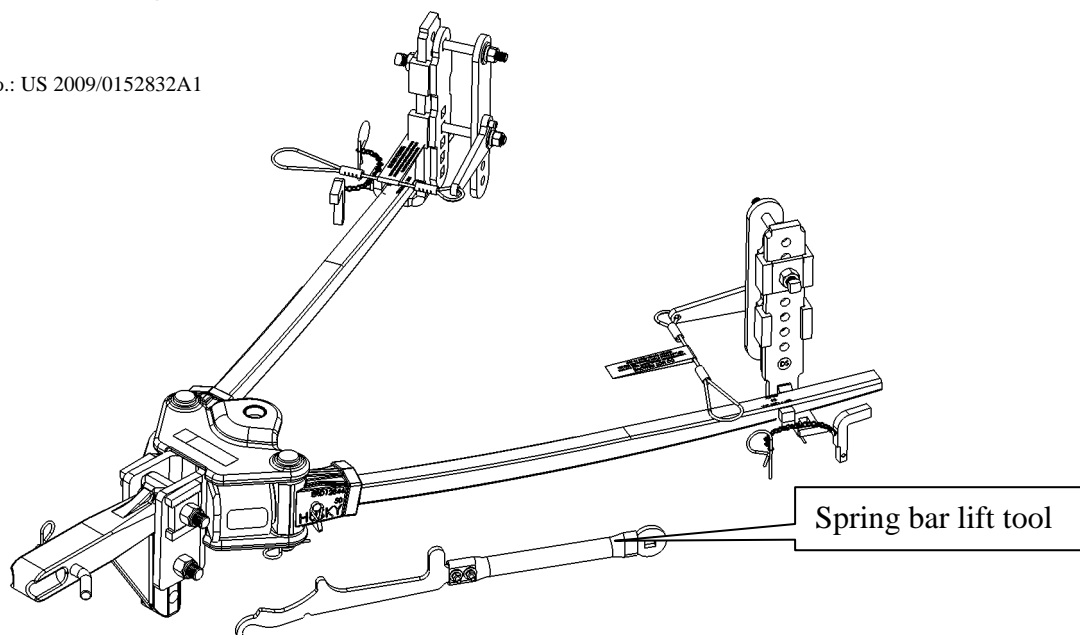
*This product should not be used for any trailer under 4,000 lbs gross weight.

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 and size for your trailer.
READ ALL INSTRUCTIONS AND CHECK PACKAGE CONTENTS BEFORE BEGINNING INSTALLATION.

Bolt Together CENTER LINE™ WD with Sway Control

Patent No.: US 2009/0152832A1



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Dealer/Installer:	Provide a copy of these Instructions to the end user of this product. These Instructions provide important operating and safety information for proper usage of this product. Demonstrate the proper use of the product with the end user. Have the end user demonstrate that they understand the proper use of the product. Please refer to the husky weight demonstrator at: http://www.huskytow.com/product-support/?dir=Literature/. (requires Microsoft excel)
End User:	Read and follow all instructions included in this manual. Ask your Dealer / Installer for assistance if you do not understand the proper use of the product. Never remove any warning decals from the product.

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Tools Required for Installation

The following list of tools will be needed for proper installation of all components:

Safety Glasses

1 1/8" Box End Wrench (3/4" HEX HEAD BOLTS)

1 1/16" Socket (3/4" NYLON LOCK NUTS)

3/4" Socket (1/2" HEX NUTS)

Measuring Tape

Torque Wrench capable of 260 ft-lbs of torque.

Recommended tools for installing the Hitch Ball:

1-1/2" or 1-7/8" Thin walled socket depending on hitch ball size.

Torque Wrench capable of 360 ft-lbs of torque (always check ball manufacturer's specifications for proper torque rating).

Definitions of terms: When a statement like "LEFT SIDE or RIGHT SIDE OF VEHICLE" is made, this always refers to the driver's point of view, in other words, when the driver is sitting in the driver's seat of the vehicle. Other terms used are DS which means DRIVERS SIDE and PS which means PASSENGER SIDE, this is irregardless of where you are positioned inside or outside of the vehicle.

Important, Read first!

Before installing or towing with this CENTER LINE WD™ with Sway hitch please read and follow all instructions and warnings in the tow vehicle owners manual and trailer owners manual.

Have gross trailer weight and tongue weight checked before selecting and installing any weight distributing system.

Weigh trailer again after fully loaded and check loaded tongue and gross weight to ensure proper weight distribution hitch is being used.

If your trailer is a straight tongue, you will not be able to use this system.

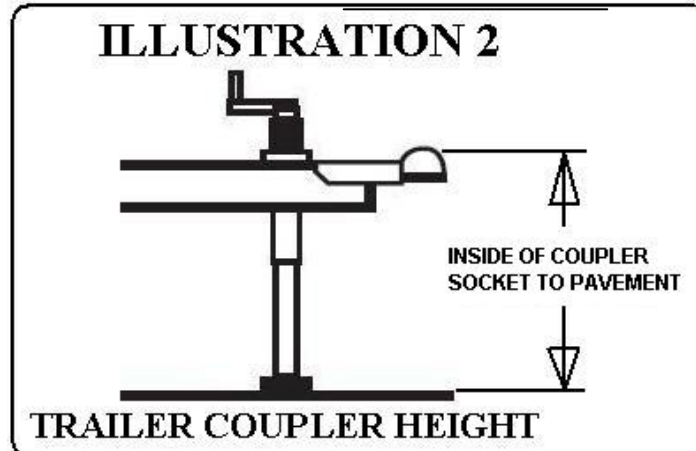
Measure Trailer Coupler & Frame Height

NOTE: Changing the weight of the trailer and/or tow vehicle by adding, moving or unloading cargo may require the need to adjust how the weight distribution system is set up. IMPORTANT! Set parking brake of tow vehicle and chock the wheels of the trailer before lifting!

1. Line up the tow vehicle and trailer on level pavement, in a straight position.



2. Use the trailer tongue jack to level the trailer. Measure the distance from pavement to the inside of the coupler socket and record here:



3. Mark a spot on the frame of the trailer as close to the coupler as you can, measure from this mark to the ground/pavement and record here: _____. This measurement will be used later to determine if a proper setup has been achieved.

Determine The “Target” Uncoupled Ball Height For Tow Vehicle

4. Tow vehicle uncoupled ball height should be set 1” higher than coupler height measured in Step 2, to allow for vehicle squat when coupled to trailer. Add 1” to the measurement from step 2 and record here: _____.

Measure The Tow Vehicle

5. 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 distribution hitch. Pick reference points at the top center of the front and rear fender well of towing vehicle. Measure and record height to pavement here.

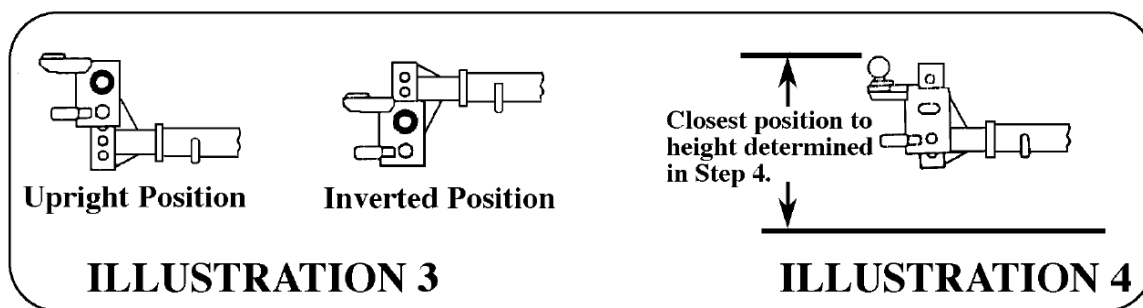
FRONT FENDER TO PAVEMENT: _____.

REAR FENDER TO PAVEMENT: _____.



Install Shank, Hitch Head And Ball

6. Insert SHANK item #1(see Parts Listing pg 15) into receiver on towing vehicle and secure with HITCH PIN item #22(see Parts Listing pg 15) and HAIR PIN item #8(see Parts Listing pg 15).



NOTE: To obtain proper ball height on low ground clearance tow vehicles, shank may be oriented in the “UP POSTION” as shown in Illustration 3. If shank is used in the “DOWN POSITION, check for adequate ground clearance. Accessory shanks with greater height and length are available from your dealer. **IMPORTANT! Proper adjustment requires the use of the proper length shank; proper head height and proper head tilt adjustment.**

7. 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, item #24(see Parts Listing pg 15) must be placed in the ball hole in the head assembly. **CAUTION! Do not use more than one bushing.**
8. Install ball and tighten to:
240 ft-lbs for 1” shank diameter
360 ft-lbs for 1-1/4” shank diameter
9. 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 and Insert (1) 3/4” x 4.5” HEX BOLT item #3(see Parts Listing pg 15) into bottom hole of channel.

