

This manual has been prepared for the owners and operators of the ARMEDICA<sup>™</sup> AMTM-700 Series Parallel Bars and contains installation instructions, precautionary instructions and maintenance procedures for the following model numbers:

AMTM-700, AMTM-702, AMTM-703, AMTM-705, AMTM-706, AMTM-706HD



# This User's Manual is for the following AM-700 series Parallel platforms only

- AMTM-700 Electric platform 10'x43"
- AMTM-702 Electric platform 7'x43"
- AMTM-703 Electric platform 15'x43"
- AMTM-705 Electric bariatric platform 10'x49-1/2"
- AMTM-706 Electric bariatric platform 10'X49-1/2"



WARNING: Read and understand this user's manual before installing or using this equipment.

Failure to follow operating and maintenance instructions could result in equipment damage or personal injury.



**IMPORTANT**: Do not use this manual to reference instructions, requirements or specifications for any product other than those listed in this manual. Equipment damage, void of warranty and personal injury may occur.

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# SYMBOLS and INDICATORS



**WARNING**: Read and understand the operating instructions listed in this manual before installing or using this equipment. Failure to follow manufacturer's operating instructions could result in equipment damage or personal injury.



**ATTENTION**: Important information or instructions.



**WARNING**: Follow safe lifting procedures and precautions.

WARNING: Identifies electrical shock hazard.



Type B Applied part: An Applied Part complying with the specified requirements to provide protection against electric shock, particularly regarding allowable patient leakage current and patient auxiliary current.



This platform is equipped with a protective earth ground. This device may only be connected to a power source with a protectively earthed ground.



Alternating Current

# DEFINITIONS

The AMTM-700 Series Electric Parallel Bars are a Class 1 medical device in respect to the use of an earthed ground as a means of protection against electric shock.

<u>Intended use</u>: The AMTM-700 Series Electric Parallel Bars is intended for medical rehabilitation purposes and, to be used in conjunction with other forms of exercise, as a stability aid in standing, walking and balance exercises.



**CAUTION**: Using this device in a manor inconsistent with its labeling will void warranty and, damage to device or personal injury may occur.



**CAUTION**: This device is not suitable for use in an oxygen rich environment or in the presence of flammable anesthetics. Fire or explosion may occur.

<u>Patient</u>: Any person cleared by a doctor or physical therapist currently using this device as an exercise platform under the direction and supervision of a qualified operator.

<u>Operator</u>: Any person/persons who has been trained, qualified and authorized by the consumer or responsible organization to operate this platform.



**CAUTION**: A patient is not intended to operate this device in any way. The AMTM-700 series Electric Parallel Bars shall be operated by trained, qualified and authorized personnel ONLY.

<u>Service Technician</u>: Any person/persons authorized by Armedica Manufacturing to perform service, component replacement or repair to the AMTM-700 Series Electric Parallel Bars.

# **DEFINITIONS CONTINUED**

<u>Duty Cycle</u>: The ratio of time the device can be in a state of continuous actuation (moving) and rest. Noted in units of minutes as ON/OFF. The Duty Cycle of this device is rated for 1(one) minute on / 9(nine) minutes off.

<u>Electrical power source</u>: This platform is intended to be connected to an external 120V, 8 Amp (peak), 60Hz electrical power source.



**WARNING**: To avoid risk of electrical shock, this device must only be connected to a supply mains with protective earth ground.



**ATTENTION**: This device has been tested for Electromagnetic capability in accordance with IEC 60601-1-2 Ed.4. It is suitable to be used in industrial areas and hospitals. The possibility of EMC and/or RF interference may occur in the presence of other devices. If interference is suspected, move this device away from other sensitive devices or contact manufacturer.

<u>Applied part</u>: An applied part is one specifically intended to come into direct contact with patient during normal use. This includes Armedica part #'s 28442, 28443, 28444, 14601, 14605, 14609, 14610 and 14615 only. Applied parts are identified, either in this manual or directly on the part, with this symbol  $\hat{\mathbf{X}}$ . (Refer to the bill of materials on Pg. 13 for list of parts and descriptions)

<u>Accessible Part</u>: An Accessible Part is any part that the patient or operator may come into direct contact with, either intentional or unintentionally, but direct contact is not required for normal operation.

<u>Operator Interface</u>: The point in which the operator will input data, via momentary push button, for actuation, memory function and device control.

# AMTM SERIES ELECTRIC PARALLEL BARS



WARNING: Read and understand this operator's manual before installing or using this equipment. Failure to follow operating and maintenance instructions could result in equipment damage or personal injury.

# **ELECTRIC PARALLEL BARS INSTALLATION**

ALL MODELS



WARNING: 4 people are required to move this equipment. This unit weighs in excess of 500lbs/227kg. Failure to follow safe lifting instructions can result in serious personal injury and/or damage to equipment.

