



**HYDRO-FORCE™**

# AW82: Truck Mount Swivel Wand OPERATOR'S MANUAL



## **⚠ WARNING**

All users must read and understand this manual completely before operating the tool.

Hydro-Force  
4282 South 590 West  
Salt Lake City, UT 84123  
801-268-2673  
801-268-3856 FAX

# Introduction

Congratulations on your purchase of the Hydro-Force Truck Mount Swivel Wand. The Truck Mount Swivel wand is designed to give professional cleaning performance with either truck mounted or portable extractors. Years of experience, engineering, and planning have gone into the design and manufacturing of the Truck Mount Swivel Wand. We take a great deal of pride in our products; our goal is no less than your complete satisfaction.

This manual will provide users with the knowledge required to operate the Hydro-Force Swivel Wand safely, to understand how to properly operate and maintain the tool, and to ensure that the equipment operates at its maximum performance level.

Always maintain this manual in legible condition adjacent to the equipment, or place in a secure location for future reference.

Any questions pertaining to the operating or servicing of this unit should be directed to your nearest Hydro-Force distributor.

This manual is written specifically for the Hydro-Force Truck Mount Swivel Wand manufactured by:

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4282 South 590 West  
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Information in this manual is subject to change without notice and does not represent a commitment on the part of Hydro-Force or its parent or affiliated companies.

# Technical Specifications

## AW82 Swivel Wand

Height: 33.75”

Length: 55”

Width: 14”

Weight: 10.5 lbs.

## Safety

### **NOTICE**

**This tool must be protected from freezing conditions which may damage the valves, swivels, hoses and other components.**

- **Freezing of water in this tool will cause damage.** The Truck Mount Wands must be protected from freezing temperature. Store, transport, and use this equipment only in temperatures well above freezing. (32°F or 0°C). If you suspect the Wand has been frozen, do not try to operate until you are sure it has thawed completely.
- If the tool cannot be stored or transported in a warm environment, it can be guarded from freezing by running an anti-freeze solution through the tool or using compressed air to blow the water out of the tool. If anti-freeze is used, the anti-freeze solution must be completely flushed from the tool before it is returned to service.

### **⚠️ WARNING**

**High Pressure water at high temperatures can cause Injury**

- Do not clean with solutions that are at temperatures above 250°F.
- HP hoses may rupture if worn or damaged. Do not use tool if solution hose covering is cut, bulging, or otherwise damaged. Examine HP solution hoses daily and replace or repair hoses as needed.

**\*\*\*Use common sense to protect yourself and others while using this equipment\*\*\***

- Keep pets and children away from the tool when in use.

# Operation Procedures

## SET UP AND OPERATION

### 1. Water Pressure & Flow Requirements:

The solution pump providing the water pressure to operate the Truck Mount Wand requires the following:

Adjust your system solution pressure for the best cleaning performance on the type of carpet you will be cleaning.

**Required Pump Flow & Pressure: 1.80gpm @ 800psi**

**Recommended operation pressure is - 500-800psi**

- The increased agitation at higher pressures may damage carpet fibers.

### **NOTICE**

**Exceeding the recommended pressure may damage the tool and cause damage to carpet fibers.**

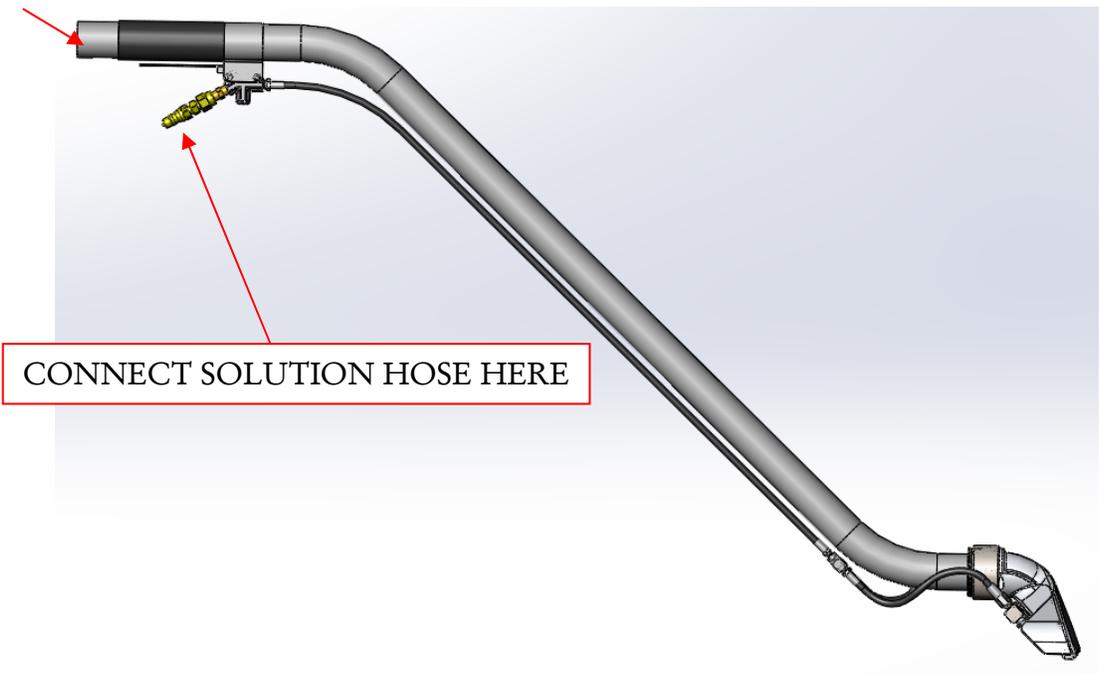
### 2. Connection of Solution Hose:

Connect the solution hose from your extractor to the 1/4" Male Quick connect on the QC Assembly under the main tube of the wand.

