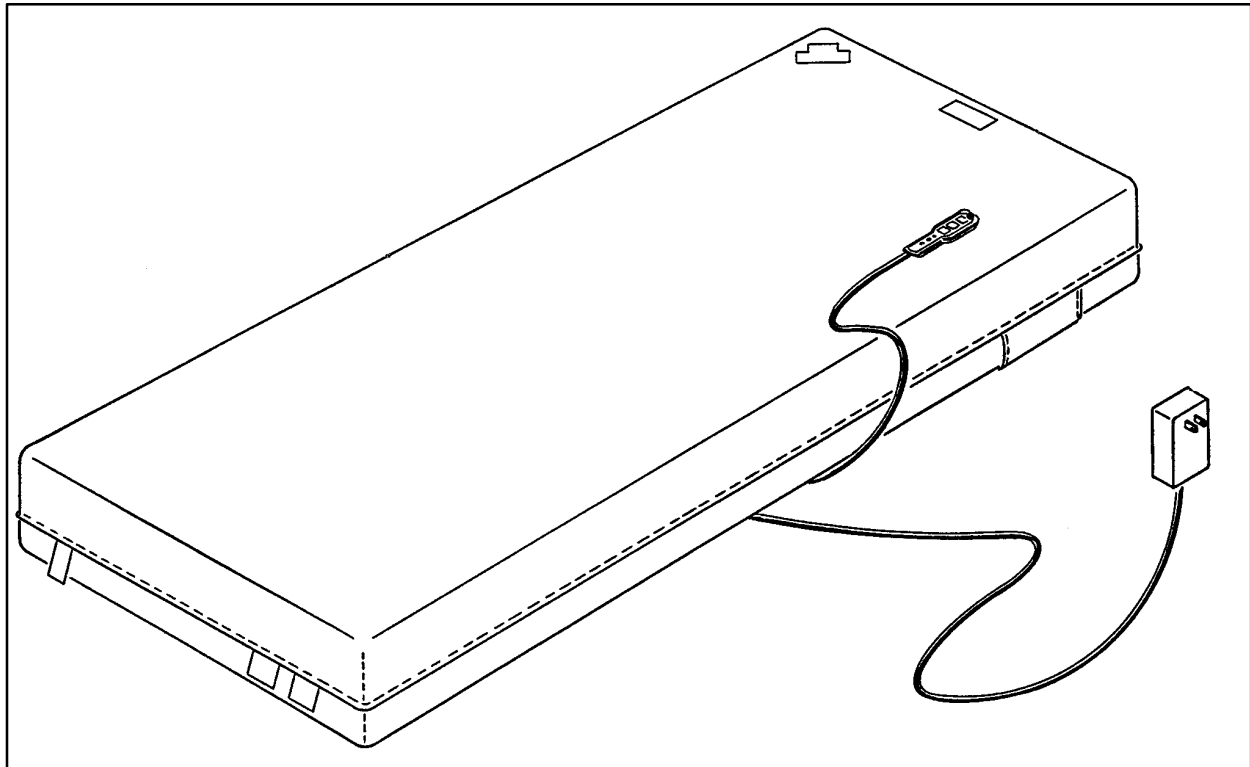


---

**IMPORTANT**  
File in your  
maintenance  
records

**stryker**<sup>®</sup>  
Medical



---

# Pressure Management

---

## Dynamic Mattress System 2500

### MAINTENANCE MANUAL

For Parts or Technical Assistance  
1-800-327-0770

---

# Table of Contents

---

INTRODUCTION .....	2
SPECIFICATIONS .....	2
WARNING / CAUTION / NOTE DEFINITION .....	2
CLEANING .....	3
PREVENTATIVE MAINTENANCE .....	3
PRODUCT ILLUSTRATIONS .....	4
STATIC DISCHARGE PRECAUTIONS .....	5
TROUBLESHOOTING GUIDE .....	6
MATTRESS COVER REPLACEMENT .....	7
AIR BLADDER REPLACEMENT .....	8
FOAM BASE ASSEMBLY REPLACEMENT .....	8
PENDANT REPLACEMENT .....	9
POWER SUPPLY REPLACEMENT .....	9
CONTROL UNIT REPLACEMENT .....	10
FIELD REPLACEMENT PARTS .....	11
MATTRESS ASSEMBLY DRAWING .....	12, 13
WARRANTY	
Obtaining Parts and Service .....	14
Supplemental Warranty Coverage .....	14
Return Authorization .....	15
Freight Damage Claims .....	15

