The Glass Front vendor provides self-diagnostics to aid you in the trouble shooting process. Error codes are stored in the controller's memory when a system error is sensed. These codes can be accessed the Diagnostic section of Programming.

The trouble shooting section contains Error Codes, General Machine Troubleshooting, and Vending Troubleshooting.

Error Codes (version 15)

ERROR	DESCRIPTION OF ERROR CODE	CHECKING METHOD	CORRECTIVE ACTION
Vending Mechanism - PDC Error (Hand Control Board)			
X-motor Jam	X motor mechanism did not start or complete.	ServiceMode: The LED on the lower LEFT hand side should be a constant Red Light. 24VDC. (Fuse & Wires) If RED LED is not on, unplug machine, check 24VDC fuse on power distribution panel and wiring harnesses for continuity. The LED on the lower RIGHT hand side should be a 'flashing' Orange Light. 34VDC. Check the two pin power connector at the bottom of the door. Check connection to board on X rail. Check power supply connections in power distribution panel at bottom left of cabinet.	POWER DOWN. Replace fuse(s) & or wiring harnesses if necessary. POWER ON. Perform a test vend cycle. Wires must be seated firmly in the Molex Plug. Ensure Molex Plug has not been reversed.
		If X Motor has not returned to the home position, check to see if the hand is jammed on a tray or other item in the cabinet.	POWER DOWN. Clear jam, wait 5 seconds and POWER ON. If hand goes home after 'Auto Recovery', run 'X' Motor in Test Motors. Complete a test vend cycle. If hand does not go home in X, replace X motor.
		If unit has returned to the 'Home position', hand jammed. Check product positions to determine if any are sold out with product still in column.	Perform a Calibration Discovery 2. See Manual. Complete a test vend cycle of sold out products. If hand hits tray in X, adjust X home position by adding or removing spacers.
Y-motor Jam	Y' Motor portion of vending mechanism did not start or complete.	Preform System Check, see X-Motor Jam.	POWER DOWN. Replace fuse(s) if necessary. POWER ON. Complete a test vend cycle.

		If 'Y' Motor has not returned to the home position, check to see if the hand is jammed on a tray or other item in the cabinet.	Clear jam. POWER DOWN, wait 5 seconds then POWER ON. If hand (Y Motor) goes back home after 'Auto Recovery', run 'Y' Motor test in Test Motors. Complete a test vend cycle. If hand does not go home in 'Y', replace 'Y' Motor.
		If 'Y' Motor has returned to the home position, hand jammed, but recovered, check product positions to determine if any display 'sold out' with product still in a column.	Complete a test vend cycle of sold out products. If hand hits tray in Y, perform a Calibration Discovery 2.
Z-motor Jam	Z' Motor portion of vending mechanism did not start or complete.	Perform System Check, see X-Motor Jam.	POWER DOWN. Replace fuse(s) if necessary. POWER ON. Complete a test vend cycle.
		If unit is extended in 'Z' check 'Z' Housing Ribbon Cable (within the hand) to be sure it is plugged in. Please refer to Diagram 1A	POWER DOWN. Plug in 'Z' Housing Ribbon Cable. POWER ON. If hand goes back home after auto recovery, run 'Z' Motor Test in Test Motors. Complete a test vend cycle.
		If a product is in the hand, perform a visual check to see if the product is stopping the hand from closing around it.	Remove product from hand. POWER DOWN, wait 5 seconds. POWER ON. If hand goes back home after auto recovery, run 'Z' Motor Test in Test Motors. Complete a test vend cycle.
		If unit has returned to the home position, hand jammed, but recovered, check product positions to determine if any display 'sold out' with product still in a column.	Complete a test vend cycle of sold out products. If hand hits the tray front, run a Calibration Discovery 2. If hand jams on center gate, reduce 'Z' Product Position by 3 encodings in 'Calibration'. Please call Tech Services at: 1-800-344-7216 for information when attempting this function.
Clamp-motor Jam	Clamp Motor did not start or complete its cycle.	See X-Motor Jam information listed on prior page.	POWER DOWN. Replace fuse(s) if necessary. POWER ON. Complete a test vend cycle.
		Inspect clamp fingers to see if they are partially open only.	Clamp motor has failed. Replace clamp motor.

Jam - Recovered	A jam condition was encountered while vending, but recovered from the jam, and returned to the home position. The user was requested to select a new product.	Check product positions to determine if any display sold out with product still in a column.	Complete a Test Vend cycle of sold out products. If hand hits tray front, run Calibration - Discovery 2. If hand jams on center gate, reduce Z Product Position by 3 encodings. Please call Tech Services at: 1-800-344-7216 when attempting this function.
Failed Movement	This is a non - jam failure. A motor function failed to complete.	Depends on 'X, Y, Z' or Clamp Open/ Close movement attempted. If it is after Discovery, check the reflectors.	Test Mode: Test Motors - Check 'X, Y, Z, Clamp open/close Movement and regular Vending. Check all Sensors under Check Sensor Status. Install any missing reflectors.
X-Rail Not Level	During a Discovery 2 operation, the X rail was higher on one side by more than 1 inch.	POWER DOWN. Move the X rail manually to the center of the machine opposite a shelf. Close the door and inspect the bottom of the rail at the trays to determine which side is higher.	Remove the X-rail cap. On the latch side of the machine, release the Y gear coupling then move the X-rail down until it is level. Inspect, then run a Discovery 2.
FLO Always On (Forward Looking Optics)	During a target search operation, the Forward Looking Optic (FLO) was found to be continuously active.	Test 'FLO' with a corner-cube reflector piece. The device has 2 lights. The Green Light should be on. When the reflector is in front of the FLO, the second light should change from 'Off' to 'Orange'. Check reflectors along latch side trays. FLO may have only seen the shelf 4 reflector during scan. Verify 'X' Home is aligned with latch side reflectors.	If the Green Light is off, check the plug on the PDC. If the Orange Light does not turn on and off, POWER DOWN, then replace the FLO Assembly, Part # 1126113. POWER ON. If the Flo does turn on/ off, POWER DOWN, then replace the PDC board.
FLO Always Off(Forward Looking Optics)	During a target search operation, the Forward Looking Optic (FLO) would not activate.	Test 'FLO' with a corner-cube reflector piece. The device has 2 lights. The Green Light should be on. When the reflector is in front of the FLO, the second light should change from 'Off' to Orange. The FLO may not have missed all of the reflectors on latch side. Check that all reflectors are in place along latch side trays.	If the Green Light is off, check the plug on the PDC. If the Orange Light does not turn on and off, POWER DOWN, then replace the FLO Assembly, Part # 1126113. POWER ON. If the FLO does turn on/ off POWER DOWN, then replace the PDC board. Make sure the door is closed properly.

Missing Coordinates	During the 'Discovery Operation', a tray reflector was not found.	1) Verify the reflectors are in place on all of the top trays. 2) Are all reflectors on latch and hinge side trays installed.	Install any missing reflectors.
		Check power on the FLO device. The <u>Green Light</u> should be on. Test FLO with a corner-cube reflector piece. When the reflector is in front of the FLO, the second light should change from '<u>Off</u>' to <u>Orange</u>. Check all the trays are properly seated on the base metal.	If the <u>Green Light</u> is off, check the plug on the PDC. If the <u>Orange Light</u> does not turn on/ off, replace the FLO assembly. If the FLO does turn on/ off replace the PDC board. Reseat tray firmly in shelf
Missing Tray	A tray is missing on the top or bottom shelf.	There should be a reflector on each tray on top and bottom shelves.	Install any missing reflectors.
Shelf ends Mismatch	During a Discovery Operation, the number of trays found on the latch side, did not match the number of trays found on the hinged side of the vendor.	Check all tray positions. Make sure each tray has a corner-cube reflector in the center tray pocket.	Replace any missing tray reflectors. Run Discovery 2.
		Check all side trays are fully seated in shelves.	Reseat tray firmly in shelf. Run Discovery 2.
Shelf Not Level	During a Discovery Operation, one or more trays varied more than 1 inch in position from the hinge side to the latch side.	Check all tray positions. Make sure each tray is fully seated on the shelf.	Reseat tray firmly in shelf.

Failed Communication	PDC failed to communicate with VMC.	Check all harnessing between PDC and VMC.	POWER DOWN. Reseat any loose pins in harnesses. Reseat harness plugs. POWER ON.
		Check LED's on PDC. Lower Right Hand Light (Orange), should be flashing. Green flashing = PDC not receiving communication from VMC. Orange pulsing = PDC both receiving and transmitting communication. Red flashing = PDC closed communication. No flashing (LED off or solid color LED) = PDC not operating. Check the FLO power indicator light (should be solid green).	If Green Light is flashing, or the Orange Light is either steady or not lit, check MDB communication cable connections as above. If Red Light is flashing, PDC has logic error. POWER DOWN, wait 5 seconds then POWER ON. If the Orange Light is not flashing, LED is off and FLO power indicator is off, the PDC does not have power. Check for 'flashing' Red Light at the top right side of the Main Control Board. If this Control Board has power, check the MDB cables. If the Red Light is not flashing and the FLO power indicator is on, it is most likely an issue with the software flash chip. Replace the flash chip. If this does not repair the problem, replace the PDC.
Failed Unknown	An error occurred that did not conform to any known error.	Check all harnessing between PDC and Main Control Board.	POWER DOWN. Inspect/ reseat any loose pins in harnesses. Re-connect harness plugs. POWER ON.
		Check LED's on PDC. Lower right hand light should be flashing. Green Light flashing = PDC not receiving communication from VMC. Orange Light flashing = PDC both receiving and transmitting communication. Red Light flashing=PDC closed communication. Not flashing (LED is off, or a solid color) = PDC not operating. If LED is off, or a solid color, check FLO power indicator (FLO indicator should be solid green).	If the Green Light is flashing, check MDB communication cable connections as above. If the Orange Light is not flashing, LED is off and FLO power indicator is off, the PDC does not have power. If the Red Light is flashing, the PDC has a logic error. POWER DOWN, wait 5 seconds then POWER ON. No flashing = LED is off and Flo power indicator is off, the PDC does not have power. Check that the Red Light is flashing on the Main Control Board. If it is flashing, the Main Control Board is powered. Check the MDB cables. If the Red Light is not flashing on the Main Control Board and the FLO power indicator is on, it is likely an issue with the software flash chip. Replace the flash chip. If this does not repair the problem, replace the PDC.

