



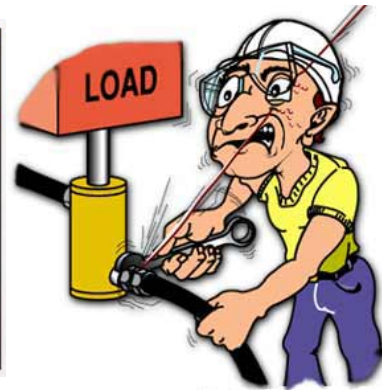
# B-SERIES PARTS COUNTERMAN'S CATALOG

## Section 7 Hydraulics



# AQUATECH®

**CAUTION: HYDRAULIC REPAIRS SHOULD ONLY BE PERFORMED BY PROPERLY TRAINED INDIVIDUALS**



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## Aquatech "B" Series Hydraulic Components

Part No.	Description	Application
A110233	PUMP, HYDRAULIC, 7.67 GPM@1800 RPM	MAIN PUMP
A304121	PUMP, HYDRAULIC, 12V MOTOR/PUMP COMBO	BACK-UP SYSTEM
A110234	VALVE, CHECK	MAIN PUMP
A110083	VALVE, 1 SPOOL, POWER BEYOND,800 PSI PORT RELIEF	MANUAL TANK TIPPING
A110304	VALVE, AIR BLEED (VELOCITY CHECK)	HYDRAULIC SYSTEM BLEED
A110292-3	VALVE, PRIORITY FLOW CONTROL, 3 GPM	BOOM/REEL FLOW CONTROL
A249270	VALVE, INTRGRATED, W/MANUAL OVERRIDE	BOOM CONTROL
A110275	VALVE, FLOW CONTROL, 1/4", ADJUSTABLE	BOOM UP/DOWN SPEED CONTROL
A380510	VALVE, FLOW CONTROL, W/PRESSURE THROUGH	REEL SPEED CONTROL
A110517	VALVE, 4 SPOOL, 12V SOLENOID	REEL CONTROL, REAR DOOR CONTROL
A249366	VALVE, PRESSURE COMPENSATED FLOW CONTROL, .5 GPM	REAR REEL ACTUATOR CONTROL
A110019	VALVE, CHECK/RELIEF, INTEGRATED ASSEMBLY	REAR DOOR OPEN/CLOSE
A380839	MOTOR,HYD, 1" SHAFT, 14.1 CI/REV, W/MANIFOLD CATRIDGE RELIEFS	HOSE REEL PAYOUT/RETRIEVE
A383241	ACTUATOR, HYDRAULIC ,RACK & PINION, 2" SHAFT	HOSE REEL ARTICULATE
A110015-1-RJ	CYLINDER, DOUBLE ACTING, 6.75" STROKE, 5" BORE, 2.5" ROD	REAR DOOR OPEN/CLOSE CYLINDER
A246523-P	CYLINDER & WEDGE ASSEMBLY	REAR DOOR LOCK CYLINDER
A110108	CYLINDER, DOUBLE ACTING, TELESCOPING, 109.25" STROKE	B5, B10, B10/1300, B10/1500, B52 TIPPING CYLINDER
A110107	CYLINDER, DOUBLE ACTING, TELESCOPING, 120" STROKE	B15 TIPPING CYLINDER
A110102	CYLINDER, DOUBLE ACTING, TELESCOPING, 74" STROKE	B6 TIPPING CYLINDER
A110210-RJ	CYLINDER, DOUBLE ACTING, 53" STROKE, 2" BORE, 1.25" ROD	19' BOOM EXTENSION CYLINDER
A110210-1-RJ	CYLINDER, DOUBLE ACTING, 66" STROKE, 2" BORE, 1.375" ROD	23' BOOM EXTENSION CYLINDER
A380443-RJ	CYLINDER, DOUBLE ACTING, 89" STROKE, 2" BORE, 1.5" ROD	25' & 27' BOOM EXTENSION CYLINDER
A304616	CYLINDER, DOUBLE ACTING, 134" STROKE, 2.5" BORE, 1.5" ROD	25' FRONT REEL BOOM EXTENSION CYLINDER
A110645-1-RJ	CYLINDER, DOUBLE ACTING, 10" STROKE, 4" BORE, 1.75" ROD	19' BOOM LIFT CYLINDER
A110645-5-RJ	CYLINDER, DOUBLE ACTING, 5" STROKE, 5" BORE, 2" ROD	25' FRONT REEL BOOM LIFT CYLINDER
A380212-RJ	CYLINDER, DOUBLE ACTING, 5" STROKE, 5" BORE, 2" ROD	25' FRONT REEL BOOM LIFT CYLINDER
<b>OPTION COMPONENTS</b>		
A110428	VALVE, 1 SPOOL, 12V SOLENOID, 4-WAY,2-POSITION	180 GPM PUMP OFF
A381608	MOTOR, HYD, CASAPPA PLM20,11R0-31S1-LOC/OCNELH	180 GPM PUMP OFF
A110428	VALVE, 1 SPOOL, 12V SOLENOID, 4-WAY,2-POSITION	300 GPM PUMP OFF
A381608	MOTOR, HYD, CASAPPA PLM20,11R0-31S1-LOC/OCNELH	300 GPM PUMP OFF
A110428	VALVE, 1 SPOOL, 12V SOLENOID, 4-WAY,2-POSITION	500 GPM PUMP OFF
A381825	PUMP, HYDRAULIC GEAR, 1.29 CI/REV, 2900 PSI CONTINUOUS, 3000 RPM	500 GPM PUMP OFF
A381824	MOTOR, HYD, 2.11 CI/REV, CASAPA PLM30.34R-04S5L0D/OF-C	500 GPM PUMP OFF
A380889	VALVE, 1 SPOOL, 12V SOLENOID, 2-POSITION	HYDRAULIC VIBRATOR
A380112	FLOW RESTRICTOR,2.8 GPM	HYDRAULIC VIBRATOR
U3917-0007	VIBRATOR, HYD, C3-6.0-2HC, 4 LB UNBALANCE, 2,840 LB OF FORCE	HYDRAULIC VIBRATOR
A380103	VALVE,DIVERTER, #12 PORTS, ADJUSTABLE	HYDRAULIC TOOL CIRCUIT
A110422	VALVE, 1 SPOOL, MANUAL, 2-POSITION	SLUDGE PUMP
A249056	PUMP, CENTRIFUGAL, ATLANTIC PUMP	SLUDGE PUMP
A381409	PUMP,HYD,RH,A PAD,A SPLINE,W/INT CHECK	SLUDGE PUMP
A100103	HEAT EXCHANGER,HYD.,12-24V SINGLE FAN	SLUDGE PUMP
A381512	MOTOR, HYD, 32.8 CI/REV, W/MANIFOLD CATRIDGE RELIEFS	1000' HOSE REEL PAYOUT/RETRIEVE
A383241	ACTUATOR, HYDRAULIC ,RACK & PINION, 2" SHAFT	HOSE REEL ARTICULATE
A380886	VALVE, 1 SPOOL, 12V SOLENOID, POWER BEYOND,800 PSI PORT RELIEF	ELECTRIC TANK TIPPING
A381409	PUMP, HYD, RH, A PAD, A SPLINE, W/INT CHECK	125 GPM BOOSTER PUMP
A381608	MOTOR, HYD, .67 CI/REV, CASAPPA	125 GPM BOOSTER PUMP
A381506-1	VALVE,12V SOLENOID VENTED RELIEF	125 GPM BOOSTER PUMP
A100103	HEAT EXCHANGER,HYD.,12-24V SINGLE FAN	125 GPM BOOSTER PUMP
A381860	VALVE, HYD, 1-SPOOL W/POWER BEYOND	1/2" HYDRAULIC HOSE REEL
A381859-1	HOSE REEL,1/2" X 200',HYDRAULIC DRIVEN	1/2" HYDRAULIC HOSE REEL
A110078	VALVE,LINE THROTTLE,1GPM,.032 DIA ORIFIC	1/2" HYDRAULIC HOSE REEL

## MISC. HYDRAULIC COMPONENTS



**A131782**  
0 to 5000 psi Pressure Gauge  
1/4" MNPT Pedestal Mount



**A110000-5**  
Hydraulic Oil Reservoir Level  
& Temperature Gauge



**A131788**  
0 to 5000 psi Pressure Gauge  
1/4" MNPT Flange Mount



**A110234** (Replaced by 121005022 Rev. A)  
Hydraulic Check Valve



**A131780-1**  
0 to 5000 psi Mini Hydraulic  
Pressure Gauge  
1/8" MNPT Back Mount



**A110019**  
Integrated Check/Relief Valve Assembly  
For Door Lift Cylinder



**A110000-9**  
0 to 60 psi Hydraulic Return  
Filter Pressure Gauge



**A110275**  
Hydraulic Adjustable Flow Control Valve  
1/4" NPT, For Boom Lift Cylinder



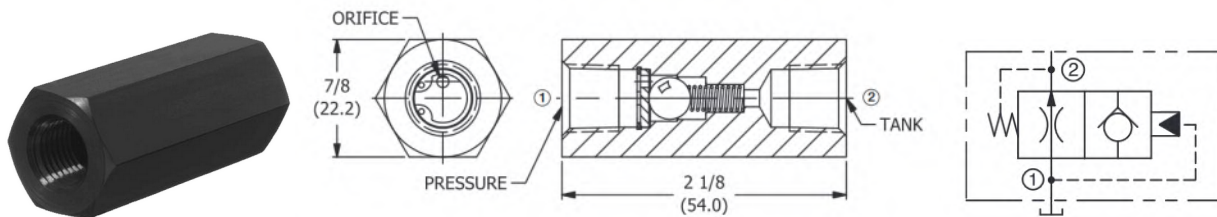
**A110304**  
Air Bleed Valve  
For Tank Tipping Cylinder



**A221044**  
1" X 13" Extension Spring for  
Boom Hydraulic Hoses

# A110304

## 1/4" FNPT AIR BLEED VALVE



P/N A110304 In-Line Air Bleed Valve is used to remove trapped air from a hydraulic system, allowing system pump to prime itself. The valve will pass air or a small amount of oil with pump pressure below 50 psi (3.4 bar). Trapped air in the system is bled off back to the reservoir until a solid stream of hydraulic fluid at +50 psi (3.4 bar) closes the valve. This is automatic during every system start-up. The valve should be installed at the high point of the hydraulic system using a tee connection.

### SPECIFICATIONS

<b>Maximum Operating Pressure (Non-Shock Service)</b>
Carbon Steel: 5,000 psi (345 bar)
<b>Minimum Seating Pressure</b>
50 psi (3.4 bar)
<b>Operating Temperature Range (O-Ring)</b>
Buna N: -30° to +400° F (-34° to +204° C)
<b>Threads</b>
NPTF 1/4"
<b>Orifice Diameter</b>
.089 (2.3)
<b>Materials</b>
Body: Steel
Spring: Stainless Steel 302
Ball: Stainless Steel 440
Washer: Steel
Retainer Ring: Steel

## CHECK VALVES BY THREAD SIZE & PSI

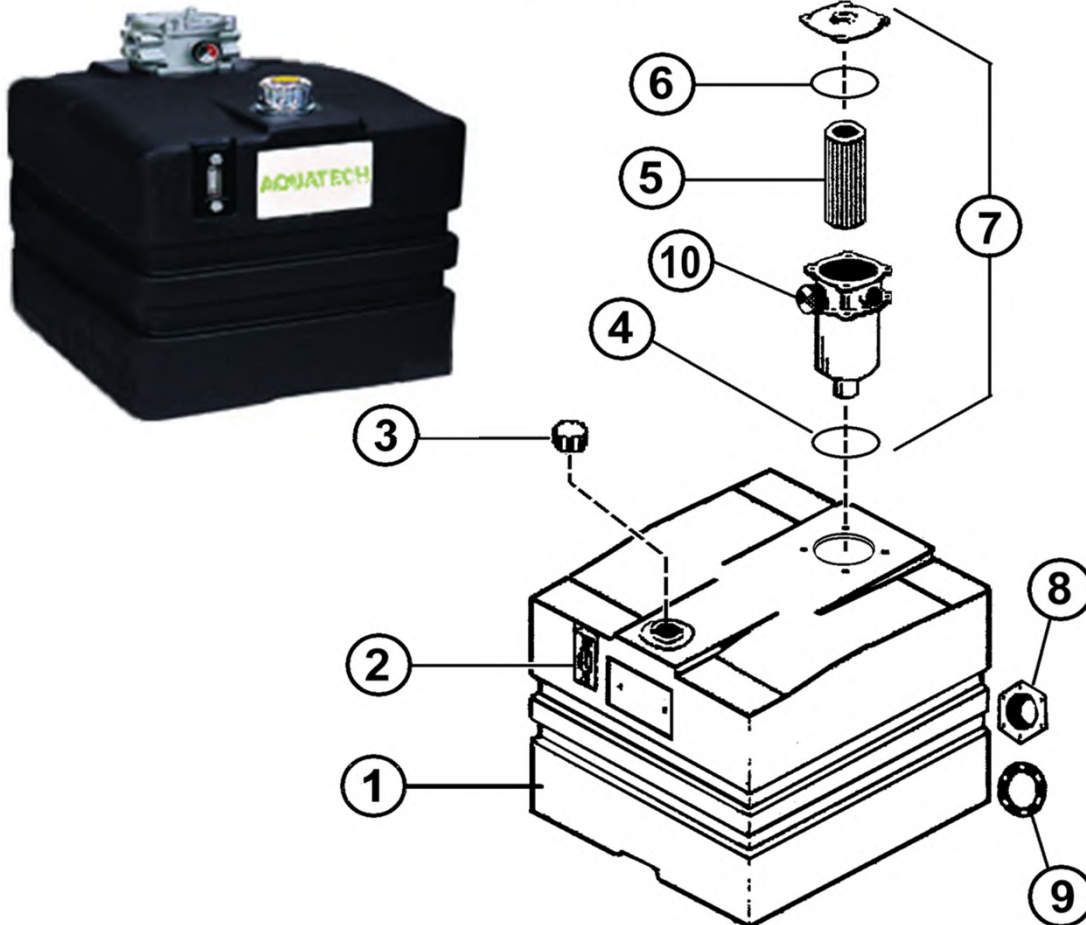


STYLE	PART NO.	SVC	SIZE	MAX PSI	CRACK PSI	TEMP RANGE *	BODY
1	A381995	W	1/2"FNPT	200	swing type	-20° to 405°F	Bronze
2	A383977	W	1/2"FNPT	400	0.5	350° Max	SS
3	U3904-0027	W	1/2"FNPT	400	0.5	-20° to 350°F	Bronze
3	A110311-SS	W	1/2"FNPT	3,000	0.33	-4° to 350°F	316 SS
4	A383977-5000	W	1/2"FNPT	5,000	1	-30° to 200°F	303 SS
2	A140015	W	3/4"FNPT	400	0.5	406° Max	Bronze
4	A140015-5000	HW	3/4"FNPT	5,000	1	-30 to 200°F	SS
8	121002877	P	1"FNPT	350	NA	250°F Max	Brass
2	A384013	W	1"FNPT	400	0.5	350° Max	316 SS
5	A304417-SS	W	1"FNPT	10,000	1	-20° to 400°F	SS
5	A304429	HW	1"FNPT	10,000	5	-20° to 400°F	SS
5	121005954 A	H	1 1/2"NPT	10,000	1	-20° to 400°F	SS
1	A381996	W	2 1/2"FNPT	125	swing type	-20° to 405°F	Bronze
5	A249118	H	#8 SAE	10,000	5	-20° to 400°F	CS
6	A100097	H	#12 SAE	3,000	3	-13 to 176°F	CS
5	121005022 A	H	#12 SAE	5,800	7	-4°F to 176°	CS
5	A380833	H	#12 SAE	10,000	5	-20° to 400°F	CS
7	121003667 A	H	#16 SAE	5,075	65	-20° to 212°F	CS
5	A249624	H	#16 SAE	10,000	5	-20° to 400°F	CS
5	U3904-0110	H	1"BSP	3,000	5	-45°C to 230°C	316 SS

↳ H = Hydraulic    P = Pneumatic    W = Water

### B-SERIES HYDRAULIC RESERVOIR

For your convenience, here is a parts listing for the 35 gallon polyethylene hydraulic reservoir found on most late model B-Series jet-vacs.



ITEM	PART NUMBER	DESCRIPTION
1	A110000	Reservoir Assembly (includes items 2 thru 10)
2	A110000-5	Oil Level / Temp Gauge
3	A110000-1	Filler / Breather Cap
4	A110000-8	O-Ring, Filter Housing to Tank
5	A110000-3	Filter Element
6	A110000-7	O-Ring, Filter Housing Lid
7	A110000-2	Return Filter Assembly (includes 4, 5, 6 & 10)
8	A110000-6	Flanged Pipe Adapter
9	A110000-4	Flange Gasket
10	A110000-9	Pressure Gauge, 0 to 60 psi

*Use AW46 hydraulic oil for top-off or refill.*

# HYDRAULIC FILTERS

This is an informational bulletin to help identify the hydraulic filters on standard B-Series machines.



