



INSTALLATION MANUAL

Congratulations on the purchase of your new BrakeBuddy! The BrakeBuddy was designed and built as an auxiliary braking system to operate in conjunction with the existing braking system in your towed vehicle.

Use of the BrakeBuddy in a manner inconsistent with these instructions may result in damage to your vehicle, serious injury or death. You must read and understand these instructions prior to the use of this product.

If you have any questions after reading these instructions, please call BrakeBuddy customer service at 1-800-470-2287.

1. Remove the BrakeBuddy and components from the shipping carton. The complete system consists of:

- Main BrakeBuddy Unit**
- Breakaway System**
- Clevis Assembly**
- Remote Alert System**
- Handle and Knob**

2. Install the breakaway system by following the step-by-step instructions included with the breakaway kit.
3. Attach the lock nut and clevis assembly to the air cylinder (Fig.1).
4. Attach handle assembly to main unit (Fig. 2) with adjustment knob.
5. Adjust the driver's seat to the far back position (Fig. 2). Place the BrakeBuddy on the floorboard between the seat and the brake pedal. Slide the BrakeBuddy back against the seat for maximum working room. If for some reason the BrakeBuddy does not fit your vehicle properly, please call technical service at 1-800-470-2287.
6. With the notched end of the clevis facing up, attach the clevis to the top of the towed vehicle's brake pedal (Fig. 3). Angle the brake pedal clevis so the upper portion of the clevis grabs the top of the towed vehicle's brake pedal. Pull down on the air cylinder rod (or lower portion of the clevis) to extend the clevis under the bottom of the towed vehicle's brake pedal. Pull back on the red locking tab **(A)** until secure (tab should not go all the way down).
7. Move the BrakeBuddy forward until the air cylinder rod is fully retracted (Fig. 4). Make sure the brake pedal is not being pressed.
8. Adjust the driver's seat forward until it touches the handle on the back on the BrakeBuddy (Fig. 5).
9. Adjust the BrakeBuddy handle (Fig. 6). Loosen the adjustment knob on the back center portion of the BrakeBuddy and adjust the height of the handle so it contacts the seat at the lowest position possible without sliding under the seat. (NOTE: the lower on the seat, the firmer the support). Tighten the adjustment knob to secure handle.

FIG. 1

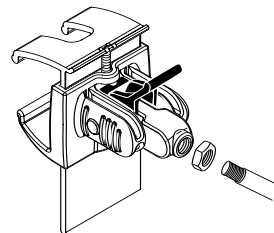


FIG. 2

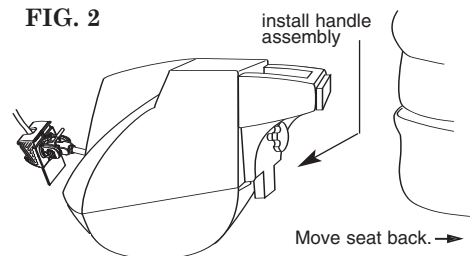


FIG. 3

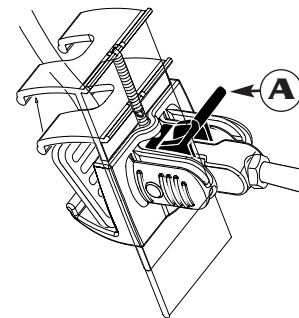


FIG. 4

Move BrakeBuddy forward.

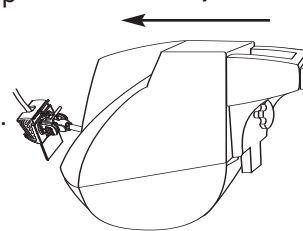


FIG. 5

Move seat forward.

