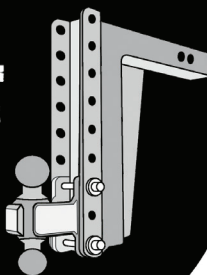


BULLETPROOF HITCHES™



BULLETPROOF MEDIUM DUTY WEIGHT DISTRIBUTION SYSTEM



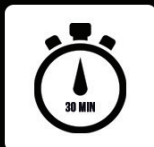
MAXIMUM STABILITY



LIFETIME WARRANTY



ULTIMATE TRAILER
PROTECTION



30 MINUTE
INSTALLATION



UP TO 80% SQUAT
REDUCTION

FOR SAFETY AND PROPER INSTALLATION PLEASE READ THIS INSTRUCTION MANUAL!

OVERVIEW

PRODUCT BENEFITS

The Bulletproof Medium Duty Weight Distribution System is designed to reduce the effect of tongue weight on the tow vehicle while also increasing stability and reducing sway. Our easy-to-install system is designed to accommodate trailers up to 10,000lbs gross weight and 1,000lbs of tongue weight. The BulletProof Weight Distribution design allows you to back up without having to uninstall the spring bars. It is also designed to work with all A-frame trailers.

CAUTION!

- NEVER exceed your vehicle's receiver towing weight rating
- NEVER exceed your vehicle's receiver tongue weight rating
- NEVER exceed your vehicle's GVWR capacity
- NEVER exceed your vehicle's trailer capacity
- ALWAYS check local State/DOT rules regarding towing

REQUIRED TOOLS

- Tape Measure
- 1-1/16" Wrench x2
- 3/4" Wrench x2
- Sharpie
- Bubble Level

OPTIONAL TOOLS

- Torque Wrench
- 1-1/16" Socket & Ratchet
- 3/4" Socket & Ratchet
- Grease Gun
- Grease
- Impact Gun



USE THIS QR CODE TO VIEW THE ONLINE INSTALLATION VIDEO!

SPECS

SPECIFICATIONS

- Max Gross Trailer Weight 10,000 lbs
- Max Tongue Weight 1,000 lbs
- Spring bar brackets fit 1-1/2" to 2" wide trailer frames from 3" to 6" tall.

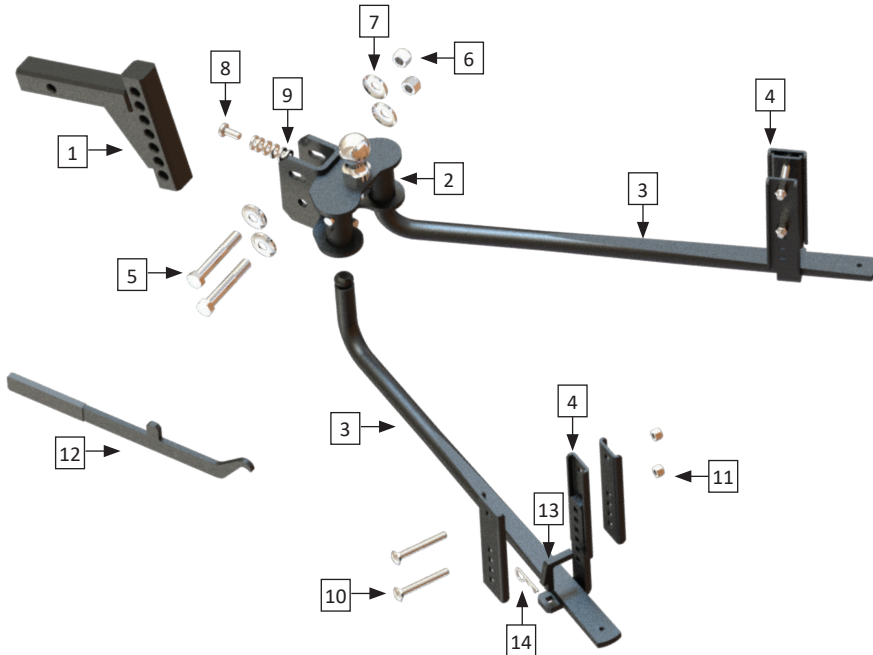


- Before installation, ensure proper trailer loading to maintain 10%-15% tongue weight.
- Trailer tires may need to upgrade to heavier weight capacity.