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10. Then place (1) ADJUSTING PLATE item #2(see Parts Listing pg 15) on $\frac{3}{4}$ " x 5.5" HEX BOLT item #3a(see Parts Listing pg 15) and insert into adjusting slot of channel through the corresponding shank hole until adjusting plate teeth mesh with adjusting teeth on channel. **CAUTION! Failure to align teeth properly and/or properly torque hitch head can cause damage to your hitch head.**
11. Ball should be vertical or tilted slightly back (away from rear of tow vehicle, see Illustration 4a.). If it is not, pull the top $\frac{3}{4}$ " bolt out enough for the adjusting plate teeth to clear the teeth on the channel and allow the head to rotate backward (away from the rear of the tow vehicle), and then push the $\frac{3}{4}$ " bolt back in to re-engage the adjustment plate teeth with the teeth on the channel.

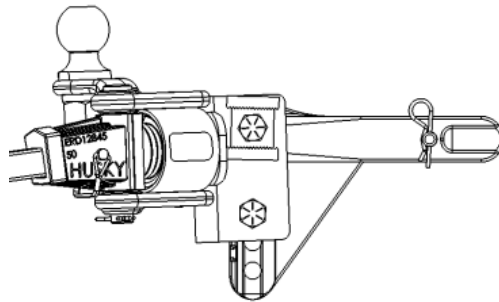
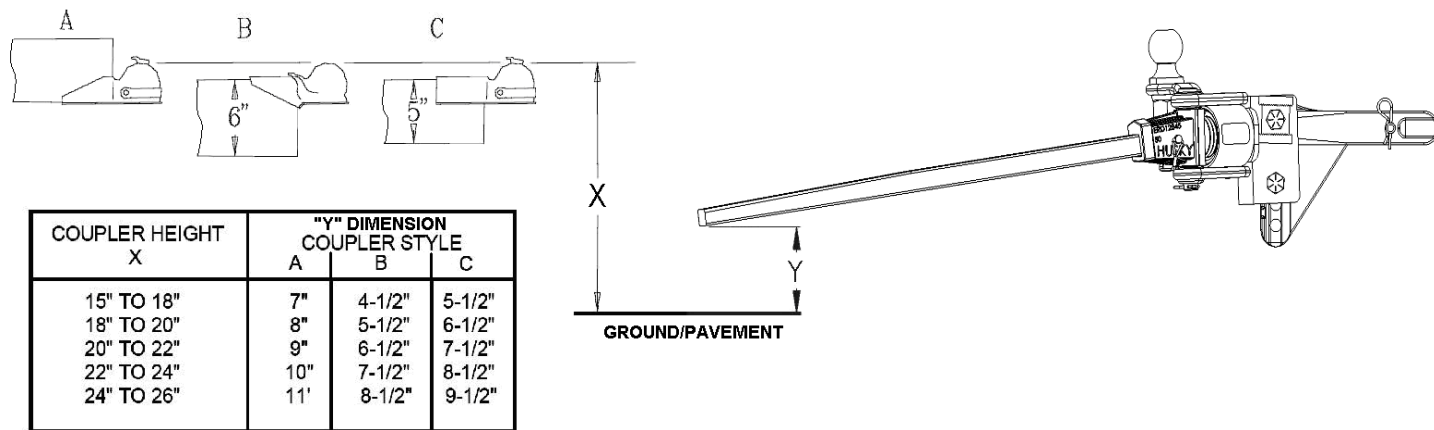


Illustration 4a

12. Slide the SPRING BARS item #7(see Parts Listing pg 15) (tapered side of spring bar should be facing up) into the square hole on the front side of the trunnion. Insert "D" pin item # 5 into $\frac{3}{8}$ " hole on the side of the trunnion. You may have to move the spring bar in and out slightly, secure "D" pin by rotating the wire strap around to the other side of the trunnion and snap over the end of the $\frac{1}{4}$ " pin protruding through the trunnion.
13. Do the same for the other trunnion.
14. Refer to "Preliminary Head Adjustment Chart," below, for determining the initial positioning of the hitch head before proceeding onto the next step.
15. Using the "Target Uncoupled Ball Height" measurement find the range in column "X" that this measurement fits within. Then move across the chart until you line up with the "Y" dimension "Coupler Style" that fits your application. This dimension is your "Preliminary Head Adjustment" value you will use to adjust the tilt angle of your head.



"PRELIMINARY HEAD ADJUSTMENT CHART"

This chart is to get you started with your setup, a proper setup will result in your tow vehicle settling evenly front and rear, make sure to check your measurements with your initial measurements to determine if minor adjustments are needed.

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16. Measure the distance from the ground to the bottom edge of the free hanging spring bars. If needed, adjust the tilt of the head to achieve this dimension. **IMPORTANT!** The head assembly should never tilt forward (toward the tow vehicle), it should be nearly vertical or tilted slightly rearward (away from tow vehicle).
17. Place 2nd adjustment plate on top $\frac{3}{4}$ " x 5.5" hex bolt on opposite side of the channel but do not engage the teeth with the teeth on the channel yet. Install LOCK NUTS item #21 (see Parts Listing pg 15) on $\frac{3}{4}$ " bolt finger tight only.
18. Refer to Illustration 4b below, and count the number of teeth that EDGE 1 is from EDGE 2 on the same side of the head that the $\frac{3}{4}$ " x 5.5 hex bolts were installed on. Locate the adjustment plate on the opposite side to be in the same position as shown in Illustration 4b; you may have to lift the head slightly to do this.

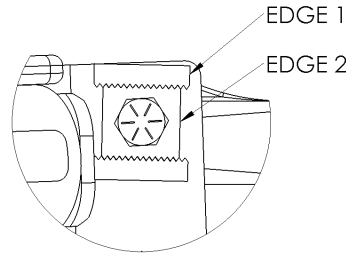


Illustration 4b

19. Tighten locknuts to 260 ft. lbs.

Installing Frame Lift Brackets

For ease of installation, do not couple the trailer to tow vehicle yet.

1. Measure and mark a line on the top of the frame (both sides) $30'' \pm 0.5''$ from center of coupler ball socket along frame, see Illustration 4c.
2. In order to mount frame brackets item #17 (see Parts Listing pg 15), you will need to remove the lift brackets item #9 & #23 (see Parts Listing pg 15) from frame brackets.

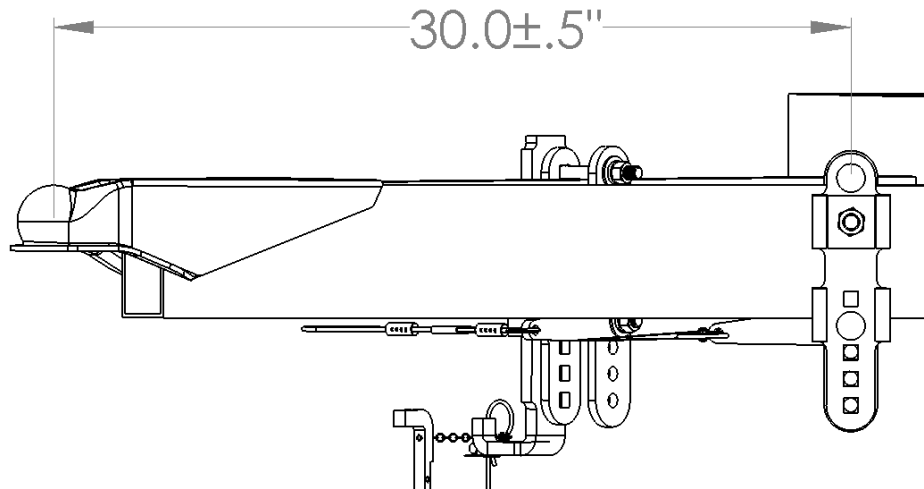


Illustration 4c

IMPORTANT! Failure to install frame brackets at the proper location could lead to vehicle damage or personal injury.

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3. Insert ½" x 4" CARRIAGE HEAD BOLT item #12(see Parts Listing pg 15) into top hole of FRAME BRACKET WELDMENT item #17(see Parts Listing pg 15) set carriage head bolt on top of frame so bracket is on out side of frame. Place FRAME MOUNTING PLATE item #13(see Parts Listing pg 15) on inside of frame and insert threads from ½" x 4" carriage head bolt through top of frame mounting plate. See Illustration 4d.

