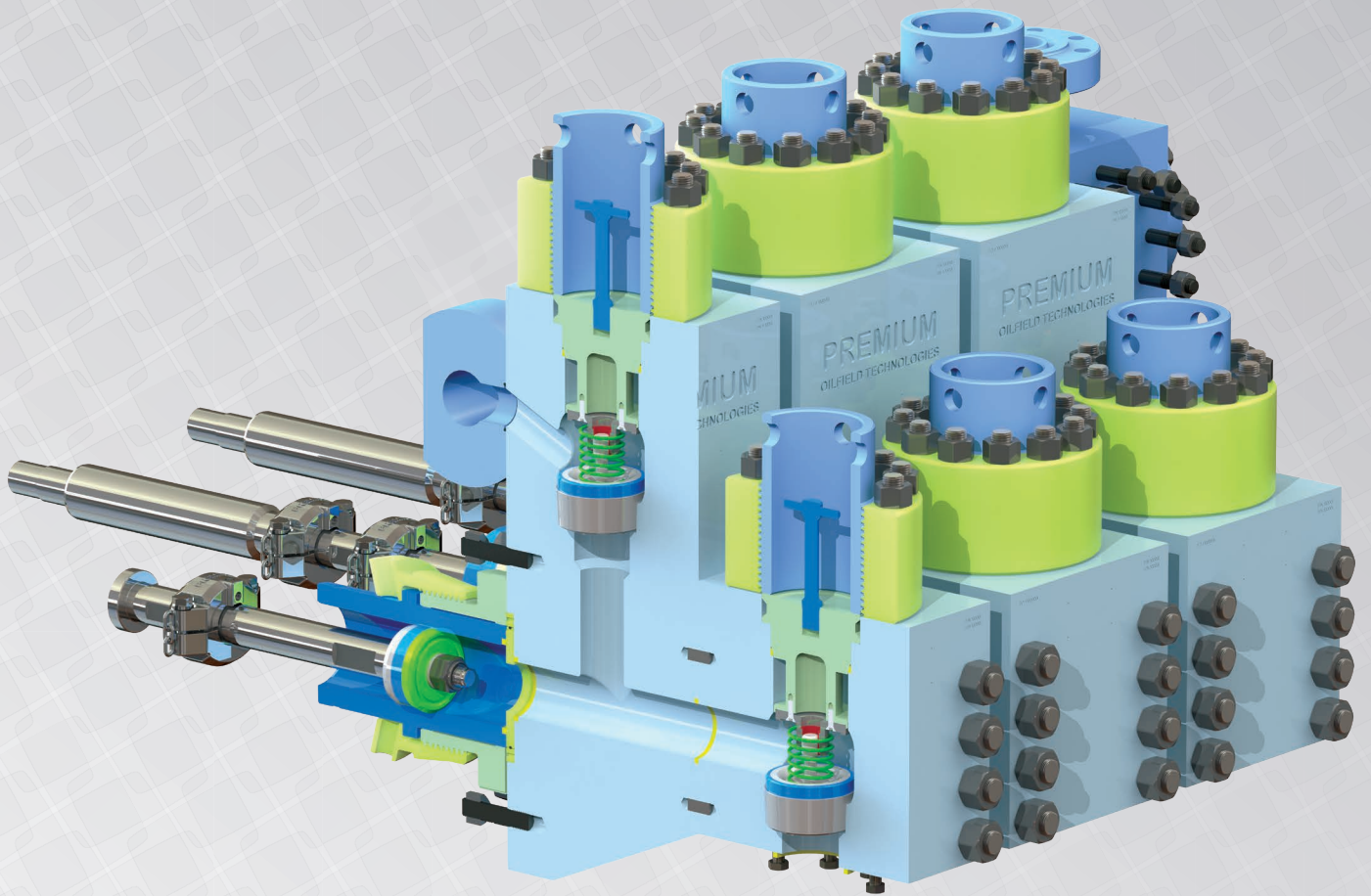


CALIBER[®]

