



To read or verify the serial number and model number of a Sleep Therapy device, perform the following:. Connect the other end of the tubing to the Flow Control Valve. ERROR CODE DESCRIPTION TYPE CORRECTIVE ACTION General Errors E- ERR SOFTWARE STOP STOP Replace Therapy PCA E- Not Used E- ERR_INT_RAM REBOOT Replace Therapy PCA E-4 ERR_NULL_PTR REBOOT Replace Therapy PCA E-5 ERR_DATA REBOOT Replace Therapy PCA E-6 ERR_STATE_MACHINE REBOOT Replace Therapy PCA E-7 ERR_SOFTWARE REBOOT Replace Therapy PCA E-8 Not Used E-9 Not Used Watchdog and Timer Errors E-0 ERR WDOG_TEST_RAM REBOOT Replace Therapy PCA E- ERR WDOG_TEST REBOOT Replace Therapy PCA E- ERR BACKGROUND_WDOG_SD_CARD REBOOT REPLACE THERAPY PCA E- ERR BACKGROUND_WDOG_SD_ ERR_CYCLE_HANDLER_OVERRUN REBOOT Replace Therapy PCA E-6 ERR_RASP_RESTORE_TIMEOUT CONTINUE Replace Therapy PCA E-7 ERR_ONEMS_HANDLER_OVERRUN REBOOT Replace Therapy PCA E-8 Not Used E-9 ERR_WDOG_TIMEOUT REBOOT Clear Error Log and Retest Motor/Blower Errors49 PAGE , VER. Actual screens may vary slightly. The setting of provides a small amount of pressure relief, with higher numbers providing additional relief. Insert the brush or cloth approximately 7cm (.75 inches) into the outlet opening while cleaning. The device should be used only with masks and connectors recommended by Philips Respironics or with those recommended by the health care professional or respiratory therapist. Replace any damaged parts. Press the UI Knob onto the UI stem. Lift the Right Panel Assembly out of the Bottom Enclosure. Clean the humidifier outlet port by using a damp bottle brush or a damp cloth. NAVIGATING THE DEVICE SCREENS In either User Mode or Provider Mode, turn the UI Knob wheel to toggle between options and settings on the screen. 9-7 This page intentionally blank. TO INSTALL THE OUTSIDE PANEL: Slide the Outside Panel into the Bottom Housing. To Install the Humidifier Tank Assembly:. 0 This page intentionally blank.56 0984, VER. For example, if the device recognized airflow for 0 hours, and nine (9) hours were spent at or below cm H O, and hour was spent above cm H O, then the 90% Pressure would be cm H O. The book's four rules, which are easy to follow and thoroughly explained, will help you develop money-management skills and turn them into powerful tools you can use to gain control over your finances. Close the Flip Lid Assembly. The following will be displayed at the successful completion of the Upgrade. Select Real Time Clock Calibration from the drop-down menu. The Air Outlet Port that accommodates the Heated Tubing locking mechanism. 0 b. You can choose either () for the Philips Respironics mm tubing, or (5) for the optional Philips Respironics 5 mm tubing. 90% Pressure (90% cm H O) During any given night, the device recognizes the 90% Pressure achieved by the Auto Algorithm. You can set this from three () to 0 days. Pull the Humidifier Tank Assembly out of the Humidifier Tank Assembly out of the Humidifier. Dishwashing can be performed once a week. Gently remove the tank lid from the tank base. 0 PAGE REPLACING THE BLOWER ASSEMBLY AND/OR THE BLOWER OUTLET BELLOWS Included in Kit Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver T5 Torx screwdriver T5 Torx screwdriver T5 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Tools Required T8 Torx screwdriver Blower Assembly Blower Outlet Bellows Removed from Device FIGURE 6-: BLOWER ASSEMBLY AND BLOWER OUTLET BELLOWS TO REMOVE THE BLOWER ASSEMBLY/OUTLET BELLOWS: Remove the UI Knob. This Device was manufactured on August, 0 Serial Number the complete serial number includes the four characters to the far right (77AC in this example) REV 00 is not needed on reproduced labels. CAUTION The PCA s Flow and Pressure Sensors must be in proper alignment with the Flow Manifold. PRS(60 Series) REMstar & BiPAP Service & Technical Information95 PAGE, VER. The device s stored error codes will be displayed on the PC monitor. NOTE The A-Flex feature must be enabled (set to) in provider mode. Be sure the connectors are properly seated in their mounting locations.. This feature allows the patient to check the fit of their mask prior to starting therapy. To Verify/Calibrate the device s Real-time Clock, click on the Start menu button and launch the Service Center Tools application. If so, you might be learning just how important a skill budgeting can be. The SD card is not erased. Place the Humidifier Cable into the Bottom Enclosure. PRS(60 Series) REMstar & BiPAP Service & Technical Information79 PAGE, VER Remove the Blower Housing. Allow the platform to air dry before reconnecting to the therapy device.. NOTE hpa = cm H O.0 THERAPY DEVICE SPECIFICATIONS Environmental Operating Temperature: 5 to 5 C (4 to 95 F) Storage Temperature: -0 to 60 C (-4 F to 40 F) Relative Humidity (operating & storage): 5 to 95% (non-condensing) Atmospheric Pressure: 0 to 77 kpa (0-86 m / ft) Physical Dimensions: 8 x 4 x 0 cm (7 L x 5.5 W x 4 H) Weight (Device with power supply): Approximately.5 kg (.7 lbs) Standards Compliance This device is designed to conform to the following standards: IEC General Requirements for Safety of Medical Electrical Equipment EN ISO 750- Sleep Apnea Breathing Therapy Devices EN Electromagnetic Compatibility RTCA/DO-60F section. PRS(60 Series) REMstar & BiPAP Service & Technical Information WARNING To prevent electrical shock, disconnect the electrical supply before attempting to make any repairs to the PR System One 60 Series REMstar and BiPAP devices. FIGURE 8-: UTILITY TOOLS LINK PRS (60 Series) REMstar & BiPAP Service & Technical Information 78 0984, VER. 0984, VER. This screen only displays if CPAP-Check mode is available and enabled. PRS(60 Series) REMstar & BiPAP Service & Technical Information87 PAGE, VER REPLACING THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal Tools Required Flathead Screwdriver Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal Tools Required Flathead Screwdriver Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal Tools Required Flathead Screwdriver Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL Included in Kit Dry Box Assembly Inlet Seal Tools Required Flathead Screwdriver Dry Box Assembly Inlet Seal FIGURE 7-4: BLOWER CAP TO REMOVE THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL INCLUDED IN THE DRY BOX ASSEMBLY/HUMIDIFIER INCLUDED I INLET SEAL:. FIGURE 8-0: PRESSURE TEST SETUP 9. CLEANING THE NON-HEATED TUBING Clean the flexible tubing before first use and daily. Zero the Manometer and the enrichment attachment pick-off port. FIGURE 4-: THERAPY SCREEN 4. PRODUCT OPERATING SOFTWARE UPGRADES SERVICE NOTICE SERVICE TRAINING PRODUCT SUPPORT STATEMENT CHAPTER : WARNINGS & CAUTIONS.0 THERAPY DEVICE SPECIFICATIONS MEATED TUBING SPECIFICATIONS MEATED TUBING SPECIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS & CLASSIFICATIONS & CLASSIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS & CLASSIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS & CLASSIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS & CLASSIFICATIONS & CLASSIFICATIONS & CLASSIFICATIONS.0 THERAPY DEVICE SPECIFICATIONS.0 THERAPY DEVICE ELECTROMAGNETIC EMISSIONS ELECTROMAGNETIC IMMUNITY RECOMMENDED SEPARATION DISTANCES BETWEEN PORTABLE & MOBILE RF COMMUNICA- TIONS AND THE DEVICE CHAPTER 4: SETUP 4.0 SUPPLYING POWER TO THE DEVICE Supplying AC Power to the Device Supplying DC Power to the Device STARTING THE DEVICE NAVIGATING THE DEVICE SCREENS USER AND PROVIDER MODES5 0984, VER User Mode Provider Mode Screen Descriptions CHAPTER 5: TROUBLESHOOTING READING THE DEVICE S ERROR LOG CLEARING THE DEVICE S ERROR LOG ERROR CODES CHAPTER 6: REPAIR & REPLACE 6.0 RP KITS (REMSTAR DEVICES) RP KITS (BIPAP DEVICES) REPLACEMENT INSTRUCTIONS Replacing the User Interface (UI) Knob Replacing the SD Card Slot Cover Replacing the SD Card Slot Cover Replacing the SD Card Slot Cover Replacing the User Interface (UI) Knob Replacing the SD Card Slot Cover Replacing the User Interface (UI) Knob Replacing the SD Card Slot Cover Replacing Outside Panel Replacing the Main PCA Replacing the Blower Cap Replacing the Blower Assembly and/or the Blower Outlet Bellows Replacing the Flow Manifold Replacing the Flow Manifold Replacing the Blower Assembly and/or the Blower Outlet Bellows Replacing the Blower Cap Replacing the Blower Assembly and/or the Blower Outlet Bellows Replacing the Blower Outlet Bellows Replacing the Flow Manifold Replacing the Blower Assembly Replacing the Blower Outlet Bellows ONE HUMIDIFIER REPLACEMENT PART (RP) KITS HEATED HUMIDIFIER PERFORMANCE CONFIRMATION REPLACEMENT INSTRUCTIONS Replacing the Dry Box Seal Replacing the Dry B the Humidifier Outside Panel Replacing the Humidifier Bottom Housing Replacing the Heater Plate Assembly Replacing the Humidifier Plate Spring CLEANING AND MAINTENANCE Cleaning the Humidifier Base Cleaning the Humidifier Base Cleaning the Heater Plate Assembly Replacing the Humidifier Plate Assembly Replacing the Humidifier Plate Spring CLEANING AND MAINTENANCE Cleaning the Humidifier Base Cleaning the Humidifier Base Cleaning the Heater Plate Assembly Replacing the Humidifier Plate Assembly Cleaning the Humidifier Base Cleaning the CHAPTER 8: TESTING 8.0 REQUIRED EQUIPMENT NECESSARY SOFTWARE Downloading the Service Center Tools Suite Software Downloading the Device Testing Software PREREQUISITES FOR FINAL TESTING (CLEAR ERROR LOG/VERIFY REAL-TIME CLOCK) FINAL TESTING PROCEDURE PERFORMANCE VERIFICATION CHAPTER 9 SCHEMATICS 9.0 PROPRIETARY STATEMENT... When the airflow is off, this button allows you to activate the Mask Fit Check. Reassemble the tank base. Save or upload Data to Encore before beginning an Upgrade. "You Need a Budget" by Jesse Mecham Photo Courtesy [Peter Cade/Getty Images] Like many of us, you might not realize exactly how well a budget can help you manage your day-to-day life. FIGURE 4-5: HOME SCREEN. FIGURE 4-5: HOME SCREEN. FIGURE -7: UPGRADE SUCCESSFUL NOTE Respironics recommends that you use the Service Center Tools software to Clear the device s error log. This will only display if the humidifier is attached. SYSTEM ONE resistance This setting allows you to adjust the level of air pressure relief based on the specific Philips Respironics mask. C-FLEX+ FEATURE C-Flex+ is a special comfort feature that when enabled, patient comfort is enhanced by a small amount of pressure relief during the latter stages of inspiration and during active exhalation (the beginning part of exhalation). 0 PAGE 4-4. Affix the Clear Overlay over the label. PRS(60 Series) REMstar & BiPAP Service & Technical Information93 PAGE , VER REPLACING THE HUMIDIFIER BOTTOM HOUSING Included in Kit Bottom Housing (with Left Side Panel) #6 X /4 screw (x4) Tools Required T8 Torx Screwdriver T5 Torx Screwdriver Torque screws to 5 in.-lbs. Be sure to route the power cord to the outlet in a way that will prevent the cord from being tripped over or interfered with. Recommended separation distance: Conducted RF IEC Vrms 50 khz to 80 MHz V/m 80 MHz to.5 GHz Vrms V/m d = . 0 PAGE - CHAPTER : INTRODUCTION CAUTION U.S. federal law restricts this device to sale by or on the order of a physician..0 OVERVIEW The Philips Respironics (PR) System One 60 Series REMstar continuous positive airway pressure (CPAP) and BiPAP (Bi-level) sleep therapy devices are low-pressure, electrically-driven sleep apnea systems with electronic pressure control for the treatment of Obstructive Sleep Apnea (OSA) in spontaneously breathing patients weighing >66 lbs (>0 kg). 