



BRIGHT IS ONLY THE BEGINNING

INSTALL GUIDE

XB EVO HEADLIGHTS: DODGE RAM (09-18)

LF2-520



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.



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WHAT'S INCLUDED



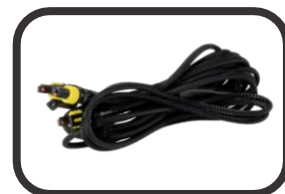
2X (PAIR) HEADLIGHT HOUSINGS



1X MINI FUSE TAP



1X MICRO FUSE TAP



1X DRL HARNESS



2X MAGNET-MOUNTED RESISTORS



2X DE REFLECTOR HEADLIGHT HARNESSES



2X DE PROJECTOR HEADLIGHT HARNESSES



4X PAIRS MODE SELECTOR KEYS

REQUIRED TOOLS

- **TRIM REMOVAL TOOL**
- **RATCHET**
- **10MM SOCKET**
- **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.

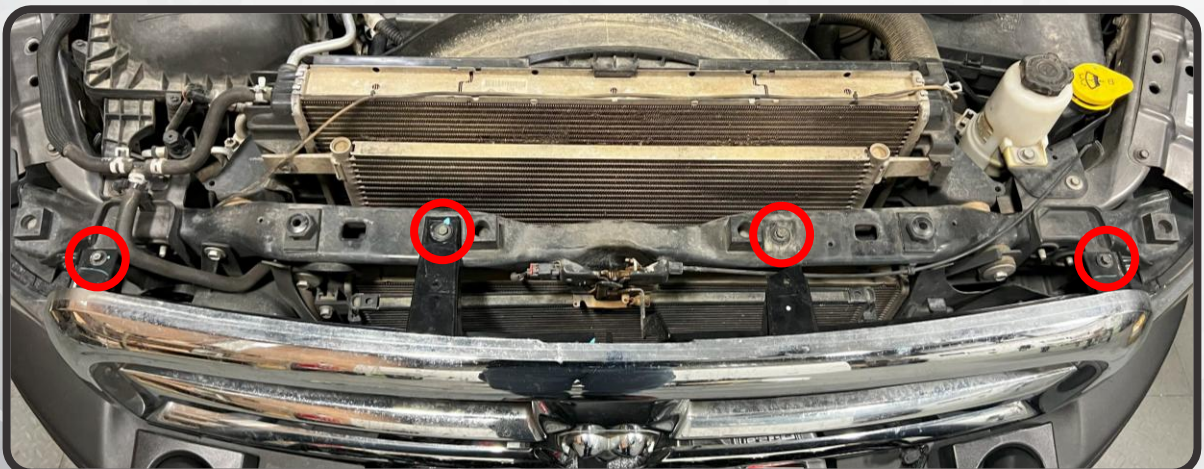
VEHICLE USED IN THIS GUIDE:

2014 RAM 2500HD

1. RAISE THE HOOD OF THE VEHICLE
2. USING A TRIM REMOVAL PRY TOOL, REMOVE THE FOUR PLASTIC PUSH CLIPS THAT SECURE THE PLASTIC RADIATOR SHROUD TO THE VEHICLE. ONCE THE CLIPS ARE REMOVED, REMOVE THE SHROUD AND SET IT ASIDE