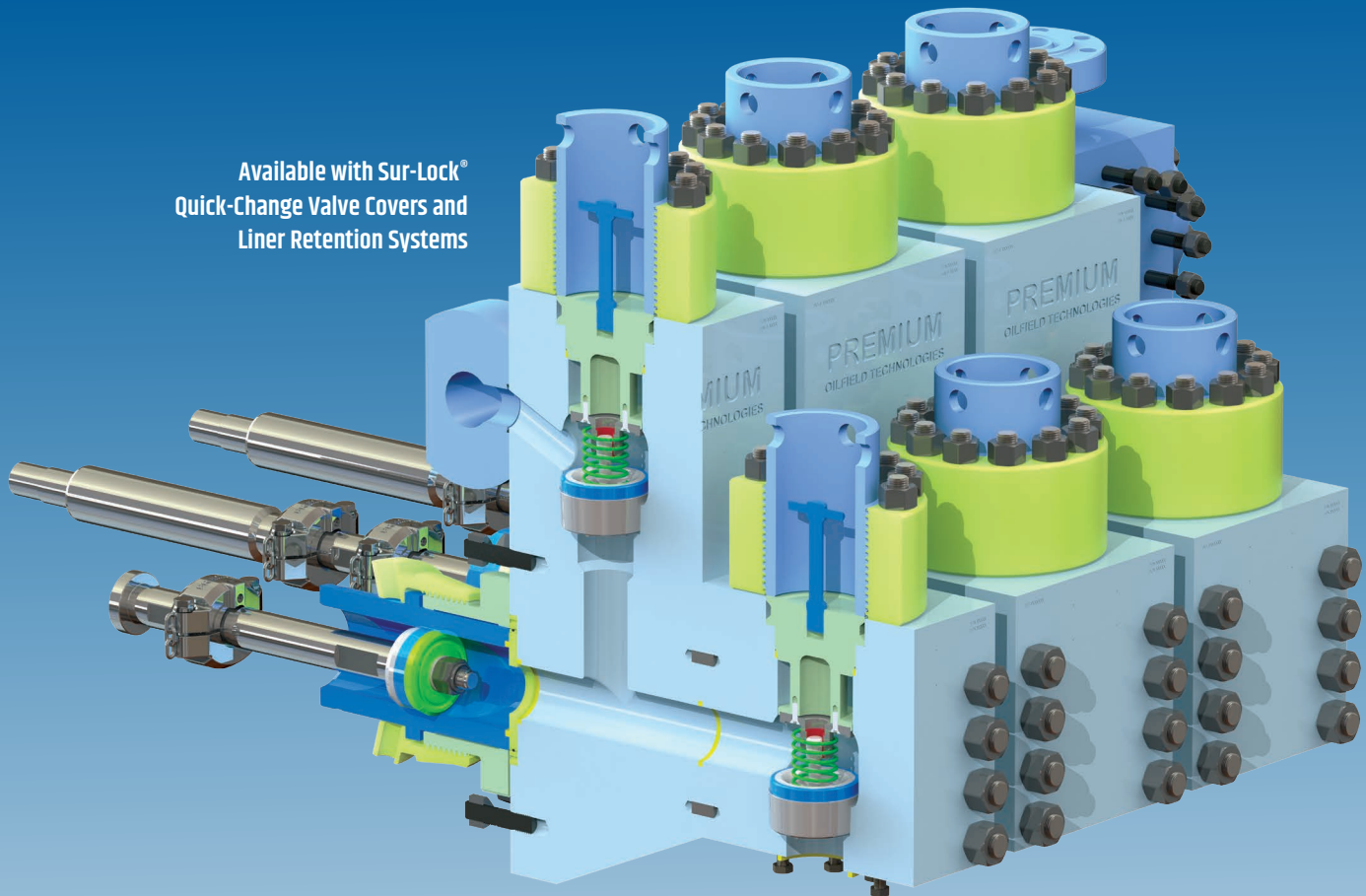
MXL-7500



PREMIUM[®]
Oilfield Technologies

Premium Oilfield Technologies offers a complete line of fluid end modules and components that are manufactured to OEM specifications and interchangeability. We offer 7500 psi designs for all major pump configurations. **Our Caliber® modules start with high-tensile strength steel and are machined to precise engineering tolerances.** Each forging is machined and heat treated to maintain the best physical properties inside the module and on the surface, thus minimizing washing and stress cracking.

Available with Sur-Lock®
Quick-Change Valve Covers and
Liner Retention Systems



Caliber® MXL-7500 2-Piece Design

12-P-160 Compatible Fluid End Modules

The 2-piece 7500 psi fluid end module for the 12-P-160 pumps is based on industry-standard design and is 100% compatible with parts from the OEM and other manufacturers.

EXPENDABLES AND PERFORMANCE

| Size (inches) | Liners | | Liner Gaskets | |
|---------------|----------------------|-------------------------|----------------|--------------|
| | Caliber® Steel Liner | Patriot® Zirconia Liner | Nitrile Rubber | Urethane |
| 4" | 100-51C40-00 | 101-51Z40-00 | 202-50N50-00 | 202-50U50-00 |
| 4-1/2" | 100-51C44-00 | 101-51Z44-00 | 202-50N50-00 | 202-50U50-00 |
| 5" | 100-51C50-00 | 101-51Z50-00 | 202-50N50-00 | 202-50U50-00 |
| 5-1/2" | 100-51C54-00 | 101-51Z54-00 | 202-50N54-00 | 202-50U54-00 |
| 6" | 100-51C60-00 | 101-51Z60-00 | 202-50N60-00 | 202-50U60-00 |
| 6-1/2" | 100-51C64-00 | 101-51Z64-00 | 202-50N64-00 | 202-50U64-00 |
| 7" | 100-51C70-00 | 101-51Z70-00 | 202-50N70-00 | 202-50U70-00 |

