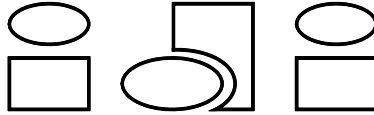


# THE TASQ™ LINE INTENSIFIER PUMP

## INSTALLATION, OPERATION & MAINTENANCE MANUAL



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**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:** \_\_\_\_\_

**Pump Model Code:** \_\_\_\_\_

**Parts & Repairs:** (Use the space below to document service history)

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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 either an integral, self-contained reservoir having a capacity of 40, 60, 80 or 120 cubic inch oil capacity or without a reservoir (the non reservoir version includes mounting brackets, pump-to-reservoir gasket and a 200 mesh low profile suction strainer). 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) ¼" fasteners.
2. Non Reservoir version: Drill the four (4) pump mounting holes and the three (3) pipe holes in the reservoir top per the dimensions shown on the enclosed "General Arrangement-Customer Mount Reservoir" drawing. Install your own "Suction" (3/8 NPT x length to suit) pipe into the pump suction port. Install your own "Return" (1/4 NPT x length to suit) pipe into the return port. Mount the pump to the reservoir top and install the furnished suction strainer to the bottom end of the suction pipe before attaching the reservoir top to the reservoir.

### 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<sup>®</sup>, Shell Tellus 32<sup>®</sup>, 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"> <li>• Check that supply air pressure exceeds 50 psi.</li> <li>• 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.</li> </ul>
Pump brings system up to normal operating pressure but "chugs" intermittently.	<ul style="list-style-type: none"> <li>• Check all system components for leaks, including valve or cylinder that may be bypassing internally.</li> <li>• 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).</li> </ul>
Pump will not cycle Pump "short" cycles	<ul style="list-style-type: none"> <li>• Air limit valve in Air Cap failed. Replace.</li> <li>• Air limit valve in Hydraulic Body failed. Replace.</li> </ul>
Pump cycles but does not generate pressure.	<ul style="list-style-type: none"> <li>• Pump is airbound; check fluid reservoir level and bleed.</li> <li>• Pump internal check valves are jammed with foreign material; remove and clean; be sure that reservoir does not contain any foreign material.</li> </ul>
Pump Air Cap leaking air continuously.	<ul style="list-style-type: none"> <li>• Leak from muffler; spool valve seals worn or contaminated; clean/replace seals.</li> <li>• Leak from 4-way air valve cap; stem seals worn or contaminated; clean/replace cap.</li> </ul>

