

# Installation Instructions "HUSKY ROLLER" Part # 32220

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.
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 decals from the product.
APPLICATION:	For use on short bed pickup applications no less than 6-1/2 feet long.

**NOTE**: The "HUSKY ROLLER" is to be used only with 5th wheel trailers which weigh 16,000 lbs. or less. Never use with heavier trailers. You will need to disassemble the uprights from your current 5th wheel to install the "HUSKY ROLLER". The "HUSKY ROLLER" takes the place of those uprights.

<u>Caution:</u> The "HUSKY ROLLER" will reposition your 5th wheel 9" rearward. HOWEVER this will <u>NOT</u> guarantee complete truck cab/trailer clearance when towing & making sharp turns. See page 2, "Truck Cab and 5th Wheel Trailer Clearance".

<u>Caution:</u> Do not install mounting/base rails over plastic bed liners. Plastic bed liners must be cut out of the way. Rails may be installed on spray in liners. **Note**: Consult spray liner installer for recommended curing time.

**IMPORTANT:** The installation of the Husky Roller 32220 REQUIRES the purchase and installation of the Husky Center Bolt Kit 32059. **CENTER BOLT KIT 32059 IS SOLD SEPARATELY.** 

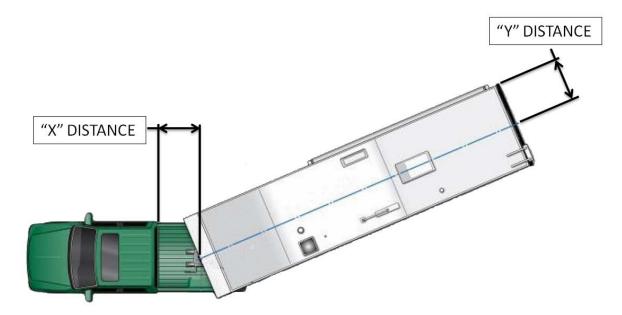
The "Husky Roller" will only work in the base rail slots spaced 20-5/8" or 29" apart.

Only use Husky 5th Wheel Hitches with this product.

### WARNING

The Husky Roller is <u>NOT</u> to be used with rotating pin boxes or pin boxes that require a "wedge"; such as the REESE Sidewinder, REESE Revolution, 5<sup>th</sup> Airborne Sidewinder. Use of these products may damage this product and will void the warranty.

### Truck Cab and 5th Wheel Trailer Clearance



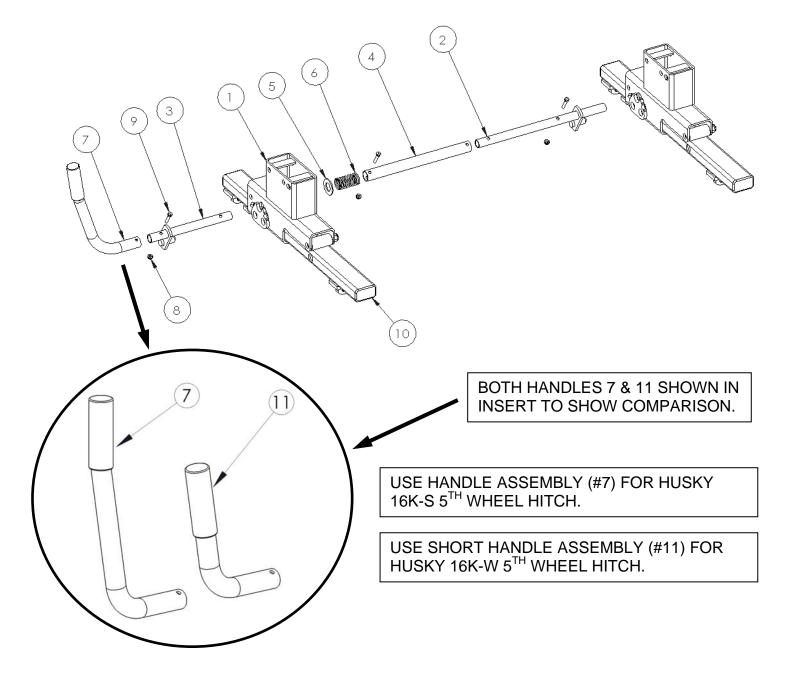
**NOTE!** Not all 5th wheel trailers are the same, it is the driver's responsibility to determine what kind of trailer to cab clearance will result at hook-up time. This can be determined by measuring the distance from the center of the 5th wheel hitch opening to the rear of the truck cab ("X" DISTANCE) and adding 4 inches to it. Then measure the width of the trailer and divide this in half, this will result in the ("Y" DISTANCE). The "X" DISTANCE must be equal to or greater than the "Y" DISTANCE. This does not mean that your 5th wheel trailer cannot still come in contact with the truck cab. Always have a spotter to help be your eyes to warn you when to stop turning.