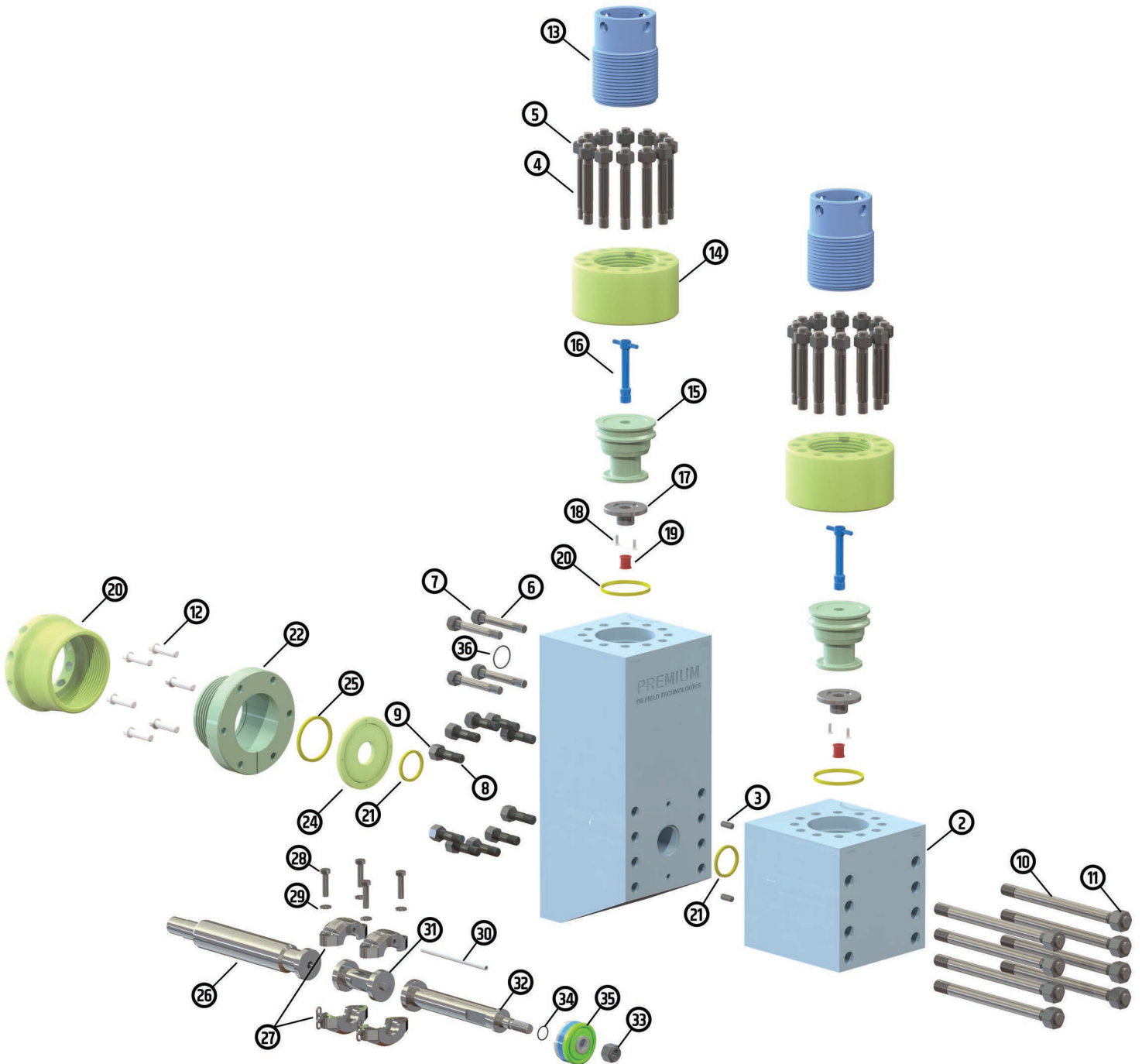
¼" sizes available on request

| 7,500 PSI Operating Pressure | | Strokes Per Min. | 120 | 110 | 100 | 90 | 80 | 70 | 60 | 50 | 40 |
|------------------------------|---------------------------|------------------|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 12" STROKE | | Input HP | 1600 | 1467 | 1333 | 1200 | 1067 | 933 | 800 | 667 | 533 |
| Piston Size | Discharge Pressure Rating | Output Gal/Rev | OUTPUT - Gallons Per Minute (L/min)* | | | | | | | | |
| 7 1/2" | 2,987 | 6.885 | 826 (3127) | 757 (2867) | 689 (2606) | 620 (2345) | 551 (2085) | 482 (1824) | 413 (1564) | 344 (1303) | 275 (1042) |
| 7 1/4" | 3,197 | 6.434 | 772 (2922) | 708 (2679) | 643 (2435) | 579 (2192) | 515 (1948) | 450 (1705) | 386 (1461) | 322 (1218) | 257 (974) |
| 7" | 3,429 | 5.998 | 720 (2724) | 660 (2497) | 600 (2270) | 540 (2043) | 480 (1816) | 420 (1589) | 360 (1362) | 300 (1135) | 240 (908) |
| 6 3/4" | 3,977 | 5.577 | 669 (2533) | 613 (2322) | 558 (2111) | 502 (1900) | 446 (1689) | 390 (1478) | 335 (1267) | 279 (1055) | 223 (844) |
| 6 1/2" | 4,302 | 5.171 | 621 (2349) | 569 (2153) | 517 (1957) | 465 (1762) | 414 (1566) | 362 (1370) | 310 (1174) | 259 (979) | 207 (783) |
| 6 1/4" | 4,668 | 4.781 | 574 (2172) | 526 (1991) | 478 (1810) | 430 (1629) | 383 (1448) | 335 (1267) | 287 (1086) | 239 (905) | 191 (724) |
| 6" | 5,082 | 4.406 | 529 (2001) | 485 (1835) | 441 (1668) | 397 (1501) | 353 (1334) | 308 (1167) | 264 (1001) | 220 (834) | 176 (667) |
| 5 3/4" | 5,555 | 4.047 | 486 (1838) | 445 (1685) | 405 (1532) | 364 (1379) | 324 (1225) | 283 (1072) | 243 (919) | 202 (766) | 162 (613) |
| 5 1/2" | 6,097 | 3.703 | 444 (1682) | 407 (1542) | 370 (1401) | 333 (1261) | 296 (1121) | 259 (981) | 222 (841) | 185 (701) | 148 (561) |
| 7 1/4" | 6,722 | 3.374 | 405 (1532) | 371 (1405) | 337 (1277) | 304 (1149) | 270 (1022) | 236 (894) | 202 (766) | 169 (638) | 135 (511) |
| 5" | 7,448 | 3.060 | 367 (1390) | 337 (1274) | 306 (1158) | 275 (1042) | 245 (927) | 214 (811) | 184 (695) | 153 (579) | 122 (463) |
| 4 3/4" | 7,500 | 2.762 | 331 (1254) | 304 (1150) | 276 (1045) | 249 (941) | 221 (836) | 193 (732) | 166 (627) | 138 (523) | 110 (418) |
| 4 1/2" | 7,500 | 2.479 | 297 (1126) | 273 (1032) | 248 (938) | 223 (844) | 198 (751) | 174 (657) | 149 (563) | 124 (469) | 99 (375) |
| 4 1/4" | 7,500 | 2.211 | 265 (1004) | 243 (920) | 221 (837) | 199 (753) | 177 (669) | 155 (586) | 133 (502) | 111 (418) | 88 (335) |
| 4" | 7,500 | 1.958 | 235 (890) | 215 (815) | 196 (741) | 176 (667) | 157 (593) | 137 (519) | 118 (445) | 98 (371) | 78 (297) |

7-1/2" Liner only available in Flame Hardened Material

*Based on 100% volumetric efficiency and 90% mechanical efficiency

OEM STYLE MODULE COMPONENTS



MODULE COMPONENTS

| Item No. | Part Number | OEM Part Number | Part Description | Torque Ft. Lbs. | Qty. Per Pump |
