



CATALOG AT-A-GLANCE



DEF EQUIPMENT

Pg 2



OIL PUMPS

Pg 7



PORTABLE OIL EQUIPMENT

Pg 14



GREASE PUMPS

Pg 18



DIAPHRAGM PUMPS

Pg 24



DRUM PUMPS

Pg 36



HOSE REELS

Pg 38



CONTROL VALVES

Pg 46



FLUID INVENTORY
CONTROL SYSTEMS

Pg 62



WASTE OIL EQUIPMENT

Pg 64



TANK PACKAGES

Pg 72



AIR SYSTEM COMPONENTS

Pg 80



GREASE GUNS

Pg 91



GREASE FITTINGS

Pg 95

Table of Contents

DEF Equipment	
DEF Pumping Systems	2-3
Hand Pumps	4
Reels	4
Down Tubes and Accessories	4-6
Oil Pumps and Packages	
1:1 Transfer Pumps	7
3:1 & 5:1 "Thunder" Oil Pumps	8-10
Electric Oil Pumps	11
4-1/4" Oil pumps	12-13
Portable Oil Equipment	14-17
Grease Pumps and Packages	
2" & 3" "Thunder" Grease Pumps	18-19
4-1/4" & 6" Grease Pumps	20-21
Portable Grease Equipment	22-23
Diaphragm Pumps	24-28
Pump Accessories	29-34
Drum Accessories	35
Drum Pumps (Hand-Operated)	36-37
Hose Reels	
Advantage Plus Single-Arm Reels	38-39
Advantage ² Plus Double-Arm Reels	40-41
Platinum Series Double-Arm Reels	42-43
Reel Enclosures	44
Reel Accessories	45
Control Valves and Meters	
Pro Series Electronic Control Valves	46-47
Pro Series Mechanical Control Valves	48-49
Electronic Preset Control Valves	50-51
Mechanical Preset Control Valves	52
Pro Series High Flow Digital Control Valves	53
Non Metered Control Valves - Water Bibbs	54-57
In-Line Oil Meters	58
Grease Control Valves and Swivels	59-60
Oil Bars	61
Fluid Inventory Control System	62-63
Waste Oil Equipment	
Waste Oil Drains	64-67
Waste Oil Pump Packages	68
Accessories	69-71
Tank Packages	
Tank Packages	72-74
Tank Specifications	75
Tank Accessories	76-78
Quick Lube Equipment	79
Air Systems Components	
Filters, Regulators, and Lubricators	80-81
Air Couplers & Connectors	82
Air System Accessories	83
Installation Accessories	84-87
Hoses	88-90
Grease Guns	
Hand Operated Grease Guns	91
18V Battery-Operated Grease Gun	92
Grease Gun Accessories	93-94
Grease Fittings	95-98
Shop Layout	100-101
Warranty	102-103



American Lubrication offers a wide range of diesel exhaust fluid pumping equipment and accessories for totes and drums in electric, air and hand-operated configurations.



TIM-DEF-3A
(tote not included)

IBC Tank (Tote) Electric Pumping System

Model Number	Description
TIM-DEF-3A	IBC Tank (Tote) Electric Pumping System with Meter and Automatic Nozzle - Includes self priming electric membrane pump without dynamic seal to reduce the need of maintenance, stainless steel mounting bracket with nozzle holder, electronic meter (measures in gallons), automatic stainless steel nozzle, 20 ft. delivery hose, (1) 4 ft. suction hose, electric motor with on/off switch 110vac/60, 2900 RPM, 370 watt, flow rate 7-8 GPM. 110 volt electric pump features a new timer which automatically shuts pump off after 2.5 minutes preventing pump burnout. (Tote not included, order suction connection separately.)
TIM-DEF-5A	IBC Tank (Tote) Electric Pumping System with Manual Nozzle - Includes self priming electric membrane pump without dynamic seal to reduce the need of maintenance, stainless steel mounting bracket with nozzle holder, electronic meter (measures in gallons), manual nozzle, 20 ft. delivery hose, (1) 4 ft. suction hose, electric motor with on/off switch 110/60, 2900 RPM, 370 watt, flow rate 7-8 GPM. 110 volt electric pump features a new timer which automatically shuts pump off after 2.5 minutes preventing pump burnout. (Tote not included, order suction connection separately.)

Portable 55-Gallon Electric Pumping Systems

Model Number	Description
TIM-DEF-1A	Portable 55-Gallon Electric Pumping System - Includes self priming electric membrane pump without dynamic seal to reduce the need of maintenance, stainless steel mounting bracket with nozzle holder, electronic meter (measures in gallons), automatic stainless steel nozzle, 20 ft. delivery hose, (1) 4 ft. suction hose, heavy-duty three-wheel cart with two (2) pneumatic front wheels and one (1) rear wheel with wheel lock, electric motor with on/off switch 110/60, 2900 RPM, 370 watt, flow rate 7-8 GPM. 110 volt electric pump features a new timer which automatically shuts pump off after 2.5 minutes preventing pump burnout. (Order suction connection separately.)
TIM-DEF-4A	Portable 55-Gallon Electric Pumping System - Same as TIM-DEF-1A except with manual polyethylene nozzle. Excludes meter. 110 volt electric pump features a new timer which automatically shuts pump off after 2.5 minutes preventing pump burnout. (Order suction connection separately.)



TIM-DEF-1A
(drum not included)

Stationary 55-Gallon Electric Pumping System

Model Number	Description
TIM-DEF-2A	Stationary 55-Gallon Electric Pumping System with Manual Nozzle - Includes self priming electric membrane pump without dynamic seal to reduce the need of maintenance, stainless steel mounting bracket, manual polyethylene nozzle, 20 ft. delivery hose and (1) 4 ft. suction hose. Excludes meter. 110 volt electric pump features a new timer which automatically shuts pump off after 2.5 minutes preventing pump burnout. <u>Order TIM-355-1 separately to make this a portable unit.</u> (Order suction connection separately.)
TIM-DEF-8A	Stationary 55-Gallon Electric Pumping System with Automatic Nozzle - Same as TIM-DEF-2A except with automatic nozzle. 110 volt electric pump features a new timer which automatically shuts pump off after 2.5 minutes preventing pump burnout.



TIM-DEF-2A
(drum not included)

NEW

12Volt D.E.F. Pumping Systems

Model Number	Description
TIM-DEF-6	IBC Tank (Tote) 12V Electric Pumping System - Includes 12 volt membrane pump with 6 ft. cables, stainless steel mounting bracket with nozzle holder, electronic meter (measures in gallons), automatic stainless steel nozzle, 20 ft. delivery hose and 4 ft. suction hose. 12V electric motor, 2800 RPM, 18 amp, flow rate of 7-9 gpm. (Order suction connection separately.)
TIM-DEF-7	Portable 55-Gallon 12V Electric Pumping System - Includes 12 volt membrane pump with 6 ft. cables, stainless steel mounting bracket with nozzle holder, electronic meter (measures in gallons), automatic stainless steel nozzle, 20 ft. delivery hose, 4 ft. suction hose, heavy-duty 3-wheel cart with (2) pneumatic front wheels and one (1) swiveling rear wheel with wheel lock. 12 volt electric motor, 2800 RPM, 18 amp, flow rate of 7-9 gpm. (Order suction connector separately.)



TIM-DEF-6
(tote not included)

D.E.F. ACCESSORIES

Hand-Operated Drum Pumps

Model Number	Container Size	Products Handled	Downtube Type	Body Material	Pump Type	Delivery	Delivery Hose	Delivery Nozzle
4166-DEFN	55-gallon drums	DEF	Polypropylene	Polypropylene with Teflon® seals	Rotary	8 ounces per revolution	9.8'	Manual nozzle



4166-DEFN

Reel For D.E.F.

Galvanized steel reel for D.E.F. includes 3/4" x 26' EDPM hose with hose stop and hose fastening clamp. Reel features protected latch mechanism and adjustable arm for more mounting options.

Model Number	Hose Size	Hose Length	Hose Stop	Inlet/Outlet	Maximum PSI	Weight
TIM-DEF-52H	3/4"	26'	Included	3/4" BSPG	140 psi	17 kg



TIM-DEF-52H

Accessories

Model Number	Description
TIM-DEF-49	Stainless steel automatic nozzle - (3/4" barb inlet)
TIM-DEF-50	Polyethylene manual nozzle - (3/4" barb inlet)
TIM-DEF-57	Polyethylene automatic nozzle - with magnetic mis-filling adapter (3/4" barb inlet)
TIM-DEF-57A	Magnetic mis-filling adapter
TIM-DEF-58	Polyethylene automatic nozzle w/ built-in meter - (3/4" barb inlet)



TIM-DEF-49

TIM-DEF-50

TIM-DEF-57A

TIM-DEF-58

TIM-DEF-57

MicroMatic Downtubes & Connectors

Model Number	Description
TIM-DEF-34P1	MicroMatic RSV dispense coupler - with 3/4" barbed outlet
TIM-DEF-39	MicroMatic EPV dispense coupler - with 3/4" barbed outlet
TIM-DEF-40	MicroMatic RSV container valve
TIM-DEF-41	MicroMatic RSV container valve install/remove tool
TIM-DEF-42	MicroMatic EPV container valve
TIM-DEF-43	MicroMatic EPV downtube - for 55-gallon drum
TIM-DEF-44	MicroMatic EPV downtube - for 275-gallon IBC
TIM-DEF-45	MicroMatic EPV downtube - for 330-gallon IBC
TIM-DEF-46	MicroMatic RSV downtube - for 55-gallon drum
TIM-DEF-47	MicroMatic RSV downtube - for 275-gallon IBC
TIM-DEF-48	MicroMatic RSV downtube - for 330-gallon IBC
TIM-DEF-54	MicroMatic RSV vapor recovery fill head coupler
TIM-DEF-56	MicroMatic RSV poly container valve

EPV - Single trip/one way, disposable
RSV - Returnable/refillable/on-site refilling



Colder Downtubes & Connectors

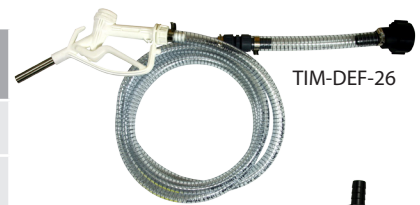
Model Number	Description
TIM-DEF-24	Colder dispense coupler and air filter - 3/4" barbed hose
TIM-DEF-35	Colder dispense coupling and downtube package - 2" buttress thread for 55-gallon drum
TIM-DEF-36	Colder dispense coupling and downtube package - 2" NPS thread for 55-gallon drum
TIM-DEF-37	Colder dispense coupling and downtube package - 2" buttress thread for IBC tank (tote)
TIM-DEF-38	Colder dispense coupling and downtube package - 2" NPS thread for IBC tank (tote)
TIM-DEF-63	Colder 2" buttress drum insert
TIM-DEF-64	Colder 2" NPS drum insert
TIM-DEF-66	Colder 55-gallon dip tube
TIM-DEF-67	Colder 275/330 tote dip tube
TIM-DEF-68	Colder installation torque tool



D.E.F. ACCESSORIES

Accessories

Model Number	Description
TIM-DEF-25	Adapter kit for installation of TIM-DEF-22 meter on manual nozzle
TIM-DEF-26	Gravity kit for totes - Includes manual nozzle and a 9 foot hose
TIM-DEF-28	Kit bottom connection
TIM-DEF-31	3/4" Delivery hose (order by foot)
TIM-DEF-32	3/4" Suction hose (order by foot)
TIM-DEF-51	Stainless steel hose clamps (package of 2)
TIM-DEF-53A	Adapter kit for installation of TIM-DEF-22 meter on automatic nozzle
TIM-DEF-69	Micromatic 6" center mount cap
TIM-DEF-72	Micromatic tamper wire
TIM-DEF-73	Install/removal tool for EPV container valve



TIM-DEF-26



TIM-DEF-25



TIM-DEF-28

Meter

Model Number	Description
TIM-DEF-22	In-Line Resettable Electronic DEF Meter - 1" BSP(M) x 1" BSP(M) Measures in gallons, flow rate up to 31 GPM



TIM-DEF-22

Adapters

Model Number	Description
TIM-DEF-55	Plastic fitting - hosetail with ring nut 3/4" barb x 1"(F) BSP
TIM-DEF-74	Plastic fitting - hose tail with ring nut and nipple 3/4" barb x 1"(M) BSP
TIM-DEF-75	Plastic fitting - 90° elbow with ring nut 3/4" barb x 1"(F) BSP
TIM-DEF-76	Plastic fitting - 90° socket 1"(F) BSP x 1"(F) BSP
TIM-DEF-78	Plastic fitting - 1" (M) BSP with ring nut and nipple x 3/4" barb
TIM-DEF-79	Plastic fitting - 1" (M) BSP x 1" (F) BSP
TIM-DEF-80	Plastic fitting - 1" (F) BSP x 1" (F) BSP
TIM-DEF-81	Plastic fitting - 3/4" (M) BSP x 1" (F) BSP
4190	Buttress Thread Adapter - Nylon adapter converts 2" buttress thread to 2" NPT. Ideal for using pumps with 2" NPT male threads on containers which have 2" buttress threads.



TIM-DEF-74



TIM-DEF-75

ARO 1:1 Transfer Pumps

Reliable Design - ARO 1:1 pumps feature a proven design. They are constructed with fewer parts. Fewer parts means less problems.

Double-Acting - All ARO 1:1 piston pumps are double-acting, ensuring high flow rates.

Long Stroke Piston - Pumps feature a 6" long stroke design to ensure smooth delivery.

Divorced Design - These pumps incorporate a divorced design. The air motor is isolated from the lower pumping assembly. This assures that the materials being pumped do not contaminate the air motor.



Specifications

Ratio 1:1
 Double-acting Yes
 Air Motor Diameter 2"
 Stroke 6"
 Air Inlet..... 1/4"(F)
 Fluid Outlet..... 3/4"(F)
 Pump Style Divorced Design
 Free Flow Rating..... 18 GPM
 Working Flow Rating..... 9 GPM
 Air Inlet Pressure..... 0-150 PSI

Fluid Compatibility

Automatic Transmission Fluid
 Gear Oil
 Hydraulic Oil
 Motor Oil
 Solvents*
 Synthetic Oil

*This pump is compatible with many solvents. Please call American Lubrication for specific solvent compatibility recommendations.

Rebuild Kit

Air Motor 637084
 Fluid Section 637083

Model Number	Description
612041-3	High-Volume Air-Operated Drum Transfer Pump - 1:1 ratio pump constructed of carbon steel and aluminum with Teflon® packings. Fits 16-gallon and 55-gallon drums with a 2" (F) opening. Includes air inlet needle valve and 2" (M) bung adapter.

Oil Pumps

ARO Thunder Oil Pumps



Reliable Design - Thunder pumps feature a patented, ice-free air motor contained in a rugged housing that is designed to withstand the harshest working environments. ARO is so confident in this design that it is backed by a 5-year warranty.

Lube-Free Air Motor - The air valves and the piston are pre-lubricated. Thunder pumps do not require an air line lubricator.

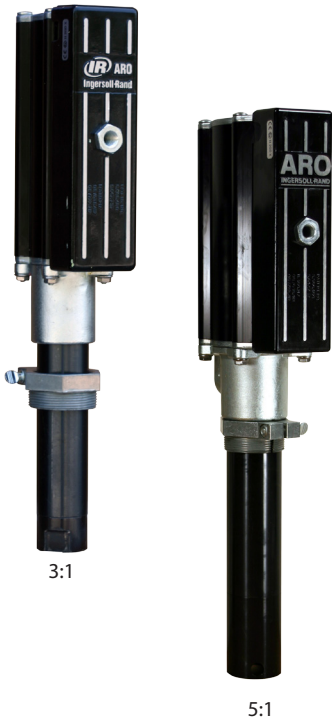
No Mechanical Assist - Thunder’s patented valve design uses no trip rods, push pins, or springs. Instead of one mechanical pilot valve in the air motor, Thunder has two independent 3-way spool valves which work together to change the direction of the pump piston.

In-Line Service - Thunder pumps can be serviced in the tank or drum using just a standard wrench.

Fewer Parts - Thunder pumps are constructed with 50% fewer parts than the majority of comparable pumps. Fewer parts means less problems.

Cost-Effective Design - Most competitive pumps are too costly to repair after their warranty expires. Thunder’s revolutionary design, inexpensive rebuild kits, and field serviceability all add up to a pump that has the lowest cost of ownership in the lubrication equipment market.

Fluid Compatibility - Thunder oil pumps are compatible with the following fluids: automatic transmission fluid, gear oil, hydraulic oil, motor oil and synthetic oil.



3:1 Specifications

Ratio	3:1
Double-acting	Yes
Air Motor Diameter	2"
Stroke	3"
Air Inlet	1/4"(F)
Fluid Outlet	1/2"(F)
Fluid Inlet (stub)	3/4"(F)
Free Flow Rating	9 GPM
Working Flow Rating	6 GPM
Air Inlet Pressure	0-150 PSI
Cycles Per Gallon	37
Noise Level @ 100 PSI	80 db
Rebuild Kit Part Number	637224

5:1 Specifications

Ratio	5:1
Double-acting	Yes
Air Motor Diameter	3"
Stroke	3"
Air Inlet	1/4"
Fluid Outlet	1/2"
Fluid Inlet (stub)	1-1/2"(F)
Free Flow Rating	9 GPM
Working Flow Rating	6 GPM
Air Inlet Pressure	0-150 PSI
Cycles Per Gallon	28
Noise Level @ 100 PSI	85 db
Rebuild Kit Part Number	637226

ARO Thunder Oil Pumps



Stub Pump Models

Model Number	Ratio	Air Coupler	Air Connector	Air Hose	Material Hose	Wall Bracket	Suction Hose
LM-2203A-11C*	3:1	--	--	--	--	--	--
LM-2203A-C*	3:1	210	2608	--	--	--	--
LM-2203A-H*	3:1	210	2608	TIM-4214-3	TIM-4418-4S	--	--
LM-2203A-HWM*	3:1	210	2608	TIM-4214-3	TIM-4418-4S	TIM-460	TIM-4416-8
LM-2305A-11B**	5:1	--	--	--	--	--	--
LM-2305A-C**	5:1	210	2608	--	--	--	--
LM-2305A-H**	5:1	210	2608	TIM-4214-3	TIM-4418-4S	--	--
LM-2305A-HWM**	5:1	210	2608	TIM-4214-3	TIM-4418-4S	TIM-460	TIM-4416-8



LM-2203A-11C



LM-2305A-11B

Stub Pump Installation Package

Model Number	Description
LM-2203A-COMP*	Complete 3:1 Stub Pump Installation Kit - Includes LM-2203A-H stub pump, P-39224-624 air filter/regulator and gauge, TIM-212-1 nipple, TIM-196-C check valve and TIM-2000-4 pressure relief kit.
LM-2305A-COMP**	Complete 5:1 Stub Pump Installation Kit - Includes LM-2305A-H stub pump, P-39224-624 air filter/regulator and gauge, TIM-212-1 nipple, TIM-166-LLC low-level cutoff and TIM-2000-4 pressure relief kit.

Tank & Drum Pump Models

Model Number	Description
LM-2203A-31C*	3:1 Pump for 16-gallon drum (built-in check valve).
LM-2203A-41C*	3:1 Pump for 55-gallon drum (built-in check valve).
LM-2203A-51C*	3:1 Pump for 275-gallon obround horizontal tank (built-in check valve).
LM-2203AV-61C*	3:1 Pump for 275-gallon obround vertical tank (built-in check valve).
LM-2305A-31B**	5:1 Pump for 16-gallon drum (includes low-level cutoff).
LM-2305A-41B**	5:1 Pump for 55-gallon drum (includes low-level cutoff).
LM-2305A-51B**	5:1 Pump for 275-gallon obround horizontal tank (includes low-level cutoff).
LM-2305AV-61B**	5:1 Pump for 275-gallon obround vertical tank (includes low-level cutoff).



LM-2203A-41C



LM-2305A-41B

*Includes bung adapter 67145-3B. For weather tight applications order bung adapter 67088-3 separately.

**Includes bung adapter 67145-4B. For weather tight applications order bung adapter 67088-4 separately.

Oil Pumps

Thunder 3:1 Tapper Pumps

Versatile - If your customer's needs change, just remove the tap-per and the pump can be used for pumping to remote overhead reel applications.

Complete Packages - All taper pump packages include 3:1 pump, bung adapter, air filter/regulator/gauge, air coupler, air con- nector and taper valve assembly.

Tapper - All taper packages include a rugged, heavy-duty tap- per assembly with a splash-reduction adapter. Part number TIM- 724-1B (tapper only).



TIM-728-2

Stub Pump Model

Model Number	Description
TIM-728-2*	Stub Pump Tapper Package - Includes Thunder 3:1 ratio pump, bung adapter, 1/4" nipple, P-39224-624 air filter/regulator and gauge, air coupler, air connector and oil dispensing tapper with splash reduction adapter.

55-Gallon Model

Model Number	Description
TIM-726-2*	55-Gallon Tapper Package - Includes Thunder 3:1 ratio pump, bung adapter, downtube, 1/4" nipple, air filter/regulator (P-39224-624) and gauge (TIM-220), air coupler, air connector and oil dispensing tapper with splash reduction adapter.



TIM-726-2

275-Gallon Model

Model Number	Description
TIM-727-2*	275-Gallon Tapper Package - Includes Thunder 3:1 ratio pump, bung adapter, downtube, 1/4" nipple, air filter/regulator (P-39224-624) and gauge (TIM-220), air coupler, air connector and oil dispensing tapper with splash reduction adapter. De- signed to be used on 275-gallon obround horizontal tanks.

*Includes bung adapter 67145-3B. For weather tight applications order bung adapter 67088-3 separately.

Electric Oil Pumps

ESQ Series

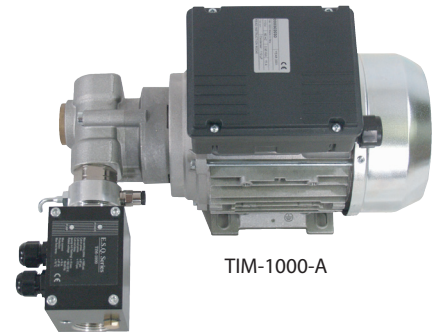
Efficient - Pumps are up to 90% more energy efficient than air-operated pumps.

Quiet - E.S.Q. series pumps are much quieter than piston pumps, drastically reducing shop noise. Noise level is below 65 db.

Internal Thermal Relief - Pumps have an internal thermal relief valve to prevent the potentially harmful effects of thermal expansion.

Built-In Pressure Switch - Built-in pressure switch senses oil demand, automatically turning the pump off and on.

Integrated Mounting Bracket - Integrated bracket simplifies mounting.



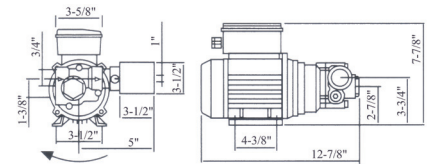
TIM-1000-A

Specifications

Motor Self-ventilated closed motor
Current 110 Volt AC
H.P. 3/4
Power Cord 5' 3-Prong plug
Pump Style Gear type
Noise Level Less than 65 db
Material Inlet 3/4"
Material Outlet 1"
Working Pressure 175 PSI
Working Flow 3.5 GPM

Fluid Compatibility

Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil



On-Demand 110 VAC Electric Pump

Model Number	Similar Application	Average PSI	Working Flow	Voltage	Amps	H.P.	Inlet (F)	Outlet (F)
TIM-1000-A*	3:1 Piston Pump	175	3.5 GPM	110 VAC	15.0	3/4	3/4"	1"

*The internal pressure relief system vents thermal pressure build-up through the downtube. Using a check or foot valve on the pump inlet or the pump downtube can damage the pump.

Connecting Hoses

Model Number	Length	Hose ID	Connection	Inlet/Outlet	Maximum PSI
TIM-1000-IN5	5'	3/4"	3/4" (M) x 3/4" Swivel (M)	inlet	300
TIM-1000-IN7	7'	3/4"	3/4" (M) x 3/4" Swivel (M)	inlet	300
TIM-1000-OUT2	2'	1/2"	1" (M) x 1/2" 90° Swivel (M)	outlet	2,500
TIM-1000-OUT4	4'	1/2"	1" (M) x 1/2" Swivel (M)	outlet	2,500
TIM-1000-OUT6	6'	1/2"	1" (M) x 1/2" Swivel (M)	outlet	2,500



TIM-1000-OUT4

Tank Mounting Adapter

Model Number	Description
TIM-173	3/4" x 2" double-tap bushing simplifies mounting of E.S.Q. electric pumps to a 2" NPT (F) opening. Just add a 3/4" downtube matched to the correct tank height and an inlet suction hose from below.



TIM-173

Oil Pumps

ARO AFX Oil Pumps

New & Improved Design - AFX pumps feature a new innovative and simplistic design with universal parts without sacrificing the reliability of the legacy models.

Heavy-Duty Construction - The AFX Series oil pumps are designed for long distance, heavy viscosity oils, industrial installations and cold weather applications.

Lube-Free Air Motor - AFX Series air motors are self lubricated and do not require an air line lubricator.

Muffler - AFX Series pumps include a muffler which can also be ported to a remote location for quieter operation.

9:1 & 10:1 Ratio - ARO AFX 4-1/4" oil pumps are ideal in systems requiring long piping runs.

Stress-Free Performance - 4" stroke and easy 19.2 cycles per gallon dispensing rate lead to a long service free pump life.

Specifications

Ratio.....	9:1
Ratio (AF0409C81BBW2).....	10:1
Double-acting	Yes
Air Motor Diameter	4-1/4"
Stroke	4"
Air Inlet.....	1/2"
Air Lubricator.....	Required
Fluid Outlet	3/4"
Fluid Outlet (613100-1)	3/8"
Fluid Inlet (stub)	2"(F) or 1-1/2"(M)
Fluid Inlet (613100-1)	Barbed
Free Flow Rating.....	18.1 GPM
Working Flow Rating.....	3.9 GPM
Air Inlet Pressure.....	0-150 PSI

Accessory

Intergrated Ball Valve Regulator67442



(order integrated ball valve regulator 67442 separately)

9:1 Fluid Compatibility

- Automatic Transmission Fluid
- Gear Oil
- Hydraulic Oil
- Motor Oil
- Synthetic Oil

9:1 Rebuild Kit

Packing Kit	637486
Air Motor Service Kit	637489

10:1 Fluid Compatibility

- Antifreeze

10:1 Rebuild Kit

Packing Kit	K1875C81BBW2
Air Motor Service Kit	637489

ARO AFX 9:1 Oil Pumps



Oil Pump Models

Model Number	Description
AF0409A13PFL1*	9:1 Stub pump - Order TIM-161 coupler separately to mount pump in tank.
AF0409A53PFL1*	9:1 Pump for 55-gallon drum (built-in check valve).

*Order bung adapter 60869 separately.

NEW



AF0409A13PFL1
(order integrated ball valve regulator 67442 separately)

NEW



DM0409A53PFL1000

Oil Pump Packages

Model Number	Description
DM0409A53PFL1000*	55-Gallon Drum Pump Package - Includes AF0409A53PFL1 pump with TIM-4258-5 air hose (5'), TIM-4418-8S material hose (8') and 60869 bung adapter.

Antifreeze Pump Model

Model Number	Description
AF0409C81BBW2*	10:1 Stainless Steel Stub Pump for Antifreeze and Antifreeze Mixtures. Pump has 3/8" hose barbed inlet for easy connection to suction hose. When using in 55-gallon drum applications, order part number 61139-1 suction tube assembly separately.

*Order bung adapter 60869 separately.

NEW



AF0409C81BBW2
(order integrated ball valve regulator 67442 separately)

Portable Oil Equipment

55-Gallon Air-Operated Oil Dispensing Carts

Options - 55-gallon dispensing carts are available with air-operated oil pumps, electric pumps and diaphragm pumps and are capable of pumping oils and antifreeze.

Mobility - Heavy-duty three-wheel cart allows drums to be moved with ease on any shop's surface.

Cost Effective - Dispensing carts are a lower cost alternative to installing overhead reels.

Model Number	Description
Air-Operated	
TIM-729	55-Gallon Air-Operated Portable Pumping System - Includes Thunder 3:1 ratio pump for 55-gallon drum, air coupler, air connector, P-39224-624 air filter/regulator and gauge, 20' delivery hose, digital metered control handle (TIM-600-FM) and heavy-duty three-wheel cart. Cart has (2) pneumatic front wheels and (1) rear wheel with wheel lock.
TIM-729-P	Same as TIM-729 except with TIM-900A-2 preset metered control handle in place of TIM-600-FM
TIM-730	55-Gallon Air-Operated Portable Pumping System - Includes Thunder 3:1 ratio pump, bung adapter, siphon tube with quick disconnect cam lock, check valve, suction hose, air coupler and connector, P-39224-624 air filter/regulator and gauge, 8' delivery hose, quart digital metered control handle (TIM-600-FM) and heavy-duty three-wheel cart. Cart has (2) pneumatic front wheels and (1) rear wheel with wheel lock.
Electric	
TIM-731	55-Gallon Electric Portable Pumping System - Includes TIM-1000 electric on-demand pump (110 VAC), siphon tube with quick disconnect cam lock, suction hose, 8' Delivery hose, quart digital metered control handle and heavy-duty 3-wheel cart. Cart has (2) pneumatic front wheels and (1) rear wheel with wheel lock.
Diaphragm Pump	
TIM-732	55-Gallon Air-Operated Diaphragm Pump System - Includes 66605J-322 1/2" diaphragm pump, siphon tube with quick disconnect cam lock suction hose, air coupler and connector, P-39224-624 air filter/regulator and gauge, 8 ft. delivery hose, non-metered control handle and heavy-duty 3-wheel cart. Cart has (2) pneumatic front wheels and (1) standardized rear wheel with wheel lock.



