

COLLAGENTEX

RX-1 (Light Exposure Unit)



OWNERS MANUAL

**A LICENSED PRACTITIONER IS REQUIRED TO SUPERVISE/DIRECT THE USE OF THIS DEVICE.
READ THIS MANUAL THOROUGHLY BEFORE ATTEMPTING TO USE THE EQUIPMENT.
IF YOU HAVE ANY QUESTIONS CONTACT COLLAGENTEX BEFORE ANY USE.**

Manufactured and Distributed By

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Warning! UNPLUG THE UNIT BEFORE OPENING COVERS.

TABLE OF CONTENTS

1. INTRODUCTION.....	Page 4
2. DEVICE DESCRIPTION.....	Page 5
3. INTENDED USE.....	Page 5
4. WARNINGS.....	Page 5
5. HOW TO READ THE MANUFACTURERS LABELS.....	Page 6
6. LABELS.....	Page 7
7. MODEL SPECIFICATIONS.....	Page 9
8. USER INSTRUCTIONS.....	Page 10
9. RECEIVING THE UNIT.....	Page 12
10. INSTALLATION OF THE UNIT.....	Page 13
11. REMOVAL/INSTALLATION OF THE LAMPS.....	Page 16
12. POWER BOX, CONNECTORS, TIMER, HOUR COUNTER.....	Page 18
13. EYE PROTECTION.....	Page 19
14. CLEANING AND MAINTENANCE.....	Page 20
15. WARRANTY.....	Page 21
16. LIFE EXPECTANCY OF THE PARTS.....	Page 21
17. TROUBLESHOOTING.....	Page 22
18. ELECTRICAL DIAGRAMS.....	Page 24

INTRODUCTION

Near Infrared Light has been in adjunctive use in providing temporary relief of minor chronic neck and shoulder pain of musculoskeletal origin since the early development of laser, LED and quartz lamp systems.

The light spectrum from 580nm wavelength to 1500nm wavelength has been used effectively since 1965 to provide temporary pain reduction.

Collagentex RX-1 equipment uses a single proprietary plasma-arc lamp as the light source. The lamp spectral output has been controlled by a metallic/glass filter system to band pass only the desired near infra-red rays that are known not to cause any harm while blocking the unwanted wavelengths including any traces of UV which may be present in most quartz halogen lamps.

There are no lasers or LED's in any Collagentex equipment.

There are multiple user safety systems in place as such as an instant lamp shutdown safety switch which detects the proper filter installation in order to power the lamp. In case of a removed filter or cracked, damaged and shattered filter; the safety switch will instantly shut down the lamp.

There is also an exterior safety acrylic sheet that is impact resistant and will prevent any physical damage to the filter and the lamp protecting the user.

Visible instruction labels, signs and warning statements are permanently fixed on each unit to guide the user.

Each user should be provided an approved eye protection for their specific use as recommended and supplied by the manufacturer.

You, as an owner of this equipment, should follow the exposure schedules prepared by the equipment manufacturer under the guidelines of your local regulation body in order to avoid any injuries at a short term or a long term from happening.

DEVICE DESCRIPTION

Collagentex RX-1 model is a stand alone device made up of a single quartz lamp, emitting polychromatic visible to near infrared light from 580nm to 1500nm, non-collimating, non pulsing in order to offer exposure to the user where directed at a distance of 8" and farther from the body, non topical light therapy in order to relieve minor pain temporarily for overall wellness.

The unit can be mounted on a table top or rolled on a base with casters. Narrow band filter and acrylic shield are designed to eliminate any emission of ultraviolet or wavelength shorter than 480nm wavelengths. The lamp replacement interval is 500hrs. The exposure dosage is controlled by a user set timer.

Exposure area is set to receive 44.2 miliWatt/sqcm or 2.6 Joule/minute of exposure at the minimum user distance of 8". The device runs on AC power of 120 Volt 60 Hz or 220 Volt 50 Hz by plugging to main power.

INTENDED USE

Collagentex RX-1 model is intended to emit light energy in the near infrared spectrum to provide non heating adjunctive use for temporary relief of minor chronic neck and shoulder pain of musculoskeletal origin.

WARNINGS

This equipment is not tested to be used in an oxygen enriched area.

This equipment should not be used in any damp and wet area that there could be liquid spillage which could result in damage and danger to the user.

This equipment should be unplugged before cleaning the device.

Do not spray liquids on the device for cleaning purposes.

Do not look directly into the light.