### 3. Connection of Vacuum Hoses:

Connect the vacuum hose from your extractor to the 2" Vacuum pipe end of the handle of the Wand. A 2" cuff is recommended and will fit over the outside of the pipe. A 1-1/2" cuff can be used. It will fit inside the pipe, but may not seal as well.

CONNECT VACUUM HOSE HERE

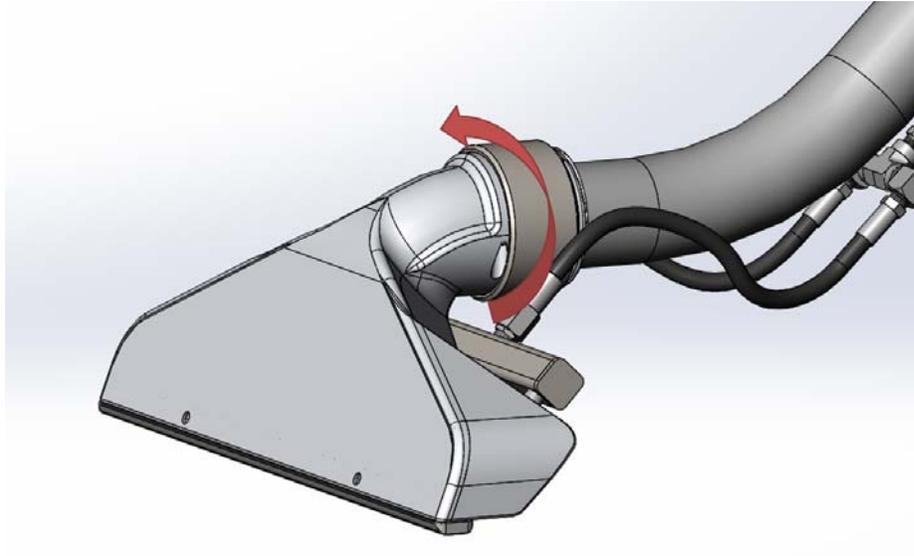


#### 4. Locking Swivel Operation

The Hydro-Force AW82 Swivel Truck Mount Wand handle has the ability to swivel while the head of the wand maintains flat contact with the carpet. The handle can be quickly locked in place for use of the wand with a fixed handle.

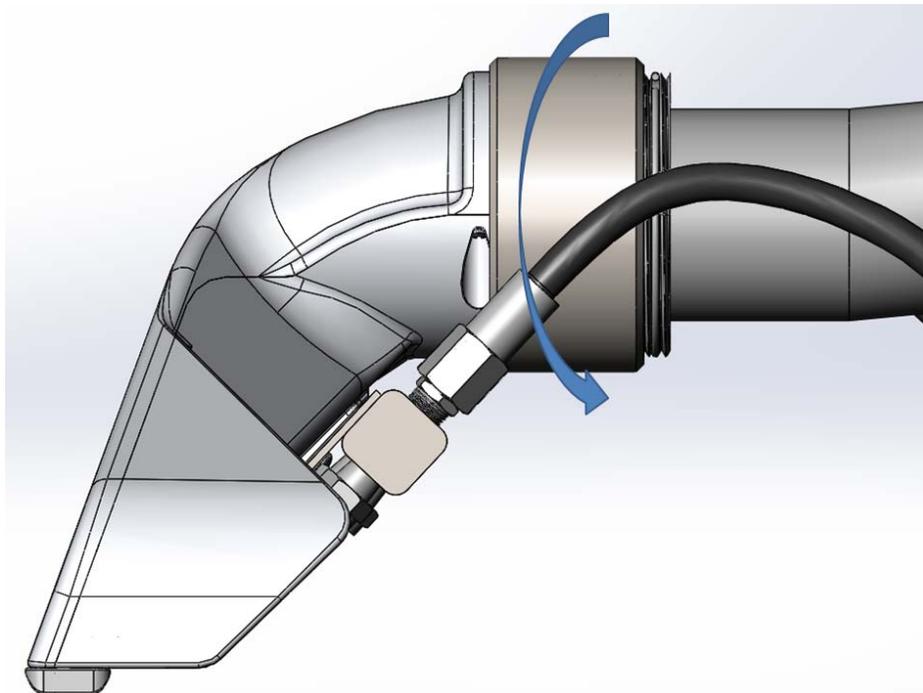
##### Handle locking

Position the handle at 90° relative the bottom surface of the head. Turn the collar at the base of the head clockwise until the collar firmly locks the handle in place.



##### Handle unlocking

Turn the collar at the base of the head counter-clockwise until the collar stops on the retaining ring. The handle is now free to rotate.



## 5. Cleaning Procedure:

### Vacuum Carpet

Vacuum the carpet or use a counter rotating brush machine to remove debris and dry soil from the carpet.

### Prespray Carpet

Prespray the carpet with your selected cleaning solution. Allow it to dwell for 5 or 10 minutes but do not allow it to dry before applying the extraction process using the Wand.

### Clean and Extract with the Carpet Wand

Simultaneously squeeze the trigger and pull the Wand back. This achieves the cleaning and extraction stroke. As you near the end of the cleaning pass, release the trigger on the wand to stop the solution spray. Continue to pull the wand back until you have vacuumed over the entire sprayed section of carpet.

If needed, you can now make a drying pass with no solution flow by pushing the wand forward over the same path or a new path adjacent to the first path, overlapping slightly. Repeat with as many cleaning and drying passes as needed to clean the entire area.

Note: Check the vacuum glide on a regular basis to make sure no debris is stuck in the slot. A clogged glide could result in uneven removal of the solution.

## 6. Shutdown Procedure:

- a. Turn the extractor solution pump off.
- b. Squeeze the trigger of the wand to release the pressure.
- c. Pull the wand over the area where the jets sprayed when the pressure was released to recover the water.
- d. Disconnect the solution hose and vacuum hose.
- e. Use the vacuum hose to remove any fibers, dirt and debris from the glide.
- f. Turn the extractor vacuums off.
- g. Rinse off the glide and wand to remove hair, fibers and dirt.
- h. Collect the wand and hoses and return them to your van or other storage area.

