

# BAXTER FLO-GARD 6200

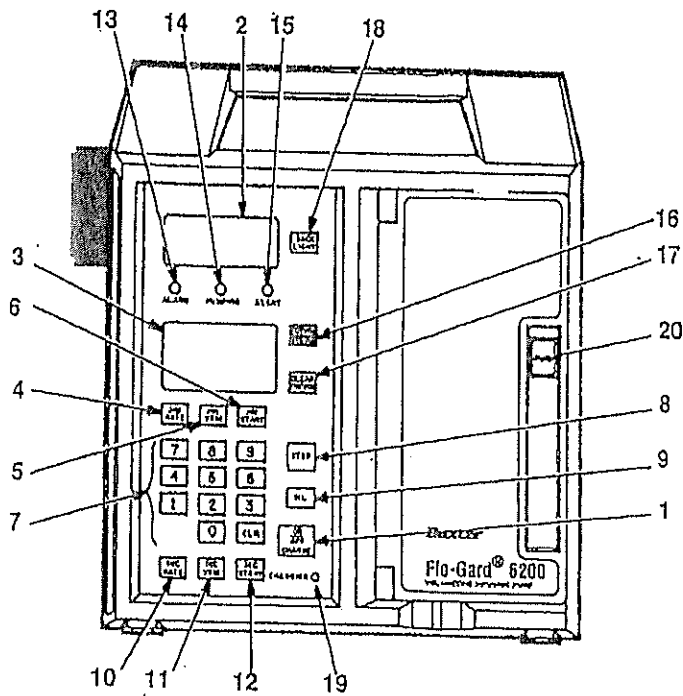


Figure 1. Front View of Pump

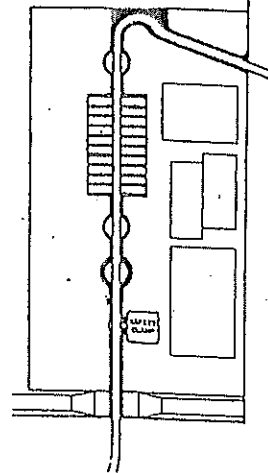


Figure 4. Tube Loading Diagram

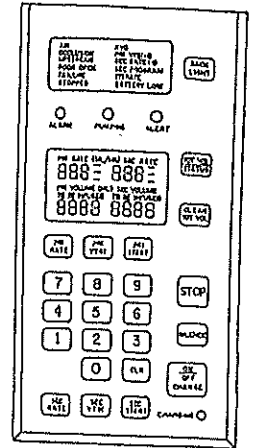


Figure 5. Self-Test Displays

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|--------------------------------|--|
| 1. On/Off/Charge Key           | Turns pump on and off. As long as the pump is plugged into a power source, the battery charger remains on. |
| 2. Message Display             | Shows all alarm and alert messages.  |
| 3. Main Display                | Shows rate, VTBI (volume to be infused) & total volume infused for primary & secondary infusion programs.  |
| 4. PRI Rate Key                | Enters the infusion rate for the primary solution.   |
| 5. PRI VTBI                    | Enters the VTBI for the primary solution   |
| 6. PRI START Key               | Starts the delivery of the primary solution.   |
| 7. NUMBER KEYPAD               | Enter values for rate & VTBI. CLR key clears any RATE or VTBI currently being entered                      |
| 8. STOP Key                    | Stops infusion. Alert sounds if stopped for more than 2 minutes.   |
| 9. SILENCE Key                 | Temporarily silences alarm or alerts for 2 minutes. Visual alarms or alerts remain displayed.              |
| 10. SEC RATE Key               | Enters the infusion rate for the secondary solution.   |
| 11. SEC VTBI Key               | Enters the VTBI for the secondary solution.  |
| 12. SEC START Key              | Starts the delivery of the secondary solution.   |
| 13. ALARM LED                  | Red LED blinks during an alarm with message display. Indicates immediate attention is required.            |
| 14. PUMPING LED                | Green LED constantly lit while pumping.  |
| 15. ALERT LED                  | Yellow LED, constant during alert, has visual display & tone every 8 seconds. Routine attention required.  |
| 16. TOT/VOL/STATUS Key         | Pressing displays total volume infused is displayed for 3 seconds, followed by all rate & volume data.     |
| 17. CLEAR TOT VOL Key          | Resets volume infused to zero when the pump is stopped.  |
| 18. BACK LIGHT KEY             | Press once to backlight display. Press again to turn off back light. Will auto off.                        |
| 19. CHARGING LED               | Lit when plugged in and battery is charging.   |
| 20. DOOR LATCH                 | Opens and closes pump door.  |
| 1. UPSTREAM OCCLUSION SENSOR   | Occlusion Sensor Detects a complete tubing restriction upstream of the pump.                               |
| 2. PUMPING MECHANISM           | Linear peristaltic pumping mechanism.  |
| 3. DOWNSTREAM OCCLUSION SENSOR | Detects a complete tubing restriction downstream of the pump.  |
| 4. TUBING DIAGRAM              | Shows the correct way to load tubing into the pump.  |
| 5. SAFETY CLAMP                | Prevents accidental fluid flow when the pump door is opened.   |
| 6. AIR SENSOR                  | Detects air bubbles in the tubing.   |
| 7. POWER CORD CLIP             | Stores power cord.   |
| 8. PANEL LOCK SWITCH           | Disables front panel controls except "total/volume/status" when pressed.                                   |
| 9. FUSE                        | Fuse compartment.  |
| 0. VOLUME KNOB                 | Adjust volume level. Cannot completely silence alarms or tones.  |
| 1. POWER CORD                  | Remove only by qualified service technician.   |
| 2. ACCESSORY PORT              | Allows addition of future accessories.   |
| 3. AUDIO SPEAKER               | For generation of tones and alerts.  |
| 4. NURSE CALL PORT             | Optional addition of nurse call jack.  |
| 5. BATTERY COMPARTMENT         | Allows easy access to the battery.   |
| 6. IV POLE CLAMP               | Secures the pump to the IV pole.   |

