

SPIRIT



SP-4309 Abdominal

OWNER'S MANUAL

Please carefully read this entire manual before operating your new strength equipment.

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Introduction

This manual will acquaint you with the assembly, operation and maintenance of your strength equipment.

SPIRIT Series – **SP4309 Abdominal** manufactured by Spirit Fitness®

Be sure to read and follow the information and instructions before assembling, using or servicing SPIRIT strength equipment.

Manufacturer

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If any items need replacement contact the Spirit Fitness Customer Support Department. For international customers, please contact your local distributor.

IMPORTANT SAFETY INSTRUCTIONS

Read the Owner's Manual carefully before assembling, servicing or using the equipment. It is the responsibility of the facility owner and/or owner of the equipment to instruct users on proper operation of the equipment and review all labels.

WARNING: Serious injury could occur if these safety precautions are not observed:

USER SAFETY PRECAUTIONS

- Obtain a medical exam before beginning any exercise program.
- Stop exercising if feeling faint, dizzy or experiencing pain and consult your physician.
- Obtain instructions before using.
- Read and understand the owner's manual and all warnings posted on the machine before using.
- Keep all children (12 and under) away. Teenagers (13 and over) and disabled must be supervised.
- Keep body and clothing free from and clear of all moving parts.
- Use the machine only for the intended use. DO NOT modify the machine.
- Inspect machine prior to use. DO NOT use if it appears damaged or inoperable.
- Inspect all cables and connections prior to use. DO NOT use if any components are worn, frayed or damaged.
- DO NOT attempt to fix a broken or jammed machine. Notify floor staff.
- DO NOT use if guards are missing or damaged.
- Be sure that the weight pin is completely inserted. Use only the pin provided by the manufacturer. If unsure seek assistance.
- Never pin the weights in an elevated position. DO NOT use this machine if found in this condition. Seek assistance from floor staff.
- DO NOT use dumbbells or other incremental weights, except those provided by the manufacturer.
- Report any malfunctions, damage or repairs to the facility.
- Replace any warning labels if damaged, worn or illegible.
- DO NOT use this machine outdoors.

FACILITY SAFETY PRECAUTIONS

- Read the Owner's Manual carefully before assembling, servicing or using the equipment.
- Make sure that each machine is set up and operated on a solid level surface.
- Make sure that all users are properly trained on how to use the equipment.
- Make sure there is enough room for safe access and operation of the equipment.
- Perform regular maintenance checks on the equipment. Also pay close attention to all areas most susceptible to wear, including (but not limited to) cables, pulleys, belts and grips.
- Immediately replace worn or damaged components. If unable to immediately replace worn or damaged components then remove from service until the repair is made.
- Use only Spirit Fitness supplied components to maintain/repair the equipment.
- Keep a repair log of all maintenance activities.
- Inspect all cables and belts and connections prior to use. DO NOT use if any components are worn, frayed or damaged.

NOTE: It is the sole responsibility of the user/owner or facility operator to ensure that regular maintenance is performed.

PRECAUTIONS

These safety notes are directed to you as the owner of the Strength Equipment manufactured by Spirit Fitness. Please train all your users and fitness staff to follow these safety instructions.

DO

- Do encourage each of your users to discuss their health program or fitness regimen with a healthcare professional.
- Do stop operating your Strength Equipment if you feel dizzy or faint.
- Do perform regular preventative maintenance.
- Do exercise slowly until you reach a level of comfort.

DO NOT

- Do not let unsupervised children operate the Strength Equipment.
- Do not use without proper athletic shoes.
- Do not use in rainy weather outdoors, or in an enclosed pool environment.
- Do not drop or insert any object, hands, or feet into any opening or within the area of the product.
- Do not attempt to remove any shrouds or modify the Strength Equipment.

WARNING

- Your Strength Equipment manufactured by Spirit Fitness is designed for the exercise in a commercial or consumer environment.
- Please check with your physician prior to beginning any exercise program.
- Do not push yourself to excess. Stop if you are feeling faint, dizzy, or exhausted. Use common sense during workout.
- Read the owner's manual in its entirety before operating the Strength Equipment.
- Failure to obey this warning can result in injury or death.

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SECURING EQUIPMENT

The machine has holes in the feet, which allow for ease in anchoring to the floor. Spirit Fitness strongly recommends that to eliminate rocking, tipping or falling over due to incorrect usage and misuse, equipment be secured to a solid, level surface.

The solid, level surface should not deviate more than 1/8" over a 10' distance or as defined and required by local building and architectural codes.

Anchoring of equipment must be completed by a qualified licensed contractor.

Anchoring holes are provided on the feet of the frame. All anchoring locations must be used when anchoring the equipment to the floor.

Due to the wide variation of flooring on which machines may be anchored or installed, verify anchoring method and anchoring fasteners with a qualified and licensed contractor.

All anchor points must be able to withstand 750 lbs. (3.3 kN) pull-out force.

Do not use machine until it is properly anchored.

SAFETY GUIDELINES AND PRACTICES

Spirit Fitness recommends that all fitness equipment be used in a supervised area. It is recommended that the equipment be located in an access controlled area. Control is the responsibility of the owner. The extent of control is at the discretion of the owner.

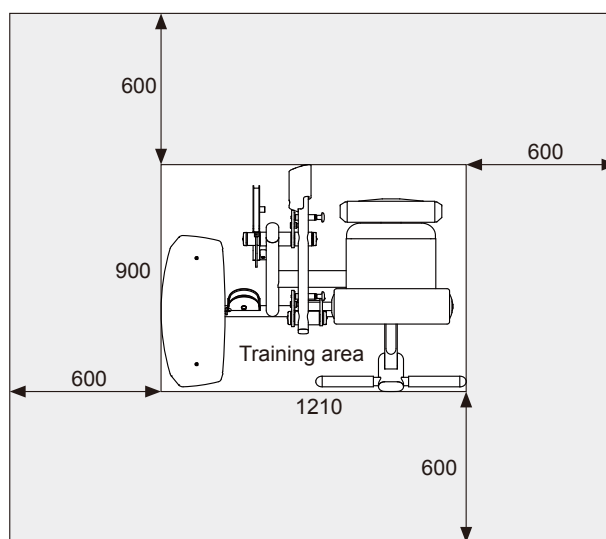
It is the responsibility of the purchaser/user of Spirit Fitness products to read and understand the owner's manual, and warning labels; as well as instruct all individuals, whether end users or supervising personnel, on proper usage of the equipment.

PROPER USAGE

- Use machine only as described in the manual. Failing to follow proper instructions may result in injury.
- Do not lean against or pull on the framework or any component, whether machine is at rest or in use. Inappropriate or improper use may result in injury to users or third parties (bystanders).
- Do not use machine if it is not located on a solid level surface or is improperly installed.
- Provide an adequate safety perimeter between the machine, walls and other equipment to ensure that the facility has the proper clearance for usage and training.

Live area and Training area

The live area shall be not less than 600mm (23.62") greater than the training area in the directions from which the equipment is accessed. The live area must also include the area for emergency dismount.



California Prop 65 Warning



WARNING: This product can expose you to chemicals including Toluene and Acrylamide, which are known to the State of California to cause cancer and birth defects or other reproductive harm.
For more information go to www.P65Warnings.ca.gov.

