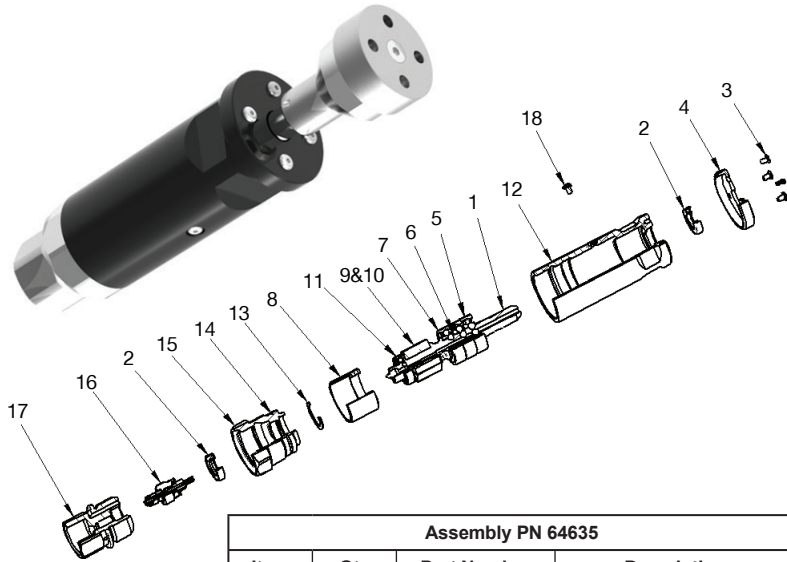


# PRODUCT QUICK-START GUIDE

## MagJet™ X40 Self-powered Rotating Nozzle



Assembly PN 64635			
Item	Qty	Part Number	Description
1	1	57938	Shaft
2	2	57926	Oil Seal
3	4	64637	Capscrew, #8-32
4	1	64638	Front Cover
5	2	57933	Angular Contact Bearings
6	1	64992	Shim. Spring Steel
7	1	64991	Deep Groove Ball Bearing
8	1	57937	Current Sleeve
9	4	65005N	North Magnet
10	4	65005S	South Magnet
11	1	57928	Pilot Bearing
12	1	64636	Main Housing
13	1	57931	Wave Spring
14	1	57935	O-ring, 1-1/2 ID
15	1	57918	Pilot Bearing Retainer
16	1	57911	Seal Cartridge
17	1	57916	Seal Cartridge Housing
18	1	66982	Capscrew, #8-32, Security

