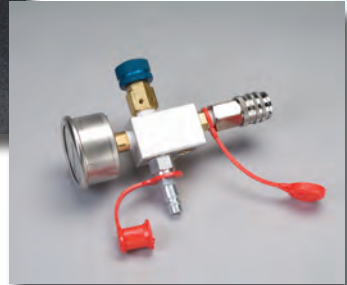


# Gas Spring Service & Maintenance Accessories



## *ACCESSORIES FOR SERVICING HYSON NITROGEN GAS SPRINGS AND HOSE SYSTEMS*

<b>Table of Contents</b>	<b>Page</b>
Accessories .....	1
Charging & Discharging Accessories .....	2
Crimping Equipment .....	4
Test Stands .....	5



### General Information

HYSON Metal Forming Solutions, headquartered in Brecksville, Ohio, is a world class engineering and manufacturing company that provides high-quality, safety-engineered force and motion control solutions for a wide range of applications and industries, including automotive, aerospace, appliance, medical and HVAC. HYSON partners with our customers to understand applications and provide the best solutions for each one. We are a full service force control provider for critical machine, vehicle and precision metal processing applications, meaning we can supply dependent upon each customer's needs, including: gas springs, cam systems, cushions, manifolds and knockout systems.

Our success lies with our commitment to continually improve ourselves, our processes and our products to ensure we meet or exceed our customers' expectations. Our ISO-9001, AS-9000 and PED certifications attest to our ongoing commitment to the highest standards of quality.

## Tool Kit

### Order Number 1714779

For 38mm – 50mm spring diameter

### Order Number 1814779

For 75mm – 195mm spring diameter

The COMPLETE Tool Kit. Other kits are available in various sets and all come with a protective carry case.

Items included in the Tool Kits include:

- Lock Ring Removal Tool
- Valve Pliers
- M6 Valve Tool
- 7/16 Valve Tool
- M6/Hex Valve Tool
- M3 Piston Removal Tool
- T-Handles
- Assembly Cups



## Nitrogen Gas Booster Assembly

Order Number: Standard: HPB-4350-S

Order Number: Portable: HPB-4350-M

The Nitrogen Gas Booster Assembly gets the most from your nitrogen gas supply by safely and easily boosting nitrogen gas bottles with a minimum of 30 bar (435psi). Driven by plant air, the assembly provides pressures up to 300 bar (4350 psi) to charge high pressure gas springs and manifold systems.

### Features:

- Boosts N2 bottles containing as low as 30 Bar (435 psi).
- Suitable for all HYSON cylinders
- Robust, lightweight design
- Male quick release coupling for output hose connection
- Available in two models:

**Standard:** Ideal for single location. Mounted on holding place and capable of hanging on neck of nitrogen bottle.

**Portable:** Ideal for on-the-go applications. Booster pump does not require removal from transport case while in use.



### Nitrogen Charging Assembly

**Order Number NCA-580-2600**

Transfer nitrogen gas from a commercial bottle to gas springs with the NCA-580-2600. The charging assembly includes a CGA-580 bottle fitting, regulator with bottle and system pressure gauges, shut-off valve and 10 feet of high pressure hose with a quick disconnect fitting. Easily connects to the Control Panel Fill Valve, Service Gauge Assembly or Pressure Indicator.

**Order Number NCA-680-2600**

The NCA-680-2600-HP is available for use with 3000 – 5000 psi bottles and includes a CGA-680 bottle fitting.

Other Charge Assemblies are available. Contact HYSON with your specific requirements.



### Pressure Indicator

**Order Number 4215072**

- Charge, discharge, bleed and measure pressure in nitrogen gas springs with M6 ports.
- Adapters for 7/16"-20 and M6 ports sold separately.

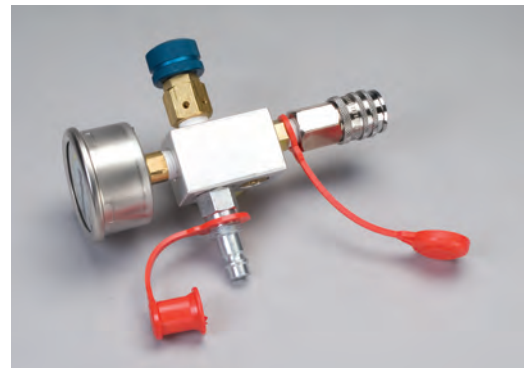


Adapters		
Order Number	Port Size	Notes
3014016	G 1/8 Port	Standard port adapters included with pressure indicator
3014021	M6 Rod Port	
3014623	7/16" - 20	Alternate port adapters sold separately
4026164	M6 (T5 models)	

### Service Gauge Assembly

**Order Number MGA-3000NH**

- Charging and discharging gas springs for use in the self-contained mode is simple with the MGA-3000NH.
- Refer to male quick disconnects to select proper fittings for gas spring ports.



