

Description

The EL Series O30080 Digital Oil Meter is a cost effective solution for all your intermittent or seasonal oil transfer and metering work. The meter of this easy to use control valve feature a 5 digit liquid crystal display, a low battery indicator in addition to Rest and Move buttons.

Accurate to the second decimal place, the meter is powered by one easily and quickly replaceable 3V CR2 battery with an expected working life of around 8 years corresponding to approximately 500,000 litres.

The EL Series O30080 has a comfortable ergonomic grip, is easy to operate and features a lock on device for your convenience.

Technical Details

Item No.	030080
Inlet connection	1/2" BSP
Fluid Range	1-35L/min
Pressure Range	70-725psi (5-50Bar)
Temperature	Min. -10°C Max. 60°C
Precision	--
Viscosity	8-5000mps
Power source	--
Rigid tube	-
Flexible hose	•
Manual tip	-
Automatic tip	•
Digital meter	-





OWNER'S TECHNICAL MANUAL

Digital Oil Meter

O30080

Installation

1. Control valve is 1/2" oil inlet, when connecting with hose fitting, please remember to apply the Teflon for better seal.

Meter

1. 5-digital liquid crystal display for both volume each time and total
2. 4 units: L, GAL, PT and QT
3. Accurate to the second decimal place
4. Low battery indicator
5. 2 buttons: "Move", "Reset"



Attention: Do not apply the meter as a measuring tool for commercial trading

Details of Operation

1. Before putting into operation

- Check the technical data of the installation match with those of the lube meter. For example connections, pressure, flow range and medium. Use the formula: Proper correction factor = (actual value / displayed value) x current correction factor to decide the right connection factor, then set the proper correction factor (refer to 3. Button usage part)
- Once the meter has been installed, please make sure that no air pressure shocks or particles can damage the meter
- Please check all connections to avoid leakage

2. Change the battery

- Battery type: Lithium CR2, 3V/1400mAh
- Last for 8 years of operation, corresponds to approximately 500,000 litres
- Change the battery like below when the battery signal is flashing on the display
- Remove the protector cover, unscrewing the screw
- Change the battery and screw the lid on again

3. User buttons

- The turbine digital meter features two buttons (MOVE and RESET) which individually perform two main functions and together, other secondary functions

The main functions performed are:

- For the reset key, resetting the partial Register and reset table total (reset total)
- For the move key, entering instrument calibration mode
- Used together, the two keys permit entering configuration mode

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4. Battery replacement

When replacing the battery, please open the cover, remove the plug and replace the battery.

LCD Display

KEY

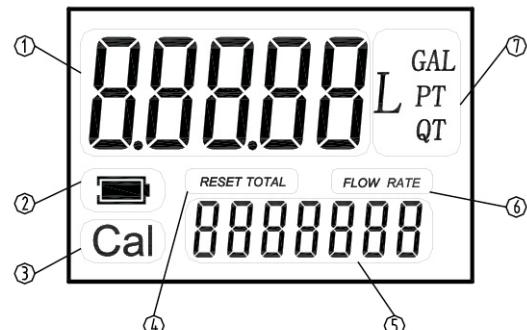
- ① Partial register (5 figures with moving comma from 0.1 to 99999)
Indicating the volume dispensed since the reset button was last pressed.
- ② Indication of battery charge
- ③ Indication of calibration mode
- ④ Indication of resetting present total to Zero
- ⑤ Total register
- ⑥ Indication of flow rate mode
- ⑦ Indication of unit of measurement of partial:

L = Litres

GAL = Gallons

PT = Pints

QT = Quarts



Daily Use

Button usage, calibration & measurement unit change

Reset the present total (See Fig. 1)

- 1) When the meter is on standby, press the RESET key.
- 2) The display shows all the segments.
- 3) The meter resets the present total already.