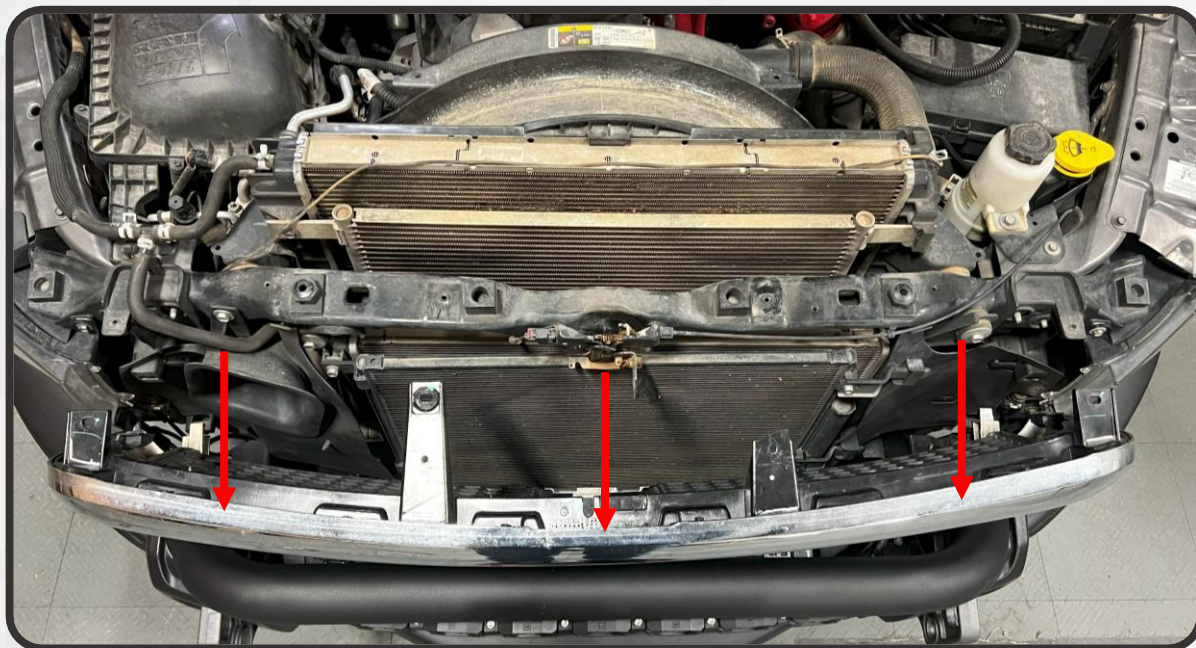


3. REMOVE THE FOUR 10MM BOLTS THAT SECURE THE TOP OF THE GRILLE TO THE UPPER RADIATOR SUPPORT

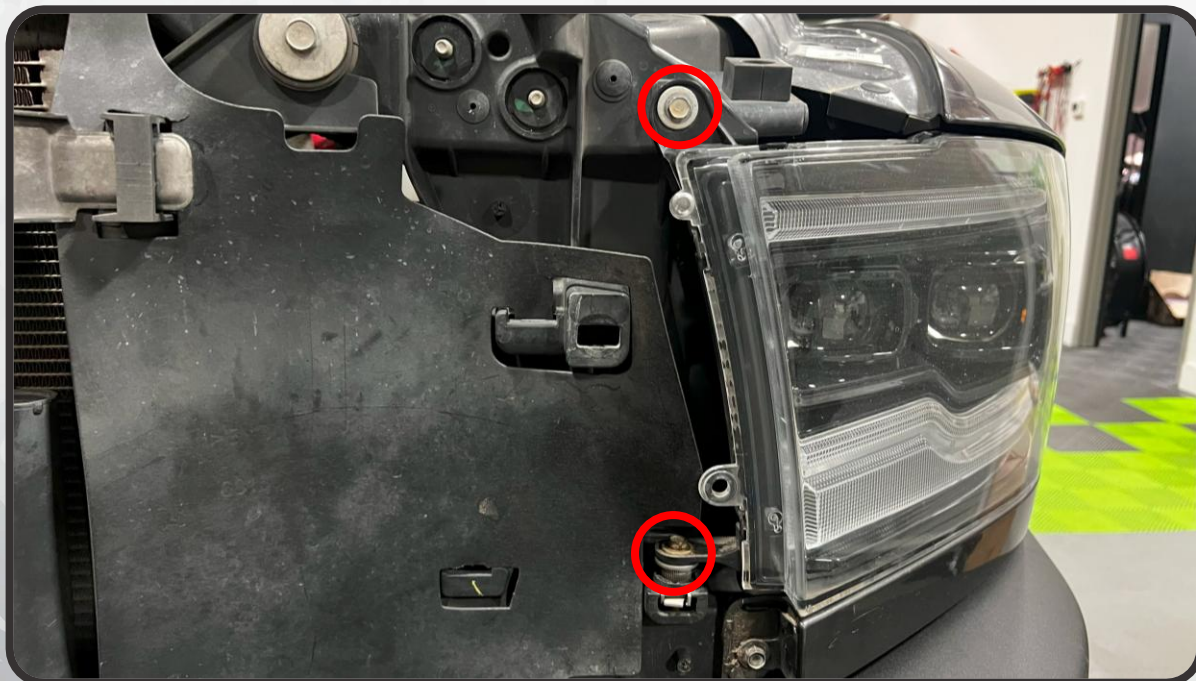


DISASSEMBLY

4. PULL THE FRONT GRILLE ASSEMBLY FORWARD WITH MODERATE FORCE TO RELEASE THE FOUR CLIPS THAT SECURE IT TO THE TRUCK. ONCE IT IS RELEASED, REMOVE THE GRILLE FROM THE TRUCK AND SET IT ASIDE



5. REMOVE THE TWO 10MM BOLTS THAT SECURE THE INNER CORNERS OF THE DRIVER-SIDE HEADLIGHT HOUSING



DISASSEMBLY

- MOVING TO THE DRIVER-SIDE WHEEL WELL, OPEN THE ACCESS PANEL ON THE FENDER LINER



- REACH THROUGH THE ACCESS PANEL AND SLIDE THE WHITE CLIP UPWARDS INTO THE "UNLOCKED" POSITION



DISASSEMBLY

8. FIRMLY PULL THE HEADLIGHT FORWARD TO RELEASE IT FROM THE TRUCK. DISCONNECT THE CONNECTOR(S) ON THE BACK OF THE HOUSING, AND SET THE LIGHT ASIDE



