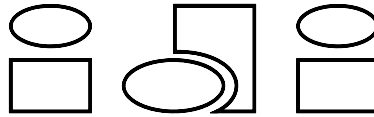


THE TASQ™ LINE INTENSIFIER PUMP

INSTALLATION, OPERATION & MAINTENANCE MANUAL



INTERFACE DEVICES, INC. 230 Depot Road, Milford, CT 06460
Ph: (203) 878-4648, Fx: (203) 882-0885, E-mail: info@interfacedevices.com
www.interfacedevices.com

**IMPORTANT! FILE THIS MANUAL IN A SAFE PLACE FOR FUTURE SERVICE & PARTS NEEDS
ALWAYS REFERENCE THE SERIAL NUMBER FOR SERVICE & PARTS REQUESTS**

Pump Serial Number: _____

STATEMENT OF WARRANTY

INTERFACE DEVICES, INC. (hereafter, the factory) warrants its products to be free from defects in material and workmanship under normal use and service for a period of one (1) year from date of shipment from the factory. Any defect discovered after the warranty period has expired will be deemed to be outside the above coverage. No goods claimed to be under warranty shall be accepted for return unless authorized by the factory beforehand.

Upon discovery of a defect (other than freight damage) or a shortage of an item received in the original factory container, the purchaser shall, within (10) calendar days, deliver notice of the defect or shortage. Damaged freight claims must be placed with the freight carrier and will not be honored by the factory. If after due investigation of a claim of defect or shortage is found valid, the factory, at its sole discretion, may discharge its entire obligations to the purchaser by either repair or replacement of the defective product or component and for shortages by furnishing a replacement of the missing quantity (FOB, factory).

This express warranty supersedes and is in lieu of all other remedies and warranties, including the implied warranties of merchantability and fitness for a particular purpose, and liability for negligence. IN NO EVENT SHALL THE FACTORY BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL LOSSES, EXPENSES OR DAMAGES INCLUDING DAMAGES FOR PERSONAL INJURY OR COMMERCIAL LOSS.

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SECTION 1.0: INTRODUCTION

- A. The TASQ Line pumps are a single ratio, single acting pump. All ratios are rated at 0.60 peak hydraulic horsepower at a maximum air consumption of 9 SCFM.
- B. TASQ pumps are furnished with an integral, self-contained reservoir having a capacity of 40, 60, 80 or 120 cubic inch oil capacity. Reservoirs can be installed so that the two supplied site gages can be viewed from any side. Standard installation has site gages facing the regulator side of the pump as shown in the General Arrangement Drawing.

SECTION 2.0: INSTALLATION AND OPERATION

A. INSTALLATION

- 1. Self Contained Reservoir version: Drill the four mounting holes on the intended vertical mounting surface per the dimensions shown on the enclosed "General Arrangement-Self Contained Reservoir" Drawing. Mount the pump using four (4) 1/4" fasteners.

B. CHECK LIST

Before operating the unit, complete the following checklist to assure proper and safe operation:

- 1. All hydraulic components (fittings, hoses, valves, etc.) shall be rated at, or above the maximum operating pressure of the power unit.
- 2. Inlet air pressure must not exceed 150 psig (10 bar). Normal range of supply air pressure shall be not less than 50 and not over 100 psig (4-7 bar).
- 3. All air supply fittings and lines shall be of non-corrosive materials and of pipe size adequate for the pump.
- 4. Air supply must be free of contaminants and an air filter must be installed as closely as possible to the pump.
- 5. Air lubrication must NOT be used.
- 6. At initial startup, the air regulator MUST be turned out completely counter-clockwise (CCW) before the supply air source is turned on.

C. RESERVOIR FILLING AND DRAINING

It is recommended that a light grade hydraulic oil be used. (Mobil DTE 24[®], Shell Tellus 32[®], or equivalent) Consult your distributor or the manufacturer if your application requires other than light viscosity petroleum based fluids recommended above.

Remove vent/filler cap. Pour clean oil through a strainer into reservoir until full as indicated in the upper bulls-eye. Replace vent/filler cap. Top-off the reservoir after the system has been bled (Sec. D, below).

Note: The self-contained reservoir may be drained in the future via the “B” cylinder port.

D. START-UP & BLEEDING THE SYSTEM

Once all the above requirements are met and the reservoir is full, make sure the air regulator is completely turned out counterclockwise (CCW) before connecting the air supply. Slowly turn in the air regulator clockwise (CW) until the pump just begins to reciprocate. Alternately extend and retract the cylinder(s), bleeding the lines at the stroked end of each cylinder.

SECTION 3.0: MAINTENANCE AND SERVICE

A. GENERAL

1. Upon receipt of the pump, inspect the assembly thoroughly. If physical damage is evident, do not operate the unit. Consult your distributor or the manufacturer for replacement parts or corrective action.
2. TASQ Series pumps are designed to be virtually maintenance free as long as the air supply and hydraulic oil are contaminant free. However, it is recommended that the air cycling valve spool and seals be greased every six months or annually, depending on usage. Refer to items 4 through 43 on the enclosed “Pump Assembly” drawings.