		Test Mode: - Test Motors - Vending - perform Test Vends. Check the sensors in Test Mode - Check Sensors.	POWER DOWN. Replace any malfunctioning motors or sensors. POWER ON. If the problem persists, change the PDC and the Main Control Board.
Setup Flash Write Failed	Changes to the configuration could not be stored in the PDC's FLASH chip.	POWER DOWN, wait 5 seconds, then POWER ON.	1) If issue persists, the FLASH chip has failed. 2) Save all relevant information for PDC's Configuration. 3) Remove the FLASH chip using a 'chip extractor tool' and gently prying away from the housing. 4) Replace defective FLASH chip with the new one, pressing gently into position. 5) If the FLASH chip change does not work (after several attempts), replace the Hand.? 6) If it is a 3 Tray GFV, it will need to be re-programmed in 'Calibration: Set # of Trays'. The embedded default is 4 trays.
Failed Conformation	Discovery 1 scanned the latch side of the GFV and the trays discovered do not match those stored in FLASH. tray configuration changed.	Vendor will automatically perform a Discovery 2.	If no changes were made to the trays/shelves in GFV, it may indicate a missing reflector.
Inappropriate Command	Test/Config Mode command received while the VMC is not in Test/Config Mode. Eg. Test Motors command received while the machine is vending.	PDC will ignore the inappropriate command.	

Command Out of Sequence	The MDB command requested is inappropriate for the current state of the PDC.Eg. If the "Vend Drop" command was received when the hand was not at the hopper to drop a product during either a Vend, Startup, or Recovery.	PDC will ignore the command.	It should recover by itself. If it is a frequent occurrencechange the 'Hand'.
Command in Progress	Test/Config Mode command received while the VMC is in the process of executing a Test/Config command.	PDC will automatically ignore the command.	
Command Data Out of Range	Test/Config Mode received an invalid comand.	VMC will retry sending the command to PDC	It should recover by itself. If it is a frequent occurrence change the 'Hand'.
Command Denied Safely	A command was rejected because it is unsafe.	PDC will automatically ignore the command.	Call Tech Services at: 1-800-344-7216
Shelf Invalid	Test/Config commands that have a shelf number as a parameter, can return this error for a shelf number, while in range, which identifies a shelf that was not found during discovery.	Performing Calibrations / Set Z corrections without running discovery will cause this error.	Service Mode: Calibration Discovery - Run Discovery 2 before making any Changes.

TC Failed Movement (Test Configuration failed Movement)	1.When one of the movements in X , Y , Z or Clamp fail during Test Motors. 2. When one of the sensors fails. (eg. X,Y, Z , Clamp or Forward Looking Optics Sensors)	1.Check to see if the X , Y , Z or Clamp movements are performing normally. On Exit from Test Motors the X,Y, Z and clamp should be in the home position. 2.Check the Sensors. (O denotes a good sensor. If the sensor is blocked - then change the respective sensor)	Service Mode: Test Motors - Sensor Status Check X, Y, Z, C and F. Refer to Programming Sction of the GFV Manual for Sensor Status Readings.
Vending Mechanism - VMC Error			
Hop.Flap No Current	Hopper flap motor either did not run, or, no current was detected.	Check the Hopper flap harness connection.	Run Test Hopper Flap in Test Mode
			If motor moves, current detection circuitry has been damaged on VMC. Replace VMC board.
Hopper Flap Jam	VMC (Main Controller) detected high current while running the Hopper Flap motor. It did not detect the Hopper flap positioning switch.		Run Test Hopper Flap in Test Mode If motor does not move, replace Hopper Flap motor.
		Check to see if product is jamming the Flap	Remove the product. Run Test Hopper Flap in Test Mode
Hop.Buck No Current (Hopper Bucket no current)	Hopper Bucket Motor either did not run, or did not detect any current.	Check Hopper Bucket harness connection.	Disconnect then reconnect Hopper Bucket Harness Run Test Hopper Bucket in Test Mode
		Run Test Hopper Bucket in Test Mode	If motor moves, the current detection circuitry has been damaged on VMC. Replace VMC board.
Hopper Buck Jam	VMC (Main Controller) detected high current while running the Hopper Bucket.	Run Test Hopper bucket in Test Mode	If motor does not move, replace Hopper Bucket motor.
		Check to see if product is jamming the Bucket	Remove the product. Run Hopper Bucket Test.
Hopper Flap Switch	Hopper flap motor runs but does not detect the home switch.	Run Test Hopper Flap in Test Mode	Replace hopper flap motor assy.

Hopper Bucket Switch	Hopper bucket motor runs but does not detect the home switch.	Run Test Hopper Bucket in Test Mode	Replace the hopper bucket motor assy.
Temperature Lockout Error			
Door Open Timer	Door was open more than 10 minutes during reloading. The cabinet could not cool below 41º F. (4º C)	Service Mode - Diagnostics - Clear the errors.	Replace the products from the Temperature lockout shelves
High Temperature	Cabinet temperature remained above 41º F (4º C) for more than 15 minutes	Service Mode - Diagnostics - Clear the errors.	Replace the products from the Temperature lockout shelves
Power Failure	Vendor lost power for more than 15 minutes. Cabinet temperature rose above 41º F (4º C).	Service Mode - Diagnostics - Clear the errors.	Replace the products from the Temperature lockout shelves
Bad Ambient Temperature Sensor	Ambient Temperature Sensor is not working	Open the door- The Ambient Temperature Sensor should be fitted at the top-left, front of the cabinet. (Silver probe with brown wiring)	Check wiring harness for continuity from the probe to the power supply at bottom left of cabinet. If Harness is damaged, replace. If it is not the harness - replace the Ambient Temperature Sensor.
Coin Changer			
Coin Communication	Changer communication error - no changer communication for more than 2 seconds.	Check that red light is flashing on control board.	If light is not flashing, there is no power to board. Check and replug any unplugged connections.
			If fuse is blown replace it.
			Replace transformer.
		Defective acceptor.	Replace acceptor.
Tube Sensor	Tube sensor is defective -- reported by changer.	Check changer tubes for blockage	Clear tube blockage. If no blockage is found, replace changer.

Coin Inlet	Changer inlet chute blocked - no coins sensed for over 96 hours by the changer.	Check inlet chute for blockage. Drop coins in Sales Mode or Tube Fill Mode to test acceptance. Manually clear the error.	Clear inlet chute blockage. If no blockage found, replace changer. If acceptance rate is acceptable, system is OK. If acceptance rate is low or changer will not accept coins, replace changer.
Tube Jam	Tube pay out jam -- reported by changer.	Check changer tubes and payout for blockage.	Clear blockage, if found. If no blockage is found, replace changer.
Coin Read Only Memory	Changer check sum incorrect -- reported by changer.	Unplug machine, wait at least five seconds, replug machine. Manually clear the error	If error does not clear, replace changer/acceptor.
			Replace acceptor
Excessive Escrow	Excessive escrow requests -- more than 255 requests since the last coin was sensed.	Check escrow lever and associated mechanisms.	Manually clear the lever and error.
		Close door then reopen. Check to see if error still occurs.	Replace changer/acceptor.
Coin Jam	Coin jam - reported by changer	Check changer/acceptor for jammed coins or other obstructions.	If no obstructions are apparent, replace changer/acceptor
Low Acceptance	Low acceptance rate -- coin acceptance has fallen below 80%	Check changer/acceptor for obstructions or dirt	If no obstructions are apparent, and acceptance appears to be OK, this may be an indication of cheating attempts.
		Drop coins test acceptance.	If no obstructions are apparent and coins do not accept, or acceptance rate is poor, replace changer/acceptor.
Accept Disconnect	Disconnected acceptor -- indicates that an acceptor is unplugged.	Check coin mechanism plugs. Check for faulty harness wiring (see wiring diagram for circuit).	Correct connections.
Routing	Coin routing - indicates a coin was routed incorrectly.	Verify acceptor set-up using manufacturer's recommendations.	If acceptor was set up correctly, replace acceptor.
Dollar Bill Validator			
Bill Validator Communication	Bill validator communications - No bill validator communication for 5 seconds.	If changer or card reader is being used, check for "Coin Communication" or "Coin Read Only Memory" errors.	If there are no "Coin Communication" or "Coin Read Only Memory" errors: 1) Check bill acceptor harness; 2) Replace bill acceptor. If there is a "Coin Communication" or "Coin Read Only Memory" 1) Check control board MDB harness.
		Turn off door switch and wait at least five seconds. Turn on door switch.	
Bill Validator Full	Bill validator full - reported by validator (STACKER command).	Insure bill cashbox is empty and that the cashbox is properly closed and in place.	If cashbox appears to be OK, replace bill acceptor.