0 PAGE 6-5. Do not use the device will automatically change this setting to the appropriate tubing type (5H). NOTE Choosing EXIT or the icon from the Provider screen will exit provider mode and the device will return to the Home screen in the patient mode. "Living Well, Spending Less" by Ruth Soukup Photo Courtesy: [Kittiphan Teerawattanakul/Getty Images] If you're feeling overwhelmed by debt and aren't sure of the way out, this is the audiobook to listen to. "The Recovering Spender" by Lauren Greutman Photo Courtesy: [Peter Dazeley/Getty Images] If you've come to terms that you're spending more money than you can afford to - The Recovering Spender is the audiobook that can teach you how to shift your current spending habits. products and Respironics, Inc. Remember to use the correct Power Supply for heated or nonheated tubing Humidifiers. PRS (60 Series) REMstar & BiPAP Service & Technical Information64 0984, VER. Min Days This screen allows you to adjust the duration of the Auto-Trial mode (not available on all devices) in number of days. Place the Flow Manifold onto the Right Side Assembly as shown in Figure Assemble the remainder of the device as instructed in previous sections. This action plan can help you take control of your spending as you develop a clear inventory of your needs and habits. The white ultra-fine filter is disposable and should be replaced after 0 nights of use or sooner if it appears dirty. Place the Top Housing onto the Bottom Housing.. Auto min This screen allows you to modify the Auto minimum pressure setting. PRS (60 Series) REMstar & BiPAP Service & Technical Information106 0984, VER. Enter the device s serial number, and your name when prompted. FIGURE 7-5: DRY BOX SEAL REMOVAL CAUTION Do not press firmly on the screwdriver as damage to the Humidifier may occur. FIGURE 6-: BLOWER CAP To remove the Blower Cap:. Press the tab in the hole on top of the tank in toward the front of the tank. Once the device is powered, the Home screen appears, shown below. 0 PAGE 7-7. Turn the wheel to toggle between the options. That's when she knew she had to take a chance and take control of her extreme spending habits. This is done by measuring the amount of leak in the patient circuit. Complete testing by following all remaining Action Required prompts and entering all information appropriately.. CLEANING THE HUMIDIFIER BASE WARNING Allow the humidifier heater plate and water to cool down for approximately 5 minutes before removing the water tank. It's all about making budgeting a habit — a process the audiobook delves into in great detail. Launch the Flash Upgrade Utility. When complete, a test report will be printed. 0 This page intentionally blank.24 0984, VER. turns this option on and 0 turns this option off. FIGURE 7-8: HEATED TUBE CONNECTOR PRS(60 Series) REMstar & BiPAP Service & Technical Information 91 PAGE, VER REPLACING THE HUMIDIFIER TOP HOUSING Included in Kit Top Housing #4 X / screw (x4) Tools Required T8 Torx Screwdriver FIGURE 7-9: HUMIDIFIER TOP HOUSING TO REMOVE THE HUMIDIFIER TOP HOUSING:. NOTE Never use the water tank if the tank lid does not fit comfortably on the tank base. REPLACING THE SD CARD SLOT COVER Included in Kit SD Card Slot Cover Tools Required Small flat blade screwdriver SD Card Slot Cover Tools Required 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD Card Slot Power Inlet Air Outlet Port Filter Area FIGURE 6-: 8D CARD SLOT COVER Included in Kit SD CARD SLOT COVER Included i Assembly:. Refer to Section Slide the Outside Panel out of the Bottom Housing. By understanding the psychology behind the whys of your budgeting, you'll be able to make conscious decisions to develop brand new spending habits that stick. PRS(60 Series) REMstar & BiPAP Service & Technical Information73 PAGE , VER REPLACING THE RIGHT PANEL ASSEMBLY Included in Kit Right Side Assembly Tools Required T8 Torx screwdriver T5 Torx screwdriver FIGURE 6-6: RIGHT PANEL ASSEMBLY To remove the Right Panel Assembly. WARNING It is important to follow the exact steps below when performing this test in order to ensure no injury. This warranty does not cover damage caused by accident, misuse, abuse, alteration, water ingress, and other defects not related to material or workmanship. NOTE Refer to the device s User and Provider Manuals for additional Warnings, Cautions, Notes, and Operating Instructions. REPLACEMENT INSTRUCTIONS The following subsections provide information for replacing Humidifier components. Provider mode will time out after one () minute of inactivity and automatically exit the provider mode and return to the Home screen in the patient mode. Refer to Replacing the Top Cover.. For example, the PR System One 60 Series REMstar Plus with C-Flex device s Domestic U.S. model number is 60, whereas the International version of the device is model number 6. A-Flex is top limited at 0.0 cm H O pressure... C-Flex levels of,, or progressively reflect increased pressure relief. Rinse thoroughly to remove all detergent residue. Finally, plug the power supply cord s connector into the power inlet on the back of the device.. Therapy hours The device is capable of recognizing the difference between the time the patient is actually receiving the seven #4 x / screws. In addition, any implied warranties including any warranty of merchantability or fitness for the particular purpose are limited to two years. This feature determines the optimal start pressure for patient therapy mode. This setting allows you to choose the desired humidifier:, or. 0 PAGE REPLACING THE RAMP BUTTON Included in Kit Ramp Button Tools Required T5 Torx screwdriver LCD Screen UI Knob Air Outlet Port Ramp Button FIGURE 6-8: RAMP BUTTON To remove the Ramp Button:. Supply power to the device. Click on the Done button when ready. Machine hours This screen displays the amount of time that the machine has been active over the life of the device. The following Setup screen will appear. This will prevent oxygen accumulation in the device. 0 PAGE REPLACING THE BOTTOM ENCLOSURE Included in Kit Bottom Enclosure Warning Label Tools Required T8 Torx screwdriver T5 Torx screwdriver T5 Torx screwdriver FIGURE 6-: BOTTOM ENCLOSURE TO REPLACE THE BOTTOM ENCLOSURE 10 a serial number/model number label. This Icon lights up (different colors) when the optional humidifier and/or heated tube is attached and heat is being applied. Inspect the humidifier base for any damage and replace it if necessary.. PRS (60 Series) REMstar & BiPAP Service & Technical Information86 0984, VER. Verify that the Heater Plate Wiring Harnesses are properly routed in the Lower Base Assembly and not at risk of being pinched or damaged. The device automatically adjusts the starting pressure after every 0 hours of Auto-CPAP therapy to the optimal set point based on the 90% pressure level. Disconnect the heated tubing from the heated humidifier. It also displays the average of these individual nightly values of periodic breathing over a seven (7) day and a 0 day time frame (provided the device has at least seven (7) or 0 days of data respectively). Remove the SD Card is inserted properly, PRS(60 Series) REMstar & BiPAP Service & Technical Information105 PAGE , VER. 0 PAGE 8-9. Insert the narrow side of the Dry Box Seal into the Dry Box Assembly.. The Therapy screen will appear, which will show the current pressure setting being delivered (example shown below). This will not display if your provider in the following sub-sections may vary, depending on which device you have. Use caution so as not to damage the Wiring Harness or connectors when lifting the Flip Lid Assembly. Gently wash the middle seal. As you rotate the UI Knob to toggle over different options the screen will slide up and down accordingly. HS denotes tat the system does not include heated patient tubing.) 6X (TS or HS) 46X (TS or HS) 56X (TS or HS) 56X (TS or HS) 76X (end of the AC power cord into an electrical outlet that is not controlled by a wall switch. Primary function is to turn airflow on/off. This screen displays the nightly value of periodic breathing for the most recent one () day time frame. PRODUCT OPERATING SOFTWARE UPGRADES Most Philips Respironics products can be upgraded with the latest available software via an Internet connection. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device. PRS (60 Series) REMstar & BiPAP Service & Technical Information66 0984, VER. Voltage dips, short interruptions, and voltage variations on power supply input lines IEC 95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (0% dip in UT) for 5 cycles 95% dip in UT) for 5 cycles 70% UT (0% dip in UT) for 5 cycles 95% dip in UT) for humidity control has been disabled, the classic style of basic temperature controlled heated humidification will be used and the display will show: 0, C, C, C, C4 or C5 for these settings. Refer to the Disconnecting the Optional Heated Tubing section earlier in this manual... The Respironics, Inc. White means classic humidification is selected. NOTE Therapy hours and blower hours can be reset for new patients. This screen displays the nightly value of percentage of time in large leak for the most recent one () day time frame. 0 This page intentionally blank. Disconnect the wiring harnesses from the Main PCA. PRS (60 Series) REMstar & BiPAP Service & Technical Information34 0984, VER. Reset data This screen allows you to erase all seven (7) and 0 day averages, compliance data, therapy hours and patient information on the device to automatically turn the airflow off whenever the patient removes the interface (mask) from their airway. Place the Foam in the Bottom Enclosure as shown in Figure 6-. 0 PAGE 4- Split night start You can modify the Split night start You can modify the Split night start You can modify the humidifier. always remove from the therapy device.. The Heater Plate Assembly is secured by three small tabs. Align the flat side of D clip with the flat side of D clip with the flat side of the UI stem.. FIGURE 8-: SAVING SOFTWARE 4. Lift the Humidifier To install the Heater Spring:. Turn the humidifier setting off, turn the therapy device off, and allow the heater plate and water to cool or authorized distributors. Therefore, before testing, verify that the Device is operating with the most current version and if required for life support. Use the correct Power Supply required for the Humidifier you will being used for testing (60W for non-heated tubing humidifiers), and c. At the completion of the humidifiers), and c. At the completion of the humidifiers or 80W for heated tubing humidifiers), and c. At the completion of the humidifiers or 80W for heated tubing humidifiers or 80W fo between the Device and PC Communication Port (Com only). If the user of the device requires continued operation during power mains interruptible power supply or a battery. A properly installed, undamaged reusable foam inlet filter is required for proper operation. Lift the Blower Housing out of the Bottom Enclosure. If you are not a registered user, go to and complete the on-line registration process. If the measured field strength in the location in which the device is used exceeds the applicable RF compliance level above, the device should be observed to verify normal operation. When A-Flex is enabled, patient comfort is enhanced by a small amount of pressure relief during the latter stages of inspiration and during active exhalation). Note: Please see the Limited Warranty section of this manual for information on warranty coverage.22 0984, VER. This setting allows you to choose the desired temperature for the heated tube: 0,,,, 4 or 5. FIGURE 8-: FLOW MEASUREMENT SETUP. 4.0 SUPPLYING AC POWER TO THE DEVICE 4.0. SUPPLYING A can not mate with legacy Humidifiers. Insert a flat blade screwdriver into the hole located on the back of the Humidifier and lightly press inward to release the Dry Box Assembly. Place the Top Cover onto the Bottom Enclosure.. SYSTEM ONE humidification System One humidity control maintains a consistent mask humidity by monitoring and adjusting for changes in room temperature and room humidity. This can be performed after repairs have been made to the humidifier as part of the performed after repairs have been made to the humidifier as part of the performed after repairs have been made to the humidifier as part of the performed after repairs have been made to the humidifier as part of the performance confirmation, or as a bench checkout procedure. "Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like a Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Images] Budget Like A Pro" by Zoe McKey Photo Courtesy: [Oscar Wong/Getty Imag new to budgeting. To exercise your rights under this warranty, contact your local authorized Respironics, Inc. When setting up the Device as per the Action Required prompt shown in Figure 8-8, be sure to: a. b Interference may occur in the vicinity of equipment marked with the following symbol: NOTE At 80 MHz and 800 MHz, the higher frequency range applies. reserves the right to charge dealers for warranty service of failed product not purchased directly from Respironics, Inc. Refer to section Remove the Top Cover. In the Bi-Flex mode, the amount of pressure relief at the end of inhalation and at the beginning of exhalation is established. Print the label and verify that the label information is the same as the original or existing label. If you choose Back on any screen, it will take you back to the previous screen. Refer to Section Remove the Left Side Panel. TO INSTALL THE HUMIDIFIER BOTTOM HOUSING:. Using the four #6 x /4 screws, secure the Bottom Housing to the Lower Base Assembly. 