

**SC505
Sof•Care[®]
Inflator**




Gaymar[®]
Your patients. Our commitment.

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**Operating Instructions
and
Service Manual**

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11.0 Disposal and Recycling

Metal parts of the device should be disposed of as scrap metal. Synthetic materials, electrical components, and printed circuit boards should be disposed of as electrical scrap. Material must be disposed according to the relevant local legal regulations. Consult specialized disposal companies for this purpose. Please contact local city/community administrations concerning local disposal companies.

12.0 Warranty Information

ALL GAYMAR EQUIPMENT AND PRODUCTS ARE WARRANTED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP UNDER NORMAL USE AND OPERATION.

Warranty entitlements on the inflator are as follows:

Free replacement of the SC505 Inflator unit where defects in materials and/or workmanship are evident at time of delivery.

All labor and parts are free of charge for a period of one full year from the date of purchase, providing the equipment is returned prepaid to Gaymar Industries. (See Section 6.0)

1.0 Safety Precautions

The user must understand this *Operator's Manual* and all precautions prior to use. Handle this system with the same care you would use when handling precision medical equipment.

Review the following safety precautions prior to using the inflator.

⚠ DANGER

- Explosive hazard. Do not use in the presence of flammable anesthetics.
- Risk of electric shock. Disconnect power before servicing inflator.

⚠ WARNING

Repairs should be performed only by qualified personnel such as biomedical electronic technicians or certified clinical engineers familiar with repair practices for servicing medical devices and accessories in accordance with Sections 7.0, 8.0 and 9.0 of this manual. **Damage to the inflator or malfunction could otherwise result.**

⚠ CAUTION

- Check skin condition daily. Consult physician if any redness or skin break occurs. Left untreated, serious injury could result.
- For grounding reliability, plug inflator only into a grounded outlet labelled "Hospital Grade".
- Do not position unit near any objects that can generate a strong electrical/magnetic field. Unit has been investigated to be in compliance with IEC60601-1-2. **Potential electromagnetic interference may result.**

2.0 Technical Data

Model number	SC505
Classification	Class 1 grounded equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.
Regulatory	UL60601-1, CSA C22.2 No 601.1-M90
Ingress	IPX0
EMC	IEC 60601-1-2:2007 CISPR 11/EN 55011, Class A, Group 1 ISM equipment
Mode of Operation	INTERMITTENT Operation 1 Minute ON/10 Minutes OFF
Voltage	120 VAC
Current	2.1 A
Frequency	60 Hz
Fuses	Two 5x20mm Fuses: 2.5A, 250V, T, L
Power Cord	Detachable, 15', #18AWG minimum with ground wire.
Static Pressure	30 mm Hg minimum; 37 mm Hg maximum
Operating Temperature	60°-90°F (16°-32.2°C)
Storage Temperature	-20°-120°F (28°-48°C)
Storage Humidity	0%-95% Non-Condensing
Weight	3 lb (1.4kg)
Size	4" X 10.5" (10.5cm x 26.7cm)

3.0 Description

The SC505 Sof•Care Inflator is Class 1 device designed for the intermittent operation required to fill Sof•Care series cushions.

By using the SC505 Sof•Care Inflator, the Sof•Care Cushion can be correctly filled with the proper air pressure for each patient.

Item	Description	Part Number
1	Handle Assembly	77550000
2	Switch Assembly Kit	101335000
3	Inflator Adaptor	11299000
4	Gasket	05423000
5	Test Kit	77553000
6	Foam Gasket	05892000
7	Screen	05506000
8	Trim (12" Long)	81175000
9	Power Entry Module	91368010
10	Cordset Lock	78154000
11	Power Cord	10031000
12	Fuse (Not Shown)	10219

Figure 3 - Spare Parts List

▲ CAUTION

The use of other parts or materials other than those specified in the table above can degrade the safety of this device.

