

ENB-04, ENB-05, ENB-10 Gas Booster

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: _____

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.**

ENB-40, ENB-05, ENB-10 GAS BOOSTER
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1.0 INSTALLATION

1.1 MOUNTING:

The booster comes standard with foot mounting brackets at each end of the pump (for 1/4 inch screws).

The unit may be mounted vertically (wall mount) or horizontally (floor mount).

1.2 CONNECTIONS:

Connect FILTERED shop air to the 1/2 npt "AIR IN" port on the pump (No Air Regulator or Lubricator is required). Maximum inlet drive pressure is 125 psi.

Connect your gas source to the ¼ npt "IN" port. Minimum/Maximum gas inlet pressures are listed below.

ENB-04	100-320 psi
ENB-05	100-400 psi
ENB-10	100-800 psi

Connect your high pressure circuit to the ¼ npt "OUT" port on the pump.

1.3 STARTUP:

Turn on the regulated gas supply to the pump.

Starting with the integral air regulator (on the pump) backed-out all the way, slowly increase the pressure by turning the regulator knob clockwise. The pump will start to cycle and the "OUT" gas pressure will rise.

The pump will stall when circuit pressure reaches the regulated air pressure times the pump ratio (4, 5 or 10). The pump will maintain this pressure even if there is some circuit leakage. At this time check for and fix any circuit leaks since this only causes unnecessary air/gas consumption and wear and tear on the pump.

2.0 MAINTENANCE:

2.1 ROUTINE MAINTENANCE:

The only routine maintenance required is to re-grease the main air spool (item 10) and the six "T-seals" (item 15) every 6 months.

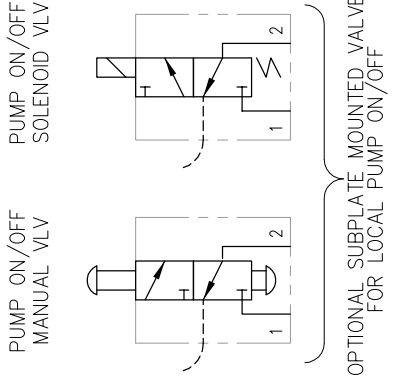
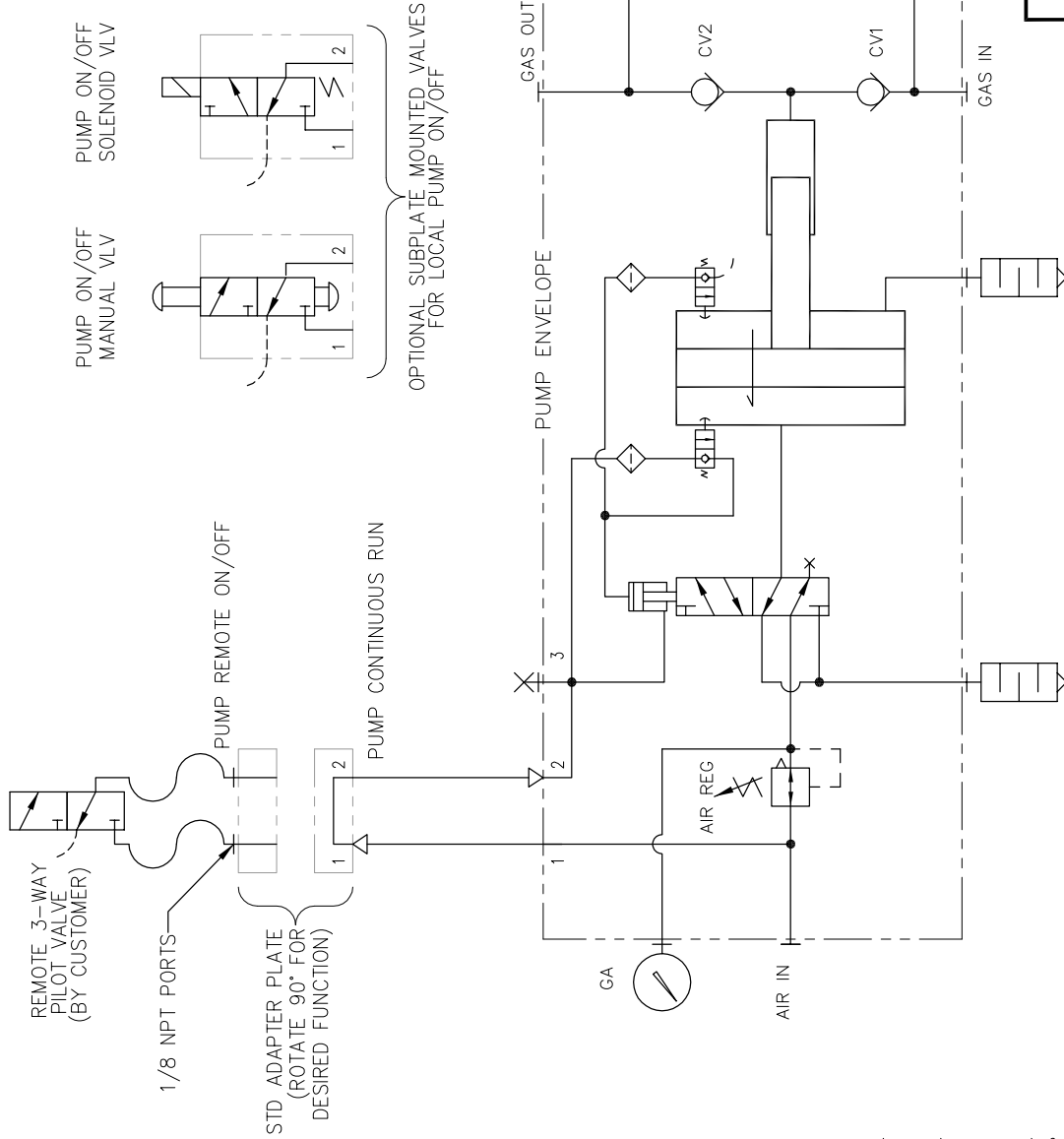
2.2 TROUBLESHOOTING GUIDE: See following table on page 4.

