

NEXGEN 40 WATT / 4 OUTLET 12-24 VOLT POWER SUPPLY & LED LIGHT KIT 15 Different Light Patterns 8504 SERIES

INSTALLATION INSTRUCTIONS

Your purchase of Wolo's NEXGEN LED light system is the perfect choice to compliment your vehicles emergency warning lights. Wolo's LED kits are manufactured with the finest materials. Each light is tested to meet our high standards to ensure that all functions work perfectly. Our quality workmanship and components are Wolo's assurance that this product will provide years of dependable service. If you need help using or installing your new Wolo warning light, our technicians are available to answer your questions, Monday thru Friday, from 9 AM to 4 PM EST at: 888-550-4676.

Before installing the LED it is important to read these instructions completely. The lives of people are dependent on the proper installation. The person installing the power supply must have advanced knowledge of the proper method of installing emergency warning lights to a vehicle as well as knowledge of the vehicle's electrical system. Again, read this manual completely and note any messages marked "**IMPORTANT**" or "**WARNING**". A safe installation will prevent serious injury or damage to the vehicle.

NEXGEN is completely wired and does not require any wiring inside the power supply. There are four (4) power cables included in the kit; two (2) that are 3 meters / 9.8 ft. in length for installation in front of vehicle and two (2) that are 5 meters / 16.4 ft. in length for installation in rear of vehicle. Also included in the kit is a control panel, dash mountable with an on/off switch and a push button switch to change the LED light pattern, all which is required for a successful installation.

Installation of NEXGEN requires drilling to the vehicle. The installer must carefully inspect both sides of any location that will be drilled to ensure that there are no components, wires and or any vehicle parts that could be damaged when drilling.

IMPORTANT: Always de-burr any drilled holes to ensure that there are no sharp edges. Install a rubber grommet into all metal holes that the wires are being routed through.

Always refer to the vehicle's shop manual for the deployment location of the air bags. Never install the control panel switches, wires and/or components in the deployment area of any air bag. Improper installation could reduce the effectiveness of the vehicle's air bag system and/or project an object that could cause serious personal injury or death to the driver or passenger. The user/installer assumes all responsibility to properly access a safe mounting location for the switch control panel, so to provide ultimate safety to the driver and passengers inside the vehicle.

All NEXGEN models produce both low voltage and low current. To operate this product at peak performance, the black wire should always be connected directly to the (-) negative battery post, or under a metal body bolt. If the length of the black wire needs to be made longer, use a minimum 18 gauge or heavier.

The vehicle operator and/or maintenance department should inspect the light system frequently to ensure that all LED heads are functioning and are securely held in the vehicle's light assembly.

These installation instructions should always be kept and stored in a safe location so that they can be referred to when information, maintenance or reinstallation is required. Failure to follow all safety precautions and installation procedures as outlined in these instructions could result in property damage to the vehicle, serious injury or death to you or others.

WARNING

- All 8504 models contain four (4) LED heads. **At a close distance, never look directly at the heads when the power supply is turned on. Momentary blindness and/or permanent eye damage could occur.**
- The power supply produces LOW VOLTAGE. **Never touch or remove any of the LED heads while in operation. Wait no less than 5 minutes after disconnecting the power supply from it's power source to attempt to handle LED heads or troubleshoot.**
- **DO NOT** connect the power supply to the vehicle's battery or any other power source until ALL LED heads are mounted and wired to power supply.

FAILURE TO FOLLOW ALL SAFETY WARNINGS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO PRODUCT, VEHICLE OR COULD CAUSE SERIOUS INJURY TO YOU AND PASSENGERS!

INSTALLATION OF POWER SUPPLY Fig. A

CAUTION

The power supply is NOT waterproof and must be mounted in a dry location inside vehicle. The power supply should NEVER be exposed to weather conditions such as rain, snow, water and etc. The power supply should be mounted in a well-ventilated location. Never mount the power supply in the vehicle's engine compartment near a heater duct or close to the engine components that will get hot.

IMPORTANT

The power supply should be mounted on a metal surface to help prevent radio interference and to act as a heat sink. Doing such will reduce heat from the power supply protecting the electronic components. Make sure that the mounting surface does not get hot from normal vehicle operation.

