

Part Number 41920-18 Standard, and 44458-18 Chain Version

Linear Lift 800 Assembly

Installation & Operator's Instruction Manual



1083-10 1/99

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.
P.O. Box 2000
Milford, Indiana 46542-2000 U.S.A.

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General

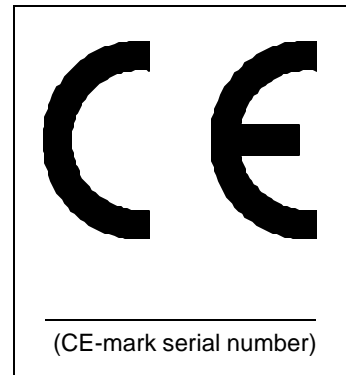
Support Information

The Chore-Time Linear Lift 800 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]

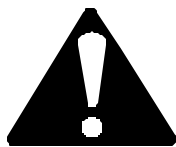
- Optional equipment contains necessary instructions for assembly or operation.
- Major changes from the last printing will be listed on the back cover.
- This Planning Symbol is used in areas where planning needs to take place before construction continues.
- Very small numbers near an illustration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



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.

Safety Information- continued

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

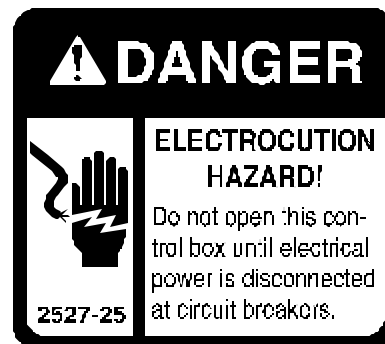
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

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.



Introduction and Layout Diagrams

The Linear Lift 800 is designed to open and close inlets. The Linear Lift 800 is designed to run on the 2:1 ratio. At the 2:1 ratio, the Linear Lift 800 will move at 18" per minute, while the Inlets will move 9" per minute. It may be wired into the ventilation control (i.e. Static Pressure Inlet Control, SUPER-Selector, Chore Tronics, etc.). The maximum load the Linear Lift 800 can operate at is 800 pounds.

Tools Needed for Installation

- | | |
|------------------------------|-------------------------|
| 1. Regular Screwdriver | 5. Wire Strippers |
| 2. Box-End Wrenches | 6. Electrical Wire |
| 3. Drive Ratchet and Sockets | 7. Drill and Drill Bits |
| 4. Wire Cutters | |

Note: It is recommended that the Linear Lift 800 not be used to pull doors closed. Excessive loads at time of closure may cause the Linear Lift 800 to fail.

Available Sizes and Speed of Operation

- The Linear Lift 800 has a total stroke of 18".
- The lifting speed is 18" per minute.

