

Kit PN 18923-R – Street Light and Horn Package for Standard Cab

Kit PN 18924-R – Street Light and Horn Package for Crew Cab

19144 Installation Guide, Street Light & Horn Package

SPECIAL REQUIREMENTS: This Guide covers Standard Cab and Crew Cab

TOOLS REQUIRED		ESTIMATED INSTALL TIME	RECOMMENDED SKILL LEVEL
1/2" Wrench	7/16" Socket & Ratchet	3 Hours	Intermediate
1/2" Socket & Ratchet	3/4" Hole Saw		
4 mm Allen Wrench	Medium Flat Screw Driver		
3/16" Allen Wrench	Wire Cutters		
Carpet Knife	3/16" Socket & Ratchet		
3/16" Drill Bit & Drill			

Before you begin, check the contents of the kit against the parts list below. Immediately contact American Landmaster with any questions or discrepancies. American Landmaster cannot assume responsibility for any damage or injury resulting from incorrect installation of parts. American Landmaster suggests that accessory kits be installed by an authorized American Landmaster dealer or service center.

!! WARNING !!

Serious Injury or death could occur!

- Use proper personal protective equipment during installation of this kit. Use safety glasses.

PARTS LIST FOR AMERICAN LANDMASTER ACCESSORY KIT

(1) Backup Switch	(1) Brake Switch	(1) Electric Horn	(1) Turn Signal Switch
(1) Turn Signal Switch bracket	(1) Turn Signal Hose Clamp	(2) Tail Lights	(2) Front Turn Signal Lamps
(2) Tail Light Brackets	(4) Tail Light Carriage Bolts	(4) Tail Light Nuts	(1) Backup Alarm
(1) License Plate Light	(1) Turn Signal Flasher	(1) Brake Switch Bracket	(1) Backup Switch Bracket
(1) Red Horn Switch	(1) Electrical Harness	(20) Zip Ties	(15) #10 Screw
(15) #10 Nuts	(1) License Plate Bracket	(2) 5/16" X 1.5" Bolts	(6) 5/16" Lock Nut
(2) M6 Clamp Nut	(2) M6 X 1" Screw	(4) 5/16" X 2.0" Bolts	

Note: Parts and fasteners will be sub-assembled as much as possible to minimize installation time and errors in assembly.

Note: For vehicles with a FLIP SEAT, Kit part number 19305 must be purchased and installed with this kit.

ASSEMBLY INSTRUCTIONS:

Here is the instructional video: In Process

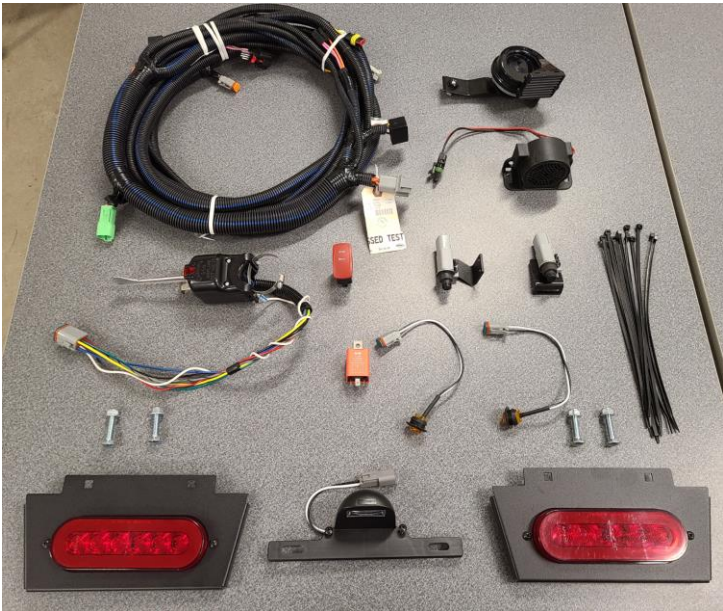


Figure 1 – Kit contents – Street Light & Horn Package



Figure 2 – License Plate Light & Backup Alarm Bracket
(Not used with Flip Seat)

Preliminary Dis-Assembly Instructions:

- 1- Remove the hood. Remove three screws from each front fender and two screws from the front hood using the 4 mm Allen wrench. Lift the hood off and set aside. If the vehicle has turn signals, disconnect the amber lights by depressing the release tab on each turn signal lamp connector and pull apart. Set the hood aside where it will not be damaged.