B. TROUBLE SHOOTING GUIDE

If a problem arises with the unit, the following guide should help to make an accurate diagnosis and offer a proper remedy:

SYMPTOM	CORRECTIVE ACTION
Pump will not cycle after extended no-flow period.	<ul style="list-style-type: none"> • Check that supply air pressure exceeds 50 psi. • Check that Air Cap valve spool is not stuck in mid position; if so, disconnect and reconnect the air supply to reset the spool to its default position.
Pump brings system up to normal operating pressure but "chugs" intermittently.	<ul style="list-style-type: none"> • Check all system components for leaks, including valve or cylinder that may be bypassing internally. • If symptom is coupled with evidence of fluid leakage from the air cap muffler, then internal rod seals are worn excessively; repair/replace without delay to prevent internal damage to the pump (Note: This condition is always caused by contaminated oil).
Pump will not cycle Pump "short" cycles	<ul style="list-style-type: none"> • Air limit valve in Air Cap failed. Replace. • Air limit valve in Hydraulic Body failed. Replace.
Pump cycles but does not generate pressure.	<ul style="list-style-type: none"> • Pump is airbound; check fluid reservoir level and bleed. • Pump internal check valves are jammed with foreign material; remove and clean; be sure that reservoir does not contain any foreign material.
Pump Air Cap leaking air continuously.	<ul style="list-style-type: none"> • Leak from muffler; spool valve seals worn or contaminated; clean/replace seals. • Leak from 4-way air valve cap; stem seals worn or contaminated; clean/replace cap.

SECTION 4.0: GENERAL ASSEMBLY

This section is provided to a general overview for all the service needs of the TASQ Series pumps. An exploded view with Bill of Materials of all parts is included at the back of this manual.

The general assembly of all TASQ Series Pumps consists of three major sub-assemblies: AIR CAP, AIR BODY, and HYDRAULIC BODY. It is most efficient if each of these three components is entirely sub-assembled prior to final assembly.

A. MOUNTING THE AIR BODY TO THE HYDRAULIC BODY

Slip one air body gasket over the air piston and align to the edges with the hydraulic body. Apply a thin film of waterproof grease to the bore of the Air Body and lay atop the piston with chamfered bore edge down. Holding the Air Body and piston with both hands, "squeeze" the body over the air piston seal and wiggle down until contact

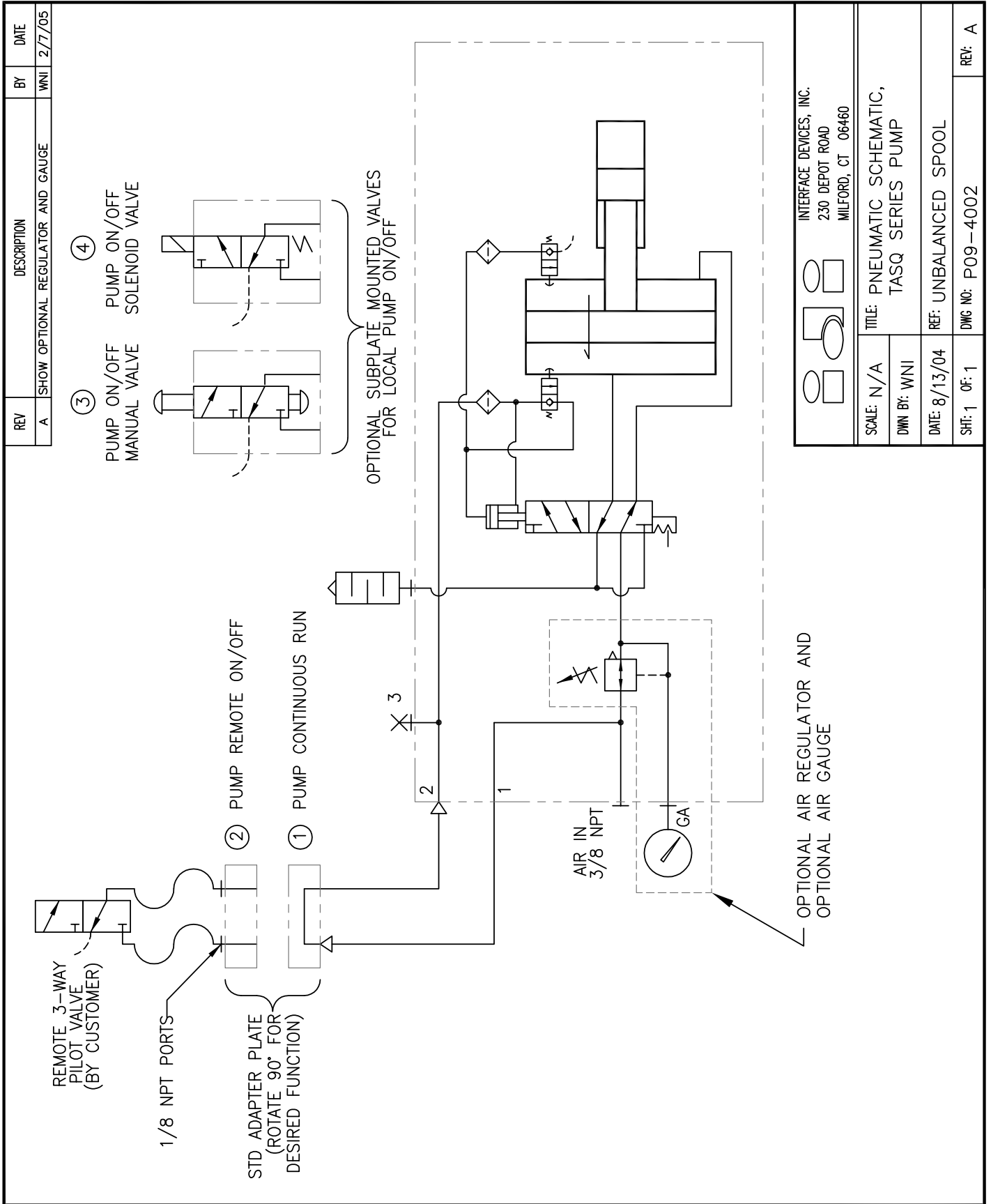
is made with the body gasket.

