

# T-54/T-64 Light Kit Mounting Instructions

Original Series 3-Light Kit

Original Series 2-Light Kit



Note: Connecting liftgate lights to the truck's trailer tow harness may disable park aid features on trucks with trailer detection capabilities. To avoid this, it may be necessary to connect to the truck's tail light wiring or trailer tow harness using a relay. Tommy Gate offers a relay kit (PN 15863) for these situations. The relay kit minimizes the amount of electrical load on the vehicle's factory wiring. See page 6 for more information.

## Preparing the Kit

### 1. Verify kit

- 3-light kit (Figure 1, Table 1)
- 2-light kit (Figure 2, Table 2)

### 2. Prepare the 12V light relay kit, if installing it.

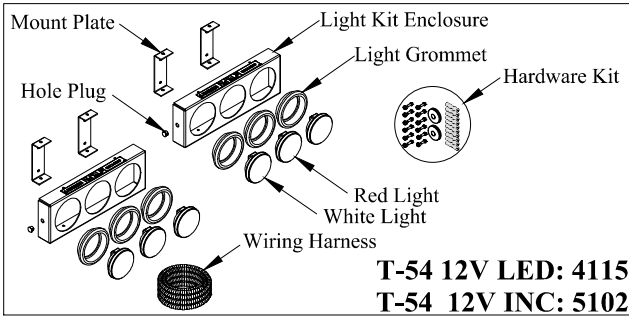


Figure 1: Part Identification: 3-light Kit.

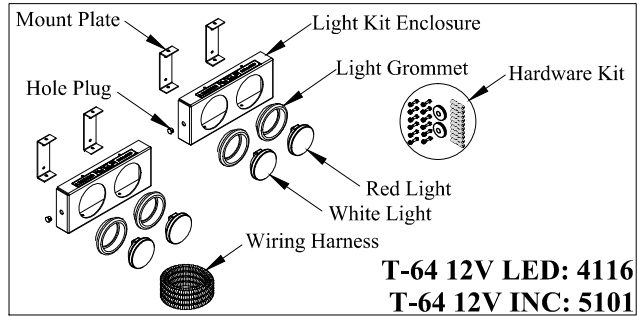


Figure 2: Part Identification: 2-light Kit.

Table 1: Parts List: 3-light Kit.

QTY.	PART NO.	DESCRIPTION
2	6003	3-Light Kit Enclosure
6	4014	Light Grommet
4	4047	Red Light (LED)
	4016	Red Light (INC)
2	4073	White Light (LED)
	4013	White Light (INC)
4	5708	Mount Plate
1	9103	Hardware Kit
2	3065	Hole Plug
1	9143	Wiring Harness

Table 2: Parts List: 2-light Kit.

QTY.	PART NO.	DESCRIPTION
2	6002	2-Light Kit Enclosure
4	4014	Light Grommet
2	4047	Red Light (LED)
	4016	Red Light (INC)
2	4073	White Light (LED)
	4013	White Light (INC)
4	5708	Mount Plate
1	9103	Hardware Kit
2	3065	Hole Plug
1	11955	Wiring Harness

## Preparing the Liftgate

### 1. Lower the liftgate to the ground.

### 2. Disconnect the power cable from the positive side of the battery or **Manually Trip** the circuit breaker (Figure 3).

### 3. Remove the mainframe box cover by taking out the two $\frac{5}{16}$ " hex head cap screws with a $\frac{1}{2}$ " wrench or socket (Figure 4).

CAUTION: Check for obstructions before drilling in the next step.

### 4. Locate or Create an unused $1\frac{1}{4}$ " hole in the rear of the mainframe to use to connect the harness in the liftgate to the truck's harness (Figure 5).

### 5. Remove plastic plugs from access holes (Figure 6).

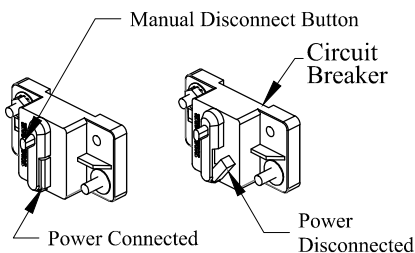


Figure 3: Circuit breaker.

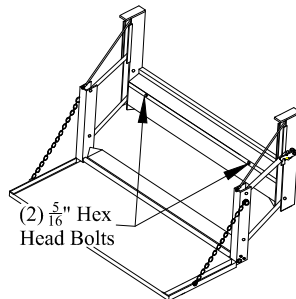


Figure 4: Assembled liftgate.

