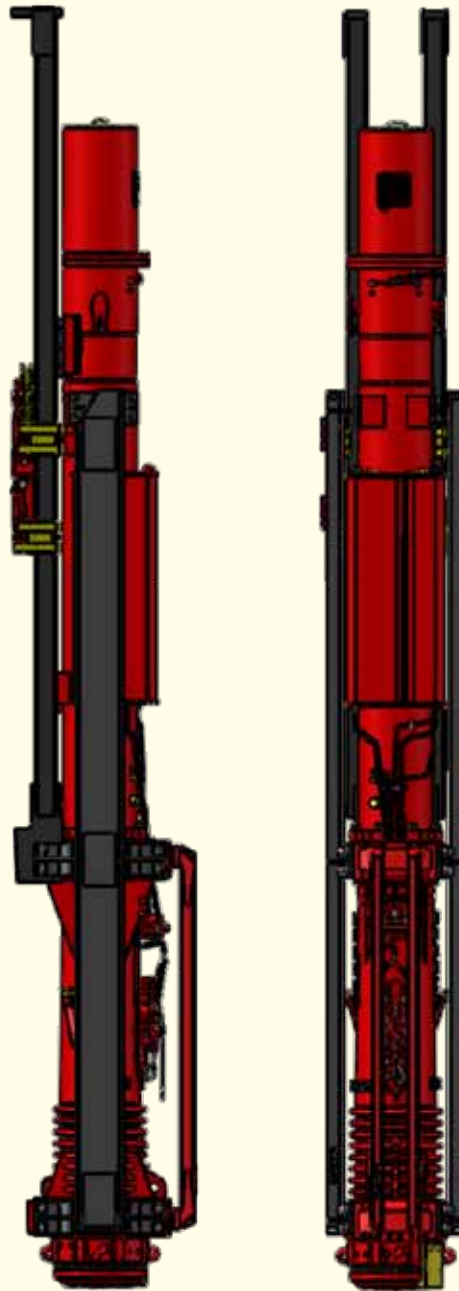




PILECO INC.

Parts Manual

Diesel Pile Hammer **D19-42** *Parts Manual*

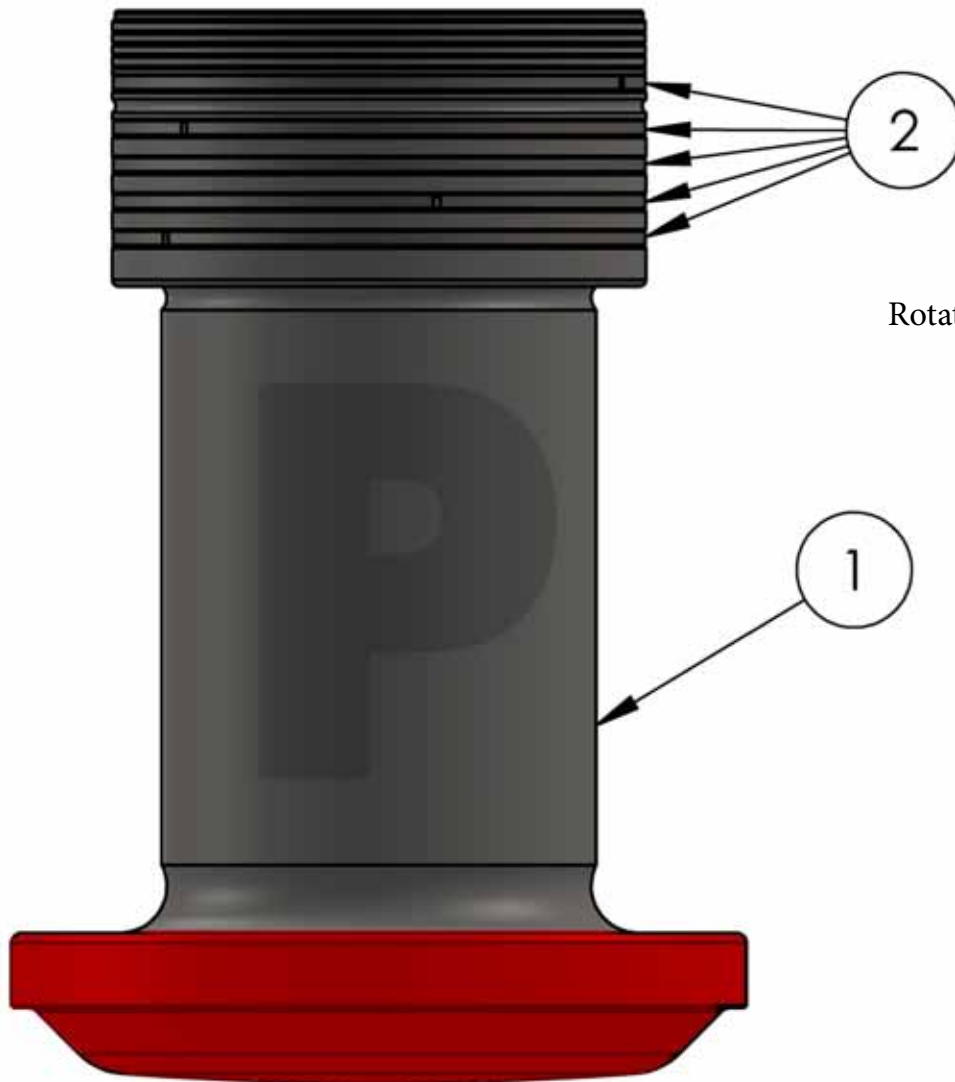


**Index Page**

Impact Block	page #3
Striking Weight Piston	page #4
Lower Cylinder Complete	page #5
Lube Pump	page #6-8
Cylinder Complete	page #9
Pressure Valve	page #10
Piston Complete	page #11
Variable Delivery Fuel Pump	page #12-17
Pump Element 19MM	page #18
Stop Valve Complete	page #19
Suction Valve Complete	page #20
Check Non Return Valve	page #21
Hydraulic Variable Delivery Fuel Pump	page #22-24
Fuel Pump Control	page #25
Pigtail Installment	page #26
Hydraulic Hand Pump	page #27-28
Manifold Complete	page #29
Hand Pump 1/4" Hose assembly	page #30
Fuel Injection Valve	page #31-32
Threaded Pipe Joint	page #33
Fuel Injection Device	page #34
Fuel Tube Complete	page #35
Upper Cylinder Complete	page #36-38
Filter Elbow Complete	page #39
Lube Lines w/Connector	page #40
Fuel Line— Breather Line	page #41
Manual Starting Device—Trip	page #42-45
Hydraulic Starting Device—Trip	page #46-47
Hydraulic Cylinder Complete	page #48
Hydraulic Cylinder Assembly	page #49
Hydraulic Start Cylinder Ring Kit	page #50
Counterbalance Valve	page #51
Guiding Assembly Hardware Kit	page #52
U-21 X 8 Lead Guiding Assembly	page #54
U-26 X 8 Lead Guiding Assembly	page #55
U-32 X 8 Lead Guiding Assembly	page #56
Transportation Protection	page #58
Tool Box	page #59-60



Impact Block



Rotate Rings 120° as stacked

**each part number links to web site part*

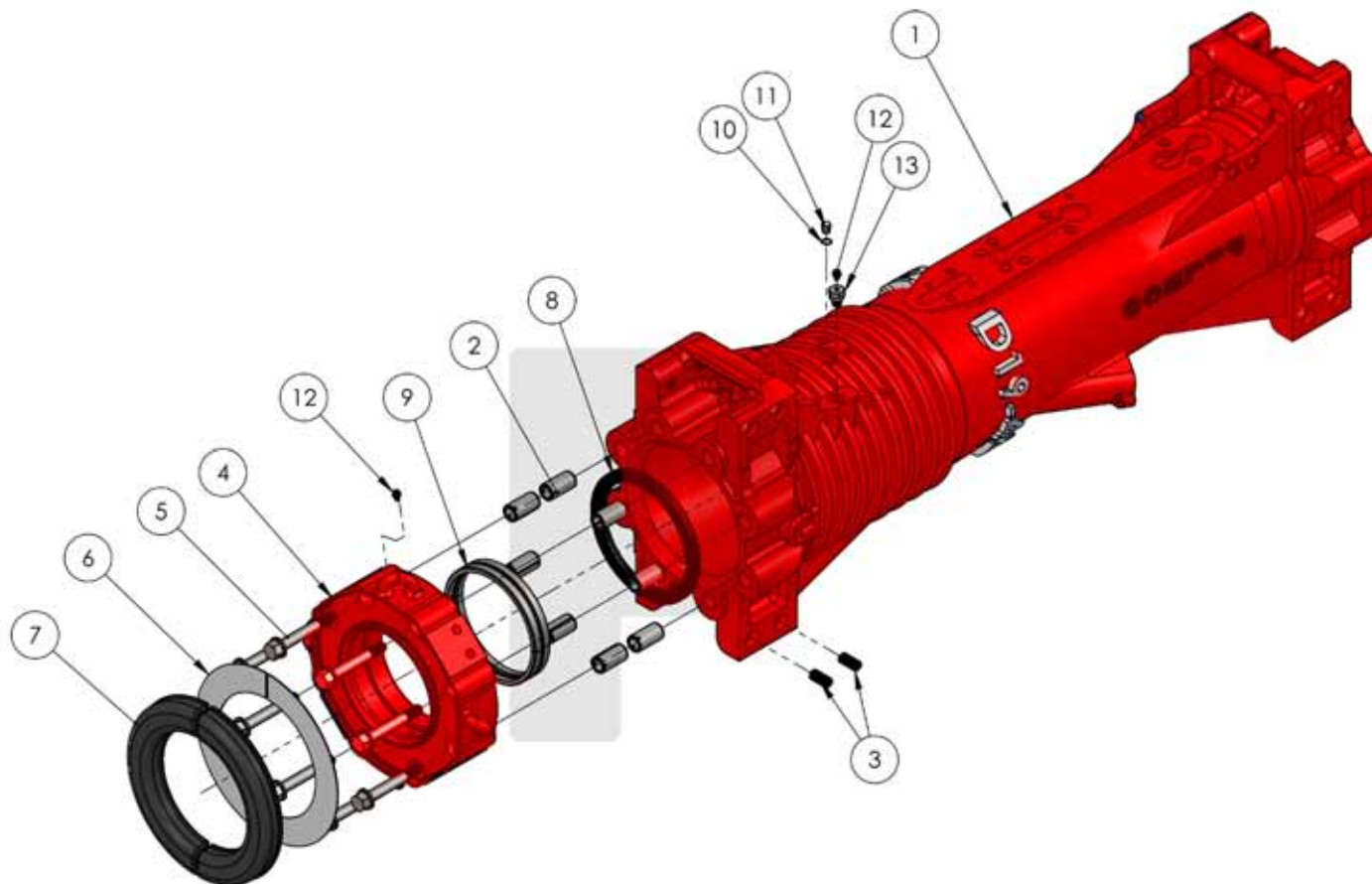
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100599	IMPACT BLOCK	1
2	100588	PISTON RING	5

Striking Weight (Piston) Complete



*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	120943	STRIKING WEIGHT(PISTON)	1
2	100588	PISTON RING	6
3	100587	CATCH PISTON RING	1

**Lower Cylinder Complete**

*each part number links to web site part

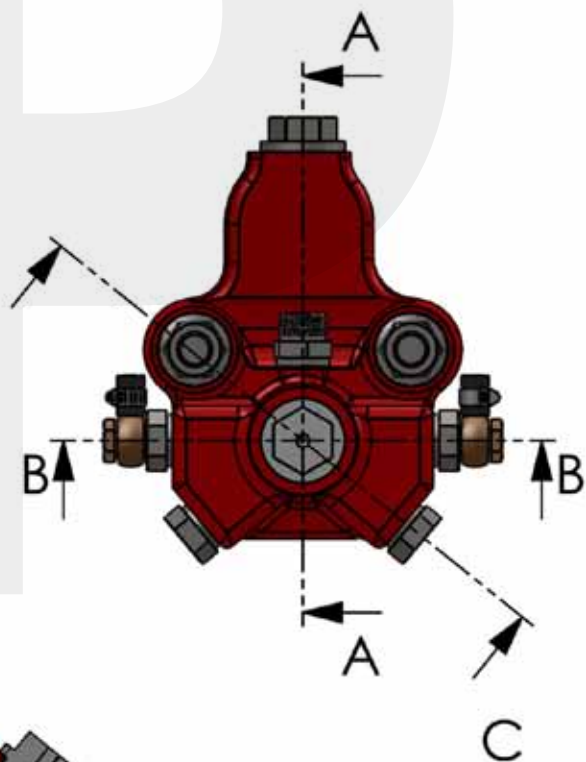
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100593	LOWER CYLINDER PART D19	1
2	95195	40 X 75 DOWEL PIN	8
3	95582	THREADED INSERT M24	16
4	132537	OUTER END RING	1
5	20174	M24 X 165 HEX BOLT	8
6	203001	RUBBER RING SPACER	1
7	102101	RUBBER RING	1
8	102100	INNER DAMP RING	1
9	102105	INNER END RING	1
10	90002	SEALING RING 18 X 22	2
11	91460	M18 X 1.5 DIN 910 HEX PLUG	2
12	90791	GREASE NIPPLE M10 X 1	2
13	22592	REDUCER	1



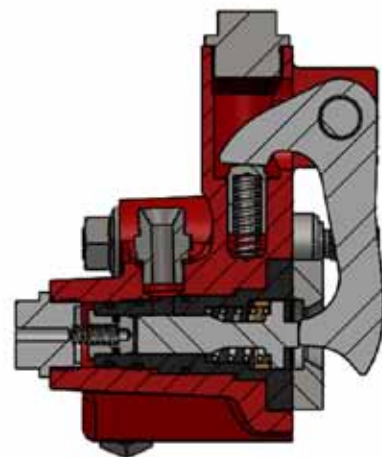
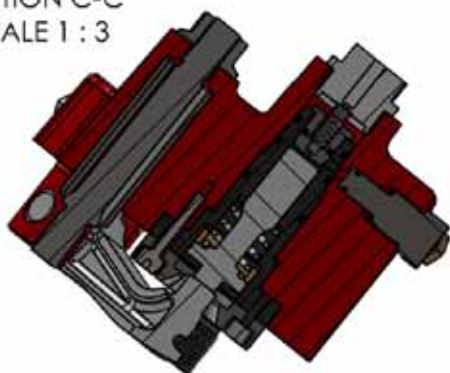
Lube Pump



SECTION B-B
SCALE 1 : 3



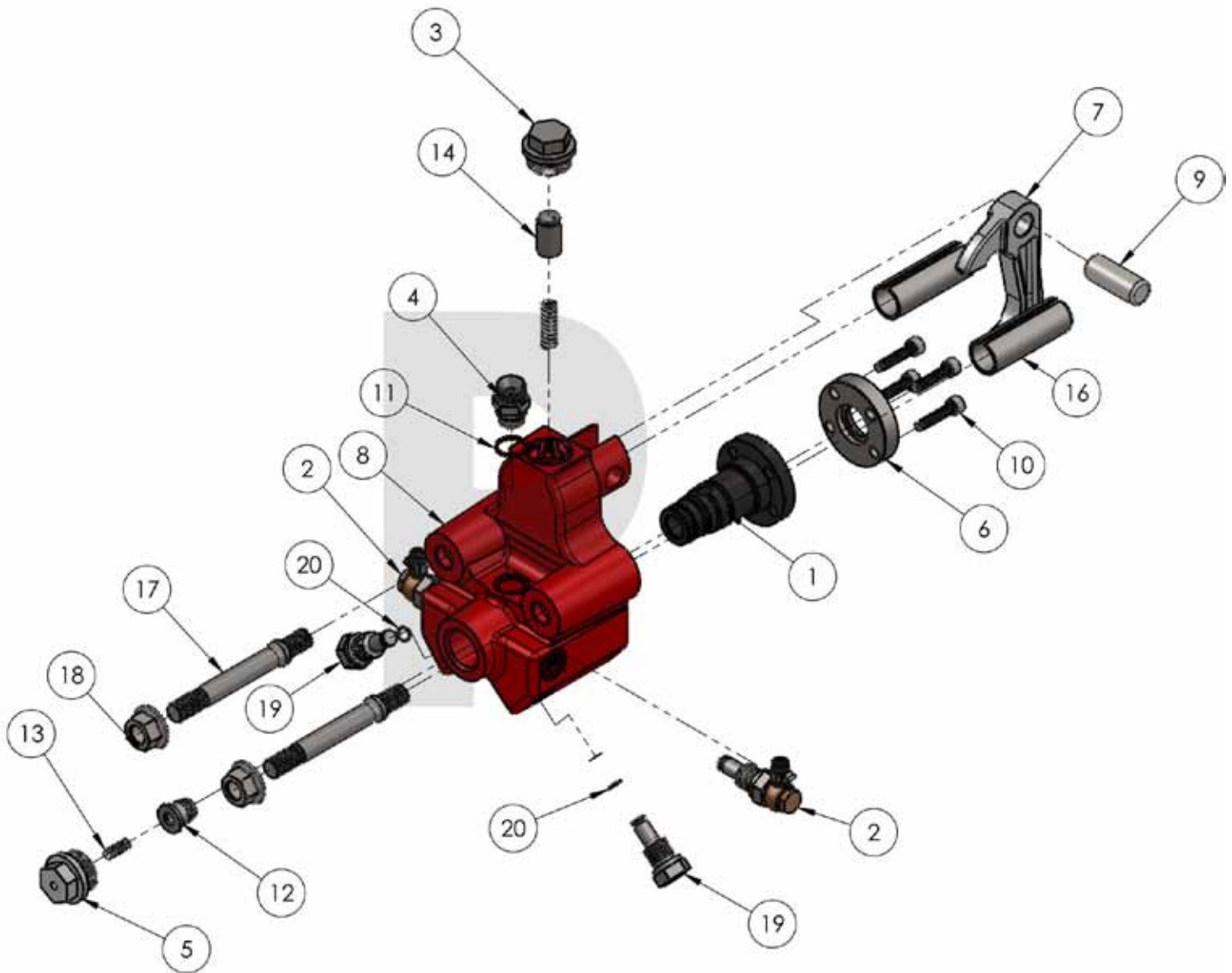
SECTION C-C
SCALE 1 : 3



SECTION A-A
SCALE 1 : 3



**Lube Pump
Complete**

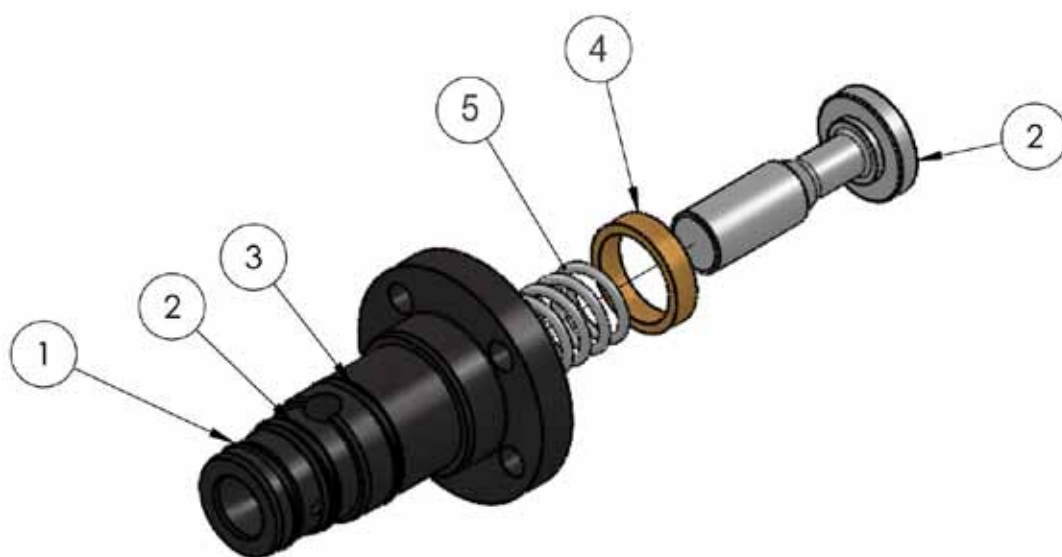


Lube Pump Complete continued.....