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

### QSG-MAGJETX40

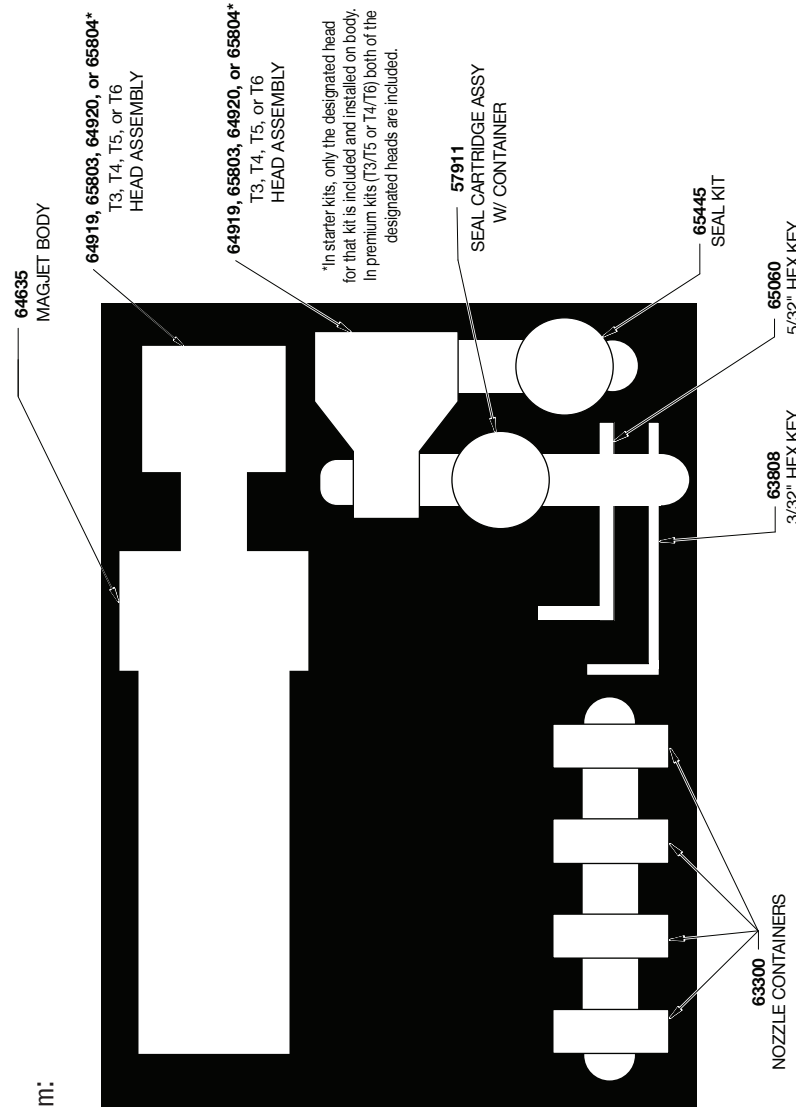
#### Part Placement

MagJet X40 available in hard case kit form:

Kit Part Number	Kit Description
65306	MAGJET T3 STARTER KIT
66236	MAGJET T4 STARTER KIT
66308	MAGJET T5 STARTER KIT
66237	MAGJET T6 STARTER KIT
65307	MAGJET T3/T5 PREMIUM KIT
66238	MAGJET T4/T6 PREMIUM KIT

#### Head Assemblies

Designation	PN	Torque	Angle
T1	66881	10°	
T2	66261	12.5°	
T3	64919	15°	
T4	65803	17.5°	
T5	64920	20°	
T6	65804	22.5°	
T7	66259	25°	



\*In starter kits, only the designated head for that kit is included and installed on body. In premium kits (T3/T5 or T4/T6) both of the designated heads are included.

### QSG-MAGJETX40

#### 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 MagJet X40 PI (PI-162) for full flow charts and associated thrust.

Orifice Size (in.)	T2 Head (PN 66261)										T3 Head (PN 64919)														
	4 UHPx Nozzles					2 UHPx Nozzles, 2 Plugs					4 UHPx Nozzles					2 UHPx Nozzles, 2 Plugs									
	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm					
.016"	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	
.017"					4.80	18.17																			
.018"					5.16	19.53	5.38	20.37																	
.019"					5.74	21.73	5.99	22.67																	
.020"	5.50	20.82	6.35	24.04	6.63	25.10																			
.021"	6.06	22.94	6.99	26.46	7.29	27.60																			
.022"	6.64	25.14	7.66	29.00	7.99	30.25																			
.023"	7.24	27.41	8.36	31.65																					
.024"	7.86	29.75																							
.025"	8.51	32.21																							
.026"	9.18	34.75																							
.027"	9.87	37.36																							
.028"																									
.029"																									
.030"																									
.031"																									
.032"																									
.033"																									
.034"																									
.035"																									
.036"																									
.037"																									
.038"																									
.039"																									

Orifice Size (in.)	T4 Head (PN 65803)										T5 Head (PN 64920)														
	4 UHPx Nozzles					2 UHPx Nozzles, 2 Plugs					4 UHPx Nozzles					2 UHPx Nozzles, 2 Plugs									
	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm					
.013"	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	
.014"					3.27	12.38																			
.015"					3.59	13.59	3.75	14.20																	
.016"					4.08	15.44	4.26	16.13																	
.017"	3.99	15.10	4.61	17.45	4.80	18.17																			
.018"	4.47	16.92	5.16	19.53	5.38	20.37																			
.019"	4.97	18.81	5.74	21.73																					
.020"	5.50	20.82																							
.021"	6.06	22.94																							
.022"	6.64	25.14																							
.023"	7.24	27.41																							
.024"																									
.025"																									
.026"																									
.027"																									
.028"																									
.029"																									
.030"																									
.031"																									
.032"																									

