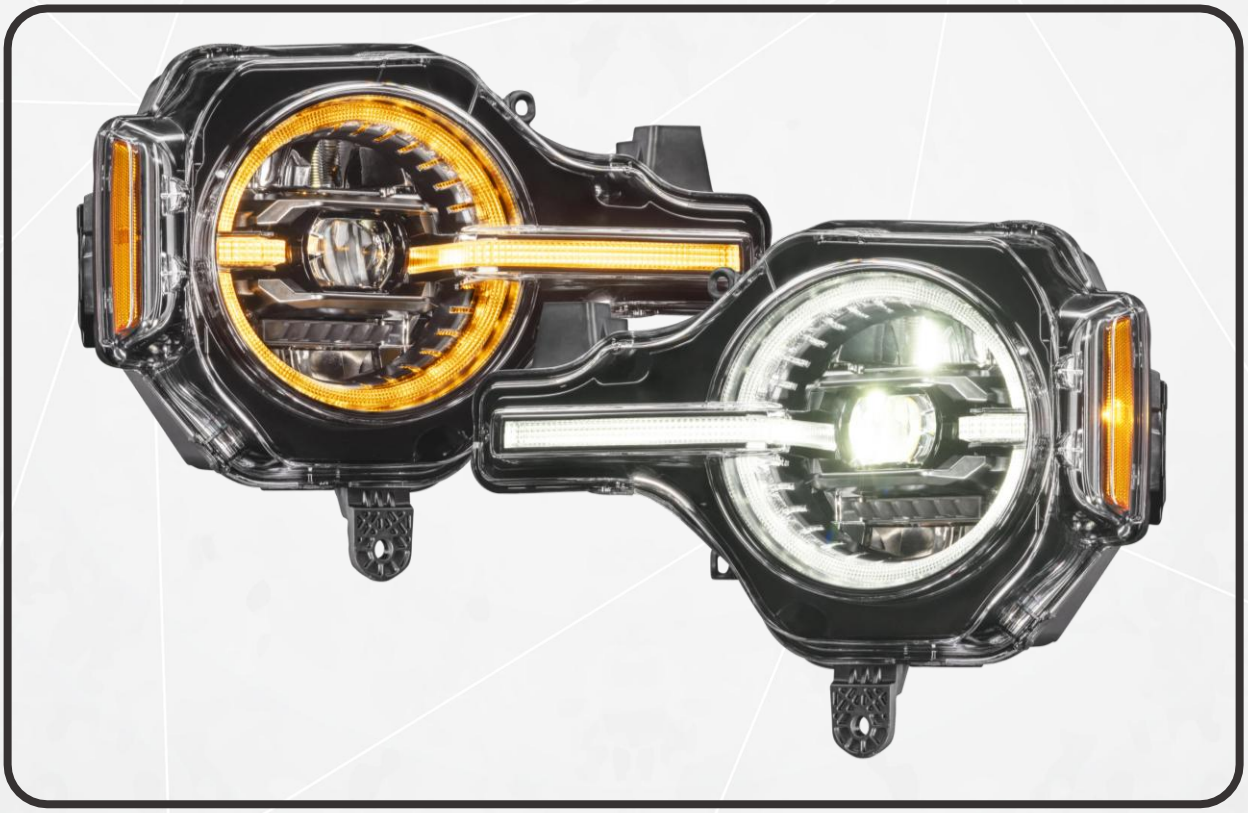
MORIMOTO

BRIGHT IS ONLY THE BEGINNING

INSTALL GUIDE

XRGB EVO HEADLIGHTS: 2021+ FORD BRONCO

LF2-497R



DESIGNED + ENGINEERED + PERFECTED IN ATLANTA, GA

WARNING: IT IS THE INSTALLERS RESPONSIBILITY TO CONFIRM COMPLIANCE WITH STATE AND LOCAL LAWS. BY READING THIS DOCUMENT, YOU AGREE IT IS ONLY TO BE USED AS AN EDUCATIONAL GUIDE. MORIMOTO LIGHTING NOR ITS DEALERS MAKE GUARANTEES ON ANY FINISHED RESULTS, NOR ARE THEY TO BE HELD RESPONSIBLE FOR ANY DAMAGE, MISUSE, OR PERSONAL INJURIES. IF YOU ARE UNABLE TO CLEARLY UNDERSTAND AND ADAPT THE INFORMATION BELOW, PROFESSIONAL INSTALLATION IS RECOMMENDED.

IMPORTANT: IF YOUR VEHICLE IS EQUIPPED WITH ANYTHING BUT MORIMOTO OR OEM TAILLIGHTS, SIDE MARKERS OR OTHER OEM EXTERIOR LIGHTING; YOU MAY EXPERIENCE A HYPER FLASH AND/OR PROBLEMS WITH THE SEQUENTIAL SIGNAL SETTING ON THESE HEADLIGHTS. THIS IS NOT A DEFECT IN THE HEADLIGHT AND CAUSED BY UN-MATCHED IMPEDANCE WITH YOUR ORIGINAL VEHICLE SETTINGS.

XRGB EVO HEADLIGHTS: 2021+ FORD BRONCO

TABLE OF CONTENTS PAGE

DISASSEMBLY ---------- 4

HEADLIGHT SETUP ---------- 8

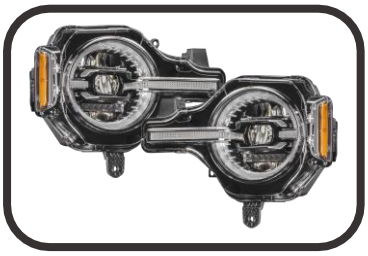
WIRING ---------- 12

HEADLIGHT INSTALLATION ---------- 14

HEADLIGHT AIMING ---------- 15

RGB CONTROLLER OPPERATION ---------- 16

WHAT'S INCLUDED



2X (PAIR) HEADLIGHT ASSEMBLIES



2X RGB CROSSOVER HARNESSES



1X FUSE TAP



1X DRL RELAY



1X DRL HARNESS



4X PAIRS OF MODE SELECTOR KEYS

XRGB EVO HEADLIGHTS: 2021+ FORD BRONCO

WHAT'S INCLUDED



2X MODE SELECTOR
KEY EXTENSIONS

OPTIONAL ADD-ONS (SOLD SEPARATELY)



