

Weight Distribution Hitches (WDH)

Hayman Reese Towing Technical Support Representative Gary Gardiner also attended Caravanning QLD's recent 'Pre-Easter Caravan Safety Check' day and observed numerous Weight Distribution Hitches (WDH) which had been set up incorrectly.

It's important to remember that fitting load levelling bars will not make a caravan any lighter. According to Caravan Trade & Industries Association of Queensland's (CTIAQ) Vehicle Towing Mass Guide "Before using load levelling bars, it must be determined that the tow bar on the vehicle and the vehicle itself are strong enough to withstand the loads imposed on the system by load levelling devices. This is particularly critical when dealing with the lighter weight vehicles and bars."

Gary carries out training sessions to educate Dealerships and Manufacturers on how to correctly set up and adjust Weight Distribution Hitches.

For more information contact Gary on: ggardiner@trimas.com.au

Below are some basic Weight Distribution Hitch set up instructions:



WEIGHT DISTRIBUTION SYSTEM SETUP AND ADJUSTMENT

1. Set the tow vehicle and trailer on firm and level ground, a quiet car park is ideal.
2. Using your jockey wheel to level the trailer, measure the distance between the caravan and the ground, front and rear, and record (Before D & E), as well as Coupling height (C).
3. Measure the distance between the ground and the top of the wheel arches on one side of your tow vehicle, front and rear, and record (Before A & B).
4. Make any adjustments to the towball height (if equipped) to ensure your trailer's Coupling measurement (C) is aligned with the towball. This can be done by rotating your towbar's TBM (Mini or Intermediate WDS), or adjusting the ball mount of the WDS as shown earlier in this guide (Medium, Heavy and Super Heavy Duty).
5. Hitch your trailer onto your towball and release the jockey wheel from the caravan's A-frame.
6. You will now see the suspension geometry of your tow vehicle change and notice the rear section compress whilst the front of the tow vehicle will rise. Now measure the wheel arches as done in step 3 and record (After A, B, D & E).
7. Setup Weight Distribution System as per instructions included with the kit or download new details from the Hayman Reese website. Lift spring bars and adjust into position, using retaining pins where applicable to lock the hitch into position.
8. Measure the change in suspension height on the front and rear of the tow vehicle as done in steps 3 and 6.
9. Adjust tension on the spring bars by increasing or reducing the number of chain links between the end of the bars and the snap up brackets. Re-take measurements and ensure you have rebalanced the difference between the front and rear wheel arch taken in step 6 (within a 10mm difference).
10. If you have observed an increase in the suspension height at the rear of the tow vehicle, you have re-distributed too much weight forward. You may need to experiment by adjusting the amount of tension.