

INSTALLATION, OPERATION AND SERVICE MANUAL

SPRING LIFT TABLE

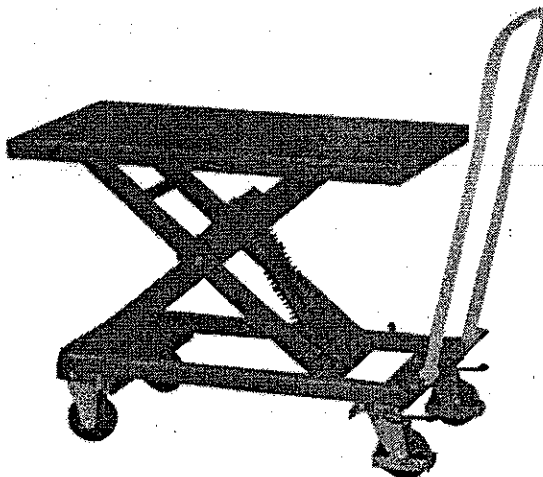


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INTRODUCTION

PLEASE READ THIS MANUAL CAREFULLY BEFORE USING THIS SPRING LIFT TABLE. The safety of all persons installing, using or servicing the BC40 is of utmost importance to us. The BC40 is capable of supporting heavy loads and is capable of causing SEVERE PERSONAL INJURY if used improperly or if certain safety precautions are not taken. When properly used and maintained, the BC40 will provide many years of safe, trouble free service. If you have any questions about any of the instructions in this manual or about the use of this product, PLEASE contact your DEALER.

INSPECTION

IMMEDIATELY upon receipt of the BC40, remove all packing and strapping material and visually inspect the unit for damage. Any damage to the unit MUST BE NOTED on the delivery receipt. After the preliminary inspection is conducted, the unit should be thoroughly inspected for any concealed damage that was not readily apparent during the preliminary inspection. Any concealed damage found that was not noted on the delivery receipt should be IMMEDIATELY reported in writing TO THE DELIVERING CARRIER.



WARNING

NEVER go under the platform or service the BC40 until the load is removed and the scissor mechanism is securely blocked in the raised position.

SEVERE PERSONAL INJURY COULD RESULT!

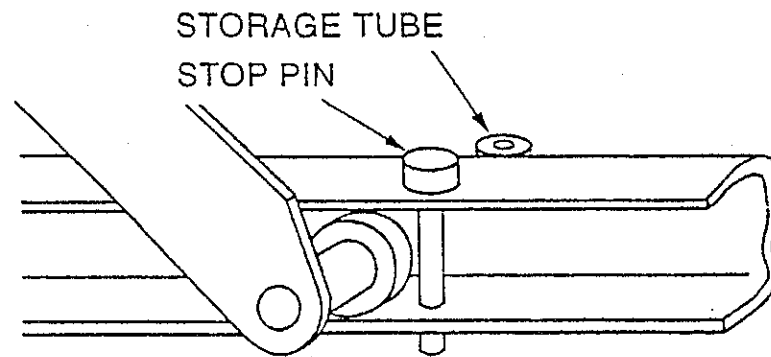


Figure 1 Maintenance Pin Location

TO ENGAGE THE MAINTENANCE PINS

1. Remove all load from the platform and allow to extend to its fully raised position. At the fully raised position, the bottom scissor roller will have traveled past the hole in the base channel.
2. As detailed above, insert the roller stop pin into the hole in the base channel. Ensure that the pin is inserted completely through the hole, at the top of the channel and the hole at the bottom of the channel, as shown.



WARNING

DO NOT PLACE ANY LOAD UPON BC40 PLATFORM WHEN IT IS BLOCKED IN THE RAISED POSITION, LOADING THE PLATFORM WHEN BOLCKED COULD CAUSE THE LOAD TO SUDDENLY FALL.

SEVERE PERSONAL IN JURY AND PROPERTY DAMAGE COULD RESULT!

WARNINGS

The following safety alerts are intended to create awareness of owners, operators, and maintenance personnel of the potential safety hazards and the steps necessary to avoid accidents. These same alerts are inserted throughout this manual to identify certain specific hazards that may endanger personnel. Not every potentially hazardous situation can be anticipated. Therefore, all personnel have the responsibility to diligently exercise safety practices whenever exposed to this equipment. your safety is important to us.



WARNING: Hazardous situation with potential for death or serious injury.

