

WHELEN[®]

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Installation Guide
MirrorBeam™
Model MBLD02 (L.E.D.)
Model MBMD02 (TIR)
Model MBDI02** (STROBE)
2002 - 2003 Dodge Intrepid

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 owners 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

NOTE: Although the procedures outlined within this manual are demonstrated using the Passenger-side mirror assembly, the same principals and guidelines are applicable to the Driver-side mirror assembly.

Remove the Side Mirror:

1. Remove the door panel from vehicle.
2. Remove the hex nuts that secure the mirror assembly to the vehicle. Disconnect the mirror's harness cable from the door's power harness.
3. Carefully remove the mirror assembly from the vehicle.

Prepare the Mirror Assembly:

1. Position the assembly as shown in Figure 1.
2. From the lower corner of the rear edge, measure a distance of 1.5 inches along this edge. Mark this distance, as it will be used as the starting point for the next measurement.
3. From the area marked in the previous step, carefully measure from the rear edge of the assembly, to a distance of 4.25 inches. THE ANGLE OF THIS MEASUREMENT MUST BE PERPENDICULAR TO THE REAR EDGE. Mark this area.
4. Double-check the measurements made in the previous steps. Using a 1" hole saw, drill a wire passage hole into the mirror assembly.
5. Reposition the mirror assembly so that its mounting surface is viewable.
6. Locate the area where surfaces "A" and "B" meet as shown in Figure 2.
7. Using a 3/8" bit, drill a wire passage hole into the assembly at the exact area shown. Use Torx™ head screw shown as a reference.

Note: It is critical that the angle of the drill bit is perpendicular to angle AB as shown.

Prepare the Wire Harness:

Because the wire harness must be routed through a specific, narrow and twisting path within the mirror assembly, it is necessary to temporarily extend the length of the harness with a make-shift "snake".

1. Locate the tie-wrap included with your Mirror Beam™ and cut the fastener-end off.
2. Locate the end of the wire harness that has SOCKET-type terminals installed on the free wires. Cut off the non-insulated wire (it is not used in this application).
3. Strongly secure the tie-wrap to the wire harness with electrical or similar tape as shown in the photo on the right. It is important to have a sufficient length of the tie-wrap secured to the harness (2" minimum).

Routing the Wire Harness:

1. Insert the end of the tie-wrap into the 3/8" hole drilled into the assembly.
2. Guide the tip of the tie-wrap towards the 1" opening made previously. It may be easier to get the tie-wrap to the 1" opening by bending the tie-wrap about an inch from the tip. If the tip can not be guided directly to the hole, it may be necessary to grasp the tie-wrap using a pair of needle-nose pliers.
3. Now feed the cable through the mirror assembly. There should not be more than 4 or 5 inches of harness sticking out of the 1" hole. If the length is different from this, adjust cable length accordingly.
4. The tie-wrap is now removed from the harness and the wire terminals inserted into their 3 position connector (supplied) as follows based on application:

For Strobe Applications

Position 1 = RED
Position 2 = BLACK
Position 3 = WHITE

For LED Applications

Position 1 = RED
Position 2 = None
Position 3 = BLACK

Fig. 1

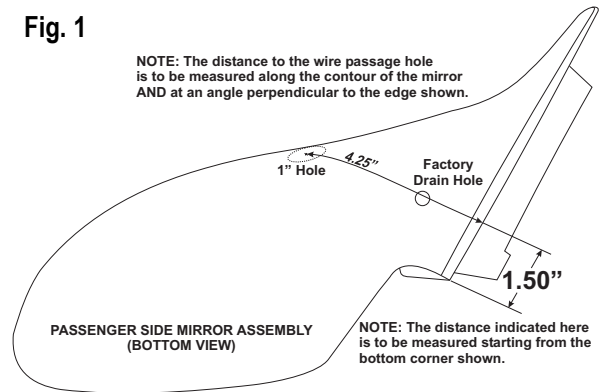
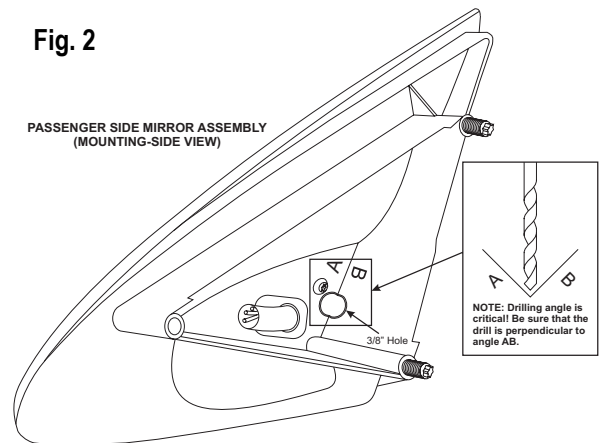