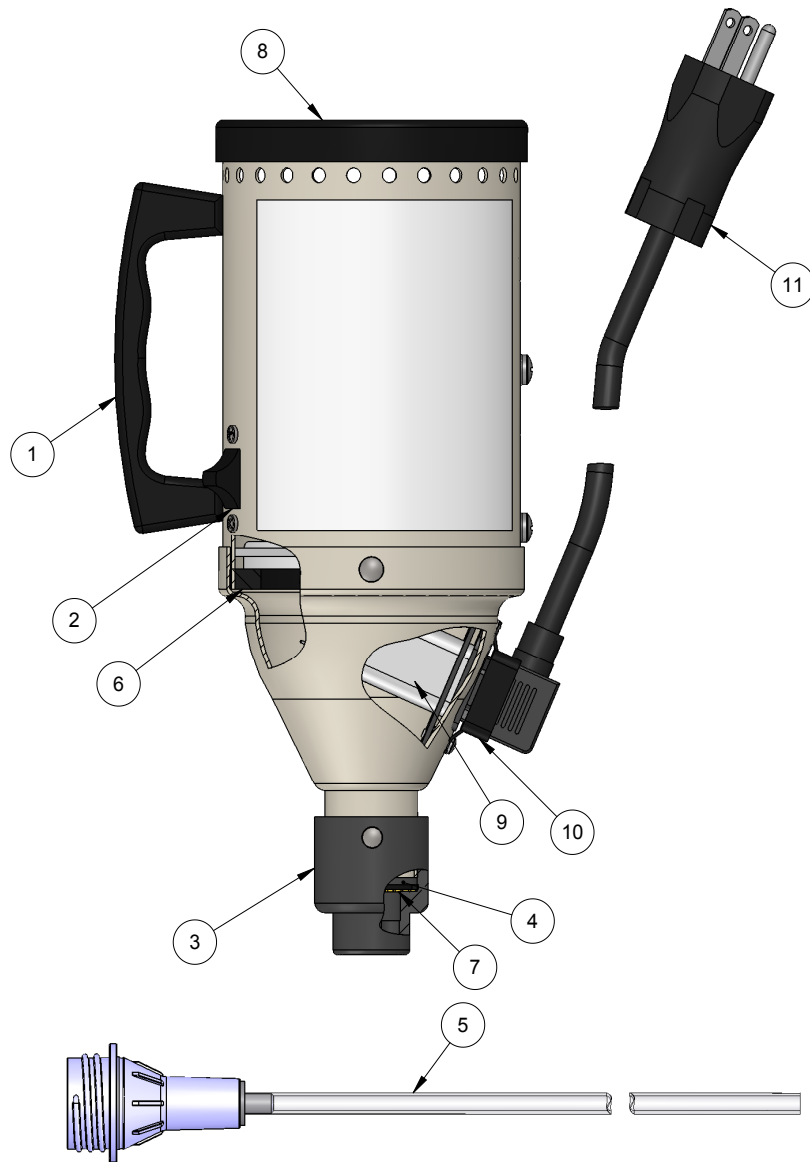


Figure 2 - Parts Drawing

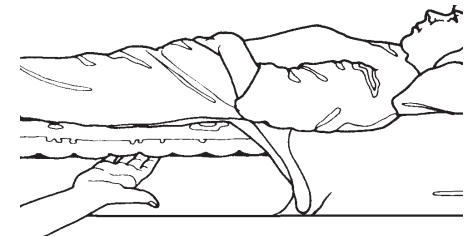
4.0 Operation

1. Plug the power cord into a properly grounded outlet.
2. Insert the inflator into the air valve of the Sof•Care cushion.
3. Switch the ON/OFF switch to the ON position for:
 - 60 seconds for Sof•Care Bed Cushions, Stretcher Cushions and Heel Cushions.
 - 30 seconds for Sof•Care Operating Room Cushions.

The inflator automatically avoids putting too much air into the bed cushion.

4. Remove and switch the ON/OFF switch to the OFF position. Quickly replace and tighten the Sof•Care Cushion valve cap. Ensure inflator remains OFF for 10 minutes before next use.
5. Perform a HAND CHECK:

Place hand under the Bed Cushion, beneath the patient's buttocks. Hand must be positioned with palm up and fingers flat. (If fingers are flexed, the HAND CHECK will be misleading.) If patient does not touch hand, the Bed Cushion is correctly inflated. If patient does touch hand, reinflate until patient's buttocks no longer touch hand.



Perform the HAND CHECK every 8 hours and after each inflation.

For further cushion instructions refer to the *Instructions for Use* booklet enclosed in Sof-Care Cushion package.

5.0 Cleaning and Storage

Do not allow liquids to enter housing. Unplug the power cord. Clean the housing with a mild detergent and damp cloth. Wipe dry before operating. Cleaning should be performed as often as required by institution protocol.

6.0 Incoming Inspection and Return Policy

1. Check the shipping carton for damage immediately after receipt. If package damage is discovered, the device should be unpacked with the carrier's agent present. Make a claim immediately to the carrier for damage.
2. Do not return damaged goods without notifying the carrier. If goods damaged during shipping are returned to Gaymar without notifying the carrier, Gaymar will assume the repairs will be made at the customer's expense.
3. Merchandise returned to Gaymar must be accompanied by a Return Goods Number (RG#) given by Gaymar, authorizing goods to be returned. Contact Customer Service at:

1 800 828-7341, or (716) 662-2551

10.0 Drawings/Parts List

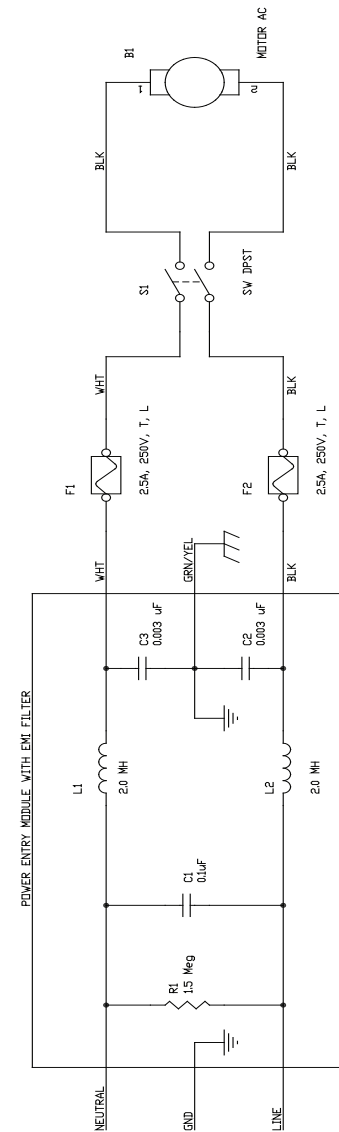


Figure 1 - Electrical Schematic

9.0 Parts Replacement [refer to figures 1-3]

Unplug the power cord before replacing any parts.