2X SUPERCHARGED
LED DRIVERS

REQUIRED TOOLS

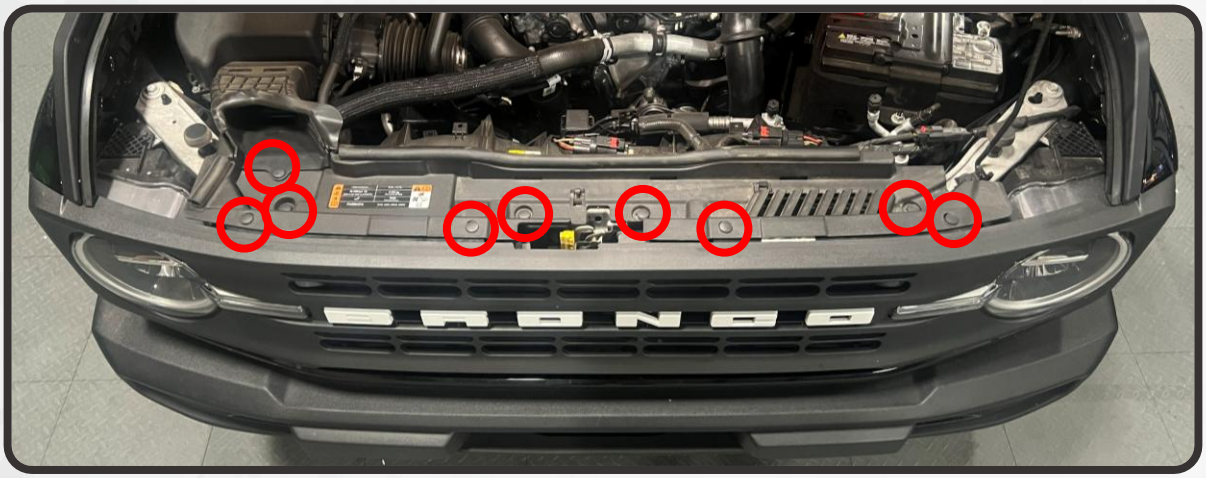
- TRIM REMOVAL TOOL
- RATCHET
- 8MM AND 10MM SOCKETS
- #2 PHILLIPS HEAD SCREWDRIVER

DISASSEMBLY

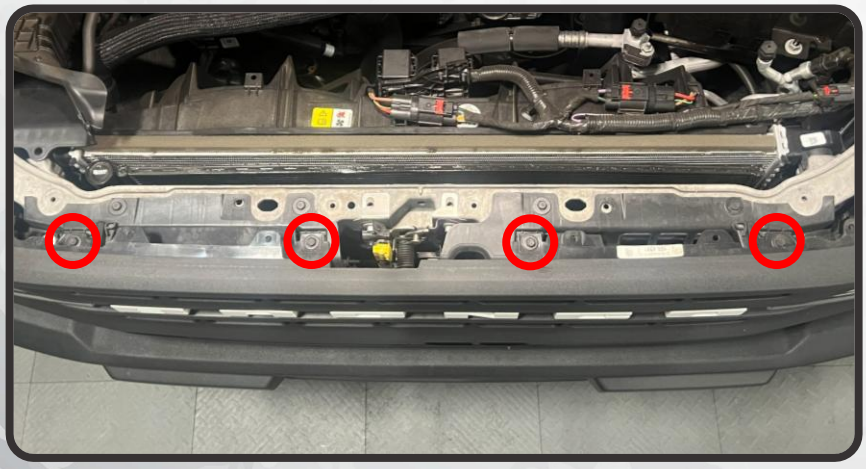
THIS DOCUMENT IS MEANT TO SERVE AS A GENERAL GUIDE FOR VEHICLE DISASSEMBLY AND PRODUCT INSTALLATION. WHILE WE TRY TO COVER THE PROCESS AS THOROUGHLY AS POSSIBLE, YOUR EXPERIENCE MAY DIFFER SLIGHTLY DUE TO DIFFERENCES BETWEEN YEARS, TRIM PACKAGES, OPTIONS, OR AFTERMARKET PARTS INSTALLED

VEHICLE USED IN THIS GUIDE:
2025 FORD BRONCO BIG BEND

1. RAISE THE HOOD OF THE VEHICLE
2. REMOVE THE NINE PLASTIC PUSH-CLIPS THAT SECURE THE UPPER GRILLE COVER. REMOVE THE GRILLE COVER AND SET IT ASIDE



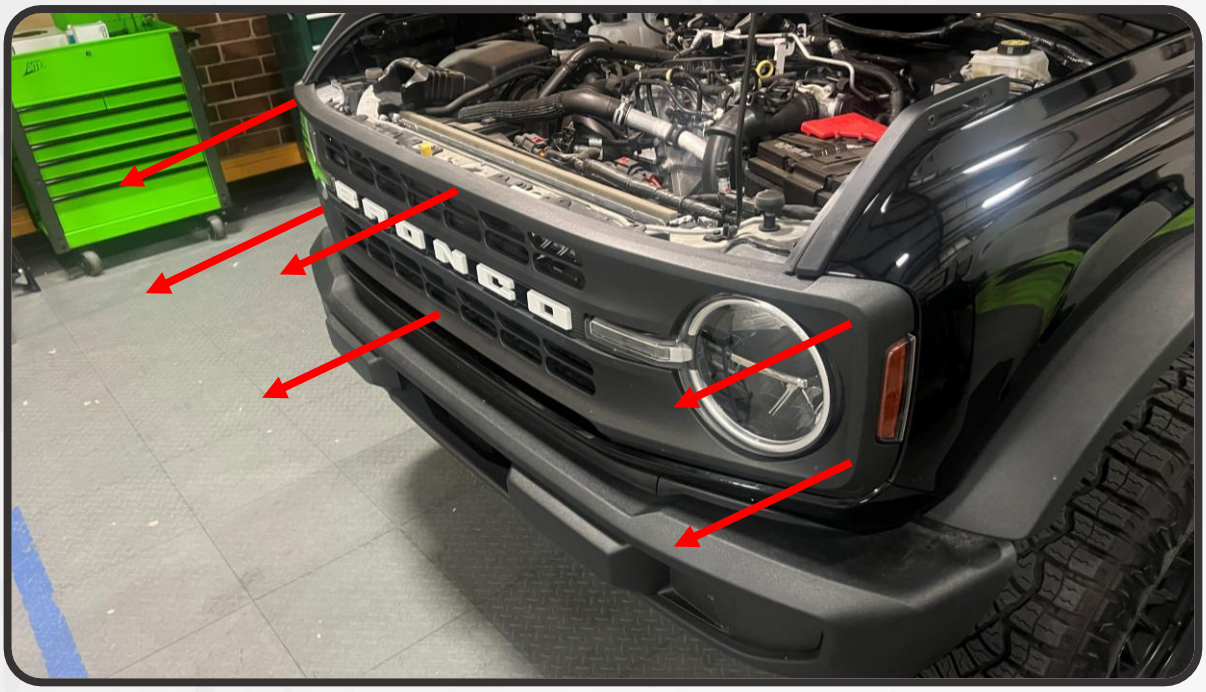
3. REMOVE THE FOUR 10MM BOLTS THAT SECURE THE TOP OF THE GRILLE
4. IF YOUR VEHICLE IS EQUIPPED WITH THE FRONT CAMERA, DISCONNECT THE BROWN FRONT CAMERA PLUG LOCATED AT THE TOP OF THE GRILLE NEXT TO THE PASSENGER-SIDE HEADLIGHT





DISASSEMBLY

5. PULL THE GRILLE FORWARD TO RELEASE THE CLIPS THAT SECURE IT TO THE VEHICLE. REMOVE THE GRILLE AND SET IT ASIDE



6. BEHIND THE FENDER FLARE, LOCATE THE LATCH AND ROTATE IT 90 DEGREES COUNTER-CLOCKWISE UNTIL IT STOPS. THIS WILL RELEASE THE FRONT OF THE FLARE FROM THE FENDER