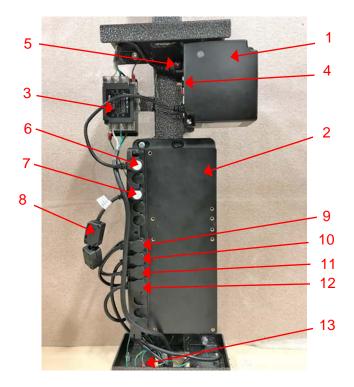


CAUTION: Do not lift or support by end ramps or columns. Damage or serious personal injury may occur

CAUTION: There are no contradictions associated with this device. The emissions characteristics of this device make it suitable for use in industrial areas and hospitals.

- Remove platform (item # 1, 46, 47, 51 or 52) from crate using handles attached to mounting brackets. Set the platform on firm level floor. For 2-piece split platforms, set both pieces on side against a solid surface while installing connecting plates (50). Align the 2 pieces and firmly hold together. Using screws (49), install all connecting plates in recessed pockets. After all connecting plates have been installed, place platform on floor as directed in step 1.
- 2. Place the four upright columns (13) on the platform aligning the holes in the mounting plate(15) with the screws sticking through the platform. Paying attention to and ensuring the cable at the bottom of the column is facing outward. Tighten the mounting bolts (14) securely.
- 3. Install the hand rails ★ (30, 44 or 45) onto the adjustment tubes (4) using spacer (31), washers x2 (32), and lock nut (35); tighten the lock nut (35), sufficiently, to eliminate any play but not so tight that they will not pivot when adjusting the width. When necessary, adjust the width according to the operating instructions.
- 4. Remove the cover plate from box (24) to allow access to inside of control stand (53). Using nuts (21), mount the control stand (53) to the platform, threading AC mains cable with EMI filter, 4 protective earth ground wires (green with yellow), and column motor cables (36, 37) through appropriate holes. Ensure all protective earth grounds are secured on the bolt pin with paint removed.
- 5. With screws (26) and cover plate (24) removed, connect the controller (22) per the following instructions.

# SCU CONTROLLER



- 1. TP4 Power Supply
- 2. TC8 Control Unit
- 3. EMI Filter
- 4. Protective Earth Ground
- 5. AC Mains Port
- 6. DC Power Supply Port
- 7. Operator Interface Port
- 8. Ferrite Filter
- 9. Column Motor Port 1
- 10. Column Motor Port 2
- 11. Column Motor Port 3
- 12. Column Motor Port 4
- 13. Protective Earth Terminal



CAUTION: All cables must be fully inserted into their appropriate receptacles on control box and columns. Failure to do so may cause unit malfunction and/or permanent damage to equipment.

WARNING: Dangerous voltage present. Do not connect this unit to a power source before reading these instructions. Damage to equipment and/or electrical shock may occur.

WARNING: This device may only be used in a professional healthcare facility where operators with professional medical training are continuously available when patients are present.

WARNING: Do not adjust or operate this device while patient is on or using this device. Serious personal injury and/or damage to equipment may occur.

# CABLE CONNECTIONS

- Connect the four cables (36 & 37) (DIN8 connectors) to the appropriate column (13) and snap coupling lock closed.
- Remove cable retainer bracket from the ports on the TC8 controller by gently prying loose and set to the side. Replace bracket after ALL cables are connected.
- Connect the four cables (36 & 37) (DIN8 connectors) to corresponding TC8 control unit using the Column motor ports 1, 2, 3 and 4.
- Verify that the control switch (27) cable has two ferrite filters (41) secured and insert fully in the operator interface port.
- Verify that the TP4 supply cable is securely connected to the power supply port.
- Snap the AC mains EMI filter onto the DIN rail as shown then fully insert the AC mains cable female end into the AC mains port of the TP4.
- Connect the protective earth ground from the EMI filter to the brass terminal on the TP4 power supply and verify ALL PE ground wires are secured properly.
- Verify that the required supply voltage indicated in this manual and on the name plate corresponds with the supply voltage of the electrical outlet and connect the unit to the electrical outlet. \*See Technical Data section for a full list of operating conditions and requirements.\*



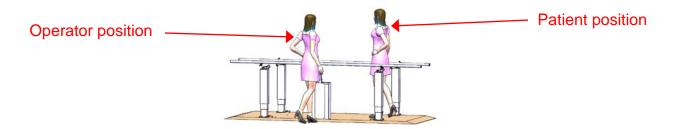
CAUTION: This device is rated for 120 volts 60Htz, 6.5Amps/8Amps peak. Protective earth ground required.

ATTENTION: Significant risk of reciprocal interference may be posed by the presence of this device during specific investigations or treatments. Potential Electromagnetic or other interference between this device and other devices may occur. If interference is suspected, move this device away from sensitive devices or call the manufacturer.

ATTENTION: Allow 10 seconds, after connecting to power supply, for system to fully initialize before attempting any operation. ELECTRIC PARALLEL BARS OPERATING INSTRUCTIONS

ALL AMTM MODELS

INTENDED POSITIONS



This unit has been initialized by Armedica Manufacturing Corp. prior to shipment and should not need to be synchronized again unless a column or control box is replaced.

