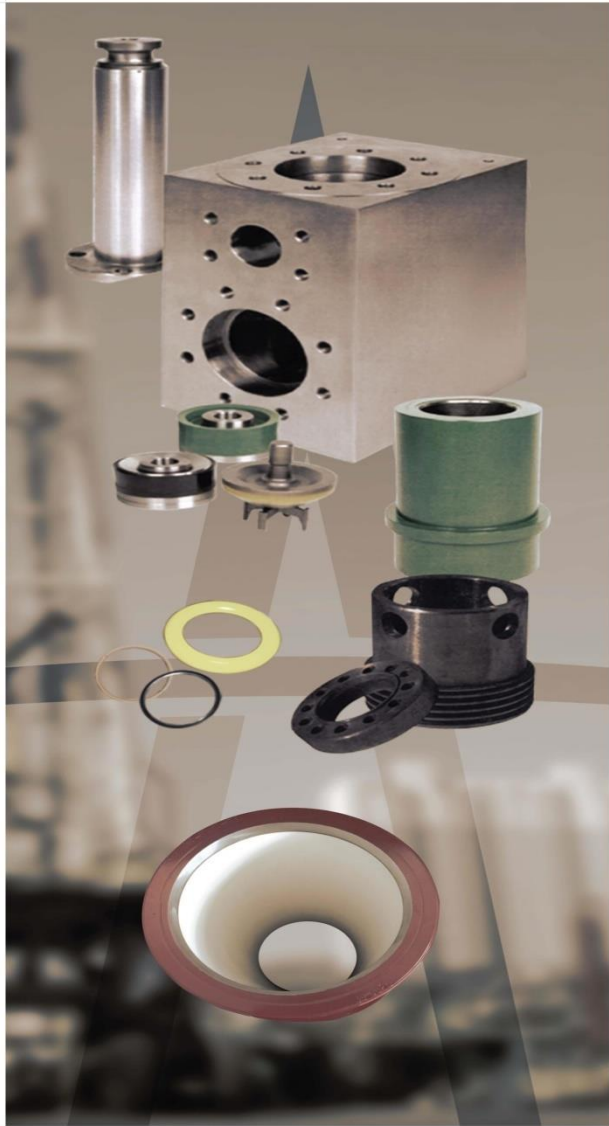




MUD PUMP SPARE PARTS MANUAL

MUD PUMP SPARE PARTS MANUAL



Oilman Group (Oilman International LLC) has been supplying International Drilling Contractors with OEM and /or OEM Equivalent mud pump fluid end parts since its establishment in 1999, by jointly working with Mud King Products Inc of USA.

----Mud pump fluid end parts for NOV pump (P and F pump), Gardner Denver (PZ pump) , BOMCO (F pump) and HH (F pump)

---Frac pump fluid end module and AR valves for FMC, GD, SPM pump

---BOMCO made F series Mud pump

---RS made PZ series Mud pump

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MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

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MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

EMSCO

6³/₄ × 7

F-350

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0146-40 | G-0281 |
| 4½" | 0146-44 | G-0281 |
| 5" | 0146-50 | G-0281 |
| 5½" | 0146-54 | G-0281 |
| 6" | 0146-60 | G-0281 |
| 6¼" | 0146-62 | G-0281 |
| 6½" | 0146-64 | G-0281 |
| 6¾" | 0146-66 | G-0281 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0733 | G-0281 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|----------------|---------|---------|----------|-----------------|-------------|
| P-4 WEB | U5B-05 | 5DD-B1 | 5710-111 | UDD-5B | 1700-5 |
| P-FULL OPEN | 5DFO-V1 | 5DFO-S1 | 5710-030 | 5DFO-SI | 1700-5FO |
| P-DOUBLE ANGLE | 0500117 | 0508623 | 05147900 | 0515844 | 1700-5BA |
| P-PLATE TYPE | 0504991 | 0508623 | 05144230 | 0504888 | 1700-5BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400-10 | I40HK10 | I40HK | RB-400-10 | LL-400-10 |
| 4½" | RT-440-10 | I44HK10 | I44HK | RB-440-10 | LL-440-10 |
| 5" | RT-500-10 | I50HB10 | I50HB | RB-500-10 | LL-500-10 |
| 5½" | RT-540-10 | I54HB10 | I54HB | RB-540-10 | LL-540-10 |
| 6" | RT-600-10 | I60HB10 | I60HB | RB-600-10 | LL-600-10 |
| 6½" | RT-640-10 | I64HL10 | I64HL | RB-640-10 | LL-640-10 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0147 | N/A | 16-0142 | 24-0146 | 7403224 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

EMSCO

6³/₄ × 7¹/₂

F-500

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0146-40 | G-0281 |
| 4½" | 0146-44 | G-0281 |
| 5" | 0146-50 | G-0281 |
| 5½" | 0146-54 | G-0281 |
| 6" | 0146-60 | G-0281 |
| 6¼" | 0146-62 | G-0281 |
| 6½" | 0146-64 | G-0281 |
| 6¾" | 0146-66 | G-0281 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0733 | G-0281 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|----------------|---------|---------|----------|-----------------|-------------|
| P-4 WEB | U5B-05 | 5DD-B1 | 5710-111 | UDD-5B | 1700-5 |
| P-FULL OPEN | 5DFO-V1 | 5DFO-S1 | 5710-030 | 5DFO-SI | 1700-5FO |
| P-DOUBLE ANGLE | 0500117 | 0508623 | 05147900 | 0515844 | 1700-5BA |
| P-PLATE TYPE | 0504991 | 0508623 | 05144230 | 0504888 | 1700-5BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400-10 | I40HK10 | I40HK | RB-400-10 | LL-400-10 |
| 4½" | RT-440-10 | I44HK10 | I44HK | RB-440-10 | LL-440-10 |
| 5" | RT-500-10 | I50HB10 | I50HB | RB-500-10 | LL-500-10 |
| 5½" | RT-540-10 | I54HB10 | I54HB | RB-540-10 | LL-540-10 |
| 6" | RT-600-10 | I60HB10 | I60HB | RB-600-10 | LL-600-10 |
| 6½" | RT-640-10 | I64HL10 | I64HL | RB-640-10 | LL-640-10 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0146 | N/A | 16-0142 | 24-0146 | 7403224 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

EMSCO

6³/₄ × 8

F-650

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0146-40 | G-0281 |
| 4½" | 0146-44 | G-0281 |
| 5" | 0146-50 | G-0281 |
| 5½" | 0146-54 | G-0281 |
| 6" | 0146-60 | G-0281 |
| 6¼" | 0146-62 | G-0281 |
| 6½" | 0146-64 | G-0281 |
| 6¾" | 0146-66 | G-0281 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0733 | G-0281 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|----------------|---------|---------|----------|-----------------|-------------|
| P-4 WEB | U5B-05 | 5DD-B1 | 5710-111 | UDD-5B | 1700-5 |
| P-FULL OPEN | 5DFO-V1 | 5DFO-S1 | 5710-030 | 5DFO-SI | 1700-5FO |
| P-DOUBLE ANGLE | 0500117 | 0508623 | 05147900 | 0515844 | 1700-5BA |
| P-PLATE TYPE | 0504991 | 0508623 | 05144230 | 0504888 | 1700-5BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0151 | N/A | 16-0141 | 24-0147 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

EMSCO

6³/₄ × 9

F-800

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0148-40 | G-0282 |
| 4½" | 0148-44 | G-0282 |
| 5" | 0148-50 | G-0282 |
| 5½" | 0148-54 | G-0282 |
| 6" | 0148-60 | G-0282 |
| 6¼" | 0148-62 | G-0282 |
| 6½" | 0148-64 | G-0282 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0740 | G-0282 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-111 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-111 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115 | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-110L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-2 | 951 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0520008 | 05139890 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0520008 | 05139880 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0150 | N/A | 16-0150 | 24-0150 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

EMSCO

6³/₄ × 10

F-1000

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0148-40 | G-0282 |
| 4½" | 0148-44 | G-0282 |
| 5" | 0148-50 | G-0282 |
| 5½" | 0148-54 | G-0282 |
| 6" | 0148-60 | G-0282 |
| 6¼" | 0148-62 | G-0282 |
| 6½" | 0148-64 | G-0282 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0740 | G-0282 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-111 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-111 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115 | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-110L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-2 | 951 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0520008 | 05139890 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0520008 | 05139880 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0148 | N/A | 16-0148 | 24-0148 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

EMSCO

7½ × 12

FB-1300

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 2145-40 | G-0800 |
| 4½" | 2145-44 | G-0800 |
| 5" | 2145-50 | G-0800 |
| 5½" | 2145-54 | G-0800 |
| 6" | 2145-60 | G-0800 |
| 6¼" | 2145-62 | G-0800 |
| 6½" | 2145-64 | G-0800 |
| 6¾" | 2145-66 | G-0800 |
| 7" | 2145-70 | G-0800 |
| 7½" | 2145-74 | G-0800 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0741 | G-0801 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-115 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-115 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-115 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-115L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05139890 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05139880 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | N/A | N/A |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 2145 | N/A | 16-0145 | 24-0145 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

EMSCO

7½ × 12

FB-1600

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 2145-40 | G-0800 |
| 4½" | 2145-44 | G-0800 |
| 5" | 2145-50 | G-0800 |
| 5½" | 2145-54 | G-0800 |
| 6" | 2145-60 | G-0800 |
| 6¼" | 2145-62 | G-0800 |
| 6½" | 2145-64 | G-0800 |
| 6¾" | 2145-66 | G-0800 |
| 7" | 2145-70 | G-0800 |
| 7½" | 2145-74 | G-0800 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0741 | G-0801 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-115 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-115 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-115 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-115L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05139890 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05139880 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | N/A | N/A |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 2145 | N/A | 16-0145 | 24-0145 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

OPI

7 x 8

700HDL

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0481-40 | G-0753 |
| 4½" | 0481-44 | G-0754 |
| 5" | 0481-50 | G-0742 |
| 5½" | 0481-54 | G-0743 |
| 6" | 0481-60 | G-0745 |
| 6½" | 0481-64 | G-0746 |
| 7" | 0481-70 | G-0756 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0745 | G-0745 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115 | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-115 | RN6-I | 1700-6FO |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | | |
|-------------|------------|---------|---------------|---------------------|------------------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | EXTENSION ROD CLAMP | PISTON ROD CLAMP | PISTON ROD NUT |
| CLAMP TYPE | 0482 | 0482-B | 16-0481 | 24-0481 | 24-0482 | 7403364 |
| THREAD TYPE | 0481 | 0481-B | 16-0481 | N/A | N/A | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

GARDNER DENVER

5 × 8

PAH (All Models), PJ8A

| Liners & Liner Packing | | | |
|------------------------|---------------------|---------------|---------------------|
| SIZES | LINER (Small OD) | LINER PACKING | LINER (Large OD) |
| 3" | 0189-30 | G-0266 | |
| 3½" | 0189-34 | G-0266 | 0193-34 |
| 4" | 0189-40 | G-0266 | 0193-40 |
| 4½" | 0189-44 | G-0266 | 0193-44 |
| 5" | | G-0266 | 0193-50 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0799 | G-0799 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------|---------|---------|----------|--------------------|----------------|
| P-FULL OPEN | 4DFO-V1 | 4FFO-S5 | 5710-033 | 4FFO-SI | 1700-4FO |
| P-3 WEB | PJ482A | PJ451 | 5710-078 | PJ452 | 1700-4GD |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|----------------|-------------------------------|-----------------|-------------------------|---------------|-------------------------|
| 3" | N/A | | I30HA | N/A | N/A |
| 3½" | N/A | I34HK14/15 | I34HK | N/A | N/A |
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |

* ¼ Size are available upon request

| RODS | | | | | |
|-------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| CLAMP TYPE. | 0193 | N/A | 16-0192 | 24-0191 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

GARDNER DENVER TEE, TGE

4 × 5

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 3" | 1190-30 | G-0174 |
| 3½" | 1190-34 | G-0174 |
| 4" | 1190-40 | G-0174 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| 25AL20 | 25AL20 |

| | ABRASION RESISTANT |
|------------------------|--|
| VALVE ASSEMBLY | 209TEE482 (Includes Valve Body, Cage, Spring and Insert) |
| INSERT | ARI-10 |
| SPRING | 2116523 |
| VALVE SEAT PULLER HEAD | 1700-16SN |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 3" | N/A | I30HA10 | I30HA | N/A | N/A |
| 3½" | N/A | I34HK10 | I34HK | N/A | N/A |
| 4" | RT-400-10 | I40HK10 | I40HK | RB-400-10 | LL-400-10 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|------------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0204 | N/A | 300TEE839 | 201TAE092A | 7403224 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

GARDNER DENVER

7 x 7

PZ-GA & GB

PZ-7

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 1192-40 | G-0692 |
| 4½" | 1192-44 | G-0692 |
| 5" | 1192-50 | G-0692 |
| 5½" | 1192-54 | G-0692 |
| 6" | 1192-60 | G-0692 |
| 6¼" | 1192-62 | G-0692 |
| 6½" | 1192-64 | G-0692 |
| 6¾" | 1192-66 | G-0692 |
| 7" | 1192-70 | G-0692 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0749 | G-0749 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HB | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HB | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|-------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| CLAMP TYPE | 0205 | N/A | 16-0205 | 24-0191 | 7403364 |
| THREAD TYPE | 0196 | N/A | 16-0196 | N/A | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

GARDNER DENVER

7 x 8

PZ-H-E,VE

PZ-8

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 1191-40 | G-0692 |
| 4½" | 1191-44 | G-0692 |
| 5" | 1191-50 | G-0692 |
| 5½" | 1191-54 | G-0692 |
| 6" | 1191-60 | G-0692 |
| 6¼" | 1191-62 | G-0692 |
| 6½" | 1191-64 | G-0692 |
| 6¾" | 1191-66 | G-0692 |
| 7" | 1191-70 | G-0692 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0749 | G-0749 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|-------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| CLAMP TYPE | 0191 | N/A | 16-0192 | 24-0191 | 7403364 |
| THREAD TYPE | 0202 | N/A | 16-0196 | N/A | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

GARDNER DENVER

7 x 9

PZ-GA & GB

PZ-9

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 1191-40 | G-0692 |
| 4½" | 1191-44 | G-0692 |
| 5" | 1191-50 | G-0692 |
| 5½" | 1191-54 | G-0692 |
| 6" | 1191-60 | G-0692 |
| 6¼" | 1191-62 | G-0692 |
| 6½" | 1191-64 | G-0692 |
| 6¾" | 1191-66 | G-0692 |
| 7" | 1191-70 | G-0692 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0749 | G-0749 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|-------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| CLAMP TYPE | 0191 | N/A | 16-0191 | 24-0191 | 7403364 |
| THREAD TYPE | 0202 | N/A | 16-0201 | N/A | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

GARDNER DENVER

7 × 10

PZL

PZ-10

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0197-40 | G-0692 |
| 4½" | 0197-44 | G-0692 |
| 5" | 0197-50 | G-0692 |
| 5½" | 0197-54 | G-0692 |
| 6" | 0197-60 | G-0692 |
| 6¼" | 0197-62 | G-0692 |
| 6½" | 0197-64 | G-0692 |
| 6¾" | 0197-66 | G-0692 |
| 7" | 0197-70 | G-0692 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0780 | G-0780 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|-------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| CLAMP TYPE | 0200 | N/A | 16-0200 | 24-0200 | 7403364 |
| THREAD TYPE | 0201 | N/A | 16-0201 | N/A | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

GARDNER DENVER

7 × 11

PZL

PZ-11

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0197-40 | G-0692 |
| 4½" | 0197-44 | G-0692 |
| 5" | 0197-50 | G-0692 |
| 5½" | 0197-54 | G-0692 |
| 6" | 0197-60 | G-0692 |
| 6¼" | 0197-62 | G-0692 |
| 6½" | 0197-64 | G-0692 |
| 6¾" | 0197-66 | G-0692 |
| 7" | 0197-70 | G-0692 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0780 | G-0780 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 500110 | 509309 | 5147900 | 514275 | 1700-7BA |
| P-PLATE TYPE | 505062 | 509309 | 5144230 | 504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|-------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| CLAMP TYPE | 200 | N/A | 16-0200 | 24-0200 | 7403364 |
| THREAD TYPE | 201 | N/A | 16-0201 | N/A | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

IDECO

7 × 8

T-500

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0234-40 | MKG-0783 |
| 4½" | 0234-44 | MKG-0783 |
| 5" | 0234-50 | MKG-0783 |
| 5½" | 0234-54 | MKG-0783 |
| 6" | 0234-60 | MKG-0783 |
| 6¼" | 0234-62 | MKG-0783 |
| 6½" | 0234-64 | MKG-0783 |
| 6¾" | 0234-66 | MKG-0783 |
| 7" | 0234-70 | MKG-0783 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0783 | G-0783 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115L | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-115L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-2 | 950 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0520008 | 05147900 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0520008 | 05144230 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO | 0237 | N/A | 16-0237 | 24-0237 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

IDECO

7 x 9

T-800

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0230-40 | G-0783 |
| 4½" | 0230-44 | G-0783 |
| 5" | 0230-50 | G-0783 |
| 5½" | 0230-54 | G-0783 |
| 6" | 0230-60 | G-0783 |
| 6¼" | 0230-62 | G-0783 |
| 6½" | 0230-64 | G-0783 |
| 6¾" | 0230-66 | G-0783 |
| 7" | 0230-70 | G-0783 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0783 | G-0783 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115L | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-115L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-2 | 950 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0520008 | 05147900 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0520008 | 05144230 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO | 0230 | N/A | 16-0230 | 24-0230 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

IDECO

7 x 10

T-1000

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0230-40 | G-0783 |
| 4½" | 0230-44 | G-0783 |
| 5" | 0230-50 | G-0783 |
| 5½" | 0230-54 | G-0783 |
| 6" | 0230-60 | G-0783 |
| 6¼" | 0230-62 | G-0783 |
| 6½" | 0230-64 | G-0783 |
| 6¾" | 0230-66 | G-0783 |
| 7" | 0230-70 | G-0783 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0783 | G-0783 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115L | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-115L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-2 | 950 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0520008 | 05147900 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0520008 | 05144230 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0230 | N/A | 16-0231 | 24-0230 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

IDECO

7½ × 12

T-1300

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0233-40 | G-0782 |
| 4½" | 0233-44 | G-0782 |
| 5" | 0233-50 | G-0782 |
| 5½" | 0233-54 | G-0782 |
| 6" | 0233-60 | G-0782 |
| 6¼" | 0233-62 | G-0782 |
| 6½" | 0233-64 | G-0782 |
| 6¾" | 0233-66 | G-0782 |
| 7" | 0233-70 | G-0782 |
| 7½" | 0233-74 | G-0782 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0782 | G-0782 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-115 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-115 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-115 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-115L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | RB-740 | LL-740 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0233 | N/A | 16-0233 | 24-0233 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

IDECO

7½ × 12

T-1600

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0233-40 | G-0782 |
| 4½" | 0233-44 | G-0782 |
| 5" | 0233-50 | G-0782 |
| 5½" | 0233-54 | G-0782 |
| 6" | 0233-60 | G-0782 |
| 6¼" | 0233-62 | G-0782 |
| 6½" | 0233-64 | G-0782 |
| 6¾" | 0233-66 | G-0782 |
| 7" | 0233-70 | G-0782 |
| 7½" | 0233-74 | G-0782 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0782 | G-0782 |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-115 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-115 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-115 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-115L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | RB-740 | LL-740 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 233 | N/A | 16-0233 | 24-0233 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

OILWELL

7 x 8

A-560-PT

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0287-40 | G-0753 |
| 4½" | 0287-44 | G-0754 |
| 5" | 0287-50 | G-0742 |
| 5½" | 0287-54 | G-0743 |
| 6" | 0287-60 | G-0745 |
| 6¼" | 0287-62 | G-0770 |
| 6½" | 0287-64 | G-0746 |
| 6¾" | 0287-66 | G-0755 |
| 7" | 0287-70 | G-0756 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0732 | N/A |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115L | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-115L | RN6-I | 1700-6FO |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | | |
|-----------------|------------|---------|----------------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | CONNECTING ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0283-C | 0283-A | 0283-D | 16-0283 | 24-0283 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

OILWELL

7 x 8

A-350/600-PT

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0287-40 | G-0753 |
| 4½" | 0287-44 | G-0754 |
| 5" | 0287-50 | G-0742 |
| 5½" | 0287-54 | G-0743 |
| 6" | 0287-60 | G-0745 |
| 6¼" | 0287-62 | G-0770 |
| 6½" | 0287-64 | G-0746 |
| 6¾" | 0287-66 | G-0755 |
| 7" | 0287-70 | G-0756 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0732 | N/A |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B6 | 5710-111 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B6 | 5710-111 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S6 | 5710-115 | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561380 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S6 | 5710-111 | RN6-I | 1700-6FO |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |

* ¼ Size are available upon request

| RODS | | | | | | |
|-----------------|------------|---------|----------------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | CONNECTING ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0283-C | 0283-B | 0283-D | 16-0282 | 24-0284 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

OILWELL

7 × 8

A-850-PT

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0289-40 | G-0753 |
| 4½" | 0289-44 | G-0754 |
| 5" | 0289-50 | G-0742 |
| 5½" | 0289-54 | G-0743 |
| 6" | 0289-60 | G-0745 |
| 6¼" | 0289-62 | G-0770 |
| 6½" | 0289-64 | G-0746 |
| 6¾" | 0289-66 | G-0755 |
| 7" | 0289-70 | G-0756 |
| 7¼" | 0289-72 | G-0757 |
| 7½" | 0289-74 | G-0758 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0760 | N/A |

*Also available in small OD, 0285-XX

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | N/A | N/A |

* ¼ Size are available upon request

| RODS | | | | | | |
|----------|------------|---------|----------------|---------------|-----------|----------------|
| PART NO. | PISTON ROD | SUB ROD | CONNECTING ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| | 0283-C | 0283-A | 0283-D | 16-0284 | 24-0284 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

OILWELL

7½ × 10

A-1100-PT

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0289-40 | G-0753 |
| 4½" | 0289-44 | G-0754 |
| 5" | 0289-50 | G-0742 |
| 5½" | 0289-54 | G-0743 |
| 6" | 0289-60 | G-0745 |
| 6¼" | 0289-62 | G-0770 |
| 6½" | 0289-64 | G-0746 |
| 6¾" | 0289-66 | G-0755 |
| 7" | 0289-70 | G-0756 |
| 7¼" | 0289-72 | G-0757 |
| 7½" | 0289-74 | G-0758 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0760 | N/A |

*Also available in small OD, 0285-XX

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | N/A | N/A |

* ¼ Size are available upon request

| RODS | | | | | | |
|----------|------------|---------|----------------|---------------|-----------|----------------|
| PART NO. | PISTON ROD | SUB ROD | CONNECTING ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| | 0283-C | 0283-A | 0283-D | 16-0284 | 24-0284 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

OILWELL

7½ × 10

A-1400-PT

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0284-40 | G-0753 |
| 4½" | 0284-44 | G-0754 |
| 5" | 0284-50 | G-0742 |
| 5½" | 0284-54 | G-0743 |
| 6" | 0284-60 | G-0745 |
| 6¼" | 0284-62 | G-0770 |
| 6½" | 0284-64 | G-0746 |
| 6¾" | 0284-66 | G-0755 |
| 7" | 0284-70 | G-0756 |
| 7¼" | 0284-72 | G-0757 |
| 7½" | 0284-74 | G-0758 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0760 | N/A |

*Also available in small OD, 0283-XX

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | N/A | N/A |

* ¼ Size are available upon request

| RODS | | | | | | |
|-----------------|------------|---------|----------------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | CONNECTING ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0283-C | 0283-A | 0283-D | 16-0284 | 24-0284 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

OILWELL

7½ × 12

A-1700-PT

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0284-40 | MKG-0753 |
| 4½" | 0284-44 | MKG-0754 |
| 5" | 0284-50 | MKG-0742 |
| 5½" | 0284-54 | MKG-0743 |
| 6" | 0284-60 | MKG-0745 |
| 6¼" | 0284-62 | MKG-0770 |
| 6½" | 0284-64 | MKG-0746 |
| 6¾" | 0284-66 | MKG-0755 |
| 7" | 0284-70 | MKG-0756 |
| 7¼" | 0284-72 | MKG-0757 |
| 7½" | 0284-74 | MKG-0758 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0760 | N/A |

*Also available in small OD, 0283-XX

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|------------|-----------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B1 | 5710-110 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B1 | 5710-110 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S1 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561370 | 1560702 | 1560557 | 1700-7G2 |
| P-3 WEB | 202PZL482A | 202PZL039 | 5710-110 | 201PZL106 | 1700-7R |
| P-ROUGHNECK | RN7-V1 | RN7-S1 | 5710-110L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-7 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0509309 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0509309 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | N/A | N/A |

* ¼ Size are available upon request

| RODS | | | | | | |
|-----------------|------------|---------|----------------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | CONNECTING ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0283-C | 0283-A | 0283-D | 16-0284 | 24-0284 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

NATIONAL

4½ × 5

JWS165/340

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 3" | 0240-30 | 1712064 |
| 3½" | 0240-34 | 1712064 |
| 4" | 0240-40 | 1712064 |
| 4½" | 0240-44 | 1712064 |

| Gaskets | |
|---------|-------------|
| JWS165 | 2410031-429 |
| JWS340 | 1718265 |

| SERIES | P – G2 | P – G2 |
|----------------------------|---------|-----------|
| | SUCTION | DISCHARGE |
| VALVE (Urethane Insert) | 1561575 | 1561575 |
| VALVE (Rubber Insert) | N/A | N/A |
| VALVE SEAT | 1561571 | 1561572 |
| VALVE SPRING | 1712211 | 1712206 |
| VALVE INSERT (Urethane) | 1561577 | 1561577 |
| VALVE INSERT (Red Thunder) | N/A | N/A |
| VALVE INSERT (Rubber) | N/A | N/A |
| VALVE SEAT PULLER HEAD | N/A | N/A |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 3" | N/A | I30HA10 | I30HA | N/A | N/A |
| 3½" | N/A | I34HK10 | I34HK | N/A | N/A |
| 4" | RT-400-10 | I40HK10 | I40HB | RB-400-10 | LL-400-10 |
| 4½" | RT-440-10 | I44HK10 | I44HK | RB-440-10 | LL-440-10 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| ONE PIECE | 0238 | | 16-0238 | 24-0238 | 7403224 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

NATIONAL

4½ × 5

JWS400

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0237-40 | G-0272 |
| 4½" | 0237-44 | G-0274 |
| 5" | 0237-50 | G-0276 |
| 5½" | 0237-54 | G-0278 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| 1715146 | N/A |

| SERIES | P – G2 | |
|----------------------------|---------|-----------|
| | SUCTION | DISCHARGE |
| VALVE (Urethane Insert) | 1561575 | 1561575 |
| VALVE (Rubber Insert) | N/A | N/A |
| VALVE SEAT | 1561561 | 1561569 |
| VALVE SPRING | 1560698 | 1717296 |
| VALVE INSERT (Urethane) | 1561577 | 1561577 |
| VALVE INSERT (Red Thunder) | N/A | N/A |
| VALVE INSERT (Rubber) | N/A | N/A |
| VALVE SEAT PULLER HEAD | N/A | N/A |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400-10 | I40HK10 | I40HK | RB-400-10 | LL-400-10 |
| 4½" | RT-440-10 | I44HK10 | I44HK | RB-440-10 | LL-440-10 |
| 5" | RT-500-10 | I50HB10 | I50HB | RB-500-10 | LL-500-10 |
| 5½" | RT-540-10 | I54HB10 | I54HB | RB-540-10 | LL-540-10 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 2239-A | 2239-B | 16-2239 | 24-2239 | 7403224 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

NATIONAL

6 1/4 x 7 3/4

7-P-50

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0257-40 | G-0272 |
| 4 1/2" | 0257-44 | G-0274 |
| 5" | 0257-50 | G-0276 |
| 5 1/2" | 0257-54 | G-0278 |
| 6" | 0257-60 | G-0280 |
| 6 1/4" | 0257-62 | G-0268 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| 61-0253 | N/A |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|----------------|---------|---------|----------|-----------------|-------------|
| P-4 WEB | U5B-05 | 5DD-B3 | 5710-111 | UDD-5B | 1700-5 |
| P-FULL OPEN | 5DFO-V1 | 5DFO-S3 | 5710-030 | 5DFO-SI | 1700-5FO |
| P-DOUBLE ANGLE | 500117 | 515745 | 5147900 | 515844 | 1700-5BA |
| P-PLATE TYPE | 504991 | 515745 | 5144230 | 504888 | 1700-5BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4 1/2" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5 1/2" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |

* 1/4 Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0257-A | 0257-B | 16-0257 | 24-0257 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

NATIONAL

6½ × 8½

8-P-80

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0256-40 | G-0272 |
| 4½" | 0256-44 | G-0274 |
| 5" | 0256-50 | G-0276 |
| 5½" | 0256-54 | G-0278 |
| 6" | 0256-60 | G-0280 |
| 6¼" | 0256-62 | G-0268 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| 61-0255 | N/A |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B4 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B4 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S4 | 5710-115 | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561450 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S4 | 5710-115L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-1 | 951 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0512436 | 05147900 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0512436 | 05155760 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HB14/15 | I64HB | RB-640 | LL-640 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0259-A | 0259-B | 16-0259 | 24-0259 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

NATIONAL

6³/₄ × 9¹/₄

9-P-100

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | N/A | N/A |
| 4½" | 0255-44 | G-0274 |
| 5" | 0255-50 | G-0265 |
| 5½" | 0255-54 | G-0263 |
| 6" | 0255-60 | G-0261 |
| 6¼" | 0255-62 | G-0283 |
| 6½" | 0255-64 | G-0283 |
| 6¾" | 0255-66 | G-0283 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| 61-0255 | N/A |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B4 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B4 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S4 | 5710-115 | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561450 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S4 | 5710-115L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-1 | 951 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0512436 | 05147900 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0512436 | 05155760 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0260-A | 0260-B | 16-0260 | 24-0260 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

NATIONAL

6³/₄ × 10

10-P-130

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | N/A | N/A |
| 4½" | 0255-44 | G-0274 |
| 5" | 0255-50 | G-0265 |
| 5½" | 0255-54 | G-0263 |
| 6" | 0255-60 | G-0261 |
| 6¼" | 0255-62 | G-0283 |
| 6½" | 0255-64 | G-0283 |
| 6¾" | 0255-66 | G-0283 |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| 61-0255 | N/A |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5B-EH | 6ADD-B4 | 5710-115 | UDD-6AB | 1700-6 |
| P-4 WEB HIGH TEMP | U5B-EHHT | 6ADD-B4 | 5710-115 | UDD-6ABHT | 1700-6 |
| P-FULL OPEN | 6FO-V1 | 6FO-S4 | 5710-115 | 6FO-SI | 1700-6FO |
| P-G2 | 1560995 | 1561450 | 1560701 | 1560587 | 1700-6G2 |
| P-ROUGHNECK | RN6-V1 | RN6-S4 | 5710-115L | RN6-I | 1700-6FO |
| P-SW FULL OPEN | 773-1 | 873-1 | 951 | 973 | 1700-6SW |
| P-DOUBLE ANGLE | 0500119 | 0512436 | 05147900 | 0515845 | 1700-6BA |
| P-PLATE TYPE | 0505038 | 0512436 | 05155760 | 0504890 | 1700-6BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |

* ¼ Size are available upon request

| RODS | | | | | |
|-----------------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0256-A | 0256-B | 16-0256 | 24-0256 | 7403364 |



MUD PUMP EXPENDABLES TRIPLEX FLUID END PARTS

NATIONAL

7½ × 12

12-P-160

| Liners & Liner Packing | | |
|------------------------|---------|---------------|
| SIZES | LINER | LINER PACKING |
| 4" | 0259-40 | G-0265 |
| 4½" | 0259-44 | G-0265 |
| 5" | 0259-50 | G-0264 |
| 5½" | 0259-54 | G-0263 |
| 6" | 0259-60 | G-0261 |
| 6¼" | 0259-62 | G-0283 |
| 6½" | 0259-64 | G-0284 |
| 6¾" | 0259-66 | G-0287 |
| 7" | 0259-70 | G-0285 |
| 7¼" | 0259-72 | G-0286 |
| 7½" | 0259-74 | N/A |

| Gaskets | |
|--------------------|----------------------|
| Valve Cover Gasket | Cylinder Head Gasket |
| G-0771 | N/A |

| SERIES | VALVE | SEAT | SPRING | URETHANE INSERT | PULLER HEAD |
|-------------------|-----------|---------|-----------|-----------------|-------------|
| P-4 WEB | U5C-EEF | 7DD-B12 | 5710-115 | UDD-7B | 1700-7 |
| P-4 WEB HIGH TEMP | U5C-EEFHT | 7DD-B12 | 5710-115 | UDD-7BHT | 1700-7 |
| P-FULL OPEN | 7FO-V1 | 7FO-S12 | 5710-115L | 7FO-SI | 1700-7FO |
| P-G2 | 1560985 | 1561440 | 1560702 | 1560557 | 1700-7G2 |
| P-ROUGHNECK | RN7-V1 | RN7-S12 | 5710-115L | RN7-I | 1700-7FO |
| P-SW FULL OPEN | 777-7 | 877-8 | 951 | 977 | 1700-7SW |
| P-DOUBLE ANGLE | 0500110 | 0514299 | 05147900 | 0514275 | 1700-7BA |
| P-PLATE TYPE | 0505062 | 0514299 | 05144230 | 0504893 | 1700-7BA |

| Piston Size | Red Thunder Bonded Pistons | Imperial Piston | Imperial Rubber Kits | Rubber Bonded | Long Life (Urethane) |
|-------------|----------------------------|-----------------|----------------------|---------------|----------------------|
| 4" | RT-400 | I40HK14/15 | I40HK | RB-400 | LL-400 |
| 4½" | RT-440 | I44HK14/15 | I44HK | RB-440 | LL-440 |
| 5" | RT-500 | I50HB14/15 | I50HB | RB-500 | LL-500 |
| 5½" | RT-540 | I54HB14/15 | I54HB | RB-540 | LL-540 |
| 6" | RT-600 | I60HB14/15 | I60HB | RB-600 | LL-600 |
| 6½" | RT-640 | I64HL14/15 | I64HL | RB-640 | LL-640 |
| 7" | RT-700 | I70HL14/15 | I70HL | RB-700 | LL-700 |
| 7½" | N/A | I74HL14/15 | I74HL | RB-740 | LL-740 |

* ¼ Size are available upon request

| RODS | | | | | |
|----------|------------|---------|---------------|-----------|----------------|
| | PISTON ROD | SUB ROD | EXTENSION ROD | ROD CLAMP | PISTON ROD NUT |
| PART NO. | 0258-A | 0258-B | 16-0258 | 24-0258 | 7403364 |



**MUD PUMP EXPENDABLES
TRIPLEX FLUID END PARTS**

FLUID END MODULE AND ACCESSORIES



FLUID END MODULE AND ACCESSORIES

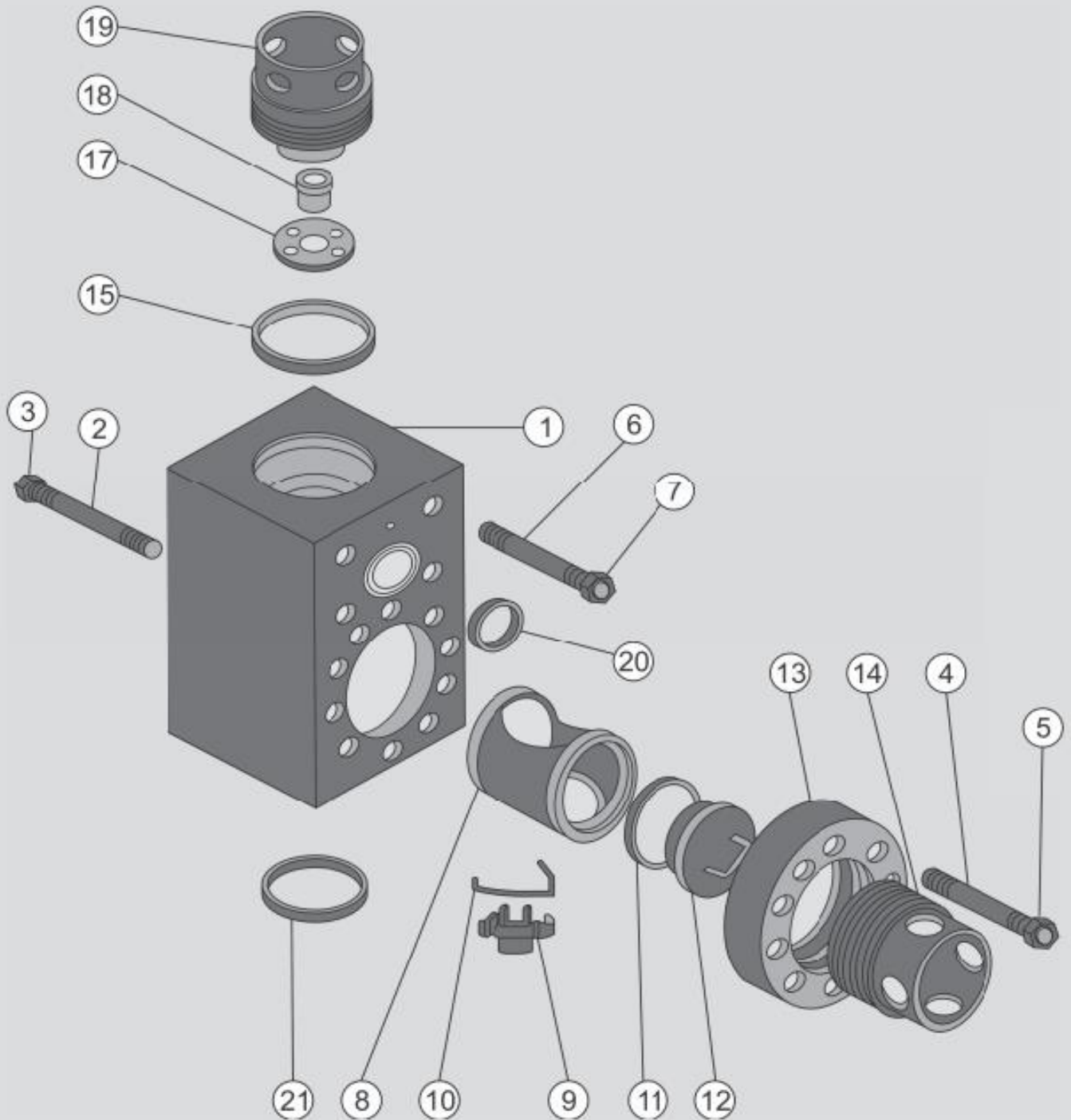
EMSCO

F-350, F-500 & F-650

| Item | Part No. | Description | Qty per Pump |
|------|---------------|---|-----------------|
| | 6318-0151-00 | Fluid Module, Studed (Included Items 2 – 7) | (3) |
| 1 | | Fluid Module, Only | 3 |
| 2 | 7507-2207-00 | Stud – Frame | 18 |
| 3 | 7601-0630-17 | Nut – Frame | 18 |
| 4 | 7507-3402-00 | Stud – Threaded Ring | 36 |
| 5 | 7601-0630-26 | Nut – Threaded Ring | 36 |
| 6 | 7507-3407-00 | Stud – Discharge Manifold | 12 |
| 7 | 7601-0630-26 | Nut – Discharge Manifold | 12 |
| 8 | 6318-0148-00 | Liner Cage | 3 |
| 9 | 6318-0177-00 | Lower Valve Guide with Bushing | 3 |
| 10 | 6318-0153-00 | Locking Clip | 3 |
| 11 | 7602-2200-34 | Gasket – Liner | 6 |
| 12 | 6318-0158-00 | Cylinder Head Plug | 3 |
| 13 | 6318-0130-00 | Threaded Ring | 3 |
| 14 | 6318-0157-00 | Cylinder Head | 3 |
| 15 | 6310-0084-00 | Gasket – Valve Pot Cover | 3 |
| 16 | 7501-0051-00* | Retainer Bolt | 12 |
| 17 | 6310-0133-00 | Retainer Plate | 3 |
| 18 | 6397-0602-00 | Upper Valve Guide | 3 |
| 19 | 6310-0016-01 | Valve Pot Cover | 3 |
| 20 | 7602-1600-23 | Gasket – Discharge Manifold | 3 |
| 21 | 7602-1600-33 | Gasket – Suction Manifold | 3 |
| 22 | 6318-0155-00 | Lower Valve Guide Bushing | 3 |

