

EVEN BRAKE

patent pending

Portable Proportional Braking System

Second Vehicle Kit Installation Instructions

Part number 98400



Quality Towing Systems since 1974

ROADMASTER, Inc. • 6110 NE 127th Ave. • Vancouver, WA 98682 • 800-669-9690 • roadmasterinc.com

85-3300-02 05/08

IMPORTANT NOTICE!

Safety Definitions

Statements in these instructions identified as follows are of special significance:



WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in property damage, serious personal injury, or even death.



CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in property damage, or minor or moderate personal injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

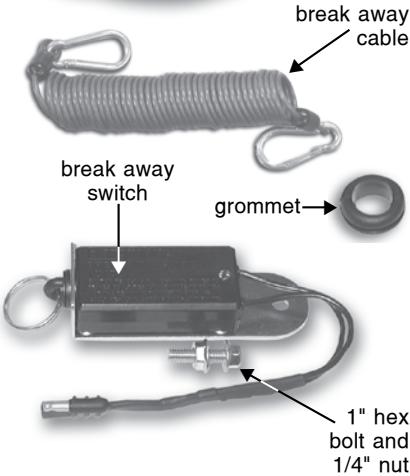
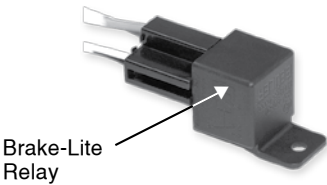
NOTE

Refers to important information and is placed in italic type. It is recommended that you take special notice of these items.

Statement of FCC compliance

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.

COMPONENTS



part number	description
9420.....	ICX transmitter
450310-20 & -22.....	Velcro pads (2)
350006-20.....	Phillips screws (4)
88410.....	Brake-Lite Relay
450782-1	fuse tap (1)
300140-04.....	zip ties (4)
650898.....	break away switch
450840.....	break away cable
650900.....	break away wiring harness
300117-00.....	rubber grommet
350400-20.....	1" hex bolt
350251-20.....	1/4" nut
450782-1	Fuse tap (1)
300036-00.....	ring terminal, blue
300115-22.....	insulated female terminal, red

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WARNING

Read all instructions before installing the second vehicle kit or operating Even Brake. Failure to understand how to install or operate Even Brake could result in property damage, personal injury or even death.

CAUTION

Not for use on older vehicles without power brakes. Even Brake is designed to work with vehicles that have a power brake system (even though the power brakes are not activated while towing). Using Even Brake on vehicles that do not have power brakes will result in over-braking and severe non-warranty brake damage.

CAUTION

Do not install Even Brake in a vehicle with an 'active' braking system.

'Active' (or, 'continuous power assist') braking systems are a safety feature on some new vehicles. This feature allows the brakes to always have power, even with the ignition off. The only supplemental braking system that ROADMASTER manufactures for these vehicles is BrakeMaster, with the addition of a Brake Pressure Reducer (part number 900002).

If any ROADMASTER supplemental braking system other than a BrakeMaster with a Brake Pressure Reducer is installed, the vehicle will brake with excessive force, which will damage the tires. Other non-warranty damage may also occur.

It is the owner's responsibility (or if professionally installed, the installer's responsibility) to determine if the vehicle being equipped with supplemental brakes has an active braking system – refer to the owner's manual, the vehicle manufacturer or the dealership.

ROADMASTER expressly disallows any and all claims relating to tire damage, brake damage, or any other damage to vehicles with 'active' braking systems caused by: 1) installation of any ROADMASTER supplemental braking system other than BrakeMaster; or 2) failure to install a Brake Pressure Reducer with the BrakeMaster.

BEFORE YOU BEGIN THE INSTALLATION...

1. ALWAYS CHECK THE ROADMASTER WEBSITE – www.roadmasterinc.com – for vehicle-specific information. Select 'Vehicle-Specific Info,' enter the motorhome and towed vehicle make, model and year, then select 'Braking Systems' and scroll down the page.

2. If the battery must be disconnected for towing, a 12-volt outlet kit (part number 9332) and a stop light switch must be installed. ROADMASTER manufactures stop light switch kits for a number of vehicles; to see if one is available for any specific vehicle, visit www.roadmasterinc.com and select 'Vehicle-Specific Info,' enter the vehicle make, model and year, then select 'Braking Systems' and scroll down the page.

Note: if a stop light switch kit is listed on the website for any particular vehicle, it is required.

3. If fuse(s) must be removed from the vehicle before it can be towed – verify that removing the fuse(s) will not disrupt power to Even Brake or the ICX transmitter, or otherwise affect the installation or operation.

4. Check the towed vehicle's 12-volt outlet for correct power – Even Brake is powered through the 12-volt outlet, with the ignition key turned to the "tow" position; however, some vehicles only have power at the 12-volt outlet when the engine is running. Before you begin the initial installation, verify that you have

power in the towed vehicle's 12-volt outlet with the ignition key turned to the "tow" position.

If there is no power, you can install ROADMASTER's optional 12-volt outlet kit (part number 9332). When installed, this kit will provide power to the 12-volt outlet even when the engine is off.

5. Check the 12-volt outlet socket to make certain that: a) the socket has been wired correctly; and b) the socket is not corroded.

a. Make certain that the socket has been wired correctly – the contact point at the bottom of the socket should be positive, and the outer shell around the top of the socket should be negative.

CAUTION

If the socket's positive and negative connections have been reversed, the fuse in the Even Brake power cord will blow when the cord is plugged into the 12-volt outlet.

b. Make certain that the socket is not corroded or otherwise damaged – a corroded socket may not provide constant power to Even Brake, which may cause intermittent operation or disrupt the Even Brake diag-

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Before you begin the installation...