WARNINGS



WARNING:

1. **READ THIS MANUAL COMPLETELY BEFORE USING AND THOROUGHLY UNDERSTAND AND FOLLOW ALL SAFETY INSTRUCTIONS.**
2. The **BC40** is designed for use with stable, uniformly distributed loads on a solid level floor. **DO NOT** concentrate the load at one point on the pallet or platform. **DO NOT** use the for any purpose other than its intended use.
3. **DO NOT** use the **BC40** on a sloped, unlevel, or soft surface. The **BC40** and its load could become uncontrollable or unstable and fall. **SEVERE PERSONAL INJURY AND PROPERTY DAMAGE COULD RESULT!**
4. **DO NOT** overload the **BC40**. **ALWAYS** stay within the designated load capacity. Overloading the **BC40** could cause the load to suddenly fall. **SEVERE PERSONAL INJURY AND PROPERTY DAMAGE COULD RESULT!**
5. The **BC40** is designed for use with uniformly distributed, balanced loads, **DO NOT** concentrate the load at one point on the platform. Uniformly distribute each layer of the load over 80% of the platform surface. Unbalanced loads may become unstable and fall. **SEVERE PERSONAL INJURY and PROPERTY DAMAGE COULD RESULT!**
6. **ALWAYS** apply the caster brake **BEFORE** loading or unloading the **BC40**.
7. **DO NOT** slide the load on or off the platform. Sudden platform height changes may cause the load to fall. **SEVERE PERSONAL INJURY and PROPERTY DAMAGE COULD RESULT!**

**WARNING:**

8. **ALWAYS** ensure the load is tightly stacked and stable **BEFORE** moving the **BC40**. **ALWAYS** move **BC40** slowly and **CONTINUALLY** check the condition of the load. Should the load shift or become unstable, **STOP** immediately and restack the load.
9. **ALWAYS** ensure other persons are clear of the **BC40** and its load **BEFORE** moving.
10. **NEVER** stand, sit, or ride on the platform, moving components could cause loss of balance. **SEVERE PERSONAL INJURY COULD RESULT!**
11. **ALWAYS** keep hands and feet clear of all moving components. **SEVERE PERSONAL INJURY COULD RESULT!**
12. **NEVER** go under the platform or service the **BC40** until the load is removed and the scissor mechanism is securely blocked in the raised position. **SEVERE PERSONAL INJURY COULD RESULT!**
13. **NEVER** put hands or arms under the platform or attempt to adjust load capacity until the load is removed and the scissor mechanism is securely blocked in the raised position. **SEVERE PERSONAL INJURY COULD RESULT!**
14. **NEVER** compress the spring when removed from the **BC40**. Accidental release of a compressed spring could result in **SEVERE PERSONAL INJURY**.
15. **NEVER** leave the loaded **BC40** unattended.
16. **DO NOT** place any load upon the **BC40** platform when it is blocked in the raised position. Loading the platform when blocked could cause the load to suddenly fall. **SEVERE PERSONAL INJURY AND PROPERTY DAMAGE COULD RESULT!**

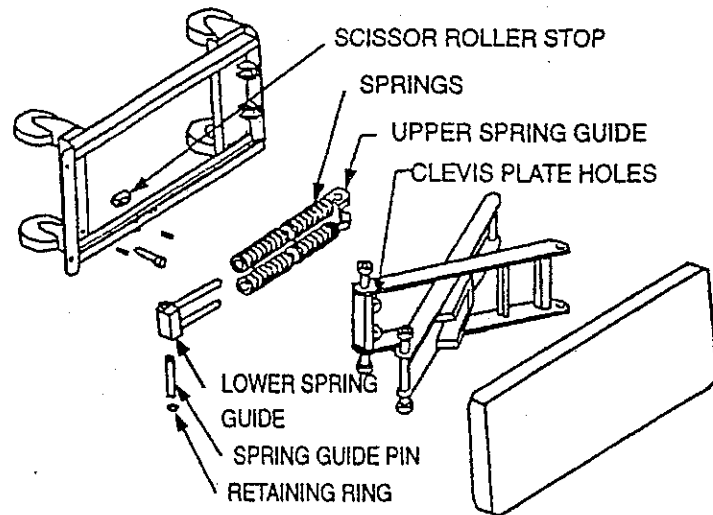


Figure 2 Assembly Components

1. Ensure that all packing material is removed and set out of the way.
2. Remove handle and set off to the side.
3. Using the allen wrenches provided, remove the screw securing the scissor roller stop to the base frame. Remove the roller stop and set aside.
4. Gently place the BC40 on its side, as shown.
5. Carefully extend the platform until the scissor roller travels beyond the point where the scissor roller stop bolts to the base frame.
6. Replace the scissor roller stop and secure using the screws provided to the base frame.
NOTE: The scissor roller should be behind the scissor roller stop at this point.
7. Remove the packaging material from the spring mechanism.
8. Remove the retaining clip from the spring guide pin. Then, remove the spring guide pin from the lower spring guide and set aside.
9. Position the springs on the upper spring guide as shown.
10. Slide the lower spring guide tubes onto the upper spring guide until the holes in the lower guide are aligned with the holes in the clevis plates. The lower guide should be installed with the chamfer or notch facing down.
11. Insert the spring guide pin through the holes in the clevis plates and the lower spring guide.
12. Replace the retaining clip on the spring guide pin.
13. Extend the platform and remove the scissor roller stop as detailed in step 3. Collapse the platform until the scissor roller is positioned in front of the scissor roller stop mounting holes. Replace the scissor roller stop and secure with the screws provided.
14. Upright the BC40. The unit is now ready for spring adjustment.

