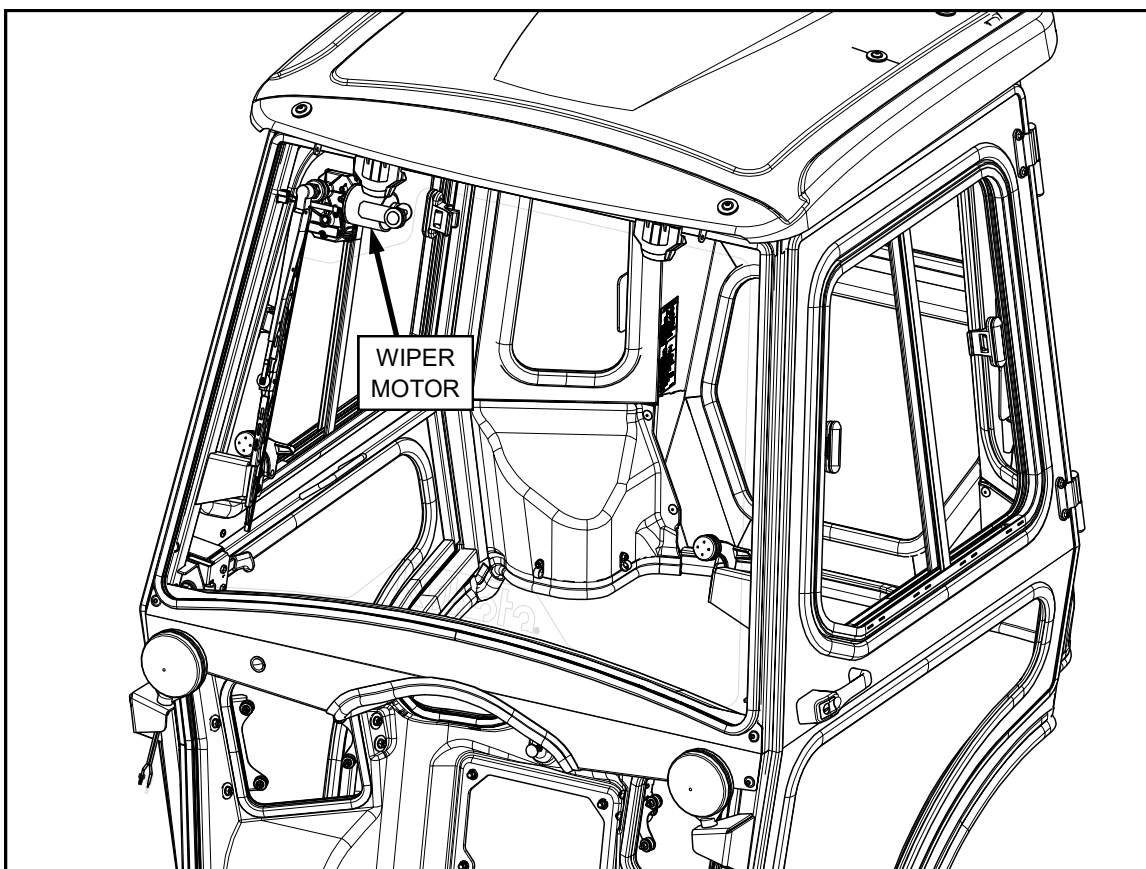


# OWNER'S MANUAL

MANUAL P/N: IM-BX4072  
MANUAL P/N: 77700-08651

# Kubota®

**BX-80 SERIES FRONT WIPER**  
**P/N BX4072**



**For use with: BX4070 AND BX4090 CAB SYSTEMS FOR**  
**KUBOTA BX1880, 2380, 2680 AND 23S TRACTORS**

Rev. B, 02/21/2024

**PLEASE READ THIS MANUAL CAREFULLY**  
**KEEP READY AT ALL TIMES**

All products are designed to give safe, dependable service if they are operated and maintained according to the instructions. **Read and understand this manual before operation.** It is the owner's responsibility to be certain anyone operating this product reads this manual, and all other applicable manuals, to become familiar with this equipment and all safety precautions. Failure to do so could result in serious personal injury or equipment damage. If you have any questions, consult your dealer.



# SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and on labels on the machine itself to warn of the possibility of personal injury. Read these instructions carefully. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.



**DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING:** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**IMPORTANT:**

Indicates that equipment or property damage could result if instructions are not followed.

**NOTE:**

Gives helpful information.

**Legal Disclaimer**

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The Product(s) described in this Publication are designed and manufactured only for the country in which they are initially wholesaled by Kubota. Kubota does not provide parts, warranty or service for any Product which is re-sold or retailed in any country other than the country for which the Product(s) were designed or manufactured.

California Proposition 65



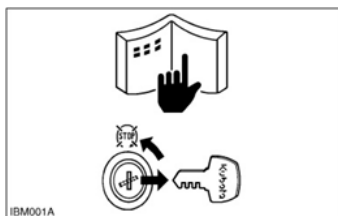
**WARNING**



Engine exhaust, some of its constituents, certain machine components and fluids, contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



# GENERAL SAFETY INFORMATION



IBM001A

## BEFORE YOU START SERVICE

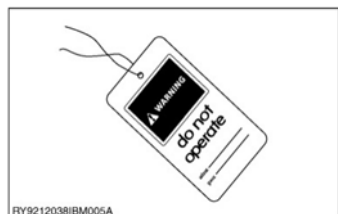
- Read all instructions and safety instructions in this manual and on your machine safety decals.
- Clean the work area and machine.
- Park the machine on a stable and level ground, and set parking brake.
- Lower the implement to the ground.
- Stop the engine, then remove the key.
- Disconnect the battery negative cable.
- Hang a "DO NOT OPERATE" tag in the operator station.



