

Part Number 39644

Mini Linear Lift Assembly

Installation & Operator's Instruction Manual



Chore-Time Warranty

Chore-Time Equipment warrants each new product manufactured by it to be free from defects in material or workmanship for one year from the date of initial installation by the original purchaser. If such a defect is found by Chore-Time to exist within the one year period, Chore-Time will, at its option, (a) repair or replace such product free of charge, F.O.B. the factory of manufacture, or (b) refund to the original purchaser the original purchase price, in lieu of such repair or replacement.

Conditions and limitations:

1. The product must be installed and operated in accordance with instructions published by **Chore-Time or warranty will be void.**
2. Warranty is void if **all components** of a system are not supplied by **Chore-Time.**
3. This product must be purchased from and installed by an authorized Chore-Time dealer or certified representative thereof, or the warranty will be void.
4. Malfunctions or failure resulting from misuse, abuse, negligence, alteration, accident, or lack of proper maintenance shall not be considered defects under this warranty.
5. This warranty applies only to systems for the care of poultry and livestock. Other applications in industry or commerce are not covered by this warranty.

Chore-Time shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to have suffered as a result of any defect in the product. **“Consequential” or “Special Damages”** *as used herein include, but are not limited to, lost or damaged products or goods, costs of transportation, lost sales, lost orders, lost income, increased overhead, labor and incidental costs and operational inefficiencies.*

THIS WARRANTY CONSTITUTES CHORE-TIME'S ENTIRE AND SOLE WARRANTY AND CHORE-TIME EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

Any exceptions to this warranty must be authorized in writing by an officer of the company. Chore-Time reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

CHORE-TIME EQUIPMENT, A Division of CTB, Inc.
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General

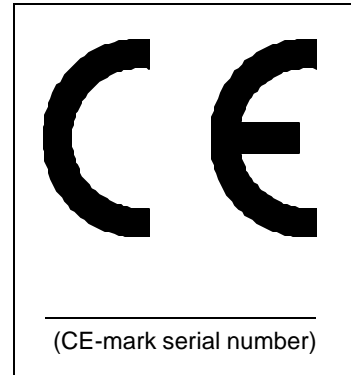
Support Information

The Chore-Time Mini Linear Lift Assembly is designed to open inlet doors. Using this equipment for any other purpose or in a way not within the operating recommendations specified in this manual will void the warranty and may cause personal injury.

This manual is designed to provide comprehensive planning, installation, operation, and parts listing information. The Table of Contents provides a convenient overview of the information in this manual. The Table of Contents also specifies which pages contain information for the sales personnel, installer, and consumer (end user).

IMPORTANT: CE stands for certified Europe. It is a standard which equipment must meet or exceed in order to be sold in Europe. CE provides a benchmark for safety and manufacturing issues. **CE is required only on equipment sold in Europe.**

Chore-Time Equipment recognizes CE Mark and pursues compliance in all applicable products. *Fill in the CE-Mark serial number in the blank space provided for future reference.*



Distributor and Installer Information

Please fill in the following information about your Product.
Keep this manual in a clean, dry place for future reference.

Distributor's Name _____

Distributor's Address _____

Distributor's Phone _____ **Date of Purchase** _____

Installer's Name _____

Installer's Address _____

Installer's Phone _____ **Date of Installation** _____

System Specifications _____

About This Manual

The intent of this manual is to help you in two ways. One is to follow step-by-step in the order of assembly of your product. The other way is for easy reference if you have questions in a particular area.

Important ! Read **ALL** instructions carefully before starting construction.

Important ! Pay particular attention to all **SAFETY** information.

- *Metric measurements are shown in millimeters and in brackets, unless otherwise specified.* “ ” equals inches and “ ’ ” equals feet in English measurements.

Examples:

1" [25.4]

4' [1 219]

- Optional equipment contains necessary instructions for assembly or operation.
- Major changes from the last printing will be listed on the back cover.
- This Planning Symbol is used in areas where planning needs to take place before construction continues.
- Very small numbers near an illustration (*i.e.*, ¹²⁵⁷⁻⁴⁸) are identification of the graphic, not a part number.



