Swage Bus Installation Instructions

NOTE: VISUALLY INSPECT ALL TOOLS, ACCESSORIES AND FITTINGS PRIOR TO BEGINNING THE INSTALLATION PROCEDURE. INSPECT CONDUCTOR ACCESSORIES AND ENSURE THE BORE OF EACH FITTING IS LINED WITH AFL FILLER COMPOUND (AFC).

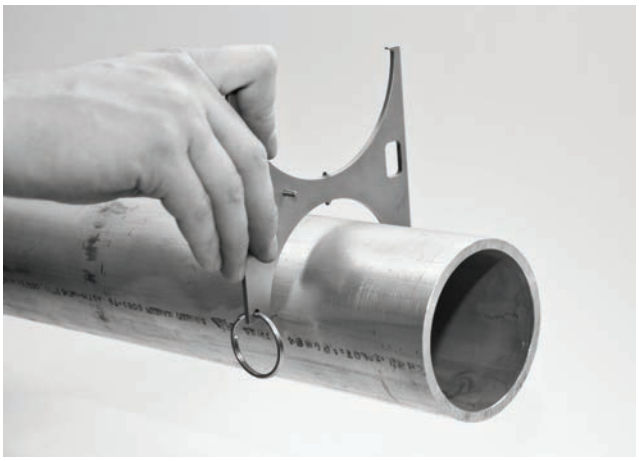
1. Verifying the Outer Diameter of the Pipe

Use the "Swage Gauge," SWGGB Series, as shown in Fig. 1 to ensure the pipe's outer diameter is larger than the –NO GO– diameter. Refer to Table 1 below for gauge sizes, die sizes and pipe insertion lengths.

Table 1

AFL NO.	S.P.S.	DEPTH OF INSERTION		DIE SIZE
		MIN.	MAX.	
SWGGB100	1	1.5	2	65TD100
SWGGB150	1.5	1.5	2	65TD150
SWGGB200	2	2	2.5	65TD200
SWGGB250	2.5	2	2.5	65TD250
SWGGB300	3	3	3.5	65TD300
SWGGB350	3.5	3	3.5	65TD350
SWGGB400	4	3	3.5	65TD400
SWGGB500	5	5	5.75	85TD500
SWGGB600	6	6	6.75	115TD600

Fig. 1

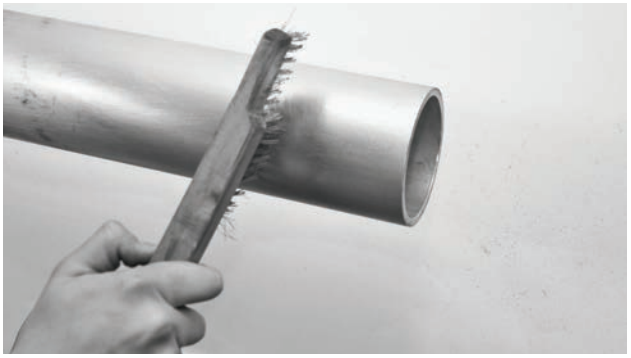


2. Cleaning and Preparing the Outside of the Pipe

Using an emery pad (Fig. 2a) followed by a wire brush (Fig. 2b), clean the pipe end. Remove any oil, oxidation or burrs on exterior of the pipe. Be sure to prepare an area greater than the max insertion depth listed in Table 1.

Fig. 2a

Fig. 2b



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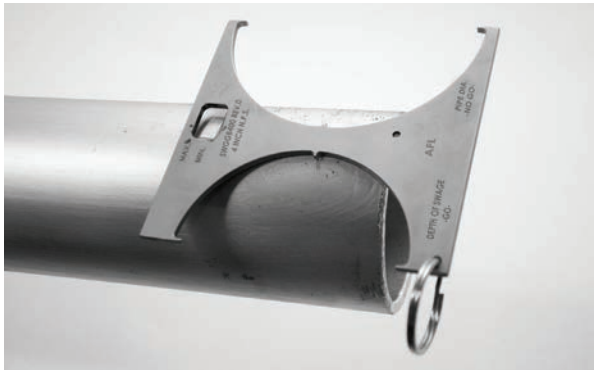
Swage Bus Installation Instructions (cont.)

3. Measuring the Insertion Depth

Use the "Swage Gauge" to mark the insertion depth by placing the gauge pin against the end of the pipe. Ensure the marking window (MIN/MAX) is on the pipe side and mark the pipe depth through the window. See Fig. 3a and 3b.