RY9212001IBM006A

## NO SMOKING OR OPEN FLAMES WHILE FUELING

- Fuel is extremely flammable and dangerous. Never smoke near fuel. If fuel is spilled on the machine, its engine, or electrical parts, it may cause a fire. If fuel is spilled, wipe it all up immediately.
- Never smoke while filling machine with fuel. And always tighten the fuel cap securely and wipe up any spilled fuel.



RY9212038IBM005A

- When performing maintenance on the equipment, hang the DO NOT OPERATE sign where it will be obvious from and around the driver's seat.
- When performing maintenance or repairs, always lower attachments to the ground, stop the engine and secure the tracks with blocks.
- When performing maintenance on the equipment, always disconnect the negative battery cable.
- Before using tools, make sure you understand how to use them correctly and use tools in good condition and of the right size for the job.



RY9212001IBM003A

- Before getting on/off of the machine, clean off around the steps so there is no mud on them. Always give yourself 3-point support when getting on/off the machine

## CAUTION

- 3-point support means using both legs and one hand or both hands and one leg as you climb up/down.



IBM002A

## START SAFELY

- Do not do the procedures below when you start the engine
  - short across starter terminals
  - bypass the safety start switch
- Do not alter or remove any part of machine safety system.
- Before you start the engine, make sure that all shift levers are in neutral positions or in disengaged position.
- Do not start the engine when you stay on the ground. Start the engine only from operator's seat.



RY9212091IBM002A

- Do not remove the radiator cap when the engine operates, or immediately after it stops. If not, hot water can spout out from radiator. Only remove the radiator cap when it is at a sufficiently low temperature to touch with bare hands. Slowly loosen the cap to release the pressure before you remove it fully.



RY9212001IBM004A

## STARTING THE MACHINE SAFELY

- Before starting the engine, always sit in the driver's seat and make sure the area is safe and clear.
- As it is dangerous, never start the engine from anywhere but the driver's seat
- Always check and make sure control lever(s) are not engaged before starting the engine.
- Never start the engine by hot-wiring the starter circuit. This is not only dangerous, but may damage the machine.



RY9212091IBM001A

- The engine, muffler, radiator, hydraulic line, etc., have parts that remain very hot even after the engine has been stopped. Be sure to avoid these parts, as touching them can result in burns. Radiator coolant, hydraulic fluid and oil also remain hot. Therefore, do not attempt to remove caps and plugs, etc., before these fluids have sufficiently cooled.
- Make sure the coolant temperature has dropped sufficiently before opening the radiator cap. Also since the inside of the radiator is pressurized, when removing the cap, first loosen it to release the pressure before removing the cap completely.



RY9212001IBM002A

- Wear clothes appropriate for working on equipment. Do not wear loose-fitting clothes as they may catch on the machine controls.
- When working on the equipment, use all safety gear, such as a helmet, safety glasses and shoes, that are required by law or regulation.
- Never perform maintenance while drowsy or under the influence of alcohol or drugs.



RY9212001IBM007A

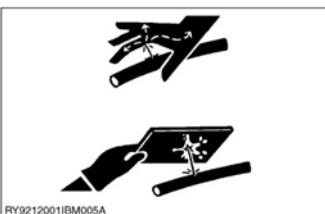
- Grease is under high pressure inside the hydraulic cylinder. It is very dangerous to loosen a grease nipple quickly as it may shoot off. Always loosen grease nipples slowly.
- And never face a grease nipple while loosening it.



IBM010A

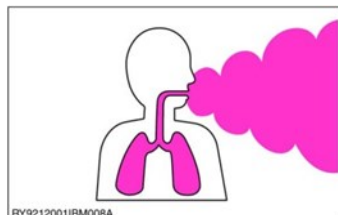
## BE READY FOR AN EMERGENCY

- Keep a first-aid kit and fire extinguisher close at hand so you can use it when needed.
- Keep emergency contact information for doctors, hospitals and ERs handy.



RY9212001IBM005A

- The pressure in the hydraulic circuit stays at pressure even after the engine stops. Before removing parts, such as hydraulic devices from the machine, first release the pressure. Please note that when releasing residual pressure, the machine itself and/or implements may move without warning, so be very careful when releasing the pressure.
- Oil gushing out under pressure is extremely dangerous as it may pierce your skin or your eyes. Similarly, oil leaking out of pinholes is not visible. So when checking for oil leaks, always wear safety glasses and gloves and use a piece of cardboard or a wood block to shield yourself from oil.



RY9212001IBM008A

## KEEP A GOOD AIRFLOW IN THE WORK AREA

- If the engine is in operation, make sure that the area has good airflow. Do not operate the engine in a closed area. The exhaust gas contains poisonous carbon monoxide.

- Do not open a fuel system under high pressure. The fluid under high pressure that stays in fuel lines can cause serious injury. Do not disconnect or repair the fuel lines, sensors, or any other components between the fuel pump and injectors on engine with a common rail fuel system under high pressure.
- Put on an applicable ear protective device (earmuffs or earplugs) to prevent injury against loud noises.
- Be careful about electric shock. The engine generates a high voltage of more than DC100 V in the ECU and is applied to injector.



