KINESIS STATION SERVICE & MAINTENANCE MANUAL

REV. 4.2





The information contained in this manual is intended for QUALIFIED TECHNICIANS who have completed a specific TECHNOGYM training course and are authorized to perform machine start-up and adjustment procedures as well as extraordinary maintenance or repairs which require a thorough knowledge of the machine, its operation, its safety devices and working procedures.

CAREFULLY READ THE INFORMATION CONTAINED IN THIS MANUAL BEFORE PERFORMING ANY MAINTENANCE PROCEDURES ON THE MACHINE



NOTE

The information contained in this document is subject to change without notice.

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1. GENERAL NOTICES

1.1. INTRODUCTION

This document is reserved for Technogym Service technicians, and is intended to provide authorized personnel with the necessary information to correctly carry out repairs and maintenance. A thorough knowledge of the technical information contained in this manual is essential for completing the professional training of the operator.

In order to facilitate consultation, the paragraphs are accompanied by schematic drawings which illustrate the procedure being described.

This manual contains notices and symbols which have a specific meanings:

MARNING: non observance may result in accident or injury.

CAUTION: non observance may cause damage to the machine.

Information about the operation in progress.

D Observation about the operation in progress.

1.2. RECOMMENDATIONS

Technogym recommends the following steps for planning repair procedures:

- Carefully evaluate the customer's description of the machine malfunction and ask all the necessary questions to clarify the symptoms of the problem.
- Clearly diagnose the causes of the problem. This manual provides the fundamental theoretical basis, which must then be integrated by personal experience and attendance at the training courses periodically offered by Technogym.
- Rationally plan the repair procedure so as to minimize the downtime necessary for procuring spare parts, preparing tools, etc.
- Access the component to be repaired, avoiding any unnecessary operations. In this regard it will ٠ be useful to refer to the disassembly sequence described in this manual.



1.3. GENERAL RULES FOR REPAIR PROCEDURES

- 1. Always mark any parts or positions which may be confused with each other at the time of reassembly.
- 2. Use original Technogym spare parts and lubricants of the recommended brands.
- 3. Use special tools where specified.
- 4. Consult the Technical Newsletters, which may contain more up-to-date information on adjustments and maintenance than those contained in this manual.
- 5. Before starting the repair procedure, make sure that the recommended tools are available and in good condition.
- 6. For the procedures described in this manual, use only the specified tools.

IF The tool sizes quoted in this manual are expressed in mm.

2. TECHNICAL CHARACTERISTICS

2.1. PRODUCT CODES

The Kinesis Station, machine code is a sequence of 15 alphanumeric characters arranged as follows:

Characters	Description	Key to values
1,2,	Line,	MH = Kinesis Station
		15 = Overhead Press
		20 = Press
2.4	Fauinment and	30 = High Pull
3,4,	Equipment code,	65 = Core Station
		67 = Step/Squat
		95 = Low Pull
		0 = Standard weight stack
5	Weight stack configuration	4 = Enhanced weight stack +40Kg
з,	weight stack configuration,	5 = Enhanced weight stack + 50Kg
		7 = Enhanced weight stack +70Kg
6	Cartification	$\mathbf{E} = \mathbf{C}\mathbf{E}$
0,	Certification,	$\mathbf{M} = \mathbf{M}\mathbf{E}\mathbf{D}$
-	-	_
70	Frame colour	AC = Brilliant Aluminium
7,8,	Frame colour,	$\mathbf{BW} = \text{Carbon Grey}(*)$
		00 = None
		1A = Black with contrast stitching
		6A = Black
0 10	Unholstom, oclour	$3\mathbf{A} = Bordeaux$
<i>)</i> ,10,	Opholslery colour,	$4\mathbf{A} = \text{Red}$
		5A = Aviation blue
		$\mathbf{7A} = \mathbf{Grey}$
		9A = Mocha (*)
11 12	Plastics colour	$\mathbf{G}\mathbf{G} = \mathbf{G}\mathbf{r}\mathbf{e}\mathbf{y}$
11,12,		GZ = Dark Grey
13 14	Covering guards colour	BG = Dark Grey
13,14,		CW = Carbon Grey (*)
		K = Europe Packaging - Kg
15.	Packaging.	$\mathbf{L} = \mathbf{Overseas}$ Packaging - Lb
		S = Overseas Packaging - Kg

(*) The colour variants "**BW**", "**9A**" and "**CW**" must be mandatory combined together in the ARTIS® configuration.

It follows in the next page ...



