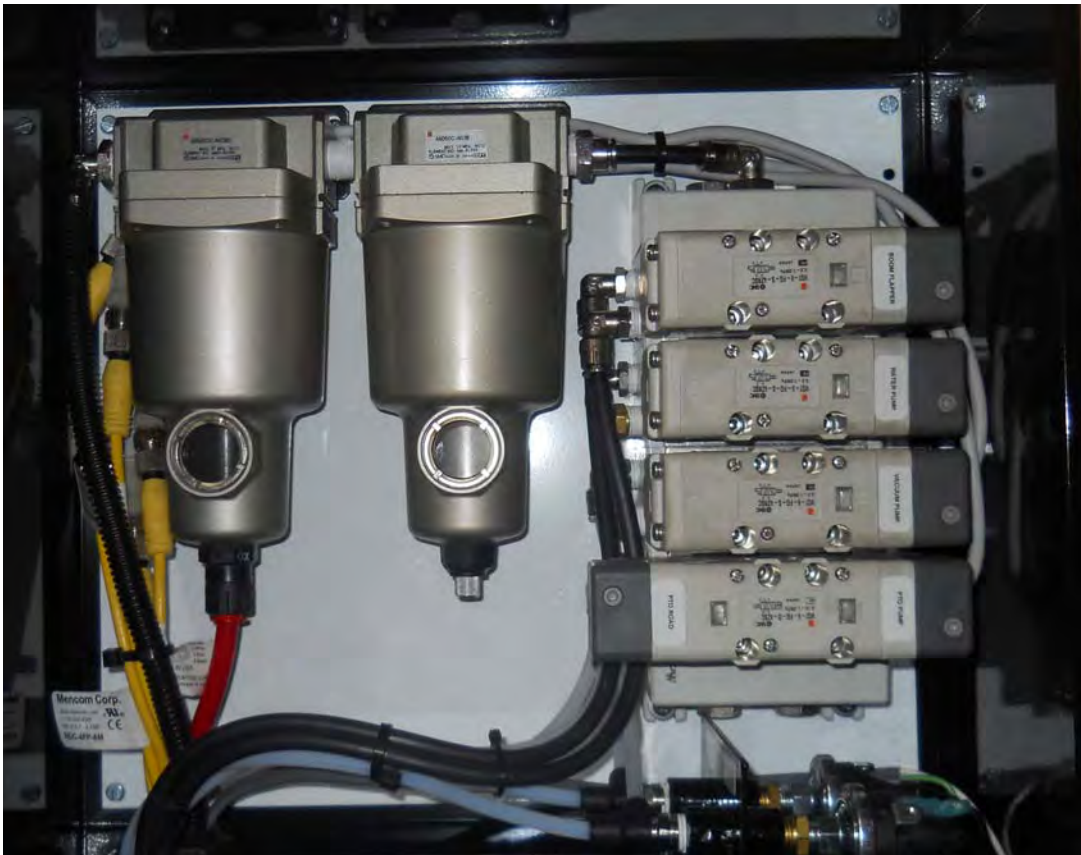




# B-SERIES PARTS COUNTERMAN'S CATALOG

## Section 8 Pneumatics

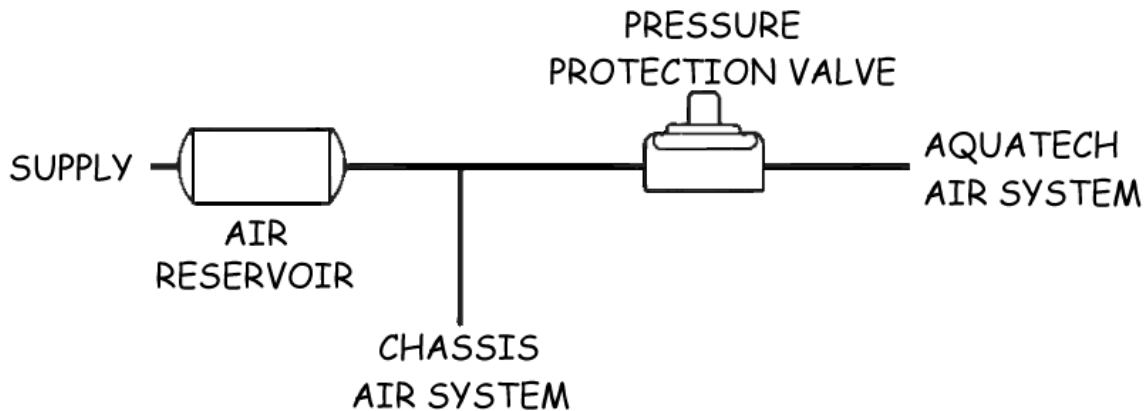




# A111235

## Pressure Protection Valve

This valve is installed to protect the primary (chassis) system air pressure by automatically closing when the supply pressure drops below 70 psi.



SPECIFICATIONS	
PORT SIZE .....	1/4-18 NPTF
MAXIMUM OPERATING PRESSURE .....	150 PSI (1034 kPa)
OPERATING TEMPERATURE .....	-40°F to 180°F (-40°C to 82°C)
MOUNTING .....	By Inlet and Outlet Ports
MOUNTING ATTITUDE .....	Optional
MATERIALS: Body .....	Die Cast Zinc Alloy
Cover .....	Zinc-Plated Steel
Diaphragm .....	Fabric-Reinforced Buna N
WEIGHT .....	9.5 oz. (0,3 kg)



# A111135

## PNEUMATIC FILTER REGULATOR

*NOTE: We ceased using these when we went to the SMC Pneumatic Control panels circa 2007. These were set to 100psi.*

### PARTS

A380653-2 *	WIKA AIR GAUGE, 200 PSI, ¼"NPT
A111135-02	TWIST DRAIN KIT
A111135-03	REPLACEMENT METAL BOWL GUARD
A111135-04	POLYCARBONATE BOWL WITH O-RING
A111135-05	FILTER ELEMENT, 40 MICRON
A111135-06	MOUNTING BRACKET
A111135-07	REPLACEMENT PLASTIC KNOB

*\* Replaces A111135-01 Ross Air Gauge (pictured)*

# PLASTIC TUBING



PART NO.	O.D.	DESCRIPTION	COLOR	MATERIAL	MAX PSI	WALL
A176010	1/4"	Air Line	Black	Polyethylene	350	0.0620
A176030	5/16"	Air Line	Black	Polyethylene	150	0.0620
A176020	5/16"	Air Line	Natural	Polyethylene	150	0.0620
10-0063	1/4"	Air Line	Black	Nylon	300	0.0350
10-0064	1/4"	D.O.T. Air Brake Tubing	Black	Nylon	150	0.0400
A176051	3/8"	D.O.T. Air Brake Tubing	Black	Nylon	150	0.0620
A176052	1/2"	D.O.T. Air Brake Tubing	Black	Nylon	150	0.0620
A176050	5/8"	D.O.T. Air Brake Tubing	Black	Nylon	150	0.0920
A383232	5/8"	D.O.T. Air Brake Tubing	Green	Nylon	150	0.0920
A176056	3/4"	D.O.T. Air Brake Tubing	Black	Nylon	150	0.0920
A176010-1	1/4"	High Temp Air Line Tubing	White	Teflon	300	0.0625
A176020-1	5/16"	High Temp Air Line Tubing	White	Teflon	250	0.0625

## PUSH CONNECT FITTINGS FOR TUBING

PART NO.	DESCRIPTION	STYLE
A381566	1/4" BULKHEAD TUBE UNION	1
A381981	5/16" BULKHEAD TUBE UNION	1
A135412	90° ELBOW, 1/4" TUBE X 1/4" FNPT	2
02-0387	90° ELBOW, 1/4" TUBE X 1/4" MNPT O-RING	3
U4004-0011	90° ELBOW, 1/4" TUBE X 1/4" MNPT (BRASS)	4
A135405	90° ELBOW, 1/4" TUBE X 1/8" UNIV.*	4A
A135406	90° ELBOW, 1/4" TUBE X 1/4" UNIV.*	4A
02-0014	90° ELBOW, 1/4" TUBE X 3/8" MNPT	4
A135407	90° ELBOW, 5/16" TUBE X 1/4" NPT	4
A135408	90° ELBOW, 5/16" TUBE X 3/8" MNPT	4
A135409	90° ELBOW, 3/8" TUBE X 1/4" MNPT	4
A135411	STRAIGHT, 1/4" TUBE X 1/4" MNPT	5
02-0110	STRAIGHT, 1/4" TUBE X 1/8" MNPT	5
1168X5X6	STRAIGHT, 5/16" TUBE X 3/8" NPT	5
A135413	UNION, 1/4" TUBE	6
A135414	UNION, 5/16" TUBE	6
A383946	BRANCH TEE, 1/4" TUBE X 1/4" MNPT	7
A384992	BRANCH TEE, 3/8" TUBE X 1/8" FNPT	8
A135416	Y-CONNECTOR, 5/16" TUBE	9

\* Universal - will work with NPT, BSPT or BSPP ports.