Figure 3: Removing Three Fender Fasteners



Figure 4: Removing Two Hood Fasteners

- 2- Remove the Black Instrument panel cover. Unscrew each stainless steel fastener that holds down the black instrument panel cover using a 4 millimeter Allen wrench. Place the fasteners in a small container so they do not get lost. Lift the cover straight up and off the panel. Set the cover aside where it will not get damaged.



Black Instrument
Panel cover

Figure 5: Removing Black Instrument Panel Cover

- 3- Remove the tunnel cover. Remove 8 bolts from the cab top side using a 3/16" socket. Clamp nuts are used for easy removal and installation. If you have a crew cab, remove the rear tunnel cover as well.



Figure 6: Tunnel Cover Installed

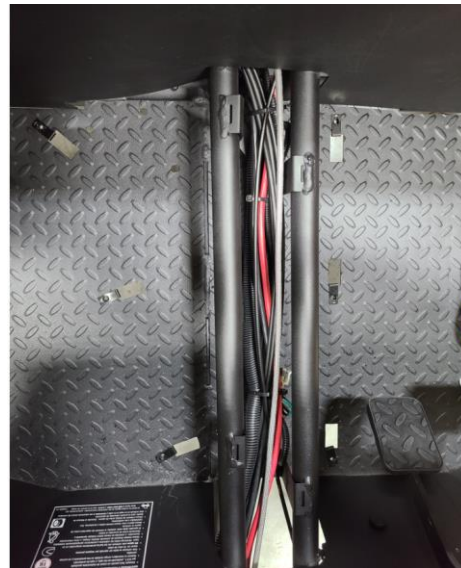


Figure 6: Tunnel Cover Removed

- 4- Remove the driver seat.
- 5- Lift up on the front of the seat to remove. Lift the seat up and out of the vehicle. Set it aside in a safe place. Do not place the seat next to sharp surfaces that could puncture the covering.

6- Remove the Front Brake System Cover

Use a flat screwdriver and pry the two clam shells apart. Getting the right half off is difficult. Rock the upper top side to the right and roll it down to remove. You will not reinstall this shell.



Figure 7: Brake System Clam shell housing



Figure 8: Brake System clam shell removed

Brake switch Installation:

- 1- Obtain the brake switch from the kit. It is the one with a simple right angle dual slotted bracket.
- 2- Locate the two holes in the bracket in front of the brake pedal linkage.
- 3- Mount the switch to the brake system bracket using the black #10 screws and nuts. Do not tighten.

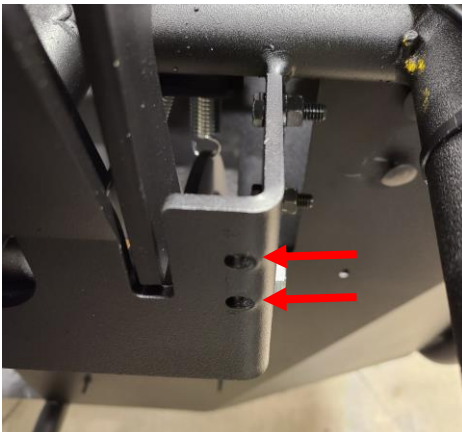


Figure 9: Brake Switch Mounting Location

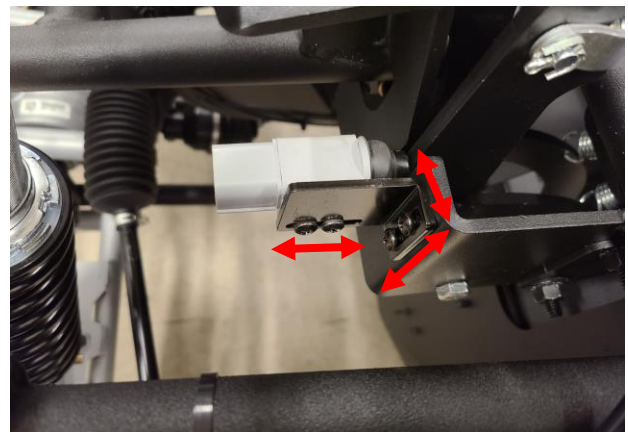


Figure 10: Brake Switch Mounted in position

- 4- Adjust the brake switch, side to side or up or down, such that it can travel between the openings in the brake system bracket. Tighten these two screws.
- 5- Adjust the brake switch forward or backward such that the switch is depressed (opened), when the brake switch is not depressed. Move the switch forward until you feel the click of the switch opening. Tighten these two screws.



Note: In this application, the switch is used as a **NORMALLY CLOSED** switch. Pushing the brake pedal allows the switch to close and power to be delivered to the tail lamps through this normally closed switch.