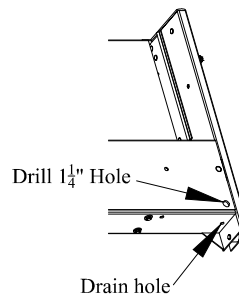


Figure 5: Access hole under vehicle.

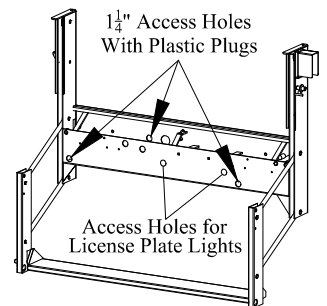


Figure 6: Light kit access holes.

# T-54/T-64 Light Kit Mounting Instructions

## Attaching the Kit Enclosure

**1. Loosely Attach** two (2) mount plates to the back of each enclosure using two (2) 1/4-20 nuts and bolts per mount plate (Figure 7).

**2. Loosely Attach** each enclosure to the mainframe using one (1) 1/4-20 nut and bolt through the upper hole of each mount plate (Figure 8).

Note: Ensure the warning stickers are on top (Figures 7 and 8).

**3. Tighten** the twelve (12) nuts and bolts attached in steps 1 and 2.

Note: On older liftgates without mounting holes, weld the enclosures in place as shown (Figure 10).

**4. Mount** the license plate lights and license plate light brackets if they are not already mounted (Figure 6).

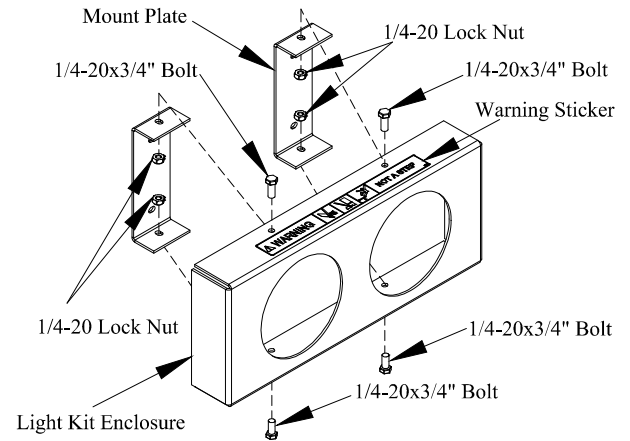


Figure 7: Light kit assembly.  
2-light kit is shown, 3-light kit is similar.

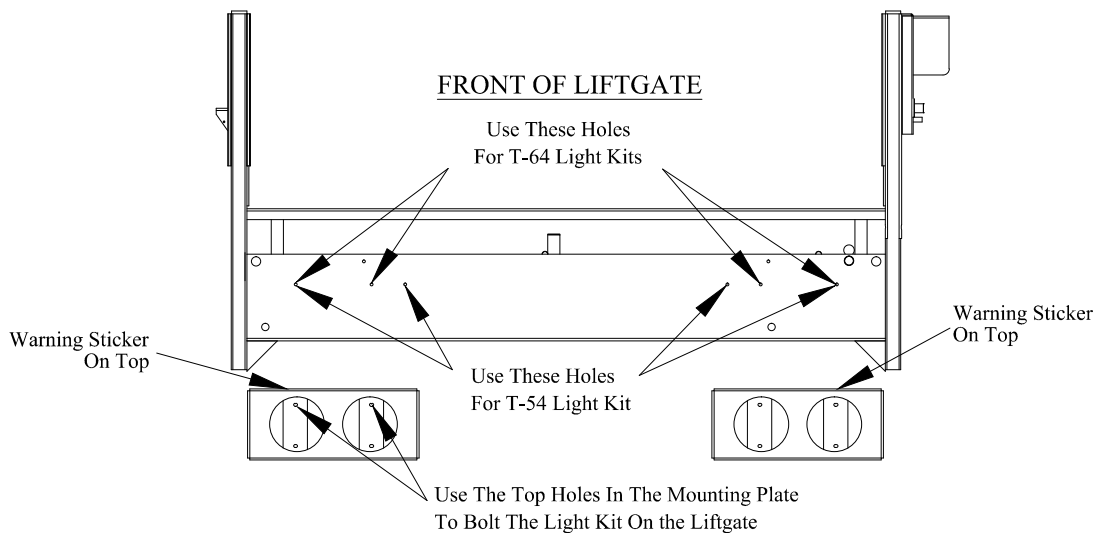


Figure 8: Light kit mounting holes.  
2-light kit is shown, 3-light kit is similar.

