Warranty

Stryker Medical, a division of Stryker Corporation (“Stryker”) warrants that its model 2781 **Companion Pump 2.0** will be free from defects in manufacturing and workmanship for a period of two (2) years. Stryker’s obligation under this warranty is expressly limited to supplying a product replacement, at its option, any product which is, in the sole discretion of Stryker, found to be effective. If requested by Stryker, products for which a claim is made shall be returned prepaid to the factory. Any improper use or any alterations or repair by others in such manner as in Stryker’s judgment affects the product materially and adversely shall void this warranty. Any repair of Stryker products using parts not provided or authorized by Stryker shall void this warranty. No employee or representative of Stryker is authorized to change this warranty in any way.

Warranty exclusion and damage limitations

The express warranty set forth herein is the only warranty applicable to the product. **Any and all other warranties, whether express or implied, including any implied warranty of merchantability or fitness for a particular purpose are expressly excluded by Stryker.** In no event shall Stryker be liable for incidental or consequential damages.

Return authorization

Product cannot be returned without prior approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned product. Stryker reserves the right to charge shipping and restocking fees on returned product. Special, modified, or discontinued products are not subject to return.

Damaged merchandise

ICC Regulations require that claims for damaged product must be made with the carrier within fifteen (15) days of receipt of the product. Do not accept damaged shipments unless such damage is noted on the delivery receipt at the time of receipt. Upon prompt notification, Stryker will file a freight claim with the appropriate carrier for damages incurred. Claims will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker within the fifteen (15) day period following the delivery of the product, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full within thirty (30) days of receipt. Claims for any incomplete shipments must be made within thirty (30) days of invoice.

International warranty clause

This warranty reflects U.S. domestic policy. Warranty outside the U.S. may vary by country. Please contact your local Stryker Medical representative for extra information.

Operation

Disposing of the product

Dispose of the product in accordance with your local waste management policy.

Safety Precautions

WARNING

- Do not use if the package is damaged.
- Do not place the control unit in the patient’s bed, in contact with the patient, or under sheets or other coverings. Doing so could cause serious injury or could affect control unit performance.
- Do not use in the presence of a flammable anesthetic mixture or with oxygen (O2) or nitrous oxide (N2O).
- Close supervision is necessary when this product is used on or near children. Electrical burns or choking may result from a child swallowing a small part detached from the device.
- Use this product only for its intended use as described in this manual.
- Do not operate product if the power cord or plug has been damaged.
- Keep the cord away from heated surfaces.
- Never block any air openings of this product or place it on soft surfaces, such as a bed or couch, where openings may be blocked. Keep the air opening free of lint, hair, and other similar particles.
- Never drop or insert any object into any opening or hose.
- Do not modify this equipment without the authorization of the manufacturer.
- The power cord to the Companion Pump 2.0 should be positioned to avoid a strangulation hazard and/or damage to the cord. Careful consideration is required when routing the power cable. It is recommended that placing the cord under the bed frame and attaching it to an electrical outlet at the head of bed.
- If there is a possibility of electro-magnetic interference with mobile phones, please increase the distance (3.3m) between devices or turn off the mobile phone.

CAUTION

Do not use sharp objects or pins with this product.

Cleaning and Disinfection

The control unit housing and tubing should be cleaned between patients.

- To clean, use water and a clean cloth to wipe down the Control Unit, power cord and hoses.
- Apply disinfectants to the external surfaces of the control unit and hoses by wiping twice a week.

Suggested Disinfectants:

- Quaternary Cleaner, Virex TB - Phenolic Cleaner, Matar
- Chlorinated Bleach solution : Use 3c concentration
- Alcohol

- Avoid dust and proximity to dusty areas.
- All components should be air dried thoroughly before use.

Symbols

cULus CLASSIFIED	cUL marking
	Caution
	General warning
	Double Insulation
	Fuse
	Refer to instruction manual/ booklet
	Consult instructions for use
	Disposal: Contact local distributor who will take the necessary steps according to your national market.
	Manufacturer
IP24	Protected against solid foreign objects of 12,5 mm and greater; Protection against vertically falling water drops
REF	Catalogue Number (model)
SN	Serial Number

Operation

Installing the pump

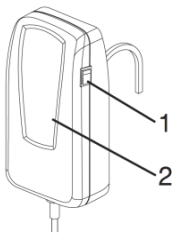
1. Place the product on flat surface or suspend the product on end of bed using attached hooks. See Figure 1 and Figure 2. Remove the plug to disconnect the device.
2. Refer to manufacturer’s instructions for overlay positioning.
3. Connect the hose assembly between the mattress air cell and the control unit. Unscrew the cap from the air valve of the mattress and screw the adaptor from control unit onto the air valve tightly.
4. Plug the power cord and turn control unit on using green on/off switch. The unit will take approximately 40 minutes to inflate the mattress.

