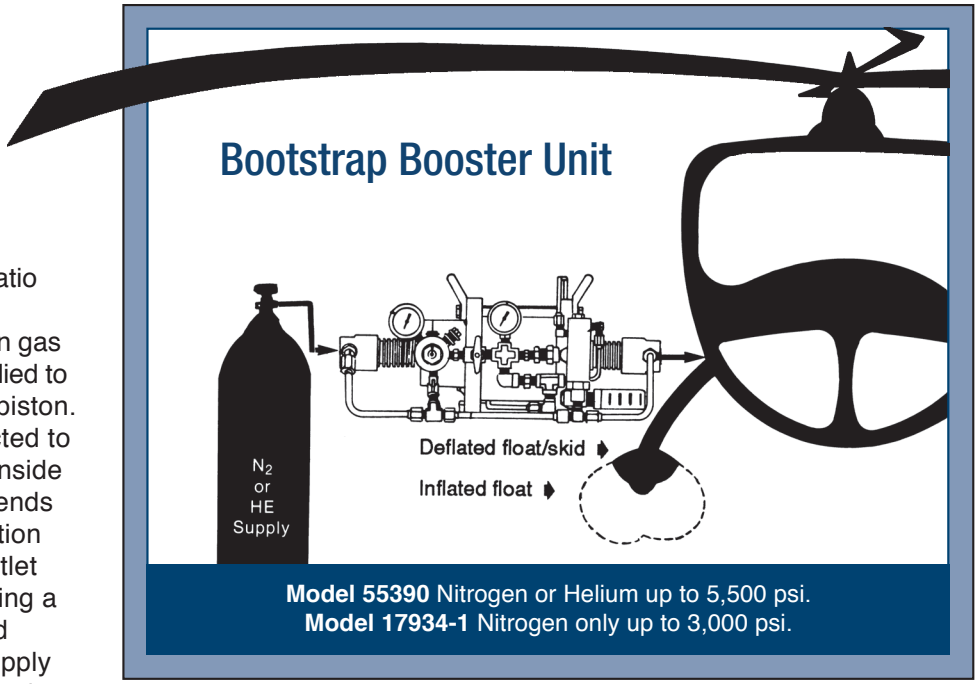
BOOTSTRAP NITROGEN BOOSTERS

for Charging On-Board Helicopter "Pop Float" Inflation Bottles



Model 55390 Nitrogen or Helium up to 5,500 psi.
Model 17934-1 Nitrogen only up to 3,000 psi.

How they work

These units are simple area ratio piston type boosters that automatically reciprocate when gas pressure, up to 150 psi, is applied to the large low pressure drive piston. This piston is directly connected to small high pressure pistons inside the booting sections of both ends of the drive. Each boost section contains integral inlet and outlet check valves thereby producing a pumping action. Unregulated Nitrogen or Helium from a supply cylinder(s) is directly connected at maximum pressure to the boost sections. Nitrogen to the drive section is regulated to 115-120 psi by the integral drive control system

Wearing parts are low cost elastomers and self lubricating engineering plastics, all available in seal kits, are field replaceable with simple instructions and conventional hand tools.

Both units are lightweight, 1-man-portable, weather resistant and operate in any position.

Applications

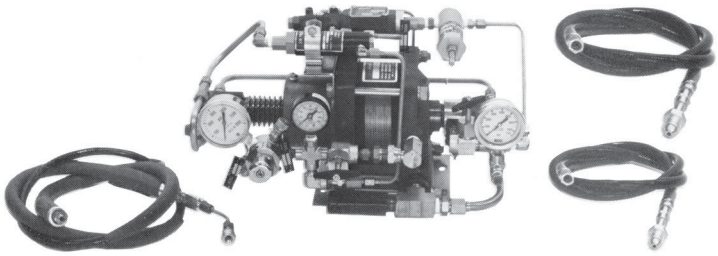
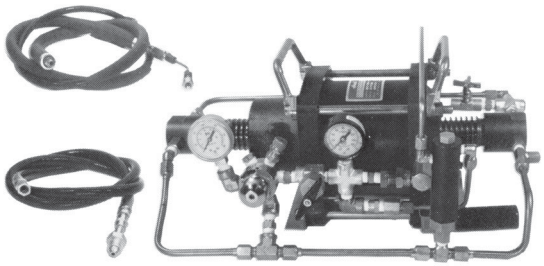
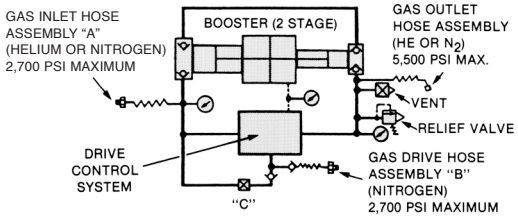
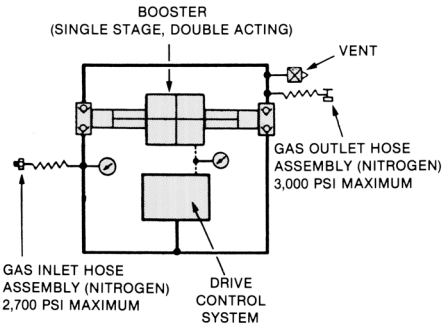
Both models have been designed for operators of helicopters and/or small aircraft where a portable self-powered booster is needed for ground support. The primary application is to service the high pressure on-board Nitrogen or Helium bottles on helicopters equipped with emergency inflatable "Pop Type" floats. However, using either model to service other components needing high pressure Nitrogen such as shock struts and precharging hydraulic accumulators is also common.

