



First in LEDs...The solid state warning light leader.™

OPERATING INSTALLATION GUIDE

LS12, LS12STT, TD28, TD39, WL28, WL39



**NEVER INSTALL ANY ELECTRICAL
DEVICE WITHOUT PROPER
FUSE PROTECTION!**



**ALWAYS REMOVE POWER
PRIOR TO ANY SERVICE
OR REPAIR OPERATION**



**DO NOT BENCH TEST THIS
PRODUCT USING AN AUTOMOBILE
BATTERY CHARGER!**

PRODUCT SPECIFICATIONS

Optimum Operating voltage: +13.8 VDC (working range 12 –15 volts D.C.)

Operating Current:	LS12/LS12S - .7A/1.5A	Recommended fuse:	3 Amp
	TD28/WL28 - 1.7A/3.5	Recommended fuse:	5 Amp
	TD39/WL39 - 2.5A/5A	Recommended fuse:	7.5 Amp



INSTALLATION INSTRUCTIONS

It is highly recommended that a bench test be performed prior to any installation. This should be performed using an automotive battery or regulated power supply. NEVER use a battery charger as this can introduce voltage spikes and could result in permanent damage to the device!

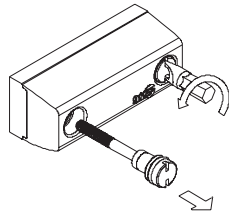
AFTER TESTING...

- 1) Physically mount the light and route the cord to its electrical connection point.
(On corded [hard-wired] version, the black wire is ground (-) and the red wire is positive (+). These two wires handle the current requirements of the device.)
- 2) Attach fuse and switch to the red (+) wire.
- 3) Connect black (-) and drain (bare silver wire) to chassis or battery ground.

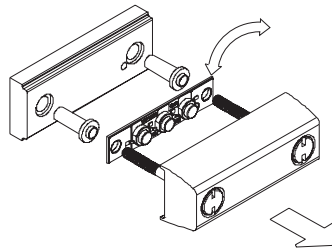
The remaining four wires are pattern activation wires. Applying a switched and fused +12VDC signal will activate the unit. The flash pattern will continue as long as the power is present. Pattern selection is obtained via various wire combinations (reference chart enclosed).

LED STAR, LS-12, WL & TD 28, 39 LENS/LED MODULE REPLACEMENT

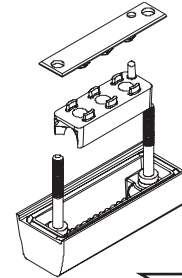
1) Turning counterclockwise, remove both shoulder bolts



2) Remove lens and gasket, LED level 2 boards (if applicable)

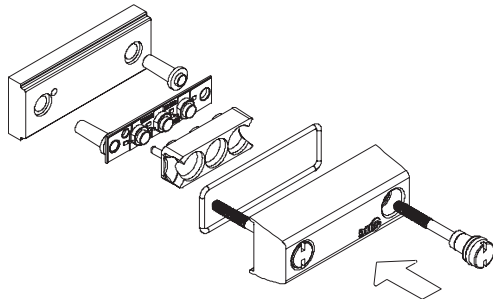


3) Inspect gasket for rips, tears, or weather checking and replace if found defective.

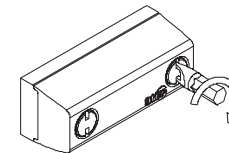


This is the proper part orientation.

4) When reassembling in the manner shown above, carefully inspect and remove dirt buildup or foreign matter that may cause the gasket not to seal.



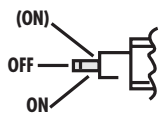
5) Reinsert lens assembly back in to the chassis and tighten bolts until the gasket seals and LED element illuminates



	LS12 Hard Wired				LS12 STT/BIF				LS12 Call				TD28 TD39				WL28 WL39			
	G	O	B	Y	G	O	B	Y	G	O	B	Y	G	O	B	Y	G	O	B	Y
Rotator			X																	
Alternating		X	X																	
Chicago			X	X																
Steady on				X																
Left Turn								X												
Right Turn						X														
Stop*	X						X													
Running Lights					X															
Warning						X		X												
50/50 wig wag									X									X		
64 flash		X												X	X	X			X	
Triple Rotator												X	X	X	X					
On/Off																		X		
Pulsar		X		X													X	X		
Double Chaser																	X		X	
Chaser		X	X	X													X	X	X	
Center 4 steady on																X				
Steady on 50/50 wig wag																X				
Steady on 64 flash																X			X	
Steady on new rotator																X		X		
Steady on on/off										X						X	X			
Steady on pulsar																X	X	X		
Steady on double chaser																X	X		X	
Brake																X	X	X	X	
Direct left-all segments																X				
Direct right-all segments																	X			
Direct center out													X							
Tracer-left													X				X			
Tracer-right															X	X				
Tracer-center out														X	X					
Direct right 6/10												X			X					
Direct left 6/10												X				X				
Direct center out 6/10												X	X							
Tracer left 6/10												X	X				X			
Tracer right 6/10												X		X	X					
Tracer Center Out 6/10												X	X	X						
Wig wag - end 2 segments																X				
Driver side flash 2 segments																X	X			
Center 2 segments Flash																X	X			
On/off all segments										X										
Passenger side flash 2 segments										X	X									
Outside 2 segments										X			X							
64 flash/end - steady on									X		X									
64 flash/inside - steady on									X			X								
New Rotator Pattern																		X	X	

* Stop function switches to hyper-flash when used with any other flash pattern.

MEMORY



DESIGNATOR

Pattern selection for LS12 Switch

- | | |
|-------------------------|---------------|
| 1) Rotator | 6) Pulsar |
| 2) Alternating | 7) 64 Flash |
| 3) Chicago | 8) Four seg. |
| 4) Chaser | 9) Steady on |
| 5) Accelerating wig-wag | 10) Cycle all |

TO ACCESS A DESIRED PATTERN

Perform the following: with power applied, toggle through patterns by moving switch handle from "neutral" to "designator" position. When desired pattern is found, move switch handle to "memory"; that pattern will be active.

LIMITED WARRANTY – EFFECTIVE NOVEMBER 11, 2002

Congratulations on your purchase of a quality 911EP product.

911EP, Inc. (the “Warrantor”) will replace parts, in case of defects in materials or workmanship, for five years subject to the following conditions and limitations:

- This warranty only covers failures due to defects in materials or workmanship, and does not cover normal wear or cosmetic damage. This warranty does not cover damage that occurs in shipment, failures caused by products not supplied by the Warrantor, or failures that result from abuse, accidents, maladjustment of consumer controls, neglect, improper or inadequate maintenance, improper use of the product, corruption of the cigarette plug, amputation of the cigarette plug, unauthorized modification of the product, commercial use (such as rental use) of the product or damage that is attributable to acts of God or other events beyond the control of the Warrantor.
- The Warrantor will, for five years from the date product is shipped from the 911EP manufacturing facility, cover the cost of replacement for defective parts under this Warranty. This warranty does not cover chipping, scratching, fading or discoloration of lenses or paint. ***Halogen lamps are not covered under this warranty.*** The warranty does not cover labor charges for removal and re-installation of the product. This warranty will be voided by any unauthorized alteration made to your 911EP product, or by the installation or attachment of any accessory not designed by 911EP specifically for the product.
- The Warrantor shall not be liable for incidental or consequential damages resulting from the use of this product, or arising out of any breach of this warranty. If a problem with this product develops within the warranty period, contact a Customer Service Representative at (800) 863-6911.

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