INDEX

Raasm Waste Oil Equipment

Applied Lubrication Technology Inc.
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Mono, ON L9W 5W1
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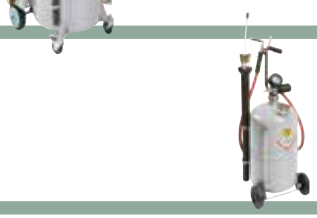
Sales, Service, Installation



FLOOR AND PIT OIL DRAINS

Applied Lubrication Technology Inc.

Waste oil drains.
Suitable for gravity draining of engine, gearbox and differential oil from all motor vehicles. Equipped with antisplash screen which can be used as a support for draining oil filters.

Do not use flammable or corrosive liquids

P/N 42061-55

Pit waste oil drain, 29 gal capacity, equipped with 3/4" quick-release connector

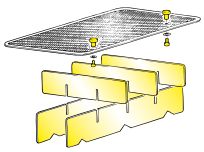
P/N 42072-55

Floor waste oil drain, 25 gal capacity, equipped with 3/4" quick-release connector, with 2 castors and 2 fixed wheels

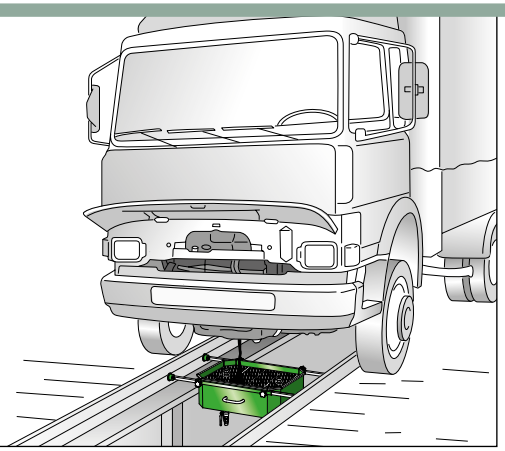
P/N 42075-55

Floor waste oil drain, 40 gal capacity, equipped with 3/4" quick realease connector, with 2 castors and 2 fixed wheels

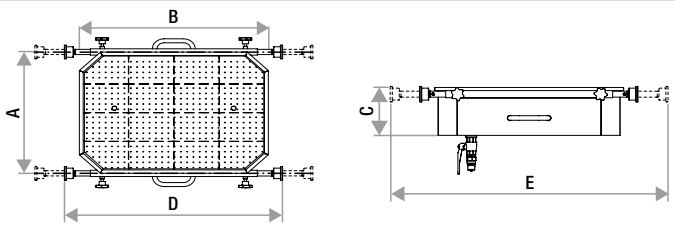
USES



Antisplash screen



Series	A	B	C	D	E	1 ft³	lb
42061-55	25.0"	31.1"	10.4"	33.0"	49.3"	8.3	86
42072-55	28.5"	39.0"	7.8"	47.2	-	7.1	75
42075-55	29.2	39.2"	11.6"	48.7"	-	11.7	136



EVACUATION KIT

Applied Lubrication Technology Inc.

Wall-mounted evacuation kit.
A practical solution for draining movable equipment, waste oil suction/drains by means of connection with quick-coupling valve. Wall application enables connection to a fixed system for discharging the extracted fluid directly into the storage tank.

P/N 33550-55

P/N 33127-55

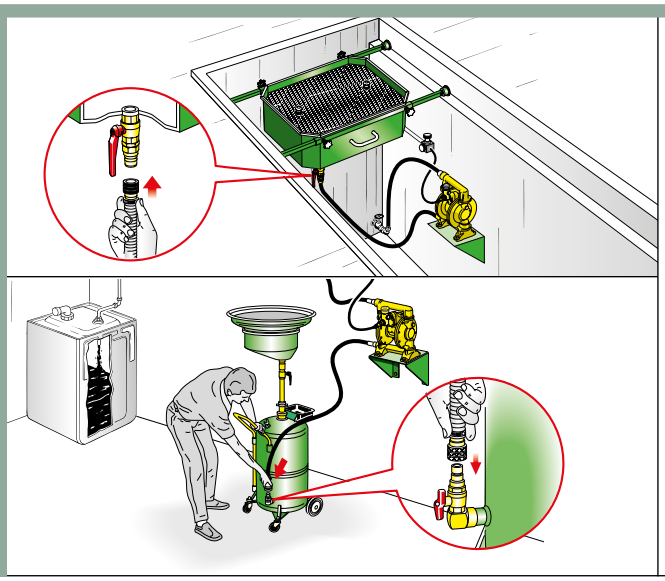
	P/N 33550-55	P/N 33552-55
Diaphragm pumps	32/2011NHH2-55 - seals NBR High Nitrile	32/2011NHH2-55 - seals NBR High Nitrile
Air flow regulator	37803-55	-
Bracket	33590-55	suitable for pit drainer
Flexible suction tube	ø 1-1/4" - 38026-55	ø 0.5" x 0.8" suitable for probes
Discharged tube	-	1/2" G
Female quick connector 3/4" (f)	33126-55 (with check valve)	-
Set of probes	-	45507-55 - 45508-55 - 45509-55 45510-55 - 45511-55
Packaging - Weight	No. 1 1.4 ft³ lb 31	No. 1 1.2 ft³ lb 27.5