**PART NO. A110000-3**

**RETURN FILTER ELEMENT:** Located inside return filter housing on top of hydraulic reservoir. Replace annually.



**PART NO. A110516**

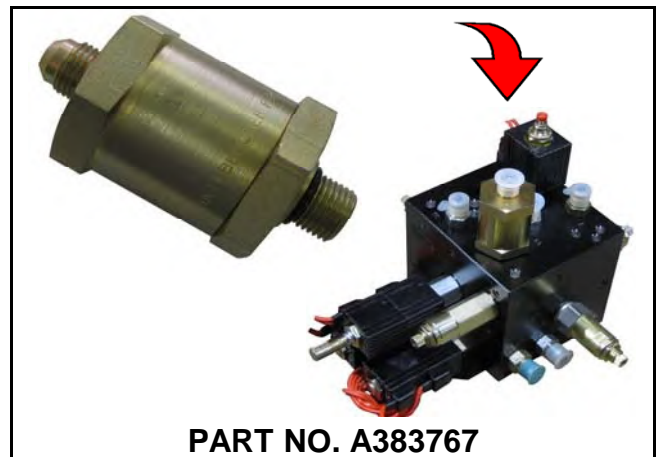
**PRIMARY SPIN-ON FILTER:** Located near the outlet of the hydraulic reservoir right after the gate valve and prior to the hydraulic pump. This is the primary filter for the hydraulic system. Replace annually.



**P/N A383754-E**

**121005071 Rev A**

**HIGH PRESSURE FILTER CARTRIDGE:** Filter housing is located after the hydraulic pump and is mounted to the power deck. We started using this filter in early 2009. **NOTE:** In March 2018 we change suppliers from Pall (on the left) to Parker (on the right). These filter cartridges are not interchangeable. Replaced annually.



**PART NO. A383767**

**LAST CHANCE FILTER:** This filter screws directly into the integrated boom control valve to protect it from any contaminants that may get past the other filters. We started using this filter in early 2009. Replace every two years.

### AVAILABLE FILTER KITS

A381152-B10-S-KIT For even anniversary - includes: A110000-3, A110516 & A383754-E








A381152-B10-P-KIT For odd anniversary - includes: A110000-3, A110516, A383754-E,

A383767, A383736-E\* & A383737-E\* (\*SMC pneumatic filter elements)



## B-SERIES FILTER CHANGE INTERVALS AND FILTER KITS

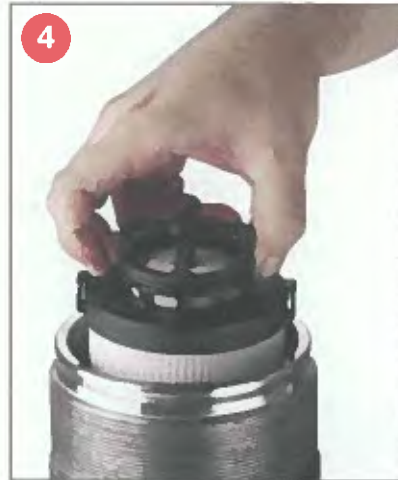
Up to 90% of all hydraulic system failures can be attributed to contaminated oil. Particle contaminated hydraulic oil accounts for 82% of all wear

	FILTER	BREAK-IN FILTER CHANGE	1st YEAR	CHANGE INTERVAL AFTER THE FIRST YEAR	A381152-B10-S-KIT (Even Anniversary Kit)	A381152-B10-P-KIT (Odd Anniversary Kit)
	A110516 Hydraulic Spin-On	After the first 50 Hours	✓	Every Year (Even & Odd Anniversary)	✓	✓
	A110000-3 Hydraulic Reservoir	After the first 50 Hours	✓	Every Year (Even & Odd Anniversary)	✓	✓
	A383754-E Pall HP Element (to March 2018)	After the first 50 Hours	✓	Every Year (Even & Odd Anniversary) or when the change indicator light stays solidly on, whichever would occur first. NOTE: the light will flicker occasionally during normal operation.	✓	✓
	121005071 A Parker HP Element (Mar 2018 on)					
	A383767 Last Chance Hydraulic		✓	Every 2 Years (Odd Anniversary)		✓
	A383736-E Pneumatic Oil Separator		✓	Every 2 Years (Odd Anniversary)		✓
	A383737-E Pneumatic Water Separator		✓	Every 2 Years (Odd Anniversary)		✓

# WPF Series

## Service & Maintenance Instructions

- 1 Stop system power and vent captive pressure.
- 2 Drain filter assembly.
- 3 Remove bowl and element assembly.
- 4 Push down to squeeze tangs and lift element.
- 5 Twist to remove core.
- 6 Retain reusable core.
- 7 Discard used element.
- 8 Insert reusable core into new element until it snaps.
- 9 Push element assembly into bowl, snap tangs.
- 10 Inspect o-ring and anti-extrusion ring.
- 11 Install bowl with new element.
- 12 Torque bowl, vent and drain plugs.
- 13 Power up and inspect.



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Hydraulic Filter Division  
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[www.parker.com/hydraulicfilter](http://www.parker.com/hydraulicfilter)



# FILTERS

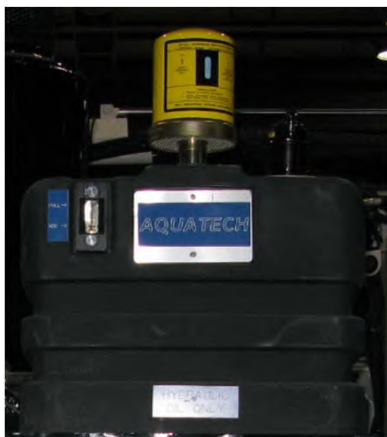


ASSY P/N	PALL TAG NUMBER	TYPE	PORT SIZE	MICRON	MAX WORKING PSI	ELEMENT P/N	ELEMENT LENGTH	SWITCH P/N
A249555		Reservoir Return	1"	6	150	A249564	8.4"	--
U3914-0009		Ultipor Spin-On		3	435	U3914-0010	8"	--
A110521		Charge Pump		6	290	A110522	4.6"	--
A382273	UR209HA12AN07HBFD	Trans Charge	3/4"SAE	6	600	A382273-FILTER	7"	--
A383754	UH209HA12AN07HBLYS39	Hi-Press	3/4"SAE	6	5075	A383754-E	7.5"	A383754-PS
A373759	UR319HA24AN08ZG9YR85	Return	1 1/2"SAE	6	600	A373759-E	8"	--
A304482	UR219CA16AN13ZGP	Return	1"SAE	6	600	121003670 A **	13"	A373763
121003669 A	UR210A1613ZG	Return	1"SAE	6	600	121003670 A	13"	TBA
A384096 *	UR219CA16AN13ZG9861CZ	Return	1"SAE	6	600	121003670 A **	13"	A373763
A384096 *	UR219HA20AN20ZG861CZ	Return	1 1/4"SAE	6	600	A384096-E	20"	TBA

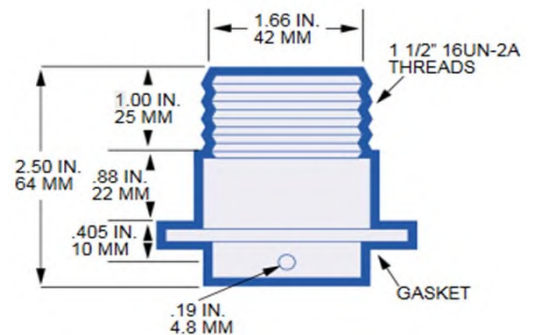
\* Please note - two different size filters were supplied under this p/n.

\*\*replaces A304482-E

ASSY P/N	TYPE	MICRON	LENGTH	COMMENT
A338054	Reservoir Vent	1	8"	
A338056	Reservoir Vent	1	8"	w/o Bracket
A338057	Adapter for the above	--	--	1.5"-16 Thd.



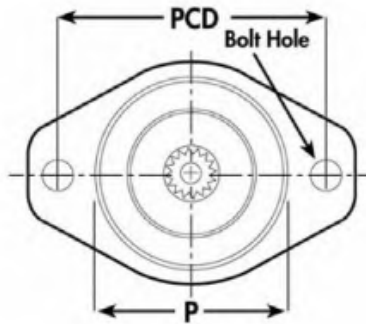
A338054



A338057

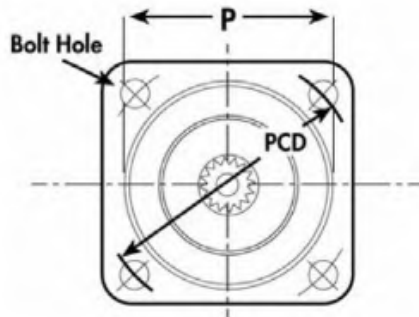
## SAE PUMP MOTOR MOUNTING FLANGES AND SHAFTS

### SAE TWO BOLT MOUNTING



SAE CODE	PCD	Bolt Hole Diameter	(P) Pilot Diameter
AA	3.25	0.406	2.00
A	4.187	0.437	3.25
B	5.75	0.562	4.00
C	7.125	0.687	5.00
D	9.00	0.812	6.00
E	12.50	1.062	6.50

### SAE FOUR BOLT MOUNTING



SAE CODE	PCD	Bolt Hole Diameter	(P) Pilot Diameter
B	5.000	0.562	4.00
C	6.375	0.562	5.00
D	9.000	0.812	6.00
E	12.500	1.062	6.50

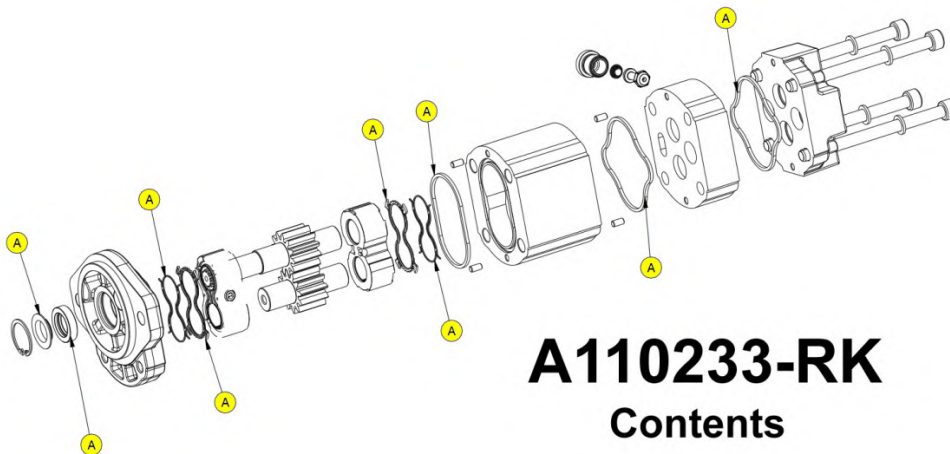


## B-SERIES HYDRAULIC PUMPS



**A110233**

MAKE	PART NO.	ROT.	MOUNT	APPLICATION	SEAL KIT
Casappa	A100096	Reversible	SAE "A"	B-Series High Output Tandem Pump	TBA
Casappa	A110233	Reversible	SAE "A"	9T Spline – Std. B-Series Current Models	A110233-RK
Casappa	A249463	CW	SAE "A"	Some B-Series w/Pump Off	TBA
Casappa	A249456	CW	SAE "B"	Leasco B15 & CB15	TBA
Casappa	A249612		SAE "A"	Tandem Pump - Ciemsa B15	TBA
Linde	A249601	CW		B-Series w/Hydrostatic Drive	TBA



**A110233-RK**  
Contents

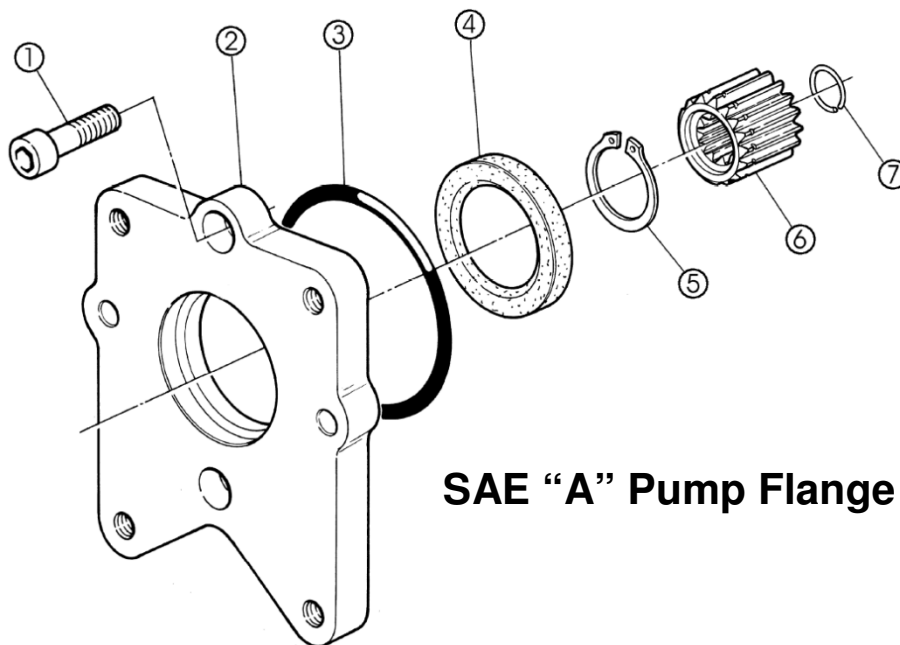


## PTO HYDRAULIC PUMP MOUNTING PLATE



OMSI Trasmissioni S.p.A.

### For PFT/PC4-3000 PTOs



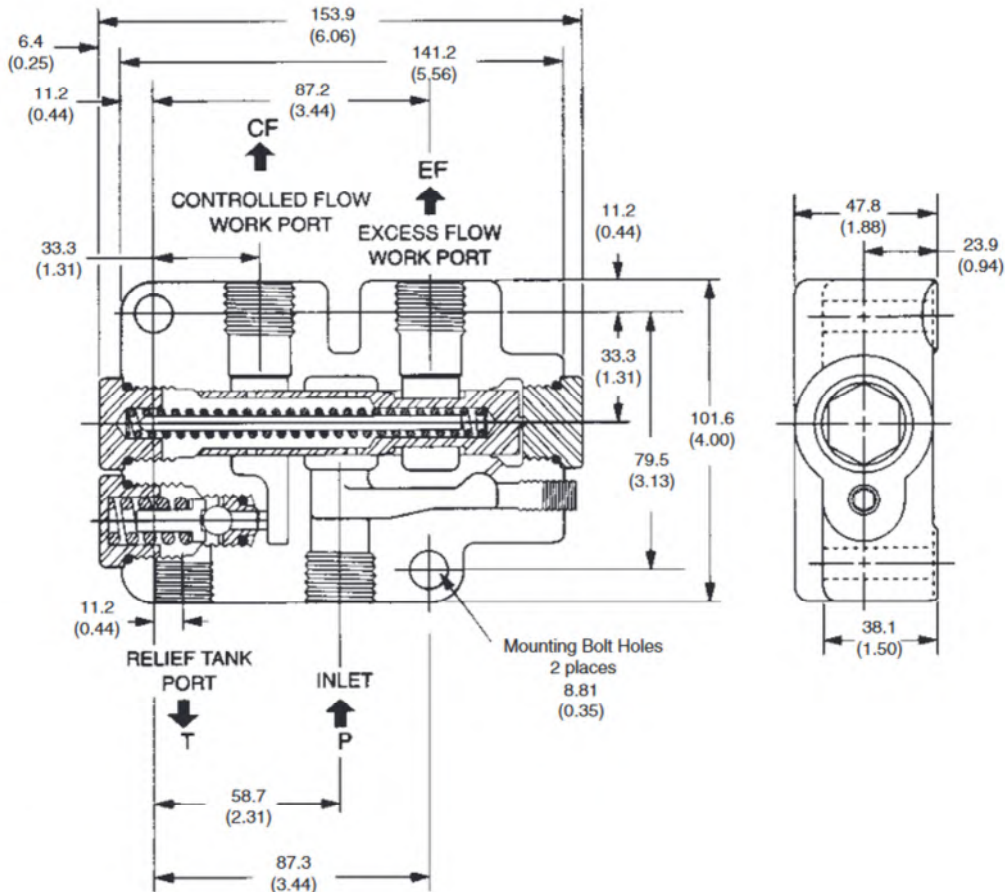
SAE "A" Pump Flange

ITEM	FOR PTO A164134 TAG# 10750036	FOR PTO A164134-1 TAG# 10750036-05	DESCRIPTION	QTY.
1	A164477	A164477	M10 x 25 Screw	4
2	A164478	A164478	Plate, Mounting	1
3	A164475	A164464	O-Ring	1
4	A164509	A164462	Oil Seal	1
5	A164510	A164510	Snap Ring	1
6	A164511	A164511	Bushing, Splined	1
7	A164512	A164512	Circlip	1

## Hydraulic Priority Flow Control Valve

Provides a fixed controlled flow source where two separate hydraulic power circuits are to be served from a single pump.