Cable/Pulley Combinations

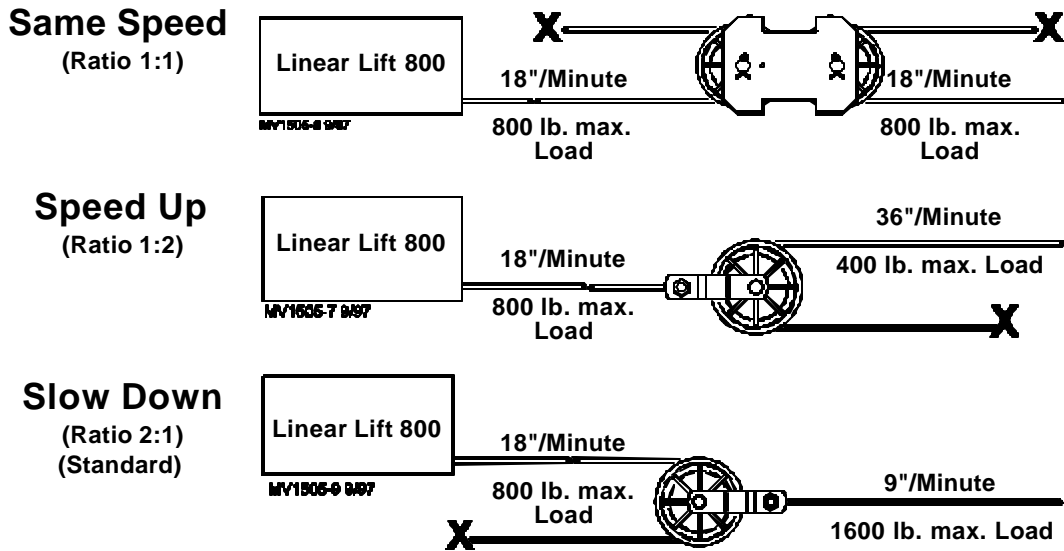


Figure 1. Cable Ratio Diagram (side view).

Standard Inlet Door Installation

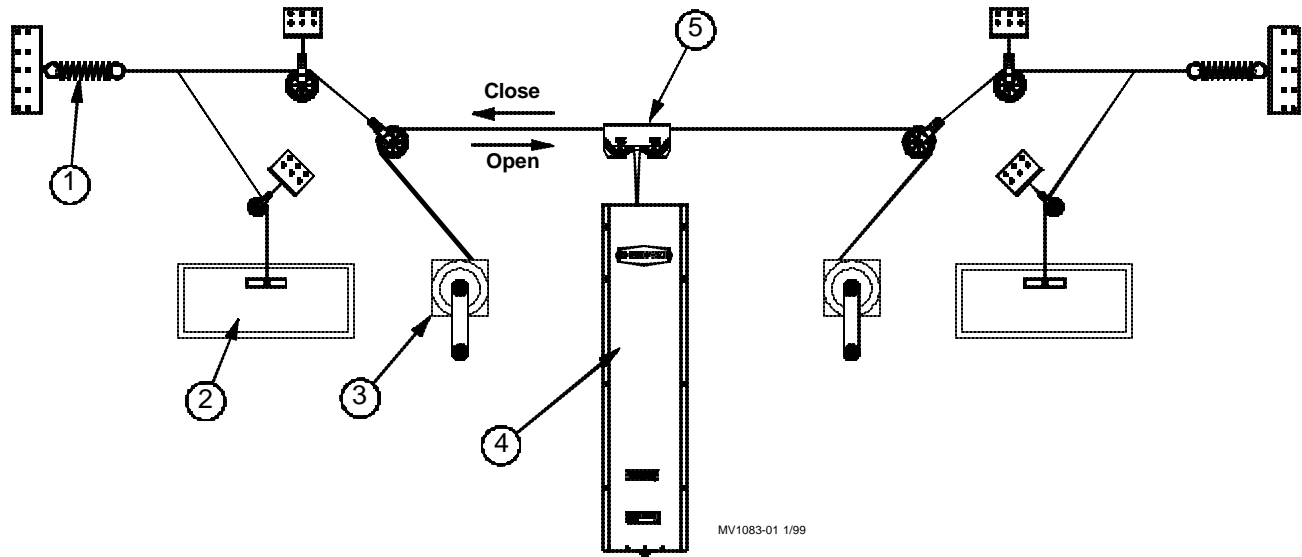


Figure 2. Side Wall Linear Lift 800 with 2:1 double-back cable arrangement

Key	Description	Part No.
1	Inlet Spring (Close Doors)	41143
2	Inlet Door	
3	Hand Winch Winch Mounting Assembly	1212 1193
4	Linear Lift 800 (Open Doors)	41920-18
5	Center Pulley Assembly	27302

