



2012+ FORD PI-UTILITY M180
UNDER MIRROR SIDE LITE BRACKETS

Introduction:

The M180 Under Mirror Side Brackets for the 2012+ Ford PI Utility fit under the vehicle's side mirrors and provided a side warning signal at street intersections.



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IMPORTANT! Read all instructions before installing and using. Installer: This manual must be delivered to the end user.

 **WARNING!** Failure to install or use this product according to manufacturers recommendations may result in property damage, serious injury, and/or death to those you are seeking to protect!

 **Do not install and/or operate this safety product unless you have read and understand the safety information contained in this manual.**

1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency warning devices often require high electrical voltages and/or currents. Exercise caution when working with live electrical connections.
3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
4. Proper placement and installation is vital to the performance of this warning device. Install this product so that output performance of the system is maximized and the controls are placed within convenient reach of the operator so that s/he can operate the system without losing eye contact with the roadway.
5. It is the responsibility of the vehicle operator to ensure daily that all features of this product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles or other obstructions.
6. The use of this or any other warning device does not ensure all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is your responsibility to be sure you can proceed safely before entering an intersection, drive against traffic, respond at a high rate of speed, or walk on or around traffic lanes.
7. This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding emergency warning devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this warning device.

Specifications:

The M180 Under Mirror Side Brackets for the 2012+ Ford PI Utility fit under the vehicle's side mirrors and provide a side warning signal at street intersections. The brackets are each 1.36" Deep X 1.58" High X 4.34" Wide. For M180 light head specifications and operation see the M180 installation manual.

Installation and Mounting:

Step-1. Refer to the Ford Service Manual to remove the side mirrors from the vehicle. Remove the under side mirror covers. See Figure 1.

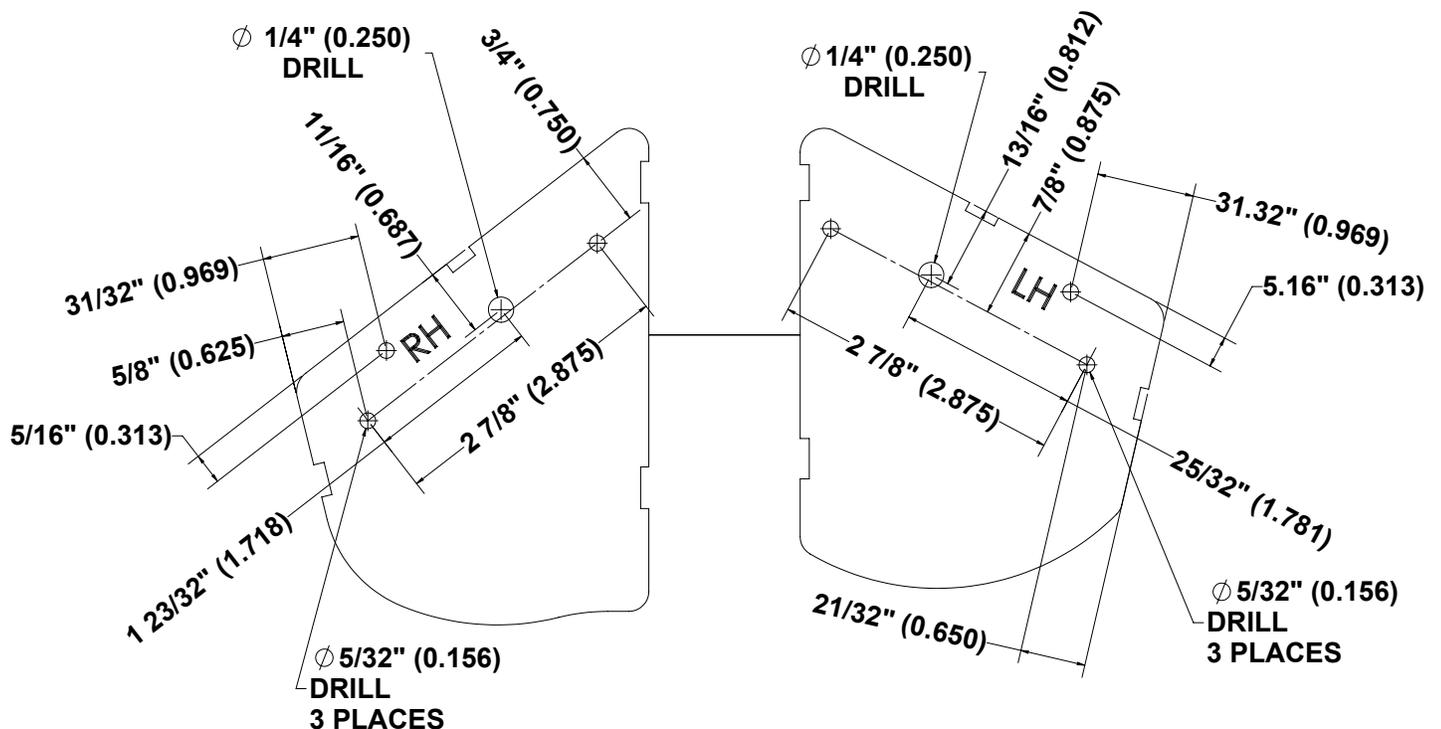
Step-2. Mark and drill the mounting & cable holes using the dimensions shown in Figure 2 below. **Note: Paper templates are provided on page (3).** If desired, cut out the paper templates & position them over the covers to locate the holes. Use a sharp scratch awl or an ice pick to stick through the paper templates at each of the hole center marks and mark the hole center points.

