



CT2 Retro Box Installation Instruction Manual



CTB Inc. Warranty

CTB Inc. warrants each new product manufactured by it to be free from defects in material or workmanship for one year from and after the date of initial installation by or for the original purchaser. If such a defect is found by the Manufacturer to exist within the one-year period, the Manufacturer 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. Labor costs associated with the replacement or repair of the product are not covered by the Manufacturer.

Conditions and Limitations

1. The product must be installed by and operated in accordance with the instructions published by the **Manufacturer or Warranty will be void.**
2. Warranty is void if **all components** of the system are not original equipment supplied by the **Manufacturer.**
3. This product must be purchased from and installed by an authorized distributor 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 the 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.

The **Manufacturer** shall not be liable for any **Consequential or Special Damage** which any purchaser may suffer or claim to suffer 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 THE MANUFACTURER’S ENTIRE AND SOLE WARRANTY AND THIS MANUFACTURER EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, INCLUDING, BUT NOT LIMITED TO, EXPRESS AND IMPLIED WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSES SOLD AND DESCRIPTION OR QUALITY OF THE PRODUCT FURNISHED HEREUNDER.

CTB Inc. product Distributors are not authorized to modify or extend the terms and conditions of this Warranty in any manner or to offer or grant any other warranties for CTB Inc. products in addition to those terms expressly stated above. An officer of CTB, Inc. must authorize any exceptions to this Warranty in writing. The Manufacturer reserves the right to change models and specifications at any time without notice or obligation to improve previous models.

Effective: **December 2007**

Thank You

The employees of CTB Inc. would like to thank your for your recent purchase. If a problem should arise, your CTB distributor can supply the necessary information to help you.

General

Support Information

The Chore-Time/CT Alarm system is designed to work the Chore-Tronics® and Chore-Tronics 2 controls to alert the user via text (SMS) message on a cell phone, or pager or email when certain alarm conditions exist in the house or room. 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, safety, 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).

Safety

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 decals immediately.

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

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.

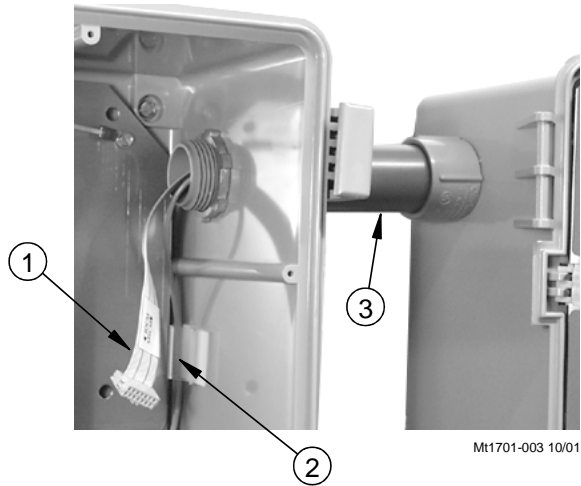
Ground all non-current carrying metal parts to guard against electrical shock.

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

Removing CT1 Box

Step 1: Turn off the Main breaker in the power distribution panel. Note: Use a Volt meter to check if power is off before you continue.

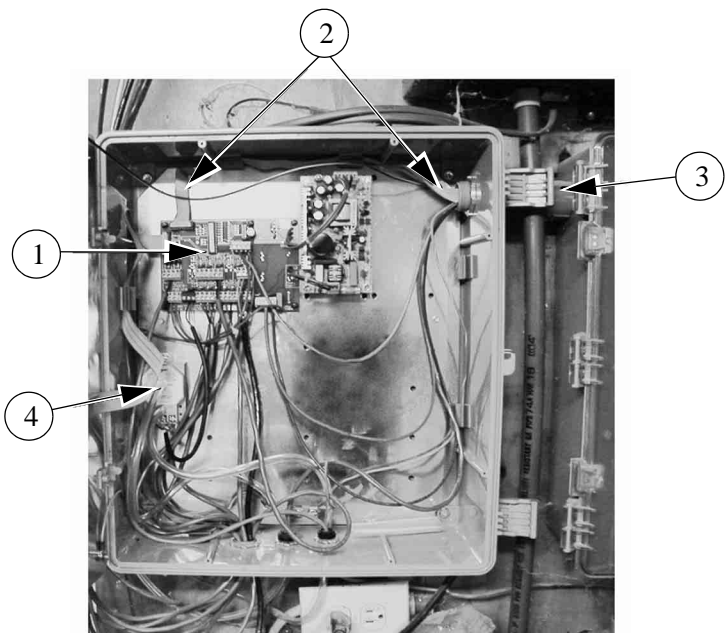
Step 2: Disconnect the I.O./M.S. Flat Cable (**Item 1, Figure 1**) from the I.O. board and pull it through the connecting conduit (**Item 3**) but do not disconnect it from the M.S. Board (See **figure 1&2**). **Note: The only other wire that can be in the conduit is the Ground wire (Item 2);** disconnect it in the Main box and pull it through the Conduit. Remove any other wires and reroute later.



