

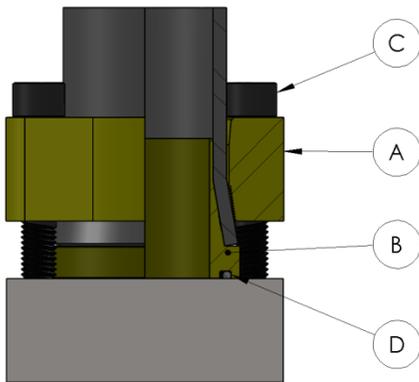
## BARCONN® ASSEMBLY INSTRUCTIONS

The BARCONN® system to flare flange couplings is used whenever hydraulic systems are subject to maximum loads. The concept of a flared system also meets extreme demands for safety.

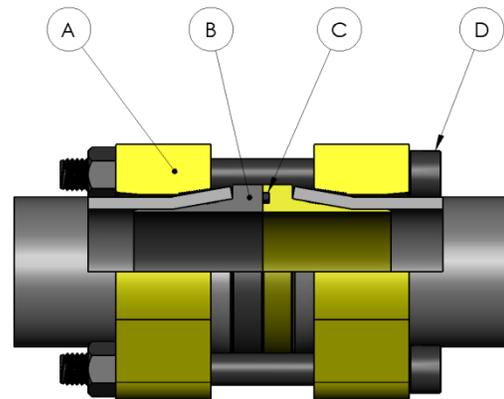
The range covers flanges for tubes with an outside diameter from 16mm 500mm. The flanges for tube to port or tube to tube connections are available in standard series (250 bar) and a high pressure series (400 bar). As standard patterns we offer SAE Code 61 & 62, SAE 3000 & 6000 series square, and ISO 6164 square flanges. BARCONN® flanges with other hole patterns or special designs are available upon request.

The BARCONN® flange system consists of the following parts:

- Flange to component or hose connection:
  - a) (1) BARCONN® flange
  - b) (1) BARCONN® sealing cone (O-Ring for component or Flat Face for hose)
  - c) (1) Viton O-Ring
  - d) (4) Socket head cap screws with high collar lock washers
- Flange to flange connection:
  - a) (2) BARCONN® flange
  - b) (2) BARCONN® sealing cone (one O-Ring and one Flat Face)
  - c) (1) Viton O-Ring
  - d) (4) Socket head cap screws with nuts and high collar lock washers



**Flange to Component Connection**

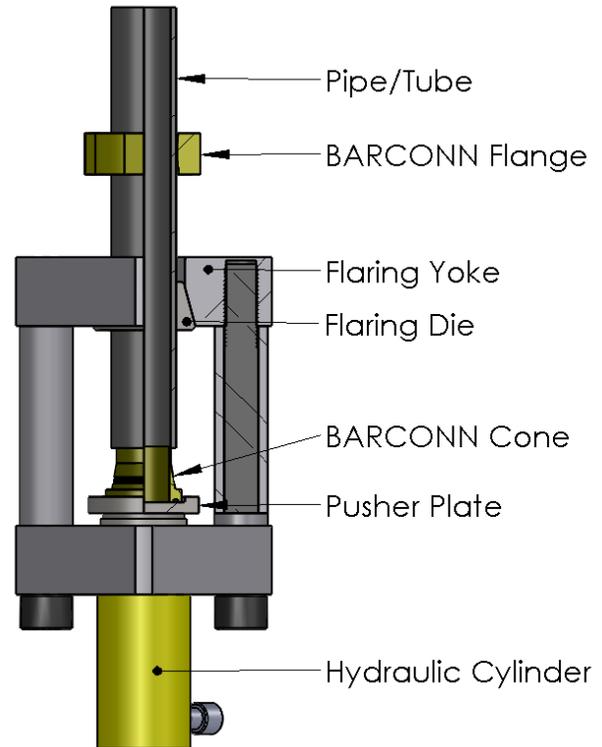


**Flange to Flange Connection**

## BARCONN® ASSEMBLY INSTRUCTIONS

(CONTINUED)

- 1) Cut tube square with cut-off saw, do NOT use tube cutters.
- 2) De-burr pipe end both on OD and ID. For optimum function it is recommended to de-burr only lightly on the OD and stronger on the ID. Use proper reaming tool, no die grinders of any kind.
- 3) Outside and inside surfaces of the pipe should not show any damages and should be cleaned from dirt and chips.
- 4) Lubricate BARCONN® cone taper with synthetic grease and position onto pusher plate.
- 5) Slide BARCONN® flange onto tube with threaded taper facing towards tube end to be flared.



- 6) Insert tube through flaring yoke and push up against taper side of cone as shown in diagram so that the tube is now holding the BARCONN cone against the pusher plate and the BARCONN flange is sitting on the tube outside of the flaring yoke.
- 7) Place the two (2) halves of the flaring dies between the tube and the yoke and push in as far as possible. Be sure that flaring dies are parallel with each other.
- 8) To flare the tube extend the hydraulic ram by activating power pack to force BARCONN® cone into the face of the tube making sure that the tube or the cone do not kink or twist during the flaring process.
- 9) **The BARCONN® cone itself flares the tube**, it is driven into the tube through the stroke of the piston until the collar of the cone sits close at the tube end. Be sure not to “over flare” by continuing to extend the cylinder after the collar of the cone reaches the tube, damage to the sealing surface between the cone and tube could occur. A gap of about 1mm between cone collar and tube face does not affect the sealing function.
- 10) The flared BARCONN® assembly can now be removed from the flaring machine. Release the pressure from the power pack and the cylinder will retract via internal spring.