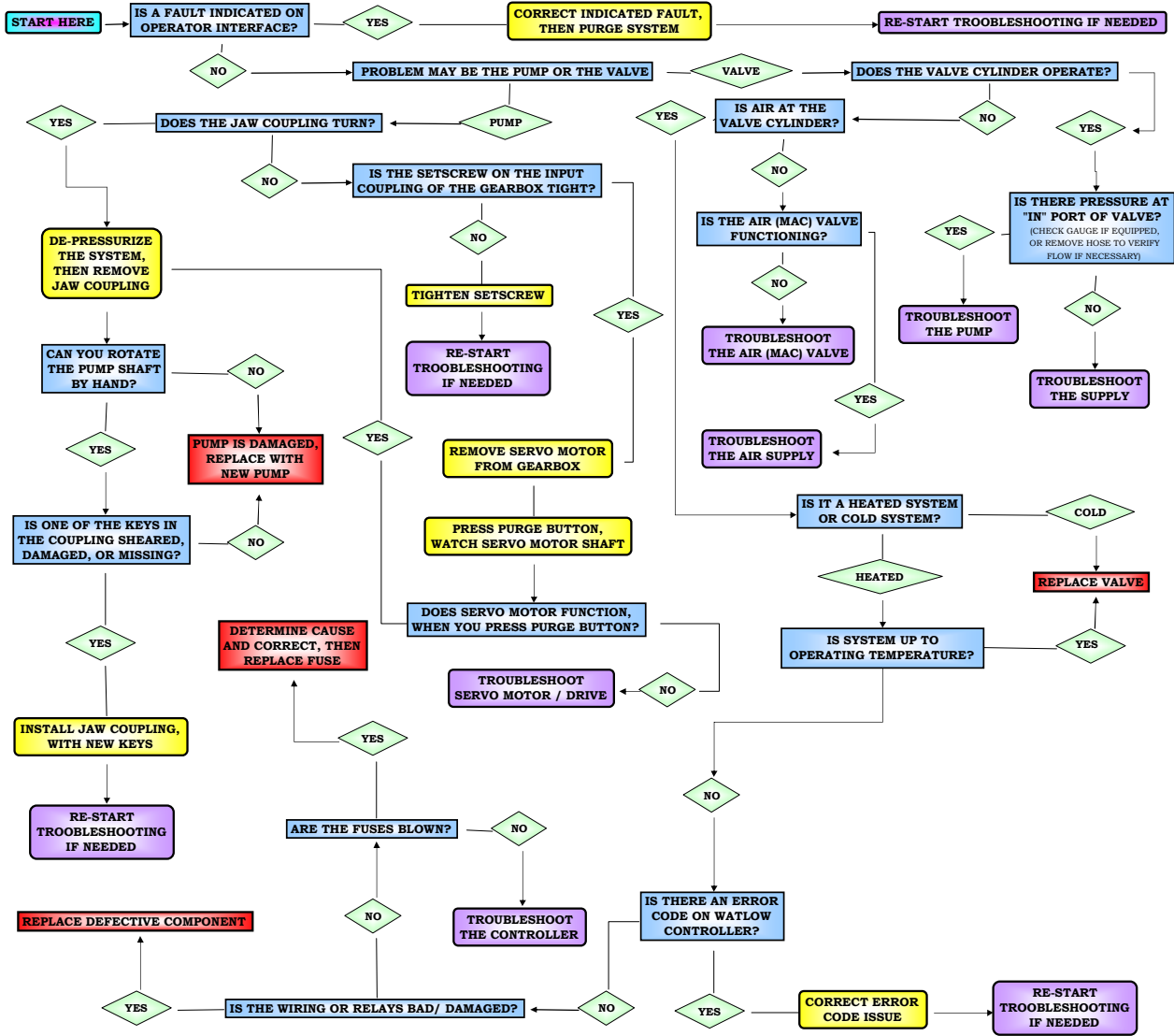


TROUBLESHOOTING: NO SEALANT



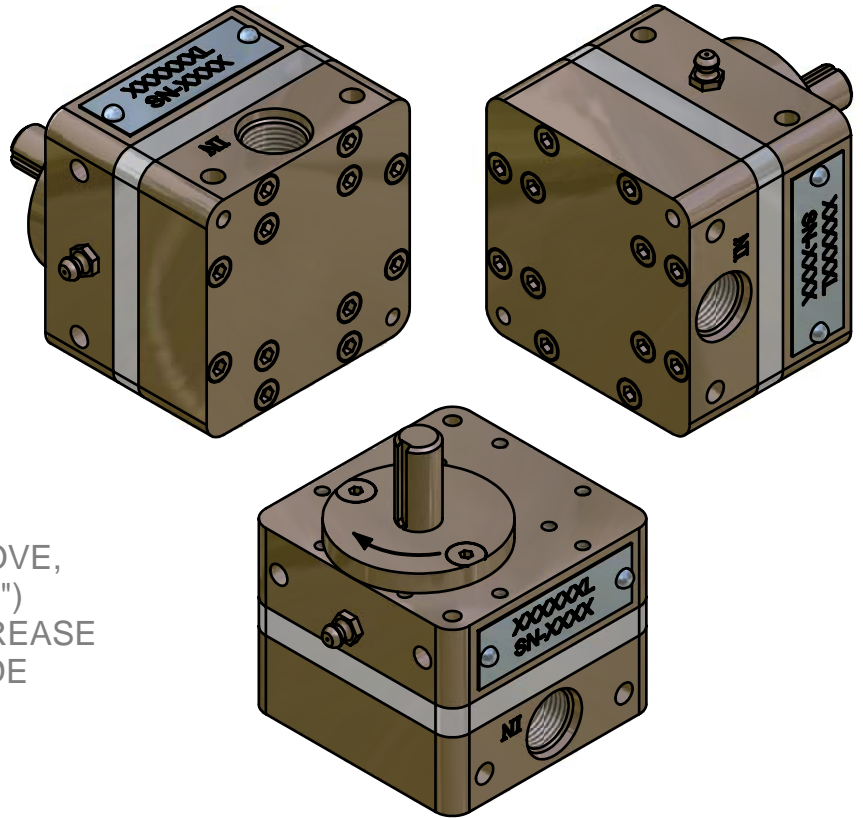
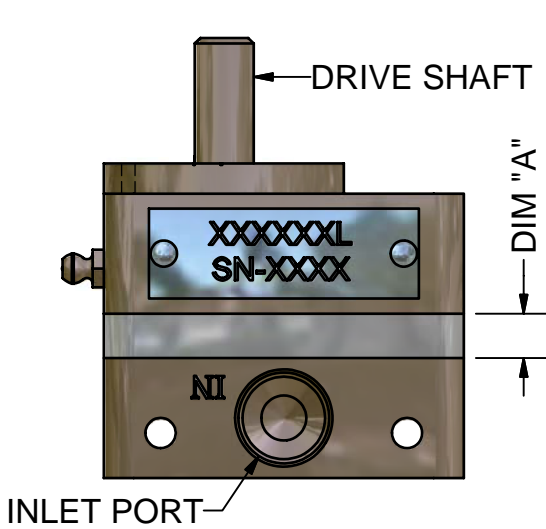
EA Cypump Fluid Meter and EA Cyflo Valve:
Instruction for removal and installation

1. Shut off the air to the extrusion pump and purge the remaining air pressure in the sealant hose by using the Purge Button on the controls cabinet of the machine.
2. When all the pressure has been depleted from the sealant supply hose, shut off and disconnect the air to the machine and extrusion pump. Turn off the power and disconnect the supply cord to the machine controls cabinet.
3. Have a supply of rags or paper towels handy to clean up any excess adhesive.
4. Disconnect and cap the main sealant supply hose from the existing fluid meter or valve. *Note: Parts and/or fittings that are disconnected and exposed to air for more than 15 minutes should be sealed to prevent curing that can cause malfunction or damage to sensitive components.*
5. Mark the placement of air supply lines to the cylinder on the existing valve and disconnect. (On heated units, mark placement of thermal couples and heater elements on both fluid meter and valve to assure proper installation on new unit.)
6. When replacing both fluid meter and valve, complete initial fluid meter and valve assembly as it appears on your machine before removing old unit. When only replacing fluid meter or valve, take note of assembly orientation before removing old unit and assembly accordingly.
7. Fluid meter and valve assemblies are mounted to the gearbox using a variety of mounting plates. It may be easier to remove a portion of the mounting assembly with the fluid meter so take a moment to find the best method of removal. Pull the fluid meter away from the gearbox, making sure to note the placement of the spider gear for installation on the new fluid meter. Transfer any portion of the mounting assembly to the new fluid meter if needed.
8. Remove the Coupling on the old fluid meter shaft by loosening the setscrew and place it on the new fluid meter shaft. (Repeat this step for nozzle coupling on long body style fluid meters.) Do not tighten the setscrew(s) at this time. Hold the spider gear in place on the gearbox coupling, while positioning the new fluid meter. When the fluid meter is in position, tighten the setscrew on the fluid meter side coupling. Replace the socket head bolts on the mounting assembly and tighten.

