

Troubleshooting Guide

R2200/E3200 Brake Problems

<u>Symptom</u>	<u>Solution</u>
1) Tension works in reverse	A) Press and hold start/stop button to reset and start magnet from correct starting position. B) Brake assembly is defective, replace brake. C) Console is defective, replace console. D) Wire harness is reversed internally, replace wire harness.
2) Erratic console display or magnet moves continuously.	A) Reset tab does not go to halfway position of photo-sensor switch. Loosen two screws that hold reset tab and lower tab (see page 15). B) Remove console mast and visually inspect harness and do a continuity check on the wires. Replace wire harness (see page 16). C) Black counting wheel missing. replace wheel. D) Brake assembly is defective, replace. E) Replace console, defective. F) Console software not compatible with brake. Serial Numbers 0695-1296 is console Z3258750. Serial Numbers 0197- present are Z3260119. Replace brake or Console.
3) No change in tension though display works fine.	A) Inspect photosensor board and make sure leads from motor plug do not contact metal mounting bracket. B) Motor stalls until black counting wheel is manually turned. If motor works when wheel is readjusted everything is normal, but if it does not the brake needs to be replaced. C) Console is defective, replace console.
4) Brake has a clicking or clunking noise when changing tension.	A) The inner part of the cam is catching, it is not lubricated properly or has loctite on it. Apply a Teflon lubricant such as Tri-Flow to the inner part of the cam. B) Cam is defective, replace brake assembly.

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R2200/E3200 Console Problems

<u>Symptom</u>	<u>Solution</u>
1) No RPM, speed or watts readouts	A) Check to see if the RPM sensor wire is in the correct position, adjust and check readout (see page 14). B) Check the RPM sensor wire for damage. C) Magnet missing from crank sprocket. Glue a new magnet in place. D) Remove console mast and visually inspect harness or do a continuity check on the black and yellow wires on black harness. Replace wiring harness if it is bad (see picture of continuity check on page 16). E) Defective console, replace.
2) Console power goes off intermittently.	A) Check power supply connection. B) Use pliers to center the pin in the power jack. Recheck the connection by wiggling the plug back and forth when pin is properly centered until power will stay on.
3) No display.	A) Check power supply connection and for correct voltage (see page 18). B) Check voltage regulator board for correct voltage (see page 17). C) Check wire harness connection and for correct voltage (see page 16) . D) Defective console, replace.
4) Console resets after 5 minutes.	A) Normal if not pedaling. If no RPM readout the console will reset itself.

HRC Console Problems

1) No heart rate read out. Note: For all other non-HRC problems see the console problems section of the trouble shooting guide.	A) Center the transmitter on your chest over the sternum, directly against your skin. Moisten the rubber electrodes with several drops of water prior to placing it against your chest (see owner's guide). B) Make sure that the strap is tight. If the strap is too loose then you will have intermittent readouts. C) The range of the chest transmitter is about 36 inches, position yourself so that the transmitter is within 36" of the console.
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R2200/E3200 HRC Console Problems

<u>Symptom</u>	<u>Solution</u>
1) No heart rate read out. Note: For all other non-HRC problems see the console problems section of the trouble shooting guide.	D) Batteries are weak in chest transmitter, voltage on battery should be no lower than 3.0v (if bike and transmitter were stored next to a neon sign in show room there is a chance battery will be drained, check with multimeter). E) Using a HRC bike near electrical items may cause interference with the transmission signal to the console. Move bike to another location and the problem will go away. F) Defective console or chest strap, replace.

R2200/E3200 HRC Console Problems

<u>Symptom</u>	<u>Solution</u>
1) Clicking, knocking or thunking noise while pedaling.	A) Tighten down pedals with a pro quality bicycle wrench or long 15mm wrench. Also make sure to apply grease to the threads of the pedal. (Vision Fitness stocks pro quality wrenches, part #Y0059533, cost \$12.00). This is the most common cause. B) If noise only occurs while pedaling, the idler wheel is not tracking on the belt straight. Use a wrench to bend the idler arm out or in until the belt tracks on the center of the idler wheel. C) The brake is rubbing on the flywheel. This only happens at the higher tension levels and only if the brake has slipped on the frame. Adjust the brake so that the gap between the flywheel and the brake at the highest level is 3mm. D) If noise occurs both while pedaling and while coasting, flywheel bearings are bad. Replace flywheel bearings. E) If noise occurs while pedaling, check and replace crank or crank bearings (see page 10).

