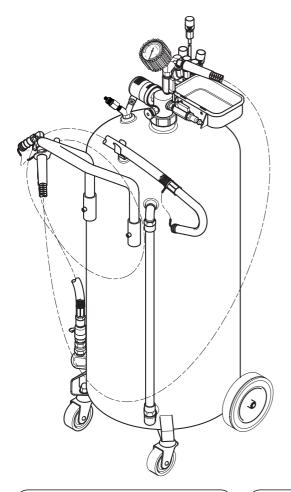
Assembly and operations guide



# Portable oil extractor, self-evacuating

Model 3637



<i>(</i>		
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### 🔺 DANGER

Read manual prior to installation or use of this product. Keep manual nearby for future reference. Failure to follow instructions and safety precautions may result in death or serious injury.



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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 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 extract flammable or caustic fluids. Do not exceed 7 psi (0,5 bar) air pressure when emptying this extractor.

Check each component regularly and replace if worn or damaged.

Verify all connections are tight.

Never modify or alter any component of this extractor.

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.

### $oldsymbol{A}$ safety instruction

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.

#### A WARNING

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

#### ▲ CAUTION

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 extractor system.

All required parts, tools, and equipment needed to complete the assembly and operation of the 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 extractor system is designed to safely capture oil from engine crankcases with the use of a vacuum.

An external air supply is required to run the extractor.

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

**Table 1** lists the specifications of theportable extractor system.

Table 2 lists the sub assemblies of theextractor system.

Do not exceed maximum specification ratings.

**Table 3** details the specifications for thedifferent suction wands that are part of theextractor 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.

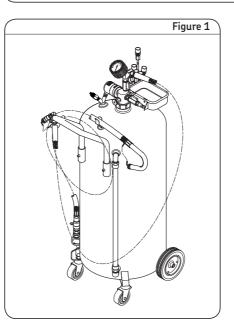
Any other use not in accordance with instructions will result in loss of claims for warranty and liability

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

					Table 1			
Specifications								
Tank size	Holding capacity	Suction rate <sup>1)</sup>	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 <i>bar</i> )	7 psi (0,5 bar)			
<sup>1)</sup> Waste oil temperature at a minimum of 158 °F (70 °C) with a 0.24 in. (6 <i>mm</i> ) diameter wand.								

		Table 2
Specifications		
Tank Level gauge Tool tray	24 U.S. gal. (91 liters) Gallons and liters	
Six suction wands Suction hose Two adapters	Refer to <b>table 3</b> 79 in. (2 m) Refer to <b>table 3</b>	
Discharge hose Vacuum gauge Muffler	79 in. (2 <i>m</i> )	
Caster Wheel	4 in. ( <i>101 mm</i> ), rubber tread, ball bearing 6 in. ( <i>152 mm</i> ), rubber tread, ball bearing	

				Table 3
Suction wands		Suction adapters		
Material	Dimension	Material	Use	
Copper Plastic Plastic	Ø 0.2 in. (5 mm) x 27.5 in. (700 mm) Ø 0.2 in. (5 mm) x 27.5 in. (700 mm) Ø 0.24 in. (6 mm) x 27.5 in. (700 mm)	Metal Metal	BMW VW	
Copper Plastic Plastic	Ø 0.24 in. (6 mm) x 27.5 in. (700 mm) Ø 0.28 in. (7 mm) x 39.4 in. (1 000 mm) Ø 0.32 in. (8 mm) x 27.5 in. (700 mm)			

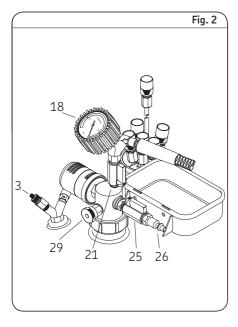


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# Operation

# Charging the tank (vacuum)

- **1** Release pressure from the tank by turning the valve (29) counterclockwise.
- 2 Close ball valves (13) and (51).
- 3 Open ball valves (21) and (25).



Notice

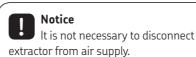
Pressure is relieved from tank by turning valve (29) completely counterclockwise.

