# Tech Bulletin



## Peterson Provides Upgrade Path To "Sync Wire" LED Warning Strobes

Peterson has revised our line of synchronized 4" round and 6½" oval strobing LED lights. These *LumenX*<sup>®</sup> and *Piranha*<sup>®</sup> lights feature state-of-the-art diodes, advanced circuitry and improved manufacturing methods. As a result, we can now offer increased output and better value.

As part of this switch, we are able to streamline our product line. As a result, many of our earlier LED strobes are being discontinued. The chart to the right shows the upgrade path for obsolete part numbers.

The new part will have the same or similar look and the same or improved output. There is no need to upgrade if your existing LED strobes are functional. They have proven reliable and, barring physical damage, should provide many more miles of trouble-free operation. However, should you need to replace a discontinued light with the new part listed, two important caveats must be considered:

- *New-generation lights will NOT synchronize with older lights.* In order to maintain the "sync wire" functionality that is such an important feature of these lights, all interconnected 4258, 4343, 4344, 8344, 420S, 423S, 4353, and 8363 strobes must be upgraded as a complete set.
- All new-generation lights are offered exclusively with AMP-compatible receptacles integrated into the rear of the light. We no longer offer versions with hard-wired leads. Therefore, retrofitting these lights into an existing vehicle's wiring harness may require the use of an accessory jumper or pigtail. The shaded box to the right pictures the available wiring options and describes their application. Detailed upgrade information on the following pages provides additional information about which accessories will be required for each part number's specific upgrade path.

Please study the following pages carefully. If you have questions about which light and harness products you need, please inquire with your Peterson sales representative or ask Peterson's Customer Service associates for help. Our corporate contact information is listed below.

THE SYNC FUNCTION OF THESE NEW LIGHTS IS INCOMPATIBLE WITH DISCONTINUED PART NUMBERS. SYNCHRONIZED LIGHTS MUST BE UPGRADED AS A COMPLETE SET!

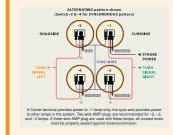
<b>Round Series</b>		<b>Oval Series</b>			
OBSOLETE	REPLACE WITH	OBSOLETE	REPLACE WITH		
417S	817S	420S	820S		
418S	818S	423S	823S		
4258	866S	4353	861S		
4343	0005	8363	860S		
4344	867S				
8344	0075				

## **AMP-Compatible Adapter Harnesses**

Order No.	Description	Pack	Std Carton
417-48	2-wire AMP to stripped lead/ring term.	poly pack	κ 6
417-49	3-wire AMP to stripped leads/ring term.	poly pack	κ 6
417-491	3-wire AMP to PL3 female	poly pack	к 6
866-486	Single AMP to Packard hardshell conn.	poly pack	κ 6
880-49	Single AMP to stripped lead	poly pack	κ 6
B417-496	Triple AMP to AMP extension harness	mfg. pacl	k 100



## Multi-Function LED Strobe & Rear Turn Signal



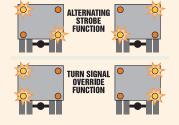
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#### MULTI-FUNCTION STROBES FUNCTION AS TURN SIGNALS!

Each lamp has electronic strobe and turn signal functions built-in, with no external strobe controller. Activating turn signal automatically overrides

strobe function. Two power wires allow strobes to be activated with cab switch and automatically when shifted into reverse.







## QUAD FLASH

### Upgrades for 4344/8344 10-LED to 9-Diode Round LED

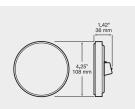
Obsolete	Description	LumenX® Upgrade	Pack	Std Carton
4344 <b>A</b> -1	amber, pos. 1	867SA-1*	poly pack	6
4344 <b>A-2</b>	amber, pos. 2	867SA-2*	poly pack	6
4344 <b>A-</b> 3	amber, pos. 3	867SA-3*	poly pack	6
4344 <b>A</b> -4	amber, pos. 4	867SA-4*	poly pack	6
8344A-1	amber, pos. 1	867SA-1*	poly pack	6
8344 <b>A-2</b>	amber, pos. 2	867SA-2*	poly pack	6
8344A-3	amber, pos. 3	867SA-3*	poly pack	6
8344 <b>A</b> -4	amber, pos. 4	867SA-4*	poly pack	6

## 867SA LumenX<sup>®</sup> LED Strobe & Rear Turn Signal w/Sync



- Two- or four-lamp system functions as both alternating strobes and DOTcompliant rear turn signals.
- Activating turn signal automatically overrides strobe function. No external strobe controller needed. (Requires vehicle flasher for turn function.)
- Meets SAE J595 Class 2 specifications.
- Requires 426-18 grommet, 417-49 3-wire plug, and 880-49 or 866-486 single wire sync plug for installation.





