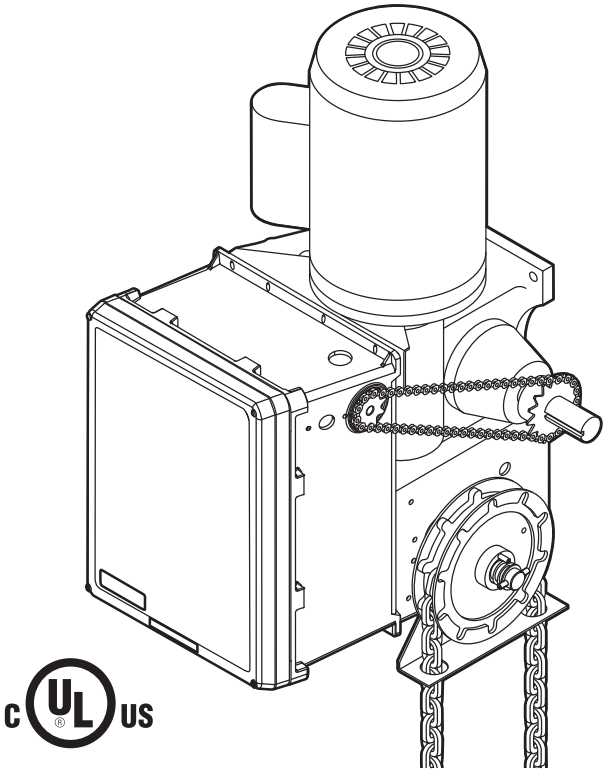
LiftMaster®

LOGIC 5 ADDENDUM
N4 AND N4X MODIFICATION



⚠ ⚠ WARNING

To reduce the risk of Severe Injury or Death:

- Any maintenance to the operator or in the area near the operator must not be performed until disconnecting the electrical power and locking-out the power. Upon completion of maintenance the area must be cleared and secured, at that time the unit may be returned to service.
- Disconnect power at the fuse box BEFORE proceeding. Operator MUST be properly grounded and connected in accordance with local electrical codes. The operator should be on a separate fused line of adequate capacity.
- All electrical connections MUST be made by a qualified individual.
- Do not install ANY wiring or attempt to run the operator without consulting the wiring diagram. We recommend that you install an optional reversing edge BEFORE proceeding with the control station installation.
- All power wiring should be on a dedicated circuit and well protected. The location of the power disconnect should be visible and clearly labeled.
- All power and control wiring must be run in separate conduit.

APPLICATION

The N4 and N4X modification is for use in environments requiring a watertight enclosure.

This addendum is to be used in conjunction with the owner's manual included with this operator. Refer to the manual for all mounting, additional programming and field wiring instructions. The N4 and N4X modification includes a TEFC motor; dynamic braking, watertight/oiltight control enclosure; watertight/oiltight 3-button control station; and nickel-plated chain in lieu of all standard components of the operator. For service or replacement part requirements, use this addendum in lieu of those included with the manual.

Leave this addendum and the owner's manual with the owner.

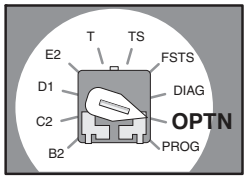
TROUBLESHOOTING

FAULT	POSSIBLE CAUSE	FIX
Door coasts significantly or fails to stop.	1. Wiring or AUXCARD is not properly connected. 2. Dynamic Brake is not enabled for the operator. 3. Door is too heavy for the operator or is not properly balanced.	• Verify the AUXCARD is correctly seated in one of the two expansion slots on the logic board. Verify all wiring using the wiring diagrams. • Reprogram the operator to enable the dynamic brake. Refer to Program the Dynamic Brake. • Inspect the springs and other aspects of the door to make sure it is properly balanced and can be easily lifted by the operator.
Operator resets every time the door stops.	1. Short on transformer secondary.	• Check the wiring. Verify that the bridge rectifier is not shorted. Verify that all relays, including the relay on the AUXCARD, have not failed.

PROGRAM THE DYNAMIC BRAKE

The Logic Board (L5) is pre-programmed to control the dynamic brake. If the logic board is replaced the following programming steps will be required.

1. Set selector dial to OPTN.
2. Press and release MAS.
3. Press and release MID.
4. Turn the selector dial back to the desired wiring type.