* Not shown

FLUID END MODULE AND ACCESSORIES F-350 F-500 F-650





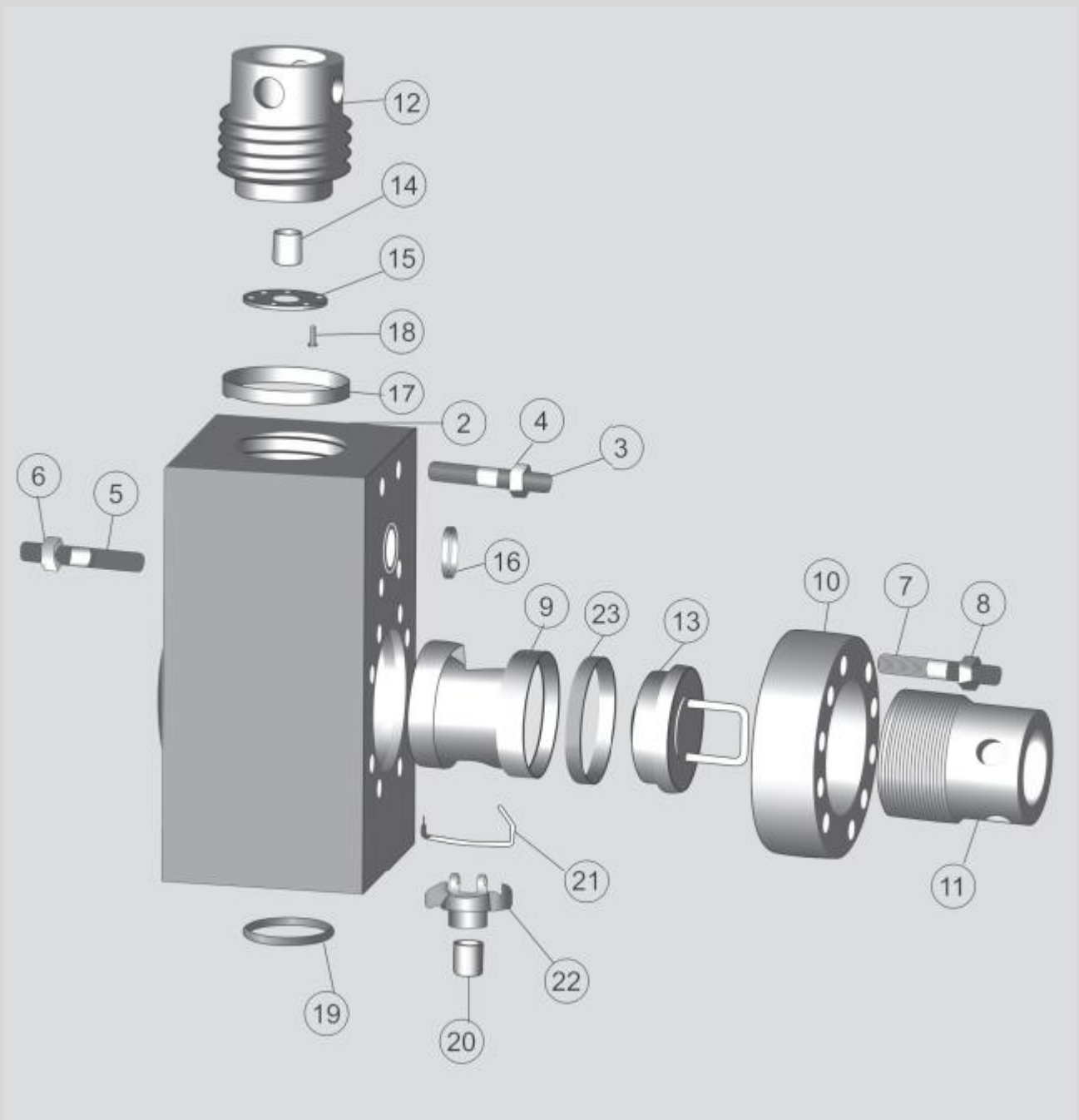
FLUID END MODULE AND ACCESSORIES

EMSCO

F-800 & F-1000

| Item | Part No. | Description | Qty per Pump |
|------|--------------|--|-----------------|
| 1 | 6999-0086-02 | Fluid Module, Studded (Included Items 2 – 8) | (3) |
| 2 | 6999-0087-02 | Fluid Module, Only | 3 |
| 3 | 7507-2108-00 | Stud – Discharge Manifold | 12 |
| 4 | 7601-0630-24 | Nut – Discharge Manifold | 12 |
| 5 | 7507-2205-00 | Stud – Frame | 18 |
| 6 | 7601-0630-17 | Nut – Frame | 18 |
| 7 | 7507-2150-00 | Stud – Threaded Ring | 30 |
| 8 | 7601-0630-26 | Nut – Threaded Ring | 30 |
| 9 | 6319-0026-00 | Liner Cage | 3 |
| 10 | 6999-0089-00 | Threaded Ring | 3 |
| 11 | 6319-0090-00 | Cylinder Head | 3 |
| 12 | 6319-0027-00 | Valve Pot Cover | 3 |
| 13 | 6319-0031-00 | Cylinder Head Plug | 3 |
| 14 | 6397-0575-00 | Upper Valve Guide | 3 |
| 15 | 6397-0603-00 | Retainer Plate | 3 |
| 16 | 7602-1610-46 | O-Ring, Discharge Manifold | 3 |
| 17 | 6319-0076-00 | Seal – Valve Pot Cover | 3 |
| 18 | 7501-0051-00 | Retainer Bolt | 12 |
| 19 | 7602-1600-61 | O-Ring – Suction Manifold | 3 |
| 20 | 6316-0096-00 | Lower Valve Guide Bushing | 3 |
| 21 | 6319-0089-00 | Locking Clip | 3 |
| 22 | 6319-0087-00 | Lower Valve Guide with Bushing | 3 |
| 23 | 7602-2200-32 | Seal – Liner, Cylinder Head Plug | 3 |

F-800 F-1000





FLUID END MODULE AND ACCESSORIES

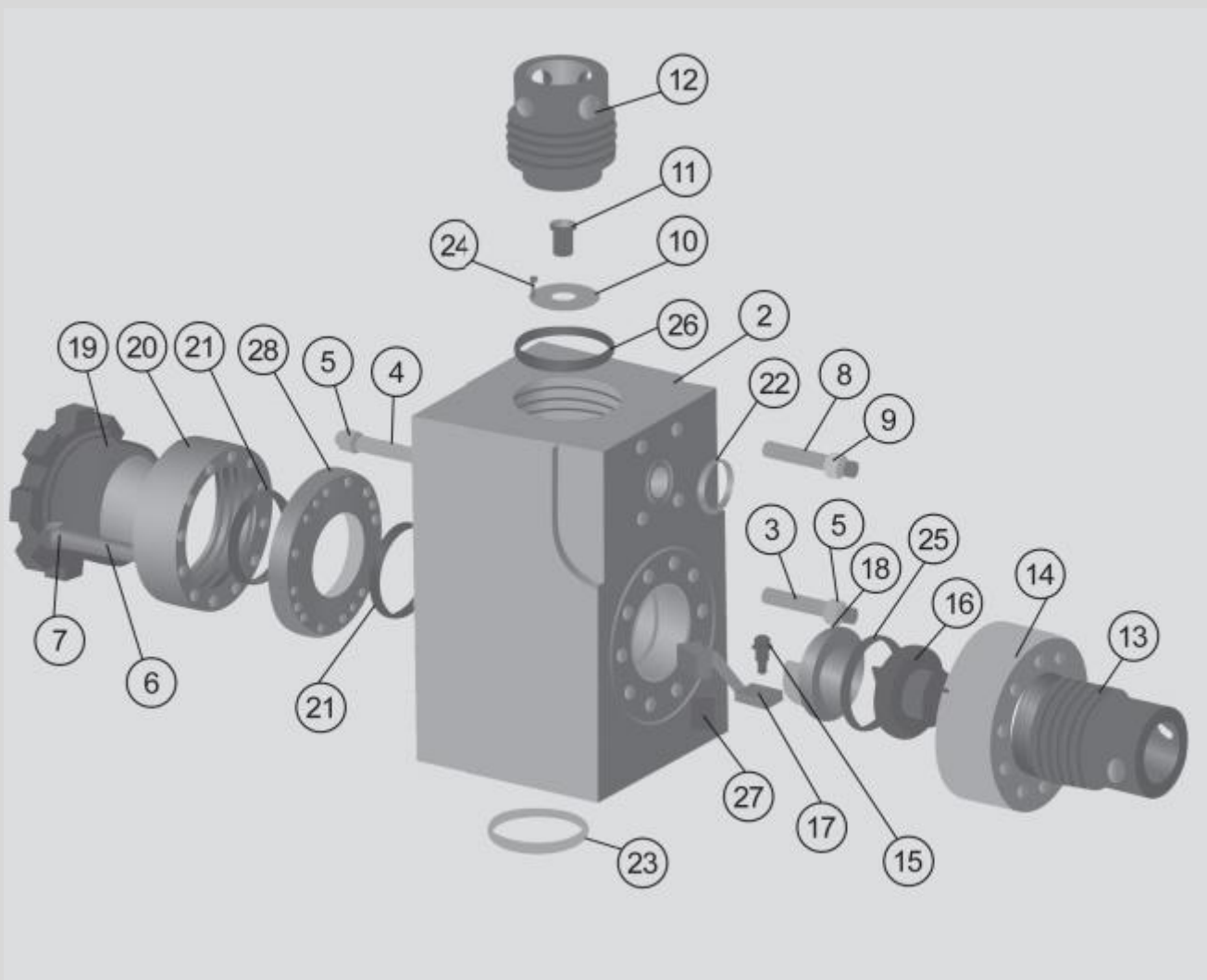
EMSCO

FB – 1300 & FB – 1600

| Item | Part No. | Description | Qty per Pump |
|------|--------------|--|-----------------|
| 1 | 6316-0357-00 | Fluid Module, Studded (Included Items 2 – 9) | (3) |
| 2 | 6316-0356-00 | Fluid Module, Only | 3 |
| 3 | 7507-2210-00 | Stud – Threaded Ring | 30 |
| 4 | 7507-2201-00 | Stud – Frame | 18 |
| 5 | 7601-0630-17 | Nut – Frame, Threaded Ring | 48 |
| 6 | 7507-2013-00 | Stud – Liner Thread Ring | 36 |
| 7 | 7601-0610-18 | Nut – Liner Thread Ring | 36 |
| 8 | 7507-2108-00 | Stud – Discharge Manifold | 12 |
| 9 | 7601-0630-24 | Nut – Discharge Manifold | 12 |
| 10 | 6397-0603-00 | Retainer Plate | 3 |
| 11 | 6397-0575-00 | Upper Valve Guide | 3 |
| 12 | 6316-0039-00 | Valve Cover | 3 |
| 13 | 6316-0362-00 | Cylinder Head | 3 |
| 14 | 6316-0361-00 | Cylinder Threaded Ring | 3 |
| 15 | 6316-0360-00 | Lock Bolt | 3 |
| 16 | 6316-0364-00 | Cylinder Head Plug | 3 |
| 17 | 6316-0354-00 | Lower Valve Guide with Bushing | 3 |
| 18 | 6316-0363-00 | Alignment Ring | 3 |
| 19 | 6316-0367-00 | Liner Lock | 3 |
| 20 | 6316-0366-00 | Liner Threaded Ring | 3 |
| 21 | 6316-0373-00 | Seal – Wear Plate, Liner | 3 |
| 22 | 7602-1600-25 | Seal – Discharge Manifold | 3 |
| 23 | 7602-1600-61 | Seal – Suction Manifold | 3 |
| 24 | 7501-0051-00 | Retainer Bolt | 12 |
| 25 | 6316-0369-00 | Seal – Cylinder Head Plug | 3 |
| 26 | 6316-0092-00 | Seal – Valve Pot Cover | 3 |
| 27 | 6316-0096-00 | Valve Guide Bushing | 3 |
| 28 | 6316-0365-00 | Wear Plate | 3 |

Offered in Plain Carbon or Stainless Steel

FB-1300 FB-1600





FLUID END MODULE AND ACCESSORIES

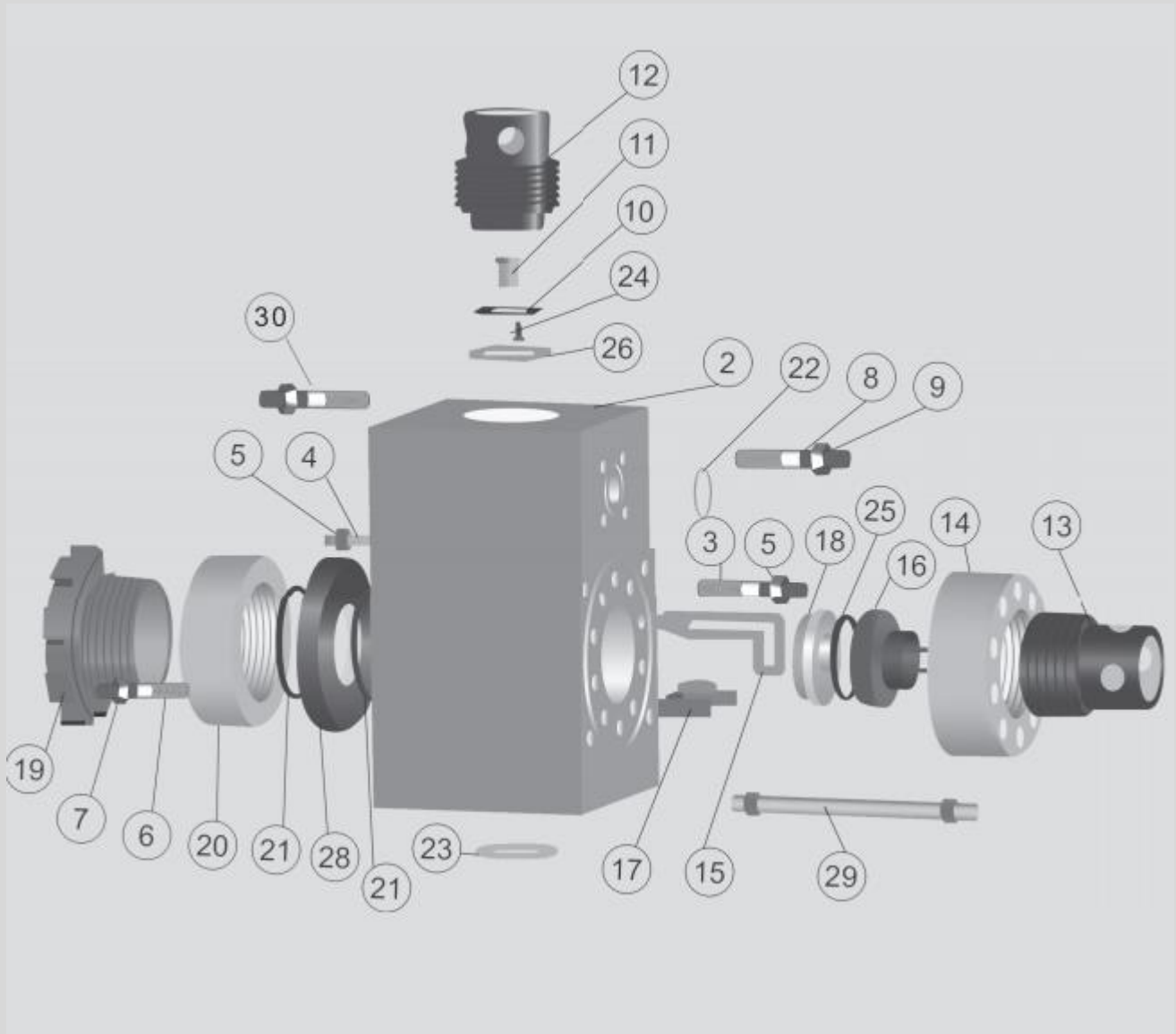
BOMCO F – 1300 & F – 1600

| Item | Part No. | Description | Qty per Pump |
|------|-------------------|--|--------------|
| 1 | AH36002-05-01-00 | Fluid Module, Studded (Included Items 2 – 9) | (3) |
| 2 | AH36002-05-01-00U | Fluid Module, Only | 3 |
| 3 | 7507-2210-00 | Stud – Threaded Ring | 30 |
| 4 | 7507-2201-00 | Stud – Frame | 18 |
| 5 | 7601-0630-17 | Nut – Frame, Threaded Ring | 48 |
| 6 | 7507-2013-00 | Stud – Liner Thread Ring | 36 |
| 7 | 7601-0610-18 | Nut – Liner Thread Ring | 36 |
| 8 | 7507-2108-00 | Stud – Discharge Manifold | 12 |
| 9 | 7601-0630-24 | Nut – Discharge Manifold | 12 |
| 10 | 6397-0603-00 | Retainer Plate | 3 |
| 11 | 6397-0575-00 | Upper Valve Guide | 3 |
| 12 | 6316-0039-00 | Valve Cover | 3 |
| 13 | 6316-0362-00 | Cylinder Head | 3 |
| 14 | 6316-0361-00 | Cylinder Threaded Ring | 3 |
| 15 | AH36001-05A.04 | Lower Valve Guide Retainer | 3 |
| 16 | AH36001-05A.06.00 | Cylinder Head Plug | 3 |
| 17 | AH36001-05A.05 | Lower Valve Guide with Bushing | 3 |
| 18 | AH36001-05A.07 | Alignment Ring | 3 |
| 19 | 6316-0367-00 | Liner Lock | 3 |
| 20 | 6316-0366-00 | Liner Threaded Ring | 3 |
| 21 | 6316-0373-00 | Seal – Wear Plate, Liner | 3 |
| 22 | 7602-1600-25 | Seal – Discharge Manifold | 3 |
| 23 | 7602-1600-61 | Seal – Suction Manifold | 3 |
| 24 | 7501-0051-00 | Retainer Bolt | 12 |
| 25 | 6316-0369-00 | Seal – Cylinder Head Plug | 3 |
| 26 | 6316-0092-00 | Seal – Valve Pot Cover | 3 |
| 27 | 6316-0096-00 | Valve Guide Bushing | 3 |
| 28 | 6316-0365-00 | Wear Plate | 3 |
| 29 | AH36002-01 | Frame Stud c/w 2 nuts | 12 |
| 30 | AH36002-02 | Frame Stud c/w 1 nut | 12 |

Offered in Plain Carbon or Stainless Steel

* Not shown

BOMCO F-1300 F-1600



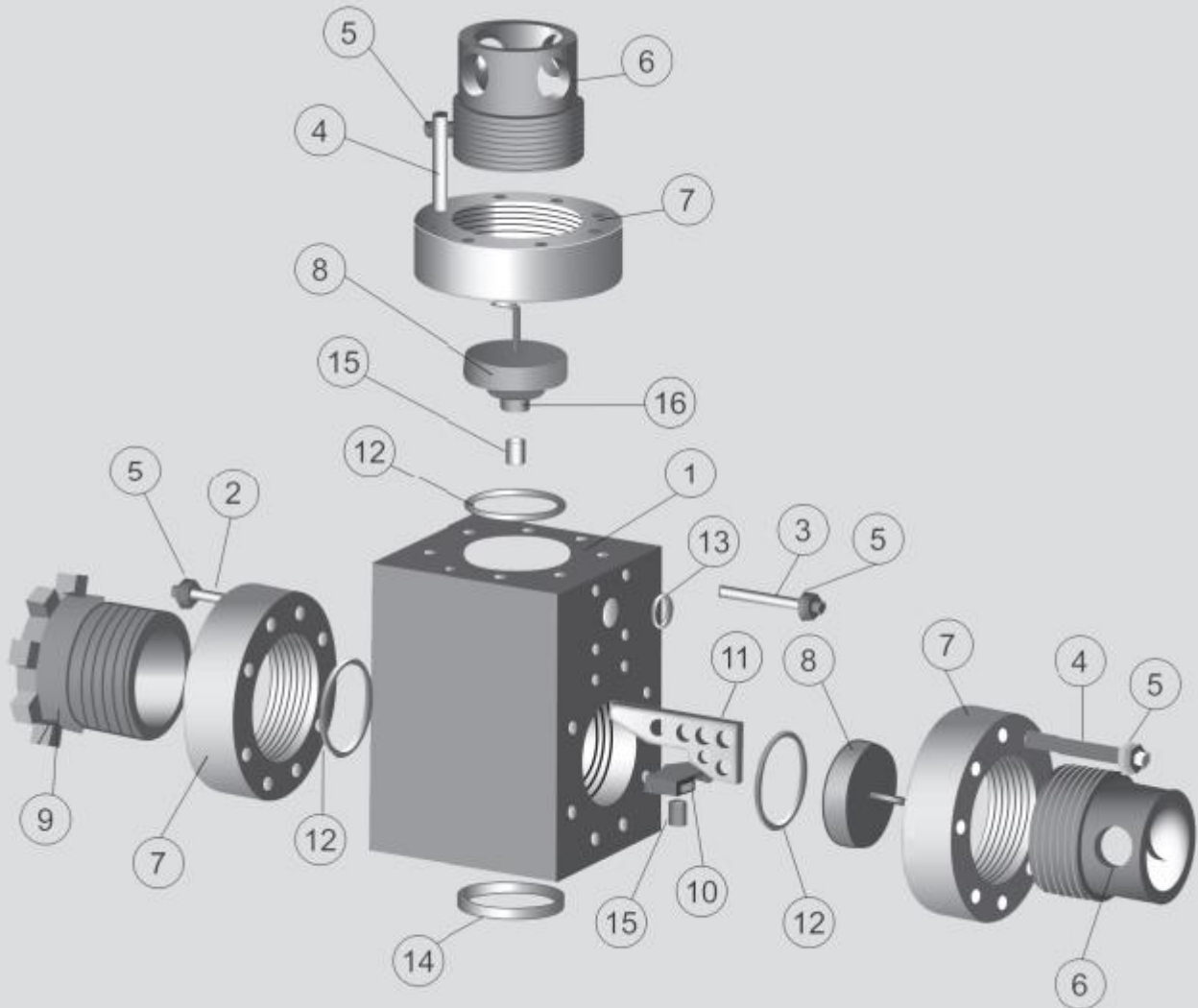


FLUID END MODULE AND ACCESSORIES

IDECO T-500, T-800 & T-1000

| Item | Part No. | Description | Qty per Pump |
|------|----------------|---|--------------|
| 1 | 551-458 | Fluid Module, Only (Studded Included Items 1 – 5) | 3 |
| 2 | 551-410-01 | Stud – Frame | 24 |
| 3 | 551-410-02 | Stud – Discharge Manifold | 12 |
| 4 | 551-410-03 | Stud – Threaded Ring | 48 |
| 5 | IN-416 | Nut | 84 |
| 6 | 551-405-04 | Threaded Plug Retainer | 6 |
| 7 | 551-405-03 | Threaded Ring | 9 |
| 8 | 551-422-02 | Cylinder Head Plug | 3 |
| | 551-422-03 | Cylinder Head Plug – Top (Included Items 8 & 16) | 3 |
| 9 | 551-405-05 | Threaded Liner Retainer | 3 |
| 10 | 551-405-07 | Lower Valve Guide | 3 |
| 11 | 551-422-04 | Retainer – Lower Valve Guide | 3 |
| 12 | BMT-1669-63-09 | Seal – Cylinder Head Plug, Liner | 9 |
| 13 | IO-548 | Seal – Discharge Manifold | 3 |
| 14 | IO-521 | Seal – Suction Manifold | 3 |
| 15 | 551-405-09 | Valve Guide Bushing | 6 |
| 16 | 551-405-06 | Upper Valve Guide | 3 |

