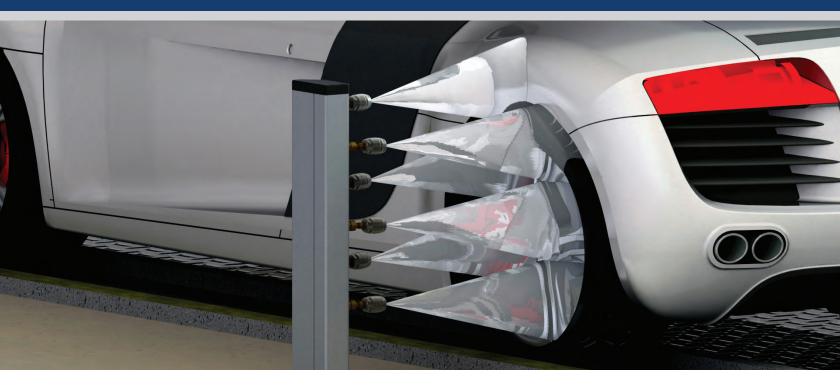
# BLAST-TEC PROTM - ROTATING TURBO NOZZLES



## **BLAST-TEC PROTM**

ROTATING TURBO NOZZLE - 1000 PSI

The Blast-Tec Pro was designed specifically for high-pressure, high-impact vehicle wash applications including wheel blaster, undercarriage wash, rinsing, and high pressure cleaning.

#### **GREATER IMPACT:**

Blasts a  $0^{\circ}$  straight water stream at up to 1,000 PSI (69 bar), while rotating at 1500-2500 RPM to provide a 24° or 30° cone of coverage.

#### **LESS WATER:**

Greater impingement allows you to use a smaller Blast-Tec Pro nozzle size while getting the same impact as nozzles with higher GPM flow rates.

#### **HEAVY DUTY:**

Corrosion resistant stainless steel housing and precision machined tungsten carbide wear surfaces offer long life and smooth operation.

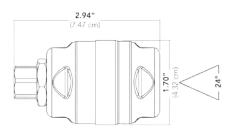
### LONG LASTING:

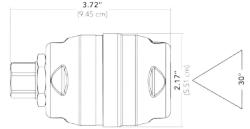
Minimal number of components, reduces complexity for better reliability – lasts five times longer than the competition. Repair kits are also available for extended life and lower overall operating costs.





# BLAST-TEC PROTM - ROTATING TURBO NOZZLES





ROTATING NOZZLE ORDER GUIDE		BLAST-TEC PRO 324 24° ANGLE		BLAST-TEC PRO 430 30° ANGLE	
NOZZLE NUMBER	FLOW RATE (@1000 PSI) (69 bar)	1/4" BSPP INLET	1/4" NPT INLET	1/4" BSPP INLET	1/4" NPT INLET
2.0	1.00 GPM (3.8 LPM)	1001106	1001600	1001631	1001620
3.0	1.50 GPM (5.7 LPM)	1001107	1001601	1001632	1001621
3.5	1.75 GPM (6.6 LPM)	1001108	1001602	1001633	1001622
4.0	2.00 GPM (7.6 LPM)	1001109	1001603	1001634	1001623
4.5	2.25 GPM (8.5 LPM)	1001110	1001604	1001635	1001624
5.0	2.50 GPM (9.5 LPM)	1001111	1001605	1001636	1001625
5.5	2.75 GPM (10.4 LPM)	1001112	1001606	1001637	1001626
6.0	3.00 GPM (11.4 LPM)	1001113	1001607	1001638	1001627

### BLAST-TEC PRO 324 & 430 REPAIR KITS



Instead of replacing your entire nozzle, Blast-Tec Pro repair kits can be used for extended nozzle life and lower overall operating costs. Each repair kit includes: dome screen, mini rotor assembly, mini rubber boot, o-ring, and seat retainer.