Warning Labels and Communication Stickers

The following pages show examples of Spirit® Fitness warning labels and communication stickers placed on the equipment as part of the manufacturing process. It is critical that owners maintain the integrity and placement of these stickers. If you find any stickers missing or damaged contact your local dealer or distributor for a replacement.

If any instructions or information are not clear, and please contact to SPIRIT FITNESS customer service right away.

NOTE: STICKERS AND LABELS ARE NOT SHOWN TO SCALE



SAFEGUARDS

The following fitness safeguards and operating precautions are directed to purchasers and users of the Strength Equipment. Club Managers should ensure that members and fitness staff are trained to follow these same instructions. Failure to follow these safeguards may result in injury or serious health risk.

Proper Usage

- DO NOT use any equipment in any way other than designed or intended by the manufacturer. It is imperative that SPIRIT FITNESS equipment is used properly to avoid injury.
- Injuries may result if exercising improperly or excessively. It is recommended that all individuals consult a physician prior to commencing an exercise program. If at any time during exercise you feel faint, dizzy or experience pain, STOP EXERCISING and consult your physician.
- Keep body parts (hands, feet, hair, etc.), clothing and jewelry away from moving parts to avoid injury.
- Follow instructions provided in this manual for correct foot position and basic techniques.
- The maximum weight for individuals using the Strength Equipment should not exceed 330 pounds (150 kilograms).

Inspection

- DO NOT use or permit use of any equipment that is damaged and/or has worn or broken parts. For all SPIRIT FITNESS equipment use only replacement parts supplied by SPIRIT FITNESS.
- Cables and belts pose an extreme liability if used when frayed. Always replace any cable or belt at first sign of wear (consult SPIRIT FITNESS if uncertain).
- EQUIPMENT MAINTENANCE - Preventative maintenance is the key to smooth operating equipment as well as to keep your liability to a minimum. Equipment needs to be inspected at regular intervals.
- Ensure that any person(s) making adjustments or performing maintenance or repair of any kind is qualified to do so.
- DO NOT ATTEMPT TO USE OR REPAIR ANY ACCESSORY APPROVED FOR USE WITH THE SPIRIT FITNESS EQUIPMENT WHICH APPEARS TO BE DAMAGED OR WORN.
- Check all belts, pulleys and bungee cords regularly for signs of wear, and replace if needed.
- Check regularly and follow all instructions for maintenance as specified in this manual.
- Replace immediately any defective parts and do not operate unit until all repairs are complete.

Operating Warnings

- Keep children away from the equipment. Parents or others supervising children must provide close supervision of children if the equipment is used in the presence of children.
- Do not allow users to wear loose fitting clothing or jewelry while using equipment. It is also recommended to have users' secure long hair back and up to avoid contact with moving parts.
- All bystanders must stay clear of all users, moving parts and attached accessories and components while machine is in operation.

Note: This Strength Equipment is not suitable for therapeutic purposes.

Assembly & Setup

Use the following procedures to unpack and assemble your **Strength Equipment manufactured by Spirit Fitness**.

Unpacking & Parts

1. Position the shipping carton so the Heavy End is located at the bottom.
2. Cut the straps then lift the box over the unit and unpack. Remove all parts from the shipping carton and foam inserts, and verify that all parts are included in your shipment:
3. Locate the hardware package. The hardware is separated into four steps. Remove the tools first. Remove the hardware for each step as needed to avoid confusion. The numbers in the instructions that are in parenthesis (#) are the item number from the assembly drawing for reference.

NOTE: All tools required to assemble the Strength Equipment are included within the packaging.

Take time now to enter your Strength Equipment serial number in the space below.
(Serial number is located on the center tube, see page 17).

Serial No. _____

NOTE: If you are missing any of the parts listed above, inspect the packing material and the box for items that may have been overlooked.

If parts are missing, or if you have any operational questions, please call your local Spirit Fitness's Service department or the distributor whom sold you the product. Please see page 3 for a listing of international corporate offices and locate the office nearest you. Have your serial number ready.

CAUTION: Damage to the Strength Equipment during assembly is not covered as part of the limited Spirit Fitness warranty. Take care not to drop or lean the Strength Equipment on its side. Carefully stand the Strength Equipment up in the normal upright position on a stable surface so it will not tip over during assembly.

Protect the environment by not disposing of this product with household waste. Check your local authority or approved waste center for recycling advice and facilities.

Product Specifications

Maximum Training Weight	180 kgs / 360 lbs
Products Weight	216 kgs / 476 lbs
Overall Dimensions	900*1210*1500

