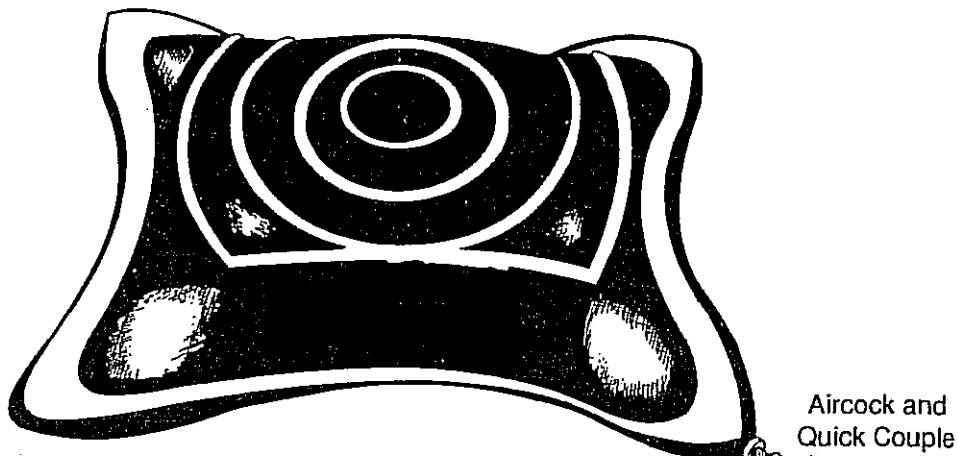


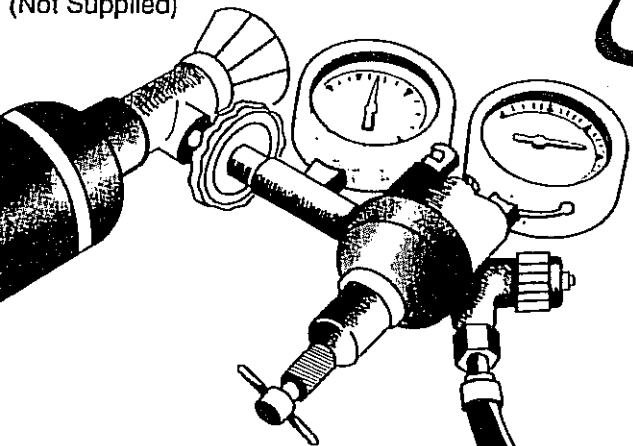
## TABLE OF CONTENTS

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2216 or 4500 PSI  
High Pressure  
Air Cylinder  
(Not Supplied)