Bill Validator Motor	Bill validator motor is reported as defective by validator.	No test available	Replace bill acceptor.
Bill Validator Jammed	Bill jammed -- reported by validator.	Check bill validator for obstructions or dirt.	If no obstructions are apparent, replace bill validator.
Bill Validator ROM	Bill validator check sum is incorrect.	Turn power switch off. Wait at least five seconds. Turn power switch on. Manually clear the error.	If error does not clear, replace bill acceptor.
Bill Validator Open	Bill validator is open.	Check that bill cashbox is closed and in correct position.	If cashbox appears to be OK, replace bill acceptor.
Bill Validator Sensor	Bill validator sensor is not functioning.	Check bill validator for obstructions or dirt.	If no obstructions are apparent, replace bill validator.
Card Reader			
Card Reader Communication	There is no card reader communication for 5 seconds.	If card reader/bill acceptor is being used, check for "Coin Read Only Memory" or "Bill Read Only Memory" errors.	If there is no "Coin Read Only Memory" or "Bill Read Only Memory" error: 1) Check changer harness. 2) Replace changer.
		Turn power switch off. Wait at least five seconds. Turn power switch on.	If there is a "Coin Read Only Memory" or "Bill Read Only Memory" error: 3) Check control board MdB harness.
Card Reader	Most recent "non-transient error" from the card reader.	No test available.	Refer to card reader manual for corrective action.
Refrigeration			
Temp Sensor	The temperature sensor is defective or unplugged.	Verify the temperature sensor harness is plugged into door harness at power box area.	Check for continuity on the sensor harness and the sensor harness is plugged in properly. If it still does not work, change the sensor probe.
		Verify the 2 brown wires, # 11 & 12 pins for the temperature sensor connection on the J7 plug of Main Control Board are firmly positioned in plug.	POWER DOWN. Remove J7 plug, push both brown wires into the pins. POWER ON. Service Mode: Configuration - Set 'Display Temperature' to 'on'. Close outer door. You should see the temp begin to lower once the refrigeration deck begins to cycle. If the temperature does not drop, change the sensor probe.
Compressor	System has failed to decrease temperature 1° per hour while the compressor is running.	Check refrigeration settings (refer to the refrigeration section of programming manual).	Change settings if required.
		Check whether the evaporator is frozen.	Check seal around cabinet.

		Verify the evaporator fan is running.	Check harness to fan motor and check output voltage. Test Mode - Relays: Evaporator Fan - attempt to turn the evaporator fan on then off in this mode.
Miscellaneous Problems			
Stuck Selection SW on Keypad	Bad Selection Switch - A Selection switch inside the Keypad was actuated more than 15 seconds in door closed, Sales Mode, or door open, Service Mode.	Check the selection switch number shown in the detailed error code "nn" to see if: 1) The Keypad is defective 2) The harness is wired incorrectly or shorted out.	The harness from the Ribbon Cable to the Selection Switch Keypad could be upside down. The # 2 slot on both the ribbon cable and harness should be empty. If this does not work, replace the Keypad.
Door Switch	Outer door has been open for more than one hour.	Check the vendor's door switch to see if it's sticking or miswired.	Replace the door switch, if defective.
Ram Error	Ram check sum for service mode settings stored in non-volatile memory has been corrupted.	No test available.	If error shows up frequently, replace the control board.
AC Low	AC voltage to the controller is less than 20Vrms for more than 30 seconds.	Check for low voltage at the wall outlet at vendor start-up.	Contact a qualified electrician.
Scale	Scaling Factor error - one of the credit peripherals has introduced a scaling factor that is not compatible with the current configuration.	Check the connections of changer harness; make sure changer is plugged in and working.	Make corrections to harness or replace the changer if necessary.
Inlet Sensor	Machine's coin inlet sensor is blocked for more than 1 minute.	Check changer harnessing for cut, pinched or crimped wires.	Make sure the coin return button is not pushed on the vendor or on the coin mechanism. Replace harnesses or changer.

| Escrow Return Mech. | 3 successive coins are detected at the inlet but do not make it into the changer in 10 seconds. | Check inlet for blockage. If nothing is found, check changer harnessing for cut, pinched or crimped wires. | Clear blockage or replace harness or changer. |

OPERATIONAL FAILURES - Machine is reported as non-operational.These are major failures that can shut the machine completely. Please check the display message on the machine and compare them to the messages listed below.

DISPLAY MESSAGE	ROOT CAUSE	CHECKING METHOD	CORRECTIVE ACTION
" Sorry...Machine Servicing Required Sorry... Please Come Again "	One of the following conditions would trigger this message. 1) Flap jammed and could not recover after 3 tries. 2) Bucket Jammed and could not recover. 3) X / Y movements failed and could not recover after 5 tries.	Service Mode - check error(s) displayed.	1.Conduct Hopper Flap Test. Check to see if the flap cam is broken. 2.Conduct Hopper Bucket Test. Check to see if the bucket movement is smooth. 3.Conduct Test Motors Test. Make sure there is no physical jam in the X / Y movements. 4. If the above tests 'fail' - call Technical Services at: 1-800-344-7216
"PDC Not Available Please Check Cables Machine is not ready Thank You"	PDC cannot communicate with the VMC	Check the MDB cable/port running from the VMC to the PDC.	POWER DOWN. Unplug the MDB connector and check the pins inside the MDB socket. Change the cable if it is found to be defective. POWER ON - Service Mode - Diagnostics, check whether the error code still appears. If it does, change the PDC.
"Calibration-Dscv 1 / 2 Failure - Please Check Diagnostics"	Machine could not complete Discovery 1 / 2 .	Service Mode: Diagnostics - check the error that displays.	POWER DOWN - wait 5 seconds then POWER ON the vendor. Perform Calibration 2 Discovery. If this does not correct problem call: Tech Service: 1-800-344-7216

"Calibration - Dscv 2 in progress .. Please wait" - but the vendor remains idle.	Electronics could not complete Discovery 2.	POWER ON The 'physical' stop made by the Y-Rail is at a lower position to the Y-Home sensor then it should be. **Note - the PDC does not slide down further once it stops.	Calibration Discovery Mode: Manually perform a discovery 2. The machine should scan the left side of the tray and then the right side of the tray. Once the hand finishes the left scan, the PDC will move to the home position and stop. The rail should not stop and slid. Adjust the physical stop so that it holds the rail in place. Please refer to Y-home adjustment.
"Auto Recovery Failure… Please wait" - but the vendor remains idle.	Electronics could not complete the initial startup routine.	Service Mode: Diagnostics - check the error code displayed.	POWER DOWN. Wait 5 seconds, POWER ON. Perform Calibration 2 Discovery in Service Mode.

VENDING ERRORS - These errors are intermittent and affect only some selections.

OBSERVATION	DESCRIPTION OF ERROR CODE	CHECKING METHOD	CORRECTIVE ACTION
The PDC fixed fingers are off of the X-axis.	When a product is vended, the fixed fingers (Bottom 2) miss the middle gate.	Vend top-left selection - note the postion of the fixed finger. Vend top-right selection - note the position of the fixed finger. Check the position of red optic light from the PDC - while the hand is in 'Home' position- make sure the light is just below the center of the right-bottom tray.	POWER DOWN. Adjust the X-position to move to the left or right by adding or removing 1 or 2 spacers in the X-Home sensor located at the right-end cap of the rail. POWER ON. Perform 'Test' vends from all columns
Z-Moves in but does not take the product.	PDC fixed fingers hit the front gate on Z-out.	Perform a 'Test' vend of the affected column. Check to see that Z-extends fully and the hand moves down.	Make sure the gate pin holding the front gate in place is all the way in. If the hand hits the front gates or moves in after moving out, perform a Calibration 2 Discovery in Service Mode.
Selection(s) display a 'false' soldout.	Selections prematurely set to soldout.	Service Mode - Check the errors reported in diagnostics. Close the door. Vend the premature soldout selections to check the PDC X, Y, Z position.	Make sure there is no physical blockage for the vend process in the X/Y/Z movement. If the X, Y, Z tracks appear to be clear, perform a Calibration 2 Discovery.
Selection 30 / 40 / 50 display a 'false' soldout.	A Selection is made - PDC moves to the selection but does not complete the vend.	Check the metal retainer and cover for the IGUS Cable.	The IGUS Cable should be seated properly inside the bracket. Replace/fix the metal cover if it is twisted or bent outwards.
Power on - while the PDC is away from Home the Y Motor moves up a few inches and goes home.	At startup the Y-Motor tries to moves up but goes back to the 'Home' position.	POWER DOWN. Open the door then pull the Y-rail upwards away from the 'Home' position. POWER ON. The PDC should move up to the top of the door then go home.	If the rail tries to move up and stays idle - change the Y-ribbon cable. If the problem persists, change the Y-Motor.
Power on - while the PDC is in the 'Home' position, 'Y' Motor moves up, hits the top of the door then goes home.	PDC cannot detect the Y-home sensor.	Test Mode: Test all Sensors.	Change the Y-sensor attached to the door. If problem persists, change the Y -sensor on the PDC.

PDC movement on X-Rail is very slow while going home in X - Direction	Hand retrieves a product, the PDC appears to stop on X-axis when it is near the vend drop position	Vend any product, make sure the X-movement is smooth while the PDC is going to the home position in X.	If the PDC appears to stop then move, change the rollers in the X-carriage.
Hand stopping at the middle of the machine.	Hand moves to the hopper above position and stops.	1) Check the diagnostic message. 2) Check the hopper flap.	1) Perform action as defined in the error code. 2) Change flap motor if it is not working.
When the PDC is away from the 'Home' position, the rail moves upward in Y-direction and stops.	The PDC moved in Y direction but not in Z.	Service Mode: Activate PDC Software Maintainance	Make sure the hand assembly is fitted evenly on the L/R Z- tracks in the 'Hand Housing'. If the hand is off the tracks - POWER DOWN. Separate the hand assembly from the housing by rotating the Z-Motor Encoder Wheel (black wheel visible once hand is extended). Place the hand assembly evenly back onto the left and right tracks. POWER ON. Wait during Discovery. If performing this action does not correct the problem, change the PDC hand.

