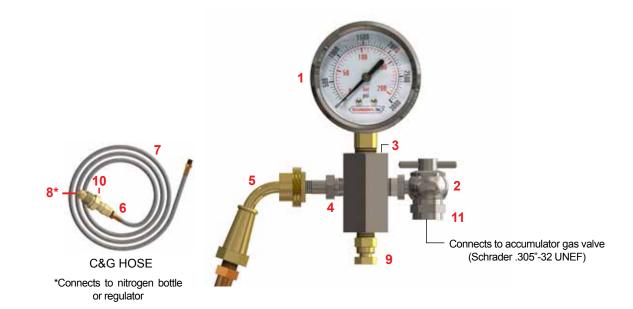
## 3000 PSI C&G ASSEMBLY

**BLADDER ACCUMULATORS - CHARGING & GAUGING** 

#### CHARGING AND GAUGING KITS FOR 3000 PSI ACCUMULATORS



#### **3000 PSI CHARGING KITS**

Kit with 3000 PSI Gauge (Items 1a-11)AI-CG3-3KT-SSKit with 6000 PSI Gauge (Items 1b-11)AI-CG3-6KT-SS

#### WARNING!

AI-CG3-3KT-SS and AI-CG3-6KT-SS are rated to 3000 PSI maximum working pressure. Connects to a maximum 3000 PSI nitrogen tank with a CGA 580 connection. Do not use on accumulators with a pressure higher than 3000 PSI. It is highly recommended that a  $N_2$  gas regulator be used while charging any accumulator. Use dry nitrogen gas ( $N_2$ ) only.

#### ALSO AVAILABLE:

- Complete accumulator repair kits
- N<sub>2</sub> gas regulators

Accumulators, Inc

Special order C&G kits with different connections and different hose lengths

COMPONENT PARTS LIST				
PART	DESCRIPTION	PART NUMBER		
1a	3000 PSI Gauge	AI-CG3-001		
1b	6000 PSI Gauge	AI-CG6-001		
2	Air Chuck	AI-CG-002		
3	Adapter Block	AI-CG-003		
4	Tank Valve	AI-CG-005-KIT		
5	Swivel Connector	AI-CG-004		
6	Coupler	AI-CG-006		
7	Hose (8 ft.)	AI-CG-007-SS		
8	Gland (Nipple)	AI-CG-008		
9	Bleed Valve	AI-CG-009		
10	Nut	AI-CG-011		
11	Copper Washer	AI-CG-020		
	TR Adapter (Connects to 11)	AI-TR-015		
	Gauging & Head Assembly, 3000 PSI Gauge (Items 1a-4,9,11)	AI-CG3-313		
	Gauging & Head Assembly, 6000 PSI Gauge (Items 1a-4,9,11)	AI-CG3-613		
	Hose Assembly (Items 5-8,10)	AI-CG-017-SS		
	Valve Core (Internal)	AI-S-304		

# 6000 PSI C&G ASSEMBLY

**BLADDER ACCUMULATORS - CHARGING & GAUGING** 

#### CHARGING AND GAUGING KITS FOR 4000, 5000 & 6000 PSI ACCUMULATORS





\*Connects to accumulator high pressure gas valve

	FULL ASSEMBLY COMPONENT PARTS LIST					
PART	DESCRIPTION	PART NUMBER				
	Complete Kit (Items 1-8)	AI-CG6-6KT-SS				
1	Gauge, 6000 PSI	AI-CG6-501-SS				
2	Air Chuck	AI-CG6-502-SS				
3	Cross	AI-CG6-503-SS				
4	JIC Adapter	AI-CG6-506-SS				
5	Hose (8 ft.)	AI-CG6-507-SS				
6	Cylinder Valve Tube	AI-CG6-508-SS				
7	Bleed Valve	AI-CG6-509-SS				
8	Cylinder Valve Nut	AI-CG6-511-SS				
	Hose Assembly (Items 2,4,5)	AI-CG6-517-SS				
	Gauging & Head Assembly (Items 1,3,4,6,7,8)	AI-CG6-613-SS				

#### WARNING!

Al-CG6-6KT-SS is rated to 6000 PSI maximum working pressure. Do not use on accumulators with a pressure higher than 6000 PSI. Connects to a maximum 6000 PSI nitrogen tank with a CGA 677 connection. It is highly recommended that a  $N_2$  gas regulator be used while charging any accumulator. Use dry nitrogen gas ( $N_2$ ) only.