Tools Needed for Installation

- Regular Screwdriver
- Box-End Wrenches
- Drive Ratchet and Sockets
- Wire Cutters
- Wire Strippers
- Electrical Wire
- Drill and Drill Bits

Safety Information

Caution, Warning and Danger Decals have been placed on the equipment to warn of potentially dangerous situations. Care should be taken to keep this information intact and easy to read at all times. Replace missing or damaged safety signs.

Using the equipment for purposes other than specified in this manual may cause personal injury and or damage to the equipment.



Safety–Alert Symbol

This is a safety–alert symbol. When you see this symbol on your equipment, be alert to the potential for personal injury. This equipment is designed to be installed and operated as safely as possible...however, hazards do exist.

Understanding Signal Words

Signal words are used in conjunction with the safety–alert symbol to identify the severity of the warning.



DANGER indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



CAUTION indicates a hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

Follow Safety Instructions

Carefully read all safety messages in this manual and on your equipment safety signs. Follow recommended precautions and safe operating practices.

Keep safety signs in good condition. Replace missing or damaged safety signs.

Decal Descriptions

DANGER: Electrical Hazard

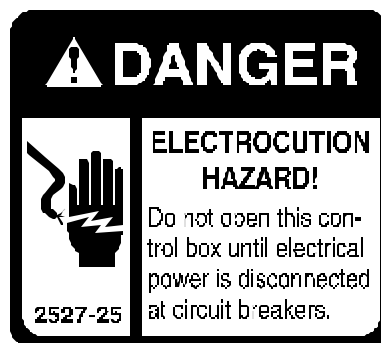
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

Ground all electrical equipment for safety.

All electrical wiring must be done by a qualified electrician in accordance with local and national electric codes.

Ground all non-current carrying metal parts to guard against electrical shock.

With the exception of motor overload protection, electrical disconnects and over current protection are not supplied with the equipment.



Layout Diagrams

The Mini Linear Lift has a working load of 300 lbs. and a maximum load of 500 lbs. It has the capabilities to pull the cable at a rate of 18" per minute, with a maximum stroke of 16". The normal pulley set up, cuts the rate in half so that the doors will only open and shut at a rate of 9" per minute. **The force applied by the two large springs or counter weight is used to close the doors, where as the Mini Linear Lift is used to open the doors. Thus extending Mini Linear Lift closes the inlet doors, while retracting Mini Linear Lift opens the doors.**

Note: The Mini Linear Lift should not pull doors closed.
Excessive loads at time of closure may cause the Mini Linear Lift to fail.

