



# Rack Lift Tool Operation and Maintenance

## Note to Printer:

1. Cover to be self cover, no graphics.
2. Book trim size to be 7 3/8" x 9" (saddle stitched).
3. Discard this page and the following blank page.





# Rack Lift Tool Operation and Maintenance

**First Edition (October 2001)**

Before using this information and the product it supports, read the information in "Appendix A. Notices" on page 29.

A reader's comment form is provided at the back of this publication. If the form has been removed, address comments to Publications Department, Internal Zip 905-6C006, 11400 Burnet Road, Austin, Texas 78758-3493. To send comments electronically, use this commercial internet address: [aix6kpub@austin.ibm.com](mailto:aix6kpub@austin.ibm.com). Any information that you supply may be used without incurring any obligation to you.

© **International Business Machines Corporation, 2001. All rights reserved.** Note to U.S. Government Users -- Documentation related to restricted rights -- Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

---

# Contents

<b>About This Book</b> . . . . .	v
Safety Notices . . . . .	v
Safety Notice . . . . .	v
Safety Label . . . . .	viii
ISO 9000 . . . . .	ix
Related Publications . . . . .	ix
Trademarks . . . . .	ix
<b>Chapter 1. Reference Information</b> . . . . .	1
Rack Lift Tool Front View . . . . .	1
Rack Lift Tool Back View . . . . .	2
<b>Chapter 2. Lift Tool Assembly and Disassembly</b> . . . . .	3
Assembly . . . . .	3
Disassembly . . . . .	9
<b>Chapter 3. Using the Lift Tool</b> . . . . .	13
Preoperation Inspection . . . . .	13
Installing a Drawer in the Rack . . . . .	14
Removing a Drawer from the Rack . . . . .	20
<b>Chapter 4. Maintenance</b> . . . . .	25
<b>Chapter 5. Parts Information.</b> . . . . .	27
<b>Appendix A. Notices</b> . . . . .	29
<b>Appendix B. Safety Notice and Safety Label Translations</b> . . . . .	31
Safety Notices . . . . .	31
Safety Notices (Arabic) . . . . .	31
Safety Notices (Brazil) . . . . .	34
Safety Notices (Chinese) . . . . .	37
Consignes de sécurité (French) . . . . .	40
Safety Notices (German) . . . . .	43
Safety Notices (Hebrew) . . . . .	46
Informazioni sulla sicurezza (Italian) . . . . .	49
Safety Notices (Korean) . . . . .	52
Consejos de seguridad (Spanish) . . . . .	55
Safety Labels . . . . .	58
Safety Label (Arabic) . . . . .	58
Safety Label (Brazil) . . . . .	59
Safety Label (Chinese Traditional) . . . . .	60
Safety Label (Chinese) . . . . .	61
Safety Label (Dutch) . . . . .	62
Safety Label (French) . . . . .	63
Safety Label (German) . . . . .	64
Safety Label (Greek) . . . . .	65

Safety Label (Hebrew) . . . . .	66
Safety Label (Hungarian) . . . . .	67
Safety Label (Italian) . . . . .	68
Safety Label (Japanese) . . . . .	69
Safety Label (Korean) . . . . .	70
Safety Label (Polish) . . . . .	71
Safety Label (Spanish) . . . . .	72

---

## About This Book

This book provides information on how to assemble and disassemble the rack lift tool. This book also provides information on how to use the rack lift tool to install and remove drawers in rack systems.

---

## Safety Notices

This section contains the English safety notice and safety label. For a translation of this notice and label see “Appendix B. Safety Notice and Safety Label Translations” on page 31.

## Safety Notice

### DANGER

**Failure to obey the instructions and safety rules in this manual can result in death or serious injury.**

**Do not operate unless you:**

- 1. Learn and practice the principles of safe operation contained in this manual.**
- 2. Always perform a preoperation inspection.**
- 3. Inspect the workplace.**
- 4. Only use the lift tool as a material lift.**

## **CAUTION:**

### **Falling Hazards**

- Do not use as a step, or to lift or carry personnel.
- Do not stand or sit on the forks, load platform, or boom.
- Do not climb on the lift tool.

### **Tip-Over Hazards**

- Do not exceed the rated load capacity.
- Do not raise the load unless the leg lock pins have been properly inserted into the legs.
- Do not raise the load unless the correct-length legs are properly installed.
- Do not raise the load unless the lift tool is on a firm, level surface.
- Do not tilt the lift tool with a raised load.
- Do not use blocks to level the lift tool.
- Do not operate the lift tool in strong or gusty winds. Increasing the load surface will decrease lift tool stability in windy conditions.
- Do not place ladders or scaffolding against any part of the lift tool.
- Do not operate the lift tool unless the wheel/ leg/ caster assembly is properly installed.
- Prior to using the lift tool, check the work area for drop-offs, holes, bumps, debris, unstable or slippery surfaces, or other possible hazardous conditions.
- Avoid debris and uneven surfaces while rolling the lift tool.
- Do not replace lift-tool parts critical to stability or structure with items of different weight or specification.
- Do not cause a horizontal force or side load to the lift tool by raising or lowering a fixed or overhanging load.
- Do not use the lift tool on a moving or mobile surface or vehicle.

### **Lifting and Collision Hazards**

- Do not raise if the load is not properly centered on the forks or load platform.
- Check the work area for overhead obstructions or other possible hazards.
- Do not stand under or allow personnel under the lift tool when the load is raised.
- Do not lower the load unless the area below is clear of personnel and obstructions.
- Use common sense and planning when transporting the lift tool on an incline, slope, or stairs.
- Do not move lift tool on stairs when lift tool is equipped with four- point caster option.

### **Bodily Injury Hazards**

- Do not grasp the cable.
- Keep hands and fingers away from pulleys, the carriage, and other potential pinch points.

### **Improper Use Hazard**

Never leave a loaded lift tool unattended. Unauthorized personnel might attempt to operate the lift tool without proper instruction, creating an unsafe condition.

### **Damaged Lift Tool Hazards**

- Do not use a damaged or malfunctioning lift tool.
- Do not use a lift tool with a worn, frayed, kinked or damaged cable. Do not use a lift tool with fewer than four wraps of cable on the winch drum when the carriage is fully lowered.
- Conduct a thorough preinspection prior to each use.
- Be sure all labels are in place and legible.

### **Crushing Hazard**

Do not release grasp on the winch handle until the brake is locked. The brake is locked when the load will not cause the winch handle to turn.

## Safety Label

### PROPERTY OF IBM



#### DANGER

You must read, understand, and obey all safety rules and operating instructions in the Lift Tool Operation and Maintenance book, SA23-1242.

Failure to do so can result in death or serious injury.



#### CAUTION

Keep hands and fingers away from pulleys, the carriage, and other possible pinch points.



#### CAUTION

This winch could cause serious injury:

- Do not use to lift personnel.
- Be sure you hear a clicking sound while the load is being raised.
- Be sure the winch is locked in position before releasing the handle.



#### CAUTION

Do not allow any people on the lift tool.



#### CAUTION

Tip-Over Hazard: The lift tool can become unstable if wheel/leg/caster assembly is improperly installed.

---

## ISO 9000

ISO 9000 registered quality systems were used in the development and manufacturing of this product.

---

## Related Publications

The following publication provides additional information:

*Genie Lift Operator's Manual (Genie Part Number 35566)*

*Genie Lift Parts and Service Manual (Genie Part Number 35572)*

*Genie Lift Schedule Maintenance Procedure (Genie Part Number 35523)*

---

## Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

- IBM

Other company, product, and service names may be trademarks or service marks of others.



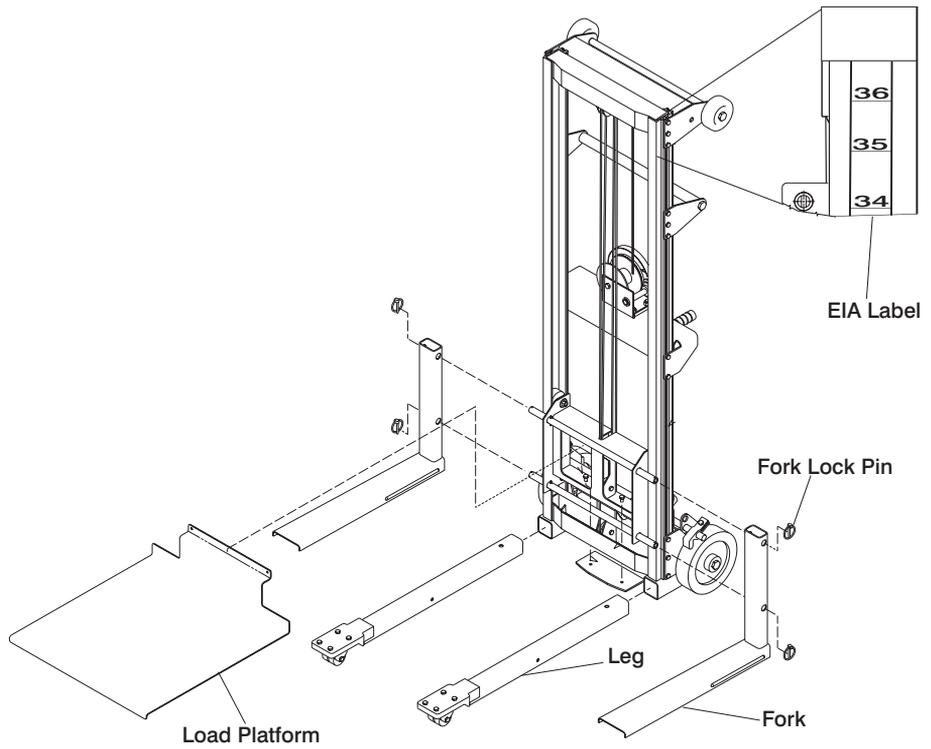
---

## Chapter 1. Reference Information

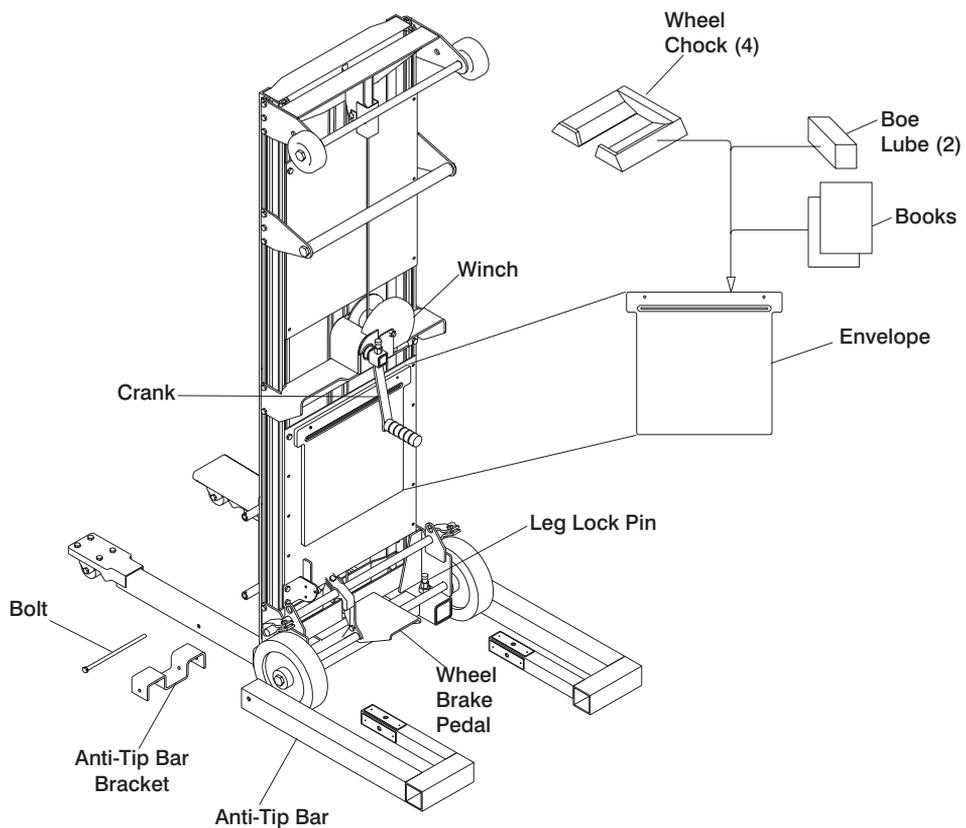
This chapter contains illustrations of the front and rear view of the rack lift tool.

---

### Rack Lift Tool Front View



## Rack Lift Tool Back View



---

## Chapter 2. Lift Tool Assembly and Disassembly

This chapter contains assembly and disassembly instructions for the rack lift tool.

---

### Assembly

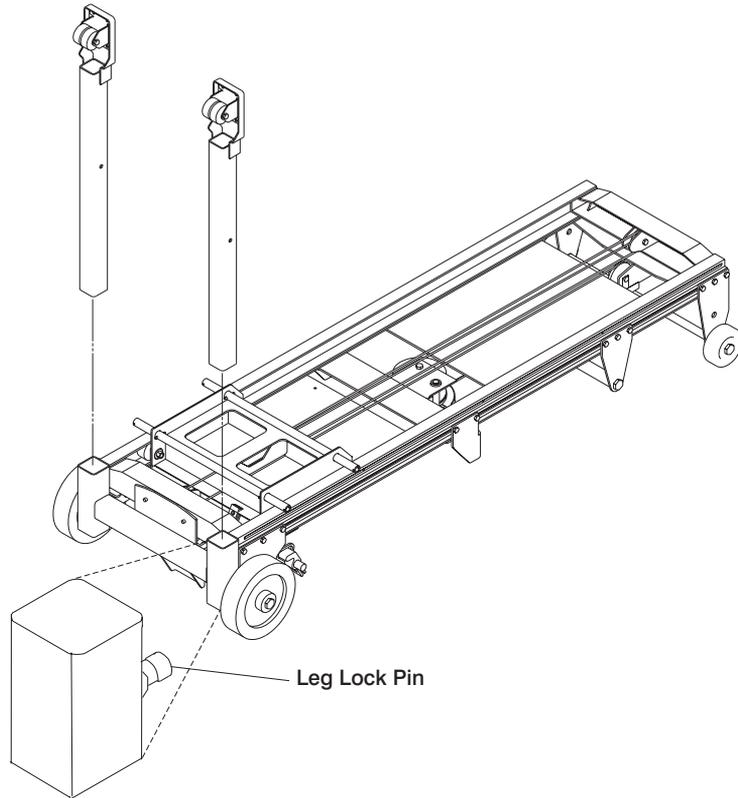
This section describes how to assemble the lift tool.