WARNING
NOT FOLLOWING INSTRUCTIONS CAN LEAD TO
SERIOUS INJURY OR DEATH

PARTS

PART LIST		
ITEM #	PART	QTY
1	WD SHANK	1
2	BALL MOUNT ASSEMBLY	1
3	SPRING BAR	2
4	SPRING BAR BRACKET	2
5	3/4"- 16 x 5" HEX BOLT	2
6	3/4"- 16 LOCK NUT	2
7	3/4" SERRATED WASHER	4
8	BALL MOUNT ADJUSTMENT POST	7
9	1/2" SPACER WASHER	7
10	1/2" x 4" CARRIAGE BOLT	4
11	1/2"-13" LOCK NUT	4
12	SPRING BAR LIFT TOOL	1
13	SPRING BAR RETENTION CLIP	2
14	R-CLIP	2



3

INSTALLATION

IMPORTANT

BEFORE GETTING STARTED: If your vehicle has airbags completely deflate them for this install and for the whole time you are using the BulletProof Weight Distribution System.

STEP 1

Measure the distance from the ground to the top of the wheel arch. Do this for all four corners and record below. Also, measure the height of the receiver. This will help us determine how effective our install is at the end.

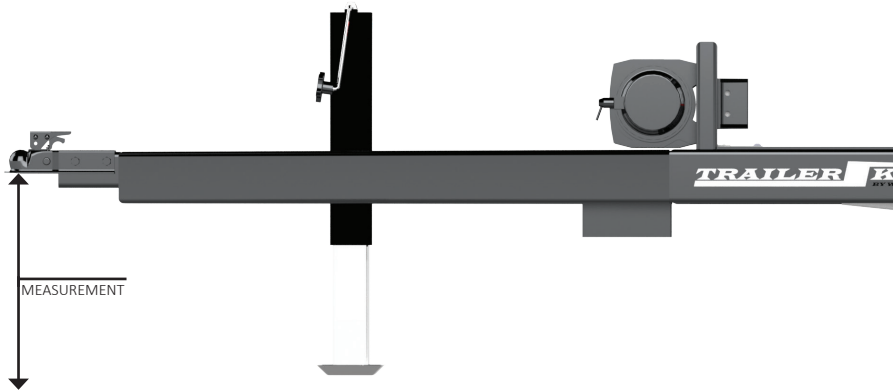
	UNLOADED	LOADED WITHOUT SYSTEM	LOADED WITH SYSTEM
Front Driver Side Wheel Arch			
Front Passenger Wheel Arch			
Truck Receiver Height			
Rear Driver Side			
Rear Passenger Side			



4

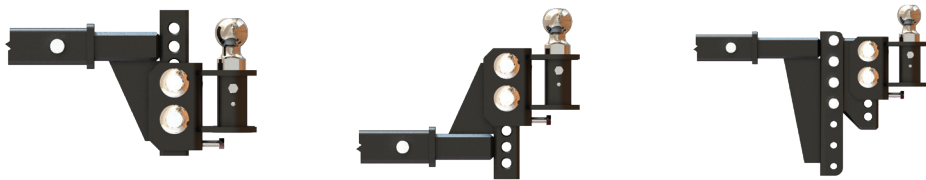
STEP 2

Park your trailer on level ground and wind the trailer jack up or down until the trailer is level. Using a bubble level on the frame of the trailer will help with this step. Once the trailer is level, measure from the bottom of the coupler to the ground. Record measurement on the blank line below.



STEP 3

Install the BulletProof Weight Distribution Shank into the hitch receiver. Trailer coupler height will determine the orientation of the WD Shank (rise/drop). Secure the Weight Distribution Shank with the 5/8" Pin and R-Clip. Top of the ball should be greater than the coupler height by approximately four inches.



NOTE: If you already have a BulletProof drop hitch, the WD Shank can be replaced with a BulletProof WD Adapter.