**Lube Pump
Complete**

*each part number links to web site part

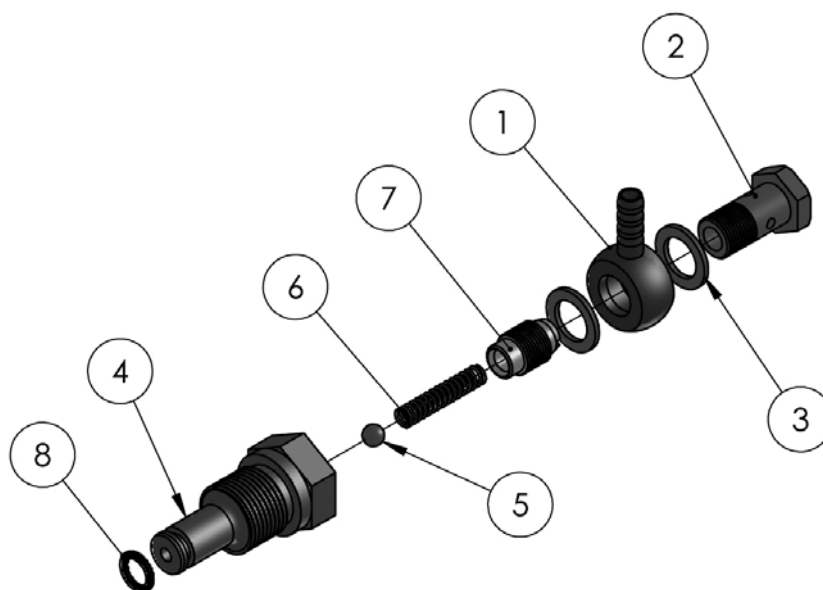
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	67279	CYLINDER COMPLETE	1
2	108317	PRESSURE VALVE COMPLETE	2
3	91976	PLUG SCREW	1
4	67290	ADAPTER	1
5	108311	PLUG SCREW	1
6	67282	WASHER	1
7	22081	LUBE PUMP LEVER	1
8	108315	LUBE PUMP BODY	1
9	22082	PUMP LEVER PIN	1
10	90937	8-1.25MM X 35 SOCKET HEAD CAPSCREW	4
11	92031	SEALING RING A20 X 24	1
12	67284	PISTON COMPLETE	1
13	190479	PRESSURE SPRING 7.3 X 29.4 X 1.2	1
14	22090	SLEEVE	1
15	22089	PRESSURE SPRING 10 X 43 X 2	1
16	94315	DOWEL PIN 28 X 80 DIN 7346	2
17	20189	PUMP STUD M16	2
18	94722	M16 WASHER NUT	2
19	108316	PLUG SCREW	2
20	97855	O RING 8 X 2	1

**Lube Pump Cylinder
Complete**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	205020	O RING 24 X 3	1
2	91357	O RING 26 X 3	1
3	92952	O RING 30 X 3	1
4	67283	RING	1
5	97325	PRESSURE SPRING 22 X 52 X 2, 8	1

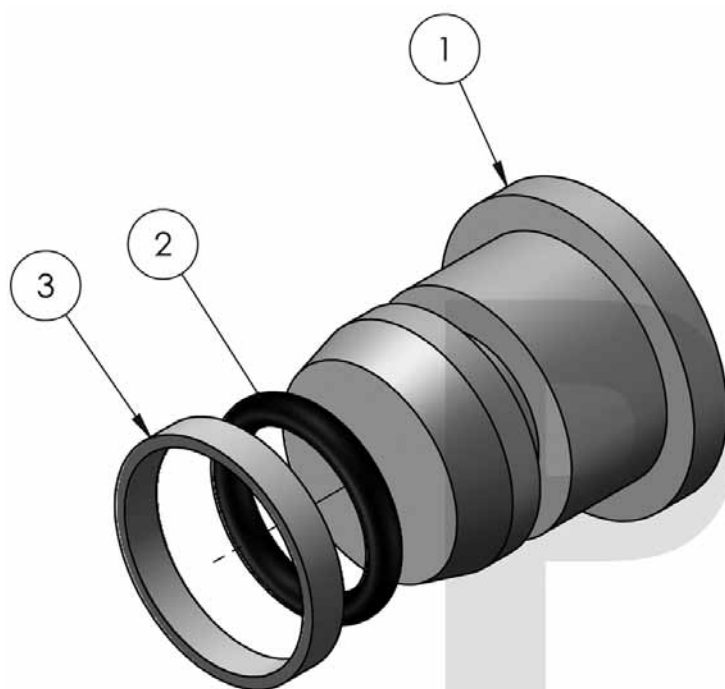
Pressure Valve Complete



*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	97949	RING NIPPLE	1
2	97948	HOLLOW SCREW A6 DIN 7623-6.8	1
3	91417	SEALING RING A12 X 15.5 DIN 7603-CU	2
4	108319	ADAPTER	1
5	90307	BALL 6MM DIN 5401	1
6	190005	PRESSURE SPRING 5 X 36 X 0.8	1
7	104679	PLUG SCREW	1
8	97855	8 X 2 O-RING	1

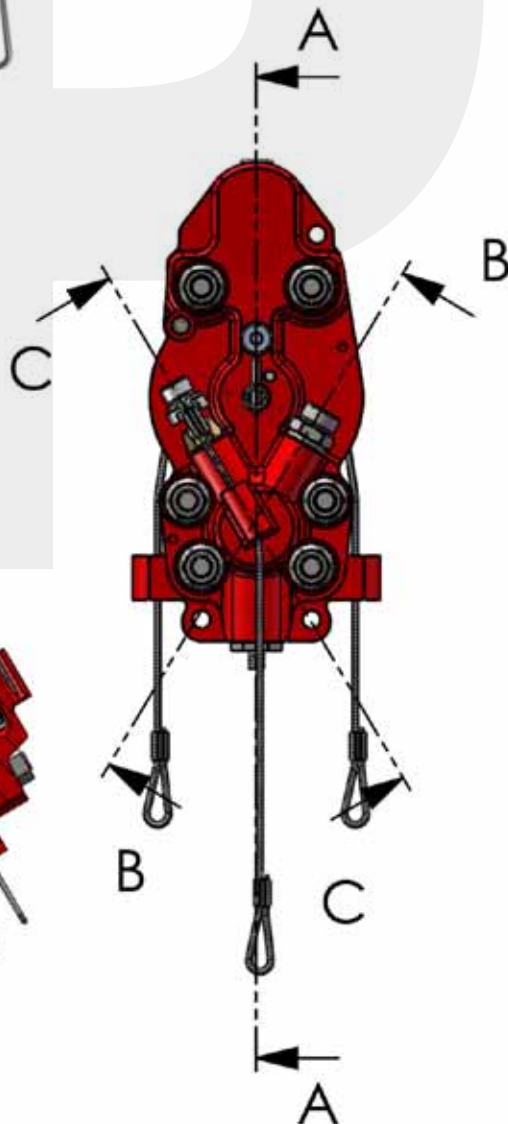
**SOLD
TOGETHER**

**Piston
Complete**

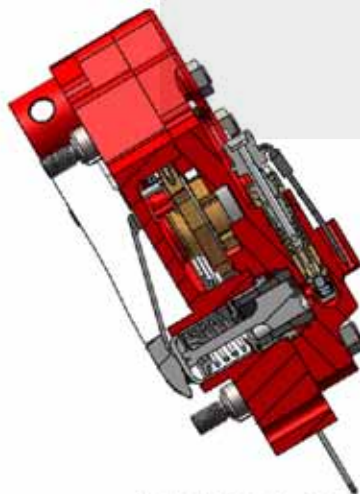
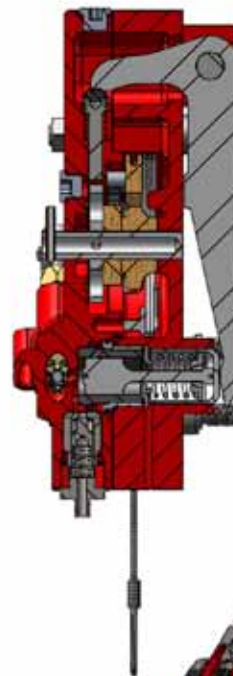
**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	67285	PISTON	1
2	97326	O RING	1
3	97326	SLIP RING	1

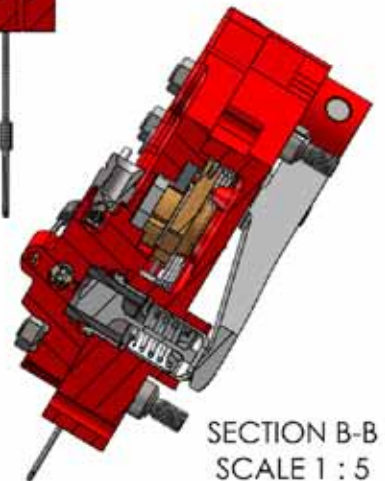
Manual Delivery Fuel Pump



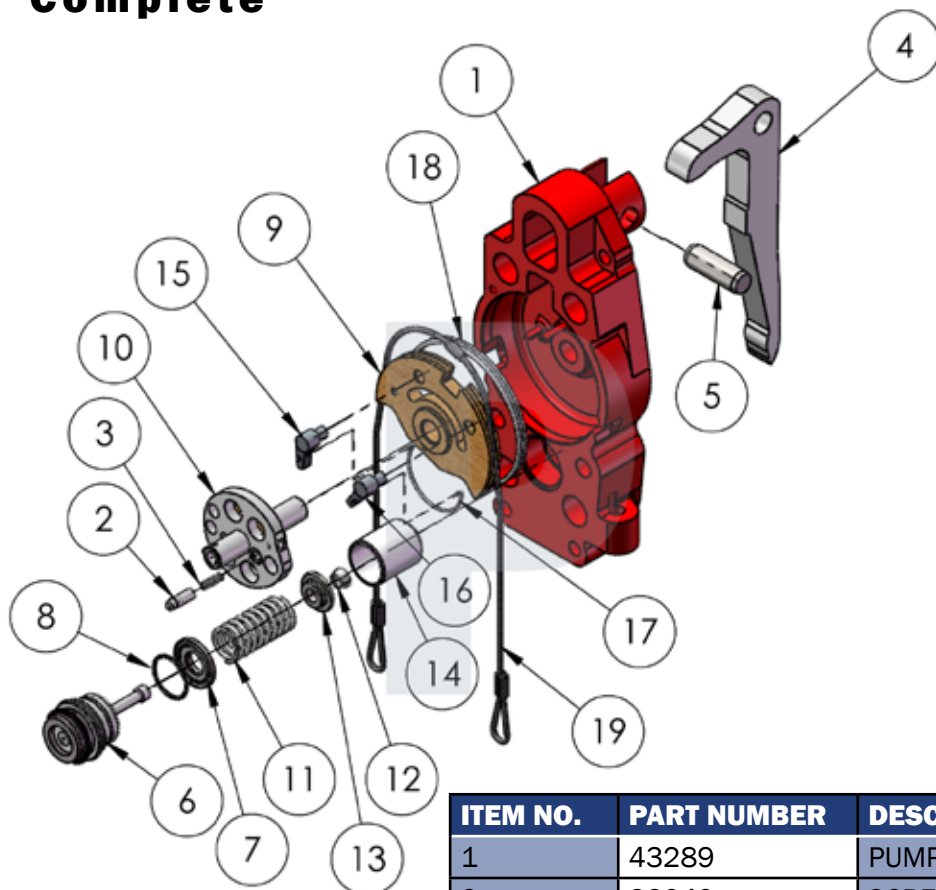
SECTION A-A
SCALE 1 : 5



SECTION C-C
SCALE 1 : 5

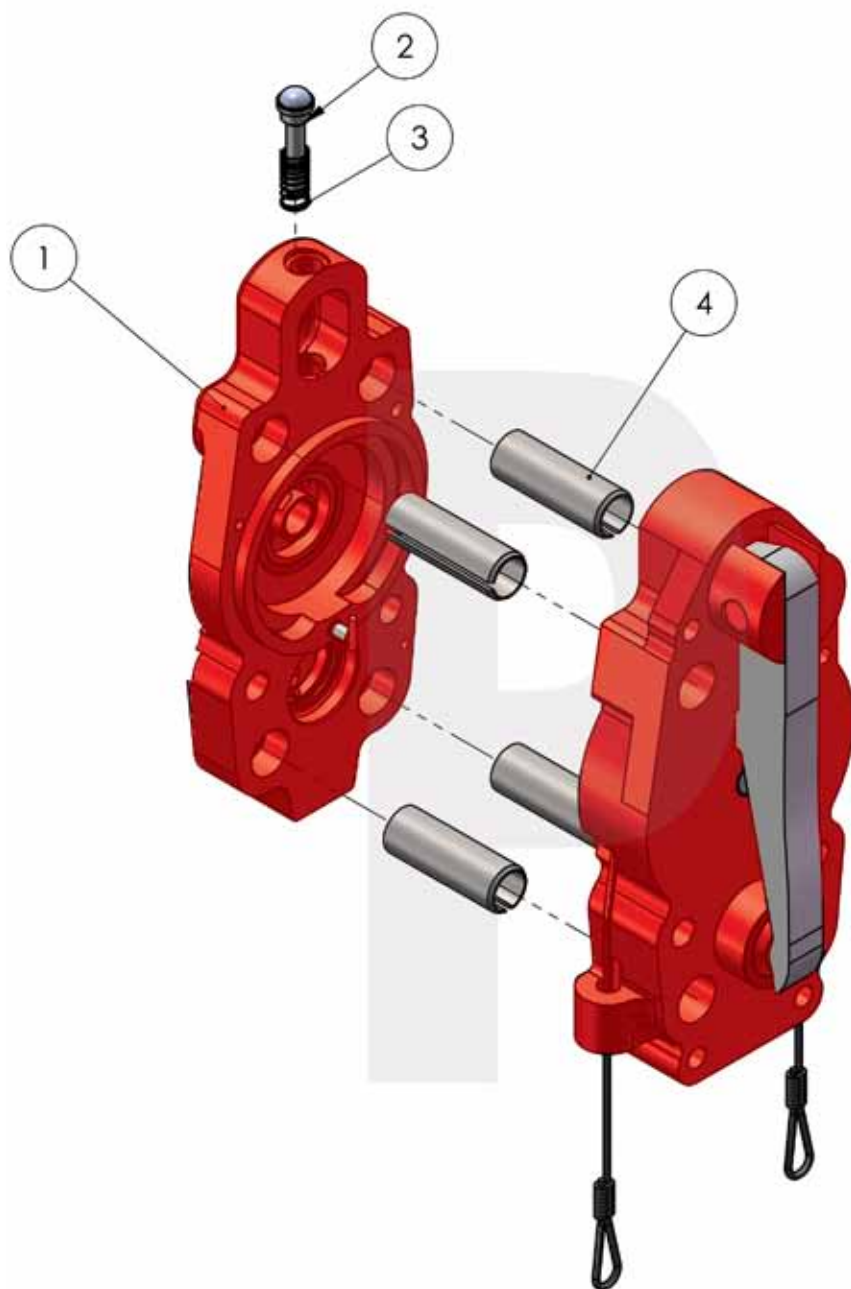


SECTION B-B
SCALE 1 : 5

**Variable Delivery Fuel Pump
Complete**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	43289	PUMP BODY	1
2	22049	SCREEN PIN	1
3	22044	PRESSURE SPRING 5.5 X 20 X 1.2	1
4	41869	PUMP LEVER	1
5	22043	PUMP LEVER PIN	1
6	44015	D19 PUMP ELEMENT 19MM	1
7	43994	HOLDER RING	1
8	92996	ROUND SEALING RING 35 X 2.5	1
9	22040	ROPE DISC	1
10	43308	SWITCH SHAFT	1
11	22060	PRESSURE SPRING 28 X 67.2 X 3.5	1
12	22059	CONICAL RING 2 PCS	1
13	22058	SPRING RETAINING COLLAR	1
14	43287	GUIDE SLEEVE	1
15	22051	CAM	1
16	22052	CAM	1
17	22245	SPRING	1
18	22062	SWIVEL SPRING	1
19	17546	REGULATION ROPE	1

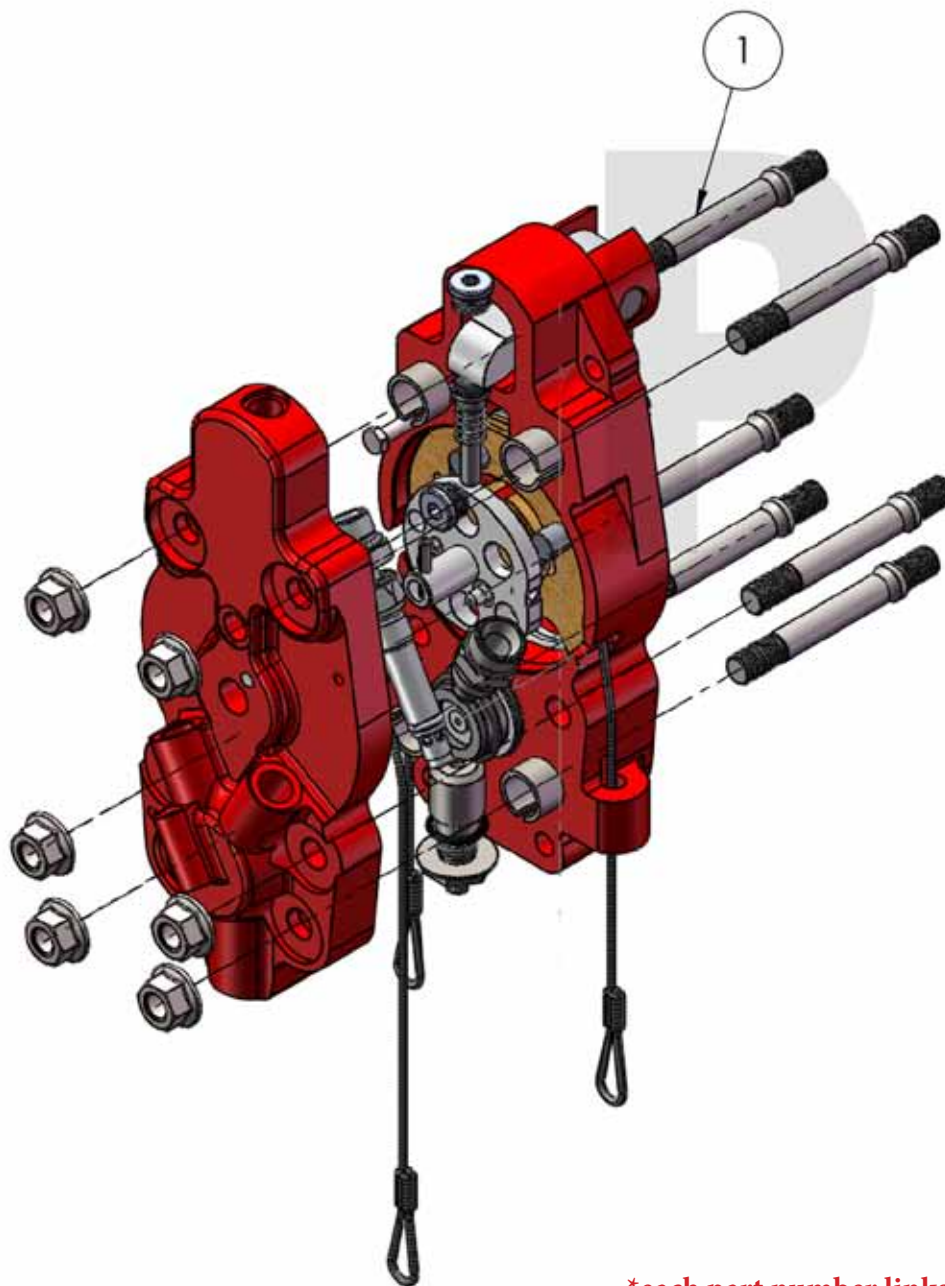
**Variable Delivery Fuel Pump
Complete**

**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	43291	PUMP COVER	1
2	62125	PRESSURE PIECE	1
3	22046	PRESSURE SPRING	1
4	94315	DOWEL PIN 28 X 80	4



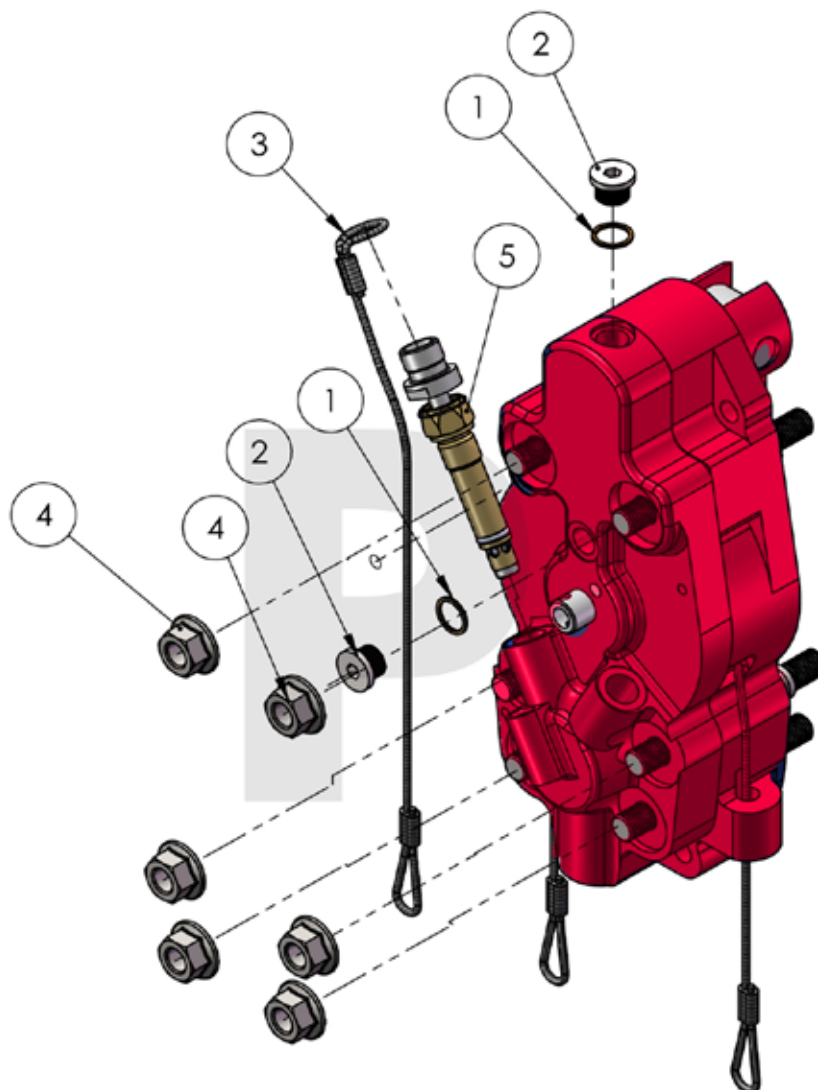
**Variable Delivery Fuel Pump
Complete**



