MORIMOTO

BRIGHT IS ONLY THE BEGINNING

INSTALL GUIDE

XB EVO HEADLIGHTS: 07-13 TOYOTA TUNDRA 08-17 TOYOTA SEQUOIA

LF2-533/LF2-533Y

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.

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TABLE OF CONTENTS PAGE

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

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

WIRING ---------- 11

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

HEADLIGHT AIMING ---------- 16

LENS HEATER ACTIVATION (EVO MODEL ONLY) ---- 17

WHAT'S INCLUDED (ALL VERSIONS)

2X (PAIR) HEADLIGHT ASSEMBLIES

1X FUSE TAP

1X DRL HARNESS

2X MAGNET MOUNT RESISTORS

2X INPUT HARNESSES

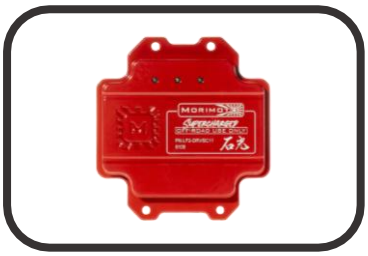
2X 10MM MOUNTING BOLTS

XB EVO HEADLIGHTS: 07-13 TOYOTA TUNDRA 08-17 TOYOTA SEQUOIA

WHAT'S INCLUDED (EVO MODEL ONLY)

4X PAIRS OF MODE SELECTORS

OPTIONAL ADD-ONS (SOLD SEPARATELY)



2X SUPERCHARGED LED DRIVERS

REQUIRED TOOLS

- 10MM SOCKET
- RATCHET
- NEEDLE NOSE PLIERS
- TRIM REMOVAL/PRY TOOL
- LONG #2 PHILLIPS HEAD SCREWDRIVER

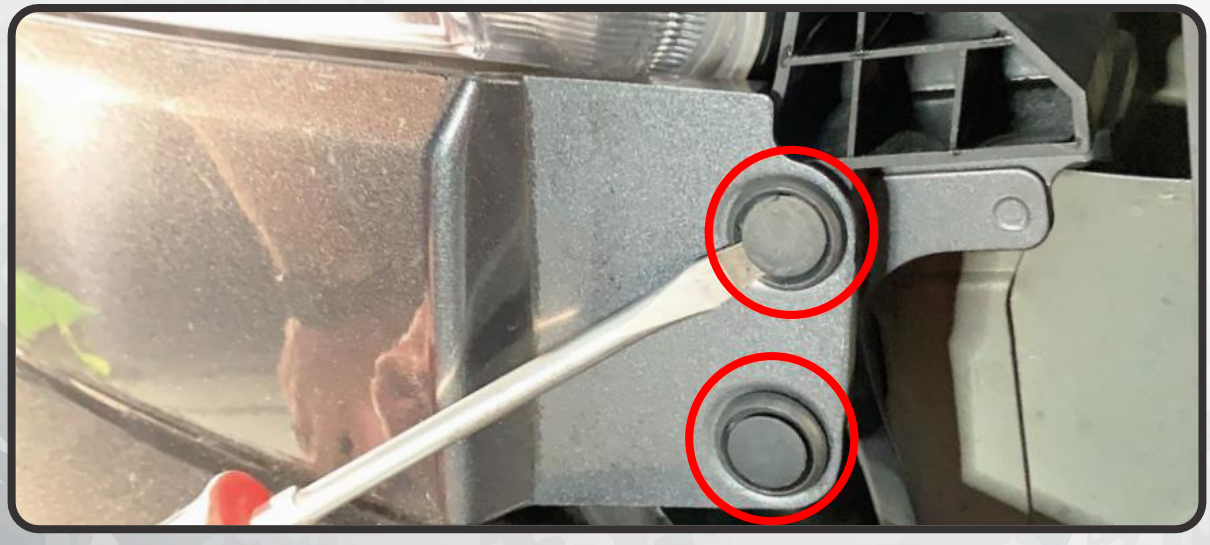
DISASSEMBLY

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:
2007 TOYOTA TUNDRA
2012 TOYOTA SEQUOIA

1. RAISE THE HOOD OF THE TRUCK
2. IF YOUR VEHICLE CAME EQUIPPED WITH THE FACTORY HEADLIGHT WASHERS, PULL THE WASHER ARM OUT AND USE A PICK OR SMALL PRY TOOL TO RELEASE THE TWO TABS SECURING THE WASHER ARM COVER. REMOVE THE COVER AND SET IT ASIDE

3. ON THE FENDER EXTENSION PANEL BELOW THE HEADLIGHT, POP OUT THE HEADS OF EACH OF THE TWO CLIPS, THEN REMOVE THE CLIPS



DISASSEMBLY

4. REMOVE THE FENDER EXTENSION PANEL BY PULLING IT FORWARD WITH A BIT OF FORCE, BEING CAREFUL NOT TO FLEX IT SIDE-TO-SIDE WHICH COULD BREAK THE TABS ON THE PANEL

