

WHELEN[®]

ENGINEERING COMPANY INC.

51 Winthrop Road
Chester, Connecticut 06412-0684
Phone: (860) 526-9504
Fax: (860) 526-4078
Internet: www.whelen.com
Sales e-mail: autosale@whelen.com
Canadian Sales e-mail: canadiansales@whelen.com
Customer Service e-mail: custserv@whelen.com

Installation Guide:
LED Traffic Advisor™
Model(s) TANF85, TANF85, TAMF85,**
TACF85, TACF85, SCCF85**

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!**

Installation:

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

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.

1. Position the unit onto its mounting location. Draw a pencil line onto the mounting surface along the top and bottom of the extrusion and a "centerline" centered between the two.
2. Four 13/64" holes are required to mount this unit. These holes may be located anywhere along the horizontal centerline that you drew in step one. It's best to locate the holes as far apart as possible. Mark the hole locations onto the mounting surface.
3. Using a #9 drill bit, drill a hole in each of the hole locations marked.
4. Remove the endcap and slide the hex-head mounting bolts (included) into any one of the three channels provided on the extrusion (use the top, rear or bottom channel depending on which position you wish to mount the unit) and reinstall the endcap.
5. Align these bolts with the 4 mounting holes and insert them into the mounting holes.
6. Install a flat washer and elastic stop nut onto each bolt and tighten.

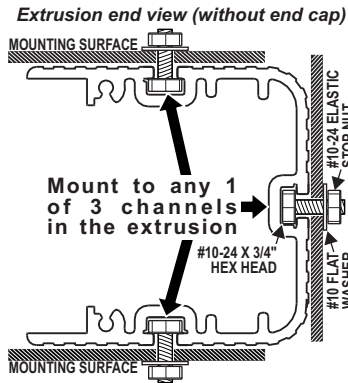
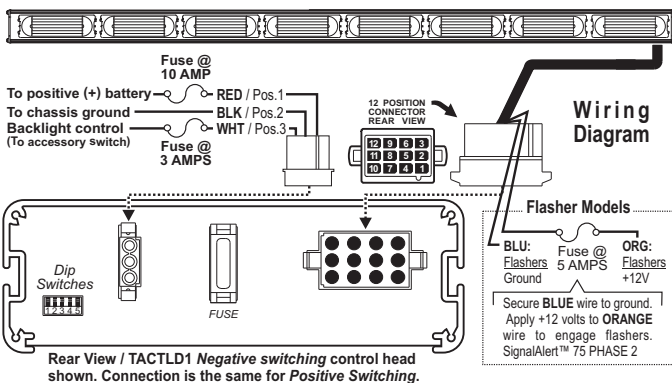
Wiring:

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!**

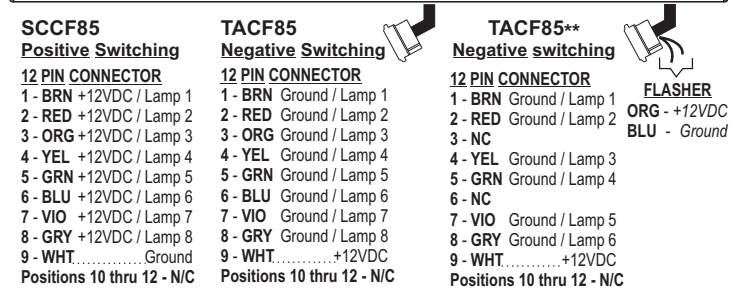
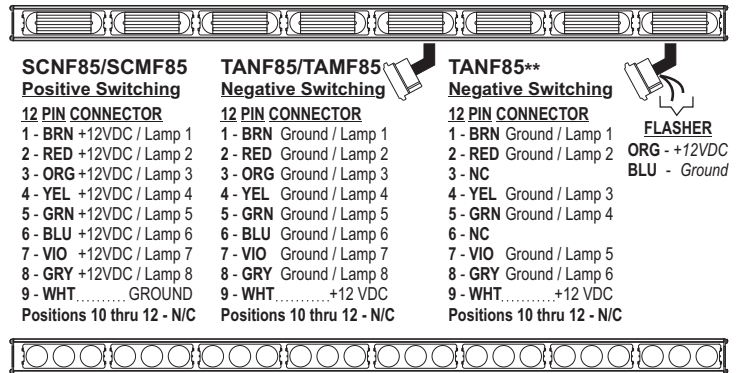
Operation:

Connect the Traffic Advisor™ to your control head as shown in the wiring diagram below and follow the instructions included with the control head for operation.