NOZZLE NUMBER	FLOW RATE (@1000 PSI) (69 bar)	324 REPAIR KIT	430 REPAIR KIT
2.0	1.00 GPM (3.8 LPM)	1000273	1001640
3.0	1.50 GPM (5.7 LPM)	1001088	1001641
3.5	1.75 GPM (6.6 LPM)	1000274	1001642
4.0	2.00 GPM (7.6 LPM)	1001089	1001643
4.5	2.25 GPM (8.5 LPM)	1001090	1001644
5.0	2.50 GPM (9.5 LPM)	1001091	1001645
5.5	2.75 GPM (10.4 LPM)	1001092	1001646
6.0	3.00 GPM (11.4 LPM)	1001093	1001647

SPECIFICATIONS			
Inlet Pressure (Min/Max)	800 - 1,200 PSI (55 - 83 bar)		
Optimal Operating Distance	12"- 32" (31 - 82 cm)		
Maximum Temperature	+120°F (+49°C)		
Housing Material	Stainless Steel		
Weight: Blast-Tec Pro 324	0.50 lbs (.23 kg)		
Weight: Blast-Tec Pro 430	0.95 lbs (.43 kg)		
Water Filtration (Recommended)	150 Micron		

# BLAST-TEC PROTM - RETROFIT KITS

#### COLEMAN WATER WIZARD RETROFIT KIT



Coleman Water Wizard Nozzle Retrofit kits use up to 47% less water\* than the factory standard nozzles. Kit includes nozzles for rockers, top and side oscillators. (Kit may require additional parts to be purchased from Coleman Hanna.)

KIT INCLUDES	PART NUMBER
(14) 2.0 Blast-Tec Pro 324 Nozzles (P/N 1001106), (10) 3.5 Blast-Tec Pro 324 Nozzles (P/N 1001108), and (24) 1/4" BSPP x 1/4" NPT Brass Adapters (P/N 3000572)	1001394

#### SONNY'S SPINNER/PENDULUM NOZZLE RETROFIT KIT



The Sonny's Spinner/Pendulum Nozzle Retrofit Kit can use up to 40% less water.\* Replaces (10) factory-standard nozzles with (6) powerful Blast-Tec Pro nozzles. Eliminates troublesome spinner mechanism, reducing maintenance. Kit includes driver's and passenger's side.

KIT INCLUDES	PART NUMBER
(6) 4.0 Blast-Tec Pro 324 Nozzles (P/N 1001109), (6) 1/4" BSPP x NPT Brass Adapters (P/N 3000572), and (2) Spinner Eliminator Adapter (P/N 3000959)	1001448

#### SONNY'S OMNI I SIDE/WHEEL BLASTER NOZZLE RETROFIT KIT



The Sonny's OMNI I Side/Wheel Blaster can Nozzle Retrofit Kit can use up to 45% less water\*. Replaces 20 factory-standard nozzles with 6 powerful Blast-Tec Pro Rotating Turbo Nozzles. Kit is designed for single nozzle manifold, includes both driver's and passenger's side. Order two kits for dual manifold.

KIT INCLUDES	PART NUMBER
(6) 4.0 Blast-Tec Pro 324 Nozzles (P/N 1001109), (6) 1/4" BSPP x NPT Brass Adapters (P/N 3000572), (6) 1/4" NPT Brass Street Elbow (P/N 3000670), and (16) 1/4" NPT Brass Hex Socket Plug (P/N 3000094)	1001441

#### SONNY'S OMNI I TOP/BUMPER BLASTER NOZZLE RETROFIT KIT



The Sonny's OMNI I Top/Bumper Blaster can Nozzle Retrofit Kit use up to 27% less water.\* Replaces 10 factory-standard nozzles with 4 powerful Blast-Tec Pro Rotating Turbo Nozzles. Kit designed for single nozzle manifold. Order two kits for dual manifold.

KIT INCLUDES	PART NUMBER
(4) 4.0 Blast-Tec Pro 324 Nozzles (P/N 1001109), (4) 1/4" BSPP x NPT Brass Adapt- ers (P/N 3000572), (4) 1/4" NPT Brass Street Elbow (P/N 3000670), and (7) 1/4" NPT Brass Hex Socket Plug (P/N 3000094)	1001447

\*Water savings calculations are based on 1000 PSI (69 bar) and minimum required nozzle sizes. Actual water savings may vary based on unique application.

# BLAST-TEC PROTM - RETROFIT KITS & ADAPTERS

#### MACNEIL MAGNUM WHEEL BLASTER NOZZLE RETROFIT KITS



MacNeil Magnum 300



MacNeil Magnum 600

MacNeil Magnum 900

MacNeil Magnum Kits can use up to 10% less water\* than legacy factory-standard nozzles. (Blast-Tec Pro Nozzles are now factory-standard.) Kits include nozzles for both driver's and passenger's side.

