Wiring a ‘combined’ towed vehicle to a ‘combined’ motorhome

General information
• Use the wiring diagram below to wire the towed vehicle.
• Before wiring, check to ensure that both vehicles have ‘combined’ lighting systems – in a ‘combined’ system, the brake light does the flashing for the turn signal; in a ‘separate’ system, there are amber or red turn signals which are separate from the brake lights. Refer to the illustrations to the right.
• The diagram below applies 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. (Wiring information for many vehicles is also available at this website, under “Vehicle Specific Information.”)

Warnings and Cautions
• Attach the diodes as close to the towed 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 farther away may cause the towed vehicle’s lights to work improperly, and may also cause damage to other electrical components in the vehicle.
• Wire the towed vehicle according to the instructions above, and the diagram below. Improperly wiring the towed vehicle may cause electrical malfunction or other damage, which may result in property damage, personal injury or even death.

Wiring from motorhome –
green = combined brake and right turn
brown = taillights
yellow = combined brake and left turn
white = ground

‘IN’ indicates the source of electricity; ‘OUT’ is always to the bulb
Use spade connectors to attach the wiring to the diode.
If you’re using a diode, why not use the best? ROADMASTER’s Hy-Power™ diodes have a heavy-duty, anodized aluminum heat sink, and each diode is protected against the elements – all components are housed inside an epoxy-sealed, anodized aluminum case.

-rear of towed vehicle

Specifications subject to change without notice

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Wiring a ‘combined’ towed vehicle to a ‘separate’ motorhome

**General Information**
- Use the wiring diagram below to wire the towed vehicle.
- Before wiring, check to ensure that the towed vehicle has a ‘combined’ lighting system, and that the motorhome has a ‘separate’ lighting system. In a ‘combined’ system, the brake light does the flashing for the turn signal; in a ‘separate’ system, there are amber or red turn signals which are separate from the brake lights. Refer to the illustrations to the right.
- The diagram below applies 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. (Wiring information for many vehicles is also available at this website, under “Vehicle Specific Information.”)

**Warnings and Cautions**
- Attach the diodes as close to the towed 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 farther away may cause the towed vehicle’s lights to work improperly, and may also cause damage to other electrical components in the vehicle.
- Wire the towed vehicle according to the instructions above, and the diagram below. Improperly wiring the towed vehicle may cause electrical malfunction or other damage, which may result in property damage, personal injury or even death.

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Wiring from motorhome into Brite-Lite converter –
green = right turn
yellow = left turn
red = brake lights

Use spade connectors to attach the wiring to the diode

“In” indicates the source of electricity; “Out” is always to the bulb

Original factory wiring

Wiring from motorhome

Motorhome ground

Green
Yellow
Red

White

Brite-Lite converter

Factory left turn & brake signal

Factory left taillight yellow

Green

Jump the diodes

Diodes

Left brake & turn with taillight

Right brake & turn with taillight

Rear of towed vehicle

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If you’re using a diode, why not use the best? ROADMASTER’s Hy-Power™ diodes have a heavy-duty, anodized aluminum heat sink, and each diode is protected against the elements – all components are housed inside an epoxy-sealed, anodized aluminum case.

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Time Tested • Time Proven
specifications subject to change without notice
Wiring a ‘separate’ towed vehicle to a ‘combined’ motorhome

**General information**
- Use the wiring diagram below to wire the towed vehicle.
- Before wiring, check to ensure that the towed vehicle has a ‘separate’ lighting system, and that the motorhome has a ‘combined’ lighting system – in a ‘separate’ system, there are amber or red turn signals which are separate from the brake lights; in a ‘combined’ system, the brake light does the flashing for the turn signal. Refer to the illustrations to the right.
- The diagram below applies 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. (Wiring information for many vehicles is also available at this website, under “Vehicle Specific Information.”)

**Warnings and Cautions**
- Attach the diodes as close to the towed 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 farther away may cause the towed vehicle’s lights to work improperly, and may also cause damage to other electrical components in the vehicle.
- Wire the towed vehicle according to the instructions above, and the diagram below. Improperly wiring the towed vehicle may cause electrical malfunction or other damage, which may result in property damage, personal injury or even death.

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**Wiring from motorhome**
- green = combined brake and right turn
- yellow = combined brake and left turn
- brown = taillights
- white = ground

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Use spade connectors to attach the wiring to the diode. If you’re using a diode, why not use the best? ROADMASTER’s Hy-Power™ diodes have a heavy-duty, anodized aluminum heat sink, and each diode is protected against the elements – all components are housed inside an epoxy-sealed, anodized aluminum case.

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Time Tested • Time Proven
Wiring a ‘separate’ towed vehicle to a ‘separate’ motorhome

General information

- Use the wiring diagram below to wire the towed vehicle.
- Before wiring, check to ensure that both vehicles have ‘separate’ lighting systems – in a ‘separate’ system, there are amber or red turn signals which are separate from the brake lights; in a ‘combined’ system, the brake light does the flashing for the turn signal. Refer to the illustrations to the right.
- The diagram below applies 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. (Wiring information for many vehicles is also available at this website, under “Vehicle Specific Information.”)

![Diagram of wiring diagram]

Warnings and Cautions

- Attach the diodes as close to the towed 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 farther away may cause the towed vehicle’s lights to work improperly, and may also cause damage to other electrical components in the vehicle.
- Wire the towed vehicle according to the instructions above, and the diagram below. Improperly wiring the towed vehicle may cause electrical malfunction or other damage, which may result in property damage, personal injury or even death.

![Diagram of wiring connections]

Wiring from motorhome –
- green = right turn
- yellow = left turn
- red = brakes
- brown = taillights
- white = ground

 Specifications subject to change without notice

If you’re using a diode, why not use the best? ROADMASTER’s Hy-Power™ diodes have a heavy-duty, anodized aluminum heat sink, and each diode is protected against the elements – all components are housed inside an epoxy-sealed, anodized aluminum case.

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