T-500 T-800 T-1000



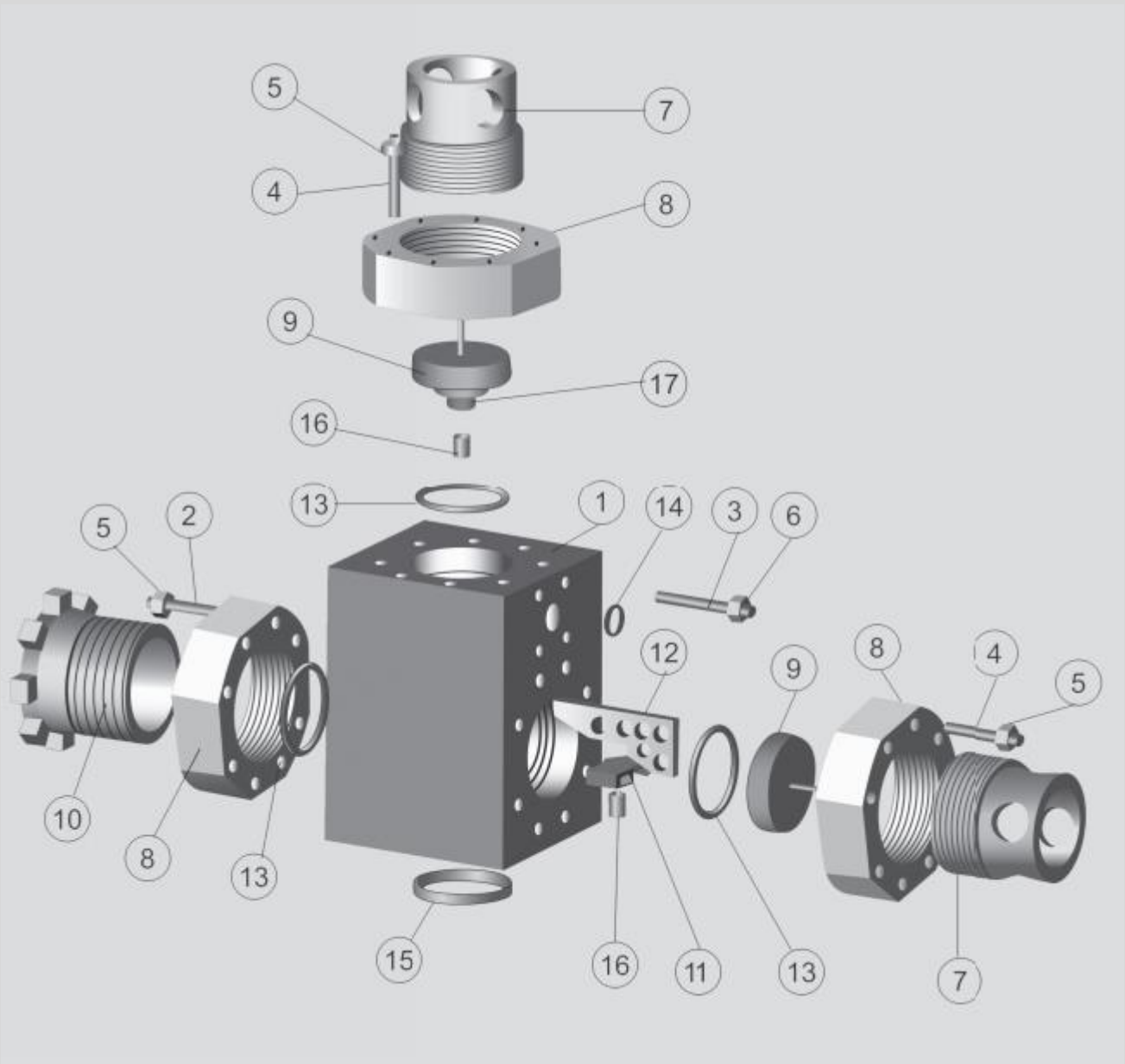


FLUID END MODULE AND ACCESSORIES

IDECO T-1300 & T-1600

| Item | Part No. | Description | Qty per Pump |
|------|----------------|--|--------------|
| 1 | 551-122-01 | Fluid Module Only (Studded Included Items 1 – 6) | 3 |
| 2 | 551-110-01 | Stud – Frame, Threaded Ring | 24 |
| 3 | 551-110-02 | Stud – Discharge Manifold | 12 |
| 4 | 551-110-03 | Stud – Threaded Ring | 48 |
| 5 | IN-415 | Nut – Threaded Ring | 72 |
| 6 | IN-416 | Nut – Discharge Manifold | 12 |
| 7 | 551-105-04 | Threaded Plug Retainer | 6 |
| 8 | 551-105-03 | Threaded Ring | 9 |
| 9 | 551-122-02 | Cylinder Head Plug | 3 |
| | 551-122-03 | Cylinder Head Plug – Top (Included Items 9 & 17) | 3 |
| 10 | 551-105-05 | Threaded Liner Retainer | 3 |
| 11 | 551-105-07 | Lower Valve Guide | 3 |
| 12 | 551-105-08 | Retainer – Lower Valve Guide | 3 |
| 13 | BMT-1669-63-08 | Seal – Cylinder Head Plug, Liner | 9 |
| 14 | IO-548 | Seal – Discharge Manifold | 3 |
| 15 | IO-507 | Seal – Suction Manifold | 3 |
| 16 | 551-105-09 | Valve Guide Bushing | 6 |
| 17 | 551-105-06 | Upper Valve Guide | 3 |

T-1300 T-1600





FLUID END MODULE AND ACCESSORIES

GARDNER DENVER PAH (All Models)

| Item | Part No. | Description | Qty per Pump |
|------|------------|--|--------------|
| 1 | 200PJH029B | Fluid Module, Studded (Included Items 2 – 6) | (3) |
| 2 | | Fluid Module, Only | 3 |
| 3 | 79AJ2 | Stud – Frame, Liner Clamp | 18 |
| 4 | 50B35 | Nut – Frame, Liner Clamp | 36 |
| 5 | 79L142 | Stud – Discharge Manifold | 12 |
| 6 | 50B9 | Nut – Discharge Manifold | 12 |
| 7 | 3PA587 | Threaded Cap | 6 |
| 8 | 200PJH147 | Cover – Valve | 6 |
| 9 | 200PJH715 | Gasket – Valve Cover | 6 |
| 10 | 2013547 | Bushing – Discharge Valve Cover | 3 |
| 11 | 200PJH205 | Retainer | 3 |
| 12 | 200PJH483 | Valve Guide – Suction | 3 |
| 13 | 25G18 | Gasket – Suction Manifold | 3 |
| 14 | 25AL54 | Gasket – Discharge Manifold | 3 |
| 15 | 1PA217 | Clamp – Liner | 3 |



FLUID END MODULE AND ACCESSORIES

GARDNER DENVER PZ-7, PZ-8 & PZ-9

| Item | Part No. | Description | Qty per Pump |
|------|------------|---|--------------|
| 1 | 205PZL029D | Fluid Module, Studded (Included Items 2 – 9) | (3) |
| 2 | | Fluid Module, Only | 3 |
| 3 | 79L188 | Stud – Frame, Liner Clamp | 24 |
| 4 | 50B36 | Nut – Frame, Liner Clamp | 48 |
| 5 | 79L73 | Stud – Frame | 12 |
| 6 | 50AQ30 | Nut – Frame | 12 |
| 7 | 79AL6 | Stud – Threaded Ring | 48 |
| 8 | 50B34 | Nut – Threaded Ring, Discharge Manifold | 60 |
| 9 | 202PZL110 | Stud – Discharge Manifold | 12 |
| 10 | 2011857 | Cap – Valve Lock | 6 |
| 11 | 2011699 | Threaded Ring | 6 |
| 12 | 2011860 | Cover – Valve | 6 |
| 13 | 2007674 | Valve Guide Bushing | 3 |
| 14 | 2011862 | Gasket – Valve Cover | 6 |
| 15 | 2011861 | Ring – Retaining / Valve Cover Gasket | 6 |
| | 2011706 | Valve Guide Assembly (Included Items 16 – 20) | -3 |
| 16 | 2011701 | Retainer Plate | 3 |
| 17 | 2011700 | Valve Guide – Suction | 3 |
| 18 | 2007674 | Valve Guide Bushing – Suction | 3 |
| 19 | 95W2 | Lock Washer – Valve Guide / Suction | 6 |
| 20 | 655EE06S | Bolt – Valve Guide / Suction | 6 |
| 21 | 25AL35 | Gasket – Discharge Manifold | 3 |
| 22 | 25G41 | Gasket – Suction Manifold | 3 |
| 23 | 1PV14 | Liner Clamp | 3 |

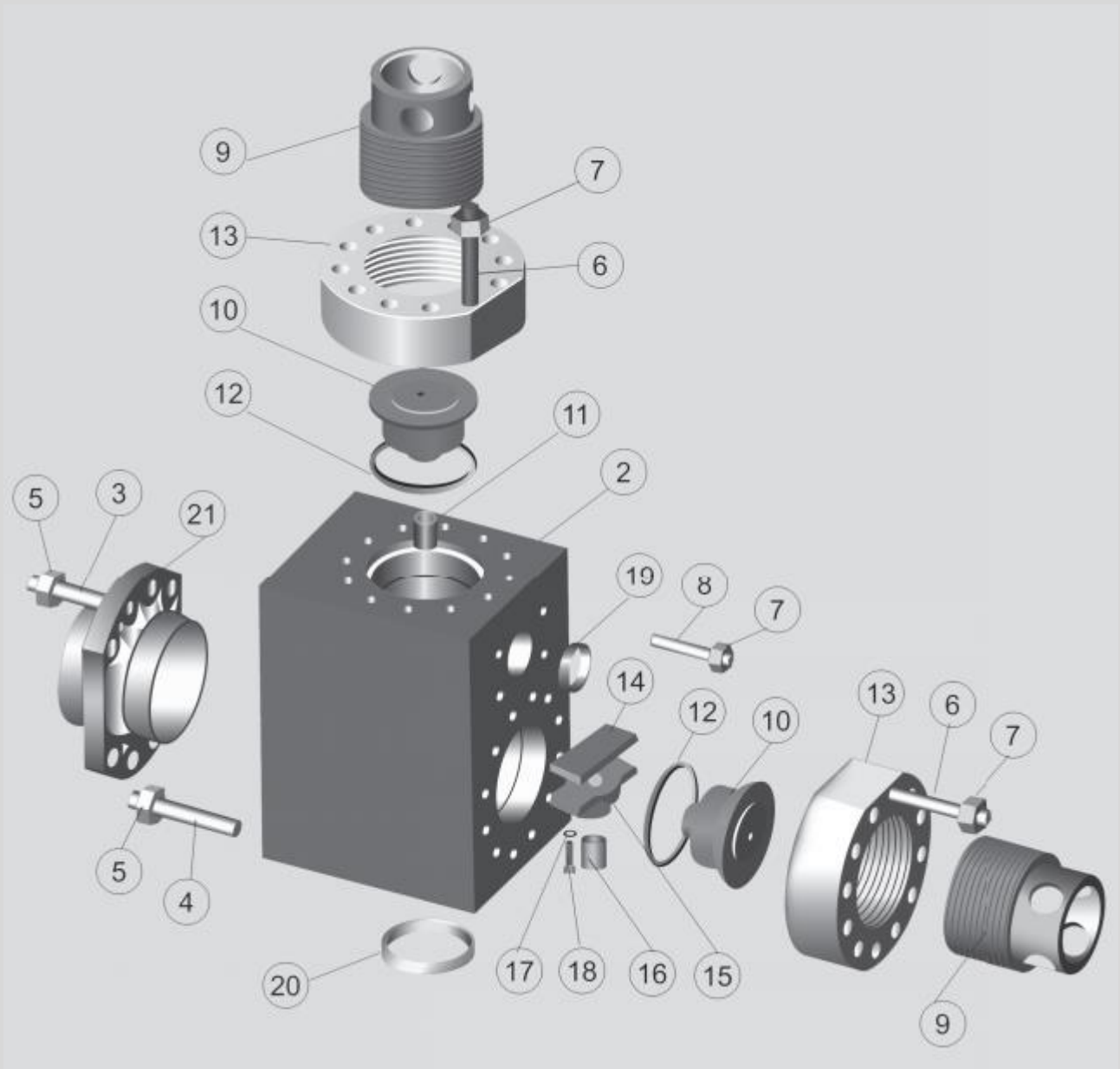


FLUID END MODULE AND ACCESSORIES

GARDNER DENVER PZ-10 & PZ-11

| Item | Part No. | Description | Qty per Pump |
|------|------------|---|--------------|
| 1 | 202PZL029B | Fluid Module, Studded (Included Items 2 – 8) | (3) |
| 2 | | Fluid Module, Only | 3 |
| 3 | 201PZL110 | Stud – Frame, Liner Clamp | 24 |
| 4 | 205PZL110 | Stud – Frame | 24 |
| 5 | 50B36 | Nut – Frame, Liner Clamp | 60 |
| 6 | 204PZL110 | Stud – Threaded Ring | 72 |
| 7 | 50B34 | Nut – Threaded Ring, Discharge Manifold | 84 |
| 8 | 202PZL110 | Stud – Discharge Manifold | 12 |
| 9 | 200PZL587 | Cap – Valve Lock | 6 |
| 10 | 200PZL147 | Cover – Valve | 6 |
| 11 | 2007674 | Valve Guide Bushing – Discharge | 3 |
| 12 | 204PZL715 | Gasket – Valve Cover | 6 |
| 13 | 200PZL387 | Threaded Ring | 6 |
| | 200PZL483A | Valve Guide Assembly (Included Items 14 – 18) | -3 |
| 14 | 2011701 | Retainer Plate | 3 |
| 15 | 200PZL483 | Valve Guide – Suction | 3 |
| 16 | 2007674 | Valve Guide Bushing – Suction | 3 |
| 17 | 95W2 | Lock Washer – Valve Guide / Suction | 6 |
| 18 | 655EE06S | Bolt – Valve Guide / Suction | 6 |
| 19 | 25AL35 | Gasket – Discharge Manifold | 3 |
| 20 | 25BE41 | Gasket – Suction Manifold | 3 |
| 21 | 200PZL455 | Liner Clamp | 3 |

PZ-10 PZ-11





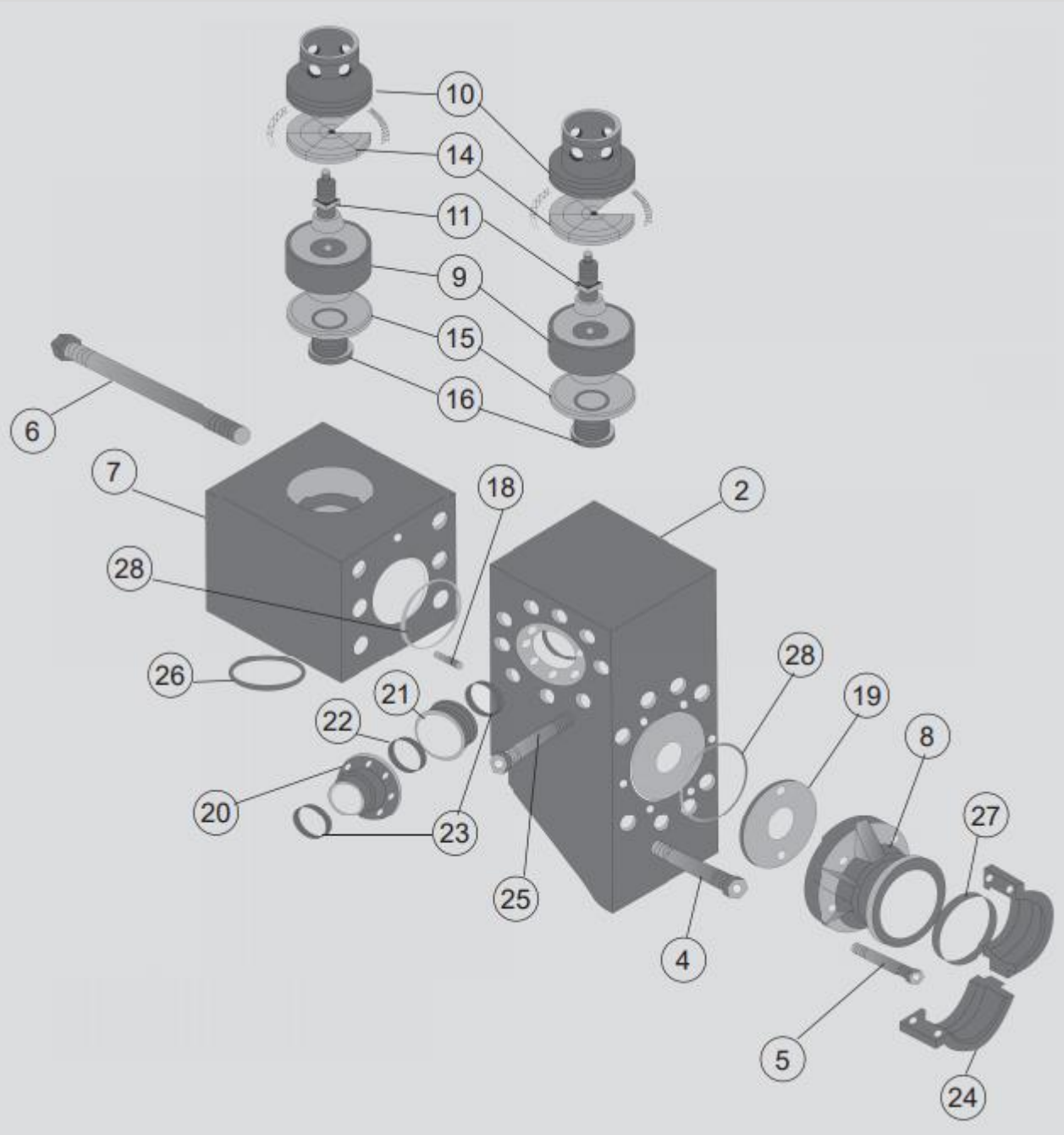
FLUID END MODULE AND ACCESSORIES

NATIONAL 7-P-50

| Item | Part No. | Description | Qty per Pump |
|------|-------------|--|--------------|
| 1 | 1294150 | Discharge Module, Studded (Included Items 2 – 7) | (3) |
| 2 | 1294151 | Discharge Module, Only | 3 |
| 3 | 6300160 | Nut – Wedge Adjusting | 24 |
| 4 | 2408042 | Stud w/Nut – Frame | 24 |
| 5 | 2408043 | Stud w/Nut – Liner Bushing | 18 |
| 6 | 2408041 | Stud w/Nut – Discharge to Suction | 18 |
| 7 | 1294156 | Suction Module | 3 |
| 8 | 1294165 | Bushing – Liner | 3 |
| 9 | 1294174 | Seal Retainer | 6 |
| 10 | 1294172 | Valve Cover | 6 |
| 11 | 1290178 | Screw – Wedge Adjusting | 6 |
| 12 | 1290315* | Washer – Wedge Adjusting | 6 |
| 13 | 1290181* | Spring – Wedge Assembly | 6 |
| 14 | 1290376 | Wedge Assembly | 6 |
| 15 | 1540126 | Gasket – Valve Cover | 6 |
| 16 | 1292140 | Holder – Valve Guide | 6 |
| 17 | 1292141* | Insert – Valve Guide | 6 |
| 18 | 6511416 | Pin, Dowell | 6 |
| 19 | 1294160 | Plate – Wear | 3 |
| 20 | 1294170 | Connector – Discharge | 2 |
| 21 | 1294171 | Adapter – Discharge Connector | 2 |
| 22 | 2410031-348 | Packing, Rectangular | 2 |
| 23 | 2410031-427 | Packing, Rectangular | 4 |
| 24 | 1294166 | Clamp – Liner | 3 |
| 25 | 2402560 | Stud w/ Nut, Discharge Spacer | 16 |
| 26 | 1 540142 | Seal – Suction Manifold | 3 |
| 27 | 1294168 | Collar – Liner | 3 |
| 28 | 1294192 | Seal – Module, Wear Plate | 6 |

