

WHELEN[®]

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Installation Guide: Inner Edge[®] Interior Lightbar with MR8 Take-downs

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. 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!**

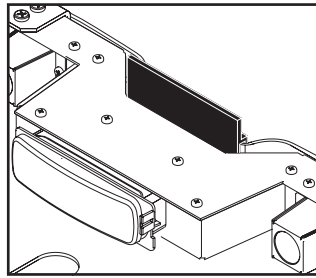
For warranty information regarding this product, visit www.whelen.com/warranty

IMPORTANT! Do not install this product or route any wires in the deployment area of your air bag (see air bag warning on first page).

IMPORTANT! The lightbar should be located a minimum of 16" from any radio antennas!

Important installation note for Chevrolet Impalas:

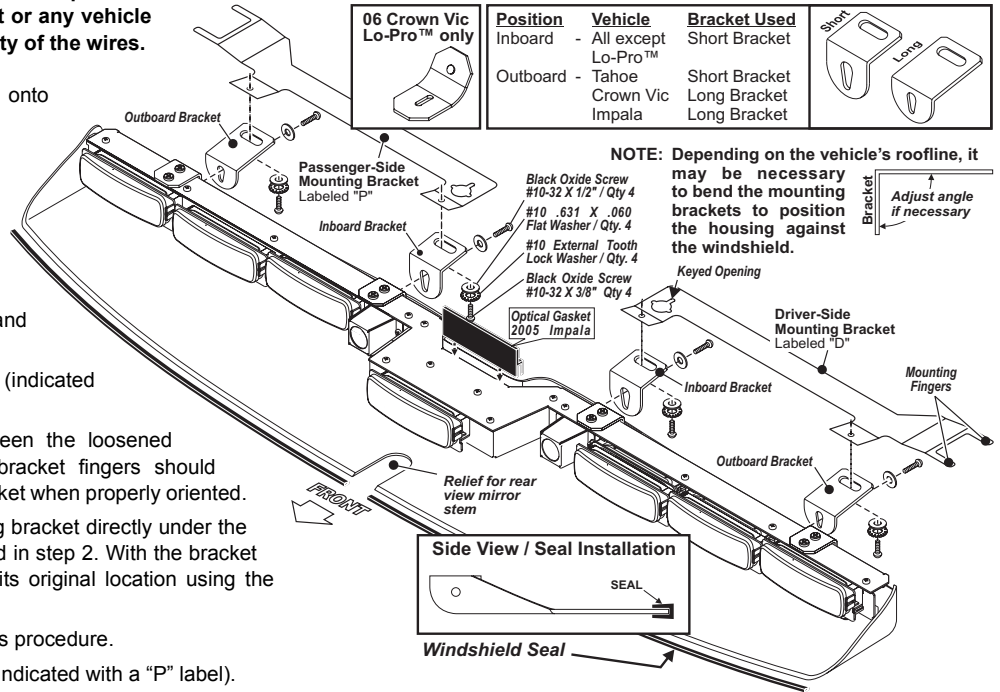
When mounting this product in a Chevrolet Impala, an optical gasket must be installed as shown here and below. Failure to do so could result in reflected light within the passenger compartment.



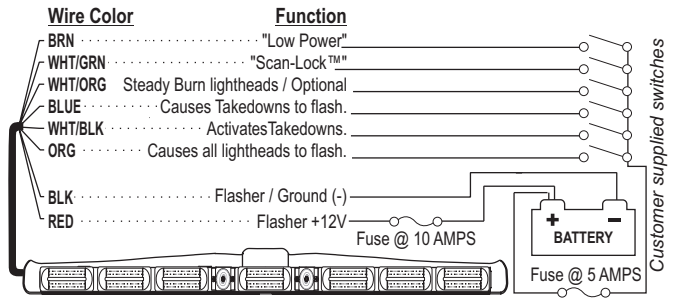
Installation:

When routing the wires, it is important to choose a path that will keep the wires away from excessive heat or any vehicle equipment that could compromise the integrity of the wires.