CAUTION: When using the paper templates it is highly recommended that you pull the paper templates tight to the edges & tape the template to the three straight edges of the covers with masking tape. Be very careful not to allow the templates to move when moving from one hole to the next as you mark the holes.

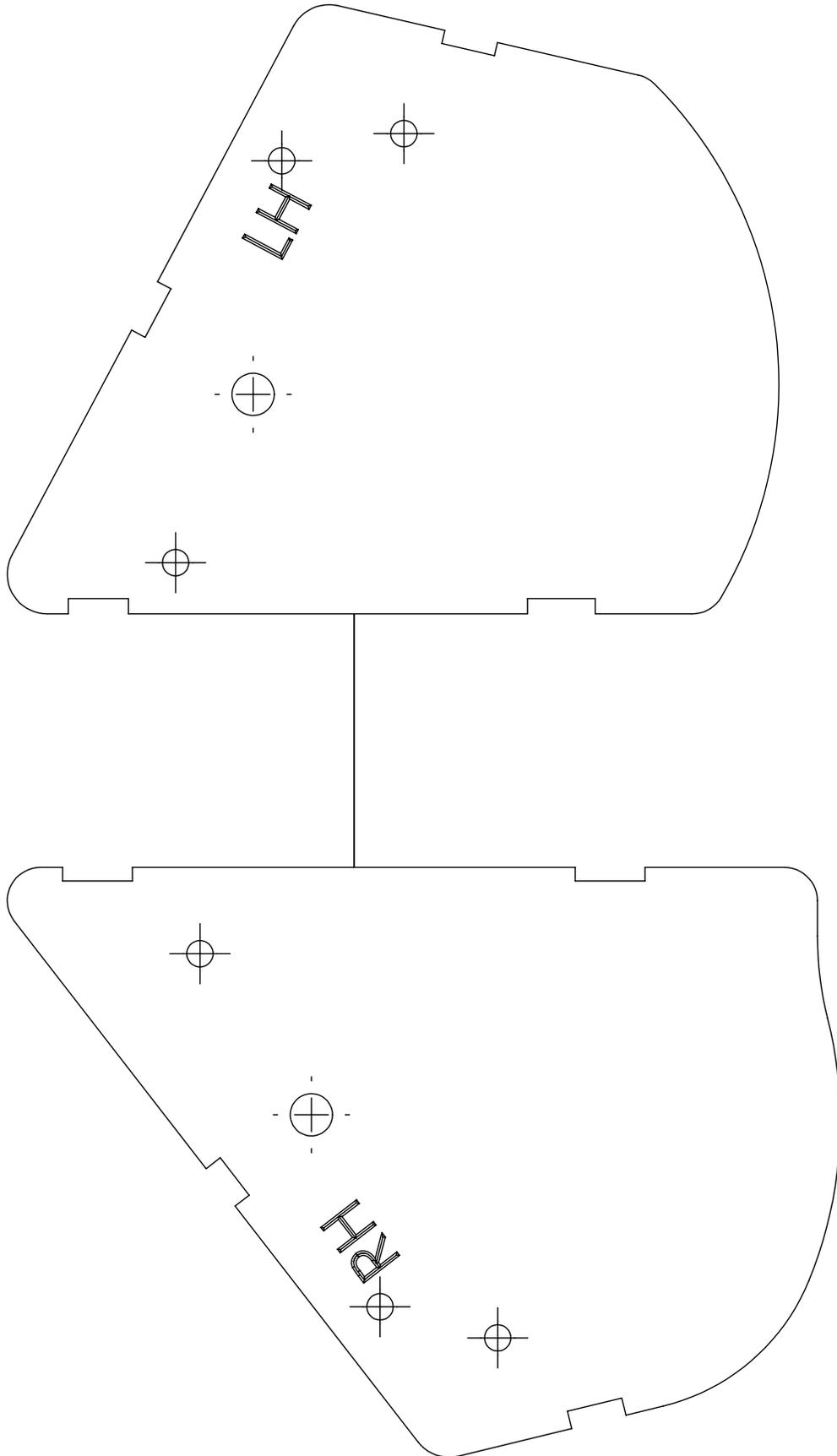
Step-3. Drill the mounting holes with a 5/32" (.156") diameter drill and the cable holes with a 1/4" (.250") diameter drill.