9. REPEAT STEPS 5-8 ON THE OPPOSITE SIDE

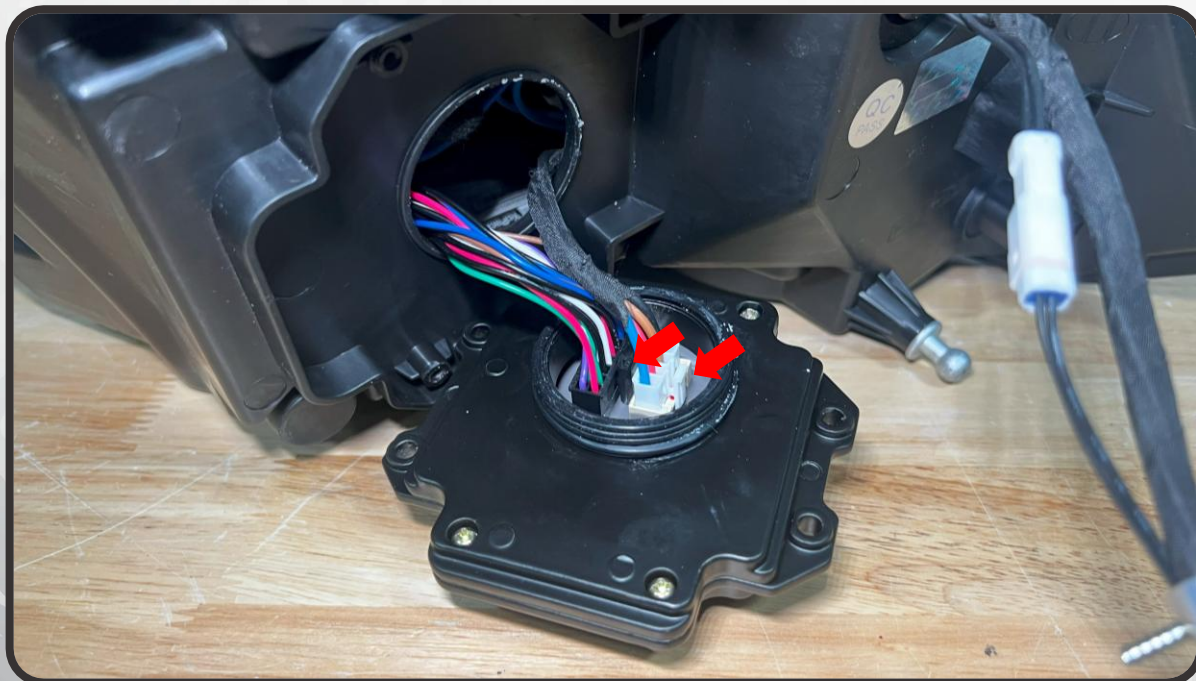


HEADLIGHT SETUP

- 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 BACK OF THE HEADLIGHT



- 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

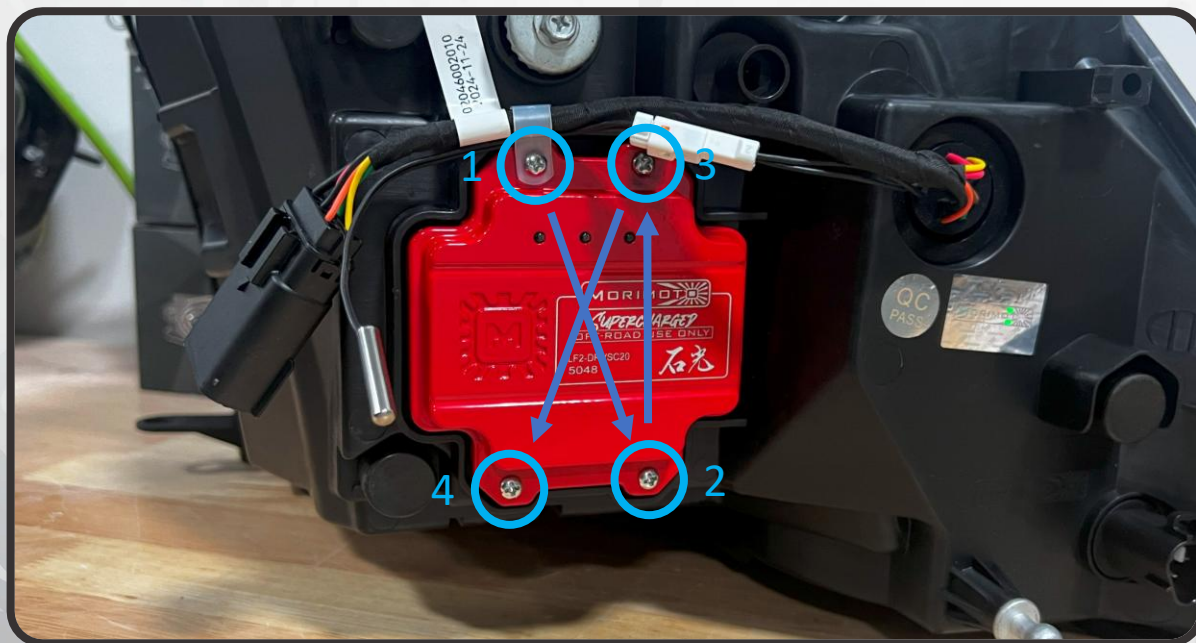


HEADLIGHT SETUP

- 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



- 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 THE ORIGINAL FOUR PHILLIPS HEAD SCREWS, HAND TIGHTENING THEM DOWN IN A STAR PATTERN TO ENSURE THE DRIVER SEATS EVENLY AGAINST THE HOUSING



HEADLIGHT SETUP

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

			
<ul style="list-style-type: none">• DRL: WHITE• TURN SIGNAL: FADE-OFF	<ul style="list-style-type: none">• DRL: WHITE• TURN SIGNAL: SEQUENTIAL	<ul style="list-style-type: none">• DRL: AMBER• TURN SIGNAL: FADE-OFF	<ul style="list-style-type: none">• DRL: AMBER• TURN SIGNAL: SEQUENTIAL

