

PRODUCT CATALOG

40,000^{PSI}
2,758 BAR

WORLDWIDE LEADER

IN TOTAL WATER BLASTING SOLUTIONS

Jetstream of Houston is a leading supplier of innovative water blasting solutions for a wide range of applications, including industrial cleaning, surface preparation, hydro-demolition and abrasive waterjet cutting.

Jetstream is committed to providing customers with safe, sure, simple solutions in everything we do. Our total water blasting solutions include:

- Manufacture and distribution of quality industrial high-pressure water blasting units, pumps, parts and accessories; that are built to last and easy to maintain
- Leading the way with an approved Visual Safety System (VSS) color-coding on most water blasting components for safer operation within each pressure range
- Providing a wide range of application appropriate automation tools - for safe, hands-free cleaning
- Sharing Application Expertise with customers for the best total solution approach for maximum productivity
- Training - operators on the application, product operation and safety
- Rentals for short-term or rent to own - units, accessories, automation tools - complete with training
- Service equipment with experienced technicians, provide 24/7 support by telephone and ship parts quickly (most same day)

TOTAL WATER BLASTING SOLUTIONS



24/7 SERVICE AND SUPPORT TAILORED TO YOU

The 24/7 Support Program provides Jetstream customers uninterrupted access to critical parts and accessories, service and expertise to keep the job running, no matter what time of day.

800.231.8192
832.590.1300

Jetstream Support Standard business hours
7 am – 6 pm CST

832.590.1369
After Hours Support Hotline



Jetstream TwinForce 800HP Unit

SOME INDUSTRIES WE SERVE:

- CHEMICAL
- PETROCHEMICAL
- STEEL MILLS
- POWER GENERATION
- MARINE
- CONSTRUCTION
- MINING
- OIL FIELD
- MILITARY
- HYDRO-DEMOLITION

TYPICAL APPLICATIONS:

- TUBE AND TUBE BUNDLE CLEANING
- PIPE CLEANING
- STACK CLEANING
- COLLING TOWER CLEANING
- TANK CLEANING
- FACILITIES MAINTENANCE
- GRATE AND FLOOR CLEANING
- AUTOMOTIVE PAINT BOOTH CLEANING
- SHIP HULL CLEANING
- UNDERWATER CLEANING
- KILN CLEANING
- SURFACE PREPARATION
- HYDROSTATIC TESTING
- BOP TESTING
- CONCRETE DEMOLITION
- WATERJET CUTTING

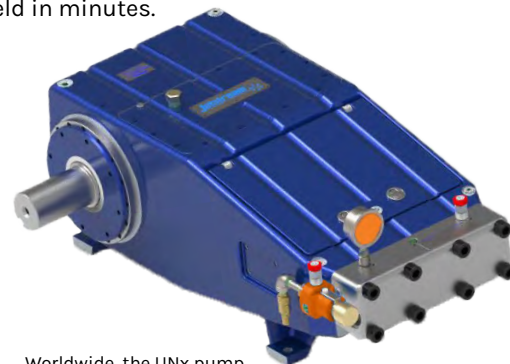
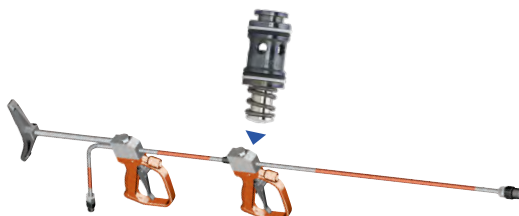
INNOVATIVE

ENGINEERED SOLUTIONS

Jetstream pioneered the use of valve cartridges to allow accessories to be repaired in the field in minutes.



Nozzles that spin on a bearing of water.



Worldwide, the UNx pump design is the easiest to maintain and operate.

TOOL RENTALS

Jetstream provides pumps, parts, and tool rentals for all the demands of your job. You can pick up the equipment you need, or we can deliver it straight to your job site. Our tools are ready to work the second they arrive on-site and are backed by our world-class customer support team and highly trained technicians that are committed to the success of your project.

BEST-IN-CLASS SERVICE AND SUPPORT, TAILORED TO YOU

Jetstream is a subsidiary of Federal Signal Corporation's Environmental Solutions Group. Member companies include Vactor Manufacturing, TRUVAC, Guzzler Manufacturing, Westech Vac Systems, Ltd., and Elgin Sweeper Company.



If you need service and support for your equipment, Jetstream has you covered with the most experienced and customer-focused team in the industry.

In the United States, our products are serviced by FS Solutions. With 13 convenient locations, FS Solutions provides high-performance parts and accessories, Jetstream rentals, repair and rebuild, and safety training services. In Canada, Joe Johnson Equipment (JJE) is there to handle your every need.

Whatever your needs may be, Jetstream offers a full range of products, services, and customized solutions designed to keep your products and projects running smoothly, effectively, and efficiently!



VALVE REBUILD PROGRAM

Get same as new performance and reliability for your valves with Jetstream's Valve Rebuild Program (VRP).

The program utilizes OEM parts and processes to maximize the value of your equipment by:

- ▶ Reducing hourly operational costs
- ▶ Boosting up-time
- ▶ Optimizing reliability
- ▶ Restoring original system performance
- ▶ Increasing return on investment

We guarantee to provide new seals, springs, suction/discharge valve, and lapping with every rebuild.

TRADE-IN PROGRAM

The Trade-In Program offers customers an opportunity to exchange any competitor tools for credit towards Jetstream Signature Series Premium Kits. Tools do not have to be functional, but they must be a complete part.

**Discounts applied at the time of trade-in.*

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HORSEPOWER CHART

COMMON ENGINE POWERS		PUMP DISPLACEMENT* AT 40,000 PSI (2,758 BAR)	
hp	kW	gpm	lpm
MODEL TWINFORCE			
800	600	29.4	112
650	484	23.8	90
MODEL 5240			
400	300	14.7	56
MODEL 4240			
325	242	11.9	45.0
MODEL 3640			
270	201	10.8	40.9
MODEL 3040			
154	114	5.2	19.5

*Displacement (flow) values represented refer to "theoretical" flow, neglecting inefficiency resulting from compressibility of water and expansion of pressure-bearing components.
The chart above is for diesel engines. Contact Jetstream for an electric unit chart.



UNITS

Jetstream waterblasters are available in a wide selection of standard models with nearly limitless options for customization to suit specific needs. All Jetstream waterblasters employ UNx™ Fluid End technology for superior performance, greater flexibility in the field, and reduced downtime and maintenance (see page B-13 for details).

TWINFORCE™ UNITS

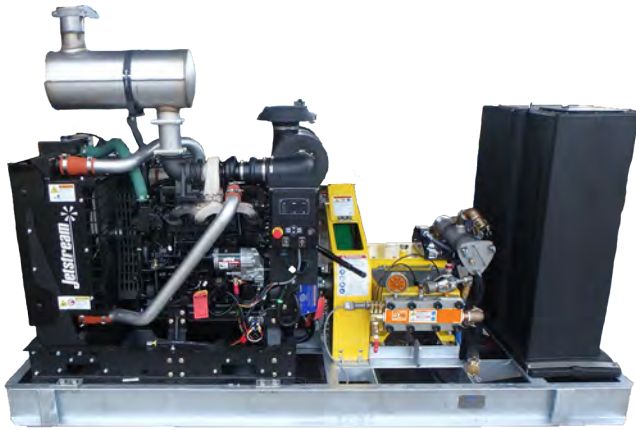
The TwinForce series was engineered to outperform other high-flow units by providing a multi-functional product to enhance the utilization of two waterblasting units on one single trailer.

- ▶ Two 325 or 400 hp high performance diesel engines
- ▶ Pilot bearing free PTOs and covered banded belt drives
- ▶ Dual Slave Control Panels for control of both engines from either side of the trailer
- ▶ Dual Water Filters for each unit
- ▶ High pressure discharge from both units combined into a single control station
- ▶ Dual Fuel Tanks
- ▶ Tier 4 Engines

X-SERIES

From the innovative UNx pump down to the EZ-Lube wheel bearings, every detail of the X-Series was engineered to minimize maintenance and provide contractors with the most productive and versatile waterblaster on the market today.

- ▶ 80 to 400 hp (59 to 300 kW) high performance diesel engines
- ▶ Pilot bearing free PTOs and covered banded belt drives
- ▶ Guardian Waterblast Filtration System extends component life and increases uptime
- ▶ Available as a skid or low profile trailer with balanced weight distribution for stable towing
- ▶ State-of-the-art controls
- ▶ Electronic throttle control
- ▶ Hand-adjustable bypass valve
- ▶ Shutdown system protects the engine and the pump



3040 SERIES UNITS

Employing our smallest pump, 3040 Series waterblasters are ideal for small or single operator jobs.

- ▶ 150 hp (112 kW)
- ▶ Galvanized water tank
- ▶ Available as a skid or tandem trailer
- ▶ Spec chart—from page B-10, use 150 hp



ELECTRIC UNITS

Jetstream manufactures several models of electric waterblasters for in-plant installations configured to user requirements.

- ▶ 60 to 600 hp (45 to 447 kW)
- ▶ TEFC or explosion proof motors
- ▶ Soft-start or VFD starters
- ▶ Available as stationary skid or steerable in-plant trailer



CUSTOM UNITS

In addition to a wide selection of standard units and options, close collaboration between Jetstream solutions providers and engineers provide almost unlimited custom options to meet specific needs. Common requests include:

- ▶ Custom trailers and skids
- ▶ Special control devices (pneumatic, electronic, hydraulic)
- ▶ Customizable to meet special plant requirements. Jetstream can build the perfect unit for any job

TRAINING



In order to ensure customer satisfaction, Jetstream has developed the Right Start program, a four-step plan designed to provide the owners and operators of new Jetstream waterblast units with the knowledge and support needed to feel familiar, confident and satisfied with Jetstream equipment and personnel.



1. Transportation

Once a new waterblaster is built and thoroughly tested, the Shipping Manager contacts the new owner to arrange for the unit's arrival to the right place at the right time.



2. Training

All new waterblasters include personal training by the Right Start Technician. Training involves both classroom and "hands-on" instruction to make sure that each operator is thoroughly familiar with the design and function of the unit and accessories, enabling him to safely put the new equipment to optimal use.



3. Follow-up

Within thirty days of delivery, and again within sixty days, the Solutions Provider will call to answer any questions and ensure complete satisfaction.



4. Trust

If any questions or problems ever arise, the Jetstream team is available and committed to providing prompt answers and solutions.

CLASSES OFFERED

PUMP OPERATION & MAINTENANCE

The course combines extensive hands-on training with classroom instruction and is recommended for maintenance personnel, operator and supervisors.

Class Length: 3 days

Class Size: 10 maximum

Location: Jetstream Manufacturing
Training Center
Houston, TX

Call for class schedules and availability. Classes can be tailored to those in attendance.

This course covers:

- ▶ Safe waterblast operation
- ▶ Unit maintenance and troubleshooting
- ▶ Physical application and related safety issues
- ▶ Safe pump operation
- ▶ Pump maintenance
- ▶ The UNx System (10K, 20K and 40K)
- ▶ Swapping fluid ends
- ▶ Waterblast guns
- ▶ Pedals and accessories
- ▶ Uni-valves
- ▶ Proper packing, disassembly, repair and re-lapping
- ▶ Hoses, lances, nozzles
- ▶ Recommended spare parts
- ▶ Preventative maintenance and winterization

SAFETY-FS SOLUTIONS

As the experts on waterblast and industrial vacuum equipment, FS Solutions makes OSHA training and compliance more convenient than ever through hands on courses developed by Gary Toothe, whose significant contributions and 25 years of experience are well-known in the water blast and industrial vacuum industries.

ONLINE WITH FEDERAL SIGNAL ESG UNIVERSITY

- ▶ Work at your pace and convenience
- ▶ Remain compliant with OSHA training
- ▶ Safely increase productivity
- ▶ Decrease risk of future liability

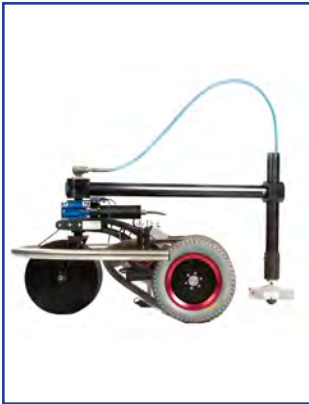
Additional Tools

- ▶ Jetstream Safety Manual Part No. 62113



AUTOMATED WATERBLASTING SOLUTIONS

Automation is a rapidly growing waterblast solution for tube cleaning, tank and vessel cleaning, surface preparation and hydro-demolition. Hands-free operation is key to a safe work environment. Positioning the operator at a distance, away from the work area, is the number one benefit to utilizing automated tools. This placement away from direct contact with the high pressure application allows for quick reaction time and decreases the possibility for employee injury.

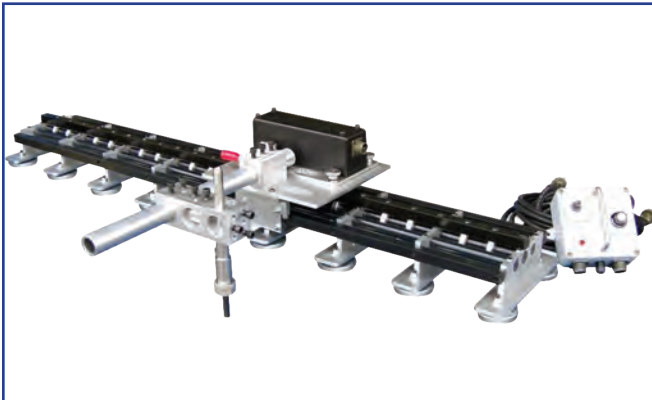


To enhance operator safety, productivity and efficiency, Jetstream has partnered with strategic manufacturers of specialty equipment in automated and robotic tools and accessories. These alliances allow Jetstream to provide a total solution to the customer, from the waterblasting unit to the tools needed to perform the job safely and efficiently.

Offering the broadest range of automation solutions for industrial cleaning contractors, Jetstream provides:

- ▶ The broadest offering of hands free cleaning solutions
- ▶ Innovative, automated and robotic tools and accessories
- ▶ On-site solutions provided by regional automation specialists
- ▶ Rent or purchase options on a variety of state-of-the-art tooling
- ▶ Convenience with availability through Jetstream and FS Solutions rental centers
- ▶ Robotic and mechanical hydro-demolition solutions
- ▶ Application and safety training

For a list of products offered, contact your Regional Sales Manager or Inside Sales Technician for more details.



UNx™ BARESHAFT PUMPS

UNRIVALED STRENGTH AND DURABILITY

The Jetstream 40,000 psi UNx Bareshaft Pump provides unrivaled durability and strength. The pump is capable of power inputs up to 325 horsepower and, coupled with the best Jetstream UNx fluid end, provides flow* rates approaching twelve gallons per minute. Jetstream bareshaft pumps are the best choice for those building their own system or replacing a complicated, worn, or unreliable pump.

The following UNx Bareshaft Pumps are available:

- ▶ 5200 Series (5240): 400HP @ 20.7 gpm
- ▶ 4200 Series (4240): 325HP @ 11.9 gpm
- ▶ 3600 Series (3640): 270HP @ 7.8 gpm
- ▶ 3000 Series (3040): 200HP @ 7.6 gpm

Seventeen different pump displacement levels are available within the four series. See pages B-2, B-5, B-7, and B-10 for further details.

FEATURES AND BENEFITS

- ▶ The strongest ductile iron power frame in the industry is made tough to last
- ▶ A heat-treated billet alloy steel crankshaft delivers superior performance at high power inputs
- ▶ The largest bearings of any pump on the market to prevent overheating
- ▶ Components designed to be easily serviced and maintained to reduce downtime
- ▶ Use of simple, bolt-on Jetstream UNx™ Fluid Ends for fast in-the-field pressure range conversions to allow one pump to perform multiple applications
- ▶ See more UNx Fluid End features and benefits on page B-13

An optional gear drive is available on the 3000, 3600, 4200 and 5200 Series Bareshaft Pumps. Several configurations are available. See pages B-3, B-6, B-8, and B-10 for ratio information. Clocking position required when ordering.

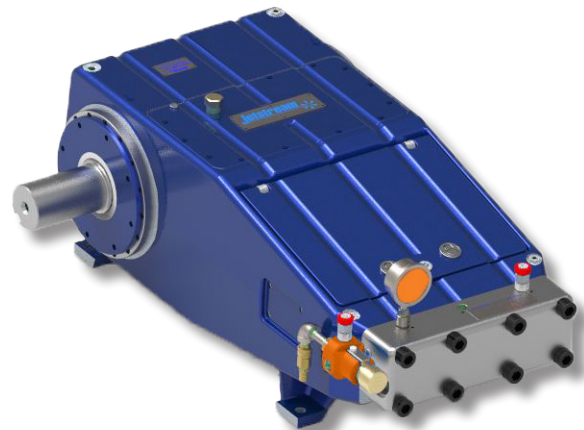
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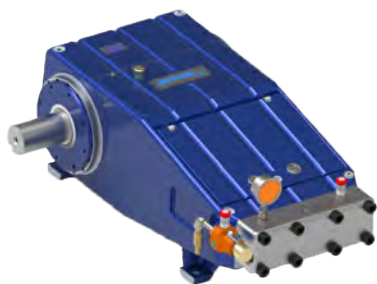
The customer can specify the placement of the crankshaft (right-hand or left-hand side) and paint color for a bareshaft pump. Standard paint color is blue. Other paint colors are available upon request.

*Displacement (flow) values represented refer to "theoretical" flow, neglecting inefficiency resulting from compressibility of water and expansion of pressure-bearing components.



Please refer to the [Jetstream Bareshaft Pump Operation Manual](#) for general installation guidelines. Contact Jetstream Engineering for detailed technical guidance and design review before installing any Jetstream bareshaft pump.





MODEL 5240

UNx™ BARESHAFT PUMP

The Jetstream model 5240 waterblast pump is capable of power input of up to 400 horsepower (298 kW). It is the most advanced and efficient compact waterblast pump in the industry. Combining the strength and durability of a proven power end workhorse with the unparalleled simplicity, serviceability and versatility of the UNx fluid end design, Jetstream bareshaft pumps are the best choice for those building their own system or replacing a complicated, worn, or unreliable pump.

- ▶ Up to 400 horsepower (298 kW)
- ▶ Three plunger (triplex) design

KEY FEATURES

- ▶ Ductile iron power frame is the strongest in the industry
- ▶ Crankshaft machined from high-tech forged alloy for superior performance at higher power input
- ▶ Largest bearings of any comparable pump on the market
- ▶ Maximum Flow: 20.7 gpm (78 lpm) at 30,000 psi (2068 bar)

POWER END SPECS

MAX. POWER INPUT		PLUNGERS			CONNECTION TYPE (DISCHARGE)	PUMP RPM	MAX. FRAME LOAD		TOTAL WEIGHT		PUMP OIL*			
		#	STROKE								TYPE	CAPACITY		
hp	kW			in	mm	Jetstream 40K Port	RANGE	lb	kN	lb		kg		gal
400	300	3	5.25	133		183-518	17,750	79		2100	954	80W-90*	9	34

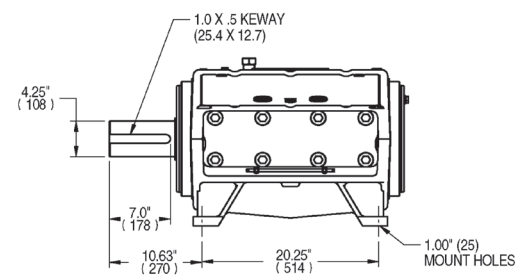
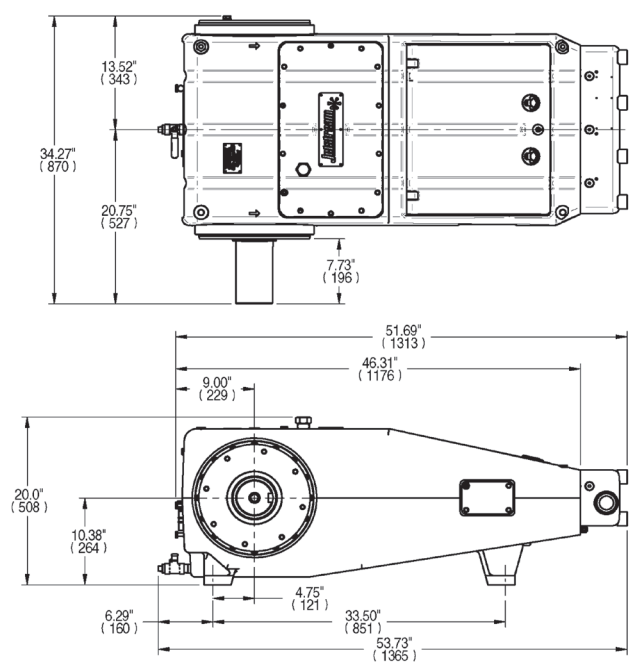
*See manual for list of approved oils.

FLUID END SPECS

PUMP PART NO.	PLUNGER SIZE			MAX. POWER INPUT		FLOW AT SPECIFIED PUMP SPEEDS**												MAX. OPERATING PRESSURE	
	NO.	DIAMETER				183 RPM		200 RPM		300 RPM		400 RPM		500 RPM		518 RPM			
		in	mm	hp	kW	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm		
																		psi	bar
67374	#7	0.670	17.02	321	239	4.2	16	4.8	18	7.2	27	9.6	36	12.0	45	13.5	51	40,000	2750
67375	#8	0.730	18.54	382	285	5.0	19	5.7	22	8.6	33	11.4	43	14.3	54	14.7	56	40,000	2750
67376	#8HF	0.790	20.1	400	300	5.9	22	6.7	25	10.0	38	13.4	51	16.7	63	17.2	65	36,000	2483
67377	#9	0.865	22.0	400	300	7.0	27	8.0	30	12.0	45	16.0	61	20.0	76	20.7	78	30,000	2068

**Flow values represented refer to "theoretical" flow, neglecting inefficiency resulting compressibility of water and expansion of pressure-bearing components.

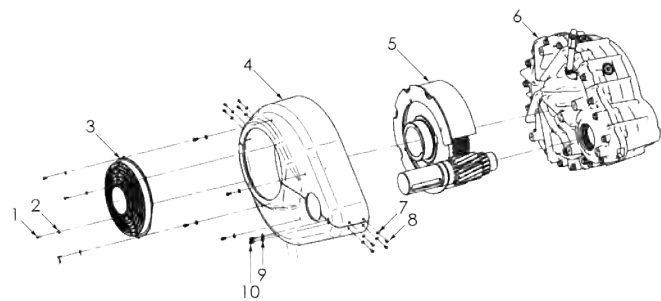
MODEL 5240
UNx™ BARESHAFT PUMP
DIAGRAMS



GEAR DRIVE

An optional Gear Drive can be added to the 5240 Bareshaft Pump. Several options are available, as well as the specific clocking position needed. Contact your Jetstream Sales Manager for more information.

PART NO.	DRIVE RATIO	MAX. INPUT SPEED
12V		
59100-16-69-12V	4.31:1	2230 RPM
59100-17-68-12V	4.00:1	2070 RPM
59100-19-67-12V	3.53:1	1825 RPM
59100-22-64-12V	2.91:1	1500 RPM
24V		
59100-16-69-24V	4.31:1	2230 RPM
59100-17-68-24V	4.00:1	2070 RPM
59100-19-67-24V	3.53:1	1825 RPM
59100-22-64-24V	2.91:1	1500 RPM



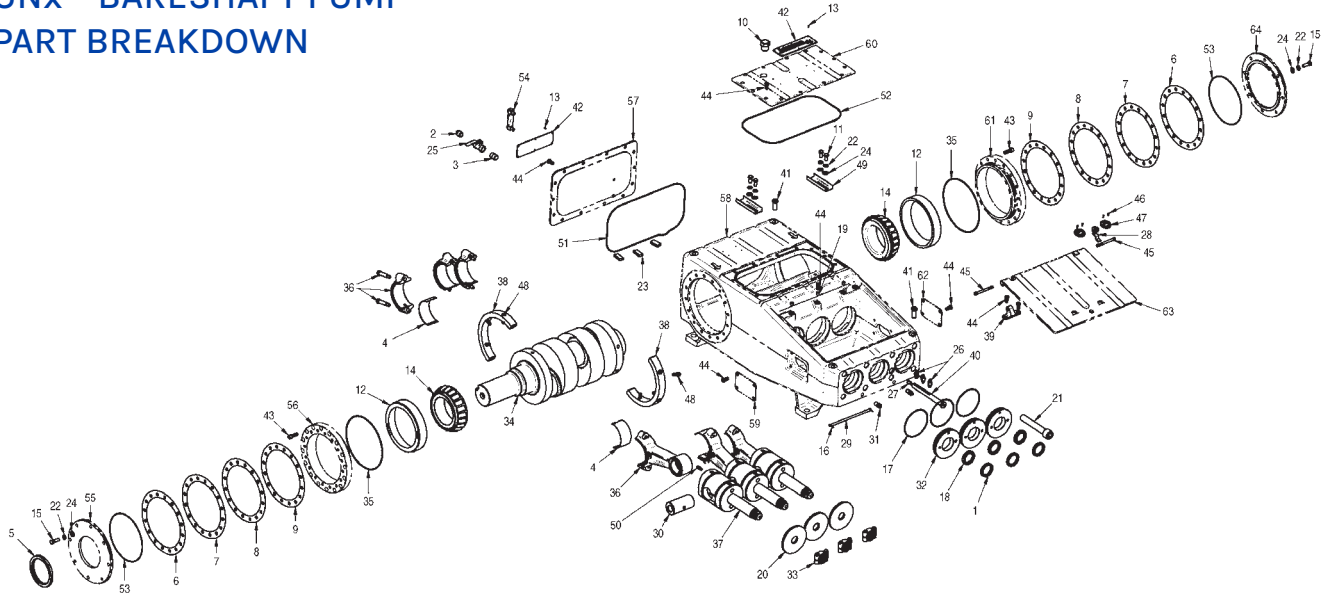
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	65082	Screw	6	59101	Gear Drive Kit Common Parts
2	57244	Washer	7	57244	Washer
3	Various	Fan	8	65082	Screw
4	64883	Fan Shroud	9	70206	Washer
5	Various	Gear Drive Kit, dependent on gear ratio and voltage	10	63790	Capscrew

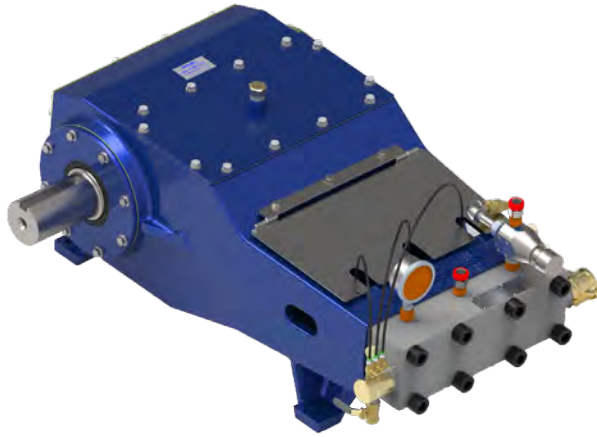
MODEL 5240

UNx™ BARESHAFT PUMP

PART BREAKDOWN



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	04101	Oil Seal	23	26705	Magnet	45	67342	Capscrew, .38C x 4.5
2	25928	Brass Plug	24	26798	Flat Washer	46	67343	Capscrew, #6-32 x .50
3	25946	3/4" NPT Nipple	25	27101	3/4" NPT Ball Valve	47	67345	Lift Handle
4	26051	Journal Bearing	26	67412	Needle Valve	48	67346	Capscrew, .5F x 1 3/8"
5	26208	Crankcase Oil Seal	27	25120	Plug	49	67347	Oil Trough
6	26259	End Cap Shim	28	29829	Locking Pawl Latch	50	67348	Setscrew
7	26259-1	End Cap Shim	29	50295	Trunnion Rod	51	67349	O-Ring
8	26259-2	End Cap Shim	30	51534	Crosshead Pin	52	67349	O-Ring
9	26259-3	End Cap Shim	31	51659	Manifold Trunnion	53	71017	O-Ring
10	26360	1" NPT Breather Vent	32	51713	Oil Seal Plate	54	71318	Oil Level Gauge
11	26361	Capscrew	33	51736	Coupling Assy	55	51538	Inboard Frame Cap
12	26376	Race Bearing Cup	34	66087	Crankshaft	56	66089	Bearing Adapter
13	26379	Screw Drive	35	66112	O-Ring	57	67613	Rear Cover
14	26390	Tapered Cone Bearing	36	66964	Connecting Rod Assy	58	66961	Power Frame
15	26435	Capscrew	37	67076	Crosshead Assy	59	67298	Side Access Plate
16	26468	Cotter Pin	38	67078	Weight, Narrow	60	67588	Top Cover
17	26479	O-Ring	39	67299	Hinge, Rod Box Cover	61	66089	Bearing Adapter
18	26481	Oil Seal Plunger Adptr	40	67781	Lube Line Adapter	62	67298	Side Access Plate
19	26482	Set Screw	41	67301	Lifting Adapter	63	67614	Rod Box Cover
20	26487	Deflector	42	67305	Logo Plate	64	51536	Outboard Frame Cap
21	26500	Capscrew	43	67340	Capscrew, .5C x 1.5			
22	26558	Lock Washer	44	67341	Capscrew, .5C x 1.0			



MODEL 4240

UNx™ BARESHAFT PUMP

The Jetstream model 4240 is capable of power input up to 325 horsepower and flows* approaching twelve gallons per minute at 40,000 psi. It is the most advanced and efficient high horsepower waterblast pump in the industry. Combining the strength and durability of a proven power end workhorse with the unparalleled simplicity, service ability, and versatility of the UNx fluid end design, Jetstream bareshaft pumps are the best choice for those building their own system or replacing a complicated, worn, or unreliable pump.

PUMPS &
FLUID ENDS

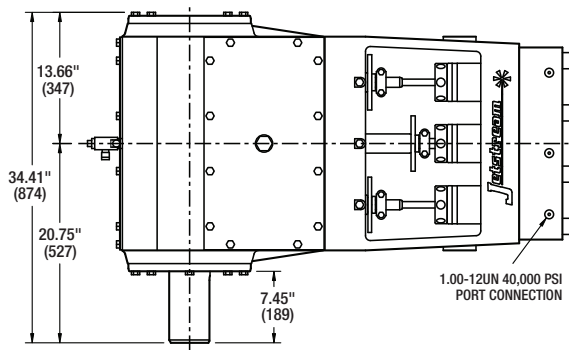
POWER END SPECS

MAX. POWER INPUT		PLUNGERS			PUMP RPM		MAX. PUMP DISPLACEMENT*		MAX. FRAME LOAD		MAX. OPERATING PRESSURE		TOTAL WEIGHT		PUMP OIL		
		QTY.	STROKE												TYPE	CAPACITY	
			in	mm												min	max
hp	kW		in	mm	min	max	gpm	lpm	lbs	N	psi	bar	lbs	kg		gal	l
325	242	3	4.25	108	175	514	11.9	45.0	17,500	77,900	40,000	2,750	1,800	820	80W-90	9.0	34

FLUID END SPECS

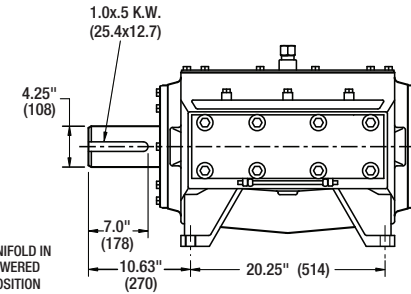
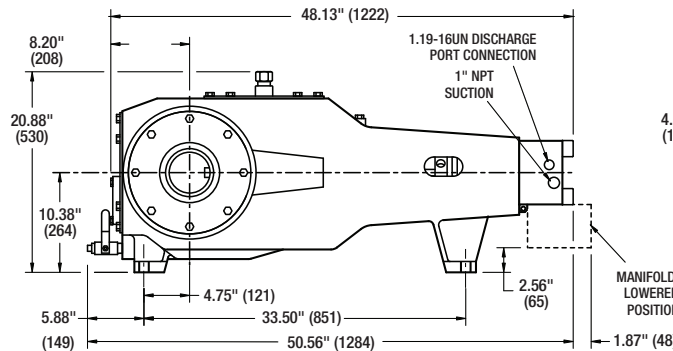
PART NO.	PLUNGER SIZE			MAX. POWER INPUT		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS*										MAX. OPERATING PRESSURE	
	NO.	DIAMETER				175 RPM		200 RPM		300 RPM		400 RPM		518 RPM			
		in	mm	hp	kW	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
54515	#6	0.600	15.24	210	156	2.7	10.2	3.1	11.8	4.7	17.7	6.2	23.6	8.1	30.7	40,000	2,758
54520	#7	0.670	17.02	260	194	3.4	12.9	3.9	14.7	5.8	22.1	7.8	29.5	10.1	38.2	40,000	2,758
54525	#8	0.730	18.54	310	231	4.0	15.1	4.6	17.5	6.9	26.2	9.2	35.0	11.9	45.0	40,000	2,758
65039	#8HF	0.790	20.1	325	242	4.7	17.8	5.4	20.4	8.1	30.7	10.8	40.9	14.0	53.1	36,000	2,483
64937	#9	0.865	22.0	325	242	5.7	21.6	6.5	24.6	9.7	36.7	13.0	49.2	16.8	63.6	30,000	2,068

*Displacement (flow) values represented refer to "theoretical" flow, neglecting inefficiency resulting from compressibility of water and expansion of pressure-bearing components.



MODEL 4240 UNX™ BARESHAFT PUMP DIAGRAMS

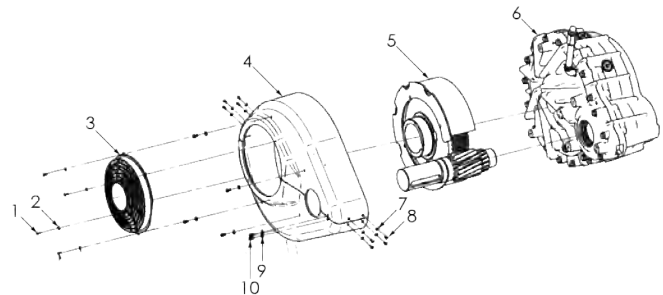
Primary dimensions are in inches.
Dimensions in parentheses are millimeters.



GEAR DRIVE

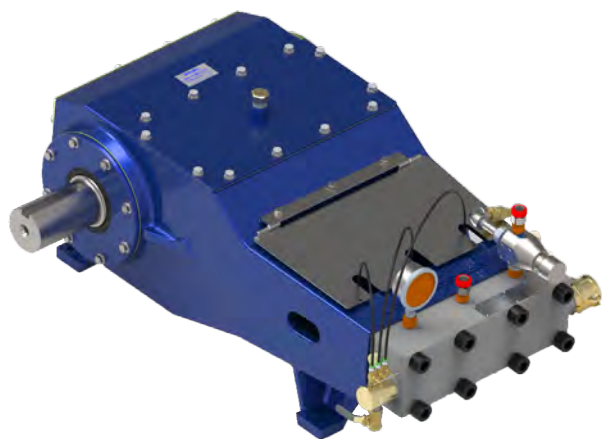
An optional Gear Drive can be added to the 4240 Bareshaft Pump. Several options are available, as well as the specific clocking position needed. Contact your Jetstream Sales Manager for more information.

PART NO.	DRIVE RATIO	MAX. INPUT SPEED
12V		
59100-16-69-12V	4.31:1	2230 RPM
59100-17-68-12V	4.00:1	2070 RPM
59100-19-67-12V	3.53:1	1825 RPM
59100-22-64-12V	2.91:1	1500 RPM
24V		
59100-16-69-24V	4.31:1	2230 RPM
59100-17-68-24V	4.00:1	2070 RPM
59100-19-67-24V	3.53:1	1825 RPM
59100-22-64-24V	2.91:1	1500 RPM



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	65082	Screw	6	59101	Gear Drive Kit Common Parts
2	57244	Washer	7	57244	Washer
3	Various	Fan	8	65082	Screw
4	64883	Fan Shroud	9	70206	Washer
5	Various	Gear Drive Kit, dependent on gear ratio and voltage	10	63790	Capscrew



MODEL 3640

UNx™ BARESHAFT PUMP

The Jetstream model 3640 is capable of power input up to 270 horsepower and flows* exceeding seven gallons per minute at 40,000 psi. It is the most advanced and efficient medium horsepower waterblast pump in the industry. Combining the strength and durability of a proven power end workhorse with the unparalleled simplicity, service ability, and versatility of the UNx fluid end design, Jetstream bareshaft pumps are the best choice for those building their own system or replacing a complicated, worn, or unreliable pump.

PUMPS &
FLUID ENDS

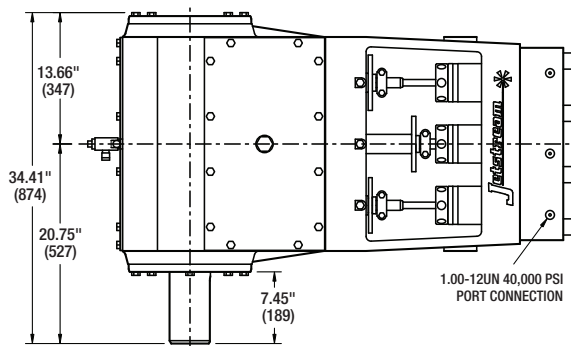
POWER END SPECS

MAX. POWER INPUT		PLUNGERS			PUMP RPM		MAX.PUMP DISPLACEMENT*		MAX. FRAME LOAD		MAX. OPERATING PRESSURE		TOTAL WEIGHT		PUMP OIL		
		QTY.	STROKE												TYPE	CAPACITY	
hp	kW		in	mm	min	max	gpm	lpm	lbs	kN	psi	bar	lbs	kg		gal	l
270	201	3	3.63	92	183	550	10.8	40.9	17,750	79	40,000	2,758	1,720	780	80W-90	9.0	340

FLUID END SPECS

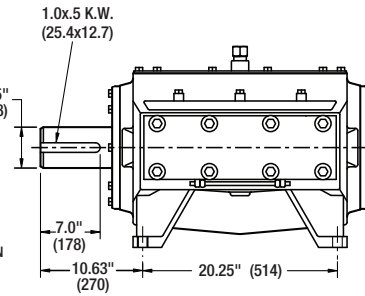
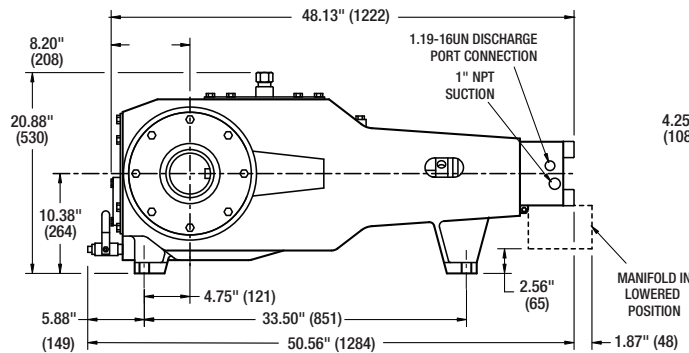
PART NO.	PLUNGER SIZE			MAX. POWER INPUT		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS*										MAX. OPERATING PRESSURE	
	NO.	DIAMETER				183 RPM		200 RPM		300 RPM		400 RPM		550 RPM			
		in	mm	hp	kW	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
54500	#6	0.600	15.24	190	142	2.4	9.0	2.6	10.0	4.0	15.0	5.3	20.0	7.3	27.6	40,000	2,758
				170	127											36,000	2,482
54505	#7	0.670	17.02	220	164	3.0	11.0	3.3	12.0	4.9	19.0	6.6	25.0	9.1	34.4	40,000	2,758
				190	142											33,000	2,275
				170	127											29,000	2,000
54510	#8	0.730	18.54	270	201	3.6	14.0	3.9	15.0	5.9	22.0	7.8	30.0	10.8	40.9	40,000	2,758
				230	172											35,000	2,413
				190	142											27,500	1,896
				170	127											24,500	1,689
				270	201											36,000	2,482
66947	#8HF	0.790	20.07	230	172	4.2	16.0	4.6	17.0	6.9	26.0	9.2	35	11.9	45.0	30,000	2,068
				270	201											30,000	2,068
66948	#9	0.865	21.97	230	172	5.0	19.0	5.5	21.0	8.2	31.0	11.0	42.0	14.2	54.0	25,000	1,724

*Displacement (flow) values represented refer to "theoretical" flow, neglecting inefficiency resulting from compressibility of water and expansion of pressure-bearing components.



MODEL 3640 UNx™ BARESHAFT PUMP DIAGRAMS

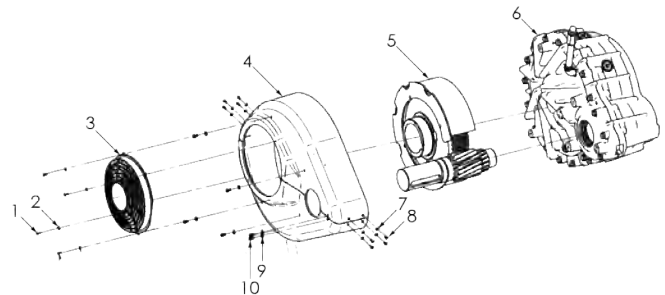
Primary dimensions are in inches.
Dimensions in parentheses are millimeters.



GEAR DRIVE

An optional Gear Drive can be added to the 3640 Bareshaft Pump. Several options are available, as well as the specific clocking position needed. Contact your Jetstream Sales Manager for more information.

PART NO.	DRIVE RATIO	MAX. INPUT SPEED
12V		
59100-16-69-12V	4.31:1	2230 RPM
59100-17-68-12V	4.00:1	2070 RPM
59100-19-67-12V	3.53:1	1825 RPM
59100-22-64-12V	2.91:1	1500 RPM
24V		
59100-16-69-24V	4.31:1	2230 RPM
59100-17-68-24V	4.00:1	2070 RPM
59100-19-67-24V	3.53:1	1825 RPM
59100-22-64-24V	2.91:1	1500 RPM



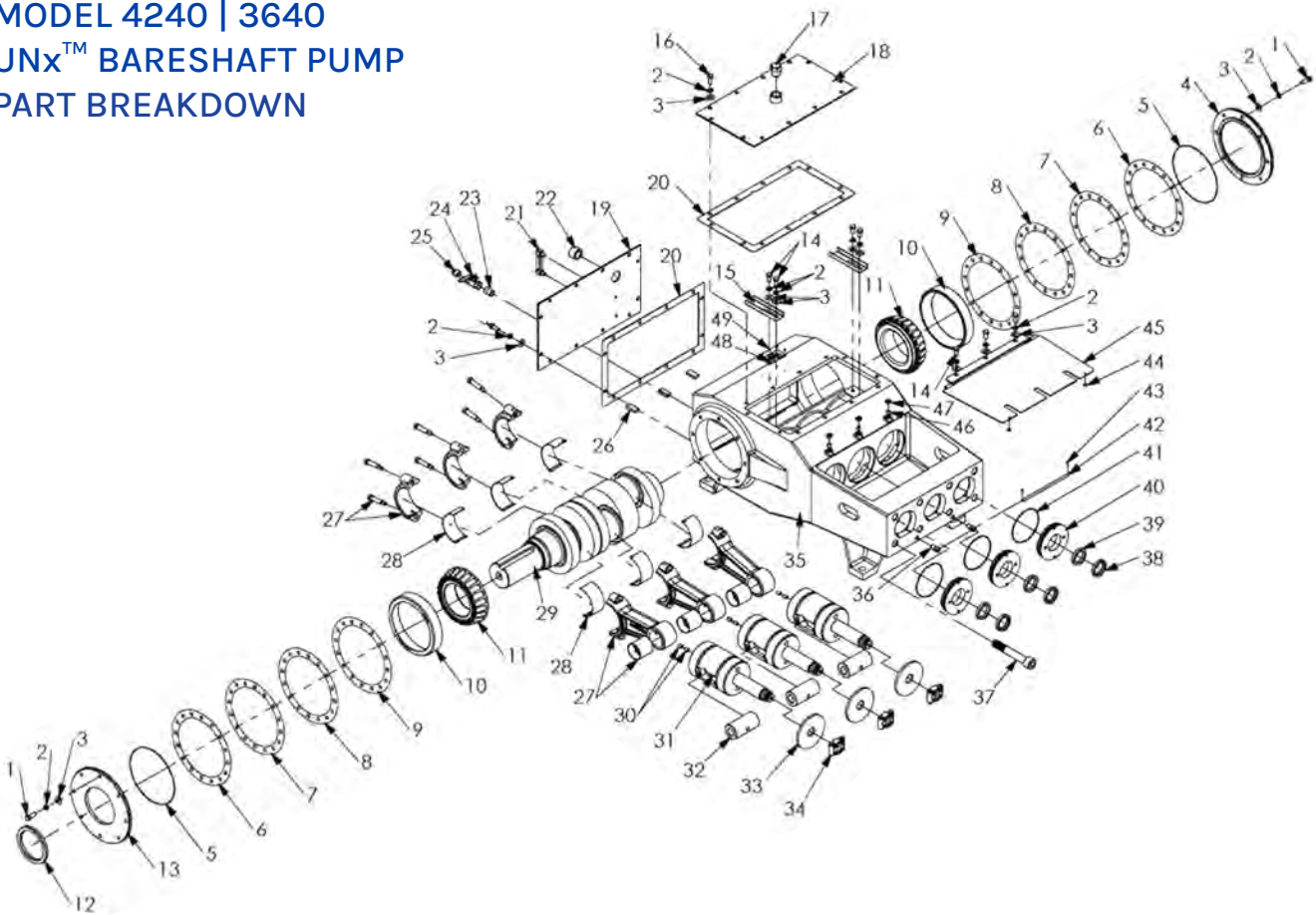
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	65082	Screw	6	59101	Gear Drive Kit Common Parts
2	57244	Washer	7	57244	Washer
3	Various	Fan	8	65082	Screw
4	64883	Fan Shroud	9	70206	Washer
5	Various	Gear Drive Kit, dependent on gear ratio and voltage	10	63790	Capscrew

MODEL 4240 | 3640

UNx™ BARESHAFT PUMP

PART BREAKDOWN

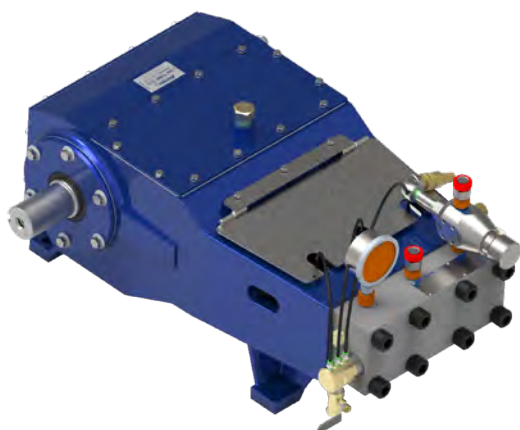


PUMPS &
FLUID ENDS

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	26435	Capscrew	18	51279	Top Cover Plate	34	51736	Plunger Coupling
2	26558	Washer	19	55253	Back Cover Plate	35	51421	Power Frame
3	26798	Washer	20	26195	Gasket, Cover Plate	36	51659	Trunnion
4	51536	Frame Cap, Outboard	21	71318	Oil Level Gage	37	26500	Capscrew
5	71017	O-Ring	22	29738	Plug	38	04101	Oil Seal, Outboard
6	26495	Shim, 0.020" Thick	23	25946	Nipple	39	26481	Oil Seal, Inboard
7	26495-1	Shim, 0.010" Thick	24	27101	Ball Valve	40	51713	Oil Seal Plate
8	26495-2	Shim, 0.0075" Thick	25	25928	Plug	41	26479	O-Ring
9	26495-3	Shim, 0.005" Thick	26	26705	Magnet	42	50295	Trunnion Rod
10	26376	Bearing, Cup, Race	27	51487	Connecting Rod	43	26468	Cotter Pin
11	26390	Bearing, Cone	28**	26051	Journal Bearing	44	27592	Grommet
12	26208	Oil Seal	29	53600	3600 Crankshaft	45	53632	Rod Box Cover
13	51538	Frame Cap, Inboard		28826	4200 Crankshaft	46	26482	Setscrew
14	26361	Capscrew	30	26369	Setscrew	47	27608	Washer
15*	26484	Oil Trough	31	51731	Crosshead	48	26590	Caution Plate
16	26491	Capscrew	32	51534	Crosshead Pin	49	26379	Screw, Caution Plate
17	26360	Breather	33	26487	Deflector			

*For reverse rotation pump, use 29014.