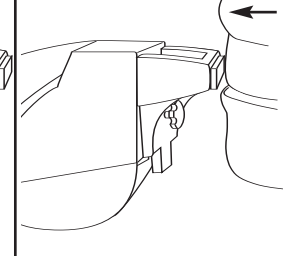
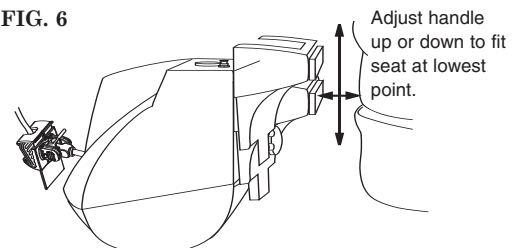


FIG. 6





INSTALLATION MANUAL

10. Power the BrakeBuddy by plugging the unit into a 12-volt receptacle in the towed vehicle (Fig. 7). When powered, the air compressor will fill the air tank in 30-40 seconds. If a 12-volt power supply is not available in the towed position (or the 12-volt power remains off in the ignition off position), a 12-volt Battery Direct Kit is available (part number 39305). At a minimum, a 15-amp 12-volt power supply is required to operate the BrakeBuddy. **NOTE: The red “bleed brakes” light will be lit until completion of step 10.**

11. Push the red AUTO START button located on top of the BrakeBuddy (Fig. 8). The arm will automatically extend / cycle 5 times. This will remove any vacuum stored in the brake vacuum reservoir of the towed vehicle as well as diagnose any errors in the system startup (B).

NOTE: While the arm is activating, look at the brake lights on the rear of the towed vehicle. The brake lights will fluctuate on and off as the BrakeBuddy is pressing on and off the brake pedal. If the brake lights remain on, the BrakeBuddy unit is too close to the brake pedal.

NOTE: After Auto Start cycle is complete, the red “bleed brakes” light will go out and the green “normal” light will be on.

NOTE: The test button (Fig. 8 / C) is a manual (one time) arm activation test. The test button can be used to confirm the unit is in the correct floor position.

WARNING: Any time the towed vehicle’s engine has been started you must push the Auto Start after shutting the towed vehicle’s engine off. This removes the vacuum out of the vehicle’s brake system. Failure to drain the towed vehicle’s brake vacuum will result in excessive tire wear.

12. Make final seat adjustments. If there is a gap between the seat and handle, adjust the seat forward to close the gap.

FIG. 7

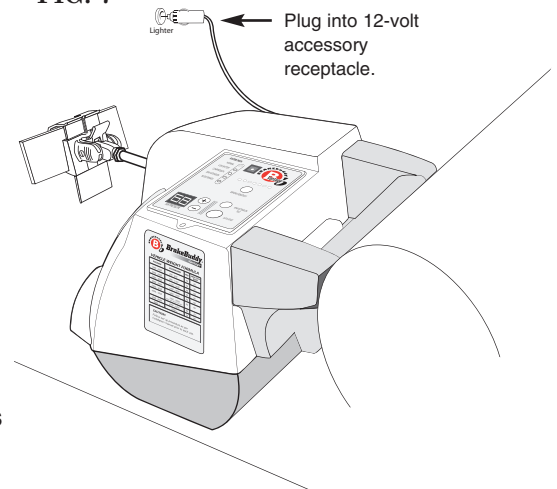
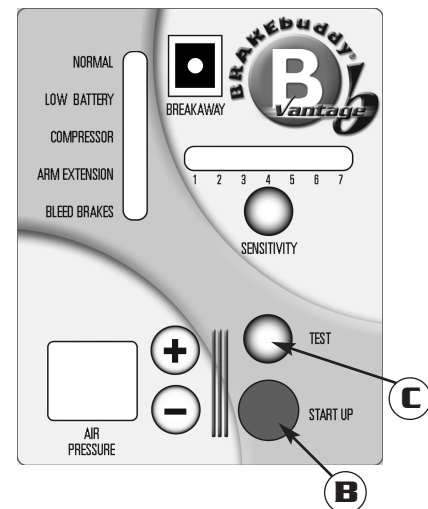


FIG. 8





OPERATION INSTRUCTIONS

1. Adjust the air pressure to match the weight of your towed vehicle. The braking pressure, or how hard your towed vehicle will brake in tow, is adjusted by the **+ / - Buttons** located on top of the BrakeBuddy (Fig. 9). To find the correct pressure setting specific for your towed vehicle, please refer to the Vehicle Weight Formula Chart below. The display will adjust in increments or decrements of 1 when held down and displays air pressure from 20 to 90 PSI. After 5 minutes the display will “power down.” Upon a button press, the display will “power on.”

