



Hydra-Clean®

Air-Operated Pressure Washers

2

Features and Benefits

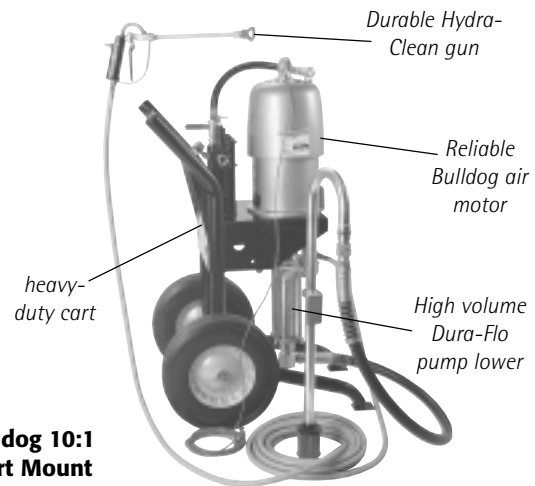
- Supply packages include everything you need for use with open-head universal drums
- Available with an accumulator and chemical injector
- Configurations available to fit most pressure, flow, and material requirements
- Supports multiple guns
- Use with cold or hot water up to 200°F (93°C)

Typical Applications

- Vehicle fleets, buses, transit systems
- Heavy construction equipment, off-highway vehicles
- General industrial equipment
- Building exteriors
- Sanitizing
- Public Works facilities and equipment
- Farm maintenance
- Marinas

Typical Coatings Applied

- Water
- Detergent solutions
- Chemical solutions



**Bulldog 10:1
Cart Mount
226314**



**President 10:1
Open Drum Mount
206515**

Hydra-Clean Packages

Air-Operated Pressure Washers

Technical Specifications

Pump Package	Max. Working Pressure psi (MPa, bar)	Max. Air Input Pressure psi (MPa, bar)	Fluid Flow at 60 cpm gpm (lpm)	Vol. per Cycle oz (cc)	Air Inlet Size	Fluid Inlet Size	Fluid Outlet Size	Package Instruction Manual
President 10:1	1000 (7, 69)	100 (0.7, 7)	3 gpm (11.4)	6.4 (189)	1/2 npt(f)	3/4 npt(f)	1/2 npt(f)	306817
Bulldog 10:1	1000 (7, 69)	100 (0.7, 7)	8 (29)	17 (505)	3/4 npsm(f)	2 npt(f)	1-1/2 npt(m)	306926 308509
Premier 34:1	3400 (23, 230)	100 (0.7, 7)	9.2 (34.8)	19.6 (580)	3/4 npsm(f)	2 npt(f)	1-1/2 npt(m)	-

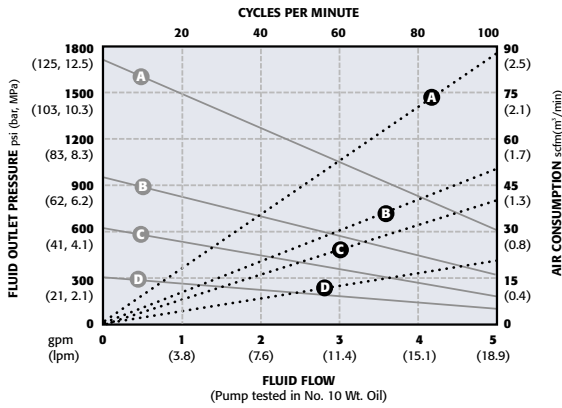
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Hydra-Clean Packages

