10.0. - Troubleshooting Guide

10.0. - Problem List
10.1. - Firmware Issues - (pg 144)
10.2. - Hardware Error Codes - (pg 150)
10.3. - Lamp Issues - (pg 143)
10.4. - MOF Issues - (pg 147)
10.5. - Picture Quality - (pg 145)
10.6. - Software Error Codes - (pg 148)
10.7. - Start-Up Problems - (pg 142)
10.8. - Transport Issues - (pg 146)
10.9. - Troubleshooting Flow Charts - (pg 166)
10.10. - EEProm Data Issue (section 9.2.1)
Service Manual Index Page

10.0. - Troubleshooting Guide

10.0. - Troubleshooting Guide

10.3. - LAMP ISSUES
Lamp comes on and goes off when you turn scanner on - (pg 153)
Lamp current running high errors - (pg 153)
Lamp Error 16384 - (pg 153)
Lamp goes out when scan starts - (pg 153)
Scanner locks up after bulb replacement - (pg 153)
Go to Problem List

10.0. - Troubleshooting Guide

10.1. - FIRMWARE ISSUES
Double EPROM problems during initialization - (pg 154)
Hardware fault 200 - (pg 154)
PSI Error Code 240 - (pg 154)
PSI Error Code 244 - (pg 154)
PSI Error Code 250 - (pg 154)
Scanner doesn't make noise on start up - (pg 154)
Go to Problem List

10.0. - Troubleshooting Guide

10.5. - PICTURE QUALITY
A darker color cast on images after scanning - (pg 158)
Black boarders on pictures - (pg 157)
Blue images - (pg 156)
Bright frames, no images - (pg 156)
Distorted, stretched images - (pg 155)
Distorted, stretched images only 1-2 frames - (pg 155)
Errors 127, 147 - (pg 157)
Film longer than scanner is configured - (pg 156)
Picture has vertical lines 4 & 16 Base - (pg 152)
PSI error code 800000 - (pg 156)
PSI Hardware fault 4000 - (pg 155)
Scan gives little black pictures - (pg 156)
Small scratches still there when using Digital ICE - (pg 157)
Unit will not focus - (pg 157)
White lines in images. Red / Blue / Brown lines in picture - (pg 155)
While using PSI film exits at end of scan but scanner keeps running - (pg 156)
While using PSI film will travel in part way and stop and advance - (pg 156)
Go to Problem List

10.0. - Troubleshooting Guide

10.8. - TRANSPORT ISSUES
Film will not go through Scanner - (pg 158)
In PSI film jams - (pg 158)
PSI takes first frame and then stops - (pg 158)
Takes APS or 35mm film only - (pg 158)
Go to Problem List

10.0. - Troubleshooting Guide

10.4. - MOF ISSUES
APS film jam - (pg 159)
Does NOT read MOF data - (pg 159)
Will scan APS film that is out of the canister. But will NOT scan film from the canister - (pg 159)
Go to Problem List

10.0. - Troubleshooting Guide

10.0. - Troubleshooting Guide

Table 1: 10.2. - HW EC

Error Code	Code Description	Code Resolution / Repair
HW EC	Hardware Error Code is detected.	A repeated HW EC is seen after selecting the "OK" Button. Call Pakon Technical Support
	Go to Problem List	

10.0. - Troubleshooting Guide

Table 2: 10.7 - START-UP PROBLEMS

Problem	Causes	Solution & Link
Scanner won't initialize.	1. Corrupt registry files.	1. Run magnification test. 2. Run film speed test.
Scanner not acknowledged by computer.	1. Faulty USB cable. 2. Scanner software not loaded. 3. Faulty USB board in scanner.	1. Replace USB cable. 2. Load proper software. 3. Replace USB board in scanner.
PSI won't start up.	1. Scanner not turned on. 2. Firmware on one of the boards corrupted.	1. Scanner must be fully initialized for PSI to run. 2. Reload all firmware.
Error code 151 - scan line acquisition error.	1. (U5) chip on CCD Board failed. 2. CCD power module fuse blown. 3. CCD firmware corrupt.	1. Lift label on (U5) chip if number AT17C512A is on chip replace it with AT17LV512A. Reload CCD firmware. 2. Replace CCD power module. 3. Load CCD firmware.