Reverse Switch Installation

- 1- Obtain the backup switch from the kit. It is the switch with the two offset holes in the bracket.
- 2- Locate the lower holes on the shifter cable housing on the driver side.

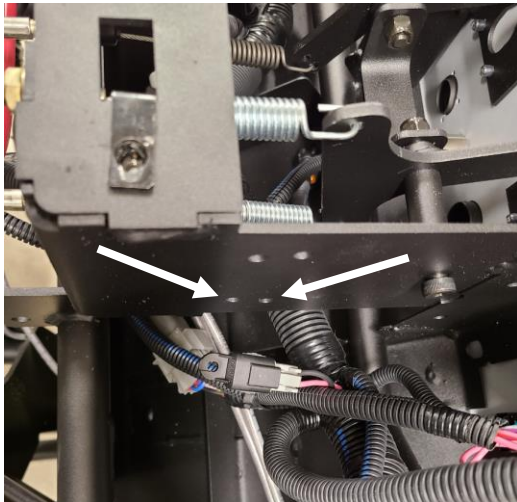


Figure 11: Mounting holes for the Backup Switch

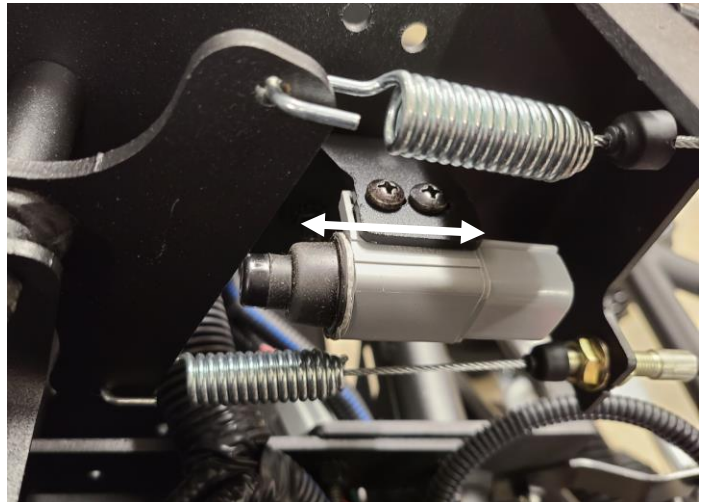


Figure 12: Backup Switch mounted in position

- 3- Mount the switch to the shifter housing using the two black #10 screws and nuts. Do not tighten. The switch will be inside the housing and directly in front of the gear shifter linkage.
- 4- Place the vehicle in Reverse.
- 5- Adjust the backup alarm switch forward or backward such that the switch is depressed (closed), when the vehicle is in Reverse. Move the switch forward until you feel the click of the switch closing while in the reverse gear. Tighten all four screws. When the vehicle is in Neutral, the switch must be open (not depressed).

Note: In this application, the switch is used as a **NORMALLY OPEN** switch. Placing the vehicle in Reverse allows the power to be delivered to the backup alarm through this switch when it is closed.

Note: This single switch contains both **NORMALLY OPEN** and **NORMALLY CLOSED** contacts. Different switch contacts are used based upon the feature through the harness connections, i.e. pins 1 and 5 are normally open and pins 4 and 8 are normally closed.

Electric Horn Installation:

- 1- Obtain the electric trumpet horn from the kit.
- 2- Use the 5/16" by 3/4" long bolt to attach the horn to this location on the frame.
- 3- Attach the horn to the center of the instrument panel bracket as shown below.
- 4- The Horn should be parallel to the ground. Tighten the bolt to secure.
- 5- The horn trumpet must point down. If it is mounted facing up, it will fill with water and fail.

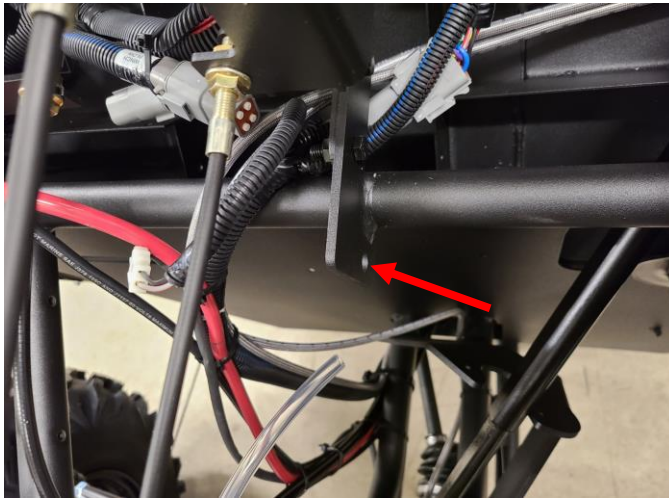


Figure 13: Mounting location for the Electric Horn



Figure 14: Proper Mounting Orientation

Front Turn Signal Lamp Installation:

- 1- Locate the two amber front turn signal lamps from the kit.
- 2- Place the hood on a stable surface.
- 3- Using a $\frac{3}{4}$ hole saw, drill a hole in each headlight housing as shown below. Each hole should be two inches back from the front edge and centered top to bottom.
- 4- Feed each lamp through the hole and snap into place by pushing the lamp grommet into the hole with a flat screw driver.
- 5- Front Turn Signals will be hooked up in the final steps of the reassembly process described later.



Figure 15: Front Turn Signal Lamp Mounting location.



Figure 16: Front Turn Signal Lamps Installed

Turn Signal Switch Installation:

- 1- Locate the turn signal switch from the kit.
- 2- The switch should have the black half-moon bracket attached to it with two screws as shown below.
- 3- Make sure that the white wire is attached to the lower screw as referenced when the switch is in the mounted position.

- 4- The hose clamp should be fed through the two slots in the half-moon bracket and fully opened in preparation for mounting on the steering shaft.
- 5- Remove the steering wheel. Use a 3/16" Allen Wrench and a 7/16" socket to remove the 6 bolts that attach the wheel to the steering shaft.



Figure 17: Turn Signal Switch with Bracket & Clamp Installed

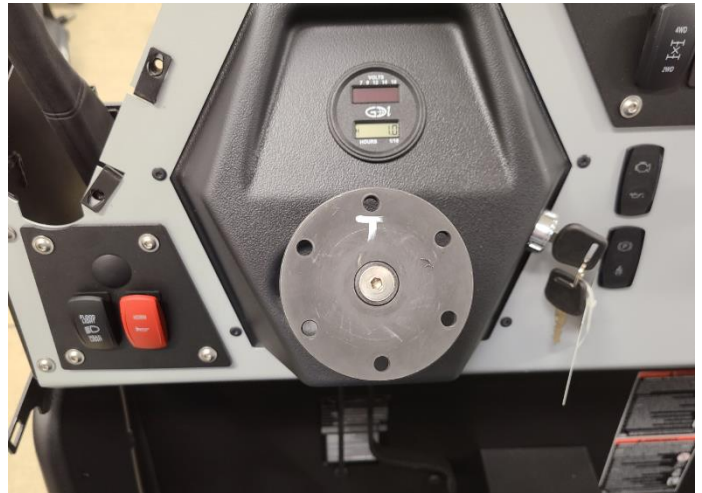


Figure 18: Steering wheel Removed

5. Use a 3/4" hole saw to make a 3/4" by 1.5" rectangular hole. Drill two holes side by side to start the rectangle. Use a carpet knife to trim out the rest of the rectangle. The hole needs to be large enough the slip the 8 pin turn signal connector through the hole. Rock the connector through the hole.

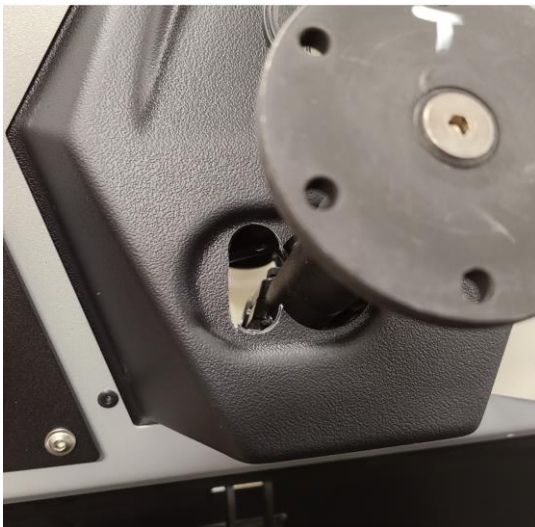


Figure 19: Dual 3/4" holes drilled for Turn Signal Connector



Figure 20: Hole Drilled for the Harness Connector

6. Place the turn signal switch into position with the wire harness fed through the hole in the trim cover.
7. Slide the open hose clamp over the steering shaft. Close the hose clamp around the shaft and loosely tighten.



8. Orient the switch such that the body of the switch is seated against the trim cover and the handle is in a pure horizontal position when in the middle or OFF position. Tighten the hose clamp to secure the switch to the steering shaft.

NOTE: The following two sections apply to both the polyvinyl bed and the steel bed for rear lighting and backup alarm installation. If you have a FLIP SEAT bed, skip to the section titled "FLIP SEAT Lighting and Alarm Installation".

