RIGHT WEIGH 201-EBT-01B Onboard Load Scale Instruction Manual

Contents

RIGHT WEIGH 201-EBT-01B Onboard Load Scale

Product Information

SPECIFICATIONS & OVERVIEW
The Right Weigh 201-EBT-01(B) digital load scale has one internal air pressure sensor. This scale will monitor one air suspension single, tandem, or tridem drive axle group or trailer axle group with one Height Control Valve (HCV).

Technical Specifications:

- **Model:** 201-EBT-01(B)
- **Internal air pressure sensor:** 1
- **Compatible with:** Single, tandem, or tridem drive axle group or trailer axle group with one Height Control Valve (HCV)

Installation
To install the Right Weigh 201-EBT-01(B) onboard load scale, follow these steps:

1. Refer to the installation manual provided with the product for detailed instructions.
2. Ensure the vehicle is parked on a level surface.
3. Locate the appropriate axle group for installation based on the specifications.
4. Mount the scale securely in the designated location as per the manual.
5. Connect any necessary wiring according to the instructions.
6. Verify the installation and make sure all connections are secure.

Getting Started
Before using the Right Weigh 201-EBT-01(B) onboard load scale, make sure to:

- Download the Right Weigh Load Scales App from the App Store.
- Calibrate the scale following the provided instructions.
- Ensure all connections are properly set up.

Operating Modes

The scale offers different operating modes for monitoring various axle groups. Refer to the manual for detailed information on each mode and how to switch between them.

Calibration
Calibrate the scale according to the guidelines provided in the manual to ensure accurate weight measurements.

FAQ

- **Q: Can I use the 201-EBT-01(B) on an axle group with two HCVs?**
  A: No, the 201-EBT-01(B) is not suitable for axle groups with two HCVs. You will need the 201-EBT-02(B) for such configurations.
- **Q: How do I estimate the weight of the steer axle?**
  A: The weight of the steer axle can be estimated by monitoring a tractor's drive axle group using the 201-EBT-01(B). Refer to Appendix C for detailed instructions on this process.
- **Q: Can I connect a remote sensor to the 201-EBT-01(B) scale?**
  A: Yes, the scale has a Remote Sensor Feature that allows connection to a separate vehicle. Refer to the separate kit instructions or contact technical support for more information.

Scan here to download the Right Weigh App!

WELCOME
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. If your vehicle configuration is not described in this manual, our technical support team is ready to answer your questions!

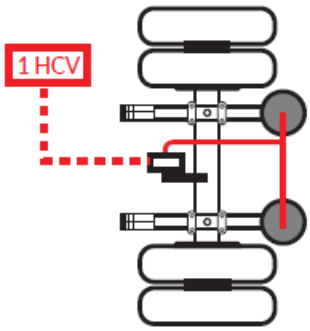
- (503) 628-0838
- (888) 818-2058 – Toll Free (USA ONLY)
- **support@rwls.com**.
- **www.rwls.com/how-to-calibrate-install/**.

IMPORTANT!
Please read the instructions COMPLETELY and thoroughly before installation. Right Weigh, Inc. is not responsible or liable for any negative consequences as a result of improper installation or operation including, but not limited to, product failure or damage that could affect the integrity of the vehicle. The installation steps in this manual are for the sole use of trained installers. Right Weigh, Inc. accepts no responsibility or liability for issues involving, but not limited to, incorrect installation that occur from misinterpretation of the steps outlined in this document.

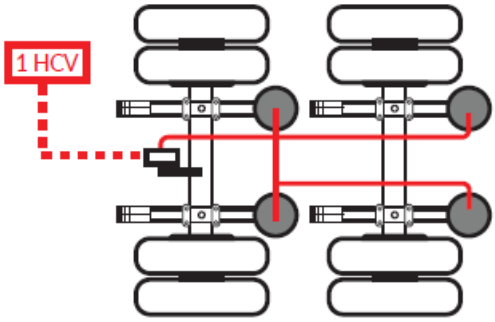
It is the end user's responsibility to be aware of vehicle manufacturer policies before making modifications to the vehicle. Right Weigh, Inc. is not liable or responsible for issues regarding, but not limited to, warranties with other manufacturers. This is the responsibility of the end user. For a more detailed explanation of the warranty and liability of Right Weigh, Inc. please refer to the "Warranty Statement" and "Return Policy & Repairs" section of this document and **www.rwls.com/warranty**.

SPECIFICATIONS & OVERVIEW

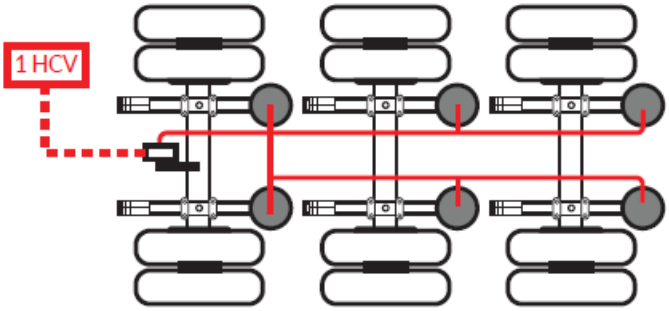
The Right Weigh 201-EBT-01(B) digital load scale has one internal air pressure sensor. This scale will monitor one air suspension single, tandem, or tridem drive axle group or trailer axle group with one Height Control Valve (HCV).



Single Axle Group



Tandem Axle Group



Tri Axle Group

The 201-EBT-01(B) cannot be used on an axle group that has two HCVs. To monitor an axle group that has two HCVs you will need the 201-EBT-02(B).

Drop Axle:
This load scale can be used to monitor one axle group with an air ride lift axle if the lift axle airbags are controlled by the same height control valve as the other axles in the group. The scale will need to be set up using multiple calibration modes. Refer to the Operating Modes section for more information.