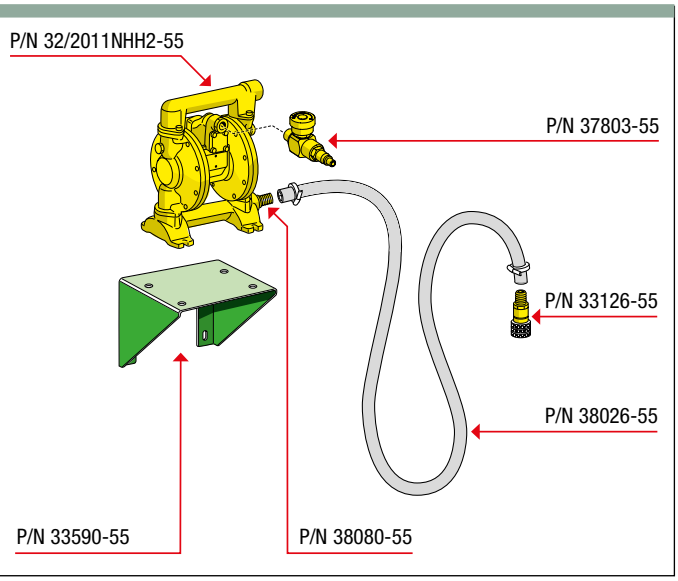
P/N 33127-55

Male quick connector with check valve, (to be installed on the waste oil drain for connection to the evacuation kit).

Article not manufactured by RAASM ordered separately

USES





WASTE OIL AND ANTIFREEZE DRAINS

Applied Lubrication Technology Inc.

Waste oil and antifreeze drains with wheel-mounted tank.
Suitable for gravity draining of engine, gearbox differential oil and antifreeze from all motor vehicles placed on an auto lift or pit.
The bowl with height-adjustable is mounted on a swivel joint that facilitates positioning.

⚠ Do not use flammable or corrosive liquids

P/N 42085-55

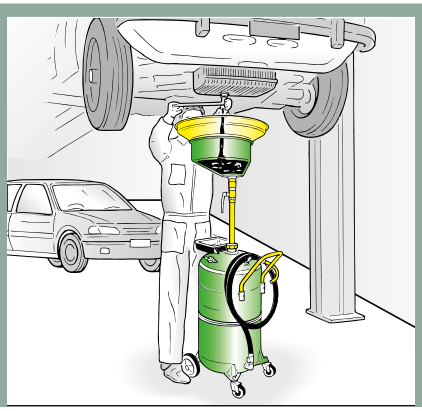
Waste oil drainer with wheel-mounted 21.1 gal tank, equipped with:
- level gauge
- 4.2 gal collection bowl
- antisplash screen/filter
- removable tool tray

P/N 42090-55

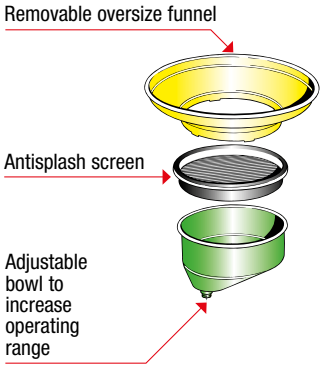
Waste oil drainer with wheel-mounted 23.8 gal tank, equipped with:
- level gauge
- 3.9 gal collection bowl with oversize funnel
- antisplash screen/filter
- removable tool tray

Tank capacity	21.1 gal	23.8 gal
Max. collection capacity	16.4 gal	19.8 gal
Bowl capacity	4.2 gal	3.9 gal
Oversize funnel diameter	ø 17.1”	ø 22.9”
Draining hose length	7’	7’
Max. height	69.3”	74.9”
Min. height	56.7”	55.2”
Draining pressure	7 psi	7 psi
Packaging - Weight	No. 1 6.7 ft³ lb 73	No. 2 10.6 ft³ lb 75

USE

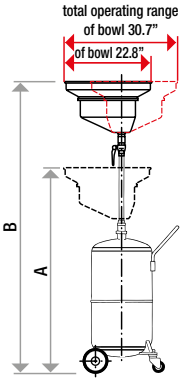


DETAILS AND ADVANTAGES



OVERALL DIMENSIONS inches

P/N	A	B
42085-55	56.7”	69.4”
42090-55	58.2”	74.9”



WASTE OIL AND ANTIFREEZE DRAINS

Applied Lubrication Technology Inc.