	Т	orque in pounds	-foot		0
				GRADE	E
	<b>Bolt Diameter</b>	Thread Pitch	2	5	8
	1/4	20	4	8	12
	1/4	28	6	10	14
	5/16	18	9	17	25
	5/16	24	12	19	29
	3/8	16	16	30	45
	3/8	24	22	35	50
	7/16	14	24	50	70
	7/16	20	34	55	80
	1/2	13	38	75	110
	1/2	20	52	90	120
	9/16	12	52	110	150
	9/16	18	71	120	170
	5/8	11	98	150	220
	5/8	18	115	180	240
	3/4	10	157	260	380
	3/4	16	180	300	420
L		16 E BOLT GRADE IDEN			420
	GRAD		GRAD	)	
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	TOOLS REQUIRED:			
	DRILL*			
	5/8" DRILL BIT*			
	3/16" ALLEN WRENCH			
	7/16" WRENCH & SOCKET			
	9/16 WRENCH & SOCKET			
	3/4" WRENCH & SOCKET			
	TORQUE WRENCH (150 LBSFT. MIN.)			
*These tools only required if you do not have				
а	center bolt kit installed in your base rails.			

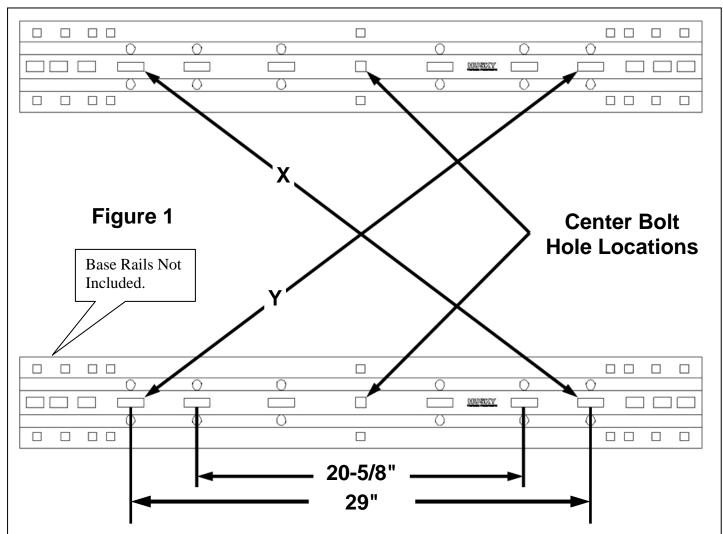
### **Parts Listing**

ITEM NO.	Description	QTY.
1	ROLLER HOUSING ASSEMBLY	2
2	ROLLER LONG TUBE ASSEMBLY	1
3	ROLLER SHORT TUBE ASSEMBLY	1
4	CONNECTOR TUBE	1
5	15/16" FLAT WASHER	1
6	SPRING, COMPRESSION 1-1/4 OD X .148 WIRE DIA.	1
7	HANDLE ASSEMBLY	1
8	1/4-20 FLANGE LOCK NUT	3
9	1/4"-20 X 1-1/2" GR.5 HEX HEAD BOLT	3
10	RUBBER TUBE PLUG	4
11	SHORT HANDLE ASSEMBLY	1