Before performing these procedures, read “Safety Notices” on page v.

If the lift tool is new or recently transported to a new site, it may be necessary to assemble the lift tool.

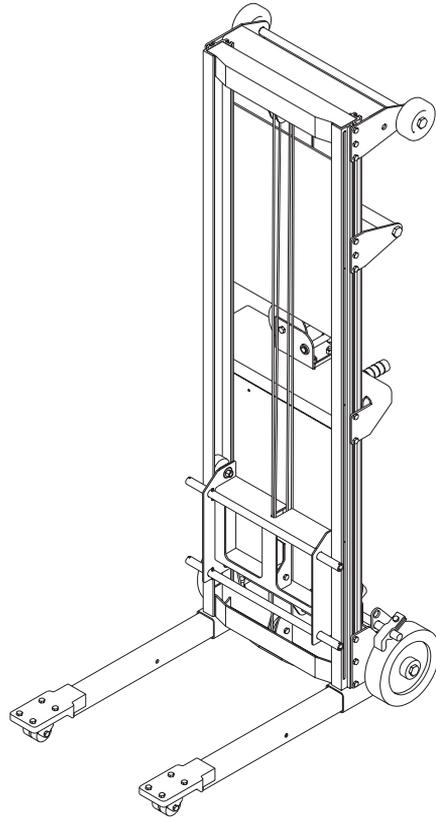
1. One box is attached to the lift tool; remove the box.
2. Open the box and remove attachments. Save the box because it may be needed for transporting the lift tool at a later date.
3. Inventory the attachments.
  - Legs (2)
  - Forks (2)
  - Fork lock pins (4)
  - Load platform (1)
  - Anti-tip bars (2)
  - Anti-tip bar brackets (2)
  - Bolt (2)
4. Lower the lift tool to the horizontal position.
5. Locate the legs and attach them to the lift tool.

a. Pull out on the leg lock pins and insert the legs.

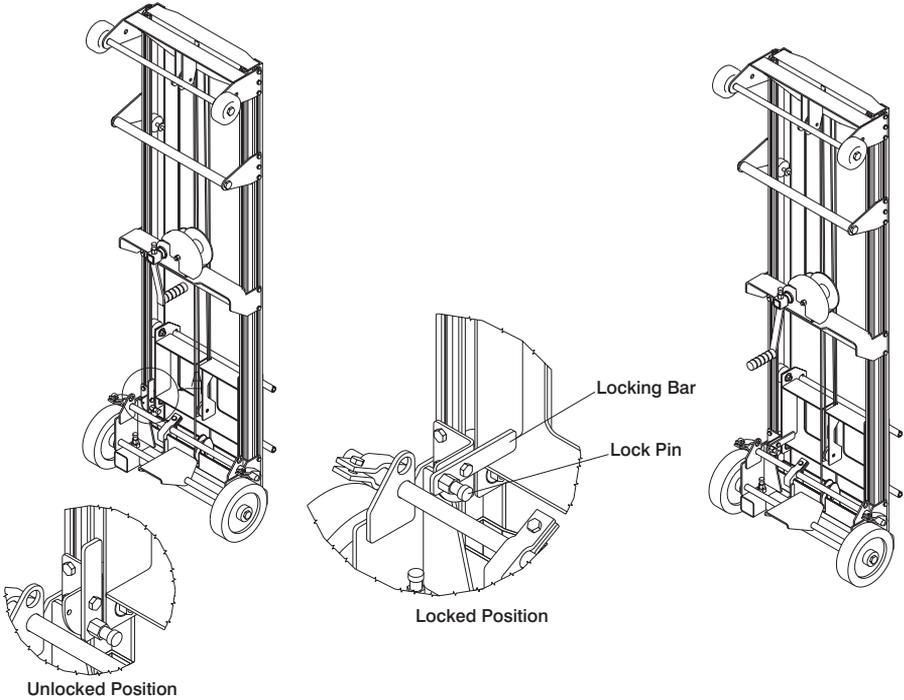


b. Pull on the legs to ensure that they are locked into position.

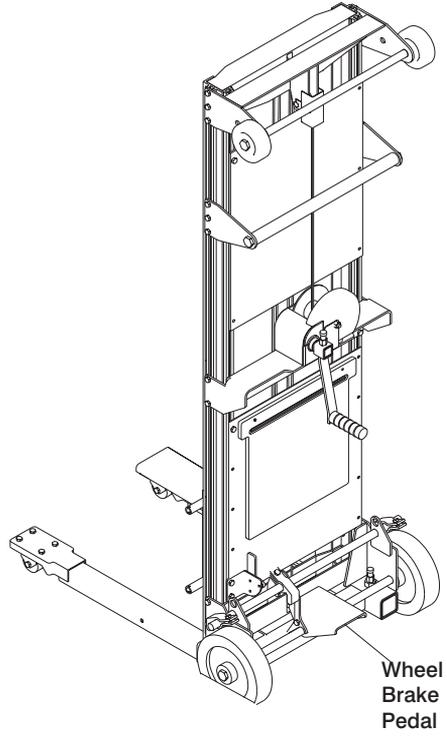
6. Raise the lift tool to the vertical position.



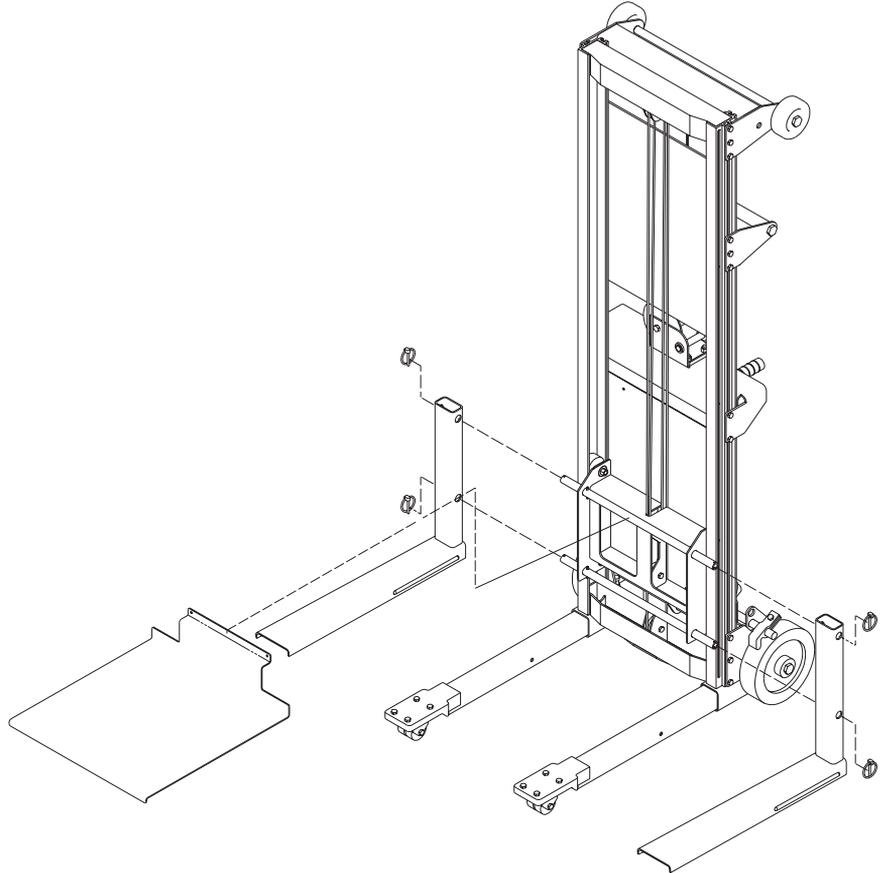
7. Unlock the lift assembly by pulling out on the lock pin and rotating the locking bar to the unlocked position.



8. Set the wheel brake by depressing the wheel brake pedal.



9. Locate the forks and the fork lock pins.
10. Attach the forks to the lift tool and secure them with the fork lock pins.



11. Attach load platform to lift tool.
12. Release the wheel brake.
13. Remove winch handle, reverse handle, and then install it. Handle grip should now face operator.

---

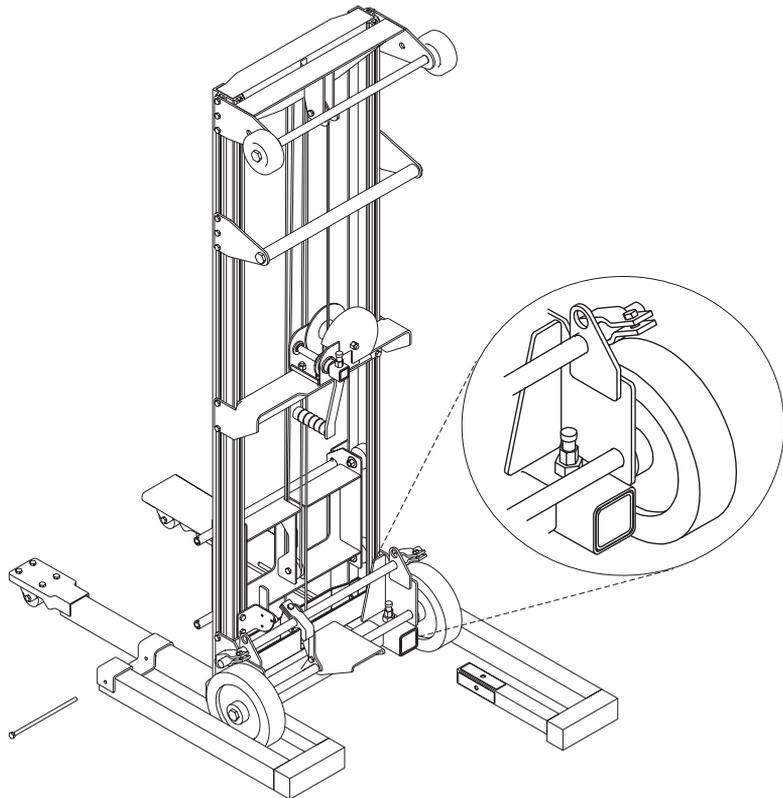
## Disassembly

This section describes how to disassemble the lift tool.

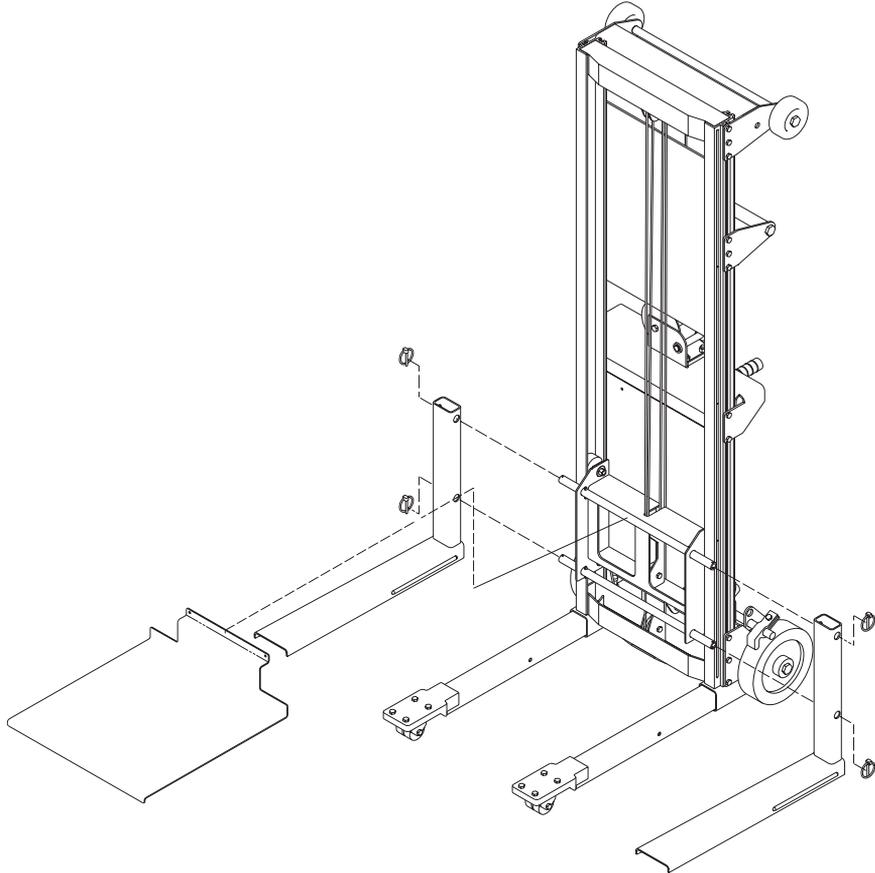
Before performing these procedures, read “Safety Notices” on page v.

If the lift tool is being transported to another site, it may be necessary to disassemble the lift tool before transporting.

