

WHELEN[®]

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Installation Guide:
Super-LED[®] Traffic Advisor[™]
Model(s) TAM65, TAM85, TAM85**
TAM65W, TAM85W, TAM85W**

Warnings to Installers

Whelen's emergency vehicle warning devices must be properly mounted and wired in order to be effective and safe. Read and follow all of Whelen's written instructions when installing or using this device. Emergency vehicles are often operated under high speed stressful conditions which must be accounted for when installing all emergency warning devices. Controls should be placed within convenient reach of the operator so that they can operate the system without taking their eyes off the roadway. Emergency warning devices can require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or vehicle damage, including fire. Many electronic devices used in emergency vehicles can create or be affected by electromagnetic interference. Therefore, after installation of any electronic device it is necessary to test all electronic equipment simultaneously to insure that they operate free of interference from other components within the vehicle. Never power emergency warning equipment from the same circuit or share the same grounding circuit with radio communication equipment. All devices should be mounted in accordance with the manufacturer's instructions and securely fastened to vehicle elements of sufficient strength to withstand the forces applied to the device. Driver and/or passenger air bags (SRS) will affect the way equipment should be mounted. This device should be mounted by permanent installation and within the zones specified by the vehicle manufacturer, if any. Any device mounted in the deployment area of an air bag will damage or reduce the effectiveness of the air bag and may damage or dislodge the device. Installer must be sure that this device, its mounting hardware and electrical supply wiring does not interfere with the air bag or the SRS wiring or sensors. Mounting the unit inside the vehicle by a method other than permanent installation is not recommended as unit may become dislodged during swerving; sudden braking or collision. Failure to follow instructions can result in personal injury. Whelen assumes no liability for any loss resulting from the use of this warning device. **PROPER INSTALLATION COMBINED WITH OPERATOR TRAINING IN THE PROPER USE OF EMERGENCY WARNING DEVICES IS ESSENTIAL TO INSURE THE SAFETY OF EMERGENCY PERSONNEL AND THE PUBLIC.**

Warnings to Users

Whelen's emergency vehicle warning devices are intended to alert other operators and pedestrians to the presence and operation of emergency vehicles and personnel. However, the use of this or any other Whelen emergency warning device does not guarantee that you will have the right-of-way or that other drivers and pedestrians will properly heed an emergency warning signal. Never assume you have the right-of-way. It is your responsibility to proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes. Emergency vehicle warning devices should be tested on a daily basis to ensure that they operate properly. When in actual use, the operator must ensure that both visual and audible warnings are not blocked by vehicle components (i.e.: open trunks or compartment doors), people, vehicles, or other obstructions. It is the user's responsibility to understand and obey all laws regarding emergency warning devices. The user should be familiar with all applicable laws and regulations prior to the use of any emergency vehicle warning device. Whelen's audible warning devices are designed to project sound in a forward direction away from the vehicle occupants. However, because sustained periodic exposure to loud sounds can cause hearing loss, all audible warning devices should be installed and operated in accordance with the standards established by the National Fire Protection Association.

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.**
- **Whelen Engineering requires the use of waterproof butt splices and/or connectors if that connector could be exposed to moisture.**
- **Failure to use specified installation parts and/or hardware will void the product warranty.**
- **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 the 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 (this does not include products that use cigar power cords).**
- **If this product uses a remote device for activation or control, make sure that this device is located in an area that allows both the vehicle and the device 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. Lenses 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!**

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, so 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.