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nostic program, causing false alerts.

If the socket is corroded or damaged, you can install ROADMASTER's optional 12-volt outlet kit (part number 9332). When installed, this kit will provide constant power to Even Brake.

CAUTION

If the towed vehicle has a single 12-volt outlet which has been used to heat a cigarette lighter plug, install the optional 12-volt outlet kit for the Even Brake power supply.

Using a cigarette lighter plug in a 12-volt socket will corrode the contact points. The socket will not supply sufficient voltage to be used as the Even Brake power source – Even Brake may not operate, or may only operate intermittently.

6. The circuit at the towed vehicle's 12-volt outlet must be rated at NO LESS THAN 15 AMPS to power Even Brake. Check the fuse at the outlet – if the fuse is rated at 15 amps or higher, the circuit is adequate to power Even Brake. If the fuse is rated at less than 15 amps, install the optional 12-volt outlet kit (part number 9332). When installed, this kit will provide adequate power to Even Brake.

CAUTION

If the circuit at the 12-volt outlet is rated at less than 15 amperes, install the optional 12-volt outlet kit. Depending on the available current during towing, Even Brake may not function, or may function incorrectly, without at least 15 amps.

WARNING

If the circuit is rated at less than 15 amps, do not simply replace the outlet's fuse with a higher-ampere fuse. This will cause the wiring to overheat, which can cause wiring damage, an electrical fire, or other consequential, non-warranty damage.

Failure to follow these instructions may cause property damage, personal injury or even death.

7. Check the towed vehicle's brake lights – Even Brake must function with the ignition key turned to the "tow" position; however, some vehicles' brake lights only operate with the key turned to the "on" position. Check to see if this is the case: turn the ignition key to the "tow" position, apply the brakes, and check to see if the brake lights illuminate. If the brake lights do not illuminate, a two-prong stop light switch and 10-amp fuse must be installed.

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Before you begin the installation...

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Note: check the owner's manual to see if the vehicle is equipped with an "automatic shut down" feature. If this is the case, ensure that the vehicle is not in automatic shut down mode before performing this test.

ROADMASTER manufactures stop light switch kits for a number of vehicles; to see if one is available for any specific vehicle, visit www.roadmasterinc.com and select 'Vehicle-Specific Info,' enter the vehicle make, model and year, then select 'Braking Systems' and scroll down the page.

Note: if you must install a Brake-Lite Relay (see Step Three – "If required, install the Brake-Lite Relay" under "Installation"), a stop light switch is not required. A stop light switch and a Brake-Lite Relay are mutually exclusive – if you use one, the other is not necessary.

INSTALLATION

Step One

Install the break away system

"Break away" systems are secondary safety devices, required by law in many states, which will brake the towed vehicle if it separates ("breaks away") from the motorhome.

1. Mount the break away switch (Figure 1) at the front of the vehicle, on the driver's side. Choose an area you can easily reach, with a surface of sufficient strength to hold the switch firmly in place, so that the break away pin (Figure 1) will pull freely from the switch. Mount the switch in a horizontal position, with the break away pin facing toward the motorhome.

Ensure that the break away pin can be pulled freely away from the towed vehicle, without any obstructions.

WARNING

Do not attach the break away switch to the tow bar or the tow bar bracket. If the tow bar or bracket fails, the break away switch will separate with it, preventing the break away system from activating. If the towed vehicle separates, the brakes will not be applied, which may cause property damage, personal injury or even death.

2. The Inter Connect transmitter ("ICX transmitter") will be attached in a later step; however, since the break away wiring harness will be connected to it, choose a location for the ICX transmitter now. Look for a mounting point on the driver's side of the towed vehicle, on the lower portion of the dashboard, where the end of the transmitter with the antenna and socket will be visible and accessible.

Choose an area away from pre-existing components or electronics, and where the transmitter will not present an obstruction or hazard to the driver of the vehicle, or interfere with the operation of the vehicle. The mounting surface must be of sufficient strength to hold the transmitter firmly in place, so that an electrical connector can be plugged into and out of the transmitter.

3. Once you have found a location for the ICX transmitter, look for a pre-existing hole in the firewall (or, if there is sufficient space, a pre-existing grommet with other wiring) close to where you will mount the ICX transmitter, to route the break away wiring harness through the firewall.

If there is no pre-existing hole or grommet with sufficient space, drill a 1/2" hole through the firewall.

Drill from the engine compartment or from the in-

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Install the break away system

continued from preceding page

terior of the vehicle, whichever is more convenient. Before drilling, make certain you will not damage any components on the other side of the firewall.

4. Route the wiring harness (Figure 1) from the break away switch to the firewall (or, from the firewall to the break away switch, whichever is more convenient), avoiding lines, hoses, moving parts or “hot” components such as exhaust systems. Where appropriate, use wire ties to secure the break away wiring harness.

Connect the wiring harness to the break away switch.

5. Cut through the included grommet (Figure 1) on one side, slide it over the wiring harness, and fit the grommet into the hole in the firewall. Feed the remaining length of the wiring harness through the grommet. Then, seal the grommet with a silicone sealant.