For example, a possible product code would be:



MH150E-AC1AGGBGK

2.2. SERIAL NUMBER STRUCTURE

The *Serial Number*, consists of 14 alphanumeric characters arranged as follows:

Characters	Description	key to values
		MH = Kinesis Station
		15 = Overhead Press
		20 = Press
		30 = High Pull
1 2 3 4 5 6	Droduct type	65 = Core Station
1,2,3,4,3,0,	Froduci type,	67 = Step/Squat
		95 = Low Pull
		0 = Standard weight stack
		4 = Enhanced weight stack +40Kg
		5 = Enhanced weight stack +50Kg
7,8,	Year of production,	10 = 2010
9,10,11,12,13,14.	Progressive.	000001

For example, a possible product code would be:

MH1501000001

2.3. AMBIENT SPECIFICATIONS

Tomponature	Operating	<i>to</i> 5° <i>a</i> 35° <i>C</i>
Temperature	Storage	<i>to -20 a 55° C</i>
IIidit.	Operating	to 30% a 80% non-condensing
нитишу	Storage	to 5% a 85% non-condensing

2.4. CONFORMITY TO REGULATIONS

The machine conforms to the following directives:

Directive	Europe	USA
Medical equipment directive	93/42/CE	-
Equipment safety	EN 957-1 EN 957-2 EN 957-4	-

2.5. COLOUR OPTION

The following table shows the possible combinations for ordering the line machines:

STANDARD CONFIGURATION:					
Frame	Guar	d	Plastic	Standard Upholstery	
AC: Brilliant Aluminium BG: Dark		Grey (G G : Grey	IA: Black with contrast stitching	
	U	pholstery varia	nts:		
6A: Black 3A: Bordeaux		4 A: Red	5A: Aviatio blue	n 7A : Grey	



ARTIS CONFIGURATION:					
Frame	Guard	Plastic	Standard Upholstery		
BW : Carbon Grey	CW: Carbon Grey	GZ: Dark Grey	9A: Mocha		



2.6. MECHANICAL CHARACTERISTICS

2.6.1. MH15 - OVERHEAD PRESS





2.6.2. MH20 - PRESS





2.6.3. MH30 – **HIGH PULL**





2.6.4. MH65 – CORE





2.6.5. MH67 – Step





2.6.6. MH95 - LOW PULL





2.7. PACKING DIMENSIONS EUROPE AND OVERSEAS

Model	Equipment Cod.	Outside box dimensions (L)	Outside box dimensions (W)	Outside box dimensions (H)	Weight (kg)
Press	MH200E	1750mm	1370mm	790mm	298Kg
Overhead Press	MH150E	1750mm	1370mm	790mm	254Kg
Low Pull	MH950E	1750mm	1370mm	790mm	303Kg
Core	MH650E	1750mm	1370mm	790mm	317Kg
Step/Squat	MH670E	1750mm	1370mm	870mm	320kg
High Pull	MH300E	1750mm	1370mm	870mm	318Kg





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3. MOVING AND INSTALLING THE MACHINES

3.1. SPECIFICATIONS AND REQUIREMENTS

For proper installation of the equipment, make sure that:

- 1. The equipment is installed on a level, vibration-free surface with a sufficient capacity to support its weight plus that of the user.
- 2. The area is not dusty or sandy.
- 3. You have observed the temperature and humidity operating requirements indicated in paragraph: 2.3. "Ambient specifications".

3.2. UNPACKING INSTRUCTIONS

The equipment supplied on pallets, which joined with bands of transportation. To free the equipment from the package follows the instruction below:





3.3. LIFTING AND MOVING

To move the equipment use the standard lifting and transport devices. Lift and move the equipment as shown below.



Once the machine is in the desired place of installation, level it by adjusting the height of one or more of the machine feet as described in paragraph: 6.3 "The machine is not flat".



3.4. SECURING THE EQUIPMENT

WARNING: All the equipment of the line must be mandatory fixed to the floor, wall or ceiling according to the fixing kit provided with each machine.



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4. ACCESSORIES

The following accessories are available for the these machines:

4.1. NFC CONNECTIVITY

If the relevant logo NFC is present on the exercise placard, the NFC technology is available to connect with your mobile device.





4.2. A0000526: POWER MODE



4.3. A0000551: BACK TO BACK CONNECTION





4.4. A0000564: FLOOR FIXING KIT





4.5. A0000661: BACK SECURING SET



4.6. A0000662: IN LINE SECURING SET



Stations set upwith an "in line" configuration can be secured to one another with 2 brackets and a connecting rod.

4.7. WHAT TO ORDER TO AUGMENT THE WEIGHT STACK

Model	Equipment Code	Weight Stack STANDARD	Weight Stack ENHANCED	Group Code
Overhead Press	MH15	40Kg 88lb	60Kg 132lb	R0006743AA
Press	MH20	70Kg 154lb	95Kg 209lb	R0006744AA
High Pull	MH30	70Kg 154lb	95Kg 209lb	R0006745AA
			(Crunch Side)	
Como	MU65	87,5 <i>Kg</i> – 192,5 <i>lb</i>	107,5Kg – 236,5lb	R0006746AA
Core	MH03		(Rotation Side)	
		55Kg – 121lb	75Kg – 165lb	R0006746AA
Step/Squat	MH67	60Kg 132lb	95Kg 209lb	R0006794AA
Low Pull	MH95	70Kg 154lb	95Kg 209lb	R0006747AA

• Are available some bushings of different thickness are available for more precise adjustment of the weight stack plates, so that they can all be easily selected using the pin.

CODE	THICKNESS (mm)
0B178AA	2.5
0B000563AA	2
0B000562AA	1.5



5. HOW TO DISASSEMBLE THE...

5.1. FOR ALL EQUIPMENT...

5.1.1. DISASSEMBLING THE REAR HANDLES



Figure 5.1-1

For each handle:

- 1. Back off the 2 screws (a) using a 4mm hexagonal wrench and remove the plate inside the handle.
- 2. Remove the handle (**b**).
 - To reassemble the handle, carry out the above steps in reverse order.



5.1.2. DISASSEMBLING THE REAR GUARD



Figure 5.1-2



Figure 5.1-3

Carry out the procedure detailed in paragraph: 5.1.1. "Disassembling the rear handles".

<u>For each guard:</u>

1. Back off the 5 screws (a) using a 4mm hexagonal wrench and remove them and their washer (b).

2. Lightly lift the rear guard (c) towards, starting from the bottom to the top following the yellow arrow.

Continued on the following page...

5.1.3. DISASSEMBLING THE FRONT GUARD

Figure 5.1-6

Figure 5.1-7

Carry out the procedure detailed in paragraph: 5.1.2. "Disassembling the rear guard".

On the <u>OVERHEAD PRESS</u> and <u>PRESS</u> equipment: to remove the front guard it is necessary to remove only the rotating pulley group and the cable, as described at the paragraph: 5.1.8. "Disassembling arms and ", up to point (5). On all the other equipment, it is necessary to remove completely the cable and the arms, as described at the paragraphs: 5.1.7. "Disassembling the handle and the cable" and 5.1.8. "Disassembling arms and ".

For each guards:

- 1. Back off the 12 screws (a) along the perimeter of the guard, using a medium Phillips screwdriver.
- For each guard, the total number of screws is 12, so do not take care if you find some holes that are not used.
- 2. Remove the guard (**b**).

To reassemble the guard, carry out the above steps in reverse order.

5.1.4. DISASSEMBLING THE CENTRAL GUARD

Figure 5.1-9

Carry out the procedure detailed in paragraph: 5.1.2. "Disassembling the rear guard".

1. Back off the 2 screws (a) using a 4mm hexagonal wrench.

- 2. Pull up and then out the central guard (b), aligning the bent plate on the slots, as indicated in the detail.
- 3. Remove the central guard.
 - To reassemble the central guard and the foot, carry out the above steps in reverse order.

5.1.5. DISASSEMBLING THE REAR FOOT

Figure 5.1-10

Carry out the procedure detailed in paragraph: 5.1.2. "Disassembling the rear guard".

- 1. Back off the screw (a) using a 8mm hexagonal wrench, locking down the counternut on the opposite side using a 17mm wrench.
- 2. Loosen the 2 screws (b) using the 17mm wrench.
- 3. Remove the rear foot (c).

To reassemble the rear foot, carry out the above steps in reverse order.


5.1.6. DISASSEMBLING THE WEIGHT STACK



Figure 5.1-11



Figure 5.1-12

- Carry out the procedure detailed at paragraph: 5.1.2. "Disassembling the rear guard".
- 1. Loosen the screw (x) and the counter-nut (y) using two 17mm wrenches.
- 2. Rotate the lever (a) in the direction of the yellow arrow, to loosen the cable tension.
- When you've reassembled, carry out the cable tension adjustment, as indicated at the paragraph: 6.2. "The weight stack cable is not in tensioned".
- Back off the screw (b) and the counter-nut (c) using two 17mm wrenches, one opposite to the other as indicated in figure.
- 4. Remove the pulley (**d**).
- **During the pulley reassembly, respect** the correct position of the components, as indicated below:







Figure 5.1-13







Figure 5.1-15

- 5. Back off the screw (e) using a medium Phillips screwdriver.
- 6. Remove the guard (**f**).

