Fitting Instructions

SKU

WDH270, WDH355

PRODUCT

TAG Weight Distribution Hitch (WDH)

SPECIFICATIONS

- Tow ball Weight:
  WDH270 = 120-270kg,
  WDH355 = 250-355kg
- Approx. Fitment Time: 40 Minutes

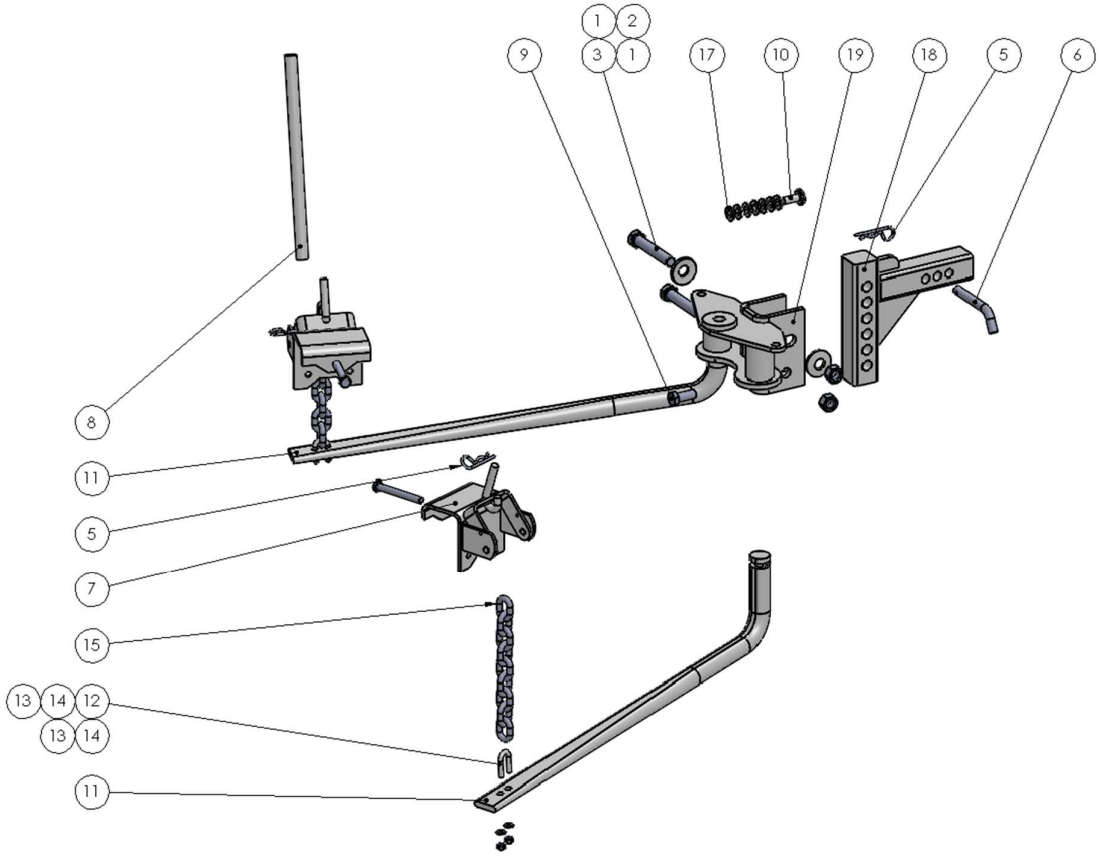
TOOLS REQUIRED

- Tape Measure
- Pen or Pencil
- Spanners
- Sockets
- Torque Wrench

IN THIS GUIDE

- Fitment Instructions
- Torque Settings
- Warranty Info

WDH Assembly



Item No.	Description	QTY.	Item No.	Description	QTY.
1	3/4" Conical Washer	2	11	Spring Bar	1
2	3/4" UNC Nut	2	12	3/8" U-Bolt	1
3	3/4" x 4 & 1/2" Bolt	2	13	M8 1.25 PITCH NUT METRIC HEX FULL NUT DIN 9	2
5	E-Clip for Class 4 Pin & Clip	1	14	M8 FLAT WASHER FLAT ROUND ZINC CLEAR	2
6	Class 4 Pin	3	15	WDH Chain	1
7	Connection Bracket	1	17	Spacer Washer	1
8	Lever Tube	2	18	Adjustable Weight Distribution Shank.	7
9	M16 x 2 x 40 Hex Set Screw	1	19	Weight Distribution Block	1
10	Spacer Pin	1			1

Important Information

Warning:

- This product is for towing purposes only and must only be loaded as shown in your vehicle Owner's Manual.
- The WDH is NOT to be drilled, cut, welded, or modified in any way.
- All load ratings shown are under the assumption your trailer has a functional braking system installed.
- When installed in positions other than the one depicted in these instructions the Tow Ball Mount may interfere or obstruct certain features of your vehicle (tailgate opening, chassis clearance, etc.)
- If reversing the trailer, it is recommended to remove the spring bars from the trailer. Components of the WDH may be forced into making undue contact with the drawbar of the trailer. If a "jack knife maneuver has occurred, examine all towing system components for damage or loosening immediately. Repair or replace any damaged components before resuming to tow.
- If any parts of your WDH make contact with the ground whilst travelling or if you suspect damage may have occurred in any other way, pull over and thoroughly inspect for any damage prior to resuming travel.