This phototherapy light may cause reaction with certain medications.

Please check with your pharmacist/physician before using this equipment.

Stop the treatments in case of any redness/reaction.

Pregnant women and epilepsy sufferers should not use this equipment.

Heart pacemaker wearers should not use this equipment.

Replace the lamp with the original Collagentex lamp for your safety.

There are no serviceable parts inside by the user, call the authorized service center for repairs and lamp replacement at Tel: 450-622-4004

HOW TO READ MANUFACTURERS LABELS

All serial number labels are manufactured of aluminum foil with pressure sensitive adhesive for mounting on the rear panel. The adhesive and the manufacturer of the labels are both registered and approved by CSA.

All the labels indicate the name and the address of the manufacturing company and CSA logo, CSA file numbers, model name, power input in watts, and Voltage input in 120V or 240V AC single phase, Power factor in percentages lagging and at not below 90%. Power cycle is in 60 Hz for North America.

Serial numbers

First 2 letters RX, and first digit indicates model and number of lamps in unit. EG:
RX-1.

The fourth, fifth and sixth digit are unit numbers up to 1000 from same family. Seventh and eighth digit is the month of manufacture and last 2 digits are the year.

For example: RX1-457-0516 represents a total of 10 digits for identifying and locating the unit as follows.

RX-1 model, the four hundred and fifty seventh unit, which was manufactured in May 2016.

Every unit should be operated by a perfectly functioning timer.

Any user that develops a rash or other discomfort should not use this equipment and should consult a physician.

Anybody who is taking photosensitive drugs should not be using this equipment.

All the warning labels should be legible at all times. If any of the labels is removed or damaged immediately call your distributor for a new replacement label. If you remove any of the warning labels by mistake or intentionally, the equipment conformance to CSA, Health Canada, CE and FDA standards will disappear and put you in position of using substandard equipment.

The user may direct the light exposure module to the area and keep it not closer than 20 cm or 8 inches which is simply the average open hand distance from the skin surface in order to be able to deliver an approximate 44.2 miliwatt/sqcm or 2.6 Joule/minute of intensity.

LABELS

1) User instructions and Warning label as follows (Label ID=Tan067)

COLLAGENTEX USER INSTRUCTIONS - RX-1

PRE TREATMENT PREP

Remove all metal jewelry or body piercing before the treatment.
Remove any residue of the creams and make up.

Patient Position

The use has to be monitored by the staff at all times
Patient can sit upright in a chair or laydown on a massage table.
Position the Rx-1 unit over the patient's neck/shoulder area.
Tilt the head section to focus the light to the target area.
Keep a minimum distance of 8" or 20 cm distance from the clear shield.
Place provided eye wear or glare blocking sun glasses to reduce glare.
Set the timer interval to the desired time.
Press the start button to begin the session.
Press the start button again to pause/ stop the session or
use master shut off switch for emergency stopping the session.

Duration of Treatment

4-10 minutes per treatment twice a day or a max of 20 minutes/day

Number of Treatments

1 to 2 treatment per day for as many days as required.

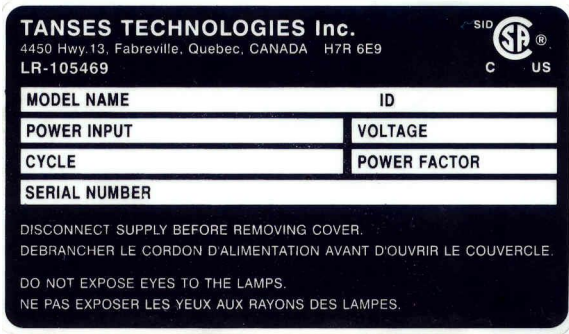
WARNINGS

This equipment is not tested to be used in an oxygen enriched area.
This equipment should not be used in any damp and wet area that there could be liquid spillage which could result in damage and danger to the user.
This equipment should be unplugged before cleaning the device.
Do not spray liquids on the device for cleaning purposes.
Do not look directly into the light.
This phototherapy light may cause reaction with certain medications.
Please check with your pharmacist/physician before using this equipment.
Stop the treatments in case of any redness/reaction.
Pregnant women and epilepsy sufferers should not use this equipment.
Heart pacemaker wearers should not use this equipment.
Replace the lamp with the original Collagentex lamp for your safety.
There are no serviceable parts inside by the user, call the authorized service center for repairs and lamp replacement at Tel: 450-622-4004.