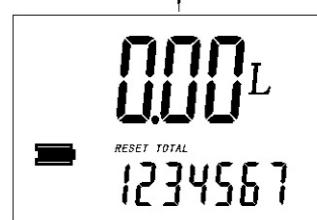
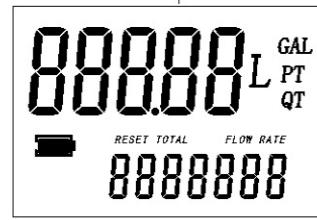
FIG. 1



Show current correction factor and general total (See Fig. 2)

Press MOVE and RESET together and hold for less than 3 seconds.
Value "1.4000" is the correction factor which can be reset; "1234567" is the general total which cannot be reset.

FIG. 2





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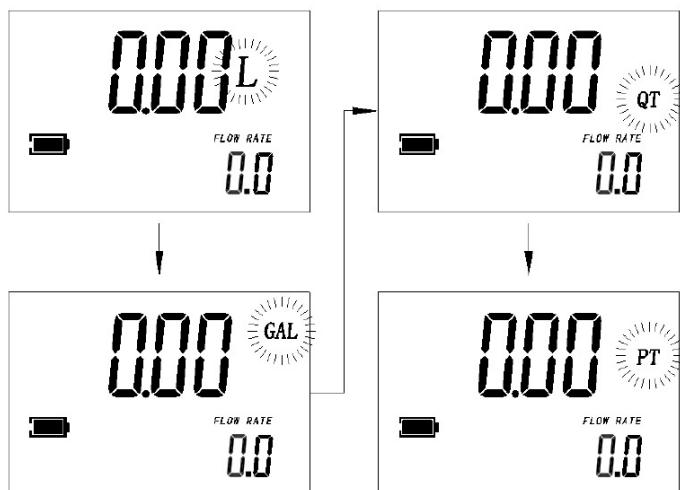
O30080

Measurement unit change (See Fig. 3)

Press MOVE and RESET together and hold for more than 3 seconds.

Zone 7 on the display is the current unit. Press RESET to chose a different measurement unit and then press MOVE and hold for more than 3 seconds to confirm.

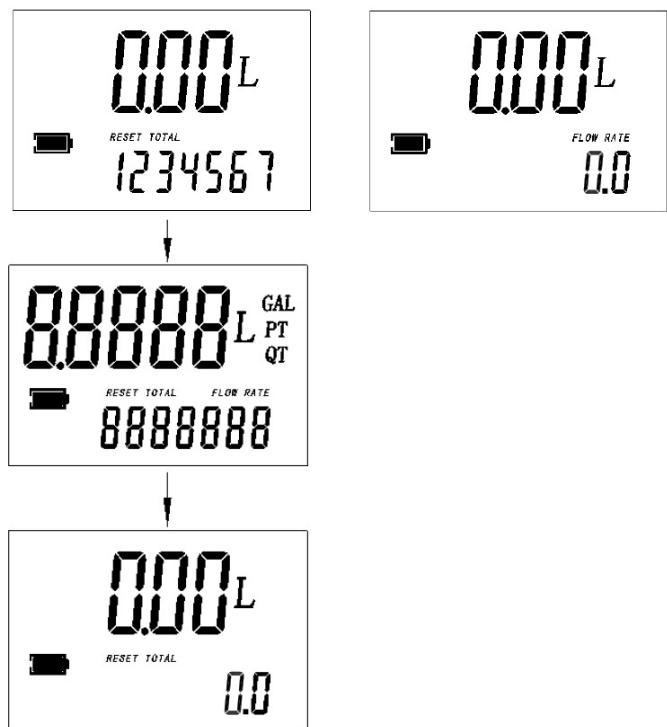
FIG. 3



Reset the resettable total (See Fig. 4)

When the meter is on standby, press the RESET key for more than 3 seconds to reset the present total first.

FIG. 4



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Procedure for entering the correction factor directly

Carefully follow the procedure indicated below.