**For .010" oversize bearing for repaired crankshaft, use 60728.



MODEL 3040

UNx™ BARESHAFT PUMP

The Jetstream model 3040 is capable of power input up to 200 hp and flows* exceeding seven gallons per minute at 40,000 psi. It is the most advanced and efficient medium horsepower waterblast pump in the industry. Combining the strength and durability of a proven power end workhorse with the unparalleled simplicity, serviceability, and versatility of the UNx fluid end design, Jetstream bareshaft pumps are the best choice for those building their own system or replacing a complicated, worn, or unreliable pump.

POWER END SPECS

MAX. POWER INPUT		PLUNGERS			PUMP RPM		MAX. PUMP DISPLACEMENT*		MAX. FRAME LOAD		MAX. OPERATING PRESSURE		TOTAL WEIGHT		PUMP OIL		
		QTY	STROKE												TYPE	CAPACITY	
hp	kW		in	mm	min	max	gpm	lpm	lbs	N	psi	bar	lbs	kg			gal
200	149	3	3.00	76	200	600	7.6	28.7	13,000	57,827	40,000	2,750	970	440	80W-90	5.0	19.0

FLUID END SPECS

PUMP AY. PART NO.	PLUNGER SIZE			MAX. POWER INPUT		FLOW AT SPECIFIED PUMP SPEEDS*										MAX. PRESSURE	
	NO.	DIAMETER				200 RPM		300 RPM		400 RPM		500 RPM		600 RPM			
		in	mm	hp	kW	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
56620	#5	.530	13.46	134	100	1.7	6.4	2.6	9.8	3.4	13.0	4.3	16.3	5.2	19.5	40,000	2,758
66534	#5HF	.550	13.97	143	107	1.8	6.8	2.8	10.6	3.7	14.0	4.6	17.4	5.6	21.2	40,000	2,758
63770	#6	.580	14.73	159	119	2.1	7.9	3.1	11.7	4.1	15.5	5.1	19.3	6.2	23.4	40,000	2,758
68471	#7	.645	16.38	197	147	2.5	9.5	3.8	14.4	5.1	19.3	6.4	24.2	7.6	28.8	40,000	2,758

*Displacement (flow) values represented refer to "theoretical" flow, neglecting inefficiency resulting from compressibility of water and expansion of pressure-bearing components.

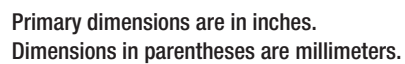
GEAR DRIVE

An optional Gear Drive can be added to the 3040 Bareshaft Pump. Several options are available, as well as the specific clocking position needed. Contact your Jetstream Sales Manager for more information.

PART NO.	DRIVE RATIO	MAX. INPUT SPEED
MODELS WITHOUT COOLING COIL		
58501-17-68	4.00:1	2400 RPM
58501-18-66	3.67:1	2200 RPM
58501-21-63	3.00:1	1800 RPM
58501-24-60	2.50:1	1500 RPM
MODELS WITH COOLING COIL		
68453-17-68	4.00:1	2400 RPM
68453-18-66	3.67:1	2200 RPM
68453-21-63	3.00:1	1800 RPM
68453-24-60	2.50:1	1500 RPM



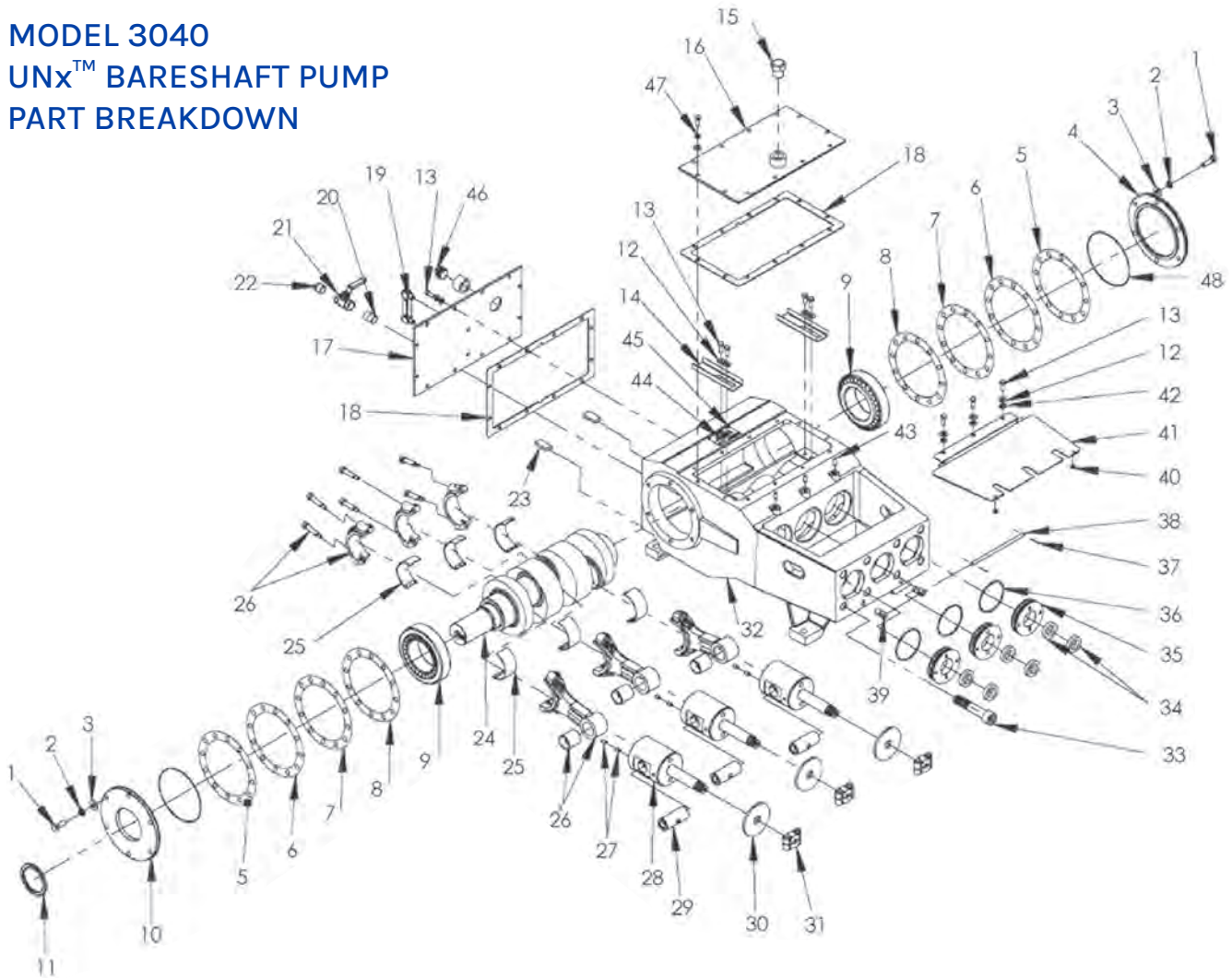
PUMPS & FLUID ENDS



MODEL 3040

UNx™ BARESHAFT PUMP

PART BREAKDOWN



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	26435	Capscrew	17	55252	Plate, Back Cover	33	26462	Capscrew
2	26558	Washer	18	26496	Gasket, Cover Plate	34	25536	Oil Seal
3	26798	Washer	19	71318	Gauge, Oil Level	35	51712	Seal Plate
4	51733	Frame Cap, Outboard	20	25465	Nipple	36	26478	O-Ring
5	26495-3	Shim, 0.005" Thick	21	27101	Ball Valve	37	26468	Cotter Pin
6	26495-2	Shim, 0.0075" Thick	22	25928	Plug	38	51666	Trunnion Rod
7	26495-1	Shim, 0.010" Thick	23	26705	Magnet	39	51659	Trunnion
8	26495	Shim, 0.020" Thick	24	25508	Crankshaft	40	27592	Grommet
9	25541	Bearing, Crankshaft	25**	26486	Bearing, Journal	41	59399	Cover, Rod Box
10	51732	Frame Cap, Inboard	26	51749	Connecting Rod	42	27616	Washer
11	25428	Crankshaft Seal	27	25132	Setscrew	43	26483	Setscrew
12	25251	Washer	28	51738	Crosshead	44	26590	Caution Plate
13	26492	Capscrew	29	52077	Pin, Crosshead	45	26379	Caution Plate Screw
14*	26484	Oil Trough	30	26623	Deflector	46	29738	Plug
15	26360	Breather Cap	31	51737	Plunger Coupling	47	25249	Washer
16	50807	Plate, Top Cover	32	51748	Power Frame	48	71016	O-Ring

*For reverse rotation pump, use 29014.

**For .010" oversize bearing for repaired crankshaft, use 60729.

UNx™ FLUID ENDS

FEATURES AND BENEFITS

The Jetstream 40,000 psi UNx Fluid End is standard on every Jetstream 40,000 psi unit or bareshaft pump. It is also available as a conversion package for popular pump models or as an addition to an existing Jetstream 3600 or 4200 pump. Please refer to the catalog pages that follow for details on available models.

The UNx™ Advantage Serviceability

- ▶ Reduced downtime and maintenance
- ▶ Five minute packing change
- ▶ Fifteen minute pop-out valve cartridge change
- ▶ No special tools or equipment required
- ▶ Plungers clamped, NOT threaded

Simplicity

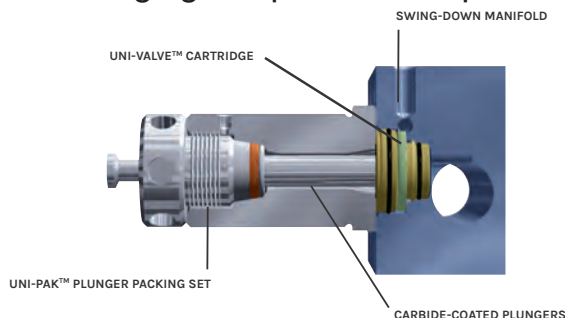
- ▶ Fewer parts than other 40,000 psi fluid ends
- ▶ Uni-Valve™ one-piece cartridges include suction & discharge valves, seats, springs, and seals
- ▶ Swing-down manifold for easy access to components

Versatility

- ▶ Fast in-the-field pressure range conversion with simple bolt-on Jetstream UNx Fluid Ends
- ▶ Convertibility of the UNx design allows one unit to do the work that another manufacturer would require multiple units or several hours of downtime to perform

Other Features

- ▶ Water lubricated, single-piece high-lubricity packing ring
- ▶ Solid carbide plungers and plunger bushings
- ▶ Specially designed discharge and top port connections that are superior to industry standard connections
- ▶ High volumetric efficiency
- ▶ All pressure-bearing components precision machined from high quality stainless steel
- ▶ Pulsation dampener built in to manifold
- ▶ **All 40K Fluid Ends include a gauge, adapter and two rupture disc holders**

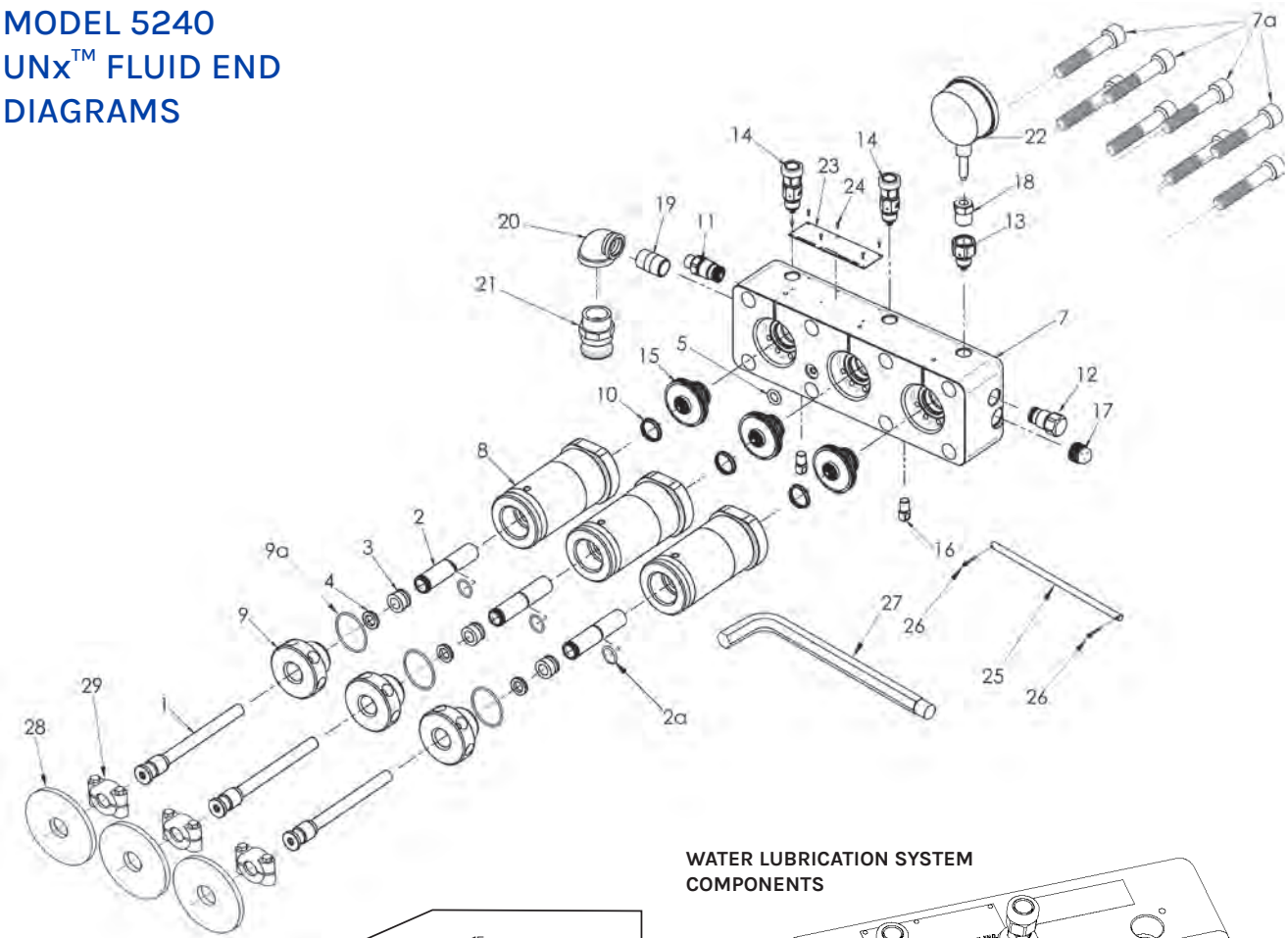


15-MINUTE VALVE
REPLACEMENT

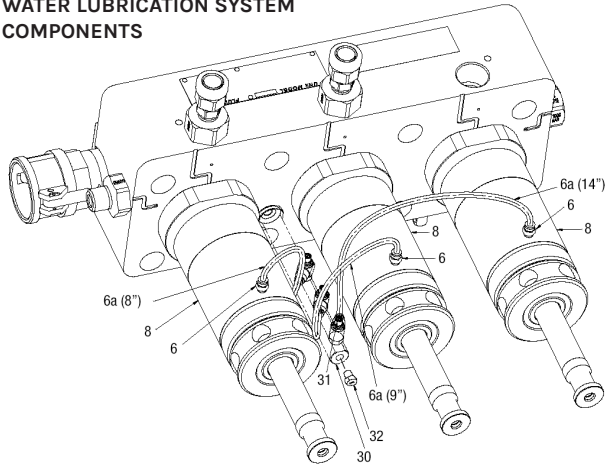
5-MINUTE
PACKING CHANGE

SLIDE-OUT
STUFFING BOXES

MODEL 5240 UNx™ FLUID END DIAGRAMS



WATER LUBRICATION SYSTEM COMPONENTS



FLUID END SPECS

FLUID END PART NO.	CONNECTION TYPES* (HIGH PRESSURE PORTS)	PLUNGER SIZE		PLUNGER STROKE		MAX. CRANK SPEED RPM	MAX. FLOW		MAX. OPERATING PRESSURE		
		NO.	DIAMETER				gpm	lpm	psi	bar	
			in	mm							
67387	Jetstream 40K Port	7	0.670	17.02	5.25	133	518	13.5	51	40,000	2750
67388		8	0.730	18.54				14.7	56	40,000	2750
67389		8HF	0.790	20.1				17.2	65	36,000	2483
67390		9	0.865	22.0				20.7	78	30,000	2068

MODEL 5240

UNx™ FLUID END

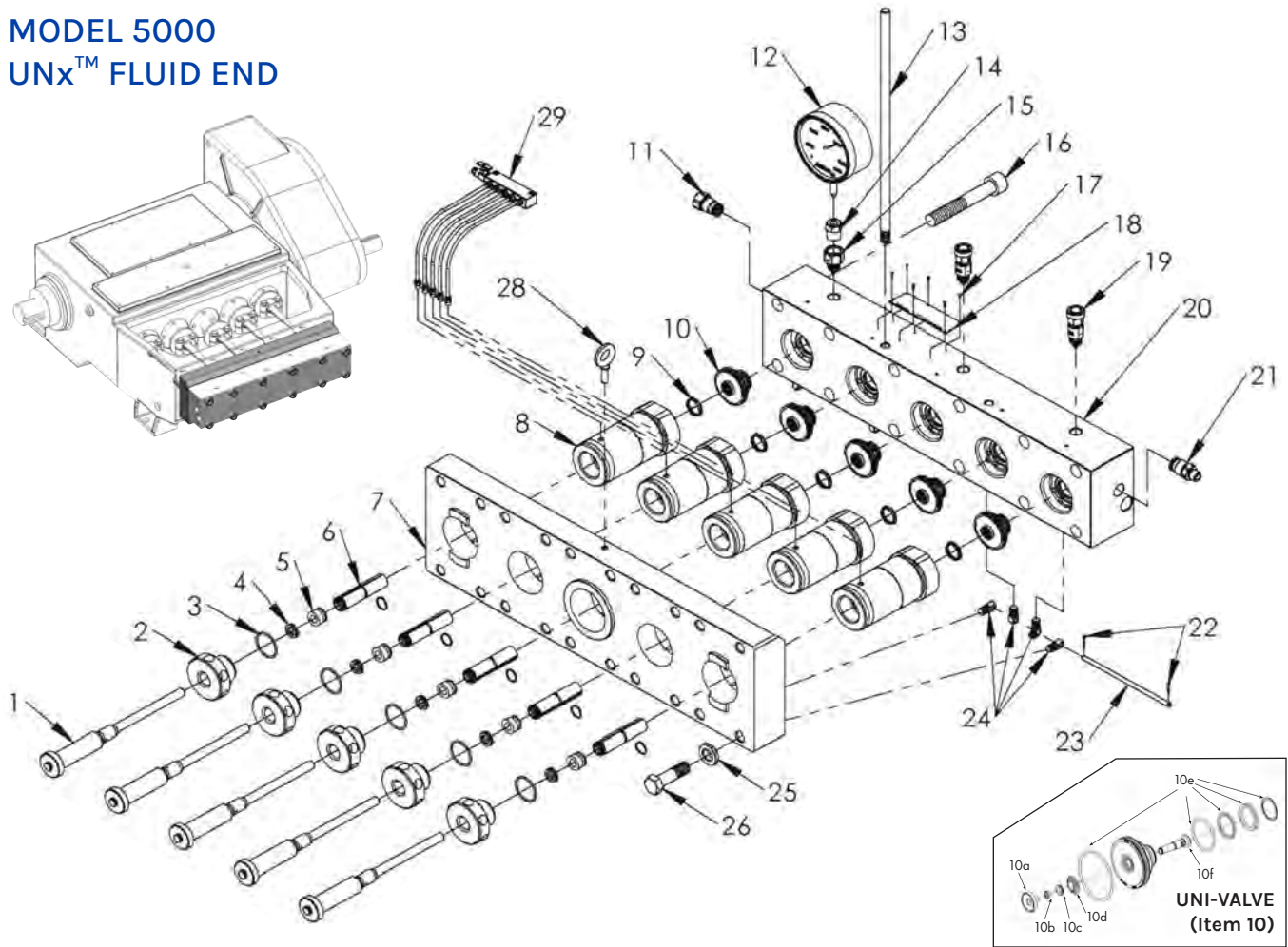
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	67049	#7 Plunger	13	53572	40K Top Adapter
	67050	#8 Plunger	14	53505	Rupture Disc Assy
	67051	#8HF Plunger	15	67867	Uni-Valve
	67052	#9 Plunger	15a	53489	Valve, Suction
2	67059	#7 Sleeve Assy	15b	55229	Keeper
	67060	#8 Sleeve Assy	15c	55231	Retainer Spring
	67061	#8HF Sleeve Assy	15d	27509	Valve, Spring
	67062	#9 Sleeve Assy	15e	54143	Seal Kit
3	54117	#7 Packing Ring	15f	67866	Valve, Discharge
	54118	#8 Packing Ring	16	51659	Manifold Trunnion
	64840	#8HF Packing Ring	17	29738	Plug
	64275	#9 Packing Ring	18	28090	Anti-Vibration Gland
4	27480	#7 Bushing	19	27728	Nipple
	27481	#8 Bushing	20	27727	Elbow
	64841	#8HF Bushing	21	27546	Adapter
	64276	#9 Bushing	22	27488	60K Pressure Gauge
5	67548	O-Ring	23	26589	Caution Plate
6	27732	Adapter	24	26379	Screw
6a	67808	Tubing	25*	50295	Trunnion Rod
7	67279	Manifold	26*	26468	Cotter Pin
7a*	26500	Manifold Bolt	27	50889	Pump Wrench
8	67068	Stuffing Box	28*	26487	Deflector
9	64278	Gland Nut	29*	51736	Plunger Coupling
9a	26464	O-Ring (#7, #8, #8HF, #9 Gland Nut)	30*	67781	Lube Line Adapter
10	54125	Stuffing Box Seal Assy	31*	67412	Needle Valve
11	53672	Manifold Adapter	32*	25120	Plug
12	53589	Manifold Plug			

*Power end component included in drawing for convenience. Not included with new fluid ends.



MODEL 5000 UNx™ FLUID END



PUMPS &
FLUID ENDS

		PLUNGER SIZE				5000 PUMPS				
FLUID END PART NO.	NO.	DIAMETER		PLUNGER STROKE		MAX. RPM	MAX. FLOW		MAX. OPERATING PRESSURE	
		in	mm	in	mm		gpm	lpm	psi	bar
55292	#8	0.73	18.54	5	127	2000	18.7	70.9	40,000	2,758

*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	55279	#8 Plunger	10c	55231	Retainer Spring	19	53505	Rupture Disc Holders
2	64278	Gland Nut	10d	27509	Valve Spring	20	55277	Manifold
3	26464	O-Ring	10e	54143	Seal Kit	21	53672	Adapter, Pump Discharge x 7/8" Type M Male
4	27481	#8 Guide Bushing	10f	53491	Valve, Discharge	22	26468	Cotter Pin
5	54118	#8 Packing	11	53589	Pump Discharge Plug	23	50295	Trunnion Rod
6	55291	#8 Sleeve	12	27488	Gauge (0-60,000 psi)	24	51659	Trunnion
7	54627	Adapter Plate	13	52114	Lifting Rod	25	54638	Washer
8	55278	Stuffing Box	14	28090	Anti-Vibration Gland Set	26	60248	Capscrew, Adapter Plate
9	54125	Stuffing Box Seal (Face Seal)	15	53572	Adapter, Male Port x 9/16" HP Female	27*	50889	Pump Wrench
10	53495	Uni-Valve	16	26500	Capscrews	28	J70287	Lifting Eye
10a	53489	Valve Suction	17	26379	Screws, Caution Plate	29	54690	Lube Harness
10b	55229	Keeper	18	26589	Caution Plate			

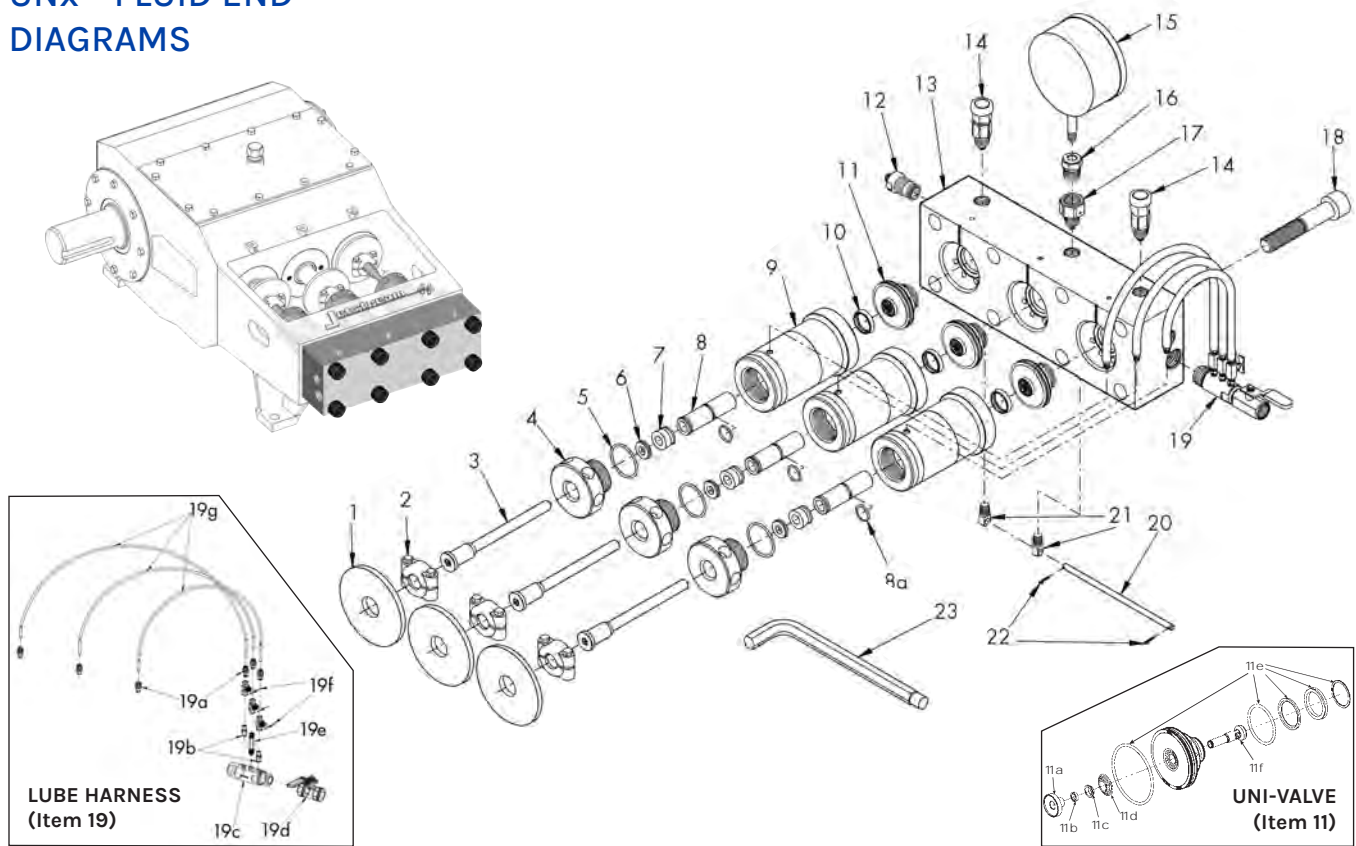
*Not Shown

MODEL 4240 | 3640

UNx™ FLUID END

DIAGRAMS

PUMPS &
FLUID ENDS



FLUID END PART NO.*	PLUNGER SIZE					4240 PUMPS							3640 PUMPS						
	NO.	DIAMETER		PLUNGER STROKE		MAX. RPM	MAX. FLOW		MAX. OPERATING PRESSURE		PLUNGER STROKE		MAX. RPM	MAX. FLOW*		MAX. OPERATING PRESSURE			
		in	mm	in	mm		gpm	lpm	psi	bar	in	mm		gpm	lpm	psi	bar		
53540	#6	0.600	15.24	4.25	108	500	7.8	29.5	40,000	2,758	3.63	92	550	7.3	27.7	40,000	2,758		
53545	#7	0.670	17.02	4.25	108	500	9.7	36.8	40,000	2,758	3.63	92	550	9.1	34.4	40,000	2,758		
53550	#8	0.730	18.54	4.25	108	500	11.6	43.7	40,000	2,758	3.63	92	550	10.8	40.9	40,000	2,758		
64849	#8HF	0.79	20.1	4.25	108	518	14.0	53.1	36,000	2,483	3.63	92	550	11.9	45.0	36,000	2,482		
64850	#9	0.865	22.0	4.25	108	518	16.8	63.6	30,000	2,069	3.63	92	550	14.2	54.0	30,000	2,068		

*Includes gauge, adapter and two rupture disc holders. Electric units require by pass valve, not included.

MODEL 4240 | 3640

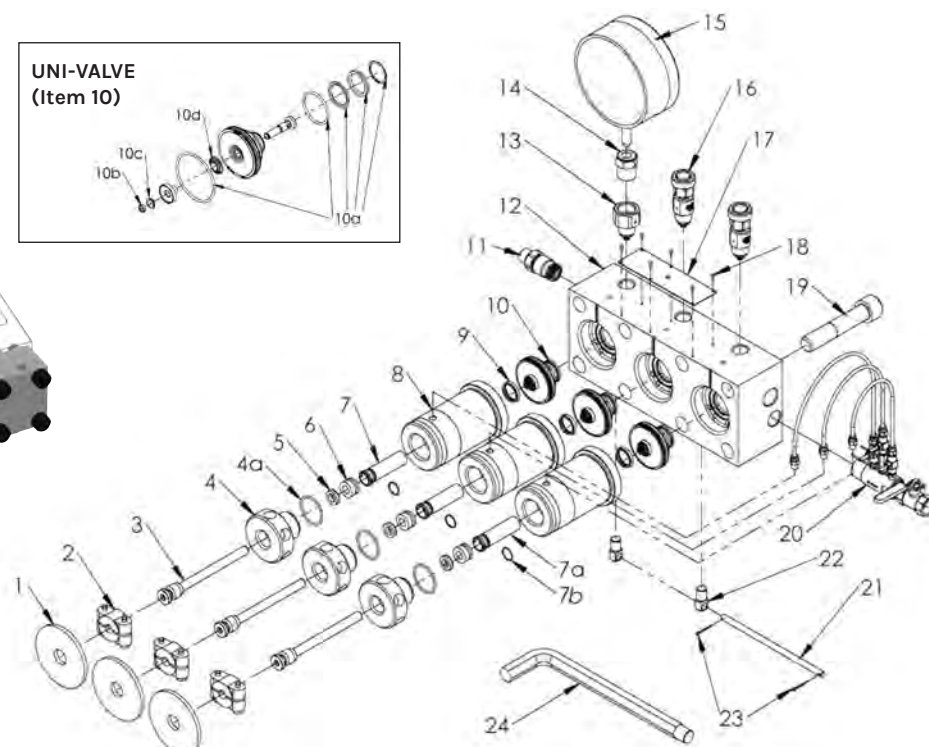
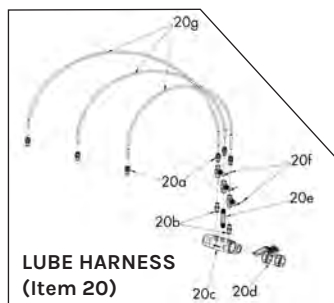
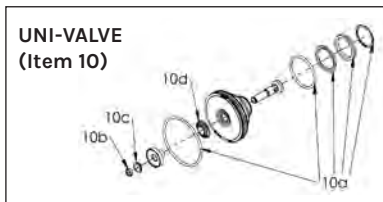
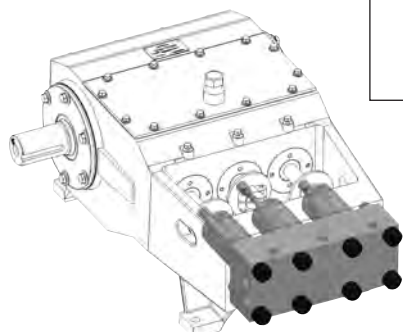
UNx™ FLUID END

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	26487	Deflector	8	54096	#6 Sleeve	15	27488	Gauge (0-60,000 psi)
2	51736	Plunger Coupling		54097	#7 Sleeve	16	28090	Anti-Vibration Gland Set
3	53561	#6 Plunger		54098	#8 Sleeve	17	53572	Adapter, Male Port x 9/16" HP Female
	53562	#7 Plunger		64844	#8HF Sleeve	18	26500	Manifold Bolt
	53563	#8 Plunger		64837	#9 Sleeve	19	53795	Lube Harness
	64839	#8HF Plunger	8a	64848	#8HF & #9 O-Ring	19a	27732	Hose Fitting
	64836	#9 Plunger		26522	#7 & #8 O-Ring	19b	26465	Nipple
4	64278	Gland Nut	9	54099	Stuffing Box	19c	53792	Manifold, Lube
5	26464	O-Ring	10	54125	Stuffing Box Seal (Face seal)	19d	27101	Ball Valve, Ball
6	27479	#6 Bushing	11	53495	Uni-Valve	19e	60615	Nipple, Large
	27480	#7 Bushing	11a	53489	Valve, Suction	19f	27475	Valve, Needle
	27481	#8 Bushing	11b	55229	Keeper	19g	27740	Hose (order in feet)
	64841	#8HF Bushing	11c	55231	Retainer Spring	20	50295	Trunnion Rod
	64276	#9 Bushing	11d	27509	Valve, Spring	21	51659	Trunnion
7	54116	#6 Packing	11e	54143	Seal Kit	22	26468	Cotter Pin
	54117	#7 Packing	11f	53491	Valve, Discharge	23	50889	Pump Wrench
	54118	#8 Packing	12	See Pump Discharge Fittings Pages E-3 & E-4				
	64840	#8HF Packing	13	53456	Manifold			
	64275	#9 Packing	14	53505	Rupture Disc Holder			

MODEL 3040 UNx™ FLUID END DIAGRAMS

PUMPS &
FLUID ENDS



1. Power end component included in drawing for convenience. Not included with new fluid ends.

FLUID END PART NO.*	PLUNGER SIZE			PLUNGER STROKE		MAX. RPM	MAX. FLOW		MAX. OPERATING PRESSURE	
	NO.	DIAMETER								
		in	mm	in	mm		gpm	lpm	psi	bar
J55635	#5	0.530	13.46	3.00	76	600	5.2	19.5	40,000	2,758
66533	#5HF	.550	13.97	3.00	76	600	5.6	21.2	40,000	2,758
62954	#6	0.580	14.73	3.00	76	600	6.2	23.4	40,000	2,758
68458	#7	.645	16.38	3.00	76	600	7.6	28.8	40,000	2,758

*Includes gauge, adapter and two rupture disc holders. Electric units require by pass valve, not included.

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	26623	Deflector	7	62949	#6 Sleeve Assy	16	53505	Rupture Disc Assy
2	51737	Plunger Coupling		65253	#7 Sleeve Assy	17	J55673	#5 Caution Plate
	J55646	#5 Plunger		J70308	#5 Sleeve		62953	#6 Caution Plate
3	66526	#5HF Plunger	7a	66532	#5HF Sleeve	18	26379	Screws, Caution Plate
	62948	#6 Plunger		62950	#6 Sleeve	19	26462	Manifold Bolt
		65256	#7 Plunger	7b	25126	#5, #6 O-Ring	20	53795
4	62984	Gland Nut	8	J55641	#5,#5HF, #6, #7 30K Stuffing Box	20a	27732	Hose Fitting
	67768	#7 Gland Nut (40K)		67739	#7 40K Stuffing Box	20b	26465	Nipple
4a	25566	O-Ring	9	J70301	Stuffing Box Seal	20c	53792	Manifold, Lube
5	J70298	#5 Guide Bushing	10	J55630	Uni-Valve	20d	27101	Ball Valve
	66530	#5HF Guide Bushing	10a	J55657	Seal Kit	20e	60815	Nipple, Large
	62951	#6 Guide Bushing	10b	J55634	Keeper	20f	27475	Needle Valve
	65255	#7 Guide Bushing	10c	J55636	Spring Retainer	20g	27740	Hose (order in feet)
6	J70299	#5 Packing	10d	J70300	Spring	21	50295	Trunnion Rod
	66529	#5HF Packing	11	See Pump Discharge Fittings Pages E-3 & E-4		22	51659	Trunnion
	62952	#6 Packing	12	J55631	Manifold	23	26468	Cotter Pin
	65254	#7 Packing 30K	13	53572	Adapter, Port x 9/16" HP Female	24	50064	Pump Wrench
	67738	#7 Packing 40K	14	28090	Anti-Vibration Gland Set			
7	J55647	#5 Sleeve Assy	15	27488	Pressure Gauge			
	66531	#5HF Sleeve Assy						

UNx™ FLUID END UPGRADES

BRINGING THE UNx™ ADVANTAGE TO YOUR EXISTING PUMP

Jetstream has created a wide variety of UNx Fluid Ends conversions to adapt to your existing competitor pump. The upgrade delivers all of the benefits of the UNx Fluid End design:

- ▶ Superior performance
- ▶ Reduced downtime and maintenance
- ▶ Greater flexibility in the field
- ▶ See UNx Features and Benefits on page B-13

Contact your Regional Sales Manager for inquiries on upgrades required.

JETSTREAM FLUID END CONVERSIONS

FLUID END PART NO.	FLUID END MODEL	DESCRIPTION	MANUFACTURER	MANUFACTURER MODEL
56831	3040N	#5 Triplex	NLB	4012 / 40145 / 125 Series
67618	3040NF			125 Series (Flange Crosshead Stud)
53750	4240N	#6 Triplex	NLB / Union	40201 and others / TD-120 / 225 Series
53755	4240N	#7 Triplex		
53700	4240QN	#6 Quintuplex	NLB / Union	36250 / QD-200
53705	4240QN	#7 Quintuplex		
55320	3740B	#6 Triplex	Butterworth / Gardner Denver	L-375, T-375, I-375, TF-375, L-130
55325	3740B	#7 Triplex		
59578	3740B	#8 Triplex without Mounting Package		
53760	4540B	#6 Triplex	Butterworth / Gardner Denver	L-450, TF-450
53765	4540B	#7 Triplex		
53770	4540B	#8 Triplex		
56745	4540B	#8 Triplex without Mounting Package		
J55640	3740WZ	#5 Triplex	Woma	150-Z
56754	3740W	#5 Triplex		150Z
59558	3740WM	#5 Triplex		180-M
66314	4740T	#6 Triplex	Tongjie	T-Series
66313	4740T	#7 Triplex		
65765	4740T	#8 Triplex		

*Detailed information to follow on pages B-22 to B-28.

EUROPEAN JETSTREAM FLUID END CONVERSIONS

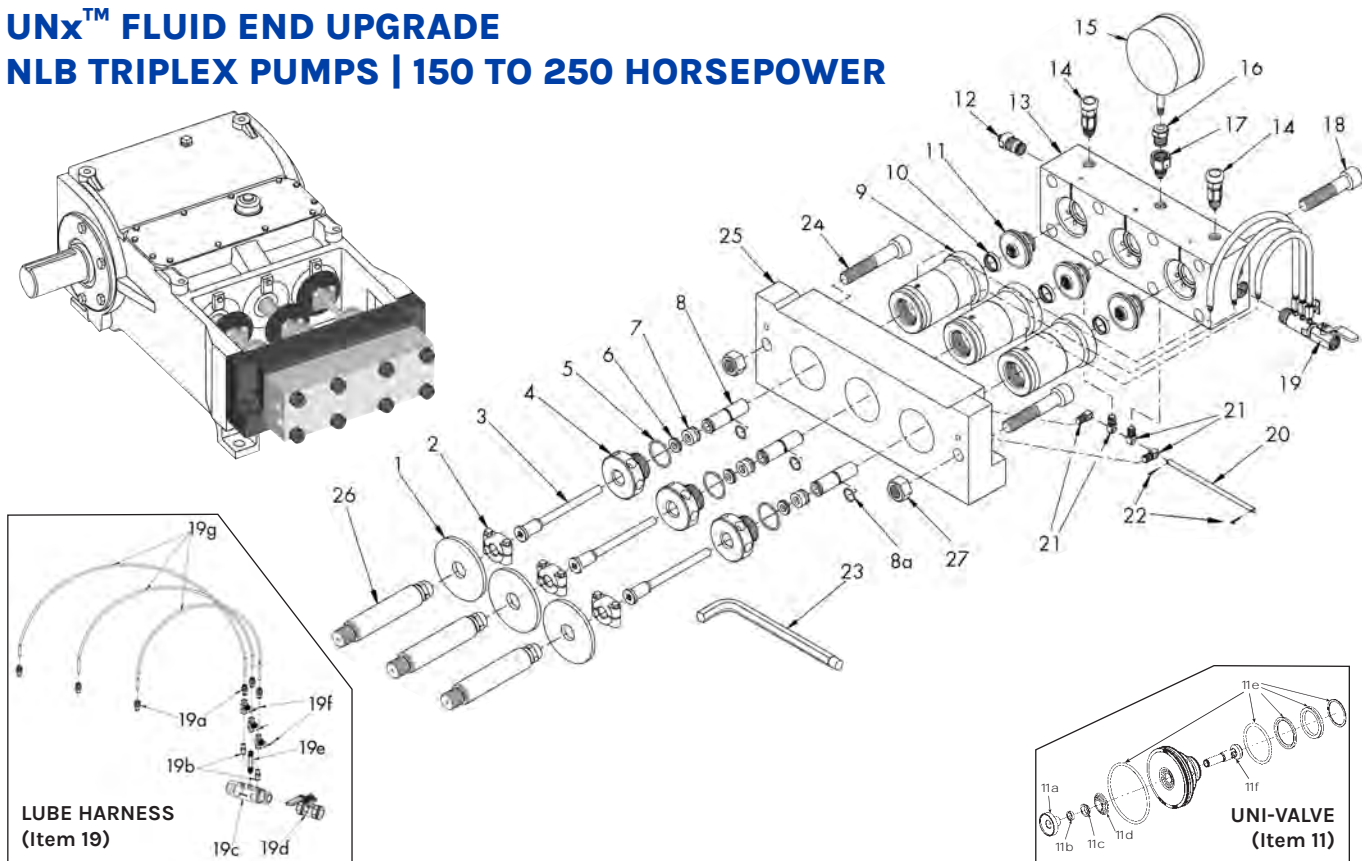
FLUID END PART NO.	FLUID END MODEL	DESCRIPTION	MANUFACTURER	EURO MODEL INCLUDES
J55830	3040	#5 Triplex	Jetstream	Euro Filter Package
55192	3640	#6 Triplex		
55342	3640	#7 Triplex		
55349	4240	#6 Triplex		Euro Lube Harness
55196	4240	#7 Triplex		
55200	4240	#8 Triplex		Dual Gauge
55356	5040Q	#8 Triplex		
				Euro Bypass Valve

MODEL 4240N

UNx™ FLUID END UPGRADE

NLB TRIPLEX PUMPS | 150 TO 250 HORSEPOWER

PUMPS &
FLUID ENDS



FLUID END PART NO.*	PLUNGER SIZE		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS								MAX. OPERATING PRESSURE		
	NO.	DIAMETER		200 RPM		300 RPM		400 RPM		500 RPM			
		in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
53750	#6	0.600	15.24	3.1	11.8	4.7	17.7	6.2	23.6	7.8	29.5	40,000	2,758
53755	#7	0.670	17.02	3.9	14.7	5.8	22.1	7.8	29.5	9.7	36.8	40,000	2,758

*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

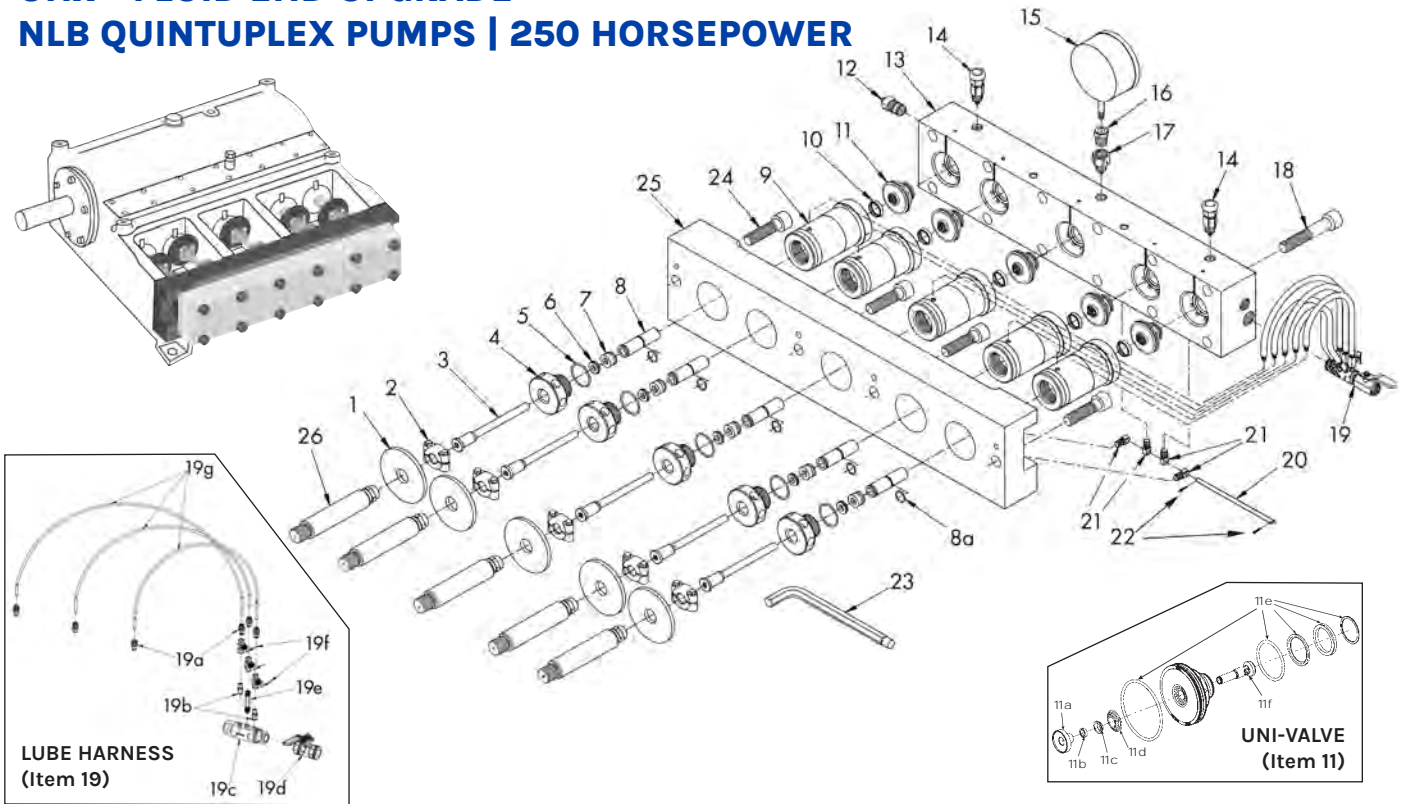
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	26487	Deflector	11a	53489	Valve, Suction	19	53795	Lube Harness
2	51736	Plunger Coupling	11b	55229	Keeper	19a	27732	Hose Fitting
3	53561	#6 Plunger	11c	55231	Retainer, Spring	19b	26465	Nipple
	53562	#7 Plunger	11d	27509	Valve, Spring	19c	53792	Manifold, Lube
4	64278	Gland Nut	11e	54143	Seal Kit	19d	27101	Ball Valve
5	26464	O-Ring	11f	53491	Valve, Discharge	19e	60815	Nipple, Large
6	27479	#6 Guide Bushing	12	See Pump Discharge Fittings Pages E-3 & E-4		19f	27475	Needle Valve
	27480	#7 Guide Bushing				19g	27740	Hose (order in feet)
7	54116	#6 Packing				20	50295	Trunnion Rod
	54117	#7 Packing				21	51659	Trunnion
8	54096	#6 Sleeve	14	53505	Rupture Disc Holder	22	26468	Cotter Pin
	54097	#7 Sleeve	15	27488	Gauge (0-60,000 psi)	23	50889	Pump Wrench
8a	26522	O-Ring	16	28090	Anti-Vibration Gland Set	24	26500	Adapter Plate Bolt
9	54099	Stuffing Box	17	53572	Adapter, 40K Port Male x 9/16" HP Female	25	50293	Adapter Plate
10	54125	Stuffing Box Seal				26	51766	Crosshead Stub
11	53495	Uni-Valve	18	25607	Manifold Bolt	27	26669	Nut

