

Balcrank[®]

Air Operated Oil Evacuators

Model #4140-025



Model #4140-024





Thoroughly read and understand this manual before installing, operating or servicing this equipment.


**OPERATION, INSTALLATION,
MAINTENANCE AND REPAIR GUIDE**


General Safety


THOROUGHLY READ AND UNDERSTAND THIS MANUAL BEFORE INSTALLING, OPERATING, OR SERVICING THIS EQUIPMENT.


	<h2>Caution</h2>
<p>Because this pressurized dispenser controls pressurized oil delivery, the following safety precautions should be observed:</p>	
<ol style="list-style-type: none">1) Check equipment regularly and repair or replace worn and damaged parts. Be sure fluid connections are tight before operating this equipment.2) Never alter or modify any parts of this product; doing so may cause damage and/or personal injury.	

	<h2>IMPORTANT</h2>
<p>Read these safety warnings and instructions in this manual completely, before installation and start-up of the dispenser. It is the responsibility of the purchaser to retain this manual for reference. Failure to comply with the recommendations stated in this manual could damage the dispenser and void factory warranty.</p>	

	<h2>WARNING</h2>
<p>DANGER: Not for use with fluids that have a flash point below 100°F (38°C, examples: gasoline , alcohol). Sparking could result in an explosion which could result in death.</p>	

	<h2>WARNING</h2>
<p>Always use the following Pressure Relief Procedure whenever shutting off, cleaning, or in any way checking or servicing the dispenser:</p> <ol style="list-style-type: none">1) Disconnect air source from dispenser.2) Pull ring on pressure relief valve, hold until air pressure gage reads 0 psi.	

	<h2>WARNING</h2>
<p>This unit is equipped with a pressure relief valve. Do not remove/modify, or tamper with the valve in any way. Any tampering with the safety valve could result in overpressurization which could cause an explosion.</p>	

	<h2>WARNING</h2>
<p>Tank pressure limit 14 psi.</p> <p>Overpressurization can result in an explosion.</p>	

	<h2>WARNING</h2>
<p>Splashing hazard.</p> <p>Wear eye protection.</p>	

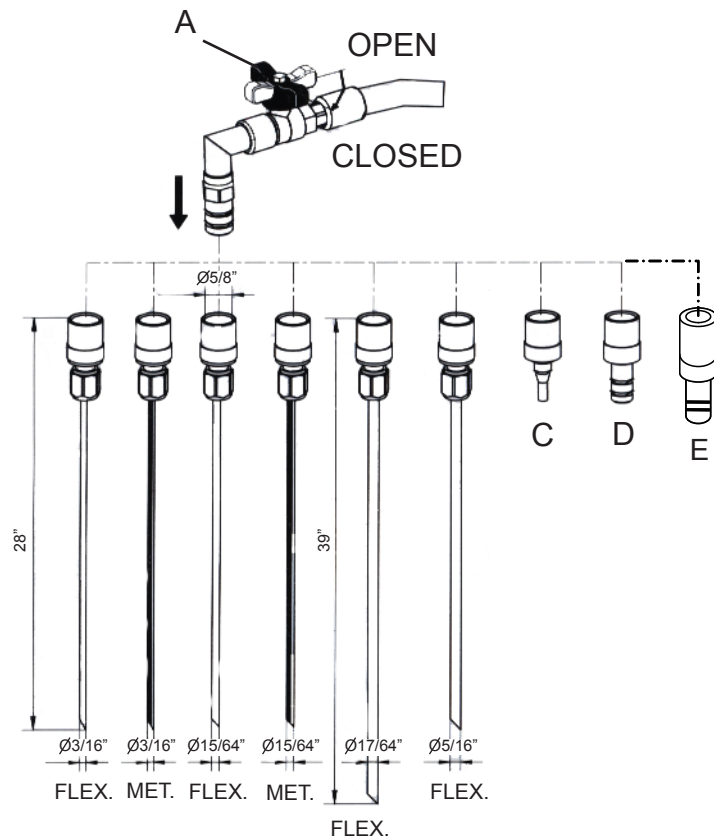
Product Description

The Air Operated Oil Evacuator is used to extract used oil and other compatible (or non-corrosive) fluids from any vehicle. It is ideal for cars, boats, motorcycles, and small engines. The vacuum-charged unit is completely portable and easy to use. Included are six evacuation wands (metal and flexible). The evacuation wands are equipped with quick-disconnect couplers. Adapters are included for BMW and Volkswagen (Mercedes adapter included with the 4140-025). The self-evacuating feature makes emptying clean and easy. The tank capacity is 17 gallons.