*each part number links to web site part

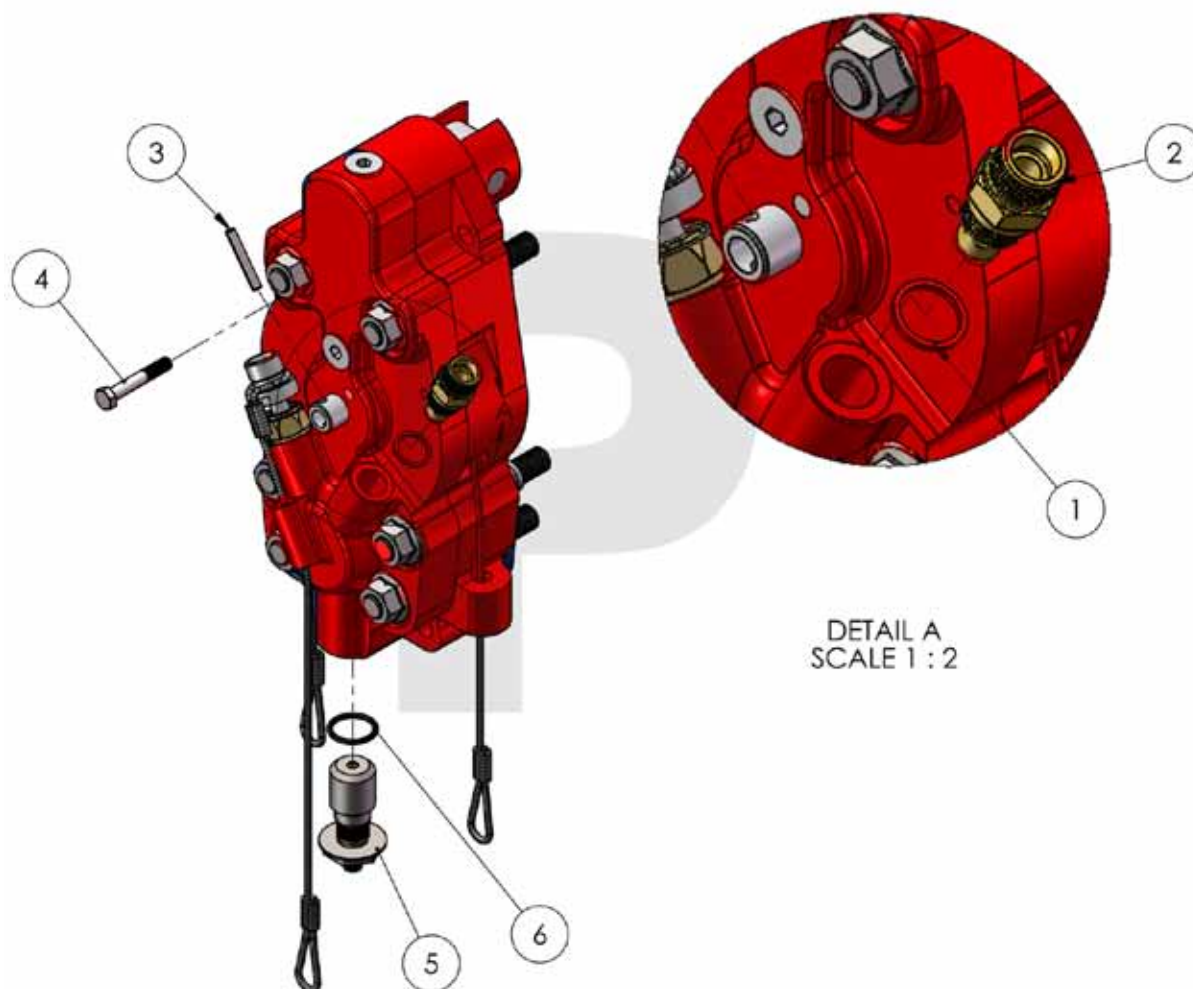
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	20189	PUMP STUD M16	6

Variable Delivery Fuel Pump Complete



*each part number links to web site part

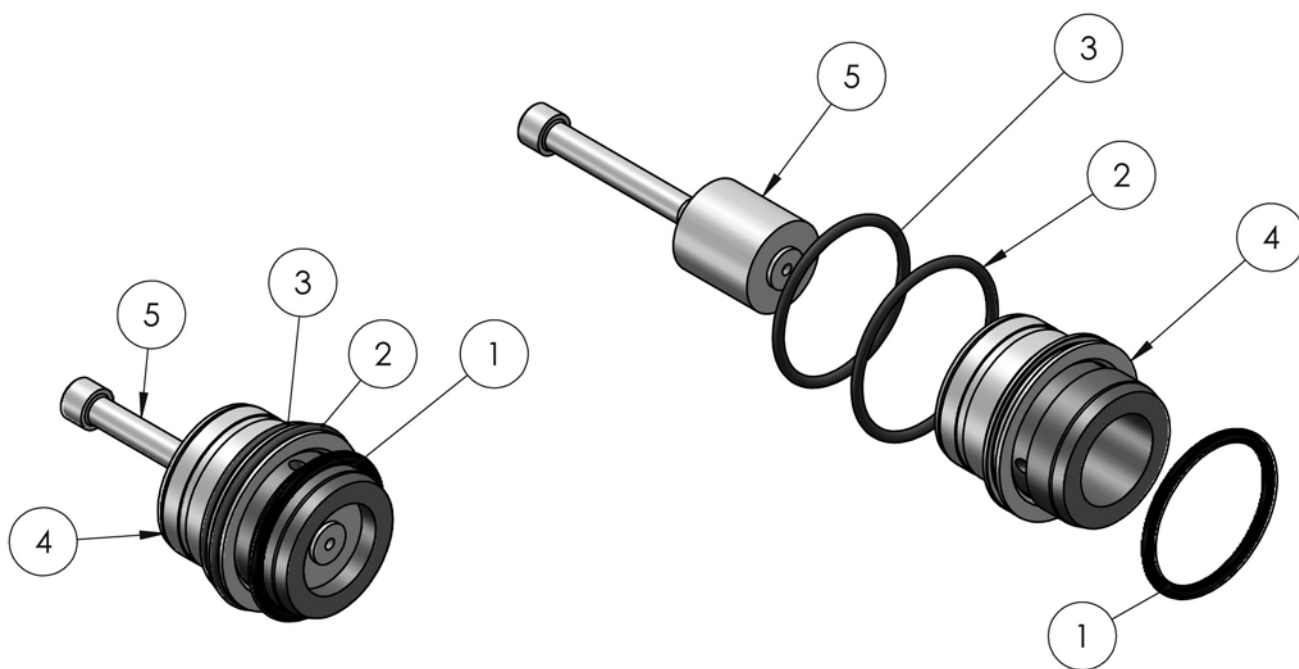
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	90002	SEALING RING A18 X 22	2
2	93055	PLUG SCREW M18 X 1.5	2
3	17546	REGULATING ROPE	1
4	94722	M16 WASHER NUT	6
5	41868	STOP VALVE COMPLETE	1

**Variable Delivery Fuel Pump
Complete**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	92031	SEALING RING A20 X 24	1
2	41863	SUCTION VALVE	1
3	90150	DOWEL PIN 6 X 40	1
4	93456	LOCKING SCREW M8 X 50	1
5	43296	CHECK NON-RETURN VALVE COMPLETE	1
6	91296	O-RING 22 X 3	1

19MM Pump Element Complete



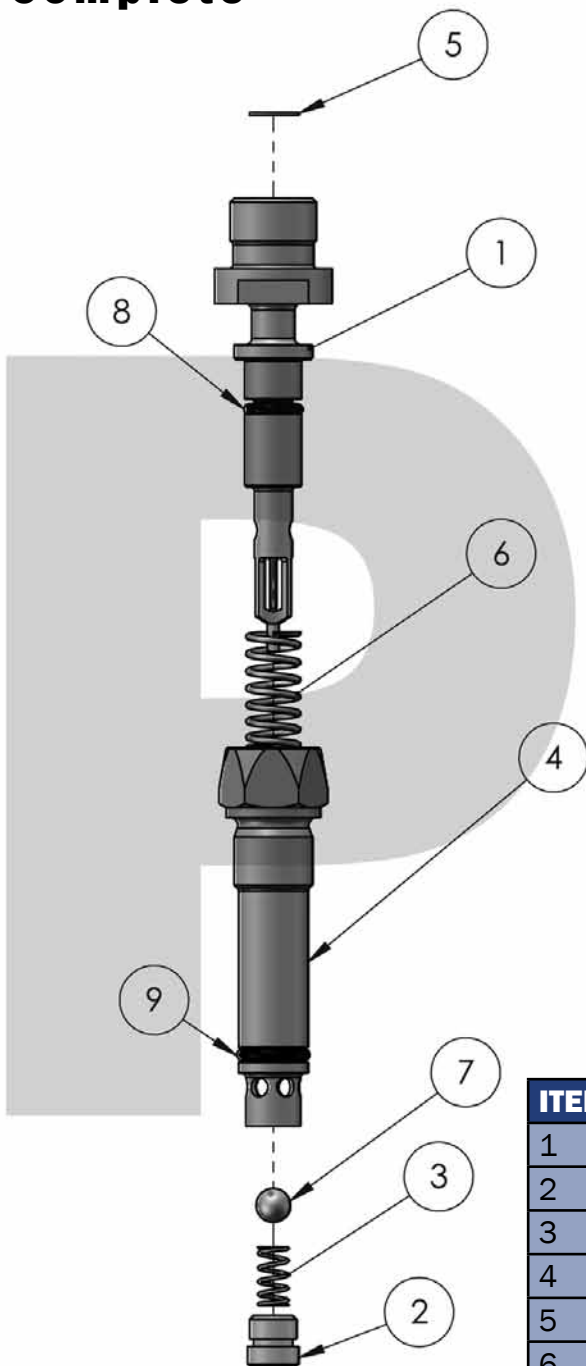
*each circle links to web site part

Sold as one complete unit!

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	95933	O-RING 42 X 3	1
2	91322	O-RING 44 X 3	1
3	91339	O-RING 40 X 2.5	1
4	44015	19MM ELEMENT BODY	1
5	44015	19MM ELEMENT PLUNGER	1

TOGETHER

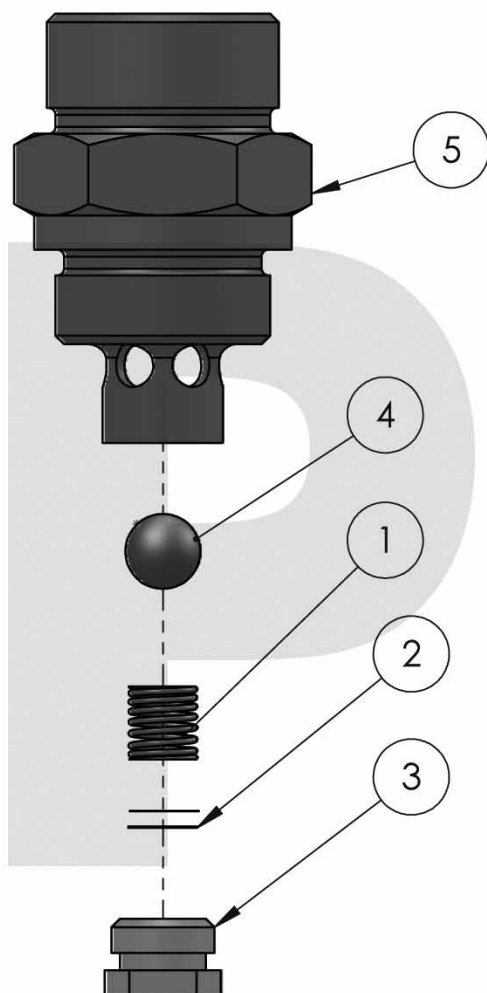
Stop Valve Complete



*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	43138	VALVE PISTON	1
2	22021	THREADED PLUG	1
3	98929	PRESSURE SPRING	1
4	43130	VALVE SCREW	1
5	95768	CIRCLIP 20 X 1	1
6	43279	PRESSURE SPRING	1
7	98511	BALL 8.731MM	1
8	91894	O-RING 8 X 3	1
9	94316	O-RING 12 X 3	1

Suction Valve Complete

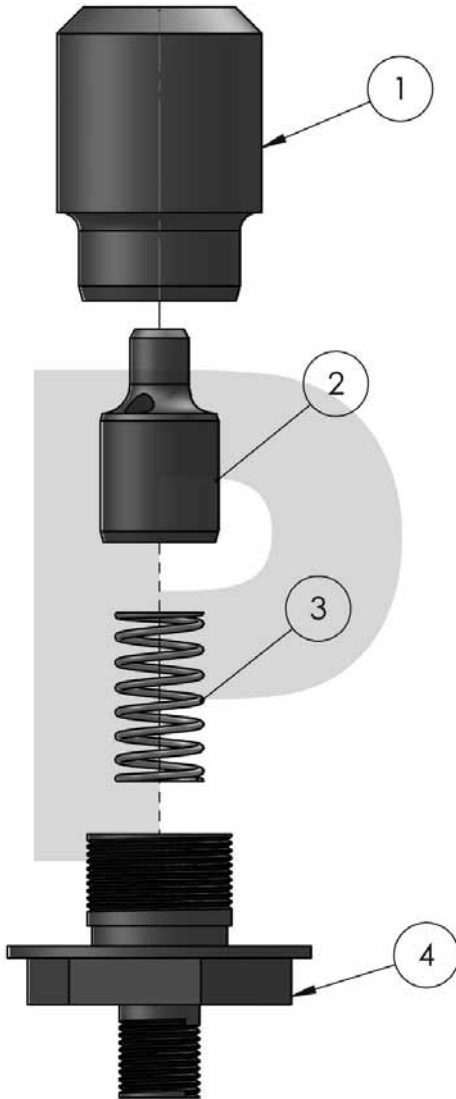


*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	22022	PRESSURE SPRING 7.3 X 8 X 0.7	1
2	22023	WASHER	2
3	41862	THREADED PLUG	1
4	98511	BALL 8.731MM	1
5	41861	SLEEVE	1



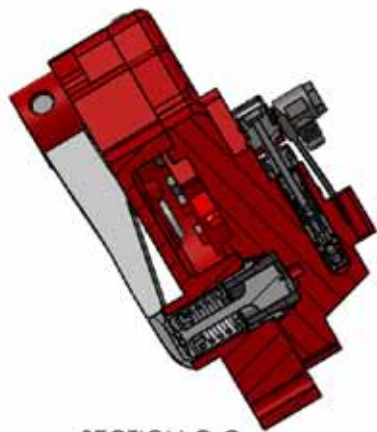
Check Non-Return Valve Complete



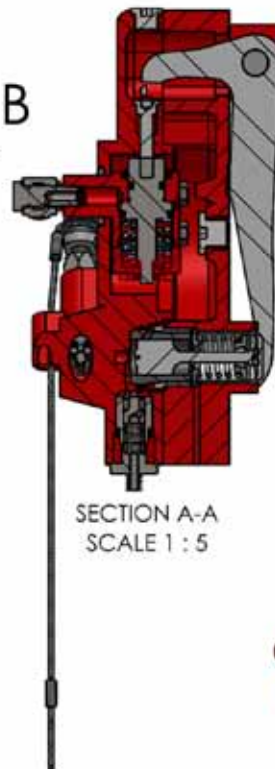
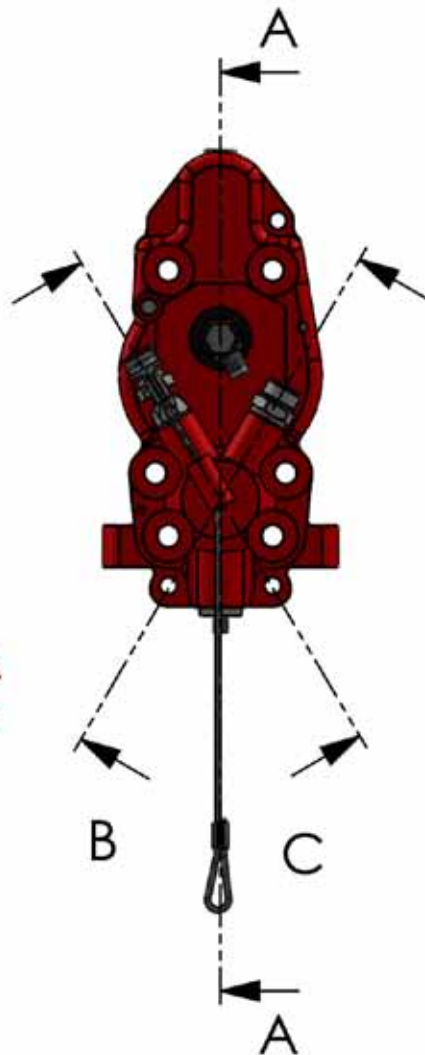
**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	43297	HOUSING	1
2	43299	VALVE PISTON	1
3	22034	PRESSURE SPRING	1
4	43298	RING TYPE NIPPLE	1