7. Back off the ring-nut (g) using a socket wrench, as indicated in the figure at the side.

8. Remove the weight stack pulley group (h).





Figure 5.1-16



Figure 5.1-17

For each weight stack bar:

- 9. Take note of the **"X"** measure of weight stack stopper position.
- This dimension will be used to position the bars stopper again during the reassembly.
- 10. Back off the 2 grub-screw (i) using a 4mm hexagonal wrench.

- 11. Loosen the grub-screw (m) using a 4mm hexagonal wrench.
- 12. Remove the stopper (j), sliding it from the top.
- ATTENTION: The bar (k), is falling down.





Figure 5.1-18



Figure 5.1-19

- 13. Incline both the bars in the direction of yellow arrows, as indicated in the figure.
- 14. Pull out the first plate (**n**), in the direction of the orange arrow, as shown in the figure at the side.
- 15. Now it is possible to remove the weight stack plates.

- 16. Using a flat screwdriver, lightly press on the bushes (o) to remove them from their housing.
 - To reassemble the components, carry out the above steps in reverse order.



5.1.7. DISASSEMBLING THE HANDLE AND THE CABLE



Figure 5.1-20



Figure 5.1-21



Figure 5.1-22

On both ends of handle:

- 1. Lock down the cable-retainer using a wrench or a screwdriver, through the hole (a).
- 2. Back off the screw (b) using a 4mm hexagonal wrench.

- 3. Remove the crimped cable (c) from the cable-retainer (d).
- 4. Now it is possible to slip out the cable.

Place the handle on a work bench:

- 5. Back off the 2 screws (e) using two 4mm hexagonal wrenches, one opposite to the other; as shown in the figure at the side.
 - To reassemble the components, carry out the above steps in reverse order.
- During the handle reassembly, respect the position of its components, as detailed below:





5.1.8. DISASSEMBLING ARMS AND ROTATING PULLEY



Figure 5.1-23



Figure 5.1-24



Figure 5.1-25

Carry out the procedure detailed at paragraph: 5.1.7. "Disassembling the handle and the cable".

- 1. Using a Phillips screwdriver press on the unlocking tab through the hole (a).
- 2. Slip off the rotating pulley group (**b**) in the direction of the yellow arrow.
- During the reassembly, take care that the pulley group matches with the arm holes.

For each rotating pulley group:

- 3. On a work bench remove the snap-ring (c).
- 4. Slip off the bearings group (d) in the direction of the yellow arrow.
- 5. Back off the 2 screws (e) using a 6mm hexagonal wrench.
- **During the reassembly of rotating pulley** group, reassembly, respect the position of its components, as detailed below:



Continued on the following page...





Figure 5.1-26

For each arm:

- 6. Back off the 2 screws (f) using a 6mm hexagonal wrench.
- 7. Remove the arm (g) slipping it off in the direction of the yellow arrow.
 - To reassemble the components, carry out the above steps in reverse order.



5.1.9. DISASSEMBLING THE PULLEYS



Figure 5.1-27

Carry out the procedure detailed at paragraph: 5.1.2. "Disassembling the rear guard".

- 1. Back off the screw (a) using a 6mm hexagonal wrench, locking down the counternut on the opposite side using a 17mm wrench, as shown in the figure at the side.
- 2. Remove the pulley (c).
- During the reassembly of the pulley, respect the position of its components, as detailed below:





Figure 5.1-28

- To reassemble the pulley, carry out the above steps in reverse order.
- During the reassembly, take care to correctly position again the anti-slippage plate in the properly slot, as highlighted in the figure at the side.



5.2. PRESS

5.2.1. DISASSEMBLING THE SEAT



Figure 5.2-1

- 1. Back off the 4 screw (a) using a 4mm hexagonal wrench.
- 2. Remove the seat (**b**).
- To reassemble the seat carry out the above steps in reverse order.



5.2.2. DISASSEMBLING THE BACK-REST







For each plug:

1. Using a flat Phillips screwdriver lift up the cover plug (a).

- 2. Back off the screw (b) using the 8mm hexagonal wrench.
- 3. Remove the back-rest (c).
- **To prevent falling down into the frame** of the screw, it is recommended to insert a paper into the hole of the frame until the end, so as to secure the screw.
- To reassemble the back rest carry out the above steps in reverse order.



