



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 RotoMag X22* installation and operation. It does not replace the complete product instructions (PI-078).

* 'RotoMag X22' is used to describe both the RotoMag X22 (1/2"-28 UNEF nozzle ports) and RotoMag X22N (1/4" NPT nozzle ports) except in reference to nozzle ports. RotoMag X22N is called out when necessary.

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 RotoMag 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 ROTOMAG™ X22

The RotoMag X22 is generally mounted to a rigid lance or a flexible hose for cleaning pipes. It can be used with a centralizer and can be fitted with nozzle extensions. See Appendix B of the RotoMag X22 PI (PI-078) for applicable accessories.

Prior to connecting the RotoMag X22, engage the pump to flush out any system debris. Ensure all RotoMag X22 connections are securely tightened.

NOZZLE INSTALLATION

The RotoMag X22 uses up to 8 flush-mounted tungsten carbide RM nozzles or sapphire RMS nozzles. Refer to the charts in Appendix B of the RotoMag X22 PI (PI-078) for the proper flow rate for your application.

NOTE: It is strongly recommended the RotoMag X22 be used with a BALANCED (same size nozzles) combination of nozzles. Failing to do so may reduce the life of the tool.

Configurations of 2, 4, 6, or 8 nozzles are available using the different combinations of nozzles and plugs. RotoMag X22 nozzles can be installed in either the 90 degree ports or the 45 degree forward ports, or both sets of ports simultaneously. Nozzle extensions can be installed in all ports. When nozzles are installed in both the 90 degree and 45 degree ports the RotoMag X22 will spin faster. There are two sets of radial ports marked 'HS' for high speed and 'LS' for low speed.

1. New RotoMag X22 comes with nozzle plugs installed. Determine nozzle configuration to be used and remove plugs (if needed) using a 3/16" hex key.
2. For RotoMag X22 (1/2"-28 UNEF): If plugs are to be used, apply anti-seize compound to male threads and install into correct ports using 3/16" hex key. Tighten to 50 lbs. in.
For RotoMag X22N (1/4" NPT): If plugs are to be used, apply 3-4 wraps of Teflon thread sealant tape to male connection thread. Apply anti-seize compound over the sealant tape and install into correct ports using 3/16" hex key. Tighten connection 1-1/2 to 2 turns past hand tight.
3. For RotoMag X22: Apply anti-seize compound to male threads of nozzles and install using 3/16" hex key. Tighten to 50 lbs. in.
For RotoMag X22N: Apply 3-4 wraps of Teflon thread sealant tape to male connection thread. Apply anti-seize compound over the sealant tape install using 3/16" hex key. Tighten connection 1-1/2 to 2 turns past hand tight.

FOR 22,500 PSI OPERATION (3/4" MP FML INLET)

1. Apply anti-seize compound to the threads and cone on the 3/4" MP male connection.
2. Install the RotoMag X22 and tighten to 90 lbs. ft.

FOR 15,000 PSI OPERATION (NPT FML INLET)

Use a female NPT to male 3/4" MP adapter for 15,000 psi operation.

1. Apply 3-4 wraps of Teflon thread sealant tape to the male connection thread (NOT adapter).
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-seize compound to the threads and cone on the male end of the adapter.

NOTE: Do not use Teflon tape.

5. Install the RotoMag X22 onto the adapter and tighten to 90 lbs. ft.

OPERATION



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

The RotoMag X22, with the flush-mounted nozzles, rotates between 30 and 600 rpm. Optional nozzle extensions can be used to slow the RotoMag X22's rotation while bringing the nozzles closer to the cleaning surface.



A centralizing device is strongly recommended when using nozzle extensions to prevent damage to the extensions of the RotoMag X22.

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An anti-withdrawal device (backout preventer) should be used to prevent the tool from accidentally exiting the pipe under high pressure. Hose restraints (whip checks) should be used at all high pressure hose connections including the fluid end discharge. Refer to the charts in Appendix B of the RotoMag X22 PI (PI-078) for a list of backout preventers.



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

1. Place barricades with warning signs or barricade tape around work area. This includes the waterblast unit and all high-pressure hoses.
2. 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.



DO NOT use the RotoMag X22 if it has not been cleaned and inspected prior to starting the working shift.

FOR FURTHER INFORMATION SEE:

[YouTube](https://www.youtube.com/user/JetstreamWaterblast) <https://www.youtube.com/user/JetstreamWaterblast>

and the

Jetstream Safety Manual

