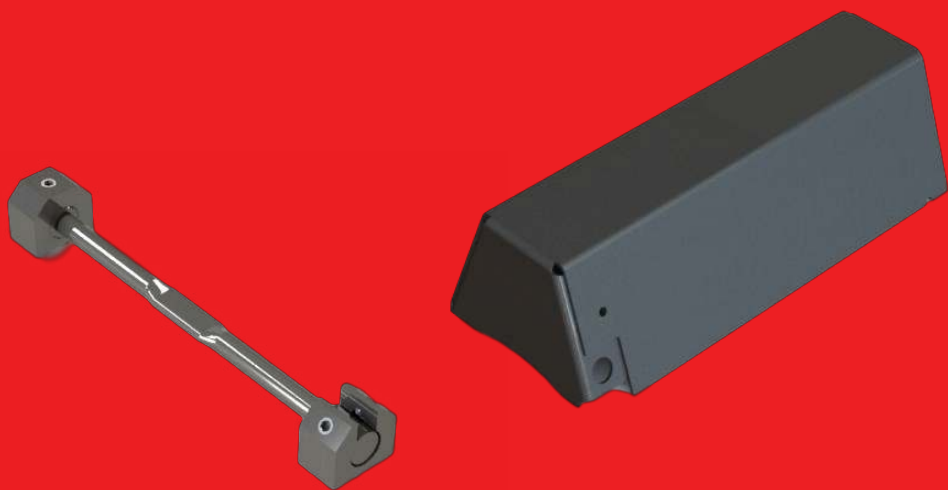




# Installation Manual



## STRAIN SENSOR WELDING KIT

FOR ROUND AXLES | 211-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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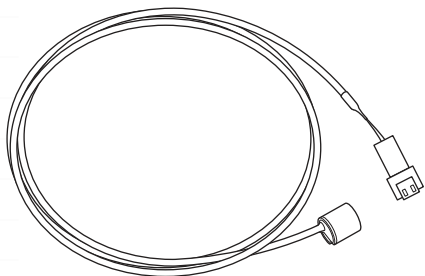
## IMPORTANT!

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.

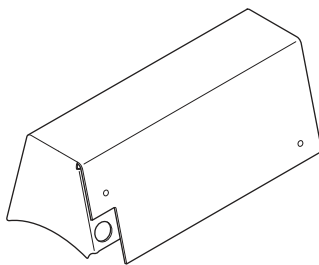
It is also important to be aware of vehicle manufacturer policies before making modifications to the vehicle. Right Weigh, Inc. is not liable or responsible for issues regarding warranties with other manufacturers. This is the responsibility of the customer. If you are unsure about how these installation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

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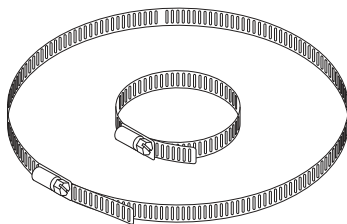
# PARTS INCLUDED



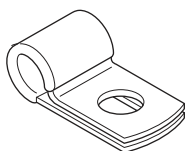
Pick-Up Coil  
RW #EL-004-0009



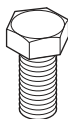
Metal Cover  
RW #HW-010-0040



2 x Worm Drive Hose Clamps  
(small and large)