Table 2: 10.7 - START-UP PROBLEMS

Problem	Causes	Solution & Link
Error code 1006 in PSI.	1. Boot EPROM version wrong.	Check the USB version in "Help About" in PSI. Version (1) is for the older style USB boards and Version (2) is for the new style USB board. This version can be changed in MFC Test. For Version (1) select [USB Board Rev B1]. For Version 2 select [USB Board Rev D DDR FIFO]. These are found under Load Boot EPROM.

10.0. - Troubleshooting Guide

Table 3: 10.3.- LAMP ISSUES

Problem	Causes	Solution & Link
Lamp current running high errors.	1. Shorted lamp filament.	1. Replace with approved bulb.
Lamp goes out when scan starts.	1. Shorted lamp filament.	1. Replace with approved bulb.
Lamp error 16384.	1. Lamp board firmware corrupted.	1.Reload lamp board firmware.
Lamp comes on and goes off when you turn scanner on.	1. Lamp board firmware corrupted.	1. Reload lamp board firmware.
Scanner locks up after bulb replacement.	1. Lamp board firmware corrupted.	1. Reload lamp board firmware.

10.0. - Troubleshooting Guide

Table 4: 10.1. - FIRMWARE ISSUES

Problem	Causes	Solution & Link
Double EPROM problems during initialization.	1. Double EPROM firmware corrupted.	1. Run PTS Package and Select the Adavance Tab for Erasing EEProm. 2. Reload double EPROM through calibration wizard. 3. Bad USB board.
Scanner doesn't make noise on start up.	1. Motor board not initializing.	1.Reload motor board firmware. 2. Replace Motor Control Board.
PSI error code 250.	1. DX firmware corrupted.	1.Reload DX firmware.
PSI error code 240.	1. CCD board.	1. Reload CCD firmware. 2. If this doesn't work CCD board needs to be replaced.
PSI error code 244.	1. Motor board firmware.	1. Reload motor board firmware.
Hardware fault 200.	1. Double EPROM corrupted.	1. Run Scanner Cure. 2. Reload Double EPROM. 3. Reestablish regedit settings.

10.0. - Troubleshooting Guide

Table 5: 10.5. - PICTURE QUALITY

Problem	Causes	Solution & Link
PSI Hardware fault 4000.	1. Lamp board fan slow, clean the filter.	1. Reload the lamp firmware.
Distorted, stretched images.	1. DX sensors dirty. 2. Film speed bad. 3. Film transport dirty or out of adjustment. 3. Running TLA ver. Older than 29RC8 with motor firmware ver. 0x1B.	1. See Troubleshooting Streched Images in Section 4.2.3 or 10.8..
Distorted, stretched images only 1-2 frames.	1. Too much light. 2. Track test bad.	1. See Troubleshooting Streched Images in Section 4.2.3 or 10.8..
Picture has vertical lines 4 & 16 Base.	1. Light shows in sprocket holes.	1. Replace flare guard.
White lines in images. Red / Blue / Brown lines in picture.	1. Dust on light bar, (most likely), Lens, CCD.	1. See Troubleshooting Horizontal Lines Images in Section 5.3.6. or 10.8.
A darker color cast on images after scanning.		1. See Troubleshooting Low Light in Section 5.3.4. or 10.8.

Table 5: 10.5. - PICTURE QUALITY

Problem	Causes	Solution & Link
Blue images.		1. See Trouble-shooting Low Light in Section 5.3.4. or 10.8.
PSI error code 800000.	1. Filter wheel sensor.	1. Clean filter wheel sensor for something sticking in it preventing wheel from turning.
Film longer than scanner is configured.	1. Filter wheel not moving properly. 2. CCD board bad.	1. Reload motor board firmware. 2. Replace CCD board.
While using PSI film will travel in part way and stop and advance.	1. Gains not set properly.	1. Run Gains Test.
While using PSI film exits at end of scan but scanner keeps running.	1. Gains not set properly.	1. Run Gains Test. 2. See Trouble-shooting Low Light in Section 5.3.4. or 10.8.
Scan gives little black pictures.		1. See Trouble-shooting No Light in Section 5.3.1. or 10.8.
Bright frames, no images.	1. Magnification registry files corrupt.	1. Correct registry files. 2. Run magnification test. 3. Reload motor board firmware.

