



## General Guidelines

- The owner must comply exclusively with these operating instructions and the authorized use of this piece of equipment. Should problems arise that cannot be solved using these operating instructions, please contact Dixon®. We will be happy to provide further assistance.
- If any modification work is performed on the product by the owner, Dixon shall no longer be considered the manufacturer of the device. In such cases, all components must be subjected to a new certification process for any applicable certifications that the equipment holds. Unless agreed to in writing by Dixon, liability, warranties, and guarantees shall immediately be deemed null and void as soon as the owner.
  - Performs modifications/conversion work on the product.
  - Uses the product for unauthorized purposes.
  - Removes or disable safety elements.
  - Processes products whose material, form, and size do not correspond exactly to the description provided.
  - Makes alterations to the original state of the device.
- The operating instructions are regarded as part of the product.
- The operating and maintenance personnel must always be able to access the operating instructions.
- The safety instructions provided in the operating instructions must be observed.
- The operating instructions shall be valid for the entirety of the device's lifespan.
- The operating instructions must be maintained and updated as necessary.
- The operating instructions must be passed on to any subsequent owners or operators of the device.

## Safety Information

The following signs may be used in this manual. To avoid serious injury and/or possible damage to equipment, pay attention to these messages. Hazards or unsafe practices could result in severe personal injury or death.



Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. May also be used to alert against an unsafe operating or maintenance practice.

Use only replacement parts and devices recommended by the manufacturer to maintain the integrity of the equipment. Make sure the parts are properly matched to the series, model, serial number, and revision level of the equipment.

Safety labels are placed on equipment where appropriate. Do not remove any labeling from any piece of equipment. Replace any label that is missing.

DO NOT modify any Dixon product. Non-factory modifications could create hazardous conditions and void all warranties. DO NOT attempt to use a Dixon product in any application that exceeds the product rating.

## Safety Precautions

- When used indoors, the pressure relief valve on the pump must be connected to a drain or water collection tank.
- This pump is designed to test rubber hose Dixon does not recommend the use of this pump for any other application.
- Adequate steps should be taken to protect property and personnel in the event of failure during a test. These steps should include, but are not limited to the following:
  1. Only trained personnel should conduct hydrostatic testing.
  2. Personnel conducting and witnessing the test must use safety glasses or shields.
  3. All personnel should be perpendicular to the test sample and at least 15' away.
  4. Place test sample in a protective enclosure.
  5. Restrain both ends of the test sample to prevent hose from whipping in case of a failure.
  6. If testing is done outside a protective enclosure, restrict the movement of the couplings by using sandbags or other means.
  7. Use only water as a test fluid.
- All incidental connections, intermediate hose, and piping should be rated at **2000 PSI** minimum.
- Before removing or adjusting any part of the pumping system or test sample, the following precautions should be exercised:
  1. Shut off pump air supply.
  2. Shut off pump water supply.
  3. Release pressure inside the test sample.

# Technical Specifications

## Materials

- Pump: aluminum
- Plunger: hard-coat aluminum
- Pressure gauge: **0 – 2000 PSI**, center mount, liquid filled

## Specifications

- Haskel model 4B-14-D3 air over hydraulic pump
- Air Chief 1/4" industrial series plug quick connect air connection
- Quick connect garden hose coupler for water supply line
- 1/2" x 15' intermediate hose with brass straight-thru quick couplers on both ends
- 1/2" brass straight-thru nipple on pressure outlet
- Test caps, test plugs, and pressure relief valves are available; visit [dixonvalve.com](http://dixonvalve.com) for part numbers
- Output pressure: **1500 PSI** at **100 PSI** inlet air pressure
- 5.5 GPM fill rate (at **60 PSI** inlet water pressure)

## Recommendations

- Use a coalescing filter: Oil or air tool lubricant will damage the seals of the pump very quickly. The coalescing filter, installed in front of the supplied modular air filter/regulator, will prevent oils from entering the air dome of the pump. Coalescing filters are available from Dixon®. Visit [dixonvalve.com](http://dixonvalve.com) for part numbers.
- Use a 5 to 10 micron water filter: Particulate matter, present in all water supplies, will damage the check valves and hydraulic seals very quickly. These filters (cartridge type) can be purchased from a variety of plumbing supply centers.