Model Selection

Model 17934-1 is the original low cost single stage Nitrogen unit designed specifically for the 2,800 to 3,000 psi flight bottles still used on many commercial helicopters. The 55390 is a 2 stage unit, suitable for all applications including the newer high pressure flight bottles (up to 5,500 psi) charged with nitrogen or Helium. It includes adjustable automatic air pilot switch to stop at a preselected output pressure and integral adjustable output safety relief with 0-7,500 psi gauge.

Required by F.A.A. under F.A.R. regulation 135.183 if flying over water beyond the point where landing would be possible if engine failed.

BOOTSTRAP NITROGEN BOOSTERS for Charging On-Board Helicopter "Pop Float" Inflation Bottles

	Model 55390	Model 17934-1
		
SCHEMATIC (Abbreviated)	 • For NITROGEN boost and drive, connect supply gas to "A"; open valve "C": (Hose "B" can be removed) • For HELIUM boost with nitrogen drive, connect helium supply to "A"; nitrogen supply to "B"; close valve "C"	
DRIVE CONTROL SYSTEM	• Manual valve for start/stop • Automatic stop when gas INLET ("A") drops to 150 psi; or gas OUTLET increases to user adjusted setting (5,500 psi maximum) • Gas regulator with relief valve limiting drive section to 115 psi • Drive pressure gauge 0-160 psi	• Manual valve for start/stop • Automatic stop when gas INLET drops to 300 psi • Gas regulator with relief valve limiting drive section to 115 psi • Drive pressure gauge 0-160 psi
GAS OUTLET CONTROLS AND ACCESSORIES	• Safety relief valve, user adjusted • Vent valve • Gauge 0-7,500 psi • 6 ft. x 3/16" I.D. hose assembly 5,500 psi maximum working pressure with Schrader No. 5007 connector (To fit MS28889 – 2 type aircraft charge valve)	• Vent valve • 6 ft. x 1/4" I.D. hose assembly 5,000 psi maximum working pressure but limited to 3,000 psi with the Schrader No. 556 connector provided (To fit MS28889 – 2 type aircraft charge valve)
GAS INLET CONTROLS AND ACCESSORIES	• Gauge 0-3,000 psi • 2 each 6 ft. x 3/8" I.D. hose assembly, 4,000 psi maximum working pressure with CGA – 580 bottle connector • Manual stop valve "C" (turn off if pumping helium)	• Gauge 0-3,000 psi • 6 ft. x 3/8" I.D. hose assembly, 4,000 psi maximum working pressure with CGA – 580 bottle connector
TARE WEIGHT	48 lbs.	43 lbs.
PERFORMANCE	• Charge two 425 cu. in. flight bottles to 3,000 psi within 20 minutes from less than two standard D.O.T. 2,200 psi nitrogen cylinders (226 SCF each); or one 7.93 litre bottle to 4,500 psi N_2 from approximately 2-1/2 D.O.T. cylinders; or Helium from 2,200 psi, 215 SCF cylinder using less than two N_2 cylinders for drive.	• Charge two 425 cu. In. flight bottles to 3,000 psi within 20 minutes from one standard D.O.T. 2,200 psi nitrogen cylinder (226 SCF).

Haskel International, LLC.
818.843.4000
Email: sales@haskel.com
www.haskel.com

For further information on Haskel products, visit our website at: **www.haskel.com**

Printed in USA

BST REV 08/14