Insure that the twin locating pins remain in place during the above to assure proper alignment between the ratio plate and the air body.

B. MOUNTING THE AIR CAP TO THE AIR BODY

Be sure the Air Cap is fully sub-assembled before mounting it to the Air Body. Place another air body gasket on the Air Body and align to the edges. Place the Air Cap on the Air Body with the Air Regulator adjusting knob in plane with the DO-3 pad on the hydraulic body.

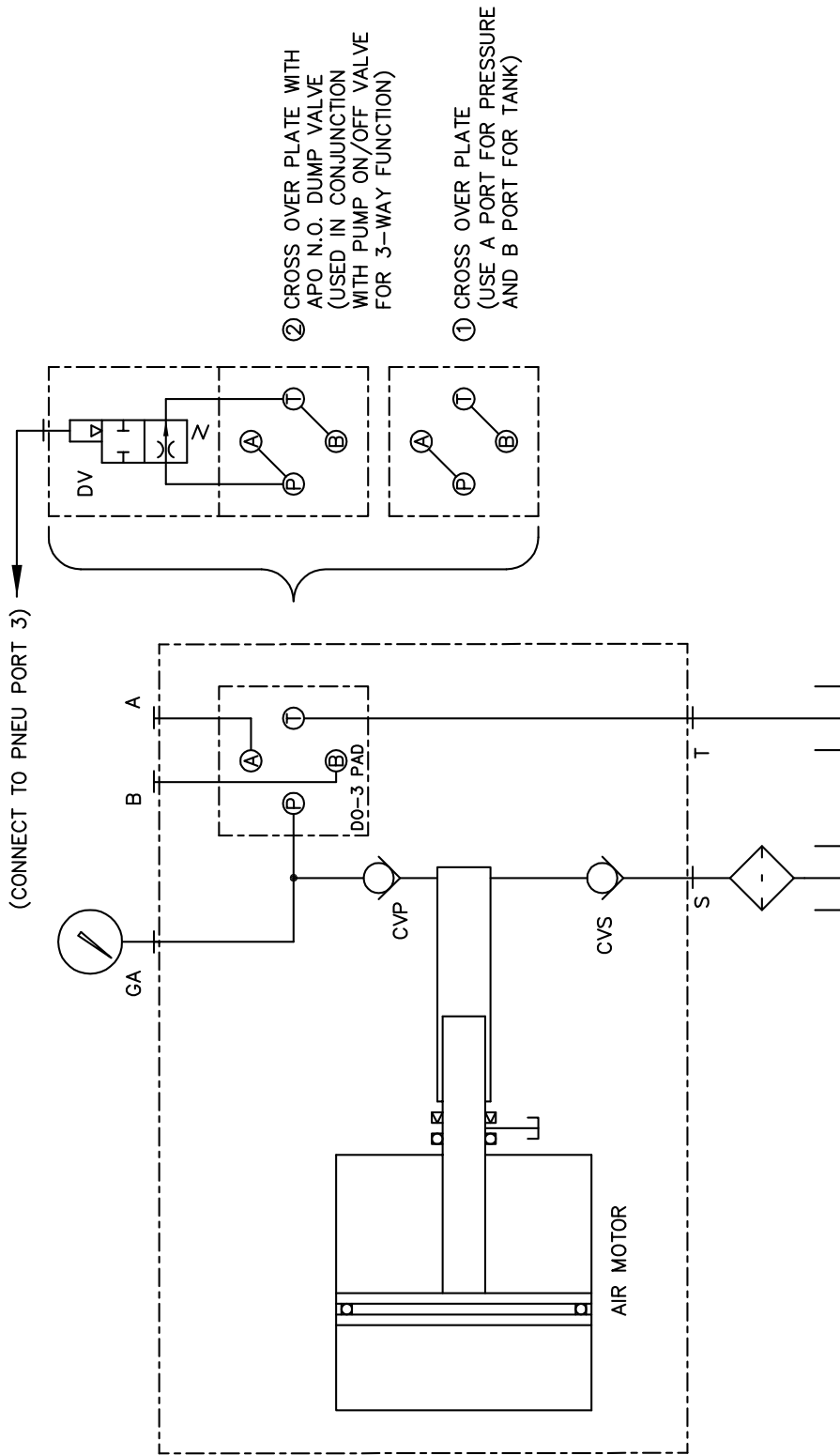
- C. Install the four (4) 5/16 x 4.5 socket head cap screws (with lock washers) through the air cap and air body and thread into the hydraulic body. Cross torque all four cap screws to 120-150 in/lbs.