Portable Units  
PTP  
PTP-N



Wall Mount Units  
PTP-WM  
PTP-N-WM

# Procedure for Hydrostatic Testing using Portable and Wall Mount Pneumatic Test Pump (PTP or PTP-N)\* (PTP-N or PTP-N-WM)\*\*

It is important to know the parameters of the test being conducted. Follow recommendations of hose manufacturer, the Association for Rubber Products Manufacturers (ARPM), OSHA, or other regulatory bodies guidelines for specific test parameters. The test should be carefully monitored, and all results recorded. Dixon® recommends the following sequence for a successful test:

1. Determine the test pressure of the assembly to be tested.
2. Make sure that the test caps, or test plugs, and all connections are tight on the test sample.
3. Connect the air supply line, the water supply line, and the intermediate hose to the test pump. (Item #21 on parts list)
4. Connect one end of the test sample to the intermediate hose. The connection between test sample and intermediate hose should be tight.
5. Connect the bleed-off valve to the other end of the test sample. (See IBV50BOV on pg. 13)
6. Open the bleed-off valve on the test sample.
7. Close the pressure relief valve (see 1 on drawing and parts list) on the pump.
8. Open the water inlet valve (see 2 on drawing and parts list) on the pump.
9. Fill test sample with water. Vent all air from test sample by keeping the bleed-off valve elevated until a solid stream of water (no bubbles) is coming out of the bleed-off valve.
10. Close the bleed-off valve.



Do not turn off water supply once test sample has been filled with water.

11. Turn air regulator knob (see 3 on drawing and parts list) counterclockwise to the fully closed position.
12. Turn on the air supply valve (see 4 on drawing and parts list).
13. Turn the air regulator knob (see 3 on drawing and parts list) clockwise until desired test pressure is shown on the liquid-filled pressure gauge (see 5 on drawing and parts list).
14. Hold test pressure until test duration requirement is met.
15. Turn off air supply valve (see 4 on drawing and parts list).
16. Turn the air regulator knob (see 3 on drawing and parts list) counterclockwise until it is in the fully closed (off) position.
17. Close water inlet valve (see 2 on drawing and parts list).
18. Open bleed-off valve or pressure relief valve (see 1 on drawing and parts list) slowly to release pressure inside test sample.
19. Disconnect test sample from intermediate hose.
20. Drain water from test sample.

