# CHORE-TIME

# 27761 Hopper Level Control

**International Version** 

The 27761 Hopper Level Control is designed for use with any conveying system that carries free-flowing feed. The control automatically starts and stops the fill system as feed level against the paddle changes.

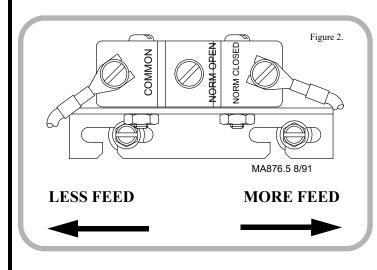
Switches may be placed in more than one hopper to assure that no hopper empties before the control unit hopper requires feed. All switches must be wired in parallel so that any one switch can start the system.

#### Installation

Install the control in the last hopper which is located at the end of the delivery system. Mount it low so the feed level will be lower in that hopper than in the others. The lower feed level will cause the system to start frequently enough to maintain the feed level in every hopper and provide a reservoir for the feed in the fill system if another hopper calls for feed. Position the feed drop tube to deliver feed to the center and near the top of the hopper, in front of the paddle. Position the drop tubes and switches high in the other hoppers so that they fill but do not overflow. See page 2 of this instruction.

Mount the Hopper Level Control vertically, as shown in Figure 1, to assure free movement of the switch paddle. Drill two 9/32" (7.2 mm) holes at the desired location. Use the bracket as a guide to determine the hole spacing. Fasten the bracket in place with the hardware supplied. Install the Control in the Mounting Bracket Assembly. The control may be removed for switch adjustment or for house clean-out.

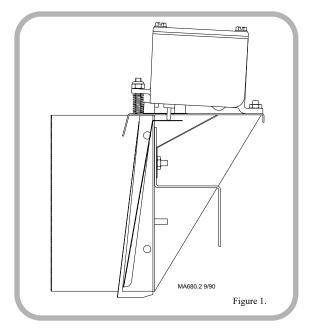
Note: The Mounting Bracket can be relocated to the studs underneath the Paddle Shield to lower the Hopper Level Control approximately 2" (50 mm) in the hopper.





### **CHORE-TIME**

### **Replacement Parts.**



### Switch & Paddle Adjustment

The Control Switch is factory adjusted for both Switch Sensitivity and Paddle Position. It is set for medium to light weight feed (less than 40  $lb/ft^3$  or 64 kg/m<sup>3</sup>).

IMPORTANT: External Adjustment nut is for paddle positioning only. Switch sensitivity can only be adjusted internally.

#### Paddle Positioning

- 1. Place switch in a vertical position with <u>NO FEED</u> in front of paddle.
- 2. Turn external nut CLOCKWISE until switch actuates (clicks).
- Turn external nut back <u>COUNTER-CLOCKWISE</u> until switch deactivates (clicks).
- 4. Turn external nut an additional <u>TWO</u> full turns <u>COUNTER-</u> <u>CLOCKWISE</u>.

### Switch Sensitivity Adjustment

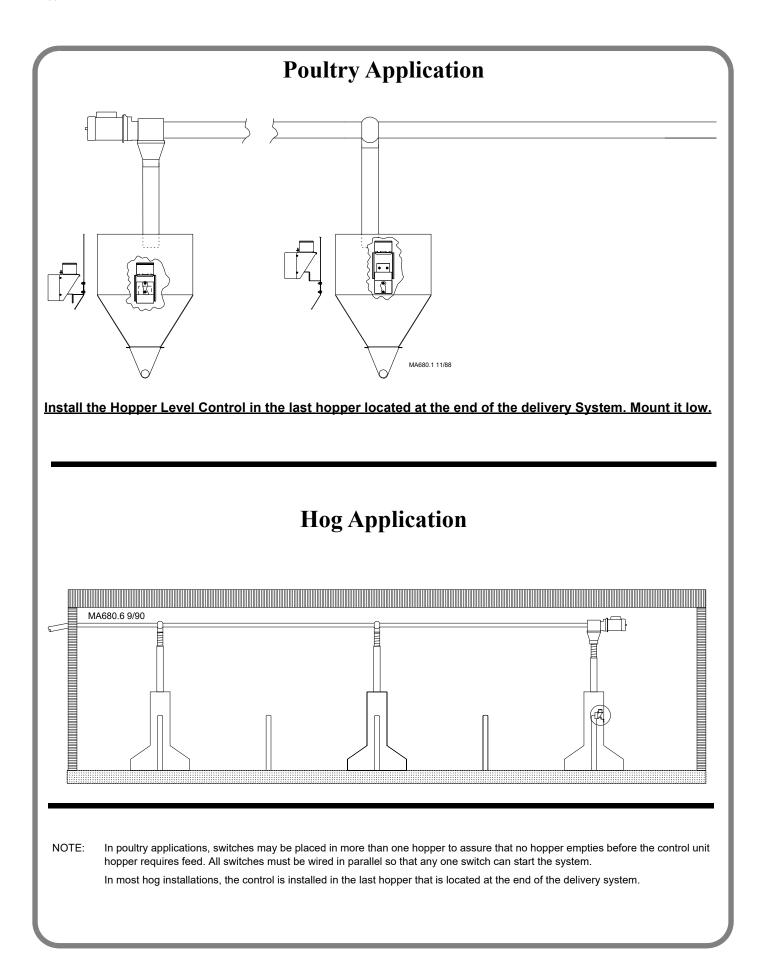
- 1. Loosen the two #6 slotted, hex washer head screws holding the switch bracket in place.
- Slide the switch and bracket assembly----<u>RIGHT</u> to make the switch <u>LESS SENSITIVE</u>, --<u>LEFT</u> to make the switch <u>MORE SENSITIVE</u>. See Figure 2.
- 3. Re-tighten the screws (do not over-tighten).
- 4. <u>IMPORTANT</u>: Re-adjust paddle position whenever switch sensitivity is adjusted.

