

SANITARY TANK SPUD WELDING GUIDELINES

00809-0100-4016
English
Rev. BA

This welding guideline is given for general guidance only, to aid in installation of the standard sanitary tank spud. Employ a skilled and experienced welder in order to reduce the potential need for costly rework. Actual specifications may vary depending on the equipment and application.

Because the clearance between the inside diameter of the tank spud and the transmitter diaphragm extension is small, the tank spud must be welded to the tank with a minimum of distortion. A **recommended welding guideline** is included below. An area with a minimum diameter of 9¼ in. (235 mm) on the tank is needed to weld the tank spud as shown in Figure 1. ❶

NOTE

If the tank spud is shipped attached to the transmitter/seal assembly, remove the spud before welding it to the tank.

NOTE

Vertical locations of the tank spud center line should be at least 1½ in. (38 mm) below minimum measurement level as shown in Figure 1. ❷ At least half of the diaphragm surface must be covered to obtain proper level measurement.

1. Cut a 6 in. + 1/16-0 (153 mm + 2-0) dia. hole in the tank as shown in Figure 1. ❸
2. Position the tank spud as shown in Figure 2, such that:
 - The inner surface of the spud (at horizontal center line) is flush with the inner surface of the tank. ❹
 - The outer vertical surface of the spud is as near vertical as possible.
 - The leak detection hole is at the bottom of the spud. ❺
3. Tack weld the outer surfaces in four places. ❻
4. Weld the inner surface of the tank spud to the tank. Use the **recommended welding guideline**. Grind weld smooth so that the surface is free of irregularities in which dirt can lodge. ❼

Recommended Welding Guideline

⚠ CAUTION

Excessive heat **will** distort the tank spud. Allow adequate cooling time between passes.

Tank spud is 316L SST; use a compatible low carbon welding rod.

1. Weld the indicated portions of the tank spud in the sequence indicated in Figure 3.
2. After each section is welded, cool the tank spud with water until the temperature is below 700 °F (370 °C) before welding the next section.

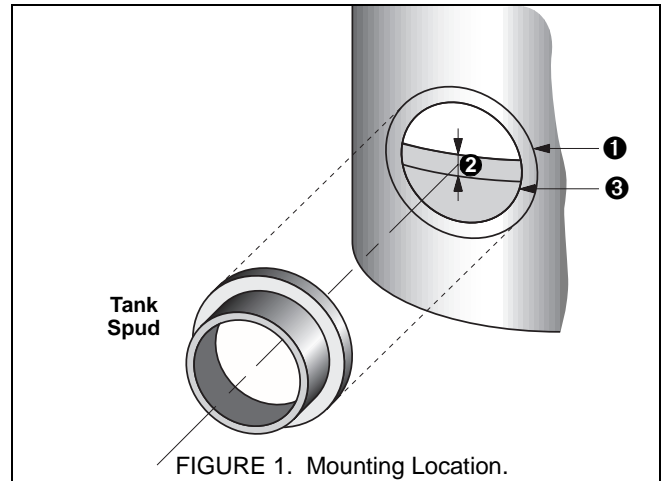


FIGURE 1. Mounting Location.

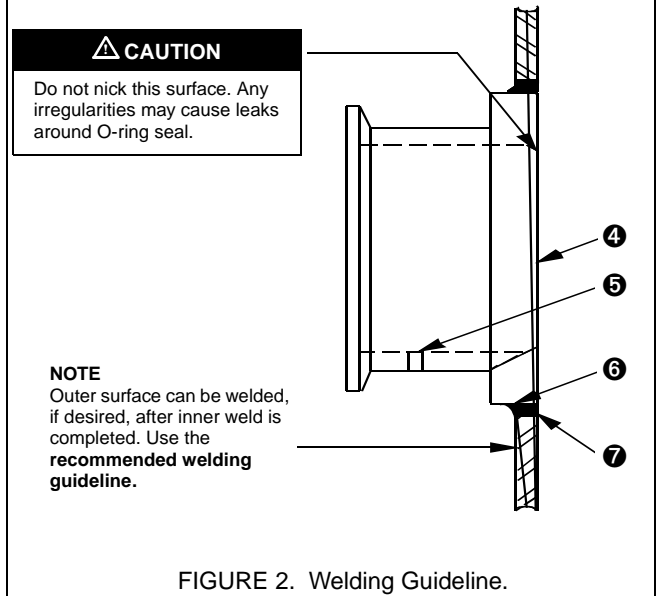
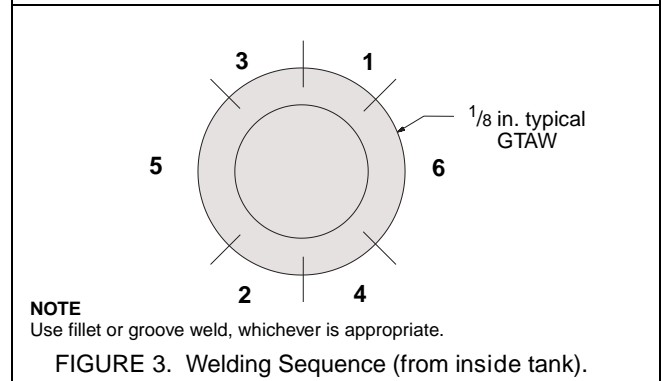


FIGURE 2. Welding Guideline.