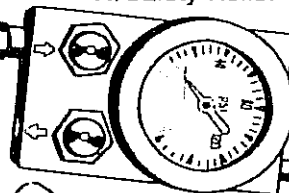


Aircock and  
Quick Couple

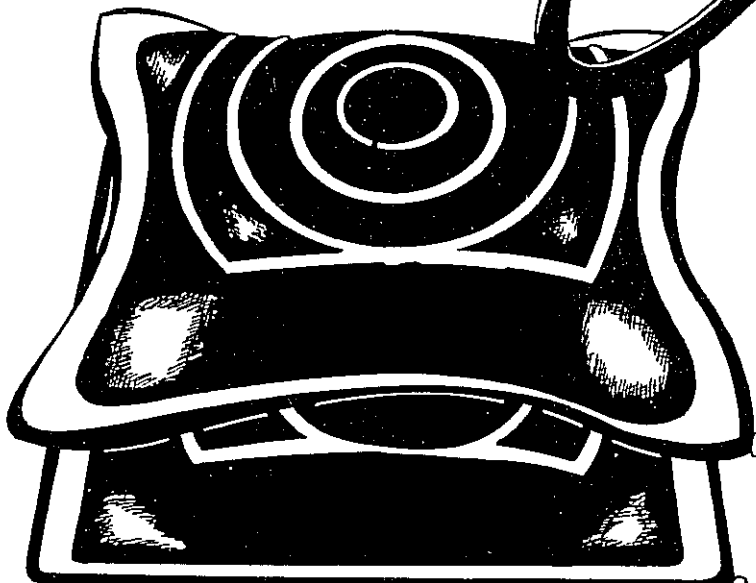


2 Stage Regulator,  
Model 2216 or 4500

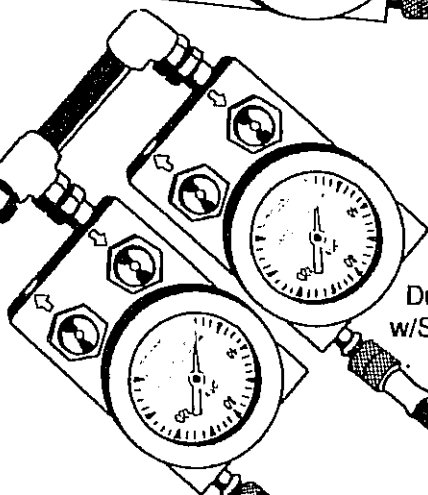
Single Control  
W/Safety Relief



Y-Hose

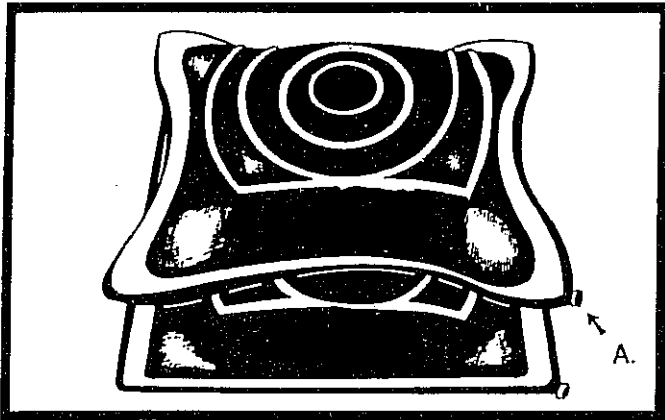


Dual Control  
w/Safety Relief



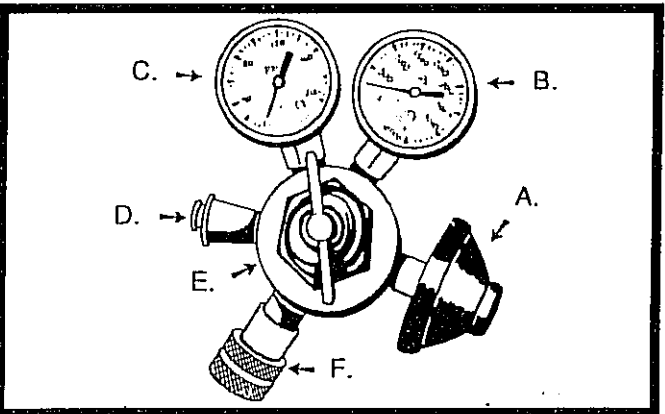
# DESCRIPTION

(Fig. 1)



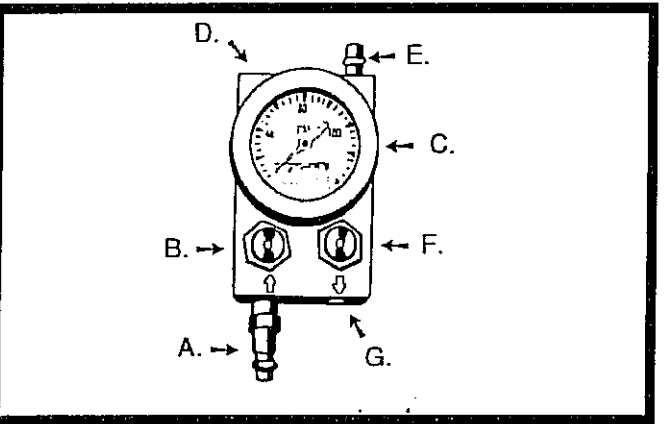
1. BAG (Fig. 1)
  - A. Air Inlet Nipple

(Fig. 2)



