



INSTALLATION GUIDE

Direct-Fit 20" Light Bar, Fits 2021+ Ford Bronco w/ Standard Bumper
SKU: BNLT-BR-21S-B20

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RESOURCES & CONTACT



CALL 1.877.466.4744

CUSTOMER SERVICE HOURS: MON-FRI 9:00AM-7:00PM EST



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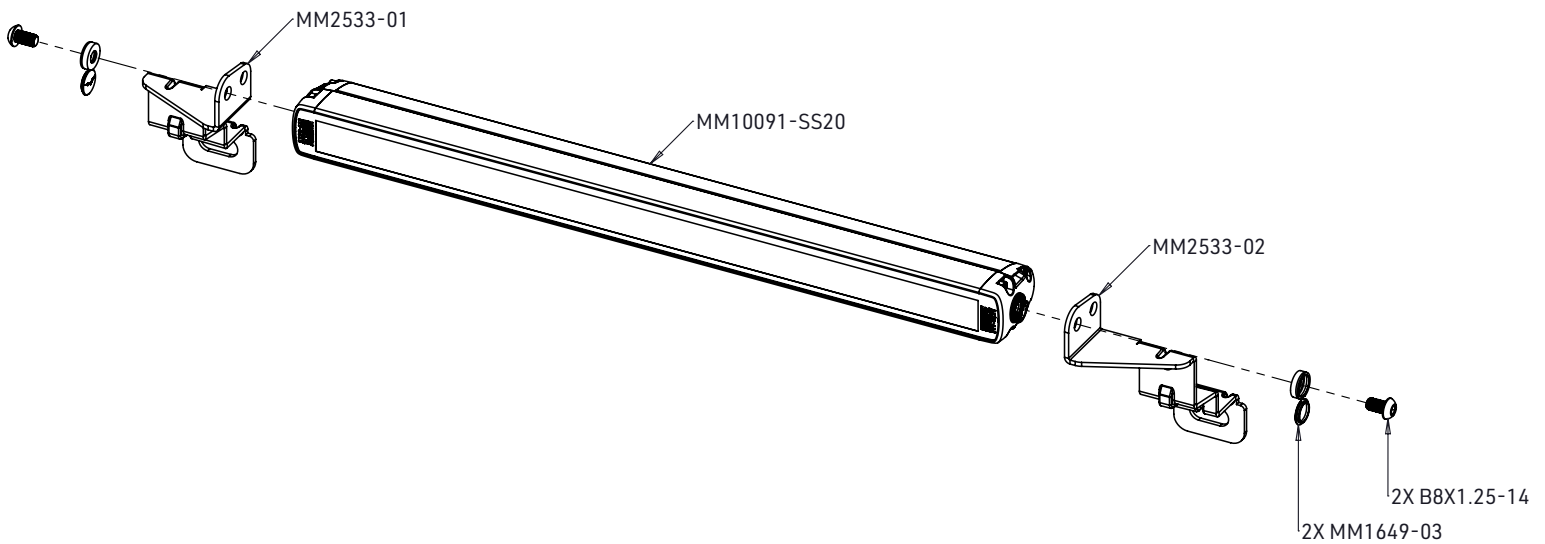


ENGINEERING BLOG

WWW.BORNE.COM/ENGINEERING

PARTS BREAKDOWN

PART NUMBER	DESCRIPTION	QTY
MM10091-SS20	20 INCH LIGHT BAR	1
MM2533-01	BRACKET 1	1
MM2533-02	BRACKET 2	1
B8X1.25-14	M8 BUTTON HEAD BOLT	2
MM1649-03	M8 FASTENER CAP	2
MM10082	WIRE HARNESS (NOT SHOWN)	1
MM1164-01	ZIP-TIE (NOT SHOWN)	12



FOR QUESTIONS OR ASSISTANCE WITH YOUR BORNE OFF-ROAD PRODUCT, CONTACT US AT 1.877.466.4744 OR VISIT BORNE.COM

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IMPORTANT SAFETY INFORMATION

- ▶ Borne Off-Road recommends you use safety glasses and protective gloves during the installation of our products
- ▶ Raise vehicle only on jack stands or on a vehicle lift
- ▶ Allow vehicle to cool completely prior to attempting installation
- ▶ Borne Off-Road is not responsible for any vehicle damage or personal injury due to installation errors, misuse, or removal of Borne Off-Road products
- ▶ If you need any assistance while installing our products, reach out to our Customer Service Team at 1-877-466-4744