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TAN-067

2) Label, nameplate in the back with its warnings



3) Danger label



4) Grounding/danger label



MODEL SPECIFICATIONS

RX-1 Collagentex model has a single lamp module.

The head assembly which contains the lamp can be tilted by the user to adjust to the height of the user. The tilt action is simplified with the aid of a pair of nylon bushings on the side of the lamp module. The lamps and the filters are cooled with fans circulating air through the lamp assembly.

The fans continue to run for an additional four (4) minutes upon expiration of the session in order to cool the lamps and the components for an easier start for the subsequent session

USER INSTRUCTIONS /DIRECTION OF USE

A licensed practitioner is required to supervise/direct the use of this device.

COLLAGENTEX USER INSTRUCTIONS - RX-1

PRE TREATMENT PREP

Remove all metal jewelry or body piercing before the treatment.
Remove any residue of the creams and make up.

Patient Position

The use has to be monitored by the staff at all times
Patient can sit upright in a chair or laydown on a massage table.
Position the Rx-1 unit over the patient's neck/shoulder area.
Tilt the head section to focus the light to the target area.
Keep a minimum distance of 8" or 20 cm distance from the clear shield.
Place provided eye wear or glare blocking sun glasses to reduce glare.
Set the timer interval to the desired time.
Press the start button to begin the session.
Press the start button again to pause/ stop the session or
use master shut off switch for emergency stopping the session.

Duration of Treatment

4-10 minutes per treatment twice a day or a max of 20 minutes/day

Number of Treatments

1 to 2 treatment per day for as many days as required.

WARNINGS

This equipment is not tested to be used in an oxygen enriched area.

This equipment should not be used in any damp and wet area that there could be liquid spillage which could result in damage and danger to the user.

This equipment should be unplugged before cleaning the device.

Do not spray liquids on the device for cleaning purposes.

Do not look directly into the light.

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Pregnant women and epilepsy sufferers should not use this equipment.

Heart pacemaker wearers should not use this equipment.

Replace the lamp with the original Collagentex lamp for your safety.

There are no serviceable parts inside by the user, call the authorized service center for repairs and lamp replacement at Tel: 450-622-4004.

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TAN-067

Always read the manual before using the equipment.

Replace the lamp with the factory original replacement lamp (Collagentex-31/51).

If you have any questions, call the local distributor indicated on page 2.
The equipment can be used in multiple positions.

A. Sitting in front of the unit on a chair or treatment table in order to expose the neck frontal, rear, shoulder, back.

B. Lying down on a treatment table to treat individual areas of the body.

The timer and ON/OFF function panel are all mounted on the top stainless steel surface.

If the session is going according to your satisfaction wait until the equipment shuts itself off.

Please note that the unit fans will be running to cool the lamp assembly and the inner components for the subsequent user for an additional four (4) minutes "after cooling" at the end of the session.

Please do not spray any liquids near or onto the equipment while the fans are running which may damage the still hot lamps.

RECEIVING THE UNIT

Your Collagentex equipment goes through a number of tests at different stages of the manufacturing process for excellent quality and good manufacturing practices for CSA and FDA, CE, Health Canada conformance.

CSA conducts their inspections at the factory and manufacturing techniques with factory audits 4 times and at least once for ISO 13485 audits annually.

Your unit was assembled and tested for proper grounding, then; 1500Volts was applied at the unit for a minimum of 1 min according to CSA regulations. The lamp was tested for 20 minutes and the timer for its accuracy until the unit turns itself off automatically.

Meanwhile the other components are checked for proper support and final approval of the quality control supervisor.

Once all tests are completed the unit gets its OK and its serial number is logged on to CSA/ISO log book and packaging proceeds.

When you receive a unit, check for damages on the packaging. If you see any damage ask the transport company personnel to mark it on the receiving documents for future damage claim purposes.

UNPACKING THE UNIT

The units are always strapped on to the wood pallet at the legs.

1. Remove components from transportation carton
2. Remove the outer stretch covering.
3. RX1 is shipped with the lamp assembly and the base/stand as separate as such that you can easily move to the room each piece before the final assembly.
4. You will need two enabled person to carry each piece.
5. Make sure that the floor at the final assembly site is level and has a power wall outlet near the unit.
6. Remove the filament tape that secures the filter in place during transportation
7. Check the filter for any visible cracks prior to plugging the equipment

INSTALLATION OF THE UNIT

Please see the step by step installation of the RX-1 head assembly by the following pictures.

Unpack all components and lay out on cardboard from packing box.