- Proper trailer loading is important. Heavy items should be placed close to the floor near the trailer axle(s). The load should be balanced side-to-side and firmly secured to prevent slipping.

General:

- Before fitting this WDH, read the fitting instructions and check installation hardware is correct.
- Check that the WDH is suitable for the vehicle and be wary of any changes to the vehicle design that may conflict with the fitting of this towbar. (Tray, Canopy, Suspension etc.)
- The high tensile fasteners supplied with this product are an integral feature to achieving the specified rating, if replacement is required ensure that fasteners of the same grade (8.8) & quality are used. Contact an authorised TAG distributor or the TAG fitment center - (07) 3208 3022 - if further information is required.

WDH Maintenance and Care:

- Tow Ball and spring bars should be lubricated each towing day. Failure to do so will result in excessive pocket and spring bar wear. Use heavy oil or grease. Excessive oil, dirt and grit should be wiped out of pockets whenever the trailer is uncoupled. Clean the tow ball and coupler socket. Coat the tow ball lightly with grease.

- Check all connections prior to towing. Check the hitch pin and R-Clip is securing the shank to the towbar receiver. Check the weight distribution block is secured to the shank with the fastening bolts and nuts. Check the tow ball nut, connection bracket set screws, chain, U bolts & nuts.

- It is recommended, when not in use, that the WDH assembly and class 4 Pin and Clip are stored inside & away from moisture to prevent standing water from forming rust. Inspect to ensure, on regular basis, fasteners are torqued to the specifications below and in good condition.

Ensure that the fitting instructions are read and understood prior to fitment, Following the fitment place these instructions in the vehicle's glovebox after installation is completed.