5.3. OVERHEAD PRESS - CORE

5.3.1. DISASSEMBLING THE ADJUSTABLE SEAT



Figure 5.3-1



Figure 5.3-2

To remove the seat:

- 1. Back off the 4 screws (a) using a 4mm hexagonal wrench.
- 2. Remove the seat (b) and replace if it is necessary.

To remove the seat adjustable system:

- 1. Move the seat completely up, in **position 1**, as shown in the figure.
- 2. Back off the 2 screws (a) using a medium Phillips screwdriver.





Figure 5.3-3



Figure 5.3-4

- 3. Remove the guard (**b**) from the slot highlighted in the figure, in the direction of the yellow arrow.
- 4. Lightly force outward the guard and remove the pin (c) from its housing, releasing the spring.

- 5. Move the seat completely down, in **position** <u>9</u>, as shown in the figure.
- 6. Back off the 2 screws (d) using a 6mm hexagonal wrench.
- 7. Remove the spring group (e).





Figure 5.3-5



Figure 5.3-6



Figure 5.3-7

<u>For each bearing:</u>

8. Back off the screw (f) using a 4mm hexagonal wrench.

9. Remove the seat group (g), slipping it off from the bottom, as shown in the figure at the side.

- 10. Back off the 2 screws (h) using a 6mm hexagonal wrench.
- 11. Remove the plastic selector (i).
- 12. Remove the 6 rivets (j).
- 13. Remove the rear cover (**k**).
 - To reassemble the components, carry out the above steps in reverse order.



5.4. LOW PULL

5.4.1. DISASSEMBLING THE ARMS



Carry out the procedure detailed at paragraph: 5.1.2. "Disassembling the rear guard".

- 1. Back off the 2 screws (a) using a 6mm hexagonal wrench, locking down the counter-nut (b) on the opposite side using a 17mm wrench.
- 2. Loosen the screw (c) using a 6mm hexagonal wrench, avoiding to remove it completely.
- 3. Remove the arm from the front side of the equipment.



5.5. HIGH PULL

5.5.1. DISASSEMBLING THE KNEE UPHOLSTERY REST GROUP





For each roller:

- 1. Back off the screw (a) using a 5mm hexagonal wrench.
- 2. Remove the cover plug (**b**).
- 3. Now it is possible to remove the roller (c).







Figure 5.5-3

During the rollers reassembly, respect the position of its components, as detailed at the side.

4. Remove the spacer (d), slipping it off from the frame pin.



5.5.2. DISASSEMBLING THE ROLLERS ADJUSTING SYSTEM











Figure 5.5-6

Carry out the procedure detailed at paragraph: 5.5.1. "Disassembling the knee upholstery rest group".

- 1. Back off the screw (a) using a medium Phillips screwdriver.
- 2. Back off the 2 screws (b) using a 4mm hexagonal wrench.
- 3. Remove the guard (c).

- 4. Back off the 2 screws (d) using a 4mm hexagonal wrench.
- 5. Remove the guard (e).

6. Back off the screw (f) using a 5mm hexagonal wrench locking down, on the opposite side, the pin (g) using a 6mm hexagonal wrench, as shown in the figure.





Figure 5.5-7

- 7. Remove the spacer (h) and the pin (i).
- 8. Remove the group (j).



Figure 5.5-8

position of its components, as detailed





Figure 5.5-9









- 10. Detach the adhesive label (l).
- 11. Back off the 4 screws (m) using a 8mm hexagonal wrench.
- 12. Remove the plate (**n**).

To remove the knob:

Place the group on a work bench:

- 1. Lock down the screw (a) using a 6mm hexagonal wrench.
- 2. Back off the knob (b).

To reassemble the components, carry out the above steps in reverse order.

During the reassembly, respect the position of its components, as detailed at the side.



5.5.3. DISASSEMBLING THE SEAT



Figure 5.5-12

- 1. Back off the screws (a) using a 8mm hexagonal wrench.
- 2. Remove the seat (b).



5.6. CORE

5.6.1.

DISASSEMBLING SHOULDER-REST BELT

Figure 5.6-1



Figure 5.6-2





To remove the Shoulder-rest Belt group:

Carry out the procedure detailed at paragraph: 5.1.7. "Disassembling the handle and the cable".

1. Remove the Shoulder-rest Belt group (a).

To remove the single belt:

1. Flip or lift the group in direction of the yellow arrow.

- 2. Remove the 5 screws (a) using a medium Phillips screwdriver.
- 3. Remove the guard (b).





Raise the footboard completely up:

hexagonal wrench.