Side Wall Linear Lift 800 Installation

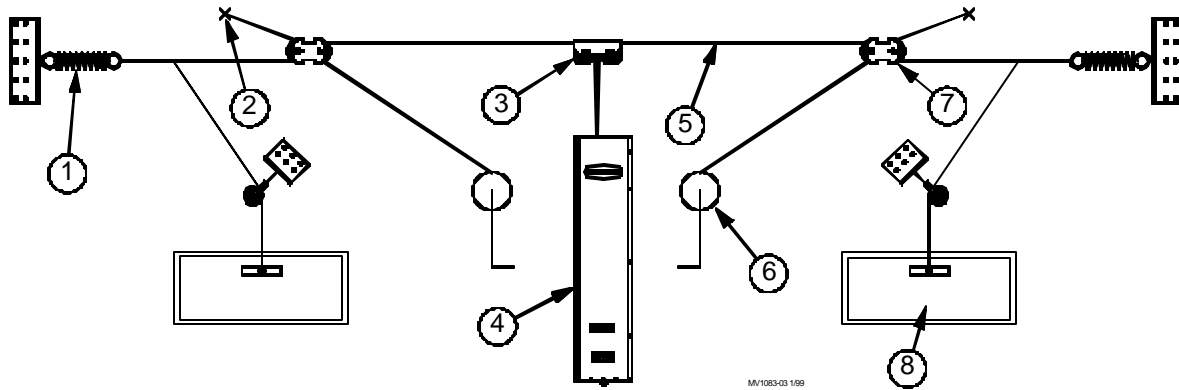
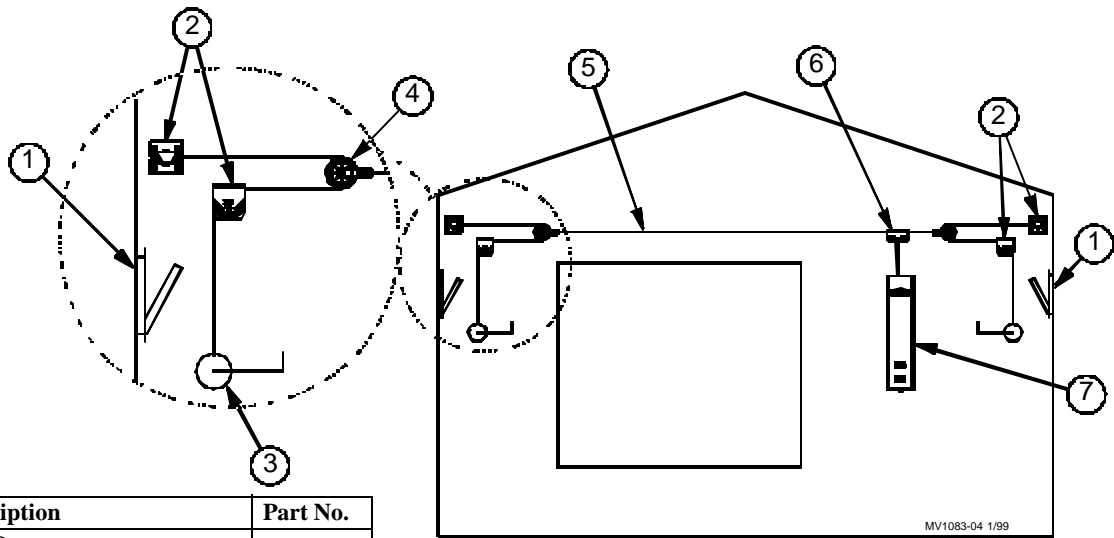


Figure 3. Side Wall Linear Lift 800 with a 1:1 double-back cable arrangement

Item	Description	Part No.
1	Inlet Spring (Close Doors)	41143
2	Tie Down	
3	Center Pulley Assembly	27302
4	Linear Lift 800 (Open Doors)	41920-18
5	Curtain Cable	41342
6	Hand Winch Winch Mounting Assembly	1212 1193
7	Double Pulley Assembly	27772
8	Inlet Door	

End Wall Linear Lift 800 Installation (with corner pulleys)



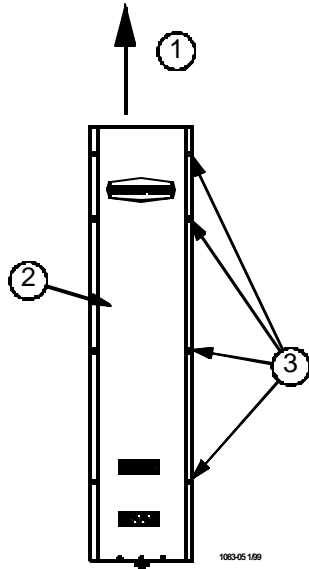
Item	Description	Part No.
1	Inlet Door	
2	Single Pulley Assembly	27301
3	Hand Winch Winch Mounting Assembly	1212 1193
4	Single Pulley Assembly	2500
5	Curtain Cable	
6	Center Pulley Assembly	27302
7	Linear Lift 800	41920-18