Air-Operated Pressure Washers

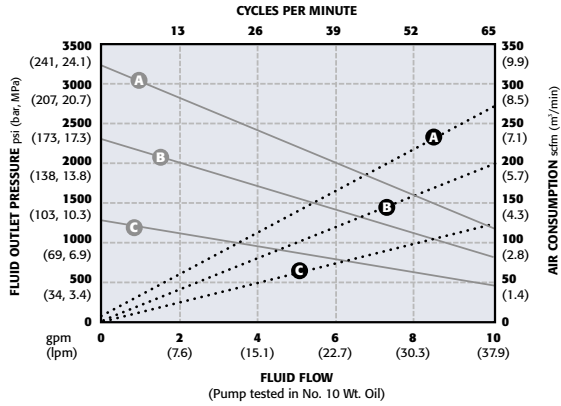
Performance Charts

PRESIDENT 10:1



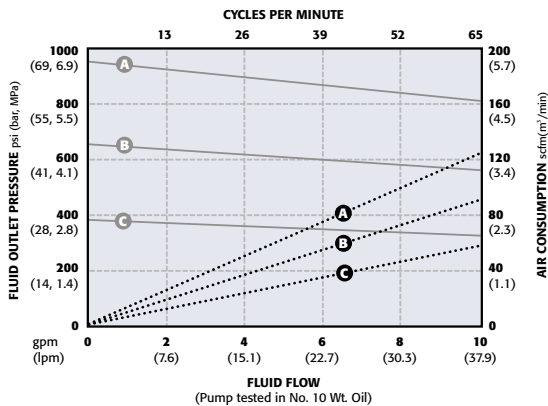
AIR PRESSURES	LEGEND
(A) = @ 180 psi (12 bar, 1.2 MPa)	Air Consumption
(B) = @ 100 psi (7.0 bar, 0.7 MPa)	Fluid Flow _____
(C) = @ 70 psi (4.8 bar, 0.5 MPa)	
(D) = @ 40 psi (2.8 bar, 0.3 MPa)	

PREMIER 34:1



AIR PRESSURES	LEGEND
(A) = @ 100 psi (7 bar, 0.7 MPa)	Air Consumption
(B) = @ 70 psi (4.8 bar, 0.5 MPa)	Fluid Flow _____
(C) = @ 40 psi (2.8 bar, 0.3 MPa)	

BULLDOG 10:1

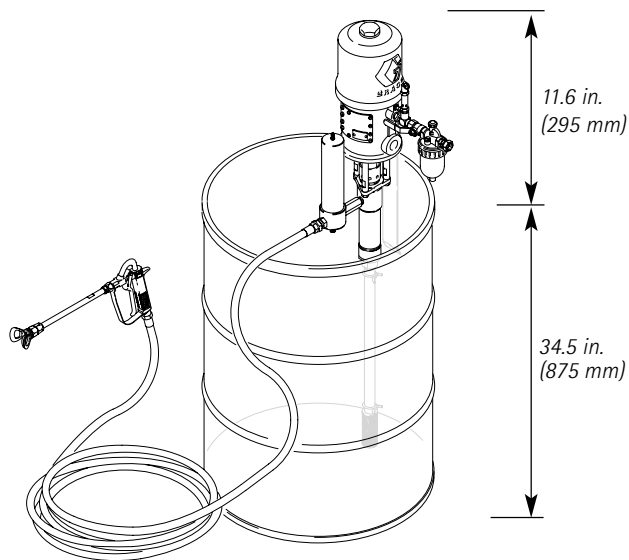


AIR PRESSURES	LEGEND
(A) = @ 100 psi (7.0 bar, 0.7 MPa)	Air Consumption
(B) = @ 70 psi (4.8 bar, 0.5 MPa)	Fluid Flow _____
(C) = @ 40 psi (2.8 bar, 0.3 MPa)	

Hydra-Clean Packages

Air-Operated Pressure Washers

System Dimensions



206515 President 10:1 Open Drum Mount

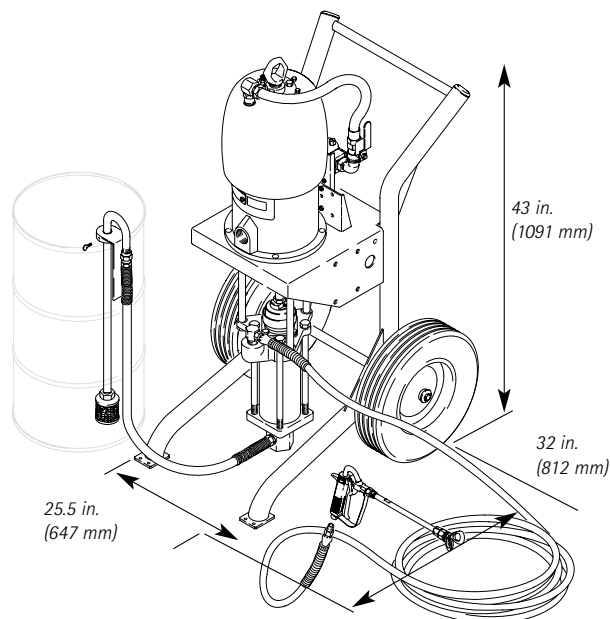
Includes:

- Air line lubricator
- Fluid intake filter
- Hydra-Clean gun and hose
- Fluid accumulator
- Pump mounting bracket
- Suction hose

226314 Bulldog 10:1 Heavy-Duty Cart Mount

Includes:

- Air filter/regulator/lubricator
- Fluid intake filter
- Hydra-Clean gun and hose
- Suction hose

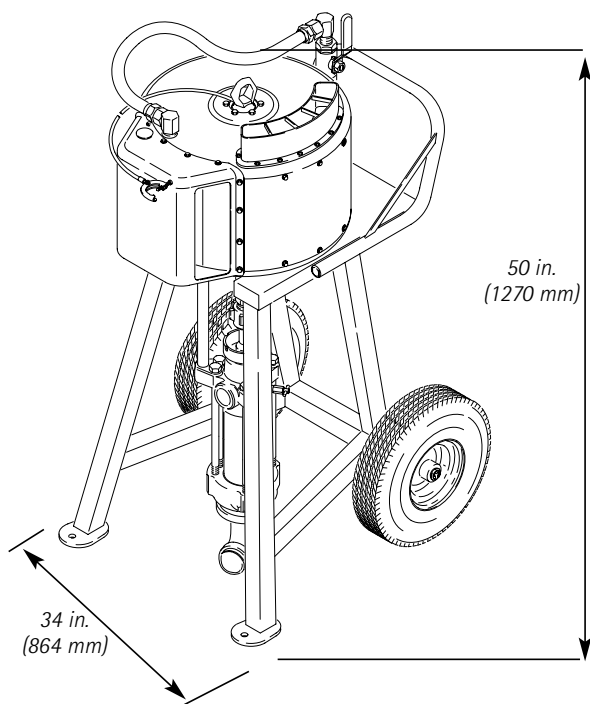


Hydra-Clean Packages

Air-Operated Pressure Washers

System Dimensions (continued)

2



965389 Premier 34:1 Heavy-Duty Cart Mount

Includes:

- Air regulator
- Hydra-Clean® gun and hose

Hydra-Clean Packages

Air-Operated Pressure Washers

Accessories

GUNS AND TIPS

- 208008** Hydra-Clean Spray Gun with 10 in. Wand
804381 Hydra-Clean Gun with 32 in. Wand
207299 10 in. Replacement Wand for Hydra-Clean

FLUID HOSES

Whip Hose

- Maximum working pressure: 3000 psi (20.7 MPa, 207 bar). ID 3/16 in. (5 mm).
214700 2 ft. (0.6 m), 1/4 npsm(fbe)
214701 3 ft. (0.9 m), 1/4 npsm(f) x 1/4 npt(m)
 Maximum working pressure: 5000 psi (34.5 MPa, 345 bar). ID 1/4 in. (0.63 cm), 1/4 npsm(fbe).
214912 3 ft. (0.91 m)
214913 6 ft. (1.83 m)