1. Back off the screws (a) using a 4mm

2. Remove the stopper (**b**) and the guard (**c**).

5.7. STEP

5.7.1. DISASSEMBLING THE MOBILE FOOTBOARD











3. Back off the 6 screws (d), on both side, using

4. Remove the footboard (e).





If needed to remove the pulley on the lower side:

5. Back off the screw (f) using a 4mm hexagonal wrench, look down on the opposite side the nut (g) using a 8mm wrench.



5.7.2. DISASSEMBLING THE HANDLES AND ITS CABLE



Figure 5.7-4



Figure 5.7-5



Figure 5.7-6

Carry out the procedure detailed at paragraph: 5.7.1. "Disassembling the mobile footboard".

- 1. Back off the 2 screws (a) using a 4mm hexagonal wrench.
- 2. Slip off the cable (**b**) from the cable-retainer.
- **During the reassembly, route the cable** as before, as shown in the picture.

To remove the cable:

- 1. Remove the snap ring (a) and the pin (b).
- 2. Remove the spring and the cable (c).

To reassemble the components, carry out the above steps in reverse order.

To remove the unlocking handle:

- 1. Remove the snap ring (a) and the pin (b) in the direction of the yellow arrow.
- 2. Remove the handle (c).



5.7.3. DISASSEMBLING THE HANDLE AND THE CABLE



Figure 5.7-7







Figure 5.7-9

Carry out the procedure detailed at paragraph: 5.1.7. "Disassembling the handle and the cable" up to the step (4).

1. Connect the new cable to the cable you have to replace, as shown at left.

- 2. Slip off the old cable and the new one will replace it automatically.
- If necessary, loosen the anti-slipping plates fixing screws, to easily route the cable.



5.7.4. DISASSEMBLING THE ROTATING PULLEY GROUP



Figure 5.7-10



Figure 5.7-11



Figure 5.7-12

Carry out the procedure detailed at paragraph: 5.7.3. "Disassembling the handle and the cable".

- 1. Press on the looking pin using a Phillip screwdriver (a).
- 2. Remove the rotating pulley group (b) upwards in the direction of the yellow arrow.

- 1. Back off the screw (c) using a medium Phillip screwdriver, (a magnetic tip on the screwdriver could be very useful).
- 2. Remove the lower guard (d).

- 3. Carefully lift a little bit up the equipment.
- 4. Back off the 2 screws (e), using a medium Phillip screwdriver.
- 5. Remove the upper guard (**f**).



5.7.5. DISASSEMBLING THE FOOTBOARD FRONT COLUMN



Figure 5.7-13



Figure 5.7-14

Carry out the procedure detailed at paragraph: 5.1.2. "Disassembling the rear guard" and 5.1.5. "Disassembling the rear foot".

1. Loosen the 2 screws (a) using a 8mm hexagonal wrench.

2. Lift the machine up and place a safe support below the front frame, as shown in figure at left.





Figure 5.7-15



Figure 5.7-16

- 3. Back off the 2 screws (b) using a 8mm wrench.
- 4. Remove the column and place it on the floor, taking care to protect the floor.

Before to reassembly the column, take care to protect the frame, as shown in the figure at the left, to avoid to scratch it.



5.7.6.1.

5.7.6. DISASSEMBLING THE FOOTBOARD COLUMN COMPONENTS

Disassembling the footboard group

Figure 5.7-17



Figure 5.7-18





Carry out the procedure detailed at paragraph: 5.7.5. "Disassembling the footboard front column".

- 1. Back off the 4 screws (a) using a 4mm hexagonal wrench.
- 2. Remove the guard (b).

- 3. Back off the 4 screws (c) using 4mm hexagonal wrench.
- 4. Remove the guard (**d**).

5. Protect the column, to avoid scratching the frame, as shown in the figure at the left.





Figure 5.7-20

- 6. On both sides, back off the 8 screws (e) using a 5mm hexagonal wrench.
- 7. Remove the footboard (f) from the column and place it on the floor with careful.



5.7.6.2. Disassembling the selection pin

Carry out the procedure detailed at paragraph: 5.7.6.1 "Disassembling the footboard group".



Figure 5.7-21



Figure 5.7-22

<u>To remove the pin:</u>

- 1. Loosen the 2 grub screws (a) using a 4mm hexagonal wrench.
- 2. Slip off the cable in the direction of the yellow arrow.