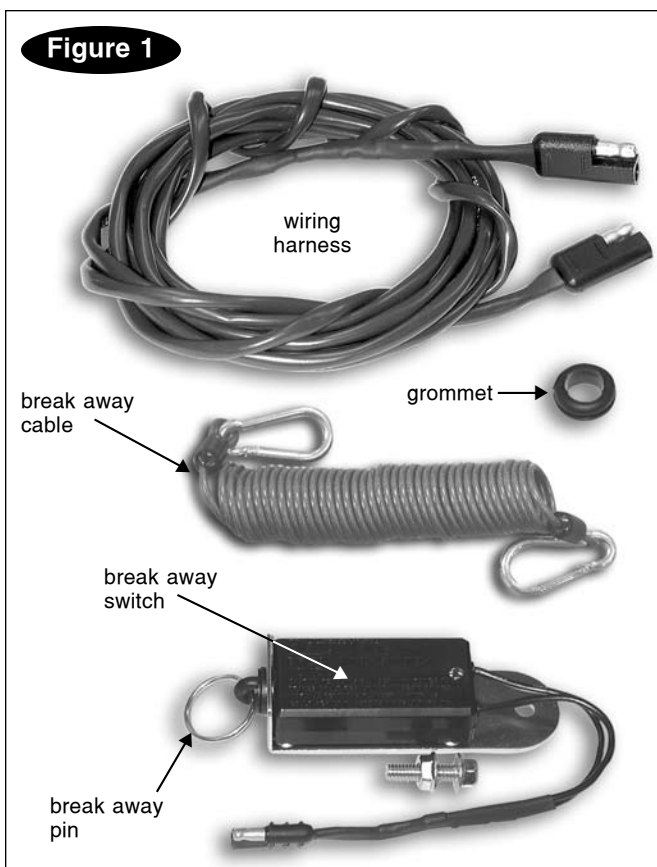
You will connect the wiring harness to the ICX transmitter in a later step.

Step Two

Modifications to the towed vehicle's lighting system

A supplemental braking system will affect the operation of the vehicle's tow lighting system. Use the

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Modifications to the towed vehicle's lighting system

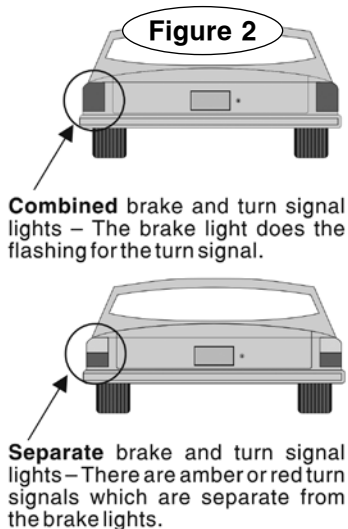
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information below to determine if optional accessories must be installed in a vehicle which has been wired for towing – or, if no lighting system has been installed, which systems are appropriate.

1. First, identify the type of brake and turn signals in the vehicle. There are two types – combined or separate. In a **combined** system (Figure 2), the brake light does the flashing for the turn signal; in a **separate** system (Figure 2), there are amber or red turn signal lights which are separate from the brake lights.

2. Next, test to see if the towed vehicle's brake lights will illuminate with the engine off – turn the ignition key to the “tow” position, press the brake pedal, and check the brake lights.

3. Based on whether or not the brake lights illumi-



nate, and the type of brake and turn signals, there are three possibilities: 1) the brake lights illuminate and the towed vehicle has combined lighting; 2) the brake lights illuminate and the towed vehicle has separate lighting; or 3) the brake lights do not illuminate. Choose from the appropriate list below to install either an optional accessory or another lighting system.

(If you choose to install a system of diodes and rewire the vehicle's turn signals, taillights and brake lights for towing, wiring diagrams are available at www.roadmasterinc.com.)

1. If the brake lights illuminate and the towed vehicle has combined lighting...

...one of the three alternatives below is required.

A. A system of diodes (the vehicle's turn signals, taillights and brake lights have been rewired for towing) **with** the Brake-Lite Relay. See Step Three – “If required, install the Brake-Lite Relay.”

(This method cannot be used in Ford vehicles with ‘neutral tow’ kits. See “Ford ‘neutral tow’ vehicles” for wiring instructions.)

B. Install an optional “bulb and socket set” (also called a “taillight wiring kit,” part number 155).

C. Install an optional magnetic tow light system (part number 2100 or 2120).

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Modifications to the towed vehicle's lighting system

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2. If the brake lights illuminate and the towed vehicle has separate lighting...

...one of the four alternatives below is required.

A. A system of diodes (the vehicle's turn signals, tail-lights and brake lights have been rewired for towing) with a Brake-Lite Relay. See Step Three – "If required, install the Brake-Lite Relay."

(This method cannot be used in Ford vehicles with 'neutral tow' kits. See "Ford 'neutral tow' vehicles" for wiring instructions.)

B. A system of diodes **with the diodes jumped**. This method is also used to wire Ford vehicles with 'neutral tow' kits. See Figure 9.

C. Install an optional "bulb and socket set" (also called a "taillight wiring kit," part number 155).

D. Install an optional magnetic tow light system (part number 2100 or 2120).

3. If the brake lights do not illuminate...

...an optional stop light switch **must** be installed. ROADMASTER manufactures stop light switch kits for a number of vehicles; visit www.roadmasterinc.com for the most current list of available kits.

Any one of the following tow lighting systems must

also be installed with the stop light switch:

- a system of diodes (the vehicle's turn signals, tail-lights and brake lights have been rewired for towing)
- an optional "bulb and socket set" (also called a "taillight wiring kit," part number 155)
- an optional magnetic tow light system (part number 2100 or 2120)

Step Three

If required, install the Brake-Lite Relay

(These instructions apply to the majority of vehicles; however, applications vary. Before wiring, refer to the owner's manual, or ask the dealership or manufacturer for vehicle-specific information.)

