

OWNER'S MANUAL
MODEL TB
INDUSTRIAL DUTY DOOR OPERATOR

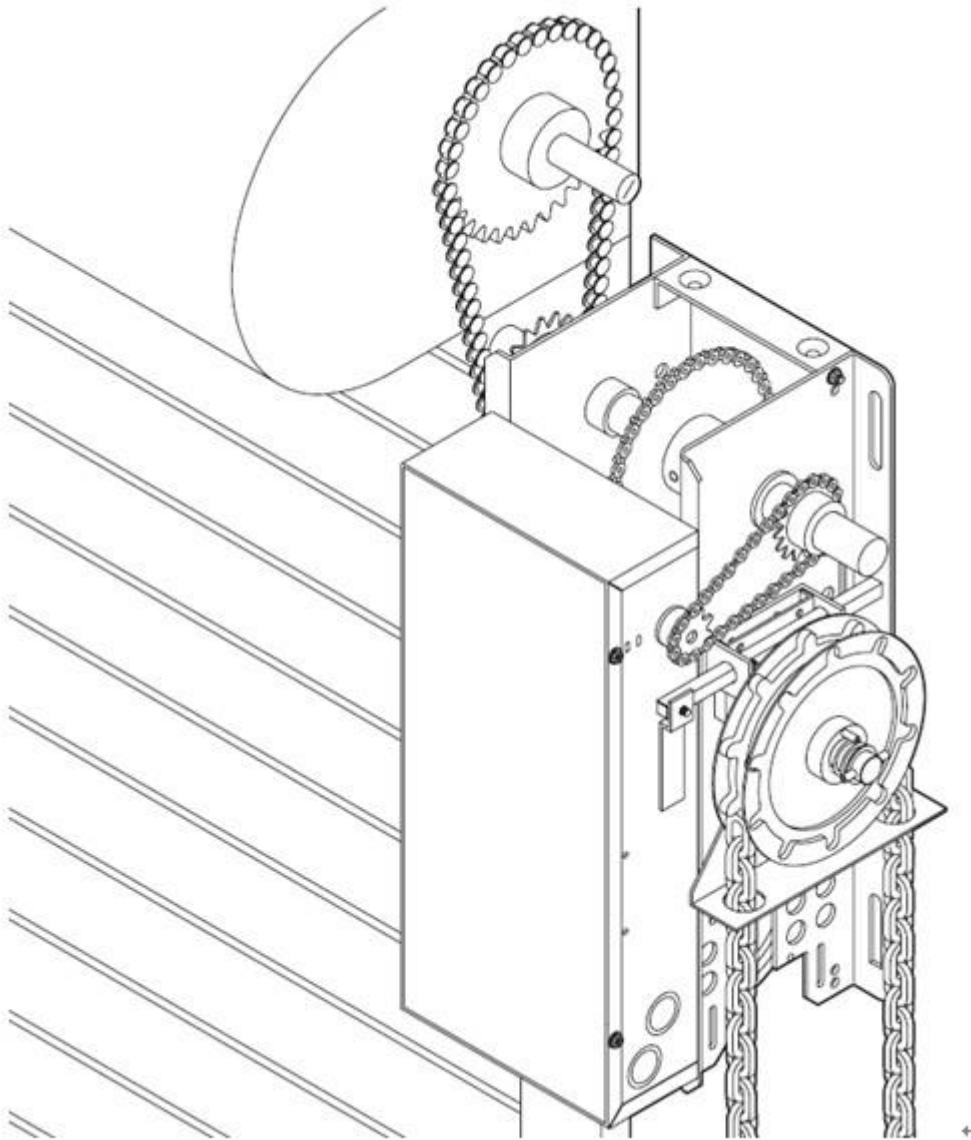


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SPECIFICATIONS

VOLTAGE: 220V±30V

Rated Power:280W

TEMPERATURE: -40°C~+45°C

SPEED: 100mm/S~140mm/S

LIFT HEIGHT: 7 m

INSTALLATION: CHAIN

OPEN FREQUENCY: ≤25 /HOUR OR ≤15

DRIVE: BELT

MOTOR PROTECTION

LIMIT: MECHINAL

BRAKE: CHAIN

Emergency:

SAFETY INFORMATION

- BEFORE attempting to install, operate or maintain the operator, you must read and fully understand this manual and follow all instructions.
- DO NOT attempt installation ,repair or service of your commercial door and gate operator unless you are an Authorized Service Technician
- When the door is running, no people and object can across, or stay below the door .
- It is forbidden to use the remote control when you can not see the door running, avoid accidents and misuse of the garage doo opening.
- Suggestion you install the photo sensor and wire rope fault prevention device

Caution : If there was no other entrance in the workshop, the door must be installed the emergency door, in case of power failure.