Some cars have a built-in oil evacuation wand. In this case, connect the coupler of the oil changer B directly to the probe. For other makes of car (Volkswagen-BMW) equipped with a built-in probe having a different opening, connector (C-BMW, D-Volkswagen, E-Mercedes) must be used.

Specifications

Tank Capacity.....	17 gallons
Max. draining capacity.....	12 gallons
Air pressure for vacuum.....	100 psi
Depressurization time.....	2-2.5 minutes
Noise level.....	75 Dba
Suction rate.....	0.4-0.5 gpm
Suction hose.....	6.5 ft
Draining hose.....	6.5 ft
Dimensions.....	23 x15 x 34



Assembly

Fig. 1: Attach the venturi group to the tank. Make sure the gasket is properly positioned. Tighten the ring nut J using a suitable wrench.

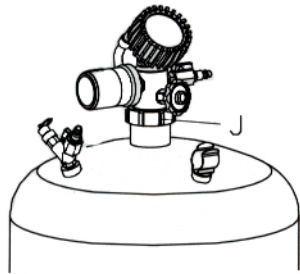


Figure 1

Fig. 2: Insert the handle H into its seat and secure it with the screws provided. Position the tool tray G with a snap onto the support on the top of the tank.

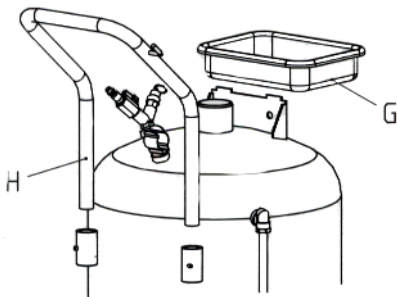


Figure 2

Fig. 3: Connect the drain hose with the ball valve and adapter I on the base of the units tank. Assemble wheels and casters to base of tank.

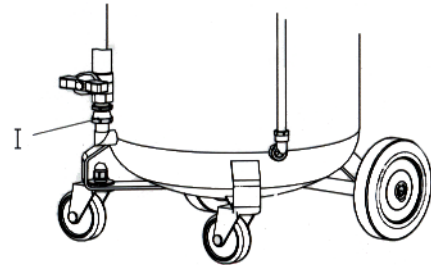


Figure 3

Fig. 4: Slide the carrying tube for the evacuation wands through the rings on the side of the tank.

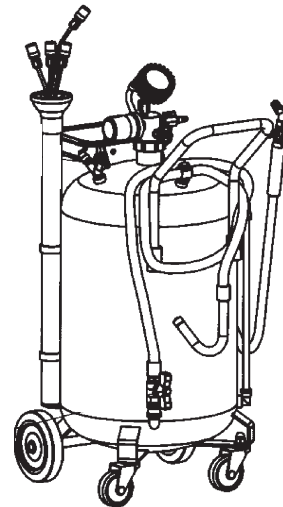


Figure 4

Charging the System

Fig. 5: Open valve K completely by turning it counter clockwise. Close the suction valve (ball valve) A. Close the air valve (ball valve) L. close the drain valve (ball valve) B.

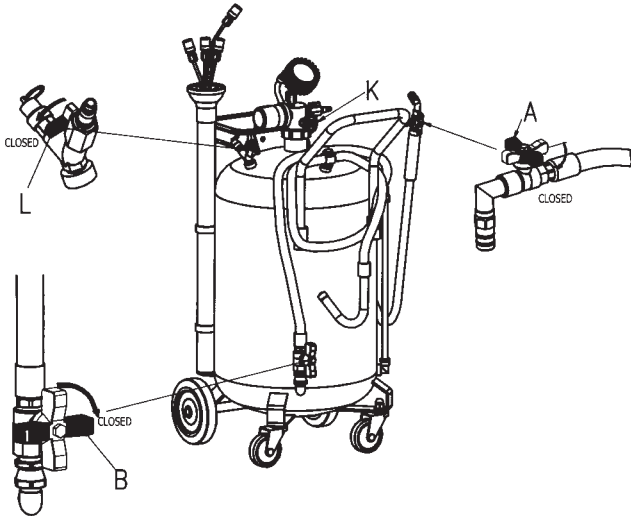


Figure 5

Fig. 6: Connect compressed air hose with pressure set at 100 psi (7 bar) to ball valve C. Open ball valve C and valve F. Air will flow out from the muffler E. When the dial on the vacuum gauge approaches the red field (after 2.5-3 minutes), close ball valve C. Shut off compressed air. The unit is now depressurized and ready for use.