# Troubleshooting

## Troubleshooting – Hydro-Force Truck Mount Swivel Wand

<b>Problem</b>	<b>Cause</b>	<b>Solution</b>
No water Spraying	Solution Hose not connected	Connect Solution hose to the wand
	Ball Valve Closed on Solution Hose	Open Ball Valve
	Trigger Valve Stuck Shut	Repair or replace Trigger Valve
	Defective Quick Connect	Repair or replace quick connect
	Filter Screen Plugged	Clean or replace filter screen
	Spray Jets plugged	Clean out or replace jets
	Extractor Pump turned Off	Turn Pump On
	Extractor Pump not pumping	Check pump operation & flow – Repair or Replace
	Solution Hoses Disconnected	Check & re-connect all connections between sections of hose
	Solution Hose Plugged	Check & clean out or replace hoses
Manifold Flow Issues	Pressure too low	Check Pump rating & operation – Repair or replace
	Flow Rate too low	Check Pump rating & operation – Repair or replace
	Filter Screen Plugged	Clean or replace filter screen
	No water spraying	See previous section on No Water Spraying
	Jets Plugged	Clean Out or Replace Jets
Not picking up water	Vacuum Hose not connected	Connect Vacuum hose to the wand
	Vacuum Glide Plugged	Clean out Vacuum Glide Slot
	Lid off extractor waste tank	Replace lid
	Extractor Drain Valve Open	Close Valve
	Tank Full – Vac Shutoff Engaged	Drain Tank
	Filter clogged	Clean Filter
	Vacuum Hose plugged or leaking	Clean Out, Repair or replace vacuum hoses
	Vacuums not running	Check Extractor
Glide Catching on carpet	Glide Worn	Replace Glide
	Screws on glide loose	Tighten or replace screws
	Debris embedded in Glide	Clean off or replace Glide

**Contact your distributor for additional troubleshooting assistance, to order parts or for advice and assistance in performing necessary repairs.**

# Maintenance

*Proper maintenance is required to keep the Truck Mount Swivel Wand operating properly, prevent downtime and to extend the life of your equipment.*

**WARNING:** Disconnect solution hose before performing any service or maintenance inside machine head, valve or solution filter.

Operation	Interval
Cleaning the Solution Filter	Once a month or more often as needed
Inspect Glide	Before each job
Replace Glide	As Needed
Replace O Rings	As Needed
Freeze Protection	Before storage or as needed.

## Cleaning the Solution Filter:

A dirty or clogged Solution Filter on the Wand will reduce the flow rate of water to the spray jets. This will reduce the cleaning effectiveness of the Wand.

The Solution Filter Screen NA0803 is in the Filter Body NA0802, between the 1/4" Male Quick Connect AH102B and the Filter Adapter NA0804.

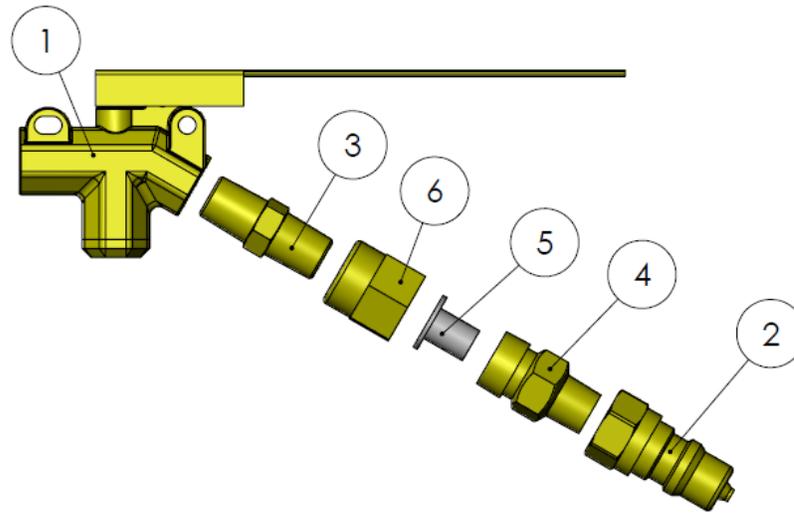
To remove the Solution Filter use a 13/16" wrench to hold the Filter Adapter and an 11/16" wrench to turn the Filter Body.

Usually the filter screen will fall out or is easily pulled out of the Filter Body. If extremely dirty, you may need to pry the filter screen out with a small flat head screwdriver.

Washout the filter screen or use an air gun to blow the debris off of the screen. If the screen is damaged it should be replaced.

Place the Filter Screen back into the Filter Body. Apply Teflon Tape to the male threads of the Filter Body and screw it back into the Filter Adapter and use your 13/16" & 11/16" wrenches to tighten the fittings.