1. Locate and install the rubber window seal onto the lower, leading edge of the housing.
2. Using an appropriately sized Torx head screwdriver, loosen the three screws securing the driver-side visor swivel bracket to the vehicle. Do not remove these screws.
3. Remove the screws securing the visor clip to the vehicle. Remove and retain the clip and all hardware.
4. Locate the driver-side mounting bracket (indicated with a "D" label) and orient as shown.
5. Slide the mounting bracket fingers between the loosened swivel bracket and the headliner. The bracket fingers should straddle the inner section of the swivel bracket when properly oriented.
6. Position the keyed opening of the mounting bracket directly under the mounting location for the visor clip removed in step 2. With the bracket in this position, remount the visor clip in its original location using the original hardware.
7. Firmly tighten any hardware loosened in this procedure.
8. Repeat this procedure for passenger-side (indicated with a "P" label).



9. Using the hardware provided (#10-32 x 3/8" black oxide screws), secure the lightbar to the mounting brackets. Tighten this hardware firmly. Route lightbar cable down vehicle A-pillar to your control head. Make wiring connections as shown here.



Wiring:

IMPORTANT: 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:

With the lightbar on:

- Applying +12 volts to the WHT/BLK wire activates the take-downs.
- With the take-downs activated, applying +12 volts to the BLUE wire will cause the take-down lights to flash.
- Applying +12 volts to the ORANGE wire causes all lighthead to flash.
- Apply +12 volts to the WHT/ORG wire to activate the steady burn lighthead (optional).

Scan-Lock™ / WHITE/GREEN

To change a flash pattern, turn on the desired lighthead:

CYCLE THROUGH ALL PATTERNS: To cycle forward, apply +12 volts to the WHT/GRN wire for less than 1 second and release. To cycle backward, apply +12 volts to the WHT/GRN wire for more than 1 second and release.

SET A PATTERN AS DEFAULT: When the desired pattern is displayed allow it to run for more than 5 seconds and this pattern will become the default pattern.

RESET TO THE FACTORY DEFAULT PATTERN: Turn off power and apply +12 volts to the WHT/GRN wire while turning power on.

A Normally Open Momentary Switch can be used to control Scan-Lock.