The PDC Hand crashes into the flap.	1.The Y Motor Encoder is potentially malfunctioning.
	
	2.The flap linkage is broken
		POWER DOWN
		
		Disconnect the Flap motor.
		1) POWER ON while the hand is away from the home position.
		2. Perform the flap test.
			Check that the position of the hand is around the middle of the vend flap when it is in the vend drop mode.
			1) If the vend drop position is below the normal position,
			   change the Y Motor on the rail.
			2) Ensure the link connecting the flap to the motor
			   is not broken.
			Call Tech Service: 1-800-344-7216

The clamp closes but does not open fully.	While attempting to operate, the clamp fingers close but cannot open to their original position.	Test clamp motor in Test Motors Mode.	Perform Clamp Open test. If it does not open all the way, check whether the compression spring is seated correctly. Perform Clamp Close test. In the clamp closed position, check to see if the fingers are stuck. The fingers should move easily when pushed out. If the Clamp is working properly in 'Test Mode', change the clamp sensor board. In the problem persists, change the clamp motor.

Products are not moving forward.	The 'Pushers' are not advancing product properly.	There is a gap between the products and the product retainer.	Empty the column, spray the inside bottom of the tray with a "Food Grade" silicone spray. Reload the products and test.
Door will not close or is hard to close.	1) The hand catches the on the top of the bottom shear panel.2) Door latch is preventing the door from closing.3) Rollers do not seem to lift the door.	1) Make sure the 'Forward Looking Optic' on the hand is just below the reflector on the bottom left tray of the machine.2.Check whether the door latch on the cabinet is damaged.3) Check the rollers located beneath the door.	1) Adjust the Y-stop,Please refer to Y-Adjustment Section then perform Calibration 2 Discovery.2) If damaged, straighten out the latch and re-fit or re-place the door latch bar. 3. If the rollers are not pushing the door up, add a few washers underneath the roller slide.
Problem with the Flap Motor	Flap opens half way	Test Mode - Perform Test Hopper Flap function.	Check whether there is something physically blocking the inner flap from opening. Eg. Screws/ bolts / coins etc. If there is no blockage, change the flap bucket motor.
Problem with the Bucket Motor	Bucket tries to close and then re-opens	Test Mode - Perform Test Hopper Bucket function. 1) The linkage on the hopper bucket should move freely. 2) The plastic piece on the front panel may be scraping the front of the bucket. 3) The bucket may be scraping the side of the hopper.	If it does not perform properly: 1) Dis-assemble the link from the bucket assembly. 2) Run the Hopper Bucket Test. The bucket cam should rotate from switch to switch. 3) If the cam does not stop on the switch and runs for about 6 seconds change the bucket motor. 4) If the cam stops on the switch, inspect the bucket assembly for a physical blockage.
Problem with Bucket Motor	Outer door is closed - the bucket opens/ closes then remains open. Display reads: "Checking hopper flap and bucket"	1) Inspect the bottom of the bucket for any debris blocking the vend optics. 2) Check for water drops in the bucket due to condensation from product.	Verify the connections to the 'Vend Optics' are plugged in and seated correctly. If the 'Vend Optics' connectors are in place, change the 'Vend Sensor Optics'.

ERROR	PROBABLE CAUSE	CORRECTIVE ACTION
COIN ACCEPTANCE/PAYOUT (Record all errors for reference if Vendo Technical Service is required)		
Coin mechanism will not accept coins.	No power to control board.	Check to make sure the red LED on the control board is flashing red. If flashing, check MDB harness connections. If connections are good, replace changer.
	Harness from coin mech to board is cut or disconnected.	Use a meter and check each wire for continuity and ground.
	Short in coin mechanism.	Replace coin changer/acceptor.
	Acceptor is dirty or other problem may exist (not tuned).	Clean acceptor or contact your local coin mech dealer.
	Defective control board.	Replace control board.
No acceptance or rejects a percentage of good coins.	Coin return lever pressing down on acceptor's coin plunger.	Make sure changer is mounted correctly and the coin return lever is in the proper position.
	Acceptor is dirty or foreign matter is in the path.	Clean acceptor or contact dealer.
	Coin changer is improperly tuned (if tunable).	Contact manufacturer for tuning.
	Defective controller board.	Replace/test controller.
Always accepts coins but gives erratic/no credit.	If NO CREDIT: Defective harness between coin mech and control board (will have "CC" error).	Check harness f or cut wires or wrong/bad connections. Test each wire for continuity or test to ground. If found to be defective, replace.
	If ERRATIC OR NO CREDIT: Acceptor or coin mech.	Replace coin mech and test.
	If NO CREDIT: Defective controller.	Replace/test controller.
Changer will not payout coins.	Defective harness between coin mech and control board.	Test vendor's manual coin payout. If vendor won't pay out using the Coin Payout mode or during sales, check harness for cuts, bad continuity or wrong connections. If defective, replace and test.
	Defective coin mech.	Replace coin mech and test.
	Defective controller board.	If coin mech won't payout coins manually in the Coin Payout mode or during the Sales Mode and the above two procedures have failed, replace the control board and test payout both in the Coin Payout mode and during a sale.
	Changer payout buttons are disabled while door is closed or while in Open-Door Sales Mode.	Enter the Service Mode or access the Coin Payout Mode.
BILL ACCEPTANCE		
Bill Acceptor will not pull bill in.	No power to validator.	Unplug power. Wait for 10 seconds. Reconnect power and see if bill acceptor cycles. If not, check acceptor harnessing or replace the bill acceptor.
	Acceptance disabled by coin mech (if present), or bad harnessing.	Make sure that the coin mech is plugged in (accepts coins) and that the coin tubes have enough coins to enable bill acceptance.
	Coin mech is not operative.	Make sure that the changer harnessing is correctly connected and has continuity. Repair or replace if necessary.
	Replace acceptor and test.	If acceptor accepts, bill acceptor was defective.

Bill acceptor takes a bill but does not establish credit.	Defective acceptor harness (credit not getting from acceptor to control board through the harness).	Make sure that the acceptor and harnessing is correct for your style of acceptor and it is plugged in and wired properly.
	Defective acceptor.	Replace/test acceptor.
	Defective controller.	Replace/test controller.
Bill acceptor takes a bill and credits but not erasing credit.	Defective bill acceptor.	Replace acceptor and test acceptance and erasure of credit.
	Defective controller.	Replace/test controller for erasure of credit.
	Both vend sensors are defective	Replace vend sensor.
Acceptor takes a bill and allows payback of coins without a selection.	Controllers configurations not set properly.	Access vendor configuration mode and check the "Forced Vend" setting.

VENDING PROBLEMS

Hand not in home postion	Communication error between VMC and PDC or PDC software error	Cycle power to unit. Start-up routine should begin.
Hopper is open	Vend optics blocked	Enter Test Mode check Vend Detection (see service manual). Cycle power to unit. Strat-up routine should begin.Relpace/Test vend optics.
No vend upon selection.	No power or communication to hand.	Check for lights on hand. Left side red light (motor power) right side flashing (logicpower/ communication). If no light than check MDB connection on VMC.
Hand not aligned correctly to tray when vending.	Tray or shelf out of position (not seated). Tray table in the PDC not present or correct.	Reseat tray or shelf. Run calibration #1 then #2.
X-rail not moving, product in hand.	Vend flap motor umpluged or linkage broken.	Test vend flap in Test Mode. Replace if broken.
Completely sold out while product is still in the column.	Product pusher not functioning	Check to see if product pusher is engaged.

MISCELLANEOUS PROBLEMS

Door will not close completely.	Hand assembley hitting the lower blukhead. Tri-Teq lock system is in the locked position.	Reposition y-rail stops and check y-home magnet. Open Tri-Teq lock, check for damage to lock slide.
Display shows sold out immediately upon pressing selection button of full column (sold out not clearing).	Door switch wired incorrectly or cut/pinched.	Manually press door switch. If still not vending, check wiring or replace door switch.
	Defective control board.	If door switch is replaced and still reading sold out, replace control board.
Vendor appears dead; no digital display and no lights.	Defective main harness.	If red light on control board is off, check fuse and transformer.
No digital display; vendor lights on.	Defective display or display harness.	Check display and display harness. Replace if necessary.
	Check for a flashing red light on control board.	If no light, replace control board.
Vendor scrolls message on display but does not accept money.	Changer out of tune.	See "Tuning Changer".
	Defective changer.	Replace changer.
	Defective controller board.	Replace control board.
Vendor accepts money but does not display credit.	Defective changer.	Replace changer.
	Defective controller board.	Replace board.
Vendor accepts and credits money but does	Defective selection switch.	Replace switch.

not vend (does not indicate a sold-out).	Defective selection switch harness.	Repair or replace harness.
	Defective controller board.	Replace board.