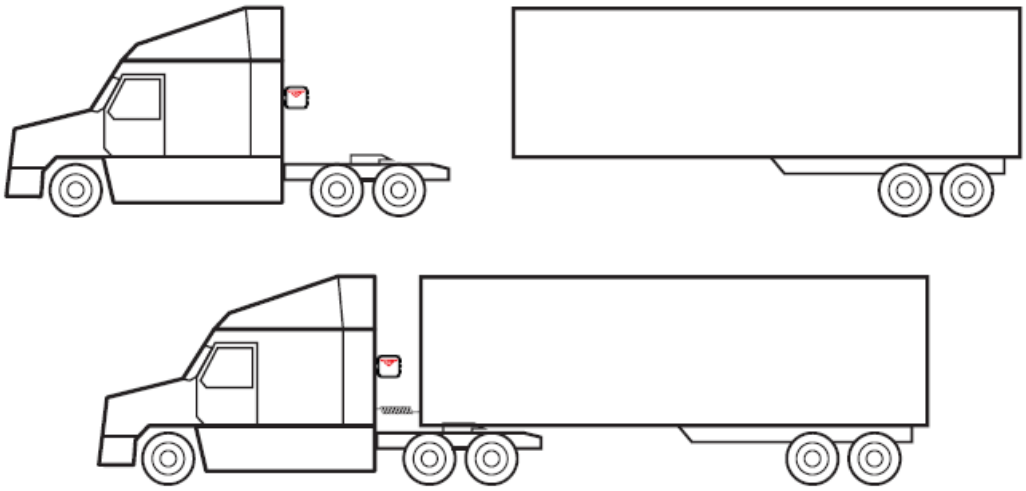
- Independently regulated lift axles cannot be considered part of an axle group and must be in the UP position when calibrating and weighing.

Estimated Steer Axle:
The weight of the steer axle can be estimated if this scale is used to monitor a tractor's drive axle group. Refer to Appendix C for more information.

Estimated Steer is for use on tractors with a fifth wheel hitch only, it will NOT work on straight trucks or car hauliers. Re-calibration is required after changing the position of a sliding fifth wheel. To monitor the steer axle weight on a straight truck, you will need the 201-EBT-11B.

Remote Sensor Feature:

The 201-EBT-01(B) scale has the capability of connecting to a Right Weigh Remote Sensor that has been installed on a separate vehicle, most commonly used in drop & hook situations. To use this feature, a separate 403-SK, and RTK-01 or RTK-02 kit must be purchased to connect to a trailer. For more information about this feature, please refer to the 403-SK Instruction Manual or call Right Weigh Technical Support listed.



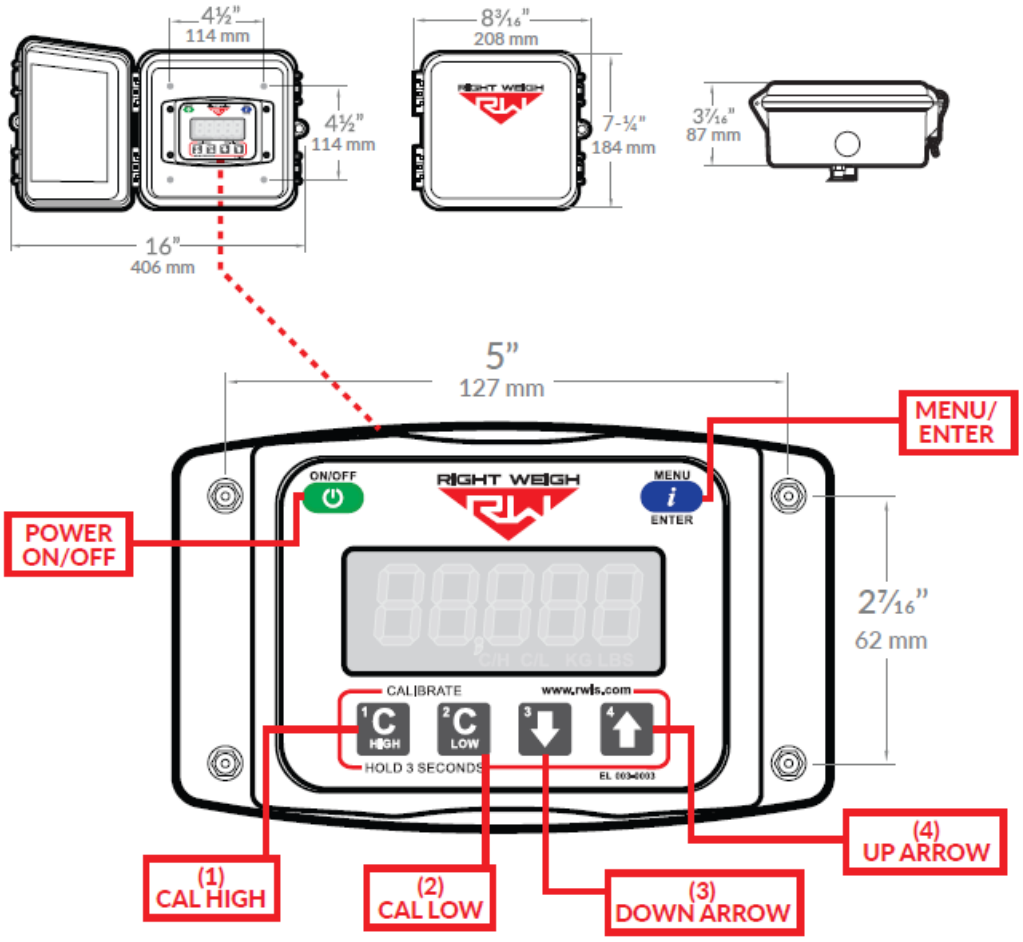
Right Weigh Load Scales App:

- Scan here to download the “Right Weigh Load Scales” App directly from the App Store
- Scan here for instructions about how to connect to your scale(s) and use the app along with a video tutorial

Technical Specifications:

- **Operating Temperature:** -22° F to +185° F (-30° C to +85° C)
- **Storage Temperature:** -40° F to +185° F (-40° C to +85° C)
- **Power Requirement:** 9 VDC to 32 VDC (Switched)
- **Units:** Pounds (LBS) or Kilograms (KG)
- **Housing:** High-impact polycarbonate blend
- **Display:** 0.8” LCD sunlight readable

Bluetooth

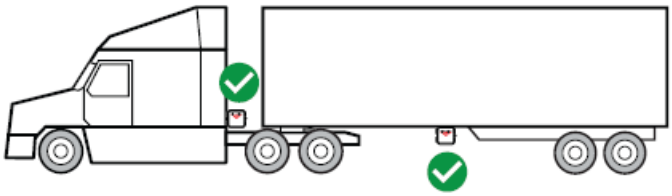


INSTALLATION

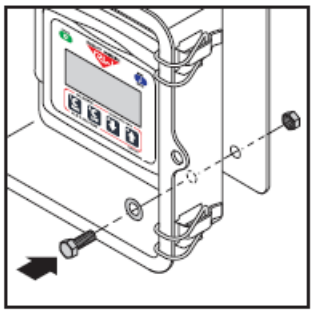
CHOOSE LOCATION

The 201 series scale is designed to be mounted on the outside of a truck or trailer, however, it must still be mounted in a protective enclosure. A protective box and mounting bracket are included with the 201 scale. Be sure to choose a location that is easily accessible and safe from potential damage (forklift posts, tyre caps, etc.)

- DO NOT mount the scale directly to the chassis or any other main beam unless it is approved by the vehicle manufacturer. Doing so may void the warranty with the vehicle manufacturer.



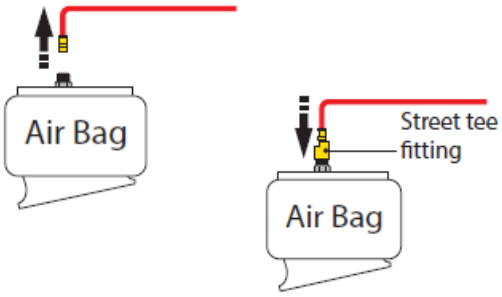
- Mount the bracket in the chosen location and install the gauge box to the bracket using the supplied hardware.
- Make sure to use BOTH supplied mounting bolts to secure the bracket to the vehicle. Using only one bolt can result in a cracked bracket and the scale falling off the vehicle.



DUMP AIR FROM SUSPENSION SYSTEM

INSTALL NEW STREET TEE FITTING

Remove the suspension air line fitting from the top of one of the airbags. Insert a street tee fitting into the top of the airbag that matches the thread size of the vehicle suspension. Reinstall the suspension air line and fitting into the street tee. For more information on the parts needed for airline installation, see Appendix A.



INSTALL NEW AIRLINE

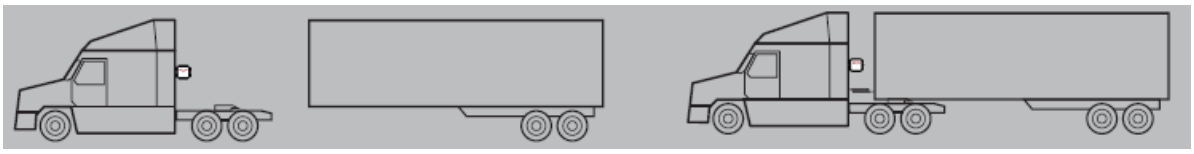
Install a new airline and fitting into the remaining port on the tee.

ROUTE AIR LINE TO GAUGE

Route the new airline from the tee fitting assembly to the gauge. Secure airline with zip ties. Insert the airline into the push-to-connect fitting on the back of the gauge. DO NOT ROTATE THE AIR FITTING!

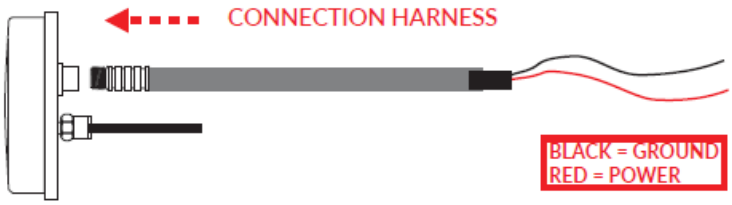
The air fittings on the back of the gauge are directly connected to the internal circuit board. Applying ground(-) or positive(+9-32) voltage to air fittings will cause immediate air sensor failure!

If using the Remote Sensor Feature, stop these instructions at this time and follow the instructions on the 403-SK installation manual to finish product installation.



INSTALL POWER CABLE

- Insert the male connector on the harness onto the female connector on the back of the scale. Make sure to orient the connector properly so that the small cutout on both connectors lines up. Once the connector has been pressed in, thread the collar into the scale until it is hand-tight.
- The two unterminated wires coming out of the harness are used to power the scale. Connect the RED wire to a switched positive (+) power source and the BLACK wire to the chassis ground (-). The required supply voltage must be between 9 and 32 volts DC. For more information on wiring connection and insulation, see Appendix B.
    - DO NOT connect directly to a battery or any constant power source, the gauge should be connected to a switched source so that it can be disconnected from power when not in use. Most users connect the power to vehicle marker lights or the AUX/ABS wire.
    - Electrical connections MUST be insulated, see Appendix B for instructions.