# GENERAL SAFETY INFORMATION



IRM006A

## **PREVENT A FIRE**

- Fuel is very flammable and explosive under some conditions. Do not smoke or let flames or sparks in your work area.
- To prevent sparks from an accidental short circuit, always disconnect the battery negative cable first and connect it last.
- The battery gas can cause an explosion. Keep the sparks and open flame away from the top of battery. Especially when you charge the battery.
- Make sure that you do not spill fuel on the engine.



## **LOADER AND BACKHOE SAFETY**

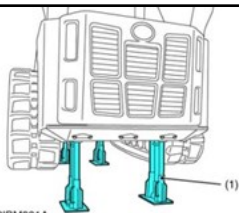
- Engage the loader control valve lock to prevent accidental actuation when the implement is not in use or during transport. Do not utilize the valve lock for machine maintenance or repair.
- Engage the loader control valve lock to prevent accidental actuation when the implement is not in use or during transport. Do not utilize the valve lock for machine maintenance or repair.
- Do not perform machine maintenance with loader in the air. If possible, follow loader instructions to remove loader before performing maintenance.
- If the machine has a backhoe, engage swing and boom locks



IRM009A

## **DISPOSE OF WASTE FLUIDS PROPERLY**

- Never dispose of waste fluids on the ground, in the gutter, a river, pond or lake. Always dispose of hazardous substances like waste oil, coolant and electrolytic fluid in accordance with the relevant environmental protection regulations.
- Keep the safety plates clean so they can be read. If a safety plate is damaged and comes off or becomes illegible, put a plate with the same warnings back in its place.



RY9212038IRM001A

## **(1) SAFETY STAND**

- When you need to access the underside of the machine for maintenance purposes, be sure to support the machine with a safety stand. Getting under the machine while supporting the machine by machine's own hydraulic cylinder or using a hydraulic jack can be extremely dangerous in the event of a hydraulic fluid leakage or similar mishap.
- Whenever it is necessary to open the engine covers or hood in order to service the machine, always prop them open.
- If it is absolutely necessary to run the engine while working on the machine, make sure you are clear of all rotating or moving parts. Also take care not to leave anything, such as tools or rags, near any moving parts.

# ESTIMATED ASSEMBLY TIME

Refer to the following table for the estimated assembly time to open the packaging and assemble the accessory.

Approximate Installation Time	30 minutes
-------------------------------	------------

Assembly times on the table are just reference under the average conditions with following assumption(s)

1. Assembly is done by one worker
2. The following tools are readily available:
  - 1) 3/8" Drive Ratchet and Long Drive Extension
  - 2) Torque Wrench (inch-pounds)
  - 3) 2.5mm Allen Wrench
  - 4) 3/16 Allen Wrench
  - 5) 1/2" Socket
  - 6) 7/16" Socket
  - 7) 7mm Open End Wrench
  - 8) 8mm Open End Wrench
  - 9) 21mm Open End Wrench
  - 10) Flat Head Screw Driver
  - 11) #2 Phillips Screw Driver

## ASSEMBLY

**All installation procedures listed within this manual are generally representative of the machine model for which the manual is written.** Your machine may be configured differently (e.g. SP1 vs. SP2, etc.), but the outline for the procedure should still be followed. For further support for any issues not covered within the pages of this manual, please contact your local Kubota representative.

### **WARNING:**

### **TO PREVENT SERIOUS PERSONAL INJURY OR DEATH: REQUIRED BEFORE INSTALLATION:**

1. Read and understand this entire manual and any other publications for the equipment being operated.
2. Ensure that the surrounding area is clear and that personnel are positioned away from the area where engagement and disengagement of attachments will occur.
3. Always shut off engine when leaving the operator's area to perform any portion of the listed procedures.

# ASSEMBLY

Steps 1-2 are only required if a cab has already been fully installed.

If a cab is currently being installed for the first time, proceed to step 3.

