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## 2021-22 Ford Bronco Bumper Auxiliary Light Kit Part number 14041.0004.99.A Component Identification

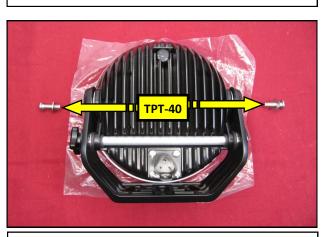
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**NOTE:** In addition to common hand tools, installation of the RTR Aux Lights will require the use of a wire crimper, stripper, heat gun, electrical tape, and a welding rod or equivalent.

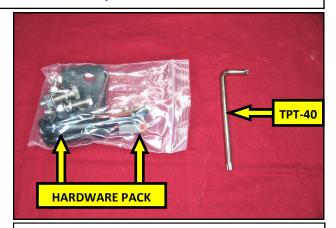
This RTR product is only intended to be installed on vehicles equipped with the OEM Auxiliary Switches in the Overhead Console.



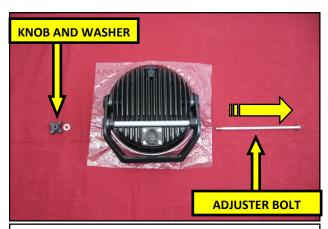
**1.** Remove the light from its packaging and set it face down on a protective work surface. **NOTE:** RTR recommends leaving the factory protective film on the lens cover for added protection while transferring the lights into the RTR brackets.



**3.** Using the supplied Torx wrench, remove the two screws at the top of the light bracket. Retain these screws and washers for reuse with the RTR Brackets.



**2.** Remove the T-40 Tamper Proof Torx® wrench from the HP.70 light hardware and wiring pack. This is the only component that will be used. Disregard all other components in this pack.

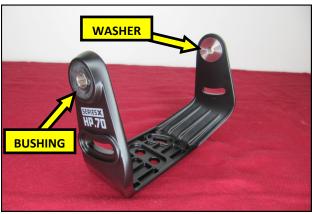


**4.** Unthread the adjuster knob at the center of the bracket and remove it and the washer from the adjuster bolt. Remove the adjuster bolt from the bracket and set it aside.





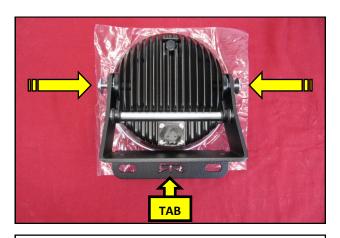
**5.** Slide the light out of the factory bracket and set it aside.



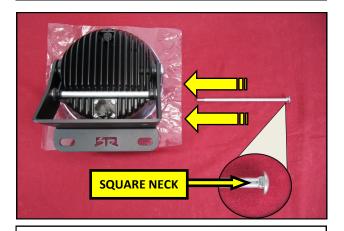
**6.** Press the aluminum sleeved washers out of the black urethane bushings in the factory bracket and retain them. The bracket will not be used in this kit.



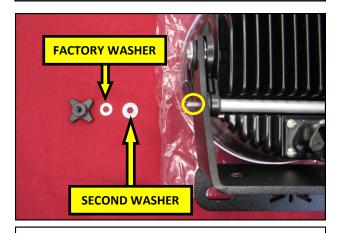
**7.** Transfer the factory sleeved washers and bushings into the RTR Bracket as shown.



**8.** Slide the light into the RTR Bracket with the lens facing towards the vertical tab. Align the bolt holes at the top of the bracket and thread the factory hardware from step **3** into the light. Do not tighten at this time.

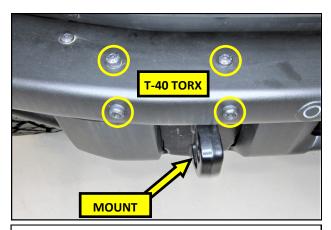


**9.** Insert the adjuster bolt from step **4** through the Bracket and into the adjuster tube. Ensure that the square neck of the bolt has properly mated to the adjustment channel in the Bracket and that the head sits flat against it.

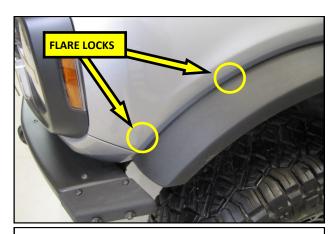


**10.** Using the RTR supplied Second Washer, reinstall the adjuster knob and factory washer into the adjuster rod. Do not fully tighten at this time. Repeat steps **1-10** with the other set of components. When complete, remove the protective film from both of the lights.

