

The Heavy-Duty 50:1 Grease Pump Family from Lincoln

Lincoln air-operated lube equipment models featuring our high-pressure Series 20 and Series 40 grease pumps have been performance proven in automotive, agricultural, heavy-duty, marine, construction and industrial facilities throughout the world.

- Series 20 grease pumps include the time proven 20 cubic inch displacement Lincoln air motor with 2 1/2" stroke—ideal for most applications.
- Series 40 grease pumps include the time proven 40 cubic inch displacement Lincoln air motor with 4 1/2" stroke—ideal for high volume applications.

These pumps are built for power, durability and dependability and these exclusive engineering features ensure top performance and longer service life.

Series 20 & 40 Grease Pump Features

- Lightweight, corrosion-resistant zinc head casting design incorporates uniform wall thickness and an integral patented muffler which keeps noise level below OSHA standards without compromising performance. Keeps pumping, while other pumps slow down or stop due to icing.
- 150 psi pre-lubricated air motor requires no external oiler.
- Pneumatically-assisted mechanical air valve assures positive tripping.
- Springless air motor construction prevents premature pump failure due to spring fatigue.
- Precision-machined, hardened steel slide valve for longer life—no packings to wear out.
- Powerful—20 cu. in. or 40 cu in. air motor.
- Designed for greater cycle rates. Exceeds maximum limits recommended for competitive pumps.
- One piece pump outlet body withstands constant high lubricant pressures.
- Easier serviceability. Majority of parts are common with other series 20, 25 and 40 pumps.
- Faster output. Double-acting design provides high-pressure and uniform delivery on both up and down strokes.
- Hardened steel plunger and bushing resist abrasion and prolong pump life. Micro-lapped to high precision tolerance to eliminate bypassing lubricant.
- All pumps are 100% electronically tested to assure quality performance.
- Backed by the most extensive, qualified service network in the industry.
- Shovel-type foot valve adds mechanical priming to normal suction. Handles all grades of lubricants.
- Backed by a five-year limited warranty. See your Lincoln representative for details.





918

Series 20 • 50:1 • Double Acting

Shop/Plant Applications

Model 918 120 lb. Drum

Equipped with 82050 bare pump assembly, 46007 drum cover, 815 air coupler, 11659 air nipple, 72036 3' air connecting hose, 75060 5' high-pressure grease connecting hose, 84780 deluxe follower plate, 80202 volume elbow union. Height with drum is 39³/₈". Drum not included.

Model 83447 Pump Elevator Assembly

Pump elevator assembly lifts pump assembly clear of drum for easy, one person drum changes. Also helps prevent introduction of foreign material into grease during drum changes. Height with drum is 39³/₈", 67¹/₄" with elevator raised. Drum not included.



83447

Model 926 400 lb. Drum

Equipped with 82054 bare pump assembly, 81523 drum cover, 815 air coupler, 11659 air nipple, 72036 3' air connecting hose, 75060 5' high-pressure grease connecting hose and 80202 volume elbow union. Height with drum is 46". Drum not included.

NOTE: A deluxe follower plate 83366 is recommended for use with this pump. See page 5.

Model 926-1 400 lb. Drum

Same as 926 except without 81523 drum cover.

Lube Truck/Mobile Applications

Model 82991 120 lb. Drum

Equipped with 82050 bare pump assembly, 82989 drum cover and tie rod assembly, 84941 eye bolt kit, 815 air coupler, 11659 air nipple and 80202 volume elbow union. Height with drum is 40³/₄". Drum not included.

NOTE: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.



926

Model 83112 400 lb. Drum

Equipped with 83112-1 pump, 83115 drum cover and tie rod assembly 815 air coupler, 11659 air nipple and 80202 volume elbow union. Height with drum is 50". Drum not included.

NOTE: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.



82991

These high-pressure pumps incorporate a 20 cu. in. air motor design.

Series 20 Grease Pumps

Model	Description	Bare Pump	Free Delivery (per min.)	Ratio	Drum Size	Air Inlet NPT	Material Outlet NPT
918	Shop/garage	82050	80 cu. in.	50:1	120 lb.	1/4" (f)	1/4" (f)
923	Shop/garage w/elevator	82050	80 cu. in.	50:1	120 lb.	1/4" (f)	1/4" (f)
926	Shop/garage	82054	80 cu. in.	50:1	400 lb.	1/4" (f)	1/4" (f)
82991	Lube truck model	82050	80 cu. in.	50:1	120 lb.	1/4" (f)	1/4" (f)
83112	Lube truck model	82054	80 cu. in.	50:1	400 lb.	1/4" (f)	1/4" (f)

Series 40 • 50:1 • High Output • Double Acting Shop/Garage Applications



1418

Model 1418 120 lb. Drum

Equipped with 84667 bare pump assembly, 46007 drum cover, 815 air coupler, 11659 air nipple, 72036 3' air connecting hose, 75060 5' high-pressure grease connecting hose, 84780 deluxe follower plate and 80202 volume elbow union. Height with 120 lb. drum is 41³/₈". Drum not included.

Model 1426 400 lb. Drum

Equipped with 84668 bare pump assembly, 81523 drum cover, 815 air coupler, 11659 air nipple, 72036 3' air connecting hose, 75060 5' high-pressure grease connecting hose and 80202 volume elbow union. Height with 400 lb. drum is 48". Drum not included.

NOTE: Deluxe follower plate 83366 is recommended for use when pumping extra-heavy lubricants and must be ordered separately for this model. See page 5.

Model 1426-1 400 lb. Drum

Same as 1426 except without 81523 drum cover.

Lube Truck/Mobile Applications

Model 84684 120 lb. Drum

Equipped with 84667 bare pump assembly, 82989 drum cover and tie rod assembly, 84941 eye bolt kit, 815 air coupler, 11659 air nipple and 80202 volume elbow union. Height with drum is 42³/₄". Drum not included.

NOTE: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.

Model 84683 400 lb. Drum

Equipped with 84668 bare pump assembly, 83115 drum cover and tie rod assembly, 84941 eye bolt kit, 815 air coupler, 11659 air nipple and 80202 volume elbow union. Height with drum is 52". Drum not included.

NOTE: Connecting hoses are not included with this package. Order connecting hoses separately to suit application.

NOTE: For lube truck/mobile applications, optional deluxe follower plate is available. See page 5.

These high-output pumps incorporate a 40 cu. in. air motor design with a 4¹/₂" stroke for higher volume output and fewer cycles per pound of grease.

Series 40 Grease Pumps

Model	Description	Bare Pump	Free Delivery (per min.)	Ratio	Drum Size	Air Inlet NPT	Material Outlet NPT
1418	High-volume shop	84667	90 cu. in.	50:1	120 lb.	1/4" (f)	1/4" (f)
1426	High-volume shop	84668	90 cu. in.	50:1	400 lb.	1/4" (f)	1/4" (f)
84683	High-volume lube truck	84668	90 cu. in.	50:1	400 lb.	1/4" (f)	1/4" (f)
84684	High-volume lube truck	84667	90 cu. in.	50:1	120 lb.	1/4" (f)	1/4" (f)



84775

Follower Plates

Recommended when pumping lubricants that will not seek their own level.

Model 84775

Deluxe universal follower for use with 25-50 lb. containers for 1", 1 1/4", 1 1/2" diameter pump tubes. All rubber unit ensures complete grease dispensing to the bottom of dented or plastic lined drums; wipes pail or drum clean. Metal cap holds insert firmly in place, ensuring seal and maintaining vacuum.



84780

Model 84780

Same as 84775 except for use with 120 lb. containers for 1", 1 1/4", 2 1/8" diameter pump tubes. Used with Series 20 and 40 air-operated grease pumps.

Model 83366

Deluxe pressed steel follower plate for 400 lb. drums includes a seal in the hub to prevent channeling of grease past the pump tube.



46007

Drum Covers

Model 46007

Drum cover for 120 lb. or 16-gallon open top refinery containers for all series 20, 25 and 40 pumps.



81523

Model 81523

Drum cover for 400 lb. or 55-gallon open top refinery containers for all series 20, 25 and 40 pumps.



282396

3:1—5:1 • Motor Oil, ATF, Gear Lube and Other Fluid Lubricants

The 3:1 and 5:1 Stub Pump Family from Lincoln

For over 75 years, Lincoln's exclusive pump designs have proven their superiority in application after application. And our lineup of strong, silent oil-dispensing pumps is no exception.

Both our stub pumps are built with the same rugged reliability and powerful performance you've come to expect from Lincoln. They are super quiet—the quietest pumps on the market. They deliver increased output for faster product delivery. And they let you handle a wider range of applications with total mounting flexibility.

Lincoln has taken the time proven pump design of the Lincoln 84933 5:1 pressure ratio balanced double-acting oil stub pump and created a more compact air motor to produce a 3:1 pressure ratio balanced double-acting oil stub pump, model 282396. This pump creates a versatile, economical, reliable and smooth delivering lower pressure version of the Lincoln 5:1 ratio pump.

Since the 282396 balanced double-acting 3:1 pressure ratio oil stub pump and the 84933 balanced double-acting 5:1 pressure ratio oil stub pump share all dimensions other than air motor cylinder diameter, these pumps are now directly interchangeable without piping changes.

