

# INSTALL GUIDE

THE AUTOMOTIVE LIGHTING BENCHMARK

#### XB LED HEADLIGHTS: FR-S / BRZ / GT86

LF2-470



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; YOUMAY 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) HEADLIGHTS



**1X FUSE TAP** 



2X HEADLIGHT ADAPTERS



**1X DRL HARNESS** 



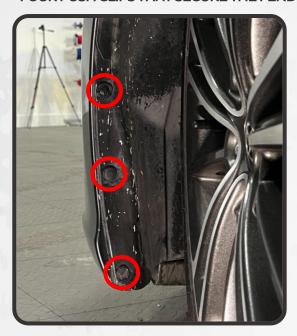
2X TURN SIGNAL ADAPTERS

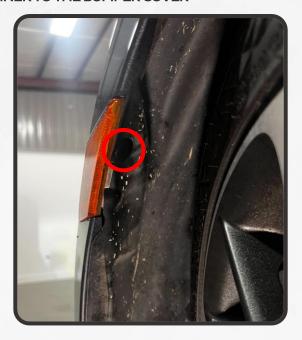


#### REQUIRED TOOLS

- RATCHET W/ EXTENSION
- 10MM SOCKET
- TRIM REMOVAL TOOL
- FLAT HEAD
  SCREWDRIVER
- LONG PHILLIP'S HEAD
  SCREWDRIVER

1. BEGINNING ON THE SIDE OF THE VEHICLE IN FRONT OF THE FRONT WHEEL, REMOVE THE FOUR PUSH CLIPS THAT SECURE THE FENDER LINER TO THE BUMPER COVER





2. REMOVE THE SIDE MARKER BY INSERTING A FLAT HEAD SCREWDRIVER BEHIND THE ASSEMBLY TO DEPRESS THE CLIP SECURING THE SIDEMARKER. AS YOU DEPRESS THE CLIP, PULL THE TOP CORNER AWAY FROM THE VEHICLE. TWO MORE CLIPS SHOULD RELEASE AS YOU DO



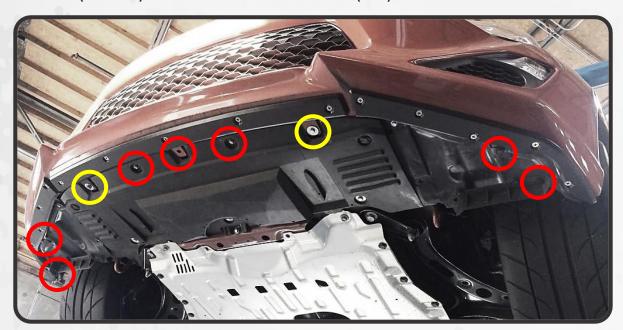
3. PULL THE SIDE MARKER OFF OF THE VEHICLE. DOSCONNECT THE PLUG, AND SET IT ASIDE



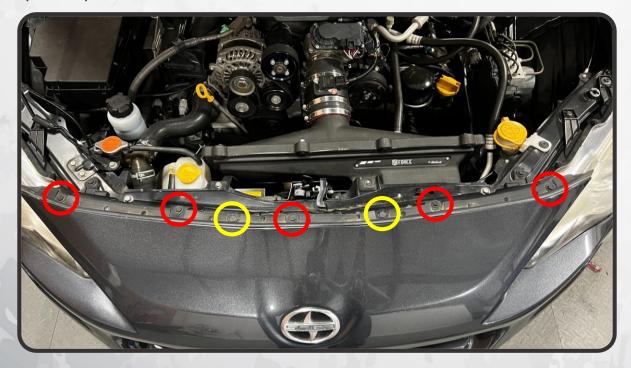
4. REMOVE THE PLASTIC PUSH CLIP THAT WAS HIDDEN BY THE SIDE MARKER ASSEMBLY



- 5. REPEAT STEPS 1-4 ON THE OPPOSITE SIDE
- 6. MOVING TO THE UNDERSIDE OF THE FRONT BUMPER COVER, REMOVE THE TWO 10MM SCREWS (YELLOW) AND SEVEN PLASTIC PUSH CLIPS (RED) FROM THE BUMPER COVER



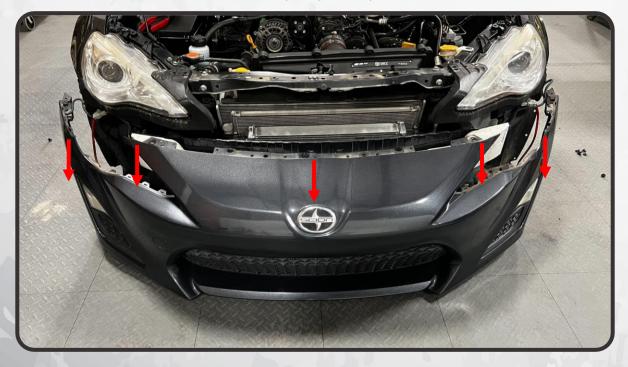
7. RAISE THE HOOD OF THE CAR. REMOVE THE FIVE 10MM BOLTS (RED) AND TWO PUSH CLIPS (YELLOW) FROM THE UPPER EDGE OF THE BUMPER COVER