TIM-729-P
(container not included)



TIM-730
(container not included)



TIM-731
(container not included)



TIM-732
(container not included)

16-Gallon Air-Operated Oil Dispensers

Options - 16-gallon air-operated oil dispensers are available with 3:1 or 5:1 pumps and now with platform dollies or heavy-duty 3-wheel carts.

Mobility - The dolly or cart option allows kegs to be moved with ease on any shop's surface.

Cost Effective - Dispensing carts are a lower cost alternative to installing overhead reels.

Model Number	Description
3:1 Pumps	
LP-2100-1*	16-Gallon Portable Gear Oil Package - Includes Thunder 3:1 pump, check valve, drum cover, digital pint meter, 6' material hose, TIM-762-TGA control handle and platform dolly.
LP-2100-1C*	16-Gallon Portable Gear Oil Package - Includes Thunder 3:1 pump, check valve, drum cover, digital pint meter, 6' material hose, TIM-762-TGA control handle and TIM-408 heavy-duty 3-wheel cart.
5:1 Pumps	
LP-3100-1*	16-Gallon Portable Gear Oil Package - Includes Thunder 5:1 pump, check valve, drum cover, digital pint meter, 6' material hose, TIM-762-TGA control handle, and platform dolly.
LP-3100-1C*	16-Gallon Portable Gear Oil Package - Includes Thunder 5:1 pump, check valve, drum cover, digital pint meter, 6' material hose, TIM-762-TGA control handle, and TIM-408 heavy-duty 3-wheel cart.

*Order 210 coupler, 2608 connector and P-39224-624 filter/regulator/gauge separately.



LP-2100-1C
(container not included)



LP-3100-1
(container not included)

Portable Oil Equipment

Self-Contained Oil Dispensers

Air-Charged Oil Dispenser

Model Number	Description
TIM-390-A1	Heavy-duty "Pumpless" Metered Oil Dispenser. 24-gallon capacity. Ideal for use as a synthetic oil dispenser. The unit must be filled with oil and then charged to 100 PSI. The air hose can then be disconnected and the unit will dispense oil remotely. Dispenses approximately 8-gallons on the first charge and the remaining 12-gallons on the second charge. Flow rate approximately 2 gallons per minute. Safety pop-off valve prevents over-pressurization. Includes wide-mouth filling funnel (not shown), 2608 air connector, air filter, built-in fluid gauge, 6' discharge hose and a quart digital metered control valve TIM-600-FM. (Order 210 air coupler separately.)



Portable Electric Oil Transfer Pump with Filter

Model Number	Description
TIM-307	Electric Oil Filter and Oil Transfer Cart - This filter cart is perfect for transferring oil and for decontaminating oil in bulk storage tanks. The oil is extracted using a 6' suction hose with an integrated inlet screen. The extracted oil is filtered through a 10 micron replaceable cartridge filter and then pumped back through a 6' discharge hose that has a 3' extension tube on the end. Unit has a pressure gauge installed on the filter head which indicates when the filter needs to be replaced. Pump requires 115 VAC and is rated at 8 GPM. Replacement filter number TIM-307-FIL.



Portable Oil Equipment

Gear Oil Dispensers

Model Number	Container Size	Products Handled	Meter	Accessories	Hose	Nozzle
TIM-60	5 Gal.	Gear oil	No	Carrying handle & drum cover	4'	Goose neck
611170	5 Gal.	Gear oil	No	Drum cover Adjustable ratio 2:1, 4:1 & 7:1	5'	Goose neck
TIM-61	16 Gal.	Gear oil	No	Drum cover	4'	Goose neck



TIM-60
(container not included)



611170
(container not included)

16-Gallon Heavy-Duty Oil Dispensers

Model Number	Products Handled	Meter	Accessories	Hose	Nozzle
TIM-62-1A	Gear/Motor/ Synthetic oils & ATF	No	Bare pump and bung adapter only	5'	90° rigid w/ manual non-drip tip
TIM-62-2	Gear/Motor/ Synthetic oils & ATF	No	Drum cover & platform dolly	5'	90° rigid w/ manual non-drip tip
TIM-62-2C	Gear/Motor/ Synthetic oils & ATF	No	Drum cover & 3-wheel cart	5'	90° rigid w/ manual non-drip tip
TIM-62-LD2	Gear/Motor/ Synthetic oils & ATF	No	Drum cover	5'	90° rigid w/ manual non-drip tip
TIM-63-2	Gear oil	Digital in-line Pints	Drum cover & platform dolly	5'	90° rigid w/ manual non-drip tip
TIM-63-2C	Gear oil	Digital in-line Pints	Drum cover & 3-wheel cart	5'	90° rigid w/ manual non-drip tip
TIM-63-LD2	Gear oil	Digital in-line Pints	Drum cover	5'	90° rigid w/ manual non-drip tip
TIM-64-2	Motor/Synthetic oils & ATF	Digital in-line Quarts	Drum cover & platform dolly	5'	45° rigid w/ manual non-drip tip
TIM-64-2C	Motor/Synthetic oils & ATF	Digital in-line Quarts	Drum cover & 3-wheel cart	5'	45° rigid w/ manual non-drip tip
TIM-64-LD2	Motor/Synthetic oils & ATF	Digital in-line Quarts	Drum cover	5'	45° rigid w/ manual non-drip tip



TIM-63-2C
(container not included)



TIM-63-2
(container not included)

Grease Pumps

ARO Thunder 50:1 Grease Pumps



Reliable Design - Thunder pumps feature a patented, ice-free air motor contained in a rugged housing that is designed to withstand the harshest working environments. ARO is so confident in this design that it is backed by a 5-year warranty.

Protected Inlet Tube - Thunder grease pumps have 5/16" inlet holes in the sides of the bottom of the pick up tube. This helps eliminate problems caused by sucking plastic grease drum liners into the pump's lower section.

Lube-Free Air Motor - The air valves and the piston are pre-lubricated. Thunder pumps do not require an air line lubricator.

No Mechanical Assist - Thunder's patented valve design uses no trip rods, push pins, or springs. Instead of one mechanical pilot valve in the air motor, Thunder has two independent 3-way spool valves which work together to change the direction of the pump piston.

In-Line Service - Thunder grease pump air motors can be serviced in the drum using just a standard wrench.

Fewer Parts - Thunder pumps are constructed with 50% fewer parts than the majority of comparable pumps. Fewer parts means less problems.

Cost-Effective Design - Most competitive pumps are too costly to repair after their warranty expires. Thunder's revolutionary design, inexpensive rebuild kits, and field serviceability all add up to a pump that has the lowest cost of ownership in the lubrication equipment market.

Grease Compatibility - Thunder pumps are compatible with NLGI 0, NLGI 1, NLGI 2 and NLGI 3 grease.



2" Specifications

Ratio 50:1
Double-acting Yes
Air Motor Diameter 2"
Stroke 3"
Air Inlet. 1/4"
Material Outlet 3/8"
Free Flow Rating 9 lbs/min
Working Flow Rating 2 lbs/min
Air Inlet Pressure 0-150 PSI
Noise Level @ 100 PSI 85 db
Rebuild Kit Part Number 637332

3" Specifications

Ratio 50:1
Double-acting Yes
Air Motor Diameter 3"
Stroke 3"
Air Inlet. 1/4"(F)
Material Outlet 3/8"(F)
Free Flow Rating 7.5 lbs/min
Working Flow Rating 4 lbs/min
Air Inlet Pressure 0-150 PSI
Noise Level @ 100 PSI 85 db
Rebuild Kit Part Number 637227-B

Bare Pump Models

Model Number	Description
LM-2250E-21B*	2" 50:1 Grease pump for 35-lb container.
LM-2250E-31B*	2" 50:1 Grease pump for 120-lb container.
LM-2350E-21B*	3" 50:1 Grease pump for 35-lb container.
LM-2350E-31B*	3" 50:1 Grease pump for 120-lb container.
LM-2350E-41B*	3" 50:1 Grease pump for 400-lb container.

*All pumps include bung adapter 67145-2. For weather tight applications order seal kit 67088 separately. Order 210 coupler, 2608 connector and P-39224-624 filter/regulator/gauge separately.



LM-2250E-31B

Grease Pumps

ARO Thunder 50:1 Grease Pumps Stationary Pump Packages



Model Number	Size	Bare Pump	Drum Cover	Follower Plate	Material Hose	Air Hose	Z-Swivel	Control Handle
--------------	------	-----------	------------	----------------	---------------	----------	----------	----------------

2" Diameter Air Motor

LP-2001-AL*	35 lb.	LM-2250E-21B	TIM-367-1	TIM-368	----	----	----	----
LP-2003-AL*	120 lb.	LM-2250E-31B	TIM-451-1	TIM-366	TIM-4516-4	TIM-4214-3	----	----
LP-2004-AL*	120 lb.	LM-2250E-31B	TIM-451-1	TIM-366	TIM-4514-10	----	TIM-111-1	TIM-792-1

3" Diameter Air Motor

LP-3002-AL*	120 lb.	LM-2350E-31B	TIM-451-1	TIM-366	TIM-4516-4	TIM-4214-3	----	----
LP-3005-AL*	400 lb.	LM-2350E-41B	TIM-369	----	TIM-4516-4	TIM-4214-3	----	----
LP-3008-AL*	35 lb.	LM-2350E-21B	TIM-367-1	TIM-368	TIM-4510-10	----	----	----
LP-3009-AL*	400 lb.	LM-2350E-41B	TIM-369	TIM-640015-1	TIM-4516-4	TIM-4214-3	----	----

PORTABLE GREASE Pump Packages

Model Number	Size	Bare Pump	Drum Cover	Follower Plate	Material Hose	Z-Swivel	Control Handle	Dolly/ Cart
--------------	------	-----------	------------	----------------	---------------	----------	----------------	-------------

2" Diameter Air Motor

LP-2002-AL*	35 lb.	LM-2250E-21B	TIM-367-1	TIM-368	TIM-4514-10	TIM-111-1	TIM-792-1	----
LP-2006-AL*	120 lb.	LM-2250E-31B	TIM-451-1	TIM-366	TIM-4514-10	TIM-111-1	TIM-792-1	TIM-358
LP-2006-ALC*	120 lb.	LM-2250E-31B	TIM-451-1	TIM-366	TIM-4514-10	TIM-111-1	TIM-792-1	TIM-408

3" Diameter Air Motor

LP-3001-AL*	35 lb.	LM-2350E-21B	TIM-367-1	TIM-368	TIM-4514-10	TIM-111-1	TIM-795-1	----
LP-3003-AL*	120 lb.	LM-2350E-31B	TIM-451-1	TIM-366	TIM-4514-10	TIM-111-1	TIM-795-1	TIM-358
LP-3004-AL*	120 lb.	LM-2350E-31B	TIM-451-1	TIM-366	TIM-4514-10	TIM-111-1	TIM-792-1	TIM-358
LP-3004-ALC*	120 lb.	LM-2350E-31B	TIM-451-1	TIM-366	TIM-4514-10	TIM-111-1	TIM-792-1	TIM-408
LP-3005-ALC*	400 lb.	LM-2350E-41B	TIM-369	TIM-640015-1	TIM-4514-10	TIM-111-1	TIM-792-1	TIM-401-1

*All pumps include bung adapter 67145-2. For weather tight applications order seal kit 67088 separately. Order 210 coupler, 2608 connector and P-39224-624 filter/regulator/gauge separately.



Grease Pumps

ARO AFX Grease Pumps

New & Improved Design - AFX pumps feature a new innovative and simplistic design with universal parts without sacrificing the reliability of the legacy models.

Heavy-Duty Construction - The AFX Series oil pumps are designed for long distance, heavy viscosity oils, industrial installations and cold weather applications.

Lube-Free Air Motor - AFX Series air motors are self lubricated and do not require an air line lubricator.

Muffler - AFX Series pumps include a muffler which can also be ported to a remote location for quieter operation.

Grease Compatibility - AFX grease pumps are compatible with NLGI 0, NLGI 1, NLGI 2 and NLGI 3 greases.

4-1/4" Specifications

Ratio	50:1
Double-acting	Yes
Air Motor Diameter	4-1/4"
Stroke	4"
Air Inlet.....	1/2"(F)
Air Lubricator	Required
Material Outlet	1/2"(F)
Max Delivery	6 lbs
Air Inlet Pressure.....	0-150 PSI

6" Specifications

Ratio	100:1
Double-acting	Yes
Air Motor Diameter	6"
Stroke	4"
Air Inlet.....	1/2"(F)
Air Lubricator	Required
Material Outlet	1/2"(F)
Free Flow Rating.....	2.1 lbs/min
Max Delivery	2.1 lbs
Air Inlet Pressure.....	0-100 PSI



NEW

(order integrated ball valve regulator 67442 separately)

4-1/4"

4-1/4" Rebuild Kit

Packing Kit	637485
Air Motor Only.....	637489

4-1/4" Accessories

Intergrated Ball Valve Regulator	67442
Follower Plate 120 lb.	TIM-363
Follower Plate 400 lb.	TIM-364
Drum Cover 120 lb.	66492
Drum Cover 400 lb.	60898
Bung Adapter	4148

6" Rebuild Kit

Air Motor Service Kit	637489
Packing Kit	65130

6" Accessories

Intergrated Ball Valve Regulator	67442
Follower Plate 120 lb.	640152-1
Follower Plate 400 lb.	640015-5
Drum Cover 120 lb.	66715
Drum Cover 400 lb.	71060
Bung Adapter	4148

ARO AFX Grease Pumps



Bare Pump Models

Model Number	Description
4-1/4" Diameter Air Motor Type	
AF0450L43PKL1†	4-1/4" 50:1 Grease Pump For 120-lb Container.
AF0450L53PKL1†	4-1/4" 50:1 Grease Pump For 400-lb Container.
6" Diameter Air Motor Type	
AF060BL43PKL1**	6" 100:1 Grease Pump for 120-lb Container
AF060BL53PKL1**	6" 100:1 Grease Pump for 400-lb Container

† Order 4148 bung adapter separately

** Order 60870 bung adapter separately



AF0450L43PKL1
(order integrated ball valve regulator 67442 separately)

Pump Packages

Model Number	Description
4-1/4" Diameter Air Motor Type	
DM0450L53PKL1000	400-lb. Grease Package - Includes AF0450L53PKL1 pump, TIM-4258-5 air hose (5'), TIM-4516-8 material hose (8') and 4148 bung adapter. (Order follower plate TIM-364 separately.)
DC0450L53PKL1000	400-lb. Grease Package - Includes AF0450L53PKL1 pump, TIM-4258-5 air hose (5'), TIM-4516-8 material hose (8'), 60898-AL drum cover and 4148 bung adapter. (Order follower plate TIM-364 separately.)
6" Diameter Air Motor Type	
DC060BL43PKL1C11**	120-lb. Grease Package - Includes AF060BL43PKL1 pump, 66715 drum cover and 640152-1 follower plate.
DC060BL53PKL1C11	400-lb. Grease Package - Includes AF060BL43PKL1 pump, 71060-1 drum cover, 60870 bung adapter and 640015-5 follower plate.

** Order 60870 bung adapter separately



DC0450L53PKL1000

***WARNING:** ARO 6" 100:1 pumps deliver pressures up to 10,000 PSI which is in excess of the rated capacity of the accessories shown in this catalog. These 100:1 pumps can only be used in permanently installed systems where the pump is connected directly to piping with a proper rating for the application.

Portable Grease Equipment

Grease Filler Pumps & Accessories

Model Number	Description
TIM-80	35-lb. Hand-Operated Grease Filler Pump - Ideal for filling hand grease guns. Includes follower plate, drum cover and loader valve which is compatible with the TIM-20 grease gun loader fitting.



TIM-80
(container not included)

35-lb. Hand Operated Grease Pump

Model Number	Description
TIM-83-KM	35-lb. Hand-Operated Grease Pump - Delivers up to 5,000 PSI. Includes drum cover, tapered follower plate, 1/4" x 5' delivery hose, narrow diameter grease coupler and carrying handle.



TIM-83-KM

Wheel Bearing Packers

Model Number	Description
TIM-65	Wheel Bearing Packer - Can be used with either hand or air-operated lube equipment. For all car, boat, trailer and RV bearings having an ID of 1/2" to 5", and a height of 1/4" to 2". Rugged steel construction.
TIM-66-A	Drum-Mounted Wheel Bearing Packer with Pump - Mounts directly to 25 - 50 lb. standard grease containers. Ideal for packing several bearings in a short amount of time. For all car, boat, trailer and RV bearings having an ID of 1/2" to 5", and a height of 1/4" to 2". Rugged steel construction.



TIM-66-A
(container not included)



TIM-65

Portable Grease Equipment

35-lb. Grease Packages

Model Number	Description
2" Diameter Air Motor	
LP-2002-AL*	35-lb. Grease Package - Includes LM-2250E-21B pump, TIM-367-1 drum cover and carry handle, TIM-368 follower plate, TIM-4514-10 material hose (10'), TIM-111-1 Z-swivel and TIM-792-1 control handle.
3" Diameter Air Motor	
LP-3001-AL*	35-lb. Grease Package - Includes LM-2350E-21B pump, TIM-367-1 drum cover and carry handle, TIM-368 follower plate, TIM-4514-10 material hose (10'), TIM-111-1 Z-swivel and TIM-795-1 control handle.



LP-2002-AL
(container not included)

120-lb. Grease Packages

Model Number	Description
2" Diameter Air Motor	
LP-2006-AL*	120-lb. Grease Package - Includes LM-2250E-31B pump, TIM-451-1 drum cover, TIM-366 follower plate, TIM-4514-10 material hose (10'), TIM-111-1 Z-swivel, TIM-792-1 control handle and TIM-358 band dolly.
LP-2006-ALC*	120-lb. Grease Package - Includes LM-2250E-31B pump, TIM-451-1 drum cover, TIM-366 follower plate, TIM-4514-10 material hose (10'), TIM-111-1 Z-swivel, TIM-792-1 control handle and TIM-408 heavy-duty 3-wheel cart.
3" Diameter Air Motor	
LP-3004-AL*	120-lb. Grease Package - Includes LM-2350E-31B pump, TIM-451-1 drum cover, TIM-366 follower plate, TIM-4514-10 material hose (10'), TIM-111-1 Z-swivel, TIM-792-1 control handle and TIM-358 band dolly.
LP-3004-ALC*	120-lb. Grease Package - Includes LM-2350E-31B pump, TIM-451-1 drum cover, TIM-366 follower plate, TIM-4514-10 material hose (10'), TIM-111-1 Z-swivel, TIM-792-1 control handle and TIM-408 heavy-duty 3-wheel cart.

*Order 210 coupler, 2608 connector and P-39224-624 filter/regulator/gauge separately.



LP-2006-AL
(container not included)



LP-2006-ALC
(container not included)

Diaphragm Pumps

ARO 3/8" - 2" Diaphragm Pumps

Patented Air Valve - ARO's patented "unbalanced" air valve design eliminates stalling, a common occurrence in competitive pumps.

Hi- Flow - These pumps offer high-volume delivery of material even at low air pressures.

Runs Dry - ARO diaphragm pumps can run dry without any damage to the pump.

Bolted Construction - Pumps feature bolted construction to avoid the proven problems created by band clamp type pump fasteners.

Lube-Free Air Motor - ARO diaphragm pumps are pre-lubricated. They do not require an air lubricator, eliminating maintenance concerns. (The use of a lubricator is not recommended.)

Variable Flow Rate - Adjusting the air pressure to the pump allows precise control over the pump's flow rate without damaging the pump.

Simple Design - Provides trouble-free operation and virtually maintenance-free performance.

Variety* - ARO diaphragm pumps are available in metallic and composite bodies, single and multiple-port designs, and many different ball, seat, and diaphragm configurations to suit your application.

ARO

IR Ingersoll Rand
Industrial Technologies

**5
YEAR
WARRANTY**



PD-03PARS-PAA



66605J-322



666100-3C9C



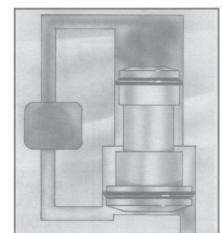
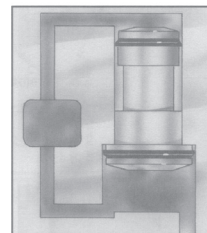
PD-20AAP-GGGB

Fluid Compatibility

Antifreeze
Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil
Waste Oil
Windshield Washer Fluid

*ARO has a complete line of diaphragm pumps to handle most product pumping applications. Please call American Lubrication at 888-252-9300 for recommendations on fluids not listed above.

"Unstallable" Air Valve



ARO's patented "unbalanced" major air valve has constant air pressure applied to its small end. This assures that the pump resets. Competitive designs lose their signal during every shift, making them vulnerable to stalling. To reverse the valve, air pressure is supplied to the larger end of the valve, allowing the valve to shift - note that constant air pressure continues to be applied to the small end.

Diaphragm Pumps

ARO

IR Ingersoll Rand
Industrial Technology

**5
YEAR
WARRANTY**

3/8" Diaphragm Pump

Model Number	Ball	Diaphragm & O-Ring	Body	Air Inlet (F)	Material Inlets (F)	Material Outlet (F)	Air Max. PSI	GPM Max
PD-03PARS-PAA	Santoprene	Santoprene	Polypropylene	1/4"	3/8"	3/8"	100	10.6 GPM

1/2" Diaphragm Pump

Model Number	Ball	Diaphragm & O-Ring	Body	Air Inlet (F)	Material Inlet & Outlet (F)	Air Maximum PSI	GPM Max
66605J-322*‡	Nitrile	Nitrile	Polypropylene	1/4"	1/2"	100	13 GPM
66605J-344*	Teflon®	Teflon®	Polypropylene	1/4"	1/2"	100	13 GPM
PD-05PAAS-PGG	Nitrile	Nitrile	Aluminum	1/4"	1/2"	100	13 GPM

*Not recommended for oil use in a "closed" system (where the pump remains pressurized when not in use) without thermal relief kit model number TIM-RELIEF-KIT.

‡Use for antifreeze and windshield washer fluid.

1" Diaphragm Pump

Model Number	Ball	Diaphragm & O-Ring	Body	Air Inlet (F)	Material Inlet & Outlet (F)	Air Maximum PSI	GPM Max
666100-344C*	Teflon®	Teflon®	Aluminum	1/4"	1"	120	35 GPM
666100-3C9C*	Hytrel®	Hytrel®	Aluminum	1/4"	1"	120	35 GPM

*Not recommended for oil use in a "closed" system (where the pump remains pressurized when not in use) without thermal relief kit model number TIM-RELIEF-KIT.

1" 50/50 Antifreeze/ Water Blending Pump

Model Number	Ball	Diaphragm & O-Ring	Body	Air Inlet (F)	Material Inlets (F)	Material Outlet (F)	Air Max. PSI	GPM Max
650715-C	Acetal	Nitrile	Aluminum	1/4"	3/4"	1"	120	35 GPM

1-1/2" Diaphragm Pump

Model Number	Ball	Diaphragm & O-Ring	Body	Air Inlet (F)	Material Inlet & Outlet (F)	Air Maximum PSI	GPM Max
666150-362C	Acetal	Nitrile	Aluminum	1/2"	1-1/2"	120	90 GPM

2" Diaphragm Pump

Model Number	Ball	Diaphragm & O-Ring	Body	Air Inlet (F)	Material Inlet & Outlet (F)	Air Maximum PSI	GPM Max
PD-20AAAP-GGGB	Nitrile	Nitrile	Aluminum	3/4"	2"	120	170 GPM

Diaphragm PumpS



ARO Diaphragm Drum Pump Package

Matched Components - ARO drum pump package components (adapters, siphon tubes, etc.) contain pre specified, matching materials of construction for complete fluid compatibility.

Runs Dry - ARO diaphragm pumps can run dry without any damage to the pump.

Patented Air Valve - ARO's patented "unbalanced" air valve design eliminates stalling, a common occurrence in competitive pumps.

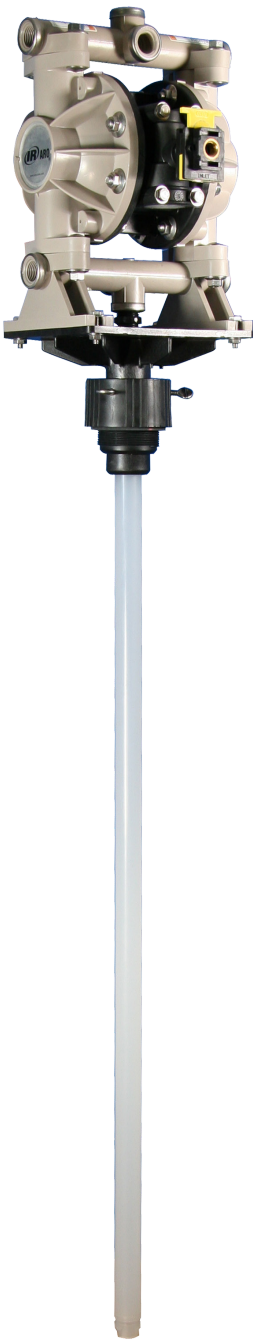
Bolted Construction - Pumps feature bolted construction to avoid the proven problems created by band clamp type pump fasteners.

Lube-Free Air Motor - All ARO 1/2" diaphragm pumps are pre-lubricated. They do not require an air lubricator, eliminating maintenance concerns. (The use of a lubricator is not recommended.)

Simple Design - Provides trouble-free operation and virtually maintenance-free performance.

Specifications

- Ratio 1:1
- Drum size 16 or 55-Gallon
- Double-acting Yes
- Air Inlet..... 1/4"(F)
- Material Outlet 1/2"(F)
- Free Flow Rating..... 13 GPM
- Air Inlet Pressure..... 100 PSI Max



Model Number	Body	Seat	Ball & Diaphragm	Fluid Compatibility
DA-B05PPC-C2A*	Polypropylene	Polypropylene	Nitrile	Oil, water and antifreeze

*Package includes pump, bung adapter, air shut-off valve, siphon tube, weather seal and base. Not recommended for oil use in a "closed" system (where the pump remains pressurized when not in use) without thermal relief kit model number TIM-RELIEF-KIT.

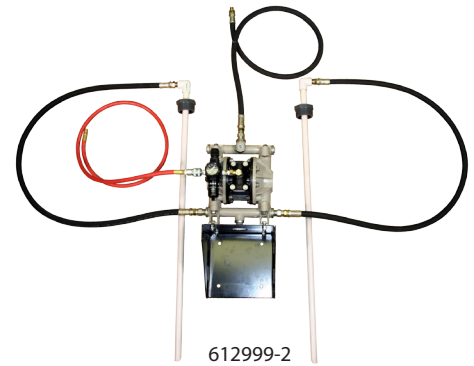
Diaphragm Pumps

Diaphragm Pump Packages



55-Gallon Antifreeze Pumping Packages

Model Number	Description
612999-1*	1/2" Wall Mounted Pump Package for Pre-Blended Antifreeze - Includes 66605J-322 pump, TIM-461-B wall mount bracket, TIM-1055 siphon tube assembly, (2) TIM-4418-5 1/2" material hoses, TIM-4214-5 air hose, P-39224-624 air filter/regulator/gauge, 210 air coupler, 2608 air connector and TIM-212-1 1/4" air adapter.
612999-2*	1/2" Wall Mounted 50/50 Antifreeze/Water Blending Pump Package - Includes 666053-388 pump, TIM-461-B wall mount bracket, (2) TIM-1055 siphon tube assemblies, (3) TIM-4418-5 1/2" material hoses, TIM-4214-5 air hose, P-39224-624 air filter/regulator/gauge, 210 air coupler, 2608 air connector and TIM-212-1 1/4" air adapter.
612999-3	1" Wall Mounted 50/50 Antifreeze/Water Blending Pump Package - Includes 650715-C pump, TIM-461-B wall mount bracket, (2) 66779 siphon tube assemblies, (2) 628066-6 1" material hoses, 628067-3 material hose, P-39224-624 air line filter/regulator, 100067-S gauge and 622201-3 1/4" air hose.



55-Gallon Windshield Washer Fluid Pump Package

Model Number	Description
612999-1*	1/2" Wall Mounted Pump Package for Windshield Washer Fluid - Includes 66605J-322 pump, TIM-461-B wall mount bracket, TIM-1055 siphon tube assembly, (2) TIM-4418-5 1/2" material hoses, TIM-4214-5 air hose, P-39224-624 air filter/regulator/gauge, 210 air coupler, 2608 air connector and TIM-212-1 1/4" air adapter.



55-Gallon Plastic Drum

Model Number	Description
TIM-I-55B	55-Gallon Translucent Blue Poly Drum - Ideal for 50/50 antifreeze and water applications or windshield washer solvent and water applications. TIM- I-55 is compatible with D.E.F. Urea products.



*Not recommended for oil use in a "closed" system (where the pump remains pressurized when not in use) without thermal relief kit model number TIM-RELIEF-KIT.