Emergency door interlock function, guarantee the emergency door open the door machine can't run in the open condition. (connection mode are shown in table 1 - the interface and function description table)

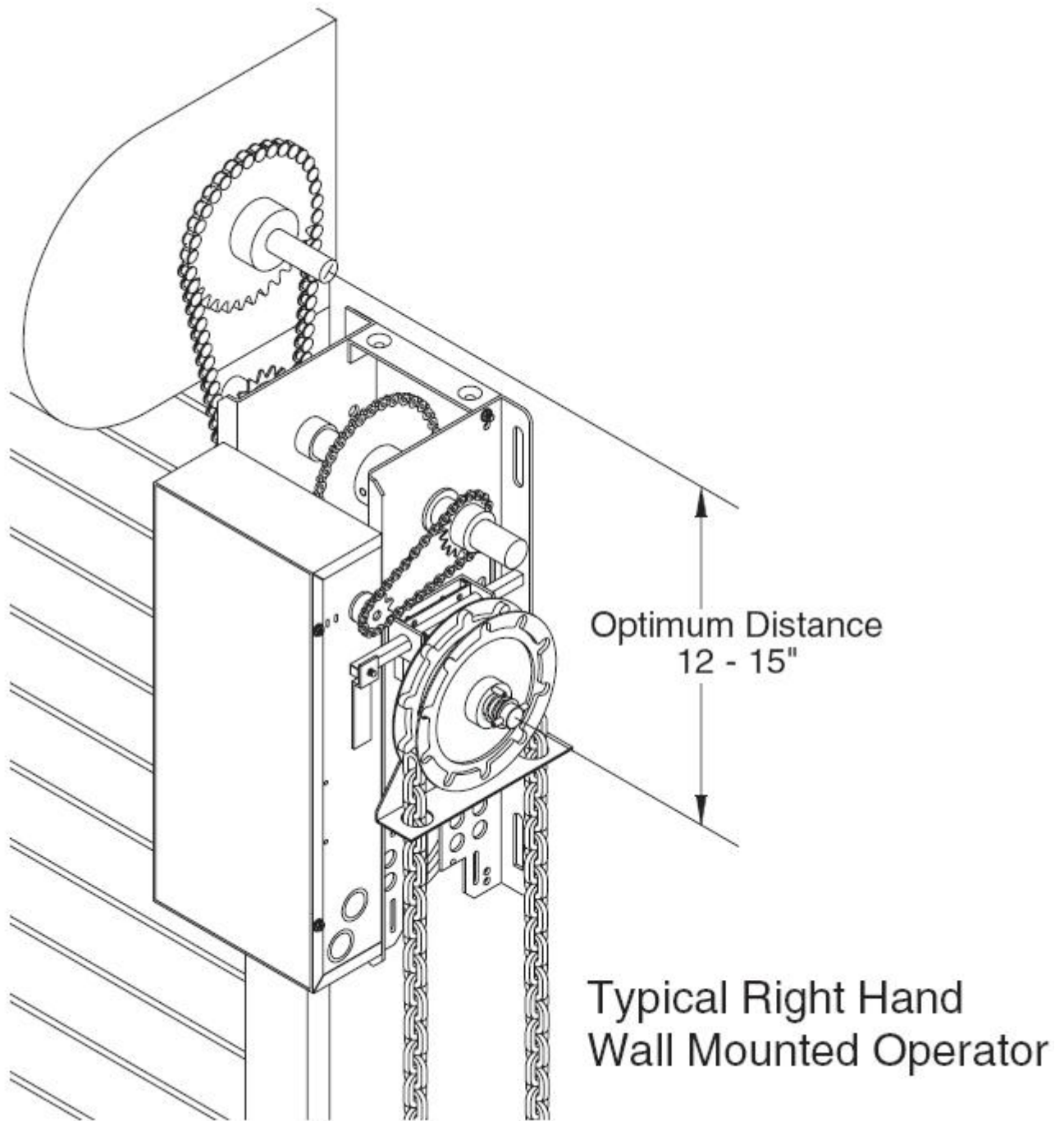
INSTALLATION

Before your operator is installed, be sure the door has been properly aligned and is working smoothly.

