

WHELEN[®]

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Installation Guide: SC Series Super-LED[®] Traffic Advisor[™] Models: SCM65, SCM85, SCM85**, SCM65W, SCM85W, SCM85W*

Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained herein that could prevent serious injury or damage.

- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.
- If mounting this product requires drilling holes, the installer **MUST** be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr any holes and remove any metal shards or remnants. Install grommets into all wire passage holes.
- If this manual states that this product may be mounted with suction cups, magnets, tape or Velcro[®], clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.
- Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owner's manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.
- For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the **NEGATIVE (-)** battery post.
- If this product uses a remote device to activate or control this product, make sure that this control is located in an area that allows both the vehicle and the control to be operated safely in any driving condition.
- Do not attempt to activate or control this device in a hazardous driving situation.
- This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.
- Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lens in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.
- It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.
- **FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!**

For warranty information regarding this product, visit www.whelen.com/warranty

Mounting:

Note: Permanent mounting of this product will require drilling. It is absolutely necessary to make sure that no other vehicle components could be damaged by this process. Check both sides of the mounting surface before starting. If damage is likely, select a different mounting location.

Note: When routing the wires, it is important to choose a path that will keep these wires away from excessive heat and from any vehicle equipment that could compromise the integrity of the wires (ex. trunk lids, door jams, etc.).

There are two ways to mount the light array. Both require the unit to be secured to the mounting surface using sheet metal screws (supplied). The cable harness can either be routed directly into the mounting surface or out the side of the end cap (see below). When facing the LED display, the cable harness should exit from the right side of the bar.

Note: When the Traffic Advisor™ is mounted to the rear of the vehicle, the cable exit must be on the passenger side. If not, the flash pattern sequence you choose on the control head will be incorrect. For example, a left flashing pattern will flash right.

1. Position the unit in its proposed mounting location to ensure that it fits properly. With the unit in place, use an awl or other suitable tool and scribe the areas to be drilled, based on the desired style.

Style 1 - Remove the unit from its mounting area and, using a 5/8" drill bit, drill a hole for the cable harness. Affix the 5/8" grommet to the hole and feed the cable harness through the grommet.

Style 2 (OPTIONAL) - To route the cable harness through the end cap a 5/8" passage hole must be drilled. Remove the endcap from the light array, via the machine screws, as to prevent damage to the cable harness and drill the hole. Place the 5/8" grommet on the hole and feed the cable through. Once this is done, secure the endcap back onto the light array.

2. Using an appropriately sized drill bit, drill a hole in each of the areas scribed in the previous step.
3. Return the unit to its mounting location and using the supplied hardware, mount the unit as shown below.

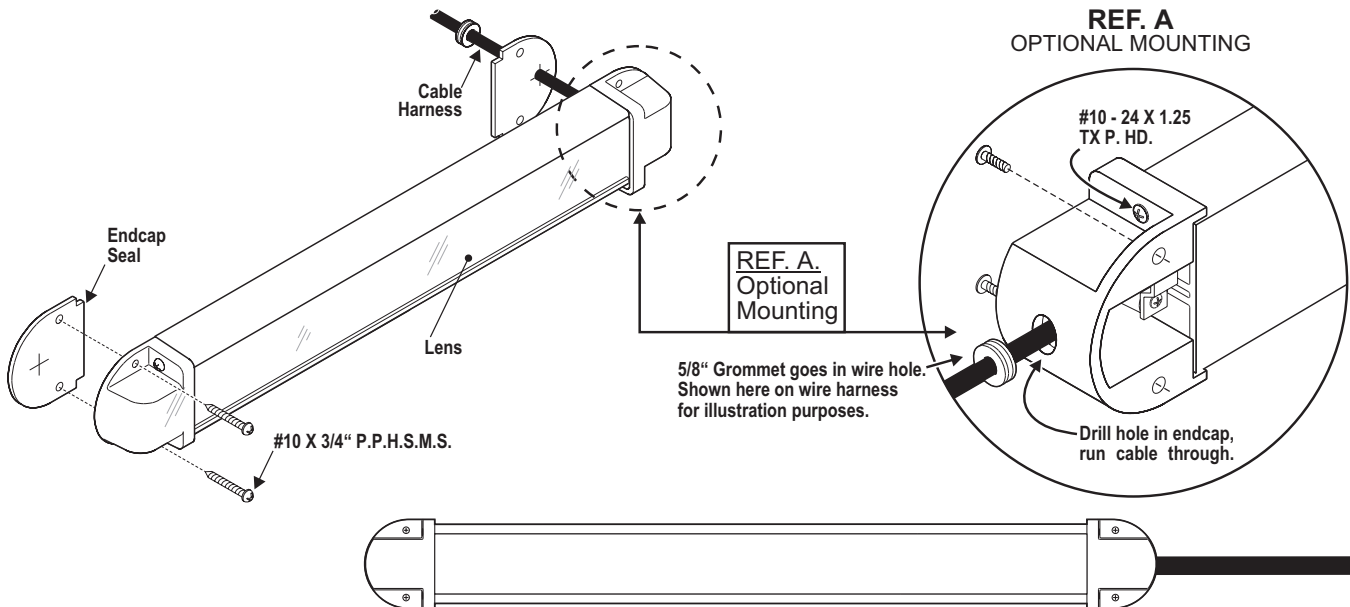
WARNING! All customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and **FUSED** at the battery to carry that load. **DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!**