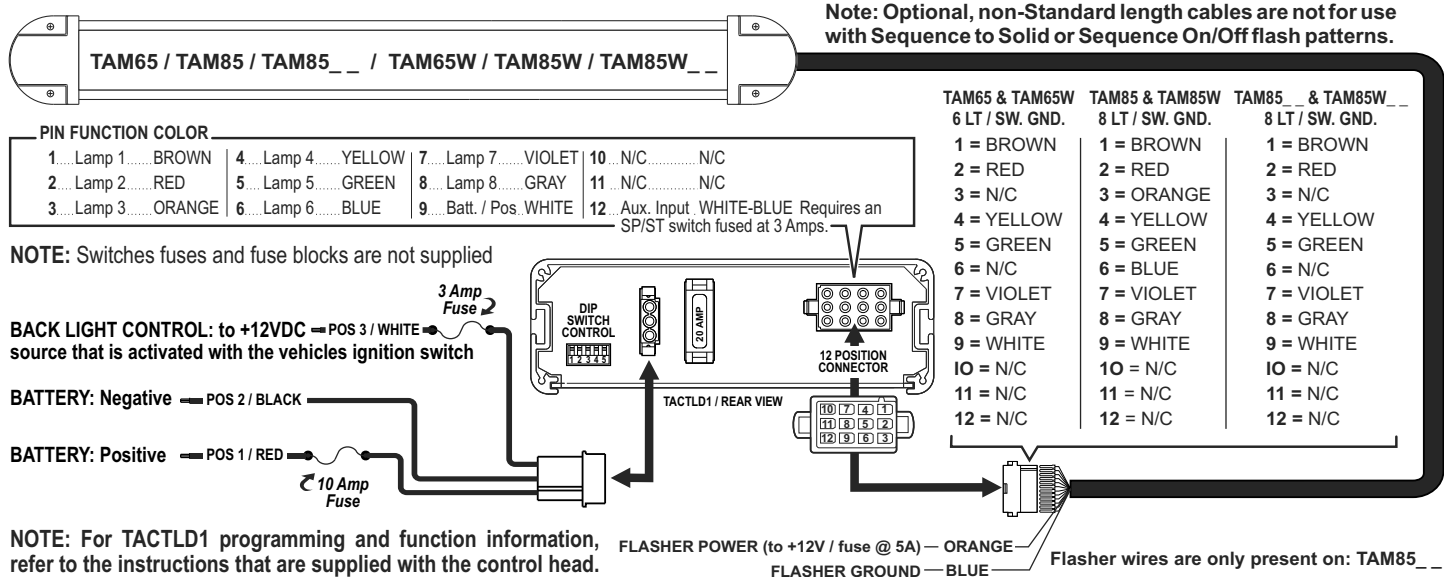
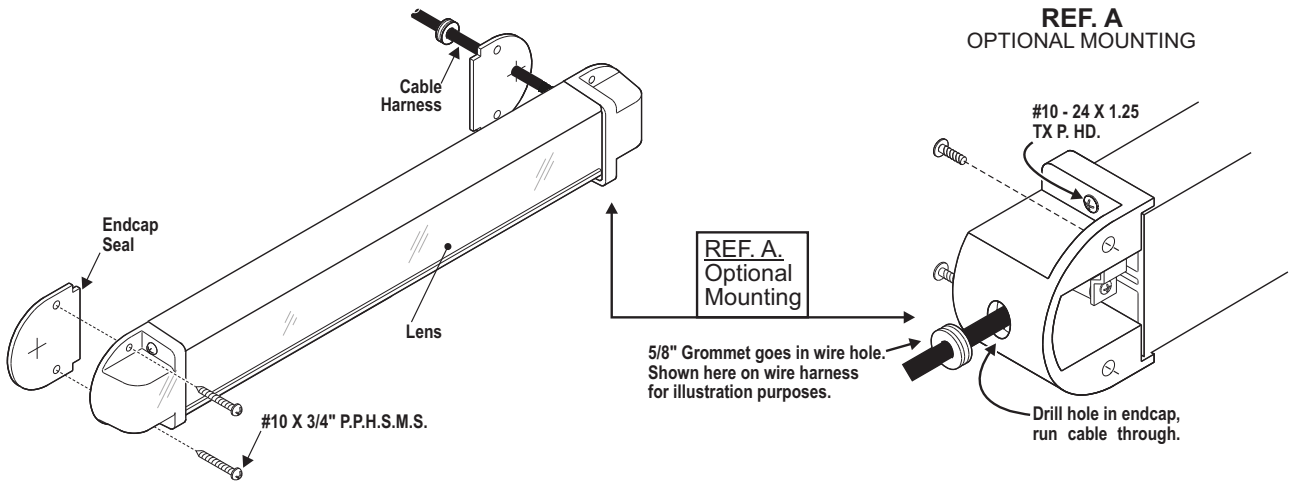
WARNING! All customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and **FUSED** at the battery to carry that load. **DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!**

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!