## **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.

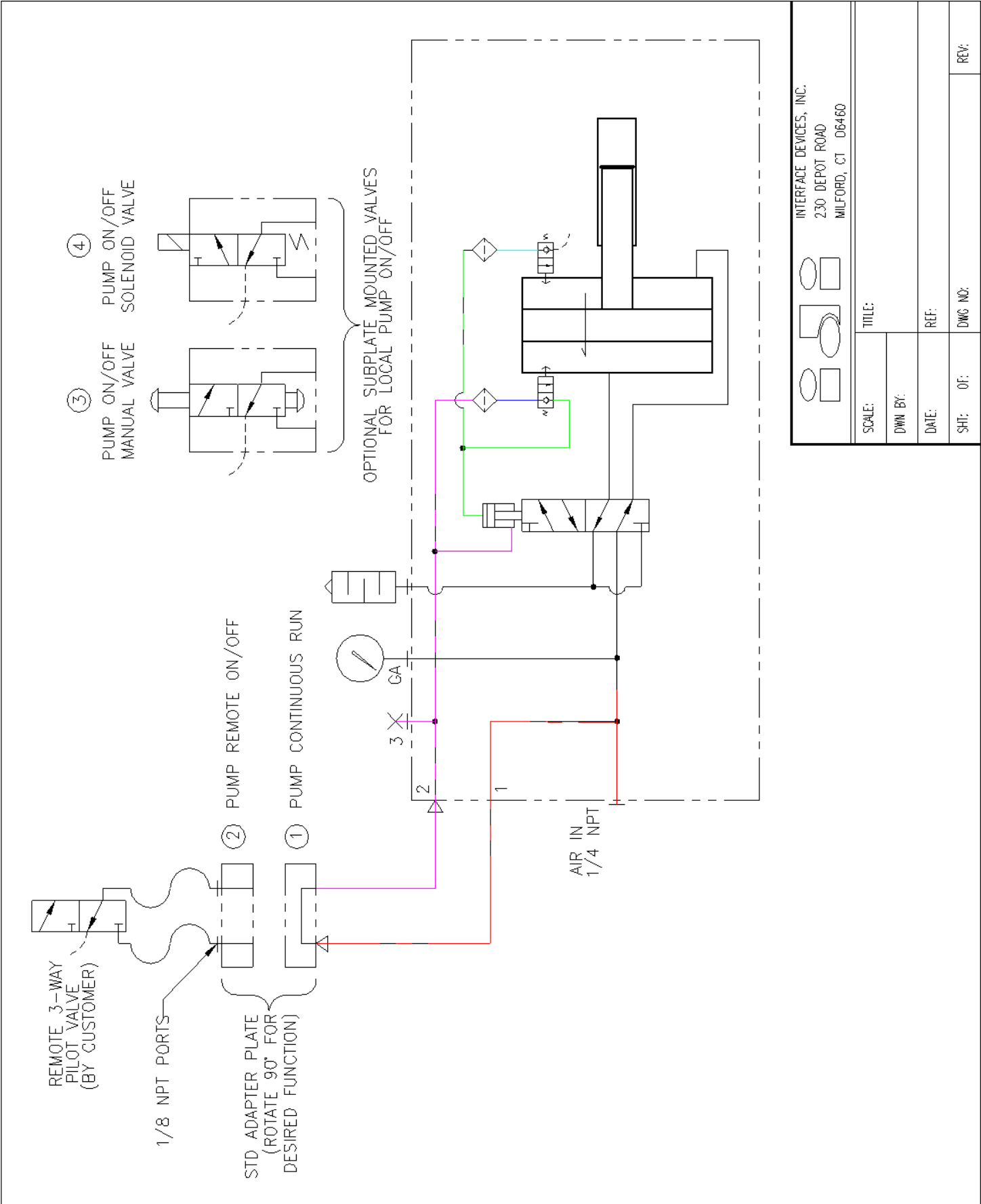
- C. Install the four (4) 5/16 x 4.5 socket head cap screws (with lock washers) through the air cap and air body and thread into the hydraulic body. Cross torque all four cap screws to 11 ft. lbs.

### **SECTION 5.0: WARRANTY STATEMENT**

INTERFACE DEVICES, INC. (hereafter, the factory) warrants it's 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 may discharge it's 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 warrantee supersedes and is in lieu of all other remedies and warranties, including the implied warranties of merchantability and fitness, and liability for negligence. IN NO EVENT SHALL THE FACTORY BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL LOSSES, EXPENSES OR DAMAGES.