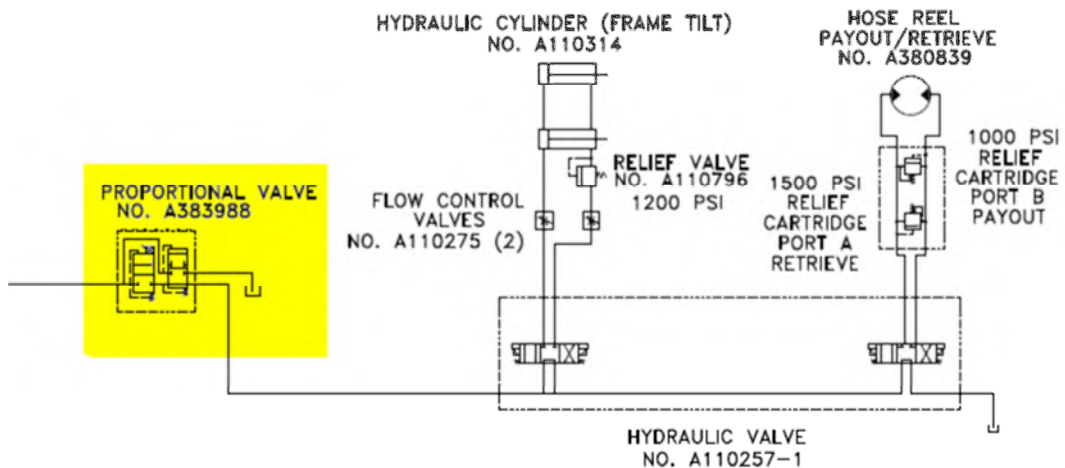
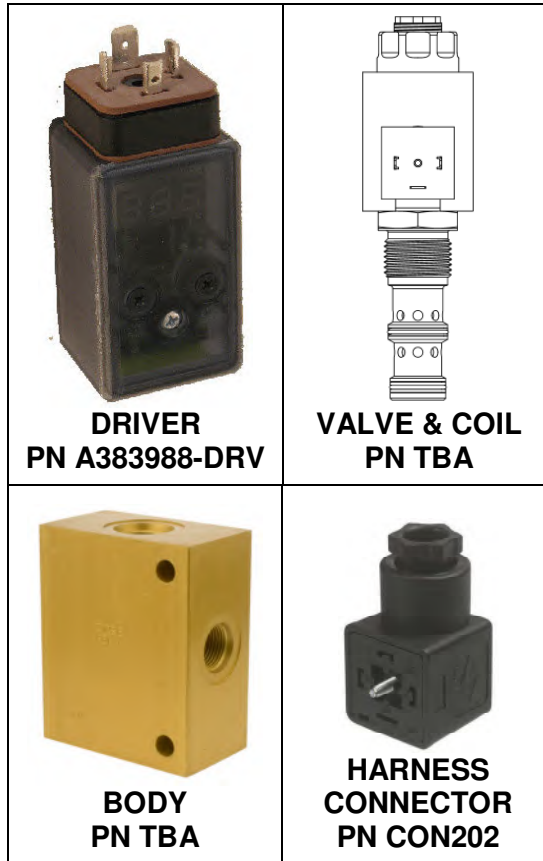
A110292-2	1 GPM
A110292	2 GPM
A110292-3	3 GPM





# A383988




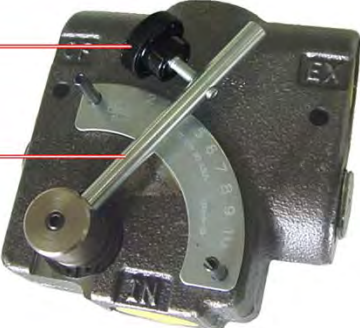
## PRIORITY FLOW CONTROL VALVE USED WITH SOME FRONT REEL UNITS





**AQUATECH**  
**PARTS BULLETIN**

This is an informational bulletin to provide visual identification for adjustable flow control valves used on various Aquatech units. They are used to control the speed of the reel. On B-Series units, the supply to all the hydraulic functions on the rear flow through this valve (this design necessitates returning the valve to wide open position for the dumping operations to operate at full speed).

 <p><b>NOB</b> A110271-K</p> <p><b>A110271</b> Fits older models</p>	 <p><b>A110279</b> (r/b A110282-1) Fits older models</p>
 <p><b>NOB</b> A110282-K</p> <p><b>A110282</b> Fits older models</p>	 <p><b>NOB</b> A380510-2</p> <p><b>LEVER</b> A380510-1</p> <p><b>A380510</b> Current Valve</p>

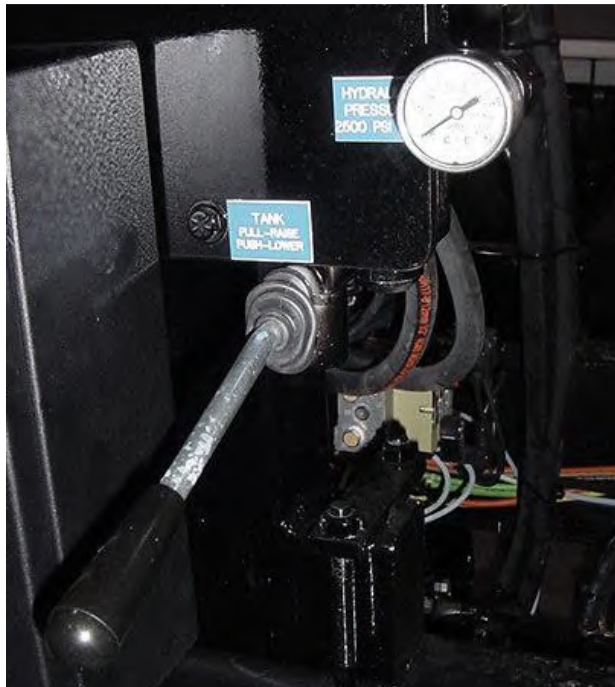


**A110282-1**  
Consists of 1 p/n A380510 valve and 3 p/n A135184 JIC adapter elbows.



# A110083

## TANK TIPPING CONTROL VALVE



Replacement Handle .....	A110082
Replacement Handle Boot .....	A110083-BK
Replacement Handle Kit .....	A110083-HK
Mini Pressure Gauge.....	A131780-1

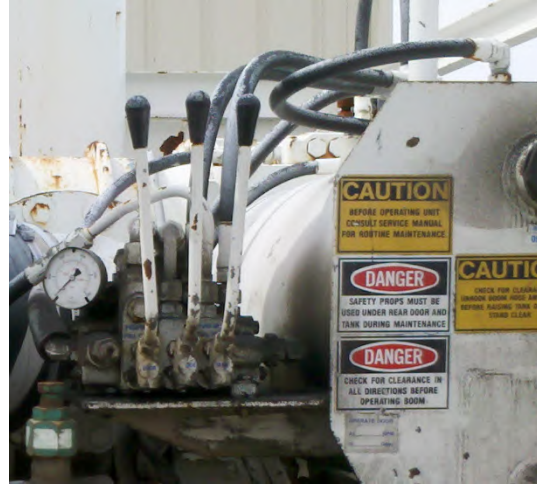
*Note: Gauge is not included with A110083 valve.*



## HYDRAULIC CONTROL VALVES FOR OLDER B-SERIES

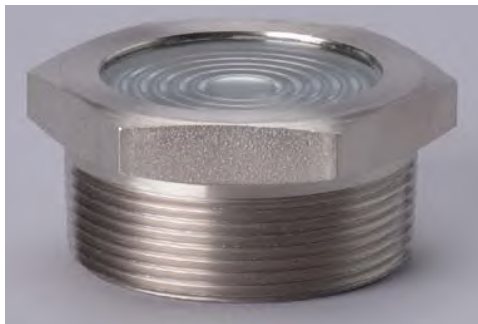


**A110602**  
**2-Spool Manual Lever**  
Rear Door & Tank Tipping



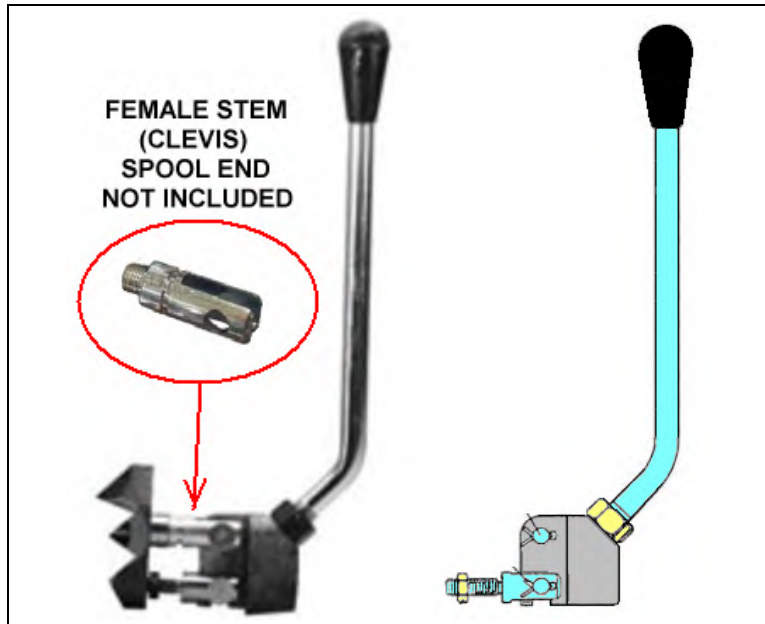
**A110073**  
**3-Spool Manual Lever**  
Rear Door, Door Locks & Tank Tipping

The steel hydraulic tank in the above photos is obsolete. The only thing available for it is the 2" round sight glass, part number A110580.





## A110612-1 LEVER KIT



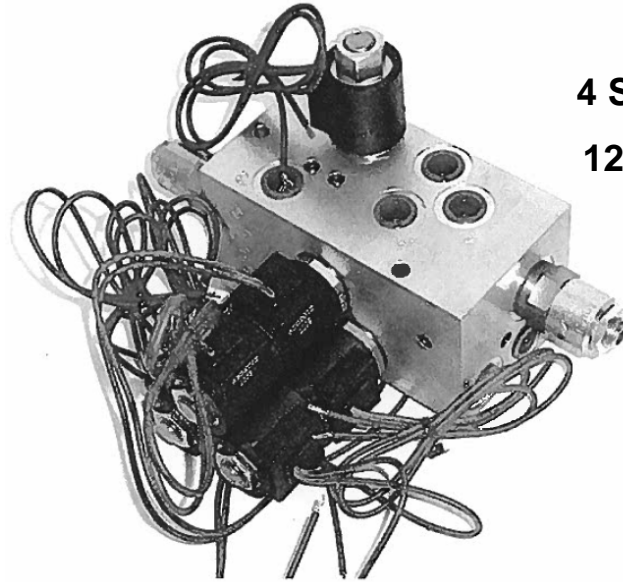
**Fits the following hydraulic valves: A110073, A110422, A110602, A110612, A110613, A110614 and A249614.**





# A110396

**OBSOLETE INTEGRATED BOOM  
CONTROL VALVE ASSEMBY**



**4 Spool**

**12 Volt**

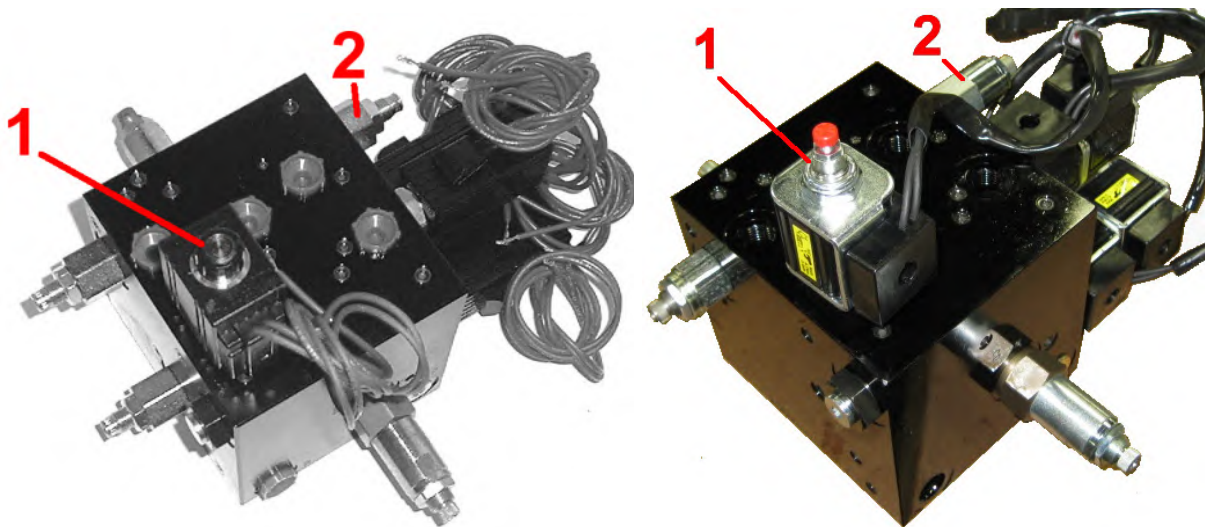


**Used till Jan. 2001**

**This valve is no longer available.  
It will have to be retrofitted with p/n A246521.**



## A110391 VS A249270 BOOM CONTROL VALVE



The picture to the left is of an obsolete A110391, the one to the right is our current A249270. The two main differences are items 1 and 2.

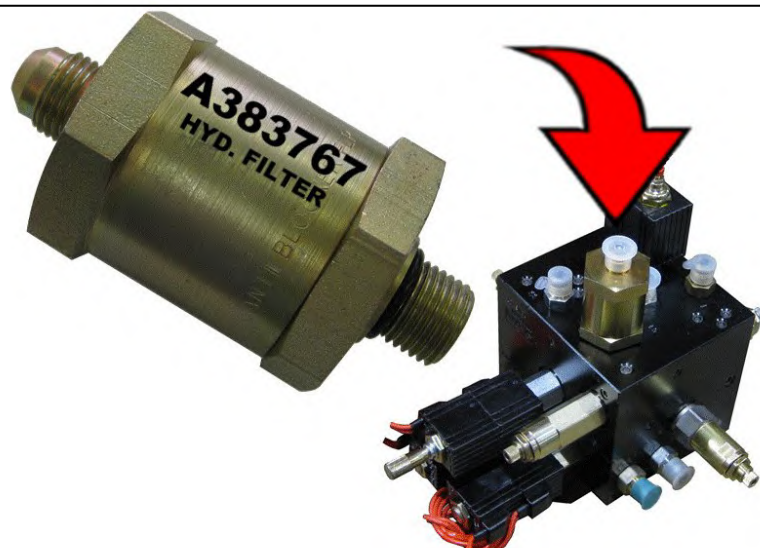
**Item 1:** The old solenoid cartridge used on the A110391 does not have a manual override button. The solenoid cartridge pictured on A249270 has the manual override (red button). Note: Until about 2016 both valves utilized the same coils. The current coils will not fit the old stems and old coils will not fit the current stems.

**Item 2:** On the old A110391 the item 2 cartridge was a needle valve - we no longer use that valve and no replacement is available. On the new valve A249270, we use a relief valve cartridge. We have used this cartridge since 2003. It fits in the same cavity where the needle valve fits.

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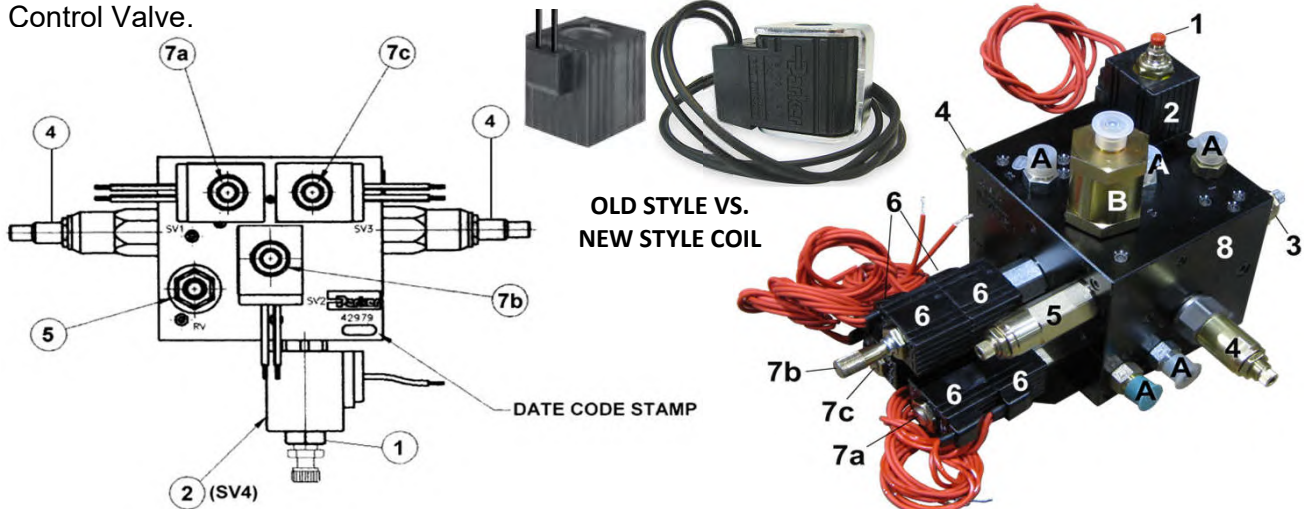
In 2007 we started installing a "Last Chance" hydraulic filter in the supply port to filter out any contaminants that may have gotten through the other filters in the system.