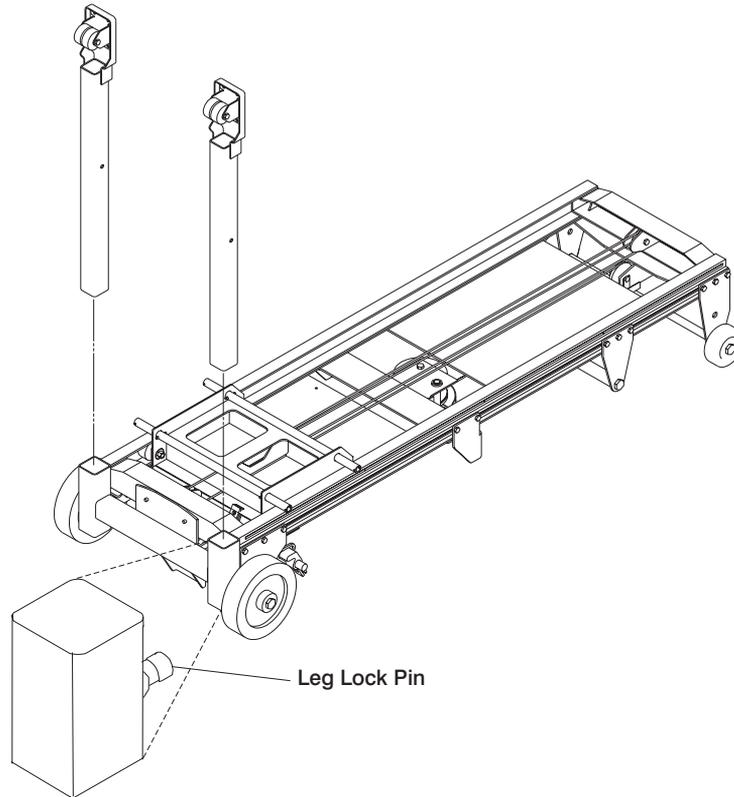
1. If attached, remove the anti-tip bars.
  - a. Remove the bolt securing the anti-tip bracket and remove the anti-tip bracket.
  - b. Pull up on the leg lock pins and remove the anti-tip bars.



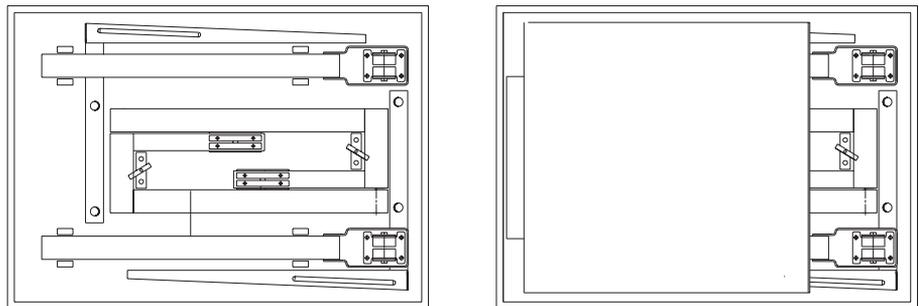
2. Remove load platform from lift tool.
3. Remove the fork lock pins and remove the forks from lift tool.



4. Pull up on the leg lock pins and remove the legs from lift tool.



5. Place removed attachments in the box that they arrived in as shown in the following illustration.



6. Remove winch handle, reverse handle, and install it. Handle grip should now face away from operator.



---

## Chapter 3. Using the Lift Tool

This chapter contains information for inspecting and using the rack lift tool.

---

### Preoperation Inspection

This section lists the items that should be inspected before using the lift tool.

1.  Be sure that all labels are legible and in place.
2.  Check the following components or areas for damage and for parts improperly installed, loose, or missing.
  - Winch and related components
  - Base components
  - Legs
  - Roller wheels
  - Inner and other frames
  - Carriage hold down assembly
  - Cable anchor
  - Cable (kinks, frays, abrasions) and pulleys
  - Wheels and casters
  - Forks
  - Load platform and boom (if equipped)
  - Nuts, bolts, and other fasteners
  - Brake system
3.  Check entire lift tool for:
  - Dents or damage
  - Corrosion or oxidation
  - Cracks in welds or structural components
4.  Be sure that structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.
5.  Be sure that there is a minimum of four wraps of cable around the winch drum when the carriage is fully lowered.

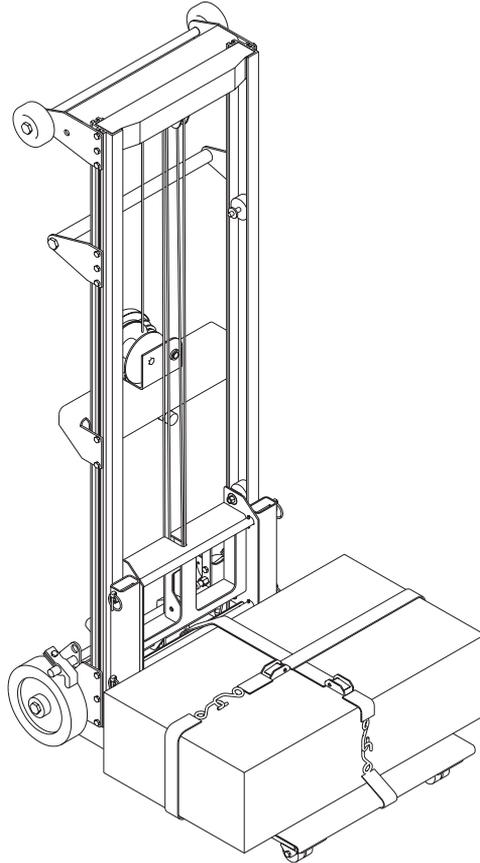
---

## Installing a Drawer in the Rack

This section describes how to use the lift tool to install a drawer in the rack.

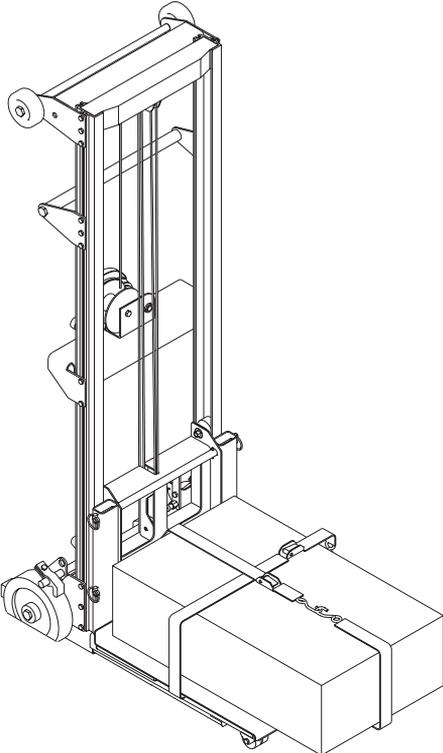
Before performing these procedures, read “Safety Notices” on page v.

1. Assemble the lift tool if not previously assembled. (See “Chapter 2. Lift Tool Assembly and Disassembly” on page 3 for assembly instructions.)
2. Place the drawer on the lift tool load platform and center the drawer on the load platform.

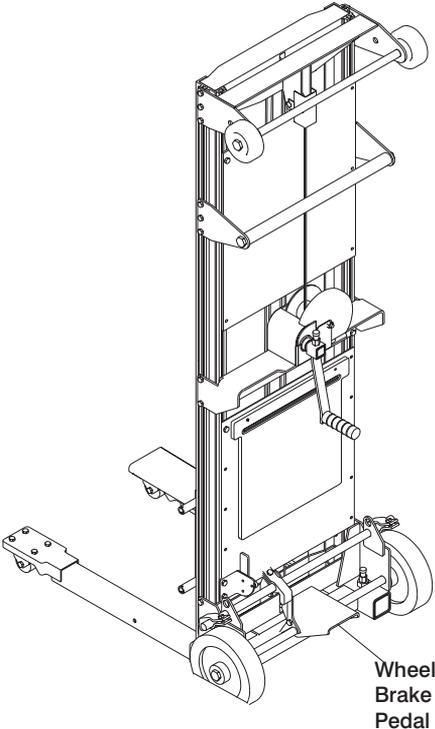


3. Attach retention straps around the drawer.
4. If not at its lowest position already, lower the load platform to its lowest position.
5. Move the lift tool to a position near the rack.

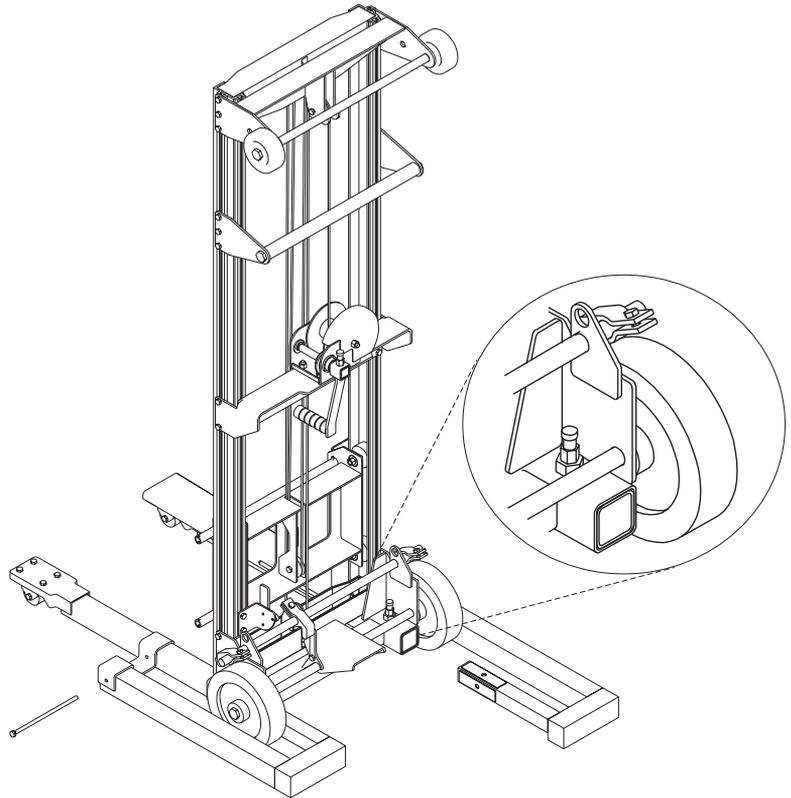
**Note:** If passing through a narrow passage or door, it may be necessary to rotate the drawer on the load platform.



6. Set the wheel brake by depressing the wheel brake pedal.

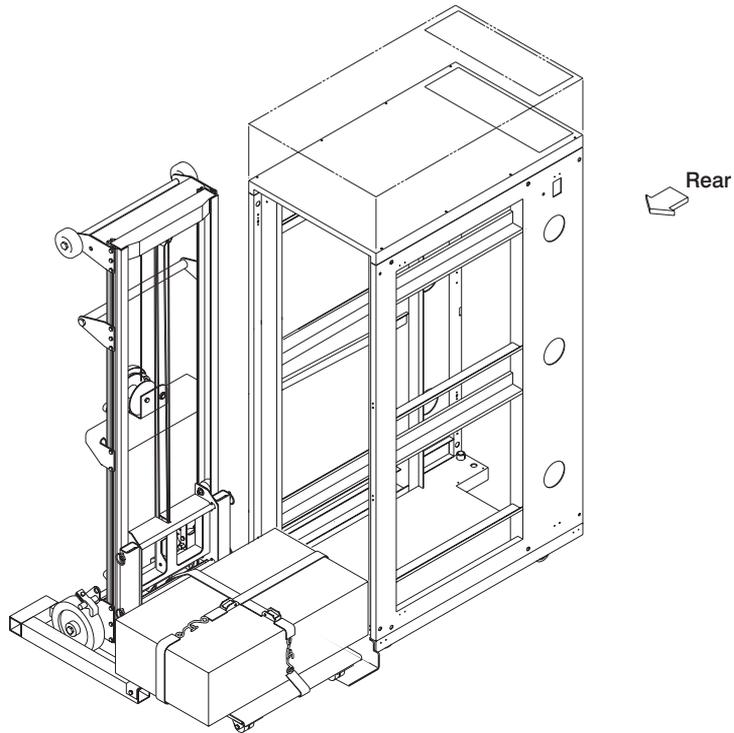


7. If not previously attached, locate the anti-tip bars and attach them to the lift tool. If anti-bars were previously attached, continue on to step 8.
  - a. Pull up on the leg lock pins and insert the anti-tip bars inside the legs.



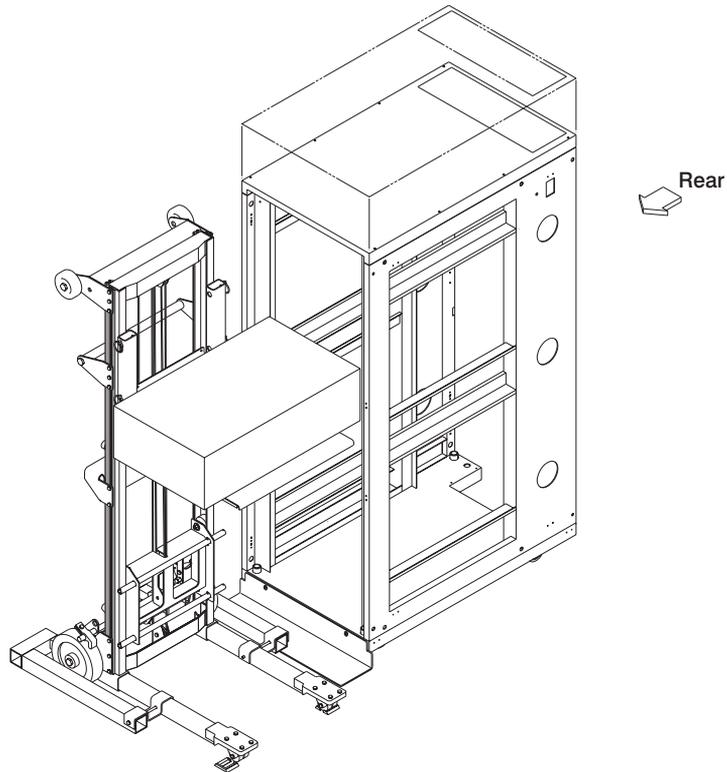
- b. Pull on the legs and anti-tip bars to ensure that both are locked into position.
    - c. Raise the platform to allow enough room to attach the anti-tip bracket.
    - d. Secure the anti-tip bars using the anti-tip bracket and bolt as shown.
8. Release the wheel brake.