1



2



3



4



4A

Note imbedded  
Teflon sealing  
ring



5



6



7



8



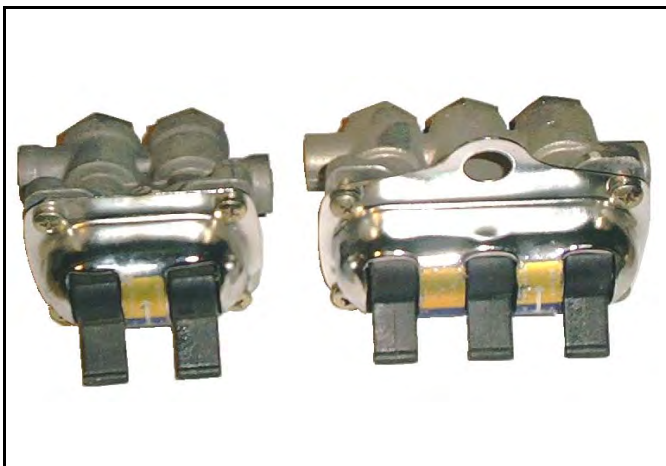
9

NOTE: Appearance and material may vary depending on the supplier used.



# AQUATECH PARTS BULLETIN

Aquatech, Inc. used to use manual air switches to control the split shaft PTOs used on most of their truck mounted sewer machines. They started to phase them out in the mid 1990s in favor of solenoid operated pneumatic valves. By the time Hi-Vac bought the company in 1999 they were no longer used in production. Part number A110320 was a three lever air switch and part number A110321 was a two lever air switch. We continued to supply these valves for service replacement until the manufacturer in Italy went out of business. We searched unsuccessfully for several months trying to find similar valves on the market. In the end we had to assemble our own replacement air switch assemblies. Part number A381763 replaces the A110320 three lever air switch and part number A381762 replaces the A110321 two lever air switch.



**ORIGINAL ONE PIECE AIR SWITCH**

**PART NO. A110320**

Old 3 Lever

**PART NO. A110321**

Old 2 Lever



**REPLACEMENT COMPOSITE AIR SWITCH**

**PART NO. A381763**

New 3 Lever (pictured)

**PART NO. A381762**

New 2 Lever

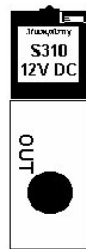
### HUMPHREY PNEUMATIC VALVES

In the mid 90s, Aquatech, Inc. used Parker and Humphrey solenoid operated pneumatic valves to control the OMSI split shaft PTOs and other pneumatically operated devices. By the time Hi-Vac bought Aquatech in 1999, the Humphrey and Parker valves had been phased out and the Ross valves were being used. Like most pneumatic spool valves the Humphrey valve is stackable and many configurations can be created for a single installation. This bulletin is being issued to help identify the various Humphrey valve configurations that we have encountered thus far.

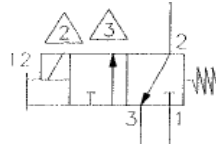


TYPICAL HUMPHREY VALVE

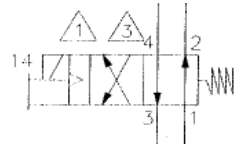
#### SINGLE REPLACEMENT SOLENOID VALVES



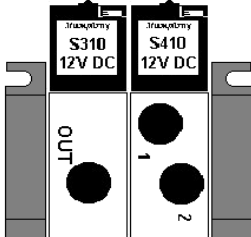
A111273 (12V)



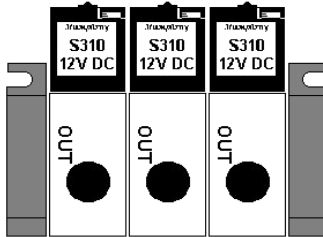
A111272 (12V)



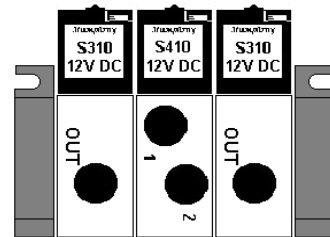
### VALVE ASSEMBLIES



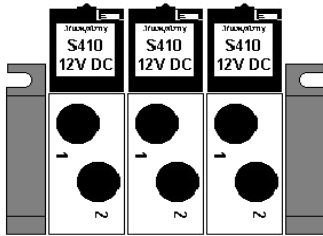
A111248 (12V) A111247 (24V)



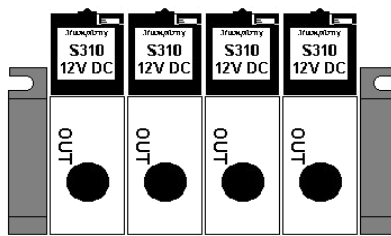
A111249 (12V)



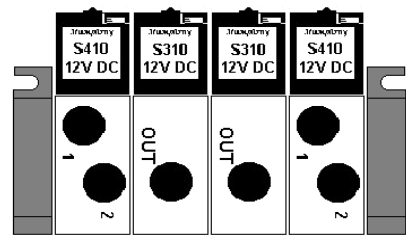
A111249-1 (12V)



A111240 (12V) A111240-24 (24V)



A111250 (12V) A111250-24 (24V)



A111277 (12V)






# A111140

AAB503-12V-CE

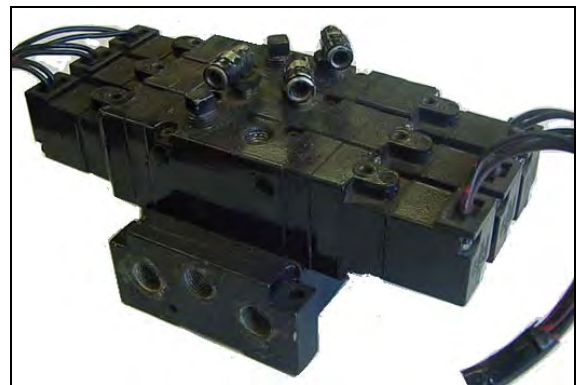
## Parker Pneumatic Control Valve



PICTURE	DESCRIPTION	HI-VAC P/N
	Single Station	A111140-1
	Coil Only w/18" Leads	A111140-SOL r/b A111140-2
Pic N/A	Valve Body To Manifold Kit (12 O'Rings)	A111140-3
	Bar Manifold	TBA
Pic N/A	Valve Body Service Kit	TBA
Pic N/A	Solenoid Nut (10 pack)	A111140-4



Picture showing single station, ports & text on coil



Older Version of A111140?



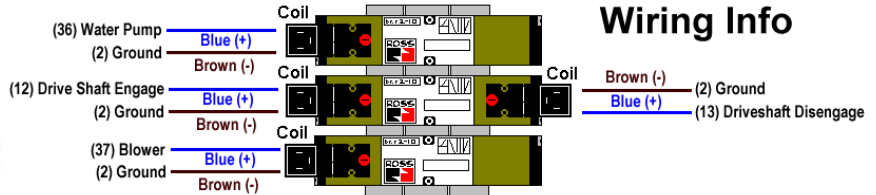


# A111139 (OBSOLETE) 12VDC 3-SPOOL ROSS VALVE



Used on the B-Series from the late 90s through circa 2007

The 24VDC version was p/n A111139-24



2 Single Coil Spools

1 Double Coil Spool

The above valve was discontinued by the manufacturer and does not have a direct substitute available. SMC Pneumatic Control Center p/n A255061-4B-12V (or A255061-4B-24V for 24VDC) can be used to replace it. The SMC valve is a four spool because it also incorporates the boom flapper valve (see parts bulletin AQP B-120). The housing and filters are required to protect the SMC valve from contaminants and harsh weather.

