

Personal Selection TÜV

SERVICE & MAINTENANCE MANUAL

Rev. 1.0



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**



**DANGEROUS VOLTAGES
PRESENT EVEN WHEN THE
MACHINE IS TURNED OFF**

NOTE

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

Technogym does not guarantee this documentation in any way. Technogym shall not be held responsible for any errors contained in this manual and declines all liability for accidents or damages resulting from the supply, characteristics or use of this manual.

This document contains proprietary information that is protected by copyright. All rights reserved. No part of this document may be photocopied, reproduced or translated into another language without the prior written consent of Technogym.

The Technogym[®] trademark is property of Technogym S.p.A.
The Personal Selection TÜV[™] trademark is property of Technogym S.p.A.

Contents

1. GENERAL NOTICES	1.1
1.1. INTRODUCTION	1.1
1.2. RECOMMENDATIONS	1.1
1.3. GENERAL RULES FOR REPAIR PROCEDURES	1.2
2. TECHNICAL CHARACTERISTICS	2.1
2.1. PRODUCT CODE: MACHINES	2.1
2.2. CODIFICA DI PRODOTTO: PANCHE	2.1
2.3. EQUIPMENTS: MECHANICAL CHARACTERISTICS	2.3
2.3.1. D6946 – Upper Back	2.3
2.3.2. D6950 – Rotary Torso	2.3
2.3.3. D6951 – Leg Press	2.4
2.3.4. D6957 – Abdominal Crunch	2.4
2.3.5. D6958 – Lower Back	2.5
2.3.6. D6971 – Vertical Traction	2.5
2.3.7. D6980 – Low Row	2.6
2.3.8. D6990 – Leg Curl	2.6
2.3.9. D6991 – Leg Extension	2.7
2.4. BENCH: MECHANICAL CHARACTERISTICS	2.8
2.4.1. D6P915 – Crunch Bench	2.8
2.4.2. D6P920 – Adjustable Bench	2.8
2.5. AMBIENT SPECIFICATIONS	2.9
2.6. CONFORMITY TO REGULATIONS	2.9
3. INSTALLING AND MOVING THE MACHINES	3.1
3.1. SPECIFICATIONS AND REQUIREMENTS	3.1
3.2. MOVING	3.3
3.2.1. Moving without wheels	3.3
3.2.2. Moving with wheels	3.3
4. ACCESSORIES	4.1
5. WHAT IF	5.1
5.1. THE WEIGHT STACK DOES NOT SLIDE SMOOTHLY	5.1
5.2. THE WEIGHT STACK CABLE IS NOT TAUT	5.2
5.2.1. Adjusting the tension of the cable with crimped fitting	5.2
5.2.2. Adjusting the tension of the cable with doubling pulley	5.2
5.3. THE MACHINE IS NOT FLAT	5.4
5.4. THE LEVERS OF DUAL-AXIS MACHINES ARE NOT ALIGNED	5.5
5.5. THE SLIDING BARS OF THE LEG PRESS SEAT ARE NOT ALIGNED	5.6
5.6. THE TUBE START TO WABBLE	5.7
6. HOW TO DISASSEMBLE THE	6.1
6.1. FRONT WEIGHT STACK CASING	6.1
6.2. TOP	6.2
6.3. SEAT ON LOW MACHINES	6.3
6.4. SEAT ON TALL MACHINES	6.5
6.5. LEG PRESS SEAT	6.7
6.6. EASY START FOR TALL MACHINES	6.9
6.7. RELEASE LEVER	6.11
6.8. SELECTOR SWITCH FOR ADDITIONAL WEIGHT	6.13
6.8.1. Machines with cross with crimped cable fitting	6.13
6.8.2. Machines with cross with doubling pulley	6.14

6.9. DISASSEMBLING UNLOCKING LEVER ON ABDUCTOR - ADDUCTOR	6.16
7. SPECIAL OPERATIONS	7.1
7.1. LOCKING DOWN THE CABLE FIXING DOWELS	7.1
7.2. LOCKING DOWN THE PULLEYS	7.2
8. WEIGHT STACK CABLE	8.1
8.1. LENGTH OF THE WEIGHT STACK CABLE	8.1
8.2. ROUTING OF THE WEIGHT STACK CABLE	8.2
8.2.1. D6946 – Upper Back	8.2
8.2.2. D6950 – Rotary Torso	8.2
8.2.3. D6951 – Leg Press	8.3
8.2.4. D6957 – Abdominal Crunch	8.3
8.2.5. D6958 – Lower Back	8.4
8.2.6. D6971 – Vertical Traction	8.4
8.2.7. D6980 – Low Row	8.5
8.2.8. D6990 – Leg Curl	8.5
8.2.9. D6991 – Leg Extension	8.6
9. MAINTENANCE	9.1
9.1. DAILY MAINTENANCE OPERATIONS	9.1
9.1.1. Cleaning upholstery	9.1
9.2. WEEKLY MAINTENANCE OPERATIONS	9.2
9.2.1. Cleaning the frame and painted parts	9.2
9.2.2. Cleaning the chrome-plated parts	9.2
9.3. MONTHLY MAINTENANCE OPERATIONS	9.3
9.3.1. Check the cross, bars and weight stack plates	9.3
9.3.2. Check the cables	9.3
9.3.3. Check the mechanisms	9.3
9.3.4. Check the gas springs	9.3
9.3.5. Check the weight stack stops	9.4
9.3.6. Check the Leg Press seat mechanism	9.4
9.3.7. Checking the seat mechanism on low machines	9.4
9.3.8. Checking the seat mechanism on tall machines	9.4
9.3.9. Checking the upholstery	9.4
9.3.10. Checking various rubber parts	9.4
9.4. TWICE-YEARLY MAINTENANCE OPERATIONS	9.5
9.4.1. Checking the additional weight	9.5
9.4.2. Check the pulleys	9.5
9.4.3. Check the cam group	9.5
9.4.4. Check the lever stops	9.5
9.4.5. Replacing the cables	9.5
9.4.6. Lubricating the release systems	9.5
9.4.7. Screw and bolt check	9.5
9.4.8. Checking for mechanism play	9.6
9.4.9. Checking cross alignment	9.6
10. FUNCTIONAL TESTS	10.1
10.1. WEIGHT STACK CABLE ASSEMBLY TEST	10.1
10.2. HOUSING ASSEMBLY TEST	10.1
10.3. MECHANICAL RESISTANCE DEVICE ASSEMBLY TEST	10.1
10.4. SEAT GROUP ASSEMBLY TEST	10.2
11. APPENDIX	11.1
11.1. WHAT TO ORDER TO AUGMENT THE WEIGHT STACK	11.1
11.2. UPHOLSTERY	11.3
11.3. TOOLS TO USE	11.4

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 meaning:



WARNING: non observance may result in accident or injury.



ATTENTION: non observance may cause damage to the machine.



Information about the operation in progress.



OBSERVE: 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 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.

 **OBSERVE: The tool sizes quoted in this manual are expressed in mm.**

2. TECHNICAL CHARACTERISTICS

The Personal Selection TÜV machine code is a sequence of alphanumeric characters arranged as follows:

2.1. PRODUCT CODE: MACHINES

PERSONAL SELECTION TÜV		
Characters	description	key to values
1,2,3	Personal Selection TÜV	D69 = machine
4,5	Machine code	See Table 2-1
6	Weight stack configuration	0 = standard 3 = enhanced
-		
7,8	Frame colour	AL = Silver
9,10	Upholstery colour	R0 = Brilliant green
11	Front casing colour	C = grey
12,13	Plastic parts colour	GG = RAL 7024
14	Unit of measurement	K = Kg

Code	Machine
46	Upper Back
50	Rotary Torso
51	Leg Press
57	Abdominal Crunch
58	Lower Back

Code	Machine
71	Vertical Traction
80	Low Row
90	Leg Curl
91	Leg Extension

Table 2-1

2.2. CODIFICA DI PRODOTTO: PANCHE

PERSONAL SELECTION TÜV		
Characters	description	key to values
1,2,3,4	Personal Selection TÜV	D6P9 = bench
5,6	Bench code	See Table 2-2
-		
7,8	Frame colour	AL = Silver
9	Upholstery colour	R = Brilliant green

Code	Machine
15	Crunch Bench

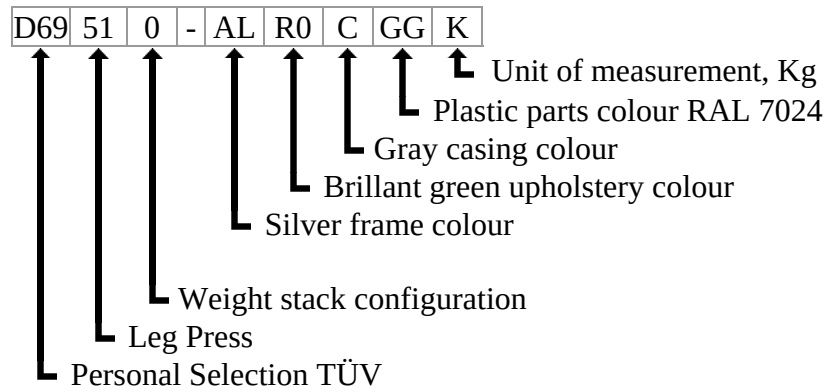
Code	Machine
20	Adjustable bench

Table 2-2

For example, a possible product code would be:

D69510-ALR0CGGK

which is interpreted as follows:



2.3. EQUIPMENTS: MECHANICAL CHARACTERISTICS

2.3.1. D6946 – UPPER BACK

D6946 – Upper Back		
		
Dimensions	stand by	max during exercise
	119 x 114 x 148.5 cm	119 x 142 x 148.5 cm
	47 x 45 x 58 in	47 x 56 x 58 in
Overall weight	197 Kg – 394 lbs	
Standard weight stack	65 Kg – 130 lbs	
Enhanced weight stack	95 Kg – 190 lbs	

2.3.2. D6950 – ROTARY TORSO

D6950 – Rotary Torso		
		
Dimensions	stand by	max during exercise
	118.5 x 112x 148.5cm	118.5 x 112x 148.5cm
	47 x 44 x 58 in	47 x 44 x 58 in
Overall weight	197 Kg – 394 lbs	
Standard weight stack	65 Kg – 130 lbs	
Enhanced weight stack	95 Kg – 190 lbs	

2.3.3. D6951 – LEG PRESS

D6951 – Leg Press		
		
Dimensions	stand by	max during exercise
	207 x 120 x 180 cm	207 x 120 x 180 cm
	81 x 47 x 71 in	81 x 47 x 71 in
Overall weight	572 Kg – 1144 lbs	
Standard weight stack	190 Kg – 380 lbs	
Enhanced weight stack	250 Kg – 500 lbs	

2.3.4. D6957 – ABDOMINAL CRUNCH

D6957 – Abdominal Crunch		
		
Dimensions	stand by	max during exercise
	128 x 105 x 148.5 cm	142 x 105 x 148.5 cm
	50 x 41 x 58 in	56 x 41 x 58 in
Overall weight	207 Kg – 414 lbs	
Standard weight stack	65 Kg – 130 lbs	
Enhanced weight stack	95 Kg – 190 lbs	

2.3.5. D6958 – LOWER BACK

D6958 – Lower Back		
		
Dimensions	stand by	max during exercise
	121 x 103 x 148.5 cm	140 x 103 x 148.5 cm
	48 x 40 x 58 in	55 x 40 x 58 in
Overall weight	212 Kg – 424 lbs	
Standard weight stack	65 Kg – 130 lbs	
Enhanced weight stack	95 Kg – 190 lbs	

2.3.6. D6971 – VERTICAL TRACTION

D6971 – Vertical Traction		
		
Dimensions	stand by	max in usage
	150 x 131.5 x 186 cm	167 x 145.5 x 186 cm
	59 x 52 x 73 in	59 x 57 x 73 in
Overall weight	292 Kg – 584 lbs	
Standard weight stack	100 Kg – 200 lbs	
Enhanced weight stack	130 Kg – 260 lbs	

2.3.7. D6980 – Low Row

D6980 – Low Row		
		
Dimensions	stand by	max during exercise
	113.5 x 120.5 x 148 cm	113.5 x 120.5 x 148 cm
	44.5 x 47.5 x 58.5 in	44.5 x 47.5 x 58.5 in
Overall weight	268 Kg – 536 lbs	
Standard weight stack	95 Kg – 190 lbs	
Enhanced weight stack	130 Kg – 260 lbs	

2.3.8. D6990 – LEG CURL

D6990 - Leg Curl		
		
Dimensions	stand by	max during exercise
	130 x 105 x 148.5 cm	141 x 107 x 148.5 cm
	51 x 41 x 58 in	55 x 42 x 58 in
Overall weight	254 Kg – 508 lbs	
Standard weight stack	95 Kg – 190 lbs	
Enhanced weight stack	125 Kg – 250 lbs	

2.3.9. D6991 – LEG EXTENSION

D6991 – Leg Extension		
		
Dimensions	stand by	max during exercise
	130 x 105 x 148.5 cm	152 x 105 x 148.5 cm
	51 x 41 x 58 in	60 x 41 x 58 in
Overall weight	257 Kg – 514 lbs	
Standard weight stack	95 Kg – 190 lbs	
Enhanced weight stack	125 Kg – 250 lbs	



Be aware:

- The weights in the above tables refer to machines with standard weight stack.
- The dimensions are “length x width x height” related to the user in exercise position.
- The stand by dimensions are the minimum machine dimensions without any disassembling.