0.5 RECOMMENDED SEPARATION DISTANCES BETWEEN PORTABLE & MOBILE RF COMMUNICATIONS AND THE DEVICE This device is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not appl to you. FIGURE 4-8: SETUP SCREEN NOTE The screen will only show a few lines at a time. It'll help you create a plan and feel inspired and motivated to make it all happen. P d =. The best part? FIGURE 4-6: PROVIDER SCREEN 4.. NOTE To remove AC power, disconnect the power supply cord from the electrical outlet SUPPLYING DC POWER TO THE DEVICE A Philips Respironics DC Power Cord can be used to operate this device in a stationary recreational vehicle, boat, or motor home. NOTE: U T is the AC mains voltage prior to application of the test level. NOTE if Split night is enabled. Flex type This screen displays the comfort mode setting. This book discusses ways to make essential, brain-rewiring changes that can set you up for long-term financial success. Turn the control wheel to toggle between the four options and highlight Setup or the icon. Refer to Replacing the Blower Cap. Surge IEC ± kv Differential Mode ± kv common M ode ± kv common mode Mains power quality should be that of a typical home or hospital environment. PRS (60 Series) REMstar & BiPAP Service & Technical Information 45 PAGE , VER. Remove the Humidifier Cable. 0 PAGE 7- CHAPTER 7: HUMIDIFIER REPAIR AND REPLACEMENT This section illustrates the names and locations of the replaceable components in the PR System One Humidifier. FIGURE -: LINK MODULE NOTE The Link Module and DB9F-DB9M cable in RP kit #074. PRS(60 Series) REMstar & BiPAP Service & Technical Information77 PAGE , VER REPLACING THE AIR INLET SEAL Air Inlet Seal Included in Kit Tools Required T8 Torx screwdriver T5 Torx screwdriver FIGURE 6-0: AIR INLET SEAL:. When prompted, enter the pressure reading from the manometer display for all requested pressures.. Regularly examine the inlet filters as needed for integrity and cleanliness.. FIGURE -: HEATED TUBE CONNECTION 60 Series Sleep Therapy devices and Humidifiers are not compatible with the legacy System One devices (models 5X, 5Z, 45X, 55, 65X, and 75X). Refer to Section Remove the Heater Plate Assembly. All PC to Device Communications require the use of Link Module Kit P/N DOWNLOADING THE SERVICE CENTER TOOLS SUITE SOFTWARE. Open the humidifier door with the release lever, and then slide the water tank out of the humidifier door with the release lever, and then slide the water tank out of the humidifier base. CAUTION Use a mild liquid dishwashing detergent only for either hand washing detergent on hand washing Lower Base.. You can start doing all of it as you listen! MORE FROM ASKMONEY.COM 1 Philips Respironics System One (60 Series) Sleep Therapy Devices Service & Technical Reference Manual2 0984, VER. C-FLEX FEATURE Continuous Positive Airway Pressure (CPAP) sleep therapy devices (listed above) provide patients with the special comfort feature C-Flex. Trim label if required.. ELECTROMAGNETIC EMISSIONS This device is intended for use in the electromagnetic environment specified below. Tubing type lock the Tubing type lock the Tubing type setting for either the 5 mm or the mm tubing if you do not want the patient to change it. Therefore you must: Verify that the Interface cable used to communicate with the Device has been connected to Com on the PC and That only one software program is being used at one time. 0 PAGE REPLACING THE HUMIDIFIER OUTSIDE PANEL Included in Kit Outside Panel Tools Required T8 Torx Screwdriver FIGURE 7-0: OUTSIDE PANEL TO REMOVE THE HUMIDIFIER OUTSIDE PANEL Included in Kit Outside Panel Tools Required T8 Torx Screwdriver FIGURE 7-0: OUTSIDE PANEL TO REMOVE THE HUMIDIFIER OUTSIDE PANEL Included in Kit Outside Panel Tools Required T8 Torx Screwdriver FIGURE 7-0: OUTSIDE PANEL TO REMOVE THE HUMIDIFIER OUTSIDE PANEL Included in Kit Outside Panel Tools Required T8 Torx Screwdriver FIGURE 7-0: OUTSIDE PANEL TO REMOVE THE HUMIDIFIER OUTSIDE PANEL Included in Kit Outside Panel Tools Required T8 Torx Screwdriver FIGURE 7-0: OUTSIDE PANEL TO REMOVE THE HUMIDIFIER OUTSIDE PANEL Included in Kit Outside Panel Tools Required T8 Torx Screwdriver FIGURE 7-0: OUTSIDE PANEL TO REMOVE THE HUMIDIFIER OUTSIDE PANEL:. 4.. Narrow Side of the Seal FIGURE 7-: DRY BOX SEAL REMOVAL TO INSTALL THE DRY BOX SEAL:. Refer to Section Using a screwdriver or similar probing tool, push in on the latches that secure the Flip Lid Assembly to the Humidifier Top Housing. To remove the Flow Manifold:. In the Auto-Check phase, the device will deliver a PRS (60) Series) REMstar & BiPAP Service & Technical Information10 0984, VER. A-Flex is top limited at 0.0 cm H O pressure...4 BI-LEVEL DEVICES The BiPAP Pro and BiPAP Auto bi-level devices sense the patient s breathing effort by monitoring airflow in the patient circuit and adjust the output pressure to assist in inhalation and exhalation. Turn the oxygen off before turning the device off. 0 NOTE In Icon Mode, FLEX shown above will either display a blank screen or it will show FLEX depending on the provider settings. Replace Therapy PCA E-65 ERR STUCK ENCODER A CONTINUE Clear Error Log and Retest Replace Therapy PCA E-66 ERR_STUCK_ENCODER_B CONTINUE Clear Error Log and Retest Replace Therapy PCA E-67 Not Used N/A52 0984, VER. Rinse thoroughly and allow to air dry. GUIDANCE & MANUFACTURER S DECLARATION - ELECTROMAGNETIC IMMUNITY TEST IEC 6060 TEST LEVEL COMPLIANCE EMC ENVIRONMENT GUIDANCE Electrostatic Discharge (ESD) IEC ±6 kv contact ±8 kv air ±6 kv contact ±8 kv air ±6 kv contact ±8 kv air Floors should be wood, concrete, or ceramic tile. PRS (60 Series) REMstar & BiPAP Service & Technical Information18 0984, VER. Device Name/ Description Bar code and scanner box are not needed Model Number - Note the 60 in the 60 Series Device Model numbers Device manufacture date in YYY/MM/DD format. If the device is used by multiple persons (such as rental devices), a low-resistance, main flow bacteria filter should be installed in-line between the device and the circuit tubing to prevent contamination. McKey shares details about her own life, explaining how she became independent at the age of 14 and had to learn to budget on the fly. The patient also has access to this feature. NOTE For Heated Humidifiers equipped with Heated Tubing circuitry, you must release the wiring harness connector. PRS (60 Series) REMstar & BiPAP Service & Technical Information110 0984, VER. The device defaults to the Silent mode being enabled (), meaning the device does not emit a beep during these operations. Verify that the D clip is installed in UI Knob.. Properly seat the Blower Housing. 4. The serial number and model number of the device will be displayed. Flex You can modify the Flex setting (, or) on this screen if you enabled Flex. If the HS suffix is present, The system does not include heated tubing functionality. Allow them to air dry. Click on the Set RT Clock button to set the Real-time clock (this should be performed any time a PCA has been replaced. To install the Bloween if you enabled Flex. Assembly/Outlet Bellows: 0 PAGE - CHAPTER : WARNINGS & CAUTIONS Warnings, cautions, and notes are used throughout this manual to identify possible safety hazards, conditions that may result in equipment or property damage, and important information that must be considered when performing service and testing procedures on the REMstar and Bi-PAP devices. The devices augment patient breathing by supplying pressurized air through a patient circuit. However, it's still suitable for beginners who are looking to understand why their budgeting decisions haven't been successful so far. Pay close attention to all corners and crevices. If the Upgrade fails again, troubleshooting and repair of the device may be required to resolve the issue. Training includes complete disassembly of the device, troubleshooting subassemblies and components, and necessary safety testing. This audiobook is for you. NOTE Refer to Section 7.. 0 PAGE - CHAPTER : SPECIFICATIONS & CLASSIFICATIONS This chapter includes specifications and EMC compliance for the PR System One REMstar and BiPAP devices. If repair or replacement procedures are performed, the device must be run-in for approximately 0 minutes, and tested to verify its proper operation. The Home screen will appear, as follows: FIGURE 4-: HOME SCREEN PRS(60 Series) REMstar & BiPAP Service & Technical Information 35 PAGE, VER. You can enable () or disable (0) this feature. To use the Service Center Tools Suite, remove the SD Card Cover and connect the Link Module Interface between the Device and PC COM port. Click on the OK button when ready. It also notes five budgeting approaches and addresses the process of staying motivated instead or connect the Link Module Interface between the Device and PC COM port. quitting. Using a T5 Torx screwdriver, remove the four #6 x /4 screws that secure the Bottom Housing to the Lower Base Assembly. CAUTION Route the Humidifier Bottom Housing. Auto-Trial If Auto-Trial (where xx/xx is the number of accumulated trial days / number of selected trial days). Following disinfection, visually inspect each piece. NOTE Verify that the standoffs secure the PCA.. Remove the Blower Assembly. Install all the components into the new Bottom Enclosure and assemble the device as instructed in previous sections REPLACING THE SERIAL NUMBER/MODEL NUMBER LABEL There are several instances in which you will have to replace the Serial Number/Model Number Label (e.g., the label is becoming illegible or if the Bottom Enclosure is replaced). The 60 Series devices are also manufactured so as to not allow for the connection of 60 Series devices with legacy devices. Lift the Top Cover away from the Bottom Enclosure. and click on the Download button adjacent to it. Icon Mode Text Mode FIGURE 4-4: SETUP SCREEN NOTE The screen will only show 4 lines at a time. This error is promoted to a STOP level error by use of the Verbose Mode configuration flag. This button lights up when therapy is active or during specific alerts.. FIGURE 8-: ADJUST BLOWER SPEED PRS (60 Series) REMstar & BiPAP Service & Technical Information108 0984, VER. REPLACING THE WATER CHAMBER ASSEMBLY Included in Kit Tools Required Tank Assembly None FIGURE 7-: WATER CHAMBER ASSEMBLY To remove the Water Chamber Assembly:. Mask alert You can enable () or disable (0) the mask alert setting. If this device has been exposed to either very hot or very cold temperature) before starting therapy. 0 PAGE REPLACING THE HEATER PLATE ASSEMBLY Included in Kit Bottom Housing (with Left Side Panel) #6 X /4 screw (x4) Tools Required T8 Torx Screwdriver T5 Torx Screwdriver T5 Torx Screwdriver FIGURE 7-: HEATER PLATE ASSEMBLY To remove the Heater Plate Assembly:. You are now in provider mode and can modify the various settings. Verify that the Flow VALVE ADJUSTMENT/READING PRS(60 Series) REMstar & BiPAP Service & Technical Information109 PAGE , VER When the following Action Required window appears, you will have to set up additional equipment. 0 PAGE 4- CHAPTER 4: SETUP This chapter provides an overview of the system setup including introductory information on the User and Provider modes and menus. 0 Tube temperature This setting will only display if you are using the heated tube. If it is not, the test will immediately halt and fail the Device. RATED MAXIMUM POWER OUTPUT OF TRANSMITTER (W) SEPARATION DISTANCE ACCORDING TO FREQUENCY OF TRANSMITTER (m) 50 khz to 80 MHz 800 MHz to.5ghz d =. Refer to Replacing the Main PCA. It guides you through a variety of topics, including the very first step you have to take to get the ball rolling. Do not place the device in or on any container that can collect or hold water. The error information is recorded in NVRAM and the unit is rebooted. The installation wizard will guide you through the upgrade process. The exhalation port(s) associated with the mask should never be blocked. Remove the Blower Cap. 8. This audiobook is a result of 25 years of psychiatric and psychoanalytic research into how our brains influence our spending decisions. Squeeze the standoffs, indicated by white arrows in Figure 6-0, to release the Main PCA from its mounting location in the Bottom Enclosure. WARNING Avoid submerging the Humidifier Connector End of the heated tubing in water. Do not place the device directly onto carpet, fabric, or other flammable materials. 