

CorkSport Performance

CX50-8-521 Hood Light Brackets

Installation Instructions for the CorkSport Performance Hood Light Brackets for the 2023+ Mazda
CX50

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INTRODUCTION

In this installation guide we have provided step by step instructions to install the CorkSport Hood Light Brackets & show an example of light installation.

Advisory:

- These hood light brackets were designed around the Rigid D-Series 3" pod lights. Other lights may be used however, not all fitments have been confirmed and other lights may contact the vehicle. Take care during installation.
- Most LED pod lights are not legal for road use and can easily blind other drivers. Make sure you only use your lights when off-road or away from other drivers.
- Required tools shown only for bracket install. Assembly & install of light pods themselves will require additional tools and/or wiring supplies.

TOOLS:

- [3/8" Drive Ratchet](#) (1)
- [3/8" Torque Wrench](#) (1)
- [12mm Socket](#) (1)
- [Wire Cutters](#) (1)

PARTS:

- [CorkSport LH Hood Light Bracket for CX-50](#) (1)
- [CorkSport RH Hood Light Bracket for CX-50](#) (1)
- [Optional: Rigid D-Series 3" Pod Lights](#) (1)
- [Zip Tie](#) (8)

Step 1 — Getting Started



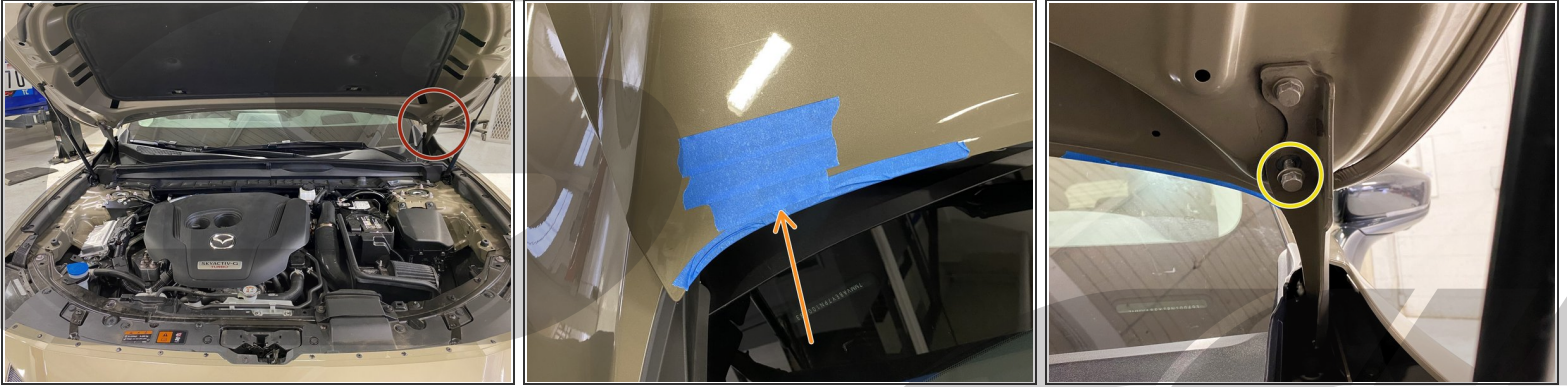
- First and foremost; **THANK YOU** for becoming a part of the CorkSport Family. We hope to bring you the highest level of Parts, Customer Service, & Support
- ⓘ How To Use These Instructions
 - The instruction format will relate colored marking in the image to the color dot in the text to the right of the image
 - The vehicle used in these instructions was a 2023 Mazda CX-50 Turbo Premium Plus. Other model years and trim levels will be nearly identical.