REQUIRED TOOLS

PANEL TOOL	1/2" RATCHET AND EXTENSION
PAINTERS/MASKING TAPE	8MM SOCKET
ELECTRICAL TAPE	10MM SOCKET
METAL ROD	15MM SOCKET
WIRE STRIPPER	1/2" TORQUE WRENCH
DEUTSCH CLOSED BARREL TERMINAL CRIMP TOOL (FOR SIZE 16 TERMINAL)	5MM ALLEN WRENCH
1/4" RATCHET AND EXTENSION	SIDE CUTTERS
	LEVEL

INSTALL TIME: 3 HOURS

INSTALL DIFFICULTY: 

INSTALLATION INSTRUCTIONS

1. Remove the radiator cover. (9 pop clips)



2. Remove the bolts securing the grill to the grill support structure. (4x 10mm bolts)



3. If equipped, disconnect the electrical harness for the front camera and the fitting for the camera washer.



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4. Locate the front three rotating fasteners securing the fender flares in place and turn them 90 degrees, then pull outward to partially remove them. Do this on both sides.



5. Apply masking tape to the front sections of both fenders as shown in the images below.



6. Carefully pull on both sides of the grill to unseat the grill from the grill support structure, then remove the grill from the vehicle.

7. Pull outward on the rear corners of the front fascia to unseat it from the clips that secure it to the fenders. Do this on both sides.



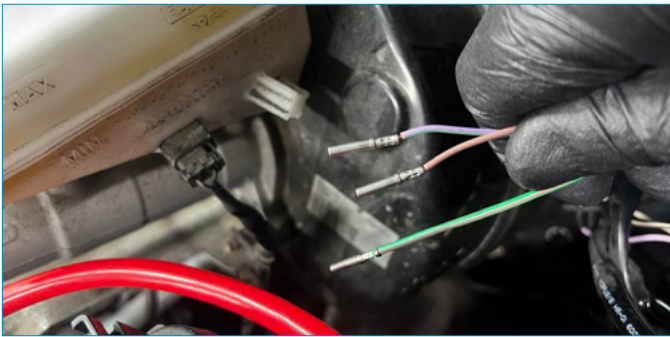
8. Unseat the front fascia from the clips that secure it to the grill support structure. Once fully unseated, remove the front fascia from the vehicle.



If installing the light bar kit compatible with the factory Upfitter switches, proceed to step 9. If installing a light bar kit using the non-Upfitter wiring harness, proceed to step 15.

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9. The Upfitter auxiliary wires are located on the driver's side of the vehicle next to the brake booster. Locate the green with brown stripe wire (Aux 2) and trim the cap off the end. Once trimmed, strip approximately 1/4" of insulation off the wire. Once stripped, carefully insert the wire into one of the provided female closed barrel terminals, ensuring all strands make it into the terminal, then crimp it in place. This green with brown stripe wire corresponds to the auxiliary 2 Upfitter switch. The main LED array of the 20-inch light bar draws approximately 7amp at 12vdc, allowing it to be connected to any of the auxiliary circuits. Two additional auxiliary circuits will also be needed, one for the white DRL and one for the amber DRL. Any two of the remaining circuits can be used for the DRLs. For this install guide, we chose auxiliary 3 (violet with green stripe wire) and 4 (brown wire). Trim the caps off the ends of the two additional upfitter auxiliary wires, then strip approximately 1/4" of insulation. Insert each wire into one of the provided female closed barrel terminals. Once inserted, crimp the terminal in place. (3x Female Closed Barrel Terminals)



10. Insert the green with brown stripe wire into position 4 of the provided male wire harness connector. Insert the brown wire into position 3; this will power the amber DRL. Insert the violet with green stripe wire into position 2; this will power the white DRL. A clicking sound will indicate that the terminals have been pressed far enough to engage with the locking tabs inside the connector.

