



## **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 Swivel X22 installation and operation. It does not replace the complete product instructions (PI-179).

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 Swivel 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 SWIVEL X22

Engage the pump to clear any debris from the system prior to installing the Swivel X22 onto the Hydro-mower, hose or lance.

1. Apply anti-seize compound to the male connection threads and male cone for protection against galling in connection threads.
2. Install male connection into the female port of the Swivel X22 and tighten to 90 lbs. ft. (122 Nm).
3. Apply anti-seize compound to the male connection threads and male cone for protection against galling in connection threads.
4. Install the nozzle holder onto the male threads of the Swivel X22 and tighten to 125 lbs. ft. (170 Nm).
5. Use the Nozzle Flow Chart to determine the size and number of nozzles.
6. Determine spray pattern to be used and remove the appropriate plugs.
7. Inspect o-rings on nozzles and/or plugs to ensure they are present and in good shape.
8. Apply anti-seize compound to the male threads and taper.
9. Install nozzles and /or plugs in the appropriate nozzle ports and tighten hand tight.

**NOTE:** Make sure the nozzle orifices are not too small in order to prevent excessive system pressure when the system is pressurized.

## **WARNING**

A Multi-Gun Valve (MGV) must be used when 2 or more operators are connected to a single waterblast unit. Each operator must have independent control of nozzle pressure at their location.

## OPERATION

### **DANGER**

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

1. Carefully inspect the Swivel X22 for damage or missing parts. Ensure that all components work smoothly and freely.
2. During all operations, a secondary or "safety watch" operator should observe the operator at all times from a safe, but proximate, distance. The safety watch should have both voice and sight communication with the 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 valves 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 valves 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 Swivel X22 if it has not been cleaned and inspected prior to starting the working shift.

Protect the Swivel X22 in freezing conditions. Stop using the tool if any low temperature operational problems occur. Drain the tool if not in use during freezing conditions.

## FOR FURTHER INFORMATION SEE:

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

and the

**Jetstream Safety Manual**

