



Installation Manual



STRAIN SENSOR WELDING KIT

FOR SPRING SUSPENSION AND WALKING BEAMS | 218-SK-AU

Thank you for choosing to drive more and scale less! Here at Right Weigh, we are committed to making our products simple to install and easy to use. We understand that installation can vary between vehicles and yours may not be described in this manual. In any event, our technical support team is ready to answer your questions!



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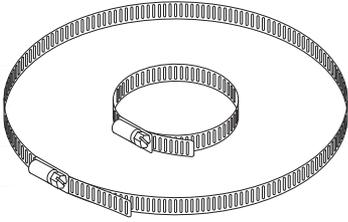
IMPORTANT!

Please read instructions **COMPLETELY** and thoroughly before installation. Right Weigh, Inc. is not responsible or liable for product failure or vehicle damage due to improper installation. The installation requirements are outlined in this manual and should be followed thoroughly to avoid inaccuracy or damage to the product.

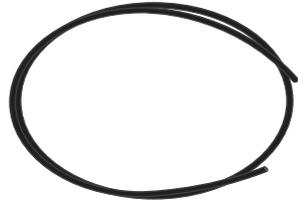
It is also important to be aware of vehicle manufacturer policies before making modifications to the vehicle. Right Weigh, Inc. is not liable or responsible for issues regarding warranties with other manufacturers. This is the responsibility of the customer. If you are unsure about how these installation practices apply to your vehicle, please contact your vehicle or component manufacturer.

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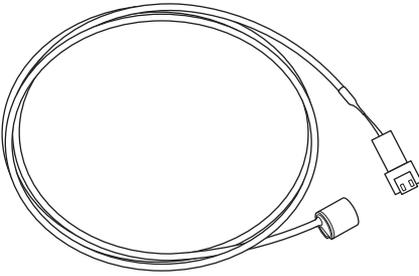
PARTS INCLUDED



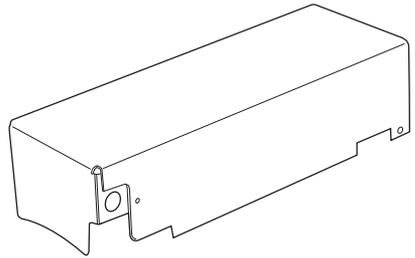
2 x Worm Drive Hose Clamps
(1 large, 1 small)



Split Loom



Pick-Up Coil
RW #EL-004-0054



Metal Cover
RW #HW-010-0047



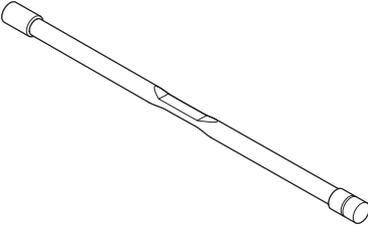
Loop Clamp



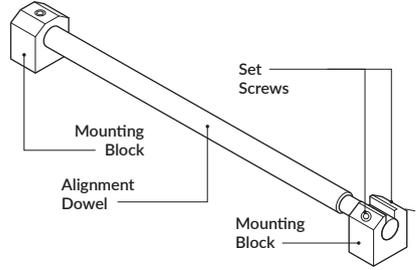
Bolt



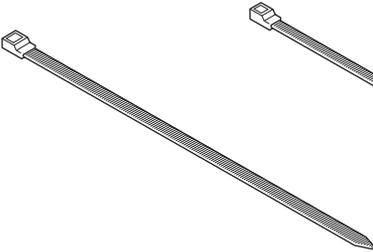
Washer



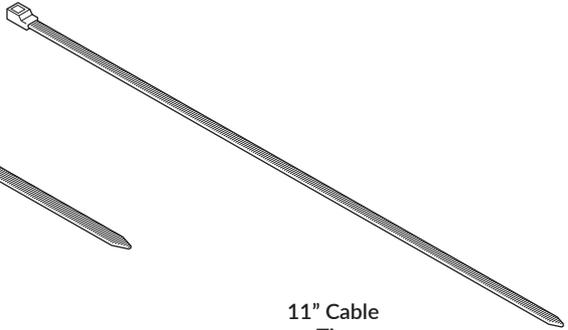
Tension Bar
RW #EL-001-0002



Welding Jig
Assembly

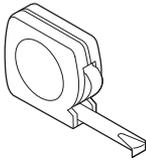


7"
Cable Ties

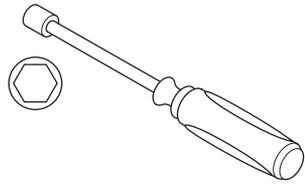


11"
Cable Ties

TOOLS REQUIRED



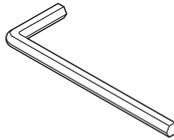
Tape Measure



Nut Drivers (1/4" and 5/16")