8. FIRMLY PULL THE SIDE OF THE BUMPER COVER OUT, AWAY FROM THE FENDERS, RELEASING THE TABS SECURING IT. DO THIS FOR BOTH SIDES



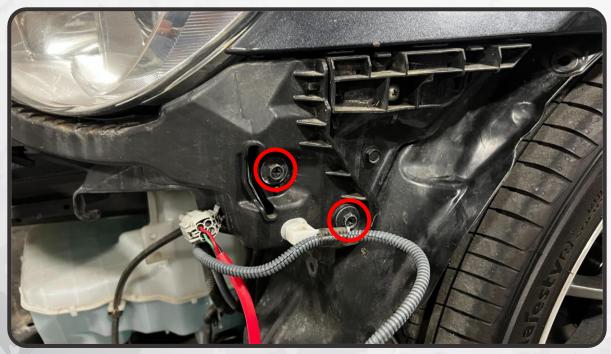
9. PULL THE BUMPER COVER FORWARD, JUST OFF OF THE CAR. DISCONNECT THE BUMPER MOUNT TURN SIGNALS AND FOG LIGHTS (IF EQUIPPED). SET THE BUMPER COVER ASIDE



10. REMOVE THE FOUR 10MM BOLTS FROM THE BUMPER BRACKET ON THE HEADLIGHT, AND PULL IT STRAIGHT FORWARD TO REMOVE IT. SET IT ASIDE







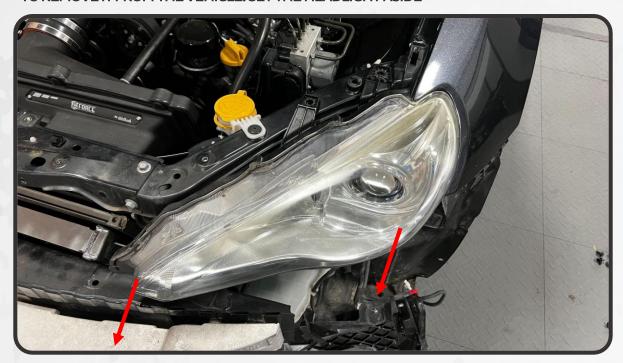
11. DISCONNECT THE MAIN HEADLIGHT CONNECTOR FROM THE BACK OF THE HEADLIGHT ASSEMBLY. DISCONNECT THE ADJUSTER MOTOR AS WELL IF EQUIPPED



12. REMOVE THE PUSH CLIP AND 10MM BOLT FROM THE TOP OF THE HEADLIGHT

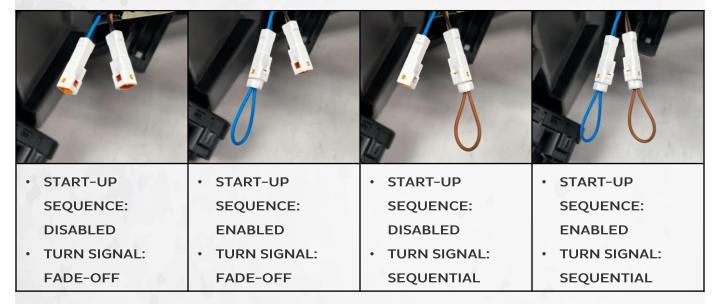


13. LIFT UP ON THE FENDER TAB ON THE HEADLIGHT AND PULL THE HEADLIGHT FORWARD TO REMOVE IT FROM THE VEHICLE. SET THE HEADLIGHT ASIDE



14. REPEAT STEPS 10-13 ON THE OPPOSITE SIDE

15. REMOVE THE NEW HEADLIGHT ASSEMBLIES FROM THE PACKAGING AND LOCATE THE BLUE AND BROWN MODE SELECTOR LOOPS ON THE BACK OF THE LIGHT. EITHER REMOVE OR CONNECT THESE LOOPS AS SHOWN IN THE GRAPHIC BELOW TO CONFIGURE THE HEADLIGHT TO YOUR PERSONAL PREFERENCE. THIS CAN ALWAYS BE CHANGED AFTER INSTALL IF DESIRED. MAKE SURE THE VEHICLE AND HEADLIGHTS ARE OFF WHEN CHANGING MODES



