

# **P/N: 13826-13786 Wiper/washer kit for the EMP Glass Windshield P/N: 13563.**

## **Includes:**

1. Wiper Motor
2. 17-1/2" Wiper Blade
3. Bent Wiper Arm with Spray (BR-12089AFGAR4, 360mm, 14.17" Long, Bent by BROT)
4. Black Plastic 90 Degree Angle connector (should be attached to arm above)
5. Connector Kit (Large thin nuts and gaskets, used to attach wiper motor shaft to frame and nut to attach arm to shaft)
6. 2 Liter Washer Bottle
7. Rubber Washer Tube (4mm x 10 ft long)
8. Washer Pump to match wiring harness (Attached to washer bottle)
9. Wiring Harness W/Rocker switch and bracket (Bracket P/N: 13786-03)

## **Hardware Kit:**

1. (1) M6-14mm Long Bolt
2. (1) M6-50mm Long Bolt
3. (4) 1/4" Flat Washers (used for a spacer)
4. (1) 5/16" x 1" Coupling nut (used for a spacer)
5. (1) Factory Style Plastic Rivet (P/N: 12148) (used for T-shaped tank bracket)
6. (2) 1/4-20 x 3/4" Long Phillips Pan Head Screws (used to attach tank to T-shaped bracket)
7. (2) 1/4-20 Nyloc Flange Nuts (used to attach tank to T-shaped bracket)
8. (2) 1/4" x 1" Self-Tapping Screws, Black
9. (1) T-Shaped Washer Bottle Bracket (P/N: 13766-01)
10. (10) Zip Ties - 6" long
11. (2) Adhesive backed Zip Tie Anchors-White (BR-21040)
12. (1) EMP® Logo Decal

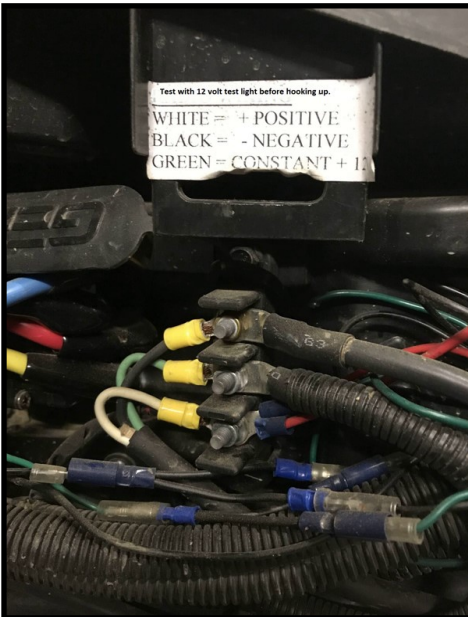
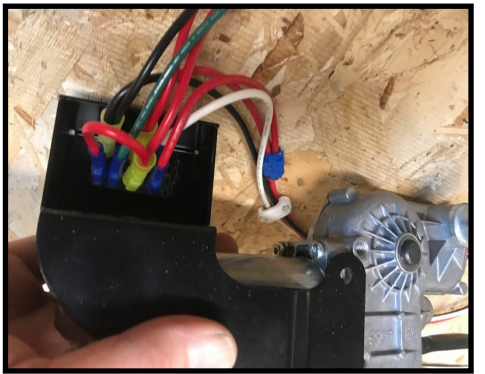
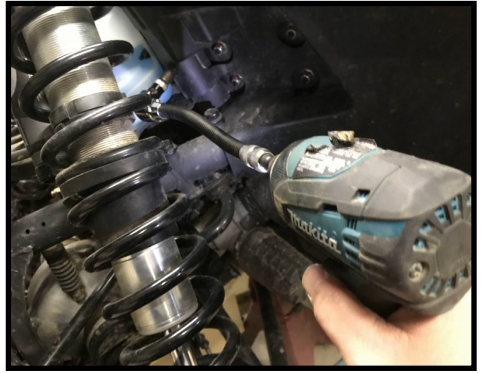
## **Tools Needed:**

1. 3/8" nut driver in a cordless drill to install the washer tank bracket.
2. Torx bits to remove the hood.
3. 10mm Wrench or Socket to install motor to frame.
4. Small flat screw driver to break out knock outs in the frame.
5. 15mm Socket to remove the passenger seat.
6. 7/16" Socket to hook up wires.