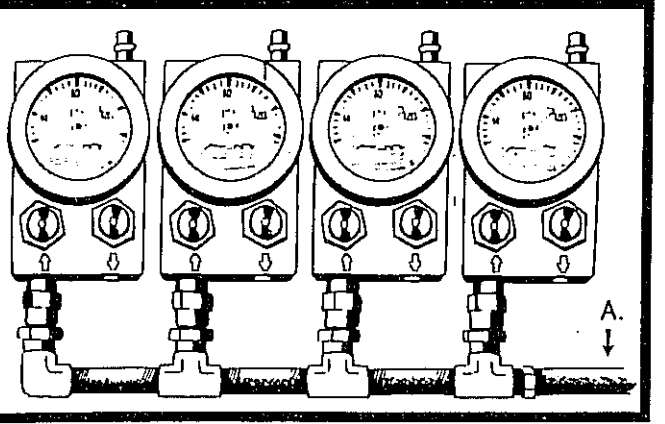
2. TWO STAGE REGULATOR (Models 2216 and 4500) (Fig. 2)
  - A. High Pressure Air Inlet
  - B. High Pressure Gauge
  - C. Low Pressure Gauge
  - D. Regulator Relief Valve
  - E. T. Handle To Adjust Low Pressure Range
  - F. Air Outlet

(Fig. 3)



3. SINGLE PUSH-BUTTON CONTROL VALVE AND SAFETY RELIEF (Fig. 3)
  - A. Air Inlet
  - B. Inlet Valve
  - C. Operating Gauge
  - D. Safety Relief
  - E. Air Outlet To Bag
  - F. Air Exhaust Valve
  - G. Air Exhaust Port

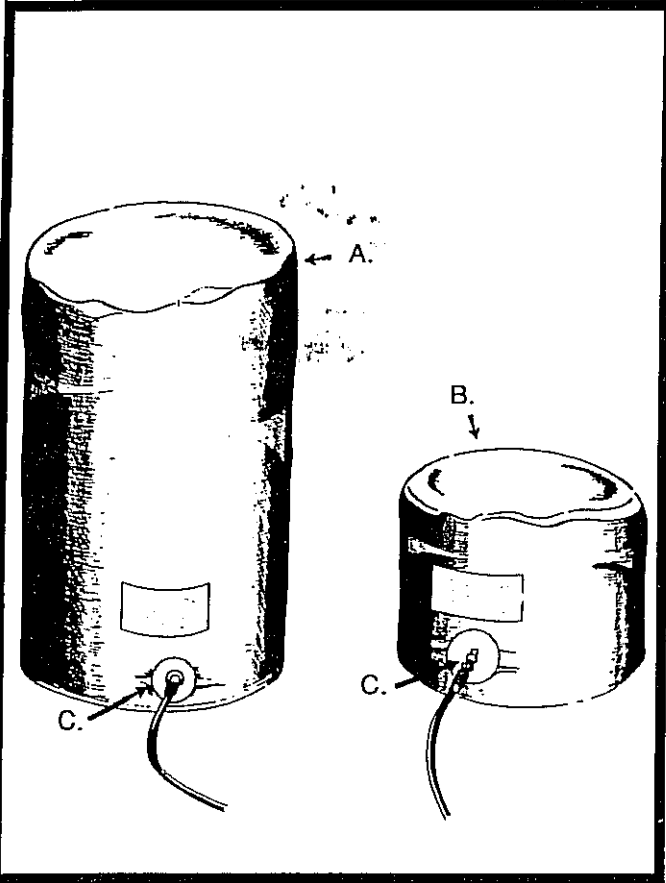
(Fig. 4)



4. MULTIPLE PUSH BUTTON CONTROL VALVES W/SAFETY RELIEF (Fig. 4)
  - A. Air Source Connection
  - \* All other functions same as single control.

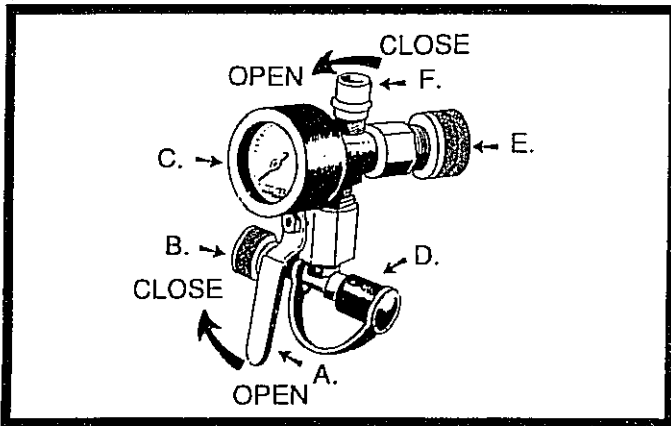
# DESCRIPTION (Con't.)

