

# **BriteNight LED Lighting**



# **Betts**

**LED SUPPLEMENT CATALOG 2002**

**Betts Industries is proud to announce it's new line of**

# **LED Lighting Products**

BriteNight LED's are more visible than ordinary incandescent lighting. By using 60 Diodes in our innovative circuitry we have harnessed a very intense light source into one of the most visible 4" vehicle lamp's today. With no bulbs or filaments to fail LED lighting is proven to be the most reliable product on the market. LED's are rated at 100,000 hours of operation, draw far less current, reach required light output quicker, and last longer than any bulb used in vehicle lighting.

Betts reputation for quality and customer first attitude was incorporated in all of the new LED light designs giving the customer the best value for their money. The innovative sealed lens design makes changing over from existing Betts "Snap Seal" lighting truly a "Snap". Unlike many LED lights, Betts LED inserts can truly be retrofitted into existing Betts lamp housings without hours of expensive labor to remount or rewire.

Couple BriteNight LED's with Betts Plug & Seal wiring harnesses and you get the only total lighting system that can truly be sealed from outside moisture, eliminating corrosion.

So don't wait, light up the night with Betts BriteNight LED Lighting Products.

# **Betts**



**NOTE:** All lens assemblies with butt connectors are provided with heat shrinking tubing that must be used to ensure warranty consideration.



**PART NO.**

**201201**

**201202**

**201203**

**201204**

**LED Lens inserts for 200 Series aluminum lamps**

Used in Betts low profile, aluminum body surface mount lamps that can be mounted horizontally or vertically. Features (4) light emitting diodes (LED's) in an epoxy sealed polycarbonate lens assembly.

Red, LED lens insert with (1) eyelet & (1) butt connector.

Amber, LED lens insert with (1) eyelet & (1) butt connector.

Red, LED lens insert with (2) butt connectors.

Amber, LED lens insert with (2) butt connectors.



**PART NO.**

**221201**

**221202**

**LED Lens inserts for 200 Series Valox lamps**

Used in Betts Valox body surface mount lamps that can be mounted horizontally or vertically. Features (6) light emitting diodes (LED's) in an epoxy sealed REFLEX polycarbonate lens assembly.

Red, LED REFLEX lens insert with (2) eyelets.

Amber, LED REFLEX lens insert with (2) eyelets.



Shallow lens

**PART NO.**

**510003**

**510004**

**510005**

**510006**

**510007**

**510008**

**LED S.C. Lens inserts for 50, 56, 57, & 60 Series aluminum lamps.**

Used in Betts aluminum body surface and recessed mount lamps. Single contact lens features (4) light emitting diodes (LED's) in an epoxy sealed lens assembly. Available in both shallow and deep lenses.

Red, shallow LED lens insert with (2) butt connectors.

Amber, shallow LED lens insert with (2) butt connectors.

Red, shallow LED lens insert with (1) eyelet & (1) butt connector.

Amber, shallow LED lens insert with (1) eyelet & (1) butt connector.

Red, shallow LED lens insert with S.C. bulb base.

Amber, shallow LED lens insert with S.C. bulb base.



Deep lens

**PART NO.**

**510013**

**510014**

**510015**

**510016**

**510017**

**510018**

Red, deep LED lens insert with (2) butt connectors.

Amber, deep LED lens insert with (2) butt connectors.

Red, deep LED lens insert with (1) eyelet & (1) butt connector.

Amber, deep LED lens insert with (1) eyelet & (1) butt connector.

Red, deep LED lens insert with S.C. bulb base.

Amber, deep LED lens insert with S.C bulb base.

# LED Retrofit Lens Assemblies



**PART NO.**

**510001**

Red, shallow LED lens insert with (2) eyelets.

**510002**

Amber, shallow LED lens insert with (2) eyelets.

**PART NO.**

**510011**

Red, deep LED lens insert with (2) eyelets.

**510012**

Amber, deep LED lens insert with (2) eyelets.



Shallow lens

**PART NO.**

**510023**

Red, shallow LED lens insert with (3) butt connectors.

