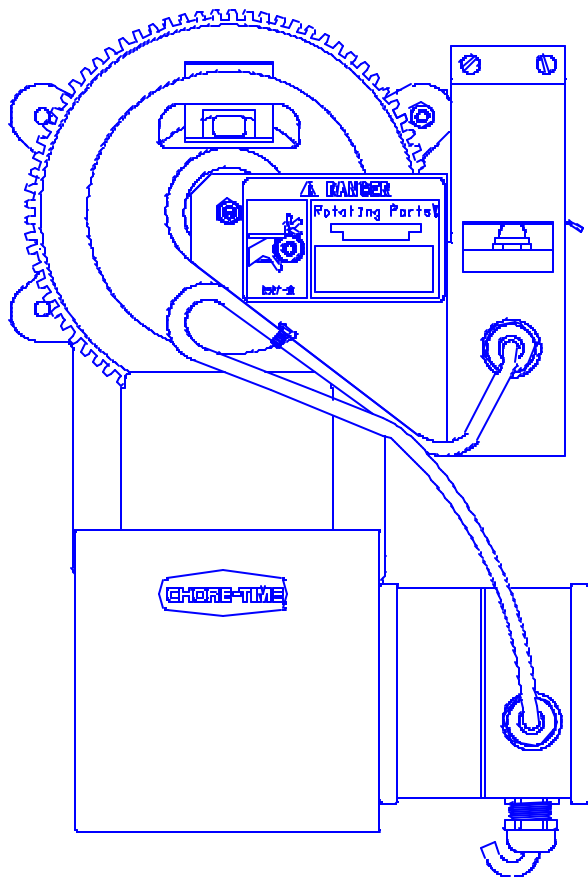


Light Duty Winch

Part #25800

Installation & Operator's Instruction Manual



VP108-4 12/93

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.

Additional extended warranties are herewith provided to the original purchaser as follows:

- *1. **TURBO™ Fans.**
- *2. **Poultry feeder pans** that become unusable within five years from date of installation. Warranty prorated after three years usage.
3. **MEAL-TIME® Hog Feeder pans** that become unusable within five years of installation.
4. **Rotating centerless augers**, excluding applications involving High Moisture Corn (exceeding 18%), for ten years from date of installation. Note: MULTIFLO® and applications involving High Moisture Corn are subject to a one year warranty.
5. **Chore-Time manufactured roll-formed steel auger tubes** for ten years from date of installation.
- *6. **Laying cages** that become unusable within ten years. Warranty prorated after three years usage.
- *7. **ULTRAFLO® Auger and ULTRAFLO® Feed Trough (except ULTRAFLO® Trough Liners)** are warranted for a period of five (5) years from date of original purchase against repeated breakage of the auger or wear-through of the feed trough caused solely by the auger.

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.

*See separate Chore-Time Warranty as to these products.

CHORE-TIME EQUIPMENT, A Division of CTB, Inc.
P.O. Box 2000
Milford, Indiana 46542-2000 U.S.A.

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***Legend: C = Customer (end user), D = Distributor (sales), I - Installer of equipment**

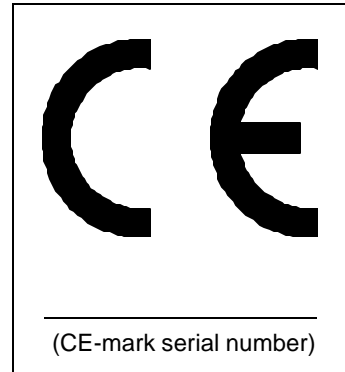
Support Information

The **Chore-Time Light Duty Winch** is designed to open and close curtains, baffles and inlet doors in livestock housing applications. 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 _____

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.



Signal Words

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

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

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

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



DANGER



WARNING

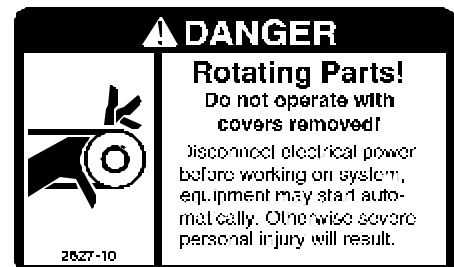


CAUTION

DANGER: ROTATING PARTS

This decal is placed on the Anti-Reverse Switch Bracket of the Light Duty Winch.

Severe personal injury will result, if the equipment is operated without covers properly installed.



DANGER: ELECTRICAL HAZARD

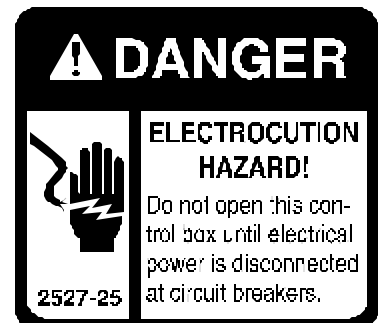
Disconnect electrical power before inspecting or servicing equipment unless maintenance instructions specifically state otherwise.

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 noncurrent 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

The Chore-Time Light Duty Winch is designed to drive 250' (76 m) of *total* side wall curtain, up to 6' (1.8 m) long, in single or double sided installations.

When properly installed, the Light Duty Winch will pull up to 500 lbs. at a rate of 3" (75 mm) per minute.

A Limit Switch Assembly (supplied separately) is required to set the limits of curtain travel in either direction.

Planning the Installation

Tools Needed for Installation

- | | |
|----------------------------|------------------------|
| 1. Misc. Open End Wrenches | 7. Tape Measure |
| 2. Side Cutters | 8. Slotted Screwdriver |
| 3. Wire Cutters | 9. Level |
| 4. Wire Strippers | 10. Allen Wrenches |
| 5. Electric Drill and Bits | 11. Hammer |

Winch Installation

Securely fasten the winch to the wall.