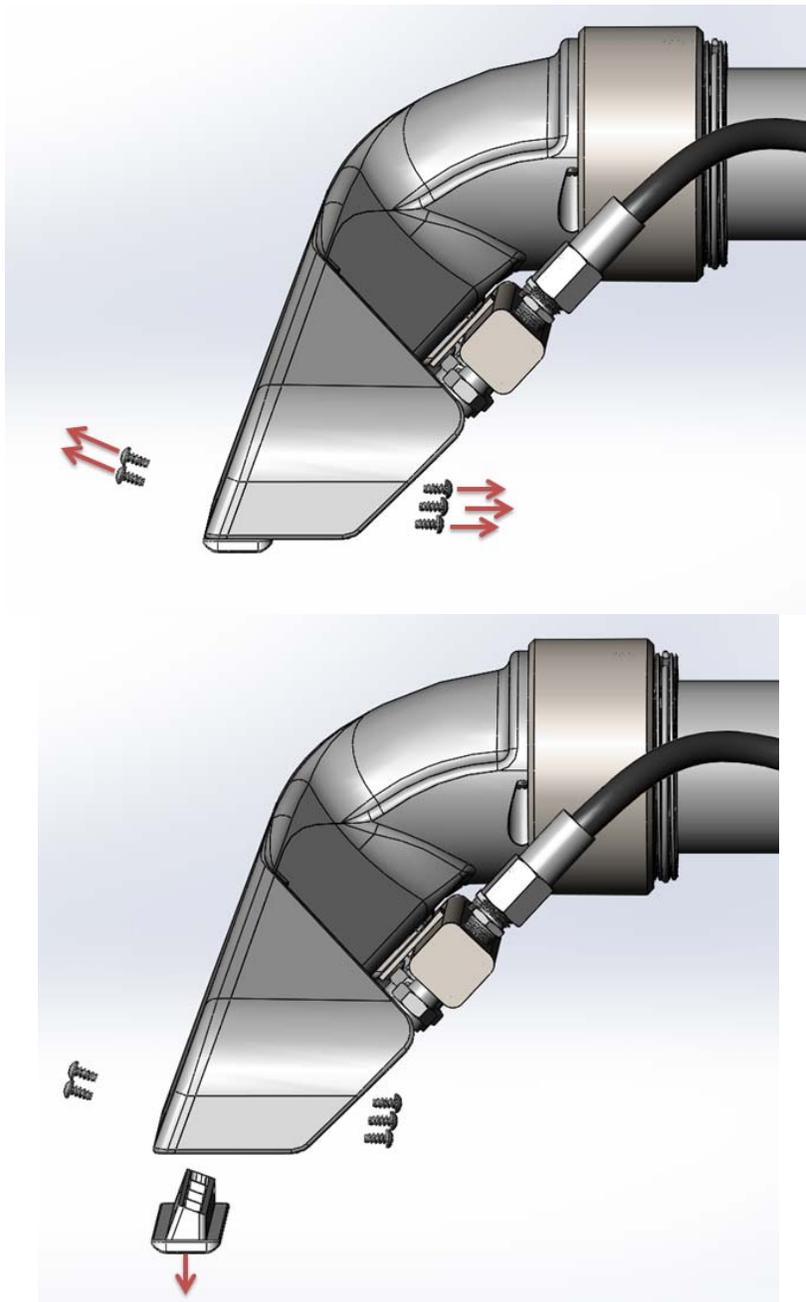
Test the Wand for flow operation before returning to service.



ITEM NO.	PART NUMBER	QTY.
1	AW791, soft touch valve	1
2	AH102B, Quick connect 1-4, MPT Bras, 52495K610	1
3	BR072, Nipple, Hex, 1-4x1-4, Brass	1
4	NA0802 Strainer Body	1
5	NA0803, Strainer 100 Mesh w o CHK VALV	1
6	NA0804 Strainer Adapter	1

## Inspecting & Changing the Glide:

With normal use, the Glide will last for years, but as the carpet contact point for the wand, over time, the Glide may wear out or get damaged. Before each job, inspect the Glide. Look for and remove any debris or grit which may be imbedded in the Glide surface. Check for rough edges or nicks which could catch the carpet. A file, emery board or a fine grit sanding block can be used to smooth the Glide surface. A worn glide may not seal as well or a damaged glide could snag the carpet.



To replace the Glide, apply silicone sealant around the edge of the glide. Place the new Glide into the bottom of the wand head replace and hand tighten the five screws. If reattaching a glide that has already been used, lightly rotate the screws back and forth into the glide to find the original thread cut into the glide and hand tighten screws. Test the wand operation before returning to service.

## Freeze Protection Procedure:

Your Hydro-Force Wand must be protected from freezing. Freezing can cause serious damage to any component containing water. If the Wand is transported or stored in freezing temperatures, the following procedures should be performed:

### Anti-Freeze Solution Method:

It is recommended that a non-toxic anti-freeze such as propylene glycol be used to freeze guard this tool. Follow all local and federal laws regarding the disposal of any anti-freeze solution. Pour an anti-freeze solution into the solution tank or water box of your extractor. (Refer to your extractor operator's manual section regarding freeze guard instructions for the extractor to determine the best method to run anti-freeze through your extractor.)

The solution must be of sufficient dilution to prevent freezing at the expected low temperatures in your area. Refer to the anti-freeze container label or check with the manufacturer to determine the dilution rate required.

Connect the solution hose to the extractor and the 1/4" Male Quick Connect on Wand tool Spray Gun.

Turn on the extractor pump.

Hold the Wand over a bucket to collect the water & anti-freeze sprayed from the tool.

Squeeze the trigger on the Wand to spray water from the tool and continue to spray until you see anti-freeze being sprayed from the Wand jets.

Turn off the extractor pump.

Disconnect the solution hose from the Wand.

### **Compressed Air Method:**

Connect a compressed air hose to the 1/4" Male Quick connect on the Wand valve.

Hold the Wand over a bucket to collect the water sprayed from the tool.

Squeeze the trigger on the Wand to spray water from the tool and continue to spray until you no longer see water being sprayed from the Wand jets.