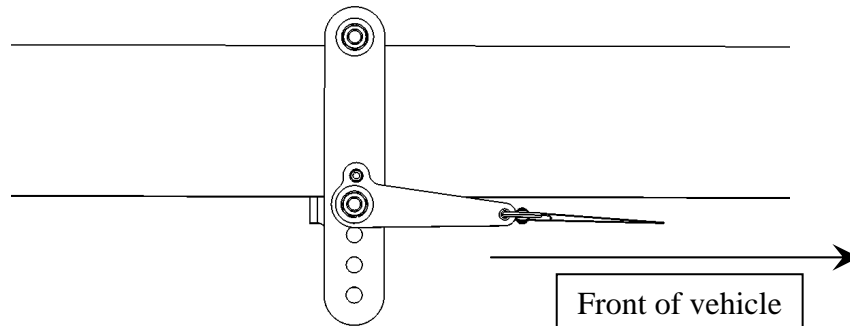
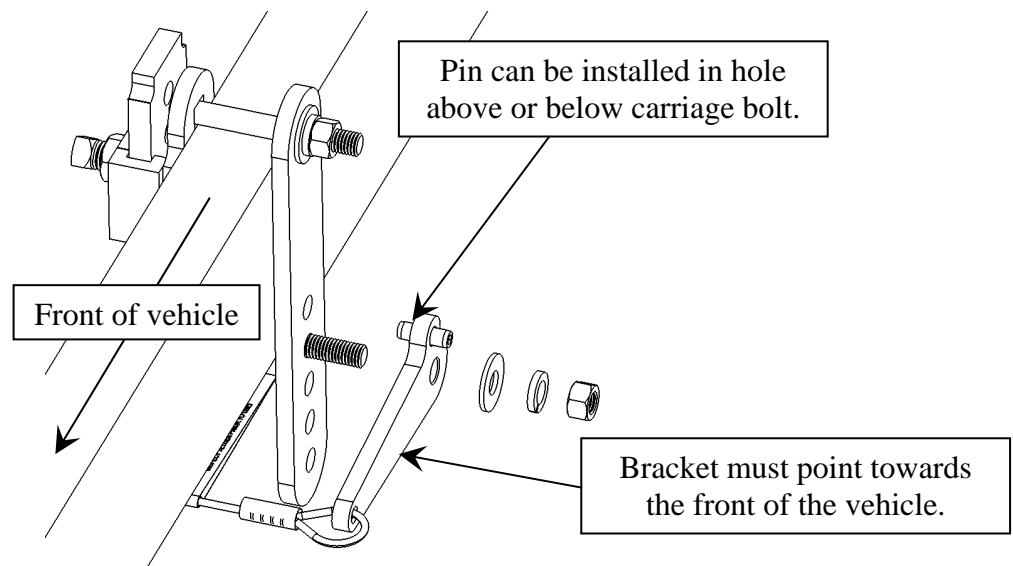


Illustration 4d
Inside frame view

4. Place ½" x 4" CARRIAGE HEAD BOLT item #12(see Parts Listing pg 15) into hole closest to the underside of the frame through frame bracket weldment into corresponding hole in frame mounting plate. Then slide SPRING BAR TETHER ASSEMBLY item 27 onto bottom carriage head bolt as shown below so the bracket points towards the front of the vehicle. The pin must be installed in the ½" hole above or below the carriage bolt.



5. Secure with (1) ½" FLAT WASHER item #16(see Parts Listing pg 15), (1) ½" LOCK WASHER item #15(see Parts Listing pg 15) and (1) ½" HEX NUT item #14(see Parts Listing pg 15) on both carriage head bolts and torque to 65-70 ft. lbs.
6. Repeat steps 3-5 for other side of trailer.

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Attaching Trailer To Ball

The following directions apply to trailers with an “A” frame tongue only. If your trailer has a straight tongue, you will **NOT** be able to use this system. Do not make any modifications to use a “Pole tongue Adapter”.

1. Back up the tow vehicle and align the hitch ball so that it is directly under the coupler socket (use a spotter if you have one. **CAUTION! Spotter should never stand between trailer and tow vehicle during connecting**). Then lower the trailer until the tongue jack comes off the ground and the tow vehicle is supporting the weight of the trailer tongue.
2. Ensure the hitch ball is completely inside the coupler socket and close the coupler ball latch if it is not yet closed. Install coupler lock or pin for safety.

Hooking Up Spring Bars

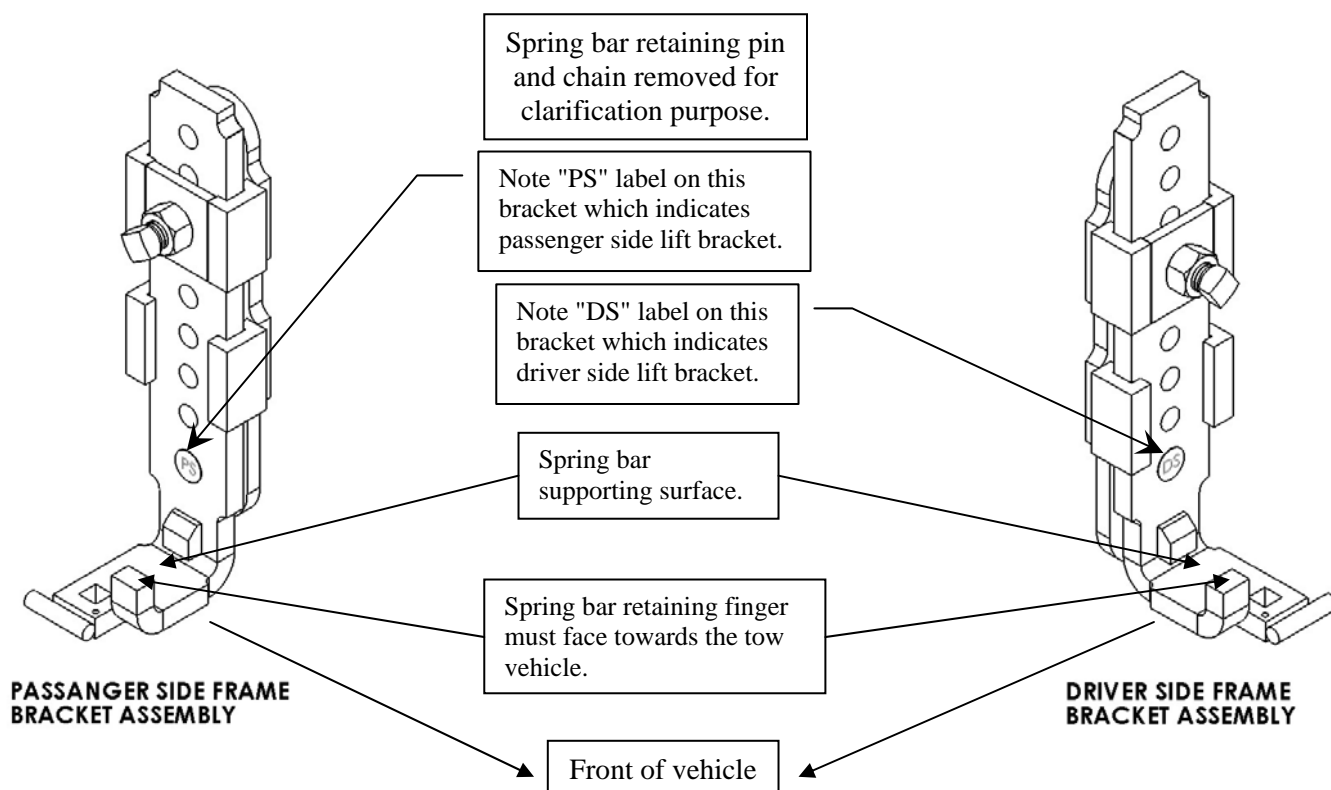
IMPORTANT! Set parking brake of tow vehicle and chock the wheels of the trailer before lifting!

CAUTION! Before hooking up spring bars, ensure that the tow vehicle and trailer are inline and straight with each other.

Raise the front of the trailer (should be attached to tow vehicle hitch ball) to reduce the spring bar lift bracket tension, this will make hooking up the spring bars easier and safer. Read the following instructions before proceeding to ensure you adjust the height of the trailer and the location of the lift brackets in the frame brackets.

The amount of leveling is adjusted by changing which hole the square head set screw is secured in on the spring bar lift bracket.