Offered in Plain Carbon or Stainless Steel
Not shown

7 – P – 50





FLUID END MODULE AND ACCESSORIES

NATIONAL

8-P-80

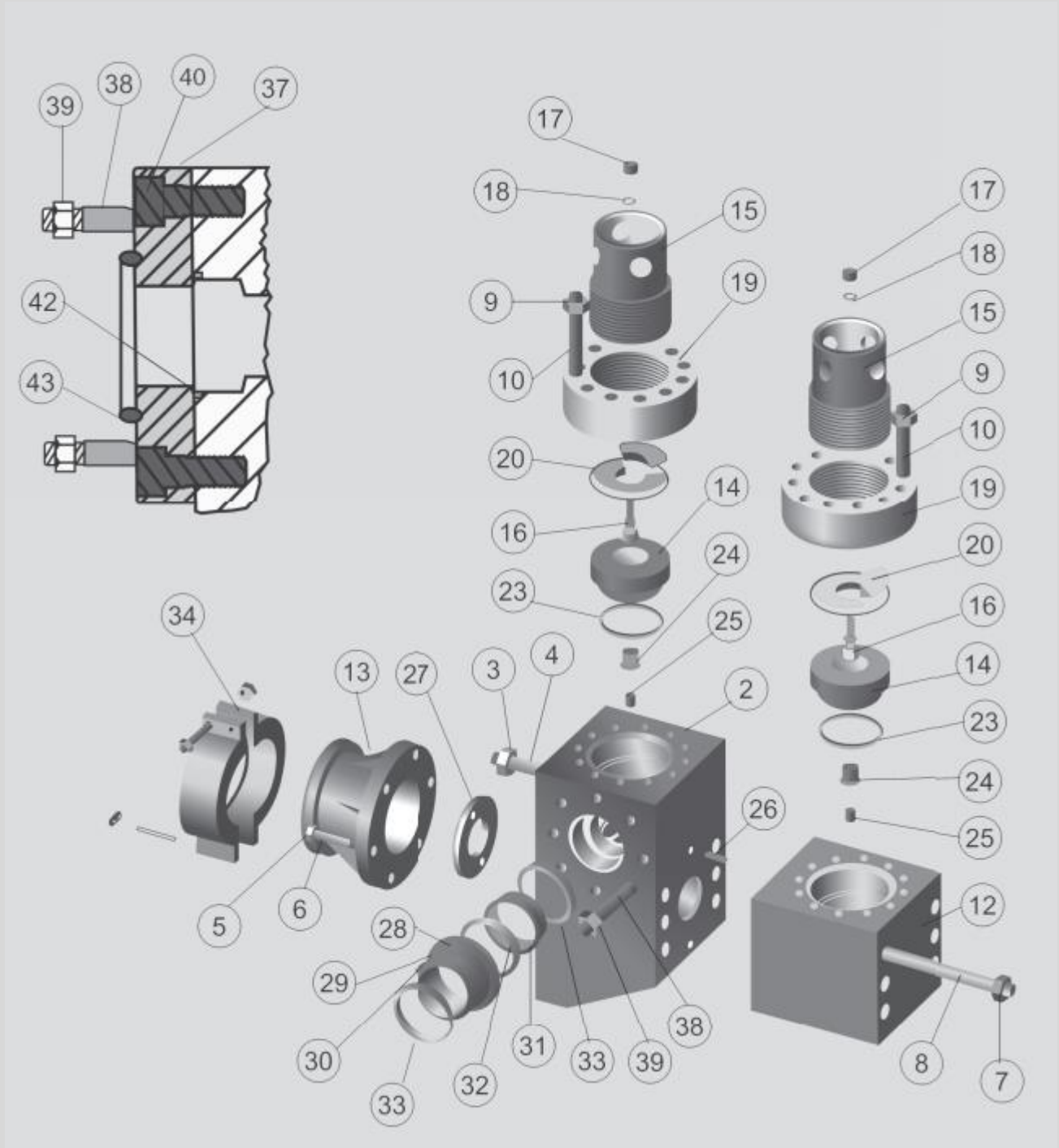
| Item | Part No. | Description | Qty per Pump |
|------|-------------|--|--------------|
| 1 | 1291280 | Discharge Module, Studded (Included Items 2 – 10) | (3) |
| 2 | 1291281 | Discharge Module, Only | 3 |
| 3 | 6300180 | Nut – Frame | 24 |
| 4 | 2408026 | Stud – Frame | 24 |
| 5 | 6300120 | Nut – Liner Bushing | 18 |
| 6 | 2408025 | Stud – Liner Bushing | 18 |
| 7 | 6300241 | Nut – Suction to Discharge Module | 18 |
| 8 | 2408034 | Stud – Suction to Discharge Module | 18 |
| 9 | 6300220 | Nut – Threaded Ring | 72 |
| 10 | 2408019 | Stud – Threaded Ring | 72 |
| 11 | 1290338 | Suction Module, Studded (Included Items 9, 10, 14) | (3) |
| 12 | 1290339 | Suction Module, Only | 3 |
| 13 | 1291165 | Bushing – Liner | 3 |
| 14 | 1290174 | Seal Retainer | 6 |
| 15 | 1290307 | Valve Cover | 6 |
| 16 | 1290178 | Screw – Wedge Adjusting | 6 |
| 17 | 6300160 | Nut – Wedge Adjusting | 6 |
| 18 | 1290315 | Washer – Wedge Adjusting | 6 |
| 19 | 1290308 | Threaded Ring | 6 |
| 20 | 1290376 | Wedge Assembly (Included Items 21 – 22) | (6) |
| 21 | 1290179* | Wedge, Set | 6 |
| 22 | 1290181* | Spring – Wedge Retaining | 6 |
| 23 | 1540126 | Gasket – Valve Cover | 6 |
| 24 | 1292140 | Holder – Valve Guide | 6 |
| 25 | 1292141 | Insert – Valve Guide | 6 |
| 26 | 6511416 | Pin, Dowell | 6 |
| 27 | 1290357 | Plate – Wear | 3 |
| 28 | 1290342 | Connector – Discharge | 2 |
| 29 | 7000305-11 | Screw, Hex Head | 16 |
| 30 | 7619050 | Washer, Lock | 16 |
| 31 | 1290343 | Adapter – Discharge Connector | 2 |
| 32 | 2410031-348 | Packing, Rectangular | 2 |
| 33 | 2410031-427 | Packing, Rectangular | 4 |
| 34 | 1291166 | Clamp – Liner | 3 |
| 35 | 1590051* | Seal – Suction Manifold | 3 |
| 36 | 1291286 | Spacer – Discharge, Studded (included items 37 – 39) | (2) |
| 37 | 1291287 | Spacer – Discharge | 2 |
| 38 | 2402560 | Stud – Discharge Spacer | 16 |
| 39 | 6300200 | Nut – Discharge Spacer | 16 |

| | | | |
|----|----------|---------------------------|------|
| 40 | 7006607 | Capscrew | (16) |
| 41 | 1290344* | Seal – Module, Wear Plate | 6 |
| 42 | 1290345 | Seal – Discharge Spacer | 2 |
| 43 | 6908033 | Ring, Oval Joint | 2 |

Offered in Plain Carbon or Stainless Steel

* Not shown

8 – P – 80





FLUID END MODULE AND ACCESSORIES

NATIONAL 9-P-100

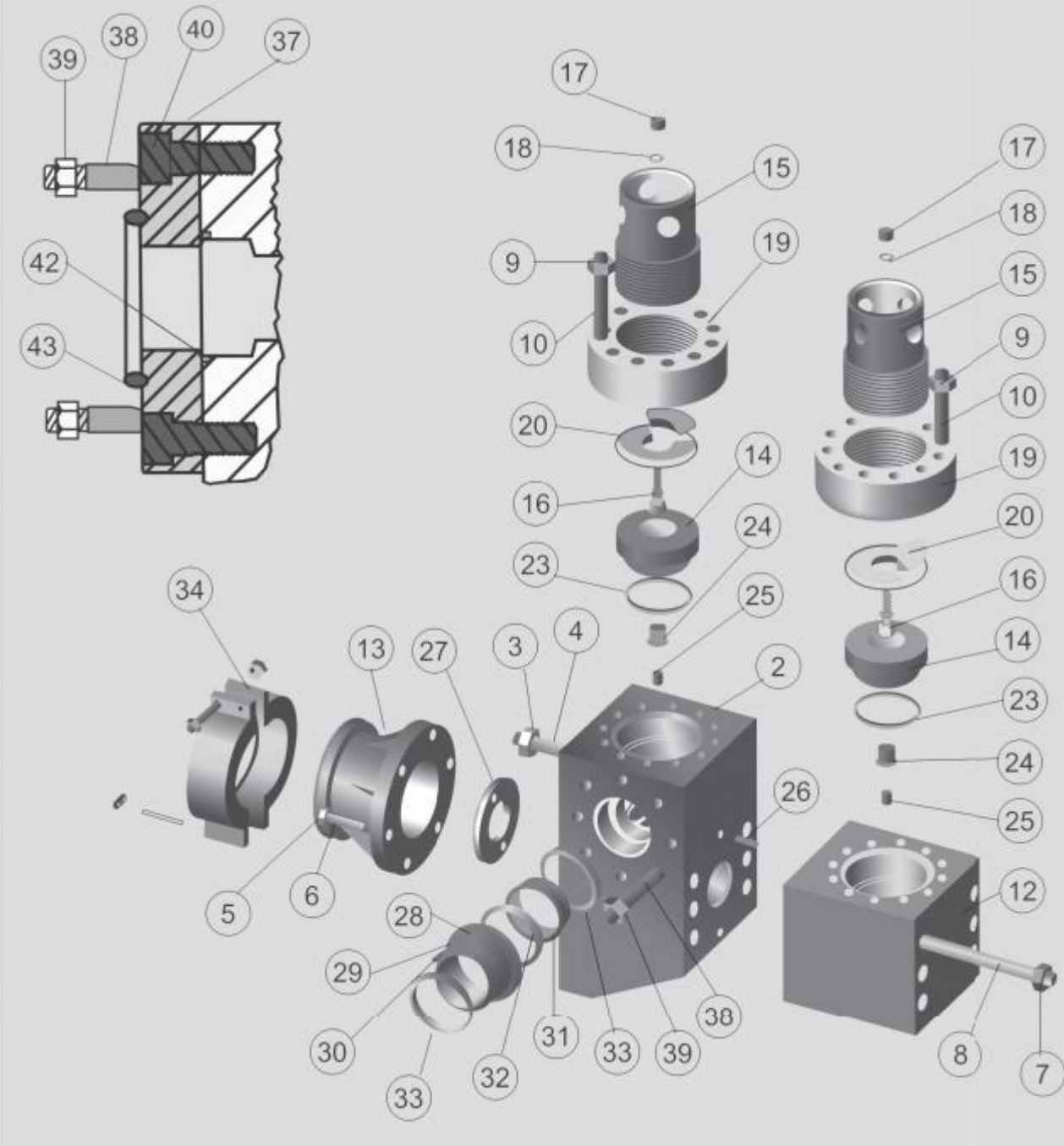
| Item | Part No. | Description | Qty per Pump |
|------|-------------|--|--------------|
| 1 | 1293240 | Discharge Module, Studded (Included Items 2 – 10) | (3) |
| 2 | 1293241 | Discharge Module, Only | 3 |
| 3 | 6300200 | Nut – Frame | 24 |
| 4 | 2408030 | Stud – Frame | 24 |
| 5 | 6300160 | Nut – Liner Bushing | 18 |
| 6 | 2408018 | Stud – Liner Bushing | 18 |
| 7 | 6300241 | Nut – Suction to Discharge Module | 18 |
| 8 | 2408034 | Stud – Suction to Discharge Module | 18 |
| 9 | 6300220 | Nut – Threaded Ring | 72 |
| 10 | 2408019 | Stud – Threaded Ring | 72 |
| 11 | 1290338 | Suction Module, Studded (Included Items 9, 10, 14) | (3) |
| 12 | 1290339 | Suction Module, Only | 3 |
| 13 | 1293165 | Bushing – Liner | 3 |
| 14 | 1290174 | Seal Retainer | 6 |
| 15 | 1290307 | Valve Cover | 6 |
| 16 | 1290178 | Screw – Wedge Adjusting | 6 |
| 17 | 6300160 | Nut – Wedge Adjusting | 6 |
| 18 | 1290315 | Washer – Wedge Adjusting | 6 |
| 19 | 1290308 | Threaded Ring | 6 |
| 20 | 1290376 | Wedge Assembly (Included Items 21 – 22) | (6) |
| 21 | 1290179* | Wedge, Set | 6 |
| 22 | 1290181* | Spring – Wedge Retaining | 6 |
| 23 | 1540126 | Gasket – Valve Cover | 6 |
| 24 | 1292140 | Holder – Valve Guide | 6 |
| 25 | 1292141 | Insert – Valve Guide | 6 |
| 26 | 6511416 | Pin, Dowell | 6 |
| 27 | 1290357 | Plate – Wear | 3 |
| 28 | 1290342 | Connector – Discharge | 2 |
| 29 | 7000305-11 | Screw, Hex Head | 6 |
| 30 | 7619050 | Washer, Lock | 6 |
| 31 | 1290343 | Adapter – Discharge Connector | 2 |
| 32 | 2410031-348 | Packing, Rectangular | 2 |
| 33 | 2410031-427 | Packing, Rectangular | 4 |
| 34 | 1293166 | Clamp – Liner | 3 |
| 35 | 1590051* | Seal – Suction Manifold | 3 |
| 36 | 1293243 | Spacer – Discharge, Studded (Included Items 37 – 39) | (2) |
| 37 | 1293244 | Spacer – Discharge | 2 |
| 38 | 2402560 | Stud – Discharge Spacer | 16 |
| 39 | 6300200 | Nut – Discharge Spacer | 16 |
| 40 | 7006606 | Capscrew | 16 |
| 41 | 1290344* | Seal – Module, Wear Plate | 6 |

| | | | |
|----|---------|-------------------------|---|
| 42 | 1290345 | Seal – Discharge Spacer | 2 |
| 43 | 6908033 | Ring, Oval Joint | 2 |

Offered in Plain Carbon or Stainless Steel

* Not shown

9 – P – 100





FLUID END MODULE AND ACCESSORIES

10-P-130

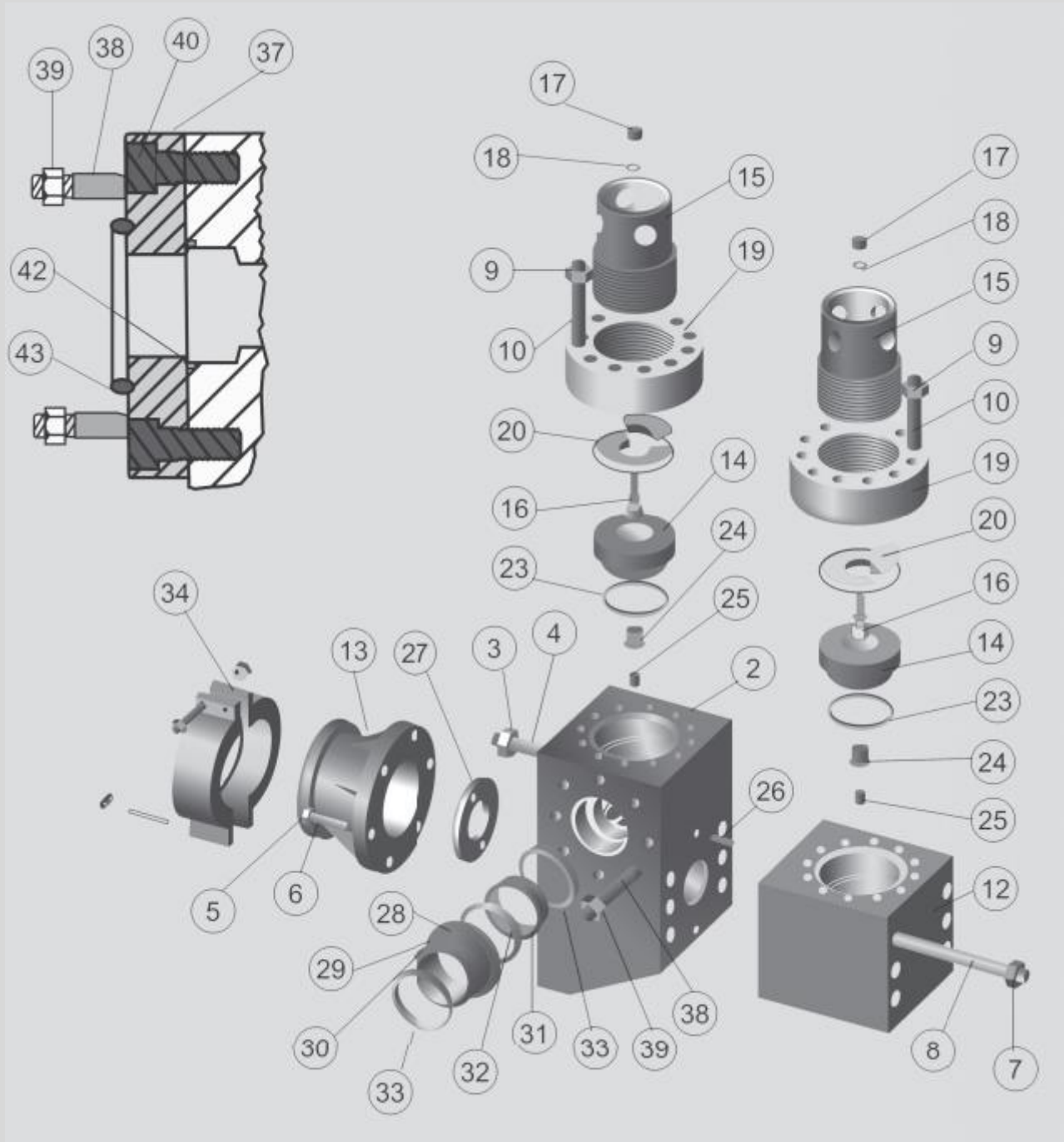
| Item | Part No. | Description | Qty per Pump |
|------|-------------|--|--------------|
| 1 | 1290335 | Discharge Module, Studded (Included Items 2 – 10) | (3) |
| 2 | 1290336 | Discharge Module, Only | 3 |
| 3 | 6300240 | Nut – Frame | 24 |
| 4 | 2408020 | Stud – Frame | 24 |
| 5 | 6300160 | Nut – Liner Bushing | 18 |
| 6 | 2408018 | Stud – Liner Bushing | 18 |
| 7 | 6300241 | Nut – Suction to Discharge Module | 18 |
| 8 | 2408034 | Stud – Suction to Discharge Module | 18 |
| 9 | 6300220 | Nut – Threaded Ring | 72 |
| 10 | 2408019 | Stud – Threaded Ring | 72 |
| 11 | 1290338 | Suction Module, Studded (Included Items 9, 10, 12) | (3) |
| 12 | 1290339 | Suction Module, Only | 3 |
| 13 | 1290165 | Bushing – Liner | 3 |
| 14 | 1290174 | Seal Retainer | 6 |
| 15 | 1290307 | Valve Cover | 6 |
| 16 | 1290178 | Screw – Wedge Adjusting | 6 |
| 17 | 6300160 | Nut – Wedge Adjusting | 6 |
| 18 | 1290315 | Washer – Wedge Adjusting | 6 |
| 19 | 1290308 | Threaded Ring | 6 |
| 20 | 1290376 | Wedge Assembly (Included Items 21 – 22) | 6 |
| 21 | 1290179* | Wedge, Set | 6 |
| 22 | 1290181* | Spring – Wedge Retaining | 6 |
| 23 | 1540126 | Gasket – Valve Cover | 6 |
| 24 | 1292140 | Holder – Valve Guide | 6 |
| 25 | 1292141 | Insert – Valve Guide | 6 |
| 26 | 6511416 | Pin, Dowell | 6 |
| 27 | 1290357 | Plate – Wear | 3 |
| 28 | 1290342 | Connector – Discharge | 2 |
| 29 | 7000305-11 | Screw, Hex Head | 16 |
| 30 | 7619050 | Washer, Lock | 16 |
| 31 | 1290343 | Adapter – Discharge Connector | 2 |
| 32 | 2410031-348 | Packing, Rectangular | 2 |
| 33 | 2410031-427 | Packing, Rectangular | 4 |
| 34 | 1290166 | Clamp – Liner | 3 |
| 35 | 1590051* | Seal – Suction Manifold | 3 |
| 36 | 1290348 | Spacer – Discharge, Studded (Included Items 37 – 39) | 2 |
| 37 | 1290341 | Spacer – Discharge | 2 |
| 38 | 2402560 | Stud – Discharge Spacer | 16 |
| 39 | 6300200 | Nut – Discharge Spacer | 16 |
| 40 | 7006605 | Capscrew | 16 |
| 41 | 1290344* | Seal – Module, Wear Plate | 6 |

| | | | |
|----|---------|-------------------------|---|
| 42 | 1290345 | Seal – Discharge Spacer | 2 |
| 43 | 6908033 | Ring – Oval Joint | 2 |