5. REMOVE THE 10MM BOLT THAT SECURES THE SIDE OF THE HEADLIGHT HOUSING

6. REMOVE THE TWO 10MM BOLTS THAT SECURE THE TOP OF THE HEADLIGHT

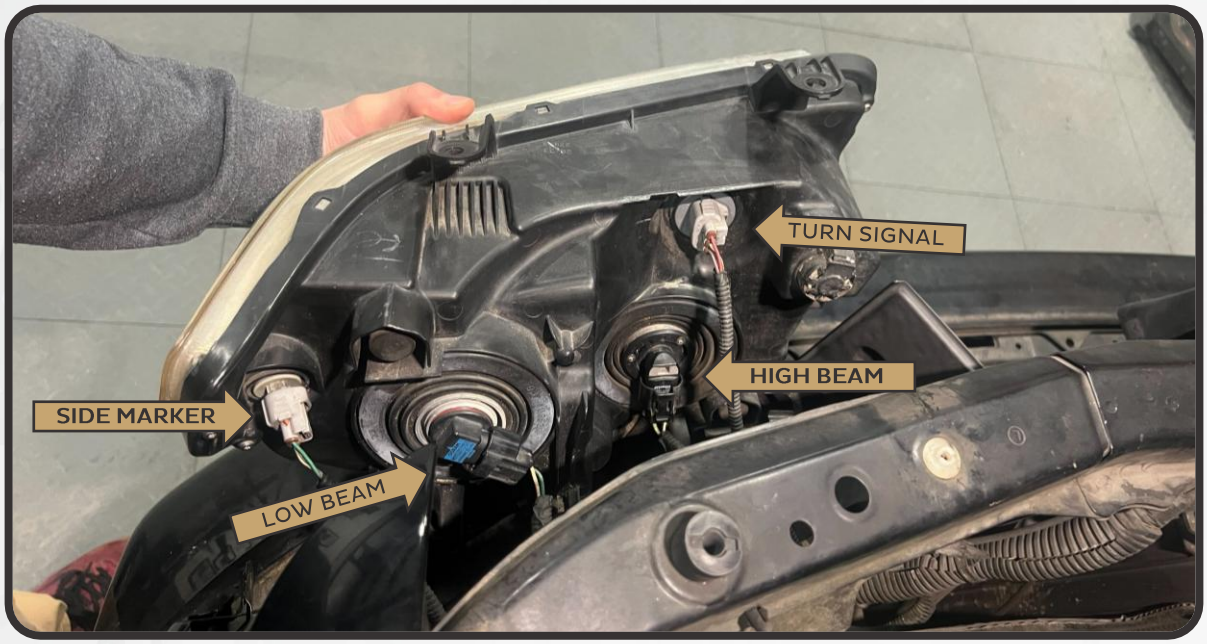
DISASSEMBLY

7. RELEASE THE LOWER HEADLIGHT TAB BY LIFTING UP ON THE BOTTOM OF THE HEADLIGHT, THEN PULLING SLIGHTLY FORWARD

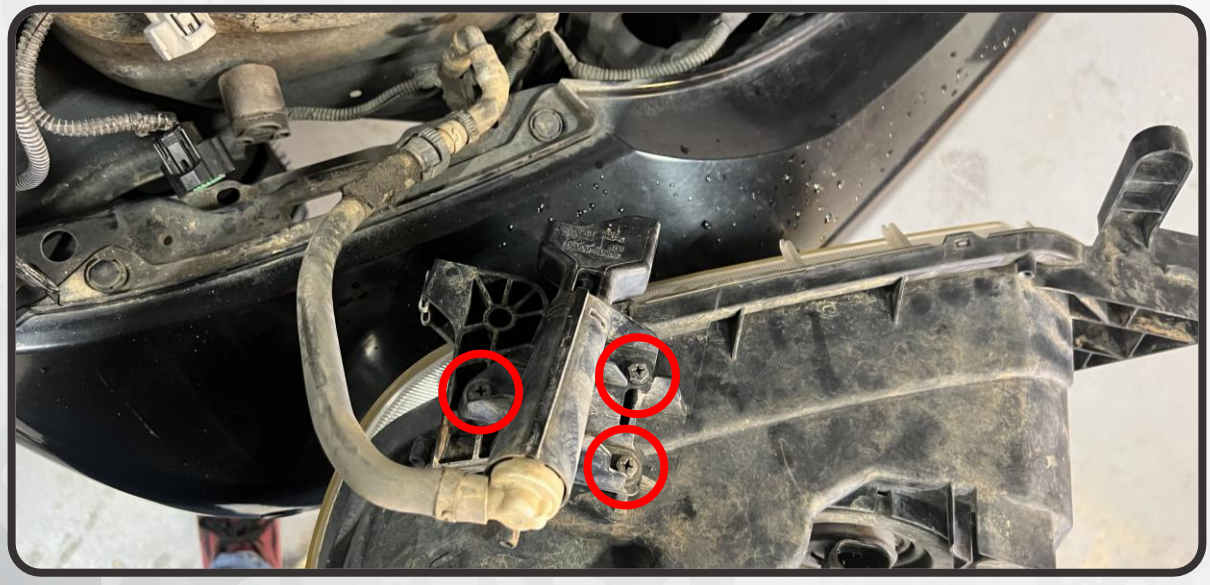
8. LIFT UP ON THE TWO TABS ON TOP OF THE HEADLIGHT, AND THE ASSEMBLY CAN NOW BE PULLED AWAY FROM THE VEHICLE

DISASSEMBLY

9. DISCONNECT ALL CONNECTIONS ON THE BACK OF THE HEADLIGHT HOUSING



10. IF YOUR VEHICLE CAME EQUIPPED WITH THE FACTORY HEADLIGHT WASHERS, FLIP THE HEADLIGHT OVER AND USE A #2 PHILLIPS HEAD SCREWDRIVER TO REMOVE THE THREE SCREWS SECURING THE WASHER ARM TO THE HOUSING