Tail Lamp Installation:

1. Locate the two tail light assemblies from the kit and the four 1.5 inch long carriage bolts and nuts.
2. Each lamp is attached to the tail light bracket with black #10 screws and nuts.
3. Tilt the bed up. Locate the two holes on each side of the back rail to mount the tail lights.
4. Mount a lamp assembly on each end of the rear rail. Use a half inch socket to tighten.



Figure 21: Location for Mounting Tail Lights



Figure 22: Tail Lights Mounted

Backup Alarm & License Plate Light Installation:

1. Locate backup alarm, license plate light and the mounting bracket from the kit.
2. Mount the license plate light on the center section using black #10 screws and nuts as shown below.
3. Mount the backup alarm on the right side of the bracket as shown below using the M6 fasteners.
4. Place the bracket with light and alarm on the rear diagonal of the frame tubes in a level manner.
- 6- Insert the two 2" carriage bolts through the holes in the end of the bracket and tighten securely.



Figure 23: License Plate Light and Backup alarm Mounted to the vehicle



FLIP SEAT Lighting and Alarm Installation

For vehicles equipped with a rear flip seat bed, the tail lamps are mounted on the rear Upper B pillar tube rails using a pair of P clamps found in KIT 19305. Attach each tail light as shown below to the vertical rail using two 2 inch P clamps and four black ¼" bolts provided in the kit.



Figure 24: Tail Lights Mounted on Upper Cab Rails for Flip Seat

- 1- Mount the License plate light on the center position of the upper seat cross rail tube as shown below using a pair of 1.5" P clamps and #10 black screws and nuts.
- 2- Mount the backup alarm beside the license plate light using two P Clamps and a pair of ¼" bolts with lock nuts. Make sure the lamp harness is routed behind the clamp and under the upper seat rail. Loosen the seat back screws to enable slipping the connector behind the rail.

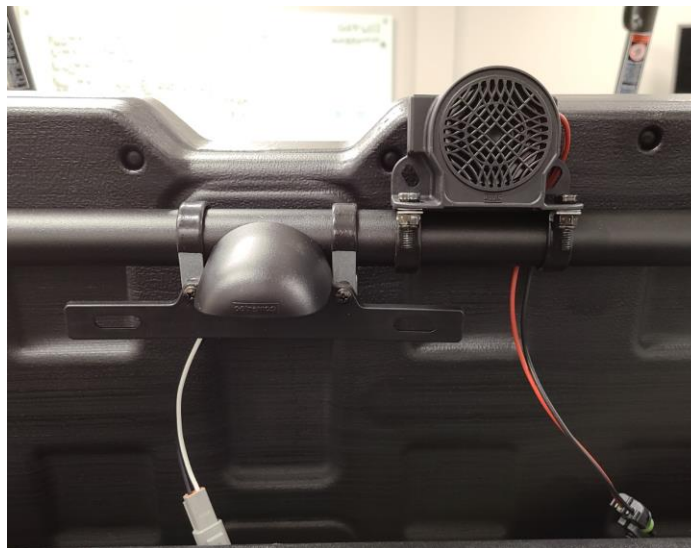


Figure 25: License Plate Light and Backup Alarm Mounted on Upper Seat Rail

Note: All electrical components are now mounted for this feature and next the wire harness must be installed.



Street Light Harness Installation for the Forward Portion:

- 1- Start the harness installation by laying the harness on the front cab tunnel with the green four pin connector and other associated connectors positioned forward toward the dash panel.
- 2- First, route the forward portion of the harness through the dash panel and up to the instrument panel harness.
- 3- Locate the green connector on the instrument panel harness and remove the black cap by depressing the release tab. **DO NOT PULL THE CAP OFF BY PULLING ON THE WIRES. USE ONE HAND ON EACH CONNECTOR HALF.**