P/N A246521 includes the A249270 valve and the A383767 filter along with eight hook-up fittings. See parts bulletin AQP-B-111 for more Info.



# BOOM CONTROL VALVE

This is an informational bulletin listing the components of our A246521 Integrated Boom Hydraulic Control Valve.



ITEM #	PART NUMBER	DESCRIPTION	QTY.
Assy.	A246521	A249270 Control Valve (12 Volt) with Adapter Fittings and Filter	1
	A246521-1	A249270-24 Control Valve (24 Volt) with Adapter Fittings and Filter	1
A	A135170	Adapter, Straight, 3/8"MSAE x 3/8"MJIC	6
B	A383767	Inline Hydraulic "Last Chance" Filter	1
n.i.	A170186	Adapter, 90°, 3/8"FJIC Swivel x 3/8"MJIC	1
n.i.	A135251	Adapter, Run Tee, 3/8"FJIC Swivel x (2) 3/8"MJIC	1
1 to 8	A249270	Integrated Hydraulic Control Valve (12 Volt)	1
	A249270-24	Integrated Hydraulic Control Valve (24 Volt)	1
1	A249270-5	SV4 Solenoid Valve - Energize / De-Energized (By-Pass)	1
2	A249270-13	Solenoid Coil, 12V	1
	A249270-13-24V	Solenoid Coil, 24V	1
3	A249270-10	High Pressure Needle Valve	1
4	A249270-6	Counterbalance Valve	2
5	A249270-14	Relief Valve	1
6	A249270-12	Old Style 12V Solenoid Coil (Double Stacked - 2 Req.) for A249270-8, 9 & 15	6
	A249270-12B	New Style 12V Solenoid Coil (Double Stacked - 2 Req.) for A249270-8B, 9B & 15B	
	A249270-12-24V	Old Style 24V Solenoid Coil (Double Stacked - 2 Req.) for A249270-8, 9 & 15	
	TBA	New Style 24V Solenoid Coil (Double Stacked - 2 Req.) for A249270-8B, 9B & 15B	
7a	A249270-9 (NLA)	SV1 Solenoid Valve - Boom In/Out (Tag DS085C1) <b>USE A249270-9B &amp; two 12B</b>	1
	A249270-9B	SV1 Solenoid Valve - Boom In/Out (Tag GS025100N) <b>Requires New Style Coils</b>	
7b	A249270-15 (NLA)	SV2 Solenoid Valve - Boom Left/Right (Tag DS085C4M) <b>USE A249270-15B &amp; two 12B</b>	1
	A249270-15B	SV2 Solenoid Valve - Boom Left/Right (Tag GS025310N) <b>Requires New Style Coils</b>	
7c	A249270-8	SV3 Solenoid Valve - Boom Up/Down (Tag DS085C4)	1
	A249270-8B	SV3 Solenoid Valve - Boom Up/Down (Tag TBA) <b>Requires New Style Coils</b>	
8	A249270-1	Body, Boom Control Valve	1

Please note: If you are attempting to repair this valve, extreme care must be exercised that dirt does not enter the valve while removing and installing hoses and valve stems. The tiniest amount of dirt can cause the valve to fail. Thoroughly clean the area around the fitting(s) or stem(s) before removing. If you are experiencing problems with a unit with some age on it, you would probably be ahead to replace the entire valve.

# AQUATECH<sup>®</sup>

## PARTS BULLETIN

Bulletin No. AQP-B-128

Issued: 02/28/07 by RR - Revised 06/04/19

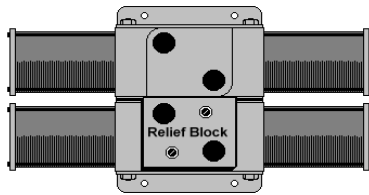
Subject: Hydraulic Directional Control Valve

File In Hydraulics section



This is an informational bulletin on the spool type hydraulic directional control valves found on our equipment. Assemblies are listed immediately below and replacement components are listed at the bottom. Individual replacement spool sections are available but keep in mind that we buy the complete assemblies on an OEM pricing schedule and in most cases it is more cost effective to replace the whole valve.

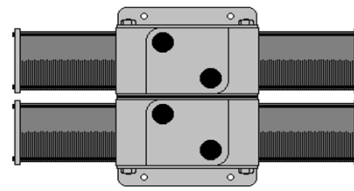
The **A110503** (12V) and **A110503-24** (24V) were used on early model B-Series units with front mounted reels.



Hose Reel S1

Reel Articulation S3

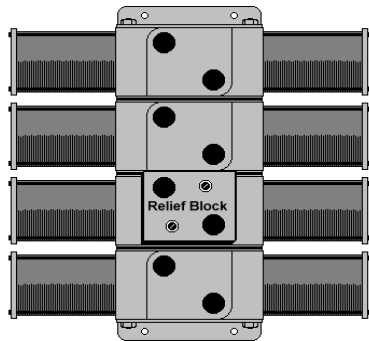
**A110503-1** (12V) is used on the rear of later model front reel units to control rear door functions.



Rear Door S1

Door Locks S1

**A110517** (12V) and **A110517-24** (24V) valves are used on B-Series units with rear mounted reels. Located on the top right rear of the debris tank.



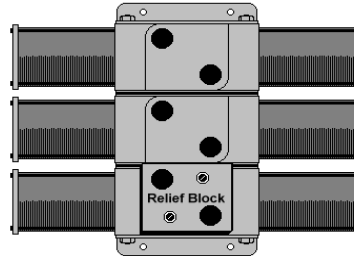
Rear Door S1

Door Locks S1

Reel Articulation S3

Hose Reel S1

**A110496** (12V) and **A110501** (24V *Obsolete*) are used on older B-Series units to control boom function. It was replaced by an integrated valve in the mid 90s. Located next to the boom.

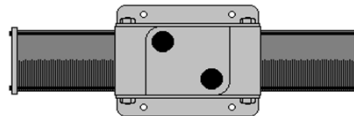


Left / Right S4

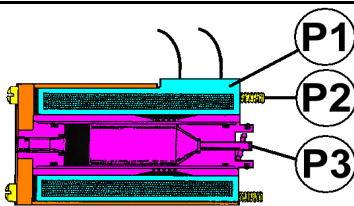
In / Out S1

Up / Down S3

**A110486** (12V) is used on some front reel units.



Hose Reel S1



Repl. Spool Section (Typical)

*S1 NOTE: P/N A110486 includes the end plate / mounting brackets. P/N A110517-AD is just the replacement spool section.*

P1 - 12V Coil (with two 8" wire leads)	A110517-SOL
P1 - 24V Coil (with two 8" wire leads)	A000027
P2 - Solenoid Mounting Bolt (four used per solenoid)	A110517-BOLT
P3 - Stem (Tube & Plunger)	A110517-SC
NI - Spool Valve Seal Kit (services one spool).	A110496-1



### PARTS

S1 - Repl. Spool Section, 12V w/wire leads	A110517-AD
S2 - Repl. Spool Section, 12V w/wire leads	A110517-SD
S3 - Repl. Spool Section, 12V w/relief block & wire leads	A110517-RD
S4 - Repl. Spool Section, 12V w/wire leads	A110517-AB
NI - Seal between valve sections and/or end plates	A110486-1

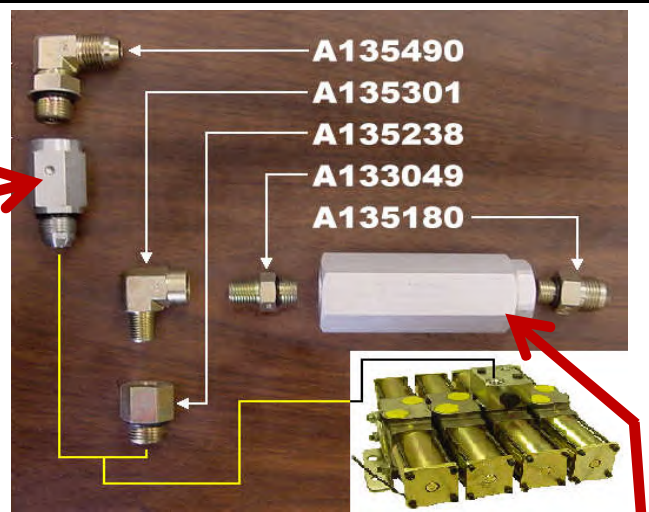


## HYDRAULIC FLOW CONTROL VALVES

On B-Series and SJR units with rear reels there are two in-line valves, one on each hydraulic hose going from the four spool hydraulic valve to the reel articulation hydraulic actuator. The purpose of these valves is to slow down the reel articulation (in and out swing) to a safe speed. Older models use part no. A110078 "Line Throttle Valve" and more recent models use part number A110079 "Pressure Compensated Flow Control Valve". A110079 has been superceded by part no. A249366. A249366 is physically larger than it's predecessor, but the thread sizes are the same. Please use this bulletin as a supplement to the hydraulic section of your manuals.



Photo of the earlier (and still available) A110078. It screwed vertically into the control valve.



Above are the fittings associated with the early and current setups.

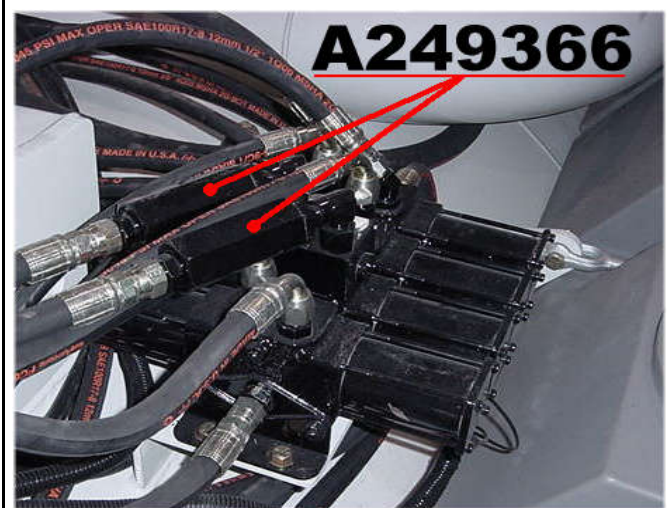


Photo showing the location of part no. A249366 flow control valves.



Photo showing the difference in size between part no. A110079 (left) and A249366 (right).

## B-SERIES & X-SERIES HYDRAULIC CYLINDERS

PHOTO	PART NO.	DESCRIPTION
 <p><b>Debris Tank Lift (Dump) Cylinder</b></p>	A111072	74" Stroke <i>(Replaces A111072-2)</i> B-3
	A110102	74" Stroke <i>(Replaces A110101)</i> B-6 & X-6
	A110108	109.25" Stroke B-5, B-10 & B-52
	A110107	120" Stroke B-15, X-10 & X-12
 <p><b>Debris Tank Door Lift Cylinder</b></p>	A110015-1-RJ	B-Series Circa 1996 & Later All X-Series
 <p><b>Debris Tank Door Lock Cylinder</b></p>	A246523-P	Door Lock Cylinder Including Wedge - See parts bulletin AQP B-104 for more information.
 <p><b>Boom Extension Cylinder</b></p> <p><i>* Beginning Mid-2019: New cylinders have #8 SAE ports (instead of 3/8"NPT ports) and fixed end is turned 90° relative to hydraulic porting.</i></p>	A110221 300000129 *	48" C to C collapsed 36.375" Stroke f/14.5' Reach Boom
	A110210-RJ 300000130 *	64" C to C collapsed 53" Stroke f/19' Reach Boom
	A110210-1-RJ 300000131 *	77" C to C collapsed 66" Stroke f/23' Reach Boom
	A380213-RJ	88.875" C to C collapsed 78" Stroke f/23' & 25' Telescopic
	A110359-RJ	96" C to C collapsed 85" Stroke F/24' Reach Boom
	A380443-RJ 300000132 *	101" C to C collapsed 89" Stroke f/25' Reach Boom
 <p><b>Boom Lift Cylinder</b></p>  <p>CYLINDER      CROSSHEAD</p>	A110645-1-RJ	1-3/4" Rod, 1-1/4"-12 Thread 20.675" C to E Collapsed <i>used with A242184 Crosshead</i>
	A110645-3-RJ +	2" Rod, 1-1/4"-12 Thread 20.675" C to E Collapsed <i>used with A242184 Crosshead</i> <b>+ NLA - use below cylinder and crosshead</b>
	A110645-5-RJ	2" Rod, 1-15/16"-12 Thread 20.675" C to E Collapsed <i>used with A242184-2 Crosshead</i>
	A380212-RJ	for 23' & 25' Telescopic Boom

## SEAL KITS FOR RJ SERIES CYLINDERS

CYLINDER P/N	FUNCTION	DESCRIPTION	SEAL KIT
A110221	Boom Extension	48" C to C collapsed 36-3/8" Actual Stroke	A110210-RJ-KIT *
A110210-RJ & 300000130	Boom Extension	64" C to C collapsed 53" Actual Stroke	
A110210-1-RJ & 300000131	Boom Extension	77" C to C collapsed 66" Actual Stroke	A110210-1-RJ-SK
A110359-RJ	Boom Extension	96" C to C collapsed 85" Actual Stroke	
A380213-RJ	Boom Extension	88.875" C to C collapsed 78" Actual Stroke	TBA
A380443-RJ	Boom Extension	101" C to C collapsed 89" Actual Stroke	
A110645-1-RJ	Boom Lift	1-3/4" Rod, 1-1/4"-12 Thread 20.675" C to E Collapsed	A110645-1-RJ-SK
A110645-3-RJ <i>(r/b A110645-5-RJ)</i>	Boom Lift	2" Rod, 1-1/4"-12 Thread 20.675" C to E Collapsed	TBA
A110645-5-RJ	Boom Lift	2" Rod, 1-15/16"-12 Thread 20.675" C to E Collapsed	TBA
A110015-1-RJ	Door Lift	21.25" C to C Collapsed 6.75" Stroke	A110015-1-RJ-SK

\* This seal kit is not compatible with cylinder p/n A110210-SI

*NOTE: The above kits will not work on cylinders that were manufactured for Hi-Vac by U. S. Cylinders, Inc. which ceased operations in 2010. They can be identified by the following stamping numbers...*

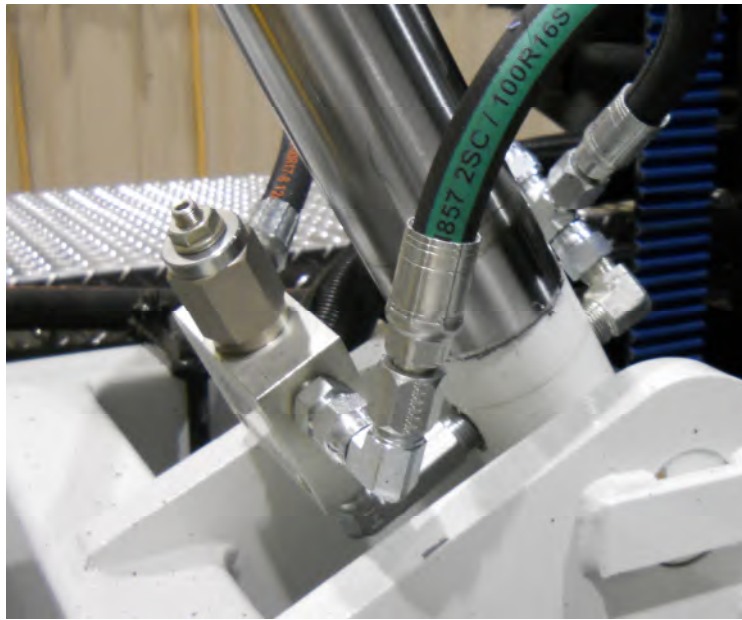
STAMPING NO.	HI-VAC P/N
AQT2053	A110210
AQT2504	A111067
AQT2506	A110260
AQT3504	A110260-3

STAMPING NO.	HI-VAC P/N
AQT4010-C	A110645-1
AQT4011	A110260-2
AQT 5.0-6.75	A110015-1

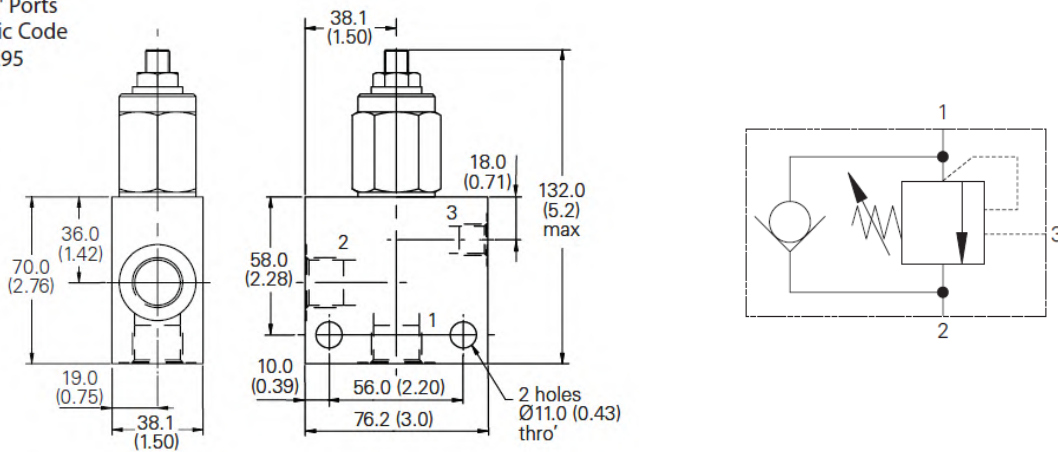
REVISED 10/1/2019

# A381188

## COUNTERBALANCE VALVE FOR DEBRIS TANK LIFT CYLINDER



Single Valve  
1/2" Ports  
Basic Code  
1CE95



# HYDRAULIC DOOR LOCK

For your convenience, here is information on the rear door lock cylinder use on the B and SJR series Aquatechs. Because the manufacturer is supplying the cylinders with the door lock wedge, the cylinder only is not available separately as it was in the past.



