

2021+ Bronco R Series Ditch Lights Kit

Installation Instructions
P/N: 422301



ROUSH
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Application: 2021+ Bronco 2.3L/2.7L, 4 Door

Important Note:

Before installing your ROUSH Performance Product(s), read through the entire installation procedure and check to make sure all items are present. Contact ROUSH Customer Service at 1-800-59-ROUSH, weekdays from 9:00 AM to 5:00 PM EST, with any questions regarding fit, missing parts or instructions that are unclear to you.

TABLE OF CONTENTS

PACKING LIST FOR 2021+ BRONCO Ditch Lights Kit.....3
EQUIPMENT AND SUPPLIES REQUIRED4
LIMIT OF LIABILITY STATEMENT5
SAFETY PRECAUTIONS5
INSTALLATION OF WORK LIGHT MOUNTING BRACKET6
SWITCH INSTALLATION (ONLY FOR VEHICLES WITHOUT UPFITTER AUX SWITCHES).....9
INSTALLING OF WIRING HARNESS (ONLY FOR VEHICLES WITHOUT UPFITTER AUX SWITCHES)10
INSTALLING OF WIRING HARNESS (ONLY FOR VEHICLES WITH UPFITTER AUX SWITCHES)11
BRONCO DITCH LIGHTS ALIGNMENT15

PACKING LIST FOR 2021+ BRONCO Ditch Lights Kit

| Description | Part Number | Quantity |
|--|---------------|----------|
| Bronco Trail Light System | XP0095 | 1 |
| SS3 Pro SAE/DOT White Driving Light - Pair (Qty. 2) | DD6278P | 1 |
| Wire Harness w/Switch, relay, fuse and connectors | DD4045 | 1 |
| ROUSH SPECIFIC HARNESS HARDWARE KIT | XP0093 | 1 |
| Worklight SS3 Cover Standard Black with ROUSH R Logo | XP0092 | 2 |
| Work Light Mounting Bracket Kit | DD6260P | 1 |

EQUIPMENT AND SUPPLIES REQUIRED

- Impact Drill
- T25 and T30 Torx bit
- 5-30 s Allen bit
- 10 mm socket
- A small extension
- Ratchet or electric ratchet

***Note:** Check your vehicle's glove box to see if your Bronco is equipped with tools kit

(Pictures shown below), you may find tools needed for this installation.



If you are missing any items, please call us toll free at 1-800-59-ROUSH.

LIMIT OF LIABILITY STATEMENT

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. ROUSH Performance Products (RPP) reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

SAFETY PRECAUTIONS



CAREFULLY READ THE IMPORTANT SAFETY PRECAUTIONS and WARNINGS BEFORE PROCEEDING WITH THE INSTALLATION!

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personal injury or death. Read each step of the installation manual carefully before starting the installation.

- Always wear safety glasses for eye protection.
- Place ignition switch in the OFF position.
- Always apply the parking brake when working on a vehicle.
- Block the front and rear tire surface to prevent unexpected vehicle movement.
- If working with a lift, always consult vehicle manual for correct lifting specifications.
- Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- Do not smoke or use flammable items near or around the fuel system.
- Use chemicals and cleaners in well-ventilated areas.
- Batteries produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or flammable substances to come near the battery.
- Keeps hands and any other objects away from the radiator fan blades.
- Keep yourself and your clothing away from moving parts when the engine is running.
- Do not wear loose clothing or jewelry that can get caught in rotating parts or scratch surface finishes.
- Allow the engine, cooling system, brakes and exhaust to cool before working on a vehicle.

WORK SAFELY!

Perform this installation on a good clean level surface for maximum safety and with the engine turned off.

INSTALLATION OF WORK LIGHT MOUNTING BRACKET

1. Disconnect negative battery cable and remove radio antenna by twisting it in a counterclockwise direction, set it aside for the last step.



2. Remove the T25 and T30 torx fasteners from the passenger's side of the vehicle. *Note: The bolt above the antenna is size T30, and the bolt closer to the side mirror is size T25.