0 PAGE -.0 WARNINGS WARNINGS WARNINGS water. Do not place the device directly onto carpet, fabric, or other flammable materials. 0 PAGE -.0 WARNINGS WARNINGS WARNINGS water. 75 C (67 F) Pressure Drop with Humidifier Max.: 0. This error is promoted to a STOP level error by use of the Verbose Mode configuration flag.48 0984, VER. This screen only displays if Auto-CPAP mode is enabled or if Auto-CPAP mode is enabled or if Auto-CPAP mode is enabled. prior to use. AHI The device accumulates individual Apnea/Hypopnea indices (AHI) for each session the patient used the device. Do not use this device if the room temporarily when the unit is first powered. CLEANING THE HEATED TUBING Clean the heated tubing before first use and weekly. A small flat blade screwdriver may be used to carefully pry the UI Knob from the device. 0 during the expiratory phase of breathing. Use of any other system may cause damage to the device. 0 during the expiratory phase of breathing. Use of any other system may cause damage to the device. 0 during the expiratory phase of breathing. Use of this device without a humidifier would result in measurements equal to or less than the stated values. 5. The test software requires operator interaction throughout the testing program. PRS (60 Series) REMstar & BiPAP Service & Technical Information96 0984, VER. Discontinue use and replace if damaged. at: 00 Murry Ridge Lane Murrysville, Pennsylvania or Deutschland Gewerbestrasse 7 8 Herrsching, Germany4 0984, VER. PRS(60 Series) REMstar & BiPAP Service & Technical Information97 PAGE , VER CLEANING THE WATER CHAMBER ASSEMBLY Hand washing can be performed daily. Connect the O enrichment attachment to the Humidifier Outlet Port and occlude the end of the attachment. What makes this audiobook beginner-friendly is all the extra content — you can get checklists, worksheets and plenty of other resources to put the concepts into practice. Remove the Sound Abatement Foam. RP KIT NAME PART NO. To install the Flow Manifold:. A burn may result from: touching the heater plate, coming in contact with the heated water, or touching the tank pan.. When using oxygen with this system, the oxygen supply must comply with local regulations for medical oxygen. If necessary, remove the Ramp Button from the Top Cover and maintain it for installation in the replacement Top Cover. 0 PAGE 8-. (or greater). Clean the humidifier base and heater plate by wiping it with a damp cloth. You can select one of the following settings: 0 (Off - no reminder is set), or you can set the device to display a reminder is set), or you can set the device to display a reminder is set). label. When entering the negative flow information, you must enter a minus sign for the negative value, as follows: 0. PRS(60 Series) REMstar & BiPAP Service & Technical Information11 PAGE , VER. The screws are indicated by the white arrows in Figure Push the grommet and the Blower Cap Tobacco smoke may cause tar build-up within the device, which may result in the device s Real-time Clock, confirm that he PC s date and time are accurate. You can also verify the Real-time clock by clicking on the Verify RT Clock button. You must ensure sufficient drying time for the cleaned filter. For more information, contact us at:.5 PRODUCT SUPPORT STATEMENT Phone: (74) Fax: (74) For product support, please contact Respironics Customer Satisfaction. 0 PAGE 5-9 ERROR CODE DESCRIPTION TYPE CORRECTIVE ACTION E-0 ERR STACK REBOOT Replace Therapy PCA E-ERR EXCEPTION STACK OVERFLOW REBOOT Replace Therapy PCA E- ERR EXCEPTION STACK RESERVE LOG ONLY Replace Therapy PCA E- ERR FIQ STACK RESERVE LOG ONLY Replace Therapy PCA E- ERR FIQ STACK RESERVE LOG ONLY Replace Therapy PCA E- ERR FIQ STACK NOT REPLACE THERAPY PCA E- ERR FIQ STACK RESERVE LOG ONLY Replace Therapy PCA E- ERR FIQ STACK NOT REPLACE THERAPY PCA E- ERR FIQ STACK RESERVE LOG ONLY REPLACE THERAPY PCA E- ERR FIQ STACK RESERVE PCA E-6 ERR FIQ STACK UNDERFLOW REBOOT Replace Therapy PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE PCA E-9 ERR IRQ STACK OVERFLOW REBOOT REPLACE THE ERR SVC STACK RESERVE LOG ONLY Replace Therapy PCA E- ERR SVC STACK UNDERFLOW REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT Replace Therapy PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA E- ERR DATA ABORT EXCEPTION REBOOT REPLACE THERAPY PCA ERR SWI ABORT EXCEPTION REBOOT Replace Therapy PCA55 PAGE, VER. 0 PAGE 6-6. b Over the frequency range 50 khz to 80 MHz, the field strengths should be less than V/m. Verify that it is flush with the Bottom Enclosure and fully seated on the two prongs as shown in Figure Assemble the remainder of the device as instructed in previous sections. Explanation of the Warning: When the device is not in operation and the oxygen flow is left on, oxygen delivered into the tubing may accumulate within the device s enclosure. Connect one section of 8 inch tubing between the other end of the Flow Control Valve and the Flow Meter. Refer to Chapter of this Service Manual for additional information on connecting the device to a PC and downloading software. Regularly examine the inlet filters as needed for integrity and cleanliness. Tubing type This setting allows you to select the correct size diameter tubing that you are using with the device. a. NOTE The menu options will vary depending on which therapy mode is selected. Note These guidelines may not apply in all situations. FIGURE -5: OPERATING SOFTWARE UPGRADES 5. Use care when removing the Top Cover so as not to lose the SD Card Slot Cover. 0 PAGE REPLACING THE MAIN PCA Main PCA Included in Kit Tools Required T5 Torx screwdriver FIGURE 6-0: MAIN PCA To remove the Main PCA:. Always ensure that the DC power cord securely fits into your therapy device prior to use. A-FLEX FEATURE A-Flex is a special comfort feature that is only active if Auto-CPAP therapy is enabled. 6.. A burn may result from: touching the heater plate, coming in contact with the heater plate, coming in contact with the heater plate. instructed in previous sections. If the device has only five (5) days of data to use for the PRS (60 Series) REMstar & BiPAP Service & Technical Information44 0984, VER. Connect the Power Supply to the Device which you will be using as the negative flow source and adjust the Device to the maximum pressure setting. CPAP-Check If CPAP-Che mode is available and enabled, this screen will either display XX.X (where XX.X is the 90% pressure) or 90%(XX.X) (where XX.X is the 90% pressure) or 90%(XX.X) (where XX.X is the 90% pressure) or 90%(XX.X) (where XX.X) is the 90% pressure) or future. 0 Phone-in This screen displays the total herapy hours for the device, the total number of days used when the sessions were greater than four (4) hours since the Ramp time when you set the Ramp time when you set the Ramp time when the sessions were greater than four (4) hours since the device was last reset. screen to the therapy pressure setting over the length of time specified here. cm H O at 60 LPM flow Humidity min Output: 0 mg H O /L - max flow, 5 C, 5% RH.. RUn in the device at maximum output pressure for 0 minutes.. Remove the UI Knob. Route the Heater Plate wiring harnesses as shown in Figure 7-. FIGURE 4-9: SPLIT-NIGHT SCREEN You can adjust the duration, which is the amount of time spent in PAP therapy before switching to Auto-PAP therapy. This screen only displays if Auto-Trial mode is available and enabled. While soaking the tank pieces in mild liquid dish detergent, use a soft bristle brush to clean each piece. Dirty inlet filters may cause high erating temperatures that may affect device performance. PRS(60 Series) REMstar & BiPAP Service & Technical Information67 PAGE, VER. They're all beginner-friendly, with clear plans of action that can help you take more steps toward reaching your financial goals. FIGURE 7-: HEATER PLATE INSTALLATION. This assistance is provided by the administration of two levels of positive pressure. Greutman's book offers a clear plan on eliminating debt while staying within your budget. Large leak is defined as the level of leak that is so large, it is no longer possible to determine respiratory events with statistical accuracy. a (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. 0 CHAPTER : INTRODUCTION.0 OVERVIEW DEVICE FEATURES C-Flex Feature A-Flex Feature Bi-Level Devices AutoIQ Heated Tube...-. Patient-adjustable settings of, or provide progressively increased pressure relief...5 AUTOIQ If AutoIQ mode is available, the device is capable of providing a two-phase therapy approach that is comprised of an Auto-Check phase. As you rotate the control wheel to toggle over different options the screen will slide up and down accordingly. PRS (60 Series) REMstar & BiPAP Service & Technical Information62 0984, VER. Service department shall examine any devices returned for service, and Respironics, Inc. DO NOT immerse the device in any fluids. You can adjust this setting from the Auto minimum pressure setting to 0 cm H O. The content about defining your values encompasses some of the best advice in the book and asks you to carefully consider what you find alternatives. If the white ultra-fine filter is dirty or torn, replace it. Large leak During any given night, the device recognizes the percentage of time the patient was experiencing what it deemed to be a large leak. to the dealer location only. Remove the Top Cover. NOTE If the lid does not close easily onto the base, separate the two parts, reassemble the tank, and inspect it again. Remove the existing label and affix the newly created label in the same location and orientation. This screen only displays if the device on the set therapy mode. 0 ERROR CODE DESCRIPTION TYPE CORRECTIVE ACTION E-0 ERR MOTOR SPINUP FLUX LOW REBOOT Reseat Blower Assy Replace Therapy PCA E- ERR MOTOR SPINUP FLUX MAGNITUDE REBOOT Reseat Blower Connectors Replace Blower Assy R Reseat Blower Connectors Replace Blower Assy Replace Therapy PCA E-6 ERR MOTOR RL NOCONVERGE STOP Reseat Blower Connectors Replace Blower Assy Replace Therapy PCA E-6 ERR MOTOR RL NOCONVERGE STOP Reseat Blower Connectors Replace Blower Assy Repla power cord to the outlet in a way that will prevent the cord from being tripped over or interfered with by chairs or other furniture. WARNING Warnings indicate the possibility of injury to people. CAUTION Never install a wet filter into the device. When the following Action Required window appears, you will have to set up additional equipment. Lift the PCA out of the Bottom Enclosure. This book is not only helpful and motivating, but it's also inspiring hearing McKey's personal story of budgeting hearing McKey's personal story of budgeting success. This is a beginner-friendly book that explains a step-by-step process to help you develop your own budgeting success. drowning in debt. Once you have logged onto click on the Service Software and Documentation link. Learn how to cultivate a healthy relationship with your money and reach your goal, whether it's earning more, making more, makin Chamber Assembly. Lock SYSTEM ONE This enables you to lock the System One resistance control setting if you do not want the patient to change it. If the text is too long to completely fit on the screen, it will scroll horizontally across the screen when highlighted. If the foam filter is torn, replace it. Do not use the device in the presence of a flammable anaesthetic mixture in combination with oxygen or air, or in the presence of nitrous oxide. Secure the Bottom Housing to the Lower Base using the four #6 x /4 screws and assemble the remainder of the device as necessary. Do not immerse the device in any fluids. Refer to the instructions supplied with the DC Power Cord and adapter cable for information on how to operate the device using DC power. Refer to Figure 7-7. WARNING Allow the humidifier heater plate and water to cool down for approximately 5 minutes before removing the water tank. 0. Service. Refer to Replacing the Blower Housing. PRS(60 Series) REMstar & BiPAP Service & Technical Information75 PAGE , VER REPLACING THE BLOWER HOUSING Included in Kit Blower Housing Tools Required T8 Torx screwdriver T5 Torx screwdriver T5 Torx screwdriver FIGURE 6-8: BLOWER HOUSING Included in Kit Blower Housing. The following Info screen will appear. Refer to Section Remove the Blower Housing Tools Required T8 Torx screwdriver T5 Torx screwdriver FIGURE 6-8: BLOWER HOUSING Info screen will appear. that may affect device performance. Remove the O enrichment attachment with manometer from the Humidifier Outlet Port. Before using the tank, fill it with distilled water no higher than the maximum fill line located on the front and sides of the tank. also located in the Utility Tools category. Open Service Center Tools from the Windows Start menu. During inspiration, pressure is variably positive and always equal to or higher than the expiratory level. Slide the Outside Panel into the Bottom Enclosure. Very light pressure is needed to release the Dry Box Assembly. Refer to Section Remove the Top Housing. The instructions in this manual are not intended to supersede the health care professional s instructions regarding the use of the device. By using the most current version of the service manual, and the latest testing software (both found on my.respironics.com), all repairs and testing can be performed. Let the device dry completely before plugging in the power cord.. Do not disturb the Upgrade Utility software or the Device while the Upgrade is operating. When the airflow is on, this button allows you to activate or restart the ramp function. Be sure to agitate it vigorously in water when rinsing and allow to air dry, but not in direct sunlight. 