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# **Beacon Light Installation**

All 1998 – Current Model GEM Vehicles

#### **WARNING!** TO PREVENT PERSONAL INJURY OR PROPERTY DAMAGE BE SURE TO TURN THE MASTER DISCONNECT SWITCH (MDS) TO THE 'OFF' POSITION BEFORE ATTEMPTING ANY SERVICE TO THE VEHICLE.

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#### **Procedure:**

Steps:	Key Points:
1. Determine Beacon Light mounting position and locate Beacon Light mounting area.	• 2 Pass placement: (e2, eS, eL, eLXD)

Steps:	Key Points:
2. Remove Roof trim.	<ul> <li>Remove the Driver's side black Roof trim molding.</li> <li>Dispose and clean the surface area of the roof panel with Rubbing Alcohol.</li> <li>See picture to left (6-pass shown).</li> </ul>
3. Mark Grommet hole location.	<ul> <li>Using the measurements from Step 1 mark the hole location along the roof rail. This will be the hole for the grommet for routing the wires.</li> <li>Measure out from the roof rail about 5/8" and mark an 'X' where the two measurements intersect.</li> </ul>
4. Drill a hole in the top of the rail.	<ul> <li>Drill a ½ inch hole on the 'X'.</li> <li>Drill through the roof panel and the roof rail.</li> <li><u>NOTE:</u> CAREFUL NOT TO DRILL ALL THE WAY THROUGH THE ROOF RAIL. ONLY DRILL THROUGH THE TOP OF THE RAIL AND IN TO THE CENTER, NOT ALL THE WAY THROUGH TO THE BOTTOM.</li> <li>See picture to left.</li> <li>Insert one Part # 0619-00359 grommet provided.</li> </ul>

Steps:	Key Points:
5. Drill a hole in the bottom of the rail.	<ul> <li>Remove the gray colored upper dash.</li> <li>Drill a <sup>1</sup>/<sub>2</sub> inch hole on the bottom of the Driver's side roof rail. Hole location here is not specific, try to center it across the rail about 3-4" from the foot of the rail.</li> <li>See picture to left.</li> <li>Insert one Part # 0619-00359 grommet provided.</li> </ul>
6. Route the wires through the roof.	<ul> <li>Set the Beacon on top of the roof.</li> <li>Twist the two wires together on the ends about 6" and wrap them with tape so they don't unravel.</li> <li>Insert the wires to the roof rail through the grommet on the roof.</li> <li>Feed the wires through the roof rail to the bottom.</li> <li><u>HINT:</u> USE A HEAVIER PIECE OF SOLID CORE WIRE TO PULL THE WIRES THROUGH. CUT IT TO ABOUT 72". FEED IT THROUGH FROM THE BOTTOM FIRST. TWIST IT AND TAPE IT WITH THE OTHER WIRES. THEN PULL THE WIRES THROUGH THE RAIL.</li> </ul>

Steps:	Key Points:
7. Determine Beacon light mount position.	<ul> <li>From the measurement in Step 1, measure out from the roof rail edge 1-1/2" and mark a hole. This is the first measurement for the Beacon light. It is placed such that it clears the thickness of the new roof trim to be added in a later step.</li> <li>Measure out from the roof rail edge 4-7/8" and mark a hole.</li> <li>These will be the Beacon light mount hole locations. You may use the Beacon as a template.</li> <li>Using a 13/64" drill bit drill out the two (2) holes.</li> <li>See picture to left for reference.</li> </ul>
8. Mount the Beacon Light.	<ul> <li>Set the Beacon Light on to the roof panel to its mounting location.</li> <li><u>NOTE:</u> PULL THE WIRES TAUT SO THERE IS NO EXCESS STICKING OUT ON THE ROOF.</li> <li>Place the provided Part # 0310-03141 Gasket between the Beacon and the roof panel.</li> <li>Using the hardware provided, from the top insert two (2) Part # 0523-00241 Black blind post screws.</li> <li><u>NOTE:</u> IT IS RECOMMENDED TO ADD THREAD SEALANT TO THE BLIND</li> </ul>
	<ul> <li>POST SCREWS.</li> <li>Using the hardware provided, from the bottom insert two (2) Part # 0510-00342 O-rings and Part # 0521-00240 White blind post nuts.</li> <li>Secure the hardware installed using a large Flat screwdriver. Do not over tighten.</li> <li>See picture to left.</li> </ul>