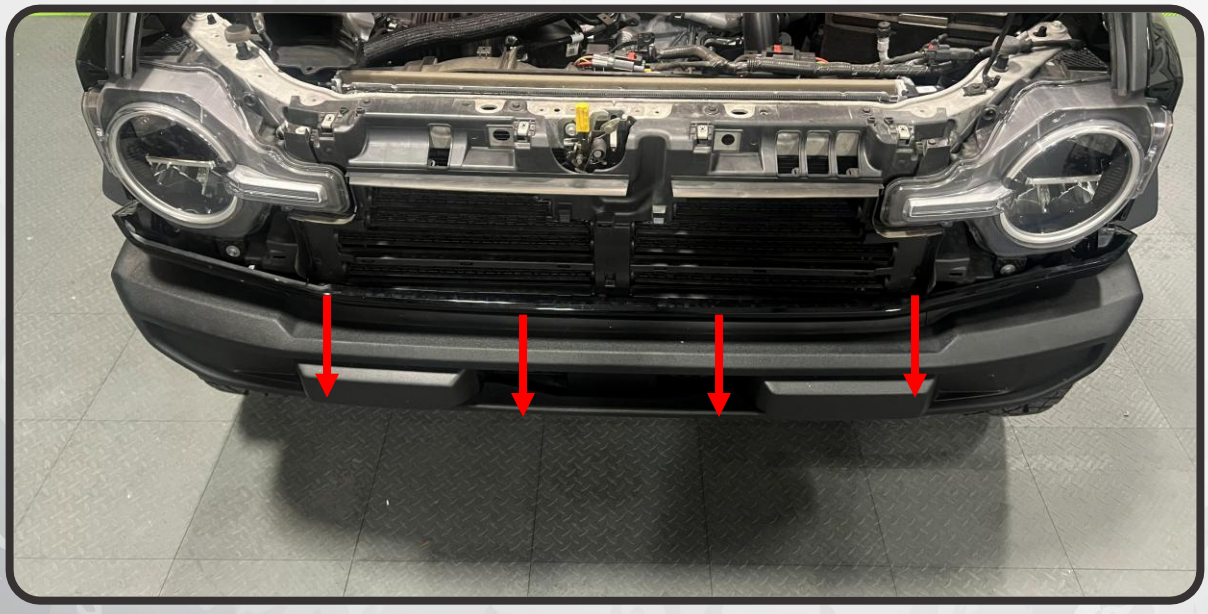
DISASSEMBLY

7. PULL THE FRONT OF THE FENDER FLARE AWAY FROM THE VEHICLE. WHILE HOLDING THE FLARE WITH ONE HAND, USE THE OTHER HAND TO FIRMLY PULL THE END OF THE FRONT GRILLE TRIM AWAY FROM THE FENDER



8. REPEAT STEPS 6 AND 7 ON THE OPPOSITE SIDE OF THE VEHICLE

9. PULL THE FRONT GRILLE TRIM PANEL FORWARD TO RELEASE THE CLIPS SECURING THE CENTER OF THE PANEL. WITH THE CLIPS RELEASED, REMOVE THE PANEL AND SET IT ASIDE



DISASSEMBLY

10. REMOVE THE ONE 8MM BOLT FROM THE BOTTOM OF THE HEADLIGHT, AND THE TWO 10MM BOLTS AND ONE PLASTIC PUSH-CLIP SECURING THE TOP OF THE LIGHT





11. PULL THE HEADLIGHT ASSEMBLY FORWARD TO RELEASE IT FROM THE VEHICLE. UNPLUG THE MULTI-PIN CONNECTOR FROM THE BACK OF THE LIGHT, AND SET THE HEADLIGHT ASIDE

12. REPEAT STEPS 10 AND 11 ON THE OPPOSITE SIDE OF THE VEHICLE



HEADLIGHT SETUP

DRL/TURN SIGNAL MODE SELECTOR KEYS

13. WITH THE MORIMOTO XB MODE SELECTOR KEYS, YOU CAN DECIDE WHAT STYLE YOU'D LIKE FOR YOUR DAYTIME RUNNING LIGHT AND TURN SIGNAL. CHOOSE FROM THE COLORCODED KEYS SHOWN BELOW FOR YOUR DESIRED STYLE

			
• DRL: WHITE • TURN SIGNAL: FADE-OFF	• DRL: WHITE • TURN SIGNAL: SEQUENTIAL	• DRL: AMBER • TURN SIGNAL: FADE-OFF	• DRL: AMBER • TURN SIGNAL: SEQUENTIAL

14. INSTALL THE MODE SELECTOR FOR YOUR PREFERRED MODE ONTO THE 3-PIN CONNECTOR ON THE BACK OF EACH HEADLIGHT (BLUE WILL COME PREINSTALLED OUT OF THE BOX). THIS CAN ALWAYS BE CHANGED AFTER INSTALL IF DESIRED. MAKE SURE THE VEHICLE AND HEADLIGHTS ARE OFF WHEN CHANGING MODE SELECTORS. IF YOU DO PLAN TO CHANGE MODE SELECTOR KEYS LATER, AND WOULD LIKE TO MAKE THE CONNECTOR EASIER TO ACCESS AFTER INSTALL, CONNECT THE INCLUDED EXTENSION HARNESS WHICH CAN BE ROUTED TO THE ENGINE BAY DURING INSTALL





HEADLIGHT SETUP

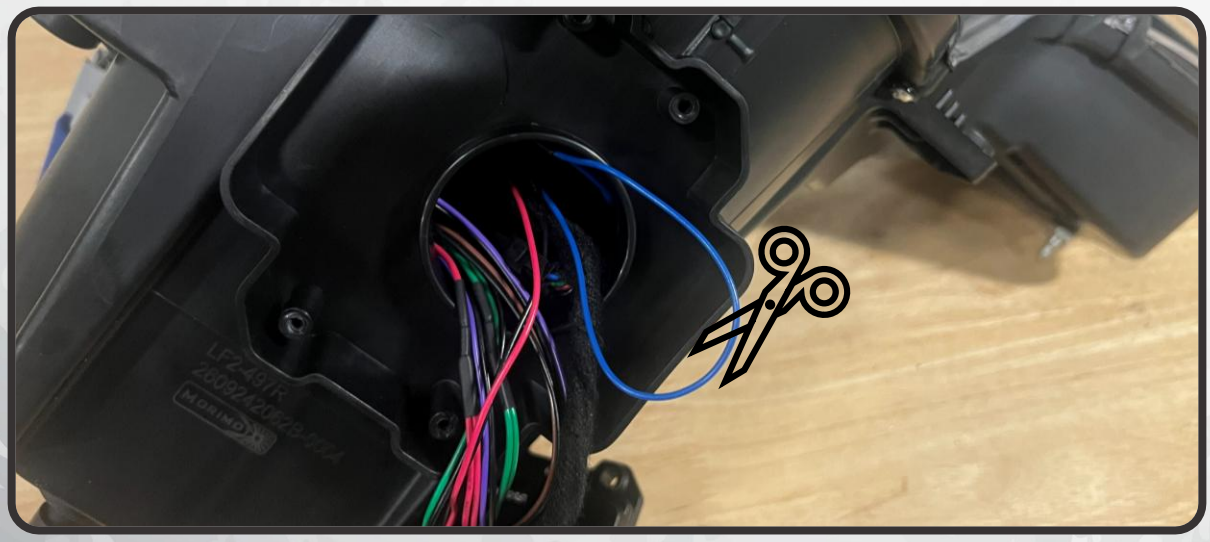
ENABLING RGB MODE (OFFROAD USE ONLY)