1. Remove installed roof and set aside with mounting hardware.

Tools: 3/16 Allen Wrench  
1/2" Socket

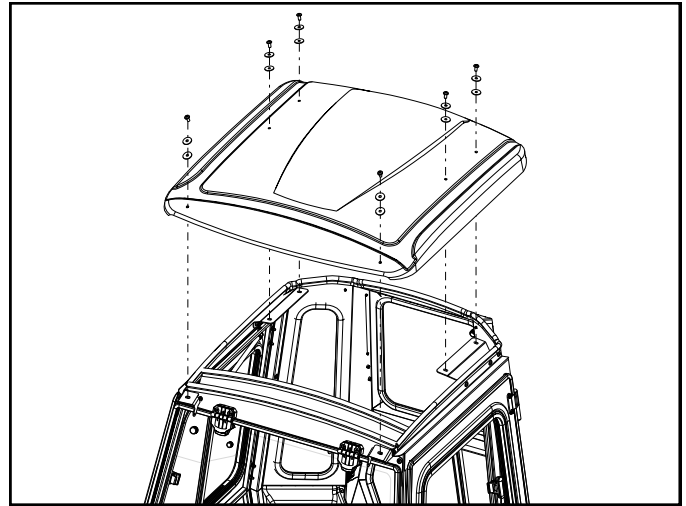


Figure 1: Remove Roof

2. Disconnect the weatherproof connector from the main power harness protruding from the bottom of the right sideframe.

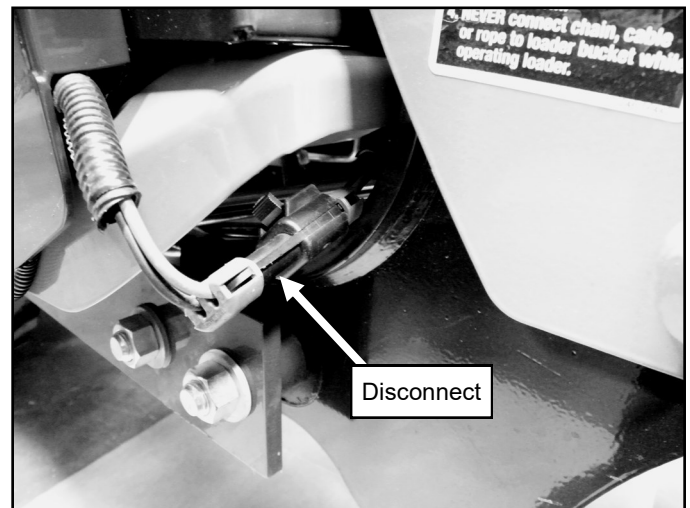


Figure 2: Disconnect Weatherproof Connector

3. Remove and discard the (2) plugs found on the windshield.

**WARNING: Avoid damage! Do not pry against the windshield to remove the plugs from outside the cab. Push them out from inside the cab.**

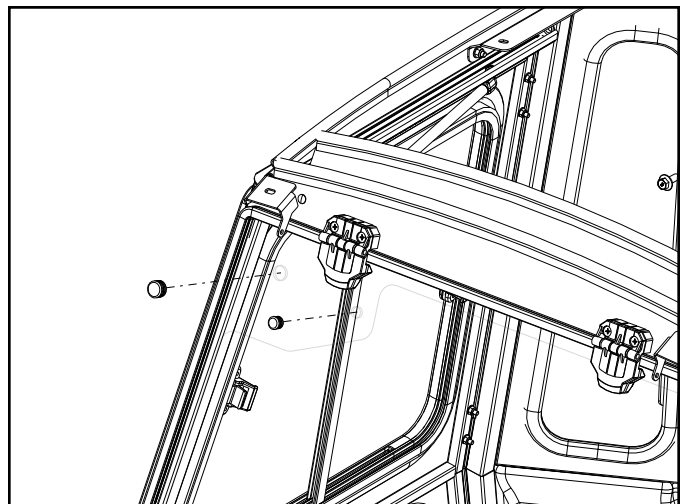


Figure 3: Remove Windshield Plugs

# ASSEMBLY

4. Remove (1) dome plug on the underside of the windshield near the Rocker Switch hole plugs. Next, remove the larger dome plug above the previously removed hole plugs found in the windshield.
5. Install the wiper motor using the hardware provided on the wiper motor and in the wiper motor mounting kit.

Tools: 21mm Open End Wrench  
7/16" Socket  
Torque Wrench

*Note: Tighten the bolts at this time. Tighten the hex nut on the motor shaft to 30 inch-lbs. and the 1/4-20 hex head bolt to 75 inch-lbs..*

**WARNING: Over tightening wiper mounting hardware can damage windshield and components. Tighten only to specified values.**

