



20:1 NITROGEN BOOSTER

MODEL NUMBER ENB-20

INSTALLATION, OPERATION & MAINTENANCE MANUAL

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

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Revised February 2002

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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 CLEAN AND FILTERED shop air (**150 psi maximum**) to the 1/2" NPT "AIR IN" port on the pump. NO Air Regulator or Lubricator is required.

Connect your gas SOURCE to the 1/4" NPT "IN" port.

Connect your high-pressure circuit to the 1/4" NPT "OUT" port on the pump.

1.3 STARTUP:

Connect the compressed air supply to the pump.

If the unit is supplied with the optional on/off air toggle switch, move it to the "on" position.

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" nitrogen pressure will rise. Continue to increase the pressure until the desired nitrogen pressure is obtained.

The pump will stall when circuit pressure reaches your setting. 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/nitrogen consumption and wear and tear on the pump.

2.0 MAINTAINENCE:

2.1 ROUTINE MAINTAINENCE:

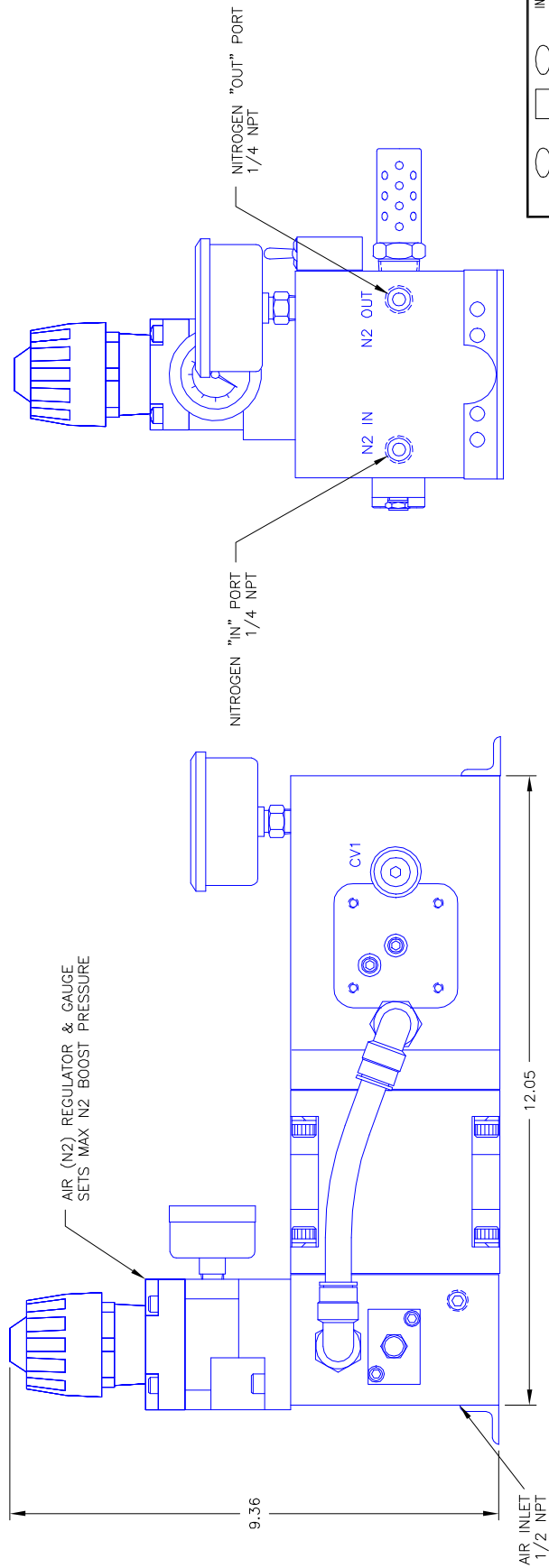
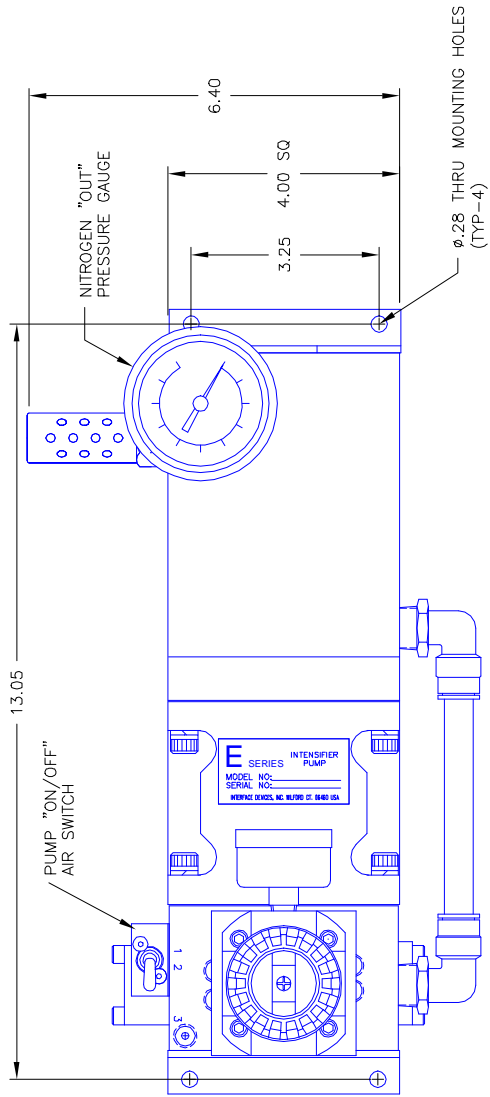
The only routine maintenance required is to re-grease the main air spool and it's six "T-seals" every 6 months.

