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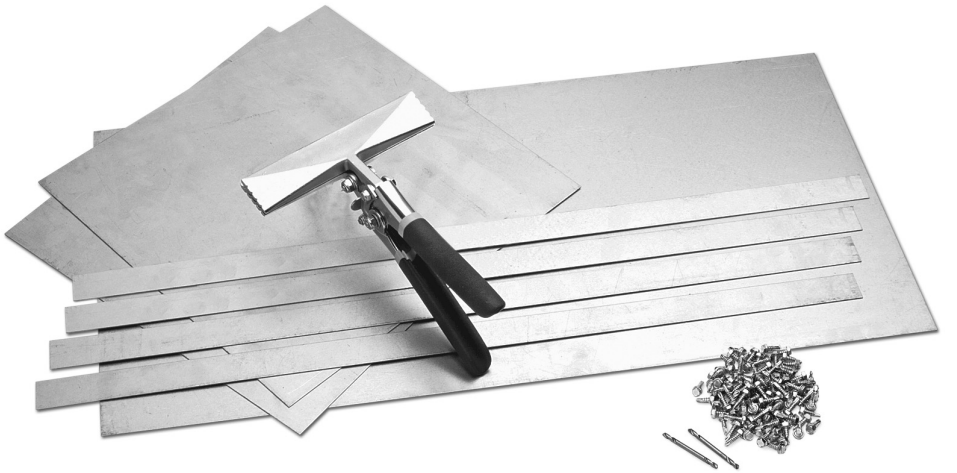
Part #13376

PATCH PANEL INSTALL KIT

INSTRUCTIONS



The **Eastwood Patch Panel Install Kit** comes complete with necessary items to repair a common rust hole or damaged sheet metal and/or install a replacement body panel. Using your MIG welder you will be able to complete various sheet metal repair issues along with this kit.
NOTE: Log onto **www.Eastwood.com** – Keyword 'PATCH PANEL' for a detailed how to video.

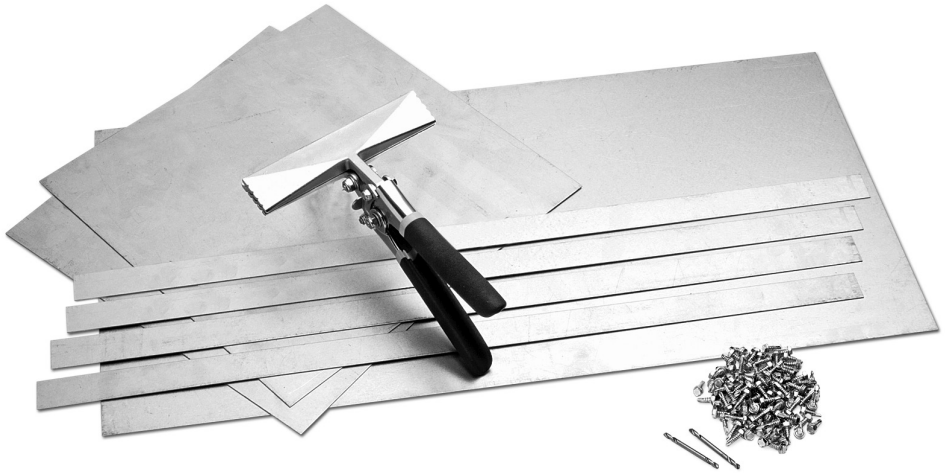
WARNINGS

- Sheet metal edges may be sharp, always handle with gloves.
- Always wear a minimum Shade 10 welding helmet when welding.
- Always wear safety glasses while using this kit.

SPECIFICATIONS

Your Eastwood Patch Panel install kit includes the following items:

- Patch Panel Kit, Aluminized Steel, 20ga
  (1 piece – 12" x 24"; 2 pieces – 12" x 12"; 4 pieces– 1" x 24")
- 6" Straight Seaming Pliers
- 2 PC 3/16" Double Ended Drill Bits
- 100 PC Self Drilling Screws



INSTRUCTIONS

1. Start off by assessing the situation of the area that needs to be repaired. Determine if there are curves, bends, or any other features that will need to be replicated on the replacement panel.

2. Using an Angle Grinder (12807) with a Flap Disc (11947), remove any paint, coatings, or corrosion in the repair area. Be sure to clean outside the repair area also to allow for easier blending when the repair is complete.


Fig. 1 – Assessing the repair

3. Mark out the damaged area to be cut out, it is recommended to cut past the actual damage to access structurally sound material. To mark your lines use either a scribe or a pencil on the sheet metal.

4. Using a Shear or other cutting tool, cut out the damaged area on the lines made in Step 3.


Fig. 2 – Removing the damaged area

5. Make a template of the cut out area using a manila folder or any type of heavy paper. When making the template make sure to include any bends, curves or other features.