Cable/Pulley Combinations

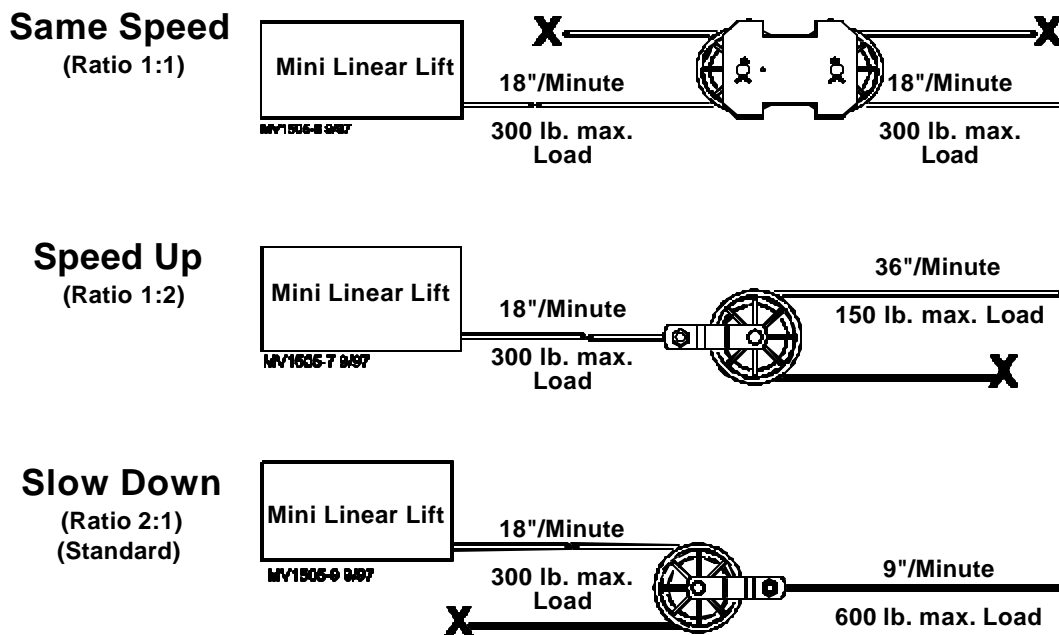


Figure 1. Cable Ratio Diagram (side view).

Vertical Installation—Mini Linear Lift

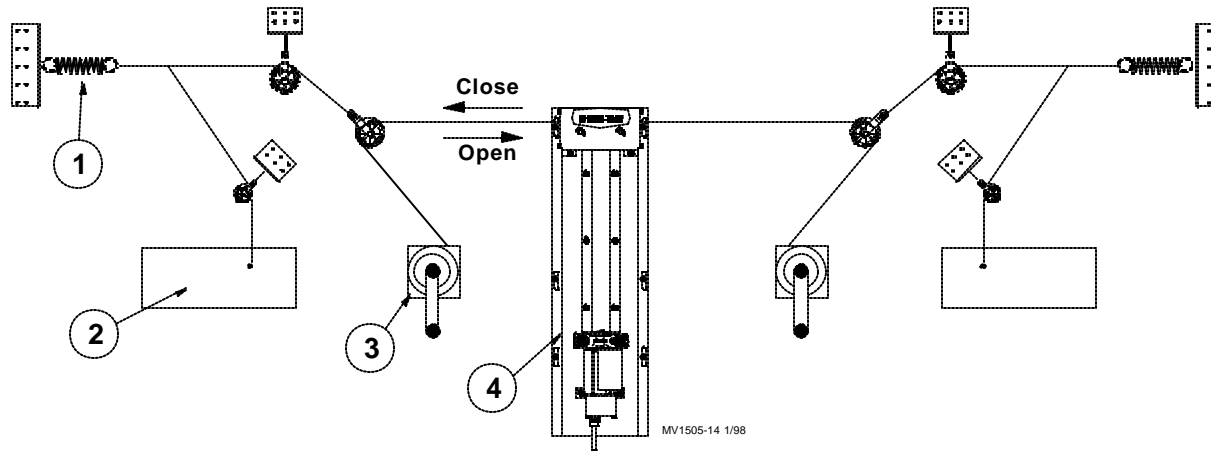


Figure 2. Mini Linear Lift Vertical Installation

Key	Description
1	Inlet Spring (Close Doors)
2	Inlet Door
3	Hand Crank
4	Mini Linear Lift (Open Doors)

Horizontal Installation—Mini Linear Lift

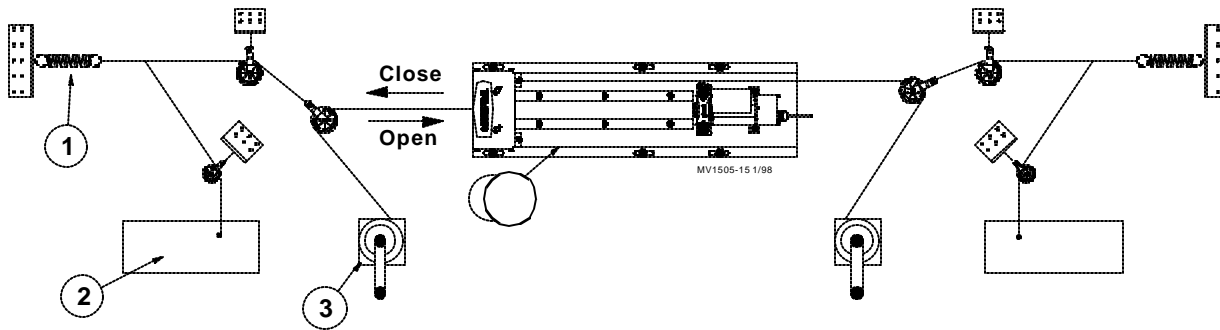


Figure 3. Mini Linear Lift Horizontal Installation

Key	Description
1	Inlet Spring (Close Doors)
2	Inlet Door
3	Hand Crank
4	Mini Linear Lift (Open Doors)