Formula: Proper correction factor = current correction factor × (actual value / display value)

Example: Actual value 20.75

Display value 18.96

Current correction factor 1.000

Proper correction factor $1.000 \times (20.75 / 18.96) = 1.000 \times 1.094 = 1.094$

1	Wait for the meter to go standby.	
2	Reset the resettable total.	
3	Press the MOVE key. Keep it pressed until it shows similar to the right image (the digit flash in ① zone), which means the meter is under the calibration mode.	
4	Press the RESET key to choose the right digit from 0 to 9. Press the MOVE key to start the next digit. So the digit of correction factor can be changed one by one.	
5	Make sure the correction factor is right, press the MOVE key. Keep it pressed until the indication of calibration mode quits and the factor is saved.	

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To modify the correction factor in field follow this procedure

1	Wait for the meter to go standby.	
2	Reset the resettable total.	
3	Start dispensing into a measuring glass. Stop dispensing when over 5 Litres of volume is reached, read out the actual value. The volume that is displayed on the LCD is the Display Value, not the Actual Value which may be slightly higher. For example, in the figure on the right, the Display Value is 18.96 while the Actual Value is 20.75.	
4	Press the MOVE key. Keep it pressed until it shows as the right fig., with the digit flashing in ① zone. Press the MOVE key to go the next digit so that the Actual Value can be input.	
5	Make sure the correction factor is right and then press the MOVE key. Keep it pressed until calibration is finished and the factor is save. The meter will then return to be on standby.	

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Usage Instruction

1. Start:

Turn on the trigger to make the oil transmission.



2. Keep the status:

Push the lock ahead, then the transmission can be kept when the trigger is released.

3. Finish:

- If the lock is not used, release your hand, the trigger will turn off and finish the transmission.
- If the lock is used, please turn on the trigger once again, the lock will stop working.

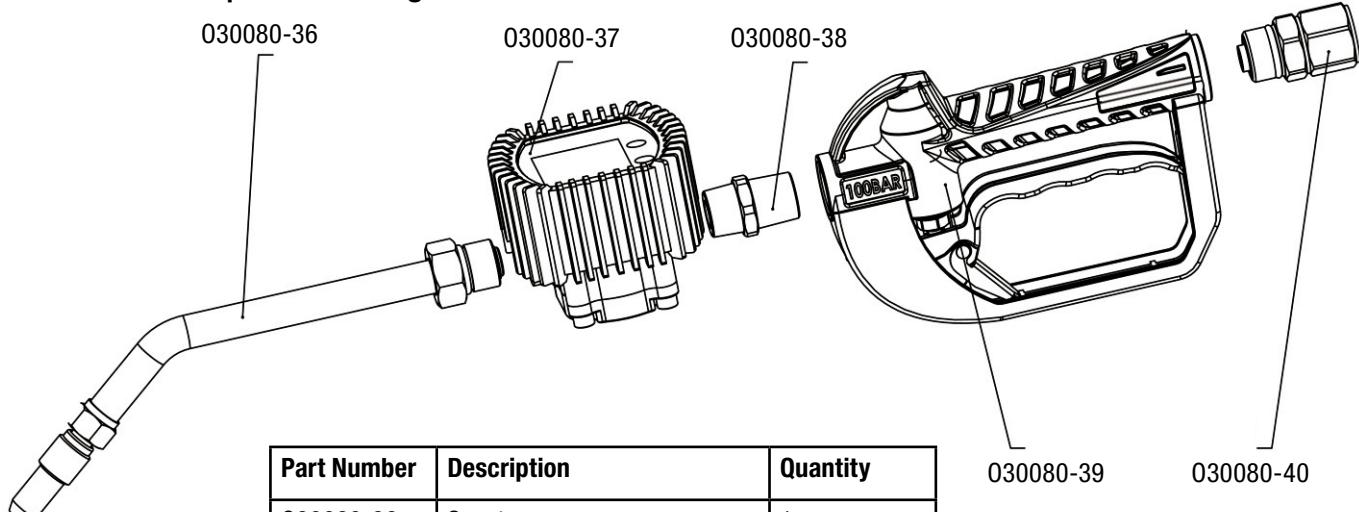
Then turn off the trigger, release your hand, the transmission will be finished.