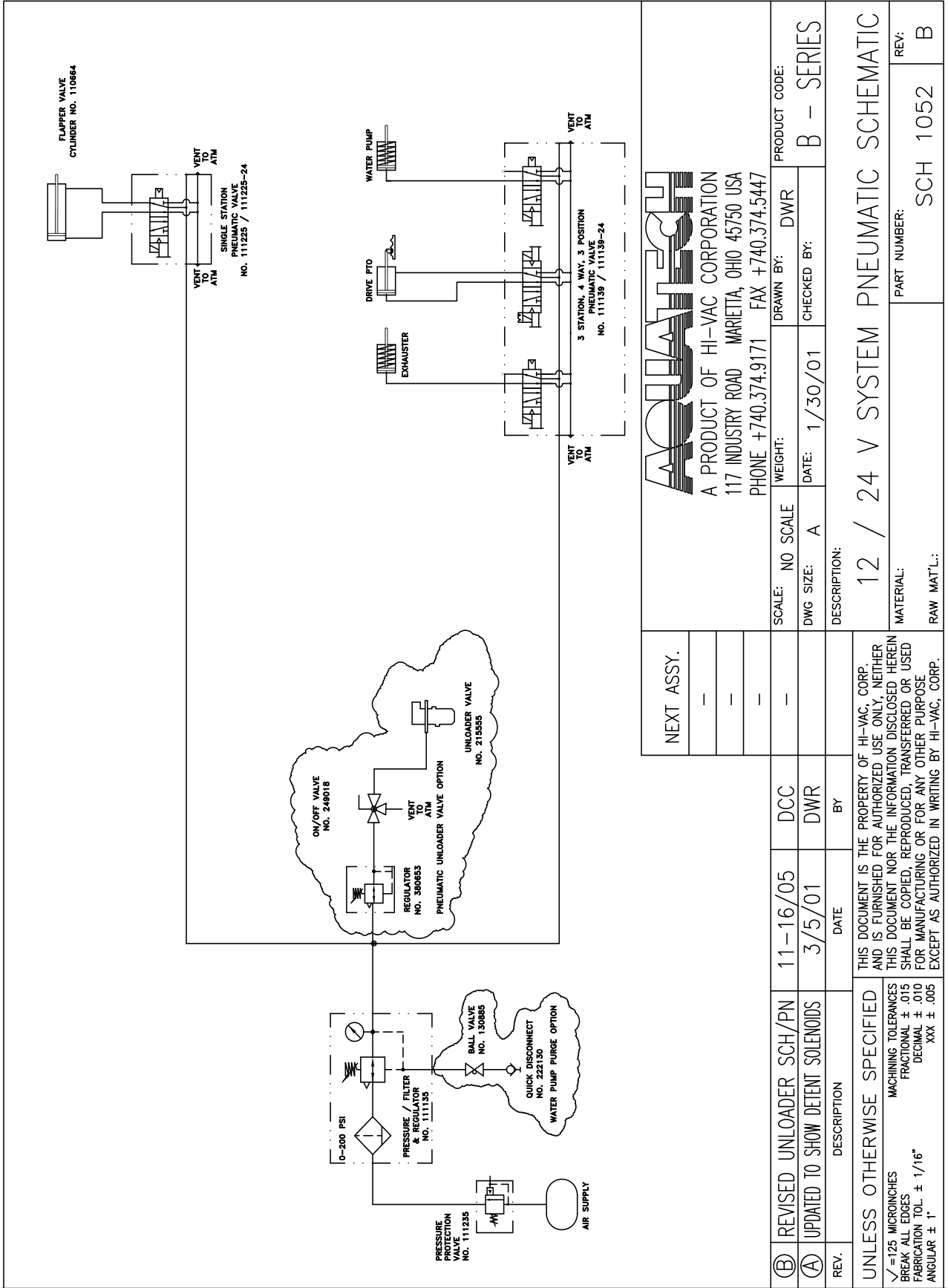


*NOTE: Depending on where the box is mounted, extra wire and tubing may be required to reach the associated devices. Also please note that the position of the double coil spool is at the bottom of the SMC valve array.*

# PNEUMATIC SYSTEM



A Product of HI-Vac Corporation



A PRODUCT OF HI-VAC CORPORATION  
 117 INDUSTRY ROAD MARIETTA, OHIO 45750 USA  
 PHONE +740.374.9171 FAX +740.374.5447

SCALE: NO SCALE	WEIGHT: DWR	PRODUCT CODE: B - SERIES
DWG SIZE: A	DATE: 1/30/01	CHECKED BY:
DESCRIPTION: 12 / 24 V SYSTEM PNEUMATIC SCHEMATIC		
MATERIAL:		REV: B
RAW MAT'L:		PART NUMBER: SCH 1052
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REV. (B)	DESCRIPTION: REVISED UNLOADER SCH/PN	DATE: 11-16/05
(A)	UPDATED TO SHOW DETENT SOLENOIDS	DATE: 3/5/01
REV.	DESCRIPTION	DATE
UNLESS OTHERWISE SPECIFIED MACHINING TOLERANCES FRACTIONAL ± .015 DECIMAL ± .010 ANGULAR ± 1°		



## A111139-5 (OBSOLETE)

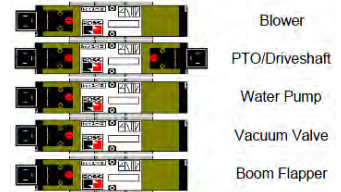
### 5-SPOOL ROSS VALVE FOR MODEL B-6EW (PUERTO RICAN UNITS)



Used on S/N's 24101068 through 24101085

4 Single Coil Spools

1 Double Coil Spool



The above valve was discontinued by the manufacturer and does not have a direct substitute available. Part number A255061-5B-12V SMC Pneumatic Control Center can be used to replace the above valve. The housing and filters are required to protect the SMC valve from contaminants and harsh weather.



*NOTE: Depending on where the box is mounted, extra wire and tubing may be required to reach the associated devices. Also please note that the position of the double coil valve is in the center of the SMC valve array. No instructions are available but the conversion is fairly straight forward.*



**(DISCONTINUED) ROSS PNEUMATIC VALVES**



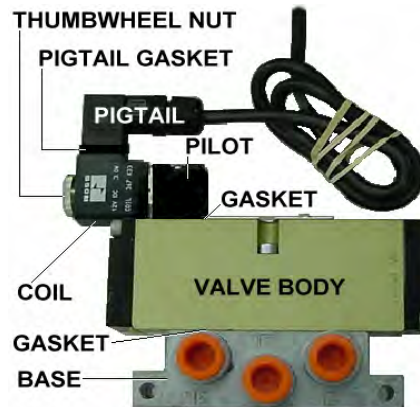
Valve configurations are as viewed from above

Assemblies	Valve Body Parts				
12V - A111139 (NLA) 24V - A111139-24 (NLA) 	Individual Valve Bodies (less Pigtail & Base)			Valve Body Repair Kit *	Base
	Ref. Tag Number	12V	24V		
	TAG# W6376B1401 Single Coil Valve Body	A111139-3 (NLA)	NLA	A111225-1	NLA
	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
TAG# W6376B1401 Single Coil Valve Body	A111139-3 (NLA)	NLA	A111225-1	NLA	
12V - A111146 (12V) (NLA) 	TAG# W6376B1401 Single Coil Valve Body	A111139-3 (NLA)	NLA	A111225-1	NLA
	TAG# W6377B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
12V - A111225 (NLA) 24V - A111225-24 (NLA) 	TAG# W6376B1401 Single Coil Valve Body	A111139-3 (NLA)	NLA	A111225-1	NLA
12V - A111430 (NLA) 	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
12V - A381209 (NLA) 24V - A381209-24 (NLA) 	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
12V - A381629 (NLA) 	TAG# W6376B1401 Single Coil Valve Body	A111139-3 (NLA)	NLA	A111225-1	NLA
	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
	TAG# W6376B1407 Dual Coil Valve Body	A111139-5 (NLA)	A111139-24-2 (NLA)	A111139-5-GK (NLA)	NLA
	TAG# W6376B1401 Single Coil Valve Body	A111139-3 (NLA)	NLA	A111225-1	NLA

\* Includes spool, spacers, and all required gaskets & seals.

COMMON COMPONENTS
12V coil & pilot: A111225-1-2 (NLA)
24V coil & pilot: A111139-24-3 (NLA)
12V coil only: A111139-1 (NLA)
24V coil only: A111139-24-1 (NLA)
Gasket, Valve Body to Base: A111139-G (NLA)
Pigtail: A111139-PT (NLA)
Square Rubber Pigtail Gasket: A111139-PTG (NLA)
Gasket underneath pilot: A111225-1-1 (NLA)
Thumbwheel nut for coil: A111139-2






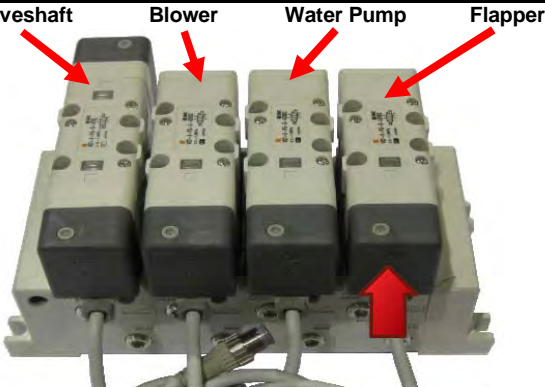
WIRING INFO
Blue Wire: Hot
Brown Wire: Ground
Green/Yellow Wire: Not used



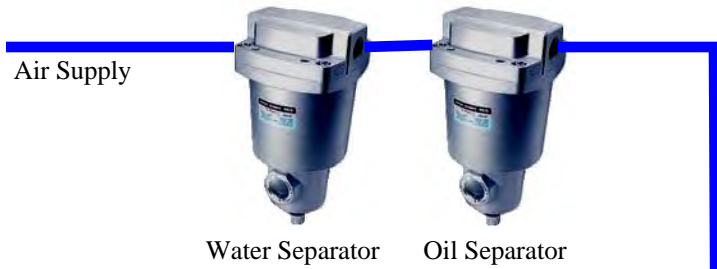


### BOOM FLAPPER PNEUMATIC CONTROL VALVE

In the past Aquatech has used different pneumatic solenoid valves to control the boom flapper valve cylinder. Below are pictures and part numbers that have been used. **NOTE:** The old Aquatech company made a running supplier change on part number A111225 in the late 90s from Parker to Ross.