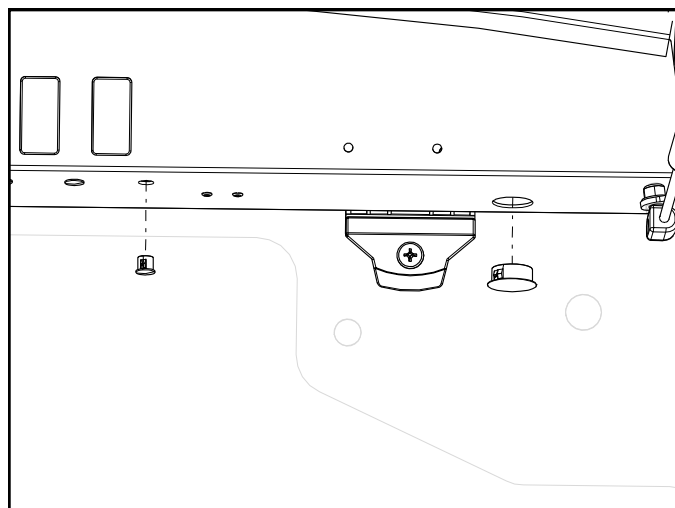


Figure 4: Remove and Discard Dome Plugs

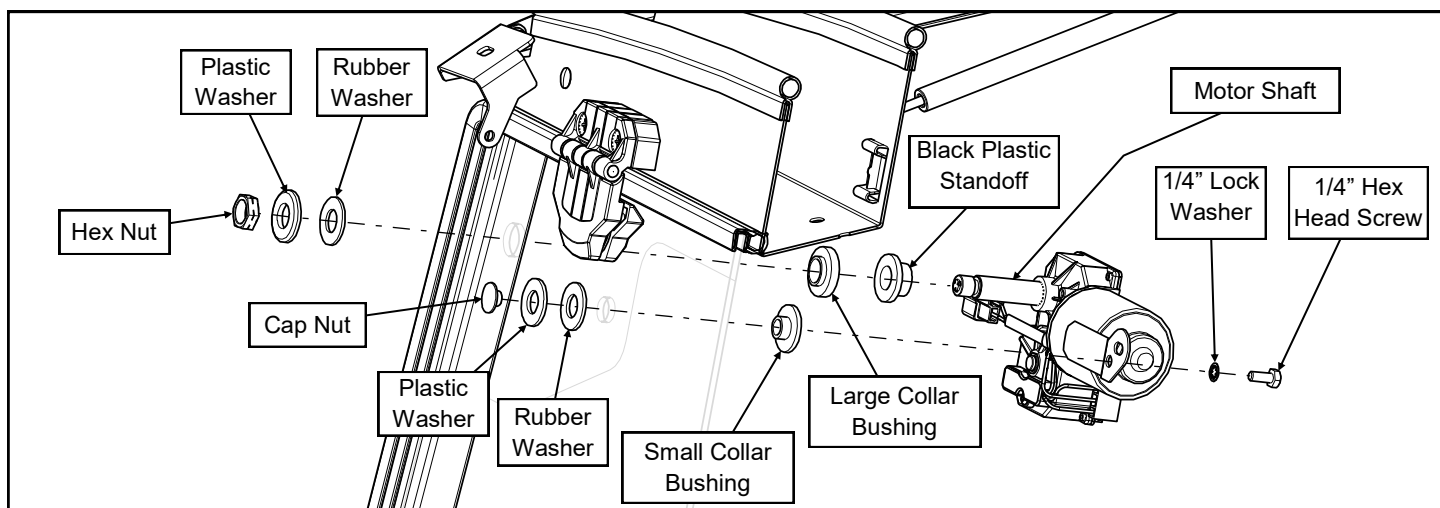


Figure 5: Install Wiper Motor

6. Install the circuit breaker on the inside of the windshield support using the supplied thumb nut. Make sure that the marking for terminal "1" is on the front right side as shown. Next, install the supplied rubber grommet into the bottom of the windshield support right above the wiper motor.

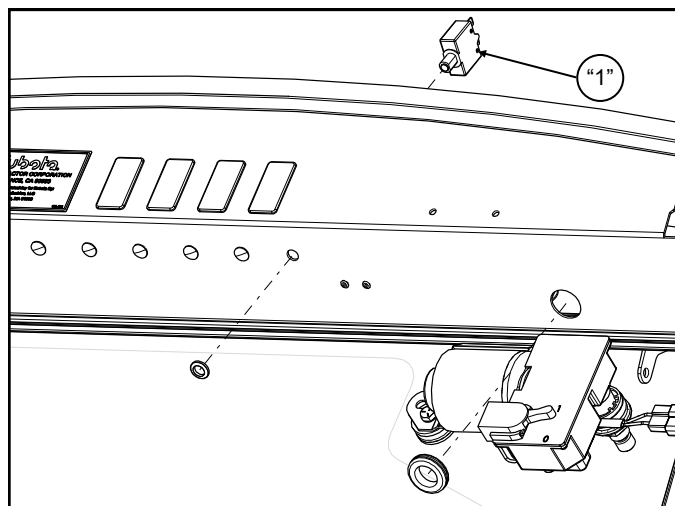


Figure 6: Install Circuit Breaker & Grommet

# ASSEMBLY

7. Connect the supplied front wiper wire harness to the wiper motor and run the harness through the rubber grommet.

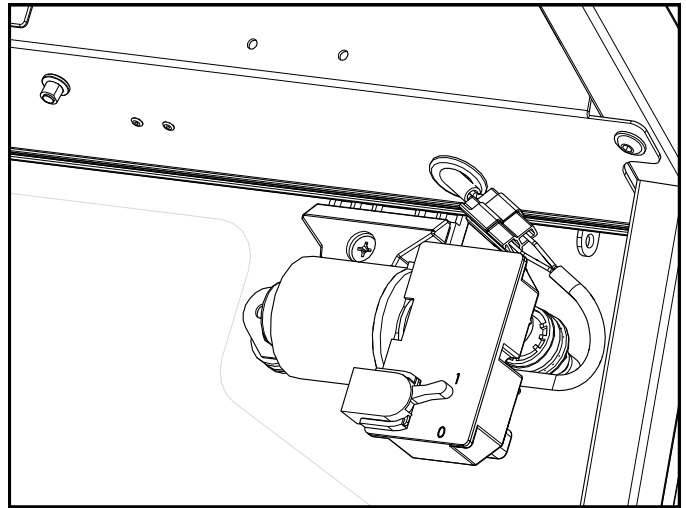


Figure 7: Install Wiper Wire Harness

8. Connect the white power wire extending from the top of the sideframe to terminal "1" found on the circuit breaker.

Note: If additional accessories will be installed, install the supplied jumper wire to terminal "1" and connect the white power wire to the male portion of the piggyback terminal. Connect the open end of the jumper wire to terminal "1" on the next circuit breaker.

Next, install the red wire found on the front wiper wire harness to terminal "2" found on circuit breaker.

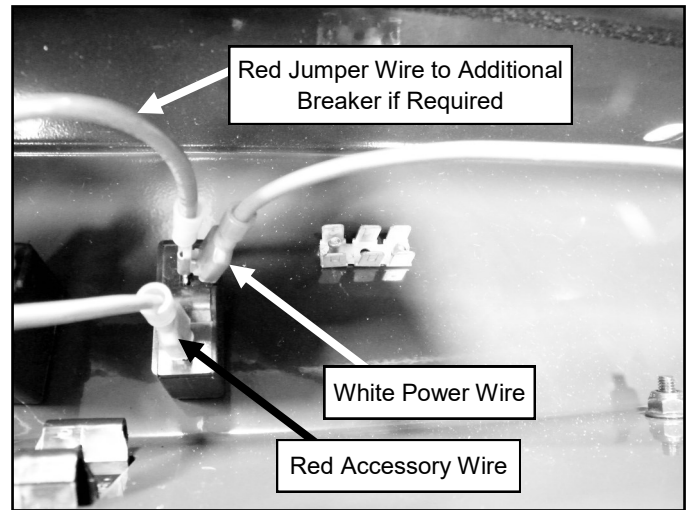


Figure 8: Connect Red Wire

9. Connect the black power wire extending from the top of the right sideframe onto the ground strip. Next, place the black wire found on the front wiper wire harness onto the same ground strip.
10. If there are any additional electrical accessories being installed, install them now.