Diaphragm Pumps

Diaphragm Pump Waste Oil Packages

Model Number	Description
612999-4	Waste Oil Evacuation System - Includes 666100-3C9C 1" diaphragm pump, TIM-461-B wall mount bracket, 612999-4H 1" pump inlet hose assembly, 628067-3 1" pump outlet hose assembly, P-39224-624 air line filter/regulator/gauge, TIM-4214-3 1/4" air line hose, TIM-180 fluid coupler and TIM-250-BV air valve.
612999-5	Waste Oil Evacuation System - Includes 66605J-322 1/2" diaphragm pump, TIM-461-B wall mount bracket, 612999-5H 3/4" pump inlet hose assembly, TIM-4418-5S 1/2" pump outlet hose assembly, P-39224-624 air line filter/regulator/gauge, TIM-4214-3 1/4" air line hose and TIM-180 fluid coupler.



612999-4

Differential Oil Evacuation Package

Model Number	Description
612999-6AL	Portable 1/2" Evacuation System - Designed to speed up vehicle transaxle differential drainage. Lightweight system's left rear bracket tube doubles as a fluid drainage outlet allowing the pump to be positioned on quick lube rolling drains. Can also be used on 16 and 55-gallon drums. Package includes 1/2" diaphragm pump, tube brackets for hanging unit, 8' fluid suction line, evacuation wand, and P-39224-624 filter/regulator and gauge.



612999-6AL

UL Fuel Diaphragm Pumps

Designed specifically for high-volume transfer, bulk-unloading, or fueling applications. These pumps meet UL 79 specification code and are compatible with gasoline, aviation fuel, diesel fuel, fuel oil, motor oil and kerosene.

To meet UL 79 specifications, pumps utilize pressure relief valves to limit dispensing line pressure to under 50 PSI. If line pressure between the pump and dispensing point exceeds 50 PSI due to thermal expansion, line compression, back pressure or gravity, the relief valve opens and bleeds off excess pressure. **The relief valve must be plumbed to return the bleed-off fuel to the storage container.**



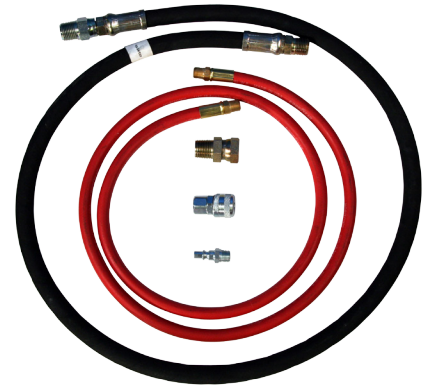
650717-C

UL Fuel Diaphragm Pumps

Model Number	Ball	Seat	Diaphragm & O-Ring	Body	Air Inlet (F)	Material Inlet & Outlet (F)	Maximum PSI	GPM Max
650717-C	Acetal	Kynar®	Viton®	Aluminum	1/4"	1"	50	29 GPM
650718-C	Acetal	Kynar®	Viton®	Aluminum	1/2"	1-1/2"	50	75 GPM

Thunder Pump Connecting Hose Kits

Model Number	Description
TIM-4430	Connecting Hose Kit for Thunder Oil Pumps - Includes 3' air hose, 4' material hose, air coupler and connector.
TIM-4431	Connecting Hose Kit for Thunder Oil Pumps - Includes 5' air hose, 5' material hose, union adapter, air coupler and connector.



TIM-4431

Pressure Relief Kits **NEW & IMPROVED**

Model Number	Relief Setting	Description
TIM-2000-4	600 PSI	Pressure Relief Kit - Relieves pressure build-up in the fluid line due to thermal expansion. Valve must be plumbed back to the oil supply tank. Kit includes everything required for hook-up: tee-connection for discharge side of pump, relief valve, nylon tubing, compression nuts for tubing connections and 2" PVC adapter for tank fill cap. Use on 3:1 and 5:1 ratio pumps.
TIM-2000-4A	900 PSI	Pressure Relief Kit - Relieves pressure build-up in the fluid line due to thermal expansion. Valve must be plumbed back to the oil supply tank. Kit includes everything required for hook-up: tee-connection for discharge side of pump, relief valve, nylon tubing, compression nuts for tubing connections and 2" PVC adapter for tank fill cap. Use on 9:1 ratio pumps.
TIM-RELIEF-KIT	100 PSI	Pressure Relief Kit - Used on 1/2" and 1" diaphragm pump applications to reduce pressure build-up due to thermal expansion. Must be plumbed back to the supply tank.



TIM-2000-4

Fluid Y-Strainer

Model Number	Inlet/Outlet	Working Pressure	Description
TIM-2000-6A	1/2" (F)	1200 PSI	20 Mesh Filter - For keeping contaminants out of a fresh oil system.
TIM-2000-10	1" (F)	200 PSI	20 Mesh Filter - For keeping contaminants out of a waste oil system.



TIM-2000-6A

Pump Accessories

Stub Pump Suction Tubes

Suction tubes are made from black steel pipe. The tubes in these charts are based on using no check valve. Subtract 3" from the tube length if using a 3:1 (TIM-196-C) check valve, and subtract 5" from the tube length if using a 5:1 or 9:1 low-level cutoff (TIM-166-LLC). If using a 9:1 Series 425 pump order TIM-161 pipe coupler separately to connect the suction tube to the pump. (Used with bung adapters.)

Tank Type	For 3:1 Pump 3/4" (M) Pipe	For 5:1 Pump 1-1/2" (M) Pipe	For 9:1 Pump 1-1/2" (M) Pipe
165-gallon workbench	TIM-MTL75-25	TIM-MTL-23	TIM-MTL-15
250-gallon workbench	TIM-MTL75-25	TIM-MTL-23	TIM-MTL-15
275-gallon horizontal obround	TIM-MTL75-37	TIM-MTL-35	TIM-MTL-26
275-gallon vertical obround	TIM-MTL75-53	TIM-MTL-51	TIM-MTL-42
525-gallon horizontal round	TIM-MTL75-39	TIM-MTL-37	TIM-MTL-28
500-gallon vertical round	TIM-MTL75-53	TIM-MTL-51	TIM-MTL-42
Cube style (60" Internal Depth)	TIM-MTL75-53	TIM-MTL-51	TIM-MTL-42



TIM-MTL-29

Pump Inlet Check Valves

Model Number	Used On	Description
TIM-166-1	Thunder 3:1 pumps	Inlet Check Valve - Installs at the bottom of the pump suction tube to help the pump maintain prime during periods of non-use. 1-1/2" (F) inlet. Check valve is 2-3/4" (L) which must be taken into consideration when ordering the suction tube.
TIM-166-LLC	Thunder 5:1 and Series 425 oil pumps	Low-level Cutoff and Inlet Check Valve - Installs at the bottom of the pump suction tube to help the pump maintain prime during periods of non-use. Also helps protect the pump's packings by slowing down the cycle rate if the pump runs dry (no oil in tank). 1-1/2" (F) inlet. Low-level cutoff is 4-5/8" (L) which must be taken into consideration when ordering the suction tube.
TIM-196-C	Thunder 3:1 pumps	Inlet Check Valve - Installs at the bottom of the pump suction tube to help the pump maintain prime during periods of non-use. 3/4" (F) inlet. Check valve is 2-3/4" (L) which must be taken into consideration when ordering the suction tube.



TIM-196-C



TIM-166-1



TIM-166-LLC

Bung Adapters

Model Number	Description	Pumps Used With
67145-3B	2"(M) Thread	Thunder 3:1 ratio oil pumps
67145-4B	2"(M) Thread	Thunder 5:1 ratio oil pumps
67145-2	2"(M) Thread	Thunder grease pumps
4148	2"(M) Thread For Use With 1-7/8" Siphon Tube	Series 425 grease pumps & AFX grease pumps
60869	2"(M) Thread For Use With 2-1/8" Siphon Tube	AFX oil pumps
60870	2"(M) Thread For Use With 2-1/8" Siphon Tube	Series 200 1:1 pumps, Series 425 oil pumps, Series 600 grease pumps & 6" AFX grease pumps
67088	Water-tight seal kit. Used in conjunction with bung adapters that come with Thunder grease pumps.	Thunder grease pumps
67088-3	Water-tight seal kit. Consists of 67088 seal kit and 67145-3 bung adapter.	Thunder 3:1 ratio oil pumps
67088-4	Water-tight seal kit. Consists of 67088 seal kit and 67145-4 bung adapter.	Thunder 5:1 ratio oil pumps



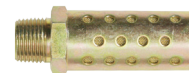
67145-3B



67088-4

Air Motor Mufflers

Model Number	Inlet	Size Inches x Inches	Pumps Used With
91790	1-1/4"(M)	3-1/2" x 11-3/16"	Series 425 and Series 600 pumps
93110	3/8"(M)	7/8" x 2 5/8"	1" diaphragm pumps
93139	3/4"(M)	3-1/8" x 4-1/4"	1-1/2" diaphragm pumps
94117	1-1/2"(M)	2" x 4"	2" and 3" diaphragm pumps
96916	1/2"(M)	1" x 3"	AFX oil & grease pumps





93110



91790

Pump Accessories

Mounting Brackets & Kits

Model Number	Pumps Used With	Description
TIM-460-A	All Thunder oil pumps	Wall mount bracket with 2" threaded opening.
61113	Series 200 pumps, all Thunder oil pumps, Series 425 & AFX stub pumps fitted with bung adapters	Wall mount bracket with 2" threaded opening. Bracket is slotted to fit over rim of open-head drum.
TIM-461-B	1/2" & 1" diaphragm pumps	Wall-mount bracket
TIM-460-3	Thunder 3:1 stub pumps	Kit for wall mounting 3:1 Thunder stub oil pumps. Includes wall mount bracket, 3/4" x 6' suction hose, double-tap bushing and adapters. Order 3/4" downtube and check valve (TIM-196-C) separately.
TIM-460-5	Thunder 5:1 stub pumps	Kit for wall mounting 5:1 Thunder stub oil pumps. Includes wall mount bracket, 1" x 8' suction hose, double-tap bushing and adapters. Order 1-1/2" downtube and check valve (TIM-166-LLC) separately.
TIM-463 	1/2" & 1" diaphragm pumps	IBC tote bracket for diaphragm pumps
TIM-464 	Thunder oil pumps	IBC tote bracket for oil pump & reel mounting



Siphon Tubes for Wall Mounted Pumps

Model Number	Container Size	Included Accessories	Tube Material	Foot Valve	Material Outlet Size	Use With
TIM-1049	55-gallon drum	1" x 6' suction hose	1-1/2" PVC	Yes	1-1/2"(M)	3" or 4 1/4" stub oil pumps
TIM-1052	55-gallon drum	3/4" x 6' suction hose	1-1/2" PVC	Yes	3/4"(M)	2" stub oil pumps
TIM-1055	55-gallon drum	None	1/2" PVC	No	1/2"(F) x 90 degree	1/2" diaphragm pumps wall mounted
TIM-1056	55-gallon drum	None	1/2" PVC	No	1/2"(M)	1/2" diaphragm pumps direct drum mount
TIM-1057	275-gallon tank	None	1/2" PVC	No	1/2"(M)	1/2" diaphragm pumps direct tank mount
TIM-1058	55-gallon drum	None	1-1/2" PVC	Yes	1"(F)	Stub pumps & 1/2" or 1" diaphragm pumps wall mounted
TIM-1059	275-gallon tank	None	1-1/2" PVC	Yes	1"(F)	Stub pumps & 1/2" or 1" diaphragm pumps wall mounted



Drum Covers

Model Number	Drum Size	# of 2" Threaded Holes	Works with Tie-Down Kits	Used On
TIM-367-1	35-lb.	1	No	2" and 3" bare grease pumps
TIM-451-1	16-gallon/ 120-lb.	1	Yes*	All Thunder 2" and 3" pumps
66492	16-gallon/ 120-lb.	1	Yes*	AFX Series 4-1/4" oil and grease pumps
66715	120-lb.	1	No	AFX Series 6" grease pumps
TIM-369	55-gallon/ 400-lb.	1	No	All Thunder 2" and 3" pumps
60898-AL	55-gallon/ 400-lb.	4	No	AFX Series 4-1/4" grease pumps
71060-1	55-gallon/ 400-lb.	2	Yes*	All Thunder pumps, AFX Series 4-1/4" grease pumps equipped with a bung adapter, and AFX Series 6" grease pumps

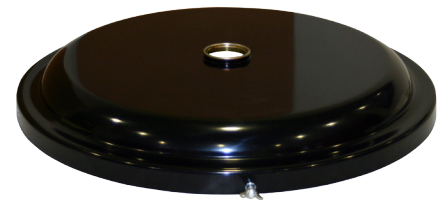
*Tie-down kits not included. Order tie-down kits separately.



TIM-367-1



TIM-451-1



TIM-369



71060-1

Drum Tie-Down Kits

Tie-down kits facilitate the mounting of drums on lube trucks. Tie-down rods mount to the drum cover and are attached to the truck's floor bed to prevent the drum from moving. Kit includes (2) tie-down rods and mounting hardware.

Model Number	Drum Size	Cover Used With	Pumps Used With
640164-AL	16-gallon 120-pound drum	TIM-451-1	All Thunder 2" and 3" pumps
71027-1	55-gallon 400-pound drum	71060-1	All Thunder 2" and 3" pumps and all AFX Series pumps



640164-AL

Pump Accessories

Pump Lifts

Model Number	Description	Max. Height	Required Drum Cover	Pumps Used With
640225	Air-operated lift for 16-gallon or 120-pound drum	62"	TIM-451-1	All Thunder 2" and 3" pumps
640067	Single-acting cylinder lift for 55-gallon or 400-pound drum	92"	71060-1	All Thunder 2" and 3" pumps and all AFX pumps

Grease Follower Plates

Model Number	Drum Size	Wiper Seal Material	Used On
TIM-368	35-lb.	Rubber	Thunder 2" and 3" grease pumps
TIM-366	120-lb.	Buna-N	Thunder 2" and 3" grease pumps
TIM-363	120-lb.	Buna-N	AFX Series, 50:1 ratio grease pumps
640152-1	120-lb.	Buna-N	AFX Series, 100:1 ratio grease pumps
TIM-640015-1	400-lb.	Buna-N	Thunder 3" grease pump
TIM-364	400-lb.	Buna-N	AFX Series, 50:1 ratio grease pumps
640015-5	400-lb.	Buna-N	AFX Series, 100:1 ratio grease pumps

Drum Dollies

Model Number	Drum Size	Dolly Type
TIM-353	35-lb.	Band Dolly with polypropylene wheels
TIM-358	120-lb.	Band Dolly with polypropylene wheels
TIM-352	120-lb.	Platform Dolly with polypropylene wheels
TIM-355-1	400-lb.	Band Dolly

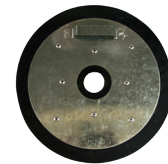
ARO

IR Ingersoll Rand
Industrial Technologies

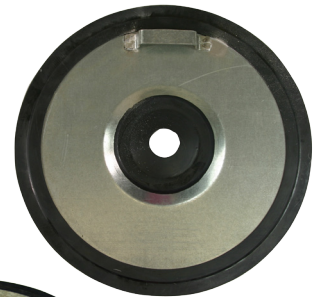
THUNDER
SERIES PUMPS



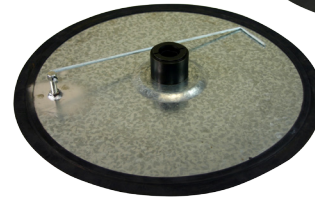
640067



TIM-368



TIM-366



TIM-640015-1



TIM-352



TIM-355-1



TIM-358

Drum Carts

Model Number	Description
TIM-401-1	Heavy-Duty Industrial Drum Cart - For use with either 16-gallon, 55-gallon, 120-lb. or 400-lb. drums. Two front tires are pneumatic for maneuverability on even the most difficult surfaces. Rear wheel includes wheel lock. Comes complete with drum fastening system, hose hanger and control handle storage slot.
TIM-408	3-Wheel Drum Cart - Includes hinged handle, swivel type front wheel and (2) 6" diameter rubber rear wheels. Accommodates either 16-gallon or 120-lb. drum.



TIM-401-1



TIM-408

Drum Accessories

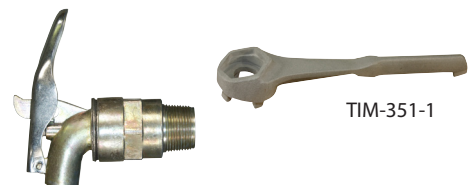
Model Number	Description
TIM-351-8	Drum Cradle with Wheels - This easy to use drum cradle is ideal for storing and moving 55-gallon drums. Includes (4) 2-1/4" fixed poly wheels and an easy to use lever bar. Weight capacity is 600 lbs.
TIM-351-8HD	Heavy-Duty Drum Cradle with Wheels - This cradle has (2) 4" fixed wheels in the front and (2) 4" swivel wheels in the rear for maximum mobility. Has an adjustable handle and weight capacity is 1100 lbs.
TIM-351-1	Aluminum Drum Wrench - Non sparking. Opens 3/4" slotted bung and 2" cross bar bung.
TIM-32-34A	Metal Drum Spigot - Self-closing drum spigot fits 3/4" NPT opening. Spigot allows for the use of a lock.
TIM-32-34P	Box of 10 Polyethylene Drum Spigots - 3/4" NPT (M)



TIM-351-8



TIM-351-8HD



TIM-351-1

TIM-32-34A



TIM-32-34P

Hand-Operated Drum Pumps



TIM-75



TIM-77



TIM-79-SS



TIM-87



4188



4162

Model Number	Container Size	Products Handled	Downtube Type	Body Material	Pump Type	Discharge	Delivery
TIM-75	16 - 55-gallon drums	Oils & non-corrosive fluids	Telescoping 18" - 34.5"	Aluminum	Lever	Twisting non-drip spout	12 ounces per stroke
TIM-77	16 - 55-gallon drums	Oils & non-corrosive fluids	Telescoping 18" - 34.5"	Aluminum	Lever	Twisting non-drip spout	16 ounces per stroke
TIM-79-SS	16 - 55-gallon drums	Antifreeze, strong chemicals & solvents that are compatible with the materials used in the body and downtube of the pump	Nylon/ stainless Steel	Nylon & stainless steel w/Teflon® seals. Bung adapter is made of polypropylene	Vertical pull	Twisting non-drip spout	8 ounces per stroke
TIM-87	5 - 55-gallon drums	Antifreeze, windshield washer solvent & any product compatible with stainless steel & Teflon®	316 Stainless steel & Teflon®	316 Stainless steel & Teflon®	Vertical pull	Fixed 316 stainless steel spout	7 ounces per stroke
4188	5 - 55-gallon drums	Various chemicals, solvents and antifreeze	Polyethylene	Polyethylene/ polypropylene	Siphon	5' 8" hose	Siphon
4162	5 - 55-gallon drums	Antifreeze, windshield washer fluid, methanol, chlorinated solvents & some water based chemicals	Polyethylene	Polyethylene/ polypropylene	Lever	Straight spout	13 ounces per stroke

Buttress Thread Adapter

Model Number	Description
4190	Buttress Thread Adapter - Nylon adapter converts 2" buttress thread to 2" NPT. Ideal for using pumps with 2" NPT male threads on containers which have 2" buttress threads.



4190

Hand-Operated Drum Pumps



TIM-74



TIM-323



TIM-321



TIM-74-AL



TIM-322-A



4166-1

Model Number	Container Size	Products Handled	Downtube Type	Body Material	Pump Type	Discharge	Delivery
TIM-74	16 - 55-gallon drums	Oils & antifreeze	Adjustable bung adapter	Cast iron	Rotary	Spout w/ 3/4" (M)	1 gallon per 12 revolutions
TIM-74-AL	16 - 55-gallon drums	Oils	Aluminum	Aluminum	Rotary	Spout with swing-arm return drain	1 gallon per 8 revolutions
TIM-321	16 - 55-gallon drums, bulk tanks	Oils	Telescoping 22" - 40"	Cast iron	Rotary - can be padlocked	Spout with swing-arm return drain	Quart stroke pump - one quart per cycle
TIM-322-A	16 - 55-gallon drums, bulk tanks	Oils & diesel fuel	Telescoping 22" - 40"	Aluminum	Lever - pull/push - can be padlocked	5/8" x 8' delivery hose (3/4" (M) both ends) and nozzle	1 gallon per 5 strokes
TIM-323	16 - 55-gallon drums, bulk tanks	Oils, gasoline & diesel fuel	Telescoping 22" - 40"	Aluminum	Rotary - can be padlocked	5/8" x 8' delivery hose (3/4" (M) both ends) and nozzle	1 gallon per 10 strokes
4166-1	5 - 55-gallon drums	DEF, antifreeze, windshield washer fluid, methanol, chlorinated solvents & some water based chemicals	Polypropylene	Polypropylene with Viton® seals	Rotary	Twisting non-drip spout	8 ounces per revolution

Hose Reels

Advantage Plus Series

Slide-In Mounting Bracket - Optional slide-in bracket simplifies reel mounting. Easily allows one person to hang the reel in an overhead application.

More Choices - All reels are available in 65' versions.

Latch Spring - Heavy duty latch spring is designed for years of trouble-free service, and can be replaced without removing or disassembling the reel.

Enclosed Spring - Cartridge style spring motor is packed with grease and fully enclosed for extra safety. Springs are factory balanced for each size reel.

Mounting Flexibility - Multi-position guide arm is easily adjusted for ceiling, floor, wall, tank, or truck mounting.

Strength Beads - Reels are constructed with strength beads for added rigidity.

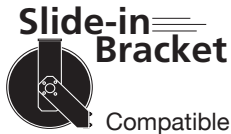
Rolled Edges - Hubs are constructed of heavy gauge steel with rolled edges for extra strength and maximum protection.

Self-Lubricating - 1" double supported steel axle with 1" self-lubricating precision bearings.

Rigid Construction - Base plate and support post are built from heavy 1/4" plate steel to reduce flexing and fatigue.

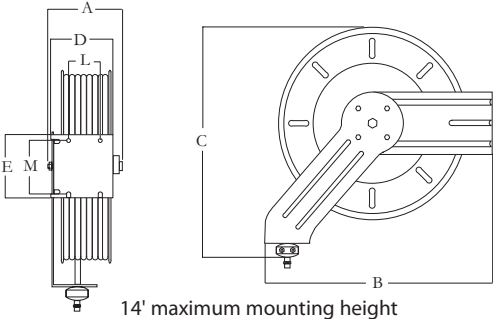
Hi-Flow Swivel - Load-free high-flow swivel allows maximum product delivery, and can be replaced without removing or disassembling the reel.

Durable Finish - All Advantage Plus Series reels are powder-coated black for increased durability.



Size Index Chart

A	B	C	D	E	Mount L-M
8 7/16"	21 1/2"	20 5/8"	5 3/4"	9"	3 1/2" x 7 1/2"



Air & Water Reels - Low Pressure



Model Number	Used For	Hose Size	Max PSI	Delivery Hose	Hose Stop	Inlet / Outlet Size	Weight in Pounds
TIM-3616-50	Air, Water, WWS	3/8"(M) x 50'	300	TIM-4216-50F	TIM-131-3	3/8" (F)	49
TIM-3616-65*	Air, Water, WWS	3/8"(M) x 65'	300	TIM-4216-65F	TIM-131-3	3/8" (F)	53
TIM-3618-50	Air, Water, WWS	1/2"(M) x 50'	300	TIM-4208-50F	TIM-131-4	1/2" (F)	60
TIM-3618-65*	Air, Water, WWS	1/2"(M) x 65'	300	TIM-4208-65F	TIM-131-4	1/2" (F)	64

*These reels are equipped with a special factory-balanced spring designed specifically for 65' hose.



TIM-3616-50

Oil Reels - Medium Pressure



Model Number	Used For	Hose Size	Max PSI	Delivery Hose	Hose Stop	Inlet / Outlet Size	Weight in Pounds
TIM-3628-25	Oil, ATF, A/F	1/2"(M) x 25'	2000	TIM-4418-25S	TIM-131-4	1/2" (F)	47
TIM-3628-50	Oil, ATF, A/F	1/2"(M) x 50'	2000	TIM-4418-50S	TIM-131-4	1/2" (F)	55
TIM-3628-65*	Oil, ATF, A/F	1/2"(M) x 65'	2000	TIM-4418-65S	TIM-131-4	1/2" (F)	62

*These reels are equipped with a special factory-balanced spring designed specifically for 65' hose.



TIM-3628-50

Grease Reels - High Pressure



Model Number	Used For	Hose Size	Max PSI	Delivery Hose	Hose Stop	Inlet / Outlet Size	Weight in Pounds
TIM-3636-50	Grease	3/8"(M) x 50'	4000	TIM-4506-50S	TIM-131-3	3/8" (F)	60
TIM-3636-65*	Grease	3/8"(M) x 65'	4000	TIM-4506-65S	TIM-131-3	3/8" (F)	66

*These reels are equipped with a special factory-balanced spring designed specifically for 65' hose.



TIM-3636-50

Optional Slide-In Mounting Bracket



Model Number	Description
TIM-3600-50	12.75" L x 10.5" W slide-in mounting bracket simplifies reel mounting by allowing for one man installations. Easily mounts to Uni-Strut® using Uni-Strut® hardware (not included). Can also be mounted by drilling and fastening to an I-Beam or H-Beam (fastening hardware not included). 1/8" steel construction.



TIM-3600-50

Hose Reels

Advantage² Plus Series

Dual Arm Design - Adds rigidity to the reel making it well suited for heavy use, high ceilings or lube truck applications.

More Choices - All reels are available in 50' and 65' versions.

Latch Spring - Heavy duty latch spring is designed for years of trouble-free service, and can be replaced without removing or disassembling the reel.

Enclosed Spring - Cartridge style spring motor is packed with grease and fully enclosed for extra safety.

Mounting Flexibility - Multi-position guide arm is easily adjusted for ceiling, floor, wall, tank, or truck mounting.

Strength Beads - Reels are constructed with strength beads for added rigidity.

Rolled Edges - Hubs are constructed of heavy gauge steel with rolled edges for extra strength and maximum protection.

Rigid Construction - Base plate and support post are built from heavy 1/4" plate steel to reduce flexing and fatigue.

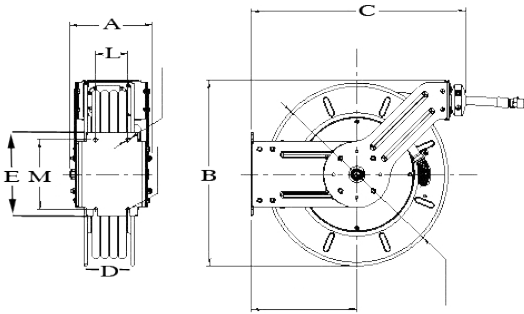
Hi-Flow Swivel - Load-free high-flow swivel allows maximum product delivery, and can be replaced without removing or disassembling the reel.

Durable Finish - All Advantage Plus Series reels are powder-coated black for increased durability.



Size Index Chart

A	B	C	D	E	Mount L-M
9"	20 1/2"	23"	7 1/2"	9"	3 1/2" x 7 1/2"



Air & Water Reels - Low Pressure

Model Number	Used For	Hose Size	Max PSI	Delivery Hose	Hose Stop	Inlet / Outlet Size	Weight in Pounds
TIM-3916-50	Air, Water, WWS	3/8"(M) x 50'	300	TIM-4216-50F	TIM-131-3	3/8" (F)	60
TIM-3916-65*	Air, Water, WWS	3/8"(M) x 65'	300	TIM-4216-65F	TIM-131-3	3/8" (F)	64
TIM-3918-50	Air, Water, WWS	1/2"(M) x 50'	300	TIM-4208-50F	TIM-131-4	1/2" (F)	71
TIM-3918-65*	Air, Water, WWS	1/2"(M) x 65'	300	TIM-4208-65F	TIM-131-4	1/2" (F)	75

*These reels are equipped with a special factory-balanced spring designed specifically for 65' hose.



TIM-3918-50

Oil Reels - Medium Pressure

Model Number	Used For	Hose Size	Max PSI	Delivery Hose	Hose Stop	Inlet / Outlet Size	Weight in Pounds
TIM-3928-50	Oil, ATF, A/F	1/2"(M) x 50'	2000	TIM-4418-50	TIM-131-4	1/2" (F)	68



TIM-3928-50

Grease Reels - High Pressure

Model Number	Used For	Hose Size	Max PSI	Delivery Hose	Hose Stop	Inlet / Outlet Size	Weight in Pounds
TIM-3936-50	Grease	3/8"(M) x 50'	4000	TIM-4506-50S	TIM-131-3	3/8" (F)	83



TIM-3936-65

Hose Reels

Platinum Series Premium Double-Arm

Double-Arm Construction - Reel is supported on both sides by pedestal style base and arm guides.

Enclosed Spring - Cartridge style spring motor is packed with grease and fully enclosed for extra safety. Springs are factory balanced for each size reel.

Mounting Flexibility - Multi-position guide arm is easily adjusted for ceiling, floor, wall, tank or truck mounting.

Triple Support - Reel axle is independently supported in three separate places and has self-lubricating bearings.

Strength Beads - Reels are constructed with strength beads for added rigidity.

Rolled-Edge - Hubs are constructed of heavy gauge steel with rolled edges for extra strength and maximum protection.

Rigid Construction - Base plate and support post are built from heavy 1/4" plate steel to reduce flexing and fatigue.

Latch-Out Prevention - Hose reels can be installed to prevent "latch-out" or locked reel syndrome.