NOTE: If you are using a different control head from the one shown, refer to that control head's manual for connection and operational information.



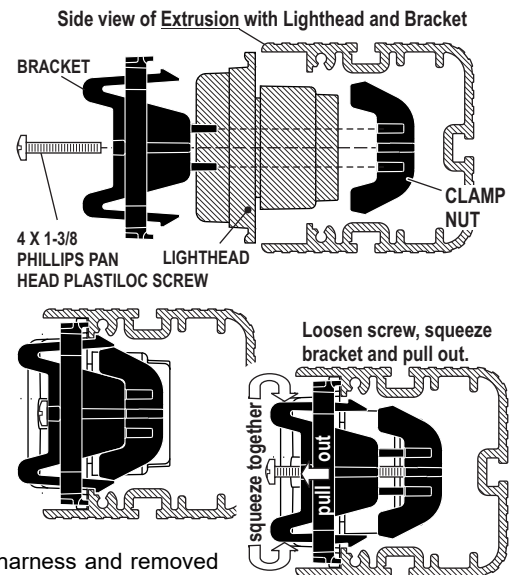
Control Cable Identification



Service:

This section shows you how to access the lightbar for service or lighthead replacement.

Loosen the set screw(s) on the bracket, squeeze the brackets clip together so that it disengages from the extrusion and pull the bracket straight out. With the bracket removed the lighthead lifts out and can be unplugged from the harness and removed from the lightbar.

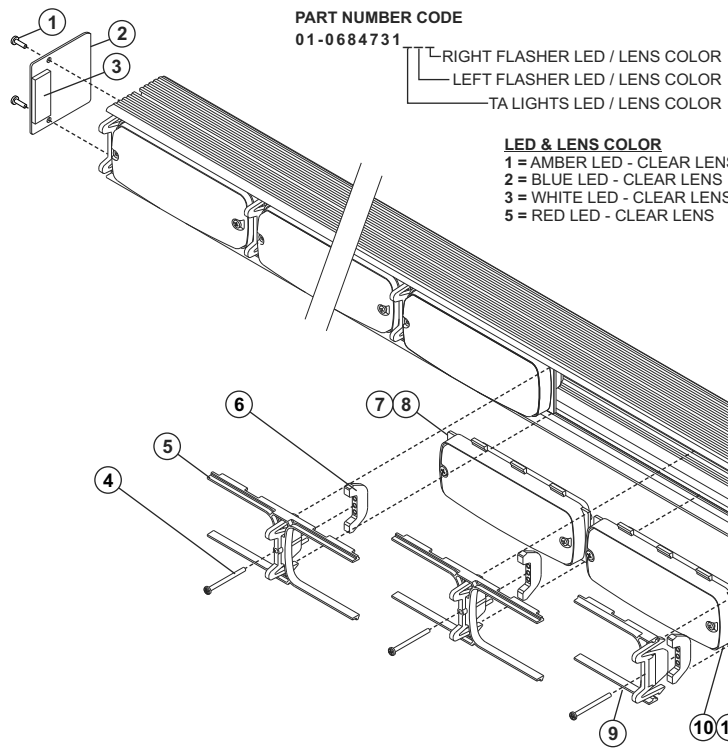


IMPORTANT! It is the responsibility of the installation technician to make sure that the installation and operation of this product will not interfere with or compromise the operation or efficiency of any vehicle equipment!

IMPORTANT! Before returning this 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 LEDS WHILE THEY ARE ON. MOMENTARY BLINDNESS AND/OR EYE DAMAGE COULD RESULT!



