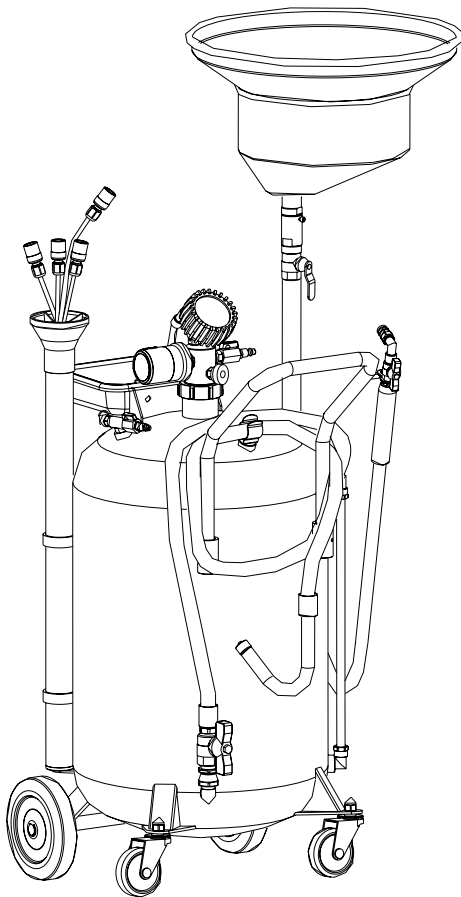


Portable oil drain/extractor, self extracting

Model 3639



*Indicates change

Date of issue	December 2015
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Read manual prior to installation or use of this product. Keep manual nearby for future reference.

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Safety

Read and carefully observe this operating instruction before operating or troubleshooting the system.

The system must be installed, maintained and repaired exclusively by persons familiar with the instructions.

Operate the portable oil drain and extractor only after safety instructions and this guide have been read and are completely understood.

Adequate personal protection must be used to prevent splashing of material on the skin or in the eyes.

Do not misuse, over-pressurize, modify parts, or use worn and/or damaged parts.

Do not use this product with flammable or caustic fluids.

Do not exceed 7 psi (0,5 bar) air pressure when pressurizing the tank.

Check each component regularly and replace if worn or damaged.

Verify all connections are tight.

Never modify or alter any component of this product.

Relieve pressure or vacuum before inspecting or servicing.

Any other use not in accordance with instructions will result in loss of claim for warranty or liability.

Failure to comply may result in personal injury and/or damage to equipment.

Explanation of signal words for safety



This is the safety alert symbol. It is used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



Safety instruction signs indicate specific safety-related instructions or procedures.



Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



Indicates a hazardous situation which, if not avoided will result in death or serious injury.



Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

Overview

This service page details the procedure that must be followed while operating the portable oil drain and extractor system.

All required parts, tools, and equipment needed to complete the assembly and operation of the portable oil drain and extractor system are defined and listed within this manual.

Review of the manual, parts list and nomenclature is recommended before starting operation.

General description and information

The portable oil drain/extractor system is designed to safely capture oil from engine crankcases with the use of a vacuum or by use of the funnel drain system.

An external air supply is required to run the extractor.

When the tank is full, the tank is emptied using air pressure.

Table 1 lists the specifications of the portable drain and extractor system.

Table 2 lists the sub assemblies of the extractor system.

Do not exceed maximum specification ratings.

Table 3 details the specifications for the different suction wands that are part of the extractor system.

Refer to **fig. IPB 1, page 7** for the illustrated parts breakdown of this assembly.

Inspection

Inspect this equipment for damage prior to use that would prevent the equipment from operating as intended.

Damaged equipment

Do not use this equipment if it appears to be damaged, badly worn or cannot be operated as directed by this user manual.

Any other use not in accordance with instructions will result in loss of claims for warranty and liability

A listing of authorized warranty and service centers is available upon request.

Table 1

Specifications

Tank size	Holding capacity	Suction rate ¹⁾	Pressure relief valve	Air pressure for vacuum	Maximum pressure for emptying
24 U.S. gal. (91 liters)	16 U.S. gal. (61 liters)	1.5 U.S. gal./min. (0,4 liters/min.)	14 psi (1 bar)	100 psi (7 bar)	7 psi (0,5 bar)

¹⁾Waste oil temperature at a minimum of 158 °F (70 °C) with a 0.24 in. (6 mm) diameter wand.