2.4. BENCH: MECHANICAL CHARACTERISTICS

2.4.1. D6P915 – CRUNCH BENCH

D6P915 – Crunch Bench		
		
Dimensions	Standard configuration	max in usage
	144 x 66 x 115 cm	155 x 66 x 115 cm
	52 x 26 x 46 in	61 x 26 x 46 in
Overall weight	44 Kg – 88 lbs	

2.4.2. D6P920 – ADJUSTABLE BENCH

D6P920 – Adjustable bench		
		
Dimensions	Standard configuration	max in usage
	119 x 69 x 45.5 cm	119 x 69 x 130 cm
	47 x 28 x 18 in	47 x 28 x 52 in
Overall weight	36 Kg – 72 lbs	



Be aware:

- The dimensions are “length x width x height” related to the user in exercise position.
- The stand by dimensions are the minimum machine dimensions without any disassembling.

2.5. AMBIENT SPECIFICATIONS

Temperature	Operating	from 5° to 35° C
	Storage	from -20 to 55° C
Humidity	Operating	from 30% to 80% non-condensing
	Storage	from 5% to 85% non-condensing

2.6. CONFORMITY TO REGULATIONS

The machine conforms to the following directives:

Directive	Europe	USA
Medical devices	93/42/CEE	-
Mechanical safety	EN 957-1 (2000) EN 957-2 (2004)	EN 957-1 (2000) EN 957-2 (2004)

In addition all the machines have a **Risk rate I**.

Page intentionally left blank

3. INSTALLING AND MOVING 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 2.5. "Ambient specifications".



Photo 3.1-1

1. The machine is supplied on a wooden pallet, wrapped in nylon bag and packed in a carton.
2. To move the machine, it is necessary to use a pallet truck or fork lift truck.

Continued on the following page →



Photo 3.1-2

3. Remove the carton and the nylon bag, and leave the machine secured to the pallet with the fixing straps.
4. Position the machine in the place of installation using a pallet truck, a wheeled platform (dolly) or by fitting the wheels as described in paragraph 3.2.2. "Moving with wheels".

3.2. MOVING

For proper movement of the machines, proceed as follows:

3.2.1. MOVING WITHOUT WHEELS



When lifting or moving the machine press only against the frame.

1. Adequately protect the parts of the frame that will be in contact with the means of transportation: pallet changer or lift truck.
2. Insert the means of transportation (pallet changer or lift truck) from the weight stack side.
3. Move the machine carefully, making sure it does not overbalance.

3.2.2. MOVING WITH WHEELS



When lifting or moving the machine press only against the frame.

1. Tip the machine from the user side and insert the 2 fixed wheels under the weight stack hoists, as illustrated in the following photos:



Photo 3.2-1



Photo 3.2-2

2. Tip the machine from the weight stack side and insert 1 or 2 steering wheels under the user side hoists, as illustrated in the following photo:



Photo 3.2-3

Depending on the wheel model used, it could be necessary to back off the screw fixing the foot, inserter the wheel and secure it using the screw previously removed.

3. This allows the machine to be moved easily, pushing it from the weight stack side.



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 5.3. “The machine is not flat”.

4. ACCESSORIES

There are no accessories available with this product line.

Page intentionally left blank

5. WHAT IF ...

5.1. 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:



Photo 5.1-1

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 cross bushings as shown in the photo below.
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.



Do not use too much oil, and dry all excess thoroughly since too much oil could cause more dust to build up.



When the bars and bushings are especially dirty, and only when the cross alone or at most the cross and one plate are selected, it may not return to rest on the other plates but stick a few centimetres above. Clean and lubricate the bars thoroughly, as well as inside the bushings where the bars slide, using a paper towel moistened with ethyl alcohol.

5.2. THE WEIGHT STACK CABLE IS NOT TAUT

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.

There are 2 possible mechanical solutions:

- weight stack with crimped cable;
- weight stack with doubling pulley.

the 2 different adjustment procedures detailed here below correspond to these two mechanical options:

5.2.1. ADJUSTING THE TENSION OF THE CABLE WITH CRIMPED FITTING



This operation applies to Abdominal Crunch, Leg Curl, Leg Extension, Lower Back.

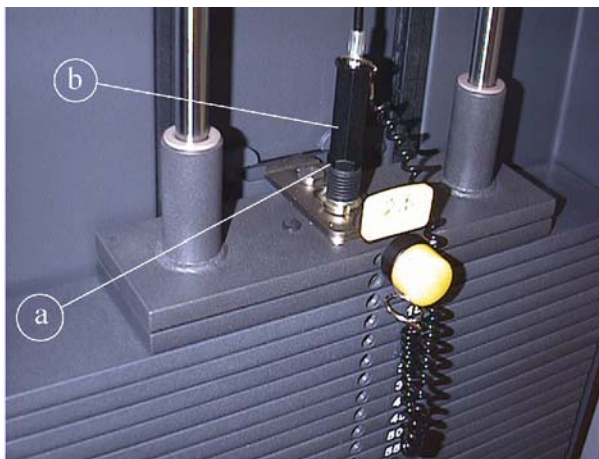


Photo 5.2-1

1. Set the minimum weight: the only selected weight will be the cross.
2. Loosen the counter-nut **a** using a 22-gauge wrench.
3. Tighten the screw **b** at the end of the cable so that the cable is taut and the cross raised.
4. Slowly loosen the screw **b** until the cable is still taut, but the cross is resting on the weight stack.
5. Tighten the counter-nut **a** using a 22-gauge wrench.



Check the tension of the cable by carrying out a couple of repetitions with the minimum weight, 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.

5.2.2. ADJUSTING THE TENSION OF THE CABLE WITH DOUBLING PULLEY



This operation applies to Leg Press, Low Row, Rotary Torso, Upper Back and Vertical Traction.

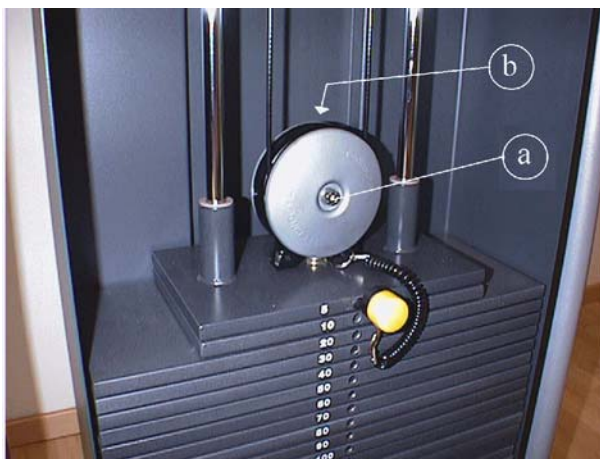


Photo 5.2-2

1. Set the minimum weight: the only selected weight will be the cross.
2. Loosen the screw **a** using a 8-gauge hexagonal T-wrench, holding the nut **b** in place with a 17-gauge wrench.
3. Working on both pulley covers, turn the pulley group counter-clockwise to increase the cable tension until the cable is taut and the cross rises.
4. Then turn the pulley cover clockwise to reduce the cable tension until the cable, still taut, rests on the weight stack.
5. Then tighten the screw and its nut loosened previously.



Check the tension of the cable by carrying out a couple of repetitions with the minimum weight, 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.

5.3. THE MACHINE IS NOT FLAT

To level the machine, you may adjust the height of the levelling foot as illustrated below:

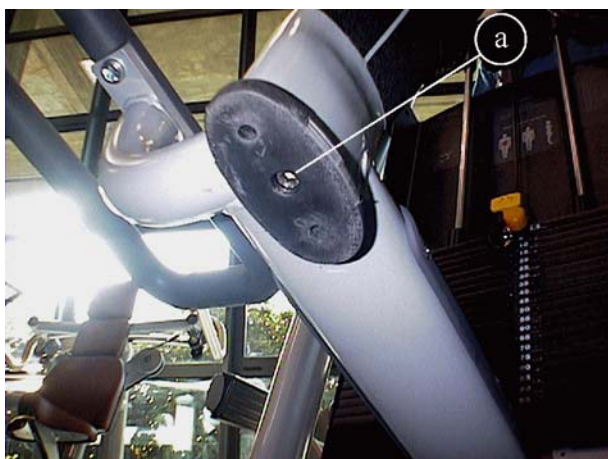


Photo 5.3-1



We recommend that 2 people carry out this operation.

1. Lift the machine on one side until you can access the underside of the foot.
2. Adjust the screw **a** with a 8-gauge hexagonal T-wrench, tightening it to reduce the height of the foot and loosening it to increase the height.
3. Lower the machine back to the floor to check the effects of the adjustment.
4. Repeat the procedure described in point 2 until a satisfactory solution is reached.

5.4. THE LEVERS OF DUAL-AXIS MACHINES ARE NOT ALIGNED



This operation applies to Low Row, Upper Back and Vertical Traction.

To align the levers of dual-axis machines, you may adjust the position of the stop buffers against which the machine levers rest, as illustrated below:

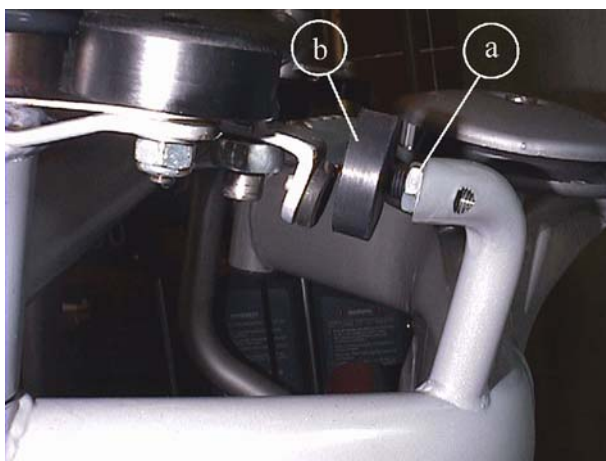


Photo 5.4-1

1. Loosen the counter-nut **a** on both sides, using a 17-gauge wrench.
2. Adjust the position of the 2 stop buffers **b**, tightening or loosening them until the levers are aligned.



Use a lever for a more precise check.

3. When the adjustment is complete, tighten the counter-nuts **a** once again.



This procedure may also be carried out to adjust the starting position of the levers on the other machines.

5.5. THE SLIDING BARS OF THE LEG PRESS SEAT ARE NOT ALIGNED

To align the sliding bars of the seat, you may adjust the position as illustrated below:

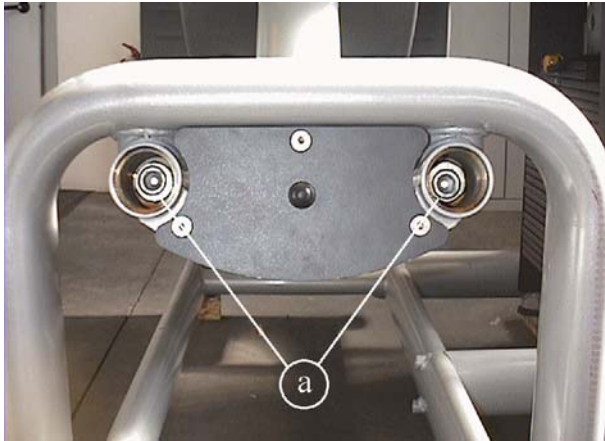


Photo 5.5-1

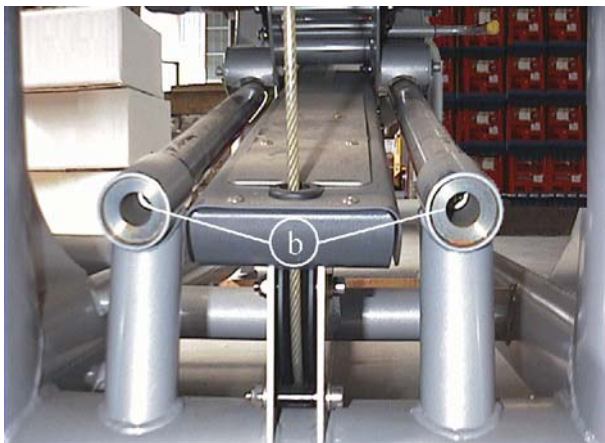


Photo 5.5-2

1. Remove the seat as described in paragraph 6.5. "Leg Press Seat".

For each bar:

2. Remove the protective caps at the ends of the bars.
3. Loosen the screw **a** using a 14-gauge hexagonal T-wrench.
4. Loosen the screw **b** using a 14-gauge hexagonal T-wrench.
5. Turn the bar until it is perfectly aligned.

5.6. THE TUBE START TO WABBLE



This operation applies to Upper Back, Low Row, Crunch bench.

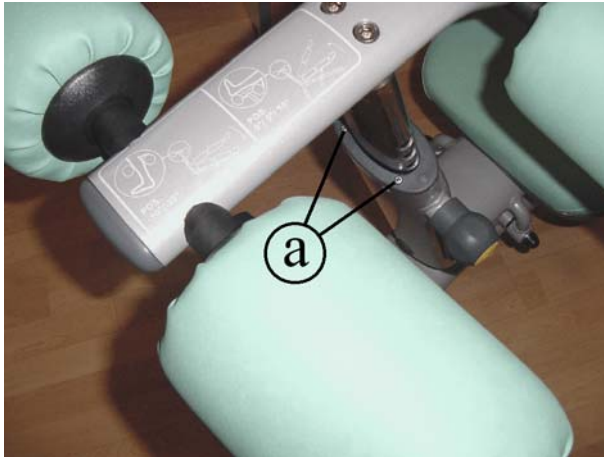


Photo 5.6-1

1. Act on the 2 screws **a** to adjust the amount of play between the inner and outer tube and improve their sliding movement.