9. Reconnect the air supply lines to the cylinder on the new valve and install thermal couples/heater elements to fluid meter/valve, if applicable.
10. Make sure the valve fitting on the main sealant supply hose is free and clear of any debris. If not, wipe clean and attach to the new valve. Check all bolts and fittings for tightness.
11. Plug in the power cord and apply power to the machine, this will allow the machine to come up to operating parameters. Plug in the air supply lines to the machine and to the extrusion pump. Apply air pressure to both.
12. Purge the system, using the Purge Button on the control cabinet. Repeat the purging process until all the oil and air is out of the new fluid meter and valve assembly.
13. If the fluid meter is being returned to EAC as a core return, tape over the ports or use the plugs. Packing slip should include Return Goods Authorization # to assure core return credit to your account. (If the replacement fluid meter was not assigned an RGA#, or was a spare from your inventory, please call EAC at (763) 389-9475 to be assigned an RGA#.

FLUID METER IDENTIFICATION GUIDE

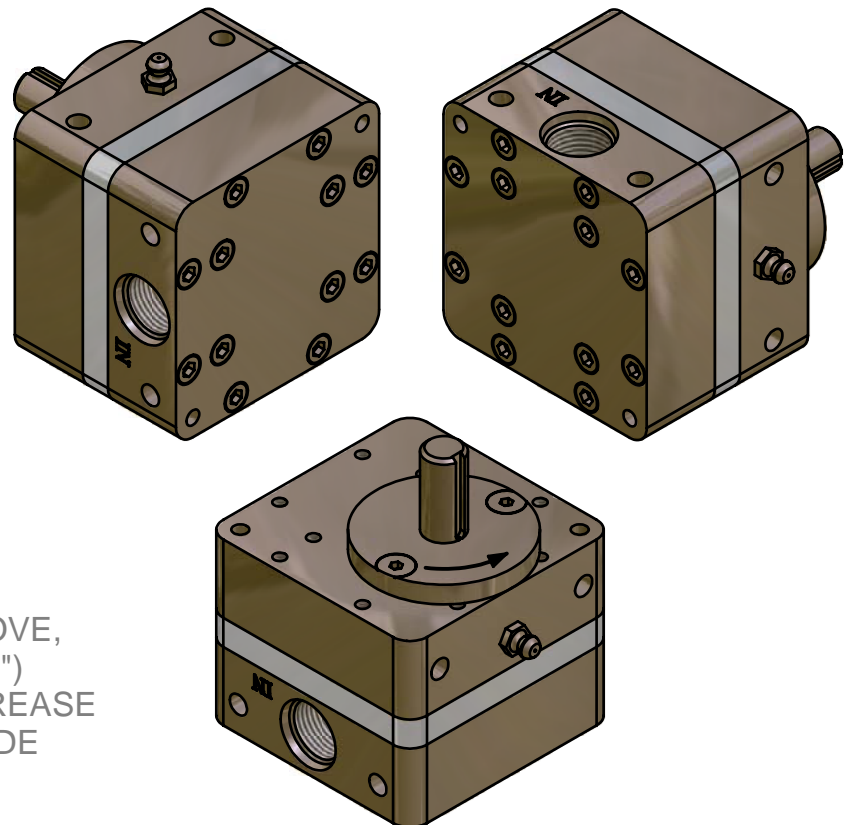
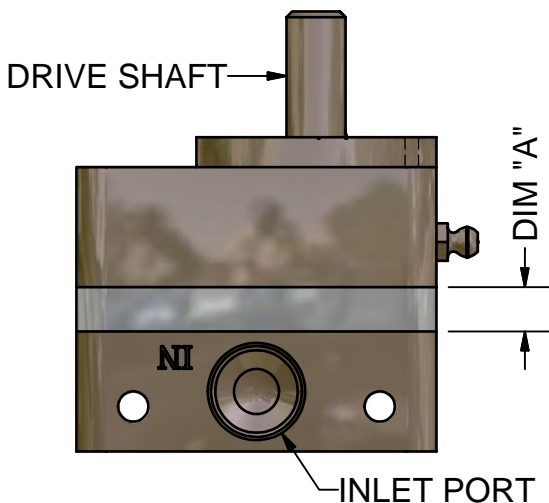
LEFT HAND FLUID METER COMMONLY CALLED A "PUMP"