Waste oil drain, with wheel-mounted tank equipped with quick-release P/N 33137-55 connector for emptying the drained oil by wall mounted evacuation kit (page 153). Suitable for gravity draining of engine, gearbox and differential oil from all motor vehicles placed on an auto lift or pit. The bowl (3.9 gal) with height-adjustable central support is mounted on a swivel joint that facilitates positioning.

P/N 33137-55

Male quick connector
P/N 33127-55 + nipple

Article not manufactured by RAASM ordered separately

Do not use flammable or corrosive liquids

P/N 42088-55

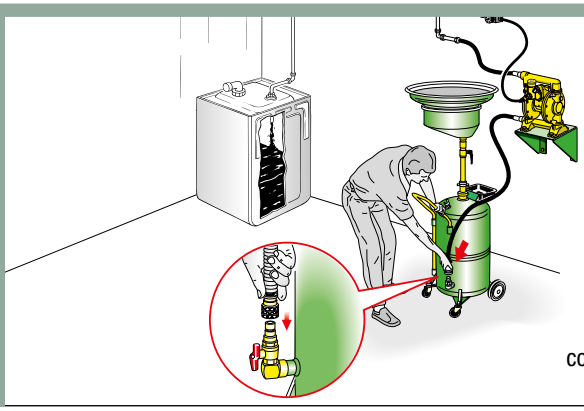
Waste oil drainer with wheel-mounted 23.8 gal tank with:
- quick-release connector for emptying the tank
- level gauge
- 3.9 gal collection bowl
- antisplash screen/filter
- removable tool tray

P/N 42113-55

Waste oil drainer with wheel-mounted 30.4 gal tank with:
- quick-release connector for emptying the tank
- level gauge
- 3.9 gal collection bowl
- antisplash screen/filter
- removable tool tray

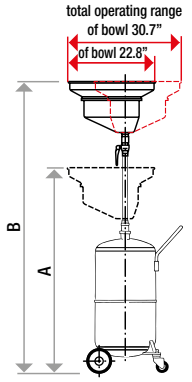
Tank capacity	23.8 gal	30.4 gal
Max. collection capacity	19.8 gal	25.6 gal
Bowl capacity	3.9 gal	3.9 gal
Oversize funnel diameter	ø 22.9"	ø 22.9"
Draining hose length	7'	-
Max. height	74.9"	75.6"
Min. height	55.2"	55.9"
Draining pressure	7 psi	7 psi
Packaging - Weight	No. 2 10.6 ft³ lb 75	No. 2 14.8 ft³ lb 93

DETAILS AND ADVANTAGES



Quick-release connector for emptying the drained oil

OVERALL DIMENSIONS inches



P/N	A	B
42088-55	58.2"	74.9"
42113-55	55.9"	75.6"

SUCTION POWER

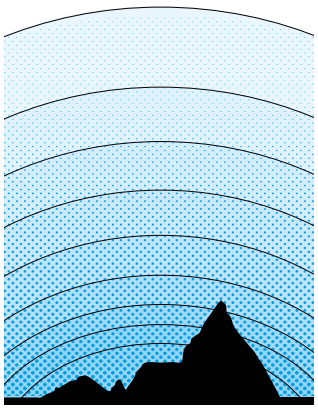
To understand the concept of suction power it is important to remember the difference between pressure and depression. In this way the characteristics and advantages offered by the oil drain will be easy to understand.

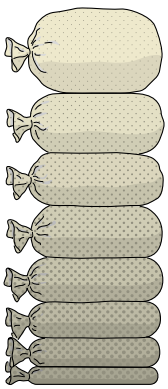
It is necessary to refer to the structure of the atmosphere that surrounds us and, above all, its barometric stratification and compressibility. Its lower layers, i.e. those nearest the ground, are more densely compressed than those higher up, precisely like what happens with a pile of bags of compressible material. (see picture 1).
The atmospheric pressure decreases as the altitude increases: At sea level it is 14.69 psi. At 6560 feet a.s.l., it is approximately 11.75 psi and at 32800 feet a.s.l., it falls to 4.41 psi (see picture 2).
In general, pressure is obtained by compressing any type of fluid inside a given container, until reaching the required values: 10 - 20 - 100 - 200 psi etc. without limits, apart from those of the fluid container's structure and the power of the pump used.