Assemble the first pillar to the base using screws and washers provided and tighten firmly.

Note: Make sure the four large holes on the flange of pillar are facing upwards.



Place the second pillar on top of first pillar.

Note: Make sure the four large holes are facing downwards to align with the first pillar. Use



the screws and nuts provided to attach the two pillars together and tighten firmly.



Remove screws from back of main support piece and remove cover.



Attach main support to top pillar using screws and washers provided and tighten firmly.
Note: Make sure the leading edge of support unit is facing forwards and aligned with base.



Replace rear cover on support panel. The assembly should now look like this.



Mount the lamp module in the support panel ensuring the nylon round head assembly pivot bearings are located into the semi-arc shaped cut outs on the support panel arms.

Note: Make sure the clear lamp panel is facing forwards as shown.



Mount the semi-arc shaped safety locks over the nylon bearing and use in the middle and use the provided screws to install the both screws on each side. Total of four (4) screws.

Once all the screws are in, tighten the screws as such that the lock washers are flattened to the final assembly site.

Note: The safety locks should be on the outside of the support panel arm as shown below.



Remove plastic protective sheet from outer clear lens then remove top and bottom screws on **right side** of clear outer door as shown.

Remove cardboard packing between outer door and filter glass, close outer door and replace screws at top and bottom.

Note: Always only open right hand side of hinged outer door as the left side has nylon washers in place to facilitate opening and closing the door without having to remove it completely.



Your equipment will be free to roll on its casters and ready to use in the desired location. Once in the desired location the head section can be tilted up and down to the desired angle depending on

whether the user is sitting up or lying down.

REMOVAL AND INSTALLATION OF THE LAMPS



Warning! UNPLUG THE UNIT BEFORE OPENING COVERS.

ALWAYS REMOVE POWER PLUG FROM THE WALL OUTLET BEFORE REMOVING OR INSTALLING THE LAMPS.

ALL LAMP REPLACEMENTS SHOULD BE DONE BY FACTORY TRAINED TECHNICIANS OR YOUR LOCAL ELECTRICIAN USING THE GUIDE BELOW.

NOBODY ELSE SHOULD BE ALLOWED TO TOUCH THE LAMP OR FILTER ASSEMBLY WITHOUT SUPERVISION.

For your safety and security the lamp and lamp holder is manufactured exclusively for Collagentex and only the original lamp will fit into the Collagentex unit.

Beware of anyone trying to sell or fit a non genuine lamp as it will damage the unit and power supply irreparably and use of a non genuine lamp is not covered by and voids all warranties.

To order genuine replacement lamps contact Collagentex Inc. using the details on page two.

Always install the filters in place. Check the filters for any visual cracks or damage before installing.

Do not use any damaged or cracked filters which may cause emission of dangerous light rays.

Always install the outer acrylic impact resistant shield in place and place the screws properly.

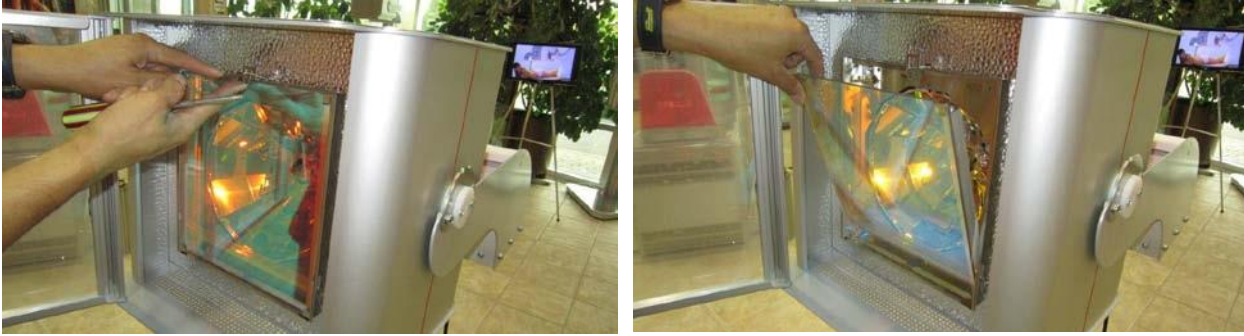
Do not block any of the inlet and outlet of the fans, which may cause overheating of the lamps and premature failing. Do not spray any cleaning liquids while the fans are still running.

Remove the top and bottom screws on **right side** of clear outer door as shown.