Offered in Plain Carbon or Stainless Steel

* Not shown

10 – P – 130



NATIONAL



FLUID END MODULE AND ACCESSORIES

12-P-160

| Item | Part No. | Description | Qty per Pump |
|------|-------------|--|--------------|
| 1 | 1292240 | Discharge Module, Studded (Included Items 2 – 10) | (3) |
| 2 | 1292241 | Discharge Module, Only | 3 |
| 3 | 6300220 | Nut – Frame | 30 |
| 4 | 2408029 | Stud – Frame | 30 |
| 5 | 6300180 | Nut – Liner Bushing | 18 |
| 6 | 2408028 | Stud – Liner Bushing | 18 |
| 7 | 6300281 | Nut – Suction to Discharge Module | 18 |
| 8 | 2408033 | Stud – Suction to Discharge Module | 18 |
| 9 | 6300240 | Nut – Threaded Ring | 72 |
| 10 | 2408027 | Stud – Threaded Ring | 72 |
| 11 | 1292243 | Suction Module, Studded (Included Items 9, 10, 12) | (3) |
| 12 | 1292244 | Suction Module, Only | 3 |
| 13 | 1292165 | Bushing – Liner | 3 |
| 14 | 1292174 | Seal Retainer | 6 |
| 15 | 1292172 | Valve Cover | 6 |
| 16 | 1292178 | Screw – Wedge Adjusting | 6 |
| 17 | 6300182 | Nut – Wedge Adjusting | 6 |
| 18 | 1292171 | Washer – Wedge Adjusting | 6 |
| 19 | 1292176 | Thread Ring | 6 |
| 20 | 1292268 | Wedge Assembly (Included Items 21 – 22) | 6 |
| 21 | 1292179* | Wedge, Set | 6 |
| 22 | 1292181* | Spring – Wedge Retaining | 6 |
| 23 | 1540127 | Gasket – Valve Cover | 6 |
| 24 | 1292140 | Holder – Valve Guide | 6 |
| 25 | 1292141 | Insert – Valve Guide | 6 |
| 26 | 6511416 | Pin, Dowell | 6 |
| 27 | 1292266 | Plate – Wear | 3 |
| 28 | 1292252 | Connector – Discharge | 2 |
| 29 | 7000307-11 | Screw, Hex Head | 16 |
| 30 | 7619050 | Washer, Lock | 16 |
| 31 | 1292253 | Adapter – Discharge Connector | 2 |
| 32 | 2410031-433 | Packing, Rectangular | 2 |
| 33 | 2410031-437 | Packing, Rectangular | 4 |
| 34 | 1292166 | Clamp – Liner | 3 |
| 35 | 1540851* | Seal – Suction Manifold | 3 |
| 36 | 1292262 | Spacer – Discharge, Studded (Included Items 37 – 39) | 2 |
| 37 | 1292246 | Spacer – Discharge | 2 |
| 38 | 2408015 | Stud – Discharge Spacer | 16 |



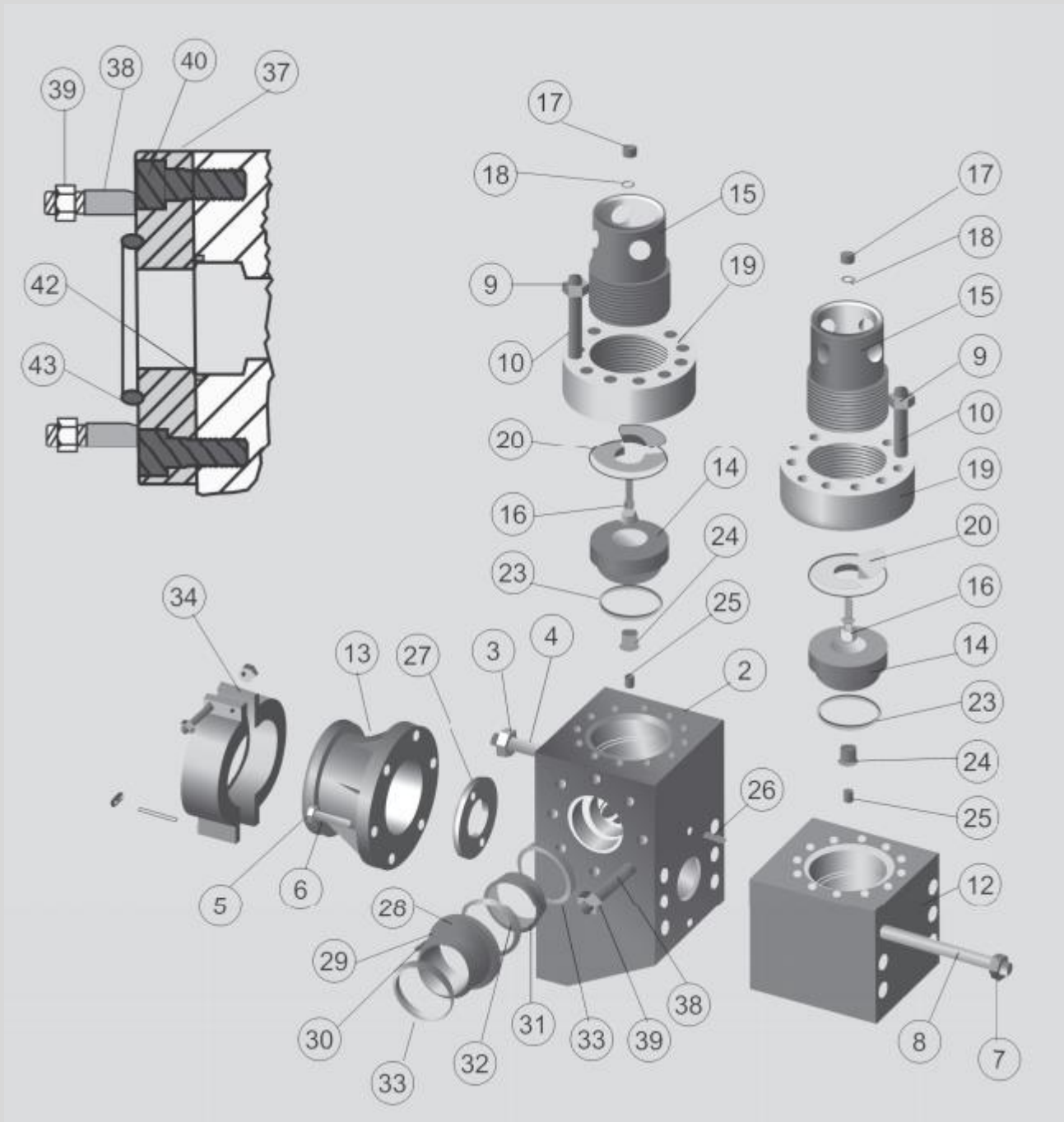
FLUID END MODULE AND ACCESSORIES

| | | | |
|----|----------|---------------------------|----|
| 39 | 6300240 | Nut – Discharge Spacer | 16 |
| 40 | 7006685* | Capscrew | 16 |
| 41 | 1292257* | Seal – Module, Wear Plate | 6 |
| 42 | 1292258 | Seal – Discharge Spacer | 2 |
| 43 | 6908040 | Ring – Oval Joint | 2 |

Offered in Plain Carbon or Stainless Steel

* Not shown

12 – P – 160





FLUID END MODULE AND ACCESSORIES

OILWELL

A-850-PT, A-1100-PT, A-1400-PT & A-1700-PT

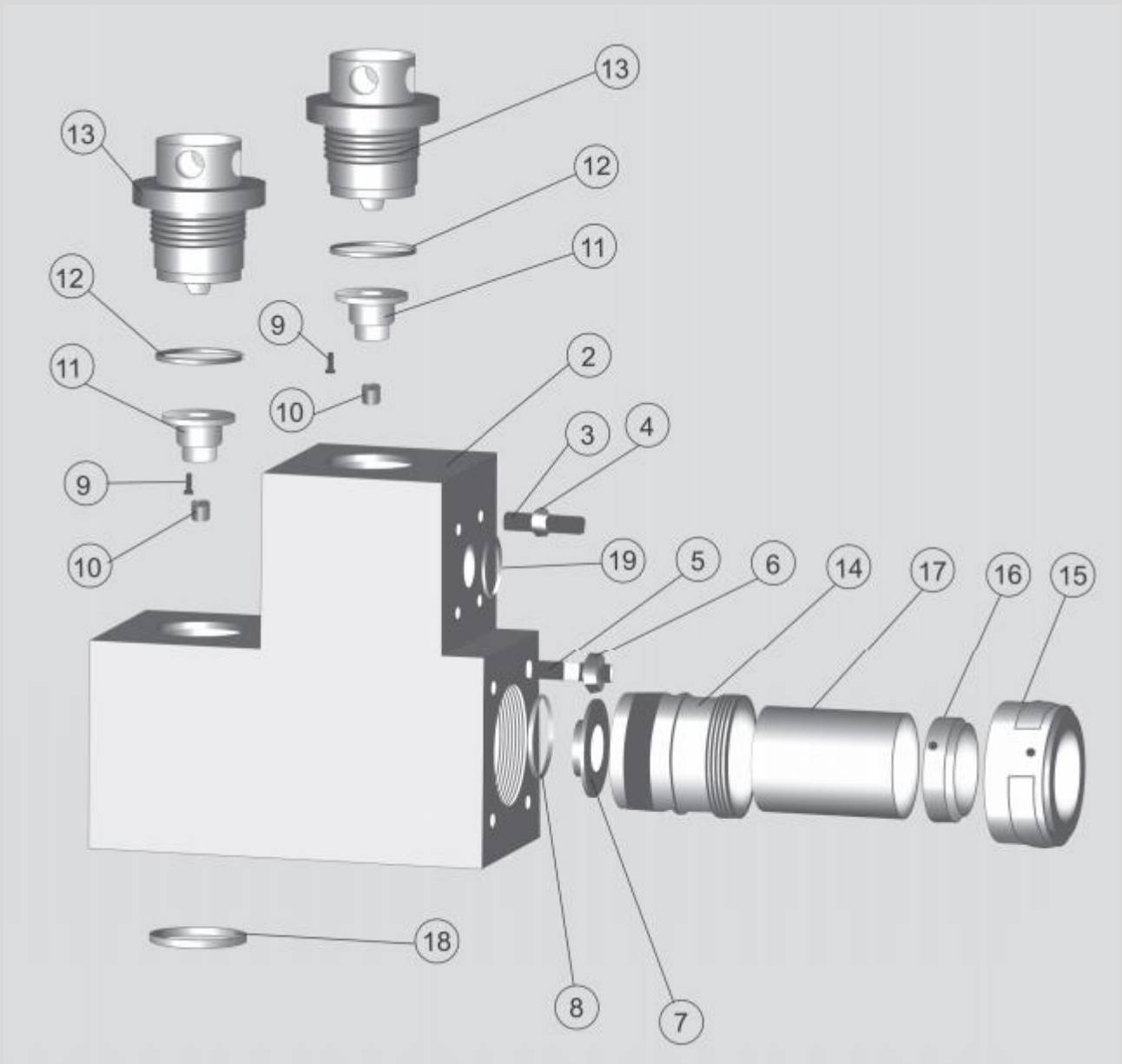
| Item | Part No. | Description | Qty per Pump |
|------|------------|--|--------------|
| 1 | 10-300-181 | Discharge Module, Studded (Included Items 2 – 6) | (3) |
| 2 | | Discharge Module, Only | 3 |
| 3 | 49-001-292 | Stud – Discharge Manifold | 12 |
| 4 | 75-511-754 | Nut – Discharge Manifold | 12 |
| 5 | 49-002-837 | Stud – Frame | 12 |
| 6 | 75-510-126 | Nut – Frame | 12 |
| 7 | 10-300-184 | Wear Plate – Liner | 6 |
| 8 | 20-100-008 | Gasket – Liner Wear Plate | 6 |
| 9 | 75-632-234 | Cap Screw, Self Locking | 24 |
| 10 | 20-200-004 | Valve Guide Bushing | 6 |
| 11 | 10-300-004 | Valve Guide | 6 |
| 12 | 10-300-011 | Gasket – Valve Cover | 6 |
| 13 | 10-300-005 | Valve Cover | 6 |
| 14 | 10-300-183 | Liner Adapter | 3 |
| 15 | 10-303-092 | Nut – Liner Adapter (A850-PT, A1100-PT only) | 3 |
| | 10-300-182 | Nut – Liner Adapter (A1400-PT, A1700-PT only) | 3 |
| 16 | 10-300-185 | Spacer Ring – Liner | 3 |
| 17 | 10-303-091 | Centering Sleeve – Liner (A850-PT, A1100-PT only) | 3 |
| | 10-300-186 | Centering Sleeve – Liner (A1400-PT, A1700-PT only) | 3 |
| 18 | 10-300-201 | Seal – Suction Manifold | 3 |
| 19 | 99-609-345 | Seal – Discharge Manifold | 3 |

Offered in Plain Carbon or Stainless Steel

* Not shown

FLUID END MODULE AND ACCESSORIES

A-850-PT A-1100-PT
A-1400-PT A-1700-PT





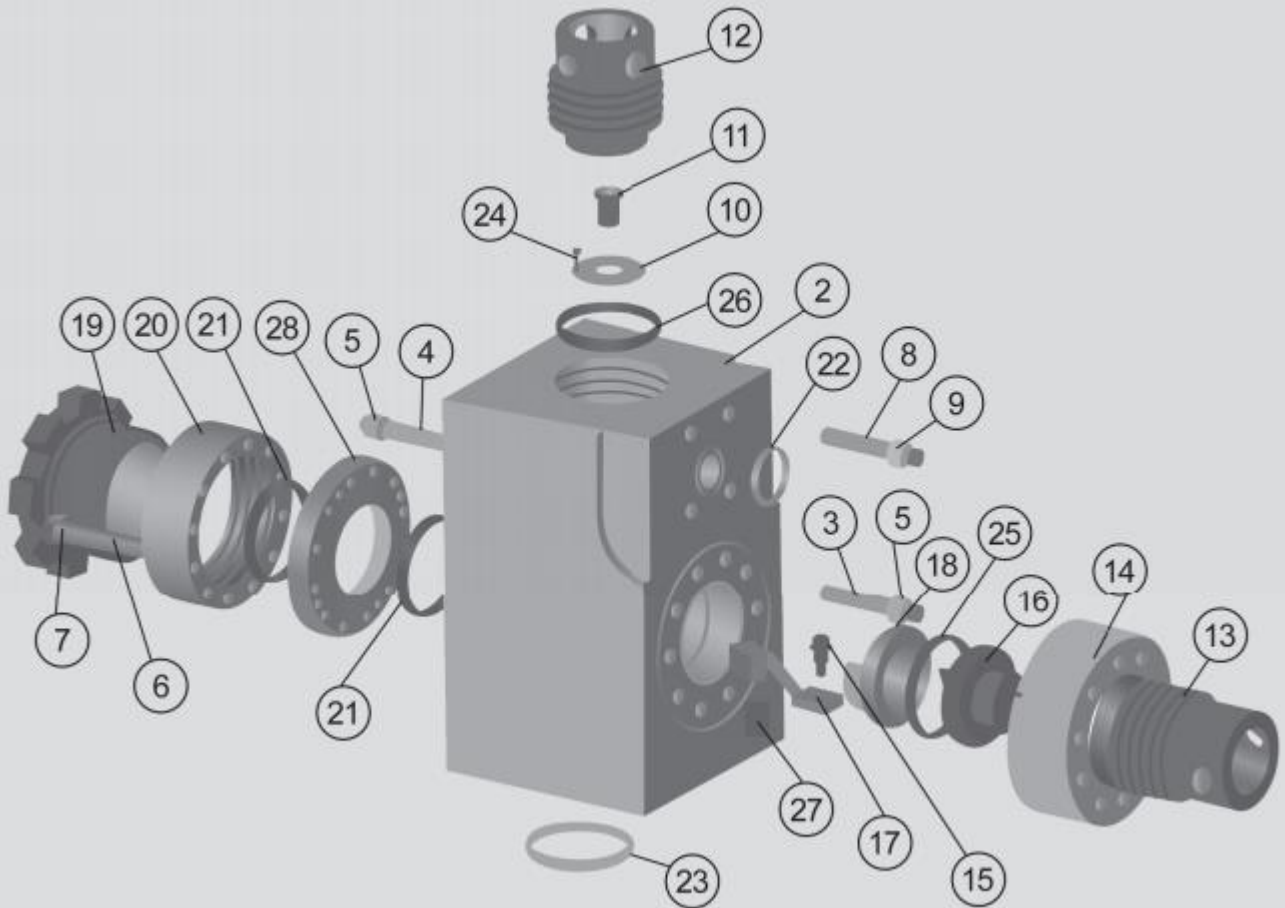
FLUID END MODULE AND ACCESSORIES

“L” SHAPED

FB-1300 & FB-1600

| Item | Part No. | Description | Qty per Pump |
|------|--------------|--|--------------|
| | 8490-2A | Complete Assembly | (3) |
| | 8490-1 | Fluid Module, Discharge - Studded (included Items 1-5) | (3) |
| 1 | | Fluid Module - Discharge | 3 |
| 2 | 4016-9 | Stud w/Nut - Frame | 18 |
| 3 | 4017-1 | Stud w/Nut - Suction Module | 18 |
| 4 | 4017-46 | Stud w/Nut - Discharge Manifold | 12 |
| 5 | 4015-2 | Stud w/Nut - Valve Cover | 72 |
| | 8490-2 | Fluid Module, Suction - Studded (included items 5-6) | (3) |
| 6 | | Fluid Module - Suction | 3 |
| 7 | 7602-1600-61 | Seal - Suction Manifold | 3 |
| 8 | 8488-5 | Dowel Pin | 6 |
| 9 | 4475 | Threaded Flange | 6 |
| 10 | 4575 | Screw Gland | 6 |
| | 4675-2A | Valve Cover Plug Assembly (included items 11-14) | (6) |
| 11 | 4675-2 | Plug - Valve Cover | 6 |
| 12 | 4775-2 | Valve Guide | 6 |
| 13 | 4016-99 | Stud w/Nut - Valve Guide | 16 |
| 14 | 4700-1 | Insert - Valve Guide | 6 |
| 15 | P129 | Seal - Valve Cover Plug | 6 |
| 16 | 6490-3 | Liner Retainer Flange | 3 |
| 17 | 4017-36 | Capscrew - Liner Retainer | 24 |
| 18 | 6590-1 | Nut - Liner Retainer | 3 |
| 19 | 8422-3 | Pilot Ring - Liner Retainer | 3 |
| 20 | 8490-3 | Plate - Wear | 3 |
| 21 | 2988 | Seal - Module and Wear Plate | 6 |
| 22 | 7602-1600-25 | Seal - Discharge Manifold | 3 |

