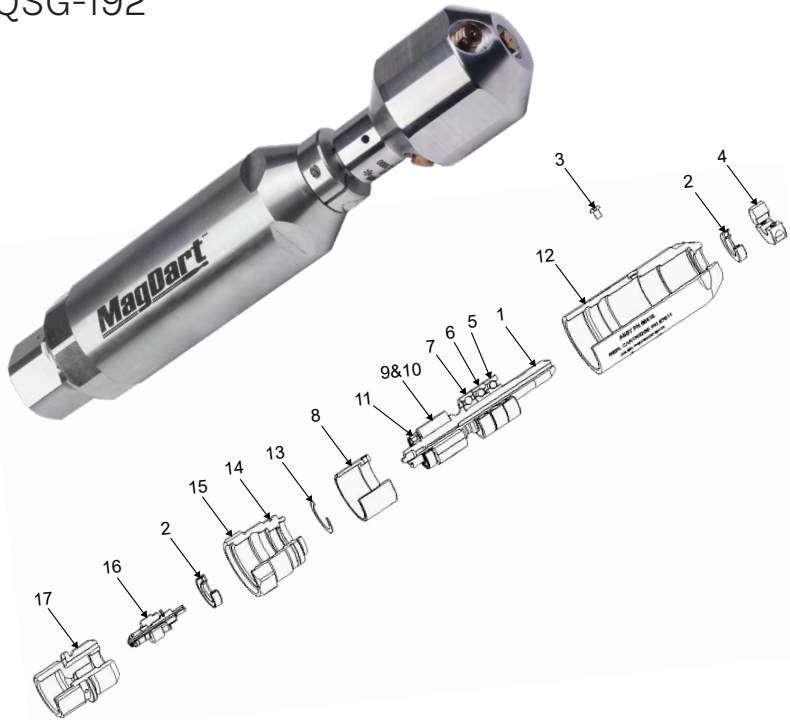


MAGDART™ X40

QUICK START GUIDE

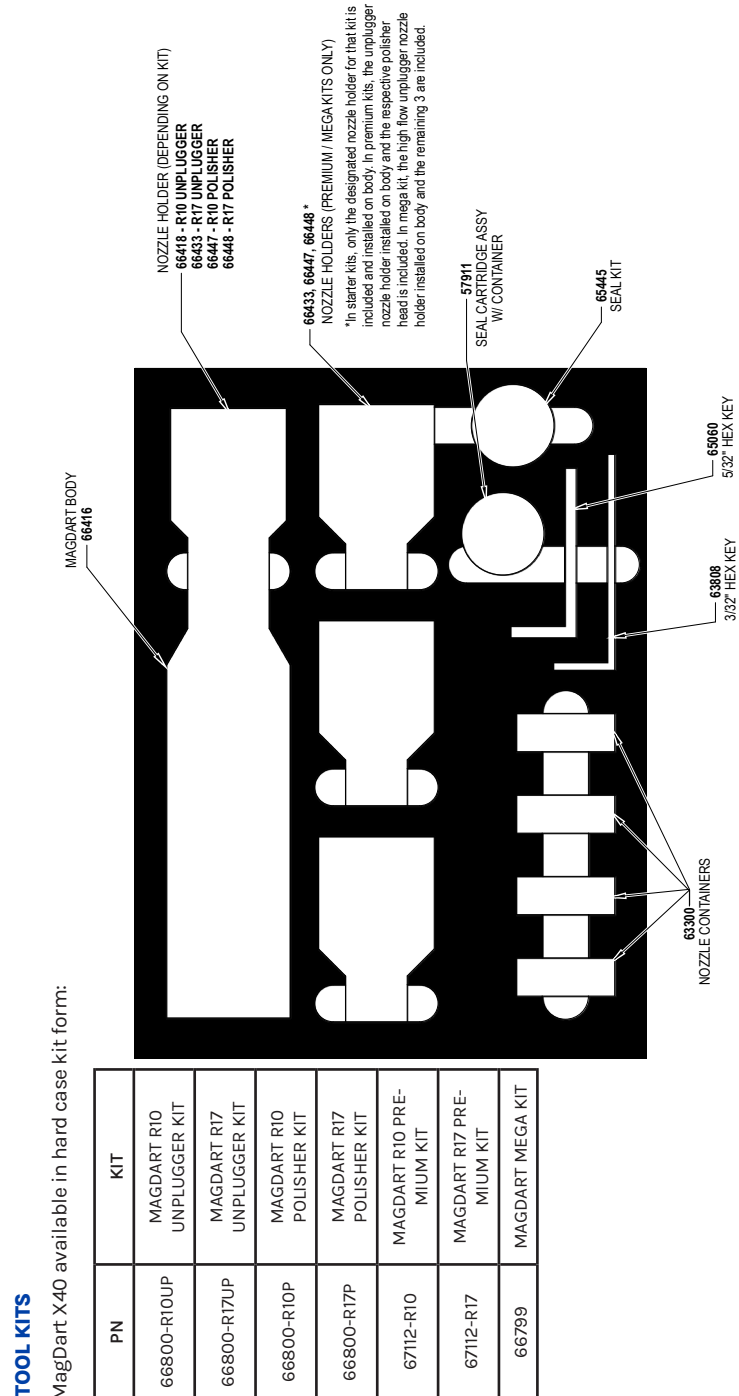
QSG-192



Assembly PN 66416							
Item	Qty	Part Number	Description	Item	Qty	Part Number	Description
1	1	57938	Shaft	10	4	65005S	South Magnet
2	2	57926	Oil Seal	11	1	57928	Pilot Bearing
3	1	64637	Screw	12	1	66417	Main Housing
4	1	66778	Shaft Clamp	13	1	57931	Wave Spring
5	2	57933	Angular Contact Bearings	14	1	57935	O-ring, 1-1/2 ID
6	1	64992	Shim, Spring Steel	15	1	57918	Pilot Bearing Retainer
7	1	64991	Deep Groove Ball Bearing	16	1	57911	Seal Cartridge
8	1	66502	Current Sleeve	17	1	57916	Seal Cartridge Housing
9	4	65005N	North Magnet				

NOTE: Part numbers and descriptions are subject to change without notice.

MAGDART™ X40 | PARTS PLACEMENT



TOOL KITS

MagDart X40 available in hard case kit form:

Jetstream of Houston LLP • 5905 Thomas Road Houston, TX 77041
www.waterblast.com • 832-590-1300

MAGDART™ X40 | NOZZLE FLOW RATES

NOTE: Preferred thrust is 1/3 the body weight of the operator. This chart assumes 200 lb. operator (67 lb-F thrust limit). See MagDart X40 PI (PI-192) for full flow charts and associated thrust.

10°, 30° & 40° PORT Orifice Size (in.)	2x 135° PORT Orifice Size (in.)	R17 Unplugging Head (PN 66433)									
		5 UHPx Nozzles									
		30000 psi		2068 bar		40000 psi		2757 bar		43511 psi	
gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
0.010	0.019			4.0	15.1	4.3	16.3				
0.011	0.020			4.6	17.4	4.9	18.5				
0.012	0.022	4.8	18.1	5.6	21.2	5.8	21.9				
0.013	0.023	5.4	20.4	6.3	23.8	6.5	24.6				
0.014	0.024	6.0	22.7	7.0	26.5						
0.015	0.025	6.7	25.3								
0.016	0.026	7.3	27.6								

10°, 30° & 40° PORT Orifice Size (in.)	2x 135° PORT Orifice Size (in.)	R10 Unplugging Head (PN 66418)									
		5 UHPx Nozzles									
		30000 psi		2068 bar		40000 psi		2757 bar		43511 psi	
gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
0.014	0.024					7.3	27.6				
0.015	0.025			7.7	29.1	8.0	30.2				
0.016	0.026			8.5	32.1	8.8	33.3				
0.017	0.027	8.1	30.6	9.3	35.2	9.7	36.7				
0.018	0.028	8.8	33.3	10.2	38.6	10.6	40.1				
0.019	0.029	9.6	36.3	11.1	42.0	11.5	43.5				
0.020	0.031	10.8	40.8								
0.021	0.032	11.6	43.8								

80° PORT Orifice Size (in.)	100° PORT Orifice Size (in.)	R17 Polisher Head (PN 66448)									
		6 UHPx Nozzles									
		30000 psi		2068 bar		40000 psi		2757 bar		43511 psi	
gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
0.011	0.013			3.5	13.2	3.6	13.6				
0.012	0.014			4.0	15.1	4.2	15.9				
0.013	0.015	4.1	15.5	4.7	17.8	4.9	18.5				
0.014	0.016	4.7	17.8	5.4	20.4	5.7	21.5				
0.015	0.017	5.3	20.0	6.2	23.4						
0.016	0.018	6.0	22.7								
0.017	0.019	6.8	25.7								

80° PORT Orifice Size (in.)	100° PORT Orifice Size (in.)	R10 Polisher Head (PN 66447)									
		6 UHPx Nozzles									
		30000 psi		2068 bar		40000 psi		2757 bar		43511 psi	
gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm	gpm	lpm
0.014	0.016					5.6	21.2				
0.015	0.017			6.2	23.4	6.4	24.2				
0.016	0.018			7.0	26.5	7.3	27.6				
0.017	0.019	6.8	25.7	7.8	29.5	8.1	30.6				
0.018	0.020	7.5	28.4	8.7	32.9	9.1	34.4				
0.019	0.021	8.3	31.4	9.6	36.3	10.0	37.8				
0.019	0.022	8.8	33.3	10.1	38.2	10.5	39.7				
0.020	0.022	9.2	34.8	10.6	40.1						
0.021	0.023	10.0	37.8								
0.021	0.024	10.6	40.1								
0.022	0.024	11.0	41.6								
0.022	0.025	11.5	43.5								
0.022	0.026	12.0	45.4								

DANGER

THIS PRODUCT CAN BE DANGEROUS IF NOT USED PROPERLY! Always wear appropriate Personal Protective Equipment (PPE). Detailed PPE information can be found at: www.fsesgsafety.com and clicking on the JETSTREAM name or by referring to the yellow JETSTREAM SAFETY WARNING pamphlet (PI-082).