Note: Always only open right hand side of hinged outer door as the left side has nylon washers in place to facilitate opening and closing the door without having to remove it completely.



Lift up the safety catch at the top of the filter glass and **tilt gently** towards you.



Remove the filter glass by lifting the locating lugs on each lower side out of the positioning slot.
Note. Avoid touching the filter glass by always handling it from the outer steel edges.

Remove old lamp and replace with new lamp.

Note: Never touch the lamp with your fingers as oils and other residue on your hands can damage the lamp and shorten the life expectancy. Always use a clean cotton glove or piece of clean, non-abrasive material when handling the lamp.



Place guide lugs on lower side of filter into the positioning slots in the frame and gently place into position.

Re-position the safety catch at the top of the filter glass.

Close outer door and replace screws at top and bottom.

Note: Always only open right hand side of hinged outer door as the left side has nylon washers in place to facilitate opening and closing the door without having to remove it completely.



POWER BOX, CONNECTORS, TIMER, HOUR COUNTER

Note: Only a factory trained technician or electrician should open the rear cover of the unit!



Warning! UNPLUG THE UNIT BEFORE OPENING COVERS.

ALWAYS REMOVE POWER PLUG FROM THE WALL OUTLET BEFORE REMOVING THE REAR COVER.

The rear of the lamp module carries all the power components as such ballasts, capacitors, terminal blocks, time delay relays for after cooling and main contactor.

The rear cover of the unit is opened by the right hand side of the hinged door in the same manner as the front outer door.

Note: Always open right hand side of hinged outer door as the left side has nylon washers in place to facilitate opening and closing the door without having to remove it completely.



The capacitors may contain dangerous amounts of charge even after removing from the power outlet. If the capacitor charge is not bled in first 3 minutes; the technician should use a capacitor discharge tool on the capacitor terminals before touching any components.

HOUR COUNTER

The hour counter at the rear of the unit totalizes the hours the unit is operated in order to aid in scheduled maintenance and lamp replacement, and protective replacement of other components.

NOTE: DO NOT REPLACE THE HOUR COUNTER ON YOUR OWN, ALWAYS CONSULT A FACTORY TRAINED TECHNICIAN OR YOUR ELECTRICIAN.

EYE PROTECTION

High intensity, bright light may cause damage in the eyes.

Avoid looking directly into the light without eye protection.

In order to eliminate any risk of damage to the eyes each equipment is shipped with eye protection goggles that is in conformance to 21 CFR.1040.20. (FDA regulation) and CSA, CE, Health Canada requirements. Each user should be provided with a new pair of goggles for their personalized use in order to prevent any cross contamination between users.

The user should be wearing the eye protection goggles at all times while looking directly at the light. The eye protectors are manufactured and marketed by Lucas Products Corporation located 5663 Opportunity drive, TOLEDO, Ohio 43612 Tel=(419) 476 6992. Under the trade name of "opaque super sunnies."

Attach the elastic supplied in the packet according to the instructions provided. Adjust the length of attached elastic band by tying and knotting it securely behind your head.

Place the eyewear on your eyes for a secure, comfortable fit. Proper fit is essential when using this equipment.

CLEANING AND MAINTENANCE



Before any cleaning action remove the power plug from the outlet.

The exterior of the equipment should be wiped cleaned periodically using a damp cloth in order to prevent any dust build-up. The front acrylic shield should also be kept clear of any dust/dirt in order for the equipment to maintain maximum performance.

Do not use excessive amounts of water. Do not spray the device with cleaning liquids.

If the unit is soaked with water accidentally do not plug the unit to the wall outlet until every component is dry.

Acting contrary to this advice may result in a dangerous electrical shock.

WARRANTY

If the equipment is properly installed, and not damaged during transportation, the defective parts will be replaced by the distributor/manufacturer in 1 year from the purchase date subject to the exclusions below.

Lamps and Ignitors are covered with a replacement warranty during the first 60 days of use only. The cost of the freight is to be prepaid by the customer.

LIFE EXPECTANCY OF THE PARTS

Lamps should be replaced every 500 hours to ensure that the unit is working to factory specifications at all times. The totalizer type hour counter on the back of the unit should be checked periodically.

ONLY INSTALL LAMPS DESCRIBED ON THE UNIT AND BY FACTORY TRAINED TECHNICIANS. DO NOT ALLOW ANY UNAUTHORIZED TECHNICIAN TO TOUCH THE LAMP, FILTER OR REFLECTOR ASSEMBLY.