FB-1300 FB-1600



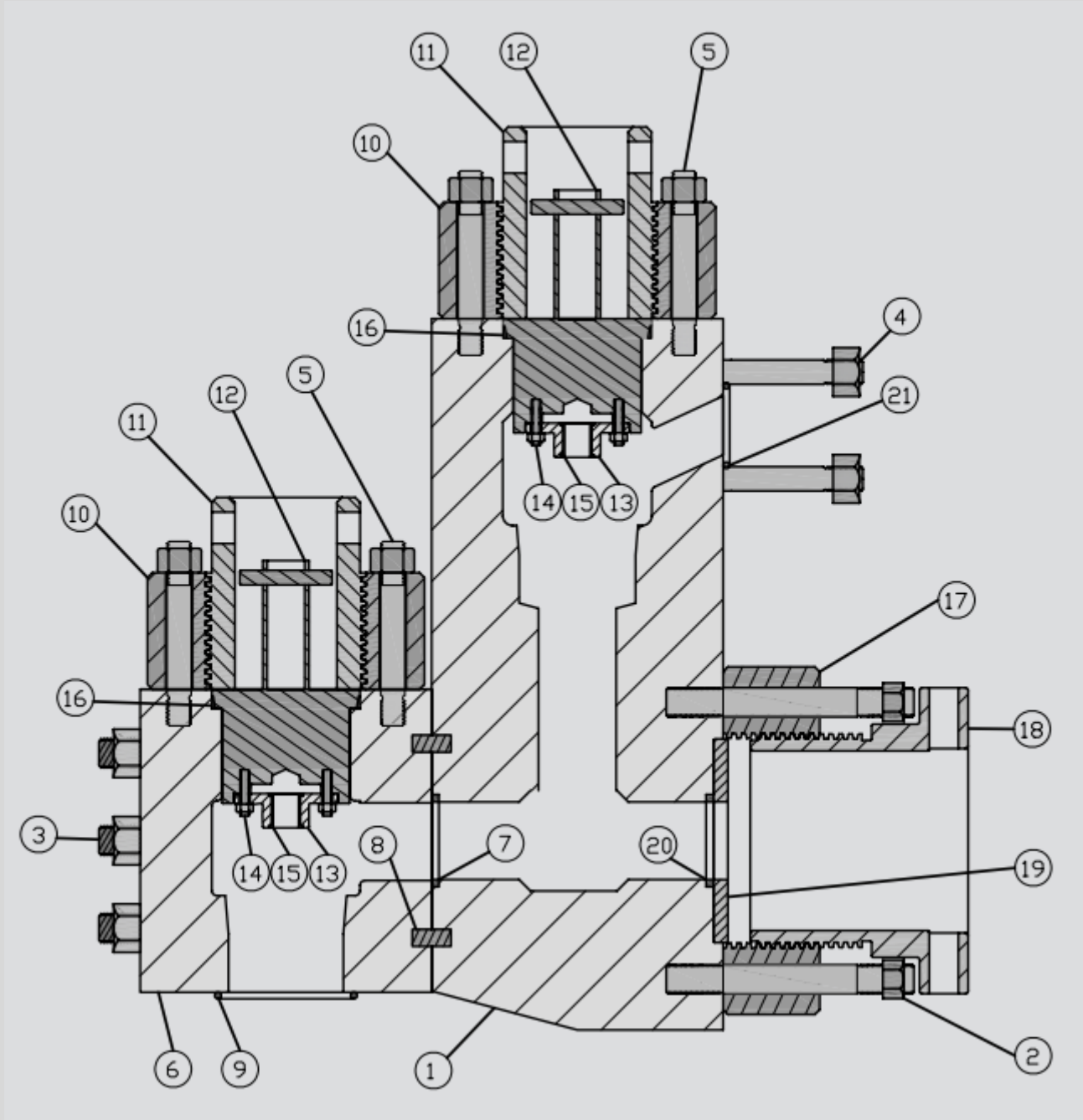


FLUID END MODULE AND ACCESSORIES

“L” SHAPED T-1300 & T-1600

| Item | Part No. | Description | Qty per Pump |
|------|----------|--|--------------|
| | 8407-7A | Complete Assembly | (3) |
| | 8407-7 | Fluid Module, Discharge - Studded (included items 1-5) | (3) |
| 1 | | Fluid Module - Discharge | 3 |
| 2 | 4018-68 | Stud w/Nut - Frame, Liner Retainer | 24 |
| 3 | 4016-97 | Stud w/Nut - Suction Module | 24 |
| 4 | 4017-50 | Stud w/Nut - Discharge Manifold | 12 |
| 5 | 4015-2 | Stud w/Nut - Valve Cover | 48 |
| | 8407-11 | Fluid Module, Suction - Studded (included items 5-6) | (3) |
| 6 | | Fluid Module - Suction | 3 |
| 7 | 2988 | Seal - Suction Module | 3 |
| 8 | 8488-5 | Dowel Pin | 6 |
| 9 | IO-507 | Seal - Suction Manifold | 3 |
| 10 | 4475 | Threaded Flange | 3 |
| 11 | 4575 | Screw Gland | 3 |
| | 4675-2A | Valve Cover Plug Assembly (included items 12-15) | (3) |
| 12 | 4675-2 | Plug - Valve Cover | 3 |
| 13 | 4775-2 | Valve Guide | 3 |
| 14 | 4016-99 | Stud w/Nut - Valve Guide | 12 |
| 15 | 4700-I | Insert - Valve Guide | 3 |
| 16 | P129 | Seal - Valve Cover Plug | 3 |
| 17 | 6407 | Liner Retainer Flange | 3 |
| 18 | 6507 | Nut - Liner Retainer | 3 |
| 19 | 8407-10 | Plate - Wear | 3 |
| 20 | 2988 | Seal - Wear Plate | 3 |
| 21 | IO-548 | Seal - Discharge Manifold | 3 |

T-1300 T-1600



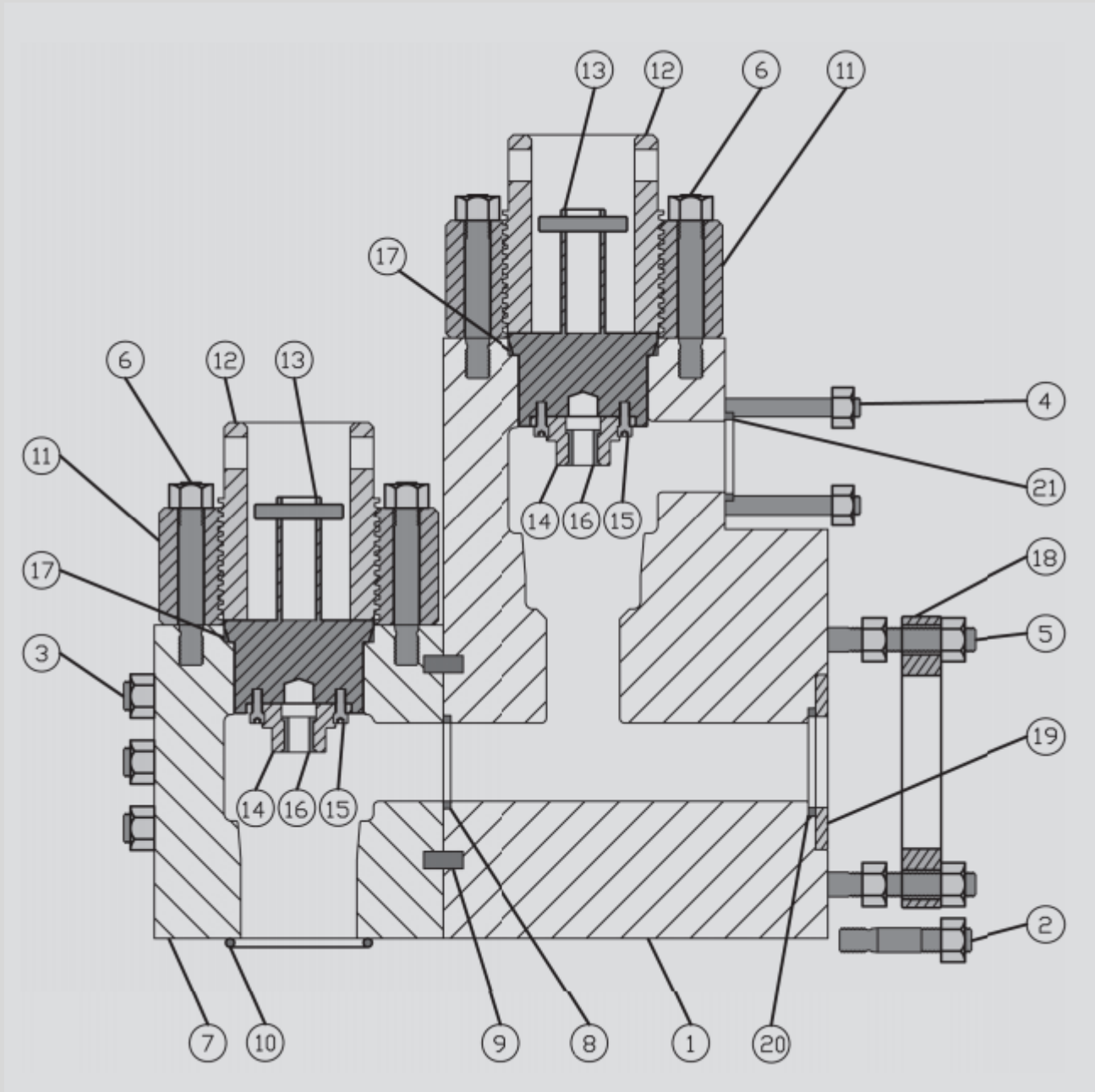


FLUID END MODULE AND ACCESSORIES

“L” SHAPED PZ-10 & PZ-11

| Item | Part No. | Description | Qty per Pump |
|------|----------|--|--------------|
| | 8477-A | Complete Assembly | (3) |
| | 8477-1 | Fluid Module, Discharge - Studded (included items 1-6) | (3) |
| 1 | | Fluid Module - Discharge | 3 |
| 2 | 4018-35 | Stud w/Nut - Frame | 24 |
| 3 | 4016-97 | Stud w/Nut - Suction Module | 18 |
| 4 | 4017-5 | Stud w/Nut - Discharge Manifold | 12 |
| 5 | 4018-34 | Stud w/2 Nut - Liner Retainer | 24 |
| 6 | 4015-2 | Stud w/Nut - Valve Cover | 72 |
| | 8477-2 | Fluid Module, Suction - Studded (included items 6-7) | (3) |
| 7 | | Fluid Module - Suction | 3 |
| 8 | 2988 | Seal - Suction Module | 3 |
| 9 | 8488-5 | Dowel Pin | 6 |
| 10 | 25BE41 | Seal - Suction Manifold | 3 |
| 11 | 4475 | Threaded Flange | 6 |
| 12 | 4575 | Screw Gland | 6 |
| | 4675-1A | Valve Cover Plug Assembly (included items 13-16) | (6) |
| 13 | 4675-1 | Plug - Valve Cover | 6 |
| 14 | 4775 | Valve Guide | 6 |
| 15 | 4016-99 | Stud w/Nut - Valve Guide | 24 |
| 16 | 4700-I | Insert - Valve Guide | 6 |
| 17 | P129 | Seal - Valve Cover Plug | 6 |
| 18 | 6477 | Liner Retainer Flange | 3 |
| 19 | 8477-3 | Plate - Wear | 3 |
| 20 | 2930-08 | Seal - Wear Plate | 3 |
| 21 | 25AL35 | Seal - Discharge Manifold | 3 |

PZ-10 PZ-11



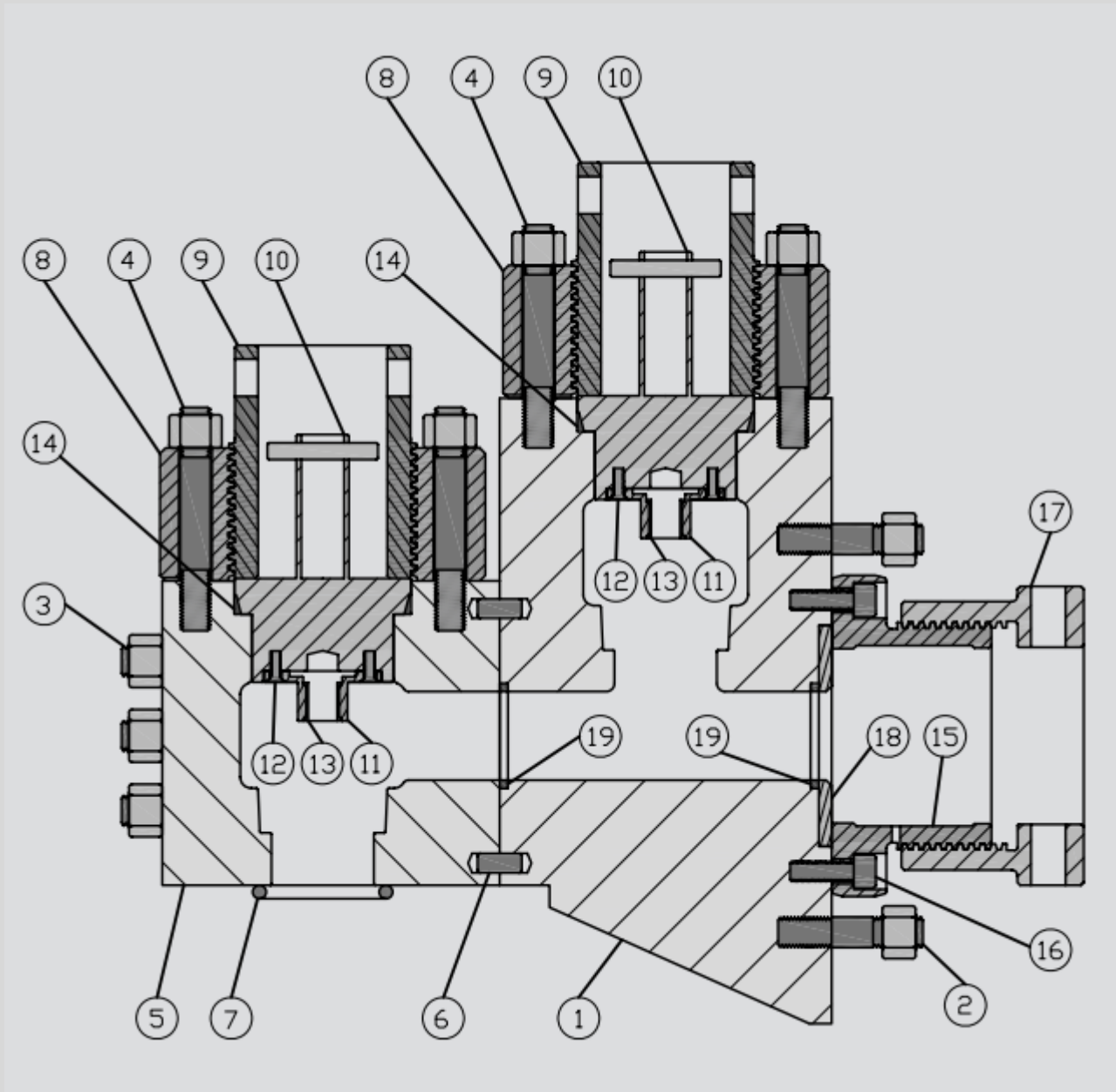


**FLUID END MODULE
AND ACCESSORIES**

**“L” SHAPED
10-P-130**

| Item | Part No. | Description | Qty per Pump |
|-------------|-----------------|--|-------------------------|
| | 8467-A | Complete Assembly | (3) |
| | 8467-1 | Fluid Module, Discharge - Studded (included Items 1-4) | (3) |
| 1 | | Fluid Module - Discharge | 3 |
| 2 | 4015-96 | Stud w/Nut - Frame | 30 |
| 3 | 4017-1 | Stud w/Nut - Suction Module | 18 |
| 4 | 4015-5 | Stud w/Nut - Valve Cover | 72 |
| | 8467-2 | Fluid Module, Suction - Studded (included items 4-5) | (3) |
| 5 | | Fluid Module - Suction | 3 |
| 6 | 8488-5 | Dowel Pin | 6 |
| 7 | 1590051 | Seal - Suction Manifold | 3 |
| 8 | 4467 | Threaded Flange | 6 |
| 9 | 4567 | Screw Gland | 6 |
| | 4667-A | Valve Cover Plug Assembly (included items 10-13) | (6) |
| 10 | 4667 | Plug - Valve Cover | 6 |
| 11 | 4760-3 | Valve Guide | 6 |
| 12 | 4016-98 | Screw - Valve Guide | 16 |
| 13 | 4700-I | Insert - Valve Guide | 6 |
| 14 | P128 | Seal - Valve Cover Plug | 6 |
| 15 | 6495 | Liner Retainer Flange | 3 |
| 16 | 4017-8 | Capscrew - Liner Retainer | 18 |
| 17 | 6595 | Nut - Liner Retainer | 3 |
| 18 | 8467-3 | Plate - Wear | 3 |
| 19 | 2988 | Seal - Module and Wear Plate | 6 |

10-P-130





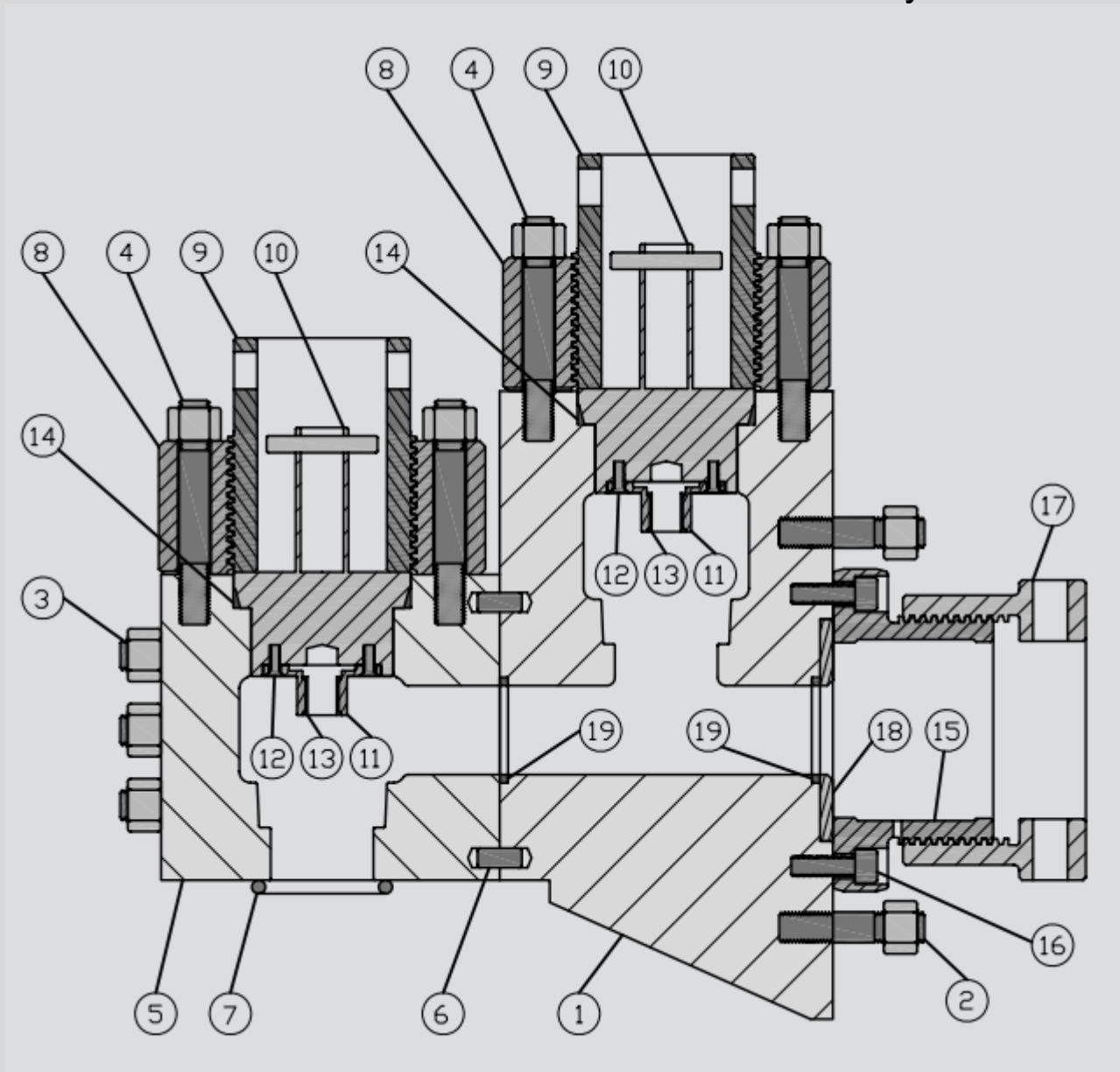
FLUID END MODULE AND ACCESSORIES

“L” SHAPED

12-P-160 New Style

| Item | Part No. | Description | Qty per Pump |
|------|----------|--|--------------|
| | 8476-4A | Complete Assembly | (3) |
| | 8476-5 | Fluid Module, Discharge - Studded (included Items 1-4) | (3) |
| 1 | | Fluid Module - Discharge | 3 |
| 2 | 4015-95 | Stud w/Nut - Frame | 30 |
| 3 | 4018-17 | Stud w/Nut - Suction Module | 18 |
| 4 | 4015-54 | Stud w/Nut - Valve Cover | 72 |
| | 8476-6 | Fluid Module, Suction - Studded (included items 4-5) | (3) |
| 5 | | Fluid Module - Suction | 3 |
| 6 | 8488-5 | Dowel Pin | 6 |
| 7 | 1540851 | Seal - Suction Manifold | 3 |
| 8 | 4476 | Threaded Flange | 6 |
| 9 | 4597 | Screw Gland | 6 |
| | 4676-6A | Valve Cover Plug Assembly (included items 10-13) | (6) |
| 10 | 4676-6 | Plug - Valve Cover | 6 |
| 11 | 4776 | Valve Guide | 6 |
| 12 | 4016-98 | Screw - Valve Guide | 24 |
| 13 | 4700-I | Insert - Valve Guide | 6 |
| 14 | P119 | Seal - Valve Cover Plug | 6 |
| 15 | 6476 | Liner Retainer Flange | 3 |
| 16 | 4017-65 | Capscrew - Liner Retainer | 18 |
| 17 | 6576 | Nut - Liner Retainer | 3 |
| 18 | 8476-3 | Plate - Wear | 3 |
| 19 | 2988 | Seal - Module and Wear Plate | 6 |