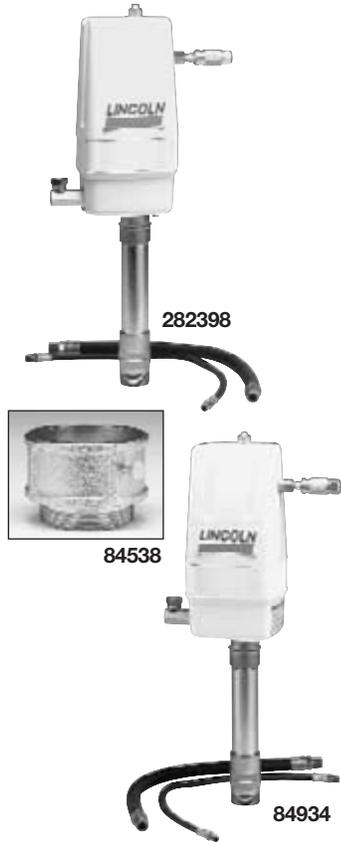
The Lincoln oil pump design enables all pump users to choose 3:1 ratio or 5:1 ratio pump models to suit their specific application.



84933

Series 25 & 40 Oil Pump Features

- More powerful. 25 cu. in. or 40 cu. in. air motor with universal mounting capability.
- Balanced double-acting pump design provides uniform output and stroke for less pulsation (7.5 cu in./cycle).
- Longer Life. Full 4 1/2" stroke for fewer cycles per gallon dispensed.
- Lightweight, corrosion-resistant zinc head casting design incorporates uniform wall thickness. Keeps pumping while other pumps slow down or stop due to "icing."
- 150 psi air motor with integral patented muffler. Keeps noise below OSHA standards without compromising performance.
- Ball check valve helps keep pump primed.
- Pneumatically assisted mechanical air valve assures positive tripping.
- Springless air motor construction prevents premature pump failure due to spring fatigue.
- Precision-machined, hardened steel slide valve for longer life.
- Designed for greater cycle rates. Exceeds maximum limits recommended for competitive pumps.
- Large Pump Outlet. 1/2" NPT(f).
- Easier serviceability. Majority of parts are common with other series 20, 25 and series 40 pumps.
- Each pump is 100% electronically tested to assure quality performance.
- Backed by most extensive, qualified service network in the industry.
- Large Pump Inlet. 1" NPT(f) inlet with 1 1/2" NPT(m) pump inlet for versatile pump mounting and full oil flow.
- Backed by our five year limited warranty. See your Lincoln representative for details.



3:1—5:1 • Motor Oil, ATF, Gear Lube and Other Fluid Lubricants

Now you can build your 3:1 ratio or 5:1 ratio oil pump with a stub pump plus suction kit or you can order complete models. You make the choice.

Series 25 Pumps

This 2" diameter, 25 cubic inch displacement stub pump family is based on our 3:1 ratio 282396 bare stub pump.

Model 282398

3:1 pressure ratio stub pump assembly comes complete with 282396 bare stub pump, 84935 pump cover kit, 73024 oil connecting hose, 72024 air connecting hose, 241584 90° volume union elbow, 815 air coupler, 11659 air nipple and 84538 bung bushing. Delivers a uniform six gallons of product per minute free delivery. Ideal for dispensing fluids from drums, tanks or remote standpipe mount.

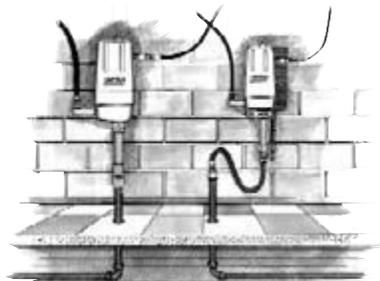
Series 40 Pumps

This industry proven 2 1/2" diameter, 40 cubic inch displacement stub pump family is based on the Lincoln 5:1 ratio 84933 bare stub pump.

Model 84934

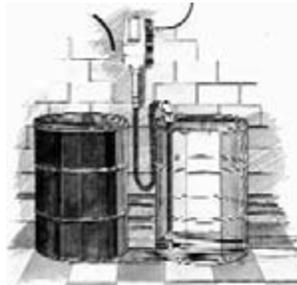
5:1 pressure ratio stub pump assembly comes complete with 84933 bare stub pump, 85935 pump cover kit, 73024 oil connecting hose, 72024 air connecting hose, 241584 90° volume union elbow, 815 air coupler, 11659 air nipple and 84538 bung bushing. Delivers a uniform six gallons of product per minute free delivery.

Versatile Stub Pump Mounting Options



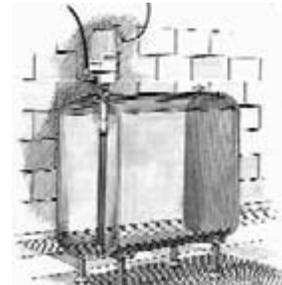
Standpipe and wall mount assembly to remote bulk tanks

3:1 (282398) or 5:1 (84934) pump, wall mount kit (84940), low level cut-off (84946) or foot valve (85765).



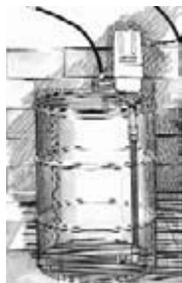
Wall mount to any size drum

3:1 (282398) or 5:1 (84934) pump, wall mount kit (84940), suction kit (84945) and low level cut-off (84946) or foot valve (85765).



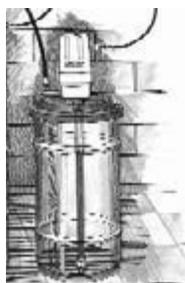
Above ground tank

(275-gallon tank shown) 3:1 (282398) or 5:1 (84934) pump and universal suction kit (85949).



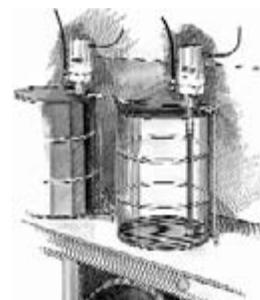
55-gallon drum mount using bung bushing

3:1 (282398) or 5:1 (84934) pump and 55-gallon drum suction (85755).



16-gallon drum mount using drum cover

3:1 (282398) or 5:1 (84934) pump, drum cover (46007) and 16-gallon drum suction kit (85716).



55-gallon drum mount on lube truck using drum cover

3:1 (282398) or 5:1 (84934) pump, eyebolt kit (84941), drum cover/tie-down kit (83115) and 55-gallon drum suction kit (85755).



2424



83447



284168



284231

Series 25 • 3:1 • Motor Oil, ATF, Gear Lube and Other Fluid Lubricants

Shop/Garage Applications— 16-Gallon Drums

Model 2437

Complete with 282686 pump, 73060 lubricant connecting hose, 241584 volume elbow, 72060 air connecting hose, 815 air coupler, 11659 air nipple.

Model 83447

Pump elevator assembly lifts pump assembly clear of drum for easy, one person drum changes. Helps prevent introduction of foreign material into grease during drum changes. Height with drum is 39³/₈" , 67¹/₄" with elevator raised. Drum not included.

55-Gallon Drums

Model 2424

Comes complete with 282133 pump, 84538 2" NPT(m) bung bushing, to fit original 55-gallon bung opening drums, 241584 volume union elbow, 815 air coupler, 11659 air nipple, 73060 lubricant connecting hose and 72060 air hose.

Model 284168

Comes complete with 282396 pump and 85949 universal suction tube kit, 84538 bung bushing, air and lubricant connecting hose. Pumps oil, gear lube, ATF, etc. from tanks, drums.

Lube Truck/Mobile Applications— 55-Gallon Drum

Model 284231

Contractor pump assembly for 55 gallon drums, comes complete with 282133 pump, 84941 eyebolt kit and 83115 drum cover with tie down assembly providing a rigid and sealed drum mount for protection against the elements. Air coupler and air nipple also included.

All models based on the 282396 series 25 3:1 bare oil pump which delivers 6 gpm free flow plus a suction tube.

Series 25 Oil Pumps

Model	Description	Bare Pump No.	Free Delivery	Ratio	Drum Size	Air Inlet	Material Outlet	Use/ Location
282133	Bare drum pump	282396	6 gallons	3:1	55-gallon	1/4" NPT	1/2" NPT	replacement
282396	Bare stub pump	282396	6 gallons	3:1	stub/universal	1/4" NPT	1/2" NPT	universal
2424	Stationary	282133	6 gallons	3:1	55-gallon	1/4" NPT	1/2" NPT	shop
2437	Stationary	282686	6 gallons	3:1	16-gallon	1/4" NPT	1/2" NPT	shop
282398	Stub pump assemb.	282396	6 gallons	3:1	stub/universal	1/4" NPT	1/2" NPT	universal
284168	Stationary tank	282396	6 gallons	3:1	250-/275-gallon	1/4" NPT	1/2" NPT	shop
284231	Lube truck	282133	6 gallons	3:1	16-gallon	1/4" NPT	1/2" NPT	lube truck



Series 40 • 5:1 • Motor Oil, ATF, Gear Lube and Other Fluid Lubricants

Shop/Garage Applications—16 Gallon Drums Model 2537

Complete with 285686 pump, 73060 lubricant connecting hose, 241584 volume elbow, 72060 air connecting hose, 815 air coupler, 11659 air nipple.