The winch must be mounted to a vertical surface.

Note: For ceiling mount applications, use the Ceiling Mount Kit (ordered separately).

Mount the winch out of the reach of livestock.

The winch may be adapted to drive the curtain in any one of 3 configurations by relocating the Anti-Reverse Switch on the side of the winch. The Anti-Reverse Switch may be mounted on the right side, left side, or top of the winch, depending on how the winch is mounted in relation to the curtain. See **Figure 1**.

When mounting the Anti-Reverse Switch on either the left or right side of the winch, align the mounting flanges on the switch with the mounting flanges on the winch. If the Anti-Reverse Switch is to be mounted above the winch, a flat surface flush with the base of the winch may be used to anchor the switch mounting flanges.

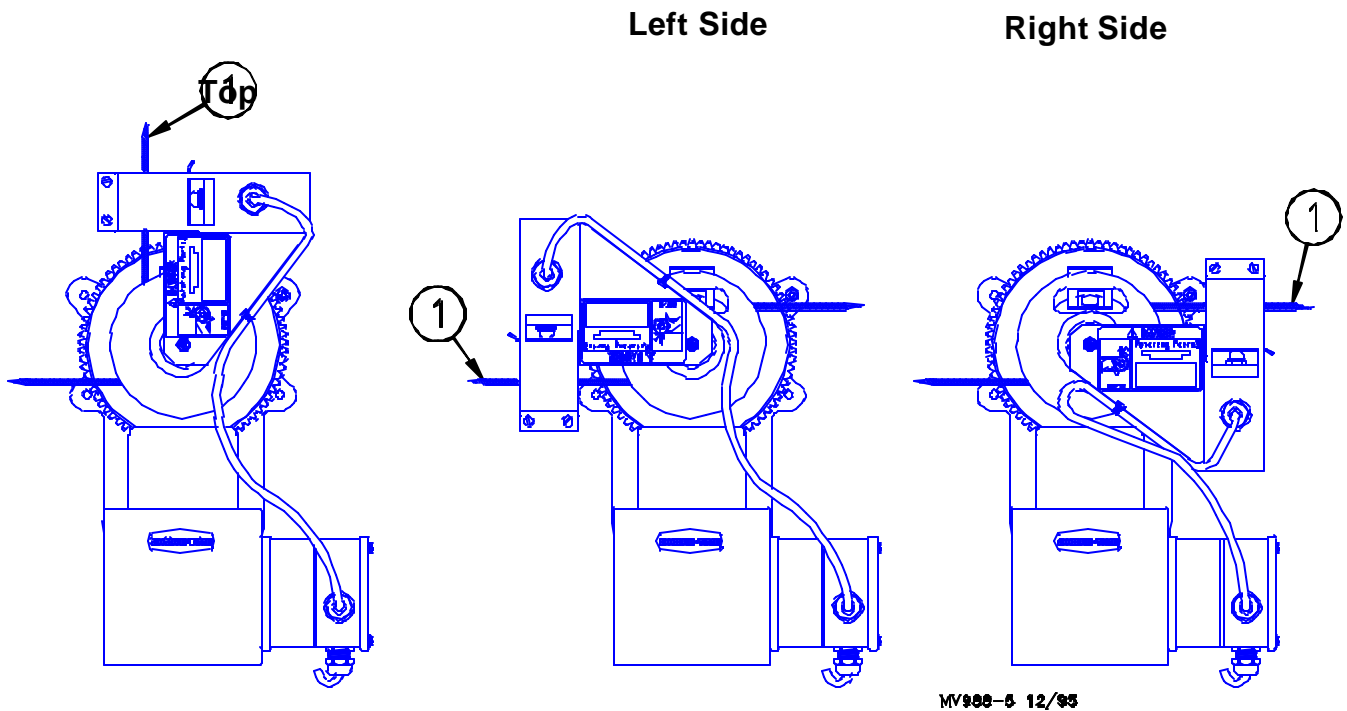


Figure 1. Anti-Reverse Switch Mounting Options

Key	Description
1	To Curtain

Double-Sided Curtain Installation

Install 1/8" cable on the winch drum as shown in **Figure 2**. Use the set screw, supplied with the winch, to secure the cable to the drum. The Cable Clip prevents the cable from coiling on itself.

Note: The cable should be pre-wrapped 1/2 turn around the drum, when the curtain is in the fully down position, as shown in **Figure 2**. Extra pre-wrapping around the drum may prevent the Anti-Reverse Switch from operating properly.

