

## WIPER SHAKER INSTALLATION MANUAL

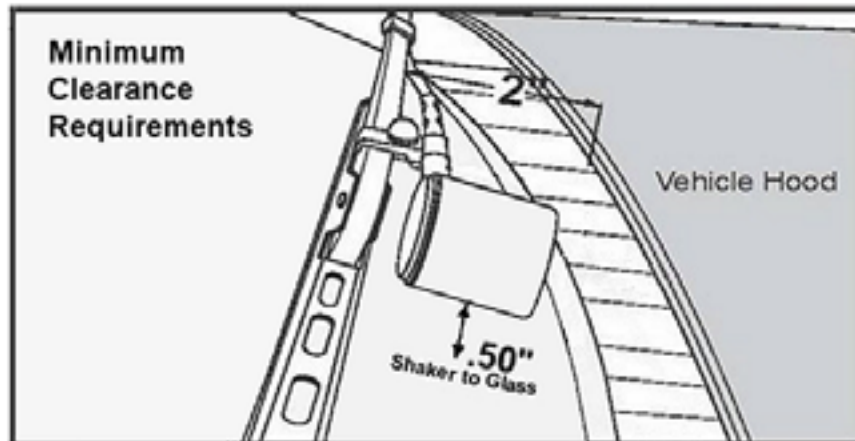
# THE SHAKER<sup>TM</sup> WIPER DE-ICER

Thank you for purchasing a Wiper Shaker. Please follow the instructions in this manual for your installation.



# COMPATIBILITY TO WIPER ARM:

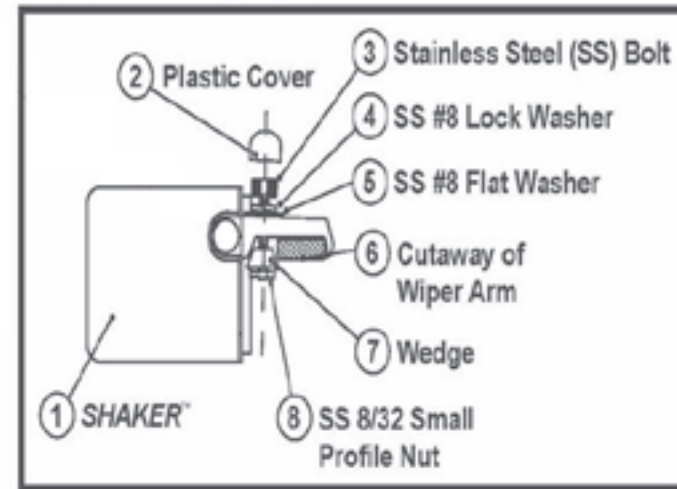
- **Standard:** The Wiper Shaker motor is designed to install on 9 mm (.35 in.) wide, “hook” style wiper arms.
- **Other Wiper Arm Styles:**  
If your wiper arms are not 9mm wide you will need one of the following motor adaptor kits:
  - **12mm Wide Arms:** If your vehicle has 12mm (.47in.) wiper arms you will need to modify the mount on the standard motor base and use the kit # BR64K which is a bracket and screw assembly that accommodates the wider arm. The installation instructions come with the BR64K adaptor if ordered.
  - **Tubular Arms:** If your vehicle has “tubular” style wiper arms you will need kit # BR70K to mount the motors. The installation instructions come with the BR70K adaptor if ordered.
  - **“Flat” Wiper Blades:** If your vehicle has the newer “flat” style blades you will need Kit # LA001K. The installation instructions come with the LA001K adaptor if ordered.
  - **“Pin in Side” Style Wiper Arms:** The Wiper Shaker may not be compatible with older wiper arms where the blade mounts with pin on the side of the arm.
- **MOTOR INSTALLATION CLEARANCE**  
It’s important that the Shaker motor is mounted close to the center of the wiper arm, and that the motor doesn’t contact either the windshield or the back edge of the hood.  
(See minimum clearances below)



# MOUNTING THE MOTORS

## MOUNTING THE MOTORS

- The motors mount to the flat section in the center of the wiper arm with a wedge assembly.
- The wedge assembly comes installed on the motor base. Disassemble the wedge screw with the hex wrench provided.
- Place the motor mount on the metal, flat section of the wiper arm with the motor facing toward the front of the vehicle. After placing the washers as shown in figure hand tighten the screw.
- Tighten the screw with the hex key provided until the lock washer is compressed. Do not over tighten. To check, lightly twist the motor to make sure it is mounted securely to the arm. See finished photo below.
- A black plastic cap is provided to cover the stainless screw head.