15. TO ENABLE RGB FUNCTIONALITY, REMOVE THE FOUR PHILLIPS HEAD SCREWS SECURING THE HEADLIGHT DRIVER TO THE BOTTOM OF THE HEADLIGHT, AND REMOVE THE DRIVER FROM THE HOUSING



16. LOOK INTO THE HOUSING AND LOCATE THE BLUE WIRE LOOP. CUTTING THIS WIRE WILL ENABLE RGB FUNCTIONALITY. WRAP THE BARE WIRE ENDS WITH ELECTRICAL TAPE

17. REINSTALL THE DRIVER ONTO THE HOUSING, MAKING SURE THE RUBBER SEAL IS SEATED PROPERLY AND DOES NOT GET PINCHED OR BUNCHED UP. SECURE THE DRIVER TO THE HOUSING USING THE ORIGINAL FOUR PHILLIPS HEAD SCREWS, HAND TIGHTENTING THEM DOWN IN A STAR PATTERN TO ENSURE THE DRIVER SEATS EVENLY AGAINST THE HOUSING



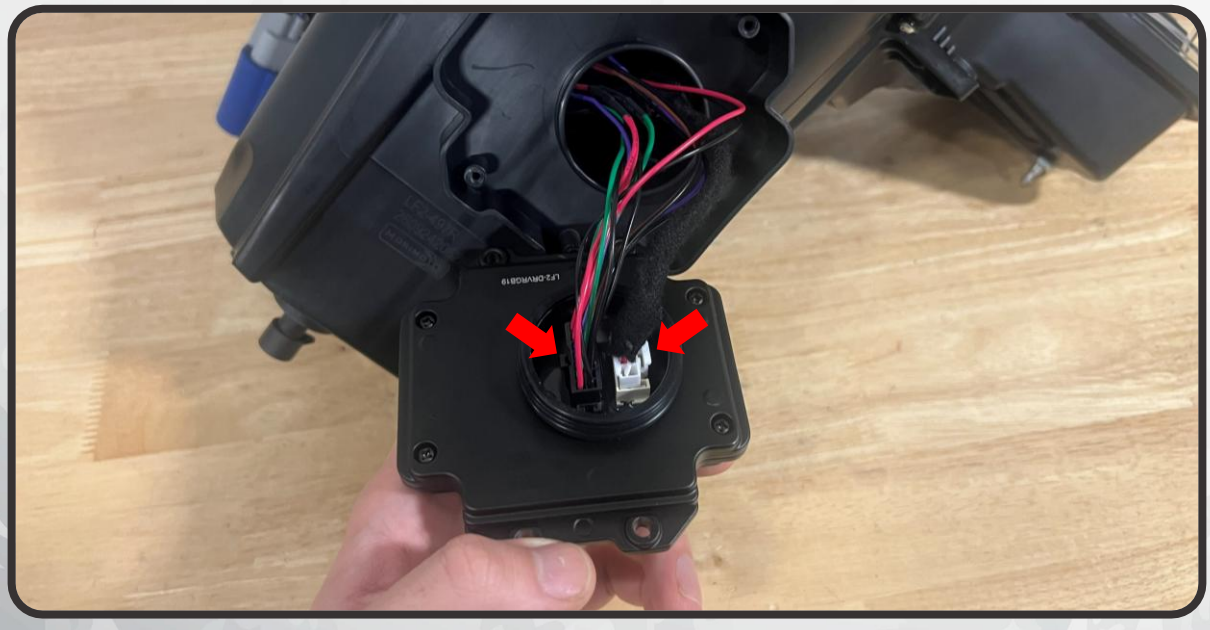
HEADLIGHT SETUP

SUPERCHARGED DRIVER INSTALLATION (OFFROAD USE ONLY)

18. IF YOU HAVE PURCHASED THE MORIMOTO XB SUPERCHARGED HEADLIGHT DRIVERS (SOLD SEPARATELY, FOR OFFROAD USE ONLY), REMOVE THE FOUR PHILLIPS HEAD SCREWS SECURING THE STANDARD HEADLIGHT DRIVER TO THE BOTTOM OF THE HEADLIGHT



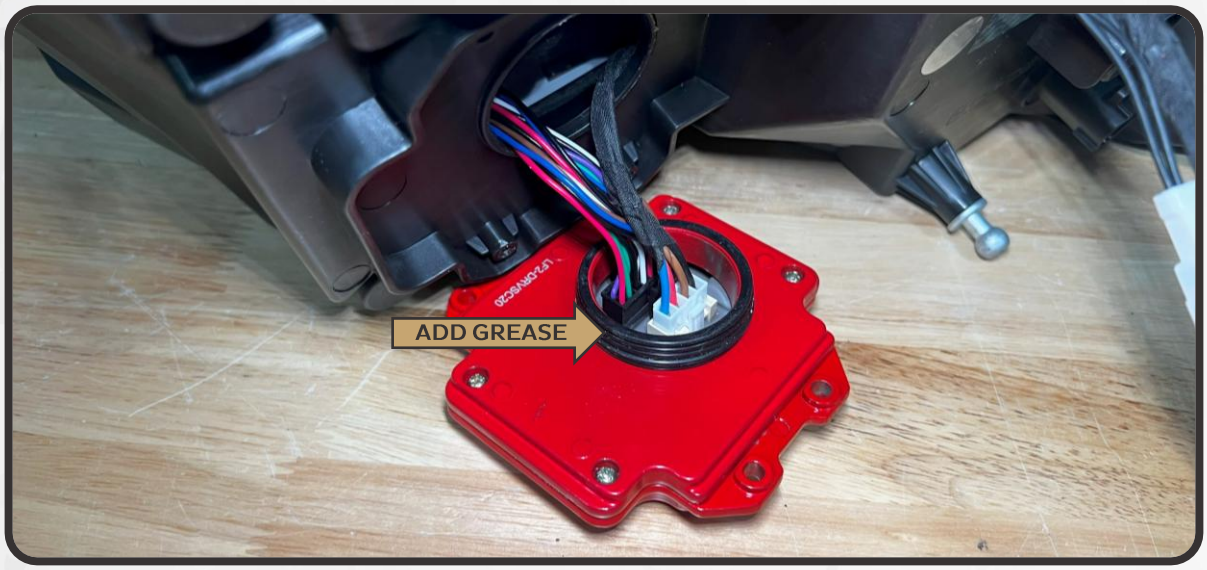
19. PULL THE DRIVER OFF OF THE HOUSING. DEPRESS THE CLIP ON EACH OF THE DRIVER CONNECTORS AND PULL TO DISCONNECT THE DRIVER FROM THE INTERNAL HEADLIGHT WIRING