Item	Description
1	I.O./M.S. Flat Cable
2	Ground Wire
3	Connecting Conduit

Figure 1. Removing CT1 Box

Step 3: Label and remove all the wires entering the CT1 Main box. (Temperature sensors, Alarm, Water meter, etc.)



Item	Description
1	I/O Board
2	I.O. M.S. Flat Cable
3	Connecting Conduit
4	Static Pressure Kit

Figure 2. Removing CT1 Box

- Step 4: Label and remove the Static Pressure hoses.
- Step 5: Remove the Static Pressure Kit (**Item 4, Figure 2**) and store in a safe place. **Note: The Static Pressure Kit will be used in the Retro box.**
- Step 6: In the Main box remove the locking nut from the connecting conduit.
- Step 7: Remove all the mounting screws from the Main box and remove it from the wall.

Retro Box Installation

Note: Before beginning the new Box installation, check the software level of the MSCM Boards (See **Figure 3**). The version number on the Board must be atleast A5.0 or higher.

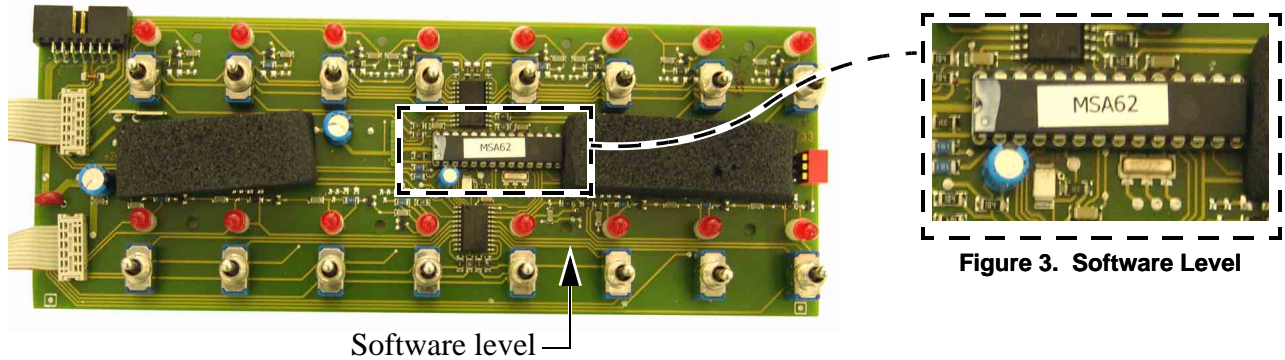


Figure 3. Software Level

- Step 1:** Mounting the CT2 Retro Box on the wall. Align the hole in the box with the connecting conduit. Be sure that the box is level and plumb and then install four mounting screws, one in each corner.
- Step 2:** Install the locking nut back on the connecting conduit connector.
- Step 3:** Drill holes and install any connectors needed to route the wires and hoses back into the box. This can be done before mounting.
- Step 4:** Reconnect all the wires that were removed from the CT1 main box. Fill in the form on the cover plate with the location of the Analog and Digital ins (**See figures 4&5**). Note: No high voltage wires can be ran through the main box.