MODEL 4240QN

UNx™ FLUID END UPGRADE

NLB QUINTUPLEX PUMPS | 250 HORSEPOWER



PUMPS &
FLUID ENDS

FLUID END PART NO.*	PLUNGER SIZE		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS								MAX. OPERATING PRESSURE		
	NO.	DIAMETER		150 RPM		200 RPM		300 RPM		400 RPM			
		in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
53700	#6	0.600	15.24	3.9	14.8	5.2	19.7	7.8	29.5	10.4	39.4	40,000	2,758
53705	#7	0.670	17.02	4.9	18.4	6.5	24.6	9.7	36.8	13.0	49.1	40,000	2,758

*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

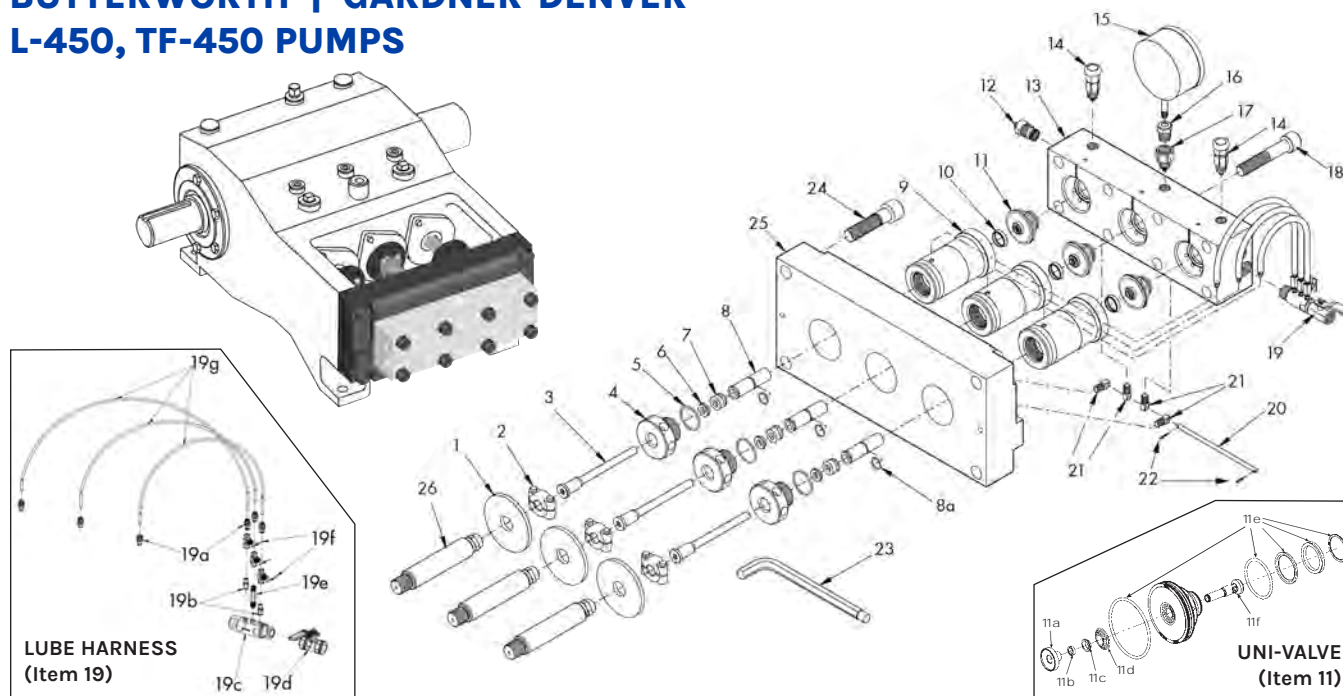
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	26487	Deflector	11	53495	Uni-Valve	19	53795	Lube Harness
2	51736	Plunger Coupling	11a	53489	Valve, Suction	19a	27732	Hose Fitting
3	53561	#6 Plunger	11b	55229	Keeper	19b	26465	Nipple
	53562	#7 Plunger	11c	55231	Retainer, Spring	19c	53792	Manifold, Lube
4	64278	Gland Nut	11d	27509	Valve, Spring	19d	27101	Ball Valve
5	26464	O-Ring	11e	54143	Seal Kit	19e	60815	Nipple Large
6	27479	#6 Guide Bushing	11f	53491	Valve, Discharge	19f	27475	Needle Valve
	27480	#7 Guide Bushing	12	See Pump Discharge Fittings Pages E-3 & E-4		19g	27740	Hose (order in feet)
7	54116	#6 Packing				20	50295	Trunnion Rod
	54117	#7 Packing	13	53754	Manifold	21	51659	Trunnion
8	54096	#6 Sleeve	14	53505	Rupture Disc Holder	22	26468	Cotter Pin
	54097	#7 Sleeve	15	27488	Gauge (0-60,000 psi)	23	50889	Pump Wrench
8a	26522	O-Ring	16	28090	Anti-Vibration Gland Set	24	27550	Adapter Plate Bolt
9	54099	Stuffing Box	17	53572	Adapter, 40K Port Male x 9/16" HP Female	25	53602	Adapter Plate
10	54125	Stuffing Box Seal (Face Seal)				26	51766	Crosshead Stub
			18	25607	Manifold Bolt			

MODEL 4540B

UNx™ FLUID END UPGRADE
BUTTERWORTH | GARDNER-DENVER
L-450, TF-450 PUMPS

PUMPS &
FLUID ENDS



FLUID END PART NO.*	PLUNGER SIZE		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS									MAX. OPERATING PRESSURE	
	NO.	DIAMETER		200 RPM		300 RPM		400 RPM		500 RPM			
		in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
53760	#6	0.600	15.24	3.3	12.5	5.0	18.8	6.6	25.0	8.3	31.3	40,000	2,758
53765	#7	0.670	17.02	4.1	15.6	6.2	23.4	8.2	31.2	10.3	39.0	40,000	2,758
53770	#8	0.730	18.54	4.9	18.5	7.3	27.8	9.8	37.0	12.2	46.3	40,000	2,758

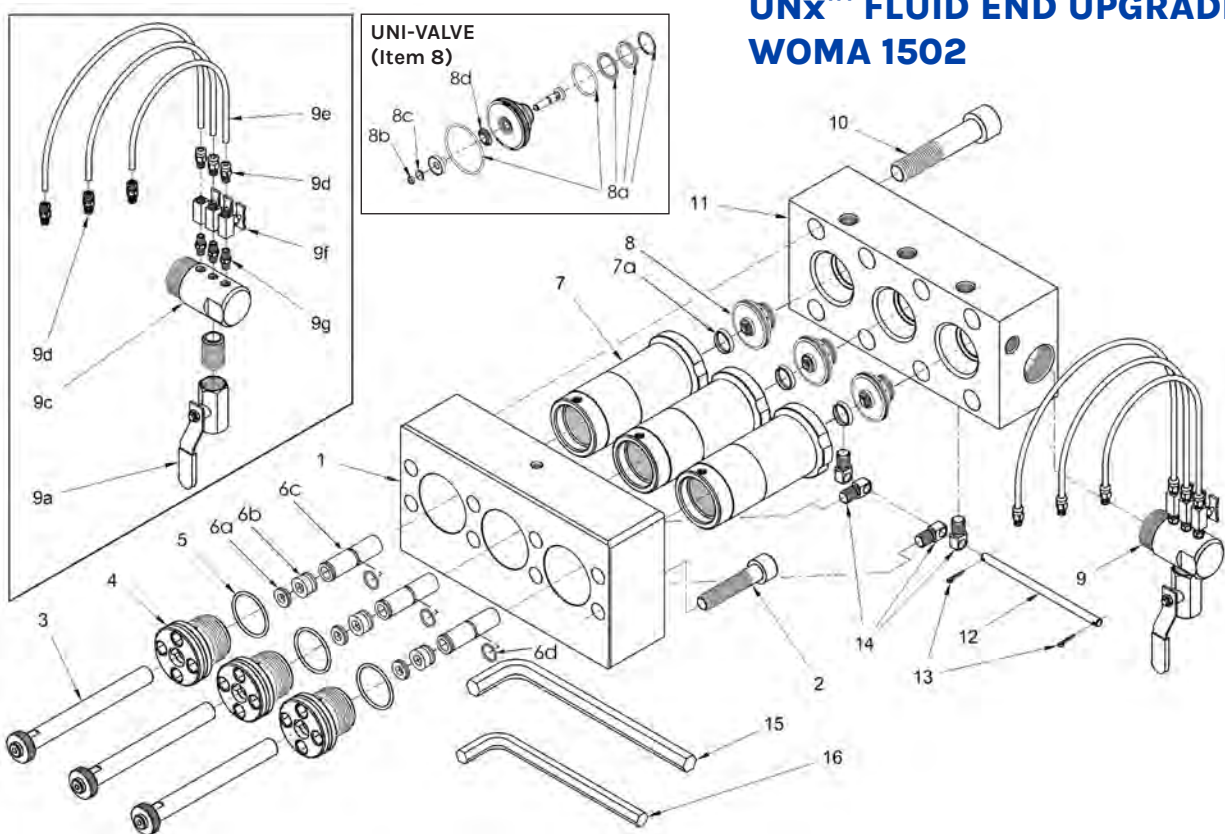
*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	26487	Deflector	9	53769	Stuffing Box	18	25607	Manifold Bolt
2	51736	Plunger Coupling	10	54125	Stuffing Box Seal (Face Seal)	19	53795	Lube Harness
3	53561	#6 Plunger				19a	27732	Hose Fitting
	53562	#7 Plunger				19b	26465	Nipple
	53563	#8 Plunger				19c	53792	Manifold, Lube
4	64278	Gland Nut	11c	55231	Retainer, Spring	19d	27101	Ball Valve
5	26464	O-Ring	11d	27509	Valve, Spring	19e	60815	Nipple Large
6	27479	#6 Guide Bushing	11e	54143	Seal Kit	19f	27475	Needle Valve
	27480	#7 Guide Bushing	11f	53491	Valve, Discharge	19g	27740	Hose (order in feet)
	27481	#8 Guide Bushing	12	See Pump Discharge Fittings Pages E-3 & E-4		20	50295	Trunnion Rod
	7	54116				#6 Packing	21	51659
54117		#7 Packing				22	26468	Cotter Pin
	54118	#8 Packing	14	53505	Rupture Disc Holder	23	50889	Pump Wrench
8	54096	#6 Sleeve	15	27488	Gauge (0-60,000 psi)	24	26212	Adapter Plate Bolt
	54097	#7 Sleeve	16	28090	Anti-Vibration Gland Set	25	51714	Adapter Plate
	54098	#8 Sleeve	17	53572	Adapter, 40K Port Male x 9/16" HP Female	26	51719	Plunger Adapter
8a	26522	O-Ring						

MODEL 3740W

UNx™ FLUID END UPGRADE WOMA 1502



PUMPS &
FLUID ENDS

FLUID END PART NO.*	PLUNGER SIZE		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS									MAX. OPERATING PRESSURE	
	NO.	DIAMETER		200 RPM		300 RPM		400 RPM		500 RPM			
		in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
56754	#5	0.530	13.46	2.1	7.9	3.2	12.1	4.3	16.2	5.4	20.4	40,000	2,758

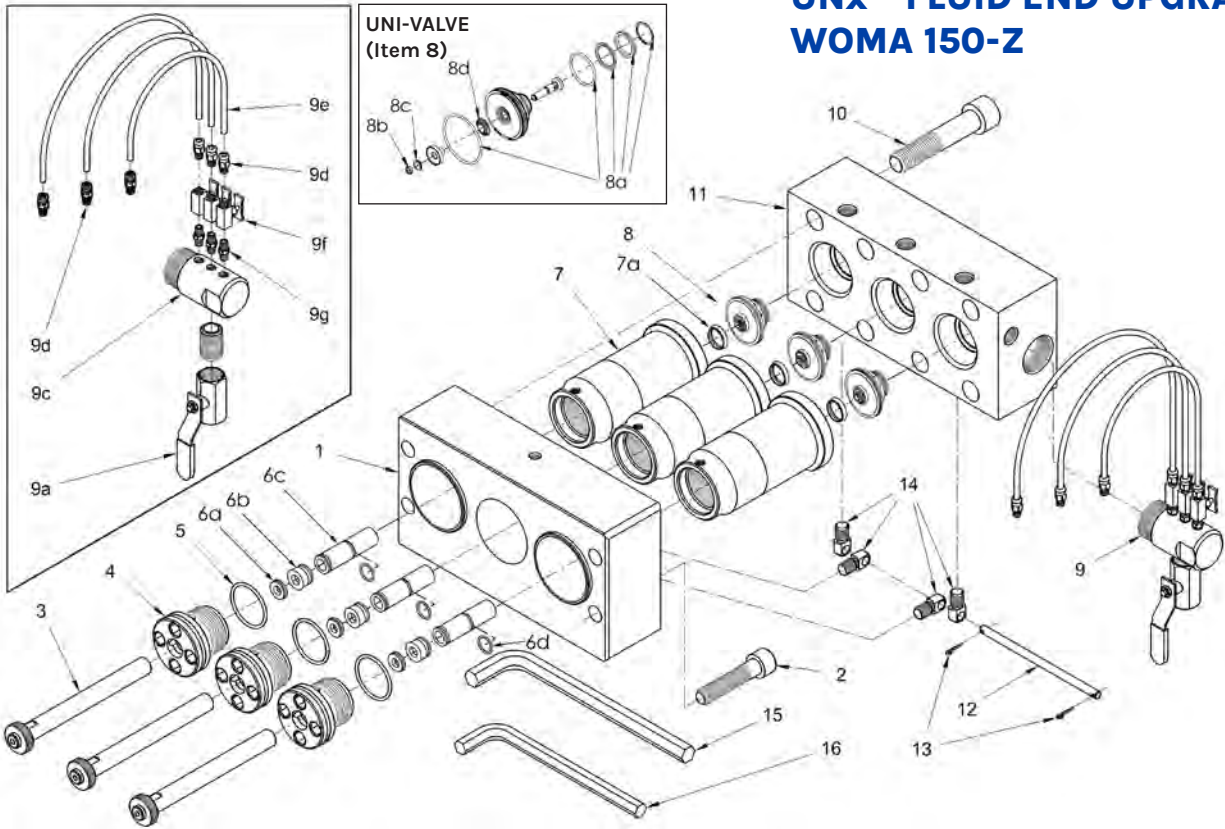
*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	54426	Adapter Plate	9	56732	Lube Harness
2	29748	Adapter Plate Bolt	9a	27913	Ball Valve
3	J55654	#5 Plunger	9c	53792	Lube Manifold
4	J55656	#5 Gland Nut	9d	26465	Hose Fitting
5	25165	O-Ring	9e	27740	Hose (order in feet)
6a	J70298	#5 Guide Bushing	9f	27475	Needle Valve
6b	J70299	#5 Packing	9g	27732	Nipple
6c	J55647	#5 Sleeve	10	26462	Manifold Bolt
6d	25126	O-Ring	11	J55652	Manifold
7	56757	#5 Stuffing Box	12	51666	Trunnion Rod
7a	54125	Stuffing Box Seal	13	26468	Cotter Pin
8	J55630	Uni-Valve	14	51659	Trunnion
8a	J55657	Uni-Valve Seal Kit	15	50064	3/4" Pump Wrench
8b	J55634	Keeper	16	26544	5/8" Pump Wrench
8c	J55636	Spring Retainer			
8d	J70300	Spring			

MODEL 3740WZ

UNx™ FLUID END UPGRADE WOMA 150-Z



FLUID END PART NO.*	PLUNGER SIZE		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS								MAX. OPERATING PRESSURE		
	NO.	DIAMETER		200 RPM		300 RPM		400 RPM		500 RPM			
		in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
J55640	#5	0.530	13.46	2.1	7.9	3.2	12.1	4.3	16.2	5.4	20.4	40,000	2,758

*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

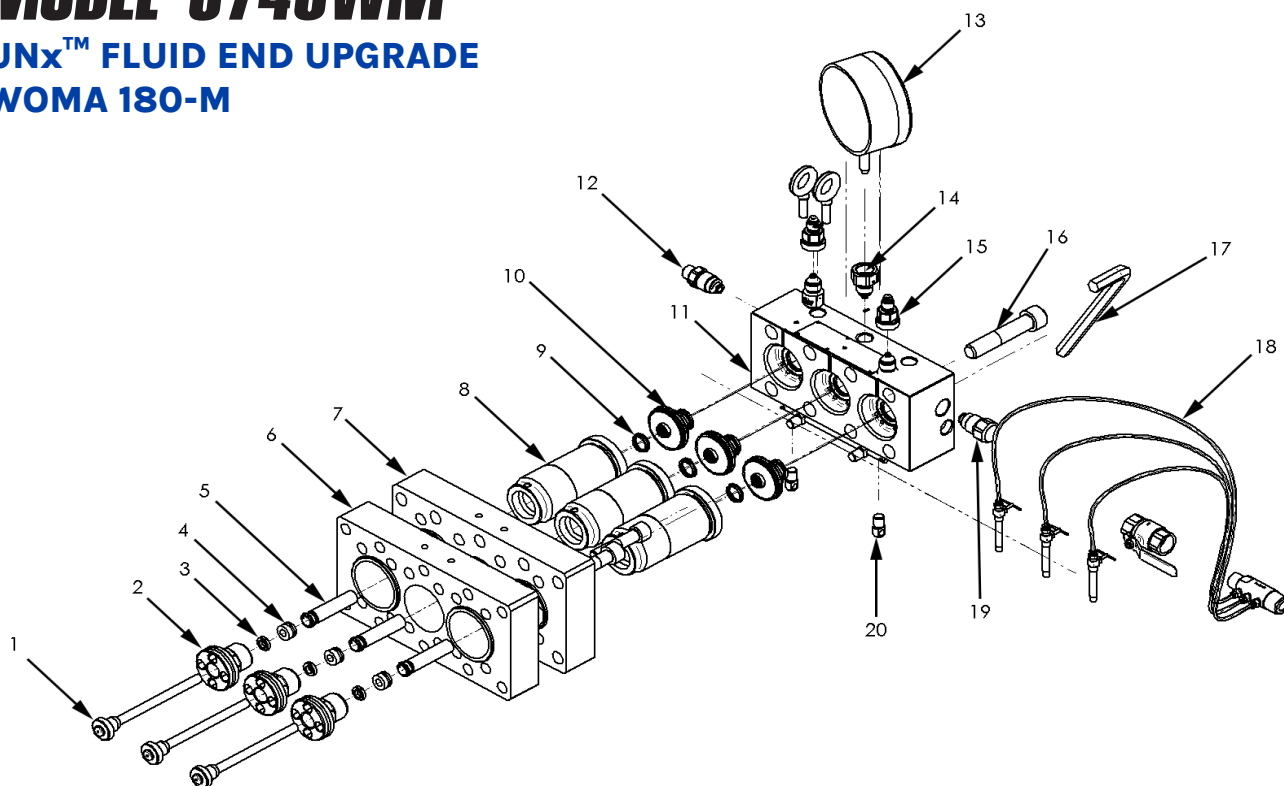
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	55267	Adapter Plate	9	56732	Lube Harness
2	29748	Adapter Plate Bolt	9a	27913	Ball Valve
3	J55654	#5 Plunger	9c	53792	Lube Manifold
4	J55656	#5 Gland Nut	9d	26465	Hose Fitting
5	25165	O-Ring	9e	27740	Hose (order in feet)
6a	J70298	#5 Guide Bushing	9f	27475	Needle Valve
6b	J70299	#5 Packing	9g	27732	Nipple
6c	J55699	#5 Sleeve	10	26462	Manifold Bolt
6d	25126	O-Ring	11	J55652	Manifold
7	J55648	#5 Stuffing Box	12	51666	Trunnion Rod
7a	54125	Stuffing Box Seal	13	26468	Cotter Pin
8	J55630	Uni-Valve	14	51659	Trunnion
8a	J55657	Uni-Valve Seal Kit	15	50064	3/4" Pump Wrench
8b	J55634	Keeper	16	26544	5/8" Pump Wrench
8c	J55636	Spring Retainer			
8d	J70300	Spring			

MODEL 3740WM

UNx™ FLUID END UPGRADE
WOMA 180-M

PUMPS &
FLUID ENDS



FLUID END PART NO.*	PLUNGER SIZE		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS								MAX. OPERATING PRESSURE		
	NO.	DIAMETER		200 RPM		300 RPM		400 RPM		500 RPM			
		in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
59558	#5	0.530	13.46	2.1	7.9	3.2	12.1	4.3	16.2	5.4	20.4	40,000	2,758

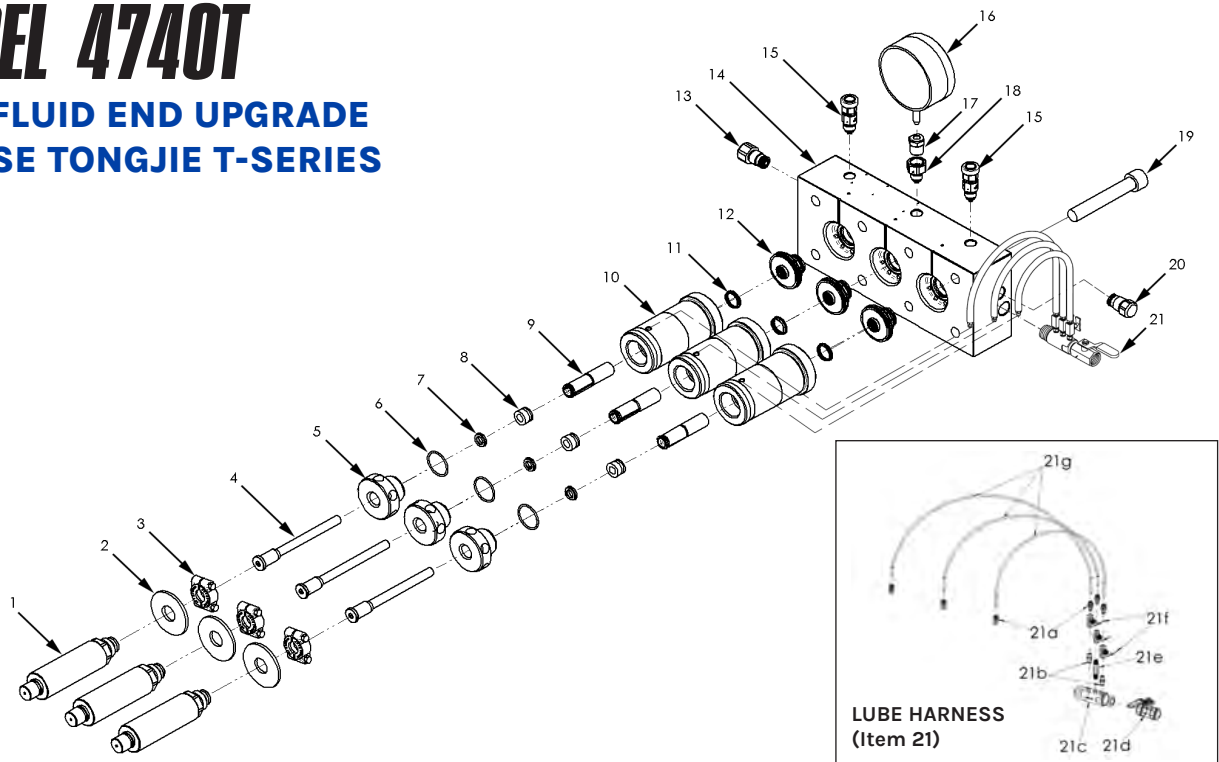
*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	J55654	#5 Plunger	11	J55652	Manifold
2	J55656	#5 Gland Nut	12	53672	Manifold Plug
3	J70298	Guide Bushing	13	27488	60K Pressure Gauge
4	J70299	#5 Packing Ring	14	53572	40K Adapter Ay
5	J55699	#5 Sleeve Ay	15	53505	Rupture Disc Ay
6	59560	Fluid End Adapter Plate	16	26462	Manifold Bolt
7	59559	Fluid End Adapter Plate	17	25421	3/4" Pump Wrench
8	J55648	#5 Stuffing Box	18	59799	Lube Harness
9	J70301	#5 Stuffing Box Seal Ay	19	53589	Manifold Plug
10	J55630	Uni-Valve	20	51659	Trunnion

MODEL 4740T

UNx™ FLUID END UPGRADE CHINESE TONGJIE T-SERIES



FLUID END PART NO.*	PLUNGER SIZE		PUMP DISPLACEMENT AT SPECIFIED PUMP SPEEDS								MAX. OPERATING PRESSURE		
	NO.	DIAMETER		200 RPM		300 RPM		400 RPM		500 RPM			
		in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	psi	bar
66314	#6	0.600	15.24	3.3	12.5	5.0	18.8	6.6	25.0	8.3	31.3	40,000	2,758
66313	#7	0.670	17.02	4.1	15.6	6.2	23.4	8.2	31.2	10.3	39.0	40,000	2,758
65765	#8	0.730	18.54	4.9	18.5	7.3	27.8	9.8	37.0	12.2	46.3	40,000	2,758

*Includes gauge, adapter and two rupture disc holders. Electric units require bypass valve, not included.

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	51766	Crosshead Stub	11	54125	Stuffing Box Seal (Face Seal)
2	65992	Deflector	12	53495	Uni-Valve
3	51736	Plunger Coupling	13	53988	Adapter, 40K Manifold
	66312	#6 Plunger	14	65764	Manifold
4	66311	#7 Plunger	15	53505	Rupture Disk Holder
	65784	#8 Plunger	16	27488	Pressure Gauge
5	64278	Gland Nut	17	28090	Anti-Vibration Gland Set
6	26464	O-Ring	18	53572	Adapter, 40K Top Connector
	27479	Guide Bushing, #6	19	65853	Manifold Bolt
7	27480	Guide Bushing, #7	20	53589	Manifold Plug
	27481	Guide Bushing, #8	21	53795	Lube Harness
	54116	Packing Ring, #6	21a	27732	Hose Fitting
8	54117	Packing Ring, #7	21b	26465	Nipple
	54118	Packing Ring, #8	21c	53792	Manifold, Lube
	66310	Sleeve, #6 Stuffing Box	21d	27101	Ball Valve
9	66309	Sleeve, #7 Stuffing Box	21e	60815	Nipple Large
	65792	Sleeve, #8 Stuffing Box	21f	27475	Needle Valve
10	65780	Stuffing Box	21g	27740	Hose (order in feet)



PUMP ACCESSORIES

EVERYTHING YOU NEED TO SUCCEED

Jetstream's full range of recommended pump and fluid end parts and accessories help you succeed on every job. From pump tools, valves, hydro-throttles, filters, and other add-ons, to gear drives and spare parts packages, we have everything you need to maximize performance of your pump and ensure a safe and uninterrupted workday.

The Pump Accessories section includes the following parts and packages:

- ▶ Fluid End Spare Parts Packages
- ▶ Pump Tools (Wrenches, Studs, Lubricants)
- ▶ Filters and Filter Assemblies
- ▶ Pressure Gauges
- ▶ Rupture Disc Assembly and Discs
- ▶ Valves (Bypass, Air-Operated, Tumble Box)
- ▶ Hydro-Throttle Assemblies
- ▶ Spare Cartridges



SPARE PARTS PACKAGES

FOR UNx™ FLUID ENDS

A must-have for field repairs, these packages include all major fluid end replacement parts packaged together for easy transport and storage.

- ▶ Available for most 40K UNx fluid ends.
- ▶ Packaged in a top-of-the-line, waterproof case with tough custom foam inlay.
- ▶ Contents: 1 or 3 Plungers, 3 Uni-Valves, 3 Packing Sets, 3 Uni-Valve Seal Kits, Locking waterproof case and keys, 10 Burst Discs (5 each at primary and secondary relief pressures, or 10 at the same relief pressure if only one rupture disc holder is used)
- ▶ Locking waterproof case and keys.

PACKAGING NOTES:

of Plungers S1 or SP | S1=1 plunger | SP=3 plungers
 Fluid End Model 304, 374, or 424
 Working Pressure 30, 36 or 40
 Plunger Size 5, 6, 7 or 8
 Burst Discs B or S | B=five discs at primary and secondary relief pressures;
 S=ten discs for use with secondary relief device

1 PLUNGER PACKAGES

PART NO.	PRESSURE (PSI)	DESCRIPTION
S1304-30-5-B	30,000	3040 #5
S1304-36-5-B	36,000	3040 #5
S1304-40-5-B	40,000	3040 #5
S1304-36-6-B	36,000	3040 #6
S1424-30-6-B	30,000	4240 #6
S1424-30-6-S	30,000	4240 #6
S1424-30-7-B	30,000	4240 #7
S1424-30-7-S	30,000	4240 #7
S1424-30-8-B	30,000	4240 #8
S1424-30-8-S	30,000	4240 #8
S1424-36-6-B	36,000	4240 #6
S1424-36-6-S	36,000	4240 #6
S1424-36-7-B	36,000	4240 #7
S1424-36-7-S	36,000	4240 #7
S1424-36-8-B	36,000	4240 #8
S1424-36-8-S	36,000	4240 #8
S1424-40-6-B	40,000	4240 #6
S1424-40-6-S	40,000	4240 #6
S1424-40-7-B	40,000	4240 #7
S1424-40-7-S	40,000	4240 #7
S1424-40-8-B	40,000	4240 #8
S1424-40-8-S	40,000	4240 #8

3 PLUNGER PACKAGES

PART NO.	PRESSURE (PSI)	DESCRIPTION
SP304-30-5-B	30,000	3040 #5
SP304-36-5-B	36,000	3040 #5
SP304-40-5-B	40,000	3040 #5
SP304-36-6-B	36,000	3040 #6
SP304N-36-5-B	36,000	3040N #5
SP374W-36-5-B	36,000	3740W/WZ #5
SP424-30-6-B	30,000	4240 #6
SP424-30-6-S	30,000	4240 #6
SP424-30-7-B	30,000	4240 #7
SP424-30-7-S	30,000	4240 #7
SP424-30-8-B	30,000	4240 #8
SP424-30-8-S	30,000	4240 #8
SP424-36-6-B	36,000	4240 #6
SP424-36-6-S	36,000	4240 #6
SP424-36-7-B	36,000	4240 #7
SP424-36-7-S	36,000	4240 #7
SP424-36-8-B	36,000	4240 #8
SP424-36-8-S	36,000	4240 #8
SP424-40-6-B	40,000	4240 #6
SP424-40-6-S	40,000	4240 #6
SP424-40-7-B	40,000	4240 #7
SP424-40-7-S	40,000	4240 #7
SP424-40-8-B	40,000	4240 #8
SP424-40-8-S	40,000	4240 #8

TOOLS

PUMP WRENCHES

The only special tool needed to work on a Jetstream UNx pump. For use with manifold and gland nut.



SIZE 7/8" PART NO. 50889	SIZE 3/4" PART NO. 50064
5040	3040
4240	3040N
3640	3740W
4240N	2740WZ
4240QN	3740WM
3740B	
4540B	

MANIFOLD MOUNTING STUDS

For easy and safe removal of manifolds during pressure conversions that require a manifold change (e.g. 10,000psi-40,000psi). To use, replace the top two outer manifold bolts with the mounting studs. Then, remove all bolts and the trunnion rod (hinge rod). The manifold can then be easily slid out and replaced with another. Sold individually.



FOR USE WITH THE FOLLOWING MODELS:	
PART NO. 54261	PART NO. 56742
5040	3040
4240	3040N
3640	3740W
4240N	3740WZ
4240QN	3740WM
3740B	
4540B	

OIL SEAL PULLER PLATES

For easy and safe removal of oil seals on bareshaft pumps.



PART NO.	PUMP SERIES
56949	3600/4200/5200
56950	3000

BELT TENSION GAUGE

Ensure pump drive belts are properly tensioned for proper pump operation and maximum belt life. For use with V-belts.
Part No. 26993



BELT TENSION GAUGE

For use with Power Band and synchronous belts.
Part No. 62140



VALVE PULLER

The perfect tool for easily extracting uni-valves from the manifold. Sold individually.
Part No. 70179



O-RING PICK

6-7/8" length with cushioned grip
Part No. 63443



3/16" T-WRENCH (HEX KEY)

Hex key for ease of nozzle maintenance. Short Length with comfort handle.
Part No. 63442



1/4" T-WRENCH (HEX KEY)

Hex key for ease of nozzle maintenance. Short Length with comfort handle.
Part No. 63814



GLAND NUT TOOL

3/4" Drive tool for ease of gland nut removal for pumps.

PART NO.	PUMP SERIES
62110	4200/5000
66607	3000
66608	6000



BYPASS VALVE

HAND ADJUSTABLE



A bypass valve diverts a portion of pump flow to a low-pressure outlet and can be used on diesel and electric units. For diesel engines, it is used to prevent bogging of the engine when using flows at the low end of the pump's capability. A bypass valve is required on electric units due to the non-adjustability of motor speed.

- ▶ Field-replaceable cartridge design for minimal downtime
- ▶ Hand adjustment—no wrench needed
- ▶ Mounts directly to fluid end manifold using 40,000 psi male port nipple shown below
- ▶ All pressure-bearing components are precision machined from stainless steel
- ▶ Two inlet ports utilize Jetstream 40,000 psi port connection for wear resistance and fast, simple connections

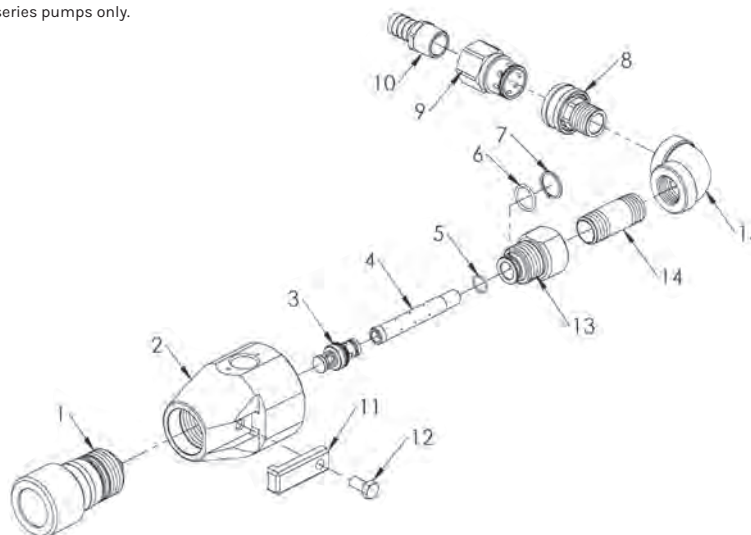
REPLACEMENT CARTRIDGE



Easily replaceable valve cartridge enables the user to completely re-build the valve in about two minutes. Both the valve and seat are manufactured from hardened stainless steel and coated for maximum wear resistance and service life. **Part No. 53725**

PART NO.	MOUNTING STYLE	HIGH PRESSURE CONNECTIONS	OUTLET CONNECTION	MAX. OPERATING PRESSURE	
				psi	bar
53715	Pump-Mount	Jetstream 40K Port			
54303	Base-Mount	Female	3/4" Hose Barb	40,000	2,758
67394*	Pump-Side	HF Port			

* 5240 series pumps only.



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	52144	Adjustment Knob	10	25796	Hose Barb
2	53713	Body	11	50795	Locking Arm
3	53725	Cartridge	12	25593	Capscrew
4	53726	Diffuser	13	53719	Outlet Adapter
5	26452	O-Ring (male side)	14	27644	Nipple
6	27641	O-Ring	15	71497	Elbow
7	53724	Back-Up Ring	16*	53735	40K Port Male Nipple
8	29713	Nipple	17*	25603	Adjuster O-ring
9	29714	Coupler			

*Not Shown

40K MALE PORT NIPPLE



Used to connect bypass valve to fluid end manifold.
Part No. 53735



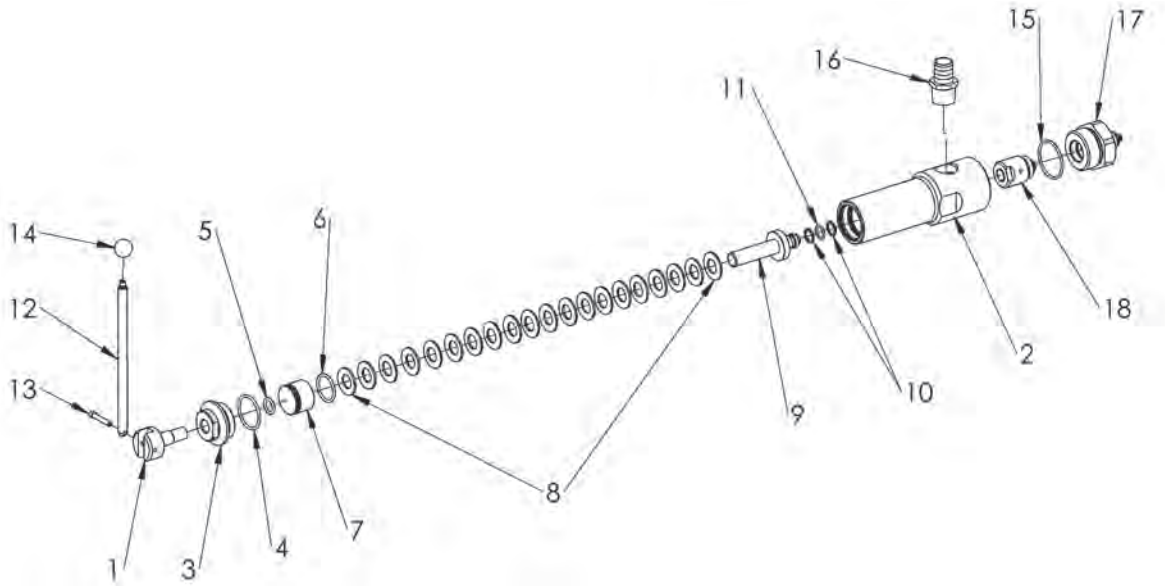
REGULATOR VALVE

LONG HANDLE

The Regulator Valve allows for pressure adjustment on constant speed or shut-in style waterblasting pumps. This valve maintains a constant pressure independent of the flow while relieving a portion of the high pressure water back to a remote location at low pressure.

- ▶ Hand adjustable—no wrench needed
- ▶ Field-replaceable cartridge design for easy maintenance
- ▶ Mounts onto the fluid end

PART NO.	STYLE	HIGH PRESSURE CONNECTIONS	MAX. OPERATING PRESSURE	
			psi	bar
55525	Long Handle	Jetstream 40K Port Male	40,000	2750
60703	Long Handle	Jetstream 40K Port Female	40,000	2750



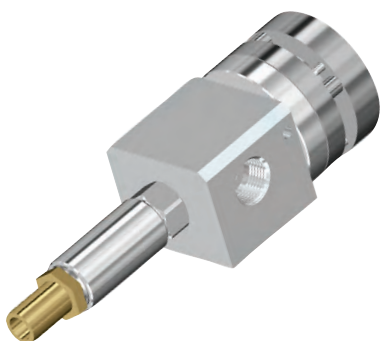
REPLACEMENT CARTRIDGE



Regulator valve utilizes a cartridge, to completely rebuild the valve in about 30 seconds.
Part No. 55545

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	55524	Adjuster, Regulator,	10	70125	Ring, Back-up
2	55521	Body, Regulator, Vertical	11	25740	O-Ring
3	55523	Cap, End, Regulator,	12	55531	Handle, Regulator, Adjust
4	25165	O-Ring	13	27680	Capscrew
5	25212	O-Ring	14	70130	Ball, Knob
6	25125	O-Ring	15	26416	O-Ring
7	55522	Pusher, Spring, Regulator	16	29722	Barb
8	70127	Spring, Disc	17	55518	Base Ay, Reg, Vertical, 40K M
9	55519	Plunger, Spring, Regulator	18	55545	Cartridge Assy, Regulator



DIVERTER VALVE

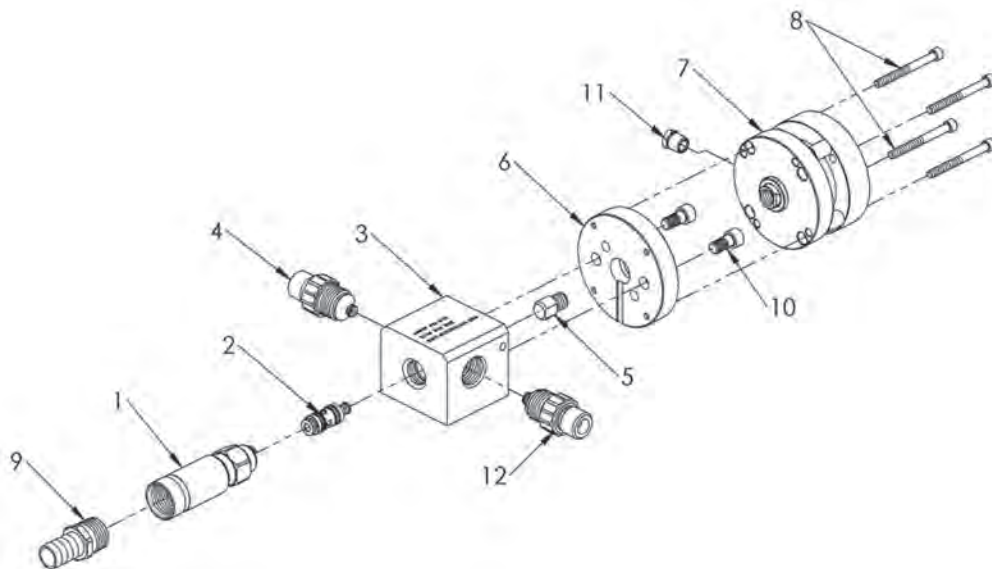
AIR-OPERATED

The Air-Operated Diverter Valve allows an operator to remotely control pressure in 40,000 psi cleaning applications, specially in automated cleaning processes. Reduces operator fatigue by actuating the system pneumatically rather than mechanically.

When air is sent to the cylinder, the valve closes and allows the system to build pressure. The valve opens when the air is exhausted, reducing system pressure to near atmospheric.

- ▶ Quick cartridge overhaul for easy field maintenance
- ▶ Remote operation for added operator convenience and safety
- ▶ Pneumatic operation for reduced operator fatigue

ASSEMBLY PART NO.	MOUNTING STYLE	CONNECTION TYPE		MAXIMUM FLOW RATE		MAX. OPERATING PRESSURE		INLET AIR PRESSURE			
		INLET	OUTLET	gpm	lpm	psi	bar	MIN.		MAX.	
53620X	Pump-Mount	7/8" Type M Male	9/16" Type M Male	13	49	40,000	2,758	70	4.8	125	8.6
55115	Base-Mount										



REPLACEMENT CARTRIDGE



Diverter valve utilizes a cartridge, to completely rebuild the dump valve in about 30 seconds. **Part No. 53475**

PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	51864	Diffuser	7	54342*	Air Cylinder
2	53475	Cartridge	8	28399	Capscrew
3	53546	Body	9	25796	Hose Fitting
4	53570	Adapter, 7/8" Type M	10	27714	Capscrew
5	53424	Pusher	11	28364	Muffler
6	54321	Mounting Plate	12	53571	Adapter, 9/16" Type M

*Repair Kit for 2.5" Air Cylinder (54342-KIT) (Includes o-rings, bushings and wiper).



DIVERTER VALVE

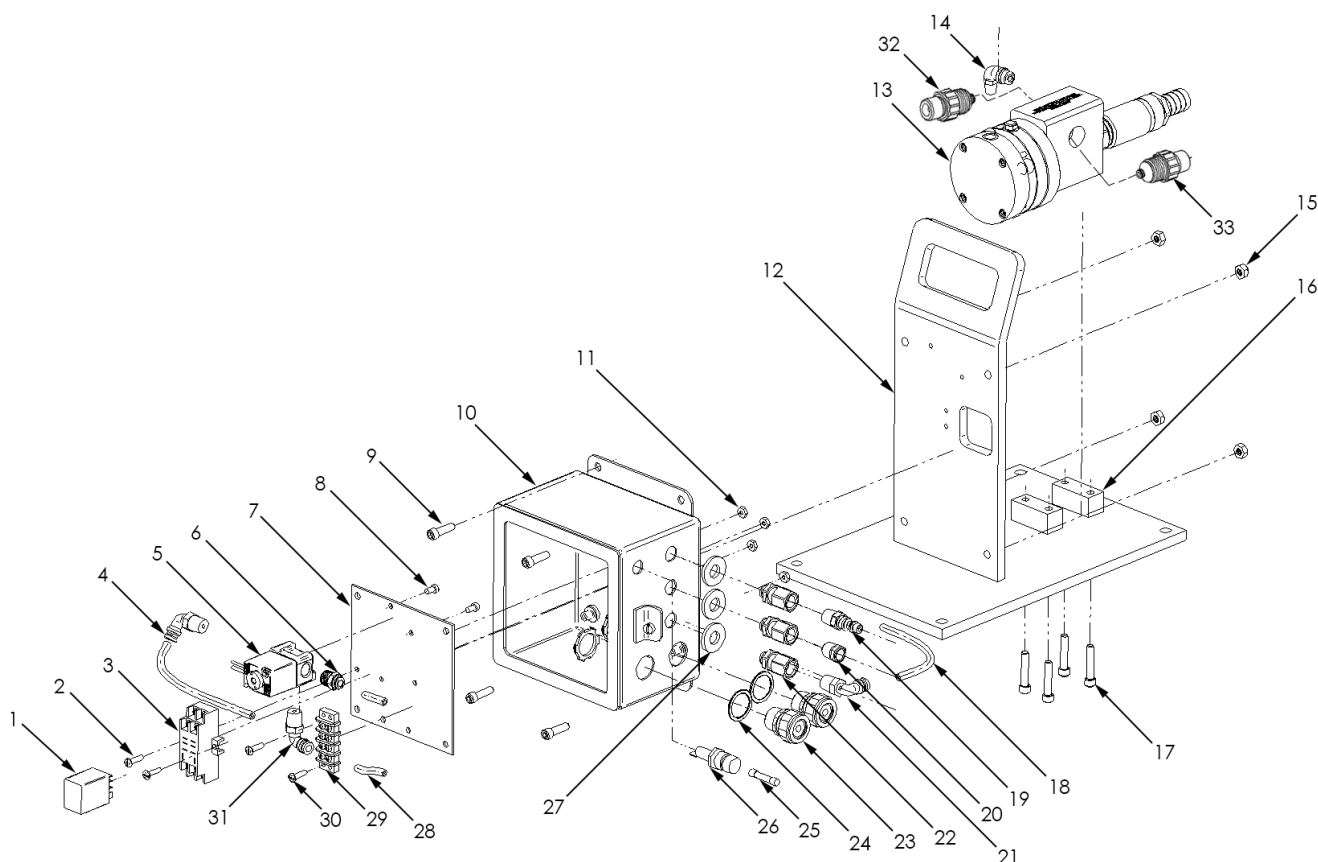
ELECTRIC/AIR-OPERATED

The Electric/Air-Operated Diverter Valve allows an operator to remotely control pressure in cleaning applications up to 40,000 psi, specifically in automated cleaning processes. Reduces operator fatigue by actuating the system electronically rather than mechanically.

When electric voltage is present, the valve opens to allow water to the nozzle. The valve closes when the voltage is removed, preventing the water from reaching the nozzle while maintaining system pressure.

- ▶ Quick cartridge overhaul for easy field maintenance
- ▶ Remote operation for added operator convenience and safety
- ▶ Electric operation for reduced operator fatigue

ASSEMBLY PART NO.	VOLTAGE	MOUNTING STYLE	CONNECTION TYPE		MAXIMUM FLOW RATE		MAX. OPERATING PRESSURE		DIMENSIONS (H X W X D)		WEIGHT	
			INLET	OUTLET	gpm	lpm	psi	bar	in	mm	lb	kg
63910	12 VDC	Base	7/8" Type M	9/16" Type M	13	49	40,000	2,758	12 X 8 X 17	305 x 203 x 432	36	16
67621	24 VDC	Base	Male	Male			40,000	2,758				



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	27349	Relay, 12VDC	18	27740	Plastic Tubing
	29155	Relay, 24VDC	19	28223	Nipple, Q.D.
2	58864	Capscrew	20	28364	Muffler
3	29158	Relay Socket	21	28367	Elbow
4	27740	Plastic Tubing	22	65011	Bulkhead Fitting
5	65002	Valve, 3 Way, 12VDC	23	64998	Gland
	65003	Valve, 3 Way, 24VDC	24	64999	Washer
6	J70518	Adapter	25	27348	Fuse
7	58868	Mounting Panel	26	25644	Fuse Holder
8	27380	Capscrew	27	65012	Washer
9	58865	Capscrew	28	27740	Plastic Tubing
10	58867	Electrical Box	29	27347	Block, Terminal
11	29799	Nut	30	58864	Capscrew
12	53203	Mounting Base	31	28367	Elbow
13	53620X	Air-Operated Valve	30	58864	Capscrew
14	28365	Elbow	31	28367	Elbow
15	26711	Nut	32	53571	Adapter, 9/16" Type M
16	53203	Mounting Base	33	53570	Adapter, 7/8" Type M
17	26126	Capscrew			



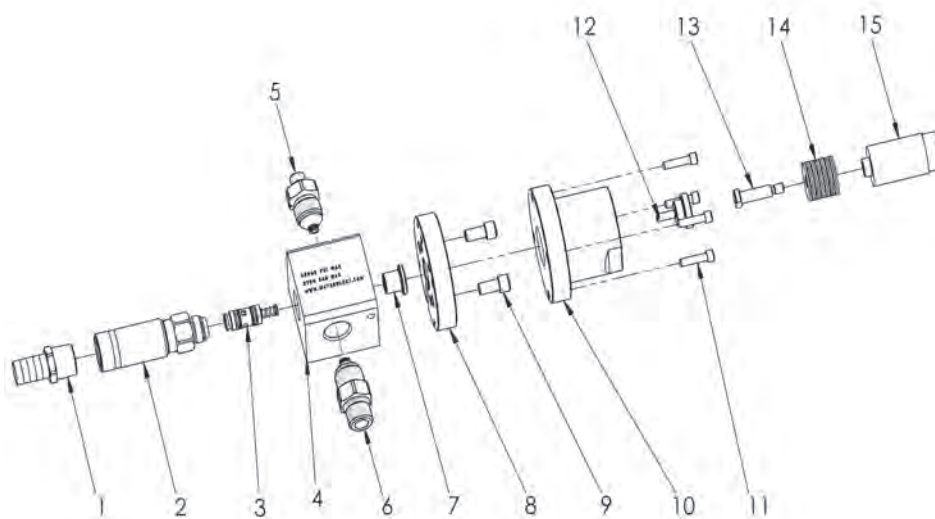
HYDRAULIC DIVERTER VALVE

The Hydraulic Diverter Valve allows an operator to remotely control pressure in 40,000 psi cleaning applications, specially in automated cleaning processes. Reduces operator fatigue by actuating the system hydraulically rather than mechanically.

When hydraulic pressure sent to the cylinder, the valve closes and allows the system to build pressure. The valve opens when the hydraulic pressure is exhausted, reducing system pressure to near atmospheric.

- ▶ Quick cartridge overhaul for easy field maintenance
- ▶ Remote operation for added operator convenience and safety
- ▶ Hydraulic operation for reduced operator fatigue

ASSEMBLY PART NO.	MOUNTING STYLE	CONNECTION TYPE		MAXIMUM FLOW RATE		MAX. OPERATING PRESSURE		HYDRAULIC PRESSURE			
		INLET	OUTLET	gpm	lpm	psi	bar	MIN.		MAX.	
62031	Pump-Mount	7/8" Type M Male	9/16" Type M Male	13	49	40,000	2,758	500	34.4	5000	344.7



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	25796	Barb	9	27114	Capscrew
2	51864	Diffuser Assy	10	60075	Adapter, Sa Hydraulic Cyl Mounting
3	53475	Cartridge Assy, C-40	11	26689	Capscrew
4	53546	Body, DCF-40 Durasafe	12	62049	Pusher, Hydraulic Cyl
5	53571	Adapter Assy, 40K Top	13	60027	Guide, Spring, Hydraulic Cyl
6	53570	Adapter, 40K Male x M-14 Male	14	60026	Spring, Disc
7	62050	Retainer, Valve	15	60079	Cylinder, Hydraulic, Single Act
8	54321	Plate, Mounting, Air Cyl			

REPLACEMENT CARTRIDGE



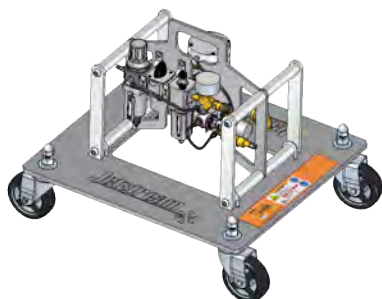
Diverter valve utilizes a cartridge, to completely rebuild the dump valve in about 30 seconds. **Part No. 53475**



MULTI-MODE VALVE FRONT VIEW



MULTI-MODE VALVE BACK VIEW



CART FOR MULTI-MODE VALVE

TUMBLE BOX

MULTI-MODE VALVE

The Jetstream 40,000 psi Multi-Mode Valve is a combination air-actuated high pressure control valve and air preparation unit. The Multi-Mode Valve controls the flow of the filtered and lubricated air and high pressure water to the gun or other appropriate device. It can be operated in FOUR different configurations (see operation options on the next page) including the use of multiple guns (see Jetstream Tornado Guns) when configured for constant pressure or shut-off mode.

Rated for 40,000 psi (2,758 bar) maximum operating pressure, the control valve features connections specifically designed to resist wear and leakage common with high pressure connections. Adapters are included to connect high pressure hoses featuring the Type M or High Pressure connection, depending on the model ordered.

- ▶ Self contained dual-seat cartridge that can be easily removed in a single piece and replaced in the field. Complete overhaul and modification can be accomplished in about one minute.
- ▶ Cartridge and other pressure containing components machined from hardened stainless steel and coated for longer wear life.
- ▶ Cartridge is hydraulically biased, for safer operation, as opposed to a spring return system which is susceptible to corrosion, wear and failure.
- ▶ Air supply pressure regulated to the custom designed actuation cylinder. This constant pressure eliminates damage to the valve caused by excessive activation forces.
- ▶ Improved air tool oil
- ▶ Plumbing design eliminates oil in the signal valve and cylinder
- ▶ Regulator, filter, and oiler components protected against abuse and damage.
- ▶ Ergonomically designed for ease of use and transportation. Components raised for better ground clearance. Optional cart available (**Part No. 64377**)
- ▶ Heavy duty, light weight aluminum frame (3/8" plate).

PART NO.	DIMENSIONS						CONNECTION TYPE	MAXIMUM FLOW RATE		MAX. OPERATING PRESSURE		AIR REQUIREMENTS				LUBRICATOR OIL
	WIDTH		DEPTH		HEIGHT							INLET AIR PRESSURE				
								MIN.		MAX.						
	in	mm	in	mm	in	mm		gpm	lpm	psi	bar	psi	bar	psi	bar	
53905	17.1	435	12.8	329	12.9	324	Type M Male	6.8	25.7	40,000	2,758	70	4.8	125	8.6	SAE 10W
54695							HP Female									



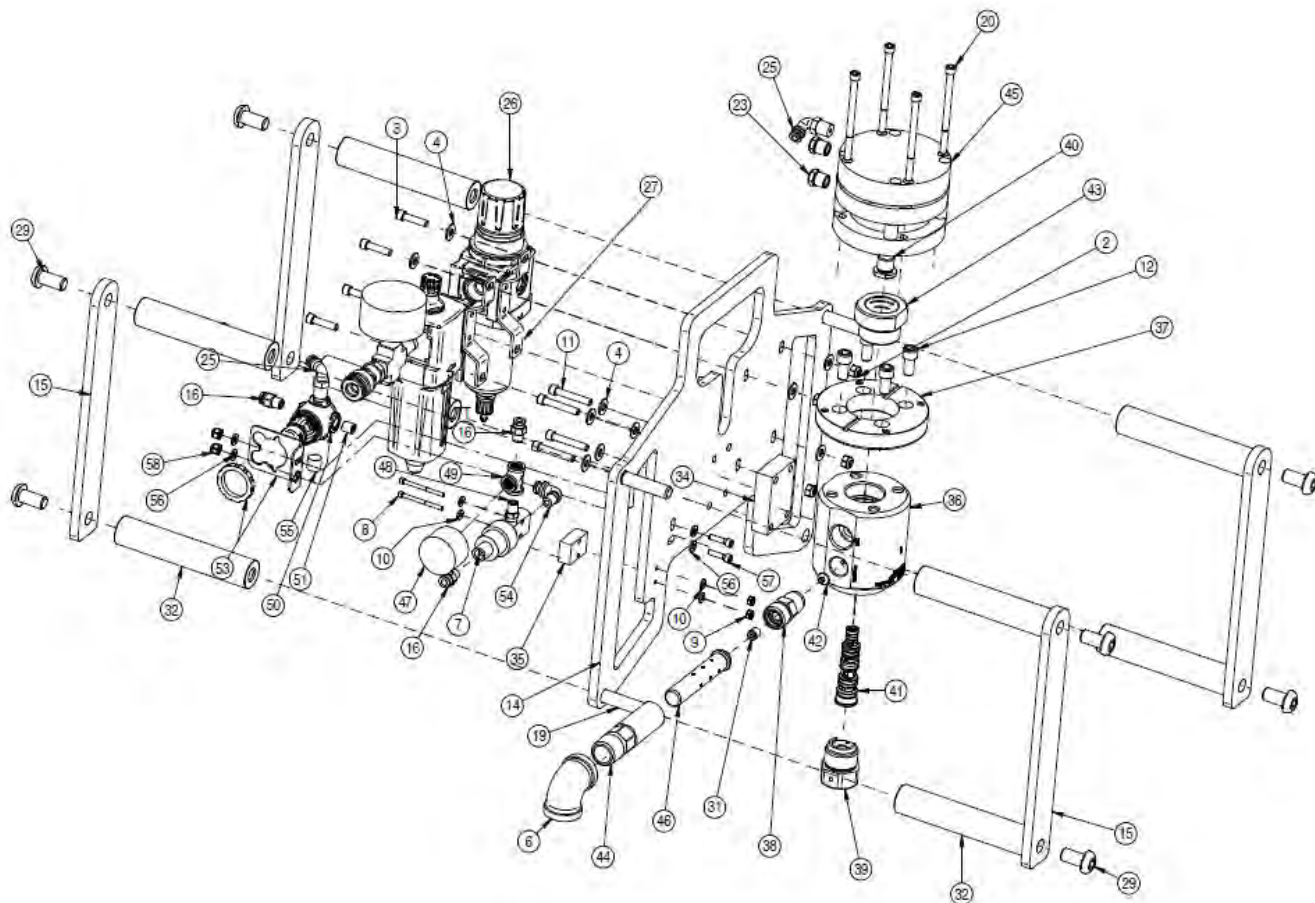
REPLACEMENT CARTRIDGE

Multi-Mode Valve utilizes C-40 Cartridge to completely rebuild the valve in about 30 seconds.

Part No. 54014

TUMBLE BOX MULTI-MODE VALVE DIAGRAMS

PUMP
ACCESSORIES



59



60



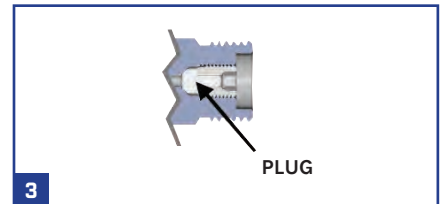
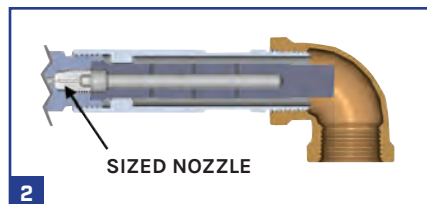
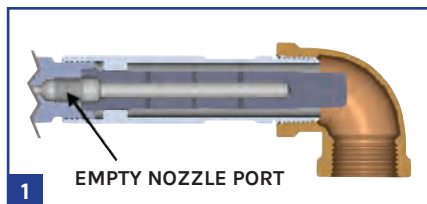
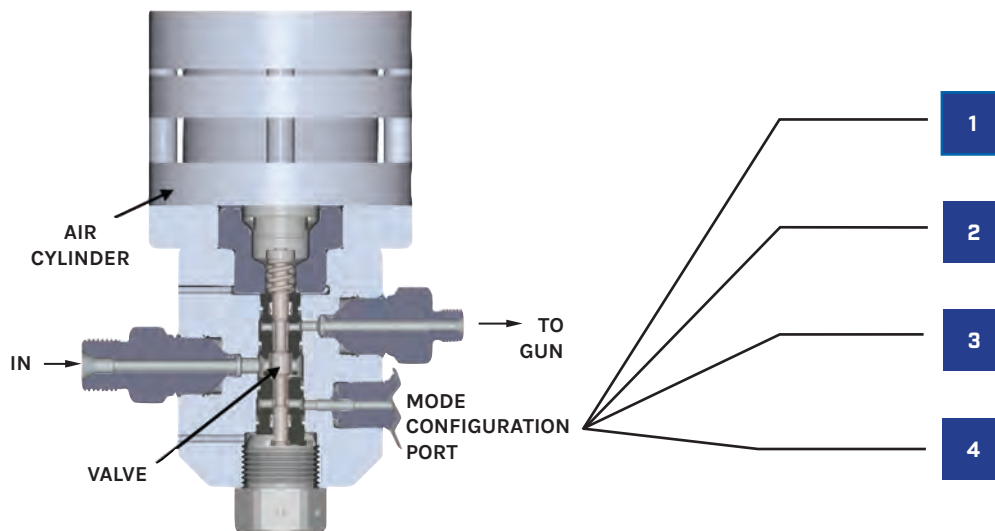
TUMBLE BOX MULTI-MODE VALVE PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
2	25314	Nut	39	53868	Cartridge Plug
3	62778	Capscrew	40	53869	Pusher
4	26709	Washer	41	54014	Cartridge
6	27645	Elbow	42	54059	Button Seal
7	27670	Pilot Valve	43	54233	Cartridge Plug
8	27671	Capscrew	44	54264	Diffuser Housing
9	27673	Nut	45	54343	Air Cylinder
10	27674	Washer	45	54343-KIT	Air Cylinder Repair Kit
11	27680	Capscrew	46	54404	Diffuser
12	27714	Capscrew	47	63907	Gauge
14	66774	Mounting Plate	48	26465	Nipple
15	27725	Guard	49	63903	Tee
16	27732	Tubing Adapter	50	28363	Regulator
17	27740	Tubing (Order in Feet)	51	63946	Plug
18	27740	Tubing (Order in Feet)	52	27740	Tubing (Order in Feet)
19	27763	Stud	53	64016	Mounting Kit
20	28222	Capscrew	54	28365	Elbow
23	28364	Exhaust Muffler	55	28369	Plug
25	28367	Elbow	56	28387	Washer
26	62696	Regulator/Oiler Assy	57	27716	Capscrew
27	63904	T-Bracket	58	28437	Nut
29	28436	Capscrew	59	28066	Air Control Hose
31	53502	UHP Nozzle Retainer	60	27749	Air Tool Oil
32	53747	Guard Rod	61*	53570	Adapter, 40K Port Male x 7/8" Type M
34	53788	Mounting Block	62*	53571	Adapter, 40K Port Male x 9/16" Type M
35	53789	Mounting Block	63**	53572	Adapter, 40K Port Male x 9/16" HP Female
36	53852	Body	64**	54056	Adapter, 40K Port Male x 3/8" HP Female
37	53853	Air Cylinder Mounting Plate			
38	53863	Nozzle Holder			

* Not Shown (used with model 53905).

** Not Shown (used with model 54695).

MULTI-MODE VALVE OPERATION OPTIONS



1) Dump Mode

Configured for single gun operations. When the user is not blasting, the supply water is dumped to atmospheric pressure through the Multi-Mode Valve discharge port. The dumped water can be piped to a holding or recycle tank.

2) Constant Pressure Mode

Configured for multiple gun operation. When the user is not blasting, pressure is maintained throughout the system by means of a nozzle (specifically sized for each operators' gun flow rate) that is placed in the multi mode valve discharge orifice. Multiple guns can be used without significant pressure fluctuation when other guns are not blasting.

3) Dry Shut-Off Mode

Configured for use with Intensifier type pumps and for single or multiple gun operation. A plug is placed in the discharge orifice, preventing any water from venting through the Multi-Mode Valve. Actuation of the gun almost immediately produces desired blast pressures and flow rates.

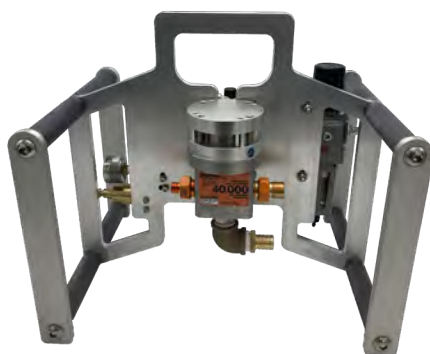
CAUTION: NOT TO BE USED WITH PISTON TYPE PUMPS WITHOUT SPECIAL EQUIPMENT CONSIDERATIONS. CONSULT JETSTREAM OR PUMP MANUFACTURER.

4) Custom Application Mode

The Multi-Mode Valve has the unique feature to allow it to be used as a switching valve in automation type systems. Special components are required, and Jetstream should be contacted to discuss your application.

TUMBLE BOX

UNLOADER VALVE



UNLOADER VALVE FRONT VIEW



UNLOADER VALVE BACK VIEW

The Jetstream 40,000 psi Unloader Valve is a combination air-actuated high pressure control valve and air preparation unit for use in conjunction with the Jetstream Tornado or Quadrablast guns. The Unloader Valve controls the flow of the filtered and lubricated air and high pressure water to the gun or other appropriate device. When the gun is not engaged, the valve unloads, or “dumps” the water through a low-pressure outlet to relieve the system of high pressure.

It is designed for single gun operation and utilizes the patented Jetstream C-Series cartridge, which allows the valve to be completely rebuilt in the field in less than one minute.

Rated for 40,000 psi (2,758 bar) maximum operating pressure, the control valve features Jetstream proprietary connections specifically designed to resist wear and leakage at extreme pressures. Adapters are included to connect high pressure hoses featuring the Type M connection. High-Pressure adapters are also available (see Fittings, Section E).

- ▶ 30 second field replaceable cartridge design for minimal downtime.
- ▶ Cartridge valve and seat machined from hardened stainless steel and coated for longer wear life.
- ▶ Cartridge is hydraulically biased to ensure positive disengagement, ensuring maximum safety.
- ▶ Air supply pressure regulated to actuation cylinder; this constant pressure eliminates damage to valve caused by excessive activation forces.
- ▶ Custom designed actuation air cylinder for durability under severe conditions.
- ▶ Regulator, filter, and oiler components protected against abuse and damage.
- ▶ Ergonomically designed for ease of use and transportation.
- ▶ Heavy duty, light weight aluminum frame (3/8" plate).

PART NO.	DIMENSIONS						CONNECTION TYPE	MAX. FLOW RATE		MAX. OPERATING PRESSURE		AIR REQUIREMENTS				LUBRICATOR OIL
	WIDTH		DEPTH		HEIGHT							INLET AIR PRESSURE				
	in	mm	in	mm	in	mm		gpm	lpm	psi	bar	MIN.		MAX.		
54325	17.1	435	12.8	329	12.9	329	Type M Male	6.8	25.7	40,000	2,758	70	4.8	125	8.6	SAE 10W



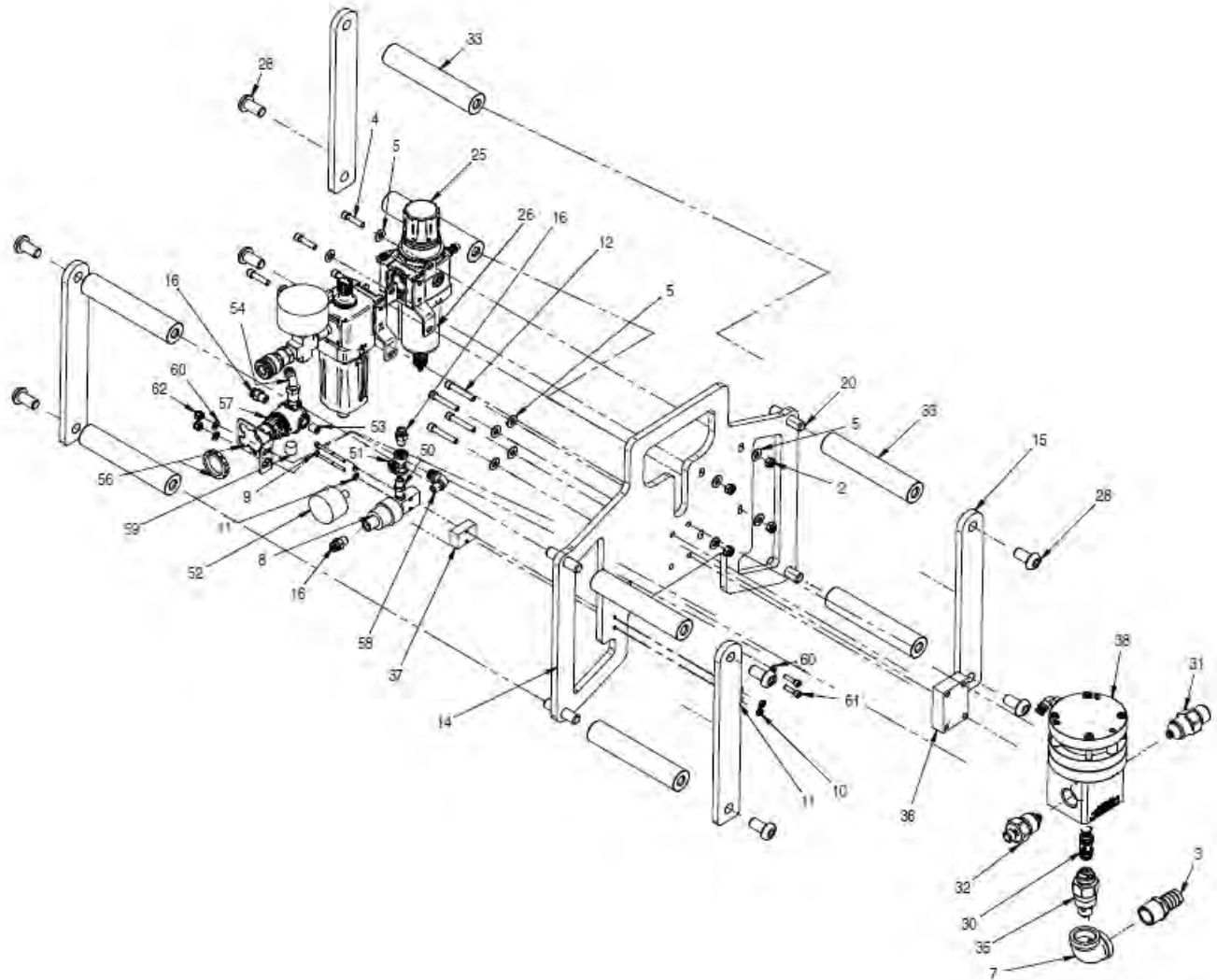
REPLACEMENT CARTRIDGE

Cartridge made from hardened steel and allows for a complete valve rebuild quickly and easily.

Part No. 53475

TUMBLE BOX UNLOADER VALVE DIAGRAMS

PUMP
ACCESSORIES



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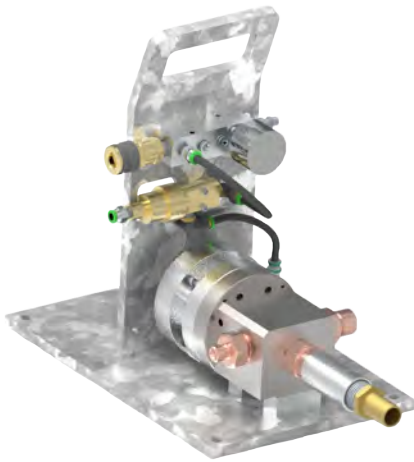
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TUMBLE BOX UNLOADER VALVE PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
2	25314	Nut	33	53747	Guard Rod
3	25796	Hose Fitting	35	53753	Diffuser
4	62778	Capscrew	36	53788	Mounting Block
5	26709	Washer	37	53789	Mounting Block
7	27645	Elbow	38	54323	Body Assy
8	27670	Pilot Valve	38a*	54342-KIT	Air Cylinder Repair Kit
9	27671	Capscrew	50	26465	Nipple
10	27673	Nut	51	63903	Tee
11	27674	Washer	52	63907	Gauge
12	27680	Capscrew	53	63946	Plug
14	66774	Mounting Plate	54	28367	Elbow
15	27725	Guard	56	64016	Mounting Kit
16	27732	Adapter, 1/8" NPTM x 1/4 Tube	57	28363	Regulator
20	27763	Stud	58	28365	Elbow
25	62696	Regulator/Oiler Assy	59	28369	Plug
26	63904	T-Bracket	60	28387	Washer
28	28436	Capscrew	61	27716	Capscrew
30	53475	Cartridge	62	28437	Nut
31	53570	Adapter, 40K Port Male x 7/8" Type M	63	27749	Air Tool Oil
32	53571	Adapter, 40K Port Male x 9/16" Type M	64	28066	Air Control Hose

* Not Shown



LIGHTWEIGHT UNLOADER VALVE

The Jetstream 40,000 psi Lightweight Unloader Valve is an air-actuated high pressure control valve for use in conjunction with the Jetstream Tornado or Quadrablast guns. The valve controls the flow of the air and high pressure water to the gun or other appropriate device. It does not include the air preparation unit found on the Tumble Box Unloader Valve. When the gun is not engaged, the valve unloads, or “dumps” the water through a low-pressure outlet to relieve the system of high pressure.

It is designed for single gun operation and utilizes the patented Jetstream C-Series cartridge, which allows the valve to be completely rebuilt in the field in less than one minute.

Rated for 40,000 psi (2,758 bar) maximum operating pressure, the control valve features Jetstream proprietary connections specifically designed to resist wear and leakage at extreme pressures. Adapters are included to connect high pressure hoses featuring the Type M connection. High-Pressure adapters are also available (see Fittings, Section E).

- ▶ 30 second field replaceable cartridge design for minimal downtime.
- ▶ Cartridge valve and seat machined from hardened stainless steel and coated for longer wear life.
- ▶ Cartridge is hydraulically biased to ensure positive disengagement, ensuring maximum safety.
- ▶ Air supply pressure regulated to actuation cylinder; this constant pressure eliminates damage to valve caused by excessive activation forces.
- ▶ Custom designed actuation air cylinder for durability under severe conditions.
- ▶ Ergonomically designed for ease of use and transportation.

PART NO.	DIMENSIONS						CONNECTION TYPE	MAX. FLOW RATE		MAX. OPERATING PRESSURE		AIR REQUIREMENTS				LUBRICATOR OIL
												INLET AIR PRESSURE				
	WIDTH		DEPTH		HEIGHT			MIN.		MAX.						
	in	mm	in	mm	in	mm		gpm	lpm	psi	bar	psi	bar	psi	bar	
64996	8.0	203	16.3	414	12.3	312	Type M Male	6.8	25.7	40,000	2,758	70	4.8	125	8.6	SAE 10W



REPLACEMENT CARTRIDGE

Cartridge made from hardened steel and allows for a complete valve rebuild quickly and easily.

Part No. 53475



ELECTRONIC HYDRO-THROTTLE

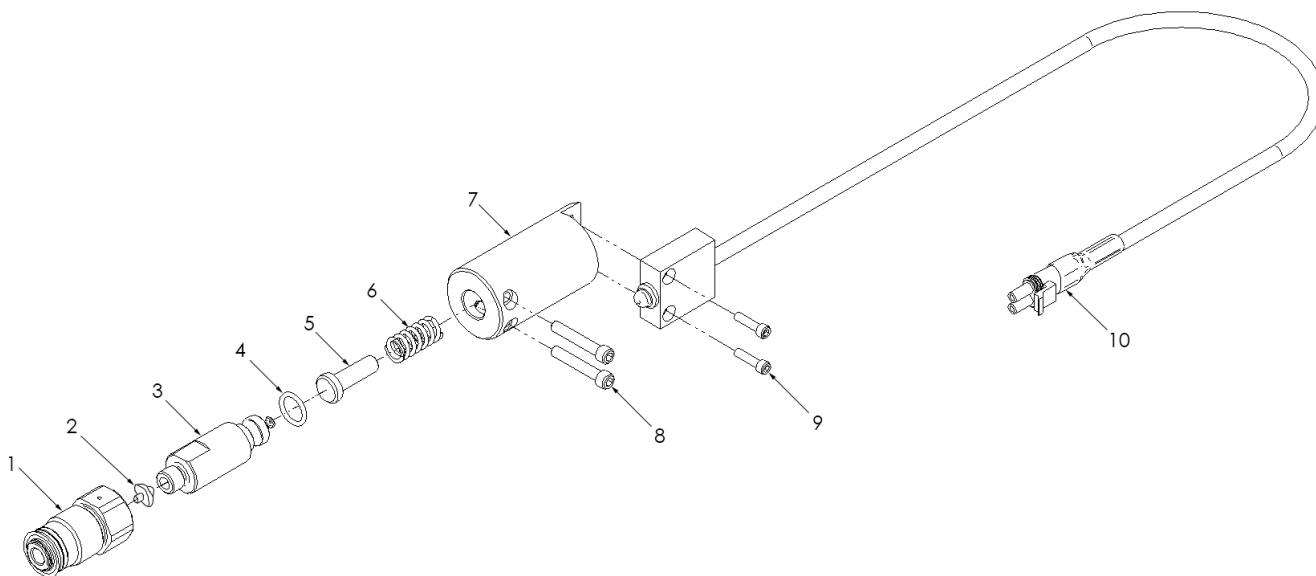
THROTTLE CONTROLS FOR DUMP SYSTEMS

The Jetstream hydro-throttle enables the operator to reduce the engine to idle speed and relieve the system of high pressure when the dump gun trigger (or foot pedal) is released—saving water and fuel, while reducing wear on the engine and pump.

- ▶ Electronic hydro-throttle assembly is standard on current models and includes the actuator assembly, cartridge and electrical plug to connect to the engine control panel
- ▶ Replaceable cartridge for fast field service or conversion to another pressure range

PUMP
ACCESSORIES

TYPE	PART NO.	LENGTH (LESS CORD)		HOSE CONNECTION THREAD	DIAMETER		WEIGHT		MAX. OPERATING PRESSURE	
		in	mm		in	mm	lbs	kg	psi	bar
ELECTRONIC	J56373	7.2	182	9/16" Type M Female	1.75	44.5	1.6	0.7	40,000	2,758



REPLACEMENT CARTRIDGE



The hydro-throttle utilizes a cartridge, for easy maintenance in about 30 seconds.
Part No. 53609

PART BREAKDOWN

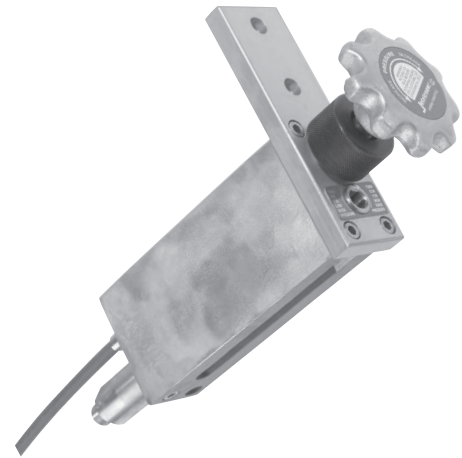
ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	59675	Manifold Adapter	7	56759	Throttle Control
2	53888	Ring Seal	8	27680	Capscrew
3	53609	Cartridge	9	27716	Capscrew
4	26426	O-Ring		53446	Corded Switch (<2007)
5	53444	Plunger	10	56551	Corded Switch (2007-9/2008)
6	25279	Spring		57970	Corded Switch (>9/2008)

MECHANICAL HYDRO-THROTTLE

THROTTLE CONTROLS FOR DUMP SYSTEMS

The Jetstream hydro-throttle enables the operator to reduce the engine to idle speed and relieve the system of high pressure when the dump gun trigger (or foot pedal) is released—saving water and fuel, while reducing wear on the engine and pump.

- Mechanical hydro-throttle parts can be purchased and include the control unit, cartridge and control cable
- Replaceable cartridge for fast field service or conversion to another pressure range



TYPE	PART NO.	CONTROL CABLE LENGTH		HOSE CONNECTION THREAD	CONTROL UNIT SIZE (L X W X H)		WEIGHT		MAX. OPERATING PRESSURE	
		ft	m		in	mm	lbs	kg	psi	bar
MECHANICAL	54595	2	0.6	9/16" Type M Female	11.7 x 1.75 x 5.6	297 x 44.5 x 142	4	1.8	40,000	2,758
	54600	5	1.5							

REPLACEMENT CARTRIDGE



The hydro-throttle utilizes a cartridge for easy maintenance in about 30 seconds.

Part No. 53609

REPLACEMENT PARTS

27731-0063939 Hose (Required)

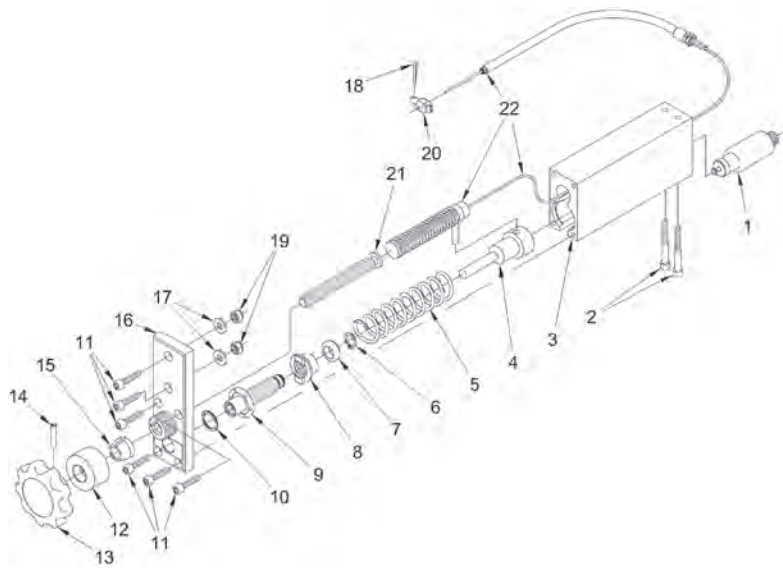
27532 Cartridge O-Ring

53608 Cartridge Backup Ring

53888 Button Seal

53671 Adapter, 9/16" Type M Male x Pump Discharge Male

For connection types, see Fittings, Section E.



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	53609	Cartridge	12	51887	Friction Adjustment Nut
2-21	52894	Throttle Control Unit	13	51879	Hand Knob
2	26690	Capscrew	14	26688	Pin
3	51877	Body	15	51888	Friction Ring
4	54293	Spring Retainer	16	51908	Face Plate
5	26682	Return Spring	17	25247	Washer
6	28274	Retaining Spring	18	26468	Cotter Pin
7	54272	Adjuster Stop Ring	19	25314	Nut
8	54269	Pressure Adjustment Nut	20	26728	Pivot Terminal
9	54268	Pressure Adjustment Screw	21	51885	Adjustment Screw
10	54271	Thrust Washer	22	51903A	5' (1.5m) Ctrl Cable
11	26689	Capscrew		51903	2' (0.6m) Ctrl Cable

STANDARD FILTERS

Available for a range of flows to meet all needs, Jetstream filters provide the necessary protection to even the most versatile waterblast system. The severe condition of 40,000 psi pumps require a higher degree of protection, and it is recommended that water is filtered to 10 microns by a primary filter and then by a secondary 1 micron filter before entering the pump.



GUARDIAN SYSTEM
PART NO. 58368



PART NO. 61607



PART NO. 70968

PUMP
ACCESSORIES

PART NO.	INLET/OUTLET DRAIN CONNECTIONS	MAX. FLOW RATE		DIMENSIONS				WEIGHT		MAX. OPERATING PRESSURE	
				DIAMETER		HEIGHT					
		gpm	lpm	in	mm	in	mm	lb	kg	psi	bar
61607	1 ½" NPT	40	150	4.0	102	20	510	w7.5	3.4	150	10
70968	2" NPT	200	750	8.5	216	36	910	40	18	150	10
58368	1 ½" / 3" / 2" NPT	-	-	18 5/16" deep x 47 5/8" wide x 50" tall				185	83.9	100	6.8

FILTER BAGS



FILTER STYLE	BAG DIAMETER		BAG LENGTH		NOMINAL FILTRATION BAGS (MICRON)			
	in	mm	in	mm	5 micron	10 micron	25 micron	50 micron
58368	7	180	42	1070	71254	J56204	J70917	-
70968	7	180	32	810	27688	26765	26766	27497
61607	4	100	14	360	28806	26916	25117	25866

RELATED ITEMS

58414 Retrofit Float Assy for non-Guardian Water Tanks

28519 Low Water Level Switch

28480MOD Float Valve Modified (plastic floats)



US & Canada: 800-231-8192 or 832-590-1300 | waterblast.com

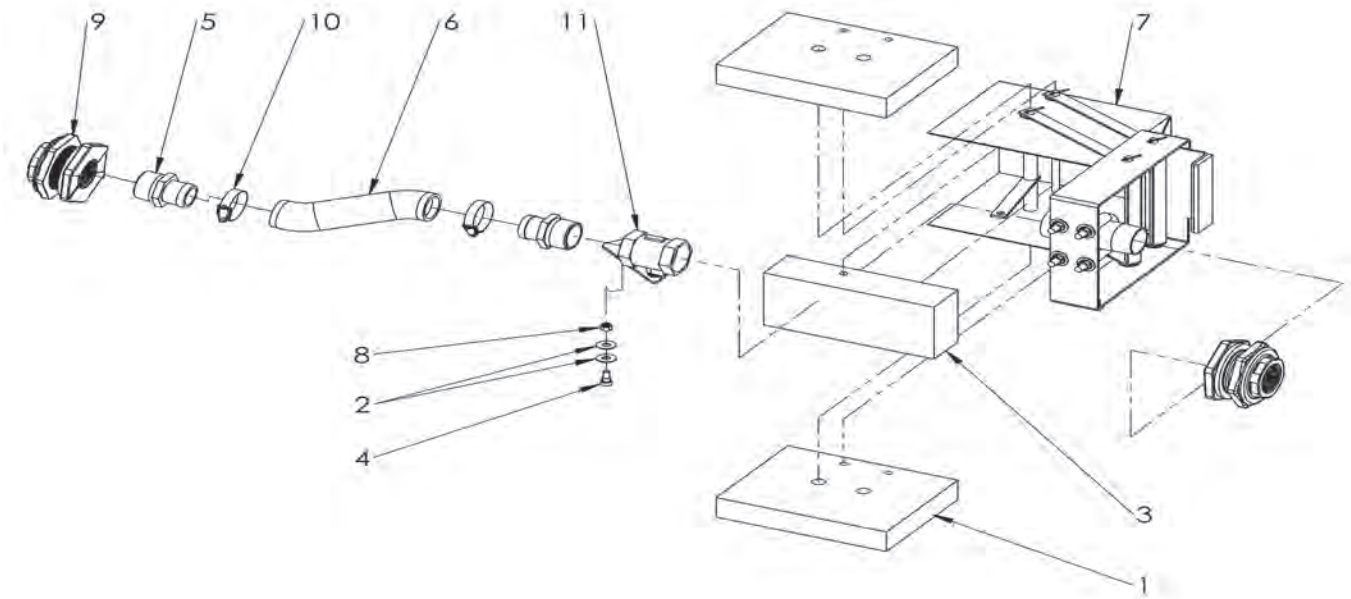
C-21

GUARDIAN TANK FILL VALVE ASSEMBLY

The new durable design for the fill valve assembly is constructed of stainless steel to withstand the rigor of transport. This valve assembly is used on all Jetstream units and is built to supply water for varying pressures. **Part No. 57858**



PUMP
ACCESSORIES



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	57853	Float Segment	7	58305	Frame Ay, Fill Valve
2	71202	Washer	8	27698	Nut
3	58044	Float Segment	9	29374	Fitting, Bulkhead
4	57856	Screw, Shoulder	10	25221	Clamp, Hose
5	58002	Nipple, King	11	58314	Valve Ay, Modified
6	58000	Hose			



DESSICANT BREATHER

The dessicant breather filters out small particulates and removes moisture from the incoming air to ensure reliable and effective operation of the pump. Reduces downtime and costly repairs by minimizing abrasive wear, rust or corrosion. 1" NPT female connection. **Part No. 71671**



POLISHING FILTER PACKAGE

A recommended accessory for any 40,000 psi UNx™ bareshaft pump or fluid end, this package (**Part No. J56453**) provides the necessary protection to prevent damage to the pump caused by poorly filtered or insufficient water supply. Intended for use as a secondary filter only, not as a substitute for a primary filter.

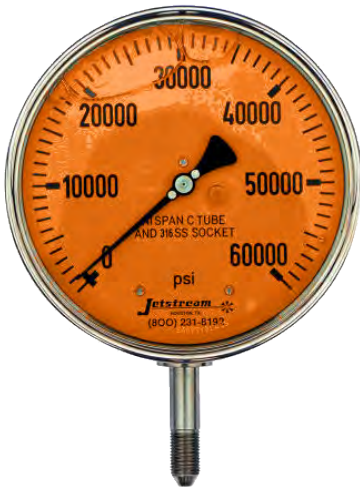
- ▶ Secondary filter assembly can be mounted directly to all Jetstream and some non-Jetstream brand power frames (as shown) or mounted vertically, using the stand that is included (not shown).
- ▶ Differential Pressure Switch detects clogged filter elements and shuts down the unit to prevent cavitation (Sold separately; **Part No. 28112**).
- ▶ Cam-Lok connections for easy conversions to and from fluid ends with lower pressure ranges.

A Differential Pressure Switch Package (**Part No. 56467**) can be purchased separately and added to existing filters. It is included in J56453 filter package. (Includes switch, hoses, fittings, wiring, and mounting hardware.)

FILTER PART NO.	FILTER CARTRIDGES*	
	1 MICRON	3 MICRON
27503	27504	27505

*Pleated cartridges available:
 1 micron J70260
 1 micron absolute J70259
 5 micron J70261

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
27796	Lid O-Ring	27503-3	Clevis Pin
27503-4	Cartridge Retaining Bolt	71490	Center Post
27503-5	Cartridge Retaining Washer	58318	Spring Cup Assembly
27503-1	Swing Bolt		
27503-2	Eye Nut		



PRESSURE GAUGES

- ▶ 4" high visibility face with laminated safety glass dial cover
- ▶ Glycerin-filled for protection against pulsation and vibration
- ▶ Blow-out back panel pressure relief in the event of Bourdon tube failure for maximum safety
- ▶ Pointer zero adjustment

PART NO.	GAUGE TYPE	INLET CONNECTION*	RANGE (PSI)	MAX. WORKING PRESSURE	
				psi	bar
27488	psi	9/16" HP Male	0 - 60,000	40,000	2,758
29820	psi/bar	9/16" HP Male	0 - 60,000	40,000	2,758
61628**	psi	9/16" HP Male	0 - 60,000	40,000	2,758

*Anti-vibration gland set not included, sold separately (Part No. 28090). Male Port to HP Female Top Port Adapter (Part No. 53572) also sold separately.

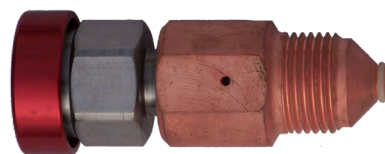
**Certified & Calibrated

RUPTURE DISC HOLDERS

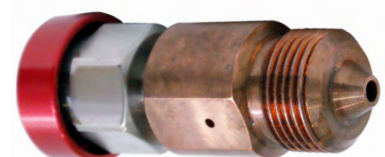
For protection from dangerous over-pressurization, rupture discs function in a waterblast system similar to the function of fuses in an electrical circuit. When the system pressure exceeds that of the burst disc, the disc fails and allows water to flow out of the holder's cap, relieving the system of high pressure.

- ▶ May be used as primary and/or secondary relief device
- ▶ Tamper-resistant design
- ▶ Discs are quickly and easily replaceable

NOTE: Burst disc not included with assembly.

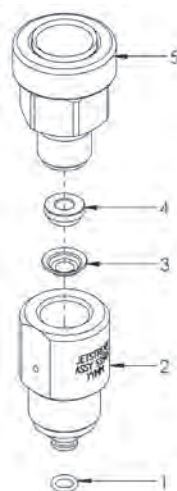


PART NO. 53505



PART NO. 54540

PART NO.	CONNECTION TYPE	OVERALL LENGTH		DISC BLOW OUT DIAMETER		FLATS		MAX. WORKING PRESSURE	
		in	mm	in	mm	in	mm	psi	bar
54540	9/16" HP Ports	3.56	90.4	.25	6.4	1.25	31.8	40,000	2,758
53505	Jetstream 40K Port	3.70	94.0	.25	6.4	1.25	31.8	40,000	2,758



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION
1	27502	O-Ring
2	53576	Base, Jetstream 40K Port Male
	54483	Base, 9/16" High Pressure Male
3	See Burst Disc Chart	Rupture Disc
4	53578	Hold-Down Ring
5	53579	Cap

BURST DISCS

DISC SELECTION

For **primary** relief devices, select disc with burst pressure of approximately 1.2 times desired operating pressure.

Example

Operating pressure: 40,000 psi
Desired burst pressure $40,000 \times 1.2 = 48,000$ psi

Select 50,000 psi Burst Disc, Part No. 27484.

For **secondary** relief devices, select disc with burst pressure of approximately 1.4 times desired operating pressure.

PART NO.	BURST DISC PRESSURE	
	psi	bar
28575	35,000	2,414
28576	40,000	2,758
28615	45,000	3,103
27484	50,000	3,448
27485	56,000	3,860

HOSES & LANCES

Jetstream provides a full arrangement of hoses and flex lances for ultra high pressure waterblasting. The hoses and lances are designed to be durable and reliable for any 20,000 psi application. A large selection of 25', 35' and 50' hoses and lances are kept in inventory, while a wide variety of lengths can be ordered.

All hoses and flex lances are constructed of a plastic core reinforced with high tensile steel wire and enclosed in a durable, flexible thermoplastic jacket. The smooth plastic core minimizes pressure loss and offers maximum resistance to damage caused by aging, moisture absorption and changing environmental factors. All flex lances supplied will be orange for 40K from end to end. Hoses with the abrasion cover spiral will also be colored orange.

A key element of the thermoplastic supply hose is the heavy-duty abrasion cover. This cover prevents excess damage caused by vibration and movement of the hose on rough or uneven surfaces when connecting from the pump to an intermediary high pressure tool, such as a Tumble Box.

The flex lances are uncovered lances used for the cleaning of small diameter tubes found in heat exchangers, condensers and boilers. The use of smaller flex lances allows for easy passage through bends due to great flexibility and minimal bend radius.

HOW TO ORDER JETSTREAM HOSES & FLEX LANCES 28460-AAABCCX

- 1 **Specify Series Number**
Insert dash after Series Number. **28460**
- 2 **Specify Desired Length in Feet (AAA) (000 – 999)**
Example: 050 for a 50 ft. long hose. **AAA**
- 3 **Specify End Fitting Codes (BB & CC)**
For a hose or lance requiring two different end fittings, list the codes in numerical order when creating the part number. **BB
CC**
- 4 **Specify Cover Options Code (X)**
Leave blank if no cover is desired.
Cover Option Codes: **X**
 - 1 Abrasion Cover Guard
 - 2 Burst Shield Guard
 - 3 Tornado Gun Shield (See 27731-02539393)

CONNECTION SIZE & TYPE*	FITTING CODE**	HOSE ID (MM)				
		4mm	5mm	6mm	8mm	13 mm
1/4" HP Male	31	●	●			
3/8" HP Male	32	●	●			
9/16" HP Male	33		●	●	●	
9/16" Type M Female	39	●	●	●		
7/8" Type M Female	41				●	
1" Type M Female	42					●
1-1/8" Type M Female	43				●	

*See Section I for a description of each connection type.

** End Fitting Codes

● Available



HOSES

General purpose hoses are used to distribute high pressure water throughout the system.

- Safety whips are six foot hoses that are connected between a waterblast control gun and the rest of the hoses. These are intended for periodic replacement to ensure that the hose near the gun operator's body is always in good condition.
- Hydro-Throttle hoses are connected from the fluid end to the hydraulic throttle control.

PART NO.	END FITTING CONNECTION*	LENGTH		INSIDE DIAMETER		MAX. OPERATING PRESSURE		MIN. BEND RADIUS	
		ft	m	in	mm	psi	bar	in	mm
27731-02539391	9/16" Type M Female	25	7.6	.20	5	46,400	3,200	8.7	220
27731-05039391	9/16" Type M Female	50	15.2	.20	5	46,400	3,200	8.7	220
29172-02539391	9/16" Type M Female	25	7.6	.20	5	40,000	2,758	9.8	249
29172-05039391	9/16" Type M Female	50	15.2	.20	5	40,000	2,758	9.8	249
70346-02539391	9/16" Type M Female	25	7.6	.23	6	40,600	2,800	9.8	250
70346-05039391	9/16" Type M Female	50	15.2	.23	6	40,600	2,800	9.8	250
59469-02541411	7/8" Type M Female	25	7.6	.32	8	44,000	3,035	11.8	300
59469-05041411	7/8" Type M Female	50	15.2	.32	8	44,000	3,035	11.8	300
59469-02533331	9/16" HP Male	25	7.6	.32	8	44,000	3,035	11.8	300
59469-05033331	9/16" HP Male	50	15.2	.32	8	44,000	3,035	11.8	300
27524-02541411	7/8" Type M Female	25	7.6	.32	8	36,250	2,500	10.3	260
27524-05041411	7/8" Type M Female	50	15.2	.32	8	36,250	2,500	10.3	260
28612-02541411	7/8" Type M Female	25	7.6	.32	8	40,580	2,799	9.8	250
28612-05041411	7/8" Type M Female	50	15.2	.32	8	40,580	2,799	9.8	250
28612-02533331	9/16" HP Male	25	7.6	.32	8	40,580	2,799	9.8	250
28612-05033331	9/16" HP Male	50	15.2	.32	8	40,580	2,799	9.8	250
27731-00639392	9/16" Type M Female	6	1.8	.20	5	40,600	2,800	8.7	220
59469-00641412	7/8" Type M Female	6	1.8	.32	8	44,000	3,035	11.8	300
27524-00641412	7/8" Type M Female	6	1.8	.32	8	36,250	2,500	10.3	260
66909-02542421	1" Type M Female	25	7.6	.50	13	40,600	2,800	13.8	351
66909-05042421	1" Type M Female	50	15.2	.50	13	40,600	2,800	13.8	351

*See page D-3 for end fitting dimensions and page D-2 for cover descriptions. See Section I for a description of each connection type.

HOSE COVER OPTIONS

Abrasion Cover Guard (Code 1)



Constructed of a clear PVC or heavy-duty vinyl and reinforced with a rigid helix coil. The Abrasion Cover Guard helps protect the hose from excessive wear due to scuffing or rough surfaces, and also provides additional protection from external objects.

Burst Shield Guard (Code 2)



Constructed of steel wire reinforced heavy-duty synthetic rubber. The Burst Shield Guard helps protect the user and/or surrounding areas from hose failures.

FLEX LANCES

Flex Lances are uncovered flexible hoses used for the cleaning of small diameter tubes such as those found in:

- Heat Exchangers
- Condensers
- Boilers

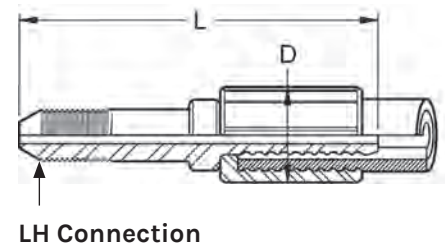


PART NO.	END FITTING CONNECTION (INLET SIDE)*	END FITTING CONNECTION (NOZZLE SIDE)*	LENGTH		INSIDE DIAMETER		MAX. OUTSIDE DIAMETER**		MAX. OPERATING PRESSURE		MIN. BEND RADIUS	
			ft	m	in	mm	in	mm	psi	bar	in	mm
59736-0503139	9/16" Type M Female	1/4" HP Male	50	15.2	.12	3	.60	15.3	40,600	2,800	5.91	150
28460-0503131	1/4" HP Male	1/4" HP Male	50	15.2	.16	4	.67	17.1	40,600	2,800	6.9	175
28460-0253239	9/16" Type M Female	3/8" HP Male	25	7.6	.16	4	.67	17.1	40,600	2,800	6.9	175
28460-0353239	9/16" Type M Female	3/8" HP Male	35	10.7	.16	4	.67	17.1	40,600	2,800	6.9	175
28460-0503239	9/16" Type M Female	3/8" HP Male	50	15.2	.16	4	.67	17.1	40,600	2,800	6.9	175
28460-0253232	3/8" HP Male	3/8" HP Male	25	7.6	.16	4	.67	17.1	40,600	2,800	6.9	175
28460-0353232	3/8" HP Male	3/8" HP Male	35	10.7	.16	4	.67	17.1	40,600	2,800	6.9	175
28460-0503232	3/8" HP Male	3/8" HP Male	50	15.2	.16	4	.67	17.1	40,600	2,800	6.9	175
27731-0253339	9/16" Type M Female	9/16" HP Male	25	7.6	.20	5	.78	19.7	40,600	2,800	8.7	220
27731-0353339	9/16" Type M Female	9/16" HP Male	35	10.7	.20	5	.78	19.7	40,600	2,800	8.7	220
27731-0503339	9/16" Type M Female	9/16" HP Male	50	15.2	.20	5	.78	19.7	40,600	2,800	8.7	220
27731-0253333	9/16" HP Male	9/16" HP Male	25	7.6	.20	5	.78	19.7	40,600	2,800	8.7	220
27731-0353333	9/16" HP Male	9/16" HP Male	35	10.7	.20	5	.78	19.7	40,600	2,800	8.7	220
27731-0503333	9/16" HP Male	9/16" HP Male	50	15.2	.20	5	.78	19.7	40,600	2,800	8.7	220
70346-0503339	9/16" Type M Female	9/16" HP Male	50	15.2	.23	6	.65	16.4	40,600	2,800	9.84	250
70346-0353339	9/16" Type M Female	9/16" HP Male	35	10.7	.23	6	.65	16.4	40,600	2,800	9.84	250

*See Section I for a description of each connection type. ** Sleeve O.D.

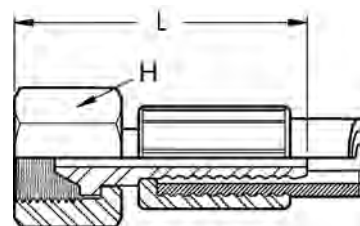
END FITTINGS HIGH PRESSURE (HP)

HOSE SERIES	SIZE (LH)	L	SLEEVE OD (D)	WEAR GUARD DIAMETER	GUARD SLEEVE DIAMETER
28460	1/4"	3.31	.66	.98	.95
	3/8"	3.34	.66	.98	.95
27731	1/4"	3.43	.73	1.00	1.07
	3/8"	3.90	.73	1.00	1.07
	9/16"	3.90	.73	1.00	1.07
27524	3/8"	3.78	.96	1.27	1.34
	9/16"	4.25	.96	1.27	1.34
59469	3/8"	3.78	1.09	1.40	1.47
	9/16"	4.25	1.09	1.40	1.47
28612	9/16"	5.13	1.10	1.27	1.49
70346	9/16"	2.96	.88	1.00	1.07



END FITTINGS TYPE M

HOSE SERIES	SIZE	L	SLEEVE OD (D)	WEAR GUARD DIAMETER	GUARD SLEEVE DIAMETER
28460	9/16"	2.50	.75	.98	.95
27731	9/16"	2.96	.88	1.00	1.07
70346	9/16"	2.96	.88	1.00	1.07
27524	7/8"	3.65	1.19	1.27	1.34
59469	7/8"	3.65	1.19	1.40	1.47
28612	7/8"	4.43	1.25	1.27	1.49
29172	9/16"	4.65	1.00	1.24	1.50



RIGID LANCES

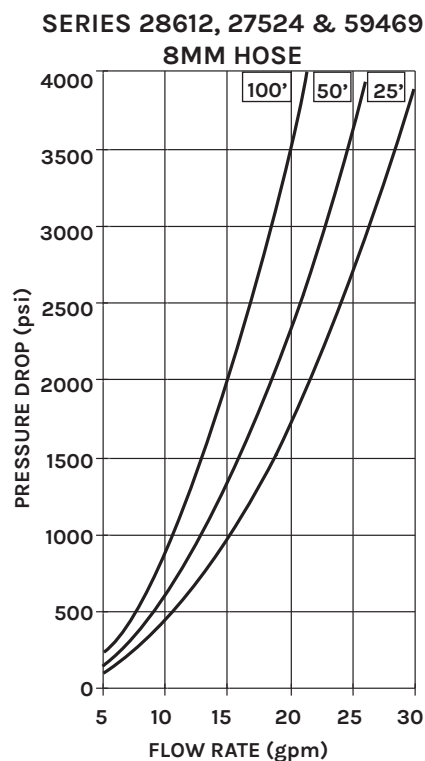
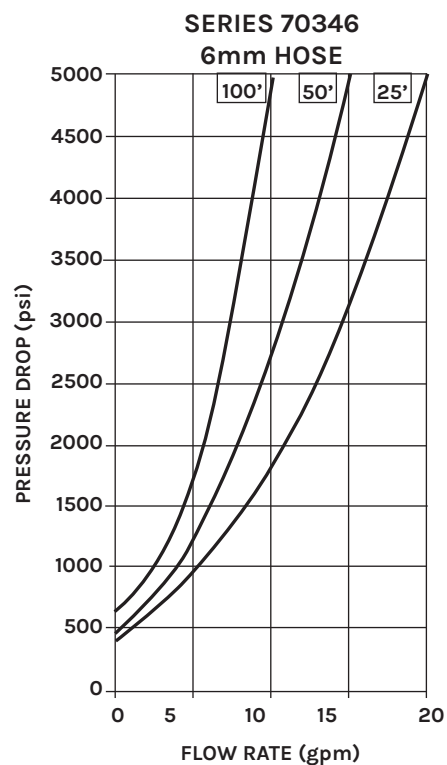
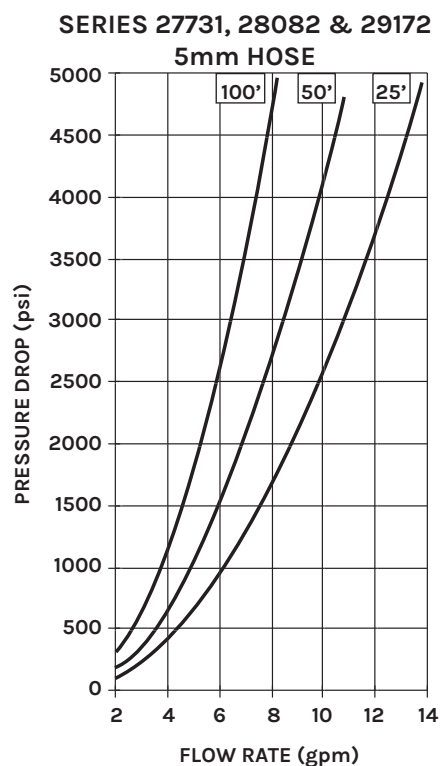
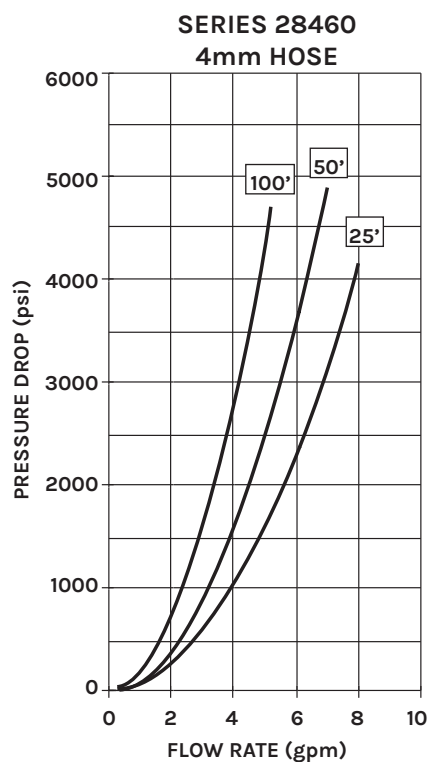
Made from high tensile strength cold drawn stainless steel. Typically used in the following applications:

- Heat exchanger tube cleaning.
- Small diameter tube and pipe cleaning.

PART NO.	CONNECTION TYPE		OUTSIDE DIAMETER		INSIDE DIAMETER		MAX. PRESSURE		LENGTH
	CONNECTION 1	CONNECTION 2	in	mm	in	mm	psi	bar	ft
53831-XX	1/4" HP LH	1/4" HP LH	.245	6.22	.083	2.11	60,000	4,138	02 - 30
54364-XX	1/4" HP RH	1/4" HP RH	.245	6.22	.083	2.11	60,000	4,138	02 - 30
54554-XX	1/4" HP LH	1/4" HP RH	.245	6.22	.083	2.11	60,000	4,138	02 - 25
54224-XX	3/8" HP LH	3/8" HP LH	.368	9.35	.125	3.18	60,000	4,138	02 - 30
54225-XX	3/8" HP RH	3/8" HP RH	.368	9.35	.125	3.18	60,000	4,138	02 - 35
54556-XX	3/8" HP LH	3/8" HP RH	.368	9.35	.125	3.18	60,000	4,138	02 - 25
23-54556-30	3/8" HP LH	3/8" HP RH	.368	9.35	.125	3.18	60,000	4,138	30
54226-XX	9/16" HP LH	9/16" HP LH	.553	14.05	.188	4.78	60,000	4,138	02 - 30
54227-XX	9/16" HP RH	9/16" HP RH	.553	14.05	.188	4.78	60,000	4,138	02 - 30
54557-XX	9/16" HP LH	9/16" HP RH	.553	14.05	.188	4.78	60,000	4,138	02 - 30
54228-XX	9/16" HP LH	9/16" HP LH	.553	14.05	.250	6.35	40,000	2,758	02 - 30
54229-XX	9/16" HP RH	9/16" HP RH	.553	14.05	.250	6.35	40,000	2,758	02 - 30
54558-XX	9/16" HP LH	9/16" HP RH	.553	14.05	.250	6.35	40,000	2,758	02 - 25
23-54558-30	9/16" HP LH	9/16" HP RH	.553	14.05	.250	6.35	40,000	2,758	30

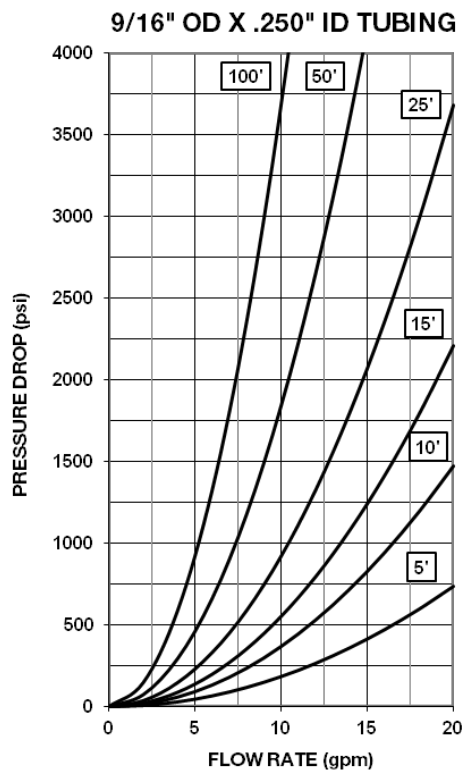
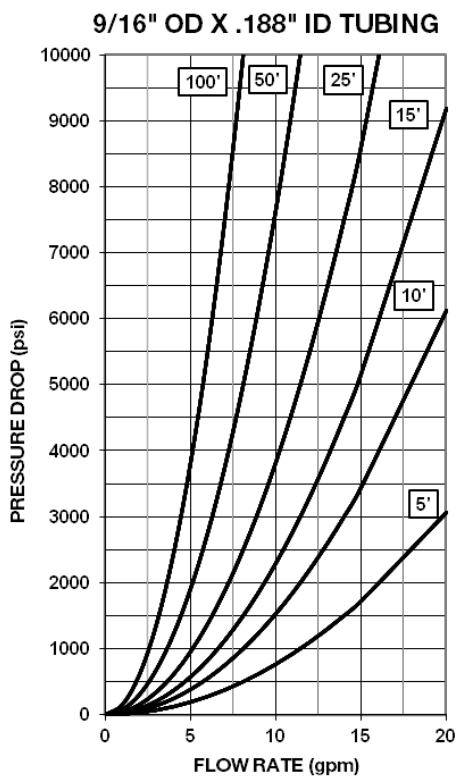
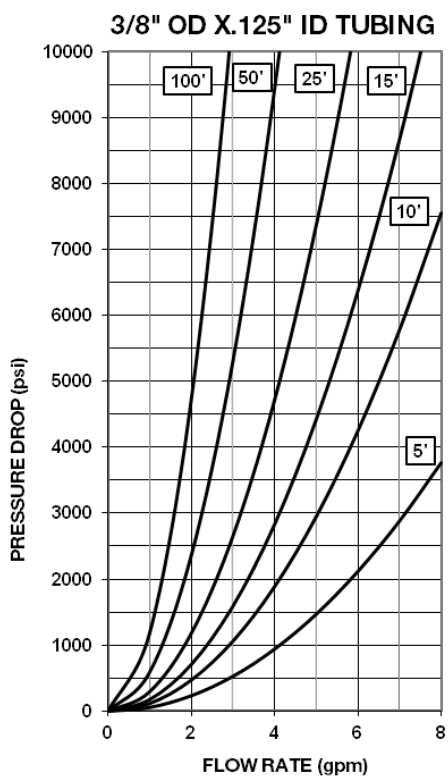
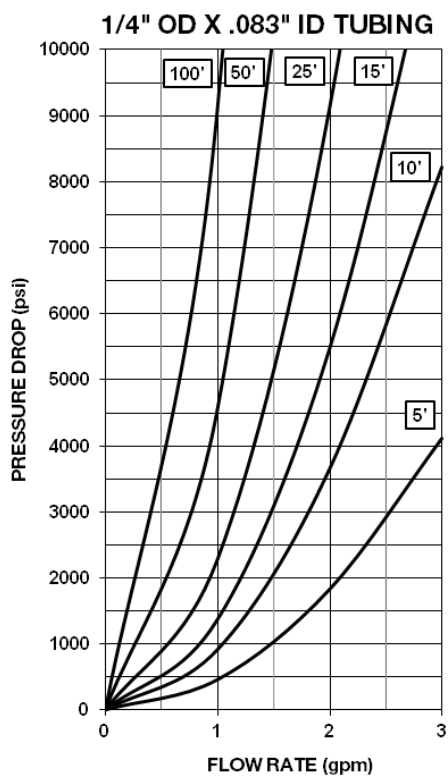
PRESSURE DROP DATA

HOSE & FLEX LANCE



PRESSURE DROP DATA

RIGID LANCES



FITTINGS

Jetstream offers a wide variety of fittings with various connection types to fit your 40,000 psi application needs. The standard connection types, Type M, HP lance and button seals, are available in standard thread sizes. A benefit that Jetstream brings to the fittings realm was the invention of our proprietary 40K Port and 40K Pump Discharge fittings. These two connectors were specially designed to help prevent leakage and wear.

THREAD LUBRICANTS

Thread Lubricants prevent threaded connections from galling together or seizing up.



Part No. 27721

Blue Goop Thread Lubricant
2 oz. Tube



Part No. 28197

Nickel-Based Anti-Seize
1 lb. Brush Top Can

MALE PORT TO TYPE M FEMALE ADAPTER

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
59674	M9 Female x 9/16" Button Seal	40,000	2,758

Replacement Part

27502 O-Ring

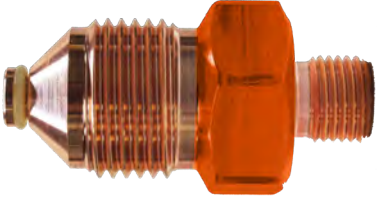


MALE PORT TO TYPE M MALE ADAPTERS

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53571	9/16" Type M Male	40,000	2,758
53570	7/8" Type M Male	40,000	2,758
68038	1 1/8" Type M Male	40,000	2,758

Replacement Part

27502 O-Ring



MALE PORT TO HIGH PRESSURE FEMALE ADAPTERS

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
54056	3/8" HP Female	40,000	2,758
53572	9/16" HP Female	40,000	2,758

Replacement Part

27502 O-Ring

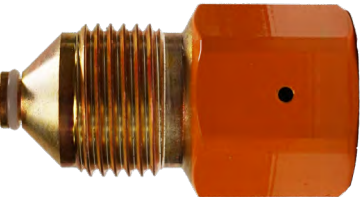


MALE PORT TO METRIC HIGH PRESSURE FEMALE ADAPTERS

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
58522	M18 x 1.5 Button Seal	40,000	2,758

Replacement Part

27502 O-Ring



MALE PORT TO HIGH PRESSURE MALE ADAPTERS

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
58326	3/8" HP Male	40,000	2,758
54454	9/16" HP Male	40,000	2,758

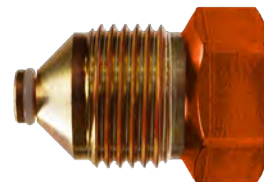


Replacement Part

27502 O-Ring

MALE PORT PLUG

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53573	Plug	40,000	2,758



Replacement Part

27502 O-Ring

MALE PORT NIPPLE

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53735	40K Port Male	40,000	2,758



Replacement Part

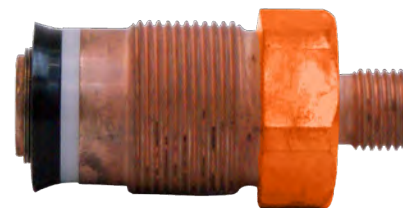
27502 O-Ring

FITTINGS

PUMP DISCHARGE MALE TO TYPE M MALE ADAPTERS

Used to connect hoses having Type M female swivel end fittings to the discharge port of the Jetstream Fluid End.

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53671	9/16" Type M Male	40,000	2,758
53672	7/8" Type M Male	40,000	2,758
67282	1" Type M Male	40,000	2,758
66061	1-1/8" Type M Male	40,000	2,758



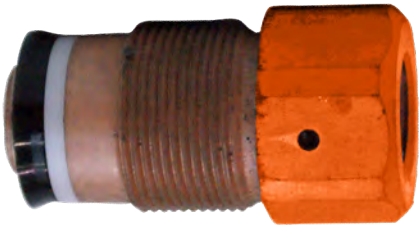
Replacement Parts

27536 Seal Ring
53592 Seal Backup Ring
27537 Seal Retaining Ring

PUMP DISCHARGE MALE TO HIGH PRESSURE FEMALE ADAPTERS

Used to connect hoses having high pressure (HP) male end fittings to the discharge port of the Jetstream 40,000 psi Fluid End.

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53989	3/8" HP Female	40,000	2,758
53988	9/16" HP Female	40,000	2,758
55075	14mm Metric HP Female	40,000	2,758



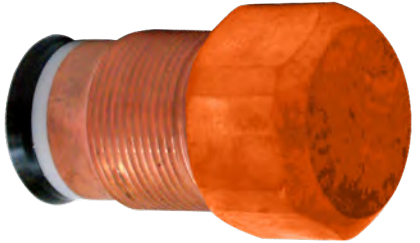
Replacement Parts

- 27536 Seal Ring
- 53592 Seal Backup Ring
- 27537 Seal Retaining Ring

PUMP DISCHARGE MALE PLUG

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53589	Plug	40,000	2,758

*Allen wrench (hex key) socket. Wrench available below.



Replacement Parts

- 27536 Seal Ring
- 53592 Seal Backup Ring
- 27537 Seal Retaining Ring
- 26544 5/8" Hex Wrench

DURASAFE™ GUN TO TYPE M MALE ADAPTERS

Used to connect hoses having Type M female end fittings to the Jetstream Durasafe 40,000 psi hand-held control guns.

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53529	9/16" Type M Male	40,000	2,758
53468	7/8" Type M Male	40,000	2,758



DURASAFE™ GUN TO HIGH PRESSURE FEMALE ADAPTERS

Used to connect hoses having high pressure male end fittings to the Jetstream Durasafe 40,000 psi hand-held control guns.

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
53534	3/8" HP Female	40,000	2,758
54446	9/16" HP Female	40,000	2,758



DURASAFE™ GUN RELATED ITEMS

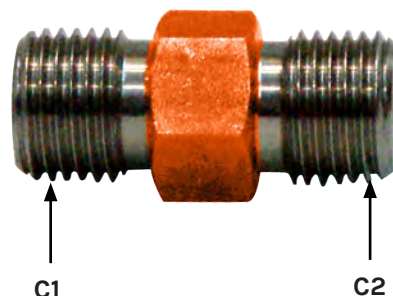
PART NO.	DESCRIPTION
52087	9/16" Collet
52083	9/16" Collet Nut
27502	Rear Barrel O-Ring



COLLET NUT COLLET

TYPE M CONNECTORS

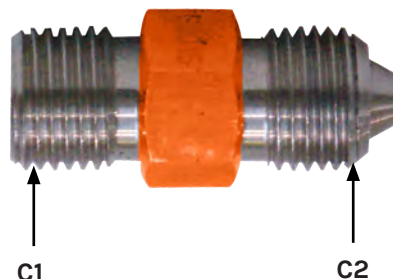
PART NO.	CONNECTION TYPE		MAX. OPERATING PRESSURE	
	CONNECTION 1	CONNECTION 2	psi	bar
27527	9/16" Type M Male	9/16" Type M Male	40,000	2,758
27529	9/16" Type M Male	7/8" Type M Male	40,000	2,758
27528	7/8" Type M Male	7/8" Type M Male	40,000	2,758
J70844	1 1/8" Type M Male	9/16" Type M Male	40,000	2,758
28669	1 1/8" Type M Male	7/8" Type M Male	40,000	2,758
28831	1 1/8" Type M Male	1 1/8" Type M Male	40,000	2,758



FITTINGS

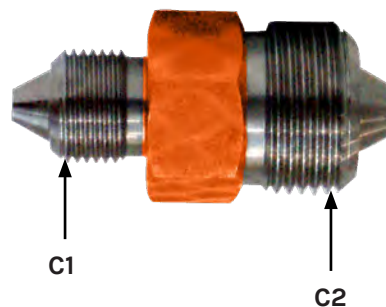
TYPE M MALE TO HIGH PRESSURE MALE CONNECTORS

PART NO.	CONNECTION TYPE		MAX. OPERATING PRESSURE	
	CONNECTION 1	CONNECTION 2	psi	bar
29163	9/16" Type M Male	1/4" HP Male	40,000	2,758
27530	9/16" Type M Male	3/8" HP Male	40,000	2,758
27706	9/16" Type M Male	9/16" HP Male	40,000	2,758
61076	3/4" Type M Male	9/16" HP Male	30,000	2,068
28169	7/8" Type M Male	3/8" HP Male	40,000	2,758
27531	7/8" Type M Male	9/16" HP Male	40,000	2,758
28670	1 1/8" Type M Male	9/16" HP Male	40,000	2,758



HIGH PRESSURE MALE TO MALE CONNECTORS

PART NO.	CONNECTION TYPE		MAX. OPERATING PRESSURE	
	CONNECTION 1	CONNECTION 2	psi	bar
28657	1/4" HP Male	1/4" HP Male	60,000	4,138
28658	1/4" HP Male	3/8" HP Male	60,000	4,138
28659	1/4" HP Male	9/16" HP Male	60,000	4,138
28170	3/8" HP Male	3/8" HP Male	60,000	4,138
28171	3/8" HP Male	9/16" HP Male	60,000	4,138
28172	9/16" HP Male	9/16" HP Male	60,000	4,138



HIGH PRESSURE STRAIGHT COUPLINGS

PART NO.	CONNECTION TYPE		MAX. OPERATING PRESSURE	
	CONNECTION 1	CONNECTION 2	psi	bar
28643	1/4" HP Female	1/4" HP Female	60,000	4,138
28644	1/4" HP Female	3/8" HP Female	60,000	4,138
28645	1/4" HP Female	9/16" HP Female	60,000	4,138
27965	3/8" HP Female	3/8" HP Female	60,000	4,138
28646	3/8" HP Female	9/16" HP Female	60,000	4,138
27607	9/16" HP Female	9/16" HP Female	60,000	4,138



HIGH PRESSURE UNION COUPLINGS

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
28647	1/4" HP Female	60,000	4,138
28648	3/8" HP Female	60,000	4,138
28649	9/16" HP Female	60,000	4,138



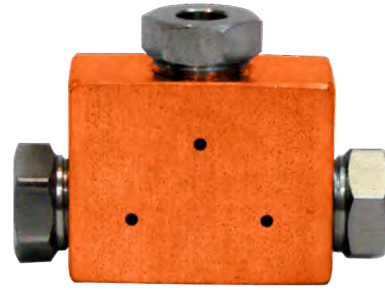
HIGH PRESSURE CROSSES

PART NO.	CONNECTION TYPE	MAX. OPERATING PRESSURE	
		psi	bar
28639	1/4" HP Female	60,000	4,138
28163	3/8" HP Female	60,000	4,138
27839	9/16" HP Female	60,000	4,138



HIGH PRESSURE TEES

PART NO.	CONNECTION TYPE	MAX. WORKING PRESSURE	
		psi	bar
28640	1/4" HP Female	60,000	4,138
28164	3/8" HP Female	60,000	4,138
27838	9/16" HP Female	60,000	4,138



HIGH PRESSURE ELBOWS

PART NO.	CONNECTION TYPE	MAX. WORKING PRESSURE	
		psi	bar
28641	1/4" HP Female	60,000	4,138
28165	3/8" HP Female	60,000	4,138
28166	9/16" HP Female	60,000	4,138



HIGH PRESSURE GLAND NUTS, COLLARS, AND PLUGS

SIZE	GLAND	COLLAR	PLUG
1/4" HP	28650	28651	28652
3/8" HP	28176	28175	28653
9/16" HP	27520	27510	28654



GLAND NUT



COLLAR

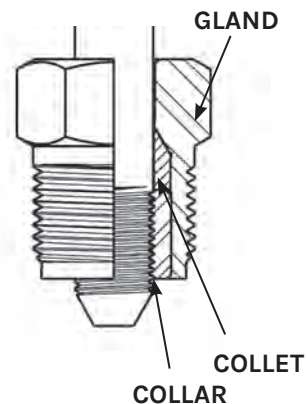


PLUG

ANTI-VIBRATION GLAND ASSEMBLIES

Used to reduce stress on tubing threads in conditions where bending or vibration are present. Anti-vibration gland assemblies feature a collet that clamps onto the tubing when tightened to provide extra support and strength.

SIZE	ASSEMBLY PART NO.	COLLAR REPLACEMENT	GLAND REPLACEMENT
1/4" HP	28655	28651	28650
3/8" HP	28656	28175	28176
9/16" HP	28090	27510	27520



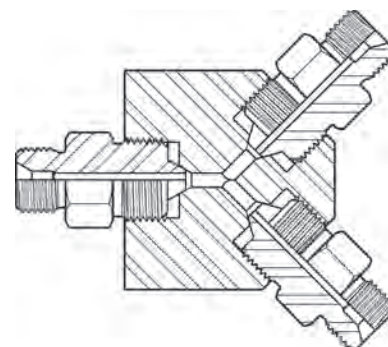
Y-ADAPTERS

Allows for the connection of two multi-mode valves to one supply source.

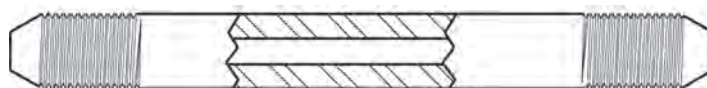
PART NO.	CONNECTION TYPE	MAX. WORKING PRESSURE	
		psi	bar
28672*	9/16" HP Female	60,000	4,138
54482**	7/8" Type M Male	60,000	4,138

*28672 - Block only, shown above right.

**54482 shown at right, includes adapters.



HIGH PRESSURE NIPPLES



PART NO.	CONNECTION TYPE		OUTSIDE DIAMETER		INSIDE DIAMETER		MAX. WORKING PRESSURE		LENGTH
	CONNECTION 1	CONNECTION 2	in	mm	in	mm	psi	bar	
54456-XX	1/4" HP LH	1/4" HP LH	.245	6.22	.083	2.11	60,000	4,138	2-48
54457-XX	1/4" HP LH	1/4" HP RH	.245	6.22	.083	2.11	60,000	4,138	2-48
54458-XX	1/4" HP RH	1/4" HP RH	.245	6.22	.083	2.11	60,000	4,138	2-48
54208-XX	3/8" HP LH	3/8" HP LH	.368	9.35	.125	3.18	60,000	4,138	3-48
54459-XX	3/8" HP LH	3/8" HP RH	.368	9.35	.125	3.18	60,000	4,138	3-48
54461-XX	3/8" HP RH	3/8" HP RH	.368	9.35	.125	3.18	60,000	4,138	3-48
54209-XX	9/16" HP LH	9/16" HP LH	.553	14.05	.188	4.76	60,000	4,138	3-48
54462-XX	9/16" HP LH	9/16" HP RH	.553	14.05	.188	4.76	60,000	4,138	3-48
54463-XX	9/16" HP RH	9/16" HP RH	.553	14.05	.188	4.76	60,000	4,138	3-48
54464-XX	9/16" HP LH	9/16" HP LH	.553	14.05	.250	6.35	40,000	2,758	3-48
54466-XX	9/16" HP LH	9/16" HP RH	.553	14.05	.250	6.35	40,000	2,758	3-48
54467-XX	9/16" HP RH	9/16" HP RH	.553	14.05	.250	6.35	40,000	2,758	3-48

XX - Specify length in inches, up to 48 inches. EX: 3 inches = 03 inches in length.
For lengths over 48 inches, see Rigid Lances, page D-4.

HIGH PRESSURE RIGID LANCE HOLDERS

The Jetstream high pressure rigid lance holder is used to provide reduced stress on the rigid lance to flexible lance connection greatly reducing lance breakage and increasing safety. The rigid lance is inserted into the support tube and screwed into the female threaded connection.

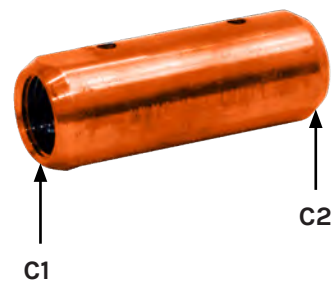
PART NO.	CONNECTION TYPE		MAX. WORKING PRESSURE	
	CONNECTION 1	CONNECTION 2	psi	bar
28202	9/16" HP	1/4" HP	60,000	4,138
28203	9/16" HP	3/8" HP	60,000	4,138
28204	9/16" HP	9/16" HP	60,000	4,138



SLIMLINE LANCE COUPLINGS

Used to connect two lances together without the use of glands and collars.

PART NO.	CONNECTION TYPE		MAX. WORKING PRESSURE	
	CONNECTION 1	CONNECTION 2	psi	bar
54468	1/4" HP Lance RH	1/4" HP Lance RH	40,000	2,758
54469	1/4" HP Lance RH	1/4" HP Lance LH	40,000	2,758
54471	1/4" HP Lance LH	1/4" HP Lance LH	40,000	2,758
54472	1/4" HP Lance RH	3/8" HP Lance RH	40,000	2,758
54473	1/4" HP Lance LH	3/8" HP Lance RH	40,000	2,758
54474	1/4" HP Lance RH	3/8" HP Lance LH	40,000	2,758
54476	1/4" HP Lance LH	3/8" HP Lance LH	40,000	2,758
53982	3/8" HP Lance RH	3/8" HP Lance RH	40,000	2,758
54198	3/8" HP Lance RH	3/8" HP Lance LH	40,000	2,758
54197	3/8" HP Lance LH	3/8" HP Lance LH	40,000	2,758
54202	3/8" HP Lance RH	9/16" HP Lance RH	40,000	2,758
54477	3/8" HP Lance LH	9/16" HP Lance RH	40,000	2,758
54201	3/8" HP Lance RH	9/16" HP Lance LH	40,000	2,758
54200	3/8" HP Lance LH	9/16" HP Lance LH	40,000	2,758
53981	9/16" HP Lance RH	9/16" HP Lance RH	40,000	2,758
54204	9/16" HP Lance RH	9/16" HP Lance LH	40,000	2,758
54203	9/16" HP Lance LH	9/16" HP Lance LH	40,000	2,758
54478	9/16" HP Lance RH	9/16" Button Seal	40,000	2,758
54479	9/16" HP Lance LH	9/16" Button Seal	40,000	2,758
54205	9/16" Button Seal	9/16" Button Seal	40,000	2,758





CONTROL GUNS

AIR, HAND AND FOOT-OPERATED

Control guns are a necessity in any hand lancing application. Jetstream offers several options from manual to air-actuated, rotary control guns for 40,000 psi waterblasting.

QUADRABLAST™ AIR GUN

The Jetstream QuadraBlast air gun is produced with performance, durability and simplicity in mind. This gun enhances productivity while maintaining limited operator exposure to hazardous conditions due to the lightweight and mechanically-simplified design. For optimal performance, it is recommended to use this gun in conjunction with a self-rotating nozzle (MagJet® X40) and Jetstream tumble box, either multi-mode or unloader style.

- ▶ Air—the only source for triggering the flow of water
- ▶ Telescopic shoulder stock
- ▶ Minimal parts to maintain
- ▶ 48" (1219 mm) stainless steel lance barrel
- ▶ Spring-loaded safety latch on trigger
- ▶ Single or dual trigger available

FXG2 TORNADO GUN

Jetstream's FXG2 Tornado Gun is an improved version of the gun has been on the market for many years with proven productivity results. The dual trigger, air-powered rotating waterblast control gun is used in conjunction with a Jetstream tumble box, multi-mode or unloader style, and the Tornado FX nozzle head.

- ▶ Sealed swivel assembly with heavy-duty thrust bearing and quick-change HP swivel seal
- ▶ All pressure bearing components are stainless steel
- ▶ Large internal air porting for quick pressure release
- ▶ Lightweight

DURASAFE™ HAND GUNS (DUMP STYLE)

Designed with safety, comfort and simplicity in mind, the Durasafe™ 40,000 psi control guns are used for a variety of surface cleaning applications. The DCP models feature fully adjustable body pads for maximum operator comfort in any position (shoulder, hip, chest, etc.). The DCPx models showcase an ergonomically designed shoulder stock. In addition to the standard welded guns, Jetstream



offers a field repairable option for barrel replacement to be performed in the field. Both standard and field repairable guns are offered in single or dual trigger.

DURASAFE™ FOOT GUN

The Durasafe™ foot gun is ideal for numerous tube cleaning applications.

- ▶ Fast field replaceable cartridge design for minimal downtime
- ▶ All pressure bearing components are stainless steel
- ▶ Zinc-plated base and cage for corrosion resistance
- ▶ VSS orange powder-coated



QUADRABLAST™ AIR GUN

The QuadraBlast* air gun is an air actuated single or dual trigger waterblast control gun. While maintaining productivity and limiting operator exposure to hazardous conditions, this gun was designed for superior field durability. Used in conjunction with the 40K Multi-Mode.

- ▶ Uses MagJet® X40 self-rotating nozzle
- ▶ Telescopic shoulder stock
- ▶ Dump cartridge located away from the gun
- ▶ Spring-loaded safety latch on trigger
- ▶ Maintenance made easy with minimal parts
- ▶ Lightweight

NOTE: Nozzle head and nozzles not included.

BASE PART NO.	TRIGGER STYLE	BARREL LENGTH		INLET CONNECTION*	NOZZLE CONNECTION	MAX. FLOW		MAX. OPERATING PRESSURE	
		in	mm			gpm	lpm	psi	bar
65875	single or dual	see options below		see options below	9/16" HP Male	7	26.5	40,000	2,758

HOW TO ORDER A JETSTREAM QUADRABLAST AIR GUN

EXAMPLE PART NUMBER: 65875-A-B-C-D-E

Customize the QuadraBlast air gun by choosing from the options below:

- Specify the barrel length**

A

48 = 48"
60 = 60"
- Specify the number of handles**

B

S = 1
D = 2
- Specify the angle of the barrel at rear**

C

70 = 70°
90 = 90°
- Specify the shoulder support**

D

SS = Shoulder stock
BP = Body pad
- Specify the desired inlet connection**

E

.56M = 9/16" Type M
.87M = 7/8" Type M
.38HP = 3/8" HP
.56HP = 9/16" HP



FXG2 TORNADO GUN

The FXG2 Tornado Gun, used in conjunction with the Jetstream Multi-Mode or Unloader style tumble box, is a dual trigger, air-powered rotating barrel water-blast control gun. Maximizing safety, serviceability and durability, FXG2 Tornado Guns are designed to provide the highest level of productivity.

- ▶ High-torque air drill
- ▶ Large bearings with extended HP seal life of 40-60 hours
- ▶ No-grease barrel bushings
- ▶ Easy to replace HP seal bushing design
- ▶ Uses FX nozzle heads with 3, 4, 5, or 6 jets. Available nozzle head and front bushing guards
- ▶ Use with Sapphire **UPHX/UHPXi Series** or synthetic diamond **UHPXD Series** nozzles
- ▶ Optional lightweight shoulder stocks
- ▶ Tool-less wing nut handle adjustment
- ▶ Serialized assemblies
- ▶ VSS colored components for safety

NOTE: Shoulder stock, front bushing guard, nozzle head and nozzles not included.

FXG2 TORNADO GUN PACKAGES

Two optional packages are available:

Part No. 66938 includes a 36" front barrel FXG2 gun, a Multi-Mode valve, and a 25 foot hose

Part No. 66939 includes a 48" front barrel FXG2 gun, a Multi-Mode valve, and a 25 foot hose

PART NO.	BARREL LENGTH		WEIGHT		CONNECTIONS		ROTATIONAL SPEED	MIN. AIR REQUIREMENTS				MAX. FLOW		MAX. OPERATING PRESSURE	
					INLET	NOZZLE HEAD		INLET PRESSURE		AIR CONSUMPTION					
	in	mm	lb	kg			RPM	psi	bar	cfm	l/s	gpm	lpm	psi	bar
66210	48.0	1219	13.8	6.3	9/16" Type M	9/16" Button Seal	1500-2500	90	6.2	20	9.4	7	26.5	40,000	2,758
66211	36.0	914	13.0	5.9											

* Gun includes adapter to connect hoses having 9/16" Type M connections. For other available fittings, see Section E.

RELATED PARTS

ADJUSTABLE SHOULDER STOCK

An adjustable shoulder stock is available for flexibility and comfort when using the air gun.

Part Nos. 66354 - Straight
66930 - Offset



NOZZLE HOLDER GUARD

Protects the nozzle head and barrel from wear and damage when using the air gun.

Part No. 64450



TORNADO SURFACE CLEANING FX NOZZLE HEADS

3, 4, 5, or 6 jet nozzle heads for use with the FXG2 Tornado Gun. See page F-5.

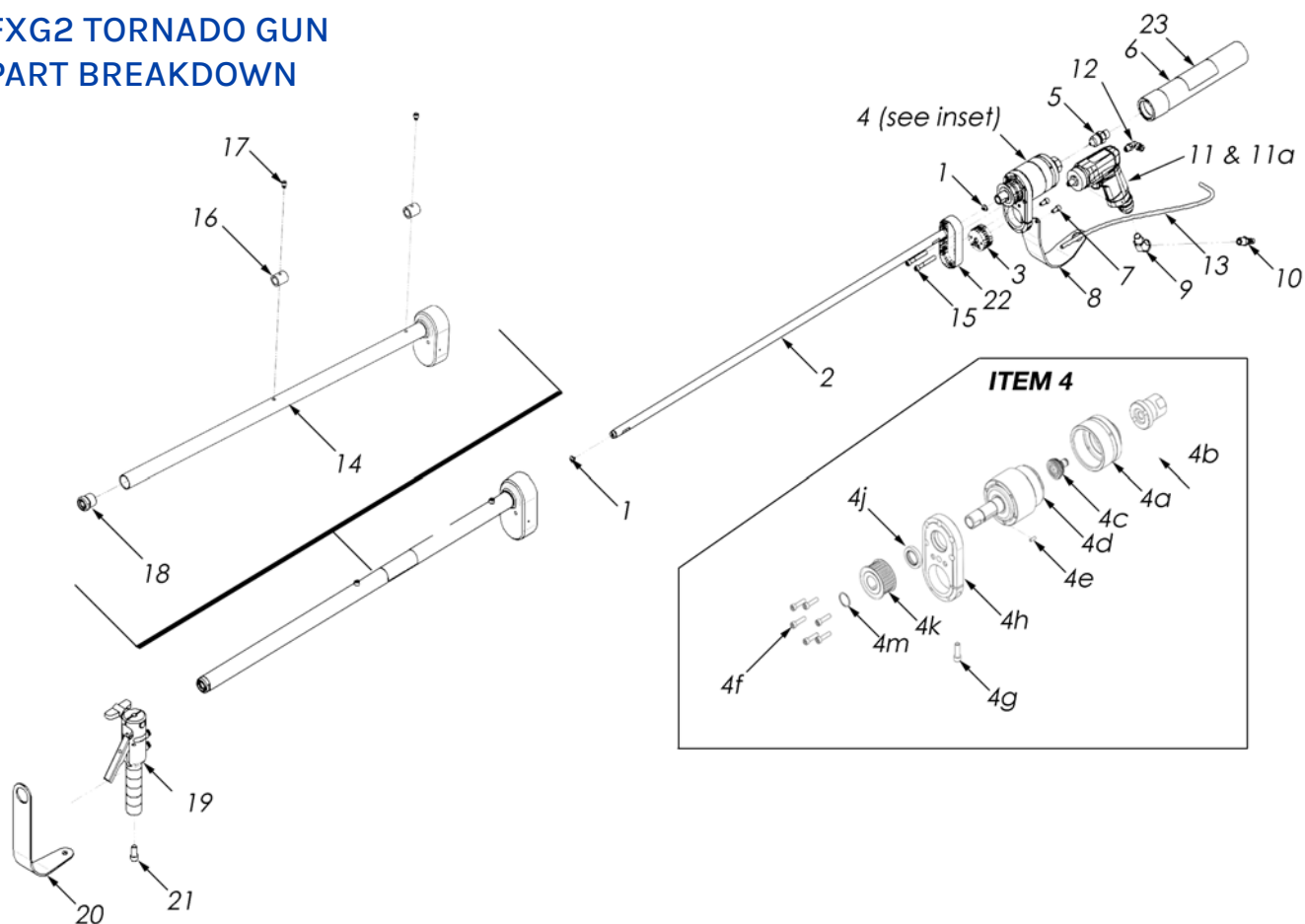
PART NO.	DESCRIPTION
53970	F3-Jet Pattern
53971	F4-Jet Pattern
64448	F5-Jet Pattern
64449	F6-Jet Pattern

FRONT BUSHING GUARD

Part No. 66343



FXG2 TORNADO GUN PART BREAKDOWN



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	54059	Button Seal	5	27530	Connector M9 x .38	18a	27707	Barrel Seal
2	53701	36" Barrel	6	53723	Hose Support	18b	53732	Front Barrel Bushing
	53894	48" Barrel	7	25261	Capscrew	19	67330	Secondary Handle
3	54307	Driver Sprocket	8	29808	Trigger Guard	20	27662	Trigger Guard
4	66023	Swivel Assembly	9	28224	Elbow	21	27714	Capscrew
4a	64123	Swivel Nut	10	28223	Male QD Fitting	22	27661	Belt
4b	53709	Inlet Adapter	11	65098	Pneumatic Drill	23	64268	Label, VSS
4c	66021	Seal Kit	11a	66848	Drill Service Kit			
4d	66022	Swivel Rebuild Kit	12	27733	Elbow			
4e	27277	Pin	13	27740	Tubing (Order in Feet)			
4f	27716	Capscrew	14	53790	36" Barrel Housing			
4g	27713	Capscrew		53895	48" Barrel Housing			
4h	53703	Mounting Plate	15	27717	Capscrew			
4j	27708	Shaft Seal	16	53771	Center Barrel Bushing*			
4k	53782	Driven Sprocket	17	67325	Capscrew			
4m	27712	Retaining Ring	18	53972 (with seal)	Front Barrel Bushing			

TORNADO SURFACE CLEANING FX NOZZLE HEADS

Designed for use with the Jetstream FXG2 Tornado Gun and other air-powered rotary control guns.

- ▶ Button seal connection prevents wear and leakage of the nozzle
- ▶ Manufactured from heat-treated stainless steel
- ▶ Utilizes Jetstream **UHPX/UHPXi/UHPXD Series** replaceable nozzle tips (see Section G for more information)
- ▶ Maximum Operating Pressure: 40,000 psi (2,758 bar)

PART NO. 68262
F2-JET PATTERN



PART NO. 53970
F3-JET PATTERN



PART NO. 53971
F4-JET PATTERN



PART NO. 64448
F5-JET PATTERN



PART NO. 64449
F6-JET PATTERN



RELATED PARTS

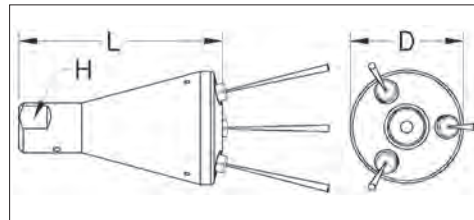
NOZZLE SHIELDS AND RETAINERS

PART NO.	DESCRIPTION
68006	2 Jet Nozzles
53763-SS	3 or 6 Jet Nozzles
64184-SS	4 Jet Nozzles
64013-SS	5 Jet Nozzles



Part No. 27722 Capscrew (for 53763-SS, 64013-SS)

Part No. 63860 Retaining Ring (for 68006, 64184-SS)



ASSEMBLY PART NO.*	DIAMETER (D)		ASSEMBLY LENGTH (L)		FLATS (H)		INLET CONNECTION**	MAX. OPERATING PRESSURE		REPLACEMENT SEAL
	in	mm	in	mm	in	mm		psi	bar	
68262	1.90	48.3	3.37	85.6	1.16	0.53	9/16" Button Seal	40,000	2,758	 PART NO. 54059
53970	1.99	50.5	3.60	91.4	1.29	0.59				
53971	1.90	48.3	3.37	85.6	1.16	0.53				
64448	1.90	48.3	3.60	91.4	1.16	0.53				
64449	1.99	50.5	3.37	85.6	1.29	0.59				

*Each assembly comes with one nozzle shield. **See Section I for connection specifications.

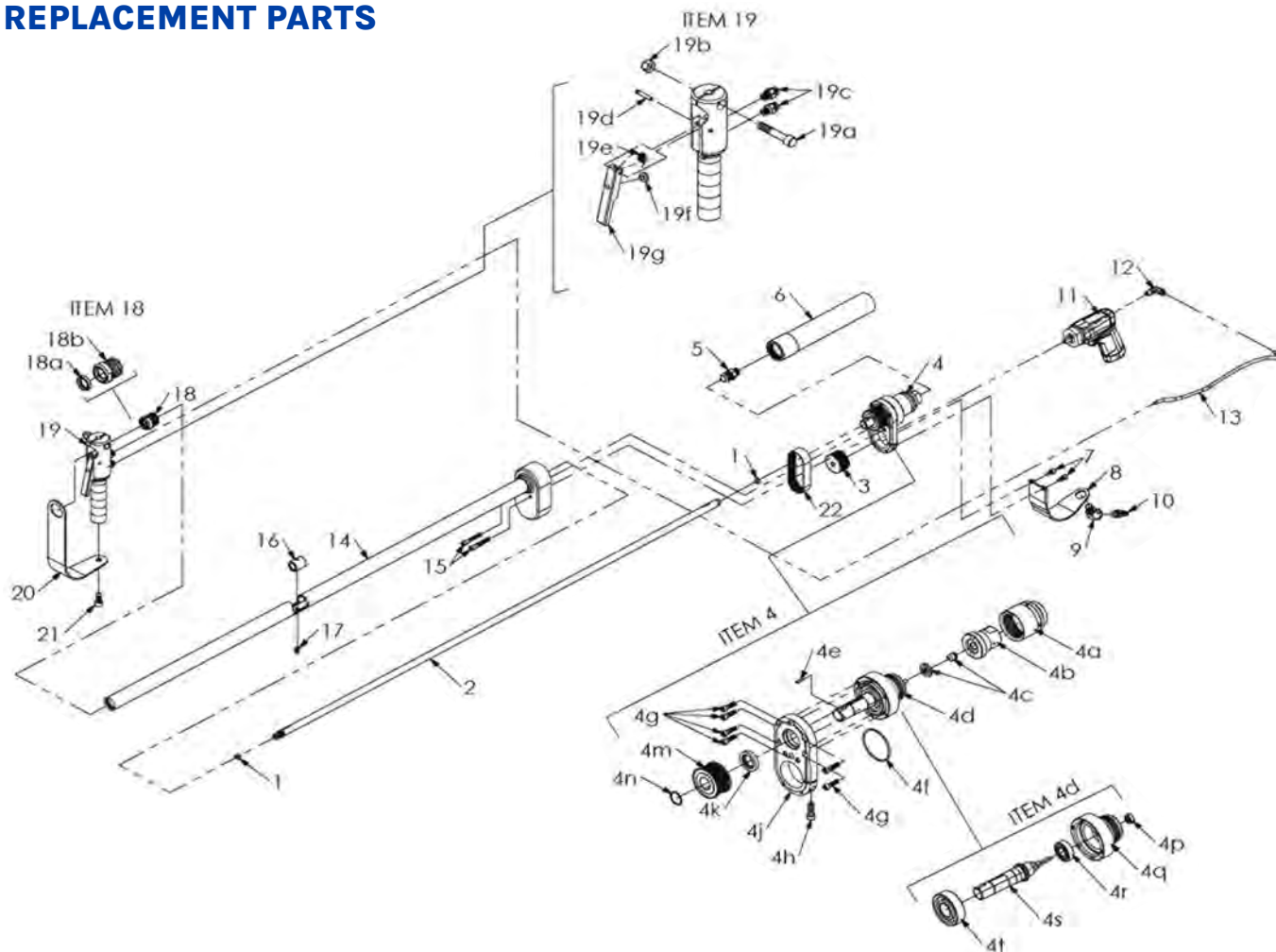


TORNADO SURFACE CLEANING NOZZLE HEAD - SMALL DIAMETER

Designed for use with the Jetstream FXG2 Tornado Gun and other air-powered rotary control guns. 0.75" spray pattern. Utilizes Jetstream **UHPX/UHPXi/UHPXD Series** replaceable nozzle tips (see Section G for more information). **Part No. 67434**

SP-40 TORNADO SPINNER GUN

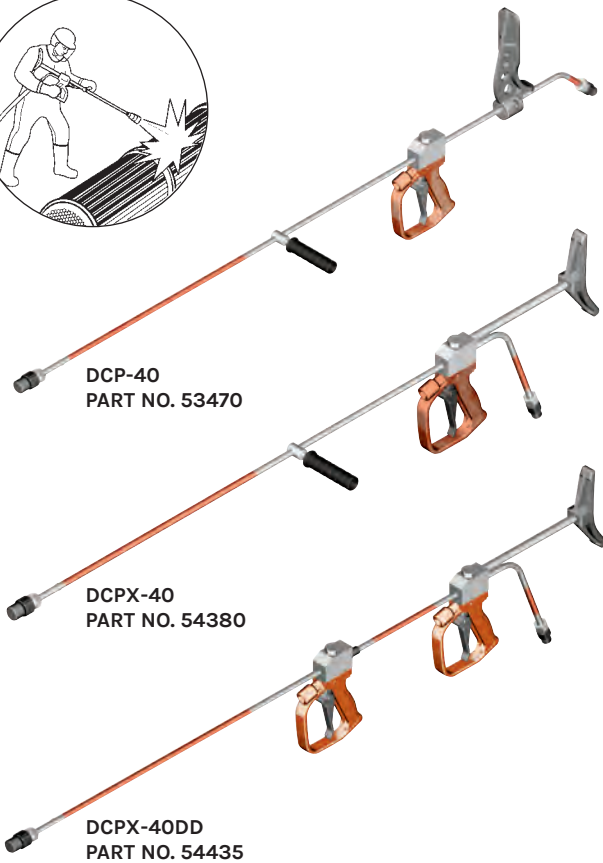
REPLACEMENT PARTS



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	54059	Button Seal	4q	53704	Swivel Housing	18	53972 (with seal)	Front Barrel Bushing
2	53701	36" Barrel	4r	27710	Guide Bushing	18a	27707	Barrel Seal
	53894	46" Barrel	4s	53708	Shaft	18b	53732	Front Barrel Bushing
3	54307	Driver Sprocket	4t	62594	Thrust Bearing	19	53785	Secondary Handle
4	53973	Swivel Assembly	5	27530	Connector M9 x .38	19a	53762	Clamp Stud
4a	53711	Swivel Nut	6	53723	Burst Shield	19b	64451	Nut
4b	53709	Inlet Adapter	7	25261	Capscrew	19c	27732	Tubing Adapter
4c	53775	Seal Kit	8	29808	Trigger Guard	19d	53787	Pin
4d	54230	Swivel Rebuild Kit	9	28224	Elbow	19e	53798	Spring
4e	27277	Pin	10	28223	Male Quick Disconnect Fitting	19f	27719	Bumper
4f	27883	O-Ring	11	65098	Pneumatic Drill	19g	53761	Trigger
4g	27716	Capscrew	12	27733	Elbow	20	27662	Trigger Guard
4h	27713	Capscrew	13	27740	Tubing (Order in Feet)	21	27714	Capscrew
4j	53703	Mounting Plate	14	54484	36" Barrel Housing	22	27661	Belt
4k	27708	Shaft Seal		54486	46" Barrel Housing			
4m	53782	Driven Sprocket	15	27717	Capscrew			
4n	27712	Retaining Ring	16	53771	Center Barrel Bushing*			
4p	27709	Shaft Seal	17	27492	Grease Zerk*			

*48" barrel model uses two center barrel bushings and two grease zerks. 36" barrel model uses one of each. **Not Shown



DURASAFE™ HAND GUNS

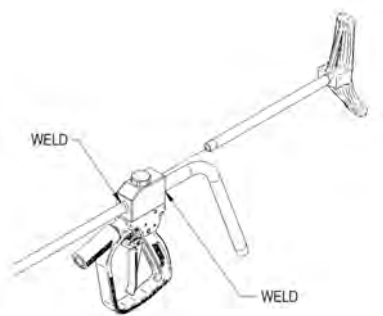
DUMP STYLE

DuraSafe™ 40,000 psi control guns allow the operator to have complete control of the pressure at all times.

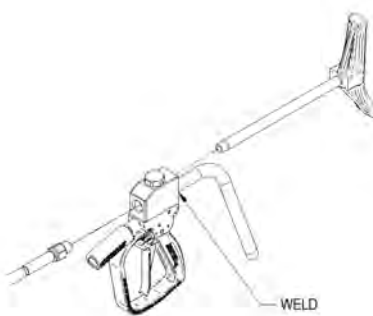
- ▶ Replaceable cartridge design for minimal downtime.
- ▶ 48" distance from primary trigger to end of barrel to ensure maximum operator safety.*
- ▶ Lightweight.
- ▶ DCP models feature fully adjustable body pad for maximum operator comfort in any position (shoulder, hip, chest, etc.), while an ergonomically designed shoulder stock is included with DCPx models.
- ▶ Adjustable secondary grip included with single trigger models.
- ▶ Dual trigger models require both triggers to be engaged in order to build system pressure for maximum operator safety.
- ▶ All pressure-bearing components are stainless steel.
- ▶ Equipped with holder for single nozzle.
- ▶ Ideal for use with self-rotating nozzles.
- ▶ Fully field repairable guns available. No barrel weldments allows for gun maintenance to be completed on the job.
- ▶ All Jetstream Hand Guns are color-coded orange for added safety at 40,000 psi (2758 bar).

*Custom length barrels available. Call for information.

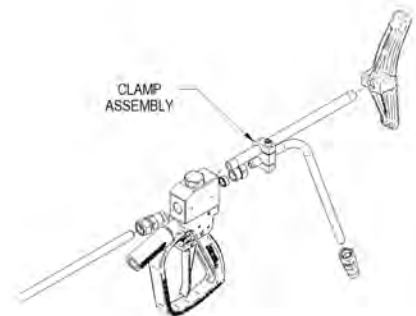
STANDARD, WELDED



PARTIALLY FIELD REPAIRABLE



FULLY FIELD REPAIRABLE



NOTE: The Jetstream PI082 Safety Pamphlet Section 'CONTROL GUNS AND DEVICES' Item 5:

The use of a Safety Shroud and Safety Whip Hose with handheld control guns is strongly recommended for additional operator protection against a burst occurring in the high pressure hose connected to the gun. Use of Hand Grip and Shoulder Stock in hand-held control guns will provide greater operator comfort and safety.

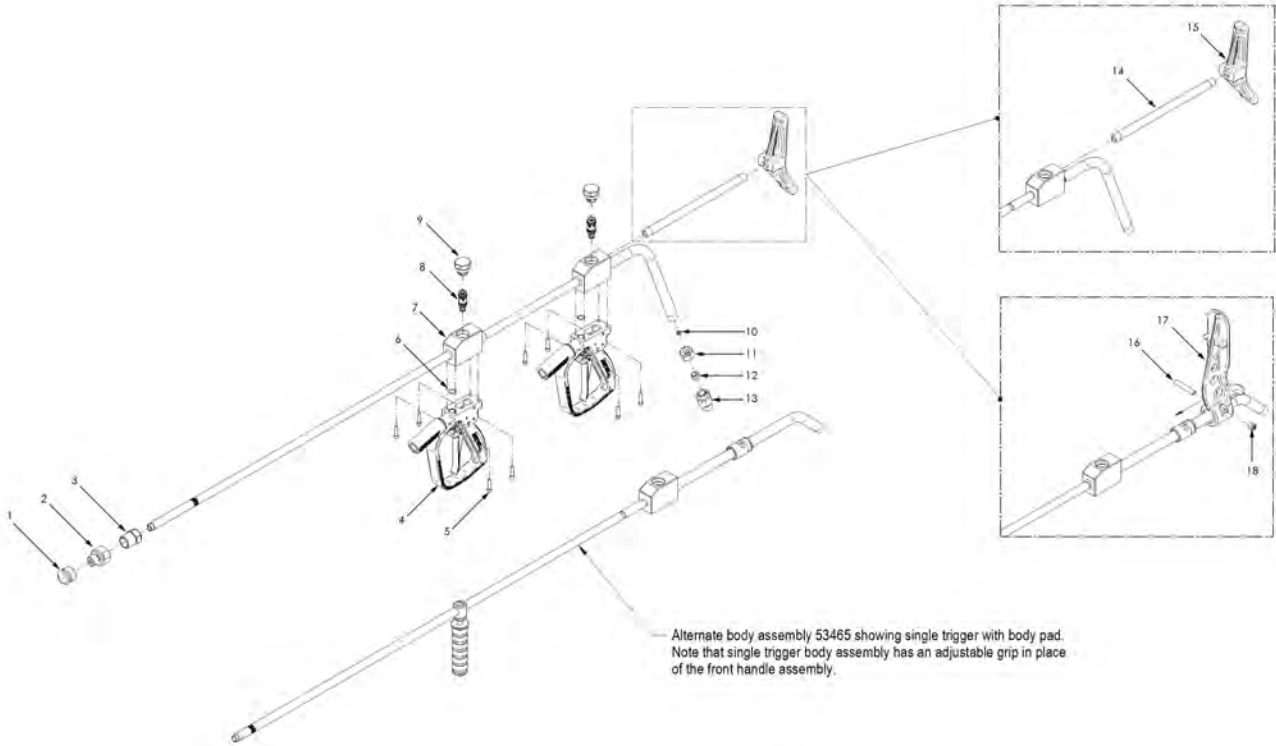
DURASAFE™ HAND GUNS

DUMP STYLE

STANDARD, WELDED GUN

PART NO.	MODEL	TRIGGER ACTUATION	REST TYPE	INLET CONNECTION*	OUTLET CONNECTION	LENGTH		MAX. OPERATING PRESSURE	
						in	mm	psi	bar
53470	DCP-40	Single	Body Pad	7/8" Type M Male	9/16" HP Male	71	180	40,000	2,758
54380	DCPx-40	Single	Shoulder Stock			66	167	40,000	2,758
54435	DCPx-40DD	Dual	Shoulder Stock			70	177	40,000	2,758

*Adapters available for other connection types. See details on all connection types in Section I.



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	53537	Cap, Nozzle Holder	11	52083	Collet Nut
2	53536	Nozzle Holder	12	52087	Collet
3	28090	Anti-Vibe Gland Ay	13	53468	Adapter, Rear Barrel
4	57956-68	Handle Ay, Orange	14	50127	Extension, Shoulder Stock (54380, 54435)
5	26689	Capscrew	15	65808	Shoulder Stock (54380, 54435)
6	25193	O-Ring	16	53303	Stud (53470)
7	53465	Body Ay (53470)	17	53304	Body Pad (53470)
	54365	Body Ay (54380)	18	25296	Nut
	54440	Body Ay (54435)	19*	66000	Decal, Front Barrel, Orange
8	53475	Cartridge	20*	64268	Decal, Rear Barrel, Orange
9	53175	Plug	21*	71744	Decal, Body Orange
10	27502	O-Ring	22*	66332	Cushion, Shoulder Stock (54380, 54435)

*Not shown.

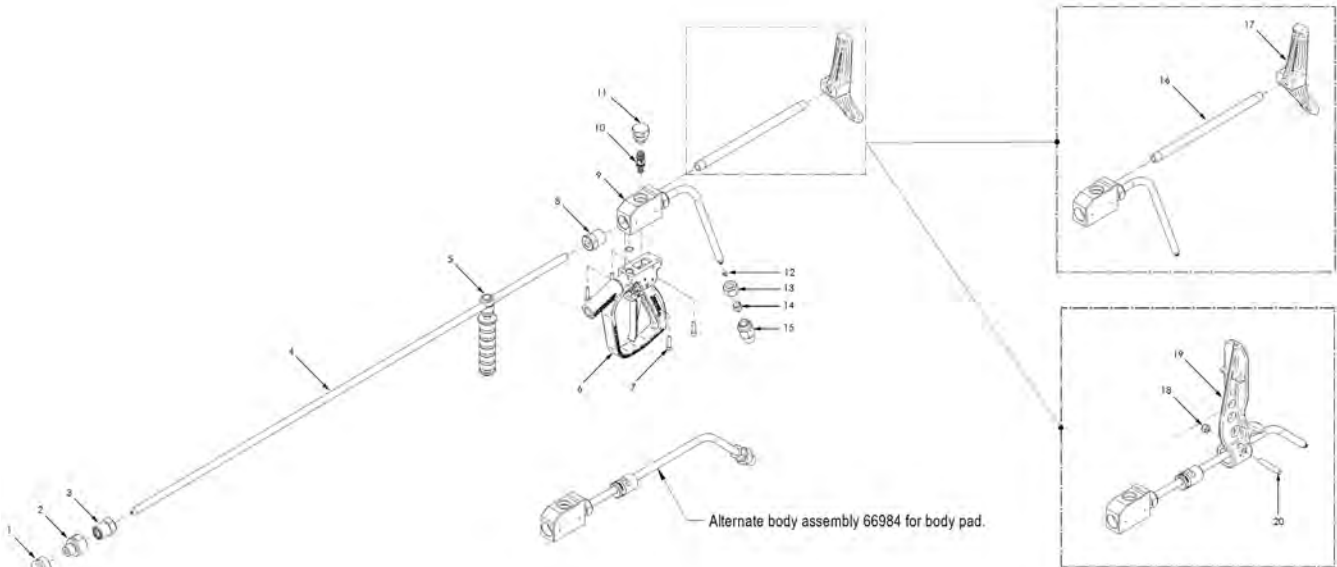
DURASAFE™ HAND GUNS

DUMP STYLE

PARTIALLY FIELD REPAIRABLE GUN

PART NO.	MODEL	TRIGGER ACTUATION	REST TYPE	INLET CONNECTION*	OUTLET CONNECTION	LENGTH		MAX. OPERATING PRESSURE	
						in	mm	psi	bar
59822	DCP-40	Single	Body Pad	7/8" Type M Male	9/16" HP Male	71	180	40,000	2,758
59823	DCPx-40	Single	Shoulder Stock			66	167	40,000	2,758

*Adapters available for other connection types. See details on all connection types in Section I.



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	53537	Cap, Nozzle Holder	13	52083	Collet Nut
2	53536	Nozzle Holder	14	52087	Collet
3	28090	Anti-Vibe Gland Ay	15	53468	Adapter, Rear Barrel
4	54209-48	Nipple, 48"	16	50127	Extension, Shoulder Stock (59823)
5	53464	Grip Ay	17	65808	Shoulder Stock (59823)
6	57956-68	Handle Ay, Orange	18	25296	Nut (59822)
7	26689	Capscrew	19	53304	Body Pad (59822)
8	28090	Anti-Vibe Gland Ay	20	53303	Stud (59822)
9	66899	Body Ay (59823)	21*	66000	Decal, Front Barrel, Orange
	66984	Body Ay (59822)	22*	64268	Decal, Rear Barrel, Orange
10	53475	Cartridge	23*	71744	Decal, Body Orange
11	53175	Plug	24*	66332	Cushion, Shoulder Stock (54380, 54435)
12	27502	O-Ring			

*Not shown.

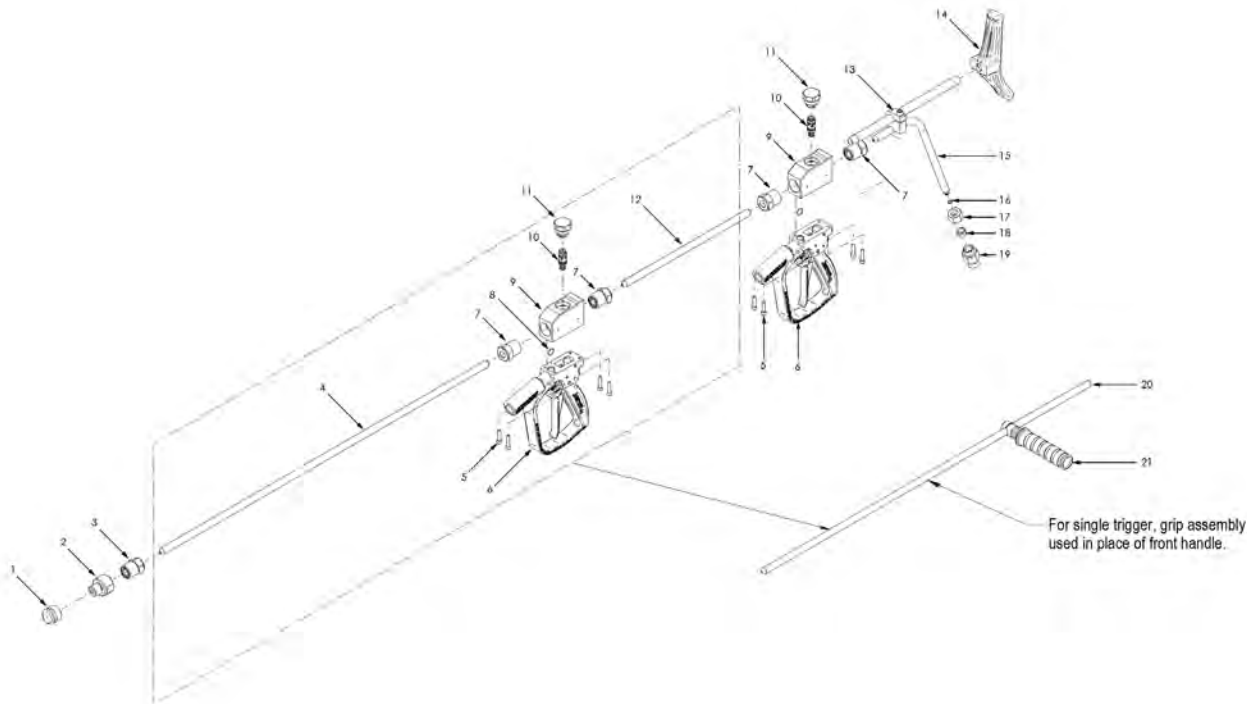
DURASAFE™ HAND GUNS

DUMP STYLE

FULLY FIELD REPAIRABLE GUN

PART NO.	MODEL	TRIGGER ACTUATION	REST TYPE	INLET CONNECTION*	OUTLET CONNECTION	LENGTH		MAX. OPERATING PRESSURE	
						in	mm	psi	bar
56995	FR-40SD	Single	Shoulder Stock	7/8" Type M Male	9/16" HP Male	66	167	40,000	2,758
56991	FR-40DD	Dual	Shoulder Stock			66	167	40,000	2,758

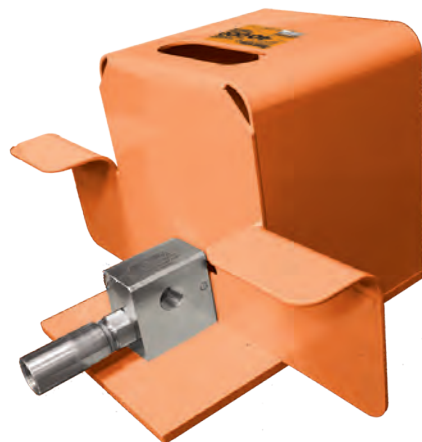
*Adapters available for other connection types. See details on all connection types in Section I.



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	53537	Cap, Nozzle Holder	14	65808	Shoulder Stock
2	53536	Nozzle Holder	15	56996	Rear Barrel
3	28090	Anti-Vibe Gland Ay	16	27502	O-Ring
4	54209-48	Nipple. 48"	17	52083	Collet Nut
5	26689	Capscrew	18	52087	Collet
6	57956-68	Handle Ay, Orange	19	53468	Adapter, Rear Barrel
7	28090	Anti-Vibe Gland Ay	20	54209-48	Nipple, 48" (56995)
8	25193	O-Ring	21	53464	Grip Ay (56995)
9	56997	Body, Dump Valve	22*	66000	Decal, Front Barrel, Orange
10	53475	Cartridge	23*	64268	Decal, Rear Barrel, Orange
11	53175	Plug	24*	71744	Decal, Body Orange
12	54209-14	Nipple, 14"	25*	66332	Cushion, Shoulder Stock
13	61882	Clamp Ay, Shoulder Stock			

*Not shown.

DURASAFE™ FOOT GUN

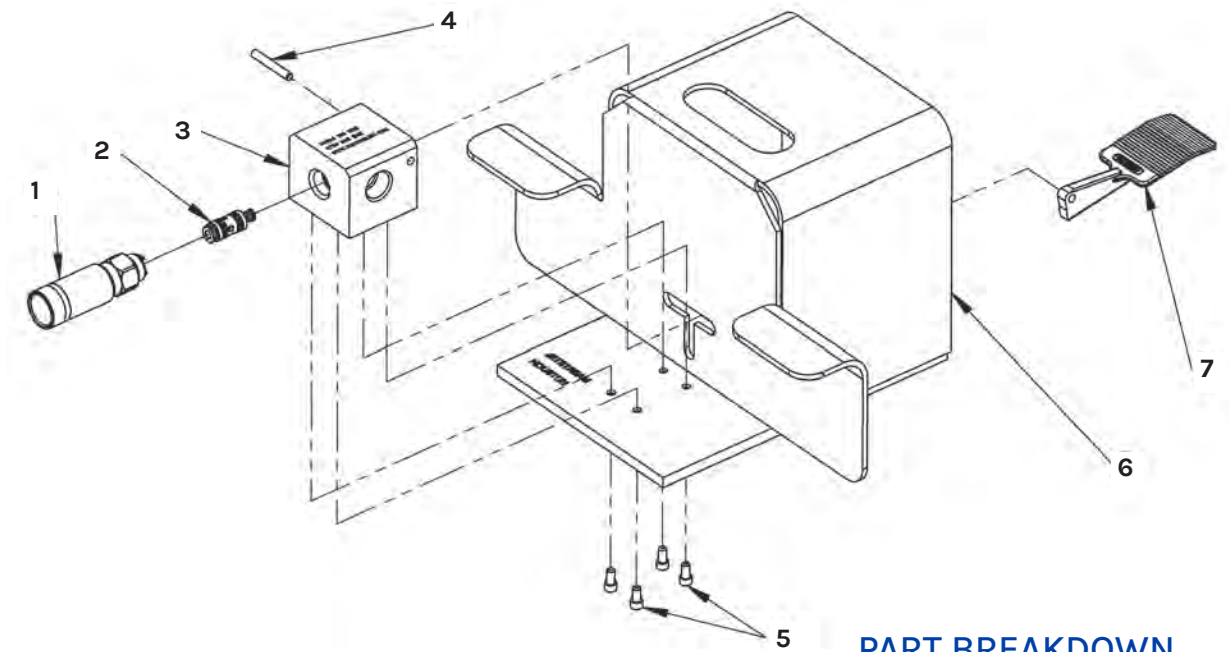


Ideal for a variety of waterblast tube cleaning applications, the Durasafe™ DCF-40 foot-operated control gun allows the operator to have complete control of the pressure at all times.

- ▶ Custom safety cage and thick blast wall protect operators better than any foot control gun in the industry
- ▶ Built in “wings” protect high pressure end fittings from external damage
- ▶ VSS orange powder-coated

PART NO.	MODEL	INLET & OUTLET CONNECTIONS*	DIMENSIONS (H X W X D)		WEIGHT		MAX. OPERATING PRESSURE	
			in	mm	lbs	kg	psi	bar
59373	DCF-40	Jetstream 40K Port Female	7.9 x 14.8 x 12.7	200 x 380 x 320	26.2	11.9	40,000	2,758

*Adapters available for other connection sizes and types. See replacement parts below.



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION
1	51864	Diffuser
2	53475	C-40 Cartridge
3	53546	Body
4	26453	Pin
5	25261	Capscrew
6	55432	Base
7	53373	Pedal



ROTARY, STRAIGHT, PIPE & TUBE CLEANING TOOLS & NOZZLES

Jetstream provides nozzles for different 40,000 psi applications in surface preparation and tube cleaning. All of our nozzles are made of stainless steel or hardened steel and treated to withstand ultra high pressures.

The Tornado nozzle is a rotary nozzle designed to use in conjunction with the Jetstream tornado gun or other air-powered rotary control guns. This nozzle utilizes the UHPX/UHPXi sapphire nozzles or UHPXD synthetic diamond nozzles for the high output.

The UHPX, UHPXi, and UHPXD nozzles are premier high productivity nozzles used in a variety of 40,000 psi applications. The UHPX and UHPXD series have an external hex, while the UHPXi have an internal hex. The tapered orifice retainer reduces turbulence and provides a cohesive, aggressive waterjet.

Tube cleaning nozzles are drilled for each order and are designed for use at the end of a flex lance or rigid lance. The configurations and flow ratings are customized to each specific request per the job requirements. Jetstream has put together fourteen standard patterns; however, these can be drilled in any pattern requested and it has been determined that the nozzle will perform efficiently.

NOTE: Jetstream is an authorized distributor for many vendors and can offer additional specialized rotary, abrasive cutting and pipe cleaning nozzles are upon request.





MAGJET® X40

ROTARY SURFACE PREPARATION TOOL

The Jetstream MagJet X40 is a rugged, self-powered, rotating tool utilizing up to four straight-pattern, hard-hitting, replaceable sapphire nozzles, rated up to 43,500 psi. The tool rotates in a 360° pattern to provide maximum surface coverage and superior cleaning.

- ▶ Straight-pattern nozzles produce concentrated streams for more cleaning power than a fan tip.
- ▶ Multiple head assemblies are available so that the desired rotation speed can be maintained across a wide range of flow rates.
- ▶ Magnetic braking system controls rotational speed for minimal wear and maximum cleaning.
- ▶ Rebuild kit allows five minute complete overhaul of wear components right in the field.
- ▶ Use with Sapphire **UHPX/UHPXi Series** or Synthetic Diamond **UHPXD Series** nozzles.
- ▶ **Premium Kits** and **Starter Kits** are available for full product tools.

PART NO.	INLET CONNECTION*	SPEED RANGE	DIAMETER		ASSEMBLY LENGTH		ASSEMBLY WEIGHT		MAX. FLOW RATE (HAND GUN)		MAX. OPERATING PRESSURE	
		rpm	in	mm	in	mm	lbs	kg	gpm	lpm	psi	bar
64635	9/16" HP Female	1000-2500	2.3	57	9.4	238	4.0	1.8	7.0	26.5	43,500	3,000

*See details on all connection types in Section I.

TOOL KITS

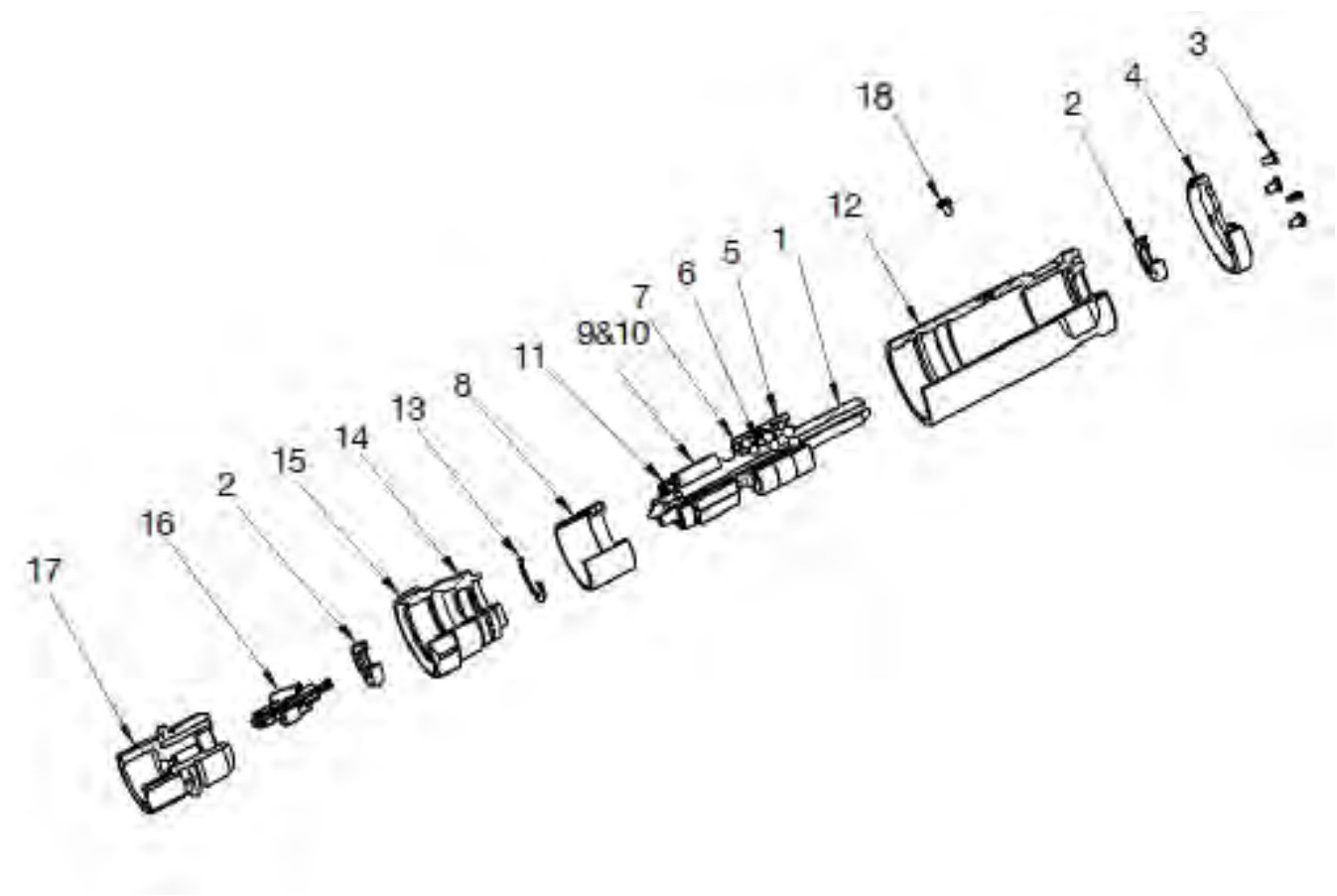
PART NO.	DESCRIPTION
67513	T1 Starter Kit
67514	T2 Starter Kit
65306	T3 Starter Kit
66236	T4 Starter Kit
65308	T5 Starter Kit
66237	T6 Starter Kit
67515	T7 Starter Kit
68002	T1/T3 Premium Kit
65307	T3/T5 Premium Kit
66238	T4/T6 Premium Kit



MagJet X40 Premium Kit

MAGJET® X40

PART BREAKDOWN



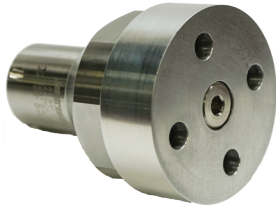
ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	57938	Shaft	10	65005S	South Magnet
2	57926	Oil Seal	11	57928	Pilot Bearing
3	64637	Capscrew	12	64636	Main Housing
4	64638	Front Cover	13	57931	Wave Spring
5	57933	Contact Bearing	14	57935	O-Ring
6	64992	Shim	15	57918	Pilot Bearing Retainer
7	64991	Ball Bearing	16	57911	Seal Cartridge
8	57937	Current Sleeve	17	57916	Seal Cartridge Housing
9	65005N	North Magnet	18	66982	Screw, Torx

TOOLS &
NOZZLES

MAGJET® X40 ACCESSORIES

HEAD ASSEMBLIES

DESIGNATION	PART NO.	TORQUE ANGLE	FLOW RANGE (GPM @ 40K PSI)
T1	66881	10°	6.0 - 11.0
T2	66261	12.5°	4.9 - 9.0
T3	64919	15°	4.1 - 7.3
T4	65803	17.5°	3.4 - 6.3
T5	64920	20°	2.9 - 5.4
T6	65804	22.5°	2.5 - 4.6
T7	66259	25°	2.3 - 4.3



SEAL CARTRIDGE

The patented seal cartridge is designed to facilitate quick seal changes without special tools or small parts that are easy to lose.
Part No. 57911



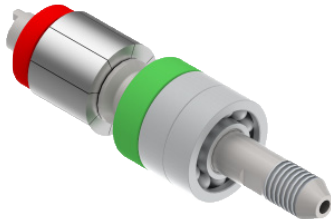
ALUMINUM EXTERNAL GUARD

Provides additional protection to reduce wear on the head assembly and body. **Part No. 67082**



SHAFT KIT

Part No. 66266



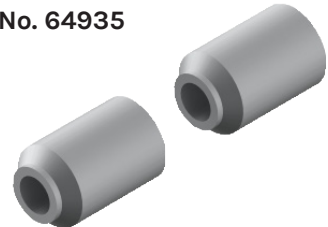
OIL SEAL PRESS TOOL

Part No. 64957



BEARING PRESS TOOL

Part No. 64935



SECURITY TORX L-KEY

Part No. 66983



OVERHAUL KIT

Part No. 65313



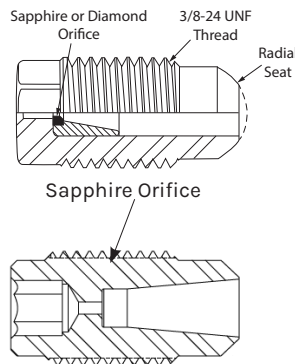
MAGJET® X40 NOZZLES

UHPX/UHPXi/UHPXD SERIES NOZZLES

UHPX/
UHPXD



UHPXi



- High productivity sapphire (UHPX, UHPXi) or synthetic diamond (UHPXD) nozzles for use in the MagJet X40.
- UHPX and UHPXD have 5/16" external hex, UHPXi have 5/32" internal hex
- Tapered orifice retainer reduces turbulence and provides a cohesive, aggressive waterjet.
- Select nozzles from the charts below by choosing head type, operating pressure, desired flow, and two or four nozzle operation.

FOUR UHPX/UHPXi/UHPXD NOZZLES

NOZZLE SIZE*					T1 HEAD						T2 HEAD										
UHPX PART NO	UHPXi PART NO.	UHPXD PART NO.	ORIFICE DIAMETER		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)						
			in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm					
UHPX-017	UHPXi-017	UHPXD-017	.017	0.43											4.8	18					
UHPX-018	UHPXi-018	UHPXD-018	.018	0.46									5.2	20	5.4	20					
UHPX-019	UHPXi-019	UHPXD-019	.019	0.48									6.0	23			5.7	22	6.0	23	
UHPX-020	UHPXi-020	UHPXD-020	.020	0.51								6.4	24	6.6	25	5.5	21	6.4	24	6.6	25
UHPX-021	UHPXi-021	UHPXD-021	.021	0.53								7.0	27	7.3	28	6.1	23	7.0	26	7.3	28
UHPX-022	UHPXi-022	UHPXD-022	.022	0.56								7.7	29	8.0	30	6.6	25	7.7	29	8.0	30
UHPX-023	UHPXi-023	UHPXD-023	.023	0.58	7.3	28	8.4	32	8.8	33	7.2	27	8.4	32							
UHPX-024	UHPXi-024	UHPXD-024	.024	0.61	7.9	30	9.2	35	9.5	36	7.9	30									
UHPX-025	UHPXi-025	UHPXD-025	.025	0.64	8.6	33	9.9	38	10.4	39	8.5	32									
UHPX-026	UHPXi-026	UHPXD-026	.026	0.66	9.3	35	10.7	41			9.2	35									
UHPX-027	UHPXi-027	UHPXD-027	.027	0.69	10.0	38					9.9	38									
UHPX-028	UHPXi-028	UHPXD-028	.028	0.71	10.8	41															
UHPX-029	UHPXi-029	UHPXD-029	.029	0.74	11.6	44															
UHPX-030	UHPXi-030	UHPXD-030	.030	0.76	12.4	47															

*Orifice size is denoted in the part number (-018, etc.).

MAGJET® X40 NOZZLES

FOUR UHPX/UHPXi/UHPXD NOZZLES

NOZZLE SIZE					T3 HEAD						T4 HEAD													
UHPX PART NO.	UHPXi PART NO.	UHPXD PART NO.	ORIFICE DIAMETER		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)									
			in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm								
UHPX-014	UHPXi-014	UHPXD-014	.014	0.36											3.3	12								
UHPX-015	UHPXi-015	UHPXD-015	.015	0.38											3.6	14	3.8	14						
UHPX-016	UHPXi-016	UHPXD-016	.016	0.41											4.1	15	4.3	16						
UHPX-017	UHPXi-017	UHPXD-017	.017	0.43											4.6	17	4.8	18	4.0	15	4.6	17	4.8	18
UHPX-018	UHPXi-018	UHPXD-018	.018	0.46											5.2	20	5.4	20	4.5	17	5.2	20	5.4	20
UHPX-019	UHPXi-019	UHPXD-019	.019	0.48	5.0	19	5.7	22	6.0	23	5.0	19	5.7	22										
UHPX-020	UHPXi-020	UHPXD-020	.020	0.51	5.5	21	6.4	24	6.6	25	5.5	21												
UHPX-021	UHPXi-021	UHPXD-021	.021	0.53	6.1	23	7.0	26			6.1	23												
UHPX-022	UHPXi-022	UHPXD-022	.022	0.56	6.6	25					6.6	25												
UHPX-023	UHPXi-023	UHPXD-023	.023	0.58	7.2	27					7.2	27												
UHPX-024	UHPXi-024	UHPXD-024	.024	0.61	7.9	30																		
NOZZLE SIZE					T5 HEAD								T6 HEAD											
UHPX-013	UHPXi-013	UHPXD-013	.013	0.33					2.8	11			2.7	10	2.8	11								
UHPX-014	UHPXi-014	UHPXD-014	.014	0.36					3.1	12			3.3	12	3.1	12	3.3	12						
UHPX-015	UHPXi-015	UHPXD-015	.015	0.38					3.6	14	3.8	14	3.1	12	3.6	14	3.8	14						
UHPX-016	UHPXi-016	UHPXD-016	.016	0.41	3.5	13	4.1	15	4.3	16	3.5	13	4.1	15	4.3	16								
UHPX-017	UHPXi-017	UHPXD-017	.017	0.43	4.0	15	4.6	17	4.8	18	4.0	15	4.6	17										
UHPX-018	UHPXi-018	UHPXD-018	.018	0.46	4.5	17	5.2	20			4.5	17												
UHPX-019	UHPXi-019	UHPXD-019	.019	0.48	5.0	19					5.0	19												
UHPX-020	UHPXi-020	UHPXD-020	.020	0.51	5.5	21																		
UHPX-021	UHPXi-021	UHPXD-021	.021	0.53	6.1	23																		
NOZZLE SIZE					T7 HEAD																			
UHPX-012	UHPXi-012	UHPXD-012	.012	0.30					2.4	9														
UHPX-013	UHPXi-013	UHPXD-013	.013	0.33					2.7	10							2.8	11						
UHPX-014	UHPXi-014	UHPXD-014	.014	0.36	2.7	10	3.1	12	3.3	12														
UHPX-015	UHPXi-015	UHPXD-015	.015	0.38	3.1	12	3.6	14	3.7	14														
UHPX-016	UHPXi-016	UHPXD-016	.016	0.41	3.5	13	4.1	15																
UHPX-017	UHPXi-017	UHPXD-017	.017	0.43	4.0	15																		
UHPX-018	UHPXi-018	UHPXD-018	.018	0.46	4.5	17																		
UHPX-019	UHPXi-019	UHPXD-019	.019	0.48	5.0	19																		
UHPX-020	UHPXi-020	UHPXD-020	.020	0.51	5.5	21																		

MAGJET® X40 NOZZLES

TWO UHPX/UHPXI/UHPXD NOZZLES AND TWO PLUGS

NOZZLE SIZE					T1 HEAD						T2 HEAD															
UHPX PART NO.	UHPXI PART NO.	UHPXD PART NO.	ORIFICE DIAMETER		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)											
			in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm										
UHPX-024	UHPXi-024	UHPXD-024	.024	0.61																						
UHPX-025	UHPXi-025	UHPXD-025	.025	0.64													4.8	18								
UHPX-026	UHPXi-026	UHPXD-026	.026	0.66													5.0	19	5.2	20						
UHPX-027	UHPXi-027	UHPXD-027	.027	0.69													5.4	20	5.6	21						
UHPX-028	UHPXi-028	UHPXD-028	.028	0.71													5.8	22	6.1	23						
UHPX-029	UHPXi-029	UHPXD-029	.029	0.74													6.2	24	6.5	25						
UHPX-030	UHPXi-030	UHPXD-030	.030	0.76													6.7	25	7.0	26	5.8	22	6.7	25	7.0	26
UHPX-031	UHPXi-031	UHPXD-031	.031	0.79													7.2	27	7.5	28	6.2	23	7.1	27	7.4	28
UHPX-032	UHPXi-032	UHPXD-032	.032	0.81	7.6	29	8.0	30	6.6	25	7.6	29	7.9	30												
UHPX-033	UHPXi-033	UHPXD-033	.033	0.84	7.0	27	8.1	31	8.5	32	6.2	23	7.1	27	7.4	28										
UHPX-034	UHPXi-034	UHPXD-034	.034	0.86	7.5	28	8.7	33	9.0	34	6.6	25	7.6	29	7.9	30										
UHPX-035	UHPXi-035	UHPXD-035	.035	0.89	8.0	30	9.2	35	9.6	36	6.6	25	7.6	29	7.9	30										
UHPX-036	UHPXi-036	UHPXD-036	.036	0.91	8.4	32	9.7	37	10.2	38	6.6	25	7.6	29	7.9	30										
UHPX-037	UHPXi-037	UHPXD-037	.037	0.94	8.9	34	10.3	39			6.6	25	7.6	29	7.9	30										
UHPX-038	UHPXi-038	UHPXD-038	.038	0.97	9.4	36	10.9	41			6.6	25	7.6	29	7.9	30										
UHPX-039	UHPXi-039	UHPXD-039	.039	0.99	9.9	38					6.6	25	7.6	29	7.9	30										
UHPX-040	UHPXi-040	UHPXD-040	.040	1.01	10.3	39					6.6	25	7.6	29	7.9	30										
UHPX-041	UHPXi-041	UHPXD-041	.041	1.04	10.5	40					6.6	25	7.6	29	7.9	30										
UHPX-042	UHPXi-042	UHPXD-042	.042	1.07	10.9	41					6.6	25	7.6	29	7.9	30										
UHPX-043	UHPXi-043	UHPXD-043	.043	1.09	11.0	42					6.6	25	7.6	29	7.9	30										
UHPX-044	UHPXi-044	UHPXD-044	.044	1.12	11.6	44					6.6	25	7.6	29	7.9	30										

*Orifice size is denoted in the part number (-018, etc.).

MAGJET® X40 NOZZLES

TWO UHPX/UHPXI/UHPXD NOZZLES AND TWO PLUGS

NOZZLE SIZE					T3 HEAD						T4 HEAD											
UHPX PART NO.	UHPXI PART NO.	UHPXD PART NO.	ORIFICE DIAMETER		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)							
			in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm						
UHPX-020	UHPXi-020	UHPXD-020	.020	0.51											3.3	13						
UHPX-021	UHPXi-021	UHPXD-021	.021	0.53											3.5	13			3.7	14		
UHPX-022	UHPXi-022	UHPXD-022	.022	0.56											3.9	15			4.0	15		
UHPX-023	UHPXi-023	UHPXD-023	.023	0.58											4.2	16			4.4	17		
UHPX-024	UHPXi-024	UHPXD-024	.024	0.61							4.6	17	4.8	18	4.0	15			4.6	17	4.8	18
UHPX-025	UHPXi-025	UHPXD-025	.025	0.64							5.0	19	5.2	20	4.3	16			5.0	19	5.2	20
UHPX-026	UHPXi-026	UHPXD-026	.026	0.66	4.7	18	5.4	20	5.6	21	4.7	18	5.4	20	5.6	21						
UHPX-027	UHPXi-027	UHPXD-027	.027	0.69	5.0	19	5.8	22	6.1	23	5.0	19	5.8	22								
UHPX-028	UHPXi-028	UHPXD-028	.028	0.71	5.4	21	6.2	24	6.5	25	5.4	20	6.2	24								
UHPX-029	UHPXi-029	UHPXD-029	.029	0.74	5.8	22	6.7	25			5.8	22										
UHPX-030	UHPXi-030	UHPXD-030	.030	0.76	6.2	23	7.2	27			6.2	23										
UHPX-031	UHPXi-031	UHPXD-031	.031	0.79	6.6	25					6.6	25										
UHPX-032	UHPXi-032	UHPXD-032	.032	0.81	7.0	27			7.0	27												
UHPX-033	UHPXi-033	UHPXD-033	.033	0.84	7.4	28																
UHPX-034	UHPXi-034	UHPXD-034	.034	0.86	7.9	30																
NOZZLE SIZE					T5 HEAD						T6 HEAD											
UHPX-018	UHPXi-018	UHPXD-018	.018	0.46											2.6	10	2.7	10				
UHPX-019	UHPXi-019	UHPXD-019	.019	0.48											3.0	11	2.9	11			3.0	11
UHPX-020	UHPXi-020	UHPXD-020	.020	0.51											3.2	12	3.3	13			3.2	12
UHPX-021	UHPXi-021	UHPXD-021	.021	0.53			3.5	13	3.7	14	3.1	12			3.5	13	3.7	14				
UHPX-022	UHPXi-022	UHPXD-022	.022	0.56			3.4	13	3.9	15	4.0	15			3.4	13	3.9	15			4.0	15
UHPX-023	UHPXi-023	UHPXD-023	.023	0.58			3.7	14	4.2	16	4.4	17			3.7	14	4.2	16			4.4	17
UHPX-024	UHPXi-024	UHPXD-024	.024	0.61	4.0	15	4.6	17	4.8	18	4.0	15			4.6	17						
UHPX-025	UHPXi-025	UHPXD-025	.025	0.64	4.3	16	5.0	19			4.3	16										
UHPX-026	UHPXi-026	UHPXD-026	.026	0.66	4.7	18	5.4	20			4.7	18										
UHPX-027	UHPXi-027	UHPXD-027	.027	0.69	5.0	19					5.0	19										
UHPX-028	UHPXi-028	UHPXD-028	.028	0.71	5.4	20			5.4	20												
UHPX-029	UHPXi-029	UHPXD-029	.029	0.74	5.8	22																
UHPX-030	UHPXi-030	UHPXD-030	.030	0.76	6.2	23																

*Orifice size is denoted in the part number (-018, etc.).

MAGJET® X40 NOZZLES

TWO UHPX/UHPXi/UHPXD NOZZLES AND TWO PLUGS

NOZZLE SIZE					T7 HEAD							
UHPX-017	UHPXi-017	UHPXD-017	.017	0.43					2.4	9		
UHPX-018	UHPXi-018	UHPXD-018	.018	0.46					2.6	10	2.7	10
UHPX-019	UHPXi-019	UHPXD-019	.019	0.48					2.9	11	3.0	11
UHPX-020	UHPXi-020	UHPXD-020	.020	0.51	2.8	10	3.2	12	3.3	13		
UHPX-021	UHPXi-021	UHPXD-021	.021	0.53	3.1	12	3.5	13	3.7	14		
UHPX-022	UHPXi-022	UHPXD-022	.022	0.56	3.3	13	3.9	15	4.0	15		
UHPX-023	UHPXi-023	UHPXD-023	.023	0.58	3.7	14	4.2	16				
UHPX-024	UHPXi-024	UHPXD-024	.024	0.61	4.0	15						
UHPX-025	UHPXi-025	UHPXD-025	.025	0.64	4.3	16						
UHPX-026	UHPXi-026	UHPXD-026	.026	0.66	4.7	18						

*Orifice size is denoted in the part number (-018, etc.).



These resources contain additional technical information about the MagJet™ X40.

Click or scan the QR code.



Quick Start Guide
QSG-162



Product Instruction
PI-162



Jetting Calculator



MAGDART® X40

ROTARY PIPE CLEANING TOOL

The MagDart™ X40 is a self-powered rotating nozzle that offers a polisher or unplugging head for cleaning a variety of process lines. The tool rotates in a 360° pattern to provide maximum surface coverage and superior cleaning.

- ▶ Straight-pattern nozzles produce concentrated streams for more cleaning power than a fan tip.
- ▶ Multiple nozzle holders are available so that the desired rotation speed can be maintained across a wide range of flow rates.
- ▶ Magnetic braking system controls rotational speed for minimal wear and maximum cleaning.
- ▶ Rebuild kit allows five minute complete overhaul of wear components right in the field.
- ▶ Use with Sapphire **UHPX/UHPXi Series** or Synthetic Diamond **UHPXD Series** nozzles.
- ▶ A **Mega Kit**, **Premium Kits** and **Starter Kits** are available for full product tools.

PART NO.	INLET CONNECTION*	SPEED RANGE	DIAMETER		ASSEMBLY LENGTH		ASSEMBLY WEIGHT		MAX. FLOW RATE		MAX. OPERATING PRESSURE	
		rpm	in	mm	in	mm	lbs	kg	gpm	lpm	psi	bar
66416	9/16" HP Female	200 - 800	2.0	51	9.9	251	6.0	13	12	45	43,500	3,000

*See details on all connection types in Section I.

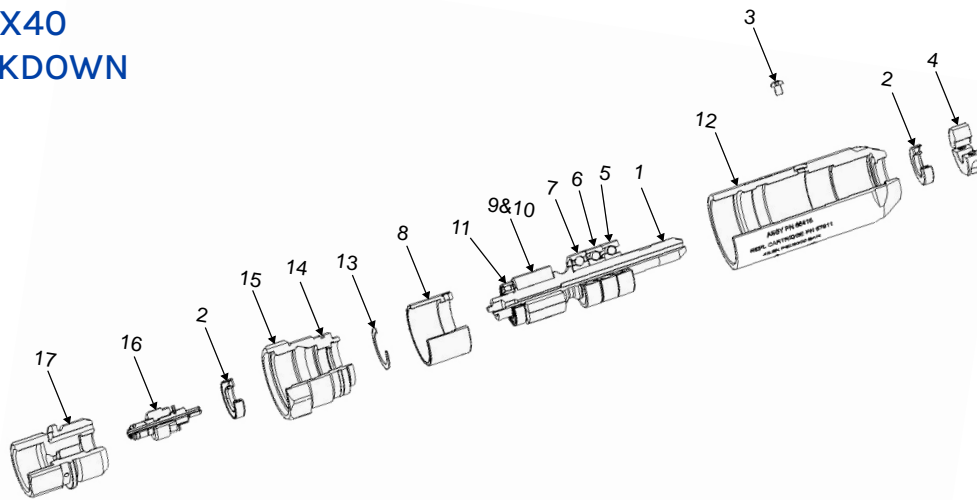
TOOL KITS

PART NO.	DESCRIPTION
66799	Mega Kit
66800-R10P	R10 Polisher Kit
66800-R10UP	R10 Unplugging Kit
66800-R17P	R17 Polisher Kit
66800-R17UP	R17 Unplugging Kit
67112-R10	R10 Polisher Premium Kit
67112-R17	R17 Unplugging Premium Kit



MagDart X40 Mega Kit

MAGDART® X40 PART BREAKDOWN



ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	57938	Shaft	10	65005S	South Magnet
2	57926	Oil Seal	11	57928	Pilot Bearing
3	64637	Screw	12	66417	Main Housing
4	66778	Shaft Clamp	13	57931	Wave Spring
5	57933	Angular Contact Bearings	14	57935	O-Ring
6	64992	Shim, Spring Steel	15	57918	Pilot Bearing Retainer
7	64991	Ball Bearing	16	57911	Seal Cartridge
8	66502	Current Sleeve	17	57916	Seal Cartridge Housing
9	65005N	North Magnet			

MAGDART X40 ACCESSORIES

NOZZLE HOLDERS

DESIGNATION	PART NO.	OFFSET	FLOW RANGE (GPM @ 40K PSI)
Unplugger	66418	R10	8 - 12
Unplugger	66433	R17	4 - 8
Polisher	66447	R10	8 - 12
Polisher	66448	R17	4 - 8



POLISHER



UNPLUGGER

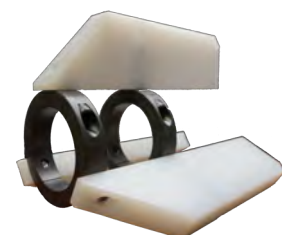
SEAL CARTRIDGE

The patented seal cartridge is designed to facilitate quick seal changes without special tools or small parts that are easy to lose.
Part No. 57911



CENTRALIZERS

PART NO.	PIPE SIZE
63842-DART-4	4" (100 mm)
63842-DART-5	5" (127 mm)
63842-DART-6	6" (152 mm)
63842-DART-8	8" (203 mm)
63842-DART-12	12" (305 mm)



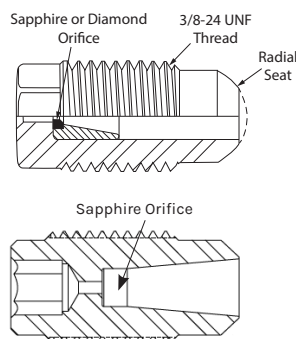
MAGDART® X40 NOZZLES

UHPX/UHPXi/UHPXD SERIES NOZZLES

UHPX/
UHPXD



UHPXi



- ▶ High productivity sapphire (UHPX, UHPXi) or synthetic diamond (UHPXD) nozzles for use in the MagDart X40.
- ▶ UHPX and UHPXD have 5/16" external hex, UHPXi have 5/32" internal hex
- ▶ Tapered orifice retainer reduces turbulence and provides a cohesive, aggressive waterjet.
- ▶ Select nozzles from the charts below by choosing head type, operating pressure, desired flow, and two or four nozzle operation.

FIVE UHPX/UHPXi/UHPXD NOZZLES

NOZZLE SIZE*				R17 UNPLUGGER						R10 UNPLUGGER					
10°, 30° & 40° PORT ORIFICE DIAMETER		2X 135° PORT ORIFICE DIAMETER		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)	
in	mm	in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
.010	.25	.019	.48			4.0	15.1	4.3	16.3						
.011	.28	.020	.51			4.6	17.4	4.9	18.5						
.012	.30	.022	.56	4.8	18.1	5.6	21.2	5.8	21.9						
.013	.33	.023	.58	5.4	20.4	6.3	23.8	6.5	24.6						
.014	.36	.024	.61	6.0	22.7	7.0	26.5							7.3	27.6
.015	.38	.025	.64	6.7	25.3							7.7	29.1	8.0	30.2
.016	.41	.026	.66	7.3	27.6							8.5	32.1	8.8	33.3
.017	.43	.027	.69							8.1	30.6	9.3	35.2	9.7	36.7
.018	.46	.028	.71							8.8	33.3	10.2	38.6	10.6	40.1
.019	.48	.029	.74							9.6	36.3	11.1	42.0	11.5	43.5
.020	.51	.031	.79							10.8	40.8				
.021	.53	.032	.81							11.6	43.8				

*Orifice size is denoted in the part number (-018, etc.).

MAGDART® X40 NOZZLES

TWO UHPX/UHPXI/UHPXD NOZZLES & 3 PLUGS

NOZZLE SIZE*				R17 UNPLUGGER						R10 UNPLUGGER															
10°, 30° & 40° PORT ORIFICE DIAMETER		2X 135° PORT ORIFICE DIAMETER		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)											
in	mm	in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm										
PLUG	--	.021	.53					3.7	14.0																
PLUG	--	.022	.56					3.8	14.4							4.0	15.1								
PLUG	--	.023	.58					4.2	15.9							4.4	16.6								
PLUG	--	.024	.61	4.0	15.1	4.6	17.4	4.8	18.1																
PLUG	--	.025	.64	4.3	16.3	5.0	18.9	5.2	19.7																
PLUG	--	.026	.66	4.6	17.4	5.4	20.4																		
PLUG	--	.027	.69	5.0	18.9																				
PLUG	--	.028	.71	5.4	20.4											6.3	23.8	6.5	24.6						
PLUG	--	.029	.74	5.8	21.9											6.7	25.3	7.0	26.5						
PLUG	--	.030	.76	6.2	23.4											7.2	27.2	7.5	28.4						
PLUG	--	.031	.79													7.7	29.1	8.0	30.2						
PLUG	--	.032	.81													7.0	26.5	8.2	31.0	8.5	32.1				
PLUG	--	.033	.84													7.5	28.4	8.7	32.9	9.0	34.0				
PLUG	--	.034	.86											8.0	30.2	9.2	34.8	9.6	36.3						
PLUG	--	.035	.89											8.5	32.1	10.0	37.8								
PLUG	--	.036	.91					9.0	34.0	10.4	39.3														
PLUG	--	.037	.94					9.5	35.9																
PLUG	--	.038	.97					10.0	37.8																
PLUG	--	.039	.99					10.5	39.7																
PLUG	--	.040	1.02					11.0	41.6																
PLUG	--	.041	1.04					11.6	43.8																

*Orifice size is denoted in the part number (-018, etc.).



These resources contain additional technical information about the MagDart™ X40.

Click or scan the QR code.



Quick Start Guide
QSG-192



Product Instruction
PI-192



Jetting Calculator

MAGDART® X40 NOZZLES

FOUR UHPX/UHPXI/UHPXD NOZZLES & 1 PLUG

NOZZLE SIZE*						R17 UNPLUGGER						R10 UNPLUGGER							
10°, 30° & 40° PORT ORIFICE DIAMETER		30° & 40° PORT ORIFICE DIAMETER		2X 135° PORT ORIFICE DIAMETER		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)			
in	mm	in	mm	in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm		
PLUG	--	.011	.28	.017	.43			3.3	12.5	3.4	12.9								
PLUG	--	.012	.30	.018	.46			3.7	14.0	3.9	14.7								
PLUG	--	.013	.33	.019	.48			4.2	15.9	4.4	16.6								
PLUG	--	.014	.36	.020	.51	4.1	15.5	4.8	18.1	5.0	18.9								
PLUG	--	.015	.38	.021	.53	4.6	17.4	5.3	20.0	5.6	21.2								
PLUG	--	.016	.41	.022	.56	5.1	19.3	5.9	22.3					6.0	22.7	6.2	23.4		
PLUG	--	.017	.43	.023	.58	5.7	21.5							6.5	24.6	6.8	25.7		
PLUG	--	.018	.46	.024	.61	6.2	23.4											7.2	27.2
PLUG	--	.019	.48	.025	.64							6.8	25.7					7.9	29.9
PLUG	--	.020	.51	.026	.66							7.5	28.4	8.7	32.9	8.9	33.6		
PLUG	--	.020	.51	.027	.69							7.8	29.5	9.4	35.5	9.4	35.5		
PLUG	--	.021	.53	.028	.71	8.5	32.1	9.8	37.0										
PLUG	--	.022	.56	.029	.74	9.2	34.8	10.6	40.1										
PLUG	--	.023	.58	.030	.76	9.9	37.4												
PLUG	--	.024	.61	.031	.79	10.6	40.1												
PLUG	--	.025	.64	.032	.81							11.4	43.1						

THREE UHPX/UHPXI/UHPXD NOZZLES & 2 PLUGS

.007	.18	PLUG	--	.021	.53			3.7	14.1	3.8	14.4										
.008	.20	PLUG	--	.022	.56			4.1	15.5	4.3	16.3										
.009	.23	PLUG	--	.023	.58	3.9	14.7	4.5	17.0	4.8	18.1										
.010	.25	PLUG	--	.024	.61	4.3	16.3	5.0	18.9	5.2	19.7										
.011	.28	PLUG	--	.025	.64	4.7	17.8	5.5	20.8	5.7	21.5										
.012	.30	PLUG	--	.026	.66	5.2	19.7	6.0	22.7							6.2	23.4				
.013	.33	PLUG	--	.027	.69	5.6	21.2							6.5	24.6	6.8	25.7				
.014	.36	PLUG	--	.028	.71	6.1	23.1							7.1	26.8	7.4	28.0				
.015	.38	PLUG	--	.029	.74	6.6	24.9							7.6	28.7	8.0	30.2				
.016	.41	PLUG	--	.030	.76	7.1	26.8							8.2	31.0	8.6	32.5				
.017	.43	PLUG	--	.031	.79							7.6	28.7	8.8	33.3	9.2	34.8				
.018	.46	PLUG	--	.032	.81							8.2	31.0	9.5	35.9	9.9	37.4				
.019	.48	PLUG	--	.033	.84							8.8	33.3	10.2	38.6	10.6	40.1				
.020	.51	PLUG	--	.034	.86							9.4	35.5	10.8	40.8	11.3	42.7				
.021	.53	PLUG	--	.035	.89							10.0	37.8	11.6	43.8						
.022	.56	PLUG	--	.036	.91							10.7	40.4								
.023	.58	PLUG	--	.037	.94							11.3	42.7								

*Orifice size is denoted in the part number (-018, etc.).

MAGDART® X40 NOZZLES

SIX UHPX/UHPXI/UHPXD NOZZLES

NOZZLE SIZE*				R17 POLISHER						R10 POLISHER					
3X 80° PORT ORIFICE SIZE		3X 100° PORT ORIFICE SIZE		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)		30,000 PSI (2,068 BAR)		40,000 PSI (2,758 BAR)		43,511 PSI (3,000 BAR)	
in	mm	in	mm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
.011	.28	.013	.33			3.5	13.2	3.6	13.6						
.012	.30	.014	.36			4.0	15.1	4.2	15.9						
.013	.33	.015	.38	4.1	15.5	4.7	17.8	4.9	18.5						
.014	.36	.016	.41	4.7	17.8	5.4	20.4	5.7	21.5					5.6	21.2
.015	.38	.017	.43	5.3	20.0	6.2	23.4					6.2	23.4	6.4	24.2
.016	.41	.018	.46	6.0	22.7							7.0	26.5	7.3	27.6
.017	.43	.019	.48	6.8	25.7					6.8	25.7	7.8	29.5	8.1	30.6
.018	.46	.020	.51							7.5	28.4	8.7	32.9	9.1	34.4
.019	.48	.021	.53							8.3	31.4	9.6	36.3	10.0	37.8
.019	.48	.022	.56							8.8	33.3	10.1	38.2	10.5	39.7
.020	.51	.022	.56							9.2	34.8	10.6	40.1		
.021	.53	.023	.58							10.0	37.8				
.021	.53	.024	.61							10.6	40.1				
.022	.56	.024	.61							11.0	41.6				
.022	.56	.025	.64							11.5	43.5				
.022	.56	.026	.66							12.0	45.4				

THREE UHPX/UHPXI/UHPXD NOZZLES & 3 PLUGS IN 80° PORTS

PLUG	--	.016	.41					3.2	12.1						
PLUG	--	.017	.43			3.5	13.2	3.6	13.6						
PLUG	--	.018	.46			3.9	14.7	4.0	15.1						
PLUG	--	.019	.48			4.3	16.3	4.5	17.0						
PLUG	--	.020	.51	4.2	15.9	4.8	18.1	5.0	18.9						
PLUG	--	.021	.53	4.6	17.4	5.3	20.0	5.5	20.8						
PLUG	--	.022	.56	5.0	18.9	5.8	21.9					5.8	21.9	6.1	23.1
PLUG	--	.023	.58	5.5	20.8							6.3	23.8	6.6	24.9
PLUG	--	.024	.61	6.0	22.7							6.9	26.1	7.2	27.3
PLUG	--	.025	.64	6.5	24.6							7.5	28.4	7.8	29.5
PLUG	--	.026	.66							7.0	26.5	8.1	30.6	8.5	32.1
PLUG	--	.027	.69							7.5	28.4	8.8	33.1	9.1	34.4
PLUG	--	.028	.71							8.1	30.6	9.4	35.5	9.8	37.0
PLUG	--	.029	.74							8.7	32.9	10.1	38.2		
PLUG	--	.030	.76							9.4	35.5				
PLUG	--	.031	.79							10.0	37.8				
PLUG	--	.032	.81							10.6	40.1				
PLUG	--	.033	.84							11.3	42.7				
PLUG	--	.034	.86							12.0	45.4				

*Orifice size is denoted in the part number (-018, etc.).

TORNADO SURFACE CLEANING FX NOZZLE HEADS

Designed for use with the Jetstream FXG2 Tornado Gun and other air-powered rotary control guns.

- ▶ Button seal connection prevents wear and leakage of the nozzle
- ▶ Manufactured from heat-treated stainless steel
- ▶ Utilizes Jetstream **UHPX/UHPXi/UHPXD Series** replaceable nozzle tips (see Section G for more information)
- ▶ Maximum Operating Pressure: 40,000 psi (2,758 bar)

RELATED PARTS

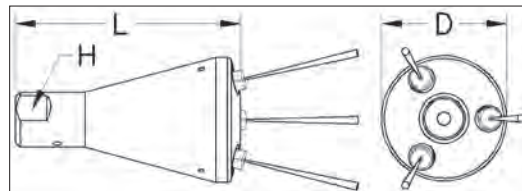
NOZZLE SHIELDS AND RETAINERS


PART NO.	DESCRIPTION
68006	2 Jet Nozzles
53763-SS	3 or 6 Jet Nozzles
64184-SS	4 Jet Nozzles
64013-SS	5 Jet Nozzles



Part No. 27722 Capscrew (for 53763-SS, 64013-SS)

Part No. 63860 Retaining Ring (for 68006, 64184-SS)



ASSEMBLY PART NO.*	DIAMETER (D)		ASSEMBLY LENGTH (L)		FLATS (H)		INLET CONNECTION**	MAX. OPERATING PRESSURE		REPLACEMENT SEAL  PART NO. 54059
	in	mm	in	mm	in	mm		psi	bar	
68262	1.90	48.3	3.37	85.6	1.16	0.53	9/16" Button Seal	40,000	2,758	
53970	1.99	50.5	3.60	91.4	1.29	0.59				
53971	1.90	48.3	3.37	85.6	1.16	0.53				
64448	1.90	48.3	3.60	91.4	1.16	0.53				
64449	1.99	50.5	3.37	85.6	1.29	0.59				

*Each assembly comes with one nozzle shield. **See Section I for connection specifications.



TORNADO SURFACE CLEANING NOZZLE HEAD - SMALL DIAMETER

Designed for use with the Jetstream FXG2 Tornado Gun and other air-powered rotary control guns. 0.75" spray pattern. Utilizes Jetstream **UHPX/UHPXi/UHPXD Series** replaceable nozzle tips (see Section G for more information).

Part No. 67434

UHPX/UHPXi/UHPXD NOZZLES

UHPX PART NO.	UHPXi PART NO.	UHPXD PART NO.	ORIFICE SIZE*		30,000 PSI (2,069 BAR)		35,000 PSI (2,414 BAR)		40,000 PSI (2,758 BAR)	
			in	mm	gpm	lpm	gpm	lpm	gpm	lpm
UHPX-PLUG			NOT APPLICABLE							
UHPX-005	UHPXi-005	UHPXD-005	0.005	0.13	0.09	0.33	0.09	0.35	0.10	0.38
UHPX-006	UHPXi-006	UHPXD-006	0.006	0.15	0.12	0.47	0.13	0.51	0.14	0.55
UHPX-007	UHPXi-007	UHPXD-007	0.007	0.18	0.17	0.64	0.18	0.69	0.20	0.74
UHPX-008	UHPXi-008	UHPXD-008	0.008	0.20	0.22	0.84	0.24	0.91	0.26	1.0
UHPX-009	UHPXi-009	UHPXD-009	0.009	0.23	0.28	1.1	0.30	1.1	0.32	1.2
UHPX-010	UHPXi-010	UHPXD-010	0.010	0.25	0.35	1.3	0.37	1.4	0.40	1.5
UHPX-011	UHPXi-011	UHPXD-011	0.011	0.28	0.42	1.6	0.45	1.7	0.48	1.8
UHPX-012	UHPXi-012	UHPXD-012	0.012	0.30	0.50	1.9	0.54	2.0	0.58	2.2
UHPX-013	UHPXi-013	UHPXD-013	0.013	0.33	0.59	2.2	0.63	2.4	0.68	2.6
UHPX-014	UHPXi-014	UHPXD-014	0.014	0.36	0.68	2.6	0.73	2.8	0.78	3.0
UHPX-015	UHPXi-015	UHPXD-015	0.015	0.38	0.78	3.0	0.80	3.2	0.90	3.4
UHPX-016	UHPXi-016	UHPXD-016	0.016	0.41	0.89	3.4	1.0	3.6	1.0	3.9
UHPX-017	UHPXi-017	UHPXD-017	0.017	0.43	1.0	3.8	1.1	4.1	1.2	4.4
UHPX-018	UHPXi-018	UHPXD-018	0.018	0.46	1.1	4.2	1.2	4.6	1.3	4.9
UHPX-019	UHPXi-019	UHPXD-019	0.019	0.48	1.3	4.7	1.4	5.1	1.4	5.5
UHPX-020	UHPXi-020	UHPXD-020	0.020	0.51	1.4	5.2	1.5	5.7	1.6	6.1
UHPX-021	UHPXi-021	UHPXD-021	0.021	0.53	1.5	5.8	1.7	6.2	1.8	6.7
UHPX-022	UHPXi-022	UHPXD-022	0.022	0.56	1.7	6.3	1.8	6.9	1.9	7.3
UHPX-023	UHPXi-023	UHPXD-023	0.023	0.58	1.8	6.9	2.0	7.5	2.1	8.0
UHPX-024	UHPXi-024	UHPXD-024	0.024	0.61	2.0	7.3	2.2	8.2	2.3	8.7
UHPX-025	UHPXi-025	UHPXD-025	0.025	0.64	2.2	8.2	2.3	8.9	2.5	9.5
UHPX-026	UHPXi-026	UHPXD-026	0.026	0.66	2.3	8.9	2.5	9.6	2.7	10.2
UHPX-027	UHPXi-027	UHPXD-027	0.027	0.68	2.5	9.6	2.7	10.3	2.9	11.0
UHPX-028	UHPXi-028	UHPXD-028	0.028	0.71	2.7	10.3	2.9	11.1	3.1	11.9
UHPX-029	UHPXi-029	UHPXD-029	0.029	0.73	2.9	11.0	3.2	11.9	3.4	12.7
UHPX-030	UHPXi-030	UHPXD-030	0.030	0.76	3.1	11.8	3.4	12.8	3.6	13.6
UHPX-031	UHPXi-031	UHPXD-031	0.031	0.78	3.3	12.6	3.6	13.6	3.8	14.6
UHPX-032	UHPXi-032	UHPXD-032	0.032	0.81	3.6	13.4	3.8	14.5	4.1	15.5
UHPX-033	UHPXi-033	UHPXD-033	0.033	0.83	3.8	14.3	4.1	15.4	4.4	16.5
UHPX-034	UHPXi-034	UHPXD-034	0.034	0.86	4.0	15.2	4.3	16.4	4.6	17.5
UHPX-035	UHPXi-035	UHPXD-035	0.035	0.89	4.2	16.1	4.6	17.4	4.9	18.6
UHPX-036	UHPXi-036	UHPXD-036	0.036	0.91	4.5	17.0	4.9	18.4	5.2	19.6
UHPX-037	UHPXi-037	UHPXD-037	0.037	0.93	4.7	18.0	5.1	19.4	5.5	20.7
UHPX-038	UHPXi-038	UHPXD-038	0.038	0.96	5.0	18.9	5.4	20.5	5.8	21.9
UHPX-039	UHPXi-039	UHPXD-039	0.039	0.99	5.3	19.9	5.7	21.5	6.1	23.0
UHPX-040	UHPXi-040	UHPXD-040	0.040	1.02	5.5	21.0	6.0	22.7	6.4	24.2
UHPX-042	UHPXi-042	UHPXD-042	0.042	1.06	6.1	23.1	6.6	25.0	7.1	26.7
UHPX-046	UHPXi-046	UHPXD-046	0.046	1.16	7.3	27.7	7.9	30.0	8.5	32.0
UHPX-052	UHPXi-052	UHPXD-052	0.052	1.32	9.4	35.5	10.1	38.3	10.8	40.9
UHPX-067	UHPXi-067	UHPXD-067	0.067	1.70	15.6	58.9	16.8	63.6	18.0	68.0

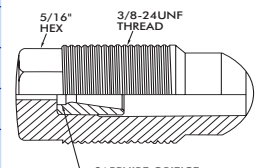
UHPX / UHPXD



UHPXi



- Premier high productivity sapphire (UHPX and UHPXi) and synthetic diamond (UHPXD) nozzles.
- UHPX and UHPXD have 5/16" external hex, UHPXi have 5/32" internal hex
- Tapered orifice retainer reduces turbulence and provides a cohesive, aggressive waterjet.



* Orifice size is denoted in the part number (-018, etc.).

Flow rate in chart is per nozzle. Multiply flow by the number of nozzles being used to determine the overall flow rate of the tool

UHPE EVAPORATOR

TUBE CLEANING NOZZLES

Designed for use with Flex or Rigid Lances

- High pressure female left-hand or right-hand threads
- Hardened stainless steel

Custom drilled patterns available upon request

UHPEX - ABBCC




Nozzle Sizes (A)

Nozzles shown to actual size

1=1/4" THREADED NOZZLE BODY	
	
Connection Type*	1/4" HP Lance
Outside diameter	.375
Overall length	1.25

2=3/8" THREADED NOZZLE BODY	
	
Connection Type*	3/8" HP Lance
Outside diameter	.50
Overall length	1.59

3=9/16" THREADED NOZZLE BODY	
	
Connection Type*	9/16" HP Lance
Outside diameter	.75
Overall length	2.13

*Left hand or right hand threads must be specified when ordering.

UHPE

Nozzle Type

40,000 psi rated Jetstream
"Ultra-High Pressure Evaporator"

X

Threads

L = Left Hand Threads
R = Right Hand Threads

A

Nozzle Size (A)

1 = 1/4" threaded nozzle body
2 = 3/8" threaded nozzle body
3 = 9/16" threaded nozzle body

BB

Nozzle Pattern (BB)

Select the two digit number corresponding to the desired pattern. See Patterns chart on the next page.

When sizing a nozzle, it is important to note that each pattern has a corresponding minimum flow rating determined by the number of orifices in the pattern.

Example: 06 denotes a nozzle with 1 jet front, 3 jets drilled at the forward location, and 6 jets drilled at the back location. This particular pattern is available only for nozzles with a flow rating number of 4 or greater.

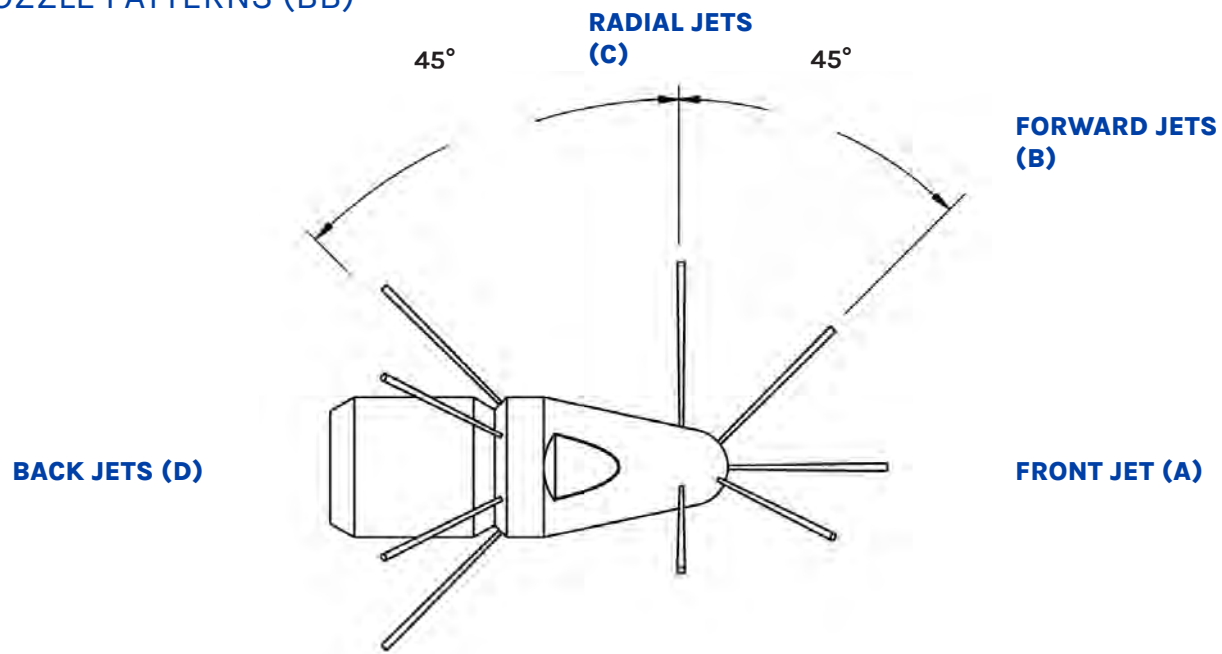
CC

Nozzle Flow Rating (CC)

To select the correct flow number:

- 1) Determine the desired nozzle tip pressure.
- 2) Consult available flow charts for hoses, flexible lances, and rigid lances which will be used for the tube cleaning operation to determine the amount of flow through all components which will result in the desired tip pressure.
- 3) Find the column in the flow rating chart (next page) which corresponds to the desired tip pressure, and select the flow number corresponding to the row containing the desired flow rate within that column.

NOZZLE PATTERNS (BB)



JET LOCATOR	USE WITH FLEXIBLE OR RIGID LANCE										RIGID LANCE ONLY				
	PATTERN	01	02	03	04	05	06	07	08	09	10	11	12	13	14
	NUMBER OF JETS AT EACH LOCATION														
	FRONT JETS (A)	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	FORWARD JETS (B)	2 3									4				
	RADIAL JETS (C)							2	4	3	4	3	4	8	4
	BACK JETS (D)	3	4	6	8	4	6	4	4	6					
	TOTAL JETS	4	5	7	9	7	10	7	9	10	9	4	5	9	4
	MINIMUM FLOW RATING	0	1	2	3	2	4	2	3	4	3	0	1	3	0

NOZZLE FLOW RATING (CC)

FLOW RATING NUMBER	EQUIVALENT ORIFICE SIZE (IN)	FLOW (GPM/LPM) @ SPECIFIED PRESSURES (PSI/BAR)											
		30,000 psi	2,000 bar	32,000 psi	2,150 bar	34,000 psi	2,300 bar	36,000 psi	2,450 bar	38,000 psi	2,600 bar	40,000 psi	2,758 bar
0	0.029	2.8	10.4	2.9	10.8	3.0	11.2	3.1	11.5	3.1	11.9	3.2	12.2
1	0.033	3.6	13.3	3.7	13.8	3.8	14.2	3.9	14.7	4.0	15.2	4.1	15.6
2	0.038	4.7	17.6	4.9	18.3	5.0	18.9	5.2	19.5	5.3	20.1	5.5	20.7
3	0.042	5.8	21.5	6.0	22.3	6.2	23.1	6.3	23.8	6.5	24.5	6.7	25.3
4*	0.047	7.1	26.4	7.3	27.4	7.5	28.3	7.8	29.2	8.0	30.1	8.2	31.0
5	0.055	9.9	36.9	10.2	38.3	10.6	39.6	10.9	40.9	11.2	42.1	11.5	43.3
6	0.063	12.8	47.7	13.2	49.4	13.6	51.1	14.0	52.8	**	**	**	**
7	0.067	14.7	54.8	15.2	56.8	**	**	**	**	**	**	**	**
8	0.070	16.1	59.8	**	**	**	**	**	**	**	**	**	**

*Typical flow used. It is recommended not to exceed 8 gpm for hand lancing.



SAFETY APPAREL & EQUIPMENT

SAFETY. The one word every organization places at the top of the list when thinking about an employee. Jetstream understands the importance of conducting a safe environment when working in any high pressure waterblasting application. From personal protective equipment (PPE) to caution tape and signage, Jetstream provides a complete line of safety products to ensure a well protected job site and operator safety.

Products included in this section:

VISUAL SAFETY SYSTEM

- ▶ Jetstream's pioneered Visual Safety System
- ▶ Safety Protection through color coding of parts
- ▶ Guns, Foot Guns, Hoses, Lances, Fittings, and Decals

SAFETY SHROUDS

- ▶ Standard Waterblasting Safety Shrouds
- ▶ TST[®] Hose Shrouds
- ▶ TST Hose Connection Covers
- ▶ Covered Safety Whips

FLEX LANCE SAFETY

- ▶ Hand-Held Lance Grip and Accessories
- ▶ Pipe and Tube Cleaning Exit Safety Devices

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- ▶ TurtleSkin[®] WaterArmor
- ▶ TST Waterjet Protection

SAFETY ACCESSORIES

- ▶ Sonetics[®] APEX wireless headsets
- ▶ Safety Glasses, Goggles, Boots, and Gloves
- ▶ Face Shield, Hard Hats, and Ear Protection
- ▶ Protection Suits

SAFETY TAPE, SIGNS AND DECALS

SAFETY HOSE CHECKS

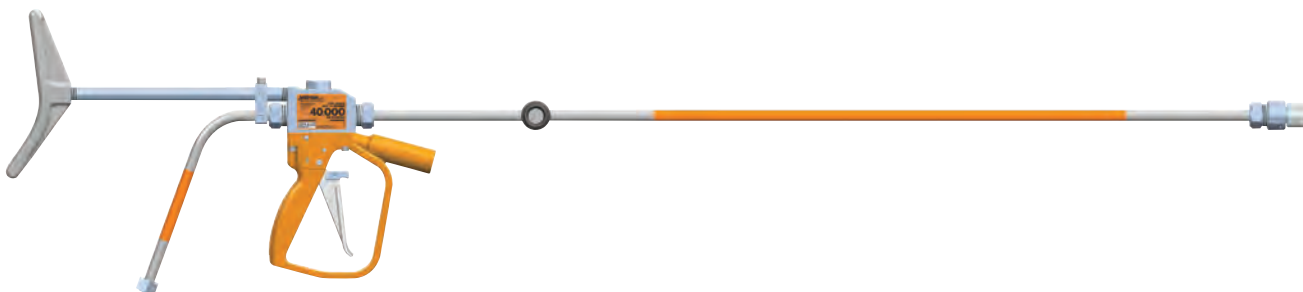
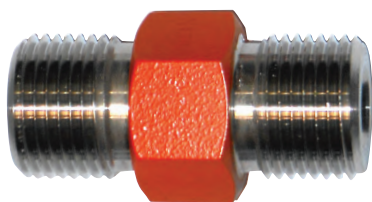
- ▶ Nylon
- ▶ Stainless Steel





VISUAL SAFETY SYSTEM DECALS

are highly visible and brightly colored to provide operators and supervisors with visual confirmation that all waterblast components, not colored, are appropriately matched to pressure ratings.
Part No. 71744



VISUAL SAFETY SYSTEM

PROTECT YOUR WORKERS AND THE WATERBLASTING EQUIPMENT WITH JETSTREAM'S VISUAL SAFETY SYSTEM.

Ensuring the operator is using the correct equipment is now identifiable from a distance. Jetstream's Visual Safety System uses highly visible and color-matched decals and additional markers to clearly show waterblast components in use are correctly and safely suited to current pump pressures.

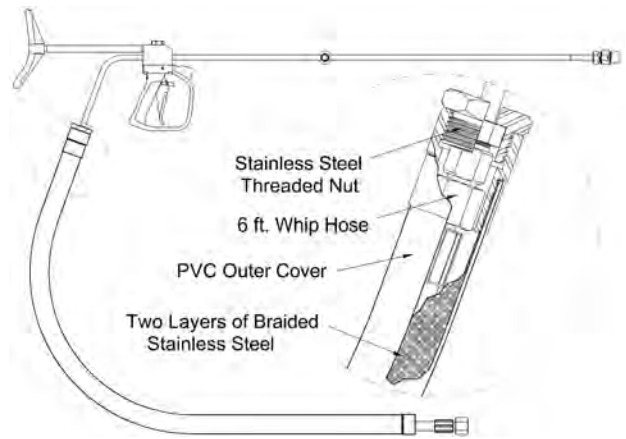
Jetstream is now following the WJTA recommended colors to visually identify the pressure being used on a job site:

- ▶ 15,000 psi - GREEN
- ▶ 20,000 psi - BLUE
- ▶ 40,000 psi - ORANGE

All 40K psi rated Jetstream lances, adapters, couplers and connectors are color-coded orange to represent 40,000 psi (2758 bar) working pressure.