Figure 26: Harness ready to install starting at cab tunnel

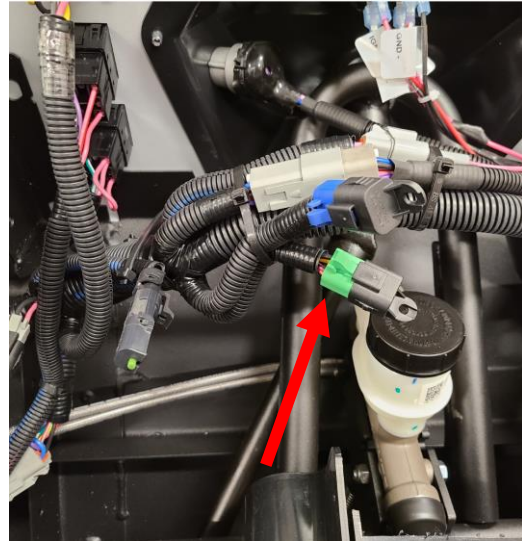


Figure 27: Locate Green Connector on Main IP Harness

- 4- Connect the green connector of the Street harness to the green connector of the instrument panel harness.
- 5- Route the black horn switch connector and the gray eight pin connector over to the right towards the driver side.
- 6- Route the harness up and over the frame tube that arches over the steering shaft tubes. Loosely tie wrap.
- 7- Connect the horn connector to the red horn switch. Be sure to attach the connector with the latch lining up with the hook on the switch. The hook is on the lower side of the switch. Place one hand on the front of the switch while mating the harness connector with the other.

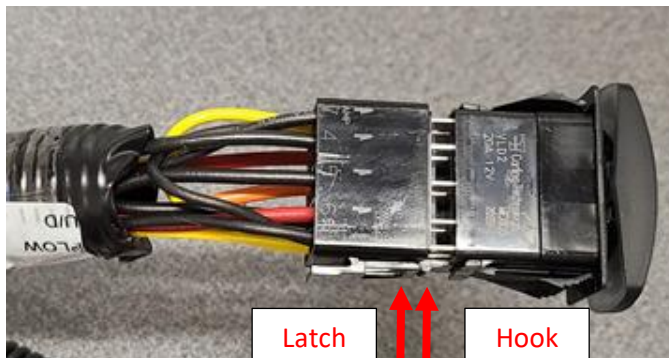


Figure 28: Correct Harness Orientation to the Switch



Figure 29: Horn Switch & Turn Signal Switch Hooked Up



- 8- Connect the turn signal switch harness connector to the gray eight pin connector on the Street harness.
- 9- Route the shorter gray two pin connector to the right and down the frame tube with the head light wires.
- 10- The turn signal lamp connector should reach to the vicinity of the head light.
- 11- Route the black 8 pin connector down the same path but connect it to the brake switch.
- 12- Plug the orange turn signal flasher element into the three pin connector on the harness.
- 13- Drill a 3/16" hole in the park brake bracket and attach the flasher to the back side of the bracket with a #10 screw and nut.
- 14- Loosely tie wrap the harness to the frame tubes about every 12 inches.

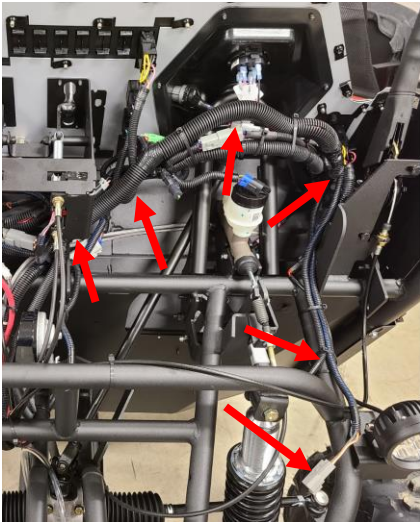


Figure 28: Right Side of Harness Routed

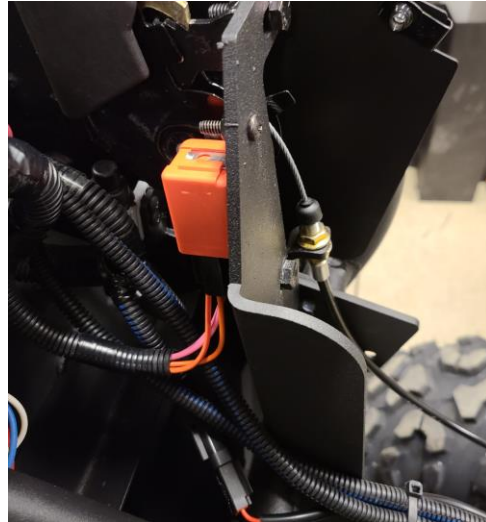


Figure 29: Turn signal Flasher Mounted on Park Brake Bracket

- 15- Route the second black eight pin connector to the reverse switch in the center of the panel. Connect to the reverse switch.
- 16- Route the gray two pin connector that will mate to the electric horn. Connect to the horn. Tie wrap horn harness to the horn bracket.
- 17- Route the remaining two pin gray connector toward the jump start stud, under the battery and then over to the passenger side head light.