Table 5: 10.5. - PICTURE QUALITY

Problem	Causes	Solution & Link
Black boarders on pictures.	1. Magnification corrupt.	1. Run PTS Package and Select the Film Path Tab for Offset Adjust.
Unit will not focus.		See Troubleshooting Soft Focus in Section 7.3.2. or 10.8.
Errors 127, 147.	1. Unknown.	1. Run magnification in calibration wizard.
Small scratches still there when using Digital ICE.	2. Lamp not running at full power.	1. Replace with approved bulb.

10.0. - Troubleshooting Guide

Table 6: 10.8. - TRANSPORT ISSUES

Problem	Causes	Solution & Link
Film will not go through Scanner.		1. See Trouble-shooting Streched Images in Section 4.2.3 or 10.8..
Takes APS or 35mm film only.	1. Film guides won't move between APS or 35mm.	1. See Trouble-shooting Streched Images in Section 4.2.3 or 10.8..
PSI takes first frame and then stops.	1.CCD power module 2. CCD board not running.	1. Check Internal Wiring. 2. Check Commu-nications inPTS. 3. Reload Firm-ware. 4. Replace PCB if defective.
In PSI film jams.		1. See Trouble-shooting Streched Images in Section 4.2.3 or 10.8..

Table 7: 10.4. - MOF ISSUES

Problem	Causes	Solution & Link
Does not read MOF data.	1. Worn or Bad film. 2. Magnetic heads need cleaning. 3. MOF transport not properly aligned.	1. Re-run scan. 2. Clean magnetic heads using alcohol and air. 3. Align MOF transport. Try a different cassette.
APS film jam.	1. Worn or Bad film. 2. MOF transport not properly aligned. 3. Running TLA version older than 29RC8 with motor firmware 0x1B.	1. Check end of film for proper trim. 2. Align MOF transport. 3. Upgrade TLA or Downgrade motor firmware.
Will scan APS film that is out of the canister. But will not scan film from the canister.	1. Scanner type not set in registry.	1. Set Scanner type in registry to 8.

Error Code	Code Name	Code Description	Code Resolution / Repair
10	EC Scanner Not Initialized	An attempt to perform some scanner function was made before the scanner was initialized. Initialize the scanner first.	P
11	EC No Pictures Or Strips	An attempt to perform some function on a picture or strip was made, but there are no pictures or strips. Create them first.	P
12	EC Too Many Rolls	The maximum number of rolls has been reached. Delete one or more before scanning more rolls. **Check Hi Res-Mega bytes-Roll, Total to insure install was ok.**	I or U.
15	EC Invalid Parameter	One or more function parameters are not valid values.	P or I
25	EC Previous Error	Used in the call stack trace to indicate part of an error previously listed in the trace.	P

28	EC Lamp Error	Indicates a lamp error (low voltage or high temperature or slow fan or burn out).	H
29	EC Changing Frame Number with APS.	Indicates that an attempt to change the frame number of APS film was made. This is not allowed.	U
104	EC APS Film Jam Extract	Indicates that during an APS scan, the film stopped (before it reached the light bar) and is probably jammed.	H
105	EC APS Film Jam Scan	Indicates that during an APS scan, the film stopped and is probably jammed.	H
106	EC APS Film Jam Retract	Indicates that during an APS scan or a manual retract, the film stopped (while retracting) and is probably jammed.	H

109	EC APS Park	Indicates that, after retraction, the APS cartridge could not be parked (the film status indicator could not be returned to its correct position).	H
140	EC Lamp Warm Up Failure	Indicates that the lamp failed to reach a stable state during warm up.	Try replacing Bulb. H
151	EC Scan Line Acquisition	Indicates that TLX has trouble communicating with the scanner.	Check the USB cable and connections, other wise the scanner will need to be diagnosed and repaired by a technician. C or H. See Note 2, see Note 8.

Error Code	Code Name	Code Description	Code Resolution / Repair
127	EC EEProm Warning Check Sum Bad	Indicates an internal problem with the scanner's EEPROM	Call a technician for repair. H The EEPROM data is corrupt. See Note 10.

