

## Installation Instructions for the AirBAT<sup>®</sup> RF Single Tire AirBAT

### English – Single Tire AirBAT Sensor Installation

**WARNING!** Always use appropriate personal protective equipment (PPE) during the installation and maintenance of the sensors and or related systems on a vehicle. If you have questions regarding which PPE are appropriate, please consult [OSHA 3151-12R 2003](#) to determine appropriate equipment.

1. Choose the correct bracket for the application. Brackets are available for drive axles and various trailer hub configurations. *Figure 1* shows a hub cap flange mounted bracket.
2. Attach the AirBAT to the bracket. The AirBAT has an anti-rotation pin on the back of the manifold that must fit into the small hole in the bracket. Use the washer and locking nut supplied with the AirBAT. **CAUTION: USING HAND TOOLS ONLY, TORQUE THE NUT TO 12 ft-lb.** Over-tightening may break off the mounting stud. *See Figure 2.*
3. Make a note of the unique serial number printed on the AirBAT cover. Also note the position on the truck where the AirBAT is being installed (Left-Rear, Right-Rear, etc.) along with the vehicle ID. This information may be entered into WebBAT or used for reference at a later time.
4. Hold the bracket (with AirBAT attached) near the hub and visually select a pair of mounting studs or bolts on the hub so that the AirBAT hose will not be stretched or be too loose, as shown in *Figure 3*. Remove the two bolts and attach the bracket, using the same bolts. Typical hub cap bolts are 5/16–18 and are tightened 12–16 ft-lb. of torque.
5. *Figure 4* shows the AirBAT attached to a drive axle cover plate. The same procedure as detailed in step 4 is to be used. Typical drive axle cover plate nuts are torqued to 250 ft-lb. of torque.
6. Remove any valve stem caps from the wheels. Be sure the threads on the valve stem are clean and usable with no dings or dents on the sealing edge of the valve stem. Restore/replace if needed. Connect the AirBAT hose to the appropriate valve stem and tighten the knurled valve stem fitting to approximately ½ turn past finger tight. Hand tighten manifold hose fitting until it is secure and will tighten no further. Use a leak detection method such as soap and water or a commercial bubble solution to ensure no air leaks are present.
7. Check the tire pressure with the HandBAT reader or a conventional tire gauge. The tire may be filled using the fill port on the AirBAT hose fitting. The HandBAT reading should confirm the unit's serial number recorded in step 3.



**OPERATION:**

If the LED/light on the AirBAT is blinking, it means that the tire's air pressure is AT or BELOW the lower pressure threshold. The blink pressure is defined by the last 3 numbers of the AirBAT part number. The threshold is a software function and can be changed with the HandBAT reader.

**MAINTENANCE:**

The AirBAT is a low maintenance product; however it is recommended that the valve stem gasket be changed at the regular maintenance interval for the tires (i.e. when you replace a tire at the end of tread life). Gaskets are available from STEMCO (PN: 810-0050) in packages of 24 each.

**RF INTERROGATION:**

This unit can be read by any BatRF reader such as the HandBAT or Gate Reader System. The AirBAT broadcasts information (pressure and serial number) approximately every 2.5 seconds. For the Gate Reader System, a loop imbedded in the ground activates the AirBAT and prompts it to transmit data. Finally, the BatRF Driver Alert System (DAS) or Tractor Interface Module (TIM) may be used in conjunction with the AirBAT tire pressure sensors to provide in-cab driver notification and off-board communication of data. All of the above mentioned equipment will operate with single, dual and steer tire AirBAT tire pressure sensors.

**CERTIFICATIONS:**

This unit complies with FCC Part 15. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**FC** FCC ID: SRA-816

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This product meets the applicable Industry Canada technical specifications/Le present materiel est conforme aux specifications techniques applicables d'Industrie Canada. IC:7413A-816

**NOTE:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. Users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

**IMPORTANT NOTES:**

This unit contains a Lithium-Thionyl Chloride battery and should be disposed of according to local regulations. The battery contains less than 1 gram of lithium and is therefore classified as a non-hazardous product. Lithium-Thionyl Chloride batteries contain no poisonous materials and do not present environmental hazards when properly disposed of.

**WARRANTY INFORMATION:**

All warranty returns may be sent to: STEMCO  
300 Industrial Blvd.  
Longview, TX 75691  
Attn. Warranty Dept.

  
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