Step 2 — CS Hood Light Bracket Identification



- This step serves to identify which hood light bracket is the LH side and RH side. Note this information for later steps
 - LH side (driver's side)
 - RH side (passenger's side)

Step 3 — CS Hood Light Bracket Install Part 1



- Open your hood
- Locate the hood mounting bolts on the driver's side of the vehicle
- Place a few strips of blue painters tape or masking tape on the edge of the hood as shown to prevent scratches during install
- Remove the lower hood mounting bolt using a 12mm socket and ratchet

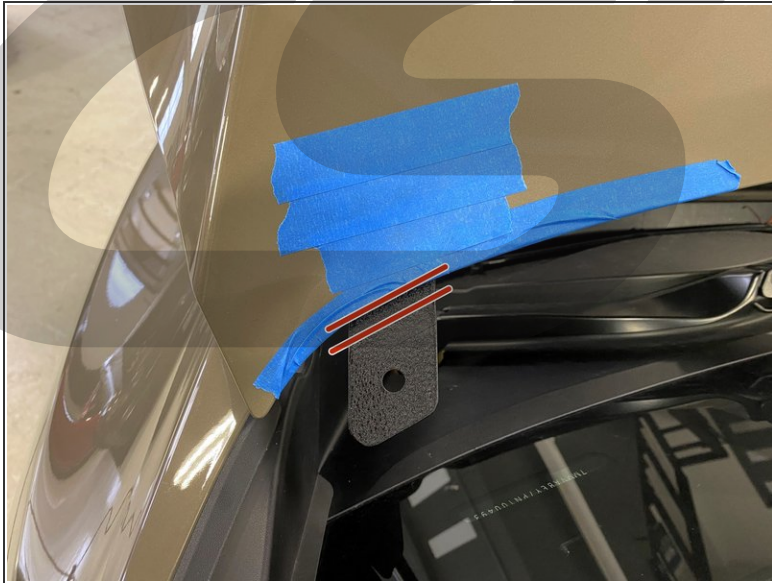
Step 4 — CS Hood Light Bracket Install Part 2



⚠ Take care to not cross-thread the hood bolts during the next steps

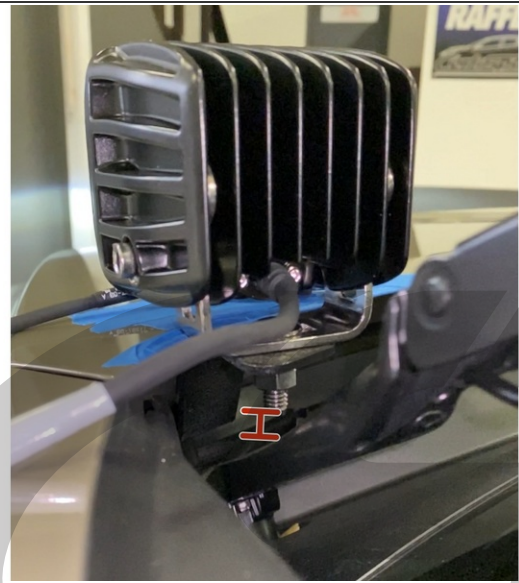
- Begin to install the CorkSport LH side hood light bracket using the bolt removed in the previous step. Thread this bolt in a few turns so the bracket can still rotate. Position it out of the way of the other bolt as shown
- ⓘ Steady the hood with your hand to ensure it does not fall during the next steps
- Remove the other hood mounting bolt with a 12mm socket and ratchet
- Line up the hood light bracket with this new hole and reinstall the bolt that was removed through the CS Bracket
- Tighten both bolts most of the way but leave slightly loose to allow for slight bracket repositioning in the next step

Step 5 — CS Hood Light Bracket Install Part 3



- Check that the bend of the CS hood light bracket is approximately parallel to the hood edge as shown. This ensures an even gap between the bracket and hood
- Once happy with position, tighten the two 12mm bolts to **18-20ft-lbs**.
- Repeat **Steps 3-5** for the passenger side of the vehicle using the RH side bracket

Step 6 — Hood Light Install Note



- ① The CorkSport Hood Light Brackets were designed for use with the Rigid D-Series 3" Pod Lights
 - Other similar lights can be used, however fitment issues may occur with the hood and/or windshield wiper
 - Other lights must have mounting stud/bolt diameter of 8mm, 5/16", or smaller. Larger mounting hardware will require drilling out the hood brackets
 - Windshield wiper clearance is tight on the driver's side. Designed for mounting bolts ~25mm, 1", or shorter.
- ⚠ Failure to check windshield wiper clearance can result in damage to your lights, wipers, and/or hood
- Image shows windshield wiper clearance with Rigid D-Series Lights for reference. Clearance is approximately 1/4"-3/8"