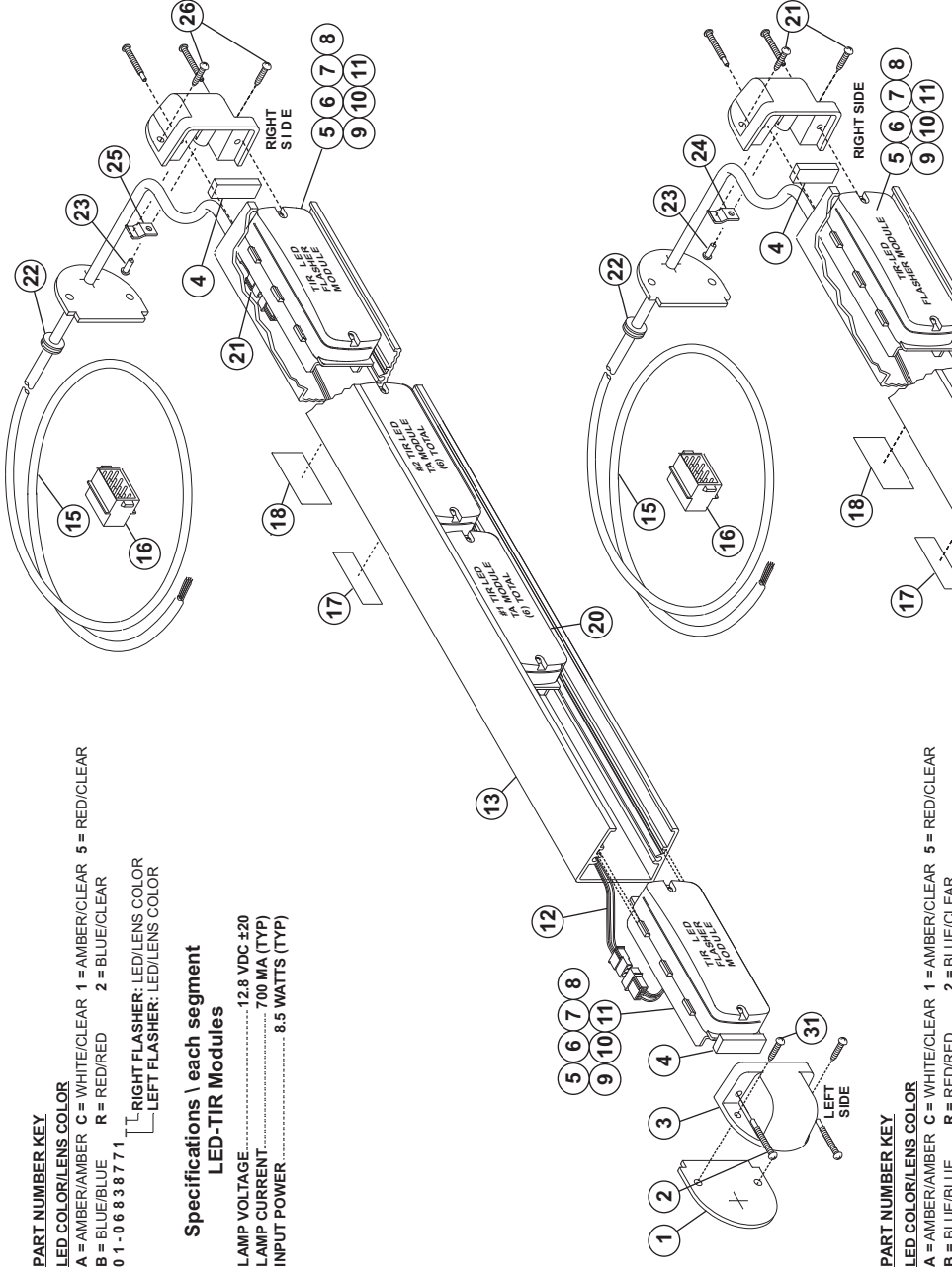
QTY/ITEM	PART NUMBER	DESCRIPTION
*	01-06638771	TIR T/A - TAM85
1	38-0242922-00	SEAL, ENDCAP
2	14-0-023347-00	SCREW, #10-24 X 1.25" TX PHD
2	11-26B486-000	ENDCAP, TIR LED T/A SERIES
4	38-0143142-00	GASKET, ENDCAP, LIGHTHEAD
AR	01-0663507A23	500 TIR LED FLASH, AMB-AMB
AR	01-0663507B23	500 TIR LED FLASH, BLU-BLU
AR	01-0663507C23	500 TIR LED FLASH, CLR-WHT
AR	01-0663507R23	500 TIR LED FLASH, RED-RED
AR	01-0663507123	500 TIR LED FLASH, CLR-AMB
AR	01-0663507223	500 TIR LED FLASH, CLR-BLU
AR	01-0663507523	500 TIR LED FLASH, CLR-RED
1	12 46-0742931-00	HARNES ASSY, TIR LED FLASHER
1	13 11-463638-043	EXTRUSION, 43.25"
1	15 46-0963577-01	CABLE ASSY, 6-LIGHT, T/A SERIES
1	16 39-0412014-14	HOUSING, 12-POS AMP PIN
1	17 10-0320776-00	LABEL, MADE IN USA FLAG
1	18 10-0522976-03	LABEL, TAM85
6	20 01-0663507A32	ASSY, 500 TIR LED STEADY, AMB-AMB
1	21 39-0402023-04	HOUSING, SOCKET, 2-POS AMP
1	22 21-11122002-0	GROMMET, .58"
1	23 15-06521B-060	SCREW, 6 X 3/8" PPH
1	25 07-222519-000	BRACKET, STRAIN RELIEF
4	26 15-101416-120	SCREW, #10 X 3/4" PPHSMS