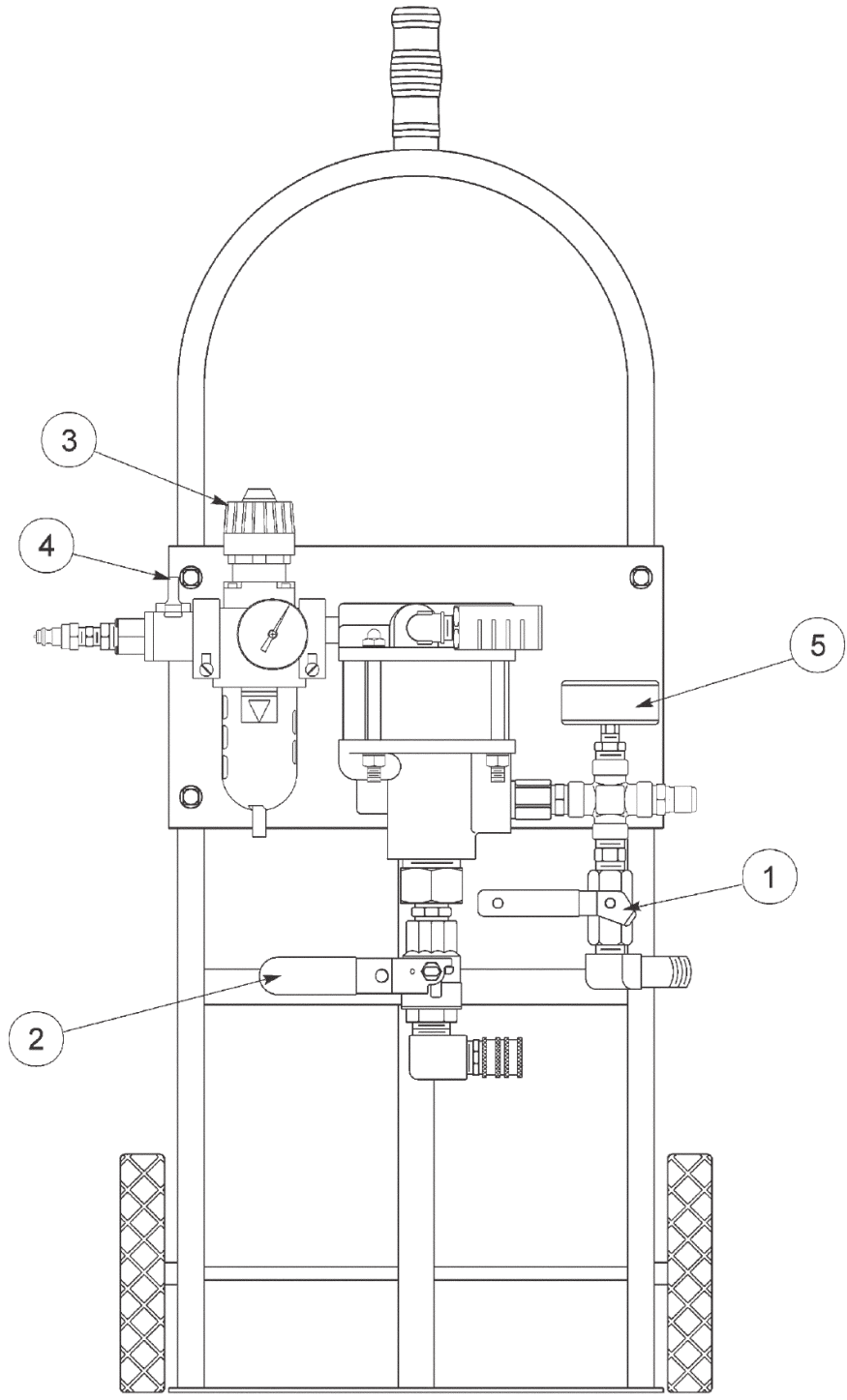


When relieving the pressure and draining the test sample, many gallons of water may be released on the floor or ground. Use all precautions necessary to ensure that no one slips or falls as a result of this water being on the floor or ground.

\* For PTP and PTP-WM models refer to the Dixon® Valve website, [www.dixonvalve.com](http://www.dixonvalve.com). Search for part number CB6-04M. Under resources download the CB6 installation sheet for operating instructions.

\*\* For PTP-N and PTP-N-WM models refer to the Dixon Valve website, [www.dixonvalve.com](http://www.dixonvalve.com) Search for B73G-4MG-MB. Under resources download the B73G installation sheet for operating instructions.