Note: Do not install the fuse required in the fuse block, until all wire connections are completed.

Installation is now complete. Refer to the wiring diagram below and the manual that comes with your control head.

IMPORTANT: It is the responsibility of the installation technician to make sure that the installation and operation of this product will not interfere with or compromise the operation or efficiency of any vehicle equipment! Before returning the vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/equipment.

IMPORTANT WARNING!
CAUTION! DO NOT LOOK DIRECTLY AT THESE LED'S WHILE THEY ARE ON. MOMENTARY BLINDNESS AND/OR EYE DAMAGE COULD RESULT!



Wiring:

The wire colors and pin positions for your model Traffic Advisor are shown here. Refer to your control head manual for function and operation

Only model SCM85__ is equipped with outer flashers.

SCM65 / 6 LIGHT / SWITCHED POSITIVE

1 = BROWN / Lamp 1 / +12v	4 = YELLOW / Lamp 3 / +12v	7 = VIOLET / Lamp 5 / +12v	10 = No Connection
2 = RED / Lamp 2 / +12v	5 = GREEN / Lamp 4 / +12v	8 = GRAY / Lamp 6 / +12v	11 = No Connection
3 = No Connection	6 = No Connection	9 = WHITE / Neg. / Ground	12 = No Connection

SCM85 8 LIGHT and SCM65W 6 Light Waterproof SWITCHED POSITIVE / Position / Wire Color / Function

1 = BROWN / Lamp 1 / +12v	4 = YELLOW / Lamp 4 / +12v	7 = VIOLET / Lamp 7 / +12v	10 = No Connection
2 = RED / Lamp 2 / +12v	5 = GREEN / Lamp 5 / +12v	8 = GRAY / Lamp 8 / +12v	11 = No Connection
3 = ORANGE / Lamp 3 / +12v	6 = BLUE / Lamp 6 / +12v	9 = WHITE / Neg. / Ground	12 = No Connection

