

INSTALLATION CHECKLIST
One Motor Door

Job Name:

Door Number:

Location:

This installation check list is a continual improvement list, developed by service personnel in the field. This is not a Megadoor Inc. document, only a guideline developed by George Shrokman to assist the installer and dealer in a quality installation that will assist in extended life of the Megadoor system. This does not replace the Megadoor Warranty sheets that must be signed by all installation personnel upon the completion of the door. We do however suggest sending this worksheet along with the Megadoor Warranty sheet as a detailed confirmation of the quality of the installation.

The check list may seem long, but depending on the door size and the quality of the installation, an experienced installer can run through the list in 15 minutes. Very large doors may take up to an hour, depending on the time it takes to move the man lift around.

For the safety of all concerned, we suggest using a boom lift, NOT A SCISSOR LIFT OR SCAFFOLD when checking the operation. Take note that the Megadoor is a hoist system intended to pick up a tremendous amount of weight quickly. The bottom beam or curtain will only stop moving upward when a stop button is pressed and held, or the power is turned off. The lift must be clear of the moving curtain. When you are in the air checking the door, safety personnel should be positioned near the power disconnect to shut the system down in case of an emergency.

Since this is a continual improvement list, please forward any comments or suggestions so we can incorporate them into this procedure.

Thank you for the opportunity to work with you.

George A. Shrokman, Jr.
email: jr@shrokman.com.

General Information

Customer : _____ **inspection Date:** _____
Door Serial Number: _____ **Location Description** _____

Total Width Dimension _____ ' _____ " **Clear Width Dimension** _____ ' _____ "

Total Height Dimension _____ ' _____ " **Clear Height Dimension** _____ ' _____ "

General Information

These are items of general information that is used to document that the proper dimensions have been used during the door installation.

Checking Total Width Dimensions

1. Total Width (TW) 6" above floor level. Total width measurement _____ ' _____ ".
2. Total Width ¼ up side jamb (_____ ' height) Total width measurement _____ ' _____ ".
3. Total Width ½ up side jamb (_____ ' height) Total width measurement _____ ' _____ ".
4. Total Width ¾ up side jamb (_____ ' height) Total width measurement _____ ' _____ ".
5. Total Width at top of header box. Total width measurement _____ ' _____ ".

Checking Total Height Dimensions

1. Measure Total Height from the bottom of the mounting steel to the top of the header box.
Left Side _____ ' _____ ". Right Side _____ ' _____ "