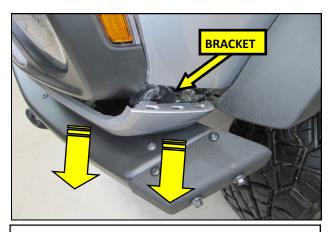




**11.** Using a T-40 Torx® driver, remove the 4 bumper bolts above the shackle mounts on both sides of the bumper. Retain this hardware for reuse.



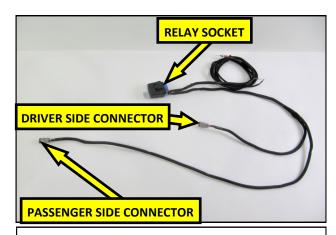
**12.** Locate the quarter turn fasteners for the flares in the inner fender area. Turn the fasteners counterclockwise to unlock the first two fasteners on each fender flares.



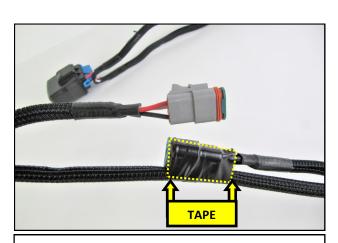
**13.** Using a plastic trim panel removal tool, separate the lower facia from the mounting bracket.



**14.** Remove the lower facia from the vehicle and set it aside on a padded surface.

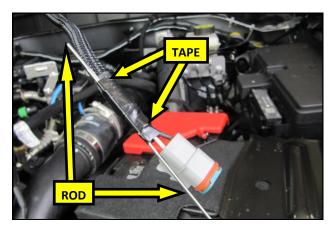


**15.** Set the Wiring Harness on a work bench and prepare it for installation.

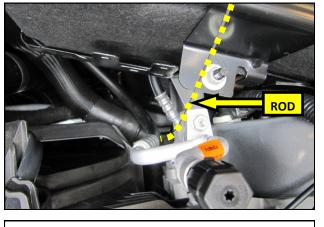


**16.** Using electrical tape, secure the driver side connector to the passenger side leg of the Wire Harness.

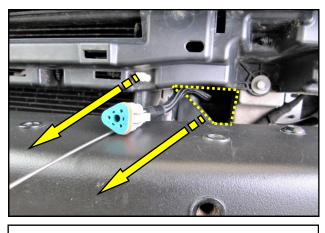




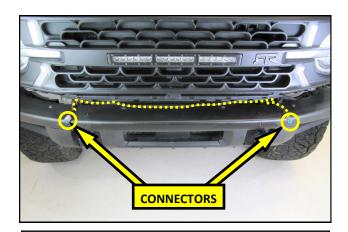
**17.** Using electrical tape, secure the Passenger side leg of the Wiring Harness to the welding rod or wire coat hanger.



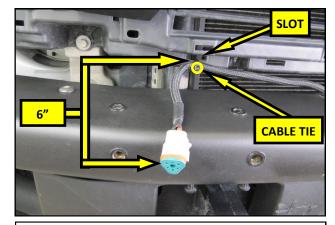
**18.** Using the welding rod as a draw wire, feed the rod in front of the battery, down between the AC lines, and towards the bumper area.



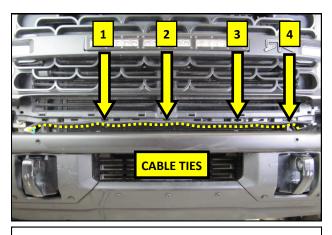
**19.** Locate and retrieve the draw wire from the large opening at the bottom of the grille and above the bumper. Pull the wire through the opening along with the Wiring Harness and both connectors.



**20.** Remove the draw wire and lay the Harness across the bumper as shown. Un-tape the Driver side connector from the Passenger side leg of the Harness.

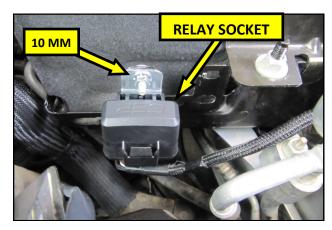


**21.** Using one of the supplied Cable Ties, secure the Passenger side of the Harness to the outermost slot in the shutter frame as shown.

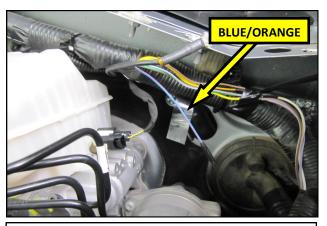


**22.** Continue securing the Harness to the shutter frame, using the supplied Cable Ties. Trim the excess length when fully secure.