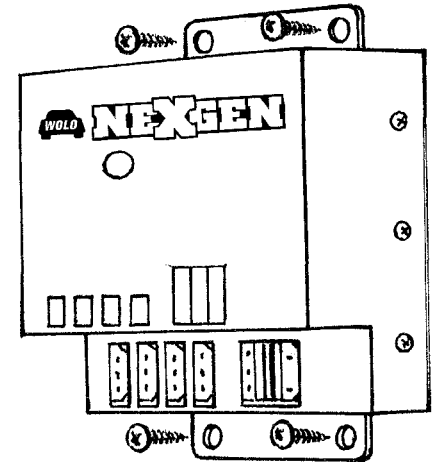


Fig. A

1. Place the power supply on the mounting surface. Using the mounting bracket as a template, mark the four hole locations onto the mounting surface and drill to size using a 1/8" drill.
2. The installer must carefully inspect both sides of the selected mounting location to ensure that there are no components, wires and or any other vehicle part that could be damaged by the drilling.
3. Position the power supply to the mounting surface and secure using the sheet metal screws provided.

INSTALLATION OF THE LED HEADS INTO THE HEADLIGHT and TAILLIGHT ASSEMBLIES Fig. B

IMPORTANT

- The LED heads are going to share the same reflector and lens as the headlight and taillight. Before drilling any hole into the light assembly you must make sure that the position of the LED head will not interfere with the operation or visibility of the vehicles original equipment light.
 - The LED head must have a minimum of one (1) inch of open space from the OEM factory bulb.
 - Never install the LED head directly above the OEM factory bulb.
 - Before drilling the hole for the LED head, the installer should remove the OEM factory light assembly and reflector.
4. Select a position in the headlight or taillight assembly that is flat to ensure a good watertight seal with the rubber gasket that is placed between the LED head and the light assembly.
 5. Using a 1" hole saw, cut a hole into the light assembly in the selected location and de-burr hole.
 6. Install the LED head into light assembly.

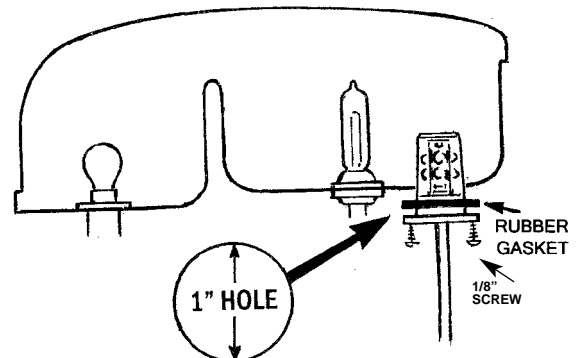
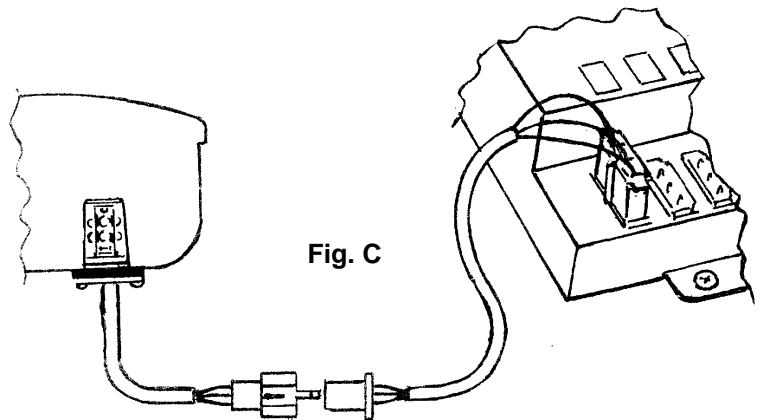


Fig. B

7. There are two holes in the metal rim of the LED head. Use the metal rim as a template and mark the two holes locations on the light assembly housing and drill to size using a 1/8" drill.
8. Clean the interior of light assembly and lens of any dust or filings, which may have developed during cutting the hole.
9. Re-install the OEM factory light assembly and reflector.
10. Place the rubber gasket around the LED head and install the head into the one (1) hole and secure using the self-tapping screws (provided).
11. Repeat the same installation procedure for the remaining LED heads.

