INSTALLATION INSTRUCTIONS

1. Align template on center line of pipe and scribe a line onto the pipe following the template.

2. Cut out the marked section of pipe. Remove all burrs, slag, or rough edges from inside and outside of cutout before welding saddle to pipe.

3. Position saddle on pipe, making sure that it is centered over the cutout section. Make sure that no part of the pipe protrudes past the inside edge of the saddle. Tack weld the saddle prior to welding a continuous bead around the saddle.

4. Straightening vanes should be installed inside the pipe using the following instructions:
   a. Hold the vanes on the outside of the pipe 6" upstream from the edge of the saddle opening. The vanes must be parallel to the center line of the pipe and should be equally spaced radially 120 apart.
   b. Mark the stud locations on the pipe and drill 9/16" diameter holes through the pipe wall. Remove any burrs.
   c. Insert the vanes through the saddle cutout. Hold the vanes with the studs protruding through the drilled holes.
   d. Weld-in Vanes: Weld the base of each stud. Bolt-in Vanes: Secure the studs with the supplied hardware. Set the rubber face of the stainless/rubber washer against the pipe. Add a brass washer and secure with a nut (or bolt). NOTE: Threaded studs can also be welded (but the washers should be omitted).