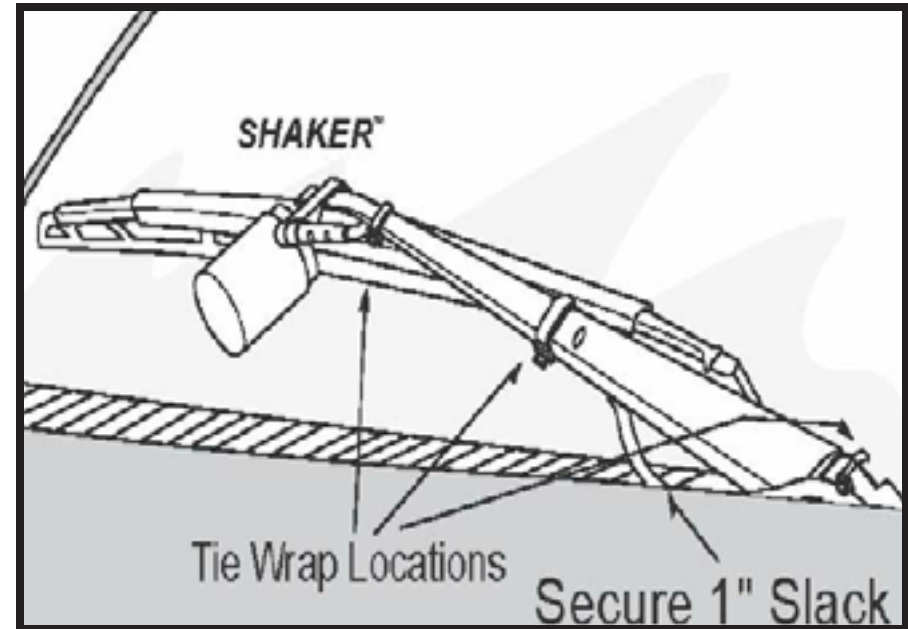


## ROUTING THE MOTOR ELECTRICAL LEADS:

- Feed the lead wire coming from the motor under the wiper arm.
- The motor lead wire is held in place under the wiper arm with three (3) of the black nylon tie wraps provided at the locations shown in the figure at the right.

### Important Warning:

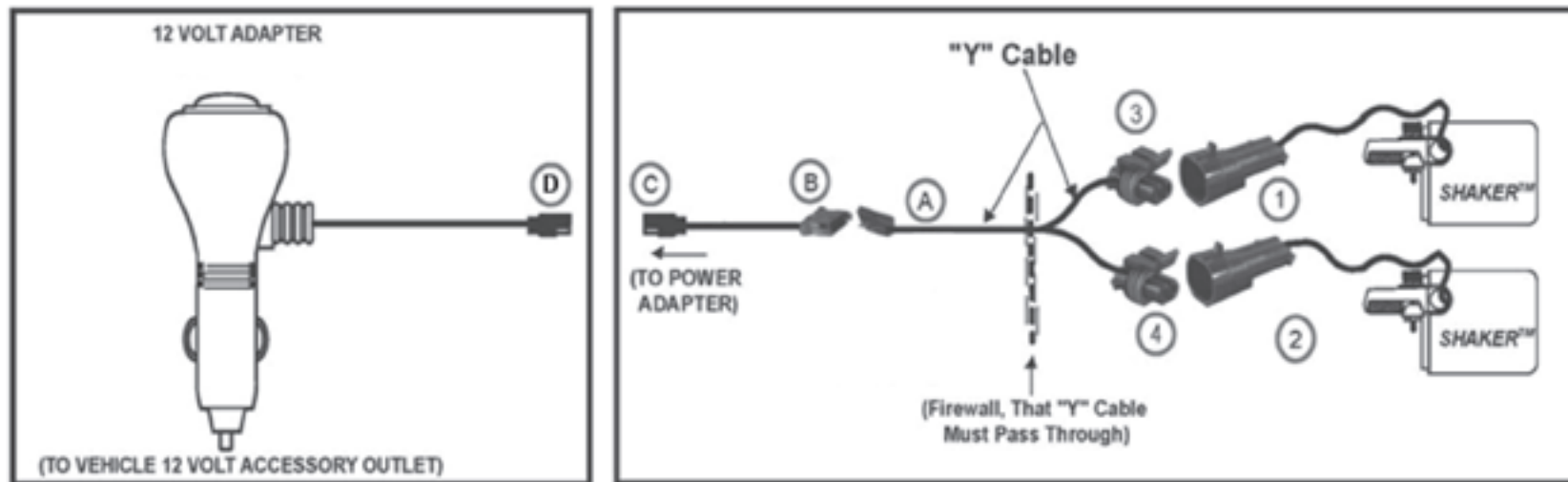
- There must be at least 1" slack in the motor lead at the hinge of the wiper arm to allow the arm to be lifted for cleaning.
- Without this "slack" or "strain relief" the lead wire can be pulled out of the motor when you lift the wiper arm.
- This failure is not covered by the warranty.