Notes when using:

Cautions:

- For working condition, please refer to the specification parameter list. Temperature: -10°C~60°C.
- Medium: Lubricant Oil.

Oil control valve exploded drawing



Part Number	Description	Quantity
030080-36	Spout	1
030080-37	Meter	1
030080-38	Adapter	1
030080-39	Handle Body	1
030080-40	Swivel Fitting	1

Maintenance

If any problem, please contact your local Alemlube Service Centre.

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Trouble Shooting Guide

Relieve the pressure before you check or repair the dispensing valve. Be sure all other valves and controls and the pump are operating properly.

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the pressure relief procedure on page 3.

Problem	Problem	Solution
Slow or no fluid flow	Filter is clogged, or pump pressure is low, or shut-off valve is not fully open, or foreign materials jammed in the metering element	<ol style="list-style-type: none">1. Relief the pressure2. Loose swivel fitting, clean or replace the filter3. If the problem remains, contact your distributor for repair or replacement
Oil leaks from swivel	Swivel is loose	Torque the swivel. If the problem remains, contact your distributor for repair or replacement
	O-Ring is worn or damaged	Replace the O-Ring. If the problem remains, contact your distributor for repair or replacement
Oil drips from nozzle	Nozzle is damaged or obstructed	Inspect the nozzle for damage or obstructions, and replace if damaged. If the problem remains, contact your distributor for repair or replacement
Valve leaks	O-Rings or valve seat are worn or damaged	Replace the O-Rings and/or the valve seat. If the problem remains, contact your distributor for repair or replacement
Leakage from meter	O-Ring damaged	<ol style="list-style-type: none">1. Get the meter off from the dispense system2. Take off the protector3. Loosening four the socket head cap screws on the cover of the meter4. Loosening eight the hex bolts on the bottom of the meter5. Take off the seat6. Check the O-Ring, replacing the O-Ring if it is damaged7. After replacing the o-ring, assemble the meter and fix it back to the dispense system
No display	Loosing battery	<ol style="list-style-type: none">1. Get the meter off from the dispense system2. Take off the protector3. Take off the labels sticks on the bottom of the meter4. Loosening the five socket head cap screws on the bottom of the meter5. Take off the seat6. Check the battery, replacing the battery if it is out of power7. After replacing the battery, assemble the meter and fix it back to the dispense system
	Battery out of power	
Wrong reading	Correction coefficient error	Reset the correction factor