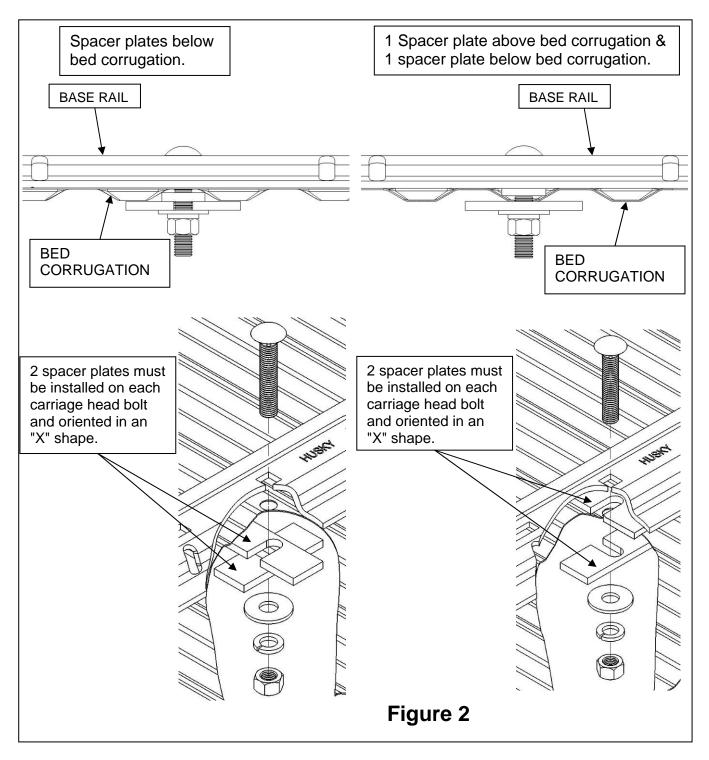


### **CENTER BOLT INSTALLATION**

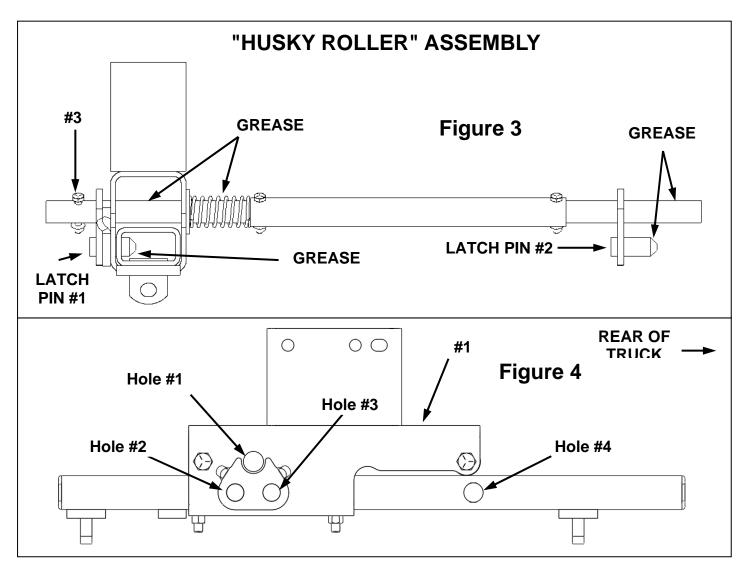
 Prior to assembly of "HUSKY ROLLER", be sure that your base rails are properly installed and square with each other. Measure diagonally across the rails. See Figure 1. Measurements "X" & "Y" should be within 3/16" of each other. These measurements are required for proper fit and function of the "HUSKY ROLLER". If using pre-existing base rails ensure that the center to center (fore and aft) distance is 22" and that there are two pairs of slots in the base rails that are 20-5/8"" apart (side to side) Otherwise contact your local dealer for proper base rail selection and installation.



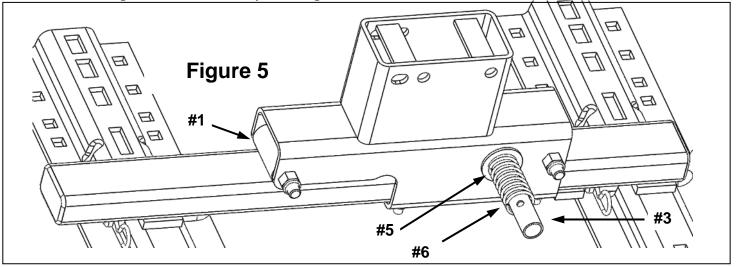
- 2. Install the Husky Center Bolt kit 32059, which is **REQUIRED**. Purchased separately.
- Locate the center hole in each base rail. See Figure 1. Using these holes as a guide, drill a 5/8" hole through the truck bed. <u>Confirm that the fuel tank, brake/fuel lines, electrical wires located</u> <u>under the bed are not in the path of drilling the holes in this step.</u>
- 4. Drop the 5/8 carriage bolts supplied through the center bolt locations, through the truck bed.
- 5. Check the corrugations in the truck bed floor and place the spacer plate in the correct position as shown. See Figure 2.