|----------|---------------|-----------------|---|-----------------|---------------|
| | 140-51M75-00 | | Fluid End Assembly (3-Module Assemblies, 1-Discharge Manifold, Studs, Nuts & Gaskets) | | |
| | 142-51M75-00 | 80704032 | Module Assembly Complete With Accessories (Items 1 - 24) | | |
| | 145-51M75-00 | 80704000 | Module, Discharge (Studded) (Includes Items 4 - 12) | | 3 |
| 1 | 145-51M75-01 | | Module, Discharge (Unstudded) | | 3 |
| | 144-51M75-00 | 80704001 | Module, Suction (Studded) (Includes Items 4 & 5) | | 3 |
| 2 | 144-51M75-01 | | Module, Suction (Unstudded) | | 3 |
| 3 | 170-07A09-05 | 6511416 | Dowel Pin .875 X 2.00 LG | | 6 |
| 4 | 170-14A06-22S | 80700014 | Stud - 1.500-6 X 12.00LG | 1630 | 72 |
| 5 | 170-14A06-00 | 6300240 | Nut - 1.500-6 Heavy Hex | | 72 |
| 6 | 170-12A08-18S | 80702011 | Stud - 1.250-8un X 10.50LG | 890 | 12 |
| 7 | 170-12A08-00 | 7601-0630-24 | Nut - 1.250-8un Heavy Hex | | 12 |
| 8 | 170-13A06-10S | 2408029 | Stud - 1.375-6unc X 6.25LG | 1775 | 30 |
| 9 | 170-13A06-00 | 6300220 | Nut - 1.375-6unc Heavy Hex | | 30 |
| 10 | 170-16A08-17S | 80704002 | Stud - 1.750-8un X 24.000LG | 2650 | 24 |
| 11 | 170-16A08-00 | 6300821 | Nut - 1.750-8un Heavy Hex | | 24 |
| 12 | 170-11B07-06 | PEP75 | 12pt Capscrew, 1.125-7unc X 4.0" LG | 1050 | 18 |
| 13 | 152-51M75-00 | 80704004 | Screw Gland | | 6 |
| 14 | 151-51M75-00 | 80704003 | Threaded Ring | | 6 |
| | 153-51M75-00 | | Valve Cover Assembly (Includes Items 15 - 19) | | 6 |
| 15 | 627-0082 | 80704005 | Valve Cover | | 6 |
| 16 | 627-0196 | | T-Handle | | 6 |
| | 154-51S00-00 | | Valve Guide Assembly (Includes Items 17 - 19) | | 6 |
| 17 | 154-51S00-01 | 12PVGASWNS | Valve Guide | | 6 |
| 18 | 170-04B13-07 | 7007303 | FHCS, 1/2-13 X 1.500 LG | | 12 |
| 19 | 206-44U07-00 | OWVGI | Insert, Valve Guide | | 6 |
| 20 | 204-01U19-00 | 7207129 | Seal, Valve Cover, Urethane | | 6 |
| 21 | 202-00U88-00 | 1290344 | Seal, Module/Wear Plate, Urethane | | 6 |
| 22 | 181-51S00-00 | 12PLASW | Liner Retainer Bushing | | 3 |
| 23 | 182-51S00-00 | 12PLANSW | Liner Retainer Nut | | 3 |
| 24 | 183-51S75-SS | PP6021260SW | Wear Plate, SS | | 3 |
| 25 | See Chart | | Liner Gasket | | 3 |
| 26 | 16-0258-P | 1292083 | Extension Rod | | 3 |
| 27 | 132-51C00-00 | 1292085 | Rod Clamp Assembly | | 6 |
| 28 | 202-1701 | 80701038 | Hex Head Capscrew, 7/8-9 X 3.50 LG | | 12 |
| 29 | 202-008 | | Spring Lock Washer, 7/8" | | 12 |
| 30 | 1200120 | 80701089 | Water Spray Pipe | | 3 |
| 31 | 131-51C00-00 | 1292146 | Sub Rod | | 3 |
| 32 | 130-51C15-00 | 1292147 | Piston Rod C/W Nut | | 3 |
| 33 | 170-14A06-01 | 6308241 | Nut, Piston Rod | 1000 | 3 |
| 34 | 301-0006 | | O-Ring, Piston Rod Seal | | 3 |
| 35 | See Chart | | Piston | | 3 |
| 36 | 3N9-2338 | 99609573 | Discharge Manifold Seal | | 3 |