WIRING LED HEADS Fig. C

IMPORTANT: To prevent damage to the power supply, DO NOT connect any power source until all of the LED heads are completely wired to the power supply. All 8504 models come with four (4) cables that are used to connect the LED heads to the power supply. Each cable has two female plugs, one at each end. The plugs are different and will only connect to its mate, either the LED head, or power supply.



12. Two of the cables are 3 meters / 9.8 ft. in length and should be used to connect the LED heads installed in the front light assemblies to the power supply position L1 & L2.
13. Two of the cables are 5 meters / 16.4 ft. in length and should be used to connect the LED heads installed in the rear light assemblies to the power supply position L3 & L4.

NOTE: If you need to lengthen the rear cables, see chart below for proper wire gauge.

<u>16-30 ft.</u>	<u>31-50 ft.</u>
Use 18 Gauge or heavier	Use 16 Gauge or heavier

MOUNTING SWITCH CONTROL PANEL

Using double face tape or screws

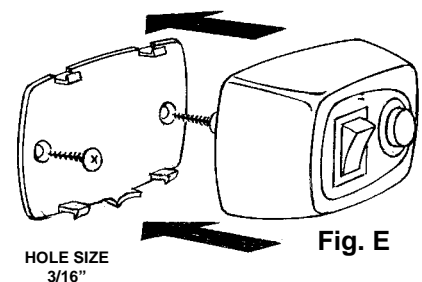
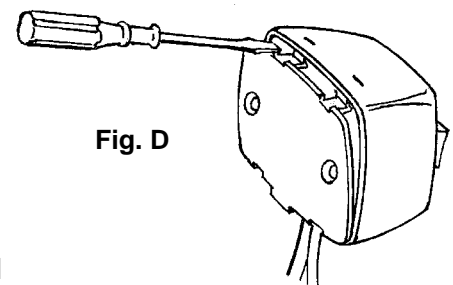
TAPE METHOD

14. Select a mounting location for the control panel that is easy to reach. **IMPORTANT:** Be sure that the switch control panel or its wires will not interfere with air bags or the driver's vision.
15. Using the double-sided foam adhesive tape provided, mount the control panel to selected location. Make sure that mounting surface is free from dust, wax etc. A clean surface is necessary so that double-sided tape will hold properly.

IMPORTANT: THE ADHESIVE HOLDING POWER BECOMES MAXIMUM IN ABOUT 24 HOURS. LIMIT MOVING OR PUTTING PRESSURE ONTO THE KEYBOARD UNTIL THEN.

SCREW METHOD Fig. D & E

16. Remove the control panel's backing plate using a flat tip screwdriver.
17. Using the backing plate as a template, mark the two hole locations onto the mounting surface where the switch panel will be mounted and drill to size using a 3/16" drill. **IMPORTANT:** The installer must carefully inspect both sides of the mounting location before drilling any holes to ensure that there are no components, wires and or any vehicle part that could be damaged by drilling.
18. Position the backing plate on the mounting surface and secure using the two sheet metal screws provided that have the countersunk head.
19. The control panel is carefully pushed onto the backing plate.



WIRING SWITCH CONTROL PANEL TO 12-24 VOLTS. Fig. F

WARNING: The power supply has an external 5-amp fuse to protect its internal circuit. The 5-amp in-line fuse attached to the red wire must be connected **“AT A POWER SOURCE”** so to protect the wire connection between the power source and power supply.

20. **BLACK WIRE:** Is connected to ground (-). Secure the BLACK to the negative battery post or under any metal body bolt. Make sure that the METAL surface around the bolt that secures the wire is clean of rust and paint so to make a good electrical connection.
21. **RED WIRE:** Is connected to 12-24 volts (+) positive. Using the inline fuse provided, connect the red wire to the vehicle’s fuse block or (+) positive battery post. Remove fuse from the inline fuse holder until all wiring is completed.
22. The plug with the YELLOW wire is connected to the power supply in the position marked “CONTROL”.
23. The plug with the RED & BLACK wires is connected to the power supply in the position marked “12-24 VOLTS”.
24. Inspect all wiring and make sure all connections are secure. Install fuse back into the inline fuse holder.