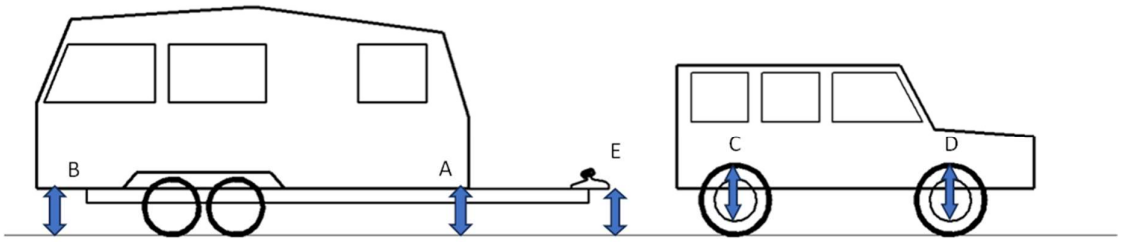
Metric Bolt Torque Settings										
Diameter	Pitch	Grade	Torque	Unit		Diameter	Pitch	Grade	Torque	Unit
M8	1.25	8.8	29	Nm		M12	1.25	10.9	125	Nm
M10	1.25	8.8	57	Nm		M12	1.50	10.9	105	Nm
M10	1.50	8.8	44	Nm		M14	1.25	10.9	195	Nm
M12	1.25	8.8	101	Nm		M14	1.50	10.9	165	Nm
M12	1.50	8.8	97	Nm		M16	1.25	10.9	295	Nm
M12	1.75	8.8	77	Nm		M16	1.50	10.9	250	Nm
M14	2.00	8.8	122	Nm		50mm Tow Ball	N/A	N/A	300	Nm
M16	2.00	8.8	190	Nm		70mm Tow Ball	N/A	N/A	750	Nm

Assembly Instructions

Step 1: Prepare Vehicle & Trailer

Before setting up your Weight Distribution Hitch (WDH) it is suggested that your tow vehicle and trailer be loaded according to your intended purpose of travel. For example, travelling on holiday with a caravan. This is so you can set-up the WDH as close to the required settings without having to follow up with difficult and time-consuming adjustments prior to your journey.

a. Choose a flat area large enough to park your vehicle and trailer to set up your weight distribution hitch. We suggest a quiet street, car park etc.
b. Detach your trailer from the tow vehicle and drive forward at least 1 metre to allow sufficient room to set-up your WDH.
c. Begin by leveling the trailer. Pick a point that is on the same plane at each end of the trailer. E.g. The bottom of the clad panel on a caravan is ideal.
d. Use the diagram in Figure1 to record your measurements. Larger version available at the back of this instruction.
e. Raise or lower the jockey wheel and use a tape measure to measure from the ground to your chosen points until the trailer is level. A tolerance of 5 to 10mm is acceptable. Record your measurements.
f. Measure the distance from the ground to the underside of the trailer coupling. Record your measurement.
g. Measure the front and rear towing vehicle heights. Place the end of your tape measure on the bottom of the wheel (not the tyre) and measure vertically to the centre of the wheel arch. Record your measurements.



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Step 2: Prepare Weight Distribution Block (WDB)

a. Insert the towbar shank into the hitch receiver of the towbar and secure with the pull pin & R-clip.
b. Mount the WDB to the towbar shank. Set the height of the Weight Distribution Block (Tow Ball Mount) equal to measurement the height of the trailer coupling. **Fig 2.**
c. Insert the 2 x ¾" x 4½" bolts and washers provided into the WDB & tow bar shank so that the top surface of the WDB is at, or as close as possible to the height measured. Do not tighten bolts & nuts.
Note: Use the nearest lower holes if you cannot achieve the exact result.
d. The top of the WD Block must be aligned parallel to the ground. To do this, remove the top ¾" bolt only. Tilt the mount away from the shank.
e. Adjust the bottom 5/8" bolt in or out.
f. Insert the rivet pin into the top hole in rear face so the flat face is inside the channel. Add a combination of spacer washers to the rivet pin that are the closest to the measurement taken before to space the tow ball mount correctly.
g. Replace the top bolt.
h. Tighten the set screw until the previously installed spacer washers and pin contact the shank.
i. Torque the 2X ¾" to 350Nm.