Note: do not install the Brake-Lite Relay unless it is required. Refer to Step Two – "Modifications to the towed vehicle's lighting system."

CAUTION

Do not install the Brake-Lite Relay in any Ford vehicle with a 'neutral tow' kit. Using the Brake-Lite Relay in these vehicles may prevent disengagement of the transmission for towing, causing severe non-warranty transmission damage.

Refer to "Ford 'neutral tow' vehicles" for wiring instructions.

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If required, install the Brake-Lite Relay

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1. Locate the towed vehicle's brake light switch and, with a test light, find the "cold" side of the brake light switch. (The "cold" side of the switch does not register voltage unless the brakes are applied.) With a 12-volt meter, verify that you have found 12 VDC+.

Then, remove the vehicle's brake light fuse, located in the vehicle's fuse panel.

CAUTION

Failure to remove the brake light fuse from the

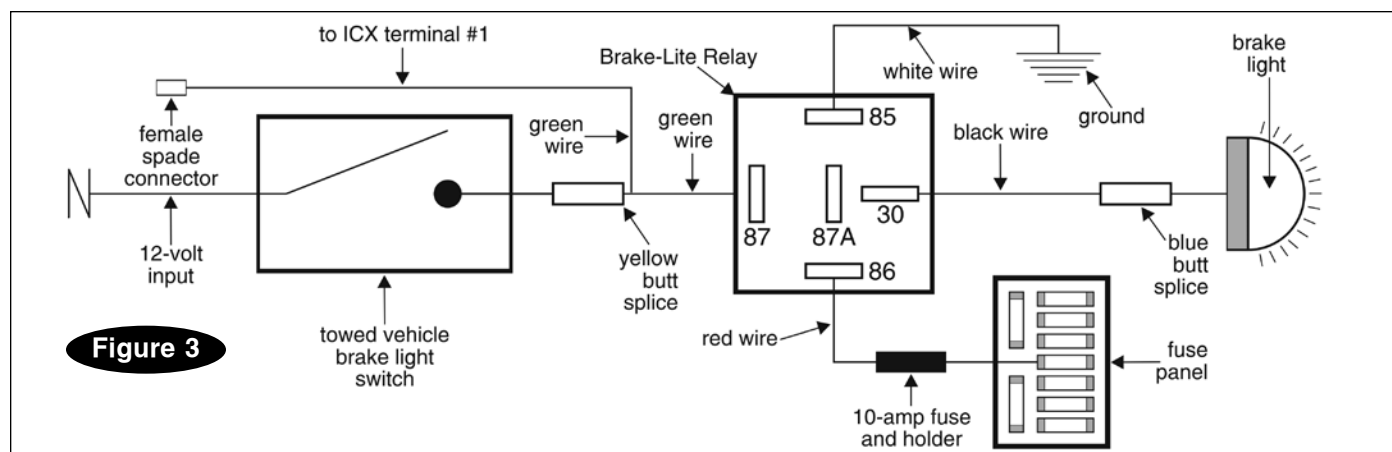
vehicle's fuse panel may activate the vehicle's theft deterrent system, or other electrical system indicators, if the brake pedal is pressed during the installation. This may require non-warranty repair to the vehicle.

2. Cut the brake light wire, a few inches downstream from the "cold" side of the brake light switch.

CAUTION

In order to prevent damage from a short circuit,

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If required, install the Brake-Lite Relay

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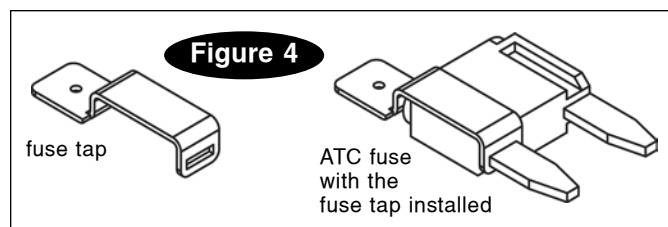
the 10-amp fuse and holder assembly must be within six inches of the electrical connections. If the 10-amp fuse assembly is further than six inches, a short circuit may cause an electrical fire, resulting in severe damage to the vehicle.

3. Install the Brake-Lite Relay in line, as shown in Figure 3.

4. Using the included fuse tap (Figure 4), connect the red wire from the Brake-Lite Relay to the “hot” side of any fuse which is powered only when the towed vehicle’s ignition is turned on.

Note: the “hot” side of the socket is the one that registers voltage when the fuse is pulled, the ignition-switch is on, and the tester is connected between the socket and ground.

5. Connect the white wire from the Brake-Lite Relay



Wire and attach the ICX transmitter

continued from preceding page

b. Connect the brake switch wire...

- If the Brake-Lite Relay **was** installed – push the female spade connector extending from the Brake-Lite Relay (at the end of the green wire) into the terminal marked “1” on the ICX transmitter (Figure 5).

- If the Brake-Lite Relay **was not** installed – connect the “cold” side of the brake light switch to the terminal marked “1” on the ICX terminal (Figure 5).

c. Connect a power source – using the included fuse tap (Figure 4), connect the red wire from the ICX transmitter to the “cold” side of any fuse with a continuous source of power.

Note: determine which side of the fuse is “cold” – the “cold” side of the socket is the one that registers no voltage when the fuse is pulled.

Note: unless the red (power) wire is connected to a fuse that provides 12 VDC+ at all times, the motorhome monitor will display error messages relating to low battery power, such as “Low Battery,” when towing.

d. Connect to a suitable ground – connect the white wire from the ICX transmitter to any good chassis ground.