PART NUMBER KEY
LED COLOR/LENS COLOR
 A = AMBER/AMBER C = WHITE/CLEAR 1 = AMBER/CLEAR 5 = RED/D/CLEAR
 B = BLUE/BLUE R = RED/RED 2 = BLUE/CLEAR

01-06638771
 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)

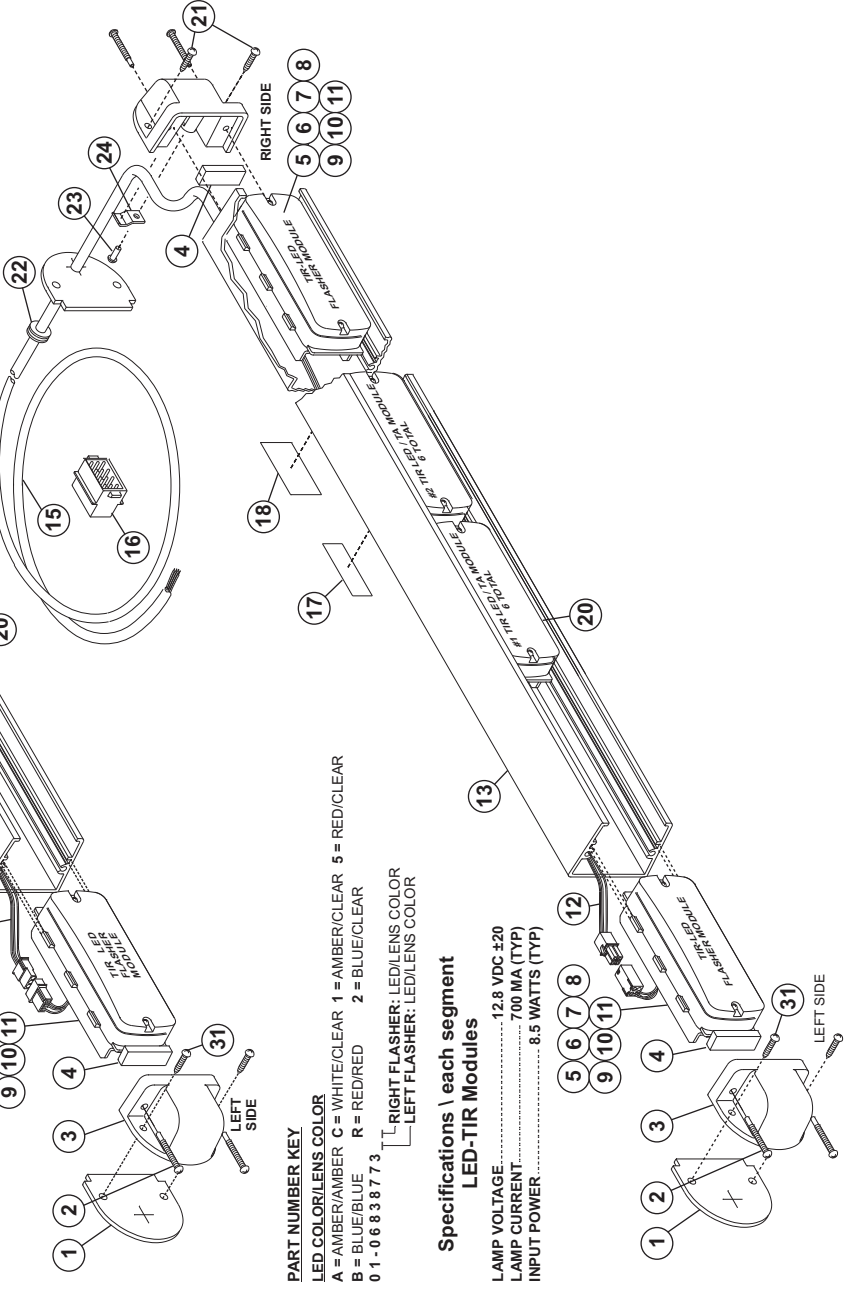


PART NUMBER KEY
LED COLOR/LENS COLOR
 A = AMBER/AMBER C = WHITE/CLEAR 1 = AMBER/CLEAR 5 = RED/D/CLEAR
 B = BLUE/BLUE R = RED/RED 2 = BLUE/CLEAR