Parts List

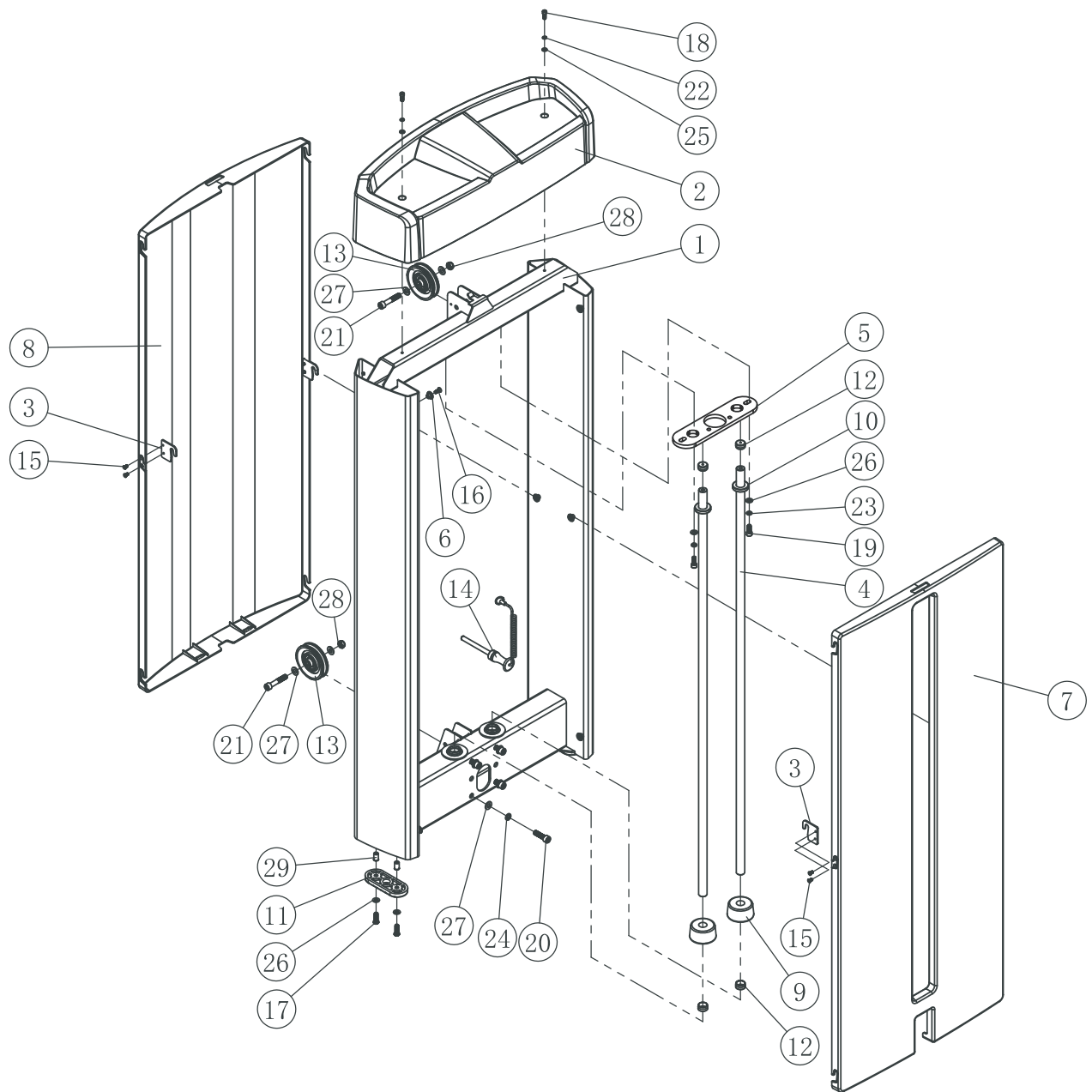
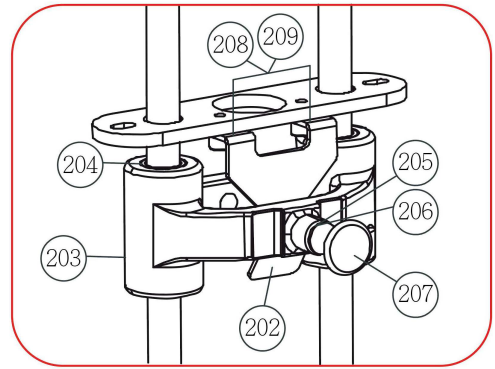
No.	Description	Spec	Qty	Part No.
001	Doorframe		1	SP-4309-001
002	Upper shield		1	SP-4309-002
003	Shield fixed plate		4	SP-4309-003
004	Guide rod		2	SP-4309-004
005	Guide rod fixed plate		1	SP-4309-005
006	Fixed bushing		12	SP-4309-006
007	Front shield		1	SP-4309-007
008	Back shield		1	SP-4309-008
009	Rubber bumper	φ64*φ32*φ20*35	2	SP-4309-009
010	Rubber bumper	φ38*φ21*10	2	SP-4309-010
011	Floor cushion		2	SP-4309-011
012	Rod end cover		4	SP-4309-012
013	Pulley sets	φ89*32	2	SP-4309-013
014	Selector pin		1	SP-4309-014
015	Cross recessed countersunk head screw	M5*10	8	SP-4309-015
016	Countersunk head hexagon socket screw	M6*16	12	SP-4309-016
017	Inner Hexagon Mushroom Head Bolt	M8*25	4	SP-4309-017
018	Inner Hexagon Socket Head Bolt	M6*16	2	SP-4309-018
019	Inner Hexagon Socket Head Bolt	M8*20	2	SP-4309-019
020	Inner Hexagon Socket Head Bolt	M10*35	4	SP-4309-020
021	Inner Hexagon Socket Head Bolt	M10*55 30	2	SP-4309-021
022	Spring washer	M6	2	SP-4309-022
023	Spring washer	M8	2	SP-4309-023
024	Spring washer	M10	4	SP-4309-024
025	Flat washer	Φ12*Φ6.4*1.6	2	SP-4309-025
026	Flat washer	Φ16*Φ8.4*1.6	6	SP-4309-026
027	Flat washer	Φ20*Φ10.5*2	8	SP-4309-027
028	Nylon nut	M10	2	SP-4309-028
029	Rivet nut with small countersunk head	M8*18	4	SP-4309-029