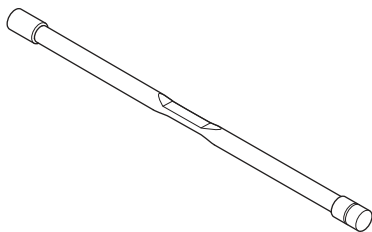
Loop Clamp



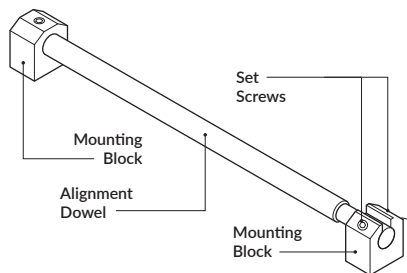
Bolt



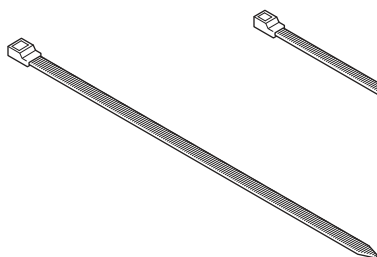
Washer



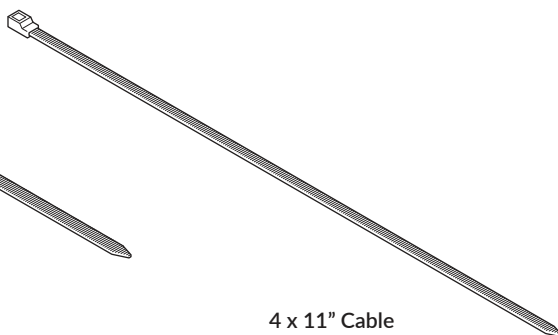
**Tension Bar**  
RW #EL-001-0002



**Welding Jig  
Assembly**  
RW #HW-010-0019

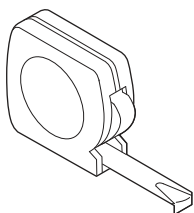


**15 x 7"  
Cable Ties**

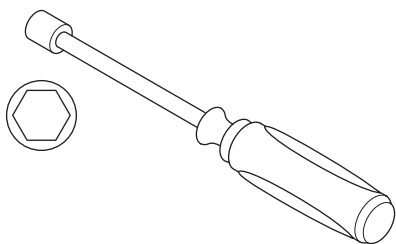


**4 x 11"  
Cable Ties**

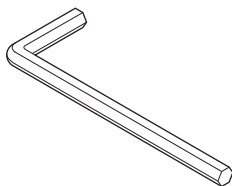
# TOOLS REQUIRED



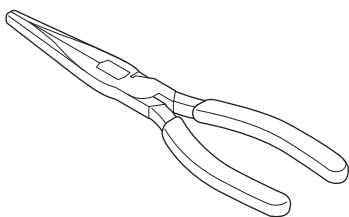
Tape  
Measure



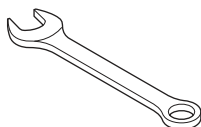
Nut Drivers  
(1/4" and 5/16")



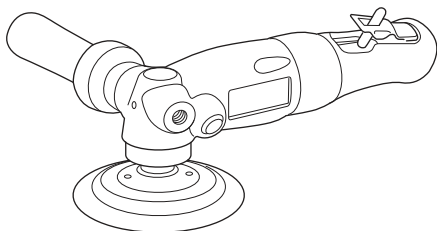
Allen Wrench  
(1/8")



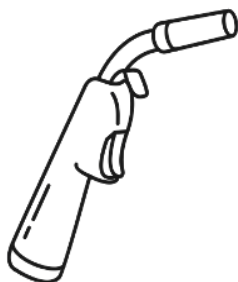
Pliers



Wrench (11mm)



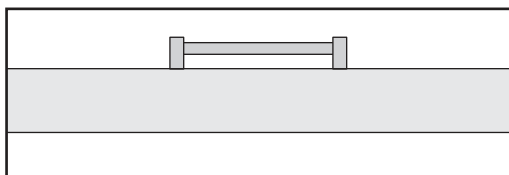
Angle Grinder  
or Sander



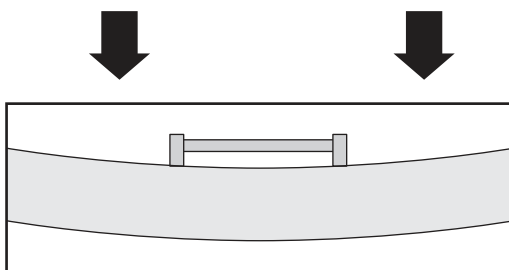
Welder

The sensor is mounted so that it bends along with the axle when weight is applied or taken off. As the load increases, the sensor will detect the strain in the axles. This strain is then measured and converted to weight by the Right Weigh gauge after calibration.