Page intentionally left blank

6. HOW TO DISASSEMBLE THE ...

6.1. FRONT WEIGHT STACK CASING

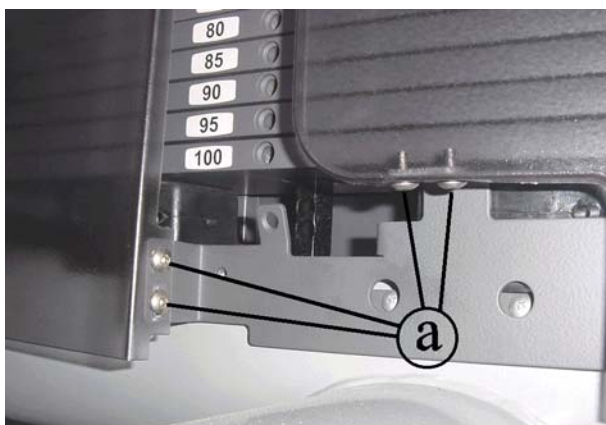


Photo 6.1-1

1. Back off the 4 screws **a** which are fixing the front casing to the encoder support bracket, using a 4-mm hex wrench.

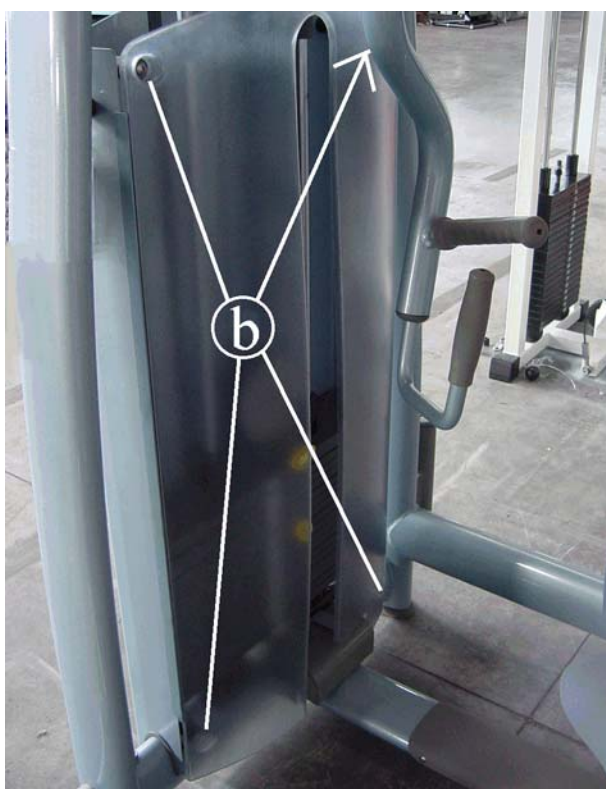


Photo 6.1-2

2. Back off the 4 screws **b**, using a 5-mm hex wrench.
3. Remove the front weight stack casing.

Reassemble all the components, carrying out the procedure in reverse order.

6.2. TOP

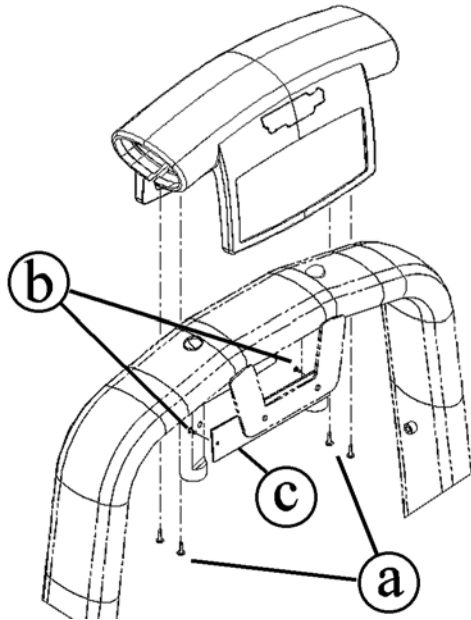


Photo 6.2-1

1. Back off the 4 screws **a**, using a medium Phillips screwdriver.
2. Back of the self threading screws **b** on both internal side of the top and remove the plates **c**.
3. Remove the Top from the machine.
4. Reassemble all the components, carrying out the procedure in reverse order.

6.3. SEAT ON LOW MACHINES



This operation applies to Leg Curl, Leg Extension.

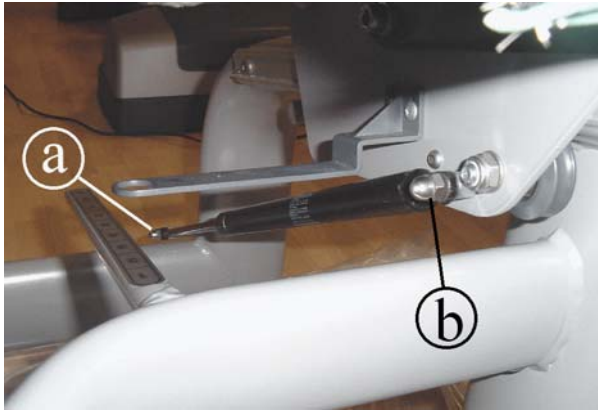


Photo 6.3-1

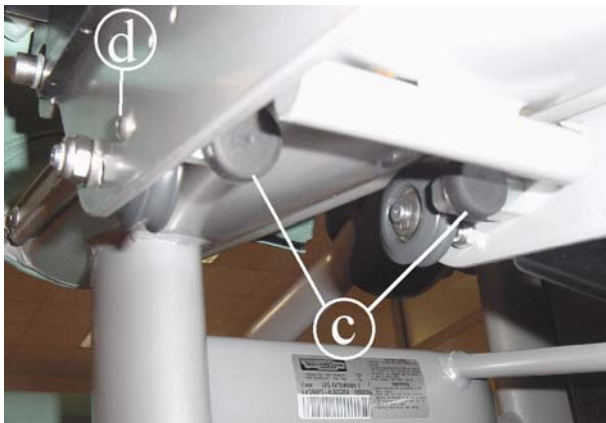


Photo 6.3-2

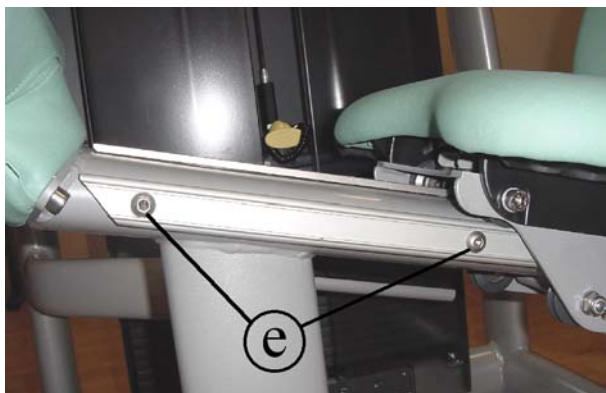


Photo 6.3-3

1. Move the seat into position 1 (all the way forward) so that the gas spring is as fully extended as possible.
2. Unscrew the nut **a** using a 13-gauge wrench.
3. Help the stem **b** of the gas spring extend itself, and rest its end on the floor.
4. Unscrew the nut **a** using a 13-gauge wrench.



The two nuts “a” and “b” contain a steel ball to avoid to tighten them too much.

5. Remove the two stops **c**, backing off the screw **d** on both sides of the machine, using a 4-gauge hexagonal T-wrench.



During reassembly procedure, take care to mount the stops so that, the rubber side is direct toward the rear of the machine, as shown in the photo.

6. Back off the two screws **e** which are fixing the guide on the left side of the machine, using a 6-gauge hexagonal T-wrench.

Continued on next page →

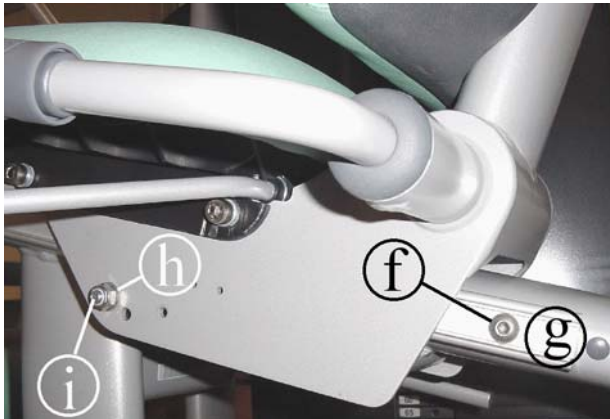


Photo 6.3-4



Place a cloth between the frame and the seat carriage, to avoid to scratch the frame.

7. Back off the screw **f** and remove the guide **g** sliding it out from behind.
8. Back off the nut **h** using a 17-gauge wrench, locking the eccentric pin **i** using a 5-gauge hexagonal T-wrench.
9. Remove the eccentric pin and the pulley fixed on it.
10. Remove the seat, sliding it out from behind.

6.4. SEAT ON TALL MACHINES



This operation applies to Low Row, Upper Back e Vertical Traction.



Photo 6.4-1

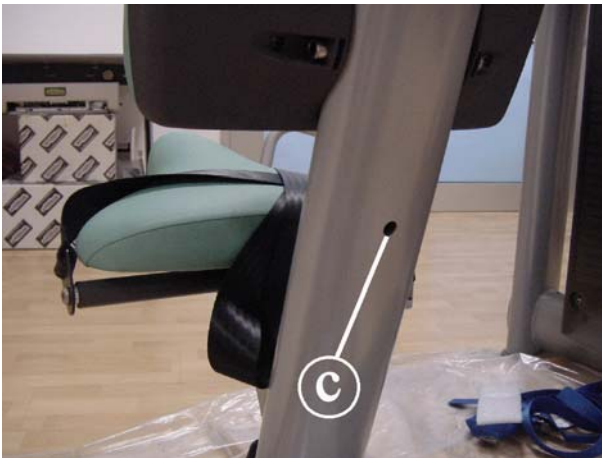


Photo 6.4-2

1. Move the seat into position 1 (all the way down) so that the gas spring is as fully extended as possible.
2. Unscrew one of the three screws **a** using an 8-gauge hexagonal T-wrench.
3. Screw the removed screw into the hole **c** to fasten the seat sliding group to the machine frame.
4. Unscrew the other 2 screws **a** using an 8-gauge hexagonal T-wrench.
5. Remove the seat **b**.

Continued on next page →

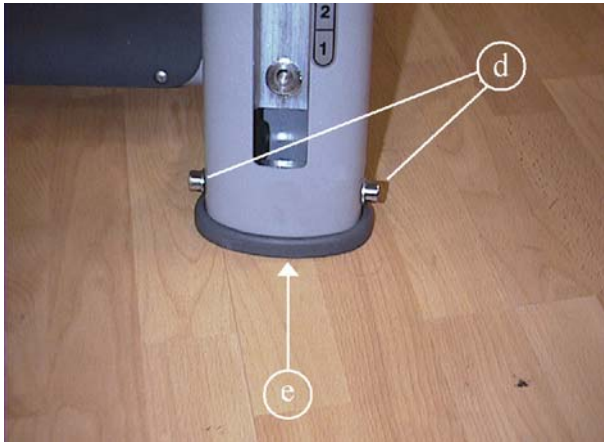


Photo 6.4-3



Photo 6.4-4

6. Unscrew the 2 screws **d** using an 8-gauge hexagonal T-wrench.
7. Lift the machine on the weight stack side and unscrew the screw **e** of the foot using an 8-gauge hexagonal T-wrench; remove the foot.
8. Slide the seat sliding group downward, aided with a rubber mallet if necessary to help you pull it out.



Make sure to insert again the spacer “f” that allows to limit the range of motion of the seat group.



Make sure that the spacers between the wheels and frame of the sliding group have enough play to allow the group to slide.

To reassemble the seat, proceed as follows:

1. Insert the sliding group into the machine frame.
2. Fasten the group in place with the screws **d**.
3. Insert the foot.
4. In a slot for the screws **a**, insert one at least 9 cm long, and screw it in by at least 4÷5 threads.
5. Press your foot against the screw just inserted to compress the gas spring, thus allowing you to insert the screw in the hole **c** to lock the carriage.
6. Then proceed with assembling the seat.

6.5. LEG PRESS SEAT

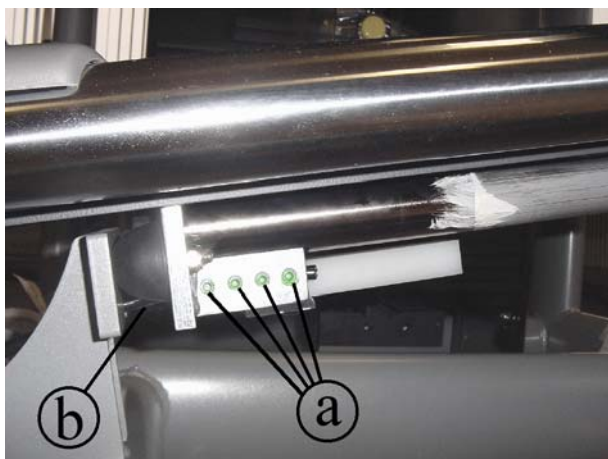


Photo 6.5-1



Photo 6.5-2



Photo 6.5-3

1. Loosen the 4 dowels **a**, using a 4-gauge hexagonal T-wrench.
2. Remove the cable **b**.
3. Unscrew the 2 screws **c**, using a 4-gauge hexagonal T-wrench, locking down the nuts on the opposite side, using an 8-mm wrench.
4. Unscrew the 4 nuts **d** using a 17-mm tube wrench.
5. Remove the footboard pulling it out from the top.