SCM85__ and SCM85W__ / SWITCHED POSITIVE

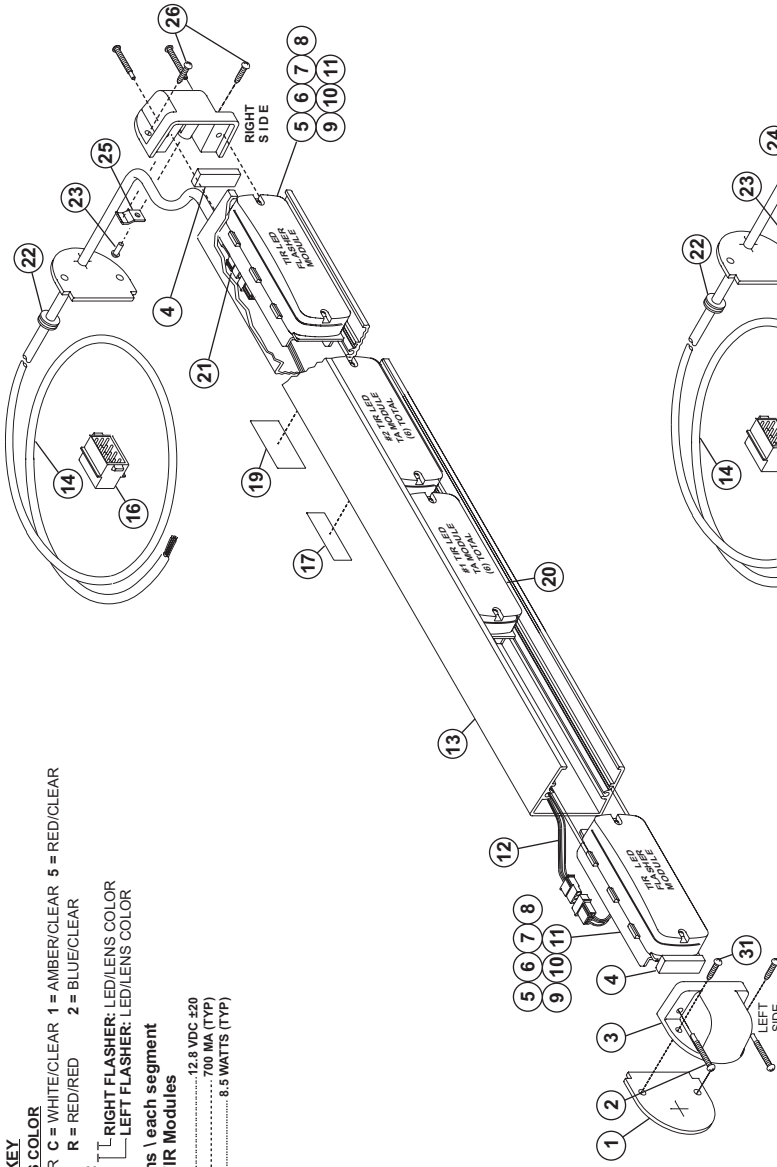
1 = BROWN / Lamp 1 / +12v	4 = YELLOW / Lamp 3 / +12v	7 = VIOLET / Lamp 5 / +12v	10 = No Connection
2 = RED / Lamp 2 / +12v	5 = GREEN / Lamp 4 / +12v	8 = GRAY / Lamp 6 / +12v	11 = No Connection
3 = No Connection	6 = No Connection	9 = WHITE / Neg. / Ground	12 = No Connection



PART NUMBER KEY
LED COLOR/LENS COLOR
 A = AMBER/AMBER C = WHITE/CLEAR 1 = AMBER/CLEAR 5 = RED/CLEAR
 B = BLUE/BLUE R = RED/RED 2 = BLUE/CLEAR
 0 1 - 0 6 8 3 8 7 7 2

RIGHT FLASHER: LED/LENS COLOR
LEFT FLASHER: LED/LENS COLOR
Specifications \ each segment
LED-TIR Modules