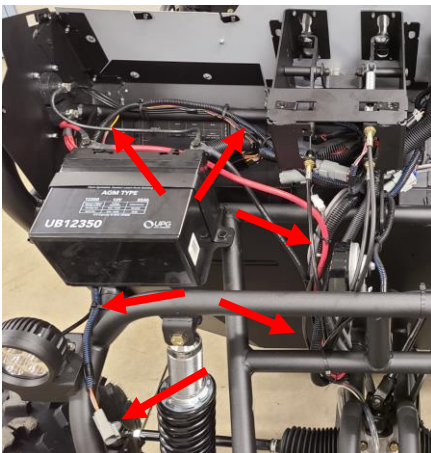


Figure 30: Left Side of Harness Routed



Figure 31: Backup Switch hooked up to the Harness



- 18- Tie wrap the harness about every 12 inches to frame tubes. Tighten all tie wraps and cut off the extra tails with a wire cutter.

There is a black connector that is labeled as STROBE for a strobe switch. This is for an optional capability that is covered under Feature Part number 19143 Installation Guide, Strobe Light Option with Street Light Package. Fold back this connector behind the main IP harness and tie wrap.

Street Harness Installation for the Rearward Portion of the Vehicle:

The next section applies to vehicles with a polyethylene bed or a steel bed. If you have a FLIP SEAT bed, jump to the section labeled "FLIP SEAT REAR LIGHTING AND ALARM HARNESS INSTALLATION".

- 1- Route the rear portion of the harness out of the tunnel and follow the seat frame as shown below. Loosely tie wrap the harness to the frame tubes. Keep the harness routed low near the far left corner to keep it clear of the seat retention bracket hooks.
- 2- With a crew cab, route the two pin strobe light harness around the front seat frame with tie wraps. Route the tail light harness and connectors around the rear seat frame and tie wrap.

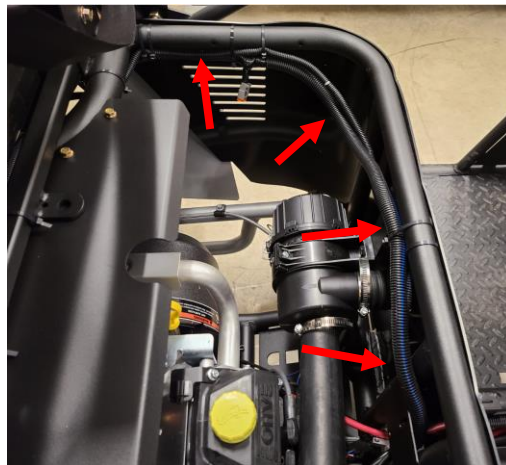


Figure 32: Path to Route the Street Light Harness

- 3- Continue routing the tail light harness toward the rear of the vehicle.
- 4- Route under the seat frame and continue along the outer frame tube for the fender supports.
- 5- Tie wrap loosely about every 12 inches.
- 6- There is a gray two pin connector near the side seat frame that is for a strobe light. This is for an optional capability that is covered under Feature Part number 19143 Installation Guide, Strobe Light Option with Street Light Package. Fold back this connector and ignore it.

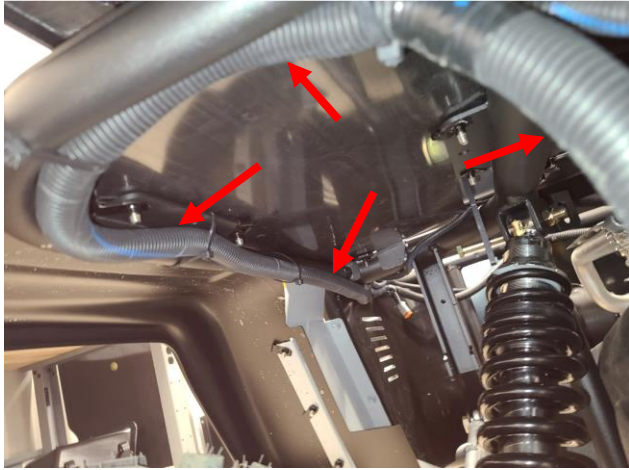


Figure 33: Tail Light Harness routed along outer frame



Figure 34: Harness Routed through the Pivot Point

- 7- Feed the harness past the bed pivot point and tie wrap again.
- 8- Attach the two connectors to the license plate light and the backup alarm.
- 9- Route the shorter tail light connector to the driver side light. Install the connector on the lamp until it clicks.
- 10- Route the longer tail light connector to the passenger side light. Install the connector on the lamp until it clicks.
- 11- Locate the 1/4" holes in the bed frame for installing Christmas tree tie wraps which are provided on the harness.