Mini Linear Lift Installation

The Mini Linear Lift may be mounted horizontally or vertically on a wall or ceiling. The Mini Linear Lift may also be placed in the middle of the side wall or on the end wall depending on whether you have one or two sides of doors. See **Figure 2 and 3**. The installation location must be reinforced and sturdy enough so the Mini Linear Lift can operate properly and safely.

Important:

The Mini Linear Lift must be placed inside the building to prevent rust from forming on the threaded shaft.

Installation Procedure:

1. The first step is to fasten the Lift, the Hand Crank, and the Large Springs in their proper locations. **Figures 2 and 3**.
2. Route the cables from the Lift through the Pulley System and the Hand Crank and then back to the Large Springs. The Cable should be loose and the Large Springs unstretched. With the normal Pulley setup—**Figure 2**, the force needed from the Mini Linear Lift is cut in half. Make sure not to arrange the Pulleys in a way that would double the force needed.
3. Make sure that the white plastic block inside the lift is in its fully retracted position—this would be nearest to the gear motor. After doing so, use the Hand Crank to tighten the Cable. Continue tightening until the two Large Springs are each stretched to a length of 3-6 feet.
4. At this stretched position, attach to the cable the Inlet Doors. Make sure the Inlet Doors are in their fully opened position.

Note:

It is recommend that a Small Spring be placed in-line with the Inlets to reduce unnecessary torque when the Doors are closed.

5. The Large Springs should be stretched 3-6 feet, the Threaded actuator nut fully retracted, and the Inlet Doors fully opened. The next step is to extend the Mini Linear Lift until the Inlet Doors close. **Do Not Over Extend The Lift**. If Inlet Doors do not completely close, adjustments can be made later. When the Mini Linear Lift is extended far enough to close the Inlet Doors, the Limit Switch should be set. See **Figure 4**.
6. The final step is making fine adjustments to the lengths of the Inlet ropes, checking that each door is tightly closed.