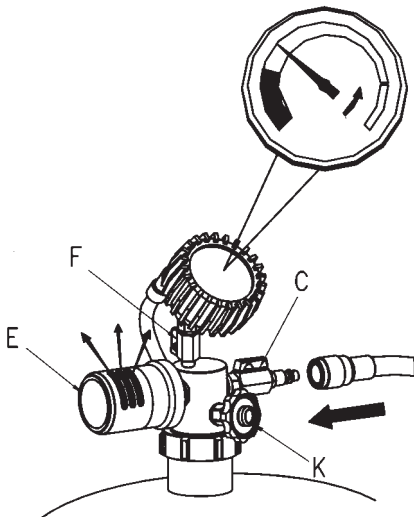


Figure 6

Operation

Oil should always be removed when it is hot (160°-175° F). The suction capacity of the unit is equal to 2/3 of its reservoir capacity.

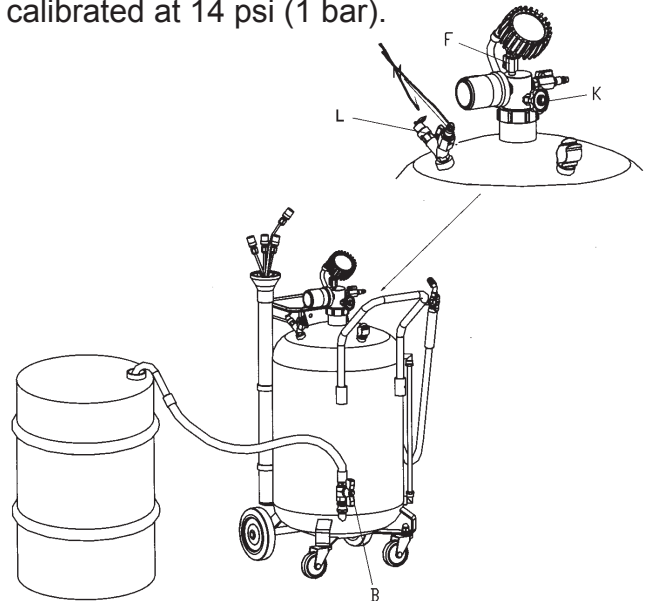
With the engine still warm, remove the dipstick and insert the largest possible probe as far down as it will go. Connect the suction hose to the probe. Open ball valve A, keeping the probe dipped in the oil. As soon as the sump is emptied, close ball valve A. It is also possible to evacuate hot waste oil while keeping the air connected to the evacuation unit.

! NOTE: Some suction wands (i.e. - Mercedes style) create a seal which may cause slow rates of suction; Remove oil fill cap in these situations to achieve normal flow rate.