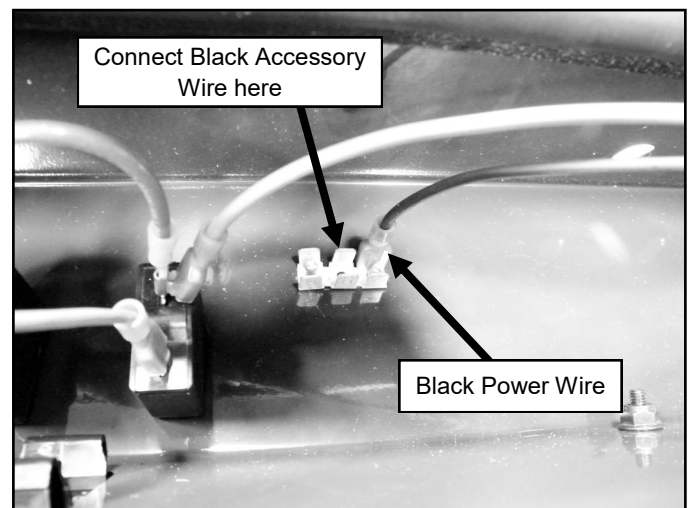


Figure 9: Connect Black Wire



# ASSEMBLY

11. If cab has been previously installed, re-connect the weatherproof connector and processed to step 12. If not, connect the weatherproof connector from the main power harness previously installed to the connector on the harness protruding from the bottom of the right sideframe. Be sure to route the harnesses to avoid sagging. Pull any excess wire back into the battery compartment and secure with cable ties provided in the cab hardware box.



Figure 11: Connect Weatherproof Connector

12. Turn the key to the on position and turn on the wiper motor to make sure the motor functions.

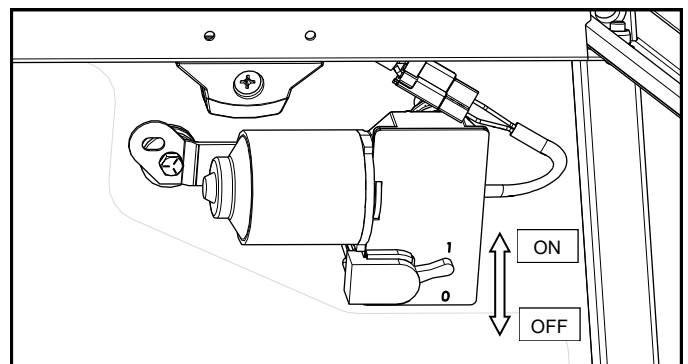


Figure 12: Power Up Wiper Motor

13. Remove the screw and locknut found on the wiper arm. Insert the screw through the wiper arm, then upper mounting hole in the wiper blade and through the wiper arm securing with the locknut.

Tools: 7mm Open End Wrench  
8mm Open End Wrench

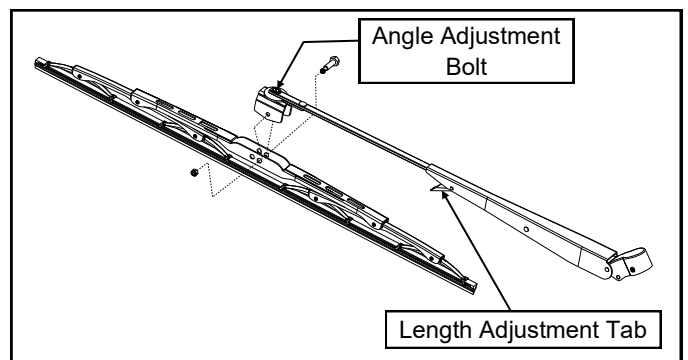


Figure 13: Install Wiper Blade onto Wiper Arm

14. Make sure the (2) set screws found on the wiper arm are backed out enough to install the wiper arm onto the wiper motor shaft. Install the wiper arm at the six (6) o'clock position onto the wiper motor. Snug set screws. Do not fully tighten. Turn the wiper motor on and test its operation. Adjust the arm sweep by turning the blade, adjusting the arm length, or removing the wiper arm off of the wiper motor shaft and reinstalling it at a different position.

Tools: 2.5mm Allen Wrench

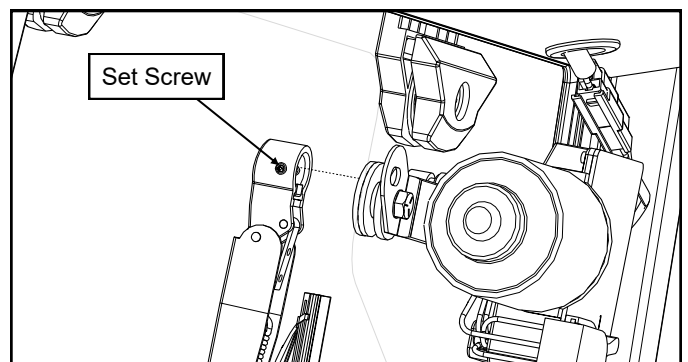


Figure 14: Install Wiper Arm onto Wiper Motor Shaft

# ASSEMBLY

15. Next, tighten down the (2) set screws found on the wiper arm (180 degrees apart) to ensure that the arm does not work its way off the splined shaft of the motor. Tighten to 24 inch-pounds max.