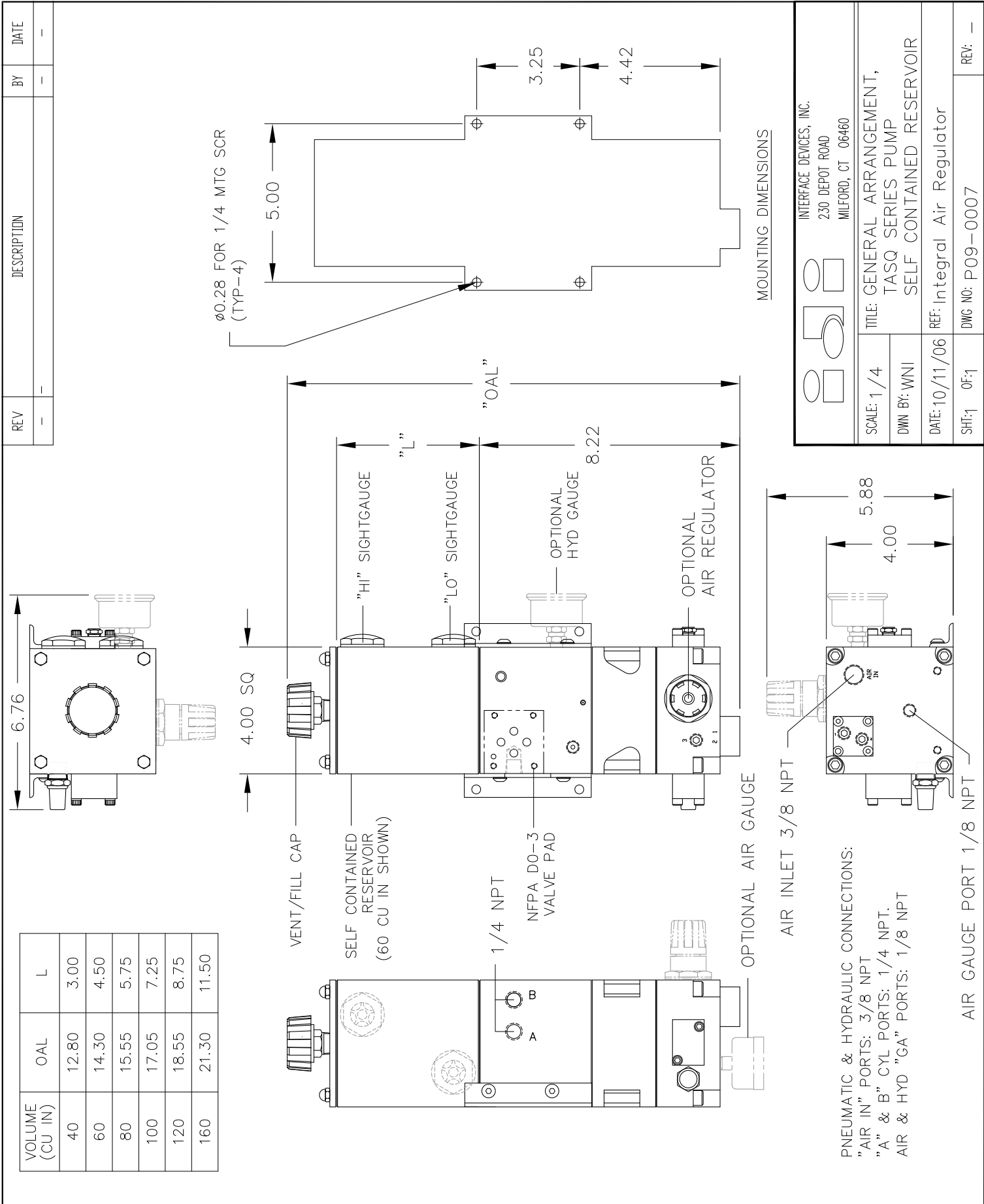
INTERFACE DEVICES, INC.
230 DEPOT ROAD
MILFORD, CT 06460

SCALE: N/A	TITLE: PNEUMATIC SCHEMATIC, TASQ SERIES PUMP		
DWN BY: WNI		REF: UNBALANCED SPOOL	REV: A
DATE: 8/13/04		DWG NO: P09-4002	
SHF: 1 OF: 1			

STANDARD PAD OPTIONS
IF DIRECTIONAL VALVE IS
NOT USED



		INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460	
SCALE: N/A	TITLE: HYDRAULIC SCHEMATIC TASQ SERIES PUMP		
DWN BY: TWH	REF:		
DATE: 2/26/03	DWG NO: P09-3001		
SHT: 1 OF: 1	REV: -		



PNEUMATIC & HYDRAULIC CONNECTIONS:

"AIR IN" PORTS: 3/8 NPT

"A" & "B" CYL PORTS: 1/4 NPT.

AIR & HYD "GA" PORTS: 1/8 NPT

AIR INLET 3/8 NPT

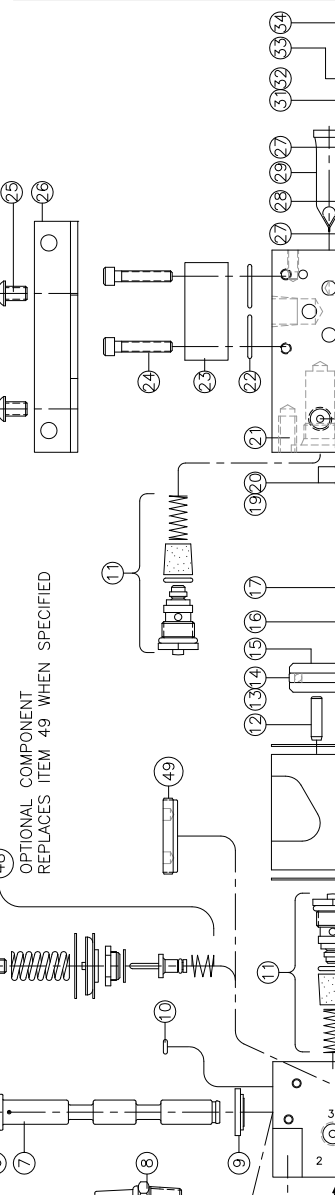
AIR GAUGE PORT 1/8 NPT

REV	DESCRIPTION	BY	DATE
A	ADDED ID PN ITEMS 2,1,2,32,39,41; DEL ITEM 30; ITEM 74 NOW (REF)	WNI	2/26/07
B	ITEM 20 NOW QTY 2	WNI	7/18/07
C	PIC CHG ITEM 58; DEL 61,63,64,66,67,69	WNI	4/14/11
D	PIC CHG ITEM 27; 34 WAS 0.50; 10627 WAS 11203; 10626 WAS 11204; IM 1 WAS 5/16-18 X 4.00; IM 2 QTY WAS 8	WNI	12/27/11
E	10625 WAS 11205	WNI	9/26/12