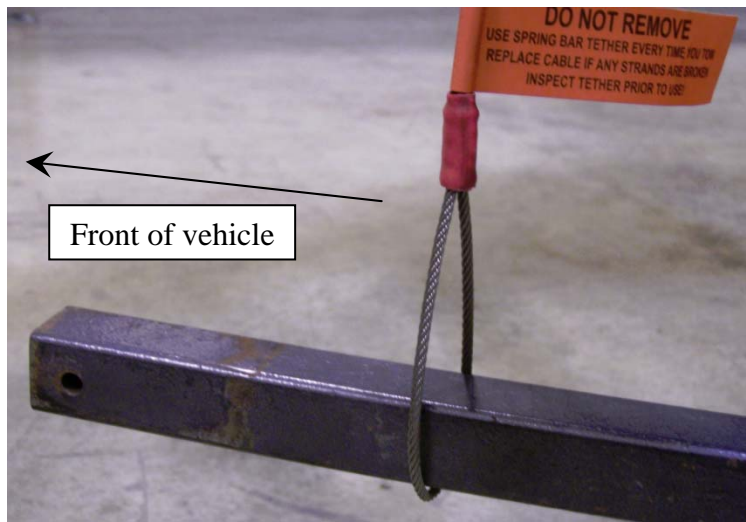
Frame lift brackets **MUST** be installed on the correct side of the trailer. If not, then damage will result to the frame bracket assemblies AND result in loss of sway control and weight distribution.



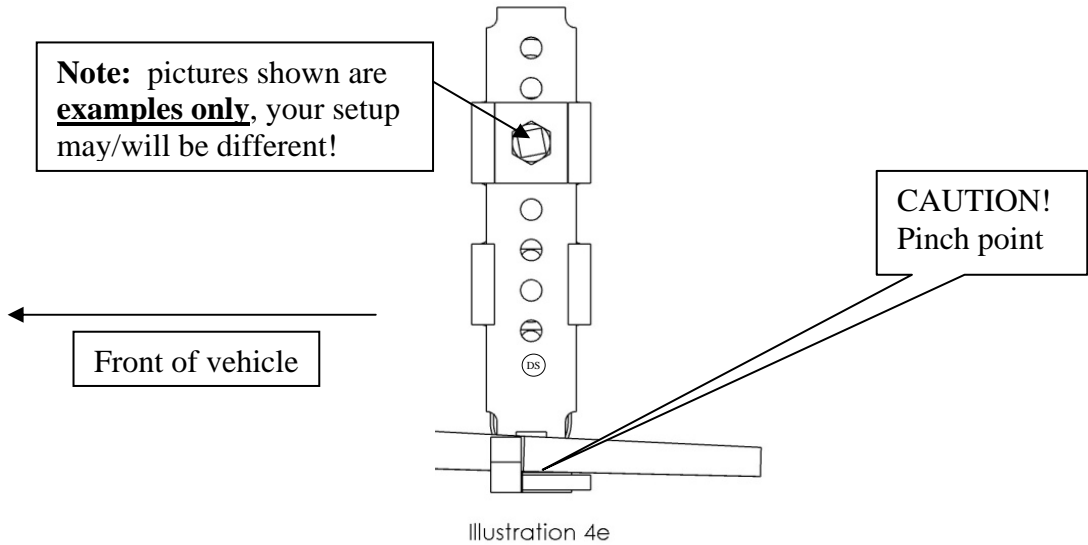
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1. Install spring bar by first passing square end through the loop in cable of the spring bar tether assembly as shown. Then continue to push spring bar into the trunnion and then fasten “D” Clip. Do the same for the other side of the trailer. Ensure that the tapered end or capacity stamp faces up when finished.



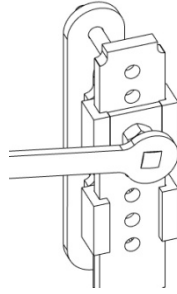
2. Setting the initial height of the spring bar lift bracket will require the use of two hands. One hand will hold and support the spring bar lift bracket and the other will lift up on the end of the spring bar to take up slop.
3. Loosen the SQUARE HEAD SET SCREW item #11(see Parts Listing pg 15) enough to allow the spring bar lift bracket to move freely up and down but do not remove.
4. Holding items as described in step 1 raise or lower the spring bar lift bracket until the supporting surface of the spring bar bracket is level with or just above the bottom surface of the spring bar. Then determine which hole in the spring bar lift bracket is closest to the square head set screw. See Illustration 4e:



5. In the Illustration shown in 4e, move the spring bar lift bracket up or down so the square head set screw will securely hold the lift bracket in place.

- Release the spring bar and while holding the spring bar lift bracket turn the SQUARE HEAD SET SCREW item #11(see Parts Listing pg 15) in to hold spring bar lift bracket in place. Tighten set screw with square wrench opening on SPRING BAR LIFT TOOL item #26(see Parts Listing pg 15) until tight.

Note: pictures shown are examples only, your setup may/will be different!



- Using the spring bar lift tool, set the curved tip into the square hole on the front lip of spring bar lift bracket so the cradle of the tool supports the bottom of the spring bar. See Illustration 4g: Driver side shown.

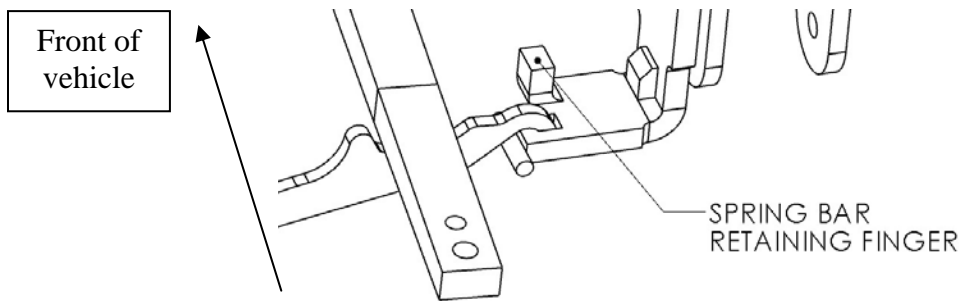


Illustration 4g

- Using both hands, grasping firmly, lift up on the end of the spring bar lift tool towards the trailer until the spring bar slides off and onto the lift bracket. **NOTE!** The movement of the spring bar from the lift tool to the lift bracket will be **QUICK** and **LOUD!** This is normal. (TIP! If needed, you can raise your trailer and tow vehicle to make lifting spring bar on to lift bracket easier, if you have a caster or block this will also add height), remove the lift tool and insert SPRING BAR RETAINING PIN item # 10(see Parts Listing pg 15) and secure with HAIR PIN CLIP item #8(see Parts Listing pg 15) as shown in Illustration 4h. Driver side shown.

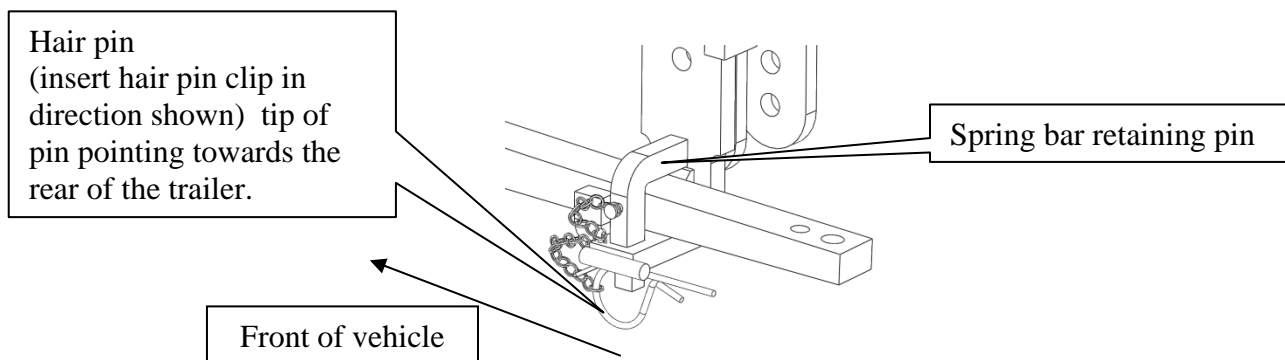


Illustration 4h

- Set spring bar lift bracket height on opposite side of trailer the same as the first one and repeat steps 2-7.

- Lower trailer and retract tongue jack to fully load spring bar lift brackets.

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

Check Vehicle Height And Adjust Spring Bars If Necessary

1. Once the tongue jack is completely unloaded, re-measure frame marking and check against measurement taken on page 5, section 3. This measurement should be $\frac{1}{4}$ " to 1" max. higher than the first measurement. If the frame marking is over 1" then the spring bars will need to be lowered 1 lift bracket hole. If the measurement is less than the initial frame measurement then you will need to raise the spring bar lift brackets by 1 hole. Refer to page 9, hooking up spring bars to raise the front of the trailer and tow vehicle.
2. When correct spring bar positions has been achieved, mark the corresponding hole on the spring bar lift bracket clearly for future reference.