Checking Clear Height Dimensions

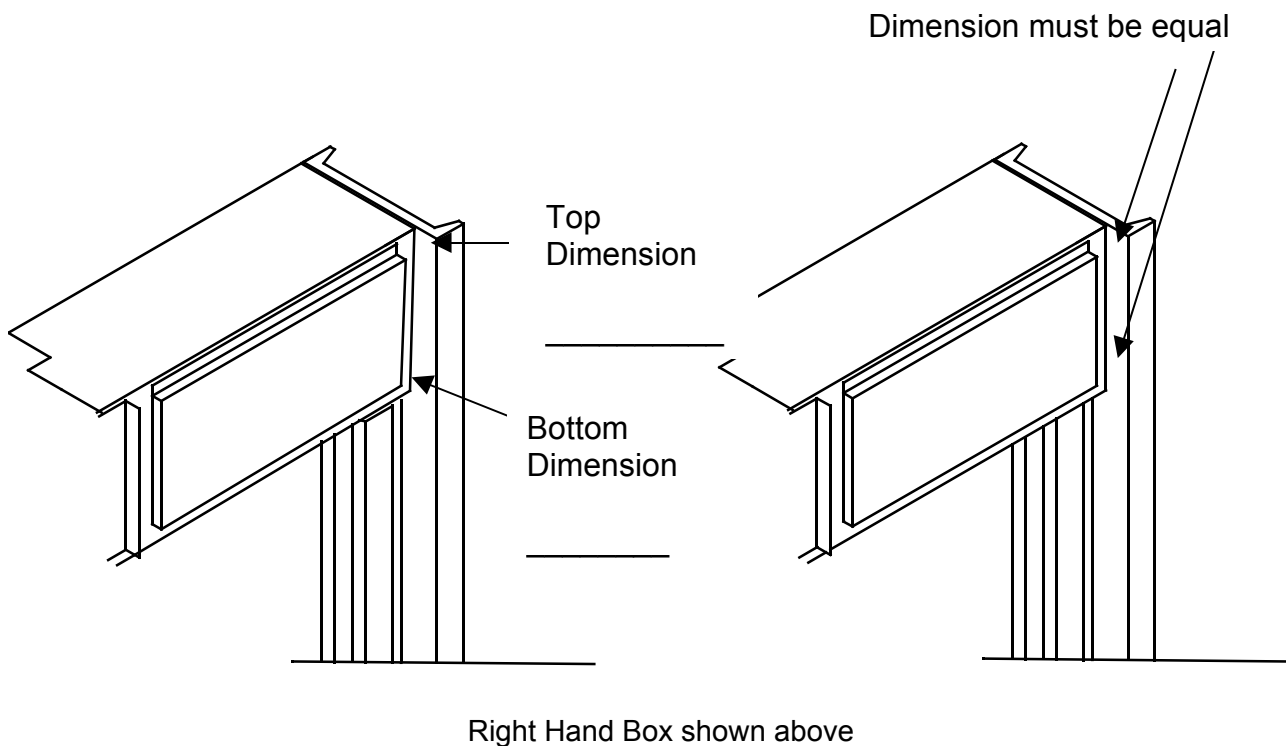
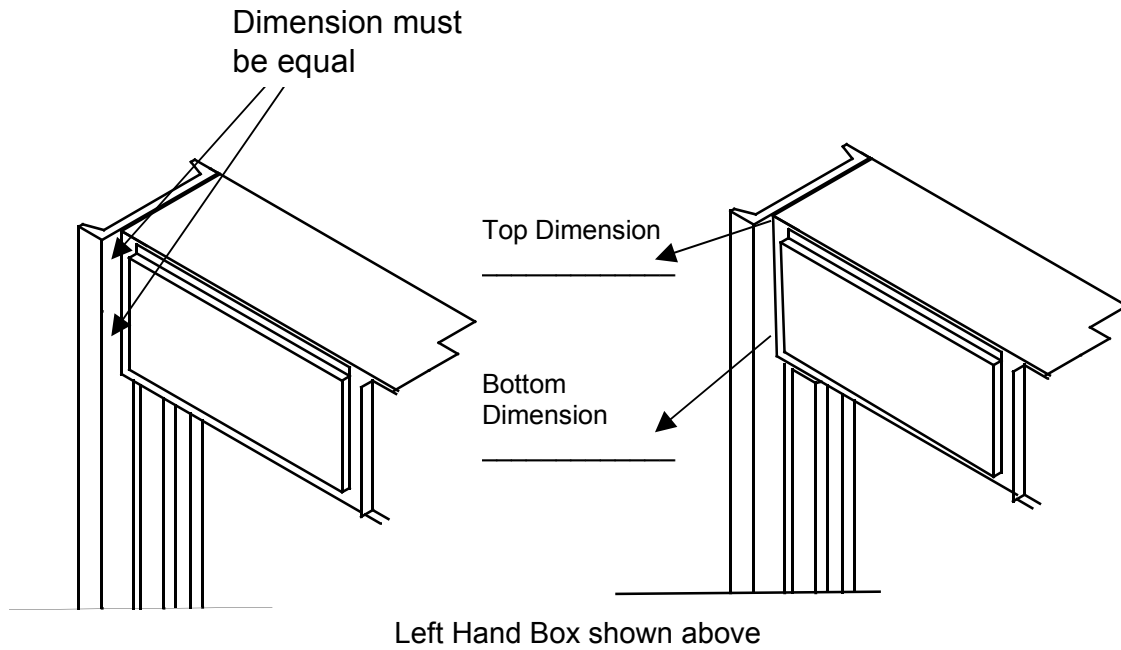
1. Measure the Opening Height from the floor to the bottom of the opening lintel.
Left Side _____ ' _____ ". Right Side _____ ' _____ "

Installation Questions.

1. Was the side jambs and header box leveled via: Transit Hydro Level Don't Know
2. How were the side jambs checked for "plumb": Transit Plumb-bob Sight
3. Check the door steel and door for squareness – perform a criss-cross measurement.
 - Dimension from left hand top to right hand bottom. _____ ' _____ "
 - Dimension from right hand top to left hand bottom. _____ ' _____ "

Checking header box for vertical alignment.