### <u>Wiring</u>

The 27761 Hopper Level Control is a single pole, double throw switch with wiring leads connected so that the circuit is complete (closed) when there is no feed against the paddle. The circuit is broken (open) when there is feed against he paddle.

The 27761 Hopper Level Control is rated for up to a 1 H.P., 230 VAC motor. If a motor larger than 1 H.P., 230 VAC is used, a contactor must be installed to control the current to the switch.

Wire according to the applicable diagram on pages 4 & 5.



## Notes & Sketches

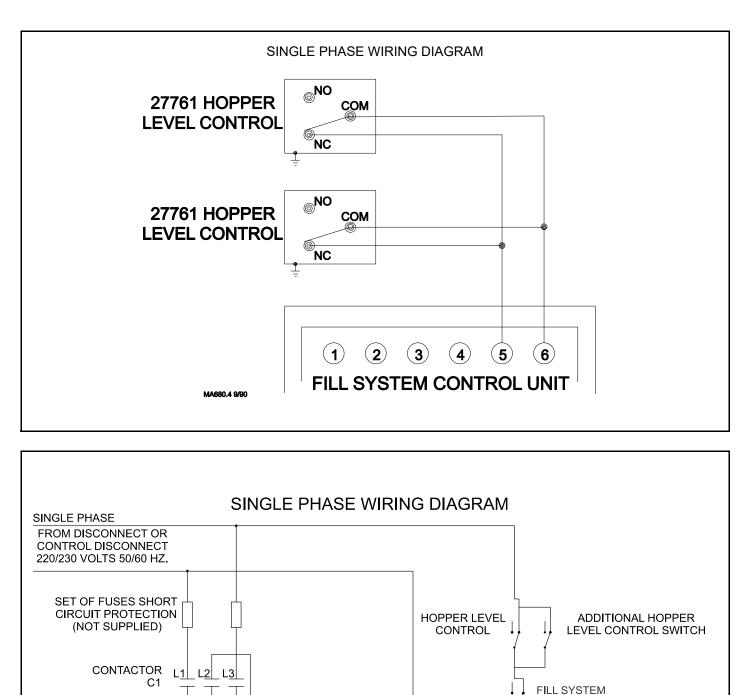
CURRENT SENSOR

К1 Т1

T2 T3

M1

## WIRING DIAGRAMS: Single Phase



FILL SYSTEM MOTOR

220/230 VOLTS 50/60 HZ.

SINGLE PHASE

CONTROL UNIT

MA876.1 8/91

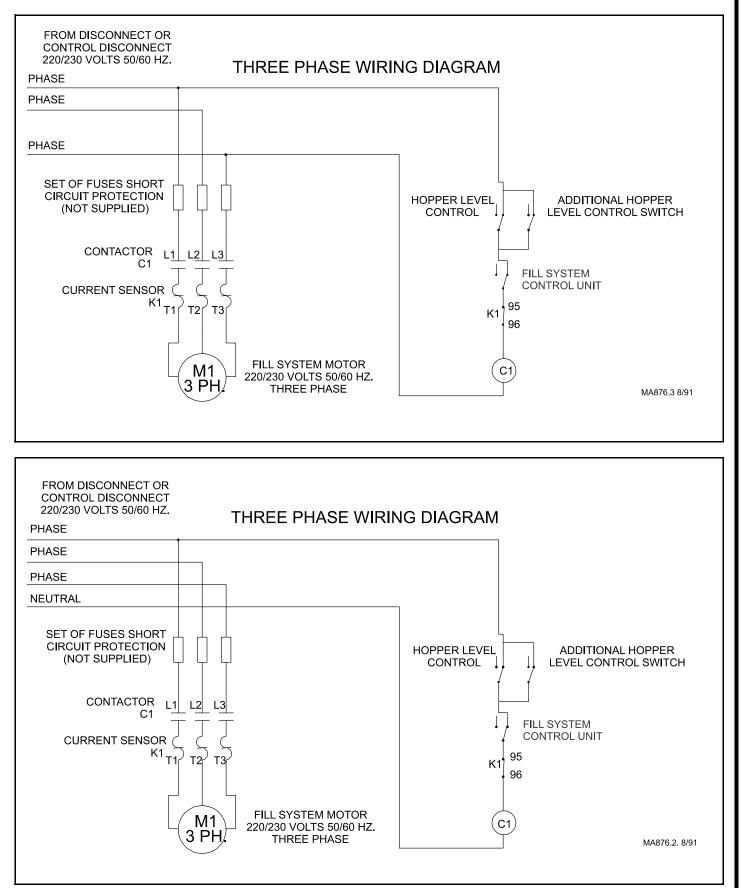
95

96

C1

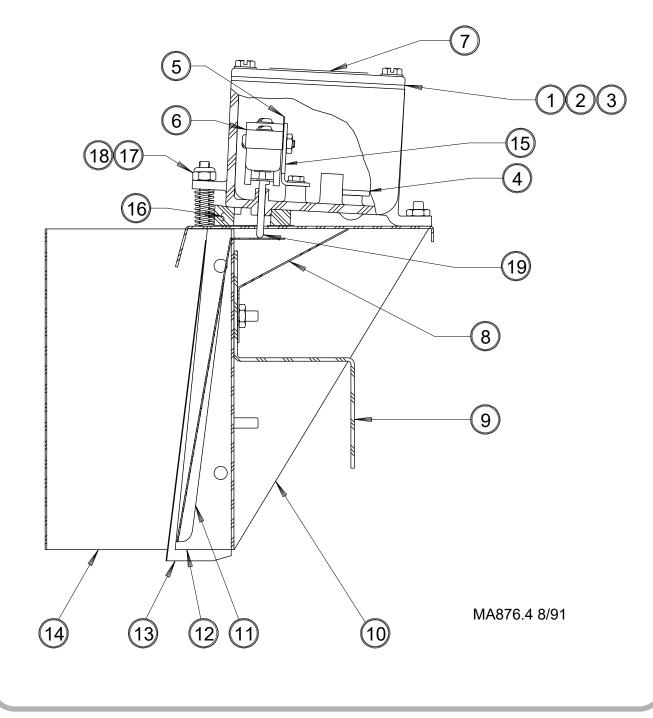
K1

### WIRING DIAGRAMS: Three Phase



# 27761 Hopper Level Control (International)

<u>ltem</u>	<b>Description</b>	Part No.	<u>ltem</u>	<b>Description</b>	<u>Part No.</u>
1	Gasket	6777	11	Paddle	14519
2	Switch Box Cover	6776	12	Switch Frame Assembly	14498
3	Switch Box	7841	13	Diaphragm	28157
4	2 Terminal Block	27845-2	14	High Differential Shield	7808
5	Switch Insulation	1907-5	15	Switch Bracket	7068
6	S.P.D.T. Switch	7069	16	Gasket	6968-1
7	Danger Decal	2527-35	17	Spring	6972
8	Paddle Shield	24059	18	10-32 Lock Nut	6963
9	Switch Brace Bracket	2703	19	Pin	6775
10	Switch Frame Assembly	14499		Mounting Bracket Assembly	2911



## WARRANTY INFORMATION

Chore-Time Group, a division of CTB, Inc. ("Chore-Time") warrants new CHORE-TIME Hopper Level 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 and Extended 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.

Effective: April, 2014



### MADE TO WORK. BUILT TO LAST.®

### **Revisions to this Manual**

 Page No.
 Description of Change
 ECO#

 -CHANGED PART 14550 TO 27761 HOPPER LEVEL CONTROL
 33873

 -UPDATE WARRANTY INFORMATION PAGE
 33873

For additional parts and information, contact your nearest Chore-Time distributor or representative. Find your nearest distributor at: www.choretime.com/contacts

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