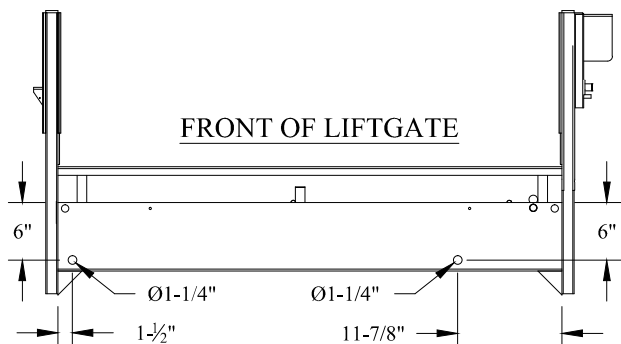


Figure 9: Older liftgate drilled hole locations.

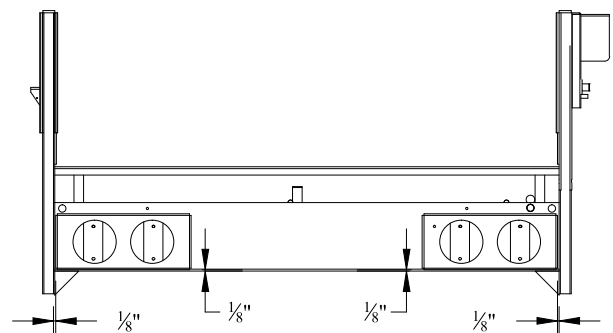


Figure 10: Measurements for welding on older liftgates.  
2-light kit is shown, 3-light kit is similar.

# T-54/T-64 Light Kit Mounting Instructions

## Running the Wiring

1. Pull two 3-prong tail light plugs and a 2-prong tail light plug through each 1¼" front access hole (Figure 6 or 9).

Note: Ensure the LT/HAZ/TAIL plug is on the driver's side and the RT/HAZ/TAIL plug is on passenger's side.

2. Cut the 1¼" rubber grommets from the inner hole out (Figure 11).

3. Place the 1¼" rubber grommets around wires (Figure 11)

4. Secure the grommets inside the 1¼" holes (Figure 6 or 9).

5. Connect license plate lights to the wiring harness.

6. Pull the vehicle end wires, through an unused hole in the back of the liftgate, to the vehicle.

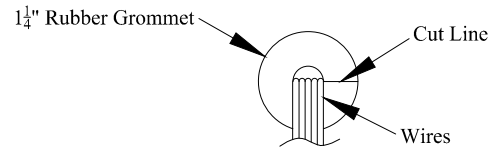


Figure 11: Rubber grommet.

## Installing the Lights

1. Press the light grommets into the large holes in the enclosures (Figure 12).

2. Pull harness plugs through the inserted light grommets, matching the proper tail light configuration (Figure 13 or 14).

3. Connect the plugs to their lights.

4. Connect the provided wiring harness to the vehicle's existing wiring. Follow the recommended electrical guidelines when connecting the wiring harness to the vehicle.

Note: If using a relay kit, install it at this time by following the relay kit's installation instructions.

5. Verify and Correct proper operation of lights.

Note: If using a relay kit, reconnect power to the liftgate to operate the lights.

6. Firmly Push lights into installed light grommets until they are secured (Figure 12).

7. Secure the harness out of the way of moving components and sharp edges, using cable ties.

8. Reinstall the box cover on the liftgate.

9. Reconnect the liftgate's power (Figure 3).

10. Verify proper operation of lights.

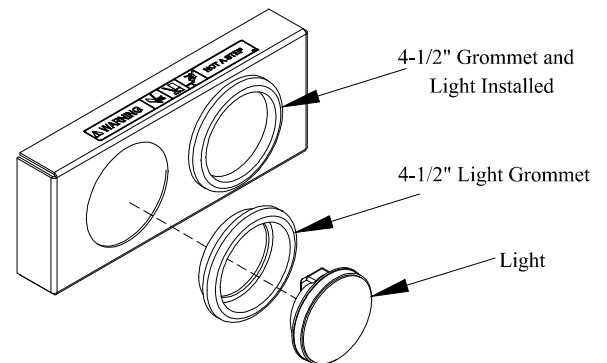


Figure 12: Lights and light grommets in enclosure. 2-light kit is shown, 3-light kit is similar.