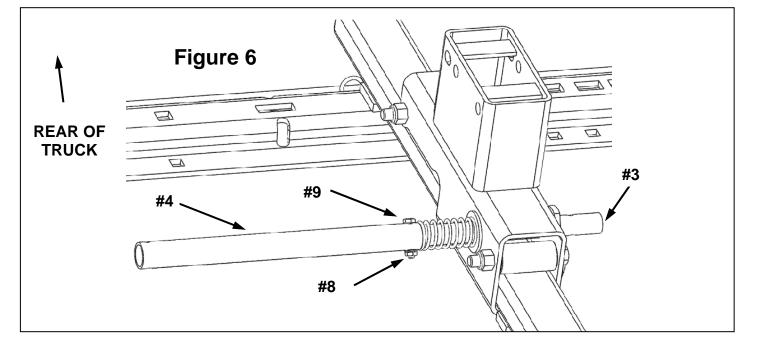


- 6. Tighten the 5/8" hex nuts to 150 lbs.-ft.
- 7. Once the bed rails are square and the center bolt kit is properly installed you can start the installation of the "HUSKY ROLLER".

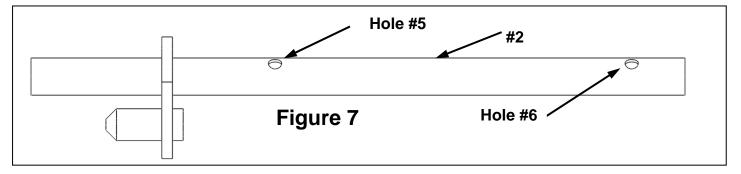


- 1. Apply grease to ALL parts requiring grease. See Figure #3 for all areas requiring grease.
- 2. Slide short tube assembly #3 into Hole #1 of the driver side roller assembly #1 so that the latch pin #1 inserts into hole #2. See Figure #4.
- 3. Place the large flat washer #5 and the compression spring #6 on the end of short tube assembly #3 as extends through the roller assembly. See Figure #5

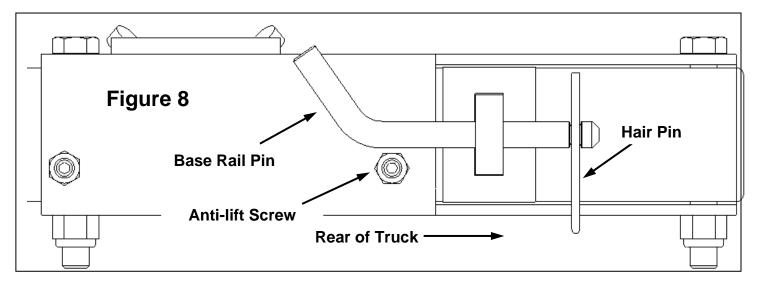




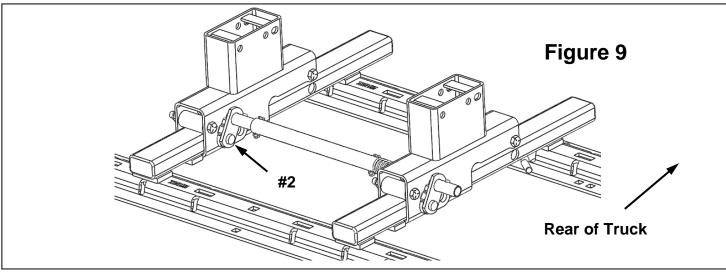
- 4. Slide the connector tube #4 onto the short tube assembly #3 so that it compresses the compression spring #6. See Figure 6.
- 5. Align the 1/4" hole attachment holes line up in the connector tube #4 and the short tube assembly #3. Loosely assemble connector tube #4 and the short tube assembly #3 with the 1/4" bolt #9 & 1/4" nut #8. See Figure 6.
- 6. Determine which foot print of Husky Roller you need. Refer to your original 5th wheel instructions. See Figure 1 for assistance. If your 5th wheel requires a 20-5/8" stance proceed to Step 7a. If your 5th wheel requires a 29" stance proceed to Step 7b. If your 5th wheel requires something different do NOT use this roller and contact your 5th wheel manufacturer for assistance