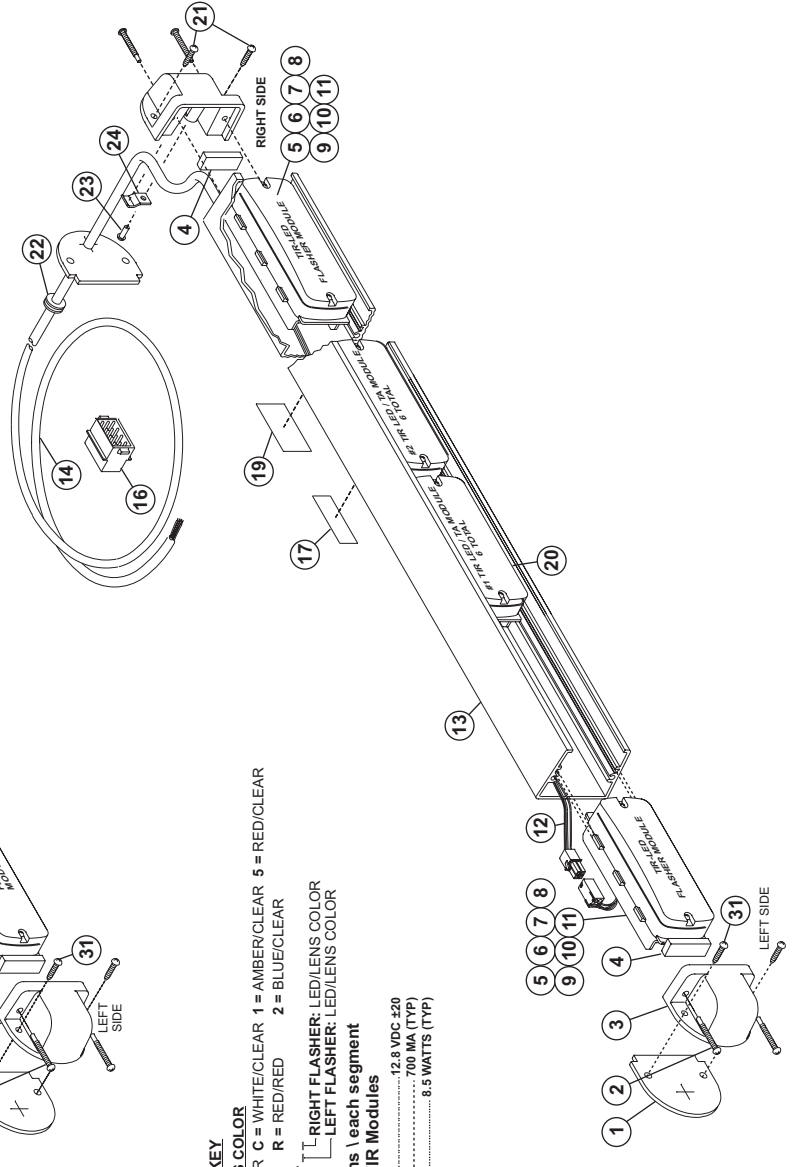
LAMP VOLTAGE.....12.8 VDC #20
 LAMP CURRENT.....700 MA (TYP)
 INPUT POWER.....8.5 WATTS (TYP)



PART NUMBER KEY
LED COLOR/LENS COLOR
 A = AMBER/AMBER C = WHITE/CLEAR 1 = AMBER/CLEAR 5 = RED/CLEAR
 B = BLUE/BLUE R = RED/RED 2 = BLUE/CLEAR
 0 1 - 0 6 8 3 8 7 7 4

RIGHT FLASHER: LED/LENS COLOR
LEFT FLASHER: LED/LENS COLOR
Specifications \ each segment
LED-TIR Modules