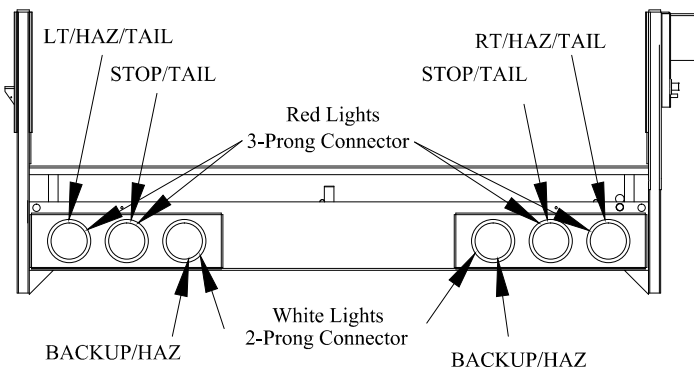


Figure 13: Installed 3-light kit (T-54).

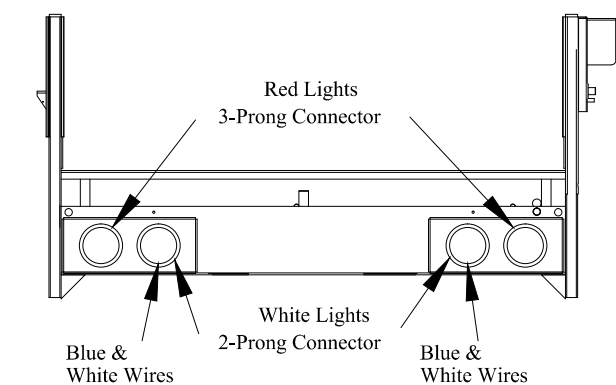


Figure 14: Installed 2-light kit (T-64).

# T-54 Electrical Guidelines and Wiring Diagram

## Electrical Guidelines:

- (1) The installer is responsible for using proper techniques when interfacing with vehicle electrical systems.
- (2) Failure to comply with the OEM guidelines could result in unsafe vehicle operation, failure of OEM wiring, or vehicle fire.
- (3) Never replace OEM fuses and/or circuit breakers with fuses or circuit breakers with a higher rating.
- (4) The total circuit current draw should not exceed 80% of the OEM circuit fuse or circuit breaker.
- (5) When possible, use body builder junction blocks, customer access circuits & connectors rather than extending OEM circuits.
- (6) Incorporate relays when extending the OEM electrical system.
- (7) Use appropriate gauge wire for extending circuits. The wire gauge should be capable of supporting the maximum load to which the added circuit will be exposed.
- (8) OEM electrical wire color coding should be maintained when extending circuits.
- (9) When adding circuits, always incorporate fuse or circuit breaker protection.

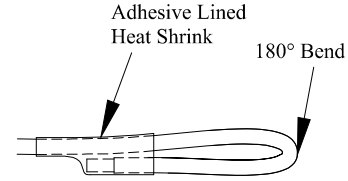
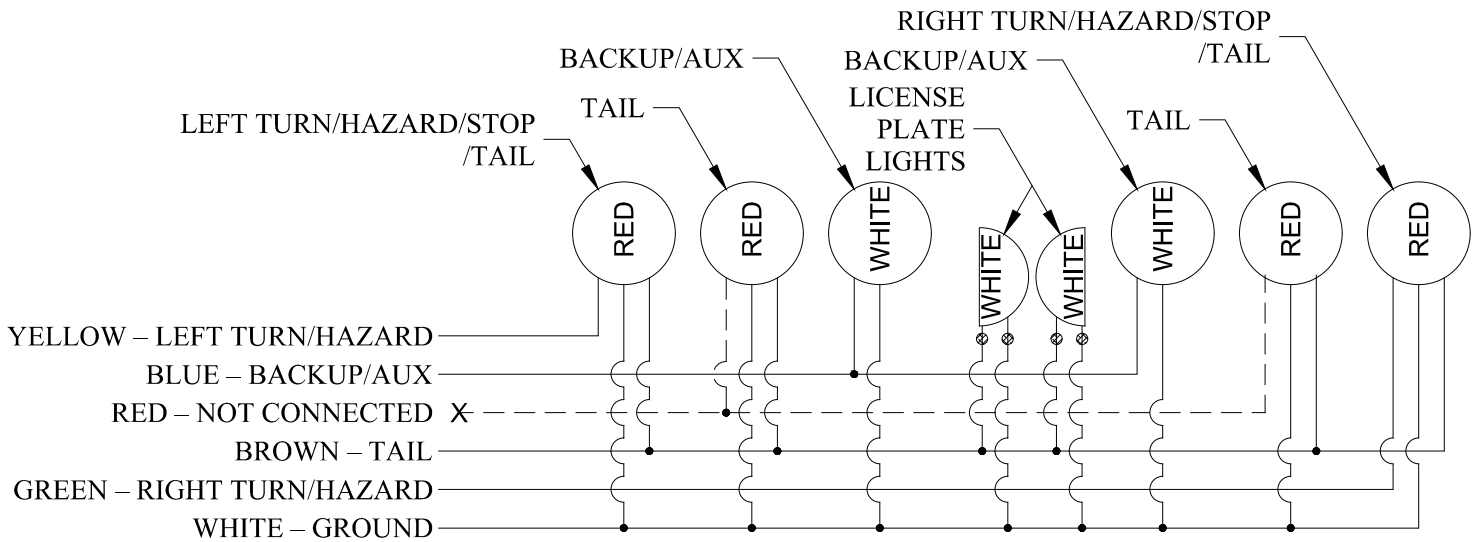