Model 83447

Pump elevator assembly lifts pump assembly clear of drum for easy, one person drum changes. Helps prevent introduction of foreign material into grease during drum changes. Height with drum is 39³/₈" , 67¹/₄" with elevator raised. Drum not included.

55-Gallon Drums Model 2524

Comes complete with 285133 pump, 84538 2" NPT(m) bung bushing, to fit original 55-gallon bung opening drums, 241584 volume union elbow, 815 air coupler, 11659 air nipple, 73060 lubricant connecting hose and 72060 air hose. Order drum cover 81523 separately.



Model 285168

Comes complete with 84933 pump and 85949 universal suction tube kit, 84538 bung bushing, air and lubricant connecting hose. Pumps oil, gear lube, ATF, etc. from tanks, drums.

55-Gallon Drum Model 285231

Contractor pump assembly for 55-gallon drums, comes complete with 285133 pump, 84941 eyebolt kit and 83115 drum cover with tie down assembly providing a rigid and sealed drum mount for protection against the elements. Air coupler and air nipple also included.



All models based on the 84933 Series 40 5:1 bare oil pump which delivers 6 gpm free flow plus a suction tube.

Series 40 Oil Pumps

Model	Description	Bare Pump No.	Free Delivery	Ratio	Drum Size	Air Inlet	Material Outlet	Use/ Location
84933	bare stub pump	84933	6 gallons	5:1	stub/universal	1/4" NPT	1/2" NPT	universal
285133	bare drum pump & tube	84933	6 gallons	5:1	55-gallon	1/4" NPT	1/2" NPT	replacement
2524	stationary 55 gal.	285133	6 gallons	5:1	55-gallon	1/4" NPT	1/2" NPT	shop
2537	stationary 16 gal.	285686	6 gallons	5:1	16-gallon	1/4" NPT	1/2" NPT	shop
84934	stub pump assembly	84933	6 gallons	5:1	stub/universal	1/4" NPT	1/2" NPT	universal
285168	stationary tank	84933	6 gallons	5:1	250- or 275-gal.	1/4" NPT	1/2" NPT	shop
285231	lube truck	285133	6 gallons	5:1	55-gallon	1/4" NPT	1/2" NPT	lube truck

3:1 Ratio • Corrosive Fluids

Series 20 Pumps/ 3:1 Press. Ratio

Model 84145-9 Stainless Steel

For pumping synthetic hydraulic oil, antifreeze or corrosive products. Pump may be coupled to stand pipe, mounted with bracket and suction kit or pump tube extension may be added for bung mounting to bulk tank, 2.5-gallon a minute free delivery. Pump tube constructed of 316 stainless steel and features Teflon® packings, air inlet 1/4" NPT(f), material outlet 1/2" NPT(f) comes with air coupler and plug and 84147-9 product check assembly.

Model 84080-9 Stainless Steel

Recommended for use with antifreeze, solvents and windshield washer solution. 316 Series stainless steel construction and Teflon® packings assures long life. 3:1 ratio pump for transfer of corrosive or toxic fluids. Mounts on 55-gallon bung opening drums. Delivers 2.5 gpm. Lasts longer than carbon steel models in corrosive service. Maximum air pressure 125 psi.



WARNING

For safe and proper use, always consult instructions accompanying



84538



85765



82439



84940



84942



84945



85935



85949



84941



72036



73036



282876

Series 25 & 40

Bung Bushing / Low-Level Cut-Off / Foot Valves

Model	Description	Threaded Connection	Notes
84538	Pump bung bushing	2" (m)	Mounts series 25 or 40 pump to 2" oil drum opening
82439	Low-level cutoff	1 1/2" NPT(m)	Used with "new oil" oil pumps
84946	Low-level cutoff	1" NPT(m)	Used with "new oil" oil pumps
85765	Foot valve	1" NPT(f)	Used with "new oil" oil pumps

Wall Mount Kits

Model	Description	Notes
84940	Wall-mount kit—Series 25 & 40	Used with 84945 Suction Kit
84942	Flange-mount kit—Series 25 & 40	Mounts pump to custom made tanks (lube trucks)

Suction Kits

Model	Description	Threaded Connection	Notes
84945	Remote suction kit	1" NPT(f)	Includes 5' oil hose, bung bushing and 1" x 32" pipe
85716	16-gal. drum suction kit	1" NPT(m)	Adapts any series 25 or 40 oil pump to 16-gallon drum
85755	55-gal. drum suction kit	1" NPT(m)	Adapts any series 25 or 40 oil pump to 55-gallon drum
85949	Universal suction kit	1" NPT(m)	Adapts any series 25 or 40 oil pump to drum or tank use

Pump Covers

Model	Description	Notes
84935	Pump cover	Series 20 pumps
85935	Pump cover	Series 25 & 40 pumps

Hose

Model	Description	Threaded Connection	Notes
72036	3' low-pressure connecting	1/4" NPT(m)	Max working pressure: 250 psi
72060	5' low-pressure connecting	1/4" NPT(m)	Max working pressure: 250 psi
73036	3' medium-pressure connecting	1/2" NPT(m)	Max working pressure: 1000 psi
73060	5' medium-pressure connecting	1/2" NPT(m)	Max working pressure: 1000 psi

Eye-Bolt Kit

Model 84941

Eye bolt kit for all series 20, 25 and 40 pumps, makes drum changing easy. Two part kit screws directly onto pump for lifting with pump elevator.

Shut-Off Valves

See *Fittings and Accessories* section for pump shut-off valves.

Thermal Pressure Relief Valve

Model 282876

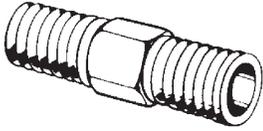
Protect lube system components from high-pressure spikes caused by temperature change in a closed fluid network.

Model	Application	Pre-Set Relief Pressure	Port Size
282876	Piston Pumps	1000 psi (68 bar)	1/2" NPT

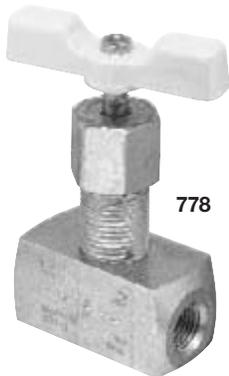
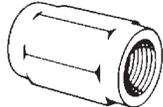
Reducing Bushing



Nipples



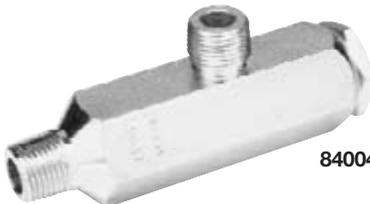
Reducing Couplings



778



66084



84004

Reducing Bushings

Model	Thread	Construction
10200	1/8" NPT(f) x 1/2"-27 (m)	Brass
10204	1/4" NPT(f) x 1/2"-27 (m)	Brass

Reducing Couplings

Model	Thread	Construction
11852	1/8" NPT(f) x 1/2"-27 (f)	Steel
10522	1/4" NPT(f) x 1/2"-27 (f)	Brass

Nipples

Model	Thread	Construction
10130	1/8" NPT(m) x 1/8" NPT(m)	Steel
10199	1/8" NPT(m) x 1/2"-27 (m)	Brass
10462	1/4" NPT(m) x 1/4" NPT(m)	Steel
10198	1/4" NPT(m) x 1/2"-27 (m)	Brass
10540	3/8" NPT(m) x 3/8" NPT(m)	Steel
11197	1/2" NPT(m) x 1/2" NPT(m)	Steel
12957	1/2" NPT(m) x 1/2"-27 (m)	Steel
10202	1/2"-27 (m) x 1/2"-27 (m)	Brass
12296	3/4" NPT(m) x 3/4" NPT(m)	Steel

Adapter Unions

Model	Thread	Description
66883	1/2" NPSM(f) swivel x 1/2" NPT(m)	Steel
69375	1" NPT(f) swivel x 1" NPT(m)	Steel

Shut-Off Valves

Needle-Type Valves for Chassis Grease

Model	Thread	Description
778	1/4" NPT(f)	High Pressure
884	3/8" NPT(f)	High Pressure
885	1/2" NPT(f)	High Pressure

Maximum Working Pressure psi 10,000 / 680 Bar

Quarter-Turn Valves

High Pressure

Control lever with "ON" on "OFF" positions provides visual check as to whether lubrication line is open or closed. Buna-N seals with Teflon® seat.

Model	Inlet/Outlet	Maximum Working Pressure (psi) / Bar
69503	1/2" NPT(f)	2000 / 138
69425	3/4" NPT(f)	2500 / 172
69423	1" NPT(f)	2500 / 172

Medium Pressure

Model	Inlet/Outlet	Maximum Working Pressure (psi) / Bar
256200	1/4" NPT(f)	600 / 52
66084	1/2" NPT(f)	600 / 52

Lubricant Filters

Model 84004

For mounting at pump outlet. Contains replaceable 140 micron stainless steel filter element 69524. 1/2" NPT(m) inlet and outlet. 1 3/8" hex. steel body. Maximum pressure 5000 psi. 100 mesh screen.