Figure 5.7-25

- the same time, the pin should not come out from the footboard frame edge but should be aligned with it, as shown by the orange
 - at the



5.7.6.3. Disassembling the gas spring



Figure 5.7-26







Figure 5.7-28

Carry out the procedure detailed at paragraph: 5.7.6.1 "Disassembling the footboard group".

1. Protect the floor and the column using a soft sponge or cloth.

- 2. Loosen the 2 screws (a) using a 8mm hexagonal wrench.
- 3. Back off the 4 screws (b) using a 4mm hexagonal wrench.
- 4. Remove the snap ring (c) and slip off the pin (d) on the opposite side.
- 5. Remove the spacers (e) and the gas spring (f).
- During the reassembly place the spacers (e) as previously removed.



5.7.6.4. Disassembling the guide bars system



Figure 5.7-29



Figure 5.7-30



Figure 5.7-31

Carry out the procedure detailed at paragraph: 5.7.6.3 "Disassembling the gas spring".

On both side:

1. Loosen the screw (a) using a 4mm hexagonal wrench, using a wrench of the same size on the opposite side to block the rotation of the bar.

2. Back off the 2 screws (b) using a 4mm hexagonal wrench.

- 3. Place 2 of the previously removed screws into the two central holes (g), as shown in the figure at the left.
- On both side of the guide: screw the two screws alternately, to make sure that the group is lifted flat.





Figure 5.7-32



Figure 5.7-33



Figure 5.7-34

- 4. Once carried out step (3) on both side of the guide bars system, remove the bars support from its two spiral pin using a lever.
- **Be** careful not to damage the paint of the frame, protecting it with a cloth.

5. Remove the spiral pin (d) from the frame.

- 6. Remove the guide bars system (e).
- 7. Back off the 4 screws (f) using a 4mm hexagonal wrench and remove the bars stops.
- 8. Remove the bars (g).



5.7.7. DISASSEMBLING LOWER FOOTBOARD GUARD AND CABLE PULLEY



Figure 5.7-35





- Raise the footboard completely up.
- 1. Loosen the 4 screws (a) using a 4mm hexagonal wrench.
- 2. Remove the guard (b).

- 3. Back off the screw (c) using a 8mm hexagonal wrench, looking down the nut on the opposite side using a 13mm wrench.
- 4. Remove the pulley (**d**).



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6. WHAT IF ...

6.1. THE WEIGHT STACK DOES NOT SLIDE SMOOTHLY

This problem is due to insufficient lubrication of the bars or grime build-up from a mixture of dust and oil. Clean and lubricate as illustrated below:

CAUTION: When the bars and bushings are particularly dirty, if the only cross or at most the first plate is selected, it is possible that these cannot lay down on the weight stack. In this case you must <u>clean</u> and <u>lubricate</u> the bars and the internal side of the bushes.



Figure 6.1-1

- 1. Use a paper towel slightly dampened with ethyl alcohol to clean the weight stack bars of the machine, removing dust and grime.
- 2. Reassemble the cross and add a few drops of the oil found in the *service box* to the bushings.
- CAUTION: Do not use too much oil, and dry all excess thoroughly since too much oil could cause more dust to build up.
- 3. Move the cross up and down, making sure to distribute the oil evenly along the full length of the bars.
- 4. Dry excess oil from the bushings with a dry cloth.



6.2. THE WEIGHT STACK CABLE IS NOT IN TENSIONED

This problem is due to lengthening of the weight stack cable. Therefore, to solve the problem you must use the cable tension adjustment system.



• If the cable is new, before adjusting its tension, it is necessary to do a few reps at maximum load to stretch the cable itself.





- 1. Act on the eccentric (a) turning it clockwise or counter-clockwise, as highlighted by the vellow arrows, to stretch or loosen the cable tension.
- It is possible to change the tension level, positioning the screw (b) in the position (c), if necessary.



Check the tension of the cable by carrying out a couple of reps at minimum load, and then slowly resting the cross on the weight stack. The cross must rest firmly on the weight stack, and the cable must be slightly taut.



6.3. THE MACHINE IS NOT FLAT

This problem may be due to the positioning of the machines on a not flat surface To level the machine, you may adjust the height of the levelling foot as illustrated below:



Figure 6.3-1

- 1. Loosen the counter-nut (**B**) and screw, or unscrew the foot (**A**) until the equipment is stable on the floor.
- 2. Look down the counter-nut (**B**) again.