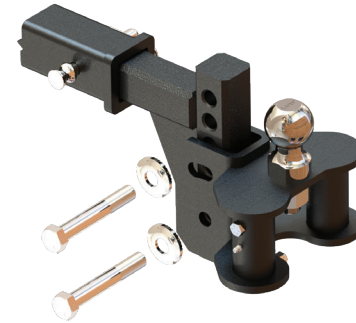
STEP 4

Insert Ball Mount Adjustment Post with 1/2" Spacer Washers to achieve the correct downward angle of the Spring Bars. Start with (5) spacer washers.



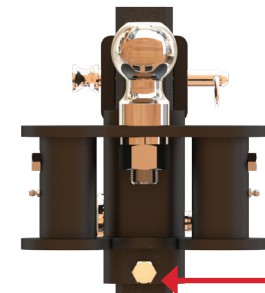
STEP 5

Slide the weight distribution ball mount onto the shank of the hitch up or down to the desired height. Attach ball mount with (2) 3/4"x 5" Hex Bolts with 3/4" Serrated Washers and hand tighten the 3/4" Hex Nuts. The top of the ball should be greater than the coupler height by approximately 5".



STEP 6

Tighten the Hex Bolt at the bottom of the Ball Mount with a 3/4" wrench. If you have a torque wrench, torque to 45 ft-lbs.



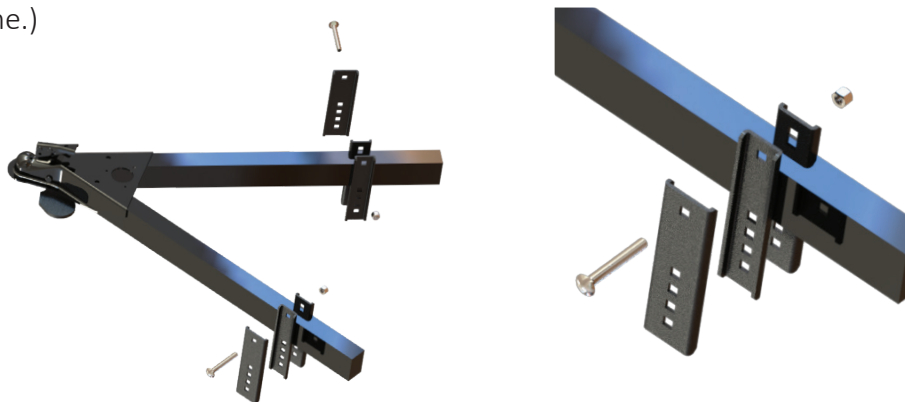
STEP 7

Install Spring Bar Support Brackets to the trailer A-frame. Measure from the center of the coupler and install the bracket between 24" - 28" from the coupler on each side. Mark this on the frame so you know where to install your support brackets. If something is in the way, move it, or install the bracket less than 24" from the coupler.



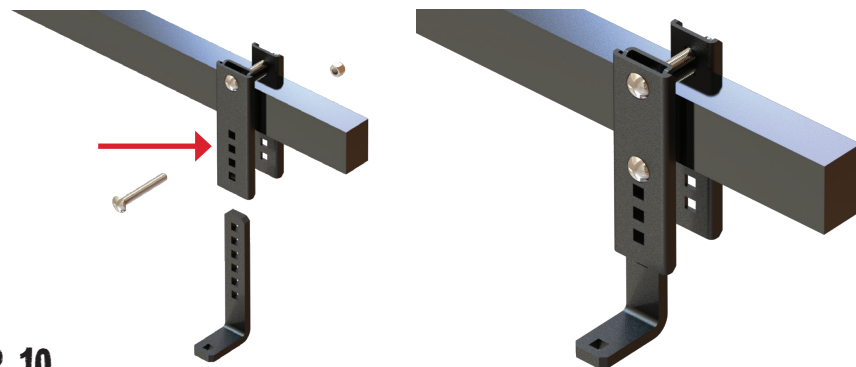
STEP 8

Use the single square cut out on the top of the bracket and insert 1/2"x 4" Carriage Bolt and hand tighten the nut. Line up the middle of the bracket with your mark and slide the brackets over the frame of the trailer. Repeat this step for the other side. (Make sure the bolt is resting on top of the frame.)