# PTP and PTP-WM

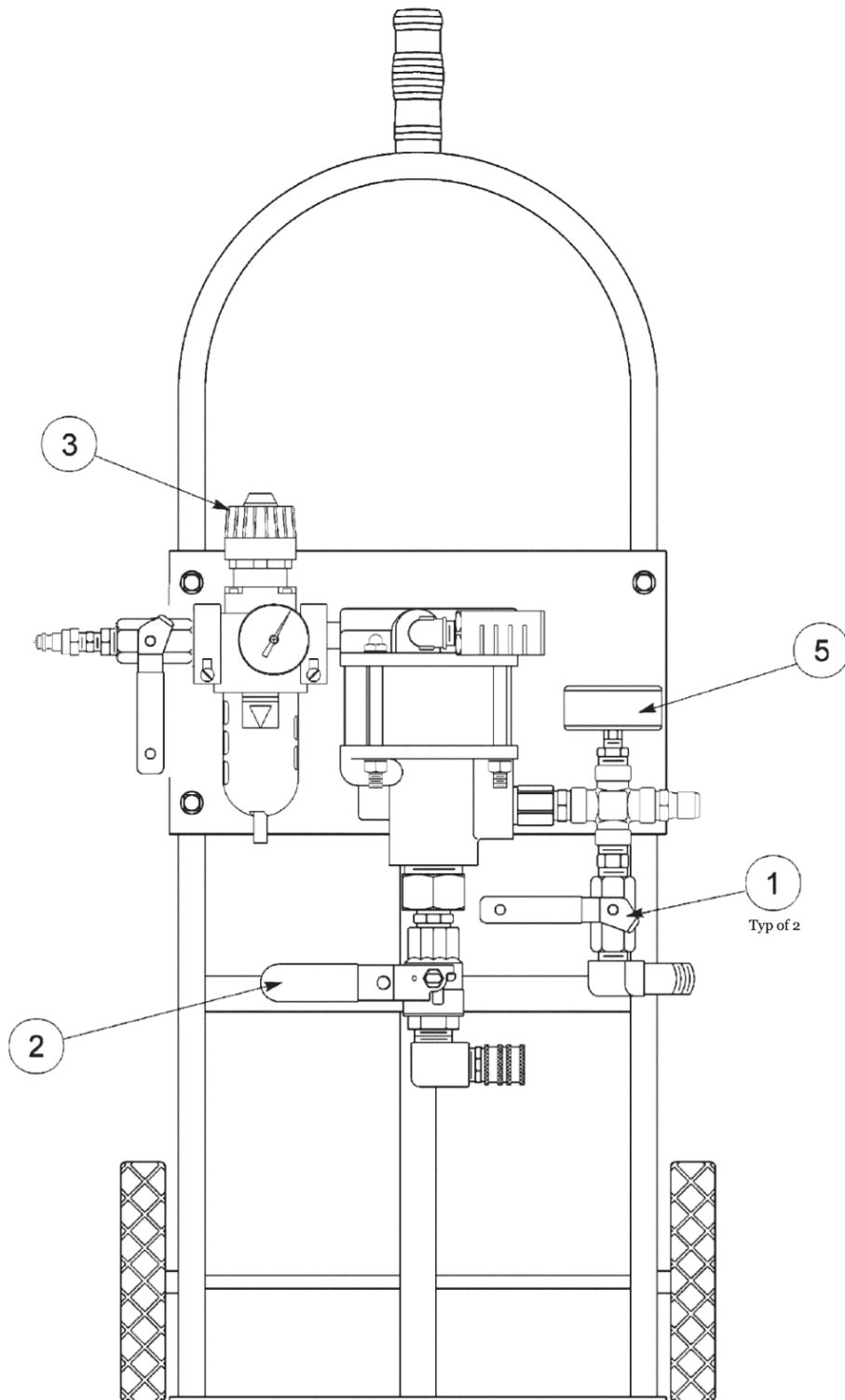


## PTP and PTP-WM Parts List

Item	Part #	Description	Material	Qty
1	IBV50	1/2" ball valve	carbon steel	1
2	BBV75	3/4" ball valve	bronze	1
3	CB6-04M	1/2" filter regulator	---	1
	GC230	gauge	---	1
4	GPA-95-098	1/2" safety shut-off valve	---	1
5	GLSC445	0-2000 PSI 1/4" center mount liquid-filled gauge	---	1
6	3700808C	1/2" hex nipple	brass	2
7	B-8-4FPCR	1/2" cross	brass	1
8	E4M4-B	1/2" E-series straight thru nipple	brass	1
9	3040808C	1/2" 90° street elbow	brass	1
10	3701212C	3/4" hex nipple	brass	1
11	3730804C	1/4" x 1/2" hex bushing	brass	1
12	DCP2103	1/4" x 3/8" Air Chief plug	brass	1
13	3730806C	3/8" x 1/2" hex bushing	brass	1
14	SE9050SS	1/2" 90° street elbow	stainless steel	1
15	4B-14	Haskel pump	---	1
	ES50MC	muffler	---	1
16	GPA-95-037	1/2" modular pipe adapter	---	1
17	GPA-95-292	modular sleeve	---	2
18	MTB	mounting boards (personnel conducting and witnessing the test must use safety glasses or shields)	---	1
19*	55HAC24	green carriage rack	---	1
20	4EF4-B	1/2" E-series straight thru coupler	brass	2
21	GH6638	Gates Matchmate Plus hose	---	1
22	FW25	1/4" flat washers	---	8
	LW25	1/4" lock washers	---	4
	MB25625	1/4" - 20 x 5/8" bolts	---	4
	MB4150	1/4" - 20 x 1-1/2" square head male	---	4
	MN4	1/4" machine nut	---	8
23	LOGO	Dixon logo sticker	---	1
24	1660830C	1/2" x 3" long pipe nipple	brass	1
25	3041212C	3/4" 90° street elbow	brass	1
26	5041212C	FGHT x 3/4" MNPT	brass	1
27	500QCF	garden hose female quick coupler	brass	1
	500QCM	garden hose male quick coupler plug	brass	1
28	TTA50	1/2" x 260" thread tape	---	1
29	PTPMANU	PTP manual	---	1