Contactors, capacitors, fans, timer; should be replaced after 5 years or 10,000 hours.

Ballasts should be checked for leakage at 10,000 hours and if necessary should be

replaced. Filters should be replaced every 2500 hours or every 5 lamp replacements.

DO NOT OPERATE ANY UNIT WITH A CRACKED, BROKEN FILTER

Ignitors should be replaced every third lamp replacement.

The steel and aluminum body parts have an indefinite life span.

All wiring should be checked by a qualified technician every three years against any heat or other damage and replaced if necessary.

The life expectancy of the wiring is 12,000 hours or 7 years of operation whichever is less.

TROUBLE SHOOTING



Timer malfunction= stop using the device and call factory

- 1) Unresponsive timer control buttons. Replace the timer (ONLY QUALIFIED TECHNICIANS)
- 2) Error message on the timer. Replace the timer (ONLY QUALIFIED TECHNICIANS)
- 3) The lamp stays on longer than the maximum time (welded relay contacts). Stop using the device, replace the timer (ONLY QUALIFIED TECHNICIANS)
- 4) Timer duration is faulty, less than expected. Stop using the device, replace the timer (ONLY QUALIFIED TECHNICIANS)

The lamp does not light up

1. Check circuit breaker
2. Check power cord to wall outlet
3. Check timer connections, (ONLY QUALIFIED TECHNICIANS)
4. Check contactor by pressing the plunger down, (ONLY QUALIFIED TECHNICIANS)
5. Check if any terminal blocks burned, (ONLY QUALIFIED TECHNICIANS)
6. Replace lamp and retry, (ONLY QUALIFIED TECHNICIANS)
7. Replace ignitor, (ONLY QUALIFIED TECHNICIANS)

The lamp does not light up

1. Replace the lamp (ONLY QUALIFIED TECHNICIANS)
2. Replace ignitor (ONLY QUALIFIED TECHNICIANS)
3. Check any disconnection at the connectors (ONLY QUALIFIED TECHNICIANS)
4. Check the wires entering the lamp ballast (ONLY QUALIFIED TECHNICIANS)

The lamp takes a long time to start

1. The after cooling time delay is not enough to cool the lamp between start ups; wait the full 4 minutes after cooling between start ups.
2. The unit is not connected to a proper voltage, probably very low input voltage. The input voltage should be set to the proper main voltage, (ONLY QUALIFIED TECHNICIANS)
3. Replace ignitor, (ONLY QUALIFIED TECHNICIANS)
4. Replace the lamp, (ONLY QUALIFIED TECHNICIANS)

The lamp is on all the time

1. Check the contactor (probably stuck plunger) Replace(ONLY QUALIFIED TECHNICIANS)
2. Check timer (probably stuck contacts) Replace(ONLY QUALIFIED TECHNICIANS)

Unit is drawing a lot of current, breaker is jumping. (ONLY QUALIFIED TECHNICIANS)

1. A capacitor or a bank of capacitors are either blown or their connections are loose. Capacitors although bleed type, may contain some electrical charge even a few minutes after removing from power source and you may get a dangerous electrical shock.
2. High leakage at a number of ballasts (Very rare) Replace ballasts.

Overheating (cracked filters, burned out lamp)

1. Blockage of air inlets and or outlets.
2. Excessive dust collection on the filter surface, fan blades
3. Defective fans not working properly
4. Lower input voltage causing lower fan speeds which is not adequate for proper air circulation.
5. Too high input voltage over 240Volts AC causing extra light output
6. Low air circulation and increased ambient air temperature in the cabin.
7. Ballast is defective ; Replace(ONLY QUALIFIED TECHNICIANS)

Noisy fans (technicians only)

1. Replace the fans immediately(ONLY QUALIFIED TECHNICIANS)

Fans do not stop (technicians only)

1. Replace fan after cooling timer(ONLY QUALIFIED TECHNICIANS)
2. Replace the relay next to fan after cooling timer(ONLY QUALIFIED TECHNICIANS)

Noise at head assembly during up, down movements

1. Loosen side pivot screws by ¼ turn
2. Grease with dry silicon the PVC spacer between the canopy and the side plates.



ALL THE ABOVE TROUBLE SHOOTING OPERATIONS SHOULD BE ATTEMPTED ONLY BY FACTORY TRAINED ELECTRICAL REPAIR TECHNICIANS.

DO NOT ATTEMPT TO REPAIR OR TROUBLE SHOOT YOURSELF AS YOU MAY SUFFER AN ELECTRIC

