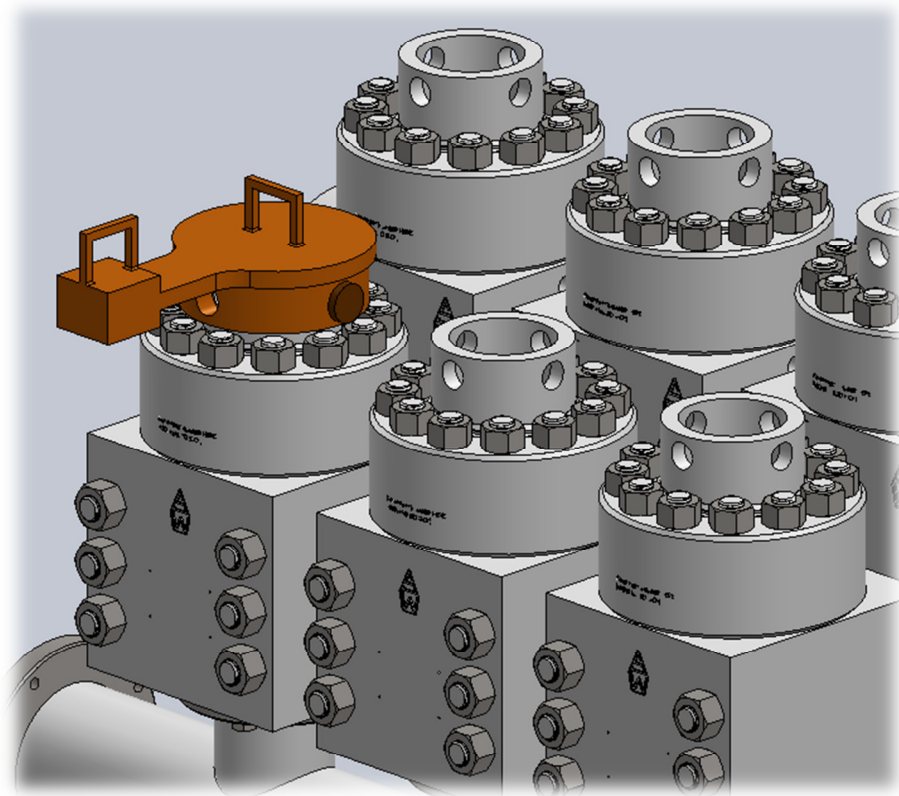




VALVE COVER TIGHTENING TOOLS

Southwest Oilfield Products, Inc. offers a variety of valve cover tightening tools (see next page) to aid in the installation and removal of valve cover screw glands on mud pumps. To use a tightening tool, follow the outlined steps below:

1. Position the tightening tool over the valve cover screw gland.
2. Line up the holes in the tool with the holes in the valve cover screw gland and push the tightening tool pin through both holes (see Figure 1).

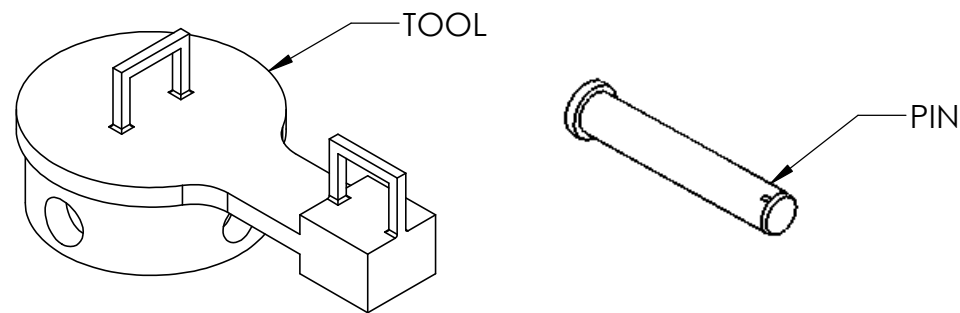


(Figure 1)