GETTING STARTED

- **POWER**

  Turn the scale on and off to view axle group weights.
- **WEIGHT**

  Weight of the selected axle group.
- **AXLE GROUP INDICATOR**

  Indicates which axle group is being displayed. No indicator means the gross weight is being displayed and a flashing indicator means the remote sensor weight is being displayed.
- **CALIBRATE**

  Press and hold C HIGH (while loaded) or C LOW (while empty) for 3 seconds to enable calibration (allows the

weight number to be adjusted by using the arrow buttons), and press the button again to save and exit calibration.

- **CALIBRATION INDICATORS**
  These indicate that calibration is enabled and that the weight can be adjusted using the arrow buttons. C/L indicates calibrate low enabled and C/H indicates calibrate high enabled.
- **MENU / ENTER**
  Press this button to switch between the axle groups being displayed.
- **UNITS**
  Units are displayed in either pounds (lbs) or kilograms (kg)
- **ARROWS**
  Press these buttons to adjust the weight number up or down when calibration is enabled.

OPERATING MODES

Each vehicle configuration requires a specific operating mode. The modes available on this gauge are:

- **AVG** -Tractor or Trailer, One Axle Group
- **S-AVG** – Tractor Drive and Estimated Steer
- **4CAL** – Trailer, One Axle Group with Multiple Configurations

See the tables on the following pages to find your vehicle configuration and set the gauge to the corresponding operating mode.

The load scale can only be set up in one operating mode at a time. If the mode is changed, the calibration data will be reset to factory defaults, requiring re-calibration.

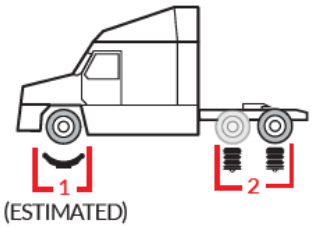
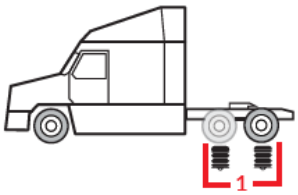
If using the Remote Sensor Feature, the feature must be enabled before setting the operating mode. For details on enabling the Remote Sensor feature and setting the operating mode when using this feature, see the 403-SK Instruction Manual.

CHANGING OPERATING MODES

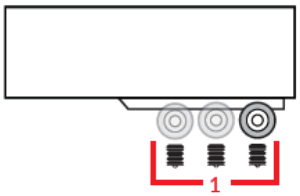
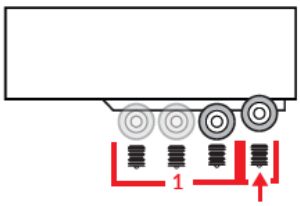
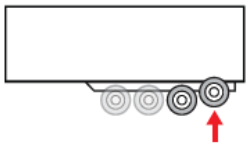
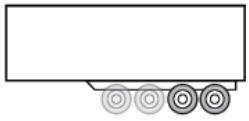
1. With the scale OFF, press and hold both the UP and DOWN arrow buttons, and then press the ON/OFF button. Release all 3 buttons. The scale will display the current mode.
2. Press the UP arrow button to cycle through the operating modes. To confirm your selection, turn the scale off by pressing the ON/OFF button.

The numbers on the images indicate the axle groups that will be displayed on the gauge. To cycle through the axle group on the gauge, press the MENU button.

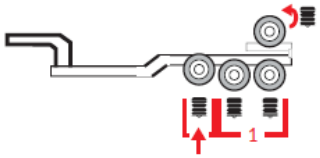
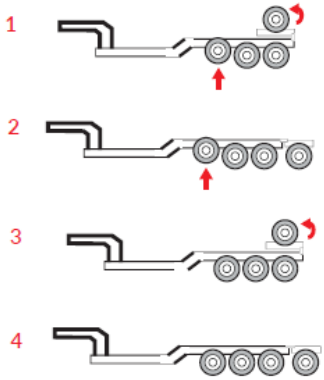
TRUCK

VEHICLE CONFIGURATION	OPERATING MODE
 (ESTIMATED) **Axle Group 1** - Estimated Steer **Axle Group 2** - Air Suspension Single, Tandem, or Tri Axle Group (1 HCV) *Recalibration required for steer axle after sliding fifth wheel. For more information about the estimated steer feature, see appendix C.	
 **Axle Group 1** - Air Suspension Single, Tandem, or Tri Axle Group (1 HCV)	

TRAILER/DOLLY

VEHICLE CONFIGURATION	OPERATING MODE
 **Axle Group 1** - Air Suspension Single, Tandem, or Tri Axle Group (1 HCV)	
Air Suspension Single, Tandem, or Tri Axle Group (1 HCV) with 1 Integrated Air Ride Lift Axle  EXAMPLE: 1  2  This trailer axle group has 1 integrated lift axle. Calibration set "1" is when the lift axle is up and set "2" is when the lift axle is down.	In **4CAL** mode, the scale can store four sets of calibration data for trailers that have various operating conditions. 

TRAILER/DOLLY

VEHICLE CONFIGURATION	OPERATING MODE
Air Suspension Single, Tandem, or Tri Axle Group (1 HCV) with 2 Integrated Air Ride Lift Axles  EXAMPLE:  On some 4-axle heavy-haul trailers, there are two fixed axles, a lift axle, and a flip axle all on the same HCV. Many operators use calibration set “1” when only two axles are down, calibration set “2” and “3” when three axles are down, and calibration set “4” when all four axles are down.	

GAUGE OPERATION

1. Press the ON/OFF button to turn on the scale display. The small numbers at the bottom left of the screen indicate which axle group is currently being displayed. Each number corresponds with an axle group, starting with 1 at the front of the vehicle and incrementing back.
2. Press the MENU button to cycle the display to the next axle group.
3. A solid axle group indicator represents an axle group that is connected directly to the gauge.
4. No visible axle group indicator, following the brief message “GroSS”, represents the gross weight screen. This is the sum of all the axle group weights.