\*Not included with PTP-WM

# PTP-N and PTP-N-WM





## PTP-N and PTP-N-WM Parts List

Item	Part #	Description	Material	Qty
1	IBV50	1/2" ball valve	carbon steel	1
2	BBV75	3/4" ball valve	bronze	1
3	B73G-4M-MB	1/2" filter regulator	---	1
	GC230	gauge	---	1
4	BBV50LV	safety vented ball valve	bronze	1
5	GLSC445	0-2000 PSI 1/4" center mount liquid filled gauge	---	1
6	3700808C	1/2" hex nipple	brass	2
7	B-8-4FPCR	1/2" cross	brass	1
8	E4M4-B	1/2" E-series straight thru nipple	brass	1
9	3040808C	1/2" 90° street elbow	brass	1
10	3701212C	3/4" hex nipple	brass	1
11	3730804C	1/4" x 1/2" hex bushing	brass	1
12	DCP2103	1/4" x 3/8" Air Chief plug	brass	1
13	3730806C	3/8" x 1/2" hex bushing	brass	1
14	SE9050SS	1/2" 90° street elbow	stainless steel	1
15	4B-14	Haskel pump	---	1
	ES50MC	muffler	---	1
16	4315-03	1/2" pipe adapter	---	1
17	4314-51	quick clamp	---	2
18	MTB	mounting boards (personnel conducting and witnessing the test must use safety glasses or shields)	---	1
19*	55HAC24	green carriage rack	---	1
20	4EF4-B	1/2" E-series straight thru coupler	brass	2
21	GH6638	Gates Matchmate Plus hose	---	1
22	FW25	1/4" flat washers	---	8
	LW25	1/4" lock washers	---	4
	MB25625	1/4" - 20 x 5/8" bolts	---	4
	MB4150	1/4" - 20 x 1-1/2" square head male	---	4
	MN4	1/4" machine nut	---	8
23	LOGO	Dixon logo sticker	---	1
24	1660830C	1/2" x 3" long pipe nipple	brass	1
25	3041212C	3/4" 90° street elbow	brass	1
26	5041212C	FGHT x 3/4" MNPT	brass	1
27	500QCF	garden hose female quick coupler	brass	1
	500QCM	garden hose male quick coupler plug	brass	1
28	TTA50	1/2" x 260" thread tape	---	1
29	PTPMANU	PTP manual	---	1