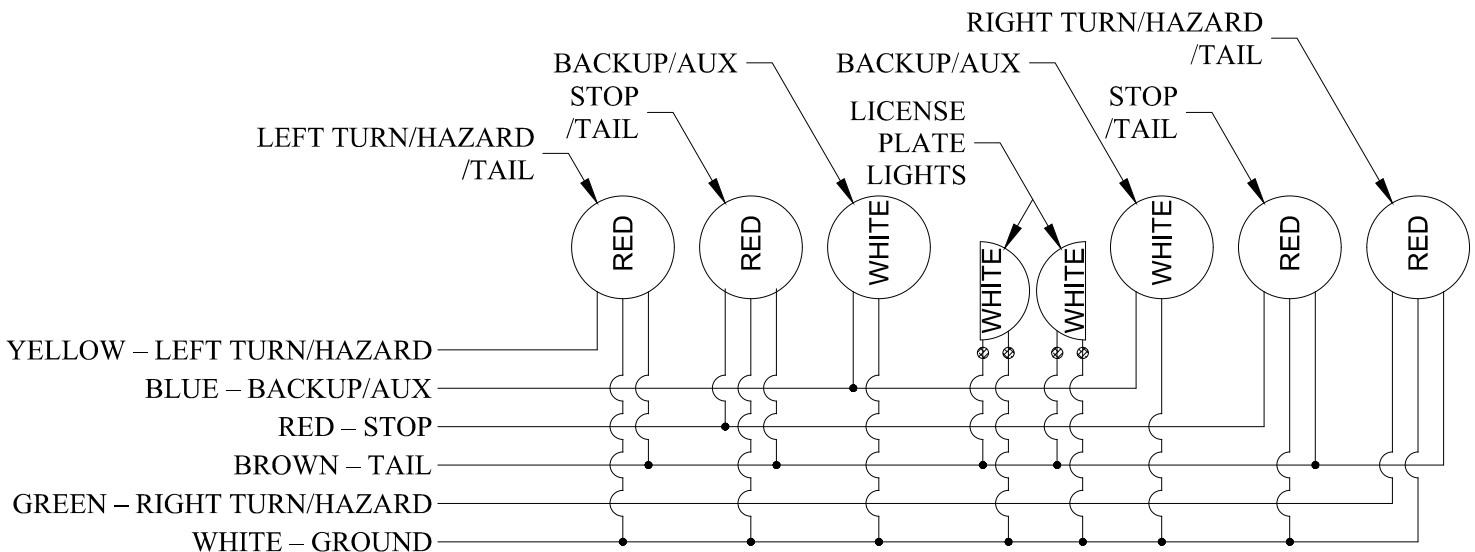
Figure 15: "Not connected" wire end

**Note:** ⊗ Symbol indicates usage of heat shrink butt connector.  
 X Indicates wire is sealed away and not used (Figure 15).