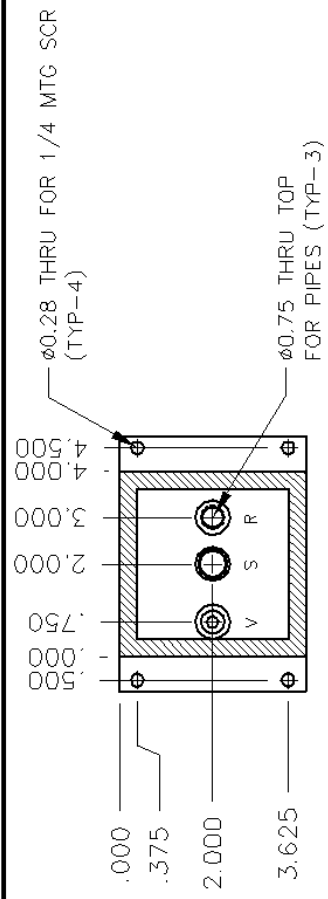


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MILFORD, CT 06460

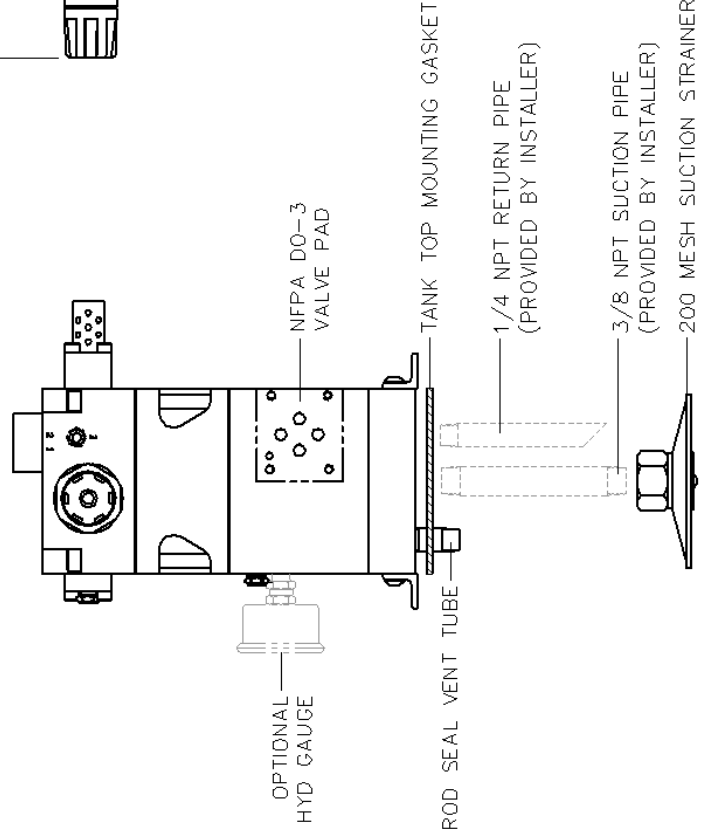
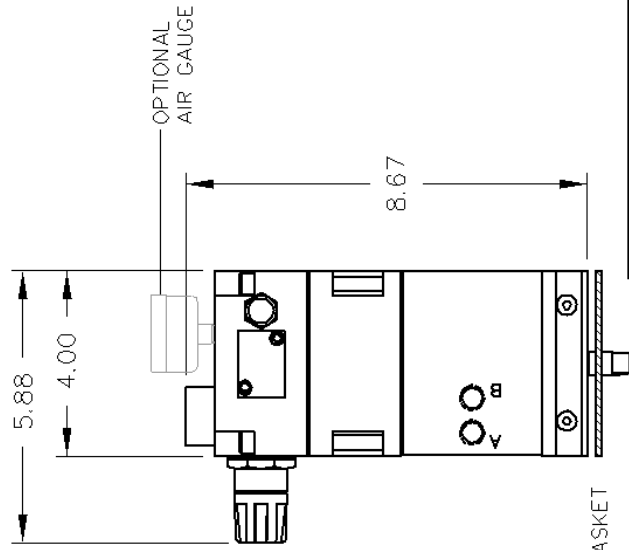
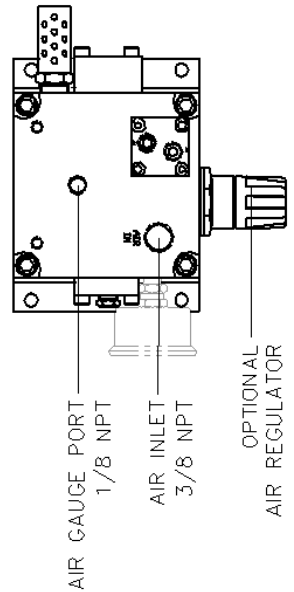
SCALE:	TITLE:
DWN BY:	REF:
DATE:	SHT: OF:
DWG NO:	REV:



REV	DESCRIPTION	BY	DATE
A	IDENTIFIED OPTIONAL COMPONENTS	WNI	11/18/04
B	PICTURE CHANGE: ADDED OPTIONAL AIR GAUGE	WNI	1/31/05



