

# MACHINING INSTRUCTIONS FOR CONVERTING THE GOULDS 8" ST BACK COVER/SEAL CHAMBER FOR USE ON THE FRAME S

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Section	Forms
Effective	Oct. 2004
Replaces	ASD 134

## Parts needed

Hardware Conversion Kit No. 99700

- Includes:
- (2) 1/4-20 Studs
  - (2) 1/4-20 Nuts
  - (4) 3/8-16 Regular Hex Nuts
  - (4) 3/8 D-Shaped Washers
  - (1) Adapter Plate Drilling Template

Newer Goulds 8" ST Back Cover/Seal Chambers have been modified to eliminate some machining operations when converting it for use on Frame S. Two 1/4-20 UNC tapped holes for use when mounting the Back Cover/Seal Chamber to the Frame S frame adapter have been added. A raised O-ring surface (45 RMS) has been extended out to a 3.00 diameter to leave a sealing surface for both O-ring and gasket mounted seals.

The original design must have these (2) 1/4-20 tapped holes machined to mount onto the Frame S frame adapter.

The Goulds 8" Wet End uses an adapter plate between the Back Cover and the casing. Two thru holes must be drilled into the adapter plate for the 1/4-20 studs on the Back Cover/Seal Chamber.

## NEW VERSION

1. Remove the (4) 3/8-16 studs and (2) 5/16-18 studs.
2. Bore out the Back Cover/Seal Chamber to 2.38 diameter .09 deep, then machine 25° angle.
3. Bore out the bottom of the Back Cover/Chamber from 2.18 diameter to 2.38 diameter to existing depth and from 1.41 diameter to a 1.520 diameter.
4. Lay template into the recess on the Adapter Plate and align it with the 5/8-11 casing bolts. Mark the two .06 dia. holes on the horizontal centerline. Drill two (2) .281 dia. clearance holes into the adapter plate and deburr.
5. Install the (2) 1/4-20 studs and (4) 3/8-16 seal chamber gland studs into the Back Cover/Seal Chamber.

## OLD VERSION

1. Remove the (4) 3/8-16 studs and (2) 5/16-18 studs.
2. Drill and tap the (2) 1/4-20 UNC holes as shown, deburr surface.
3. Bore out the Back Cover/Seal Chamber to 2.38 diameter .09 deep, then machine 25° angle.
4. Bore out the bottom of the Back Cover/Seal Chamber from 2.18 diameter to 2.38 diameter and bore out the 1.41 diameter to 1.520 diameter.
5. Lay template into the recess on the Adapter Plate and align it with the 5/8-11 casing bolts. Mark the two .06 dia. holes on the horizontal centerline. Drill two (2) .281 dia. clearance holes into the adapter plate and deburr.
6. Install the (2) 1/4-20 studs and (4) 3/8-16 seal chamber gland studs into the Back Cover/Seal Chamber



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