Figure-1



DRILL TEMPLATE



Installation and Mounting: Cont:

Step-4. With the bottom mirror covers removed, drill a 7/64" (.109") diameter X 1/2" deep hole in the center of the ribs and 5/16 (.312") from the textured edge of the mirror cover pockets (**THE TEXTURED EDGE NOT THE SHELF EDGE**) in each of the mirrors as shown in Figure 3 (Driver Side Mirror) and Figure 4 (Passenger Side Mirror). Make sure you drill the hole as straight as possible to ensure the drill doesn't break out of the side of the rib. Also ensure the drill is as perpendicular to the textured underside mirror surface as possible.

Step-5. Twist the wires from the light heads as shown in Figure 5. Feed the light head wires through the wire hole in the Side Lite Brackets. Making sure the three Puddle Light LEDs (3 White Squares with Yellow Dots) on the M180 Light Head are aiming up as oriented in Figure 6. Locate & fasten the the M180 Light Heads onto the Side Lite Mounting Brackets using (2) of the provided 3.50mm X 0.6 X 6mm long Phillips pan head stainless steel machine screws and (2) of the #6 split stainless steel lockwashers, included with the bracket kit for each light head. Tighten the Screws (See Figure 6).

Step-6. Route the light head wires through the 1/4" holes from the textured side of the vehicles plastic covers (See Figure 7). With the light head facing toward the rounded edge of the plastic mirror covers, secure the Side Lite Brackets to the covers with (2) provided #6-32 X 1/4" Phillips pan head machine screws (See Figure 8). The Passenger Side or Right Hand RH assembly is Shown in Figure 8. When completed the assemblies will look as shown in Figure 9 on Page 5.