(Fig. 5)



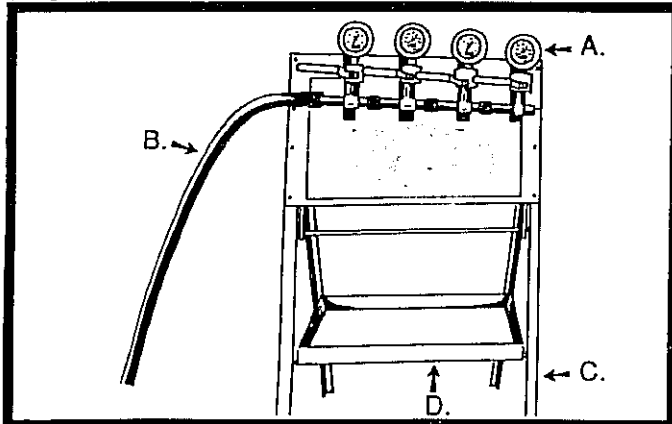
5. LOW PRESSURE AIR CUSHIONS (Fig. 5  
A & B)  
A. High Lift Bag  
B. Starter Cushion  
C. Air Inlet Valve

(Fig. 6)



6. HIGH/LOW PRESSURE LEVER CONTROL VALVES WITH SAFETY RELIEF AND COUPLING (Fig. 6)  
A. Lever Control Valve  
B. Air Source Coupling  
C. Air Pressure Gauge  
D. Check Valve Plug For Additional Control Connection  
E. Hose Connection To Low Pressure Cushion  
F. Safety Relief And Adjusting Valve

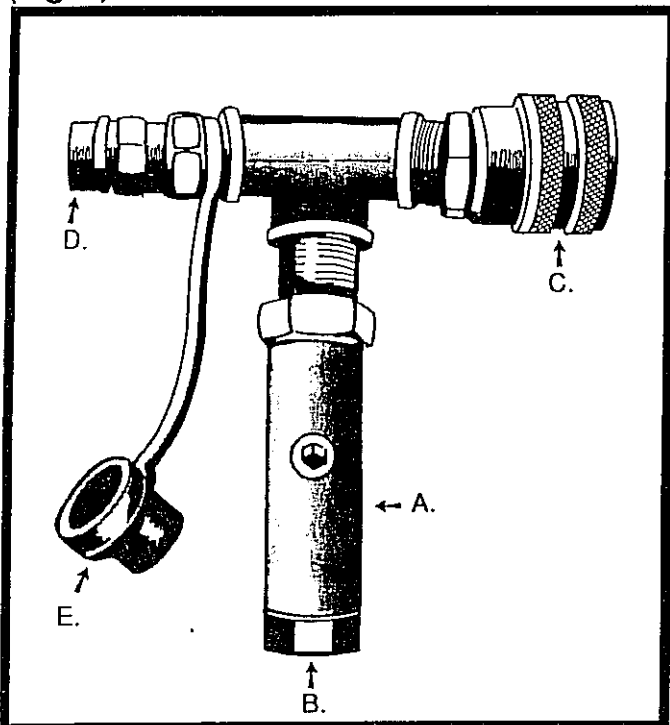
(Fig. 7)



7. MULTIPLE LOW PRESSURE/HIGH PRESSURE CONTROLS WITH STAND (Fig. 7)  
A. Combination Lever Controls Slotted Into Stand  
B. Common Air Source  
C. Control Stand  
D. Tool Tray

## DESCRIPTION (Con't.)

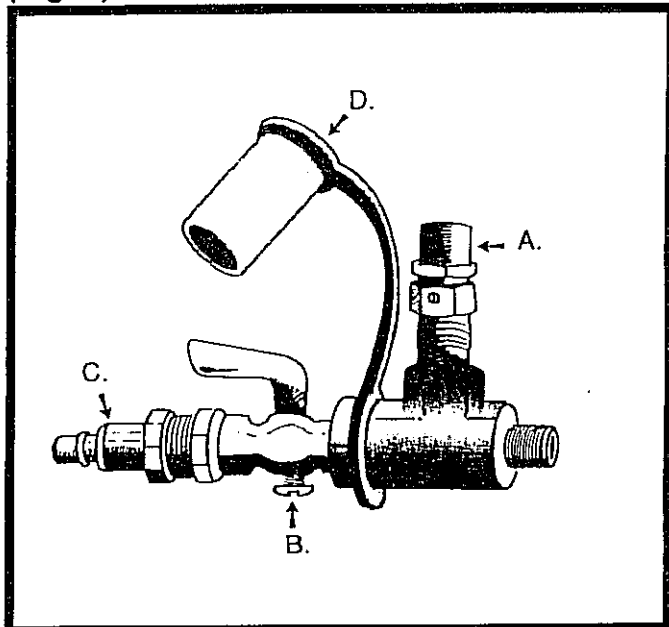
(Fig. 8)