2. Once you have connected the break away system harness and the vehicle’s brake switch wire to the ICX transmitter, and connected the ICX transmitter to

to any good chassis ground.

6. Secure the Brake-Lite Relay in place, using one or more of the included wire ties.

7. Reinstall the brake light fuse, which you removed in step 1.

8. Test to ensure that the Brake-Lite Relay has been properly installed:

- a. When the towed vehicle’s engine is running, the brake lights function normally.

- b. When the towed vehicle’s ignition key is in the “tow” position, the brake lights do not function.

Step Four

Wire and attach the ICX transmitter

Once installed, the ICX transmitter will transmit braking activity and system status information from Even Brake to the motorhome monitor.

1. Before attaching the ICX transmitter, first connect the break away system harness and the towed vehicle’s brake switch wire to the ICX transmitter. Then, connect the ICX transmitter to a 12-volt power source, as well as a suitable ground...

- a. Connect the break away system – plug the end of the break away wiring harness, which you routed through the vehicle’s firewall in Step One, into the flat, two-prong molded plug in the ICX transmitter (Figure 5).

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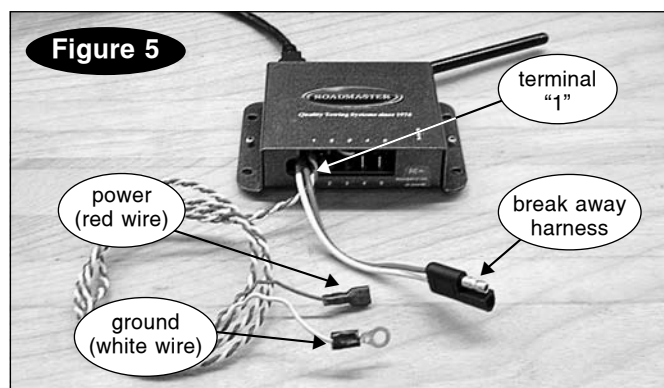
a 12-volt power source and ground, attach the ICX transmitter to the driver’s side dashboard, at the mounting point you chose in Step One.

Attach the transmitter so that the end of the transmitter with the antenna and socket will be facing the rear of the vehicle.

Use either the supplied screws (one at each corner) or the Velcro strips to mount the transmitter.

3. Ensure that the wiring for the break away system, the brake switch wire, and the power and ground connections will not present an obstacle or hazard to the driver of the vehicle, or interfere with the operation of the vehicle. Use one or more of the included wire ties,

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Wire and attach the ICX transmitter

continued from preceding page

if necessary, to secure the wiring out of the way.

Step Four

Program the motorhome monitor

Once the second vehicle kit has been installed, program the system to recognize the second ICX transmitter.

A second 12-volt outlet (in addition to the towed vehicle's) will be necessary to complete this step.

1. Before programming, first install and connect Even Brake in the towed vehicle – follow the “Initial Installation” and “Day-to-day operation” instructions in the owner’s manual. Even Brake must be completely installed and connected, with both the ICX transmitter cord and the power cord plugged in.



WARNING

Read all instructions in the Even Brake owner’s manual before installing or operating Even Brake. Failure to understand how to install or operate Even Brake could result in property damage, personal injury or even death.

Note: before transferring Even Brake to a second (or third, or fourth) vehicle, it may be necessary to adjust

the feet to maintain stability. Refer to Step Two – “Adjust the feet and the seat pad” – in the “Day-to-day operation” section of the Even Brake owner’s manual.

2. Next, at the towed vehicle, plug the motorhome monitor power cord into the second 12-volt outlet. (This outlet must be receiving power for the monitor to operate.) The LCD text display will read “Even Brake.”

3. Now, press the “Dim” button on the motorhome monitor (Figure 6) for approximately six seconds, until the LCD text display reads “Receiver is in Learn Mode.”

4. Release the “Dim” button. The LCD text display will read “Learning ICX #1 – Advance? OK ↓.”

If you are programming the monitor for a second towed vehicle, press the button with the left-hand arrow (<) on the monitor to scroll to the next message – “Learning ICX #2 – Advance? OK ↓.” If you are programming the monitor for a third or fourth towed vehicle, continue to press the button with the left-hand arrow (<) on the motorhome monitor to scroll to the appropriate message in this series – “Learning ICX #3...” or “Learning ICX #4...”

5. Press the “Test” button (Figure 7) on the Even Brake touch pad control panel. Even Brake will begin a self-diagnostic test.

(As part of the test, Even Brake will cycle the brake pedal clamp up and down three times. When the

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Program the motorhome monitor

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brake pedal clamp is depressed, the LCD display on the motorhome monitor will read “Braking.”)