### T-54 ON VEHICLES WITH COMBINED STOP/TURN FUNCTION



### T-54 ON VEHICLES WITH SEPARATED STOP/TURN FUNCTION



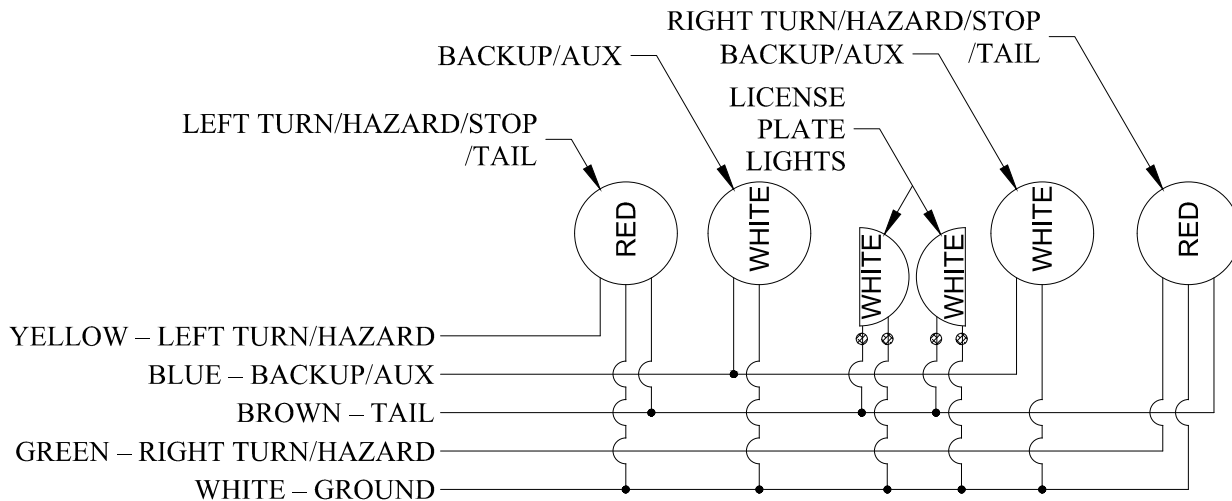
# T-64 Electrical Guidelines and Wiring Diagram

## Electrical Guidelines:

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- (2) Failure to comply with the OEM guidelines could result in unsafe vehicle operation, failure of OEM wiring, or vehicle fire.
- (3) Never replace OEM fuses and/or circuit breakers with fuses or circuit breakers with a higher rating.
- (4) The total circuit current draw should not exceed 80% of the OEM circuit fuse or circuit breaker.
- (5) When possible, use body builder junction blocks, customer access circuits & connectors rather than extending OEM circuits.
- (6) Incorporate relays when extending the OEM electrical system.
- (7) Use appropriate gauge wire for extending circuits. The wire gauge should be capable of supporting the maximum load to which the added circuit will be exposed.
- (8) OEM electrical wire color coding should be maintained when extending circuits.
- (9) When adding circuits, always incorporate fuse or circuit breaker protection.

**Note:** ⊗ Symbol indicates usage of heat shrink butt connector.

### T-64 ON VEHICLES WITH COMBINED STOP/TURN FUNCTION



### T-64 ON VEHICLES WITH SEPARATED STOP/TURN FUNCTION

Note: To use the 2-light kit on a vehicle with separated stop/turn functions, use a tail light converter or Tommy Gate 12V Light Relay Kit – PN 015863 (Sold Separately) – to combine the separated stop/turn functions. Use the above combined stop/turn diagram to connect the 2-light kit to the tail light converter or relay kit.

## T-54/T-64 Light Kit Mounting Instructions

### Tommy Gate 12V Light Relay Kit -PN 015863 (Sold Separately)

Connecting liftgate lights to the truck's trailer tow wiring may disable park aid features on trucks with trailer detection capabilities. To avoid this, it may be necessary to connect to the truck's tail light harness or trailer tow harness using a relay. Tommy Gate offers a relay kit (PN 15863) for these situations. This relay kit minimizes the amount of electrical load on the vehicle's factory wiring.

If your truck is listed in the table below (Table 3) and has a trailer detection system, use of a light relay kit (PN 15863) is recommended.

Table 3: Recommended relay applications.

PICKUP MFG	YEAR	MODEL	AVAILABLE TRAILER DETECTION SYSTEM	RECOMMENDED WIRING LOCATION WITH RELAY
CHEVY	2019-2022	1500	ADVANCED TRAILERING SYSTEM	TAIL LIGHT HARNESS
	2020-2022	2500 / 3500		
FORD	2019-2022	RANGER	SMART TRAILER TOW CONNECTOR	TAIL LIGHT HARNESS
	2015-2022	F-150		
	2016-2022	SUPER DUTY SERIES		
GMC	2019-2022	1500	PROGRADE TRAILERING SYSTEM	TAIL LIGHT HARNESS
	2020-2022	2500 / 3500		

Notes:

Compatible with both combined (2-wire) and separated (3-wire) stop/turn vehicle systems

Compatible with 12-volt applications only