Properly Adjusted System



FIGURE 1

Over Adjusted System

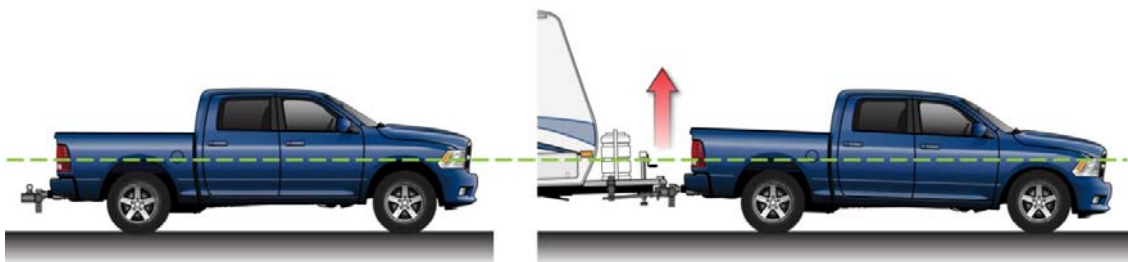


FIGURE 2

Under Adjusted System

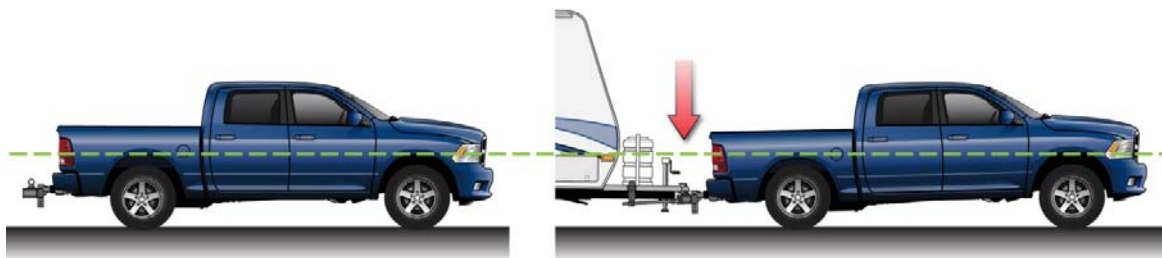


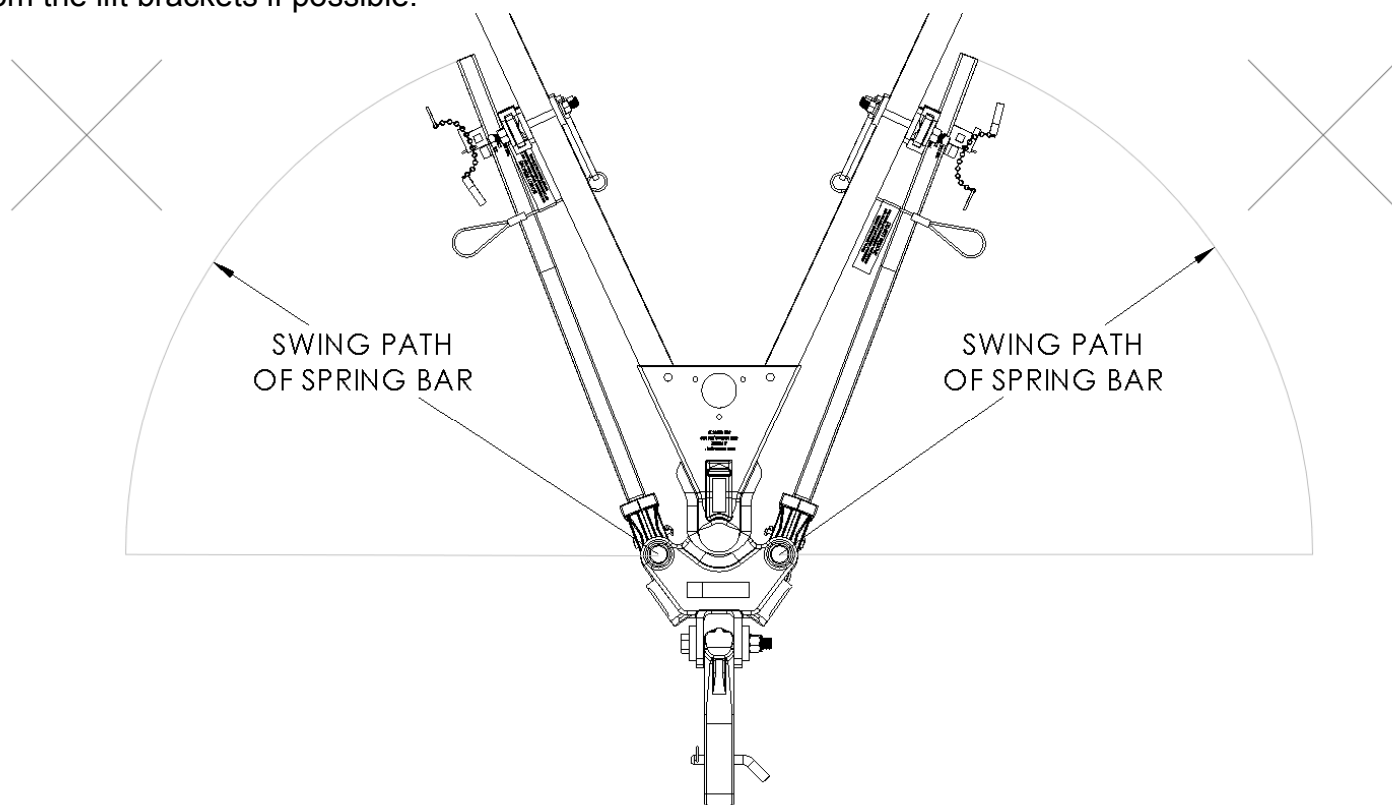
FIGURE 3

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Disconnecting Trailer From Tow Vehicle

IMPORTANT! Ensure tow vehicle and trailer are inline with each other before proceeding. When disconnecting the spring bars from the frame lift brackets, take note as to what the swing path of the spring bars are. The "X" shown below is the ideal location to stand when unhooking the spring bars from the lift brackets if possible.



LABEL ON SPRING BAR SHOWN BELOW FOR REFERENCE.

<p>⚠ WARNING ⚠</p> <p>READ INSTRUCTIONS COMPLETELY BEFORE INSTALLING SPRING BARS. STAND CLEAR OF SPRING BAR SWING PATH WHEN UN-HOOKING, THEY ARE UNDER HIGH SIDE LOAD.</p>	 <p>HUSKY</p>	<p>801 LBS. TO 1,200 LBS.</p> <p>TONGUE WEIGHT (2 BARS)</p> <p>CAUTION WHEN HOOKING UP OR UNHOOKING SPRING BARS ARE UNDER HIGH PRESSURE.</p> <p>IMPORTANT, INSTALL THIS SIDE UP. LUBRICATE TRUNNION PINS WITH GREASE.</p> <p>v-6 XXXXX XXX</p>
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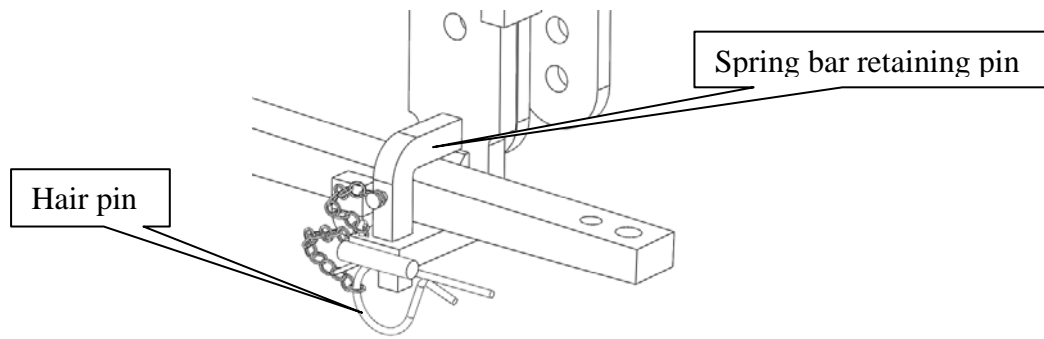
1. Raise tow vehicle and trailer with trailer tongue jack to relieve most of the pressure from the spring bar lift brackets. **IMPORTANT!** Set parking brake of tow vehicle and chock the wheels of the trailer before lifting!