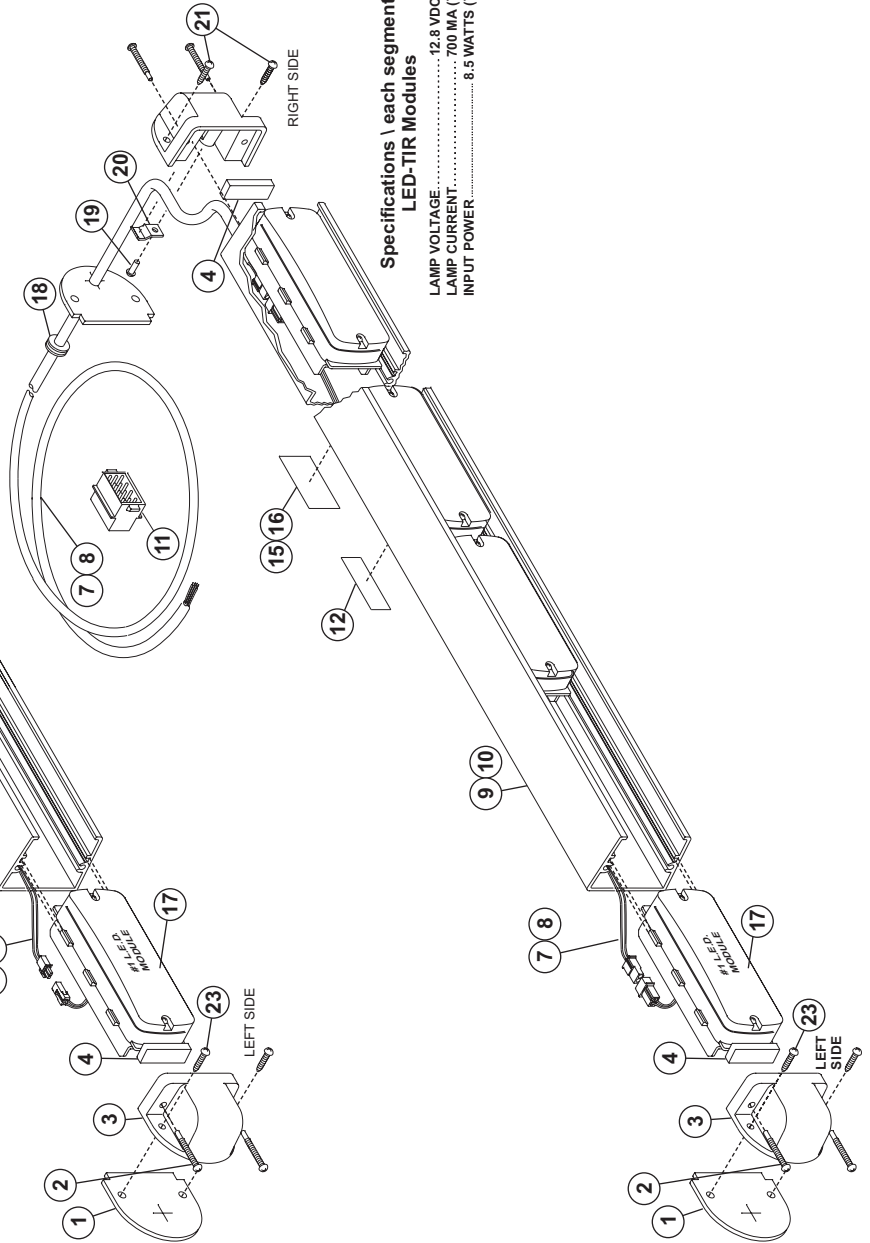
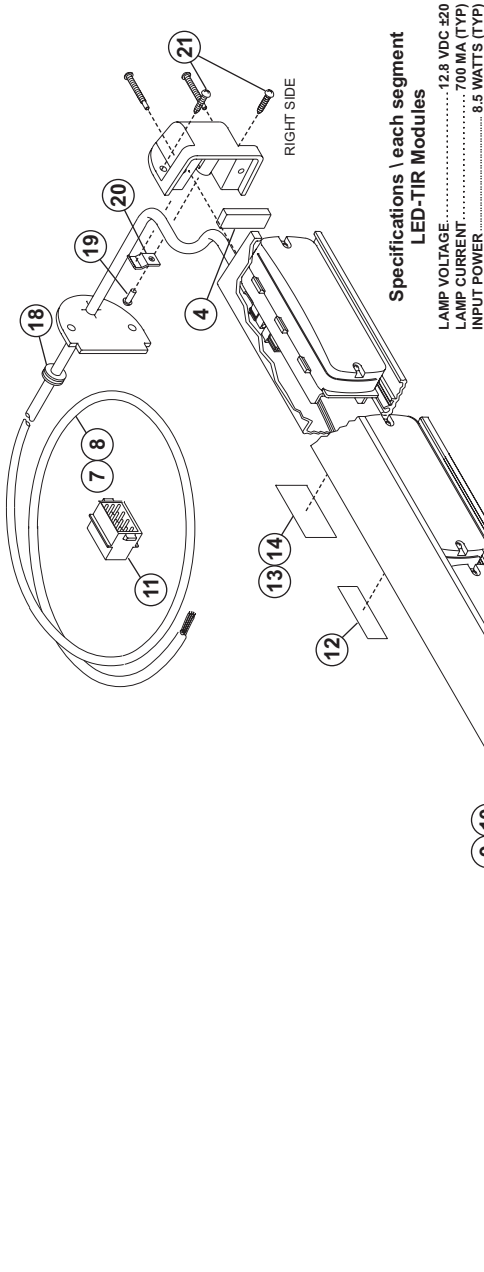
LAMP VOLTAGE.....12.8 VDC #20
 LAMP CURRENT.....700 MA (TYP)
 INPUT POWER.....8.5 WATTS (TYP)