## EMPTY



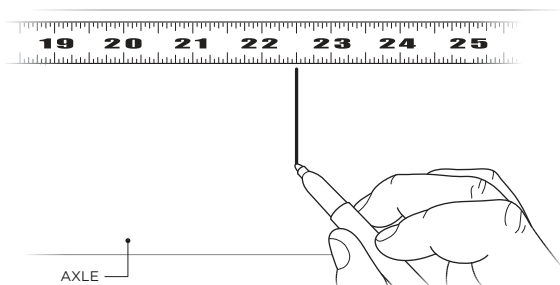
## LOADED



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.

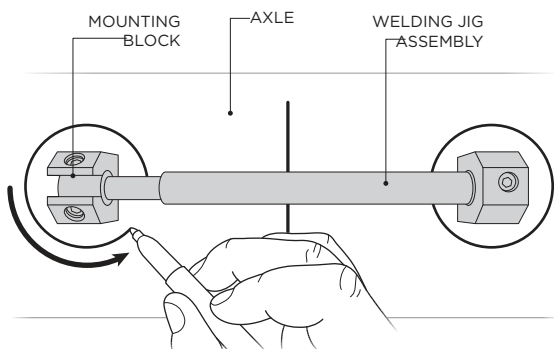
## 1 MARK CENTER OF AXLE

Use a tape measure to find the center of the axle and mark the location with a marker.



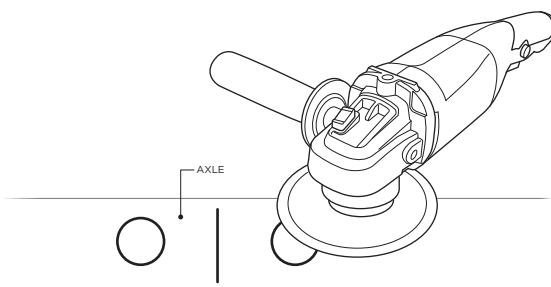
## 2 PLACE WELDING JIG ON AXLE

Place the welding jig assembly on the axle so that it is centered over your mark. Mark where the mounting blocks will be located on the axle, then remove the welding jig.



## 3 CLEAN AREA TO BE WELDED

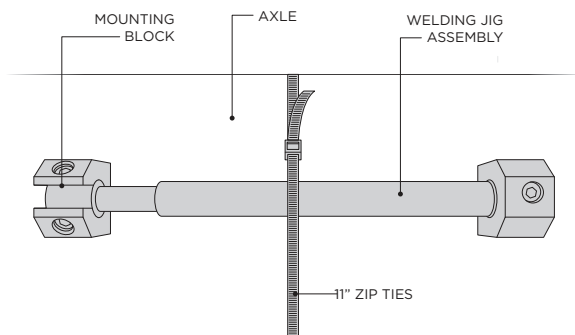
Use an angle grinder or sander to clean the surface of the axle at the marked areas. Make sure the area is free of paint, dirt, rust, and any other debris.





4

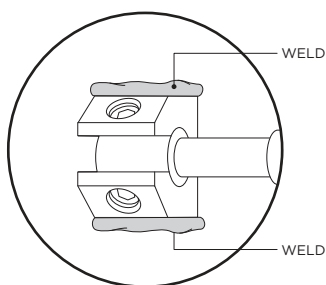
## REPOSITION WELDING JIG ON AXLE



Place the welding jig assembly back onto the axle and use a chain of 11" zip ties to hold it in place.

5

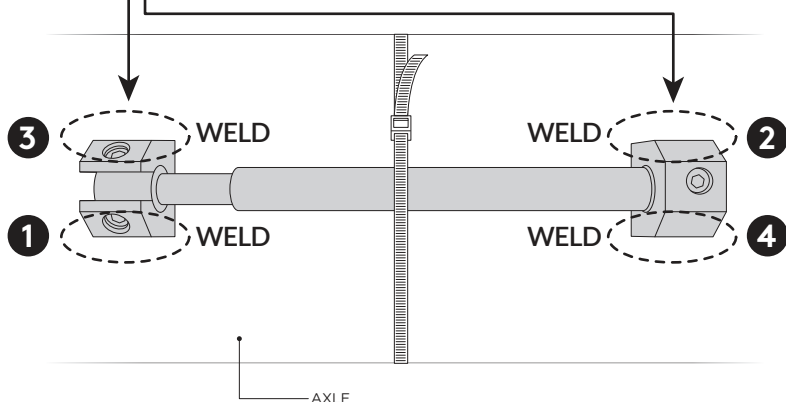
## WELDING BLOCKS



Weld the blocks on the axle in order shown.



