

**Baier Marine Company, Inc.**  
**WELDING INSTALLATION TIPS**  
**FOR FLUSH-HATCH DECK RINGS**

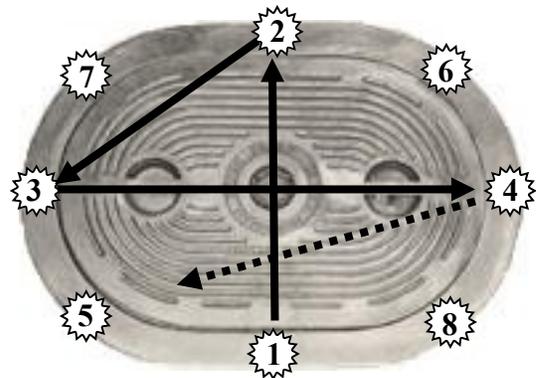
---

Your **Baier Hatch**, with its unique design, is simple and easily-serviceable. Proper installation will ensure the integrity of the hatch and provide you with long lasting and reliable operation. *Two things we want to prevent are deck-ring cracking and also deck ring distortion*, since these will not allow a positive weather-tight seal.

**1. POSITION the HATCH.** It is important to install the hatch ring in proper alignment into its location. The ring must remain flat in all applications for the gasket to form a good seal. To find the cut out dimension for your specific hatch, please refer to our catalog and/or scribe your cutout from the actual piece.

**2. TACK-WELD the DECK RING in a “STAR” SEQUENCE.** From below deck, after positioning the ring, uniformly tack-weld the ring to the deck with 1” or shorter welds. These welds *must* be made in the sequence shown here to avoid heat-distortion.

Start your short tack-welds at position #1 (see right). Then tack-weld at position #2 across from #1 . Tack at position #3 and so on. Continue tack welding, as far as possible from the last tack and in the order shown at right. Also see note at bottom: BLANK COVER



Tack-weld in a “Star” sequence.  
This diagram is an example only — to demonstrate the principle.  
Each size hatch will vary.

Heat build-up caused by weld-filling a gap can cause the ring to distort. Tack-welding, a necessary preliminary step in installation of your hatch, performed correctly, can help achieve optimal results from the final weld and can prevent distortion. Each tack should be 1” or less. Tack-welding is complete when the welds are 6” apart along the entire perimeter of the ring. This alternating spacing is critical to prevent distortion of the ring.

**3. SKIP-WELD OUTER EDGE of DECK RING to DECK from topside — also using a “star” pattern with your skip-welds** to minimize heat-generated distortion. Fully weld the perimeter of the ring on top using skip welds. Many shops will also completely weld the underside of the deck ring as well to ensure deck integrity.

**Further NOTES and TIPS:**

- Let ring and deck cool naturally. Do not quench with cool water.
- ALUMINUM RING REPAIR: If aluminum deck ring should crack for any reason, notch out the crack and use ER 4043 MIG welding wire to effect a repair. The ring is cast from ASTM-B26 Alloy 356 aluminum and will not respond well to a harder (e.g. ER 5356) welding wire which you might be using on deck plate.
- BLANK COVER: Some builders will use a “blank” hatch cover with the neoprene outer gasket removed to clamp into the deck ring and keep the ring flatter while it is being tacked into the deck cutout.

*If you have further Questions, give Baier a call at 1-800-455-3917*

*www.baiermarine.com*