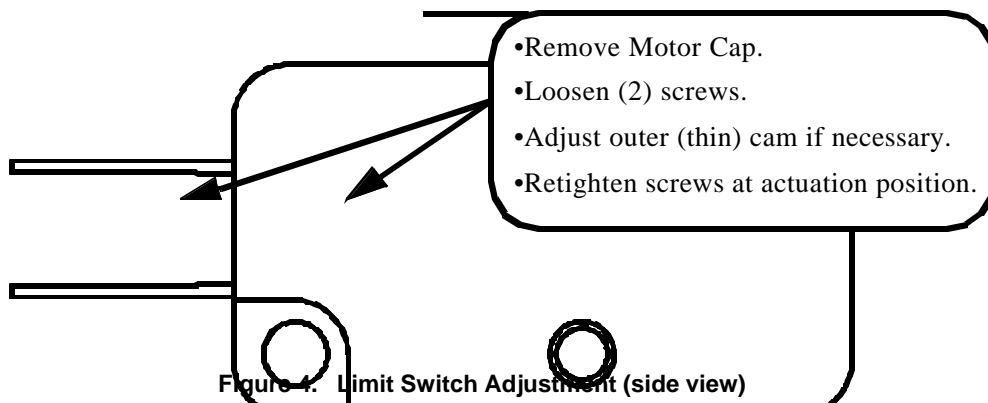
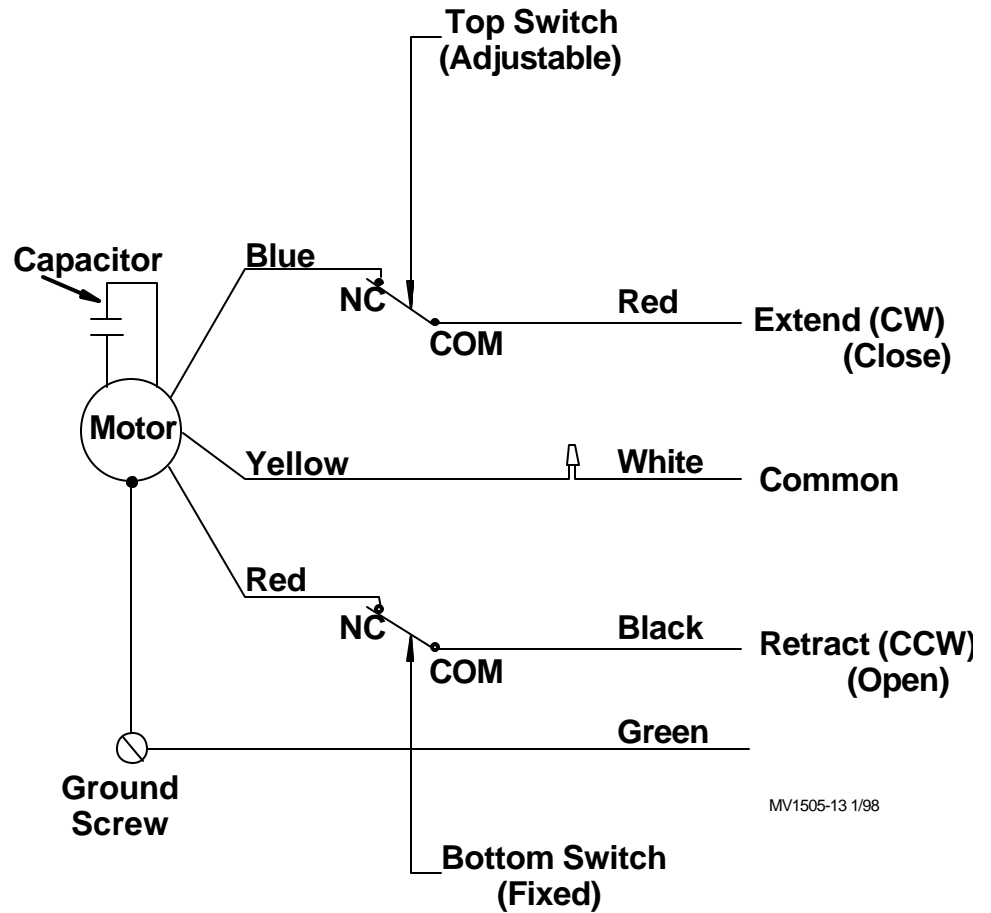


Figure 4. Limit Switch Adjustment (side view)

Wiring Diagram

A junction box is needed to connect the motor to its 230V single phase power source. The junction box is not included in the Mini Linear Lift assembly