WHEN ORIENTED AS SHOWN ABOVE,
WITH INLET PORT (MARKED "IN")
AS SHOWN, THE DRIVE SHAFT & GREASE
ZERK IS TOWARD THE LEFT SIDE
OF THE FLUID METER

DETERMINING SIZE

SIZE	DIM "A"
1 GALLON	1/4" (.25)
1 1/2 GALLON	3/8" (.38)
3 GALLON	3/4" (.75)

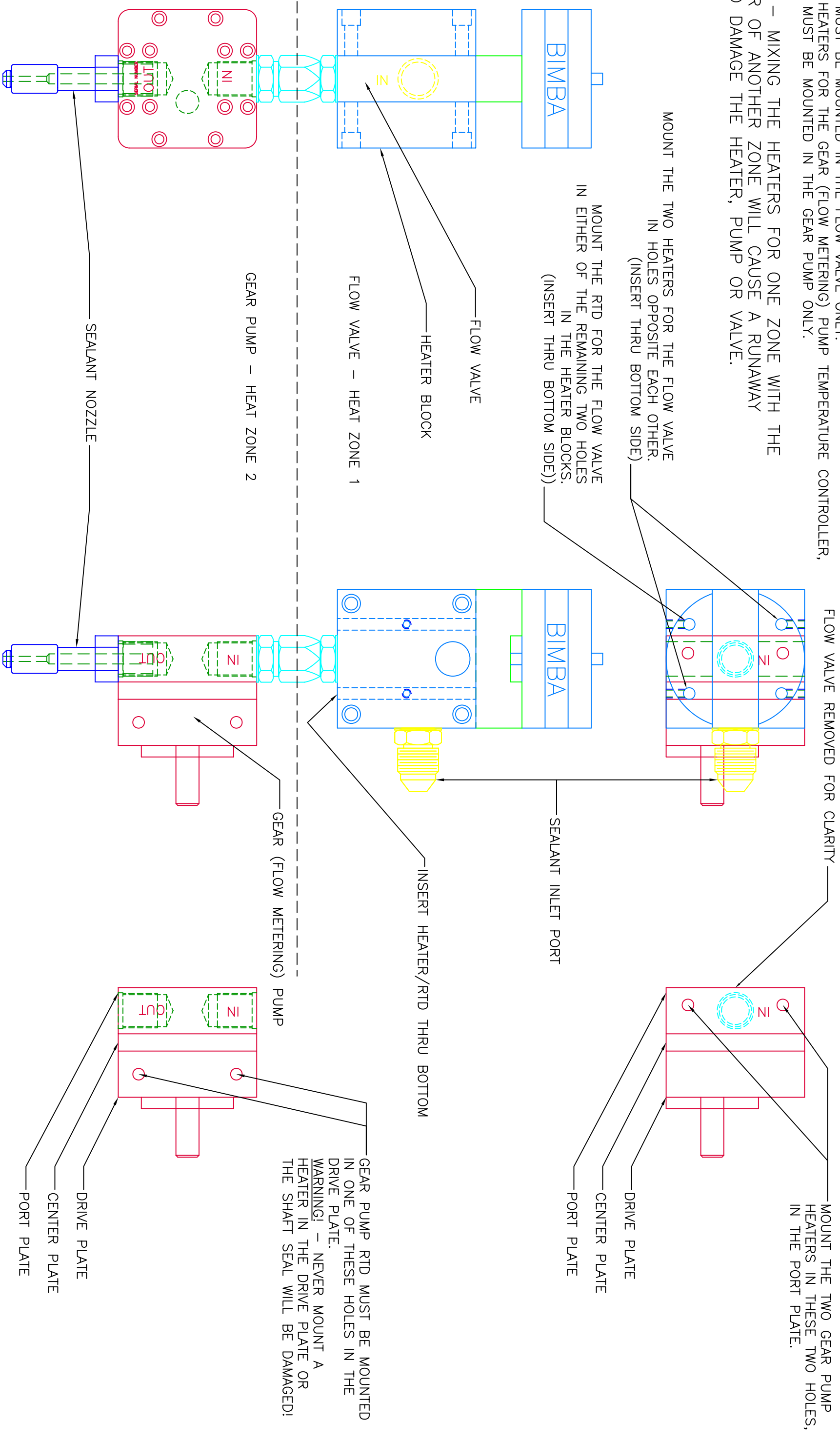


WHEN ORIENTED AS SHOWN ABOVE,
WITH INLET PORT (MARKED "IN")
AS SHOWN, THE DRIVE SHAFT & GREASE
ZERK IS TOWARD THE RIGHT SIDE
OF THE FLUID METER

RIGHT HAND FLUID METER COMMONLY CALLED A "PUMP"

NOTE: THE RTD AND HEATERS FOR THE FLOW VALVE TEMPERATURE CONTROLLER, HEAT ZONE 1, MUST BE MOUNTED IN THE FLOW VALVE ONLY. THE RTD AND HEATERS FOR THE GEAR (FLOW METERING) PUMP TEMPERATURE CONTROLLER, HEAT ZONE 2, MUST BE MOUNTED IN THE GEAR PUMP ONLY.

WARNING! – MIXING THE HEATERS FOR ONE ZONE WITH THE RTD SENSOR OF ANOTHER ZONE WILL CAUSE A RUNAWAY HEATER AND DAMAGE THE HEATER, PUMP OR VALVE.



WARNING! – BEFORE INSERTION OF A HEATER INTO ITS MOUNTING HOLE, IT MUST BE COATED WITH INDUSTRIAL BORON NITRIDE MOLD RELEASE, CRC #03310 OR EQUIVALENT. FAILURE TO DO SO MAY MAKE IT IMPOSSIBLE TO REPLACE THE COMPONENT IN THE FUTURE BECAUSE IT WILL NOT BE REMOVABLE.

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ERDMAN
 Automation Corp.
 1603 S 14TH ST, Princeton, MN 55371

