GAS BOOSTER PACKAGE SYSTEMS *for*

SPORT DIVING

- Nitrox
- Technical
- Air Scuba

FIRE DEPARTMENTS

- SCBA Fills
  - Truck Mounted
  - In Station
- EMS Oxygen

Photo courtesy of Paintballinc.com

Molly Quintana posts on her opponent.

PAINTBALL

- High Pressure Nitrogen or Air Charging
- Liquid CO_2 Transfer

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NITROX BLENDING AND HIGH PRESSURE AIR

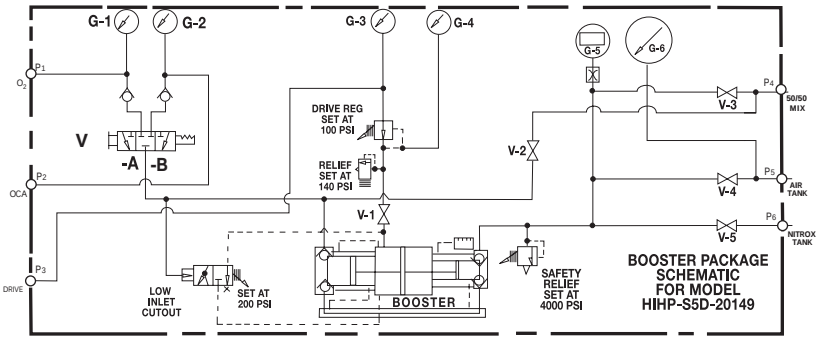
Complete Booster System – 2 Stage for Dive Stores or Dive Boats

Model HIHP-S5D-20149
Panel mount in
watertight case

- Partial pressure blends Nitrox or mixed gas fills to any %
- Provides conventional scuba Air fills to 3500 PSI
- Bootstrap powered directly from existing H.P. compressor storage
- Fills and blends 50/50 Nitrox Storage if desired to 3500 PSI, then dilutes to desired blend into dive tank
- Sealed in watertight case with complete charts for partial pressure blending

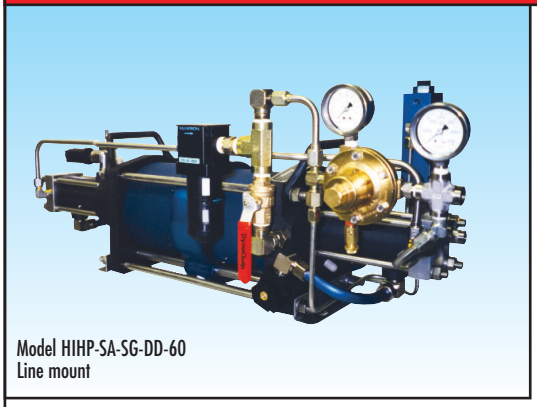
Dive Store or Boat Support Gear Required:

1. High pressure compressor producing Grade E minimum air purity
2. Hyper-purifier to produce OCA (Oxygen Compatible Air) in storage cylinders
3. Storage cylinders 9-12 total actual cu. ft., 2500-3000 PSI
4. Oxygen or other gases* supplied in D.O.T. cylinders up to 2500 PSI (Usable down to 200 PSI)



Note 1: If other diluent gases are boosted, user must use extreme care to insure absolute cleanliness for continued O_2 compatibility.

Complete Booster System for Fire Departments – Single Stage Double Acting

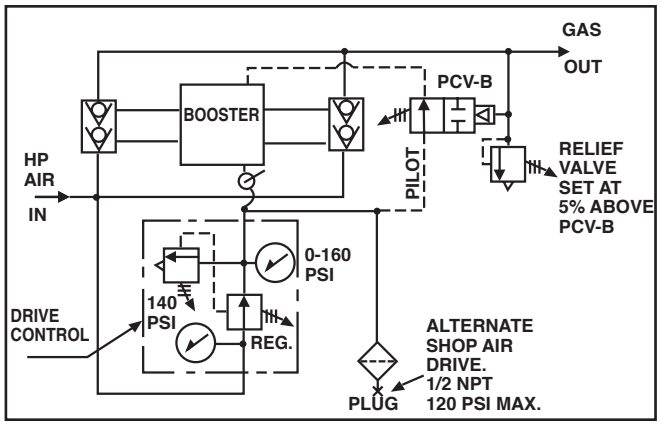


Model HIHP-SA-SG-DD-60
Line mount

- High performance balanced opposed design, double acting, single stage.
- Bootstrap powered directly from H.P. storage, or shop air up to 150 PSI.