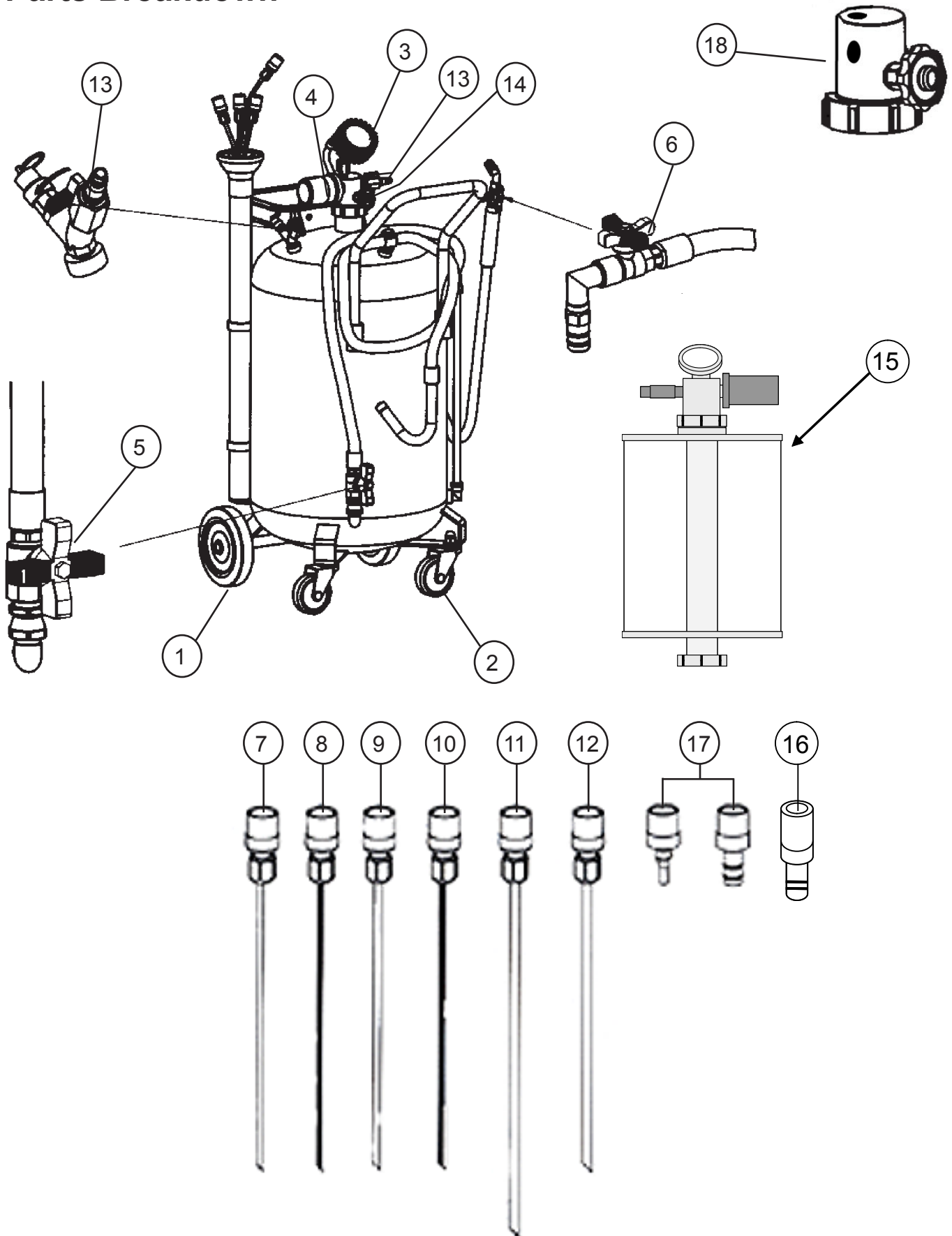
Emptying

IMPORTANT - Make sure the valves K and F are closed. Open valve B.

Connect compressed air hose with pressure set at 7 psi (0.5 bar) to valve L. Open ball valve L until all of the fluid has transferred from the unit's storage tank. The unit storage tank has been equipped with a safety valve calibrated at 14 psi (1 bar).



Parts Breakdown



Parts List

ITEM	PART #	DESCRIPTION	QTY	4140-024	4140-025
1	831899	Wheel	2	x	x
2	831900	Caster	2	x	x
3	831901	Pressure Guage	1	x	x
4	831902	Muffler	1	x	x
5	831903	Ball Valve, 1/2"	1	x	x
6	831904	Ball Valve, 1/4"	1	x	x
7	831905	Metal Wand, 3/16"	1	x	x
8	831906	Flexible Wand, 3/16"	1	x	x
9	831907	Metal Wand, 15/64"	1	x	x
10	831908	Flexible Wand, 15/64"	1	x	x
11	831909	Flexible Wand, 17/64"	1	x	x
12	831910	Flexible Wand, 5/16"	1	x	x
13	831911	Ball Valve, Air, Blue Handle	3	x	x
14	831912	Knob	1	x	x
15	832340	Clear Dome Conversion Kit	1		x
16	832315	Tip Assembly, Mercedes Adapter	1		x
17	832512	Tip Assembly, BMW & VW Adapter	1	x	
18	832568	Valve Assembly with knob	1	x	x

Revision Log:

Rev. A - Added parts list

Rev. B - Added Note on page 5

Rev. C - Added model 4140-025

Rev. D - Page 3 para. 2, items C & D corrected mis-identification of adapters.