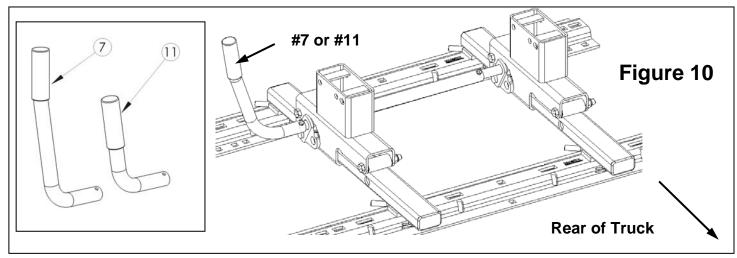
- 7a. Loosely assemble connector tube #4 and the long tube assembly #2 with the 1/4" bolt #9 & 1/4" nut #8; use **hole #5**. See Figure 7.
- 7b. Loosely assemble connector tube #4 and the long tube assembly #2 with the 1/4" bolt #9 & 1/4" nut #8; use **hole #6**. See Figure 7.
- 8. Place the roller housing assembly onto the driver side of the installed base rails and pin in place with the base rail pins and hair pins supplied with base rail kit. See Figure 1 for correct slot use. See Figure 8 for base rail pin orientation. The base rail pin **MUST** point **AWAY** from **ALL** the anti-lift screws on both roller assemblies.



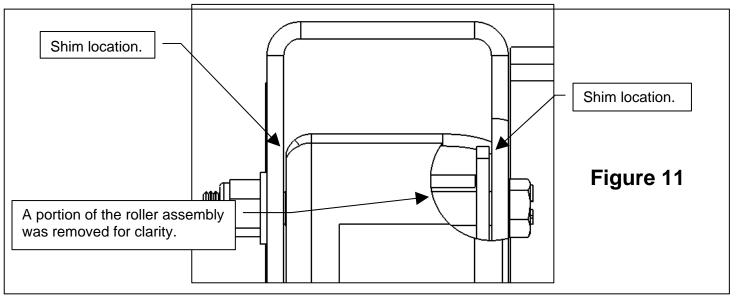
9. Grease the latch pin and free end of the long tube assembly #2 which is connected to the driver's side roller assembly. See Figure 3. Slide it into Hole #1 of the passenger side roller assembly so that the latch pin inserts into hole #2. See Figure 3 & 9. Place the roller housing assembly onto the passenger side of the installed base rails and pin in place with the base rail pins and hair pins supplied with base rail kit. See Figure 1 for correct slot use. See Figure 8 for base rail pin orientation. The base rail pin **MUST** point **AWAY** from **ALL** the anti-lift screws on both roller assemblies



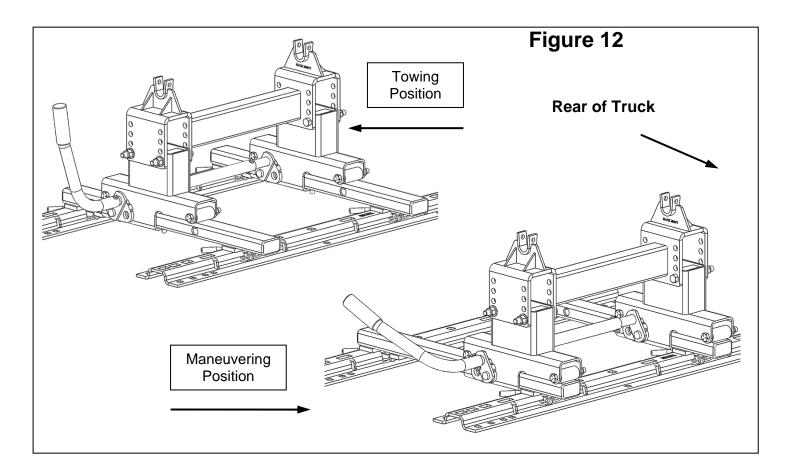
Attach handle assembly #7 onto short tube assembly #3 for Husky 16K-S 31313. Loosely
assemble using 1/4" bolt #9 and 1/4" nut #8. See Figure 10. Use short handle assembly #11 if using
Husky 16K-W 5<sup>th</sup> wheel 31326.



11. Install cross member and ensure it is centered and straight by shimming (if necessary) and then torque bolts to 75 lbs.-ft. <u>Note:</u> The roller housing assemblies need to be parallel within 1/4". Multiple shims or 1/2" washers can be stacked together if gap width is large. See Figure 11.