QTY/ITEM	PART NUMBER	DESCRIPTION
*	01-06838772	TIR-TA / SCM85
2	38-0242922-00	SEAL / ENDCAP
4	14-0023347-00	SCREW / #10-24 X 1.25 TX P.HD
2	11-26B486-000	ENDCAP / TIR LED TA SERIES
4	38-0143142-00	GASKET / ENDCAP / LIGHTHEAD
AR 5	01-0663507A23	500 TIR LED FLASH/AMB-AMB/140°/3 POS
AR 6	01-0663507B23	500 TIR LED FLASH/BLU-BLU/140°/3 POS
AR 7	01-0663507C23	500 TIR LED FLASH/CLR-WHT/140°/3 POS
AR 8	01-0663507R23	500 TIR LED FLASH/RED-RED/140°/3 POS
AR 9	01-0663507I23	500 TIR LED FLASH/CLR-AMB/140°/3 POS
AR 10	01-0663507J23	500 TIR LED FLASH/CLR-BLU/140°/3 POS
AR 11	01-0663507K23	500 TIR LED FLASH/CLR-RED/140°/3 POS
1	46-0742931-00	HARNESS ASSY, TIRLED FLASHER
1	11-463638-043	EXTRUSION / HOUSING - MACH'D / 43.25"
1	46-0963578-01	CABLE ASSY / 6 LIGHT / SC SERIES
1	39-0412014-14	HOUSING / 12 POS AMP PIN
1	17 10-0522976-04	LABEL / MADE IN USA FLAG
1	19 10-0522976-04	LABEL / MODEL NO. - SCM85
6	20 01-0663507A32	ASSY / 500 TIR LED STDY/AMB-AMB / 140°/ 2 POS
1	21 39-0402023-04	HOUSING / SOCKET / 2 POS AMP
1	22 21-11122002-0	GROMMET / 5/8"
1	23 15-065211B-060	SCREW / 6 X 3/8 PPH PLASTI-LOK SS BLACK
1	25 07-222519-000	BRACKET / STRAIN RELIEF
4	26 15-101416-120	SCREW / #10 X 3/4 PPHSSMS

QTY/ITEM	PART NUMBER	DESCRIPTION
*	01-06838774	TIR-TA / SCM85
2	38-0242922-00	SEAL / ENDCAP
4	14-0023347-00	SCREW / #10-24 X 1.25 TX P.HD
2	11-26B486-000	ENDCAP / TIR LED TA SERIES
4	38-0143142-00	GASKET / ENDCAP-LIGHTHEAD
AR 5	01-0663507A28	500 TIR LED FLASH/AMB-AMB/140°/4 POS
AR 6	01-0663507B28	500 TIR LED FLASH/BLU-BLU/140°/4 POS
AR 7	01-0663507C28	500 TIR LED FLASH/CLR-WHT/140°/4 POS
AR 8	01-0663507R28	500 TIR LED FLASH/RED-RED/140°/4 POS
AR 9	01-0663507I28	500 TIR LED FLASH/CLR-AMB/140°/4 POS
AR 10	01-0663507J28	500 TIR LED FLASH/CLR-BLU/140°/4 POS
AR 11	01-0663507K28	500 TIR LED FLASH/CLR-RED/140°/4 POS
1	46-0742931-01	HARNESS / TIR-LED FLASHER / WATERPROOF
1	13 11-463638-043	EXTRUSION / HOUSING - MACH'D / 43.25"
1	46-0963578-02	CABLE / 6 LIGHT / SC SERIES / WATERPROOF
1	39-0412014-14	HOUSING / 12 POS AMP PIN
1	17 10-0320776-00	LABEL / MADE IN USA FLAG
1	19 10-0522976-06	LABEL / MODEL NO. - SCM85
6	20 01-0663507A37	500 TIR LED / STEADY-AMB-AMB / 140° / 4 POS
4	21 15-101416-120	SCREW / #10 X 3/4 PPHSSMS
1	22 21-11122002-0	GROMMET 5/8"
1	23 15-065211B-060	SCREW / 6 X 3/8 PPH PLASTI-LOK SS BLACK
1	24 07-222519-000	BRACKET / STRAIN RELIEF