0 PAGE -9. PRS(60 Series) REMstar & BiPAP Service & Technical Information27 0984, VER. To clean the Water Chamber Assembly, perform the following:. Refer to the following subsections for instructions on cleaning the device. The only functionality available to the USP Box Seal is fully Seated in the Dry Box Assembly. Otherwise, the device will not operate properly. NOTE If Split-night is enabled, Mask Fit Check will be disabled. 0 PAGE 5-5 ERROR CODE DESCRIPTION TYPE CORRECTIVE ACTION E-8 ERR NEGATIVE QUADRATURE VOLTAGE VE CTOR REBOOT Reseat Blower Connectors Replace Blower Assy Replace Therapy PCA E-9 ERR VBUS GAIN ZERO: REBOOT Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT Reseat Blower Assy Replace Therapy PCA E-0 ERR MOTOR SPINUP FLUX HIGH REBOOT RESEAT BLOWER ASSY REPLACE THE REBOVE RESEAT BLOWER ASSY Not Used N/A NVRAM Low Level Errors E-40 ERR NVRAM REBOOT Replace Therapy PCA E-4 ERR STORAGE UNIT RAM REBOOT Replace Therapy PCA E-4 ERR NVRAM NO CALLBACK OCCURED REBOOT Replace Therapy PCA E-44 ERR NVL REBOOT Replace Therapy PCA E-4 ERR NVL REBOOT Replace Therapy PCA E-4 ERR NVRAM NO CALLBACK OCCURED REBOOT Replace Therapy PCA E-44 ERR NVL REBOOT Replace Therapy PCA E-4 ERR NVL REBOOT Replace Therapy PCA E-4 ERR NVRAM NO CALLBACK OCCURED REBOOT Replace Therapy PCA E-44 ERR NVL REBOOT Replace Therapy PCA E-4 ERR NVL REBOOT Replace Therapy PCA E-4 ERR NVL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT Replace Therapy PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR NV BUFFER NULL REBOOT REPLACE THERAPY PCA E-4 ERR Therapy PCA E-45 ERR_NV_CALLBACK_NULL REBOOT Replace Therapy PCA E-46 ERR_NV_ZERO_LENGTH REBOOT Replace Therapy PCA E-47 ERR_NVRAM INVALID BYTES XFRRED REBOOT Replace Therapy PCA E-47 ERR_NV_RAM INVALID BYTES XFRRED REBOOT Replace Therapy PCA E-46 ERR_NV_ZERO_LENGTH REBOOT Replace Therapy PCA E-47 ERR_NV_RAM INVALID BYTES XFRRED REBOOT Replace Therapy PCA E-46 ERR_NV_ZERO_LENGTH REBOOT Replace Therapy PCA E-48 Not Used N/A E-49 Not Used N Technical Information 39 PAGE, VER. However, when the device is not operating, enough fresh air will not be provided through the mask, and exhaled air may be rebreathed. Press the Side (Beauty) Cover fully into place. Refer to Replacing the User Interface (UI) Knob. Proceed to step. PRS(60 Series) REMstar & BiPAP Service & Technical Information 29 PAGE, VER. Place the Heater Plate Assembly into the Humidifier Lower Base as shown in Figure 7-. Do not press firmly on the screwdriver handle. Be sure the Humidifier Cable is properly seated in its mounting location.. Lift the Top Housing off of the Bottom Housing. The device s pressure controls are adjusted to deliver pressure support to the patient. For the remaining negative flow verifications, adjust the Flow Control Valve to the requested setting and enter the appropriate flow measurement when prompted. NOTE Notes are used to emphasize a characteristic or important consideration.19 PAGE , VER. This screen also displays a compliance check number you can use to validate that the data provided to you is the data taken from this screen. of this service manual for information on clearing the Right Panel Assembly. FINAL TESTING PROCEDURE. Follow the on-screen prompts to complete the upgrade process. 0 PAGE USER MODE From the Home screen, highlight the Setup option and press the UI Knob. Do not connect the device to an unregulated or high pressure oxygen source. PROVIDER MODE Accessing provider mode unlocks settings that cannot be modified by the user. You can also turn off (0) text mode which means the device will display the Icon Mode on the interface. 7.0 PR SYSTEM ONE HUMIDIFIER REPLACEMENT PART (RP) KITS RP KIT NAME PART NO. Auto on (not available on all devices) You can enable () or disable (0) this feature if you want the device to automatically turn the airflow on whenever the patient applies the interface (mask) to their airway. Remove the six (6) foot Heated Tubing from the Humidifier Outlet Port, if applicable. Refer to Replacing the Sound Abatement Foam. Do the following: GUIDANCE & MANUFACTURER S DECLARATION - ELECTROMAGNETIC EMISSIONS TEST RF emissions CISPR Harmonic emissions IEC Voltage fluctuations/ flicker emissions IEC COMPLIANCE Group Class B Class A Complies ELECTROMAGNETIC ENVIRONMENT GUIDANCE The device uses RF energy only for its internal function. Remove the Right Panel Assembly. Downloading the software to the default location will place it in the Windows Start menu, as shown in Figure 8-. The following table lists the error codes for the PR System One REMstar and BiPAP Sleep Therapy devices. When using oxygen with this system, turn the device on before turning on the oxygen. The humidifier is attached and therapy is active. Provider Mode - used by Home Care Professionals to set the device's parameters for the patient's needs. Know what you're doing with that money before you have an opportunity to spend it. This screen only displays if Split night is enabled and Auto-CPAP mode is enabled. PRS (60 Series) REMstar & BiPAP Service & Technical Information40 0984, VER. Refer to Replacing the Air Inlet Seal.. NOTE These measurements apply to this device with an optional humidifier. Click on the Windows Start menu button and launch the Service Center Tools. Additionally, the model numbers for core package systems are followed by either a TS or HS suffix. Wipe the parts completely on the top and bottom. 0 PAGE REPLACING THE SOUND ABATEMENT FOAM Included in Kit Sound Abatement Foam Tools Required T8 Torx screwdriver T5 Torx screwdriver environment. It also displays the average of these individual nightly values of percentage of time in large leak over a seven (7) day and a 0 day time frame (provided the device has at least seven (7) or 0 days of data respectively). To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. PRS (60 Series) REMstar & BiPAP Service & Technical Information74 0984, VER. CAUTION: Do not use extension cords with this device. STARTING THE DEVICE FIGURE 4-: DEVICE 4-: DEVI and other messages. This error is not promoted to a STOP level error by use of the Verbose Mode configuration flag. Refer to Replacing the User Interface (UI) Knob.. PROVIDER MODE SCREEN DESCRIPTIONS The following sections will describe the options available under the choices from the Provider screen (Reminder, Setup, and Info). NOTE C-Flex must be enabled (set to) in Provider Mode... Days > 4 This screen displays the cumulative number of device therapy sessions that exceeded four (4) hours over a one () day, and a 0 day time frame. Remember to periodically log onto and check for software upgrades. Condensation may damage the device. warrants that the system shall be free from defects of workmanship and materials and will perform in accordance with the product specifications for a period of two () years from the date of sale by Respironics, Inc. Inspect the tank. When the heated tube is being used with the product specifications for a period of two () years from the date of sale by Respironics, Inc. Inspect the tank. a Philips Respironics Pressure Valve must be placed in-line with the patient circuit between the device and the oxygen source. FIGURE Setup for the negative flow portion of testing as follows (refer to Figure 8-6): a. Verify that the Dry Box Assembly with Inlet Seal are secured and do not fall out of the Housing. TO INSTALL THE SOUND ABATEMENT FOAM:. The operator should read and understand this entire manual before using the device. Disassemble the tank by separating the tank lid and tank base.. This device is activated when the power cord is connected. Disconnect the flexible tubing from the device. Inspect the water tank for any leaks or damage. SLPM (Rated Flow) Maximum Recommended Pressure 5 cm H O Inner Diameter 5 mm (0.6 in.) Length.8 m (6 ft.) Heated Tubing Temperature Range 6 to ^o C (60 to 89 F) Heated Tubing F (60 to 89 F) Heated Tubing F (70 to 80 F) Heated Tubing F (70 to 8 One Heated Humidifier Specifications Environmental Refer to Environmental section of System One Heated Humidifier Specifications PRS (60 Series) REMstar & BiPAP Service & Technical Information 28 0984, VER. Proceed to step 7. Tiffany Aliche is considered a master of budgeting and reaching financial goals — she's called The Budgetnista for a reason — and her experience can help you get on track quickly. Before operating the device, ensure that the SD card cover is replaced whenever any of the accessories such as the Link Module or Modem are not installed. Press the control wheel to choose an option or setting that is highlighted. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment. It also displays the average of these individual nightly AHI values over a seven (7) or 0 days of data respectively). CLEARING THE DEVICE S ERROR LOG To clear the device s error log, perform the following:. This screen only displays if CPAP mode is enabled. Close the lid until the tab on the lid snaps back under the lip in the tank base. Install the Air Inlet Seal in the Bottom Enclosure. Launch the P Series Service Center Test software from the Windows Start menu.. Remove the Blower Assembly. Read all steps first before performing this test. 0 PAGE 7-7 base so the tab can easily snap back in place. A mask should not be used unless the device is turned on and operating properly. Rotate the UI knob and verify that it is secure and rotates freely. WARNING Inspect the power cord often for any signs of damage. Press the wheel to turn on the airflow and begin therapy. Refer to Section Using a T8 Torx