### ASSEMBLY PART NO. A246523-P

(Replaces A110065 & A110067)

Assembly consists of the following items:



1	NSS	Cylinder - <i>Not Sold Separately</i>
2	A107179	1"-12 Jam Nut
3	A246121	Door Lock Wedge (standard 1-1/2" Square x 4-3/4"OAL)

### Alternate Door Lock Wedges (Must be ordered separately)

A246121-1	1-1/2" x 1-9/16" x 4-3/4"OAL
U1007-4385	1-1/2" Square x 5-1/2"OAL

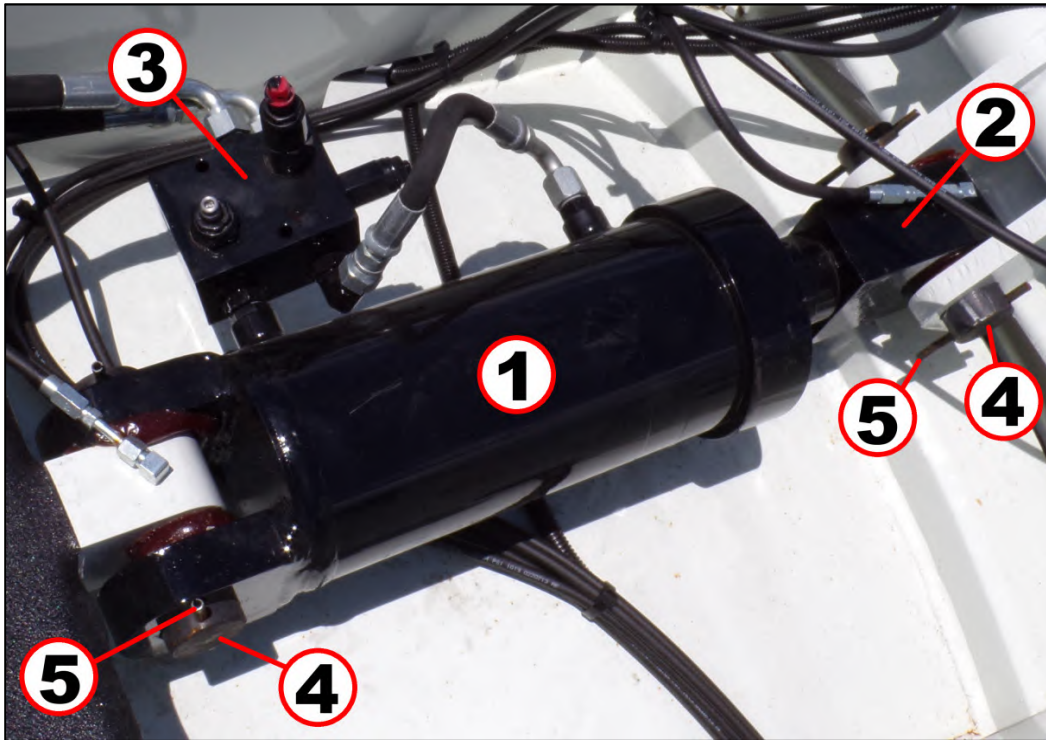
Please use the information below when ordering a seal kit.

CYLINDER PART NO.	STAMPING NO.	SEAL KIT PART NO.
A111065 NLA*	500-2600 or 70718300	NLA*
A111067 NLA*	HV2.504 or HV2504	A111068
A246523-P	SP-1526-000-00 or SI <i>MM-DD-YYYY-XXX</i>	A111068-SI

NOTE: If no stamping numbers can be found, replace complete cylinder.

\* Replace with the current part no. A246523-P Assembly

## REAR DOOR HYDRAULIC LIFT CYLINDER



ITEM	PART NUMBER	DESCRIPTION	QTY.
1	A110015-1-RJ	Cylinder, Hydraulic Door Lift	1
2	A246182	Knuckle, Rear Door Cylinder	1
3	A110019	Valve Assy., Integrated Check/Relief	1
4	A246183	Pin, Pivot	2
5	A107323	Pin, Cotter – 1/4" X 2"	2

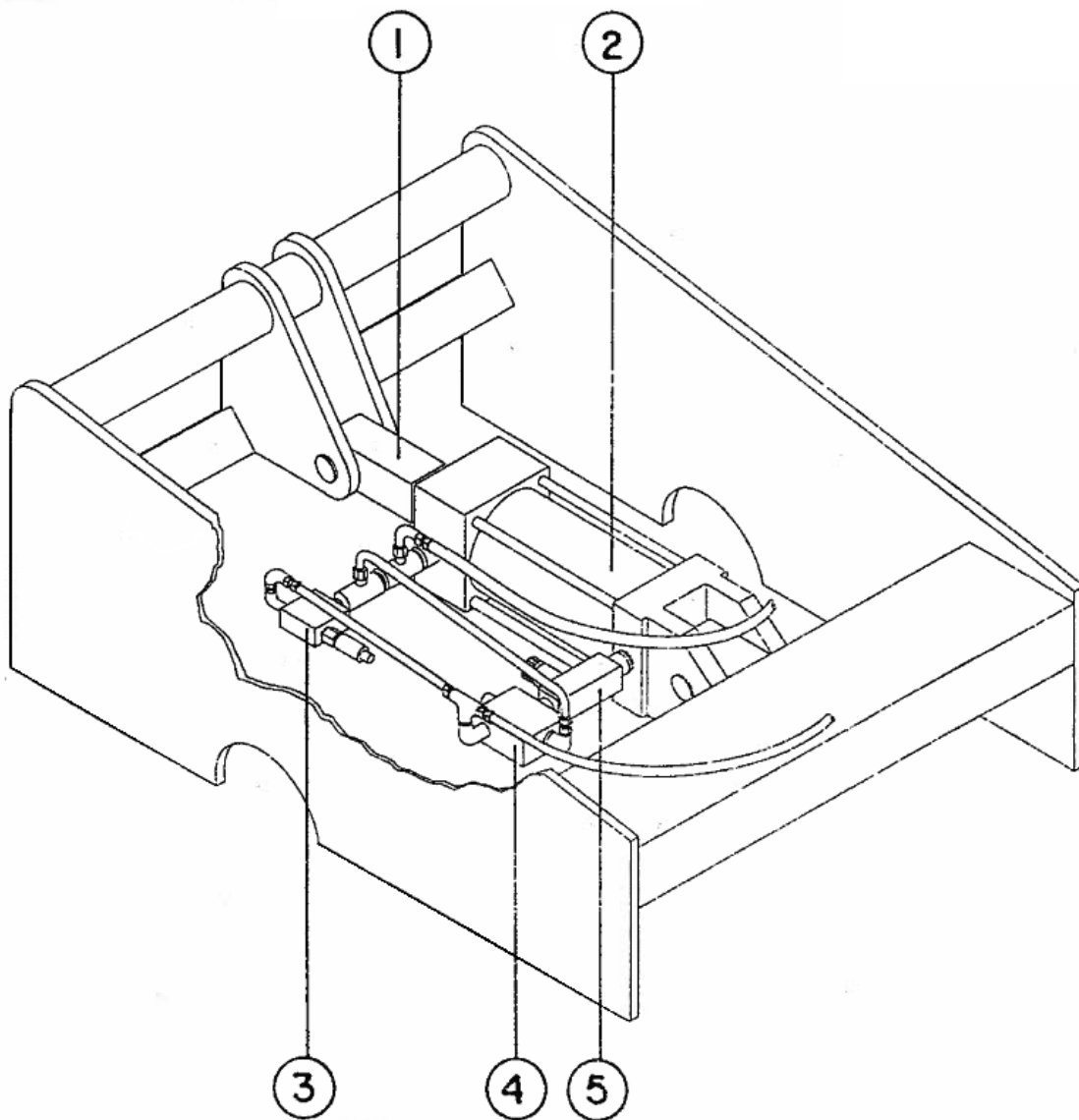
*Note: A110015-1-RJ replaces A110015, A110015-1 and A110015-1-SI*

CYLINDER STAMPING NUMBER	SEAL KIT
AQT50675 or AQT 5.0-6.75	A164576 (NLA)
110015-1 (2.5" Dia. Rod)	A110015-1-RJ-SK
110015 (2" Dia. Rod)	TBA



## EARLY 90S B-SERIES

# REAR DOOR HYDRAULICS

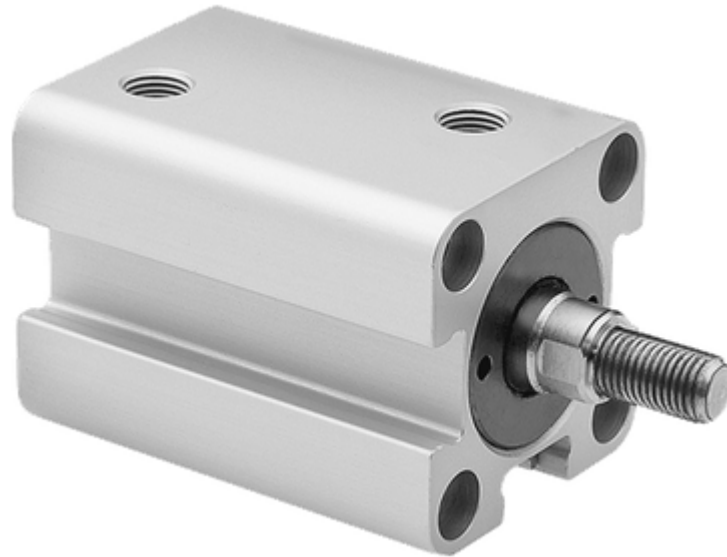


ITEM	PART NO.	DESCRIPTION	REQ'D
1	240826	ROD EYE	1
2	110010	CYLINDER, HYDRAULIC	1
3	110796	VALVE, RELIEF	1
4	110415	VALVE, HOLDING	1
5	110281	VALVE, NEEDLE	1



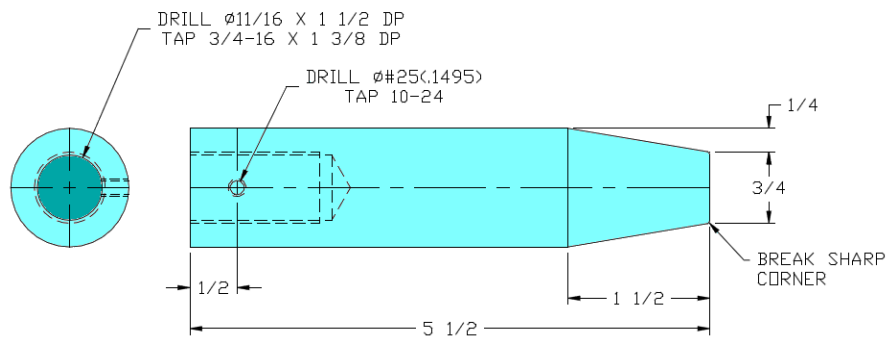
# A387111

## FRONT REEL PIVOT LOCK CYLINDER



2" Bore 3" Stroke

# A304609 LOCK PIN





### HYDRAULIC REEL MOTORS

This is an informational bulletin to help identify the hydraulic motors for reel pay-in/pay-out on standard SJR and B-Series machines.



**PART NO. A110185**

This motor fits most older units. There was a running change and earlier versions of the same part number had a round body. We still use this motor to operate the swivel bearing on "Pivart" reels and front mounted reels.



**PART NO. A110186**

This reel motor is used on older B3s that had the top suspended rear reel. This same motor is also used to drive the worm gear on the boom turret bearing & gear assembly.



**PART NO. A380464**

These reel motors feature relief valves to dampen the momentum when stopping the reel to prevent damage to the sprocket and chain. The A110211 (picture n/a) and A380464 are replaced by the A380839. The A380839 will also retrofit the above earlier style A110185. To order part number A380839 complete with JIC hydraulic hose fittings and mounting bracket, use part number A110159-1.

R/B →

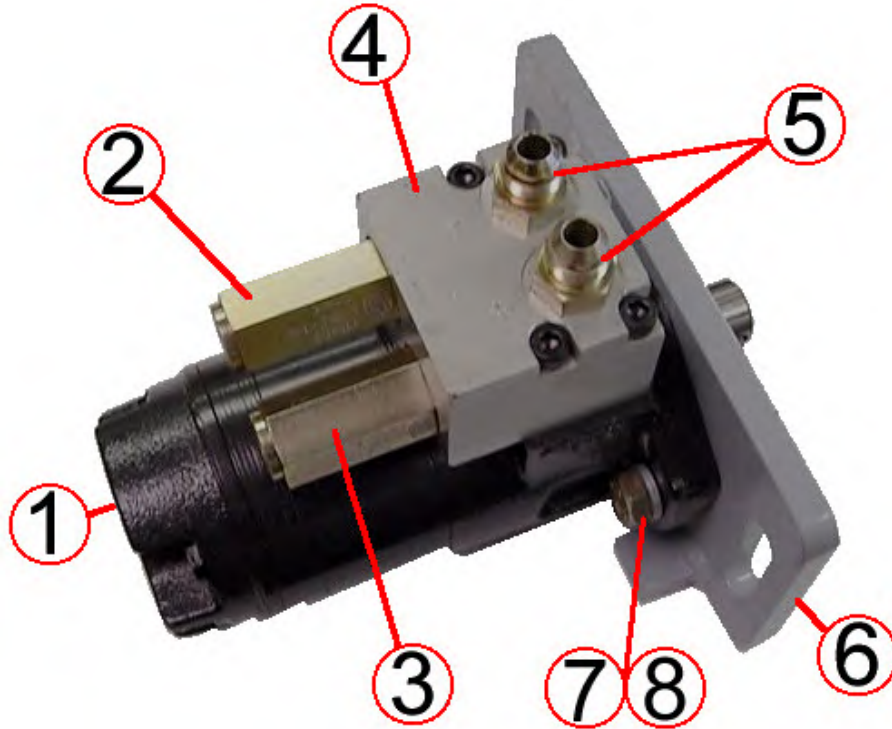


**PART NO. A380839**

STAMPING NUMBER	ORIGINAL MOTOR	STATUS	SEAL KIT	REPLACEMENT MOTOR
101-1029-007	A110160	NLA	TBA	A110185
200250A1110AAAAA or RS14040100	A110185		A191892	A110185
200160A1110AAAAA or RS1004010AA	A110186		A191892	A110186
270230A1710AAAAA	A380464	NLA	TBA	A380839
276230A1710AAAAA	A380839		A380839-SK	A380839
520540A5707AAAAA	A381512		TBA	A381512
OMP250151-70477	A110159	NLA	TBA	A110185
RS1406010	A240062	NLA	TBA	A380839
RS143001R2	A110211	NLA	TBA	A380839



**B-SERIES HYDRAULIC REEL MOTOR**  
(current design since 2001)



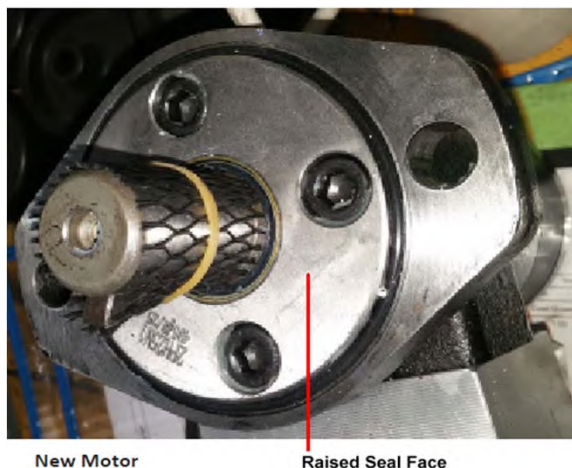
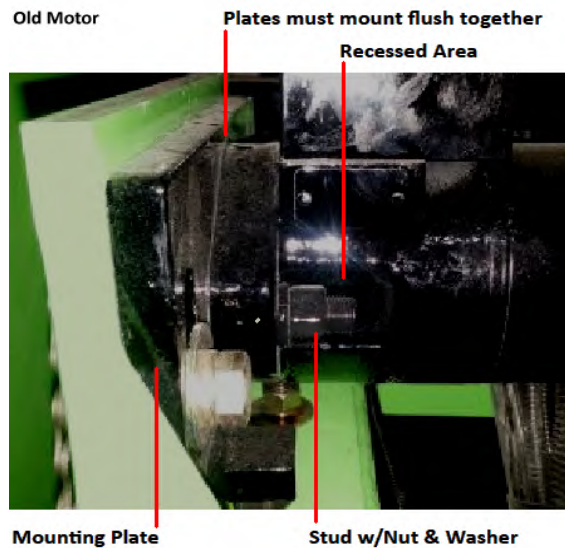
ITEM	PART NUMBER	DESCRIPTION
1 to 8	A110159-1	Complete Assembly
1 to 4	A380839 *	Hydraulic Motor ( <i>appearance may vary</i> )
2	A380839-R2	Upper Relief Valve, 1500 PSI **
3	A380839-R1	Lower Relief Valve, 1000 PSI **
4	T.B.A.	Controller
5	A135910	JIC Hydraulic Fittings
6	A234922	Reel Motor Mounting Bracket
7	121004525 A	1/2"-20 x 1 1/4" Socket Head Cap Screw
8	A107298	1/2" Plated Lock Washer, G8

\* Will Retrofit all previous hydraulic reel motors on the B-Series  
 \*\* If the O-ring only is needed, obtain a standard #908 O-Ring locally.