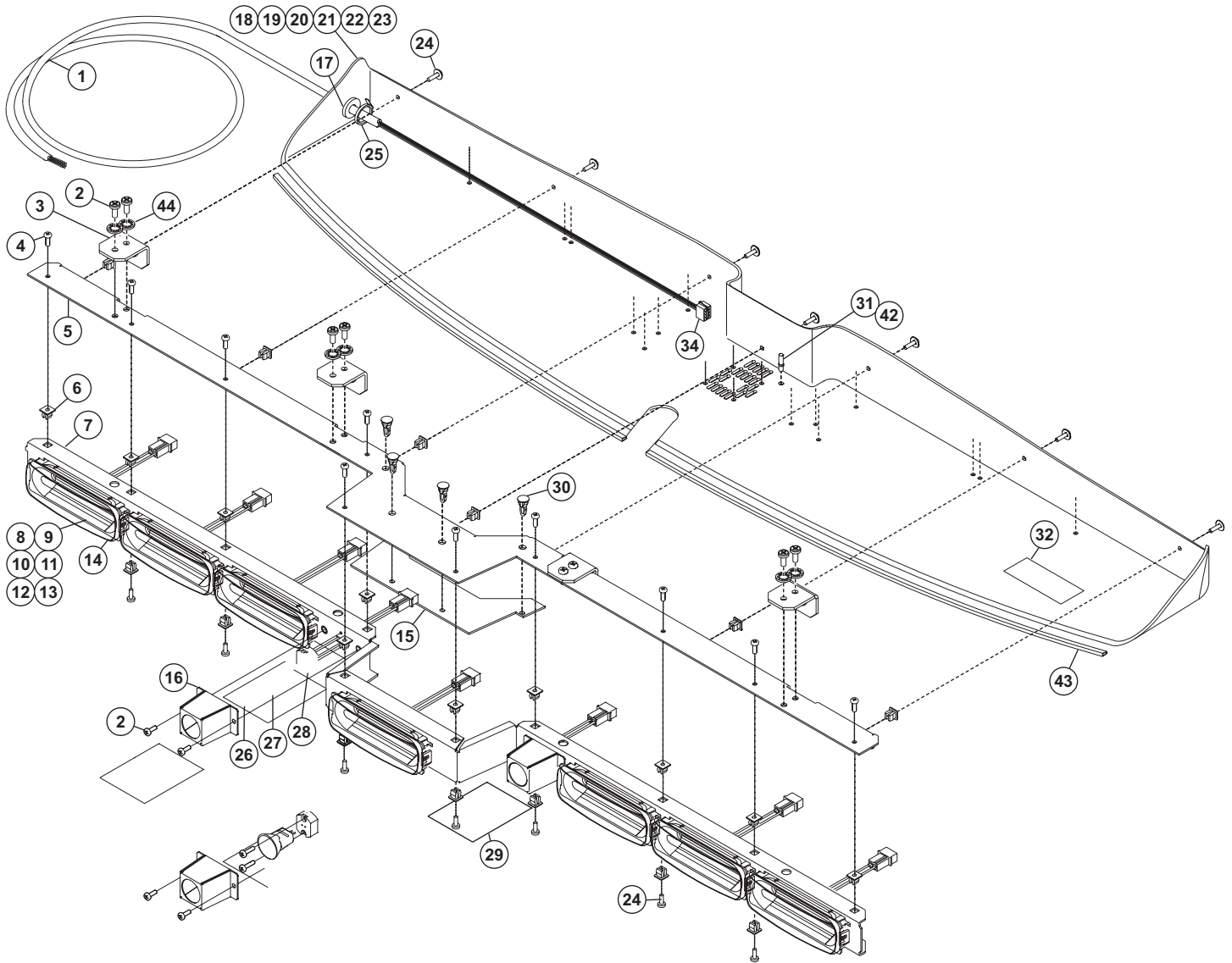
Available Scan-Lock™ Flash Patterns: Signal Alert™ 75 Alternating > Signal Alert™ 75 In-Out > SignalAlert™ 75 Left to Right > SingleFlash 90 Alternating > SingleFlash 90 In-Out > SingleFlash 90 Left to Right > CometFlash® 75 Alternating > CometFlash® 75, In-Out > CometFlash® 75, Left to Right > SingleFlash 75 Alternating > SingleFlash 75 In-Out > SingleFlash 75 Left to Right > SingleFlash 150 Alternating > SingleFlash 150 In-Out > SingleFlash 150 Left to Right > DoubleFlash 75 Alternating > DoubleFlash 75 In-Out > DoubleFlash 75 Left to Right > ActionFlash™ Alternating > ActionFlash™ In-Out > ActionFlash™ Left to Right > RandomFlash > ActionScan™ Alternating > ActionScan™ In-Out > ActionScan™ Left to Right.

Hi/Low Power / BROWN

This feature allows the user to step the unit down to low power operation for nighttime use. The type of switch used depends on how the operator wishes the Hi/Low feature to function:

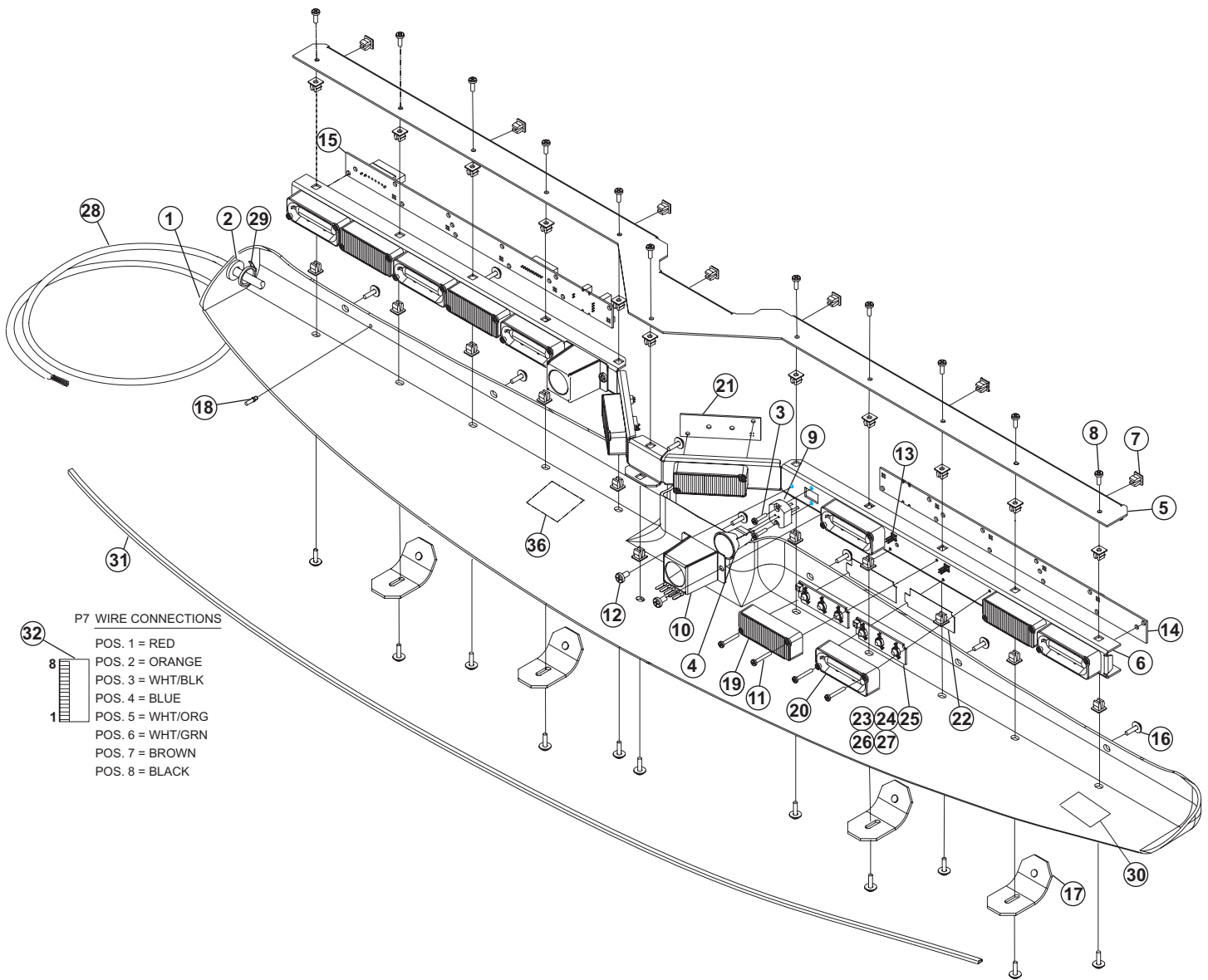
Latching Mode: By applying positive voltage to the BROWN wire for less than 1 second, the lightbar is "latched" into low power. The unit must be turned off and then back on to restore normal, high power operation (A momentary switch is preferred).

Level Mode: Applying positive voltage to the BROWN wire for more than 1 second holds the lightbar in low power mode until voltage is removed (A toggle switch is preferred).



