



Troubleshooting Guide

Mechanical Issues	Probable Cause	Actions
Skipped Stitches	1. Moving fabric too fast to the left.	1. Take your time going to the left.
	2. The needle is too small and is deflecting away from the hook tip. Gammill recommends MR 3.5 or larger needles.	2. Try increasing the needle size.
	3. Hopping foot set too high.	3. Set the hopping foot a little lower.
	4. The machine is out of time.	4. Check the needle height, and needle to hook position. If you continue to have issues, contact a technician for guidance or assistance.
Bobbin Thread won't release	1. The hook is binding.	1. Oil the machine and hook.
	2. The hook has not positioned far enough to allow the thread to release	2. Increase the speed of the needle position to allow the hook to rotate a little farther. Access the User Services & Diagnostics through the drop down menu and then Maintenance. Use the up arrow to adjust the Needle Positioning Speed to the next higher value.
Basting stitch is dragging in the fabric	1. Basting speed is set too slow for the desired speed of the fabric.	1. Adjust the basting needle position speed to shorten the time the needle is in the fabric. Access the User Services & Diagnostics through the drop down menu and then Maintenance. Use the up arrow to adjust the Basting Needle Positioning Speed to the next higher value.

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Can't pick up the bobbin thread	1. The bobbin is empty.	1. Replace or fill the bobbin.
	2. The needle is installed incorrectly.	2. Check the orientation of the needle to have the scarf of the needle to the right. Once needle is installed correctly, try again.
	3. The needle is too far from the hook tip.	3. Check machine timing. Check the needle height, and needle to hook position. Refer to your technician for guidance or assistance.
Needle will not move	1. The needle is installed incorrectly. If the needle is installed backward, the hook will catch the needle and stop the machine with the needle in the fabric.	1. Rotate the rear hand wheel in the clockwise direction to raise the needle out of the fabric. Check the orientation of the needle to have the scarf of the needle to the right. Once needle is installed correctly, try again.
	2. Thread is caught in the hook.	2. Grasp the rear hand wheel firmly and turn it clockwise to free the hook. Clean any thread from the hook and thoroughly clean the hook area. Once the hand wheel can be rotated freely, try stitching again.
	3. Needle Positioning Speed Set Too Low	3. See the section in Charm Error Messages, "Z Drive Fault – Position Error".
	4. Electrical Issue	4. Refer to Electrical Issues, "Needle will not move".

Mechanical Issues	Probable Cause	Actions
Thread Break alarm is going off when the thread is not Broken.	1. The Thread Break Delay is set too low for the size stitches you are sewing.	1. Adjust the Thread Break Delay to a higher value. Access the User Services & Diagnostics through the drop down menu and then Maintenance. Use the up arrow to adjust the Thread Break Sensor Delay value to the next higher value.
	2. The thread is slipping on the Thread Break Wheel. Some threads are more slippery than others, even from cone to cone of the same type of thread.	2. Wrap the thread another time around the Thread Break Sensor Wheel to increase the friction on the wheel.
Thread is breaking	1. Stitching too fast in the backward direction.	1. Stitching a long row by pulling the fabric toward you will increase the likelihood of breaking thread. Reduce your speed when stitching long rows while pulling the fabric toward you.
	2. The eye of the needle is worn.	2. Install a new needle with every project.
	3. The needle is too small for the size thread.	3. Change the needle to a larger size.
	4. The tension is too tight.	4. Reduce the top thread tension and bobbin tension.

Mechanical Issues	Probable Cause	Actions
Machine is making a new noise	1. The Belt Cover is out of adjustment.	1. Inspect around the Belt Cover to see if the pulley or belt may be in contact with the cover. Adjust the Belt Cover.
	2. There is a shortage of oil. If the machine has set idle for any length of time, the working surfaces inside the machine can get dry.	2. Oil the machine at the beginning of every day you wish to quilt – even if it is only for an hour. If the machine has been idle for days or weeks, oil it, and 15 minutes later oil it again. You cannot over oil this system.
	3. Any new mechanical noise can be unsettling Have a friend try to find the source of the noise	3. Call your technician when you hear a sound you sound that concerns you.
The On-Board Bobbin Winder will not wind a bobbin.	1. Bobbin is not latched on the spindle spring.	1. Insert the bobbin on the spindle and rotate until the spindle spring latches in the notch on the bobbin.
	2. The Bobbin Winder o-ring is worn.	2. Check the o-ring by pushing the lever down in the run position, rotate the hand wheel, and try to hold the spindle. If you are able to hold the spindle still while rotating the hand wheel, the bobbin winder disk drive wheel needs to be adjusted, or the o-ring needs to be replaced.

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The quilt sandwich will not fit under the hopping foot.	1. The Hopping Foot is too low with the needle up.	<ol style="list-style-type: none">1. The height of the hopping foot changes with the stroke of the needle. If the hopping foot does not raise far enough to allow the quilt sandwich to go under the hopping foot, raise the hopping foot. To raise the hopping foot the Presser bar must be adjusted higher in its clamp. Caution: raising the hopping foot/presser bar may allow the Gam-Guide Jr. to slip under the edge of the hopping foot, which can allow the needle to hit the Gam-Guide Jr. or other similar rulers.
The needle does not stop in the right place.	1. The needle is over rotating.	<ol style="list-style-type: none">1. Access the User Services & Diagnostics through the drop down menu and then Maintenance. Use the down arrow to adjust the Needle Positioning Speed value to the next lower value.

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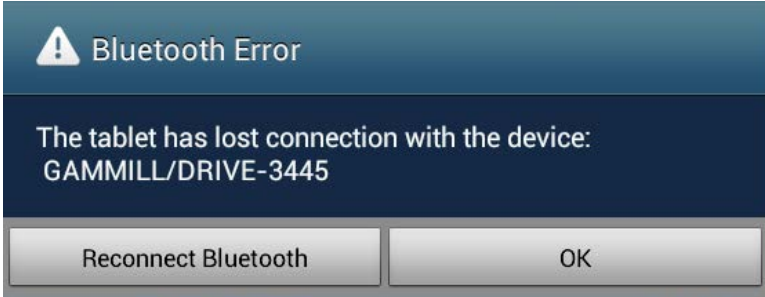
Electrical Issues	Probable Cause	Actions
The machine does not power up	1. The power cabling is not securely connected.	1. Turn the power switches to the OFF position (O). Check the power cable connections at the rear of the machine, your surge protection device, and at the wall outlet. Turn the power switches back to the ON (I) position. Test the LED light to see if power has returned.
	2. The main Fuse (F1) is blown.	2. Turn the power switches to the OFF position (O). Remove the F1 fuse. Observe if it looks burned, if so call your technician.
	3. The power breaker in the distribution panel is tripped.	3. Call your technician.
Machine does not begin stitching when the foot pedal is depressed.	1. A run mode not selected on the tablet.	1. The machine must be on the main screen, and either Variable, Constant, or basting Selected for the foot pedal control to function.
	2. The foot pedal is not plugged in. See the Charm Error Message, "Pedal Error!"	2. Follow actions listed for "Pedal Error!" 1. Reconnect the foot pedal and try again.
	3. The stitching mode speed is set too low.	3. Select the "Change Settings" icon on the main screen and ensure the Variable Speed Response and Constant Speed values are above 15 and try again
	4. The machine has no power.	4. Refer to listings above for "The machine does not power up" and "The needle does not move".

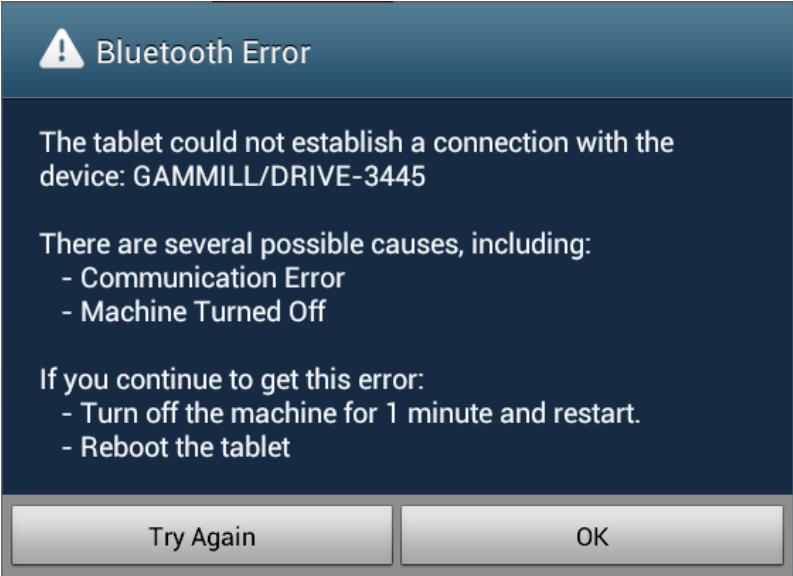
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Mechanical Issues	Probable Cause	Actions
The needle positions too slowly	1. The needle position speed is set too low.	1. Access the User Services & Diagnostics through the drop down menu and then Maintenance. Use the up arrow to adjust the Needle Positioning Speed to the next higher value.
The machine takes multiple stitches when positioning.	1. The needle position speed is set too high.	1. Access the User Services & Diagnostics through the drop down menu and then Maintenance. Use the down arrow to adjust the Needle Positioning Speed to the next lower value.
The tablet does not charge	1. The USB cable is unplugged.	1. Check connections for the USB cable to the tablet.
	2. Defective DC power receptacle.	2. Try plugging the power adapter cable into the laser power receptacle on the front side panel of the power panel.
	3. The DC to USB adapter cable is defective.	3. Try the USB wall charger supplied with the tablet. If the tablet charges with this adapter, the DC to USB cable is defective. Call your technician for a replacement.
	4. The power to the machine is off.	4. Refer to instructions above in “The machine does not power up”.


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Mechanical Issues	Probable Cause	Actions
The Laser will not light up	1. The Laser is not connected.	1. Check the Laser by holding your hand directly in front of the laser. Push the connector into the receptacle marked "Laser".
	2. The Laser is defective	2. Make certain the rest of the system is powered up. Test the Laser in the adjacent DC supply receptacle marked "Tablet Charger". If the Laser works in an alternate supply, call your technician. If the laser does not function when plugged into an alternate supply, replace it.
The LED light fixture white lights don't work.	1. The LED light is not plugged in.	1. The only outlet for the LED fixture is on the bobbin winder-side of the switch cover. Push the DC connector for the LED fixture into the connector and position the LED fixture rocker switch fully toward the back of the machine – away from you.
	2. The LED Light Is defective.	2. Call your technician
The LED fixture UV lights don't work.	1. The LED light is not plugged in.	1. The only outlet for the LED fixture is on the bobbin winder-side of the switch cover. Push the DC connector for the LED fixture into the connector and position the LED fixture rocker switch fully toward you.
	2. The LED Light Is defective.	2. Call your technician

Charm Error Messages	Probable Cause	Actions
	1. The motor power switch has been turned off.	1. Ensure the motor power switch is in the ON (I) position.
	2. The main power switch has been turned off.	2. Ensure the main power switch is in the ON (I) position.
	3. Power has become unplugged or disconnected.	3. Check the power cable connections at the rear of the machine, your surge protection device, and at the wall outlet.
	4. Communication was disrupted by another electronic device.	4. Press the Reconnect Bluetooth button.
	5. Z-Drive has become unresponsive.	5. If this message occurs approximately 5 seconds after connecting to Bluetooth, power off the machine for 1 minute and then restart. If you continue to get this message, contact your technician.

Charm Error Messages	Probable Cause	Actions
	1. Machine not turned on.	1. Ensure both power switches are set to the “ON” position (rocker toward the “I”) and press “Try Again”.
	2. Machine not fully booted.	2. When power is applied, it takes approximately 15 seconds for the Z Drive to boot fully so that it can accept a Bluetooth connection. Please wait 15 seconds and press “Try Again”.
	3. Problem with the tablet.	3. Reboot the tablet by holding the power button until a prompt appears. Press “Restart”.
	4. Z-Drive has become unresponsive.	4. Power off the machine for 1 minute and then restart. If you continue to get this message, contact your technician.

Charm Error Messages	Probable Cause	Actions
<p>NO RESPONSE FROM SENSOR NODE! Make sure that both power switches are switched ON</p>	<p>1. The Charm machine program has lost communication with the Sensor Board.</p>	<p>1. Power down Charm machine system and the tablet, wait one full minute, and restart both as normal. Restart the Charm Machine and then the tablet and try again. Report the incident to your technician.</p>
	<p>2. The Sensor Board has failed or is unplugged.</p>	<p>2. Call your technician</p>
<p>PEDAL ERROR! Please verify that pedal is plugged in to unit...</p>	<p>1. The foot pedal is disconnected.</p>	<p>1. Inspect the connection for the foot pedal on the back side panel of the power enclosure. Plug the white connector back into the receptacle.</p>
	<p>2. The foot pedal is defective.</p>	<p>2. Inspect the cable to the foot pedal for signs of damage. Call your technician to obtain a replacement foot pedal.</p>
	<p>3. The Sensor Board has failed.</p>	<p>3. Call your technician</p>

Charm Error Messages	Probable Cause	Actions
<p> Z Drive Fault - Position Error</p> <p>The Z Drive has experienced a fault. The needle could not reach the commanded position within the allotted time frame.</p> <p>Check for:</p> <ul style="list-style-type: none"> - Needle or Hopping Foot Obstruction - Thread Lock - Loose or Broken Drive Belt - Blown Motor Fuse - A Needle Positioning Speed that is set too low <p>Once the problem has been corrected, reset the drive and continue.</p> <p style="text-align: center;"><input type="button" value="Reset Drive"/></p>	<ol style="list-style-type: none"> 1. Thread Lock, or other mechanical obstruction. 2. The belt is too loose to drive the machine. 3. The motor Pulley is loose on the motor shaft. 4. The motor in-line fuse (F2) is blown. 5. Needle positioning speed set too low. 	<ol style="list-style-type: none"> 1. Refer to Mechanical Issues item "Needle will not move". 2. Check and adjust the belt tension. 3. If belt is already adjusted properly, make certain the pulley wheel is secure to the motor shaft. Tighten the set screw on the motor pulley. 4. Check the motor fuse (F2). If F2 is blown, contact your technician. 5. Access the User Services & Diagnostics through the drop down menu and then Maintenance. Use the up arrow to adjust the Needle Positioning Speed value to the next larger value.

Charm Error Messages	Probable Cause	Actions
<p> Z Drive Fault - Over Temperature</p> <p>The Z Drive has experienced a fault. The overtemp condition has been reached.</p> <p>Please wait for the drive to cool and then reset the drive and continue.</p> <p style="text-align: center;">Reset Drive</p>	<ol style="list-style-type: none"> 1. The Z Drive has overheated due to extreme use. 2. Machine has mechanical binding which is causing the Z Drive to work harder than normal. 	<ol style="list-style-type: none"> 1. Let the machine cool for a few minutes and then resume use. 2. See Mechanical Issues item “The needle will not move”. If this error persists, call your technician.