

Atom Infusion Pump P-600

for Adults / Neonates

Service Manual & Replacement Parts List

[Minute Parts]

ATOM MEDICAL CORPORATION

Preface

This Service Manual describes procedures for inspecting, repairing, and changing settings of the Atom Infusion Pump Model P-600, precautions and troubleshooting in alarm conditions. The procedures described in this Service Manual should be carried out only by personnel trained in electricity and operation of the unit. Neither Atom Medical Corporation nor its distributor will be held responsible for the performance of the unit if it should not be handled as instructed or if unauthorized parts should be used in case of repair. It should be noted that any responsibility arising from inspecting, repairing or changing settings of the unit lies with the one who carried it out.

Read this Service Manual carefully and familiarize yourself thoroughly with its contents before inspecting, repairing or changing settings of the unit.

Though Atom products are designed with safety features fully taken into consideration, improper use of electrical medical equipment can cause a fire or an electric shock, resulting in injury or death. To prevent such accidents, always bear the following points in mind.

[1] Basic precautions

1. Follow safety precautions.

Read the operating precautions thoroughly before using the unit.

2. Inspect the unit on a periodical basis.

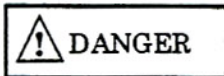
Periodical inspection is needed to use the unit under optimum conditions. Read the accompanying Operation Manual carefully.

3. Don't use a defective unit.

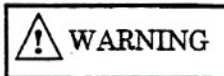
If any damage or malfunction should be found with the unit, stop using it immediately and contact your Atom distributor.

[2] DANGER · WARNING · CAUTION

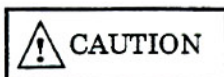
The DANGERS, WARNINGs and CAUTIONs used throughout the Operation Manual and on the unit are defined as follows:



A DANGER notice indicates an immediately hazardous situation which, if not avoided, will result in death or serious injury, serious damage to property such as total loss of use of equipment, and a fire.





A WARNING notice indicates an indirectly (potentially) hazardous situation which, if not avoided, will result in death or serious injury, serious damage to property such as total loss of use of equipment, and a fire.





A CAUTION notice indicates a hazardous situation which, if not avoided, could result in minor or moderate injury, partial damage to equipment, and loss of data stored in computers.

[3] Description of marks



1. Marks to arouse attention

Marks	<<Title>> and Indication
	<<General attention>> Indicates not particular but general caution, warning or danger.
	<<Shock hazard>> Indicates a possibility of a shock hazard under particular conditions.

2. Marks to prohibit actions






Marks	<<Title>> and Indication
	<<General prohibition>> Indicates not particular but general prohibition.
	<<Prohibition of fire>> Indicates prohibition of fire where an external fire source can set inflammable products on fire under particular conditions.







3. Marks to instruct actions

Marks	<<Title>> and Indication
	<<General instruction>> Indicates not particular but general action by the user.
	<<Connect a ground wire>> Indicates that a ground wire must be connected by the user of equipment provided with a ground terminal.



General Precautions

1. Only personnel with proper training should inspect, repair, change settings of, or disassemble and assemble the unit. 
2. The unit should not be operated or repaired with wet hands. 
3. To prevent hazardous explosion, the unit should not be operated or repaired where oxygen, nitrous oxide or inflammable anesthetic gas is used. 
4. The power cord of the unit should be connected to that power outlet including a ground terminal which meets the rated electrical requirements of the unit. 
5. If a fingertip or a tool should touch a harness or a terminal in the unit, an electric shock or a short circuit may result. Be very careful in repairing the unit. 

6. Replacing a part (e.g. fuse, internal battery) with one other than specified may compromise the safety of the unit. In replacing a part, make sure that the new part you intend to use is the one specified. 
7. The electronics of the unit may be affected by the radiation of various electromagnetic waves in the hospital and cease to function properly. The unit should not be operated or repaired in electromagnetic environments where electrocautery or imaging devices such as MRI and CT equipment are used, or near equipment having an electromotor that consumes a lot of currents. 
8. The unit cannot be disinfected by immersing in a medical fluid, autoclaving or using EOG. 
9. The unit should not be immersed in a medical fluid. A portion of the medical fluid may enter the unit and short the electronic circuit inside. 
10. After inspecting, repairing, disassembling and assembling, changing settings of, or cleaning and disinfecting the unit, follow the instructions on the completion of inspection and repair, and check that the unit operates properly. 
11. After inspecting, repairing, disassembling and assembling, changing settings of, or cleaning and disinfecting the unit, charge the internal battery for 24 hours and get the unit ready for use any time before storing it in the appointed place. 

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