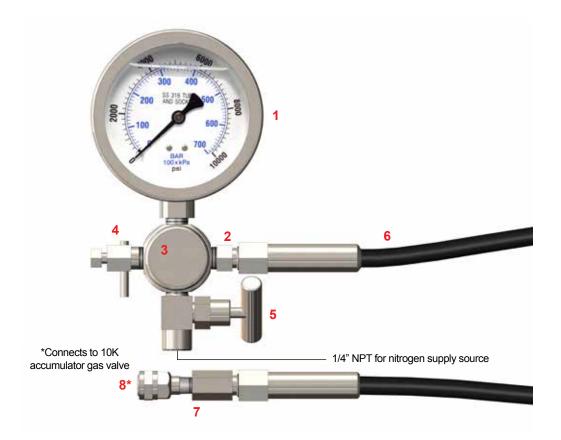
#### ALSO AVAILABLE:

- Complete accumulator repair kits
- N<sub>2</sub> gas regulators
- Special order C&G kits with different connections and different hose lengths



### 10000 PSI C&G ASSEMBLY BLADDER ACCUMULATORS - CHARGING & GAUGING

#### 10000 PSI CHARGING AND GAUGING ASSEMBLY



#### WARNING!

Al-CG10-10KT-SS is rated to 10000 PSI maximum working pressure. Do not use on accumulators with a pressure higher than 10000 PSI. It is highly recommended that a  $N_2$  gas regulator be used while charging any accumulator. Use dry nitrogen gas ( $N_2$ ) only.

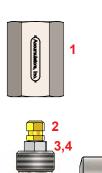
#### ALSO AVAILABLE:

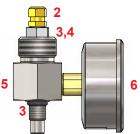
- Complete accumulator repair kits
- N<sub>2</sub> gas regulators
- Special order C&G kits with different connections and different hose lengths

	COMPONENTS LIST					
PART	DESCRIPTION	PART NUMBER				
	10K C&G Assembly (Items 1-8)	AI-CG10-10KT-SS				
1	Gauge (0-10000 PSI, liquid filled)	AI-CG10-001-L-SS				
2	Block Fitting	AI-ADP-A-NPT4M-MH6M-15-SS				
3	Adapter Block	AI-CG10-503-SS				
4	Bleed Valve	AI-CG10-509-SS				
5	Needle Valve	AI-CG10-510-SS				
6	Hose (4ft)	AI-CG10-507-4-R				
7	Air Chuck Adapter	AI-ADP-A-NPT2F-MH6M-15-SS				
8	Air Chuck	AI-CG10-502-SS				
	1					

### PERMANENT MOUNT PRESSURE MONITORS BLADDER ACCUMULATORS - CHARGING & GAUGING

#### 3000 AND 6000 PSI DELUXE PERMANENT MOUNT PRESSURE MONITORS

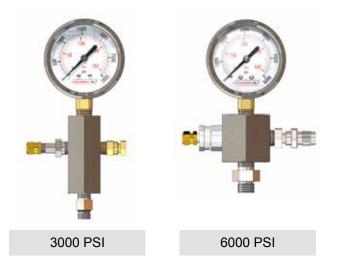


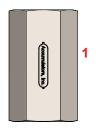


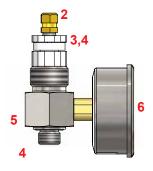
#### 3000 PSI

AI-PM3-3KT-L-SS COMPONENTS LIST 1 GAL – 40 GAL				
PART	DESCRIPTION	PART NUMBER		
1	Protective Cap	AI-306-4-SS		
2	Valve Cap	AI-S-303		
3	Gas Valve	AI-GT3-309-SS		
4	O-Ring	AI-GT3-311		
5	Pressure Monitor Block, Deluxe, 3000 PSI	AI-PM3-003-D-SS		
6	Gauge, 3000 PSI, Liquid Filled	AI-CG3-001-1-L-SS		