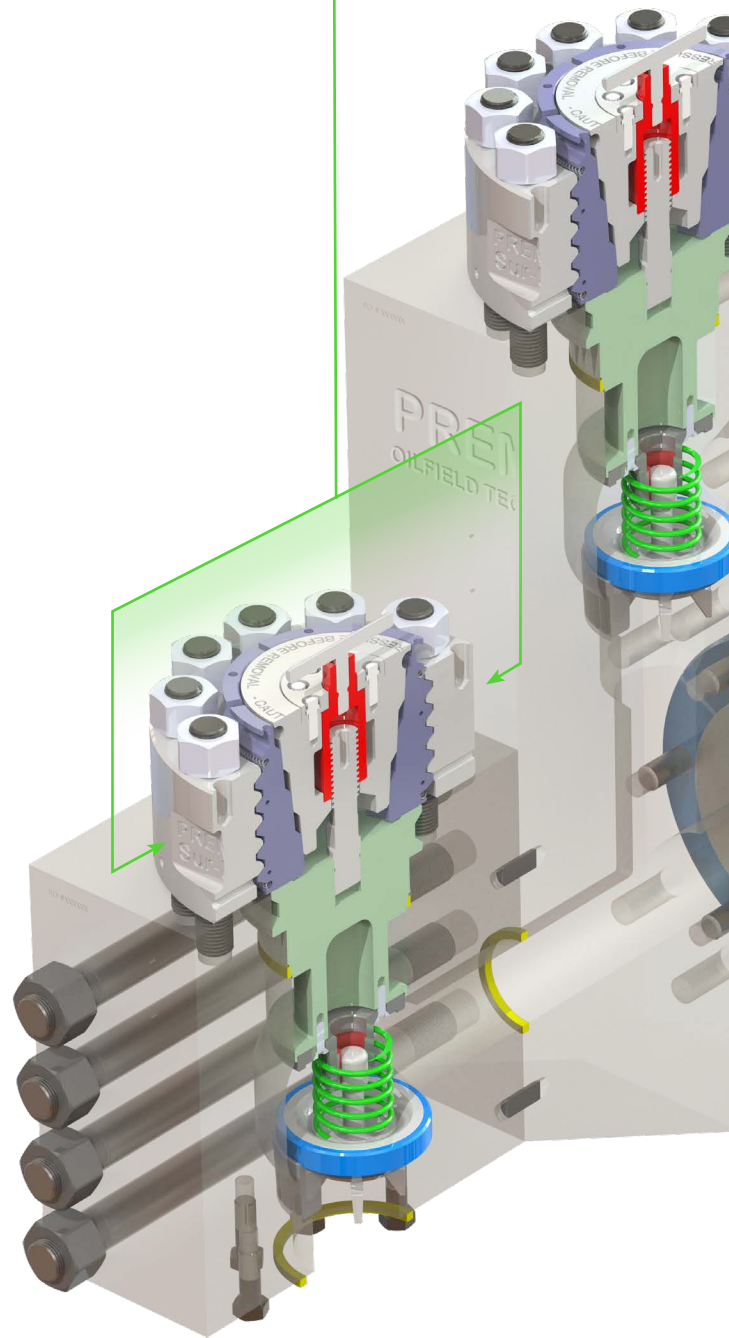
Recommended torque type expressed in foot-pounds with use of moly grease

QUICK CHANGE DRILLING TECHNOLOGIES

Sur-Lock® Valve Cover

Save time and **eliminate the unsafe practices of using cheater pipes and sledge hammers** to tighten and loosen valve covers. In current practice, one rig hand will hold a pipe in the valve cover holes and another will swing a large sledge hammer at the pipe in order to loosen or tighten the assembly.