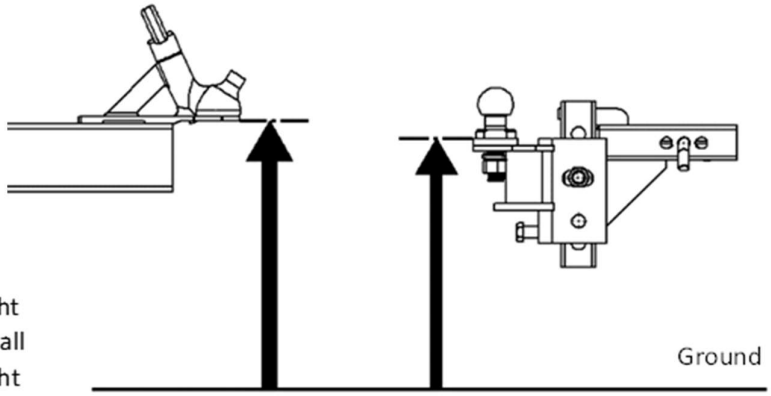


Figure 2.

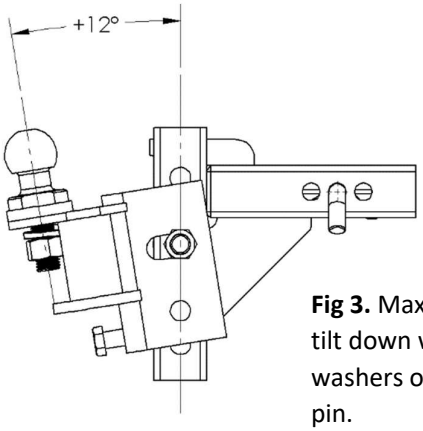


Fig 3. Maximum tilt down with 7 washers on rivet pin.

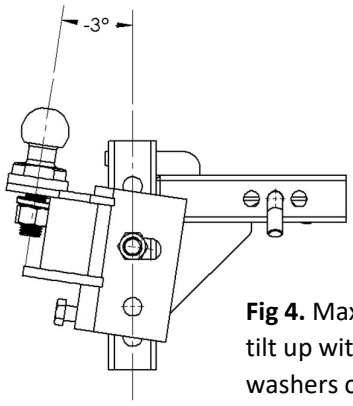


Fig 4. Maximum tilt up without washers on rivet pin.

Step 3: Spring Bar Installation

a. Attach the trailer coupling to the vehicle.

b. Position the ends of the spring bars at approximately 90° to the trailer drawbar and insert upward into the WDB. (Spring bars are interchangeable)

c. Rotate the spring bar back toward the drawbar ensuring the lock engages into the spring bar **Note: Remove the spring bars by releasing the lock manually or rotate outward to disengage.**

d. Attach the chains to the spring bars using U bolts if not attached prior.

e. To find the correct position of the locking bracket on the trailer drawbar, hold the chain straight up and down (without twist) next to the drawbar and make a note of the position. This ensures that when the chains are connected to the bracket, they are vertical. **See figure 5.**

f. Centre the locking bracket on the mark from previous step. Fasten the brackets to the drawbar with the included ½" bolt. Do not over tighten.

g. Place one of the R-clips on the drawbar adjacent to each of the connection brackets. **This will ensure it is handy once the bracket is loaded with the chain.**

h. Before hooking the chain, use the jockey wheel to raise the front of the trailer and rear of the vehicle above level. Approx 75mm.

i. With the connection bracket in the downward position hook the 5th link onto the hook. **(Begin the count at the U-bolt end of the spring bar).**

j. Slip the lever tube over the stub of the connection bracket and swing into the upward position and secure with the R-clip. **See figure 6.**

k. Lower the jockey wheel ensuring it is not in contact with the ground.