ELECTRICAL BOX N4 & N4X

NOTE: *Optional modifications and/or accessories may add or remove certain parts from this list.*

Electrical Box Replacement Parts

Item	Part #	Description	Qty
1	03-35711	24Vac Relay	2
2	21-7115-1	Transformer, 115/230V	1
	21-7460-1	Transformer, 230/460V	1
	21-7575-1	Transformer, 575V	1
3	K001D8075-1	Logic Board (L5)	1
4	AUXCARD	Relay PCB	1
5	052C0481	Rectifier	1
6	42-31247	Terminal Block	1
6A		MOV's	2
7	23-10041	Limit Switch (only)	1
8	K72-12515-1	Limit Switch Kit **Includes:** Limit switches, mounting blocks, mounting hardware, adjust plate with springs	1
9	13-10024	Limit Nut	1
10	K79-15016-1	RPM Sensor	1
11	K72-33192	Limit Shaft Assembly for GH 1/2 to 2 HP	1
	K72-33258	Limit Shaft Assembly for GT, GSD, GH - 3 HP	1
12	K75-37367	Complete Enclosure, N4/N4XGH only	1
13	29-ABC-2	2-Amp Fuse	1
14	K001C8103-1	Antenna with Coaxial Cable	1
15	K001D8115-1	1 Phase Relay Board	1
	K001D8116-1	3 Phase Relay Board	1
NOT SHOWN			
	K94-37289	1 Phase & 3 Phase System Harness	1