screwdriver, remove the four #4 x / screws that secure the Top Housing to the Humidifier Bottom Housing.. This is a representation of the device configuration used for the 60 Series Devices. Over 90% of our behaviors emerge and are carried out on an unconscious level. Refer to the section 6..7 for instructions on creating a serial number label. turns the lock on and 0 turns the lock off. PRS(60 Series) REMstar & BiPAP Service & Technical Information83 PAGE, VER. Connect the device to a PC. Click on OPEN to save the software to the Start menu programs as shown below. Your budget is a roadmap to reaching those goals, whether they include saving up for a down payment on a home retiring more comfortably or ensuring your bills are covered each month. Failure to close one program before opening and attempting to execute another program will result in a communications error. CAUTION On Heated Tube Humidifiers, a wiring harness is connected from the Flip Lid Assembly to the Heater Plate in the Lower Housing. NOTE If the Humidifier LED Backlight is enabled or disabled, the humidifier icon will always remain on (if humidifier is attached and heat is being applied), but will dim after 0 seconds of inactivity. Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, a should be less than the compliance level in each frequency range. PRS(60 Series) REMstar & BiPAP Service & Technical Information63 PAGE, VER. 9. Unauthorized service could cause injury, invalidate the warranty, or result in costly damage. FIGURE 6-: FLOW MANIFOLD. 0 PAGE -5. If Auto-Trial mode was used, you can choose the 90% pressure setting determined from the Auto-Trial mode, or you can adjust this setting from 4 to 0 cm HO. Your device will either display in text mode (English only) or icon mode. Opti-Start You can enable () or disable (0) this setting. Align the Blower Cap with the Blower Cap with the Blower Cap with the Blower Cap with the Start You can enable () or disable (0) this setting. Box Assembly. Pins of connectors marked with the ESD warning symbol shall not be touched and connections shall not be made without special precautions. Heated tube. During exhalation, pressure is variably positive or near ambient. Oxygen supports combustion. If one of your primary goals in learning how to budget better is to make sure you still have some money left at the end of every pay period, this is the audiobook for you. Press the wheel again to turn off therapy and return to the Home screen. READING THE DEVICE S ERROR LOG Error codes can be viewed on a PC using Service Center Tools Suite CAUTIONS CAUTIONS Contact your home care provider regarding EMC installation information. The Device Error Log must be cleared. 0 PAGE 4- calculation, the five (5) day average value will be seen under the seven (7) day display. FIGURE 6-7: HUMIDIFIER CABLE To remove the Humidifier Cable:. The following Reminder screen will appear. PRS (60 Series) REMstar & BiPAP Service & Technical Information88 0984, VER. First, plug the socket end of the AC power cord into the power supply. FIGURE 8-4: SERVICE CENTER TOOLS DROP-DOWN MENU 8.. Electromagnetic interference may be prevented by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and this device as recommended in the table below, according to noise test code given in ISO 750-:007, using the basic standards ISO 744 and ISO 487. FIGURE 5-: START MENU47 PAGE, VER Select Read Error Log from the drop-down menu. Click on the Download button and install the software, accepting all license agreements, and default installation locations. Refer to Figure While securely holding the PC s date and time as necessary. Refer to the PC s date and time as necessary. TS suffix is present in the model number, the system includes a heated humidifier. Verify that a Error Log Cleared confirmation window appears. Power frequency (50/60 Hz) magnetic field IEC A/m A/m Power frequency (50/60 Hz) magnetic field should be at levels characteristic of a typical location in a typical location in a typical hospital or home environment. Please refer to the humidifier user manual for more information. (Only Philips Respironics-supplied filters should be used as replacement filters.) 5. 0 hpa/cmho If enabled on your device, you will have the option to choose the units of pressure that are displayed. Precautionary procedures include methods to prevent build-up of electrostatic charge (e.g., air conditioning humidification, conductive floor coverings, nonsynthetic clothing), discharging one s body to the frame of the equipment or system or to earth. Be sure the Tank assembly is fully seated with the Dry Box Seal.. For safe operation when using a humidifier, the humidifier must always be positioned below the breathing circuit connection at the mask and the air outlet on the device. Reinstall the filters, inserting the white ultra-fine filter first if applicable. Place the device on a protected work surface and carefully turn it over to expose its bottom. Once Setup or the icon is highlighted, press and hold both the control wheel and the Ramp button on the device for at least five (5) seconds. Align the stands located on the bottom of the Blower Assembly with the holes in the Blower Housing. PRS (60 Series) REMstar & BiPAP Service & Technical Information 25 PAGE , VER. 90% Pressure is defined as the pressure at which the device spent 90% of the session time at or below. The Software programs that you will be using are written to communicate between the Device and the PC through PC Serial Communication Port (Com). Machine hours are not erased. This screen will also display xx/0 (where xx is the number of Hours). Refer to Section 7... Additionally, repair and replacement procedures are provided in this Chapter. "Your New Money Story" by David Krueger Photo Courtesy: [Jayk7/Getty Images] Your New Money Story focuses on addressing the psychology behind our spending behavior. at time of release of this service manual) Latest version of PRS Service Test Software (.5 at time of release of this service manual) Latest version of Product Operating Firmware Flash Upgrade Utility.XX (when applicable) PRS(60 Series) REMstar & BiPAP Service & Technical Information101 PAGE , VER NECESSARY SOFTWARE You must be a registered user to download service software and product operating software upgrades. Refer to Chapter for information on connecting the device to a PC.. Gently push the Blower Assembly into the Blower Housing. Replace Enclosure if necessary. The PCA s Flow Manifold FIGURE 6-5: FLOW MANIFOLD NOTE There are two types of Flow Manifolds. To access provider mode:. By clicking on the Open button, the software will be installed to the PCs Start menu and is named P-Series Service & Technical Information 104 0984, VER. This screen only displays if Auto-CPAP mode is enabled or if Auto-Trial mode is available and enabled. "The One-Week Budget" by Tiffany Aliche Photo Courtesy: [Stephen Zeigler/Getty Images] If Get Good With Money doesn't feel up to speed with your needs and you're interested in a direct action plan you can start right now, The One-Week Budget is a perfect audiobook for you. 0 Refer to the device s User and Provider Manuals for additional Warnings, Cautions, Notes, and Operating Instructions. 20 0984, VER. Only use a Philips Respironics DC Power Cord and Battery Adapter Cable. Split night You can enable () or disable (0) Split Night on this screen, which splits the therapy throughout the night, first in CPAP therapy before switching to Auto-CPAP therapy. 0 PAGE -7 GUIDANCE & MANUFACTURER S DECLARATION - ELECTROMAGNETIC IMMUNITY TEST IEC 6060 TEST LEVEL COMPLIANCE EMC ENVIRONMENT GUIDANCE Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. 0 To Install the Main PCA:. Monitor the Flow Meter display and select the appropriate interactive button on the test software display to increase or decrease the blower speed to adjust the flow to the requested setting. If the product fails to perform in accordance with the product specifications, Respironics, Inc. PRS(60 Series) REMstar & BiPAP Service & Technical Information33 PAGE , VER Ensure that all connections are secure. Connect the equipment as follows (refer to Figure 8-). FIGURE -4: SERVICE SOFTWARE MENU PRS (60 Series) REMstar & BiPAP Service & Technical Information 37 PAGE , VER You will hear a quick double beep and the Provider mode screen will appear. Place the Flow Manifold onto the Right Panel Assembly as shown in Figure Assemble the remainder of the device as instructed in previous sections. 0 PAGE 4-7 You can set a reminder on this screen that will let patients know when it is time to perform a certain task, such as replacing the mask. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. If the Device fails testing, troubleshoot for repair and re-test.. Electrical fast Transient/burst IEC ± kv for power supply lines ± kv for I/O lines Mains power quality should be that of a typical home or hospital environment. Setup Screen From the Provider screen, highlight Setup or the icon and press the control wheel. Replace Therapy PCA E-84 ERR FLOW_SENSOR_STOP STOP Replace Therapy PCA E-85 ERR FLOW_SENSOR_BUS CONTINUE Replace Therapy PCA E-88 Not Used N/A COP and RTC Errors E-90 ERR OTP NOT CONFIGURED STOP Replace Therapy PCA53 PAGE, VER. Gently squeeze the latch on the Flip Lid Assembly. Open the Service Center Tools software from the Windows Start Menu. Remove the filter(s) from the enclosure by gently squeezing the filter in the center and pulling it away from the device.. Remove the Humidifier Tank Assembly. Contact your health care professional if symptoms of sleep apnea recur.21 PAGE , VER. To Install the Outside Panel:. If service training is desired, contact the Philips Respironics service location in your area to schedule training..4 SERVICE TRAINING Respironics offers service training for the PR System One 60 Series REMstar and BiPAP devices. To install the Humidifier Cable:. If the device has only five (5) days of data to use for the calculation, the five (5) days of data to use for the calculation, the five (5) days of data to use for the calculation. screen allows you to only adjust the pressure setting from 4 to 0 cm HO. Insert the Side (Beauty) Cover, support tabs at the front of the device first, into it s mounting location.. "The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by S.J. Scott Photo Courtesy: [Peter Dazeley/Getty Images] The Budgeting Habit" by use that money for savings or investing in themselves. Release the four latches that secure the Blower Housing inside the Bottom Enclosure. What really elevates Living Well, Spending Less is that the advice doesn't stop there. This screen displays the amount of time the patient is actually receiving therapy on the device for the most recent one () day time frame. Show AHI/leak/PB You can select whether or not the Apnea/Hypopnea index, System Leak averages, and Periodic Breathing averages are displayed on the Patient Info screens. Rinse each piece with water twice. an accessible drive, otherwise, click on the Open button and download the software to your PC. One of the first verifications that this test software performs validates that the Device under test is operating with the most current firmware version. 0 PAGE 6- CHAPTER 6: REPAIR & REPLACE This Chapter identifies the names, locations, and replacement part (RP) kit numbers of the replaceable components in the PR System One 60 Series REMstar and BiPAP devices. Replace a damaged power cord immediately. D clip installed FIGURE 6-4: D CLIP IN UI KNOB PRS(60 Series) REMstar & BiPAP Service & Technical Information61 PAGE , VER REPLACING THE SIDE (BEAUTY) COVER Included in Kit Tools Required Side (Beauty) Cover is used when the System One Heated Humidifier is not present. WARNING Periodically inspect electrical cords and cables for damage or signs of wear. P For transmitters rated at a maximum output power not listed above, the recommended separation distance damage or signs of wear. in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter. Install The Inlet Seal onto the Dry Box Assembly if necessary.. Remove the Blower Cap.Refer to Replacing the Blower Cap.Lift the Blower Assembly out of the Blower Housing. Oxygen accumulated in the device enclosure will create a risk of fire. If floors are covered with synthetic material, the relative humidity should be at least 0%. WARNING Empty and clean the water tank daily to prevent mold and bacteria growth. Insert the Blower wiring harness and grommet through its mounting hole in the Blower Cap. For additional information on User Mode, refer to the appropriate PR System One REMstar and/or BiPAP device User Manual. PRS (60 Series) REMstar & BiPAP Service & Technical Information80 0984, VER. The SD card icon will display next to Info or the icon, if the SD card is inserted.. Verify that the grommet seats properly in the hole.. You can adjust this setting from 4 cm HO to the Auto maximum pressure setting. PRS (60 Series) REMstar & BiPAP Service & Technical Information 32 0984, VER. Blower hours This screen displays the number of hours that the blower has been active over the life of the device. 