01-06638773
 RIGHT FLASHER: LED/LENS COLOR
 LEFT FLASHER: LED/LENS COLOR

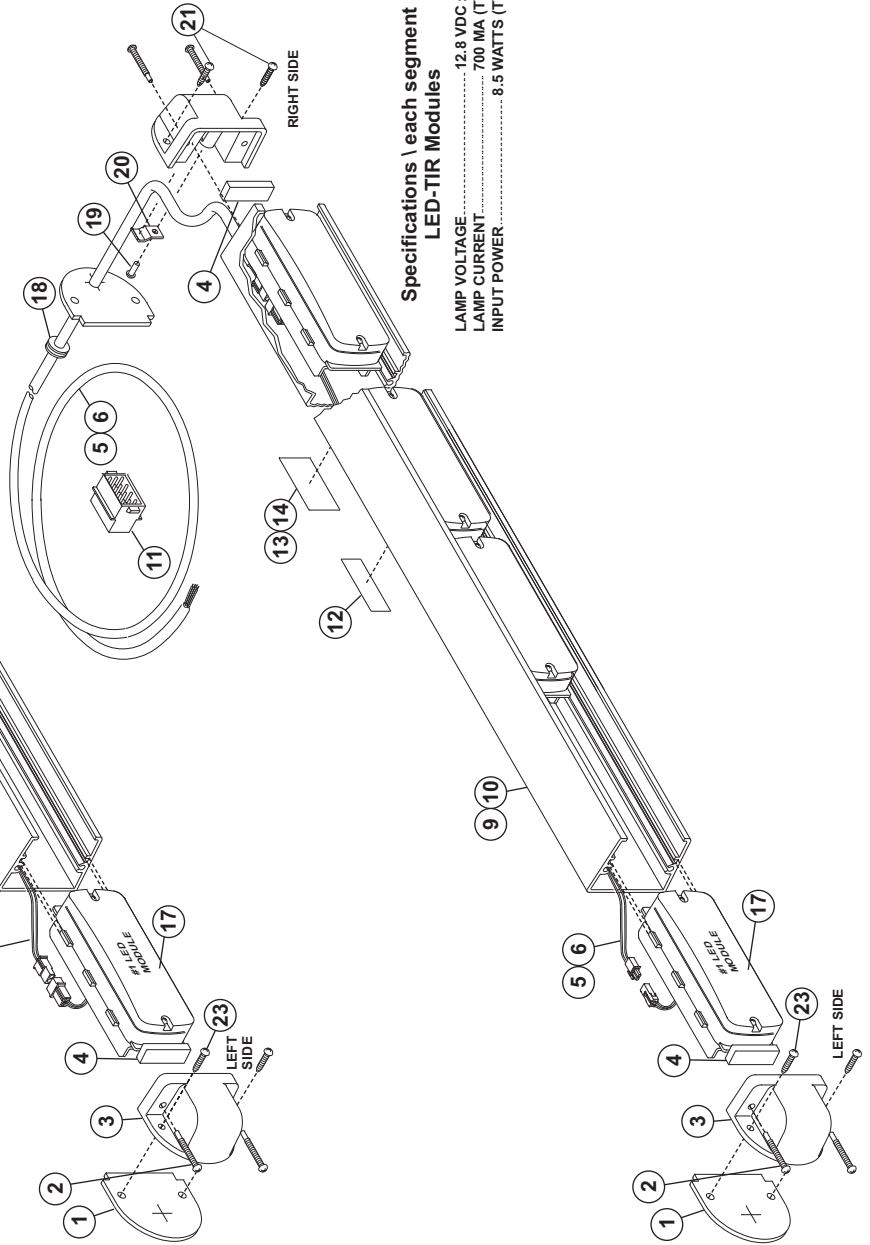