### 8. HIGH VOLUME/LOW PRESSURE RELIEF VALVE (Fig. 8)

- A. Relief Valve Set At 5 PSI/Full Open At 7 PSI
- B. Relief Port
- C. Female Coupling To Be Attached At Cushion
- D. Male Coupling For 3/4 Inch Air Hose
- E. Dust Cover For Male Connection

(Fig. 9)

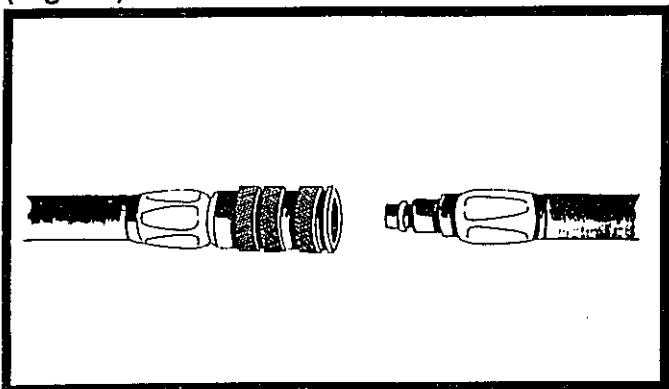


### 9. INLINE RELIEF AND SHUT-OFF FOR HIGH PRESSURE BAGS (Fig. 9)

- A. 125 Safety Relief Valve
- B. Air Cock For Shutting-Off Air In Bag
- C. Air Connection Fitting
- D. Dust Cover (When In Use)

\* Comes as standard equipment on H. P. Bags when used in combination with low pressure or as an accessory when high pressure purchased separately and is available with or without pre-connected air hose.

(Fig. 10)



### 10. HOSES (Fig. 10)

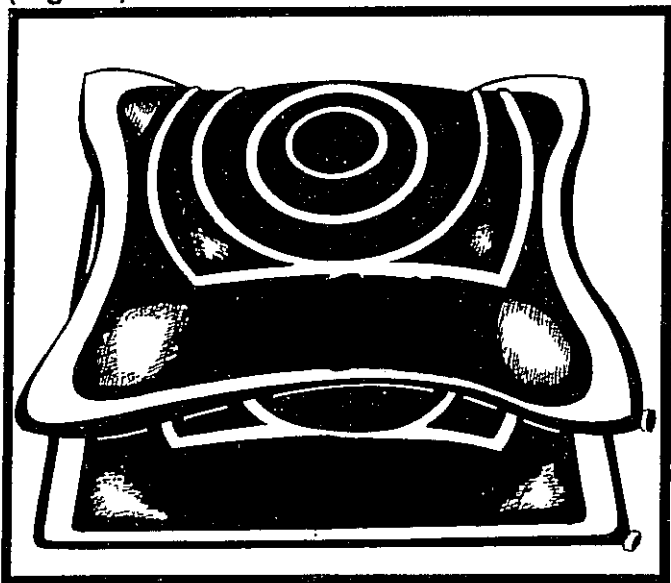
\* Hoses are used for delivery of air supply to the system. All hoses come standard with quick disconnect fittings but, are available with locking type fittings upon request. Additional lengths of hose can be attached to permit remote operation for additional bags and accessories.

### 11. CANVAS BAGS

\* Canvas bags are supplied with all basic unit kits for storage and protection of your equipment. It is recommended that these be used at all times to enhance the longevity of your equipment.

## USE AND HANDLING

(Fig. 11)



### INSPECTION (Fig. 11)

After unpacking, lay out system for general familiarization. Inspect for any shipping damage, check hoses, regulator, controller, bags and accessories.