**510024**

Amber, shallow LED lens insert with (3) butt connectors.

**510025**

Red, shallow LED lens insert with (1) eyelet & (2) butt connectors.

**510026**

Amber, shallow LED lens insert with (1) eyelet & (2) butt connectors.

**510027**

Red, shallow LED lens insert with D.C. bulb base.

**510028**

Amber, shallow LED lens insert with D.C. bulb base.



Deep lens

**PART NO.**

**510033**

Red, deep LED lens insert with (3) butt connectors.

**510034**

Amber, deep LED lens insert with (3) butt connectors.

**510035**

Red, deep LED lens insert with (1) eyelet & (2) butt connectors.

**510036**

Amber, deep LED lens insert with (1) eyelet & (2) butt connectors.

**510037**

Red, deep LED lens insert with D.C. bulb base.

**510038**

Amber, deep LED lens insert with D.C bulb base.

## LED S.C. Lens inserts for 56 Series Valox lamps.

Used in Betts Valox body recessed mount lamps. Single contact lens features (4) light emitting diodes (LED's) in an epoxy sealed lens assembly. Available in both shallow and deep lenses.

## LED Special Purpose D.C. Lens inserts for 50, 56, 57, & 60 Series aluminum lamps.

Used in Betts aluminum body surface and recessed mount lamps. Double contact lens. Features (4) light emitting diodes (LED's) on low power that increases to 12 LED's on high power in an epoxy sealed lens assembly. Available in both shallow and deep lenses.

## LED Special Purpose D.C. Lens inserts for 56 Series Valox lamps.

Used in Betts Valox body recessed mount lamps. Double contact lens. Features (4) light emitting diodes (LED's) on low power that increases to 12 LED's on high power in an epoxy sealed lens assembly. Available in both shallow and deep lenses.



Shallow lens

**PART NO.**

**710003**

**710004**

**710007**

**710008**

**710009**

**710010**

**LED Lens inserts for 40, 45, 47 and 70 Series aluminum lamps.**

Used in Betts aluminum body surface and recessed mount lamps. Double contact polycarbonate lens assembly features (60) light emitting diodes (LED's) on low power to provide tail or marker function that increase to high power output for stop or turn functions. Available in both shallow and deep lenses for 12 or 24 volt applications.

Red, shallow LED lens insert with (1) eyelet & (2) butt connectors.

Amber, shallow LED lens insert with (1) eyelet & (2) butt connectors.

Red, shallow LED lens insert with (1) eyelet & (2) butt connectors. 24 volt

Amber, shallow LED lens insert with (1) eyelet & (2) butt connectors. 24 volt

Red, shallow LED lens insert with D.C. bulb base.

Amber, shallow LED lens insert with D.C. bulb base.



Deep lens

**PART NO.**

**710013**

**710014**

**710017**

**710018**

**710019**

**710020**

Red, deep LED lens insert with (1) eyelet & (2) butt connectors.

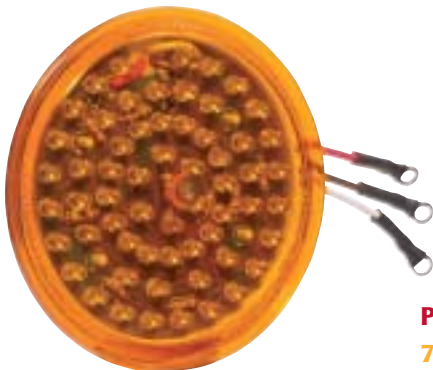
Amber, deep LED lens insert with (1) eyelet & (2) butt connectors.

Red, deep LED lens insert with (1) eyelet & (2) butt connectors. 24 volt

Amber, deep LED lens insert with (1) eyelet & (2) butt connectors. 24 volt

Red, deep LED lens insert with D.C. bulb base.

Amber, deep LED lens insert with D.C. bulb base.