Installation de la pompe

1. Placez le produit sur une surface plate ou suspendez-le à l'extrémité du lit à l'aide des crochets fournis. Voyez les figures 1 et 2 Enlevez la prise pour débrancher l'appareil
2. Consultez les instructions du fabricant pour savoir comment placer le sur-matelas.
3. Raccordez le tuyau entre les cellules d'air du matelas et la console de commande. Dévissez le bouchon de la valve d'air du matelas et vissez l'adaptateur de la console de commande sur la valve d'air.
4. Branchez le câble électrique et allumez la console de commande avec l'interrupteur marche/arrêt vert. L'appareil mettra environ 40 minutes à gonfler le matelas.

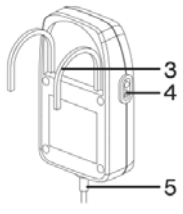
CONTROL UNIT FRONT

▼Figure (1)



1. Power Switch On/Off
2. Front Panel

▼Figure (2)



3. Hanger
4. Air Hose Port
5. Power Cord

Introduction

Specifications

Model		Companion Pump 2.0
Model Number		2781
Power Supply		AC120V 60Hz, 0.1A
Fuse Rating		F1AL, 250V
Dimension (L x W x H)		25 x 12.5 x 8.5 cm / 9.8” x 4.9” x 3.3”
Weight		1.22 kg / 2.7 lb
Environment	Atmospheric	700 hPa to 1013.25 hPa
	Temperature	· Operation: 10°C to 40°C (50°F to 104°F) · Storage: -15°C to 50°C (5°F to 122°F) · Shipping: -15°C to 70°C (5°F to 158°F)
	Humidity	· Operation: 10% to 90% non-condensing · Storage: 10% to 90% non-condensing · Shipping: 10% to 90% non-condensing
Classification		· Class II, Type BF, IP24 · Applied Part: Air Mattress · Not suitable for use in the presence of a flammable anesthetic mixture (No AP or APG protection)

Stryker reserves the right to change specifications without notice.

For US and CANADA only

E348970

53DG

Medical Equipment- Air Pump

WITH RESPECT TO ELECTRICAL SHOCK, FIRE AND MECHANICAL HAZARDS ONLY IN ACCORDANCE WITH ANSI/AAMI ES60601-1 (2005,3rd ed.) and CAN / CSA C22.2 No. 60601-1 (2008, 3rd ed.) and AAMI HA60601-1-11 and CAN/CSA-C22.2 No. 60601-1-11.

Le produit à été testé avec des équipements médicaux et respecte les normes ANSI/AAMI ES60601-1 (2005,3rd ed.) and CAN / CSA C22.2 No. 60601-1 (2008, 3rd ed.) and IEC 60601-1-11prévenant les choc électrique, le feu et les risques de blessures physiques.

Introduction

This manual assists you with the operation of the Stryker Model 2781 **Companion Pump 2.0**. Read this manual before operating this product and keep a copy on file. Set methods and procedures to educate and train your staff on the safe operation of this product.

Intended use

The Companion Pump 2.0 is a constant low pressure powered air pump intended to provide continuous air pressure to air mattress or overlay for treatment and prevention of pressure ulcers. It is recommended that the product be operated by personnel who are qualified to perform general nursing procedures and have received adequate training in the prevention and treatment of pressure ulcers.

Product descriptions

The Companion Pump 2.0 is a device to inflate the mattress or overlay.

Expected life

The Companion Pump 2.0 has an expected life of two years.

Contraindications

Air support therapy is not recommended when spinal stability is a concern.

Contact information

Contact Stryker Customer Service at: 1-800-327-0770.

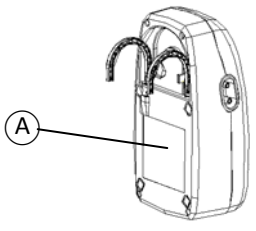
Stryker Medical
3800 E. Centre Avenue
Portage, MI 49002, USA

Have the serial number of your Stryker product available when calling Stryker Customer Service or Technical Support. Include the Lot batch code in all written communication.

Product serial number location/identification

The serial number (A) is located at the bottom casing of the pump.

▼Figure



Format:

REF 2781										
P	Y	Y	M	M	-	S	S	S	S	S

· P = Pump
· YY = Year
· MM = Month
· SSSSS = Sequence (Numeric)

Model Number Leqend (P)
2781 Companion Pump 2.0

Month Legend (MM)	
January	01
February	02
March	03
April	04
May	05
June	06
July	07
August	08
September	09
October	10
November	11
December	12

Year Legend (YY)	
2015	15
2016	16
2017	17
2018	18
2019	19

Appendix A: EMC Information

Guidance and Manufacturer's Declaration- Electromagnetic Emissions:
This device is intended for use in the electromagnetic environment specified below. The user of this device should make sure it is used in such an environment.