# CONNECTING POWER TO THE SHAKER MOTORS

## Option 1: Cigarette Lighter Power Adaptor Refer to Diagram Below

- Connect the "Y" cable to the motor leads. (Connectors 1, 2, 3 and 4 shown in the diagram below).
- Connect the extension cable, (Connectors A and B), to the "Y" cable. The extension cable can then be routed through the firewall at a convenient location and connected to the 12 volt adapter. (See connection C-D)
- Completing the Installation: The motor leads and the "Y" cable need to be fastened to appropriate anchor points with the zip ties under the hood. Fasten the motor leads and the "Y" cable to appropriate anchors out of the way of any moving components in the engine compartment.
- Test the Shaker Motors: Insert the 12 volt adapter into the cigarette lighter socket. If the vehicle ignition is turned on, the momentary switch in the 12 volt adapter will illuminate indicating power is available from the 12-volt socket. Press momentary switch to operate the Shaker motors.

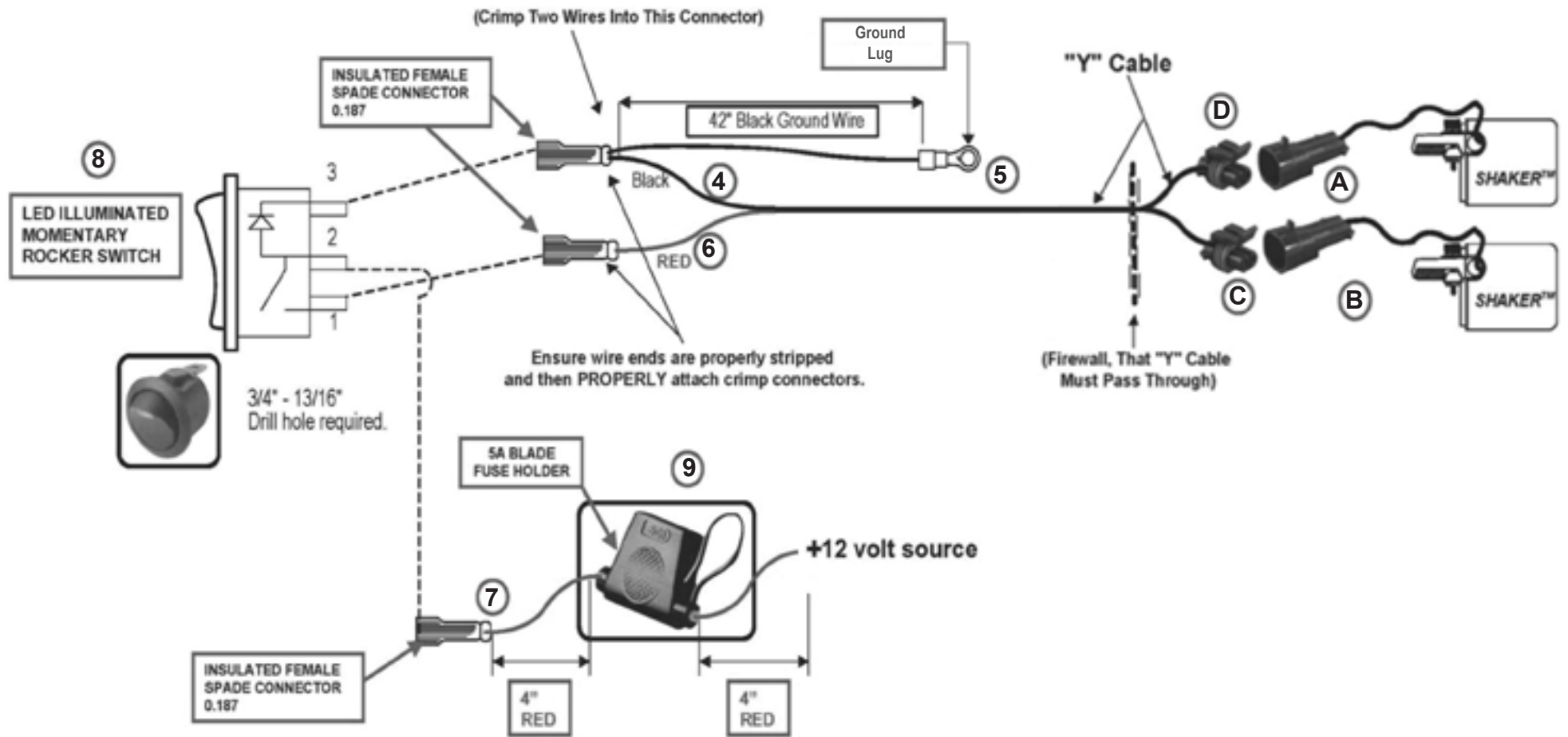


# CONNECTING POWER TO THE SHAKER MOTORS

## Option 2: Hardwired to a 12VDC Source Refer to the diagram on Page 7

- Connect the “Y” cable to the motor leads, using connectors labeled A,B,C and D in the figure on page 7.
- The momentary rocker switch, ( item #8), is to be mounted in the dash panel with the indicator light up at 12:00. The switch requires 3/4” – 13/16” diameter drilled hole. The switch has three, male 3/16” blade connectors; the top blade, marked #3 on the switch, (brass colored), is the ground connection. NOTE: do not use an on/off “toggle switch” . They can left in the “ON” position inadvertently and burn out the motors)
- Clip off the insulated connector at the single cable end of the “Y” harness.  
(This connector is used only in Option # 1 above)
- Create the ground connection by joining the black wire from the “Y” cable to the black lead wire provided in the kit using one of the 3/16” female terminals. To the other end of the black ground wire crimp-on the 3/16” eyelet and anchor it to a convenient, clean ground location. (See items #4 and 5 in the diagram on page 7) The female insulated connector can now be installed on the top, brass colored male blade marked #3 on the back of the switch.
- Connect the red lead wire at the single cable end of the “Y” harness to the bottom (#1) blade on the back of the switch with one of the female crimp-on connectors provided . (See item #6 in the diagram on page 7)