[Images on right]

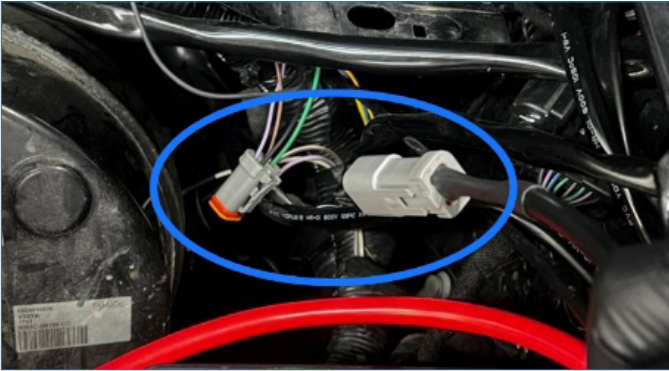


11. Perform a visual inspection of the terminals from the front side of the connector. Ensure the locking rim of each terminal rests on the locking tab inside the connector. Once confirmed, insert the provided locking wedge into the center of the fitting. The wedge will be fully seated when it sits flush with the face of the connector. Next, secure the ground ring terminal to the chassis ground located above the brake booster. (1x Locking Wedge, 1x 8mm Bolt)



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12. Connect the direct-fit wire harness to the connector.



13. Route the harness along the driver's side fender and down between the radiator and radiator support structure.



14. Once the connector on the end of the wire harness makes it past the bottom of the grill support structure, carefully pull on the wire harness until the slack in the engine bay is removed. Proceed to step 25.



15. Remove the three female spade terminals from the two-position light bar switch. Once removed, tape the three wires together so they do not get mixed up with the wires for the three-position switch. The female spade terminals have a locking feature that must be depressed to unlock them from the blades on the back side of the switch.

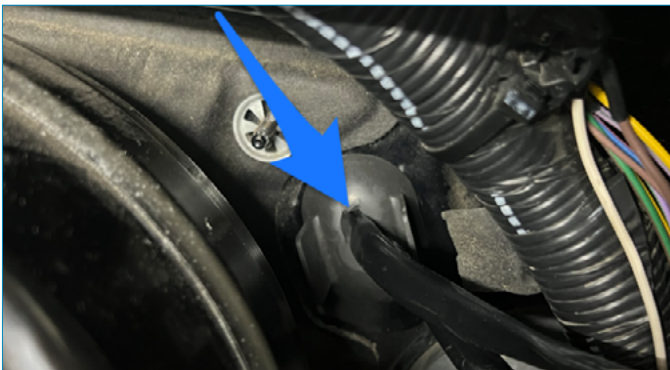


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16. Remove the five female spade terminals from the three-position amber/white switch. Once removed, tape the switch harness to a metal rod. Feed the harnesses inside the driver-side fender from the battery back to the cowl.



17. Feed the switch wiring harness through the driver's side of the firewall. For this installation, we drilled a hole in the rubber plug next to the brake booster to pass the wires through



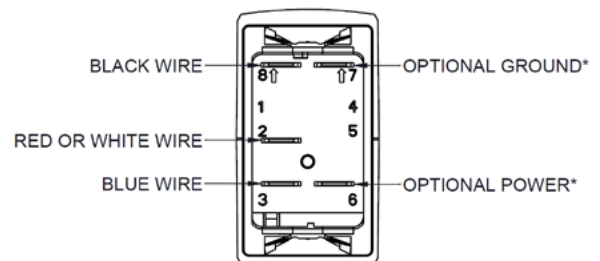
18. Pull the remaining length of the switch wire harness through the firewall, then route the wiring to the desired switch mounting location. For this installation, we used the Borne Off-Road Bronco Direct-Fit Switch Panel, which mounts above the center console.



19. Feed the wires through the switch holes, then reconnect them to the switches, as shown in the diagrams below. Once the wires are reconnected, install the switches into the mounting holes.

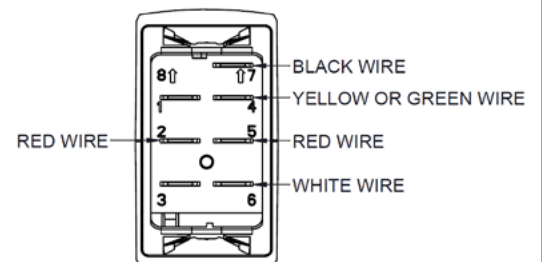


2 POSITION SWITCH: ON - OFF



*TO ILLUMINATE BOTTOM HALF OF SWITCH. WIRING NOT INCLUDED.

