

## DESCRIPTION

Trabon Drum Pumps are single stroke double acting pneumatic (or hydraulic) powered units for use with standard 35-lb. and 120-lb. lubricant containers. They are designed to provide controlled output from drum size containers and are suited for use on most types of off-the-road mobile equipment or for industrial systems utilizing Trabon series progressive lubricating systems.

## FEATURES/ADVANTAGES

- Hydraulically or Pneumatically powered (double acting)
- Available in: 30:1 Pneumatic Model  
4:1 Hydraulic Model  
10:1 Hydraulic Model
- Controlled cycling rate
- Fits Standard 35-lb. and 120-lb. lubricant container
- Follower plate standard
- Solenoid valve manifolded to pump (pneumatic only)
- High power ratio
- Cartridge discharge check valve
- Adjustable output

## OPERATION

### Pneumatic Powered Unit –

With the power piston in the up position the lubricant chamber is primed with lubricant and ready for the first pump cycle. Air is valved to the top side of the power piston, pushing the power piston and piston rod downward (See Figure 1), and forcing the lubricant out of the lubricant chamber, past the discharge check valve and out the discharge tube. Air is then valved to the bottom side of the power piston forcing it upward (See Figure 2), returning the pump piston to the prime position. As the pump piston moves upward, lubricant is drawn into the lubricant chamber through the inlet check valve. This cycle is repeated as often as air is valved to the pump.

As lubricant is pumped out of the container, atmospheric pressure, acting on the follower plate, forces it down. The follower plate wipes the side of the container and produces a positive prime pressure on the pump inlet.

The output per stroke can be reduced by 50% by reversing the end cap on the air cylinder. This reduces the stroke of the pump by 50%.

### Hydraulic Powered Unit –

The hydraulic unit operates in the same manner as the pneumatic unit except the power source is hydraulic instead of pneumatic.



The output per stroke can be reduced by 50% by screwing an adapter into the hydraulic cylinder end cap. This reduces the stroke of the pump by 50%.

The cycling rate of the drum pump is controlled by the rate at which air (or hydraulic) flow is applied to the power cylinder. This is typically accomplished by using a timer (or controller) to operate a four-way, two position solenoid valve.

**Note:** The pump assembly and the delivery tube should be pre-packed with grease prior to first use.

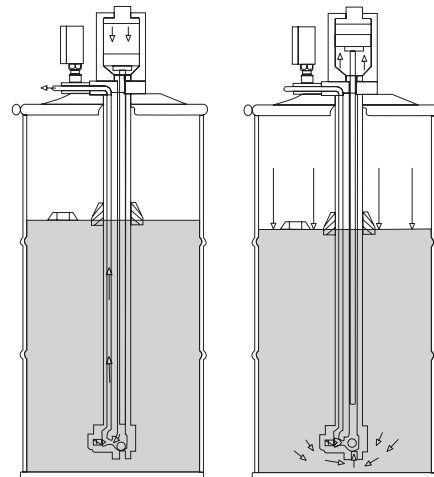


Figure 1

Figure 2

**SPECIFICATIONS**

Pump body material  
 Hydraulic unit ..... Steel  
 Pneumatic unit ..... Steel and Aluminum

Pump Data  
 Output ..... .240 cu. in. stroke (max.)  
 .120 cu. in. stroke (min.)

Power ratio ..... 30:1 pneumatic  
 10:1 hydraulic  
 4:1 hydraulic

Maximum Air Pressure ..... 150 psi; 30:1 Air Unit  
 Minimum Air Pressure ..... 50 psi; 30:1 Air Unit  
 Maximum Hydraulic Pressure ..... 500 psi  
 Minimum Hydraulic Pressure ..... 150 psi  
 Maximum Lube Outlet Pressure ..... 3000 psi  
 Cycling rate, (maximum)  
 Oil ..... 40 cycles per minute  
 (2) Grease ..... 30 cycles per minute