3.1 Installation Method (Figure 1)

(1)Wall Mounting

The operator should generally be installed below the door shaft and as close to the door as possible .The optimum distance between the door shaft and operator drive shaft is between 12"-15"

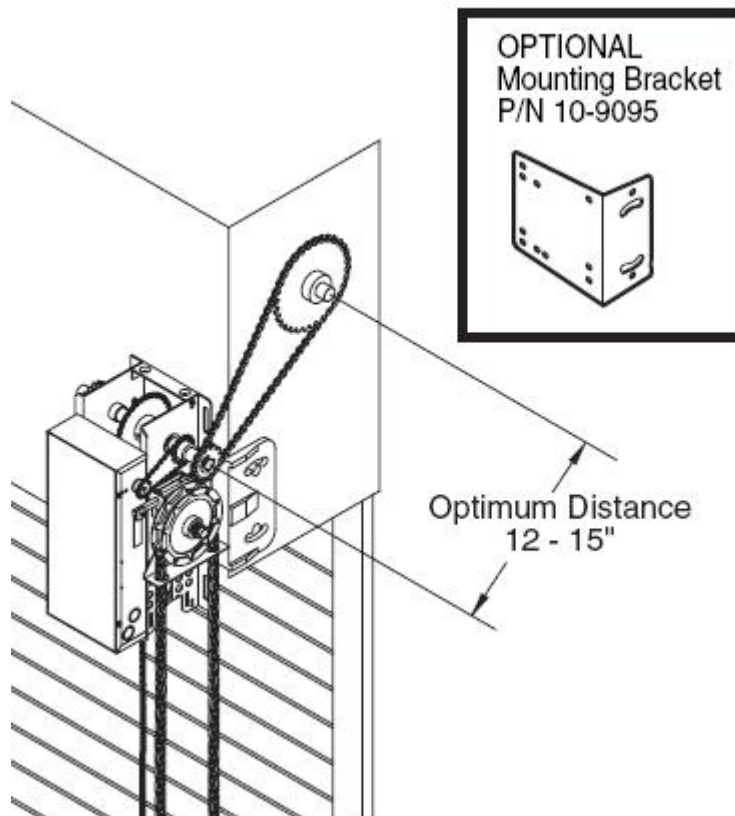


PIC 1

(2) Bracket or Shelf Mounting

The operator may be mounted either above or below the door shaft. The optimum distance between the door shaft and operator drive shaft is between 12"-15"

