

# **OXWELD<sup>®</sup>**

## **ADJUSTABLE BEVEL CUTTING ADAPTOR**

### **(Series A) PART NO. 18845**



These INSTRUCTIONS are for experienced operators. If you are not fully familiar with the principles of operation and safe practices for oxy-fuel gas equipment, we urge you to read our booklet "Precautions and Safe Practices for Welding, Cutting, and Heating," Form 2035. The same information appears in the "Oxy-Acetylene Handbook" which may be purchased from your distributor. Do NOT permit untrained persons to operate this equipment. Do NOT attempt to operate this equipment until you have read and fully understand these Instructions. If you do not fully understand these Instructions, contact your supplier for further information.

#### **OPERATING INSTRUCTIONS**

##### **TO ATTACH TO TORCH**

1. Remove the nozzle nut and nozzle from the torch.
2. Connect the adaptor to the torch in the same manner as a nozzle, using the connecting nut on the adaptor inlet. Tighten the connecting nut with a wrench.
3. Connect the nozzle to the adaptor outlet and tighten the connecting nut with a wrench.
4. Do not turn locking screw.

##### **TO ADJUST BEVEL ANGLE**

*NOTE: It is not necessary to loosen screw to adjust angle.*

1. Be sure adaptor is cool enough to handle before making adjustments.
2. Turn the lower body of the adaptor to the desired bevel angle. The angle can be read from either side of the bevel cutting adaptor.

##### **ATTACHING AUXILIARY PREHEAT TIP (ACCESSORY)**

1. Apply a single turn of Teflon tape to the male pipe threads of the 90° elbow supplied with the kit.
2. Remove the 1/8" NPT pipe plug from the lower body of the adaptor, using an Allen wrench and then install the 90° elbow.
3. Connect the preheat tip to the elbow and carefully tighten the connecting nut.
4. Bend the preheat tip so that it is aligned with the nozzle at an angle of approximately 90° to the plate.

#### **MAINTENANCE INSTRUCTIONS**

**Maintenance and repair work must be performed only by an experienced person. Do not permit untrained persons to inspect, clean, or repair this apparatus. Use only recommended replacement parts.**

**O-Rings:** Viton O-rings should be replaced every six months or less. These O-rings should be handled carefully by doing the following procedure:

1. Remove the locking screw (Note that it was assembled with Loctite compound.) Retain the Belleville washers and sealing washer on the locking screw. Clean out old Loctite from lower body 1/4 - 28 threads and remove old Loctite from locking screw threads.
2. Separate the upper and lower bodies of the adaptor and remove the O-rings (950713 and 950714).
3. Lubricate the new O-rings lightly with silicone lubricant P/N 17672 (1 oz. tube), and then install the O-rings into the proper grooves of the lower body.
4. Align and press the two bodies together. Rotating the two bodies during assembly will aid the assembly.
5. Before reinstalling locking screw, apply a small amount of Loctite Retaining Compound No. 680 into lower body 1/4"—28 threads. Also apply a light coating of silicone lubricant to the sealing washer. Reinstall locking screw, with Belleville washers and sealing washer all the way in. Back locking screw out 1/2 turn before Loctite sets up. Allow approximately 1 hour for Loctite to cure before operating the adaptor.

**Belleville Washers and Sealing Washer:** The Belleville washers provide sufficient drag to maintain the chosen angle without the need to loosen or retighten the locking screw. If replacement of the 4 Belleville washers is required, stack them on the screw in series as shown in the illustration (concave side to concave side; convex side to convex side).

Sealing washer (185W62) should be replaced periodically or whenever leakage is noted past the locking screw. Apply a light coating of silicone lubricant P/N 17672 to the washer before assembly.

**Be sure this information reaches the operator.  
You can get extra copies through your supplier.**



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**Nozzle and Inlet Connector Seat Leakage:** Dirt or nicks on inlet connector seat or nozzle seat can cause backfires in operation. Wipe off the seats with a clean oil-free cloth and examine. If badly nicked or scored, send the bevel cutting adaptor to your ESAB welding equipment distributor for reseating or repair.