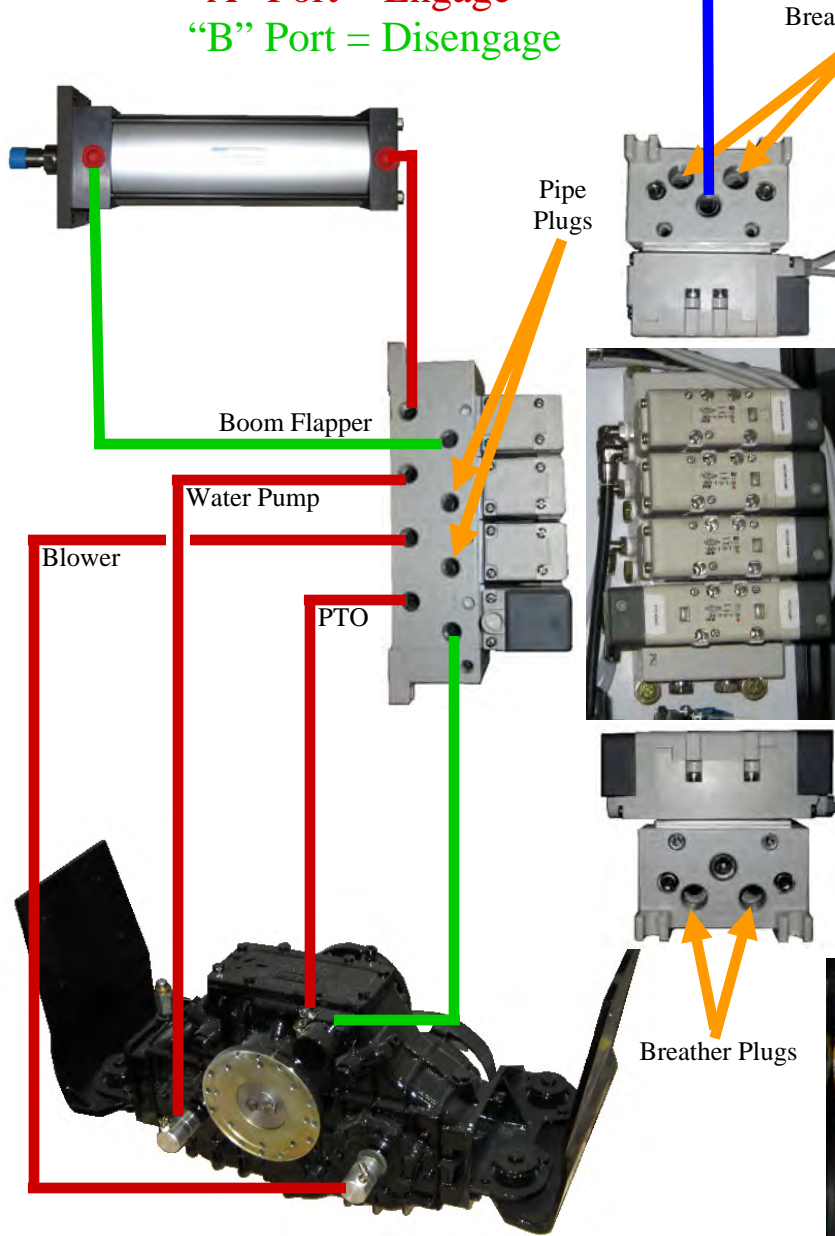
	ORIGINAL VALVE	FOR SERVICE
<b>PARKER</b>	 <p>Original A111225 (12V)      A111227 (24V)</p>	 <p>A111225-P (12V)      A111227 (24V)</p>
<b>ROSS</b>	 <p>Recent A111225 (12V)      A111225-24 (24V)</p>	 <p><b>NLA</b>                  RETROFIT WITH                  PARKER OR SMC</p>
<b>SMC (RETRO)</b>	<p>We never used a single SMC valve for the boom flapper valve on the B-Series. However we have the valve to the right available that can be used to substitute for the Ross or earlier Parker valve. A part number A383743 cord set will also be needed.</p>	 <p>A383733 (12V)      TBA (24V)</p>
<b>SMC (CURRENT)</b>	 <p>Driveshaft      Blower      Water Pump      Flapper</p>	<p>Starting in 2008 we combined the boom flapper valve control and the 3 spools that control the PTO into one valve assembly. To convert an older B-Series to the current SMC pneumatic station (including panel enclosure, oil separator and water separator) order...</p> <p>A255061-4B-12V (for 12V)                  A255061-4B-24V (for 24V)</p>

# SMC VALVE TYPICAL LAYOUT



- A255061-4B-12V  
CONVERSION KIT CONTENTS  
(Supplied Assembled)**
- A383736 Oil Separator
  - A383737 Water Separator
  - A383753 4-Spool SMC Valve
  - A388500 Hoffman Enclosure
  - A388501 Mounting Panel
  - A388504 3/8" Breather Vents (4)
  - A388506 Cord Set (4)
  - + Fittings, Tubing & Common Hardware

**"A" Port = Engage**  
**"B" Port = Disengage**



## Wiring Info

	Color	Purpose	Terminal	Old (90s)
<b>FLAPPER</b>	Black	Engage (A)	18	26
	White	Disengage (B)	Not used	
	Brown	Ground	2	6
	Blue	Not Used	Not Used	

	Color	Purpose	Terminal	Old (90s)
<b>WATER PUMP</b>	Black	Engage (A)	36	14
	White	Disengage (B)	Not used	
	Brown	Ground	2	6
	Blue	Not Used	Not Used	

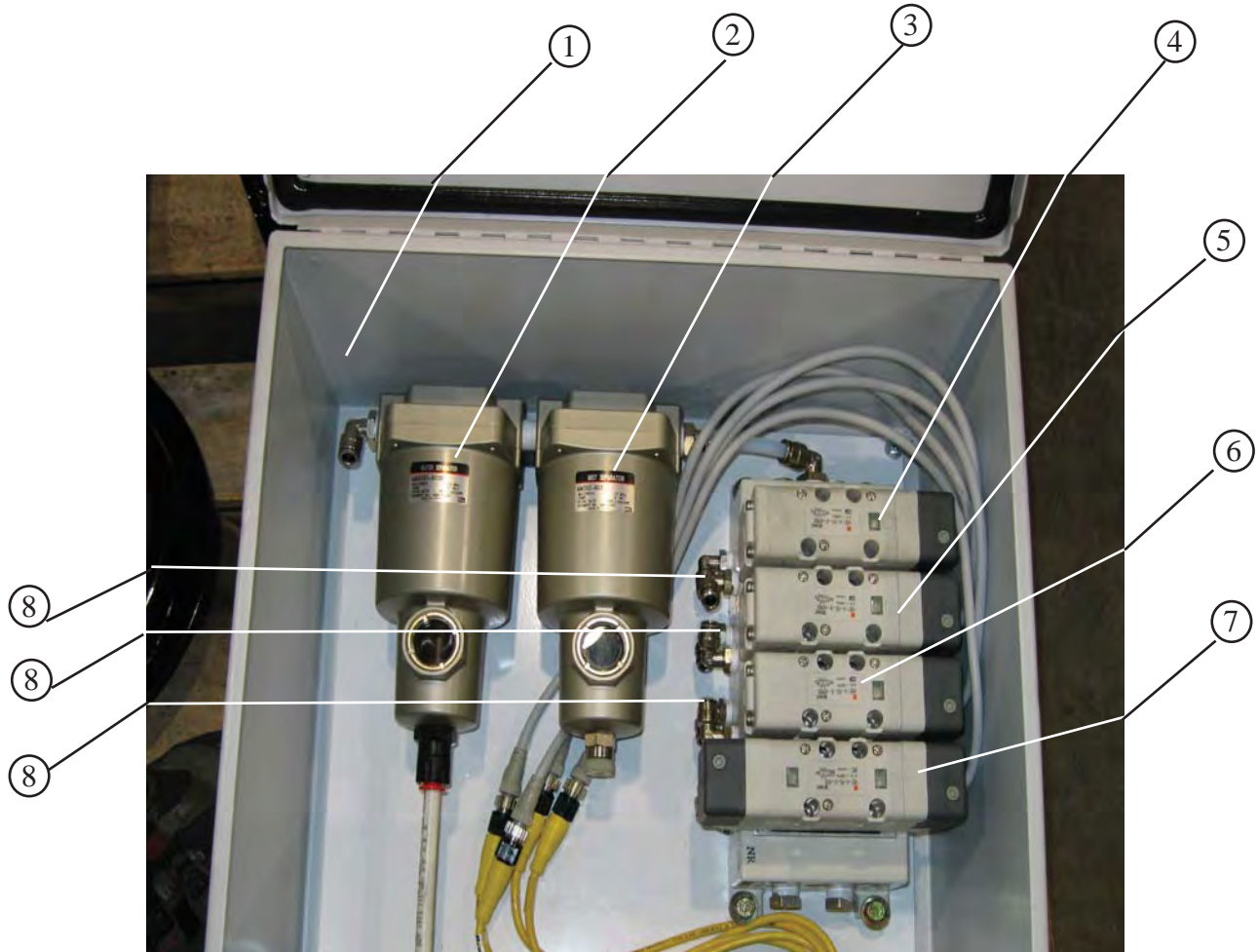
	Color	Purpose	Terminal	Old (90s)
<b>BLOWER</b>	Black	Engage (A)	37	16
	White	Disengage (B)	Not used	
	Brown	Ground	2	6
	Blue	Not Used	Not Used	

	Color	Purpose	Terminal	Old (90s)
<b>PTO</b>	Black	Engage (A)	12	12
	White	Disengage (B)	13	13
	Brown	Ground	2	6
	Blue	Not Used	Not Used	