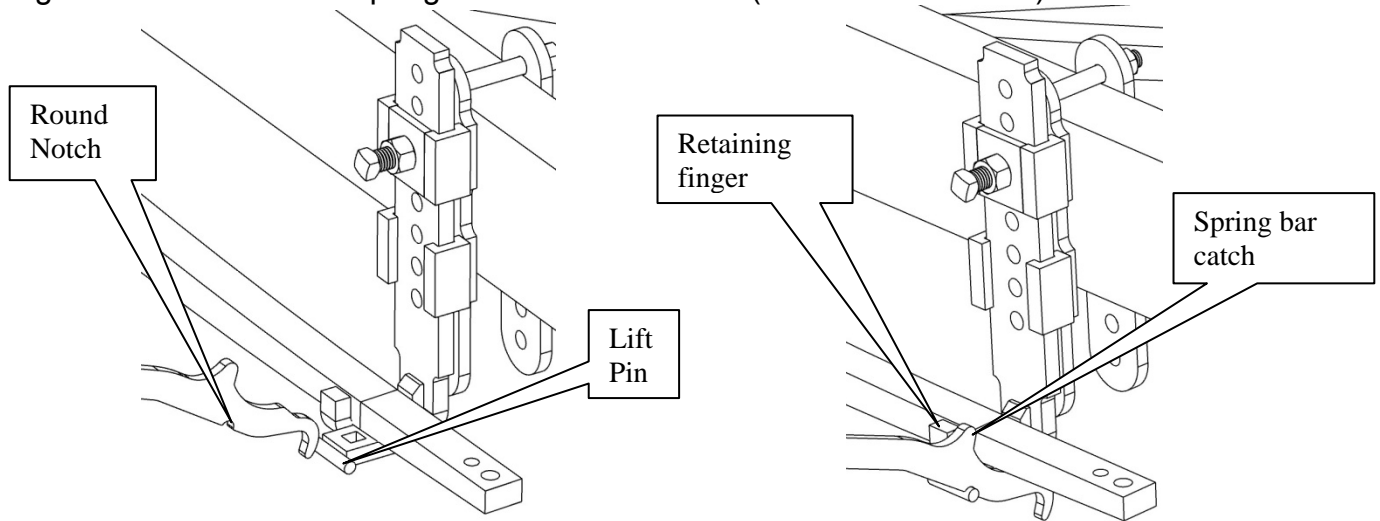
2. Remove HAIR PIN CLIP item #8(see Parts Listing pg 15) and SPRING BAR RETAINING PIN item # 10(see Parts Listing pg 15) and set aside. (Driver Side Shown.)

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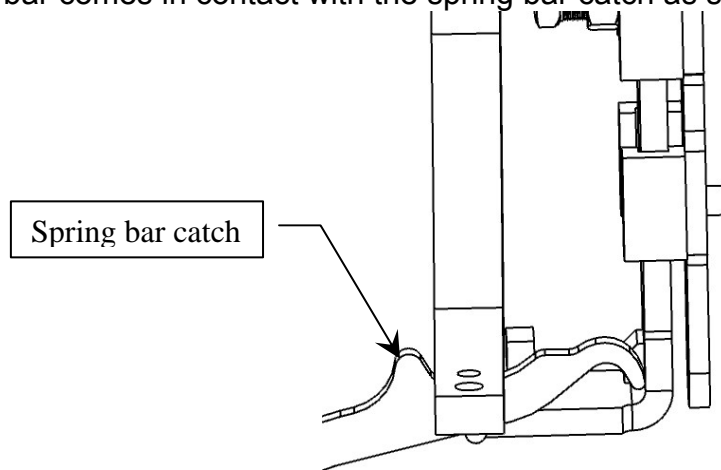
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- Using the spring bar lift tool, set the round notch on the spring bar lift pin so that the end of the spring bar tool is under the spring bar as shown below. (Driver Side Shown.)



- Grasp end of spring bar lift tool with **both hands** and **slowly** push down on end of spring bar tool handle to raise spring bar above retaining finger on lift bracket. If you are having to exert a large amount of force to lift the spring bar off the lift bracket then raise the trailer tongue with the trailer jack to reduce the load on the lift brackets. Once the spring bar clears the retaining finger the spring bar will want to move out away from the trailer. **USE CONTROL!** Slowly continue to push down until spring bar comes in contact with the spring bar catch as shown below. (Driver Side Shown.)



- Continue to rotate spring bar lift tool down until spring bar comes off of the lift tool. Repeat for other side.

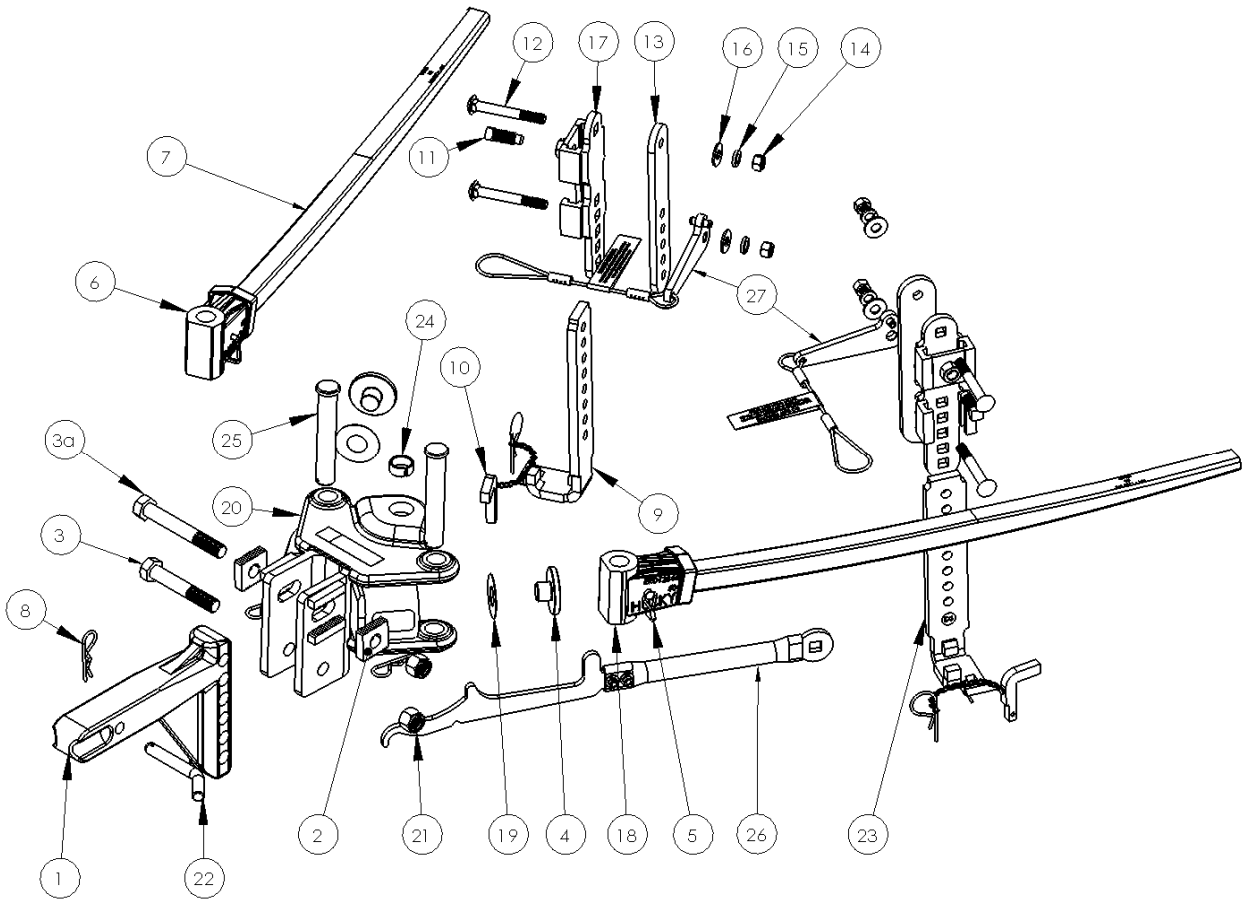
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6. Replace SPRING BAR RETAINING PIN item # 10(see Parts Listing pg 15) into square hole in spring bar lift brackets and secure with hair pin clip item #8(see Parts Listing pg 15).
7. Retract tongue jack until you can raise the coupler ball locking handle, then raise the tongue of the trailer until you clear the hitch ball. Disconnect trailer lights, safety chains, electric brake safety cable (if used), and then pull the tow vehicle forward a few feet.
8. Lower trailer tongue until level.
9. Remove spring bars from trunnion's before driving away.