ENB-04 GAS BOOSTER TROUBLESHOOTING GUIDE
(Refer to enclosed Exploded View Drawing)

SYMPTOM	PROBABLE CAUSE(S)	REMEDY
Pump will not cycle. (Only regulated gas pressure at output)	No air supply to pump. Pump air regulator set too low.	Look for and fix. Increase setting.
Pump will <u>still</u> not cycle (Only regulated gas pressure at output)	Four-way air reciprocating valve spool stuck at mid-position. After trying remedy above, spool still sticks:	Disconnect/Reconnect air supply (Re-sets air spool to end position.) Manually push spool to far end with probe through hole in item 14 "Spool Stop Cap" If stuck or requires excessive force, disassemble air valve assembly. Inspect for contamination or mechanical bind. Repair or replace, lubricate seals with water-proof grease.
Pump makes one cycle, then stops.	Faulty item 2 "2-way air valve" (Broken, leaks or contaminated).	Repair or replace.
Pump cycles constantly when "dead-headed".	External leak at pump or downstream high pressure circuit. Stuck open or contaminated item 18 "Check Valve" cartridge (2 places). Internal leak in pump.	Look for and correct. Clean or replace. Check all dynamic and static seals and gaskets. Replace if necessary.

For further assistance call INTERFACE DEVICES, INC. at 203/878-4648.