l. Proceed to **Step 4: Final Adjustments.**

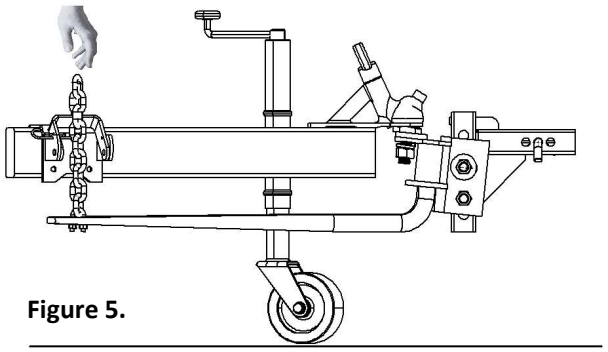
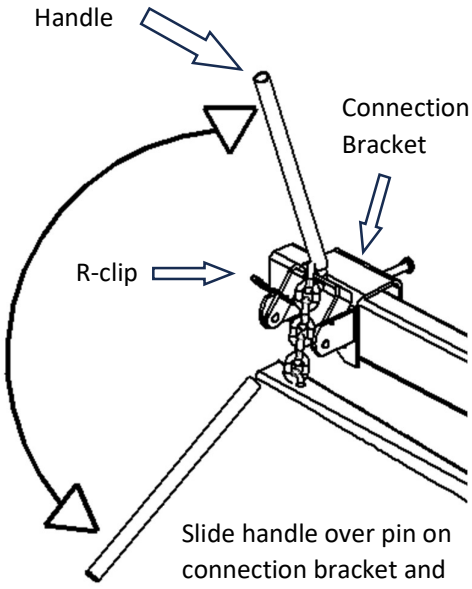


Figure 5.



Slide handle over pin on connection bracket and rotate into the upward position and secure with the R-clip.

Figure 6.

Step 4: Final Adjustment.

a. Once the jockey wheel has been retracted, the measurements of the towing vehicle and trailer must be compared.

b. Using your tape measure repeat the process of measuring the trailer & tow vehicle (Step 1F & G). Record your findings on the sheet provided. A tolerance of 5 to 10mm is acceptable.

c. If you note that the tow vehicle and trailer require more adjustment and are not level, detach the spring bars in the reverse manner of step 3 (h-k) and add or lessen the number of chain links.

d. Please make sure that there are at least 5 links (minimum) between the spring bar & connection bracket.

Warning: Releasing the tension of the spring bar without the use of the jockey wheel can be a dangerous activity. If this procedure cannot be avoided it is suggested that you ensure your legs are set wide enough apart to prevent possible injury from the lever tube when rotating the connection bracket into the downward position. Loosening of the tensioned spring bars can also be achieved by detaching one link from each spring bar at a time until both spring bars are loose. Make sure to place the R-clips in a handy position on the drawbar during this procedure.

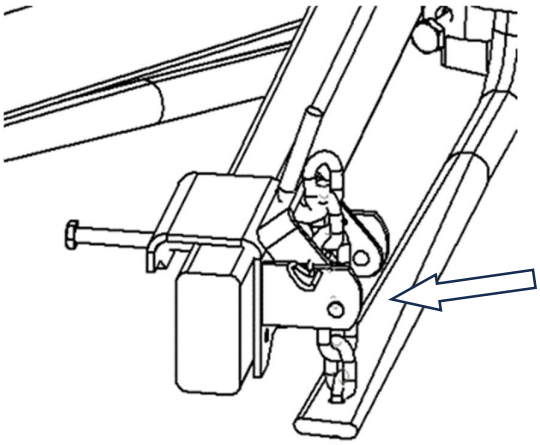


Figure 7.

Warrant Statement

SWD warrants your TAG Weight Distribution Hitch for its full product life under the following conditions:

- You can show proof of purchase.
- The WDH has been correctly installed by a suitably qualified installer.
- The WDH has not been modified or abused in any way and has only been used for the purpose intended.
- The WDH was not purchased second hand.

The extent of this warranty includes materials and workmanship used in the manufacture of the WDH and is to the equivalent value of current, full replacement cost.

Nothing stated or implied in this warranty limits in any way, the statutory rights that you may have.

To make a claim visit the original installer in the first instance or, if you are unable to or are not satisfied with their help, then contact us direct by phone on 1300 669122 or visit www.swd.com.au.

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