

## UNIVERSAL HEADLIGHT ASSEMBLY FOR PETERBILT 357, 365, 378 & 379

(TLED-H120, TLED-H121, TLED-H122, TLED-H123)

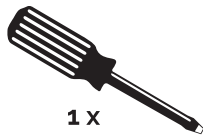


### TOOLS REQUIRED:



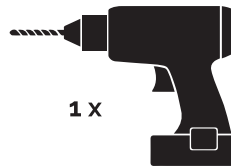
1 X

PHILLIPS SCREWDRIVER



1 X

FLAT SCREWDRIVER



1 X

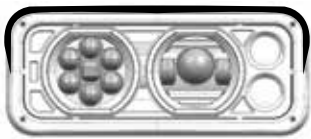
DRILL



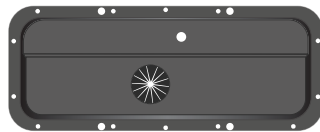
VICE GRIP

### BOX CONTENTS:

1 X



UNIVERSAL HEADLIGHT ASSEMBLY  
(DRIVER OR PASSENGER)



1 X

TRUX HEADLIGHT  
HOUSING BUCKET



1 X

MALE SPADE  
CONNECTOR



1 X

CAPS FOR  
ADJUSTMENT SCREWS

8 X



3/4"

#8-32 (3/4" LONG) PHILLIPS  
FLAT HEAD MACHINE SCREWS

8 X



#8-32 MACHINE SCREW  
NUTS (HEX)

8 X



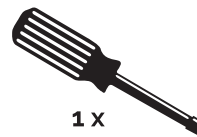
#8 FLAT WASHERS

4 X

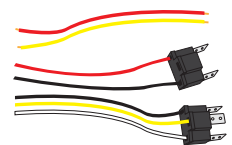


STAINLESS STEEL VISOR SCREWS

1 X



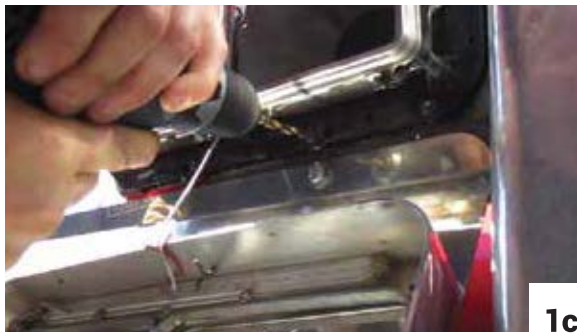
4mm SOCKET DRIVER



EXTENSION WIRES (RED, YELLOW)  
& PLUGS (3 PRONG, 2 PRONG)

## 1) REMOVE CURRENT BEZEL, HEADLIGHTS & OEM HEADLIGHT BUCKET

Unscrew the bezel to access the OEM headlight bucket. Drilling may be required to remove the OEM headlight bucket due to corroded screws. Once the OEM headlight bucket is removed, unplug the current headlight's wiring from the truck.



Due to corrosion, it is common for the screws holding the OEM headlight bucket in the housing to break off. Should this occur you will need to either use a vice grip, screw extractor or drill the old screws and re-thread the holes with a tap. Should this problem occur, Trux recommends seeking professional services to drill and re-thread the housing holes for a safe and secure installation of your new Trux Universal Headlight Assembly.