2.2 TROUBLESHOOTING GUIDE: See following table on page 2.

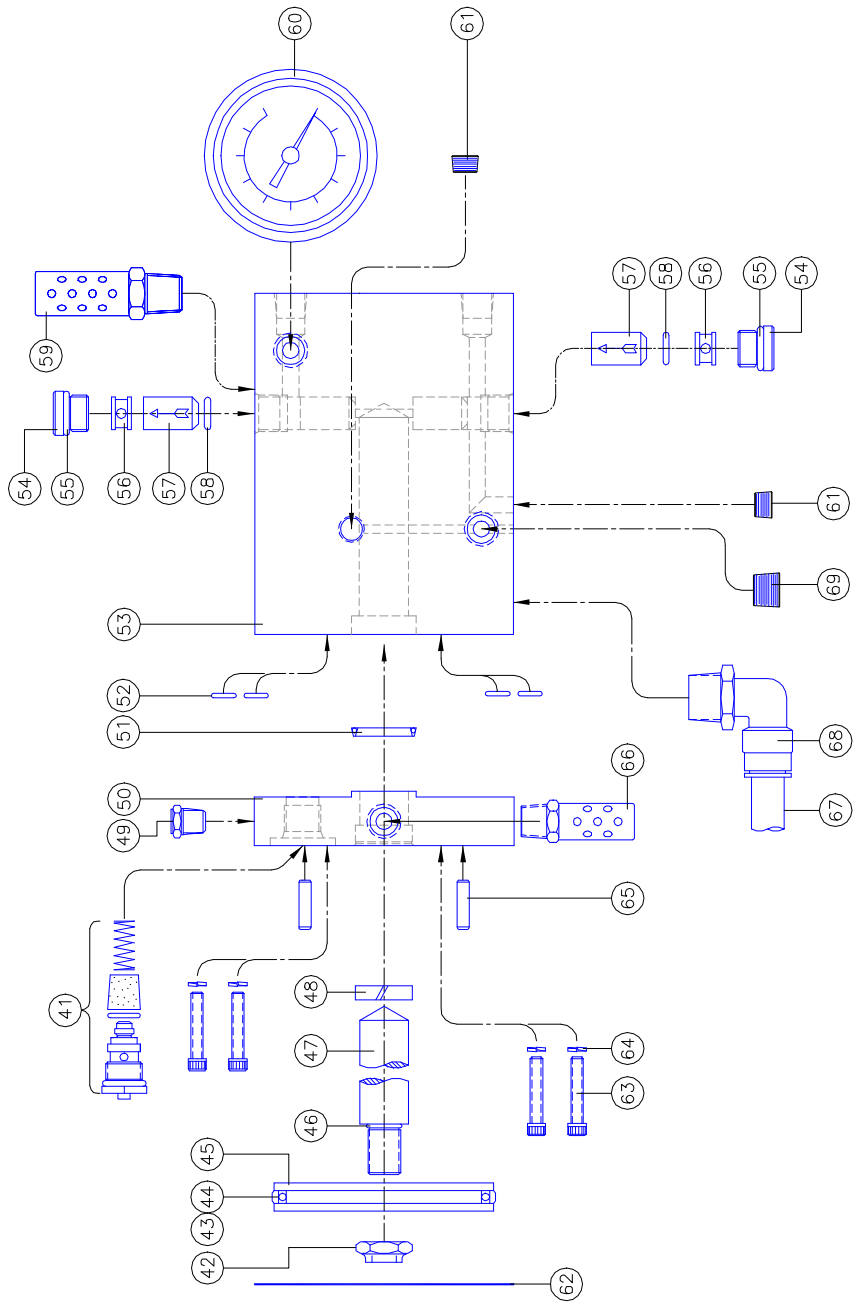
20:1 NITROGEN BOOSTER TROUBLESHOOTING GUIDE
(Refer to enclosed Exploded View Drawing)