The load capacity and height of the BC40 is determined by the spring adjustment. The steps below are to assist you in setting the BC40 for your particular load and application. If you encounter any problems in adjustment, PLEASE contact your DEALER.



WARNING

NEVER put hands or arms under the platform or attempt to adjust load capacity at the adjustment knob until the load is removed and the scissor mechanism is securely blocked in the raised position.

SEVERE PERSONAL INJURY COULD RESULT!

1. Remove all load and block the BC40 in the raised position using the blocking instructions on page 2.
2. Estimate the load capacity at which the BC40 should be completely collapsed.
3. Turn the adjustment knob until the arrow points to the desired weight graduation.
4. Remove the roller stop pin from the base frame and place in the holder.
5. The BC40 is now ready for use. Should the load capacity vary, adjustments in the load height or collapsed capacity can easily be made by following the set-up procedures and adjusting the spring adjustment knob.

HEIGHT vs WEIGHT DIAGRAM

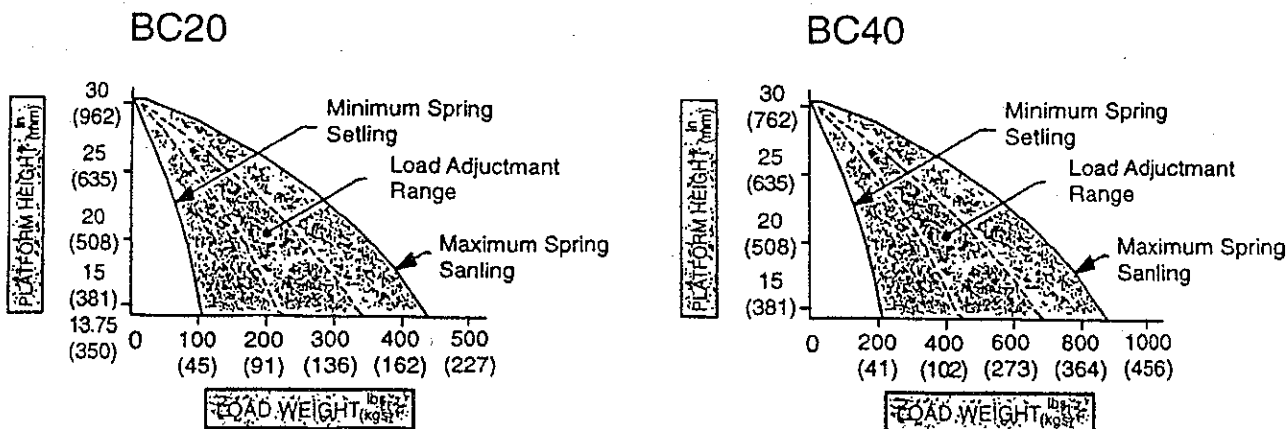


Figure 3 Height vs. Weight Diagram

FUNCTIONAL DESCRIPTION

The BC40 is a spring actuated load positioner designed to assist the operator during manual loading or unloading operations. As the load weight increases or decreases, the BC40 gradually lowers or raises to maintain the top of the load at a comfortable working height, eliminating operator strain due to bending and stretching.

The BC40 is completely variable in capacity. Load support is provided by two or more compression springs located within the scissor assembly. The collapsed load capacity of the BC40 is determined by rotating the "Load Adjustment Screw" which changes the effective spring force. The minimum collapsed capacity is 220 lbs. (100 kgs.) for the BC40. Likewise the maximum collapsed capacity is 880 lbs. (400 kgs.) for the BC40. The collapsed load capacity for each leveler is infinitely adjustable between the minimum and maximum capacities stated above.

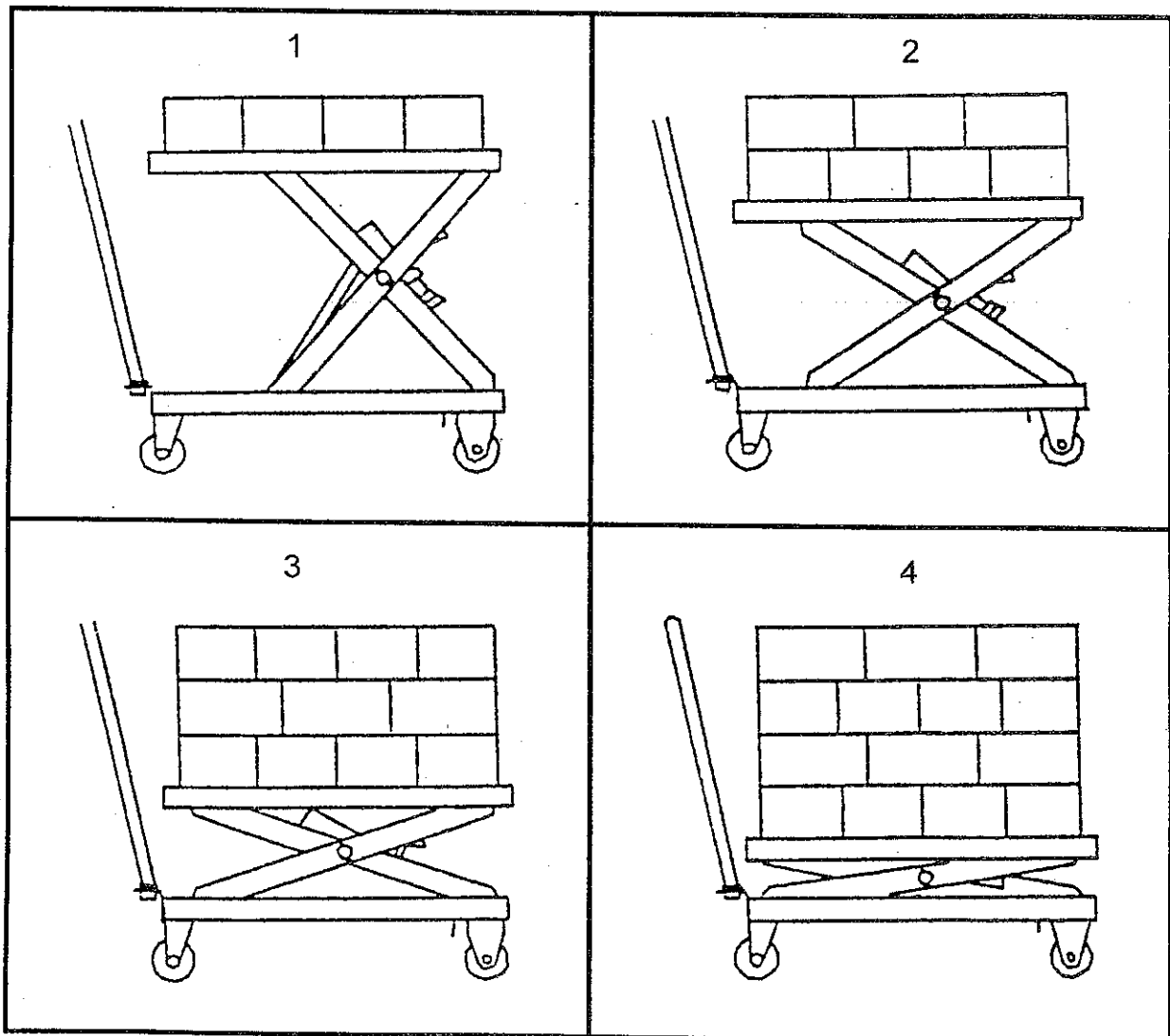
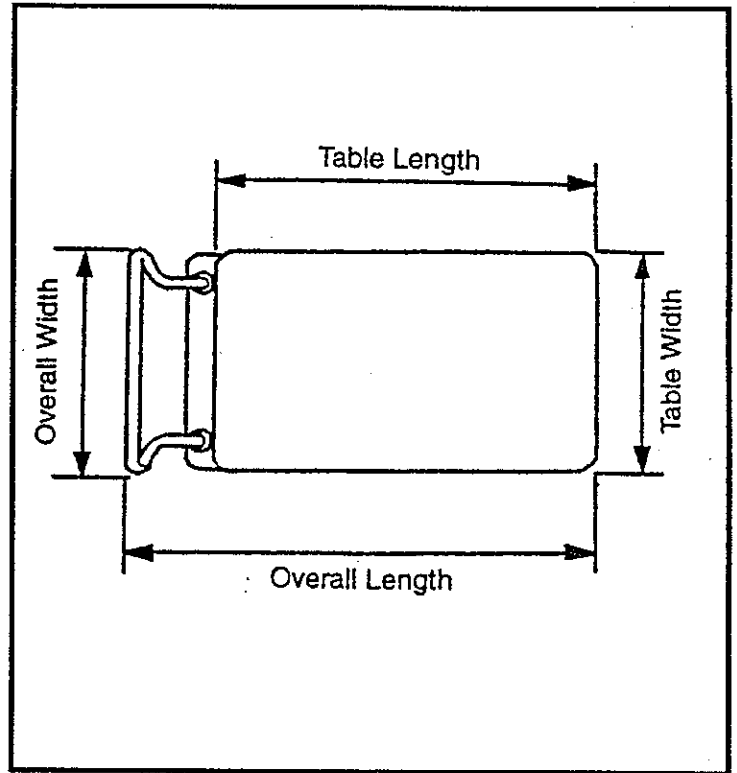


Figure 4 Functional Drawing.

SPECIFICATIONS	
BC20	
1.	MAXIMUM CAPACITY - 460 lbs.
2.	MINIMUM CAPACITY - 175 lbs.
3.	MAXIMUM HEIGHT - 30 3/8 in.
4.	MINIMUM HEIGHT - 13 3/4 in.
5.	WEIGHT - 137 lbs.
6.	TRAVEL-16 5/8 in.
7.	TABLE WIDTH - 19 3/4 in.
8.	TABLE LENGTH - 32 1/4 in.
9.	OVERALL HEIGHT - 30 1/2 in.
10.	OVERALL WIDTH - 19 3/4 in.
11.	OVERALL LENGTH - 40 in.



SPECIFICATIONS	
BC40	
1.	MAXIMUM CAPACITY - 880 lbs.
2.	MINIMUM CAPACITY - 220 lbs.
3.	MAXIMUM HEIGHT - 31 1/8 in.
4.	MINIMUM HEIGHT - 14 1/2 in.
5.	WEIGHT - 229 lbs.
6.	TRAVEL-16 5/8 in.
7.	TABLE WIDTH - 20 1/2 in.
8.	TABLE LENGTH - 39 3/4 in.
9.	OVERALL HEIGHT - 35 1/2 in.
10.	OVERALL WIDTH - 20 1/2 in.
11.	OVERALL LENGTH - 48 1/2 in.

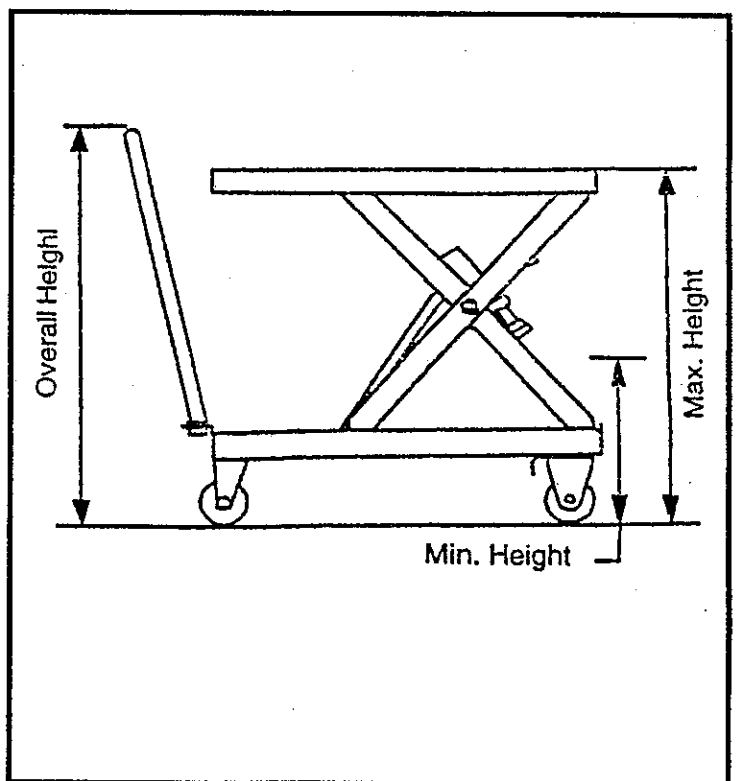


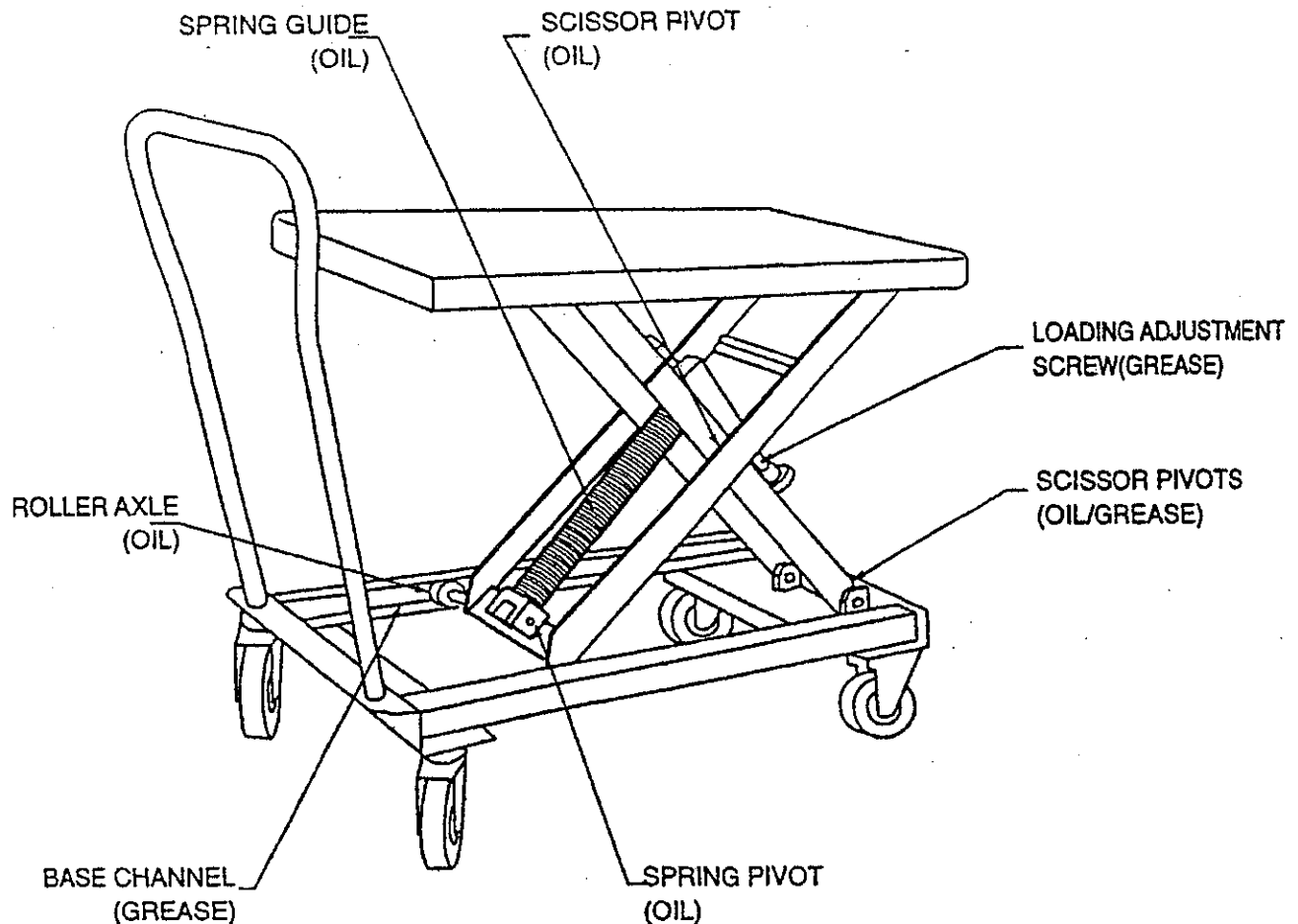
Figure 5 Specification Drawing.

ROUTINE MAINTENANCE

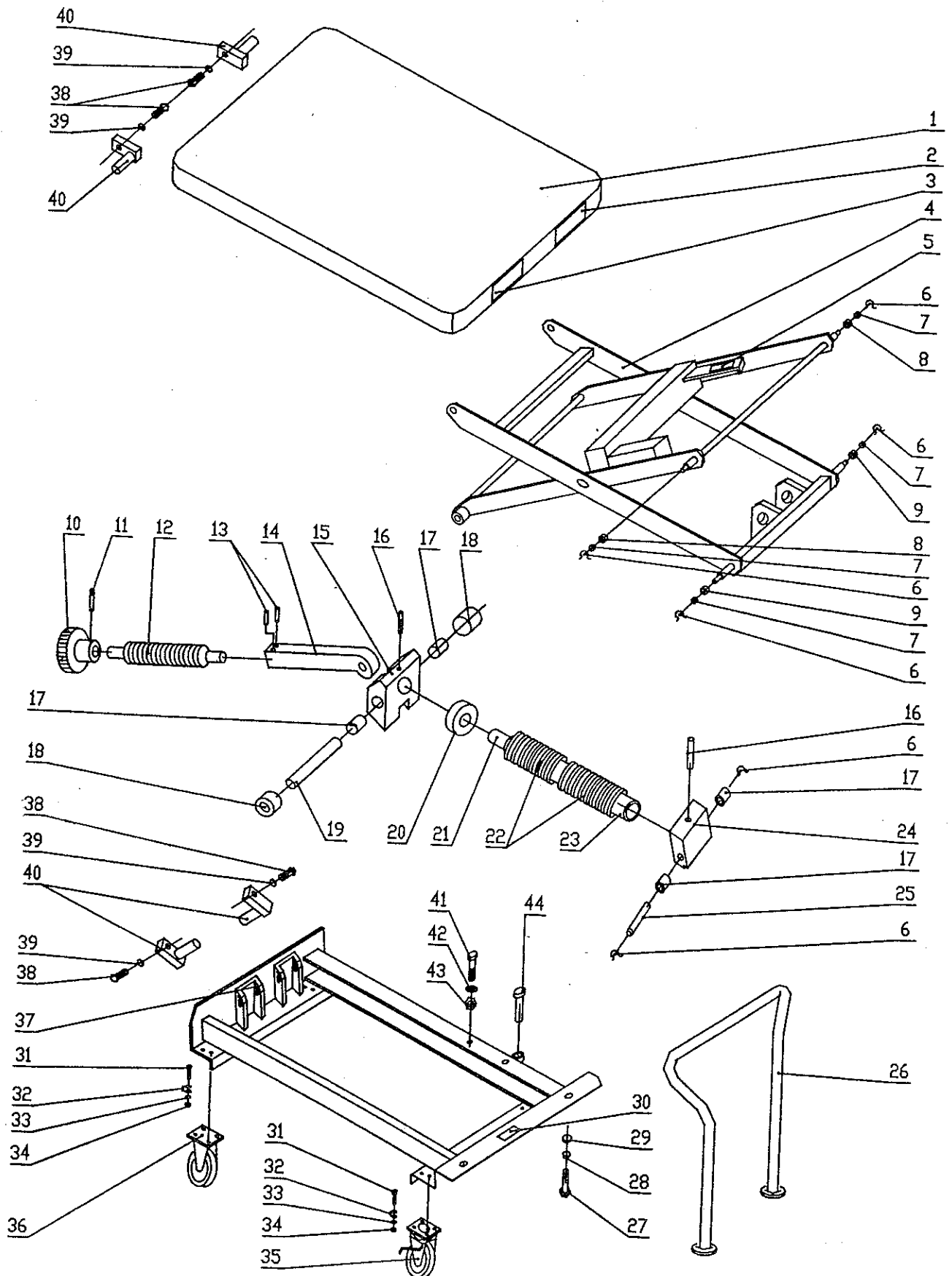
The BC40 is designed to provide years of trouble free service and requires very little maintenance. However, a routine and maintenance program will prevent costly replacement of parts and/or downtime.

Monthly inspection should consist of the following:

1. Inspect snap rings at all rollers and linkage assemblies. If not in place and/or secure, replace or repair at once.
2. Inspect all rollers for signs of wear, Replace as necessary. Rollers and axles have lifetime lubricated bearings; therefore, they do not need to be greased or lubricated.
3. Inspect the caster retaining screws for tightness. Tighten if necessary.
4. Inspect the caster brake for proper operation. Repair or replace if necessary.
5. Lubricate BC40 at the points shown in the diagram below.



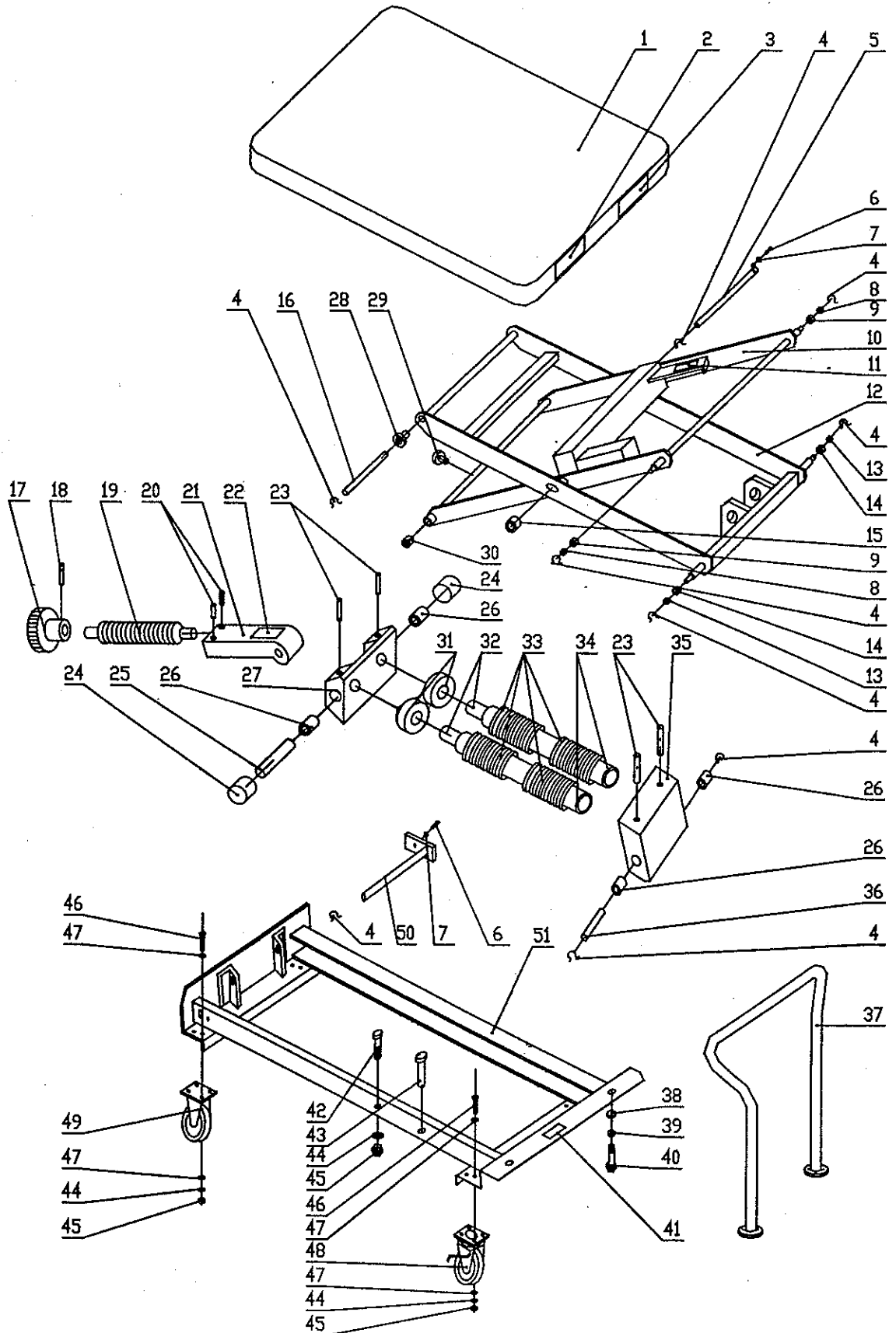
BC21



Part List of Model BC21

No.	Description	Pc/set	No.	Description	Pc/set
1	Table	1	23	Sleeve	1
2	Stick label	1	24	Connecting block	1
3	Stick label	1	25	Spindle(II)	1
4	Scissors	1	26	Lever	1
5	Stick label	1	27	Bolt M12×40	2
6	Retaining ring 16	6	28	Spring washer 12	2
7	Bushing	4	29	Washer	2
8	Roller for table	2	30	Stick label	1
9	Roller for frame	2	31	Bolt M8×20	16
10	Disc with handle	1	32	Washer 8	32
11	Elastic pin φ4×20	1	33	Spring washer 8	16
12	Bolt	1	34	Nut M8	16
13	Elastic pin φ5×30	2	35	Universal wheel	2
14	Connecting block	1	36	Fixed wheel	2
15	Connecting cartridge	1	37	Frame	1
16	Elastic pin φ5×60	2	38	Socket head cap screw M6×16	4
17	Pin bearing	4	39	Spring washer 6	4
18	Roller	2	40	Pin spindle between frame and inner scissors	4
19	Spindle(I)	1	41	Bolt M10×80	1
20	Washer	1	42	Spring washer 10	1
21	Spindle	1	43	Nut M10	1
22	Compression spring	2	44	Restricting pin	1

BC40



Part List of Model BC40

No.	Description	Pc/set	No.	Description	Pc/set
1	Table	1	27	Connecting cartridge	1
2	Stick label	1	28	Bushing	2
3	Stick label	1	29	Oil cup	1
4	Retaining ring 20	9	30	Sleeve	2
5	Pin axle for scissors	1	31	Washer	2
6	Fixed screw M8×16	2	32	Spindle	2
7	Spring washer 8	2	33	Compression spring	4
8	Sleeve for upper roller	2	34	Sleeve	2
9	Upper roller	2	35	Connecting block	1
10	Inner scissors	1	36	Spindle(Ⅱ)	1
11	Stick label	1	37	Lever	1
12	Outer scissors	1	38	Washer	2
13	Sleeve for lower roller	2	39	Spring washer 12	2
14	Lower roller	2	40	Bolt M12×40	2
15	Pin bearing	2	41	Stick label	1
16	Pin axle for table	1	42	Bolt M10×80	1
17	Disc with handle	1	43	Restricting pin	1
18	Elastic pin φ4×20	1	44	Spring washer 10	17
19	Bolt	1	45	Nut M10	17
20	Elastic pin φ5×30	2	46	Socket head cap screw M10×20	16
21	Connecting block	1	47	Washer 10	32
22	Stick label	1	48	Rack for universal wheel	2
23	Elastic pin φ5×60	4	49	Rack for fixed wheel	2
24	Roller	2	50	Pin spindle between frame and inner scissors	1
25	Spindle(Ⅰ)	1	51	Frame	1
26	Pin bearing	4			