### A380839 HOSE REEL DRIVE MOTOR CHANGE

The supplier for our p/n A380839 hose reel motor recently changed the brand of the motor they supply to us. This is a running change i.e. our part number will remain the same. The performance of the new motor is comparable to previous motor. However, if you order an A380839 hose reel motor to replace an existing motor the mounting hardware will have to be updated as explained below.

The below left photo is of the previous motor installation. Notice that the motor had a recess (on both sides) to allow a wrench to fit over a hex nut that threads onto a stud used to mount the motor. The new motor (below right) does not have this recess making it very difficult to install and tighten the nuts. Our solution was to replace the studs and nuts with 1/2"-20 x 1-1/2" socket (allen) head cap screws (p/n 121004525 A). The 1/2" lock washers (p/n A107298) are still used.



#### ALSO PLEASE NOTE

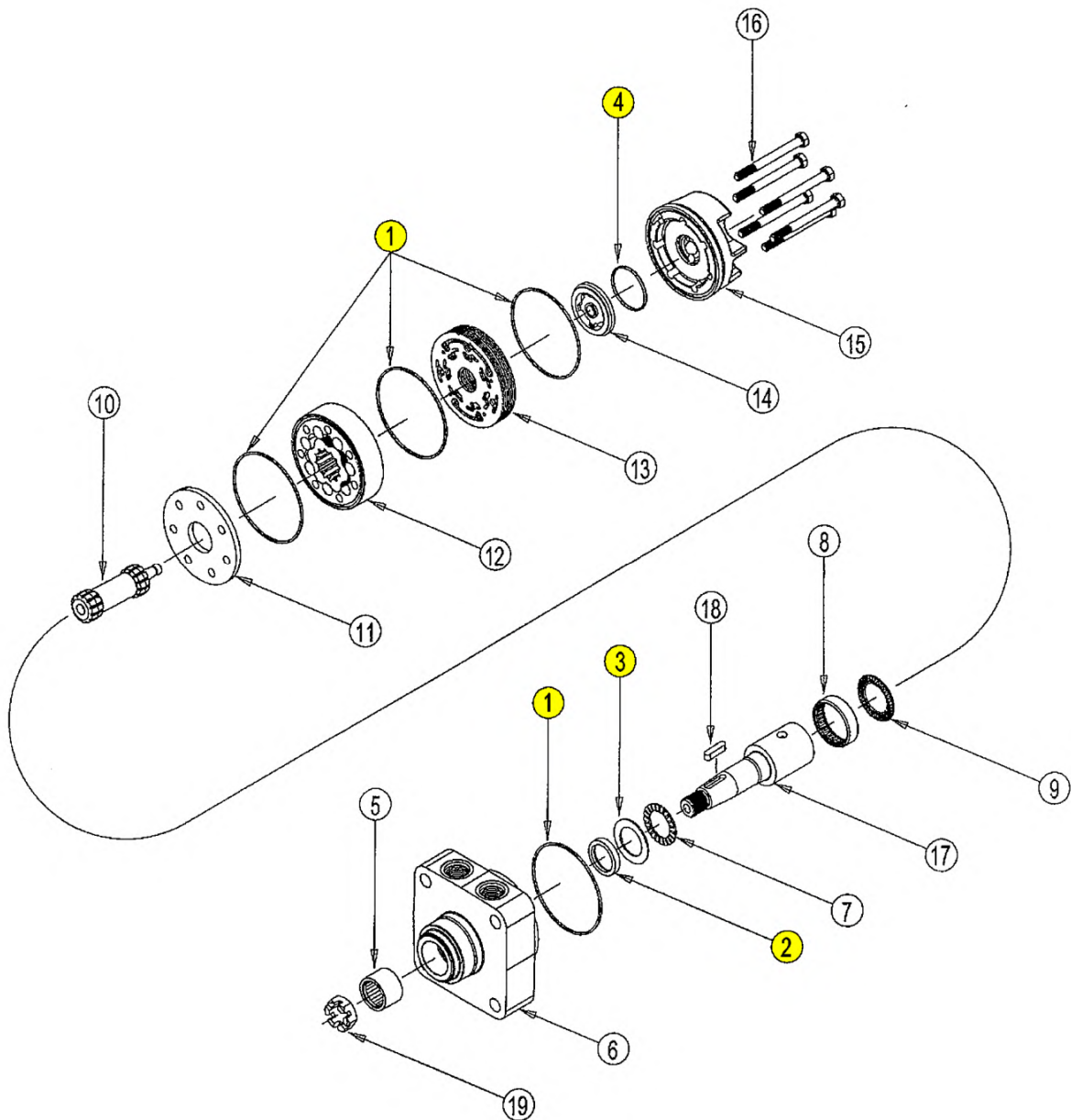
On the mounting face of the motor there is an o-ring placed around a raised boss. The o-ring is for applications where the motor is sealed to a housing where lubricating fluids are present. The o-ring is not needed on our application and can be removed and discarded.



# A380839-SK

## SEAL KIT FOR "OLD STYLE" A380839 HYDRAULIC REEL MOTOR

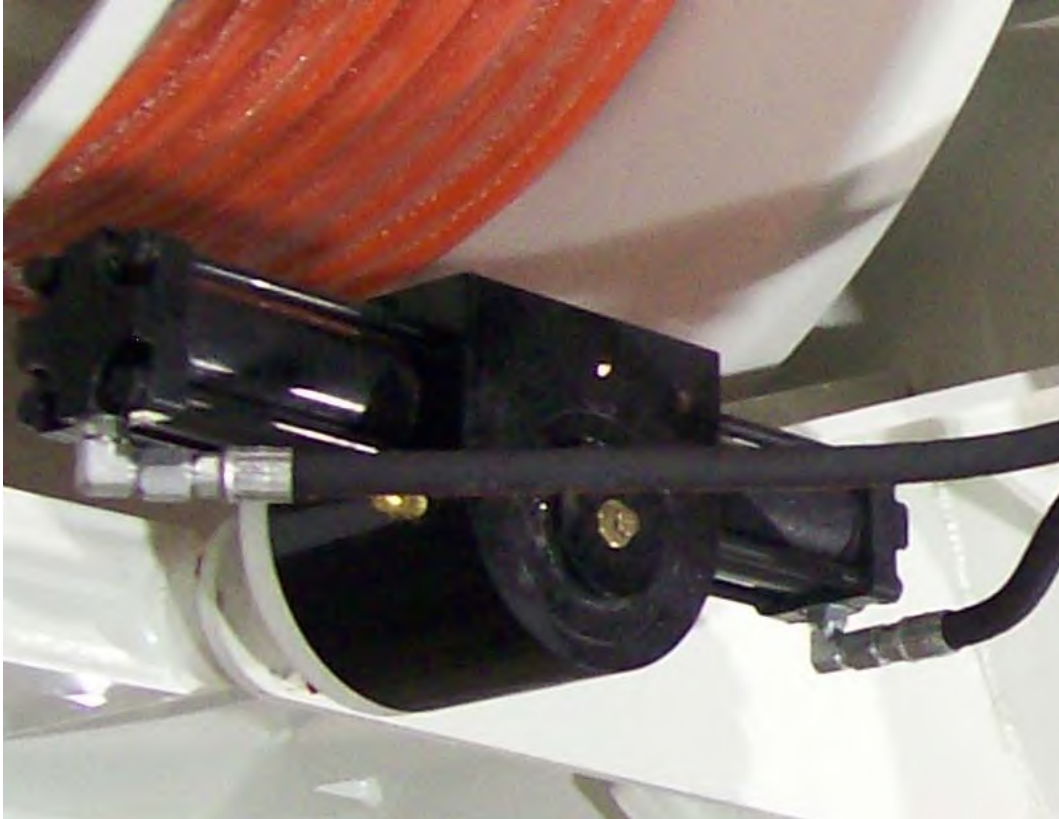
*Note: This kit will only service Roller-Stator motors with the stamping number of 276230A1710AAAAA  
(CONTAINS HIGHLIGHTED ITEMS)*



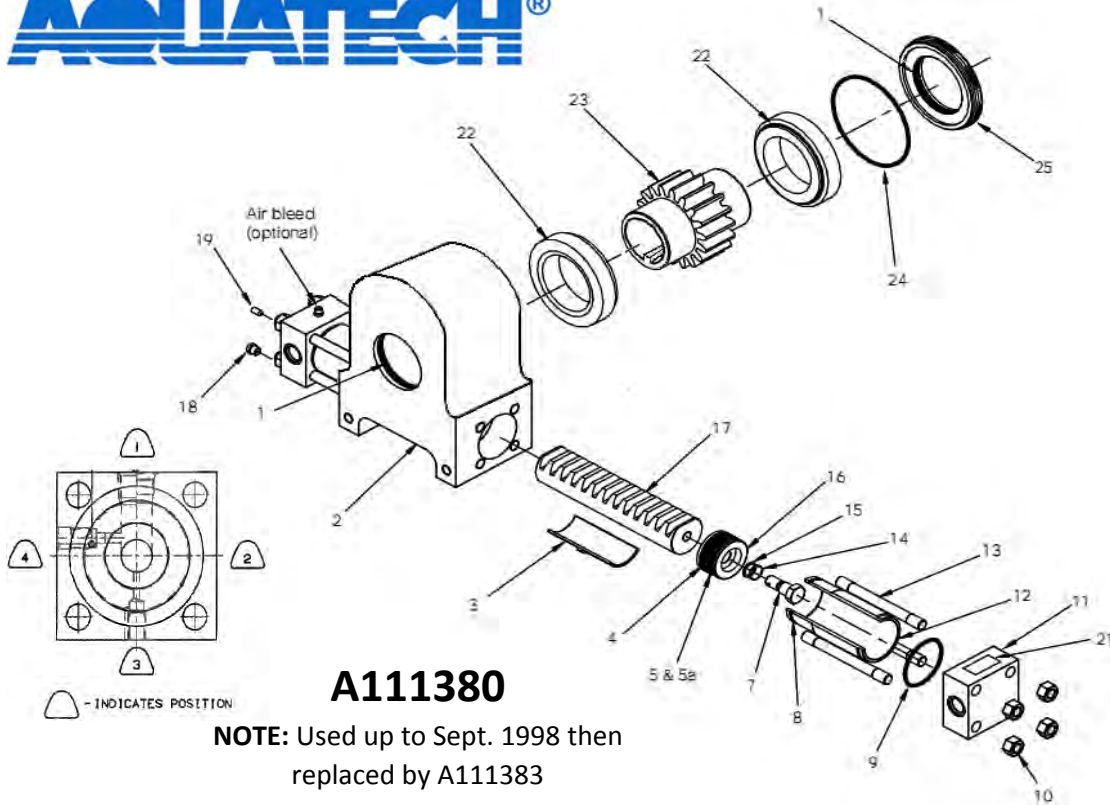
Old A111380 versus newer A111383 / A383241 Hydraulic Reel Articulation Actuator



The A111380 body has a little scroll curve toward the cylinders

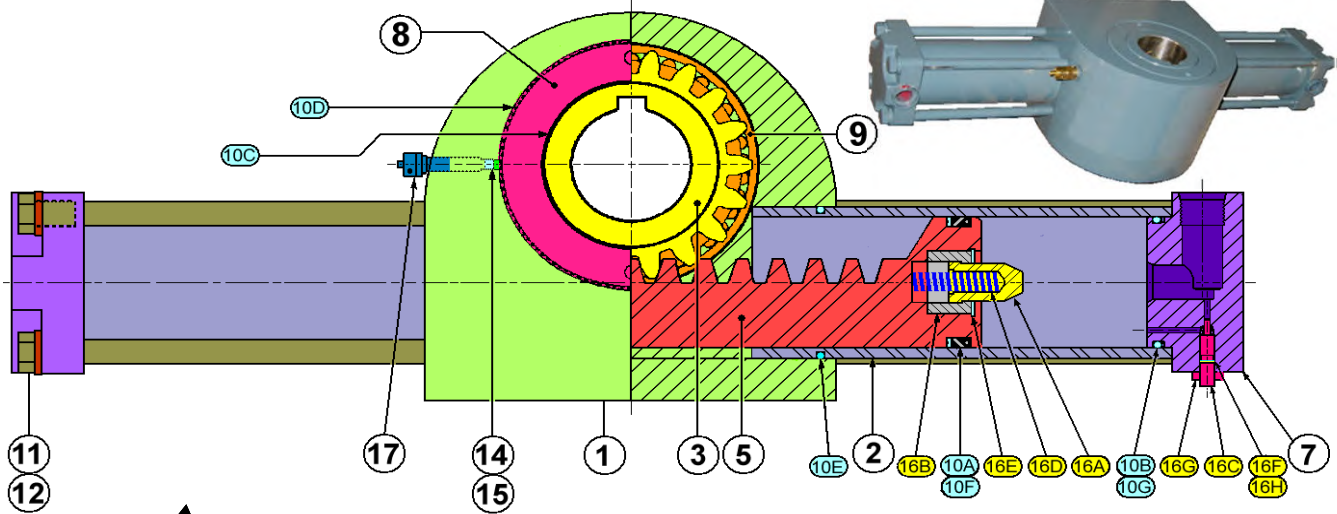


The A111383 & A383241 has a perfect "D" shaped body.