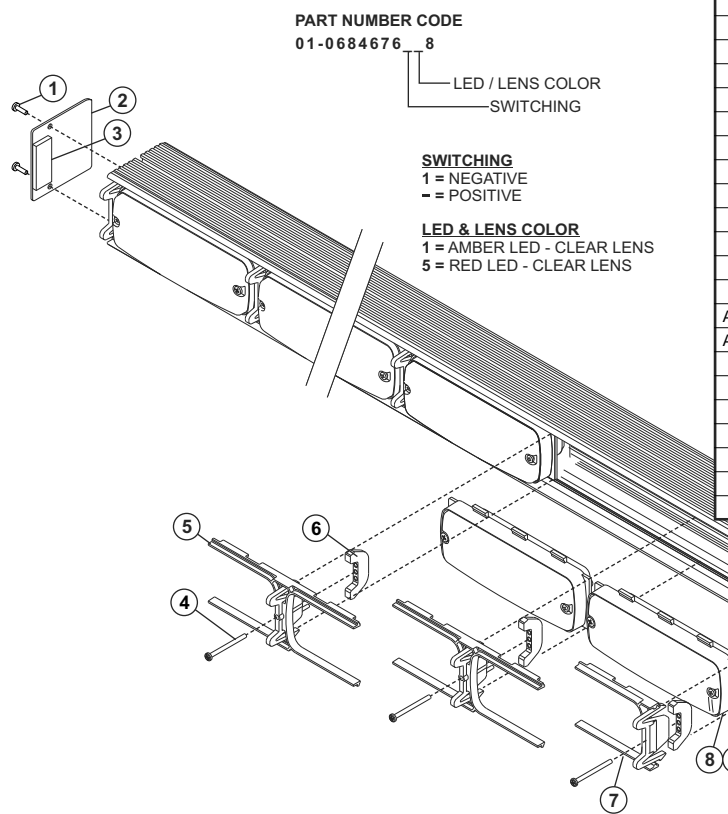
PART NUMBER CODE
01-0684731

RIGHT FLASHER LED / LENS COLOR
LEFT FLASHER LED / LENS COLOR
TA LIGHTS LED / LENS COLOR

LED & LENS COLOR
1 = AMBER LED - CLEAR LENS
2 = BLUE LED - CLEAR LENS
3 = WHITE LED - CLEAR LENS
5 = RED LED - CLEAR LENS

QTY	ITEM	PART NUMBER	DESCRIPTION
*		01-0684731	T/A, 500 LINEAR LED®, TANF85
4	1	14-062219-06D	SCREW, #6-32 X 3/8" PPHMS
1	2	11-243415-007	ENDCAP, EXT. MT. 500 SNAP-IN
2	3	38-0143142-00	GASKET, END CAP
9	4	15-04521B-220	SCREW, 4 x 1-3/8" PPH PLASTI-LOK
7	5	07-264851-000	BRACKET, EXT. MT. 500 SNAP-IN
9	6	19-343555-000	CLAMP NUT, DIVIDER
A/R	7	01-066C289213	LIGHTHEAD, 500 LINEAR LED, STEADY, AMB.
A/R	8	01-066C289253	LIGHTHEAD, 500 LINEAR LED, STEADY, RED
2	9	07-264851-001	BRACKET, EXT. MT. 500 SNAP-IN / HALF
A/R	10	01-066C289113	LIGHTHEAD, 500 LINEAR LED, SYNC, AMB.
AR	11	01-066C289123	LIGHTHEAD, 500 LINEAR LED, SYNC, BLUE
AR	12	01-066C289133	LIGHTHEAD, 500 LINEAR LED, SYNC, WHITE
A/R	13	01-066C289143	LIGHTHEAD, 500 LINEAR LED, SYNC, GREEN
A/R	14	01-066C289153	LIGHTHEAD, 500 LINEAR LED, SYNC, RED
1	15	11-36A055-045	EXTRUSION, T/A 500 LED SNAP-IN
1	16	46-076A059-00	HARNESS, T/A FLASHERS 500 LINEAR
1	17	46-076A060-00	HARNESS, T/A LIGHTS 500 LINEAR
1	18	11-243415-017	END CAP, EXT. MT. 500 with HOLE
1	19	21-11121602-0	GROMMET, 3/8" ID x 1/2" OD
1	20	46-076A061-20	CABLE ASSEMBLY, INPUT
1	21	39-0412014-14	HOUSING, PIN, 12-POS

Note: Optional, non-Standard length cables are not for use with Sequence to Solid or Sequence On/Off flash patterns.