Using the new roof trim provided measure and cut it to length. <u>OTE:</u> IT IS RECOMMENDED TO PPLY A SMALL AMOUNT OF ILICONE TO THE GROMMET EFORE APPLYING THE TRIM TO EAL THE HOLE IN THE ROOF RAIL. Remove the red backing strips from the
adhesive strips on the backside of the trim. Apply the trim to the roof. Stretch it and press it in to place.
See picture to left. Mounting procedure completed. See picture to left. Continue below for wire termination and electrical connection instructions. <u>OTE:</u> ELECTRICAL CONNECTIONS VILL VARY BY MODEL YEAR EHICLE. SEE SPECIFIC NSTRUCTIONS NOTED BELOW. GO O THE SPECIFIC STEPS AND OLLOW THE APPROPRIATE ROCEDURE(S).
Crimp the spade terminal part # 0606- 00904 provided to the Red wire. Crimp the ring terminal part # 0606-00406 provided to the Black wire See picture to left. <b>For 2005-newer Models skip to Step 13.</b>

Steps:	Key Points:
12. Wire the Beacon light to the vehicle. (2004-PREVIOUS MODEL YEARS)	<ul> <li>Open the Hood.</li> <li>Locate the 4-wire Front/Headlight harness.</li> <li>Locate the Purple/Blue wire.</li> <li>Using a pliers, attach the provided Maroon colored T-wire connector to this wire.</li> <li>Connect the Red wire lead with Male spade terminal from the Beacon to this point.</li> <li>Connect the Black wire lead with ring terminal from the Beacon to the frame of the vehicle for 12-volt Chassis Ground using the provided self-drilling screw Part # 0523-00032.</li> <li>See pictures to left.</li> </ul>

Steps:	Key Points:			
13. Wiring the Beacon Light to the vehicle.	· ·			
(2005-CURRENT MODEL YEARS)	<ul> <li>Locate the Front/Headlight Harne labeled J1 of the PSDM board, (lower 1</li> </ul>			
J2 J3 J4 J4 J5 J6 J6 J1 J2 J3 J4 J6 J6 J6 J6 J	<ul> <li>corner).</li> <li>Locate the Purple/Blue wire of the J1 connector.</li> <li>Using a pliers, attach the provided Maroon colored T-wire connector to this wire.</li> <li><u>OR</u>, locate the small 2-wire yellow harness (2007-newer) in front of the PSDM and connect the provided T-wire connector on the yellow/red wire in the two position white Molex connector, (shown to left).</li> <li>Connect the red wire lead with Male spade terminal from the Beacon to this point.</li> <li>See pictures to left.</li> </ul>			
14. Connect the black wire to the frame.	<ul> <li>Connect the Black wire lead from the Beacon to the frame of the vehicle for 12-volt Chassis Ground. Three (3) wires is the maximum on any one-ground point.</li> <li>See picture to left (shown behind PSDM, along firewall).</li> </ul>			

Steps:	Key Points:	
15. Wire termination and connection	<ul> <li>Beacon Light wiring completed.</li> </ul>	
complete.	<ul> <li>Proceed to next step.</li> </ul>	
16. Install Dashes.	• Gray Upper & White Lower.	
	<ul> <li>Use hardware previously removed.</li> </ul>	
17. Verify Beacon Light operation.	<ul> <li>Turn the MDS On.</li> </ul>	
	<ul> <li>Turn the Key On.</li> </ul>	
	• The Beacon Light has been wired to the Headlight circuit.	
	<ul><li>Turn the Headlight switch On.</li></ul>	
	<ul><li>Does the Beacon light flash?</li></ul>	
	<ul> <li>For further information or Technical</li> </ul>	
	Support call 866.764.0616	
18. Installation complete.	• Done.	

## Parts List:

## 0106-00714 ASSY, KIT - BEACON LIGHT, SVC



ITEM	<u>PART NO.</u>	DESCRIPTION	<u>QTY.</u>
1	0310-03141	GASKET, BEACON LAMP	1
2	0510-00342	0-RING, 3/32X7/32X13/32	2
3	0521-00240	NUT, BINDING POST #8-32 WHITE	2
4	0523-00032	SCREW, HEX - 1/4X.75 ZN WSH HD SD	1
5	0523-00241	SCREW, BINDING POST #8-32X.375 BLK	2
6	0606-00176	CONNECTOR, T - WIRE	1
7	0606-00406	TERMINAL, RING 14-16 GA - 1/4"	1
8	0606-00904	TERMINAL, SPADE - MALE INSULATED 14-16 GA 1/4"	1
9	0607-00902	LAMP, WARNING BEACON	1
10	0619-00359	BUSHING, OPEN/CLOSE50"	2
11	0417-00067	TRIM, ROOF MOLDING - BLK	6FT

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