REV	DESCRIPTION	BY	DATE
40	1 SO-012P9 O-RING		
39	2 11769 PIPE PLUG, 1/8 NPT		
38	2 10264 BREATHER, 1/8 NPT		
37	1 10112 P10-5203 AIR BODY		
36	2 10334 P00-5205 GASKET, AIR BODY		
35	1 10006 P10-5201 AIR CAP		
34	4 10-24 x .62 SOC HD CAP SCR		
33	1 11137 P00-5607 RETAINER, CHECK VALVE		
32	1 11757 B-UP RING, SPLIT -016		
31	1 SO-016B7 O-RING		
30	2 11731 M03-1035 FILTER, SCREEN		
29	2 11138 CHECK VALVE, -08		
28	1 16mm x 1.5mm O-RING		
27	REF 10262 P00-5601 MOUNTING BRACKET		
26	2 1/4-20 x .38 BUT HD CAP SCR		
25	4 1/4-20 x 1.00 SOC HD CAP SCR		
24	REF 11200 M50-0003 DO3 XOVER PLATE		
23	REF 11200 M50-0003 DO3 XOVER PLATE		
22	REF SO-017B7 O-RING		
21	1 SEE CHART HYDRAULIC BODY		
20	2 SEE CHART ROD SEAL		
19	2 SEE CHART O-RING		
18	1 SEE CHART HYDRAULIC ROD		
17	1 SO-902B7 O-RING		
16	1 11167 P09-5201 AIR PISTON		
15	1 10377 GLYD RING		
14	1 SO-233B7 O-RING		
13	2 11772 DOWEL PIN, #3/16 x 5/8		
12	2 10017 W04-1005 2-WAY AIR VLV ASST		
11	1 SO-006B7 O-RING		
10	1 10271 P00-5212 SPACER, SHORT		
9	1 10431 MUFFLER, 3/8 NPT		
8	1 10659 P00-5211 SPOOL, AIR		
7	1 SO-111B7 O-RING		
6	1 SO-019B7 O-RING		
5	1 10298 P00-5207 PILOT CAP		
4	2 10-24 x 1.00 SOC HD CAP SCR		
3	2 10393 HI COLLAR L'NUT, 5/16		
2	1 5/16-18 x 3.75 SOC HD CAP SCR		
1	ITEM QTY PART NUMBER DESCRIPTION		

ITEM QTY	PART NUMBER	DESCRIPTION
50	1A/R 11953	GREASE, WHT LITHIUM
49	1 10945 P10-5202 PLUG, REGULATOR CAVITY	
48	REF 10016 P10-1202 REGULATOR ASSY	
47	1 10700 M03-1020 CHECK VALVE	
46	2 10-24 x .63 SOC HD CAP SCR	
45	1 10299 P00-5208 SPOOL CAP	
44	1 10269 P00-5210 BUSHING, LONG	
43	6 10629 TEE SEAL	
42	5 10273 P00-5209 CAGE	
41	1 11753 B-U RING, SOLID -012	
51	REF P10-1903 RESERVOIR ASSY, 80-160CI	
	REF P10-1902 RESERVOIR ASSY, 40-60CI	
	REF P10-1901 RESERVOIR ASSY, 20CI	
ITEM QTY	PART NUMBER	DESCRIPTION

SCALE: 1/2
TITLE: PUMP ASSEMBLY
DWG BY: WNI
DATE: 10/10/06 REF: 5:1 THRU 45:1 RATIO
SHEET: 1 OF 2
DWG NO: P09-1004
REV: E



OPTIONAL COMPONENT REPLACES ITEM 49 WHEN SPECIFIED

NOTES
1 APPLY ITEM 50 (WHITE LITHIUM GREASE) TO ALL SEALS AND MOVING PARTS AT ASSEMBLY
2 APPLY LOCTITE 242 TO PISTON ROD THREADS. TORQUE PISTON WITH SPANNER WRENCH