17. INSTALL THE MODE SELECTOR FOR YOUR PREFERRED MODE ONTO THE 3-PIN CONNECTOR ON THE BACK OF EACH HEADLIGHT (BLUE WILL BE 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



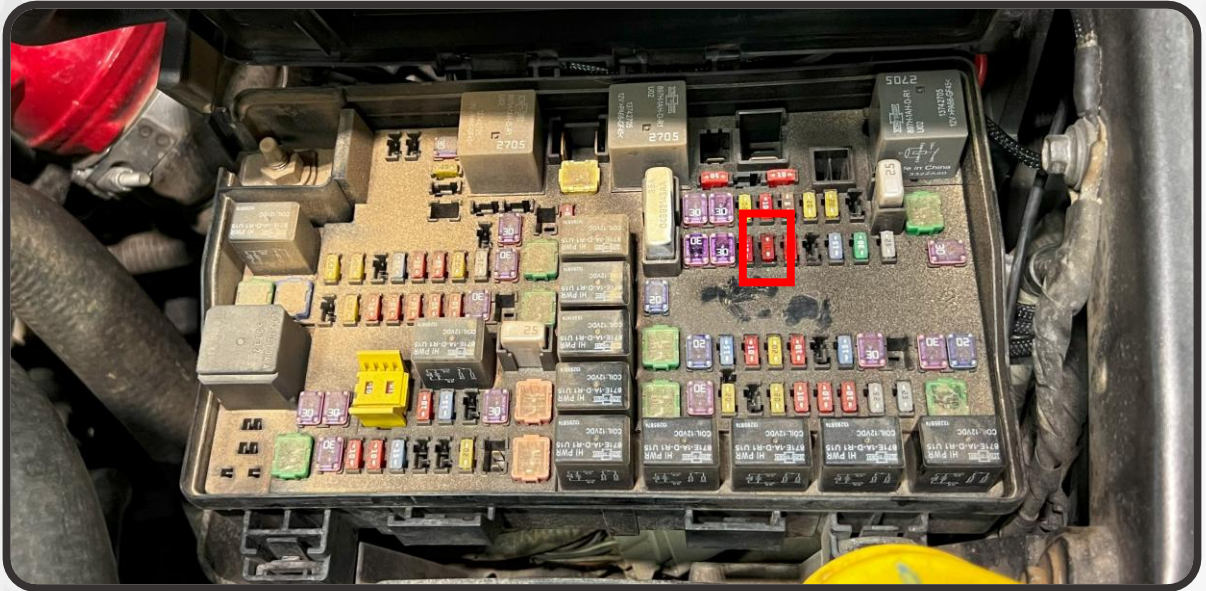
HEADLIGHT SETUP

- FOR CANADIAN SPEC VEHICLES, INSTALL THE CANADIAN ADAPTER (PART NUMBER LF2-520HCA – SOLD SEPARATELY) ONTO THE INPUT PLUG ON THE BACK OF EACH HEADLIGHT ASSEMBLY



INSTALLATION

19. OPEN THE LID TO THE FUSE BOX LOCATED IN THE ENGINE BAY
20. LOCATE AND REMOVE THE 10A FUSE IN THE F66 "SUNROOF/LRSM" SLOT ('09-'12 MODEL YEAR TRUCKS HAVE A DIFFERENT FUSE BOX. USE FUSE SLOT M6 OR M19)



21. INSTALL THE PROVIDED MICRO FUSE TAP INTO THE F66 FUSE SLOT (FOR '09-'12 MODEL YEAR TRUCKS, USE THE MINI FUSE TAP). ROUTE THE FUSE TAP WIRE OUT OF THE FUSE BOX AND CLOSE THE LID



INSTALLATION

22. CONNECT THE DRL HARNESS TO THE FUSE TAP. ROUTE THE HARNESS FORWARD TO THE DRIVER-SIDE HEADLIGHT CAVITY, THEN ACROSS THE UPPER RADIATOR SUPPORT TO THE PASSENGER-SIDE HEADLIGHT CAVITY