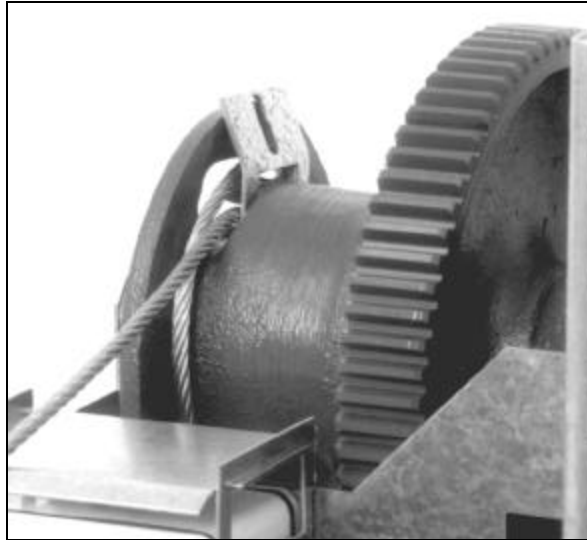


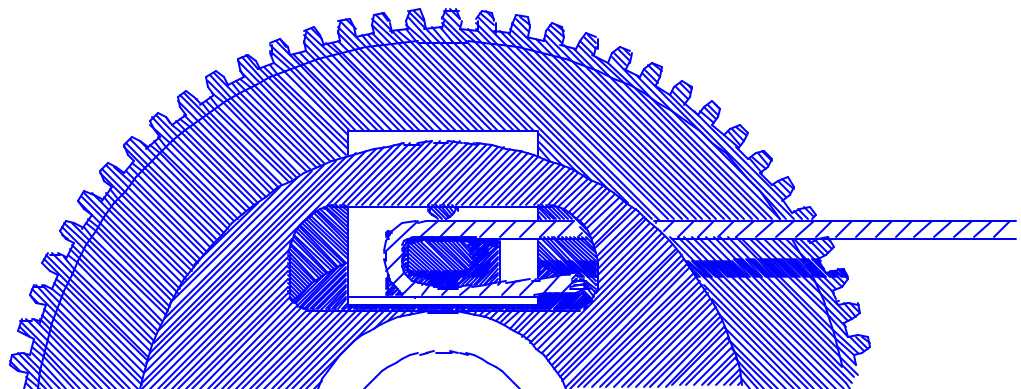
Figure 2. Winch Drum (Front View)

Single-Sided Curtain Installations

Install the 1/8" cable on the winch drum, as shown in **Figure 3**. Use the set screw, supplied with the winch, to secure the cable to the drum. The Cable Clip prevents the cable from coiling on itself.

Refer to the Limit Switch Instruction for Limit Switch installation procedure.

Wiring information is included in the control instructions. For instance, for applications using a 28102 Curtain Control, refer to MF957 Single and Dual Curtain Control Instruction for wiring diagrams and electrical information.



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Figure 3. Winch Drum (Side View)

Cable System Layout Specifications

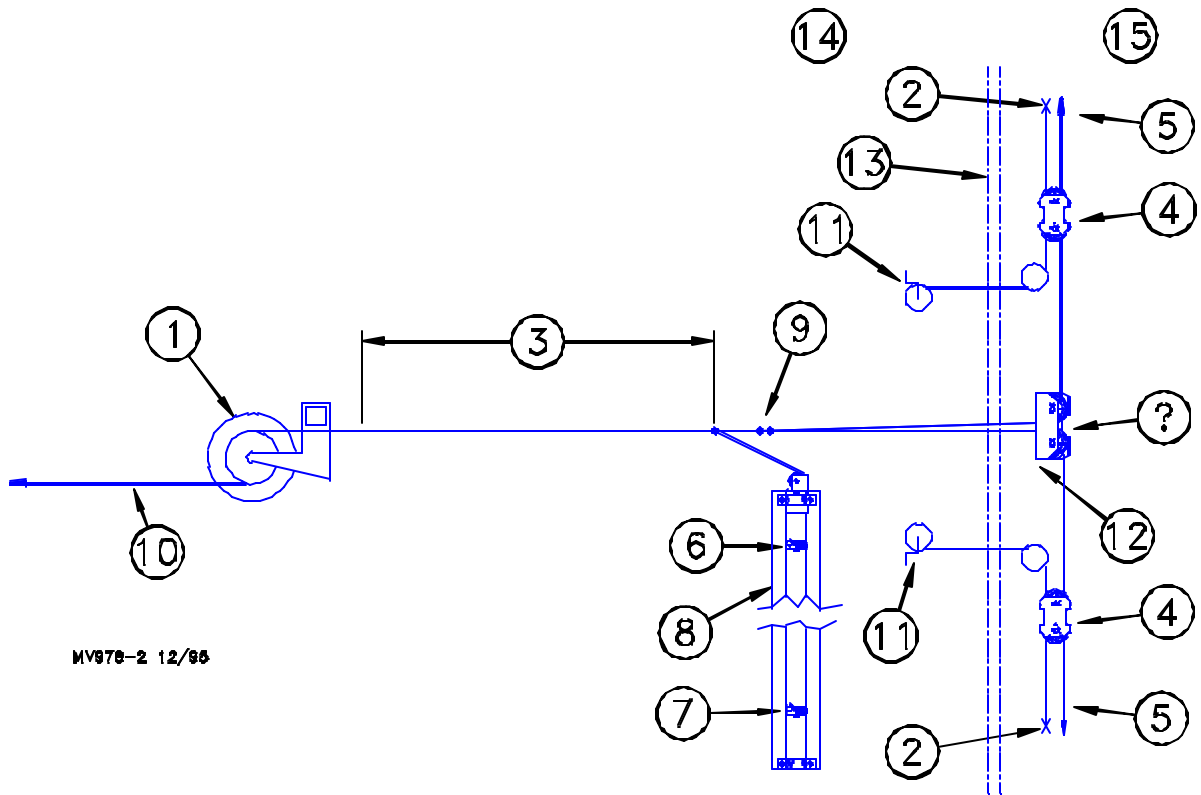
Figure 4 shows the recommended cable routing for single & double sided curtain buildings with the winch mounted in the center of the house. The winch will lift a maximum of 250' (76 m) of curtain at 3 in/min (7.5 cm/min) with this cable arrangement.

Figure 5, on page 10, shows the recommended cable routing for single curtain buildings with the winch mounted at the end of the house. The winch will lift a maximum of 250' (76 m) of curtain at 3 in/min (7.5 cm/min) with this cable arrangement.