Continued on next page →

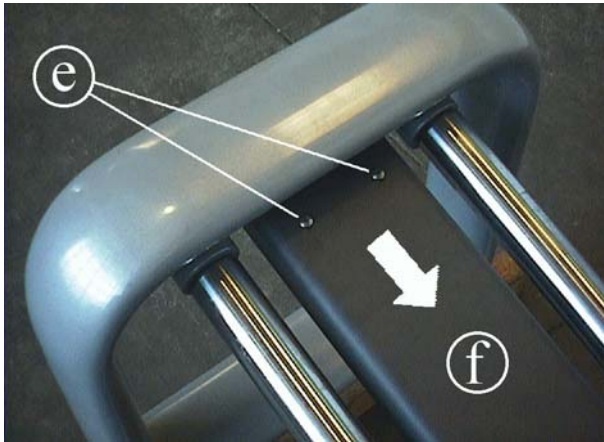


Photo 6.5-4

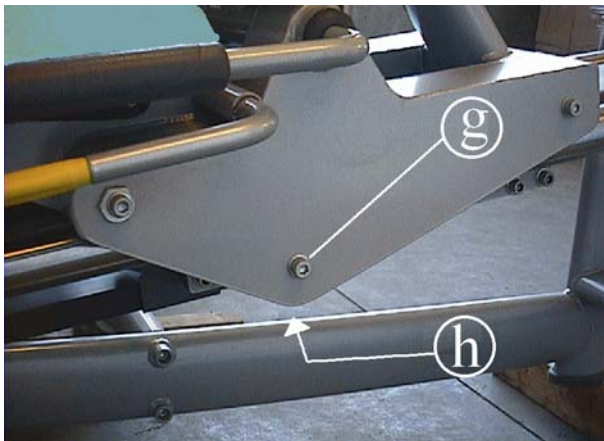


Photo 6.5-5

6. Unscrew the 2 screws **e**, using a 4-gauge hexagonal T-wrench, locking down the nuts on the opposite side, using an 8-mm wrench.
7. Remove the sheet metal **f** by pulling it forward.

For each side of the machine:

8. Unscrew the screw **g** using an 8-gauge hexagonal T-wrench, holding the nut in place with a 17-gauge wrench.
9. Remove the pulley **h**.

Remove the seat by pulling it upward.

6.6. EASY START FOR TALL MACHINES



This operation applies to Vertical Traction.

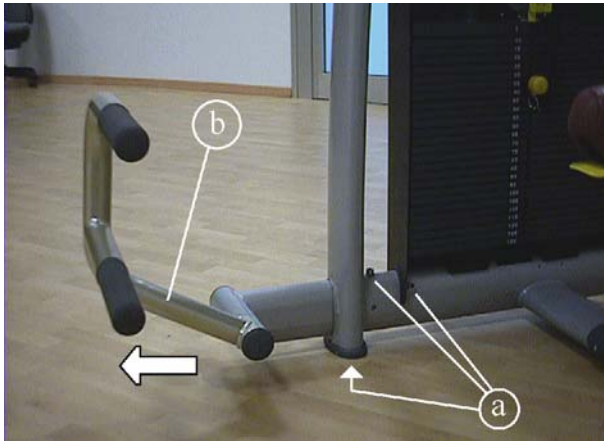


Photo 6.6-1

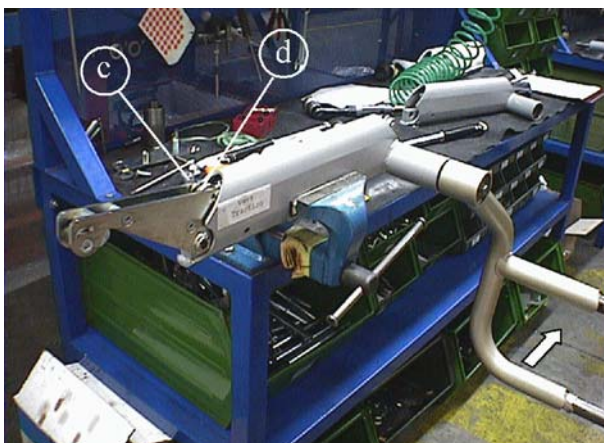


Photo 6.6-2



Photo 6.6-3

1. Use an 8-gauge hexagonal T-wrench to unscrew the 3 screws **a** and remove the easy start group **b** by sliding it forward.
2. Move the easy start group to the workbench and fasten it in a vice.
3. Adjust the easy start lever in the direction shown by the arrow.
4. Unscrew the screw **c** using a 6-gauge hexagonal T-wrench.
5. Keeping the lever activated, insert a peg remover tool in the hole of the ball joint of the tie-rod **e** to keep the spring locked.
6. Unscrew the screw **e** using a 6-gauge hexagonal T-wrench.
7. Remove the cap **f** and use a 25-gauge sector wrench to unscrew the ring-nut below.
8. Remove the lever by sliding it out the side.

Continued on next page →

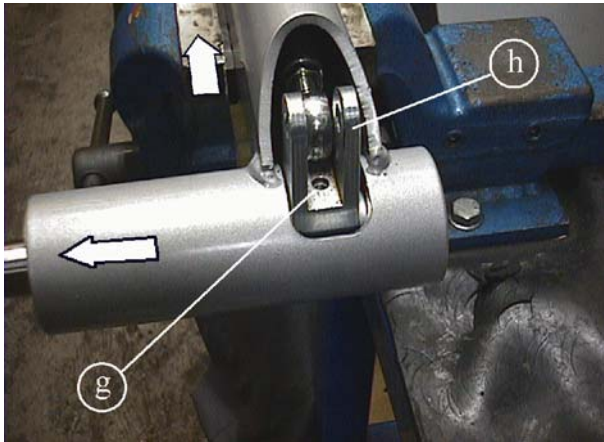


Photo 6.6-4



Photo 6.6-5

9. Adjust the previously inserted peg remover tool to stretch the spring taut and move the tie-rod until you can see the dowel **g**.
10. Loosen the dowel **g** using a 4-gauge hexagonal T-wrench.
11. Slide the shaft to the side, allowing you to remove the fork **h** holding the tie-rod.
12. Remove the peg remover tool from the ball joint of the tie-rod, holding the other end of the rod with a rag to absorb the shock due to the thrust of the compressed spring.
13. Remove the tie-rod.



The adjustment of the distance I in the figure alongside is 423 mm for Vertical Traction.

6.7. RELEASE LEVER



This operation applies to Leg Curl, Leg Extension Lower Back.

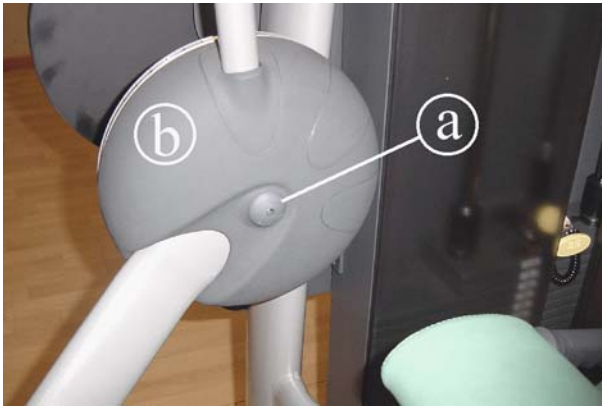


Photo 6.7-1

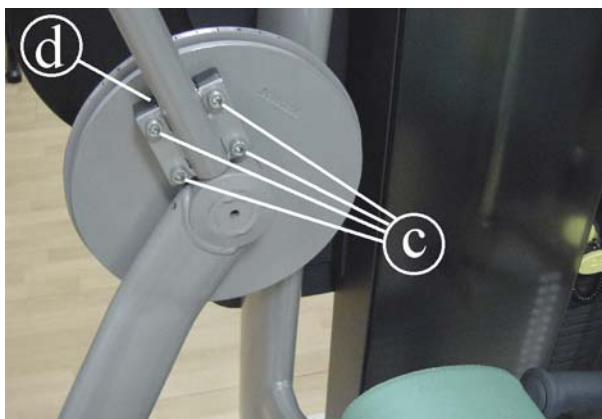


Photo 6.7-2

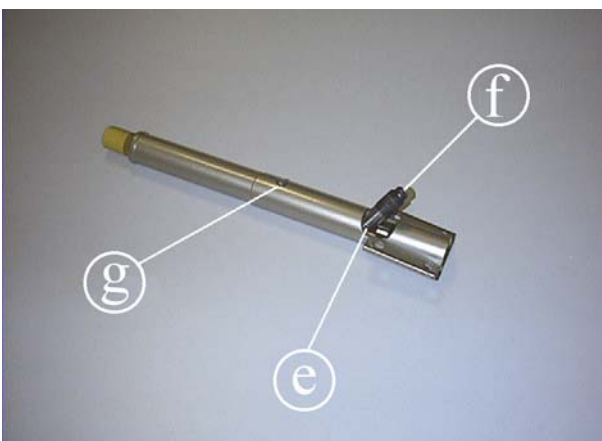


Photo 6.7-3

1. Unscrew the screw **a** using a 5-gauge hexagonal T-wrench and remove the plastic guard **b**, sliding it upward.

2. Use a 6-gauge hexagonal T-wrench to unscrew the 4 screws **c**, making sure that the spacer **d** do not fall out.
3. Remove the release button.

With the release button on a workbench:

4. Remove the threaded pin **e** using a Medium flat head screwdriver.
5. Remove the pin **f**.
6. Unscrew the screw **g** using a 4-gauge hexagonal T-wrench.
7. Open the button, sliding the inner part up or down.

The version at present in production is composed by the following pieces:

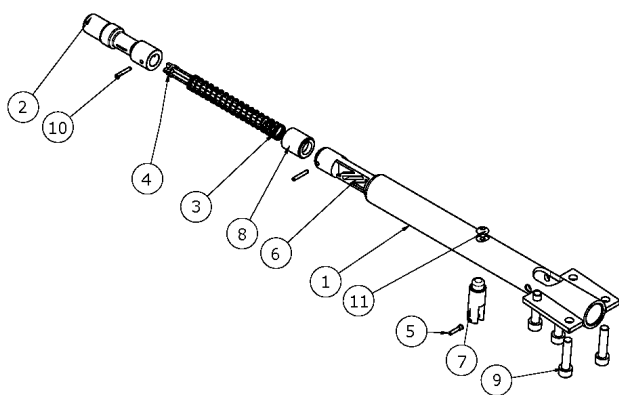


Photo 6.7-4

Ref.	Code	Description
1	0D000766-*	Housing
2	0G000117-#	ROM button
3	0M022	Return spring
4	0N447	Adjustment shaft
5	0P000661AB	Threaded pin
6	0P6176	Link pin
7	0P6216AA	Selector pin
8	0V368	Spring retainer
9	0Z103	Screw M8x35
10	0ZS00027	Spiral pin 3x20
11	0ZV00034	Screw M5x6

To reassemble the button, make sure that:

1. The Phillips screw **11** is fastened in such a way to block the piece **8**.
2. The threaded pin **5** is fastened to the piece **6** in such a way that the slot of the latter is positioned as shown in the drawing below:

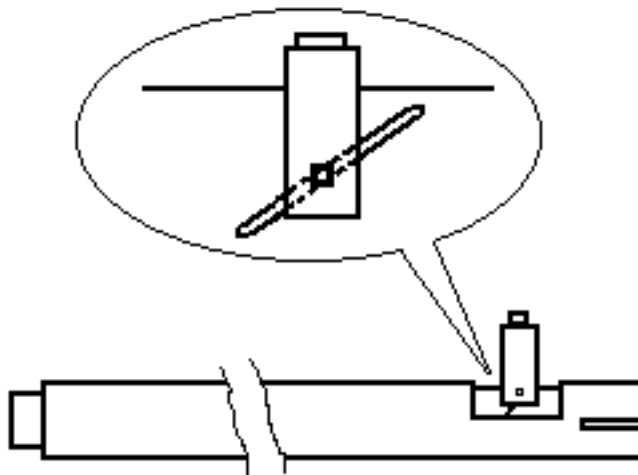


Photo 6.7-5

3. To reassemble it on the machine, insert it into a hole in the bell.

6.8. SELECTOR SWITCH FOR ADDITIONAL WEIGHT



This operation does not apply to Leg Press, Low Row.

The selector switch for additional weight is hooked onto the cross. Since there are only 2 mechanical solutions available:

- cross with crimped cable;
- cross with doubling pulley.

there are 2 different disassembly procedures detailed here below:

6.8.1. MACHINES WITH CROSS WITH CRIMPED CABLE FITTING



This operation applies to Abdominal Crunch, Leg Curl, Leg Extension, Lower Back,.