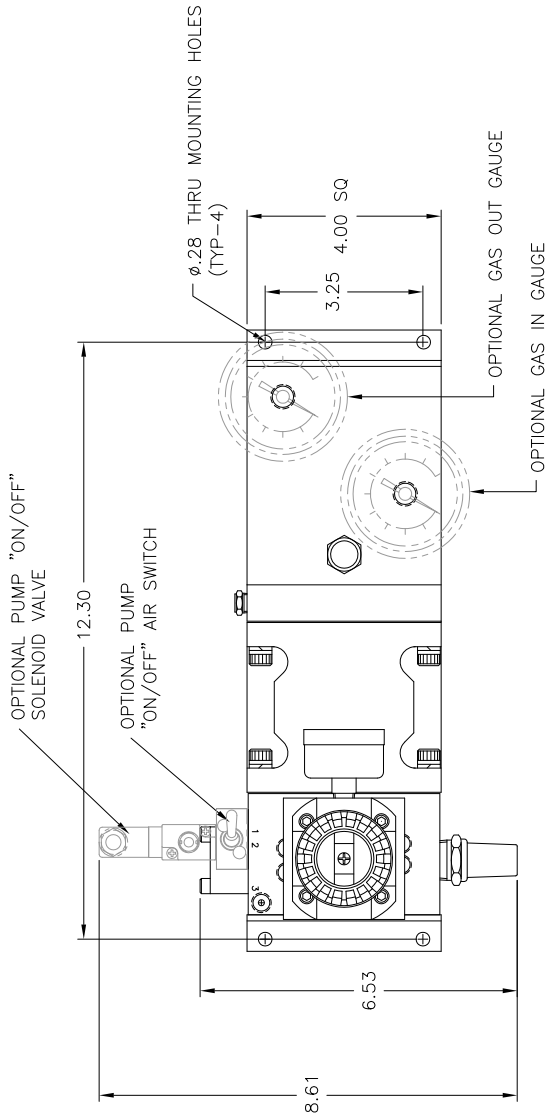
REV	DESCRIPTION	BY	DATE
-	FORMER DWG NO PS-EAB00X	WNI	1/12/06
A	ADD OPTIONAL GAUGES, ON/OFF OPTIONS	WNI	3/21/06



NOTES
1 COMPONENTS SHOWN OUTSIDE PUMP ENVELOPE
ARE OPTIONAL

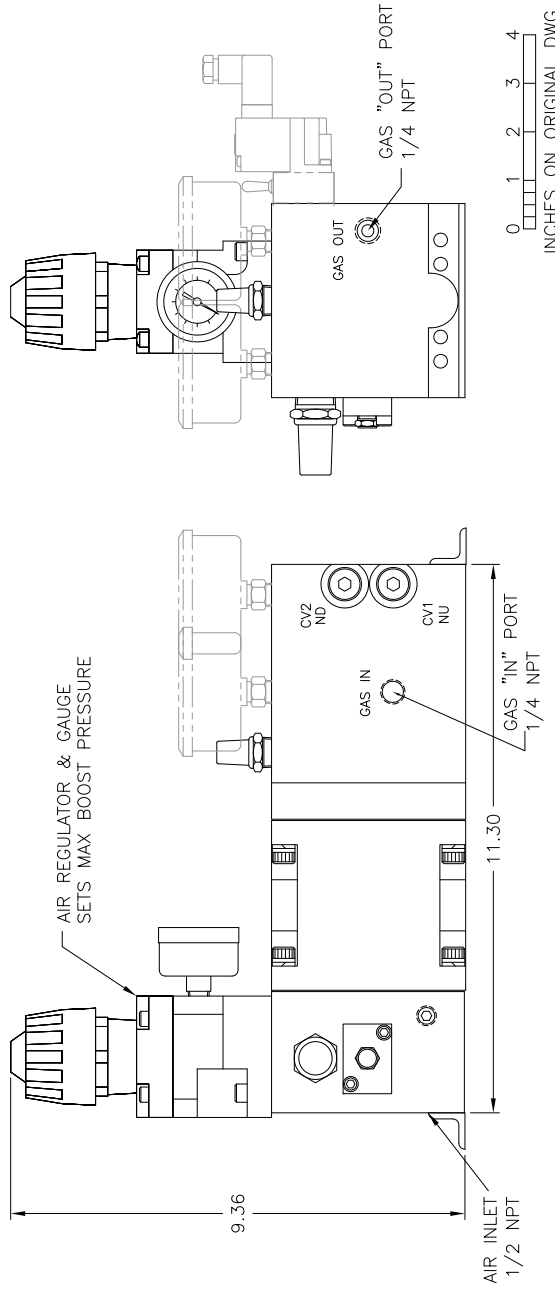
		INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460
SCALE: N/A	TITLE: PNEUMATIC SCHEMATIC, SINGLE ACTING GAS BOOSTER	
DWN BY: WNI	REF: ENB-04, ENB-05, ENB-10	
DATE: 2/5/02	DWG NO: P31-4001	
SHT: 1 OF: 1	REV: A	

REV	DESCRIPTION	BY	DATE
A	MADE GENERIC DWG; ADDED "OPTIONAL" COMPONENTS	WNI	3/17/06
B	PICTURE CHANGE: REPOSITION AIR IN GAUGE	WNI	2/24/12
C	PICTURE CHANGE: REMOVE P/L	WNI	1/24/14