REFLECTOR STYLE



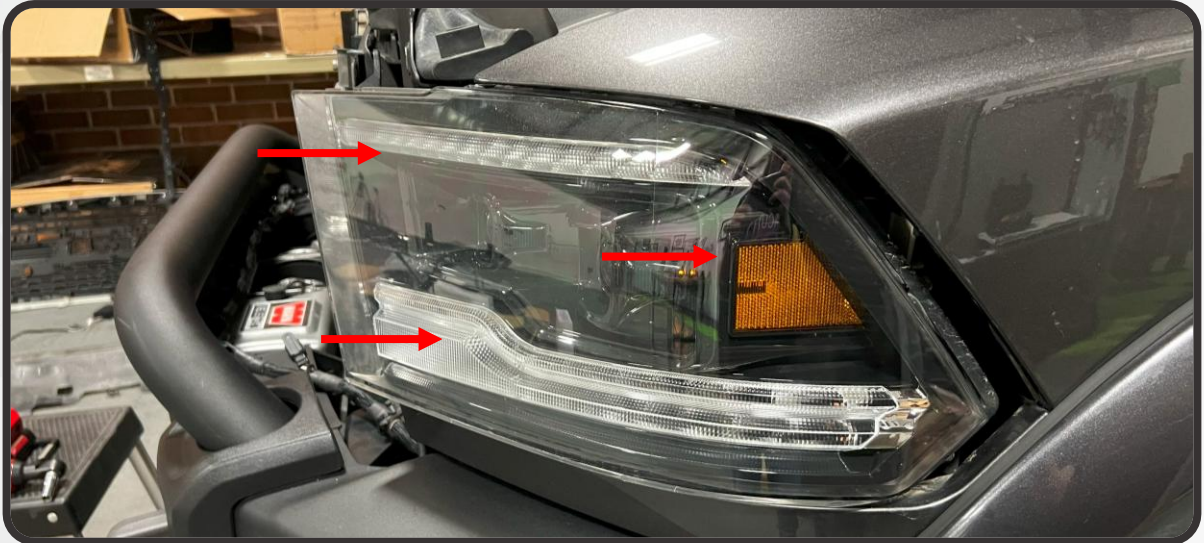
PROJECTOR STYLE

23. IDENTIFY YOUR FACTORY HEADLIGHTS ABOVE. CONNECT THE CORRESPONDING HEADLIGHT HARNESS TO THE HEADLIGHT CONNECTOR(S). FOR TRUCKS WITH FACTORY REFLECTOR HEADLIGHTS, ATTACH ONE MAGNET-MOUNT RESISTOR TO THE FRAME OF THE TRUCK IN THE HEADLIGHT CAVITY AND CONNECT THE RESISTOR TO THE HEADLIGHT HARNESS. DO THIS ON BOTH SIDES



INSTALLATION

24. LIFT THE HEADLIGHT UP TO THE TRUCK AND CONNECT THE HEADLIGHT HARNESS AND DRL HARNESS TO THE CORRESPONDING CONNECTORS ON THE BACK OF THE HOUSING. THEN, FIT THE HOUSING INTO THE HEADLIGHT CAVITY AND PUSH IT STRAIGHT ONTO THE VEHICLE



