Ross Products Division, Abbott Laboratories warrants the FLEXIFLO III External Nutrition Pump against defects in material and workmanship for a one (1) year period from date of delivery. This warranty is valid only to the original purchaser and does not extend to any product, or part thereof, which has been subjected to accident, alteration, damage, misuse, repair by other than Ross authorized representatives, or has not been operated and maintained in the manner prescribed in the Operating Manual or which at the time of pump failure was being used with pump sets or containers other than Ross pump sets and containers. Examples of damage or misuse include but are not limited to: pumps that have been dropped, have had fluid spilled into or onto the casing, have been submerged or have had the back removed.

In no event shall Ross be liable for any incidental, indirect or consequential damages in conjunction with the purchase or use of the pump.

Ross reserves the right to repair or replace (at its option) any pump that fails to meet the foregoing warranty.

THE WARRANTIES HEREUNDER ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE.

The FLEXIFLO III Pump can be used for adult and pediatric patients provided the patient's care includes a feeding range within the pump operational specifications. These specifications are:

- The flow rate range is 1-300 mL/hr in 1 mL/hr increments
- The flow rate accuracy is ±10% (see page 13 for details)
- The occlusion pressure limit is 25 psi nominal

If these specifications are not appropriate for a given patient, the FLEXIFLO III Pump should not be used.

CAUTION

Do not use this pump for feeding infants under 12 months of age. In addition, use in all pediatric patients 12 months of age or older must be carefully evaluated. All enteral pumps have the potential to bolus-feed, which is an important consideration in feeding volume sensitive patients. The rate of feeding should be 25 mL/hr or greater, and a volume of product no more than four times the hourly feeding rate should be hung.

The decision to use this pump in a pediatric patient should be made in conjunction with a pediatrician.

Confirm proper placement and function of the enteral feeding tube before initiating feeding.

Before leaving a pump-fed patient unattended, verify the following:

1. Rotor and rotor cover are clean. Failure to thoroughly clean product build-up around rotor may cause product oversupply.
2. Confirm rotor cover moves freely up and down, and returns to a fully closed (down) position before starting pump.
3. Rotor is firmly seated on pump.
4. Confirm that tubing guide is mounted tightly against pump.
5. Pump-set tubing is properly placed on the rotor.
6. Feeding is being administered at the prescribed rate. Failure to do so may result in an uncontrolled feeding rate, which may lead to vomiting and/or aspiration.

Pump set and container should be replaced as needed, or at least every 24 hours, to avoid product-contamination problems. For single use only.
null
DROP DETECTOR
- Clean with cotton swab and warm, soapy water. Dry thoroughly. Be sure no soap film or residue is left on lenses. DO NOT CLEAN WITH ALCOHOL.

- The pump should be stored away from excessive heat, cold, or humidity.
- Be sure ON/OFF switch is in the OFF position.

This FLEXI-FLO II pump is highly reliable. As with any electromechanical device, however, minor problems may occur. In the event of a pump malfunction, heed for technical assistance or parts, please contact Rents Products Division, Applied Laboratory.

BEFORE CALLING, DO A FEW SIMPLE CHECKS:
1. Check for proper electrical hookup, (is pump plugged in? Is electrical outlet functioning? Is battery properly charged?)
2. Be certain that the DC power ON/OFF switch on rear panel of pump is ON.
3. Be sure the FLEXI-FLO II pump site tubing is properly positioned over the rotor, with each of the plastic connectors in the tube-guide slots, and that the rotor cover is closed.
4. Be sure that the clamp on the pump set is open fully.
5. Be sure the drop detector is clean and the sight chamber is not overfilled or covered with a film of product.
6. Be sure the tubing, pump, rotor, rotor cover and drop detector are clean and free of grease, oil and product.
7. Be sure the roller and rotor cover are properly sealed and that threaded screws on the tubing guide are securely tightened.

