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|  Compat Feeding Pump  | NO.  |
| See the following pages for troubleshooting guidelines, operating instructions, routine maintenance checklist, and also routine 12 month maintenance checklist. |
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|  Compat Enteral Feeding Pump – Trouble Shooting Guide  | NO.  |
| Model 199235

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| Situation | Possible Cause | Solution |
| * Low battery alarm activated
 | * Battery charge is below performance level
 | * Plug cord into AC outlet
 |
| * OCCL/EMPTY alarm activated
 | * Feeding container is empty
* Occlusion is restricting flow
* Drip chamber not properly placed in pump
* Pump is not in an upright/vertical position or not clamped properly to the pole
* Pump is on hold for more than 2 ½ minutes
 | * Replace or refill feeding container
* Identify point of occlusion
* Pump set

 Kinked tubing Blocked tubing Closed roller clamp* Feeding tube
* Feeding container
	+ Assemble properly
	+ Straighten the pump and clamp properly to the pole
	+ Press RUN/HOLD button
 |
| * + Free Flow (“FrE FLO”) alarm activated
 | * + Silicone tubing detached from pump rotor; formula is gravity flowing
	+ Drip chamber walls coated with formula
	+ Drip sensor is in direct path of intense light
 | * + Assemble silicone tubing properly around pump rotor
	+ Manipulate chamber to clear drops or condensation in sensor path
	+ Turn pump so sensor is not in direct light
 |
| * + Dose Complete
 | * + Flow sensors need cleaning
	+ Pump has delivered preset volume
 | * + Clean with cotton swab dampened with isopropyl alcohol
	+ Press volume reset. Press RUN/HOLD. Pump will operate until DOSE is completed again.
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|  Compat Feeding Pump – Operating Instructions  | NO.  |
| Model 199235Operating Instructions:1. Plug the power cord into a 115 VAC, 60 HZ three wire grounded outlet.
2. Press ON; alarm will sound briefly. Remember, the pump has lifetime memory and will automatically recall the previous parameter settings. (Diagram 1)
3. Check Infusion Rate. If change is desired, press INC or DEC to change rate setting. (Diagram 1)
4. Check Dose Limit by pressing DOSE LIMIT SET. If change is desired, press INC or DEC within 3 seconds to change limit setting (Diagram 1). Zero Dose Limit implies no does limit monitoring by pump.
5. Press TOTAL RESET to clear Total Volume, if desired.
6. Prepare and hang COMPAT Delivery Set from an IV pole. Close roller clamp.
7. Insert drip chamber into drip chamber brackets. (Diagram 2)
8. Open roller clamp. Fill tubing with formula until all air is expelled from tubing. Close clamp.
9. Stretch silicone tubing around rotor. Insert pump adaptor into bridge. (Diagram 3)
10. Place tubing into tubing guide. (Diagram 4)
11. Attach pump set to patient’s enteral feeding tube.
12. Open roller clamp.
13. Press RUN/HOLD to start pump.
14. OFF will turn off the pump at any time. (Infusion Rate, Dose Limit, Volume Delivered, and Accumulated Volume are retained.)

 DIAGRAM 1: Activate DIAGRAM 2: Insert DIAGRAM 3: Assemble DIAGRAM 4: Completely Pump; Set Desired Flow Pump Set Drip Silicone Tubing Around Assembled Pump Set. Rate Chamber Rotor. |
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|  Compat Feeding Pump – Accumulated Volume Feature  | NO.  |
| Model 199235Accumulated Volume:This feature tracks the formula administered over several feedings when dose limit is used. This feature can be used to monitor the accumulated total volume of formula over several intermittent feedings in a day. The total volume of formula delivered will continue to accumulate until it is cleared.To View or Clear Accumulated Volume:1. Press RUN/HOLD to stop pump.
2. Press and hold DOSE LIMIT SET for 5 seconds. The words “TOT VOL” and the accumulated volume are displayed for 10 seconds.
3. To clear accumulated volume, press TOTAL RESET within 10 seconds.
4. Press RUN/HOLD to restart the pump.

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|  Compat Enteral Feeding Pump – Routine Maintenance  | NO.  |
| Model 199235NOVARTIS NUTRITION Recommends that routine cleaning of the COMPAT pump should be an ongoing process in order to ensure maximum performance.CLEANING:Cleaning consists of removing any spillage from the pump housing, rotor, rollers, control panel, and drop sensor.CAUTION:Always disconnect the pump from the AC outlet before cleaning to avoid electric shock.Prolonged exposure to alcohol, household detergents or strong cleaners could result in damage to the pump housing.DO NOT IMMERSE PUMP IN CLEANING SOLUTIONSDO NOT AUTOCLAVEDO NOT USE STERILIZING SOLUTIONSCLEANING INSTRUCTIONS:1. Using a cloth or sponge, clean the pump housing and rollers regularly with warm soapy water. Clean the drop sensor parts with soft cotton swabs and isopropyl alcohol or warm soapy water.
2. Check that the pump rotor rollers rotate freely. If they do not rotate easily, clean them as described in steps 3-8.