\*Not included with PTP-N-WM

# Sample Hydrostatic Test Report

Engineer Report No. \_\_\_\_\_

<b>Subject:</b>			
<b>Pressure (PSIG)</b>	<b>Time (Minutes)</b>	<b>Comments</b>	
		<b>"A" End</b>	<b>"B" End</b>
<b>Remarks:</b>			

Test conducted by: \_\_\_\_\_ Date: \_\_\_\_\_

Test approved by: \_\_\_\_\_  
VICE PRESIDENT OF ENGINEERING



# Holedall Type Permanently Attached Coupling Test Report

Engineer Report No. \_\_\_\_\_

<b>Subject:</b>			
<b>Hose:</b>		<b>Working Pressure:</b>	
		<b>Test Pressure:</b>	
		<b>Burst Pressure:</b>	
		<b>"A" End</b>	<b>"B" End</b>
<b>Hose O.D. (free)</b>			
<b>Hose O.D. (over stem)</b>			
<b>Stem</b>			
<b>Ferrule</b>			
<b>Die</b>			
<b>Mulcoram</b>			
<b>Pusher</b>			
<b>Force (PSI)</b>			
<b>Reduce Length</b>			
<b>Hose Wall (free)</b>			
<b>Hose O.D. reduced</b>			
<b>Stem Mean O.D.</b>			
<b>Hose Wall Reduced</b>			
<b>Reduction</b>			
<b>Remarks:</b>			

Coupled by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved by: \_\_\_\_\_  
 VICE PRESIDENT OF ENGINEERING



# Industrial Band Type/Clamp Type Coupling Test Report

Engineer Report No. \_\_\_\_\_

<b>Subject:</b>			
<b>Hose:</b>		<b>Working Pressure:</b>	
		<b>Test Pressure:</b>	
		<b>Burst Pressure:</b>	
		<b>"A" End</b>	<b>"B" End</b>
<b>Hose O.D. (free)</b>			
<b>Hose O.D. (over stem)</b>			
<b>STEM:</b>			
<b>Shank diameter</b>			
<b>Serrations</b>			
<b>Diameter over collar</b>			
<b>Diameter of groove</b>			
<b>Insertion</b>			
<b>Lubricant</b>			
<b>CLAMP:</b>			
<b>Bolts torqued</b>			
<b>Remarks:</b>			

Coupled by: \_\_\_\_\_ Date: \_\_\_\_\_

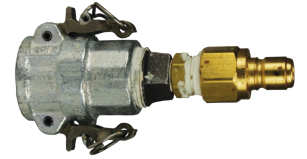
Approved by: \_\_\_\_\_  
VICE PRESIDENT OF ENGINEERING



## Accessories

### Cam & Groove Test Caps

Size	Iron / Steel Part #
1"	ID100TC
1-1/2"	ID150TC
2"	ID200TC
3"	ID300TC
4"	ID400TC



### Cam & Groove Test Plugs

Size	Iron / Steel Part #
1"	IA100TP
1-1/2"	IA150TP
2"	IA200TP
3"	IA300TP
4"	IA400TP



### Female NPT Test Caps

Size	Iron / Steel Part #
1"	NPT100TC
1-1/2"	NPT150TC
2"	NPT200TC
3"	NPT300TC
4"	NPT400TC



### Male NPT Test Plugs

Size	Iron / Steel Part #
1"	100TP
1-1/2"	150TP
2"	200TP
3"	300TP
4"	400TP



### Bleed-off Valve

Part #
IBV50BOV