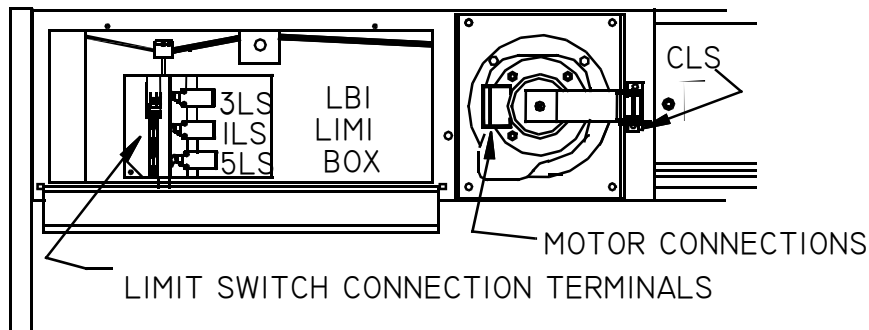
Measure from the face of the side jamb to the top and bottom of the header box. The dimension should be the same at the top and the bottom. (see illustration below). Front of header box must be plumb!



Check for header twist between the left and right side. FRONT OF HEADER BOX MUST BE PLUMB!

Left Hand Machine Box (Page 1 or 2)

These Items are to be checked when up at the left side machine box.
Tools Required: Tape measure, bullet level, torqs 30, Allen m5, small screw driver.



Items to check with limit box cover removed.

- **Items to check with door not in motion.**

1. LB1 Mounting Bolts Installed (Qty of 4)
2. Belt wound on drum properly (belt wraps to the top of the drum from the left hand side)
3. Top mounting bolt located above the belt is installed so the bolt head is on the bottom, and the nut is on the top. (if it is installed with the nut on the bottom, the bolt will eventually rub the belt).
4. Belt not twisted.
5. Belt drum bolt is tight on motor shaft.
6. U-bracket on limit plunger straight (not bent into a “w” shape)
7. U-bracket Roller Square with Belt
8. Top Plunger straight.
9. Open plunger (bottom plunger) moves freely.
10. Open plunger (bottom plunger) spring not rubbing aluminum top beam.
11. Limit switches mounted square. (note: 1LS can have a slight twist when a two speed motor is used..)
12. Check tightness of all wires in the terminal blocks
13. Electrical wires not rubbing belt drum or belt.
14. Header box and side guide align (check alignment of the square belt feed hole in the header box and the top of the side guide. The guide should be centered with the hole.
15. Bolts attaching curtain to header box installed.
16. Is the motor / gearbox assembly level?

Left Hand Machine Box (Page 2 of 2)

Items to check while the door is running.

CAUTION: MOVING DOOR CAN CAUSE DEATH. MAKE SURE LIFTS AND PERSONEL ARE CLEAR OF MOVING DOOR CURTAIN. KEEP FINGERS AND HANDS CLEAR OF MOVING PARTS INSIDE OF MOTOR BOX

NOTE: MAKE SURE THE HINGED COVER IS NOT CAUGHT BY THE DOOR CURTAIN AS THE DOOR MOVES UPWARD

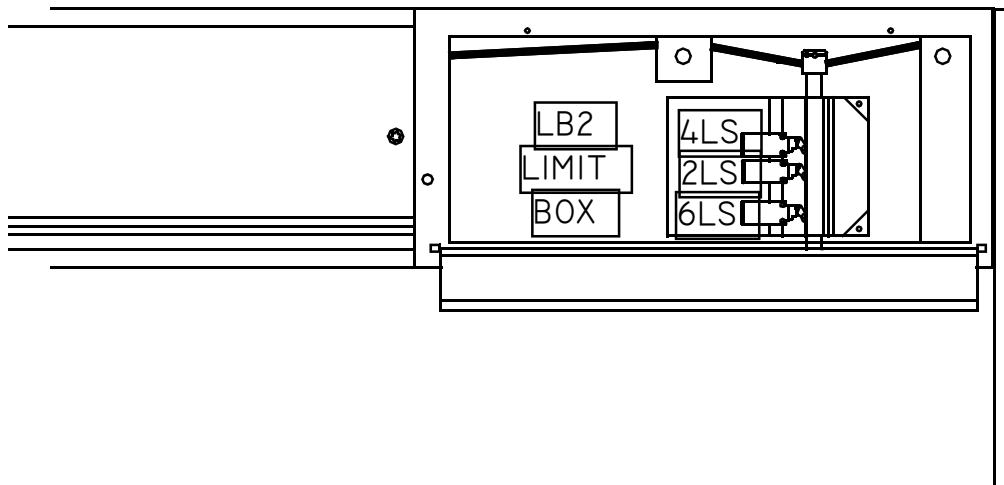
1. Belt running in the center of the rollers.
2. Belt clears all wires as drum diameter changes.
3. Belt runs smoothly through bottom of box.
4. Belt runs smoothly through U-bracket and top plunger
5. When the door is fully closed, 2LS trips, and 1LS is not tripped.
6. When the door is fully open, 5LS trips, and 1LS is not tripped.
7. When the door stops at the fully open position, the open plunger (bottom plunger) does not touch 1LS roller. If it does, explain what happens after it touches the roller.
8. Manually depress 1LS, have someone press the open/close button. Door should not operate. If it does, door is not wired properly.