Description: HEATED PUMP ASSEMBLY
 CONTROLS' LOCATIONS

Drawn By: SES
 Dwg: INFO-1

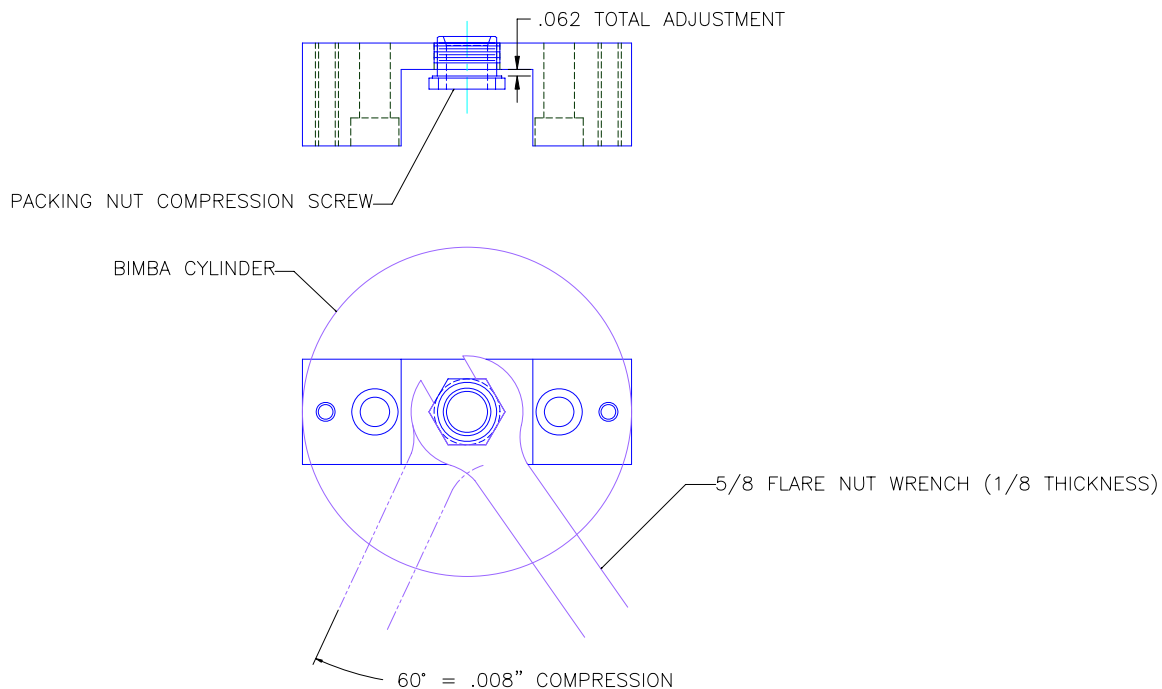
Date: 11 / 2006
 Sheet 1 of 1



EA Cypump and EA Cyflo Valve: **ENGINEERING UPDATE NOTICE**

Recent advancements in the EacyFlo Valve have brought a need for technical memo illustrating proper adjustments of Erdman Standard Packing Gland Valves. The reason for the design change to a Packing Gland Nut style is to ensure longer life and cleaner – leak free operation. This memo will explain proper maintenance of Packing Gland valves. Failure to follow procedure may result in valve failure/damage.

1. Clean all seepage or migrated sealant from Poppet Rod & Gland Nut.
2. Actuate valve to check proper operation before adjustments are made.
3. Make a single 60 deg turn to gland nut to compress Teflon o-rings.
4. Monitor adjustments made after 24 hours. If migration has not stopped, repeat step 3 – check again in 24 hours.



FLUID METER NUMBERING B SERIES-2011

NEW METER				OLD METERS										
P	B	3	0	S	PD30SDRM	PD30SDLM	PD30SAR	PD30SAL	P D30SDR	PD30SDL				
P	B	3	0	S H	PD30SDRMH	PD30SDLMH								
P	B	3	0	F	P D30FDRM	PD30FAR	PD30FDR							
P	B	3	0	F L	P D30FDLM	PD30FAL	PD30FDL							