# Introduction

---

## INTRODUCTION

This manual is designed to assist you with the maintenance of the DMS 2500. Read it thoroughly before using the equipment or beginning any maintenance on it.

## SPECIFICATIONS

Size	32" x 80", 35" x 80", 35" x 84"
Thickness	7"
Weight	35 pounds
Maximum Weight Capacity	500 pounds
Electrical Requirements	110 VAC, 60 Hz, 0.28 Amp

## WARNING / CAUTION / NOTE DEFINITION

The words WARNING, CAUTION and NOTE carry special meanings and should be carefully reviewed.

---

### WARNING

The personal safety of the patient or user may be involved. Disregarding this information could result in injury to the patient or user.

---

### CAUTION

These instructions point out special procedures or precautions that must be followed to avoid damaging the equipment.

### NOTE

This provides special information to make maintenance easier or important instructions clearer.

## CLEANING

1. Follow standard housekeeping cleaning protocol when cleaning the mattress.
2. Fitted sheet cover (optional) will remain impermeable to liquids after a minimum of 10 washings.

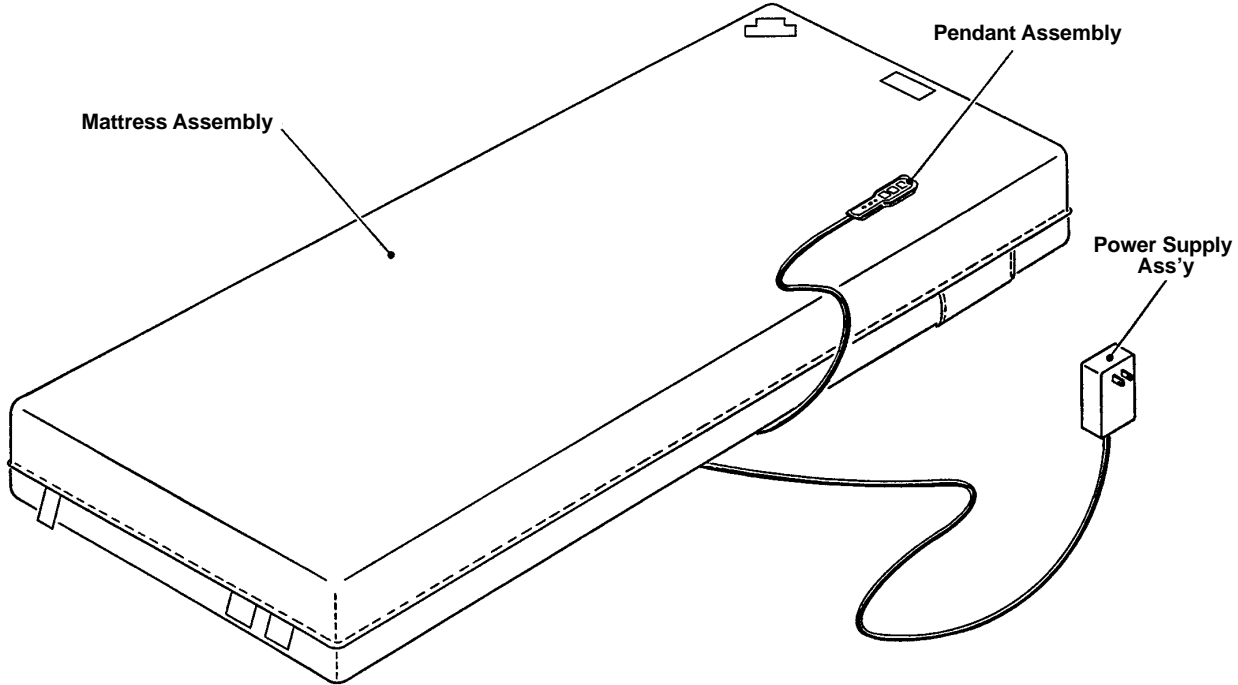
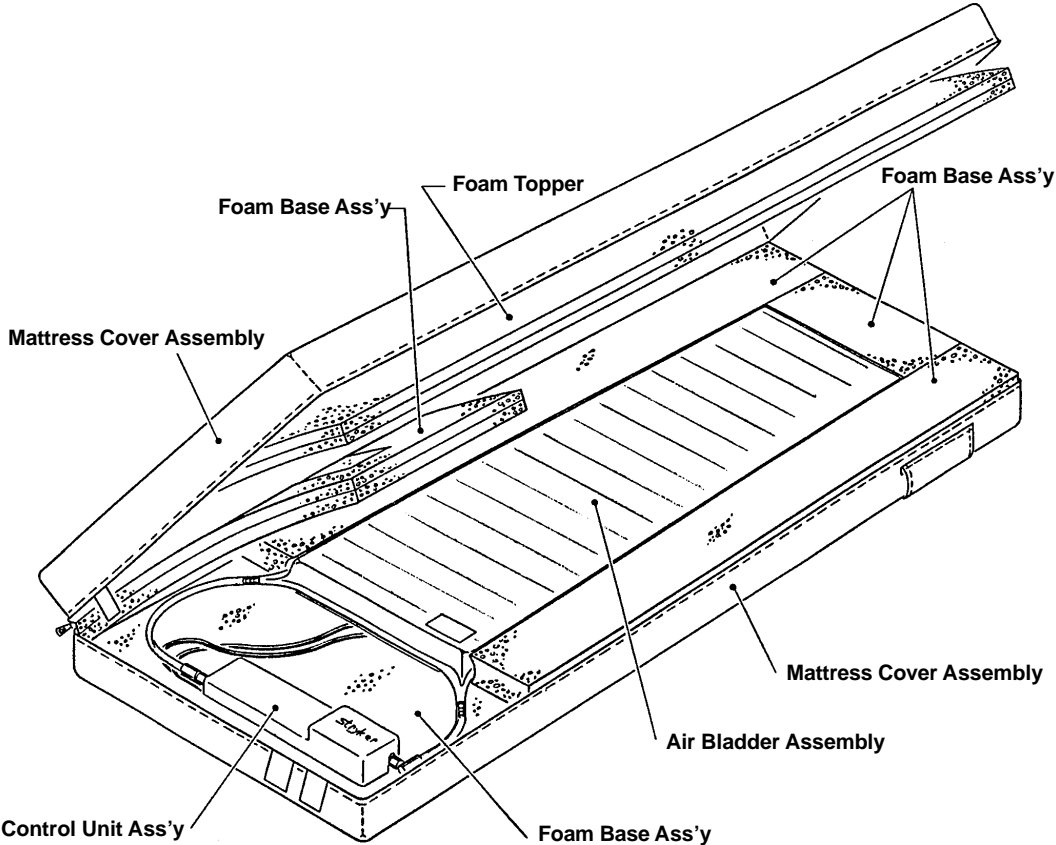
## BIANNUAL CHECKLIST

- All functions on pendant control operating properly (page 9)
- No rips or cracks in mattress cover
- No cables worn or pinched
- Power cord not frayed: no loose connections

Unzip upper cover and inspect internal components

- Foam intact and clean
- Foam not excessively worn
- Fasteners on control unit secure
- No hoses worn or kinked
- All electrical connections tight

# Product Illustrations



## STATIC DISCHARGE PRECAUTIONS

The electronic circuits in the DMS 2500 control unit are completely protected from static electricity damage only while the control unit is assembled. It is extremely important that all service personnel always use adequate static protection when servicing the DMS 2500 control unit. *Whenever you are touching wires, you should be using static protection.*

### Static Protection Equipment

The necessary equipment for proper static protection is:

- 1 static wrist strap; 3M part number 2214 or equivalent,
- 1 grounding plug; 3M part number 61038 or equivalent,
- 1 test lead with a banana plug on one end and an alligator clip on the other; Smith part number N132B699 or equivalent.