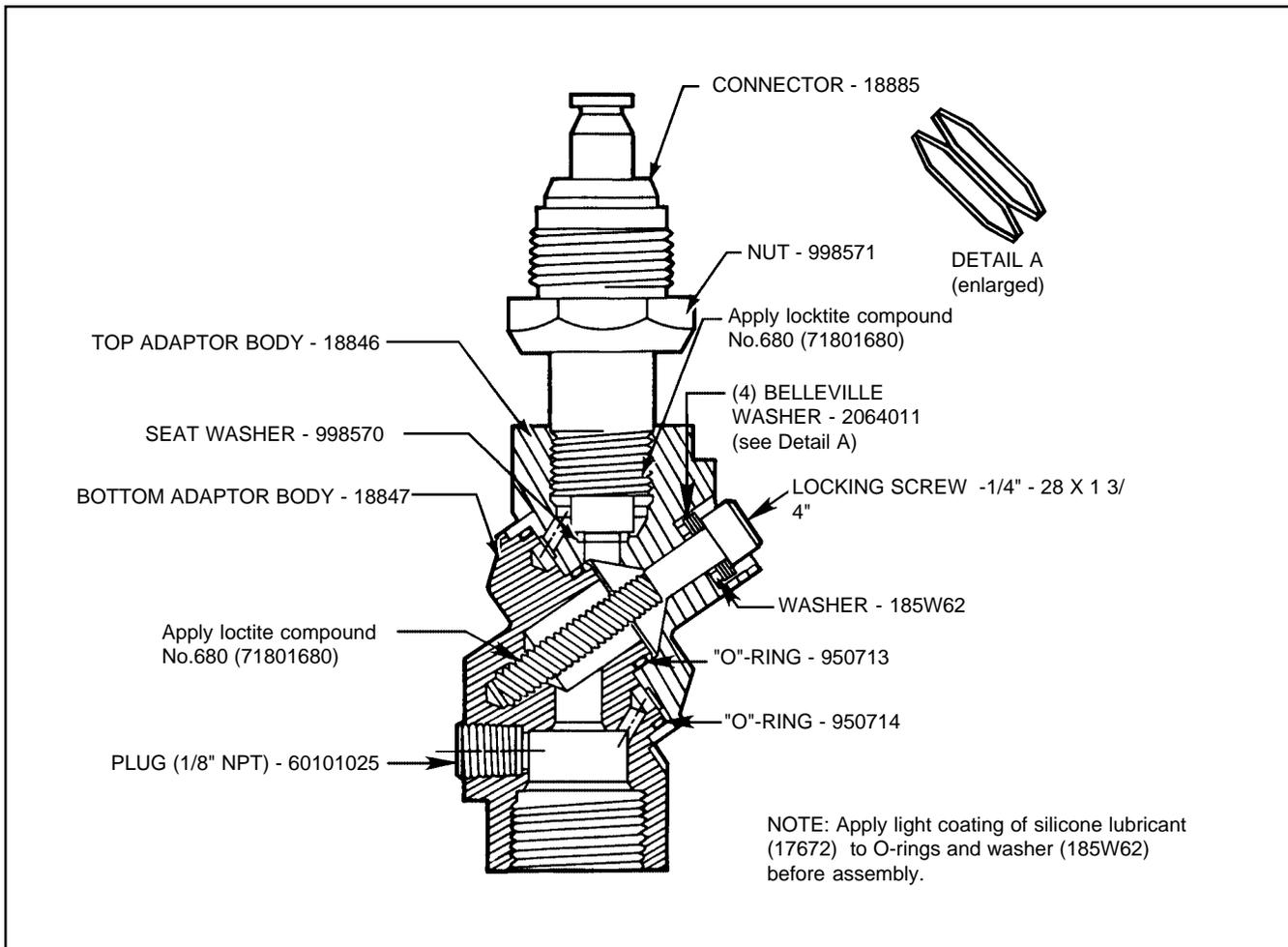
**Inlet Connector:** The inlet connector ( 18885) was sealed to the top body adaptor of the bevel cutting adaptor with Loctite compound which can withstand temperatures up to 300° F (149° C). If leakage was noted at the inlet connector after being exposed to temperatures above 300° F, the gasket (998570) should be replaced and the connector should be resealed to the upper body as follows:

1. Disassemble the adaptor and then clamp the upper body in a vise.

2. Using a wrench, unscrew the connector. If difficult to turn, heat the connector to 200-300° F.
3. Replace the gasket, and if damaged, replace the connector.
4. Assemble connector to upper body and turn clockwise only one full turn.
5. Apply one drop of Loctite 680 (71201680) to connector thread and then continue turning clockwise. Tighten the connector firmly to compress the gasket (50-55 in-lbs torque). Do NOT overtighten. Do NOT allow the Loctite compound to flow to the lead-in thread of the connector nor inside the gas passages of the adaptor.
6. Reassemble the adaptor as covered in the "O-rings" section on front page.
7. Wait 24 hours before using the bevel cutting adaptor so that the Loctite sealant can cure to full strength.

### REPLACEMENT PARTS

Replacement parts are keyed in the illustration below. When ordering, supply both part number and description. **DO NOT ORDER BY PART NUMBER ONLY.** Parts can be ordered from your ESAB welding equipment distributor or from ESAB Customer Service Department, Florence, SC.



Adjustable Bevel Cutting Adaptor, P/N 18845



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