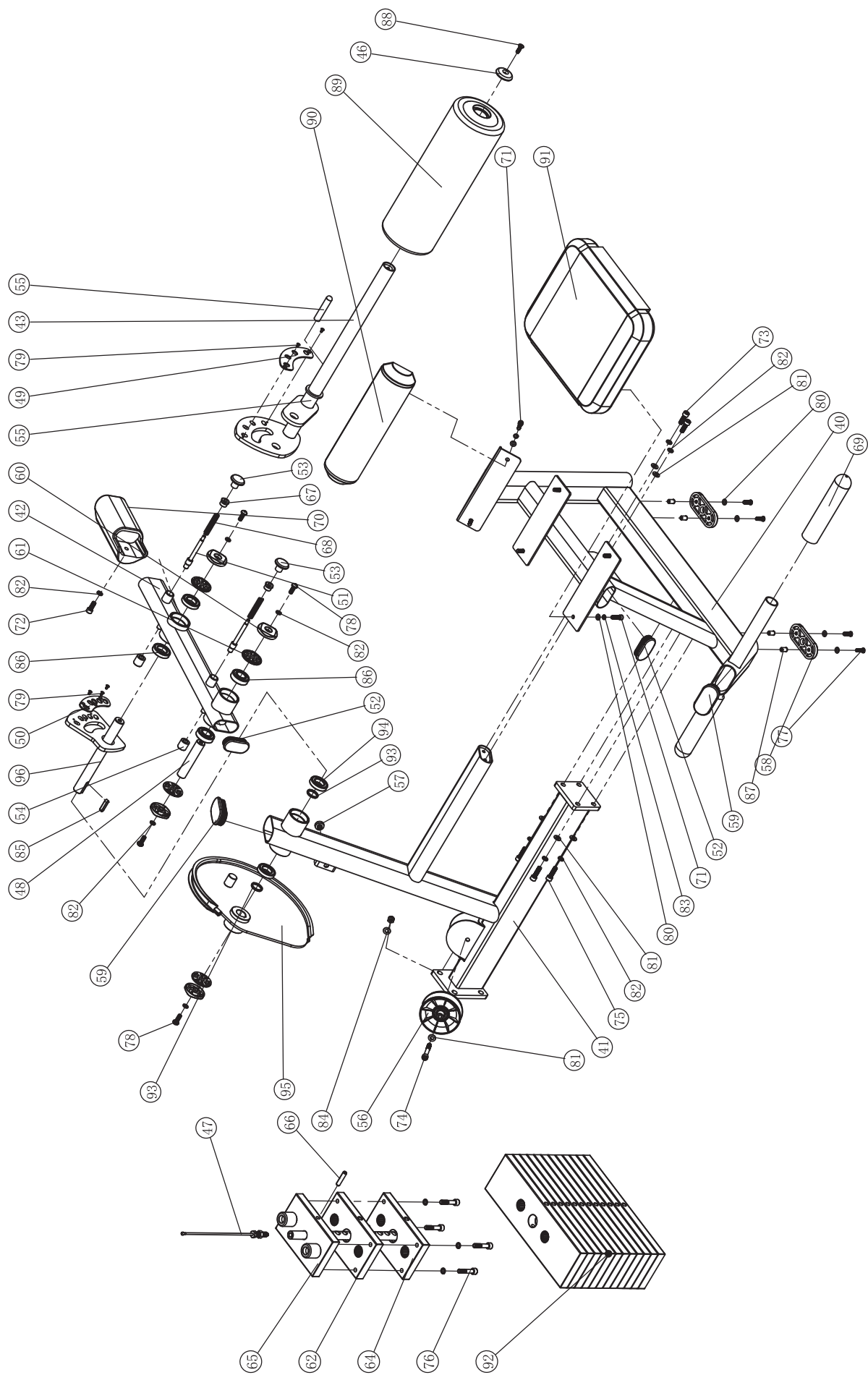
Parts List

No.	Description	Spec	Qty	Part No.
040	Seat frame		1	SP-4309-040
041	Connecting frame		1	SP-4309-041
042	Swing frame		1	SP-4309-042
043	Roll pad asjustment tube		1	SP-4309-043
046	Aluminum end cap		1	SP-4309-046
047	Cable		1	SP-4309-047
048	Shaft		1	SP-4309-048
049	Selector Plate		1	SP-4309-049
050	Selector Plate		1	SP-4309-050
051	Pivot pin		2	SP-4309-051
052	Oval end cap		2	SP-4309-052
053	Knob		2	SP-4309-053
054	Bushing		2	SP-4309-054
055	Handgrip		1	SP-4309-055
056	Pulley		1	SP-4309-056
057	Bumper		1	SP-4309-057
058	Foot		2	SP-4309-058
059	Oval end cap		2	SP-4309-059
060	End cap		4	SP-4309-060
061	Ring		4	SP-4309-061
062	10lb weight stack-A		1	SP-4309-062
064	10lb weight stack-B		1	SP-4309-064
065	10lb top weight stack		1	SP-4309-065
066	roll pin	φ10*45	1	SP-4309-066
067	M20 nut		2	SP-4309-067
068	Spring		2	SP-4309-068
069	Handgrip		2	SP-4309-069
070	Counter weight		1	SP-4309-070
071	Socket Fead Cap Screw	M8*30	6	SP-4309-071
072	Socket Fead Cap Screw	M10*25	1	SP-4309-072
073	Socket Fead Cap Screw	M10*30	2	SP-4309-073
074	Socket Fead Cap Screw	M10*70	1	SP-4309-074
075	Socket Fead Cap Screw	M10*35	4	SP-4309-075
076	Socket Fead Cap Screw	M10*50	4	SP-4309-076
077	Socket Button Head Screw	M8*25	4	SP-4309-077
078	Socket Button Head Screw	M10*25	5	SP-4309-078
079	Panhead screw	M5*10	5	SP-4309-079
080	Flat washer	φ16*φ8.4*1.6	10	SP-4309-080
081	Flat washer	φ20*φ10.5*2	8	SP-4309-081

Parts List

No.	Description	Spec	Qty	Part No.
082	Spring washer	M10	15	SP-4309-082
083	Spring washer	M8	6	SP-4309-083
084	Nut	M10	1	SP-4309-084
085	Bumper		1	SP-4309-085
086	Shoulder bearing		6	SP-4309-086
087	Rivet nut	M8*18	4	SP-4309-087
088	Socket Flat head screw	M8*25	1	SP-4309-088
089	Roll pad		1	SP-4309-089
090	D shape pad		1	SP-4309-090
091	Seat pad		1	SP-4309-091
092	20-pound weight		12	SP-4309-092
093	Ring		2	SP-4309-093
094	Deep groove ball bearing	60/28-2Z	4	SP-4309-094
095	Cam frame		1	SP-4309-095
096	Swing span		1	SP-4309-096
202	Fixing plate	79*33*80*3	1	SP-43-202
203	Counter weight	175*119*80	1	SP-43-203
204	Copper bush	φ28*φ21.5*10	4	SP-43-204
205	Adjustable pin	Φ12*57	1	SP-43-205
206	Spring	Φ11.5*Φ1*25	1	SP-43-206
207	Knob	Φ24*Φ12*32	1	SP-43-207
208	Socket cap screw	M8*12	2	SP-43-208
209	Spring washer	M8	2	SP-43-209

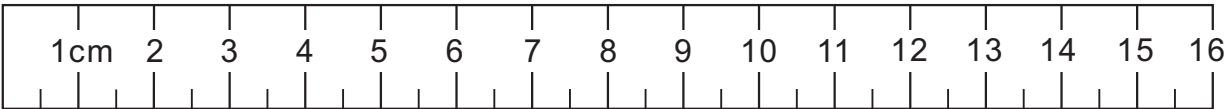
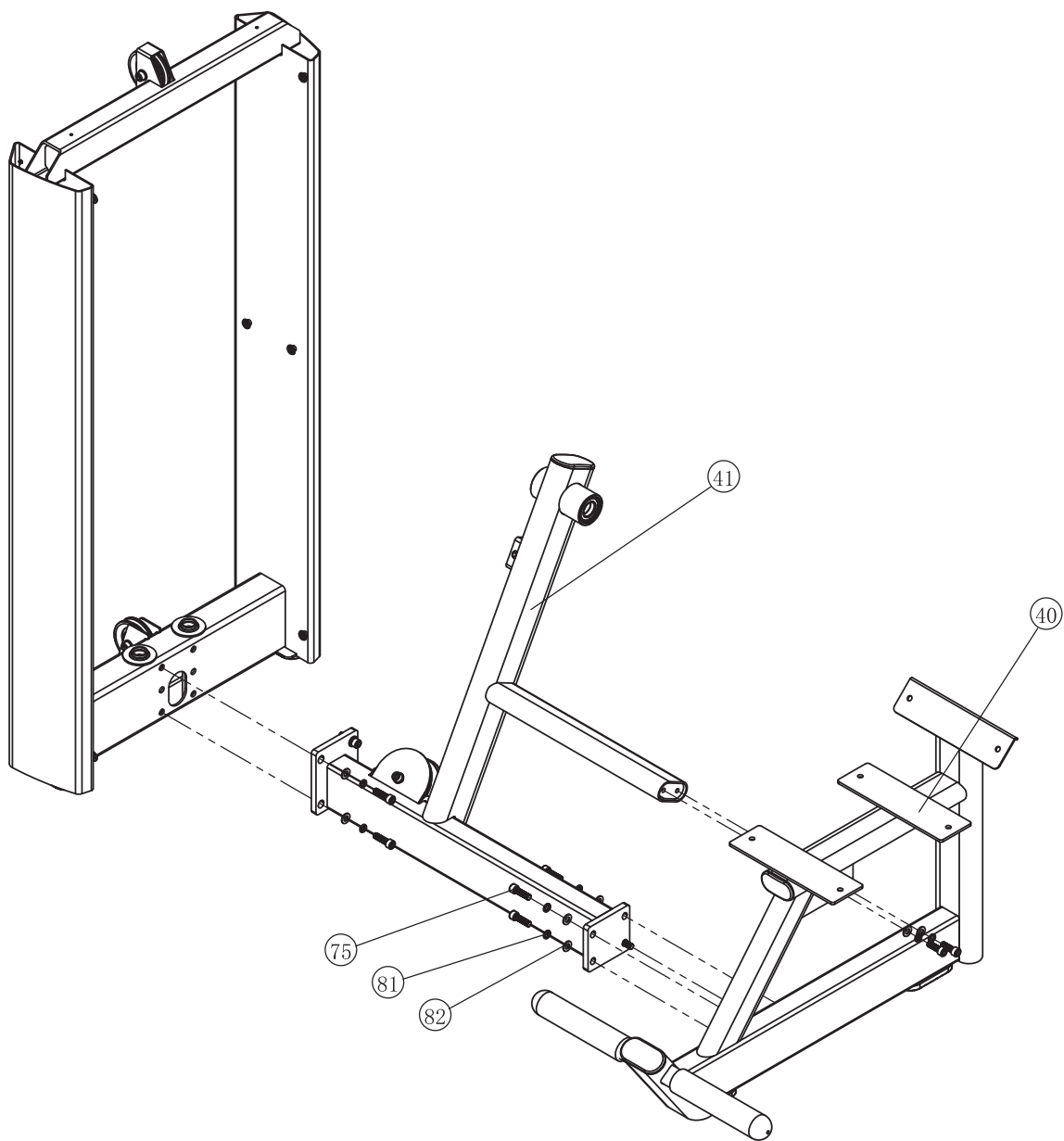