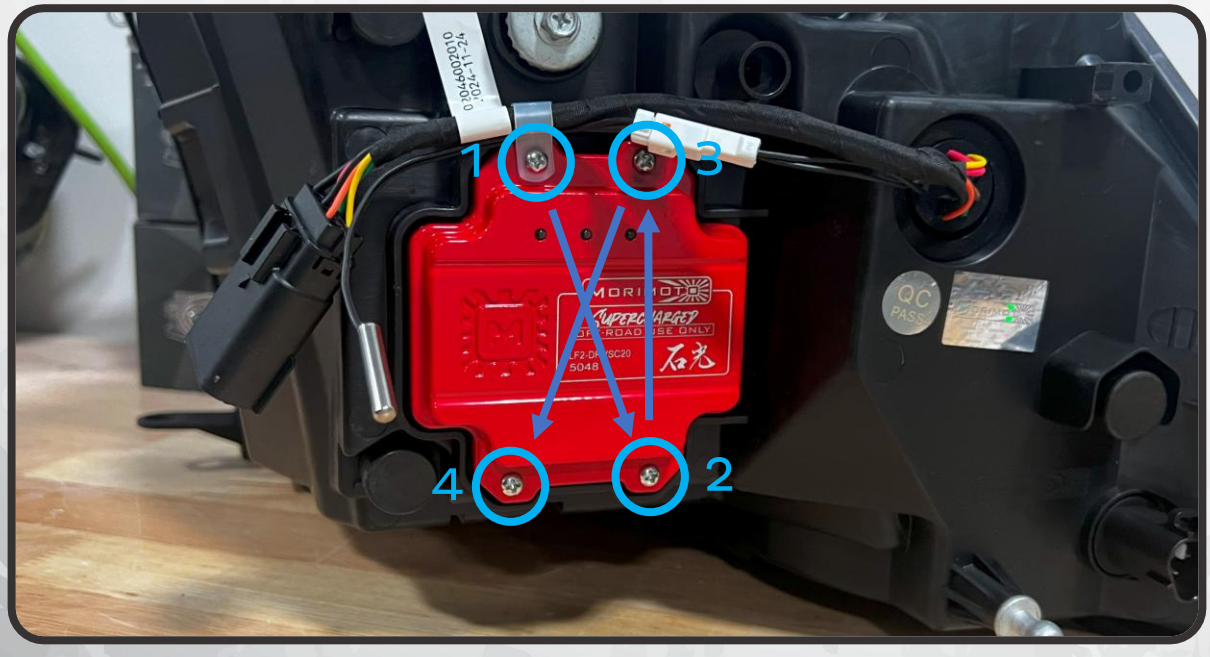
HEADLIGHT SETUP

SUPERCHARGED DRIVER INSTALLATION (OFFROAD USE ONLY)

20. CONNECT THE NEW SUPERCHARGED DRIVER TO THE INTERNAL HEADLIGHT WIRING, MAKING SURE THE TAB ON EACH OF THE CONNECTOR'S CLIPS SECURELY INTO PLACE. APPLY A THIN LAYER OF THE INCLUDED GREASE TO THE OUTER EDGE OF THE SEAL ON THE NEW DRIVER



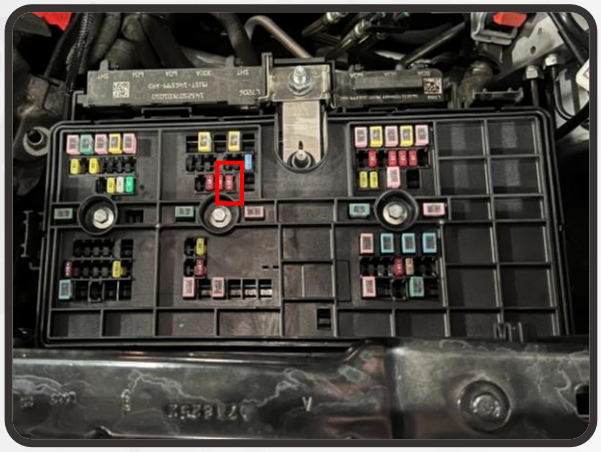
21. PRESS THE SUPERCHARGED DRIVER STRAIGHT INTO THE MOUNTING LOCATION, MAKING SURE THE RUBBER SEAL IS SEATED PROPERLY AND DOES NOT GET PINCHED OR BUNCHED UP. SECURE THE DRIVER TO THE HOUSING USING FOUR OF THE PROVIDED PHILLIPS HEAD SCREWS, HAND TIGHTENTING THEM DOWN IN A STAR PATTERN TO ENSURE THE DRIVER SEATS EVENLY AGAINST THE HOUSING

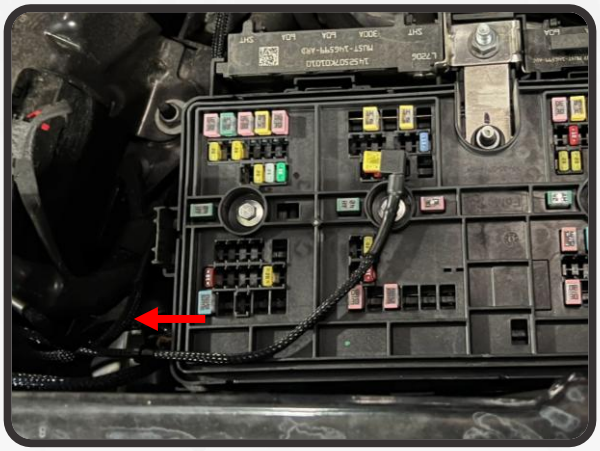


WIRING

22. OPEN THE UNDER-HOOD FUSE BOX AND LOCATE AND REMOVE THE 10A FUSE IN SLOT #24

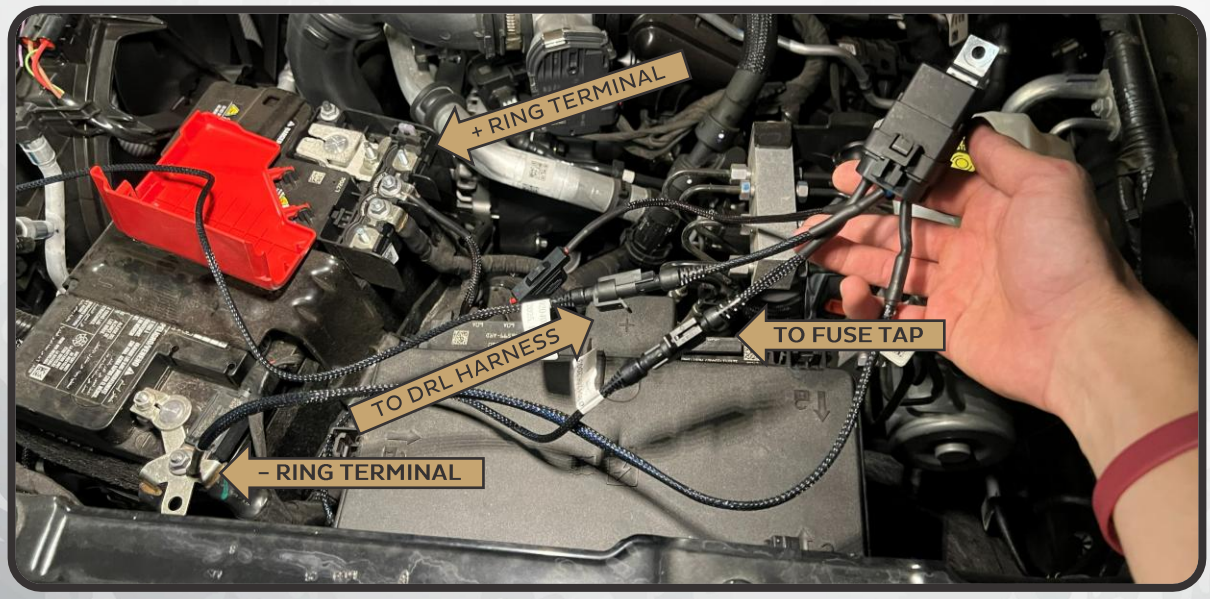
23. INSTALL THE PROVIDED FUSE TAP INTO THE #24 SLOT AND ROUTE THE WIRE OUT OF THE FUSE BOX. USING A DRILL WITH A 5.5MM/7/32" DRILL BIT OR A SMALL CUTTING TOOL, MAKE A NOTCH IN THE SIDE WALL OF THE FUSE BOX LID SO THAT THE LID CAN CLOSE OVER THE GROMMET ON THE DRL FUSE TAP WIRE





