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 warrantee 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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5.0 DRAWINGS
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) ¼” 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:

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>CORRECTIVE ACTION</th>
</tr>
</thead>
</table>
| Pump will not cycle after extended no-flow period. | • 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. | • 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 | • Air limit valve in Air Cap failed. Replace.  
• Air limit valve in Hydraulic Body failed. Replace. |
| Pump cycles but does not generate pressure. | • 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. | • 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.
STANDARD PAD OPTIONS
IF DIRECTIONAL VALVE IS NOT USED

CONNECT TO PNEU PORT 3)

2 CROSS OVER PLATE WITH APO N.O. DUMP VALVE
(USED IN CONJUNCTION WITH PUMP ON/OFF VALVE
FOR 3-WAY FUNCTION)

1 CROSS OVER PLATE
(USE A PORT FOR PRESSURE AND B PORT FOR TANK)
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.

**Diagram:****

- **Continuous Pump Run**
- **Remote Valve (1/8 NPT Ports)**
- **Local Manual Valve (Option)**
- **Local Solenoid Valve (Option)**

**Table:**

<table>
<thead>
<tr>
<th>VOLTAGE</th>
<th>ITEM 57 P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 VDC</td>
<td>11837 V04-1003</td>
</tr>
<tr>
<td>120 VAC</td>
<td>11838 V04-1003</td>
</tr>
<tr>
<td>240 VAC</td>
<td>11919 V04-1003</td>
</tr>
</tbody>
</table>

**Options:**

- 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

**Technical Details:**

- SCALE: 1/2
- TITLE: PUMP ASSEMBLY, TASQ SERIES, (INTEGRATED AIR REGULATOR)
- DATE: 10/10/06
- REF: 5:1 THRU 45:1 RATIO
- SHH: 2 OF 2
- DWG NO: P09-1004
- REV: E

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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

CONTINUOUS
PUMP RUN

REMOTE VALVE
(1/8 NPT PORTS)

LOCAL MANUAL VALVE
(OPTION)

LOCAL SOLENOID VALVE
(OPTION)

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

OPTION

OPTION

STD

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

SCALE: 1/2

TITLE: PUMP ASSEMBLY.
TASQ II SERIES,
(INTEGRATED AIR REGULATOR)

DWN BY: WNI

DATE: 10/10/06

REF: 60:1 RATIO

REV: F

SH: 2 OF 2

DWG NO: P09-1005