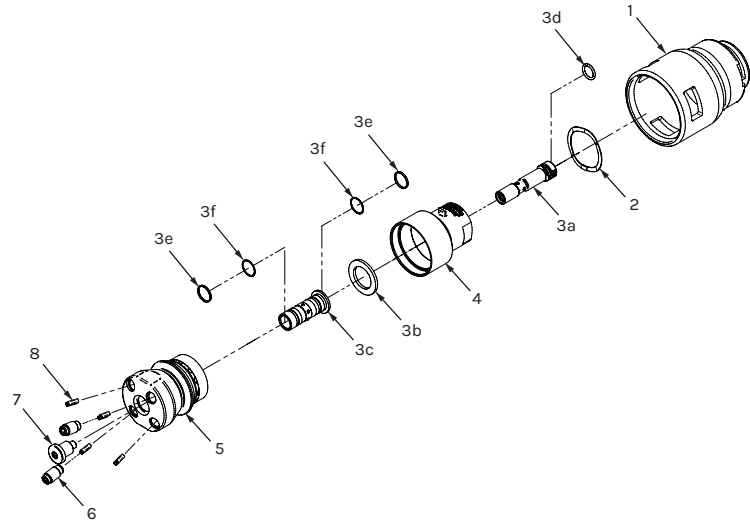


ORBI-JET™ X22

QUICK START GUIDE

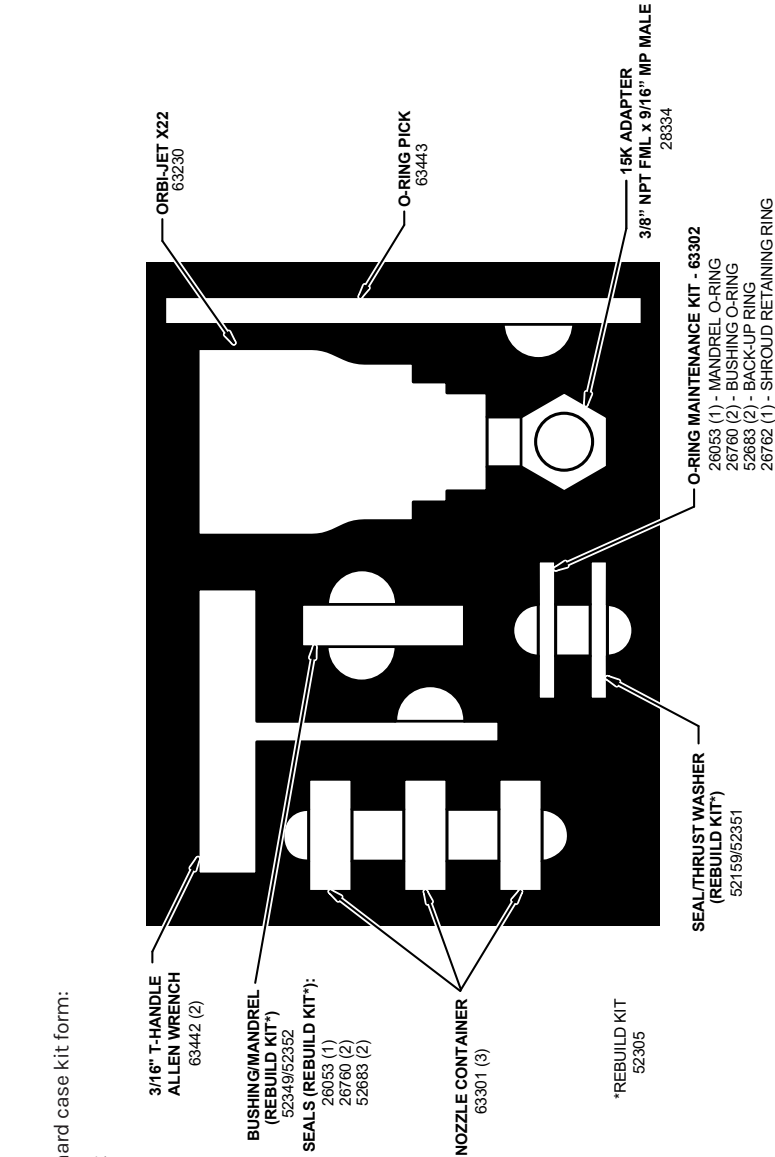
QSG-077



Assembly PN 63230							
Item	Qty	Part Number	Description	Item	Qty	Part Number	Description
1	1	63202	Twis-Lok Shroud	3f	2	26760	O-ring, Bushing
2	1	26762	Shroud Retaining Ring	4	1	63207	Body
3a-3f	1	52305	Rebuild Kit	5	1	54277	Rotor
3a	1	52352	Mandrel	6	2	UHPXi-PLUG	Plug, UHPXi
3b	1	52351	Thrust Washer	7	1	54276	Retaining Screw
3c	1	52349	Bushing	8	4	28435	Straightening Vane
3d	1	26053	O-ring, Mandrel	9	1	63302	Maintenance Kit*
3e	2	52683	Backup Ring, Bushing				

NOTE: Part numbers and descriptions are subject to change without notice.
* Maintenance kit includes items 3d, 3e, and 3f

ORBI-JET™ X22 | PARTS PLACEMENT



TOOL KITS

Orbi-Jet X22 available in hard case kit form:

- PN 63305 Premium Kit
- PN 63306 15K Kit
- PN 63392 Starter Kit

ORBI-JET™ X22 | 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 Orbi-Jet X22 PI (PI-077) for full flow charts and associated thrust.