Table 2

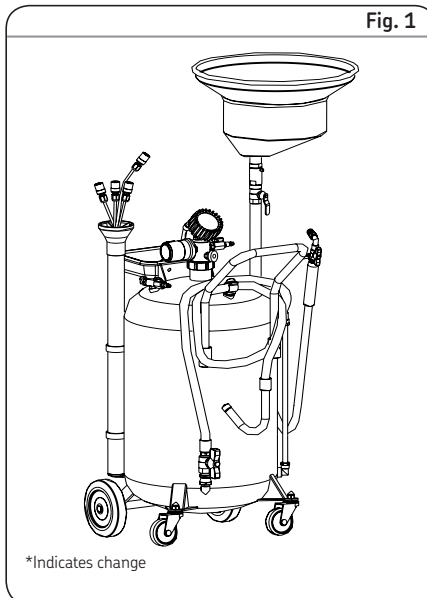
Specifications

Level gauge	Gallons and liters
Tool tray	
Six suction wands	Refer to table 3
Suction hose	79 in. (2 m)
Two adapters	Refer to table 3
Discharge hose	79 in. (2 m)
Vacuum gauge	
Muffler	
Caster	4 in. (101 mm), rubber tread, ball bearing
Wheel	6 in. (152 mm), rubber tread, ball bearing

Table 3

Suction wands		Suction adapters	
Material	Dimension	Material	Use on automobile
Copper	Ø 0.2 in. (5 mm) x 27.5 in. (700 mm)	Metal	BMW
Plastic	Ø 0.2 in. (5 mm) x 27.5 in. (700 mm)	Metal	VW
Plastic	Ø 0.24 in. (6 mm) x 27.5 in. (700 mm)		
Copper	Ø 0.24 in. (6 mm) x 27.5 in. (700 mm)		
Plastic	Ø 0.28 in. (7 mm) x 39.4 in. (1 000 mm)		
Plastic	Ø 0.32 in. (8 mm) x 27.5 in. (700 mm)		

Fig. 1



*Indicates change

Operation

Charging the tank (vacuum)

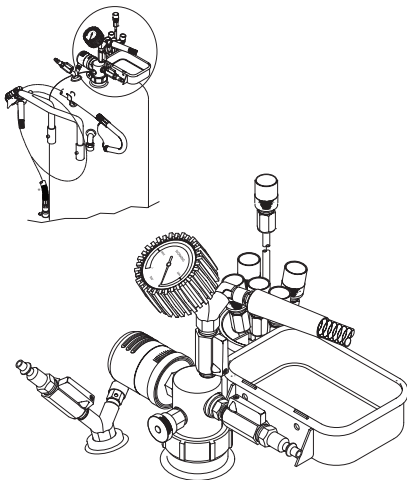
- 1 Release pressure from the tank by turning the valve (29) counterclockwise.



Notice

Pressure is relieved from tank by turning valve (29) completely counterclockwise.

Fig. 2



*Indicates change

- 2 Close ball valves (13) and (53) and close vent (3) by turning fully clockwise.
- 3 Open ball valves (21) and (25).
- 4 Set the air supply to a maximum of 100 psi (7 bar).
- 5 Connect air supply to air connection (26).



Notice

When vacuum gauge (18) reaches red zone, tank (39) is charged. Vacuum gauge (18) should reach red zone in approximately three minutes.

- 6 Monitor vacuum gauge (18) and close ball valve (25) when gauge (18) reaches red zone.

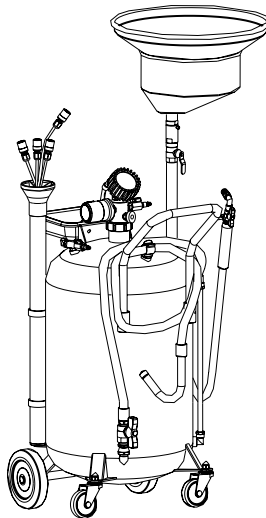


Notice

It is not necessary to disconnect extractor from air supply.

- 7 If desired, disconnect the air supply from the connector (26).

Fig. 3



*Indicates change

Oil extraction

- 1 Remove vehicle crankcase dipstick.
- 2 Insert the largest wand (7).



Notice

Verify level gauge (51) does not show tank as full and has enough room to accept fluid from vehicle, before evacuating fluid.

For best results, crankcase oil temperature must be at least 158 °F (70 °C).

- 3 Insert the suction hose connector (16) into the wand (7).
- 4 Open the ball valve (13) to evacuate the crankcase.
- 5 Close ball valve (13) once the crankcase is empty.

