



**Chore-Tronics®**

## Chore-Tronics® Variable Frequency Drive Control

### General

#### Support Information

The Frequency Drive is used in conjunction with the Chore-Tronics® 2 or 3 Control to vary the speed of Chore-Times Vanguard™ Plus, Turbo®, and Endura® Fans that have been equipped with a 3 phase motor. 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.

**Warning!** See “Wiring with a Backup Relay” on page 6 for connecting the VFD to a Backup Box.

#### Required Motor and Blade Combinations

The following Motor and Blade combinations are required to use a Variable Frequency Drive.

	Motor Part Number	Blade Part Number
52" VanGuard™ Plus Fan	48608	48507
48" Turbo® Fan	44694	38903
57" Endura® Fan	48608	53532

### 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.



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## Limited Warranty

Chore Time Group, a division of CTB, Inc. (“Chore-Time”) warrants new CHORE-TRONICS® 2 and 3 Variable Frequency Drive Controls manufactured by Chore-Time to be free from defects in material or workmanship under normal usage and conditions, for One (1) year from the date of installation by the original purchaser (“Warranty”). If such a defect is determined by Chore-Time to exist within the applicable period, Chore-Time will, at its option, (a) repair the Product or Component Part free of charge, F.O.B. the factory of manufacture or (b) replace the Product or Component Part free of charge, F.O.B. the factory of manufacture. This Warranty is not transferable, and applies only to the original purchaser of the Product.

**CONDITIONS AND LIMITATIONS.** 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, INCLUDING, WITHOUT LIMITATION, WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES. CHORE-TIME shall not be liable for any direct, indirect, incidental, consequential or special damages 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. *Some jurisdictions prohibit limitations on implied warranties and/or the exclusion or limitation of such damages, so these limitations and exclusions may not apply to you. This warranty gives the original purchaser specific legal rights. You may also have other rights based upon your specific jurisdiction.*

Compliance with federal, state and local rules which apply to the location, installation and use of the Product are the responsibility of the original purchaser, and CHORE-TIME shall not be liable for any damages which may result from non-compliance with such rules.

The following circumstances shall render this Warranty void:

- Modifications made to the Product not specifically delineated in the Product manual.
- Product not installed and/or operated in accordance with the instructions published by the CHORE-TIME.
- All components of the Product are not original equipment supplied by CHORE-TIME.
- Product was not purchased from and/or installed by a CHORE-TIME authorized distributor or certified representative.
- Product experienced malfunction or failure resulting from misuse, abuse, mismanagement, negligence, alteration, accident, or lack of proper maintenance, or from lightning strikes, electrical power surges or interruption of electricity.
- Product experienced corrosion, material deterioration and/or equipment malfunction caused by or consistent with the application of chemicals, minerals, sediments or other foreign elements.
- Product was used for any purpose other than for the care of poultry and livestock.

The Warranty may only be modified in writing by an officer of CHORE-TIME. CHORE-TIME shall have no obligation or responsibility for any representations or warranties made by or on behalf of any distributor, dealer, agent or certified representative.

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# Mounting the Variable Frequency Drive (VFD)

The VFD enclosure must be mounted on a flat level surface no more than 20' [6.09m] from the Fan as shown.

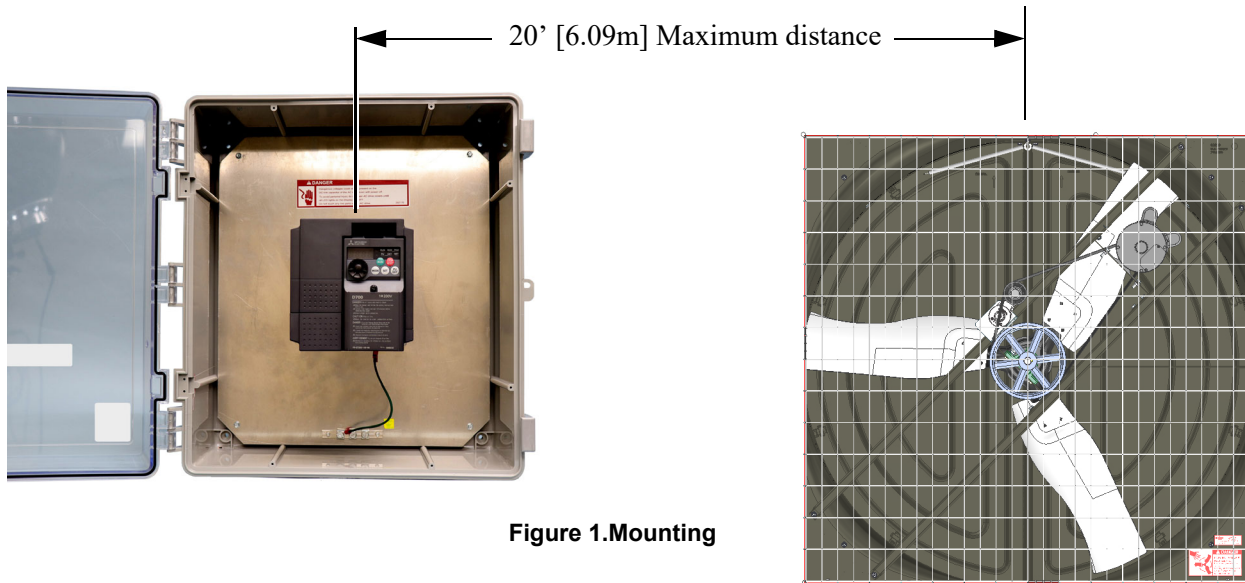


Figure 1.Mounting

# Wiring

## Wiring the Drive to CT2

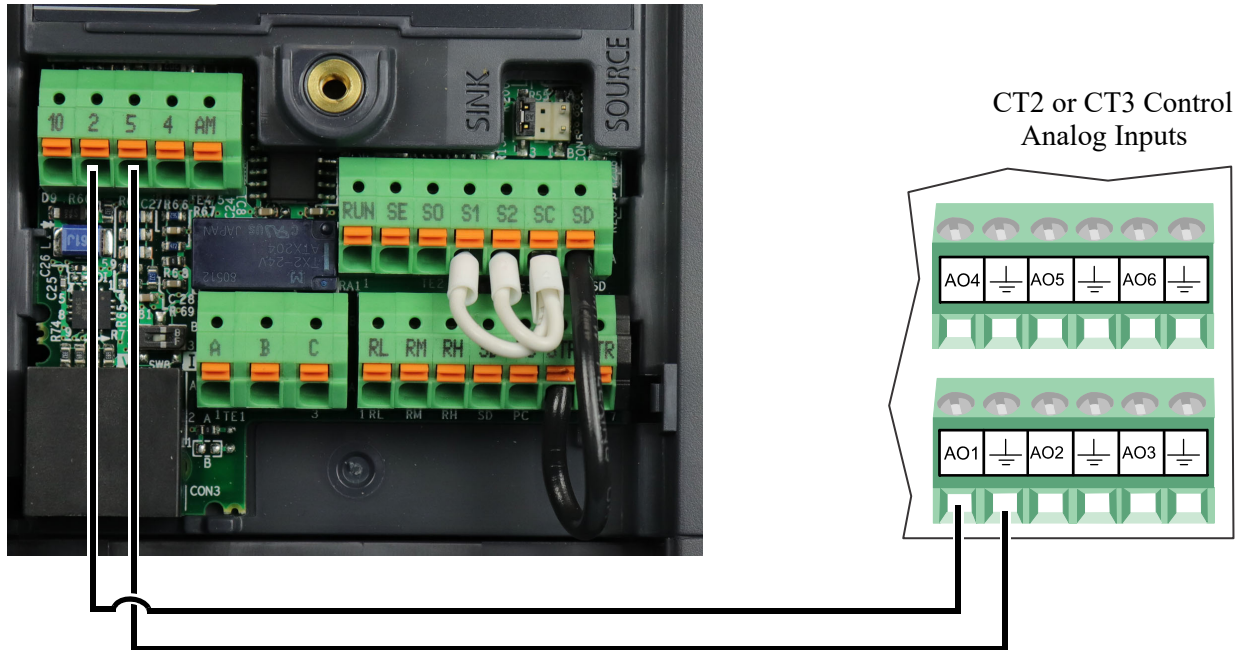


Figure 2. Wiring to CT2

## Motor Wiring

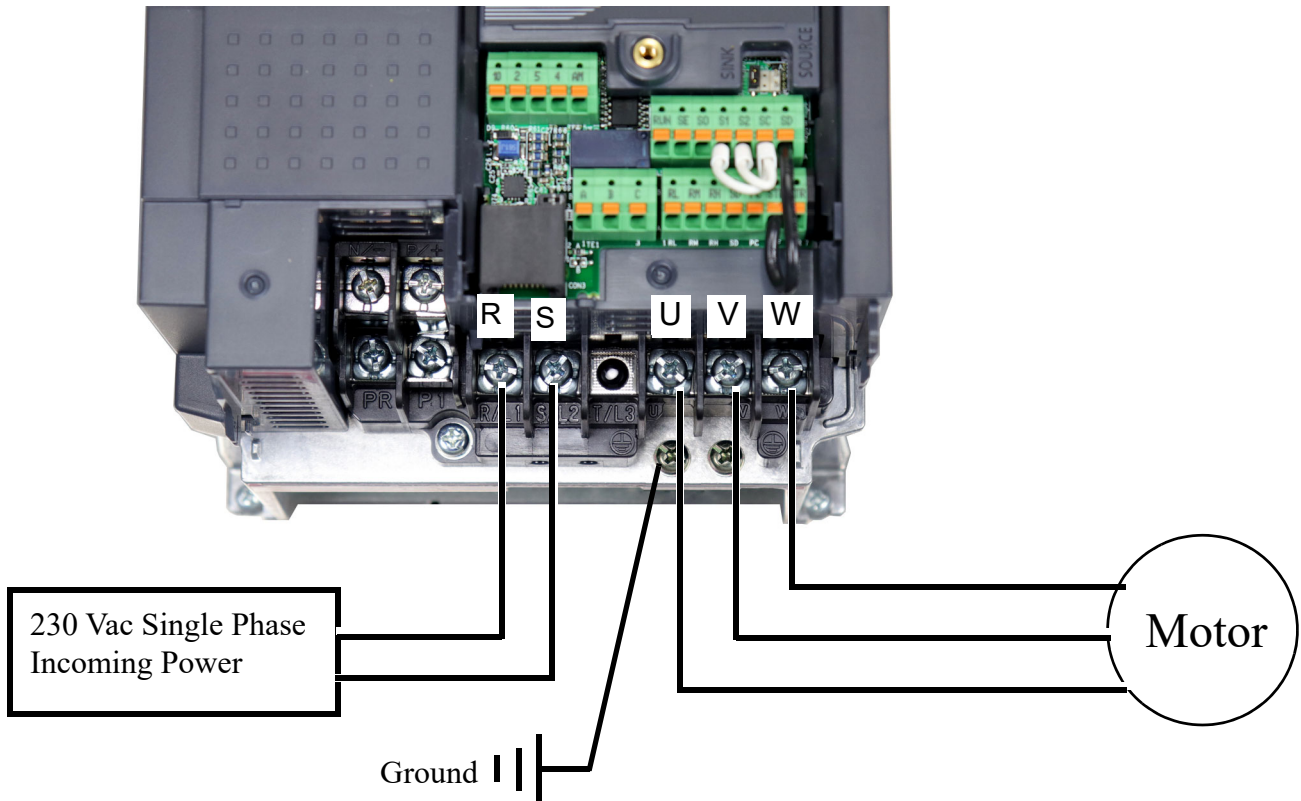


Figure 3. Motor Wiring

# Wiring with a Backup Relay

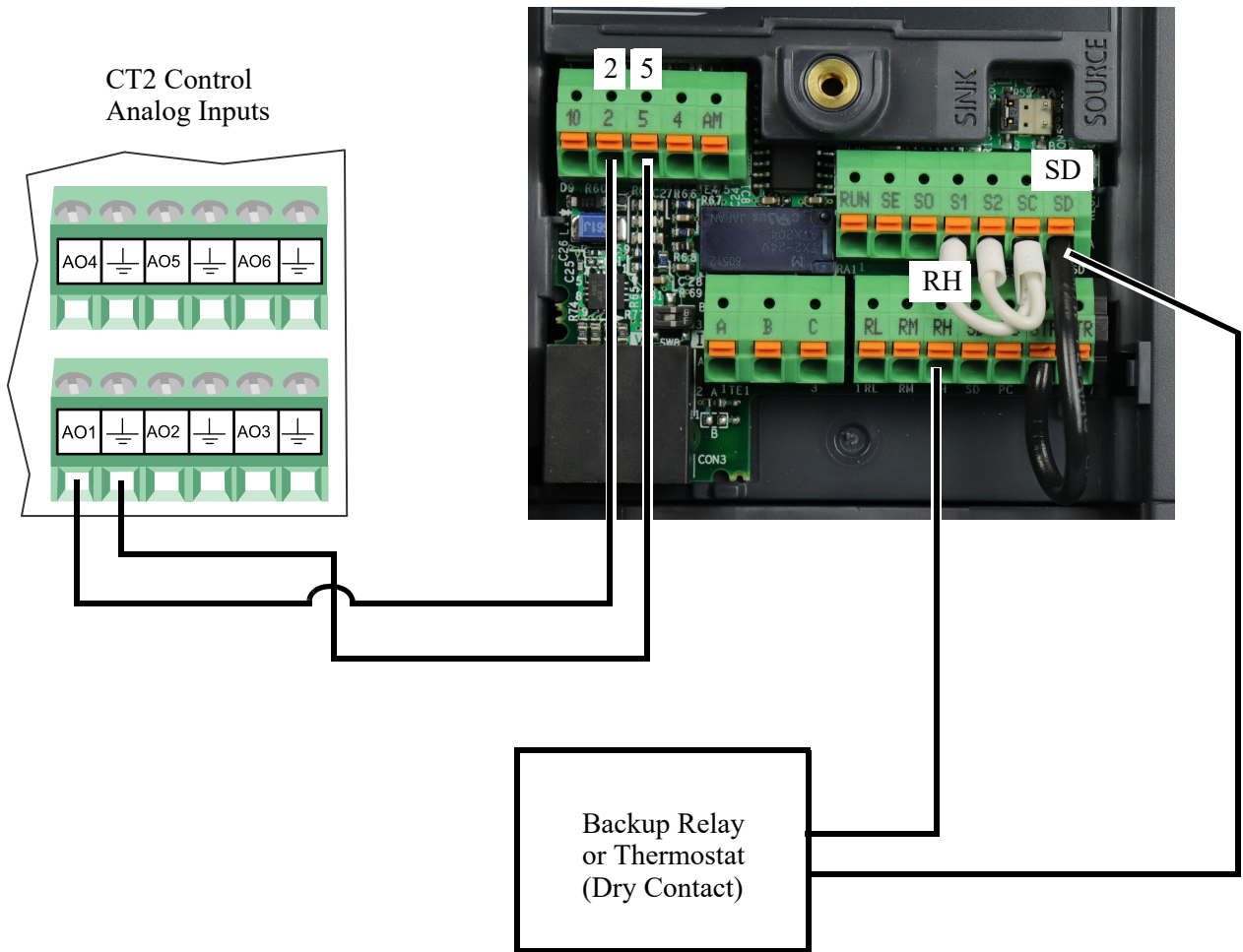
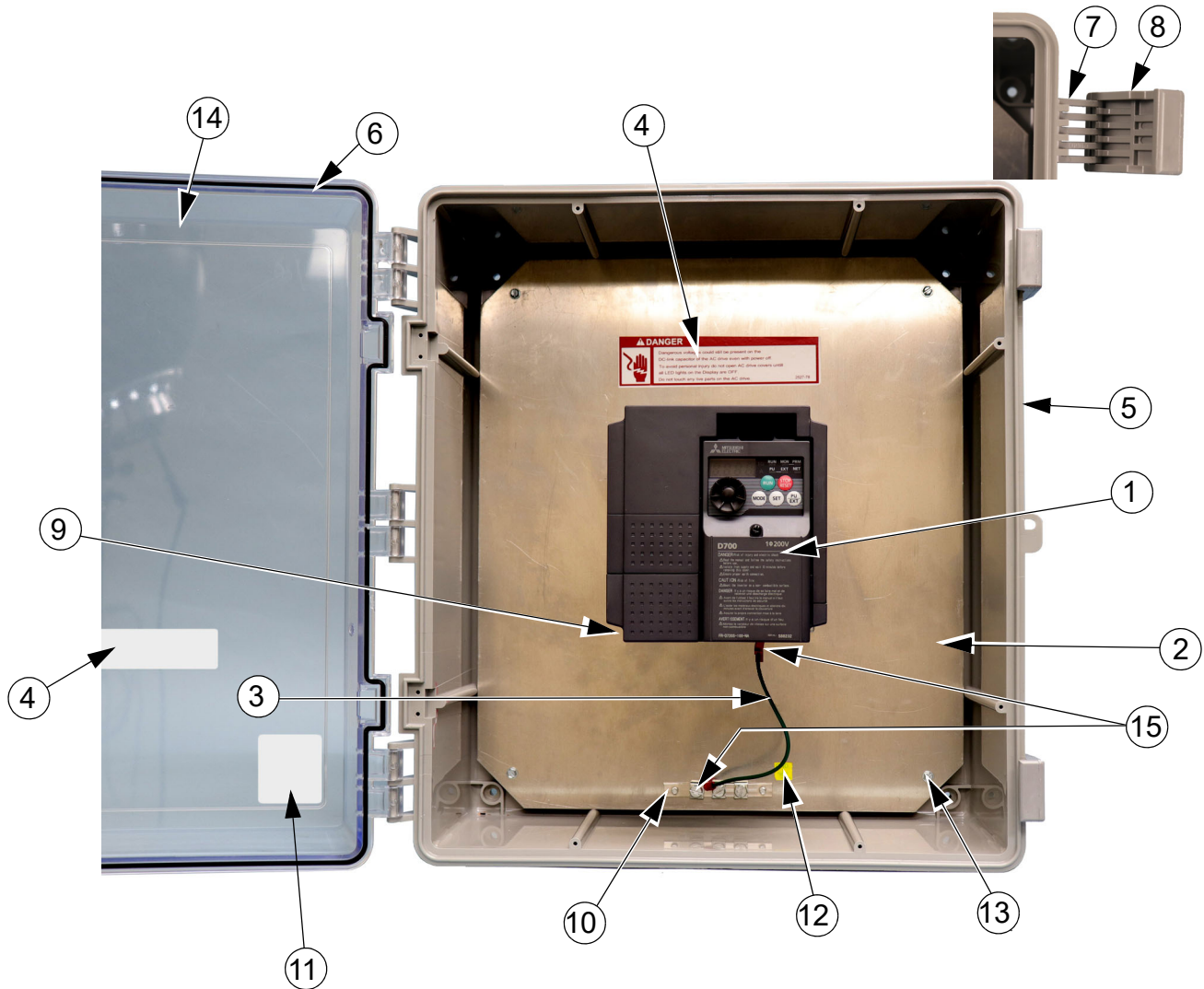


Figure 4. Wiring with a Backup Relay

# Part Numbers



Item	Description	Part No.
1	AC Frequency Drive Unit	52099-1
2	Plate, Frequency Drive Bottom	51740
3	Wire, Ground	51741
4	Decal, Dangerous Voltage	2527-78
5	Box, Electric 14 X 16	42684
6	Lid, Electric Box 14 X 16	42683
7	Latch, Control Box	30862
8	Pivot, Control Box Latch	30863
9	Screw, Phil Panh SFTP #6-32 X .500	35367
10	Grounding Rail	43384-2
11	Decal, Danger	2527-35
12	Decal, Ground	2527-63
13	Screw, HXWH #8 X .375 C/Z	13019
14	Seal, Neoprene Closed Cell .125	34767
15	WSHR, Ext. Lock .203 X.403 X .023 C/Z	305
16	Decal, Caution	2527-62





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

### **Revisions to this Manual**

<b>Page No.</b>	<b>Description of Change</b>	<b>ECO</b>
1	Updated Fan Blade part number to 53532	34968

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

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