ENB00-0-0-0-0

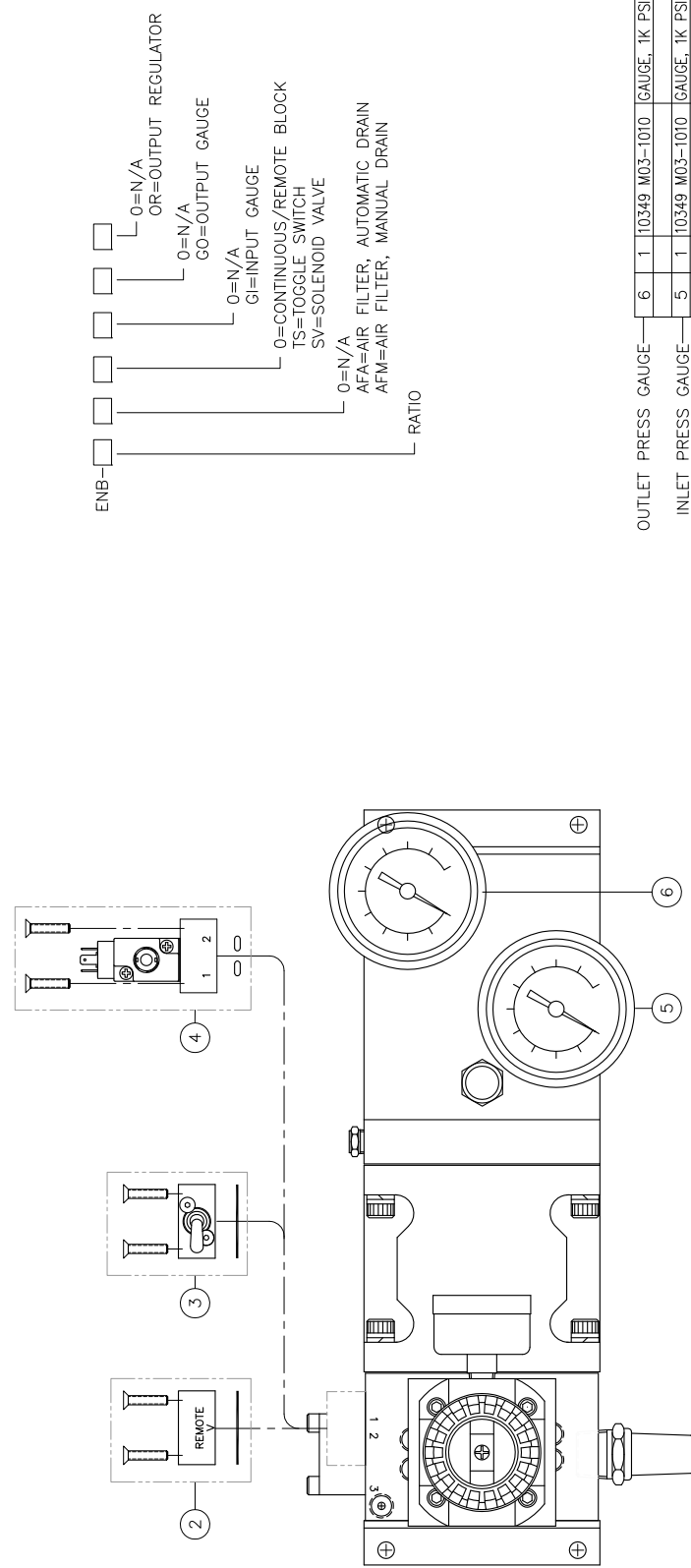
- 0= NO GAUGE
- GO=OUTLET GAUGE
- 0= NO GAUGE
- GI=INLET GAUGE
- 0= NO ON/OFF (CROSSOVER BLOCK)
- TS=ON/OFF TOGGLE VALVE
- SV=ON/OFF SOLENOID VALVE
- SQ=ON/OFF SEQUENCE VALVE
- 0= NO FILTER
- AFA=AIR FILTER, AUTO DRAIN
- AFM=AIR FILTER, MANUAL DRAIN
- PUMP RATIO: 04, 05, 10