Shallow lens

**PART NO.**

**710001**

**710002**

**710005**

**710006**

**LED Lens inserts for 40, 45, and 47 Series Valox lamps.**

Used in Betts Valox body surface and recessed mount lamps. Double contact polycarbonate lens assembly features (60) light emitting diodes (LED's) on low power to provide tail or marker function that increase to high power output for stop or turn functions. Available in both shallow and deep lenses for 12 or 24 volt applications.

Red, shallow LED lens insert with (3) eyelets.

Amber, shallow LED lens insert with (3) eyelets.

Red, shallow LED lens insert with (3) eyelets. 24 volt

Amber, shallow LED lens insert with (3) eyelets. 24 volt



Deep lens

**PART NO.**

**710011**

**710012**

**710015**

**710016**

Red, deep LED lens insert with (3) eyelets.

Amber, deep LED lens insert (3) eyelets.

Red, deep LED lens insert with (3) eyelets. 24 volt

Amber, deep LED lens insert with (3) eyelets. 24 volt

# LED Retrofit Lens Assemblies and Accessories



**PART NO.**

**660001**

**LED S.C. Lens inserts for 65 series Valox lamps.**

Used in Betts Valox body recessed mount lamps. Polycarbonate lens assembly features (3) light emitting diodes (LED's) in an epoxy sealed lens assembly. Available in shallow lens only.

Red, LED lens insert with (2) eyelets.

**660002**

Amber, LED lens insert with (2) eyelets.



Signal light kit

**Battery operated LED warning lamps and kits.**

High visibility battery operated LED lamps that can be used for roadside emergency signals, temporary barricade marking, accident site marking, agricultural vehicle marking, or as a personnel marking while working in traffic areas.

**NOTE: Batteries not included.**

**PART NO.**

**920091**

(3) Red LED lights (920570) with 3 self supporting stands in a compact carrying case. Operates on (4) AA batteries per light.

**920092**

(3) Amber LED lights (920571) with 3 self supporting stands in a compact carrying case. Operates on (4) AA batteries per light.



Individual signal light

**920570**

Red LED with (18) super bright diodes, water resistant housing with 2 light patterns. Operates on (4) AA batteries.

**920571**

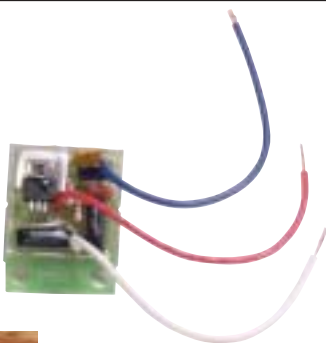
Amber LED with (18) super bright diodes, water resistant housing with 2 light patterns. Operates on (4) AA batteries.



Personal Light

**920577**

Red LED with (5) super bright diodes, water resistant housing with 6 light patterns. Includes elastic armband, belt clip, or a mounting bracket for bicycles. Operates on (2) AA batteries.



**PART NO.**

**920622**

**LED Strobe Flash Control**

Solid state circuitry designed to operate multiple BriteNight LED lamps simultaneously in a quad strobe flash. Designed for 12 volt systems.

Strobe Flash control for interior applications.

