

TECHNICAL SPECIFICATIONS

At its maximum working distance of 30 metres, the force of water on the surface being cleaned is approximately 10kg

Recommended water pressure	6kg/cm ² (6 bar)	85 psi
Recommended air pressure	7kg/cm ² (7 bar)	100 psi
Estimated water consumption	454 lpm—18-22m ³ /h	100 gal/min
Estimated air consumption	33 lps—2m ³ /min	70 cfm
Recoil	10 to 18 kg.	22 to 40 lbs
Weight (Cleaning Jet & tripod)	14.5 kg.	32 lbs.
Weight of Cleaning Jet with ball valve	5.9 kg.	13 lbs.
Weight of Tripod	8.6 kg.	19 lbs
Weight of Base	6.7 kg.	14.8 lbs
Length Cleaning Jet (including ball valve)	800 mm	31.5"
Length of tripod (closed)	1160 mm	45.5"
Height of tripod (open)	1027 mm	40.5"
Air hose	20 mm	¾"
Water hose	51 mm	2"
Water shut off valve	2" BSP	2" BSP

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This applies to trademarks, model denominations, part numbers and drawings.
Use only genuine spares.

The use of non-manufacturers spare parts invalidates the warranty.

This tool has been designed and produced in accordance with the following directives: 2006/42/EC Machinery Directive
If your company has any problem with our products or would like to discuss the possibility of an improvement being made to them, then please do not hesitate to contact us. Your comments are both important and appreciated.

UNITOR

INSTRUCTION MANUAL TORNADO 3 CLEANING JET



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ORIGINAL INSTRUCTIONS

SAFETY INSTRUCTION

Foreword

Thank you for your purchase of the Professional use UNITOR CLEANING JET.

These instructions contains the necessary maintenance information for you to ensure proper operation and care for these tools.

General Information

Before operating, performing maintenance or repairing the UNITOR Cleaning Jet these instructions must be read and understood by the operator, if in any doubt, ask your supervisor before using this equipment.

Local safety regulations must be followed at all times. Failure to follow these instructions could result in damage to the UNITOR Cleaning Jet and/or result in personal injury.

The manufacturer disclaims all responsibility for damage to persons or objects arising as a consequence of incorrect handling of the tool, failure to inspect the tool for damage or other faults that may influence the operation prior to starting work, or failure to follow the safety regulations listed or applicable to the job site.

The tool is primarily designed for the cleaning/washing of ships cargo holds; it produces a powerful jet of water, which can also remove flaking rust and paint.

Safety

Do wear Personal Protective Equipment including safety goggles, footwear, ear defenders and gloves. In some environments it will be necessary to wear facemasks or breathing apparatus.

Do be aware that this tool is not electrically insulated.

Do be aware that this tool can create flying debris.

Do be aware of others working around you.

Do store this tool in a secure and dry place.

Always observe safe working practices and local safety regulations at all times.

Never aim the Cleaning Jet at any person, this equipment produces a very powerful jet of water and can cause serious injury if misused.

Do not operate the Cleaning Jet, unless it is securely fixed to its tripod and base and situated on a flat surface.

Do not modify this tool in any way, as this will invalidate the warranty and could lead to serious injury.

Do not drag this tool by the water or air hose.

Please note: Unrestrained air and water hoses can whip if they become detached.

Water Supply

Ensure that a minimum 51mm (2.0") bore water hose is used and that all couplings are secure, leak free and in good condition.

The recommended water pressure is 5.9 bar (85p.s.i.).

Operators should be familiar with the data given in the specification section.

Please keep these instructions in a safe and accessible place.

Air Supply

Ensure that a minimum 19mm (3/4") bore air hose is used and that all couplings are secure, leak free and in good condition.

Limit the length of air hose to 30M (100ft).

Where extra length is necessary, for each additional 15M (50ft) of air hose used, the pressure drop is approximately 0.21bar (3psi).