The Sur-Lock® Valve Cover system eliminates this unsafe practice and radically decreases the time it takes to remove valve covers, and replace valves and seats. **Sur-Lock requires no special tooling** and weighs about the same as a conventional valve cover assembly. **With the use of an impact wrench or just a torque wrench, the valve cover can be removed and replaced with minimal safety risk.**



Caliber® MXL-7500

12-P-160 Mission L Compatible
7500 psi Two-Piece Fluid End

SUR-LOCK

HAMMERLESS™
TECHNOLOGY



Sur-Lock[®] Rod Link

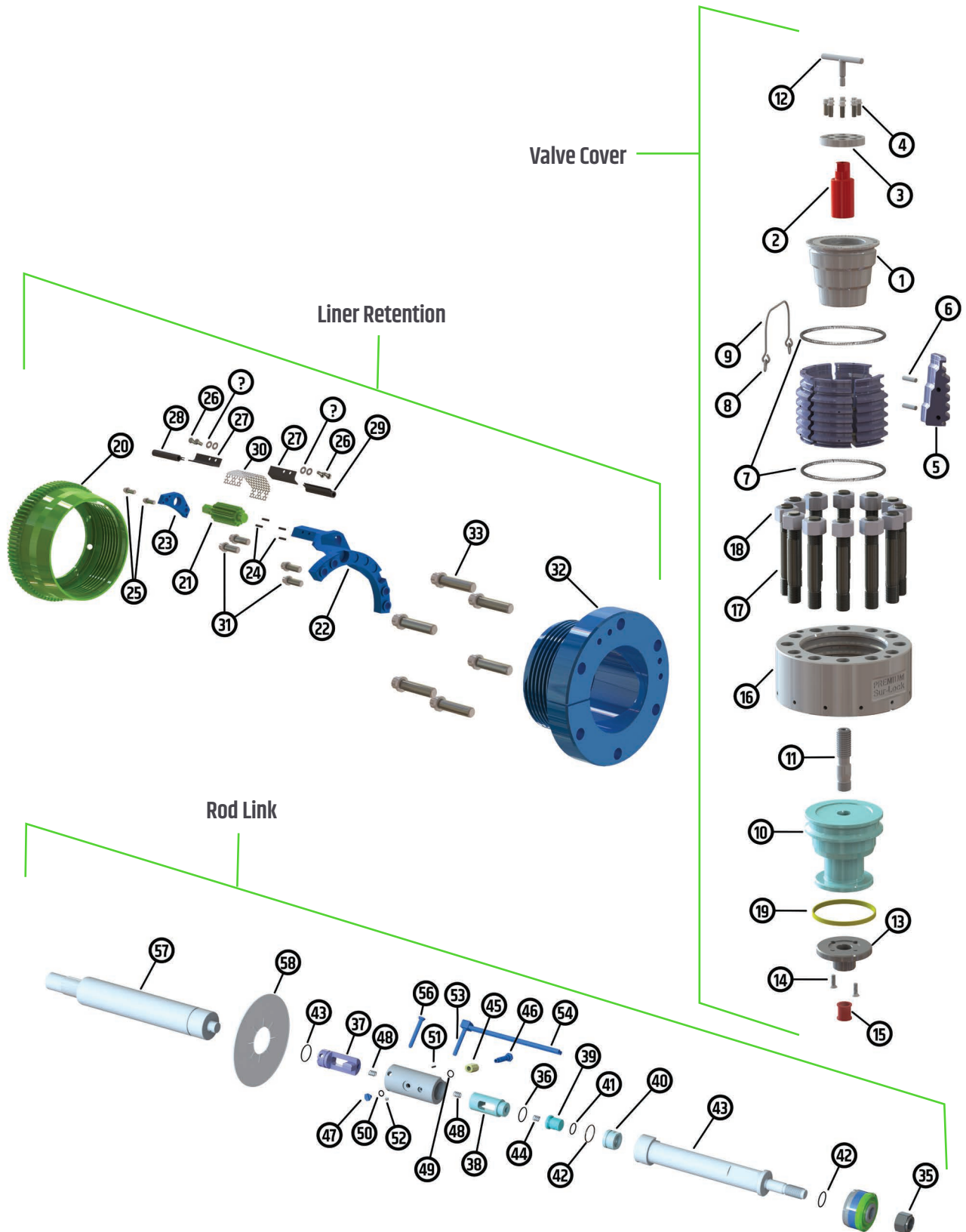
Save time and reduce failure points by eliminating the need for a hydraulic pump. **With our proprietary “taper lock” mechanism you simply use a standard wrench to unload the pins for removal.**

Our low profile water jet design can be used on pistons 4.5” and up. This system is fully interchangeable with P-Quip’s Rod Link System allowing you to effortlessly replace only the sub rod in “plug & play” fashion.