Fig. 3a

Fig. 3b



4. Assembly of the Bus Connector Fitting Over the Pipe

Slide the bus connector fitting over the pipe until the end of the connector reaches the insertion depth. Ensure the Bus Connector end is between the marked MIN/MAX. See Fig. 4.

Fig. 4

5. Assembly of the Hydraulic Pump to the Power Swage Press

Connect the 65 Ton Power Unit to the hydraulic pump using the quick disconnect hose. See Fig. 5.

Fig. 5

continued

Swage Bus Installation Instructions (cont.)

6. Swaging the Bus Connector Fittings

Using the correct 65TD die set, listed in Table 1, assemble the power unit with the press head. Position the press perpendicular on the pipe as shown below in Fig. 6. Ensure the die teeth are in-line with the Swage lines on both sides. Compress the bus connector to 10,000 psi.

Fig. 6—NOTE: COMPLETE DIE CLOSURE IS REQUIRED ON ALL COMPRESSIONS.

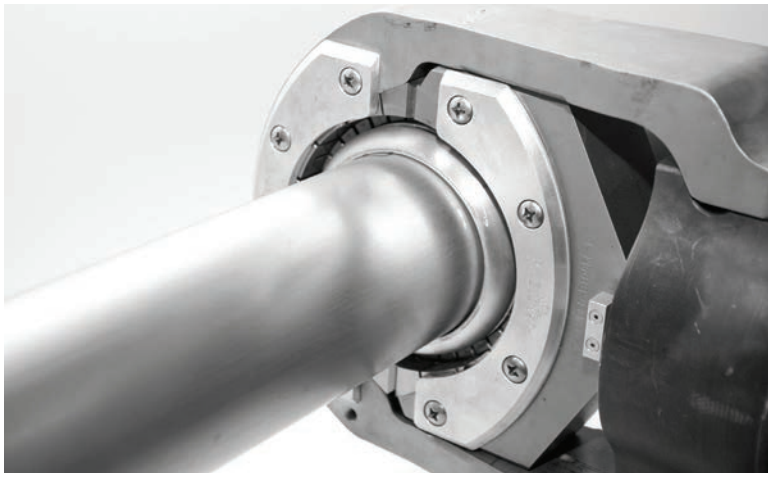


Fig. 7—NOTE: ALWAYS PROPERLY POSITION YOURSELF TO THE SWAGE PRESS WHEN COMPRESSION IS IN PROGRESS. KEEP CLEAR OF THE PRESS HOSE. SEE FIG. 7.

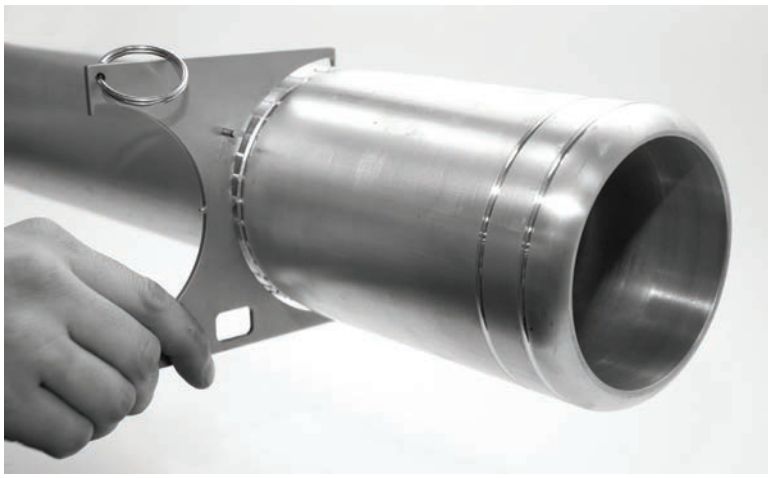
continued

Swage Bus Installation Instructions (cont.)

7. Visually Inspecting the Swage

Verify complete compression was achieved by using the "Swage Gauge". Place –GO– gauge over Swage compression to ensure all three points touch the compression mark. Confirm that the points touch both from the top profile and side profile (90°). See Fig. 8. If the "Swage Gauge" does not touch all three points on both profiles, re-swage the fitting and re-inspect using the –GO– points ensuring they touch the compression mark.

Fig. 8



Repeat steps 1-7 for each Bus Connector Fitting.

Double Swage Bus Connector Fitting

AFL also offers some connector fittings which need two Swage compressions on each side of the fitting. The process is the same as a single swage compression, although the inner Swage lines should be compressed first, followed by the outer Swage lines. See Fig. 9.