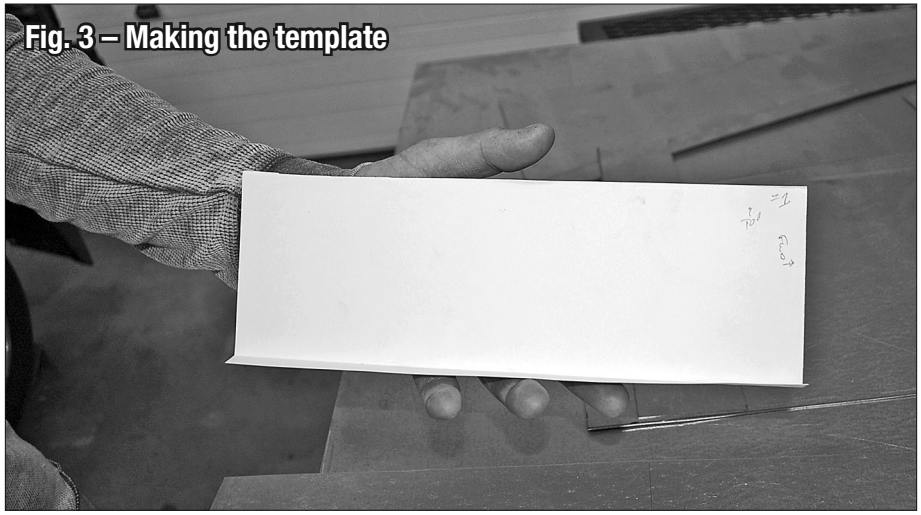


Fig. 3 – Making the template

6. Flatten the template on one of the pieces of sheet metal included in the kit. Trace around the template with a scribe or pencil and follow up by cutting the template out of the new piece of sheet metal.


Fig. 4 – Tracing the template to the work piece

7. Once the template has been cut out it is time to replicate the replacement patch panel, using the seaming pliers to make any bends or seams. These pliers work like a mini brake and are used by clamping the metal and bending it against a hard surface to the desired angle.

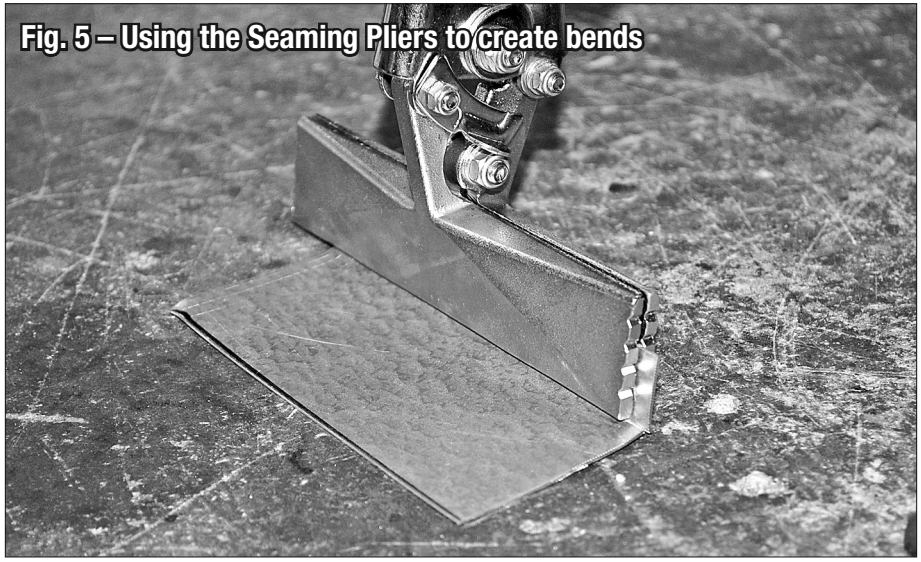


Fig. 5 – Using the Seaming Pliers to create bends

8. Since it is very difficult to get the template exact for butt welding the new piece into place, 'backers' or 'doublers' are included in the kit to be installed to aid in the repair. The backers are the 1" x 24" strips of sheet metal. These are cut to length and installed on the backside of the repair. Start by cutting the backer to length and testing its fit, half of the back should be against the original metal and half should be visible in the repair area.


Fig. 6 – Spot welding backer in place

9. Along the outer edges of the repair area drill 3/16" holes with the supplied drill bit to allow for plug welding the backer to the original sheet metal. Once all of the holes have been drilled, the backer can be clamped in place and each of the drilled holes can be utilized to plug weld the backer to the original metal (Figure 6). It is often an issue especially with floor boards that when the old metal is cut out the surrounding area sags and it is difficult to attach the patch panel to the original metal. If this is the case, the included self drilling sheet metal screws can be used. These will drill through both sheets of metal with no pilot hole necessary and then pull the 2 sheets tight together to eliminate any gap. Once welded in place remove screws and weld holes closed.


Fig. 7 – Stitch welding in replacement metal

10. With the backer welded in, the patch panel built in Step 7 can be installed. The panel will sit on top of the backing strips allowing for much easier welding then a butt weld (See Figure 7). Using a stitch welding technique (short bursts of the trigger), the panel can be welded in. When welding the panel only do small sections of weld at a time and move around to different sections of the panel. If you weld too much in one area you risk building up too much heat and warping the panel.

11. Once the panel has been welded in place the final clean up of the welds can be done using a flap disc (11947). The disc can be used to grind the weld flat so that minimal filler will be needed on the repair.


Fig. 8 – Complete repair

OPTIONAL ACCESSORIES

12011	Eastwood MIG135 Welder
12012	Eastwood MIG175 Welder
13485	2Pc 3/16" Double Ended Drill Bits
13602	100Pc Self Drilling Screws
13603	Patch Panel Kit, Aluminized Steel, 20ga
12567	6" Straight Seaming Pliers

Log onto **www.Eastwood.com** – Keyword 'PATCH PANEL' for a detailed how to video.

If you have any questions about the use of this product, please contact
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