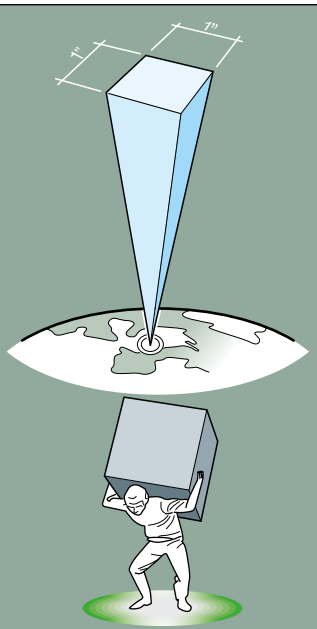
On the other hand, a depression or vacuum is obtained by removing all the air contained in a given recipient or tank, and the maximum value obtainable (vacuum or suction power) is independent of the pumping or suction system used. Whatever is the pump used (electric pump, air pump, Venturi principle, etc.) the maximum depression (or suction power) obtained is equal to the atmospheric pressure outside the suction system.
In fact, this value cannot be exceeded because, obviously, it is not possible to remove from a container more air than what is contains.

PICTURE 1

It is important to remember that the atmospheric pressure is given by the weight of the air above us, and this value is expressed in atmospheres. At sea-level this weight is approx.
14.5 lb per square inches







Atmospheric pressure

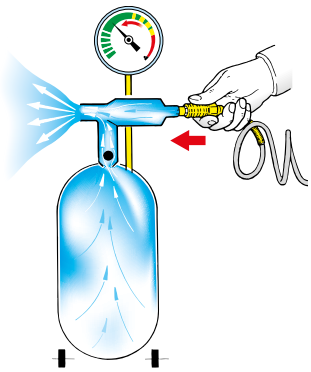
14.5 lb per square inches corresponds to 2044 lb per square feet of area; almost the same as 3 cubic feet block of lead.
Man, however, does not feel this enormous weight exerted on him because the atmosphere is also present inside his body

ATMOSPHERIC PRESSURE

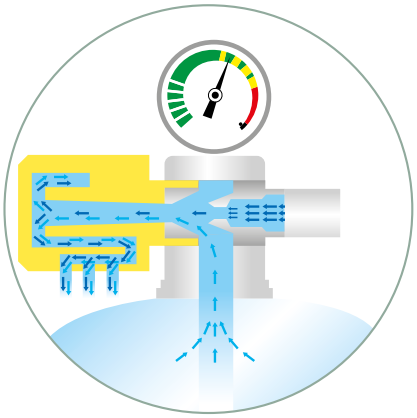
PUMP OPERATION WITH VENTURI PRINCIPLE

Connect a compressed air line (100 psi) to the special connection on the suction device. The air then passes through a special “MULTIPLIER NOZZLE” of the Venturi unit. The air increases in speed considerably, creating “EDDIES” that can suck and “pump” all the air contained in the suction device tank, thus creating a complete vacuum.

For correct depressurization, the pressure of the air passing through the Venturi system must be between 90 psi and 105 psi.