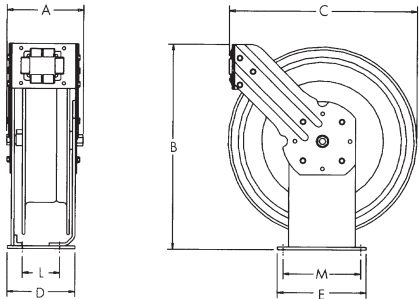
Hi-Flow Swivel - Load-free hi-flow swivel allows maximum product delivery. Swivel O-ring seals are supported by Teflon® backup rings for added durability.

Durable Finish - All Platinum Series reels are powder-coated grey for increased durability.



Size Index Chart

Size Index	Reel Dimensions In Inches					Mount L-M
	A	B	C	D	E	
1	9.25	25.50	23.00	8.00	9.00	7X8
2	9.75	25.50	23.00	8.00	9.00	7X8



Air & Water Reels-Low Pressure

Model Number	Hose Size	Maximum PSI	Delivery Hose	Hose Stop	Inlet Size	Delivery Hose Thread Size	Weight Pounds	Size Index
TIM-3106-75P	3/8" X 75'	300	TIM-4216-75F	TIM-131-3	3/8"(F)	3/8"(M)	82	1
TIM-3106-100P	3/8" X 100'	300	TIM-4216-100F	TIM-131-3	3/8"(F)	3/8"(M)	85	1
TIM-3108-75P	1/2" X 75'	300	TIM-4208-75F	TIM-131-4	1/2"(F)	1/2"(M)	82	1
TIM-3108-100P	1/2" X 100'	300	TIM-4208-100F	TIM-131-4	1/2"(F)	1/2"(M)	95	1

Oil , ATF & Antifreeze Reels-Medium Pressure

Model Number	Hose Size	Maximum PSI	Delivery Hose	Hose Stop	Inlet Size	Delivery Hose Thread Size	Weight Pounds	Size Index
TIM-3208-75P	1/2" x 75'	2,500	TIM-4418-75S	TIM-131-4	1/2"(F)	1/2"(M)	100	1
TIM-3208-100P	1/2" x 100'	2,500	TIM-4418-100F	TIM-131-4	1/2"(F)	1/2"(M)	106	1

Grease Reels-High Pressure

Model Number	Hose Size	Maximum PSI	Delivery Hose	Hose Stop	Inlet Size	Delivery Hose Thread Size	Weight Pounds	Size Index
TIM-3306-75P	3/8" X 75'	4,000	TIM-4506-75	TIM-131-3	3/8"(F)	3/8"(M)	98	2

Diesel Fuel , Gasoline & Oil Reel

Model Number	Used For	Hose Size	Maximum PSI	Inlet Size	Weight Pounds	Size Index
TIM-3412-50P	Evacuation, Fuel	3/4" x 50'	300	3/4"(F)	110	5

Hose Reel Enclosures

Cabinet Enclosures for Advantage Plus Reels

Construction - Cabinet enclosures and end panels are constructed of 14-gauge steel.

Durable Finish - All steel parts are powder-coated with a white textured finish.

Access Panels - Removable panels for easy access to the reels.

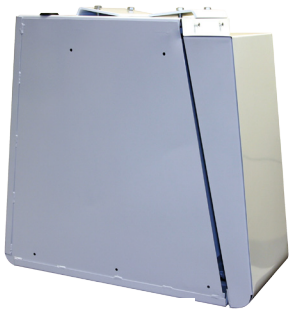
Mounting Channel - Included 1/4" powder-coated mounting plate attaches to 4"- 7-1/2" flange on "I" or "H" beam.

Roller Guides - Each reel cabinet includes a four-roller non-sag hose guide system that reduces hose wear.



Cabinet Enclosures & Accessories

Model Number	Description
TIM-3600-CAB	Single Cabinet Enclosure - For Advantage Plus Series Reels only. Top, bottom, and back panels are constructed of 14-gauge steel and are painted with a textured white powder-coated finish. Each cabinet includes mounting bracket, non-sag roller outlets and reel access panel. Once the cabinet is mounted the reel slides easily into place. Order one cabinet per reel. (Must remove hose-guide arm from reel before installing.)
TIM-3600-PAN	End-Panel Kit - Includes two end panels. Design allows for end user to customize the panels with their own logo/decal. Order one kit for each bank of reels.



TIM-3600-CAB

Required Connecting Hoses for Cabinet Enclosures

Model Number	Product	Hose ID	Thread Sizes	Working PSI	Length In Feet
TIM-4216-4NS	Air	3/8"	3/8"(M) x 3/8"-90° swivel (M)	300	4
TIM-4218-4NS	Air	1/2"	1/2"(M) x 1/2"-90° swivel (M)	300	4
TIM-4418-4NS	Oil	1/2"	1/2"(M) x 1/2"-90° swivel (M)	2,000	4
TIM-4516-4NS	Grease	3/8"	3/8"(M) x 3/8"-90° swivel (M)	4,000	4



TIM-3600-PAN
(decal not included)

Hose Reel Accessories

Hose Reel Connecting Hoses

Model Number	Product	Hose ID	Thread Sizes	Maximum PSI	Length In Feet	For Use On
TIM-4216-2	Air	3/8"	3/8"(M) x 3/8"(M)	300	2	3/8" air/water reels
TIM-4216-2N	Air	3/8"	3/8"(M) x 3/8"-90° swivel (M)	300	2	3/8" air/water reels
TIM-4218-2N	Air	1/2"	1/2"(M) x 1/2"-90° swivel (M)	300	2	1/2" air/water reels
TIM-4418-2NS	Oil	1/2"	1/2"(M) x 1/2"-90° swivel (M)	2,000	2	1/2" oil reels
TIM-4412-3	Oil	3/4"	3/4"(M) x 3/4"(M)	1,250	3	3/4" oil reels
TIM-4412-5	Oil	3/4"	3/4"(M) x 3/4"(M)	1,250	5	3/4" oil reels
TIM-4516-2N	Grease	3/8"	3/8"(M) x 3/8"-90° swivel (M)	4,000	2	3/8" grease reels

Hose Stops

Model Number	Hose ID	Outside Diameter	Reel	Style
TIM-131-A	1/4"	2.5"	All 1/4" ID Hose Reels	Donut
TIM-254-D	1/2"	3.5"	Quick Lube Consoles	Donut
TIM-131-3	3/8"	3.0"	3/8" air reels	Donut
TIM-131-4	1/2"	3.0"	1/2" oil & air reels	Donut
TIM-430	3/4"	3.5"	3/4" oil reels	Donut



TIM-131-4

Challenger Series Light Cord Reel

The TIM-4000-50 50' light cord reel uses LED technology to provide illumination for up to 100,000 hours at a brightness equivalent to an 80 watt light bulb. The LEDs are encased in a water proof/shatter proof clear plastic housing for increased durability. All Challenger Series electric reels are UL and CUL listed. Reel cabinets are 11" x 4" x 11".

Model Number	Gauge	Cord Length	Volt	LEDs	Brightness Equivalent	Type
TIM-4000-50	18	50'	120	6035	80W Bulb	SJTW



Oil Control Valves

Pro Series Digital Control VALVES

Exclusive Design - This meter is built exclusively for American Lubrication Equipment Corporation incorporating numerous design ideas provided by their design team.

Field Repairable - This design enables the user to replace the circuit board while the meter is installed under pressure.

Superior Design - Fluid is completely separated from the electronic head. The entire electronics head/puck is available as a replacement part.

Programmable - All Pro Series digital meters are programmable to pints, quarts, liters and gallons.

Batteries - New AAA battery design lasts up to 3 times longer.

Shock-Resistant - Rugged shock-resistant design stands up to the harshest environments. Meter covers have a molded-in soft rubber shock-guard for added protection.

Modular Assembly - Swivel, control valve, meter and tip assembly are separate units which simplifies repair.

Filter - All Pro Series digital control valves have built-in filters for added protection.

Trigger Guard & Lock - All "TG" style control valves have a built-in trigger guard which helps prevent accidental dispensing as well as a built-in trigger lock for hands-free dispensing.

3-Year Limited Warranty - All Pro Series digital control valves come with a 3-year limited warranty.



Specifications

Meter MechanismOval gear
Measurement..... Pts,Qts,Lts,Gals
Inlet/Outlet..... 1/2" NPT (F)
Flow Range (TIM-615)..... .1-26 Qts./Min
Operating Temperature 23 to 140 F
Storage Temperature-5 to 158 F
Operating Pressure 1,000 PSI
Weight (TIM-600-RM) 2.8 Pounds
Accuracy± .5%
Repeatability± .3%

Fluid Compatibility

Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil

TIM-615 COMPONENT VIEW



Oil control Valves

Digital Pro Series "TG" Style Control VALVES

Model Number	Metered Units	Totalizer Units	Tip Assembly	Tip Assembly Description	Tip Diameter	Working Flow
TIM-600-FA	Pts/Qts/Lts/Gals	Lts/Gals	TIM-747	Flex Automatic	1/2"	2.5 GPM
TIM-600-FM	Pts/Qts/Lts/Gals	Lts/Gals	TIM-743	Flex Manual	5/8"	2.5 GPM
TIM-600-FMHF	Pts/Qts/Lts/Gals	Lts/Gals	TIM-743-1	Flex Manual Hi-flow	15/16"	4.0 GPM
TIM-600-RA	Pts/Qts/Lts/Gals	Lts/Gals	TIM-746	Rigid Automatic	1/2"	2.5 GPM
TIM-600-RM	Pts/Qts/Lts/Gals	Lts/Gals	TIM-753	Rigid Manual	1/2"	2.5 GPM
TIM-600-RMGO	Pts/Qts/Lts/Gals	Lts/Gals	TIM-742	90° Rigid Manual	1/2"	2.5 GPM
TIM-600-RMHF	Pts/Qts/Lts/Gals	Lts/Gals	TIM-752	Rigid Manual Hi-flow	15/16"	4.0 GPM

Order optional colored swivel guards separately. See page 57.



TIM-600-RM

Digital Pro Series Standard Control VALVES

Model Number	Metered Units	Totalizer Units	Tip Assembly	Tip Assembly Description	Tip Diameter	Working Flow
TIM-601-FA	Pts/Qts/Lts/Gals	Lts/Gals	TIM-747	Flex Automatic	1/2"	2.5 GPM
TIM-601-FM	Pts/Qts/Lts/Gals	Lts/Gals	TIM-743	Flex Manual	5/8"	2.5 GPM
TIM-601-FMHF	Pts/Qts/Lts/Gals	Lts/Gals	TIM-743-1	Flex Manual Hi-flow	15/16"	4.0 GPM
TIM-601-RA	Pts/Qts/Lts/Gals	Lts/Gals	TIM-746	Rigid Automatic	1/2"	2.5 GPM
TIM-601-RM	Pts/Qts/Lts/Gals	Lts/Gals	TIM-753	Rigid Manual	1/2"	2.5 GPM
TIM-601-RMGO	Pts/Qts/Lts/Gals	Lts/Gals	TIM-742	90° Rigid Manual	1/2"	2.5 GPM
TIM-601-RMHF	Pts/Qts/Lts/Gals	Lts/Gals	TIM-752	Rigid Manual Hi-flow	15/16"	4.0 GPM

Order optional colored swivel guards separately. See page 57.



TIM-601-RM



TIM-743

TIM-753

TIM-747

TIM-746

TIM-742

TIM-752

TIM-743-1

Oil Control Valves

Pro Series Mechanical Control VALVES

- Superior Design** - Enables the use of manual non-drip tips.
- Durable** - No exposed pointers to break or turn backwards.
- Modular Assembly** - Swivel, control valve, meter and tip assembly are separate units which simplifies repair.
- Self-Powered** - Eliminates the headaches associated with dead batteries.
- Shock-Resistant** - Rugged shock-resistant design stands up to the harshest environments. Meter bodies are equipped with a soft rubber shock-guard for added protection.
- Filter** - All Pro Series mechanical control valves have built-in filters for added protection.
- Trigger Guard** - All "TG" style control valves have a built-in trigger guard which helps prevent accidental dispensing.
- Trigger Lock** - All "TG" style control valves have a built-in trigger lock, allowing hands-free operation.
- 3-Year Limited Warranty** - All Pro Series mechanical control valves come with a 3-year limited warranty.



Specifications

Meter MechanismOval gear/mechanical
Measurement.....Quarts
Inlet/Outlet 1/2" NPT (F)
Flow Range (TIM-616)..... .25 - 8 GPM
Operating Temperature-4 to 176 F
Storage Temperature-4 to 176 F
Operating Pressure 1,000 PSI
Weight (TIM-650-FM) 3.45 Pounds
Accuracy $\pm 1\%$
Repeatability $\pm .2\%$

Fluid Compatibility

Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil

Oil Control Valves

Mechanical Pro Series "TG" Style Control VALVES

Model Number	Metered Units	Totalizer Units	Tip Assembly	Tip Assembly Description	Tip Diameter	Working Flow
TIM-650-FA	Quarts	Quarts	TIM-747	Flex Automatic	1/2"	2.5 GPM
TIM-650-FM	Quarts	Quarts	TIM-743	Flex Manual	5/8"	2.5 GPM
TIM-650-FMHF	Quarts	Quarts	TIM-743-1	Flex Manual Hi-flow	15/16"	4.0 GPM
TIM-650-RA	Quarts	Quarts	TIM-746	Rigid Automatic	1/2"	2.5 GPM
TIM-650-RM	Quarts	Quarts	TIM-753	Rigid Manual	1/2"	2.5 GPM
TIM-650-RMHF	Quarts	Quarts	TIM-752	Rigid Manual Hi-flow	15/16"	4.0 GPM

Order optional colored swivel guards separately. See page 57.



TIM-650-RM

Mechanical Pro Series Standard Control VALVES

Model Number	Metered Units	Totalizer Units	Tip Assembly	Tip Assembly Description	Tip Diameter	Working Flow
TIM-651-FA	Quarts	Quarts	TIM-747	Flex Automatic	1/2"	2.5 GPM
TIM-651-FM	Quarts	Quarts	TIM-743	Flex Manual	5/8"	2.5 GPM
TIM-651-FMHF	Quarts	Quarts	TIM-743-1	Flex Manual Hi-flow	15/16"	4.0 GPM
TIM-651-RA	Quarts	Quarts	TIM-746	Rigid Automatic	1/2"	2.5 GPM
TIM-651-RM	Quarts	Quarts	TIM-753	Rigid Manual	1/2"	2.5 GPM
TIM-651-RMHF	Quarts	Quarts	TIM-752	Rigid Manual Hi-flow	15/16"	4.0 GPM

Order optional colored swivel guards separately. See page 57.



TIM-651-RM



TIM-743



TIM-753



TIM-747



TIM-746



TIM-752



TIM-743-1

Oil Control Valves

"900" Series Digital Preset Meters

Ergonomic - "900" Series meters are designed with an anatomical hand grip and a trigger that requires minimal pressure to operate.

Swivel Extension - All digital preset meters are equipped with a patented multi-position extension that threads directly into the meters body. Units with a rigid extension are also equipped with a rotatable non-drip tip.

Programmable - User can store (5) programmable preset values in the meter's memory that can be easily recalled at the time of dispense. The meter always stores the amount of the previous dispense as a sixth preset value.

Versatile - Digital preset meters can be set up to measure in pints, quarts, gallons or liters.

Trigger Guard - Preset meters have a built-in trigger guard which helps prevent accidental dispensing.

Swivel Guard - Units are equipped with a black swivel guard which prevents the swivel from damaging the vehicle's finish while being serviced.

L.E.D. Display - Large, easy to read L.E.D. display shows the dispensing amount and totalizer value at the same time.

Filter - All "900" Series digital control valves have built-in filters for added protection.

Batteries - Meters use (4) standard "AA" batteries which are field replaceable. The meter's memory is retained even during power loss.



Specifications

Measurements.....	Pts, Qts, Gals or Ltrs
Meter Mechanism	Oval gear
Inlet Size	1/2"(F)
Flow Range.....	0.26 to 7.9 GPM
Operating Temperature	23 to 122 F
Storage Temperature	-31 to 140 F
Operating Pressure	1000 PSI Max.
Weight	3.0 Pounds
Accuracy	±.5%
Repeatability	±.2%
Power	(4) 1.5v "AA" Batteries

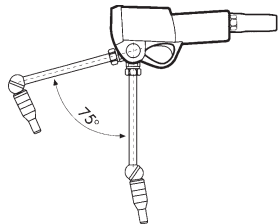
Fluid Compatibility

Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil

"900" Series Digital Preset Meters

Model Number	Unit of Measure	Tip Extension	Description	Tip Diameter	Working Flow
TIM-900A-2	Pints/Quarts/Gallons/Liters	TIM-758-1	Rigid Automatic	1/2"	2.5 GPM
TIM-901A-2	Pints/Quarts/Gallons/Liters	TIM-756-1	Flex Automatic	1/2"	2.5 GPM
TIM-901A-HF	Pints/Quarts/Gallons/Liters	TIM-755-1	Flex Hi-flow Manual	15/16"	4.0 GPM

All 900 Series meters include a black swivel guard. For other color swivel guards see page 57.



All TIM-900 Series digital preset meters have a swiveling extension. Units equipped with rigid extensions also have a rotatable automatic non-drip tip.

Oil Control Valves

Preset Mechanical Meters

Balanced Design - Preset mechanical meters have a light-weight, balanced design for ease of use.

Impact Resistant - An impact resistant nylon shroud protects the meter's knob and register dial.

Trigger Guard - Built-in trigger guard which helps prevent accidental dispensing.

Manual Tips - Units come equipped with "manual" non-drip tips in either standard or hi-flow configurations.

Inlet Swivel - 1/2" female swivel comes standard on all mechanical style meters.



Specifications

Inlet Size 1/2"(F)
Flow Range..... 0.4 to 3.0 GPM
Operating Temperature 45 to 110 F
Operating Pressure 1000 PSI Max.
Weight 4.0 Pounds
Accuracy - Preset ±.3%
Accuracy - Mechanical ±.65%

Fluid Compatibility

Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil

Model Number	Metered Units	Totalizer Units	Tip Extension	Description	Tip Diameter	Working Flow
TIM-910-HF	16 Quarts	Quarts	TIM-743-RHF	Rigid Hi-flow manual	15/16"	3.0 GPM
TIM-911-HF	60 Quarts	Gallons	TIM-743-RHF	Rigid Hi-flow manual	15/16"	3.0 GPM
TIM-912-HF	60 Gallons	Gallons	TIM-743-RHF	Rigid Hi-flow manual	15/16"	3.0 GPM

Order optional colored swivel guards separately. See page 57.



TIM-911-HF

Pro Series Hi-Flow Digital Control VALVES

High Volume - Flow rates up to 15 GPM. Pro Series Hi-Flow Digital Control Handles are ideal for filling crank cases on trucks, mining equipment and earth moving machinery.

Trigger Guard - Built-in trigger guard with manual lock helps prevent accidental dispensing.

Manual Tips - Units come equipped with "manual" non-drip tips in either standard or hi-flow configurations.

Inlet Swivel - 1" NPT female swivel comes standard on all Pro Series Hi-Flow digital meters.



Specifications

Meter MechanismOval Gear
Measurement..... Pts, Qts, Lts, Gals
Inlet Size 1" NPT (F)
Flow Range..... 4-15 GPM
Operating Temperature 23 to 140 F
Storage Temperature -5 to 158 F
Operating Pressure 1000 PSI
Weight (TIM-620-RMHF).... 5.8 Pounds
Accuracy $\pm 5\%$
Repeatability $\pm 3\%$

Fluid Compatibility

Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil

Model Number	Metered Units	Totalizer Units	Tip Assembly	Tip Assembly Description	Tip Diameter
TIM-620-RMHF	Pts/Qts/Lts/Gals	Lts/Gals	TIM-752	Rigid Manual Hi-Flow	15/16"
TIM-620-FMHF	Pts/Qts/Lts/Gals	Lts/Gals	TIM-743-1	Flex Manual Hi-Flow	15/16"



TIM-620-RMHF

Oil Control Valves

"760" Series Non-Metered VALVES

More Choices - "760" Series control valves come in a wide variety of configurations. Two valve styles and seven different tips allow you to choose the valve that best fits your application.

Light Weight - Valve valves are made of aluminum creating a light-weight, perfectly-balanced design.

Impact Resistant - Rugged impact-resistant design stands up to the harshest environments.

Filter - All "760" Series control valves have built-in filters for added protection.

Trigger Guard - All "TG" style valves have a built-in trigger guard which helps prevent accidental dispensing.

Trigger Lock - All "TG" style valves have a built-in trigger lock, allowing hands-free operation.

Non-drip Tips - Valves are available in both manual and automatic non-drip tip configurations.



Specifications

Inlet Size 1/2"(F)
Flow Range..... 0.4 to 4.0 GPM
Operating Pressure 1000 PSI Max.
Weight (TIM-761) 1.9 Pounds
Weight (TIM-761-TG)..... 1.6 Pounds

Fluid Compatibility

Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil

"TG" Style Non-Metered VALVES

Model Number	Description	Tip Extension	Tip Diameter	Working Flow
TIM-761-TG	Rigid Automatic	TIM-746	1/2"	2.5 GPM
TIM-761-TGM	Rigid Manual	TIM-753	1/2"	2.5 GPM
TIM-761-TGHF	Rigid Hi-flow Manual	TIM-752	15/16"	4.0 GPM
TIM-761-TGGO	90° Rigid Manual	TIM-742	1/2"	2.5 GPM
TIM-762-TG	Flex Manual	TIM-743	5/8"	2.5 GPM
TIM-762-TGA	Flex Automatic	TIM-747	1/2"	2.5 GPM
TIM-762-TGHF	Flex Hi-flow Manual	TIM-743-1	15/16"	4.0 GPM



TIM-761-TGM

Order optional colored swivel guards separately. See page 57.

Standard Non-Metered VALVES

Model Number	Description	Tip Extension	Tip Diameter	Working Flow
TIM-761	Rigid Automatic	TIM-746	1/2"	2.5 GPM
TIM-761-M	Rigid Manual	TIM-753	1/2"	2.5 GPM
TIM-761-HF	Rigid Hi-flow Manual	TIM-752	15/16"	4.0 GPM
TIM-761-GO	90° Rigid Manual	TIM-742	1/2"	2.5 GPM
TIM-762	Flex Manual	TIM-743	5/8"	2.5 GPM
TIM-762-A	Flex Automatic	TIM-747	1/2"	2.5 GPM
TIM-762-HF	Flex Hi-flow Manual	TIM-743-1	15/16"	4.0 GPM



TIM-762-HF

Order optional colored swivel guards separately. See page 57.



TIM-743



TIM-753



TIM-747



TIM-746



TIM-742



TIM-752



TIM-743-1

Oil Control Valves

ARO Non-Metered VALVES

Filter - All ARO non-metered control valves have built-in filters for added protection.

Trigger Lock - Valves have a built-in trigger lock, allowing hands-free operation.

Swivel - Standard control valves include 1/2" swivel. Order swivels for hi-flow versions separately.

5-Year Warranty - All ARO standard and hi-flow non-metered control valves come with a 5-year limited warranty.



Specifications

- Inlet Size (Standard) 1/2" NPT (F)
- Inlet Size (Hi-Flow) 3/4" NPT (F)
- Flow Range (Standard) 0.4-3 GPM
- Flow Range (Hi-Flow) 0.4-10 GPM
- Weight (635392) 2.2 pounds
- Weight (635193) 3.2 pounds

Fluid Compatibility

- Antifreeze Mixtures
- Automatic Transmission Fluid
- Gear Oil
- Hydraulic Oil
- Motor Oil
- Synthetic Oil

Standard Non-Metered VALVES

ARO standard non-metered valves include a 1/2" (F) inlet swivel. Order optional colored swivel guards separately.

Model Number	Description	Tip Diameter	Maximum PSI
635392	Flexible/Manual	1/2"	1,000



635392

Hi-Flow Non-Metered VALVES

ARO hi-flow non-metered valves do not include an inlet swivel. Order optional swivel (635108) separately, see page 57.

Model Number	Use With	Description	Inlet	Tip Diameter	Maximum PSI
635193	1:1 , 3:1 & 5:1 pumps	Flexible-manual non-drip	3/4" (F)	1-1/8"	600
635395-2	9:1 pumps	Flexible-manual non-drip	3/4" (F)	1-1/8"	900



635395-2



635193

Control Valves & Accessories

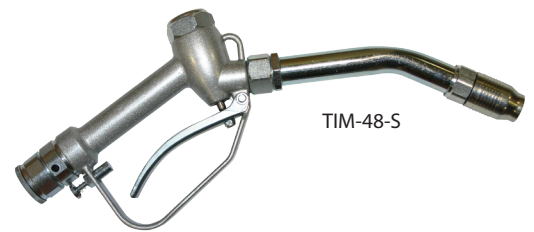
Hi-Flow Swivel

Model Number	Products Handled	Description	Inlet/Outlet	Maximum PSI
635108	Engine oils & antifreeze	For use on ARO Hi-Flow non-metered valves	3/4" (M) x 3/4" (F)	1,000



Hi-Flow/Medium Pressure Oil Nozzle

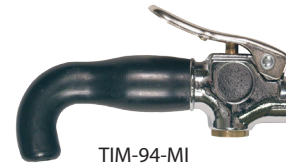
Model Number	Products Handled	Inlet Size	Shut Off Style	Flow Rate	Maximum PSI
TIM-48-S	Fluid lubricants	3/4" swivel (F)	Manual	16 GPM	1,000



Water & Antifreeze Bibbs

Low volume dispensing valves for water or antifreeze. Both models have 1/4"(F) inlet.

Model Number	Spout	Pressure Rating
TIM-94-MI	Neoprene	300 PSI



Swivel Guards

Ideal for color coding products. Swivel guard helps protect cars from damage. Can be used on any ARO or American Lubrication oil control valve with a 1/2" swivel inlet.

Model Number	Color
TIM-720-BLU	Blue
TIM-720-YEL	Yellow
TIM-720-BLK	Black
TIM-720-GRN	Green
TIM-720-RED	Red



TIM-720 Series

In-Line oil Meters

1/2" In-Line Mechanical Meter

Model Number	Inlet/Outlet	Fluid Compatibility	Metered Units	Totalizer Units	Working Flow	Maximum PSI
TIM-616	1/2" (F)	Fluid lubricants	Quarts	Quarts	1-32 Qt./Min	1,000



TIM-616

1/2" - 1-1/2" In-Line Digital Meters

In-line fluid meters allow for easy monitoring of fluid dispensing. The following digital electronic meters include (2) 1.5V "N" style batteries (AAA batteries). Accuracy within the flow range is $\pm .5\%$, and repeatability is $\pm .2\%$. All meters except 1/2" version include inlet filter screen.

Model Number	Inlet/Outlet	Fluid Compatibility	Metered Units	Totalizer Units	Working Flow	Maximum PSI
TIM-615	1/2" (F)	Fluid lubricants	Pts/Qts/Lts/Gals	Lts/Gals	1-32 Qts./Min	1,000
TIM-717-1	3/4" (F)	Lubricating oils, diesel fuel & antifreeze mixtures	Pts/Qts/Lts/Gals	Gallons	1.3 - 13 GPM	1,000
TIM-717-2	1" (F)	Lubricating oils, diesel fuel & antifreeze mixtures	Pts/Qts/Lts/Gals	Gallons	2.6 - 26 GPM	435
TIM-717-3	1-1/2" (F)	Lubricating oils, diesel fuel & antifreeze mixtures	Pts/Qts/Lts/Gals	Gallons	4.0 - 40 GPM	290



TIM-615



TIM-717-2

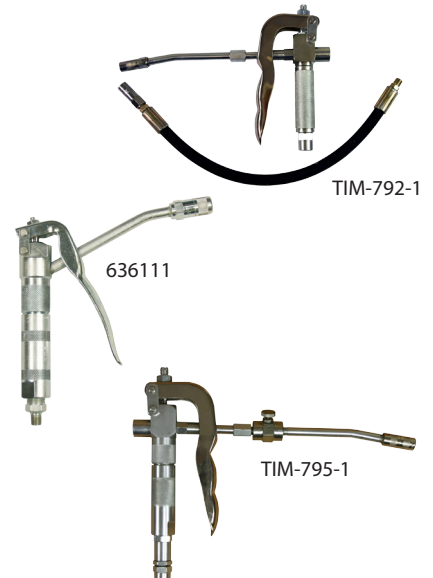
Grease Control Valves & Swivels

Standard, Booster & Hi-Flow Control Valves

Model Number	Inlet Threads	Maximum Inlet PSI	Description
TIM-792-1	1/4" (F)	7,500	Heavy-Duty Grease Control Valve - Includes whip hose and coupler
TIM-795-1	1/4" (F)	7,500	Heavy-duty Booster Control Valve - Built-in trigger booster feature delivers up to 8,000 PSI to break loose tough fittings. Includes manual pressure vent for easy disconnect. Do not use with whip hose.
636111	1/8" (M) and 3/8" (F)	7,500	ARO Heavy-duty Grease Control Valve

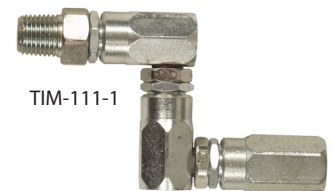
ARO

IR Ingersoll Rand
Industrial Technologies



Grease Swivels & Accessories

Model Number	Type	Thread Size	Maximum PSI	Use With
TIM-110	Z-Swivel	1/2"-27(M) x 1/4"(M)	6,000	Existing Alemite or Lincoln grease systems
TIM-111-1	Z-Swivel	1/4"(M) x 1/4"(F)	6,000	Existing Balcrank, Graco & American Lube grease systems
TIM-112	Z-Swivel	1/8"(M) x 1/4"(M)	6,000	1/4" ID grease hoses
TIM-113	Z-Swivel	3/8"(F) x 1/4"(M)	6,000	3/8" ID grease hoses
TIM-114	Z-Swivel	1/8"(M) x 1/8"(F)	6,000	1/4" ID grease hoses
TIM-115	Z-Swivel	1/8"(F) x 3/8"(F)	6,000	3/8" ID grease systems
TIM-116	Z-Swivel	1/8"(M) x 1/8"(F)	6,000	1/4" ID grease hoses
636088	Z-Swivel	3/8"(M) x 3/8"(F)	8,000	3/8" ID high-volume grease systems
636075	Straight	1/8"(M) x 1/8"(F)	8,000	Grease systems
636085	Straight	3/8"(M) x 3/8"(F)	8,000	Grease systems



Grease Control Valve Accessories

Grease Gun Couplers

Model Number	Body	Thread Size	Ball Check	Maximum PSI
TIM-100	Narrow Diameter	1/8" (F)	Yes	10,000
TIM-101	Standard Diameter	1/8" (F)	Yes	10,000



TIM-100



TIM-101

Optional Whip Hoses

High pressure grease whip hoses can be connected to the outlet side of the rigid extension of a grease control valve to allow the service technician to access hard-to-reach fittings. These hose assemblies are constructed of two-wire braid hose and high pressure couplings giving them a working pressure of 5,000 PSI. **Do not use whip hoses with booster control valve (TIM-795-1).**

Model Number	Thread Sizes	Hose Length	Connection Info
TIM-4360	1/8"(M) x 1/8"(M)	12"	Order TIM-1230 adapter to connect to grease gun extension.
TIM-4361	1/8"(M) x 1/8"(M)	18"	Order TIM-1230 adapter to connect to grease gun extension.