**Male Quick Disconnects (Charge Fittings)**

Hyson offers a variety of charge fittings for use with gas springs. For the appropriate charge fitting for your application, refer to the chart at right.

Male Quick Disconnects	
Order Number	Port Size
T2-770-T3	M6 (side or base)
T2-770-M6	M6 (rod)
11-770-0705 MTY	3/8"-32
T2-770-G1/8-P	G 1/8
T2-770-4-L	7/16"-20
T2-770-4	7/16"-20



**Valve Removal & Installation Tool**

- Safely discharges gas springs with threaded end.
- Easy to remove valve for hose systems.

Valve Removal & Installation Tool	
Order Number	Thread Size
T2TK-IN	7/16" – 20
T2TK-IN-M6	M6
T2TK-IN-G1/8	G 1/8

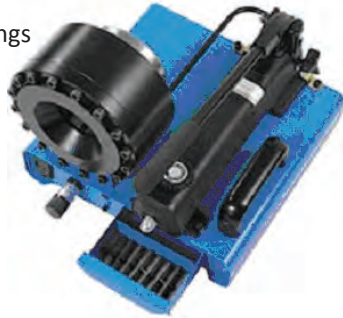


Create your own permanent hose assemblies with Hyson crimping equipment.

**EZ-Crimp**

Features:

- Ideal for EZ(CNOMO) and Micro24™ Hose systems. Die included. Additional dies available for crimping larger diameter hoses.
- Compact and portable
- Crimps straight, 45° and 90° fittings
- Crimping force: 955 kN



EZ-Crimp	
Order Number	Description
<b>EZ-Crimp</b>	Crimper and die for EZ(CNOMO) and Micro24™
<b>DIE07-6</b>	
<b>DIE07-8</b>	Die for 8-10mm OD hoses
<b>DIE07-10</b>	Die for 10-12mm (JIC & O-Ring Face)
<b>DIE07-12</b>	Die for 12-14mm OD hoses (DualSeal 24™)
<b>DIE07-14</b>	Die for 14-16mm OD hoses

**Crimping Press**

Features:

- Combine with appropriate die to create hose assemblies
- Pneumatically-operated hydraulic pump
- Crimps straight, 45° and 90° fittings
- Crimping force: 300 kN



Crimping Press	
Order Number	Description
<b>3121381</b>	Crimping Press
<b>3024010</b>	Die for Micro24™ & EZ(CNOMO)
<b>504196</b>	Die for DualSeal 24™
<b>ORHF-4 DIE</b>	Die for JIC & O-Ring Face

**Hose Cutting Plier**

Order Number 502839




## Digital Test Stand

**Order Number: DTS**

This lightweight test stand measures the initial contact force of self-contained gas springs.

Features:

- Maximum rated capacity of 5000 lbf
- Accuracy  $\pm 0.5\%$  of full scale equating to 25 lbf
- Digital read-out in lbf. or kg force
- Travel reads in inches or millimeters
- Includes a holding fixture for smaller gas springs
- Can be mounted directly to a table
- Weighs 45 pounds

 **WARNING** This test fixture should be used to measure contact force **ONLY**. Stroking a gas spring could cause the spring to project and result in serious injury.



## Digital and Analog Test Stands

### DIGITAL VERSION

**Metric Order Number: 1516713-1330**

**English Order Number: 1416713-1330**

(For gas springs up to 760mm max. spring height)

### ANALOG VERSION

**Order Number: 1516714-1330**

(For gas springs up to 700mm max. spring height)

This heavy-duty test stand measures the initial contact force of self-contained gas springs.

Features:

- Maximum rated capacity of 18,000 lbf
- Available in digital or analog models
- Handles up to 150mm diameter springs
- Quick height adjustment
- Can be mounted directly to a table
- Weighs 110 lbs.



**DIGITAL**

**ANALOG**



**[www.HysonSolutions.com](http://www.HysonSolutions.com)**  
E-mail: [Orders@HysonSolutions.com](mailto:Orders@HysonSolutions.com)

U.S.A. Headquarters • 10367 Brecksville Road • Brecksville, OH 44141 USA • Tel: 800-876-4976, 440-526-5900

©HYSON 2017  
SMACC 2M 0917