Features

- State-of-the-art, fully pneumatic air motors 3"-4" (76-101 mm).
- Full 6" (152 mm) stroke.
- Modular design for easy repair.
- Pump tubes offer ratios and outputs to fit any application.
- Available to fit any drum or pail size, or bulk tanks.
- Offered in carbon steel, 316 stainless steel or hard chrome plated.
- Full line of priming equipment and mounting devices.

Series III Air Motors

- Full pneumatic operation for longer life and durability. Only 5 moving parts.
- Total modular design for ease of service and maintenance.
- Quiet operation. Meets or exceeds OSHA requirements at all recommended operation air pressures.
- Interchangeable with all PowerMaster® III pump tubes.
- Acceptability of pump monitors and controls, such as AirBrake™.

AirBrake™

- Shuts down pump immediately when excessive pump cycle speed (runaway) occurs.
- Prevents pump damage due to a runaway condition.
- Indicates system fault caused by empty container or broken supply line.
- Limits spills due to pump outlet hose failure.
- Sends fault signal to remote alarm locations with optional 244398 signal kit.
- Can be ordered already installed (refer to Pump Specification Chart).
- Can be added later. Order Model 85317.
- Easy to install and set—graduated dial with detents
- Kit 273429 upgrades existing AirBrake-equipped pumps to the latest specifications

Pump Tubes

Ball Foot Design

- For light- to medium-viscosity, flowable fluids and materials.
- Three styles: stub for bulk mounting, 55-gallon (200 liter) or 16-gallon (60 liter) drum.
- Ratios from 6:1-12:1, outputs to 12 gpm (45 lit./min).
- Complete interchangeability with all Series III Air Motors.
- Exclusive, patented, "leakless" gland assembly kit is available as an accessory.

Shovel Foot Design, Plunger & Bushing Style

- For medium- to high-viscosity, non-pourable materials, such as grease.
- Available in 400 lb. (205 liter) or 120 lb. (60 liter) drum lengths or mounts on primer for high-viscosity materials.
- Full range of ratios: 10:1 through 75:1 for all applications.
- Selected fit, hardened steel plunger and bushing is particularly well suited to viscous lubricants.
- Complete interchangeability with all Series III Air Motors.
- Exclusive patented, leakless gland assembly kit (to protect gland seal—the only seal in pump tube) is available as an accessory.

Shovel Foot Design, Packed Piston-Style

- For medium- to high-viscosity, non-pourable materials.
- Furnished with exclusive, patented, leakless gland assembly.
- Available in 55-gallon (205 liter) or 16-gallon (60 liter) drum lengths: also suitable for mounting on priming equipment or standpipe mounting for bulk delivery.
- Complete interchangeability with all Series III Air Motors.
- Full range of ratios 10:1 through 32:1.

High-Viscosity Pumps—Carbon Steel for Transfer of Non-Corrosive Materials

Shovel Foot Pumps—Packed Piston

Model	Ratio	Pump Tube Type	Air Motor	Diameter in. / mm	Pump Tube	Material Outlet**	Output per cycle cu. in / cc	Approx. Cycles per gal / liter
	32:1	55-gal	84804	4 1/4 / 108	84978	3/4" NPTF	4.6 / 75	51 / 13
2076 ¹	32:1	16-gal	84804	4 1/4 / 108	84979	3/4" NPTF	4.6 / 75	51 / 13
	20:1	55-gal	84804	4 1/4 / 108	84976	3/4" NPTF	6.7 / 110	35 / 9
	20:1	16-gal	84804	4 1/4 / 108	84977	3/4" NPTF	6.7 / 110	35 / 9
	15:1	55-gal	84803	3 / 76	84978	3/4" NPTF	4.6 / 75	51 / 13
	15:1	16-gal	84803	3 / 76	84979	3/4" NPTF	4.6 / 75	51 / 13
2066*	10:1	55-gal	84803	3 / 76	84976	3/4" NPTF	6.7 / 110	35 / 9
	10:1	16-gal	84803	3 / 76	84977	3/4" NPTF	6.7 / 110	35 / 9

Medium-Viscosity Pumps—Carbon Steel for Transfer of Non-Corrosive Materials

Ball Pumps

Model	Ratio	Pump Tube Type	Air Motor	Diameter in. / mm	Pump Tube	Material Outlet	Output per cycle cu. in / cc	Approx. Cycles per gal / liter
2001 ¹	12:1	55-gal	84804	4 / 108	84985	3/4"	11.9 / 195	20 / 5
2014 ¹	12:1	stub	84804	4 / 108	84986	3/4"	11.9 / 195	20 / 5
2052	6:1	55-gal	84803	3 / 76	84985	3/4"	11.9 / 195	20 / 5
2051	6:1	stub	84803	3 / 76	84986	3/4"	11.9 / 195	20 / 5

¹ These models are also available with optional 84988 AirBrake assembled to air motor. To order, specify 94804 air motor and pump tube separately.

Shovel Foot Pumps—Plunger and Bushing

Model	Ratio	Pump Tube Type	Air Motor	Diameter in. / mm	Pump Tube	Material Outlet**	Output per cycle cu. in / cc	Approx. Cycles per gal / liter
2004 ¹	75:1	55-gal	84804	4 1/4 / 108	84997	3/4" NPTF	2.1 / 34	111 / 29
2008 ¹	75:1	16-gal	84804	4 1/4 / 108	84998	3/4" NPTF	2.1 / 34	111 / 29
2010 ¹	50:1	55-gal	84804	4 1/4 / 108	84995	3/4" NPTF	3.0 / 49	78 / 20
2011 ¹	50:1	16-gal	84804	4 1/4 / 108	84996	3/4" NPTF	3.0 / 49	78 / 20
	50:1	55-gal	84803	3 / 76	85201	3/4" NPTF	1.3 / 21	178 / 48
	50:1	16-gal	84803	3 / 76	85202	3/4" NPTF	1.3 / 21	178 / 48
2002 ¹	24:1	55-gal	84804	4 1/4 / 108	84991	3/4" NPTF	6.1 / 100	38 / 10

* Order pump tube and air motor separately for these models.

¹ These models are also available with optional 84988 AirBrake assembled to air motor. To order, specify 94804 air motor and pump tube separately.

Model	Gallons / Liters per Minute			Min. ID Air Supply Hose in. / mm	SCFM@70 psi	Air Consumption Per Cycle		
	30 CPM	50 CPM	70 CPM			M ³ /min.@5 bar	SCFM@100 psi	M ³ /min.@7 bar
2076*	.6 / 2.3	1.0 / 3.8	1.5 / 5.7	1/2" / 12	.48	.0014	.66	.019
	.6 / 2.3	1.0 / 3.8	1.5 / 5.7	1/2" / 12	.48	.0014	.66	.019
	.9 / 3.3	1.5 / 5.5	2.2 / 8.2	1/2" / 12	.48	.0014	.66	.019
	.9 / 3.3	1.5 / 5.5	2.2 / 8.2	1/2" / 12	.48	.0014	.66	.019
2066*	.6 / 2.3	1.0 / 3.8	1.5 / 5.7	3/8" / 10	.31	.009	.37	.011
	.6 / 2.3	1.0 / 3.8	1.5 / 5.7	3/8" / 10	.31	.009	.37	.011
	9 / 3.3	1.5 / 5.5	2.2 / 8.2	3/8" / 10	.31	.009	.37	.011
	9 / 3.3	1.5 / 5.5	2.2 / 8.2	3/8" / 10	.31	.009	.37	.011
	9 / 3.3	1.5 / 5.5	2.2 / 8.2	3/8" / 10	.31	.009	.37	.011

Model	Gallons / Liters per Minute			Min. ID Air Supply Hose in. / mm	SCFM@70 psi	Air Consumption Per Cycle		
	30 CPM	50 CPM	70 CPM			M ³ min.@5 bar	SCFM@100 psi	M ³ min.@7 bar
2001	1.5 / 5.8	2.6 / 9.7	3.9 / 14.6	1/2" / 12	.48	.0014	.66	.019
2014	1.5 / 5.8	2.6 / 9.7	3.9 / 14.6	1/2" / 12	.48	.0014	.66	.019
2052	1.5 / 5.8	2.6 / 9.7	3.9 / 14.6	3/8" / 10	.48	.0014	.66	.019
2051	1.5 / 5.8	2.6 / 9.7	3.9 / 14.6	3/8" / 10	.48	.0014	.66	.019

Model	Gallons / Liters per Minute			Min. ID Air Supply Hose in. / mm	SCFM@70 psi	Air Consumption Per Cycle		
	30 CPM	50 CPM	70 CPM			M ³ /min.@5 bar	SCFM@100 psi	M ³ /min.@7 bar
2004	.3 / 1.0	.5 / 1.7	.7 / 2.6	1/2" / 12	.48	.0014	.66	.019
2008	.3 / 1.0	.5 / 1.7	.7 / 2.6	1/2" / 12	.48	.0014	.66	.019
2010	.4 / 1.5	.6 / 2.5	1.0 / 3.7	1/2" / 12	.48	.0014	.66	.019
2011	.4 / 1.5	.6 / 2.5	1.0 / 3.7	1/2" / 12	.48	.0014	.66	.019
2002	.2 / .6	.3 / 1	.4 / 1.5	3/8" / 10	.31	.009	.37	.011
	.2 / .6	.3 / 1	.4 / 1.5	3/8" / 10	.31	.007	.37	.011
	.8 / 3.0	1.3 / 5.0	2.0 / 7.5	1/2" / 12	.48	.0014	.66	.019



85300

Hydraulic Motor for PowerMaster III Pump Tubes

- Safe to use where electric or pneumatic motors may be hazardous.
- Virtually eliminate concerns about air supply condition and exhaust emissions.
- Efficiently generates high material pressure and flow rate with minimum hydraulic power consumption.
- Few internal moving parts. No mechanical linkages or solenoids to fail or wear out.
- An internal changeover circuit requires no external signal for reciprocating action.
- Balanced cylinder design eliminates need for separate stroke adjustments.
- All key components are machined from steel or aluminum to insure long service life in the toughest applications.
- Hydro-PowerMaster was designed and is manufactured under the strict conditions of an ISO 9001 registered quality system.

