

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.

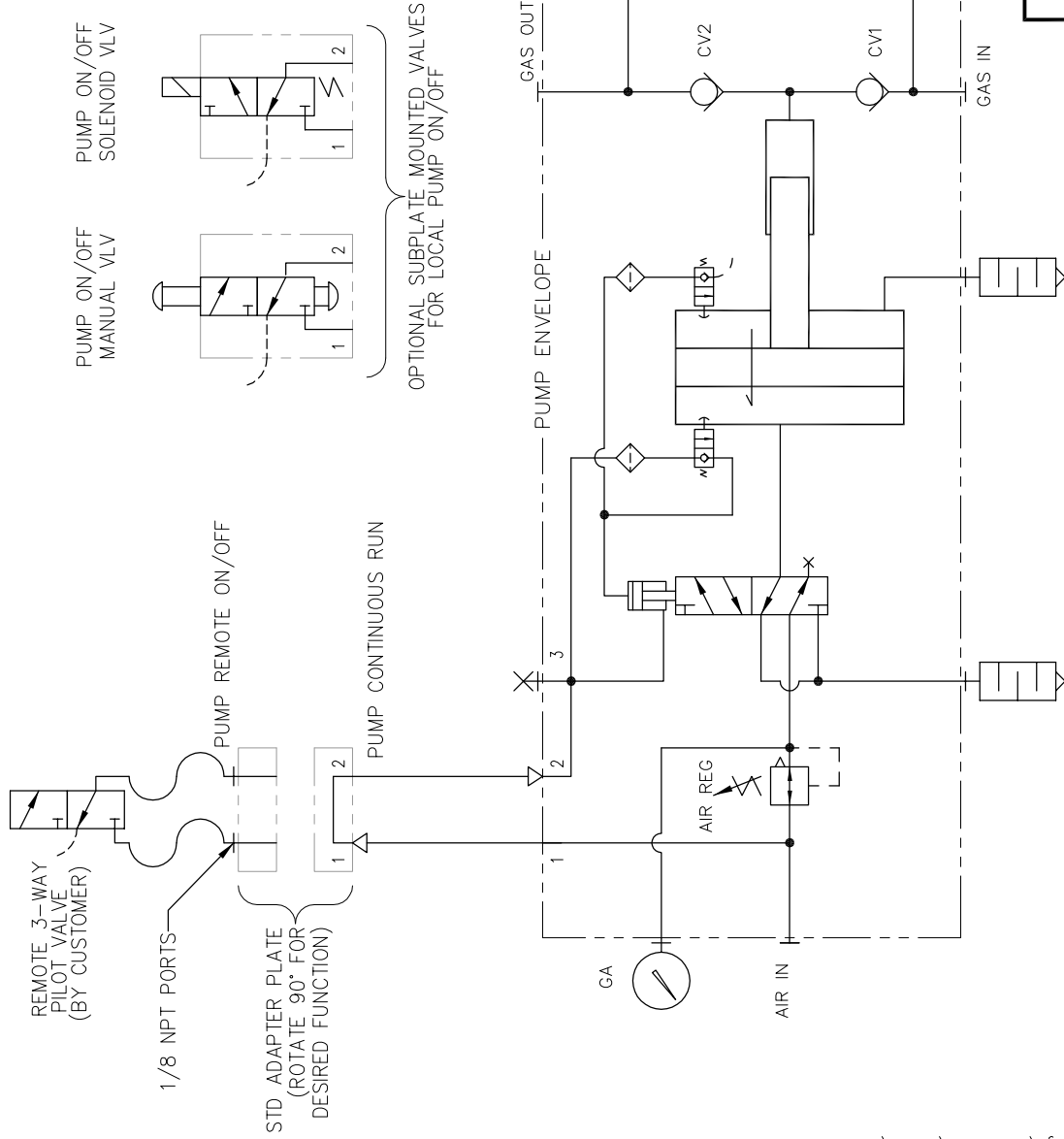
2.2 TROUBLESHOOTING GUIDE: See following table on page 4.

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.