#### 3000 AND 6000 PSI BASIC PERMANENT MOUNT PRESSURE MONITORS







#### 6000 PSI

AI-PM6-6KT-L-SS COMPONENTS LIST 1 QT – 15 GAL				
PART	DESCRIPTION	PART NUMBER		
1	Protective Cap	AI-306-2-SS		
2	Valve Cap	AI-S-303		
3	High Pressure Gas Valve	AI-S6-309		
4	O-Ring	AI-S6-310		
5	Pressure Monitor Block, Deluxe, 6000 PSI	AI-PM6-003-D-SS		
6	Gauge, 6000 PSI, Liquid Filled	AI-CG6-001-1-L-SS		

- These units are intended to be mounted permanently on the valve stem of the accumulator to monitor hydraulic system pressure. Nitrogen precharge may only be measured when hydraulic line pressure is zero PSI.
- We recommend the use of a liquid-filled gauge for high-cycle shock applications.
- Accumulator gas valve must be removed prior to installation. Ensure all accumulator pressure has been removed before beginning installation.
- Extended versions available for Top Repairable bladder accumulators and piston accumulators.
- Custom and digital assemblies are available.



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19

### MAINTENANCE KITS BLADDER ACCUMULATORS - ACCESSORIES

Everything you need to precharge, maintain and repair any accumulator up to 6000 PSI. Includes spare parts. Additional maintenance kits for 10000 PSI accumulators and other special applications are also available.









AI-TKIT COMPLETE 3000 PSI MAINTENANCE KIT					
PART # DESCRIPTION QU					
AI-TR-015	Gas Valve Extension	1			
AI-501	Bladder Pull Rod	4			
AI-505	Spanner Wrench	1			
AI-506	Valve Core Tool	1			
AI-527	Valve Core Torque Wrench	1			
AI-516	Aluminum Tool Case	1			
AI-CG-002	Air Chuck	1			
AI-GT3-309-KIT	Gas Valve	1			
AI-S-304	Valve Core	5			
AI-CG3-000-SS	C&G Assembly 3000 PSI	1			
	6 COMPLETE 6000 PSI MAINTENANCE KI				
PART #	DESCRIPTION	QUANTITY			
AI-501	Bladder Pull Rod	4			
AI-505	Spanner Wrench	1			
AI-516	Aluminum Tool Case	1			
AI-S6-309-KIT	High Pressure Gas Valve 6000 PSI	1			
AI-CG6-550-SS	C&G Assembly 6000 PSI	1			
AI-TKIT-1 DELUXE MAINTENANCE KIT 3000 PSI & 6000 PSI					
PART #	DESCRIPTION	QUANTITY			
AI-TR-015	Gas Valve Extension	1			
AI-501	Bladder Pull Rod	4			
AI-505	Spanner Wrench	2			
AI-506	Valve Core Tool	1			
AI-527	Valve Core Torque Wrench	1			
AI-516	Aluminum Tool Case	1			
	I-CG-002 Air Chuck				
AI-GT3-309-KIT	Gas Valve	1			
AI-S-304	Valve Core	5			
AI-GT3-311	Gas Valve O-ring	5			
AI-CG3-000-SS	C&G Assembly 3000 PSI	1			
AI-S6-309-KIT	High Pressure Gas Valve 6000 PSI	1			
AI-CG6-550-SS	C&G Assembly 6000 PSI	1			
AI-511	Accumulator Lifting Hook Assembly	1			
AI-515	Gas Valve Tool TR	2			
	IT-B BASIC 3000 PSI MAINTENANCE KIT	_			
PART #	DESCRIPTION	QUANTITY			
AI-TR-015	Gas Valve Extension	1			
AI-501	Bladder Pull Rod	4			
AI-505	Spanner Wrench	1			
AI-506	Valve Core Tool	1			
AI-527	Valve Core Torque Wrench	1			
AI-519	19" Tool Case	1			
AI-CG3-000-SS	C&G Assembly 3000 PSI	1			

Accumulators, Inc.