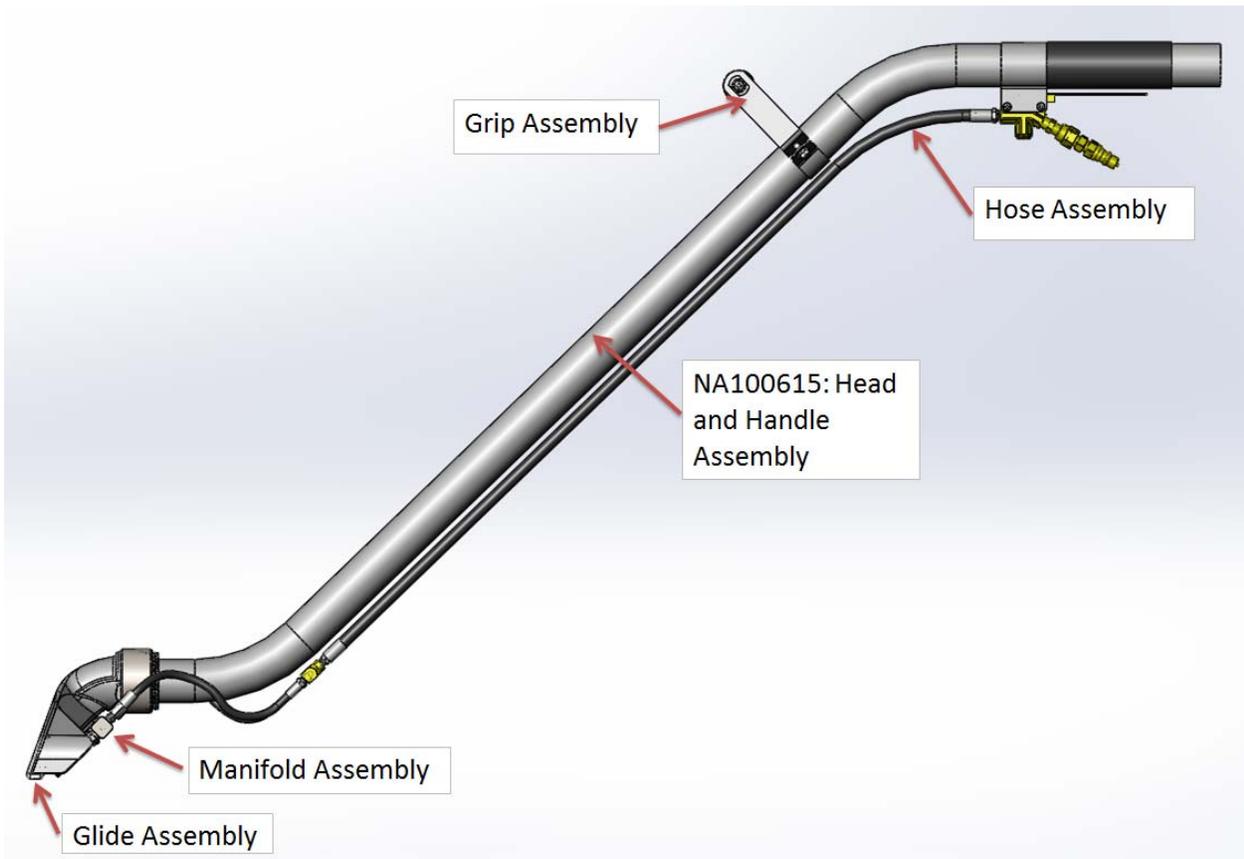
Disconnect the compressed air hose from the Wand.

## **Returning the Wand to service after storage or freeze protection:**

To return the Wand to service, the anti-freeze must be flushed from the machine. Flush the anti-freeze out of the machine by repeating the procedures above using fresh water in place of anti-freeze.