| QTY | ITEM | PART NUMBER | DESCRIPTION |
|-----|------|----------------|--|
| * | | 01-0684343-() | INNER EDGE® INTERIOR SERIES LIGHTBAR |
| 1 | 1 | 46-0743243-01 | CABLE ASSY / 9-C 18GA. TPR 20" |
| 12 | 2 | 14-082215-050 | SCREW / #8-32 X .312 PPHMS SS BLK OX |
| 4 | 3 | 07-243216-023 | BRACKET / MOUNTING |
| 10 | 4 | 15-06521B-060 | SCREW / #6 X 3/8 PPH PLASTI-LOK SS BLK OX |
| 1 | 5 | 07-784340-023 | PLATE / MOUNTING |
| 25 | 6 | 13-062C40-16J | SCREW GROMMET #6 #8 FASTEX |
| 1 | 7 | 07-284337-023 | BRACKET / LIGHTHEAD |
| A/R | 8 | 01-0264260-52 | LTHEAD ASSY / LINEAR-LED® / RED-STDY |
| A/R | 9 | 01-0264260-42 | LTHEAD ASSY / LINEAR-LED® / GRN-STDY |
| A/R | 10 | 01-0264260-32 | LTHEAD ASSY / LINEAR-LED® / WHT-STDY |
| A/R | 11 | 01-0264260-22 | LTHEAD ASSY / LINEAR-LED® / BLU-STDY |
| A/R | 12 | 01-0264260-12 | LTHEAD ASSY / LINEAR-LED® / AMB-STDY |
| A/R | 13 | 01-0264260-J2 | LTHEAD ASSY / SPLIT / LINEAR / RED-BLUE |
| 7 | 14 | 68-3963604-30 | LENS / CLEAR / NON-OPTIC SNAP-ON |
| 1 | 15 | 02-0164204-00 | PCB ASSY / CONT. BD / SMT 500 LINEAR |
| 2 | 16 | 11-264117-006 | COVER / MR8 |
| 1 | 17 | 21-11121602-0 | GROMMET |
| A/R | 18 | 11-484270-000 | HOUSING / INT LIGHTBAR / '04-'05 CROWN VIC |
| A/R | 19 | 11-484335-000 | HOUSING / INT LIGHTBAR / '05-'06 CROWN VIC |
| A/R | 20 | 11-484304-000 | HOUSING / INT LIGHTBAR / SUBURBAN/TAHOE |
| A/R | 21 | 11-484320-000 | HOUSING / INT LIGHTBAR / '05 IMPALA |

| | | | |
|-----|----|----------------|---|
| A/R | 22 | 11-484345-000 | HOUSING / INT LIGHTBAR / '06 IMPALA |
| A/R | 23 | 11-484349-000 | HOUSING / INT LIGHTBAR / '05 EXPEDITION |
| 15 | 24 | 15-M23B1C-120 | SCREW, M4.2 X 12MM, BLACK OXIDE |
| 1 | 25 | 26-0215001-06 | TY WRAP 6" BLACK |
| 4 | 26 | 14-040216-060 | SCREW / #4-40 X 3/8 LG PPHMS |
| 2 | 27 | 34-21120D0-20 | LAMP / MR8 20 WATT |
| 2 | 28 | 46-0743274-01 | LAMP BASE ASSY / MR8 - 2 POS AMP |
| 2 | 29 | 38-0623178-00 | PAD / INSULATOR / MR8 LIGHT |
| 4 | 30 | 20-0017569-00 | SPACER / MTG - PCB |
| 1 | 31 | 68-1900250-30 | LIGHT PIPE |
| 1 | 32 | 10-0523205-__ | LABEL |
| 2 | 33 | 46-0764408-00 | HARNESS ASSY / INNER EDGE LINEAR |
| 1 | 34 | 39-0408323-04 | HOUSING / SOCKET - 8 POS AMP CMNL |
| A/R | 35 | 26-0215001-03 | TY WRAP 3" |
| A/R | 36 | 01-0484269-03 | MOUNTING KIT / '05-'06 CROWN VIC |
| A/R | 37 | 01-0484269-02 | MOUNTING KIT / SUBURBAN/TAHOE |
| A/R | 38 | 01-0484269-01 | MOUNTING KIT / IMPALA '05 |
| A/R | 39 | N/A | MOUNTING KIT / IMPALA '06 |
| A/R | 40 | 01-0484269-00 | MOUNTING KIT / '04/'05 CROWN VIC |
| A/R | 41 | 01-0484269-04 | MOUNTING KIT / '05 EXPEDITION |
| A/R | 42 | 66-0715289-00 | SUPER BONDER #495 LOCKTITE |
| 2 | 43 | 38-0543284-22 | SEAL / EXTRUDED / HOUSING / WINDSHIELD |
| 8 | 44 | 16-0821220-400 | #8 INTERNAL TOOTH LOCK WASHER SS |