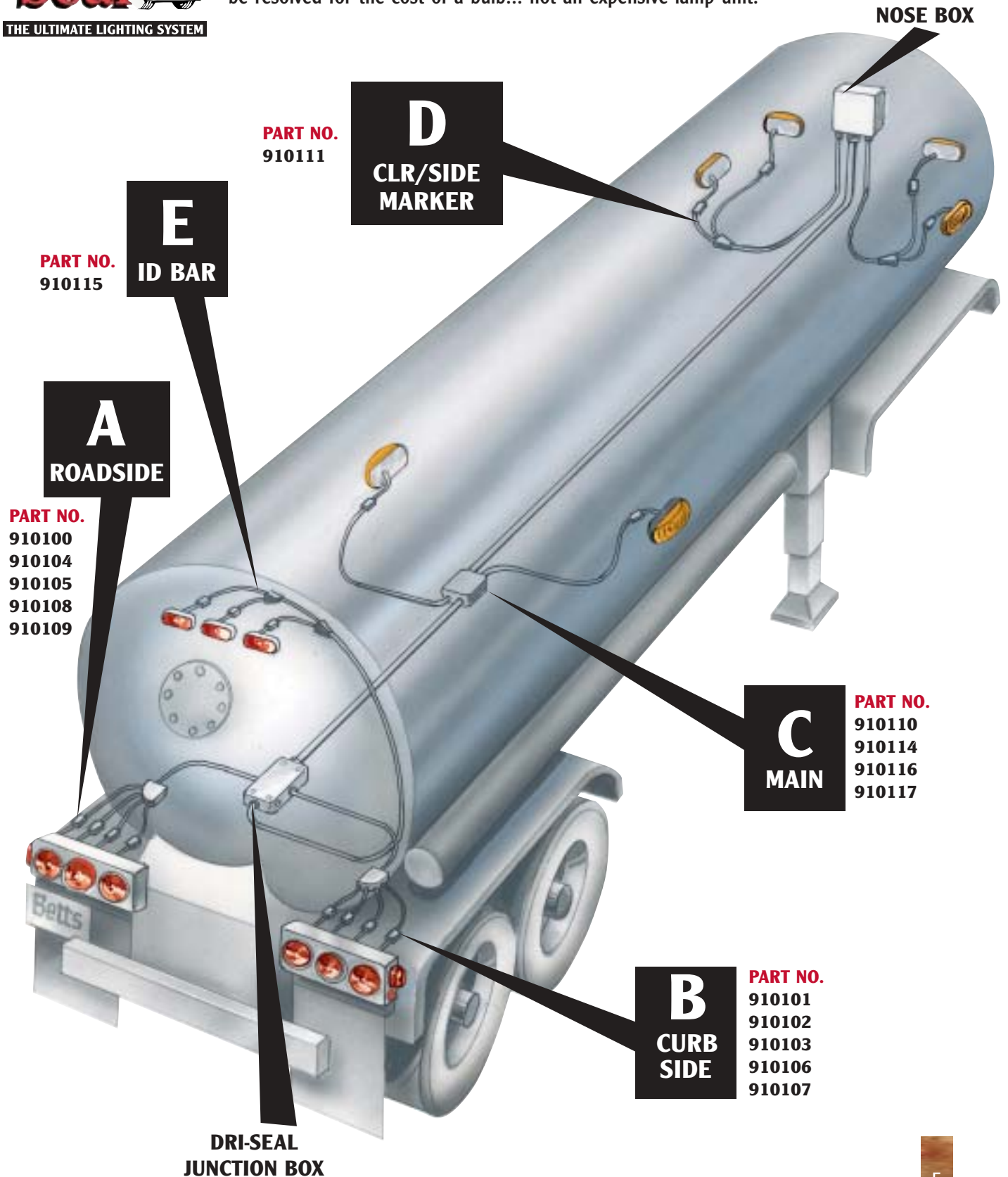
**920623**

Epoxy sealed strobe flash control for exterior severe duty applications.

**NOTE:** Control unit can be provided with Betts BriteNight LED's and harness system for custom applications.



Betts harness units are designed to speed installation and service while maintaining a sealed lighting system with dry environment connections. Male and female 2 and 4 conductor plugs use a sealed lock together system that really works. Remember, most service problems can be resolved for the cost of a bulb... not an expensive lamp unit.

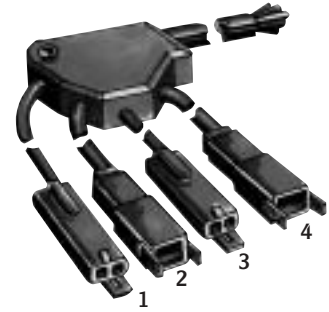


**PART NO.**

**910100**

**A** **ROADSIDE HARNESS**

10 foot lead of 5 conductor cable molded into a junction that has 4 drops consisting of; #1 - 2 conductor plug wired for clearance, #2 - 4 conductor plug wired as turn/tail, #3 - 2 conductor plug wired as backup, and #4 - 4 conductor plug wired as stop/tail. #1, 2 & 3 have 6" length of cable. #4 - 14".