9. Move the lift tool into position in front of the rack.



10. Set the wheel brake and place the wheel chocks around the wheels.
11. Remove retention straps.
12. Turn the winch crank clockwise to position the drawer with the desired rack location.

**Note:** You can use the Electronic Industry Association (EIA) label on the side of the lift tool to aid in positioning the drawer to the proper height.



13. Turn the winch crank counterclockwise 1/4 turn to set the winch brake.

**Note:** If you are installing a drawer in EIA position 28 or higher, a ladder (P/N 46G5947) and/or step stool (P/N 93G1147) might be needed.

14. Slide the drawer into the rack.
15. Remove the wheel chocks, release the wheel brake, and move the lift tool away from the rack.

---

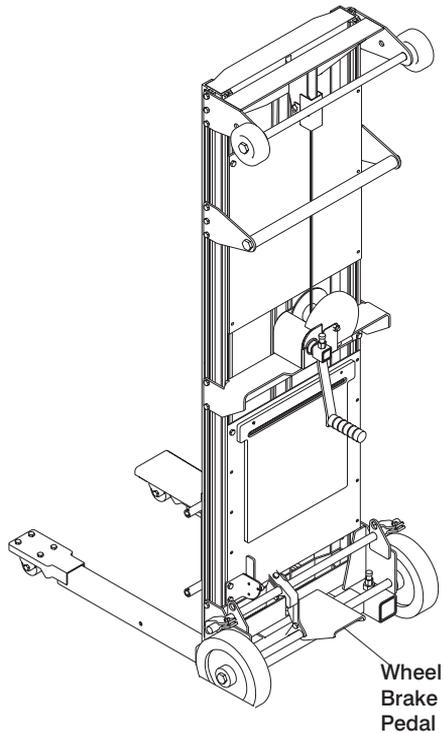
## Removing a Drawer from the Rack

This section describes how to use the lift tool to remove a drawer from the rack.

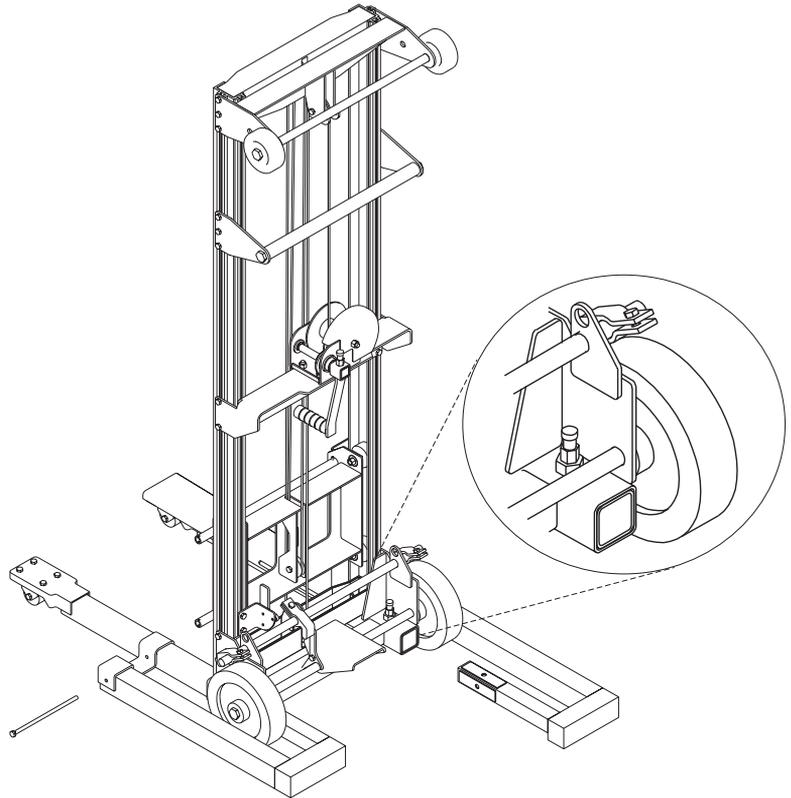
**Attention:** Before moving the lift tool into position, make sure that the front drawer stops are disabled. Failing to disable the stops will prevent you from pushing the drawer out of the rack and onto the lift tool platform. For more information about the front drawer stops, see the system service guide.

Before performing these procedures, read “Safety Notices” on page v.

1. Assemble lift tool if not previously assembled. (See “Chapter 2. Lift Tool Assembly and Disassembly” on page 3 for assembly instructions.)
2. Move the lift tool to a position near the rack.
3. Set the wheel brake by depressing the wheel brake pedal.

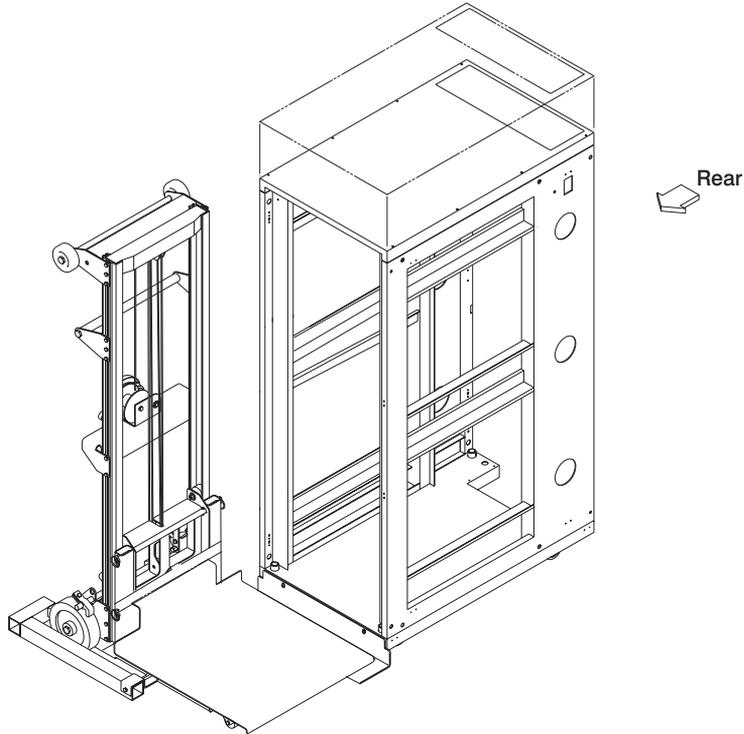


4. If not previously attached, locate the anti-tip bars and attach them to the lift tool. If anti-bars were previously attached, continue on to the step 5.
  - a. Pull up on the leg lock pins and insert the anti-tip bars inside the legs.



- b. Pull on the legs and anti-tip bars to ensure that both are locked into position.
    - c. Raise the load platform to allow enough room to attach the anti-tip bracket.
    - d. Secure the anti-tip bars using the anti-tip bracket and bolt as shown.
5. Release the wheel brake.

6. Move the lift tool into position in front of the rack.



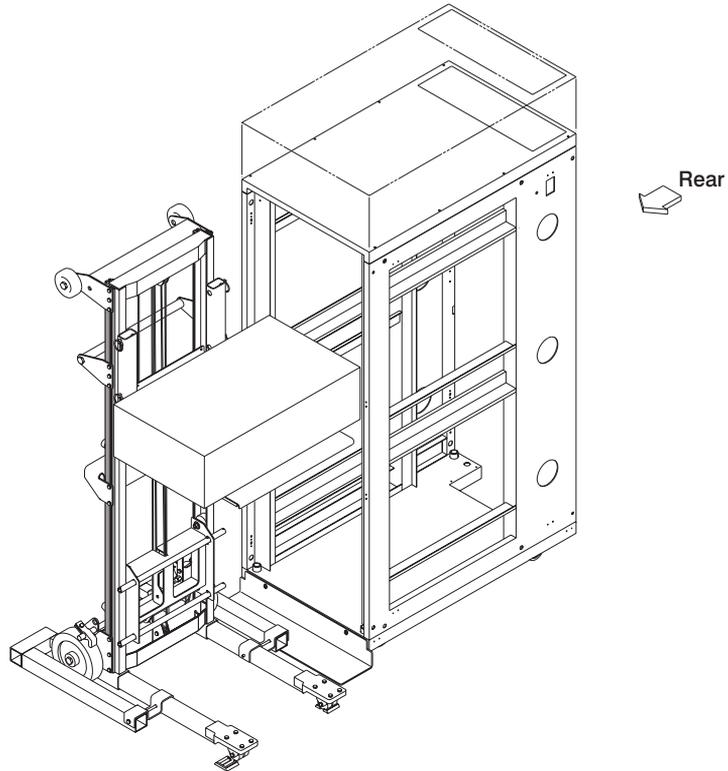
7. Set the wheel brake and place the wheel chocks around the wheels.
8. Turn the winch crank clockwise to position the load platform with the drawer you are removing.

**Note:** You can use the EIA label on the side of the lift tool to aid in positioning the lift tool platform to the proper height.

9. Turn the winch crank counterclockwise 1/4 turn to set the winch brake.

**Note:** If you are removing a drawer in EIA position 28 or higher, a ladder (P/N 46G5947) and/or step stool (P/N 93G1147) might be needed.

10. Remove the drawer from rack and slide onto the lift.



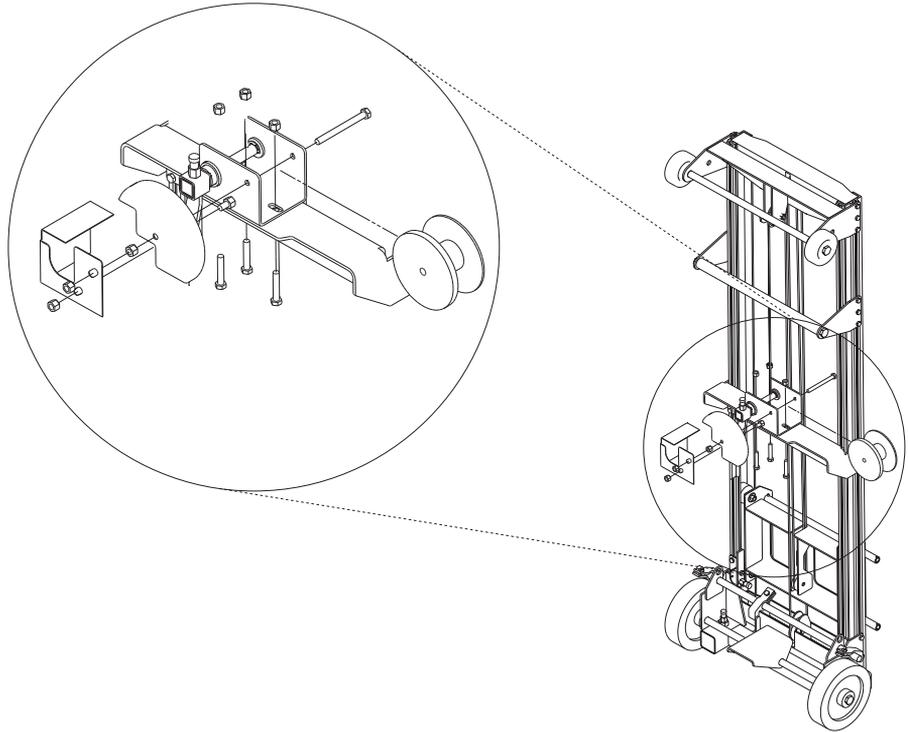
11. Crank lift to lower the drawer.
12. Attach retention straps to the drawer.
13. Remove wheel chocks and release the wheel brake.
14. Move the drawer to a safe location and remove retention straps.



## Chapter 4. Maintenance

This chapter describes the maintenance procedure for replacing the winch assembly on the lift tool. For all other maintenance procedures and maintenance inspections refer to Sections 3 and 4 of the *Genie Lift Parts and Service Manual*.

1. If not at its lowest position already, lower the load platform to its lowest position.
2. Remove the crank.
3. Remove the drum gear cover.
4. Remove the drum bolt from the cable drum.



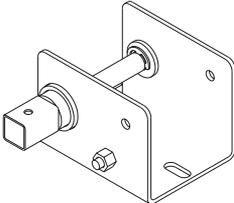
5. Inspect the cable drum teeth for damaged teeth.
6. Inspect the cable for kinks, frays, and abrasions.
7. If the cable drum and cable are OK, it is not necessary to replace them. Place the drum and cable off to the side.
8. Remove the three bolts holding the winch assembly to the lift tool.
9. Replace the winch and attach the cable drum and cable to the new winch assembly. Be sure that there is a minimum of four wraps of cable around the cable drum.
10. Attach the winch assembly to the lift tool.
11. Replace the drum gear cover.
12. Replace the crank and turn the crank to tighten the cable.



## Chapter 5. Parts Information

This chapter lists the parts that can be ordered for the lift tool.

Table 1. Parts for Lift Tool

P/N	Description	
08J5557	Wheel Chock Set (4)	
09P2498	<i>Rack Lift Tool Operation and Maintenance Manual</i>	
09P2496	M8 x 200 MM	
09P2497	M5 x 10 MM	
09P2482	Winch Assembly	



---

## Appendix A. Notices

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

*IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.*

**The following paragraph does not apply to the United Kingdom or any country where such provisions are inconsistent with local law:** INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements, or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM product should be addressed to the suppliers of those products.



## Appendix B. Safety Notice and Safety Label Translations

This appendix contains the translated safety notices and safety labels.

### Safety Notices

This section contains the translated safety notices.

### Safety Notices (Arabic)

#### خطر

أي تقصير في إتباع التعليمات وقواعد السلامة الموضحة بهذا الدليل يمكن أن ينتج عنها حالة وفاة أو إصابات خطيرة.  
لا تحاول التشغيل حتى تقوم بالآتي:

- التعرف على مبادئ السلامة المتضمنة بهذا الدليل.
- حاول دائما إجراء فحص مسبق للعملية.
- فحص مكان العمل.
- استخدم أداة الرفع فقط في رفع أي مهمات.

#### تحذير:

#### مخاطر الفشل

- لا تحاول استخدامها كدرج أو رفعها أو حملها بنفسك.
- لا تقف أو تجلس على شوكات أو ذراع الرفع أو سطح التحميل.
- لا تتسلق أداة الرفع.

## ملاحظات عن الأخطار

- لا تحاول تعدي سعة التحميل المقررة.
- لا تحاول رفع الحمل حتى يتم تثبيت أقفال الأرجل بطريقة صحيحة في الأرجل.
- لا تحاول رفع الحمل حتى يتم تركيب الأرجل ذات الطول الصحيح بطريقة صحيحة.
- لا تحاول رفع الحمل حتى يتم تكون أداة الرفع في وضع مستقر مستوي.
- لا تحاول تغطية أداة رفع ذات أحمال مرفوعة.
- لا تحاول استخدام أي كتل لموازنة أداة الرفع.
- لا تحاول تشغيل أداة الرفع في رياح شديدة. زيادة سطح الحمل سيؤدي إلى تقليل ثبات أداة الرفع في حالات الرياح الشديدة.
- لا تحاول وضع سلالم أو سقالات على أداة الرفع.
- لا تحاول تشغيل أداة الرفع حتى يتم تركيب العجل أو الأرجل أو المجرات بطريقة صحيحة.
- قبل استخدام أداة الرفع، قم بفحص منطقة العمل للتعرف على ما إذا كانت هناك أي منحدرات أو ثقوب أو نتوء أو أثقالي أو كتل حجرية أو أسطح غير متزنة أو أي من حالات المخاطر الأخرى.
- حاول تفادي أي كتل حجرية أو أسطح غير مستوية أثناء جر أداة الرفع.
- لا تحاول استبدال أجزاء أداة الرفع التي تتعلق بالثبات أو الهيكل العام بأخرى ذات مواصفات ووزن مختلف.
- لا تسبب أي قوة أفقية أو تحميل جانبي على أداة الرفع وذلك برفع أو انزال أحد الأحمال الثابتة أو المعلقة.
- لا تحاول استخدام أداة الرفع على سطح متحرك أو متنقل أو المركبات.

## مخاطر الرفع والتصادم

- لا تحاول رفعها إذا كان الحمل غير متمركز بطريقة صحيحة على الشوكات أو سطح التحميل.
- قم بفحص منطقة العمل للتعرف على أي معوقات أو المخاطر المحتملة.
- لا تقف تحت أو تسمح بمرور الأشخاص تحت أداة الرفع أثناء رفع الحمل.
- لا تحاول انزال الحمل ما لم تكن المنطقة تحته خالية من أي أشخاص أو معوقات.
- حكم عقلك فيما يتعلق بتحريك أداة الرفع على أي منطقة مائلة أو منحدرية أو على السلالم.
- لا تحاول تحريك أداة الرفع على السلالم إذا كانت أداة الرفع مزودة بمجرات ذات أربع نقاط.

### مخاطر الاصابات الجسدية

- لا تحاول التعلق بالسلك.
- ابعاد الأيدي والأصابع عن البكرات والرافعة ونقاط الضغط المحتملة.

### مخاطر الاستخدام الخاطيء

- لا تحاول أبدا ترك أداة الرفع المحملة بدون رقابة فقد يحاول الأشخاص الغير مصرح لهم تشغيل أداة الرفع بدون إتباع التعليمات السليمة مما يؤدي الى إحدات مخاطر.

### مخاطر تلف أداة الرفع

- لا تحاول استخدام أداة رفع بها تلف أو عطل.
- لا تحاول استخدام أداة رفع ذات سلك متآكل أو متهالك أو تالف.
- لا تحاول استخدام أداة رفع ذات سلك أقل من أربع لفات على اسطوانة الرفع اذا كانت الرافعة محملة بالكامل.
- قم باجراء فحص قبلية شاملة قبل كل استخدام.
- تأكد من وجود كل العلامات في أماكنها الصحيحة ويمكن قراءتها.

### مخاطر التحطم

- لا تحاول إطلاق البكرة الموجودة في ذراع الرافعة حتى يتم إحكام الفرملة. تكون الفرملة محكمة عندما لا يؤدي الحمل الى دوران ذراع الرافعة.

## Safety Notices (Brazil)

### Perigo

Falhas no cumprimento das instruções e regras de segurança contidas neste manual podem resultar em morte ou lesões graves.

Não opere a máquina, a menos que você:

1. Compreenda e execute os princípios de segurança de operação contidos neste manual.
2. Sempre execute uma inspeção pré-operação.
3. Inspeccione o local de trabalho.
4. Utilize a ferramenta de suspensão apenas para suspender materiais.

### Cuidado:

#### Perigo de Falha

- Não utilize como escada, ou para suspender ou carregar pessoas.
- Não fique de pé e não sente no garfo, na plataforma de carregamento ou na lança.
- Não suba na ferramenta de suspensão.

## Perigo de Tombamento

- Não exceda a capacidade de carga especificada.
- Não levante a carga se os pinos de travamento não estiverem inseridos corretamente nos pés.
- Não levante a carga se os pés com o comprimento correto não estiverem instalados de maneira adequada.
- Não levante a carga se a ferramenta de suspensão não estiver em uma superfície firme e nivelada.
- Não cause inclinação na ferramenta de suspensão com uma carga suspensa.
- Não utilize blocos para nivelar a ferramenta de suspensão.
- Não opere a ferramenta de suspensão em ambientes com ventos fortes. O aumento da superfície de carga irá diminuir a estabilidade da ferramenta de suspensão em ambientes com ventos.
- Não apóie escadas ou andaimes em nenhuma parte da ferramenta de suspensão.
- Não opere a ferramenta de suspensão se o conjunto roda/pé/rodízio de apoio não estiver instalado corretamente.
- Antes de utilizar a ferramenta de suspensão, verifique se existem desníveis, buracos, saliências, cascalho, superfícies instáveis ou escorregadias e outras possíveis condições perigosas no local de trabalho.
- Evite superfícies desniveladas e com cascalho ao movimentar a ferramenta de suspensão.
- Não substitua peças da ferramenta de suspensão que sejam essenciais para a estabilidade ou estrutura por itens de peso ou especificação diferente.
- Não provoque uma força horizontal ou carga lateral na ferramenta de suspensão, levantando ou baixando uma carga fixa ou pendurada.
- Não utilize a ferramenta de suspensão em uma superfície ou veículo em movimento.

### Perigo de Suspensão e Colisão

- Não levante a carga se ela não estiver centralizada corretamente nos garfos ou plataforma de carregamento.
- Verifique se existem obstruções acima da ferramenta ou outros possíveis obstáculos no local de trabalho.
- Não fique ou permita que ninguém fique sob a ferramenta de suspensão enquanto a carga estiver suspensa.
- Não abaixe a carga se houver obstáculos ou pessoas na área abaixo dela.
- Utilize bom senso e planejamento ao transportar a ferramenta de suspensão em um declive, em uma rampa ou em escadas.
- Não movimente a ferramenta de suspensão em escadas quando a ferramenta de suspensão estiver equipada com o rodízio de apoio opcional de quatro pontos.

### Perigo de Lesão Corporal

- Não segure o cabo.
- Mantenha as mãos e dedos longes das polias, do carro e de outros pontos de pressão em potencial.

### Perigo de Uso Inadequado

- Nunca abandone uma ferramenta de suspensão carregada. Pessoas não-autorizadas podem tentar utilizar a ferramenta de suspensão sem instruções adequadas, criando uma condição de falta de segurança.

### Perigo de Ferramenta de Suspensão Danificada

- Não utilize uma ferramenta de suspensão danificada ou com mau funcionamento.
- Não utilize uma ferramenta de suspensão com cabo gasto, torcido ou danificado.
- Não utilize uma ferramenta de suspensão com menos de quatro voltas de cabo no tambor do guincho quando o carro estiver completamente abaixado.
- Faça uma pré-inspeção detalhada antes de cada uso.
- Assegure que todas as etiquetas estejam legíveis e nos locais corretos.

### Perigo de Esmagamento

- Não solte a manivela do guincho enquanto o freio não estiver travado. O freio estará travado quando o peso da carga não mover a manivela do guincho.

## Safety Notices (Chinese)

### 危險

如果沒有遵循本手冊中的指示及安全規則，可能會造成死亡或人身傷害。

除非 貴客戶完成下列事項，否則，請不要進行操作：

1. 學習及練習本手冊中所包含的安全操作原則。
2. 固定進行預備性的檢查。
3. 檢查工作場所。
4. 僅將升降工具用於起降物品。

警告：

#### 墜落危險

- 不可作為踏板，不可用來起降或負載人員。
- 不可在叉臂、負載平台或支架上站立或坐臥。
- 不可攀爬。

#### 翻覆危險

- 不可超出限定的負載量。
- 除非已將支架鎖梢插好在支架上，否則，不得起降負載物。
- 除非已安裝好正確長度的支架，否則，不得起降負載物。
- 除非升降工具位於平穩的表面上，否則，不得起降負載物。
- 升降工具不可因起降的負載物而傾斜。
- 不可在底部堆積雜物以使升降工具水平。
- 不可在有強風或陣風之時操作升降工具。在受風環境中，增加負載面會降低升降工具的穩定度。
- 不可將梯子或施工架靠在升降工具的任何部份。
- 除非輪子/支架/滑輪組件已安裝妥當，否則，不得操作升降工具。
- 在使用升降工具之前，請檢查工作場所中有沒有陡降的地面、坑洞、隆起、瓦礫、不穩或易滑的表面，或其它可能的危險情況。
- 在滾動升降工具時，避開瓦礫和不平的表面。
- 不可採用不同重量或規格的项目來取代會嚴重影響穩定性或結構的升降工具零件。
- 請勿升降固定的或過長的負載物，以免對升降工具水平施壓或偏置負載物於升降工具。
- 不可在移動式或可活動的表面或車子上使用升降工具。

### 起降和碰撞危險

- 如果負載物未妥當放在叉臂或負載平台中央部位，不可抬起任何物件。
- 請檢查工作場所，找出上方是否有任何障礙物或其它可能的危險。
- 當升高負載物時，任何人皆不得站在升降工具下方。
- 除非升降工具下方區域沒有任何人或障礙物，否則，不得降下負載物。
- 當在斜坡或樓梯中移動升降工具時，要運用各種常識，並事先進行規劃。
- 當升降工具裝有四點滑輪選用裝置時，不得在樓梯間予以移動。

### 人身傷害危險

- 不可用手抓電纜。
- 手臂手指皆避開滑輪、輪架及其它可能危險處。

### 使用不當之危險

- 有負載物的升降工具，絕不可無人看管。未獲授權人員可能在沒有適當指示之下操作升降工具，而造成不安全的情況。

### 損壞升降工具危險

- 不可使用損壞或故障的升降工具。
- 不可使用電纜已破舊、磨損、纏結或損壞的升降工具。
- 支架放到最低時，不可使用絞盤鼓狀物纜線少於四套的升降工具。
- 在每次使用之前，事前都應進行完整的檢查。
- 確定所有標籤都在定位上，且都合格。

### 壓垮危險

- 在制動器鎖上之前，不可放開絞盤把手。當負載物不會使絞盤把手旋轉時，便表示制動器已經鎖上。

## Consignes de sécurité (French)

### DANGER

**Le non-respect des instructions et des règles de sécurité mentionnées dans le présent document peut causer des blessures graves, voire entraîner la mort.**

**Respectez impérativement les consignes suivantes avant toute utilisation de l'appareil :**

- 1. Consultez et mettez en pratique les principes de sécurité énumérés dans le présent document.**
- 2. Effectuez une inspection systématique de l'élévateur préalablement à toute utilisation.**
- 3. Inspectez l'environnement de travail.**
- 4. Utilisez l'élévateur uniquement pour soulever des charges.**

## **CAUTION:**

### **Risques de chute**

- **Ne pas utiliser l'élévateur comme marche-pied ou pour soulever ou porter des personnes.**
- **Ne pas se tenir debout ou s'asseoir sur les fourches, la plate-forme de chargement ou sur l'éperon de l'élévateur.**
- **Ne pas monter sur l'élévateur.**

### **Risques de basculement**

- **Ne pas dépasser la capacité de charge nominale.**
- **Ne pas soulever la charge avant de s'assurer que les goupilles de sécurité ont été correctement insérées dans les bras.**
- **Ne pas soulever la charge avant de s'assurer que les bras dont la longueur est conforme aux normes sont correctement installés.**
- **Ne pas soulever la charge avant de s'assurer que l'élévateur se trouve sur une surface plane et stable.**
- **Ne pas incliner l'élévateur lorsque celui-ci soulève la charge.**
- **Ne pas utiliser de cales pour stabiliser l'appareil.**
- **Ne pas utiliser l'élévateur par temps de rafales ou de vent fort. En cas de vent fort, plus la surface de la charge est grande, plus la stabilité de l'élévateur est réduite.**
- **Ne pas placer d'échelles ou d'échafaudages contre l'élévateur.**
- **Ne pas faire fonctionner l'élévateur si les roulettes pivotantes et les pieds ne sont pas correctement montés.**
- **Vérifier, avant d'utiliser l'élévateur, qu'aucune inégalité, trou, bosse, débris, surface instable ou glissante ou tout autre élément dangereux n'est à signaler sur la zone de travail.**
- **Ne pas faire rouler l'élévateur sur des débris ou des surfaces inégales.**
- **Ne pas remplacer les pièces cruciales pour la stabilité ou la structure de l'élévateur par des éléments dont le poids ou les spécifications sont différentes.**
- **Ne pas appliquer de force horizontale ou latérale sur l'élévateur en élevant ou en abaissant une charge fixée ou suspendue.**
- **Ne pas utiliser l'élévateur sur une surface en mouvement ou sur un véhicule.**

#### **Risques de collision liés au soulèvement**

- **Ne pas utiliser l'élévateur si la charge n'est pas correctement placée sur les bras ou sur la plate-forme de charge.**
- **Vérifier qu'aucun obstacle situé en hauteur ou autre objet n'obstrue le passage.**
- **Ne pas se placer sous l'élévateur lorsque la charge est soulevée.**
- **Ne pas déposer de charge si une personne ou un obstacle se trouve sur la zone.**
- **Faire preuve d'une attention toute particulière lors du transport de l'élévateur sur une surface inclinée, en pente ou dans des escaliers.**
- **Ne pas déplacer l'élévateur dans des escaliers si celui-ci est équipé de roulettes multi-directionnelles.**

#### **Risques de blessures corporelles**

- **Ne pas saisir le câble.**
- **Eloigner les doigts et les mains des poulies, du chariot et de tous les autres points où ils risquent de se faire coincer.**

#### **Risque dû à une utilisation incorrecte**

**Ne jamais laisser un élévateur avec charge sans surveillance. Des personnes non autorisées pourraient alors utiliser l'élévateur sans suivre les instructions.**

#### **Risques liés à l'utilisation d'un élévateur endommagé**

- **Ne pas utiliser l'élévateur s'il est endommagé ou s'il fonctionne mal.**
- **Ne pas utiliser l'élévateur à l'aide d'un câble usagé, éraillé, déformé ou abîmé.**
- **Ne pas utiliser l'élévateur avec moins de quatre tours de câbles sur le tambour du treuil lorsque le chariot est complètement abaissé.**
- **Effectuer une inspection approfondie avant toute utilisation.**
- **S'assurer que toutes les étiquettes sont en place et lisibles.**

#### **Risque d'écrasement**

**Ne pas relâcher la poignée du treuil tant que le frein n'est pas enclenché. Le frein est enclenché dès lors que la poignée du treuil ne risque pas de tourner en raison de la charge.**

## Safety Notices (German)

### Vorsicht

*Table 2.*

Das Nichtbeachten der Anweisungen und Sicherheitshinweise in diesem Dokument kann zu schweren oder lebensgefährlichen Verletzungen führen. Nehmen Sie die Vorrichtung erst in Betrieb, wenn Sie folgende Punkte beachtet haben:

1. Beachten Sie die in diesem Dokument aufgeführten Sicherheitshinweise.
2. Überprüfen Sie vor Inbetriebnahme immer den Arbeitsbereich.
3. Achten Sie auf einen ordnungsgemäß eingerichteten Arbeitsbereich.
4. Verwenden Sie die Hebevorrichtung nur zum Anheben von Materialien.

### Achtung:

#### Hinweise zu fehlerhaftem Verhalten

- Nicht als Trittleiter oder zum Anheben von Personen verwenden.
- Nicht auf die Gabeln, die Ladeplattform oder den oberen Teil stehen oder sitzen.
- Nicht auf die Hebevorrichtung steigen.

#### Allgemeine Hinweise

- Nicht die angegebene Hebelast überschreiten.
- Heben Sie die Last erst dann an, wenn sich die Verriegelungen an den Gabeln ordnungsgemäß in den Gabeln befinden.
- Heben Sie die Last nur an, wenn Gabeln mit der richtigen Länge ordnungsgemäß angebracht wurden.
- Heben Sie die Last nur an, wenn sich die Vorrichtung auf einer sicheren und ebenen Oberfläche befindet.
- Kippen Sie die Vorrichtung nicht bei angehobener Last.
- Verwenden Sie keine Klötze, um die Vorrichtung auszurichten.
- Verwenden Sie die Vorrichtung nicht bei starken oder böigen Winden. Bei Wind verringert sich die Stabilität, wenn die Ladefläche angehoben wird.
- Stellen Sie keine Leitern oder Gerüstteile gegen irgendeinen Teil der Vorrichtung.
- Verwenden Sie die Vorrichtung nur, wenn die Räder, Gabeln und Rollen ordnungsgemäß installiert sind.
- Bevor Sie die Vorrichtung verwenden, sollten Sie den Arbeitsbereich auf lose Teile, Öffnungen, Beulen, Hindernisse am Boden, instabile oder schlüpfrige Oberflächen oder andere mögliche Gefährdungen hin überprüfen.
- Tauschen Sie keine Teile, die wichtig für die Stabilität der Vorrichtung sind, gegen Teile aus, die ein anderes Gewicht oder andere Spezifikationen aufweisen.

- Üben Sie keinen horizontalen Druck oder eine seitliche Belastung auf die Vorrichtung aus, indem Sie eine fest angebrachte oder überhängende Last anheben oder absenken.
- Verwenden Sie die Vorrichtung nicht auf einer sich bewegenden oder beweglichen Oberfläche oder einem Fahrzeug.

#### Hinweise zum Anheben von Lasten

- Heben Sie die Last nur an, wenn sie sich in der Mitte der Gabeln oder der Ladeplattform befindet.
- Überprüfen Sie den Arbeitsbereich auf Hindernisse oder andere mögliche Gefährdungen.
- Stellen Sie sich bei angehobener Last nicht unter die Last, und achten Sie darauf, dass auch keine anderen Personen unterhalb der angehobenen Last stehen.
- Senken Sie die Last nur ab, wenn sich unterhalb der Last keine Personen oder sonstigen Hindernisse befinden.
- Seien Sie besonders vorsichtig, wenn Sie die Vorrichtung an einer Neigung, einem Abhang oder auf Treppen transportieren.
- Transportieren Sie die Vorrichtung nicht auf Treppen, wenn die Vorrichtung mit Vierpunktrollen ausgestattet ist.

#### Hinweise zu möglichen Verletzungen

- Fassen Sie das Kabel nicht an.
- Bringen Sie Ihre Hände und Finger nicht in die Nähe der Rollen, der Hubvorrichtung und anderer Teile, an denen Sie sich die Finger einklemmen könnten.

#### Hinweise zu unsachgemäßer Handhabung

- Lassen Sie eine beladene Vorrichtung nicht unbeaufsichtigt. Andernfalls könnten unberechtigte Personen versuchen, die Vorrichtung unsachgemäß zu bedienen. Dies kann zu Gefährdungen führen.

#### Hinweise zu Beschädigungen an der Hebevorrichtung

- Verwenden Sie keine beschädigte oder schlecht funktionierende Hebevorrichtung.
- Verwenden Sie die Vorrichtung nicht mit einem abgenutzten, durchgescheuerten, verknoteten oder beschädigten Kabel.
- Verwenden Sie die Hebevorrichtung nicht mit weniger als vier Kabelwicklungen auf der Kabeltrommel, wenn die Hebevorrichtung vollständig abgesenkt ist.
- Überprüfen Sie die Vorrichtung sorgfältig vor jeder Inbetriebnahme.
- Hinweise zu möglichen Beschädigungen Achten Sie darauf, dass alle Etiketten angebracht und lesbar sind.

**Hinweise zu möglichen Beschädigungen Achten Sie darauf, dass alle Etiketten angebracht und lesbar sind.**

- **Lassen Sie die Kurbelwinde erst los, wenn die Bremsvorrichtung verriegelt ist. Die Bremsvorrichtung ist dann verriegelt, wenn sich die Kurbelwinde nicht mehr auf Grund der Last dreht.**

### הודעות בטיחות

#### סכנה

הפעלה בניגוד להוראות ולכללי הבטיחות המפורטים במדריך זה עלולה לגרום למוות או לפציעה חמורה.

אל תפעילו את המכשיר אם לא מילאתם את הדרישות האלה:

1. לימוד ותרגול של עקרונות הפעולה הבטוחה המפורטים במדריך זה.
2. ביצוע כל הבדיקות הנדרשות לפני ההפעלה.
3. בדיקת אזור העבודה.
4. שימוש במכשיר ההרמה להרמת חומרים בלבד.

### סכנות נפילה

- אין להשתמש במכשיר בתור מדרגה, או להרמה או נשיאה של אנשים.
- אין לעמוד או לשבת על המלגזות, משטח ההרמה או הזרוע.
- אין לטפס על מכשיר ההרמה.

### סכנת התהפכות

- אין לחרוג מקיבולת ההעמסה הרשומה
- הרמת מטען מותרת רק כאשר פיני הנעילה של הרגליים מוכנסים כהלכה לתוך הרגליים.
- הרמת מטען מותרת רק כאשר רגליים באורך הנכון מותקנות כהלכה.
- רמת מטען מותרת רק כאשר מכשיר ההרמה נמצא על משטח יציב וישר.
- אין להטות את מכשיר ההרמה כשמטען מורם עליו.
- אין להשתמש בבלוקים או בחפצים אחרים ליישור מכשיר ההרמה על הקרקע.
- אין להפעיל את מכשיר ההרמה בתנאי רוח חזקה או משבי רוח. יציבות המכשיר פוחתת בתנאי רוח.
- אין להשעין סולמות או פיגומים על מכשיר ההרמה.
- יש להפעיל את מכשיר ההרמה רק כאשר מכלול הגלגלים/רגליים מותקן כהלכה.
- לפני השימוש במכשיר ההרמה, יש לבדוק את אזור העבודה לגילוי גבהים לא אחידים של הקרקע, חורים, בליטות, פסולת, משטחים לא יציבים או חלקים, או תנאים מסוכנים אחרים.
- יש להימנע מהסעת מכשיר ההרמה על משטחים לא ישרים או מכוסי פסולת.
- אין להחליף חלקים של מכשיר ההרמה החיוניים ליציבותו או לחוזקו בפריטים בעלי משקל או מפרט שונה.
- אין להפעיל כוח אופקי או עומס צדי על מכשיר ההרמה באמצעות הרמה או הנמכה של משקל מקובע או בולט מהצדדים.
- אין להשתמש במכשיר ההרמה על משטחים נעים או ניידים או על כלי רכב.

### סכנות הרמה והתנגשות

- אין להרים מטען שאינו מיוצב כהלכה במרכז המלגזות או משטח ההרמה.
- יש לבדוק את אזור העבודה לגילוי מכשולים בגובה או סכנות אפשריות אחרות.
- אין לעמוד מתחת למכשיר ההרמה או לאפשר לאנשים אחרים לעמוד תחתיו בזמן הרמת מטען.
- יש להנמיך את המטען רק כאשר האזור שמתחתיו פנוי מאנשים וממכשולים.
- יש להשתמש בשכל ישר ובתכנון זהיר בזמן הסעת מכשיר ההרמה על משטח משופע, מדרון או מדרגות.
- אין להסיע את מכשיר ההרמה על מדרגות אם מכשיר ההרמה מצויד באופציית 4 גלגלי עזר.

### סכנת פציעה

- אין ללפות את הכבל.
- יש להרחיק ידיים ואצבעות מהגלגלות, המרכב ואזורים אחרים שהן עלולות להיתפס בהן.

### סכנות שימוש לא נכון

לעולם אין להשאיר מכשיר הרמה עם מטען ללא פיקוח. אנשים לא מורשים עלולים להפעיל את מכשיר ההרמה ללא הדרכה מתאימה, וליצור מצב מסוכן.

### סכנות מכשיר הרמה פגום

- אין להשתמש במכשיר הרמה שניזוק או אינו מתפקד כהלכה.
- אין להשתמש במכשיר הרמה אם הכבל שלו שחוק, בלוי, מכופף או פגום.
- אין להשתמש במכשיר ההרמה עם פחות מארבעה ליפופים של הכבל על תוף המנוף כאשר המרכב מונמך עד הסוף.

### סכנת מחיצה

אין לשחרר או ללפות את ידית המנוף מבלי לנעול את הבלם קודם לכן. הבלם נעול כאשר המטען אינו גורם לידיית המנוף להסתובב.

## **Informazioni sulla sicurezza (Italian)**

### **DANGER**

**Il mancato adempimento delle istruzioni e delle norme di sicurezza contenute in questo manuale può comportare morte o lesioni gravi.**

**Assicurarsi di soddisfare i seguenti requisiti prima di azionare l'apparecchio:**

- 1. Apprendere e mettere in pratica le norme di sicurezza contenute nel manuale.**
- 2. Eseguire sempre un'ispezione preliminare.**
- 3. Ispezionare l'area di lavoro.**
- 4. Utilizzare il dispositivo di sollevamento solo per materiali.**

## CAUTION:

### Pericolo di caduta

- Non utilizzare come gradino né per sollevare o trasportare personale.
- Non stare in piedi né mettersi a sedere sulle forche, sulla piattaforma di carico o sul braccio meccanico.
- Non arrampicarsi sul dispositivo sollevatore.

### Pericoli di ribaltamento

- Non superare la capacità di carico nominale.
- Non sollevare il carico se i perni di blocco del montante non sono stati inseriti correttamente nei montanti.
- Non sollevare il carico se non sono stati installati correttamente i montanti della giusta lunghezza.
- Non sollevare il carico se il dispositivo di sollevamento non si trova su una superficie piana e stabile.
- Non inclinare il dispositivo di sollevamento con un carico sollevato.
- Non utilizzare i blocchi per livellare il dispositivo di sollevamento.
- Non azionare il dispositivo di sollevamento in condizioni di vento forte o in presenza di raffiche di vento. L'aumento della superficie di carico comporterà la diminuzione della stabilità del dispositivo di sollevamento in condizioni di vento.
- Non appoggiare scale o impalcature su nessuna parte del dispositivo di sollevamento.
- Non azionare il dispositivo di sollevamento se il gruppo ruota/montante/ruota orientabile non è correttamente installato.
- Prima di utilizzare il dispositivo di sollevamento, verificare l'area di lavoro per rilevare eventuali oggetti instabili che potrebbero cadere dall'alto, fori, protuberanze, detriti, superfici instabili o sdruciolevoli oppure altre possibili condizioni di pericolo.
- Evitare di spostare il dispositivo su detriti e superfici irregolari.
- Non sostituire componenti del dispositivo di sollevamento fondamentali per la stabilità o la struttura con elementi di peso o specifiche differenti.
- Non applicare una forza orizzontale o un carico laterale al dispositivo di sollevamento sollevando o abbassando un carico fisso o sovrastante.
- Non utilizzare il dispositivo di sollevamento su una superficie o un veicolo in movimento o mobili.

#### **Pericolo di sollevamento e collisione**

- **Non sollevare se il carico non è correttamente centrato sulle forche o sulla piattaforma di carico.**
- **Verificare l'area di lavoro per rilevare eventuali ostruzioni aeree o altri possibili pericoli.**
- **Non sostare né consentire al personale di sostare sotto il dispositivo di sollevamento quando il carico è sollevato.**
- **Non abbassare il carico se l'area sottostante non è libera da ostruzioni o personale.**
- **Pianificare con cautela il trasporto del dispositivo di sollevamento su piani inclinati, pendii o scale.**
- **Non spostare il dispositivo di sollevamento quando è dotato di una ruota orientabile a quattro punti opzionale.**

#### **Pericolo di lesioni personali**

- **Non afferrare il cavo.**
- **Tenere le mani lontane dalle pulegge, dal carrello o da altre potenziali morse.**

#### **Pericolo derivato da uso improprio**

**Non lasciare mai incustodito un dispositivo di sollevamento con un carico. Personale non autorizzato potrebbe tentare di azionare il dispositivo di sollevamento senza le conoscenze necessarie, dando luogo a condizioni di pericolo.**

#### **Pericoli derivanti da un dispositivo di sollevamento danneggiato**

- **Non utilizzare un dispositivo di sollevamento danneggiato o mal funzionante.**
- **Non utilizzare un dispositivo di sollevamento con un cavo usurato, logorato, attorcigliato o danneggiato.**
- **Non utilizzare il dispositivo di sollevamento con meno di quattro giri di cavo avvolti al tamburo dell'argano quando il carrello è completamente abbassato.**
- **Ispezionare completamente prima di ciascun utilizzo.**
- **Assicurarsi che le etichette siano in posizione e leggibili.**

#### **Pericolo di stritolamento**

**Non rilasciare la manovella dell'argano finché il freno non è bloccato. Il freno è bloccato quando il carico non provoca la rotazione della manovella dell'argano.**

## Safety Notices (Korean)

### 위험

본 매뉴얼의 지시사항과 안전 규칙을 따르지 않으면 사망이나 심각한 상해를 초래할 수 있습니다.

작동시 다음 사항을 유의하십시오.

1. 본 매뉴얼에 포함된 안전 조작 원칙을 습득하고 실행하십시오.
2. 항상 사전 작동 점검을 하십시오.
3. 작업장을 점검하십시오.
4. 기중기는 물건 적재에만 사용하십시오.

### 주의해야 할 위험

- 단으로 사용하거나 사람을 들어올리거나 나르는 데 사용하지 마십시오.
- 포크, 적재단 또는 기중기의 암 위에 서거나 앉지 마십시오.
- 기중기에 올라가지 마십시오.

### 심각한 위험에 대한 팁

- 정해진 적재 용량을 초과하지 마십시오.
- 다리 잠금핀이 다리에 제대로 끼워지지 않은 경우, 적재물을 들어올리지 마십시오.
- 정확한 길이의 다리가 제대로 설치되지 않은 경우, 적재물을 들어올리지 마십시오.
- 기중기가 단단한 평지에 있지 않은 경우, 적재물을 들어올리지 마십시오.
- 적재물을 들어올린 상태로 기중기를 기울이지 마십시오.
- 기중기의 수평을 맞추기 위해 받침대를 사용하지 마십시오.
- 광란 바람이 불 때 기중기를 작동하지 마십시오. 바람이 부는 상황에서 적재물의 표면적을 늘리면 기중기의 안정성이 감소됩니다.
- 기중기에 사다리나 비계를 기대어 놓지 마십시오.
- 바퀴/다리/다리 바퀴 조립이 제대로 되지 않은 경우, 기중기를 조정하지 마십시오.
- 기중기를 사용하기 전, 적재물을 내려놓을 작업장에 구덩이, 울기부, 파편, 불안정하거나 미끄러운 지면 또는 기타 위험 조건이 있는지 확인하십시오.
- 기중기 운행 중에는 파편과 울퉁불퉁한 지면을 피하십시오.
- 안정성이나 구조면에서 중요한 기중기의 부품을 다른 중량이나 스펙의 부품으로 교체하지 마십시오.
- 고정되거나 들출된 적재물을 들어올리거나 내려놓을 때 기중기에 수평 압력을 가하거나 측면 적재를 하지 마십시오.
- 움직이거나 유동적인 지면 또는 운송 수단 위에서 기중기를 사용하지 마십시오.

#### 적재 및 충돌 위험

- 적재물이 포크나 적재단 중앙에 제대로 적재되지 않을 경우, 들어올리지 마십시오.
- 고가(공중) 장애물이나 기타 위험 요인이 있는지 여부를 확인하십시오.
- 적재물을 들어올릴 때 사람이 기중기 아래 서있지 않도록 하십시오.
- 기중기 아래 사람이거나 장애물이 있을 경우, 적재물을 내려놓지 마십시오.
- 경사면, 비탈진 곳 또는 계단 위에서 기중기를 운송할 경우, 상식과 계획을 따르십시오.
- 기중기가 네 개의 다리 바퀴 장치를 갖춘 경우, 계단 위에서 기중기를 이동하지 마십시오.

#### 신체 상해 위험

- 케이블을 움켜잡지 마십시오.
- 도르래, 운반대 및 기타 물림점에 손과 손가락을 가까이 하지 않도록 주의하십시오.

#### 잘못된 사용으로 인한 위험

- 적재물을 실은 기중기를 절대로 방치하지 마십시오. 허가받지 않은 사람이 적절한 지시사항 없이 위험한 상황에서 기중기를 작동할 수 있습니다.

#### 파손된 기중기로 인한 위험

- 파손되거나 작동 불량인 기중기를 사용하지 마십시오.
- 낡고 닳아서 얽히거나 손상된 케이블이 있는 기중기를 사용하지 마십시오.
- 운반대를 완전히 내려놓았을 때 원치 몸통에 네가닥 이하의 케이블이 있는 기중기를 사용하지 마십시오.
- 매번 사용하기 전에 철저한 사전 점검을 하십시오.
- 모든 레이블이 제 위치에 있는지 여부와 읽을 수 있는지 여부를 확인하십시오.

#### 충돌 위험

- 브레이크를 잠그기 전에 원치 핸들에서 손을 떼지 마십시오. 적재물로 인해 원치 핸들이 돌아가지 않으면 브레이크가 잠깁니다.

## Consejos de seguridad (Spanish)

### DANGER

**El incumplimiento de las instrucciones de seguridad de este manual puede provocar lesiones graves e incluso la muerte.**

**No utilice el equipo a menos que:**

- 1. Aprenda y ejercite los principios de seguridad de este manual.**
- 2. Inspeccione siempre el equipo antes de utilizarlo.**
- 3. Inspeccione el lugar de trabajo.**
- 4. Utilice únicamente el elevador para levantar materiales.**

## **CAUTION:**

### **Peligro de caída de objetos**

- **No lo emplee como escalón o para subir o transportar personas.**
- **No se sitúe o siente en la horquilla, en la plataforma de carga ni en la pluma.**
- **No se suba en el elevador.**

### **Peligro de vuelco.**

- **No supere la capacidad de carga nominal.**
- **No eleve la carga sin antes haber insertado correctamente los pernos de bloqueo de los soportes.**
- **No eleve la carga si la altura correcta de los soportes no se ha instalado adecuadamente.**
- **No levante la carga si el elevador no se encuentra sobre una superficie firme y plana.**
- **No ladee el elevador cuando tenga una carga elevada.**
- **No utilice bloques para nivelar la herramienta de elevación.**
- **No utilice el elevador con ráfagas de viento o con viento fuerte. Si aumenta la superficie de carga, reducirá la estabilidad del elevador si hay viento.**
- **No apoye escaleras de mano o andamios en parte alguna del elevador.**
- **No utilice el elevador sin haber instalado correctamente el conjunto de ruedas/soportes.**
- **Antes de utilizar el elevador, compruebe que el área de trabajo no tiene desniveles, agujeros, abultamientos, escombros, que no es una superficie poco firme o resbaladiza, o que presente otras posibles condiciones de peligro.**
- **No conduzca el elevador por superficies irregulares o con escombros.**
- **No sustituya las partes del elevador esenciales para la estabilidad o para la estructura de la misma por objetos con especificaciones o pesos diferentes.**
- **No suba o baje una carga fija o que sobresalga, causando así un empuje horizontal o una carga lateral.**
- **No emplee el elevador sobre una superficie o vehículo móvil o en movimiento.**

**Peligros de elevación y de choque.**

- No haga ascender la carga si ésta no se encuentra correctamente centrada en la horquilla o en la plataforma de carga.
- Compruebe los obstáculos elevados o los posibles peligros en el área de trabajo.
- No permanezca o permita que persona alguna permanezca debajo del elevador cuando la carga se encuentre elevada.
- No baje la carga sin comprobar que el área de debajo se haya despejada de personal u obstáculos.
- Utilice el sentido común y planifique el transporte del elevador por cuestas, pendientes o escaleras.
- No desplace el elevador por escaleras cuando éste cuente con la opción de ruedecitas en cuatro puntos.

**Peligro de sufrir lesiones corporales**

- No agarre el cable.
- Mantenga las manos y los dedos alejados de las poleas, del carro y de otros lugares potencialmente peligrosos.

**Peligro por usos indebidos**

No deje nunca desatendido el elevador cargado. Personal no autorizado podría intentar manejar el elevador sin conocer las instrucciones precisas, provocando así una situación de peligro.

**Peligro por daños en el elevador**

- No utilice un elevador dañado o que funciona mal.
- No utilice el elevador con el cable desgastado, pelado, enroscado o dañado.
- No utilice el elevador con un número de envoltorios de cable inferior a cuatro en el tambor del torno cuando el carro se encuentre completamente cargado.
- Inspeccione a fondo el elevador antes de cada utilización.
- Asegúrese de que todas las etiquetas están en su sitio y de que son legibles.

**Peligro de aplastamiento.**

No suelte el mango hasta que el freno esté bloqueado. El freno se encuentra bloqueado cuando la carga no pueda hacer girar al mango.

## Safety Labels

This section contains the translated safety labels.

### Safety Label (Arabic)

ملكية خاصة بشركة IBM



خطر

يجب عليك قراءة وفهم والالتزام بكل القواعد  
الأمنية وتعليمات التشغيل الموضحة في كتاب  
Lift Tool Operation and Maintenance  
, SA23-1242.

قد يؤدي عدم التزامك بهذه التعليمات الى  
الوفاة؛ لا قدر الله؛ أو الى تعرضك لاصابات جسيمة.



تحذير

ابعد يديك وأصابعك عن مكان البكرة والحامل، وأماكن  
كل أدوات الرفع الأخرى.



تحذير

قد تؤدي هذه الرافعة الى حدوث اصابات جسيمة:

- لا تقم باستخدامها في رفع الموظفين.
- تأكد من سماع صوت أثناء رفع الحمولة.
- تأكد من أن الرافعة مثبتة في مكانها قبل ترك الذراع



تحذير

لا تسمح بوجود أي شخص في أداة الرفع



تحذير

نبذة عن مصدر الخطر: يمكن أن تصبح أداة الرفع غير ثابتة اذا تم  
تركيب مجموعة العجل أو الحاملات أو الأسطوانات بطريقة  
غير صحيحة.

## Safety Label (Brazil)

PROPRIEDADE DA IBM



### PERIGO

Você deve ler, compreender e seguir todas as regras de segurança e instruções de operação contidas na publicação Lift Tool Operation and Maintenance, SA23-1242.

O não cumprimento destes requisitos pode resultar em morte ou lesões graves.



### CUIDADO

Mantenha as mãos e dedos longe das polias, do carro e de outros possíveis pontos de pressão.



### CUIDADO

Este guincho pode causar lesões graves:

- Não o utilize para levantar pessoas.
- Certifique-se de ouvir um clique enquanto a carga estiver sendo suspensa.
- Assegure que o gancho esteja travado antes de soltar a manivela.



### CUIDADO

Não permita a presença de pessoas na ferramenta de suspensão.



### CUIDADO

Perigo de tombamento: A ferramenta de suspensão pode tornar-se instável se o conjunto roda/pé/rodízio de apoio estiver instalado de maneira incorreta.

## Safety Label (Chinese Traditional)

IBM 財產



危險

請您務必熟讀、瞭解並遵守「Lift Tool Operation and Maintenance」（書號為 SA23-1242）一書中的安全規定及操作指示。

如果無法遵守上述規定時，可能會造成死亡或嚴重的人身傷害。



警告

避免讓手或手指觸碰到滑輪、台架或其他可能的軋壓處。



警告

此絞盤會造成嚴重的傷害：

- 請勿用於將人抬起。
- 請確定在載入時您聽到「卡擦」的聲音。
- 請確定在放開把手前，絞盤已鎖定到適當的位置。



警告

請勿讓人站在升降工具上面。



警告

傾倒危險：如果輪子/腳架/滑輪安裝不適當時，此升降工具可能會不穩。

## Safety Label (Chinese)

IBM 财产



危险

必须阅读、理解和遵守《升降工具操作与维护》(Lift Tool Operation and Maintenance, SA23-1242) 一书中所有的安全规则和操作说明。

若不按照书中的安全规则和操作说明进行操作，可能会导致死亡或严重的人身伤害。



小心

请将手和手指远离滑轮、托架及其它可能会受到挤压的地方。



小心

此提物机可能会引起严重伤害：

- 请勿用此载人。
- 确保在提升负载时听到“卡嗒”一声。
- 确保在释放手柄前提物机已锁定在适当的位置。



小心

请勿让任何人员站在升降工具上。



小心

产生翻倒危险：如果车轮、腿或轮脚安装不当，此升降工具可能会变得不稳定。

## Safety Label (Dutch)

EIGENDOM VAN IBM



### GEVAAR

U dient alle veiligheids- en bedieningsinstructies in het boek Lift Tool Operation and Maintenance (SA23-1242) te lezen, te begrijpen en na te leven.

Het niet naleven hiervan kan leiden tot ernstig, en mogelijk fataal, letsel.



### ATTENTIE

Houd handen en vingers uit de buurt van katrollen, de slede en andere knelpunten.



### ATTENTIE

Deze lier kan ernstig letsel veroorzaken:

- Niet gebruiken om personen op te heffen.
- Let op dat u een klikkend geluid hoort terwijl de vracht omhoog gaat.
- Zorg dat de lier vergrendeld is voordat u de hendel loslaat.



### ATTENTIE

Zorg dat er niemand op de lift komt.



### ATTENTIE

Kantelgevaar: De lift kan instabiel worden als het geheel van wiel, steun en zwenkwiel onjuist geïnstalleerd is.

## Safety Label (French)

PROPRIETE D'IBM



**DANGER**

Vous devez lire, comprendre et suivre impérativement les consignes de sécurité ainsi que les instructions d'utilisation contenues dans le manuel Lift Tool Operation and Maintenance, SA23-1242.

Sinon, il y a risque de blessures graves, voire mortelles.



**ATTENTION**

Eloignez vos mains et vos doigts des poulies, du mécanisme d'entraînement, et d'autres sources de pincement.



**ATTENTION**

Le treuil peut provoquer des blessures graves :

- Ne pas l'utiliser pour déplacer des personnes
- Assurez-vous qu'il y a bien un cliquetis lorsque la charge s'élève
- Assurez-vous que le treuil est bloqué et bien verrouillé avant de relâcher la poignée



**ATTENTION**

N'autorisez personne à monter sur l'outil de levage.



**ATTENTION**

Risques liés au basculement : l'outil de levage peut devenir instable si l'ensemble roulettes/béquilles n'est pas installé correctement.

## Safety Label (German)

EIGENTUM VON IBM



### VORSICHT

Es müssen alle Sicherheitsregeln und Bedienungsanweisungen im Buch Lift Tool Operation and Maintenance, IBM Form SA23-1242, beachtet werden.

Wird dies versäumt, können tödliche oder schwere Verletzungen die Folge sein.



### ACHTUNG

Darauf achten, dass Hände und Finger nicht durch rotierende, antreibende oder andere Teile gequetscht werden können.



### ACHTUNG

Diese Kurbel kann zu schweren Verletzungen führen:

- Nicht zum Hochheben von Personen verwenden.
- Darauf achten, dass ein Klicken zu hören ist, wenn die Last angehoben wird.
- Darauf achten, dass die Kurbel verriegelt ist, bevor der Griff losgelassen wird.



### ACHTUNG

Darauf achten, dass keine Personen das Hebewerkzeug betreten.



### ACHTUNG

Kippgefahr: Das Hebewerkzeug kann instabil werden, wenn Räder/FüÙe/Gleitrollen falsch installiert sind.

## Safety Label (Greek)

ΙΔΙΟΚΤΗΣΙΑ ΤΗΣ IBM



### ΚΙΝΔΥΝΟΣ

Πρέπει να διαβάσετε, να κατανοήσετε και να ακολουθείτε όλους τους κανόνες ασφάλειας και τις οδηγίες χρήσης που περιέχονται στο εγχειρίδιο Lift Tool Operation and Maintenance, SA23-1242.

Αν δεν το κάνετε, θα μπορούσε να προκληθεί σοβαρός ή και θανάσιμος τραυματισμός.



### ΠΡΟΣΟΧΗ

Κρατήστε τα χέρια και τα δάκτυλά σας μακριά από τις τροχαλίες, τον ιμάντα και άλλα πιθανά σημεία τραυματισμού.



### ΠΡΟΣΟΧΗ

Αυτό το βαρούλκο θα μπορούσε να προκαλέσει σοβαρό τραυματισμό:

- Μην το χρησιμοποιείτε για την ανύψωση προσωπικού.
- Βεβαιωθείτε ότι ακούγονται κλικ κατά την ανύψωση του φορτίου.
- Βεβαιωθείτε ότι το βαρούλκο έχει σταθεροποιηθεί στη θέση του πριν αποδεσμεύσετε τη λαβή.



### ΠΡΟΣΟΧΗ

Μην επιτρέπετε να ανεβαίνουν άνθρωποι στο ανυψωτικό εργαλείο.



### ΠΡΟΣΟΧΗ

Κίνδυνος ανατροπής: Το ανυψωτικό εργαλείο μπορεί να μην είναι σταθερό αν δεν είναι σωστά εγκατεστημένη η βάση με τους τροχούς.

## Safety Label (Hebrew)

רכוש יבם

סכנה



עליכם לקרוא, להבין ולמלא אחר כל כללי הבטיחות והוראות ההפעלה בספר ההפעלה והתחזוקה של מכשיר ההרמה, SA23-1242.

הפעלה שלא על פי ההוראות עלולה לגרום למוות או לפציעה חמורה.

זהירות



הרחיקו ידיים ואצבעות מהגלגלות, המרכב ואזורים אחרים שבהם הן עלולות להיתפס.

זהירות



- המנוף עלול לגרום לפציעה חמורה.
- אין להשתמש בו להרמת אנשים.
- ודאו שאתם שומעים קול תקתוק בזמן שהמטען מורם.
- ודאו שהמנוף נעול במקומו לפני שחרור הידית.

זהירות



אל תאפשרו לאנשים לטפס על מכשיר ההרמה.

זהירות



סכנות התהפכות: מכשיר ההרמה עלול להעשות לא יציב אם מכלול הגלגלים/רגליים אינו מותקן כהלכה.

## Safety Label (Hungarian)

IBM TULAJDON



### VESZÉLY

Olvassa el és tartsa be az emelőszervezet üzemeltetési és karbantartási kézikönyvében (Lift Tool Operation and Maintenance book, SA23-1242) található összes biztonsági és kezelési utasítást!

Ennek elmulasztása súlyos vagy halálos sérüléshez vezethet.



### FIGYELMEZTETÉS

Ne fogja meg a csigákat vagy a kocsi, sem a többi, becsípődési veszéllyel fenyegető szerkezeti elemet!



### FIGYELMEZTETÉS

Ez a csörlő súlyos sérülést okozhat:

- Ne használja személyfelvonóként!
- A teher emelése közben kattogó hangot kell hallania.
- Mielőtt elengedné a kart, győződjék meg arról, hogy a csörlő rögzített helyzetben van!



### FIGYELMEZTETÉS

Senkit ne engedjen az emelőszervezetre!



### FIGYELMEZTETÉS

Borulási veszély: Az emelőszervezet ingataggá válhat, ha a forgókerék-, a lábazat- vagy a gurítókerék-szerelvényt rosszul telepítették.

## Safety Label (Italian)

PROPRIETA' DI IBM



### PERICOLO

Leggere comprendere ed osservare tutte le regole di sicurezza e le istruzioni operative riportate nella guida Lift Tool Operation e Maintenance, SA23-1242.

Il mancato rispetto di questo avviso può provocare lesioni gravi o la morte.



### ATTENZIONE

Tenere le mani e le dita lontane dalle pulegge, dal carrello e da ogni altra possibile morsa.



### ATTENZIONE

Questo argano può provocare lesioni gravi:

- Non utilizzarlo per sollevare persone.
- Assicurarsi di udire il ticchettio durante il sollevamento del carico.
- Assicurarsi che l'argano sia bloccato in posizione prima di rilasciare l'impugnatura.



### ATTENZIONE

Non permettere la sosta alle persone sulla piattaforma di sollevamento.



### ATTENZIONE

Pericolo di ribaltamento: la piattaforma di sollevamento può divenire instabile se ingranaggi/basi/ruote non sono montate correttamente.

## Safety Label (Japanese)

日本アイ・ビー・エム資産



### 危険

「Lift Tool Operation and Maintenance」(SA23-1242)の安全上のルール、および使用上の説明をお読みいただき、理解の上、したがってください。

したがわれない場合、死や重大な事故につながる可能性があります。



### 注意

プーリーやキャリッジ、他のはさまれる恐れのある部分に手や指で触れないでください。



### 注意

このウィンチは、重大な事故につながる可能性がありますので、

- 人を持ち上げるために使用しないでください。
- 積荷を上げる時は、カチカチッという音がすることを確認してください。
- ハンドルを離す前にウィンチがロックされたことを確認してください。



### 注意

リスト・ツールの上には乗らないでください。



### 注意

転倒の恐れあり：リフト・ツールの車輪/足/キャスターの各アセンブリーが正しく取り付けられていない場合、不安定な状態になります。

## Safety Label (Korean)

### IBM 자산



위험

**Lift Tool Operation and Maintenance (SA23-1242)** 서적의 모든 안전 규칙과 지시사항을 반드시 읽고 이해하여 이에 따라야 합니다.

상기 규칙과 지시사항을 어길 경우, 사망이나 심각한 상해를 초래할 수 있습니다.



주의

도르래, 운반대 및 기타 물림점에 손과 손가락을 가까이 하지 않도록 주의하십시오.



주의

- 이 원치는 심각한 상해를 야기할 수 있습니다.
- 사람을 들어올리는 데 사용하지 마십시오.
  - 적재물을 들어올리는 동안 제동음이 들리는지 확인하십시오.
  - 핸들을 풀기 전에 원치가 제대로 잠겨있는지 확인하십시오.



주의

기중기에 사람이 올라가지 않도록 하십시오.



주의

심각한 위험에 대한 팁: 기중기는 바퀴/다리/다리 바퀴 조립이 제대로 되지 않으면 불안정해질 수 있습니다.

## Safety Label (Polish)

WŁASNOŚĆ FIRMY IBM



### NIEBEZPIECZEŃSTWO

Należy zapoznać się ze wszystkimi zasadami dotyczącymi bezpieczeństwa oraz instrukcjami postępowania w podręczniku Lift Tool Operation and Maintenance, SA23-1242 i przestrzegać ich. Postępowanie niezgodne z nimi może spowodować śmierć lub poważne obrażenia.



### ZAGROŻENIE

Należy trzymać ręce i palce z dala od mechanizmów, wózka i innych miejsc, w których może dojść do ich ściśnięcia.



### ZAGROŻENIE

Ponieważ winda może spowodować poważne obrażenia:

- Nie należy jej używać do podnoszenia ludzi.
- Podnoszeniu ładunku musi towarzyszyć odgłos kliknięcia.
- Winda musi być zablokowana przed zwolnieniem uchwytu.



### ZAGROŻENIE

Pracownikom nie wolno wchodzić na część przeznaczoną do podnoszenia.



### ZAGROŻENIE

Niebezpieczeństwo przewrócenia. Część podnosząca może być niestabilna, jeśli zespół jezdno-stabilizujący nie został prawidłowo zainstalowany.

## Safety Label (Spanish)

PROPIEDAD DE IBM



### PELIGRO

Debe leer, comprender y cumplir todas las normas de seguridad e instrucciones del libro de Manejo y mantenimiento del elevador, SA23-1242.

El incumplimiento de las mismas puede provocar lesiones graves o la muerte.



### ADVERTENCIA

Mantenga manos y dedos alejados de las poleas, del carro y de otros lugares peligrosos.



### ADVERTENCIA

Este torno podría causar lesiones graves:

- No lo utilice para levantar personas.
- Asegúrese de oír un ruido seco mientras eleva la carga.
- Asegúrese de que el torno está bloqueado en posición antes de soltar el mango.



### ADVERTENCIA

No permita que nadie suba al elevador.



### ADVERTENCIA

Peligro de vuelco: El elevador puede no estar estable si el conjunto de ruedecillas/soportes/ruedas se instala indebidamente.

---

# Readers' Comments — We'd Like to Hear from You

**Rack Lift Tool Operation and Maintenance**

**Publication No. SA23-1242-00**

**Overall, how satisfied are you with the information in this book?**

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Overall satisfaction	<input type="checkbox"/>				

**How satisfied are you that the information in this book is:**

	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied
Accurate	<input type="checkbox"/>				
Complete	<input type="checkbox"/>				
Easy to find	<input type="checkbox"/>				
Easy to understand	<input type="checkbox"/>				
Well organized	<input type="checkbox"/>				
Applicable to your tasks	<input type="checkbox"/>				

**Please tell us how we can improve this book:**

Thank you for your responses. May we contact you?  Yes  No

When you send comments to IBM, you grant IBM a nonexclusive right to use or distribute your comments in any way it believes appropriate without incurring any obligation to you.

---

Name

---

Address

---

Company or Organization

---

---

Phone No.

---

**Readers' Comments — We'd Like to Hear from You**  
SA23-1242-00



Cut or Fold  
Along Line

Fold and Tape

**Please do not staple**

Fold and Tape

PLACE  
POSTAGE  
STAMP  
HERE

Information Development  
Department H6DS-905-6C006  
11400 Burnet Road  
Austin, TX 78758-3493

Fold and Tape

**Please do not staple**

Fold and Tape

SA23-1242-00

Cut or Fold  
Along Line





Part Number: 09P2498

Printed in U. S. A.

October 2001

SA23-1242-00



(1P) P/N: 09P2498