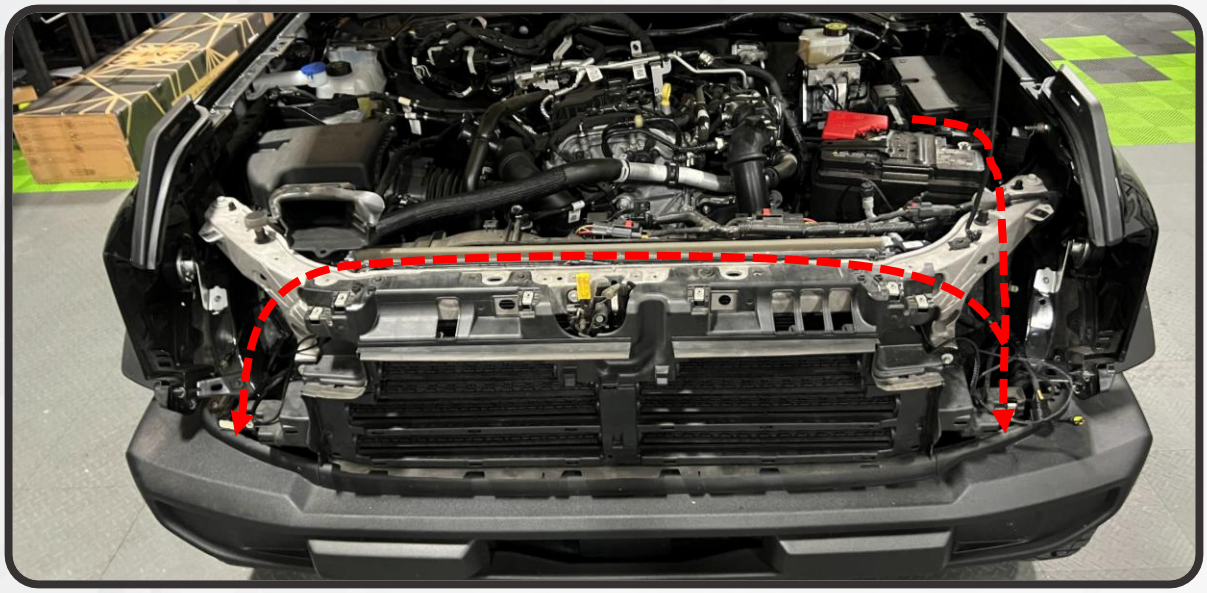
24. CONNECT THE DRL RELAY AS FOLLOWS:
    - CONNECT THE FUSE TAP TO THE RELAY
    - CONNECT THE SECOND-LONGEST END OF THE DRL HARNESS TO THE RELAY
    - CONNECT THE RING TERMINAL WITH THE FUSED WIRE TO THE POSITIVE TERMINAL ON THE BATTERY
    - CONNECT THE RING TERMINAL WITHOUT THE FUSE TO THE NEGATIVE TERMINAL ON THE BATTERY

25. WITH THE RELAY CONNECTED, SECURE IT IN THE UPRIGHT POSITION NEAR THE BATTERY AND FUSE BOX



WIRING

26. ROUTE THE SHORTER END OF THE DRL HARNESS FORWARD TO THE DRIVER-SIDE HEADLIGHT CAVITY, AND THE LONGER END ACROSS THE RADIATOR SUPPORT TO THE PASSENGER-SIDE HEADLIGHT CAVITY



27. IF YOU ARE ENABLING RGB FUNCTIONALITY, YOU WILL ALSO NEED TO INSTALL THE TWO RGB CROSSOVER HARNESSES. IN EACH HEADLIGHT CAVITY, CONNECT THE RGB CROSSOVER HARNESS TO THE FACTORY HEADLIGHT CONNECTOR. ROUTE THE LONG END OF THE RGB CROSSOVER HARNESS ACROSS THE RADIATOR SUPPORT TO THE MIDDLE OF THE VEHICLE. WE RECOMMEND FOLLOWING THE SAME ROUTING AS THE DRL HARNESS

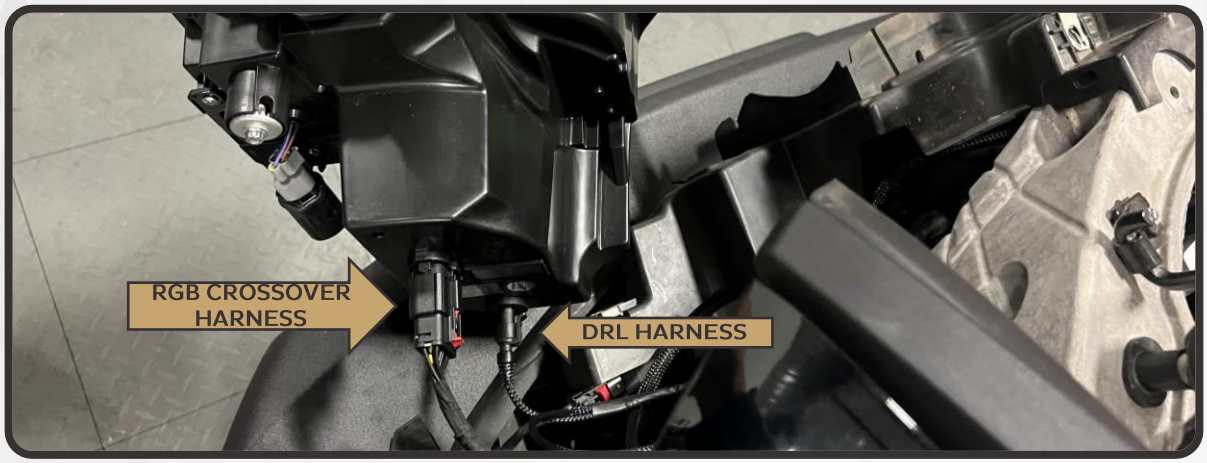
28. WITH BOTH RGB CROSSOVER HARNESSES INSTALLED, CONNECT THEM IN THE MIDDLE



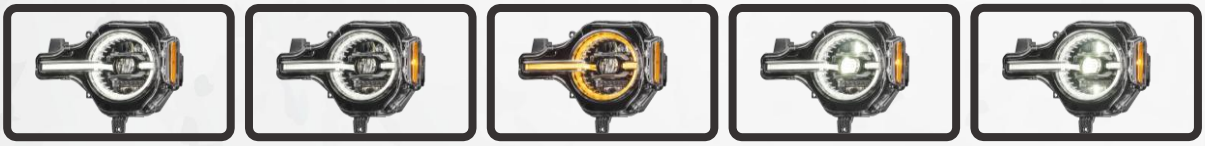


HEADLIGHT INSTALLATION

29. LIFT THE NEW HEADLIGHT ASSEMBLY UP TO THE VEHICLE AND CONNECT THE DRL HARNESS AND RGB CROSSOVER HARNESS TO THE BACK OF THE HEADLIGHT HOUSING AND FIT THE HEADLIGHT INTO THE HEADLIGHT CAVITY. ENSURE NONE OF THE WIRING IS PINCHED IN THE PROCESS. SECURE THE HOUSING TO THE VEHICLE USING THE FACTORY HEADLIGHT HARDWARE. REPEAT THIS STEP ON THE OPPOSITE SIDE