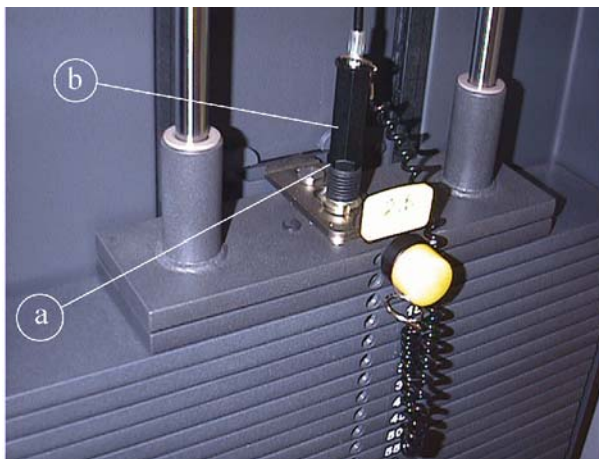


Photo 6.8-1

1. Loosen the counter-nut **a** using a 22-gauge wrench.
2. Unscrew the screw **b** at the end of the cable so that the cable is free.

Continued on page 6.15→

6.8.2. MACHINES WITH CROSS WITH DOUBLING PULLEY



This operation applies to Rotary Torso, Upper Back and Vertical Traction.

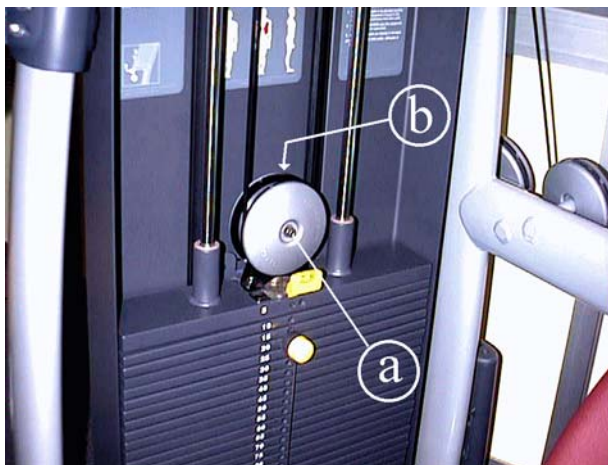


Photo 6.8-2

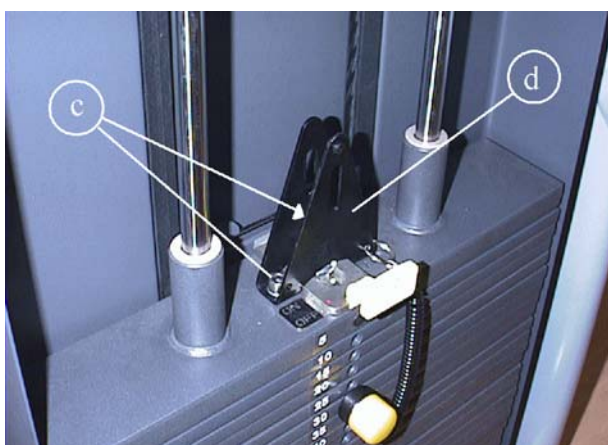


Photo 6.8-3

For machines with doubling pulley:

1. Loosen the cable tension and lock the levers.
2. Unscrew the screw **a** using an 8-gauge hexagonal T-wrench, holding the nut **b** in place with a 17-gauge wrench.
3. Remove the pulley and pulley cover to free the cable.
4. Unscrew the 2 screws **c**, using an 8-gauge hexagonal T-wrench.
5. Remove the support **d**.

Continued on page 6.15→

For all equipment:



Photo 6.8-4

6. Unscrew the screw **e** using a 17-gauge sector wrench.
7. Remove the selector switch.



Photo 6.8-5

8. Unscrew the bolt **f** using a 4-gauge wrench.
9. Remove the blade **g** and ball bearing **h** allowing the 2 selector switch positions to be selected.

6.9. DISASSEMBLING UNLOCKING LEVER ON ABDUCTOR - ADDUCTOR

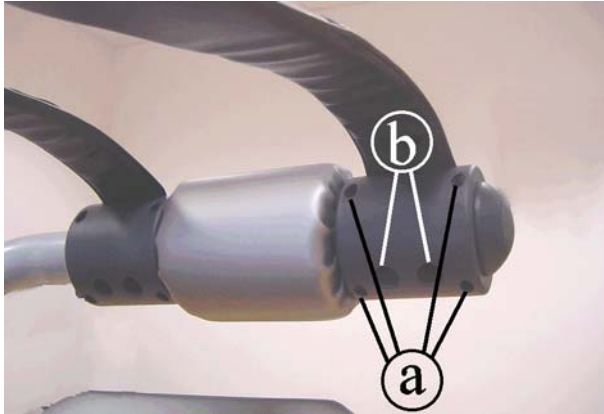


Photo 6.9-1

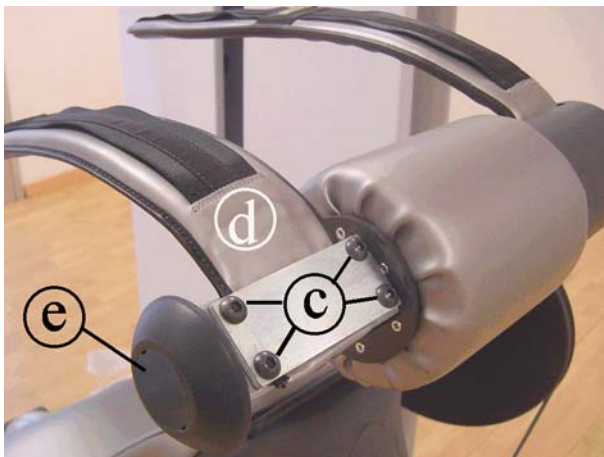


Photo 6.9-2



Photo 6.9-3

1. Back off the 4 screws **a** using a medium Phillips screwdriver and remove the upper plastic housing.
2. Back off the 2 screws **b** using a 5-mm hex wrench and remove the lower plastic housing.

3. Back off the 4 screws **c** using a 5-mm hex wrench, remove the shoulder rest upholstery **d** and its fixing plate.
4. Remove the cap **e** using a small flat screwdriver.

5. Back off the plastic cap **g** using a 17-mm hex wrench.
6. Pull out the roller upholstery **h** from the lever tube.
7. Carry out the steps from 1 to 4, on the right shoulder rest too.

To reassemble the shoulder rest lever, carry out the above steps in reverse order.

7. SPECIAL OPERATIONS

The term special operations refers to those procedures whose correct execution is fundamental for the safe and reliable operation of the machine.

7.1. LOCKING DOWN THE CABLE FIXING DOWELS

At least one end of the weight stack cable is fixed to the wheel or to a stop by means of the dowel screws highlighted in grey and circled in the figures below. The fixing dowels must be carefully locked down to prevent them from working loose and allowing the cable to come out, causing problems to the user.

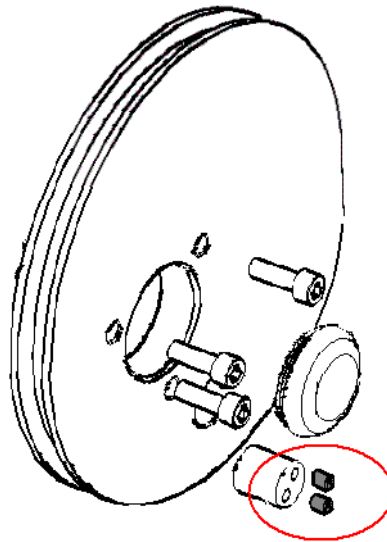


Figure 7.1-1

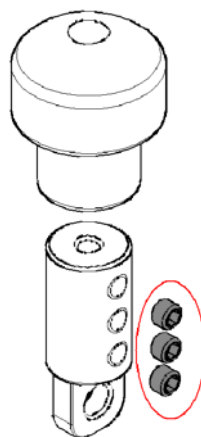


Figure 7.1-2

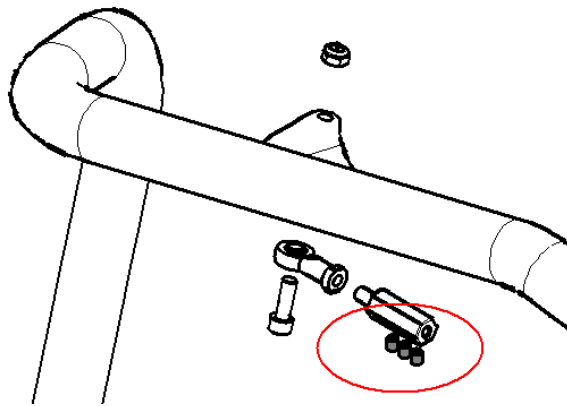


Figure 7.1-3

Use a torque wrench to ensure that the dowels are locked down with the prescribed torque of **16.5 Nm / 12.2 ft.lbs.**

7.2. LOCKING DOWN THE PULLEYS

The screws of the pulleys, highlighted in grey and circled in the figure below, must be carefully locked down to prevent them from working loose and causing problems to the user.

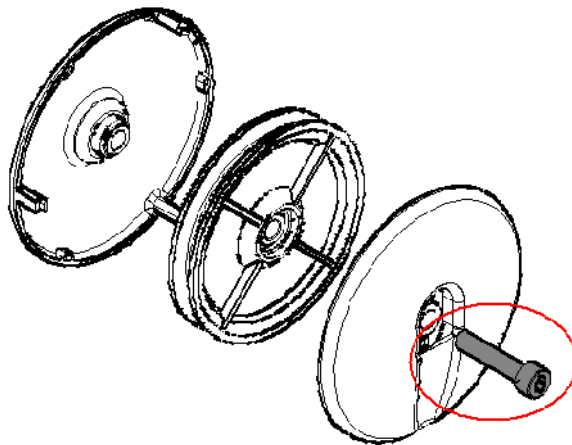


Figure 7.2-1

Use a torque wrench to ensure that the screws are locked down with the prescribed torque of **50 Nm / 36.9 ft.lbs.**

8. WEIGHT STACK CABLE

8.1. LENGTH OF THE WEIGHT STACK CABLE

Code	Machine	Standard weight stack		Enhanced weight stack	
		code	length (cm)	code	length (cm)
D6946	Upper Back	0V634 ⁽¹⁾	579	0V634 ⁽¹⁾	557
D6950	Rotary Torso	0R000059	285	0R000059	275
D6951	Leg Press	0R000018	665	0R000018	643
		0R000008	217	0R000008	217
D6957	Abdominal Crunch	0V638	236	0V638	226
D6958	Lower Back	0V638	247	0V638	237
D6971	Vertical Traction	0V634 ⁽¹⁾	613	0V634 ⁽¹⁾	591
D6980	Low Row	0V634 ⁽¹⁾	728	0V634 ⁽¹⁾	708
D6990	Leg Curl	0V646	188	0V646	178
D6991	Leg Extension	0V646	204	0V646	194

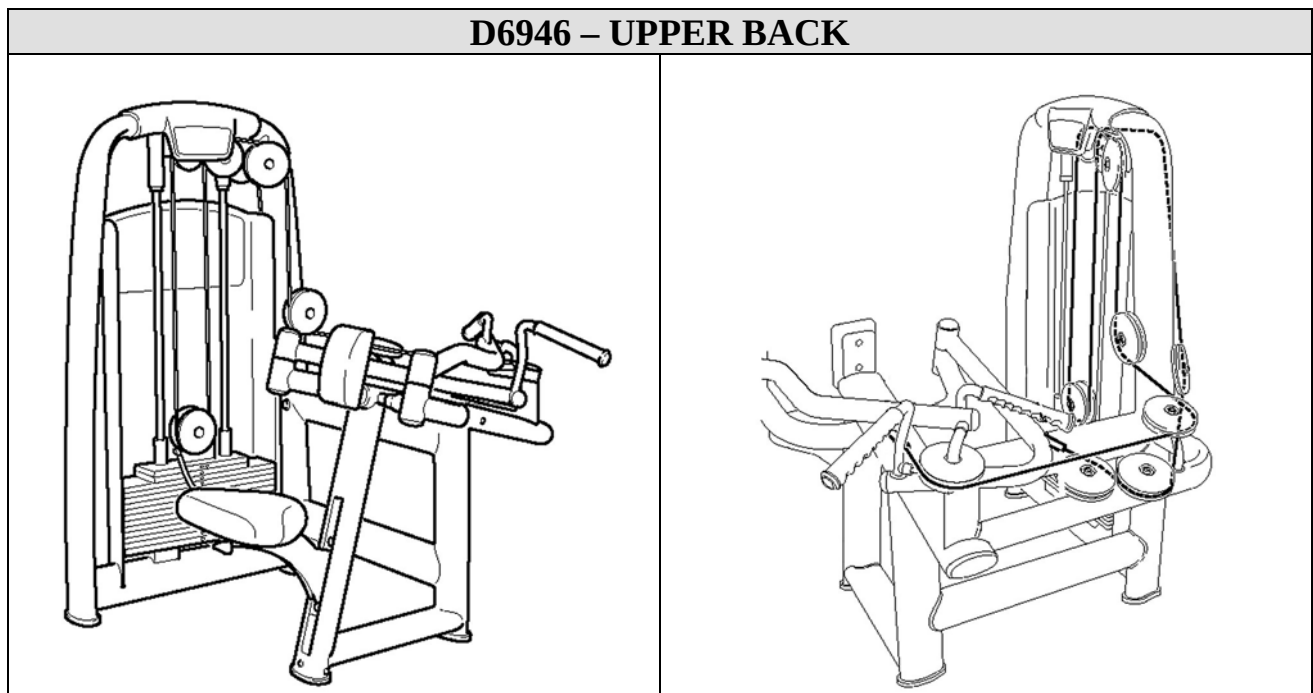
CAUTION:

(1) You must indicate the length when ordering this cable.

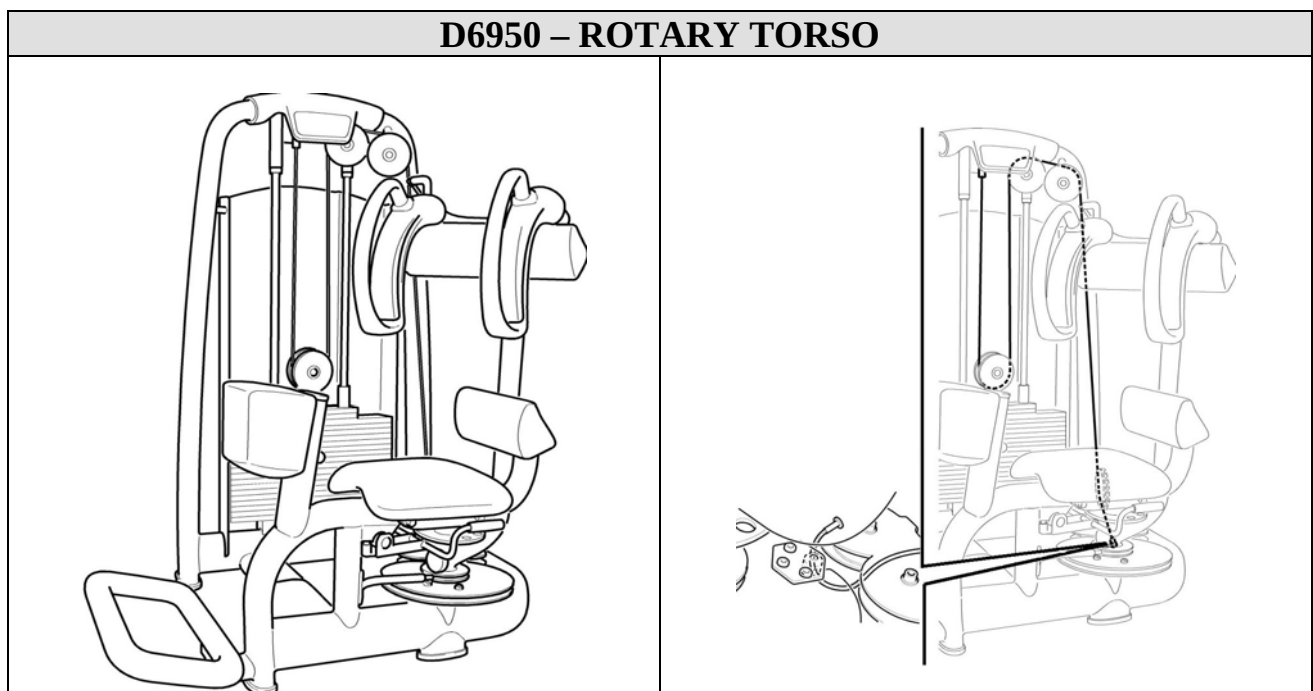
8.2. ROUTING OF THE WEIGHT STACK CABLE

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.