Sur-Lock[®] Liner Retainer

Designed to drastically reduce the amount of time it takes to change a liner, the Sur-Lock[®] Liner Retainer **eliminates the need for hammers** to generate the necessary torque required by integrating a torque multiplying pinion and bull gear into a conventional liner retention system. **We also reduced the weight of our liner nut to make change-outs safer and easier. The time to install a liner and tighten to the required torque is reduced to 45 seconds.**

SUR-LOCK™ MODULE COMPONENTS



MODULE COMPONENTS

| Item No. | Part Number | Part Description | Qty. Per Pump |
|--|---------------|------------------------------------|---------------|
| Sur-Lock Valve Cover Assembly | | | |
| | 627-0080 | Sur-Lock Valve Cover Assembly | 6 |
| | 627-0191 | Locking Cone Assembly (Items 1-4) | 6 |
| 1 | 627-0186 | Locking Cone | 6 |
| 2 | 627-0025 | Cone Nut | 6 |
| 3 | 627-0026 | Nut Retainer | 6 |
| 4 | 204-843 | 12pt Cap Screw .500-13 | 48 |
| | 627-0189 | Segment Assembly (Items 5-9) | 6 |
| 5 | 627-0185 | Locking Segments (Set Of 6) | 6 |
| 6 | 601-0043 | Dowel Pin .500 Dia. X 1.500l | 72 |
| 7 | 601-0048 | Extension Spring .375 Dia. | 12 |
| 8 | 601-0082 | Connector Link | 12 |
| 9 | 627-0193 | Handle | 6 |
| | 627-0083 | Valve Cover Assembly (Items 10-15) | 6 |
| 10 | 627-0082 | Valve Cover | 6 |
| 11 | 627-0022 | Stud, Valve Cover | 6 |
| 12 | 627-0036 | T-Handle | 6 |
| | 154-51500-00 | Valve Guide Assembly (Items 13-15) | 6 |
| 13 | 154-51500-01 | Body, Valve Guide | 6 |
| 14 | 170-04B13-07 | FHCS 1/2-13 X 1.500 Long | 12 |
| 15 | 206-44U07-00 | Insert, Valve Guide | 6 |
| 16 | 627-0060 | Ring Flange | 6 |
| 17 | 170-14A06-09S | Stud 1.500-6 X 10.000 LG | 72 |
| 18 | 170-14A06-00 | Nut 1.500-6 | 72 |
| 19 | 204-01U19-00 | Seal, Valve Cover (P-119) | 6 |
| Sur-Lock Liner Retention Assembly | | | |
| 20 | 629-0075 | Liner Nut | 3 |
| | 629-0076 | Pinion Bracket Assy (Items 21-30) | 3 |
| 21 | 629-0079 | Pinion | 3 |
| 22 | 629-0077 | Bracket | 3 |
| 23 | 629-0078 | Retainer | 3 |
| 24 | 601-0121 | Spring Pin, 420ss, .250 X 1.000LG | 12 |
| 25 | 204-841 | 12pt Screw, .500-13unc X 1.000LG | 6 |
| 26 | 202-419 | Hex Head, .375-16unc X .750LG | 12 |
| 27 | 629-0109 | Plate, Side Guards | 6 |
| 28 | 629-0080 | Guard Angle, Left Side | 3 |
| 29 | 629-0081 | Guard Angle, Right Side | 3 |
| 30 | 629-0082 | Pinion Guard | 3 |
| 31 | 204-1269 | 12pt Screw, .750-10unc X 2.000LG | 12 |
| 32 | 629-0083 | Liner Bushing | 3 |
| 33 | 170-11B07-06 | 12pt Screw, 1.125-7unc X 4.5"LG | 18 |