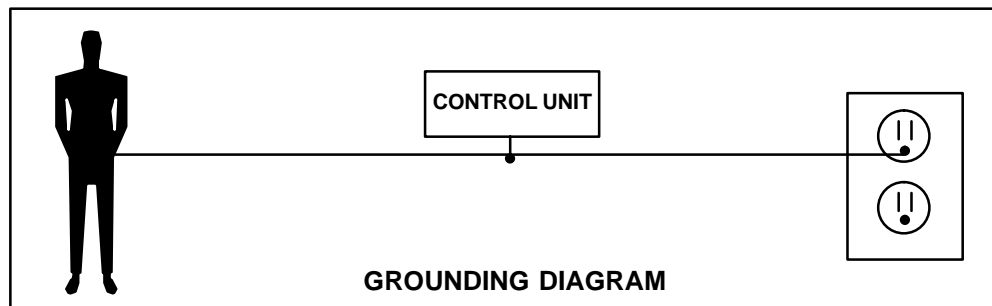
---

## CAUTION

All electronic service parts will be shipped in static shielding bags. Do not open the bags until you have completed steps 4 and 5 of the following procedure. Do not place unprotected circuit boards on the floor. All circuit boards returned to Stryker Medical should be shipped in the static shielding bags the new boards were shipped in.

### Static Protection Procedure

1. Unplug the DMS 2500 from the wall receptacle.
2. Unzip upper cover and remove upper foam elements.
3. Remove the upper housing on the control unit.
4. Insert the grounding plug into a properly grounded hospital grade wall receptacle. Plug the banana plug of the test lead into the receptacle on the grounding plug. Connect the alligator clip on the other end of the test lead to the metal chassis on the control unit.
5. Place the static control wrist strap on your wrist. Connect the alligator clip at the other end of the wrist strap cord to the metal chassis.



# Service Information

---

## TROUBLESHOOTING GUIDE

PROBLEM/SYMPTOM	SOLUTION(S)
AIR LOSS LED on.	Check air connections between bladder and control unit. Check for leak in bladder. Unplug transformer from wall socket and plug back in. Replace bladder (page 8). Replace control unit (page 10).
Auto LED does not light when plugged in.	Plug into another wall socket. Open control unit and check for 24 VDC at power supply connector. Replace power supply assembly (page 9). Replace control unit (page 10).
Cannot switch from AUTO to MANUAL mode, otherwise system functions properly.	Check pendant cord and connector. Replace pendant (page 9).
Cannot adjust FIRM or SOFT, otherwise system functions properly.	Check pendant cord and connector. Replace pendant (page 9).
Cover stained, upper foam layer stained.	Check cleaning solution and protocol. Replace outer cover (page 7). Replace upper foam topper.

## MATTRESS COVER REPLACEMENT

### Required Tools:

Screwdriver  
Needle Nose Pliers  
Static Protection Equipment (see page 5)

### Replacement Procedure:

1. Unplug the power supply from the wall socket.
2. Unzip upper cover and remove.
3. Remove and set aside the upper foam layer.
4. Properly ground yourself. (See page 5 for static discharge precautions).
5. Open control unit housing.
6. Remove pendant assembly (see page 9).
7. Remove power supply (see page 9).
8. Lay new cover on flat surface and unzip upper cover from lower.
9. Place all pieces of the foam assembly into new lower cover, being sure the control unit is at the foot end of the cover assembly (closest to the zipper).
10. Route the power supply cable and the pendant cable through the eyelet in the foam piece and through the lower foam elements.
11. Reattach cables to control unit and reattach control unit housing.
12. Place the control unit in the cutout in the lower foam.
13. Reinstall the upper foam layer, white side up.
14. Zip the upper cover onto the lower cover.

