

FRUITLAND

VACUUM PUMP

OPERATION AND MAINTENANCE

MANUAL

**RCF 250*370*500*800 AND 1200
Models**



ATTENTION

Read owners manual fully before operating pump.
Failure to do so can result in severe
pump damage and may void warranty.



FRUITLAND TOOL & MANUFACTURING

*Manufacturers of Rotary Vacuum Pumps
and Vacuum System Accessories*

324 LEASIDE AVE. STONEY CREEK, ONTARIO, CANADA L8E 2N7

TELEPHONE (905) 662-6552 * 1-800-663-9003

FAX (905) 662-5412

WEB SITE: <http://www.fruitland-mfg.com>

This is the
SERIAL NUMBER of YOUR PUMP

PREFACE

This Manual is given with your pump to help operators and owners to understand the working and maintenance of your newly acquired unit.

Please familiarize yourself and any operator with the contents of this booklet, and keep a record of the serial number handy, should you need any parts or information in the future.

We at **FRUITLAND** are committed to quality, reliability and guaranteed performance.

PURCHASED FROM:

(DEALER'S STAMP)

DATE:

.....
MM / DD / YY

Certificate of guarantee and inspection
Certificat de garantie et d'inspection

Model No.
N° modele`
Serial No.
N° serie`
Date Purchased
Date d'achat

Our Product is guaranteed for 2 years in accordance with the warranty provisions described on the reverse side.

To put this guarantee into effect the card at the back of this manual must be filled out immediately and returned to:

Fruitland Tool & Manufacturing,
324 Leaside Avenue,
Stoney Creek, Ontario,
Canada L8E 2N7

Telephone No. (905) 662-6552
1-800-663-9003
Fax No. (905) 662-5412

NOTICE - WARRANTY CLAIM

In the event of pump failure while pump is still under warranty, pumps are to be returned to factory without dismantling or other alterations for warranty assessment. Violation of this condition will void warranty. All shipping costs are the customer's responsibility.

Thank you for purchasing a Fruitland Rotary Vane Vacuum Pump. Our quality control program has been developed to ensure this vacuum pump and it's components are free from defects in materials and workmanship. With proper maintenance and operation your Fruitland pump should give many years of trouble free use.

Please read owners manual completely before operating your new Fruitland pump.

WARRANTY

If during the 2 year period from the purchase date and the return of the warranty card, the pump is found to be not operating properly, we will repair the pump free of charge, providing the pump is returned without dismantling or altering it in any way to our plant or to one of our authorized distributors and the problem is determined to have been caused by defect(s) in the pump materials or workmanship.

Rotary vane vacuum pumps are designed to pump air only! A properly designed vacuum system will have filters and shutoffs installed; and a maintenance program implemented to ensure that liquids, solids or dirt are not allowed to enter the pump. If foreign material enters the pump severe wear and damage will occur.

This Warranty Does Not Cover

- A) Repairs as a result of misuse, accident, lack of required maintenance, or improper operation.
- B) Normal wear (eg.) vanes.
- C) Repairs as a result of an improperly designed vacuum system, improper installation or foreign material entering pump.

Disclaimer

To the extent the law permits, Fruitland disclaims any responsibility for loss of time or use of the product, transportation or any other indirect, incidental or consequential damage, inconvenience or commercial loss.

Fruitland Tool and Manufacturing customer service can be reached at

Telephone:(905) 662-6552 or

1-800-663-9003

Facsimile: (905) 662-5412

E-mail: rbader@fruitland-mfg.com

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MADE IN CANADA BY FRUITLAND TOOL AND MFG. STONEY CREEK, ONT. CANADA	
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DATE <input style="width: 80%;" type="text"/>	R.P.M. <input style="width: 80%;" type="text"/>

MONTH/YEAR BUILT

PUMP MODEL

WORKING SPEED

SERIAL NUMBER

INSTALLATION

When installing a Fruitland vacuum pump that is to be driven by a hydraulic motor, or angle gear box - *special care must be given.*

The coupling between the pump and drive method should have sufficient clearance to allow the rotor in the pump to expand lengthwise due to heat. If sufficient clearance is not given, the rotor will not stay centered in the housing and severe pump damage may occur. Please consult your coupling manufacturer or Fruitland Tool for recommended clearances.