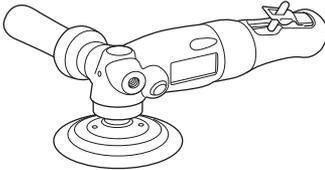
Grease or Anti-Seize Compound



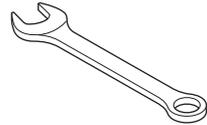
Allen Wrench (1/8")



Marker



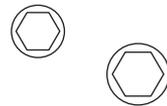
Angle Grinder or Sander



Wrench (7/16")



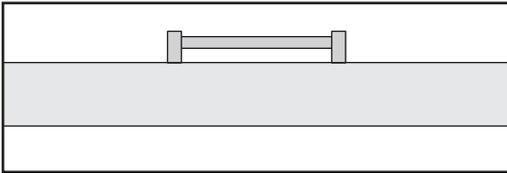
Drive Torque Wrench (Optional)



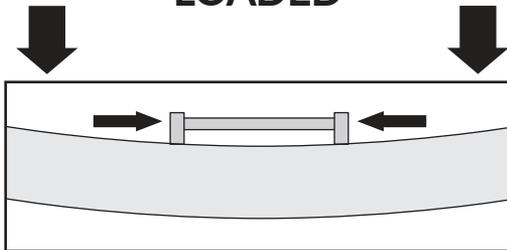
Sockets 1/4" and 5/16" (Optional)

The sensor is mounted so that it compresses or extends as the axle bends. The change in length of the sensor is measured and converted to weight by the Right Weigh gauge after calibration.

EMPTY



LOADED



The tension bar is a wear item, whose life span depends on environmental conditions and severity of use. Replacement of this part is included with your 3 year warranty, after which time it can be purchased separately.

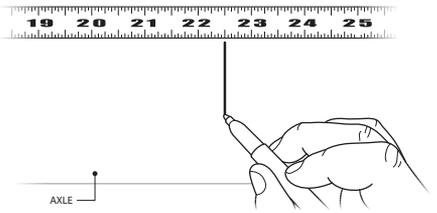


WARNING!

Please refer to the corresponding Installation Overview for specific placement of sensors before beginning. Please check your vehicle manufacturer's recommendations regarding welding before beginning.

1 FIND THE CENTER OF THE AXLE

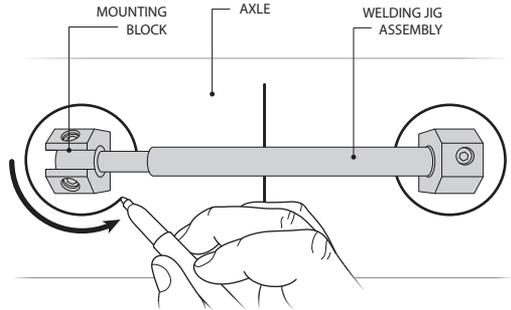
Use the tape measure to find the center of the axle and mark location with a marker. For walking beam axles, find a point about midway between the pivot point of the equalizing walking beam and the attachment point of the axle. Please refer to the corresponding Installation Overview for specific placement of sensors.



The sensor must be placed on the TOP of the axle

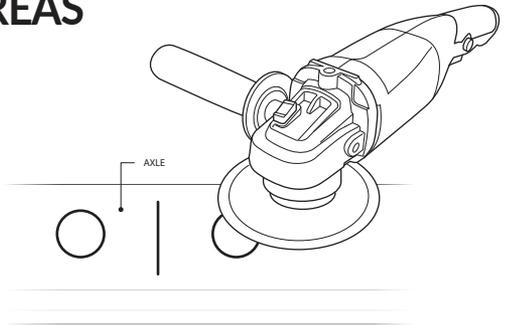
2 PLACE WELDING JIG ON AXLE

Place the Welding Jig Assembly on the axle so that it is centered over the line. Draw circles around where the mounting blocks will be located. Remove from axle.



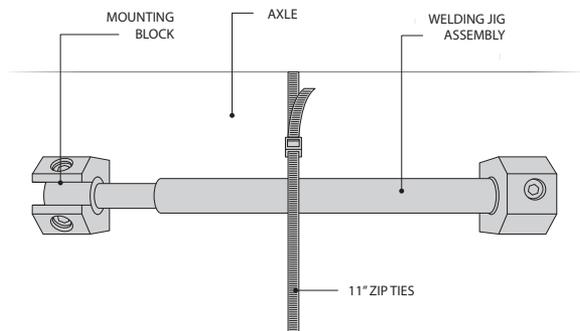
3 CLEAN WELD AREAS

Use the angle grinder or sander to clean the metal in the circles to be welded. Make sure the area is free of paint, dirt, rust, and any other debris.