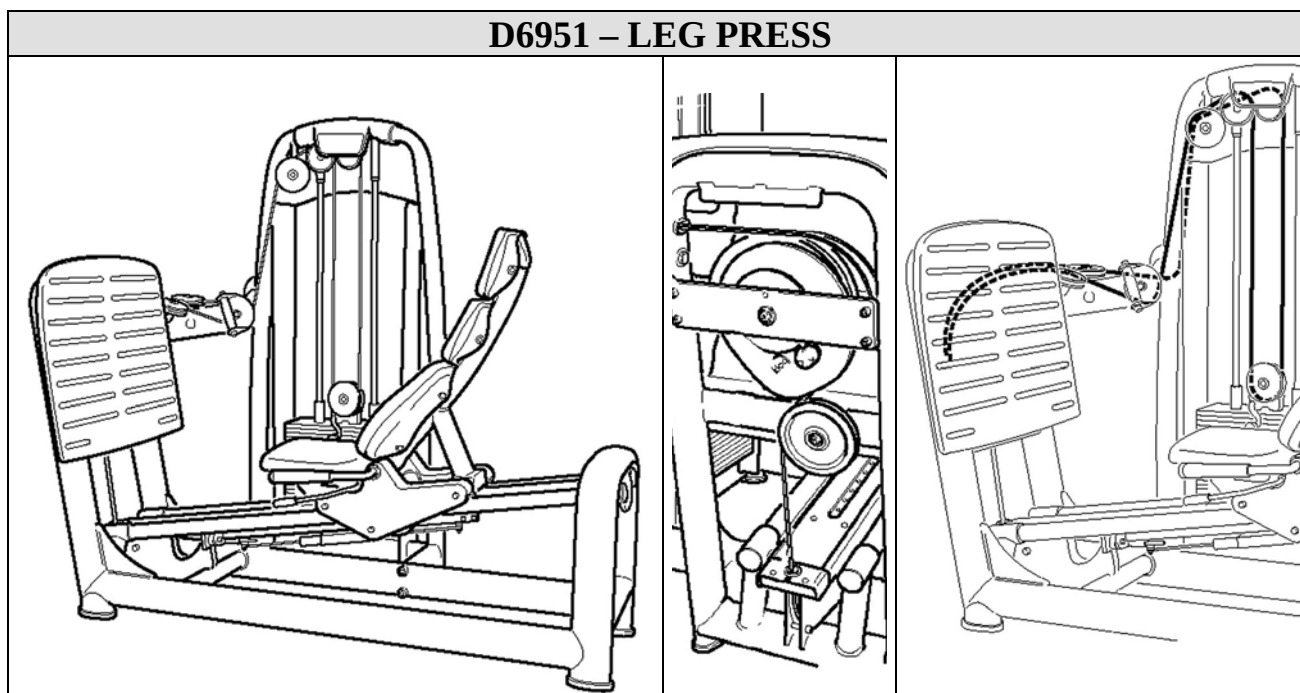
8.2.1. D6946 – UPPER BACK



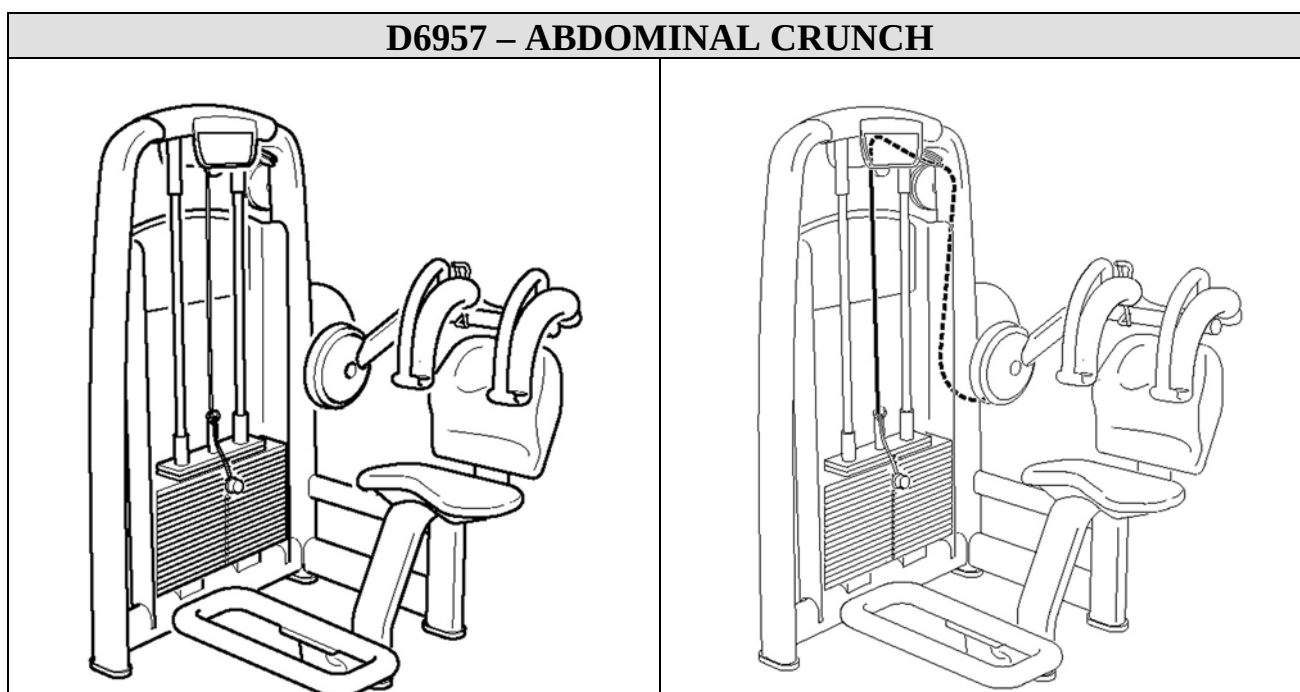
8.2.2. D6950 – ROTARY TORSO



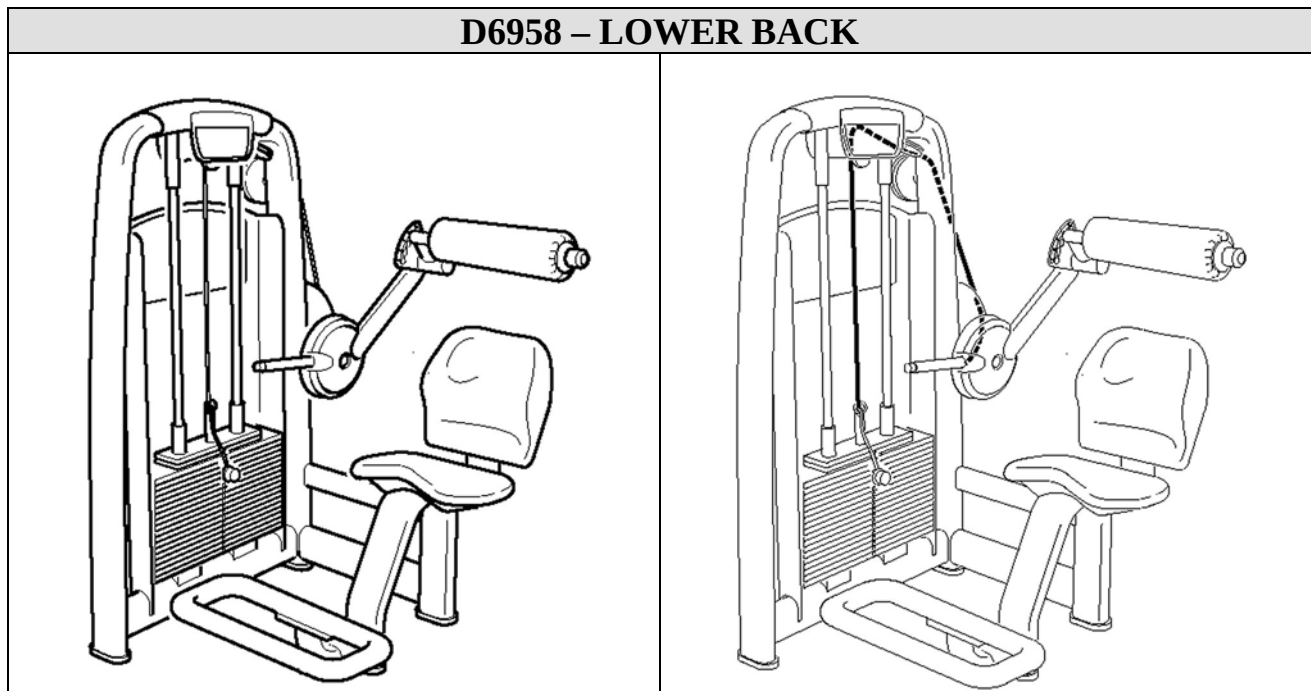
8.2.3. D6951 – LEG PRESS



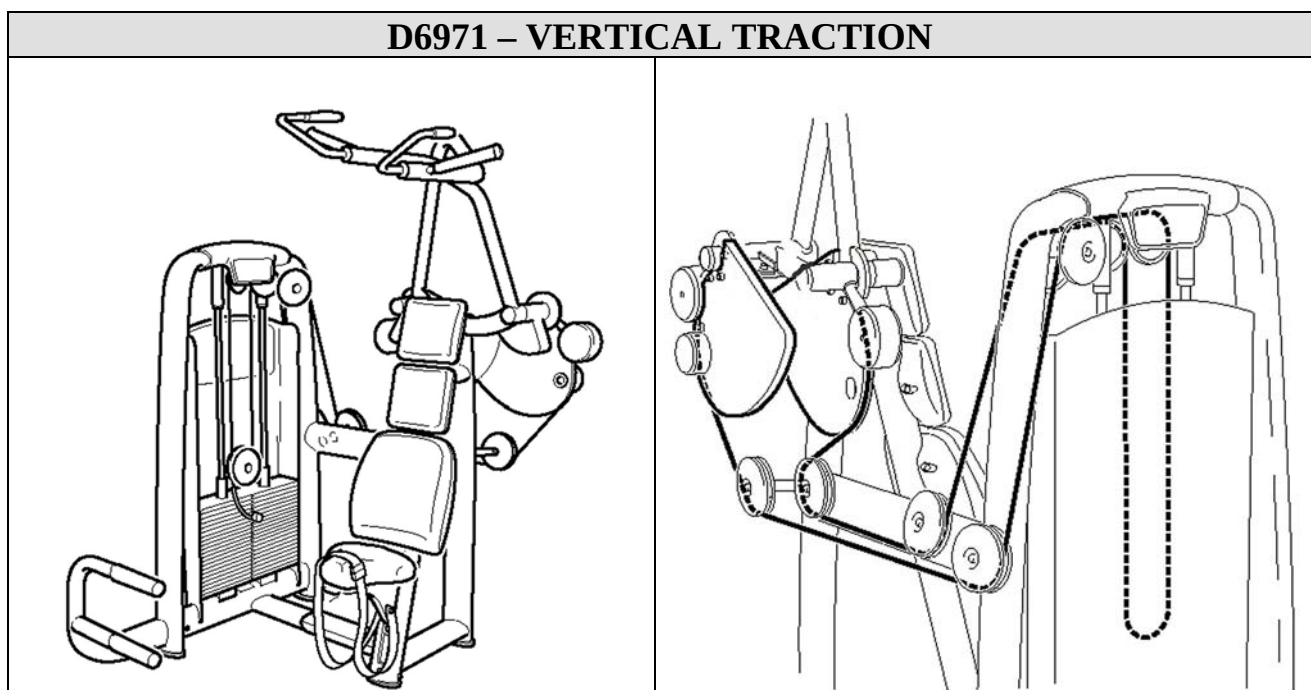
8.2.4. D6957 – ABDOMINAL CRUNCH



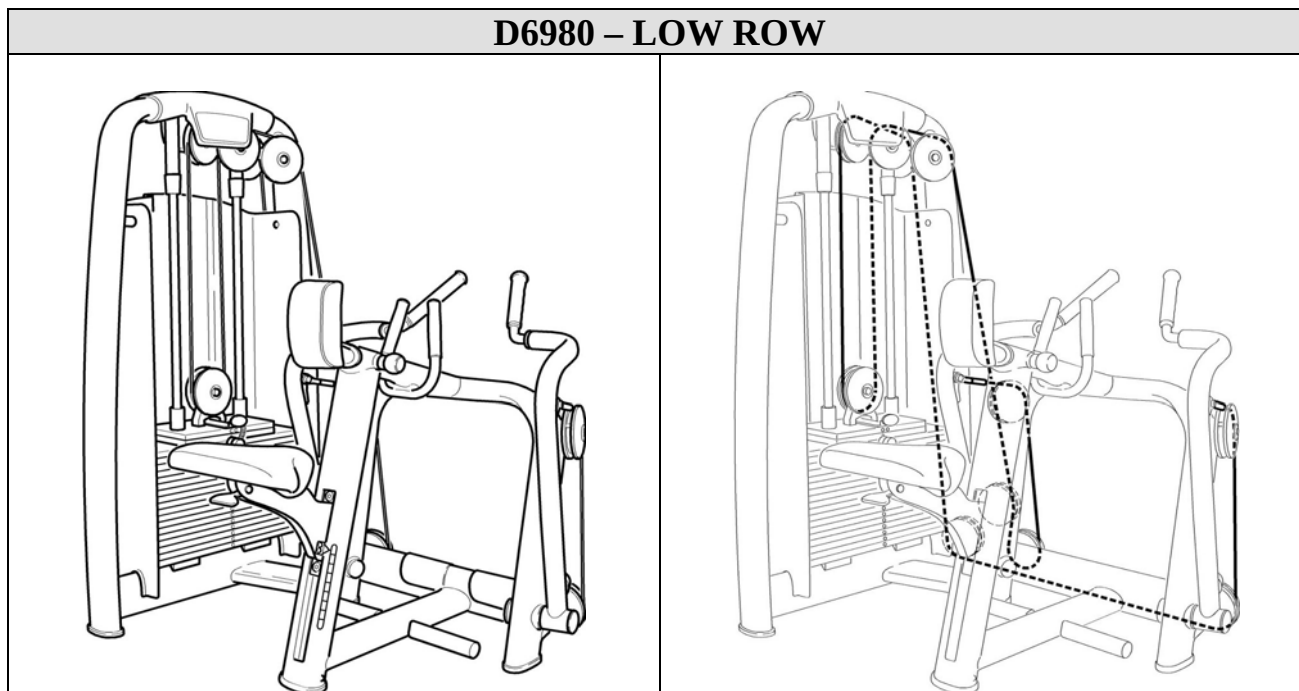
8.2.5. D6958 – LOWER BACK



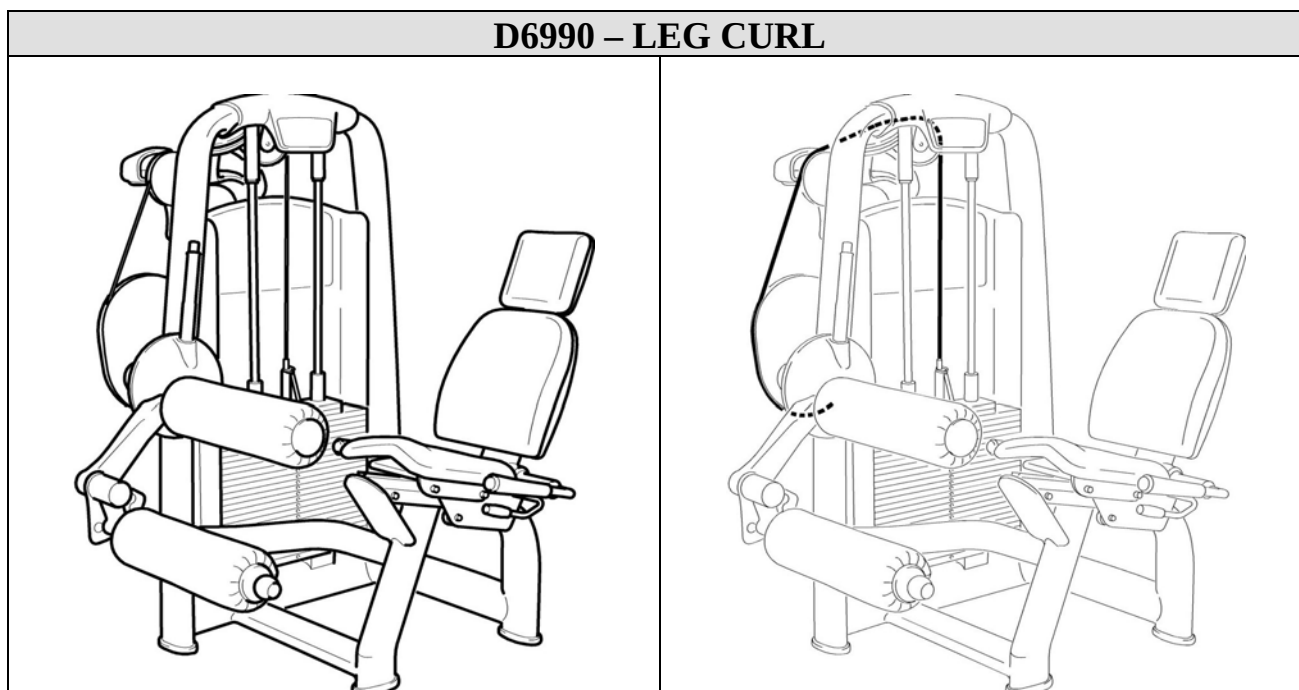
8.2.6. D6971 – VERTICAL TRACTION



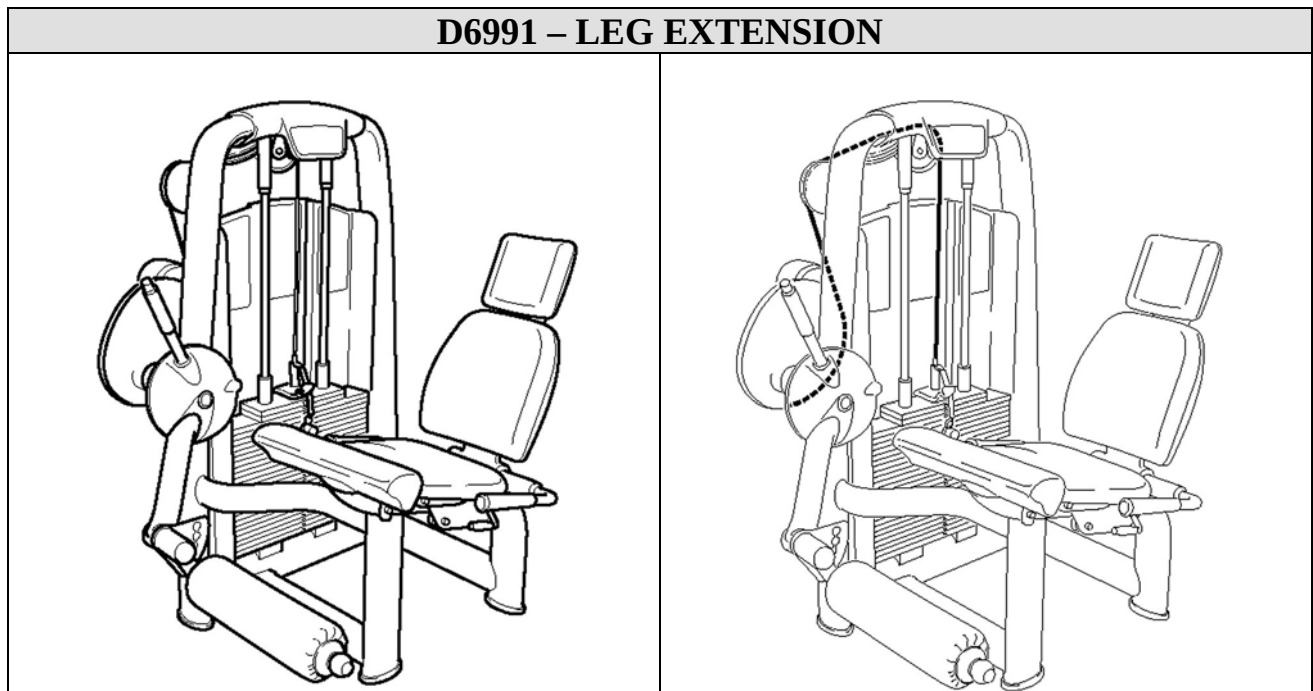
8.2.7. D6980 – Low Row



8.2.8. D6990 – LEG CURL



8.2.9. D6991 – LEG EXTENSION



9. MAINTENANCE

To keep the machine in perfect working order and forestall possible problems it is necessary to carry out the scheduled maintenance operations described below. The maintenance operations can essentially be classified according to the frequency with which they need to be performed:

- Daily maintenance operations;
- Weekly maintenance operations;
- Monthly maintenance operations;
- Twice yearly maintenance operations.

The operations require different levels of operator qualification. The following paragraphs describe the recommended procedures.

9.1. DAILY MAINTENANCE OPERATIONS



These operations can be carried out by the machine owner and do not require any special skills.

The **daily** machine maintenance consists of simple external cleaning, for the purposes of general hygiene.

For the daily maintenance of the machine, proceed as follows:

9.1.1. CLEANING UPHOLSTERY

1. We recommend that you perform this operation daily.
2. Clean the upholstery of the machine using a cloth moistened with Clean Well.



CAUTION: do not use alcohol, benzene, or chemical products in general.

3. We recommend drying the upholstery after cleaning.

9.2. WEEKLY MAINTENANCE OPERATIONS



These operations can be carried out by the machine owner and do not require any special skills.

The **weekly** machine maintenance operations consists of simple cleaning, lubrication and checking the emergency stop to ensure the correct and safe functioning of the machine.

For the weekly maintenance operations, proceed as follows:

9.2.1. CLEANING THE FRAME AND PAINTED PARTS

1. Clean the frame and painted parts of the machine using a cloth moistened with Clean Well.



CAUTION: do not use alcohol, benzene, or chemical products in general.

9.2.2. CLEANING THE CHROME-PLATED PARTS



Do not carry out this test on the sliding bars of the weight stack.

1. Use a paper towel slightly dampened with ethyl alcohol to clean the chrome-plated parts of the machine, removing dust and grime.



CAUTION: remove any surface rust spots with a metal scrubber.

2. If you expect the machines to remain unused for an extended period of time, we recommend protecting the chrome-plated parts with a layer of liquid petroleum jelly applied to the surface. Once you start using them again, clean the chrome-plated parts with a paper towel slightly moistened with ethyl alcohol.

9.3. MONTHLY MAINTENANCE OPERATIONS



These operations can be carried out by the machine owner and do not require any special skills.

The **monthly** machine maintenance operations consists of simple cleaning, lubrication and checking the state of wear to ensure the correct and safe functioning of the machine.

For the monthly maintenance of the machine, proceed as follows:

9.3.1. CHECK THE CROSS, BARS AND WEIGHT STACK PLATES

1. Check the wear status of the cross bushings and weight stack plates. Repair and/or replace any worn parts.
2. Check the wear status of the chrome plating of the weight stack bars. Repair and/or replace any worn parts.
3. Check the wear status of the weight stack bars and weight stack support stops. Repair and/or replace any worn parts.
4. Make sure the weight stack bars are firmly fastened. Repair and/or replace any worn parts.
5. Use a paper towel slightly dampened with ethyl alcohol to clean the weight stack bars of the machine, removing dust and grime.



CAUTION: remove any surface rust spots with a metal scrubber.