Fig. 2

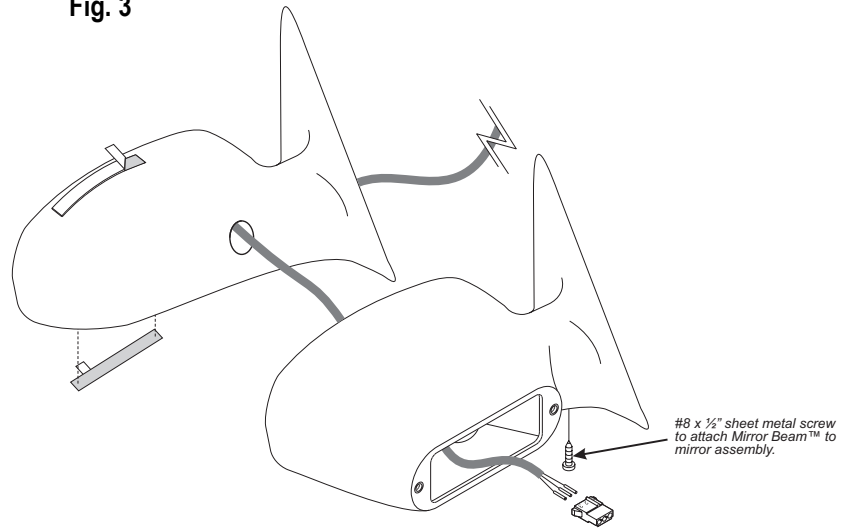


Affixing the Mirror Beam™ Housing to the Mirror Assembly:

The following procedure requires that the mirror assembly be no colder than 60°F (18°C).

1. Thoroughly clean the plastic mirror assembly and the inside surface of the Mirror Beam™ housing using a 50/50 mixture of isopropyl alcohol (do not use rubbing alcohol) and water. Dry completely.
2. Locate the two, 6" strips of double-sided adhesive tape included.
3. Position one 6" strip on the top of the mirror assembly. When properly positioned, the top piece will be centered between the inboard and outboard ends of the mirror assembly and the leading edge of the tape will be set back approximately 1/4" from the rear (mirror side) edge of the assembly. After the tape is positioned, it is important to apply pressure to the protective backing so that the tape adheres to the surface.
4. Position the remaining 6" strip below the assembly as shown. **IMPORTANT:** The angle of the Mirror Beam™ housing is such that attention is required to insure that the entire length of tape is in contact with the mounted Mirror Beam™ housing. Adjust the tape location until this is achieved.
5. Fold the protective backing strips on the top, bottom and outside tape strips so that 1/2" to 3/4" of backing is extended over the edge of the plastic mirror assembly as shown in Figure 3. Trim and remove the exposed tape.
6. Mount the Mirror Beam™ housing onto the mirror assembly as shown. **The housing must fully engage the mirror assembly.**
7. The protective backing strips must now be removed. To accomplish this, the housing must not be in contact with the backing strips. Starting with the top strip, and using a small, flat blade screwdriver (or similar tool) gently pry the housing about 1/4" away from the mirror assembly. Carefully pull the protective strip "tab" created in step 5, and gently remove it completely from the tape strip. Do not allow the strip to tear while being removed.
8. Repeat for the tape strip on the bottom of the assembly.
9. Apply pressure to the Mirror Beam™ assembly at the tape locations. Maintain pressure for a minimum of 20 minutes to allow the tape to properly setup. This can be accomplished by wrapping the Mirror Beam™/mirror assembly tightly with adhesive tape. See important adhesion information at the end of this manual.
10. Locate the factory-drilled hole in the Mirror Beam™ housing. Using a 1/8" drill bit and the Mirror Beam™ housing as a template, drill a hole into the mirror housing. Locate the #8 x 1/2" sheet metal screw (included) and secure the Mirror Beam™ housing to the mirror housing.