NOTES:
 1 OPTIONAL COMPONENTS ARE SHOWN IN PHANTOM

SCALE: NONE	TITLE: GENERAL ARRANGEMENT, GAS BOOSTER	DATE: 1/11/06	DWG NO: P.31-0002
DWG BY: WNI	REF: 4:1, 5:1, & 10:1	REV: C	
INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460			

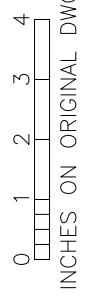
REV	DESCRIPTION	BY	DATE
A	NEW PART NUMBERS; NOW ASSEMBLIES	WNI	4/18/11
B	RENUMBERED P/L; ADDED AIR FILTER; ADDED 1K INLET GAUGE	WNI	1/24/14
C	ADDED MODEL CODE CHART; DEL 160 PSI INLET GAUGE OPTION	WNI	12/19/14



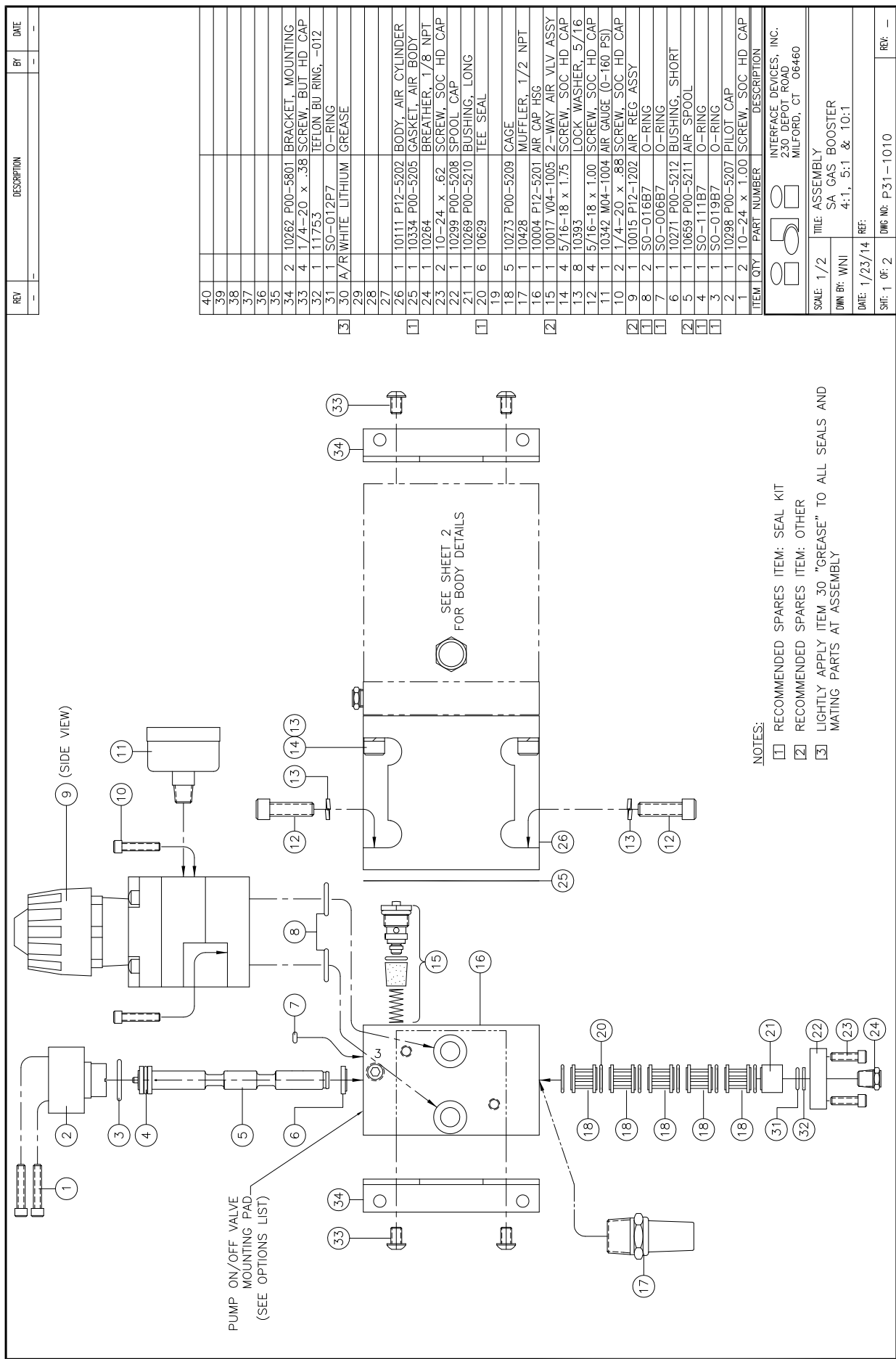
NOTES:
1 PARTS SHOWN ARE MOST COMMON OPTIONS
2 THIS DRAWING IS FOR IDENTIFYING REPLACEMENT PARTS