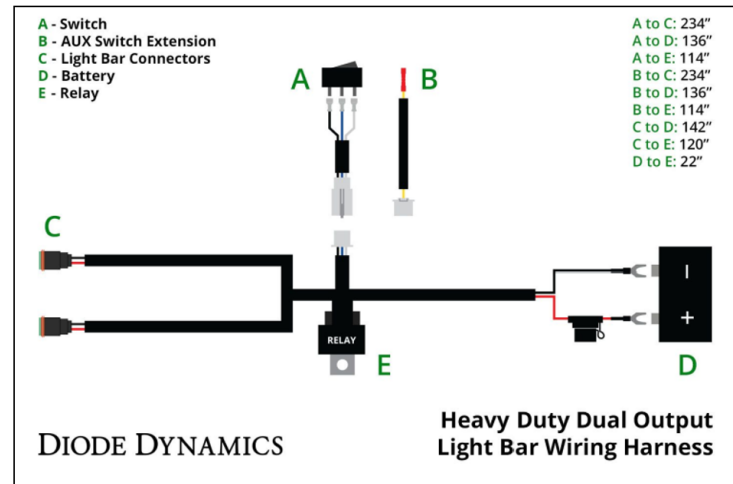


3. Lift cowl after four bolts have been removed, Open vehicle hood.



4. Identify passenger side and driver side of the wire harness, layout the wire harness in the engine bay.

*Note: Passenger side should be longer than the driver side, please verify the length before the next step.



5. Route wire harness connector thru as shown on the passenger's side. *Note: Verify the correct amount of wire to be able to connect to the light, re-secure the cowl by push it away from the windshield, the cowl should snap back in place.



6. While working on the passenger's side, align the Work Light Mounting Bracket in position as shown, tighten down the T25 torx fastener with the supplied washer from the kit.

*Note: DO NOT OVER TIGHTEN torx fastener on the bracket



7. Repeat the same process on the driver's side.

*Note the position of the wire harness by the windshield.



8. Locate one LED light pod, Position the two 5/16 nuts in the holes located at the back of the light pod. (The two nuts are facing toward each other)



9. Use the two 5/16 allen screws secure the lamp to the driver side Work Light Mounting Bracket

*Note: For the lamp position, the connector is on the bottom side of the lamp. The "D" logo should be in the upright



10. Connect the female electrical connector to the lamp.

**FOR VEHICLES WITHOUT UPFITTERS SWITCHES
CONTINUE TO THE NEXT SECTION.**



**FOR VEHICLES WITH UPFITTERS SWITCHES
CONTINUE TO PAGE 11.**

11. Repeat the same process on the other side.



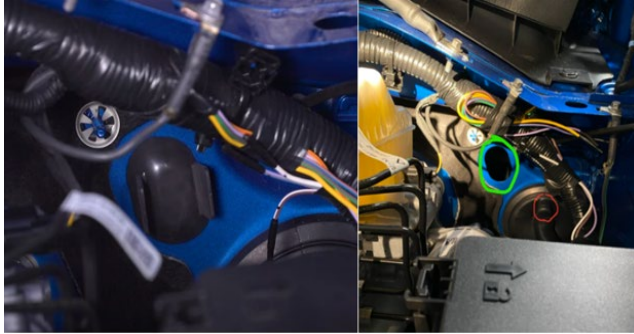
12. Reinstall the radio antenna by twisting it in clockwise direction, and make sure the letter "D" circled shown is upright on Both light pods.



SWITCH INSTALLATION (ONLY FOR VEHICLES WITHOUT UPFITTER SWITCHES)

DO NOT CUT THE HARNESS, Follow the under-hood wiring routing for Bronco without upfitter switches.

1. Find rubber grommet on driver's side and pull out from cab. See location below.



2. Fish wire and switch thru hole and into interior. Be sure to have enough wire going into the interior to reach the desired switch location.



3. With the on/off switch wires in, reinstall the plug from the interior side working around the harness.



4. Locate a position on the interior dash and install the on/off switch.

*Note: Zip tie as needed so the wire is not in the way of moving parts.



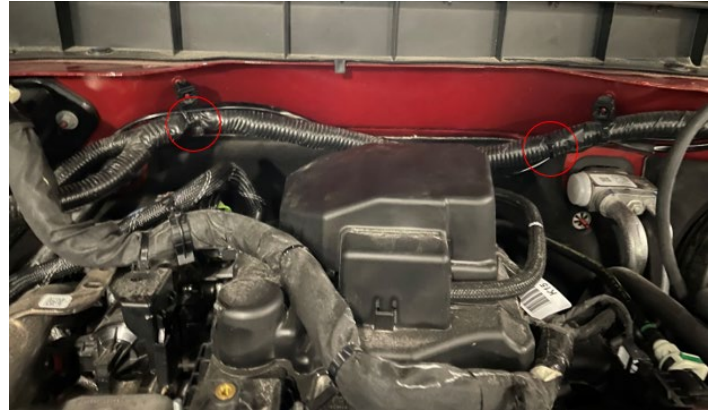
INSTALLING OF WIRING HARNESS (ONLY FOR VEHICLES WITHOUT UPFITTER SWITCHES)

1. Route the given harness under hood by attaching it with zip ties to the existing black harness at the back engine compartment wall.