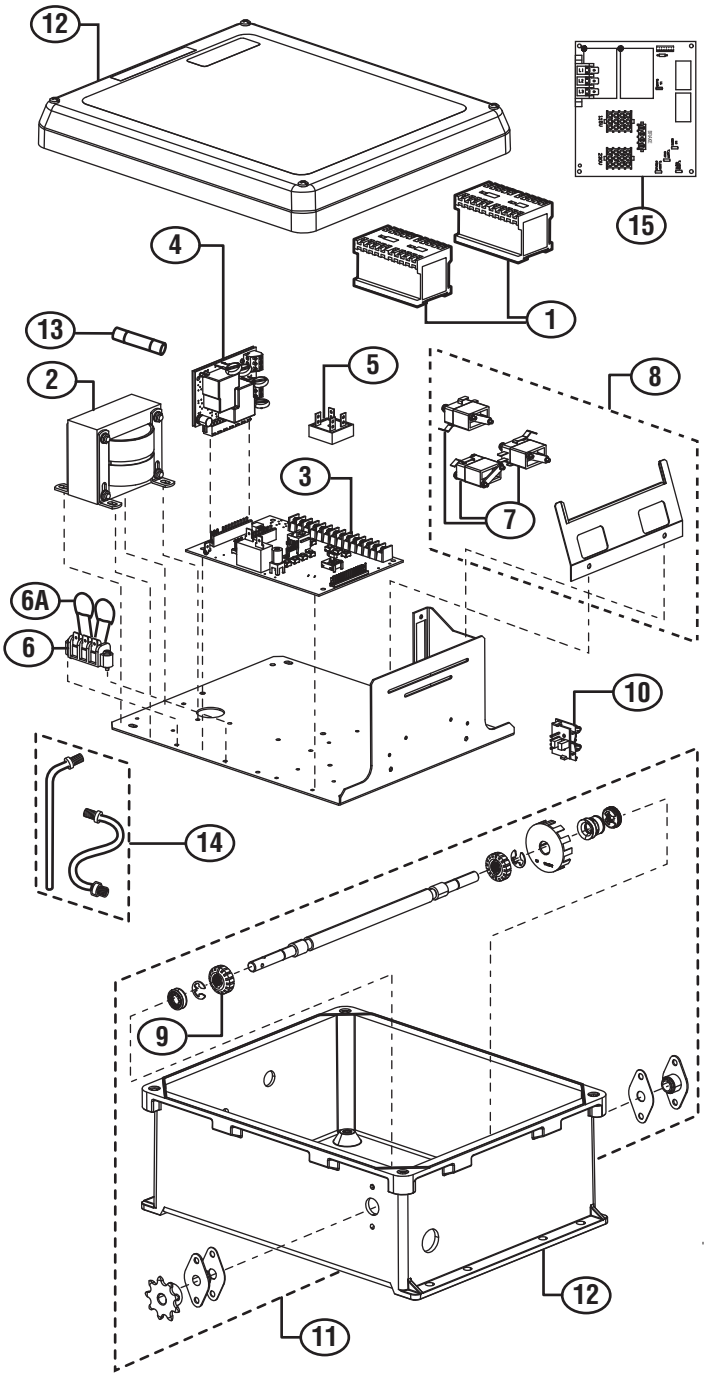
Motors

Motor Description	N4	N4X
1/2 HP, 115V, 1-PH 1/2 HP, 230V, 1-PH	20-1050C-2TLP	20-1050C-2N
1/2 HP, 208/230V, 3-PH 1/2 HP, 460V, 3-PH	20-3050C-4T	20-3050C-4N
1/2 HP, 575V, 3-PH	20-3050C-5T	20-3075C-5N
3/4 HP, 115V, 1-PH 3/4 HP, 230V, 1-PH	20-1075C-2TLP	20-1075C-2N
3/4 HP, 208/230V, 3-PH 3/4 HP, 460V, 3-PH	20-3075C-4T	20-3075C-4N
3/4 HP, 575V, 3-PH	20-3075C-5T	20-3075C-5N
1 HP, 115V, 1-PH 1 HP, 230V, 1-PH	20-1100C-2TLP	20-1100C-2N
1 HP, 208/230V, 3-PH 1 HP, 460V, 3-PH	20-3100C-4T	20-3100C-4N
1 HP, 575V, 3-PH	20-3100C-5T	20-3100M-5N
2 HP, 208/230V, 3-PH 2 HP, 460V, 3-PH	20-3200C-4TP	20-3200C-4N
2 HP, 575V, 3-PH	20-3200C-5T	20-3200C-5N

Electrical Box Replacement Kits

To order a complete electrical box replacement kit, add a K- Prefix to the model number of your operator. For example:

N4GH5011L5R (Operator) = K-N4GH5011L5R (Electrical Box Kit)



How to Order Repair Parts

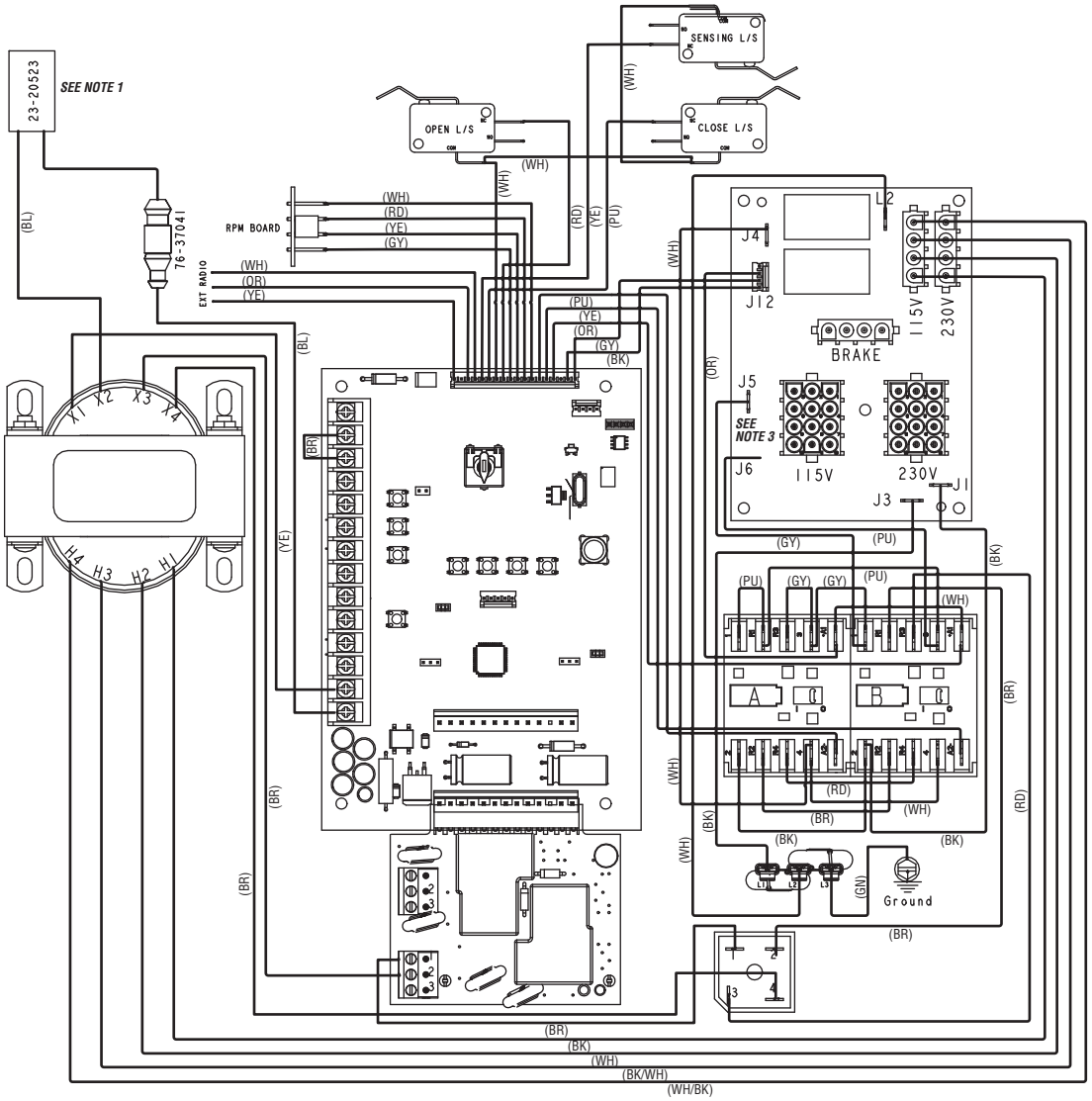
OUR LARGE SERVICE ORGANIZATION SPANS AMERICA