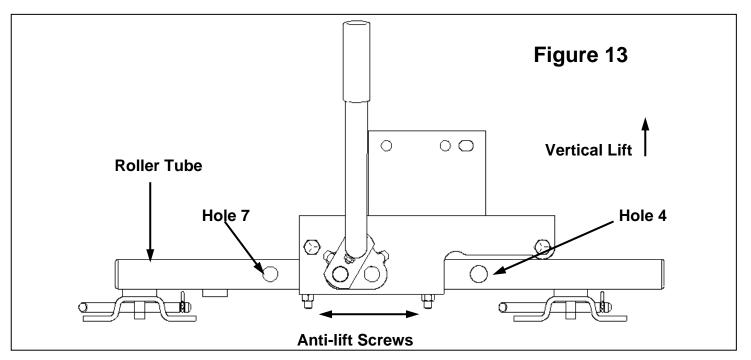
- 12. Tighten all 1/4" nuts and bolts to 7 ft.-lbs. The tubes on the handle #7 and connector tube #4 should crush onto both tube assemblies. This will insure a tight fit. The handle and short/long tube assemblies should and all move and rotate as 1.
- 13. Pull handle out and rotate so that both latching pins rotate and lock into hole # 3. See Figure 4. Push the Husky Roller rearward until the latching pins insert completely into hole #4. See Figure 4. The Husky Roller should easily move front and back in the truck. See Figure 12.



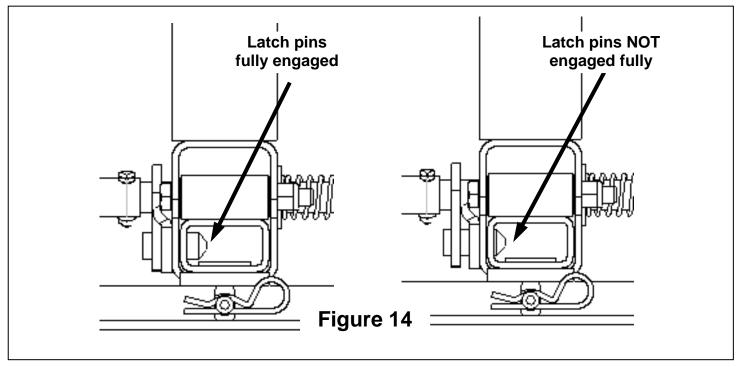
# **Trouble Shooting**

If the Husky Roller binds or is difficult to move; the housing assemblies may be tilted, this will required adjusting the shims or 1/2" washers in the cross member. See Figure 11. It may also be due to the base rails not being parallel. See Figure 1.

If the Husky Roller has too much or too little vertical lift in the housing assemblies; you can adjust the antilift screws on the bottom of the housing assemblies. See Figure 13. To adjust; loosen the lock nut and turn the set screw with a 3/16" allen wrench. Adjustments should be made in 1/8 turn increments. After adjustment; tighten the lock nut so that the set screw will not back out on its own. The Husky Roller should easily roll back and forth. The set screws should be loose enough to not drag on the roller tube, but tight enough to minimize the lifting of the roller housing.



Be sure both latch pins MUST fully engage in Holes 4 & 7. See Figures 13 & 14. If not, adjust shims or 1/2" washers so that latch pins fully engage.

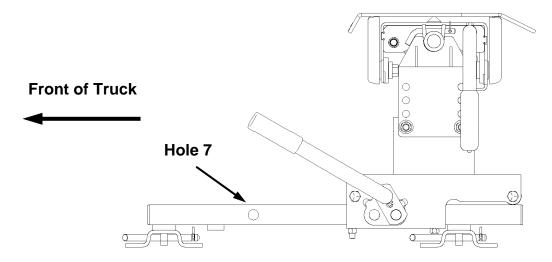


# **OPERATING INSTRUCTIONS**

### From Towing Position to Maneuver Position:

1.Be sure truck and trailer are on level ground and in a straight line.

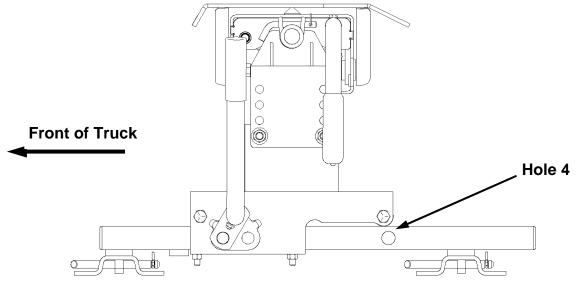
- 2. Pull the handle #7 out and rotate forward so that the latching pins are in hole #3 (rear hole).
- 3. Apply a tug test. This consists of applying the trailer brakes and slowly driving the truck forward until the Husky Roller moves rearward and the latch pins fully engage in hole #4 in both roller tubes.
- 4. Check both latch pins for full engagement.