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Parts Listing



501 - 1,400 lbs. CENTER LINE WD HEAD ASSEMBLY, SHANK AND FRAME BRACKET SYSTEM	
RH REPLACEMENT FRAME BRACKET ASSEMBLY	
LH REPLACEMENT FRAME BRACKET ASSEMBLY	
501 - 800 lbs. SPRING BARS	
801 - 1,200 lbs. SPRING BARS	
1,001 - 1,400 lbs. SPRING BARS	
CUSTOMER SHIM KIT	
COMPLETE HARDWARE KIT	
DS TRUNION KIT	
PS TRUNION KIT	
PRESSURE PLATE KIT	
SPRING BAR LIFT TOOL	
"L" PIN ASSEMBLY SERVICE KIT	
KIT, SPRING BAR TETHER	
KIT, HEAD SERVICE	

ITEM NO.	Description	31390	31393	31394	31511	31512	31513	31459	31447	31448	31449	31450	31878	31672	32017	31705	DESCRIPTION
1	SHANK WELDMENT	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	HEAD TILT ADJUSTING PLATE	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	
3	BOLT, HEX HEAD, 3/4-10 UNC X 4.5, GR8, CZ	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
3a	BOLT, HEX HEAD, 3/4-10 UNC X 5.5, GR8, CZ	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
4	PLATE, PRESSURE	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-	
5	1/4" DIA. SQUARE "D" SAFETY PIN	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	
6	TRUNION, PS MACHINED	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
7	501 - 800 LBS. SQUARE SPRING BAR	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	
7	801 - 1200 LBS. SQUARE SPRING BAR	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	
7	1000 - 1400 LBS. SQUARE SPRING BAR	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	
8	PIN, 5/8" HAIR	3	1	1	-	-	-	3	1	1	-	-	-	-	-	-	
9	PS LIFT BRACKET	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
10	"L" PIN ASSEMBLY	2	1	1	-	-	-	2	-	-	-	-	-	2	-	-	
11	SET SCREW, FULL DOG POINT, 5/8-11 X 1.50 LG, GR5, CZ	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
12	CARRIAGE HEAD BOLT, 1/2" 13-UNC X 4", GR5, CZ	4	2	2	-	-	-	4	-	-	-	-	-	-	-	-	
13	PLATE, FRAME MOUNTING	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
14	NUT, HEX 1/2-13 UNC, GR5, CZ	4	2	2	-	-	-	4	-	-	-	-	-	-	-	-	
15	HD LOCK WASHER, 1/2" ID	4	2	2	-	-	-	4	-	-	-	-	-	-	-	-	
16	WASHER FLAT, 531 ID X 1.250 OD X .10 THK, TYPE B	2	2	2	-	-	-	4	-	-	-	-	-	-	-	-	
17	FRAME BRACKET WELDMENT	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
18	TRUNION, DS MACHINED	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	
19	SHIM	2	-	-	-	-	-	6	-	-	-	-	-	-	-	-	
20	WD W/SWAY CONTROL	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
21	NUT, NYLON LOCK, 3/4" 10-UNC, GR5, CZ	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	
22	HITCH PIN, 5/8"	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
23	DS LIFT BRACKET	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
24	1-1/4" TO 1" BUSHING	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
25	CLEVIS PIN, 1" X 5.75" LONG	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-	
26	SPRING BAR LIFT TOOL	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	
27	SPRING BAR TETHER ASSEMBLY	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	

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Towing Tips

Driving 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. 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 occurred in any other way, pull over and make a thorough inspection. Correct any problems before resuming travel.

Turning and backing up present new problems-plan ahead.

When backing up, use a spotter to help guide you.

Towing a trailer will change your turning radius, the longer the trailer the larger radius turn.

Driving Conditions

When driving in conditions where the pavement is wet, icy, snowy, loose gravel, grass and dirt, reduce your speed and do not make any sudden maneuvers. Allow ample distance/time for stopping and changing lanes. If possible, wait for road conditions to improve before driving.

Follow all state, local and provincial driving and towing laws in the location you are driving in.

Not following your tow vehicle, trailer, and Husky instructions/manuals can result in a fatal accident.

Check Your Equipment

Please refer to the MAINTENANCE section. Periodically check the condition of all your towing equipment and keep it 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. Too low a tongue weight often produces tendency to sway.

Tire Inflation

Unless specified otherwise by the towing vehicle or trailer manufacturer, tires should be inflated to their manufacturer's towing recommendations.

Towing Vehicle And Trailer Manufacturers Recommendations

Review the owner's manual for your towing vehicle and trailer for specific recommendations, capacities and requirements.

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. Also, periodically check functionality of all lights before towing and repair any problems as needed.

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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.

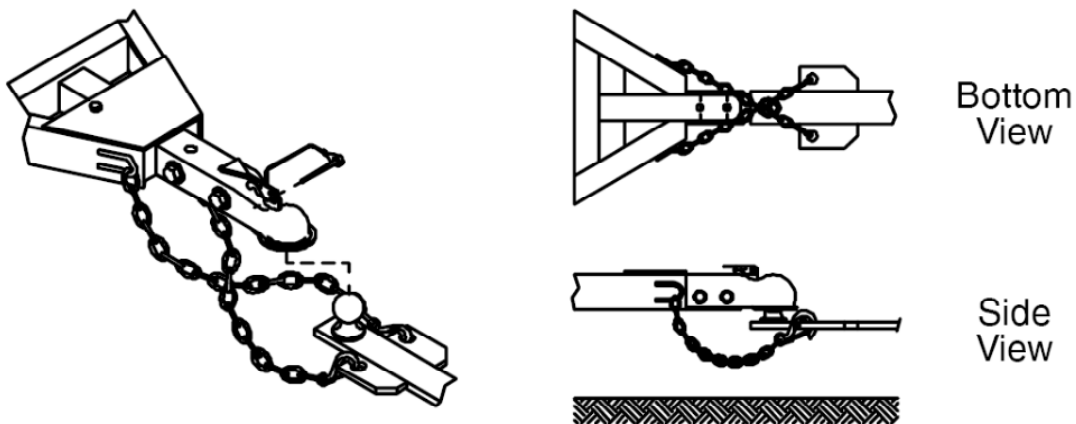
Modifications

Do not adapt or modify the CENTER LINE™ WD with Sway Control including frame brackets.

Safety Chains

Can prevent runaway trailer in case hitch/coupler fails.

1. Always use safety chains when towing.
2. Cross safety chains under coupling to prevent tongue from dropping to ground.
3. Allow only enough slack for tight turns.
4. Do not let safety chains drag on ground.
5. Twist safety chains equally from hook ends to take up slack.
6. Use safety chains rated equal to or greater than twice the maximum gross trailer weight rating.



Uncontrolled tilting of trailer can result in personal injury or equipment damage.

1. Distribute weight so that trailer tongue weight is approximately 10-15% of the gross trailer weight.

Incorrect tongue weight can cause fish tailing and loss of control of towing vehicle resulting in serious injury and equipment damage.

2. Tongue weight is the amount of trailer weight that rests on the towing vehicle hitch – that is, the downward pressure on the coupler.
3. Remove or adjust trailer load to get correct tongue weight.
4. Do not let tongue weight exceed coupler and hitch rating.
5. Use slower speeds when towing a trailer.

Maintenance

Perform the following every 2,500 miles

Keep the trunnion ends free from dirt and the clevis pins well lubricated with any brand of petroleum based grease, using anything other than this will cause premature wear. Excessive wear in this area may indicate an overload, inadequate lubrication or incorrect lubrication type.

Keep trunnion cam lobes, clevis pins and pressure plate interface free of foreign debris and well lubricated with any brand of petroleum based grease.

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Periodically check the rotation of the trunnion's by disengaging the trailer and spring bars from the hitch head. Check trunnion's for excessive clearance as follows:

1. Attempt to insert (1) SHIM item #19 between the pressure plate item #4 and the backside of the trunnion (see FIGURE 1.) If it can pass all the way through from one side to the other then you need to add this shim behind the pressure plate. Otherwise check other side and proceed with the following steps if required. Refer to FIGURE 2 for proper assembly.
 - a. Remove hair pin item #8 from bottom end of CLEVIS PIN item #25 and set aside.
 - b. Holding the trunnion with one hand, pull the clevis pin straight up and set both aside.
 - c. Pull pressure plate straight out, take note if there are already any shims in place. If so, retain as you will have to re-install these with the additional one you are installing. Place shim on small 1" diameter shaft on backside of pressure plate.
 - d. Hold pressure plate in place while putting trunnion back in position. Align holes in top and bottom plate with hole in trunnion and insert clevis pin and secure with hair pin clip.
 - e. Repeat the steps above for the other side.