## 2) DETACH THE HEADLIGHT VISOR FROM THE TRUX HEADLIGHT ASSEMBLY

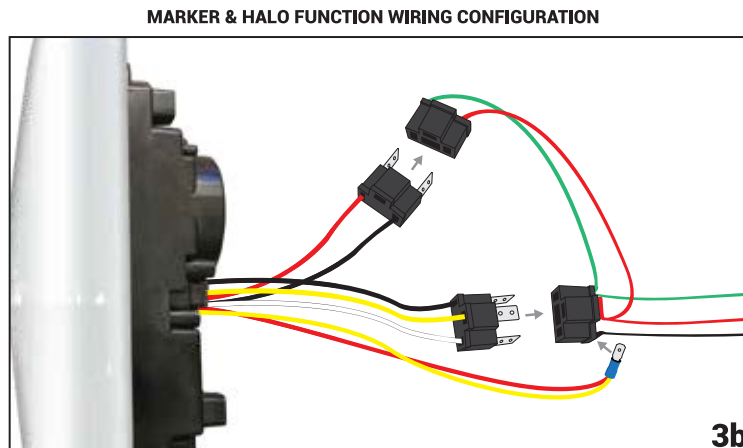
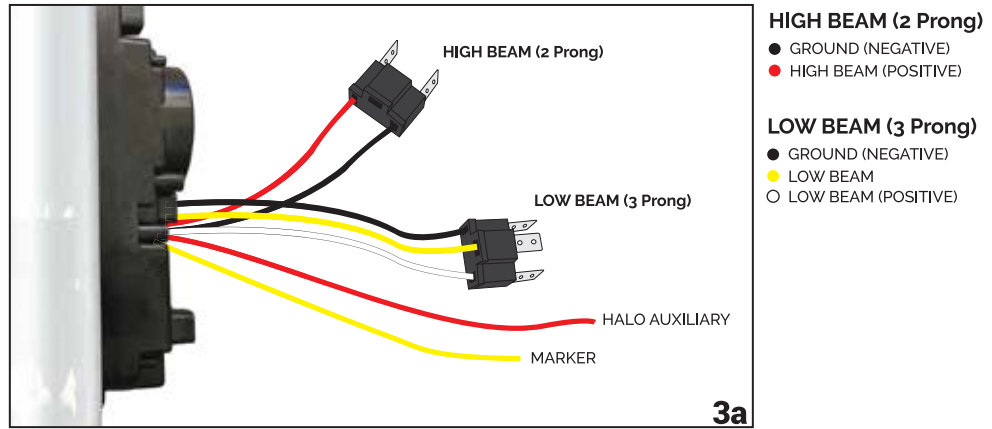
Unscrew the headlight visor from the headlight assembly and place the screws in a secured area.



### 3) WIRING THE HEADLIGHT ASSEMBLY

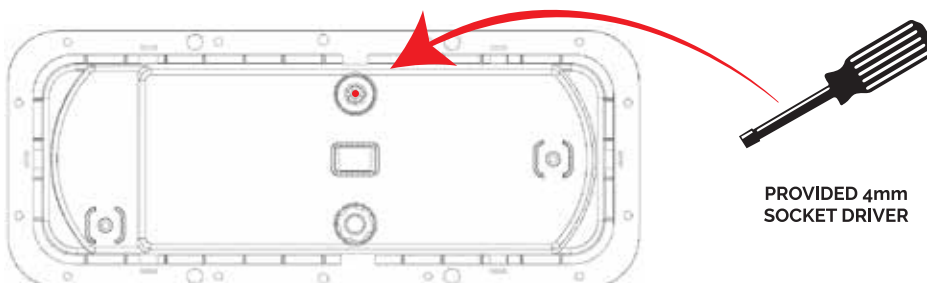
Test the wire connections by plugging the Trux Headlight Assembly connectors into the headlight plugs as shown in the diagrams below. The clear amber lights function as a marker. See below for connection. (Diagram 3b) **NOTE:** If required, Trux has provided an additional wire harness to replace any OEM damaged wires.

**MARKER & HALO FUNCTION WITH LOW BEAM CONFIGURATION:** Combine the separate 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 3b)



### 4) ADJUST THE HEADLIGHT BEAMS

The headlight beam can be adjusted with the provided 4mm socket driver. Adjust the pin clockwise or counter clockwise at the location shown below. **NOTE:** Because the aiming pin cannot be accessed once the headlight is fully mounted, we suggest mounting it temporarily using only 2 screws so that it can be easily removed often to enable you to make the necessary adjustments.



**UP/DOWN HEADLIGHT ADJUSTMENTS**



## 5) MOUNT THE HEADLIGHT ASSEMBLY

Once you configured the wiring, tested the functions and adjusted the beam, position the Trux headlight assembly onto the Peterbilt headlight housing holes. Once positioned, screw the new flat screws into the 8 screw holes located above and below the Trux Headlight Assembly.