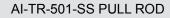
20

### TOOLS BLADDER ACCUMULATORS - ACCESSORIES



Used to help pull the bladder through the accumulator shell during assembly and bladder replacement. For 1 quart, 1 gallon, or 2.5 gallon accumulators.

- (AI-502): For 5-gallon accumulators
- (AI-503): For 10-gallon or 11-gallon accumulators
- (AI-504): For 15-gallon accumulators





Used for top repairable bladder accumulators. The "T" section of the pull rod is designed so that the rod cannot fall into the accumulator and also provides additional leverage for the technician to properly remove the bladder.

#### AI-506 VALVE CORE TOOL



Our valve core tool allows the user to remove or reinstall the valve core in our standard 3000 psi gas valve, as well as depress the valve core for gas removal. Also includes ID and OD thread chasing capabilities.

AI-511 LIFTING HOOK ASSEMBLY



Our lifting hook assembly allows the user to connect a chain or other lifting apparatus to the gas end of our accumulators. We recommend this tool to lift all accumulator sizes over 2.5 gallons. Load-tested assemblies available with a test certificate at additional cost. Standard size is 7/8"-14; 2"-12 size available as part number AI-GT-511.





Used for removal and replacement of the locknuts at the fluid end of an accumulator and at the gas end of top repairable accumulator models.

AI-TR-015 GAS VALVE EXTENSION



Our gas valve extension allows the user to connect our charging & gauging assembly (AI-CG3-3KT-SS) to the gas valve in a 3000 psi top-repairable accumulator.

#### AI-527 VALVE CORE TORQUE WRENCH



Use this tool during installation of a valve core to ensure the core is installed to precisely the correct torque; over or under-tightening the valve core can cause gas leakage and accumulator failure.

#### AI-515-KIT TR GAS VALVE TOOL



This is a set of 2 specially-designed wrenches for the installation or removal of the gas valve in a 6000 psi top-repairable accumulator.



### SAFETY BLOCKS BLADDER ACCUMULATORS - ACCESSORIES

Our accumulator safety block is a multifunctional valve placed between the hydraulic accumulator and the operating system. The safety block allows for isolation of the accumulator for maintenance or system testing, and will function as an emergency shut-off device or pressure relief valve to protect the hydraulic system from overpressurization or system failure.

Our accumulator safety blocks incorporate the following components:

- 90-degree full-orifice ball valve to isolate the accumulator from the system
- Manual adjustable safety relief valve
- Manually-operated bleed valve; bleeds down accumulator safely
- Optional female port for pressure gauge options
- Manual release handle standard

SAFETY BLOCK	BLEED VALVE	ACCUMULATOR SIDE CONNECTION	DISCHARGE SIDE CONNECTION	GAUGE		EXAMPLE
ASB	М	FK3	FK3	G1	=	ASB-M-FK3-FK3-G1