6. After Even Brake has completed the self-diagnostic test, the test light on the touch pad control panel (Figure

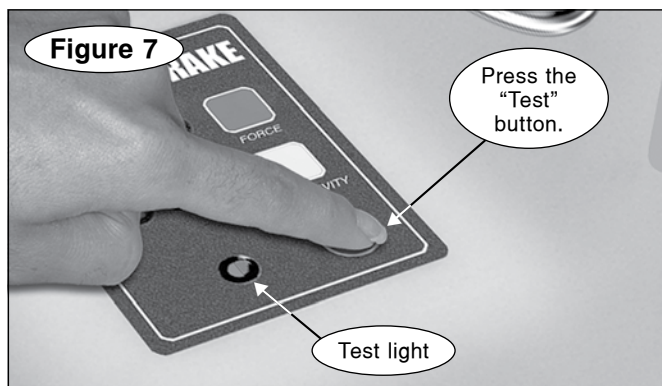
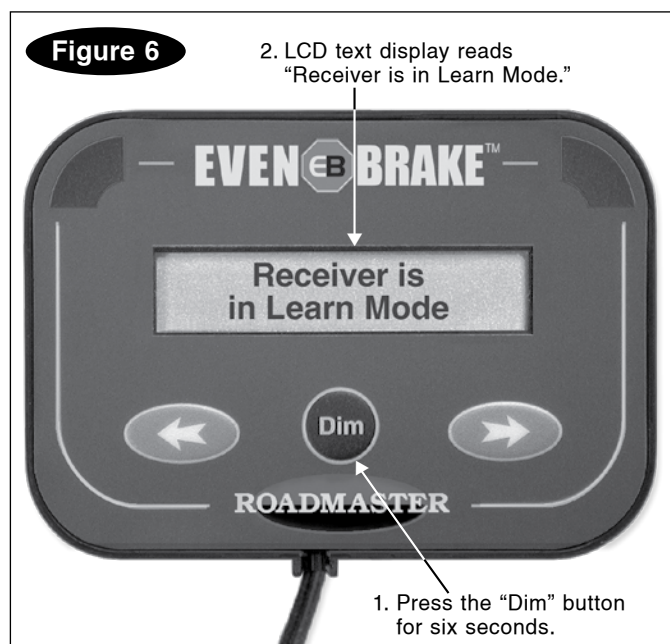
7) will illuminate green to indicate the system is ready, or red to indicate the system is not ready.

- If the test light is green and the LCD display reads “Test Is Good – System Ready,” the motorhome monitor is programmed to the ICX transmitter. When the vehicle is towed, the monitor will display braking activity and system status information from Even Brake.

The monitor can be programmed in this manner for up to four vehicles. Once programmed, the monitor will automatically recognize the ICX transmitter in each vehicle without further adjustment.

- If the test light is red, check the motorhome monitor LCD text display for detailed information. You can also

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Program the motorhome monitor

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refer to the “Communications” sections (“Overview” and “Reference Chart”) in the Even Brake owner’s manual.

7. Before towing, read the owner’s manual, cover to cover. Understand how to install and operate Even Brake, and carefully follow the instructions and safety precautions.

WARNING

Read all instructions before installing or operating your Even Brake. Failure to understand how to install or operate Even Brake could result in property damage, personal injury or even death.

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FORD ‘NEUTRAL TOW’ VEHICLES

**To wire the vehicle
for supplemental braking...**

CAUTION

If Even Brake is to be installed in any Ford vehicle with a ‘neutral tow’ kit, do not install a Brake-Lite Relay. Using a Brake-Lite Relay in these vehicles may prevent disengagement of the transmission for towing, causing severe damage to the transmission.

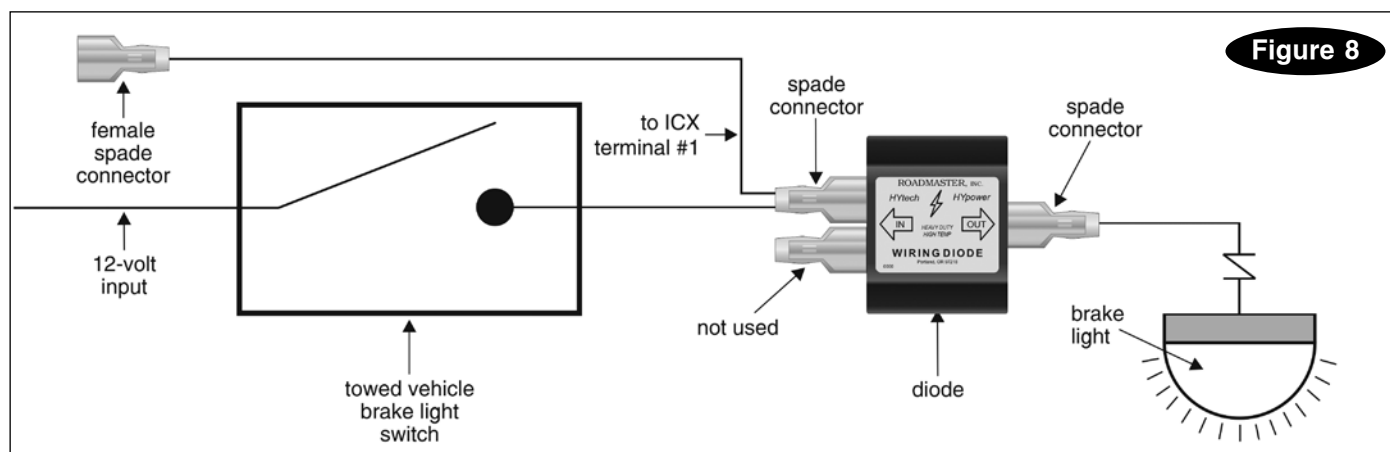
Install a diode, rather than a Brake-Lite Relay,

according to the instructions below.

1. Locate the towed vehicle’s brake light switch and, with a test light, find the “cold” side of the brake light switch. (The “cold” side of the switch does not register voltage unless the brakes are applied.) With a 12-volt meter, verify that you have found 12VDC+.

Then, remove the brake light fuse, located in the vehicle’s fuse panel.