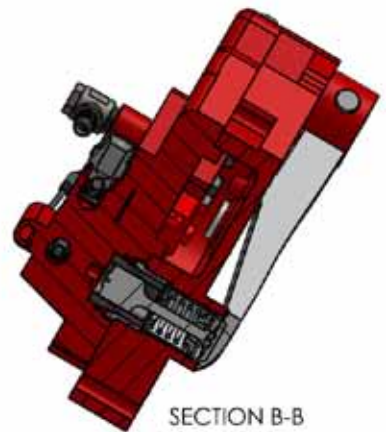
Hydraulic Delivery Fuel Pump



SECTION C-C
SCALE 1 : 5



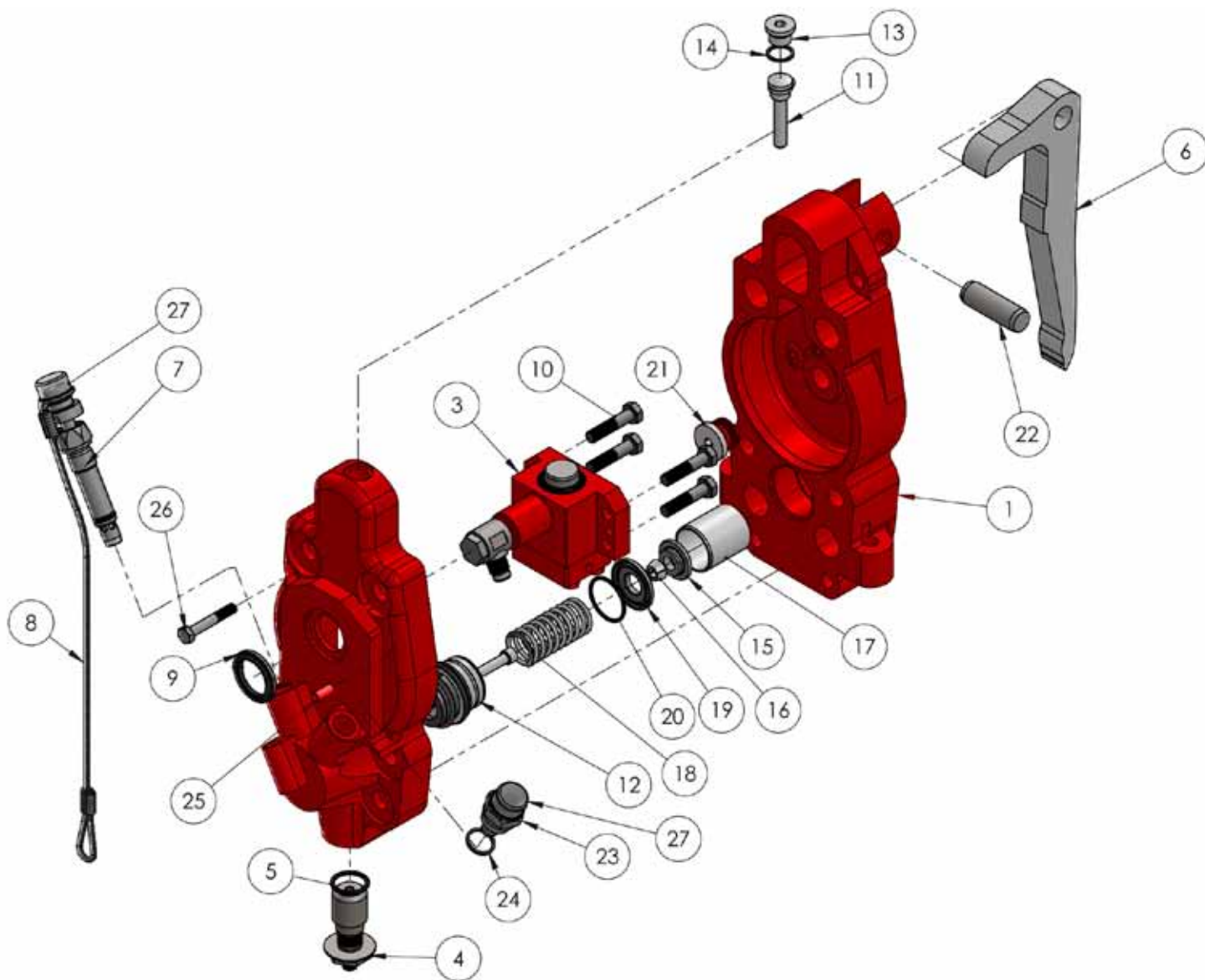
SECTION A-A
SCALE 1 : 5



SECTION B-B
SCALE 1 : 5



**Hydraulic Variable Delivery Fuel Pump
Complete**

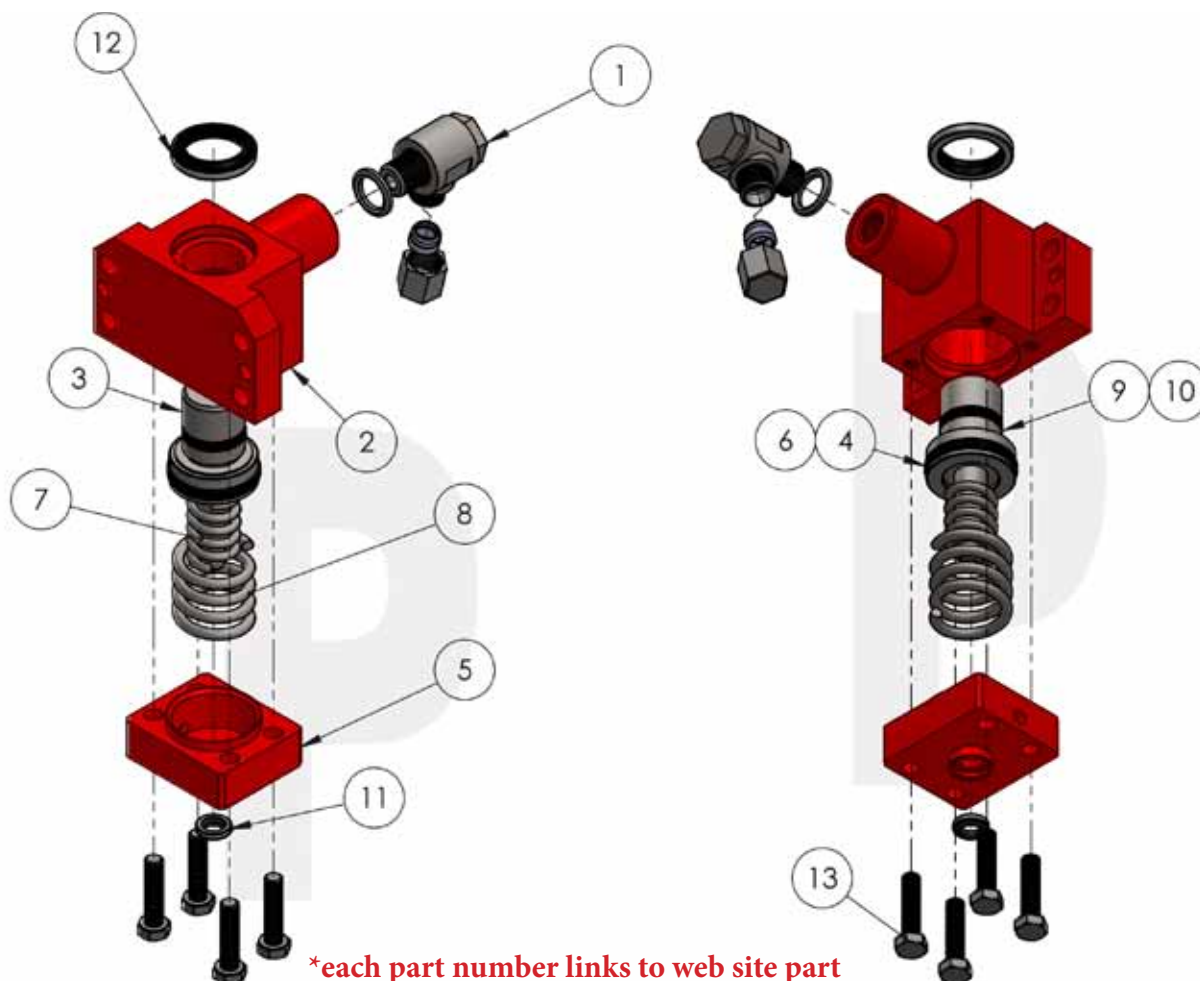


Hydraulic Variable Fuel Pump Continued.....

**Hydraulic Variable Delivery Fuel Pump
Complete**

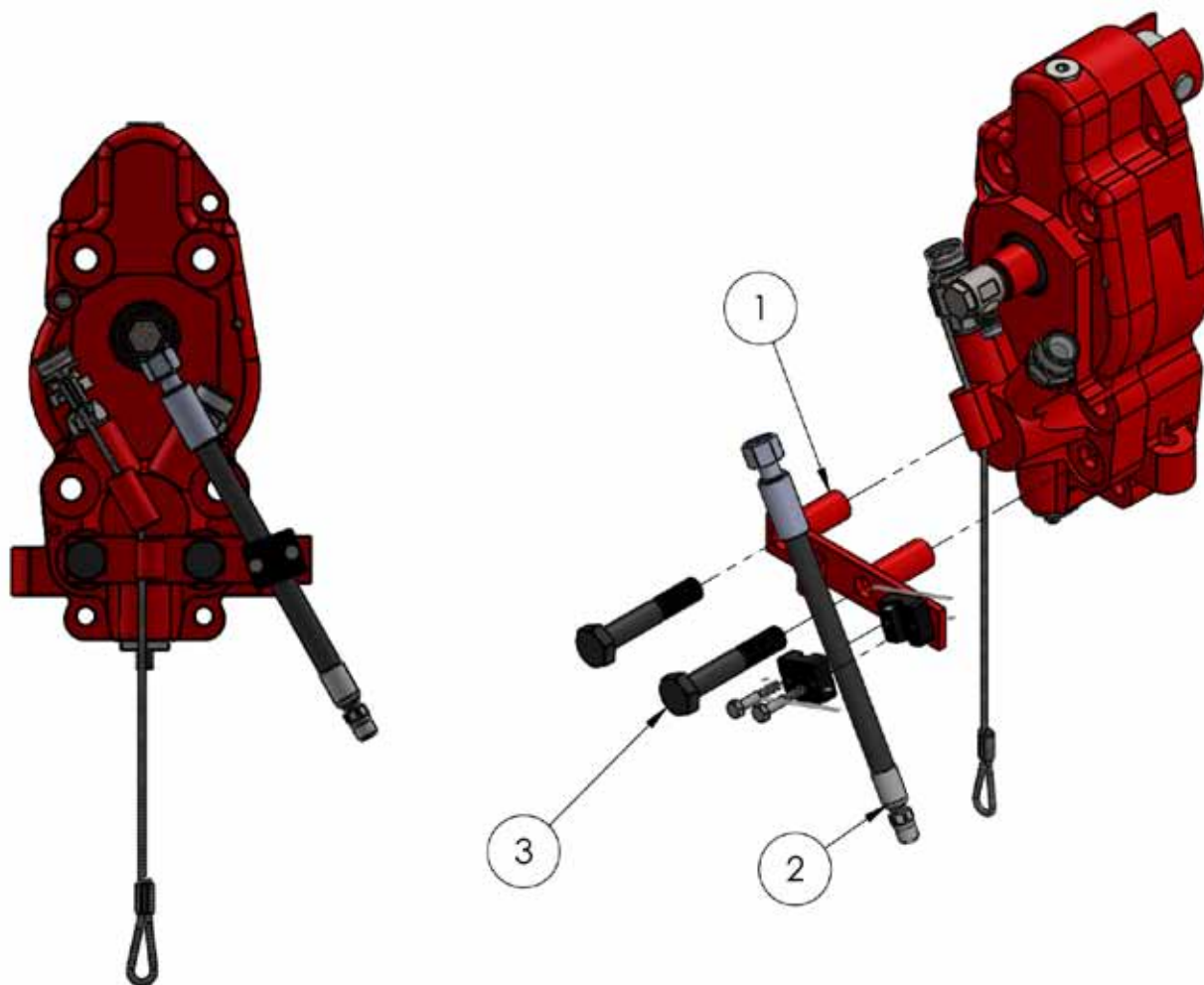
*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	205503	PUMP BODY	1
2	205508	PUMP COVER	1
3	122446-C	FUEL PUMP CONTROL COMPLETE	1
4	43296	CHECK NON RETURN VALVE COMPLETE	1
5	91296	O RING 22 X 3	1
6	41869	PUMP LEVER	1
7	41868	STOP VALVE COMPLETE	1
8	17546	REGULATING ROPE	1
9	205507	DUST RING	1
10	93414	10-1.5 X 30 HEX HEAD CAPSCREW 8.8	4
11	205501	PRESSURE PIECE	1
12	44015	D19 PUMP ELEMENT 19MM	1
13	93055	PLUG SCREW 18 X 1.5	1
14	90002	SEALING RING 18 X 22	1
15	22058	SPRING RETAINING COLLAR	1
16	22059	CONICAL RING 2 PCS	1
17	43287	GUIDE SLEEVE	1
18	22060	PRESSURE SPRING 28 X 67.2 X 3.5	1
19	43995	HOLDER RING	1
20	92996	ROUND SEALING RING 35 X 2.5	1
21	91885	PLUG SCREW M26 X 1.5	1
22	22043	PIN	1
23	41863	SUCTION VALVE	1
24	92031	SEALING RING A20 X 24	1
25	205506	DOWEL PIN 8 X 20	1
26	93456	LOCKING SCREW M8 X 50	1
27	93236	PROTECTION CAP	2

**Fuel Pump Control
Complete**

*each part number links to web site part

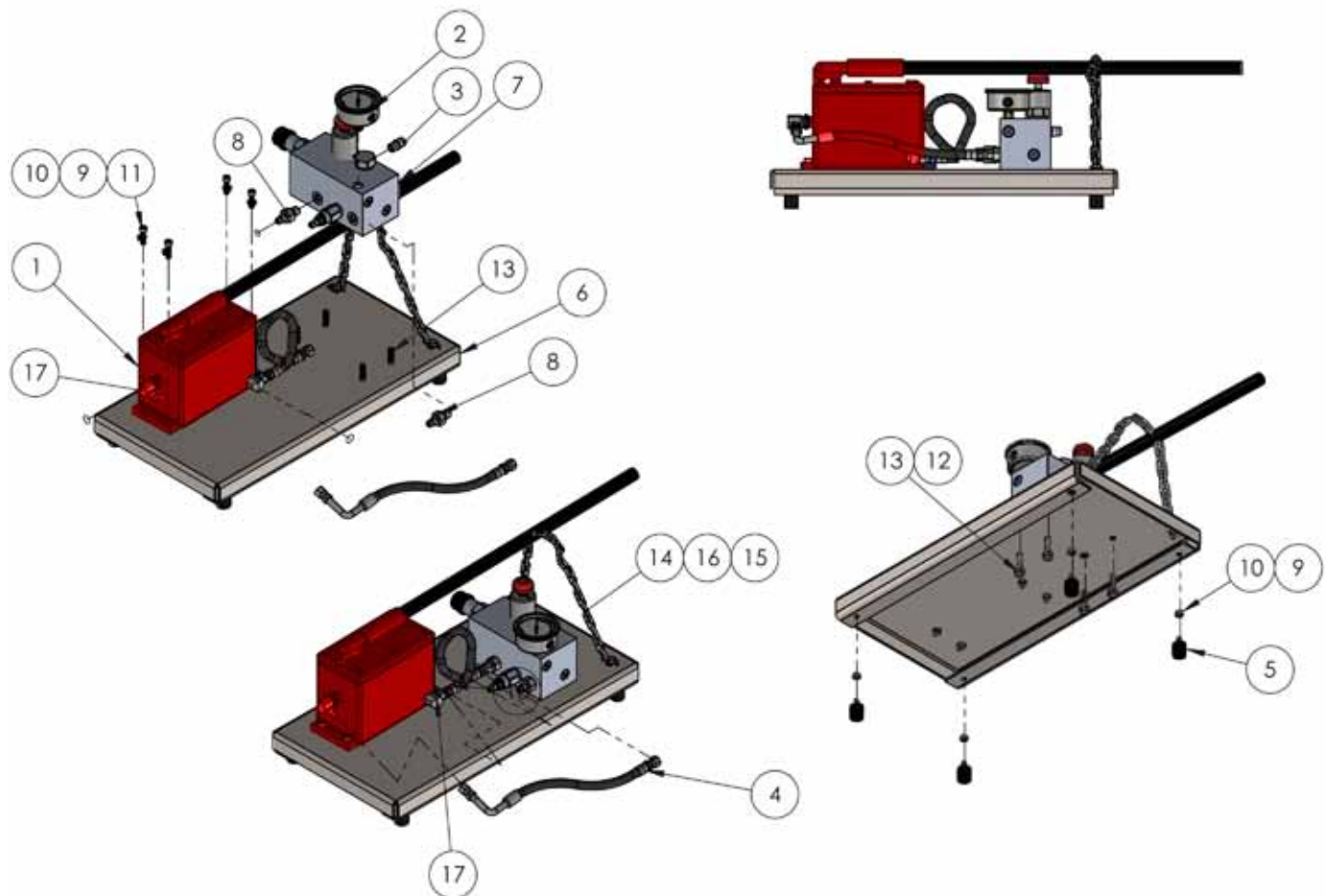
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	205509	METRIC BITE TYPE FITTING M16 X 1.5	1
2	126538-C	CYLINDER	1
3	126539	PISTON	1
4	193444	O-RING 32.93 X 3.53	1
5	126537-C	COVER	1
6	193446	BACK UP RING	1
7	193451	PRESSURE SPRING	1
8	193450	PRESSURE SPRING	1
9	193445	O-RING 20.22 X 3.53	1
10	193447	BACK UP RING	1
11	193448	ROD WIPER	1
12	193449	ROD WIPER	1
13	94989	8-1.25 X 35 HEX HEAD CAPSCREW	4

**Pigtail Installment**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	205505	HYDRAULIC FUEL PUMP HOSE CLAMP	1
2	8001063	HYDRAULIC FUEL PUMP PIGTAIL HOSE	1
3	205504	16MM-2.0 X 90MM HEX HEAD CAP SCREW 8.8	2



Hydraulic Hand Pump Assembly



**Hydraulic Hand Pump
Assembly**

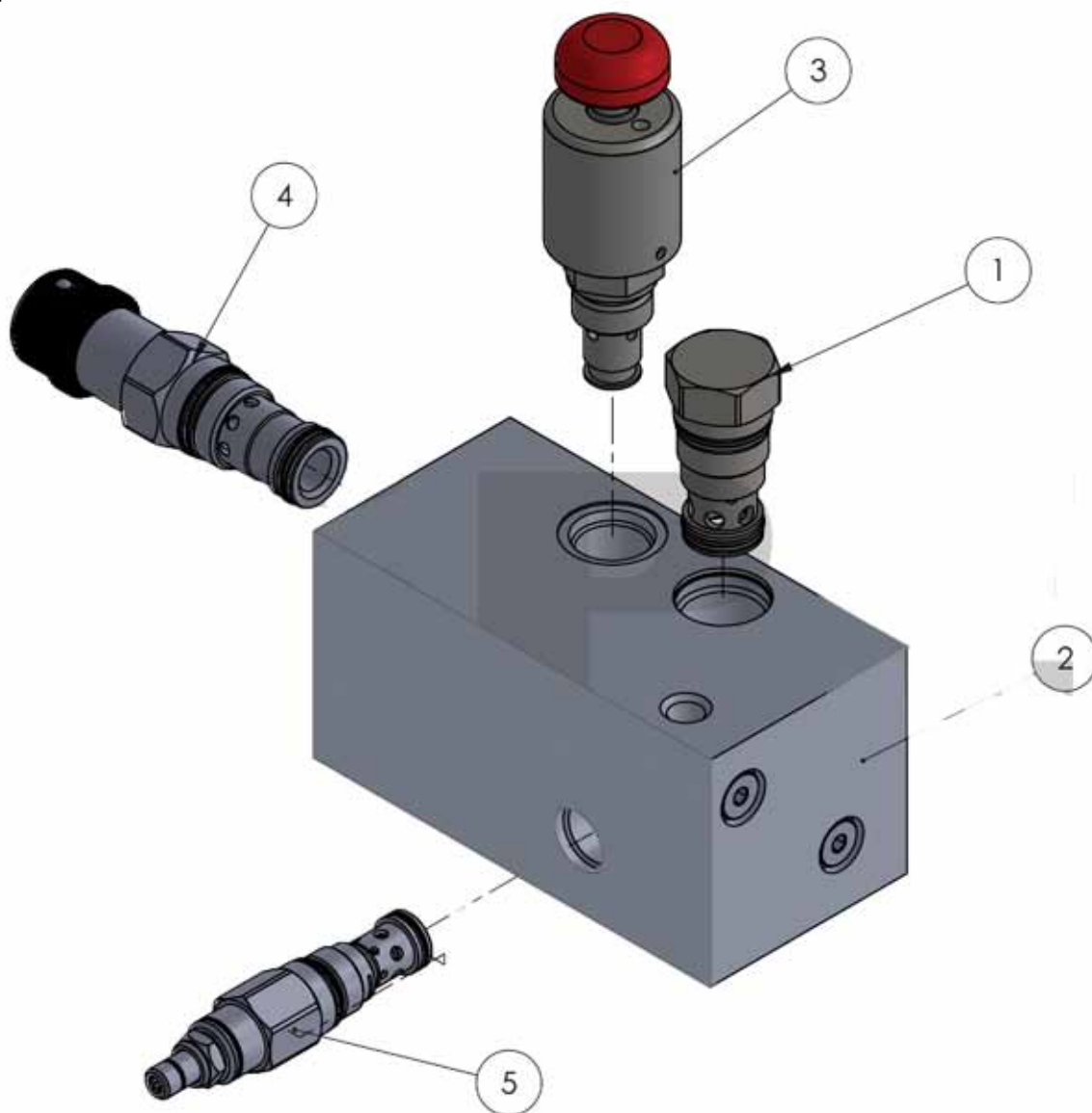
Hydraulic Hand Pump Continued....

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	55107	P-51 ENERPAC PUMP	1
2	55120	G25-SL600-CB SS PRESSURE GAUGE	1
3	55121	4SAE MALE TO 1/4 NPT MALE ADAPTER	1
4	55104	1/4 JIC FEMALE SWIVEL FITTING TO 1/4 JIC FEMALE SWIV- EL 1/4 PRESSURE HOSE	1
5	55122	RUBBER FOOT 1" X 1"-1/4-20 X 3/4 BOLT	4
6	55105	PLATE	1
7	55103	MANIFOLD COMPLETE	1
8	55123	4 SAE MALE TO 1/4 JIC MALE STRAIGHT ADAPTER	2
9	55124	M6 SPLIT LOCKWASHER	14
10	55125	M6-1.0 JAM NUT	10
11	55126	6-1.0 X 25 SOCKET HEAD CAPSCREW	4
12	55127	8MM SPLIT LOCKWASHERS	4
13	55128	8-1.25 X 30 HEX HEAD CAPSCREW	4
14	55108	CHAIN LINK #2/0 X 16"	1
15	55129	6MM FLAT WASHER	2
16	55130	6-1.0 X 20 HEX HEAD CAPSCREW	2
17	55131	3/8 NPT MALE TO 1/4 JIC MALE 90 ADAPTER	2
18	55109	1/4 JIC FEMALE SWIVEL FITTING TO 1/4 JIC FEMALE SWIV- EL HOSE TO TANK	1



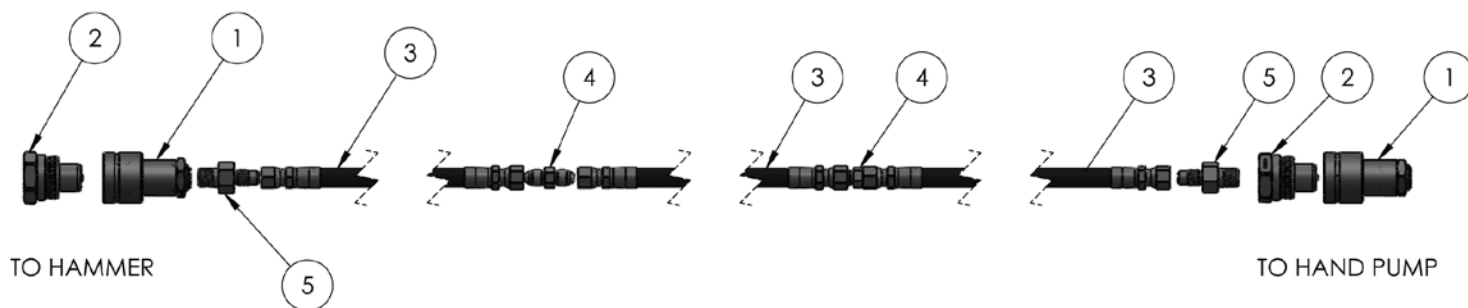
**Manifold
Complete**



**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	55110	CXFA-XCN DIRECTION CHECK	1
2	55106	MANIFOLD	1
3	55111	DOERING DUMP VALVE	1
4	55112	NEEDLE VALVE	1
5	55113	RELIEF VALVE	1

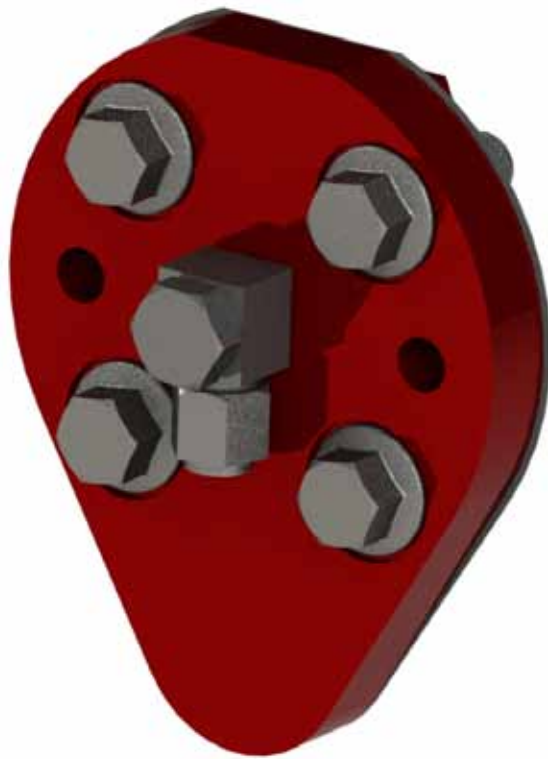
HAND PUMP 1/4" HOSE ASSEMBLY **150FT IN 50FT SECTIONS**

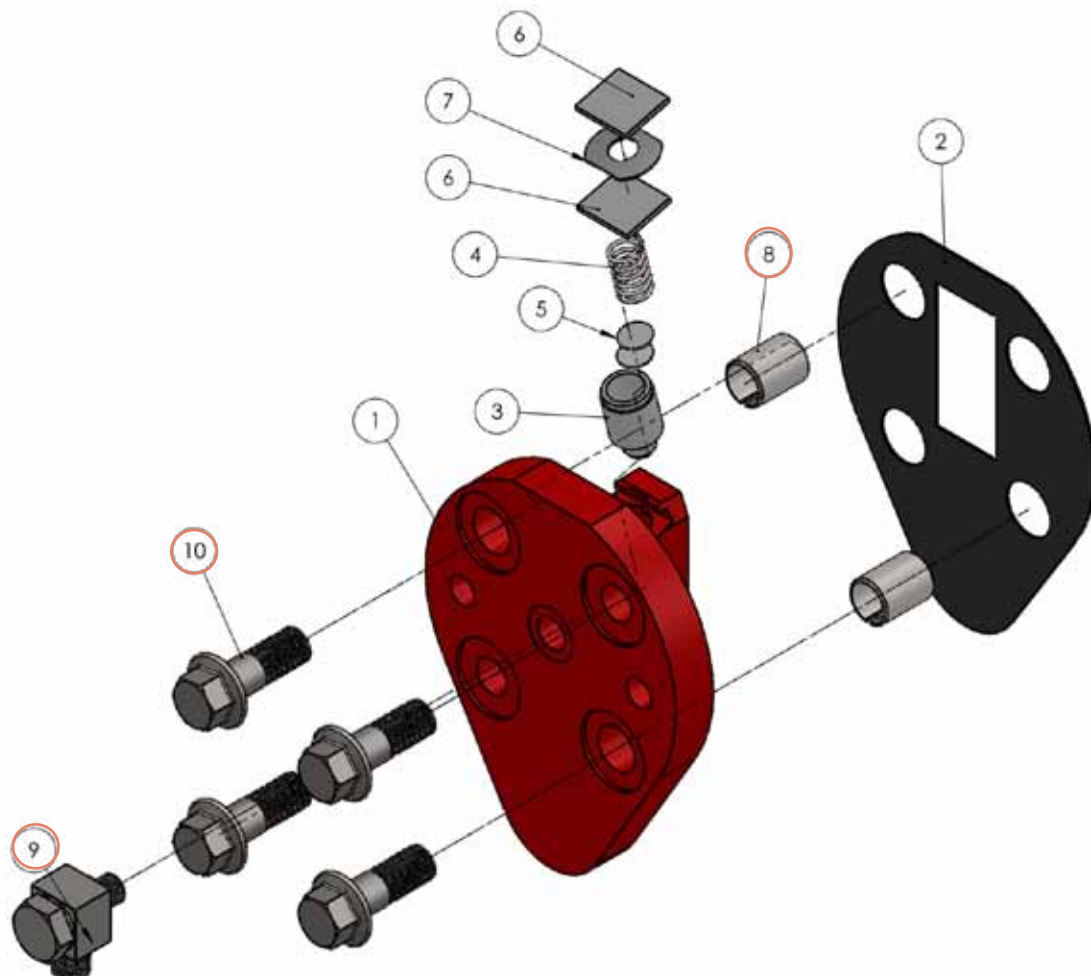


**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	55133	1/4" COUPLER NPFT SCREW TYPE QUICK DISCONNECT FEMALE	2
2	55134	1/4" 3000 SERIES NIPPLE NPFT SCREW TYPE QUICK DISCONNECT MALE	2
3	8000440	4 FEMALE JIC TO 4 FEMALE JIC 1/4 HOSE 50FT	3
4	55137	4 JIC MALE TO 4 JIC MALE STRAIGHT ADAPTER	2
5	8001067	1/4 NPT MALE TO 1/4 JIC MALE STRAIGHT ADAPTER	2

Fuel Injection



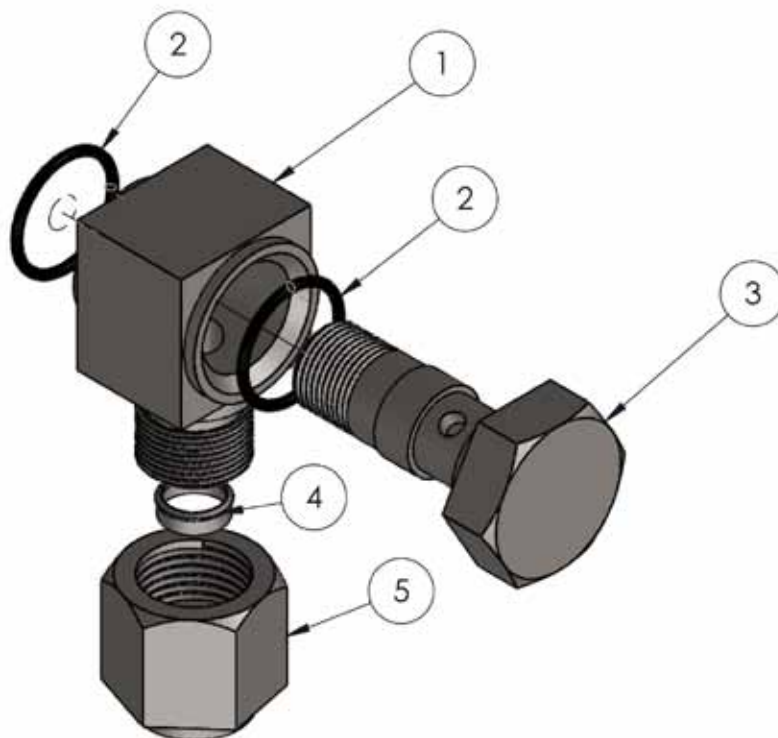
**Fuel Injection Valve
Complete**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	102133	INJECTION PLATE	1
2	45647	GASKET	1
3	63843	VALVE PISTON	1
4	97569	PRESSURE SPRING	1
5	97573	ADJUSTING WASHER	2
6	64460	LOCKING PLATE	2
7	64461	SPRING WASHER	1
8 sold separately	95633	DOWEL PIN 21 X 28 DIN 7346	2
9 sold separately	97038	THREADED PIPE JOINT (UNION)	1
10 sold separately	95639	LOCKING SCREW M16 X 45	4



**Threaded Pipe Joint
Complete**



NOTE: ITEM SHOULD BE REPLACED WITH
NEW PIPE JOINT COMPLETE WHEN
REMOVED FOR SERVICING

#1 SOLD COMPLETE

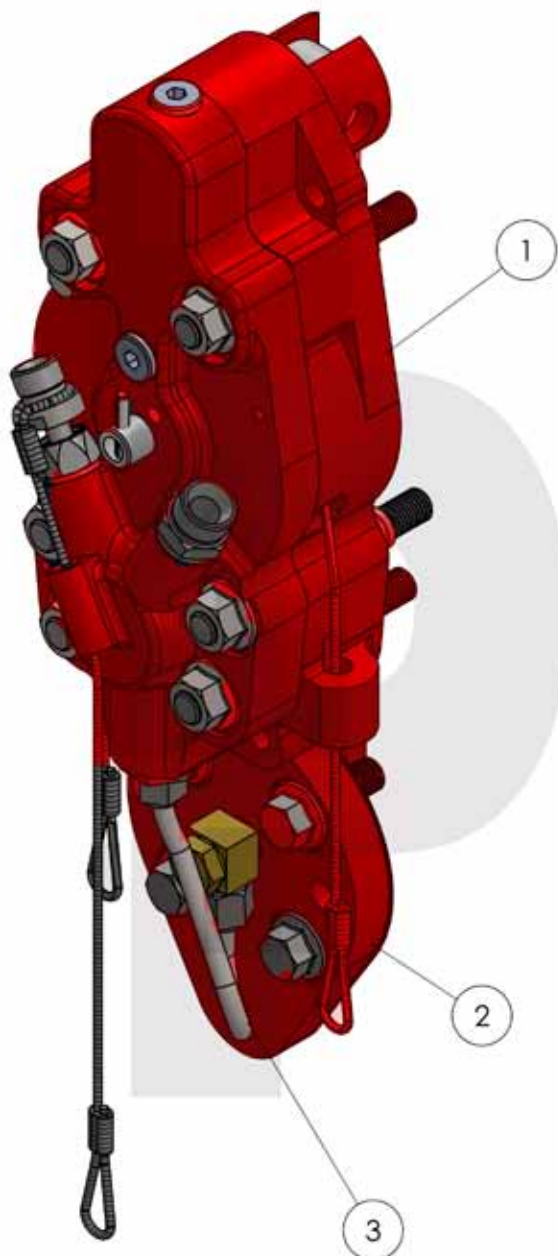
**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	97038	THREADED PIPE JOINT	1
2	97258	O RING 17 X 1.5	2
3	210405	HOLLOW SCREW	1
4	90127	OLIVE	1
5	204012	UNION NUT M16X1.5	1

**SOLD
TOGETHER**



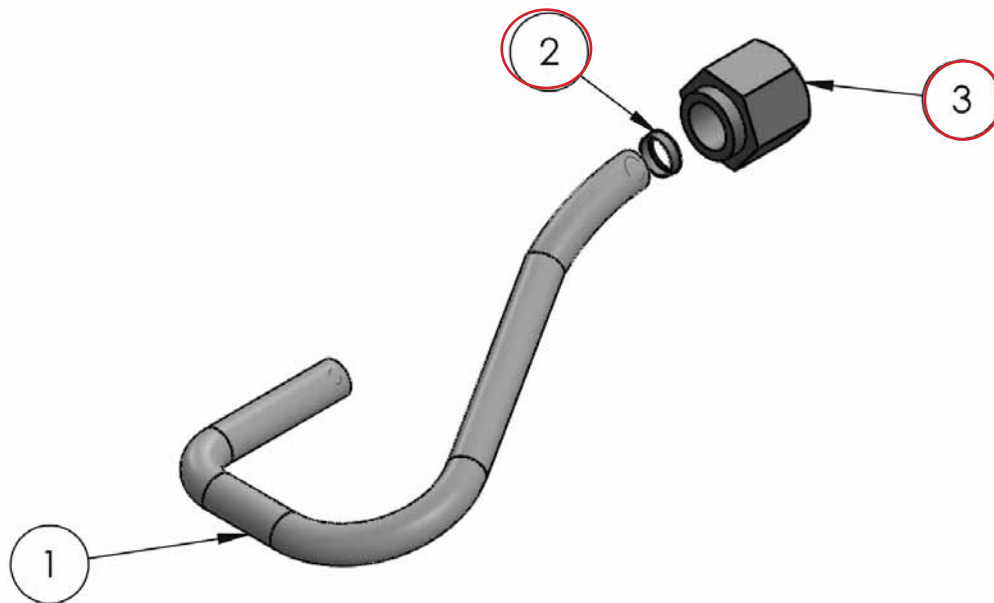
**Fuel Injection Device
Complete**



*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	170244	VARIABLE-DELIVERY FUEL PUMP D19	1
2	104675	INJECTION VAVLE COMPLETE	1
3	104974	FUEL TUBE COMPLETE	1

Fuel Tube Assembly



NOTE: FUEL TUBE , NUT, AND OLIVE SHALL BE REPLACED IF REMOVED DURING SERVICE

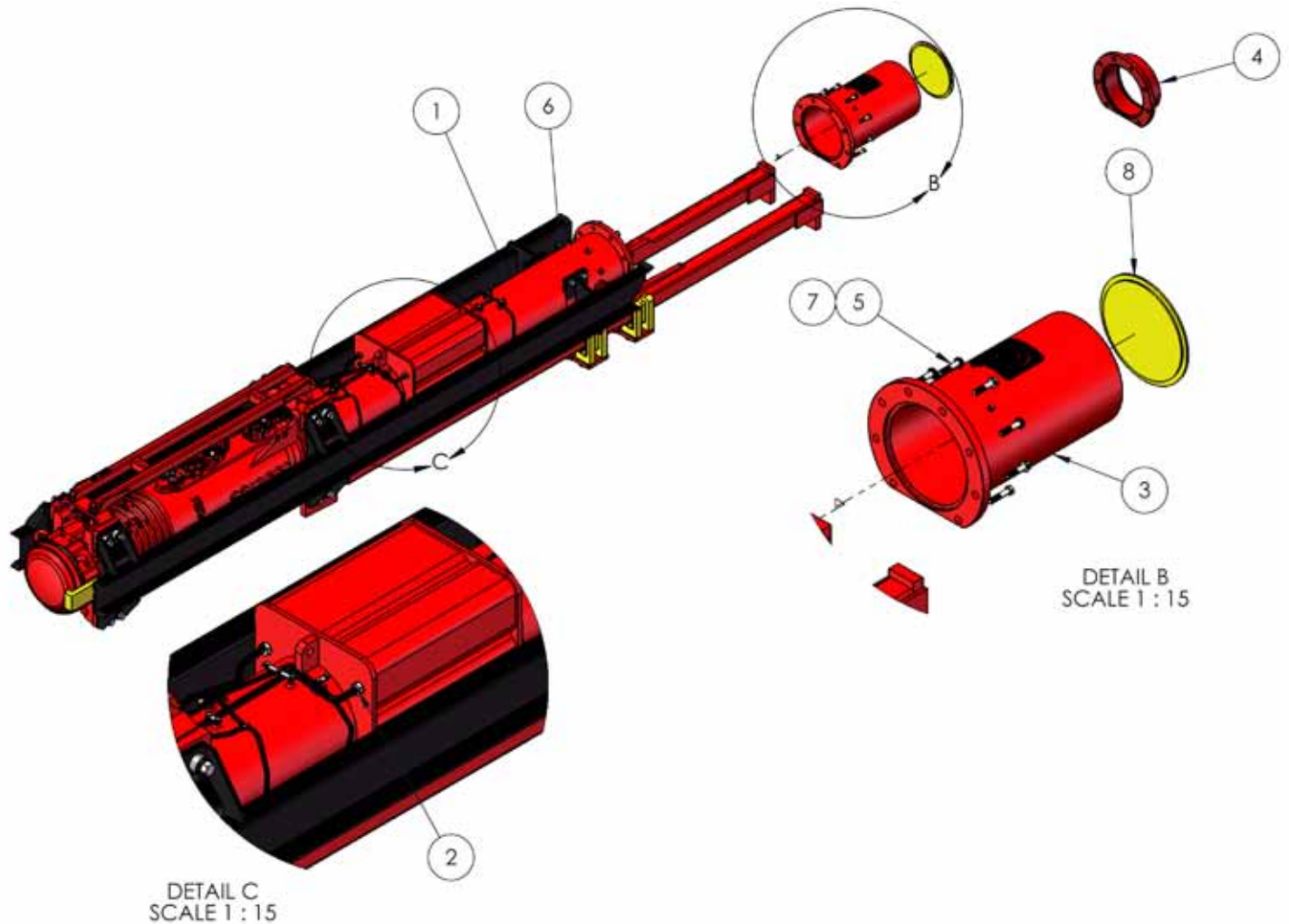
**DO NOT OVER TIGHTEN COMPRESSION NUTS
DAMAGE TO TUBE MAY OCCUR!**

**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	104974	FUEL TUBE	1
2 sold separately	90127	OLIVE	1
3 sold separately	90128	UNION NUT M18X1.5	1

Upper Cylinder

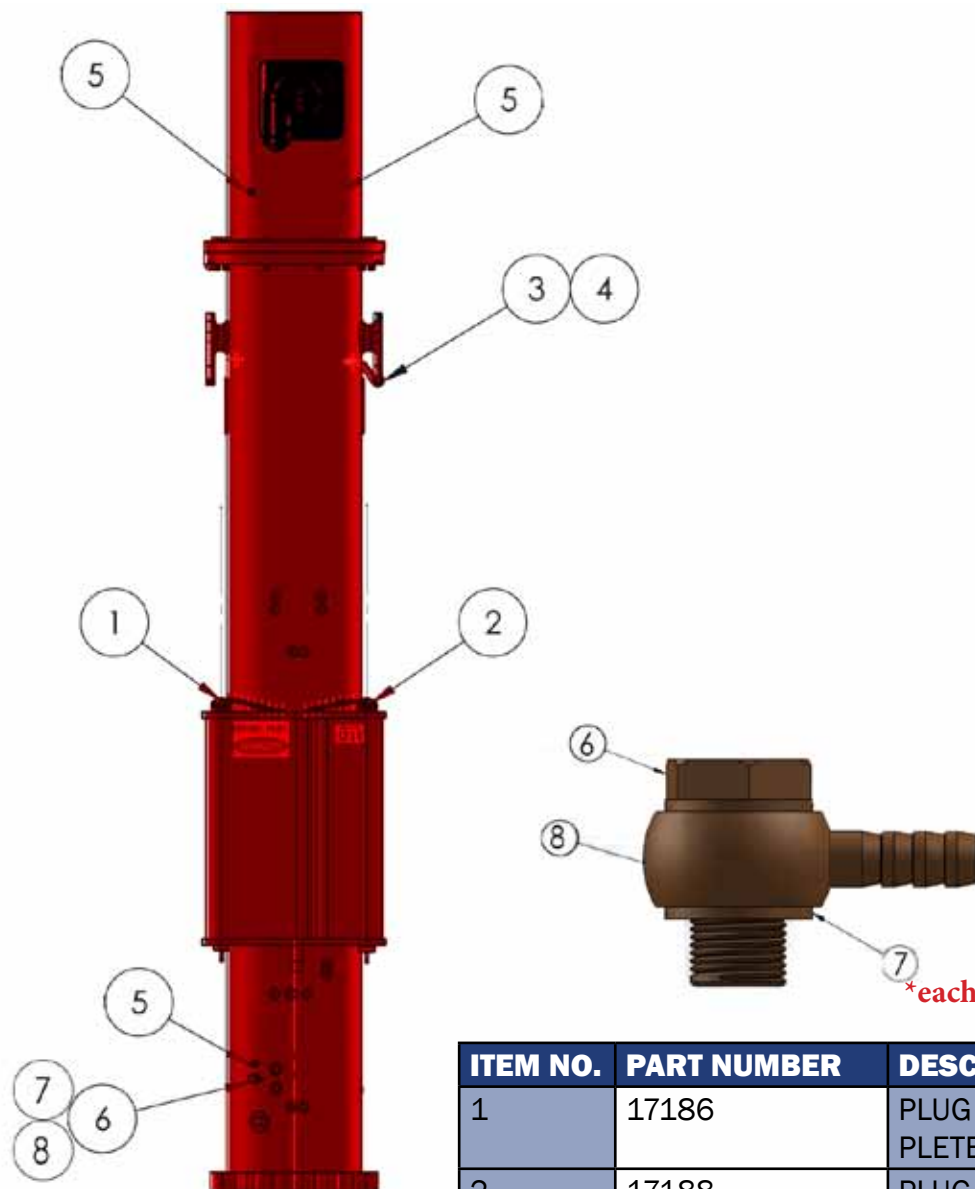


**Upper Cylinder
Complete**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	136674	UPPER CYLINDER	1
2	64403	FILTER ELBOW	2
3	202004	UPPER ENDRING (LONG VERSION)	1
4	202008	UPPER ENDRING (SHORT VERSION)	1
5	202005	16MM-2.0 X 75 HEX HEAD CAPSCREW	8
6	202006	16MM-2.0 HEAVY HEX NUT	8
7	202007	WASHER	8
8	119050	RAIN COVER	1

Upper Cylinder Complete

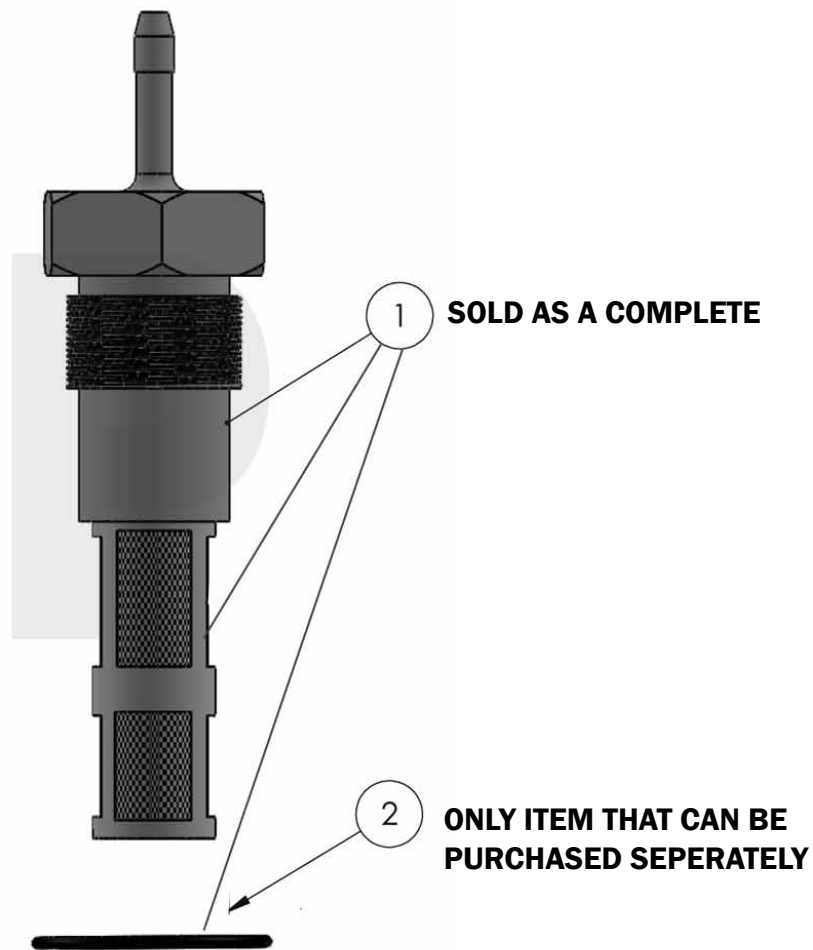


*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	17186	PLUG SCREW (DIESEL) COMPLETE	1
2	17188	PLUG SCREW(OIL)COMPLETE	1
3	17039	RATCHET	2
4	90044	12MM X 60 DOWEL PIN	2
5	90791	GREASE NIPPLE M10 X 1	3
6	97948	HOLLOW SCREW A6 DIN 7623-6.8	3
7	91417	SEALING RING A12 X 15.5 DIN 7603CU	6
8	97949	RING NIPPLE	3

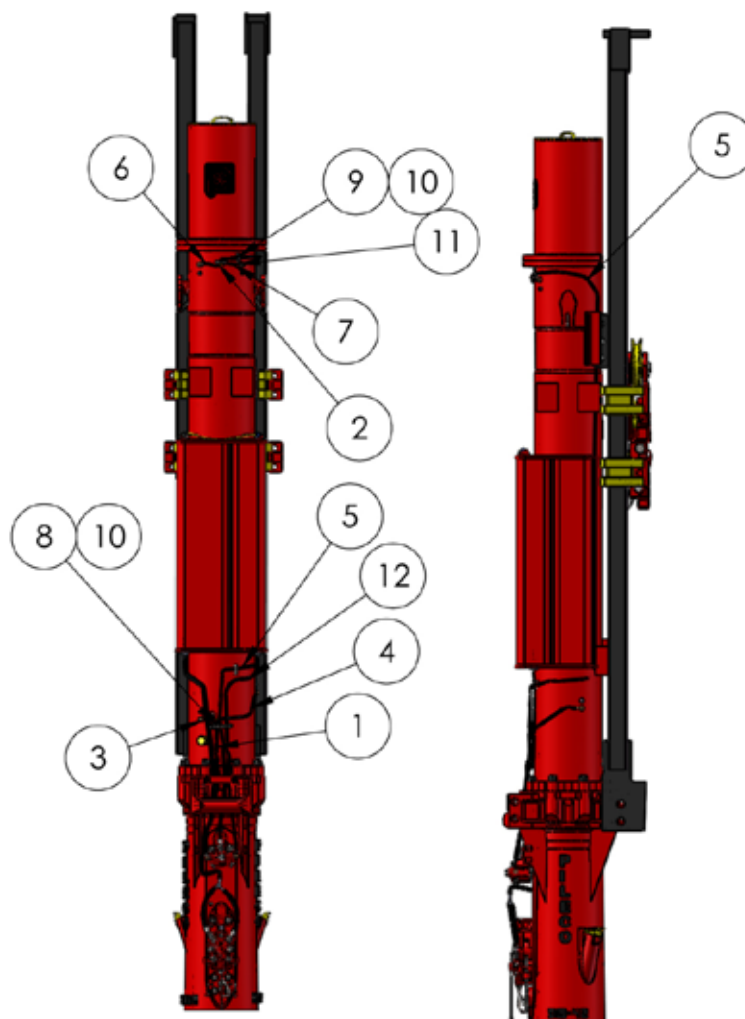


**Filter Elbow
Complete**

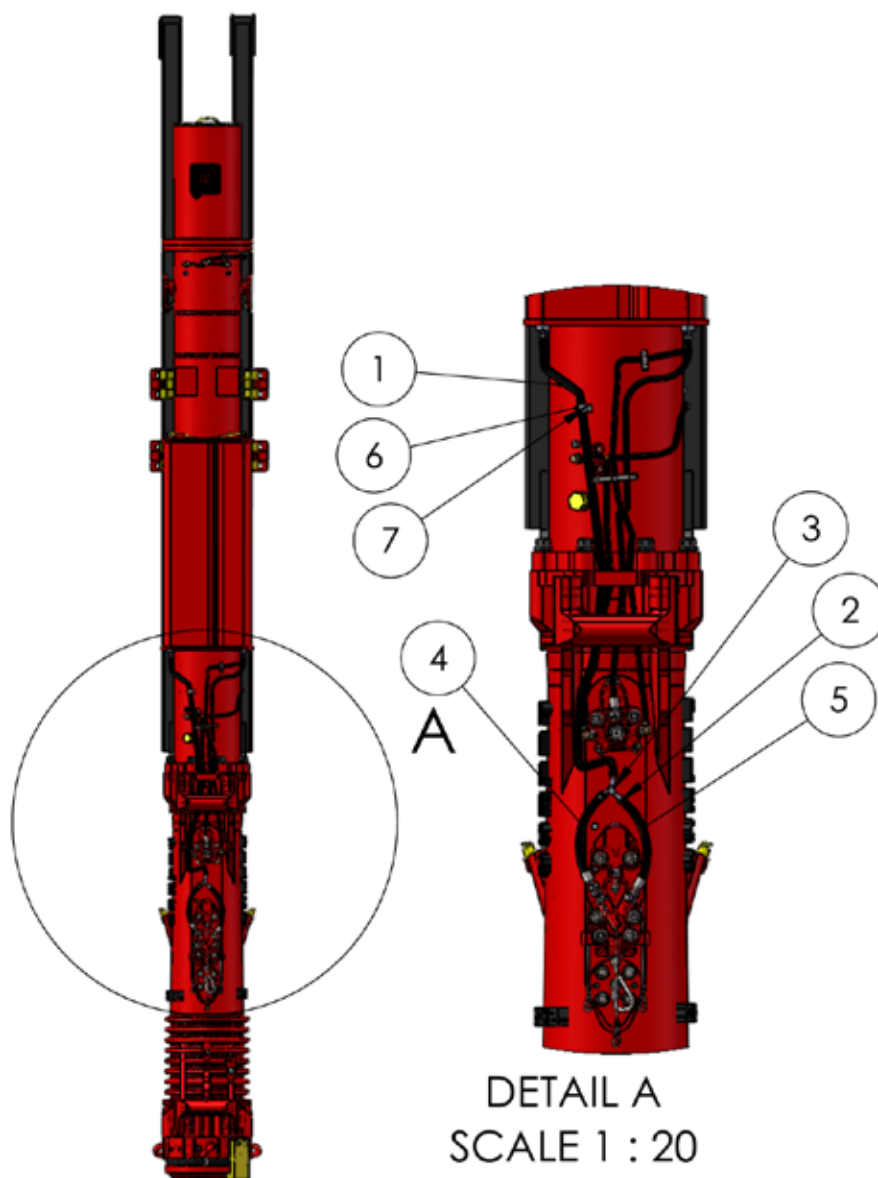


**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	64403	FILTER ELBOW COMPLETE	1
2	210607	O-RING 36 X 1.5	1

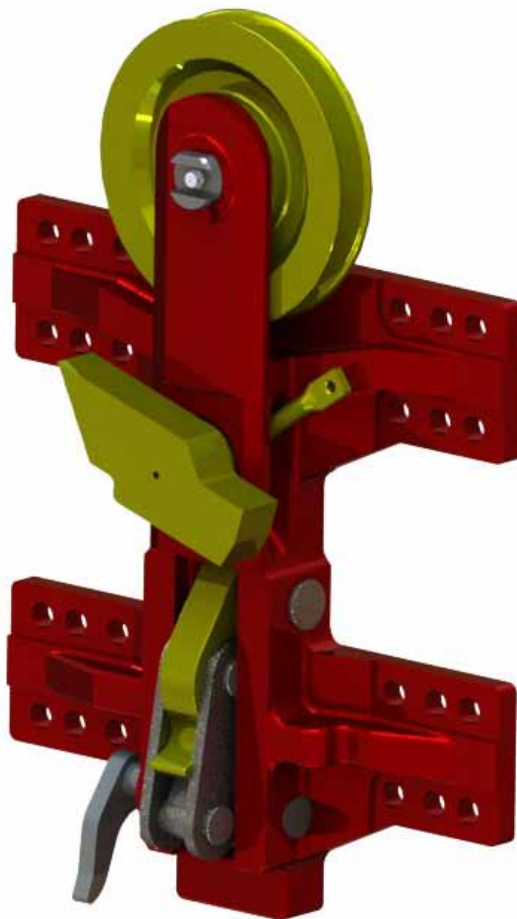
**Lube Lines w/Connectors**

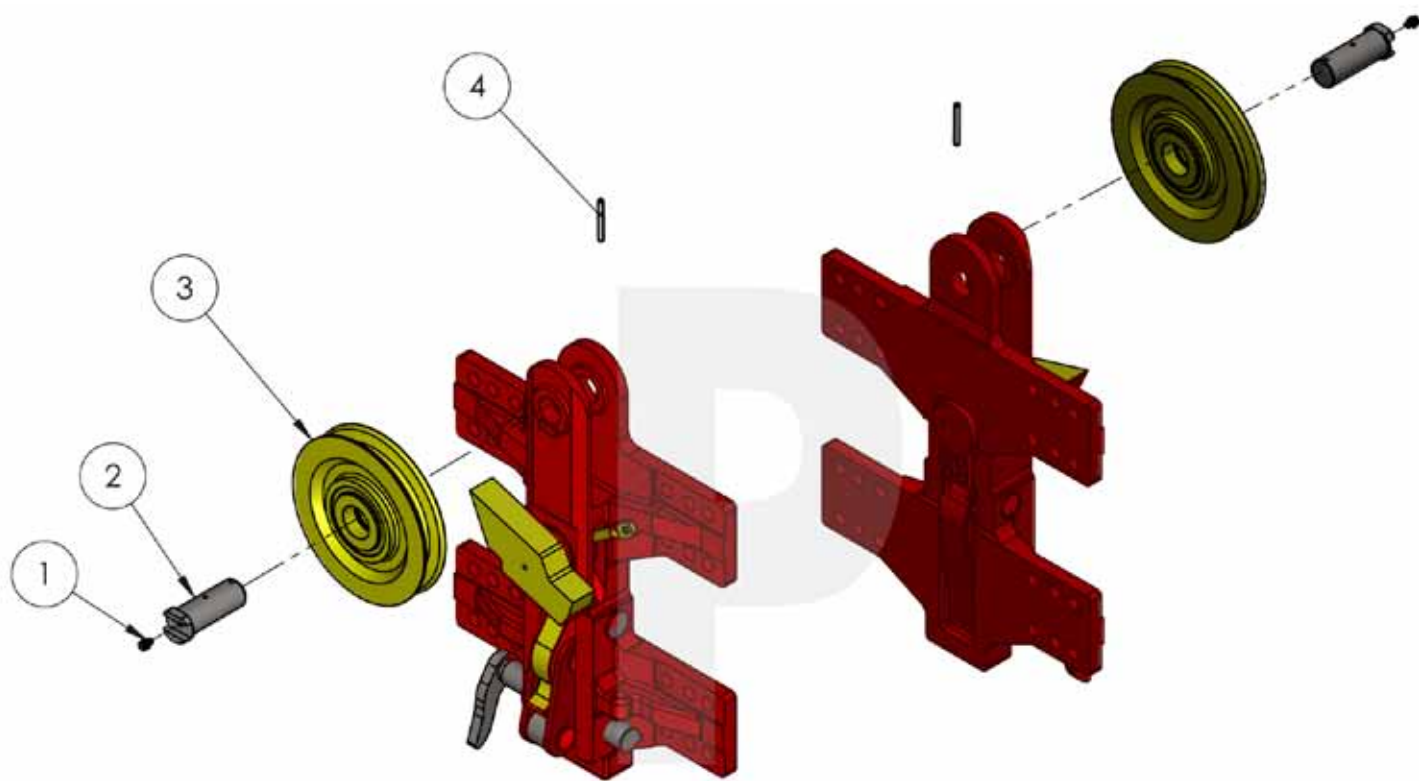
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	150156	HOSE 0.78m LONG	1
2	94522	T-PIECE	2
3	150155	HOSE 0.13m LONG	1
4	150152	HOSE 0.43m LONG	1
5	150153	HOSE 3.3M LONG	1
6	150154	HOSE 0.14m LONG	1
7	150155	HOSE 0.13m long	1
8	41981	CLIP	1
9	2932	CLIP	13
10	93412	HEXAGON SCREW M8×12	26
11	95115	HOSE CLAMP 1/4-5/8	26
12	96035	HOSE 1.15m LONG	1

**Fuel Line—Breather Line**

TEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	102124	HOSE FOR D19 FUEL FEEDING LINE, 1/2", 1.6M/62.9" LONG	1
2	94299	HOSE CLAMP 5/8-1	4
3	99019	Y-PIECE	1
4	96504	HOSE 0.28m LONG	1
5	207025	HOSE 0.36m LONG	1
6	210705	CLIP	1
7	93412	HEXAGON SCREW M8×12	2

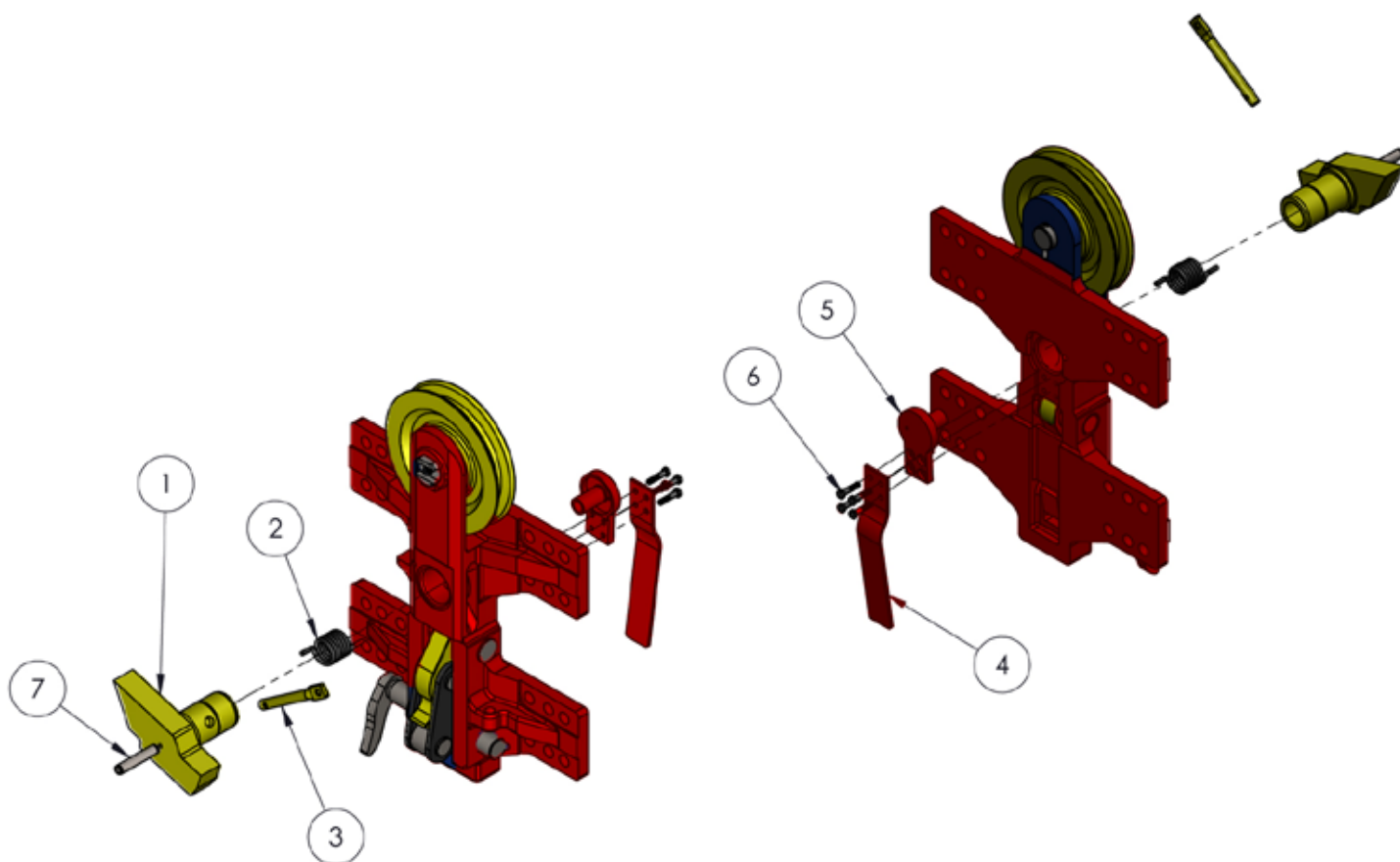
Starting Device (Trip)



**Manual Starting Device (Trip)
Complete**

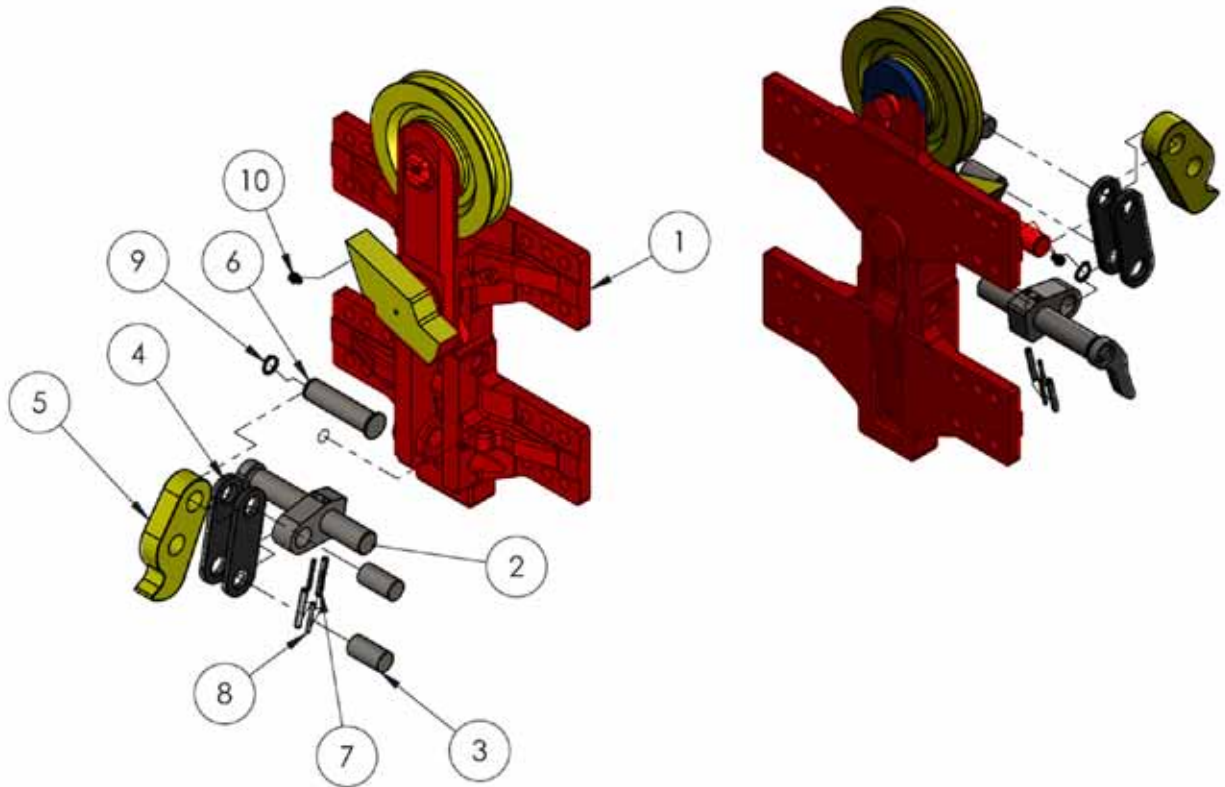
*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	90791	GREASE NIPPLE M10 X 1	1
2	104954	SHEAVE PIN	1
3	190285	ROPE PULLEY	1
4	90637	8 X 80 SPLIT PIN DIN 94-ST	1