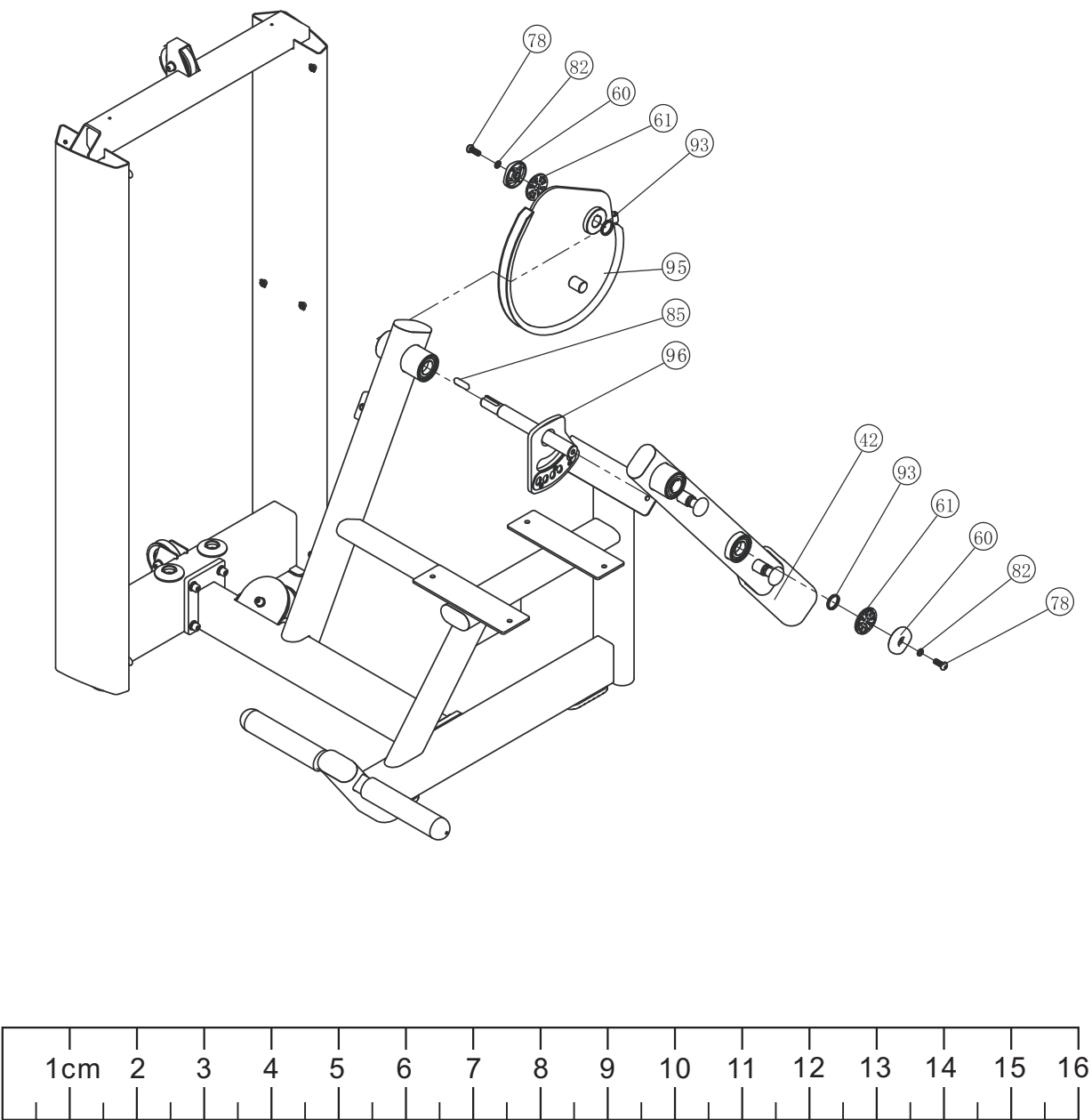
Assembly Instructions

STEP 1

No.	Description	Specifications	Qty
040	Seat frame		1
041	Connecting frame		1
075	Socket Fead Cap Screw	M10*35	8
081	Flat washer	φ20*φ10.5*2	8
082	Spring washer	M10	8



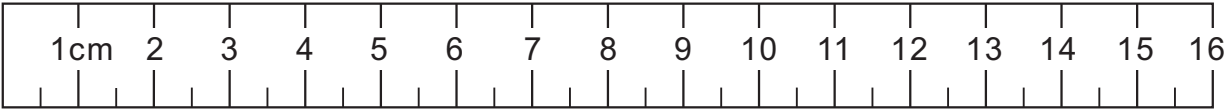
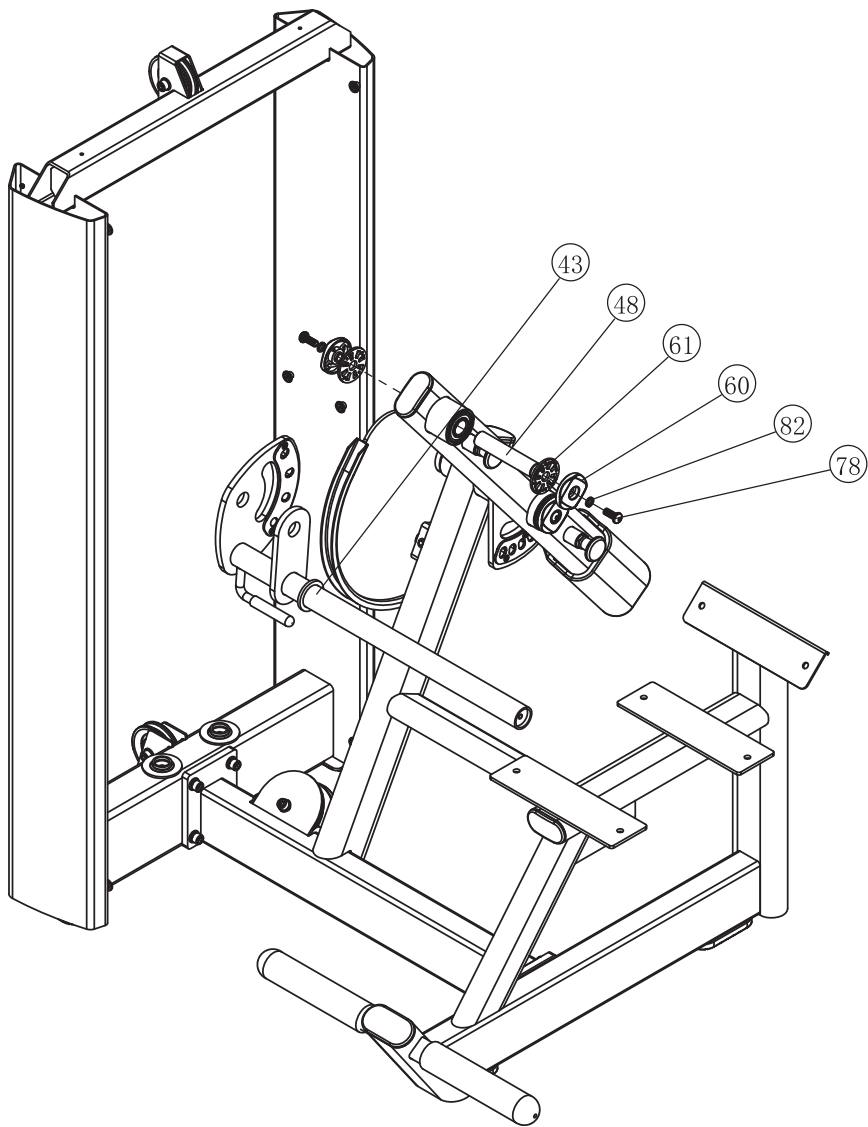
No.	Description	Specifications	Qty
042	Swing frame		1
060	End cap		2
061	Ring		2
078	Socket Button Head Screw	M10*25	2
082	Spring washer	M10	2
085	Bumper		1
093	Ring		2
095	Cam frame		1
096	Swing span		1