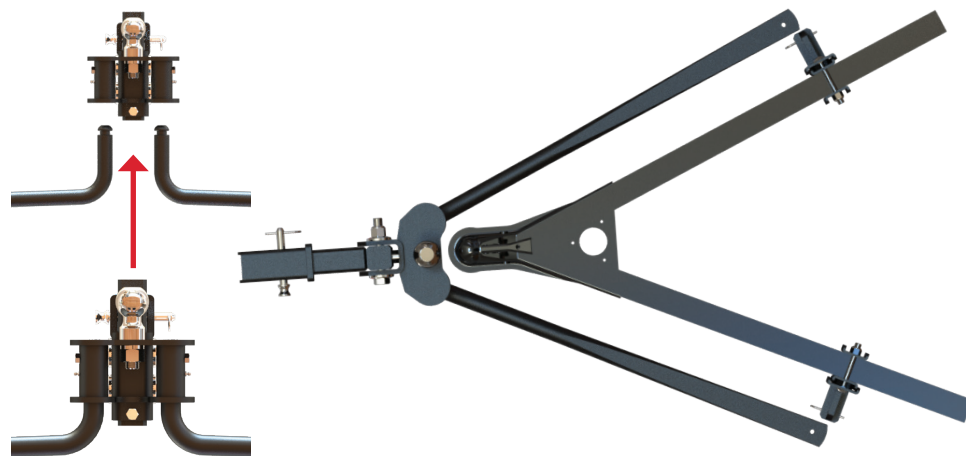
STEP 9

Slide the L-bracket into place between U-channels one below the highest position. You should see a small amount of the square opening on the L-bracket underneath the U-channel. Insert 1/2" x 4" Carriage Bolt through Spring Bar Bracket parts as close as possible to the A-Frame bracket bottom. Using a 3/4" wrench tighten the 1/2" lock nuts. If you have a torque wrench, torque to 45 ft-lbs. Repeat this step for the other side. This will secure the Spring Bar Bracket Assembly.



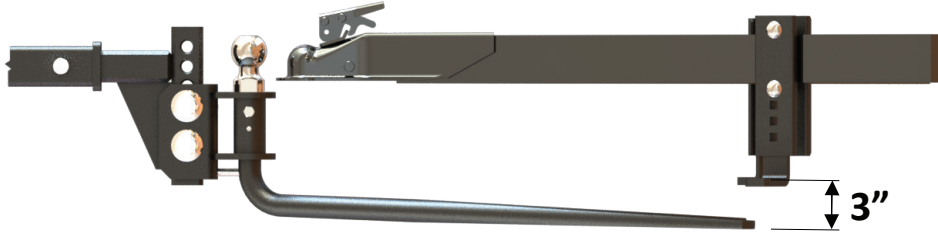
STEP 10

Back up your vehicle so the ball mount is directly in front of the coupler. Install the Spring Bars by positioning the Spring Bars parallel with the vehicle's rear bumper. Slide the Spring Bars up into Ball Mount receiver holes until they stop. Turn the bars parallel to the trailer A-frame to lock them in place.



STEP 11

The optimal load on the Spring Bars depends on a combination of the Ball Mount tilt angle and the L-bracket height. Look at the distance from the bars to the bottom of the L-bracket. This should be 3" based on the previous setup instructions. If the distance is greater than 3", remove spacer washers until you have 3". If the distance is less than 3" add spacer washers until you have 3".



STEP 12

Once you have the correct ball mount angle, tighten both the 3/4" x 5" Hex Bolts and 3/4" Lock Nuts using a 1-1/16" wrench and a 1-1/16" socket. If you have a torque wrench, torque to 260 ft-lbs. This will secure the Ball Mount.

STEP 13

Raise the trailer jack so the coupler clears the top of the ball. Lubricate the ball with grease. Back the vehicle so the ball is directly under the coupler and lower the trailer coupler on the ball until the trailer jack is no longer supporting the weight. Lock the trailer coupler.

Revisit the measurements table on page 5. With the tongue weight of the trailer on the vehicle's hitch, remeasure the distance from the ground to the top of all 4 wheel arches and record your measurements on the table. Also, remeasure the height of your receiver and record.

You should already see that the front of the vehicle is slightly higher while the rear of the vehicle is lower due to the weight of the trailer.