ITEM	AQUATECH P/N	DESCRIPTION
1	Order Seal Kit	Pinion O-Ring (NSS)
2	TBA	Housing
3	TBA	Rack Bearing
4	Order Seal Kit	Wear Ring (NSS)
5	Order Seal Kit	Piston Seal (NSS)
5a	Order Seal Kit	Back Up Ring (NSS)
7	A111380-7	Rack Bolt
8	Order Seal Kit	Cylinder O-Ring (NSS)
9	Order Seal Kit	End Cap O-Ring (NSS)
10	A111380-11	Tie Rod Nut
11	A111380-13	End Cap (port in pos. 1 - cushion in pos. 2)
	A111380-14	End Cap (port in pos. 1 - cushion in pos. 4)
12	TBA	Cylinder Tube
13	A111380-12	Tie Rod
14	Order Seal Kit	Rack Bolt O-Ring (NSS)
15	Order Seal Kit	Rack Bolt Back Up Ring (NSS)
16	TBA	Piston
17	TBA	Rack
18	TBA	Relief Valve
19	TBA	Locking Screw
20	TBA	Drive Screw
21	TBA	Name Plate
22	TBA	Bearing
23	TBA	Pinion
24	Order Seal Kit	Bearing Retainer O-Ring (NSS)
25	TBA	Bearing Retainer
KIT	A111380-2	Seal Kit
KIT	A111380-1	Cushion Kit (includes both End Caps)

### A111383 / A383241 HYDRAULIC ACTUATOR



ITEM	HI-VAC P/N	REQ	DESCRIPTION		
1	To Be Announced	1	Housing		
2	To Be Announced	2	Cylinder Tube		
3	To Be Announced	1	Pinion		
5	To Be Announced	1	Piston Rack		
7	To Be Announced	2	End Cap		
8	To Be Announced	1	Bearing Cap		
9	To Be Announced	2	Bearing (pack with #2 grease prior to install)		
10	A383241-SK	1	Seal Kit		
10a	Not Serviced Separately	2	Lip Seal	✓	
10b	Not Serviced Separately	2	O-Ring, End Cap	NOTE: p/n A383241 has improved seals over p/n A111383. Therefore this seal kit will convert an A111383 to an A383241. ✓	
10c	Not Serviced Separately	2	O-Ring, Pinion	✓	
10d	Not Serviced Separately	1	O-Ring, Retainer Cap	✓	
10e	Not Serviced Separately	2	O-Ring, Cylinder Tube	✓	
10f	Not Serviced Separately	2	Back Up Ring, Piston Rack	✓	
10g	Not Serviced Separately	2	Back Up Ring, End Cap	✓	
11	To Be Announced	8	End Cap Bolts		
12	To Be Announced	8	Lockwasher		
14	A383241-14	1	Set Screw		
15	A383241-15	1	Nylon Pellet - Bearing Cap		
16	A383241-MCK	1	Minor Cushion Kit	✓	
16	A383241-CK	1	Cushion Kit		
16a	Not Serviced Separately	1	Cushion Check		✓
16b	Not Serviced Separately	1	Cushion Check Retainer		✓
16c	Not Serviced Separately	1	Cushion Needle		✓
16d	Not Serviced Separately	1	Compression Spring		✓
16e	Not Serviced Separately	1	Retaining Ring		✓
16f	Not Serviced Separately	1	O'Ring, Cushion Needle		✓
16g	Not Serviced Separately	1	Jam Nut		✓
16h	Not Serviced Separately	1	Back Up Ring, Cushion Needle	✓	
17	A111383-RV	1	Relief Valve		



## Obsolete Chain Articulated Rear Reel Used on Older C & B Machines (1980s)



PART NO.	DESCRIPTION	QTY
A110148	Hydraulic Motor (OBS)	1
A110281	Flow Control Needle Valve (OBS)	2
A110671	Pneumatic Lockpin Cylinder (OBS)	1
A111225-P	Pneumatic Solenoid Valve	1
A160221	9T Sprocket (OBS)	1
A160222	2GT Sprocket (OBS)	1
A163110	#100 Drive Chain (OBS)	1
A241376	Lockpin (OBS)	1





## B-SERIES

### OPTIONAL PUMP-OFF SYSTEM HYDRAULIC COMPONENTS



**A110422**  
**Directional Control Valve**

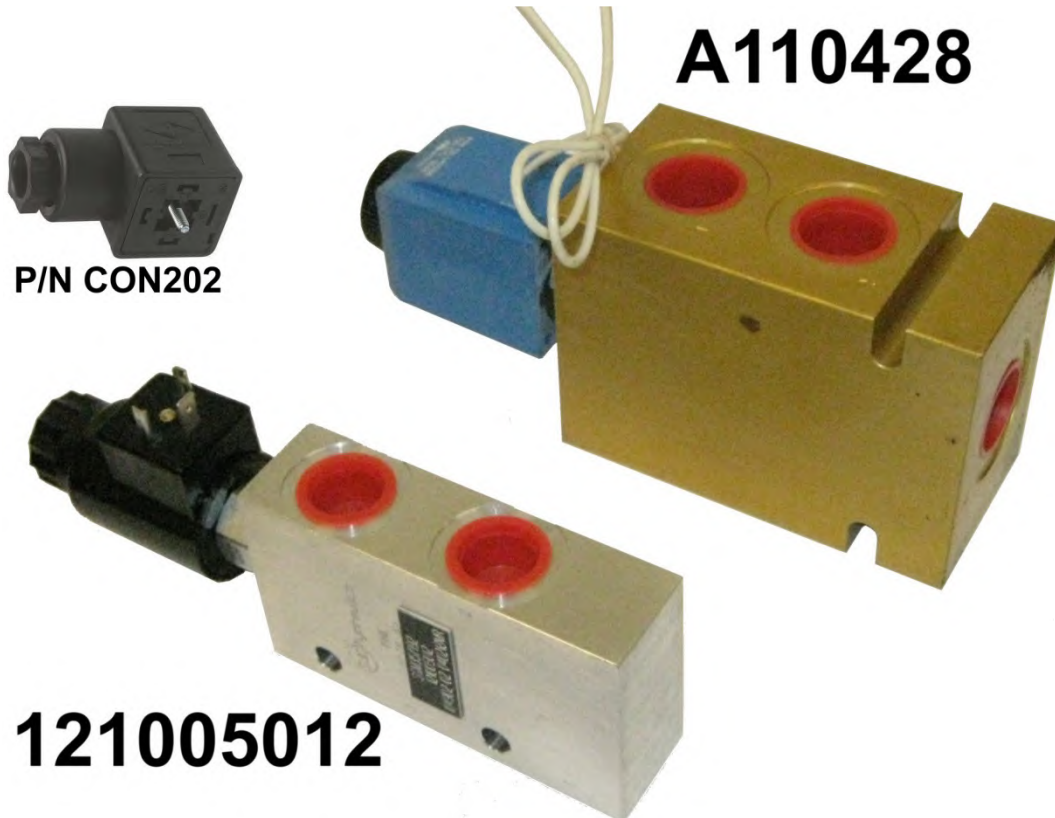


**A381608**  
**Pump Drive Motor**  
**(210 & 300 GPM Systems)**



**A110319**  
**Shuttle Valve**

**HYDRAULIC CONTROL VALVE  
 FOR PUMP-OFF AND SLUDGE PUMPS**



The above photo shows the electric over hydraulic control valves that we use to operate the centrifugal pumps used on the optional pump-off and sludge pump applications that are switch operated (older units had a manual lever operated valve).

VOLTAGE	UP TO DEC 2017	JAN 2018 AND ON
12 VDC	A110428	121005012 Rev A
24 VDC	A110428-24	TBA

Should you require the connector for the 121005012 Rev A valve, order p/n CON202.

# U3917-0007

## HYDRAULIC VIBRATOR

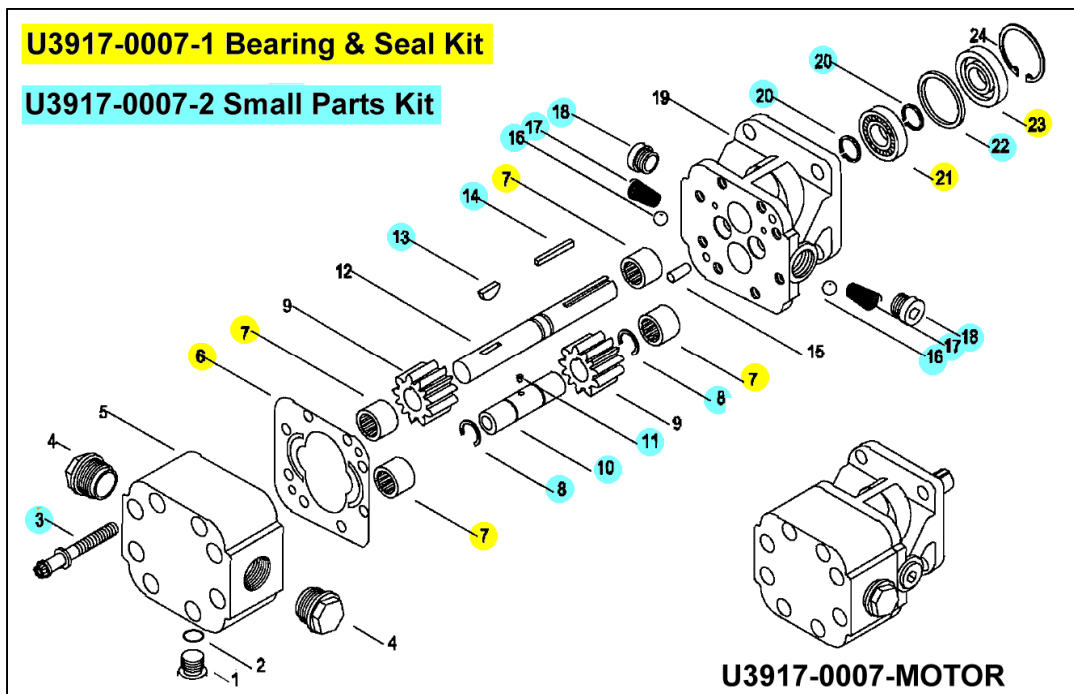
Replaces Obsolete P/N A120319



A381877 Mounting Bolt  
A381878 Mounting Washer

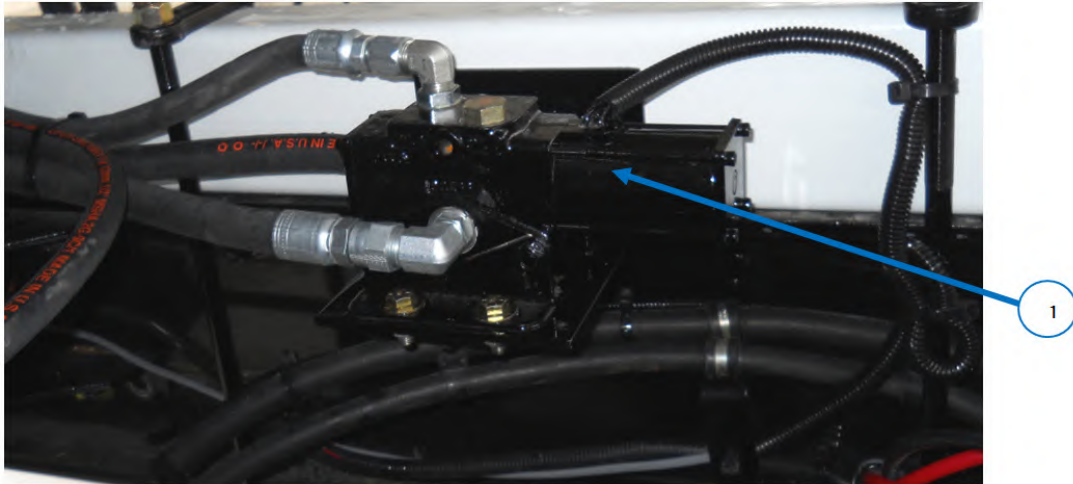
Port Size SAE	Minimum Hose Size I.D.	Displacement per Revolution	Max Speed RPM	Flow Rate at Maximum Speed	Minimum Continuous Pressure	Maximum Intermittent Pressure	Maximum Back Pressure
3/4" -16	1/2"	.129 cu in	5000	2.8 GPM	3000	4000	400

### REPLACEMENT MOTOR & MOTOR REPAIR KITS FOR BOTH

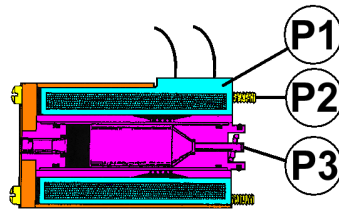


# A380889

## 12V CONTROL VALVE FOR HYDRAULIC VIBRATOR OPTION



ITEM	PART NO.	DESCRIPTION	QTY
1	A380889	HYDRAULIC CONTROL VALVE, 12VDC	1



ITEM	DESCRIPTION	PART NO.
P1	P1 - 12V Coil (with two 8" wire leads)	A110517-SOL
P2	P2 - Solenoid Mounting Bolt (four used per solenoid)	A110517-BOLT
P3	P3 - Stem (Tube & Plunger)	A110517-SC
N. I.	NI - Spool Valve Seal Kit	A110496-1



## A245901-4 HYDRAULIC VIBRATOR OPTION FOR B-SERIES, 12V VALVE



Level	Part Number	Description	Quantity	U/M	SC
1	A120319	VIBRATOR, HYDRAULIC	1	EA	P
1	A120859-1	SWITCH, TOGGLE, SPST, OFF-MOM.ON	1	EA	P
1	A121694	HOSE ASSY, 5/8" -R2-52", #10FJICS	1	EA	P
1	A121698	HOSE ASSY, 5/8" -R2-28, 5/8FJICSx	1	EA	P
1	A121735	BOOT, TOGGLE SWITCH	1	EA	P
1	A130870	ADAPTER, ELBOW, 90D, #8FJICS X #8	2	EA	P
1	A133424	PLUG, #8 MSAE	1	EA	P
1	A135193	ADAPTER, STR, #8MSAE X #6MNPT	1	EA	P
1	A135230	ADAPTER, 3/4" FJIC X 1/2" MJIC (NU	2	EA	P
1	A135490	ADAPTER, ELBOW, 90D, #8 MSAE X #8	3	EA	P
1	A135500	ADAPTER, STR, #8MSAE X #8MJIC	1	EA	P
1	A135890	ADAPTER, ELBOW, 90D, 1/2" MJIC X 3	1	EA	P
1	A136005-1	ADAPTER, STR, #12 MJIC X #8 MJIC	1	EA	P
1	A220572	CLAMP, 3/4" DOUBLE HYD. TUBE **	2	EA	P
1	A220573	COVER PLATE FOR 3/4" DOUBLE HY	1	EA	P
1	A220682	CLAMP, HOSE SUPPORT, 1-1/8" ID	1	EA	P
1	A234382-84	HOSE ASSY, 1/2" -R2-140", #8FJIC	2	EA	P
1	A249732	ADAPTER, ELBOW, 90D, 1/2 MSAE x 5	2	EA	P
1	A249869	TEE, RUN, #12MJIC-#12FJIC-#12MJI	1	EA	P
1	A380112	FLOW RESTRICTOR, 2.8 GPM	1	EA	P
1	A380889	VALVE, CONTROL, 12VDC	1	EA	P
1	A380901-1	BRACKET, VALVE MOUNT FOR A38089	1	EA	M
1	A381877	BOLT, CAT, OT-0856	2	EA	P
1	A381878	WASHER, CAT, 5P-8248	2	EA	P
1	U1007-4201	THREADED PLATE FOR VIBRATOR MO	1	EA	M



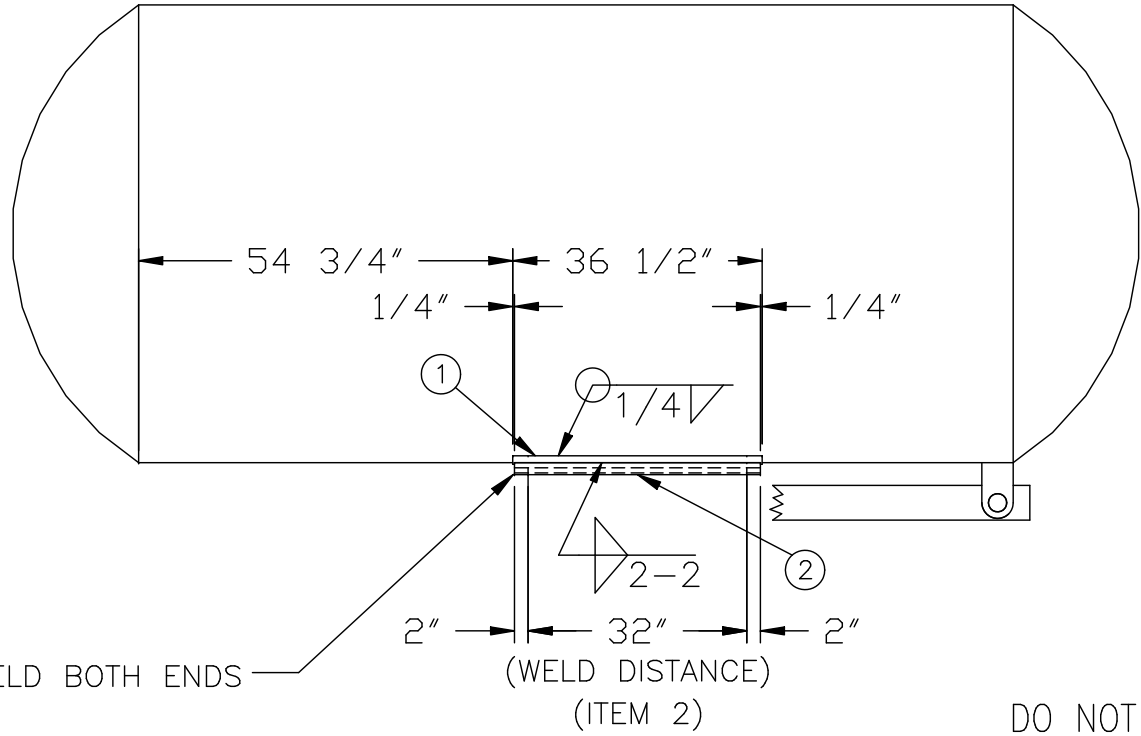
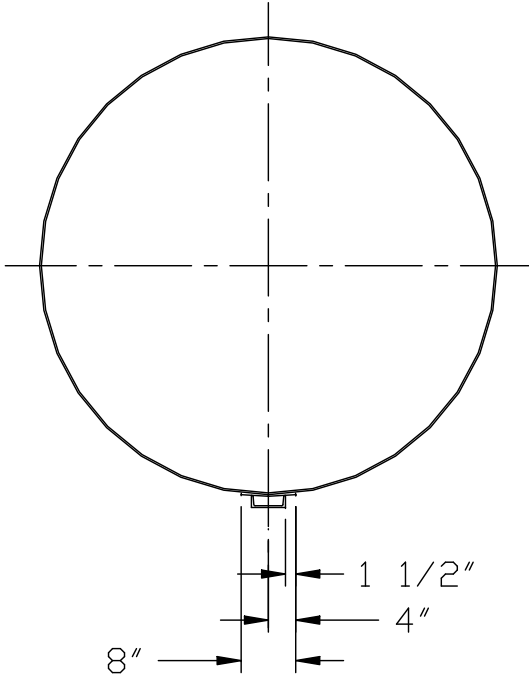
## A245901-4-FIELD