Assembly Instructions

STEP 3

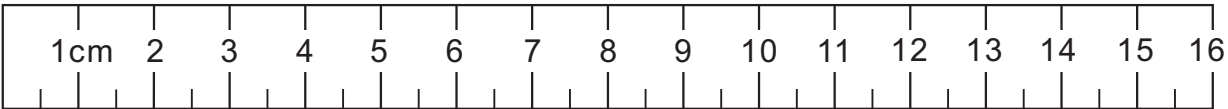
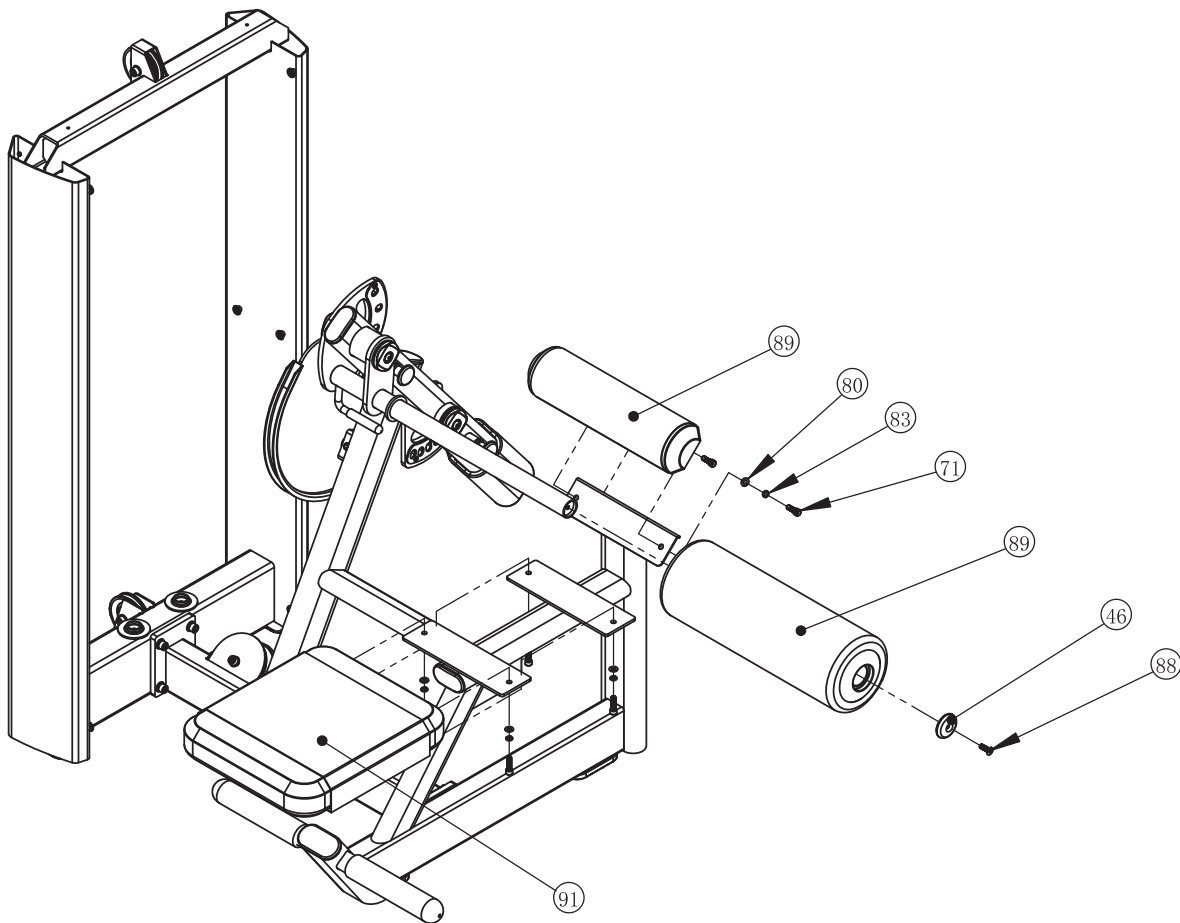
No.	Description	Specifications	Qty
043	Roll pad asjustment tube		1
048	Shaft		1
060	End cap		4
061	Ring		4
078	Socket Button Head Screw	M10*25	2
082	Spring washer	M10	2