SYMPTOM	PROBABLE CAUSE(S)	REMEDY
<p>Pump will not cycle. (Only regulated nitrogen pressure at output)</p>	<p>No air supply to pump. Pump air regulator set too low.</p>	<p>Look for and fix. Increase setting.</p>
<p>Pump will <u>still</u> not cycle (Only regulated nitrogen pressure at output)</p>	<p>Four-way Air reciprocating valve spool stuck at mid-position. After trying remedy above, spool still sticks:</p>	<p>Disconnect/Reconnect air supply (Re-sets air spool to start position.) Remove 1/8 NPT Breather from spool cap, manually push spool to far end with probe through hole in the 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.</p>
<p>Pump makes one cycle, then stops.</p>	<p>Faulty "2-way air valve" (Broken, leaks or contaminated).</p>	<p>Repair or replace.</p>
<p>Pump cycles constantly when "dead-headed".</p>	<p>External leak at pump or downstream high pressure circuit. Stuck open or contaminated "Check Valve" cartridge (2 places). Internal leak in pump.</p>	<p>Look for and correct. Clean or replace. Check all dynamic and static seals and gaskets.</p>

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



INTERFACE DEVICES, INC. 230 DEPOT ROAD MILFORD, CT 06460	
SCALE: NONE	TITLE: GENERAL ARRANGEMENT, NITROGEN BOOSTER (w/o Supercharge Regulator)
DWG BY: WNI	REF: EAB-20, EAB-30, EAB-45
DATE: 2/22/02	DWG NO: GA0202221
SHT: 1 OF: 1	REV:



70	1	1/4 NPT	PIPE PLUG
69	1	6520-08-08	FITTING
68	REF	NYLON N2	TUBING
67	1	10429	MUFFLER, 1/4 NPT
66	2	3/16 x .75	DOWEL PIN
65	2	1/4 HI COLLAR	LOCK WASHER
64	4	1/4-20 x 1.00	SOC HD CAP SCR
63	4	103343	GASKET, AIR BODY
62	1	1/8 NPT	PIPE PLUG
61	1	160 PSI, LIQ FILL	GAUGE, 1/8 NPT, CBM
60	1	10431	MUFFLER, 3/8 NPT
59	2	50-012B7	O-RING, BUNA
58	2	2203-C-3-5	CHECK VALVE
57	1	10600	RETAINER, .31 OAL
56	1	50-906B7	O-RING, BUNA
55	2	6HP50N-S	HOLLOW HEX PLUG
54	1	11095	BODY
53	1	50-011B7	O-RING, BUNA
52	7	M10MR210Z1103	VARISEAL
51	1	11096	RATIO PLATE
50	1	10264	BREATHER, 1/8 NPT
49	2	GR0A-0750-147	ROD BEARING, TEFLON
48	1	11097	PISTON ROD
47	1	50-905B7	O-RING, BUNA
46	1	10479	AIR PISTON
45	1	36G03375-29	GLYDE RING
44	1	50-233B7	O-RING
43	1	1/2-20	FLEXLOC JAM NUT
42	1	10017	2-WAY AIR VLV ASSY
41	1		
ITEM	QTY	PART NUMBER	DESCRIPTION