25. LOOSELY REINSTALL THE FACTORY HARDWARE AND LOCK THE TAB ON THE BACK OF THE HOUSING TO SECURE THE LIGHT TO THE TRUCK

26. REPEAT STEPS 23-25 ON THE OPPOSITE SIDE OF THE TRUCK

27. GET IN THE VEHICLE AND CONFIRM THAT ALL FUNCTIONS ARE WORKING PROPERLY

- 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



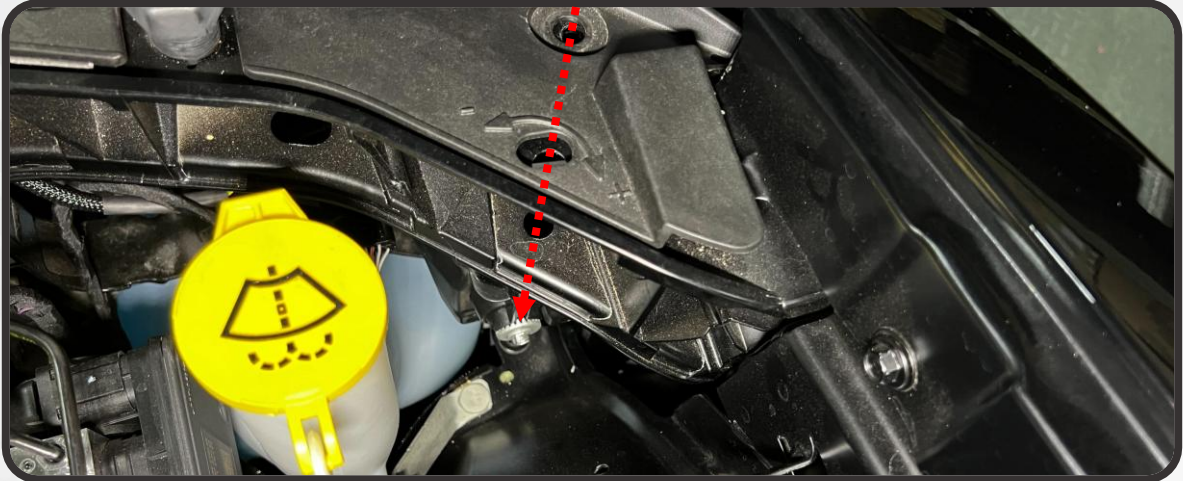
- GREEN – LOW BEAM
- BLUE – HIGH BEAM
- RED – FUSE TAP

28. GO BACK AND TIGHTEN DOWN ALL HARDWARE AND REASSEMBLE THE FRONT OF THE VEHICLE IN THE REVERSE ORDER OF DISASSEMBLY



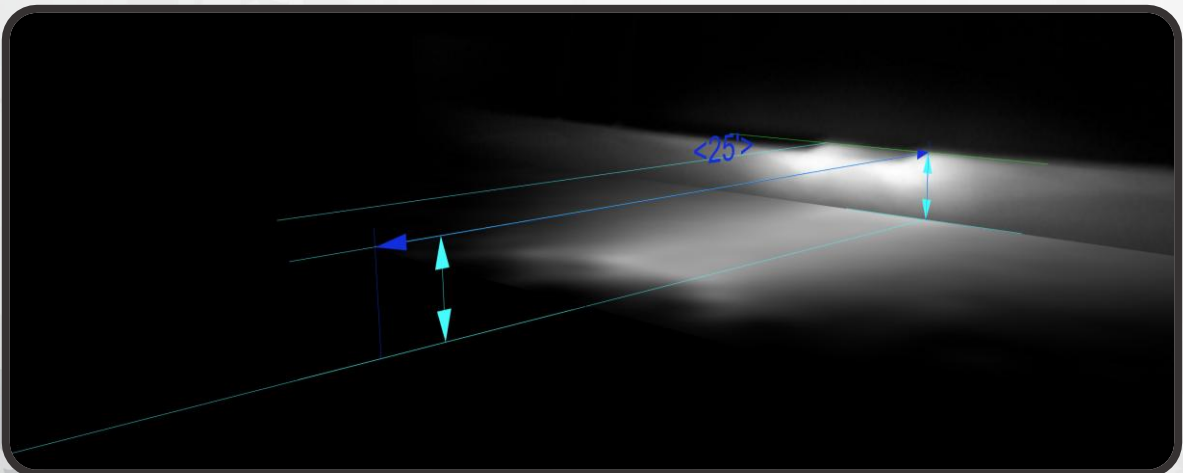
AIMING

29. 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 BACK OF THE HEADLIGHT TO THE ADJUSTER GEAR, FOLLOW THE INSTRUCTIONS BELOW TO PROPERLY ALIGN YOUR HEADLIGHTS' LOW BEAM CUTOFF (THE UPPER HORIZONTAL EDGE OF THE LOW BEAM)