Emptying tank

- 1 Remove the plug (55) from the nozzle on the drain hose J-hook (54).
- 2 Position the drain hose J-hook nozzle (54) into an appropriate collection container.
- 3 Close valve (44), (21), (25) and (29) and turn vent (3) fully clockwise.



WARNING

If valve (44) is not closed, oils will shoot out of the funnel and spray the user.

- 4 Open ball valve (53).



WARNING

Do not exceed 7 psi (0,5 bar)
Failure to comply may result in serious personal injury.

- 5 Set the air supply to a maximum of 7 psi (0,5 bar).
- 6 Check fill gauge (49) and verify tank is empty.
- 7 Connect air supply to valve stem (3) using air chuck/tire inflator.
- 8 Remove air chuck from valve stem (3) when desired flow rate is achieved or if relief valve (37) opens.



Notice

If flow rate stops prior to the tank being empty, repeat step 7.

- 9 After tank is empty, reinsert the plug (55) into the nozzle (54) outlet.

Table 4

Parts list

Item no.	Description	Part no.	Quantity	Item no.	Description	Part no.	Quantity
1	Clip	278356	1	24	Nozzle	None	1
2	Screw	278356	1	25	Ball valve	278342	1
3	Valve core ⁵⁾	278569	1	26	Air connector		
4	O-ring 0.37 x 0.078 in. (9,5 x 2 mm) ^{1), 5)}	None	1	27	Muffler	278344	1
5	Valve body ⁵⁾	278569	1	28	O-ring 0.15 x 0.31 in. (4 x 8 mm) ¹⁾		
6	Wand holder	278357	1	29	Valve	278345	1
7	Wand 5 mm dia. (700 mm) copper	278363	1	30	O-ring 1.65 x 1.8 in. (42 x 47 mm) ^{1) or 8)}	None	1
	Wand 6 mm dia. (700 mm) copper	278364	1	31	Retaining ring ⁸⁾	None	1
	Wand 5 mm dia. (700 mm) plastic	278365	1	32	Ball ⁸⁾	None	
	Wand 6 mm dia. (700 mm) plastic	278366	1				
	Wand 8 mm dia. (700 mm) plastic	278367	1	33	O-Ring 0.35 x 0.55 in. (9 x 14 mm) ^{1) or 8)}	None	1
	Wand 7 mm dia. (1 000 mm) plastic	278368	1	34	Seat ⁸⁾	None	
				35	Tube ⁸⁾	None	1
	BMW adapter	278369	1	36	Tool tray	278346	1
	VW adapter	278370	1	37	Relief valve, 14 psi (1 bar)	278347	1
8	O-ring ¹⁾		kit	38	Y adapter	278341	1
	0.39 x 0.10 in. (9,9 x 2,6 mm)	BMW	2	39	Tank	None	1
	0.26 x 0.07 in. (6,7 x 1,8 mm)	VW	1	40	Extension funnel	278372	1
9	Plug ²⁾	None	1	41	Screen	278373	1
10	O-ring 0.23 x 0.35 in. (6 x 10 mm) ^{1), 2)}	None	2	42	Funnel and adapter	278374	1
11	Hose	278340	1	43	Swivel assembly	278375	1
12	Chain ²⁾	None	1	44	Ball valve 3/4 in. NPTF	278376	1
13	Ball valve 1/4 in. NPTF	278360	1	45	Extension tube	278380	1
14	Adapter 90° 1/4 in. BSP (internal) x 1/4 in. NPT (external)	278339	1	46	Drain hose assembly	278993	1
15	Handle with two screws ⁷⁾	278362	1	47	Wheel and screw ³⁾	278352	2
16	Connector ²⁾	278359	1	48	Caster kit ⁴⁾	278351	2
17	O-ring 0.51 x 0.62 in. (13 x 16 mm) ^{1), 2)}	None	2	49	Level gauge	278350	2
18	Vacuum gauge	278338	1	50	Elbow	278353	2
19	Adapter 90° 1/4 in. BSP	278379	1	51	Adapter	278353	2
20	Adapter, Y	278377	1	52	Adapter	278354	1
21	Ball valve 1/4 in. NPTF	278342	1	53	Ball valve 1/2 in. NPTF	278354	1
22	Collar	278378	1	54	Hose and nozzle	278348*	1
23	Adapter	276343	1	55	Plug ⁶⁾	278349	1
				56	O-ring ^{6) or 1)}	None	2

1) Seal kit 278337

2) Adapter and plug kit for evacuator hose 278359

3) Wheel kit 278352

4) Caster kit 278351

5) Inlet valve assembly 278569

6) Plug and chain kit for discharge hose 278349

7) Handle kit 278362 (handle and the two screws)

8) Vacuum body kit 278343

* Indicates change.