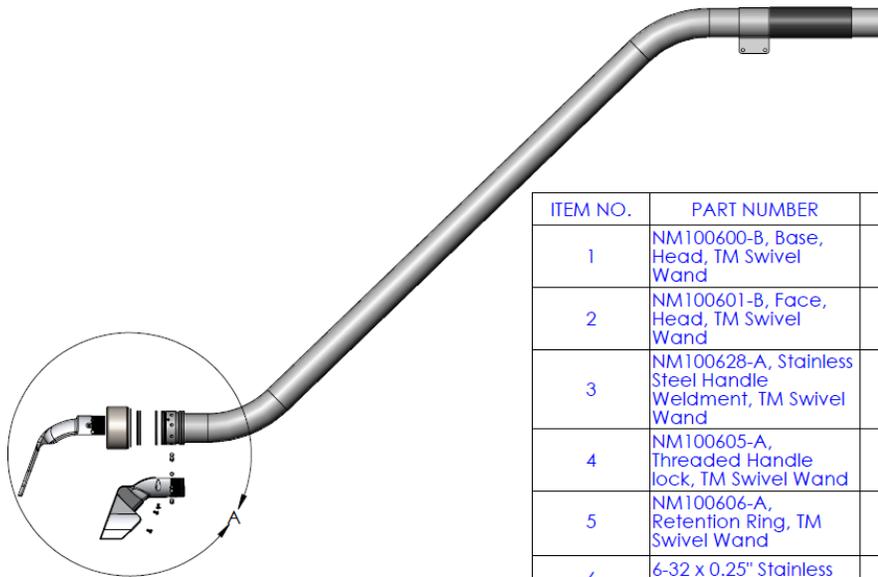
# PARTS

Drawings Used to Identify Parts for your Wand

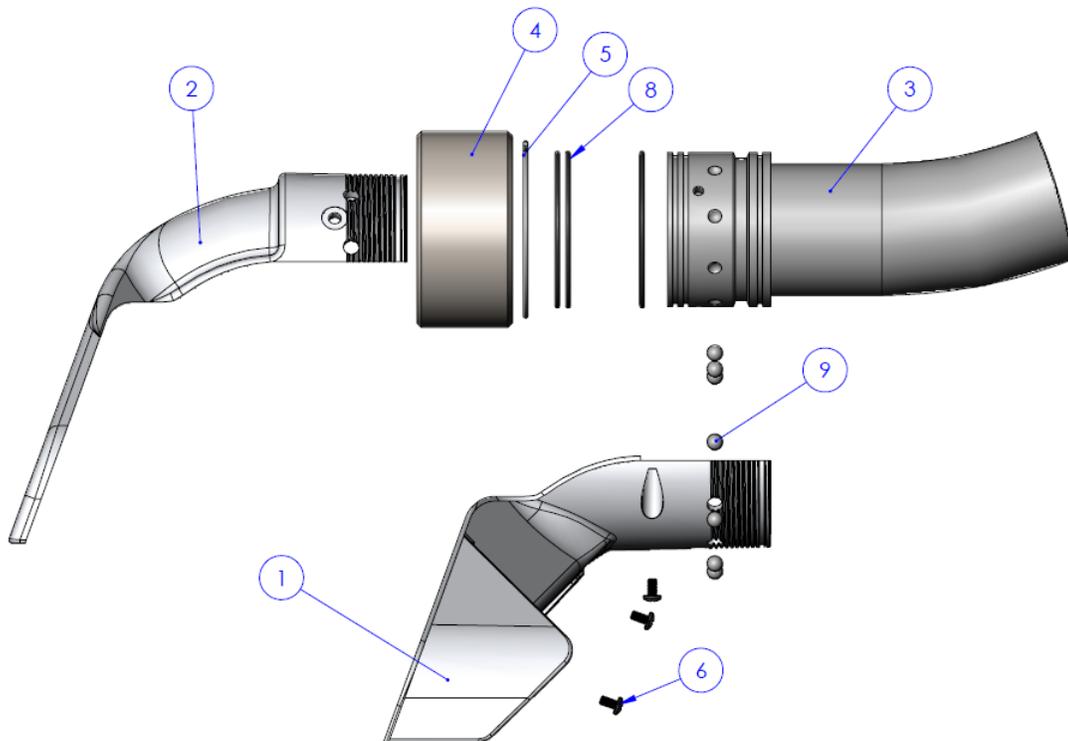


# Head and Handle Assembly

## NA100615-B, Head and Handle Assembly, Truck Mount Swivel Wand



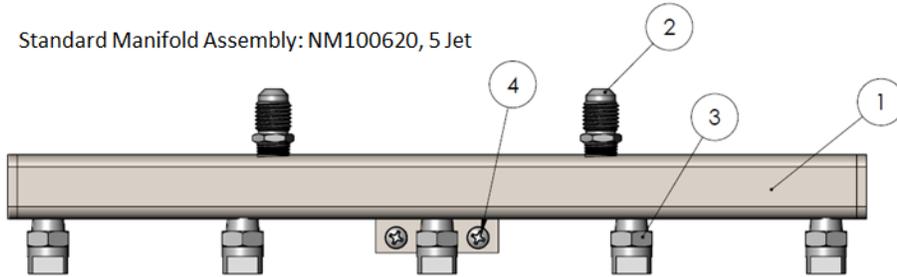
ITEM NO.	PART NUMBER	QTY.
1	NM100600-B, Base, Head, TM Swivel Wand	1
2	NM100601-B, Face, Head, TM Swivel Wand	1
3	NM100628-A, Stainless Steel Handle Weldment, TM Swivel Wand	1
4	NM100605-A, Threaded Handle lock, TM Swivel Wand	1
5	NM100606-A, Retention Ring, TM Swivel Wand	1
6	6-32 x 0.25" Stainless Steel Pan Head Screw	6
7	10-32 X 0.25" STAINLESS STEEL PAN HEAD SCREW	3
8	O35 oring	3
9	6mm STAINLESS STEEL BALL BEARING	9



DETAIL A  
SCALE 1 : 2

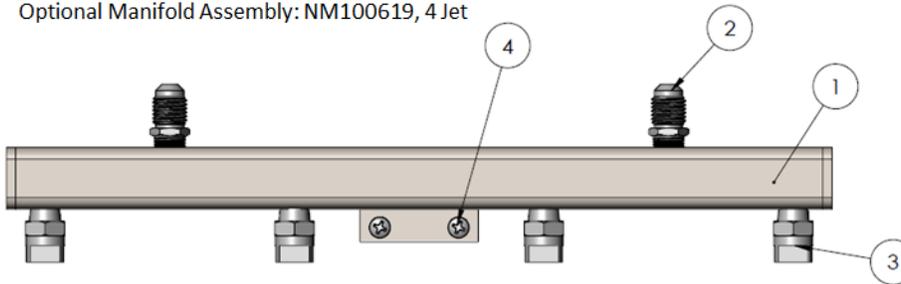
# Manifold Assemblies

Standard Manifold Assembly: NM100620, 5 Jet



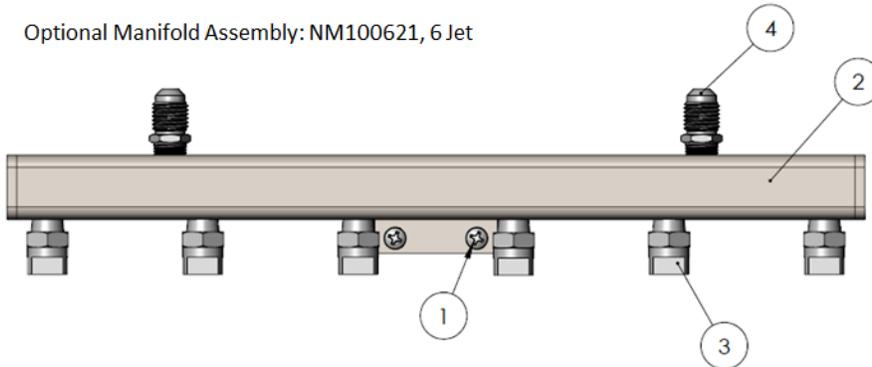
ITEM NO.	PART NUMBER	QTY.
1	NM100608-A, 5 Jet Manifold, Weldment, TM Swivel Wand	1
2	BR124, SAE 45 Male, 0.25" x 0.125" MNPT	2
3	VEE Jet and check valve AW797 Assembly	5
4	6-32 x 0.25" Stainless Steel Pan Head Screw	2