PART NUMBER CODE
01-0684676

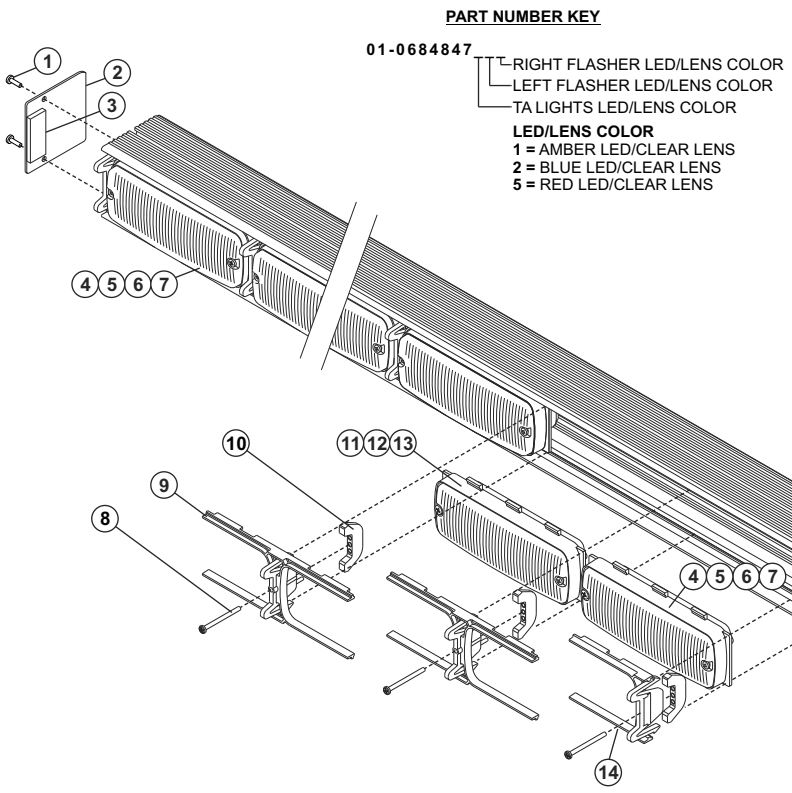
LED / LENS COLOR
SWITCHING

SWITCHING
1 = NEGATIVE
- = POSITIVE

LED & LENS COLOR
1 = AMBER LED - CLEAR LENS
5 = RED LED - CLEAR LENS

QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
		*			01-0684676-8	T/A, 500 LIN LED, POS. SWITCHING (SCNF85)
		*			01-06846761-8	T/A, 500 LIN LED, NEG. SWITCHING (TANF85)
	*				01-0686014-8	T/A, 500 TIR6 LED, POS. SWITCHING (SCMF85)
	*				01-06860141-8	T/A, 500 TIR6 LED, NEG. SWITCHING (TAMF85)
4	4	4	4	1	14-062219-06D	SCREW, #6-32 X 3/8" PPHMS
1	1	1	1	2	11-243415-007	END CAP, EXT. MT. 500 SNAP-IN
2	2	2	2	3	38-0143142-00	GASKET, ENDCAP
9	9	9	9	4	15-04521B-220	SCREW, #4 X 1 3/8" PPH PLASTI-LOC
7	7	7	7	5	07-264851-000	BRACKET, EXT. MT. 500 SNAP-IN
9	9	9	9	6	19-343555-000	CLAMP NUT, DIVIDER
2	2	2	2	7	07-264851-001	BRACKET, EXT. MT. 500 SNAP-IN
-	-	AR	AR	8	01-066C289213	LIGHTHEAD, 500 LIN LED STEADY AMBER
-	-	AR	AR	9	01-066C289253	LIGHTHEAD, 500 LIN LED STEADY RED
AR	AR	-	-	10	01-0663507137	LIGHTHEAD, 500 TIR6™LED STEADY (AMBER)
AR	AR	-	-	11	01-0663507537	LIGHTHEAD, 500 TIR6™LED STEADY (RED)
1	1	1	1	12	11-36A055-045	EXTRUSION, T/A 500 LED SNAP-IN
-	1	-	1	13	46-076A041-00	HARNESS, T/A 500 LIN LED
1	-	1	-	14	46-076A082-00	HARNESS, T/A 500 LIN LED
1	1	1	1	15	11-243415-017	END CAP, EXT. MT. 500 w/HOLE
1	1	1	1	16	21-11121602-0	GROMMET, 3/8" ID x 1/2" HOLE
1	1	1	1	17	46-076A042-20	CABLE ASSEMBLY, INPUT
1	1	1	1	18	39-0412014-14	HOUSING, PIN, 12-POS

