

INSTALLATION INSTRUCTIONS

MODEL BA-697 BACK-UP ALARM

97 Decibels 10-80 Volts DC

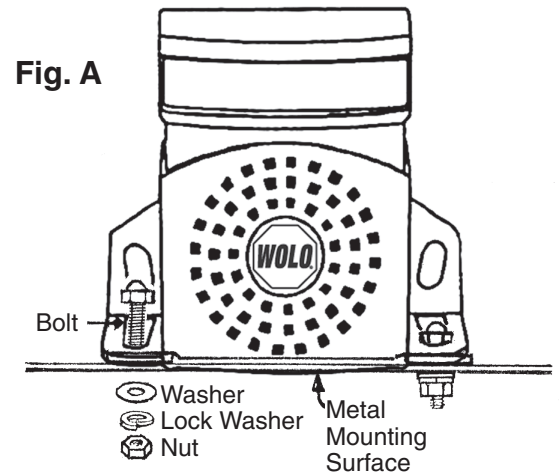
The addition of Wolo's Back-Up Alarm will provide both a warning sound and bright flashing light when the vehicle is shifted into reverse. The Wolo name, with more than fifty years experience is your guarantee of a superior product. The Model BA-697 back-up alarm is designed to provide a warning sound and bright flashing light to alert people of the hazardous condition of a vehicle being operated in reverse. People's lives depend on proper installation of this alarm. Make sure the person that is installing this alarm reads, understands and follows these instructions.

This back-up alarm will automatically turn on with a beeping sound and a bright flashing light when the vehicle is in reverse, when wired correctly at an operating voltage of 10-80 volts DC. Never install the back-up alarm in a confined area or in a compartment where the sound level of the alarm can be reduced and the light blocked from view. Never spray any coating such as paint, undercoating and etc. into the alarm's open grill. Doing such will impair the warning sound coming from the alarm. **IMPORTANT:** Operation of a vehicle in a noisy environment may require a louder back-up warning alarm. **IMPORTANT:** Always install a back-up alarm that is louder than the ambient noise.

This back-up alarm is designed for cars, off road vehicles, industrial handling equipment and commercial usage. Inspect the vehicles back-up alarm system every day before operating vehicle. **IMPORTANT:** This back-up alarm should be used to warn people that the vehicle is operating in reverse, always use proper safety requirements including visual and camera assistance. The sound of this alarm is generally recognized as a warning for a vehicle that is being driven in reverse. Operating a machine or vehicle with an inoperative back-up alarm system, could endanger lives and or property. **IMPORTANT:** Never operate a machine or vehicle, if alarm is not functioning properly. Affix a warning label to dashboard in plain view of an operator.

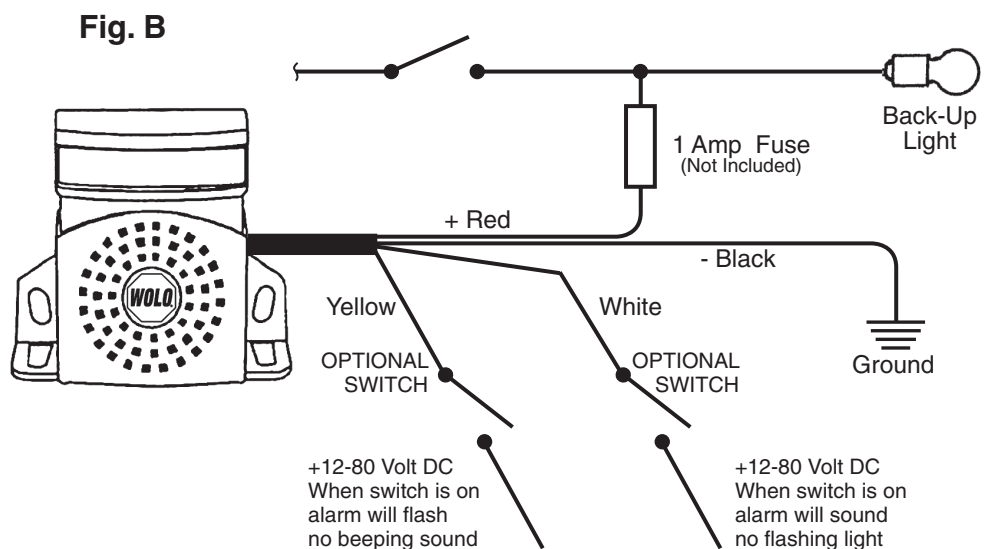
MOUNTING (See Fig. A.)

1. Select a mounting location at the rear of the vehicle that will permit the alarm's sound to be unobstructed and the flashing light to be visible. Also, the mounting location should provide protection from extreme wet conditions and possible impact to the alarm. The alarm's front grill should be mounted facing the targeted hazard area. Mount the alarm at an approximate height of four (4) foot above ground level.
2. The alarm's L-type mounting configuration provides for easy mounting and installation. Use the alarm's mounting bracket as template; mark a hole location on each side of the alarm and drill to size 1/4".
3. Secure the alarm to the vehicle using the hardware provided, see Fig. A.



WIRING (See Fig. B.)

4. RED WIRE (+): is connected to the positive (+) wire powering the vehicle's back lights, the vehicle's back-up lights have the clear lens. If the vehicle doesn't have back-up lights, connect to the reverse switch. **IMPORTANT:** Always protect the vehicle by installing a three (3)-amp fuse (not provided).
5. BLACK WIRE (-): is connected to body ground, the negative post of the vehicle's battery or a metal body bolt. **IMPORTANT:** Clean the ground surface to be free of rust and paint to assure good ground connection with black wire.



6. **IMPORTANT:** The back-up alarm must be wired as above steps 4 & 5. If the polarity is reversed, the alarms will not operate. This alarm must have a good connection to both power and ground to work reliably. Use 18-gauge wire (minimum) to lengthen wire leads if required. Make sure that all wires are secured and inspect to ensure that they will not interfere with vehicle's operation. Always make sure that any wiring is in accordance with the vehicle manufacturer's recommendations.
7. **WHITE WIRE Optional:** When connected to positive (+) power source the back-up alarm **WILL NOT** flash warning light (beeping sound only). Mount a switch (no included) in a location that can be easily reached by driver. Connect switch to positive (+) power source. The other switch terminal is connected to the back-up alarm's white wire. When the switch is in the on position, only the alarm will sound. **IMPORTANT:** Always protect the vehicle by installing a one (1)-amp fuse at the power source (not provided).
8. **YELLOW WIRE Optional:** When connected to positive (+) power source the back-up alarm will not sound (flashing light only). Mount a switch (not included) in a location that can be easily reached by driver. Connect switch to positive (+) power source. The other switch terminal is connected to the back-up alarm's yellow wire. When the switch is in the on position, the alarm will only flash its bright light. **IMPORTANT:** Always protect the vehicle by installing a one (1)-amp fuse at the power source (not provided).
9. Make sure all wires are secure using plastic wire ties or electrical tape (not provided). **WARNING:** If wire connections were made in dashboard area, carefully inspect the interior driver's area to ensure the vehicle's electrical system wires are not interfering with the operation of vehicle's controls; accelerator, brake, clutch pedals, air bags and etc.
10. Affix the warning label provided to the dashboard of the vehicle.