ITEM	QTY	PART NUMBER	DESCRIPTION
6	1	10349 M03-1010	GAUGE, 1K PSI
5	1	10349 M03-1010	GAUGE, 1K PSI
4	1	11918 V04-1003	SOL AIR VALVE, 220VAC
		11836 V04-1003	SOL AIR VALVE, 110VAC
		11835 V04-1003	SOL AIR VALVE, 24VDC
3	1	10743 V04-1001	MAN TOGGLE SWITCH
2	1	10100 P00-5206	BLOCK ASSY, ADAPTER
1	1	11196 M04-1022	AIR FILTER, MAN DR
		12051 M04-1022	AIR FILTER, AUTO DR

SCALE	TITLE
1/2	OPTIONAL COMPONENTS, GAS BOOSTER
DWN BY: WNI	
DATE: 4/17/06	REF: 4-1, 5-1, 10-1
SHEET 1 OF 1	DWG NO: P31-9005



INTERFACE DEVICES, INC.
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REV	DESCRIPTION	BY	DATE

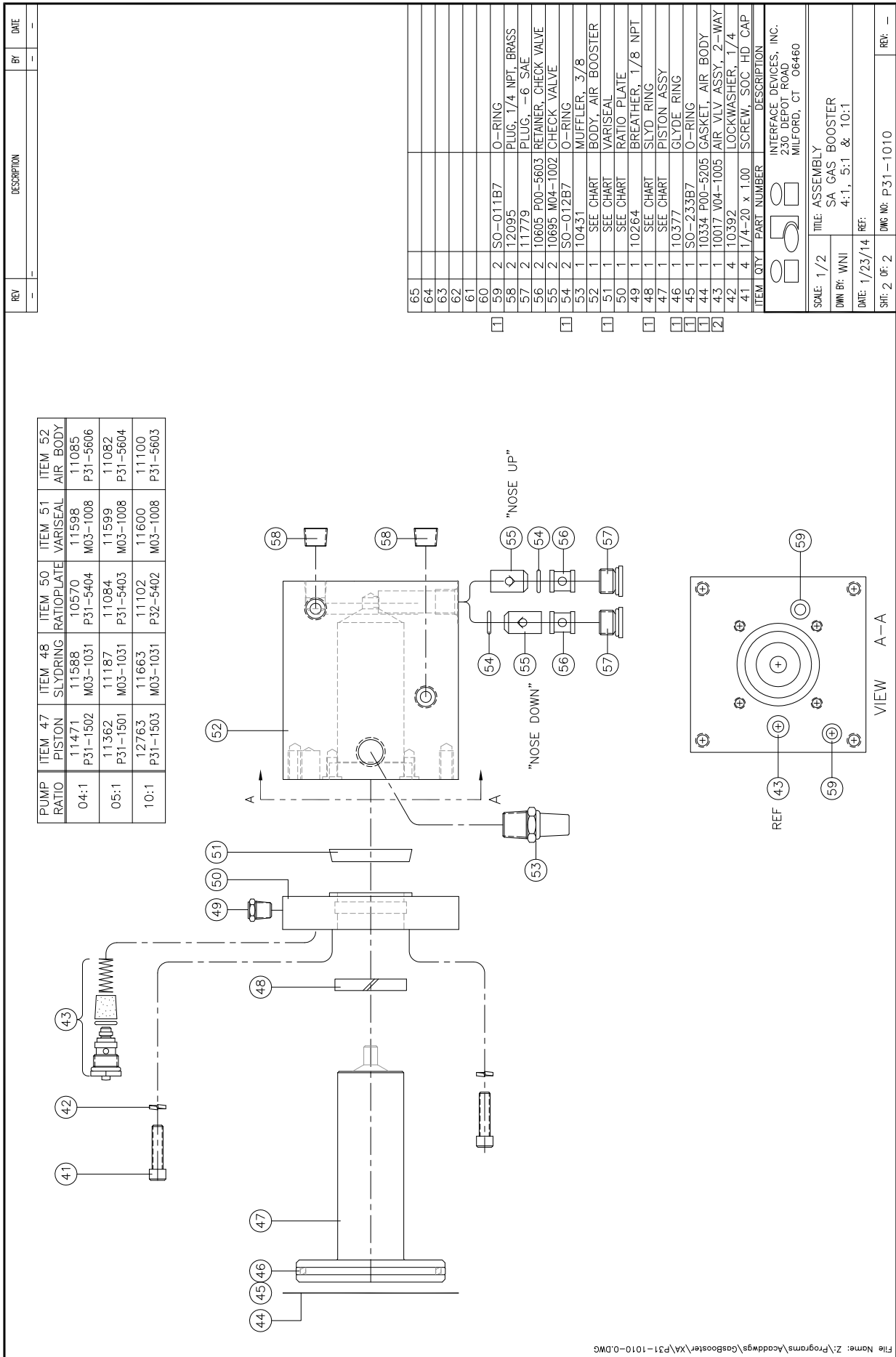
40			
39			
38			
37			
36			
35			
34	2	10262	P00-5801 BRACKET, MOUNTING
33	4	1/4-20 x .38	SCREW, BUT HD CAP
32	1	11753	TEFLON BU RING, -012
31	1	SO-012P7	O-RING
30	A/R	WHITE LITHIUM GREASE	
29			
28			
27			
26	1	10111	P12-5202 BODY, AIR CYLINDER
25	1	10334	P00-5205 GASKET, AIR BODY
24	1	10264	BREATHER, 1/8 NPT
23	2	10-24 x .62	SCREW, SOC HD CAP
22	1	10299	P00-5208 SPOOL CAP
21	1	10269	P00-5210 BUSHING, LONG
20	6	10629	TEE SEAL
19			
18	5	10273	P00-5209 CAGE
17	1	10428	MUFFLER, 1/2 NPT
16	1	10004	P12-5201 AIR CAP HSG
15	1	10017	V04-1005 2-WAY AIR VLV ASSY