## Typical Installation

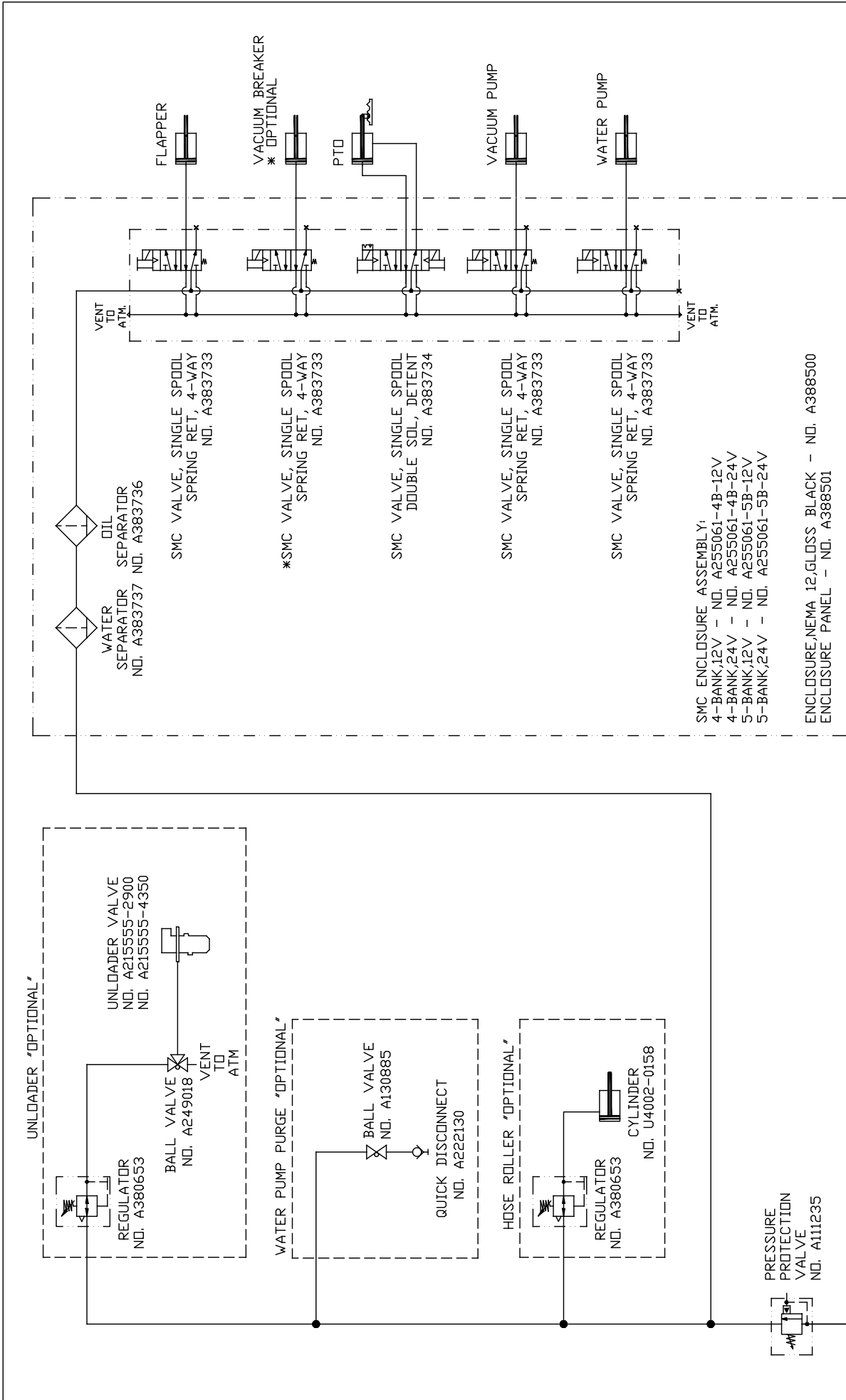


# PNEUMATIC SYSTEM



*GREEN LIGHT – POWER ON
* RED LIGHT - ENGAGED

ITEM	PART#	DESCRIPTION	QTY
1	A100021	PNEUMATIC INSTAL, SMC VALVES	1
2	A383737	SMC WATER SEPARATOR	1
3	A383736	SMC OIL SEPARATOR	1
4	A383733	FLAPPER	1
5	A383733	WATER	1
6	A383733	BLOWER	1
7	A383734	PTO	1
8	A135406	OUT	6



SMC ENCLOSURE ASSEMBLY:  
 4-BANK,12V - ND. A255061-4B-12V  
 4-BANK,24V - ND. A255061-4B-24V  
 5-BANK,12V - ND. A255061-5B-12V  
 5-BANK,24V - ND. A255061-5B-24V

ENCLOSURE, NEMA 12, GLOSS BLACK - ND. A388500  
 ENCLOSURE PANEL - ND. A388501

REV.	DESCRIPTION	DATE	BY
①	GENERAL REVISIONS	1/8/15	MLH
②	ADDED VACUUM BREAKER OPTION	1/10/12	MLH
③	UPDATED TO CURRENT STD.	11/7/14	MLH
④	ADDED HOSE ROLLER OPTION	5/2/14	MLH

SCALE:	NO SCALE	WEIGHT:	DRAWN BY:	DCC	PRODUCT CODE:
SIZE:	A	DATE:	4/27/09	CHECKED BY:	B-SERIES
DESCRIPTION:					

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MACHINING TOLERANCES	FRACTIONAL ± .015 DECIMAL ± .005 ANGULAR ± .1°
VENT TO ATM.	VENT TO ATM.

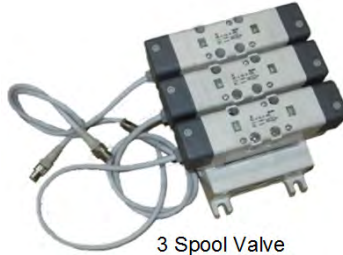
**AQUATECH**  
 A PRODUCT OF HI-VAC CORPORATION  
 117 INDUSTRY ROAD WAREHETA, OHIO 45750 USA  
 PHONE 740.374.9171 FAX 740.374.5447

**PNEUMATIC SCHEMATIC**  
 PART NUMBER: SCH1056  
 REV: G





Single (1) Spool Valve



3 Spool Valve



4 Spool Valve

## SMC VALVE ASSEMBLIES

TAG NUMBER(S)	VALVE P/N	LAYOUT	VALVE BODIES USED	WHERE USED	IN ENCLOSURE ASSY
1# VQ7-6-FG-S-4ZRSC	A383733	1 Spool	(1) 12V Single Coil	Units with Diamond Logic	A383756, A383756-624
1# VQ7-6-FG-S-3NSC	A383733-24	1 Spool	(1) 24V Single Coil	24V version of the above (export)	
1# VQ7-6-FG-D-4ZRSC	A383734	1 Spool	(1) 12V Dual Coil	SJ-1500	
1# VQ7-6-FG-D-3NSC	A383734-24	1 Spool	(1) 24V Dual Coil	24V version of the above (export)	
2# VQ7-6-FG-S-4ZRSC	A381562-SMC	2 Spool	(2) 12V Single Coil	Lift Vac Replacement	
2# VQ7-6-FG-D-4ZSC	A383781	2 Spool	(2) 12V Dual Coil	Dryvac	
1# VQ7-6-FG-S-4ZRSC 1# VQ7-6-FG-D-4ZRSC	A383759	2 Spool	(1) 12V Single Coil (1) 12V Dual Coil	SJ Truck	A383758, A383758-2
1# VQ7-6-FG-S-3NSC 1# VQ7-6-FG-D-3NSC	A383759-24	2 Spool	(1) 24V Single Coil (1) 24V Dual Coil	SJ Truck (export)	A383758-24
3# VQ7-6-FG-D-4ZSC	A383732	3 Spool	(3) 12V Dual Coil	X-Vac PTO	
2# VQ7-6-FG-S-4RSC 1# VQ7-6-FG-D-4ZSC	A383735	3 Spool	(2) 12V Single Coil (1) 12V Dual Coil	Appears on no BOM	
3# VQ7-6-FG-S-4RSC 1# VQ7-6-FG-D-4ZSC	A383753	4 Spool	(3) 12V Single Coil (1) 12V Dual Coil	B-Series PTO & Flapper	A255061-4B-12V
3# VQ7-6-FG-S-3NSC 1# VQ7-6-FG-D-3NSC	TBA	4 Spool	(3) 24V Single Coil (1) 24V Dual Coil	24V version of the above (export)	A255061-4B-24V
1# VQ7-6-FG-S-4ZRSC & 3# VQ7-6-FG-D-4ZSC	A383782	4 Spool	(1) 12V Single Coil (3) 12V Dual Coil	B-Series Tower PTO	A383783
4# VQ7-6-FG-S-4RSC 1# VQ7-6-FG-D-4ZSC	TBA	5 Spool	(4) 12V Single Coil (1) 12V Dual Coil	B-Series PTO, Flapper & Vac Brkr	A255061-5B-12V
4# VQ7-6-FG-S-3NSC 1# VQ7-6-FG-D-3NSC	TBA	5 Spool	(4) 24V Single Coil (1) 24V Dual Coil	24V version of the above (export)	A255061-5B-24V
1# VQ7-6-FG-S-4ZRSC & 4# VQ7-6-FG-D-4ZSC	A383817	5 Spool	(1) 12V Single Coil (4) 12V Dual Coil	Appears on no BOM	



## SMC VALVE PARTS

DESCRIPTION	P/N
Pressure Switch, Preset 6psi	A388505
Mounting Panel	A388501
3/8"NPT Breather Vents	A388504
Exhaust Blocking Disc	A388503
2 Section Rod	TBA
3 Section Rod	TBA
4 Section Rod	A383753-ROD
5 Section Rod	TBA
Panel Enclosure	A388500
Fitting, 90°, 5/16" Tube x 1/4"NPT	A388508
Fitting, 90°, 5/16" Tube x 3/8"NPT	A388507
Cord Set, 4 Pin, 5M Long (16.4')	A383743
Single Station Manifold (Base)	TBA
2 Station Manifold	TBA
3 Station Manifold	TBA
4 Station Manifold	A388502
5 Station Manifold	A388518
Valve Body Only, 12V, Single Coil	A383733-VB
Valve Body Only, 12V, Dual Coil	A383734-VB
Valve Body Only, 24V, Single Coil	TBA
Valve Body Only, 24V, Dual Coil	TBA
Sub-Plate, Single Spool Valve	A388517

SMC Valves have proven themselves to be very reliable and long lasting, therefore, we rarely get requests for service replacement parts for them. Most of the parts to the right are not stocked for that reason.