4 PLACE WELDING JIG BACK ON AXLE

Place the Welding Jig Assembly back onto the axle and use a chain of 11" zip ties to hold it in place.



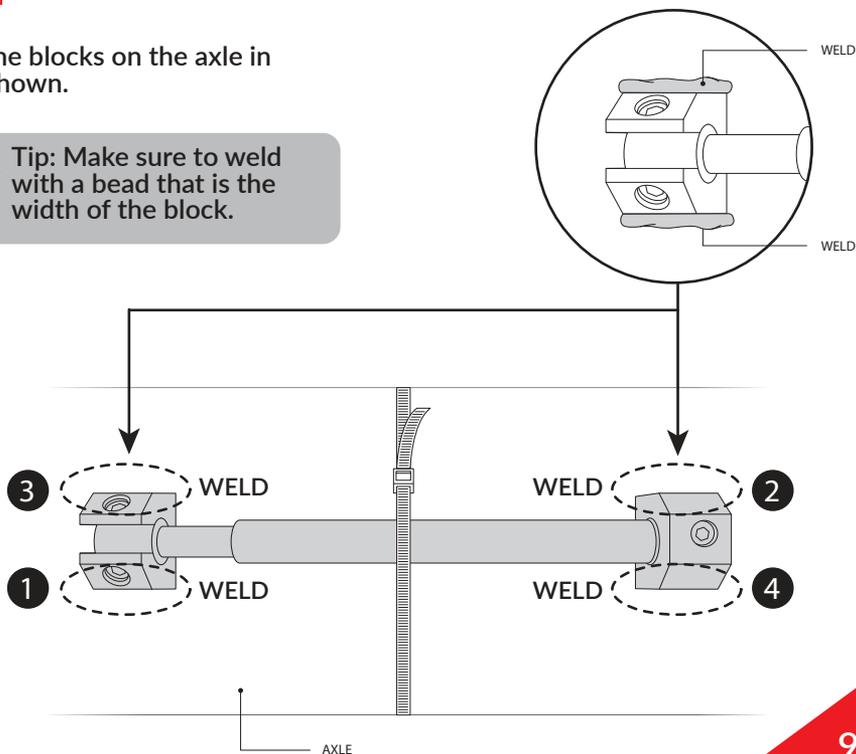
CHECK VEHICLE MANUFACTURER'S RECOMMENDATIONS REGARDING WELDING BEFORE BEGINNING.

5 WELD BLOCKS

Weld the blocks on the axle in order shown.



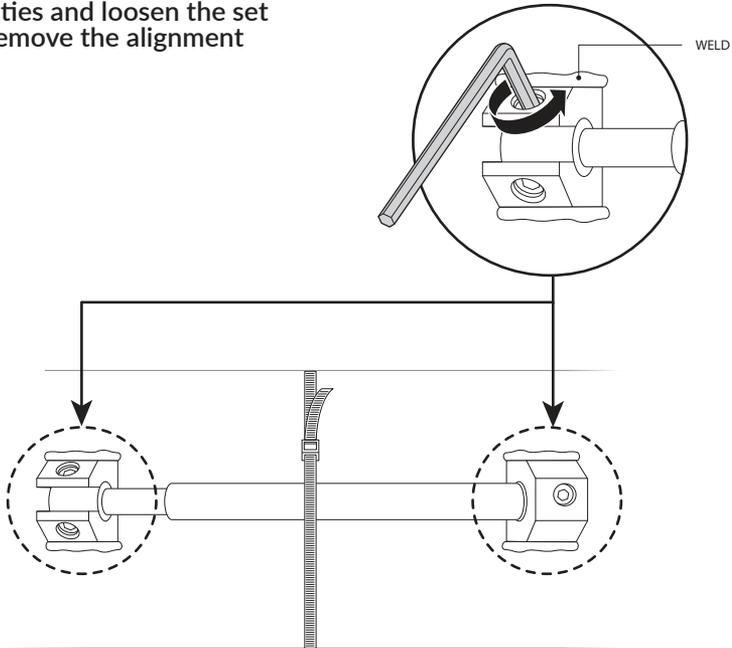
Tip: Make sure to weld with a bead that is the width of the block.



6 ALLOW BLOCKS TO COOL

7 REMOVE ALIGNMENT DOWEL

Cut the zip ties and loosen the set screws to remove the alignment dowel.