Fluid Hose

- Maximum working pressure: 3000 psi (20.7 MPa, 207 bar). ID 3/8 in. (9.52 mm), 3/8 npt(mbe).
214703 25 ft. (7.62 m)
214705 50 ft. (15.24 m)
214920 100 ft. (30.4m)
 Maximum working pressure: 3000 psi (20.7 MPa, 207 bar). ID 1/4 in. (6.3 mm). 1/4 npsm(fbe).
223540 ID 1/4 in. x 25 ft. (6.3 mm x 7.6 m) 1/4 npsm(fbe)
 Maximum working pressure: 4050 psi (28 MPa, 280 bar). ID 1/2 in. (12.7 mm), 1/2 npt(mbe).
215226 25 ft. (7.62 m)
215227 50 ft. (15.24 m)
215228 100 ft. (30.48 m)
 Maximum working pressure: 5000 psi (34.5 MPa, 345 bar). ID 3/8 in. (9.5 mm), 3/8 npt(m) x 3/8 npt(f).
238395 24.6 ft. (7.5 m)
238396 49.2 ft. (15 m)
238397 98.4 ft. (30 m)
 Maximum working pressure: 5000 psi (34.5 MPa, 345 bar). ID 1/2 in. (12.7 mm), 1/2 npt(fbe).
238716 24.6 ft. (7.5 m)
238717 49.2 ft. (15 m)
238718 98.4 ft. (30 m)
223541 ID 1/4 in. x 50 ft. (6.3 mm x 15.2 m) 1/4 npsm(fbe)

AIR HOSES

Grounded Buna-N Air Hose

- Maximum working pressure: 175 psi (1.2 MPa, 12 bar). ID 3/4 in. (19 mm). Thread size: 3/4 npt(m).
208610 6 ft. (1.8 m)
205548 15 ft. (4.5 m)
208611 25 ft. (7.6 m)
208612 50 ft. (15.2 m)

AIR CONTROLS AND VALVES

244720 Modular Air Regulator Kit with Built-In Filter

Maximum working pressure: 250 psi (1.7 MPa, 17 bar). 3/4 npt(f).

244841 Modular Air Line Lubricator Kit

Maximum working pressure: 250 psi (1.7 MPa, 17 bar). 3/4 npt(f)

207651 Air Regulator Kit

Maximum working pressure: 300 psi (2.1 MPa, 21 bar). 3/4 npt(f).

214849 Air Line Lubricator

Maximum working pressure: 250 psi (1.7 MPa, 17 bar). 3/4 in. npt(f).

Safety Relief Valves

Limits Inlet air pressure to appropriate pump ratio maximum working pressure.

- 116643** 90 psi (0.62 MPa, 6.2 bar)
103347 100 psi (0.69 MPa, 6.9 bar)
113498 110 psi (0.76 MPa, 7.6 bar)

245143 Pressure Bleed Valve

Maximum working pressure: 7400 psi (51 MPa, 510 bar).

245145 Pressure Bleed Valve Repair Kit

Includes ball, seat, retaining ring, O-ring, gasket.

224040 Pump Runaway Valve

Maximum working pressure: 120 psi (0.83 MPa, 8.3 bar). Inlet/outlet: 3/4 npt(f). Includes optional 90° 3/4 npsm swivel fitting.

Ball Valve

- Maximum working pressure: 5000 psi (34.5 MPa, 345 bar).
210657 Inlet: 1/4 npt(m). Outlet: 1/4 npt(m).
210658 Inlet: 3/8 npt(m). Outlet: 3/8 npt(m).
210659 Inlet: 1/4 npt(m). Outlet: 3/8 npt(m).

Maximum working pressure: 7400 psi (51 MPa, 510 bar).

- 237303** 1/4 npt(mbe)
237304 3/8 npt(mbe)

107141 Bleed-Type Master Air Valve

Maximum working pressure: 300 psi (2.1 MPa, 21 bar).

Hydra-Clean Packages

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Accessories (continued)

ADAPTERS AND FITTINGS

Hose Swivel

- 214925** Maximum working pressure: 5000 psi (34.5 MPa, 345 bar).
3/8 npt(f) x 1/4 npsm(f).
- 236987** Maximum working pressure: 7400 psi (51 MPa, 510 bar).
1/4 npsm(m) x 1/4 npsm(f).
- 189018** Maximum working pressure: 5800 psi (39.9 MPa, 399 bar).
1/4 npsm(m) x 1/4 npsm(f).

156173 Union Swivel

Maximum working pressure: 7400 psi (51 MPa, 510 bar). Use to connect 3/8 in. (9.5 mm) hoses together. 3/8 npt(f) x 3/8 npsm(f).

150287 Hose Coupler

Maximum working pressure: 8000 psi (55 MPa, 550 bar). Use to connect 3/8 in. (9.5 mm) hose to whip hose. 3/8 npt(f) x 1/4 npt(m).