- 4 Set the air supply to a maximum of 100 psi (7 bar).
- 5 Connect air supply to air connection (26).

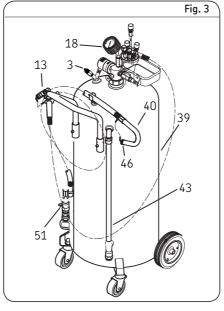


When vacuum gauge (18) reaches red zone, tank (39) is charged. Vacuum gauge (18) should reach red zone in approximately three minutes.

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



7 Disconnect the air supply from the connector (26).



# **Oil** extraction

**1** Remove vehicle crankcase dipstick.

2 Insert the largest wand (7).



Verify level gauge (43) 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 (41) from the nozzle on the drain hose J-hook (40).
- **2** Position the drain hose J-hook nozzle (40) into an appropriate collection container.
- 3 Close valves (13), (25), and turn valve (29) fully clockwise.
- 4 Open ball valve (51)

#### 

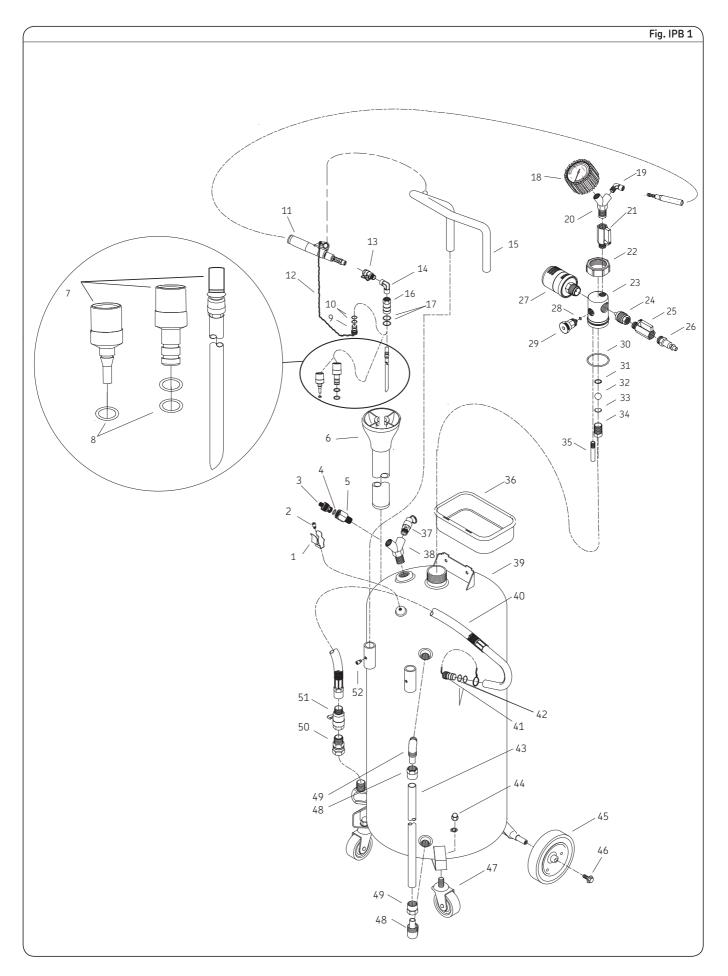
Do not exceed 7 psi (0,5 bar) Failure to comply may result in serious personal injury.

- 5 Turn valve (3) clockwise to close vent.
- 6 Set the air supply to a maximum of 7 psi (0,5 bar).
- 7 Connect air supply to valve stem (3) using air chuck/tire inflator.
- Continue to add air aupply until a 8 desired flow rate is achieved (not to exceed 7 psi (0,5 bar), then remove air supply.
- 9 Check level gauge (43) and verify tank (39) is empty.
- **10** If flow from discharge hose stops, repeat steps 7 to 9 until tank is empty.
- **11** After tank is empty, reinsert the plug (41) into the nozzle (40) outlet.

