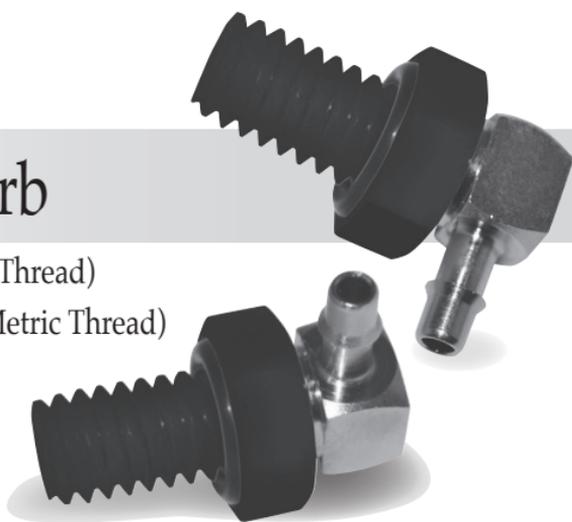


Aria™ Safety Barb

Part Nr./Ref: CA300-ASB (US Thread)

Part Nr./Ref: CA300-ASBM (Metric Thread)



INSTALLATION INSTRUCTIONS

The Aria Safety Barb can be installed into sockets 1/8"-3/8" thick (3.2-9.5mm). It features a 90 degree swivel fitting and an internal 1-way safety valve to prevent loss of vacuum in case of hose disconnect or pump/hose malfunction.

INSTALLATION INTO THERMOPLASTIC MATERIALS

For installation into thermoplastic socket materials, use the enclosed Aria Safety Barb Threaded Housing (Part Nr./Ref: CA300-SBTH US & Part Nr./Ref: CA300-SBTHM Metric).

1. Determine location for barb placement on your cast model and flatten that area so that the threaded housing sits flush on the model.
2. Mark the location of the center hole of the threaded housing with a marker.
3. Drill a 1/8" (3.20 mm for metric) pilot hole at the location of the mark. This will be the hole for the enclosed mounting screw used to secure the threaded housing onto the cast.
4. Drill a vacuum hole adjacent to the pilot hole. The vacuum hole should extend to the bottom of the cast model for optimal draw when vacuum forming.
5. Securely mount threaded housing onto the cast model using the enclosed mounting screw and then press the enclosed self-adhesive disc over the screw head.
6. Under vacuum, drape or blister mold thermoplastic material of choice. Be sure to guide the plastic material around the threaded housing to ensure that the plastic molds well around the shape of the housing.
7. Once plastic is cooled, use a disc sander to grind plastic enough to expose the self adhesive disc. Remove self adhesive disc and continue sanding slowly until you reach the top of the mounting screw, then remove the screw.
8. Screw the Aria Safety barb into the threaded housing until it sits flush against the outside of the socket wall. Determine trim length of threaded stem and mark.
9. Once marked, unscrew Aria Safety Barb from the housing and sand the threaded shank to the desired length.
10. **IMPORTANT**- After threaded shank is trimmed, disassemble the barb by loosening the screw with a flat screw driver. Do not remove screw. Hold the metal portion of the barb while unscrewing the plastic threaded portion of the barb until they come apart. Remove the small, white valve that is now exposed and seated in the metal portion of the barb. Use compressed air on the 3 parts and through valve stem to dislodge any debris that might have accumulated during the sanding process. Warm water may also be used if needed. After cleaning, place the small white valve back into the metal portion of the barb. Take plastic threaded portion of barb and screw it back onto the metal portion. Tighten the screw using a flat screw driver.
11. Apply silicone sealant around valve "O" ring before screwing valve into socket thru threaded housing.

INSTALLATION INTO PRE-EXISTING HARD SOCKETS

1. After hard socket construction is complete, determine appropriate location for Aria Safety Barb and mark.
2. Drill square to the socket wall with a 1/4" (6.9mm for metric) drill bit. **MAKE SURE TO DRILL THE HOLE STRAIGHT, NOT AT AN ANGLE AS THIS COULD CAUSE BARB SHANK TO SNAP WHEN SCREWING IT INTO THE SOCKET.**
3. Tap the hole using a 5/16"-18 tap (M8 X 1.25 for metric)
4. Screw the barb into the socket until it sits flush against the outside of the socket wall. Determine trim length of threaded stem and mark.
5. Once marked, unscrew barb from the socket and sand the threaded shank to the desired length.
6. **IMPORTANT**- After threaded shank is trimmed, disassemble the barb by loosening the screw with a flat screw driver. Do not remove screw. Hold the metal portion of the barb while unscrewing the plastic threaded portion of the barb until they come apart. Remove the small, white valve that is now exposed and seated in the metal portion of the barb. Use compressed air on the 3 parts and through valve stem to dislodge any debris that might have accumulated during the sanding process. Warm water may also be used if needed. After cleaning, place the small white valve back into the metal portion of the barb. Take plastic threaded portion of barb and screw it back onto the metal portion. Tighten the screw using a flat screw driver.
7. Apply silicone sealant around "O" ring before screwing barb into socket.