6.4. ADJUSTING THE FOOTBOARD

6.4.1. Adjusting the footboard sliding



Figure 6.4-1

Simultaneously press both the yellow handles and check the footboard smoothly and easily moves. Check that the pin select all the holes in the adjusting plate. You may experience the following cases:

- A. <u>The footboard DOES NOT moves</u>: in this case, although the two handles are correctly pressed, do not allow the pin to disengage from the adjusting plate holes and let the platform moves up and down.
- B. <u>It's NOT possible to select any position</u>: in this case, the maximum range of motion of the pin is not enough to select the adjusting plate holes.

Proceed as follows detailed:

Case B:

Case A:

- 1. Loosen the nut (a) using a 13mm wrench.
- 2. Unscrew the threaded pin (**b**) using a 13mm wrench, to tension the cable.
- 1. Loosen the 4 screws (a) using a 4mm hexagonal wrench.
- 2. Screw the threaded pin (b) using a 13mm wrench, to decrease the tension of the cable.



Figura 6.4-2

WARNING: If just a single handle is pressed, the platform will <u>NOT</u> be unlocked. For safety reasons the movement is allowed only by pressing both the handles.



6.4.2. ADJUSTING THE FOOTBOARD SLIDING



Figure 6.4-3

1. Press the handles (a).



Figure 6.4-5

3. Lift up the footboard (b) in direction of the yellow arrows.



Figure 6.4-4

2. Press slightly on the footboard (b) until the release of the pin.



Figure 6.4-6

- The footboard does not automatically scroll upwards, in late position, for security reasons.
- 4. Accompany the footboard (**b**) until the desired position, as shown above, making sure the correct connection of the pin.



6.4.3. ADJUST THE FOOTBOARD FEET

The following procedure allow to adjust the height of the footboard feet so that the footboard is flat on the floor.



Figura 6.4-7

- 1. Loosen the counter-nut (a) and screw, or unscrew the foot (b) until the footboard is laying horizontal on the floor.
- 2. Look down the counter-nut (a) again



7. CABLES

7.1. WEIGHT STACK CABLE LENGTH (FOR EACH WEIGH STACK)

Equipment	Code	Weigh stack cable Length (mm)	
		Standard	Enhanced
Overhead Press	MH15	6555mm	6295mm
Press	MH20	7140mm	6800mm
High Pull	MH30	6350mm	6010mm
Core	MH65	(Crunch)	
		6200mm	5930mm
		(Rotation)	
		8940mm	8670mm
Step	MH67	10755mm	10280mm
Low Pull	MH95	6275mm	5935mm



7.2. ROUTING OF THE CABLES

The following pages illustrate the routing of the weight stack cables through the pulleys for each machine, for use as reference when replacing the machine cables.

7.2.1. MH15 – OVERHEAD PRESS





7.2.2. MH20 – PRESS





7.2.3. MH30 – HIGH PULL





7.2.4. MH65 – CORE





7.2.5. MH67 – STEP/SQUAT





7.2.6. MH95 – LOW PULL





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8. SCHEDULED MAINTENANCE

To keep the machine in perfect working order and forestall possible problems, it is necessary to carry out the planned maintenance operations described below. These operations are essentially grouped according to the type of action and the technical skills needed perform them:

ROUTINE maintenance	SPECIAL maintenance
 ROUTINE maintenance operations can be carried out by the machine owner and do not require any special technical skills; they consist in simple external cleaning for the purposes of general hygiene. Refer to the USER manual. 	 SPECIAL maintenance operations may only be carried out by a Qualified Technician specifically trained by Technogym and authorized to perform machine adjustment and start-up operations, repairs and maintenance, and checks on the functioning and wear of mechanical components, in order to ensure correct and safe operation of the machine. Refer to the TECHNICAL SERVICE manual.
<u>ROUTINE</u> MAINTENANCE. No special training.	SPECIAL MAINTENANCE: Qualified Technician trained by Technogym

Refer to the MAINTENANCE MANUAL you can download from the TG DIRECT.



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9. TOOLS TO USE

The following tools are necessary to carry out all disassembly, adjustment and maintenance operations on the machines:

- Small Flat Screwdriver;
- Medium Philips screwdriver;
- 13mm wrench;
- 17mm wrench;
- *30mm wrench;*
- 4mm hexagonal wrench;
- 5mm hexagonal wrench;
- 6mm hexagonal wrench;
- 8mm hexagonal wrench;
- Ø17mm socket for ring nut ½ attack (cod. 0Y000061);
- Ø25mm socket for ring nut ½ attack (cod. 0Y000062);
- Snap Ring pliers;
- *Torque wrench;*
- Hammer.

You can order a complete set of hexagonal wrenches consisting of 7 pieces: 2, 2.5, 3, 4, 5, 6 and 8 mm. The code to be used is R0003677AA.



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