### SINGLE REPLACEMENT VALVES

Should you need a single valve body in a hurry, we suggest that you order the single spool valve assembly which typically is more readily available and remove and discard the manifold base if it doesn't match the existing base. Price wise the whole valve assembly is only about \$10 to \$15 more.

		
VALVE BODY KIT	SINGLE SPOOL VALVE ASSY.	VALVE TYPE
A383733-VB	A383733	12V Single Coil
TBA	A383733-24	24V Single Coil
A383734-VB	A383734	12V Dual Coil
TBA	A383734-24	24V Dual Coil

Revised 3/28/2019

## SMC PNEUMATIC FILTERS

**A383737**  
Water Separator



**A383736**  
Oil Separator





# A111232

## Air Piloted Pneumatic Valve



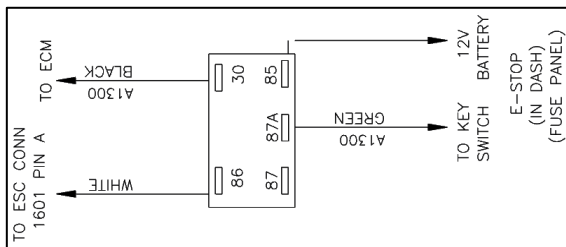
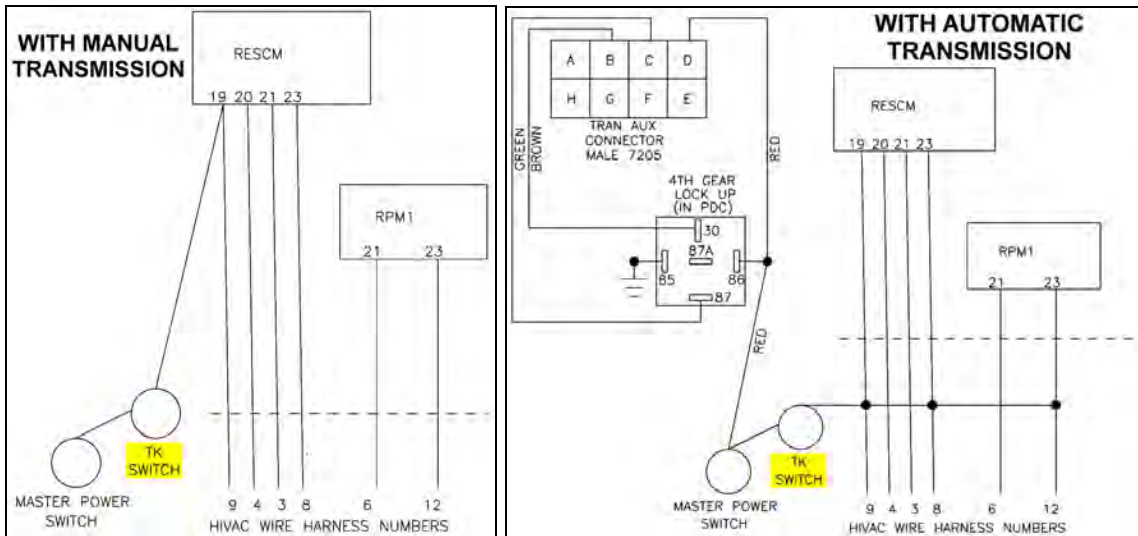




# TK SWITCH



Used as an interlock for PTO engagement on some mid to late 2000s model International Truck chassis having a multiplex system with a RESCM card.

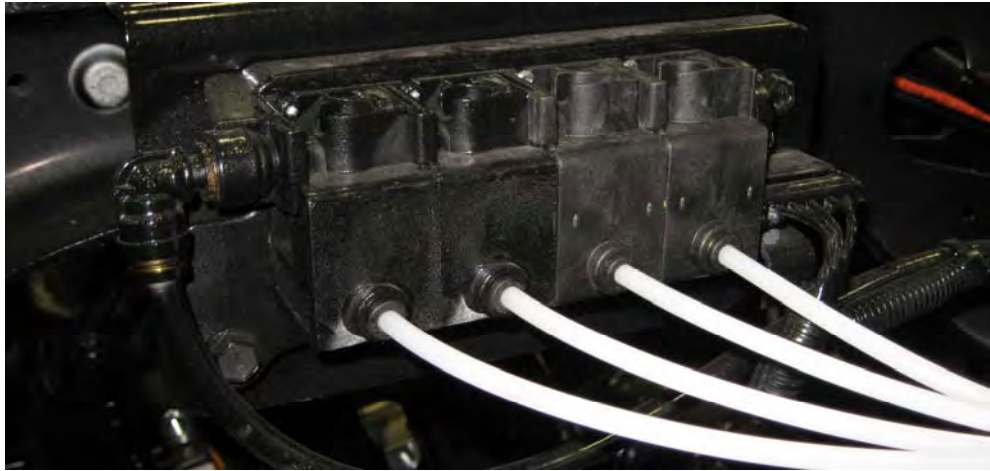




# AQUATECH<sup>®</sup>



## International Truck Diamond Logic System Components



### Pneumatic Control Solenoids



Note push-connect release ring color  
**Black** p/n 2506711C91 12V NC  
**White** p/n 2506712C91 12V NO

### 6-Gang Toggle Switch Array



**p/n 3549776C4**

## FREIGHTLINER SMARTPLEX PNEUMATIC CONTROL COMPONENTS



Normally Closed  
( A terminal is always positive )  
Pneumatic Solenoid Valve  
121001622 Rev A