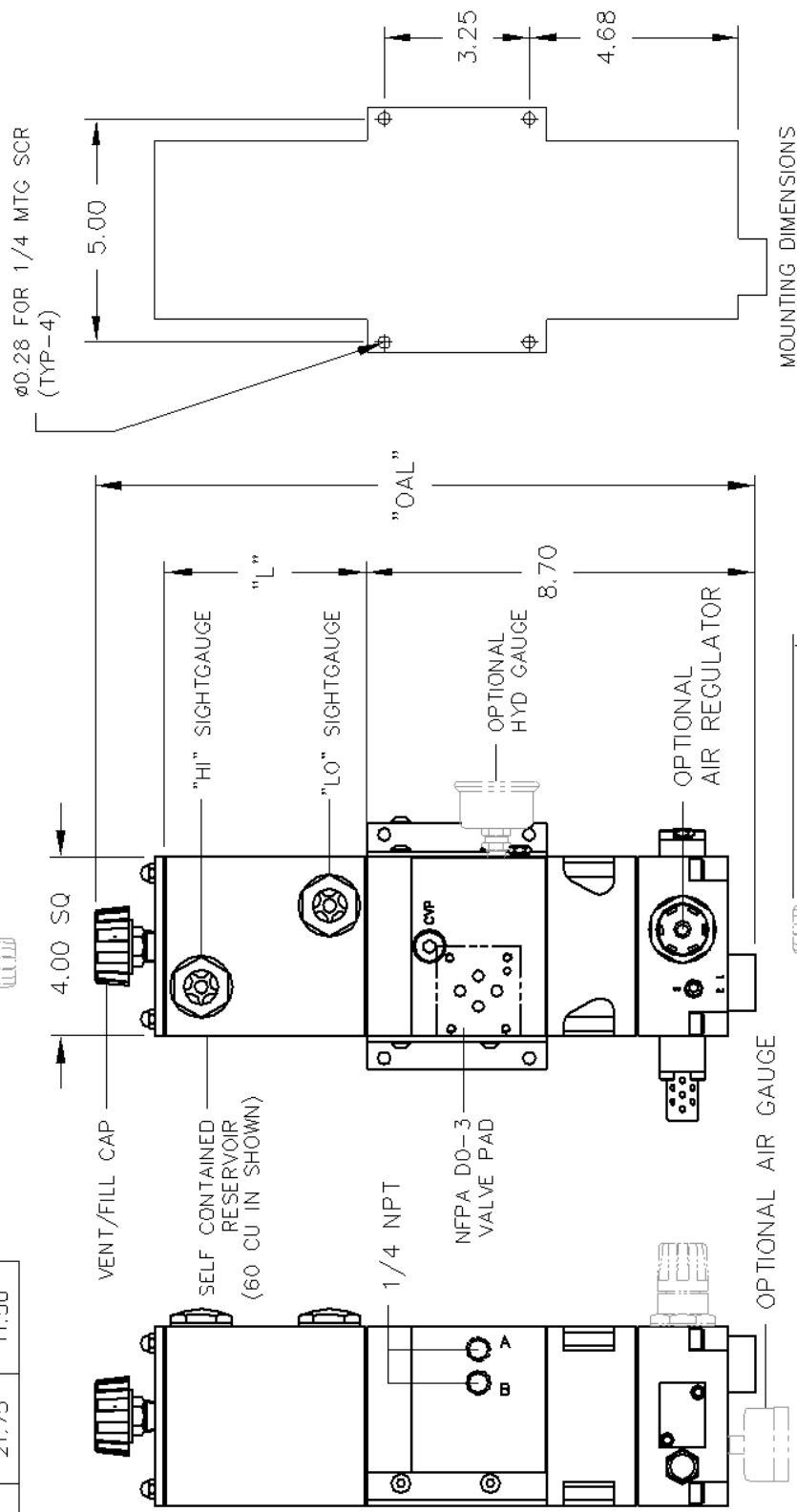
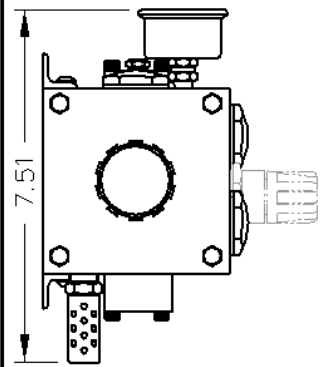
PNEUMATIC & HYDRAULIC CONNECTIONS:  
 "AIR IN" PORT: 3/8 NPT  
 "A" & "B" CYL PORTS: 1/4 NPT.  
 HYD "GA" PORTS: 1/8 NPT



		INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460	
SCALE: 1/4	TITLE: GENERAL ARRANGEMENT, TASQ SERIES PUMP, CUSTOMER MOUNT RESERVOIR	DWN BY: WNI	REF: Integral Air Regulator
DATE: 8/12/04		SHT: 1 OF: 1	DWG NO: P09-0005
			REV: B

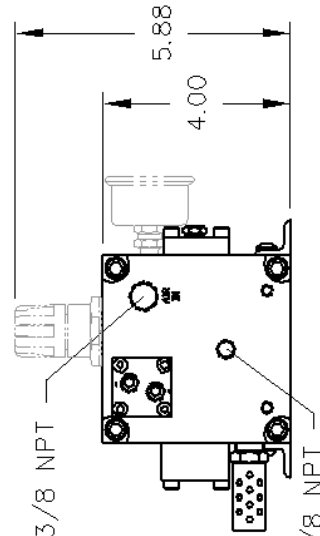
REV	DESCRIPTION	BY	DATE
A	ADDED BOTTOM VIEW: IDENTIFIED OPTIONAL COMPONENTS	WNI	11/18/04
B	IDENTIFIED OPTIONAL AIR REGULATOR	WNI	1/20/05
C	PICTURE CHANGE: SIGHT GAUGE ORIENTATION	WNI	1/31/05

VOLUME (CU IN)	OAL	L
40	13.25	3.00
60	14.75	4.50
80	16.00	5.75
100	17.50	7.25
120	19.00	8.75
160	21.75	11.50



MOUNTING DIMENSIONS

		INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460
SCALE: 1/4	TITLE: GENERAL ARRANGEMENT, TASQ SERIES PUMP	
DWN BY: WNI	SELF CONTAINED RESERVOIR	
DATE: 8/11/04	REF: Integral Air Regulator	
SHI:1 OF:1	DWG NO: P09-0006	REV: C



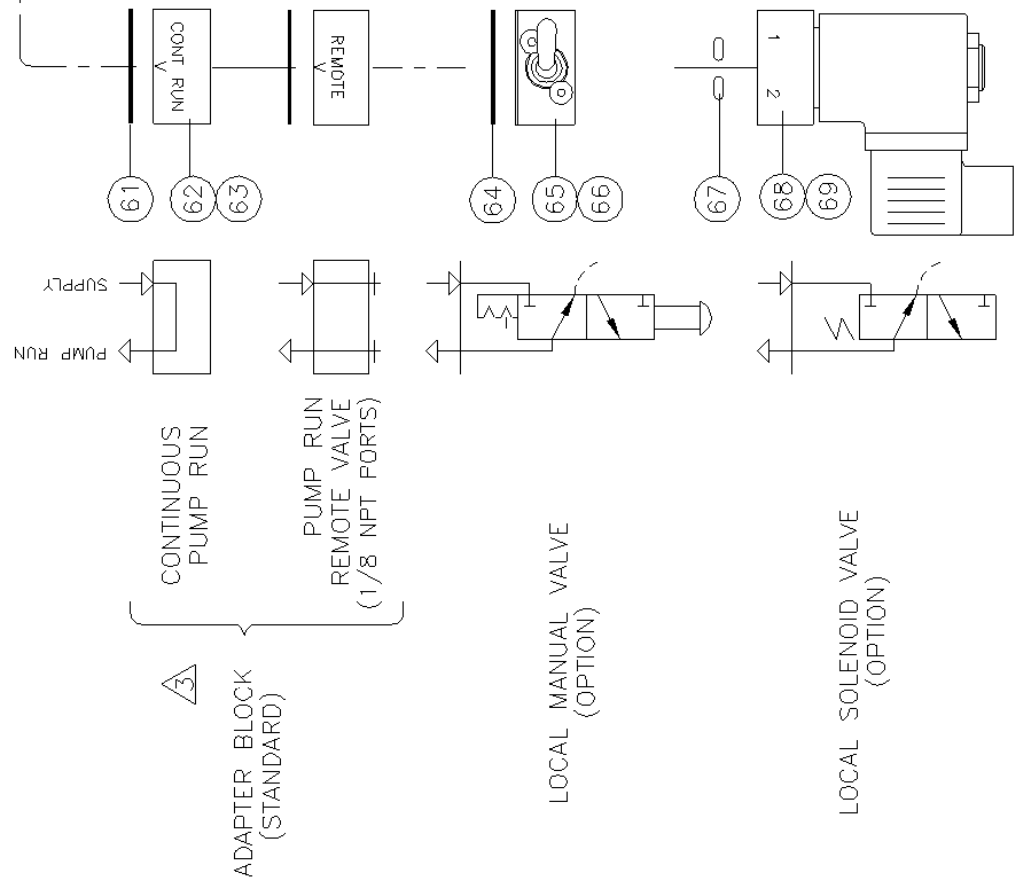
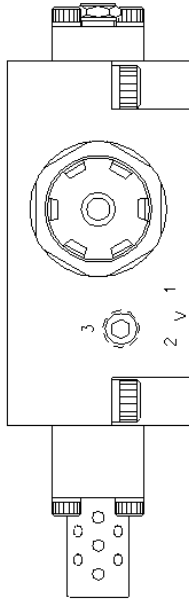
PNEUMATIC & HYDRAULIC CONNECTIONS:  
 "AIR IN" PORTS: 3/8 NPT  
 "A" & "B" CYL PORTS: 1/4 NPT.  
 AIR & HYD "GA" PORTS: 1/8 NPT