Error Code	Code Name	Code Description	Code Resolution / Repair
1002	EC DRV Ring Tail Overflow	These errors indicate a breakdown in the communications link between TLX and the scanner via the USB bus. Verify that the USB cable is the proper length and defect free.	1. Verify Communications using PTS. 2. Reboot. 3. Verify cables (USB conncted internally). 3. USB replacement.
1003	EC DRV Lost Sync	Same as EC 1002.	Same as EC 1002. C or H. If running PSI 1.4 (TLA 28.10), then upgrade to 2.0 (29.2) or replace Pakon5.hex.
1004	EC DRV Invalid Packet Type	Same as EC 1002.	Same as EC 1002. W or I or C or H.
1005	EC DRV Packet Busy	Same as EC 1002.	Same as EC 1002. W or I or C.
1006	EC DRV Fifo Overflow	Same as EC 1002.	Same as EC 1002. W or I or C.
1011	EC DRV Packet Host Error No Ack	Same as EC 1002.	Verify that the USB cable is the proper length and defect free. Same as EC 1002. W or I or C. See Note 13.

Error Code	Code Name	Code Description	Code Resolution / Repair
159	EC Time Out	Indicates some sort of time-out. If saving multiple pictures to client memory, a time-out may occur if a buffer isn't ready (use Initialize Scanner to set this time-out). A time-out can also occur if there's a problem with the TLX configuration and may be remedied by cycling power on the scanner, or rebooting the computer, or reinstalling TLX.	1. Use PTS to check communications and to verify firmware.
165	EC WIN Device Io Control	A TLX configuration and may be remedied by cycling power on the scanner, or rebooting the computer, or reinstalling TLX.	Try rebooting the host computer to clear the error. W or I or C. Cycle power to scanner, reboot computer, reinstall software. See Note 7.

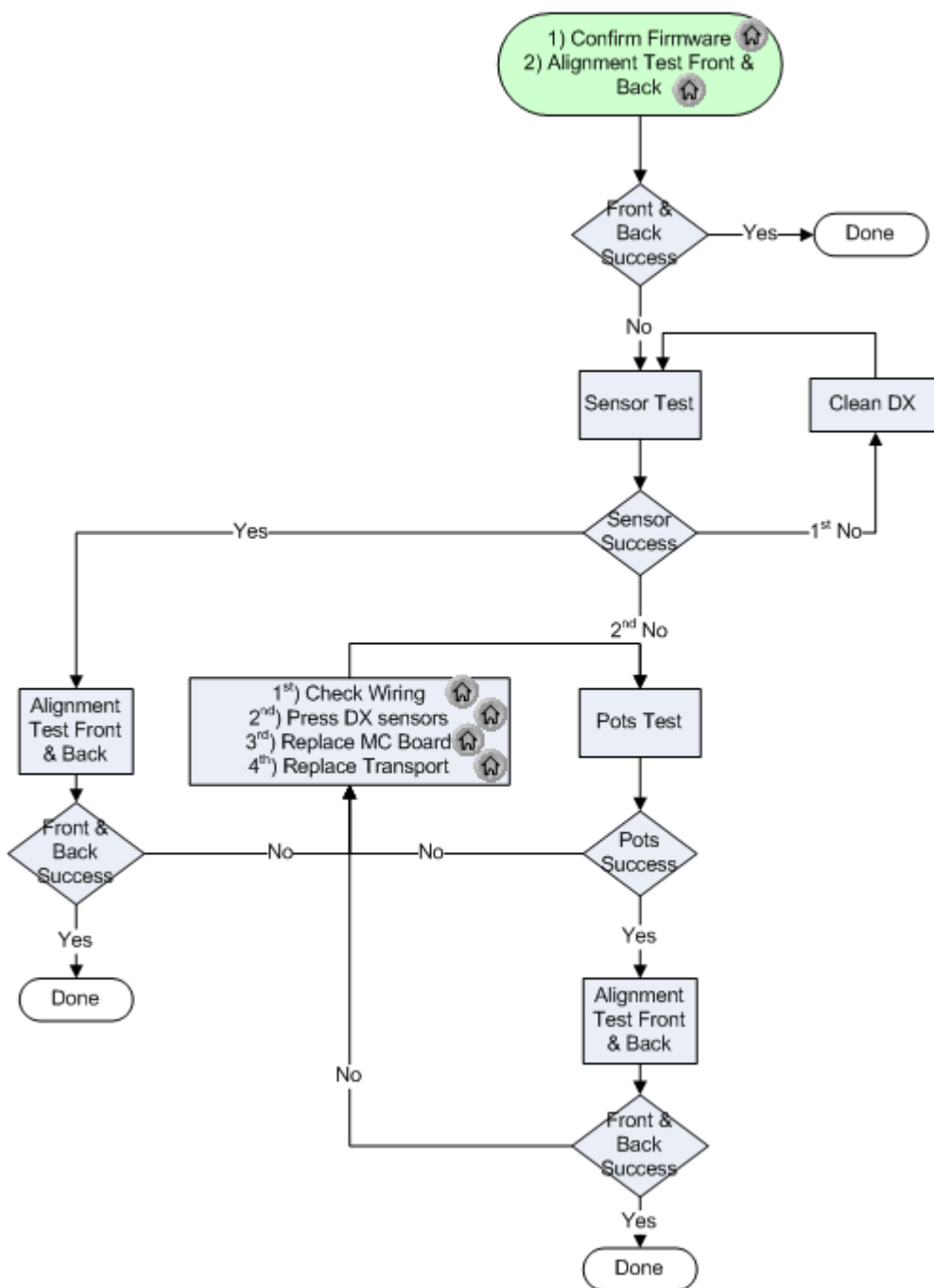| Error Code	Code Name	Code Description	Code Resolution / Repair
131	EC Focus Curvature Threshold	Indicates that focus is out of alignment.	Correct it with a call to Force Corrections. If this fails, use Calibration Wizard. H