Part Number	OX-018	OX-025	OX-029	OX-033	OX-038	OX-042	OX-046
2-OX Blasting Pressure (PSI)							
5000	–	–	–	–	6.3	7.6	9.0
7500	–	–	5.0	6.2	7.9	9.4	11.1
10000	–	4.6	5.8	7.2	9.2	11.0	13.0
12500	–	5.3	6.6	8.2	10.4	12.4	–
15000	3.6	5.6	7.1	8.8	11.3	–	–
17500	3.7	6.0	7.6	9.4	12.0	–	–
20000	3.9	6.3	8.0	9.9	–	–	–
22500	4.0	6.5	8.4	10.4	–	–	–
4-OX Blasting Pressure (PSI)							
5000	–	5.6	7.3	9.2	12.1	14.6	17.4
7500	–	6.9	9.0	11.4	14.9	18.0	–
10000	4.8	8.1	10.6	13.3	–	–	–
12500	5.4	9.2	11.9	–	–	–	–
15000	5.8	9.9	12.9	–	–	–	–
17500	6.1	10.6	–	–	–	–	–
20000	6.4	11.2	–	–	–	–	–
22500	6.7	–	–	–	–	–	–

NOTE: Flow rate values include leak-by GPM



THIS PRODUCT CAN BE DANGEROUS IF NOT USED PROPERLY! Always wear appropriate Personal Protective Equipment (PPE). Detailed PPE information can be found at: www.fsescsafety.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 Orbi-Jet X22 installation and operation. It does not replace the complete product instructions (PI-077).

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 Orbi-Jet X22. 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 ORBI-JET X22

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 Orbi-Jet X22 onto the control gun barrel. Check tightness of the retaining screw on the end of the Orbi-Jet X22 by using an allen wrench on the retaining screw while backing up the mandrel with another allen wrench.

NOZZLE INSTALLATION

Refer to the charts in Appendix B of the Orbi-Jet X22 PI (PI-077) for the proper flow rate and thrust for your application.

NOTE: Three spray pattern options are available using the different combinations of nozzles and plugs. Two narrow ports can be plugged for a wider spray pattern, two wide ports plugged for a more narrow and harder hitting spray pattern, or all ports nozzled for complete coverage.

1. If internal hex nozzles are used, shroud does not need to be removed for nozzle removal/installation. Proceed to step 2. If external hex nozzles are used, skip to step 5.
2. For internal hex nozzles: Align blind hole on outside diameter of rotor with "window" on side of shroud. Insert hex key or screwdriver into blind hole to hold rotor stationary.
3. New Orbi-Jet X22 comes with nozzle plugs installed. Determine spray pattern to be used and remove plugs (if needed) using a 3/16" hex key.

4. Apply anti-galling compound to male threads of nozzles and plugs and install using 3/16" hex key. Hand tighten to 50 lbs. in.

5. For external hex nozzles: Remove Twis-Lok shroud to access Orbi-Jet X22 rotor. Shroud can be removed by rotating counter-clockwise relative to Orbi-Jet X22 body (if nozzles are facing you). If Orbi-Jet is already installed on control gun, shroud can be slid down barrel while installing nozzles.

6. New Orbi-Jet X22 comes with nozzle plugs installed. Determine spray pattern to be used and remove plugs (if needed) using a 3/16" hex key.

7. If plugs are being used, apply anti-galling compound to male threads and cone on nozzle plugs and install into correct ports using 3/16" hex key.

8. Apply anti-galling compound to male threads of nozzles and cone and install using adjustable or 5/16" wrench. Hand tighten to 50 lbs. in.

9. Replace Twis-Lok shroud by sliding over body, making sure the protrusions on body and cutouts in shroud line up. Secure by rotating shroud clockwise relative to Orbi-Jet X22 body.

FOR 22,500 PSI OPERATION (9/16" MP FML INLET)

1. Apply anti-gall compound to the gland threads and cone on the control gun front barrel. Do not use Teflon tape.
2. Install the Orbi-Jet X22 onto the front barrel and tighten to 50 lbs. ft.

FOR 15,000 PSI OPERATION (NPT FML INLET)

Use a female NPT to male 9/16" MP adapter for 15,000 psi operation.

1. Apply 3-4 wraps of Teflon thread sealant tape to the male connection thread on the control gun barrel.
2. Apply anti-seize compound over the sealant tape for protection against galling in connection threads.
3. Tighten the connection 1-1/2 to 2 turns past hand-tight. All NPT pipe connections should have a minimum thread engagement of (4) threads.
4. Apply anti-gall compound to the gland threads and cone on the male end of the adapter.

NOTE: Do not use teflon tape.

5. Install the Orbi-Jet X22 onto the front barrel and tighten to 50 lbs. ft.

WARNING

A Multi-Gun Valve (MGV) 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.

OPERATION

DANGER

The Orbi-Jet X22 nozzle's discharge jet(s) can inflict serious bodily wounds. Use only thoroughly trained operators to perform cleaning operations with the Orbi-Jet X22.

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.
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 Orbi-Jet X22 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 INFORMATION SEE:

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

and the **Jetstream Safety Manual**