Hydro-PowerMaster Specifications

Model	Cylinder Dia. in. / cm	Piston Rod Dia. in. / cm	Stroke Length in. / cm	Hydraulic Fluid Inlet	Hydraulic Fluid Outlet
85300	2 / 5	1 3/8 / 3.5	6 / 15	SAE 8 (f)	SAE 10 (f)
Model	Operating Press. Range psi / bar	Operating Temp. Range	Fluid Flow Consumption Rate	Recommended Continuous Speed	Wetted Part Materials
85300	300 to 1500 20.4 to 103	-30°F to 200°F -34°C to 93°C	18.8 cu. in./cycle or 1 gal/12 cycle	75 cycles/min	Steel, aluminum, bronze, Nitrile, Teflon®, Polyurethane

PowerMaster III Hydraulic-Powered Pumps

NOTE: Must Order Hydraulic Motor and Pump Tube Separately

Motor	Pump Tube	Ratio	Drum Size	Material Outlet NPTF	Max. Hyd. Inlet Press. psi / bar	Max. Delivery Press. psi / bar	Max. Free Del. @75 Cycles/Min. gal / liters
85300	84985	1.5:1	55-gal	3/4"	1500 / 103	2250 / 155	3.9 / 14.6
85300	84983	1.5:1	55-gal	3/4"	1500 / 103	2250 / 155	3.9 / 14.6
85300	84982	1.5:1	55-gal	3/4"	1500 / 103	2250 / 155	3.9 / 14.6
85300	84981	1.5:1	55-gal	3/4"	1500 / 103	2250 / 155	3.9 / 14.6
85300	84984	1.5:1	16-gal	3/4"	1500 / 103	2250 / 155	3.9 / 14.6
85300	84986	1.5:1	stub	3/4"	1500 / 103	2250 / 155	3.9 / 14.6
85300	84987	1.5:1	stub	3/4"	1500 / 103	2250 / 155	3.9 / 14.6
85300	84976	2.5:1	55-gal	3/4"	1500 / 103	3750 / 258	2.2 / 8.2
85300	84977	2.5:1	16-gal	3/4"	1500 / 103	3750 / 258	2.2 / 8.2
85300	84978	4:1	55-gal	3/4"	1500 / 103	6000 / 412	1.5 / 5.7
85300	84979	4:1	16-gal	3/4"	1500 / 103	6000 / 412	1.5 / 5.7
85300	84991	3:1	55-gal	3/4"	1500 / 103	4500 / 310	2.0 / 7.5
85300	84992	3:1	16-gal	3/4"	1500 / 103	4500 / 310	2.0 / 7.5
85300	84993	5:1	55-gal	3/4"	1500 / 103	7500 / 317	1.2 / 4.5
85300	84994	5:1	16-gal	3/4"	1500 / 103	7500 / 317	1.2 / 4.5
85300	84995	6:1	55-gal	3/4"	1250 / 86	7500 / 317	1.0 / 3.7
85300	84996	6:1	16-gal	3/4"	1250 / 86	7500 / 317	1.0 / 3.7
85300	84997	9:1	55-gal	3/4"	850 / 58	7650 / 527	.7 / 2.6
85300	84998	9:1	16-gal	3/4"	850 / 58	7650 / 527	.7 / 2.6

CAUTION: Do not exceed maximum hydraulic inlet pressure listed for each motor/pump tube combination.



PowerMaster II Pump Features

- Gives years of dependable trouble-free operation.
- Costs much less to operate—costs much less to maintain.
- High-volume output—air motor has extra-long stroke for powerful, uniform delivery on both up and down strokes.
- Shovel-type pump tube used to add mechanical priming to normal suction when needed.
- Sturdy construction—plunger and bushing of hardened steel for longer life, greater wear resistance.
- Pump outlet body of all-steel construction designed to withstand pulsation and extreme pressure. All wearing parts are tough, heat-treated steel.
- Plunger, bushing and air valve mating parts are micro-lapped to close tolerances. Prevents by-passing of lubricant and bleeding of air. Eliminates need to replace washers and packings.
- Trouble-free, positive performance. Air motor operation has no springs to wear out, rust or lose tension. Air valve is stall-proof, leak-proof and pre-lubricated. Double-acting mechanisms ensure dependable low-surge operation with minimum air consumption.
- Large air passages allow unrestricted venting.
- Simplified maintenance. Modular design of pump tube allows for easy disassembly.



Ball-Type Medium-Pressure Pumps (continued next page across)

Model	Ratio	Pump Tube Type	Air Motor	Diameter in. / mm	Pump Tube	Material Outlet**	Output per cycle cu. in / cc	Approx. Cycles per gal / liter
1931	4:1	55-gal	82737	2 1/2" / 57	82790	3/4" NPTF	9 / 148	26 / 7
1952	6:1	55-gal	82895	3" / 76	82790	3/4" NPTF	9 / 148	26 / 7
1901	12:1	55-gal	82730	4 1/4" / 108	82790	3/4" NPTF	9 / 148	26 / 7

Medium-Pressure Stub Pumps (continued next page across)

Model	Ratio	Pump Tube Type	Air Motor	Diameter in. / mm	Pump Tube	Material Outlet**	Output per cycle cu. in / cc	Approx. Cycles per gal / liter
1940	4:1	stub	82737	2 1/2" / 57	84335	3/4" NPTF	9 / 148	26 / 7
1951	6:1	stub	82895	3" / 76	84335	3/4" NPTF	9 / 148	26 / 7
1914	12:1	stub	82730	4 1/4" / 108	84335	3/4" NPTF	9 / 148	26 / 7

Shovel-Type Medium-Pressure Pumps (continued next page across)

Model	Ratio	Pump Tube Type	Air Motor	Diameter in. / mm	Pump Tube	Material Outlet**	Output per cycle cu. in / cc	Approx. Cycles per gal / liter
1932	8:1	55-gal	82737	2 1/2" / 57	82791	3/4" NPTF	5 / 82	46 / 12
1933	13:1	55-gal	82737	2 1/2" / 57	82792	3/4" NPTF	2.8 / 46	83 / 22
1902*	24:1	55-gal	82730	4 1/4" / 108	82791	3/4" NPTF	5 / 82	46 / 12

* Not to be used with meters.

** All PowerMaster pumps include 12018, 3/4" NPTF(m) x 1/2" NPTF(f) bushing in the material outlet.

NOTE: Model number with "-1" indicates model including bung bushing.

Model number with "-2" indicates model including drum cover.

Shovel Foot Pumps—Plunger & Bushing (continued next page across)

Model	Ratio	Pump Tube Type	Air Motor	Diameter in. / mm	Pump Tube	Material Outlet	Output per cycle cu. in / cc	Approx. Cycles per gal / liter
1935	50:1	55-gal	82737	2 1/2" / 57	83665	3/4" NPTF	.6 / 10	385 / 100
1903	40:1	55-gal	82730	4 1/4" / 108	82792	3/4" NPTF	2.8 / 46	83 / 22
1910	50:1	55-gal	82730	4 1/4" / 108	83271	3/4" NPTF	2.3 / 38	101 / 26
1904	75:1	55-gal	82730	4 1/4" / 108	82793	3/4" NPTF	1.6 / 26	144 / 39
1907	40:1	16-gal	82730	4 1/4" / 108	82841	3/4" NPTF	2.8 / 46	83 / 22
1908	75:1	16-gal	82730	4 1/4" / 108	82883	3/4" NPTF	1.6 / 26	144 / 39

*All PowerMaster pumps include 12018 3/4" NPTF(m) x 1/2" NPTF(f) bushing in the material outlet.

See pages 20 through 23 for PowerMaster drum covers, follower plates and other mounting accessories.