## If Synchronization becomes necessary, follow these steps:

## INITIAL RESET FOR MOTORS

- After you have connected the control unit to the power supply for the first time, the network is addressed, and motors must be synced.
- Press and hold BOTH the UP and DOWN arrow buttons simultaneously.
- Continue to hold the UP and DOWN buttons, all 4 columns should lower until they reach their lowest point and, you hear a beep. If it does not beep, continue to hold the buttons for another 3 seconds after ALL 4 columns have reached the lowest height and release. The system is now synced and ready for use.

## SETTING THE PARALLEL BAR HEIGHT

- Press the up arrow to raise the parallel bars.
- Press the down arrow to lower the parallel bars.
- The current height of the bars appears (in inches) on the display.



WARNING: Ensure platform is clear and, there are no obstructions under the handrails before actuating the columns to adjust height. Serious personal injury and/or damage to equipment may occur.

## SAVING THE MEMORY POSITIONS

This function makes it possible to save a predetermined height setting. Four different heights may be saved. These saved positions can be used later.

- To be performed after the synchronization procedure has been completed.
- Move the hand rails to the desired height.
- Press and hold both the UP arrow and desired memory # buttons simultaneously for 3 to 5 seconds.
- The display will flash "P#" to confirm that position has been stored to that number.
- Repeat process for other 3 memory position buttons.

#### USING THE MEMORY POSITIONS

 While holding down the desired memory position button, the bars will move toward the predefined position and stop.

### ADJUSTING THE WIDTH OF THE PARALLEL BARS

• Turn hand knobs, on top of each column, to release adjusting tubes and set to desired width.

• Make sure adjusting tube knobs are securely tightened before use.

#### MAINTENANCE



CAUTION: Failure to follow recommended maintenance instructions may cause damage to equipment, personal injury and void warranty.

ARMEDICA<sup>™</sup> Manufacturing thoroughly inspects and tests each unit to ensure that it meets all ARMEDICA<sup>™</sup> quality standards before it leaves the facility. To ensure the longevity of your device, routine maintenance should be followed.

## AFTER FIRST 40 HOURS OF SERVICE

✓ Physically inspect all fasteners and hardware are properly secured

#### DAILY / Pre-USE

The operator should visually inspect the unit prior to each use for;

- ✓ Foreign objects that may interfere with operation or create a hazard to patient
- ✓ Signs of damage to unit and power cord
- ✓ All hardware (nuts, bolts, etc.) is present and properly secured
- ✓ All adjustments are secure
- Unit functions properly

## **CLEANING**

- Use towel dampened with mild soap and water. Wipe down to remove dust, dirt and spills. Wipe with dry towel to remove moisture
  - ✓ Laminated platform
  - ✓ Painted, plated and plastic surfaces
- > Use a commercial brand stainless steel cleaner to remove dirt and oil from hand rails
- The laminated platform and painted or plated components should be cleaned with a commercial disinfectant and wiped with a dry cloth to remove any biological contamination when necessary.



WARNING: This unit is not rated for wash down, it should not be exposed to standing or quantities of liquid.

Do not clean any electronic device with water. Electrical shock and/or damage to electronics may occur.

## TROUBLE SHOOTING

In the event it becomes necessary to replace the control box or a column on the AMTM-700 series, disconnect power prior to removal, and make certain the plugs are completely inserted into the sockets prior to reconnecting power.



## ATTENTION: The AC Mains Cable serves as the EMERGENCY DISCONNECT DEVICE

Do not position this device in a manner that would make it difficult to reach the AC mains supply cable. In the event of an emergency, unplug the AC Mains Cable from the external power supply.



WARNING: Disconnect main power to unit before opening control stand and checking cables. Electrical shock and/or damage to electronics may occur.

ELECTRIC POWERED COLUMNS DO NOT WORK.

- A. Verify that proper voltage at electrical outlet and cord is plugged in.
- B. Verify all cables inside the control stand and motor columns are securely plugged into their proper receptacles.
- C. Verify the hand switch cable is securely plugged into the proper control unit.

If problem still occurs, or columns become unsynchronized, please contact Armedica Manufacturing Customer Service.



**CAUTION:** Service to controls and column motors is to be done by the manufacturer only. In the event of a column motor or control unit failure, all 4 columns and control unit must be returned to Armedica Manufacturing Corp. All other service or repair is to be performed by Armedica Mfg. authorized field service personnel only. For information, contact Armedica customer service.



WARNING: Do not alter or modify this device in any way. Altering this device will void all warranties. Serious personal injury and/or damage to equipment may occur.



WARNING: Use only replacement parts approved by Armedica Manufacturing. Failure to do so could result in damage to device, increased emissions and serious injury.

#### **TECHNICAL SPECIFICATIONS**

#### **ENVIROMENTAL CONDITIONS**

Operating/storage temp. 5°C – 40°C / 41°F – 104°F

Humidity: 5% to 85%

Pressure/altitude: 700hPa to 1060hPa

#### **GENERAL SPECIFICATIONS**

Manufactured and assembled by

Armedica Manufacturing Corp. Greenwood, Arkansas, USA Tel.: (479) 996-2612

## Static & Dynamic load capacity

Max 500Lbs/227Kgs per bar, not exceeding 500Lbs/227Kgs total combined load.