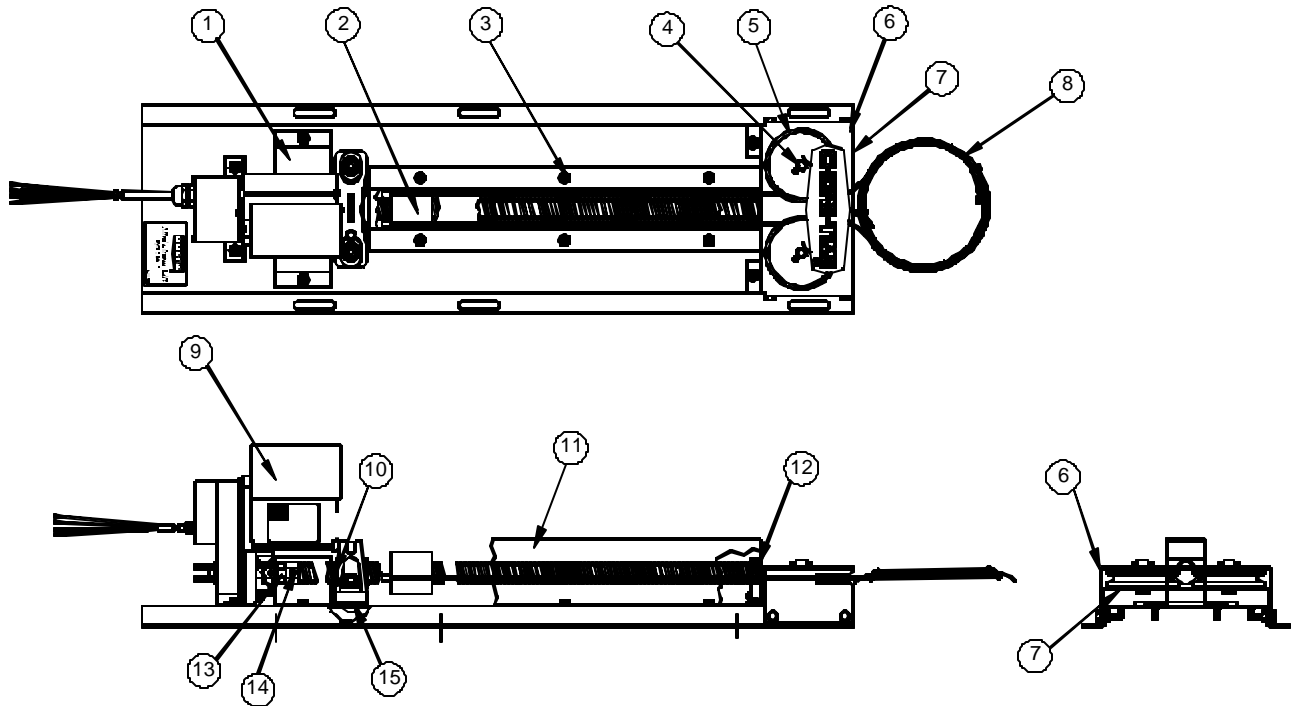
MV1505-13 1/98

Figure 5. Mini Linear Lift Wiring Diagram

Maintenance

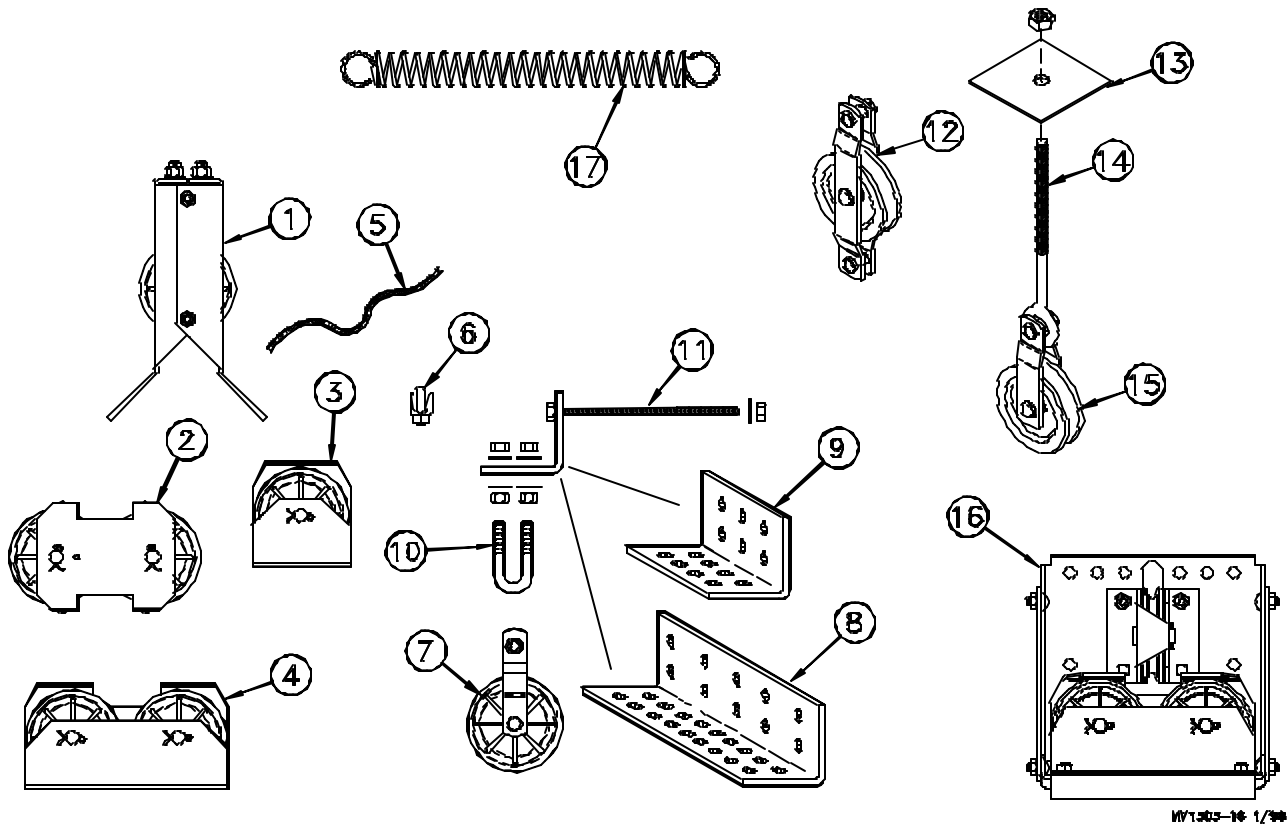
- Livestock should be kept away from the Mini Linear Lift Assembly
- The Threaded Shaft should be greased monthly.