Items to check externally while on the left side..
Door not in motion.

1. Two bolts in each limit cover (door).
2. Extra header box support installed at bottom of left motor box (welded between header box & guide steel)
3. Vent plug installed in gear case.
4. Brake release rod clipped on to motor bolt.
5. Crank limit switch sets and resets.
6. Crank arm – bolt that keeps arm from vibrating out of position installed.
7. Crank arm clears back of motor by ¼" to ½".
8. SR Relay (round plastic piece on the bottom of the motor junction box) tight to case (hand tight)
9. Dimension between the outside edge of the header box and the guide steel
(System 800 – 5mm, System 1000-0mm) _____
10. Door curtain alignment – Dimension between the side mounting steel and the batten strip on the top rail of the curtain that is attached to the header box.

Right Hand Machine Box (Page 1 of 2)

These Items are to be checked when up at the right side machine box.
Tools Required: Tape measure, bullet level, torqs 30, Allen m5, small screw driver.



Items to check with limit box cover removed.

• Items to check with door not in motion.

1. LB2 Mounting Bolts Installed (Qty of 4)
2. Belt over pulleys properly (on top of left pulley, through limit “U” bracket, on top of right pulley)
3. Top mounting bolt located above the belt is installed so the bolt head is on the bottom, and the nut is on the top. (if it is installed with the nut on the bottom, the bolt will eventually rub the belt).
4. Belt not twisted.
5. Belt is through upper square hole in left hand bracket.
6. U-bracket on limit plunger straight (not bent into a “w” shape)
7. U-bracket Roller Square with Belt
8. Top Plunger straight.
9. Open plunger (bottom plunger) moves freely.
10. Open plunger (bottom plunger) spring not rubbing aluminum top beam.
11. Limit switches mounted square.
12. Check tightness of all wires in the terminal blocks
13. Electrical wires not rubbing belt.
14. Header box and side guide align (check alignment of the square belt feed hole in the header box and the top of the side guide. The guide should be centered with the hole.
15. Bolts attaching curtain to header box installed.
16. Is the assembly level?

Right Hand Machine Box (Page 2 of 2)

Items to check while the door is running.

CAUTION: MOVING DOOR CAN CAUSE DEATH. MAKE SURE LIFTS AND PERSONEL ARE CLEAR OF MOVING DOOR CURTAIN. KEEP FINGERS AND HANDS CLEAR OF MOVING PARTS INSIDE OF MOTOR BOX.

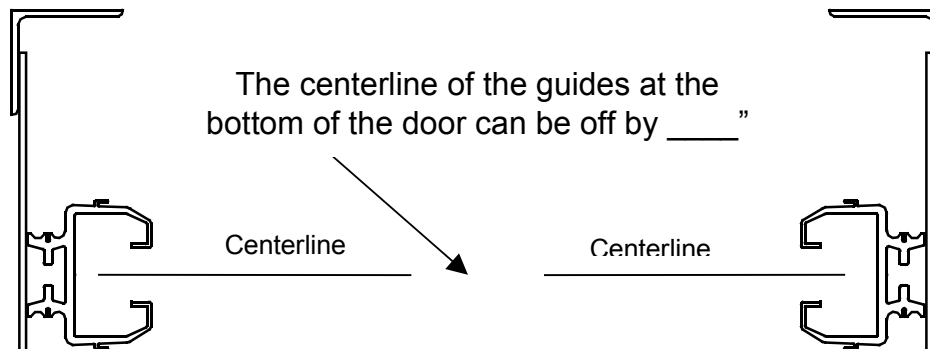
NOTE: MAKE SURE THE HINGED COVER IS NOT CAUGHT BY THE DOOR CURTAIN AS THE DOOR MOVES UPWARD.