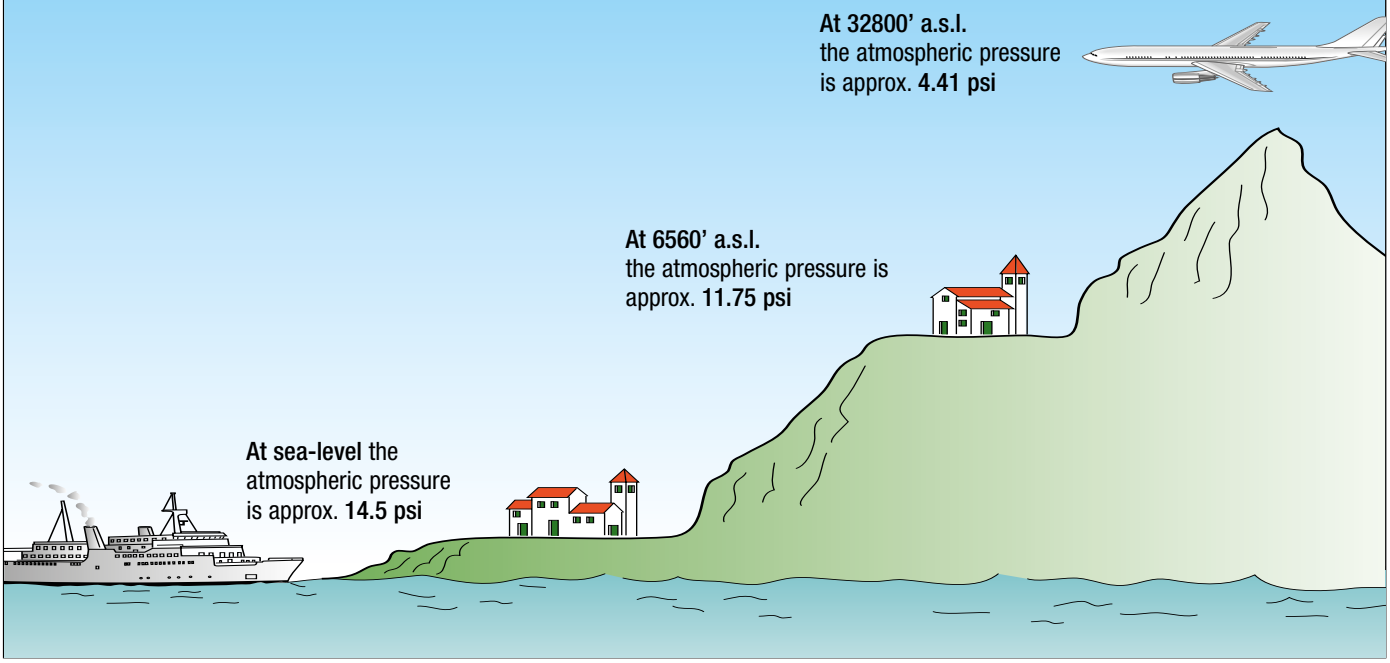


Therefore the suction force generated by the Venturi principle is equal to that obtained with any other air-operated and/or electric pump.



The air pressure at sea-level is 14.5 psi, at 6560’ above sea level (a.s.l.) the pressure falls to approximatively 11.75 psi (see picture 2).

PICTURE 2



WASTE OIL SUCTION-DRAINS

Air-operated drains, ideal for quick engine oil change of any motor vehicle. Suitable for extracting more than 2 gal from trucks, tractors and heavy vehicles. The waste oil is extracted from the engine by means of the probes supplied. After depressurization the drain works independently without requiring continuous connection to the compressed air system. Extract hot oil at 155 - 180 °F.

P/N 43084-55

Air-operated waste oil drain with wheel-mounted 21.1 gal tank, equipped with:
- level gauge
- removable tool tray
- P/N 45560-55 set of probes

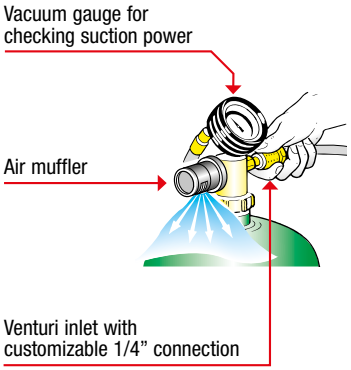
P/N 43065-55

Air-operated waste oil drain with wheel-mounted 17.2 gal tank, equipped with:
- level gauge
- removable tool tray
- P/N 45560-55 set of probes
- transparent chamber 2.1 gal

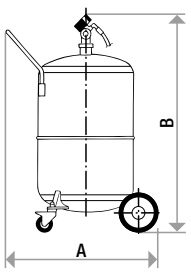
Tank capacity	21.1 gal	17.2 gal
Max. draining capacity	16.4 gal	13.7 gal
Depressurisation time	2 min	2 min
Suction speed	0.40 - 0.53 gpm (oils 158 - 176 °F, probes 0.24")	0.40 - 0.53 gpm (oils 158 - 176 °F, probes 0.24")
Total suction capacity	15 - 16 gal	11 - 12 gal
Suction hose	7'	7'
Draining hose	7'	7'
Max. pressure for draining	7 psi	7 psi
Packaging - Weight	No. 1 6.7 ft³ lb 66	No. 2 8.8 ft³ lb 69

USE

DETAILS AND ADVANTAGES



OVERALL DIMENSIONS inches



P/N	A	B
43084-55	35.3"	24.8"
43790-55	39.4"	25.2"

PANTOGRAPH OIL SUCTION-DRAINS

Applied Lubrication Technology Inc.

Air-operated combination suction-drain with large pantograph collection bowl (3.7 or 13.2 gal) and wheel-mounted 17.2 or 30.4 gal tank. The waste oil is drained by gravity with floor tray or raised for trucks placed on auto lifts or pit, or by suction with the probes supplied. After depressurization the drain works without requiring continuous connection to the compressed air system. Extract hot oil at 155 - 180 °F.

Do not use flammable or corrosive liquids

P/N 46065-55

Air-operated universal oil suction-drainer with 17.2 gal tank, equipped with:

- level gauge
- large 3.7 gal collection bowl on cantilever arms
- removable tool tray
- P/N 45560-55 set of probes

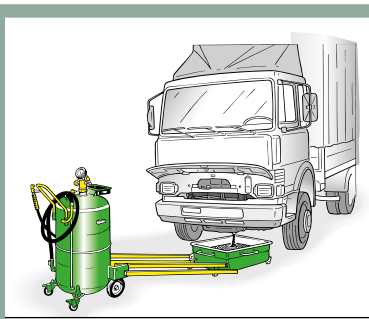
P/N 46215-55

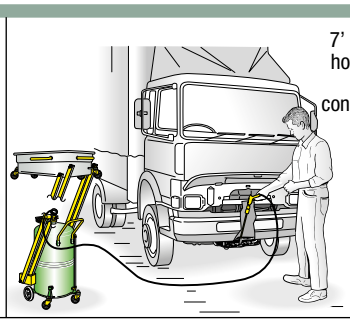
Universal waste oil suction/drain with wheel-mounted 30.4 gal tank, equipped with:

- level gauge
- large 13.2 gal collection bowl on cantilever arms
- removable tool tray
- P/N 45560-55 set of probes

Packaging - Weight		
	No. 4 10 ft³ lb 80	No. 4 17.6 ft³ lb 153

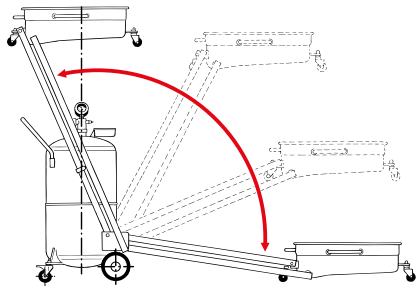
USES





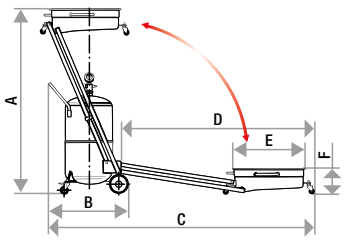
7' suction hose with probe connection

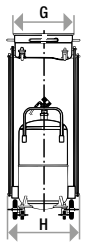
DETAILS AND ADVANTAGES



The collection tank can be placed on the floor or raised under an auto lift by means of the cantilever arms

OVERALL DIMENSIONS inches





P/N	A	B	C	D	E	F	G	H
46065-55	39.7"	22.5"	94.5"	55.5"	21.6"	5.5"	14.1"	18.9"
46215-55	61.4"	27.5"	100.5"	74.8"	26.0"	9.0"	20.0"	23.6"

WASTE OIL DRAINS FOR BOATS

Applied Lubrication Technology Inc.

Waste oil drains are ideal for changing the engine oil in boats. Draining occurs by means of a 13’ suction hose and connections for inboard engines (P/N 45551-55) and outboard engines (P/N 45550-55).

Do not use flammable or corrosive liquids

P/N 43724-55

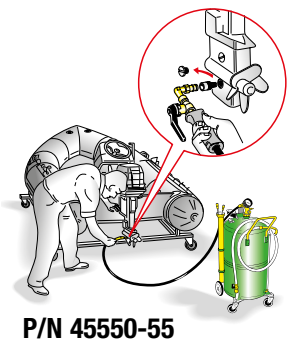
Waste oil drain with wheel-mounted 6.4 gal tank, equipped with:
- 13’ suction hose
- special connections (P/N 45550-55 - P/N 45551-55)
- P/N 45560-55 standard probe series

P/N 43760-55

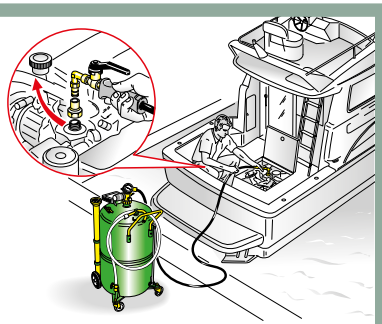
Waste oil drain with wheel-mounted 17.2 gal tank, equipped with:
- 13’ suction hose
- special connections (P/N 45550-55 - P/N 45551-55)
- P/N 45560-55 standard probe series

Tank capacity	6.4 gal	17.2 gal
Max. draining capacity	5.3 gal	13.2 gal
Depressurisation time	1-1.5 min	2 min
Suction speed	0.40 - 0.53 gpm (oils 158 - 176 °F, probes 0.24”)	0.40 - 0.53 gpm (oils 158 - 176 °F, probes 0.24”)
Total suction capacity	4 - 4.2 gal	11.4 - 11.9 gal
Suction hose	13’	13’
Draining hose	-	7’
Max. pressure for draining	manual	7 psi
Packaging - Weight	No. 1 3.2 ft³ lb 30	No. 2 8.1 ft³ lb 61

DETAILS AND ADVANTAGES

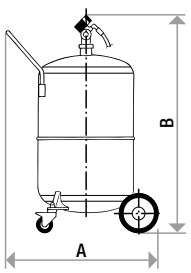


P/N 45550-55
3/8”- 16 UNC connection for outboard engines



P/N 45551-55
3/4”- NH connection for inboard engines

OVERALL DIMENSIONS inches



P/N	A	B
43724-55	33.8”	11.0”
43760-55	33.8”	23.6”

WALL MOUNTED DRAINS

Applied Lubrication Technology Inc.

Series 3/4” wall mounted drain dispensers with diaphragm pump.
The probes evacuate the waste liquid from vehicle or motorcycles. The diaphragm pump, equipped with special NBR high nitrile seals, is suitable for extracting and delivering fluids such as: various oils, waste oil, antifreeze liquid and diesel oil.