Tools: 2.5mm Allen Wrench  
Torque Wrench

*If the cab assembly has not been completed yet, continue with the remaining steps to complete the cab installation. If the cab was previously installed, proceed to the next step.*

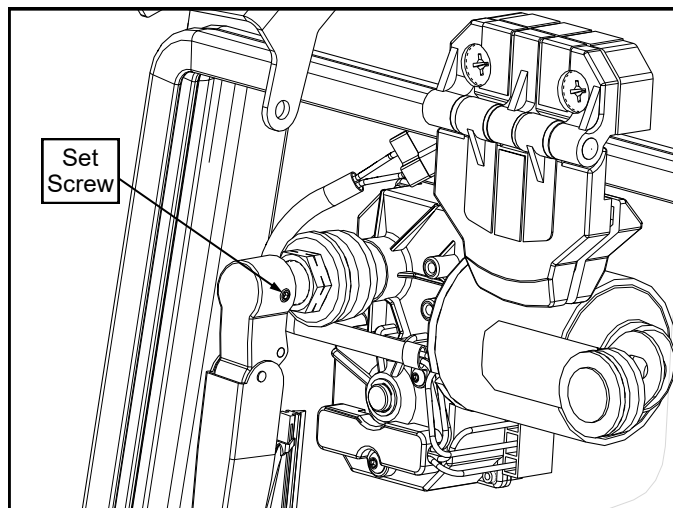


Figure 15: Wiper Arm Set Screw(s)

16. Re-install the roof using the fastening order shown. Do not overtighten as damage to the plastic will occur. Hand tighten until the rubber washer just begins to bulge from under the steel fender washer.

Hardware previously removed (Reference only)

- (6) 5/16-18 x 3/4" Flange bolts
- (6) 5/16"ID x 1-1/4"OD Steel Fender Washers
- (6) 5/16"ID x 1-1/4"OD Rubber Fender Washers
- (6) 5/16-18 Flange nuts