CAUTION: Do not exceed Maximum load capacity. Damage to unit and/or serious injury may occur. This device is not rated for a dynamic(moving) load. Do not use as a patient lift.



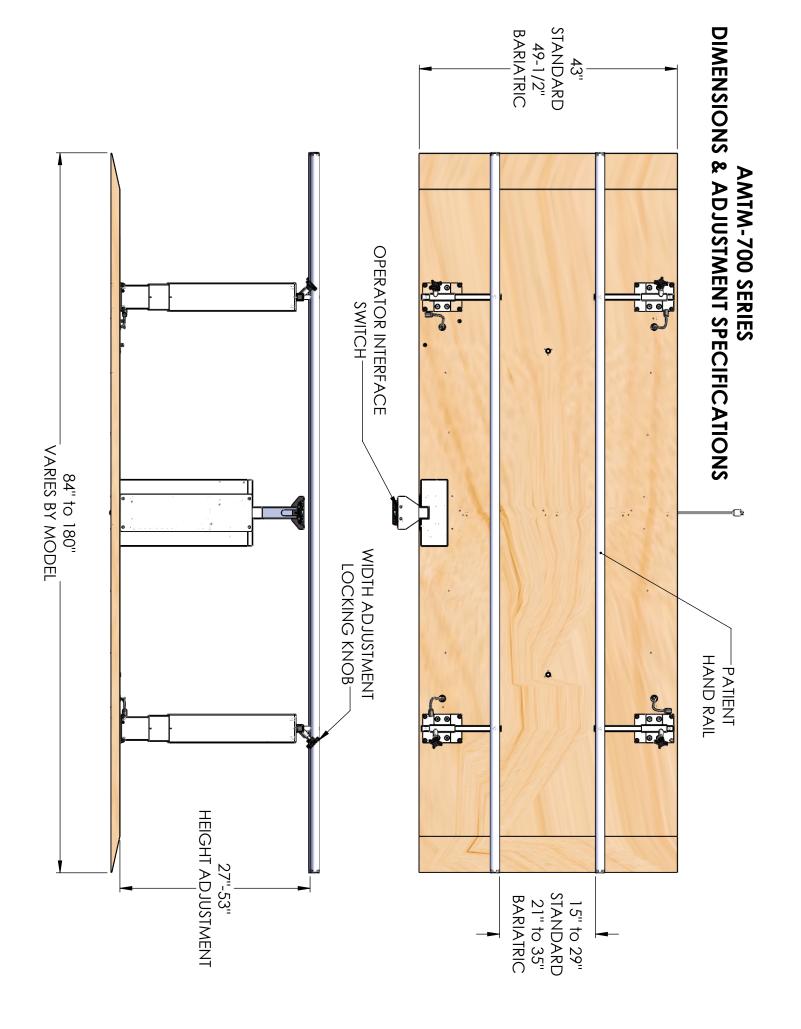
CAUTION: Do not throw in trash. Expected service life of this device is approximately 10 years. Dispose of this device in accordance with local, state and national environmental regulations. Failure to do so may constitute a criminal act.