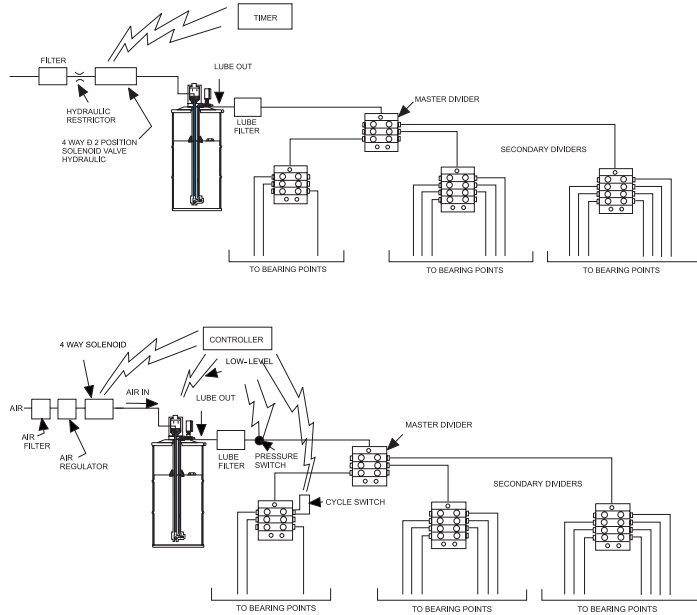
Net weight (less container)  
 35 lb. unit (pneumatic) ..... 15 lbs.  
 35 lb. unit (hydraulic) ..... 17 lbs.  
 120 lb. unit (pneumatic) ..... 18 lbs.  
 120 lb. unit (hydraulic) ..... 20 lbs.

Pneumatic Solenoid Valve w/subbase and Bolts ..... 2 lbs.

**Notes:** (1) For temperatures below 28°F. contact factory.  
 (2) Using NLGI No.1 grease at ambient temperature (75°F.)

**TYPICAL APPLICATIONS**

The barrel pump can be used in a wide range of applications for industrial and mobile markets. Typical industrial applications include conveyor systems, presses and overhead cranes. Examples of mobile applications include front end loaders, scrapers and cranes. A simple timer may be used to activate the system or a controller can be used to monitor various functions.



**ORDERING INFORMATION**

Part Number	Solenoid Included											Disc Press	LL SW	Press Gauge
	35 Lb	120 Lb	Hydr 10:1	Hydr 4:1	Air 30:1	Not	12 VDC	24 VDC	115 VAC	220 VAC				
145-100-030	X				X	X						1750		X
145-100-040	X		X			X						1750		X
145-100-050	X				X			X				1750		X
145-100-070	X				X		X					1750		X
145-100-130	X			X		X						3000	X	
526-100-770	X			X		X						3000		
145-100-000		X			X	X						1750		X
145-100-010		X	X			X						1750		X
145-100-020		X			X			X				1750		X
145-100-060		X			X		X					1750		X
145-100-110		X		X		X						3000	X	
145-100-140		X	X			X						3250	X	X
145-100-220		X			X				X			1750		X
145-100-300		X			X					X		1750	X	X
145-100-310		X			X				X			1750	X	X
526-100-700		X		X		X						3000		

**Pump Repair Kits**

Repair Kit, 10:1 Hydraulic Cyl. .... 560-002-960  
 Repair Kit, Lower Pump ..... 560-002-961  
 Repair Kit, 30:1 Air Cyl. .... 560-900-550  
 Repair Kit, 4:1 Hydraulic Cyl. .... 560-002-985

**ISO 9000:2000  
 REGISTERED FIRM**

**ISO 14000  
 REGISTERED FIRM**

**PARTS/ACCESSORIES**

24 VDC 4 way pneumatic solenoid valve assembly (includes the following solenoid valve end parts) ..... 526-100-300  
 24 VDC, 4 way pneumatic solenoid valve (.32A, 7.2W) ..... 526-100-310  
 "O" Rings for adaptor bolts (4 required)\* ..... 422-101-160  
 Manifold\* ..... 526-100-280  
 Muffler (exhaust)\* ..... 526-100-320  
 Adaptor bolts (2 required)\* ..... 521-000-560  
 12 VDC, 4 way pneumatic solenoid valve assembly (includes the following solenoid valve and the parts marked "\*" above) ... 526-100-360  
 12 VDC, 4 way pneumatic solenoid valve (.63A, 7.2W) ..... 526-100-350  
 115 VAC, 4 way pneumatic solenoid valve assembly (includes the following solenoid valve and the parts marked "\*" above) ... 526-100-820  
 115 VAC, 4 way pneumatic solenoid valve (.13A inrush, .08A Holding) ..... 526-100-810  
 1/2 capacity adaptor for hydraulic powered unit ..... 520-100-060  
 Low level switch assembly 35 lb. (SPDT, 15A) ..... 526-100-430  
 Low level switch assembly 120 lb. (SPDT, 15A) ..... 526-100-440

**Note:** Low level switch also available with pump assemblies,