KIT	KIT INCLUDES	PART NUMBER
MacNeil Magnum 300	(6) 3.5 Blast-Tec Pro 324 Nozzles (P/N1001108), (6) 1/4" BSPP x 1/4 NPT Brass Adapter (P/N 3000572)	1001443
MacNeil Magnum 600	(12) 3.5 Blast-Tec Pro 324 Nozzles (P/N1001108), (12) 1/4" BSPP x 1/4 NPT Brass Adapter (P/N 3000572)	1001444
MacNeil Magnum 900	(18) 3.5 Blast-Tec Pro 324 Nozzles (P/N1001108), (18) 1/4" BSPP x 1/4 NPT Brass Adapter (P/N 3000572)	1001445

\*Water savings calculations are based on 1000 PSI (69 bar) and minimum required nozzle sizes. Actual water savings may vary based on unique application.

### **ADAPTERS**

#### 1/4" BSPP X 1/4" NPT KNUCKLE BALL JOINT ADAPTER



The Knuckle Ball Joint Adapter gives you the flexibility to point your nozzles directly at problem areas such as mirrors, etc. Adjustable ball easily swivels for custom nozzle positioning, adding up to 20 degrees actuation.

PART NUMBER

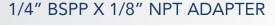
1001755

#### 1/4" BSPP X 1/4" NPT ADAPTER



PART NUMBER

3000572





**PART NUMBER** 

3000581

#### 1/4" MBSP X 3/8" FNPT ADAPTER



**PART NUMBER** 

3000988

# **NOZZLE SELECTION AND SIZING**

Proper nozzle selection should take into consideration the type of application, your pressure setting, distance from the substrate, and the nozzle number size.

**Pump Capacity** – Your pump must be capable of producing 1000 PSI (69 bar) for the total GPM flow rate of all the nozzles required for the application. For example, a wheel blaster with three #4 Nozzles (2 GPM (7.6 LPM) per nozzle) on each the driver's and passenger's side (total of 6 nozzles) will require pump capacity of 12 GPM (45.4 LPM) at 1000 PSI (69 bar).

#### Or Use This Formula To Calculate Standard:

Pump Capacity = (Quantity of Nozzles) x 
$$\left(\text{Nozzle } \# \sqrt{\frac{\text{Application Pressure (PSI)}}{4000}}\right)$$

#### Or Use This Formula To Calculate Metric:

Pump Capacity = (Quantity of Nozzles) x (Nozzle # 
$$\sqrt{\frac{\text{Application Pressure (bar)}}{275.8}}$$
)

#### **BSPP vs NPT Inlet Connection:**

To meet the needs of the majority of our customers, Blast-Tec Pro Nozzles are available with either 1/4" NPT or BSPP inlet connections.

- BSPP Connection Has an o-ring seal and can be hand-tightened
- NPT Connection Requires thread tape

#### Recommendations by Application:

- High Pressure Rinse Use a higher flow nozzle, position further away from the vehicle
  - Tip Our 30° nozzle will provide better vehicle coverage.
- High Pressure Cleaning Use a lower flow nozzle, position closer to the vehicle, and/or use more nozzles
  - Tip Our 24° nozzle will provide better cleaning power.