30. TEST AND CONFIRM THAT ALL FUNCTIONS ARE WORKING PROPERLY



DAYTIME RUNNING LIGHT | PARKING LIGHT | TURN SIGNAL | LOW BEAM | HIGH BEAM

- THERE ARE THREE LEDS ON THE BACK OF THE LED DRIVER THAT INDICATE WHEN POWER IS BEING RECEIVED BY THE HEADLIGHT. IF ANY OF THESE INDICATOR LIGHTS ARE NOT ILLUMINATED WHEN THE CORRESPONDING FUNCTION SHOULD BE POWERED, RECHECK YOUR CONNECTIONS AND RELEVANT FUSES

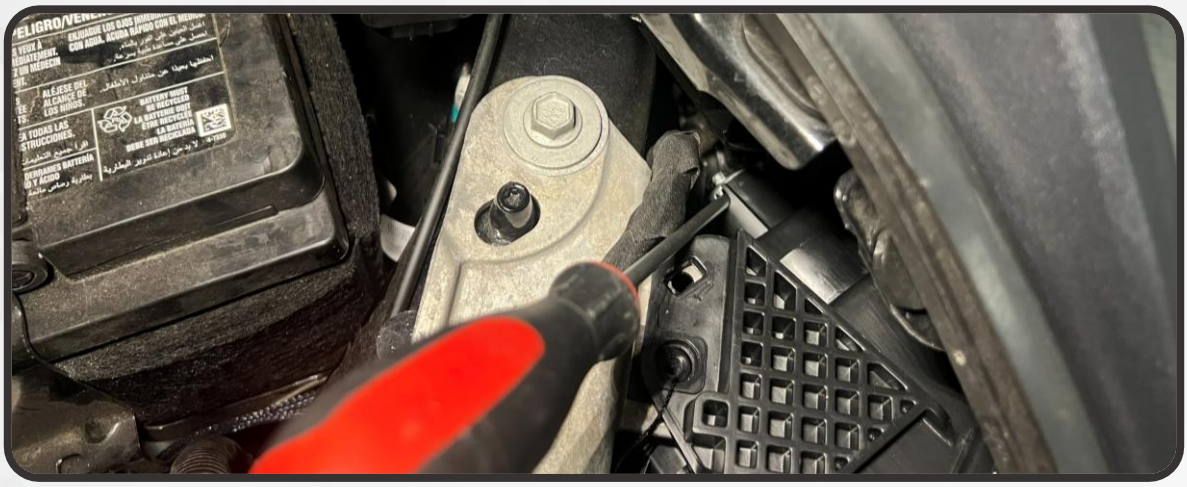


- GREEN – LOW BEAM
- BLUE – HIGH BEAM
- RED – FUSE TAP

31. REASSEMBLE THE VEHICLE IN THE REVERSE ORDER OF DISASSEMBLY. RECHECK ALL WIRING AND CONFIRM ALL CONNECTORS ARE FULLY SEATED AND ANY LOOSE/EXCESS WIRING IS SECURED

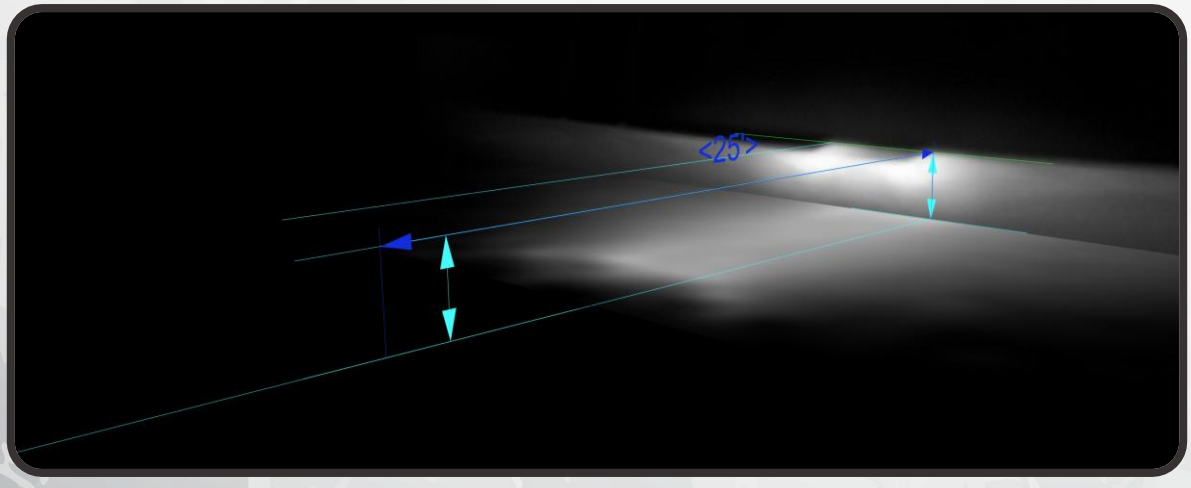
AIMING

32. THE HEADLIGHTS COME OUT OF THE BOX AIMED FOR STOCK RIDEHEIGHT, HOWEVER IT IS RECOMMENDED TO FINE TUNE THE AIM OF YOUR LOW BEAM AFTER INSTALLATION REGARDLESS. USING A LONG PHILLIPS HEAD SCREWDRIVER DOWN THE BACKOF THE HEADLIGHT TO THE ADJUSTER GEAR, FOLLOW THE INSTRUCTIONS BELOW TOPROPERLY ALIGN YOUR HEADLIGHTS' LOW BEAM CUTOFF (THE UPPER HORIZONTAL EDGE OF THE LOW BEAM)



33. WITH THE VEHICLE PARKED ON LEVEL GROUND, 25' FROM A WALL, MEASURE THE DISTANCE FROM THE GROUND TO THE OPTICAL CENTER MARK ON THE HEADLIGHT (THE CIRCULAR MARK ON THE LENS IN FRONT OF THE PROJECTOR)