11. SET THE HEADLIGHT ASSEMBLY ASIDE

12. REPEAT STEPS 2–11 ON THE OPPOSITE SIDE OF THE VEHICLE

HEADLIGHT SETUP

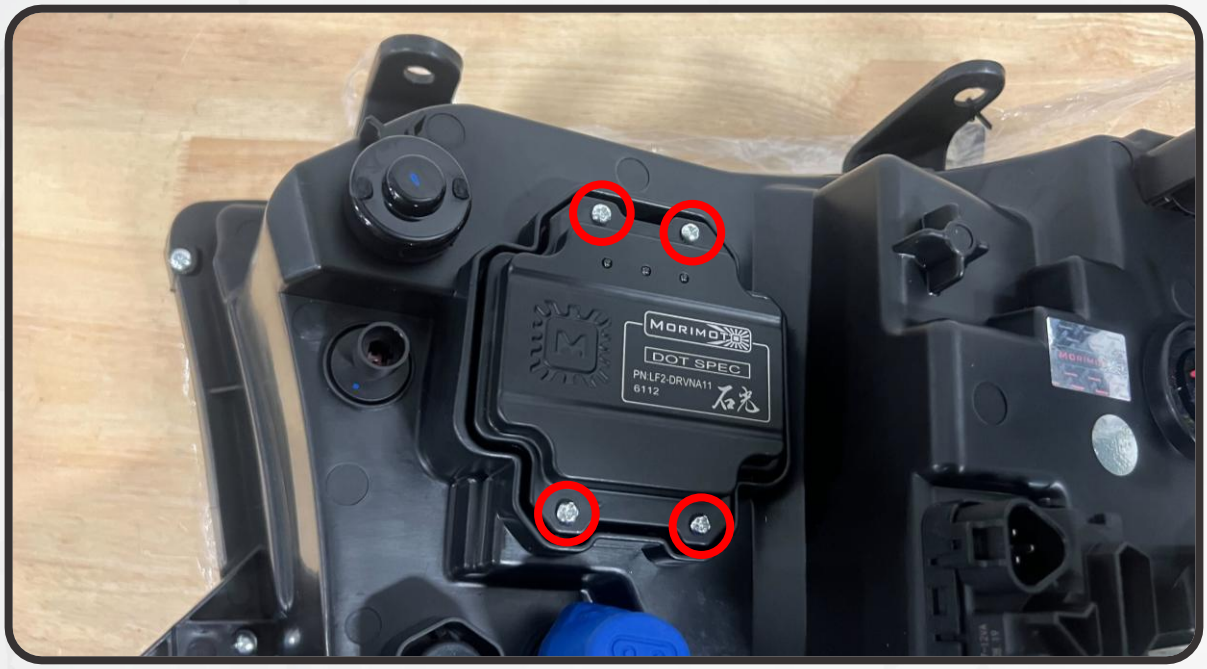
13. WITH THE MORIMOTO XB MODE SELECTOR KEYS, YOU CAN DECIDE WHAT STYLE YOU'D LIKE FOR YOUR DAYTIME RUNNING LIGHT AND TURN SIGNAL. CHOOSE FROM THE COLORCODED KEYS SHOWN BELOW FOR YOUR DESIRED STYLE (NOT APPLICABLE ON XB EVO HYBRID HEADLIGHTS)

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

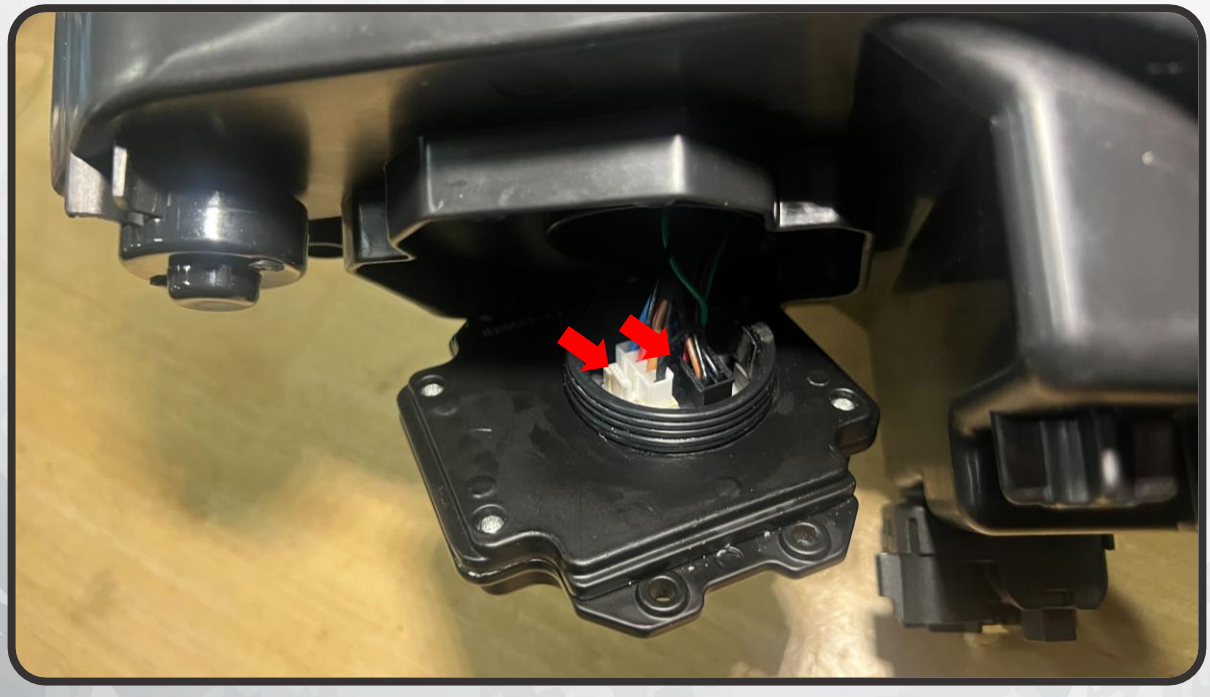
14. INSTALL THE MODE SELECTOR FOR YOUR PREFERRED MODE ONTO THE 3-PIN CONNECTOR ON THE BACK OF EACH HEADLIGHT. THIS CAN ALWAYS BE CHANGED AFTER INSTALL IF DESIRED. MAKE SURE THE VEHICLE AND HEADLIGHTS ARE OFF WHEN CHANGING MODE SELECTORS