NOTE: Removing the front cap may result in air leakage. If necessary, use a replacement front cap gasket (item 6, page 13).

9.1 Fuses

Unplug the power cord. Remove the front cap for access to the interior of the inflator. Replace blown fuse(s) with 5x20mm, 2.5A, 250V, T, L fuses as indicated on the label inside the device. Replace the front cap.

9.2 Power Switch

Unplug the power cord. Remove the front cap to access the interior. Remove the glamour cap from the switch. Remove the two screws securing the switch to the housing. Disconnect the black and white switch wires from the two fuse holders. Cut and remove ty-wraps. Remove two screws from fuse plate and push plate aside to gain access to switch. Cut off the two splice connectors from the two motor wires. Strip the two motor wires to 1/4". Using a crimp tool, crimp the motor wires to the butt connectors on the new power switch assembly, polarity does not matter. Place the switch back in the inflator housing with the push on terminals facing the top. Secure switch with the two screws and place the glamour cap back on the switch. Remount fuse plate and secure with two screws. Reconnect the push on terminals to the fuse holders ensuring the white wires connect to each other and the black wires connect to each other. Fasten one wire splice to each fuse holder, through the fuse holder plate, with a ty-wrap. Replace the front cap.

9.3 Motor

The motor is designed for long, trouble-free service. Motor replacement is difficult. If the motor fails, return the complete inflator to the factory. (See Section 6.0, *Incoming Inspection and Return Policy*.)

▲ WARNING

Procedures within this section should be performed only by qualified personnel such as biomedical electronics technicians or certified clinical engineers familiar with repair practices for servicing medical devices and accessories in accordance with this manual. **Damage to the inflator or malfunction could otherwise result.**

7.0 Functional Check and Safety Inspection

Perform the following procedures every 12 months (or as specified in the facility's preventative maintenance program) and after each repair to assure optimum performance, dependability, and safety.

7.1 Enclosure

Unplug the power cord. Examine the enclosure. Check that screws are tight, labels and markings are legible, and air vents are free of dirt. Examine the power cord for cracks and bent, broken, or missing pins.

7.2 Ground Resistance

Measure the resistance between the ground pin on the power cord plug and the screw on the handle. It should be less than 0.5 ohms. If it is greater than 0.5 ohms, check the condition of ground connections inside the inflator. Remove the front cap to access the interior of the inflator. Refer to Section 9.0.

7.3 Current Leakage Test

Measure the current leakage between the inflator enclosure and ground. It should not exceed 500 μA for any combination of input line polarity and ground conductor open. If the inflator fails the current leakage test, return the inflator to the factory or an approved service center for repair. (See Section 6.0, *Incoming Inspection and Return Policy*.)

7.4 Pressure Check [refer to figure 2]

Gaymar Test Tool P/N 77553-000 adapts the SC505 inflator to tubing (3/16" ID) for connection to a manometer. See figure 2, item 5. Attach the tubing end to a standard manometer. Hold the inflator and test tool together firmly. Turn the inflator on. Verify that the output pressure is at least 30 mm Hg, but not more than 37 mm Hg. If the unit fails pressure check, refer to Section 8.0 paragraph 5.

5. If the inflator fails the pressure check, check the integrity of the gasket between the front cap and the enclosure. If the adapter assembly was removed, check the integrity of the gasket between the front cap and the adapter. Replace gasket if missing, damaged, or otherwise unusable.

If the problem persists, return the inflator to the factory or an approved service center for repair (See Section 6.0).

8.0 Troubleshooting [refer to figure 1]

▲ WARNING

Always perform the *Functional Check and Safety Inspection* (Section 7.0) after making repairs and before returning the inflator to use. **Failure to do so could result in user injury.**

1. If the inflator fails to operate, make sure it is plugged in and the receptacle has power. Next check for a blown fuse. If a fuse has blown, replace it per Section 9.1. If a fuse blows repeatedly, check wiring or switch for electrical short. If the problem persists, return the complete inflator to the factory for repair (See Section 6.0).
2. If the unit fails to operate with a new fuse, check for continuity of the motor and switch separately.
3. If the motor shows no continuity, return the complete inflator to the factory or to an approved service center (See Section 6.0).
4. If the switch shows no continuity in the "on" position, replace it per Section 9.2 or return the complete inflator to the factory for repair (See Section 6.0).