Figure-3---Driver Side



Figure-4---Passenger Side

Drill 7/64" Hole Here



Figure-5

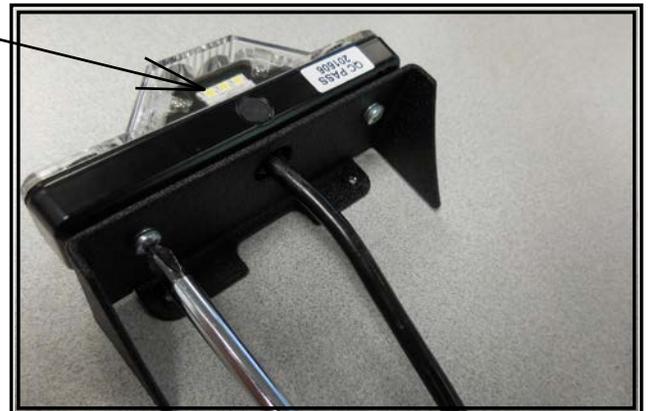


Figure-6

Puddle Light LEDs

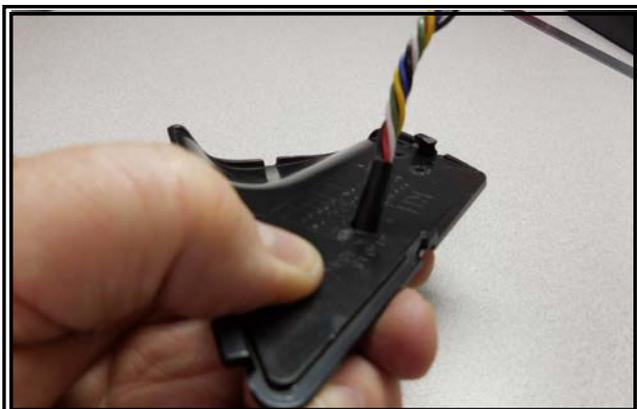


Figure-7



Figure-8

Installation and Mounting: Cont:

Step-7. Carefully remove the triangular foam seal from the interior side of the mirror assemblies. From the vehicles interior side of the vehicle's mirror housings around the mirror control wires there is a rectangular piece of foam (See Figure 10). With one of your fingers, push the foam and the mirror control wires out of the way to clear an opening and route the light head wires through to the interior side of vehicle's mirror assemblies (See Figure 11).

Step-8. Once the light head wires are all started through the hole pull the cable jacket through & pull all of the slack out of the wire. Replace the rectangular foam and snap the plastic covers with the attached light heads back into their original position in the mirror assemblies (See Figure 12). **Note: It is very important that all of the slack be pulled out of the wires and the covers are securely snapped back in place on the mirror assemblies in the final assembly.** To assure the covers stay in place, fasten them with a provided black #6 X 1/2" pointed Phillips pan head sheet metal screw by threading the screw through the cover and into the holes you drilled in step 4 (See Figure 13).



Figure-9



Figure-10



Figure-11



Figure-12



Figure-13

Installation and Mounting: Cont:

Step-9. The Light Head wires may be routed by making a small hole through the vehicles triangular foam seal and routing the wires directly down into the vehicle's door (See Figure 14) or they may be routed under the foam seal and through the existing hole in the seal adjacent to the mirror wiring connector as shown in Figure 15. If you decide to route the wires adjacent to the vehicle mirror control wiring connector, make sure you cut a clearance notch out of the opening in the vehicle's sheet metal to prevent the light head wires from getting pinched or cut due to vibration and chaffing over time. Failure to do this could cause a short circuit of the light head wires.

Step-10. Replace the triangular mirror seal, route customer supplied wires and connect the light head wires as desired to complete the connection to the vehicle's electrical system.

Step-11. Reattach the side mirrors on the vehicle per the Ford Service Manual.



Figure-14



Figure-15

Notes:

Notes:

Manufacturer Limited Warranty Policy:

Manufacturer warrants that on the date of purchase this product will conform to Manufacturer's specifications for this product (which are available from the Manufacturer upon request). This Limited Warranty extends for Sixty (60) months from the date of purchase.

DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS VOIDS THIS LIMITED WARRANTY.

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This Limited Warranty defines specific legal rights. You may have other legal rights which vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages.

Product Returns:

If a product must be returned for repair or replacement*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you ship the product to Code 3®, Inc. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

*Code 3®, Inc. reserves the right to repair or replace at its discretion. Code 3®, Inc. assumes no responsibility or liability for expenses incurred for the removal and/or reinstallation of products requiring service and/or repair.; nor for the packaging, handling, and shipping; nor for the handling of products returned to sender after the service has been rendered.



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