HEADLIGHT SETUP

15. 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

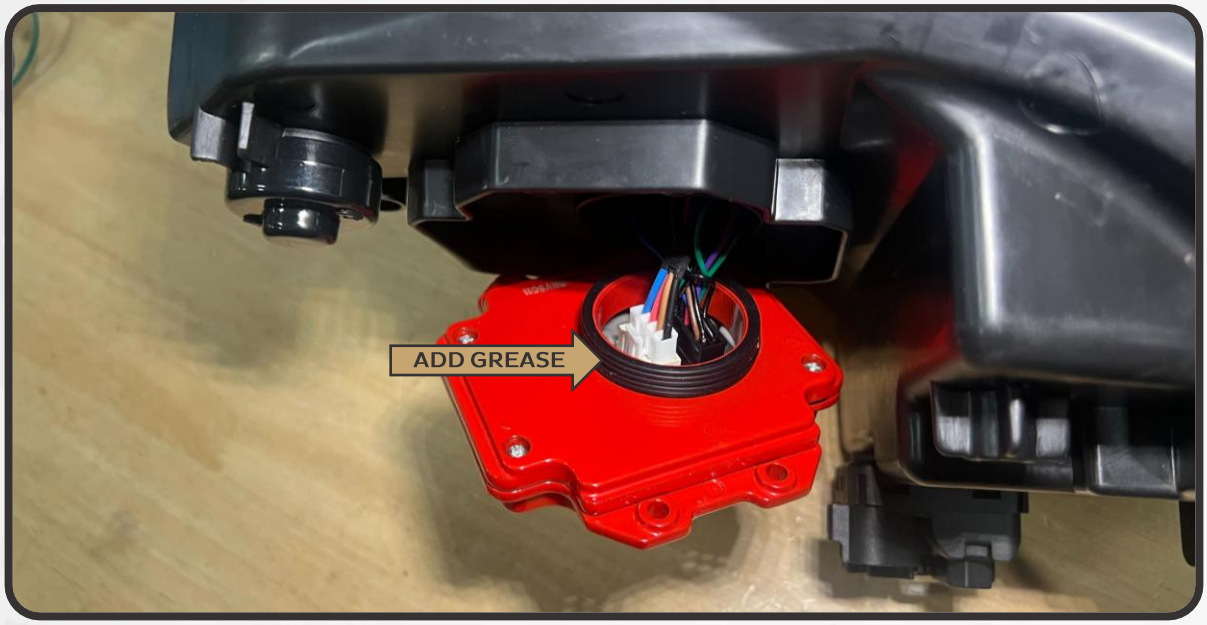


16. DEPRESS THE CLIP ON EACH OF THE DRIVER CONNECTORS AND PULL TO DISCONNECT THE DRIVER FROM THE INTERNAL HEADLIGHT WIRING

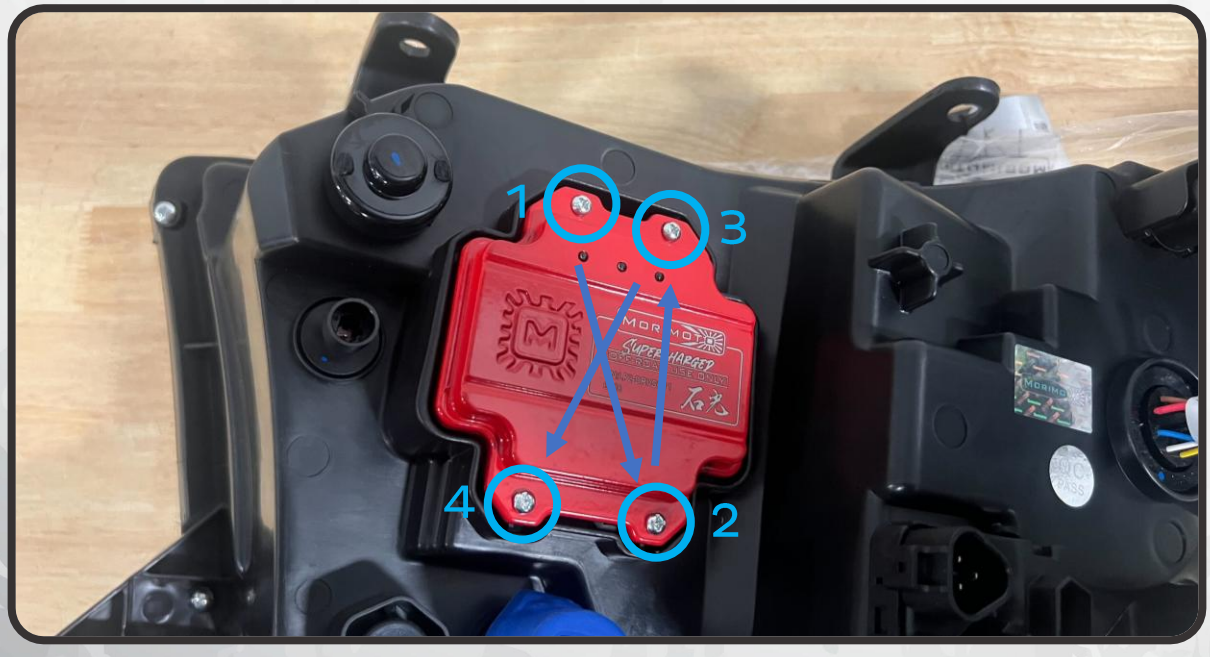


HEADLIGHT SETUP

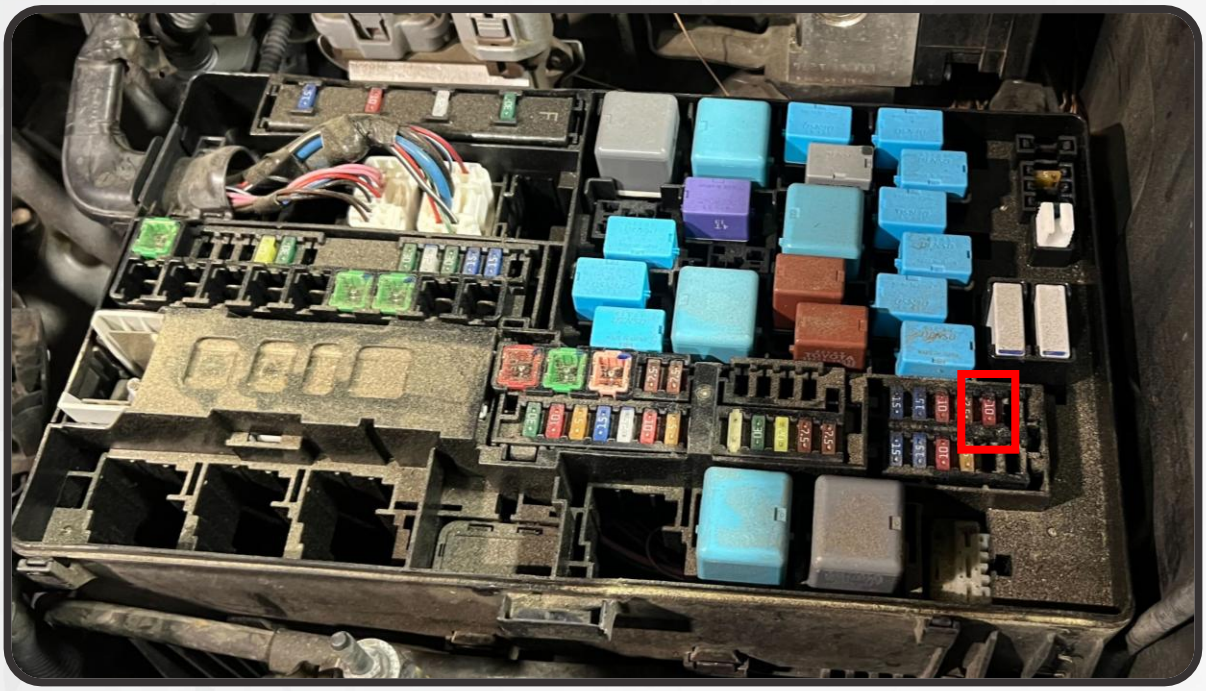
17. CONNECT THE NEW SUPERCHARGED DRIVER TO THE INTERNAL HEADLIGHT WIRING, MAKING SURE THE TAB ON EACH OF THE CONNECTOR'S CLIPS SECURELY INTO PLACE. APPLY A THIN LAYER OF THE INCLUDED GREASE TO THE OUTER EDGE OF THE SEAL ON THE NEW DRIVER



18. 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 TIGHTENTING THEM DOWN IN A STAR PATTERN TO ENSURE THE DRIVER SEATS EVENLY AGAINST THE HOUSING

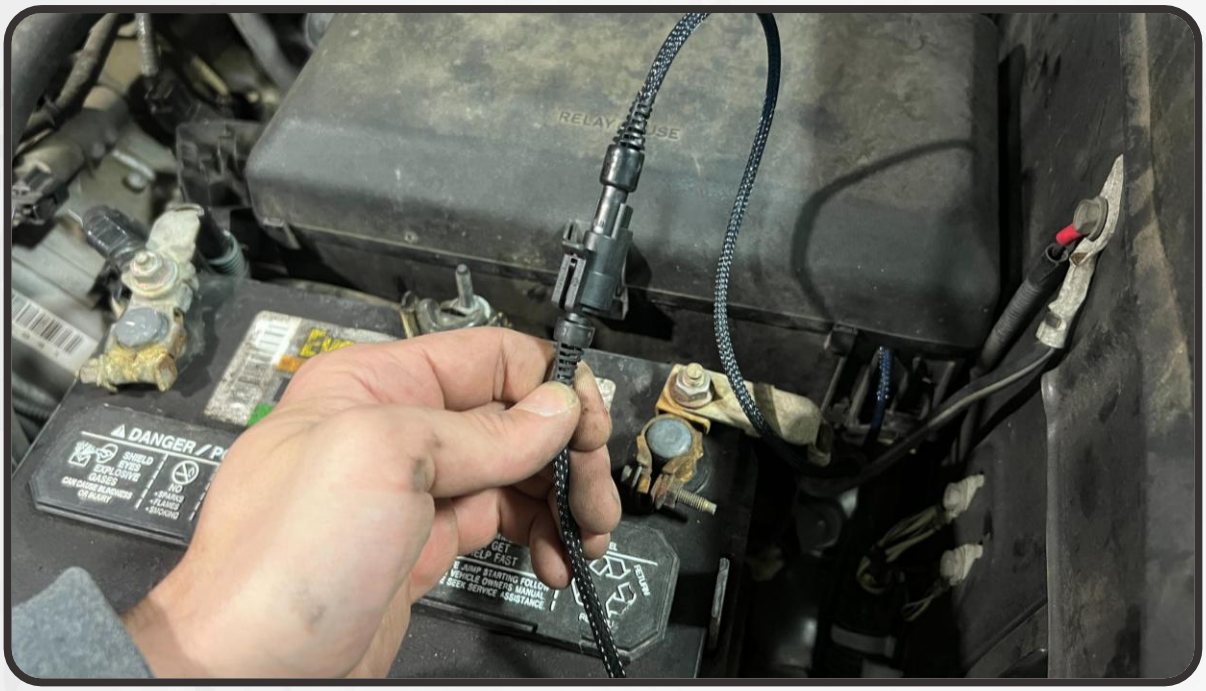


19. OPEN THE FUSE BOX LOCATED BEHIND THE DRIVER-SIDE HEADLIGHT. LOCATE AND REMOVE THE 10A IGN FUSE

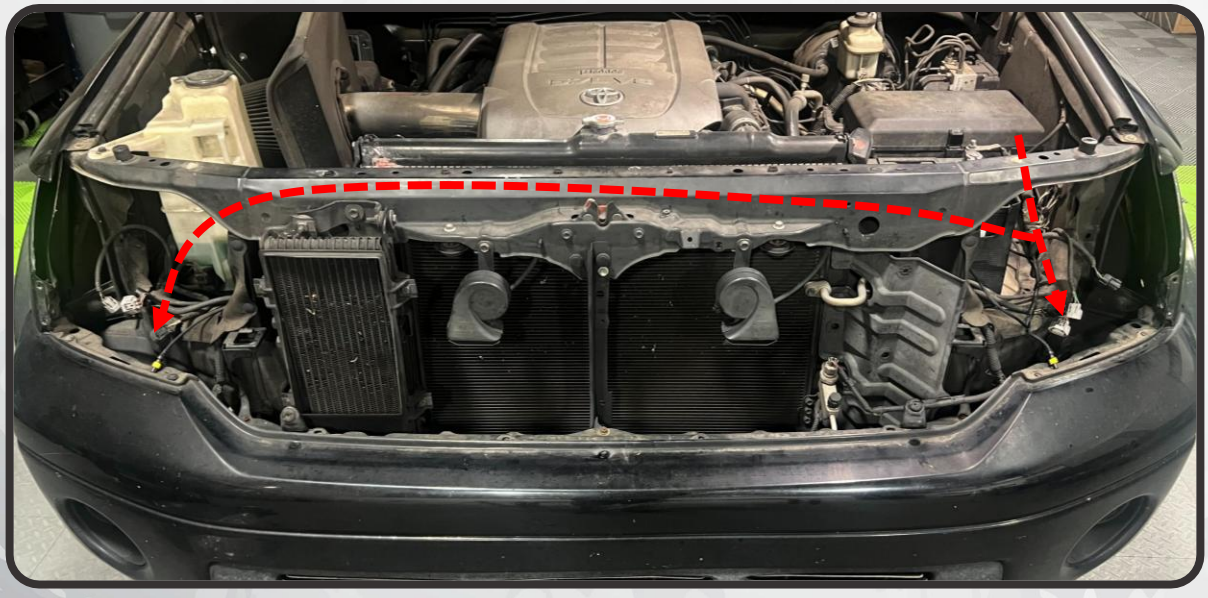


20. INSTALL THE PROVIDED FUSE TAP INTO THE FUSE SLOT. THE FUSE TAP FEATURES A 5.5MM/7/32" GROMMET TO PASS OUT OF THE FUSE BOX. USING A DRILL OR A SMALL CUTTING TOOL, MAKE A NOTCH IN THE SIDE WALL OF THE FUSE BOX LID SO THAT THE LID CAN CLOSE OVER THE GROMMET

21. CONNECT THE SECOND-LONGEST END OF THE DRL HARNESS TO THE FUSE TAP

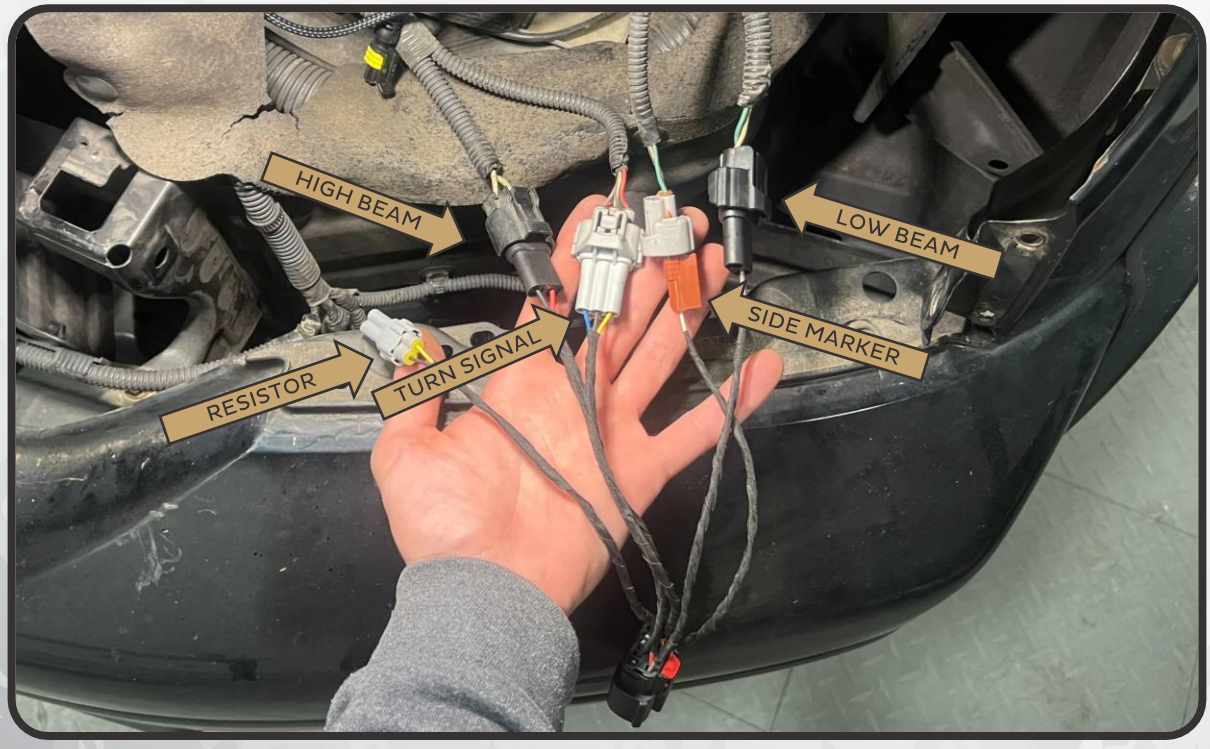


22. ROUTE THE SHORTER END FO THE DRL HARNESS FORWARD TO THE DRIVER-SIDE HEADLIGHT CAVITY, AND THE LONGER END ACROSS THE RADIATOR SUPPORT TO THE PASSENGER-SIDE HEADLIGHT CAVITY



23. ATTACH ONE OF THE PROVIDED MAGNET-MOUNT RESISTORS INTO EACH HEADLIGHT CAVITY. MAKE SURE IT IS OUT OF THE WAY OF THE HEADLIGHT ASSEMBLY

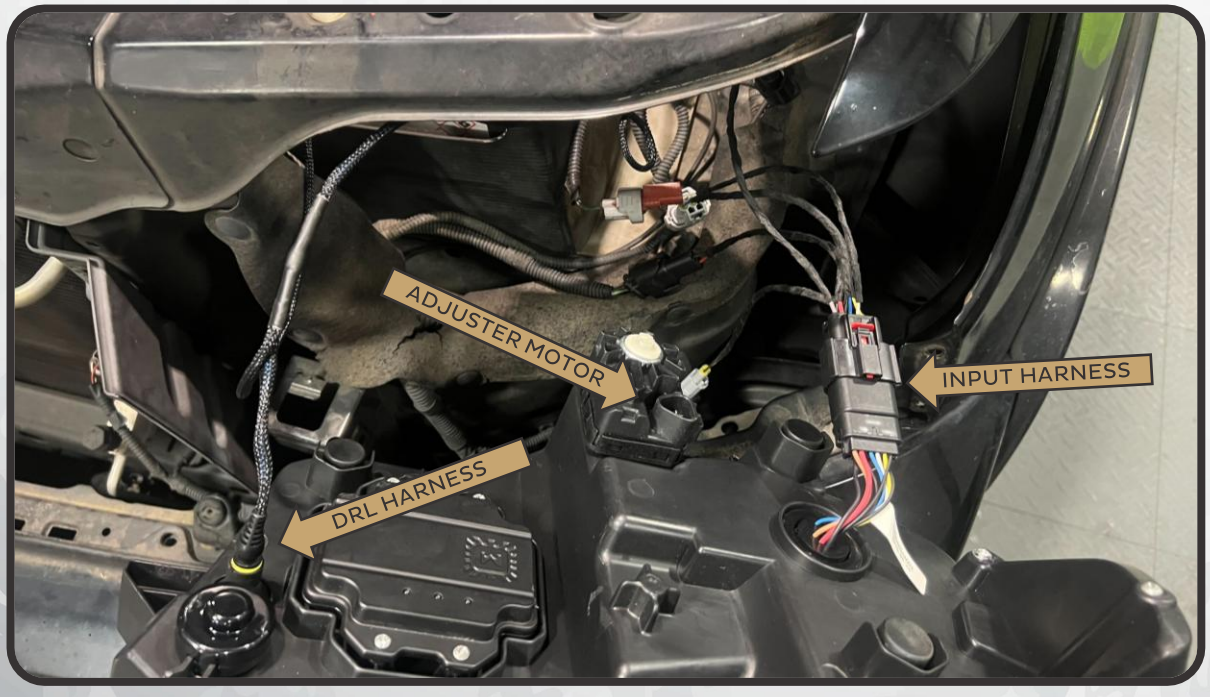
24. CONNECT THE INPUT HARNESS TO THE VEHICLE'S OE LOW BEAM, HIGH BEAM, TURN SIGNAL, AND SIDE MARKER PLUGS, AS WELL AS THE RESISTOR



HEADLIGHT INSTALLATION

25. IF YOUR VEHICLE CAME EQUIPPED WITH HEADLIGHT WASHERS, LIFT THE HEADLIGHT UP TO THE VEHICLE AND SECURE THE WASHER ARM TO THE BOTTOM OF THE HEADLIGHT ASSEMBLY USING THE THREE FACTORY SCREWS

26. CONNECT THE DRL HARNESS, INPUT HARNESS, AND ADJUSTER MOTOR (IF EQUIPPED) CONNECTORS TO THE BACK OF THE HOUSING



HEADLIGHT INSTALLATION

27. FIT THE HEADLIGHT ONTO THE VEHICLE MAKING SURE NOT TO PINCH ANY OF THE WIRING AS YOU DO. SECURE IT TO THE TRUCK USING THE OE HARDWARE ON THE TOP TWO TABS, AND ONE OF THE PROVIDED MOUNTING BOLTS ON THE LOWER-CORNER TAB

28. REPEAT STEPS 24-27 ON THE OPPOSITE SIDE OF THE VEHICLE

29. GET IN THE VEHICLE 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

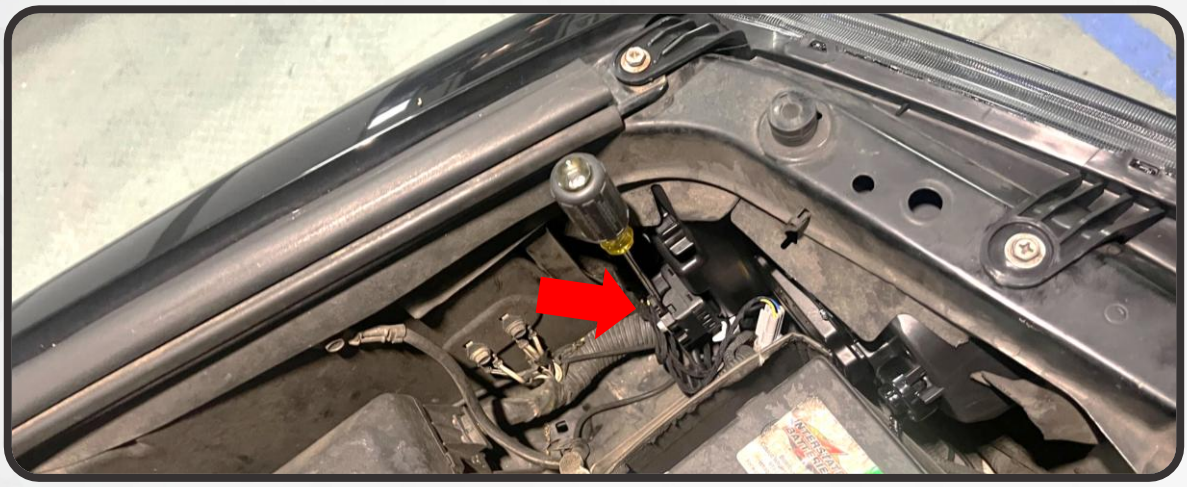
- GREEN – LOW BEAM
- BLUE – HIGH BEAM
- RED – FUSE TAP

30. TUCK AND SECURE ANY LOOSE/EXCESS WIRING

31. REASSEMBLE THE FRONT OF THE VEHICLE IN THE REVERSE ORDER OF DISASSEMBLY

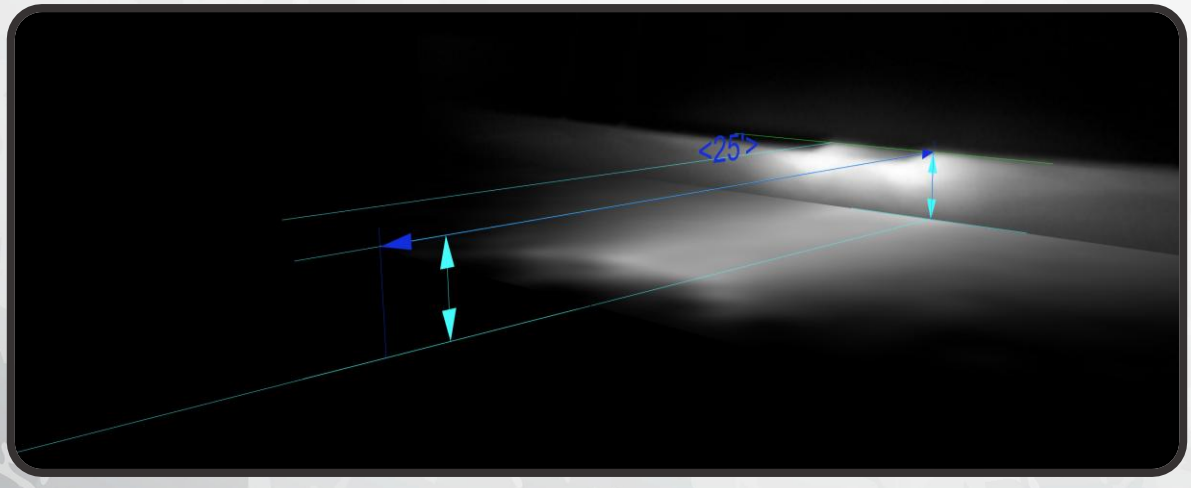
AIMING

32. THE HEADLIGHTS COME OUT OF THE BOX AIMED FOR STOCK RIDE HEIGHT; 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 OF THE PROJECTOR IN THE HEADLIGHT (INDICATED BY THE SMALL CIRCULAR FEATURE ON THE HEADLIGHT LENS)

- 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. FACTORY RIDE HEIGHT TYPICALLY FALLS IN THIS RANGE AT APPROXIMATELY 41"



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

(NOT APPLICABLE ON XB EVO HYBRID HEADLIGHTS)

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

IF YOUR HEADLIGHTS ARE NOT RESPONDING TO YOUR REQUEST, THE AUTO HIGH BEAM FEATURE CAN SOMETIMES INTERFERE WITH THE LENS HEATER SYSTEM. TURN OFF THE AUTO HIGH BEAMS AND RETRY YOUR REQUEST

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- ENJOY YOUR NEW MORIMOTO XB EVO HEADLIGHTS! -