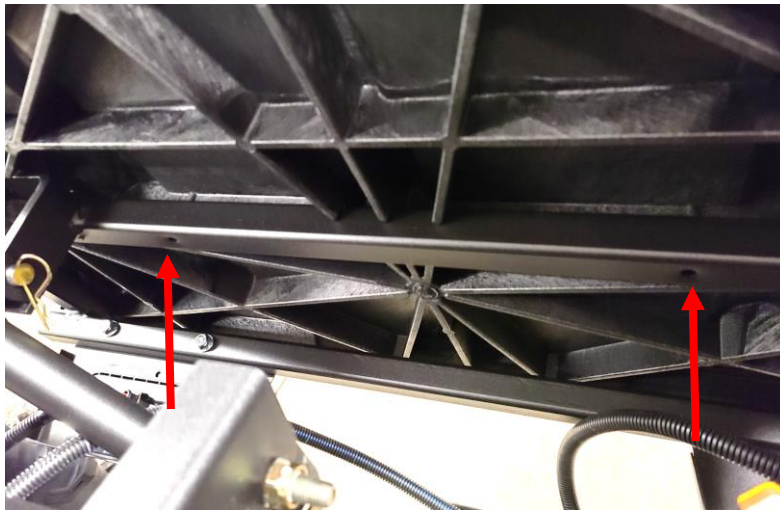


Figure 35: Sample Christmas tree Tie Wrap Hole Locations



Figure 36: Tail Light Harness Connection

- 12- Starting at each tail light, route and clip the harness to the frame with the Christmas tree tie wraps that are on the harness using the holes in the frame.
- 13- Back up and continue clipping the harness to the frame until you get back to the pivot point.
- 14- The polyethylene bed is smaller than the steel bed so there will be some extra harness length with the poly bed. Use your best judgement to hank up and tie wrap the extra length. Be sure to leave enough length to prevent stress on the harness when the bed is tilted.



Figure 37: Tail Light Wiring Routing and Clipping on a Poly Bed

Street Harness Installation for the Crew Cab

- 1- The Street harness on the crew cab is installed in exactly the same manner as the above listed standard cab procedure, except that the rearward portion of the harness is routed to the rear seat before it is attached to the fender frame and dump bed.
- 2- The strobe light two pin gray connector is routed and clipped to the front seat frame.
- 3- The crew cab kit is a different part number with a longer harness but same components.

FLIP SEAT REAR LIGHTING AND ALARM HARNESS INSTALLATION

- 1- Remove the driver side screw that holds the back plastic seat surround cover in place. Pull the end of the cover back and away from its position.
- 2- Cut off a one inch square piece from the upper right corner of the surround as shown below.



Figure 38: One inch square section of the surround cut out



- 3- Route the rear portion of the harness along the side seat frame and under the rail at the back. Take it up the front of the driver side B pillar on the outside of the seat frame. Route the harness end behind the seat at the upper seat back tube.



Figure 39: Routed Along Side Rail



Figure 40: Route under the Side Tube



Figure 41: Route up the B Pillar

- 4- Route the harness under the upper seat back rail.
- 5- Make connection to each tail light and to the License Plate Light and the Backup Alarm.
- 6- Tie wrap the harness to the rails about every 12 inches.



Figure 42: Harness Routed across upper seat back rail

- 7- Route each tail light harness up to the tail light and plug in the harness until it clicks.
- 8- Tie wrap each harness about every 12 inches.



Figure 43: Route each tail light harness up to each tail light

Testing the Street Light & Horn Feature:

- 1- The Street feature only works with the ignition key ON, except the electric horn. Turn the key to the ON position. Do not start the vehicle.
- 2- Turn on the headlight switch. Verify that both rear tail lights illuminate. Verify that the horn switch backlight illuminates.
- 3- Activate the right turn signal switch. Verify that both the front and rear right turn signal lamps illuminate in a flashing pattern.
- 4- Activate the left turn signal switch. Verify that both the front and rear left turn signal lamps illuminate in a flashing pattern.
- 5- Depress the Brake pedal. Verify that the rear brake lights illuminate. Adjust brake switch if necessary for proper operation.
- 6- Place the vehicle in Reverse. Verify that the backup alarm sounds. Adjust backup switch if necessary for proper operation.
- 7- Depress the red horn switch. Verify that the electric horn sounds.

Reassembly:

- 1- Reinstall the seat.
- 2- Reinstall the tunnel cover(s).
- 3- Reinstall the black instrument panel cover.
- 4- Reinstall the steering wheel.
- 5- Do not re-install the black plastic clam shell cover.
- 6- Reinstall the hood. Be sure to hook up the front turn signals by connecting the gray two pin connector on each side.