OPTIONAL

NOT SHOWN

50 1A/R 11953 GREASE, WHT LITHIUM

49 1 10945 P10-5202 PLUG, REGULATOR CAVITY

48 REF 10016 P10-1202 REGULATOR ASSY

47 1 10700 M03-1020 CHECK VALVE

46 2 10-24 x .63 SOC HD CAP SCR

45 1 10299 P00-5208 SPOOL CAP

44 1 10269 P00-5210 BUSHING, LONG

43 6 10629 TEE SEAL

42 5 10273 P00-5209 CAGE

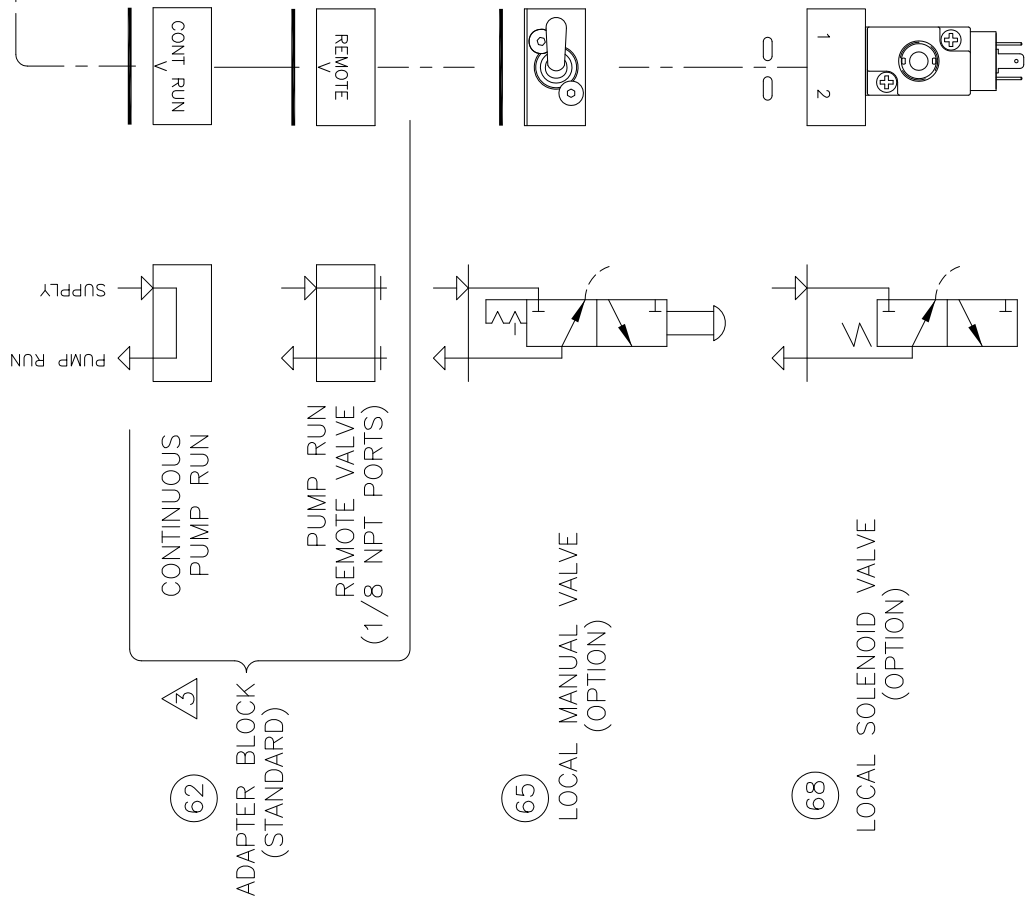
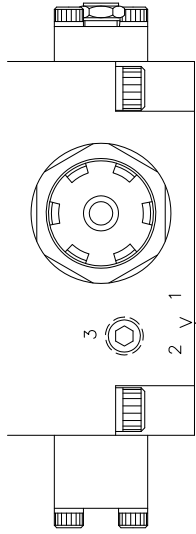
41 1 11753 B-U RING, SOLID -012

ITEM QTY PART NUMBER DESCRIPTION

REV	DESCRIPTION	BY	DATE
E	10625 WAS 11205	WNI	9/26/12

NOTES

- 1 PORT 3 IS COMMON TO PORT 2.
CONNECT PORT 3 TO REMOTE AIR PILOT OPERATED HYDRAULIC RELEASE VALVE
- 2 MOUNTING SCREWS AND GASKET/O-RINGS ARE FURNISHED FOR EACH OPTION
- 3 ROTATE ADAPTER BLOCK TO MATCH "V" STAMPED ON AIR CAP FOR THE DESIRED FUNCTION