Figure 4. End Wall Linear Lift 800 with a 1:2 double-back cable arrangement

Linear Lift 800 Installation

The Linear Lift 800 may be mounted to the wall or ceiling, using (8) 3/8" Lag Screws (included in the Hardware Package). **See Figure 5.**

1. Route the cable as required to the main curtain or baffle board cable.
2. Mount the Linear Lift 800 to the wall or ceiling using the hardware provided. **See note below.**



Item	Description
1	Cable Routing
2	Linear Lift 800
3	Mounting Hole Locations

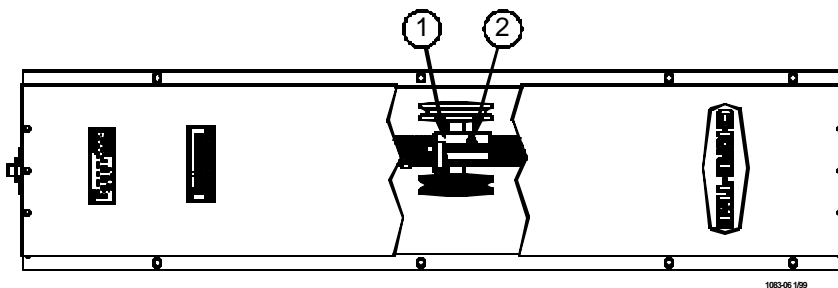
Figure 5. Linear Lift 800 Installation (vertical wall view)

Grease Recommendation

The LINEAR-LIFT™ is fully greased at the factory. However, for maximum life, Chore-Time strongly recommends greasing the Linear Lift 800 at each grease fitting monthly. For best results apply grease through grease fitting while Linear Lift 800 is in operation to put an even coating of grease over the entire length of the Threaded Shaft.

Recommended Grease: Sunoco Construction Grease or Mobile CMP Grease (available through Grainger) or similar water-resistant with moly, extreme pressure (E.P.) grease. **See Figure 6.**

IMPORTANT: Grease monthly for maximum life.



Item	Description
1	Machined Nut
2	Grease Fitting

Figure 6. Linear Lift 800 Critical Grease Fitting Locations (horizontal wall mount view)

Linear Lift 800 Switch Adjustment

The Linear Lift 800 has adjustable stops (Set Collars) that may be moved to accommodate a variety of inlet opening lengths.

A 1/8" Allen wrench is required to loosen the set screw on the Set Collar (see **Item 2 below**). Slide the Set Collar(s) on the Switch Rod allow for the maximum inlet opening travel (see **Item 4 below**).

Figure 7 shows the maximum travel settings (at a 1:1 ratio) of the Linear Lift 800s available.