Optional Manifold Assembly: NM100619, 4 Jet

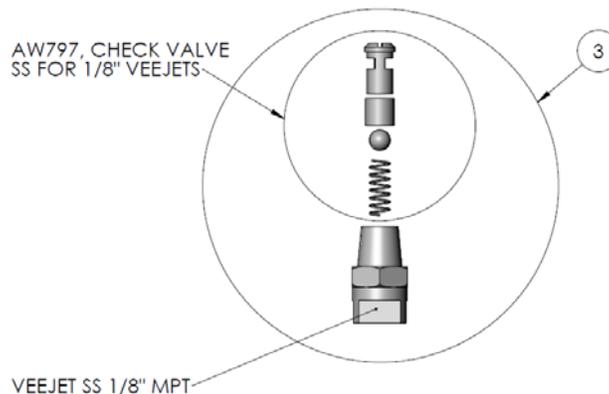


ITEM NO.	PART NUMBER	QTY.
1	NM100607-A, 4 Jet Manifold, Weldment, TM Swivel Wand	1
2	BR124, SAE 45 Male, 0.25" x 0.125" MNPT	2
3	VEE Jet and check valve AW797 Assembly	4
4	6-32 x 0.25" Stainless Steel Pan Head Screw	2

Optional Manifold Assembly: NM100621, 6 Jet

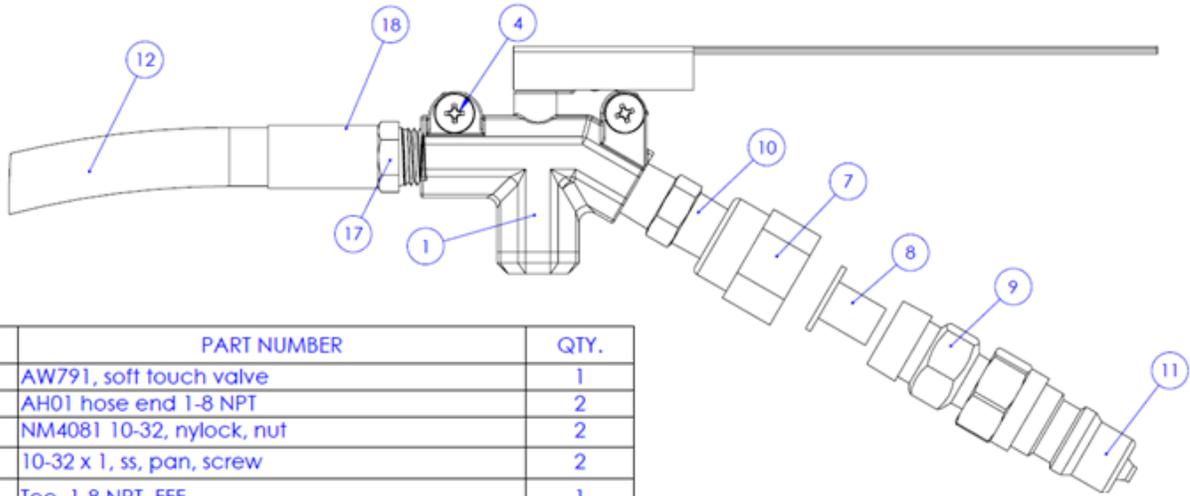


ITEM NO.	PART NUMBER	QTY.
1	6-32 x 0.25" Stainless Steel Pan Head Screw	2
2	NM100609-A, 6 Jet Manifold, Weldment, TM Swivel Wand	1
3	VEE Jet and check valve AW797 Assembly	6
4	BR124, SAE 45 Male, 0.25" x 0.125" MNPT	2