30. WITH THE VEHICLE PARKED ON LEVEL GROUND, 25' FROM A WALL, MEASURE THE DISTANCE FROM THE GROUND TO THE OPTICAL CENTER OF THE OUTERMOST PROJECTOR IN THE HEADLIGHT

- 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 AS THE HEADLIGHT MEASUREMENT YOU TOOK
- IF THE HEIGHT IS BETWEEN 35"-39", ADJUST THE CUTOFF TO 2" BELOW YOUR HEADLIGHT MEASUREMENT
- IF THE HEIGHT IS GREATER THAN 39.5", ADJUST THE CUTOFF 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



LENS HEATER ACTIVATION

THE HEATING SYSTEM HAS BEEN DESIGNED TO MITIGATE SNOW AND ICE BUILDUP ON THE FRONT LENSES OF YOUR HEADLIGHTS WHILE DRIVING IN INCLEMENT CONDITIONS. WHILE IT MAY ACT AS AN AID, IT WAS NOT DESIGNED TO DEFROST/MELT HEAVY BUILDUP FROM AN OVERNIGHT SNOWSTORM.

AS A BASIC REQUIREMENT: IT WILL ONLY ACTIVATE IF THE AMBIENT EXTERNAL TEMPERATURE SENSOR READS AT/BELOW 5°C (41°F). IF IT'S TOO WARM OUTSIDE, THE HEATING ELEMENTS WILL NOT RUN TO AVOID CREATING EXCESS/UNNECESSARY HEAT WITHIN THE HOUSINGS.

TO ENABLE THE SYSTEM, FOLLOW THE STEPS OUTLINED BELOW:

WITH THE VEHICLE RUNNING (AND AFTER THE WELCOME SEQUENCE HAS COMPLETED) FLASH YOUR HIGH BEAMS 4 TIMES WITHIN 4 SECONDS. THE HEATING SYSTEM IS NOW AWAKE: THE HIGH BEAMS WILL RESPOND ONE OF TWO WAYS.

TWO FLASHES: HEATING SYSTEM FULLY ACTIVE. POWER IS ACTIVELY BEING DELIVERED TO THE HEATING ELEMENTS AND CONVECTION FANS.

ONE FLASH: REQUEST ACKNOWLEDGED, BUT SOME CONDITION* HAS NOT BEEN MET. SYSTEM IS IN AUTOMATIC STANDBY FOR OPERATION IF ALL CONDITIONS ARE MET.

ONCE ACTIVATED: THE SYSTEM IS AUTOMATICALLY MONITORED THROUGH A CLOSED-LOOP CONTROL SYSTEM TO MAINTAIN AN IDEAL TEMPERATURE TO KEEP THE FRONT LENS CLEAR. IT WILL TURN ON/OFF AS NECESSARY UNTIL YOU TURN THE IGNITION OFF COMPLETELY OR MANUALLY DISABLE THE HEATER. FOR EACH IGNITION KEY CYCLE, THE DEFAULT STATE OF THE HEATING SYSTEM IS OFF UNTIL REQUESTED ON.

MANUAL DISABLING: JUST FLASH THE HIGH BEAMS AGAIN (4X WITHIN 4 SECONDS) AND THE SYSTEM SHOULD RESPOND WITH ONE FLASH, ACKNOWLEDGING YOUR REQUEST.

*EXAMPLES OF CONDITIONAL REQUIREMENTS:

- AMBIENT TEMPERATURE NOT LOW ENOUGH (AT BELOW 5°C / 41°F)
- LENS TEMPERATURE ALREADY AT TARGET TEMPERATURE
- PRIMARY HEATING ELEMENT TEMPERATURE TOO HIGH
- INSUFFICIENT BATTERY VOLTAGE
- SYSTEM NOT REQUESTED ON



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- ENJOY YOUR NEW MORIMOTO XB EVO HEADLIGHTS! -