## Upgrades for 8363 10-Diode Oval LED

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Obsolete	Description	LumenX® Upgrade	Pack	Std Carton
8363A-1	amber, pos. 1	860SA-1*	poly pack	6
8363A-2	amber, pos. 2	860SA-2*	poly pack	6
_	amber, pos. 3	860SA-3*	poly pack	6
-	amber, pos. 4	860SA-4*	poly pack	6

\* Sync function incompatible with older 4344/8344/8363-Series lights.

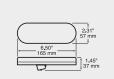
SYNCHRONIZED LIGHTS MUST BE UPGRADED AS A COMPLETE SET!

## 860SA *LumenX*<sup>®</sup> LED Strobe & Rear Turn Signal w/Sync



- Two- or four-lamp system functions as both alternating strobes and DOTcompliant rear turn signals.
- Activating turn signal automatically overrides strobe function. No external strobe controller needed. (Requires vehicle flasher for turn function.)
- Meets SAE J595 Class 2 specifications.
- Requires 421-18 grommet, 417-49 3-wire plug, and 880-49 single wire sync plug for installation.







## **Multi-Function LED Strobe & Rear Turn Signal**







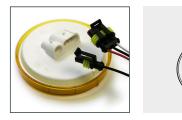
### Upgrades for 4258/4343 36-Diode Round LED

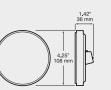
Obsolete	Description	Upgrade	+	Pigtail(s) <sup>†</sup>	Pack Std	Ctn
4258A-1	amber, pos. 1	866SA-1*	+	866-486, (417-496)	poly pack	6
4258A-2	amber, pos. 2	866SA-2*	+	866-486, (417-496)	poly pack	6
4258A-1X	amber, pos. 1	866SA-1*	+	880-49, 417-491**	poly pack	6
4258A-2X	amber, pos. 2	866SA-2*	+	880-49, 417-491**	poly pack	6
4343A-1	amber, pos. 1	866SA-1*	+	866-486, (417-496)	poly pack	6
4343A-2	amber, pos. 2	866SA-2*	+	866-486, (417-496)	poly pack	6
4343A-3	amber, pos. 3	866SA-3*	+	866-486, (417-496)	poly pack	6
4343A-4	amber, pos. 4	866SA-4*	+	866-486, (417-496)	poly pack	6
4343A-1X	amber, pos. 1	866SA-1*	+	880-49, 417-491**	poly pack	6
4343A-2X	amber, pos. 2	866SA-2*	+	880-49, 417-491**	poly pack	6
4343A-3X	amber, pos. 3	866SA-3*	+	880-49, 417-491**	poly pack	6
4343A-4X	amber, pos. 4	866SA-4*	+	880-49, 417-491**	poly pack	6

## 866SA Piranha<sup>®</sup> LED Strobe & Rear Turn Signal w/Sync



- Two- or four-lamp system functions as both alternating strobes and DOTcompliant rear turn signals.
- Activating turn signal automatically overrides strobe function.
- Requires no external strobe controller.
- Meets SAE J595 Class 2 specifications.
- Requires 426-18 grommet, 417-49 3-wire plug, and 880-49 or 866-486 single wire sync plug for installation.





### Upgrades for 4353 22-Diode Oval LED

Obsolete	Description	Upgrade	+	Pigtail(s) <sup>†</sup>	Pack Std (	Ctn
4353A-1	amber, pos. 1	861SA-1*	+	866-486, (417-496)	poly pack	6
4353A-2	amber, pos. 2	861SA-2*	+	866-486, (417-496)	poly pack	6
4353A-1X	amber, pos. 1	861SA-1*	+	880-49, 417-491**	poly pack	6
4353A-2X	amber, pos. 2	861SA-2*	+	880-49, 417-491**	poly pack	6
4353A-3X	amber, pos. 3	861SA-3*	+	880-49, 417-491**	poly pack	6
4353A-4X	amber, pos. 4	861SA-4*	+	880-49, 417-491**	poly pack	6

\*\*May require cutting and splicing ground wire.

<sup>†</sup>Pigtails in parentheses are optional, but may be needed if existing harness plug does not reach receptacle on new light

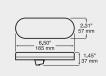
\* Sync function incompatible with older 4258/4343/4353-Series lights. SYNCHRONIZED LIGHTS MUST BE UPGRADED AS A COMPLETE SET!