Note: Optional, non-Standard length cables are not for use with Sequence to Solid or Sequence On/Off flash patterns.

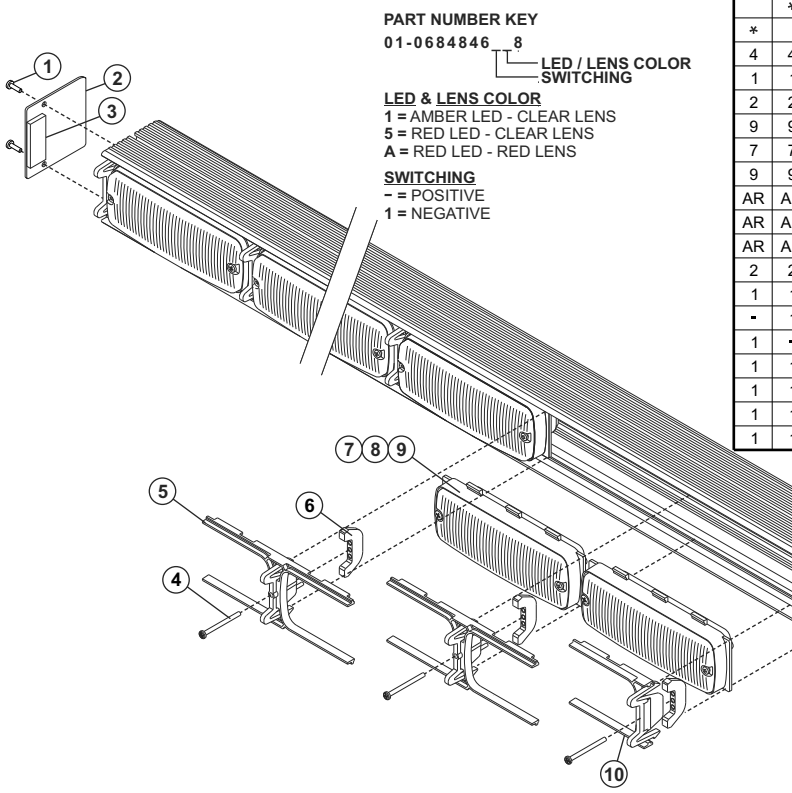


PART NUMBER KEY
01-0684847

- RIGHT FLASHER LED/LENS COLOR
- LEFT FLASHER LED/LENS COLOR
- TA LIGHTS LED/LENS COLOR
- LED/LENS COLOR**
- 1 = AMBER LED/CLEAR LENS
- 2 = BLUE LED/CLEAR LENS
- 5 = RED LED/CLEAR LENS