Lincoln industrial standard warranty

Standard limited warranty

Lincoln warrants the equipment manufactured and supplied by Lincoln to be free from defects in material and workmanship for a period of one (1) year following the date of purchase, excluding there from any special, extended, or limited warranty published by Lincoln. If equipment is determined to be defective during this warranty period, it will be repaired or replaced, within Lincoln's sole discretion, without charge.

This warranty is conditioned upon the determination of a Lincoln authorized representative that the equipment is defective. To obtain repair or replacement, you must ship the equipment, transportation charges prepaid, with proof of purchase to a Lincoln Authorized Warranty and Service Center within the warranty period.

This warranty is extended to the original retail purchaser only. This warranty does not apply to equipment damaged from accident, overload, abuse, misuse, negligence, faulty installation or abrasive or corrosive material, equipment that has been altered, or equipment repaired by anyone not authorized by Lincoln. This warranty applies only to equipment installed, operated and maintained in strict accordance with the written specifications and recommendations provided by Lincoln or its authorized field personnel.

This warranty is exclusive and is in lieu of any other warranties, express or implied, including, but not limited to, the warranty of merchantability or warranty of fitness for a particular purpose. Warranty on items sold by Lincoln, but not manufactured by Lincoln are subject to the warranty consideration, if any, of their manufacturer (such as hoses, hydraulic and electric motors, electrical controllers, etc.) Assistance in making such warranty claims can be offered as required.

In no event shall Lincoln be liable for incidental or consequential damages. Lincoln's liability for any claim for loss or damages arising out of the sale, resale or use of any Lincoln equipment shall in no event exceed the purchase price. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, therefore the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights. You may also have other rights that vary by jurisdiction.

Customers not located in the Western Hemisphere or East Asia: Please contact Lincoln GmbH and Co. Kg, Walldorf, Germany, for your warranty rights.

Special limited warranties

Special limited 2 year warranty SL-V series, single injectors–85772, 85782, and replacement injectors–85771, 85781

Lincoln warrants the SL-V Injector series to be free from defects in material and workmanship for two (2) years following the date of purchase. If an injector model (single or replacement) is determined to be defective by Lincoln, in its sole discretion, during this warranty period, it will be repaired or replaced, at Lincoln's discretion, without charge.

Special limited 5 year warranty series 20, 25, 40 bare pumps, pmv bare pumps, heavy duty and 94000 series bare reels

Lincoln warrants series 20, 25, 40 bare pumps, PMV bare pumps, heavy duty (82206), mini bench (81133, 81323), and all 94000 LFR series (single arm and dual arm) bare reels to be free from defects in material and workmanship for five (5) years following the date of purchase. If equipment is determined by Lincoln, in its sole discretion, to be defective during the first year of the warranty period, it will be repaired or replaced at Lincoln's discretion, without charge. In years two (2) and three (3), the warranty on this equipment is limited to repair with Lincoln paying parts and labor only. In years four (4) and five (5), the warranty on this equipment is limited to repair with Lincoln paying for parts only.

Special limited 5 year warranty– limited oil meters, limited fluid control valves, aod (air-operated diaphragm pumps)

Lincoln warrants the 712 series control valves, 912 series lube meters, electronic lube meters (980, 981, 982 series), our universal inline digital meters (812/813 series), and our AOD pump offering to be free from defects in material and workmanship for five (5) years following the date of purchase. If either is determined to be defective by Lincoln, in its sole discretion, during the warranty period, they will be repaired or replaced, at Lincoln's discretion, without charge.

Special DEF (diesel exhaust fluid) limited warranty

DEF products are warranted to be free from defects in material and workmanship for a period of one (1) year following the date of purchase. The following exceptions to the standard warranty period are in effect:

- **85700-30/85700-50 DEF hose reels (bare reel only),** 277251/277252 AC DEF pumps, and 277256 and 277257 DEF meters are warranted for two (2) years from date of purchase.
- **85623 DEF AOD (air operated diaphragm) pumps** are covered under the standard five (5) year AOD pump warranty.

If either is determined to be defective by Lincoln, in its sole discretion, during the warranty period, they will be repaired or replaced, at Lincoln's discretion, without charge.

Lincoln Industrial contact information

To find Lincoln Industrial's nearest service center call the following number; customer service 314-679-4200 (international number 01-314-679-4200) or you may also use our website www.lincolnindustrial.com

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