The following Quick-Start Guide is intended to provide the customer with an expedient reference for MagDart X40 installation and operation. It does not replace the complete product instructions (PI-192).

This product is sold with the understanding that the purchaser agrees to thoroughly train all operators and maintenance personnel in the correct and safe installation, operation, and maintenance of the product and to provide adequate supervision of personnel at all times. JETSTREAM urges customers to make complete instructions available to all personnel and ensure they are read thoroughly before installing, connecting or using the MagDart X40. Retain these instructions for future reference. If this product is resold or otherwise conveyed, the purchaser must pass on these instructions to the new user. If any questions remain, or to request additional copies, call JETSTREAM at (800) 231-8192 or (832) 590-1300.

Read the yellow JETSTREAM SAFETY WARNING pamphlet (PI-082) included with the shipment of the product.

CONNECTING MAGDART X40

1. The MagDart X40 must be used with an operator control dump.
2. Flush out the high pressure hose before connecting MagDart to hose end or Stinger.
3. The MagDart X40 uses a 9/16" HP FML inlet connection. Apply anti-seize compound to the gland threads and cone on the male end of the adapter.
4. Install the MagDart X40 onto the hose and tighten to 50 ft-lbs.
5. When tube cleaning, a stinger is recommended.

NOZZLE INSTALLATION

Before installing the nozzles into the MagDart X40, verify each nozzle is the correct size, and inspect each nozzle to ensure the sapphire orifice is not damaged or missing. Refer to the Flow Rate Charts for the proper flow rate and thrust for your application.

1. Apply anti-seize compound to the male threads of the nozzle or plug (and cone if using UHPX nozzles).
2. Install using an adjustable or 5/16" wrench.
3. Tighten to 50 in-lbs.



MagDart surface may exceed 200°F.



MagDart utilizes magnets which produce strong magnetic fields. Keep the tool at least 6 inches away from any medical device.

OPERATION

As per the WJTA-IMCA Recommended Practices, all operators shall follow the OSHA regulations for personal protective equipment. (OSHA guidelines for Personal Protective Equipment are available in document number 3151-12R 2004, which can be obtained from www.osha.gov.) All operators shall be issued suitable head protection, eye protection, hearing protection, body protection, hand and foot protection and respiratory protection (if needed). For detailed specifications on all protections required, refer to the WJTA-IMCA 'Recommended Practices for the Use of High Pressure Waterjetting Equipment' Section 6, Protective Equipment For Personnel.

DANGER

The MagDart X40 nozzle's discharge jet(s) can inflict serious bodily wounds. Use only thoroughly trained operators to perform cleaning operations with the MagDart X40.

1. Make sure there is an operator controlled dump in the system.
2. Carefully inspect the tool for damage or missing parts. Make sure the head spins smoothly and freely.
3. Place barricades with warning signs or barricade tape around work area. This includes the waterblast unit and all high pressure hoses.
4. The operator must be outfitted with Personal Protective Equipment (PPE). OSHA guidelines for Personal Protective Equipment are available in document number 3151-12R 2004, which can be obtained from www.osha.gov.
5. Use only clear, clean, cold water that has been filtered to 10 microns with these rotating nozzles.
6. Position the nozzle in a tube or the pipe while the pressure is being set. The high pressure seal may leak initially; it should stop when pressure is increased and rotation begins.
7. Close the dump and slowly bring up to pressure the first time to make sure no nozzles are plugged and that the jet thrust is correct. The swivel should begin to slowly rotate. Once operating pressure is reached, feed the tool into the tube or pipe to begin the cleaning job.
8. Once the work is complete and the tool is disconnected from the hose, blow out all water to prolong the life of the tool. A small amount of oil may also be blown into the inlet nut.


QSG-192

CAUTION

DO NOT use the MagDart X40 if it has not been cleaned and inspected prior to starting the working shift.

Protect the control tool in freezing conditions. Stop using the tool if any low temperature operational problems occur. Drain the tool and remove its cartridge if not in use during freezing conditions.

FOR FURTHER INFORMATION SEE:

 YouTube <https://www.youtube.com/user/JetstreamWaterblast>

and the

Jetstream Safety Manual