⚠ Do not use flammable or corrosive liquids

P/N 45300-55

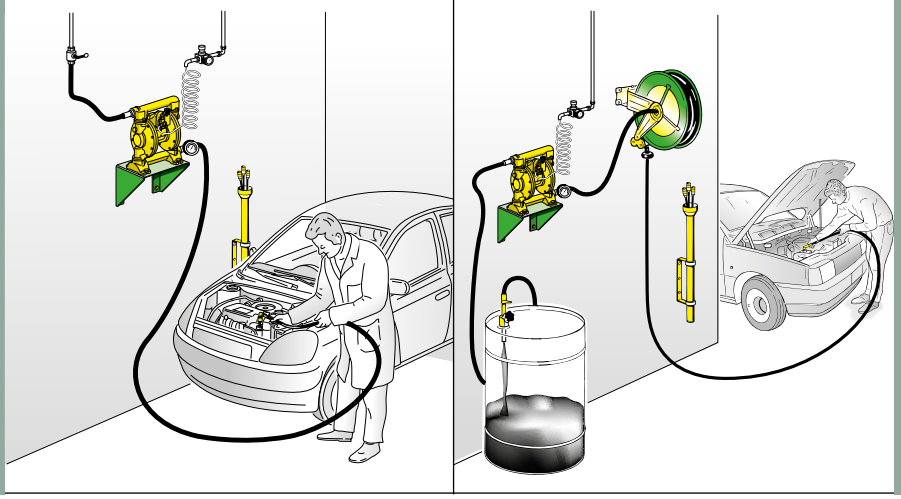
Drain-dispenser with wall-mounted station, operated by diaphragm pump Series 3/4”, equipped with:

- diaphragm pump P/N 32/2011NHH2-55 with vacuum gauge
- P/N 33590-55 wall bracket
- P/N 45540-55 probe ø 12
- 13’ suction/delivery hoses
- P/N 45560-55 set of probes
- P/N 45570-55 wall-mounted probe kit

Packaging - Weight	No. 1 2.8 ft³ lb 31

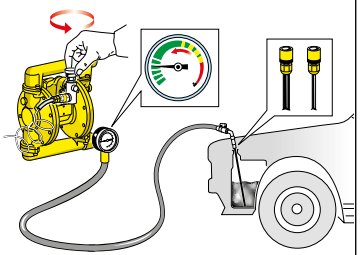
USES

Best use of the product is obtained by connecting it to a fixed system for direct draining of the extracted liquid in the storage tank



DETAILS AND ADVANTAGES

For correct draining, the pump must operate slowly.
To adjust the working speed, operate the flow regulator, “metering” the inlet air feed.
Make sure the vacuum gauge indicator is always in the optimum position



FLEXIBLE AND METAL PROBES ACCESSORIES

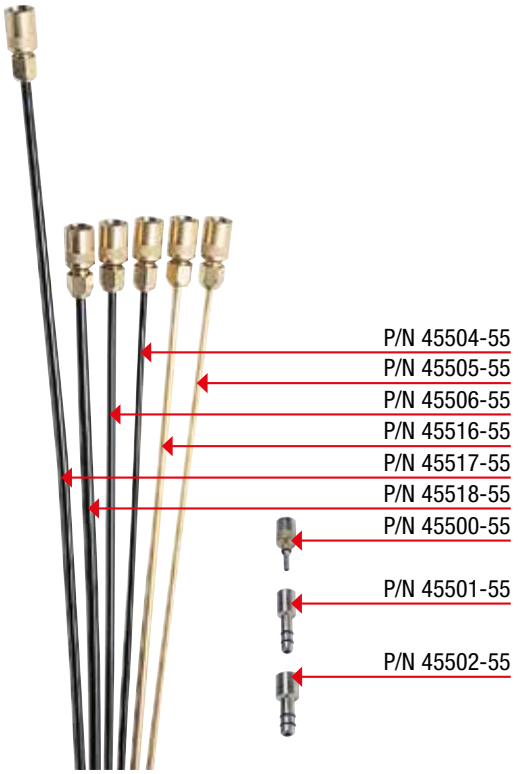
Standard probe series: All the drains used for changing engine oil come with a series of standard metal and flexible probes in addition to connections for engines with incorporated probes.

STANDARD PROBE SERIES P/N 45560-55

consisting of:

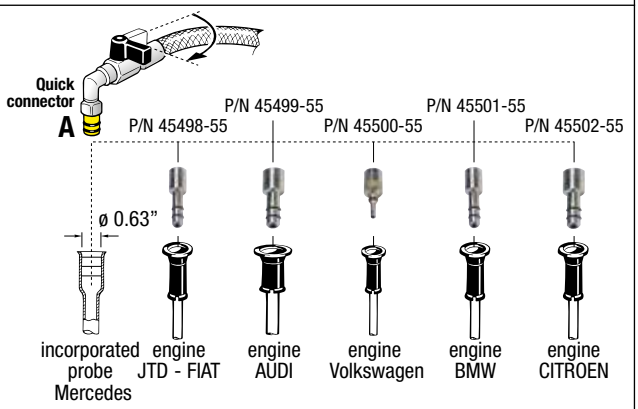
- P/N 45504-55 flexible probe ø 0.20” - length 27.5”
- P/N 45505-55 rigid probe ø 0.20” - length 27.5”
- P/N 45506-55 flexible probe ø 0.24” - length 27.5”
- P/N 45516-55 rigid probe ø 0.24” - length 27.5”
- P/N 45517-55 flexible probe ø 0.28” - length 39.4”
- P/N 45518-55 flexible probe ø 0.32” - length 27.5”
- P/N 45500-55 connection for incorporated probes Volkswagen
- P/N 45501-55 connection for incorporated probes BMW
- P/N 45502-55 connection for incorporated probes Citroen

Note: the probes can be supplied separately



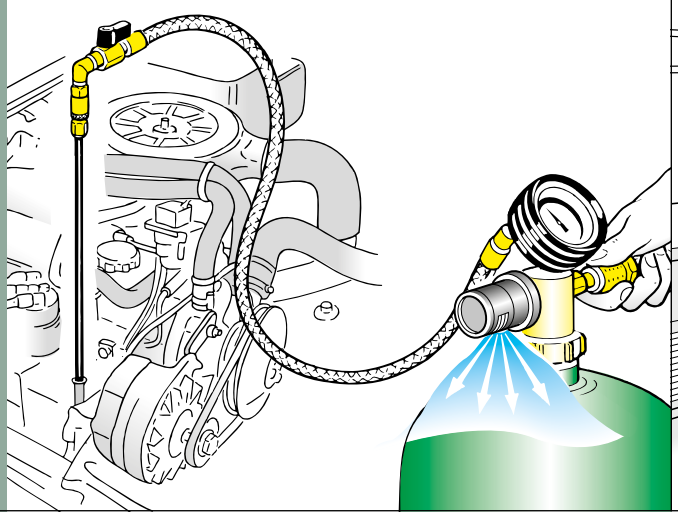
CONNECTORS FOR INCORPORATED PROBES

- for Mercedes cars connect the quick-release connector **(A)** of the oil drain directly to the probe incorporated in the engine.
- for JTD Fiat Group cars: P/N 45498-55
- for Audi cars: P/N 45499-55
- for Volkswagen cars: P/N 45500-55
- for BMW cars: P/N 45501-55
- for Citroen cars: P/N 45502-55

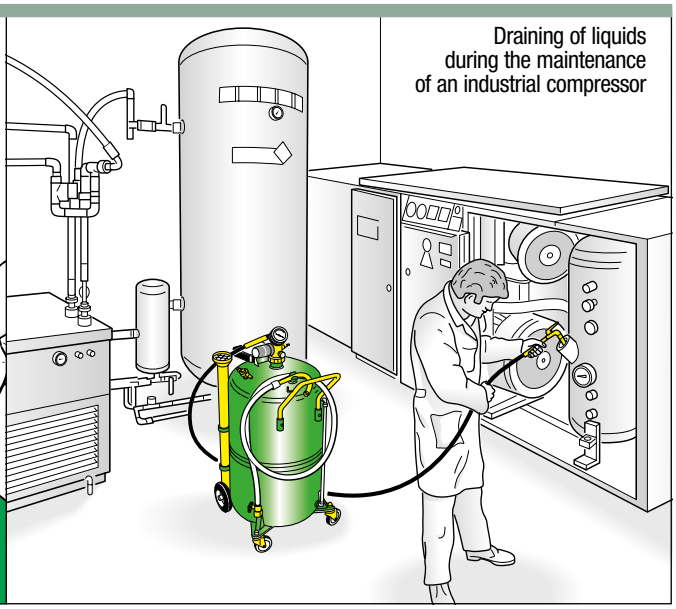


USES

Suitable for draining waste oil on motorcycles, trucks, tractors, heavy-duty vehicles



Draining of liquids during the maintenance of an industrial compressor



FLEXIBLE AND METAL PROBES ACCESSORIES

Probes supplied on request: Non-standard probes available by request. Indicated for vehicles requiring a longer probe for draining the oil from the bottom of the sump.

PROBES SUPPLIED ON REQUEST

- P/N 45515-55 flexible probe ø 0.20” - length 39.4”
- P/N 45526-55 flexible probe ø 0.24” - length 59.1”
- P/N 45527-55 flexible probe ø 0.28” - length 59.1”
- P/N 45528-55 flexible probe ø 0.28” - length 78.8”
- P/N 45538-55 flexible probe ø 0.32” - length 59.1”
- P/N 45539-55 flexible probe ø 0.32” - length 78.8”
- P/N 45540-55 special flexible probe ø 0.47” - length 27.5”

EXAMPLE OF USES IN A WORK-SHOP