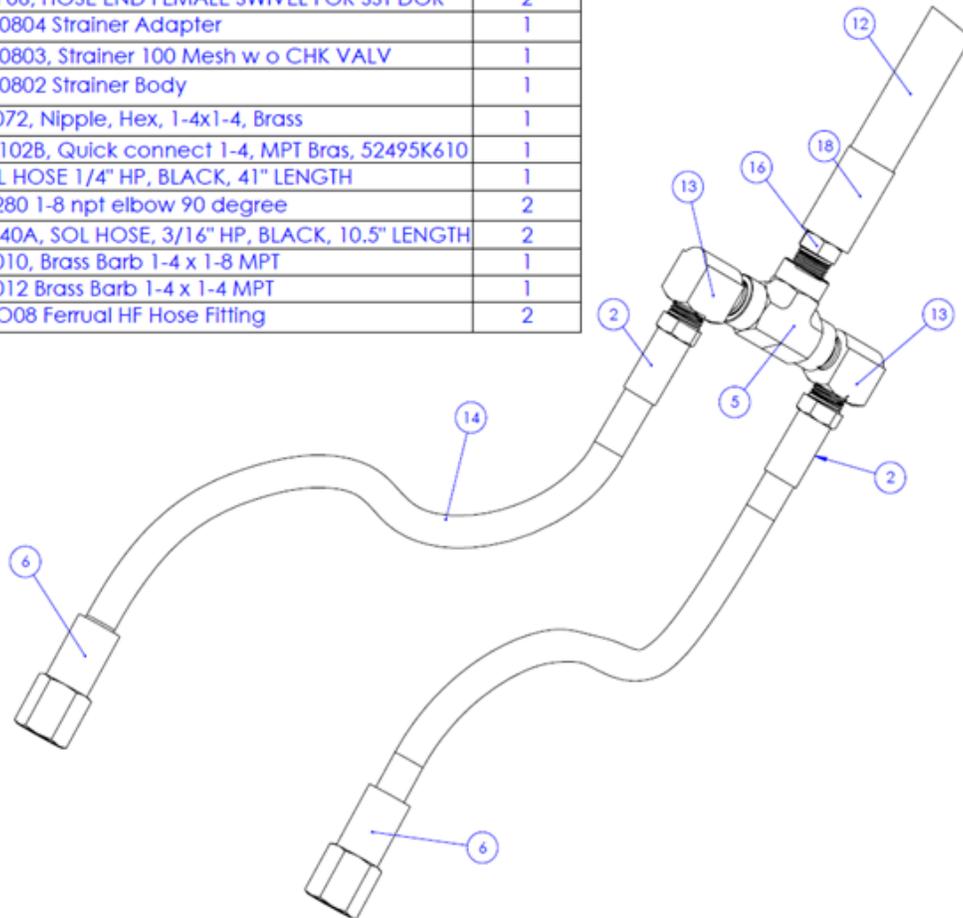


# Hose Assembly

## NA100617, Brass Valve and Rubber Hose Assembly, TM Wand

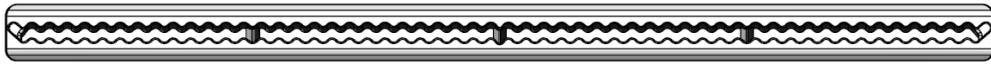


ITEM NO.	PART NUMBER	QTY.
1	AW791, soft touch valve	1
2	AH01 hose end 1-8 NPT	2
3	NM4081 10-32, nylock, nut	2
4	10-32 x 1, ss, pan, screw	2
5	Tee, 1-8 NPT, FFF	1
6	PAF06, HOSE END FEMALE SWIVEL FOR SST DOR	2
7	NA0804 Strainer Adapter	1
8	NA0803, Strainer 100 Mesh w o CHK VALV	1
9	NA0802 Strainer Body	1
10	BR072, Nipple, Hex, 1-4x1-4, Brass	1
11	AH102B, Quick connect 1-4, MPT Bras, 52495K610	1
12	SOL HOSE 1/4" HP, BLACK, 41" LENGTH	1
13	BR280 1-8 npt elbow 90 degree	2
14	NA40A, SOL HOSE, 3/16" HP, BLACK, 10.5" LENGTH	2
16	BR010, Brass Barb 1-4 x 1-8 MPT	1
17	BR012 Brass Barb 1-4 x 1-4 MPT	1
18	XHO08 Ferrul HF Hose Fitting	2

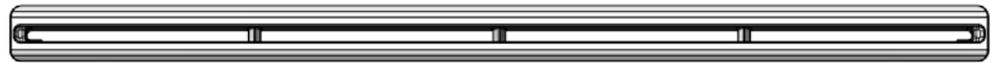
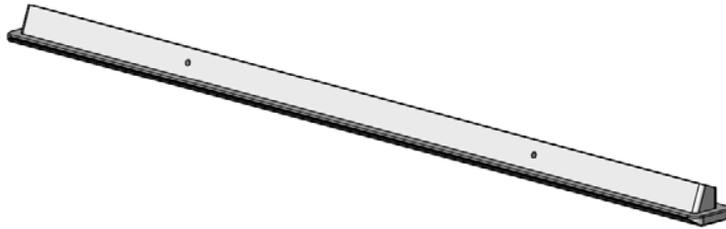


## Glides

NM100603, Glide, POM, Sawtooth, TM Wand

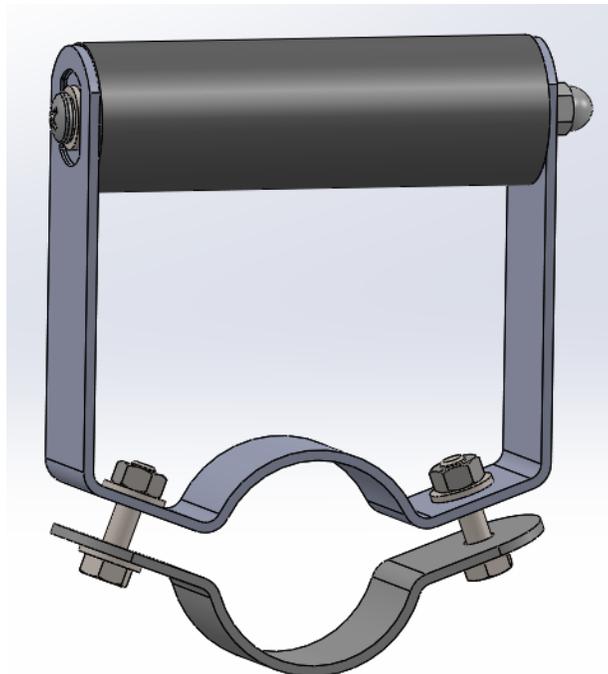


NM100612, Glide, POM, Slotted, TM Wand



## Grip

AW68, 2" Wand Handle



# Limited Warranty

Your Hydro-Force Truck Mount Wand is designed to give you years of reliable service. If a problem should arise use the troubleshooting section in the operation manual to diagnose and correct the problem if possible. If you are unable to determine the cause or solution to the problem contact your distributor or Hydro-Force for assistance.

Hydro-Force warrants the Truck Mount Wand to be free from defects in material or workmanship for one year from the date of purchase.

During the warranty period, Hydro-Force will, at its option repair or replace components which prove to be defective. This warranty does not provide for replacement of complete units due to defective components. Transportation or related service labor are covered for 1 year for non-wear items, but warranty work must be approved by Hydro-Force before work is started.

Replacement parts are warranted only for the remainder of the original warranty period.

This warranty shall not apply to defects resulting from improper operation, lack of maintenance, unauthorized modification, chemical incompatibility, misuse, abuse or exposure to freezing temperature conditions. It does not cover normal wear items such as filters, valve seals, hoses, jets, glides or other items which require replacement as a result of ordinary usage.

To obtain warranty service for the Hydro-Force Truck Mount Wand, contact your distributor or Hydro-Force.

No returned items will be accepted by Hydro-Force without prior authorization. All returns must have a return authorization number, issued by Hydro-Force, clearly marked on the exterior of the package.

Hydro-Force makes no other warranty either expressed or implied with respect to this product.

The remedies provided herein are the purchaser's sole and exclusive remedies. In no event shall Hydro-Force be liable for any direct, indirect, special, incidental or consequential damages.

This warranty gives you specific legal rights. You may also have other rights which vary from jurisdiction to jurisdiction.