Mini Linear Lift Parts List



Item	Description	Part No.
1	Mini Lift Shield	43666
2	Threaded Block	43664
3	Hex Washer Head St Bolt	39607
4	Clevis Pin	2498-1
5	Red Pulley Wheel	2503
6	Pulley Upper Bracket	39241
7	Lower Pulley Bracket	39732
8	Galv. Aircraft Cable	40574
9	Red Pulley Wheel	2503
10	Linear Actuator Gearmotor	39798
11	Inlet Actuator Nut Guide	39239
12	.198 x 1" Oiled Spirol Pin	2960-1
13	Spider Spacer	43397
14	Flexible Coupling	43396
15	Pillow Block Shim	43665

Optional Suspension Parts



MV1505-16 1/2"

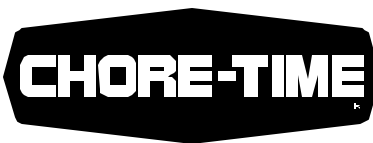
Item	Description	Part No.
1	Corner Pulley Assembly	35597
2	Double Pulley Assembly	27772
3	Pulley Kit	27301
4	Center Pulley Assembly	27302
5	3/16" Cable (150')—7/19 3/32" Cable—galvanized	13976 4973
6	Cable Clamp 1/4"	732
7	Pulley Assembly	2500
8	Double Pulley Mounting Brkt.	35404
9	Single Pulley Mounting Brkt.	35405
10	3/16-18x7" U Bolt with Nuts	35602
11	5/16-18x7" Bolt	4412-20
12	Double Eye Pulley	2501
13	Foot	1586
14	Eye Bolt	6362
15	Pulley Assembly	2500
16	Three Pulley Assembly	34651
17	Inlet Spring	41143

Items 7, 8, 10, & 11 with a quantity of 2 each—may be ordered as a Double Pulley Assembly. Part No. 35600.

Items 7, 9, 10, & 11 with a quantity of 1 each—may be ordered as a Single Pulley Assembly. Part No. 35598.

Items 13, 14, & 15—may be ordered as a Full Line Suspension Kit. Part No. 7948.

This page is for your notes.



**Made to work.
Built to last.**

Revisions to this Manual

Page No.	Description of Change
1	The Photo has been updated to reflect the update.
11	Changes include Part Number Changes and a Drawing update.

Contact your nearby Chore-Time distributor or representative for additional parts and information.

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