| QTY | QTY | ITEM | PART NUMBER | DESCRIPTION |
|-----|-----|------|---------------|--|
| | * | | 01-0684643-00 | FULL LO-PRO™ INNER-EDGE® 12-LT 2 T-D |
| * | | | 01-0684643-01 | FULL LO-PRO™ INNER-EDGE® 10-LT 2 T-D |
| 1 | 1 | 1 | 11-484501-000 | HOUSING / FRONT FULL 2006 CROWN VICTORIA |
| 1 | 1 | 2 | 21-11091202-0 | 3/8 GROMMET |
| 4 | 4 | 3 | 14-040216-080 | SCREW / 4 -40 X 1/2 PPHMS SS BLACK |
| 2 | 2 | 4 | 34-21120D0-20 | LAMP / MR8 |
| 1 | 1 | 5 | 07-784507-023 | PLATE / MOUNTING |
| 1 | 1 | 6 | 07-284506-023 | BRACKET LIGHTHEAD MOUNT |
| 29 | 29 | 7 | 13-062C40-16J | SCREW GROMMET / #6/8 |
| 11 | 11 | 8 | 15-06521B-060 | SCREW / 6 X 3/8 PPH PLASTI-LOK |
| 2 | 2 | 9 | 46-0743274-01 | ASSY LAMP BASE MR8 2 POS AMP |
| 2 | 2 | 10 | 11-264117-006 | COVER / MR8 |
| 20 | 24 | 11 | 14-040216-120 | SCREW / 4 X 3/4 PPHMS SS |
| 4 | 4 | 12 | 14-082215-050 | SCREW / 8-32 X 5/16 PPHMS SS BLACK |
| 10 | 12 | 13 | 40-0620400-03 | HEADER / .1" X 2 POS DOUBLE |
| 1 | 1 | 14 | 02-0164765-00 | ASSY / PCB CONNECTOR |
| 1 | 1 | 15 | 02-0185989-00 | ASSY / PCB MOTHER/CONTROL BOARD |
| 18 | 18 | 16 | 15-M23B1C-120 | SCREW, M4.2 X 12MM, BLACK OXIDE |
| 4 | 4 | 17 | 07-243360-023 | BRACKET / MOUNTING |
| 1 | 1 | 18 | 68-1900375-30 | LIGHT PIPE |

| QTY | QTY | ITEM | PART NUMBER | DESCRIPTION |
|-----|-----|------|---------------|--|
| | * | | 01-0684643-00 | FULL LO-PRO™ INNER-EDGE® 12-LT 2 T-D |
| * | | | 01-0684643-01 | FULL LO-PRO™ INNER-EDGE® 10-LT 2 T-D |
| 6 | 6 | 19 | 68-5964727-00 | REFLECTOR / TIR |
| 4 | 6 | 20 | 02-0323306-00 | LINEAR ASSY |
| 2 | 2 | 21 | 02-0146537-00 | 1 LIGHT CONNECTOR BOARD / SMT |
| 10 | 12 | 22 | 56-023279-000 | CO-THERM INSULATOR |
| A/R | A/R | 23 | 02-0164748-10 | ASSY / PCB 3 LED ARRAY - AMBER |
| A/R | A/R | 24 | 02-0164748-20 | ASSY / PCB 3 LED ARRAY - BLUE |
| A/R | A/R | 25 | 02-0164748-30 | ASSY / PCB 3 LED ARRAY - WHITE |
| A/R | A/R | 26 | 02-0164748-40 | ASSY / PCB 3 LED ARRAY - GREEN |
| A/R | A/R | 27 | 02-0164748-50 | ASSY / PCB 3 LED ARRAY - RED |
| 1 | 1 | 28 | 46-0743403-00 | ASSY / CABLE INPUT 18 GA 20' |
| 1 | 1 | 29 | 26-0215001-06 | TY WRAP / 6" |
| 1 | 1 | 30 | 10-0523205-__ | LABEL |
| 1 | 1 | 31 | 38-0543284-45 | SEAL / EXTRUDED |
| 1 | 1 | 32 | 39-1M17672-08 | HOUSING / PLUG 8 POS |
| 1 | 1 | 33 | 46-0743401-01 | HARNESS / TAKE-DOWN |
| 1 | 1 | 34 | 46-0764933-00 | HARNESS / INTERCONNECT |
| 1 | 1 | 35 | 01-0484643-00 | KIT / MOUNTING 12 LT 2006 CROWN VICTORIA |
| 2 | 2 | 36 | 38-0623178-00 | PAD / INSULATOR-MR8 LIGHT |