Figure 6, on page 10, shows an alternative cable routing for single and double sided curtain buildings with the winch mounted at the end of the house. The winch will lift a maximum of 125' (38 m) of curtain at 3 in/min (7.5 cm/min) with this cable arrangement.

Winch in Center of the Building.

Maximum 250' (76 m) curtain, 3 in/min (7.5 cm/min) curtain speed.



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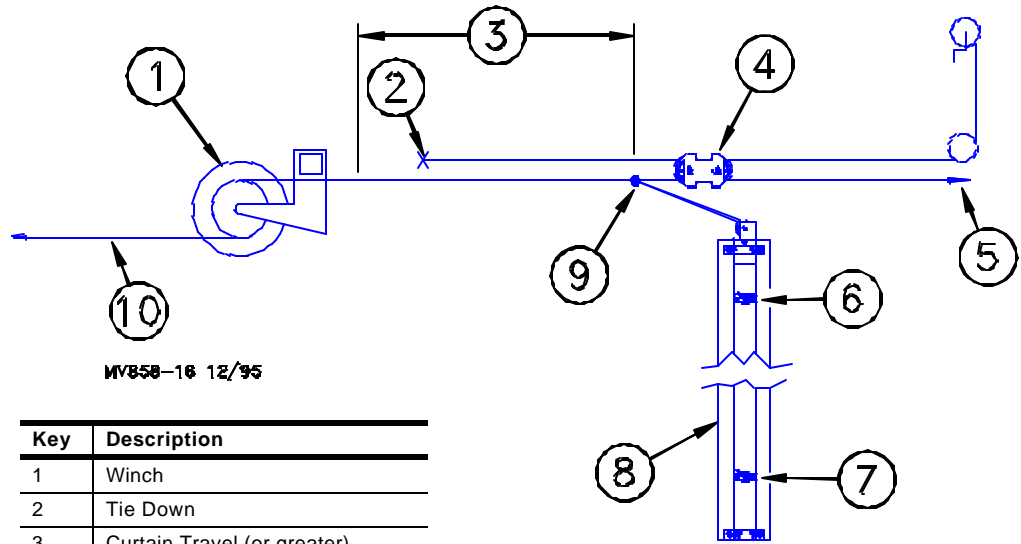
Figure 4. Winch in Center of the Building.

Key	Description
1	Winch
2	Tie down
3	Curtain Travel (or greater)
4	Double Pulley Assembly
5	To Curtain
6	Switch #1
7	Switch #2
8	Limit Switch

Key	Description
9	Cable Clamps (2)
10	To Opposite side of Building (for double sided curtain installation only)
11	Hand Winch
12	Optional Angle Mounting Kit (may be used here to match cable angle)
13	Building Wall
14	Inside of Building
15	Outside of Building
16	

Winch on End Wall of the Building.

Maximum 250' (76 m) curtain, 3 in/min (7.5 cm/min) curtain speed.



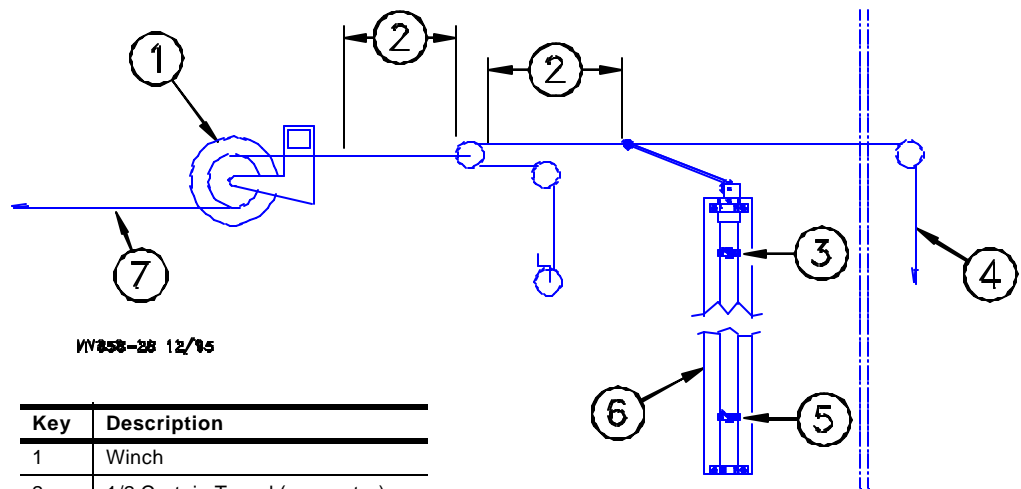
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Key	Description
1	Winch
2	Tie Down
3	Curtain Travel (or greater)
4	Double Pulley Assembly
5	Main Curtain Cable
6	Switch #1
7	Switch #2
8	Limit Switch
9	Clamp must not interfere with pulley when curtain is down.
10	To Opposite of Building

Figure 5. Winch on End Wall of the Building

Winch on End Wall of the Building.

Maximum 125' (38 m) curtain, 6 in/min (15 cm/min) curtain speed.