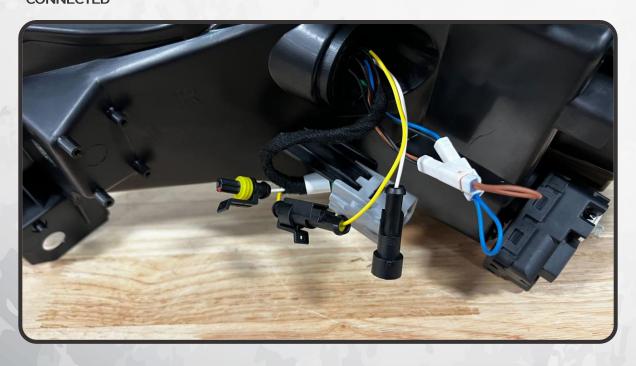
16. IF YOUR CAR CAME EQUIPPED FROM THE FACTORY WITH BUMPER-MOUNTED TURN SIGNALS (THE TURN SIGNAL IS MOUNTED IN THE LOWER PORTION OF THE BUMPER AND NOT IN THE HEADLIGHT), LEAVE BOTH THE WHITE AND YELLOW WIRES DISCONNECTED



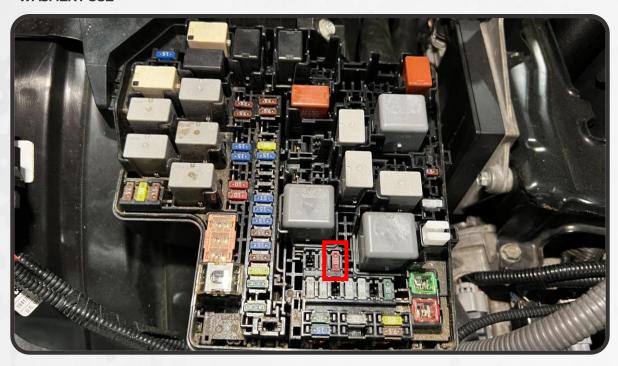
17. IF YOU HAVE A 2017+ MODEL YEAR VEHICLE, CONNECT THE FEMALE CONNECTOR ON THE WHITE WIRE TO THE MALE CONNECTOR ON THE YELLOW WIRE, AS SHOWN BELOW



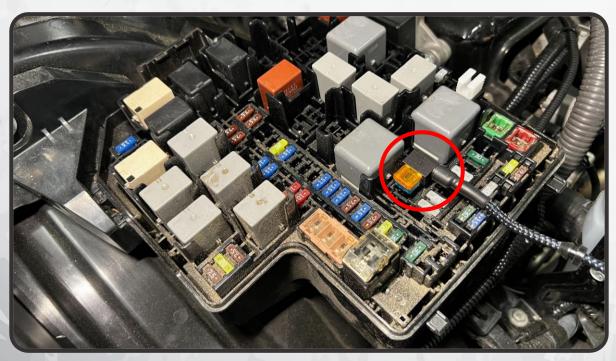
18. IF YOU HAVE A PRE-2017 MODEL YEAR VEHICLE WITHOUT BUMPER MOUNTED TURN SIGNALS, LEAVE THE WHITE WIRES DISCONNECTED AND THE YELLOW WIRES CONNECTED



19. LOCATE THE FUSE BOX IN YOUR ENGINE BAY. REMOVE THE LID AND LOCATE THE 10A WASHER FUSE



20. REMOVE THE FUSE AND INSTALL THE FUSE TAP INTO THE NOW EMPTY WASHER FUSE SLOT



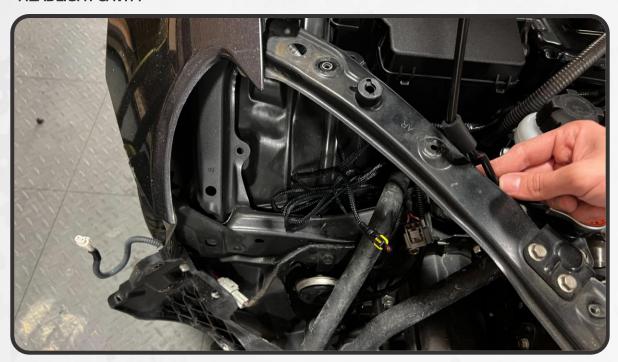
21. ROUTE THE FUSE TAP OUT OF THE FUSE BOX. USING A DRILL WITH A 5.5MM/7/32" DRILL BIT OR A SMALL CUTTING TOOL, MAKE A NOTCH IN THE SIDE WALL OF THE FUSE BOX LID FOR THE HARNESS TO PASS THROUGH, AND INSERT THE GROMMET ON THE FUSE TAP INTO THE NOTCH. CLOSE THE FUSE BOX LID DOWN OVER THE HARNESS