REFRIGERATION

Refrigeration unit will not run.	Defective temperature sensor.	1. Check connection.
		2. Replace temperature sensor.
	Defective control board.	Replace board.
Refrigeration unit will not run at all.	No power to vendor.	Check power supply, also check service cord connections.
Unit will only run in the compressor relay test mode. (Located under Test Mode)	Defective cabinet switch.	Open and close the door to make sure lights and fan come on. If not, then check the cabinet switch.
	Defective temperature sensor.	Follow the same steps detailed above about the temperature sensor.
	Wait the 3 minute delay once the cabinet door is closed.	Wait to see if unit comes on.
	Defective control board.	If unit still does not come on, then replace the control board.
Unit will not run in the compressor relay test mode. **NOTE: Leave the compressor relay test mode on, in order to check for voltage.	Defective control board.	Unplug unit at power distibution panel. Remove air dam. Reconnect power. Enable compressor relay through Test Mode. Check 2-pin connection on power distribution for 110V.
	Defective relay.	Upon opening the cabinet door, the lights and fans should shut off. If they don't, replace the cabinet switch.
Refrigeration unit runs constantly.	Defective cabinet switch.	Upon opening the door, the display should read either errors, summary sales, or none. If it does not, then replace the cabinet switch.
	Defective control board.	Replace control board.
	Defective relay - contacts are welded together.	Replace relay.
Compressor will not start.	Overload protector inoperative.	Check overload (apply insulated jumper across terminal, if compressor starts, replace overload).
	Defective cabinet switch.	Check for error codes. Replace cabinet switch.
Compressor will not start, condenser fan motor running - unit hot (power to compressor).	Defective over load relay	Replace the over load relay.
	Compressor motor rocked	Replace the refer unit.
	Defective capacitor	Replace the capacitor.
	Defective PTC relay	Replace the PTC relay.
Compressor starts but does not run.	Loss of refrigerant	Replace the refrigeration unit.
	Smashed tubings and capillary	Replace the refrigeration unit.
	Defective over load relay	Replace the over load relay.
Compressor runs but cabinet temperature warm.	Loss of refrigerant	Replace the refrigeration unit.
	Smashed tubings	Replace the refrigeration unit.
	Defective drainage	Make sure the drain hose is not kinked or clogged.
	Defective temperature sensor	Replace the temperature sensor.
	Poor air flow	Make sure nothing is sitting in front of the evaporator.
	Defective control board	Replace the control board.
	Defective door seal	Make sure the vend flap and gasket are not open.
	Defective heat exchange on condenser/ Blocking air flow by dust, lint or fins damage	Clean the surface of the condenser fins or straighten the bent fins.

Both compressor and condenser fan motors will not operate.	Bad refrigeration control relay.	Test relay using relay test function of the electronic controller. Replace relay if necessary.
	Bad connection at power board.	Check wiring connections. Make corrections if necessary.
Evaporator frosted over.	Loss of refrigerant	Replace the refrigeration unit.
	Smashed tubings	Replace the refer unit.
	Defective drainage	Make sure the drain hose is not kinked or clogged. Re-install hose correctly if kinked or clogged.
	Defective temperature sensor	Replace the temperature sensor.
	Defective control board	Replace the board.
	Poor sealing	Check gasket, vend flap, and permagum on the bulkhead.
Product freezing up (too cold).	Temperature setting too low.	Adjust set point in control board.
	Defective temperature sensor	Replace the temperature sensor.
	Defective control board	Replace the control board.
Excessive noise.	Fan blade hitting shroud or transformation or loose fitting	Replace the fan blade or re-install correctly.
	From the inside of fan motor or loose fitting	Re-install or replace the motor.
	From the inside of compressor or loose fitting	Replace the refrigeration unit.

PDC Hand Assembly
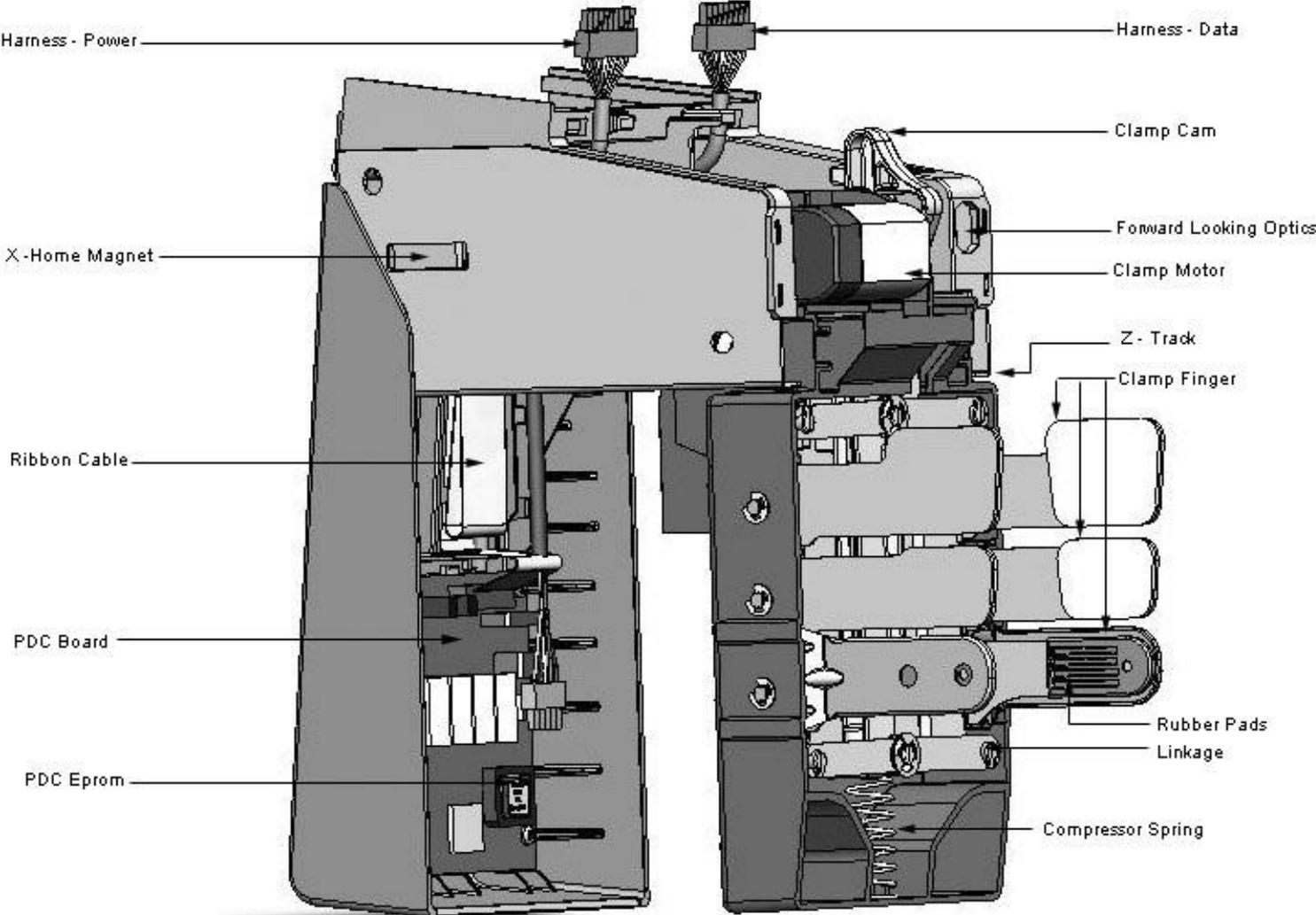
Figure 1.a - PDC Hand Assemly

GFV Cabinet, set Y home adjustment

WORK CONTENTS : Required tools to set Y home adjustment.

NOTE : (1) Spacers will be provided by the Tooling shop.

2 of each Spacer;
0.250 inch and
0.075 inch

1

∩
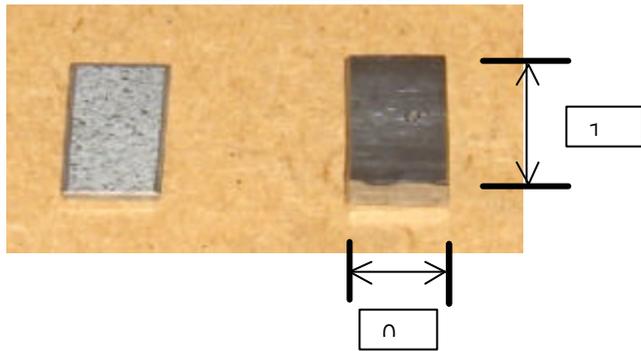
#2 Phillips screw
driver and a 5/16 open

Diagnostic Tools:
Diagnostic; Test Mode;
Sensor Status

Diagnostic; Test Mode; Sensor Status
display. In this adjustment procedure we
are monitoring the |Yo| (Y sensor) status.

Test Mode
Sensors Status

Press "4"
to access

Testing In Progress
Xo|Yo|Zo|Co|F●|

Press "4"
to reset

Diagnostic; Test Mode; Sensor Status
display. In this adjustment procedure we
are monitoring the |Yo| (Y sensor) status.

Testing In Progress
Xo|Y●|Zo|Co|F●|

Press "4"
to reset

GFV Cabinet, set Y home adjustments.

WORK CONTENTS : GFV Cabinet Prerequisites.

STEPS: (1) Before powering on the Cabinet or shutting the door verify the following:

   (1a) Door Ramp must be installed.

   (1b) All Trays must be installed and seated. Reflectors must be on all outside trays.

   (1c) Adjust latches on the Cabinet before shutting the door.

   (1d) Verify that when the door is closed that the hand assembly clears the bulkhead.

   (1e) Top of Door should be level with Cabinet top.

   (1f) X-Rail must be installed and level with the shelves.

   (1g) Power box must be installed.

   (1h) Y-Rail stop on the hinge side; the adjustment screws should be loose and the bracket in the down position.