Installation and service information are available.
Call our TOLL FREE number:

1-800-528-2806

www.liftmaster.com

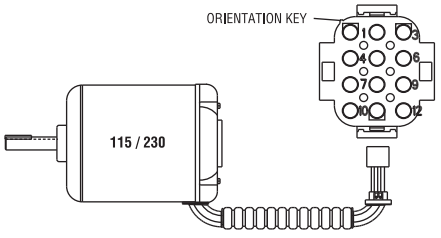
SINGLE PHASE WIRING DIAGRAM



NOTE 1: *The blue wire is connected directly from the transformer to circuit board in operator without interlock switch*
NOTE 2: *To program the dynamic brake after replacing the control board, turn mode selection to "OPTN" press the "MAS" button and then press "MID" to enable it.*
NOTE 3: *The illustration shows the purple and gray wire connections for GH operators. For GT operators the gray wire connects to J6 and the purple wire connects to J5.*

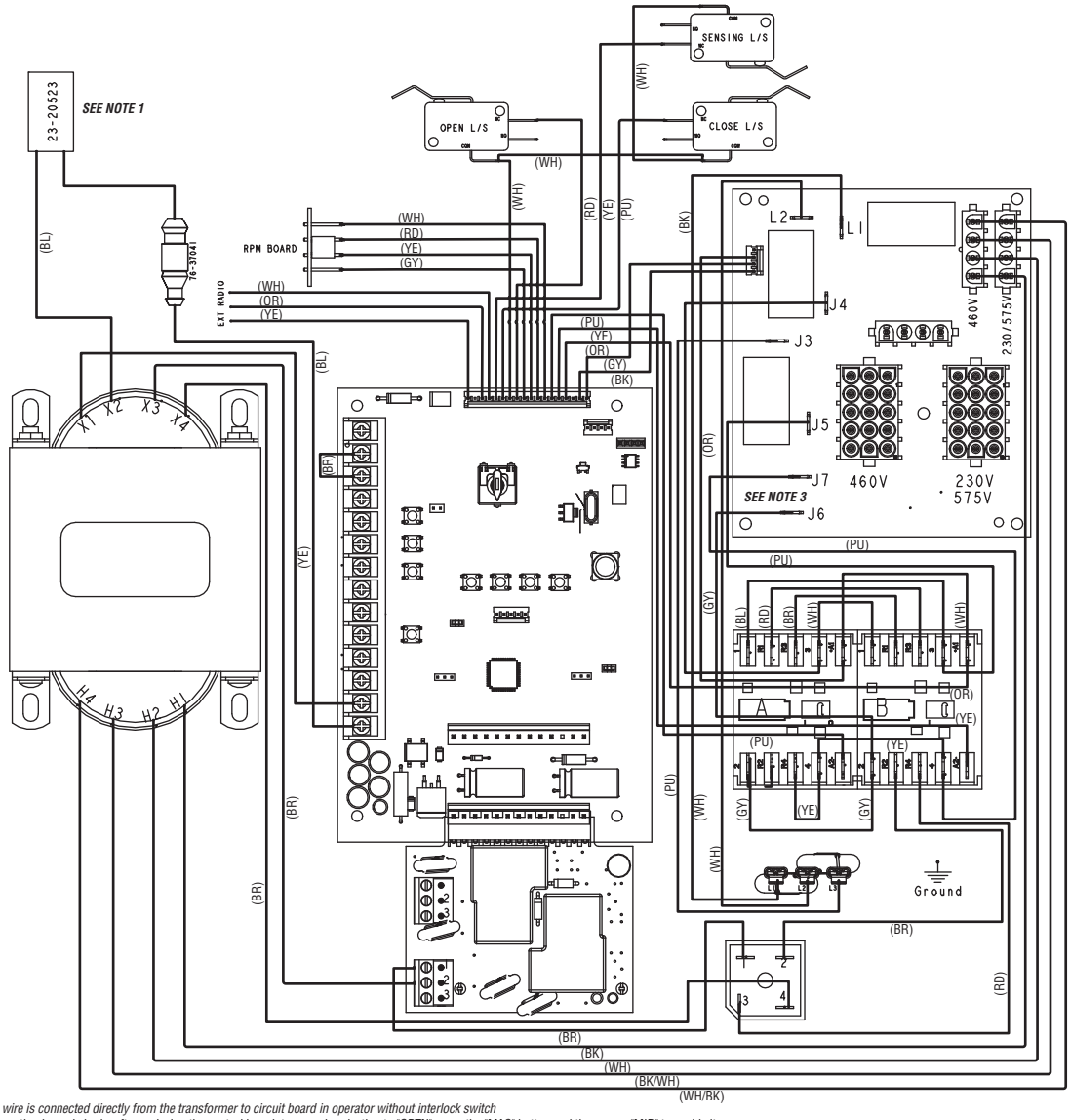
SINGLE-PHASE MOTOR TO PLUG ON POWER BOARD