Recommended air pressure is 6.9bar (100 psi).

Do not let the operating pressure fall below 6.2bar (90p.s.i.) or rise above 7.6bar (110 psi)

Preferably, the compressor should be able to supply a minimum of 47.2 L/s (100cfm) free air.

Pre-Start Check

Prior to operating the tool check: -
That all fittings are secure, free from leaks and air hoses are in good condition.

That the air pressure is correct for this tool 6.9 bar (100 psi).

That the water pressure is correct for this tool 5.9 bar (85psi).

Safe use of this tool requires that the operator adopt a solid stance and secure foothold. Gloves and personal protective equipment **must** be worn when using this tool. Care must be taken to avoid damaging or tripping over the air or water hose.

INSTRUCTION MANUAL

Starting Work

Erect the tripod and spread the tripods legs fully, ensure that the tripod is placed in a stable position. Remove the safety pin from the swivel pin and remove the swivel pin from the tripod, attach the Cleaning Jet to the tripod securing it with the swivel pin, replace the safety pin.

Optional Tripod base

Prepare the tripod base for the tripod by first removing all the retaining clips from the base legs.

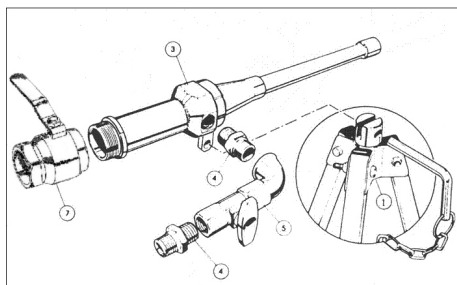
Place the Y-Piece (1) on the floor with the tripod location hole uppermost. Insert the legs (2) with the 9mm holes at the end of the legs nearest the Y-Piece and with the tripod location holes uppermost.

Secure using two of the 8mm pin (4) and close the retaining clips. Insert the tripod legs one at a time into the location hole and secure with the 8mm pin (815.0250), close the retaining clip.

Always clear the air hose before connecting it to the Cleaning Jet, this is to ensure the removal of any foreign bodies that may be present. which would otherwise block, or choke the mixing assembly.

Connect a 51mm (2.0") water hose coupling to the rear of the Cleaning Jet or fit a instantaneous adaptor and to the ball valve.

IMPORTANT: Take precautions to ensure that the area to be cleaned is completely free of personnel and of any electrical equipment that is exposed or is not protected against water ingress. (IP67 minimum protection)



Item No:	Part No:	Description
1	342.HY02	Tripod
2	342.HY60A	Tripod base
3	342.HY35	Cleaning Jet
4	342.HY16	Air inlet adapter
5	828.1000	Air inlet control valve
7	342.HY07	Water shut off valve

Machine Operation

With one operator securely holding and controlling the Cleaning Jet and the water control valve on the Cleaning Jet fully open, a second person should slowly open the water valve at the water main or pump.

It is very important that the Cleaning Jet be held securely while the water is being turned on and while it is in use.

The air valve should now be adjusted carefully to produce a tight hard-hitting jet of water. Excessive air will cause the jet of water to break up and spread, becoming less effective.

In an emergency or once cleaning has been completed, close the Cleaning Jet water valve and then the air valve.

If cleaning has been completed, instruct the second operator to shut off the main water supply. Slowly open the Cleaning Jet water control valve again to release the water pressure in the hose.

Disconnect the air and water hoses and wipe all deposits from the outside of the Cleaning Jet.

Remove the safety pin and then taking the weight of the Cleaning Jet, remove the swivel pin from the tripod and remove the Cleaning Jet.

Replace the tripod swivel pin and replace its safety pin.

When collapsing the tripod, take care not to trap fingers or hands.

It is recommended that the joints and swivel head of the Tripod be lubricated prior to storage. Cover the Cleaning Jet hold cleaner to protect it and store in a secure and dry place.

Tripod Base