WARNING: Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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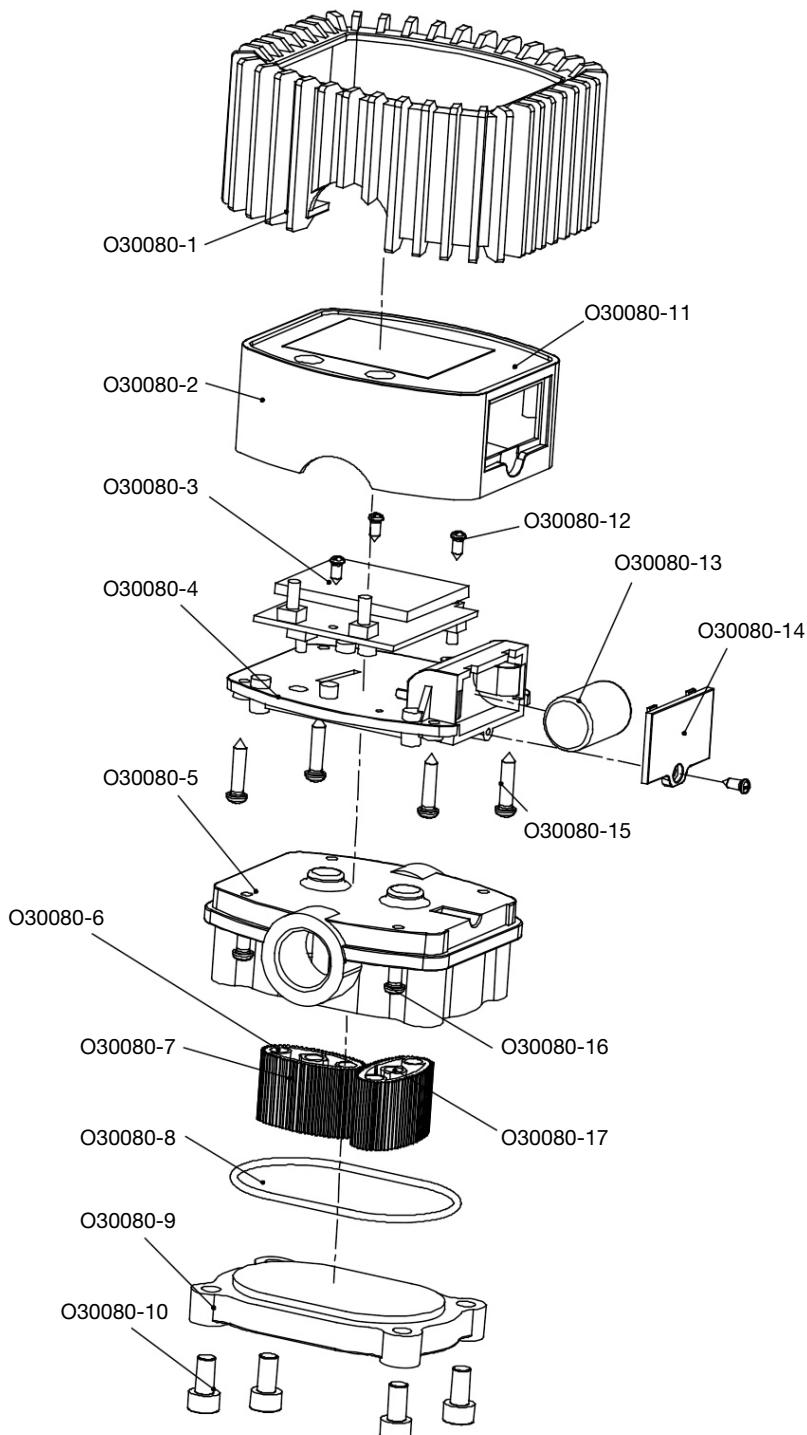
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Ordering Spare Parts

Parts List – Part No. O30080



Part Number	Description	Qty
O30080-1	Rubber Protector	1
O30080-2	Meter Cover	1
O30080-3	Main Circuit Board	1
O30080-4	Fix Board	1
O30080-5	Seat	1
O30080-6	Magnetic Rod	2
O30080-7	Oval Gear	2
O30080-8	O-Ring	1
O30080-9	Meter Holder	1
O30080-10	Screw	4
O30080-11	Label	1
O30080-12	Screw	4
O30080-13	Battery	1
O30080-14	Battery Cover	1
O30080-15	Screw	4
O30080-16	Screw	4
O30080-17	Shaft	2