Model	Gallons / Liters per Minute			Min. ID Air Supply Hose in. / mm	SCFM@70 psi	Air Consumption Per Cycle		
	30 CPM	50 CPM	70 CPM			M ³ /min.@5 bar	SCFM@100 psi	M ³ /min.@7 bar
1931	1.1 / 4.4	1.9 / 7.4	2.7 / 10.3	3/8" / 10	.17	.005	.21	.006
1952	1.1 / 4.4	1.9 / 7.4	2.7 / 10.3	3/8" / 10	2.5	.007	.31	.009
1901	1.1 / 4.4	1.9 / 7.4	2.7 / 10.3	1/2" / 12	.5	.014	.62	.017

Model	Gallons / Liters per Minute			Min. ID Air Supply Hose in. / mm	SCFM@70 psi	Air Consumption Per Cycle		
	30 CPM	50 CPM	70 CPM			M ³ /min.@5 bar	SCFM@100 psi	M ³ /min.@7 bar
1940	1.1 / 4.4	1.9 / 7.4	2.7 / 10.3	3/8" / 10	.17	.005	.21	.006
1951	1.1 / 4.4	1.9 / 7.4	2.7 / 10.3	3/8" / 10	2.5	.007	.31	.009
1914	1.1 / 4.4	1.9 / 7.4	2.7 / 10.3	1/2" / 12	.5	.014	.62	.017

Model	Gallons / Liters per Minute			Min. ID Air Supply Hose in. / mm	SCFM@70 psi	Air Consumption Per Cycle		
	30 CPM	50 CPM	70 CPM			M ³ /min.@5 bar	SCFM@100 psi	M ³ /min.@7 bar
1932	.6 / 2.4	1 / 4.1	1.5 / 5.7	3/8" / 10	.17	.005	.21	.006
1933	.4 / 1.4	.6 / 2.3	.8 / 3.2	3/8" / 10	.17	.005	.21	.006
1902*	.6 / 2.4	1 / 4.1	1.5 / 5.7	1/2" / 12	.5	.014	.62	.017

Model	Gallons / Liters per Minute			Min. ID Air Supply Hose in. / mm	SCFM@70 psi	Air Consumption Per Cycle		
	30 CPM	50 CPM	70 CPM			M ³ /min.@5 bar	SCFM@100 psi	M ³ /min.@7 bar
1935	.08 / .3	.1 / .5	.2 / .7	3/8" / 10	.17	.005	.21	.006
1903	.4 / 1.4	.6 / 2.3	.8 / 3.2	1/2" / 12	.5	.014	.62	.017
1910	.3 / 1.1	.5 / 1.9	.7 / 2.6	1/2" / 12	.5	.014	.62	.017
1904	.2 / .8	.3 / 1.3	.5 / 1.8	1/2" / 12	.5	.014	.62	.017
1907	.4 / 1.4	.6 / 2.3	.8 / 3.2	1/2" / 12	.5	.014	.62	.017
1908	.2 / .8	.3 / 1.3	.5 / 1.8	1/2" / 12	.5	.014	.62	.017

Accessories

Pump Hoists

Model 1709 Single Post Elevator

Ideal for contractor use. Can be mounted on truck body or used in maintenance shop for fast power-operated drum changing. Lifts any Lincoln pump from one 400 lb. or 120 lb. drum and lowers it into another. Can serve one or a cluster of four drum pumps from one location.

Model 2716 Single Post Primer

For use with PowerMaster III Series 2000 pumps. Air-operated single post pump hoist for 55-gallon drums performs several functions in applications of low- to medium-viscosity materials. Facilitates drum changeovers. Includes follower and wiper which uses normal suction to help maintain pump prime. Includes mounting bracket for all PowerMaster III pumps.

Specifications

Model	Height		Operating Air Pressure psi / bar	Beam		Lift Capacity
	Lowered	Raised		Length	Rotation	
1709	70 ¹ / ₂ " / 1.8m	108 ¹ / ₂ " / 2.8m	50-200 / 3-14	19" / .5m	360°	400 lb / 182kg
2716	73" / 1.9m	110 ¹ / ₂ " / 2.8m	40-200 / 3-14	19" / .5m	360°	400 lb / 182kg

Model 1716 Pump Hoist

For use with all PowerMaster II Series 1900 pumps. Air-operated single post pump hoist for 55-gallon drums performs several functions in applications of low- to medium-viscosity materials. Facilitates drum changeovers. Includes follower and wiper which uses normal suction to help maintain pump prime.

Specifications

Model	Height		Operating Air Pressure psi / bar	Beam		Lift Capacity
	Lowered	Raised		Length	Rotation	
1716	73" / 1.9m	110 ¹ / ₂ " / 2.8m	40-200 / 3-14	19" / .5m	360°	400 lbs/182kg

NOTE: A butyl rubber wiper is available for these primers for materials not compatible with Buna-N; order 34555 separately.

Drum Dollies

Model 84377 400 lb. Drum Dolly

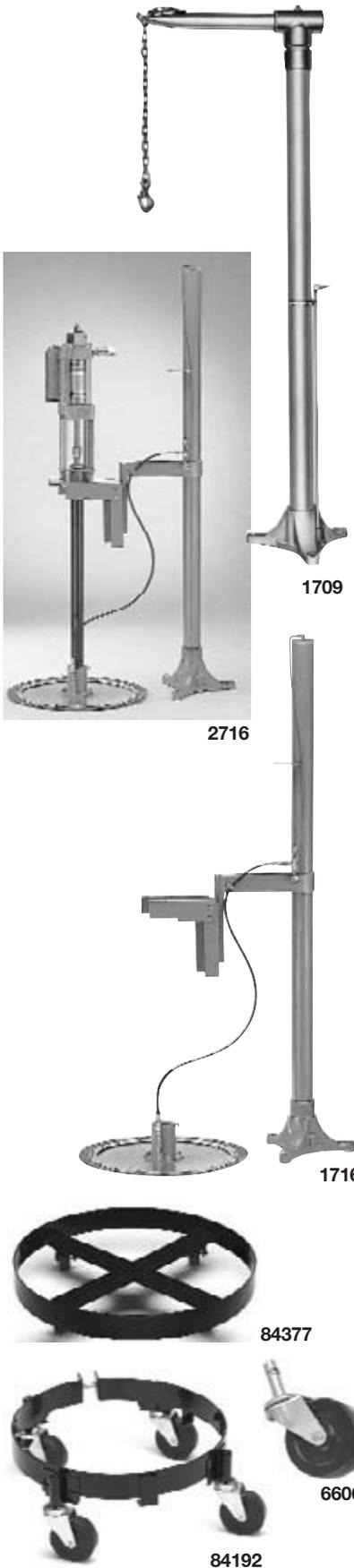
Use with any 400 lb. drum. ID 23¹/₄", height 5¹/₄", hard rubber wheels: 1" wide, 2¹/₂" dia.

Model 84192 120 lb. Band Dolly

Band-type dolly for use with 120 lb. refinery containers; caster 66060.

Model 66060 Caster for Roll-A-Round Base Units

Standard equipment on Lincoln drum and band dollies.





Accessories

PowerMaster III only

Model 84963 Flange Mounting Assembly

For rigid mounting of PowerMaster III pumps to the top of fabricated bulk tanks.

Model 86214 Gland Protection Sleeves

For all ball foot design pump tubes.

Model 84722 Muffler Adapter Kit

Replaces standard built-in muffler on Series III air motors. Pipes exhaust away from pump. Converts exhaust port to 3/4" NPT(f) thread.

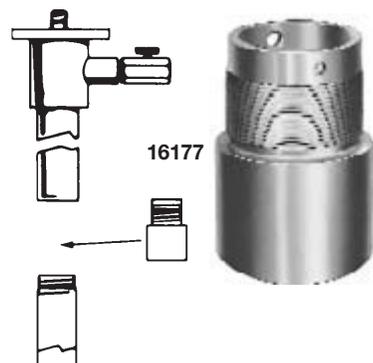
PowerMaster II and III

Model 84826 Wall Mounting Bracket Kit

For PowerMaster II or III air motor assemblies.

Model 16177 Foot Valve Adapter

For extending length of drum pumps with 82790 and 82773 PM II pump tubes or 84984 and 84985 PM III pump tubes. Install when standard tubes will not reach bottom of tank for addition of 1 1/2" NPTF(m) extension pipe (customer furnished).



Model 83132 Bung Bushing

Screws in bung opening of 400 lb. drums and custom-built tanks to secure any PM II & III pumps. Plated to resist rust. Threaded 2" NPT(m).

Model 82979 Bung Sealing Kit

Use with 81482 drum to keep oil from splashing onto drum cover top.

Model 1709 Single Post Pump Elevator

See page 20 for description and specifications.

Model 84945 Suction Kit

For transfer of product from drums, bulk tanks or reservoirs. Includes bung bushing suction tube, hose and coupling assembly. NOTE: 2" x 1" bell reducer required for use with Model 1914, not included.



Model 82439 Low-Level Cutoff

Automatically shuts off flow of oil; keeps supply lines primed. Recommended when dispensing oil through metering devices to conform with standards of the National Conference of Weights and Measures. Assembles to 1 1/2" NPT standpipe which assembles to pump.

Model 84946 Low-Level Cutoff

Same as 82439, except 1" NPT.



Thermal Pressure Relief Valve

Model 282876

Protect lube system components from high-pressure spikes caused by temperature change in a closed fluid network.

Model	Application	Pre-Set Relief Pressure	Port Size
282876	Piston Pumps	1000 psi (68 bar)	1/2" NPT



81538

Accessories

Drum Covers

Model 81538

Standard 16-gallon drum cover for mounting PowerMaster II and III drum pumps to full open drums.



81412

Model 81412

Standard 55-gallon drum cover for mounting PowerMaster II & III Series drum pumps on full open drums.

Model 83166

Same as 81412 except includes a port for installation of material agitator.



84780

Follower Plates

Recommended when pumping lubricants that will not seek their own level.