### BAGS

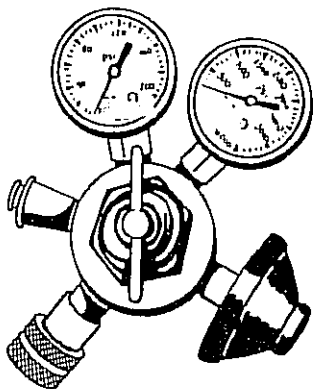
\* Inspect them and look for any obvious shipping damage. These bags are made to be durable. If there is any damage, please report this immediately to your dealer or our Service Department through our toll free number 800-827-3755.

\* Install the replaceable male nipple and aircock into the air inlet fitting on each air bag. These fittings are tapered brass and do not need to be over tightened, a snug fit is all that is required.

Before putting the Air Bag System into operation, the operator and personnel in the working area must be properly suited to the environment in which they will be working. Safety equipment is of the utmost importance. Hard hat, safety glasses or shield, proper hand protection gloves, protective clothing and footwear **MUST** be worn to prevent injuries.

Because Air Bags may be used in so many different environments, operators must be aware of the many HAZARDS which they may be exposed to and should provide protective equipment accordingly.

(Fig. 12)



### HIGH PRESSURE REGULATOR (Fig. 12)

\* This regulator must be used whenever you use a high pressure air source, such as, a breathing air cylinder. Check for damaged gauge lenses. The gauge closest to the air intake will give the operator a reading of the pressure of his air source. The second gauge indicates the low pressure operating range of the Air Bags.

## WARNING

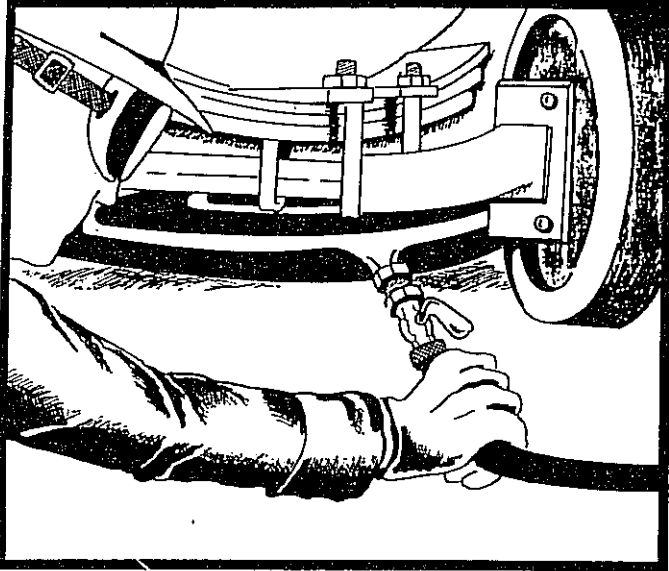
OPERATING PRESSURE NOT TO EXCEED  
PSI ON LOW PRESSURE SIDE 125

# RULES FOR SAFE OPERATION

## WARNING

READ RULES FOR SAFE OPERATION BEFORE OPERATING THE BAG

(Fig. 16)



(Fig. 16)

1. All Personnel using and assisting with the Bags should wear safety clothing, i.e., helmets, eye protection, gloves, safety boots, etc.
2. Before raising an object, careful evaluation should be made to predetermine desired height or load movement. This allows you to obtain, in advance, all necessary blocks and/or shoring before you commit the Bags.

(Fig. 17)

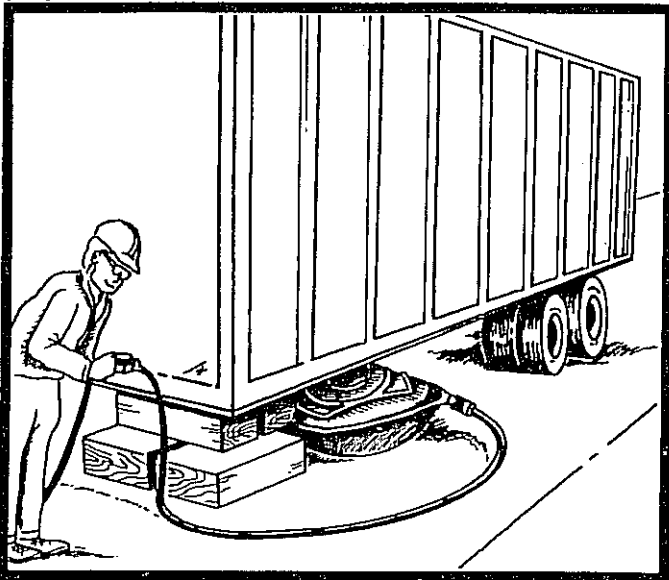
3. Always maximize the contact area of the Bag. This may require you to either block up the Bags before inflating or to use two Bags simultaneously.
4. As the Bag is being inflated, stand to one side and clear all other personnel from the vicinity. DO NOT stand in front of the opening where the Bags have been placed, as there is a possibility of Bags being pushed out by the load shifting.
5. As the load is being moved or lifted, always block and/or shore the load.