**910101**

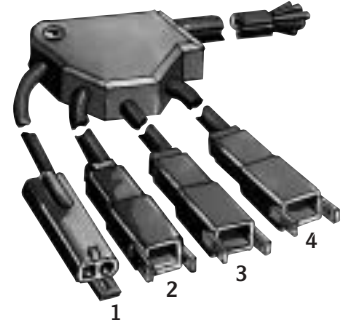
**B** **CURBSIDE HARNESS**

10 foot lead of 5 conductor cable molded into a junction that has 4 drops consisting of; #1 - 2 conductor plug wired for clearance, #2 - 4 conductor plug wired as turn/tail, #3 - 2 conductor plug wired as backup, and #4 - 4 conductor plug wired as stop/tail. #1, 2 & 3 have 6" length of cable. #4 - 14".

**910102**

**B** **CURBSIDE HARNESS**

8 foot lead of 4 conductor cable molded into a junction that has 4 drops consisting of; #1 - 2 conductor plug wired for clearance, #2, #3 #4 - 4 conductor plugs wired as stop/turn/tail. (Lamps will be wired for stop or turn functions.) #1 - 4 have 6" length of cable.



**910103**

Same as 910102 but with 25 foot lead of 4 conductor cable.

**910104**

**A** **ROADSIDE HARNESS**

8 foot lead of 4 conductor cable molded into a junction that has 4 drops consisting of; #1 - 2 conductor plug wired for clearance, #2, #3 #4 - 4 conductor plugs wired as stop/turn/tail. (Lamps will be wired for stop or turn functions.) #1 - 4 have 6" length of cable.

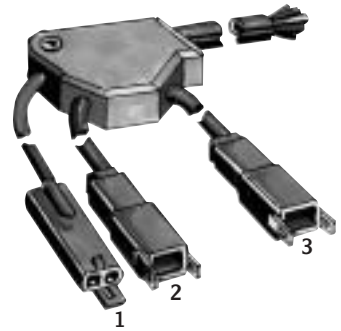
**910105**

Same as 910104 but with 25 foot lead of 4 conductor cable.

**910106**

**B** **CURBSIDE HARNESS**

8 foot lead of 4 conductor cable molded into a junction that has 3 drops consisting of; #1 - 2 conductor plug wired for clearance, #2 and #3, - 4 conductor plugs wired as stop/turn/tail. (Lamps will be wired for stop or turn functions.) #1 - 3 have 6" length of cable.



**910107**

Same as 910106 but with 25 foot lead of 4 conductor cable.

**910108**

**A** **ROADSIDE HARNESS**

8 foot lead of 4 conductor cable molded into a junction that has 3 drops consisting of; #1 - 2 conductor plug wired for clearance, #2 and #3, - 4 conductor plugs wired as stop/turn/tail. (Lamps will be wired for stop or turn functions.) #1 - 3 have 6" length of cable.

**910109**

Same as 910108 but with 25 foot lead of 4 conductor cable.

**910110**

**C** **MAIN HARNESS: 50'**

50 foot lead of 7 conductor cable with a junction molded in the center with (2) - 4 conductor drops consisting of #1 drop wired for roadside turn/clearance and #2 wired for curbside turn and clearance. #1 & 2 have 4 foot length of cable.



**910114**

Same as 910110 but with ABS cable.

**910111**

**D** **TWO CONDUCTOR "Y" HARNESS**

96 inch lead of 2 conductor cable molded into a junction with (2) - 6 inch 2 conductor drops wired for clearance/side marker.



**910115**

**E** **ID BAR HARNESS**

216 inch lead of 2 conductor cable with 2 "Y" harnesses that provide three two conductor drops to plug in individual lights to make an ID bar light.



**910116**

**C** **MAIN HARNESS: 60'**

60 foot lead of 7 conductor cable with a junction molded 33 feet from the front with (2) - 4 conductor drops consisting of #1 drop wired for roadside turn/clearance and #2 wired for curbside turn and clearance and 27 feet of cable to the rear. #1 & 2 have 1.5 foot length of cable.