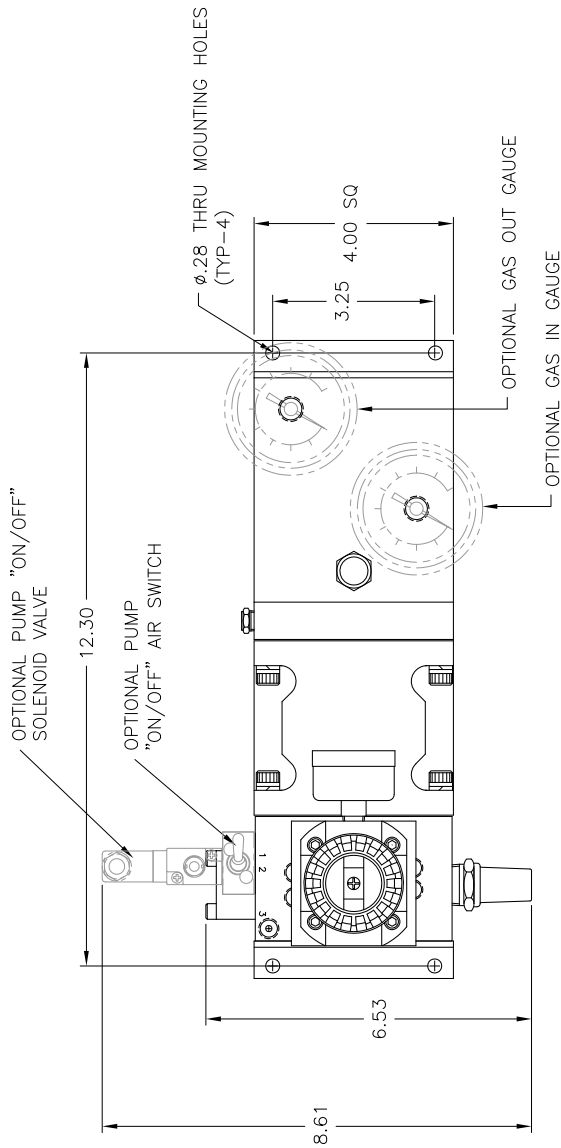
REV	DESCRIPTION	BY	DATE
-	FORMER DWG NO PS-EAB00X	WNI	1/12/06
A	ADD OPTIONAL GAUGES, ON/OFF OPTIONS	WNI	3/21/06



NOTES
 1 COMPONENTS SHOWN OUTSIDE PUMP ENVELOPE ARE OPTIONAL

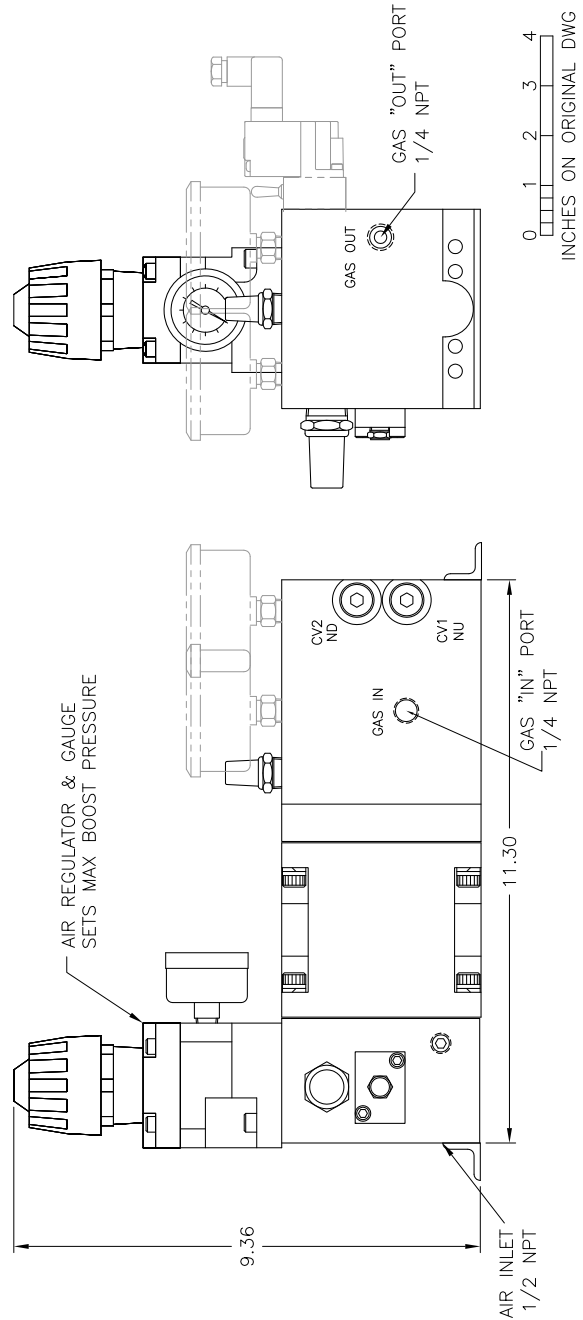
SCALE: N/A	INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460
DWN BY: WNI	
DATE: 2/5/02	TITLE: PNEUMATIC SCHEMATIC, SINGLE ACTING GAS BOOSTER
SHT:1 OF:1	REF: ENB-04, ENB-05, ENB-10
	DWG NO: P 31-4001 REV: A