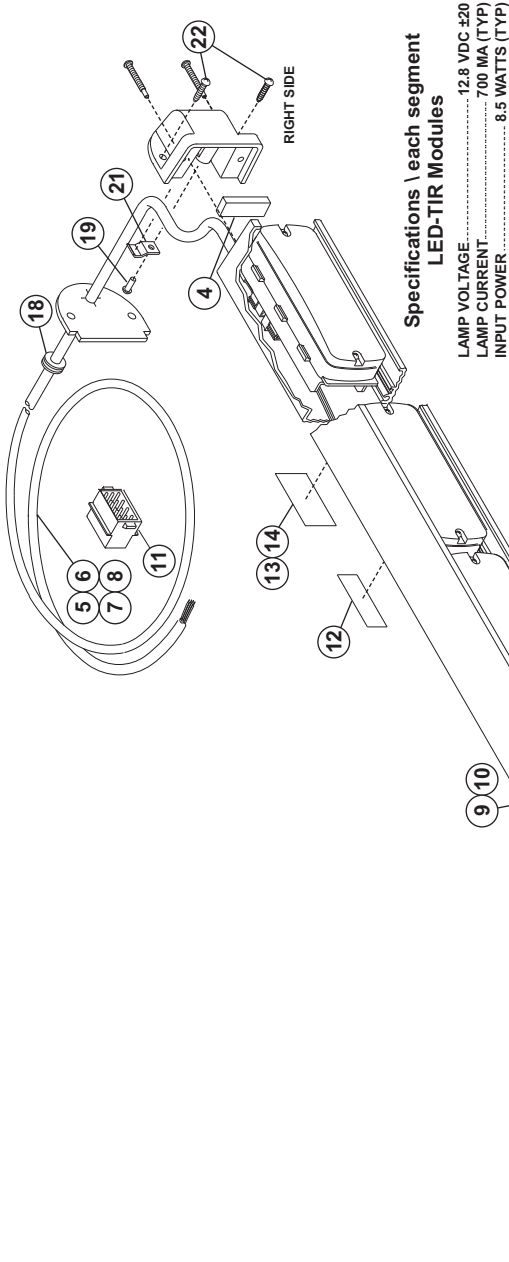
Specifications \ each segment
LED-TIR Modules