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Ford 'neutral tow' vehicles

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CAUTION

Failure to remove the brake light fuse from the vehicle's fuse panel may activate the vehicle's theft deterrent system, or other electrical system indicators, if the brake pedal is pressed during the installation. This may require non-warranty repair to the vehicle.

2. Next, cut the brake light wire, a few inches downstream from the "cold" side of the brake light switch.

3. Install the diode in line, as shown in Figure 8.

Mount the diode under the dashboard, a few inches away from the brake light switch.

4. Reinstall the brake light fuse, which you removed in step 1.

5. Test to verify that the diode has been properly installed – the towed vehicle's brake lights will illuminate when the brake pedal is pressed.

To wire the vehicle for towing...

There are three methods available which will allow a towed vehicle's turn signals, brake lights and running lights to work in conjunction with the motorhome's: 1) install a taillight wiring kit (also called a 'bulb and socket

kit,' part number 155); 2) install magnetic tow lights (part number 2100 or 2120); or 3) wire the vehicle's turn signals, taillights and brake lights for towing.

Instructions for the third method are below; instructions for the first two methods are included with the kits.

1. After you have installed a diode downstream from the brake light switch (Figure 8), wire the vehicle's turn signals, taillights and brake lights for towing by installing six diodes.

Before installing the diodes, verify that the towed vehicle has *separate* brake and turn signals – on each side, there are amber or red turn signal lights which are *separate* from the brake lights (Figure 2).

Note: if the motorhome has combined brake and turn signals, use Figure 9 to wire the towed vehicle. If the motorhome has separate brake and turn signals, visit www.roadmasterinc.com. Use the 'Separate towed vehicle to 'separate' motorhome' wiring diagram, under 'Tech Support.'

Note: if a 3-to-2 converter has been installed in a motorhome with separate brake and turn signals, wire the towed vehicle according to Figure 9.

To test for a 3-to-2 converter, use a test light to find the turn signal and brake light circuits on the motorhome electrical socket. If the same circuit energizes both the

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Ford 'neutral tow' vehicles

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turn signals and the brake lights, a 3-to-2 converter has been installed. If the turn signal and brake lights have separate circuits, a 3-to-2 converter has not been installed.

2. First, cut the factory turn signal, taillight and brake light wires, as close to the lights as possible.

3. Next, install the six diodes in line, as close to the lights as possible.

CAUTION

Attach the diodes as close to the vehicle's lights as possible, to avoid interaction with other circuits which may be tied into the center brake light, the running lights, the turn signals or the brake light wires. Attaching the diodes further away may cause the towed vehicle's lights to work improperly, and may also cause damage to other electrical components in the vehicle.

4. On each side, jump the brake and turn signal diodes, as shown in Figure 9.

CAUTION

Unless the brake and turn signal diodes are jumped, the towed vehicle's brake light circuits will

'override' the motorhome's turn signals – the towed vehicle's turn signals will not operate in conjunction with the motorhome's turn signals, as required by law.

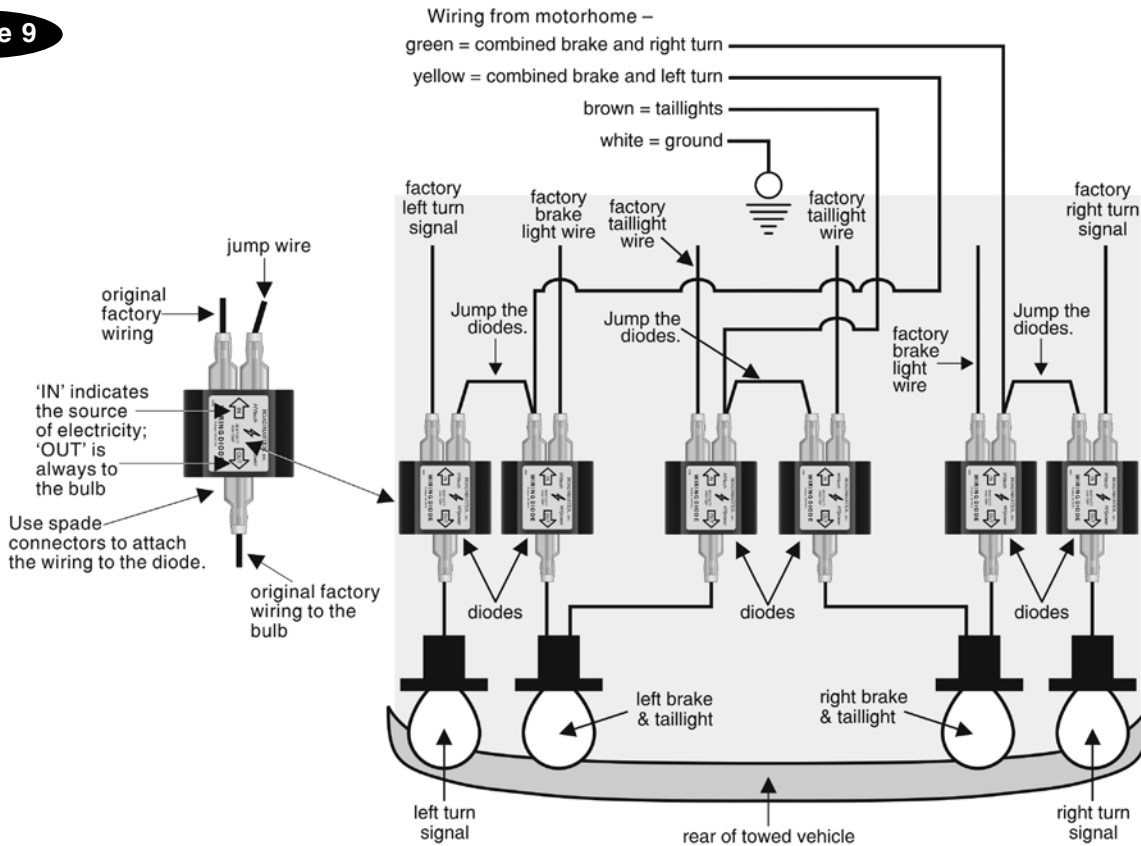
5. Test to verify that the diodes have been properly installed...