A. When blocking, have the operator stop the lift. After blocking, resume the lift.

B. Use blocks and shoring that will be able to assume the load. Remember, although the Bag does not need a smooth surface, blocks and shoring do.

C. NEVER work under a load supported by only Bags.

(Fig. 17)

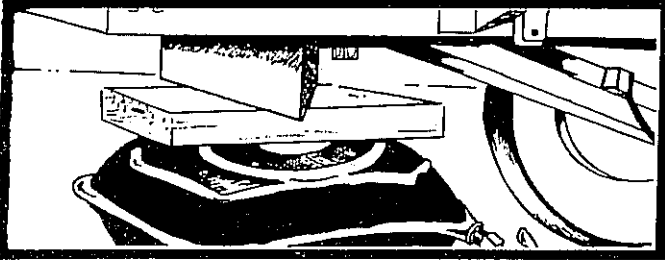


## WARNING

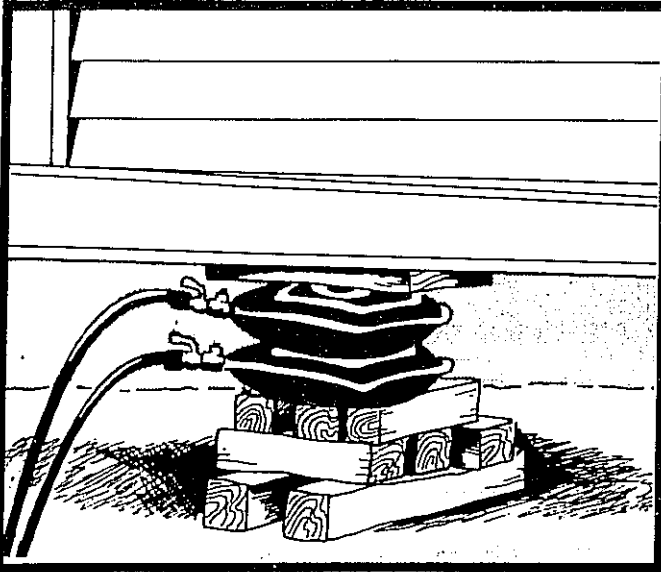
WHEN SHORING USING THE BOX CRIBBING METHOD MAKE SURE THE BAG IS PLACED ON A SOLID TOP LAYER. DO NOT LEAVE A HOLLOW CENTER AS ANY MOVEMENT OF LOAD MAY CAUSE THE CRIBBING TO SHIFT AND COLLAPSE.

# RULES FOR SAFE OPERATION (Con't.)

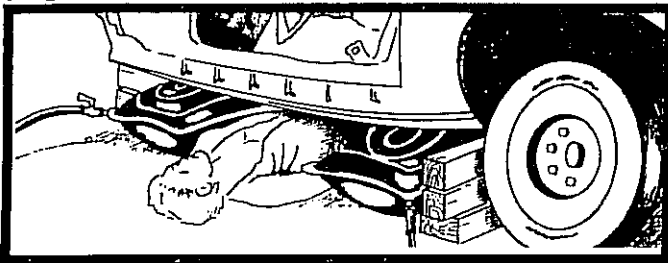
(Fig. 18)



