

Time Tested • Time Proven

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Magnetic Tow Lights

oart number 2100

Installation and Use

All specifications are subject to change without notice.

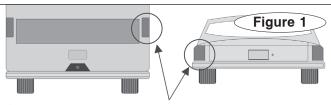
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Before you begin the installation...

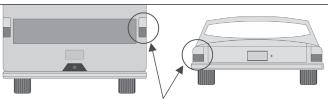
If the motorhome (or towing vehicle) has a separate lighting system, a 3-to-2 converter must be installed in order to use this kit. A 3-to-2 converter converts a separate system to a combined system.

Many late-model motorhomes come with converters already installed – test for this before installation: if the motorhome's trailer plug energizes the same pins for both brake lights and turn signals, then a 3-to-2 converter is already installed and the motorhome (or towing vehicle) should be treated as combined.

If a converter is needed, install ROADMASTER's Brite-Lite[™], part number 732.



Combined brake and turn signal lights – the brake light does the flashing for the turn signal.



Separate brake and turn signal lights – There are amber or red turn signals which are separate from the brake lights. Note: many motorhomes with separate lights have combined trailer plugs. Test the trailer plug: if the brake lights energize the same pins as the turn signals, the trailer plug is combined and you should wire the towed vehicle as a combined lighting system.

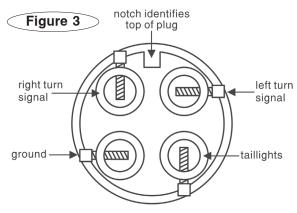
Installing the lights...

If the towing vehicle is not equipped with a four-wire electrical socket, first wire the included socket by following steps 1 through 5 below. (If the towing vehicle already has an electrical socket with a six- or seven-wire plug, it may be more convenient to replace the existing six- or seven-wire plug with the included four-wire plug.)

1. Choose a mounting point for the electrical socket – look



wiring – back of plug



for an area at the back of the towing vehicle, which you can easily reach and with a surface of sufficient strength to hold the socket firmly in place. The mounting point must be close to the center.

CAUTION

The socket must be attached at the rear of the towing vehicle, close to the center. Attaching the socket toward either side of the towing vehicle may cause the wiring to be pulled from the socket, or to drag on the ground, when the towing vehicle turns.

- **2.** With a Phillips screwdriver, remove the set screw (Figure 2) from the back of the socket. Then remove the plug from the socket housing.
- **3.** Use a test light to identify the towing vehicle's left and right turn signal, ground and taillight wires on the electrical harness. Push those four wires through the back of the socket housing.
- **4.** Attach the wires to the back of the plug (Figure 3 shows the attachment point for each wire; use the notch at the top of the plug as a reference.)...

First, strip a small amount of insulation from the end of each wire. Then unthread each connector screw on the back of the plug, and insert the ends of the wires into the appropriate wire cups. Tighten the connector screws to secure the wires in place.



Unless each wire is attached to the correct wire cup, as shown in Figure 3, the magnetic lights on the towed vehicle will not illuminate in tandem with the towing vehicle's lights. Drivers behind the towed vehicle will not be alerted when the towing vehicle stops or turns, which may cause an accident.

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

continued from preceding page

- **5.** Push the plug back into the socket housing, and replace the set screw.
- **6.** Attach the socket at the point you chose in step 1 with a bolt, nut and lock washer through both pre-drilled holes.
- 7. Test the system: follow the steps below to attach the lights to the rear of the towed vehicle. With the towing vehicle's engine on (or the ignition key in the 'on' position), turn on the headlights. Now, press and release the brake pedal and activate the turn signals to verify that the magnetic lights work in tandem with the towing vehicle's turn signals and brake lights.

Attaching the lights...

- 1. Plug the end of the 30-foot length of electrical cord into the socket.
- **2.** Route the electrical cord and the magnetic lights to the back of the towed vehicle.

CAUTION

Position the electrical cord so that it will not rub against the towed vehicle's finish. The finish may be damaged if the cord rubs against it during towing.

CAUTION

Keep the cord away from all moving parts. Severe damage to both vehicles, as well as the components of the towing system and the magnetic lights, can occur if the cord becomes entangled in the wheels, the tow bar or hitch, or any other moving component.



WARNING

The wiring can be damaged if the electrical cord is pinched or crushed. If the wiring is damaged, the magnetic lights will not operate. Drivers behind the towed vehicle will not be alerted when the towing vehicle turns or brakes, which may cause an accident.

Damaged wiring may also cause a short circuit, which can blow a fuse in the towing vehicle, as well as cause other, consequential damage to the towing vehicle's electrical system or other components.

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

3. Choose an area on the rear of the towed vehicle to position the two magnetic lights, so that they will be clearly visible to drivers behind the towed vehicle.

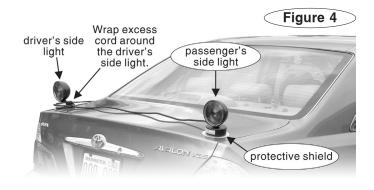
CAUTION

To reduce the likelihood of scratches or other damage to the towed vehicle's finish, make certain that both the underside of the magnets and the surface ofthe towed vehicle are clean.

Also, do not drag the magnets across the surface of the towed vehicle.

Failure to follow these instructions will damage the towed vehicle's finish. Scratches, paint chips and other damage to the vehicle's finish caused by improper use of the magnetic tow lights is not covered under warranty.

- **4.** If there is excess electrical cord, wrap the slack around the driver's side light, as shown in Figure 4.
- 5. Position both of the included protective shields (Figure



4) over the points you have chosen to mount the lights.

CAUTION

Failure to use the protective shields will cause the magnets to scratch the towed vehicle's finish. Scratches, paint chips and other damage to the vehicle's finish caused by improper use of the magnetic tow lights is not covered under warranty.

6. Position the two lights over the protective shields, as shown in Figure 4. *Note:* the driver's side light has two electrical cords extending from the base; the passenger's side light has only one (Figure 4).



WARNING

Position the driver's side and passenger's side lights as described above, and shown in Figure 4. If the lights are reversed, the towed vehicle's turn signals will be reversed, which may cause an accident.

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