NOTE: For help and explanation of the diagnostics and Sensor Status display refer to the VUE 30/40 VEC 15 Programming Manual.

Step 1h Illustration

Hinge side door, Y-Rail stop bracket. Position as shown.
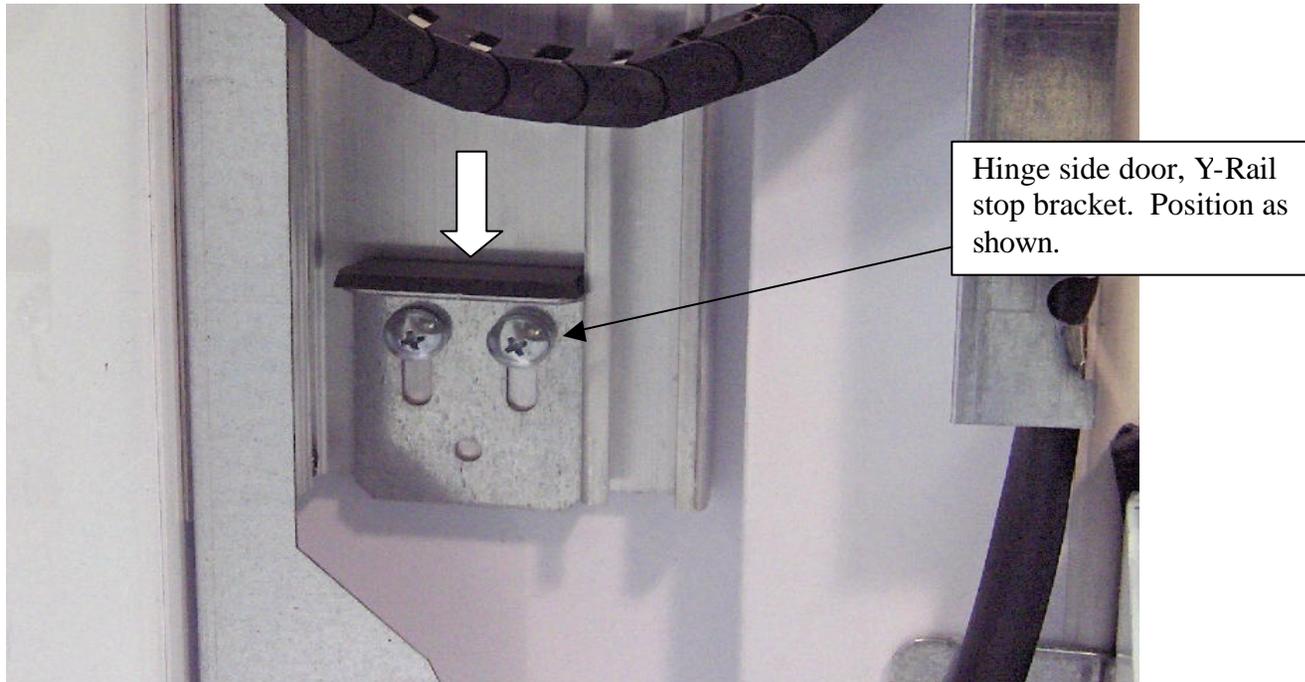
GFV Cabinet, set Y home adjustments.

WORK CONTENTS : Powering on the Cabinet.
Note: .

STEPS: (1) Before connecting the Power Box to Line Voltage (VAC) make connections
from the door harness to the power box.
(2) Connect the Power Box to Line Voltage (VAC).
(2a) At power up the Cabinet should go through the following sequence:
The optic light should be on (red beam) on the hand assembly.
The display on the front of the machine should go through the boot sequence.
The hand should go to the home position, lower left hand in the door.
The delivery bucket and delivery flap will go through the boot up sequence, open / close.

Light harness

Test Power

Door harness
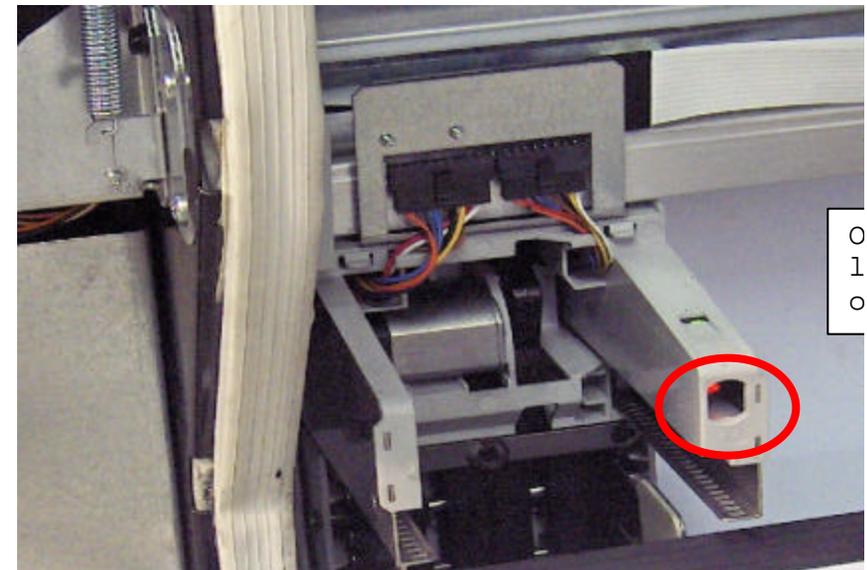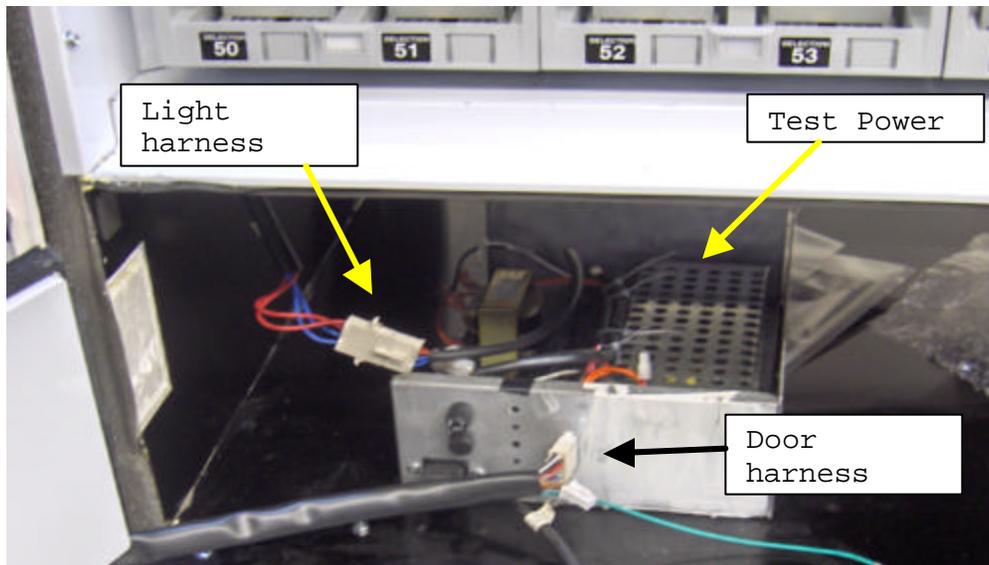
RK CONTENTS : Positioning the Y-Rail stop bracket, latch side.

e:

PS: (1) Disconnect the Y-Motor power connector as shown.

  Verify the X-Rail assembly is set down against the Y-Rail stop on the latch side.
ve the X-Rail up then down to verify.

  Close and latch the door. The door must be latched for this adjustment.

  Verify that the optic red light is below the reflector on tray 56/57 as shown.

ı) If the amber LED on the forward looking optic is illuminated, or flashing then the Y stop bracket must be lower

)) If the Y-stop bracket needs to be lowered, lower it in increments of 0.100 inches until the amber LED is off.

:) Once the Y-Stop bracket (latch side) is set, level the Y-Stop bracket (hinge side) and tighten adjustment screw

l) At this point the Y Stop brackets should be level with each other in relation to the X Rail assembly and the
ustment screws for both sides should be tight.

.

Step 1

Remove

X-Rail Assembly

Step 4

Step 4a Forward
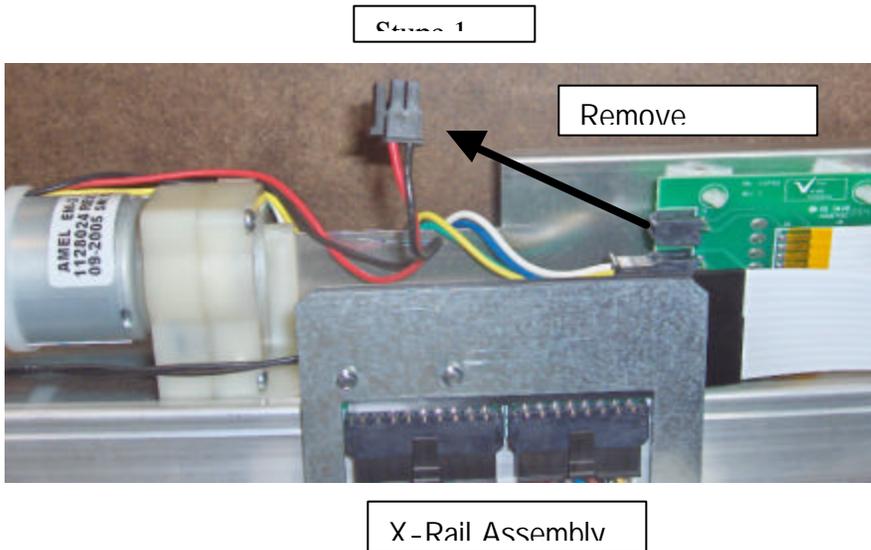
There are two LEDS
(green, amber)
where indicated by
the red circle.
Green LED is on
constantly, the
amber LED comes on

RK CONTENTS : Checking position of the Y-home magnet.
te: Once the Y Home Stop is adjusted the Y Home magnet must be tested and adjusted if required.