Table 8:

Type	Description
P	Programming error, report bug to pakon engineering
W	Operating system (windows) error, reboot computer and try again: make sure the system has Windows 2000 SP2 or later.
I	Installation error, try reinstalling software or adjusting registry values.
C	Communication error with scanner, check USB communication.
H	Hardware error (scanner or PC), call technician for repair.
U	User error, read the manual / helpfile.

10.9 - Troubleshooting Flow Charts	
Soft Focus Flow Chart Picture	Soft Focus HTML
No Light Flow Chart Picture	No Lights HTML
Low Light Flow Chart Picture	Low Light HTML
Horizontal Line Flow Chart Picture	Horizontal Line HTML
DX Flow Chart Picture	DX HTML
Stretched Images Flow Chart Picture	Stretched Images HTML
Problem List	

DX Troubleshooting Flow Chart Picture

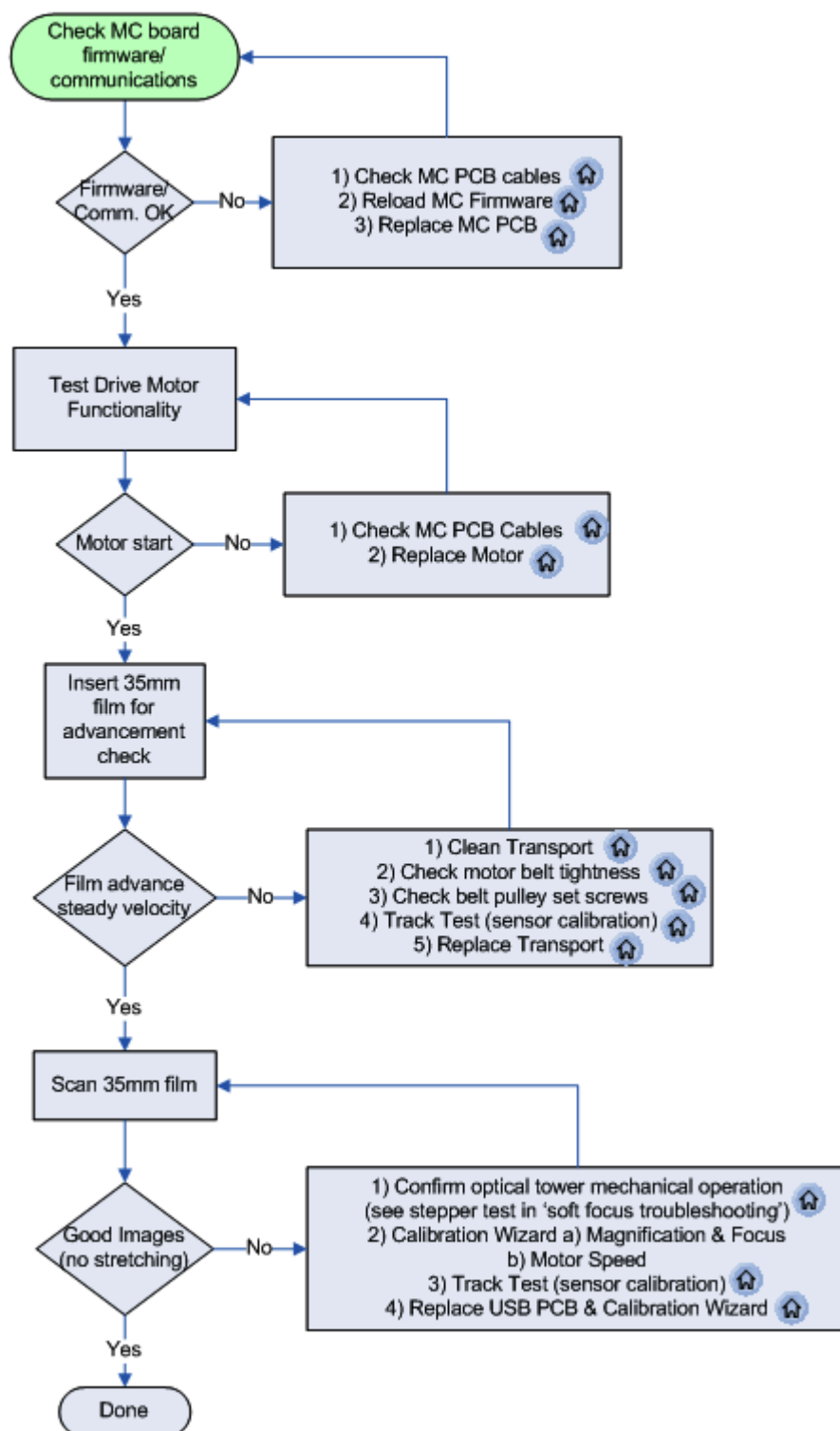**Troubleshooting Flow Charts**

Link to the DX Troubleshooting Flow Chart Enlarged with HTML Links

Strectched Image Troubleshooting Flow Chart Picture
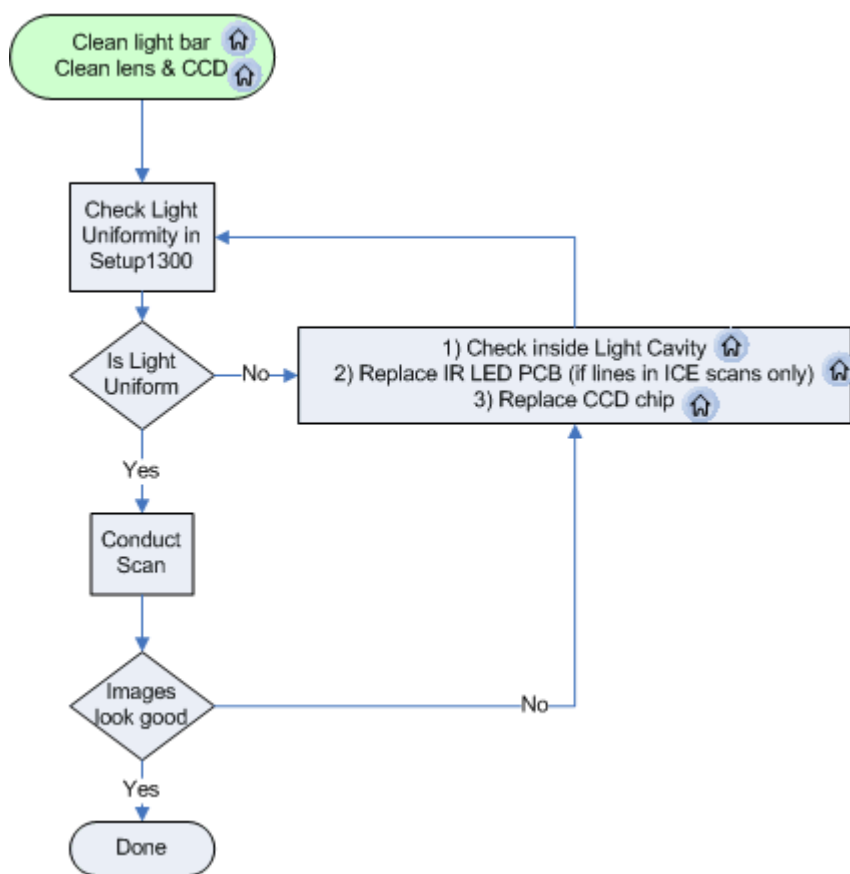
Troubleshooting Flow Charts