Orifice Size (in.)	T6 Head (PN 65804)										T7 Head (PN 66259)														
	4 UHPx Nozzles					2 UHPx Nozzles, 2 Plugs					4 UHPx Nozzles					2 UHPx Nozzles, 2 Plugs									
	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm	psi	bar	psi	bar	gpm					
.012"	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	3000	2068	4000	2757	43511	3000	
.013"					2.70	10.22	2.82	10.67																	
.014"					3.13	11.85	3.27	12.38																	
.015"	3.11	11.77	3.59	13.59	3.75	14.20																			
.016"	3.54	13.40	4.08	15.44	4.26	16.13																			
.017"	3.99	15.10	4.61	17.45																					
.018"	4.47	16.92																							
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.028"																									

## **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](http://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 MagJet X40™ nozzle installation and operation. It does not replace the complete product instructions (PI-162).

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 that all instructions are read thoroughly before installing, connecting or using the MagJet X40 surface cleaning nozzle. 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 for additional copies, call JETSTREAM at (800) 231-8192 or (832) 590-1300.

Read the yellow JETSTREAM SAFETY WARNING pamphlet included with the shipment of the product.

## **CONNECTING MagJet X40**

Only use with a control gun barrel length of 48 inches MINIMUM to prevent nozzle discharge from accidentally striking the operator's feet, legs, or body. Refer to WJTA "Industry Best Practices for the use of High Pressure Waterjetting Equipment" Section 11.10.6 and Section 2.7.

Engage the pump and depress the control gun trigger to clear any debris from the system prior to installing the MagJet X40 onto the control gun barrel.

## **NOZZLE INSTALLATION**

Before installing the nozzles into the MagJet X40, verify each nozzle is the correct size, and inspect each nozzle to ensure the sapphire orifice is not damaged or missing. Make sure the nozzle orifices are not too small in order to prevent excessive system pressure when the gun's control valve trigger/pedal is depressed. Refer to the Flow Rate Charts for the proper flow rate and thrust for your application.

**NOTE:** The MagJet X40 may be configured with either four nozzles or two nozzles and two plugs. For a given flow, the larger streams obtained by using the two-nozzle configuration may be preferred for some cleaning applications.

1. Use a 5/32" hex key to remove the bolt holding the head cover in place to allow access to the nozzle ports in the head.
2. Apply anti-seize compound to the male threads of the nozzle or plug (and cone if using UHPX nozzles) and install using an adjustable or 5/16" wrench. Hand tighten to 50 lbs. in.
3. Apply medium strength Loctite to the threads of the bolt and reinstall the head cover. Screw in an torque the bolt to 100 lbs. in.

## **WARNING**

**A system must be used when 2 or more dump gun operators are connected to a single waterblast unit. Each gun operator must have independent control of nozzle pressure at their location.**



**MagJet surface may exceed 200°F.**



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

## **OPERATION**

## **DANGER**

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

1. Carefully inspect the gun for damage or missing parts. Ensure that all components work smoothly and freely.
2. During all control gun operations, a secondary or "safety watch" operator should observe the gun operator at all times from a safe, but proximate, distance. The safety watch should have both voice and sight communication with the gun operator at all times. The safety watch must have the ability to instantly shut the waterblast system down (from his location) with the use of a shutdown device (such as JETSTREAM's Emergency Shut-Down Package, PN 53120) if the control gun operator encounters problems or if a problem is suspected. Call JETSTREAM for system specific recommendations.
3. Use only clear, clean, cold water that has been filtered to 10 microns with these rotating nozzles.

## **ATTENTION**

**The person controlling the cleaning nozzle must be the gun operator and must have control of the pressure. Do not allow a secondary or remote operator to have control of the pressure.**

4. Do not connect multiple dump type control guns to a single high-pressure water source without the use of a Multi-Gun Valve (MGV) to make each gun operator independent of the other operators. Call JETSTREAM for assistance if two or more dump type control guns must be used in the waterblast system.
5. Place barricades with warning signs or barricade tape around work area. This includes the waterblast unit and all high-pressure hoses.
6. The gun 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](http://www.osha.gov).
7. Assume blasting position with gun and ensure blast nozzle cannot cross any part of the legs, feet, or body.

## **CAUTION**

**DO NOT use the gun or MagJet X40 if it has not been cleaned and inspected prior to starting the working shift.**

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

For further info see:



Click on JETSTREAM