SAFETY SHROUDS

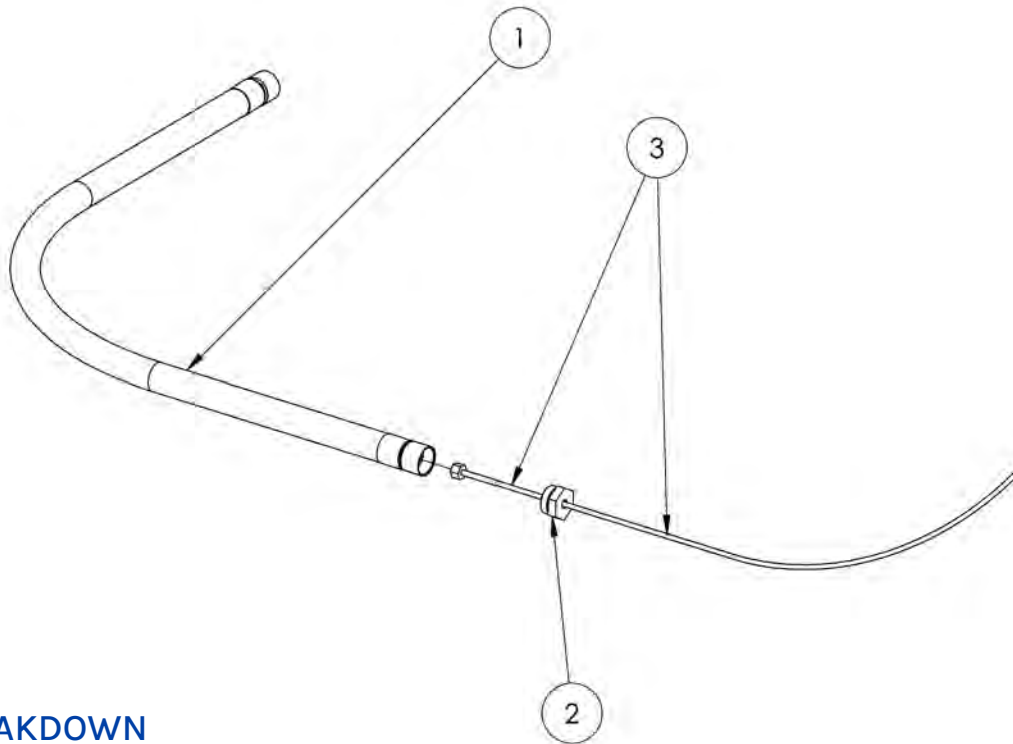
Designed for use with the 40,000 psi DuraSafe™ series of control guns, a safety shroud provides an additional layer of operator protection in the event of a hose or end fitting failure by completely enclosing the hose and connection fittings. Constructed of flexible, durable, and abrasion resistant thermoplastic covering two layers of stainless steel braiding.



PART NO.	LENGTH		HOSE CONNECTION*	HOSE I.D.		REPLACEMENT PARTS			MAX. OPERATING PRESSURE	
	ft	m		in	mm	SHROUD	NUT	WHIP HOSE**	psi	bar
54640	6	1.8	7/8" Type M Female	.32	8	28860	28861	59469-0064141	40,000	2,758
54645	6	1.8	9/16" Type M Female	.20	5	28860	28861	27731-0063939	40,600	2,800
56730	10	3.0	7/8" Type M Female	.32	8	28860-10	28861	59469-0104141	40,000	2,758

*See Section I for a description of each connection type.

**Whip Hoses listed do not have abrasion or burst shield guards and are not intended for use near an operator without a safety shroud.



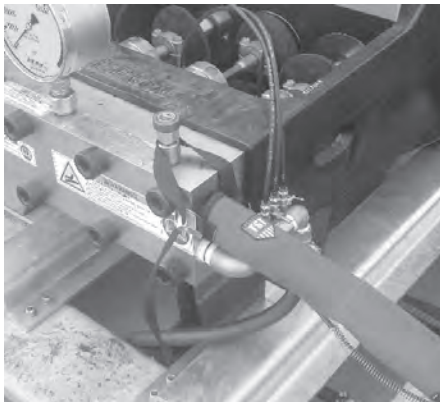
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION
1	28860	Shroud
2	28861	Nut
3	See Above	Whip Hose



TST HOSE SHROUDS

PART NO.	SIZE
59008	36mm ID x 750mm long
59009	36mm ID x 1400mm long
59010	36mm ID x 180mm long
59011	47mm ID x 1400mm long swivel
59012	59mm ID x 750mm long
59013	59mm ID x 1400mm long
59014	59mm ID x 1800mm long



HOSE CONNECTION COVER

Perfect use to protect connections on pumps or foot panels. The cover has an adjustable strap and the other end has two loops for flexible use.

PART NO.	SIZE
62257	50mm ID x 400mm long

COVERED SAFETY WHIPS

These six foot hoses are designed for connection to 40,000 psi DuraSafe™ foot gun crimped on steel-reinforced heavy-duty synthetic rubber burst shield guard for additional protection in the event of hose failure.



PART NO.	LENGTH		HOSE CONNECTION*	HOSE I.D.		MAX. OPERATING PRESSURE	
	ft	m		in	mm	psi	bar
59469-00641412	6	1.8	7/8" Type M Female	.32	8	40,000	2,758
27731-00639392	6	1.8	9/16" Type M Female	.20	5	40,000	2,758

* See Section I for a description of each connection type.

SAFETY HOSE CHECKS



NYLON HOSE CHECK - HIGH STRENGTH

One Size Fits All.

Part No. 66743



CONTAINMENT GRIP HOSE CHECK

Coated, Galvanized Carbon Steel

PART NO.	HOSE O.D.
63210	3/4" - 1 1/4"
59291	1 1/4" - 2"
61255	2" - 2 3/4"



SHACKLE ANCHOR FOR CONTAINMENT GRIP HOSE CHECKS

Part No. 65670



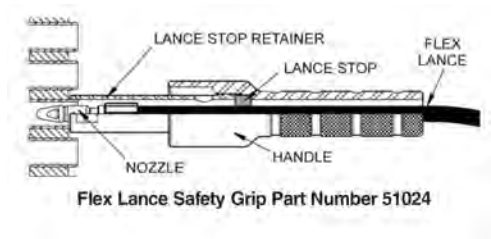
LOCKING COTTER PIN FOR SHACKLE ANCHOR

Part No. 65671

FLEX LANCE SAFETY GRIP



For use in flex lance tube cleaning operations, the safety grip prevents a nozzle from unexpectedly exiting a tube by providing a stop through which the sleeve of the flex lance will not pass. Package includes handle, lance stop retainer for use on tubes up to 3/4" O.D. Choose lance stop below (not included). **Part No. 54164**



SAFETY GRIP ACCESSORIES

LANCE STOPS

Choose lance stops below based on flex lance ID.

LANCE STOP RETAINERS

Choose lance stop retainers based on the outside diameter of the tube to be cleaned.



SAFETY GRIP SHIELD

Clear, plastic shield attaches to the safety grip handle to deflect water exiting the tube. **Part No. J55785**

LANCE STOP PART NO.	FLEX LANCE SERIES NUMBER	FLEX LANCE NOMINAL I.D.		PART NO.	LENGTH
		in	mm		
51044	51952	.16	4.0	51055	for tubes up to 3/4" O.D. (included with safety grip)
51779	53816	.32	8.0	51425	for tubes up to 1" O.D.
				51427	for tubes up to 2" O.D.

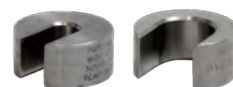
FLEXSTOP™

The FlexStop Lance Safety Device protects the operator from a flex lance exiting a tube sheet during cleaning operations in either a horizontal or vertical application. An articulating arm, two friction disc hubs and a telescoping tube allow for a wide range of adjustment and positioning possibilities. Durable stainless steel construction. **Part No. 66288**

The FlexStop Kit contains the articulating arm, the safety grip assembly with Lexan splash guard, all four lance stops, both guide bushings, an extension tube, and two flange clamps. **Part No. 61374**



LANCE STOPS

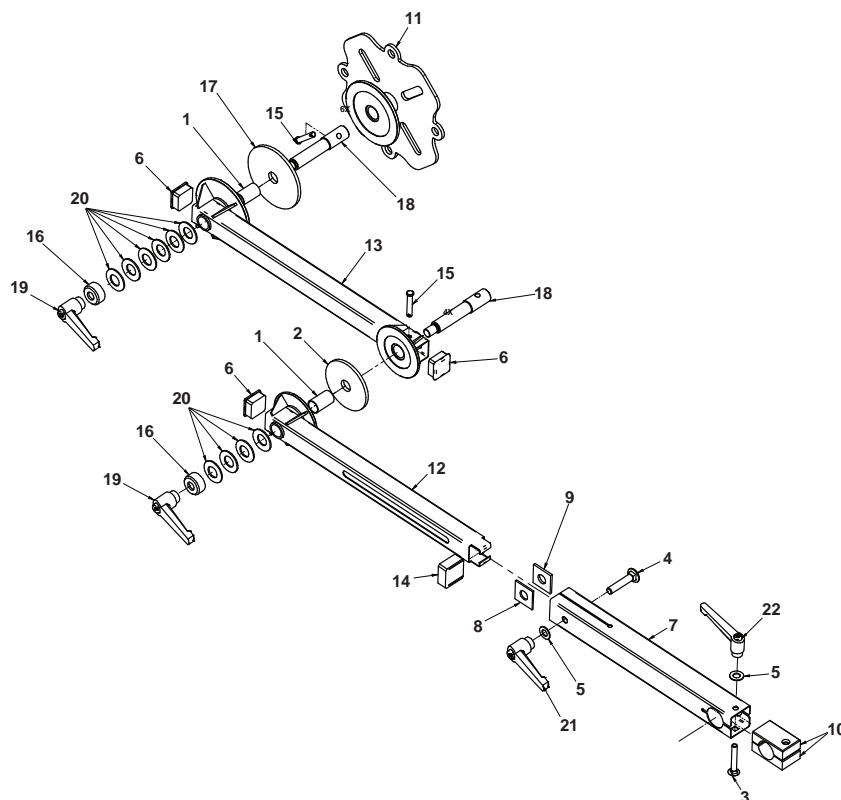


LANCE STOP PART NO.	FLEX LANCE NOMINAL I.D.		HOSE TYPE
	in	mm	
51036	.325	8	4/2 & 3/2
51038	.445	11	5/2
51044	.510	13	6/2 & 6/4
51779	.610	15	8/2 & 8/6

GUIDE BUSHINGS



GUIDE BUSHING PART NO.	NOMINAL I.D.	
	in	mm
60288	.550	14
60289	.780	20



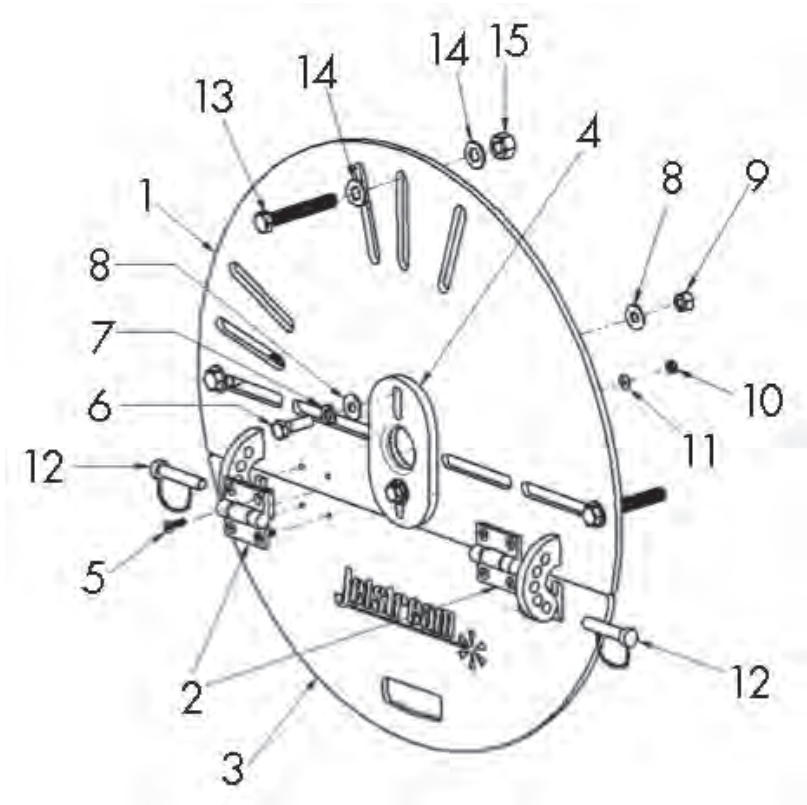
PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	60311	Sleeve Bearing	12	66298	Outer Arm
2	60998	4" Friction Element	13	66299	Inner Arm
3	61046	Capscrew	14	66300	Centering Block
4	61050	Capscrew	15	66302	Clevis Pin
5	61148	Thrust Washer	16	66865	Friction Plate Plunger
6	66274	Finishing Plug	17	66866	5" Friction Element
7	66291	Outer Telescoping Arm	18	66867	Pivot Pin
8	66293	Spacer, Telescoping Arm, Thin	19	66870	Adjustment Handle
9	66294	Spacer, Telescoping Arm, Thick	20	66871	Disc Spring
10	66296	Clamp Block	21	66889	Adjustment Handle
11	66297	Mounting Plate	22	66890	Adjustment Handle

THE WARDEN™

The Jetstream Warden is an anti-withdrawal device used for pipe cleaning applications with pipes ranging from 5"-18". With the multiple mounting location points, the pipe shield provides complete pipe coverage with a lockable shutter to allow large debris removal.

Part No. 61447



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	61283	Pipe Cover Wldt, 1-19" Dia.	9	26562	Nut .38 C,Hx
2	61448	Shield Door Hinge	10	27449	Nut #10-24,Hx,Nylok
3	61284	Tilt Panel Wldt	11	J70804	Washer #10 Flat
4	61288	Dia. Adjustment Plate	12	61449	.375" Dia. Locking Pin
5	61461	Capscrew #10-24 X .87	13	61450	Capscrew .43 C X 3.0 SS
6	27126	Capscrew .38 C X 1.25	14	59229	Washer .44 Flat
7	25249	Washer .38 Lock	15	26834	Nut .44 F,Hx Lock
8	25251	Washer .38 Flat			

VERSABOOM™

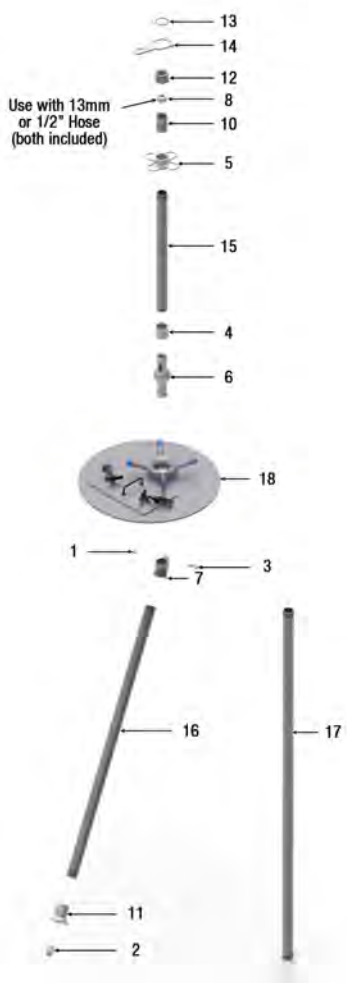
Large tanks and vessels can be challenging to clean. They come in all shapes and sizes, and they often have limited access, making it hard to get a cleaning tool into the proper position to ensure a complete cleaning.

The Versaboom™ is a positioning device designed to hold a 3D waterblast tool in a desired location inside tanks and vessels with limited access. **(Part No. 67901)**

- ▶ Adjustable extensions make it easy to extend or retract the cleaning tool to a variety of insertion depths and angles for optimal cleaning
- ▶ Aluminum mounting plate clamps to the tank or vessel during cleaning, increasing operator safety
- ▶ Access hatch in the mounting plate allows the operator to visually position the cleaning tool and check cleaning progress
- ▶ Easy to set up and operate; no special tools are required



PART NO.	MAX. HOSE I.D.		MAX. END FITTING		WEIGHT	
	in	mm	in	mm	lbs	kg
67901	.50	12.7	1.5	38.1	80	36



PART BREAKDOWN

ITEM	PART NO.	DESCRIPTION
1	25296	Lock Nut
2	26065	Bushing
3	27091	Capscrew
4	67908	Coupler
5	67919	Coupling, Anchor
6	67920	1" Ball Pipe
7	67921	Elbow
8	67922	Collet, 13mm
9	67923	Collet, 1/2" NPT
10	67924	Nipple
11	67925	Outlet Fitting
12	67926	Gland
13	67927	Retaining Ring
14	67928	Gland Wrench
15	67929	Tube Extension, 2'
16	67930	Tube Extension, 4'
17	67931	Tube Extension, 6'
18	67936	Base Plate Assy

SAFETY



Headset
Part No. 64299 (wireless)
65911 (wireless w/Bluetooth)



Wireless Base Station
Part No. 66090



Portable Com Hub
Part No. 64298 (5/100)
65644 (10/100)



Charging Cases
Part No. 64300 (5-user)
65925 (10-user)

SONETICS® APEX WIRELESS HEADSET

Sonetics APEX wireless headsets provide a communication solution for all members on your team. Operators today rely on eye-contact and hand signals to communicate when operating large, noisy machinery, including waterblasting systems.

What if you could know word-for-word what the other operator needs in an instant with NO interpretation required? Sonetics developed a headset that provides a piece-of-mind in an instant through actual voice communication, noise reduction, and noise filtration with an industry first in integrated personal sound dosimeter. Built to withstand extreme environments, Sonetics wireless systems are dust proof, watertight, and ready to perform in the same tough conditions you face every day.

FEATURES

- ▶ Secure interference-free communication with excellent range (up to 1,600 feet)
- ▶ EPA NRR of 20dB in both behind-the-head and hard-hat configurations
- ▶ Front microphones to provide situational awareness limited to no higher than 82dB
- ▶ Personal sound dosimeter measures the exposure to sound over time and adjusts headset volume to keep the operator's ears safe
- ▶ Auto-leveling microphone with automatic voice adjustments for exterior noise
- ▶ Noise suppression limits high impulse events from transmission
- ▶ Convertible headband to allow over-the-head or behind the head wear
- ▶ Customizable ruggedized colors available to aid in identification of team members
- ▶ Integration with wired or wireless two-way portable radios
- ▶ Optional bluetooth integration for communication with cell phones, MP3 players, mobile radios, and computers
- ▶ In-case charging of headsets available when not in use

Contact your Jetstream Sales Manager for more details about the system that's right for you.

TST® WORKPLACE SAFETY SOLUTIONS

TST Workplace Safety Solutions (WSS) provide protection to sensitive equipment, machinery, or people from water, water jetting, gravel spray, and ricochets! They are made with an extremely strong outer protective fabric called TECHSTEEL™, which can withstand up to 43,500 psi (3000 bar) at a stand-off distance of 5 ft (1.5 m).

WSS OPERATOR BOOTH

Inflatable body with floor to protect operator. Can be connected to protective walls and curtains. Easy to transport and store.

Part No. 66649



WSS PROTECTIVE CURTAIN

Practical curtains which can be put together to form a protective wall of desired length. Each section is approximately 5 x 8.2 ft.

Part No. 66650



WSS PROTECTIVE WALL

Protective Wall is a stand alone solution. Several walls can be connected together indefinitely. The wall can be disassembled for easy transport and storage. Each section is approximately 5.5 x 7.2 ft. Comes with aluminum frame, feet, protective fabric and bottom flap.

Part No. 66651



WSS PROTECTIVE WALL CONNECTING PANEL

Connecting panels use waterproof Keder connections to connect WSS Protective Walls, Curtains, and Booths.



PART NO.	CONNECTION TYPE
67659	Keder Between Walls
67660	Female Keder Between Walls and Curtains or Booths
67661	Male Keder Between Walls and Curtains or Booths

WSS SCUFFGUARD

Protect valuable hoses from wear and tear. The 6.6 ft. version is easy to mount with hooks and loops. The 16.4 ft. version is like a tube. Inner diameter is approximately 2.2 in. Eyelets are used for fastening at the ends.



PART NO.	LENGTH
66652	6.6 ft (2m)
66653	16.4 ft (5m)



TST® WATERJET PROTECTION

TST products provide protection to the operator without compromising on comfort or quality. Two levels of protection are offered depending on the protection needs and working pressures. See chart below for specific protection levels.

PROTECTION LEVEL*	COLOR IDENTIFIER	SINGLE JET	ROTARY JET
10/28	YELLOW	14,500 psi/1000 bar	40,600 psi/2800 bar
20/30	ORANGE	30,000 psi/2000 bar	43,500 psi/3000 bar

*Protection levels are located on all articles for quick identification.



TST ALFA KIT

Waistcoat and apron with hand protection. One size fits all.

PROTECTION LEVEL 10/28

PART NO.

67445

PROTECTION LEVEL 20/30

PART NO.

67446



TST GAMMA KIT

Trousers and jacket with integrated hand protection.

PROTECTION LEVEL 10/28

PART NO.	VENTILATED PART NO.*	SIZE
58962	58962-V	S/M
58901	58901-V	L/XL
58902	58902-V	2XL/3XL
59873	59873-V	4XL/5XL
59875	59875-V	6XL

PROTECTION LEVEL 20/30

PART NO.	VENTILATED PART NO.*	SIZE
58963	58963-V	S/M
58964	58964-V	L/XL
58965	58965-V	2XL/3XL
59874	59874-V	4XL/5XL
59876	59876-V	6XL

*Ventilated products consist of tubing throughout the suit with holes every five inches for complete coverage. (A cooling tube will need to be purchased with this system, as well. See page H-15.)

TST® DELTA KIT

Trousers, waistcoat, and hand protection.

PROTECTION LEVEL 10/28

PART NO.	VENTILATED PART NO.*	SIZE
58956	58956-V	S/M
58957	58957-V	L/XL
58958	58958-V	2XL/3XL

PROTECTION LEVEL 20/30

PART NO.	VENTILATED PART NO.*	SIZE
58959	58959-V	S/M
58960	58960-V	L/XL
58961	58961-V	2XL/3XL

*Ventilated products consist of tubing throughout the suit with holes every five inches for complete coverage. (A cooling tube will need to be purchased with this system, as well. See page H-15.)



TST SIGMA KIT

Waistcoat & overall with integrated hand protection.

PROTECTION LEVEL 10/28

PART NO.	SIZE
58944	S
58945	M
58946	L
58947	XL
58948	2XL
58949	3XL

PROTECTION LEVEL 20/30

PART NO.	SIZE
58950	S
58951	M
58952	L
58953	XL
58954	2XL
58955	3XL



TST TROUSERS

Individual item.

PROTECTION LEVEL 10/28

PART NO.	VENTILATED PART NO.*	SIZE
58966	58966-V	S/M
58967	58967-V	L/XL
58968	58968-V	2XL/3XL

PROTECTION LEVEL 20/30

PART NO.	VENTILATED PART NO.*	SIZE
58969	58969-V	S/M
58970	58970-V	L/XL
58971	58971-V	2XL/3XL

*Ventilated products consist of tubing throughout the suit with holes every five inches for complete coverage. (A cooling tube will need to be purchased with this system, as well. See page H-15.)



SAFETY



TST® JACKET

Integrated hand protection. Individual item.

PROTECTION LEVEL 10/28

PART NO.	SIZE
58972	S/M
58973	L/XL
58974	2XL/3XL

PROTECTION LEVEL 20/30

PART NO.	SIZE
58975	S/M
58976	L/XL
58977	2XL/3XL
59492	4XL/5XL



TST WAISTCOAT

Individual item.

PROTECTION LEVEL 10/28

PART NO.	SIZE
58978	M-2XL
58979	3XL

PROTECTION LEVEL 20/30

PART NO.	SIZE
58980	M-2XL
58981	3XL



TST OVERALL

Integrated hand protection. Individual item.

PROTECTION LEVEL 10/28

PART NO.	SIZE
58982	S
58983	M
58984	L
58985	XL
58986	2XL
58987	3XL

PROTECTION LEVEL 20/30

PART NO.	SIZE
58988	S
58989	M
58990	L
58991	XL
58992	2XL
58993	3XL

TST® HAND PROTECTION

One size fits all. Sold in pairs.

PART NO.	PROTECTION LEVEL
67526	10/28
67527	20/30



TST APRON

One size fits all.
Individual Item.

PART NO.	PROTECTION LEVEL
58903	10/28
58997	20/30



TST WAISTCOAT WITH APRON

One size fits all. Individual Item.

PART NO.	PROTECTION LEVEL
58955	10/28
58996	20/30



TST BOOTS 3000

PART NO.	SIZE APPROX. US MEN
59000	8.5
59001	9
59002	10
58932	11
59003	12
59004	13
59005	14



TST GAITERS

One size fits all. Pair.

PART NO.	PROTECTION LEVEL
59007	20/30



TST BALACLAVA

Comfort accessory for use under protective gear. One size fits all.

PART NO.	PROTECTION LEVEL
59006	N/A



VORTEX COOLER TUBE

(Not shown.) Personal Air Conditioner. For full body cooling, a 25cfm or 35cfm tube is recommended. If the tube is not sized for the available air supply, it will perform poorly.

PART NO.	CFM
61415	25 CFM
51416	35 CFM

TST GREASE REMOVER

PART NO.	L
59015	0.5
59016	2.5



SAFETY



TST HEAD PROTECTION

Helmet with visor and hearing protectors. One size fits all.

PART NO.	PROTECTION LEVEL
65498	20/30



TST HELMET

Helmet with CE marking approved to SS-EN397:2012. Adjustable. One size fits all.

PART NO.	PROTECTION LEVEL
66645	20/30



TST HEARING PROTECTION

One size fits all. Adjustable.
Part No. 66647



TST BLUETOOTH ADAPTER

Enables wireless communication while using TST Hearing Protection.
Part No. 67658



TST VISOR HOLDER

Visor holder for TST Head Protection.
Part No. 66646



TST VISORS (10 PACK)

10 pack of replaceable visors for TST Head Protection.
Part No. 67657



TST® CHIN STRAP

3-point chin strap for use with TST Head Protection.
Part No. 66648



TURTLESKIN® WATERARMOR

Provides waterblast operators with a high level of protection from high-pressure waterjets.

- ▶ Proven protection up to 40,000 psi (2750 bar)
- ▶ Lightweight, hinged panel design provides flexibility without fatigue
- ▶ Modular design—buy only what you need
- ▶ Open back keeps operator cooler longer

ITEM(S)	PART NO.	DESCRIPTION
TURTLESKIN MAIN PARTS		
A	27885C	Safety Suit—Torso & Chaps
B	27884	Gaiters (Shins & Feet)
C	28589	Gauntlets (Hands & Forearms)
REPAIR KITS		
-	71613	Torso
-	71614	Chaps
-	71615	Gaiters

SAFETY ACCESSORIES



SAFETY GLASSES PREMIUM

Clear/Gray anti-fog lens, adjustable nose pad, scratch resistant, UV-blocking, Z87+ approved.
Part No. J70316

SAFETY GLASSES PREMIUM

Gray/Gray anti-fog lens, adjustable nose pad, scratch resistant, UV-blocking, Z87+ approved.
Part No. J70317

SAFETY GLASSES ECONOMY

Scratch resistant, UV-blocking.
Part No. J70318



SAFETY GOGGLES

Soft frame with impact and chemical splash protection, anti-fog lens, Neoprene strap, Z87+ approved.
Part No. 25620



FACE SHIELD

Multiple Mounting Slots. Polycarbonate.
Part No. 26255

FACE SHIELD

Multiple Mounting Slots. Polycarbonate.
Part No. 26255T

FACE SHIELD

Multiple Mounting Slots with Velcro strip. Polycarbonate.
Part No. 26255V



EAR PLUGS

Uncorded with noise reduction rating: 33. Molded Polyurethane Foam.
Part No. J70321

UNIVERSAL FACE SHIELD BRACKET

Fits the brim of most hard hats. Plastic.
Part No. 25621



HARD HAT

White, six-point nylon suspension with ratchet knob. Hard Plastic.
Part No. J70315

HARD HAT

White, six-point nylon suspension with pin-lock adjustment. Hard Plastic.
Part No. 25625



EAR PLUGS

Corded with noise reduction rating: 30. Molded Polyurethane Foam.
Part No. J70322



PREMIUM 16" BOOTS

Steel toe, waterproof, meets ANSI Z41 PT99 Sect 1, 2, & 5. Size 6 to 14. Black/Yellow Rubber.
Part No. J70324-size

ECONOMY 16" BOOTS

Steel toe, waterproof. Size 7 to 13. Black Rubber.
Part No. 27168-size

12" BOOTS

Steel toe, waterproof, meets ANSI Z41 PT99 Sect 1. Size 6 to 14. Copper/Tan Neoprene.
Part No. J70326-size



SHIN & FOOT GUARDS

Padded instep and nylon straps. Aluminum.
Part No. 26894

WATER PROTECTION SUITS

Jacket, bib overall pants & face shield bib. PVC/Polyester. Sizes M-5XL
Part No. J70323-size

WATER PROTECTION SUITS

Jacket and bib overall pants. PVC/Polyester. Size M-7XL
Part No. 25617-size



GLOVES

14" PVC/NITRILE. Chemical resistant with rough finish. Fully coated with jersey lining. Size 10.
Part No. 25624

GLOVES

12" PVC Rough Finished gloves. Cotton Lining. Size 10.
Part No. J70327



SAFETY TAPE, SIGNS AND DECALS



HEALTH HAZARD
CAUTION SIGN

8½" x 11"
Part No. 26247



RESTRICTED
CAUTION SIGN

8½" x 11"
Part No. 26253



WATERBLASTING
DANGER SIGN

8½" x 11"
Part No. 25614



SAFETY WARNING
STICKER

Part No. 28501



SAFETY TAPE
"CAUTION:
WATERBLASTING
IN PROGRESS"

Dimensions:
3"x 300ft
75mm x 90 m
Part No. 57998



SAFETY TAPE
"DANGER: HYDRO-
BLASTING"

Dimensions:
3" x 1000ft
75mm x 300 m
Part No. J70413



SAFETY WARNING
DECAL SET
(UNIT AND FLUID
END)

Part No. 71147



SAFETY WARNING
DECAL SET
(FLUID END ONLY)

Part No. 71147-FE



40K COLOR CODED
PRESSURE DECAL

Part No. 71744



JETSTREAM UNIT
DECAL - BLUE

Part No. 29956



JETSTREAM UNIT
DECAL - WHITE

Part No. 26717

SAFETY LITERATURE AND MEDIA



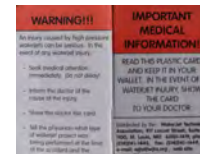
WJTA® INDUSTRY
BEST PRACTICES
FOR HIGH
PRESSURE
WATERJETTING
EQUIPMENT

Part No. 64625



WJTA®
HYDROBLASTER
ORANGE BOOK

Pocket sized.
Part No. 66858



SAFETY WARNING
MEDICAL CARD

Part No. 29263



TECHNICAL

UNIT CONVERSIONS & FORMULAS

MEASUREMENT	CONVERSION	EXAMPLE
LENGTH	1 in. = 25.4 mm	12 in. x 25.4 = 304.8 mm
	1 in. = .0254 m	120 in. x .0254 = 3.05 m
	1 ft. = .3048 m	12 ft. x .3048 = 3.68 m
	1 mm = .0394 in.	100 mm x .0394 = 3.94 in.
	1 m = 39.37 in.	10 m x 39.37 = 393.7 in.
	1 m = 3.281 ft.	10 m x 3.281 = 32.81 ft.
VOLUME	1 gal = 3.785 l	10 gal x 3.785 = 37.85 l
	1 liter = .2642 gal	100 liters x .2642 = 26.42 gal
WEIGHT	1 lb. = .454 kg	10 lbs. x .454 = 4.54 kg
	1 kg = 2.205 lbs.	10 kg x 2.205 = 22.05 lbs.
PRESSURE	1 psi = .06895 bar	40,000 psi x .06895 = 2,750 bar
	1 bar = 14.503 psi	2,750 bar x 14.503 = 40,000 psi
FLOW	1 gpm = 3.785 lpm	30 gpm x 3.785 = 113.55 lpm
	1 lpm = .2642 gpm	100 lpm x .264 = 26.42 gpm
FORCE	1 lb. = 4.448 N	100 lbs. x 4.448 = 444.8 N
	1 N = .2248 lbs.	900 N x .2248 = 202.32 lbs.
TORQUE	1 lb.-ft. = 1.3567 N-m	100 lb.-ft. x 1.3567 = 135.67 N-m
	1 N-m = .737 lb.-ft.	100 N-m x .737 = 73.7 lb.-ft.
POWER	1 hp = .7457 kW	50 hp x .7457 = 37.29 kW
	1 kW = 1.341 hp	50 kW x 1.341 = 67.05 hp
FORMULA	ENGLISH UNITS	METRIC UNITS
POWER REQUIREMENTS*	hp = gpm x psi / 1550	kW = lpm x bar / 540

*Formulas assume 90% mechanical efficiency

CONNECTION TYPES

Several connection types are available for use with Jetstream 40,000 psi products. The purpose of this section is to allow users to identify the connections needed and provide information on the features and proper use of each.

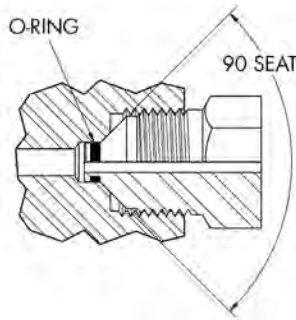


NOTE: Always apply thread lubricant (anti-seize) to male threads and male cones before assembling Jetstream 40K Port connections. See page E-1 for thread lubricants available from Jetstream.

JETSTREAM 40K PORT

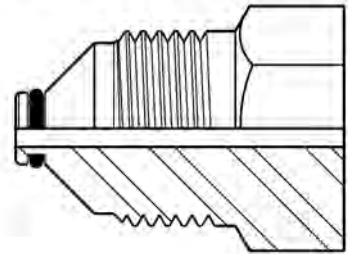
- Specially designed to prevent leakage and wear frequently associated with standard metal-to-metal seals by incorporating an o-ring with a metal-to-metal cone and seat backup.
- Repairing leaks requires only o-ring replacement, as opposed to standard high pressure connections which often require re-coning, or component replacement.
- Utilized in most Jetstream 40,000 psi products.

CONNECTION THREAD	RECOMMENDED TORQUE	
	ft-lbs	N-m
1" - 12UNF	75	102



Actual Size Reference Chart

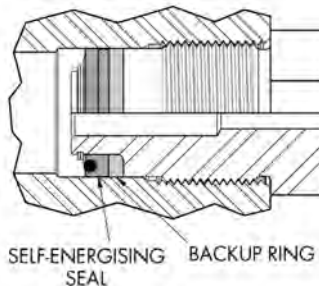
Jetstream 40K Port



JETSTREAM 40K PUMP DISCHARGE

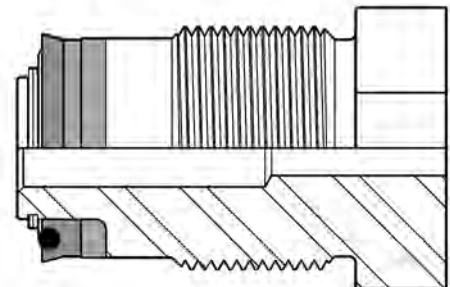
- Specially designed for use in all Jetstream 40,000 psi UNx manifold discharge ports.
- No metal-to-metal seals which can wear and require manifold replacement.

CONNECTION THREAD	RECOMMENDED TORQUE	
	ft-lbs	N-m
1 3/16" - 16 UN	75	102



Actual Size Reference Chart

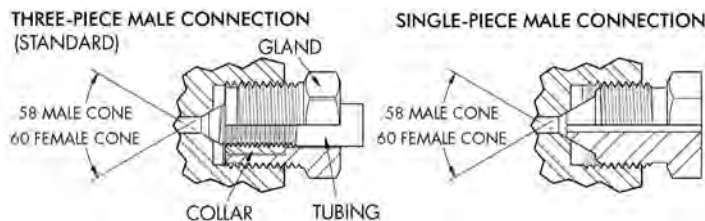
Jetstream Pump Discharge
(All 40K UNx Fluid Ends)



CONNECTION TYPES

HIGH PRESSURE (HP)

- ▶ Widely regarded as the industry standard connection for pressures from 30,000 to 60,000 psi (2,069 to 4,138 bar).
- ▶ Rated working pressure is dependent upon inner diameter bore size of tubing used. See HP Lance connection specs for rated working pressure of high pressure tubing.
- ▶ Connections exist in two different forms:
 1. Used to connect high pressure tubing with a conical male seat and left-handed threads to a female port using a gland nut and left-hand threaded collar.
 2. For many high pressure male fittings, the geometry of the gland, collar, and tubing is combined into one component that connects directly to a high pressure female port (Single Piece Style).
- ▶ Suitable for repetitive connection/disconnection.



SIZE	CONNECTION THREAD	COMMON NAME	TUBING THREAD* LEFT-HAND	RECOMMENDED TORQUE	
				ft-lbs	N-m
1/4" HP	9/16" - 18UNF	HP4	1/4" - 28UNF	25	34
3/8" HP	3/4" - 16UNF	HP6	3/8" - 24UNF	50	68
9/16" HP	1 1/8" - 12UNF	HP9	9/16" - 18UNF	75	102
METRIC					
14 MM	M26 x 1.5 - 6H	M14	--	75	102

*For three-piece connection styles only.

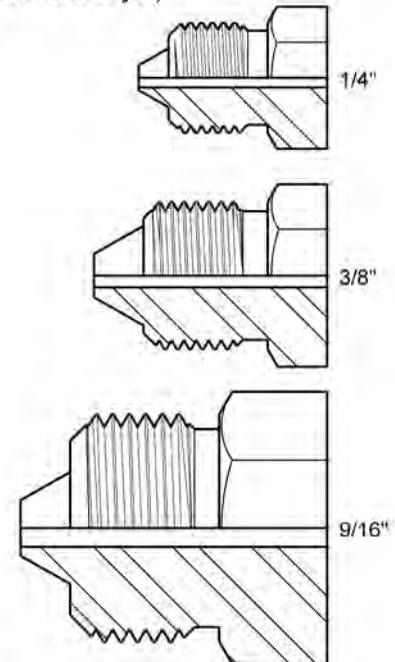
CONNECTION INSTRUCTIONS

1. 3 pc. Male Connection Style only—Liberal apply anti-seize to male tubing threads to prevent thread galling.
2. 3 pc. Male Connection Style only—Slide gland nut over tubing and thread collar (left-hand threaded) onto tubing until it is past the first one or two full threads of the tubing.
3. Both styles—Liberal apply anti-seize to male connection threads and male cone.
4. Both Styles—Install male connection into female port and tighten according to torque specification in chart above.

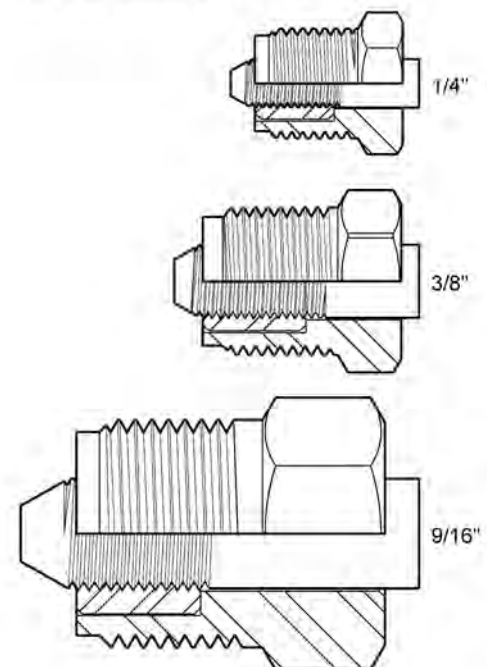
NOTE: Always apply thread lubricant (anti-seize) to male threads before assembling High Pressure connections to help prevent galling of threads. Coning and Threading tools available. See page I-6.

Actual Size Reference Chart

High Pressure (HP) (Single Piece Style)



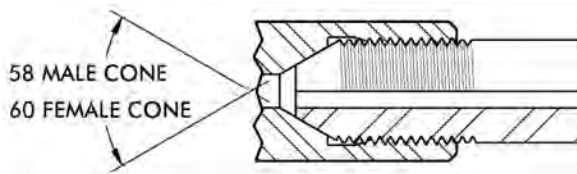
High Pressure (HP) (Gland, Collar & Tubing)



CONNECTION TYPES

HIGH PRESSURE LANCE (HP LANCE)

- ▶ This connection has the same geometry and threads as a standard high pressure tubing connection with the exception that right-hand threaded tubes are available.
- ▶ Male tubing is inserted directly into a female connection without the use of a gland and collar.
- ▶ Used in tube cleaning operations where standard connections are too large in diameter.



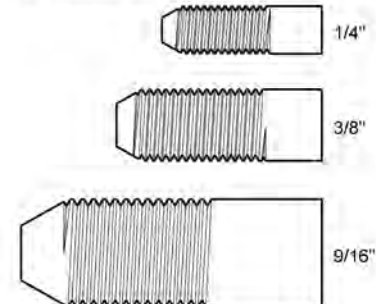
SIZE	CONNECTION THREAD	RECOMMENDED TORQUE	
		ft-lbs	N-m
1/4" HP Lance LH	1/4"-28UNF-LH	15	20
1/4" HP Lance RH	1/4"-28UNF-RH		
3/8" HP Lance LH	3/8"-24UNF-LH	20	27
3/8" HP Lance RH	3/8"-24UNF-RH		
9/16" HP Lance LH	9/16"-18UNF-LH	25	34
9/16" HP Lance RH	9/16"-18UNF-RH		

Actual Size Reference Chart

High Pressure Lance

Left Hand Threads

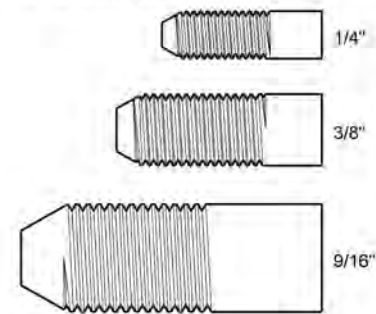
"HP Lance LH"



High Pressure Lance

Right Hand Threads

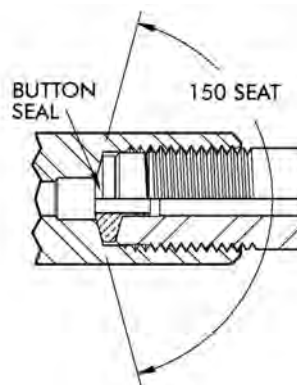
"HP Lance RH"



BUTTON SEAL

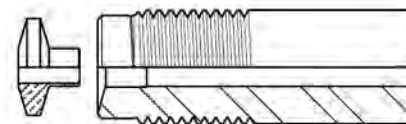
- ▶ Utilizes an inexpensive button-style seal which absorbs abuse and wear, preventing damage to the seating surfaces of more costly components.
- ▶ Used in the FXG2 Tornado Gun, Multi-Mode Valve, and in some automated lancing systems.

CONNECTION THREAD	RECOMMENDED TORQUE	
	ft-lbs	N-m
9/16" - 18UNF	40	54



Actual Size Reference Chart

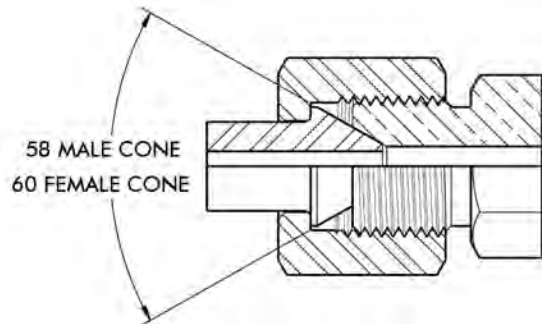
9/16" Button Seal



CONNECTION TYPES

TYPE M

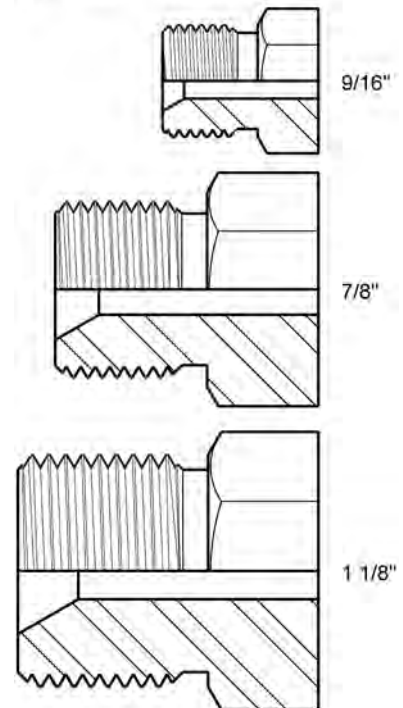
- ▶ Designed for fast, simple connection of waterblast hoses and lances.
- ▶ Male conical seat protected from damage by the hose swivel nut.
- ▶ Unlike high pressure connections, the seating surfaces do not rotate against each other when connections are made, resulting in a more reliable, longer lasting connection.



SIZE	COMMON NAME	CONNECTION THREAD	RECOMMENDED TORQUE	
			ft-lbs	N-m
9/16" Type M	M9	9/16"-18UNF	30	41
7/8" Type M	M14	7/8"-14UNF	60	81
1" Type M	M16	1"-12UNF	70	95
1 1/8" Type M	M18	1 1/8" -12UNF	90	163

Actual Size Reference Chart

Type "M"



THREADING AND CONING TOOLS

HP CONNECTIONS



THREADING TOOL



CONING TOOL

- ▶ Coning tool assemblies include tool as well as cutter and collet specific to the connection size and type needed.
- ▶ Threading tool assemblies include tool (consisting of housing and handle) as well as die and guide bushing specific to connection size needed.

NOTE:

- ▶ 3/4" & 3/8" coning tools use the same tool with differing cutters & collets.
- ▶ 9/16" coning tools use the same tool with differing cutters.
- ▶ All threading tool assemblies include LH die and all use the same handle and housing.

CONING

CONNECTION TYPE	CONING TOOL AY	CONING CUTTER	CONING COLLET
1/4" HP	71079	71085	71088
3/8" HP	71080	71086	71089
9/16" HP	71081	71087	71090

THREADING

CONNECTION TYPE	THREAD TOOL AY	LH DIE	RH DIE	BUSHING
1/4" HP	71091	70192	71095	71097
3/8" HP	28783	71093	71096	71098
9/16" HP	28872	71094	28873	71099



CONING & THREADING TOOL KIT

The tools shown above are meant for repair to existing connections. To create cones and threads from raw tubing cut to length, use the Coning and Threading Tool Kit.

Part No. 64316

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