P	B	3	0	F H	PD30FDRMH									
P	B	3	0	F L H	PD30FDLMH									
P	B	3	0	L	PD30LARM	PD30LDRM	PD30LAR	PD30LDR						
P	B	3	0	L L	PD30LALM	PD30LDLM	PD30LAL	PD30LDL						
P	B	3	0	B	PD30BARM	PD30BAR								
P	B	3	0	B L	PD30BALM	PD30BAL								
P	B	1	5	S	PD15SDRM	PD15SDLM	PD15SAR	PD15SAL	PD15SDR	PD15SDL	PD10SBL	PD10SBR	PD10SAL	PD10SAR
P	B	1	5	S H	PD15SDRMH	PD15SDLMH								
P	B	1	5	F	P D15FDRM	PD15FAR	PD15FDR							
P	B	1	5	F L	P D15FDLM	PD15FAL	PD15FDL							
P	B	1	5	F H	PD30FDRMH									
P	B	1	5	F L H	PD30FDLMH									
P	B	1	5	L	PD15LARM	PD15LDRM	PD15LAR	PD15LDR						
P	B	1	5	L L	PD15LALM	PD15LDLM	PD15LAL	PD15LDL						
P	B	1	5	B	PD15BARM	PD15BAR								
P	B	1	5	B L	PD15BALM	PD15BAL								
N	B	3	0	S	ND30SAR	ND30SAL	ND30SARM	ND30SALM						
N	B	3	0	F	ND30FAR	ND30FARM								
N	B	3	0	F L	ND30FAL	ND30FALM								
N	B	1	5	S	ND15SAL	ND15SALM	ND15SAR	ND15SARM						
N	B	1	5	F	ND15FAR	ND15FARM								
N	B	1	5	F L	ND15FAL	ND15FALM								

2 PART SEALANT FLUID METER NUMBERING B SERIES

NEW METER				OLD METERS										
C	B	3	0	S	CPD30SDRM	CPD30SDLM	CPD30SDR	CPD30SDL	CPC30SDR	CPC30SDL				
C	B	1	5	S	CPD15SDRM	CPD15SDLM	CPD15SDR	CPD15SDL	PD10SBL	PD10SBR	PD10SAL	PD10SAR	CPC15SDL	CPC15SDR