CALIBRATION

CHANGING UNITS

With the gauge on, press and hold the UP ARROW and then press the MENU button. This will toggle the settings between pounds and kilograms.

The 201 series load scale must be calibrated both empty and loaded to work properly. The scale associates the weight you enter with the air pressure values at the time of calibration. You will need to calibrate once while the vehicle is empty, and again while the vehicle is loaded for each axle group being monitored. Please follow the steps on the next 2 pages for instructions on how to calibrate both empty and loaded.

Only enter the on-the-ground weight! axle or group being monitored. DO NOT use gross weight, tare weight, etc.

RE-CALIBRATION

It is recommended to re-calibrate every 6 months for each axle group being measured.

CALIBRATION EMPTY

EMPTY CALIBRATION POINT

1. While the vehicle is empty, obtain axle group weights from a certified in-ground scale.
2. Park on a level surface. Shift the transmission to neutral and set the parking brakes. Chock the wheels to prevent unexpected vehicle movement, then release the parking and service brakes.
3. Make sure the Height Control Valve (HCV) has fully inflated the airbags. If needed, briefly dumps the air from the suspension and allows the HCV to refill the system.
4. 

Press the ON/OFF button to turn on the Right Weigh load scale.
5. 

Press the blue MENU button to select the proper axle group or calibration set.
6. 

Press and hold the C LOW button until the “C/L” symbol appears.
7. 

Adjust the value using the UP and DOWN arrows so that it matches your scale ticket for the axle group.
8. 

To save, press and hold the C LOW button until the “C/L” symbol disappears.
9. Repeat steps 5-8 for all axle groups or calibration sets.

LOADED CALIBRATION POINT

1. While the vehicle is loaded, obtain axle group weights from a certified in-ground scale.
2. Park on a level surface. Shift the transmission to neutral and set the parking brakes. Chock the wheels to prevent unexpected vehicle movement, then release the parking and service brakes.
3. Make sure the Height Control Valve (HCV) has fully inflated the airbags. If needed, briefly dumps the air from the suspension and allows the HCV to refill the system.

4. 

Press the ON/OFF button to turn on the Right Weigh load scale.
5. 

Press the blue MENU button to select the proper axle group or calibration set.
6. 

Press and hold the C HIGH button until the “C/H” symbol appears.
7. 

Adjust the value using the UP and DOWN arrows so that it matches your scale ticket for the axle group.
8. 

To save, press and hold the C HIGH button until the “C/H” symbol disappears.
9. Repeat steps 5-8 for all axle groups or calibration sets.

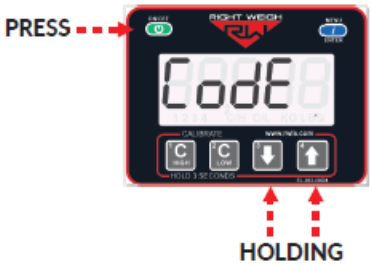
SECURITY PIN CODE

SECURITY PIN CODE (OPTIONAL)

- It is optional to set a security PIN code on the scale. Once a PIN code is set, the feature is enabled and the 5-digit number will be required to gain access to the calibration and operating mode settings.
- Once the PIN code feature is enabled, it can be changed but the feature cannot be disabled without resetting the calibration values. If you would like to disable the PIN code feature, please call Right Weigh Technical Support listed.

SET PIN CODE

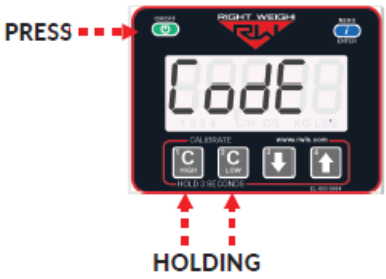
- With the gauge off, press and hold both the C LOW and C HIGH buttons, then press the ON/OFF button. Release all three buttons. The gauge will display “Code”.



- Press the MENU button and “00000” will display on the screen. Enter a 5-digit PIN code using the 1, 2, 3, and 4 buttons. Press the MENU button again to save the code.
  - If the display shows “——”, then there is already a code set.

CHANGE PIN CODE

- With the gauge off, press and hold both the C LOW and C HIGH buttons, then press the ON/OFF button. Release all three buttons. The gauge will display “Code”.



- Press the MENU button and "——" will display on the screen. Enter the previous PIN code. If the code entered is correct, the display will show "Good".

- Press the MENU button and enter the new 5-digit PIN code using the 1, 2, 3, and 4 buttons. Press the MENU button again to save the code.

OPERATION & WEIGHING

Follow these steps while weighing your vehicle:

1. Park on a level surface. Shift the transmission to neutral and set the parking brakes.
2. Chock the wheels to prevent unexpected vehicle movement, then release the parking and service brakes.
3. Make sure the Height Control Valve (HCV) has fully inflated the airbags. If needed, briefly dumps the air from the suspension and allows the HCV to refill the system. (This may take several minutes depending on the type of HCV)
4. ON/OFF Press the ON/OFF button to turn on the Right Weigh load scale.
5. Adjust the suspension or the load itself until the Right Weigh load scale displays a weight value below your legal limit.
6. MENU ENTER Press the blue MENU button to display other axle groups or calibration sets.
7. ON/OFF Press the ON/OFF button to turn off the Right Weigh load scale.