**Manual Starting Device (Trip)
Complete**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	108300	DRIVING PIN	1
2	39381	TORSION SPRING	1
3	64189	LEVER	1
4	39382	LEAF SPRING	1
5	104698	COVER	1
6	93414	10-1.5 X 30 HEX HEAD CAPSCREW 8.8	4
7	90380	8MM X 50 ROLL PIN	1

**Manual Starting Device (Trip)
Complete**

**each part number links to web site part*

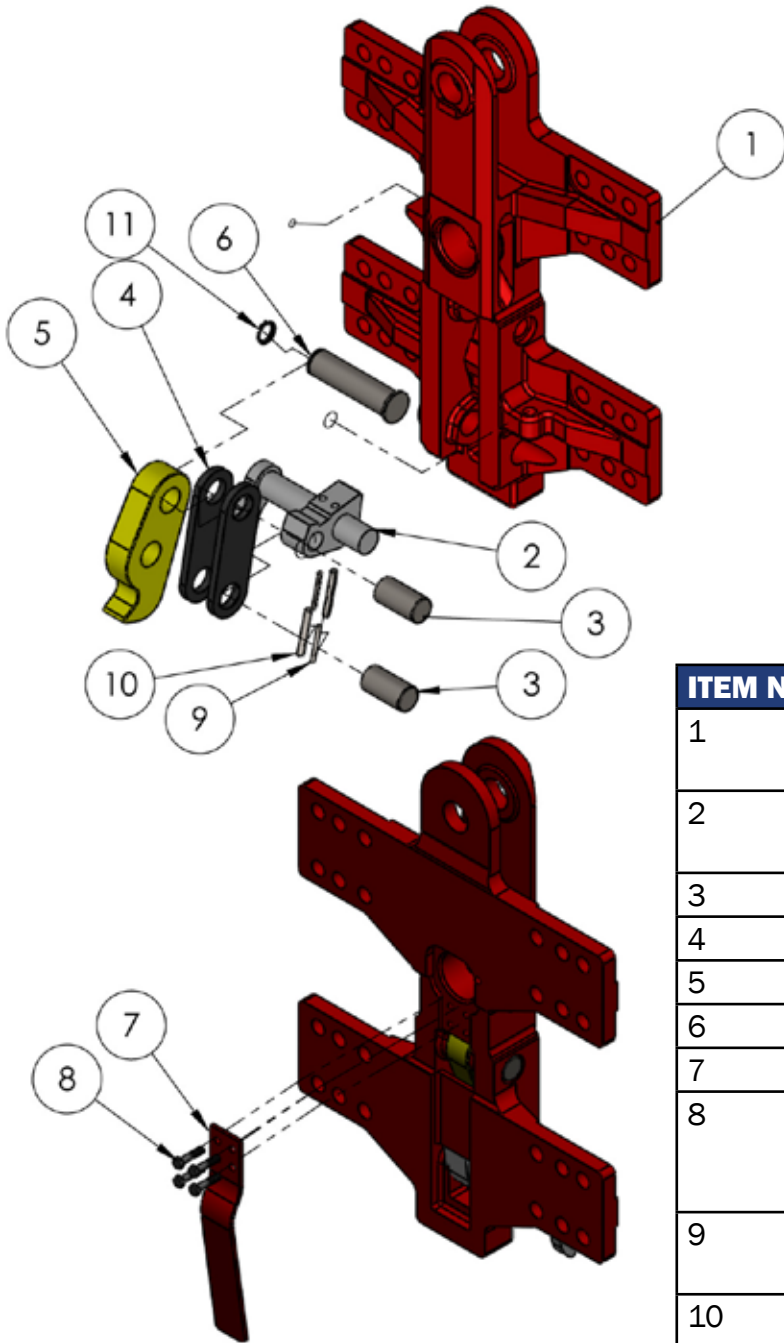
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	104697	TRIP BODY	1
2	104695	TRIP CAM WITH LEVER	1
3	1106	JOINT BOLT	2
4	1104	SHACKLE	2
5	64192	PAWL	1
6	64190	PIN	1
7	91321	10MM X 75 ROLL PIN	2
8	90160	6MM X 60 ROLL PIN	2
9	90221	CIRCLIP 30 X 1.2 DIN 471	1
10	90791	GREASE NIPPLE M10 X 1	1

Hydraulic Starting Device (Trip)





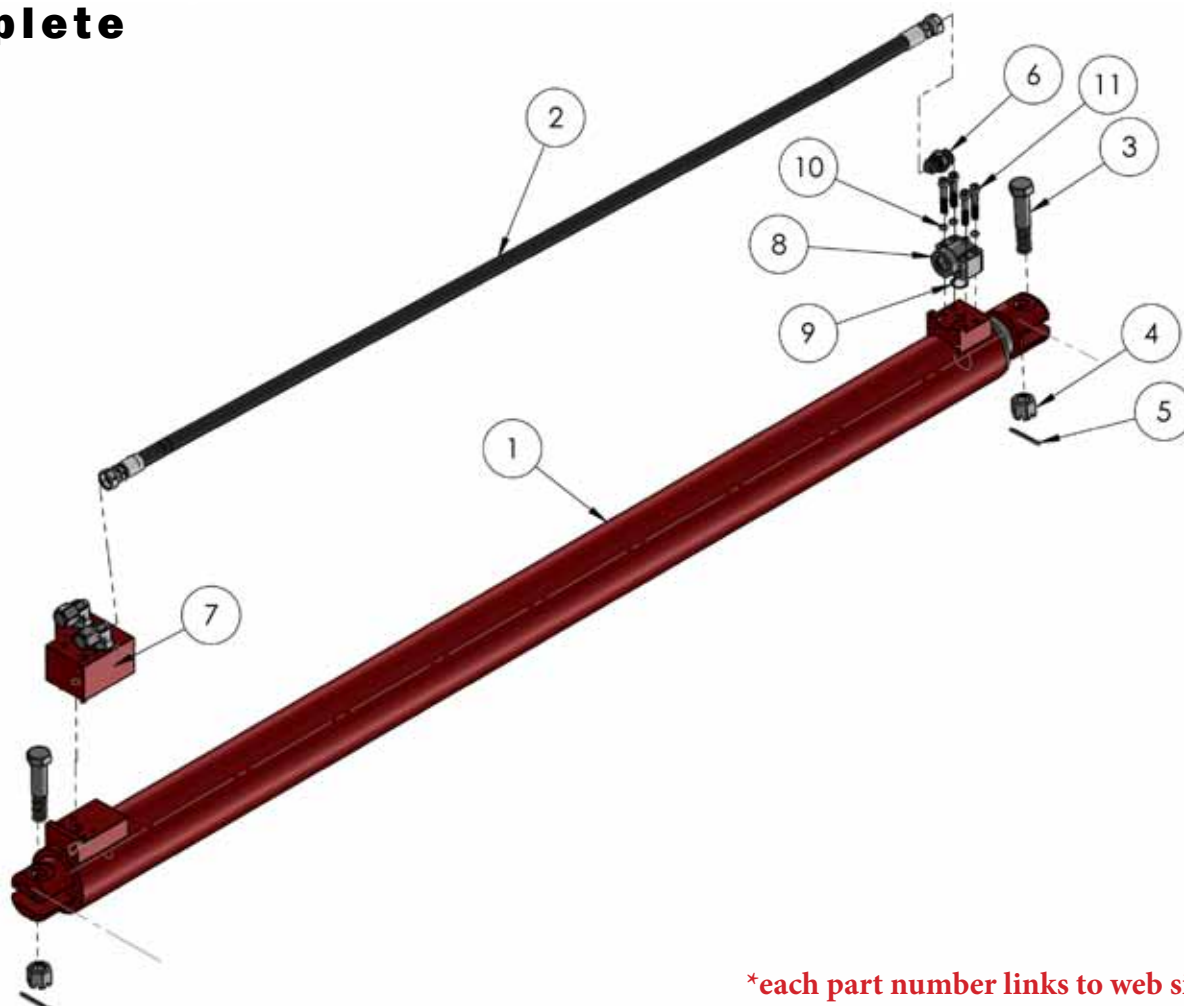
Hydraulic Starting Device (Trip) Assembly



*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	104697	GUIDE BODY COMPLETE	1
2	104695	CAM WITH LEVER COMPLETE	1
3	1106	JOINT BOLT	2
4	1104	SHACKLE	2
5	64192	PAWL	1
6	64190	PIN	1
7	39382	LEAF SPRING	1
8	93414	10-1.5 X 30 HEX HEAD CAPSCREW 8.8	4
9	90160	6MM X 60 ROLL PIN	2
10	91321	10MM X 75 ROLL PIN	2
11	90221	CIRCLIP 30 X 1.2 DIN 471	1

Hydraulic Cylinder Complete

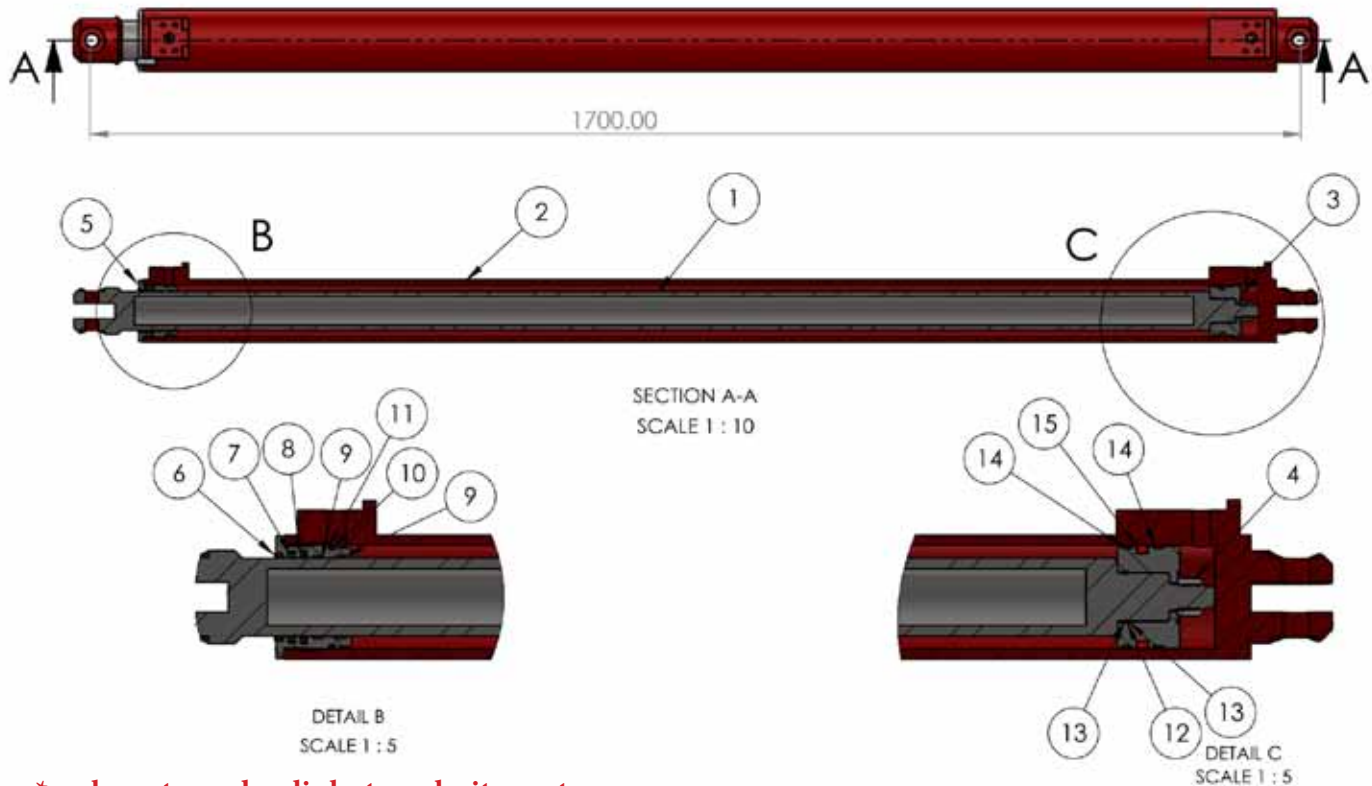


*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	203171	HYDRAULIC START CYLINDER	1
2	203175	1950MM HOSE	1
3	205110	24MM-3.0 X 110 HEX HEAD CAP SCREW w/ PIN HOLE	2
4	205111	M24 SLOTTED HEX NUT	2
5	205112	5 X 40 COTTER PIN	2
6	203124	3/4-1 1/16 - 12 JIC Straight Thread Connectors 37° Flare /SAE-ORB 12 F50X	1
7	201108	LOWER HYDRAULIC BLOCK ASSEMBLY	1
8	203173	W184-12-12 ANCHOR FLANGE	1
9	203172	O-RING 2-214 24.99 X 3.53	1
10	207116	10MM HI COLLAR LOCK WASHER	4
11	203174	10MM X 55 SOCKET HEAD CAP SCREW	4

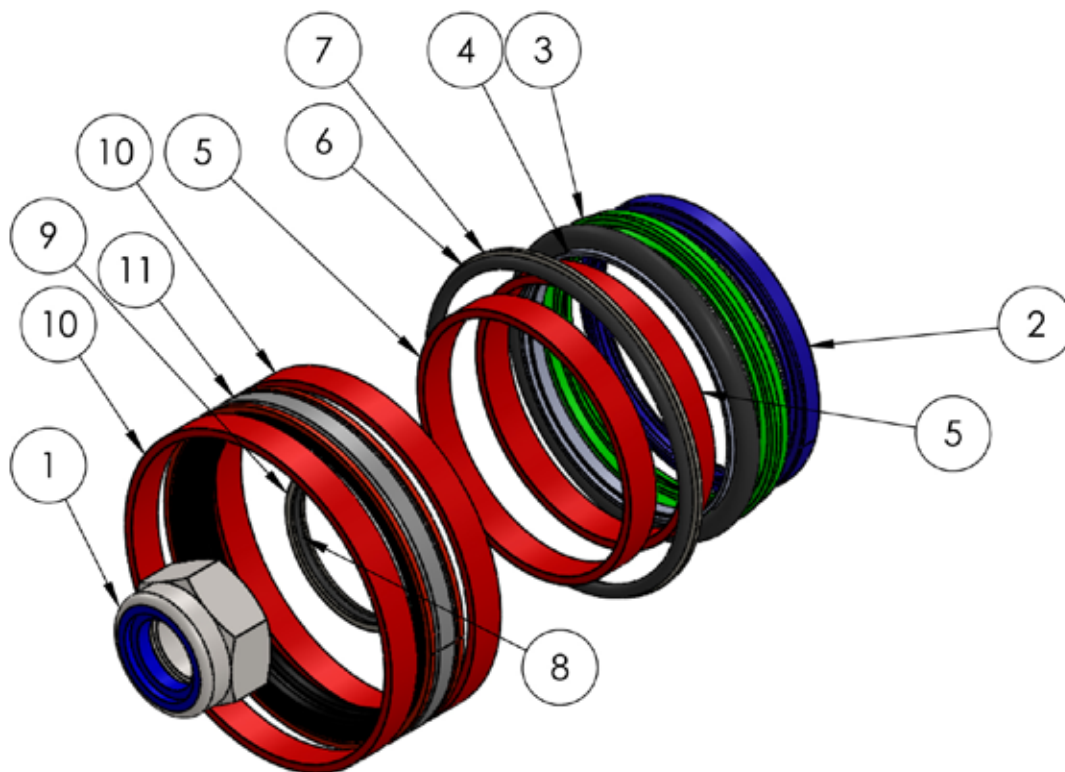


Hydraulic Cylinder Assembly



*each part number links to web site part

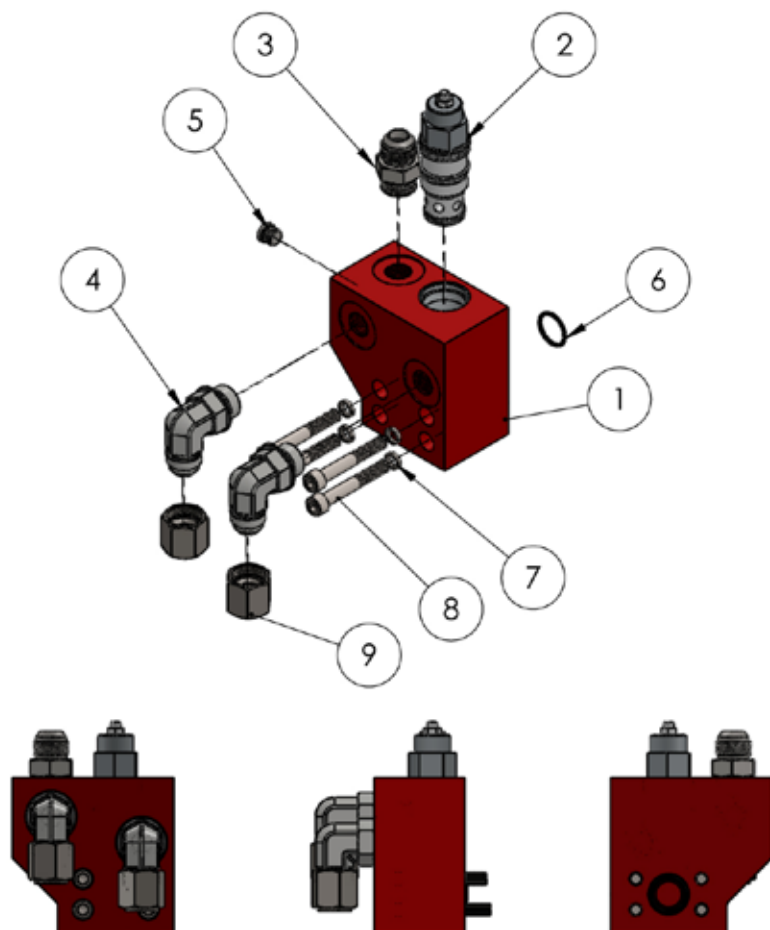
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	203178	CYLINDER ROD	1
2	203180	CYLINDER SLEEVE	1
3	203181	PISTON	1
4	201104	20MM X 2.5 NYLON INSERT LOCK NUT	1
5	203179	CLINDER HEAD	1
6	203146	WIPER SEAL	1
7	203162	ROD SEAL	1
8	203163	ROD SEAL	1
9	203164	WEAR RING	2
10	203165	2-239 91.67X3.53 O-RING	1
11	203166	95X100.5-1.5 BACKING RING	1
12	203167	2-132 44.12×2.62 O-RING	1
13	203168	45×49-1 BACKING RING	2
14	203169	100X95-9.7 GUIDING RING	2
15	203155	100X85X12.5 DOUBLE ACTING PISTON SEAL	1

**D19 Hydraulic Start Cylinder
Ring Kit**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	201104	20MM X 2.5 NYLON INSERT LOCK NUT	1
2	203146	WIPER SEAL	1
3	203162	ROD SEAL	1
4	203163	ROD SEAL	1
5	203164	WEAR RING	2
6	203165	2-239 91.67×3.53 O-RING	1
7	203166	95×100.5-1.5 BACKING RING	1
8	203167	2-132 44.12×2.62 O-RING	1
9	203168	45×49-1 BACKING RING	2
10	203169	100×95-9.7 GUIDING RING	2
11	203155	100×85×12.5 DOUBLE ACTING PISTON SEAL	1

