Malfunction	Probable Cause	Corrective Action
Grinding, rubbing, knocking noises when pedal levers rotate under load.	Pulleys misaligned.	Loosen the pillow block bearings, realign the pulleys, and retighten the pillow block bearings.
	Dirt build up in pedal tracks.	Clean and remove dirt build up.
	Rear roller wheels frozen.	Clean and lubricate with non detergent oil.
	Link cover contacting rear cover.	Reposition rear cover(s) or replace.
		Check that the inner link cover mounting screws are properly installed.
	Excessive disk wobble.	Make sure no weld interference occurs between the crankarm and the disk cover.
		Ensure that the crankshaft is flush with the crankarm and check for proper alignment. See How To.
	Faulty intermediate shaft assembly.	Replace intermediate shaft assy.
	Faulty pillow block.	Replace pillow blocks on crankshaft.
	Alternator.	Relieve tension on alternator, spin flywheel for smoothness. If thumping occurs, faulty alternator. Replace alternator.
	Bearings at pivot points are out of position or dirty.	Clean all sleeves in the linkage pivot areas and lubricate with non detergent oil.
	Setscrews or crankarm bolt in crankarm assembly are loose.	Loosen setscrew and clamping screw in crankarm assembly. Apply blue Loctite® (242) on screw threads. Tighten setscrew first to set keyway, then tighten clamping screw. Crankarm bolt requires no Loctite.
	Small extension arm bolt loose.	Replace small extension arm kit.
	Faulty link bearings.	Replace link assembly.

	Link mounting loose.	Clean, lubricate, and retighten.

Malfunction	Probable Cause	Corrective Action
Grinding, rubbing, knocking noises when pedal levers rotate under load.	Excessive end play in rocker arms.	Adjust collars as necessary to take out the end play. See How To Replace Rocker Arms.
	Pedal lever vibrates or squeaks during operation.	Align pedal lever. See How To Replace Pedal Lever.
	Pedal tape not adhering properly.	See How To Replace Pedal Lever
Drive Belt slipping.	Loose or worn belt.	Check belt tension using a J10 belt gauge. The belt deflection should be 1/4' (7mm) at 170 lb for a new belt and 160 lb for an existing belt.
Upper Arms feel loose.	Bolts that connect the upper and lower arms are loose.	Adjust and tighten to a torque of 30-35 ft lb.
Front to back play in pedal lever.	Worn bearings.	Check for front to back movement in bearings that connect pedal lever to the rocker arm. Replace pedal lever assembly.
	Poly V-Pulley on intermediate shaft is loose.	Replace intermediate shaft assembly.
	Crankarm loose.	Loosen setscrews and clamping screw in Crankarm Assembly. Apply blue Loctite® 242 on screws. Tighten setscrews first and then tighten the clamping screw.
	Worn link bearings.	Replace link.
	Loose link mounting.	Clean, lube, and reassemble.
No Load.	Faulty cables, power console board, or alternator.	Enter diagnostic state 3 and execute the field duty cycle and increase the load. If load does not increase, replace alternator.
No LEDs on display.	Faulty display console.	Using a voltmeter, verify 8Vdc at the 10 position Molex connector pin 1 on the display console PCB. If voltage is present, replace display console. If not, replace power control board.

	Faulty power control board.	Using a voltmeter, verify 8Vdc at 11 position connector pin 4 on the power control board. If present, replace console cable. If not, replace board.

Malfunction	Probable Cause	Corrective Action
Alternator belt slipping.	Belt is loose.	Retension from 65-70 lb.
No heart rate or erratic heart rate.	Pinched cable in Monocolumn cover.	Remove monocolumn covers and inspect cables. Replace damaged cable.
	Defective chest strap or improperly positioned.	Replace chest strap or reposition it. Reset transmitter. Refer to Diagnostics state 3 to execute the heart rate test.
	No heart rate reading.	Execute Diagnostic Mode to verify performance of heart rate function.
	Faulty cable connection.	Verify heart-rate cable is properly connected. Using an ohmmeter, verify continuity at the main console cable.
	Malfunctioning user arm/Lifepulse (CT9500HR) Grip Assembly (include worn or damaged heart rate lead).	Replace user arm/Lifepulse (CT9500HR) Assembly.
	Life Pulse user arm defective.	Verify user arm is functioning. Wipe sensors dry. Using an ohmmeter, verify continuity between Lifepulse sensor and cable connection. Replace if defective.
	Loose or malfunctioning heart rate lead connection at Display Console.	Secure connection. Replace malfunctioning user arm/Lifepulse (CT9500HR) Grip Assembly.
	Heart-rate (DSP) Board (CT9500HR) is faulty or not communicating.	Verify that the heart-rate (DSP) board (CT9500HR) is communi-cating. If defective, replace.
	Malfunctioning Display Console.	Test with known good Display Console. Replace malfunctioning Display Console.
	Cross talk from telemetry and another transmitter or possible interference from other electronic devices.	Position Cross-Trainer at least 3 ft (1 m) from unit with telemetry or from other electronic devices.
	Bad connection.	Check for corrosion on connectors. Disconnect and reconnect telemetry receiver.

Malfunction	Probable Cause	Corrective Action
No LEDs or random LEDs lit.	Cable connection faulty.	Remove display console and verify cable is properly plugged into console.
	Main wire harness damaged.	Check for a damaged wire harness. Replace wire harness.
No RPM. Unit shuts off one minute into program.	Bad cable connection.	Verify cables connections at console to power control PCB, and power control PCB to alternator. Disconnect and reconnect cables. Using a voltmeter, verify cable continuity on console to power control PCB and power control PCB to alternator.
Auto start failure	No RPM	Operator must be pedling unit for the auto start feature to activate.
	Battery	Battery voltage should be 5.8 – 6.3 Vdc. If not, replace the battery.
	Bad cable connection.	Verify cables connections at console, board, and reed switch are correct and connected properly.
	Magnet	Verify that magnet is on crank pulley. If magnet is not present, reinstall magnet.
	Faulty reed switch or board.	Perform a continuity test. Inspect reed switch for damage. If necessary, replace the board.
	Dead battery after C-Safe card is installed.	Replace battery if under 5 VDC and reset jumpers in C-Safe card. See How To Set Jumpers.