TIM-4361

Oil Bars

Used as a dispensing option to reels, usually in conjunction with 5-quart measuring containers. Dispensing assembly now includes a custom splash-reduction adapter. Holes are pre-drilled in sides to facilitate the mounting of ready lights for use with fluid inventory control system. Available in single, double or triple spigot configurations. Units feature white powder-coated finish, non-drip spigots, flanged back for easy mounting, drip pan with bright zinc-plated grid and drain port. Shipped complete with mounting bracket and 30" connecting hose with 90 degree union adapter for easy connection to fluid line. All oil bars have the same dimensions: 25"H x 16"W x 7 1/2"D (above the drip pan). Metered units are equipped with TIM-615 digital quart meter.

Model Number	Number of Spigots	Metered or Non-Metered
TIM-1-A	1	Non-metered
TIM-1A-DM	1	Metered
TIM-2-A	2	Non-metered
TIM-2A-DM	2	Metered
TIM-3-A	3	Non-metered
TIM-3A-DM	3	Metered
TIM-4-B	4	Non-metered



TIM-2A-DM

Oil Bar Accessories

Model Number	Description
TIM-4-A	Meter Mounting Kit - For mounting digital oil meter to a non-metered oil bar. One kit required for each meter.
TIM-5-A2	Oil Bar Spigot
TIM-6	Adapter Kit - Used to connect fluid dispensing system solenoid valve to oil bar. Use one kit per outlet.
TIM-500-FV	Flow Control Valve - Used in the material line that supplies the oil bar to control and adjust the delivery rate and prevent splashing.



TIM-5-A2



TIM-500-FV

Measuring Containers & Accessories

Model Number	Description
TIM-30-5A	6-Pack of 5-quart Graduated Measuring Containers - Units include an easy-open hinged lid to help protect from contaminants. Color is transparent white for easy viewing of liquid level. Box contains 6 units.
TIM-30-11A	Plastic Replacement Spout - For TIM-30-5A



TIM-30-5A

Fluid Inventory Control System

Easy to Operate - Two-line alpha-numeric LED display prompts the user with operating instructions.

Product Name Display - Keypad can be set up to display any of 24 pre-programmed product descriptions.

Password Protection - Programmable password protection (three levels) prevents unauthorized use.

Extremely Accurate - Field calibrateable (two different methods) for the highest level of accuracy.

Changeable Unit of Measure - Can be programmed in the field for pints, quarts, gallons or liters.

User Re-settable Totalizer - Allows more inventory tracking options for the end user.

Wall Mountable - Keypad and junction box include built-in wall mount bracket for ease of installation.

Compact Design - Small keypad with remote mounted wiring junction box takes up less space and gets wiring out of the way of the user.

Full Numeric Keypad - Allows direct entry of preset amount. Competitive models have only three buttons to accomplish this task.



Specifications

System Capacity	.....	Single product, 1-12 dispensing points
System Requirements	.....	Properly sized thermal relief kit required
Electrical Requirements	.....	120 VAC, 60HZ
Pulse Meter	.....	1000 PSI Max, 1/2" NPT (F)
Fluid Solenoid	.....	3000 PSI Max, 1/2" NPT (F)
Wiring Requirements	.....	22 Ga = <150' 18 Ga = 151' - 250' 16 Ga = 251' - 500'

Fluid Compatibility

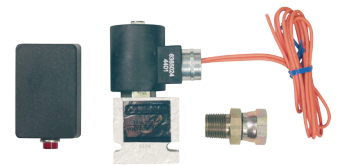
Antifreeze Mixtures
Automatic Transmission Fluid
Gear Oil
Hydraulic Oil
Motor Oil
Synthetic Oil

Fluid Inventory Control System

Model Number	Description
TIM-2002	Fluid Inventory Control System - Includes keypad unit, junction wiring box, 6' connection cable (not shown), pulse meter, 1/2" fluid solenoid valve, ready light assembly and 1/2" union adapter. Handles one product to one dispensing point. Expandable to handle up to twelve dispensing points by ordering additional TIM-2000-1 add-on station kits. Can be connected to an air solenoid safety kit (order separately). Control console can be wall mounted using built-in mounting feature. Requires either TIM-2000-4 or TIM-2000-4A pressure relief kit (order separately).
TIM-2002-REP	Replacement Keypad - Includes TIM-2002-CON keypad unit, junction wiring box and power source. Balcrank compatible.
TIM-2000-1	Add-On Station Kit - For adding additional dispensing stations to the control console. Includes 3000 PSI 1/2" fluid solenoid valve with inlet filter, 1/2" union adapter and ready light assembly.
TIM-2000-2	1/4" Air Solenoid Safety Kit - For pumps with 1/4" air inlets. Shuts off air flow to the pump when fluid inventory control system is inactive. Helps prevent potential oil spills. Must be connected to junction wiring box.
TIM-2000-2A	1/2" Air Solenoid Safety Kit - For pumps with 1/2" air inlets. Shuts off air flow to the pump when fluid inventory control system is inactive. Helps prevent potential oil spills. Must be connected to junction wiring box.
TIM-2000-3A	Wire Spool - 500' spool of 2-conductor 22-gauge wire.
TIM-2000-4	600 PSI Pressure Relief Kit - Relieves pressure build-up in the fluid line due to thermal expansion. Must be plumbed back to oil supply tank. Use on 3:1 and 5:1 pumps. <u>A pressure relief kit is required on all TIM-2002 fluid inventory control systems.</u>
TIM-2000-4A	900 PSI. Pressure Relief Kit - Relieves pressure build-up in the fluid line due to thermal expansion. Must be plumbed back to oil supply tank. Use on pumps with ratios above 5:1. <u>A pressure relief kit is required on all TIM-2002 fluid inventory control systems.</u>
TIM-2000-5	Replacement Pulse Meter - 1000 PSI maximum working pressure, 1/2" NPT (F). (Big ALEC III and Big ALEC IV F.I.C. systems only. Not for use with antifreeze.)
TIM-2000-6A	1/2" Y-Strainer - 600 PSI maximum working pressure @ 100°F. Used for keeping contaminants out of the system.
TIM-2000-7	6' Connector Cable - Used to connect the keypad unit to the wiring junction box. Cables can be connected together for runs up to 30'.
TIM-2000-8	10' Connector Cable - Used to connect the keypad unit to the wiring junction box. Cables can be connected together for runs up to 30'.
TIM-365-5S	Pulse Meter - 1000 PSI maximum working pressure, 1/2" NPT (F). 40 pulse per gallon old style mechanical pulse meter for older Big ALEC and Little ALEC systems. Will also work on many competitive systems which use mechanical pulse meters. Handles antifreeze and antifreeze solutions as well as oils. <u>Should be used in place of standard pulse meter when pumping antifreeze.</u>
TIM-6	Oil Bar Adapter Kit - For connecting fluid dispensing system solenoid valve to an oil bar. Use one kit per outlet.
TIM-2002-OVLY	Overlay Kit - Replacement overlay for TIM-2002 keypad.



TIM-2002



TIM-2000-1



TIM-2000-2
TIM-2000-2A



TIM-2000-6A



TIM-2000-7
TIM-2000-8

Waste Oil Equipment

Self-Evacuating Waste Oil Drains

Self Evacuating - Connect the house air supply directly to the preset regulator to evacuate the oil from the drain into any bulk waste oil storage tank.

Heavy-Duty - Heavy-duty all-steel tank stands up to the harshest environments.

Large Capacity - 24-gallon capacity allows user to perform more oil changes before having to evacuate the unit.

Drain Bowl - Metal drain bowl has built-in filter screen to prevent foreign matter from entering the drain.

Expansion Funnel - Removable plastic drain bowl expansion funnel with built-in filter screen provides support for draining oil filters.

Drain Hose - Clear discharge hose with curved nozzle simplifies evacuation.

Built-in Fluid Gauge - Lets operator see the oil level in the waste oil drain.

Safety - Unit incorporates a tamper resistant air regulator with air gauge and a safety pop-off valve to prevent over pressurization.

4-Wheel Design - Allows easy maneuverability, including on uneven surfaces.

Drain Plug - 1" drain plug on the bottom of the unit for easy cleaning.



Model Number	Description
TIM-317-A	Self-Evacuating “Pumpless” Waste Oil Drain. Uses standard shop air set at 8 PSI to evacuate the drain into a waste oil holding tank. 24-gallon steel tank for use with used oils. Safety pop-off valve prevents over pressurization. Includes removable storage tray, built-in fluid gauge, 7’ discharge hose with curved nozzle and manual shut-off valve, articulating 15-3/4” diameter metal drain bowl (TIM-317-37) with oil filter draining screen and 24” removable plastic drain bowl expansion funnel (TIM-317-39). Stem adjusts 51”-78”. Powder coated black paint. (Order 2608 air connector and 210 air coupler separately.) Assembly required.
TIM-317-CAM	Self-Evacuating “Pumpless” Waste Oil Drain. Uses standard shop air set at 8 PSI to evacuate the drain into a waste oil holding tank. 24-gallon steel tank for use with used oils. Safety pop-off valve prevents over pressurization. Includes removable storage tray, built-in fluid gauge, 6’ discharge hose with cam-lock connector and manual shut-off valve, articulating 15-3/4” diameter metal drain bowl with oil filter draining screen and 24” removable plastic drain bowl expansion funnel. Stem adjusts 51”-78”. Powder coated black paint. (This unit is designed to work in conjunction with TIM-CONV-CAM conversion hose kit and TIM-370-2 overfill alarm which must be ordered separately.) Assembly required.
TIM-317-AAM	Self-Evacuating Transmission Drain. Same as TIM-317 except equipped with steel transmission drain pan (TIM-317-PAN) instead of drain bowl. Collecting are of pan is 32” x 21.75”.
TIM-CONV-CAM	Hose Kit. Facilitates the connection between the TIM-317-CAM self-evacuating waste oil drain and the waste oil tank. The kit contains a 3/4” x 10’ oil evacuation hose, 3/4” cam-lock coupler, air coupler, 1/4” x 12’ recoil air hose (for connection to the TIM-370-2 overfill alarm) and a poster with operating instructions for the TIM-317-CAM drain.

24-Gallon Conventional waste Oil Drain

Heavy-Duty - Heavy-duty all-steel tank stands up to the harshest environments.

Large Capacity - 24-gallon capacity allows user to perform more oil changes before having to evacuate the unit.

Drain Pan - Metal drain bowl has built-in filter screen to prevent foreign matter from entering the drain.

Expansion Funnel - Removable plastic drain bowl expansion funnel with built-in filter screen provides support for draining oil filters.

Built-in Fluid Gauge - Lets operator see the oil level in the waste oil drain.

4-Wheel Design - Allows easy maneuverability, including on uneven surfaces.

Drain Plug - 1" drain plug on the bottom of the unit for easy cleaning.



Model Number	Description
TIM-315-COMP2	Large Capacity Waste Oil Drain - 24 gallon (90 liter) steel waste oil drain for use with waste oil evacuation pumps. Holds 50% more waste oil than standard 16-gallon drum-mounted waste oil drains. Unit has an articulating 15-3/4" diameter metal drain bowl with an oil filter draining screen and a 24" removable plastic drain bowl expansion funnel. Single piece holding tank prevents oil leaks commonly associated with waste oil drains that use 16-gallon drums. Includes removable storage tray, built-in fluid gauge and 3/4" fluid quick disconnect (TIM-181). Designed to work with 612999-4 and 612999-5 waste oil evacuation systems. Stem adjusts 48-1/2" to 76". Powder coated black paint. Assembly required. <u>Replaces TIM-315-A and TIM-315-1A waste oil drains.</u>

waste Anti-Freeze Label Kit

Model Number	Description
TIM-LABEL-KIT	Antifreeze Label Kit - Includes (4) 11" x 2" Antifreeze Only labels and (1) 2" x 2" Evacuate Drain Into Waste Antifreeze Tanks Only labels. Ideal for use with TIM-317-A self evacuating waste oil drains and TIM-315-COMP2 waste oil drains.



Waste Oil Equipment

Polyethylene Drains

Model Number	Description
TIM-318	8-Gallon Waste Oil Drain - Drain has built-in handle, emptying spout and (4) wheels for easy maneuvering. Oil level can be viewed through translucent body. Height adjusts from 48" to 65".
TIM-319	18-Gallon Waste Oil Drain - Drain has built-in handle, emptying spout, 2" (F) NPT opening with plug, gate valve for gravity draining and (4) wheels for easy maneuvering. Oil level can be viewed through translucent body. Height adjusts from 55" to 73".



Low Profile Truck Drain

Model Number	Description
TIM-310*	20-Gallon Waste Oil and Antifreeze Drain - For truck maintenance facilities. Heavy-duty steel unit is powder-coated red. Drain has 5" diameter caster wheels, 38" long handle, 3/4" (M) drain connection and elbow. Designed to mate with 612999-4 or 612999-5 diaphragm pump evacuation system. 48" (L) x 31" (W) x 7-1/2" (H).



*Order TIM-181-N waste oil evacuation adapter kit separately.

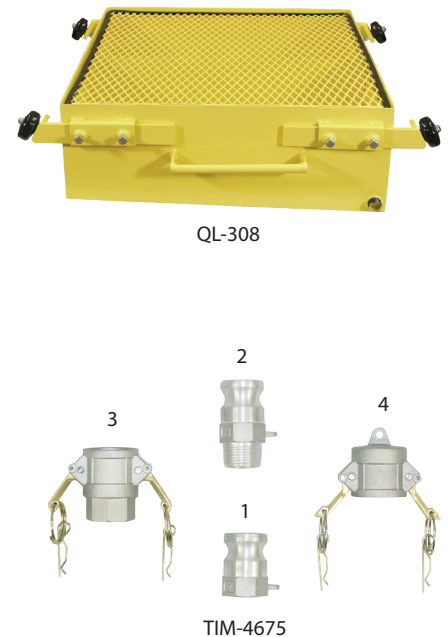
Replacement Bowls

Model Number	Description
TIM-315-KIT	15" Metal Replacement Bowl and Expansion Funnel for TIM-315 Series Drains
TIM-316A-KIT	15" Metal Replacement Bowl and Expansion Funnel for TIM-316 Series Drains
TIM-315-BOWL	15" Metal Replacement Bowl for TIM-315 Series Drains - Can be used with TIM-FUNNEL drain expansion funnel.
TIM-316A-BOWL	15" Metal Replacement Bowl for TIM-316 Series Drains - Can be used with TIM-FUNNEL drain expansion funnel.
TIM-317-PAN	Transmission Funnel. Steel construction with large collection area measuring 32" x 21-3/4". Adapts to drain model number TIM-317. For use in transmission shops.
TIM-318-BOWL	16" Replacement Bowl for TIM-318 and TIM-319 Drains



Quick Lube Pit Drain

Model Number	Description
QL-308	35-Gallon Rolling Waste Oil Drain - For use in quick lube facilities or truck maintenance shops. Heavy-duty steel unit is powder-coated yellow. Angled wheels provide easy drain movement and can be adjusted from 34-46". Drain bottom is sloped toward the two screened drain holes on the front and the rear of the unit. Drain holes are 1" (M). Drain includes pull handles on the front and rear of the unit, filter screen, and internal baffling. 31" (L) x 30-3/4" (W) x 11" (H). Order TIM-4675 camlock kit below, TIM-1000-BV ball valve and TIM-4416-3 or TIM-4416-8 suction hose separately.
TIM-4675	Waste Oil Adapter Kit - Allows TIM-308-B pit drain to be used in gravity drain or diaphragm pump evacuation systems. Includes 1" (M) camlock adapter (#2) with dust cap (#4) for pit drain, 1" camlock coupler (#3) for suction hose and 1" camlock adapter (#1) to be used as a suction hose hanger.



Waste Oil Equipment

Diaphragm Pump Waste Oil Packages

Model Number	Description
612999-4	Waste Oil Evacuation System - Includes 666100-3C9C 1" diaphragm pump, TIM-461-A wall mount bracket, 612999-4H 1" pump inlet hose assembly, 628067-3 1" pump outlet hose assembly, P-39224-624 air line filter/regulator/gauge, TIM-4214-3 1/4" air line hose, TIM-180 fluid coupler and TIM-250-BV air valve.
612999-5	Waste Oil Evacuation System - Includes 66605J-322 1/2" diaphragm pump, TIM-461-A wall mount bracket, 612999-5H 3/4" pump inlet hose assembly, TIM-4418-5 1/2" pump outlet hose assembly, P-39224-624 air line filter/regulator/gauge, TIM-4214-3 1/4" air line hose and TIM-180 fluid coupler.



612999-4

Differential Oil Evacuation Package

Model Number	Description
612999-6AL	Portable 1/2" Evacuation System - Designed to speed up vehicle transaxle differential drainage. Lightweight system's left rear bracket tube doubles as a fluid drainage outlet allowing the pump to be positioned on quick lube rolling drains. Can also be used on 16 and 55-gallon drums. Package includes 1/2" diaphragm pump, tube brackets for hanging unit, 8' fluid suction line, evacuation wand, P-39224-624 filter/regulator and gauge.



612999-6AL

Waste Oil Accessories

Waste Oil Tank Overfill Alarm

Model Number	Description
TIM-370-2	Waste Oil Tank Overfill Alarm and Pump Shut-Off Assembly - Used to shut off the air supply to the pump when the tank approaches full capacity. When the unit shuts the air off to the pump, air is diverted to a whistle mounted on the unit to signal that the tank is full. The valve is automatically reset when the tank is empty and the air pressure is turned off. Mounts into a 2" (F) NPT tank opening. ULC listed under overfill protection devices, type B, for pressure fill applications. Air inlet/outlet 1/4" (F) NPT. 150 PSI maximum. Air flow capacity 20 CFM at 100 PSI.



TIM-370-2

Waste Oil Accessories

Model Number	Description
TIM-2000-10	1" Y-Strainer - Includes 30 mesh screen. Installs on suction side of waste oil system to prevent contaminants from causing costly damage to the waste oil diaphragm pump.
TIM-WAND-1	Waste Oil Evacuation Wand - For TIM-319 waste oil drains. 22" metal tube is coupled to a TIM-181 fluid connector and strainer. Designed to mate with ARO 612999-4 or 612999-5 diaphragm pump evacuation systems.



TIM-WAND-1



TIM-2000-10

1" Diaphragm Pump Reversing Valve

Model Number	Description
TIM-4679	Reversing Valve Assembly - Used in waste oil applications on lube trucks to reverse the flow direction of the diaphragm pump. Inlet and outlet threads are 1" (F). For use with any 1" diaphragm pump.

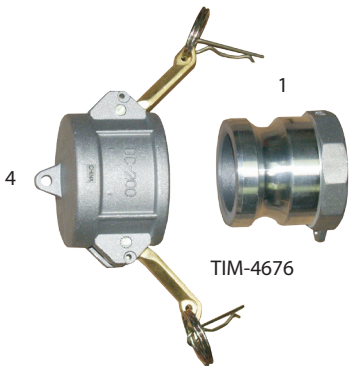


TIM-4679

Waste Oil Accessories

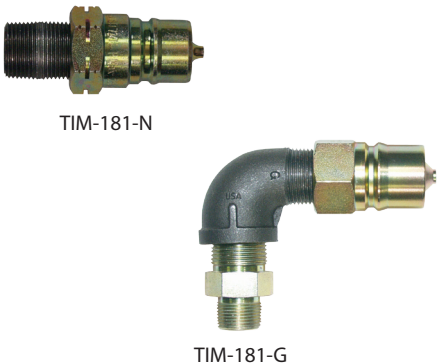
Waste Oil Tank Evacuation Kit

Model Number	Description
TIM-4676	Adapter Kit - Allows for easy evacuation of a waste oil tank. Includes TIM-4676-1 2" (F), cam lock adapter (#1) and TIM-4676-4 2" cam lock dust cap (#4). Adapter threads directly to a 2" contractor installed suction pipe running from ground level back to the waste oil tank.



Fluid Connector Kits

Model Number	Description
TIM-181-N	Waste Oil Drain Adapter Kit - Use with TIM-310 truck drain. Enables drains to be used with ARO wall mount oil evacuation systems. Includes 3/4" fluid connector and 3/4" nipple.
TIM-181-G	Waste Oil Drain Adapter Kit - Allows American Lubrication drains to be used with existing Graco oil evacuation systems. Includes adapter, street elbow and 1" Graco compatible fluid connector.

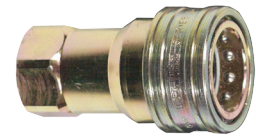


Waste Oil Accessories

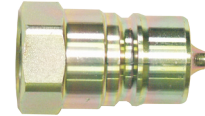
Fluid Couplers and Connectors

Used in oil evacuation systems for quick disconnect of diaphragm pump and suction discharge hoses.

Thread Size	Fluid Coupler	Fluid Connector	Maximum PSI
1/2"(F)	TIM-178	TIM-179	5,000
3/4"(F)	TIM-180	TIM-181	3,625
1"(F)	TIM-182	TIM-183	4,000



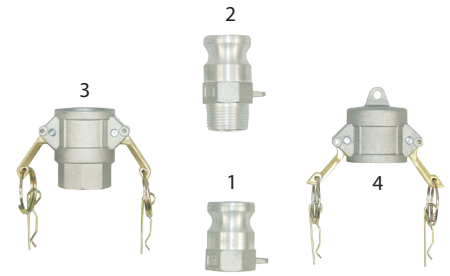
TIM-180



TIM-181

Camlocks and Connectors

Model Number	Description	Model Number	Description
TIM-4670-1	3/4" (F) camlock adapter	TIM-4675-1	1" (F) camlock adapter
TIM-4670-2	3/4" (M) camlock adapter	TIM-4675-2	1" (M) camlock adapter
TIM-4670-3	3/4" (F) camlock coupler	TIM-4675-3	1" (F) camlock coupler
TIM-4670-4	3/4" dust cap	TIM-4675-4	1" dust cap
TIM-4670-5	3/4" (M) camlock coupler		



TIM-4675

Model Number	Description
TIM-4676-1	2" (F) camlock adapter
TIM-4676-2	2" (M) camlock adapter
TIM-4676-3	2" (F) camlock adapter
TIM-4676-4	2" dust cap

NEW

Tank Packages

Bul k Oil Tank Packages

For over 94 years, American Lubrication Equipment Corporation has provided the best solutions for dispensing lubricants. Our pre-assembled tank packages are the most cost-effective way to dispense bulk lubricant in today's marketplace. Tank packages eliminate the expense associated with lubrication equipment installations. With no installation labor or piping costs, you will save hundreds - if not thousands - of dollars.

Our tank packages provide the quickest way to get a new customer up and running. Place an order today and it will leave our factory usually within 48 hours on a truck bound for the location of your choice. When it arrives, simply remove the protective packaging, connect the air hose and fill with oil. It's the fastest way to get your new customer up and running.

Cost Effective - Tank packages eliminate the installation expense associated with equipment installations.

Simple - Remove the protective packaging, connect the air hose, fill with oil, and your customer is up and running!

Fast Delivery - Large inventory enables most packages to ship within 48 hours.

More Choices - American Lubrication offers the broadest selection of tank packages on the market.

Protective Packaging - Tank packages are covered with custom protective packaging to help protect them from shipping damage.

Enamel Paint - All tank packages come standard with an enamel painted finish.

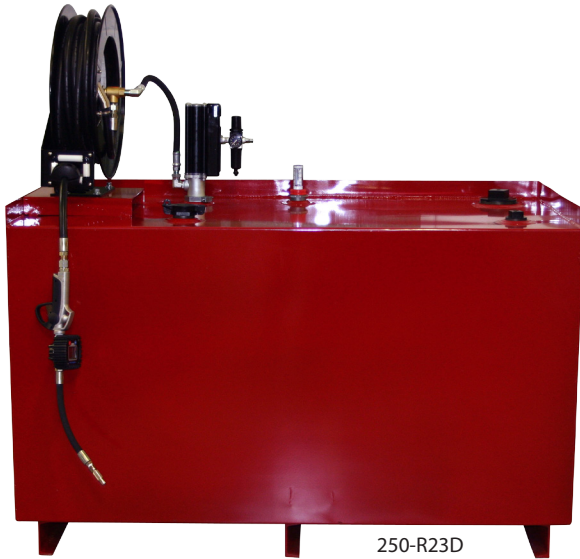
UL 142 and N.F.P.A. 30 - All tanks are built to UL 142 and also meet the N.F.P.A. 30 specifications.

Fresh and Waste Oil Packages - American Lubrication offers single and double-wall packages for fresh oil systems and waste oil systems.



275AV-R23D

Tank Packages



250-R23D



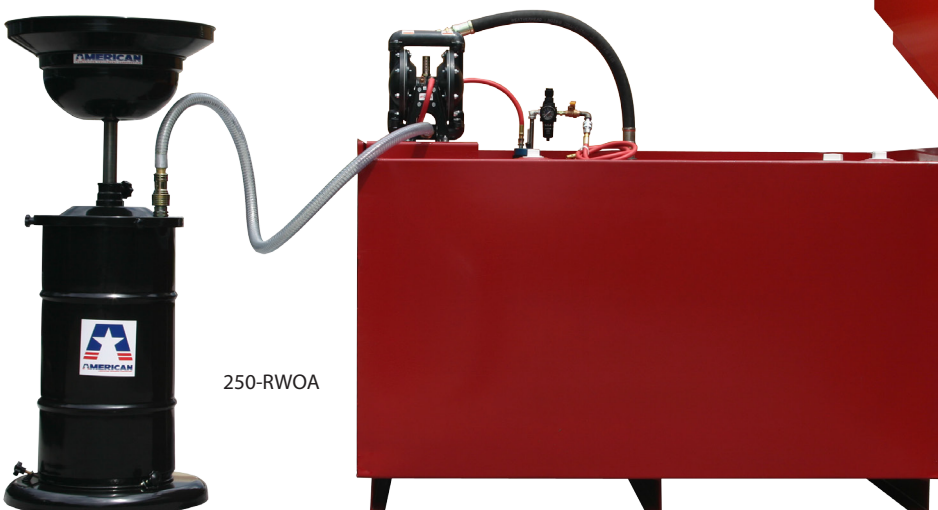
275-GALLON VERTICAL CUSTOM UNIT



275-GALLON HORIZONTAL CUSTOM UNIT



165-R33



250-RWOA

TANK Packages

Main

Applies to All Packages

Main	Tank Description
165	165-gal. bench
165DW	165-gal. double-wall bench
250	250-gal. bench
250DW	250-gal. double-wall bench
275A	275-gal. horizontal obround
275DW	275-gal. horizontal obround double-wall
275AV	275-gal. vertical obround
275VDW	275-gal. vertical obround double-wall
C500	500-gal. cube
C500DW	500-gal. double-wall cube
525RND	525-gal. round skid
500RV	500-gal. vertical round
525DW	525-gal. horizontal double-wall
500RVDW	500-gal. vertical double-wall

Suffix

Pump, Reel & Meter Packages

Suffix	Pump	Oil Reel	Meter
R13D	3:1 ARO	1/2" x 25'	Quart Digital Meter
R13P	3:1 ARO	1/2" x 25'	Preset Digital Meter
R15D	5:1 ARO	1/2" x 25'	Quart Digital Meter
R15P	5:1 ARO	1/2" x 25'	Preset Digital Meter
R23D	3:1 ARO	1/2" x 50'	Quart Digital Meter
R23P	3:1 ARO	1/2" x 50'	Preset Digital Meter
R25D	5:1 ARO	1/2" x 50'	Quart Digital Meter
R25P	5:1 ARO	1/2" x 50'	Preset Digital Meter
R1AD	Electric	1/2" x 25'	Quart Digital Meter
R1AP	Electric	1/2" x 25'	Preset Digital Meter
R2AD	Electric	1/2" x 50'	Quart Digital Meter
R2AP	Electric	1/2" x 50'	Preset Digital Meter

Tapper Pump Packages

Suffix	Pump	Accessories	Meter
R33	3:1 ARO	Tapper	No
R33D	3:1 ARO	Tapper	Digital Qt. in-line

Waste Oil Packages

Suffix	Diaphragm Pump	Hose End	Overfill Alarm
RWO	1" ARO	Non-spill coupler	No
RWOA	1" ARO	Non-spill coupler	TIM-370-2

Ordering Information

Main

Suffix

(Pick from charts above)

Example: To order a 275-gallon horizontal obround tank package with a 3:1 pump, 1/2" x 50' black Advantage Plus Series reel and digital meter you would go to the Main column and select "**275A**", and then go to the Suffix column and under "Pump, Reel & Meter Packages" select "**R23D**". The final model number would be "**275A-R23D**".