**910117**

Same as 910116 but with ABS 7 conductor cable.







All lamps are equipped with PVC jacketed cable and a molded 4 conductor male plug. Wiring conforms to FMVSS standards. Cable entry is located on the side of most lamp bodies for easy plug-in to the lamp system. Note: Amber turns are available upon request.



## 4 IN. MALE PLUG/4 COND. CABLE





## 12 IN. MALE PLUG/4 COND. CABLE

ROAD SIDE		CURB SIDE		ROAD SIDE		CURB SIDE	
<b>SHALLOW LENS</b>				<b>SHALLOW LENS</b>			
	<b>PART NO.</b> 402111 TURN/TAIL	<b>PART NO.</b> 402110 TURN/TAIL		<b>PART NO.</b> 402101 TURN/TAIL	<b>PART NO.</b> 402100 TURN/TAIL		
	402113 STOP/TAIL	402112 STOP/TAIL		402103 STOP/TAIL	402102 STOP/TAIL		
<b>DEEP LENS</b>				<b>DEEP LENS</b>			
	<b>PART NO.</b> 402115 TURN/TAIL	<b>PART NO.</b> 402114 TURN/TAIL		<b>PART NO.</b> 402105 TURN/TAIL	<b>PART NO.</b> 402104 TURN/TAIL		
	402117 STOP/TAIL	402116 STOP/TAIL		402107 STOP/TAIL	402106 STOP/TAIL		
<b>SHALLOW LENS</b>				<b>SHALLOW LENS</b>			
	<b>PART NO.</b> 452083 TURN/TAIL	<b>PART NO.</b> 452082 TURN/TAIL		<b>PART NO.</b> 452073 TURN/TAIL	<b>PART NO.</b> 452072 TURN/TAIL		
	452085 STOP/TAIL	452084 STOP/TAIL		452075 STOP/TAIL	452074 STOP/TAIL		
<b>DEEP LENS</b>				<b>DEEP LENS</b>			
	<b>PART NO.</b> 452087 TURN/TAIL	<b>PART NO.</b> 452086 TURN/TAIL		<b>PART NO.</b> 452077 TURN/TAIL	<b>PART NO.</b> 452076 TURN/TAIL		
	452089 STOP/TAIL	452088 STOP/TAIL		452079 STOP/TAIL	452078 STOP/TAIL		

# Clear/Marker Lamps & Junction Box

All lamps are equipped with PVC jacketed cable and a molded 2 conductor male plug. Cable entry is located in the rear of lamp bodies for easy plug-in to the lamp system.



	<b>4 IN. MALE PLUG/ 2 COND. CABLE</b>	<b>12 IN. MALE PLUG/ 2 COND. CABLE</b>
 <p><b>PART NO.</b>  <b>211214</b> Clear/Marker - Red  <b>211215</b> Clear/Marker - Amber</p>		<p><b>PART NO.</b>  <b>211216</b> Clear/Marker - Red  <b>211217</b> Clear/Marker - Amber</p>
 <p><b>PART NO.</b>  <b>560243</b> Clear/Marker - Red  <b>560244</b> Clear/Marker - Amber</p>		<p><b>PART NO.</b>  <b>560247</b> Clear/Marker - Red  <b>560248</b> Clear/Marker - Amber</p>
 <p><b>PART NO.</b>  <b>560245</b> Clear/Marker - Red  <b>560246</b> Clear/Marker - Amber</p>		<p><b>PART NO.</b>  <b>560249</b> Clear/Marker - Red  <b>560250</b> Clear/Marker - Amber</p>
 <p><b>PART NO.</b>  <b>650219</b> Clear/Marker - Red  <b>650220</b> Clear/Marker - Amber</p>		<p><b>PART NO.</b>  <b>650221</b> Clear/Marker - Red  <b>650222</b> Clear/Marker - Amber</p>



**PART NO.**  
**351046** 4x8 Junction Box with cable fittings and Choke Seals  
 Junction box is provided with (2) 920217 and (1) 920218 cable entrance fittings. Also (3) 920413 and (1) 920420 cable Choke Seals.