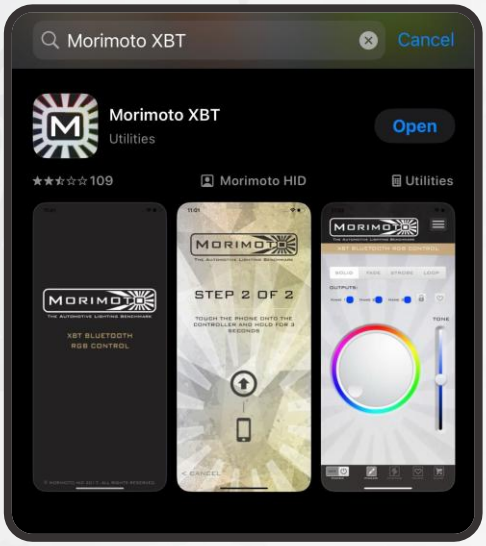
- IF THE DISTANCE FROM THE GROUND TO THE OPTICAL CENTER IS LESS THAN 34.5", ADJUST THE TOP OF THE HEADLIGHT CUTOFF TO THE SAME HEIGHT ON THE WALL AS THE HEADLIGHT MEASUREMENT YOU TOOK
- IF THE HEIGHT IS BETWEEN 35"-39", ADJUST THE CUTOFF ON THE WALL TO 2" BELOW YOUR HEADLIGHT MEASUREMENT. FACTORY RIDE HEIGHT TYPICALLY FALLS IN THIS RANGE AT APPROXIMATELY 37"
- IF THE HEIGHT IS GREATER THAN 39.5", ADJUST THE CUTOFF ON THE WALL TO 3" BELOW YOUR HEADLIGHT MEASUREMENT



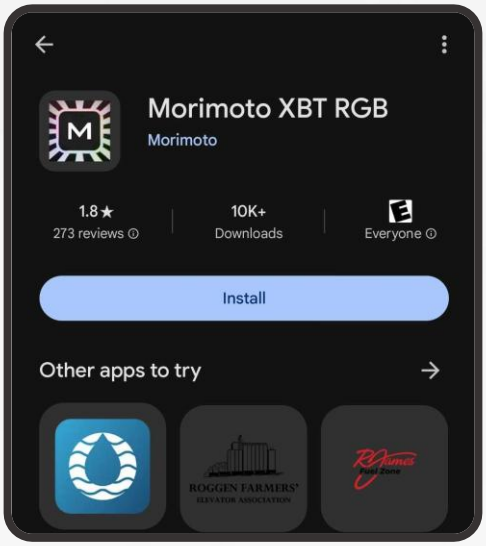
NOTE: AIMING SHOULD NOT REQUIRE MORE THAN THREE FULL TURNS OF THE ADJUSTER IN EITHER DIRECTION. OVER-ADJUSTING THE LIGHT MAY RESULT IN DAMAGE TO THE ADJUSTER

RGB CONTROLLER OPERATION

34. THE RGB DAYTIME RUNNING LIGHT IS CONTROLLED VIA AN APP ON YOUR SMARTPHONE. DOWNLOAD THE FREE MORIMOTO XBT APP TO GET STARTED

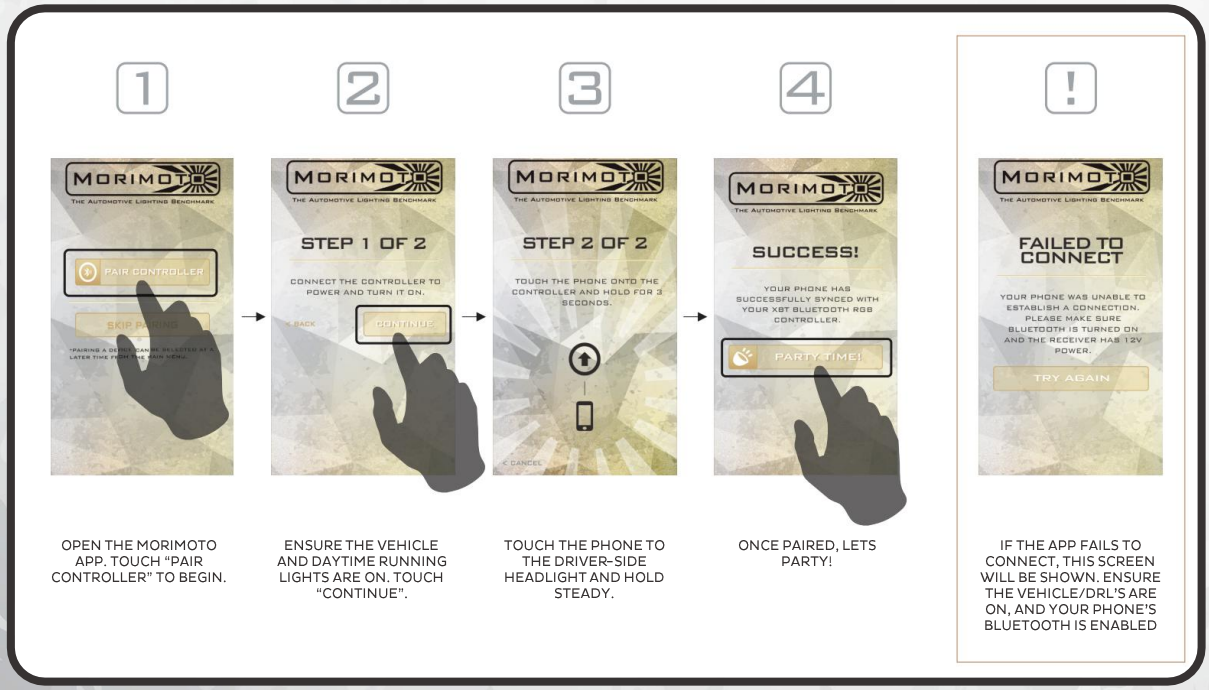


iOS



ANDROID

35. OPEN THE APP AND FOLLOW THE PROMPTS ON THE SCREEN TO PAIR YOUR PHONE TO THE HEADLIGHTS



OPEN THE MORIMOTO APP. TOUCH "PAIR CONTROLLER" TO BEGIN.

ENSURE THE VEHICLE AND DAYTIME RUNNING LIGHTS ARE ON. TOUCH "CONTINUE".

TOUCH THE PHONE TO THE DRIVER-SIDE HEADLIGHT AND HOLD STEADY.

ONCE PAIRED, LETS PARTY!

IF THE APP FAILS TO CONNECT, THIS SCREEN WILL BE SHOWN. ENSURE THE VEHICLE/DRL'S ARE ON, AND YOUR PHONE'S BLUETOOTH IS ENABLED

RGB CONTROLLER OPERATION

FUNCTION NOTES

MAKE SURE YOUR APP IS SET TO “OUTPUT 1”

TO SWITCH YOUR DAYTIME RUNNING LIGHT TO DEFAULT (WHITE OR AMBER, DEPENDING ON YOUR INSTALLED MODE SELECTOR KEY), SIMPLY SLIDE THE TONE BAR ON THE RIGHT HAND SIDE OF THE SCREEN ALL THE WAY TO THE BOTTOM

DO NOT USE THE ON/OFF TOGGLE IN THE BOTTOM LEFT TO TURN OFF THE DAYTIME RUNNING LIGHT AS THIS WILL TURN OFF THE CONTROLLER ENTIRELY. VEHICLE IGNITION WILL NEED TO BE CYCLED OFF AND BACK ON TO POWER THE CONTROLLER ON AGAIN

THE CONTROLLER IS DESIGNED SO THAT WHEN THE VEHICLE IS TURNED ON, THE DAYTIME RUNNING LIGHT WILL DEFAULT TO THE COLOR IT WAS LAST SET TO



XRGB EVO HEADLIGHTS: 2021+ FORD BRONCO



- ENJOY YOUR NEW MORIMOTO XRGB HEADLIGHTS! -