							Table 4
Parts list							
Item no. Description		Part no.	Qty	ltem no.	Description	Part no.	Qty
1 2 3	Clip Screw Valve core <sup>7)</sup>	278356 278356 278569	1 1 1	24 25 26	Nozzle Ball valve Air connector	None 278342 None	1 1 1
4 5 6	0-ring 0.37 x 0.07 in. (9, <i>5 mm x 2,0 mm</i> ) <sup>1) or 7) Valve body<sup>7)</sup> Container</sup>	None None 278457	1 1 1	27 28 29	Muffler O-ring 0.15 x 0.31 in. (4 <i>x 8 mm</i> ) <sup>1)</sup> Valve	278344 None 278345	1
7	Wand Ø5mm, 700mm copper Wand Ø6mm, 700mm copper Wand Ø5mm, 700mm plastic Wand Ø6mm, 700mm plastic	278363 278364 278365 278366	1 1 1 1	30 31 32	0-ring 1.65 x 1.8 in. (42 x 47 mm) <sup>1), 6)</sup> Retaining ring <sup>6)</sup> Ball <sup>6)</sup>	None None None	1 1 1
	Wand Ø8 mm, 700 mm plastic Wand Ø7 mm, 1 000 mm plastic BMW adapter VW adapter	278367 278368 278369 278370	1 1 1 1	33 34 35	0-Ring 0.35 x 0.55 in. (9 x 14 mm) <sup>1), 6)</sup> Seat <sup>6)</sup> Tube <sup>6)</sup>	None None None	1 1 1
8	0-ring <sup>1)</sup> 0.39 x 0.10 in. (9,9 <i>x 2,6 mm</i> ) 0.26 x 0.07 in. (6. <i>7 x 1,8 mm</i> )	BMW VW	kit 2 1	36 37 38	Tool tray Relief valve, 14 psi (1 bar) Y adapter	278346 278347 278341	1
9 10 11	Evacuator hose plug and chain kit <sup>2)</sup> O-ring 0.23 x 0.35 in. (6,9 x 1,8 mm) <sup>1), 2)</sup> Evacuator hose	278359 None 278340	1 2 1	39 40 41	Tank Discharge hose and nozzle Discharge plug and chain kit	None 278348 278349	
12 13 14	Chain <sup>2)</sup> Ball valve ¼ in. NPTF Adapter 90° ¼ in. BSP (internal) x ¼ in. NPT (external)	None 278360 278339	1 1 1	42 43 44	0-ring 0.47 x 0.63 in. ( <i>12 x 16 mm</i> ) <sup>1), 8)</sup> Level gauge Acorn nut <sup>4)</sup>	None 278350 None	2 1 2
15 16 17	Handle Connector <sup>2)</sup> O-ring 0.51 x 0.070 in. (13,2 mm x 1,8 mm) <sup>1). 2)</sup>	278362 278359 None	1 1 1	45 46 47	Wheel <sup>3)</sup> Screw <sup>3)</sup> Caster kit <sup>4)</sup>	278352 None 278351	2
18 19 20	Vacuum gauge Adapter 90°1/4 in. BSP Adapter, Y	278338 278379 278377	1 1 1	48 49 50	Elbow Ring Adapter	278353 278353 278534	2
21 22 23	Ball valve ¼in. NPTF Ring nut Adapter <sup>6)</sup>	278342 None None	1 1 1	51 52	Ball valve ½ in. NPTF Screw <sup>5)</sup>	278534 278362	

Seal kit 278337
Plug, chain and connector kit (evacuator hose) 278359
Wheel kit 278352
Caster kit 278351
Handle kit 278362
Adapter and seat assembly 278343
Air inlet vent assembly 278569
Plug and chain kit (discharge hose) 278349

6



# 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 warrantylimited 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.

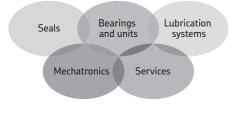
If either is determined to be defective by Lincoln, in its sole discretion, during the warranty period, they will be repaired or replaced, at Lincoln's discretion, without charge.

#### 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 This page intentionally left blank.

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