Step 7 — Light Assembly



- Assembled your mounting brackets onto your lights. Do not fully tighten the bolts as you will need to aim them later
- If using Rigid lights, they come with instructions on mounting bracket assembly. Reference those for assistance
- We assembled our Rigid lights as shown. This has the bracket positioned for a lower profile mounted height

Step 8 — Light Pod Mounting



- Install the light pods through the holes in the CS brackets using the hardware supplied with your lights
- Tighten until snug to keep lights in position during wiring installation. You will need to aim them later
- ⓘ If not using Rigid D-Series lights, now is a good time to verify clearance between the lights and your vehicle. Take special care to ensure the wipers clear the mounting hardware. Also check that your hood can fully open without issue

Step 9 — Wiring Install Note



⚠ The following steps include basic recommendations on how we installed the wiring for the LED light pods, however, full detailed wiring instructions are not included.

Step 10 — Pod Light Wiring Part 1



- Route the plugs from your pod lights along the CS brackets as shown
- Using some of the supplied zip ties, loosely secure the wires to the brackets using the zip tie holes in the brackets
- Layout the wiring harness included with your light pods and plan out how you will route your wires and locate your switch

Step 11 — Pod Light Wiring Part 2



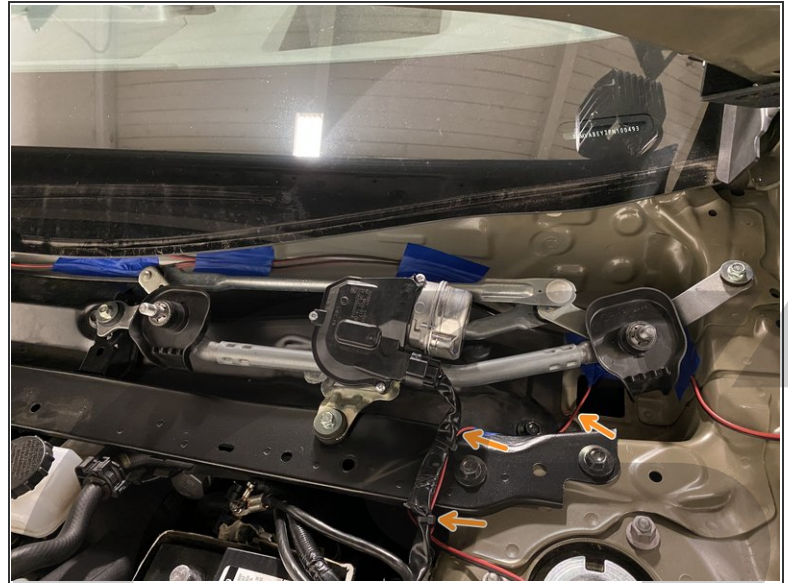
- You will need to route wires through the firewall so your light switch is easy to access while driving the car. Some disassembly is required for easiest access to the firewall
- We routed our wires through the main wiring grommet on the firewall, behind the battery area. There is a small nub that can be removed and the hole enlarged to route the wires through.
- The wires will come out under the dash, above and to the side of the pedals as shown. There is a circular insulation cover that will need to be moved to the side for access

