INSTALLATION GUIDE

TRUX accessories

UNIVERSAL HEADLIGHT ASSEMBLY
FOR KENWORTH | FREIGHTLINER | WESTERN STAR

(TLED-H100, TLED-H101, TLED-H102, TLED-H103)
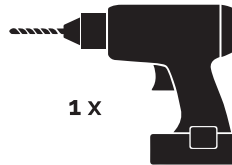

TOOLS REQUIRED:

1 X	1 X	1 X	1 X
PHILLIPS SCREWDRIVER	FLAT SCREWDRIVER	DRILL	9mm WENCH

BOX CONTENTS:
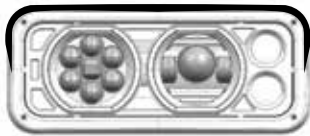
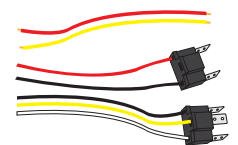|				
1 X	1 X	1 X	1 X	8 X 3/4"
UNIVERSAL HEADLIGHT ASSEMBLY (DRIVER OR PASSENGER)	TRUX HEADLIGHT HOUSING BUCKET	MALE SPADE CONNECTOR	CAPS FOR ADJUSTMENT SCREWS	#8-32 (3/4" LONG) PHILLIPS FLAT HEAD MACHINE SCREWS
8 X	8 X	4 X	1 X	
#8-32 MACHINE SCREW NUTS (HEX)	#8 FLAT WASHERS	STAINLESS STEEL VISOR SCREWS	4mm SOCKET DRIVER	EXTENSION WIRES (RED, YELLOW) & PLUGS (3 PRONG, 2 PRONG)
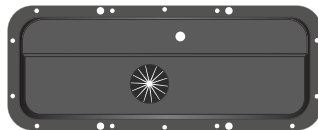
PLEASE NOTE:
An assistant is required to assemble the Trux Universal Headlight Assemblies onto a Kenworth, Freightliner or Western Star.

1) REMOVE CURRENT BEZEL, HEADLIGHTS & OEM HEADLIGHT BUCKET

If the OEM bucket is secured with rivets, drilling or grinding will be required. Unplug the current headlights from the truck, remove the wiring by opening the hood and detaching the OEM rubber gasket from the housing.

Note: The Trux Headlight housing bucket is designed only for Trux Universal Headlight Assemblies and cannot be used with any OEM headlight configuration.

1a

1b

1c

1d

1e
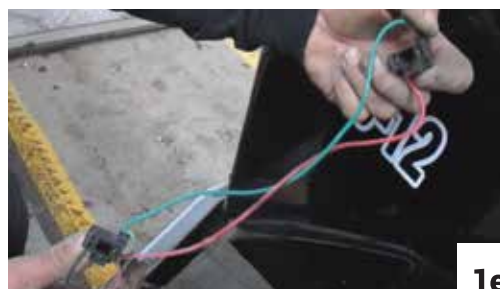
2) CLEAN AND PREP THE TRUCK HEADLIGHT AREA

Trux headlight housing bucket mounts onto the OEM mounting holes; however, some hoods require drilling, in order to widen the holes to accommodate the housing screws.

2a

2b

3) HOUSING BUCKET INSTALLATION

Open the hood to access the back of the headlight area where the housing bucket will be installed. Position the Trux housing bucket to the 4 center mounting holes of the hood. In this step, you will need an assistant, as one will tighten the 4 screws from the front of the hood, while the other holds the washer and nut in place with a wrench on the backside of the hood. Once the housing bucket is mounted, pass the wire harness from the truck through the hole in the housing bucket.

3a

3b

3c

NOTE: If required, Trux has provided an additional wire harness to replace any OEM damaged wires.

4) DETACH THE HEADLIGHT VISOR FROM THE HEADLIGHT ASSEMBLY

Unscrew the headlight visor from the headlight assembly and place the screws in a secured area.


4a

5) WIRING THE HEADLIGHT ASSEMBLY

Close the hood and test the wire connections by plugging the Trux Headlight Assembly connectors into the headlight plugs as shown in the diagrams below. The clear amber lights can function as a marker or turn signal, see below for optional connections. (Diagram 5a)