1. Belt running in the center of the rollers.
2. Belt clears all wires.
3. Belt runs smoothly through bottom of box.
4. Belt runs smoothly through U-bracket and top plunger
5. When the door is fully closed, 4LS trips, and 2LS is not tripped.
6. When the door is fully open, 6LS trips, and 2LS is not tripped.
7. When the door stops at the fully open position, the open plunger (bottom plunger) does not touch 2LS roller. If it does, explain what happens after it touches the roller.
8. Manually depress 2LS, have someone press the open/close button. Door should not operate. If it does, door is not wired properly.

Items to check externally while on the right side.. Door not in motion.

1. Two bolts in each limit cover (door).
 2. Dimension between the outside edge of the header box and the guide steel
(System 800 – 5mm, System 1000-0mm) _____
- Door curtain alignment – Dimension between the side mounting steel and the batten strip on the top rail of the curtain that is attached to the header box.

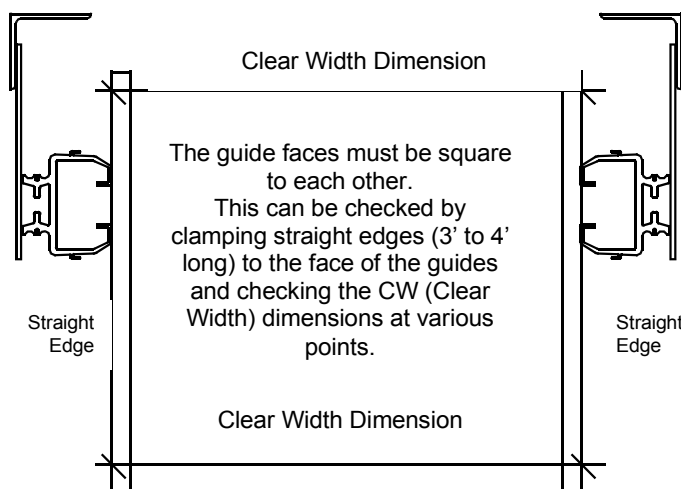
Check the centerline alignment of the door guides.



The guides are centered perfectly at the header box, and must be centered perfectly at the bottom. Make sure the guides are aligned across the opening as shown. There is a ____” tolerance, depending on the opening width. The guides must be aligned to provide correct clearance between the guide blocks and the guide itself.

A laser level rotated to the vertical position can be used to check the centerline on the guides.

Check to make sure the face of the guides and mounting steel are parallel facing each side.