PIN	I.D.	
1	T5	START WINDING
2	J1	JUMPER TO PIN 5
3	J2	JUMPER TO PIN 6
4	TP	THERMAL PROTECTOR
5	J1	JUMPER TO PIN 2
6	J2	JUMPER TO PIN 3
7	T8	START WINDING
8	T2	RUN WINDING 1
9	T3	RUN WINDING 2
10	TP	THERMAL PROTECTOR
11	T4	RUN WINDING 2
12	T1	RUN WINDING 1



MAS - Maintenance Alert System Error Codes	
MAS LED	DESCRIPTION
1 Blink	Mas triggered (cycles or months)
2 Blinks	No RPM input during movement
3 Blinks	MRT timed out
4 Blinks	Obstruction sensed on closing
5 Blinks	Stuck key - button pressed > 2 min.
6 Blinks	Invalid option card plugged into option card receptacles
7 Blinks	Fail-safe device failed/not connected
8 Blinks	Brownout detected

THREE PHASE WIRING DIAGRAM



NOTE 1: *The blue wire is connected directly from the transformer to circuit board in operator without interlock switch*
NOTE 2: *To program the dynamic brake after replacing the control board, turn mode selection to "OPTN" press the "MAS" button and then press "MID" to enable it.*
NOTE 3: *The illustration shows the purple and gray wire connections at terminals J6 and J7 for GH operators. For GT operators the gray wire connects to J7 and the purple wire connects to J6.*

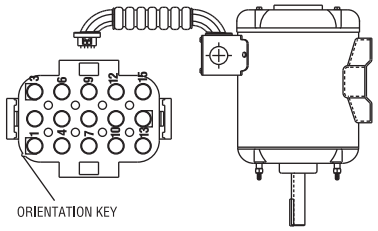
THREE-PHASE MOTOR TO PLUG ON POWER BOARD

208/230-460 VAC THREE PHASE

PIN	I.D.	
1	TP	THERMAL PROTECTOR
2	J1	JUMPER TO PIN 3
3	J2	JUMPER TO PIN 2
4	TP	THERMAL PROTECTOR
5	T6	MOTOR WINDING 3
6	T9	MOTOR WINDING 4
7	T5	MOTOR WINDING 2
8	T4	MOTOR WINDING 1
9	T3	MOTOR WINDING 3
10	J3	JUMPER TO PIN 13
11	T7	MOTOR WINDING 4
12	T8	MOTOR WINDING 4
13	J4	JUMPER TO PIN 10
14	T1	MOTOR WINDING 1
15	T2	MOTOR WINDING 2

575 VAC THREE PHASE

PIN	I.D.	
1	TP	THERMAL PROTECTOR
2	J1	JUMPER TO PIN 3
3	J2	JUMPER TO PIN 2
4	TP	THERMAL PROTECTOR
5	NC	
6	NC	
7	NC	
8	NC	
9	T3	MOTOR WINDING
10	J3	JUMPER TO PIN 13
11	NC	
12	NC	
13	J4	JUMPER TO PIN 10
14	T1	MOTOR WINDING
15	T2	MOTOR WINDING



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