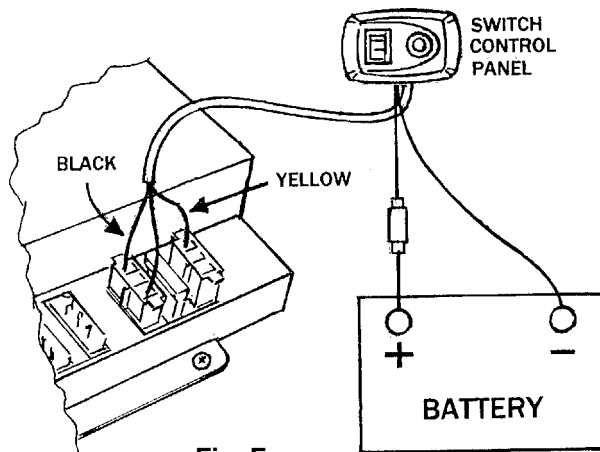


Fig. F

INSTALLATION IS COMPLETE

Position the on/off switch to “ON”. Press and release the push button to change the light pattern.

PATTERN	HEAD 1	HEAD 2	HEAD 3	HEAD 4	LED HEAD SEQUENCE
1	STEADY	STEADY	STEADY	STEADY	ALL
2	STEADY	STEADY	DF	DF	CONTINUOUS
3	DF	DF	STEADY	STEADY	CONTINUOUS
4	DF	DF	DF	DF	ALL
5	SF	SF	SF	SF	1&2 / 3&4 ALTERNATE
6	QF	QF	QF	QF	ALL
7	TF	TF	TF	TF	ALL
8	TF	TF	TF	TF	1&2 / 3&4 ALTERNATE
9	TF	TF	TF	TF	ALL
10	SF	SF	SF	SF	ALL FAST
11	SF	SF	SF	SF	ALL
12	DF	DF	DF	DF	1&2 / 3&4 ALTERNATE
13	SF-TF	SF-TF	SF-TF	SF-TF	3-SINGLE FLASHES THEN 3 TRIPLE FLASHES ALTERNATE
14	SF-TF	SF-TF	SF-TF	SF-TF	3-SINGLE FLASHES THEN 3 TRIPLE FLASHES ALTERNATE
15	STF	STF	STF	STF	1&2 / 3&4 ALTERNATE

DESCRIPTION OF LIGHT PATTERN

SF	SINGLE FLASH
DF	DOUBLE FLASH
TF	THRIPLE FLASHES
QF	QUAD FLASH
STEADY	NO FLASH
STF	SLOW TO FAST

SPECIFICATIONS

Input Voltage: 12-24 VDC

Current: 1.54 amps@ 12.5 VDC

LED Heads: Each contain 8 GEN 3 / 1-Watt Super Bright LEDs

Power Supply Maximum Output: 40-Watts

Flash Patterns: 15

Included: Two Cables 3 meters / 9.8 ft. length with locking connectors

Included: Two Cables 5 meters / 16.4 ft. length with locking connectors

Included: Switch control panel pre-wired

Power Supply Dimension: L 5-1/2 in. x W 5-3/8 in. x H 1-3/4 in.

Warranty

Wolo Manufacturing Corporation ("Wolo") warrants to the original purchaser, for three months from the date of purchase, that this product is free from defects in workmanship and materials. If there is such a proven defect, Wolo, at its option, will either repair or replace the item free of charge, if it is returned to Wolo within three months from the date of purchase together with proof of purchase as described below. Wolo reserves the right to inspect any defect prior to settling any warranty claim by repair or replacement. This warranty is limited as above provided and Wolo will not be responsible for fire or other casualty or accident, due to neglect, abuse, abnormal use, modifications, faulty installation of this product, or natural causes.

ANY EXPRESSED WARRANTY NOT PROVIDED HEREIN IS EXCLUDED AND DISCLAIMED. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO A TERM OF THREE (3) MONTHS FROM DATE OF PURCHASE. UNDER NO CIRCUMSTANCES SHALL WOLO BE LIABLE TO PURCHASER OR ANY OTHER PERSON FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES, WHETHER ARISING OUT OF BREACH OF WARRANTY OR OTHERWISE.

To obtain warranty service, return the product prepaid, and include the original bill of sale showing the date of purchase. Provide with the return a brief description of the problem. Also, include with the return a check or money order in the amount of \$10.00 to cover return shipping. Mail to:

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One Saxwood Street, Deer Park, NY 11729
Attn: Warranty Service E-mail: tech@wolo-mfg.com

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