Tank Specifications

Model Number	Gallons	Length	Width	Height	Gauge
UL Bench					
165B	170	33"	36"	37"	12
250B	249	60"	30"	36"	12
UL Bench (Double Wall)					
165BDW	170	45"	35"	37"	12
250BDW	249	69"	32"	36"	12
UL Cube					
500C	498	61"	34"	64"	10
500CDW	499	72"	34"	64"	10
Obround Tanks - Vertical & Horizontal					
275H	268	60"	27"	47"	12
275V	268	44"	27"	62"	12
Obround Tanks - Vertical & Horizontal (Double Wall)					
275HDW	268	61"	27"	47"	12
275VDW	265	45"	27.75"	62"	12
Round Tanks - Horizontal					
525RH	525	46"	74"	46"	12
525RHDW	525	46"	74"	46"	12
Round Tanks - Vertical					
500RV	495	50"		64"	12
500RVDW	490	50"		64"	12

All tanks on these sheets are painted with red enamel and are **U.L. 142**.

All dimensions shown reflect outside measurements including lips, reel brackets, and lifting lugs. These measurements may vary slightly.

All prices are FOB Hunt Valley, MD

All tanks include a reel mount bracket.

Drawings available upon request

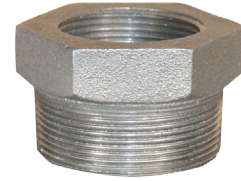
Warranty: We are advised that each tank is tested by the manufacturer at the factory before shipment in accordance with applicable Underwriters Laboratories standards, NFPA 30, 30A, or 31, OSHA and Uniform Fire Code requirements. Damage may occur during shipment that is not apparent by visual inspection. National and state codes require testing at the job site by the installer BEFORE installation. Single-wall tanks should be pressurized to a maximum of 3 PSI while all welds are tested with a soap solution as stated in instructions on the tank. Double-wall tanks must be tested in accordance with Petroleum Equipment Institute recommended practice RP100 or RP200 or with the manufacturer's published procedures. Tanks must be installed in strict accordance with NFPA 30, NFPA 30A or NFPA 31.

We assume no responsibility for damages, consequential or otherwise, resulting from defects in tanks or for damage to tanks occurring during shipment or installation. Manufacturers of these tanks generally limit their responsibility to repair or replacement of the tank for defects in workmanship or material. Any manufacturer's warranties will be passed through to the purchaser.

Tank Accessories

Double-Tap Bushings

Model Number	Description
TIM-160	Double-Tap Bushing - For mounting 5:1 or 9:1 ratio stub pumps directly to an above-ground tank. Replaces bung adapter mounting. Extension tube of pump screws directly into the bottom of the bushing. Outside thread is 2" (M), inside thread is 1-1/2" (F). When using with an ARO 5:1 ratio Thunder pump order TIM-211 (1-1/2" x 3" nipple) separately.
TIM-164	Double-Tap Bushing - For converting a 4" (F) threaded tank opening to 2" (F). Enables tank mounting of oil pumps via 2" bung adapter. Outside thread is 4" (M) and inside thread is 2" (F).
TIM-190	Double-Tap Bushing - For converting a 3" (F) threaded tank opening to 2" (F). Enables tank mounting of oil pump via 2" bung adapter. Outside thread is 3" (M) and inside thread is 2" (F).
TIM-198	Double-Tap Bushing - For mounting Thunder 3:1 ratio stub pumps directly to an above-ground tank. Replaces bung adapter mounting. Extension tube of pump screws directly into the included 3/4" x 3" nipple. Outside thread is 2" (M), inside thread is 3/4" (F).



TIM-160



TIM-190

Fill Caps

Model Number	Description
TIM-FILL-CAP	2" (M) Vented Lockable Fill Cap - For above-ground tanks.



TIM-FILL-CAP

Tank Vents

Model Number	Description
TIM-MUSH-VENT	2" (F) Mushroom Vent - Order TIM-287 (2" close nipple) separately.
TIM-VENT-3	3" (M) Emergency Vent
TIM-VENT-4S	4" (M) Emergency Vent - Slim design allows for use on both single and double-wall tanks.
TIM-VENT-6	6" (M) Emergency Vent



TIM-MUSH-VENT



TIM-VENT-3

3-1/2 Gallon AST Spill Container

Model Number	Description
TIM-SPILL-BOX3	Lockable Spill Container - Installed on above-ground tanks to contain small spills and drips from the fill nozzle. Removable screen allows for used filters to be drained. 2" (M) NPT riser connection. White powder coated finish. 3-1/2 gallon capacity. ULC listed.



TIM-SPILL-BOX3

Tank Plugs

Model Number	Description	Material
TIM-PLUG-1	1" tank plug	Steel
TIM-PLUG-2	2" tank plug	Steel
TIM-PLUG-3	3" tank plug	Steel
TIM-PLUG-4	4" tank plug	Steel
TIM-PLUG-6	6" tank plug	Steel



TIM-PLUG-2

Tank Accessories

PLASTIC FLOAT & STRING GAUGES

Model Number	Reads In	Length	Tank Used On
TIM-TG-32	Inches	32"	Workbench tanks
TIM-TG-36	Inches	36"	165 & 250-gallon bench tanks with 36" interior height
TIM-TG-44	Inches	44"	275-gallon horizontal obround
TIM-TG-275H	Gallons	44"	275-gallon horizontal obround
TIM-TG-60	Inches	60"	275-gallon vertical obround 500-gallon and larger cube tanks
TIM-TG-72	Inches	72"	Tanks with 72" interior height



TIM-TG-60

METAL FLOAT & STRING GAUGES

Model Number	Reads In	Length	Tank Used On
TIM-GG-44	Gallons	44"	275-gallon horizontal obround
TIM-GG-60	Inches	60"	275-gallon vertical obround 500-gallon vertical round and larger cube tanks
TIM-GG-72	Inches	72"	Tanks with 72" interior height



TIM-GG-60

SWING-ARM GAUGES

Model Number	Reads In	Length	Tank Used On
TIM-H2-32	8ths of a tank	32"	165 & 250-gallon bench tanks
TIM-D2-44	8ths of a tank	44"	275-gallon horizontal obround
TIM-D2-48	8ths of a tank	48"	525-gallon horizontal round
TIM-H2-60	8ths of a tank	60"	275-gallon vertical obround 500-gallon and larger cube tanks



TIM-H2-60

Dispensing Consoles

Model Number	Description
QL-702-R*	12-Hole Red Dispensing Console - 2 tiered 12-hole dispensing console conserves floor space. High quality roller guides for longer hose life. Unit is designed to place between service bays. Dimensions are 30"(W) x 12"(D) x 31-3/4"(H)
QL-702-SSR*	12-Hole Stainless Steel Dispensing Console Same as above but constructed of stainless steel.

*Meters not included



QL-702-R

Pit Drain

Model Number	Description
QL-308	35-Gallon Rolling Waste Oil Drain - For use in quick lube facilities or truck maintenance shops. Unit is powder-coated yellow. Angled wheels provide easy drain movement and can be adjusted from 35-47°. Drain bottom is sloped toward the two screened drain holes on the front and the rear of the unit. Drain holes are 1" (M). Drain includes pull handles on the front and rear of the unit, filter screen, and internal baffling. 31-1/4" (L) x 31" (W) x 11-1/4" (H). Order TIM-4675 camlock kit, TIM-1000-BV ball valve and TIM-4416-3 or TIM-4416-8 suction hose separately.



QL-702-SSR

Step Stool

Model Number	Description
QL-101	Step Stool - Durable lightweight aluminum construction features wide angled base with padded feet and molded non-slip surface for added safety. This stool weighs only 10 pounds. Dimensions 20-1/2"(D) x 20-1/2"(W) x 10-1/2"(H).



QL-308



QL-101

Floor Plate Hose Guide

Model Number	Description
QL-120	Floor Plate Hose Guide - High density polymer hose guide is self lubricating and has no moving parts to break or wear out. Ideal for running air hoses in quick-lubes. High-gloss black finish. Dimensions 6" x 6", center hole is 2-1/4" in diameter.



QL-120

Air System Components

Air Filters

Model Number	Thread Size	Series	Drain Type	Bowl Type	Air Flow
F-100	1/4"	ALEC	Automatic	Metal	20 CFM
F-35121-421	1/4"	1000	Automatic	Metal	49 CFM
F-35221-411	1/4"	1500	Automatic	Metal	73 CFM
F-35231-411	3/8"	1500	Automatic	Metal	107 CFM
F-35331-410	3/8"	2000	Manual	Metal	156 CFM
F-35341-400	1/2"	2000	Manual	Polycarbonate	197 CFM
F-35341-410	1/2"	2000	Manual	Metal	197 CFM
F-35351-411	3/4"	2000	Automatic	Metal	216 CFM
F-35451-410	3/4"	3000	Manual	Metal	288 CFM



F-35121-421



F-35221-411

Air Regulators

Model Number	Thread Size	Series	Pressure Range	Gauge Included	Air Flow
R-37121-100	1/4"	1000	0-140 PSI	No*	59 CFM
R-37221-100	1/4"	1500	0-140 PSI	No*	86 CFM
R-37221-200	1/4"	1500	0-60 PSI	No*	86 CFM
R-37221-600T	1/4"	1500	0-140 PSI	Yes	86 CFM
R-37231-600	3/8"	1500	0-140 PSI	Yes	113 CFM
R-37331-600	3/8"	2000	0-140 PSI	Yes	179 CFM
R-37341-100	1/2"	2000	0-140 PSI	No*	215 CFM
R-37341-600	1/2"	2000	0-140 PSI	Yes	215 CFM
R-37351-100	3/4"	2000	0-140 PSI	No*	210 CFM

*For gauge selection see page 81.



R-37121-600T



R-37221-600T



L-36121-120



L-36221-110

Air Lubricators

Model Number	Thread Size	Series	Bowl Capacity	Bowl Type	Air Flow
L-36121-100	1/4"	1000	0.7 Oz.	Metal*	57 CFM
L-36221-110	1/4"	1500	1.5 Oz.	Metal*	51 CFM
L-36331-110	3/8"	2000	1.5 Oz.	Metal*	85 CFM
L-36341-110	1/2"	2000	3.7 Oz.	Metal*	156 CFM
L-36351-110	3/4"	2000	10 Oz.	Metal*	222 CFM

*Metal bowl with sight gauge.

Lubricating Oil

Lubricating Oil - ARO lubricating oil is recommended for use with pneumatic power tools, motors, valves, cylinders and hoists. It is specially formulated for use in air line lubricators. Proper, regular lubrication helps ensure longer, trouble-free operation by reducing wear; saves power and cuts equipment maintenance costs. ARO lubricating oil is available in 1-quart containers and may be ordered by specifying part number 29665 ([1] 1-quart container). NOTE: There are (12) 1-quart containers per case. Viscosity: 100-200 S.S.U. @ 100°F (38°C) min. aniline point of 200°F (93°C) Class: II Lubricant, Approximate SAE No: Light SAE 10, non-detergent



29665

Air System Components

Air Filter/Regulator & Gauge Assemblies

Model Number	Thread Size	Series	Drain Type	Bowl Type	Air Flow
P-39124-124	1/4"	1000	Automatic	Metal	47 CFM
P-39124-624*	1/4"	1000	Automatic	Metal	47 CFM
P-39224-624*	1/4"	1500	Automatic	Metal	72 CFM
P-39234-614	3/8"	1500	Automatic	Metal	90 CFM
P-39344-614	1/2"	2000	Automatic	Metal	172 CFM
P-39354-614	3/4"	2000	Automatic	Metal	173 CFM

*This item also available in a 25 or more bulk pricing.



P-39124-624



P-39224-624

Filter/Regulator/Lubricator Assemblies

Model Number	Thread Size	Series	Filter Drain Type	Bowl Type	Air Flow
C-38121-801*	1/4"	1000	Automatic	Polycarbonate	46 CFM
C-38221-810*	1/4"	1500	Manual	Metal	61 CFM
C-38221-811*	1/4"	1500	Automatic	Metal	61 CFM
C-38331-811*	3/8"	2000	Automatic	Metal	99 CFM
C-38341-810*	1/2"	2000	Manual	Metal	150 CFM
C-38351-811*	3/4"	2000	Automatic	Metal	171 CFM

*All models include built-in air gauge and sight gauge.



C-38221-811

Air Gauges

Model Number	Thread Size	Series Used On	Porting	Gauge Range	Gauge Diameter
TIM-220	1/8" (M)	1000 & ALEC	Back	0-160 PSI	1.5"
TIM-221	1/4" (M)	1500, 2000, 3000	Back	0-160 PSI	2"



TIM-220

Air System Pipe Nipples

Model Number	Thread Size	Used On	Model Number	Thread Size	Used On
TIM-212-1	1/4" (M) x (M)	1/4" Components	Y-27-54C	1/2" (M) x (M)	1/2" Components
Y-27-53C	3/8" (M) x (M)	3/8" Components	Y-27-55C	3/4" (M) x (M)	3/4" Components



TIM-212-1

Air Couplers & Connectors

Aro Style 1/4" Capacity - 210 Series

All couplers are "push-to-connect" providing automatic pin-type coupling. The average flow rate is 18 cfm at 90 PSIG inlet pressure. Maximum inlet pressure is 250 PSIG. Temperature range is -40°F to 200°F. Couplers and connectors within the 1/4" capacity 210 Series group are interchangeable.

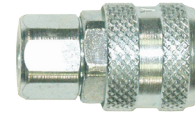
Coupler Model Number	Thread Size
210-212	1/4" NPT (M)
210	1/4" NPT (F)
210-25 *	1/4" NPT (F)
210-100 **	1/4" NPT (F)
210-300 ***	1/4" NPT (F)
2607	1/8" NPT (M)

*25 pack

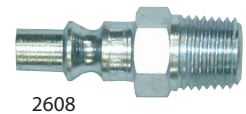
**100 pack

***300 pack

Connector Model Number	Thread Size
2608	1/4" NPT (M)
2608-25	1/4" NPT (M)
2608-100	1/4" NPT (M)
2609	1/4" NPT (F)
2609-25	1/4" NPT (F) *
2609-100	1/4" NPT (F) **
2609-300	1/4" NPT (F) ***



210



2608

MS Series 1/4" Capacity - Industrial Interchange

All couplers are "push-to-connect" providing automatic pin-type coupling. The average flow rate is 36 cfm at 90 PSIG inlet pressure. Maximum inlet pressure is 250 PSIG. Temperature range is -40°F to 200°F. Couplers and connectors within the 1/4" capacity Industrial Interchange group are interchangeable.

Coupler Model Number	Thread Size
MSCF22-000	1/4" NPT (F)

Connector Model Number	Thread Size
23902-210	1/4" NPT (M)
23902-200	1/4" NPT (F)



MSCF22-000



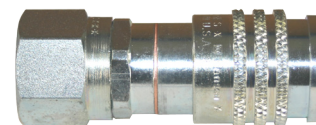
23902-210

High Flow Series 3/8" Capacity - Industrial Interchange

All couplers are "push-to-connect" providing automatic pin-type coupling. The average flow rate is 72 cfm at 90 PSIG inlet pressure. Maximum inlet pressure is 250 PSIG. Temperature range is -40°F to 200°F. Couplers and connectors within the 3/8" capacity High Flow Series Industrial Interchange group are interchangeable.

Coupler Model Number	Thread Size
23103-300	3/8" NPT (F)
23103-004	1/2" NPT (F)

Connector Model Number	Thread Size
23903-310	3/8" NPT (F)
23903-410	1/2" NPT (M)



23103-004



23903-410

Air System Accessories

ARO-STOP Automatic Air Shut-off

ARO-STOP® shut-off valves are designed to prevent pump “runaway”. Pump runaway occurs when the material container is depleted, causing the pump to cycle fast and needlessly. The ARO-STOP® valve protects the pump by shutting off the air supply when the material container is empty or a fluid line on the outlet side of the pump is broken. Use with oil or grease pumps.

Model Number	Description	Air Inlet/Outlet	Pumps Used With
635040	ARO-STOP® Valve Kit - Includes 1/4" x 5' air hose, 1/4" Aro coupler and air connector. Maximum flow rate is 23 CFM at 90 PSI.	1/4"(F)	Series 200 pumps, all Thunder pumps, 1/2" diaphragm pumps
23644-400	ARO-STOP® Valve	1/2"(F)	AFX Series pumps, 1" diaphragm pumps



635040



23644-400

Air Control Box

Model Number	Description
TIM-AIR-BOX	Air Control Box - For controlling the air to a pump or pumps from a remote location. Unit includes key switch and indicator light. Unit requires the use of an air solenoid valve and wire. 110 VAC input voltage.
TIM-2000-2	1/4" Air Solenoid Safety Kit - For pumps with 1/4" air inlets. Shuts off air flow to the pump when connected to the air control box (TIM-AIR-BOX). Helps prevent potential oil spills.
TIM-2000-2A	1/2" Air Solenoid Safety Kit - For pumps with 1/2" air inlets. Shuts off air flow to the pump when connected to the air control box (TIM-AIR-BOX). Helps prevent potential oil spills.
TIM-2000-3A	Wire Spool - 500' spool of 2-conductor 22-gauge wire.



TIM-AIR-BOX

Tire Inflation Gauges & Air Chucks

Model Number	Inlet	Description
TIM-88	1/4" (F) NPT	Bayonet Tire Inflator Gauge - With dual head
TIM-89	1/4" (F) NPT	Deluxe Tire Inflator Gauge - "Squeeze" trigger assembly simplifies tire filling. Unit has bleeder valve to allow quick adjustments for over pressurized tires, air gauge with protective cover, dual-head chuck and 12" hose. Pop-up gauge registers 0-140 PSI.
TIM-90	1/4" (F) NPT	Dual Head Air Chuck - For car and truck tires.



TIM-89



TIM-90

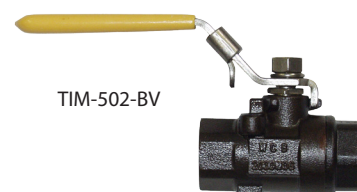


TIM-88

Installation Accessories

Low & Medium Pressure Shut-Off Valves

Inlet/Outlet	Model Number	Working Pressure
1/4" (F)	TIM-250-BV	400 PSI
1/2" (F)	TIM-500-600	600 PSI
1/2" (F)	TIM-500-1000	1000 PSI
1/2" (F)	TIM-502-BV	2000 PSI
3/4" (F)	TIM-752-BV	2000 PSI
1" (F)	TIM-1001-BV	600 PSI
1-1/2" (F)	TIM-1501-BV	600 PSI



High Pressure Shut-Off Valves

High pressure carbon steel in-line needle valves for high pressure grease applications.

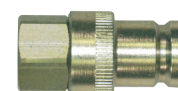
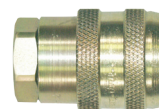
Model Number	Inlet/Outlet	Working Pressure
TIM-500-HP1	1/2" (F) x 1/2" (F)	8000 PSI
TIM-500-HP2	1/2" (M) x 1/2" (F)	8000 PSI



High Pressure Coupler & Connector

Ideal for high pressure grease applications. Used in lube truck applications for removing and storing the grease control handles. 10,000 PSI working pressure.

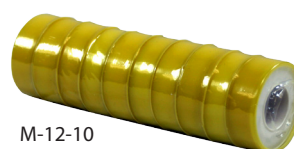
Fluid Coupler	Thread Size	Fluid Connector
TIM-192	3/8"(F)	TIM-193



Teflon® Thread Tape

1/2" x 65-1/2' roll of Teflon® threading tape. Sold in packs of 10, 100 and 250 rolls.

10 Rolls	100 Rolls	250 Rolls
M-12-10	M-12-100	M-12-250



Installation Accessories

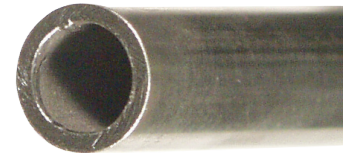
Seamless Steel Tubing

5/8" O.D. seamless steel tubing for oil and grease applications. Tubing comes in 20' lengths. Tubing styles can be combined to reach the 1000' minimum purchase quantity.

Model Number	Application	Wall Thickness	Qty
TIM-035-100	Oil	0.035	100 feet
TIM-035-1000	Oil	0.035	1000 feet
TIM-083-100	Grease	0.083	100 feet
TIM-083-1000	Grease	0.083	1000 feet



TIM-035-S



TIM-083-S

Steel Tubing Connectors

5000 PSI (4:1 safety factor) 5/8" O.D. steel tubing compression fittings. May be used for either oil or grease.

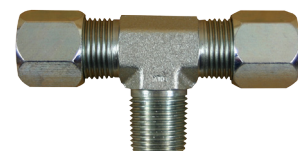
Model Number	Description	Type
SDB-10-TIM	1/2" (F) x Tube	90 degree elbow
SEB-10-TIM	Tube x Tube	90 degree elbow
SFB-10-TIM	1/2" (M) x Tube	Straight
SGB-10-TIM	1/2" (F) x Tube	Straight
SHB-10-TIM	Tube x Tube	Straight
SJB-10-TIM	Tube x Tube x Tube	Tee
SMB-10-TIM	Tube x 1/2" (M) x Tube	Tee
SOB-10-TIM	Tube x 1/2" (F) x Tube	Tee



SHB-10-TIM



SFB-10-TIM



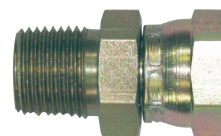
SMB-10-TIM

Installation Accessories

Straight (M) x (F) Union Adapters

Model Number	(M)	(F)	Max. PSI
TIM-1404-22	1/8"	1/8"	10,000
TIM-1404-42	1/4"	1/8"	10,000
TIM-1404-44	1/4"	1/4"	10,000
TIM-1404-46	1/4"	3/8"	7,000
TIM-1404-64	3/8"	1/4"	7,000
TIM-1404-66	3/8"	3/8"	7,000
TIM-1404-68	3/8"	1/2"	7,000
TIM-1404-84	1/2"	1/4"	7,000

Model Number	(M)	(F)	Max. PSI
TIM-1404-86	1/2"	3/8"	7,000
TIM-1404-88	1/2"	1/2"	7,000
TIM-1404-128	3/4"	1/2"	5,500
TIM-1404-812	1/2"	3/4"	5,500
TIM-1404-1212	3/4"	3/4"	5,500
TIM-1404-1216	3/4"	1"	4,000
TIM-1404-1612	1"	3/4"	4,000
TIM-1404-1616	1"	1"	4,000



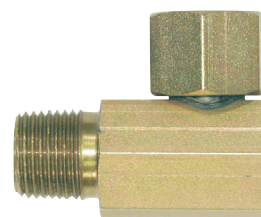
TIM-1404-88

90° (M) x (F) Union Adapters

Model Number	(M)	(F)	Max. PSI
TIM-1501-44	1/4"	1/4"	10,000
TIM-1501-66	3/8"	3/8"	7,000
TIM-1501-86	1/2"	3/8"	7,000

Model Number	(M)	(F)	Max. PSI
TIM-1501-88	1/2"	1/2"	7,000
Y-43-4C*	1/2"	1/2"	3,000
TIM-1501-1212	3/4"	3/4"	5,500

*Non-swivel

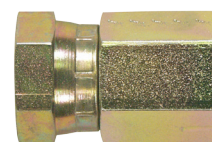


TIM-1501-88

Straight (F) x (F) Union Adapters

Model Number	(F)	(F)	Max. PSI
TIM-1405-44	1/4"	1/4"	10,000
TIM-1405-64	3/8"	1/4"	7,000
TIM-1405-86	1/2"	3/8"	7,000
TIM-1405-88	1/2"	1/2"	7,000

Model Number	(F)	(F)	Max. PSI
TIM-1405-128	3/4"	1/2"	5,500
TIM-1405-1212	3/4"	3/4"	5,500
TIM-1405-1616	1"	1"	4,000

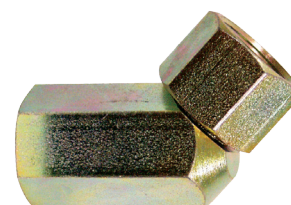


TIM-1405-88

45° (F) x (F) Union Adapters

Model Number	(F)	(F)	Max. PSI
TIM-1504-44	1/4"	1/4"	10,000
TIM-1504-66	3/8"	3/8"	7,000

Model Number	(F)	(F)	Max. PSI
TIM-1504-88	1/2"	1/2"	4,000



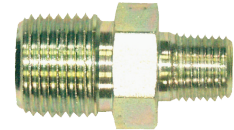
TIM-1504-88

Installation Accessories

(M) x (M) Adapters

Model Number	(M)	(M)	Max. PSI
TIM-1200-1	1/8"	1/8"	10,000
TIM-1201-1	1/8"	1/4"	10,000
TIM-1202-1	1/8"	3/8"	7,000
TIM-1209	1/4"	1/2"-27	5,000
TIM-212-1	1/4"	1/4"	10,000
TIM-1204-1	1/4"	1/2"	7,000

Model Number	(M)	(M)	Max. PSI
TIM-1205-1	3/8"	3/8"	7,000
TIM-1206-1	3/8"	1/2"	7,000
Y-27-54C	1/2"	1/2"	7,000
TIM-1208-1	1/2"	3/4"	5,500
TIM-1210-1	3/4"	1"	4,000

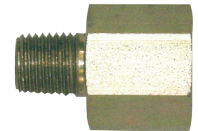


TIM-1204-1

(M) x (F) Adapters

Model Number	(M)	(F)	Max. PSI
TIM-1220	1/8"	1/4"	10,000
TIM-1221	1/8"	3/8"	7,000
TIM-1222	1/8"	1/2"	7,000
TIM-1223	1/4"	3/8"	7,000

Model Number	(M)	(F)	Max. PSI
TIM-1227	1/4"	1/2"	7,000
TIM-1225	3/8"	1/2"	7,000
TIM-1226	1/2"	3/4"	5,500

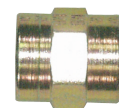


TIM-1223

(F) x (F) Adapters

Model Number	(F)	(F)	Max. PSI
TIM-1230	1/8"	1/8"	10,000
TIM-1260	1/8"	1/2"-27	5,000

Model Number	(F)	(F)	Max. PSI
TIM-1263	1/2"	1/2"	3,000
4280	1/8"	3/8"	7,000

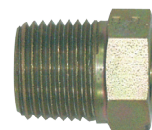


TIM-1230

Reducing Bushings

Model Number	(M)	(F)	Max. PSI
TIM-1240	1/4"	1/8"	10,000
TIM-1241	3/8"	1/8"	7,000
TIM-1242	3/8"	1/4"	7,000

Model Number	(M)	(F)	Max. PSI
TIM-1243	1/2"	1/8"	7,000
TIM-1244	1/2"	1/4"	7,000
TIM-1245	1/2"	3/8"	7,000



TIM-1245

Hoses

Air & Water Connecting Hoses for Pumps & Reels

Model Number	Hose ID	Thread Sizes	Maximum PSI	Available Lengths In Feet	For Use On
TIM-4214-__*	1/4"	1/4"(M) x 1/4"(M)	300	2, 3, 5, 10	1/4" air connecting hoses for "Thunder" pumps, 1/2" and 1" diaphragm pumps
TIM-4216-2	3/8"	3/8"(M) x 3/8"(M)	300	2	3/8" air/water reels
TIM-4216-2N	3/8"	3/8"(M) x 3/8"-90° swivel (M)	300	2	3/8" air/water reels
TIM-4216-4NS	3/8"	3/8"(M) x 3/8"-90° swivel (M)	300	4	3/8" air/water reels
TIM-4218-2N	1/2"	1/2"(M) x 1/2"-90° swivel (M)	300	2	1/2" air/water reels
TIM-4218-4NS	1/2"	1/2"(M) x 1/2"-90° swivel (M)	300	4	1/2" air/water reels
TIM-4258-5	1/2"	1/2"(M) x 1/2"(M)	300	5	1/2" air connecting hose for AFX Series pumps

*Add length of hose to the model number as the suffix. For example: TIM-4214-5 is a 1/4" I.D. hose with 1/4" (M) ends by 5' long.

Air & Water Delivery Hoses for Consoles & Reels

Model Number	Hose ID	Thread Sizes	Maximum PSI	Available Lengths In Feet	For Use On
TIM-4214-15	1/4"	1/4"(M) x 1/4"(M)	300	15, 18	Lube Consoles
TIM-4216-__*	3/8"	3/8"(M) x 3/8"(M)	300	25, 35, 50, 65, 75	3/8" air/water reels
TIM-4208-__*	1/2"	1/2"(M) x 1/2"(M)	300	50, 65, 75, 100	1/2" air/water reels

*Add length of hose to the model number as the suffix. For example: TIM-4208-50 is a 1/2" I.D. hose with 1/2" (M) ends by 50' long.