0 PAGE REPLACING THE USER INTERFACE (UI) KNOB Included in Kit UI Knob Tools Required Small flat blade screwdriver LCD Screen UI Knob Air Outlet Port Ramp Button FIGURE 6-: UI KNOB LOCATION To remove the UI Knob straight up from the UI stem. The Ramp Button FIGURE 6-: UI KNOB LOCATION To remove the UI Knob Straight up from the UI stem. desired humidity setting: 0,,,, 4 or 5. You can set it to 0, 80, or 40 minutes. NOTE The screens shown throughout this manual are examples only. Note that if the Heated Humidifier is equipped with Heated Tubing, you must disconnect the wiring harness. Slide the Outside Panel out of the Bottom Enclosure. Self- Adhesive Clear Overlay: Minimum Size -/8 inch x -/4 inch. DEVICE FEATURES.. If the System One humidify control has been disabled, the classic style of basic temperature controlled heated humidification will be used. 7.. We've rounded up eight of our favorite audiobooks that can help you learn all the basics of budgeting and set yourself up for success. Refer to Chapter 8 for Testing Procedures. Do not operate the device in direct sunlight or near a heating appliance because these conditions can increase the temperature of the air coming out of the device. For the 5 or mm flexible tubing, gently wash the tubing in a solution of warm water and a mild detergent. The user can change settings in the Setup menu. Pressure (pres) This screen displays the current pressure setting. FIGURE 8-:: The SD Card Slot Cover is loosely installed in the Top Cover. This screen only displays depending on the which mode is enabled. PRS(60 Series) REMstar & BiPAP Service & Technical Information41 PAGE , VER. C-Flex+ levels of, or progressively reflect increased pressure relief. Examine the filter(s) for cleanliness and integrity. Select Utility Tools and locate Philips Respironics System Service Test Software: FIGURE 8-5: SERVICE TEST SOFTWARE. Damage to the device may occur. Wash the parts of the tank in the dishwasher (top shelf only) or in a solution of warm water and a mild liquid dishwashing detergent. Log into PRS (60 Series) REMstar & BiPAP Service & Technical Information 12 0984, VER. Refer to Section 5. Be sure to observe and input accurate information in a timely manner. Click on the Service Software link. Remove the Dry Box Assembly with Inlet Seal. FIGURE 6-4: BLOWER INSTALL THE DRY BOX ASSEMBLY/HUMIDIFIER INLET SEAL:. If using this procedure as part of the Performance Verification of an entire system, enter the results (Pass or Fail) on the Performance Verification Data Sheet on page 8-4. PRS(60 Series) REMstar & BiPAP Service & Technical Information69 PAGE , VER Using a T8 Torx screwdriver, remove the seven #4 x / screws that secure the Blower Cap to the Bottom Enclosure. One type is for the PR System One 60 Series REMstar Plus with C-Flex, which does not have a Pressure Sensor (). Place the PCA in the Bottom Enclosure. This screen only displays if Auto-CPAP mode is enabled. PRS(60 Series) REMstar & BiPAP Service & Technical Information15 PAGE , VER Click on the Upgrade button. will repair or replace at its option the defective material or part. Refer to Remove the Top Cover. Repeat it after every single salary deposit, and soon enough, you'll notice you're saving more money than before. Click on the Done button when ready and proceed with following all prompts and inputting appropriate responses. If you're serious about changing your financial life, this book can thoroughly boost your budgeting literacy. Select Clear Error Codes from the drop-down menu. If this feature is enabled, the mask alert will sound. PRS(60 Series) REMstar & BiPAP Service & Technical Information 99 PAGE, VER HOSPITAL AND INSTITUTION DISINFECTION: WATER CHAMBER ASSEMBLY CAUTION Only the hospital and institution cleaning and disinfection procedures listed in this manual are recommended by Respironics. 0 PAGE - modified version of Auto-CPAP therapy which still reacts to patient events but requires a longer duration of time to elapse before adjustments are made and is limited in how much the pressure can be adjusted over time...6 HEATED TUBE PR System One 60 Series devices are intended for use in the home or hospital/institutional environment.pr System One REMstar and BiPAP devices are as follows: Device PR System One REMstar Plus with C-Flex CPAP Device PR System One REMstar Auto with A-Flex Bi-Level Device PR System One REMstar Auto with Bi-Flex Bi-Level Device PR System One REMstar Auto with Bi-Flex Bi-Level Device PR System One REMstar Plus with C-Flex + CPAP Device PR System One REMstar Auto with A-Flex Bi-Level Device PR System One REMstar Plus with C-Flex + CPAP Device PR System One REMstar Auto with Bi-Flex Bi-Level Device PR System One REMstar Plus with C-Flex + CPAP Device PR System One REMstar Plus with C-Flex + CPAP Device PR System One REMstar Plus with C-Flex + CPAP Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus with Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Plus With Bi-Flex Bi-Level Device PR System One REMstar Level Device Model Number Series* (TS suffix at the end of the model number denotes that the device has heated patient tubing. This setting for the humidifier. Allow the device to run in preheat mode for 0 seconds. Remove the Blower Housing If you choose zero (0), this will turn off both the humidifier and the heated tube. Be sure that all four locking tabs secure the Housing.. FIGURE 6-: SD CARD SLOT COVER: Snap the SD Card Slot Cover into place on the back of the device. Ramp start NOTE If the Ramp time is set to 0, Ramp start will not display This displays the Ramp starting pressure. Select Read Serial Number from the device when the unit is off. Never install a wet filter into the device. CAUTION If this device has been exposed to either very hot or very cold temperatures, allow it to adjust to room temperature before using or servicing it. for the instructions on how to clean the heated tube. Mobile RF communications equipment can affect medical electrical equipment. Torque screws to eight (8) in-lbs. U.S.A. and Canada Phone: Fax: PRS(60 Series) REMstar & BiPAP Service & Technical Information 17 PAGE, VER. The device will beep once signifying that the data has been reset. Orange means the heated tube is attached. Blue means System One humidification is selected. Do not try to force the devices together, otherwise damage may occur to the system. If the therapy pressure is set to 4 cm H O (the minimum setting), this screen will not display. Photo Courtesy: [Riska/iStock] Have you set some financial goals recently? Refer to Section Remove the Flip Lid Assembly. The BiPAP Auto can also operate in Auto Bi-Level or Auto Bi-Level with Bi-Flex. Connect Power to the Device. While the therapy device is not running, place your hand above the heater plate (without touching it) to assess the temperature of the heater plate when off for later comparison.. SERVICE NOTICE The service technician should have a good working knowledge and understanding of the principles of operation and repair of electro-mechanical sleep therapy devices. Lift the Foam out of the Bottom Enclosure. 0.4 ELECTROMAGNETIC IMMUNITY This device is intended for use in the electromagnetic environment specified below. Remove the SD Card and Cover and connect the Link Module Interface between the Device and PC COM port. FIGURE 8-8: ACTION REQUIRED WINDOW 6. Turn on humidifier preheat mode as described in the User Manual Refer to Section Remove the Dry Box Assembly with Inlet Seal. A-Flex transitions from no Flex at 4.0 cm H O to full Flex at 6 cm H O. will pay customary freight charges from Respironics, Inc. FIGURE 6-7: SCREW LOCATION NOTE The SD Card Slot Cover is loosely installed in the Top Cover. Use of other cleaning and disinfecting processes, not specified by Respironics, may affect the performance of the product.. Humidifier LED backlight (Ramp backlight) You can enable () or disable (0) the LED backlight for the humidifier number settings and Ramp button on the device. Contact your home care provider or Philips Respironics to determine if you have the appropriate DC cord for your specific therapy device. 4 Link Module Connect a DB9F-DB9M Cable between here and COM of the PC. Refer to Replacing the Top Cover. FIGURE 6-5: SIDE (BEAUTY) COVER. Wash the gray foam filter in warm water with a mild detergent. This warranty is non-transferable by unauthorized distributors of Respironics, Inc. 0 PAGE PREREQUISITES FOR FINAL TESTING (CLEAR ERROR LOG/VERIFY REAL-TIME CLOCK). You must be a registered user to download service software upgrades. If the Upgrade fails, check all connections and attempt once again. You can listen to seminars, download worksheets, attend workshops and much more. Push the locking tab on the end of the Side (Beauty) Cover towards the device s Outlet Port.. Dry Box Seal (included w/inlet Seal) Humidifier Top Housing Flip Lid Assembly (Non-heated Tubing) Outside Panel Heater Plate Assembly Torx Screwdriver Kit Heater Plate Spring Water Chamber Assembly Humidifier preheat mode can be used to determine if the System One Heated Humidifier is working properly. FIGURE 5-: SERVICE CENTER TOOLS 5. PRS(60 Series) REMstar & BiPAP Service & Technical Information57 PAGE, VER RP KITS (REMSTAR DEVICES) 60 Series REMstar Plus with C-Flex 40 Series REMstar Plus with A-Flex /4 Test Adapter (for run-in) Air Inlet Seal Blower Assembly Blower Cap Blower Outlet Bellows Bottom Enclosure Flow Manifold Humidifier Base Cable Link Module (with DB9F-DB9M cable) Main PCA O Enrichment (for testing) Outside Panel Assembly SD Card Slot Cover Side (Beauty) Cover Sound Abatement Foam Top Cover (French) (H&L) (French) Torx Screwdriver Kit UI Knoh Warning Label (Domestic U.S.) Warning Label (International) PRS (60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE Model 6x do not include a Pressure Sensor. Remove the Air Inlet Seal. PRS(60 Series) REMstar & BiPAP Service & Technical Information58 0984, VER. NOTE MODE Se Included in Kit Tools Required Flip Lid Assembly Tank Top Seal None FIGURE 7-6: FLIP LID ASSEMBLY: Once you have access to download the software, perform the following: 0 PAGE 7-9 FIGURE 7-7: FLIP LID ASSEMBLY REMOVAL. The humidifier must be level for proper operation. Click on the Philips Respironics System One link. FIGURE 4-0: INFO SCREEN PRS(60 Series) REMstar & BiPAP Service & Technical Information60 0984, VER. 0 PAGE I 0 Koninklijke Philips Electronics N.V.3 PAGE II 0984, VER. Press the wheel to choose an option. You can choose between cm H O or hpa. PRS(60 Series) REMstar & BiPAP Service & Technical Information103 PAGE, VER Connect Power to the Device. To give you a sneak peek, here's the number-one rule: Give every dollar you have a job. You'll also see clear examples of the ways you can make the plan work for your own personal goals. Refer to Figure 7-5. Bi Flex softens the airflow in inhalation and exhalation, making the patient s breathing more comfortable. This warranty is given in lieu of all other express warranties. You can adjust the setting from 4 cm HO to 0 cm HO. Place your hand above the heater plate (without touching it) to confirm an increase in heater plate temperature. Mask fit check You can enable () or disable (0) the mask fit check setting. Disconnect the patient tubing (if attached) and remove the water tank. You can increase or decrease the Ramp starting pressure in 0.5 cm H O increments. In Text Mode, Flex shown above will either display a blank screen or it will show the current flex mode or Rise time depending on how the provider set up the device. Slide the Dry Box Assembly with Inlet Seal into its mounting location in the Humidifier Bottom Housing. Start the blower of this Device. Periodically inspect electrical cords and cables for damage or signs of wear. This screen displays the nightly value of 90% Pressure for the most recent one () day time frame. Press the UI Knob to choose an option or setting that is highlighted. PRS (60 Series) REMstar & BiPAP Service & Technical Information100 0984, VER. C-Check mode starting pressure. CLEANING THE DEVICE WARNING To avoid electrical shock, always unplug the power cord from the wall ou cleaning the device. Verify that the locking tab snaps and secures the cover. Navigate to Service Center Utility Tools Suite. 0 PAGE 8- CHAPTER 8: TESTING This section provides procedures for conducting final testing of the Philips Respironics System One 60 Series devices. FIGURE -6: UPGRADE START SCREEN. CAUTION Electrical components used in this device are subject to damage from static electricity. PRS(60 Series) REMstar & BiPAP Service & Technical Information65 PAGE , VER REPLACING THE OUTSIDE PANEL To remove the Outside Panel:. Inspect the heated tubing for damage or wear (cracking, crazing, tears, punctures, etc.). To avoid electrical shock, always unplug the power cord from the wall outlet before cleaning the device. This is only available if Ramp time has been set to >0 and therapy pressure >4 cm H O. NOTE These guidelines may not apply in all situations. Empty any remaining water from the base of the tank. It is recommended that all individuals that will handle this device understand these precautionary procedures at a minimum as part of their training. 