| Item No. | Part Number | Part Description | Qty. Per Pump |
|-----------------------------------|-------------|--|---------------|
| Sur-Lock Rod Link Assembly | | | |
| | 628-0073 | Piston Rod C/W Nut (Items 34-35) | 3 |
| 34 | 628-0072 | Piston Rod | 3 |
| 35 | 211-027 | Nylon Nut, 1.5-6unc | 3 |
| | 628-0054-N | Sub Rod Assembly W/ Pins (Items 36-52) | 3 |
| 36 | 628-0047 | Housing | 3 |
| 37 | 628-0048 | Female Coupling | 3 |
| | 628-0049 | Male Coupling Sub-Assembly (Items 38-44) | 3 |
| 38 | 628-0050 | Body, Male Coupling | 3 |
| 39 | 628-0051 | Nose, Male Coupling | 3 |
| 40 | 628-0052 | Collar, Male Coupling | 3 |
| 41 | 3N7-2220 | 2-220 O-Ring, NBR 70 Duro | 3 |
| 42 | 3N7-2228 | 2-228 O-Ring, NBR 70 Duro | 3 |
| 43 | 3N9-2225 | 2-225 O-Ring, NBR 90 Duro | 3 |
| 44 | 601-0052 | Spring, 3/4" OD X 1.00 LG | 3 |
| 45 | 628-0025 | Wedge Block | 3 |
| 46 | 628-0151 | Lock Screw | 3 |
| 47 | 628-0152 | Lock Screw Retainer | 3 |
| 48 | 601-0052 | Spring, 3/4" OD X 1.00 LG | 3 |
| 49 | 3N7-2211 | 2-211 O-Ring, NBR 70 Duro | 3 |
| 50 | 3N7-2208 | 2-208 O-Ring, NBR 70 Duro | 3 |
| 51 | 601-0113 | Spring Pin, 1/4" X 7/8" LG, SS | 3 |
| 52 | 601-0009 | Grease Fitting, 1/8 NPT | 3 |
| | 628-0057 | Water Jet Assembly (Items 53-55) | 3 |
| 53 | 628-0028 | Water Jet Block | 3 |
| 54 | 628-0056 | Water Jet Tube 1/4 NPT | 6 |
| 55 | 601-0306 | Fitting 1/2 NPT X 1/2 JIC | 3 |
| 56a | 628-0031 | Pin, Standard 5" & Up | 6 |
| 56b | 628-0032 | Pin, Low Profile, 4.5" & Up | 3 |
| 57 | 628-0074 | Extension Rod | 3 |
| 58 | 628-0077 | Splash Shield | 3 |

Since 2003, Premium Oilfield Technologies has been supplying quality products to the oil and gas industry.

Our core focus is to provide performance enhancing solutions that meet the strictest safety standards. We have developed, tested, and enhanced mud pump components, top drives, mud valves, RCD/MPD systems, shaker screens, and other drilling products that decrease downtime, improve safety, and perform in the toughest drilling environments.

Premium Oilfield Technologies has worldwide locations and operations in all of the U.S. major shale plays. Our field locations boast a crew of experienced technical sales representatives that visit each rig several times per month. Geographic positioning allows us to directly supply our products to more than 500 drilling rigs every day.

- ◆ Industry standard, fully interchangeable parts and systems
- ◆ Performance-enhancing hammerless technology
- ◆ Time saving safety enhancements
- ◆ Field-based rig site technical support
- ◆ Managed rig site inventory 24/7/365
- ◆ Strict onsite testing and quality assurance





**NO
TIME
FOR
DOWN
TIME**

CORPORATE

Premium Oilfield Technologies - USA

10600 W. Sam Houston Pkwy. North
Houston, TX 77064
T: +1 281.670.5200

USA MANUFACTURING & REPAIR

Patriot and Urethane

10600 W. Sam Houston Pkwy. North
Houston, TX 77064
T: +1 281.670.5228

Premium Drilling Equipment and Support

9841 Windmill Park Ln.
Houston, TX 77064
T: +1 281.670.5200

Well Service Solutions and Equipment

2904 SCR 1250
Midland, TX 79706
T: +1 432.563.2338

West Texas Operations - All Divisions

10207 West Industrial Ave.
Midland, TX 79706
T: +1 432.332.3651

Patriot Screens

4602 S. MacArthur Blvd.
Oklahoma City, OK 73179
T: +1 405.470.6553

NORTH AMERICA FIELD SALES, SERVICES AND REPAIR OFFICES

California / Colorado / Louisiana / New Mexico / North Dakota / Oklahoma / Pennsylvania / Texas / Utah
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INTERNATIONAL

KUWAIT

Premium Oilfield Technologies

P.O. Box 721
Yarmouk, Kuwait 72658
T: +965 99679126
T: +965 66022296

INDIA

PMR Mud Riggers India Private Limited

21/17, D-1 Block, MIDC
Chinchwad, Pune MH 411019
India

SAUDI ARABIA

Premium Mud Pumps Trading Est.

P.O. Box 956
Dammam, KSA
Postal Code: 31951
T: +966 50 0157516

UAE

Premium Oilfield Technologies Trading LLC

P.O. Box 89561
Dubai, UAE
T: +971 55 889 7210
T: +971 56 986 3834

UAE

Premium Oilfield Technologies FZE Top Drive Solutions

S700, PLOT S30229
Jebel Ali Free Zone (South)
P.O. Box 262263
Dubai, UAE
T: +971 4 889 4897
T: +971 506587570

UAE

Premium Oilfield Technologies FZE Mud Pump Solutions

S700, PLOT S30229
Jebel Ali Free Zone (South)
P.O. Box 262263
Dubai, UAE
T: +971 4 889 4897
T: +971 558897210



Premium Oilfield Technologies
Q1-3977
ISO 9001:2015
Certificate Number: 5028



sales@premiumoilfield.com
premiumoilfield.com

061724

SUR-LOCK

CALIBER

TRU-FLOW

PATRIOT™



LOGAN
Power Swivel