## SAFETY PRECAUTIONS

Always close administration set control clamp before opening door and removing set !!!  
Always replace fluid containers before air is permitted to enter the set.  
If resistance is met with closing of door, check for misloaded tubing.  
When using with a central line, a Luer lock adapter is recommended.  
Use only with Baxter tubing administration sets that contains an "s" as the last character of the code number.  
When using in line filters, use only filters which state specifically they are compatible with pumps.  
ALWAYS VERIFY PROGRAMMED INFORMATION PRIOR TO STARTING DEVICE.

## ALERTS AND ALARMS

| ALERT MESSAGE  | FLOW STATUS                           | ALERT CONDITION  |
|--|---------------------------------------|--|
| STOPPED<br>KVO   | No Flow<br>KVO                        | Pump in stopped mode for more than 2 minutes<br>Primary VTBI delivered. Pump has switched to 5 ml/hr or primary rate whichever is delivered    |
| TITRATE  | No change until procedure is complete | Flow rate is being changed while pump is running. Pump will remain in TITRATE alert position until START key is pressed.                       |
| PRI RATE = 0   | No Flow                               | Primary flow rate of 0 has been entered.<br>Pump remains in alert until correct volume entered.  |
| BATTERY<br>BATTERY LOW<br>(with intermittent alert tone) | No Change<br>No Change                | Pump operating on internal batter power.<br>Battery needs recharging, Pump will stop operating in 15 minutes unless plugged into AC outlet     |
| SEC PROGRAM  | No Change                             | Secondary program data being programmed while pump is running. Pump will remain in SEC PROGRAM alert condition until SEC START key is pressed. |
| SEC RATE=0   | No Flow                               | A secondary flow rate of zero has been entered. Pump remains in this condition until correct volume entered.                                   |
| SEC VTBI=0   | No Flow                               | A secondary VTBI of 0 has been entered. Pump remains in this condition until correct volume entered.   |
| ALARM MESSAGE  | FLOW STATUS                           | POSSIBLE CAUSE   |
| AIR  | No Flow                               | air bubble, empty fluid container, no set in pump  |
| OCCLUSION  | No Flow                               | Closed distal clamp, stopcock, clogged filter, blockage downstream of pump.  |
| OCCLUSION<br>UPSTREAM                                    | No Flow                               | Closed clamp or other blockage upstream of pump.   |
| DOOR OPEN  | No Flow                               | Pump door not fully closed.  |
| BATTERY LOW –<br>with 3 rapid beep tones                 |                                       | Battery power exhausted. Plug into AC outlet.  |
| FAILURE with code number                                 |                                       | Press ON-OFF/CHARGE key twice to reset. If failure does not reset, record error code, replace pump and send for service                        |