REV	DESCRIPTION	BY	DATE
A	MAKE 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



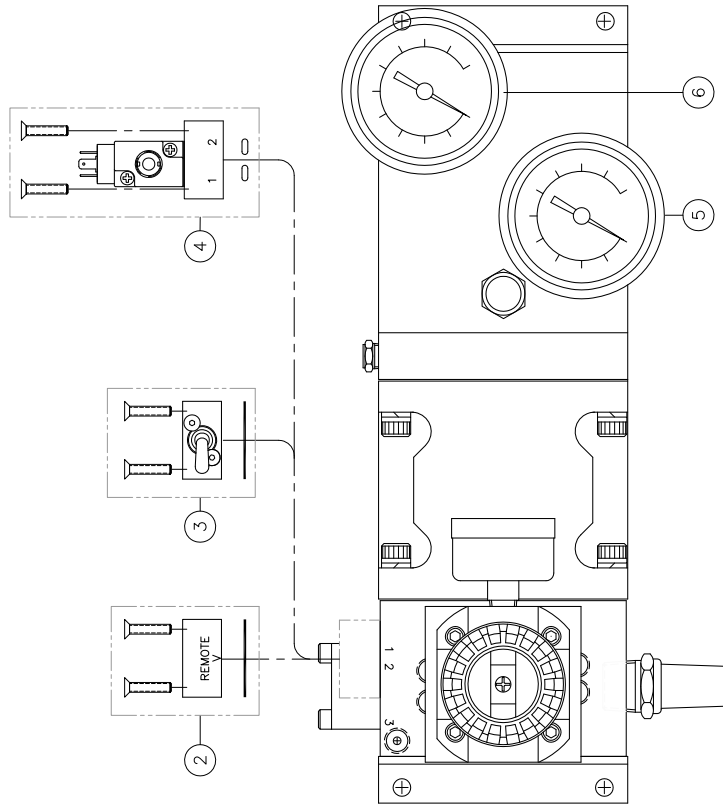
- ENB00-0-0-0-0
- 0= NO GAUGE
 - CO=OUTLET GAUGE
 - 0= NO GAUGE
 - GI=INLET GAUGE
 - 0= NO ON/OFF (CROSSOVER BLOCK)
 - TS=ON/OFF TOGGLE VALVE
 - SV=ON/OFF SOLENOID VALVE
 - SQ=ON/OFF SEQUENCE VALVE
 - 0= NO FILTER
 - AF=AIR FILTER, AUTO DRAIN
 - AFM=AIR FILTER, MANUAL DRAIN
- PUMP RATIO: 04, 05, 10

NOTES:
1 OPTIONAL COMPONENTS ARE SHOWN IN PHANTOM



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

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

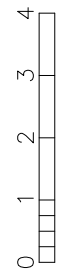


NOTES:
 1 PARTS SHOWN ARE MOST COMMON OPTIONS
 2 THIS DRAWING IS FOR IDENTIFYING REPLACEMENT PARTS

ITEM	QTY	PART NUMBER	DESCRIPTION
6	1	10349 M03-1010	GAUGE, 1K PSI
5	1	10349 M03-1010	GAUGE, 1K PSI
		12764 M03-1010	GAUGE, 160 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