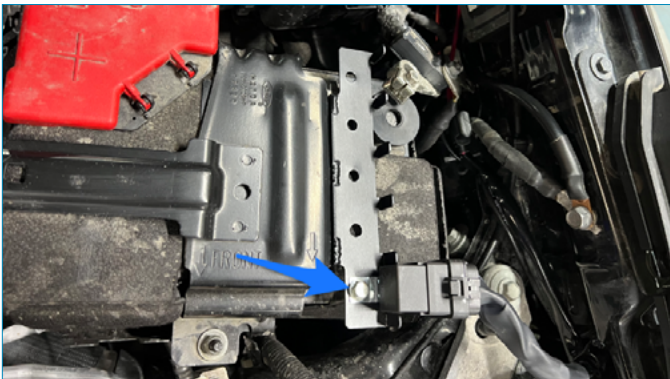
3 POSITION SWITCH: ON - OFF - ON



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20. Secure all loose wiring under the dashboard and driver-side footwell. The wire must be secured out of the way of the pedals, steering column, and any other moving components.

21. Find a suitable location to mount the wire harness relay. For this installation, we used our Borne Off-Road Bronco Direct-Fit Battery Relay Holder.



22. Connect the positive wire from the harness to a suitable power distribution point on the vehicle (this could be the battery if no other option is available). Connect the wire harness ground wire to a suitable chassis ground. For this installation, we used our Borne Off-Road Bronco Direct Fit Bus Bar Kit.



23. Route the harness down between the radiator and radiator support structure.



24. Once the connector on the end of the wire harness makes it past the bottom of the grill support structure, carefully pull on the wire harness until the slack in the engine bay is removed.



25. Remove the plastic trim covers from the bumper by pulling outward to release the clips securing them in place.



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26. Remove the upper, inner 15mm bumper bolt from both sides of the bumper as shown in the images below



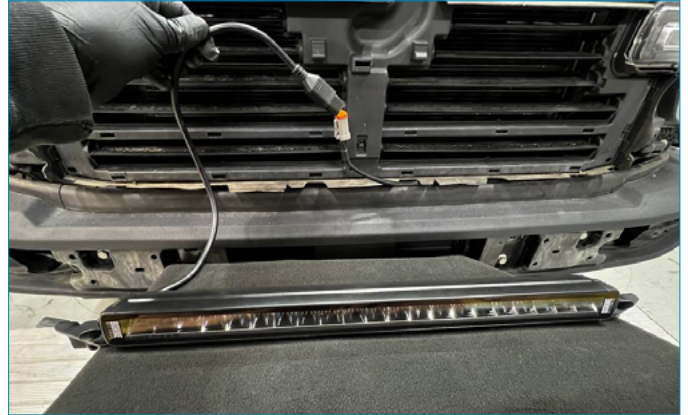
27. Loosely install the driver's side bracket (MM2533-02) to the light bar as shown in the image below using one of the provided M8 button head bolts and M8 fastener caps. (1x B8X1.25-14 and 1x MM1649-03)



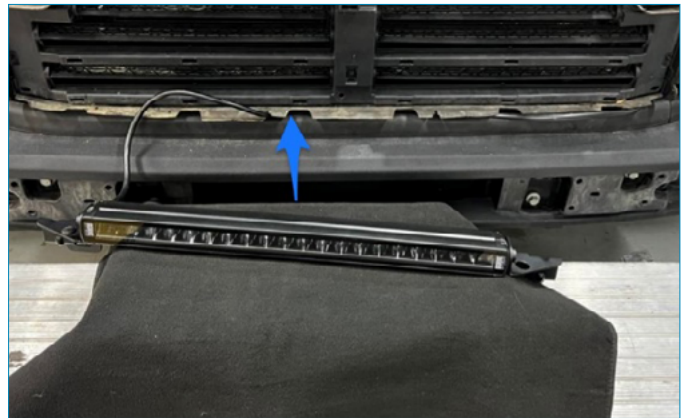
28. Loosely install the passenger's side bracket (MM2533-01) to the light bar as shown in the image below using one of the provided M8 button head bolts and M8 fastener caps. (1x B8X1.25-14 and 1x MM1649-03)