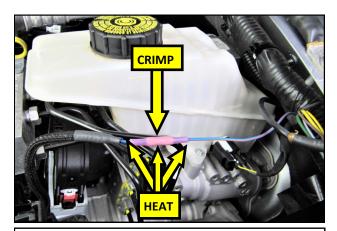




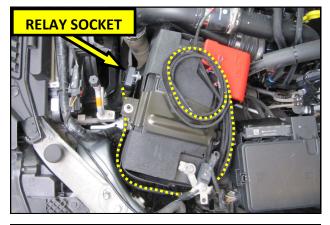
**23.** Mount the Relay Socket to the tab on the battery tray using the supplied M6 Bolt and Flange Nut.



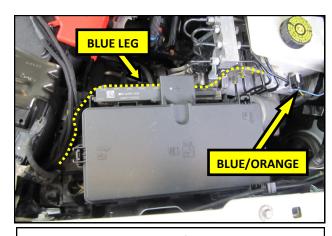
**25.** At the driver side firewall, locate the OEM Blue / Orange accessory wire taped to the main harness and unwrap it.



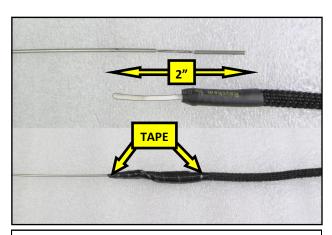
**27.** Strip approximately 3/16" of insulation from each wire and use the supplied Butt Connector to crimp the two together. Using a heat gun on low, shrink the insulation down onto the wires.



**24.** Route the Harness away from the Relay Socket and around the battery as shown.

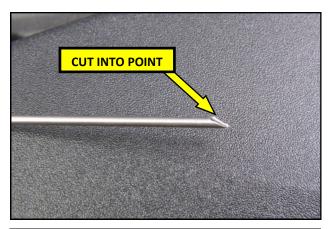


**26.** Route the Blue Wire leg of the RTR harness around the fuse box and towards the Bule/Orange wire from step **25.** 

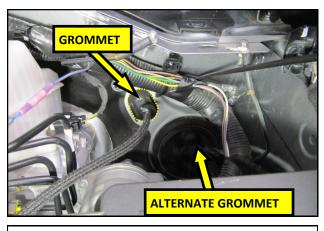


**28.** Tape approximately two inches of the White Wire leg of the RTR harness to the draw wire.

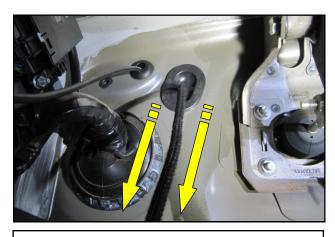




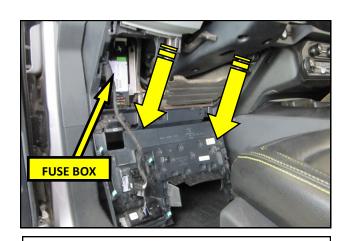
**29.** Using a pair of diagonal cutting pliers, cut the free end of the draw wire into a point.



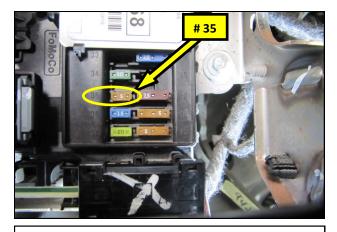
**30.** Insert the draw wire into a firewall grommet and guide it into the footwell area. Apply a small amount silicone lubricant to the taped section of the harness to ease installation into the grommet.



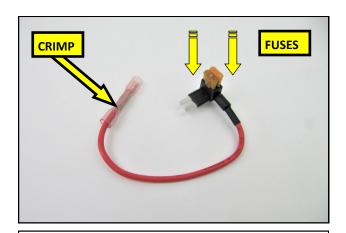
**31.** Pull the White Wire leg of the Harness through the firewall grommet and into the footwell of the vehicle.



**32.** Pull down the driver side knee bolster to gain access to the interior fuse box.

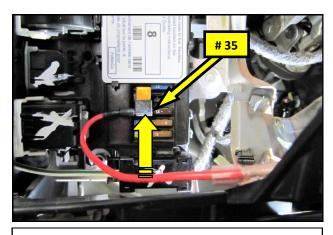


**33.** Locate and remove the 5 amp fuse in the number 35 slot in the fuse box.

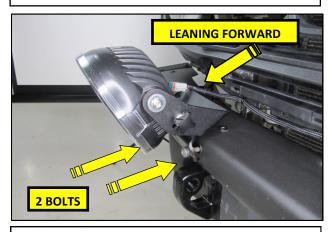


**34.** Insert the OEM and the RTR 5 amp fuses into the supplied ATM Fuse Tap as shown. Strip approximately 3/16" of insulation from the Red wire and crimp the Butt Connector onto it.