Fig. 3

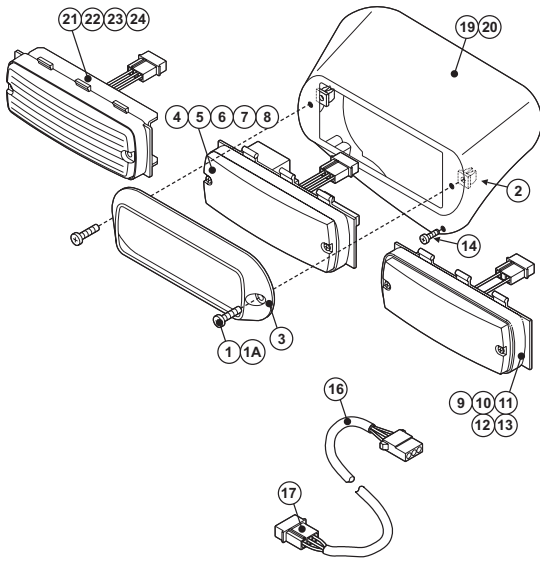


Re-assembling the Mirror Beam™:

1. Re-install the mirror assembly to the vehicle door using the factory hardware.
2. Re-connect the mirror assembly to its main power harness. Route the MirrorBeam harness through the door, along the same path as the vehicle's main power harness. Connect to a switched +12VDC power source. Install a 3 Amp fuse (customer supplied) within 2 wire feet of this source
3. Cut the non-insulated wire off the strobe harness. Insert the PIN terminals into the provided connector according to the tag included with the cable. Insert plug into power supply and confirm proper lighthouse operation.

WARNING! The tape adhesive used in this procedure is fully bonded after 72 hours @ 70°F (21°C). During this period, do not expose the Mirror Beam™ to any un-necessary force, such as the high-pressure water from a car wash.

Refer to page 4 for LED wiring information and part numbers.

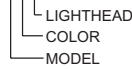


IMPORTANT NOTE: If your Mirror Beam housing has metal inserts where the lighthouse mounts, you will use ITEM 1 to mount the lighthouse. If it has no metal insert, you will use ITEMS 2 and 2A.

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!**

QTY	QTY	QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
					*		01-06836097()S	MIRROR BEAM PASS. SIDE STROBE - INTREPID
					*		01-06836097()L	MIRROR BEAM PASS. SIDE LED - INTREPID
					*		01-06836097()T	MIRROR BEAM PASS. SIDE TIR - INTREPID
		*					01-06836087()S	MIRROR BEAM DRIVER SIDE STROBE - INTREPID
	*						01-06836087()L	MIRROR BEAM DRIVER SIDE LED - INTREPID
*							01-06836087()T	MIRROR BEAM DRIVER SIDE TIR - INTREPID
2	2	2	2	2	2	1		SCREW / #10-24 X 3/4" PPHMS
2	2	2	2	2	2	1A		SCREW / #8 X 5/8" PPHMS SS
2	2	2	2	2	2	2		#8 FASTEX SCREW GROMMET
1	1	1	1	1	1	3	11-763226-000	BLACK FLANGE
-	-	A/R	-	-	A/R	4	01-0683565-A0	ASSY / LINEAR STROBE / AMBER-AMP
-	-	A/R	-	-	A/R	5	01-0683565-B0	ASSY / LINEAR STROBE / BLUE-AMP
-	-	A/R	-	-	A/R	6	01-0683565-C0	ASSY / LINEAR STROBE / CLEAR-AMP
-	-	A/R	-	-	A/R	7	01-0683565-G0	ASSY / LINEAR STROBE / GREEN-AMP
-	-	A/R	-	-	A/R	8	01-0683565-R0	ASSY / LINEAR STROBE / RED-AMP
-	A/R	-	-	A/R	-	9	02-0383558513	ASSY / LED FLASHER / AMBER-CLEAR 3 POS
-	A/R	-	-	A/R	-	10	02-0383558523	ASSY / LED FLASHER / BLUE-CLEAR 3 POS
-	A/R	-	-	A/R	-	11	02-03835585C3	ASSY / LED FLASHER / WHITE-CLEAR 3 POS
-	A/R	-	-	A/R	-	12	02-0383558543	ASSY / LED FLASHER / GREEN-CLEAR 3 POS
-	A/R	-	-	A/R	-	13	02-0383558553	ASSY / LED FLASHER / RED-CLEAR 3 POS
1	1	1	1	1	1	14	15-08141A-080	SCREW / #8 X 1/2" PPHMS BLACK PHOS
2	2	2	2	2	2	15	66-0416642-00	MOUNTING TAPE (Not Shown)
1	1	1	1	1	1	16	46-0742172-15	CABLE ASSEMBLY 3/C
1	1	1	1	1	1	17	01-0415532-00	KIT / CABLE INSTALLATION
1	1	1	1	1	1	18	26-0315001-14	TY-WRAP / 14 1/2" BLACK (Not Shown)
-	-	-	-	1	1	19	11-483737-R00	HOUSING / PASSENGER SIDE / INTREPID
1	1	1	-	-	-	20	11-483737-L00	HOUSING / DRIVER SIDE / INTREPID
A/R	-	-	A/R	-	-	21	01-0663507223	ASSY / TIR FLASHER / BLUE-CLEAR 3 POS
A/R	-	-	A/R	-	-	22	01-0663507C23	ASSY / TIR FLASHER / WHITE-CLEAR 3 POS
A/R	-	-	A/R	-	-	23	01-0663507523	ASSY / TIR FLASHER / RED-CLEAR 3 POS
A/R	-	-	A/R	-	-	24	01-0663507123	ASSY / TIR FLASHER / AMBER-CLEAR 3 POS