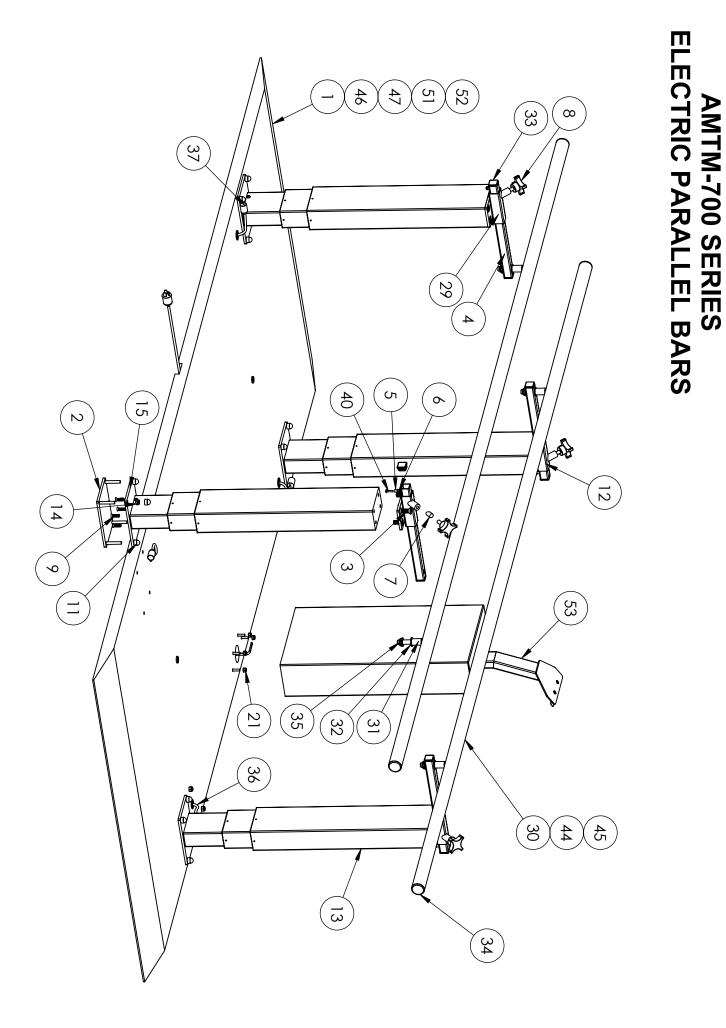
#### ELECTRICAL SPECIFICATIONS

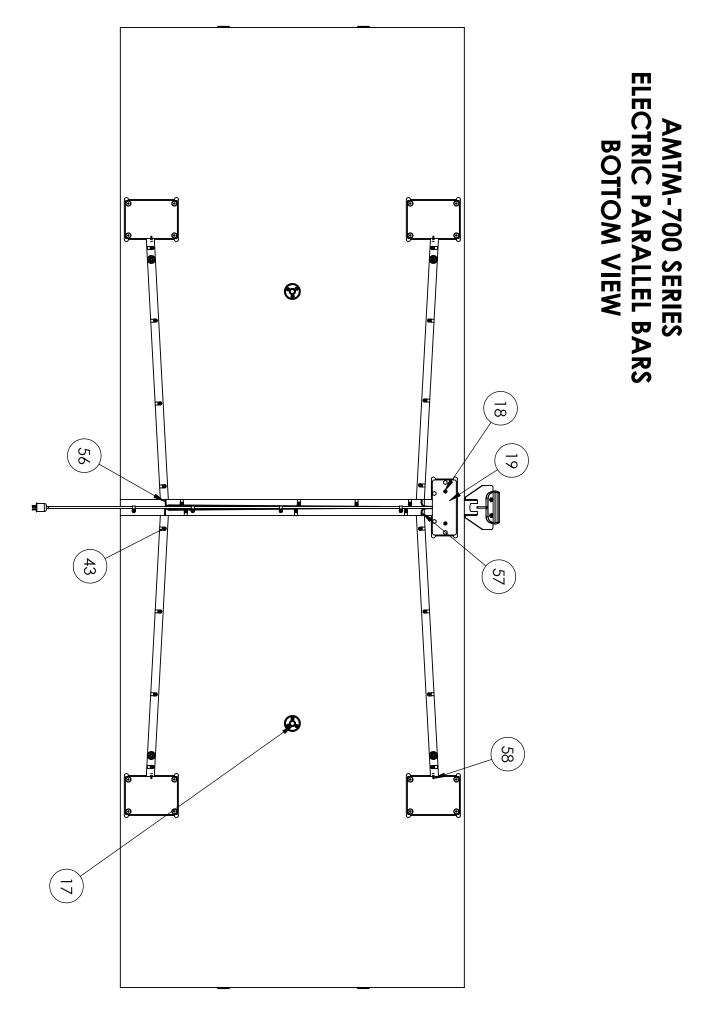
Main input power requirements 120VAC  $\frown$  60Hz Current 5,000mA / 6.5Amps Secondary output power 29VDC = - - / 360VA Duty cycle 10% 1min. on / 9min. off Model TP4-5035-001

Manufactured by: TiMotion Technologies / TiMotion USA 1535 Center Park Drive Charlotte, NC. 28217, USA Tel.: (704) 708-6924 Toll-free 1-855-235-1424 Email: sales.us@timotion.com