Tip: Make sure the weld bead extends the full length of the block as shown.

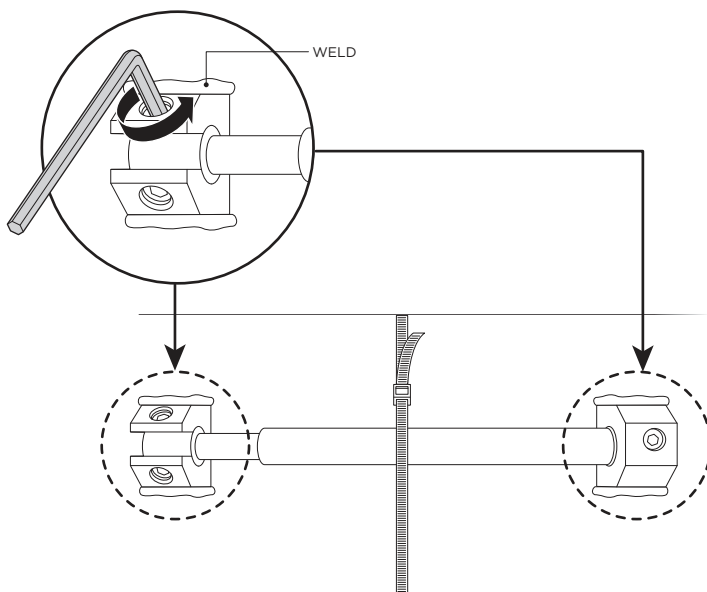


Check the vehicle manufacturer's recommendations regarding welding before beginning.

## 6 ALLOW WELDS TO COOL

## 7 REMOVE ALIGNMENT DOWEL

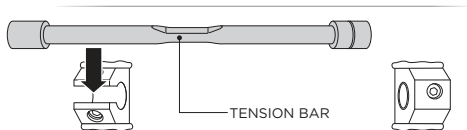
Cut the zip ties, loosen the three set screws, and then remove the alignment dowel.



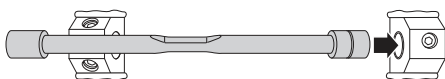
## 8 PAINT BLOCKS AND AXLE

Paint the axle tube and mounting blocks to cover any bare metal and prevent rust. Mask off the holes in the blocks to prevent overspray.

## 9 INSTALL TENSION BAR

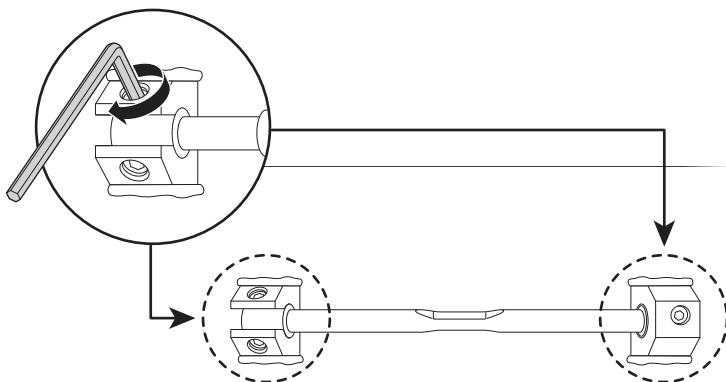


Carefully install the tension bar into the blocks so that the grooved side is in the block with only one set screw.