5a

## 6) ATTACH THE HEADLIGHT VISOR

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



6a



6b

### 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].

## UNIVERSAL HEADLIGHT ASSEMBLY FOR KENWORTH | FREIGHTLINER | WESTERN STAR

(TLED-H120, TLED-H121, TLED-H122, TLED-H123)

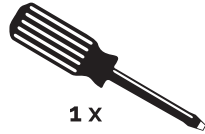


### TOOLS REQUIRED:



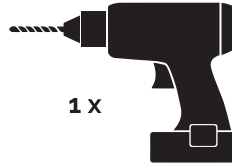
1 X

PHILLIPS SCREWDRIVER



1 X

FLAT SCREWDRIVER



1 X

DRILL

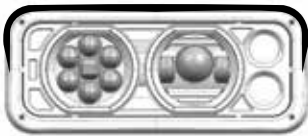


1 X

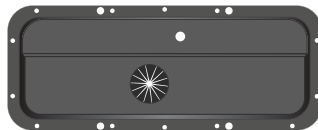
9mm WENCH

### BOX CONTENTS:

1 X



UNIVERSAL HEADLIGHT ASSEMBLY  
(DRIVER OR PASSENGER)



1 X

TRUX HEADLIGHT  
HOUSING BUCKET



1 X

MALE SPADE  
CONNECTOR



1 X

CAPS FOR  
ADJUSTMENT SCREWS

8 X



3/4"

#8-32 (3/4" LONG) PHILLIPS  
FLAT HEAD MACHINE SCREWS

8 X



#8-32 MACHINE SCREW  
NUTS (HEX)

8 X



#8 FLAT WASHERS

4 X

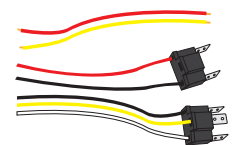


STAINLESS STEEL VISOR SCREWS

1 X



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.



## 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.



### 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.

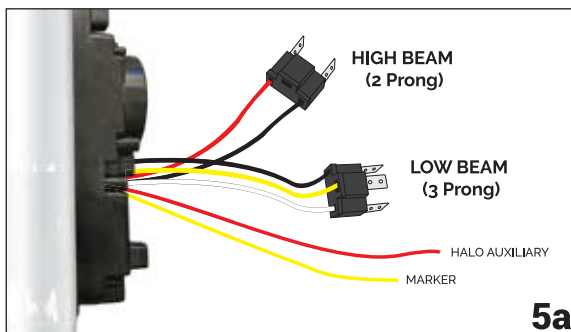


4a

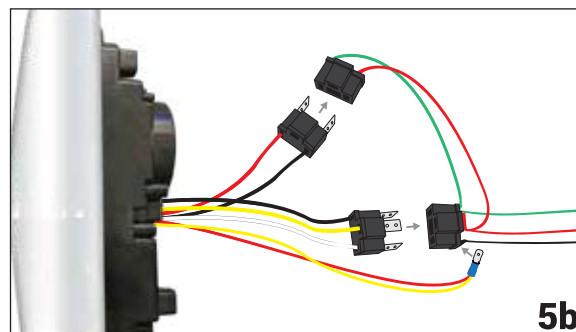
### 5) WIRING THE HEADLIGHT ASSEMBLY

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 functions as a marker. See below for connection. (Diagram 5b)

**MARKER & HALO FUNCTION WITH LOW BEAM CONFIGURATION:** Combine the separate 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)



5a



5b

**HIGH BEAM (2 Prong)**

- GROUND (NEGATIVE)
- HIGH BEAM (POSITIVE)

**LOW BEAM (3 Prong)**

- GROUND (NEGATIVE)
- LOW BEAM (POSITIVE)
- LOW BEAM (NEGATIVE)

**MARKER & 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 onto 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.



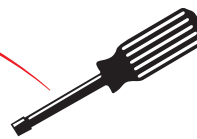
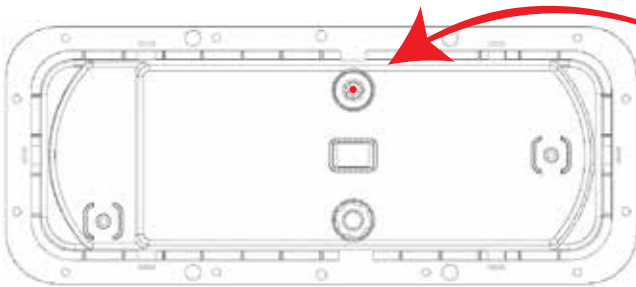
6a



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.
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