GENERAL INSTRUCTIONS

- | | |
|------------------|--|
| LIFTING: | Lift pump by eyebolts, if provided, or with slings around body of pump close to legs. |
| MOUNTING: | Secure pump unit to flat sturdy surface with four bolts, washers and lockwashers, through holes in legs. |
| LINE UP: | Be sure pump is lined up properly to prevent strain on belts or couplings. |

DRIVES:

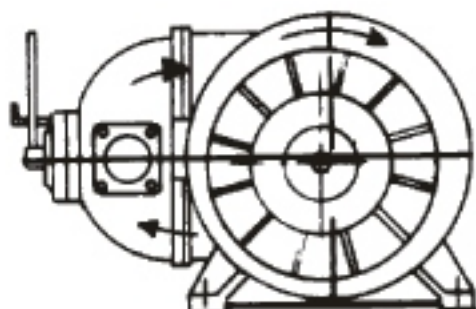
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|----------------|---|
| BELTS: | Proper tension of belts is achieved by pushing centrally with your finger. Each belt can be depressed by 1/64" for every inch of span distance. |
| CHAINS: | Same as belts (but usually not recommended).
REASON: RPM and lubrication. |
| DIRECT: | Flexible coupling. |

RPM:

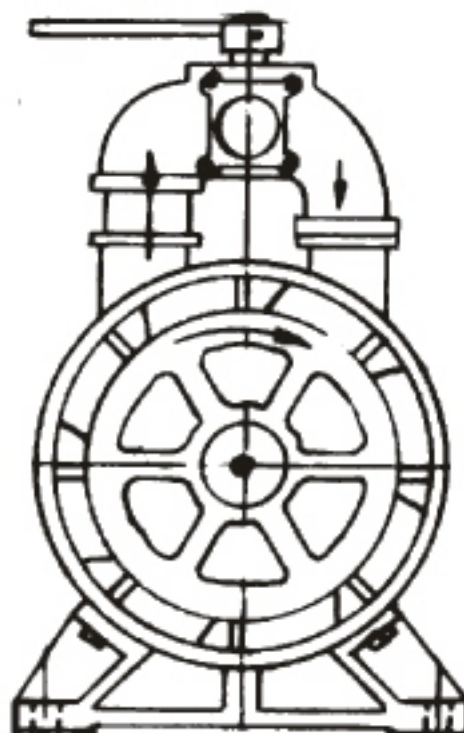
See name plate tag.
Hold within plus or minus 50 RPM set at 18" Hg.

DRIVE DIRECTION:

Pulley or drive end view of the pump.



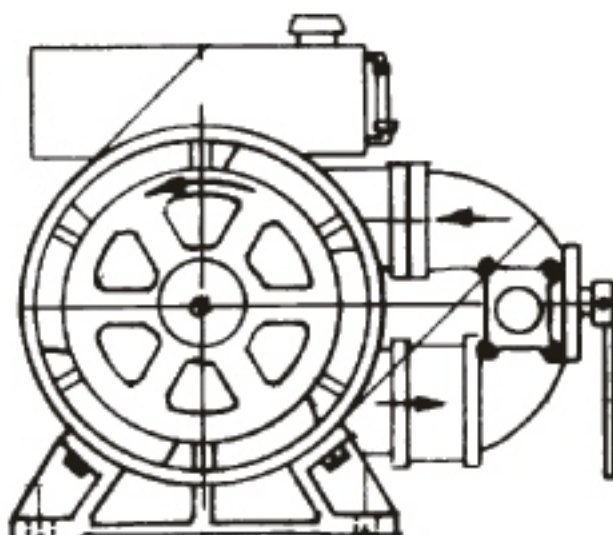
RCF 370, RCF 500
side Valve Model Shown



RCF 250, RCF 800
These pumps built
Top Valve style only.

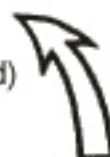


CLOCKWISE (or righthand)



RCF 1200
(Side Valve shown)

COUNTERCLOCKWISE (or lefthand)



MAINTENANCE:

LUBRICATION:

In summer conditions a W40 non-detergent motor oil or an ISO 150 compressor oil can be used. **For winter** a W30 non-detergent motor oil or an ISO 100 compressor oil. In extremely hot climates a W50 motor oil or an ISO 200 compressor oil can be used.