### To replace the upper cover only:

1. Unzip old upper cover and remove.
2. Unpack the new upper cover and lay flat on mattress, aligning the zipper properly.
3. Zip the upper cover onto the lower cover



## AIR BLADDER REPLACEMENT

### Required Tools:

None

### Replacement Procedure:

1. Unplug power supply from wall socket.
2. Unzip and remove the upper cover and remove upper foam layer.
3. Unplug pneumatic couplings from both sides of control unit.
4. Remove air bladder from mattress.
5. Install new air bladder into foam frame with 90 degree pneumatic connector on right side.
6. Attach pneumatic couplings to control unit.
7. Reinstall the upper foam layer, white side up.
8. Zip the upper cover onto the lower cover.
9. Plug in power supply and check mattress operation.

## FOAM BASE ASSEMBLY REPLACEMENT

### Required Tools:

Screwdriver

Needle Nose Pliers

Static Protection Equipment (see page 5)

### Replacement Procedure:

1. Unplug power supply from wall socket.
2. Unzip and remove the upper cover.
3. Remove and set aside the upper foam layer.
4. Remove air bladder from mattress.
5. Properly ground yourself (see page 5 for static discharge precautions).
6. Remove control unit.
7. Remove entire foam base assembly.
8. Install new foam base assembly.
9. Route pendant cable and power supply cable through opening in foam.
10. Reinstall power supply connector, pendant connector and strain relief.
11. Attach control unit housing.
12. Attach bladder hoses.
13. Reinstall the upper foam layer, white side up.
14. Zip the upper cover onto the lower cover.
15. Plug in power supply and check mattress operation.

## PENDANT REPLACEMENT

### Required Tools:

Screwdriver

Needle Nose Pliers

Static Protection Equipment (see page 5)

### Replacement Procedure:

1. Unplug power supply from wall socket.
2. Unzip and remove the upper cover and remove upper foam layer.
3. Properly ground yourself (see page 5 for static discharge precautions).
4. Open control unit.
5. Unplug connector (JP1) and disconnect strain relief. (Save strain relief for use in reassembly).
6. Remove cable from control unit and mattress assembly.
7. Route the new pendant cable through the eyelet in the lower mattress cover and foam base assembly.
8. Reinstall strain relief in chassis.
9. Plug in connector (JP1).
10. Reinstall control unit housing.
11. Reinstall the upper foam layer, white side up.
12. Zip the upper cover onto the lower cover.
13. Plug in power supply and check mattress operation.

## POWER SUPPLY REPLACEMENT

### Required Tools:

Screwdriver

Needle Nose Pliers

Static Protection Equipment (see page 5)

### Replacement Procedure:

1. Unplug power supply from wall socket.
2. Unzip and remove the upper cover and remove upper foam layer.
3. Properly ground yourself (see page 5 for static discharge precautions).
4. Open control unit. Unplug power connector (JP6) and disconnect strain relief. (Save strain relief for use in reassembly).
5. Remove cable from control unit and mattress assembly.
6. Route the new power supply cable through the eyelet in the lower mattress cover and foam base assembly.
7. Reinstall strain relief in chassis.
8. Plug in connector (JP6) and reinstall control unit housing.
9. Reinstall the upper foam layer, white side up.
10. Zip the upper cover onto the lower cover.
11. Plug in power supply and check mattress operation.