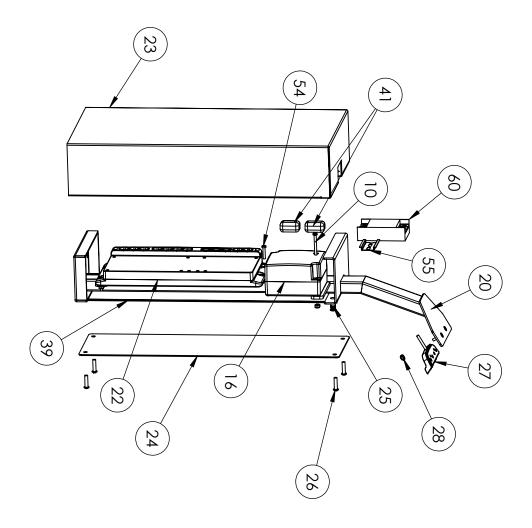
ITEM NO.	PART NO.	DESCRIPTION						
				AMTI	и мо	DEL	#	
			700	702	703	705	706	
1	14601	BD PLL COLMN PLATFORM 10' LAMNTD	1	N/A	N/A	N/A	N/A	
2 3	28156 03580	PLATE 4.5x6.5 PLL COLMN MNT PLTD SCREW FLT HD SOC M10-1.5X25	4	4 16	4 16	4 16	4 16	
4	11601	TUBE 1x1x14GAx13 PLL RAIL ATTACH	4	4	4	4	4	
5	02146	SPACER 5/16 X 3/16 ID x 1/2 OD	4	4	4	4	4	
6	02093	NUT NYLOCK 8-32	4	4	4	4	4	
7	13601	ROD 1/2 DIAx.75 PLUNGER	4	4	4	4	4	
8	03071	KNOB W/STEM 2-1/4x3/8-16x1	4	4	4	4	4	
9	03581	SCREW FLT HD SOC M6-1.0x30	16	16	16	16	16	
10	03586	SCREW PAN HD PHIL 10-32x1-3/4	2	2	2	2	2	
11	03076	CAP PLAS BLK 5/16 HEX DOME	16	16 2	16 2	16 2	16 2	
12 13	28441 03574	BRKT rght ADJ MNT TIMO PLL pntd COLUMN TL5 TIMO PLL	2	4	4	4	4	
13	02105	NUT NYLOCK 5/16-18	16	16	16	16	16	
15	12861	PLT MNT TL5 TIMO PLL PLTD	4	4	4	4	4	
16	03576	PWR SPPLY TP4 TIMO PLL	1	1	1	1	1	
17	18665	BUSH W/WASHER PLL PIN GUIDE PLTD	2	2	2	2	2	
18	02063	SCREW HX WASHER HD #10x3/4	38	38	38	38	38	
19	28040	BRKT PLL PLTFRM CONTROL STAND MNT	1	1	1	1	1	
20	28434	STND CNTRL TIMO PLL PNTD	1	1	1	1	1	
21 22	02100	NUT NYLOCK 1/4-20 CONTROL TC8 TIMO PLL	4	4	4	4	4	
22	03575 03583	BOX 4-3/8x9-1/2x22x14GA TIMO PLL	1	1	1	1	1	
23	03585	PLATE 6-1/4x21-15/16x14GA CVR PNTD	1	1	1	1	1	
25	03080	RIV NUT 1/4-20 ALUMINUM 14GA	4	4	4	4	4	
26	02538	SCREW BTN HD SOC 1/4-20x3/4	4	4	4	4	4	
27	03577	SWTCH TDH5 TIMO PLL	1	1	1	1	1	
28	02089	NUT NYLOCK 10-32	3	3	3	3	3	
29	28432	BRKT Ift ADJ MNT TIMO PLL pntd	2	2	2	2	2	
30	28443	STAINLESS STEEL HND RAIL 10' TIMO PLL	2	N/A	N/A	2	2	
31 32	13056 02165	BUSHING 1/2IDx3/40Dx1-1/8 CNTRL BUSH WASHER NYLON 1/2 ID	4	4	4 8	4 8	4 8	
33	03010	PLUG 1x1x14GA	8	8	8	8	8	
34	03014	PLUG RD 1"ODx14-20 GA BLK	4	4	4	4	4	
35	02095	NUT NYLOCK JAM 1/2-13	4	4	4	4	4	
36	03578	CBL TEC COLUMN SHORT TIMO PLL	2	2	N/A	N/A	N/A	
37	03579	CBL TEC COLUMN LONG TIMO PLL	2	2	4	4	4	
38	02148	BUSHING INSUL NYLON PLL	4	4	4	4	4	
39	02747	GASKET 39"x5MM EMC SHLD PLL	2	2	2	2	2	
40	02107	SCREW PAN HD PHIL 8-32x3/4" FERRITE EMC FILTER TIMO PLL	4	4	4	4	4	
41 42	02748		2	2	2	 1	2	
42 43	03365 02201	CBL 3.6M MED UL PWR CORD SCU CLAMP CABLE 1/4 WHITE	30	30	30	30	30	
43	28442	STAINLESS STEEL HND RAIL 7' TIMO PLL	N/A	2	N/A	N/A	N/A	
45	28444	STAINLESS STEEL HND RAIL 15' TIMO PLL	N/A		2	N/A	N/A	
46	14609	BD PLL 7FT COLMN PLTFRM LAMNT	N/A	1	N/A	N/A	N/A	
47	14610	BD PLL 15' SPLIT PLATFORM LAMNT	N/A		1	N/A	N/A	
48	02200		N/A		12	N/A	N/A	
<u>49</u> 50	02695 12609	SCREW #14x1 FLT HD PHIL WD PLT 1/4x2x8 PLL SPLIT PLTFRM PNTD	N/A		16 4	20 5	20 5	
51	14615	BD PLL 10' PLTERM BARIAT SPLIT W/EC	N/A		4 N/A	S N/A	5 1	
52	14605	BD PLL COLMN PLATFORM 10' BARIATRIC	N/A	N/A	N/A	1	N/A	
53	19870	CNTRL STND CMPLT TIMO PLL ASSEMBLED	1	1	1	1	1	
54	02681	SCREW PAN HD PHIL 10-32x3/4	4	4	4	4	4	
55	03589	RAIL DIN 7.5MMx35MMx2-1/4 EMI MNT	1	1	1	1	1	
56	03554	WIRE 74" PE GRND PLL COLUMN ASM	2	2	2	2	2	
57	03555	WIRE 48" PE GRND PLL COLUMN ASM	2	2	2	2	2	
58 59	02078	SCREW PAN HD PHIL 10-32x3/8	4	4	4	4	4	
59 60	02493 02750	TERM RING INSUL #10 STUD 22-18 AWG FILTER EMI 10A TIMO PLL	4	4	4	4	4	
00	02100			-	-	-		
 			1					