14	4	5/16-18 x 1.75	SCREW, SOC HD CAP
13	8	10393	LOCK WASHER, 5/16
12	4	5/16-18 x 1.00	SCREW, SOC HD CAP
11	1	10342	M04-1004 AIR GAUGE (0-160 PSI)
10	2	1/4-20 x .88	SCREW, SOC HD CAP
9	1	10015	P12-1202 AIR REG ASSY
8	2	SO-016B7	O-RING
7	1	SO-006B7	O-RING
6	1	10271	P00-5212 BUSHING, SHORT
5	1	10659	P00-5211 AIR SPOOL
4	1	SO-011B7	O-RING
3	1	SO-019B7	O-RING
2	1	10298	P00-5207 PILOT CAP
1	2	10-24 x 1.00	SCREW, SOC HD CAP

ITEM QTY PART NUMBER DESCRIPTION

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

SCALE: 1/2
 TITLE: ASSEMBLY
 SA GAS BOOSTER
 DWG BY: WNI
 4:1, 5:1 & 10:1
 DATE: 1/23/14
 REF:
 SHE: 1 OF: 2
 DWG NO: P.31-1010
 REV: -

- NOTES:
- 1 RECOMMENDED SPARES ITEM: SEAL KIT
 - 2 RECOMMENDED SPARES ITEM: OTHER
 - 3 LIGHTLY APPLY ITEM 30 "GREASE" TO ALL SEALS AND MATING PARTS AT ASSEMBLY



PUMP RATIO	ITEM 47 PISTON	ITEM 48 SLYDRING	ITEM 50 RATIOPLATE	ITEM 51 VARISEAL	ITEM 52 AIR BODY
04:1	11471 P31-1502	11588 M03-1031	10570 P31-5404	11598 M03-1008	11085 P31-5606
05:1	11362 P31-1501	11187 M03-1031	11084 P31-5403	11599 M03-1008	11082 P31-5604
10:1	12763 P31-1503	11663 M03-1031	11102 P32-5402	11600 M03-1008	11100 P31-5603

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