Emissions Test	Compliance	Electromagnetic Environment - Guidance
RF emissions CISPR 11	Group1	The device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment
RF emissions CISPR 11	Class B	
Harmonic emissions IEC61000-3-2	Class A	The device is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network
Voltage fluctuations / Flicker emissions IEC61000-3-3	Complies	

⚠ WARNING

1. The device should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the device should be observed to verify normal operation in the configuration in which it will be used.
2.Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
3. Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Pump, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

Companion Pump 2.0

REF 2781

stryker®

Operations Manual

2017/09 476006-5210 V1.1 www.stryker.com

Guidance and Manufacturer's Declaration- Electromagnetic Immunity:
This device is intended for use in the electromagnetic environment specified below. The user of this device should make sure it is used in such an environment.

Basic EMC standard	Immunity Test Levels HOME HEALTHCARE ENVIRONMENT	Compliance Levels	Electromagnetic Environment-Guidance
Electrostatic Discharge (ESD) IEC61000-4-2	±8kV contact ±15kV air	±8kV contact ±15kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30 %.
Electrical fast transient/ burst IEC61000-4-4	±2kV for power supply line ±1kV for input/output line	±2kV for power supply line ±1kV for input/output line	Mains power quality should be that of a typical commercial or hospital environment
Surge IEC61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	± 1 kV line(s) to line(s)	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC61000-4-11	Voltage Dips: i) 100% reduction for 0.5 period, ii) 100% reduction for 1 period, iii) 30% reduction for 25/30 period, Voltage Interruptions: 100% reduction for 250/300 period	120V (U_T) (1) Voltage Dips: i) 100% reduction for 0.5 period, ii) 100% reduction for 1 period, iii) 30% reduction for 25/30 period, Voltage Interruptions: 100% reduction for 250/300 period	Mains power quality should be that of a typical commercial or hospital environment. If the user of this device requires continued operation during power mains interruptions, it is recommended that the device be powered from an uninterruptible power supply or a battery.
Power frequency (50/60Hz) magnetic field IEC61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Conducted RF IEC 61000-4-6	3 Vrms 0,15 MHz – 80 MHz 6 Vrms in ISM and amateur radio bands between 0,15 MHz and 80 MHz 80 % AM at 1 kHz (4)	6Vrms	Portable and mobile RF communications equipment should be used no closer to any part of this device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Radiated RF EM Fields IEC61000-4-3	10 V/m 80 MHz to 2,7 GHz 80 % AM at 1 kHz 385-6000 MHz, 9-28V/m, 80% AM(1kHz) pulse mode and other modulation	10V/m	Recommended separation distance $d = \sqrt{P}$ 150kHz to 80MHz $d = 0.6\sqrt{P}$ 80MHz to 800MHz $d = 1.2\sqrt{P}$ 800 MHz to 2.7G Hz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).[b] Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey ,[a] should be less than the compliance level in each frequency ranged. Interference may occur in the vicinity of equipment marked with the following symbol:

NOTE 1: U_T is the a.c. mains voltage prior to the application of the test level
NOTE 2: At 80 MHz and 800 MHz, the higher frequency range applies.
NOTE 3: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people
NOTE 4: The ISM (industrial, scientific and medical) bands between 0.15 MHz and 80 MHz are 6.765 MHz to 6.795 MHz; 13.553 MHz to 13.567 MHz; 26.957 MHz to 27.283 MHz; and 40.66 MHz to 40.70 MHz. The amateur radio bandsbetween 0.15 MHz and 80 MHz are 1.8 MHz to 2.0 MHz, 3.5 MHz to 4.0 MHz, 5.3 MHz to 5.4 MHz, 7 MHz to 7.3 MHz,10.1 MHz to 10.15 MHz, 14 MHz to 14.2 MHz, 18.07 MHz to 18.17 MHz, 21.0 MHz to 21.4 MHz, 24.89 MHz to 24.99MHz, 28.0 MHz to 29.7 MHz and 50.0 MHz to 54.0 MHz.

a)Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land
mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. 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. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the device.
b) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 10 V/m.

Troubleshooting

Problem	Solution
Loss of power	Check if the plug is connected to mains.
Overlay fails	Make sure the air hose is not kinked, cracked, or split. Verify that the power switch is illuminated, signifying the control unit has power. Verify that the air hoses are fully inserted with a positive connection.

Distributed by:
Stryker Medical
3800 E. Centre Avenue
Portage, Michigan 49002
USA

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