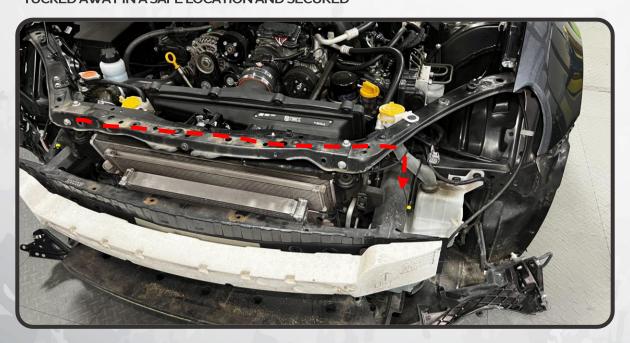
22. CONNECT THE DRL HARNESS TO THE FUSE TAP



23. ROUTE THE SHORTER END OF THE DRL HARNESS FORWARD TO THE PASSENGER-SIDE HEADLIGHT CAVITY



24. ROUTE THE LONG END OF THE HARNESS ACROSS TO THE DRIVER-SIDE HEADLIGHT CAVITY. WE RECOMMEND ROUTING IT ACROSS THE BOTTOM OF THE RADIATOR SUPPORT AND SECURING IT IN PLACE WITH ZIP TIES. MAKE SURE ANY LOOSE/EXCESS WIRING IS TUCKED AWAY IN A SAFE LOCATION AND SECURED



25. IF YOUR CAR CAME EQUIPPED FROM THE FACTORY WITH BUMPER-MOUNTED TURN SIGNALS (THE TURN SIGNAL IS MOUNTED IN THE LOWER PORTION OF THE BUMPER AND NOT IN THE HEADLIGHT) INSTALL THE TURN SIGNAL HARNESS ONTO THE CAR, AND ROUTE THE YELLOW WIRE OVER TO THE HEADLIGHT CAVITY



- 26. FIT THE NEW HEADLIGHT INTO THE HEADLIGHT CAVITY AND INSTALL THE FACTORY HEADLIGHT HARDWARE. CONNECT THE DRL HARNESS TO THE WHITE WIRE ON THE HEADLIGHT. CONNECT THE VEHICLE HEADLIGHT CONNECTOR TO THE CONNECTOR ON THE BACK OF THE HEADLIGHT. CONNECT THE HEADLIGHT ADJUSTER PLUG TO THE ADJUSTER MOTOR ON THE BACK OF THE HEADLIGHT (IF EQUIPPED)
  - IF YOUR CAR HAS THE 6-PIN HEADLIGHT CONNECTOR RATHER THAN THE 8-PIN CONNECTOR THAT MATCHES THE ONE ON THE HEADLIGHT, INSTALL THE INCLUDED ADAPTER BETWEEN THE HEADLIGHT CONNECTOR AND THE VEHICLE CONNECTOR (AS SHOWN BELOW)
  - IF YOUR CAR HAS BUMPER MOUNTED TURN SIGNALS, CONNECT THE YELLOW WIRE ON THE TURN SIGNAL HARNESS YOU INSTALLED TO THE YELLOW WIRE ON THE HEADLIGHT



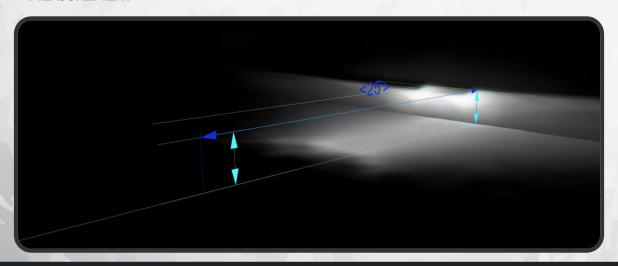
- 27. REPEAT STEPS 25 AND 26 ON THE OPPOSITE SIDE OF THE VEHICLE WITH THE OTHER HEADLIGHT ASSEMBLY
- 28. TEST AND CONFIRM THAT ALL FUNCTIONS ARE WORKING PROPERLY
  - NOTE: IF YOU HAVE BUMPER-MOUNTED TURN SIGNALS, YOU WILL NEED TO RECONNECT THEM BEFORE TESTING
- 29. REASSEMBLE THE CAR IN THE REVERSE ORDER OF DISASSEMBLY

#### AIMING

30. 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)



- 31. WITH THE VEHICLE PARKED ON LEVEL GROUND, 25' FROM A WALL, MEASURE THE DISTANCE FROM THE GROUND TO THE OPTICAL CENTER OF THE OUTERMOST PROJECTORIN 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



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- ENJOY YOUR NEW MORIMOTO XB HEADLIGHTS! -