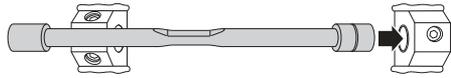
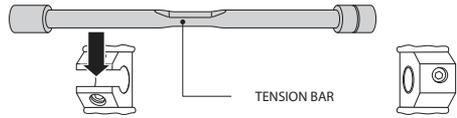


8 PAINT BLOCKS AND AXLE

Paint the axle tube and blocks to prevent rust. Mask off the holes in the blocks to prevent over spray.

9 INSTALL TENSION BAR

Carefully install the tension bar into the blocks so that the grooved side is in the block with only one set screw.

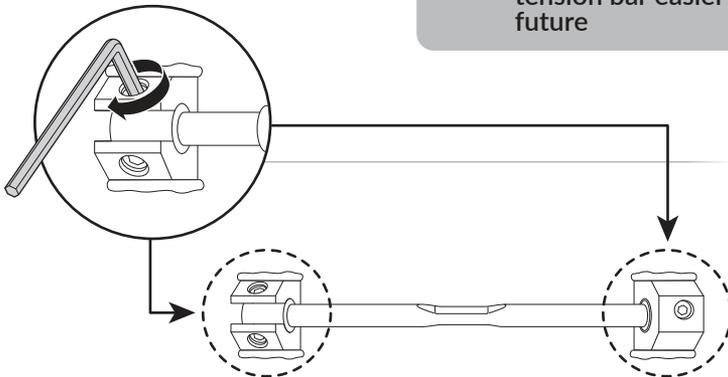


10 TIGHTEN DOWN SET SCREWS

Firmly tighten the set screws making sure to tighten the side with the single set screw first.

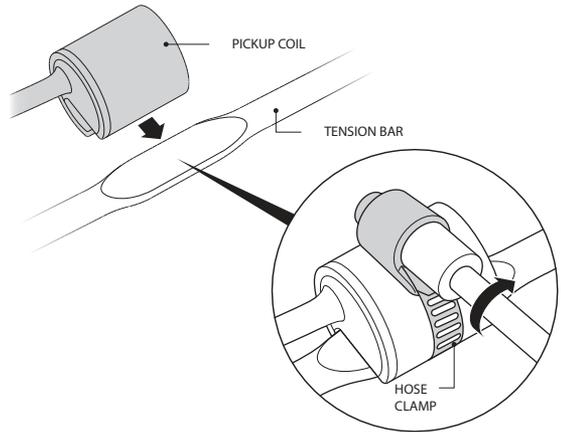


Tip: apply grease or anti-seize compound to the set screw threads to make removal of the tension bar easier in the future



11 INSERT AND CLAMP PICKUP COIL

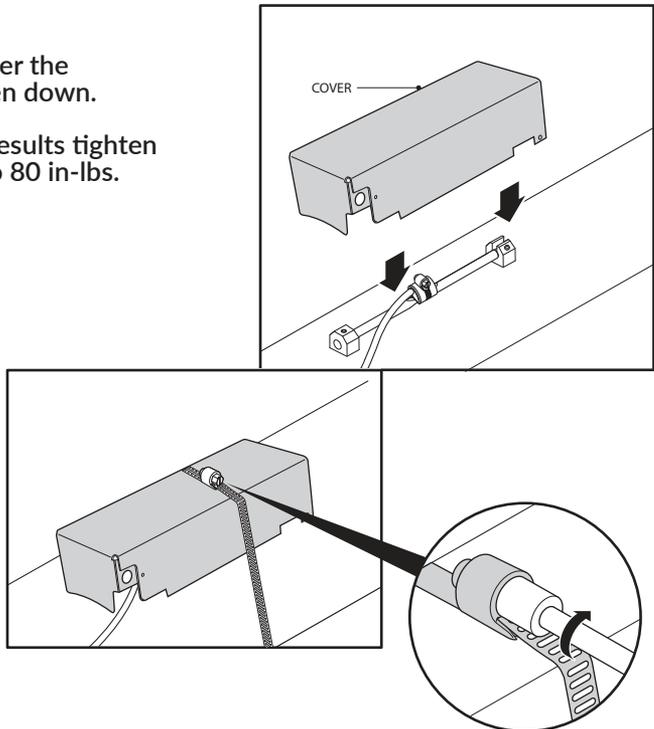
Install pickup coil over the tension bar so that the cable points in desired direction on the axle. Tighten using small hose clamp and nut driver.