STEP 14

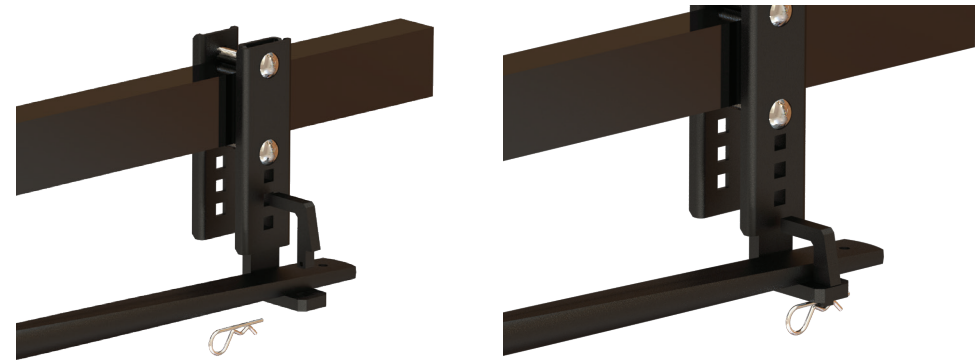
With the coupler locked, wind the trailer jack to raise the trailer and the rear end of the vehicle until there is a 2" gap between the spring bar and the L-brackets. Use the Spring Bar Lift Tool to help leverage the Spring Bars onto the L-brackets.



WARNING: Spring Bars under tension can kick back and cause serious injury. Stay out of the Spring Bars path until Safety Cover with R-Clip installed.

STEP 15

Install Spring Bar Retention Clip and R-Clip to secure Spring Bars in place.



STEP 16

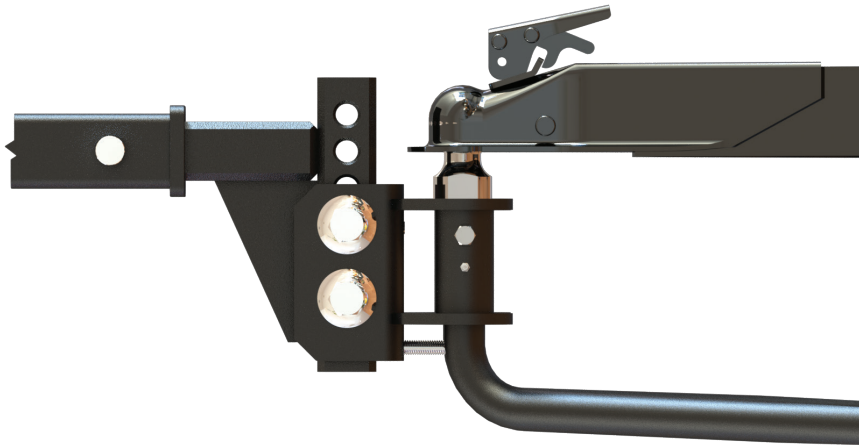
Wind the jack to lower the trailer and raise the jack leg to the highest position possible.

Revisit the measurements table on page 5. Remeasure the distance from the ground to the top of all 4 wheel arches and record your measurements on the table. Also, remeasure the height of your receiver and record.

If the system is installed correctly, you should see the height of the wheel arches return to the same as the unloaded measurements you recorded first. You should also see at least a 50% reduction in squat (receiver height).

STEP 17

Lubricate Spring Bar joints with a grease gun using the grease fittings on both sides of the Ball Mount before using the system.



STEP 18

Before towing, measure towing vehicle wheel arch heights again, compare the measurements to the unloaded heights. Measure the height of the coupler and compare it to the measurement in step 2. If you are above or below the measurement in step two adjust the height of your ball mount to get your trailer level again. Call us at 941-251-8110 if you have questions.

WARNING: If the rear wheel arch height is higher than the original, this is caused by too much load on the Spring Bars. This could lead to poor stability while driving and unreliable braking.

The optimal load of the Spring Bars should result in the front wheel arch height returning to the approximate unloaded measurements you originally recorded.

MAINTENANCE: Keep towing ball and Spring bar receiver lubricated. Excessive wear of parts indicates overload or poor lubrication.