*Note: red dotted line below shows the wiring harness' route.



3. Zip ties the given wiring harness to the existing wire at the back engine compartment wall as example shown below, cut off the end of zip ties to desired length.



2. Verify the length for connectors thru the openings by the hood hinges, up thru the panels above and to the lights, use edge biter clip zip ties on both driver's side and passenger's side as circled below, cut off the end of zip ties to desired length.



Passenger Side

Driver Side

INSTALLING OF WIRING HARNESS (ONLY FOR VEHICLES WITH UPFITTER AUX SWITCHES)

1. The upfitter auxiliary switches (6 switches in total) are located above the rearview mirror.

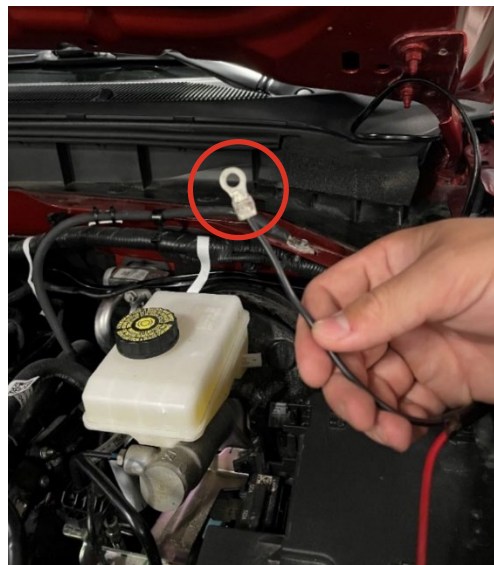
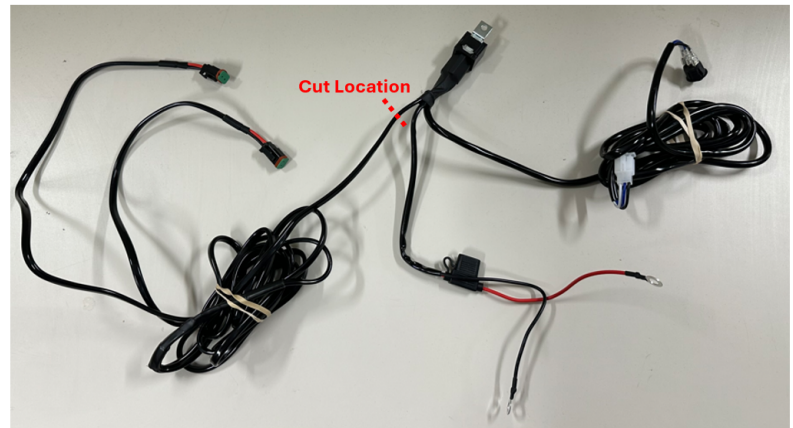
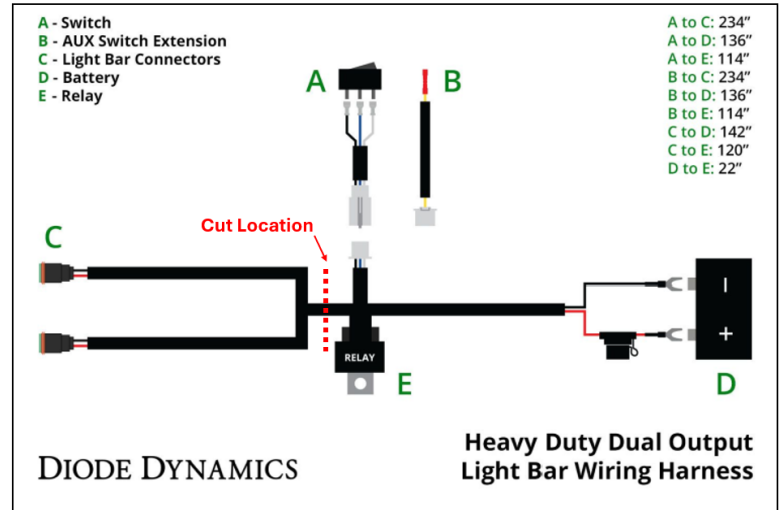
*Note: The factory-installed upfitter switches are optional extra on the Base and Outer Banks versions, and standard on Black Diamond, Wild Trak, Badlands, and First Edition trims. Check your Bronco to see if you have upfitter switches.

*Note: For more information about your Bronco please go to Bronco Owner's Manual.