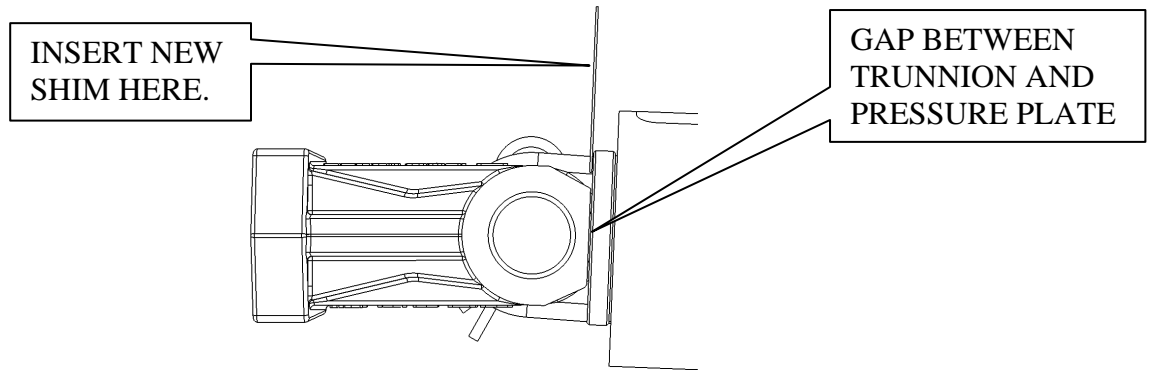


FIGURE 1

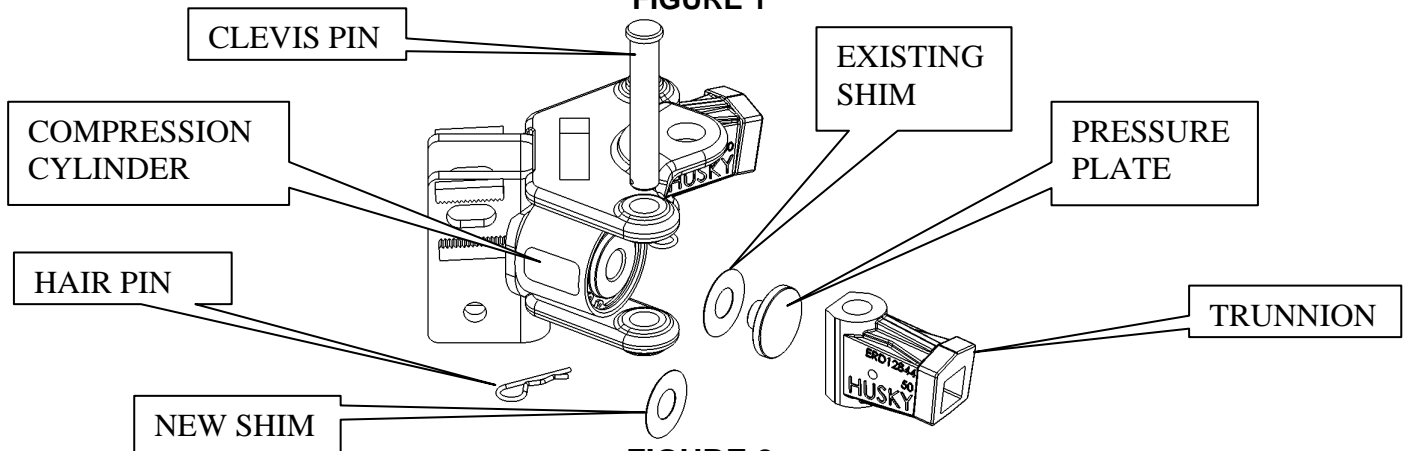


FIGURE 2

WARNING! Never attempt to repair the compression cylinder by removing the snap ring, injury may result. And never use a hammer to drive the trunnion clevis pins in.

Inspect head adjusting plates for worn or broken teeth, replace if needed.

Inspect lift bracket support and spring bar interface for excessive wear. Any brand of petroleum based grease may be used between the mating surfaces of the underside of the spring bar and the supporting surface of the lift bracket if needed.

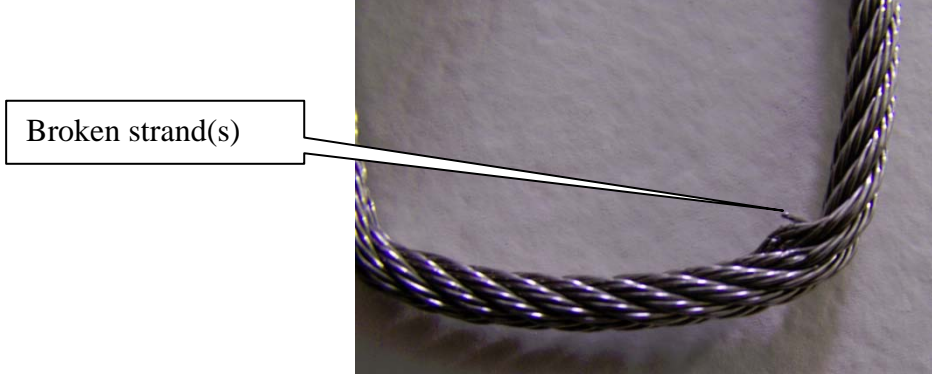
At The Beginning Of Every Towing Day:

Coat the trunnion clevis pin holes and pins with any brand of petroleum based grease.

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Clean ball and coupler socket and coat ball lightly with a heavy/thick grease.
Check that spring bar retaining pins are in good shape. Replace if they become worn.
Check to see that all hitch bolts are properly tightened and that the locking pins in the lift brackets are properly and securely in place.
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 the condition of the spring bar tether assemblies and ensure there are no broken strands at any point along the cable. If any are, contact the Husky Tow support line for a replacement.



DO NOT REMOVE
USE SPRING BAR TETHER EVERY TIME YOU TOW
REPLACE CABLE IF ANY STRANDS ARE BROKEN
INSPECT TETHER PRIOR TO USE!

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.

Tighten the two 3/4" bolts to 260 ft. lbs. torque once the 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

Before welding or drilling the trailer A-Frame, refer to the trailer manufacturer for welding and drilling recommendations.

Loaded ball height should never be greater than what these instructions allow! 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 and braking at the same time.

Loss of steering may result from a "high nose" trailer setup. If this occurs refer to page 12 "CHECK VEHICLE HEIGHT AND ADJUST SPRING BARS IF NECESSARY" and make the necessary equipment adjustment or tow vehicle and/or trailer load adjustments.

Short wheel base vehicles may induce sway when towing a trailer. **USE EXTREME CAUTION.**

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 vehicle's rear wheels are carrying their share of the load.

CAUTION!

Using the Center Line WD w/Sway system without the spring bars removes all weight distribution and sway control functionality of the product.

Warranty Terms:

Life Time Limited Warranty:

This warranty applies solely to Centerline Weight Distributing Hitch manufactured by DTS Manufacturing for Husky Towing Products.

DTS Manufacturing, Husky Towing Products and Coast Distribution make no guarantees or warranties for products not manufactured by DTS Manufacturing. Such products are covered solely under any applicable warranty of the manufacturer. It is always recommended that the operating instructions and guarantee instructions provided by the manufacturer are followed.

DTS Manufacturing warrants its products to be free from manufacturing and material defects to the original purchaser for the length of warranty stated above from the date of retail purchase. If any products are found to have a manufacturing or material defect, the product will be replaced or repaired at the option of DTS Manufacturing, Husky Towing Products and Coast Distribution with proof of purchase by the original purchaser. The original purchaser shall pay all transportation and shipping costs associated with the return of the defective product and the defective product shall become the property of DTS Manufacturing.

The Warranty applies to DTS manufactured products used for individual and recreational purposes. Commercial usage of the DTS manufactured products limits the warranty to 90-days from date of purchase.

The Warranty applies only to DTS manufactured products which are found to be defective in manufacturing or material. This warranty does not apply to normal wear and tear of to the finished placed on DTS manufactured products.

DTS Manufacturing, Husky Towing Products and Coast Distribution are not responsible for any labor costs incurred for removal or replacement of the defective product.

DTS Manufacturing, Husky Towing Products and Coast Distribution are not responsible for repair or replacement of any product under the limited warranty where the product was improperly installed, misapplied, altered, abused, neglected, overloaded, misused or damaged as a result of an accident, including any use of the product not in accordance with all product operating and safety instructions.

Without limiting the generality of the foregoing, DTS Manufacturing, Husky Towing Products and Coast Distribution shall under no circumstances be liable for any incidental or consequential loss or damage whatsoever arising out of, or in any way relating to any such breach of warranty or claimed defect in, or non-performance of the products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion or limitation may not apply to you.

This limited warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

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