Oil Connecting Hoses for Pumps & Reels

Model Number	Hose ID	Thread Sizes	Maximum PSI	Available Lengths In Feet	For Use On
TIM-4418-__*	1/2"	1/2"(M) x 1/2" 90° swivel (M)	2,000	2NS, 2.5NS, 4NS	1/2" oil reels
TIM-4418-__S*	1/2"	1/2"(M) x 1/2" swivel (M)	2,000	4, 5, 6, 8	1/2" oil reels
TIM-4412-__*	3/4"	3/4"(M) x 3/4"(M)	1,250	3, 5	3/4" oil reels
TIM-4416-__*	1"	1"(M) x 1"(M)	1,000	3, 5, 8, 10	1" oil reels
624601-4	3/4"	3/4"(M) x 3/4"(M)	2,250	4	Oil connecting hose for AFX Series pumps
628067-__*	1"	1"NPT x 1"NPT	800	3, 5	Waste oil evacuation system (612999-4)

*Add length of hose to the model number as the suffix. For example: TIM-4418-5S is a 1/2" I.D. hose with 1/2" (M) ends by 5' long.

Oil Delivery Hoses for Consoles & Reels

Model Number	Hose ID	Thread Sizes	Maximum PSI	Available Lengths In Feet	For Use On
TIM-4418-__*	1/2"	1/2"(M) x 1/2"(M)	2,000	12, 15, 18, 40	1/2" oil reels & quick lube consoles
TIM-4418-__*	1/2"	1/2"(M) x 1/2" swivel (M)	2,000	10S, 16S, 18S, 20S, 25S, 30S, 50S, 65S, 75S, 100S	1/2" oil reels & quick lube consoles
TIM-4412-__*	3/4"	3/4"(M) x 3/4"(M)	1,250	30, 50	3/4" oil reels
TIM-4416-__*	1"	1"(M) x 1"(M)	1,000	30, 50	1" oil reels

*Add length of hose to the model number as the suffix. For example: TIM-4418-10 is a 1/2" I.D. hose with 1/2" (M) ends by 10' long.

Hoses

Grease Connecting Hoses for Pumps & Reels

Model Number	Hose ID	Thread Sizes	Maximum PSI	Available Lengths In Feet	For Use On
TIM-4514-__*	3/8"	3/8"(M) x 1/4"(M)	5,000	10,20	ARO portable grease pumps
TIM-4516-2N	3/8"	3/8"(M) x 3/8"-90° swivel (M)	4,000	2	3/8" grease reels
TIM-4516-4NS	3/8"	3/8"(M) x 3/8"-90° swivel (M)	4,000	4	3/8" grease reels
TIM-4516-__*	3/8"	3/8"(M) x 3/8"(M)	4,000	2, 4, 8	ARO Grease Pumps & 3/8" grease reels

*Add length of hose to the model number as the suffix. For example: TIM-4516-8 is a 3/8" I.D. hose with 3/8" (M) ends by 8' long.

Grease Delivery Hoses for Consoles & Reels

Model Number	Hose ID	Thread Sizes	Maximum PSI	Available Lengths In Feet	For Use On
TIM-4513-5	1/4"	1/8"(M) x 1/8"(M)	5,000	5	TIM-83-KM pump
TIM-4514-__*	1/4"	3/8"(M) x 1/4"(M)	4,000	10, 20	Portable grease pumps
TIM-4517-14	1/4"	1/8"(F) x 1/8"(M)	5,000	14	Quick lube consoles
TIM-4524-__*	1/4"	1/8"(F) x 1/8"(F)	5,000	2, 6, 10, 12, 15, 20, 25, 30	Aro grease pumps
TIM-4506-__*	3/8"	3/8"(M) x 3/8"(M)	4,000	25S, 30, 50A, 65S, 75S	3/8" grease reels

*Add length of hose to the model number as the suffix. For example: TIM-4506-50S is a 3/8" I.D. hose with 3/8" (M) ends by 50' long.

Grease Guns

4110	Deluxe Heavy-Duty Grease Gun - 10,000 PSI rated. Aluminum head. Delivers 1 oz. in 23 strokes, 3-way loader capability (loader fitting included). Full pressure on variable or short strokes for controlled grease output and easy operation in tight quarters. Takes standard 14-1/2 oz. cartridge and has a 16 oz. bulk fill capacity. Gun comes with rugged plastic handle grip, loader fitting, air release valve, hydraulic coupler with ball check and rigid extension. Packaged in a 4-color POP box. Compare to Alemite 500. For case quantities order part number 4110-10
------	--



4110

4111	Deluxe Heavy-Duty Grease Gun with 18" Hose - Same as 4110 but also includes: TIM-4321 18" rubber flex hose. Packaged in a 4-color POP box. Compare to Alemite 500E. For case quantities order part number 4111-10.
------	---



4120

4120	Industrial Hi-Flow Heavy-Duty Grease Gun - Generates 10,000 PSI, cast aluminum pump head. Delivers 1 oz. in 9 strokes twice the volume per stroke when compared to the best variable stroke guns, 3-way loader capability (loader fitting included). Full pressure on variable or short strokes for controlled grease output and easy operation in tight quarters. Comes with rugged plastic handle grip, loader fitting, air release valve, heavy-duty hydraulic coupler with ball check and rigid extension.
------	---



4127

4127	Suction Gun - Suction gun with 11" vinyl hose. Low friction "O" ring for positive sealing. Pumps approximately 1 pint of non-corrosive liquid per stroke. For case quantities order part number 4127-10.
------	---



4130

4130	Deluxe Heavy-Duty Pistol Grip Grease Gun - 7,300 PSI rated. Gun features unique 2-outlet port design which allows the hose or rigid extension to be mounted on the side or the top of the grease gun head. Aluminum head, 3-way loader capability (loader fitting included). Takes standard 14-1/2 oz. cartridge and has a 16 oz. bulk fill capacity. Gun comes with loader fitting, air release valve, hydraulic coupler with ball check and rigid extension. Packaged in a 4-color POP box. Compare to Alemite 525 & Lincoln 1132. For case quantities order part number 4130-10.
------	--



4152

4131	Deluxe Heavy-Duty Pistol Grip Grease Gun with 18" Hose - Same as 4130 but also includes: TIM-4321 18" rubber flex hose. Packaged in a 4-color POP box. Compare to Alemite 550 & Lincoln 1133. For case quantities order part number 4131-10.
------	---

4152	Heavy-Duty Air-Operated Grease Gun - Ideal for factory, fleet and agricultural use. A single shot of grease is discharged each time the trigger is pressed. Air input range from 40 PSI not to exceed 120 PSI. 40:1 ratio will generate 1,600 to 4,800 PSI discharge pressure. Balanced acute angle design reduces operator fatigue. Aluminum pump head for maximum strength and durability. 3-way loader capability (loader fitting included). Takes standard 14-1/2 oz. cartridge and has a 16 oz. bulk fill capacity. Follower design allows for cartridge, suction and filler pump loading. Gun comes with rugged pistol-grip handle, loader fitting, and heavy-duty hydraulic coupler with ball check and rigid extension. For case quantities order part number 4152-10.
------	---

18V Grease Gun

Professional 18v Grease Gun

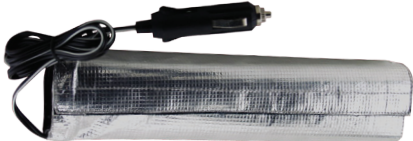
This professional 18v grease gun sets a new standard for cordless electric grease guns. This high-quality professional grade tool is powered by an 18-volt battery which allows for longer dispensing intervals between charges. Full 9,000 PSI pressure capability. 42" whip hose with bend guard for better accessibility and grease coupler with ball check (coupler includes contaminant protection cap). Kit includes 18-volt grease gun with air release valve, (1) battery pack, quick one hour battery charger (UL® rated), nylon shoulder strap and protective high impact carrying case. Comes packed in a four-color point-of-purchase display box. All guns and batteries are factory tested before shipping.

Model Number	Description
4155-1B	Professional 18v grease gun
4155-2B	Professional 18v grease gun w/ 2 batteries



Accessories

Model Number	Description
4155-1	18v Replacement Battery for all 4155 Grease Guns
4155-2	Replacement Nylon Shoulder Strap
4155-3	Replacement 42" Whip Hose - Includes hose, bend guard w/ball check and contaminate protection cap.
4155-4	Grease Warmer - 12-volt thermal heater for grease gun barrels makes dispensing of grease easier in cold weather. Plug fits most 12-volt accessory ports (cigarette lighter).
4155-5	Replacement 1 hour Quick Charger for 4155 Grease Gun Batteries
4155-6	Replacement Barrel for 4155 Grease Gun
4155-7	12-volt Vehicle Battery Charger for 4155 Grease Gun



Grease Gun Accessories

Hand Grease Gun Whip Hoses

Model Number	Description
TIM-4320*	12" Whip Hose - 12" rubber flex hose. Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4320-S*	12" Whip Hose - 12" flex hose. Coupled 1/8" NPT (M). Comes in clear clamshell display board packaging. 3,000 PSI maximum working pressure.
TIM-4320-TP*	12" Whip Hose - 12" standard duty thermoplastic hose for hand operated grease guns. Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4321*	18" Whip Hose - 18" rubber flex hose. Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4321-S*	18" Whip Hose - 18" rubber hose. Coupled 1/8" NPT (M). Comes in clear clamshell display board packaging. 3,000 PSI maximum working pressure.
TIM-4321-TP*	18" Whip Hose - 18" standard duty thermoplastic hose for hand operated grease guns. Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4322*	24" Whip Hose - 24" rubber flex hose. Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4323*	36" Whip Hose - 36" rubber flex hose. Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.

***WARNING** - For use on hand grease guns only. Do not use with air operated equipment. 3,000 PSI maximum working pressure.

Hand Grease Gun Whip Hose Assemblies

Model Number	Description
TIM-4340*	12" Whip Hose Assembly With Narrow Diameter Coupler (TIM-100) - Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4341*	18" Whip Hose Assembly With Narrow Diameter Coupler (TIM-100) - Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4342*	12" Whip Hose Assembly With Standard Diameter Coupler (TIM-101) - Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4343*	18" Whip Hose Assembly With Standard Diameter Coupler (TIM-101) - Coupled 1/8" NPT (M). 3,000 PSI maximum working pressure.
TIM-4349*	12" Whip Hose Assembly With Standard Buttonhead Pull-on Coupler (TIM-106) - Coupled 1/8" NPT (F). 4,000 PSI maximum working pressure.

***WARNING** - For use on hand grease guns only. Do not use with air operated equipment. 3,000 PSI maximum working pressure.

Grease Gun Holder

Model Number	Description
TIM-29	Grease Gun Holder - Holds any standard grease gun with approximately 2-1/2" barrel.



TIM-4320



TIM-4340



TIM-4349



TIM-29

Grease Gun Accessories

Grease Gun Loader Fitting

Used on the grease gun head for bulk loading applications using a grease filler pump. Standard 1/8" NPT (M).

Model Number	Description
TIM-24	Lincoln style filler valves.



TIM-24

Hydraulic & Buttonhead Grease Couplers

Model Number	Size	Thread Size	Type	Maximum PSI
TIM-100	Narrow diameter	1/8" (F)	Ball check	10,000
TIM-101	Standard diameter	1/8" (F)	Ball check	20,000
TIM-106	Standard buttonhead	1/8" (F)	Pull on	4,000
TIM-107	Giant buttonhead	1/8" (F)	Pull on	4,000



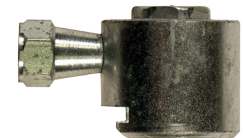
TIM-100



TIM-101



TIM-106



TIM-107

Hydraulic Grease Adapters

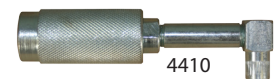
Model Number	Description
TIM-124*	360° Adjustable-Angle Standard Diameter Coupler - Locks in place at 60° increments. Inlet thread 1/8" NPT (F). Overall length 3". 7,000 PSI maximum working pressure.
TIM-126-1*	High-Pressure Needle Point Grease Adapter - Connects to grease coupler via included locking sleeve adapter. Overall length 5-1/2".
4410*	90° Grease Adapter - Professional 90° recessed grease fitting adapter for push-on greasing of recessed fittings where obstructions do not permit the use of a regular grease coupler. Connects to grease coupler via included locking sleeve adapter.
4411*	"Push-On" Buttonhead Grease Adapter - Allows for easy greasing of buttonhead fittings. Connects to grease coupler via included locking sleeve adapter.
4412*	"Push-On" Grease Fitting Adapter - Allows for easy greasing of standard grease fittings where access is limited or in low-height areas. Connects to grease coupler via included locking sleeve adapter.



TIM-124



TIM-126-1



4410



4411



4412

* **WARNING:** For use on hand-operated grease guns only.

Grease Fittings

American Lubrication fittings are sold in clamshell display packs of 10 pieces and bags of 100 pieces. American Lubrication has one of the largest standing inventories of U.S. thread, metric thread, thread-forming, drive and stainless steel grease fittings. Our extensive offering of fittings covers virtually every automotive, agricultural, industrial, marine and lawn and garden application. For fittings not listed please call.



18-065-10

1/8" PTF Grease Fittings

Model Number	Type	Thread	Length
18-001*	Straight	1/8"	.62"
18-002	Straight	1/8" (F)	1.00"
18-003*	Straight	1/8"	1.25"
18-004*	Straight	1/8"	1.77"

Model Number	Type	Thread	Length
18-030*	30°	1/8"	.91"
18-045*	45°	1/8"	.98"
18-065*	65°	1/8"	.88"
18-090*	90°	1/8"	.82"



18-090



18-001

1/4"-28 Grease Fittings

Model Number	Type	Thread	Length
14-28001*	Straight	1/4"-28	.54"
14-28002	Straight	1/4"-28	.69"
14-28003	Straight	1/4"-28	.93"
14-28004	Straight	1/4"-28	1.08"

Model Number	Type	Thread	Length
14-28045*	45°	1/4"-28	.88"
14-28046	45°	1/4"-28	.97"
14-28090*	90°	1/4"-28	.69"
14-28UNF	Straight	1/4"-28 UNF	.49"



14-28045



14-28001

1/4" PTF Grease Fittings

Model Number	Type	Thread	Length
14-001*	Straight	1/4"	.80"

Model Number	Type	Thread	Length
14-067	67-1/2°	1/4"	.96"



14-001



14-067

Special Thread Grease Fittings

Model Number	Type	Thread	Length
T-7504	Straight	5/16"-24 UNF	.62"

Model Number	Type	Thread	Length
T-7505	Straight	3/8"-24 UNF	.62"



T-7504



T-7505

Fittings must be purchased in quantities of 100.

*These fittings available in 10 packs.

Grease fittings

Stainless Steel Grease Fittings

Stainless steel grease fittings are designed to be used in harsh and highly corrosive environments. Stainless steel grease fittings use 303 stainless steel on the body and head, stainless steel stress relieving spring and a stainless steel ball. All stainless steel fittings have a single notch identification mark on the hexagonal corners.

Model Number	Type	Thread	Length
777-142801	Straight	1/4"-28	.54"
777-142845	45°	1/4"-28	.88"
777-142890	90°	1/4"-28	.69"
777-1801	Straight	1/8"	.62"

Model Number	Type	Thread	Length
777-1845	45°	1/8"	.99"
777-1890	90°	1/8"	.82"
777-1401	Straight	1/4"	.82"



777-1801-10



777-1401

Metric Thread Grease Fittings

Model Number	Type	Thread	Length
M6-001*	Straight	M6 X 1	.53"
M6-045*	45°	M6 X 1	.89"
M6-090*	90°	M6 X 1	.71"
M8-001	Straight	M8 X 1	.59"
M8-045	45°	M8 X 1	.88"

Model Number	Type	Thread	Length
M8-090	90°	M8 X 1	.70"
M10-001*	Straight	M10 X 1	.60"
M10-045*	45°	M10 X 1	.93"
M10-090*	90°	M10 X 1	.75"



M8-045



M6-001

*This fitting available in 10 packs.

Thread Forming Grease Fittings

Thread forming fittings have special hardened threads which allow the fitting to be screwed into a drilled hole which eliminates having to tap the hole. When installed, they force a rearrangement of the metal to conform with their own thread design, which is leak tight and permanent. They can easily be replaced by another thread forming fitting or standard fitting. All thread forming fittings have a yellow zinc finish and can withstand a 70-hour salt spray test.

Model Number	Type	Thread	Length
T-7300	Straight	1/8"	.60"
T-7302	90°	1/8"	.69"
T-7303	Straight	1/4"-28	.56"

Model Number	Type	Thread	Length
T-7304	45°	1/4"-28	.86"
T-7305	90°	3/8"-28	.68"



T-7305



T-7303

Drive Type Grease Fittings

Drive type fittings are most commonly used in high volume installations to avoid tapping costs. The serrated shank holds the fitting securely in place when driven into a hole. All drive fittings have a yellow zinc finish and can withstand a 70-hour salt spray test. *Actual drill size may depend upon the nature of the material into which the fitting is driven.*

Model Number	Type	Thread	Length
T-7602*	Straight	1/4"	.51"
T-7603*	Straight	3/16"	.47"
DR-316-NB2	Straight	3/16"	.49"
DR-316	Straight	3/16"	.50"
DR-316-NB	Straight	3/16"	.50"
DR-14-NB	Straight	1/4"	.41"
DR-14	Straight	1/4"	.50"

Model Number	Type	Thread	Length
DR-516	Straight	5/16"	.58"
T-7614	65°	1/4"	.85"
T-7615	Straight	6MM	.57"
T-7616	Straight	8MM	.61"
T-7619*	Straight	1/8"	.47"
T-7630*	Straight	3/16"	.39"

*This fitting has no ball check.



T-7614



DR-516



DR-316

Buttonhead Grease Fittings

All buttonhead fittings are straight fittings with a maximum pressure rating of 6,000 PSI. Standard buttonhead fittings are 5/8" diameter.

Model Number	Type	Thread	Length
BH-18	Standard	1/8"	.76"
BH-14	Standard	1/4"	.83"
BH-38	Standard	3/8"	.98"



BH-14

Vented, Relief and Leakproof Specialty Fittings

Relief fittings are designed to open at pre-determined pressures.

Leakproof fittings are equipped with a rubber seal instead of a ball check for use with light oils and heavy lubricants. Leakproof fittings are designed to handle up to 5,000 PSI of back pressure.

Model Number	Type	Relief Min	Relief Max	Thread	Length
T-7040	Vented	----	----	1/8"†	.66"
T-7046	Relief	1 PSI	5 PSI	1/8"	.47"
T-7048	Relief	1 PSI	5 PSI	1/8"	.50"
T-7049	Relief	1 PSI	5 PSI	1/4"	.66"
T-7700	Leakproof	----	----	1/8"	.85"

†Thread is 1/8" PTF-SAE short.



T-7046



T-7040



T-7700

Grease fitting Assortments

110 Piece Standard Fitting Assortment

Model Number	Description
4450	110 piece standard grease fitting assortment - Includes (40) 14-28001, (10) 14-28045, (10) 14-28090, (20) 18-001, (10) 18-045, (10) 18-065, (10) 18-090



4450

110 Piece Metric Fitting Assortment

Model Number	Description
4451	110 piece metric grease fitting assortment - Includes (40) M6-001, (5) M6-045, (5) M6-090, (20) M8-001, (5) M8-045, (5) M8-090, (20) M10-001, (5) M10-045, (5) M10-090



4451

55 Piece Stainless Steel Fitting Assortment

Model Number	Description
4452	55 piece stainless steel grease fitting assortment - Includes (20) 777-142801, (5) 777-142845, (5) 777-142890, (10) 777-1801, (5) 777-1845, (5) 777-1890, (5) 777-1401



4452

Grease Fitting Extractors & Re-Threading Tools

Model Number	Description
TIM-151	Extractor And Re-Threading Tool - Used for replacing broken 1/4" - 28 grease fittings.
TIM-152	Extractor And Re-Threading Tool - Used for replacing broken 1/8" grease fittings.

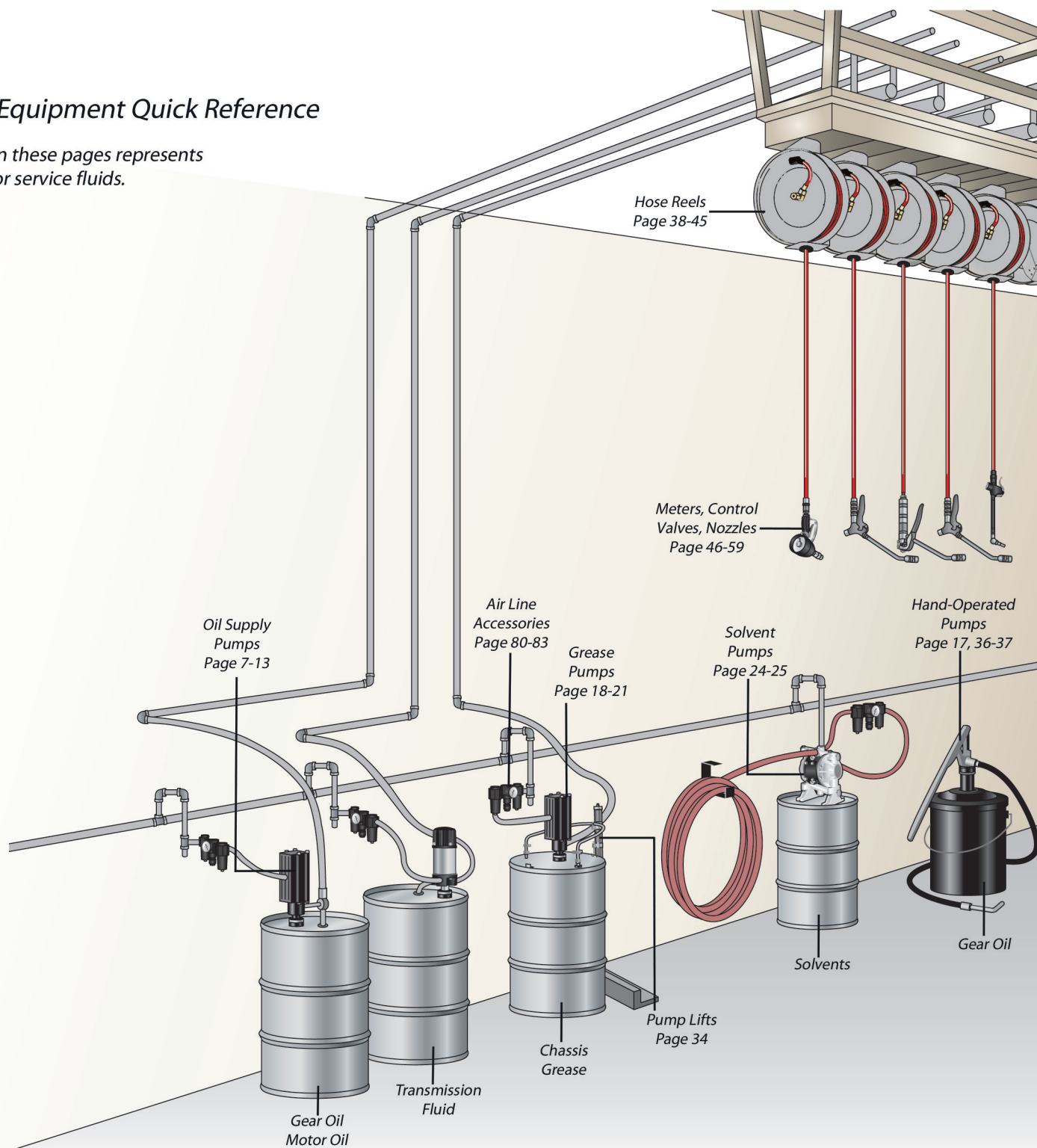


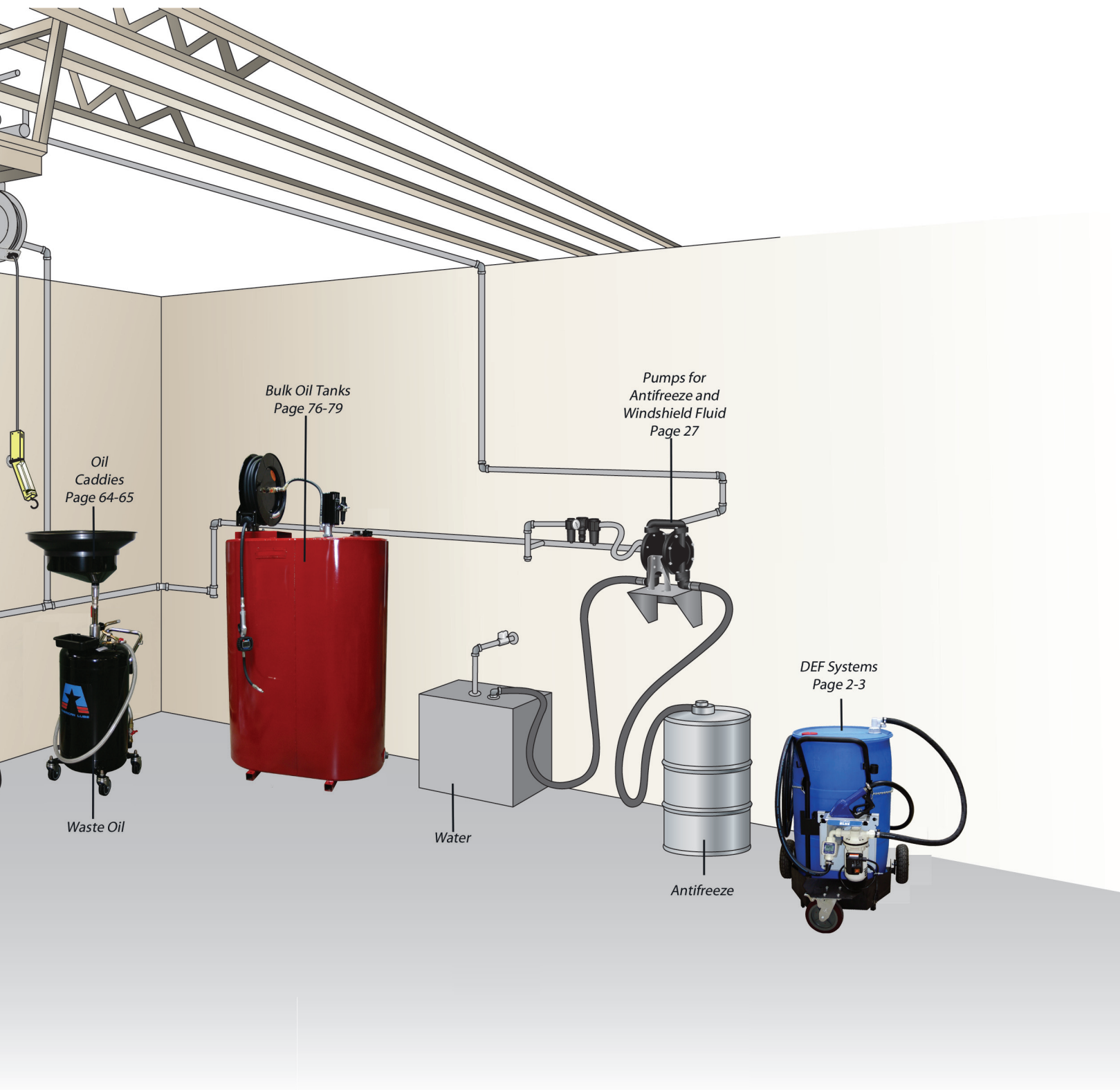
TIM-152

Shop Layout

Lubrication Equipment Quick Reference

The illustration on these pages represents a typical layout for service fluids.





Warranty

AMERICAN LUBRICATION LIMITED WARRANTY

American Lubrication Equipment Corporation (ALEC) warrants to the original use purchaser for the original installation of the products depicted in this catalog. Warranty claims involving travel time and labor must be pre-approved by American Lubrication Equipment Corporation's service department. ALEC does not pay travel time to repair/replace control handles, air systems components or portable equipment.

ALEC Products

ALEC, at its option, will repair or replace, free of charge, any product (excluding Advantage Plus and Challenger Series products) manufactured by ALEC that under normal use and service proves defective in material or workmanship, as determined by ALEC upon inspection within one year from date of purchase, 90 days from date of purchase if the product is an air hose, two years from date of purchase if the product is an ESQ Series electric oil pump, DEF pump or three years from date of purchase if the product is an Electronic Digital Meter (excluding batteries) or Electronic Digital Metered Control Handle (excluding batteries), provided the product or part claimed to be defective is returned promptly to the ALEC facility or ALEC authorized service center with transportation charges prepaid, and is accompanied by original proof of purchase. **This limited warranty does not cover failure of parts or components due to normal wear or damage or wear that in the judgement of ALEC results from misuse, abrasion, corrosion, negligence, accident, substitution of a non-ALEC part, faulty installation or tampering.** If ALEC's inspection discloses no defect in material or workmanship, ALEC will notify the purchaser and, upon authorization by the purchaser, ALEC will repair or replace and return the product at ALEC's customary charges.