0 PAGE 7-5 It is not necessary to remove the Flip Lid Assembly. To install the Blower Cap:. The measured A-weighted sound power level is 5 db(a) with an uncertainty of two () db(a). PRS(60 Series) REMstar & BiPAP Service & Technical Information 107 PAGE, VER. The error information is recorded in NVRAM and the unit continues to operate without noticeable alteration. CAUTION When you are using Heated Tubing with the compatible System One 60 Series Heated Humidifier, you must use the 80W power supply. When DC power is obtained from a vehicle battery, the device should not be used while the vehicle s engine is running. Connect the last section of 8 inch tubing between the outlet port of this Device and the open end of the flow meter. Discard and replace if necessary. ROUTINE MAINTENANCE AND CLEANING There is no routine service required for this device. Make sure the tubing is dry before use. 0 PAGE - 60 Series BiPAP Pro with Bi-Flex and BiPAP Auto with Bi-Flex Test Pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) Average flow at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheated) Measured pressure at the patient connection port (cm H O) mm tubing (heated or nonheate O) Average flow at the patient connection port (l/min) SERIES HEATED HUMIDIFIER SPECIFICATIONS Environmental Operating & storage): 5 to 95% (non-condensing) Atmospheric Pressure: 77 to 0 kpa (0-86 m / ft) Physical Dimensions: 8 x 4 x 0 cm (7 L x 5.5 W x 4 H) Weight: Approximately 0.89 kg (.95 lbs.) Water Capacity 5 ml (oz.) at recommended water level Standards: IEC General Requirements for Safety of Medical Electrical Equipment EN ISO 885:007 General Requirements for Humidification Systems Electrical (When the System One Heated Humidifier is used with a therapy device) AC Power Consumption (with 60W Power Supply): VAC, 50/60 Hz,. Verify and/or calibrate the Device Real-time Clock. To read the device s error log, perform the following:. 0 PAGE 5- CHAPTER 5: TROUBLESHOOTING AND ERROR CODES 5.0 INTRODUCTION This section provides instructions for viewing and clearing the PR System One 60 Series REMstar and BiPAP devices error log as well as a description of the error codes. Periodic breathing During any given night, the device recognizes the percentage of time the patient was experiencing periodic breathing. 0 Torque screws to 8 in-lbs during installation. Connect the wiring harnesses to the PCA. Press the Blower Housing into its mounting location in the Bottom Enclosure. TO INSTALL THE AIR INLET SEAL:. When enabled, C-Flex enhances patient comfort by providing pressure relief PRS(60 Series) REMstar & BiPAP Service & Technical Information PAGE, VER. 0 PAGE For product operating software, click on the Download button adjacent to the software you wish to download. disclaims all liability for economic loss, loss of profits, overhead, or consequential damages which may be claimed to arise from any sale or use of this product. Place the Outlet Bellows onto the Blower Assembly. Select the Tool Drop Down arrow and the following will be available for selection. Press the control wheel while Therapy or the therapy icon is highlighted on the Home screen to enter therapy and end preheat mode. A AC Power Consumption: VDC, 6.67 A Fuses: There are no user-replaceable fuses. DO NOT clean the ultra-fine filter. 0 ERROR CODE DESCRIPTION TYPE CORRECTIVE ACTION E-50 ERR DAILY VALUES CORRUPT LOG ONLY Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE Replace Therapy PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT COMPLIANCE LOG CONTINUE REPLACE THERAPY PCA E-5 ERR CORRUPT Therapy PCA E-54 ERR COMPLOG REQS OVERFLOW REBOOT Replace Therapy PCA E-55 ERR THERAPY QUEUE FULL CONTINUE Replace Therapy PCA E-56 ERR COMPLOG PACKET STATUS REBOOT Replace Therapy PCA E-58 ERR SESS OBS NO CALLBACK REBOOT Replace Therapy PCA E-59 Not Used N/A General Hardware Errors E-60 ERR UNSUPPORTED HARDWARE REBOOT Replace Therapy PCA E-6 ERR STUCK KNOB KEY CONTINUE Verify proper installation/operation of the Top Enclosure. FIGURE 6-: SERIAL NUMBER/MODEL NUMBER LABEL The following is required for creating a label: Label Printer (Hand written labels are unacceptable) Self-Adhesive Label Stock, Minimum Size: -/8 inch x -/4 inch. The following steps should be followed if there is a desire to confirm the performance of the System One Heated Humidifier. The Device Real Time Clock must be accurate. P 50 khz to 80 MHz to .5 GHz P = maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d = the recommended separation distance in meters (m). NOTE The C-Flex+ feature must be enabled (set to) in provider mode. Sign and save the test sheet as required by your facility s procedures.. PRS(60 Series) REMstar & BiPAP Service & Technical Information85 PAGE , VER REPLACING THE DRY BOX SEAL Included in Kit Tools Required Dry Box Seal Inlet Seal None FIGURE 7-: DRY BOX SEAL TO REMOVE THE DRY BOX SEAL: A AC Power Consumption (with 80W Power Supply): VAC, 50/60 Hz, 0 A DC Power Consumption: VDC, 6.67 A Type of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Type BF Applied Part Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: Class II Equipment Degree of Protection Against Electric Shock: C Operation: Continuous Electromagnetic Compatibility: The device meets the requirements of EN, nd edition. Gently wash the heated tubing in a solution of warm water and a mild detergent. PRS (60 Series) REMstar & BiPAP Service & Technical Information94 0984, VER. Unplug the device, and wipe the outside of the device with a cloth slightly dampened with water and a mild detergent. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people. 0 PAGE 5-7 ERROR CODE DESCRIPTION TYPE CORRECTIVE ACTION E-68 Not Used N/A E-69 Not Used N/A Pressure Sensor Errors E-70 ERR_PRESSURE_SENSOR_ABSENT STOP Replace Therapy PCA E-7 Not Used N/A E-7 ERR PSENS UNABLE TO OBTAIN BUS REBOOT Replace Therapy PCA E-7 ERR SENSOR PRESS OFFSET STOP STOP Replace Therapy PCA E-7 Not Used N/A E-75 Not Used N/A E-76 Not Used N/A E-79 Not Used N/A E-79 Not Used N/A E-79 Not Used N/A E-79 Not Used N/A E-76 Not Used N ERR UNABLE TO INIT FLOW SENSOR REBOOT Rep al ce Therapy PCA E-8 ERR FLOW SENSOR TABLE CONTINUE Replace Therapy PCA E-8 ERR FLOW SENSOR OFFSET CONTINUE Replace Therapy PCA E-8 ERR FLOW SENSOR TABLE CONTINUE Replace Therapy PCA E-8 ERR FLOW SENSOR TABLE TO INIT FLOW SENSOR REBOOT. allows you to modify the Auto maximum pressure setting. Inspect the device and all circuit parts for damage after cleaning. 0 PAGE For the requested setting and enter the appropriate flow measurement when prompted. FIGURE 8-: SERVICE CENTER TOOLS SUITE.. Explanation of the Warning: The device is intended to be used with special masks or connectors that have exhalation ports to allow continuous flow of air out of the mask. PRS (60 Series) REMstar & BiPAP Service & Technical Information 30 0984, VER. Depending on the device you have, some screens may be present on the device and may not be described below. WARNING To prevent electrical shock, disconnect the Humidifier from the device before attempting to make any repairs. 6. Login Here Service & Technical Information13 PAGE , VER. The default is seven (7) days. TROUBLESHOOTING Attempt to verify problem by: Visually inspecting the device and observing the device s behavior, and Using a manometer to verify the pressure. CAUTION Cautions indicate the possibility of damage to equipment. Be sure that the Heater Plate Spring is properly seated under the Heater Plate. Do not use extension cords with this device. Note : At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. With the Flip Lid Assembly into the Humidifier.. 0 WARNINGS (CONT.) Repairs and adjustments must be performed by Philips Respironics-authorized service personnel only. 0 Declared Dual-Number Noise Emissions Values In accordance with ISO 487 The measured A-weighted emission sound pressure level is 7 db(a) with an uncertainty of db(a). Wipe the seal completely. FIGURE 4-7: REMINDER SCREEN PRS (60 Series) REMstar & BiPAP Service & Technical Information38 0984, VER. Refer to Replacing the Blower Assembly and/or the Blower Outlet Bellows. It also displays the average of these individual nightly values of 90% Pressure over a seven (7) day and a 0 day time frame (provided the device has at least seven (7) or 0 days of data respectively). Refer to Section Remove the Humidifier Bottom Housing. 8.0 REQUIRED EQUIPMENT Hardware: Link Module (includes DB9F-DB9M Cable) - RI p/n 074) Digital Manometer (RI p/n 074) Digital Manometer (RI p/n 07, or equivalent) with Pressure Tubing Windows-compatible personal computer (PC) running Windows 97, 98, or XP Printer Flow meter (range: +80 to -80 lpm, % accuracy, lpm resolution) Flow control valve (RI p/n 07985) O Enrichment (70) Negative flow source (any CPAP capable of delivering 0 cm H O) Three () pieces 8 Patient Tubing (RI p/n 00898) System One 60 Series Heated Humidifier Heated Patient Tubing (RI p/n) - if testing heated hose humidifier Whisper Swivel II (RI p/n) - if testing heated Humidifier 80W Power Supply for heated tubing Humidifier SD card (each), available in RI p/n pack Software: Latest version of Service Center Tools Suite (. Continue to bend the Flip Lid Assembly completely backwards until it is completely backwar Dry Box Seal. PRS (60 Series) REMstar & BiPAP Auto Air Inlet Seal Blower Cap Blower PCA Outside Panel Power Supply (60 Watt) Power Supply (80 Watt) Ramp Button Right Panel Assembly SD Card Slot Cover Side (Beauty) Cover Sound Abatement Foam Top Cover Sound Abatement Foam Top Cover Sound Information 59 PAGE , VER REPLACEMENT INSTRUCTIONS The following sections provide instructions for replacing components in the PRS 60 Series devices. Her story is touching, and it's one that may be familiar to many people. Refer to Replacing the Humidifier Cable. Remove the Flow Manifold. Refer to Chapter 5 for additional information. Press in on latch while pulling the wiring harness to disconnect the wiring harness connectors. Please read this section carefully before servicing the device. Humidifier or tube temperature setting (if using). Be sure that the Flow and Pressure (if applicable) Sensors properly align with the Flow Manifold. The following languages may be available on your device: English (EN), German (DE), Spanish (ES), French (FR), Italian (IT), Brazilian Portuguese (BR), Danish (EI), Norwegian (NO), or Swedish (SW). Each chapter comes with an inspiring story that presents a challenge and a solution to help you better understand what the action plan is all about. Silent mode You can disable (0) this feature if you want the device to emit an audible indicator (beep) during the following device operations: power on, therapy stop, mask fit check, and humidifier preheat mode. This step removes any errors that may have been created during testing. Heated Tubing is single patient multi-use.. b. 08 0984, VER. 0 PAGE REPLACING THE HUMIDIFIER CABLE Included in Kit Humidifier Cable Tools Required T8 Torx screwdriver T5 Torx screwdriver T5 Torx screwdriver Verify that key is facing upwards during installation. If you wish to transfer the software to a different PC, click on the Save button and save the file to an accessible drive, otherwise, click on the Open button and download the software to your PC.. reserves the right to charge an evaluation fee for any returned on and functioning properly, new air from the device flushes the exhaled air out through the mask exhalation port. Allow the filter to air dry completely before reinstalling it. USER AND PROVIDER MODES The PR System One 60 Series REMstar and BiPAP devices are equipped with the following control modes: User Mode - The parameters that can be modified by the patient are limited. You can also adjust the PAP pressure, Flex type, Flex setting, Ramp time, and Ramp starting pressure from this screen. PRS (60 Series) REMstar & BiPAP Service & Technical Information70 0984, VER. The BiPAP Pro can operate in either Bi-level with Bi-Flex. The following processes can be used to disinfect the water tank for a maximum of 60 cycles: Thermal Disinfection: Immersion in a (tap) water bath at 75 C ± C for 0 minutes Control III Cidex Cidex OPA 5. 60 Series Devices are labeled.xx. Refer to Section. To install the Right Panel Assembly:. The wiring harnesses are indicated by black arrows in Figure Remove the screw that secures the Main PCA to the Right Side Panel. If you are using a full face mask (a mask covering both your mouth and your nose), the mask must be equipped with a safety (entrainment) valve. Pressure Accuracy Pressure Increments: 4.0 to 0.0 cm H O, in 0.5 cm increments (Bi-Level Devices) Pressure Stability: Static Dynamic < 0 cm H O Dynamic > 0.0 cm H O Device ± 0.5 cm H O < 0.5 cm H O