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



QTY/ITEM	PART NUMBER	DESCRIPTION
*	01-06638773	TIR T/A, TAM85
1	38-0242922-00	SEAL, ENDCAP
2	14-0023347-00	SCREW, #10-24 X 1.25" TX PHD
2	11-26B486-000	ENDCAP, TIR LED T/A SERIES
4	38-0143142-00	GASKET, ENDCAP-LIGHTHEAD
AR	01-0663507A28	500 TIR LED FLASH, AMB-AMB
AR	01-0663507B28	500 TIR LED FLASH, BLU-BLU
AR	01-0663507C28	500 TIR LED FLASH, CLR-WHT
AR	01-0663507R28	500 TIR LED FLASH, RED-RED
AR	01-0663507128	500 TIR LED FLASH, CLR-AMB
AR	01-0663507228	500 TIR LED FLASH, CLR-BLU
AR	01-0663507528	500 TIR LED FLASH, CLR-RED
1	12 46-0742931-01	HARNES, TIR LED FLASHER, WATERPROOF
1	13 11-463638-043	EXTRUSION, 43.25"
1	15 46-0963577-02	CABLE, 6-LIGHT, T/A SERIES, WATERPROOF
1	16 39-0412014-14	HOUSING, 12-POS AMP PIN
1	17 10-0320776-00	LABEL, MADE IN USA FLAG
1	18 10-0522976-05	LABEL, TAM85
6	20 01-0663507A37	500 TIR LED, STEADY, AMB-AMB
4	21 15-101416-120	SCREW, #10 X 3/4" PPHSMS
1	22 21-11122002-0	GROMMET, .58"
1	23 15-06521B-060	SCREW, 6 X 3/8" PPH
1	24 07-222519-000	BRACKET, STRAIN RELIEF

QTY	QTY ITEM	PART NUMBER	DESCRIPTION	
*		01-0683876-01	TIR T/A, TAM85	
*		01-0683876-02	TIR T/A, TAM65	
2	1	38-0242922-00	SEAL, ENDCAP	
4	2	14-0023347-00	SCREW, #10-24 X 1.25 TX P.HD	
2	3	11-26B486-000	ENDCAP, TIR LED T/A SERIES	
2	4	38-0143142-00	GASKET, ENDCAP-LIGHTHEAD	
-	1	5	46-0963577-00	CABLE, 8-LIGHT, T/A SERIES
1	-	6	46-0963577-01	CABLE, 6-LIGHT, T/A SERIES
-	1	9	11-463638-043	EXTRUSION, 43.25"
-	1	10	11-463638-032	EXTRUSION, 32.43"
1	1	11	39-0412014-14	HOUSING, 12-POS AMP PIN
1	1	12	10-0320776-00	LABEL, MADE IN USA FLAG
-	1	13	10-0522975-05	LABEL, MODEL TAM85
1	-	14	10-0522975-06	LABEL, MODEL TAM65
6	8	17	01-0663507A32	500 TIR LED STEADY, AMB-AMB
1	1	18	21-11122002-0	GROMMET, .5/8"
1	1	19	15-06521B-060	SCREW, 6 X 3/8" PPH
1	1	21	07-222519-000	BRACKET, STRAIN RELIEF
4	4	22	15-101416-120	SCREW, #10 X 3/4" PPHSMS



QTY	QTY ITEM	PART NUMBER	DESCRIPTION	
*		01-0683876-05	TIR T/A, TAM85, WATERPROOF	
*		01-0683876-06	TIR T/A, TAM65, WATERPROOF	
2	1	38-0242922-00	SEAL, ENDCAP	
4	2	14-0023347-00	SCREW, #10-24 X 1.25" TX P.HD	
2	3	11-26B486-000	ENDCAP, TIR LED T/A SERIES	
2	4	38-0143142-00	GASKET, ENDCAP-LIGHTHEAD	
-	1	5	46-0963577-03	CABLE, 8-LIGHT, T/A SERIES, WATERPROOF
1	-	6	46-0963577-02	CABLE, 6-LIGHT, T/A SERIES, WATERPROOF
-	1	9	11-463638-043	EXTRUSION, 43.25"
-	1	10	11-463638-032	EXTRUSION, 32.43"
1	1	11	39-0412014-14	HOUSING, 12-POS AMP PIN
1	1	12	10-0320776-00	LABEL, MADE IN USA FLAG
-	1	13	10-0522975-13	LABEL, MODEL TAM85
1	-	14	10-0522975-14	LABEL, MODEL TAM65
6	8	17	01-0663507A37	500 TIR LED STDY, AMB-AMB
1	1	18	21-11122002-0	GROMMET, .5/8"
1	1	19	15-06521B-060	SCREW, 6 X 3/8" PPH
1	1	20	07-222519-000	BRACKET, STRAIN RELIEF
4	4	21	15-101416-120	SCREW, #10 X 3/4" PPHSMS