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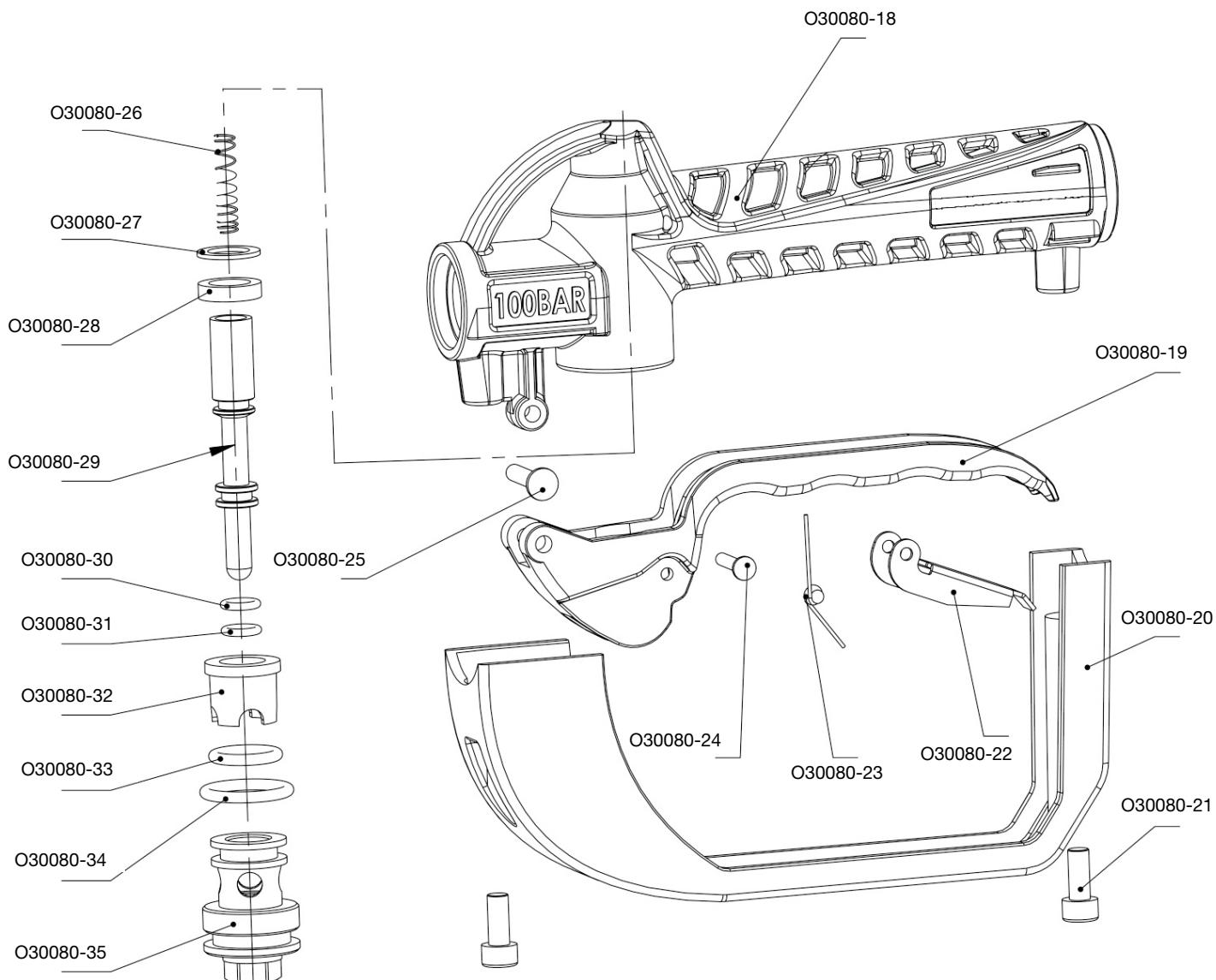
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Parts List – Part No. O30080



Part Number	Description	Qty
O30080-18	Handle Body	1
O30080-19	Trigger	1
O30080-20	Grip	1
O30080-21	Screw	2
O30080-22	Trigger Lock	1
O30080-23	Clip	1
O30080-24	Pin	1
O30080-25	Pin	1
O30080-26	Spring	1

Part Number	Description	Qty
O30080-27	Washer	1
O30080-28	Seal	1
O30080-29	Slip Pole	1
O30080-30	O-Ring	1
O30080-31	O-Ring	1
O30080-32	Bushing	1
O30080-33	O-Ring	1
O30080-34	O-Ring	1
O30080-35	Piston Sleeve	1

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