VALVE NUMBERING B SERIES

NEW VALVE		OLD VALVE									
V	T	S	VDCTS	VDHTS							
V	T	S	S	VDCTSS							
V	T	S	Z	VDHTSZ							
V	T	M	VDCTM	VDHTM							
V	T	M	I	VDCTMI	VDHTMI						
V	T	M	P	VDCTMP	VDHTMP						

FLUID METER & VALVE OLD NUMBERING C&D SERIES PRE-2011

DRIVE TYPE	
P	POWERED FLUID METER
N	NON-POWERED FLUID METER
CP	CERTIFIED

SERIES	
C	LATE 2004 TO PRESENT
D	2009 SERIES

DISPLACEMENT	
15	1 1/2 GALLON
30	3 GALLON

BODY STYLE	
S	STANDARD
L	LONG BODY RIGHT HAND
F	FACE PORT RIGHT HAND
B	FILLET BEAD RIGHT HAND

GEAR PLATE MATERIAL	
A	ALUMINUM
D	D2 TOOL STEEL

HAND	
R	RIGHT HAND
L	LEFT HAND

SEAL	
M	MC MASTER
PC	PARKER
PF	PARKER

TYPE	
H	HEATED
C	COLD

GEARS KEY	
H	D-2 GEARS
K	HARDEN KEY
M	SPECIAL NONE DRIVEN MANUS

FLUID METER ID									
SERIES									
DISPLACEMENT									
BODY STYLE									
GEAR PLATE									
HAND									
SEAL									
HEATED									
HARDEN KEY									
FLUID METER ASSEMBLY #									

VALVE ID									
SERIES									
TEMPERATURE									
SEAL TYPE									
STYLE									
TYPE									
VALVE ASSEMBLY #									

VALVE ID	
V	HIGH VOLUME VALVE

SERIES	
C	LATE 2004 TO 3/2005
D	PACKING NUT VALVE (3/2005 TO PRESENT)

TEMPERATURE	
C	COLD (AMBIENT)
H	HEATED

SEAL TYPE	
T	TEFLON O-RINGS

STYLE	
S	STANDARD
M	MANIFOLD MOUNT
X	CUSTOM VALVE BLOCK (USE PROFILE #)
MP	MANIFOLD MOUNT
M1	MANIFOLD MOUNT

TYPE	
Z	NO ZERK HARD CROME STEM
S	SHEER

SEAL & CARTRIDGE KITS	
EFV -CK1	(C VALVE VITON)
EFV -CK2	(C OR D VALVE) GAGE & CYL.
EFV -CK3	(D VALVE PTEF)
EFV -CK4	(SHEER VALVE PTEF)
EFV -CK5	(HARD CROME STEM)
MSK-1	(MSEAL KIT)
FMS-CKI	FMS VALVE

FLUID METER & VALVE NEW NUMBERING B SERIES-2011

DRIVE TYPE	
P	POWERED FLUID METER
N	NON-POWERED FLUID METER
C	CERTIFIED

SERIES	
B	BY-DIRECTIONAL

DISPLACEMENT	
15	1 1/2 GALLON
30	3 GALLON

BODY STYLE	
S	STANDARD
L	LONG BODY RIGHT HAND
F	FACE PORT RIGHT HAND
B	FILLET BEAD RIGHT HAND

HAND	
L	LEFT HAND

TYPE	
H	HEATED
M	SPECIAL NONE DRIVEN MANUS
K	HARDEN KEY

FLUID METER ID	SERIES	DISPLACEMENT	BODY STYLE	HAND	TYP
P	B	1	5	S	L
FLUID METER ASSEMBLY #					

VALVE ID	SEAL TYPE	STYLE	TYPE
V	T	S	S
VALVE ASSEMBLY #			

VALVE ID	
V	HIGH VOLUME VALVE

SEAL TYPE	
T	TEFLON O-RINGS

STYLE	
S	STANDARD
M	MANIFOLD MOUNT
MP	MANIFOLD MOUNT
M1	MANIFOLD MOUNT

TYPE	
Z	NO ZERK HARD CROME STEM
S	SHEER

SEAL & CARTRIDGE KITS	
EFV -CK1	(C VALVE VITON)
EFV -CK2	(C OR D VALVE) GAGE & CYL.
EFV -CK3	(D VALVE PTEF)
EFV -CK4	(SHEER VALVE PTEF)
EFV -CK5	(HARD CROME STEM)
MSK-1	(MSEAL KIT)
FMS-CKI	FMS VALVE