



Powered Wiper Kit Instructions (X3 Gen 2)

SKU: MA-X3-ELEC-WIPER-DS Fits: X3 with Moto Armor Gen 2 Glass Windshield

Hardware	QTY
10-24 X 5/8 Button Head BSS	4
M6 X 22 Button Head BSS	1
M8 Nut	1
10-24 nylock nut	4
1/4" Flat Washer	1
1/4 Lock Washer	1

Parts	Qty
145° 2 speed Motor	1
Arm and Blade Kit	1
X3 Motor Box	1
X3 Motor Mount Plate	1
Wiring Harness and Switch	1



Needed but not included 3/16 Drill bit, 1/4 Drill bit, 3/4 Drill bit

Step 1: Assemble Wiper Motor and Box. (may come pre-assembled) Place wiper motor in box as shown with shaft going through large hole. Place back cover over motor and secure with two 1/4" bolts with washers and lock washers. Make sure wiring is routed out notch so it's not pinched. Do NOT install large nut or 6mm bolt into front of box yet.



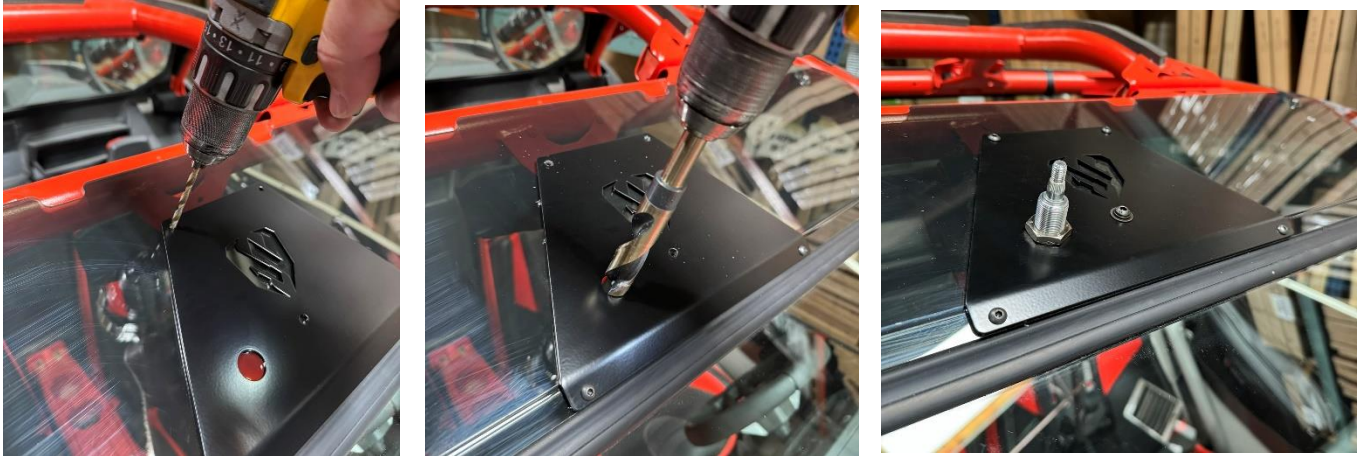
Take large nut off to install on frame

Step 2: Install wiper Motor onto windshield. Use a 1/8 Allen key and a 3/8" wrench/socket to Remove the two center bolts on the visor that bolts into the windshield frame. Place mount plate (plate with logo) onto visor with two bottom holes lining up with the two holes you removed the bolts from. Use two of the new longer bolts to fasten mount plate to windshield visor and frame.



With mount plate bolted on, use a 3/16 drill bit to drill out the top two mount plate hole through the polycarbonate visor. Use a 1/4" drill bit to drill out the medium size hole near the middle of the plate. Use a 3/4

inch drill bit to drill out the large hole. You can use multiple style 3/4" drill bits to drill the hole. The important thing is to make sure it is lined up with the hole in the plate.



When all holes are drilled, place box with motor in place with the large shaft going through the large hole. Secure in place with the large nut, and the 6mm bolt with lock washer and washer.

DO NOT MOUNT WIPER ARM YET. Finish wiring first.

Step 3: Install wiring harness and switch. The wiring harness will connect to the power posts located in the lower center consol just to the left of the passenger seat bottom. This is not difficult, but takes a few minutes to take out the seat and several fasteners to get there.

To begin installing wiring harness, plug harness into wiper plug and run harness along top roll cage bar and down the passenger side of the A-pillar of the cage. Make sure you have enough harness so that it can be tight against the cage.

On the passenger side dash, remove the two bolts above the glove box shown in the picture below. The top one has a nut on it that you access from the gas-cap cover. With these two bolts out, pull apart the plastics to run the harness behind the plastics.