<table>
<thead>
<tr>
<th>SWITCH</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RUN/STOP</td>
<td>Turns pump on or off but does not cause pump to lose DOSE or VOL. FEED data. Clears all visual and audio alarms.</td>
</tr>
<tr>
<td>UP-ARROW</td>
<td>Increases flow rate in mL/hr or DOSE in mL. Operates only in STOP mode.</td>
</tr>
<tr>
<td>DOWN-ARROW</td>
<td>Decreases flow rate in mL/hr or DOSE in mL. Also resets the VOL. FEED to zero. Operates only in STOP mode.</td>
</tr>
<tr>
<td>MILLHR (flow rate)</td>
<td>In STOP mode, press MILLHR, then UP-ARROW or DOWN-ARROW to select flow rate. In RUN mode, press MILLHR to display flow rate. Pump will not operate without a setting for MILLHR.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DOSE</th>
<th>volume in mL to be fed</th>
</tr>
</thead>
<tbody>
<tr>
<td>In STOP mode, press DOSE, then UP- or DOWN-ARROW to select volume to be fed. In RUN mode, press DOSE to recheck what was selected as volume to be fed. (Display holds for 8 seconds.) Pump will operate without a DOSE selected (DOSE set at zero).</td>
<td></td>
</tr>
</tbody>
</table>

| VOL FEED (volume in mL that has been fed at any time up to when DOSE is reached) |
| In RUN mode, press VOL FEED to recheck the amount that has been fed up to that point. (Display holds for 8 seconds.) Press DOWN-ARROW to reset volume to zero so that additional product may be fed up to volume that is set on DOSE. |

<table>
<thead>
<tr>
<th>LED DISPLAY AND AUDIO ALARM</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO FLOW</td>
<td>Pump stops because flow has stopped for some reason. Check for empty container or flow restriction (closed clamp, clogged delivering tube).</td>
</tr>
<tr>
<td>COVER OPEN</td>
<td>Pump stops if rotor cover is opened.</td>
</tr>
<tr>
<td>LOW BATT</td>
<td>Battery voltage is low. Pump will run approximately 30 minutes.</td>
</tr>
<tr>
<td>DOSE COMP</td>
<td>Planned total dose has been reached. Pump automatically stops. To feed additional product, press DOSE, then press UP-ARROW to display desired additional volume to be fed. Press RUN to restart the pump. To cancel DOSE addition feature and feed additional volume, press DOSE, then press DOWN-ARROW to display zero. Press RUN to restart the pump.</td>
</tr>
</tbody>
</table>
**PROBLEM**
Neither UP-ARROWS nor DOWN-ARROWS respond when switch is in press to increase or decrease ML/HR, DOSE or VOLL FED.

**CORRECTIVE ACTION**
The UP-ARROWS and DOWN-ARROWS operate only when the pump is in STOP mode.

**Flow rate is inaccurate.**

1. To test flow rate, use the following procedure: Be sure to use a graduated cylinder for volume measurement—not an external container. Using Enfamil® Complete, Balanced Nutrition®, Enfamil® Human Liquid Nutrition or Nestlé® BabySante Liquid Nutrition, fill the container and set up pump per instructions. Use a FLEXIFLO®-F51 Pump Set only.
2. Confirm that the testing guide and rotor are mounted tightly against the pump and the rotor is firmly seated on the shaft.
3. Be sure rotor and screw arm are free from product residue and all four rollers turn freely.
4. Check that rotor cover moves freely up and down, and returns to a fully closed (down) position before starting the pump.
5. Check rotor speed with a watch. Place two pieces of tape—one on rotor, one on rotor cover—to help count revolutions, per instruction. Check rotor speed against the chart. If necessary, refer to ROTOR ASSEMBLY, page 11.
6. Start the pump and run for 15 minutes. Then run product into graduated cylinder for 1 hour and compare to reference on pump. If flow rate is incorrect, try a new pump set and repeat procedure. Refer to SPECIFICATIONS, page 13, for accuracy rate.

**10. CONFIRM PROPER PLACEMENT AND FUNCTION OF ENTERAL FEEDING TUBE.** Connect adapter to patient's enteral feeding tube (nasogastric, gastrostomy, etc).

**11. Open clamp fully.**

**12. Switch power ON (front of pump).** Pump will initiate self-test procedure.

**13. Select flow rate (ML/HR), using UP- or DOWN-ARROW.**

**14. If desired, set dose by pressing DOSE switch and then UP- or DOWN-ARROW. Set dose to zero, using DOWN-ARROW to override the DOSE function.**

**15. Press RUN/STOP switch to start feeding.**

**17. When feeding is complete, switch pump off.**

**NOTE:** Pump stops and sounds an alarm automatically when the container is empty. If the DOSE function is in use, the pump will stop, sound the alarm and display the DOSE COMP message when the selected dose is reached.