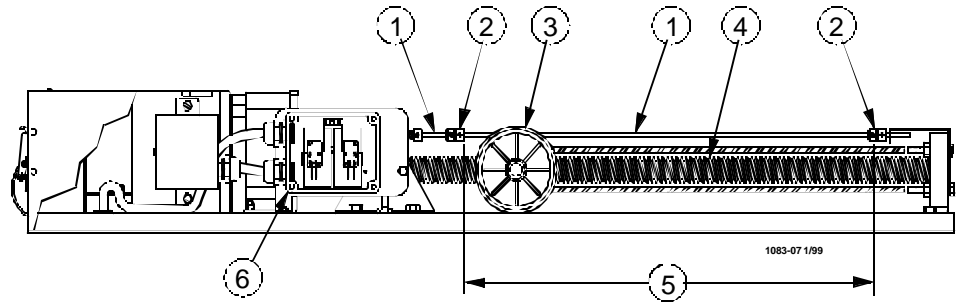
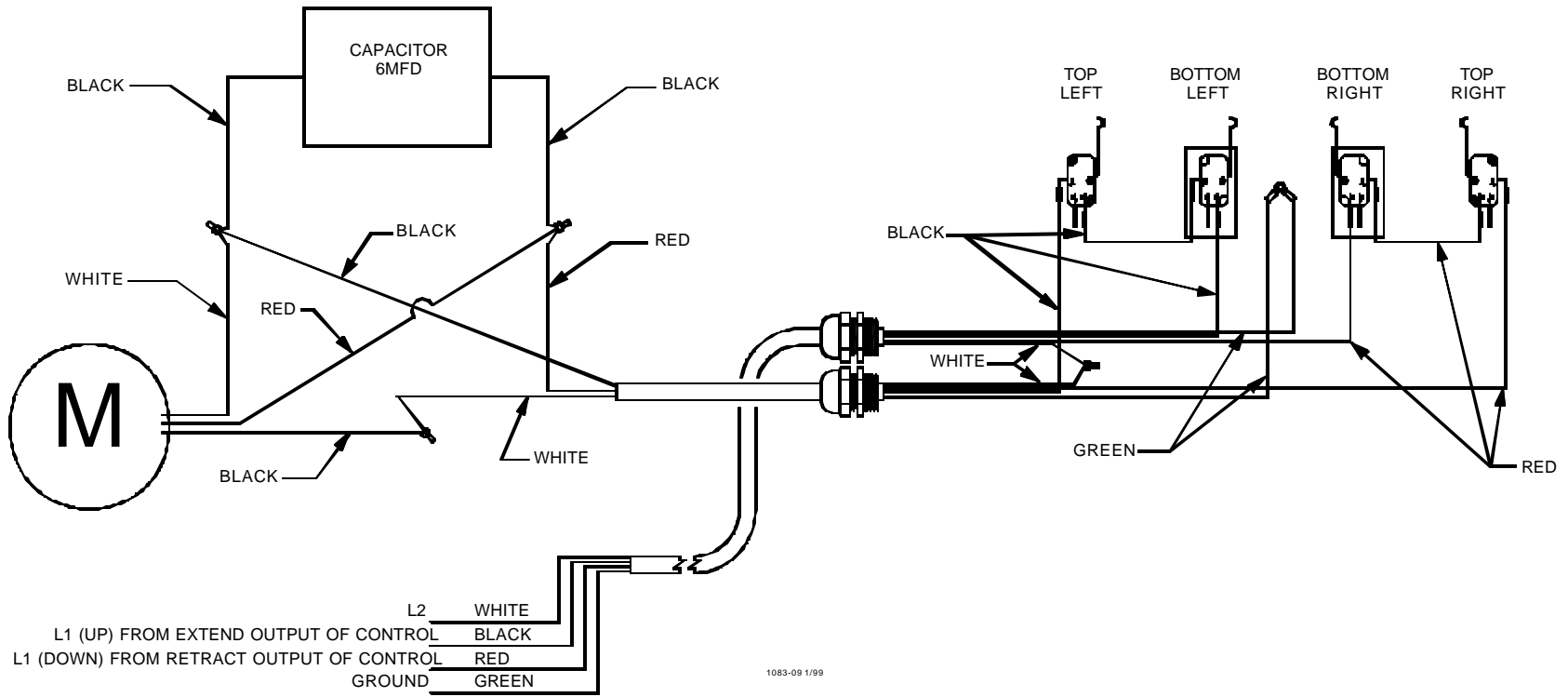