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R2200/E3200 HRC Console Problems

<u>Symptom</u>	<u>Solution</u>
1) Clicking, knocking or thunking noise while pedaling.	F) The crank assembly bearings maybe loose. If they are then they need to be re-loctited into the frame. We recommend installing a wavy washer kit or see crank assembly replacement procedure instructions (see page 10). G) Seat quick release lever is too loose. R2200 only. Tighten down nut of the bottom of lever. Serial #'s up to 0197, after 0197 tighten down the plastic knob at the bottom of the lever. H) Seat frame wheels are loose. R2200 only. Tighten down the nuts on the side of the seat frame. I) The allen bolts that hold the seat rail and/or the rear foot frame extension are loose. R2200 only. Tighten down the allen bolts. J) Pedals straps/shoe laces are hitting the side cover. Make sure that the pedal strap is adjusted properly for your shoe size.

R2100/E3100 Brake Problems

<u>Symptom</u>	<u>Solution</u>
1) Tension too easy or too hard.	A) Remove the black cable cover on the console mast and tension the cable to the proper tension. B) Remove cable and inspect cable for kink or replace cable. C) Move brake assembly away from flywheel, gap at the highest level should be 3mm away from the flywheel, if the tension is too hard. D) Move brake closer to flywheel, if the tension is too easy.
2) Bike makes a scraping or grinding noise when pedaling at high tension only.	A) Check to see if the brake assembly is hitting the flywheel. Adjust brake so that the gap between the flywheel and the brake at the highest level is 3mm. B) Check to make sure that the flywheel band is intact and in place.

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R2100/E3100 Console Problems

<u>Symptom</u>	<u>Solution</u>
1) Console resets itself or erratic readout	A) Batteries are weak, replace. B) Reposition the RPM sensor so that the magnet crosses the corner of the sensor (see diagram on page 14)). C) Defective RPM sensor wire, replace wire.
2) Console only shows time.	A) Defective console, replace. B) Defective RPM sensor wire. Time is built into the console and will always be displayed if batteries are good, replace RPM sensor wire.
3) Console does not show full LCD display in every window.	A) Batteries are weak, replace batteries. B) LCD display is defective, replace console.

R2100/E3100 Drivetrain Problems

<u>Symptom</u>	<u>Solution</u>
1) Clicking, knocking or thunking noise while pedaling.	A) Tighten down pedals with a pro quality bicycle wrench or long 15mm wrench. Also make sure to apply grease to the threads of the pedal. (Vision Fitness stocks pro quality wrenches, part #Y0059533, cost \$12.00). This is the most common cause. B) If noise only occurs while pedaling, the idler wheel is not tracking on the belt straight. Use a wrench to bend the idler arm out or in until the belt tracks on the center of the idler wheel. C) The brake is rubbing on the flywheel. This usually happens at the higher tension levels, only if the brake has slipped on the frame. Adjust brake so that the gap between the flywheel and the brake at the highest level is 3mm. D) If noise occurs both while pedaling and while coasting, flywheel bearings are defective. Replace flywheel bearings. E) If noise occurs while pedaling, check and loc-tite or replace crank assembly.

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R2100/E3100 Drivetrain Problems

<u>Symptom</u>	<u>Solution</u>
1) Clicking, knocking or thunking noise while pedaling.	F) The crank assembly bearings maybe loose. If they are then they need to be re-loctited into the frame. We recommend installing a wavy washer kit or see crank assembly replacement procedure instructions (see page 10). G) Seat quick release lever is too loose. R2100 only. Tighten down nut of the bottom of lever. Serial #'s up to 0197, after 0197 tighten down the plastic knob at the bottom of the lever. H) Seat frame wheels are loose. R2100 only. Tighten down the nuts on the side of the seat frame. I) The allen bolts that hold the seat rail and/or the rear foot frame extension are loose. R2100 only. Tighten down the allen bolts. J) Pedals straps/shoe laces are hitting the side cover. Make sure that the pedal strap is adjusted properly for your shoe size.