If the pump rotor rollers do not rotate freely:1. Loosen the set screw with a 3/32” (0.0094”) allen wrench and pull the pump rotor from its shaft.
2. Clean the rollers thoroughly with warm soapy water or isopropyl alcohol if necessary.
3. After cleaning, align the flat surface on the pump rotor with the flat surface on the output shaft.
4. Push the rotor all the way to the shaft, so that it is approximately .050” (1/8 cm) from the surface of the case.
5. Tighten the screw
6. Use thread setting adhesive to prevent set screw from vibrating free.

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|  Compat Enteral Feeding Pump – Routine Maintenance, continued  | NO.  |
| Model 199235DISINFECTING:If it is necessary to disinfect the entire pump, the following is recommended:**General disinfectants:**Cidex (Arbrook, Inc.)pHisohex (Winthrop-Breon Laboratories)Hibiclens (Stuart Pharmaceuticals)Isopropyl alcohol**AIDS and hepatitis disinfectants:**10% concentration of 5.25% sodium hypochlorite (household bleach)**Tuberculosis disinfectants:**70% concentration of isopropyl alcoholAfter application of these disinfecting agents, allow to air dry.  |
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**Pump: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**COMPAT Model 199235 Enteral Feeding Pump Routine 12 Month Maintenance Checklist**

These procedures can be performed by the pump user in the institution or at home by following steps indicated.

CLEANING AS NEEDED

* Clean pump housing and rollers regularly with warm, soapy water using a cloth or sponge.
* Clean drop sensor parts with cotton swabs and isopropyl alcohol or warm, soapy water.
* Check that the pump rotor rollers rotate freely. If rollers do not rotate freely, loosen set screw and pull pump rotor from shaft, clean the rollers, place rotor on shaft and tighten set screw.

If done at home, the form should be returned to the pump distributor to retain as a maintenance record.

FUNCTIONAL TEST MODE AS NEEDED OR EVERY 12 MONTHS

* Press the ON key.
* Press INC, then DEC, and then hold both down for 5 seconds. The pump will run at a 120 mL/hr rate, but displays will read “888” mL/hr and “8888” mL. The pump rotor will make periodic turns to make a full revolution in 6 run/stop cylces (approx. 12 sec.).
* Press each key (except ON or OFF) to verify that the motor stops, the alarm sounds and all LEDs light.
* Pass a pencil or finger through the drop sensor and wait for all 4 LEDs to light and the audible alarm.
* Press and hold the OFF key to leave test mode.

Any failure indicates a service check must be performed by authorized personnel.

Test Results: \_\_\_\_\_\_\_\_\_\_Pass \_\_\_\_\_\_\_\_\_\_Fail \_\_\_\_\_\_\_\_\_\_Initials of person testing

DISPLAY TEST AS NEEDED OR EVERY 12 MONTHS

* Enter Functional Test Mode.
* Press and hold down INC and DEC again. Displays will change to “012” and “3456” while the motor runs.
* Press any key (except ON or OFF). Display will shift one position with each key press. Correct display of digits 0 through 9 should show in sequence and then repeat.
* Check that the following LEDs light when the corresponding number is in the left-most display position: 1-LOW BAT; 2 – BAT; 3 – DOSE COMPLETE.
* OCCL/EMPTY LED should light up only when the drop sensor is blocked.
* Press and hold the OFF key to leave test mode.

Test Results: \_\_\_\_\_\_\_\_\_\_Pass \_\_\_\_\_\_\_\_\_\_Fail \_\_\_\_\_\_\_\_\_\_Initials of person testing

MOTOR SPEED TEST AS NEEDED OR EVERY 12 MONTHS

* Enter Functional Test Mode.
* It should take from 117 to 122 seconds for the pump rotor to make 10 full revolutions at 120 mL/hr test rate.

Test Results: \_\_\_\_\_\_\_\_\_\_Pass \_\_\_\_\_\_\_\_\_\_Fail \_\_\_\_\_\_\_\_\_\_Initials of person testing

OCCLUSION ALARM TEST AS NEEDED OR EVERY 12 MONTHS

* Press the ON key and make sure there is not a drop chamber in place.
* Set the infusion rate to 295 mL/hr and press Total Reset. Press RUN/HOLD to start.
* An occlusion alarm should occur within 7.5 revolutions of the rotor.
* Press and hold the OFF key to leave test mode.

Test Results: \_\_\_\_\_\_\_\_\_\_Pass \_\_\_\_\_\_\_\_\_\_Fail \_\_\_\_\_\_\_\_\_\_Initials of person testing

**RETURNING PUMPS FOR REPAIR**

Complete the checklist before returning pumps:

* Ran recommended diagnostic tests. Note test(s) failed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Used the Troubleshooting Guide in the COMPAT Operating Instructions to attempt fixing problem.
* Note problem with pump \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Properly clean pump following manufacturer guidelines.
* Use original box the pump came in whenever possible. Use protective packaging, such as bubble wrap to protect the keypad and display. Insert this sheet in the box with pump.

Facility Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Pump Serial #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Routine Maintenance Completed By \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\* Refer to the COMPAT Service Manual if more detailed testing required.