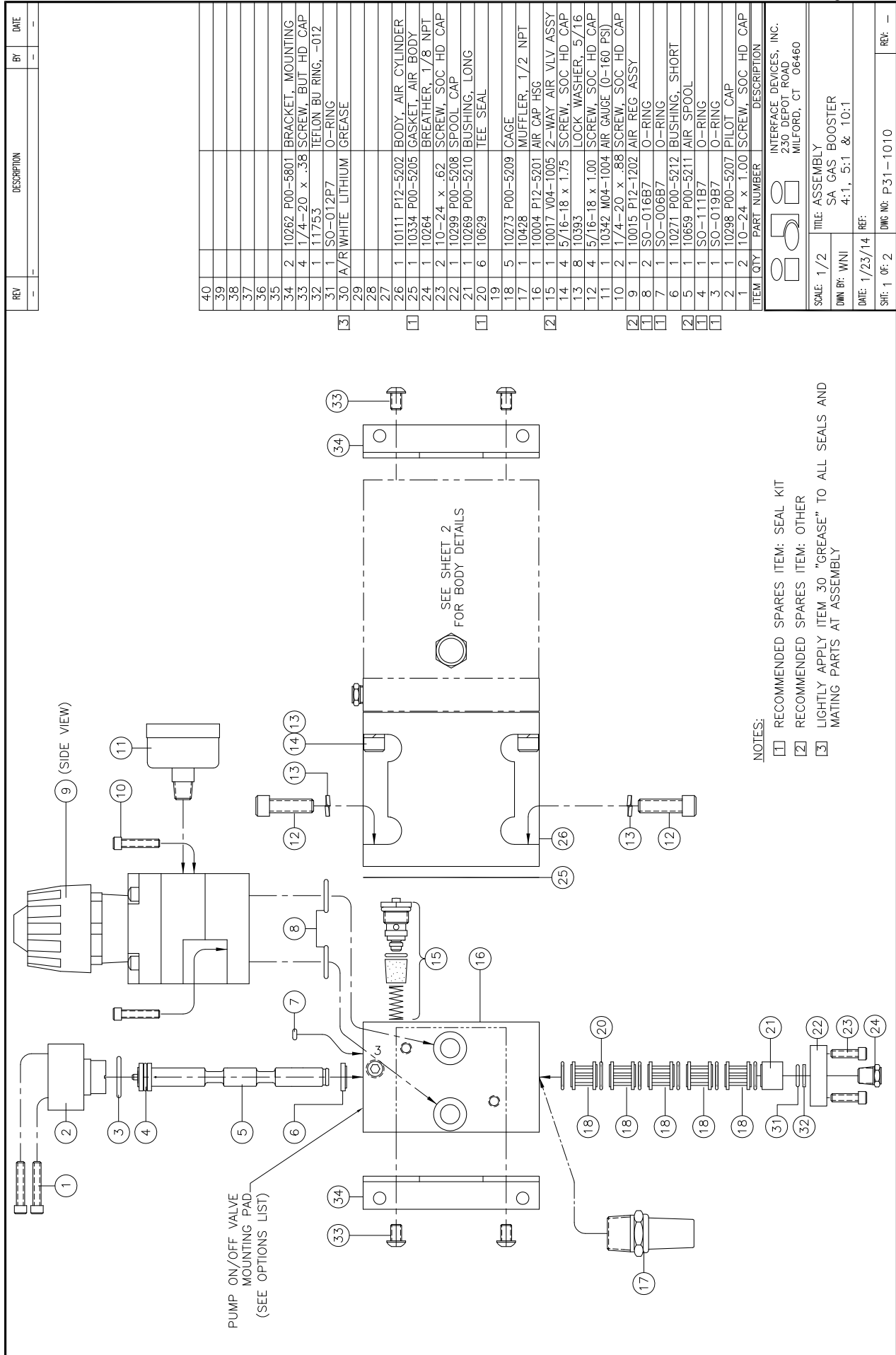
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 MILFORD, CT 06460

SCALE: 1/2	TITLE: OPTIONAL COMPONENTS, GAS BOOSTER
DWN BY: WNI	
DATE: 4/17/06	REF: 4:1, 5:1, 10:1
SHT: 1 OF: 1	DWG NO: P-31-9005