VOLTAGE	ITEM	57	P/N
24 VDC	11837	V04-1003	
120 VAC	11838	V04-1003	
240 VAC	11919	V04-1003	

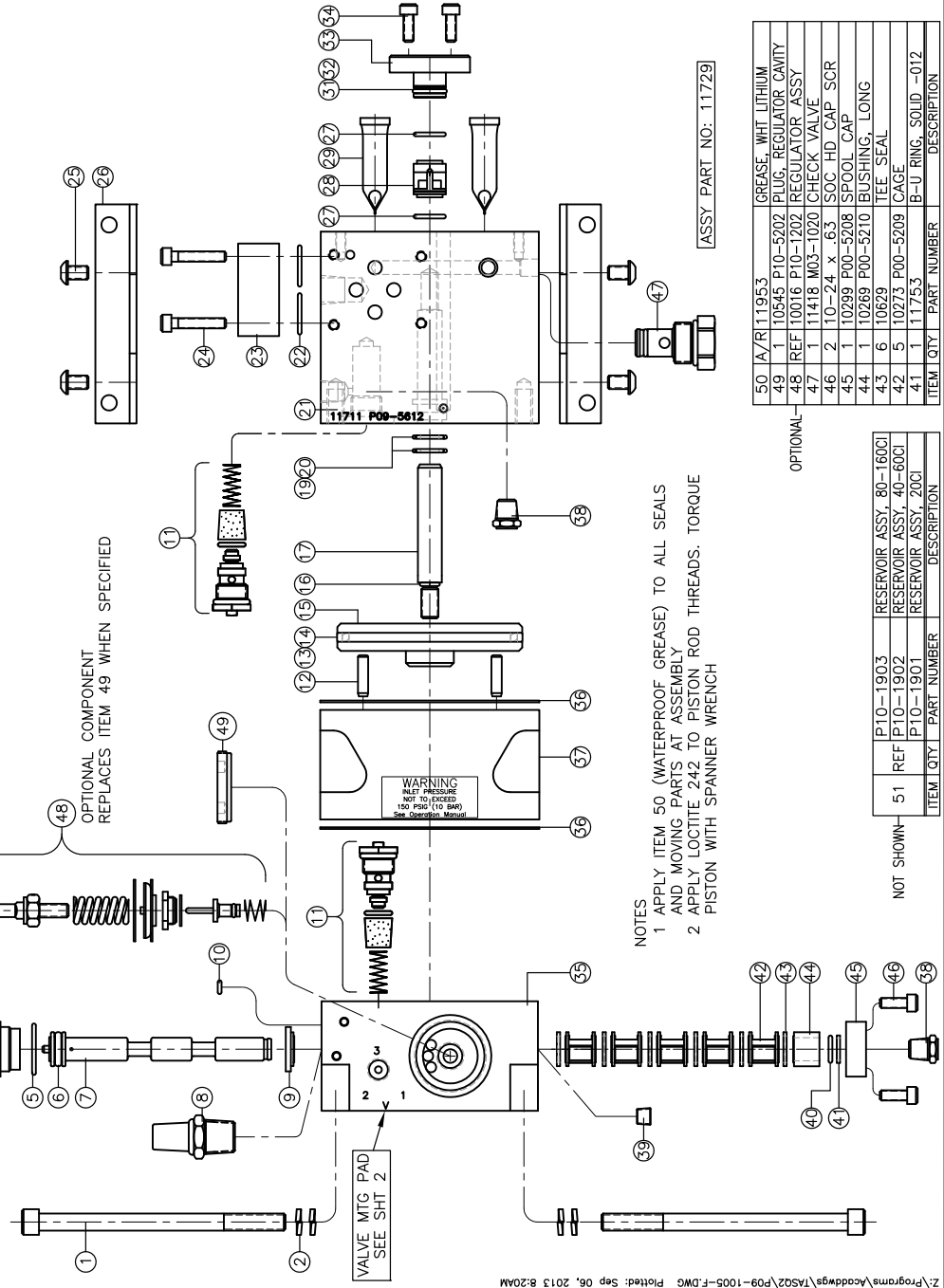
ITEM	QTY	PART NUMBER	DESCRIPTION
70			
69			
68	REF	SEE CHART	SOL AIR VALVE ASSY
67			
66			
65	REF	10449 V04-1002	MAN TOGGLE SWITCH ASSY
64			
63			
62	REF	11235 P00-1206	BLOCK ASSY, ADAPTER
61			

		INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460	
SCALE: 1/2	TITLE: PUMP ASSEMBLY.		
DWN BY: WNI	TASQ SERIES, (INTEGRATED AIR REGULATOR)		
DATE: 10/10/06	REF: 5:1 THRU 45:1 RATIO		
SHT: 2 OF: 2	DWG NO: P09-1004	REV: E	

REV	DESCRIPTION	BY	DATE
A	REDESIGNED FOR "P" STYLE HYDRAULIC BODY	WNI	9/27/06
B	ADDED ID PIN ITEMS 2,12,32,39,41; DEL ITEM 16	WNI	2/26/07
C	DEL ITEM 16; ITEM 19 & 20 NOW QTY 2	WNI	7/18/07
D	ITEM 47 WAS 10700	WNI	8/31/08
E	PIC CHG ITEM 68; DEL 61,63,64,66,67,69	WNI	4/14/11
F	PIC CHG 27; 31 WAS SQ-0155; 34 WAS O.50	WNI	12/27/11

40	1	SO-012P9	O-RING
39	2	11769	PIPE PLUG, 1/8 NPT
38	2	10264	BREATHER, 1/8 NPT
37	1	10112 P10-5203	AIR BODY
36	2	10334 P00-5205	GASKET, AIR BODY
35	1	10006 P10-5201	AIR CAP
34	4	10-24 x .62	SOC HD CAP SCR
33	1	11713 P00-5608	RETAINER, CHECK VALVE
32	1	12723	B-UP RING, SPLIT -013
31	1	SO-013B7	O-RING
30			
29	2	10328 M03-1001	FILTER
28	1	11201	CHECK VALVE, -6
27	REF	12mm x 1.5mm	O-RING
26	2	10262 P00-5801	MOUNTING BRACKET
25	4	1/4-20 x .38	BUT HD CAP SCR
24	REF	10-24 x 1.00	SOC HD CAP SCR
23	REF	11200 M50-0003	DO3 XOVER PLATE
22	REF	SO-017B7	O-RING
21	1	11711 P09-5613	HYDRAULIC BODY
20	2	11207	ROD SEAL
19	2	SO-014B7	O-RING
18			
17	1	11173 P09-5506	HYDRAULIC ROD
16	1	SO-902B7	O-RING
15	1	11167 P09-5201	AIR PISTON
14	1	10377	GLYD RING
13	1	SO-233B7	O-RING
12	2	11772	DOMEL PIN .43/16 x 5/8
11	2	10017 M04-1005	2-WAY AIR VLV ASSY
10	1	SO-006B7	O-RING
9	1	10271 P00-5212	SPACER, SHORT
8	1	10431	MUFFLER, 3/8 NPT
7	1	10659 P00-5211	SPOOL, AIR
6	1	SO-111B7	O-RING
5	1	SO-019B7	O-RING
4	1	10298 P00-5207	PILOT CAP
3	2	10-24 x 1.00	SOC HD CAP SCR
2	8	10393	HI COLLAR L'NUT, 5/16
1	4	5/16-18 x 4.00	SOC HD CAP SCR