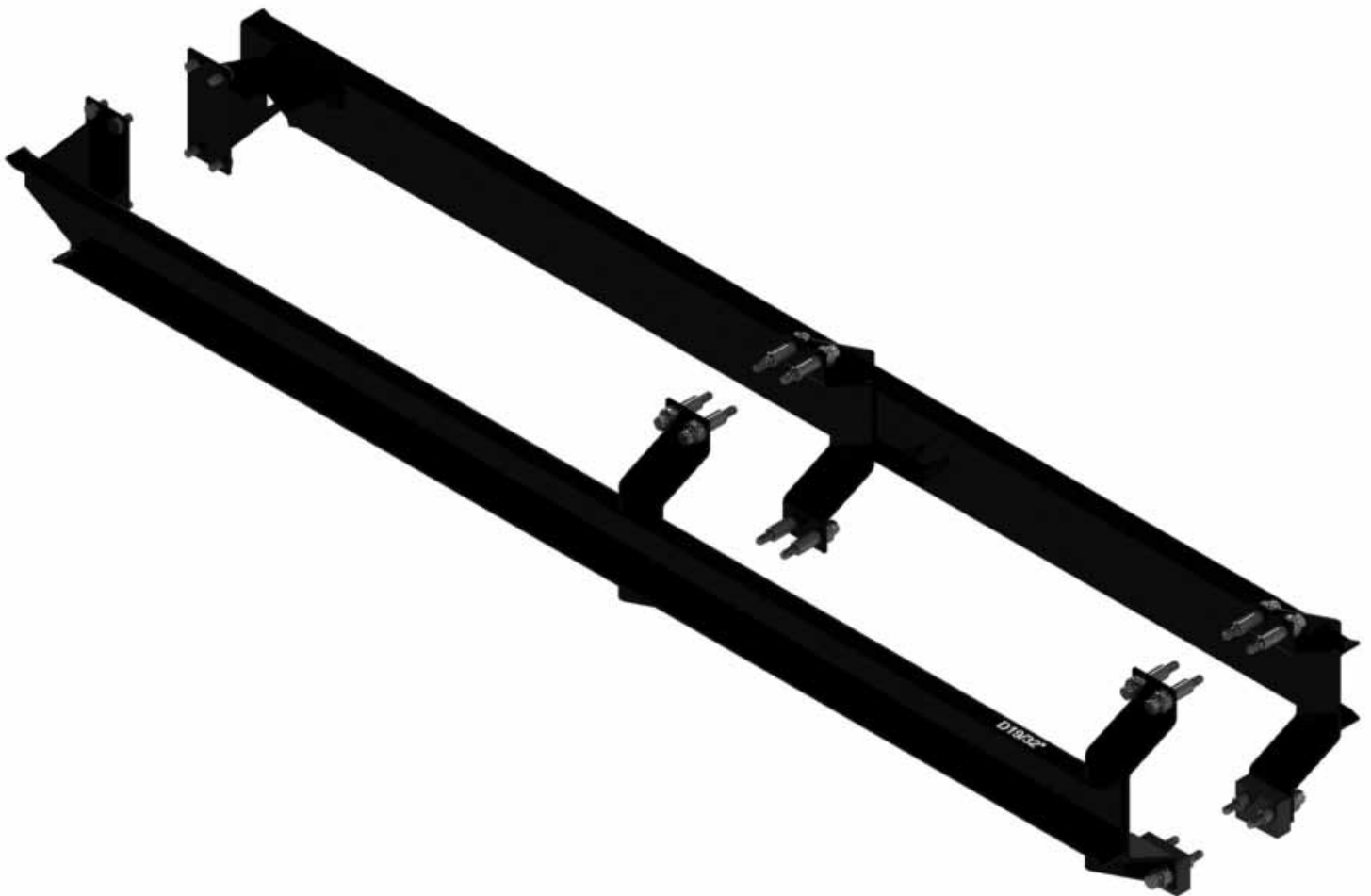
Counterbalance Valve Assembly



*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	203177	LOWER HYDRAULIC BLOCK/COUNTER BALANCE VALVE	1
2	203122	CBGG-LJN COUNTERBALANCE VALVE	1
3	203124	3/4-1 1/16 - 12 JIC Straight Thread Connectors 37 ° Flare/SAE-ORB 12 F50X	1
4	203112	3/4-1 1/16 - 12 JIC 90 Thread Connectors 37 ° Flare /SAEORB 12 C50X	2
5	203125	G1/4 PLUG	1
6	203172	O-RING 2-214 24.99 X 3.53	1
7	207116	10MM HI COLLAR LOCK WASHER	4
8	207115	10MM-1.5 X 70 SOCKET HEAD CAP SCREW	4
9	203138	12 FNTX-S CAP	2

Guides

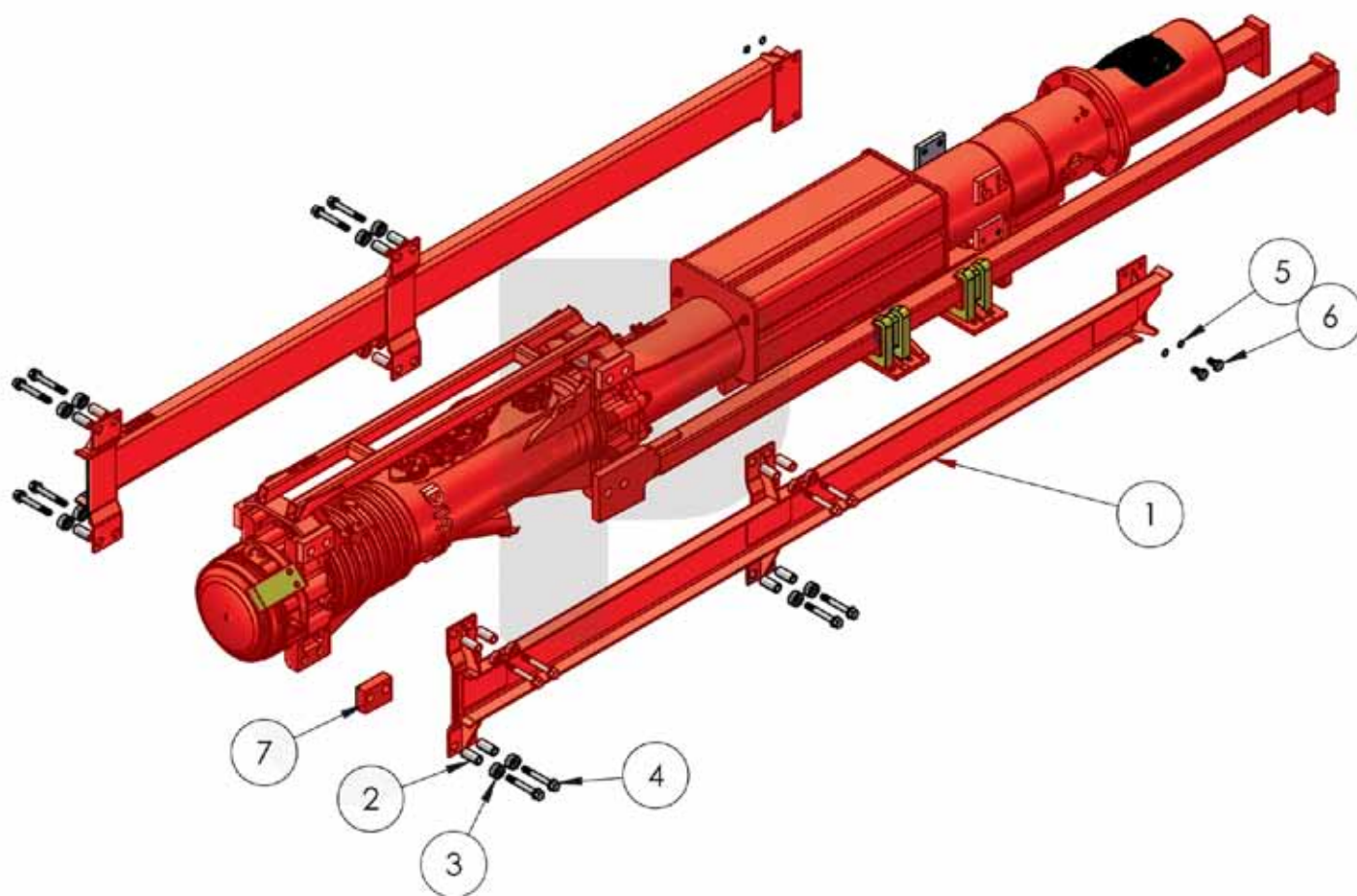


**D19 GUIDING HARDWARE
Assembly Kit**

*each part number links to web site part

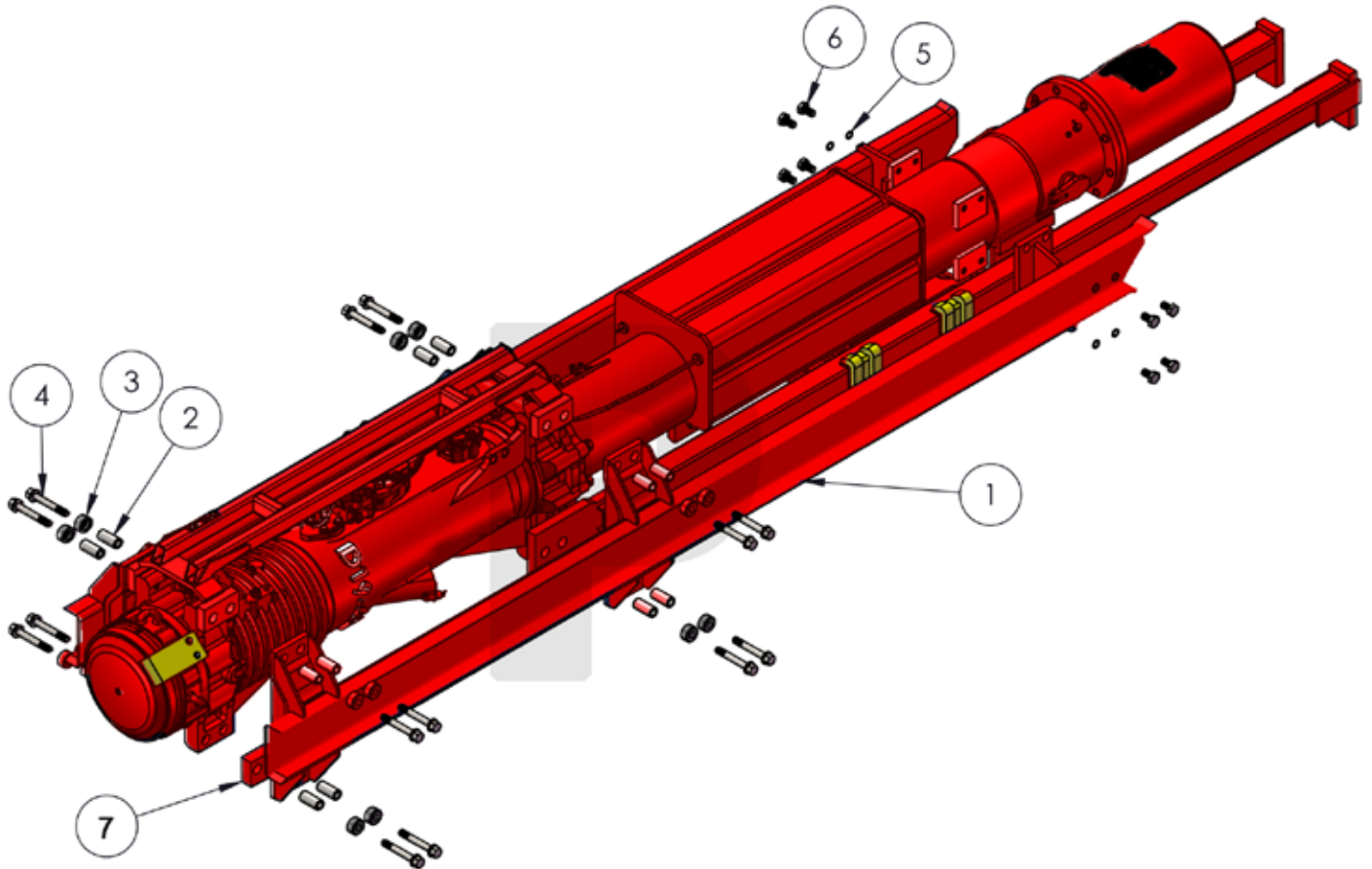
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	39991	SPACER	16
2	95195A	DOWEL PIN	16
3	20174	M24 X 165 HEX BOLT	16
4	203130	24-3.0 X 45 HEX HEAD CAPSCREW	8
5	203131	24MM SCHNORR SAFETY WASHER	8

D19 U-21 X 8 LEAD GUIDING Assembly



**each part number links to web site part*

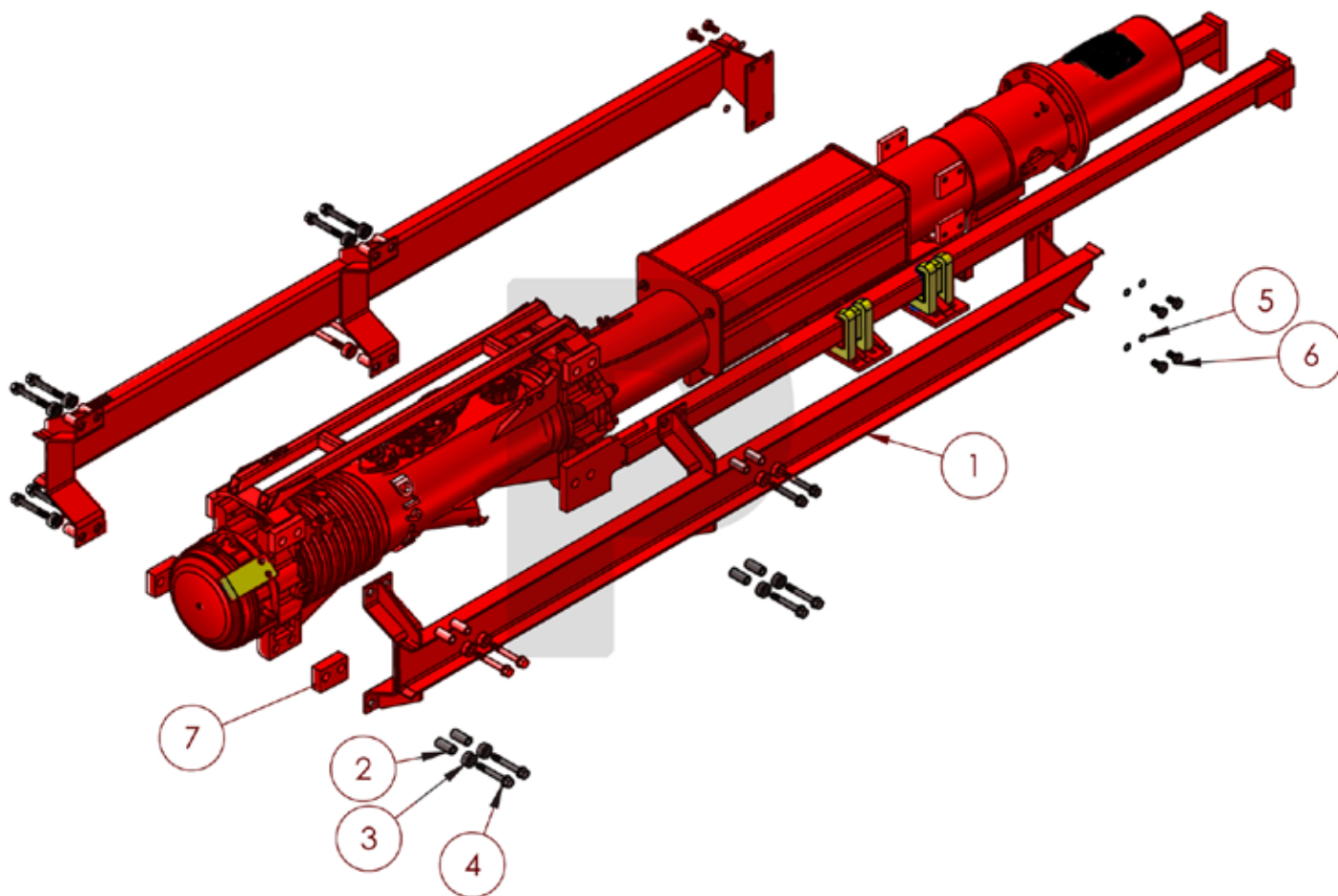
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	203202	U-21 GUIDING	1
2	95195A	DOWEL PIN	16
3	39991	SPACER	16
4	20174	M24 X 165 HEX BOLT	16
5	203131	24MM SCHNORR SAFETY WASHER	8
6	203130	24-3.0 X 45 HEX HEAD CAPSCREW	8
7	203206	SPACER BLOCK	2

**D19 U-26 X 8 LEAD GUIDING
Assembly**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	203203	U-26 GUIDING SET	1
2	95195A	DOWEL PIN	16
3	39991	SPACER	16
4	20174	M24 X 165 HEX BOLT	16
5	203131	24MM SCHNORR SAFETY WASHER	8
6	203130	24-3.0 X 45 HEX HEAD CAPSCREW	8
7	203206	SPACER BLOCK	2

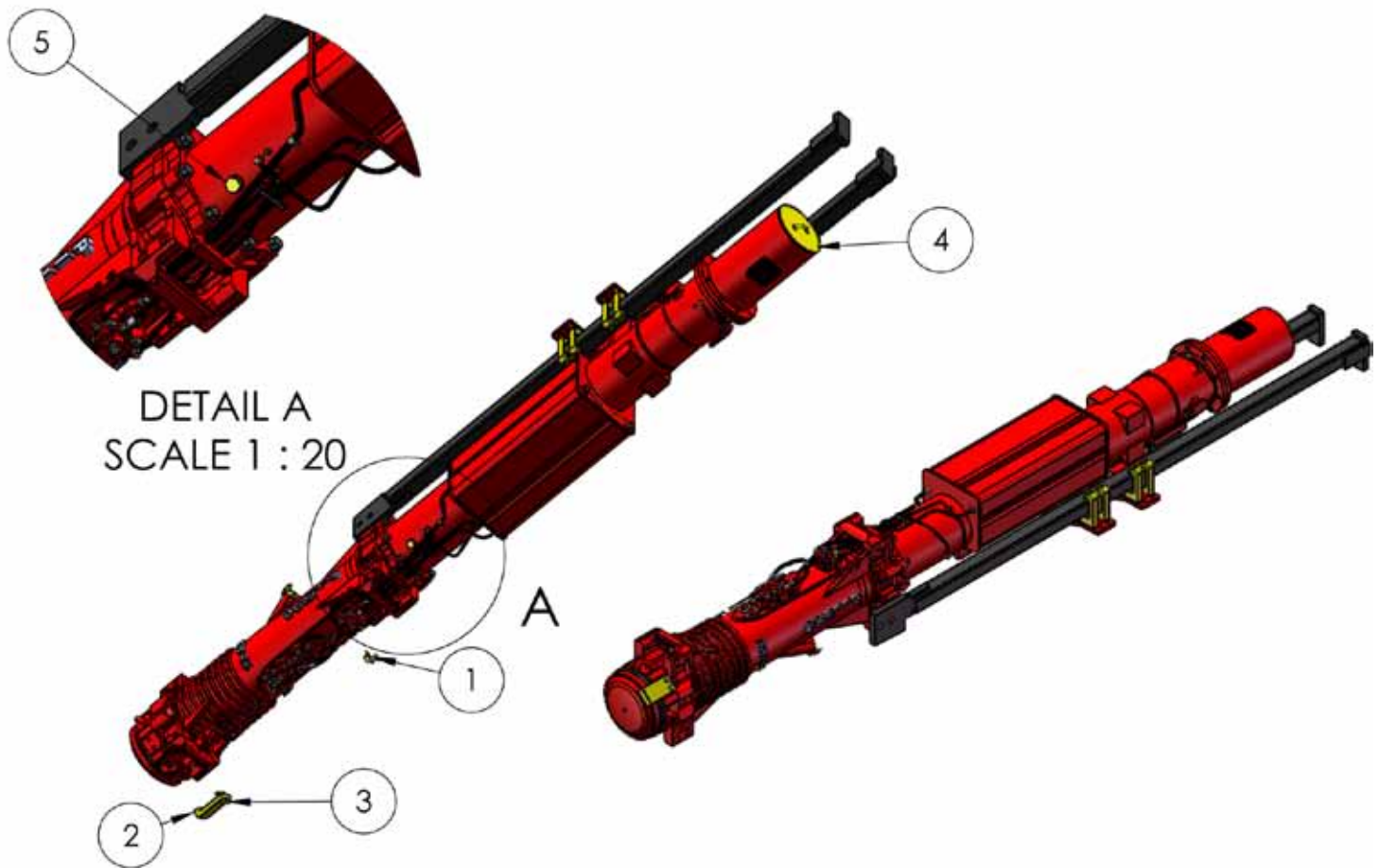
D19 U-32 X 8 LEAD GUIDING Assembly



**each part number links to web site part*

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	203204	U-32 LEAD GUIDING SET	1
2	95195A	DOWEL PIN	16
3	39991	SPACER	16
4	20174	M24 X 165 HEX BOLT	16
5	203131	24MM SCHNORR SAFETY WASHER	8
6	203130	24-3.0 X 45 HEX HEAD CAPSCREW	8
7	203206	SPACER BLOCK	2

Transportation Protection

**Transportation Protection
Complete**

*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	104963	EXHAUST COVER COMPLETE	2
2	102144	IMPACT BLOCK SECURING CLAMP	1
3	22702	24MM-3 X 60 HEX HEAD CAPSCREW	2
4	136688	COVER	1
5	16890	LOCKING SCREW	1

Tool Box



*each part number links to web site part

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	102139-1	TOOL BOX PART	1
2	626	PISTON RING FITTING PLIERS COMPLETE	1
3	90655	30 X 32 DOUBLE ENDED OPEN WRENCH	1
4	92015	17 X 19 DOUBLE ENDED OPEN WRENCH	1
5	90055	5MM HEX KEY	1
6	90862	6MM HEX KEY	1
7	90194	19MM HEX KEY	1
8	90795	GREASE GUN, 14 OZ	1
9	93551	MOLYLUBE GREASE	1
10	90443	19 X 22 OPEN END WRENCH	1
11	203014	PISTON RING BAND	1
12	91336	M30 RING SCREW	1
13	90657	8MM HEX KEY	1
14	90184	46MM WRENCH	1
15	93600	OIL CAN	1
16	95071	17MM WRENCH SINGLE OPEN END	1
17	90465	27MM SINGLE ENDED OPEN WRENCH	1
18	205015	41MM SINGLE ENDED OPEN WRENCH	1
19	90354	PUNCH 4/8 DIAMETER	1
20	93349	PUNCH 12/16 DIAMETER	1
21	90791	GREASE NIPPLE M10 X 1	2
22	91321	10MM X 75 ROLL PIN	2
23	90160	6MM X 60 ROLL PIN	2
24	90079	14MM HEX KEY	1
25	90496	10MM HEX KEY	1
26	90785	PLIERS A19	1
27	261513	13 X 15 DOUBLE ENDED RING WRENCH	1
28	94461	IMPACT SOCKET 36MM	1
29	95834	WRENCH 22 X 24	1
30	93352	SPANNER 375×46	1
31	90196	RACHET	1
32	205014	BAR 525X20	1
33	22700	ASSEMBLY PLATE COMPLETE	
34	205016	IMPACT SOCKET 19MM	