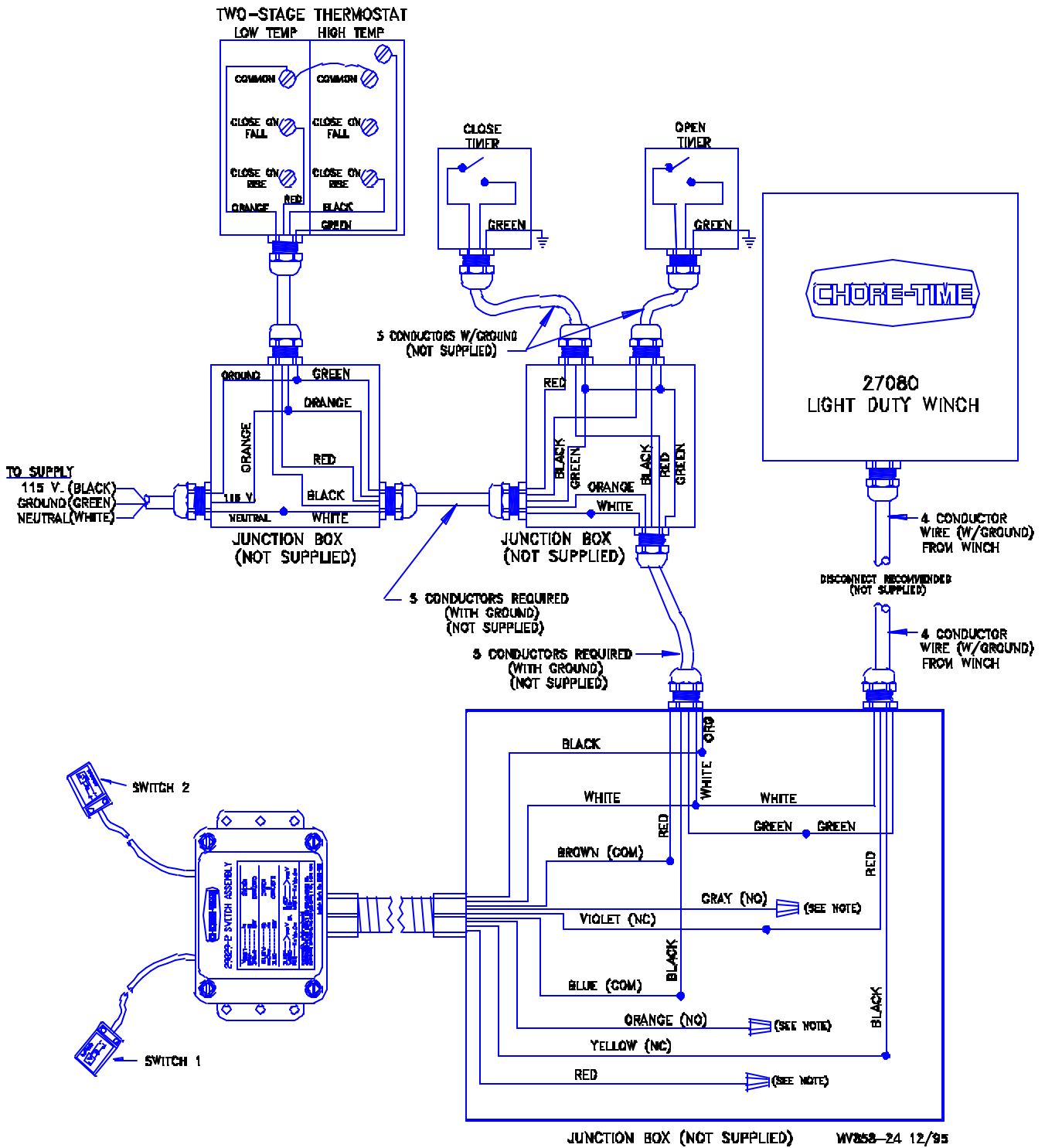


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Key	Description
1	Winch
2	1/2 Curtain Travel (or greater)
3	Switch #1
4	To Curtain
5	Switch #2
6	Limit Switch
7	To opposite side of Building (for double-sided installations)

Figure 6. Winch on End Wall of the Building

Wiring Diagram for the Light Duty Winch and Two-Stage Thermostat



NOTE: GRAY, ORANGE, AND RED CONDUCTORS MUST BE CAPPED WITH WIRE NUTS.