2. If your vehicle is equipped with upfitter switches, cut the supplied wiring harness with the light end connectors at the relay switch, peel back the protective coating about 6 inches and expose a red and black wire. Locate crimp terminal from hardware kit XP0093 and install it onto the black wire as shown.

*Note Discard the wire harness portion with the relay and the on/off switch.



3. Locate the upfitter wiring under the hood on the driver's side.



4. Referring to the wiring diagram on the below, locate the yellow wire (1st switch wire).

*Note: If the yellow wire is connected to other accessory, please use another switch wire.

Relays are Coded as Follows:

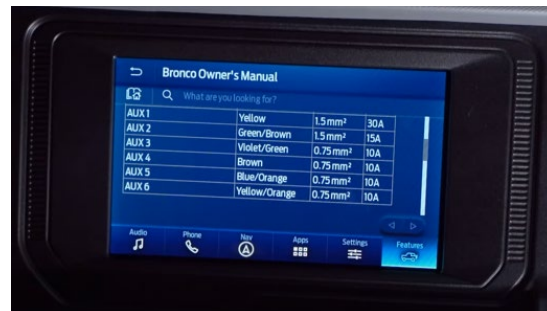
| Power Distribution Box | Wire Color | Wire Size | Fuse |
|------------------------|---------------|----------------------|------|
| AUX1 | Yellow | 1.5 mm ² | 25A |
| AUX2 | Green/Brown | 1.5 mm ² | 15A |
| AUX3 | Violet/Green | 0.75 mm ² | 10A |
| AUX4 | Brown | 0.35 mm ² | 5A |
| AUX5 | Blue/Orange | 0.35 mm ² | 5A |
| AUX6 | Yellow/Orange | 0.35 mm ² | 5A |

Non-powered Circuits:

| Circuit | Location | Wire Color | Wire Size |
|---------|-------------------------------|-------------|---------------------|
| B1 | Passenger Compartment | Brown/White | 1.5 mm ² |
| B2 | Passenger Compartment | White | 1.5 mm ² |
| C | Front Grille | Violet/Grey | 1.5 mm ² |
| D | Right-hand Visor | Grey/Orange | 1.5 mm ² |
| E | Right-hand Rear Quarter Panel | White/Grey | 1.5 mm ² |

AUX SWITCHES INFORMATION

*Note: You can find aux switches information from your Bronco Owner's Manual.



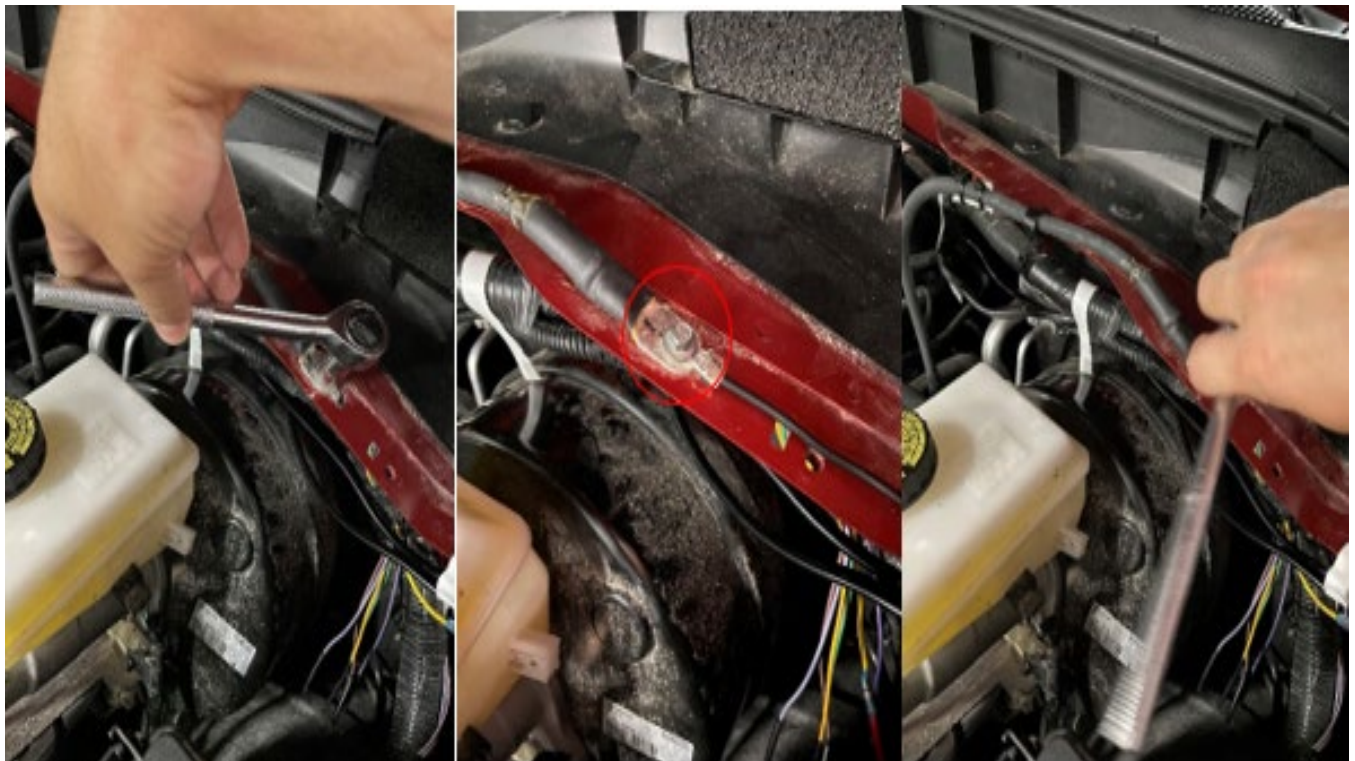
5. Install butt connector from RED power wire to upfitter YELLOW wire.