REV	DESCRIPTION	BY	DATE
A	SHEET 1 ONLY	WNI	1/31/05

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

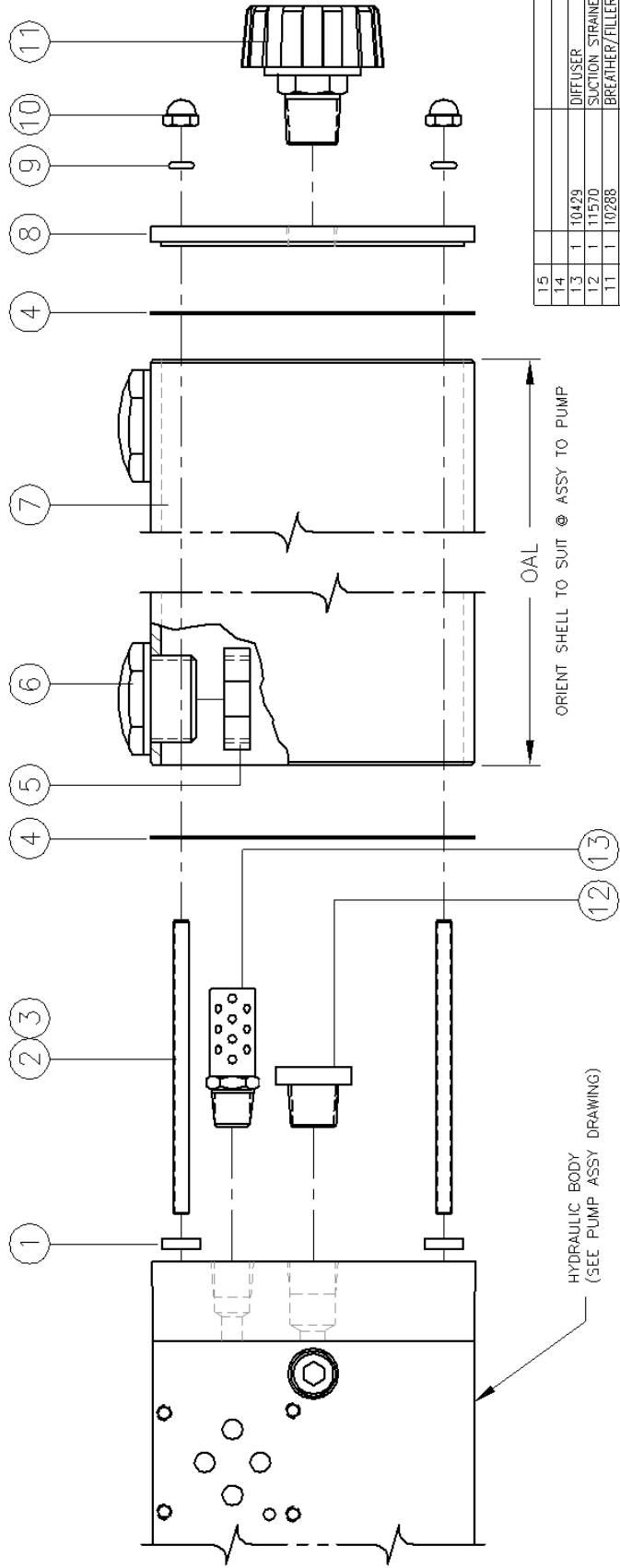


VOLTAGE	ITEM	38	P/N
110 VAC			10727
24 VDC			10728

ITEM	QTY	PART NUMBER	DESCRIPTION
70			
69	2	M4 x 20	SCREW, FLAT HEAD
68	1	SEE CHART	SOL AIR VALVE
67	2	S0-006B7	O-RING
66	2	M4 x 20	SCREW, FLAT HEAD
65	1	10449	MAN TOGGLE SWITCH
64	1	10333	GASKET
63	2	M4 X 20	SCREW, FLAT HD
62	1	10100	BLOCK, ADAPTER
61	1	10333	GASKET

		INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460	
SCALE: 2X	TITLE: PUMP ASSEMBLY.		
DWN BY: WNI	TASQ SERIES, (INTEGRATED AIR REGULATOR)		
DATE: 8/11/04	REF: 20: 1 THRU 60:1 RATIO		
SHF: 2 OF: 2	DWG NO: P09-1002		REV: A

REV	DESCRIPTION	BY	DATE
A	PICTURE CHANGE, ITEM 12 WAS P/A 11258	WHL	1/25/05



ASSEMBLY PART NO	VOLUME (CU IN)	OAL	RESERVOIR SHELL PART NO	STUD SIZE (4) REQ'D	SIGHTGAUGE (2) REQ'D	LOCKNUT (2) REQ'D
11259	40	3.00	10590	10-24 x 3.62	10363	3/4-16 NF