- The center blade on the momentary contact switch is the power connection. Crimp one of the female blade connectors, ( item #7), to one end of the in-line 5 amp fuse provided, ( item #9). Install the 5 amp fuse from the kit. The connector can be installed on the center blade on the back of the switch marked # 2). Warning: Do not use an on/off toggle switch. The motors are not designed to run continuously.
- The second red lead wire on the fuse holder is to be connected to a convenient 12 vdc source that is energized only when the ignition is on. (The Shaker motors draw 1.5 amps / pair)
- Completing the Installation: Fasten the motor leads and the “Y” cable to appropriate anchors with the zip ties provided out of the way of any moving components in the engine compartment.
- Turn the ignition on and test the Shaker motors.

# CONNECTING POWER TO THE SHAKER MOTORS OPTION #2 DIAGRAM



# WIPER SHAKER MANUAL

## HOW TO USE

- Clear your windshield of snow & ice. Remove snow & ice from wiper blades, making sure the wiper joints are flexible.
- While the wiper blades are moving, momentarily activate the Shaker at the first signs of any snow / ice build-up on the wiper blades.

## MAINTENANCE

- Other than ensuring on a regular basis (e.g., once a month), that the Shaker is securely fastened to the wiper arm in the correct position, and that there are no cuts in the wire harness, no other maintenance is required. Note: Keep your wiper blades in good condition and replace them every 6 months as recommended by manufacturers. You may need to loosen the Shaker's clamp in order to change a wiper blade.

## TROUBLESHOOTING GUIDE

- **Problem:**  
The 12-volt switch LED (or Hard Wire Kit Switch) fails to illuminate when plugged into the 12-volt power adapter (or properly hard wired to power).
- **Possible Cause / Solution:**  
Verify that the adapter (if applicable) is securely inserted into the power socket and the vehicle's ignition is turned on. If no change, check that your vehicle's 12-volt power socket fuse is OK. If this is not the problem, check the status of the 12-volt power adapter's fuse. To do this, simply unscrew the end of the adapter & the fuse will pop out. If this fuse looks to be open (i.e., the internal fuse wire appears to be burnt or broken), replace the fuse with the same fuse rating. For hard wire kits, inspect the in-line fuse and replace the internal blade fuse if required, with an identical replacement type.
- **Problem:**  
Reduced vibration of wiper assembly.
- **Possible Cause / Solution:**  
Shaker mounting screw may have loosened. To check, lightly twist the motor to make sure it is mounted securely to the arm. If loose, tighten the screw with the hex key provided until the lock washer is compressed. Do not over tighten.