Model 84775

Deluxe universal follower for use with 25 to 50 lb. containers for 1", 1 1/4", 1 1/2" diameter pump tubes. All rubber unit ensures complete grease dispensing to the bottom of dented or plastic lined drums; wipes pail or drum clean. Metal cap holds insert firmly in place, ensuring seal and maintaining vacuum.



83369

Model 84780

Same as 84775 except for use with 120 lb. containers for 1", 1 1/4", 2 1/8" diameter pump tubes.

Model 83369

For 400 lb. drums. Diameter 2 15/8".

Other Accessories

Model 83732 Standpipe Adapter Kit

Necessary to assemble PowerMaster II or III pumps to 83727 stand pipe assembly for pumping from bulk tanks.



83727

Model 83727 Standpipe Assembly

Mounts PowerMaster II or III pump on floor to accept suction line from bulk tank. Inlet 3" NPTF. 7 1/2" (19mm) height; 8" (200mm) diameter.

NOTE: PowerMaster II and III requires 83732 standpipe assembly adapter kit.

Bulk Oil Systems

3:1 and 5:1 Ratio Pump Packages

Lincoln pump 3:1 and 5:1 ratio packages include 600003 regulator, 600401 gauge, 815 coupler and 11659 nipple. Control valve, inline meter or handheld metering control valve must be ordered separately (except model 4283).

Model 4283 5:1 with 50' Reel & Meter

Deluxe assembly including 84934 5:1 ratio pump with bung bushing, universal suction tube with foot valve to fit any size container up to 275 gallons. Includes 1/2" x 50' oil hose reel 94354 with 2' connecting hose. 967 electronic meter totalizes in gallons with quart, gallon or pint readout.

NOTE: Pipe, fittings and hardware for installation of overhead reel assembly supplied by others.

Reel • Pump • Meter Packages

Lincoln puts all the components you specify in one easy-to-order package.

RPM Packages

Model	Pump Kit/Ratio	Reel/30'	Electronic Meter	Air Regulator	Air Gauge
RPM 7	282398/3:1	94334	952 quarts	600003	600401
RPM 8	282398/3:1	94334	954 universal	600003	600401
RPM 10	84934/5:1	94334	954 universal	600003	600401

NOTE: Always consult fluid/solution manufacturer specifications AND local fire code(s) before installing any pump into service. Most modern automotive fluid/solutions include some type of "additive package" which may not be compatible with the typical applications listed below. Some fluids or solutions are considered flammable and/or combustible in which case the dispensing pump should be properly grounded. (Order air coupler and air nipple separately)



4283



4493 System for mounting pump and reel on tank

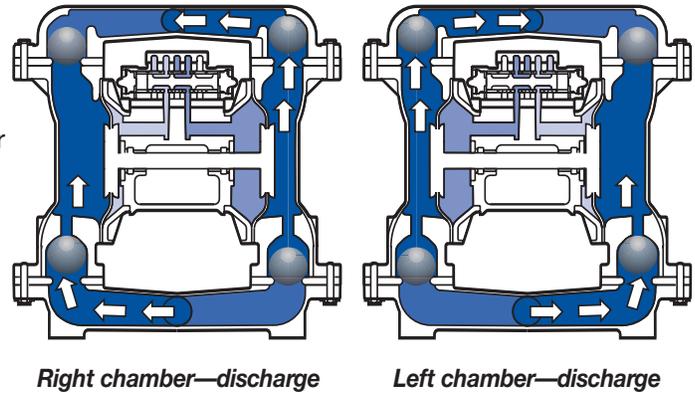
Model 4493 Value Series Pump, Reel and Meter Package

- Configured for above-ground tank installations.
- For use with natural and synthetic oils, automatic transmission fluid, gear oil, antifreeze or hydraulic oil throughout the shop.
- Fast, reliable dispensing with the 4491/six GPM free delivery pump.
- Easy handling, dependable service with the 94000 Series hose reel's heavy-gauge steel base, brass bushings and extra-wide hose guide.
- Accurate and easy dispensing with the 952 electronic oval gear meter with flexible extension.
- Package includes 4491/3.5:1 pump, 94334 reel with 30' x 1/2" hose, ball stop, 952 electronic meter (measures in quarts), air line regulator and gauge, air coupler and nipple, 2' fluid connecting hose from pump to reel and adapter union.

1/4" - 2" Air-Operated Pumps

Basic Design Features

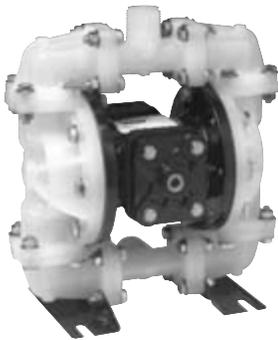
Diaphragm pumps are driven by compressed air. The directional air distribution valve and pilot valve—the “air end”—are located in the center section of the pump. Liquid moves through two manifolds and outer chambers of the pump—the “wet end”. Generally, check valves are located at the top and bottom of each outer chamber or on a common manifold. The two outer chambers are connected by suction and discharge manifolds. Lincoln’s double diaphragm self-priming design offers many advantages over other pumps.



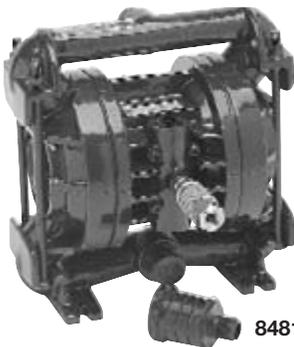
85360



85628



85622



84811

- *Pump abrasive and sheer-sensitive materials.* Low interval velocities move abrasives easily with no damage. Gentle pumping action does not shear fragile materials.
- *Pumps viscous materials.* Even heavy or solids-laden materials can be pumped.
- *Environmentally friendly.* No motors, seals or packing to leak.
- *Self-priming.* Able to dry prime under most suction lift or flooded suction conditions.
- *Variable flow.* Regulate the inlet air supply to adjust flow.
- *Runs dry without damage.*
- *Deadheads against closed discharge.* Excessive back pressure stops operation without damage until discharge opens. Eliminates bypass systems or relief valves.
- *Explosion-proof.* Eliminates sparking concerns of other electrical or rotating pumps.

WARNING

The pump exhaust should be piped to an area for safe disposal of product being pumped in the event of a diaphragm failure.

Pumps

Air-Operated Diaphragm Accessories

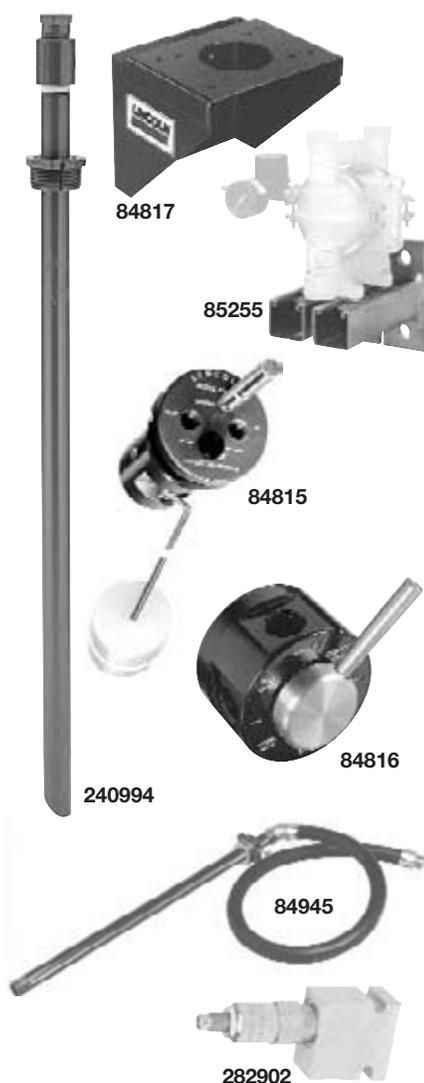
1:1 Air-Operated Diaphragm Pump Line

Model Number	Pump Description	Pump Body	Wetted or Soft Parts	Pump Inlet/Outlet NPT	Max. Free Delivery gpm	Air Inlet NPT(F)	Max. Rec. Inlet Air Pressure	Max. Susp. Solids	Application
85361	¼"	Polyprop	Buna-N	¼" / ¼"	4	⅛"	125 psi	¼"	New oil, AF, windshield washer
85631	½"	Aluminum	Buna-N	½" / ½"	15	¼"	100 psi	⅛"	New/used oil, AF
85632	½"	Aluminum	Teflon®	½" / ½"	15	¼"	100 psi	⅛"	New oil, AF
85633	½"	Aluminum	Hytrel	½" / ½"	15	¼"	100 psi	⅛"	New oil
85622	½"	Polyprop	Santoprene	½" / ½" *	14	¼"	100 psi	⅛"	High abrasion materials
85623	½"	Polyprop	Teflon®	½" / ½" *	14	¼"	100 psi	⅛"	New oil, AF
85626	½"	Polyprop	Buna-N	½" / ½" *	14	¼"	100 psi	⅛"	New oil, AF
85629	1"	Aluminum	Hytrel	1" / 1"	45	½"	125 psi	¼"	New oil
85628	1"	Aluminum	Teflon®	1" / 1"	45	½"	125 psi	¼"	New oil, AF
85627	1"	Aluminum	Buna-N	1" / 1"	45	½"	125 psi	¼"	New/used oil, AF
85621	1½"	Aluminum	Buna-N	1½" / 1½"	106	¾"	125 psi	¼"	New/used oil, AF
85624	2"	Aluminum	Buna-N	2" / 2"	150	¾"	125 psi	¼"	New/used oil, AF

U.L. Listed

84811	1" UL	Aluminum	Buna-N	1" / ¾"	37	¼"	50 psi	⅛"	Used oil, diesel, kerosene
84812	1" UL	Aluminum	Teflon®	1" / ¾"	37	¼"	50 psi	⅛"	Unleaded gas, diesel, kerosene, used oil

* Can be converted to dual 1/2" outlet.