SAFETY TIPS: When towing use extra caution while driving. Additional weight changes the behavior of the towing vehicle, acceleration, braking and handling.

Fill out safety check list!

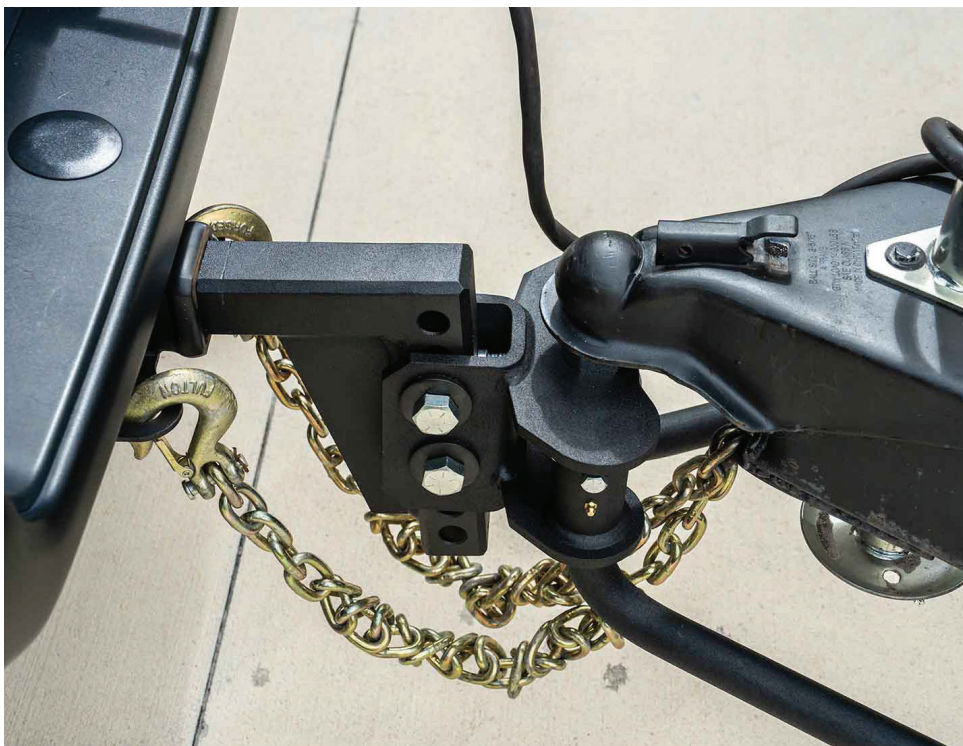
WD-Shank-receiver connection, ensure R-Clip is in place	
WD-Shank Ball Mount connection	
Coupler Latch	
Spring Bar Bracket	
Safety Cover R-Clip	
Safety Chains	
Lights & Turn Signals	
Braking System	

WARRANTY

At BulletProof Hitches™, we strive for the best, and we expect the best from our products! We want you to be 100% confident in the products that you have purchased.

Let's be honest though, our products don't fail! So chances are you will never need this warranty, but, for your peace of mind, we will replace your BulletProof Medium Duty Weight Distribution System if any issues related to the construction of the system happens to arise within one year of purchase by the original owner.

Please call us if you have any questions! 844-894-6448.



CUSTOMER SERVICE

Local: 941-251-8110
Toll Free: 844-894-6448

We are available Monday through Friday, 8:00 AM to 5:00 PM EST. Choose an option from the automated menu and you will be immediately connected to a live representative!

Sales@BulletProofHitches.com

Our representatives are standing by to answer any questions you may have. A BulletProof Hitches™ representative will reply to you within 1 business day!

COMPANY HEADQUARTERS & SHOWROOM

3145 Lakewood Ranch Blvd
Suite 106
Bradenton, FL 34211
M-F, 8:00 AM to 5:00 PM EST

We invite you to our showroom. Bring the vehicle you will be towing with, and we will measure to ensure you get the correct BulletProof Hitch™. We keep our full line of hitches and accessories in stock. Visit us today and get set up with the last hitch you will ever need!



**USE THIS QR CODE TO SUBMIT
A CONTACT REQUEST ONLINE!**





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