Tools: 3/16 Allen Wrench  
1/2" Socket

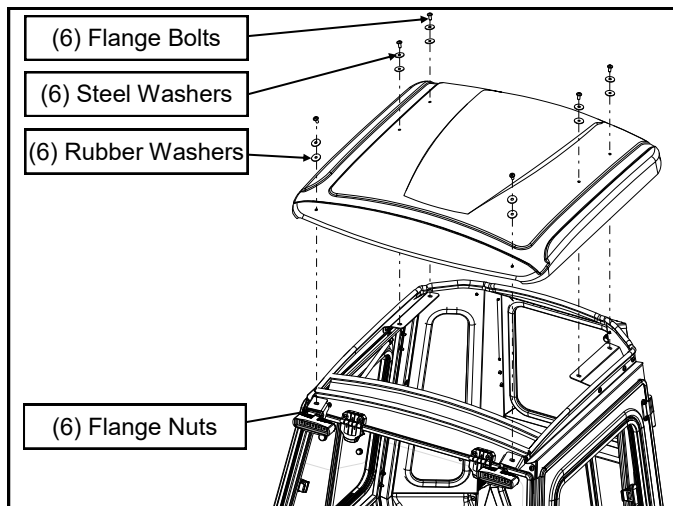


Figure 16: Re-Install Roof

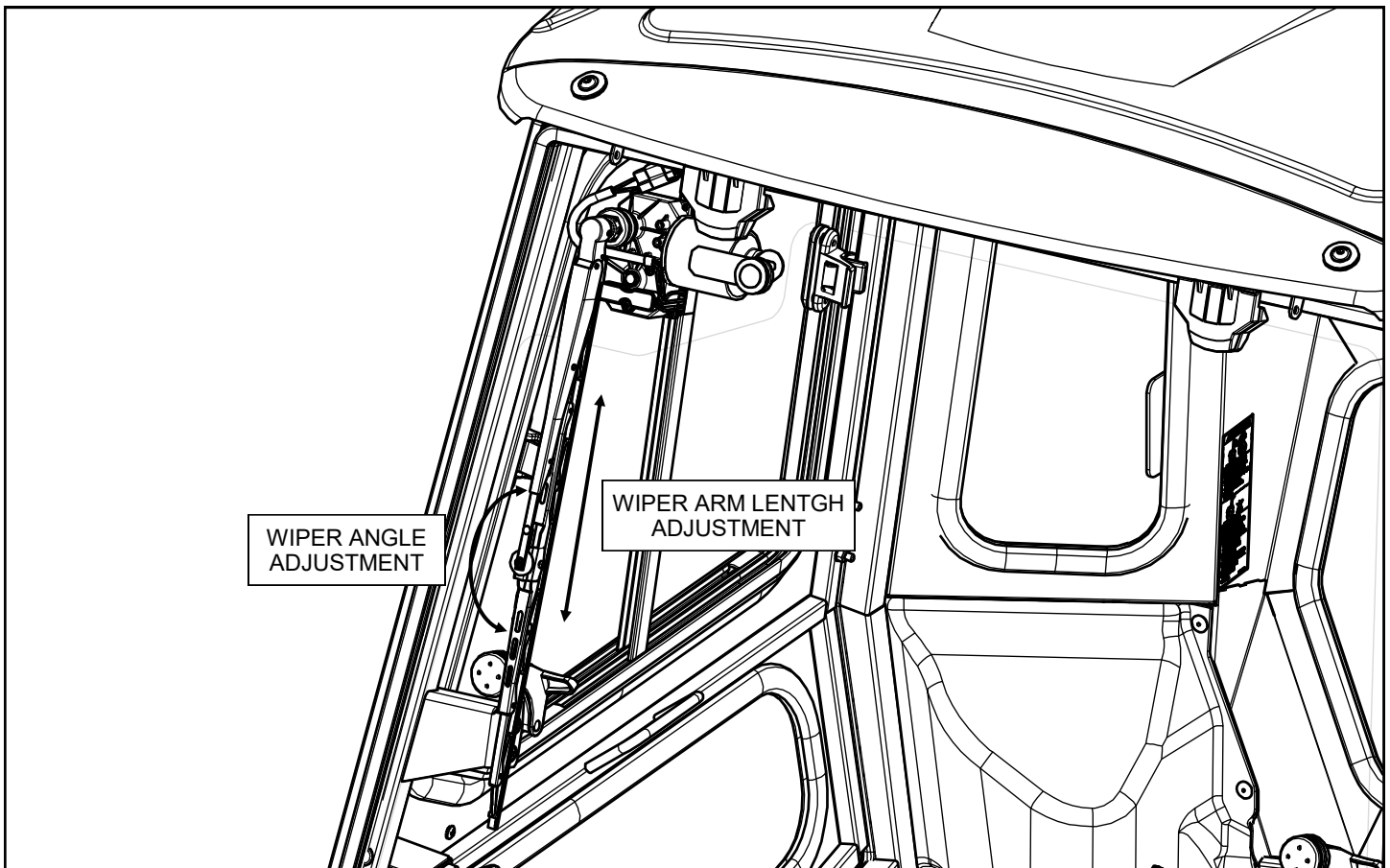
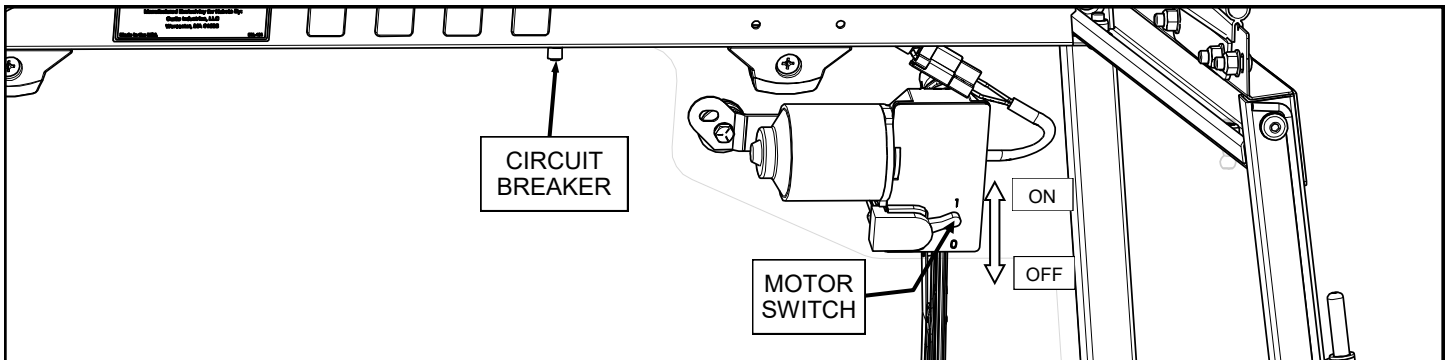
# OPERATION



## **WARNING**

### **REQUIRED BEFORE OPERATION**

1. Read and understand this entire manual and any other publications for the equipment being operated.
2. Ensure that the surrounding area is clear and that personnel are positioned away from the area where engagement and disengagement of attachments will occur
3. Always shut off engine when leaving the operator's area to perform any portion of the listed procedures



# TROUBLESHOOTING

## FRONT WIPER TROUBLESHOOTING

Condition	Possible Solution
<ul style="list-style-type: none"><li>Front Wiper Motor does not turn on</li></ul>	<ul style="list-style-type: none"><li>Is the battery dead?</li><li>Check the following electrical connections in order: wiper motor to wiper harness, power harness to main harness found on the lower part of the right sideframe, power harness to battery, main harness to ground strip, main harness to circuit breaker, jumpers to circuit breaker(s), wiper harness to ground strip, wiper harness to circuit breaker.</li></ul>

# PARTS BREAKDOWN

ITEM #:	PART NUMBER:	CODE NUMBER:	QTY/KIT:	DESCRIPTION:
1	70000-01056	9PWM852	1	WIPER MOTOR, 85 DEGREE
2	70000-01054	9PWA14-16	1	WIPER ARM, ADJUSTABLE LENGTH (11" - 16")
3	70000-01055	9PWB20-FB	1	WIPER BLADE, 20", FLEX
4	77700-08630	9PWK-HBOEM	1	GLASS MOUNTING KIT FOR WIPER SYSTEMS, O.E.M.
5	77700-08625	9SV-APBR	1	ETA 5 AMP PUSH BUTTON RESET BREAKER W/ NUT
6	77700-08631	WH-00036	1	FRONT WIPER HARNESS, BX80
7	77700-08628	WH-00035	1	WIRE HARNESS, POWER JUMPER, BX80
---	77700-08651	IM-BX4072	1	INSTALL INSTRUCTIONS (NOT SHOWN)