## INSTRUCTIONS FOR USE

1. Prepare IV fluids for administration using Baxter tubing. Expel all air from tubing.
2. Close set control clamp.
3. Raise pump door handle to horizontal position and pull door open.
4. Push safety clamp to open position.
5. Thread tubing through guide channel from top to bottom as shown.
6. Close pump door.
7. Open set control clamp completely. Verify that no drops are falling in drip chamber. If flow is observed, recheck tub loading and make sure the proper set is being used. If flow is again observed, do not use the pump. Have it inspected by service personnel.
8. Attach set to venipuncture device.
9. Press ON-OFF/CHARGE key. All displays illuminate momentarily. The audible alarms sounds and if pump is plugged in the CHARGING LED lights.
10. Set audible alarm knob on the rear of the pump to desired level.
11. Set Primary Rate as follows:
  - press RATE key.
  - enter flow rate in ml/hr on keypad. To clear errors, press PRI RATE and recalculate.
12. Set primary volume to be infused as follows:
  - press PRI VTBI.
  - enter desired VTBI (in ml) on keyboard. Set VTBI equal to the amount of fluid in the container or less if desired. To correct a mistake, press PRI VTBI again. Re-enter the correct VTBI.
13. Reset the volume infused to (if desired) by pressing CLEAR TOT VOL.
14. Press PRI START key. The green PUMPING LED lights and a moving bar appears next to the flow rate setting. Confirm flow by checking for drops in the administration set drip chamber.
15. To read total volume infused and/or review infusion settings, press TOT VOL/STATUS key. TOTAL VOLUME INFUSED is displayed first, followed by RATE and VTBI.
16. To halt infusion, press STOP key. The PUMPING LED goes out and STOPPED appears in the message display. If pump is not restarted in two minutes, an audible alert sounds.
17. When the selected volume has been delivered, the pump sounds an alert tone and switches to a KVO rate of 5ml/hr or the current setting whichever is lower.

## REMOVE SET FROM PUMP AS FOLLOWS:

- a. press STOP key
- b. Close set clamp.
- c. open pump door
- d. press SAFETY clamp
- e. check that no fluid is flowing in set, then remove set from pump

## STARTING A SECONDARY PROGRAM

1. Prepare a secondary fluid container and administration set according to the instructions accompanying the products. Expel all air from secondary set. To perform automatic piggybacking, A Baxter set labeled Continu-Flo should be used.
2. Close secondary set control clamp.
3. Set secondary flow rate as follows:
  - a. Press SEC RATE key. The right-hand side of the main display now shows secondary infusion data.
  - b. Enter desired flow rate (in ml/hr) for secondary solution. To correct a mistake, press SEC RATE again and re-enter the correct value.
4. Set secondary volume to be infused as follows:
  - a. Press SEC VTBI key.
  - b. Enter the desired fluid amount (in ml) on the keyboard. Set VTBI equal to the volume of fluid in the container. To correct a mistake, press SEC VTBI again and re-enter the correct value.
5. Lower primary container with the hanger accompanying the Baxter secondary set.
6. Open secondary set control clamp.
7. Press SEC START to begin infusion. Drops begin falling in the secondary set drip chamber. When the VTBI of the secondary program reaches zero; the pump reverts to the primary program.

## CHANGING FLOW RATES (TITRATING) WHILE PUMP IS RUNNING

To change the primary flow rate, follow the procedure given below.

1. Press PRI RATE key while pumping is running. TITRATE appears in the message display and an alert tone sounds periodically.
2. Enter the new flow rate on the keyboard.
3. Press PRI START. The pump begins delivering fluid at the new rate, the alert tone stops, and the TITRATE message disappears.
4. To change secondary flow rate follow the above procedures using the SEC RATE and SEC START keys instead of the PRI RATE and PRI START keys.

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| TITRATE   | No change until procedure is complete | Flow rate is being changed while pump is running. Pump will remain in TITRATE alert position until START key is pressed.   |
| PRI RATE = 0  | No Flow                               | Primary flow rate of 0 has been entered.<br>Pump remains in alert until correct volume entered.  |
| BATTERY<br>BATTERY LOW<br>(with intermittent alert tone)<br>SEC PROGRAM | No Change<br>No Change<br>No Change   | Pump operating on internal batter power.<br>Battery needs recharging, Pump will stop operating in 15 minutes unless plugged into AC outlet<br>Secondary program data being programmed while pump is running. Pump will remain in SEC PROGRAM alert condition until SEC START key is pressed. |
| SEC RATE=0  | No Flow                               | A secondary flow rate of zero has been entered. Pump remains in this condition until correct volume entered.   |
| SEC VTBI=0  | No Flow                               | A secondary VTBI of 0 has been entered. Pump remains in this condition until correct volume entered.   |
| ALARM MESSAGE   | FLOW STATUS                           | POSSIBLE CAUSE   |
| AIR   | No Flow                               | air bubble, empty fluid container, no set in pump  |
| OCCLUSION   | No Flow                               | Closed distal clamp, stopcock, clogged filter, blockage downstream of pump.  |
| OCCLUSION<br>UPSTREAM   | No Flow                               | Closed clamp or other blockage upstream of pump.   |
| DOOR OPEN   | No Flow                               | Pump door not fully closed.  |
| BATTERY LOW –<br>with 3 rapid beep tones                                |                                       | Battery power exhausted. Plug into AC outlet.  |
| FAILURE with code number  |                                       | Press ON-OFF/CHARGE key twice to reset. If failure does not reset, record error code, replace pump and send for service  |