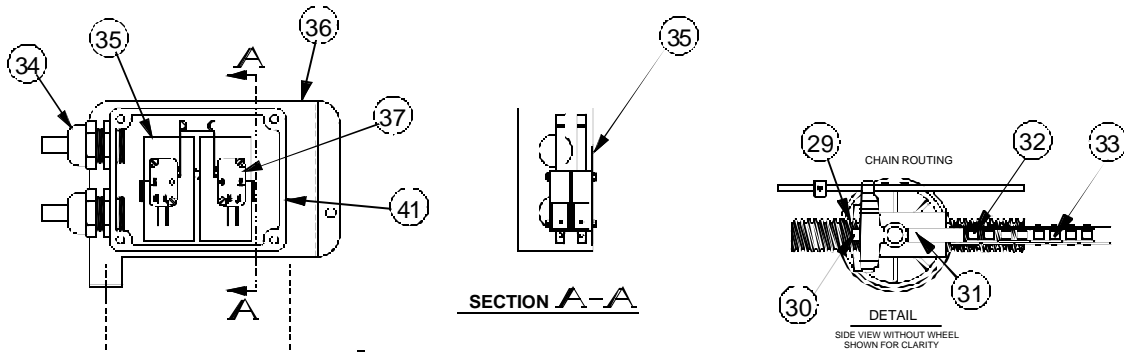
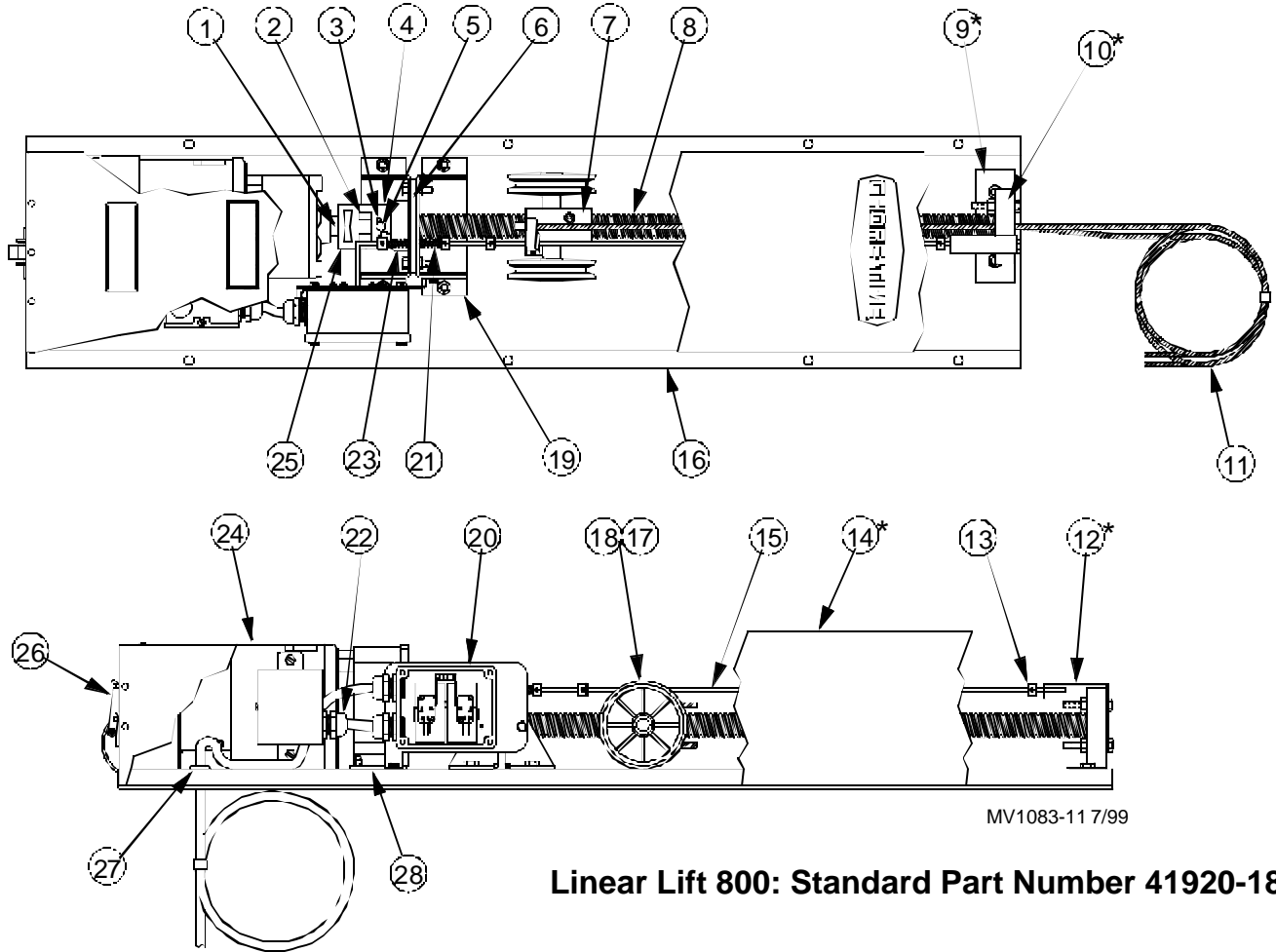
Figure 7. Linear Lift 800 Adjustment (side view)