Gun Swivels (25 Pack)

Maximum working pressure: 3600 psi (25 MPa, 250 bar). 1/4 npsm(f) x 1/4 npt(m).

- 239663** Leather
- 223341** Teflon

Maximum working pressure: 5000 psi (34.5 MPa, 345 bar).

- 214925** Leather 1/4 npsm(f) 3/8 npt(f)
- 214926** Leather 1/2 npsm(f) 3/8 npt(f)

Maximum working pressure: 5800 psi (48 MPa, 406 bar).

- 239394** Swivel with Built-in Filter

Nipples

Use to connect hoses together.

- 156971** Maximum working pressure: 7500 psi (51.7 MPa, 517 bar).
1/4 npt x 1/4 npt(mbe).
- 165198** Maximum working pressure: 10000 psi (69 MPa, 690 bar).
1/4 npt x 3/8 npt(mbe).
- 162449** Maximum working pressure: 7400 psi (51 MPa, 510 bar).
1/4 npt x 1/2 npt(mbe).
- 159239** Maximum working pressure: 7400 psi (51 MPa, 510 bar).
3/8 npt x 1/2 npt(mbe).
- 158491** Maximum working pressure: 7400 psi (51 MPa, 510 bar).
1/2 npt x 1/2 npt(mbe).

SUCTION KITS AND ACCESSORIES

184545 Suction Tube Extension

Screws into fluid intake to make a drum length pump for Bulldog 10:1.

222916 Suction Kit, Carbon Steel

Connect to pump fluid inlet to draw fluid from 55-gal. (200 L) drum. Includes ID 1-1/2 in. 222914 polyethylene hose, 8 ft. (2.4 m) length and 2 npt(m) outlet fitting.

236054 Suction Kit, Carbon Steel

Use to siphon material out of a 55-gal. (200 L) closed-end drum. Includes siphon tube, bung adapter, 6 ft. (1.8 m) nitrile hose and 1-1/2 npt(m) outlet fitting.

FILTERS

Replacement Screen Filter Elements

3 Pack	25 Pack	
238435	238436	30 mesh (595 micron)
238437	238438	60 mesh (250 micron)
238439	238440	100 mesh (149 micron)
238441		200 mesh (75 micron)

LIQUIDS AND LUBRICATION

Graco Throat Seal Liquid

206995	1 qt. (0.9 L)
206996	1 gal. (3.8 L)

MOUNTING OPTIONS

244530 Heavy-Duty 2-Wheel Cart

244527 Light-Duty 2-Wheel Cart

206221 Wall Mounting Bracket

222780 Floor Stand Kit, Bulldog 10:1

Use to mount Bulldog 10:1. Includes 222274 floor stand, 190166 intake adapter and ball valve.

235414 Connection Kit, Bulldog 10:1

Kit to install lower displacement pump under existing Bulldog air motor. Includes tie rods and other connecting hardware.

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Accessories (continued)

AIR MOTOR REPAIR KITS

- 222981 Trip Rod Repair Kit**
Repair kit to service Premier trip rod.
- 222982 Detent Repair Kit**
Repair kit to service Premier air motor.

TOOLS

- 109507 Socket Service Tool, Premier 34:1**
Use to connect or disconnect displacement rod from piston assembly. Tool fits over the top of the displacement rod, making it easier to apply a 24 in. adjustable wrench or 3/4 in. socket for servicing the displacement rod.
- 184278 Packing Nut Wrench, Premier 34:1**
For adjusting throat packing compression in pump.
- 109508 Socket Service Tool, Bulldog 10:1**
Use to connect or disconnect displacement rod from piston assembly. Tool fits over the top of the displacement rod, making is easier to apply a 24 in. adjustable wrench or 3/4 in. drive socket for servicing displacement rod.
- 184278 Packing Nut Wrench, Bulldog 10:1**
For adjusting throat packing compression in pump.
- 207579 Padded Pliers**
For servicing Bulldog and King air motor trip rod.
- 168513 Alignment Tool**
Use to ensure proper clearance and alignment for the Bulldog and King air manifolds.