### From Maneuver Position to Towing Position:

1.Be sure truck and trailer are on level ground and in a straight line.

- 2. Pull the handle #7 out and rotate rearward so that the latching pins are in hole #2 (front hole).
- 3. Apply a tug test. This consists of applying the trailer brakes and slowly driving the truck rearward until the Husky Roller moves forward and the latch pins fully engage in hole #7 in both roller tubes.
- 4. Check both latch pins for full engagement.



### **Maintenance and Care**

- 1. Every 5,000 miles check all bolted connections to ensure the proper torque is applied. (See page 1 for proper torque values based on fastener size and grade.) Also, apply fresh grease to the latch pins, tube assemblies and spring to ensure trouble free movement
- 2. Using compressed air, clean cloth or hand brush to periodically wipe off the sliding surface of the "HUSKY ROLLER".
- 3. Before each trip, it is a good idea to check the actuating mechanisms of the "HUSKY ROLLER" for proper movement and make any corrections/adjustments if needed.

## **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.

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 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.

#### **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 and do not exceed them.

#### **Passengers in Trailers**

Husky Towing does not recommend passengers traveling in or on trailers during towing.

#### Trailer Lights, Turn Signals, Electric Brakes

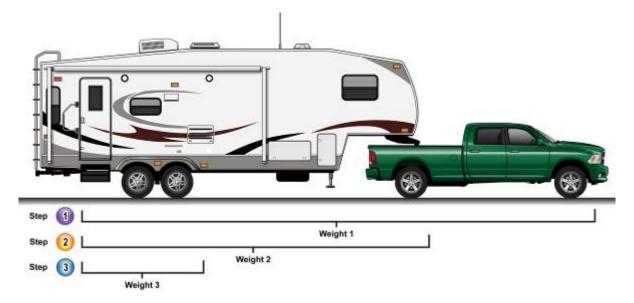
Always hook up all of the trailer lights, electric brakes and break-away switch connection whenever trailer is being towed. Also periodically check functionality of all lights before towing and repair any problems as needed.

# Appendix A

### Weighing Truck and 5th Wheel Trailer.

Weigh the Truck and 5th Wheel on a public weigh scale. Public weigh scales can be found at Some Truck Stops, or they can be located from Yellow pages or on the Internet.

Weigh the Truck and 5th Wheel in 3 stages as shown in the sketch.



**Step 1**, Weigh the both the Truck and 5th Wheel. This is **weight 1**; this will give the **GCW** (Gross Combination Weight) of the Truck and 5th Wheel Trailer. The **GCW** must not exceed the **GCWR** (Gross Combination Weight Rating) for the Truck. The **GCWR** of a truck depends on engine size, transmission, rear axle ratio, tow package and other factors. The manufacturer or dealer will be able to find the **GCWR** from the **VIN** (Vehicle Identification Number) of the truck.

Step 2, Drive the front wheels of the truck off the weighing platform. Weigh the rear wheels of the truck and the 5th Wheel Trailer wheels. This is weight 2, Subtract weight 2 from the weight 1; the result is the GAW (Gross Axle Weight) for the front axle of the truck. The GAWR (Gross Axle Weight Rating) for the front axle can be found on the VIN plate on the driver's side door pillar, the measured front GAW must not exceed the front GAWR on the VIN plate.

Step 3, Drive the rear wheels of the truck off the weighing platform; this should leave only 5th Wheel Axles remaining on the weighing platform. This is weight 3, Subtract weight 3 from the weight 1 and this is the GVW (Gross Vehicle Weight) of the truck. The measured GVW must not exceed the GVWR found on the VIN plate. Subtract weight 3 from weight 2 and this is the measured GAW of the rear axle of the truck, and must not exceed the GAWR of the rear axle found on the VIN plate. Weight 3 is also the GAW of the 5th Wheel; this weight should not exceed the GAWR on the plate on the 5th Wheel.

# Warranty Terms:

#### 5-Year Limited Warranty:

This warranty applies solely to 5th Wheel Hitches 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.