EPS: (1) Adjust the Y Home magnet so that the top edge of the magnet overlaps the
ottom edge of the Y home sensor by 0.100" .
)With the X-Rail resting on the Y-Rail stops activate the "Sensor Status"
d verify the magnet is activating the sensor.
)If the Y Home sensor is active ('Yo" o is not filled in) go to page 6.
)If the Y Home sensor is inactive adjust the Y Home magnet up 0.100 inches, reset the
nsor Status by pressing key "4".
peat step 4 until the Y Home Sensor shows Active "Yo" ("o" not filled in),
en go to page 6.

Step 1

Y sensor

Adjust overlap
to 0.100

Y magnet
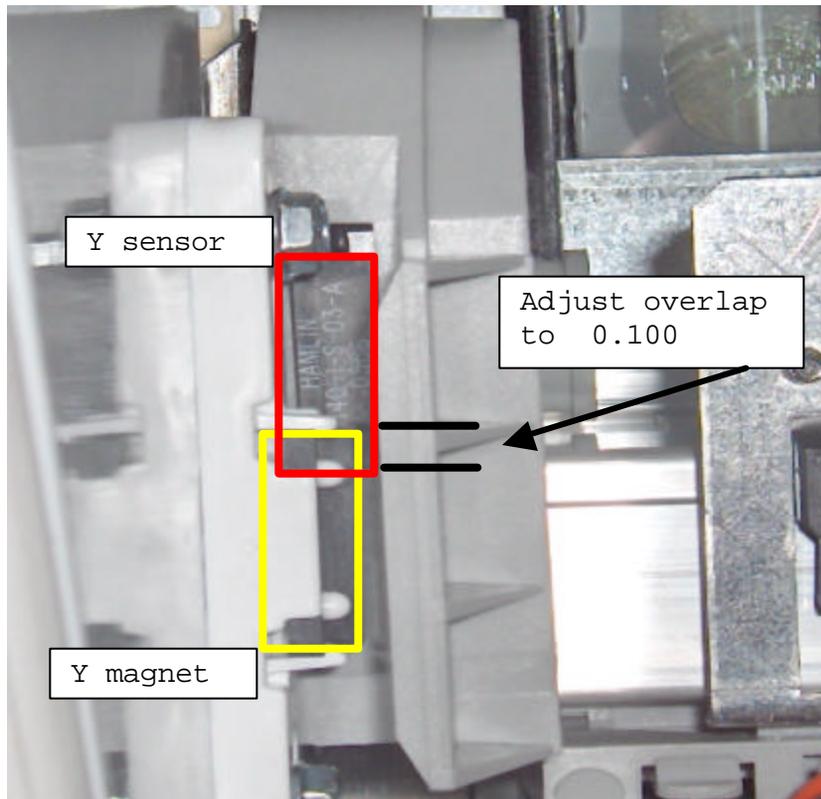
Step 2

Keypad selections:
"1" = exit /home
"2" = increase / advance
"3" = decrease / backup
"4" = enter / save

To Activate the Test Mode, Sensor Status:
1. Press the Mode button on the VMC board 2
times.
1a. Display should read "DAIGNOSTICS"
2. Press "key 2" until the "Test Mode"
appears in the display.
3. Press "key 4" to enter Test Mode menu.
4. Press "key 2" until the "Sensor Status"
appears.
5. Press "key 4" to enter Sensor Status.

To refresh Sensor Status press "key 4".

Sensor Status, "Yo", the "o" is the
indicator status:
? - Inactive (sensor did not detect magnet)
O - Active (sensor detected magnet)

GFV Cabinet, set Y home adjustment.

RK CONTENTS : Checking position of the Y-home magnet with 0.250 inch spacer.

te: .

EPS: (1) Raise the X-Rail and install the 0.250 inch " Standard 1/4 inch
           bolt" spacers on top of both Y Stops as shown. One on top of each stop.
     (2) Lower the X-Rail where it is resting on the Y-Rail stops and spacer.
     (3) Reset the "Sensor Status" and verify the magnet is not
     (4) activating the sensor ('Y?", o filled in).
     (5) If the Y Home sensor is not activated ('Y?", o filled in)
     (6) go to page 7.
     (5) If the Y Home sensor is active "Yo" ("o" not filled in)
     (6) adjust the Y Home magnet down 0.100 inches. Reset sensor status.
              Repeat step 5 until the Y Home Sensor
            shows Inactive "Y?" ("o" filled in), then goto page 7.

Step 5

Step 1
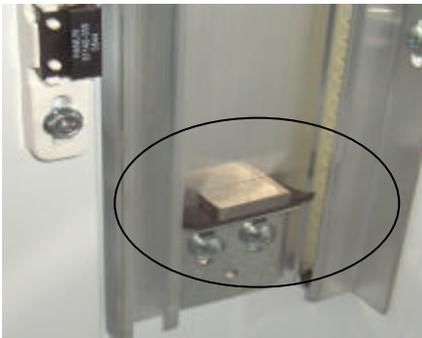
Latch
side Y -

Y sensor

Adjust Y Magnet
down 0.100
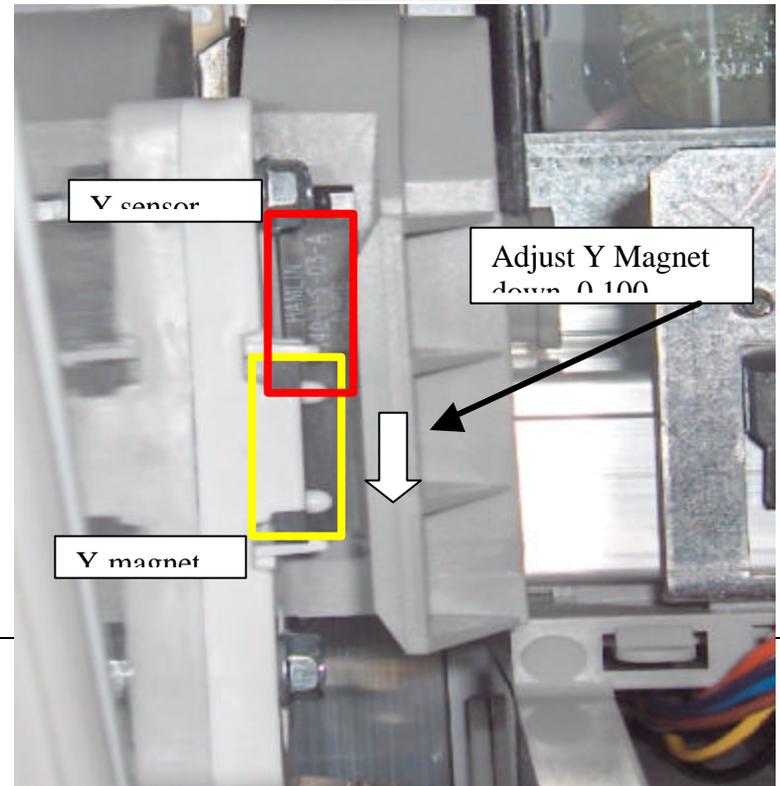
hinge
side Y -

Y magnet

GFV Cabinet, set Y home adjustment.

RK CONTENTS : Checking position of the Y-home magnet with 0.075 inch spacer.
te: .
EPS: (1)   Raise the X-Rail and install the 0.075 inch spacers "same as

ickle" on top of both Y Stops as shown. One on top of each stop.

(2)   Lower the X-Rail where it is resting on the Y-Rail stops and spacer.
(3)   Reset the "Sensor Status" and verify the magnet is actived,
      sensor status ('Yo", o not filled in).
(4)   If the Y Home sensor is activated ('Yo", o not filled in) go to page 8.
(4)   If the Y Home sensor is inactive "Y?" ("o" filled in)
(5)   adjust the Y Home magnet up 0.060 inches. Reset sensor status.
       Repeat step 5 until the Y Home Sensor shows
      active "Yo" ("o" not filled in), then goto page 6.

Step 5

Step 1

Y sensor

Adjust Y
Magnet up

Y magnet

Latch side, Y-

hinge side, Y-
Rail stop bkt.
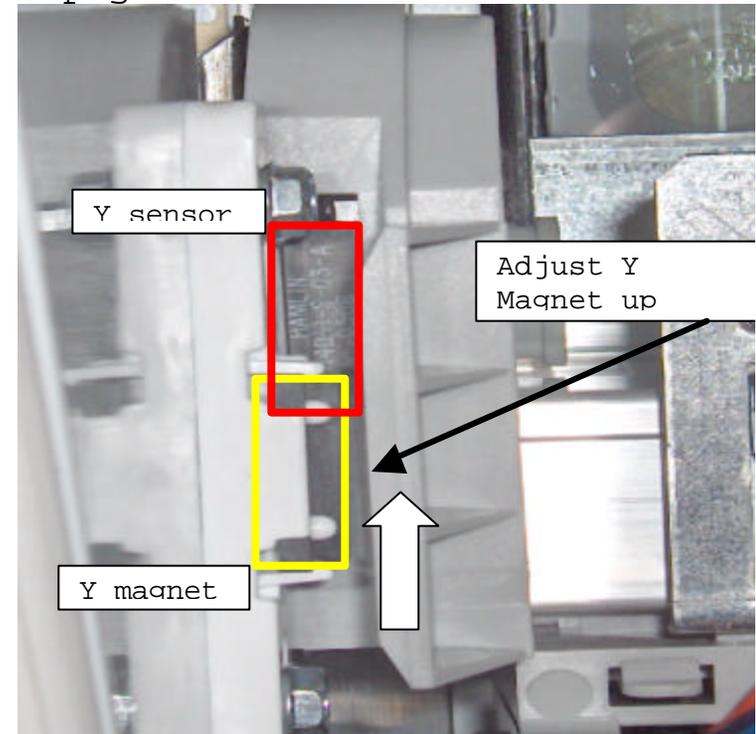
ORK CONTENTS : Checking position of the Y-home magnet with no spacer.
ote: .