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

SCALE: 1/2
DWG BY: WNI
DATE: 2/13/02
SHEET: 2 OF 2

TITLE: ASSEMBLY
20:1 BOOSTER

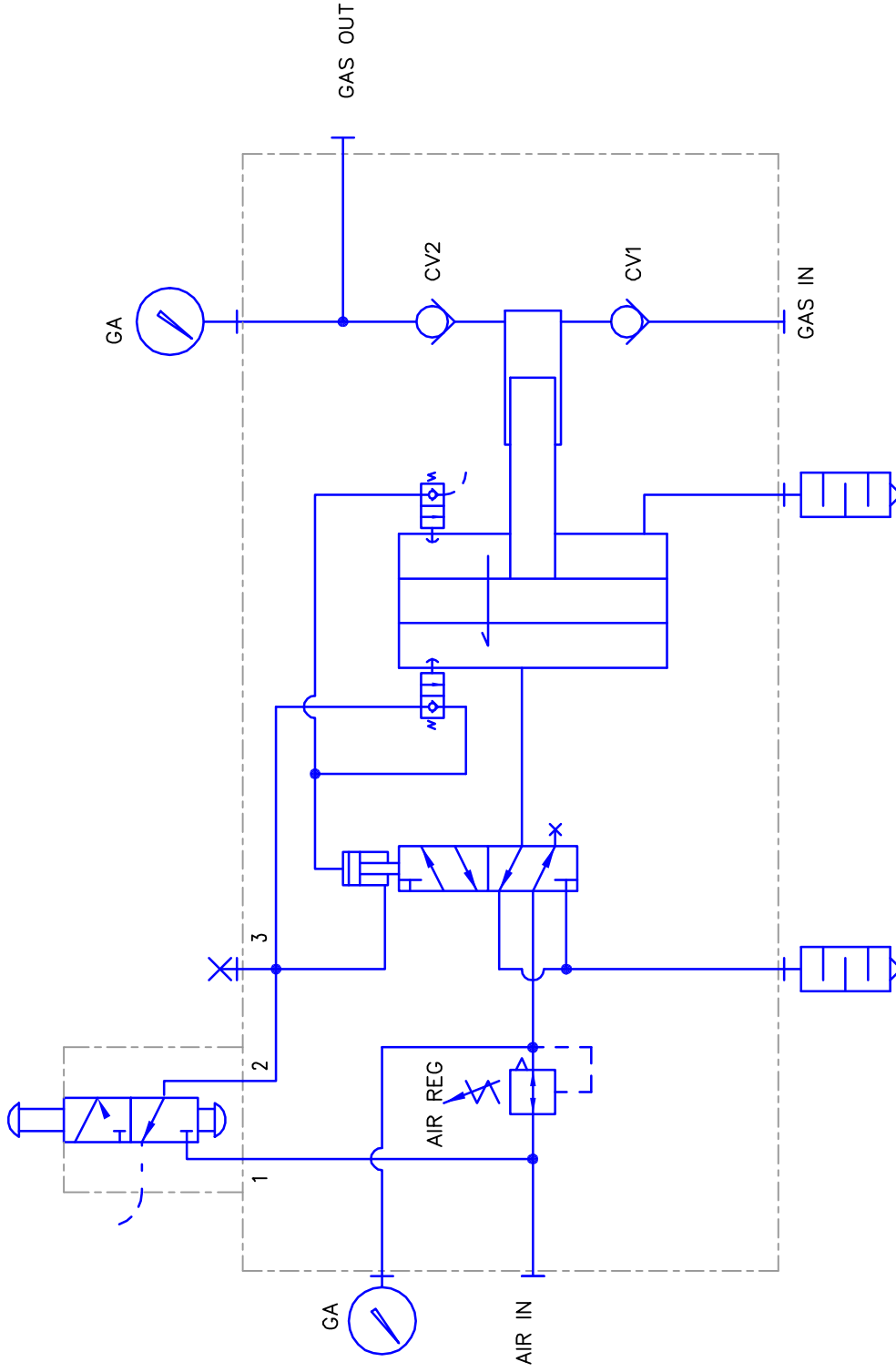
REF:

DWG NO: XA-EAB201

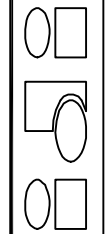
ASSEMBLY PART NUMBER 11108

- NOTES:
- 1 RECOMMENDED SPARES ITEM: SEAL KIT
 - 2 RECOMMENDED SPARES ITEM: OTHER
 - 3 LIGHTLY APPLY ITEM 29 "GREASE" TO ALL SEALS AND MATING PARTS AT ASSEMBLY

PUMP ON/OFF
MANUAL VALVE



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



SCALE: N/A
DWN BY: WNI
DATE: 2/5/02
SHT: 1 OF: 1

TITLE: PNEUMATIC SCHEMATIC,
SINGLE ACTING GAS BOOSTER

REF: EXTERNAL SUPPLY

DWG NO: PS-EAB00X

REV: