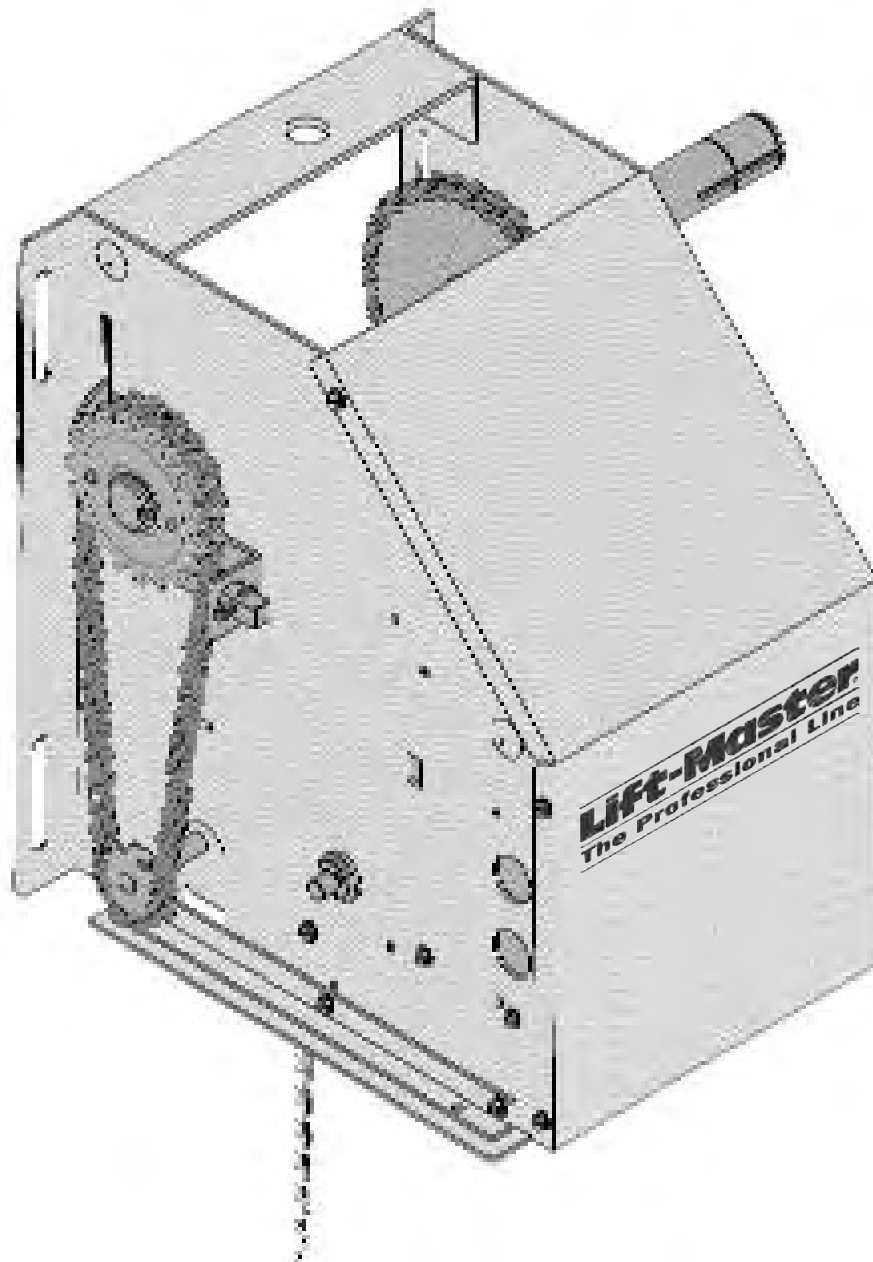


OWNER'S MANUAL

MODEL LGO

LIGHT DUTY GRILL OPERATOR



2 YEAR WARRANTY

Serial # _____
(located on electrical box cover)

Installation Date _____

Wiring Type _____

NOT FOR RESIDENTIAL USE



SPECIFICATIONS

MOTOR

TYPE:Intermittent duty

HORSEPOWER:1/2 Horsepower

SPEED:1600 RPM

VOLTAGE:115V, 1 Phase, 60Hz

CURRENT:See motor nameplate

ELECTRICAL

CONTROL STATION:.....NEMA 1 three button station.
OPEN/CLOSE/STOP or 2 button station OPEN/CLOSE.

RADIO:The internal radio receiver will not operate in D1 (constant pressure mode)

WIRING TYPES:B2 (Standard) Momentary contact to open, close and stop, plus wiring for sensing device to reverse and auxiliary devices to open and close with open override.

D1 (Optional)Constant pressure to open and close with wiring for sensing devices to stop.

LIMIT ADJUST:Linear driven, fully adjustable screw type cams. Adjustable to 24 feet.

MECHANICAL

DRIVE REDUCTION:

Primary:Worm Gear 16:1
Secondary:.....#48 chain/ sprocket
Output:#41 chain.

OUTPUT SHAFT SPEED:40 R.P.M.

DOOR SPEED:.....9" per sec. depending on door

SAFETY

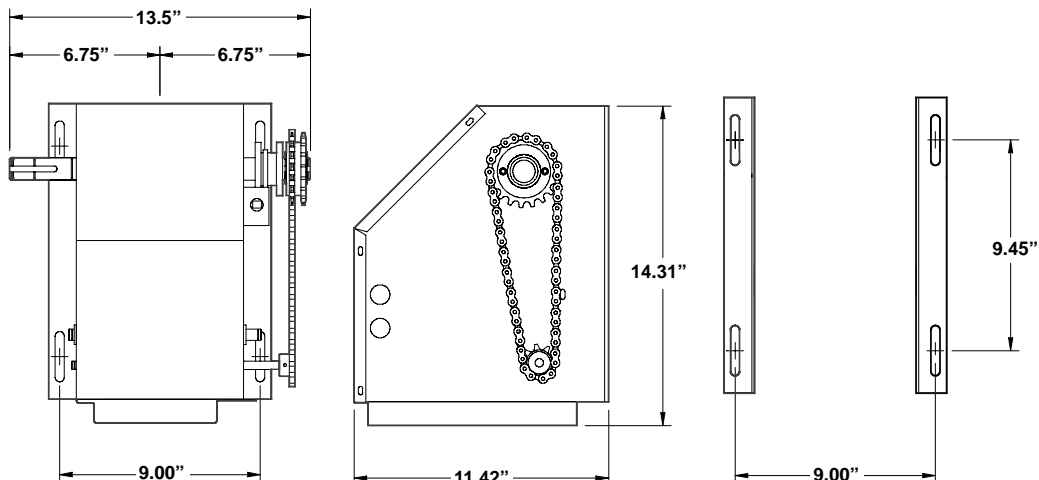
DISCONNECT:Floor level disconnect for emergency manual door operation.

PHOTO EYES :Photo eyes to reverse door.

LIFT MASTER PHOTO EYES P/N CPS-LN4 ARE STRONGLY RECOMMENDED FOR ALL COMMERCIAL OPERATOR INSTALLATIONS. REQUIRED WHEN ANY OTHER CONTROL (AUTOMATIC OR MANUAL) IS USED.

WEIGHTS AND DIMENSIONS

HANGING WEIGHT:40-45 LBS.



IMPORTANT SAFETY NOTES



CAUTION

TO AVOID DAMAGE TO DOOR AND OPERATOR, MAKE ALL DOOR LOCKS INOPERATIVE. SECURE LOCK(S) IN "OPEN" POSITION. IF THE DOOR LOCK NEEDS TO REMAIN FUNCTIONAL, INSTALL AN INTERLOCK SWITCH. DO NOT CONNECT ELECTRIC POWER UNTIL INSTRUCTED TO DO SO.



WARNING

KEEP DOOR BALANCED. STICKING OR BINDING DOORS MUST BE REPAIRED. DOORS, DOOR SPRINGS, CABLES, PULLEYS, BRACKETS AND THEIR HARDWARE MAY BE UNDER EXTREME TENSION AND CAN CAUSE SERIOUS PERSONAL INJURY. CALL A PROFESSIONAL DOOR SERVICEMAN TO MOVE OR ADJUST DOOR SPRINGS OR HARDWARE.

SITE PREPARATIONS

It is imperative that the wall or mounting surface provide adequate support for the operator.

This surface must:

- a) Be rigid to prevent play between operator and door shaft.
- b) Provide a level base.
- c) Permit the operator to be fastened securely and with the drive shaft parallel to the door shaft.

The safety and wear of the operator will be adversely affected if any of the above requirements are not met.

For metal buildings, fasten 2" x 2" x 3/16" (or larger) angle iron frames to the building purlins. Retain 7" between frames. Refer to figure 1.

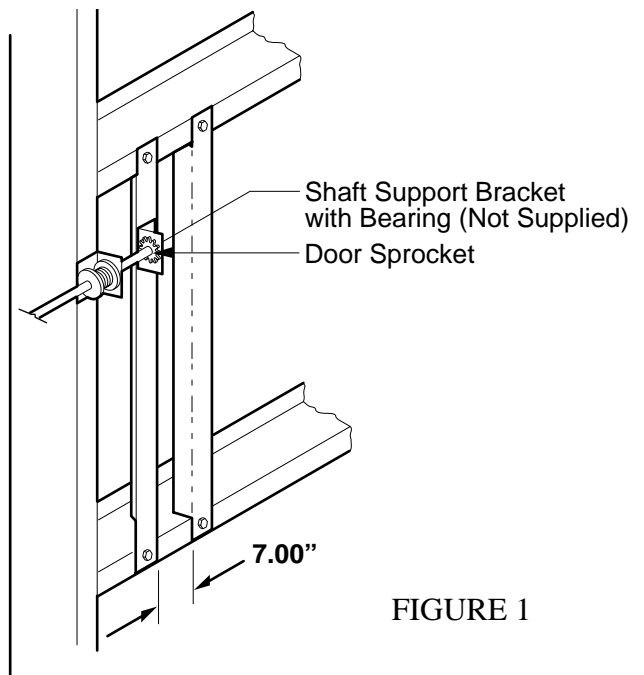


FIGURE 1

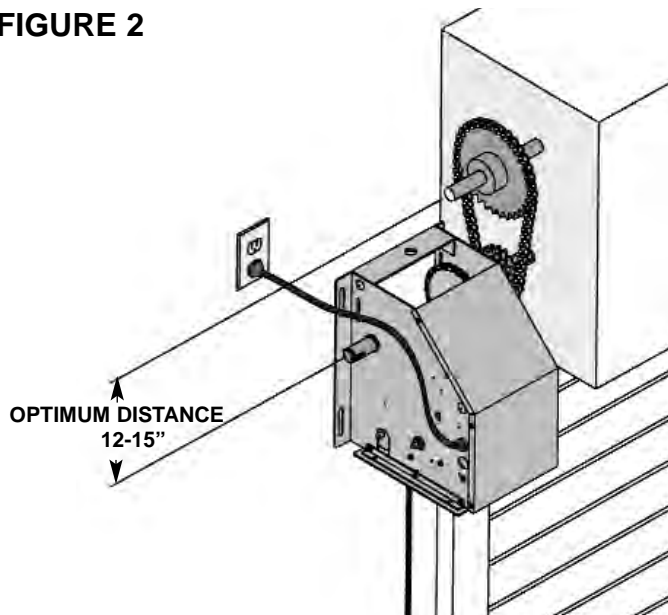
OPERATOR MOUNTING

Before your operator is installed, be sure the door has been properly aligned and is working smoothly. The operator may be wall mounted or mounted on a bracket or shelf. If necessary, refer to the operator preparations on page 3. Refer to the illustration and instructions below that suits your application.

1a. 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". Refer to figure 2.

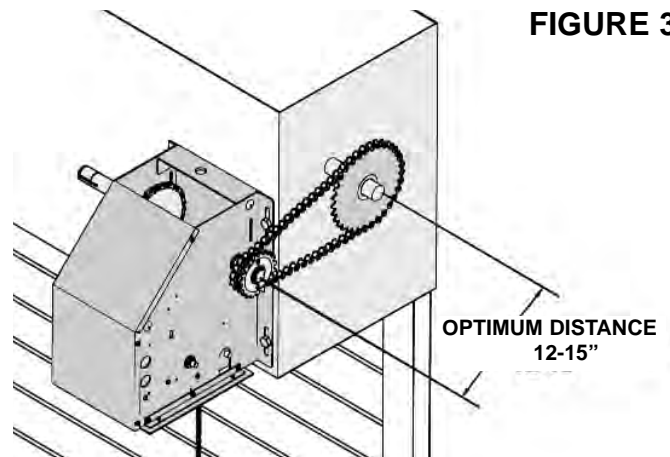
FIGURE 2



1b. 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". Refer to figure 3.

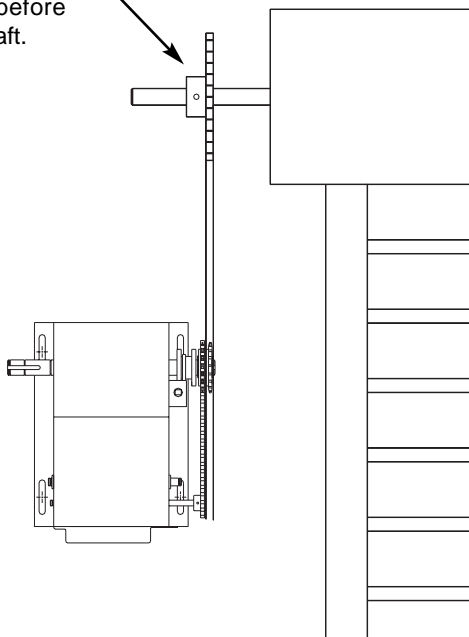
FIGURE 3



IMPORTANT: The shelf or bracket must provide adequate support, prevent play between operator and door shaft, and permit operator to be fastened securely and with the drive shaft parallel to the door shaft.

Be sure door sprocket is properly aligned with drive sprocket before securing to the shaft.

FIGURE 4



IMPORTANT: The shelf or bracket must provide adequate support, prevent play between operator and door shaft, and permit operator to be fastened securely and with the drive shaft parallel to the door shaft.

- 1c. 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.
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. Insert keys and align sprockets and secure. Refer to figure 4.

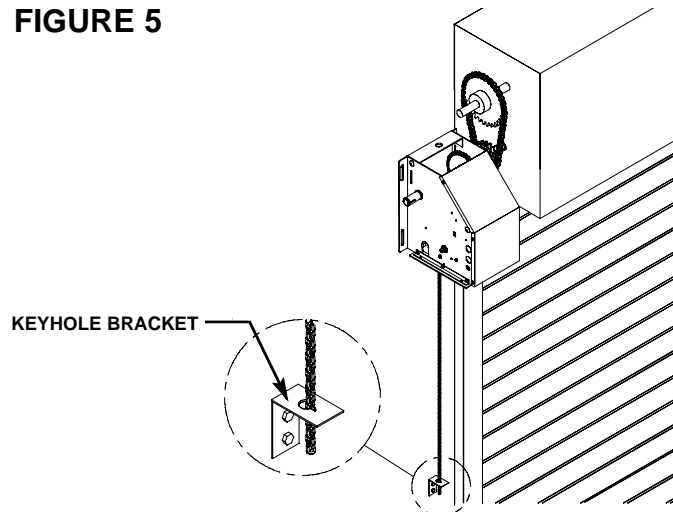
EMERGENCY MANUAL OPERATION

This operator has a floor level disconnect chain to disconnect the door from the door operator.

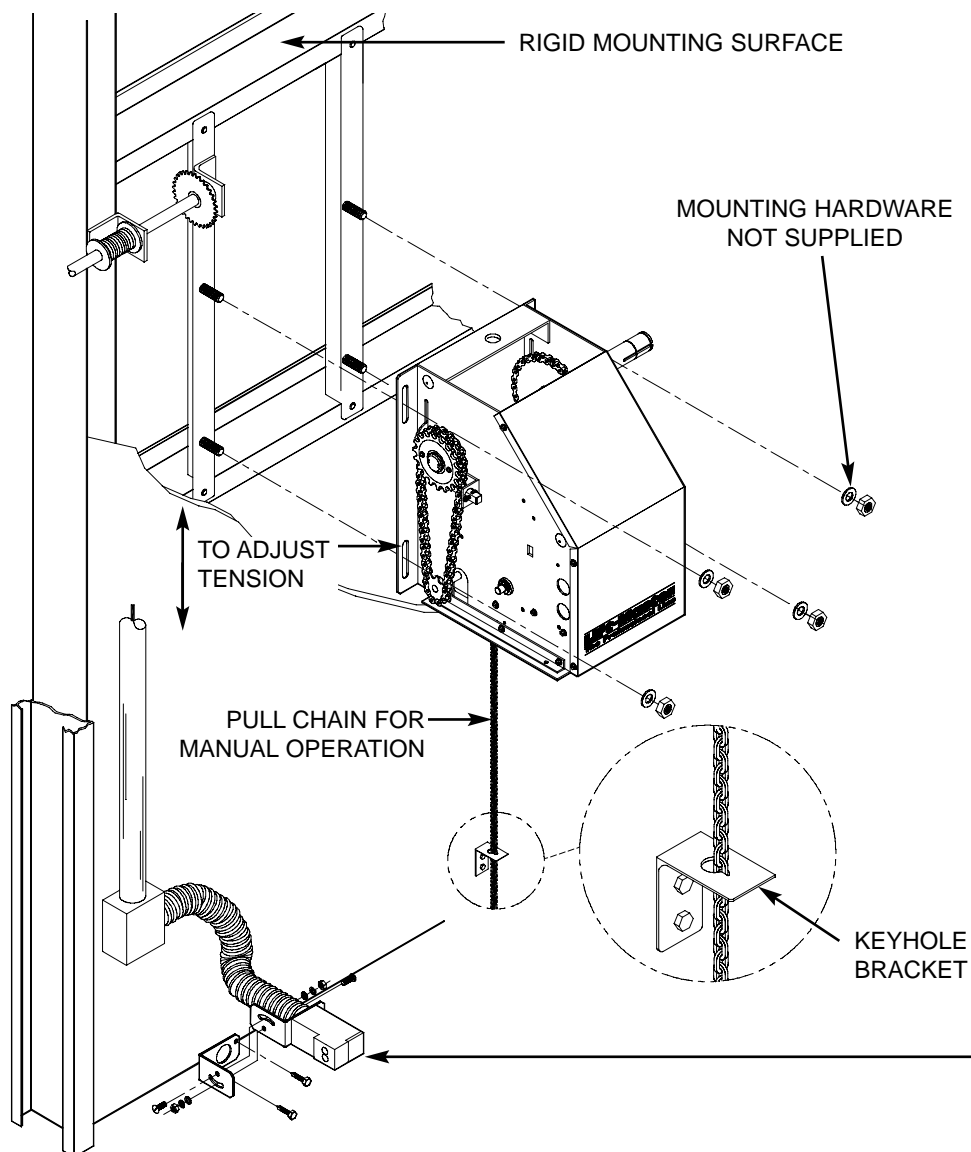
a) To disengage, pull the chain and secure in the disengaged position by slipping the end through the keyhole bracket mounted on the wall. Or if emergency egress device is used, pull handle to disengage operator from the door.

b) The door may now be pushed up or pulled down manually. Release the disconnect chain to operate the door again electrically. Refer to figure 5.

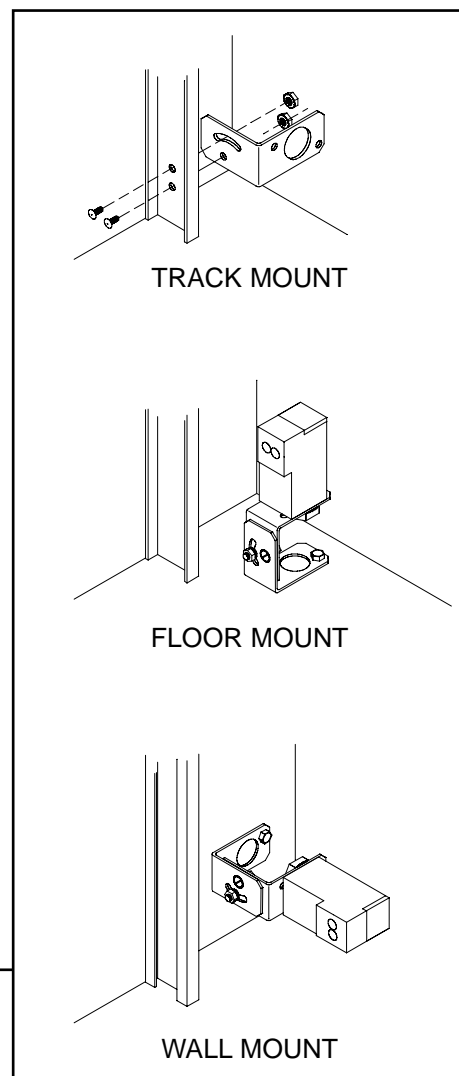
FIGURE 5



DOOR OPERATING SYSTEM ILLUSTRATION



ALTERNATE MOUNTING FOR OPTIONAL PHOTO EYES



POWER WIRING

THREE PRONG GROUNDING PLUG

To reduce the risk of shock, this operator has a grounding type plug, that has a third (grounding) pin. This plug will only fit into a grounding type outlet. If this plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way. Refer to figure 6.

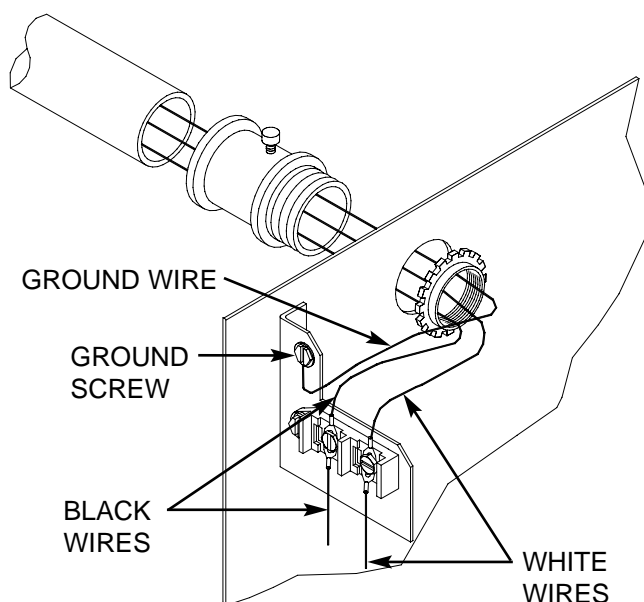
PERMANENT WIRING

If permanent wiring is required by your local code, refer to the following procedure:

To make a permanent connection through the 7/8" diameter hole in the side of the operator:

1. Remove the opener cover screws and set the cover aside. Refer to figure 8.
2. Remove the 3-prong cord.
3. Connect the black (line) wire to the screw on the brass terminal; the white (neutral) wire to the screw on the silver terminal; and the ground wire to the green ground screw. **The opener must be grounded.** Refer to figure 7.
4. Re-install the cover.