12-P-160 New Style





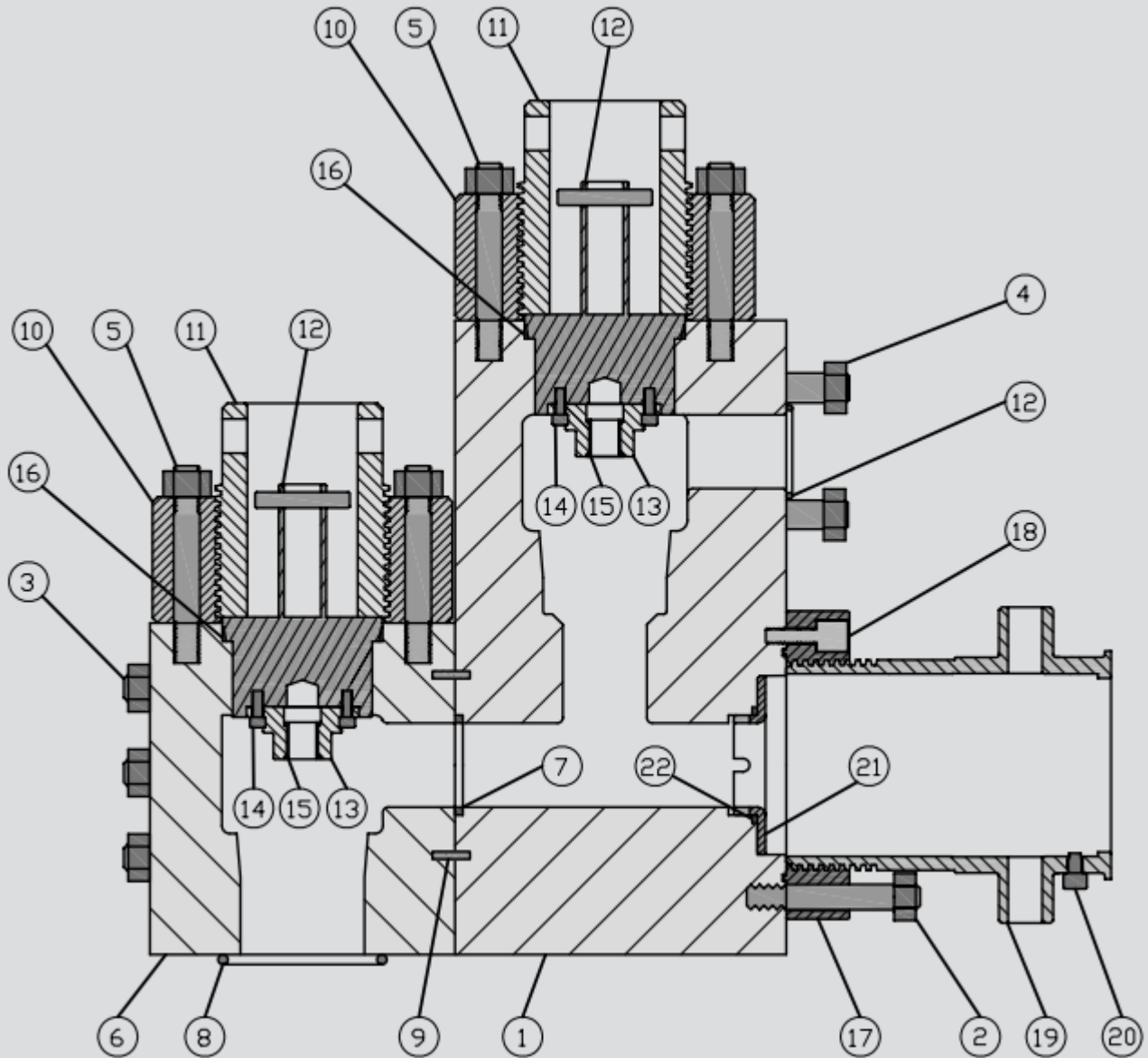
FLUID END MODULE AND ACCESSORIES

“L” SHAPED

A-850-PT, A-1100-PT, A-1400-PT & A-1700-PT

| Item | Part No. | Description | Qty per Pump |
|------|------------|--|--------------|
| | 8487-A | Complete Assembly (A-850-PT, A-1100-PT) | (3) |
| | 8488-1A | Complete Assembly (A-1400-PT, A-1700-PT) | (3) |
| | 8488-1 | Fluid Module, Discharge - Studded (included items 1-5) | (3) |
| 1 | | Fluid Module - Discharge | 3 |
| 2 | 4016-96 | Stud w/Nut - Frame | 12 |
| 3 | 4016-97 | Stud w/Nut - Suction Module | 18 |
| 4 | 4016-3 | Stud w/Nut - Discharge Manifold | 12 |
| 5 | 4015-2 | Stud w/Nut - Valve Cover | 72 |
| | 8488-2 | Fluid Module, Suction - Studded (included items 5-6) | (3) |
| 6 | | Fluid Module - Suction | 3 |
| 7 | 2988 | Seal - Module | 3 |
| 8 | 10-300-201 | Seal - Suction Manifold | 3 |
| 9 | 8488-5 | Dowel Pin | 6 |
| 10 | 4475 | Threaded Flange | 6 |
| 11 | 4575 | Screw Gland | 6 |
| | 4675-1A | Valve Cover Plug Assembly (included items 12-15) | (6) |
| 12 | 4675-1 | Plug - Valve Cover | 6 |
| 13 | 4775 | Valve Guide | 6 |
| 14 | 4018-88 | Screw - Valve Guide | 12 |
| 15 | 4700-I | Insert - Valve Guide | 6 |
| 16 | P129 | Seal - Valve Cover Plug | 3 |
| 17 | 6488-1 | Liner Retainer Flange | 3 |
| 18 | 4017-4 | Capscrew - Liner Retainer | 24 |
| 19 | 6587-1 | Nut - Liner Retainer (A-850-PT, A-1100-PT ONLY Large OD Liner, 0289-XX) | 3 |
| | 6588-1 | Nut - Liner Retainer (A-1400-PT, A-1700-PT ONLY Large OD Liner, 0284-XX) | 3 |
| 20 | 8488-7 | Set Screw - Liner Retainer | 9 |
| 21 | 8488-4 | Plate - Wear | 3 |
| 22 | 2974-1 | Seal - Wear Plate | 3 |

A-850-PT A-1100-PT
A-1400-PT A-1700-PT



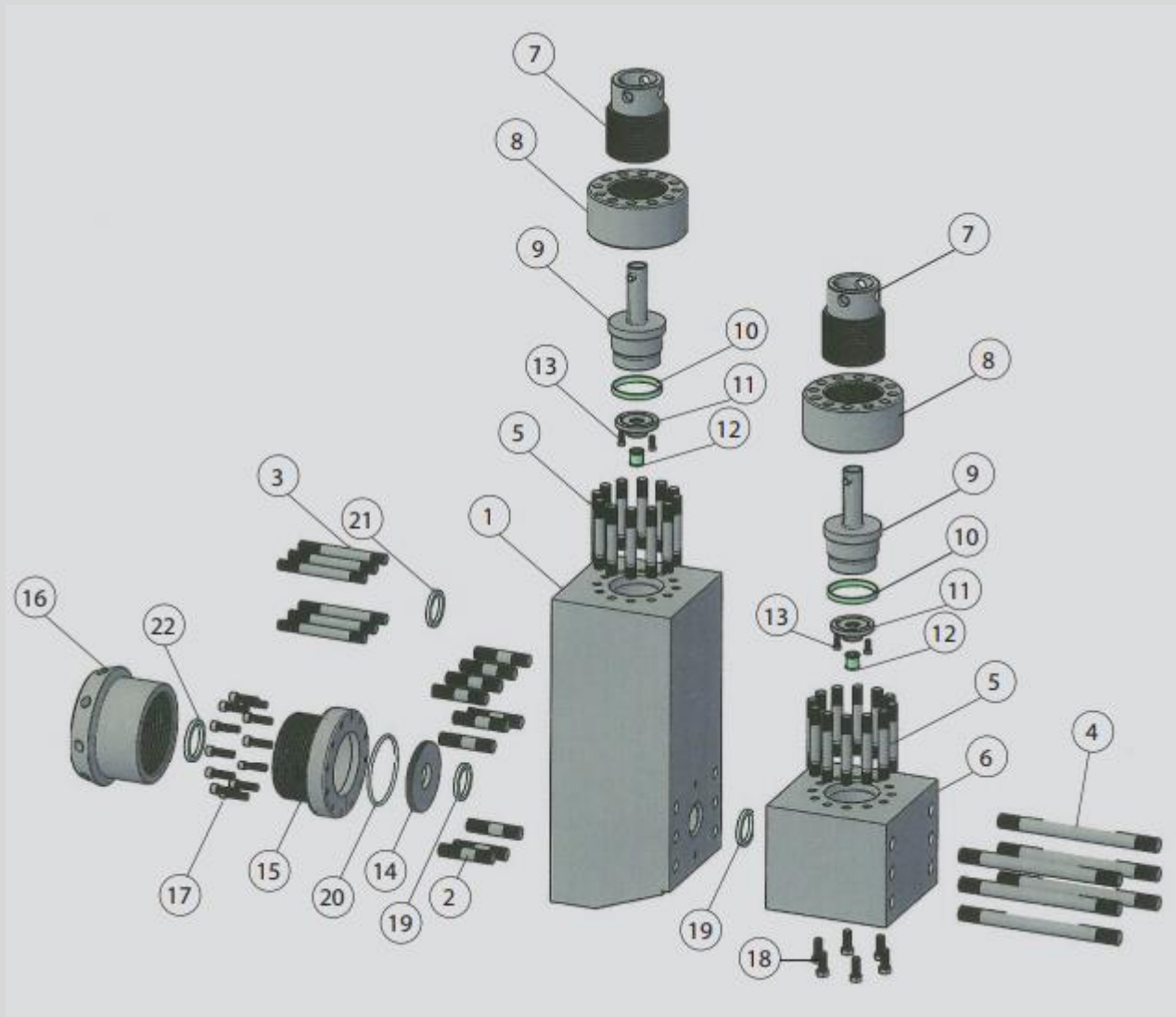


FLUID END MODULE AND ACCESSORIES

SW STYLE BOMCO F-1600 7500 PSI

| Item | Part No. | Description | Qty per Pump |
|------|------------|---|--------------|
| | 8404-25A | Fluid End Assembly Complete | 3 |
| | 8404-27 | Discharge Module - Studded (Includes Items 1-5) | |
| 1 | 8404-27U | Discharge Module | 3 |
| 2 | 4017-33 | Power End Stud c/w Nut | 30 |
| 3 | 4019-60 | Discharge Manifold Stud c/w Nut | 18 |
| 4 | 4019-61 | Suction Module Stud c/w Nut | 18 |
| 5 | 4015-2 | Valve Cover Stud c/w Nut | 72 |
| | 8404-26 | Suction Module - Studded (Includes Items 5-6) | |
| 6 | 8404-26U | Suction Module | 3 |
| 7 | 4588-25 | Screw Gland | 6 |
| 8 | 4488-25 | Valve Cover Flange | 6 |
| | 4690-25A | Valve Cover Plug Assembly (Includes Items 9-13) | |
| 9 | 4690-25 | Valve Cover Plug | 6 |
| 10 | P115 | Valve Cover Plug Seal | 6 |
| 11 | 4788-25 | Valve Guide | 6 |
| 12 | 4700-I | Valve Guide Bushing | 6 |
| 13 | 4018-18 | Valve Guide Screw | 12 |
| 14 | 8490-28 | Liner Wear Plate | 3 |
| 15 | 6490-25 | Liner Retainer Flange | 3 |
| 16 | 6590-25 | Liner Retainer Nut | 3 |
| 17 | 4019-51 | Liner Retainer Capscrew | 36 |
| 18 | 4018-19 | Suction Manifold Capscrew | 18 |
| 19 | 2988 | Module/Wear Plate Seal | 6 |
| 20 | 568-443 | Wear Plate O-Ring | 3 |
| 21 | 2988 | Discharge Manifold Seal | 3 |
| | | NOT SHOWN | |
| | 6316020100 | Suction Manifold | 1 |
| | 8376-25 | Discharge Manifold | 1 |

**SW STYLE
BOMCO F-1600
7500 PSI**



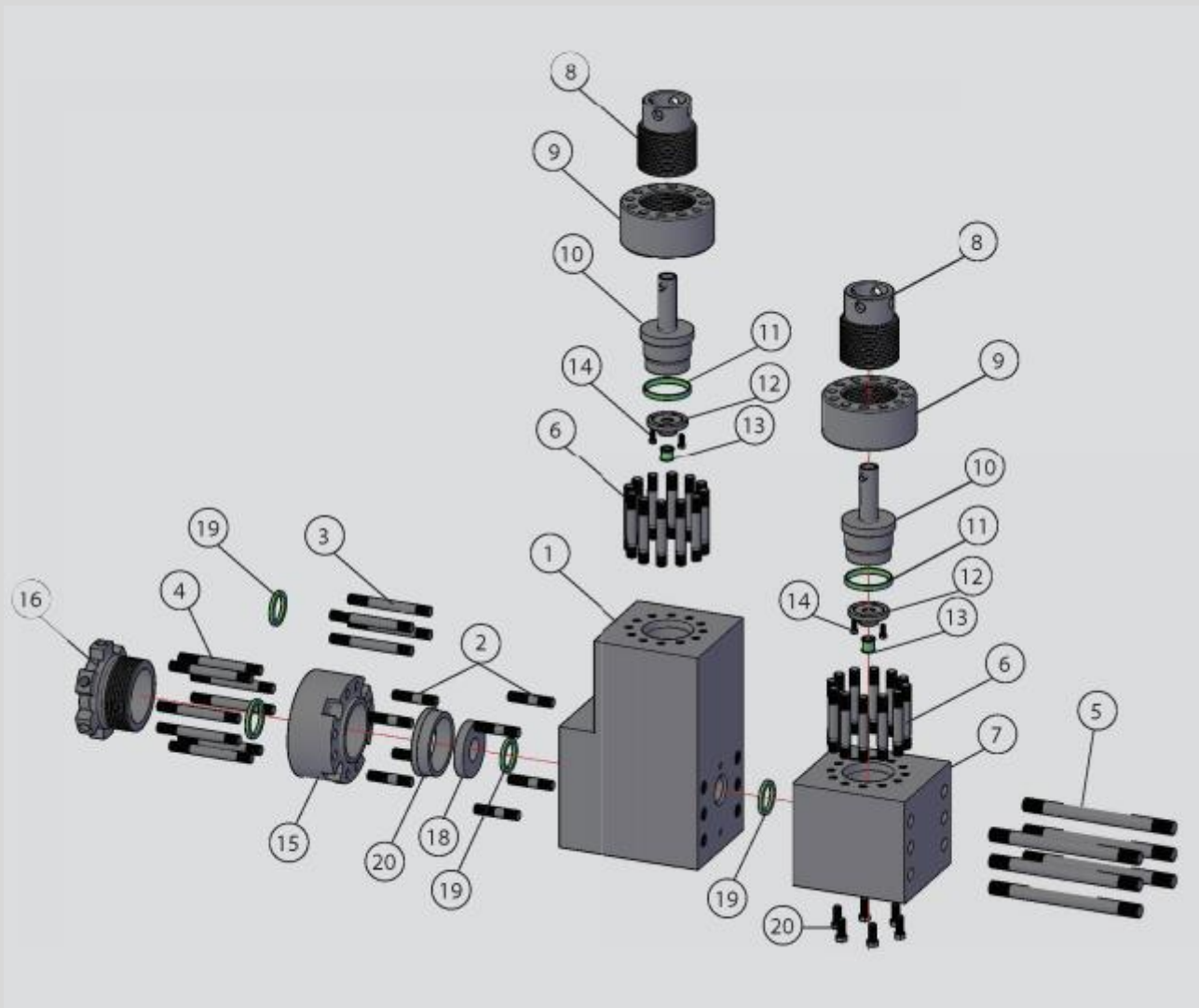


FLUID END MODULE AND ACCESSORIES

SW Style Gardner Denver PZ-11 7500 PSI

| Item | Part No. | Description | Qty per Pump |
|------|----------|---|--------------|
| | 8477-25A | Fluid End Assembly Complete | 3 |
| | 8477-27 | Discharge Module - Studded (Includes Items 1-6) | |
| 1 | 8477-27U | Discharge Module | 3 |
| 2 | 4019-46 | Power End Stud c/w Nut | 24 |
| 3 | 4019-45 | Discharge Manifold Stud c/w Nut | 12 |
| 4 | 4019-45 | Liner Retainer Stud c/w Nut | 24 |
| 5 | 4019-44 | Suction Module Stud c/w Nut | 18 |
| 6 | 4015-2 | Valve Cover Stud c/w Nut | 72 |
| | 8477-26 | Suction Module - Studded (Includes Items 6-7) | |
| 7 | 8477-26U | Suction Module | 3 |
| 8 | 4588-25 | Screw Gland | 6 |
| 9 | 4488-25 | Valve Cover Flange | 6 |
| | 4688-25A | Valve Cover Plug Assy (Includes Items 10-14) | |
| 10 | 4688-25 | Valve Cover Plug | 6 |
| 11 | P115 | Valve Cover Plug Seal | 6 |
| 12 | 4788-25R | Valve Guide | 6 |
| 13 | 4700-I | Valve Guide Bushing | 16 |
| 14 | 4018-18 | Valve Guide Screw | 12 |
| 15 | 6477-25 | Liner Retainer Flange | 3 |
| 16 | 6577-25 | Liner Retainer Nut | 3 |
| 17 | 8477-29 | Alignment Ring | 3 |
| 18 | 8477-30 | Liner Wearplate | 3 |
| 19 | 2988 | Wearplate, Module, Discharge Manifold Seal | 9 |
| 20 | 4017-77 | Suction Manifold Capscrew | 24 |
| | | NOT SHOWN | |
| | 8577-25 | Suction Manifold | 1 |
| | 8377-27 | Discharge Manifold | 1 |

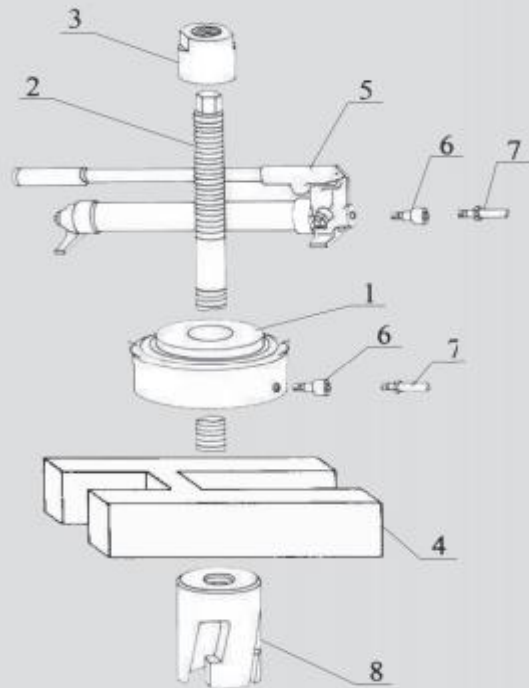
SW STYLE
GARDNER DENVER PZ-11
7500 PSI



HYDRAULIC VALVE SEAT PULLER PARTS & OPERATING INSTRUCTIONS

- 1 Insert head into pot and lock into seat. Screw stem into head.
- 2 Place H bar over stem and center over pot bore. Place jack over stem and on H bar.
- 3 Tighten stem nut onto stem until all slack is removed. The jack may be strapped down to eliminate jumping action when seat breaks loose.
- 4 Attach hose to pump and jack then pump handle until seat breaks loose.

Manual Pump(5) Max 10,000 PSI
Hydraulic Jack(1) 170 ton



| No. | Part Number | Description |
|-----|-------------|---|
| | MK-1700 | Valve Seat Puller Assembly complete w/ metal case |
| 1 | MK-1701 | Hydraulic Jack |
| | MK-1717 | Hydraulic Jack Seal Repair Kit |
| 2 | MK-1702 | Center Stem |
| 3 | MK-1703 | Center Stem Nut |
| 4 | MK-1704 | Puller H Bar |
| 5 | MK-1708 | Hydraulic Pump |
| | MK-1718 | Hydraulic Pump Repair Kit |
| 6 | MK-1713 | Gauge Coupler |
| 7 | MK-1707 | Hydraulic Hose |