6. Lubricate the bars and bushings of the plates and cross using the oil found in the service box.
7. Check the adhesive label indicating the load corresponding to the weight stack plates. Replace any worn parts.

9.3.2. CHECK THE CABLES

1. Check the wear status of the machine cables, paying special attention to any hardened spots or cracks in the protective plastic of the cable. Replace any worn parts.
2. Check the passage of the machine cables through cams, pulleys and/or the terminals connected to ball joints.
3. Lubricate ball joints with the oil found in the box service.
4. Check the tension of the machine cables.

9.3.3. CHECK THE MECHANISMS

1. Check the wear status of the machine mechanisms: lever arms, shafts, lever systems. Repair and/or replace any worn parts.
2. Lubricate the mechanisms using MOLYKOTE LONGTERM W 2.

9.3.4. CHECK THE GAS SPRINGS

1. Check the efficiency of the gas spring, making sure it sufficiently cushions the stem return to its outward position.
2. Clean the stem using a dry cloth.



CAUTION: do NOT lubricate the gas spring stem for any reason.

9.3.5. CHECK THE WEIGHT STACK STOPS

1. Check the wear status of the stops. Repair and/or replace any worn parts.
2. Check the position of the stops and make sure they are firmly fastened in place.

9.3.6. CHECK THE LEG PRESS SEAT MECHANISM

1. Check the wear status of the support bars and seat pulleys. Repair and/or replace any worn parts.
2. Clean the seat support bars using alcohol.



CAUTION: lubricate the support bars with silicon oil.

9.3.7. CHECKING THE SEAT MECHANISM ON LOW MACHINES

 **Perform this check on the Leg Extension, Leg Curl.**

1. Check the wear status of the pulleys, support bars and seat guide. Repair and/or replace any worn parts.
2. Clean the seat support guide bars using alcohol.
3. Lubricate the seat support guide bars using the oil found in the box service.

9.3.8. CHECKING THE SEAT MECHANISM ON TALL MACHINES

 **Perform this check on the Low Row, Upper Back, Vertical Traction.**

1. Check the wear status of the seat guide pulleys. Repair and/or replace any worn parts.
2. Clean the seat guide pulleys using alcohol.
3. Lubricate the seat support guide bars using the oil found in the box service.

9.3.9. CHECKING THE UPHOLSTERY

1. Check the wear status of the upholstery. Replace any worn parts.

9.3.10. CHECKING VARIOUS RUBBER PARTS



These operations apply to handles, knobs, mats, frame guards, bell covers, Selection top, feet ...

1. Check the wear status of the rubber parts used on the machine. Repair and/or replace any worn parts.

9.4. TWICE-YEARLY MAINTENANCE OPERATIONS



These operations can only be carried out by a qualified technician specifically trained by Technogym and authorized to carry out machine installation and adjustments, as well as special maintenance operations or repairs which require special knowledge of the machine, its operation, safety systems and working procedures.

The **six-monthly** maintenance operations involve checking the functioning, wear and tension of the mechanical components so as to ensure the correct and safe operation of the machine.

For the six-monthly maintenance of the machine, proceed as follows:

9.4.1. CHECKING THE ADDITIONAL WEIGHT

1. Make sure the additional weight slides smoothly. Repair and/or replace any worn parts.
2. Lubricate the sliding tracks using MOLYKOTE LONGTERM W 2.

9.4.2. CHECK THE PULLEYS

1. Check the wear status of the pulley grooves. Repair and/or replace any worn parts.

9.4.3. CHECK THE CAM GROUP

1. Check the wear status of the cam grooves. Repair and/or replace any worn parts.
2. Make sure all parts in the cam group are firmly tightened.

9.4.4. CHECK THE LEVER STOPS

1. Check the wear status of the lever stops. Repair and/or replace any worn parts.
2. Check the position of the stops and make sure they are firmly fastened in place.

9.4.5. REPLACING THE CABLES

1. Replace the machine cables once a year if the machines are used intensively, every 2 years under normal use.

9.4.6. LUBRICATING THE RELEASE SYSTEMS



Perform this check on:

- **Chest pad upholstery support on Upper Back;**
- **Roller position adjustment on Leg Extension, Leg Curl and Lower Back.**

1. On Leg Extension, Leg Curl and Lower Back disassemble the rubber bell guard and lubricate the start position selection pin using MOLYKOTE LONGTERM W 2.
2. On Upper back, lubricate the chest rest setting pin using MOLYKOTE LONGTERM W 2.

9.4.7. SCREW AND BOLT CHECK

1. Make sure that the screws and bolts are firmly tightened, especially in the weight stack and seat adjustment areas, and around moving parts in general. Tighten any that are loose.

9.4.8. CHECKING FOR MECHANISM PLAY

1. Make sure that the machine mechanisms (lever arms, shafts, starting position adjustments, leverages) have no play. Repair and/or replace any worn parts.

9.4.9. CHECKING CROSS ALIGNMENT

1. Do not select any weight, and lift the cross. Make sure that the selector rod is properly centred over the plate hole, and that all plates in the weight stack may be selected without any strain by the selection knob. Force it to the centre by hand.

10. FUNCTIONAL TESTS

Every time maintenance and/or repairs are performed on a machine, it is necessary to carry out a series of mechanical tests to ensure:

- that the medical device is working properly;
- that the medical device is working safely;
- that the exercises are performed according to the biomedical specifications for which the medical device was designed.

10.1. WEIGHT STACK CABLE ASSEMBLY TEST

Make sure the weight stack cable is properly assembled, ensuring that:

- all grub screws of the cable clamp pins have been firmly tightened, selecting the maximum load and performing one or two repetitions;
- all pulleys on which the cable slides have been fastened correctly, by selecting the weight stack plate n°10 with the doubling lever in position 2 and performing about ten repetitions, making sure that the various pulleys do not make any unusual noises;
- the cable is properly mounted, passing it through all of the pulleys in the correct order, by selecting the weight stack plate n°10 with the doubling lever in position 2 and performing about ten repetitions, making sure it moves smoothly and silently.
- That the tension and length of the cable have been properly adjusted according to the procedures illustrated in chapter 8 of this manual.

10.2. HOUSING ASSEMBLY TEST

Make sure the machine housing is properly assembled, checking that all guards have been mounted correctly, as described in the procedures in chapter 7 of this manual, so that no part of the machine remains unprotected and a possible cause of user accident and injury.

10.3. MECHANICAL RESISTANCE DEVICE ASSEMBLY TEST

Make sure the mechanical resistance devices are properly assembled, such as:

- Weight stack: make sure that all plates in the weight stack may be selected using the pin, and perform around ten repetitions by selecting the weight stack plate n°10 with the doubling lever in position 2;
- Rubber bands: make sure that the rubber bands may be included and excluded without problems, using the 4 knobs on the front of the machine.

Incorrect assembly or adjustment of the various devices could lead to user accidents and injury, or cause non-compliance with the biomedical specifications of the machine when used.

10.4. SEAT GROUP ASSEMBLY TEST

Make sure the machine seat group is properly assembled, checking that has been mounted correctly, as described in the procedures in chapter 7 of this manual, ensuring that:

- no part of the machine remains unprotected and a possible cause of user accident and injury;
- the seat group moves smoothly and silently;
- it's possible to select all the available adjusting position.

Incorrect assembly or adjustment of the device could lead to user accidents and injury, or cause non-compliance with the biomedical specifications of the machine when used.

11. APPENDIX

11.1. WHAT TO ORDER TO AUGMENT THE WEIGHT STACK

Codes Machines	Weight stack		Parts to power the weight stack	Assembly code
	Std	Powered		
D6890 Leg Curl D6891 Leg Extension	95 kg	125 kg	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-KG x 1 sticker 0P2011 x 1 selector rod	A0000176AA-KG
	190 lbs	250 lbs	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-LB x 1 sticker 0P2011 x 1 selector rod	A0000176AA-LB
D6950 Rotary Torso	65 kg	95 kg	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-KG x 1 sticker 0P2013 x 1 selector rod	A0000184AA-KG
	130 lbs	190 lbs	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-LB x 1 sticker 0P2013 x 1 selector rod	A0000184AA-LB
D6951 Leg Press	190 kg	250 kg	0F000057-GG x 6 weight 0B159 x 12 bushing 0V2236 x 12 shock absorber ⁽¹⁾ 0E000017-KG x 1 sticker 0P2012 x 1 selector rod	A0000180AA-KG
	380 lbs	500 lbs	0F000057-GG x 6 weight 0B159 x 12 bushing 0V2236 x12 shock absorber ⁽¹⁾ 0E000017-LB x 1 sticker 0P2012 x 1 selector rod	A0000180AA-LB
D6957 Abdominal Crunch D6958 Lower Back	65 kg	95 kg	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-KG x 1 sticker 0P2013 x 1 selector rod	A0000187AA-KG
	130 lbs	190 lbs	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-LB x 1 sticker 0P2013 x 1 selector rod	A0000187AA-LB

Codes Machines	Weight stack		Parts to power the weight stack	Assembly code
	Std	Powered		
D6971 Vertical Traction	100 kg	130 kg	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-KG x 1 sticker 0P2010 x 1 selector rod	A0000190AA-KG
	200 lbs	260 lbs	0F141AA-GG x 6 weight 0B178AA ⁽²⁾ x 12 bushing 0E000018-LB x 1 sticker 0P2010 x 1 selector rod	A0000190AA-LB
D6980 Low Row	95 kg	130 kg	0F141AA-GG x 7 weight 0B178AA ⁽²⁾ x 12 bushing 0P000137 x 1 selector rod 0E000018-KG x 1 sticker	A0000191AA-KG
	190 lbs	260 lbs	0F141AA-GG x 7 weight 0B178AA ⁽²⁾ x 12 bushing 0P000137 x 1 selector rod 0E000018-LB x 1 sticker	A0000191AA-LB

CAUTION:

⁽¹⁾ Are available shock absorber of different thickness, as follows:

CODE	THICKNESS (mm)
0V2236	17.8
0V2254	17.2
0V2255	17.5
0V2256	18.1
0V2257	18.4

⁽²⁾ 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

11.2. UPHOLSTERY

CODE	MACHINE	UPHOLSTERY		
		CODE	DESCRIPTION	QUANTITY
D6946	UPPER BACK	0I000001-R	Chest rest	1
		0I082AA-R	Seat	1
D6951	LEG PRESS	0I000311AA-R	Head rest	1
		0I197-R	Head rest	1
		0I080-R	Seat	1
		0I081-R	Back rest	1
D6950	ROTARY TORSO	0I080-R	Seat	1
		0I000297AA-R	Back rest	1
		0I000214-GG	Knee rest	1
		0I000264AA-R	Shoulder rest	1
D6957	ABDOMINAL CRUNCH	0I080-R	Seat	1
		0I000308AA-R	Back rest	1
		0I000338AA-R	Roller	1
		0I000339AA-R	Shoulder rest	2
D6958	LOWER BACK	0I069-R	Roller	1
		0I080-R	Seat	1
		0I000308AA-R	Back rest	1
D6971	VERTICAL TRACTION	0I000311AA-R	Head rest	1
		0I197-R	Head rest	1
		0I081-R	Back rest	1
		0I082AA-R	Seat	1
D6980	LOW ROW	0I000001-R	Chest rest	1
		0I082AA-R	Seat	1
D6990	LEG CURL	0I000311AA-R	Head rest	1
		0I080-R	Seat	1
		0I081-R	Back rest	1
		0I069-R	Roller	2
D6991	LEG EXTENSION	0I000311AA-R	Head rest	1
		0I000303AA-R	Seat	1
		0I081-R	Back rest	1
		0I069-R	Roller	1
		0I000181-R	Knee rest	1
		0I000226-R	Knee rest protection	1
D6P915	CRUNCH BENCH	0I000312AA-R	Pad	1
		0I081-R	Back rest	2
		0I030AB-R	Roller	4
D6P920	ADJUSTABLE BENCH	0I000312AA-R	Pad	1
		0I000184-R	Pad	1
		0I081-R	Back rest	1
		0I000222AA-R	Seat	1

11.3. TOOLS TO USE

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

- Medium-sized Philips screwdriver;
- 6.5-gauge wrench;
- 8-gauge wrench;
- 13-gauge wrench;
- 14-gauge wrench;
- 17-gauge wrench;
- 22-gauge wrench;
- 2.5-gauge hexagonal T-wrench;
- 4-gauge hexagonal T-wrench;
- 5-gauge hexagonal T-wrench;
- 6-gauge hexagonal T-wrench (to use only for the floor fastening kit);
- 8-gauge hexagonal T-wrench;
- 14-gauge hexagonal T-wrench 14 (only for Leg Press bars and Abdominal and Lower Back foot board);
- 4-gauge hexagonal L-wrench;
- Special socket wrench provided by Technogym for Ø 17 ring-nut fitting $\frac{1}{2}$ (code 0Y000061);
- Special socket wrench provided by Technogym for Ø 25 ring-nut fitting $\frac{1}{2}$ (code 0Y000062);
- 45-gauge hook wrench (only for side pin machines) (code 0Y000092);
- 6-mm pointed tool;
- Torque wrench;
- Hammer.

 **CAUTION: Tool measurements are expressed in mm.**



TECHNOGYM S.p.A.

Via G. Perticari, 20

47035 Gambettola (FC)

ITALIA

Tel.: +39 - 0547 650638

Fax: +39 - 0547 650150

e-mail: service@technogym.com