3. Tighten or loosen the valve cover by hammering on the block end of the tool.

***NOTE:** some tightening tools are supplied with **two** pins because the tool is drilled with two different hole sizes – this allows it to be used on multiple pump brands.*

| TOOL PART NO. | PIN PART NO. | FOR USE ON: | SWFE or OEM |
|---------------|---|---|--|
| 4509-50TT | 4509-50TT-1 | GARDNER DENVER PXL/PZ-11 (7500 PSI) | OEM |
| 4522-50TT | 4522-50TT-1 | EMSCO F-1000/F-800 | SWFE |
| 4567-50TT | 4567-50TT-1 | NATIONAL 10-P-130 (SIDE DISCHARGE) | SWFE |
| 4575-50TT | 4575-50TT-1 | BREWSTER B-1600-T/B-1300-T GARDNER-DENVER PZ-9 GARDNER-DENVER PZ-11 (5000 PSI) IDECO T-1000/T-800 IDECO T-1600-T-1300 NATIONAL 10-P-130 (EXTERNAL DISCHARGE, API-7) OILWELL A-1100-PT/A-850-PT WIRTH TPK-1600 (5000 PSI) | SWFE SWFE SWFE SWFE SWFE SWFE SWFE SWFE |
| 4576-50TT | 4576-50TT-1 | NATIONAL 12-P-160 (5000 PSI- "FAST-CHANGE" VALVE COVER) | OEM |
| 4576-52TT | 4576-52TT-1 | NATIONAL 12-P-160 (5000 PSI- "TAPR-LOK" VALVE COVER) | OEM |
| 4577-50TT | 4577-50TT-1 | GARDNER-DENVER PZ-11 (5000 PSI) | OEM |
| 4582-50TT | 4582-50TT-2 | EMSCO FC-2200 NATIONAL 14-P-220 (EXTERNAL DISCHARGE) | OEM SWFE |
| 4582-52TT | 4582-50TT-2 | NATIONAL 14-P-220 (SIDE DISCHARGE) | SWFE |
| 4588-25TT | 4588-25TT-1 | BOMCO/HH F-1600 (7500 PSI) BREWSTER B-1100-T/B-1000-T EMSCO FC-1600 (7500 PSI) EWECO EQ-2200 LEWCO WH-2214 LEWCO W-1712 GARDNER-DENVER PZ-11/PZ-10 (7500 PSI) OILWELL A-1700-PT/A-1400-PT/HD-1700-PT/HD-1400-PT (7500 PSI) WIRTH TPK-800 WIRTH TPK-1600 (7500 PSI) | SWFE SWFE SWFE SWFE SWFE SWFE SWFE SWFE SWFE SWFE SWFE |
| 4588-50TT | 4588-50TT-1 | OILWELL A-1700-PT | OEM |
| 4590-50TT | 4590-50TT-1 | EMSCO FB-1600/FB-1300 (VALVE COVER ONLY) | OEM |
| 4590-51TT | 4590-51TT-1 4590-51TT-1 4590-51TT-2 | EMSCO FB-1600/FB-1300 (CYLINDER HEAD ONLY) EMSCO FC-1600 (5000 PSI) EMSCO F-1000/F-800 | OEM OEM OEM |
| 4597-50TT | 4597-50TT-1 | EMSCO FC-2200 EWECO E-2200 GARDNER-DENVER PXL NATIONAL 12-P-160 (5000 PSI) LEWCO WH-1612 LEWCO W-2200 LEWCO W-2214 LEWCO W-2215 | SWFE SWFE SWFE SWFE SWFE SWFE SWFE SWFE |
| UVCTT-A | 4575-50TT-1 4575-50TT-1 4590-51TT-2 | GARDNER-DENVER PZ-9/PZ-11 EMSCO FB-1600/FB-1300 EMSCO F-1000/F-800 | SWFE OEM OEM |



| | | | | |
|---|------------|------------|---|--------------|
| | DRAWN BY | DATE | SOUTHWEST OILFIELD PRODUCTS 10340 WALLISVILLE ROAD, HOUSTON, TX 77013 | |
| | BH | 09/23/2014 | TITLE: VALVE COVER TIGHTENING TOOL PUMP USE LIST | |
| | CHECKED BY | DATE | SIZE | DWG. NO. |
| | EF | 09/23/2014 | B | TT LIST |
| <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SOUTHWEST OILFIELD PRODUCTS. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SOUTHWEST OILFIELD PRODUCTS IS PROHIBITED.</small> | | | REV. | B |
| | | | | SHEET 1 OF 1 |