Advantage Plus Products

ALEC will provide repair parts free of charge for any Advantage Plus product that under normal use and service proves defective in material or workmanship, as determined by ALEC upon inspection within five years from date of purchase, provided the part claimed to be defective is returned promptly to ALEC with transportation charges prepaid, and is accompanied by original proof of purchase.

During the first year, ALEC, at its option, will repair or replace, free of charge, any Advantage Plus product, that under normal use and service proves defective in material or workmanship, as determined by ALEC upon inspection within one year from date of purchase, provided the product or part claimed to be defective is returned promptly to ALEC or an ALEC authorized service center with transportation charges prepaid, and is accompanied by original proof of purchase. **This limited warranty does not cover failure of parts or components due to normal wear or damage or wear that in the judgment of ALEC results from misuse, abrasion, corrosion, negligence, accident, substitution of a non-ALEC part, faulty installation or tampering.** If ALEC's inspection discloses no defect in material or workmanship, ALEC will notify the purchaser and, upon authorization by the purchaser, ALEC will repair or replace and return the product at ALEC's customary charges.

The Advantage Plus Products 5 Year Limited Warranty does not cover routine maintenance, including but not limited to, normal user performed adjustments and maintenance of equipment, and the adjustment of any field adjustable packing nuts.

Products Not Manufactured by ALEC

ALEC makes no warranty as to products, accessories or components not manufactured by ALEC. These are subject to the warranty, if any, of their manufacturer. ALEC will provide reasonable assistance to the purchaser in making such claims.

Notice

The foregoing limited warranty supersedes, voids and is in lieu of any and all other warranties, expressed or implied. ALEC makes no warranty of merchantability or fitness for a particular purpose. ALEC's sole obligation and the original use purchaser's sole remedy is as stated above, and in no event shall ALEC be liable for any special, direct, indirect, incidental, consequential or other damages or expenses of any nature including, without limitation, loss of profits or production time incurred by the original use purchaser or any other party.

ARO LUBRICATION EQUIPMENT WARRANTY

Ingersoll-Rand Fluid Products ("IRFP") warrants to the original use purchaser of the ARO® products depicted in this catalog that IRFP will repair or replace, free of charges, including return shipping costs within the Continental United States of America, any such product which under normal use and service proves defective in material and workmanship, as determined by IRFP inspection, within (A) 1 year from date of purchase of said products, other than the following, (B) 5 years from date of purchase of a Thunder Series Pump, (C) 5 years from date of purchase of a Diaphragm Pump, and (D) 5 years from date of purchase ARO® manufactured swivels, non-metered control handles, 4-1/4", 6" pumps, drains, follower plates, tie downs, siphon tubes, drum covers, provided the claimed defective product, or part thereof, is promptly returned to the IRFP factory or IRFP Customer Service Center with transportation charges prepaid.

This warranty does not cover failure of parts or components due to normal wear or damage or wear which in the judgement of ARO® arises from misuse, abrasion, corrosion, negligence, accident, substitution of non-ARO parts, faulty installation or tampering.

If IRFP inspection discloses no defect in material or workmanship, repair or replacement and return will be made at customary charges.

Equipment not covered by IRFP warranty: Accessories or components of equipment sold by IRFP that are not manufactured by IRFP (such as switches, hoses, meters, etc.) are subject to the warranty, if any, of their manufacturer. IRFP will provide the purchaser with reasonable assistance in making such claims.

The foregoing warranty supersedes, voids and is in lieu of all or any other warranties, expressed or implied, and no warranty of merchantability or fitness for particular purpose is intended or made. IRFP's sole obligation and the original use purchaser's sole remedy is as stated above and in no event shall IRFP be liable for any special, direct, indirect, incidental, consequential or other damages or expenses of any nature including, without limitation, loss of profits or production time incurred by the original use purchaser or any other party.

ARO AIR SYSTEMS COMPONENTS WARRANTY

Ingersoll-Rand Fluid Products ("IRFP") warrants to the original use purchaser of the ARO® Air Systems Components depicted in this catalog that IRFP will repair or replace, free of charges, including return shipping costs within the Continental United States of America, any such product which under normal use and service proves defective in material or workmanship, as determined by IRFP inspection, two years from date of purchase, provided the claimed defective product or part thereof, is promptly returned to the IRFP Service Repair Center or a factory-authorized service repair center, with transportation charges prepaid.

If IRFP inspection discloses no defect in material or workmanship, repair or replacement and return will be made at customary charges.

The foregoing warranty supersedes, voids and is in lieu of all or any other warranties, expressed or implied, and no warranty of merchantability or fitness for particular purpose is intended or made. IRFP's sole obligation and the original use purchaser's sole remedy is as stated above and in no event shall IRFP be liable for any special, direct, indirect, incidental, consequential or other damages or expenses of any nature including, without limitation, loss of profits or production time incurred by the original use purchaser or any other party.

AMERICAN LUBRICATION POLICY

Returns: No returns will be accepted without prior written authorization from American Lubrication Equipment Corporation. All items to be returned must be in the original factory carton and must be in unused re-saleable condition with transportation charges prepaid. All returned goods will be subject to inspection by American Lubrication Equipment Corporation before credit is issued. We reserve the right to charge an additional handling fee or return items to the purchaser if products are found to be in unacceptable condition upon our inspection. Customer must supply a copy of our original invoice as proof of purchase.

Stock Adjustment: Stock adjustments will be made with prior written authorization. A list including quantities and model numbers of items to be returned must be faxed or mailed to American Lubrication Equipment Corporation. Only active part numbers will be considered and the products must have been purchased within the last 18 months. A 15% handling charge will be assessed. The 15% handling charge will be waived if a 2:1 offsetting order accompanies the original request for stock adjustment.

Warranty: Warranty claims will be handled in accordance with the written warranties found in the Ingersoll-Rand ARO Fluid Products catalog and the American Lubrication Equipment Corporation lubrication equipment and supplies catalog. Contact either American Lubrication Equipment Corporation or one of our authorized warranty service centers with warranty claims.

Defective Item(s): Prior written authorization is required in order to return items that are defective. Fax or mail your request for authorization for return to American Lubrication Equipment Corporation. If the returned item is found not to be defective, upon our inspection, the item will be returned at the customer's expense.

Numerical Index*

Model	Page	Model	Page	Model	Page	Model	Page
165B	75	60870	31	14-28002	95	LM-2305A-11B	9
165BDW	75	60898-AL	33	14-28003	95	LM-2305A-31B	9
210	82	61113	32	14-28004	95	LM-2305A-41B	9
210-25	82	66492	33	14-28045	95	LM-2305A-51B	9
210-100	82	66715	33	14-28046	95	LM-2305A-C	9
210-212	82	67088	31	14-28090	95	LM-2305A-COMP	9
210-300	82	67088-3	31	14-001	95	LM-2305A-H	9
250B	75	67088-4	31	14-067	95	LM-2305A-HWM	9
250BDW	75	67145-2	31	14-28UNF	95	LM-2305AV-61B	9
275H	75	67145-3B	31	18-001	95	LM-2350E-21B	18
275HDW	75	67145-4B	31	18-002	95	LM-2350E-31B	18
275V	75	71027-1	33	18-003	95	LM-2350E-41B	18
275VDW	75	71060-1	33	18-004	95	LP-2001-AL	19
500C	75	91790	31	18-030	95	LP-2002-AL	19, 23
500CDW	75	93110	31	18-045	95	LP-2003-AL	19
500RV	75	93139	31	18-065	95	LP-2004-AL	19
500RVDW	75	94117	31	18-090	95	LP-2006-AL	19, 23
525RHDW	75	96916	31	777-1401	96	LP-2006-ALC	19, 23
525RH	75	611170	17	777-1801	96	LP-2100-1	15
2607	82	612041-3	7	777-1845	96	LP-2100-1C	15
2608	82	612999-1	27	777-1890	96	LP-3001-AL	19, 23
2608-25	82	612999-2	27	777-142801	96	LP-3002-AL	19
2608-100	82	612999-3	27	777-142845	96	LP-3003-AL	19
2609	82	612999-4	28, 68	777-142890	96	LP-3004-AL	19, 23
2609-25	82	612999-5	28, 68	BH-14	97	LP-3004-ALC	19, 23
2609-100	82	612999-6AL	28, 68	BH-18	97	LP-3005-AL	19
2609-300	82	624601-4	89	BH-38	97	LP-3005-ALC	19
4110	91	628067-3	89	C-38121-801	81	LP-3008-AL	19
4111	91	628067-5	89	C-38221-810	81	LP-3009-AL	19
4120	91	635040	83	C-38221-811	81	LP-3100-1	15
4127	91	635108	57	C-38331-811	81	LP-3100-1C	15
4130	91	635193	56	C-38341-810	81	M-12-10	84
4131	91	635392	56	C-38351-811	81	M-12-100	84
4148	31	635395-2	56	DA-B05PPC-C2A	26	M-12-250	84
4152	91	636075	59	DR-14	97	M6-001	96
4155-1	92	636085	59	DR-14-NB	97	M6-045	96
4155-1B	92	636088	59	DR-316-NB	97	M6-090	96
4155-2	92	636111	59	DR-316	97	M8-001	96
4155-2B	92	640015-5	34	DR-316-NB2	97	M8-045	96
4155-3	92	640067	34	DR-516	97	M8-090	96
4155-4	92	640152-1	34	F-100	80	M10-001	96
4155-5	92	640164-AL	33	F-35121-421	80	M10-045	96
4155-6	92	640225	34	F-35221-411	80	M10-090	96
4155-7	92	650715-C	25	F-35231-411	80	P-39124-124	81
4162	36	650717-C	28	F-35331-410	80	P-39124-624	81
4166-1	37	650718-C	28	F-35341-400	80	P-39224-624	81
4166-DEFN	4	66605J-322	25	F-35341-410	80	P-39234-614	81
4188	36	66605J-344	25	F-35351-411	80	P-39344-614	81
4190	6, 36	666100-344C	25	F-35451-410	80	P-39354-614	81
4280	87	666100-3C9C	25	L-36121-100	80	PD-03PARS-PAA	25
4410	94	666150-362C	25	L-36221-110	80	PD-05PAAS-PGG	25
4411	94	AF0409A13PFL1	13	L-36331-110	80	PD-20AAAP-GGGB	25
4412	94	AF0409A53PFL1	13	L-36341-110	80	QL-101	79
4450	98	AF0409C81BBW2	13	L-36351-110	80	QL-120	79
4451	98	AF0450L43PKL1	21	LM-2203A-11C	9	QL-308	67, 79
4452	98	AF0450L53PKL1	21	LM-2203A-31C	9	QL-702-R	79
23103-300	82	AF060BL43PKL1	21	LM-2203A-41C	9	QL-702-SSR	79
23103-004	82	AF060BL53PKL1	21	LM-2203A-51C	9	R-37121-100	80
23644-400	83	DC0450L53PKL1000	21	LM-2203A-C	9	R-37221-100	80
23902-200	82	DC060BL43PKL1C11	21	LM-2203A-COMP	9	R-37221-200	80
23902-210	82	DC060BL53PKL1C11	21	LM-2203A-H	9	R-37221-600T	80
23903-310	82	DM0409A53PFL1000	13	LM-2203A-HWM	9	R-37231-600	80
23903-410	82	DM0450L53PKL1000	21	LM-2203AV-61C	9	R-37331-600	80
29665	80	MSCF22-000	82	LM-2250E-21B	18	R-37341-100	80
60869	31	14-28001	95	LM-2250E-31B	18	R-37341-600	80

*Tank package part numbers do not appear in the numerical index. They can be found on pages 72 through 75.

Numerical Index*

Model	Page	Model	Page	Model	Page	Model	Page
R-37351-100	80	TIM-83-KM	22	TIM-352	34	TIM-720-RED	57
SDB-10-TIM	85	TIM-87	36	TIM-353	34	TIM-720-YEL	57
SEB-10-TIM	85	TIM-88	83	TIM-355-1	34	TIM-726-2	10
SFB-10-TIM	85	TIM-89	83	TIM-358	34	TIM-727-2	10
SGB-10-TIM	85	TIM-90	83	TIM-363	34	TIM-728-2	10
SHB-10-TIM	85	TIM-94-MI	57	TIM-364	34	TIM-729	14
SJB-10-TIM	85	TIM-100	60	TIM-365-5S	63	TIM-729-P	14
SMB-10-TIM	85	TIM-101	60, 94	TIM-366	34	TIM-730	14
SOB-10-TIM	85	TIM-106	94	TIM-367-1	33	TIM-731	14
T-7040	97	TIM-107	94	TIM-368	34	TIM-732	14
T-7046	97	TIM-110	59	TIM-369	33	TIM-752-BV	84
T-7048	97	TIM-111-1	59	TIM-370-2	69	TIM-761	55
T-7049	97	TIM-112	59	TIM-390-A1	16	TIM-761-GO	55
T-7300	96	TIM-113	59	TIM-401-1	35	TIM-761-HF	55
T-7302	96	TIM-114	59	TIM-408	35	TIM-761-M	55
T-7303	96	TIM-115	59	TIM-430	45	TIM-761-TG	55
T-7304	96	TIM-116	59	TIM-451-1	33	TIM-761-TGGO	55
T-7305	96	TIM-124	94	TIM-460-3	32	TIM-761-TGHF	55
T-7504	95	TIM-126-1	94	TIM-460-5	32	TIM-761-TGM	55
T-7505	95	TIM-131-3	45	TIM-460-A	32	TIM-762	55
T-7602	97	TIM-131-4	45	TIM-461-B	32	TIM-762-A	55
T-7603	97	TIM-131-A	45	TIM-463	32	TIM-762-HF	55
T-7614	97	TIM-151	98	TIM-464	32	TIM-762-TG	55
T-7615	97	TIM-152	98	TIM-500-600	84	TIM-762-TGA	55
T-7616	97	TIM-160	76	TIM-500-1000	84	TIM-762-TGHF	55
T-7619	97	TIM-166-1	30	TIM-500-FV	61	TIM-792-1	59
T-7630	97	TIM-164	76	TIM-500-HP1	84	TIM-795-1	59
T-7700	97	TIM-166-LLC	30	TIM-500-HP2	84	TIM-910-HF	52
TIM-1-A	61	TIM-173	11	TIM-502-BV	84	TIM-911-HF	52
TIM-2-A	61	TIM-178	71	TIM-600-FA	47	TIM-912-HF	52
TIM-3-A	61	TIM-179	71	TIM-600-FM	47	TIM-1000-A	11
TIM-4-A	61	TIM-180	71	TIM-600-FMHF	47	TIM-1000-IN5	11
TIM-4-B	61	TIM-181	71	TIM-600-RA	47	TIM-1000-IN7	11
TIM-6	61, 63	TIM-181-G	70	TIM-600-RM	47	TIM-1000-OUT2	11
TIM-24	94	TIM-181-N	70	TIM-600-RMGO	47	TIM-1000-OUT4	11
TIM-29	93	TIM-182	71	TIM-600-RMHF	47	TIM-1000-OUT6	11
TIM-30-5A	61	TIM-183	71	TIM-601-FA	47	TIM-1001-BV	84, 94
TIM-30-11A	61	TIM-190	76	TIM-601-FM	47	TIM-1049	32
TIM-32-34A	35	TIM-192	84	TIM-601-FMHF	47	TIM-1052	32
TIM-32-34P	35	TIM-193	84	TIM-601-RA	47	TIM-1055	32
TIM-035-100	85	TIM-196-C	30	TIM-601-RM	47	TIM-1056	32
TIM-035-1000	85	TIM-198	76	TIM-601-RMGO	47	TIM-1057	32
TIM-48-S	57	TIM-212-1	81, 87	TIM-601-RMHF	47	TIM-1058	32
TIM-60	17	TIM-220	81	TIM-615	58	TIM-1059	32
TIM-61	17	TIM-221	81	TIM-616	58	TIM-1200-1	87
TIM-62-2	17	TIM-250-BV	84	TIM-620-FMHF	53	TIM-1201-1	87
TIM-62-1A	17	TIM-254-D	45	TIM-620-RMHF	53	TIM-1202-1	87
TIM-62-2C	17	TIM-307	16	TIM-650-FA	49	TIM-1204-1	87
TIM-62-LD2	17	TIM-310	66	TIM-650-FM	49	TIM-1205-1	87
TIM-63-2	17	TIM-315-BOWL	67	TIM-650-FMHF	49	TIM-1206-1	87
TIM-63-2C	17	TIM-315-COMP2	65	TIM-650-RA	49	TIM-1208-1	87
TIM-63-LD2	17	TIM-315-KIT	67	TIM-650-RM	49	TIM-1209	87
TIM-64-2	17	TIM-317-A	64	TIM-650-RMHF	49	TIM-1210-1	87
TIM-64-2C	17	TIM-317-AAM	64	TIM-651-FA	49	TIM-1220	87
TIM-64-LD2	17	TIM-317-CAM	64	TIM-651-FMHF	49	TIM-1221	87
TIM-65	22	TIM-317-PAN	67	TIM-651-RA	49	TIM-1222	87
TIM-66-A	22	TIM-318	66	TIM-651-FM	49	TIM-1223	87
TIM-74	37	TIM-318-BOWL	67	TIM-651-RM	49	TIM-1225	87
TIM-74-AL	37	TIM-319	66	TIM-651-RMHF	49	TIM-1226	87
TIM-75	36	TIM-321	37	TIM-717-1	58	TIM-1227	87
TIM-77	36	TIM-322-A	37	TIM-717-2	58	TIM-1230	87
TIM-79-SS	36	TIM-323	37	TIM-717-3	58	TIM-1240	87
TIM-80	22	TIM-351-1	35	TIM-720-BLK	57	TIM-1241	87
TIM-083-100	85	TIM-351-8	35	TIM-720-BLU	57	TIM-1242	87
TIM-083-1000	85	TIM-351-8HD	35	TIM-720-GRN	57	TIM-1243	87

*Tank package part numbers do not appear in the numerical index. They can be found on pages 72 through 75.

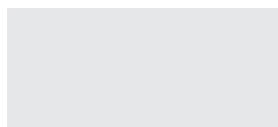
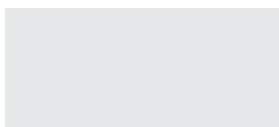
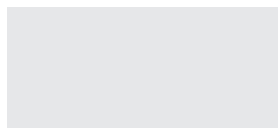
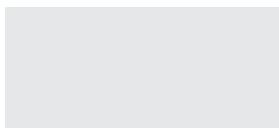
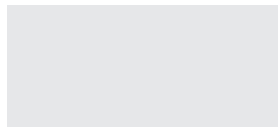
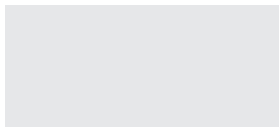
Numerical Index*

Model	Page	Model	Page	Model	Page	Model	Page
TIM-1244.....	87	TIM-3628-50.....	39	TIM-4418-20S.....	89	TIM-DEF-24.....	5
TIM-1245.....	87	TIM-3628-65.....	39	TIM-4418-25S.....	89	TIM-DEF-25.....	6
TIM-1260.....	87	TIM-3636-50.....	39	TIM-4418-30S.....	89	TIM-DEF-26.....	6
TIM-1263.....	87	TIM-3636-65.....	39	TIM-4418-40.....	89	TIM-DEF-28.....	6
TIM-1404-22.....	86	TIM-3916-50.....	41	TIM-4418-50S.....	89	TIM-DEF-31.....	6
TIM-1404-42.....	86	TIM-3916-65.....	41	TIM-4418-65S.....	89	TIM-DEF-32.....	6
TIM-1404-44.....	86	TIM-3918-50.....	41	TIM-4418-75S.....	89	TIM-DEF-35.....	5
TIM-1404-46.....	86	TIM-3918-65.....	41	TIM-4418-100S.....	89	TIM-DEF-36.....	5
TIM-1404-66.....	86	TIM-3928-50.....	41	TIM-4430.....	29	TIM-DEF-37.....	5
TIM-1404-68.....	86	TIM-3936-50.....	41	TIM-4431.....	29	TIM-DEF-38.....	5
TIM-1404-84.....	86	TIM-4000-50.....	45	TIM-4506-25S.....	90	TIM-DEF-39.....	5
TIM-1404-86.....	86	TIM-4208-50.....	88	TIM-4506-30.....	90	TIM-DEF-40.....	5
TIM-1404-88.....	86	TIM-4208-65.....	88	TIM-4506-50A.....	90	TIM-DEF-41.....	5
TIM-1404-128.....	86	TIM-4208-75.....	88	TIM-4506-65S.....	90	TIM-DEF-42.....	5
TIM-1404-812.....	86	TIM-4208-100.....	88	TIM-4506-75S.....	90	TIM-DEF-43.....	5
TIM-1404-1212.....	86	TIM-4214-2.....	88	TIM-4513-5.....	90	TIM-DEF-44.....	5
TIM-1404-1216.....	86	TIM-4214-3.....	88	TIM-4514-10.....	90	TIM-DEF-45.....	5
TIM-1404-1612.....	86	TIM-4214-5.....	88	TIM-4514-20.....	90	TIM-DEF-46.....	5
TIM-1404-1616.....	86	TIM-4214-10.....	88	TIM-4516-2.....	90	TIM-DEF-47.....	5
TIM-1405-44.....	86	TIM-4214-15.....	88	TIM-4516-2N.....	45, 90	TIM-DEF-48.....	5
TIM-1405-64.....	86	TIM-4216-2.....	45, 88	TIM-4516-4.....	90	TIM-DEF-49.....	4
TIM-1405-86.....	86	TIM-4216-2N.....	45, 88	TIM-4516-4NS.....	44, 90	TIM-DEF-50.....	4
TIM-1405-88.....	86	TIM-4216-4NS.....	44	TIM-4516-8.....	90	TIM-DEF-51.....	6
TIM-1405-128.....	86	TIM-4216-25.....	88	TIM-4517-14.....	90	TIM-DEF-54.....	5
TIM-1405-1212.....	86	TIM-4216-35.....	88	TIM-4524-2.....	90	TIM-DEF-55.....	6
TIM-1405-1616.....	86	TIM-4216-50.....	88	TIM-4524-6.....	90	TIM-DEF-56.....	5
TIM-1501-44.....	86	TIM-4216-65.....	88	TIM-4524-10.....	90	TIM-DEF-57.....	4
TIM-1501-66.....	86	TIM-4216-75.....	88	TIM-4524-12.....	90	TIM-DEF-58.....	4
TIM-1501-86.....	86	TIM-4218-2N.....	45, 88	TIM-4524-15.....	90	TIM-DEF-63.....	5
TIM-1501-88.....	86	TIM-4218-4NS.....	44, 88	TIM-4524-20.....	90	TIM-DEF-64.....	5
TIM-1501-1212.....	86	TIM-4258-5.....	88	TIM-4524-25.....	90	TIM-DEF-66.....	5
TIM-1501-BV.....	84	TIM-4320.....	93	TIM-4524-30.....	90	TIM-DEF-67.....	5
TIM-1504-44.....	86	TIM-4320-S.....	93	TIM-4670-1.....	71	TIM-DEF-68.....	5
TIM-1504-66.....	86	TIM-4320-TP.....	93	TIM-4670-2.....	71	TIM-DEF-69.....	6
TIM-1504-88.....	86	TIM-4321.....	93	TIM-4670-3.....	71	TIM-DEF-72.....	6
TIM-2000-1.....	63	TIM-4321-S.....	93	TIM-4670-4.....	71	TIM-DEF-73.....	6
TIM-2000-2.....	63, 83	TIM-4321-TP.....	93	TIM-4670-5.....	71	TIM-DEF-74.....	6
TIM-2000-2A.....	63, 83	TIM-4322.....	93	TIM-4675.....	67	TIM-DEF-75.....	6
TIM-2000-3A.....	63, 83	TIM-4323.....	93	TIM-4675-1.....	71	TIM-DEF-76.....	6
TIM-2000-4.....	29, 63	TIM-4340.....	93	TIM-4675-2.....	71	TIM-DEF-78.....	6
TIM-2000-4A.....	29, 63	TIM-4341.....	93	TIM-4675-3.....	71	TIM-DEF-79.....	6
TIM-2000-5.....	63	TIM-4342.....	93	TIM-4675-4.....	71	TIM-DEF-80.....	6
TIM-2000-6A.....	29, 63	TIM-4343.....	93	TIM-4676.....	70	TIM-DEF-81.....	6
TIM-2000-7.....	63	TIM-4349.....	93	TIM-4676-1.....	71	TIM-DEF-1A.....	2
TIM-2000-8.....	63	TIM-4360.....	60	TIM-4676-2.....	71	TIM-DEF-2A.....	3
TIM-2000-10.....	29, 69	TIM-4361.....	60	TIM-4676-3.....	71	TIM-DEF-34P1.....	5
TIM-2002.....	63	TIM-4412-3.....	45, 89	TIM-4676-4.....	71	TIM-DEF-3A.....	2
TIM-2002-OVLY.....	63	TIM-4412-5.....	45, 89	TIM-4679.....	69	TIM-DEF-4A.....	2
TIM-2002-REP.....	63	TIM-4412-30.....	89	TIM-640015-1.....	34	TIM-DEF-52H.....	4
TIM-3106-75P.....	43	TIM-4412-50.....	89	TIM-1A-DM.....	61	TIM-DEF-53A.....	6
TIM-3106-100P.....	43	TIM-4416-30.....	89	TIM-2A-DM.....	61	TIM-DEF-57A.....	4
TIM-3108-75P.....	43	TIM-4416-50.....	89	TIM-316A-BOWL.....	67	TIM-DEF-5A.....	2
TIM-3108-100P.....	43	TIM-4418-2NS.....	45, 89	TIM-316A-KIT.....	67	TIM-DEF-8A.....	3
TIM-3208-75P.....	43	TIM-4418-2.5NS.....	89	TIM-3A-DM.....	61	TIM-FILL-CAP.....	76
TIM-3208-100P.....	43	TIM-4418-4NS.....	44, 89	TIM-5-A2.....	61	TIM-GG-44.....	78
TIM-3306-75P.....	43	TIM-4418-4S.....	89	TIM-900A-2.....	51	TIM-GG-60.....	78
TIM-3412-50P.....	43	TIM-4418-5S.....	89	TIM-901A-2.....	51	TIM-GG-72.....	78
TIM-3600-50.....	39	TIM-4418-6S.....	89	TIM-901A-HF.....	51	TIM-H2-32.....	78
TIM-3600-CAB.....	44	TIM-4418-8S.....	89	TIM-AIR-BOX.....	83	TIM-H2-60.....	78
TIM-3600-PAN.....	44	TIM-4418-10S.....	89	TIM-CONV-CAM.....	64	TIM-I-55B.....	27
TIM-3616-50.....	39	TIM-4418-12.....	89	TIM-D2-44.....	78	TIM-LABEL-KIT.....	65
TIM-3616-65.....	39	TIM-4418-15.....	89	TIM-D2-48.....	78	TIM-MTL-15.....	30
TIM-3618-50.....	39	TIM-4418-16S.....	89	TIM-DEF-6.....	3	TIM-MTL-23.....	30
TIM-3618-65.....	39	TIM-4418-18.....	89	TIM-DEF-7.....	3	TIM-MTL-26.....	30
TIM-3628-25.....	39	TIM-4418-18S.....	89	TIM-DEF-22.....	6	TIM-MTL-28.....	30

*Tank package part numbers do not appear in the numerical index. They can be found on pages 72 through 75.

Model	Page
TIM-MTL-35	30
TIM-MTL-37	30
TIM-MTL-42	30
TIM-MTL-51	30
TIM-MTL-54	30
TIM-MTL-63	30
TIM-MTL75-25.....	30
TIM-MTL75-37.....	30
TIM-MTL75-39.....	30
TIM-MTL75-53.....	30
TIM-MTL75-65.....	30
TIM-MUSH-VENT	76
TIM-PLUG-1	77
TIM-PLUG-2	77
TIM-PLUG-3	77
TIM-PLUG-4	77
TIM-PLUG-6	77
TIM-RELIEF-KIT	29
TIM-SPILL-BOX3	77
TIM-TG-32.....	78
TIM-TG-36.....	78
TIM-TG-44.....	78
TIM-TG-60.....	78
TIM-TG-72.....	78
TIM-TG-275H	78
TIM-VENT-3.....	76
TIM-VENT-4S	76
TIM-VENT-6.....	76
TIM-WAND-1	69
Y-27-53C	81
Y-27-54C	81, 87
Y-27-55C	81
Y-43-4C	86

Model	Page
-------	------



*Tank package part numbers do not appear in the numerical index. They can be found on pages 72 through 75.

© 2013 American Lubrication Equipment Corporation. All rights reserved. AMERICAN LUBRICATION EQUIPMENT CORPORATION, the A and A ADVANTAGE PLUS logos and SUPERIOR TECHNOLOGY AT AN AFFORDABLE PRICE are registered trademarks, and AMERICAN BLUE SYSTEMS and CHALLENGER [list any other marks of American Lubrication here, e.g. INDUSTRIAL, PLATINUM, and PRO] are trademarks of American Lubrication Equipment Corporation.

General Notice: Other product names used herein are for identification purposes only and may be trademarks of their respective owners. American Lubrication Equipment Corporation disclaims any and all rights in those marks.



EST. 1918

DISTRIBUTED BY



American Lubrication
Equipment Corporation

Headquarters
11212 A McCormick Road
Hunt Valley, MD 21031

West Coast Dist. Facility
1251 North Patt Street
Anaheim, CA 92801

Phone 888-252-9300

Fax 800-759-2637

WWW.AMERICANLUBE.COM