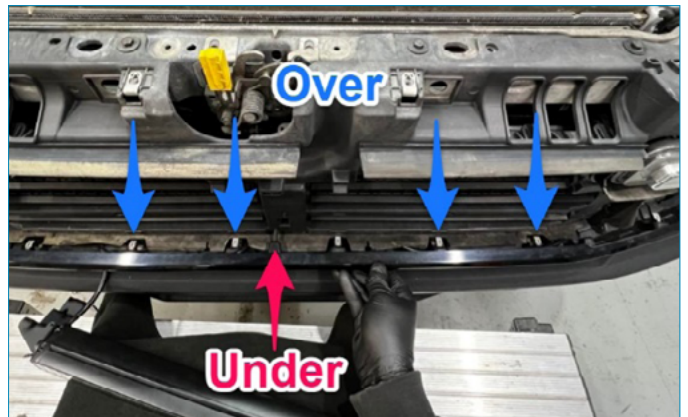
29. Rest the light and bracket assembly on a suitable surface in front of the bumper, then connect the light bar to the wire harness.



30. Push the harness connector into the front of the vehicle, between the grill support structure and bumper.



31. Route the wire harness over/under the front fascia clips as shown in the image below.

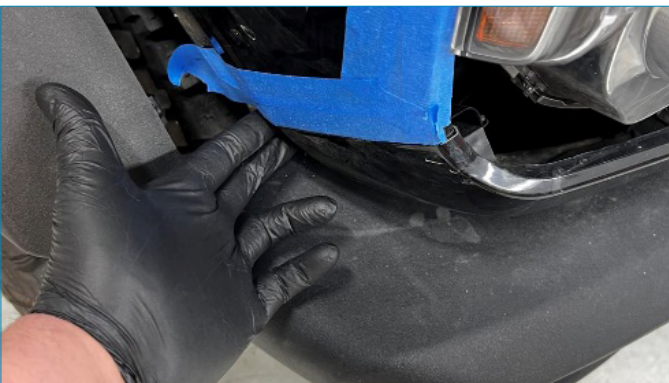


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32. Reinstall the front fascia. Be sure all the clips are fully seated and that the wires are not being pinched.



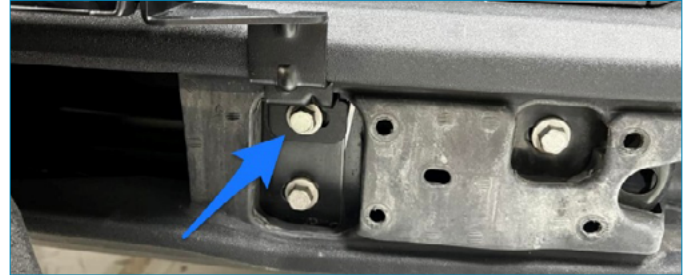
33. Push the side of the front fascia back into place. Do this on both sides.



34. Reinstall the grill, then push it in place to engage all the clips.



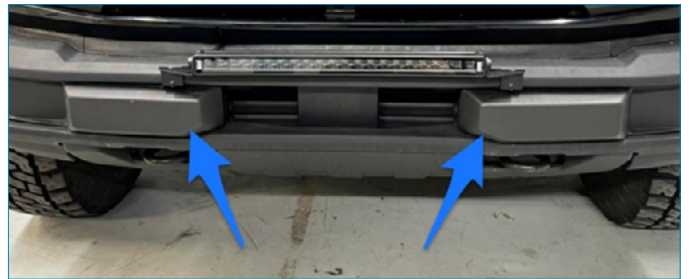
35. Fasten the light bar brackets to the front bumper with the previously removed bumper bolts. Torque the bolts to 81 lb-ft (110 Nm). (2x 15mm bolts) [Additional image on top right]



36. Use a level to adjust the light as desired. Once adjusted, tighten the bolts securing the light to the bracket and snap the fastener caps closed.



37. Reinstall the plastic trim covers onto the bumper.



38. Use the provided zip-ties to bundle up and secure all loose wires in place.

39. Reinstall the front grill to the grill support structure and secure it in place with the previously removed hardware. If equipped, reconnect the front camera and camera washer hose. (4x 10mm bolts)

40. Reinstall the radiator cover. (9x pop clips)

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DISPOSAL INSTRUCTIONS

- › Do not dispose of any product as unsorted municipal waste. Use separate collection facilities. Contact your local authority for information regarding the collection systems available.

[VIEW WARRANTY INFO](#)



WARNING

Cancer and Reproductive Harm
www.P65Warnings.ca.gov



- › This product can expose you to chemicals which are known to the state of California to cause cancer. For more information visit: www.p65warnings.ca.gov