



HOW TO ASSEMBLE, INSTALL, and USE YOUR LOCK N ROLL WEIGHT DISTRIBUTION HITCH (WDH)

Tools required: An adjustable wrench able to open up enough for a 1-3/8" bolt head. A 15/16th socket. A 1-1/16 socket. A right angle impact wrench is not required but will make the installation much easier.

NOTE: It is not intuitively obvious as to how this needs to be done. Please read all the installation and decoupling instructions and follow the correct sequence. A Lock N Roll trailer side coupler must be installed on the trailer before the WDH system can be used. Depending on your trailer tongue one of the following must be installed; 502,504,506,508,510,514,528,or 530

Step 1. Insert the height adjustment channel, either PN505, or PN 515, or PN519 into the vehicle's receiver tube and secure it in place with a 5/8" bolt or pin.



Step 2. With your trailer level, measure from the ground to the center of the coupling shaft. (This assumes a Lock N Roll is already installed on the trailer)

Step 3. Bolt the vehicle side portion of the weight distribution hitch (WDH) into the height adjustment channel such that the bottom of the slots that hold the coupling shaft are the same height as the coupling shaft when the trailer is level.



Step 4. Before hitching the trailer, pick a spot that is easy to measure from on the vehicle such as the center of the rear wheel well or the top of the height adjustment channel. Record the distance from the ground to your chosen point.



Step 5. Place the coupling shaft into the slots on the vehicle side and secure the latch plates with the hitch pin. Let the full weight of the trailer rest on the vehicle.



Step 6. With the weight of the trailer pushing down on the vehicle take a second measurement at the same place you measured in step 4 and record that measurement.



Step 7. Jack up the trailer AND the rear of the vehicle about 2 to 2-1/2 inches higher than the value recorded in step 4. Don't let it down until after step 17.



Step 8a: Place the spring bars in the pockets in Item 3 and secure them in place with the provided Indent Pins Item 9



Step 8b: Insert the 5/8" Acme bolts through the bottom of the springs and then through the bottom of the spring tensioning brackets. Place the spherical washer with the convex side down onto the 5/8 acme bolt. Screw an acme nut onto the bolt with no more than a single thread protruding out of the top of the nut.

Step 9. Place the spring bar assembly under the trailer tongue.



Step 10. Using the provided 7/8" dia. hitch pin or a 7/8" bolt, attach the spring bar assembly to the vehicle side hitch.



Step 11. Place the spring tensioning brackets on the trailer frame and screw the 1/2" bolts into the spring tensioning brackets. Don't tighten them yet. Just bring them close to the frame.



Step 12. Raise the spring bars up by using the 5/8" acme bolt & nuts. . Adjust the 1" angle adjustment bolt up or down to create the right distance. There should be 6-8" of gap between the springs and the bottom of the trailer frame. At this point in the procedure the 1" bolt should be tight against Item 3. NOTE: If you are compensating for a heavy load it is better to start with the larger 8" gap.



Step 13. Using the 1-1/16 socket on the bolt head and an adjustable wrench or open end 1-1/16 wrench on the nut, start to put tension on the springs. Alternate between the two sides. Tighten the 5/8 inch Acme bolts until there is a gap of 3 to 4 inches between the springs and the bottom of the trailer frame. A right angle impact wrench makes this much easier.

Step 14. Tighten the 1/2" bolts that hold the brackets to the trailer frame.



Step 15. Raise the jack back up and remeasure like in step 4. This value should be equal to or no more than 7/8" less than the value found in step 4.



Step 16. Attach the safety chains for on road use and attach any break away cables and electric connections.

Step 17. Check your brake lights, turn signals, and running lights. Allow extra stopping distance between you and vehicle in front of you.

Lock N Roll WDH Measurement Form

Vehicle	Point of measure at hitch	Point of measure in front of vehicle	Tongue Wt.	Trailer Wt.	Trailer height front and back	Is trailer level?	Vehicle by itself	w/ trailer on vehicle	w/ jack pushing up	w/ springs loaded & jack in up pos.
Pathfinder	Top of PN 505		500	6000		yes	23	21-5/16	26-3/8	23-1/16