



# NBSS-3 NITROGEN BACKPACK SERVICE SYSTEM

March 25, 2009

## NBSS-3 Nitrogen Backpack Service System

***A Complete High and Low Pressure Nitrogen Servicing System . . .***

- Uses lightweight high pressure man-portable backpack cylinders to transport nitrogen to the point of need.
- Cylinders can be refilled from all military mobile or stationary on-site nitrogen generators
- All system equipment is deployable in a reusable air and man-portable transport case.



### NBSS - BACKPACK SERVICING AT POINT OF NEED

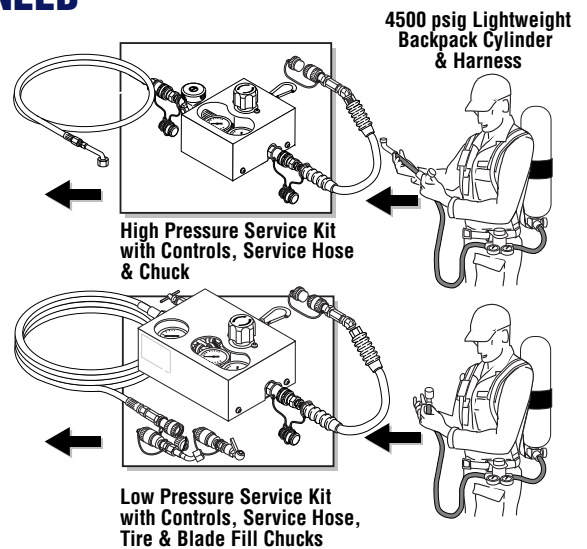
Low Pressure  
Blade Fill - Selected  
Aircraft



Low Pressure  
Tire Fill

High Pressure  
Accumulator Charging

High Pressure  
Strut Charging



**PROCURABLE FROM**

**DSCR BY STOCK NUMBER OR FACTORY DIRECT,  
Government Impact Cards Acceptable**



# NBSS-3 NITROGEN BACKPACK SERVICE SYSTEM

## Model NBSS-3 P/N 410700-3

(NSN 3655-01-559-0617)

Consisting of the following key components:

- **Backpack Cylinder Assembly (CYL-74) P/N 410780**  
(NSN 8120-01-572-6397)

A lightweight aluminum vessel with carbon fiber wrap and epoxy coating, D.O.T. approved and in service with many CVB (MANCS) Mobile Air/Nitrogen Charging Systems. Fitted with a high pressure service shut-off valve, burst disc and pressure gauge. Valve is fitted with a male quick disconnect fitting for service attachment.

Length ..... 25.5 in.      Weight (empty) ..... 13 lbs.  
Diameter .... 6.9 in.      Weight (filled) ..... 20 lbs.  
Cylinder Pressure ..... 4500 psig  
Cylinder Capacity ..... 88 scf.

- **Backpack Harness Assembly (HRN-3A) P/N 410735-1**  
(NSN 3655-01-572-6308)

A premium lightweight harness assembly similar to that worn by Scuba/Special Ops units. Has a padded back plate with heavily padded shoulder straps and a wide adjustable waist belt to handle the high pressure and low pressure service kits comfortably when attached to it.

Length ..... 26 in      Width ..... 12 in.  
Weight ..... 8 lbs.

- **Low Pressure Service Kit (LPSK-1A) P/N 410717**  
(NSN 3555-01-572-6345)

The service kit consists of an aluminum housing containing a cylinder "Supply Pressure" gauge (0-5000 psig), a "Pressure Regulator" (0-400 psig), a "Fill Pressure" gauge (0-200 psig), a "Tire Pressure" gauge (0-200 psig). In addition, it includes a built-in bleed valve and a safety relief valve set at 150 psig. A 28 inch long high pressure hose is attached to the inlet side of the enclosure with a high pressure quick disconnect coupling that mates with the quick disconnect coupling on the backpack cylinder. The outlet side of the kit enclosure has a 10 foot low pressure fill hose with a quick disconnect socket for attaching the service adapters for low pressure servicing.

- **CGA-680 to QDC Adapter (CGA-QD) P/N 410810**  
(NSN 8140-01-572-6392)

A CGA-680 hand tight nut to Quick Disconnect adapter is provided to enable the NBSS kits the use of earlier backpack cylinders P/N 410580 fitted with a CGA-680 connection.

- **QDC to CGA-680 Adapter (QD-CGA) P/N 410787**  
(NSN 8120-01-572-6405)

A Quick Disconnect connector to CGA-680 adapter enabling the NBSS backpack cylinders P/N 410780 the ability to connect to earlier CGA-680 components.

- **High Pressure Service Kit (HPSK-1A) P/N 410727**  
(NSN 3655-01-572-6314)

The high pressure service kit contains an aluminum enclosure housing a "Supply Pressure" gauge (0-5000 psig), a high pressure "Pressure Regulator" valve (0-5000 psig) and a "Fill Pressure" gauge (0-5000 psig) along with miscellaneous internal pneumatic components. The enclosure is equipped with a snap clip to attach the kit to backpack harness belt. A 28 inch long high pressure hose is attached to the inlet side of the enclosure and has a high pressure quick disconnect coupling on the other end to connect to the backpack cylinder's quick disconnect. The outlet side of the HPSK-1A enclosure has a check valve and combination shut-off/bleed valve. Attached to the shut-off valve is a 48 inch long high pressure service hose that terminates with a high pressure service chuck for high pressure servicing.

- **Transport Case Assembly (RTC-1) P/N 410740**  
(NSN 8140-01-572-6387)

The reusable Transport Case houses all components of the NBSS for storage, use and transport. It is made of high impact plastic and features heavy duty wheels, retractable carry handle and multiple fold-down handles. The case is Mil-Std-4150-J rated.