## CONTROL UNIT REPLACEMENT

### Required Tools:

Screwdriver

Needle Nose Pliers

Static Protection Equipment (see page 5)

### Replacement Procedure:

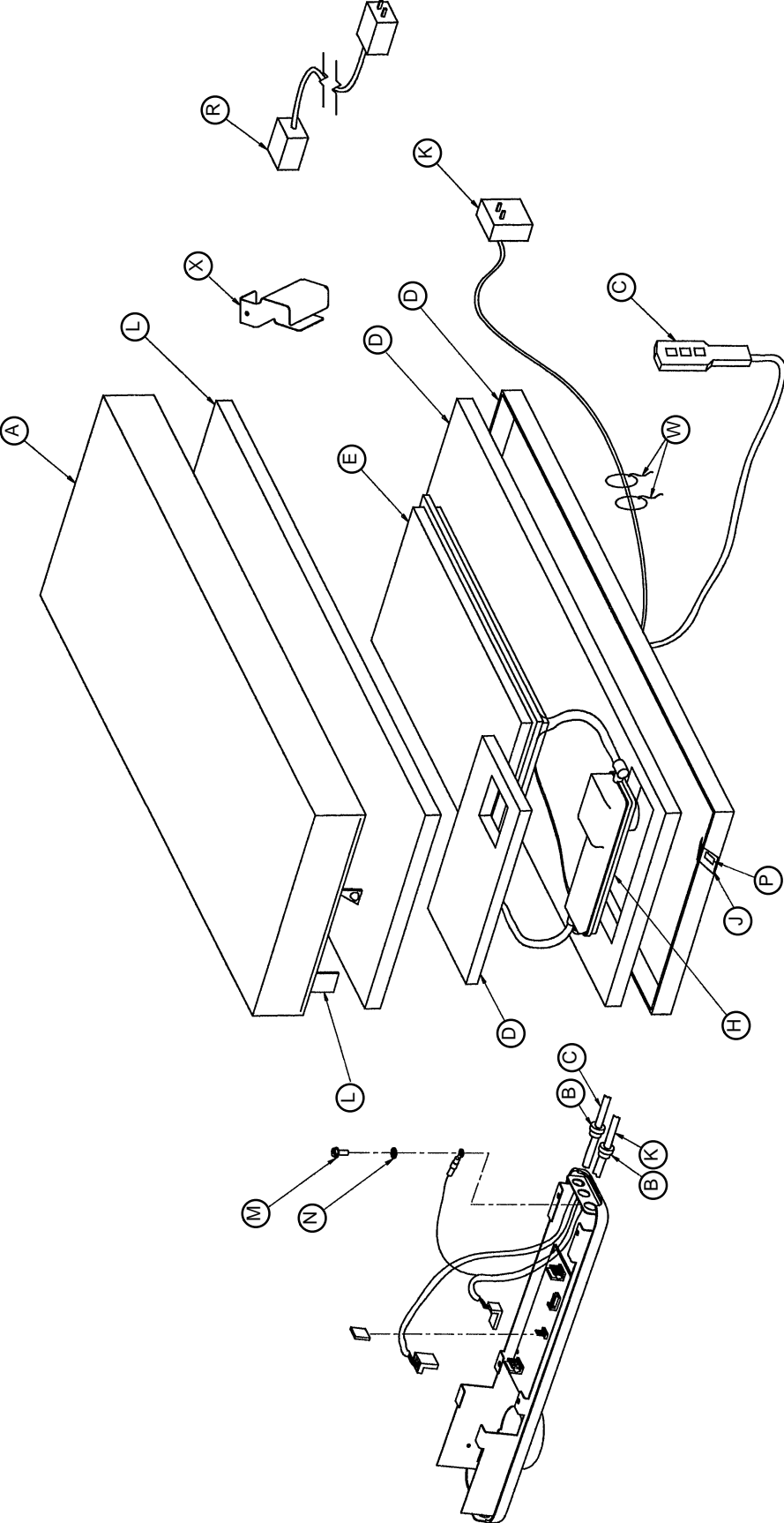
1. Unplug power supply from wall socket.
2. Unzip and remove the upper cover and remove upper foam layer.
3. Properly ground yourself (see page 5 for static discharge precautions).
4. Open control unit.
5. Disconnect power supply connector and strain relief.
6. Disconnect pendant and strain relief.
7. Unplug air bladder from control unit.
8. Remove old control unit from foam assembly and reattach old housing.
9. Install new control unit in foam assembly.
10. Remove new control unit housing cover.
11. Reinstall power supply connector and strain relief.
12. Reinstall pendant connector and strain relief.
13. Attach control unit housing.
14. Attach air bladder hoses (90 degree pneumatic connector on right side).
15. Reinstall the upper foam layer, white side up.
16. Zip the upper cover onto the lower cover.
17. Plug in power supply and check mattress operation.