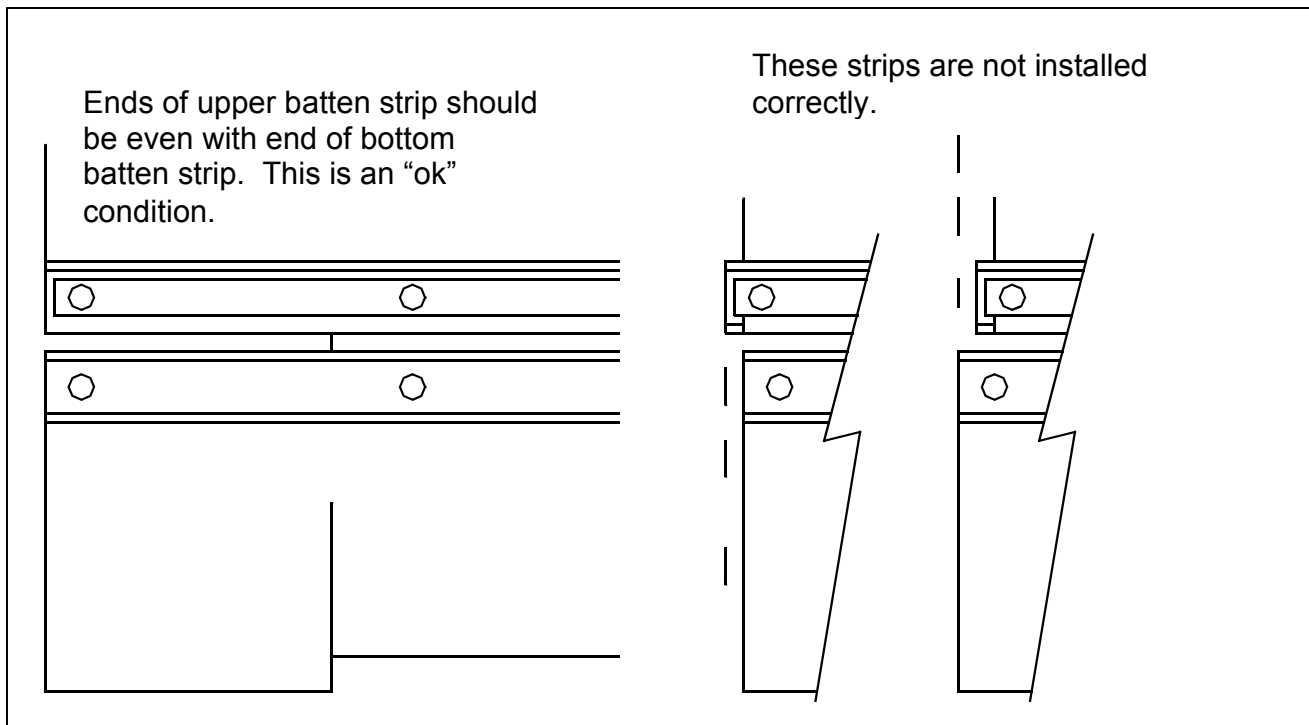


There are many ways to verify that the steel and guides are square to each other. This straight edge method is just one. We are concerned that the throat of the guide is square, so the end blocks do not wear unevenly.

We do not provide a tolerance for this being out of square.

Door Curtain

1. All clamp strips are straight on the ends (not bent).
Right Inside ok Left Inside ok Right Outside ok Left Outside ok
2. Bottom batten strips installed properly. (see figure below)
Right Inside ok Left Inside ok Right Outside ok Left Outside ok



3. Protective studs installed in the clamp strip ends on the bottom beam.
Left Inside Yes No Right Inside Yes No
Left Outside Yes No Right Outside Yes No
4. With the door fully closed the curtain is fully stretched, and the reversing door edge is $\frac{1}{2}$ " to $\frac{3}{4}$ " above the finished floor. There is adequate clearance under the edge so it does not trip when fully closed.
Guide Rails

1. All bolts installed in guides
2. Bolts have been properly torqued
3. Throat of guide measures correctly
4. Guides aligned at splice points
5. Guides plumb and straight
6. Side guide steel gussets installed
7. Bottom of guide supported where necessary
8. Guides installed square to opening
9. Guides are installed plumb.
10. Guide dimension from wall correct.
11. Edges of guides (joints) dressed and burr free.

MISC ITEMS

1. Reversing edge operates properly.
2. Photo-eyes operate.
3. Is the door making any strange sounds?

4. What other items should be noted.

Dimensions and Torque

Header Box

Nuts on bolts attaching top of curtain to the header box. Nut Size _____ Torque _____

Guides

Guide Bolt Torque: Bolt Size _____ Torque _____

Guide opening width when bolts properly tightened. _____" _____mm

Control Panel / Motor Voltage and Current Verification

Line Voltage Measurement All Measurements are in VOLTS

Incoming Voltage – Door Sitting Still

Incoming Voltage Measured at the Bottom of the Disconnect					
Leg A to B	Leg B to C	Leg A to C	Leg A to Ground	Leg B to Ground	Leg C to Ground

Incoming Voltage with Door Motion - Motor Running

Incoming Voltage Measured at the Bottom of the Disconnect					
Leg A to B	Leg B to C	Leg A to C	Leg A to Ground	Leg B to Ground	Leg C to Ground

Motor Lead Measurement (T Lead Voltage Measurement)

All measurements are in VOLTS

Voltage going to motor with Motor Running

Single Speed Motor (OPEN & CLOSE) and Two Speed T1 T2 T3 (CLOSE ONLY)

Voltage Measured at Terminal Blocks in Control Panel					
T1 to T2	T2 to T3	T1 to T3	T1 to Ground	T2 to Ground	T3 to Ground

Two Speed Motor T4 T5 T6 (OPEN ONLY)

Voltage Measured at Terminal Blocks in Control Panel					
T4 to T5	T5 to T6	T4 to T6	T4 to Ground	T5 to Ground	T6 to Ground

Clamp the Amp Probe on the Motor “T” lead to get these readings

All measurements are in AMPS.

SINGLE SPEED MOTOR

Motor T lead	LT1		LT2		LT3	
Reading Position	Raise	Lower	Raise	Lower	Raise	Lower
Near Full Open						
Middle						
Near Full Close						

TWO SPEED MOTOR: OPEN – T4 T5 T6 CLOSE – T1 T2 T3

Motor T lead	T4	T1	T5	T 2	T 6	T3
Reading Position	Raise	Lower	Raise	Lower	Raise	Lower
Near Full Open						
Middle						
Near Full Close						