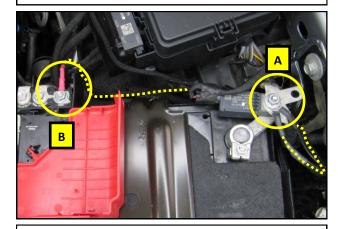




**35.** Insert the Fuse Tap into the number <u>35</u> fuse slot.

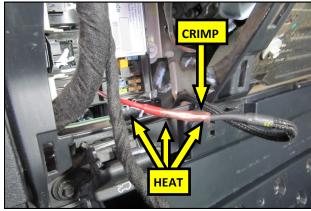


**37.** Partially install the Light assemblies onto the bumper using the OEM hardware removed in step **11**. Thread two bolts, two turns by hand, into the vertical tabs of each assembly, allowing them to lean forward. Do not use any bolts in the horizontal tabs at this time.

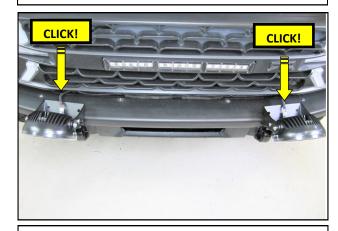


## 39. Connect the RTR Wiring Harness to the battery:

- A. Remove the flange nut on the Negative battery terminal and reinstall it with the ring terminal of the black lead underneath it.
- B. Use the supplied Flange Nut to secure the ring terminal of the Red lead to the unused post on the Positive terminal.



**36.** Strip approximately 3/16" of insulation from the White wire, insert it into the Fuse Tap Butt Connector and crimp it. Using a heat gun on low, shrink the insulation down onto both of the wires.



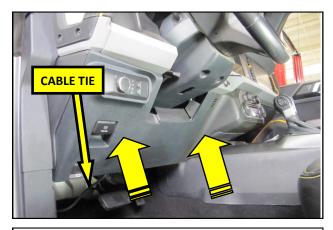
**38.** Plug the Harness Connectors into the sockets at the bottom of the lights.



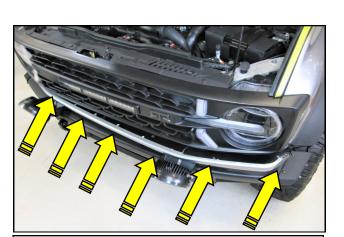
## 40. Perform a function check:

With the vehicle running or in accessory mode, the DRLs in the Auxiliary lights will be illuminated. With the engine running and the number 5 overhead accessory switch selected, the projecting lights will be illuminated. If not, recheck all electrical connections and fuses.





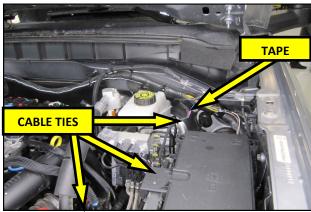
**41.** After completing a successful function check, reattach the knee bolster and use a Cable Tie to secure the wiring in the footwell area.



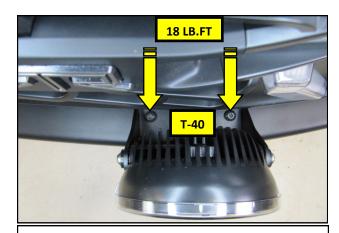
**43.** Lower the facia down onto the bumper, behind the Auxiliary Lights. Starting at one side, reinstall the facia edge into the mounting bracket and work your way across, reattaching the clips. With the facia fully installed, turn the quarter turn fasteners clockwise, on both sides of the vehicle, to resecure the flares.



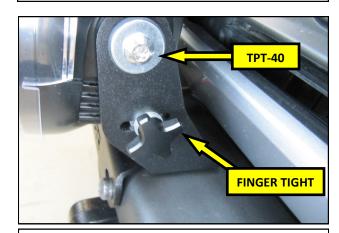
**45.** Using a T-40 Torx® driver, tighten the OEM bumper bolts into the vertical Light Bracket both sides. Torque the bolts to 18 Lb. Ft



**42.** Use the remaining Cable Ties to secure the wiring under the hood. Retape the OEM accessory wires to the main harness.



**44.** Using a T-40 Torx® driver, install 2 OEM bumper bolts into the horizontal Light Bracket and into the bumper on both sides. Torque the bolts to 18 Lb. Ft



**46.** Adjust the lights as desired and turn the adjuster knob clockwise to hold the position. Use the supplied T -40 Tamper Proof Torx® wrench to tighten the upper bolts in the light bracket.