Figure 7. Wiring Diagram for Light Duty Winch and Two-Stage Thermostat

Internal Wiring Diagram for the Light Duty Winch

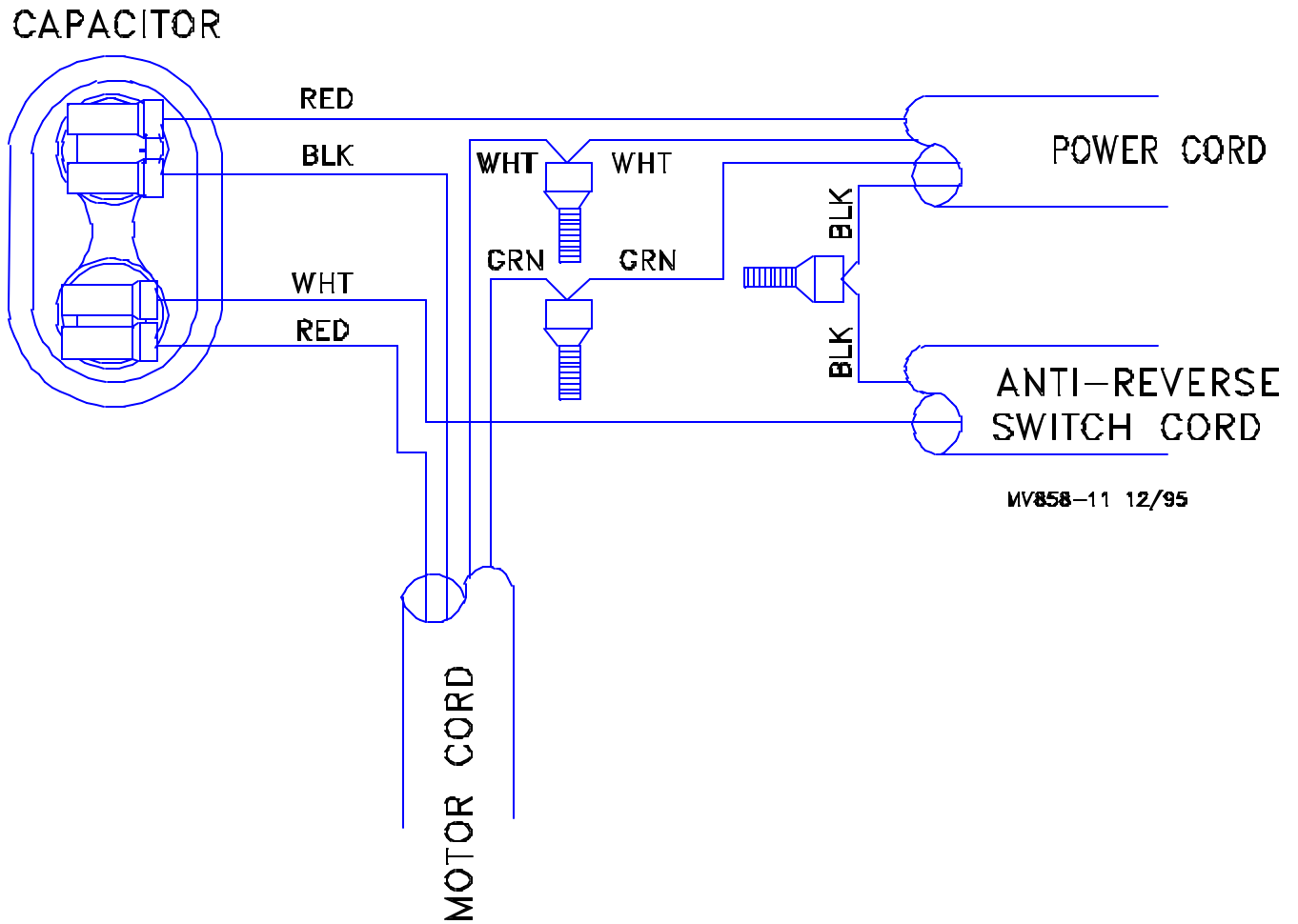


Figure 8. Internal wiring Diagram for the Light Duty winch

Light Duty Winch Parts

Part No. 27080

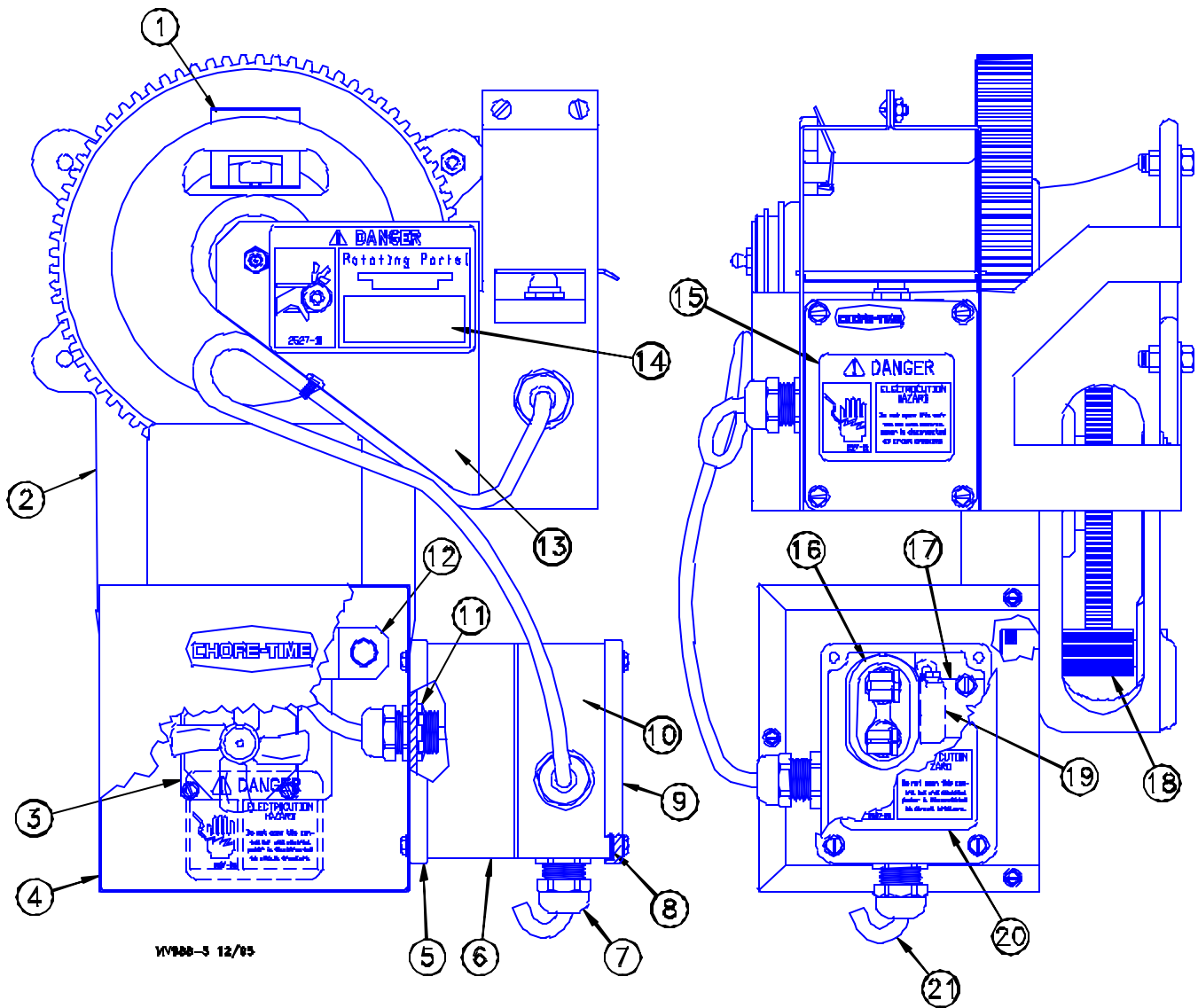


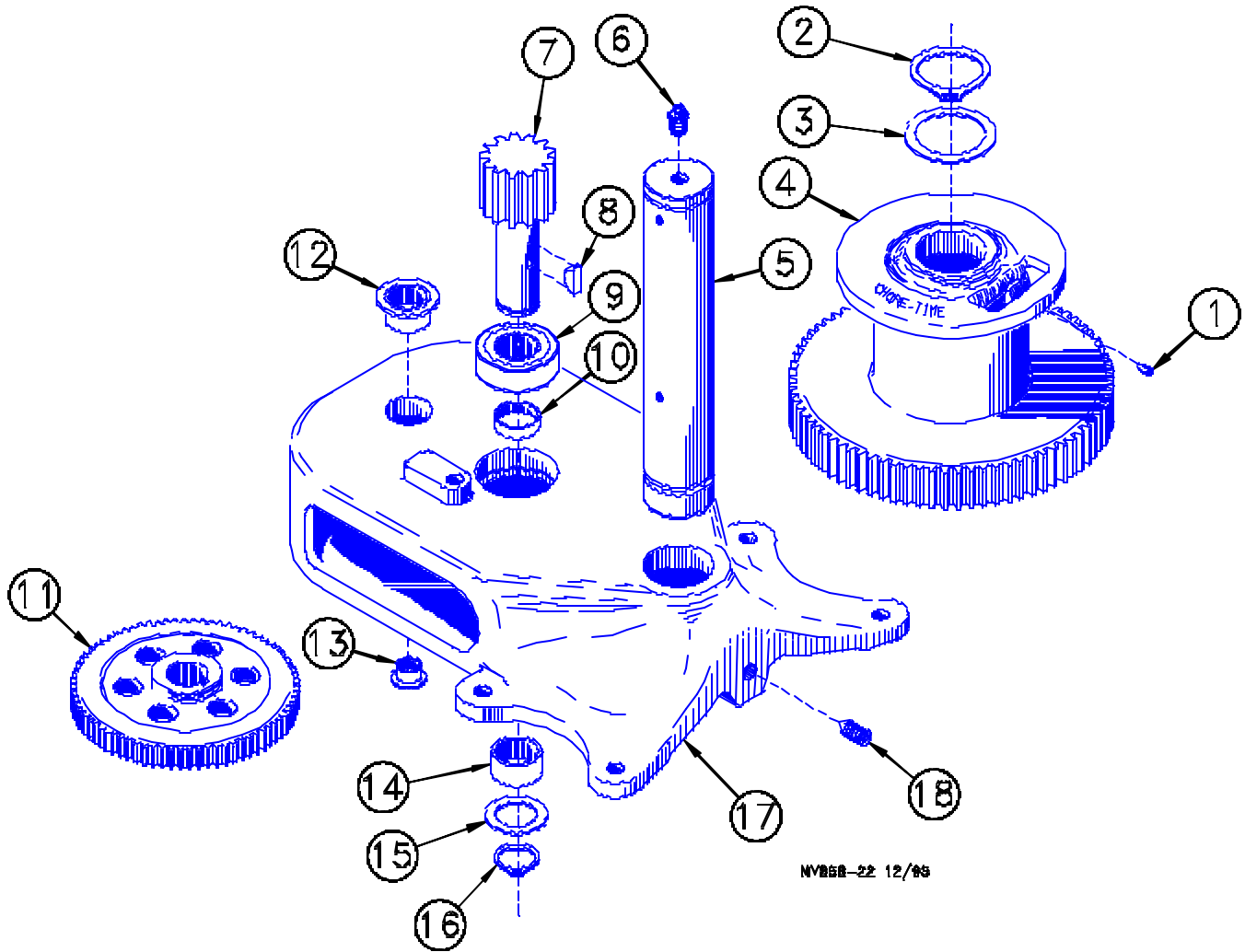
Figure 9. Light Duty Winch Parts

Item	Description	Part No.
1	Cable Clip	27049
2	Winch Assembly (see separate parts list)	25143
3	Gear Motor	7254
4	Motor Cover	34924
5	Switch Box Cover	36633
6	Terminal Box	36649
7	Water Tight Connector	23779
8	Terminal Box Gasket	6777
9	Switch Box Cover	6776
10	Terminal Box Assembly	36653
11	1/2" Conduit Locknut	3357

Item	Description	Part No.
12	Motor Bracket	34920
13	Anti-Reverse Switch Assembly	27056
14	Danger Rotating Decal	2527-10
15	Danger Electrical Decal	2527-25
16	Capacitor	7879
17	Capacitor Bracket	7249
18	Input Shaft	24090
19	1-7/8" Adjustable Clamp	3527
20	Danger Electrical Decal	2527-25
21	Cord	4999-72