KEYPAD FUNCTION GLOSSARY

FUNCTION	DESCRIPTION	BUTTON SEQUENCE	
		HOLD	PRESS
Power On / Off	Power the display on or off . Note: Pressing the ON/OFF button while in a configuration menu saves the selection and powers off the display.		
Next Axle Group / Next Screen	Cycles to the next axle group or menu screen.		
Change Units	Press while weight is displayed to change the units from pounds (lb) to kilograms (kg).		
Set Operating Mode	With the display off, use this key sequence to enter the operating mode selection menu. While in this menu, use the UP arrow button to cycle through the available options. See Operating Modes section.		
Remote Sensor Feature	With the display off, use this key sequence to enter the menu enable or disable the Remote Sensor Feature. While in this menu, use the UP arrow button to cycle through the available options. 0 = disabled 1= enabled		

FUNCTION	DESCRIPTION	BUTTON SEQUENCE	
		HOLD	PRESS
PIN Code	With the gauge off, use this key sequence to create or change an existing PIN code. See Security PIN Code section.		
Diagnostics Menu	With the display off, use this key sequence to enter the diagnostics menu and view diagnostic data for the gauge. See Diagnostics Menu section.		
Set Empty Calibration	While the desired axle group is shown, press and hold the C LOW button until the C/L indicator appears. Use the arrow buttons to adjust the displayed weight to match the actual axle group weight. Press and hold the C LOW button until the C/L indicator disappears to save.		
Set Loaded Calibration	While the desired axle group is shown, press and hold the C HIGH button until the C/H indicator appears. Use the arrow buttons to adjust the displayed weight to match your actual axle group weight. Press and hold the C HIGH button until the C/H indicator disappears to save.		

FUNCTION	DESCRIPTION	BUTTON SEQUENCE	
		HOLD	PRESS
Adjust Weight Value	While calibration is enabled, adjust the weight value using the UP and DOWN arrows		3 OR 4
Next Selection	The UP arrow is used to change selections in the menu screens.		4
Set Measurement Mode	With the display off, use this sequence to change the measurement mode. DEF (Default) - absolute weight (LBS or KG) PC (Percent) - percent of load (0-100%).	1 C HIGH + 4	ON/OFF
RS232 Configuration Menu	With the display off, use this key sequence to enter the RS232 configuration menu. See RS232 Configuration section.	2 C LOW + 3	ON/OFF

DIAGNOSTICS

Entering the diagnostics menu can help perform regular maintenance, diagnose a problem, and take a deeper look into the current state of the gauge. The following instructions show how to enter the diagnostic menu and navigate through each of the diagnostics screens.

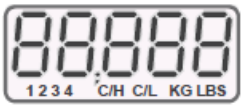
- To enter the Diagnostics Menu: With the display off, press and hold the MENU button and press the ON/OFF button. Release both buttons once the display illuminates.

- **FIRMWARE (screen #1)**

  When the display turns on it will show the firmware number. Press the MENU button to cycle through the following screens.

- **DISPLAY (screen #2)**

  This screen is a display check. Check that all characters are on, see the example image on the left.



- **BLUETOOTH (screen #3)**
  - This screen displays a unique Bluetooth identifier programmed on the gauge. This is the number you will see when connecting to a smart device for the first time.
  - If this is blank, the Bluetooth transmitter has failed. Disconnect from power, reconnect, wait 10 seconds, and try again.

- **AIR SENSOR(S) (screen #5)**

  This screen displays the air suspension pressure (in psi) measured by the internal air sensor(s) and should be

between 18 and 90 psi with the vehicle's airbags inflated. If applicable, press the UP arrow to display the pressures for the additional sensors.

- **BAROMETRIC SENSOR (screen #7)**
  This screen displays the barometric pressure (in psi) measured by the barometric sensor which should be between 13 and 16 psi.

- **OPERATING MODE (screen #8)**
  This screen displays the operating mode that the gauge is configured in. To change please see the Operating Modes section of this manual for more information.

- **KEYPAD TEST (screen #9)**
  This screen will show "PAD 0" and pressing each of the buttons should show a separate number listed below:

- **RS232 CONNECTION – if applicable (screen #10)**
  This screen displays the RS232 connection status:
  - **ALonE** – not connected to another Right Weigh gauge
  - **Front** – connected to another Right Weigh gauge, front of the chain CEntr – connected in between two other Right Weigh gauges
  - **End** – connected to another Right Weigh gauge, end [back] of the chain

Press the MENU button to go back to screen #1 and then press the ON/OFF button to power the gauge and exit the Diagnostics Menu.

RS232 CONFIGURATION

This scale can transmit weight data over RS232. Use the RS232 configuration menu to adjust the communication protocol, averaging time, and message period.

- To enter the RS232 Configuration Menu: With the display off, press and hold the C LOW and DOWN arrow buttons and press ON/OFF. Release all buttons once the display illuminates.

- **MESSAGING PROTOCOL (screen #1)**

  When the display turns on the first screen will contain the messaging protocol setting. Press the UP arrow button to cycle through the available options.

  - **232-1 – default messaging protocol**

    For details on the Right Weigh RS232 messaging protocol visit: https://rwls.com/wp-content/uploads/2022/07/rwlsnmeaserialdatainterfacespec-v4.1.pdf.

  - **232-2 – GeoTab messaging protocol**

    Press the MENU button to cycle through the following screens.

- **AVERAGING TIME (screen #2)**

  This screen contains the averaging time setting. Each weight value output over RS232 is generated by taking a rolling average of some duration of weight samples. Averaging time is the duration of time (in seconds) in which weight samples are taken to create the rolling average. 60 seconds (”A 60”) is the default setting.