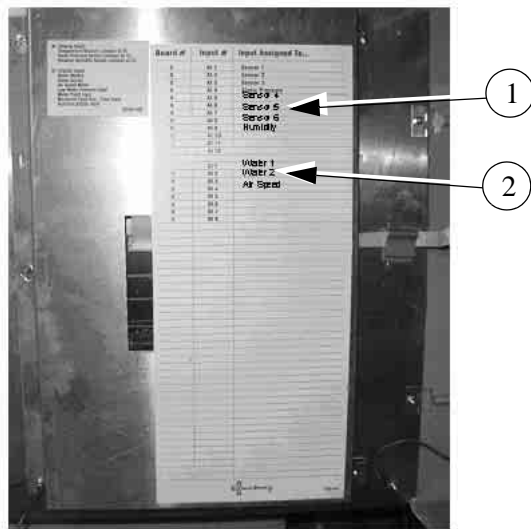


Figure 4. Input Assignments

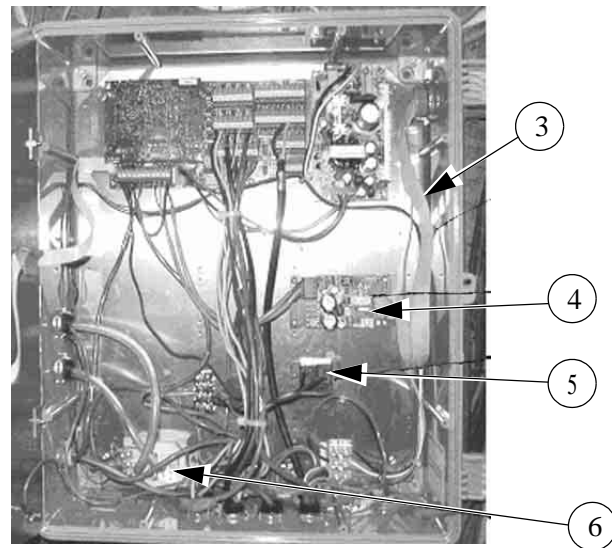


Figure 5. Installing Retro Box

Item	Description	Item	Description
1	Analog Ins	4	I to I Board
2	Analog Outs	5	Optional Alarm Relay
3	I.O. M.S. Flat Cable	6	Static Pressure Kit

- Step 5:** Mount the Static Pressure Kit in the mounting holes in the main box. Reconnect the hoses (**See figure 5 above**).

Note: No components other than ones mentioned in the CT2 manual can be mounted in the main box.

Step 6: Connect the Static Pressure Kit (See Wiring Diagram below).

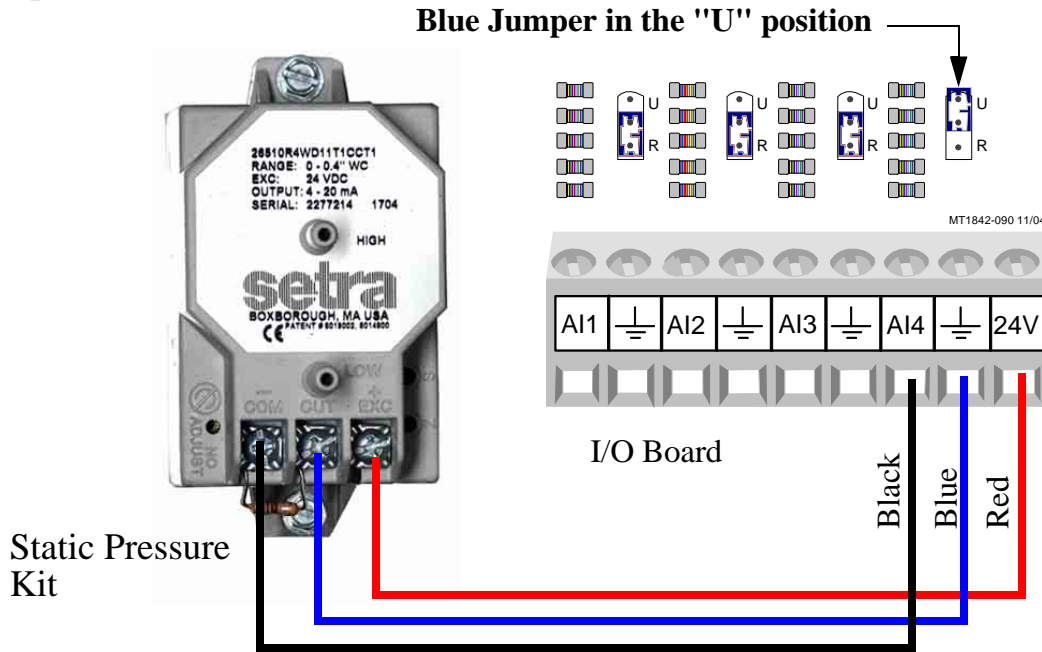


Figure 6. Software Level

Step 7: Route the ground wire back through the connecting conduit and attach it to the ground terminal in the main box.

Step 8: Route the I.O./M.S. Flat cable back through the connecting conduit and plug it into the I to I board. (See Figure 7). Note: **Only the flat cable and the ground wire should be routed through the conduit.** Check the DIP Switch settings on the I to I Board (Item 3).

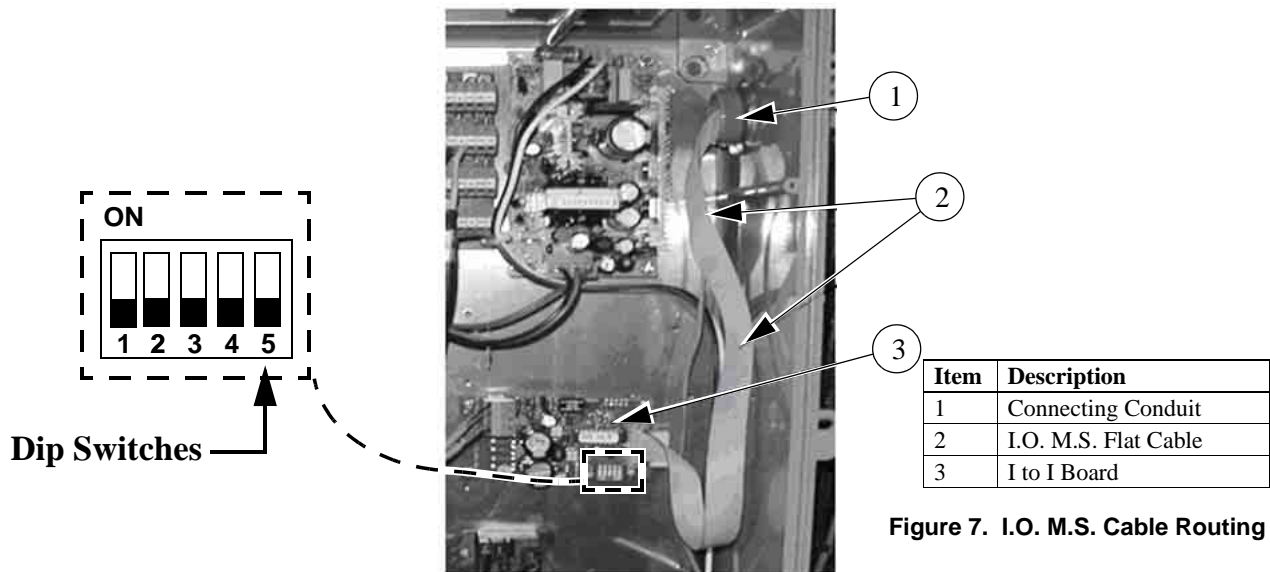


Figure 7. I.O. M.S. Cable Routing

Step 9: Check for any loose connections.

Step 10: Close and screw down the front plate.

Step 11: Supply power to the CT2 Retro box.

Step 12: After the Control boots up, press button 13 and in General Settings answer yes to Use Retro Box and number of relays. Refer to the installation part of the CT2 manual for additional setup (See figure 8).

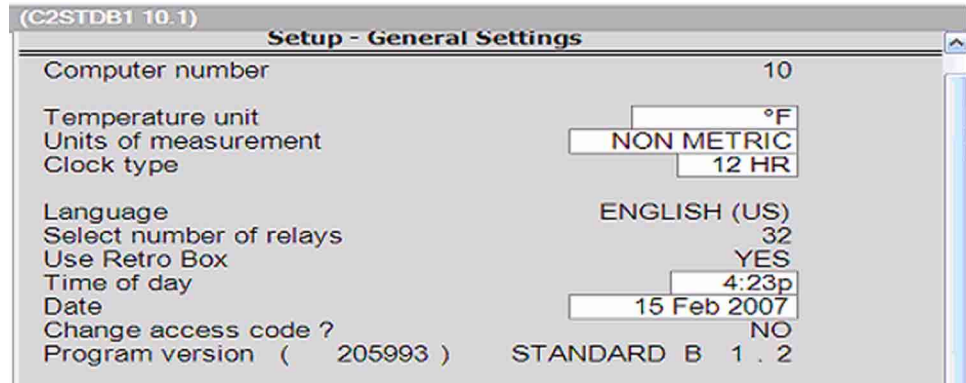
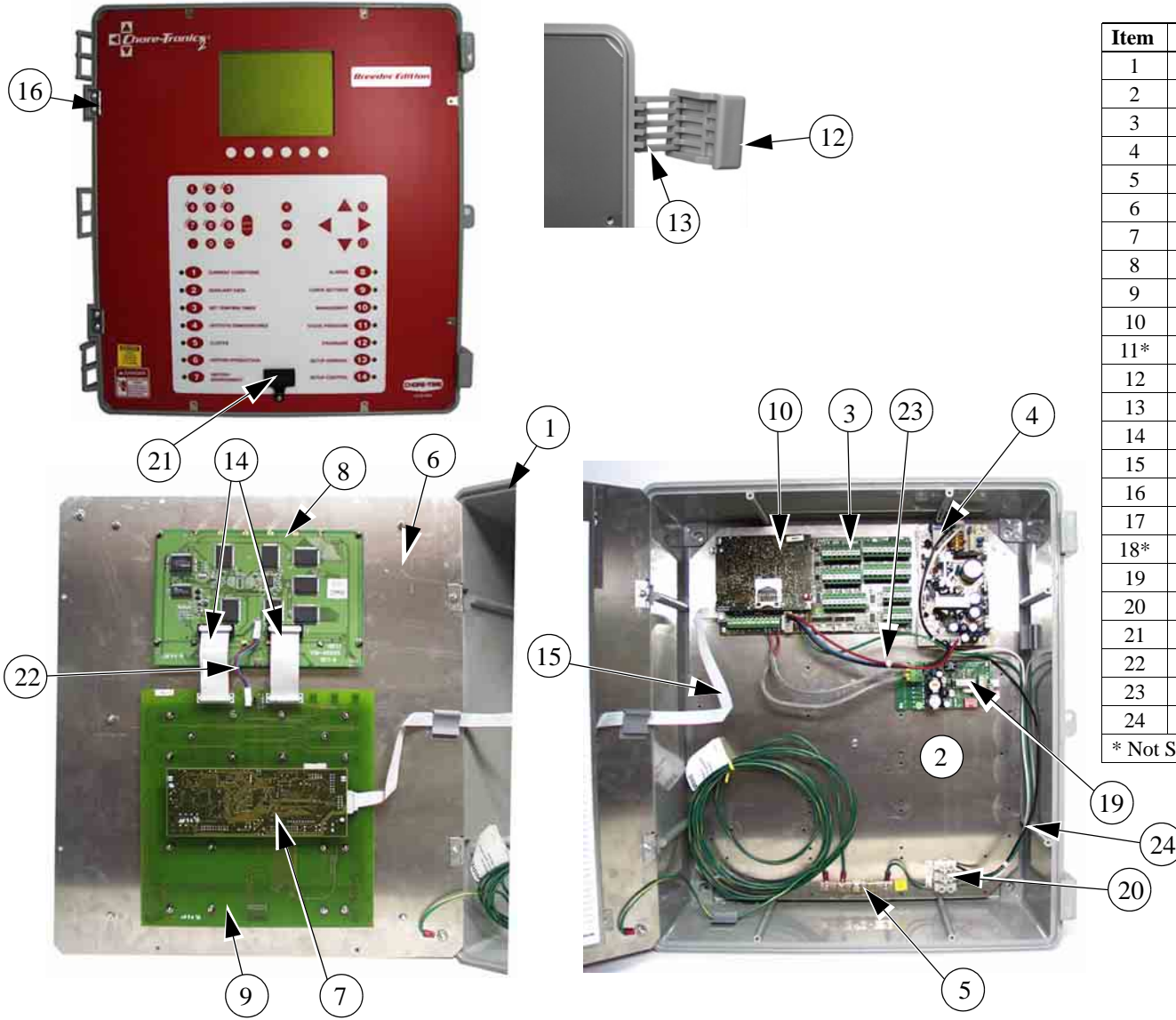


Figure 7. Button 13: General Settings

Part Numbers



Item	Description	Part No.
1	Electric Box 14 x 16	42684
2	CT2 Bottom Plate	49606
3	IO Board (B.12)	49984
4	Power Supply	49649
5	Grounding Rail	43384-2
6	CT2 Top Plate	49521
7	CT2 HI Board	49983
8	White Background Display	49651
9	CT2 KB Board	49674
10	CT2 Func Board	49653
11*	Electric Box Lid (14 x 16)	42683
12	Control Box Latch	30862
13	Control Box Latch Pivot	30863
14	20 Pin 70mm Flat Cable	49745
15	10 Pin 400mm Flat Cable	49746
16	1" x 1" Aluminum Hinge	49482
17	CT2 Main Box Decal	2529-839
18*	Cover Plate	41323
19	I2I Board	50785
20	3 Pole Terminal Strip	34925-3
21	Setup Key Plug	49724
22	CT2 Display Cable	50030
23	CT2 Power Cable	50031
24	CT2 Incoming Power Cable	50129
* Not Shown		



Revisions to this Manual

Page No.	Description of Change
Various	Add Parts Breakdown, Added Static Pressure Wiring Diagram, Added Dip switch settings

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 (574) 658-4101 • Fax (877) 730-8825
E-Mail: ctb@ctbinc.com • Internet: <http://www.ctbinc.com>
Printed in the U.S.A.