FIGURE 7



WARNING

To prevent electrocution, remove power from the garage door opener *and* from the circuit you plan to use for the permanent connection.

FIGURE 6

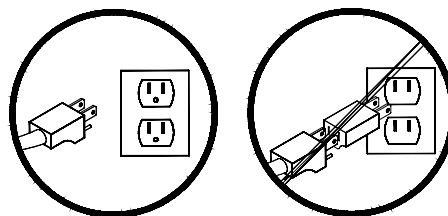
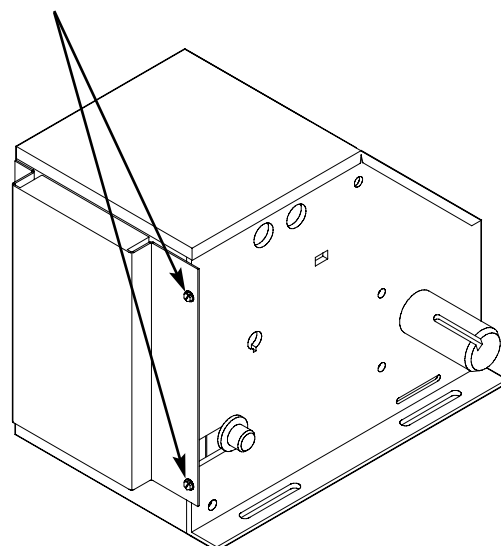


FIGURE 8

LOOSEN 2 COVER SCREWS FOR ACCESS TO POWER/ CONTROL WIRING AND LIMIT/ FORCE ADJUSTMENTS.



INSTALLATION OF DOOR CONTROLS

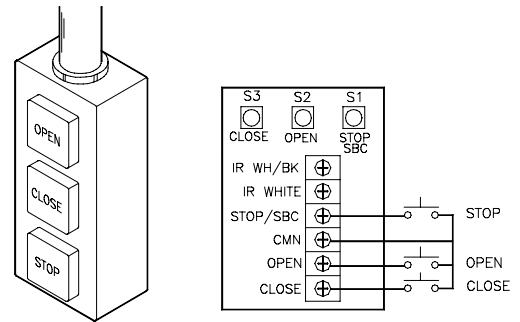
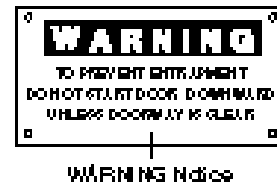
THREE BUTTON STATION (STANDARD)

Operator must be programmed to B2 Mode, See programming instructions below.

1. Locate the door control within sight of the door at a minimum height of 5 feet where small children cannot reach, and away from all moving parts of the door and door hardware.
2. Fasten the door control button securely with 6AB X 1-1/2" screws. If installing into drywall, drill 5/32" holes and use anchors provided.
3. Run the wire up the wall to the opener. Use insulated staples to secure the wire in several places. Be careful not to pierce the wire with a staple.
4. Receiver terminal screws are located inside the operator access panel on the interface board. Connect each wire to the corresponding interface board terminals- The "OPEN" terminal of the wall control connects to "OPEN", the "CLOSE" terminal of the wall control connects to "CLOSE", the "STOP" terminal connects to "SBC / STOP", and the common terminal of the wall control connects to "CMN". Refer to figure 9.

FIGURE 9

MOUNT WARNING NOTICE

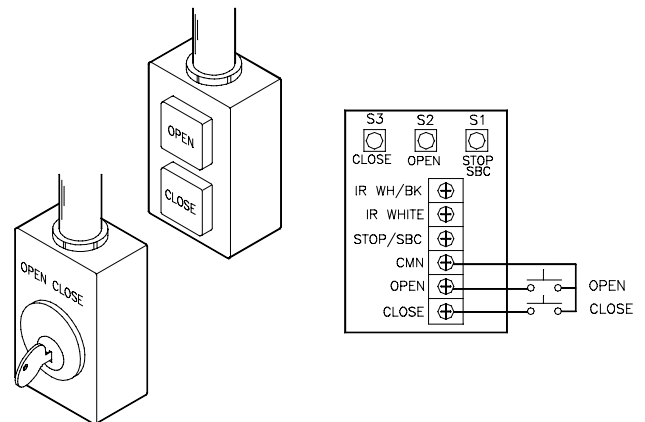


TWO-BUTTON/TWO POSITION KEY SWITCH:

Operator must be programmed to D1 Mode, See programming instructions below.