Wall Mount Brackets

Model 85255 Wall Mount Bracket

Wall mount bracket for ¼" to ½" air-operated diaphragm pumps.

Model 84817 Wall Mount Bracket

Wall mount bracket for ½" to 2" air-operated diaphragm pumps.

Other Accessories

Model 240994 Drum Adapter Kit

For use with ½" polypropylene AOD pumps. Includes 2" NPT(f) bung bushing, 1" x 36" suction tube and adapter.

Transfer Pump Accessories

Suction Kits

Model 84945 Suction Kit

For transfer of product from drums, bulk tanks or reservoirs. Includes bung bushing suction tube, hose and coupling assembly. NOTE: 2" x 1" bell reducer required for use with Model 1914, not included.

Used-Fluid Overfill Warning Valves

Float rises with used fluid to activate "whistle" warning at prescribed level.

Model 84815 Single Wall

For single wall tanks & drums in used fluid systems and above ground tanks.

Model 84824 Double Wall

Same as 84815 except for double walled tanks and above ground tanks.

4-Way Valve

Model 84816

Four port, two position valve used in waste fluid systems. Enables one pump to pump into and out of drum or tank.

Thermal Pressure Relief Valve

Model 282902

Protect lube system components from high-pressure spikes caused by temperature change in a closed fluid network.

Model	Application	Pre-Set Relief Pressure	Port Size
282902	Diaphragm Pumps	150 psi (10.2 bar)	1/2" NPT

1:1 Piston Transfer Pumps

Model	Pump Descrip.	Pump Body	Wetted or Soft Parts	Pump Inlet/Outlet NPT	Max. Free Delivery GPM	Air Inlet NPT(f)	Max. Rec. Inlet Air Pressure	Max. Susp. Solids Dia.	Typical Automotive Use
84829	stub	alum/steel/plastic	Buna-N	1" / 3/4"	14 gpm	1/4"	150 psi	NA	Universal/ new oil transfer
82230	55-gal.	alum/steel	Buna-N	3/4" -	20 gpm	1/4"	150 psi	NA	55-gal. drum/



Model 84829 Universal

Stub pump design provides the versatility to transfer and dispense controlled amounts of lubricant using an oil spigot, control valve or meter. Adaptable for 16- or 55-gal. containers as well as bulk tank or standpipe installations. Delivers 12.5 cu. in. per cycle. Includes air motor 84831, pump tube 84828, suction tube, bung bushing, air coupler and air nipple.

Model 82230

Transfer pump quickly transfers fluids directly from 55-gallon drums. 2" bung bushing adjusts to varied drum lengths. Designed to stall against lubricant pressure. Use built-in air control valve to adjust fluid output flow.

Model 82715 Teflon® Kit

For use with 82230, to allow compatibility with additional products.

Model 1326 Diaphragm Action

Neoprene seals resist wear from abrasive fluids. Double-acting diaphragm delivers one full gallon per eight strokes. 8' hose with discharge nozzle.

Transfer Pump

Model	Drum Size	Bung Bushing	Output
1326	16- to 55-gal. w/2" bung opening	2" NPT(m)	1 pint per stroke

Model 1335

Telescoping pick-up tube for 16- through 55-gallon drums with standard 2" bung openings. Bung opening tool built into pump head to open sealed refinery containers. Provides 8.5 fl. oz. per full stroke. For use with non-corrosive fluids such as motor oil, transmission fluid, gear oil, engine coolant and more.

FlowMaster® Rotary-Driven Pump & Reel Features

- Fully hydraulic FlowMaster pump performs in cold or hot weather conditions
- It's compact, fitting inside machine compartments
- Great for use with high-viscosity grease
- Reel and valve for high-pressure operation

System Specifications

Max. Grease Pressure	Max. Output Volume	Operating Temperature	Pump Ratio	Grease Outlet
4500 psi 320 bar	22 in ³ 360 cm ³	-20°F to 150°F -10°C to 65°C	10:1	1/4" NPTF
Weight (Pump Only)	Hydraulic Inlet/Return Ports	Max. Inlet Press.	Hydraulic Supply Max. Inlet Flow	Max Fluid Temp.
36 lbs 16 kg	3/8" NPTF	450 psig 32 bar	7 gallons/min. 26.5 liters/min.	200°F 93°C



New FlowMaster Models

Kit No.	Description	Bare Pump	Lid	Follower	Reel/Hose	Connecting Hose	Control Valve & Swivel
86261	5-gal pump	85486	271705	252725	94532G	75060	740, 81387
86262	5-gal pump with 30' x 1/4" hose, 5' connecting hose						

For more information on FlowMaster family of pumps, please see the Centro-Matic® catalog, form #442832.



4475



4480

Features and Benefits—Designed for Value

- Proven horizontal, valved-piston motor design for simplicity and reliability
- Provides quick dispense, fill or transfer with high-volume output
- Built-in muffler for quiet operation
- Cost-effective solution for oil distributors who need to supply pumps for customers who purchase bulk oil in tanks or drums
- Available as stub pump, 16-/55-gallon pump or 250- to 275-gallon tank pump
- Motor's single-stroke action delivers cost effective, high performance and high flow
- Provides quick dispense and fill of ATF, oil, gear lube and other fluid lubricants with the speed of many higher-priced pumps
- Ideal for use with one or two overhead reels in applications such as medium-to-light vehicle service facilities, car dealerships, small contractors, farmers and agriculture equipment dealers

Specifications

Pump Ratio	Output/Stroke	Delivery Output	Pneumatic Inlet Pressure		Oper. Temp. Range	Weight (Empty)	Pneum. Port Inlet	Material Port Outlet	Rec'd. Fluids
			Max.	Min.					
3.5:1	5.6 in ³ 91 cm ³	6 GPM	120 psig 8.3 bar	20 psig 1.4 bar	30°F - 120°F -1°C - 49°C	14 lbs.	1/4-18 NPTF	1/2 NPTF	Motor oils, transmission fluid, petroleum-based fluids

Not for water-based products

Pump Models

Model No.	Application	Mounting	Down Tube Length
4490	55 gallon	2" NPT male bung adapter	36.5"
4491	250-275-gallon oval tank	2" NPT male bung adapter	47.0"
4492	Stub	1.5" NPT male	N/A

Model 4475 Series Pump

The Model 4475 pump is a reciprocating-piston, low-pressure single action pump. Air powers the pump's piston on the dispensing, or working, stroke. An internal spring returns the piston and resets it for the working stroke. It pumps continuously when the dispensing (fluid outlet) valve is open and 20-120 psig air is supplied to the pump.

Specifications

Model	Description	Material Outlet	Operation	Pump Tube Length	Attachment	Effective Pump Ratio	Inlet Air Pressure	Output/Stroke	Free Delivery
4475	Bare Pump	1/2" NPTF	Pneum. pressure delivery stroke, spring return stroke	34" (86 cm)	2" Bung, adj. for 55- & 16-gal. drums, bench & portable tank	Approx. 0.7:1 to 0.8:1 depending on inlet air pressure	Max: 120 psi (8.3 bar) Min: 20 psig (1.4 bar)	2.9 in ³ (48 cm ³)	Up to 4 gpm (15 lpm)
4480	Spigot Pump	Spigot extension with on/off valve							



Model 4481 Oil Rider

Portable pump, tank and meter package for handling synthetic and conventional motor oils and other specialty fluids. Includes 4475 pump, 28-gallon high-strength polyethylene tank, 10' hose and electronic meter.

- Quick, reliable vehicle service fluid transfer with Lincoln's 4475 single stroke pump.
- Accurate, dependable fluid measurement and dispensing with Lincoln's precise and rugged 952 oval gear electronic meter.
- Services 20 or more cars with the high-capacity 28-gallon tank.
- Easy to maneuver around the shop with baffled tank mounted on large pneumatic wheels.
- Helps protect vehicle finish when working in tight spaces with the strong, yet light-weight polyethylene tank.
- Stores the 10' hose and meter safely out of the way on molded brackets.

Specifications

Model	Bare Pump	Mobile Tank	Electronic Meter	Air Regulator	Air Gauge	Hose	Capacity	Tank Dimensions	Tank Construction	Meter	Hose
4481	4475	273036	952	602003	247843	273037	28 gal. 106 liters	38"Hx17.5"Wx12.75"D (27"W at wheels) 4' pneumatic wheels	High strength cross linked polyethylene, molded baffle, hose brackets	Electronic oval gear meter, quart registration	10' x 3/8" ID 300 psi (20 bar) Nitrile wetted ID, neoprene cover