Normally Open  
Pneumatic Solenoid Valve  
121001623 Rev A



End Cover  
121001624 Rev A



Straight Port Tube Connector  
121001625 Rev A



90° Port Tube Connector  
121001626 Rev A



Connector  
121002002 Rev A



Pin lock  
121002003 Rev A



Connector  
121002004 Rev A



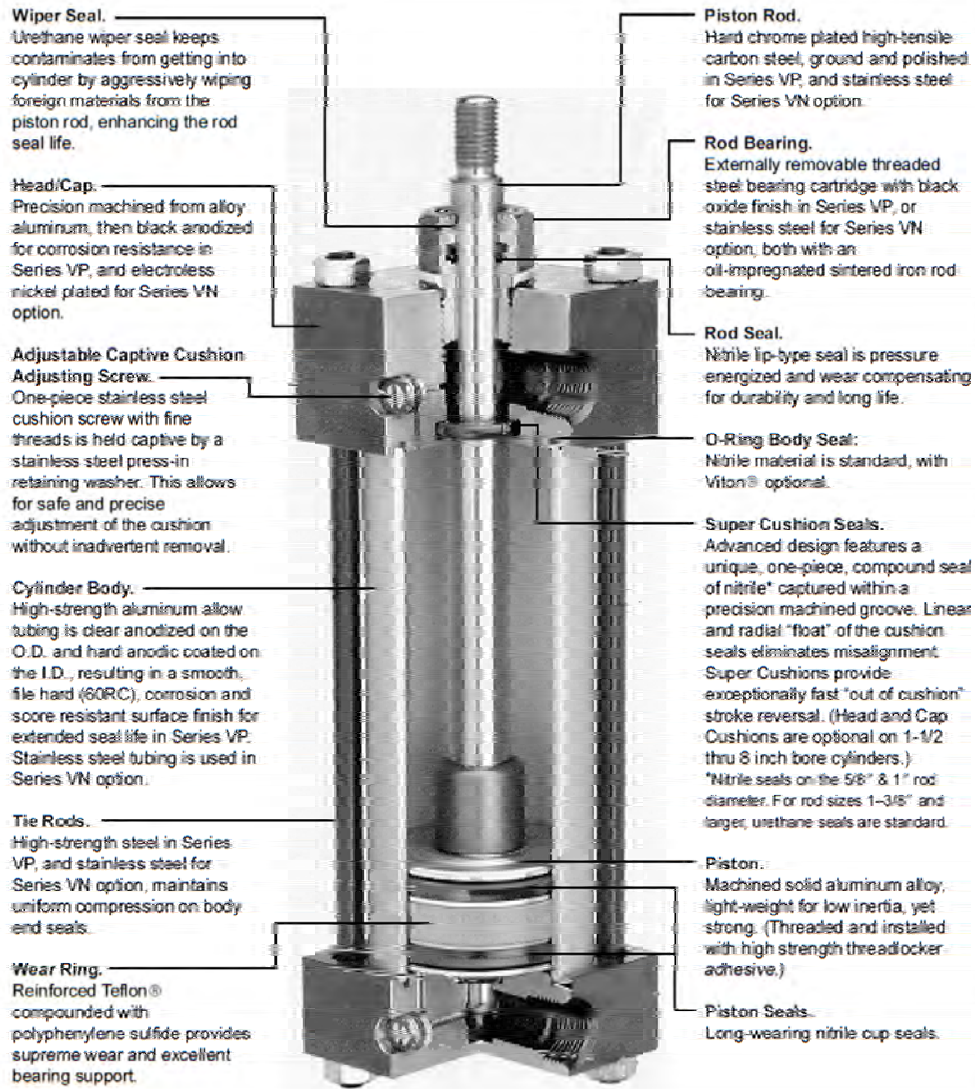
Cable Seal  
121002005 Rev A



Terminal – Female  
2 for each connector  
121002006 Rev A



## A249777 BOOM FLAPPER VALVE CYLINDER



### PISTON SEAL KIT ..... A249777-SK

- 2 PC 4" BORE TUBE SEAL
- 2 PC 4" BORE BLOCK VEE PISTON SEAL
- 1 PC 4" BORE BLOCK VEE WEARSTRIP

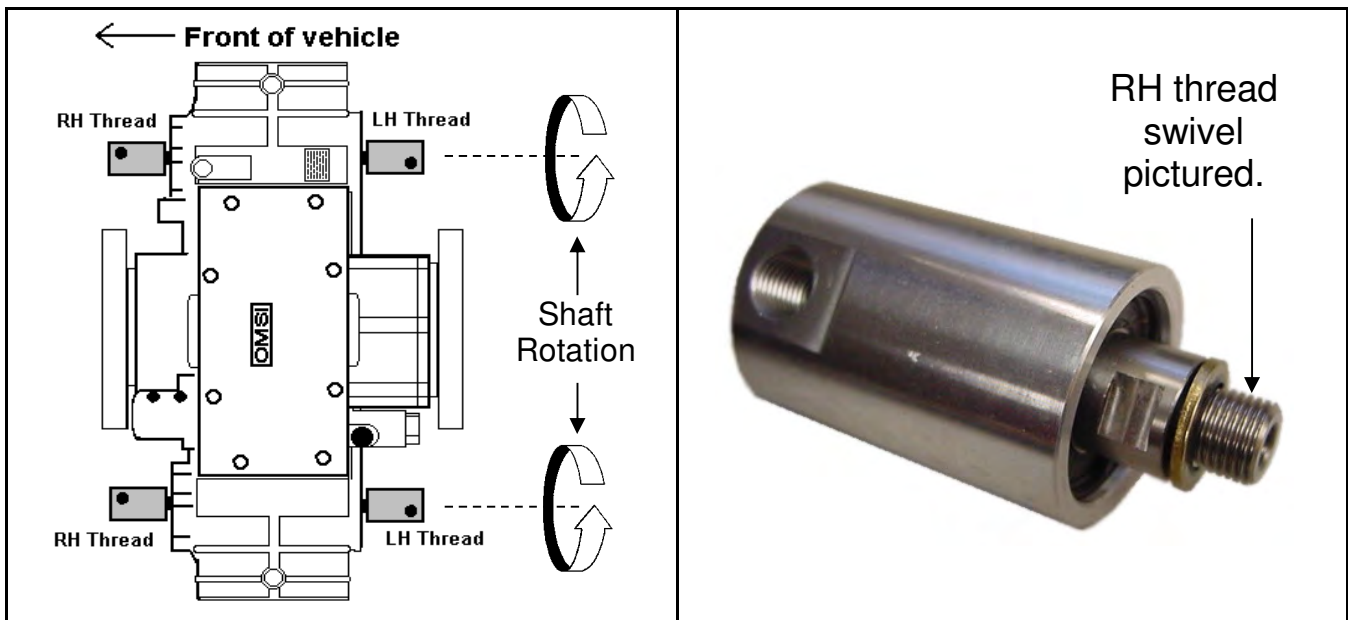
### ROD SEAL KIT..... A249777-ROD

- 1 PC BUNA O-RING, 1-3/4 X 1-7/8 X 1/16
- 1 PC 1-3/8" DIA. URETHANE WIPER
- 1 PC 1-3/8" ROD BLOCK VEE PISTON ROD SEAL
- 1 PC 1-3/8" ROD WIPER SEAL



## HIGH SPEEL PTO AIR SWIVEL

This is an informational bulletin for the high speed pneumatic swivel used on our split shaft PTOs. This swivel comes in both right handed and left handed versions. By far, the majority of our units use the RH threaded swivel which threads into the front side of the PTO. The LH threaded swivel threads into back side of the PTO and is primarily used on cab over trucks with a "reverse PTO" configuration (found mostly on units shipped overseas). The diagram below shows the thread orientation for each possible location on the PTO.



**A164148-6 - High Speed Air Swivel w/RH-Male Thread (replaces A164550)**

**A164148-7 - High Speed Air Swivel w/LH-Male Thread (replaces A164582 & A164604)**



A176010-1  
 A135406

### ASSOCIATED PARTS

High temp 1/4" O.D. Teflon tubing (sold per foot)  
 90° Pushlock Fitting: 1/4" Univ.\* x 1/4" O.D. Tube

\* Universal as of March 2019 - will work on NPT, BSPP, or BSPT fittings

These parts are also used on our







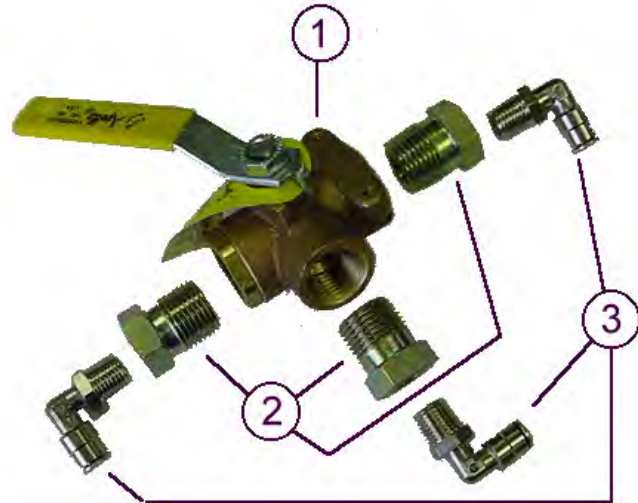
**INLINE PNEUMATIC SOLENOID VALVE  
A120215 (12VDC)  
A120215-1 (24VDC)**



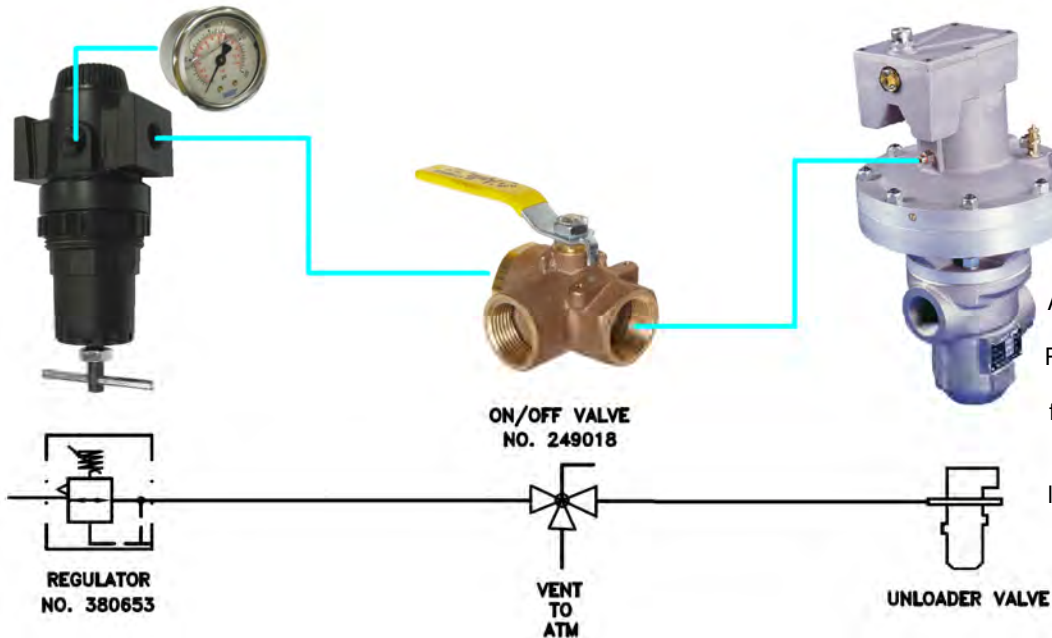
Primarily used with Muncie air shift PTOs.  
Used on some old SJR and B-Series machines.