## Incandescent Lamp to LED Lamp Conversion

For ease of conversion we have arranged our LED Lamp cross-reference list in Incandescent Lamp part number order. Look up the standard lamp or module number you would like to replace and the LED number is conveniently listed beside it with a parts breakdown. Currently license, cabinet, back up, and lamps with license plate windows are not available in LED.

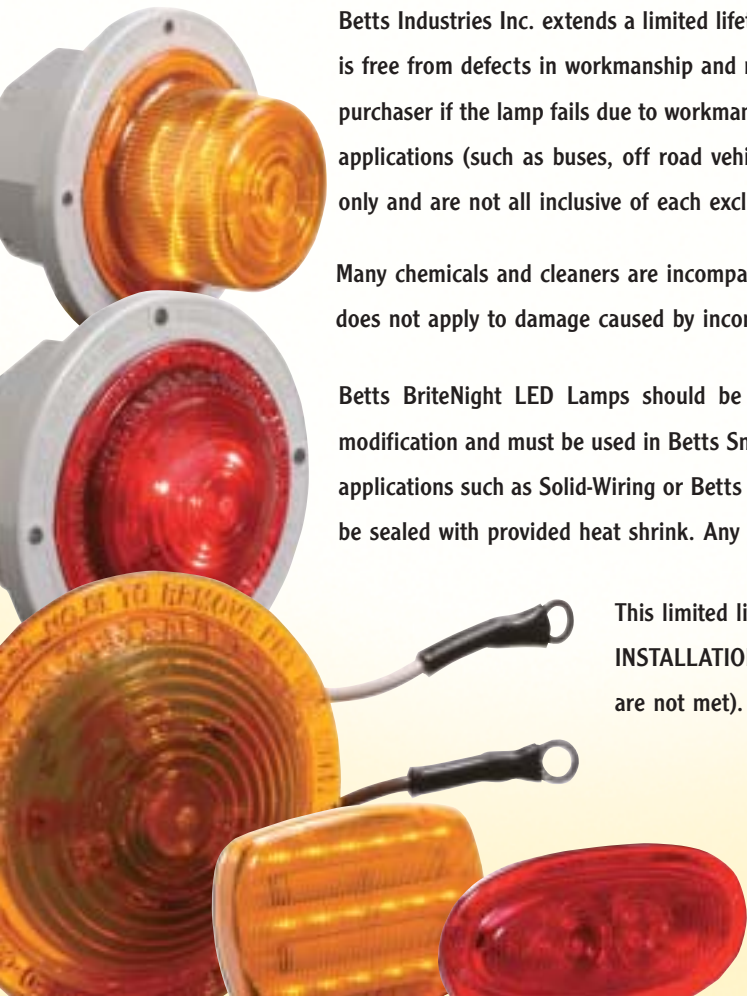
## L.E.D. Limited Warranty and Replacement

Betts Industries Inc. extends a limited lifetime warranty to the original purchaser that the Betts BriteNight LED Lamp is free from defects in workmanship and materials only. Betts will replace any LED Lamp to the original consumer/purchaser if the lamp fails due to workmanship or materials. The LED Lamp limited warranty does not apply to severe applications (such as buses, off road vehicles and construction equipment). These applications are some examples only and are not all inclusive of each excluded application.

Many chemicals and cleaners are incompatible with Betts BriteNight LED products. The LED Lamp limited warranty does not apply to damage caused by incompatible chemicals or cleaners.

Betts BriteNight LED Lamps should be kept free from physical abuse, not subject to improper installation or modification and must be used in Betts Snap-Seal housings. LED Lamps must be installed using recommended wiring applications such as Solid-Wiring or Betts Plug & Seal Wiring Harness. All lens assemblies with butt connectors must be sealed with provided heat shrink. Any violation of these conditions will void this limited warranty.

This limited lifetime warranty is not transferable and applies to the ORIGINAL INSTALLATION of the Betts LED Lamp (all warranty will be void if above conditions are not met).



# Betts™

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