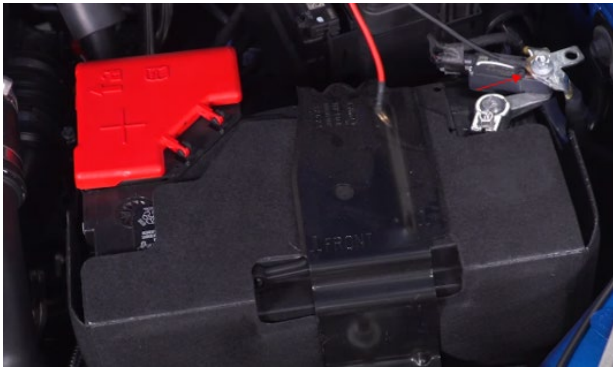
7. Add zip ties as shown below to make the engine bay organized.



6. Connect the black ground wire and fasten it with 8mm socket to the existing ground on the driver's side rear cowl area.



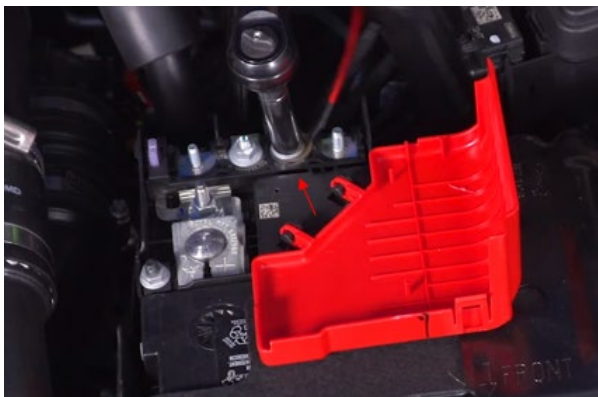
8. Install battery ground (negative) black wire to negative battery terminal.



10. When completed, close red protective cover.



9. Open red protective cover over battery positive terminal and install red positive wire to bus bar terminal using one of the fasteners on the bus bar.



BRONCO DITCH LIGHTS ALIGNMENT

1. After light installation is complete, check to see Both lights turn on with upfitter switch / dash switch.



2. Park vehicle in garage with limited or no lighting, move the light bracket to either center position or side position.

*Note: Either position is correct, it will depend on vehicle application such as off-road



3. Examples below shows the light direction (red arrows) in either center position or side position.

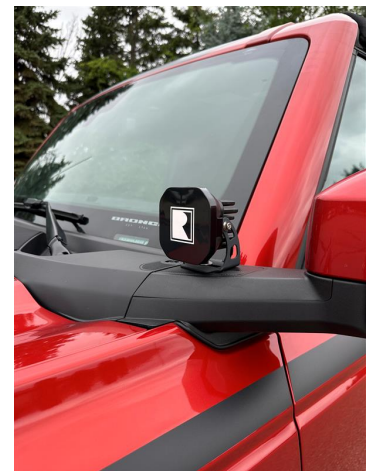


Center Position (On-Road) Side Position (Off-Road)

4. Install R Series ditch lights cover (Qty. 2) on both driver and passenger side, make sure the orientation is correct (R Series Logo upright position). Note: Please remove both covers before you turn on the ditch lights.



Passenger Side



Driver Side

5. The Bronco Ditch Lights Kit installation is complete.