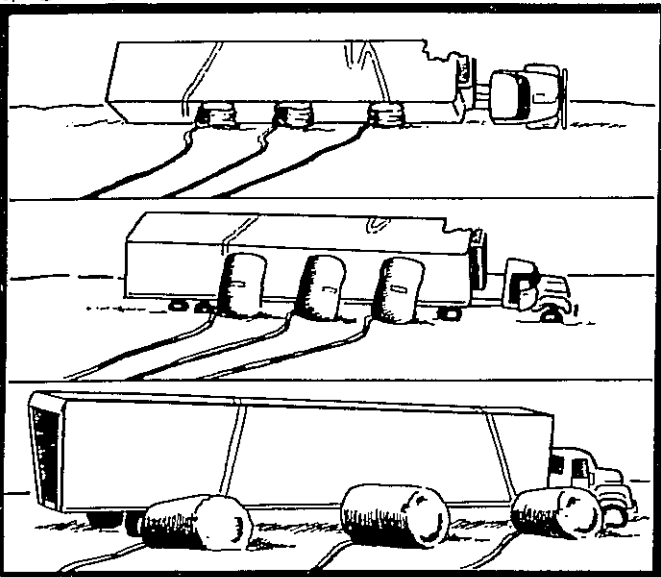
(Fig. 19)



(Fig. 20)



(Fig. 21)



(Fig. 18)

6. NEVER inflate bags against sharp objects or on a heated surface over 230 degrees Fahrenheit. When it is necessary a block can be placed between a hot or sharp surface to protect the bag.

(Fig. 19)

7. Two bags may be used safely by using a dual control.
  - A. This allows for greater lift height.
  - B. NEVER stack more than 2 bags at a time.

(Fig. 20)

- C. Allows you to lift the same load at two separate points to maximize surface contact.
- D. When using two bags always inflate the bottom bag first.

8. When using the air bags, always inflate at a slow rate.
9. NEVER operate bags, hoses, valves, regulators, etc., that are damaged or improperly assembled.

## LOW PRESSURE OPERATION

(Fig. 21; A, B & C)

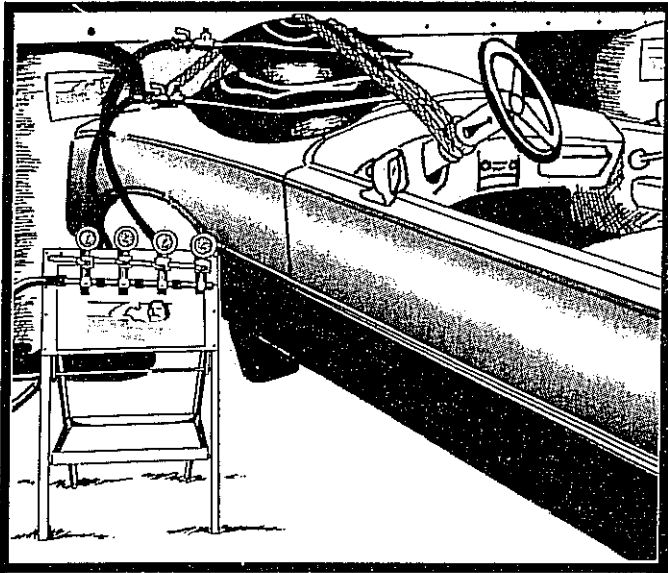
1. All loads must be secured. Secure load with blocks or chocks to prevent unanticipated shifting or sliding.
2. When placing cushions under the load:
  - A. Distribute cushions to lift load evenly.
  - B. Align tops and bottoms of cushion to assure a straight vertical lift.
  - C. Place cushions completely under the load to prevent cushions from pushing themselves out.
3. NEVER PUT ANY PART OF YOUR BODY UNDER A SUSPENDED LOAD! If necessary, use placing poles or gaff hooks to position cushions.
4. If placing cushions near sharp objects on load, place protective covering such as MatJack smooth protective top to prevent puncturing or tearing of the air cushions.

# RULES FOR SAFE OPERATION (Con't.)

## LOW PRESSURE OPERATION (Con't.)

5. Stand back twenty-five feet from load when lifting begins.
6. Apply air slowly to provide a safe, CONTROLLED lift. The load can be completely lifted using only 2 to 3 p.s.i. Warranty is voided if 7 p.s.i. is exceeded.
7. To further secure load, block and crib approximately every 4 to 6 inches.
8. Once load is completely lifted, DO NOT work underneath until load is completely blocked and secured.
9. Deflate cushions slowly to bring load back down.

(Fig. 22)



(Fig. 22)

\* Whenever using High Pressure and low pressure together personnel should man the controls at all times at a safe distance from the work in order to control inflation rate of both air bags and cushions to maintain even lift.