Added 832572 & 832568

Balcrank Lubrication Equipment Warranty Statement

All Balcrank equipment sold by authorized Balcrank distributors is warranted to their original customer to be free from defects in materials and workmanship for a period of one year from the date of sale to that customer. Selected Balcrank equipment carries warranty terms for a more extended period as defined in the Balcrank Lubrication Equipment & Accessories User Price List, wherein a "lifetime" warranty represents a warranty period of thirty years. Within the initial one-year warranty period, Balcrank will repair or replace all Balcrank equipment determined by Balcrank to have defective materials or workmanship. For equipment carrying more extended warranties, Balcrank will repair or replace the product including parts and labor during the first full year and will provide parts only for the remainder of the warranty period.

This warranty applies only to equipment installed and operated according to applicable Balcrank Service Bulletins and Installation Instructions.

Any equipment claimed to be defective must be returned, freight prepaid, to an Authorized Balcrank Service Center (ASC). Upon receiving candidate warranty equipment from a customer, ASC will: 1) diagnose to determine the warrantable condition of the equipment, 2) submit, prior to repair or replacement, a request to Balcrank for warranty authorization, then 3) in cooperation with Balcrank, proceed with repair locally or forward the equipment to Balcrank and obtain replacement. If the part(s) or equipment items are found defective upon inspection by Balcrank, they will be repaired or replaced, and then will be returned to the ASC. If Balcrank finds the claimed part(s) or equipment not to be defective, the ASC will receive written authorization from the original customer, and then repair them for a reasonable charge to the customer, which will include all applicable parts, labor, and return transportation costs.

Optionally, the customer may submit certain eligible products directly to Balcrank for warranty return by using Balcrank Lubrication Equipment Direct Service Warranty Procedure. Eligible products are defined in the Balcrank Lubrication Equipment & Accessories User Price List. Refer to the Balcrank web site www.balcrank.com for a copy.

Any equipment returned to Balcrank must have the Warranty Service Claim number (WSC#) clearly marked on the outside of the carton. Balcrank's sole responsibility is for defects in material and workmanship, and Buyer's sole and exclusive remedy hereunder, shall be limited to repair or replacement of the defective part or equipment.

This warranty does not cover, nor shall Balcrank be liable for repair or replacement of parts or equipment resulting from general wear and tear through use, or damage or failure caused by improper installation, abuse, misapplication, abrasion, corrosion, insufficient or improper maintenance, negligence, accident, alteration, or substitution of non-Balcrank parts.

Furthermore, the Warranty for Lubrication Equipment and Accessories does not cover the following specific conditions:

- Failure or damage to equipment caused by dirt or debris in compressed air lines and fluid lines. This includes, but is not limited to, clogged inlet filters, strainers, or regulators; fluid meters; control handles; fluid tips; and valves.
- Failure of normal wear parts including but not limited to: o-rings, packings, seals and valves unless originally improperly installed by the factory.
- Products placed in applications for which their use was not intended. Examples include but are not limited to Lubricant pump being used to pump solvents, or placing equipment intended strictly for indoor use outdoors
- Damage to equipment resulting from operation above and beyond Balcrank's recommendations.
- Leaks at air and fluid fittings and connections.
- Damage caused by thermal expansion whenever adequate pressure relief was not included in the system.
- Loose suction tubes on pumps.
- Incorrect hose reel spring tension, requiring adjustment.

THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL BALCRANK BE LIABLE FOR ANY SPECIAL, CONSEQUENTIAL, OR OTHER DAMAGES OF SIMILAR NATURE, INCLUDING BUT NOT LIMITED TO LOST PROFITS, LOST PRODUCTION, PROPERTY DAMAGE, PERSONAL INJURY, WHETHER SUFFERED BY BUYER OR ANY THIRD PARTY, IRRESPECTIVE OF WHETHER CLAIMS OR ACTIONS, LEGAL OR EQUITABLE, FOR SUCH DAMAGES ARE BASED UPON CONTRACTS, WARRANTY, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE. ANY CLAIM OR ACTION FOR BREACH OF WARRANTY MUST BE BROUGHT WITHIN TWO (2) YEARS FROM THE DATE OF SALE TO THE ORIGINAL CUSTOMER.

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