Always check oil level before starting unit, top up if necessary.

NEVER RUN PUMP DRY!!!

ALL PUMP Models:

Oil Tank: **IMPORTANT!**
During freezing weather,
drain possible condensation
build-up in bottom of
oil tank.

Danger: If water gets into
oil pump, it could freeze and
damage gears in pump.

Drain and clean inside of oil tank with diesel fuel periodically.



OIL PUMP IN MODEL
RCF 250
RCF 370
RCF 500
RCF 800

(Located inside Oil
Tank)

OIL CONSUMPTION (approximate)

	<u>RCF 250</u>	<u>RCF370</u>	<u>RCD 500</u>	<u>RCF 800</u>	<u>RCF 1200</u>
1 Litre Approx.	12 hr.	4.4 hr.	4.4 hr.	6.0 hr.	4.2 hr.
1 Imp. Gal. Approx.	55 hr.	20 hr.	20 hr.	27 hr.	19 hr.
1 U.S. Gal. Approx.	45 hr.	16.6 hr.	16.6hr.	22.4 hr.	15.8 hr.

RCF 1200 Pump Models:

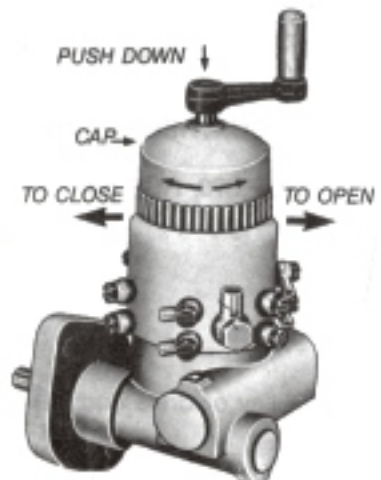
When pump has been inoperative for 48 hours or longer, push down and hold down the spring loaded crank on the oil pump, while rotating the handle about 20 - 30 turns either way, or until oil drops can be seen dripping in oil flow valve.

OIL PUMP (EXTERNAL) FOR MODEL RCF 1200

SERVICE NOTE!

If you have any questions regarding the service of your pump, contact your local Fruitland Dealer or **1-800-663-9003**.

IMPORTANT: Order Spare parts from correct Parts Drawing, e.g. "Hydraulic Model", "Standard Model", and provide serial number of your vacuum pump. To ensure proper pump operation, **USE GENUINE FRUITLAND PARTS ONLY.**



COOLING: NO Vacuum pump should run for a prolonged period of time without air passing through it.
(AT MAXIMUM VACUUM) Addition of vacuum relief valve is highly recommended. The outside of the pump housing and the fan blades should be kept clean to allow proper cooling airflow. Do not allow build-up of dirt pump shroud and housing.

Accessories

FILTERS: The vacuum system should have at least one filter between the vacuum tank and the pump so that only clean air is allowed to pass through the pump. These filters can be in the primary and/or secondary shut-offs, in-line (between secondary and pump) or at the pump. Fruitland secondary shut-offs are equipped with filters.

**SHUT-OFF
MOISTURE
TRAPS:** All vacuum tanks should be equipped with an adequate primary and a secondary shut-off moisture trap to prevent liquids or semi-solids from being drawn into the pump. Liquids or solid materials drawn into the pump can seriously damage the pump. Moisture traps should be drained often and always before shutting unit down when temperature is below freezing.

**PRESSURE
RELIEF
VALVE(S):** A MUST. Test periodically to ensure proper setting is maintained. The Fruitland secondary is equipped with a pressure relief valve.

**VACUUM
RELIEF
VALVE:** If pump is run for long periods of time at high **vacuum**, a vacuum relief valve is recommended to protect against overheating.

**PRESSURE
VACUUM
GAGE:** Recommended

**OIL TRAP
MUFFLER:** Strongly recommended.(Noise Pollution)
*Available at Fruitland for all pumps

**INTAKE
PIPING:** Pipes used must be free of corrosion or rust. Welding beads, slag or splatter must be removed.

**NON-
RETURN
VALVE:** *(Back-up valve)*
A standard installation in all our models. Its function is to close automatically when the pump is stopped to prevent air back flow and reverse running of the pump.

RCF 370F & 500F (RCF 370H & 500H)