TEPS: (1)   Raise the X-Rail and remove both spacers as shown.
     (2)   Lower the X-Rail where it is resting on the Y-Rail stops.
     (3)   Reset the "Sensor Status" and verify the magnet is actived,
          sensor status('Yo", o not filled in).
     (4)   If the Y Home sensor is activated ('Yo", o not filled in) go to page 9.
     (4)   If the Y Home sensor is inactive "Y?" ("o" filled in) adjust
     (5)   the Y Home magnet up 0.060 inches. Reset sensor status.
          Repeat step 5 until the Y Home Sensor shows active
       "Yo" ("o" not filled in), then goto page 6.

Step 1

No spacers for this test.

View of Y-Rail

No spacers for this test.
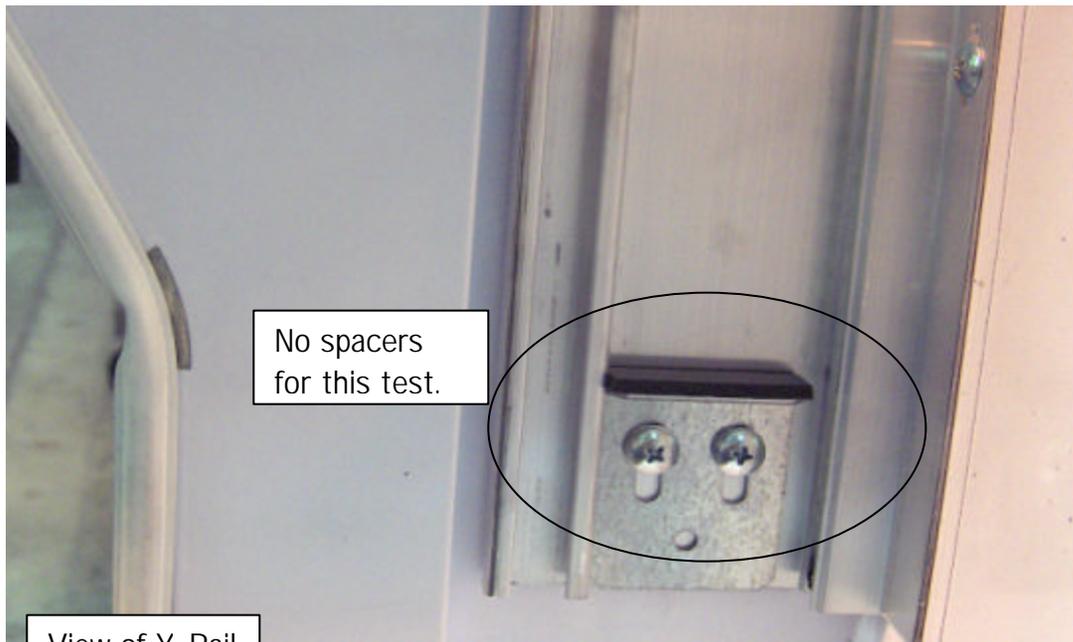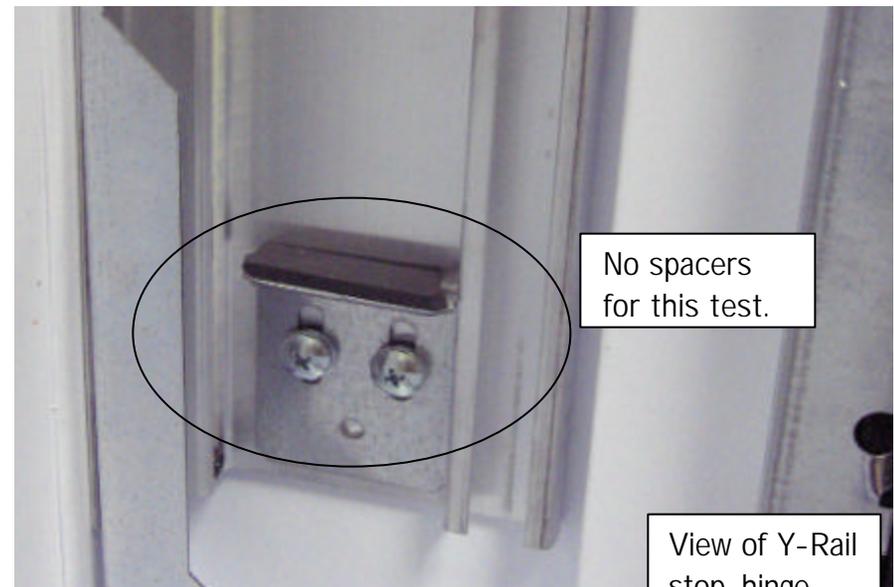
View of Y-Rail stop hinge.

RK CONTENTS : Set the Y Stops.

te: .

EPS: (1) With all the adjustments made it is time to tap and insert the Y Stop set screws
     (2) Raise the X-Rail assembly to access the Y Stops, tap the set screw holes for
          both Y stop brackets.
     (3) Insert the screw set (screw and 2 washers) in both Y Stops as shown in
          Step 3 and 4. Do not run the screw into the door liner.
     (4) Lower the X Rail assembly to the stops, connect the Y Motor connector.
     (5) Reset the power by unplugging then plugging in the power supply,
          shut the door and latch it. Machine should run Discovery 2.
     (6) Proceed to vending test or next test in sequence.

Step 4

Step 2

View of Y-Rail stop, latch

tap the hole. Screw p/n

Carriage assembly.

Step 3
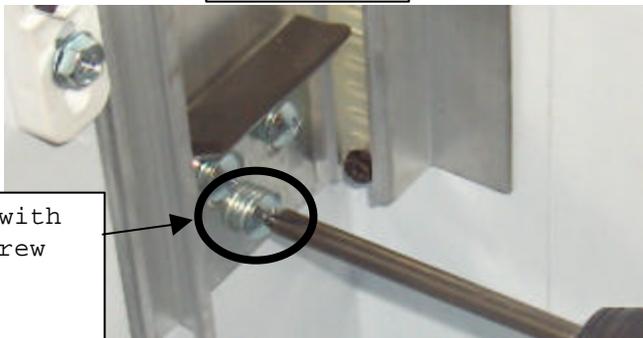
insert screw with 2 washers. Screw p/n V802212, washers p/n V801455

Y Rail stop, hinge side adjust

set

```
  ┌─────────────┐                              ( A )
  │   Start     │                                │
  └─────────────┘                                ▼
         │                          ┌──────────────────────┐
         ▼                          │ Activate Test Mode,  │
  ┌──────────────────────┐          │ Sensor Status.       │
  │ Prerequisites:       │          └──────────────────────┘
  │ X- Rail level, door ramp,                 │
  │ trays seated, door/Cab      ┌────┐        ▼
  │ level, latches,             │ NO │    ◇ Is Y ◇
  │ Y Rail stop (hinge side)    └────┘      sensor
  └──────────────────────┘                      │
         │                                  ┌─────┐
         ▼                                  │ YES │
  ┌──────────────────────┐                  └─────┘
  │ Power to Cabinet:    │          ┌──────────────────────┐
  │ Make harness connections        │ Install 0.250"       │
  │ (light, door) to power          │ spacers. Reset the   │
  │ supply.              │          └──────────────────────┘
  └──────────────────────┘            ┌─────────────────────┐
         │                            │ Adj Y home magnet   │
         ▼                            │ down 0.100". Reset  │
  ┌──────────────────────┐           │ Sensor Status.      │
  │ Once hand goes to home │          └─────────────────────┘
  │ position disconnect Y  │      ◇ Is Y ◇        │
  │ Motor power connector. │        sensor    ┌─────┐
  └──────────────────────┘         inactive   │ NO  │
         │                              │     └─────┘
         ▼                          ┌─────┐
  ┌──────────────────────┐          │ YES │
  │ Close and latch door. │         └─────┘
  │ Adjust Y Home stop, latch ┌──────────────────────┐
  │ side where Amber LED is  │ Install 0.075"       │
  └──────────────────────┘   │ spacers. Reset the   │
         │                    │ sensor status.       │
         ▼                    └──────────────────────┘
  ┌──────────────────────┐     ┌─────────────────────┐
  │ Adjust Y Home magnet to    │ Adj Y home magnet   │
  │ overlap sensor by approx.  │ up 0.60".Reset      │
  │ 0.100".  Reference only.   │ Sensor Status.      │
  └──────────────────────┘     └─────────────────────┘
         │                  ◇ Is Y ◇        │
         ▼                    sensor    ┌─────┐
       ( A )                  active    │ NO  │
                                  │    └─────┘
                              ┌─────┐
                              │ YES │
                              └─────┘
                                  │
                                ⬡ 2
```

2

Were any adjustments made? → YES → Page 1

NO

Remove all spacers. Reset the sensor status.

Is Y sensor active → NO → Page 1

YES

Finish