NOTE: The DIGITAL DISPLAY shows how much pressure is set to apply the brake; it does not display the air pressure inside the air tank that is automatically filled when the BrakeBuddy is plugged into the 12-volt receptacle.

NOTE: For vehicles equipped with a power brake boost, set air pressure to 20 PSI.

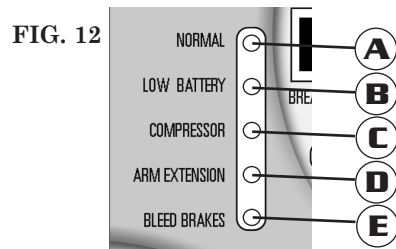
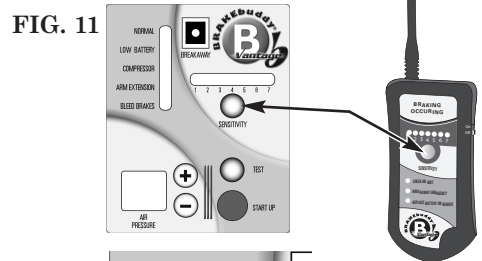
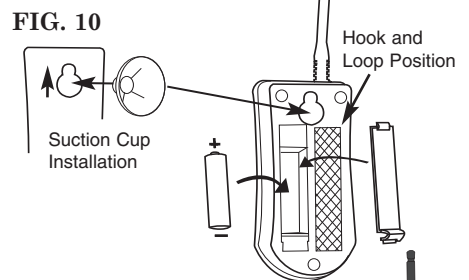
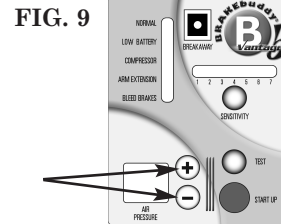
2. Install the AA battery (included) to the wireless alert system (Fig. 10) and mount in a suitable location in the RV (a suction cup or hook and loop closure is included for mounting). Adjust the **Sensitivity Button** either on the remote or on top of the main BrakeBuddy unit. The sensitivity button determines how hard you must apply the brakes in the RV before the BrakeBuddy will engage the brakes in your towed vehicle. The sensitivity of the BrakeBuddy is adjusted by each push of the **Sensitivity Button** (Fig. 11). The more lights are illuminated, the easier the BrakeBuddy will activate. Each time the BrakeBuddy is installed, the sensitivity setting remains in the last used setting. Start at setting #4 and adjust to your preferred setting as you are driving (using the remote).

NOTE: Your RV must be moving faster than 15 mph for the BrakeBuddy to engage the brakes in the towed vehicle.

DIAGNOSTIC FEATURES:

The BrakeBuddy Main Unit provides visual indication on problems that are occurring (Fig. 12).

- A - System Normal (present on main unit)
- B - Battery Low (battery voltage has dropped below 10 volts) Recharge towed vehicle battery before traveling.
- C - Compressor Error (air tank is not holding pressure or compressor is running longer than 3 minutes) Call technical service immediately 1-800-470-2287.
- D - Arm Extension Error (arm is not retracted) Call technical service immediately 1-800-470-2287.
- E - Bleed Brakes (depress the Auto Start button)



VEHICLE WEIGHT FORMULA

Pounds	Kilograms	Psi.	With Tow Dolly
1,500 – 2,000	700 – 900	25	35
2,000 – 2,500	900 – 1,150	35	45
2,500 – 3,000	1,150 – 1,400	40	50
3,000 – 3,500	1,400 – 1,600	45	55
3,500 – 4,000	1,600 – 1,800	50	60
4,000 – 4,500	1,800 – 2,050 1999+ Jeep Gr. Cherokee	55	65
4,500 – 5,000	2,050 – 2,300	65	75
5,000 +	2,300 +	75	85



OPERATION INSTRUCTIONS

The BrakeBuddy Remote provides 2-Way communication from the RV to the towed vehicle and provides visual indication on problems that are occurring (Fig. 13).

- F - Main Unit Error (red light will activate) Stop and check the main unit diagnostics for error.
- G - Breakaway Warning (red light and audible signal will activate) Stop Immediately!
- H - Battery Low on Remote (replace with new AA battery)
- I - On / Off Switch

NOTE: When the BrakeBuddy system and RV are not in use, turn the remote on / off switch to the OFF position to conserve remote battery life. If desirable, a 12-volt DC power cord is available. Call BrakeBuddy customer service.

NOTE: When done towing and parked, we recommend you unplug the BrakeBuddy system from the towed vehicle 12-volt receptacle. If that is undesirable, recharge the towed vehicle battery once every 3 days to maintain optimum battery condition.

REMOTE SYNCHRONIZE PROCEDURE:

This device works similar to a universal garage door opener. If this remote ever becomes un-synced with the main unit, simply perform the following procedure:

1. Power up / turn on both devices (dinghy and remote).
2. Hold down the (+) and (-) buttons simultaneously on the dinghy for 5 seconds (Fig. 14 / K). If both buttons are held down properly the air pressure will not increment or decrement.
3. When the air pressure shows "LL" (Fig. 14 / L), press the reset button on the remote (Fig. 13 / J). A toothpick or similar device will need to be used to insert into the hole in the remote to press the reset button.

NOTE: User has 5 seconds to press the reset on the remote once "LL" is displayed. In the event that time span elapses before the reset button is pressed go back to step 2.

4. Once the dinghy has completed the "link-up" routine, the air pressure display will change from "LL" to the last air pressure setting (# between 20 and 90).
5. Both the dinghy and coach units should be displaying the same sensitivity setting and sensitivity button presses on either unit should cause both units to update to the new setting.

FIG. 13

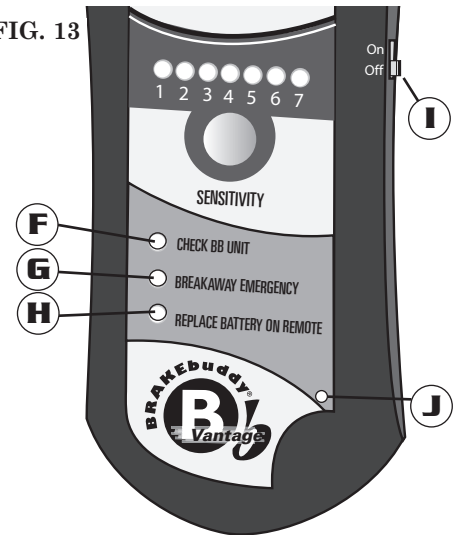
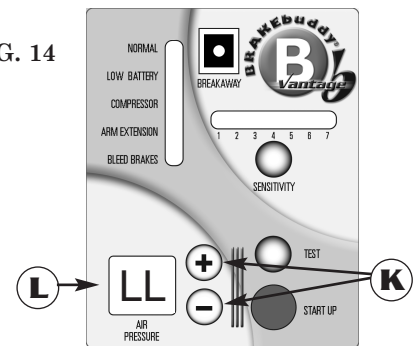


FIG. 14





BrakeBuddy®

Vantage

Phone (800) 470-2287
www.brakebuddy.com

REMOVAL INSTRUCTIONS

1. To remove the BrakeBuddy from your towed vehicle, unplug the 12-volt adapter from the towed vehicle (the air pressure in the system will automatically drain).
2. Unplug the breakaway junction box harness from the top of the BrakeBuddy and coil the wire under the dashboard or floor mat.
3. Adjust the seat back and remove the clevis after the air pressure has drained.
4. Disconnect (unclip) the breakaway safety coil from the breakaway junction box.

Information to User:

NOTE: 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. FCC Radiation Exposure Statement to comply with FCC RF exposure requirements in section 1.1307, a minimum separation distance of 0.81 cm (0.3 inches) is required between the antenna and all persons. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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.

CAUTION: Changes or modifications not expressly approved by Hopkins Manufacturing Corporation could void the user's authority to operate the equipment.



TROUBLESHOOTING

Problem: The air compressor will not come on after I plug in the BrakeBuddy.

Solution: Make sure there is power to the 12-volt receptacle and the fuse for the 12-volt plug is functioning. If both are functioning, the red indicator light on the 12-volt plug will be lit when it is plugged in. To remove the fuse on the BrakeBuddy's power cord, unscrew the finger nut on the end of the plug. Replace fuse with a 15 amp fuse.

Problem: The BrakeBuddy will not apply the brakes in the towed vehicle.

Solution: Make sure the air pressure is properly adjusted for the weight of the towed vehicle. Also check the sensitivity setting. Remember, your RV must be moving at least 15 mph for the BrakeBuddy to activate.

Problem: The BrakeBuddy applies the brakes too hard in my towed vehicle.

Solution: Push the AUTO START button before towing to relieve the vacuum in the towed vehicle's brake booster. Or reduce the air pressure by manually depressing the (-) button.

Problem: The BrakeBuddy applies the brake as soon as I plug it in.

Solution: Check that the break-away system is properly connected and the pin is plugged into the junction box.

Problem: The compressor pumps up and then keeps on pumping slowly.

Solution: There may not be enough current to the BrakeBuddy. You may have a weak battery or you may need a "12-volt Battery Direct Kit" (part number 39305). At a minimum, a 15-amp 12-volt cigarette lighter or auxiliary power plug is required to operate the BrakeBuddy.

Problem: I have to apply the brakes in my motorhome very hard for the Brake Buddy to come on.

Solution: Increase the sensitivity of the BrakeBuddy by pressing the sensitivity button.

Problem: The BrakeBuddy turns my brake lights on even though I am not applying the brakes in my motorhome.

Solution: The BrakeBuddy may be too close to the brake pedal thereby activating the brake lights. See steps 10 and 11 of the installation instructions.

Problem: The compressor will not start.

Solution: BrakeBuddy is designed with an automatic shut-off on the compressor when voltage drops to 9.5 volts.

Problem: The Vantage's compressor runs for three minutes, shuts off and red compressor light comes on.

Solution: Try with vehicle running. If this solves the problem please contact BrakeBuddy customer support 1-800-470-2287, an auxiliary 12-volt power supply may be needed.



BrakeBuddy®

Vantage

Phone (800) 470-2287
www.brakebuddy.com

LIMITED THREE-YEAR WARRANTY

Hopkins Manufacturing Corporation thanks you for purchasing BrakeBuddy. A 3-year limited warranty and a 30-day money back guarantee apply to your BrakeBuddy and BrakeBuddy accessories. An additional 2-year extended warranty is also available (part number 39307). We wish you safe and happy travels.

WHAT IS COVERED AND FOR HOW LONG?

We are confident our product will perform well and therefore warrant to you, as the original retail purchaser, for a period of three years from the date of original purchase, that your new product will be free of mechanical and electrical defects in material and workmanship.

WHAT WILL BRAKEBUDDY DO? HOW DO I GET SERVICE?

During the warranty period, we will repair or replace your new product (at our option) without cost to you, which will be your exclusive remedy under this warranty. **Please do not return this product to the place of purchase. Doing so may delay the processing of your claim and our repair of your product. Call BrakeBuddy Technical Service for return instructions 1-800-470-2287.**

WHAT IS NOT COVERED?

Our warranty for your product will not cover damage resulting from neglect or misuse of the product, use of improper voltage or current, use contrary to operating instructions, or disassembly, repair, or alteration by any person other than an authorized service station. Any implied warranty of merchantability or fitness for a particular purpose of your product is limited to the duration of this written warranty. We shall not be liable for any incidental or consequential damages for breach of any expressed or implied warranty on your product.

HOW YOUR STATE'S LAWS MAY APPLY:

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

“This device complies with Part 15 of the FCC Rules. 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.”