# Installation should always be done by a certified technician.

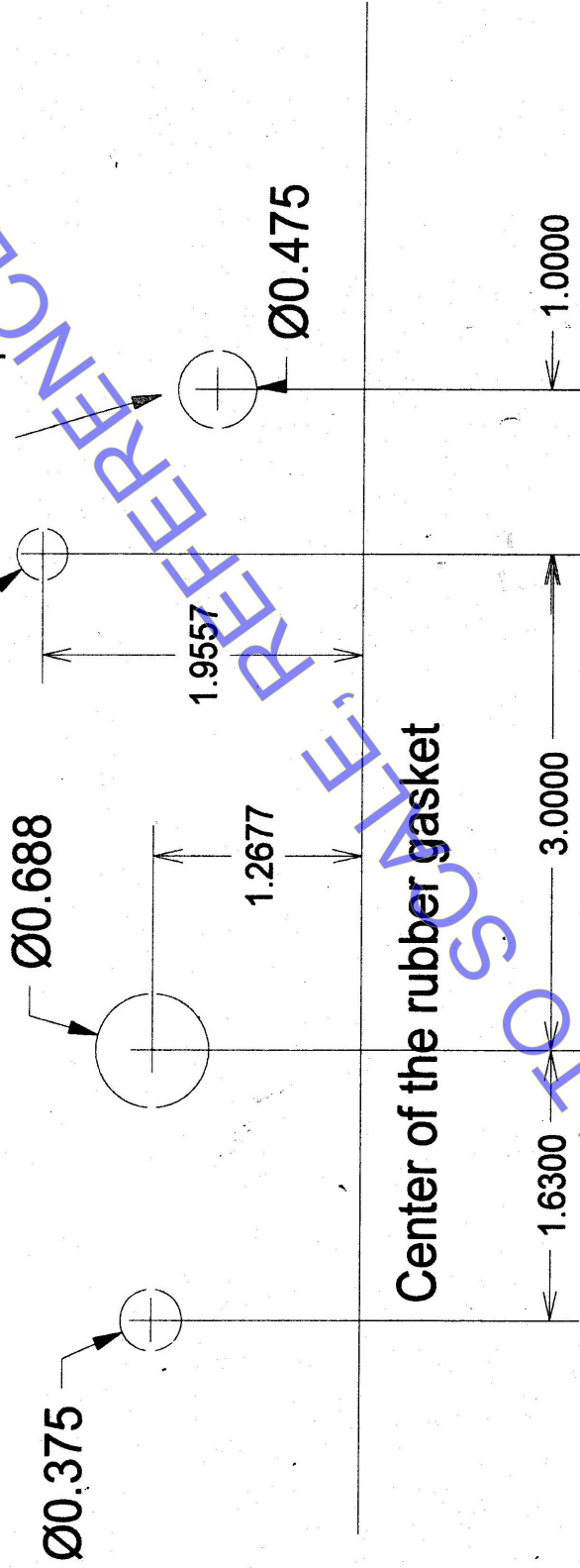
## Installation Instructions:

1. Remove the front hood. There are (12) torx screws that can be removed then the whole hood will come off. There are several videos of this on YouTube if have any trouble.
2. Put the vehicle in park.
3. Remove the top shock bolt on the front passenger side shock and move the top of the shock off to the side.
4. Install the washer bottle to the washer bottle bracket using (2) 1/4-20 x 3/4" pan head screws and (2) Nylon nuts.
5. Using the (2) Self-Tapping screws attach the water bottle assembly behind the shocks. This will be a tight fit but will fit. Drill out the factory rivets with the self-tapping screw. It is helpful to have a right angle 12 volt nut driver for this step.
6. Insert the factory style rivet into the top hole on the T-Shaped washer bottle bracket you just installed.
7. Knock out the (3) holes for the wiper motor on the windshield frame. On older models you will have to use the supplied template to drill the holes in the correct location. One for the motor shaft, one for the M6 x 50mm stabilizing bolt and one for the washer hose fitting. NOTE: two of the knock outs are for the hand operated wiper option and will not be used on the electric wiper option.
8. Bolt the wiper switch bracket to the motor using the (1) M6-14mm bolt.
9. Install the large washer and nut to the motor shaft. There will be one on the inside and one on the outside of the metal frame.
10. Bolt the assembly to the windshield frame using the (1) M6-50mm Bolt, 5/16" coupling nut (spacer) and up to four washers. The washers and coupling nuts are used for spacing the motor off of the frame.
11. Run the wiring across the top and down the passenger side tube and fasten with the zip ties. The white adhesive backed zip tie anchors can be used along the top.
12. Remove the passenger seat. You can use a socket with a long extension to reach the two nuts in the back. You have to put the socket down from the inside of the seat.
13. Remove the plastic side panel next to the passenger seat to expose the electrical hook up studs.
14. Test your wires for constant and switchable power. You want this to hook up to the switchable power other wise the light in the switch will put a draw on your battery.
15. Remove the correct nuts on the electrical block and hook up the correct wires.
16. Install the wiper arm to the wiper shaft using the supplied nut.
17. Attach the washer hose on the wiper arm to the 90 degree elbow and insert into the windshield frame next to the shaft.
18. Run the washer hose to the washer bottle under the shocks.
19. Hook the spade connectors to the washer pump. NOTE: Test to make sure it is sucking water before putting anything back together. If it is hooked up backwards it will not pump washer fluid.



# Drill Template for wiper/washer kit

Use this existing hole to measure from.  
This is the hole for the driver's side hand wiper.



Center of the rubber gasket

If using this for a drill template check the scale before drilling.  
The 1" dimension should be 1" when you measure it.

Template for drilling holes for X3 Windshield Wiper/Washer Kit  
Retrofit for the EMP® Glass Windshield P/N 13563

**Reference:**

- (2) .475" diameter holes are for the hand wipers and should already be in our frame.
- (1) .375" diameter hole is for the washer hose. This location is not too critical.
- (1) .688 diameter hole is for the wiper motor shaft.
- (1) .312 diameter hole is for the M6 bolt that stabilizes the wiper motor from rotating.

**NOTE:** The centers between the .688" and .312 holes is critical.

The line is to the center of the rubber gasket.