B-SERIES HYD VIBRATOR, 12V VALVE, FIELD INSTALL KIT



Level	Part Number	Description	Quantity	U/M	SC
1	A245901-4	* VIBRATOR, HYD, B-SERIES, 12V VA	1	EA	M
2	A120319	VIBRATOR, HYDRAULIC	1	EA	P
2	A120859-1	SWITCH, TOGGLE, SPST, OFF-MOM. ON	1	EA	P
2	A121694	HOSE ASSY, 5/8"-R2-52", #10FJICS	1	EA	P
2	A121698	HOSE ASSY, 5/8"-R2-28, 5/8FJICSx	1	EA	P
2	A121735	BOOT, TOGGLE SWITCH	1	EA	P
2	A130870	ADAPTER, ELBOW, 90D, #8FJICS X #8	2	EA	P
2	A133424	PLUG, #8 MSAE	1	EA	P
2	A135193	ADAPTER, STR, #8MSAE X #6MNPT	1	EA	P
2	A135230	ADAPTER, 3/4" FJIC X 1/2" MJIC (NU	2	EA	P
2	A135490	ADAPTER, ELBOW, 90D, #8 MSAE X #8	3	EA	P
2	A135500	ADAPTER, STR, #8MSAE X #8MJIC	1	EA	P
2	A135890	ADAPTER, ELBOW, 90D, 1/2" MJIC X 3	1	EA	P
2	A136005-1	ADAPTER, STR, #12 MJIC X #8 MJIC	1	EA	P
2	A220572	CLAMP, 3/4" DOUBLE HYD. TUBE **	2	EA	P
2	A220573	COVER PLATE FOR 3/4" DOUBLE HY	1	EA	P
2	A220682	CLAMP, HOSE SUPPORT, 1-1/8" ID	1	EA	P
2	A234382-84	HOSE ASSY, 1/2"-R2-140", #8FJIC	2	EA	P
2	A249732	ADAPTER, ELBOW, 90D, 1/2" MSAE x 5	2	EA	P
2	A249869	TEE, RUN, #12MJIC-#12FJIC-#12MJI	1	EA	P
2	A380112	FLOW RESTRICTOR, 2.8 GPM	1	EA	P
2	A380889	VALVE, CONTROL, 12VDC	1	EA	P
2	A380901-1	BRACKET, VALVE MOUNT FOR A38089	1	EA	M
2	A381877	BOLT, CAT, OT-0856	2	EA	P
2	A381878	WASHER, CAT, 5P-8248	2	EA	P
2	U1007-4201	THREADED PLATE FOR VIBRATOR MO	1	EA	M
1	A245901-4-MOD	TANK MOD FOR HYDRAULIC VIBRATO	1	EA	M
2	U1007-4200	VIBRATOR SUPPORT CHANNEL (8HOL	1	EA	M
2	U1007-4215	MOUNT PLATE, VIBRATOR CHANNEL	1	EA	M

PART NO.: 245901-4-MOD		DESCRIPTION: VIBRATOR TANK MOD	
ITEM	PART NO.	REQ'D.	DESCRIPTION
1	1007-4215	1	MOUNTING PLATE FOR VIBRATOR CHANNEL
2	1007-4200	1	VIBRATOR MOUNTING CHANNEL



NEXT ASSY.
-
-
-
-

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

(B)				SCALE:	WEIGHT:	DRAWN BY: RP	PRODUCT CODE:
(A)				DWG SIZE: A	DATE: 1/5/11	CHECKED BY:	B-SERIES

REV.	DESCRIPTION	DATE	BY
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UNLESS OTHERWISE SPECIFIED

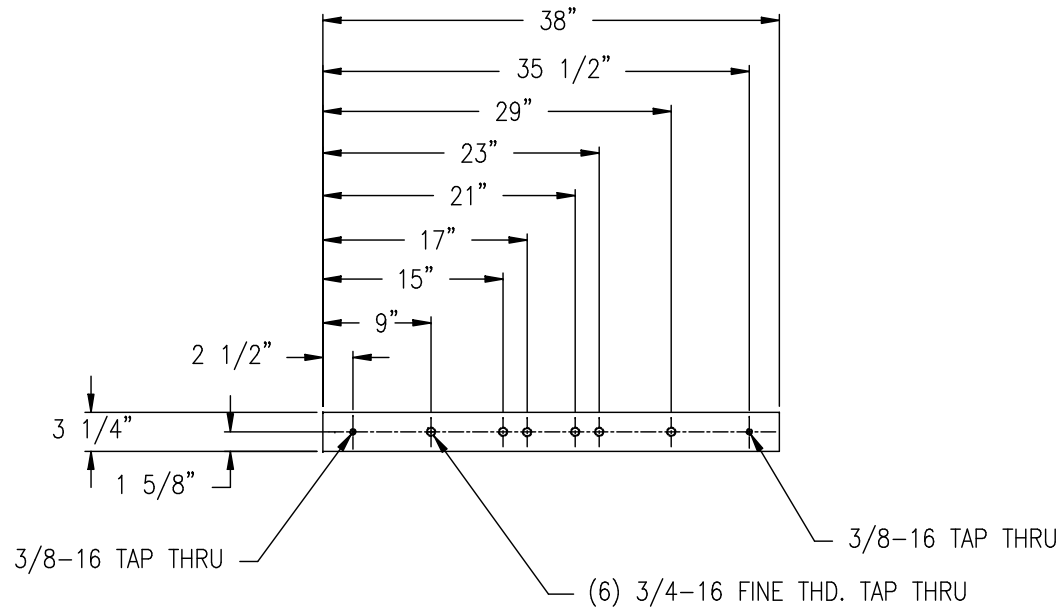
✓ = 125 MICROINCHES  
 BREAK ALL EDGES  
 FABRICATION TOL. ± 1/16"  
 ANGULAR ± 1°

MACHINING TOLERANCES  
 FRACTIONAL ± .015  
 DECIMAL ± .010  
 XXX ± .005

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DESCRIPTION: TANK MODIFICATION FOR VIBRATOR		
MATERIAL:	PART NUMBER: 245901-4-MOD	REV: -
RAW MAT'L:		

PART NO.: U1007-4201		DESCRIPTION: THD.PLATE FOR VIBRATOR MOUNT	
ITEM	PART NO.	REQ'D.	DESCRIPTION
1	U4505-0008	1	PLATE, 3/4" x 3 1/4" x 38"



**Hi-Vac**  
CORPORATION  
Formerly NPE INTERNATIONAL, LTD  
Marietta, Ohio U.S.A.

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DATE: 04/25/05 DRAWN: LAG CK'D.: APPR'D.: SCALE:

TITLE:  
THREADED PLATE FOR VIBRATOR MOUNT

JOB: NO. REVISION BY DATE DRAWING NUMBER 1-1007-4201 REV:

A RELEASED FOR PRODUCTION





# A135929

## HYDRAULIC TOOL CIRCUIT OPTION



Part No.	Description	Qty	U/M
A135423	ADAPTER,RUN TEE, #12MPx12MPx#12MJ	1	EA
A135922	ADAPTER,BKHD UNION,3/4"MP X 3/4"MJ	2	EA
A135923	ADAPTER,ELBOW,90D LONG,STR THD X 3/4T	1	EA
A135924	ADAPTER,ELBOW,90D,3/4"SAE X 3/4"T	1	EA
A121696	HOSE ASSY,5/8"-R2-49",5/8FJICSx3/4FJICS	1	EA
A135926	HOSE ASSY,3/4"-R2-96,3/4FJICS90x3/4FJICS	1	EA
A135927	HOSE ASSY,3/4-R2-24,3/4FJICS x 3/4FJICS	1	EA
A135928	HOSE ASSY,3/4-R2-60,3/4FJICS x 3/4FJICS	1	EA
A121697	HOSE ASSY,5/8"-R2-32,3/4"FJICSx3/4"FJICS	1	EA
A380103	VALVE,DIVERTER,#12 PORTS,ADJUSTABLE	1	EA
A135931	3 WAY VALVE ADAPTER MOUNTING PLATE	1	EA
A121698	HOSE ASSY,5/8"-R2-28,5/8FJICSx3/4FJICS	1	EA
A136053	ADAPTER,ELBOW,90D,3/4"MSAE X 5/8"MJIC	1	EA
A121688	HYDRAULIC FITTING, 3/4" FEMALE QUICK DIS	4	EA
A121689	FITTING, HYD 3/4" QUICK DISCONNECT MALE	4	EA
A121682	HYDRAULIC TOOL OPTION BRACKET	1	EA
A380461	HOSE ASSY,5/8"-R2-30.5",3/4FJIC SWIV x 3	1	EA
A380462	HOSE ASSY,5/8"-R2-19.5",3/4FJIC SWIV x 5	1	EA
A380465	3/8" DUST CAP AND DUST PLUG FOR 3/4"	2	EA
A135252	ADAPTER,RUN TEE,#10FJS X #10MJ X #10MJ	1	EA



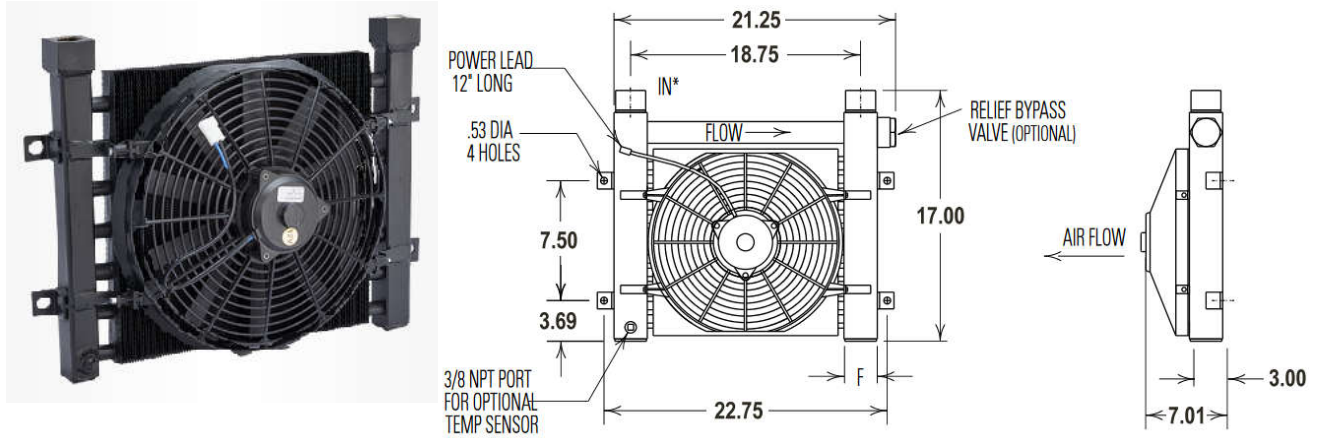
A380103

## HEAT EXCHANGERS FOR HYDRAULIC OIL COOLING

Used on applications that put a high demand on the hydraulic system such as units with a hydrostatic drive system.

### A100103

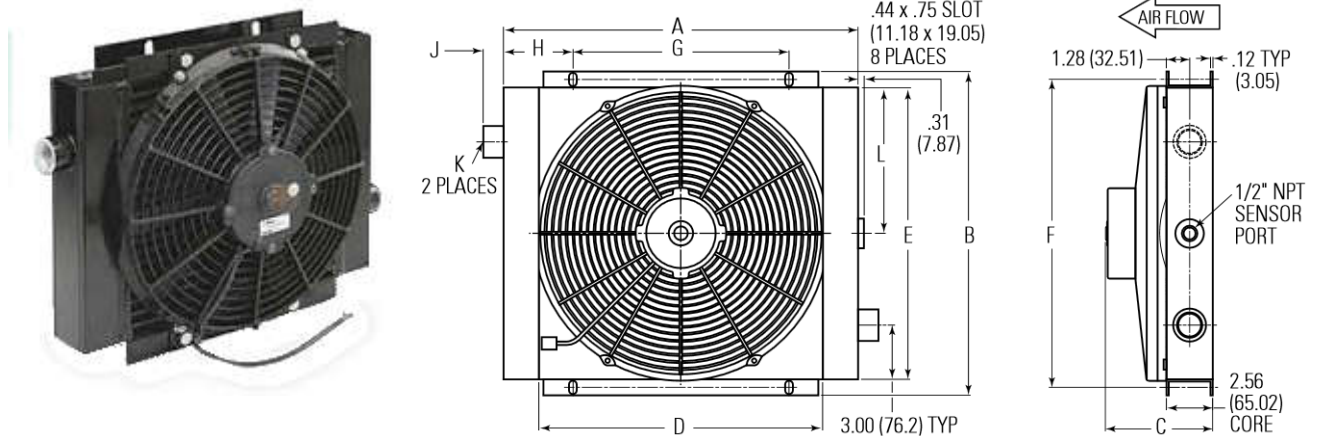
12 or 24 VDC Single Fan Heat Exchanger, 35,000 BTU/HR



**A387366** \* 22,000—30,000 BTU/HR

**A383197** 55,000—80,000 BTU/HR or **A383197-30** \* (with 30psi bypass)  
12VDC Single Fan Heat Exchanger,

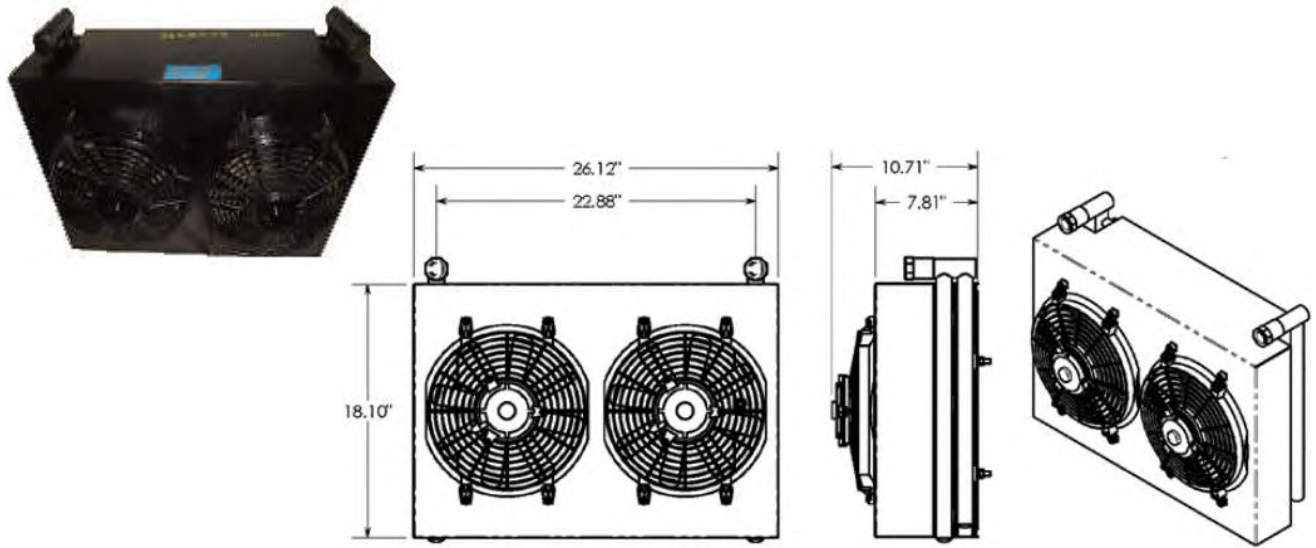
\* Inactive part (special order)



	A	B	C	D	E	F	G	H	J	K	L
<b>A387366</b>	13.78 (350.01)	11.73 (297.44)	6.26 (159.00)	9.84 (249.94)	9.96 (252.98)	10.87 (276.10)	4.96 (125.00)	4.41 (112.01)	1.00 (25.40)	#12 SAE	4.98 (126.49)
<b>A383197</b>	19.69 (500.15)	18.43 (468.12)	5.95 (151.13)	15.75 (400.05)	16.14 (409.96)	17.32 (439.93)	12.00 (304.8)	3.86 (98.04)	1.14 (28.96)	#16 SAE	8.07 (204.98)

# A159536

12VDC Dual Fan Heat Exchanger, 57,300 - 72,300 BTU/HR



# A100104 (Replaces P/N A304484)

## Thermostatic Temperature Controller (DC)

This controller was designed to mount on the cooler without requiring extensive wiring or plumbing. It provides accurate temperature control by cycling the cooling fan(s) to maintain desired oil temperature.

- 12 or 24 Volt operation
- Adjustable temperature settings range from 100°F thru 210°F
- For use with one or two fan models  
*(Relay needed for 2 fan models)*
- Temperature sensor provided
- Wiring provided for remote manual override
- Mounting hardware included



Replacement Temp Sensor only:  
P/N A383197-TS — 3/8"MNPT,  
Stamped 02024-00



Replacement Temp Switch:  
P/N A383437 — 1/2"MNPT,  
Tagged: Nason TD-5C-200R/WP  
For Heat Exchanger A383197