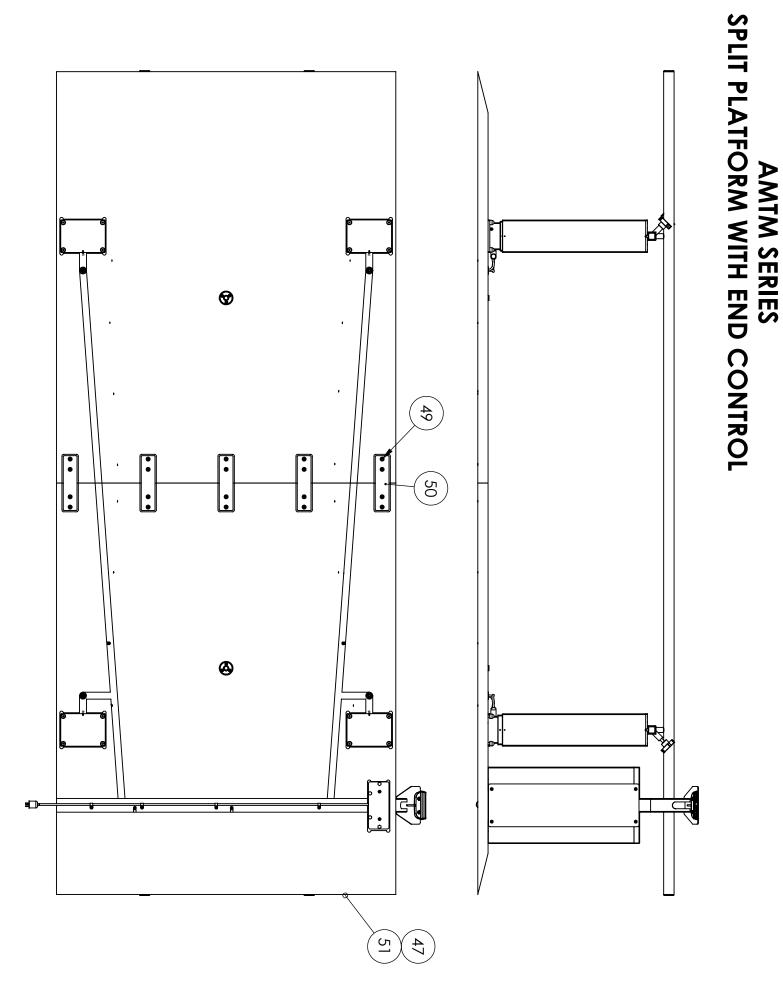






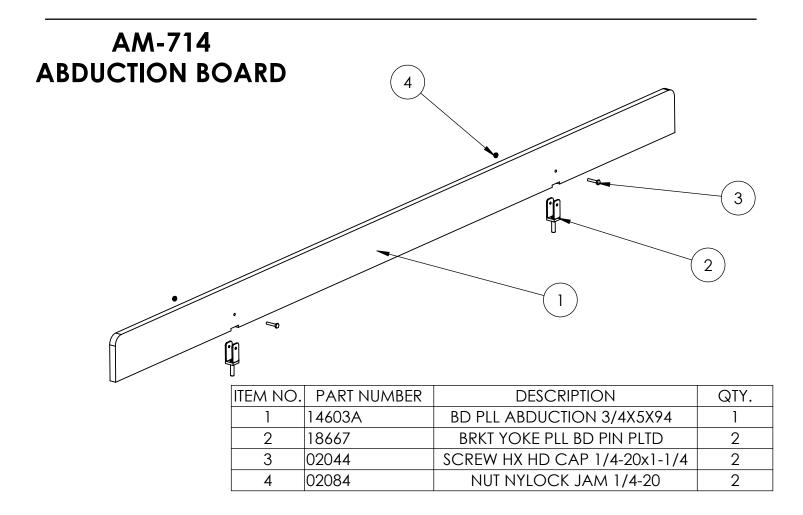
AMTM-700 SERIES CONTROL STAND

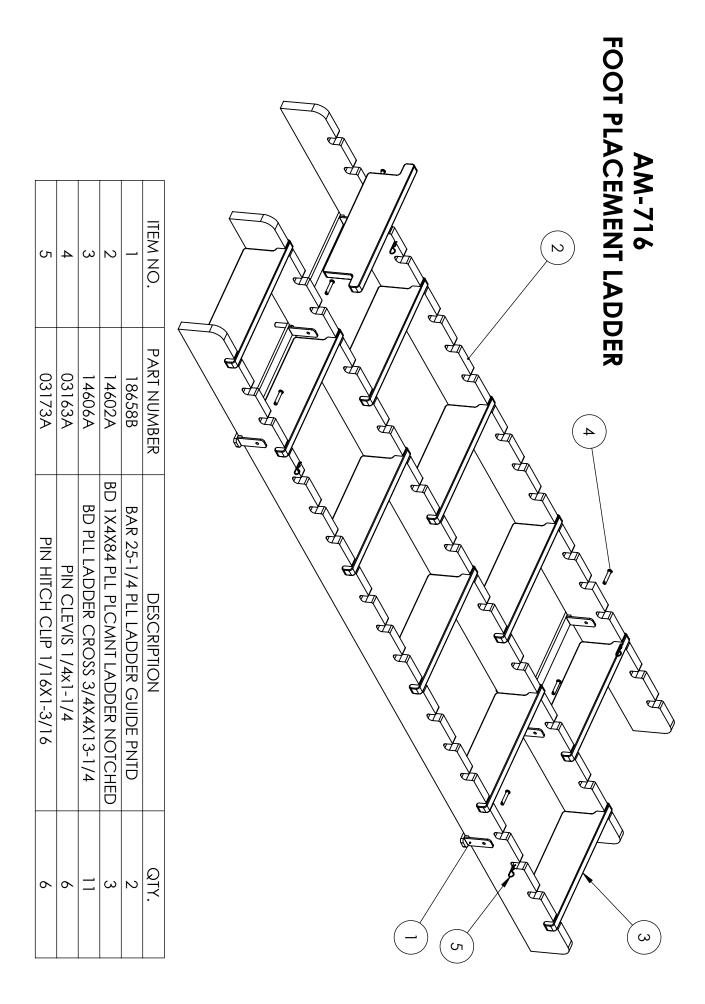




# AM-715 BALANCE BEAM

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	14604A	BD PLL BAL BEAM 2-1/2X5X80	1
2	13003A	SCREW 3/-16x3 MODIFIED 2-3/8 PIN	2





#### MAINTENANCE LOG

MAINTENANCE PERFORMED	NAME	DATE PERFORMED
	NAME	DATE PERFORMED

#### ARMEDICA™ MANUFACTURING CORP.

#### LIMITED WARRANTY

ARMEDICA<sup>™</sup> Manufacturing Corp. warrants that the AMTM-700 Series Parallel Bars are free from defects in material and workmanship. This warranty shall remain in effect for 18 months from the date of original consumer purchase of the product. If the product fails to function during the warranty period due to a defect in material or workmanship, ARMEDICA<sup>™</sup> Manufacturing Corp. or the selling Dealer will repair or replace the unit without charge within a 30 day period from the date on which the unit is returned to ARMEDICA<sup>™</sup> Manufacturing Corp. or the selling Dealer. ARMEDICA<sup>™</sup> Manufacturing Corp. has a policy of continuous improvement that may result in changes to specifications at any time.

#### THIS WARRANTY DOES NOT COVER

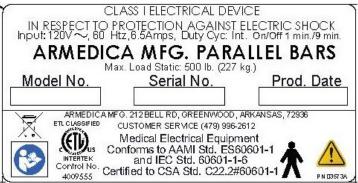
- 1. Replacement parts or labor furnished by anyone other than ARMEDICA<sup>™</sup>, selling dealer or approved ARMEDICA<sup>™</sup> service agent.
- 2. Any failure of the unit during the warranty period if the failure is not caused by a defect in material or workmanship or if the failure is caused by unreasonable use, including the failure to provide reasonable and necessary maintenance.