## RECOMMENDED STARTING POINTS



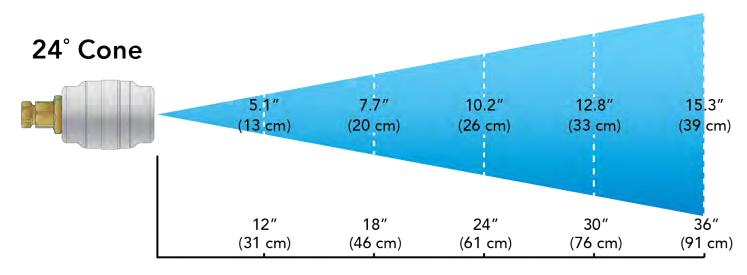


## !WARNING!

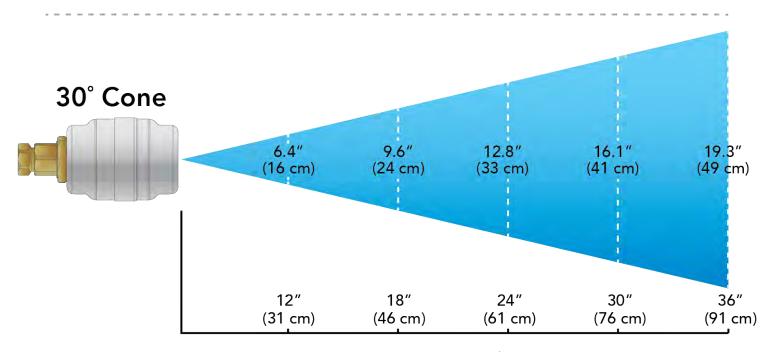
It is not recommended to use a high-pressure valve to split your high-pressure pump flow to multiple applications. This may cause a pressure spike at the nozzle and can pop threads or crack the nozzle body causing premature failure.

# **NOZZLE SELECTION AND SIZING**

## VEHICLE COVERAGE/NOZZLE SPACING/DISTANCE FROM SUBSTRATE



Distance From Substrate



Distance From Substrate

# !WARNING!

The closer to the substrate, the higher the impact of the nozzle. Positioning the nozzle too close to the substrate may cause damage. If reduced impingement is required, use a nozzle with less flow. Ex. If using a # 4.0 has too high impact, switch to a smaller nozzle such as a # 3.0 or # 2.0. **DO NOT REDUCE WATER PRESSURE BELOW 800 PSI** (55 bar) AS A WAY TO REDUCE IMPINGEMENT.

# WARRANTY

### BLAST-TECTM PRO & BLAST-FORCETM NOZZLES







Blast-Tec Pro and Blast-Force Nozzles are warranted to be free from defects in material and workmanship under normal use and service. "Normal use and service" means not in excess of the recommended pressures, temperatures and chemicals or handling fluids not compatible with component materials. This warranty shall not apply to any accessory which has been repaired or altered to affect the performance or reliability of the product.

Warranty does not apply to a) freight damage, b) freezing damage, c) damage caused by parts or accessories not obtained from or approved by Hydra-Flex, Inc., d) damage from misuse and/or misapplication, e) damage due to poor water quality, f) normal wear of moving parts, components affected by moving parts or surfaces meant to wear.

Period of warranty shall be 90 days from the date product is shipped from Hydra-Flex, Inc.'s facility. Liability of manufacturer under the foregoing warranty is limited to repair or replacement of that product at the option of Hydra-Flex, Inc., which according to our investigation was deemed defective at time of shipment. This warranty is in lieu of all other warranties, expressed or implied, including any warranty of merchantability and/or any and all other obligations or liabilities on the part of Hydra-Flex, Inc. Return merchandise authorization number, to return units for repair or replacement, must be granted in advance of return.

## CHEM-FLEX™ INJECTOR







Chem-Flex Injectors are warranted to be free from defects in material and workmanship under normal use and service. "Normal use and service" means not in excess of the recommended pressures, temperatures and chemicals or handling fluids not compatible with component materials. Rubber and synthetic rubber parts such as "o"- rings, diaphragms, squeeze tubing and gaskets are considered expendable and are not covered under warranty. This warranty shall not apply to any accessory which has been repaired or altered to affect the performance or reliability of the product.

Warranty does not apply to a) freight damage, b) freezing damage, c) damage caused by parts or accessories not obtained from or approved by Hydra-Flex, Inc., d) damage from misuse and/or misapplication, e) normal wear of moving parts or components affected by moving parts.

Period of warranty shall be 1 year from the date product is shipped from Hydra-Flex, Inc.'s facility. Liability of manufacturer under the foregoing warranty is limited to repair or replacement of that product at the option of Hydra-Flex Inc., which according to our investigation was deemed defective at time of shipment. This warranty is in lieu of all other warranties, expressed or implied, including any warranty of merchantability and/or any and all other obligations or liabilities on the part of Hydra-Flex, Inc. Return merchandise authorization number, to return units for repair or replacement, must be granted in advance of return

## **RETURNS**

If you wish to return any product that is new and unused, please call for an RMA number within 60 days to receive credit with no restocking charge. After 60 days, a restocking fee of 15% or \$40 (whichever is greater) will apply.

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**4** 952-808-3650

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