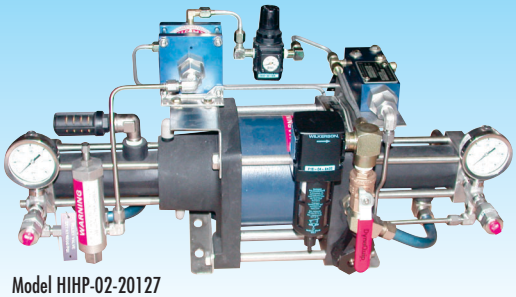
High Pressure Air SCBA Truck Mount or Stationary:

- Designed for 4500 PSI SCBA Fills from H.P. storage up to 6000 PSI and as it decays to as low as 1000 PSI
- Can also be used to top-off mobile storage to 6000 PSI from conventional 2500-3000 PSI H.P. compressor systems



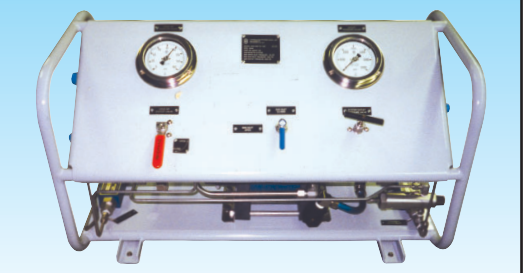
OXYGEN

Complete Systems to Service – Rebreathers – EMS O_2 Bottles



Model HIHP-02-20127
Line mount

Model HIHP-02-20159
Panel mount in watertight case

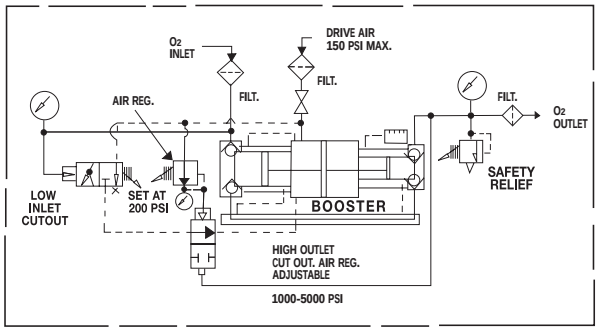


Model HIHPG2-25001
Panel mount in tubular frame

Oxygen Boost Systems – 2 Stage:

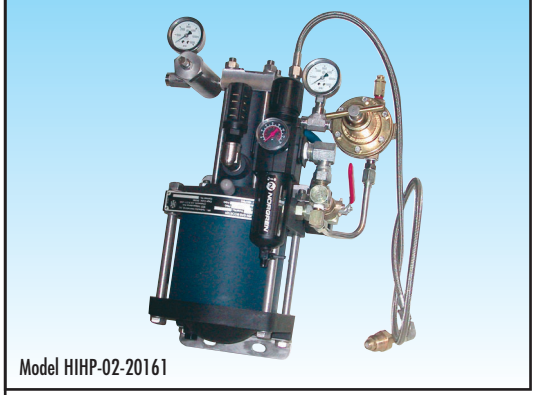
- Transfers and boosts Pure Oxygen up to 5000 PSI from purchased cylinders down to 200 PSI before replacement
- Powered by shop air source up to 150 PSI max
- May be powered from H.P. air storage with H.P. regulator (Not included)
- Adjustable, automatic start/stop control sensing inlet and outlet

Note 1: If other diluent gases are boosted, user must use extreme care to insure absolute cleanliness for continued O_2 compatibility.



- Welded aluminum tubular frame with polished aluminum panel
- Easy 2 man portable
- Mounting: Permanent, or on casters or dolly
- Open rear access to booster and controls

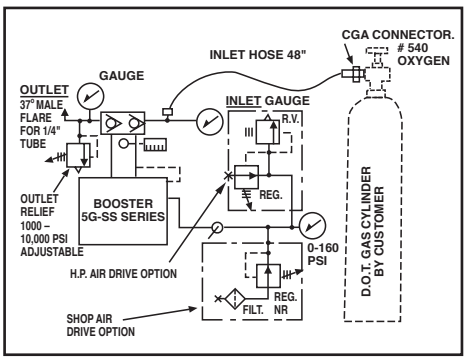
Complete Systems to Service – Rebreathers – EMS O_2 Bottles