- **MESSAGE PERIOD (Output Frequency – screen #3)**

  This screen contains the message period (output frequency) setting. The message period setting is the duration of time (in seconds) between messages. 15 seconds (”P15”) is the default setting.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Erratic / Inaccurate Weight Readings	The vehicle is not parked on a level surface	Park on level concrete ground. Parking on sloped or banked surfaces will cause the vehicle weight distribution to shift between the axle groups. Additionally, if one or more of the vehicle's wheels are in a pothole, that could result in additional pressure or torque on the suspension airbags. This will cause the suspension to have a different air pressure than what is normally needed to hold up the given weight.
	The vehicle's brakes are on	Release the parking brakes when weighing and/or calibrating. When the vehicle brakes are set, they could apply additional pressure or torque on the suspension airbags. This will cause the suspension to have a different air pressure than what is normally needed to hold up the given weight.
	There is a significant air leak in the suspension system	Check air lines for leaks. Having a leak could cause the HCV to refill the suspension at regular intervals to maintain the vehicle's ride height. If there is a significant leak, the gauge display will slowly decrease in value and then quickly increase in value when the HCV refills the suspension system.
	The Height Control Valve (HCV) is malfunctioning or broken	If the HCV is not functioning correctly, the air pressure applied to the suspension system could be inconsistent and/or erratic. To test for an HCV problem, acquire a weight reading from the Right Weigh gauge and write it down (refer to gauge operating instructions for proper procedure). Drive the vehicle around the block and return to the same location. Acquire a second reading from the Right weight gauge. If the two readings are significantly different, then the HCV might be malfunctioning.

Gauge reading “noir”	One or more air inputs a re not receiving air (If 2 air sensors are set to Av erage mode and one isn ’t receiving air, the gaug e will read your message)	Check that all air inputs are receiving air. Pull the airline out o f air fitting(s) on the back of the gauge. Follow the airline alon g the vehicle to the airbags to check that it hasn’t been pinch ed or damaged. Dump suspension and refill to ensure airbag s are full.
	The Lift Axle being mea sured is in the up positio n	If an air input is measuring a lift axle on the vehicle and the lift axle is in the up position, the airbags will be deflated of air an d the gauge will read the noir message.
App Won’t Connect to the Gauge	Scale is connected to a constant power source	Connect the scale to a switched power source between 9 an d 32 VDC (typically either the vehicle marker lights or the AU X/ABS wire). If the gauge is powered too long it can stop tran smitting a Bluetooth signal and may need to be disconnected and reconnected to work again.
	Scale is connected to a nother device	Disconnect the scale from the other device before connecting through your device.
	Phone requires re-set	To reset your phone – close the app, turn on Bluetooth, and wait 10 seconds. Then open the app and turn the Bluetooth b ack on. Try rescanning for the scale. If this still doesn’t work, i n some cases it is necessary to restart the phone completely.
Gauge Will Not Calibrate Low/High	Air pressure in the syste m is not changing	To enter low or high cal mode, the gauge must see a measur able change in air pressure. Make sure you calibrate high wh en the vehicle is near the legal limit and calibrate low when th e truck is empty. Also, be sure the airline is connected directl y to an airbag – NOT the main air supply or brake system.

Scale Does Not Pow er On	Scale is not connected t o a switched power sour ce of between 9 and 32 VDC	Connect the scale to a switched power source between 9 an d 32 VDC (typically either the vehicle marker lights or the AU X/ABS wire). If there is a bad connection in the circuit which causes voltage to drop below 9 volts, the scale will not power on. Test the power source with a voltmeter.
	Scale is connected directly to the battery	Connect the scale to a switched power source between 9 an d 32 VDC (typically either the vehicle marker lights or the AU X/ABS wire). The scale is active anytime it is connected to p ower, even if the display is off. To reset it, disconnect and rec onnect to the power source, wait 10 seconds, and then try ag ain to turn the display on.
	Polarity is incorrect	Correct the polarity. The red wire must be connected to the p ositive and the black to the negative.
Cannot Change Calibration Data	The scale has an active user-defined security PI N code	If the scale is protected with a PIN code, the PIN must be ent ered before calibration data can be changed. To understand how to reset the PIN code, see page 16. If the PIN code has been forgotten, please call Right Weigh technical support list ed on page 2 for further assistance.

APPENDIX

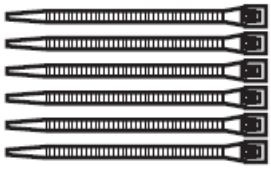
APPENDIX A

The following is a list of additional parts needed for air line installation. This list is just a suggestion and may not be

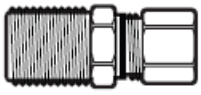
all of the parts needed for your specific vehicle. Check with your Right Weigh dealer for optional installation kits.

1/4 Inch Air Line

Approximately 20 to 30 feet (6 to 9 meters)

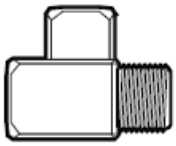


20 or more Zip Ties



Male Straight Fitting

Air line fitting for 1/4" air line, with a thread size to match the street tee fitting.

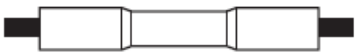


Street Tee Fitting

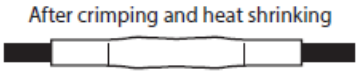
The thread size should match the air bag fitting. (1/4" NPT or 3/8" NPT)

APPENDIX B

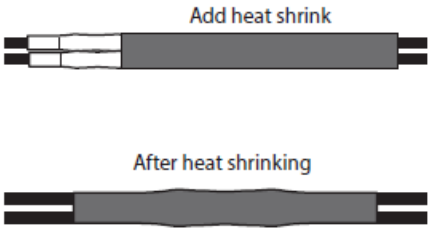
All wiring connections must be made watertight. Connections that are not watertight can allow moisture to travel through the individual strands of the wires and make their way into the scale, causing permanent damage to the electronics.



Crimp each end of the wire into the connector with a wire crimp tool (tool not provided).



With a heat gun or heat torch, heat the connector until it shrinks completely around each wire end. Make sure you do not burn the wire jacket.



After all connections have been made, heat shrink the entire group of splices so that it seals on the outer jacket of both cables.

APPENDIX C

ESTIMATED STEER

“Estimated Steer” is a calculation of the steer axle weight based on the drive axle’s air pressure. There are no sensors or airbags required on the steer axle to use this feature and it can be more accurate than measuring the weight change with an air or strain sensor. The steer axle weight can be estimated because the weight placed on a fixed position 5th wheel is in a consistent, predictable location on the frame. After calibration, the Right Weigh gauge calculates how many pounds of weight are typically placed on the steer axle, for every pound placed on the drive axle group.

Estimated Steer will not reliably work for straight trucks, car hauliers, or anyone who slides their fifth wheel regularly, as the weight applied to the drives is not in a consistent place.

CALIBRATION
Enter the weight data for the steer axle both empty and loaded, the same as you would any other axle group. Based on the data you input and the measurement from the drive axle group, the scale will calculate your steer axle weight.

- Re-calibration is required after changing the position of a sliding fifth wheel.

WARRANTY

At Right Weigh, we are committed to delivering top-notch products that perform as intended. We stand behind our commitment with confidence. Every new product manufactured or sold by Right Weigh, Inc. is backed by a 3-year warranty from the date of purchase, ensuring freedom from material or manufacturing defects. Within the initial three years of purchase, Right Weigh Inc. will, at its discretion, address product issues by correcting, replacing, or refunding the affected item by the guidelines outlined in this statement.

Please note that this warranty does not cover product problems resulting from:

1. Improper application, incorrect installation, or operation outside the approved specifications as stated in the product instruction manual.
2. Accidents, faulty suspension parts, or power surges.
3. Inadequate maintenance or repairs.
4. Abuse, misuse, or unauthorized modification.
5. Natural disasters, including but not limited to lightning strikes, floods, fires, earthquakes, etc.

Under this warranty, Right Weigh, Inc.’s liability is limited to the original cost of the product in question and does not extend to labour costs or other expenses related to the installation, removal, or replacement of a Right Weigh, Inc. product. Right Weigh, Inc. does not assume responsibility or liability for any loss or damage resulting from the use of our products. Right Weigh, Inc. shall not be liable for direct, indirect, special, incidental, or consequential damages, including loss of profits or loss of time, arising from the performance of a Right Weigh, Inc. product.

We reserve the right to make improvements to product designs, construction, and appearance without prior notice. Additionally, we may discontinue support, warranty, or repair for products that we deem obsolete or for which repair parts are no longer available. No employee or agent of Right Weigh, Inc. has the authority to modify the terms of this warranty without the express written permission of Right Weigh, Inc. Please contact Right Weigh, Inc. before uninstalling any product suspected of failure. Our support team may engage in troubleshooting efforts to

determine if the product is eligible for coverage under this warranty policy. If the product has been uninstalled and troubleshooting cannot be performed, the product in question must be returned to Right Weigh, Inc. for inspection before warranty eligibility can be determined.

To initiate a return, repair, or replacement of a product, you must obtain a Return Merchandise Authorization (RMA) number. This number is required before any product can be returned. Please contact our Customer Service at 503-628-0838 to obtain an RMA number or send an email to **rwls@rwls.com**.

Third-party extended warranties are not recognized or accepted as valid forms of coverage by Right Weigh, Inc. If you have purchased or obtained an extended warranty from a third-party provider, you must contact the provider for any claims outside of the standard 3-year warranty offered by Right Weigh, Inc. We encourage you to review the terms and conditions of your extended warranty to fully understand its limitations and scope. Right Weigh, Inc. does not extend warranty coverage to any product refurbished by a third-party reseller.

RETURN POLICY

Before returning any product, please obtain a Return Merchandise Authorization (RMA) number by calling customer service at 503-628-0838 or emailing **rwls@rwls.com**.

Include the RMA number or a printed copy of the RMA with the returned product. Shipping costs for returns must be prepaid by the customer unless otherwise specified by Right Weigh, Inc. Ensure the items are securely packed to prevent damage during shipping and consider insuring against possible damage or loss. Right Weigh, Inc. will not be liable for damages resulting from inadequate or careless packing or loss during transit.

Credit/Refund:

- Only applies to new, unused products in their original packaging.
- Must be returned within 60 days of original purchase to receive full credit.
- New, unused products returned after 60 days from the original purchase are subject to a 10% restocking fee.
- Returns are not accepted beyond 180 days from the original purchase date.

Right Weigh Inc. will issue a credit or a refund after evaluating the returned product. Whether the original purchaser receives a credit or refund is at Right Weigh Inc.'s discretion.

Warranty Repair or Replacement

- Applies to products with material or manufacturing defects within the period defined by the warranty policy.
- Must be able to provide proof of purchase date.
- Before uninstalling the product, contact customer service at 503-628-0838 or email **rwls@rwls.com** for required troubleshooting.

Right Weigh, Inc. will evaluate the returned product(s) at no charge. If the product is determined to be under warranty, it will be repaired or replaced with equivalent product(s). Right Weigh, Inc. will cover the cost of shipping the warrantied product back to the customer using a shipping method of our choosing, equal to or faster than the method used by the customer. For products or parts not covered by warranty, repair or replacement will be done at the customer's expense upon authorization.

We appreciate your understanding and cooperation in adhering to our warranty and return policy. If you have any further questions or require assistance, please don't hesitate to contact our Customer Service at 503-628-0838 or **rwls@rwls.com**.

THANK YOU FOR YOUR BUSINESS

SCAN HERE FOR ADDITIONAL RESOURCES AND VIDEOS

www.rwls.com/manuals-resources/

Right Weigh, Inc. Hillsboro, Oregon USA

Documents / Resources

	RIGHT WEIGH 201-EBT-01B Onboard Load Scale [pdf] Instruction Manual 201-EBT-01B Onboard Load Scale, 201-EBT-01B, Onboard Load Scale, Load Scale, Scale

References

- Right Weigh | Onboard Load Scales
- Manuals and Resources - Right Weigh
- rwls.com/warranty
- User Manual