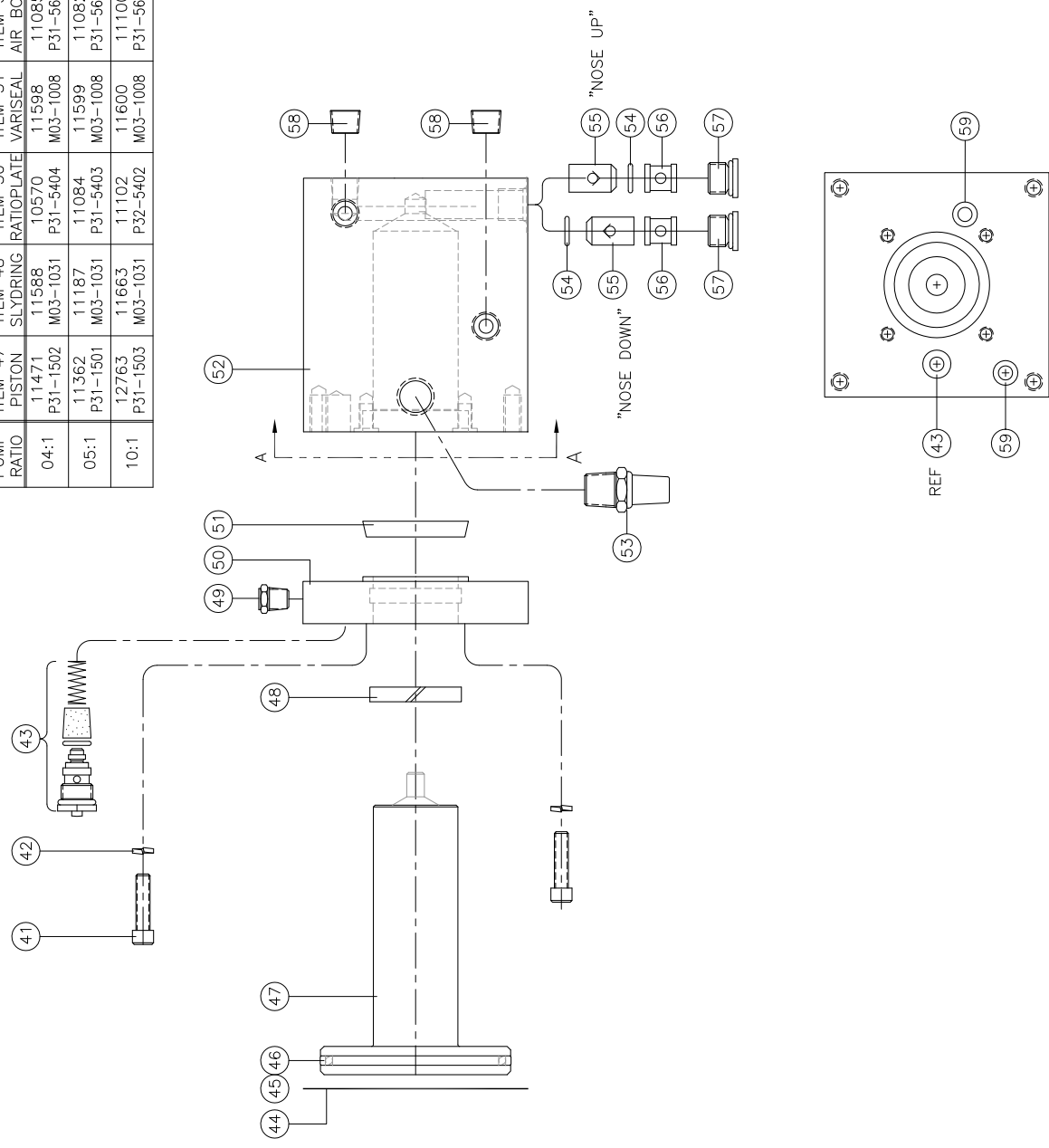
INCHES ON ORIGINAL DWG

REV: B



REV	DESCRIPTION	BY	DATE
65			
64			
63			
62			
61			
60			
59	2 SO-011B7 O-RING		
58	2 12095 PLUG, 1/4 NPT, BRASS		
57	2 11779 PLUG, -6 SAE		
56	2 10605 P00-5603 RETAINER, CHECK VALVE		
55	2 10695 M04-1002 CHECK VALVE		
54	2 SO-012B7 O-RING		
53	1 10431 MUFFLER, 3/8		
52	1 SEE CHART BODY, AIR BOOSTER		
51	1 SEE CHART VARISEAL		
50	1 SEE CHART RATIO PLATE		
49	1 10264 BREATHER, 1/8 NPT		
48	1 SEE CHART SLYD RING		
47	1 SEE CHART PISTON ASSY		
46	1 10377 GLYDE RING		
45	1 SO-233B7 O-RING		
44	1 10334 P00-5205 GASKET, AIR BODY		
43	1 10017 V04-1005 AIR VLV ASSY, 2-WAY		
42	4 10392 LOCKWASHER, 1/4		
41	4 1/4-20 x 1.00 SCREW, SOC HD CAP		

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



SCALE: 1/2
DWG BY: WNI
DATE: 1/23/14
SHT: 2 OF 2

TITLE: ASSEMBLY
SA GAS BOOSTER
4:1, 5:1 & 10:1
REF:

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ITEM QTY PART NUMBER DESCRIPTION