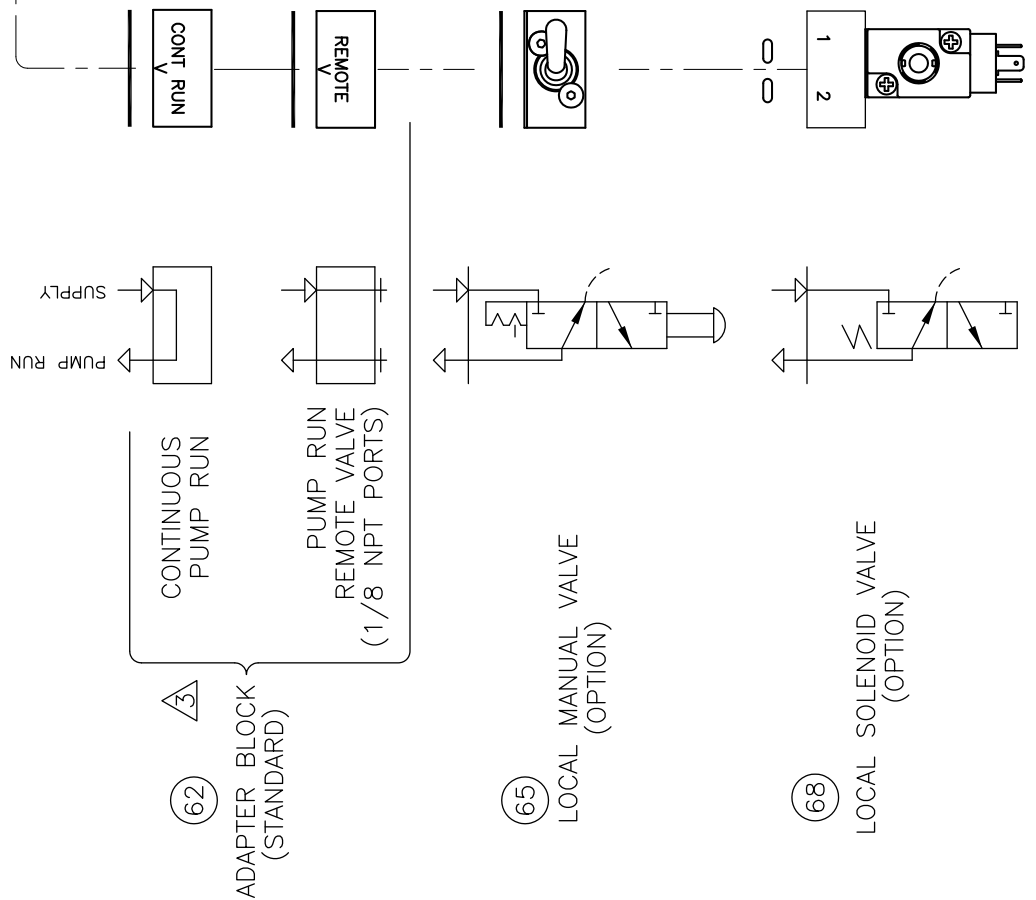
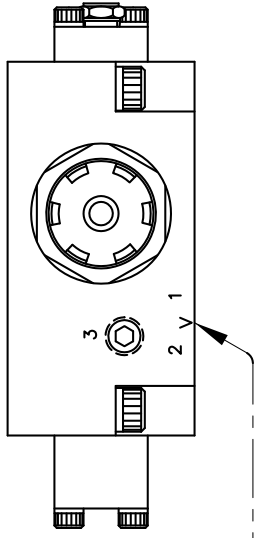
ITEM	QTY	PART NUMBER	DESCRIPTION
50	1A/R	11953	GREASE, WHT LITHIUM
49	1	10945 P10-5202	PLUG, REGULATOR CAVITY
48	REF	10016 P10-1202	REGULATOR ASSY
47	1	11418 M03-1020	CHECK VALVE
46	2	10-24 x .63	SOC HD CAP SCR
45	1	10299 P00-5208	SPOOL, CAP
44	1	10269 P00-5210	BUSHING, LONG
43	6	10629	TEE SEAL
42	5	10275 P00-5209	CAGE
41	1	11753	B-U RING, SOLID -012



REV	DESCRIPTION	BY	DATE
E	PIC CHG ITEM 68; DEL 61,63,64,66,67,69	WNI	4/14/11
F	PIC CHG 27; 31 WAS SO-015; 34 WAS 0.50	WNI	12/27/11

NOTES

- 1 PORT 3 IS COMMON TO PORT 2.
CONNECT PORT 3 TO REMOTE AIR PILOT OPERATED HYDRAULIC RELEASE VALVE
- 2 MOUNTING SCREWS AND GASKET/O-RINGS ARE FURNISHED FOR EACH OPTION
- 3 ROTATE ADAPTER BLOCK TO MATCH "V" STAMPED ON AIR CAP FOR THE DESIRED FUNCTION



VOLTAGE	ITEM 57	P/N
24 VDC	11837	V04-1003
120 VAC	11838	V04-1003
240 VAC	11919	V04-1003

ITEM	QTY	PART NUMBER	DESCRIPTION
70			
69			
68	REF	SEE CHART	SOL AIR VALVE ASSY
67			
66			
65	REF	10449 V04-1002	MAN TOGGLE SWITCH ASSY
64			
63			
62	REF	11235 P00-1206	BLOCK ASSY, ADAPTER
61			

ITEM	QTY	PART NUMBER	DESCRIPTION
INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460			
SCALE: 1/2		TITLE: PUMP ASSEMBLY.	
DWN BY: WNI		TASQ II SERIES, (INTEGRATED AIR REGULATOR)	
DATE: 10/10/06		REF: 60:1 RATIO	
SHT: 2	OF: 2	DWG NO: P09-1005	REV: F