Assembly Instructions

STEP 4

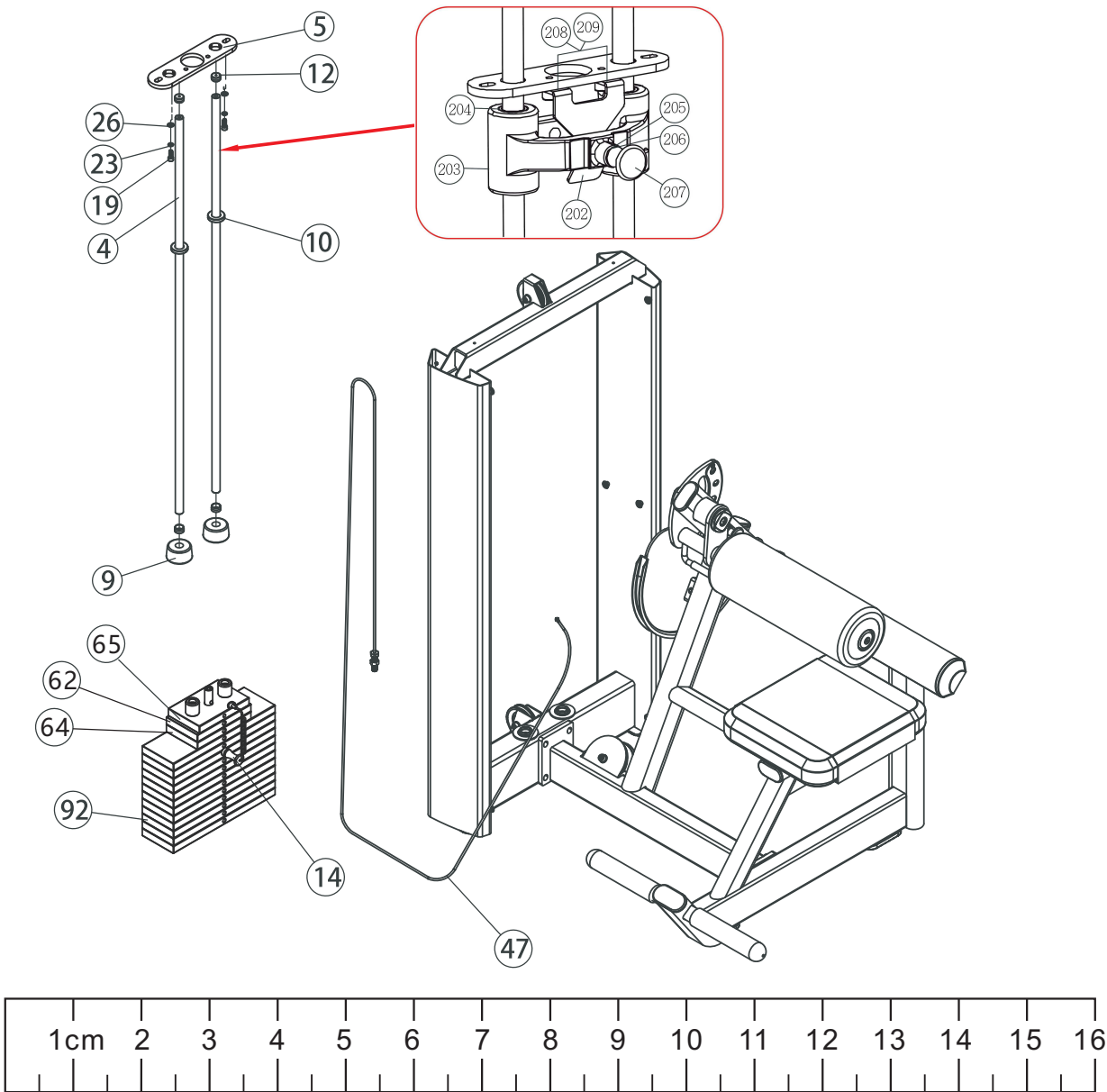
No.	Description	Specifications	Qty
046	Aluminum end cap		1
071	Socket Fead Cap Screw	M8*30	6
080	Flat washer	$\phi 16 * \phi 8.4 * 1.6$	6
083	Spring washer	M8	6
088	Socket Flat head screw	M8*25	1
089	Roll pad		1
090	D shape pad		1
091	Seat pad		1



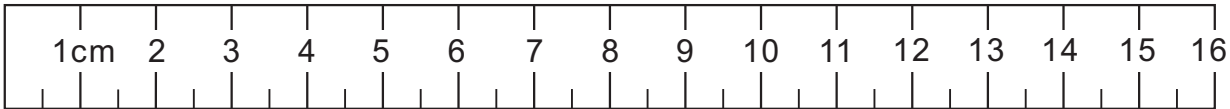
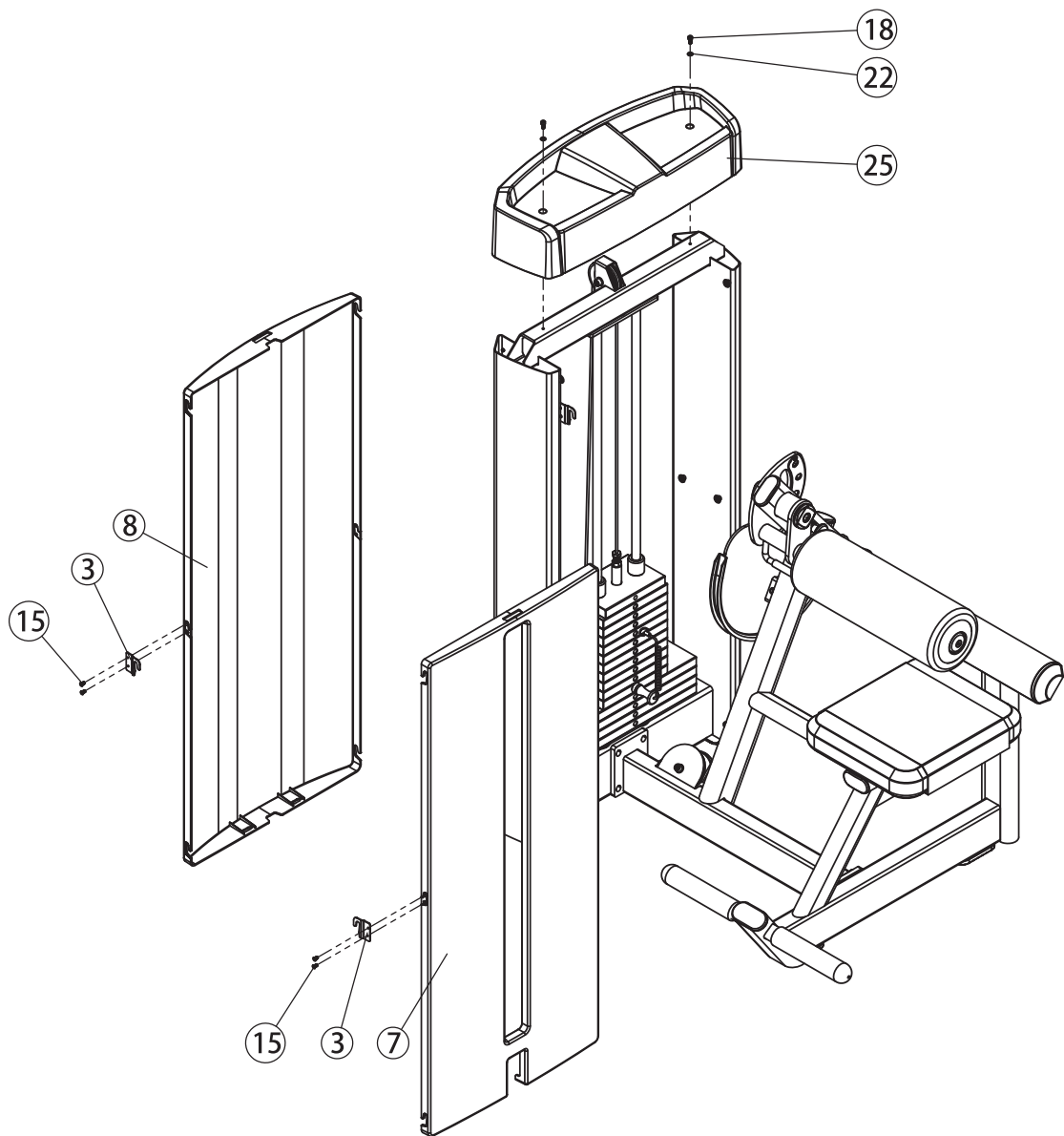
Assembly Instructions

STEP 5

No.	Description	Specifications	Qty
004	Guide rod		2
005	Guide rod fixed plate		1
009	Rubber bumper	$\phi 64 * \phi 32 * \phi 20 * 35$	2
010	Rubber bumper	$\phi 38 * \phi 21 * 10$	2
012	Rod end cover		4
014	Selector pin		1
019	Inner Hexagon Socket Head Bolt	M8*20	2
023	Spring washer	M8	2
026	Flat washer	$\Phi 16 * \Phi 8.4 * 1.6$	6
047	Cable		1
062	10lb weight stack-A		1
064	10lb weight stack-B		1
065	10lb top weight stack		1
092	20lb weight stack		12