Stretched Image Flow Chart Enlarged with HTML Links

Horizontal Lines Troubleshooting Flow Chart Picture
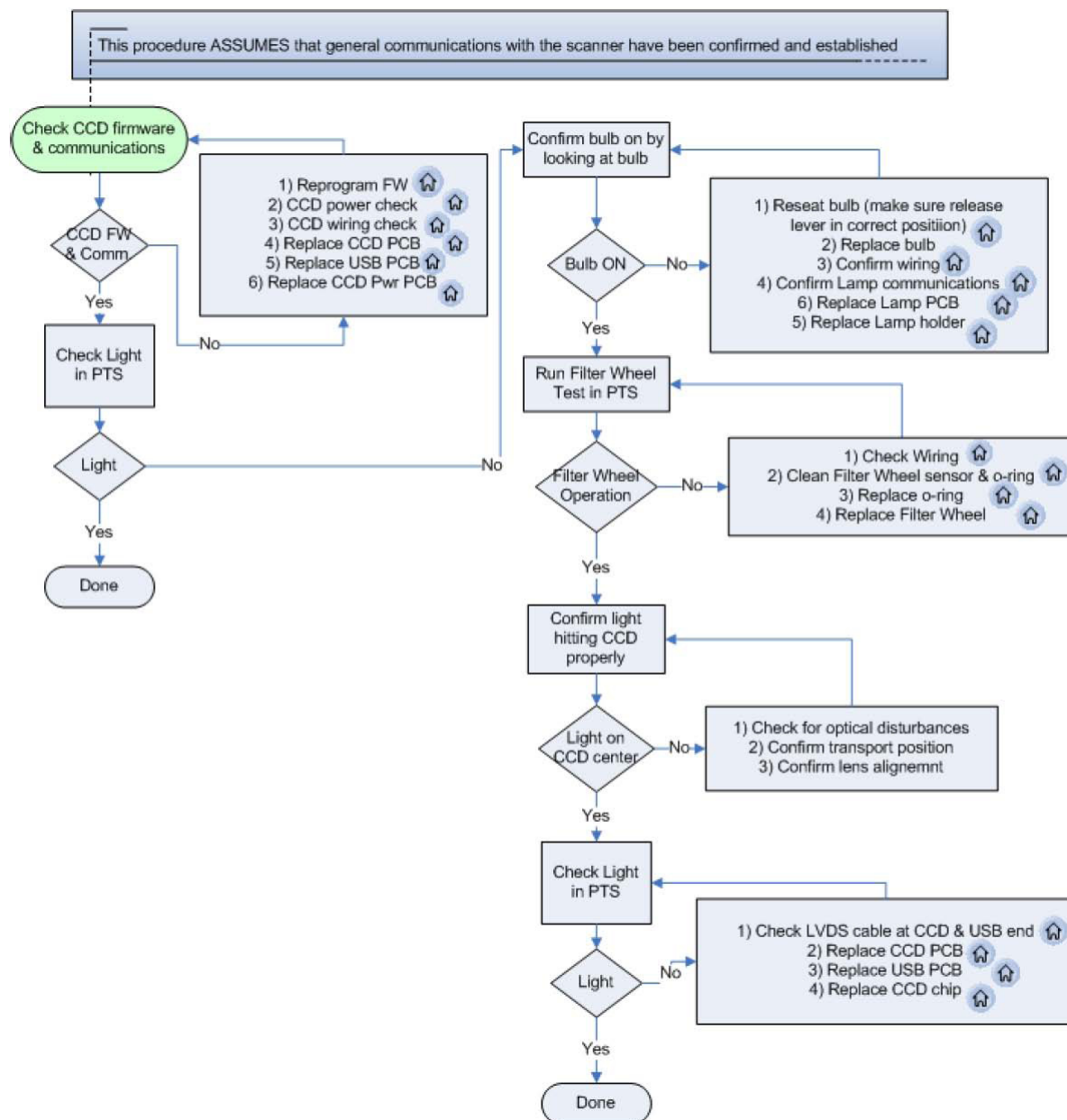
Troubleshooting Flow Charts

Link to the Horizontal Lines Troubleshooting Flow Chart Enlarged with HTML Links

No Light Troubleshooting Flow Chart Picture

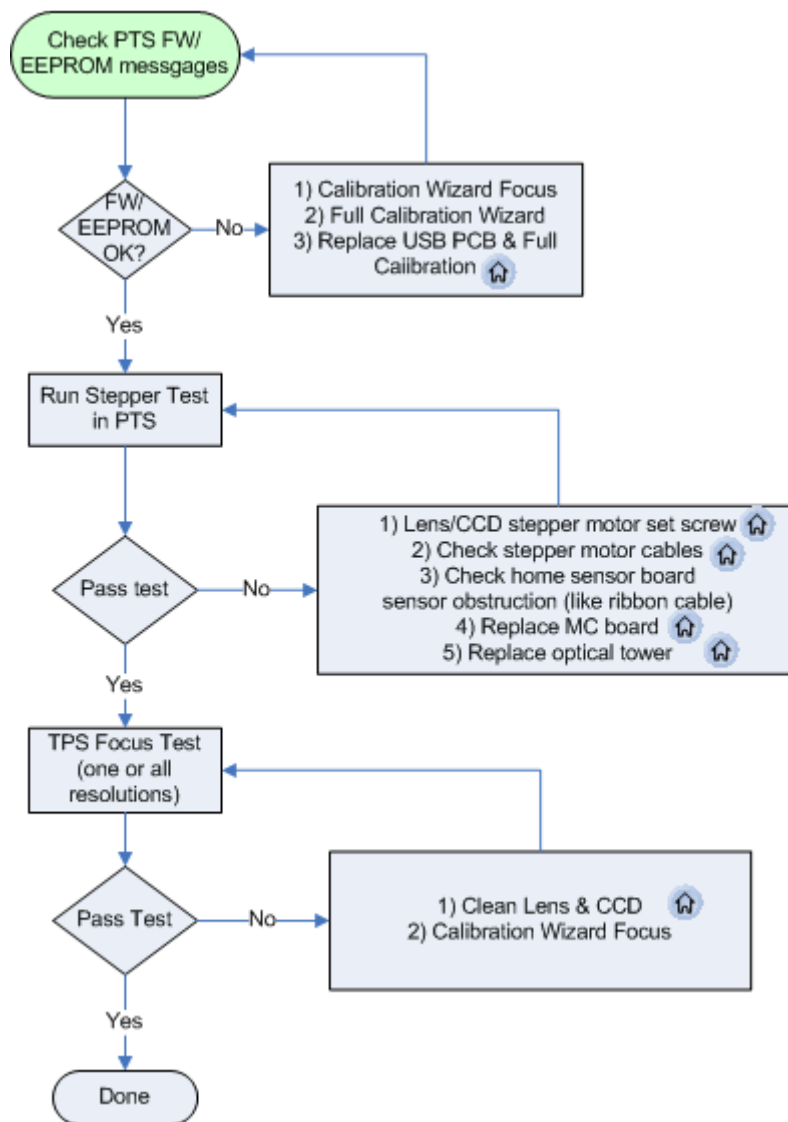**Troubleshooting Flow Charts**

Link to the No Light Troubleshooting Flow Chart Enlarged with HTML Links

 Soft Focus Troubleshooting Flow Chart Picture

Troubleshooting Flow Charts

Link tothe Soft Focus Troubleshooting Flow Chart Picture Enlarged with HTML links

Low Light Troubleshooting Flow Chart Picture

Troubleshooting Flow Charts

Link to the Low Light Troubleshooting Flow Chart Enlarged with HTML Links