NOTE
Use fillet or groove weld, whichever is appropriate.

FIGURE 3. Welding Sequence (from inside tank).

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1199-0173A

1199-0174A

1199-0175A

Sanitary Tank Spud Ordering Information

Model	Transmitter Type
01199-0061-	Sanitary Tank Spud ⁽¹⁾
Code	Size
0001	2 in. Extension
0002	6 in. Extension
Typical Model Number: 01199-0061-0001	

(1) For use with Model 1199 Sanitary Tank Spud Seal.

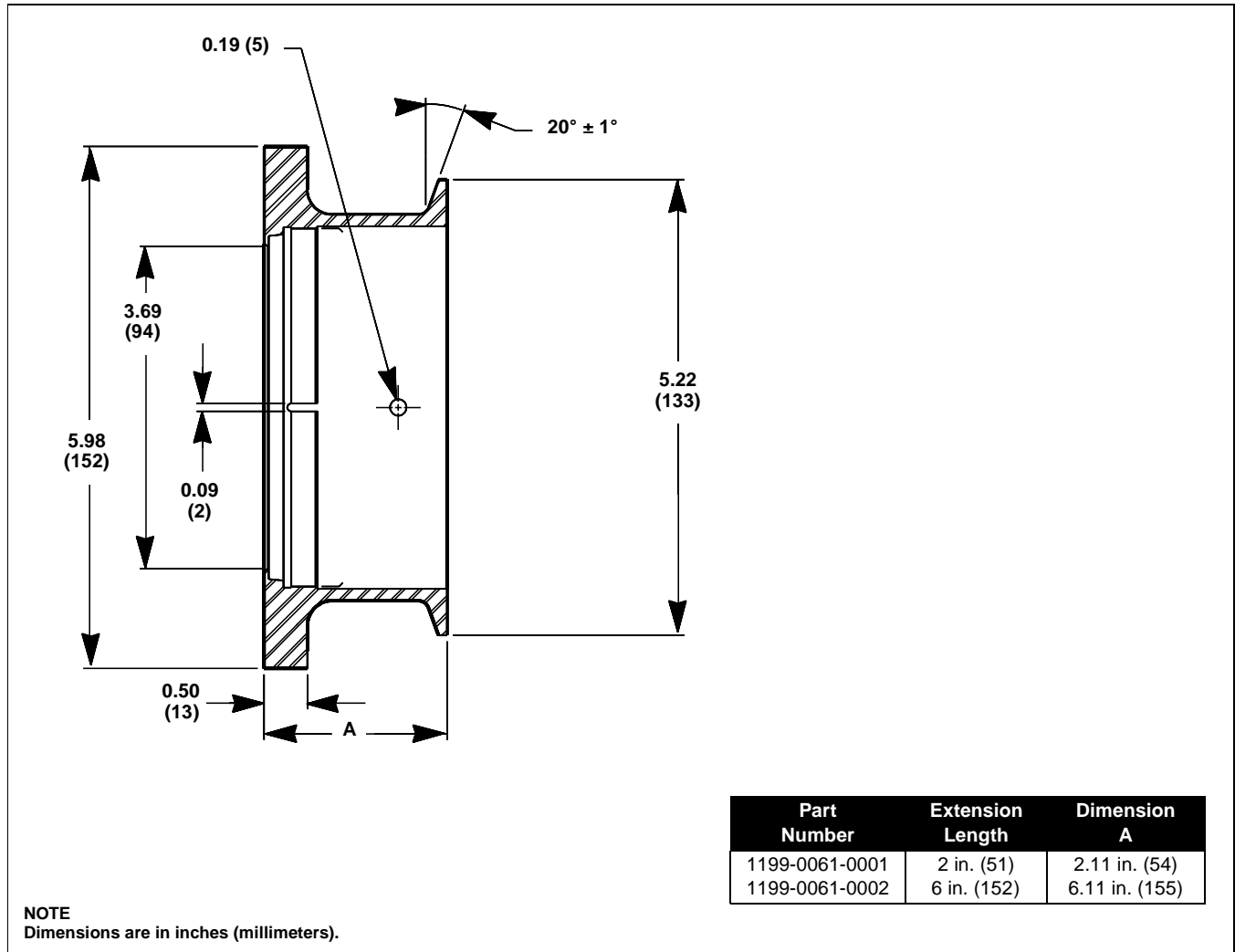


FIGURE 4. Dimensional Drawing of Sanitary Tank Spud.

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