PART NUMBER KEY:
01-0683609



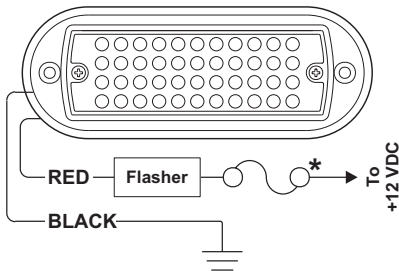
MODEL
0 = CROWN VICTORIA
1 = LUMINA
2 = TAHOE
3 = EXPEDITION
4 = EXPLORER
5 = IMPALA
6 = SUBURBAN
7 = INTREPID

COLOR
A = AMBER-AMBER
B = BLUE-BLUE
C = CLEAR-WHITE
G = GREEN-GREEN
R = RED-RED
1 = AMBER-CLEAR
2 = BLUE-CLEAR
4 = GREEN-CLEAR
5 = RED-CLEAR

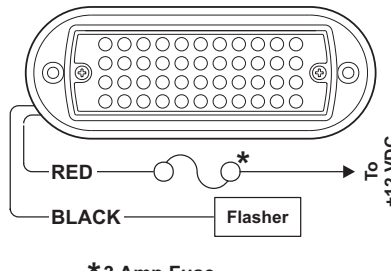
LIGHTHEAD
S = STROBE
L = L.E.D. (5mm)
T = TIR L.E.D.

Items 9, 10, 11, 12 & 13

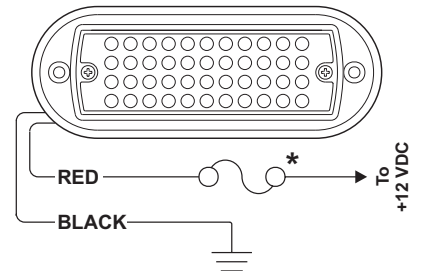
Hot Side (+12VDC) Switched



Ground Side Switched



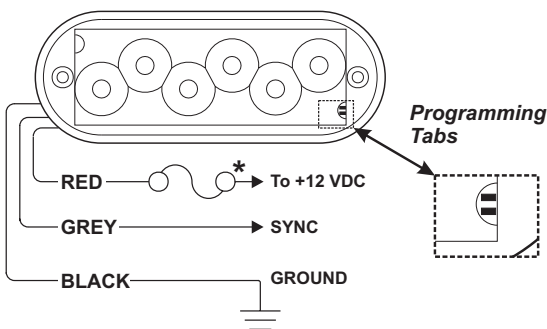
Basic Connection



* 3 Amp Fuse (Customer Supplied)

Items 21, 22, 23 & 24 (TIR)

Basic Connection / FLASHER



Synchronization:

The Model 500 TIR Flasher lighthouse uses 3 wires for control. The RED wire supplies battery voltage and the BLACK wire supplies the ground to the light head. The GREY is used to synchronize a maximum of 16 light heads by connecting all the grey wires together. Each light head comes from the factory, defaulting to a **Simultaneous** flash mode. To change one or more of the light heads to an **Alternating** flash mode, remove the front lens and find the "Phase Control" programming tabs in one of the corners of the TIR collimator lens.

Do not look directly into the beam of the LED's. Using a small screwdriver, short the 2 programming tabs, while the LED lighting system is operating, to achieve the proper alternating pattern.