Item	Description	Part No.
1	Switch Rod	41915-1
2	Adjustable Stops (set collar)	41857
3	Nut Assembly	41957
4	Threaded Rod	35945-6
5	Maximum Travel (18")	-
6	Switch Assembly	41916

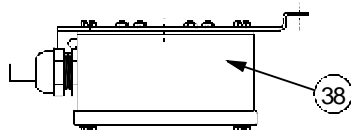
Wiring Diagram



Linear Lift 800 Parts List



Linear Lift 800: Switch Assembly



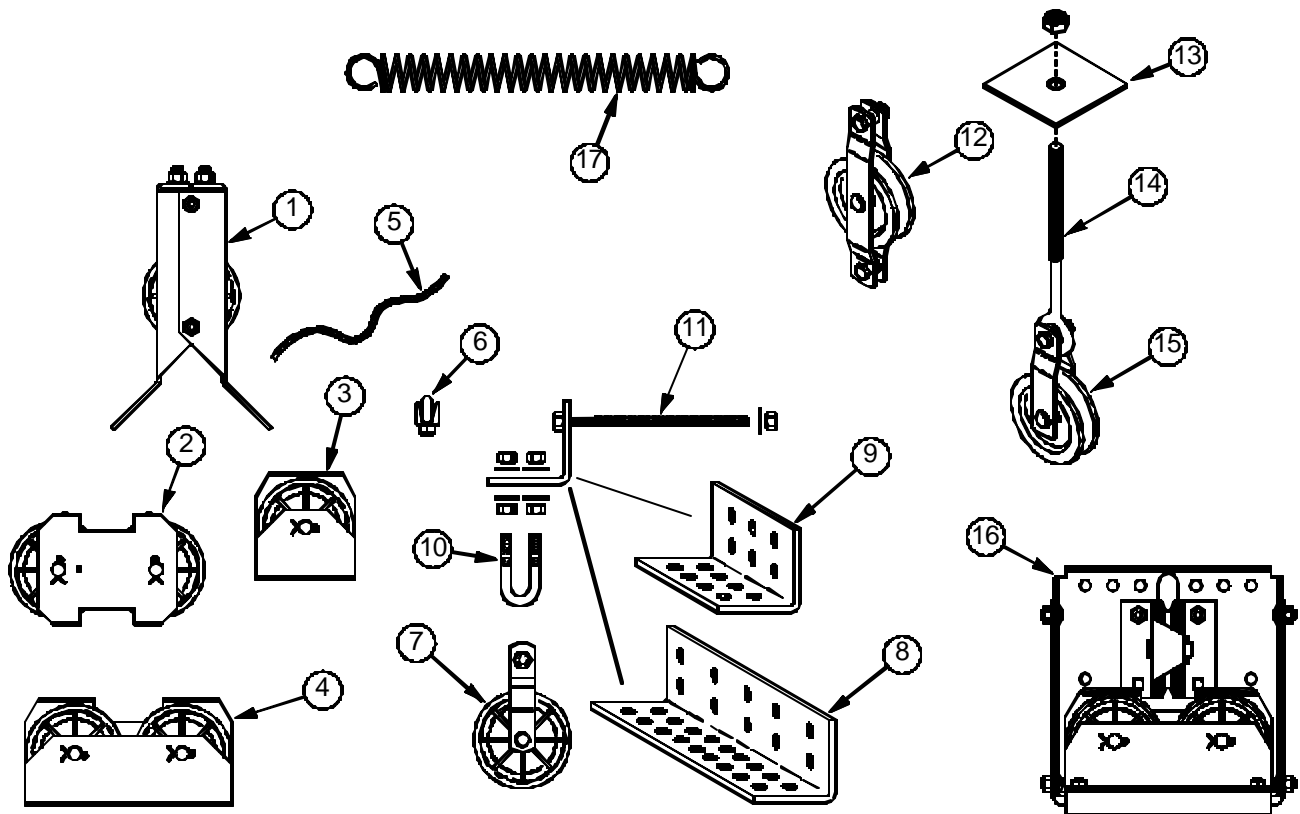
Parts Listing and Identification

*Parts listed are Standard unless otherwise marked or stated.

Item	Description	Part No.
1	3/16 x 1 Square Key	2112-1
2	"Sox" Spider Spacer	36333
3	Cotter Pin	2663
4	Flexible Coupling	35944
5	Clevis Pin	36466-1
6	Thrust Plate	41911
7	Linear Lift Nut Assembly	41957
8	Threaded Shaft	35945-6
9	End Bracket	41913
10	Threaded Shaft Pilot	35569
11	Linear Lift Cable	41342
12	Rod Support	42385
13	Set Collar	41857
14	Cover Assembly	41909
15	Switch Rod	41915-1
16	Base	41912
17	Retaining Ring	41525
18	Machined Pulley Wheel	41540
19	LL 800 Thrust Bracket	42848
20	Switch Assembly	41916
21	Compression Spring	42047
22	Liquid Tight Connector	4999-95
23	Thrust Bearing	36397
24	1/8 H.P. Gear Motor	42430

Item	Description	Part No.
25	Flexible Coupling	36363-3
26	Over Center Clamp	37803
27	Rubber Grommet	7256
28	Bison Motor Spacer	42859
*Chain Drive Version		
9*	Pilot End Bracket	44457
10*	Threaded Shaft Pilot	44413
12*	Rod Support	44459