12 INSTALL COVER

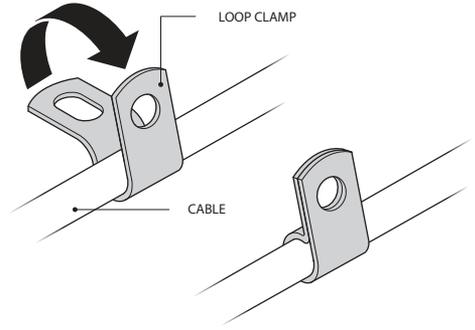
Center the cover over the assembly and tighten down.

Optional: For best results tighten cover hose clamp to 80 in-lbs.

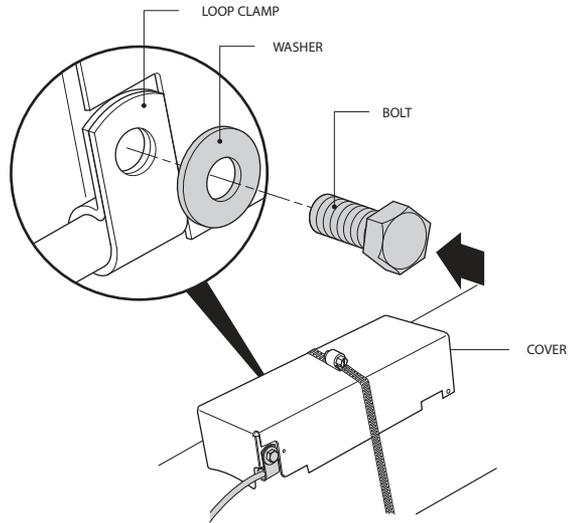


13 INSTALL LOOP CLAMP

Bend the loop clamp over the cable about 4" from the pickup coil.



Tighten to the cover using the bolt and washer and a 7/16" wrench.



14 ROUTE CABLE TO GAUGE

See gauge and kit instruction manuals for further details.



Right Weigh is committed to providing quality products that function as intended, and we always stand behind our workmanship. Our industry leading warranty is our best effort to express this commitment. Products manufactured or sold by Right Weigh, Inc. are warranted to be free from significant defects in material and workmanship 3 years from date of purchase. During this time, and within the boundaries set forth in this warranty statement, Right Weigh, Inc. will, at its sole discretion, correct the product problem or replace the product.

This warranty shall not apply to product problems resulting from: (1) Improper application, installation, incorrect wiring, or operation outside of the approved specifications of the product. (2) Accidents, faulty suspension parts or power surges (3) Inadequate maintenance or preparation by the buyer or user (4) Abuse, misuse, or unauthorized modification. (5) Acts of God, lightning strike, floods, fire, earthquake, etc.

Right Weigh, Inc. assumes no responsibility or liability for any loss or damages resulting from use of Right Weigh, Inc. products.

In no event shall Right Weigh, Inc. be liable for direct, indirect, special, incidental or consequential damages (including loss of profits or loss of time) resulting from the performance of a Right Weigh, Inc. product. In all cases, Right Weigh, Inc. liability will be limited to the original cost of the product in question. Right Weigh, Inc. reserves the right to make improvements in design, construction, and appearance of products without notice.



Return Policy and Authorization

Before returning any product, please obtain a Return Merchandise Authorization number (RMA#) by calling Customer Service at 503-628-0838 or e-mailing support@rwls.com. Include the RMA# and information regarding the reason for the return with the returned product. Shipping costs for returns must be prepaid by the customer. For your protection, items must be carefully packed to prevent damage in shipment and insured against possible damage or loss. Right Weigh, Inc. will not be responsible for damage resulting from careless or insufficient packing or loss in transit.

An RMA# must be obtained by the original purchaser before any product can be returned. Only new, unused products may be returned. Installed, used, damaged, modified or customized products can not be returned for credit. Credit will be issued to the original purchaser after evaluation by Right Weigh, Inc.

Repairs/Replacements

An RMA# must be obtained before any product can be returned. Right Weigh, Inc. will evaluate returned products at no charge. If Right Weigh, Inc. determines that the returned product is under warranty it will repair the product or parts thereof at no charge, or if unrepairable, replace it with the same or functionally equivalent product whenever possible. Right Weigh, Inc. will return the product at its expense via a shipping method (carrier to be at sole discretion of Right Weigh, Inc.) equal to or faster than the method used by the customer. Products or parts thereof not covered by warranty will be repaired or replaced at customer expense upon authorization by the customer. Right Weigh, Inc. will return the repaired product at customer expense via a shipping method (carrier to be at sole discretion of Right Weigh, Inc.) equal to or faster than the method used by the customer.

For additional support contact:

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