# Field Replacement Parts

---

<b><u>PART NAME</u></b>	<b><u>PART NUMBER</u></b>
2500-200-003 .....	Air Bladder Assembly
2500-300-000 .....	Pendant Assembly
2500-400-000 .....	Control Unit Assembly
2500-500-000 .....	Power Supply Assembly
2500-320-000 .....	Nylon Cover Assembly – 32x80
2500-350-000 .....	Nylon Cover Assembly – 35x80
2500-354-000 .....	Nylon Cover Assembly – 35x84
2500-200-001 .....	Nylon Cover Top – 35x80
2500-201-001 .....	Nylon Cover Top – 32x80
2500-202-001 .....	Nylon Cover Top – 35x84
2500-200-002 .....	Cover Bottom – 35x80
2500-201-002 .....	Cover Bottom – 32x80
2500-202-002 .....	Cover Bottom – 35x84
2500-320-100 .....	Rose Cover Assembly – 32x80
2500-350-100 .....	Rose Cover Assembly – 35x80
2500-354-100 .....	Rose Cover Assembly – 35x84
2500-210-001 .....	Rose Cover Top – 35x80
2500-211-001 .....	Rose Cover Top – 32x80
2500-212-001 .....	Rose Cover Top – 35x84
2500-320-200 .....	Lectrolite Cover Assembly – 32x80
2500-350-200 .....	Lectrolite Cover Assembly – 35x80
2500-354-200 .....	Lectrolite Cover Assembly – 35x84
2500-220-001 .....	Lectrolite Cover Top – 35x80
2500-221-001 .....	Lectrolite Cover Top – 32x80
2500-222-001 .....	Lectrolite Cover Top – 35x84
2500-350-001 .....	Top Sheet – 35x80
2500-320-001 .....	Top Sheet – 32x80
2500-354-001 .....	Top Sheet – 35x84
2500-200-004 .....	Foam Topper – 35x80
2500-201-004 .....	Foam Topper – 32x80
2500-202-004 .....	Foam Topper – 35x84
2500-200-021 .....	Foam Base Assembly – 35x80
2500-201-021 .....	Foam Base Assembly – 32x80
2500-202-021 .....	Foam Base Assembly – 35x84

# 2500-000-000 Mattress Assembly



# 2500-000-000 Mattress Assembly

Item	Part No.	Part Name	Qty.
A	(see chart below)	Mattress Cover Assembly	1
B	2500-900-23	Strain Relief	2
C	2500-300-000	Pendant	1
D	(see chart below)	Foam Base Assembly	1
E	2500-200-3	Air Bladder Assembly	1
F	2500-200-15	DMS P/N Label	1
H	2500-400-123	DMS Control Unit	1
J	(see chart below)	Mattress Label	1
K	2500-500-123	DMS Power Supply	1
L	(see chart below)	Foam Topper	1
M	23-63	Machine Screw	1
N	12-30	Star Washer	1
P	2020-1-160	Serial Number Label	1
R	2500-510-3	Extension Cord	1
S	2500-600-100	Instruction Manual	1
T	N/A	Cleaning Guide	1
W	2500-900-25	Cable Tie	2
X	2500-510-2	Brick Bracket	1
Y	2500-900-27	Strain Relief	1