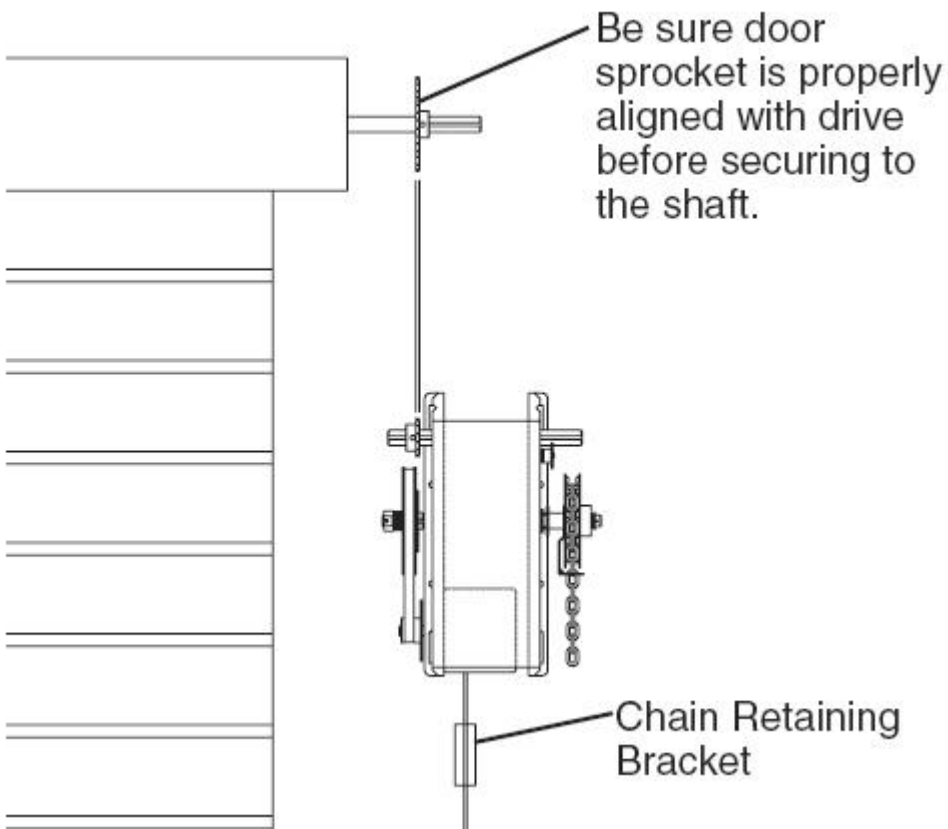
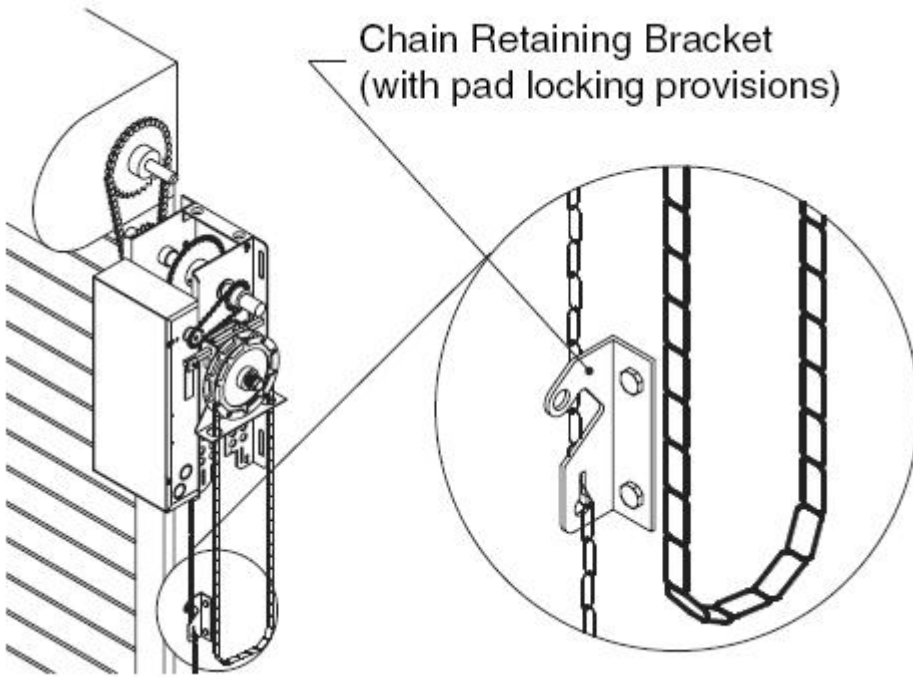
PIC2



PIC 2

3.2 Install

1. place door sprocket on the door shaft .Do not insert the key at this time .
- 2.Place drive sprocket on the appropriate side of the operator .Do not insert the key at this time .
- 3 Wrap drive chain around door sprocket and join roller chain ends together with master link .
- 4 Raise operator to approximate mounting position and position chain over operator sprocket .
- 5 Raise or lower operator until the chain is taut (not tight) Make sure the operator output shaft is parallel to door shaft and sprockets are aligned. When in position, secure the operator to wall or mounting bracket .
- 6 Align sprocket and secure

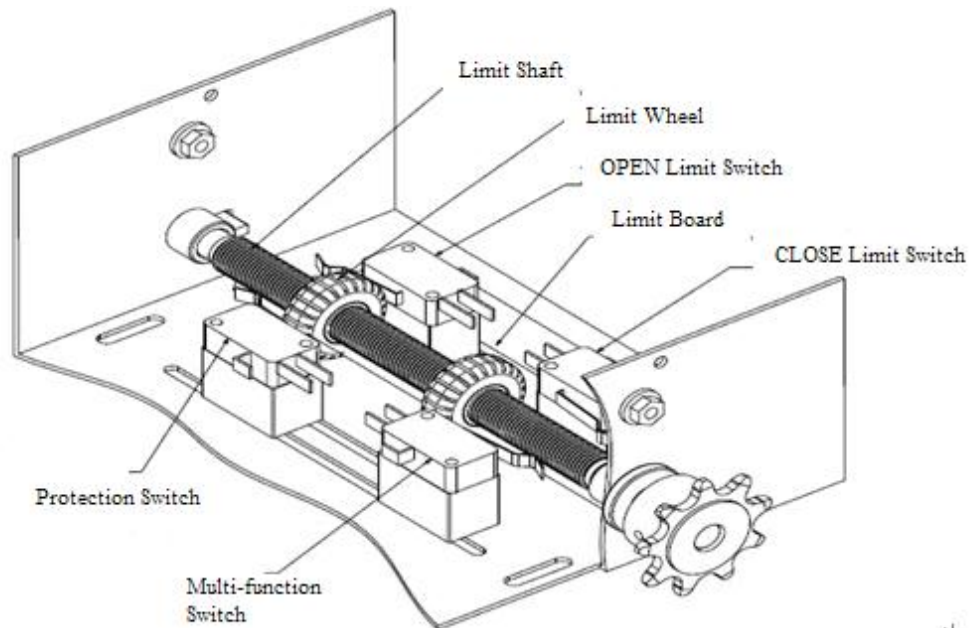


ADJUSTMENT

1.1 Limit Switch Adjustment

NOTE: Make sure the limit nuts are positioned between the limit switches before proceeding with adjustments.

- 1, Depress retaining plate to allow nut to spin freely. (PIC 7)



PIC 7

- 2, To **increase** door travel ,spin nut away from limit switch .To **decrease** door travel ,spin limit nut toward limit switch .Adjust open limit nut so that door will stop in open position with the bottom of the door even with top of door opening.

3. Adjust close limit nut so that the limit switch is engaged as door fully seats at the floor.

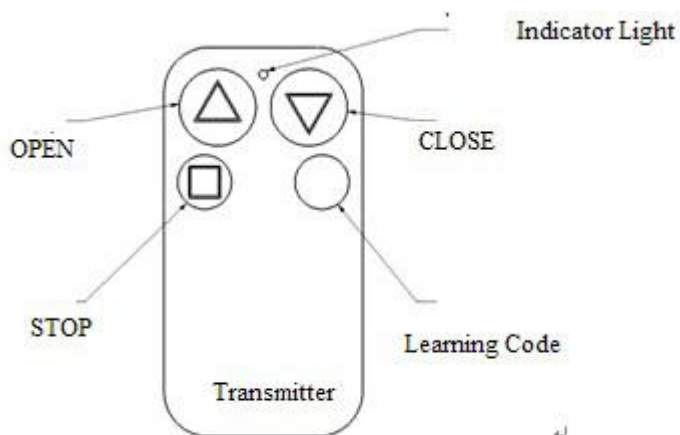
1.2 Learning remote control

- 1 Open the cover, and then find the electric board.
- 2 Ensure the garage with the power
- 3 Coding
 - a. Press coding button until the indicator light flash then release. (PIC 11)

Note: the operation within 8 second ,if the indicator light off, repeat a

 - b. Press the coding button until the indicator light off, then release.

c. Press coding button until the indicator light flash, then release .



PIC 8

3 Cancel the code: press the coding button , the indicator light will flash then off , release the button .

Note: the remote control has learned coding.

If need learning more remote controllers, please repeat step 3, the opener can study 20 remote controls at most.