QTY	ITEM	PART NUMBER	DESCRIPTION
*		01-0684847	TA ASS'Y, 500 LED SNAP-IN (TACF85_)
4	1	14-062219-06D	SCREW / #6-32 X 3/8 PPHMS ROLOK ZN
1	2	11-243415-007	ENDCAP / EXT. MT. 500 SNAP-IN
2	3	38-0143142-00	GASKET / ENDCAP-LIGHTHEAD .25"
AR	4	01-066C289113	ASSY / 500 LED AMB SYNC MINI UMNL
AR	5	01-066C289123	ASSY / 500 LED BLU SYNC MINI UMNL
AR	6	01-066C289133	ASSY / 500 LED WHITE SYNC MINI UMNL
AR	7	01-066C289153	ASSY / 500 LED RED SYNC MINI UMNL
9	8	15-04521B-220	SCREW / #4 - X 1 3/8 PPH PLASTILOC
7	9	07-264851-000	BRACKET / EXT. MT. 500 SNAP-IN
9	10	19-343555-000	CLAMP NUT / DIVIDER
AR	11	01-066A281-10	SUB-ASSY / 3 LED 500 EXT FLASH AMB
AR	12	01-066A281-20	SUB-ASSY / 3 LED 500 EXT FLASH BLU
AR	13	01-066A281-50	SUB-ASSY / 3 LED 500 EXT FLASH RED
2	14	07-264851-001	BRACKET / EXT. MT. 500 SNAP-IN-HALF
1	15	11-36A055-045	EXTRUSION / TA 500 LED SNAP-IN
1	16	46-076A059-00	HARNESS ASSY / TA FLASHERS 500 LIN
1	17	46-076A060-00	HARNESS ASSY / TA LIGHTS 500 LIN
1	18	11-243415-017	ENDCAP / EXT. MT. 500 with HOLE
1	19	21-11121602-0	GROMMET: 3/8"ID x 1/2"OD
1	20	46-076A061-20	CABLE ASSEMBLY / INPUT
1	21	39-0412014-14	HOUSING / PIN 12 POS AMP

Note: Optional, non-Standard length cables are not for use with Sequence to Solid or Sequence On/Off flash patterns.



PART NUMBER KEY
01-0684846

- LED / LENS COLOR SWITCHING
- LED & LENS COLOR**
- 1 = AMBER LED - CLEAR LENS
- 5 = RED LED - CLEAR LENS
- A = RED LED - RED LENS
- SWITCHING**
- = POSITIVE
- 1 = NEGATIVE

QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
*			01-0684846- 8	TA ASS'Y, 500 LED, POS. SWITCHING (SCCF85)
*			01-06848461_ 8	TA ASS'Y, 500 LED, NEG. SWITCHING (TACF85)
4	4	1	14-062219-06D	SCREW / #6-32 X 3/8 PPHMS ROLOK ZN
1	1	2	11-243415-007	ENDCAP / EXT. MT. 500 SNAP-IN
2	2	3	38-0143142-00	GASKET / ENDCAP / LIGHTHEAD .25"
9	9	4	15-04521B-220	SCREW / 4 x 1-3/8 PPH PLASTI-LOK
7	7	5	07-264851-000	BRACKET / EXT. MT. 500 SNAP-IN
9	9	6	19-343555-000	CLAMP NUT / DIVIDER
AR	AR	7	01-066A281-10	SUB-ASSY, 3 LED 500 EXT FLASH AMB/CLR
AR	AR	8	01-066A281-50	SUB-ASSY, 3 LED 500 EXT FLASH RED/CLR
AR	AR	9	01-066A281-A0	SUB-ASSY, 3 LED 500 EXT FLASH AMB/AMB
2	2	10	07-264851-001	BRACKET / EXT. MT. 500 SNAP-IN-HALF
1	1	11	11-36A055-045	EXTRUSION / TA 500 LED SNAP-IN
-	1	12	46-076A041-00	HARNESS ASSY / TA500 LIN LED
1	-	13	46-076A082-00	HARNESS ASSY / TA500 LIN LED
1	1	14	11-243415-017	ENDCAP / EXT. MT. 500 W/HOLE
1	1	15	21-11121602-0	3/8" GROMMET / ID x 1/2" OD
1	1	16	46-076A042-20	CABLE ASSEMBLY / INPUT
1	1	17	39-0412014-14	HOUSING / PIN 12 POS AMP

Note: Optional, non-Standard length cables are not for use with Sequence to Solid or Sequence On/Off flash patterns.