# AQUATECH<sup>®</sup>

## PNEUMATICALLY CONTROLLED UNLOADER VALVE



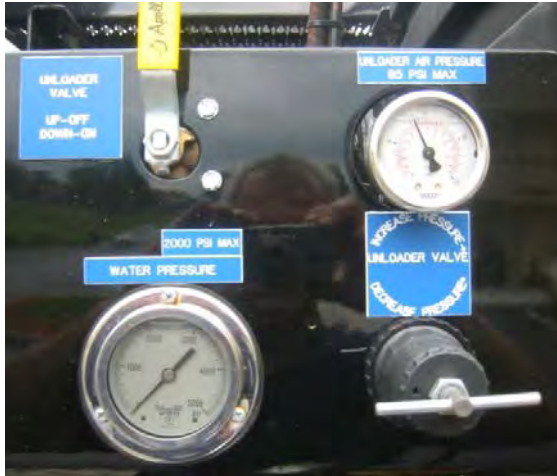
ITEM	PART NO.	DESCRIPTION
1.	A249018	Brass Ball Valve (current)
	A111123	Air Paddle Valve (older units)
2.	A135040	1/2" to 1/4" Reducing Bushing
3.	A135406	1/4" 90° Air Swivel Fitting
4.	A380653	Air Pressure Regulator w/Gauge (replaces A111122 & A111155)
5.	A380653-2	Air Pressure Gauge only, 0-200psi, 1/4"MNPT Back Mount
6.	A380653-1	Replacement Plastic Retainer Nut for Regulator



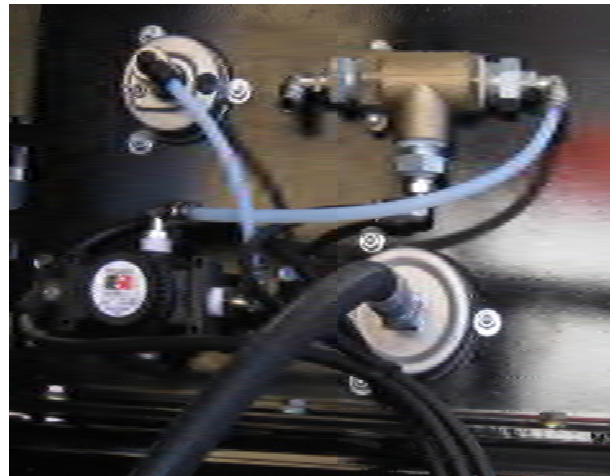
See Parts Bulletin AQP-B-134 in the High Pressure Water section for additional information on the Unloader Valve.



## REMOTE UNLOADER VALVE CONTROL STATION



FRONT OF PANEL



REAR OF PANEL



SHUTTLE VALVE

Air Pressure Regulator (with gauge)  
**A380653**

Replacement Retainer Ring for Air Pressure Regulator  
**A380653-1**

Replacement Air Pressure Gauge for Air Pressure Regulator  
**A380653-2**

3-Way Ball Valve, 1/2" NPT, Brass Body  
**A249018**

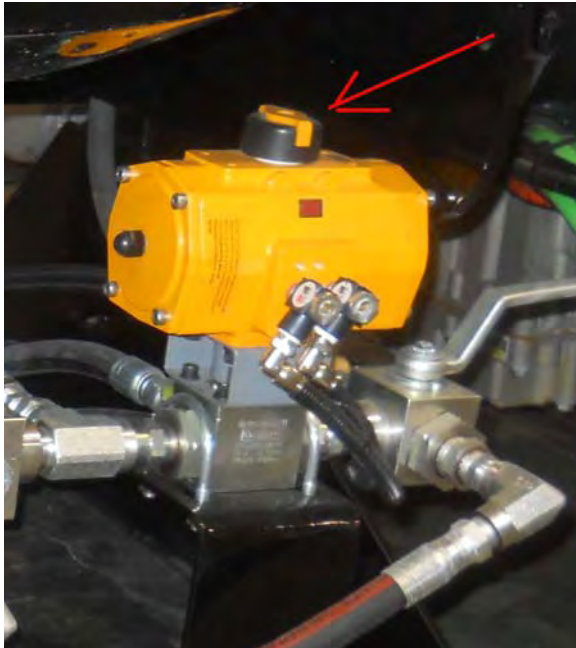
Water Pressure Gauge, 0-5K, Flange Mtd.  
**A131788**

Shuttle Valve, 1/4" NPT Ports  
**A338250**



# PNEUMATICALLY ACTUATED BALL VALVES

SIZE	ASSEMBLY	ACTUATOR ONLY	BALL VALVE ONLY	BALL VALVE SEAL KIT
3/4"	A381944	TBA	A381944-BV	A381944-SK
1"	A382555	TBA	A382555-BV	TBA



NOTE: If handle is supplied with the replacement ball valve, inform the customer to remove and discard it.

Note: Pressurize at center point only to avoid internal leakage at all ports.

## Technical Information

Item Number	Quantity	Description
1	1	Body
2	1	Stop Pin
3*	1	Stem
4*	1	Thrust Ring
5*	1	Stem O-Ring
6*	1	Stem Back Up Ring
7	1	Ball
8*	2	Ball Seat
9	1	Cam Plate
10	1	Snap Ring
11	2	Connector O-Ring
12	2	Connector

\*Included in Seal Kit



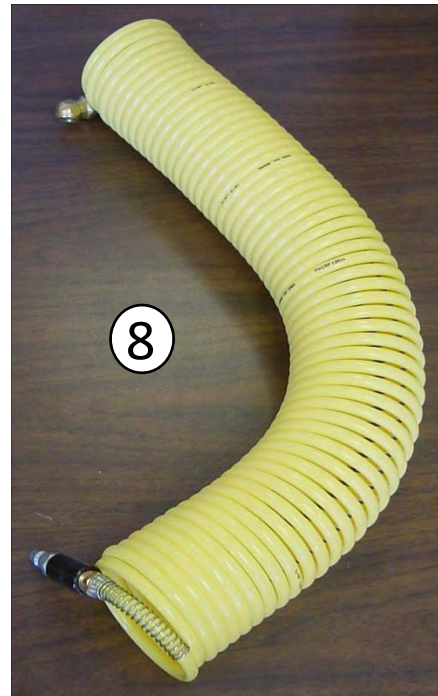
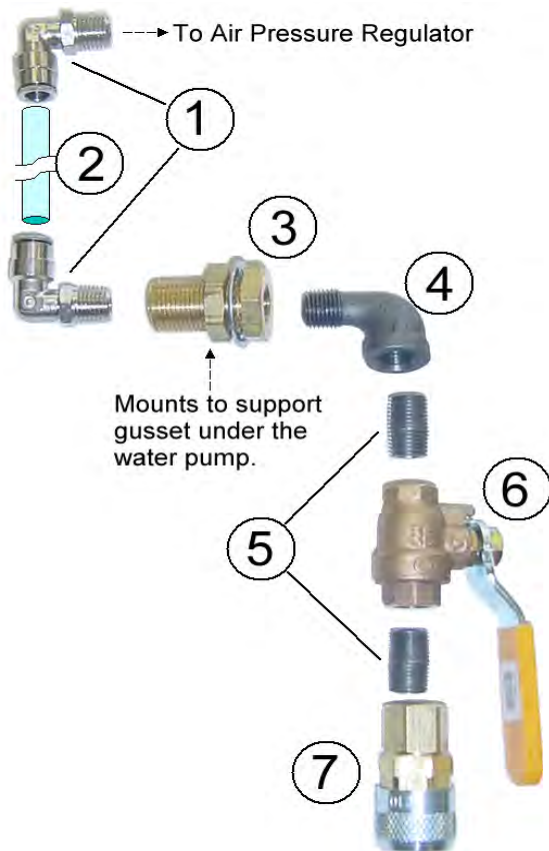


## A239902 WATER PUMP AIR PURGE INSTALLATION BOM

Item	Part No.	Description	Qty	U/M	SC
1	A135407	ADAPTER,ELBOW,90D,1/4"MNPT X 5/16"	2	EA	P
2	A176020-1	5/16" TEFLON AIR TUBING	5	FT	P
3	A135323	ADAPTER,COUPLING,ANCHOR,1/4"NPT	1	EA	P
4	02-0073	ELBOW,PIPE,STREET,1/4"NPT,150#	1	EA	P
5	A132010	NIPPLE,SCH80,1/4" X CLOSE,BLACK	2	EA	P
6	A130885	VALVE,BALL,1/4" BRASS	1	EA	P
7	A222130	COUPLER,QUICK DISCONNECT,1/4" FEMALE	1	EA	P
8	A239903	50FT HOSE COIL ASSY.	1	EA	M

### A239903 50FT HOSE COIL ASSY. BOM

Part No.	Description	Qty	U/M	SC
A110370	HOSE COIL 50 FEET	1	EA	P
A221360	CHUCK,AIR,1/4"	1	EA	P
A222145	COUPLING,QUICK DISCONNECT,1/4" MALE	1	EA	P



# QUICK COUPLERS

MALE	FEMALE	DESCRIPTION	WHERE USED
 A130811 1/4"FNPT	 A130821 1/4"MNPT	1/4" Industrial Quick Coupler (MIL-C-4109)	Air Coupler
 02-0016 1/4"MNPT	 U3905-0034 1/8"FNPT		
 A222145	 A222130	1/4" ARO Style Quick Coupler	Air Coupler
 A222140			
 60N6-6F	 60C6-6F	3/8" Quick Coupler 4000 PSI	O'Brien Wash Down Gun
 A130820	 A130810	1/2" Quick Coupler 4000 PSI	Aquatech Wash Down Gun
 05-0027	 05-0026	3/8" Quick Coupler 4500 PSI WOG (MIL-C-51234)	Hydraulic Coupler
 05-0025			
 A133376	 A131744	1/2" Brass Coupler 2200 PSI 33 GPM flow rate	Various Hose Reels
 A383063	 A383062	1/2" Locking Coupler 10,000 psi Smooth bore "straight through" design for high flow fluid requirements	Hydroexcavating Wand