Winch Assembly Parts

Part No. 25143



NV858-22 12/95

Figure 9. Winch Assembly Parts

Item	Description	Part No.
1	1/4-20x1/4 Set Screw	603
2	Retaining Ring	3556
3	1-3/4" Flat Washer	2955-2
4	Winch Drum	3723
5	Drum Shaft	3637
6	Grease Fitting	24499
7	Drive Pinion	2962
8	Woodruff Key	2959
9	Ball Bearing	4937

Item	Description	Part No.
10	Spacer	4936
11	Intermediate Gear (mach)	2890
12	Bronze Bearing	2967-2
13	Bronze Bearing	3252
14	Bronze Bearing	2967-4
15	Flat Washer	2955-1
16	Retaining Ring	2958-1
17	Winch Frame	24283
18	Set Screw	3727

Anti-Reverse Switch Assembly Parts Part No. 27056

Item	Description	Part No.
1	Liquid Tight Connector	23779
2	Switch Mounting Bracket	27055
3	Push Button Boot	20784
4	Switch Plate	27849
5	Trigger Bracket	27848
6*	Cord Assembly	4999-67
7*	Push Button Switch	27048
8	Terminal Box	27044
9	Terminal Box Cover	6776
10	Gasket	6777
11	Twin Helix Screw	6980

* These items may be ordered under Part No. 27057 Switch/Cord Assembly

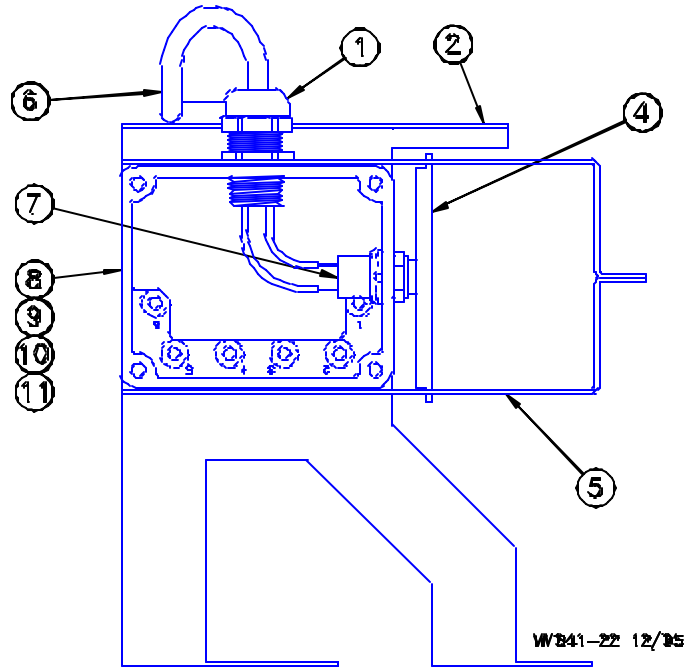


Figure 10. Anti-Reverse Switch Assembly Parts

Miscellaneous Components Parts

Item	Description	Part No.
1	Liquid Tight Connector	23779
2	Switch Mounting Bracket	27055
3	Push Button Boot	20784
4	Switch Plate	27849
5	Trigger Bracket	27848
	Cord Assembly	4999-67
6*	Push Button Switch	27048
7**	Terminal Box	27044
8**		

*Ceiling Mount Kit (Part No. 27061) includes:
2-Ceiling Mount Brackets Part No. 27041
1-5/16-18 hardware

**These items may be ordered under Part No. 27767 and include 5/16-18 hardware.

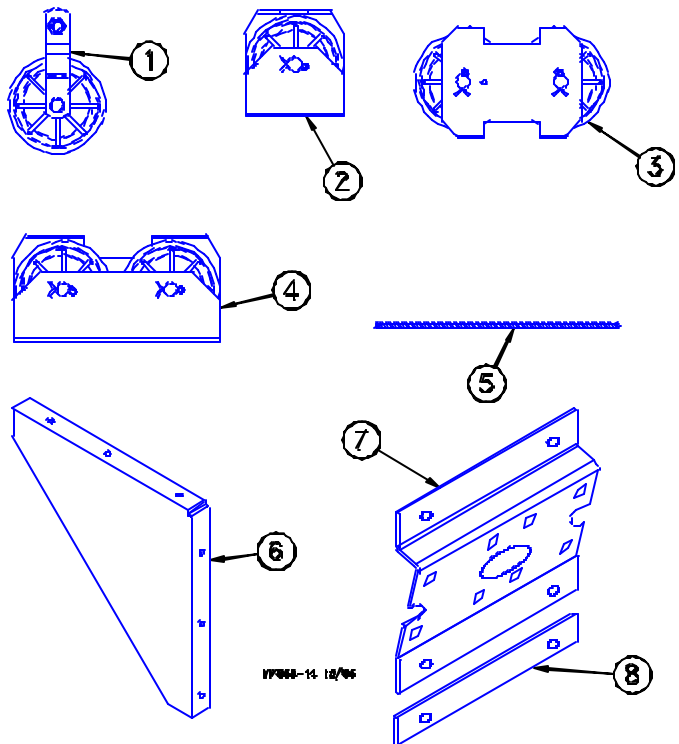
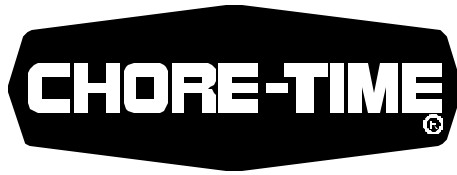


Figure 11. Miscellaneous Components Parts



**Made to work.
Built to last.™**

Revisions to this Manual

Page No.	Description of Change
All	Drawings Updated

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 • E-Mail: ctb@ctbinc.com

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