1. Locate the door control within sight of the door at a minimum height of 5 feet where small children cannot reach, and away from all moving parts of the door and door hardware.
2. Fasten the door control button securely with 6AB X 1-1/2" screws. If installing into drywall, drill 5/32" holes and use anchors provided.
3. Run the wire up the wall to the opener. Use insulated staples to secure the wire in several places. Be careful not to pierce the wire with a staple.
4. Receiver terminal screws are located inside the operator access panel on the interface board. Connect each wire to the corresponding interface board terminals- The "OPEN" terminal of the wall control connects to "OPEN", the "CLOSE" terminal of the wall control connects to "CLOSE", and the common terminal of the wall control connects to "CMN". Refer to figure 10.

FIGURE 10



PROGRAMMING OPERATING MODES

To Change Operating Modes: (Factory Set to B2 Mode)

1. Press and hold the **LEARN** button (The learn LED will light).

NOTE: IF THE LEARN/MODE BUTTON IS HELD FOR 5 SECONDS, ALL LEARNED TRANSMITTERS WILL BE ERASED.

2. To learn the appropriate mode: While holding the LEARN button, press the corresponding button on the interfaceboard.

B2 Mode: **CLOSE** Button (S3)

D1 Mode: **OPEN** Button (S2)

3. Release both buttons. The LEARN LED gives a visual indication of the mode programmed.

B2 Mode = 2 Blinks

D1 Mode = 1 Blink

IMPORTANT NOTE: When optional photo eyes (IR's) are used, Wiring Mode B2 must be reprogrammed. IR's must be connected and sending a pulse prior to programming. See programming instructions above.

SAFETY EDGE

SENSING EDGES

All types of sensing edges with an isolated normally open (N.O.) output are compatible with your operator. This includes pneumatic and electric edges. If your door does not have a bottom sensing edge and you wish to purchase one, contact the supplier of your operator.

If not pre-installed by the door manufacturer, mount the sensing edge on the door according to the instructions provided with the edge. The sensing edge may be electrically connected by either coiled cord or take-up reel. Refer to the steps below.

Important Notes:

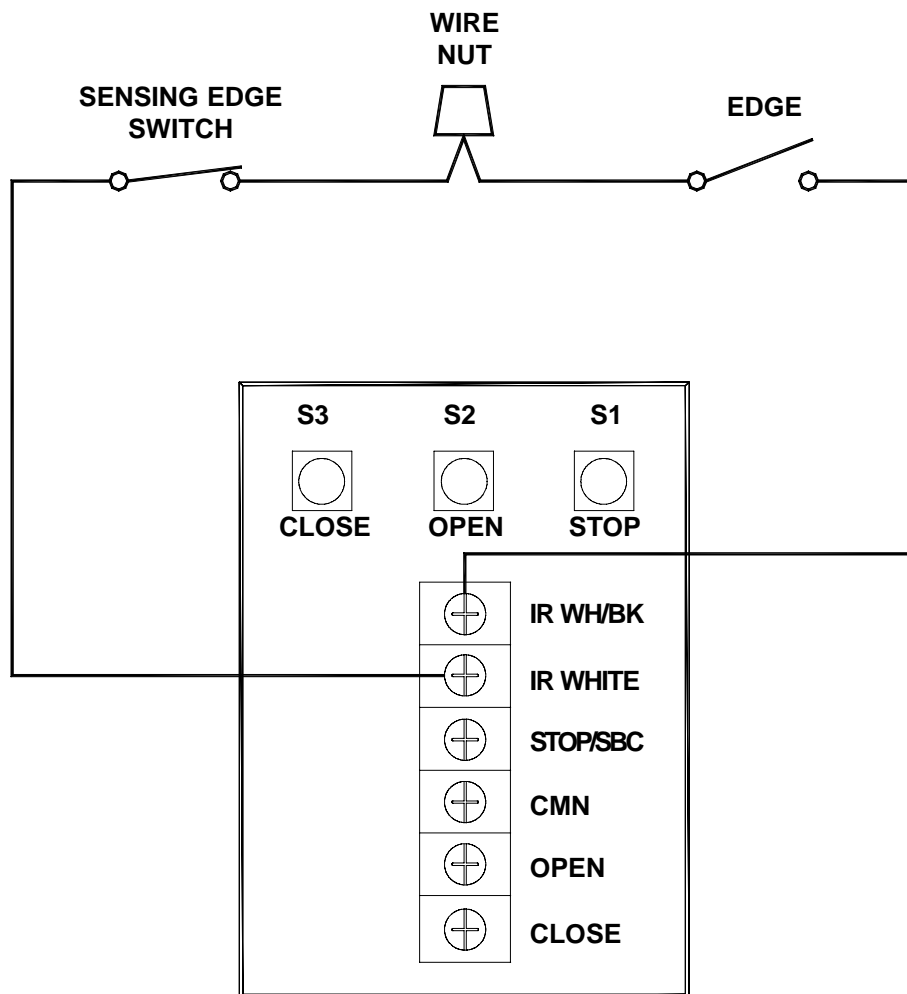
- a) To install a sensing edge, ask for sensing edge connection kit LGOSE. This must be installed in order to add a sensing edge. Refer to instructions and figure 11 on page 9.
- b) Proceed with Limit Switch Adjustments before making any sensing edge wiring connections to operator as described below.
- c) Electrician must hard-wire the junction box to the operator electrical box in accordance with local codes.