14*	Cover Assembly	44460
29	1/4-20 x 1-1/2 Socket HD Cap Screw	5083-8
30	1/4-20 x 2-1/4 Socket HD Cap Screw	5083-2
31	Chain Connecting Rod	44417
32	Connecting Link (# 40)	20017
33	Drive Chain #10 (#40 Roller)	21045-12
Switch Assembly		
34	Liquid Tight Connector	23779
35	Switch Insulation	1907-8
36	Switch Mount Bracket	42857
37	Micro Switch	6049
38	Terminal Box	36334
39	Danger Decal	2527-35
40	Switch Box Cover	6776
41	Gasket	6777

Optional Suspension Parts Listing



MV1505-16 1/98

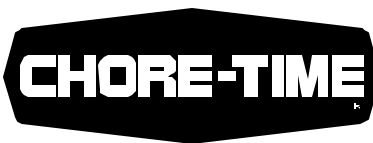
Item	Description	Part No.
1	Corner Pulley Assembly	35597
2	Double Pulley Assembly	27772
3	Pulley Kit	27301
4	Center Pulley Assembly	27302
5	3/16" Cable (150')—7/19 3/32" Cable—galvanized	13976 4973
6	Cable Clamp 1/4"	732
7	Pulley Assembly	2500
8	Double Pulley Mounting Brkt.	35404
9	Single Pulley Mounting 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.

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

Revisions to this Manual

Page No.	Description of Change
12, 13	Addition of Linear Lift with Chain Drive

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

CTB Inc.
P.O. Box 2000 · Milford, Indiana 46542-2000 · U.S.A.
Phone (219) 658-4101 · Fax (800) 333-4191
E-Mail: ctb@ctbinc.com · Internet: <http://www.ctbinc.com>

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