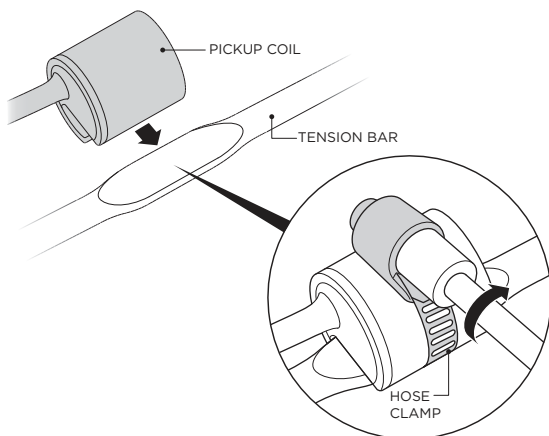


## 10 TIGHTEN SET SCREWS

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

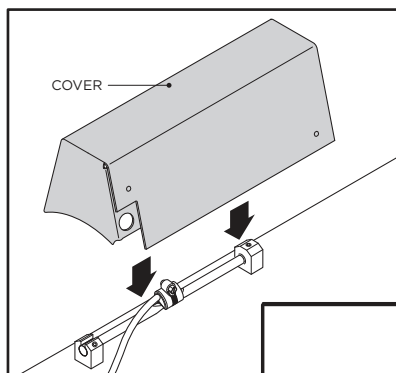


## 11 CONNECT PICKUP COIL

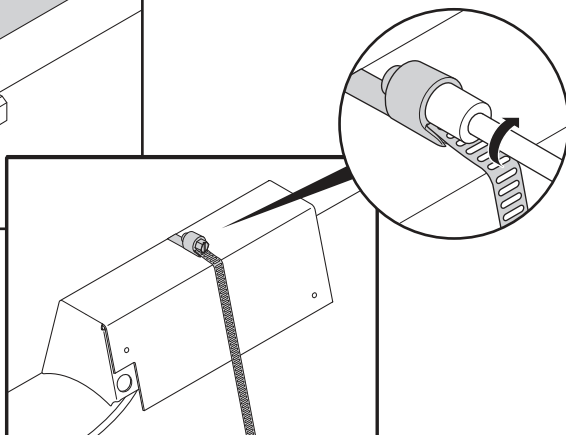


Push the pickup coil onto the tension bar as shown. Clamp the pickup coil in place using the supplied hose clamp.

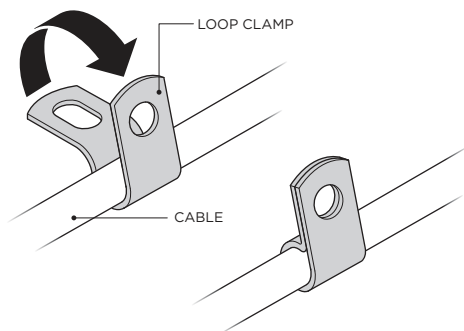
## 12 INSTALL SENSOR COVER



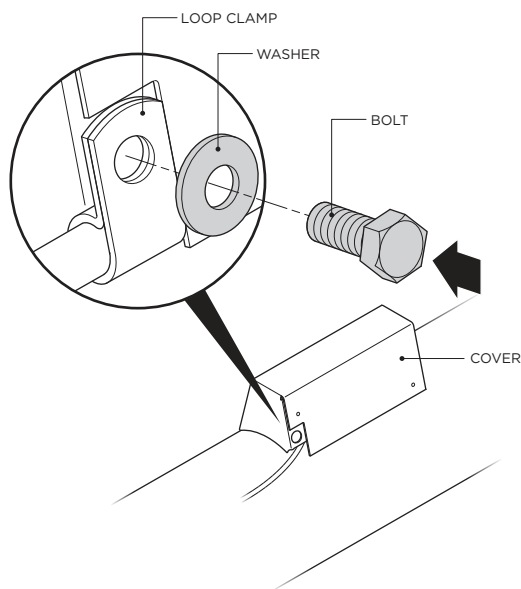
Center the cover over the sensor assembly. Use the large hose clamp to secure the cover to the axle.



## 13 CLAMP CABLE IN PLACE



Place the loop clamp over the pickup coil cable and then bend the clamp closed.



Slide the clamp down the cable until the hole in clamp is aligned with the threaded hole in the sensor cover. Fasten the clamp to the cover using the bolt and washer supplied.

## 14 CONNECT SENSOR TO GAUGE

See gauge instruction manual 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](mailto: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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Right Weigh, Inc.  
Hillsboro, Oregon USA

PP-003-0024-AU Revision B

July 2020

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