

VOYAGER MANUAL LOAD AND EJECT CYCLE

I. DEFINITIONS:

- **MGC:** Multi Gauge Controller. This is a controller that displays pressure and can be operated independently of the Voyager computer.



- **IHC:** Instrument Hardware Controller

II. PROCEDURE FOR VOYAGER NT DIAGNOSTICS PROGRAM:

1. Stop the Instrument Hardware Controller (IHC). For Windows XP and 2000: Start/Control Panel/Administrative Tools/Services/Instrument Hardware Controller/Stop. For Windows NT: Start/Control Panel/Services/Instrument Hardware Controller/Stop
2. Open Voyager NT diagnostics program. Start/Programs/Voyager/Voyager NT Diagnostic. **(IHC must be stopped in step 1)**
3. Click on: X-Y Table tab.
 - a. Click Move to Load.
 - b. Wait for the compressor to initialize (You will hear the compressor when it turns on).
4. Click on: Mechanical tab.
 - a. Manual Eject:
 - i. Open Flap Door 1
 - ii. Turn Grabber On
 - iii. Extend Linear #1
 - iv. Retract Linear #1 **(watch the sample plate video monitor during this step you should see the sample plate removed, if it does not retract with the actuator see "Troubleshooting Grabber Guide")**
 - v. Close Flap Door #1
 - vi. Close Fore line Valve #1
 - vii. Open Vent Valve
 - viii. Turn Grabber Off
 - ix. Open Flap Door #2
 - x. Extend Linear #2
 - b. Manual Load
 - i. Retract Linear #2
 - ii. Close Flap Door #2
 - iii. Close Vent Valve

- iv. Close Foreline Valve #2.
 - v. Open Foreline Valve #1.
 - vi. Wait for the TC2 pressure to reach $<8 \times 10^{-2}$ Torr (This can be monitored on the MGC or in the software).
 - vii. After the TC2 pressure drops below 8×10^{-2} Torr open Fore Line Valve #2.
 - viii. Open Flap Door #1
 - ix. Turn Grabber on
 - x. Extend Linear #1 **(The sample plate should be visible on the video monitor after the Linear #1 extends)**
 - xi. Turn Grabber off
 - xii. Retract Linear #1
 - xiii. Close Flap Door #1
 - xiv. Wait until the source chamber BA1 drops below 3×10^{-6}
- 5. Click on X-Y Table tab.
 - 6. Click: Home
 - 7. Exit Voyager NT Diagnostic software.
 - 8. Open the Instrument Control Panel.
 - a. Select sample plate type in the sample plate menu.