ARMEDICA™ MANUFACTURING CORP. IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGE TO PROPERTY OR BUSINESS.

To obtain service under this warranty, please do the following:

- 1. A written claim should be sent to ARMEDICA<sup>™</sup> Manufacturing Corp., P.O. Box 880, Greenwood, AR. 72936-0880 or the selling Dealer.
- 2. The unit must be returned to ARMEDICA<sup>™</sup> Manufacturing Corp. or the selling Dealer.
- 3. This warranty gives you specific legal rights and you may have other rights, which vary from state to state.
- 4. ARMEDICA<sup>™</sup> Manufacturing Corp. reserves the right to change, modify or discontinue products and/or parts, at our discretion, without notification.

ARMEDICA<sup>™</sup> does not authorize any person or dealer to create for it any other obligations or liabilities in connection with the sale of the units. Any representation or agreement not contained in this warranty shall be void.



The ETL Mark is proof of device compliance to North American safety standards. Authorities having jurisdiction and code officials, in the US and Canada, accept the ETL listed mark as proof that this device complies to the following published industry standards:

Medical Electrical Equipment – Part 1: General requirements for basic safety and essential Performance - AAMI ES60601-1:2005 +A1

Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance – CSA C-22.2#60601-1:2014 Ed. 3

Medical Electrical Equipment – Part 1-6: General Requirements for Basic safety and Essential Performance – Collateral Standard; Usability IEC 60601-1-6:2010 Ed. 3 +A1

PN-02751 REV. A 12/20/2018