E4100 Brake Problems

<u>Symptom</u>	<u>Solution</u>
1) Tension too easy or too hard	A) Re-adjust the jam nuts on the arms (See the arms jam nut adjustment in the owner's guide for proper adjustment). B) Remove the black cable cover on the console mast and tension the cable to the proper tension. C) Remove cable and inspect cable for kink or replace cable. D) Adjust nuts on brake to adjust the cable tension.
2) No change in tension though display works fine.	A) Tension cable not connected at the cable connection joint. Connect cable and test tension knob. B) Defective console, replace. C) Brake not moving, replace the brake.

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E4100 Console Problems

<u>Symptom</u>	<u>Solution</u>
1) Console resets itself or erratic readout	A) Defective RPM sensor wire, replace wire. B) Reposition the RPM sensor so that the magnet crosses the corner of the sensor (see page 14). C) Batteries are weak, replace.
2) Console only shows time.	A) Bad RPM sensor wire. Time is built into the console and will always be displayed if batteries are good, replace RPM sensor wire. B) Defective console, replace.
3) Console does not show full LCD display in every window.	A) Batteries are weak, replace batteries. B) LCD display is defective, replace console.

E4100 Drivetrain Problems

<u>Symptom</u>	<u>Solution</u>
1) Bike makes noise.	A) Units may vary in noise due to the tightness in the chains and the two arms and drive belt. This is normal. B) If the chain seems to be loose and is causing noise check to see if the chain contains more than a 3/4 inch of play. If adjustment is needed make only small adjustment to unit.

R2000/E3000 Brake Problems

<u>Symptom</u>	<u>Solution</u>
1) Tension too easy or too hard.	A) Remove lowest magnet on the brake assembly. If magnet is already removed slide the brake away from the flywheel. Adjust brake to the customers preference. Standard is a 3mm gap between the flywheel and the brake.
2) Brake assembly does not move for each resistance change.	B) Remove cable and inspect cable for kink or replace cable.
3) Bike makes a scraping or grinding noise when pedaling at high tension only.	C) Adjust brake so that the gap between the flywheel and the brake at the highest level is 3mm. D) Check to make sure that the flywheel band is intact and in place.

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R2000/E3000 Console Problems

<u>Symptom</u>	<u>Solution</u>
1) Console RPM readout is erratic.	A) Batteries are weak, replace batteries. B) Reposition the RPM sensor so that the magnet crosses just the corner of the sensor (see page 14). C) Defective console, replace console. D) Drivewheel has two magnets, remove one magnet.
2) Console only shows time.	A) RPM sensor wire is cut, replace wire. B) Defective console, replace.
3) Console does not show full display in every window.	A) Batteries are weak, replace batteries. B) LCD display is defective, replace console.

R2000/E3000 Console Problems

<u>Symptom</u>	<u>Solution</u>
1) Clicking, knocking or thunking noise while pedaling.	A) Tighten down pedals with a pro quality bicycle wrench or long 15mm wrench. Also make sure to apply grease to the threads of the pedal. (Vision Fitness stocks pro quality wrenches, part #Y0059533, cost \$12.00). This is the most common cause. B) The brake is rubbing on the flywheel. This usually only happens at the higher tension levels, only if the brake has slipped on the frame. Adjust brake so that the gap between the flywheel and the brake at the highest level is 3mm. C) If noise occurs both while pedaling and while coasting, flywheel bearings are defective. Replace flywheel bearings. D) If noise occurs while pedaling, check and replace crank or crank bearings (see page 10). E) The crank assembly bearings maybe loose. If they are then they need to be re-loctited into the frame. We recommend installing a wavy washer kit or see crank assembly replacement procedure instructions (see page 10). F) Pedals straps are hitting the side cover. Make sure that the pedal strap is adjusted properly for your shoe size.