MATTRESS ASSEMBLY PART NUMBER	ITEM A COVER PART NUMBER	ITEM D FOAM BASE PART NUMBER	ITEM J LABEL PART NUMBER	ITEM L FOAM TOPPER PART NUMBER	MATTRESS DESCRIPTION
2500-000-320	2500-320-000	2500-202-21	2500-201-12	2500-202-4	32 x 80, Nylon
2500-100-320	2500-320-100	2500-202-21	2500-201-12	2500-202-4	32 x 80, Aberdeen Rose
2500-200-320	2500-320-200	2500-202-21	2500-201-12	2500-202-4	32 x 80, Lectrolite
2500-000-350	2500-350-000	2500-200-21	2500-200-12	2500-200-4	35 x 80, Nylon
2500-100-350	2500-350-100	2500-200-21	2500-200-12	2500-200-4	35 x 80, Aberdeen Rose
2500-200-350	2500-350-200	2500-200-21	2500-200-12	2500-200-4	35 x 80, Lectrolite
2500-000-354	2500-354-000	2500-201-21	2500-202-12	2500-201-4	35 x 84, Nylon
2500-100-354	2500-354-100	2500-201-21	2500-202-12	2500-201-4	35 x 84, Aberdeen Rose
2500-200-354	2500-354-200	2500-201-21	2500-202-12	2500-201-4	35 x 84, Lectrolite

# Warranty

---

## Limited Warranty:

Stryker Medical Division, a division of Stryker Corporation, warrants to the original purchaser that its products should be free from defects in material and workmanship for a period of one (1) year after date of delivery. Stryker's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product which is, in the sole discretion of Stryker, found to be defective. Stryker warrants to the original purchaser that the frame and welds on its beds will be free from structural defects for as long as the original purchaser owns the bed. If requested by Stryker, products or parts for which a warranty claim is made shall be returned prepaid to Stryker's factory. Any improper use or any alteration or repair by others in such manner as in Stryker's judgement affects the product materially and adversely shall void this warranty. No employee or representative of Stryker is authorized to change this warranty in any way.

This statement constitutes Stryker's entire warranty with respect to the aforesaid equipment. STRYKER MAKES NO OTHER WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH HEREIN. THERE IS NO WARRANTY OF MERCHANTABILITY AND THERE ARE NO WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL STRYKER BE LIABLE HEREUNDER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN ANY MANNER RELATED TO SALES OR USE OF ANY SUCH EQUIPMENT.

## To Obtain Parts and Service:

Stryker products are supported by a nationwide network of dedicated Stryker Field Service Representatives. These representatives are factory trained, available locally, and carry a substantial spare parts inventory to minimize repair time. Simply call your local representative, or call Stryker Customer Service at (800) 327-0770.

## Supplemental Warranty Coverage:

Stryker has developed a comprehensive program of extended warranty options designed to keep your equipment operating at peak performance at the same time it eliminates unexpected costs. We recommend that these programs be activated *before* the expiration of the new product warranty to eliminate the potential of additional equipment upgrade charges. Stryker offers the following Supplemental Warranties:

### **Extended (Parts and Labor)**

- All replacement parts (excluding mattresses and consumable items)
- Labor and travel for *all* scheduled and unscheduled calls
- Biannual Preventive Maintenance Inspections and repairs
- JCAHO paperwork for preventive maintenance
- Priority Emergency Service

### **Standard (Labor Only):**

- Labor and travel for *all* scheduled and unscheduled calls
- Biannual Preventive Maintenance Inspections and repairs
- JCAHO paperwork for preventive maintenance
- Priority Emergency Service

### **Basic (Parts Only):**

- All replacement parts (excluding mattresses and consumable items)
- Priority Emergency Service

**Please call your local representative, or call (800) 327-0770 for further information**

**Return Authorization:**

Merchandise cannot be returned without approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned merchandise. Stryker reserves the right to charge shipping and restocking fees on returned items.

SPECIAL, MODIFIED, OR DISCONTINUED ITEMS NOT SUBJECT TO RETURN.

**Damaged Merchandise:**

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. **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. Claim 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 merchandise, 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.

Claims for any short shipment must be made within thirty (30) days of invoice.





420 Alcott Street, Kalamazoo, MI 49001

(800) 327-0770

---

DH 8/94 2500-600-100 REV A