No.	Description	Specifications	Qty
002	Upper shield		1
003	Shield fixed plate		4
007	Front shield		1
008	Back shield		1
015	Cross recessed countersunk head screw	M5*10	8
018	Inner Hexagon Socket Head Bolt	M6*16	2
022	Spring washer	M6	2
025	Flat washer	Φ12*Φ6.4*1.6	2



START WORKOUT

Warning: Improper use and form on the product might cause injury

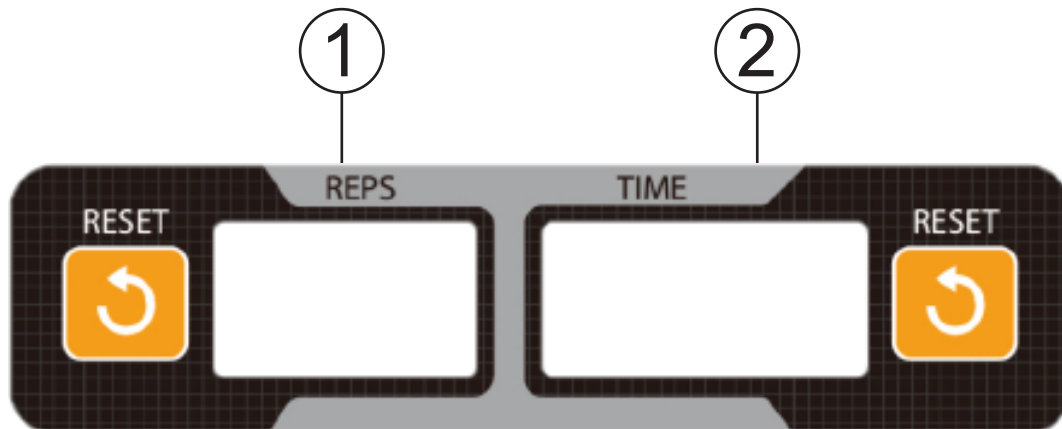


Repetition and Time Counter

A battery-operated console is available for use on SP-43 Series Selectorized Strength Equipment.

The console tracks workout time and number of repetitions per set.

1	Repetition Counter
2	Time Counter

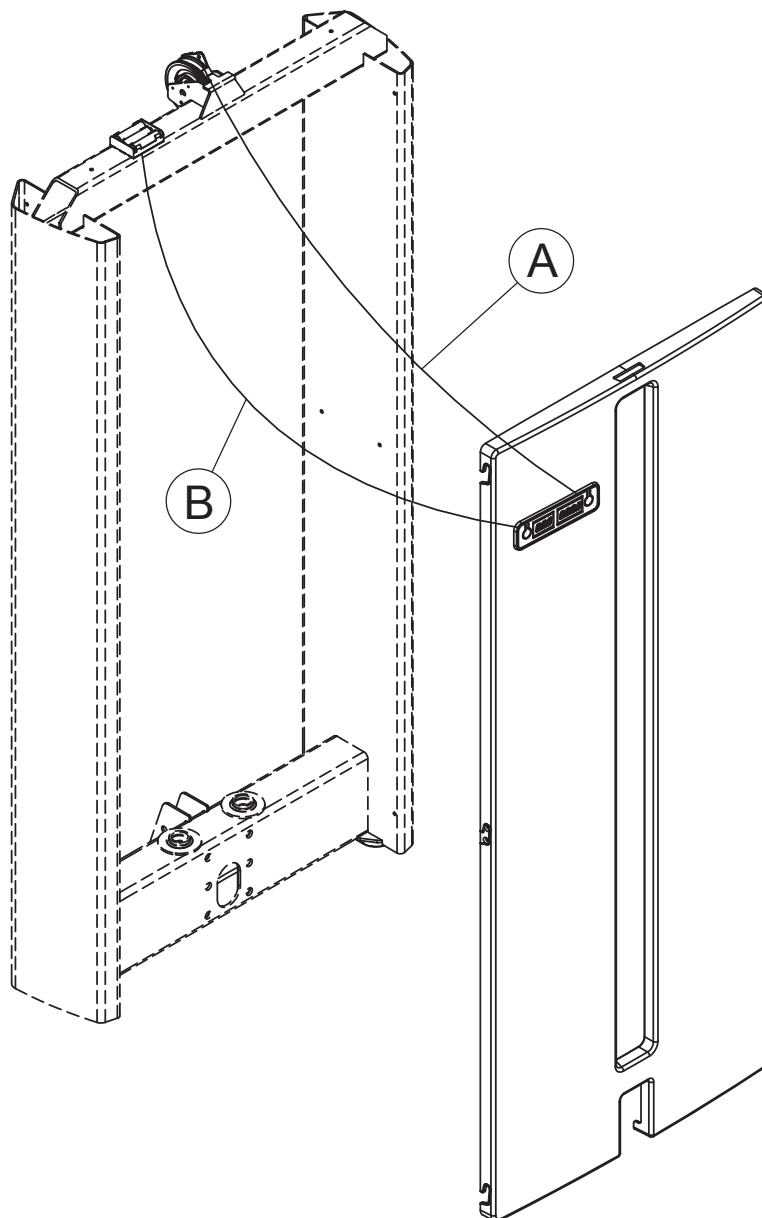


- This counter is powered by 2 pcs of AA batteries.
(Alkaline Battery Recommended)

Troubleshooting

PROBLEM	TROUBLESHOOTING
Display does not turn on when you pickup the weight	• Replace batteries. • Check the magnet is still in position and the reed switch is still positioned next to the magnet. • Check connections at back of console for battery and switch assembly. • Replace the console. NOTE: A console comes with the magnet and reed switch assembly.
Rep counter turns ON when you pick up the head plate but does not count reps.	• Make sure you are doing a full repetition. Magnet must go up past the counter reed switch and back down past it to count ONE repetition. • Check for broken or cut wires. If broken or cut wires found, replace the console. NOTE: Console includes all wiring.

No.	Description	Spec	Qty
A	Dry Reed Pipe Connection Wire		1
B	Power Line		1



Maintenance

A regular preventative maintenance schedule with all fitness equipment ensures that products are working at an optimal condition without affecting the end user exercise experience. To assist in the maintenance regiment, it is recommended to break service into: Daily, Weekly, & Monthly activities. Details on each activity can be found in the “Maintenance” section of this document.

All preventive maintenance activities must be performed on a regular basis. Performing routine preventive maintenance actions can aid in providing safe, trouble-free operation of all SPIRIT equipment. SPIRIT is not responsible for performing regular inspection and maintenance actions for your machines. Instruct all personnel in equipment inspection and maintenance actions and also in accident reporting and recording.

Item	Time Frame	Instructions
Frame	Bi-Annually	Wipe down with lint free cloth.
Belt & Cable	Daily	Wipe down with lint free cloth.
Upholstery	Daily	Wipe down with lint free cloth.
Machine	As Needed	Wipe down with lint free cloth.
Lubricate Guide Rods	As Needed	Apply the Teflon based lubricant to a cotton cloth and then apply up and down the guide rods.

Owner's Manual
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