QTY	QTY ITEM	PART NUMBER	DESCRIPTION
*		01-0683876-07	TIR-TA / SCM85 / 8 LT / WATERPROOF
*		01-0683876-08	TIR-TA / SCM65 / 6 LT / WATERPROOF
2	1	38-0242922-00	SEAL / ENDCAP
4	2	14-0023347-00	SCREW / #10-24 X 1.25 TX PHD
2	2	11-26B486-000	ENDCAP / TIR LED TA SERIES
2	2	38-0143142-00	GASKET / ENDCAP-LIGHTHEAD
-	1	46-0963578-03	CABLE / 8 LIGHT / SC SERIES WATERPROOF
1	-	46-0963578-02	CABLE / 6 LIGHT / SC SERIES WATERPROOF
-	1	11-463638-043	EXTRUSION / HOUSING - MACH'D / 43.25"
1	-	11-463638-032	EXTRUSION / HOUSING - MACH'D / 32.43"
1	1	39-0412014-14	HOUSING / 12 POS AMP PIN
1	1	10-0320776-00	LABEL / MADE IN USA FLAG
-	-	10-0522975-13	LABEL / MODEL TAM85
-	-	10-0522975-14	LABEL / MODEL TAM65
6	8	01-0663507A37	500 TIR LED STDY / AMB-AMB / 140° / MUMNLL
1	1	21-11122002-0	GROMMET 5/8"
1	1	15-06521B-060	SCREW / 6 X 3/8 PPH PLASTI-LOK SS BLACK
1	1	07-222519-000	BRACKET / STRAIN RELIEF
4	4	15-101416-120	SCREW / #10 X 3/4 PPHSMS



QTY	QTY ITEM	PART NUMBER	DESCRIPTION
*		01-0683876-03	TIR-TA / SCM85 / 8 LT
*		01-0683876-04	TIR-TA / SCM65 / 6 LT
2	1	38-0242922-00	SEAL / ENDCAP
4	2	14-0023347-00	SCREW / #10-24 X 1.25 TX PHD
2	2	11-26B486-000	ENDCAP / TIR LED TA SERIES
2	2	38-0143142-00	GASKET / ENDCAP-LIGHTHEAD
-	1	46-0963578-00	CABLE / 8 LIGHT / SC SERIES
1	-	46-0963578-01	CABLE / 6 LIGHT / SC SERIES
-	1	11-463638-043	EXTRUSION / HOUSING - MACH'D / 43.25"
1	-	11-463638-032	EXTRUSION / HOUSING - MACH'D / 32.43"
1	1	39-0412014-14	HOUSING / 12 POS AMP PIN
1	1	10-0320776-00	LABEL / MADE IN USA FLAG
-	1	10-0522975-07	LABEL / MODEL NO. - SCM85
-	1	10-0522975-08	LABEL / MODEL NO. - SCM65
6	8	01-0663507A32	500 TIR LED STEADY / AMB-AMB / 140° / 2 POS
1	1	21-11122002-0	GROMMET 5/8"
1	1	15-06521B-060	SCREW / 6 X 3/8 PPH PLASTI-LOK SS BLACK
1	1	07-222519-000	BRACKET / STRAIN RELIEF
4	4	15-101416-120	SCREW / #10 X 3/4 PPHSMS