If loosing the remote controller, please cancel the coding, ensure safety learn again

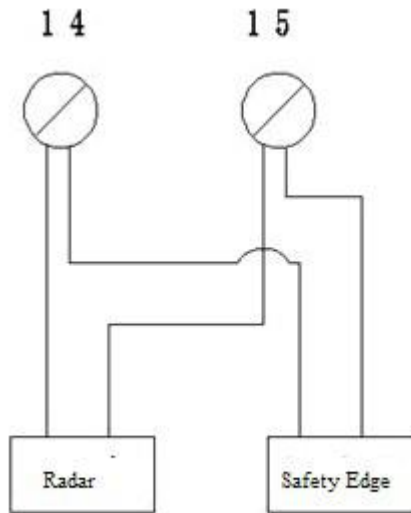
EMERGENCY

Pulling the emergency release, the straight arm will loose To Prevent possible **SERIOUS INJURY** or **DEATH** from a falling door or arm. Do not stand under the door arm when pulling the emergency release.

WIRING DIAGRAM

6.1 Control Station Wiring

Terminal block #14 and #15 connect with safety edge



6.2 PCB Wiring Diagram

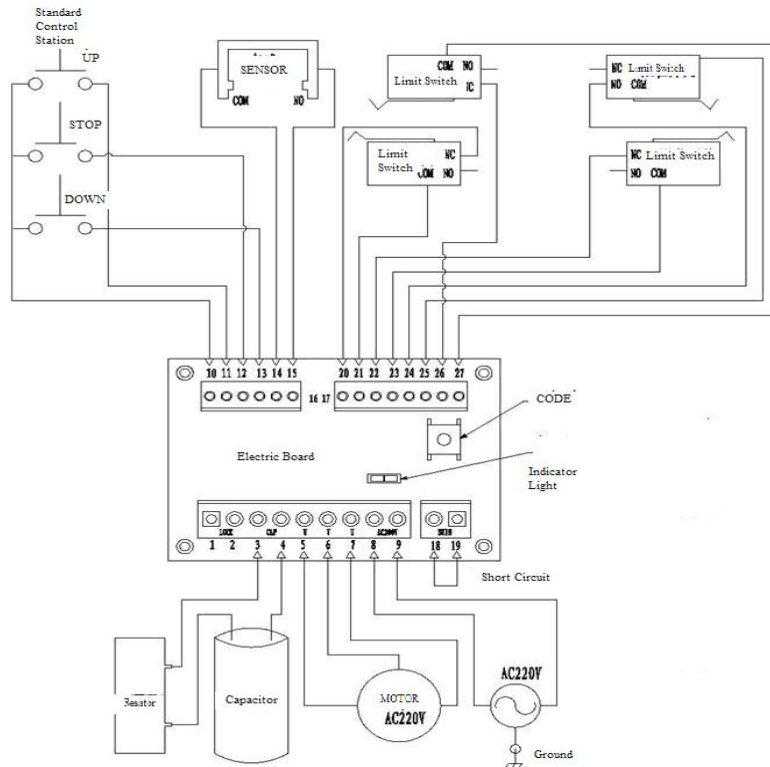
There are 27 terminal blocks, the function as follows:

PIC 1 Function

No	FUNCTION	No	FUNCTION	No	FUNCTION
1	N	11	OPEN	21	BLOCK TERMINAL
2		12	CLOSE	22	REVERSE
3	CAPACITOR	13	STOP	23	BLOCK TERMINAL
4		14	BLOCK TERMINAL	24	CLOSE LIMIT
5	REVERSE	15	SENSOR	25	BLOCK TERMINAL
6		16	N	26	OPEN LIMIT
7	MOTOR-BLOCK TERMINAL	17	N	27	BLOCK TERMINAL
8	220VAC N	18	EMERGENCY DOOR		
9	220VAC L	19			

10	Control station–block terminal	20	PROTECT
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Wiring Board



MAINTENANCE

7.1 MOTOR MAINTENANCE

Check at the intervals listed in the following chart

ITEM	PROCEDURE	EVERY 3 MONTHS	EVERY 6 MONTH
Chain	Check for excessive slack Check and adjust as required Lubricate	√	
Sprockets	Check set screw tightness	√	
Belt	Check condition and tension		√
Fasteners	Check and tighten as required		√
Bearings and Shaft	Check for wear and lubricate	√	

Note : Do not lubricate motor , clutch and belt.

To avoid SERIOUS PERSONAL INJURY or DEATH from electrocution , disconnect all electric power BEFORE performing ANY maintenance

Inspect and service whenever a malfunction is observed or suspected.