Next, open the glove box and remove the two bolts along the front edge of the dash shown in picture above. Pull away those plastics to continue running the harness behind the plastics. Leave harness hanging out just left of the glove box.

Remove passenger seat by pulling out the bottom seat cushion and accessing the back two nuts with an 18mm socket on an extension as shown in picture. Remove front two bolts and nuts and lift seat out of machine.



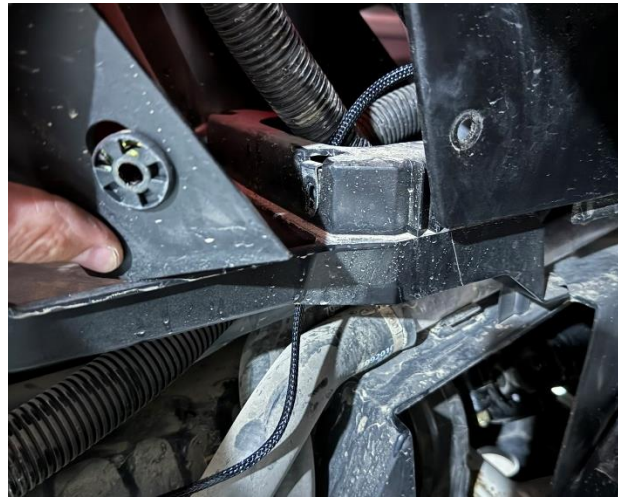
With seat out, Remove the one torx bolt circled in the picture below. Pull out at the top of the black side plastic panel to release clips and lift panel out of place.



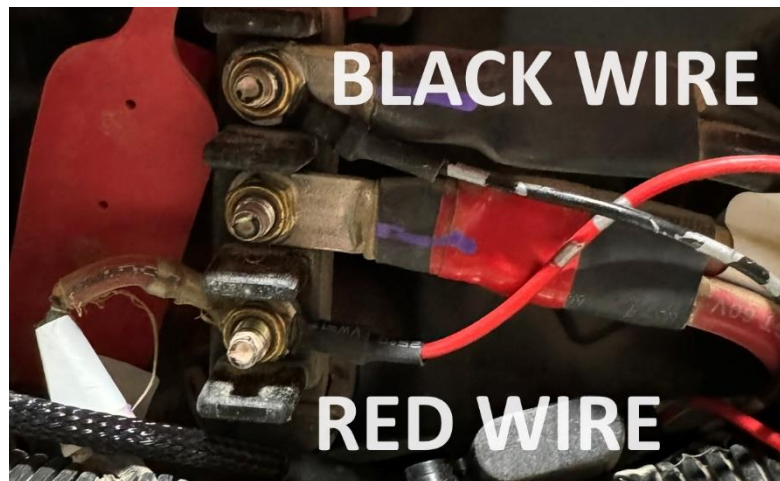
Install switch by taking out block off insert that comes on the X3 where you want the plug. Un-plug switch from harness and feed switch wiring through desired switch opening. Plug switch back in (It is directional and will only line up one way. Be careful not to try to force it the wrong way.) Push switch into place till it clips in.



There are two more panels you need to run wiring behind under the dash in the center. The upper cover, and the lower cover that goes down to the floor. Remove the two plastic push pin rivets, and the one bolt near the bottom of the upper cover. Pull out on the panel and run the harness behind the plastics. The lower panel will pull out when the upper panel is loose. Feed the wiring harness behind the covers and metal framing and run it along existing wiring. Use zip ties to secure to other wiring so that it is not loose.



Locate the 3 power posts under the red rubber cover. The top post is ground. The middle post is always on power. The bottom post is key on power. Connect the black wire to the top post by removing the nut and putting the wire on and re installing the nut. Attache the red wire to the BOTTOM post for Key on only power using the factory nut.



At this point test to make sure the switch and motor work by turning machine on (doesn't need to be running) and testing for power at the switch, and that the motor runs when switch is turned on. This is also important to do to make sure the motor is in the parked position for wiper arm installation. The motor will always return to the parked position when switch is turned to park. Reinstall all covers, hardware, and seat.

Install Wiper Arm and Blade. After motor has been cycled on and parked install wiper arm and blade as shown in the picture. Install the blade on to the arm first by clipping it on. Before installing arm on motor, remove the small plastic cover on arm by pulling up and away. **(This cover may break if you don't take it off during installation.)** Place wiper arm on motor shaft with the wiper blade up close to the rubber gasket on the driver side of windshield. Fasten the wiper arm onto shaft with the 8mm nut. Re-install plastic cover over nut and shaft.