A. If the motorhome has a 'combined' lighting system...

1. The towed vehicle's turn signals and brake lights will both flash (each side) when the motorhome's turn signal is on; and

2. When the motorhome's turn signal and brake signal are both on (each side), the towed vehicle's brake lights will stay illuminated, while the turn signal flashes.

B. If the motorhome has a 'separate' lighting system, the towed vehicle's turn signals and brake lights will illuminate identically to the motorhome's.

Figure 9

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LIMITED WARRANTY

1. WARRANTY

1a. WARRANTY OF CONFORMITY AT TIME OF SALE

ROADMASTER, Inc. warrants that at the time of sale of this product it will be free from defects in material and manufacture and will conform to ROADMASTER'S specifications for the product.

1b. CONDITIONAL ONE-YEAR WARRANTY

In addition to the preceding time-of-sale warranty, if the product registration card is completely and accurately filled out and mailed to ROADMASTER within thirty (30) days of purchase, ROADMASTER will provide an additional warranty that for a period of one year after sale the product will remain in good working order, PROVIDED THAT the product is installed and maintained in accordance with ROADMASTER'S instructions and is not subjected to: (a) alteration or unauthorized repairs or repairs by anyone other than ROADMASTER or a ROADMASTER-authorized service center, (b) misuse, abuse, commercial use, or improper maintenance, (c) Acts of God (including without limitation hurricanes, tornadoes, floods, or other severe weather or natural phenomena), (d) failures due to products not supplied by ROADMASTER, or (e) other treatments, uses, or installations for which the product was not intended. This warranty extends only to the first retail purchaser-consumer of the product and is not transferable.

2. DISCLAIMER OF OTHER WARRANTIES

The preceding warranties are the exclusive and sole ex-

press warranties given by ROADMASTER. They supersede any prior, contrary or additional representations, whether oral or written. No agent, representative, dealer or employee has the authority to alter or increase the obligations or limitations of this warranty. Any implied warranties, including the WARRANTY OF MERCHANTABILITY and any WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, are limited in duration to thirty days or the term of the applicable express warranty provided above, whichever is longer.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

3. EXCLUSIVE REMEDY FOR ANY NONCONFORMITIES

If during the applicable Warranty Period, the product does not conform to the preceding Warranties, notify ROADMASTER as provided below, and within a reasonable time ROADMASTER will provide, at its option, one of the following: (1) replacement components for any nonconforming or defective product or components or (2) the percentage of the purchase price for the nonconforming product equal to the percentage of the Warranty Period remaining when ROADMASTER is notified of the nonconformity. ROADMASTER will, at its option, (a) use new and/or reconditioned parts in performing warranty repairs and making replacement products, (b) use parts or products of original or improved design in the repair or replacement. If ROADMASTER repairs or replaces a product, its warranty continues

continued on next page

Limited warranty

continued from preceding page

for the remaining portion of the original Warranty Period or 60 days from the date of the return shipment to the customer, whichever is greater. All replaced products and all parts removed from repaired products become the property of ROADMASTER. ROADMASTER will not provide, and will not be liable for, labor, costs of removal or reinstallation of components, disposal, shipping, freight, taxes, or other incidental charges.

THESE REMEDIES ARE THE EXCLUSIVE AND SOLE REMEDIES FOR ANY BREACH OF WARRANTY.

For any breach of warranty, the Owner must telephone ROADMASTER at 1-800-669-9690 within thirty (30) days after discovering the nonconformity. Do not return any product without first calling ROADMASTER and getting a return authorization number. Returned products must include the return authorization number and a copy of the original invoice, bill or other proof of the date of purchase. The date of purchase must coincide with the original warranty registration card on file. ROADMASTER will authorize (a) shipment of the product to ROADMASTER or (b) repair or replacement at the nearest warranty service center—in both cases with shipping at your expense. Do not purchase replacement parts or pay for repair labor—you will not be reimbursed. Compliance with the requirements of this paragraph is a condition to coverage under the Warranty: if these requirements are not complied with, ROADMASTER will have no obligation to provide any remedy for any breach of warranty.

4. DISCLAIMER OF INCIDENTAL AND CONSEQUENTIAL DAMAGES

IN NO EVENT SHALL ROADMASTER BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

5. APPLICABLE LAW

This Warranty will be interpreted, construed, and enforced in all respects in accordance with the laws of the State of Oregon, without reference to its choice of law rules. The U.N. Convention on Contracts for the International Sale of Goods will not apply to this Warranty.

6. SEVERABILITY

If any provision of this warranty is found to be invalid or unenforceable, then the remainder shall have full force and effect, and the invalid provision shall be partially enforced to the maximum extent permitted by law to effectuate the purpose of the agreement.

7. ADDRESS FOR NOTICES TO ROADMASTER

ROADMASTER, Inc., 6110 NE 127th Ave., Vancouver, WA

This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

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EVEN BRAKE

patent pending

Portable Proportional Braking System

Second Vehicle Kit Installation Instructions

Part number 98400



Quality Towing Systems since 1974