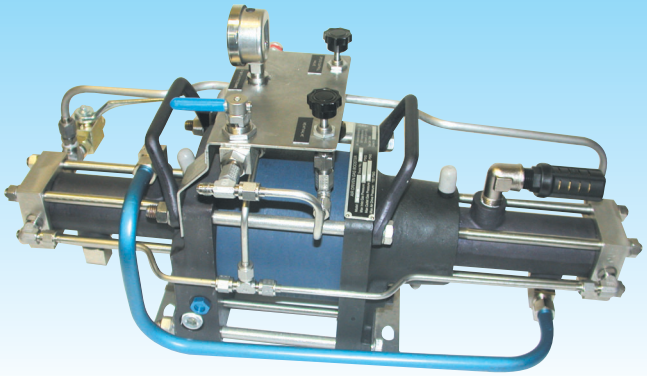
Model HIHP-02-20161

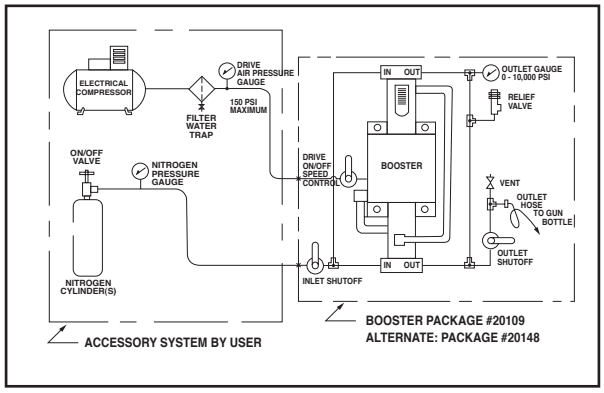
Oxygen Boost Systems – Single Stage Line Mount

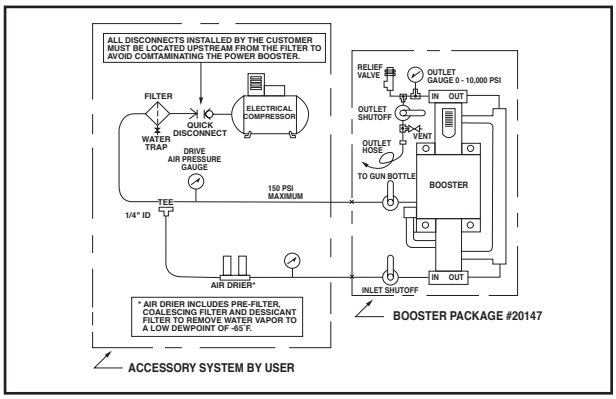
- Transfers and boosts Pure Oxygen up to 5000 PSI from purchased cylinders down to 500 PSI (or less depending on outlet)
- Powered by shop air up to 150 PSI maximum – or high-pressure air up to 6000 PSI
- Maximum outlet pressure set by regulated pressure to drive



PAINTBALL PROPELLANT BOTTLE FILLING







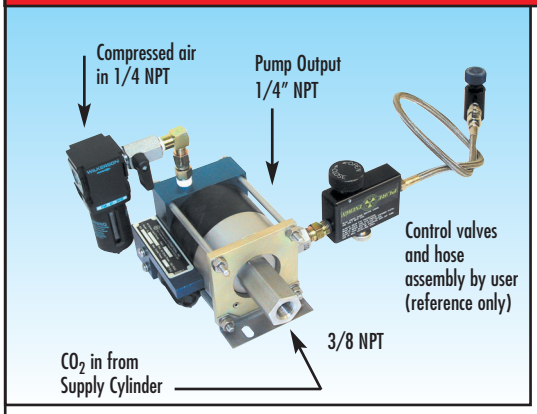
High Pressure Gas from Nitrogen Cylinder(s)

The model 20109 Package Boosts Nitrogen to 4500 PSI directly from cylinders available from any industrial gas supplier and most welding supply stores. Drive power, like any air tool, must come from a conventional 100 PSI shop air compressor. Small compressors (1-2 H.P. Range) will do the job, but of course take considerably longer than a 10 H.P. unit which may be desirable if charging multiple bottles during a tournament. Speed is also greatly affected by the nitrogen supply cylinder pressure during a fill. When it drops below 300-400 PSI, it is probably time to change to a full cylinder.

High Pressure Air from an Air Compressor

The model 20147 Package is a two-stage unit that can boost 100 PSI Shop Air up to 4500 PSI and also be powered by shop air. The advantage is no dependence on nitrogen cylinders. Disadvantages are considerably slower fill speeds (Even with a 10 H.P. air compressor), and the need to Chemically Dry the air to -50°f dewpoint or better before being boosted.

Liquid CO_2 Transfer by Weight



Liquid CO_2 will flow from a bulk supply cylinder* (800-1000 PSI depending on ambient temperature) into an empty propellant bottle (0 PSI) but stop when the vapor pressures equalize. If the propellant bottle is not completely empty, little or no transfer will occur.

Air driven pump model 30046 will transfer liquid CO_2 from bulk supply to bottle up to the desired weight, regardless of ambient pressure or temperature conditions; empty or partly empty bottles. Power to the pump (like and air tool) is supplied from any shop or portable air compressor. A start/stop/speed control valve on the air drive provides infinite flexibility so that desired bottle weight is accurately achieved.

** Not designed to work with 0° F refrigerated supply or Dwers*