MARKER & HALO FUNCTION WITH LOW BEAM CONFIGURATION: Combine the seperate yellow wire (Marker function) and red wire (Halo function) to the provided Male Spade (MS) electrical connector. Plug the MS connector into the black wire socket of the 3 wire OEM Plug. (Diagram 5b)
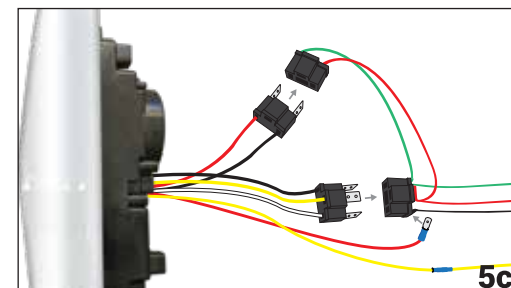
HALO & TURN SIGNAL FUNCTION WITH LOW BEAM CONFIGURATION: Daisy chain the yellow wire to a turn signal light (eg, Double Face Fender Light). Attach the MS electrical connector to the red wire (Halo function) and connect the MS into the black wire socket of the 3 wire OEM Plug. (Diagram 5c)
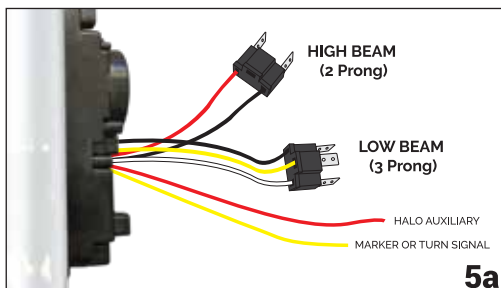
HIGH BEAM (2 Prong)
LOW BEAM (3 Prong)
HALO AUXILIARY
MARKER OR TURN SIGNAL
5a
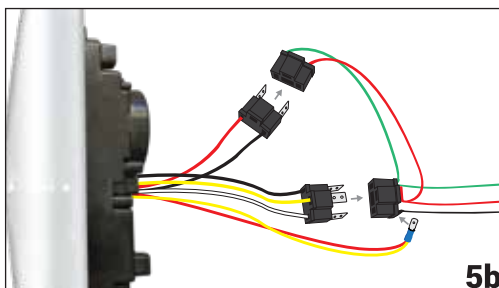
5b

5c

HIGH BEAM (2 Prong)	LOW BEAM (3 Prong)
● GROUND (NEGATIVE)	● GROUND (NEGATIVE)
● HIGH BEAM (POSITIVE)	● LOW BEAM
	○ LOW BEAM (POSITIVE)

MARKER & HALO FUNCTION WIRING CONFIGURATION

TURN SIGNAL & HALO FUNCTION WIRING CONFIGURATION

6) MOUNT THE HEADLIGHT ASSEMBLY

Once you configured the wiring, tested the functions and adjusted the beams, open the hood and position the headlight assembly to the hood mounting holes. Once positioned, fasten the 4 remaining flat screws, washers and nuts in the remaining mounting holes as mentioned in step 3.
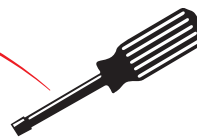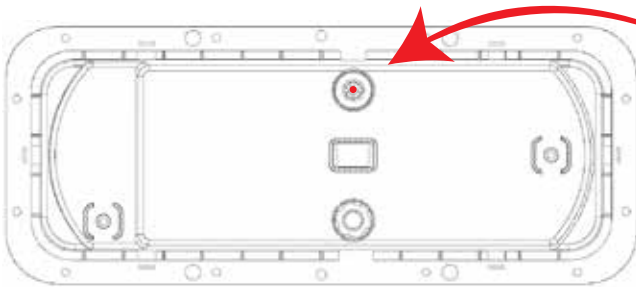

6a

6b

7) ADJUST THE HEADLIGHT BEAMS

The headlight beam can be adjusted with the provided 4mm socket driver. Using the hole in the back of the housing bucket, insert your socket driver and adjust the pin clockwise or counter clockwise at the location shown below.

PROVIDED 4mm
SOCKET DRIVER

UP/DOWN
HEADLIGHT ADJUSTMENTS

CLOCKWISE:
ADJUSTS HEADLIGHT
DOWNWARDS

COUNTER-CLOCKWISE:
ADJUSTS HEADLIGHT
UPWARDS

8) ATTACH THE HEADLIGHT VISOR

Close the hood. Align the headlight visor to the front of the headlight assembly and use the provided screws to tighten the visor into place.

TROUBLESHOOTING TIPS:

PROBLEM	SOLUTION
1- Weak or improper lighting 2- Error on the dashboard 3- Light flickering	You may need to install a load resistor on each light that is experiencing these issues. Trux offers the TU-1039 for LED headlights (80W). Load resistors are used often for vehicles that originally came with Halogen bulbs. The truck's computer is programmed to expect a higher wattage draw from halogens and may sometimes send errors to the light if it is drawing the lower wattage draw of LEDs. These errors can present themselves in different ways such as intermittent flashing. The TU-1039 load resistor is the first line of defense for these issues. It will compensate for the low power wattage of the LED to make sure there is no error message on the dash so that no re-programming is required. Once installed, it will 'trick' the vehicle's computer and allow it to send the proper current needed for the LED.
4-My high beam is not working 5-My low beam is not working 6-My Halo and/or marker is not working when connected to the low beam	Switch the 'black' ground (negative) wire with the 'white' low beam (positive) wire on your 'low beam' 3-wire H4 connector. 'White' will become ground (negative) and 'black' will become low beam (positive) (see page 3 illustration 3a). If the H4 plug is the sealed version, you can switch the wires on your truck. These are universal headlights and each of the different trucks/years that they fit may have their ground wire on different sides or colors. In some cases, you may need to switch the black and red wire on the 'high beam' 2-wire H4 connector in order to switch the ground of the high beam. [Note* Our LED headlights do not work on a double negative system].
7-The light doesn't work when I use the H4 extension	The H4 extension is designed to switch the ground (negative) to the opposite side. If you need the extra reach of the extension, please make sure the positive and negative of your vehicle match the positive and negative of the H4 extension.