800 SERIES CONFIGURABLE SAFETY BLOCK						
SAFETY BLOCK	BLEED VALVE	DESCRIPTION	ACCUMULATOR SIDE CONNECTION	DISCHARGE SIDE CONNECTION	GAUGE	
	M Manually Operated e E Solenoid Operated	Split Flange Kits	<b>FK3</b> 2" Code 61	<b>FK3</b> 2" Code 61	<b>G1</b> 3000 psi dry	
		(includes o-ring(s), bolts and washers)	<b>FK6</b> 1.5" Code 62	<b>FK6</b> 1.5" Code 62	<b>G2</b> 3000 psi liquid fill SS	
			A31 2" NPT (female)	A31 2" NPT (female)	<b>G3</b> 5000 psi dry	
			<b>A36</b> 1 7/8"-12 SAE (male)	<b>A36</b> 1 7/8"-12 SAE (male)	<b>G4</b> 5000 psi liquid fill SS	
ASB Configurable		Adapter Connector Kits - 6000 psi (includes split flange kit)	<b>A61</b> 1 5/8"-12 SAE (male)	<b>A61</b> 1 5/8"-12 SAE (male)	<b>G5</b> 6000 psi dry	
Accumulator Safety Block Core			<b>A62</b> 1 7/8"-12 SAE (male)	<b>A61</b> 1 7/8"-12 SAE (male)	<b>G6</b> 6000 psi liquid fill SS	
		_		<b>P31</b> 2" NPT (female)	<b>P31</b> 2" NPT (female)	<b>00</b> (none)
		Operated Four Bolt Flange Adapter Plate Kits (includes o-ring(s), bolts and washers)	<b>P61</b> 1.5" NPT (female)	<b>P61</b> 1.5" NPT (female)		
			<b>P66</b> 1 7/8"-12 SAE (female)	<b>P66</b> 1 7/8"-12 SAE (female)		
		No Connection (block is drilled for split and four-bolt flanges)	<b>000</b> (none)	<b>000</b> (none)		

This model is designed for our 2.5 through 15 gallon accumulators. Best suited for use with SAE split flange connections for ease of installation and maintenance. The SAE split flanges are either code 61 or code 62 series. This model is rated up to 5800 PSI MAWP.

Optional solenoid-operated dump valve

Optional lock-out plate included that can restrict access to valve position

### 850 SERIES FIXED-PORT SAFETY BLOCK

Safety Block-Manual Bleed Valve 1 5/8"SAE Connections	Complete package with fixed connections. Gauge is optional.	ASB-850-1	0 e
Safety Block-Manual Bleed Valve 1 1/16" SAE Connections		ASB-850-2	a P

Our 850 series block is designed for use with our 1 quart and 1 gallon bladder accumulators equipped with female SAE fluid ports. Safety block outlet port is available in SAE -8, -12 and -20 sizes. This model is rated up to 5000 PSI MAWP.



800 SERIES

850 SERIES

Other sizes and types of connections are available. Contact us for details and pricing.

Flange kits, adapter kits, adapter plates, gauges, bolts, washers and seals can be ordered separately as replacement parts. Optional solenoids as well as custom parts are also available. Contact us for details and pricing.



### NITROGEN GAS BOOSTER PACKAGES BLADDER ACCUMULATORS - ACCESSORIES



Most hydraulic accumulators need to be precharged with dry nitrogen gas before operation. Accumulators, Inc. nitrogen gas boosters are designed to boost gas pressure directly from nitrogen cylinders to outlet pressures as high as 10000 psi. Our unit ensures maximum outlet pressure will be maintained even if the pressure in the nitrogen cylinders drops as low as 500 psi.

Our booster is a driven by a typical industrial-style shop-air compressor, typically between 70 and 100 psi. If compressed air is not available, the booster can also be driven directly by the nitrogen cylinders. In the shop-air drive mode, non-contaminated outlet gas is assured through complete dual-vented separation from the drive section. The high pressure section of the booster is cooled by the drive exhaust gas and requires no lubrication. Valves and gauges are stainless steel and are line-mounted to the booster, which features a painted, aluminum tube frame with carry handles.

#### **CONTROLS INCLUDED**

- Single acting double drive gas booster configuration.
- Automatic control to stop/restart the booster when the outlet pressure exceeds set point; pre-selected pressure up to 6000 psi (adjustable, depending on model).
- Manual start and stop
- High pressure air controls (HP regulator, relief valve, inlet & regulated outlet gauges and on/off valve)
- Adjustable safety relief valve
- Gas inlet and outlet gauges

#### SPECIFICATIONS

- Dimensions: 30"L x 12"D x 12"H
- Weight: 60 pounds
- Maximum outlet pressure: 6000, 7500, or 10000 psi

PART NUMBER	OUTLET PRESSURE RANGE
AI-NGB-6000	0-6000 PSI
AI-NGB-7500	0-7500 PSI
AI-NGB-10000	0-10000 PSI