Step 12 — Pod Light Wiring Part 3



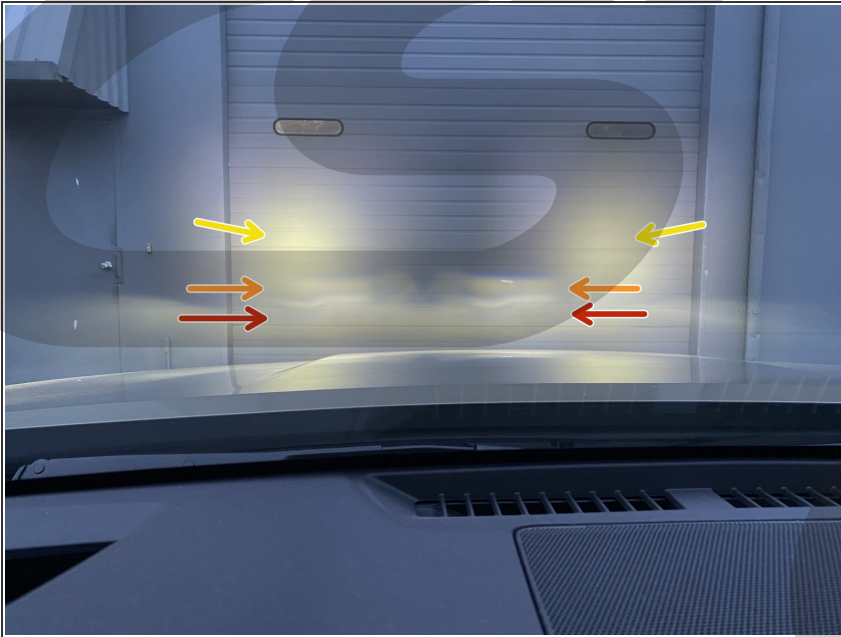
- Locate the light switch somewhere that is easy to access while driving but will not be accidentally pressed
- We located our switch in front of the cupholders, to the side of the 12V outlet as shown
 - ⓘ This location is optimal as it is hidden from view, yet easily accessible. However, to access the back of this panel for switch installation, much of the interior must be disassembled, including the entire center console & lower dash panels. A hole must also be drilled for switch install
 - ⓘ This location has a large area that could be used for 4-6 auxiliary switches if desired
- Another possible switch location is in the center console above the USB and map SD ports where shown
 - ⓘ Some LED pod light kits may not have a wiring harness long enough to reach this location
- ⓘ Ensure you follow the wiring directions that came with your light kit to ensure proper switch function
- ⓘ We recommend leaving the interior disassembled until the rest of your wiring is complete so that you can test the switch

Step 13 — Pod Light Wiring Part 4



- Once your switch is located and wired, you can organize the rest of your wiring.
- ⓘ Ensure the wiring in the vehicle is away from your pedals, feet, and anything else that is moving and may cause damage
- For the wiring going to the lights, we ran our wires underneath the plastic cowling for the windshield wipers as shown
- ⓘ We recommend using water resistant masking tape and/or zip tie anchors to keep the wires secure and away from any moving parts or sharp edges
- We ran our wires along the windshield wiper wiring to get down to the firewall and make the battery connections. If following this path, ensure your wires have plenty of clearance to the wiper mechanism
- Make your connections to the battery as instructed by your kit and verify everything functions as intended.
- Organize any extra wiring and verify you hood can close without damaging the wires. Final tighten any zip ties that were left loose earlier. Trim off the "tails" of the zip ties for a clean install
- Reassemble all underhood and interior parts that were removed.

Step 14 — Aiming the LED Pod Lights



- Find a large flat wall with a flat parking area in front of it and park your car 10-20ft away from the wall
- ⓘ Depending on your desired use for your lights, your desired aiming will differ. For spot lights, aiming them forward and slightly outward will provide the most added light. For flood lights, aiming them at ~45 degrees outwards will provide the best peripheral visibility
- We aimed our spot lights slightly above and slightly outward of the factory high beams as shown. Our drivers side light was later aimed more outward than shown
 - Factory low beams
 - Factory high beams
 - Rigid D-Series Spot Lights
- Once happy with aiming, tighten bracket & mounting hardware to lock your lights in position

Step 15 — Installation Complete



- This completes your installation of the CorkSport Hood Light Brackets!
- Contact us with any questions or concerns at sales@corksport.com or (360) 260-2675.
- Please leave a review here: <https://corksport.com/>
- Share your experience using #CorkSport on Instagram, Facebook, and Twitter.