11260	60	4.50	10592	10-24 x 5.12	10363	3/4-16 NF
11261	80	5.75	10593	10-24 x 6.38	10364	10443
11262	100	7.25	10595	10-24 x 7.88	10364	10443
11263	120	8.75	10852	10-24 x 9.38	10364	10443
11264	160	11.50	10596	10-24 x 12.12	10364	10443

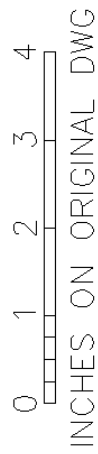
ITEM	QTY	PART NUMBER	DESCRIPTION
15			
14			
13	1	10429	DIFFUSER
12	1	11570	SUCTION STRAINER
11	1	10288	BREATHER/FILLER CAP
10	4	10-24 NC	ACORN NUT
9	4	50-00887	O-RING
8	1	10504	COVER, RESERVOIR
7	1	SEE TABLE	RESERVOIR SHELL
6	2	SEE TABLE	SIGHT GAUGE
5	2	SEE TABLE	LOCKNUT, SIGHT GAUGE
4	2	10338	GASKET, RESERVOIR
3	A/R #242		LOCTITE
2	4	SEE CHART	STUD
1	4	10-24 NC	ROUND JAM NUT

INTERFACE DEVICES, INC.  
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SIZE: N/A  
MIL RESERVOIR ASSY, SELF CONTAINED, 40 THRU 120 CU IN

DATE: 2/25/03  
REV: TASQ Series Pumps

DMG NO: P09-1901  
SHEET 1 OF 1  
REV: A



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