## 861SA Piranha<sup>®</sup> LED Strobe & Rear Turn Signal w/Sync



- Two- or four-lamp system functions as both alternating strobes and DOTcompliant rear turn signals.
- Activating turn signal automatically overrides strobe function.
- Requires no external strobe controller.
- Meets SAE J595 Class 2 specifications.
- Requires 421-18 grommet, 417-49 3-wire plug, and 880-49 or 866-486 single wire sync plug for installation.



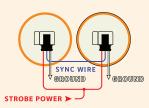


## Strobing LED Lights with Sync



823SA





Synchronous Strobe Pattern: Use two "-1" lamps

- Alternating Strobe Pattern: Use one "-1" and one "-2"
- Random Strobing: Leave black wire unconnected

## Upgrades for 417S/418S 36-Diode Round LED

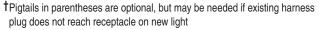
Obsolete	Description	Upgrade + Pigtails	Pack Std Ctn
417SA-1	amber, pos. 1	817SA-1* + 417-49	poly pack 6
417SA-2	amber, pos. 2	817SA-2* + 417-48	poly pack 6
418SA-1	amber w/flange, p1	818SA-1* + 417-49	poly pack 6
418SA-2	amber w/flange, p2	818SA-2* + 417-48	poly pack 6
417SR-1	red, pos. 1	NO UPGRADE AVAILABLE	
417SR-2	red, pos. 2	NO UPGRADE AVAILABLE	
418SR-1	red, w/flange, p1	NO UPGRADE AVAILABLE	
418SR-2	red, w/flange, p2	NO UPGRADE AVAILABLE	

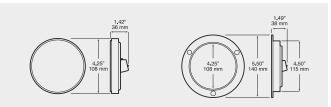
\* Sync function incompatible with older 417/418/420/423-Series lights. SYNCHRONIZED LIGHTS MUST BE UPGRADED AS A COMPLETE SET!

## 817S & 818S Piranha<sup>®</sup> LED Round Strobing Lights w/Sync



- Original 36-diode Piranha multi-diode lens look.
- AMP-compatible connector integrated into housing.
- "Sync wire" technology allows two lamps to communicate with each another without an external strobe controller.
- Operates from 9-32 volts.
- Regulated design provides voltage protection and consistent light output over entire voltage range.
- Ideal for emergency, construction and refuse vehicles.
- Meets SAE J595 Class 2 specifications.
- Requires 426-18 grommet for installation.





## Upgrades for 420S/423S 22-Diode Oval LED

820SR

823HSA

Obsolete	Description	Upgrade	+	Pigtail <sup>†</sup>	Pack Std C	tn
420SA-1	amber, pos. 1	820SA-1*	+	417-49	poly pack	6
420SA-2	amber, pos. 2	820SA-2*	+	417-48	poly pack	6
420SA-1AMP	amber, pos. 1, AMP	820SA-1*	+	(417-496)	poly pack	6
420SA-2AMP	amber, pos. 2, AMP	820SA-2*	+	(417-496)	poly pack	6
420SR-1	red, pos. 1	820SR-1*	+	417-49	poly pack	6
420SR-2	red, pos. 2	820SR-2*	+	417-48	poly pack	6
423SA-1	amber w/flange, p1	823SA-1*	+	417-49	poly pack	6
423SA-2	amber w/flange, p2	823SA-2*	+	417-48	poly pack	6
423SA-1AMP	amber flange, p1, AMP	823SA-1*	+	(417-496)	poly pack	6
423SA-2AMP	amber flange, p2, AMP	823SA-2*	+	(417-496)	poly pack	6
423HSA-1	amber surface mnt. p1	823HSA-1	+	417-49	poly pack	6
423HSA-2	amber surface mnt. p2	823HSA-2	+	417-48	poly pack	6
420SB-1	blue, pos. 1	NO UPGR	AD	E AVAILAB	LE	
420SB-2	blue, pos. 2	NO UPGR	AD	E AVAILAB	LE	
423HSR-1	red surface mount, p1	NO UPGR	AD	E AVAILAB	LE	
423HSR-2	red surface mount, p2	NO UPGR	AD	E AVAILAB	LE	

## 820S & 823S Piranha® LED Oval Strobing Lights w/Sync



- Original 22-diode Piranha multi-diode lens look.
- 9-32 volt operating range, no separate external controller required.
- "Sync wire" technology allows two lamps to communicate with each another without an external strobe controller.
- Meets SAE J595 Class 2 specifications.

grommet for installation.

• 420S grommet mount lamps require 421-18