TAKE-UP REEL: Take-up reel should be installed 12" above the top of the door.

COIL CORD: Connect operator end of coil cord to junction box (not supplied) fastened to the wall approximately halfway up the door opening.

CONNECTING SAFETY EDGE

- a) Run the wires from the edge to the operator. Use a take-up reel or coil cord for this purpose.
- b) Refer to local codes for all wiring requirements.
- c) Connect one side of the edge to the sensing edge cutout switch (white wire) using the wire nut supplied.
- d) Connect the other side of the sensing edge to the interface board (IR WH/BK) terminal.
- e) Run the door in the close direction, activate edge, and confirm that the door reverses. Refer to figure 11.



LIMIT ADJUSTMENTS

1. To adjust limit nuts depress retaining plate to allow nut to spin freely. After adjustment, release plate and ensure it seats fully in slots of both nuts.
2. To **increase** door travel, spin nut **away** from actuator. To **decrease** door travel, spin limit nut **toward** actuator.
3. Adjust open limit nut so that door will stop in open position with the bottom of the door even with top of door opening.
4. Repeat Steps 1 and 2 for close cycle. Adjust close limit nut so that actuator is engaged as door fully seats at the floor. Refer to figure 12.

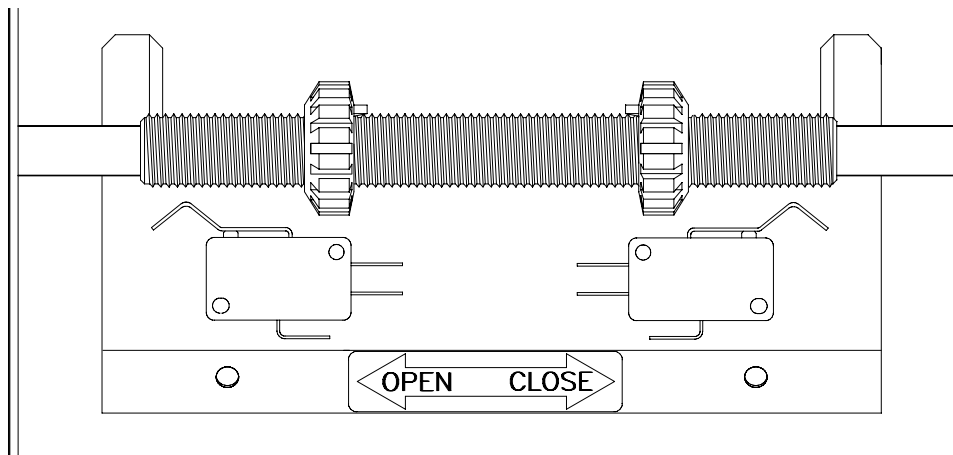


WARNING

TO AVOID SERIOUS PERSONAL INJURY OR DEATH FROM ELECTROCUTION, DISCONNECT ELECTRIC POWER BEFORE MANUALLY MOVING LIMIT NUTS.

If other problems persist, call our toll-free number for assistance **1 (800)528-2806**

FIGURE 12



MAKE SURE THE LIMIT NUTS ARE POSITIONED BETWEEN THE LIMIT SWITCH ACTUATORS BEFORE PROCEEDING WITH ADJUSTMENTS.

FORCE ADJUSTMENTS

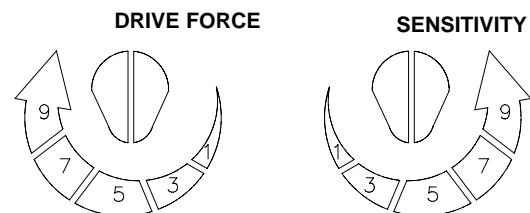
The open/down force adjustments are made by adjusting two control knobs inside the operator end panel. One knob controls the drive force adjustment. The second knob controls the sensitivity, which is the change of force as seen by the operator.

To set the forces

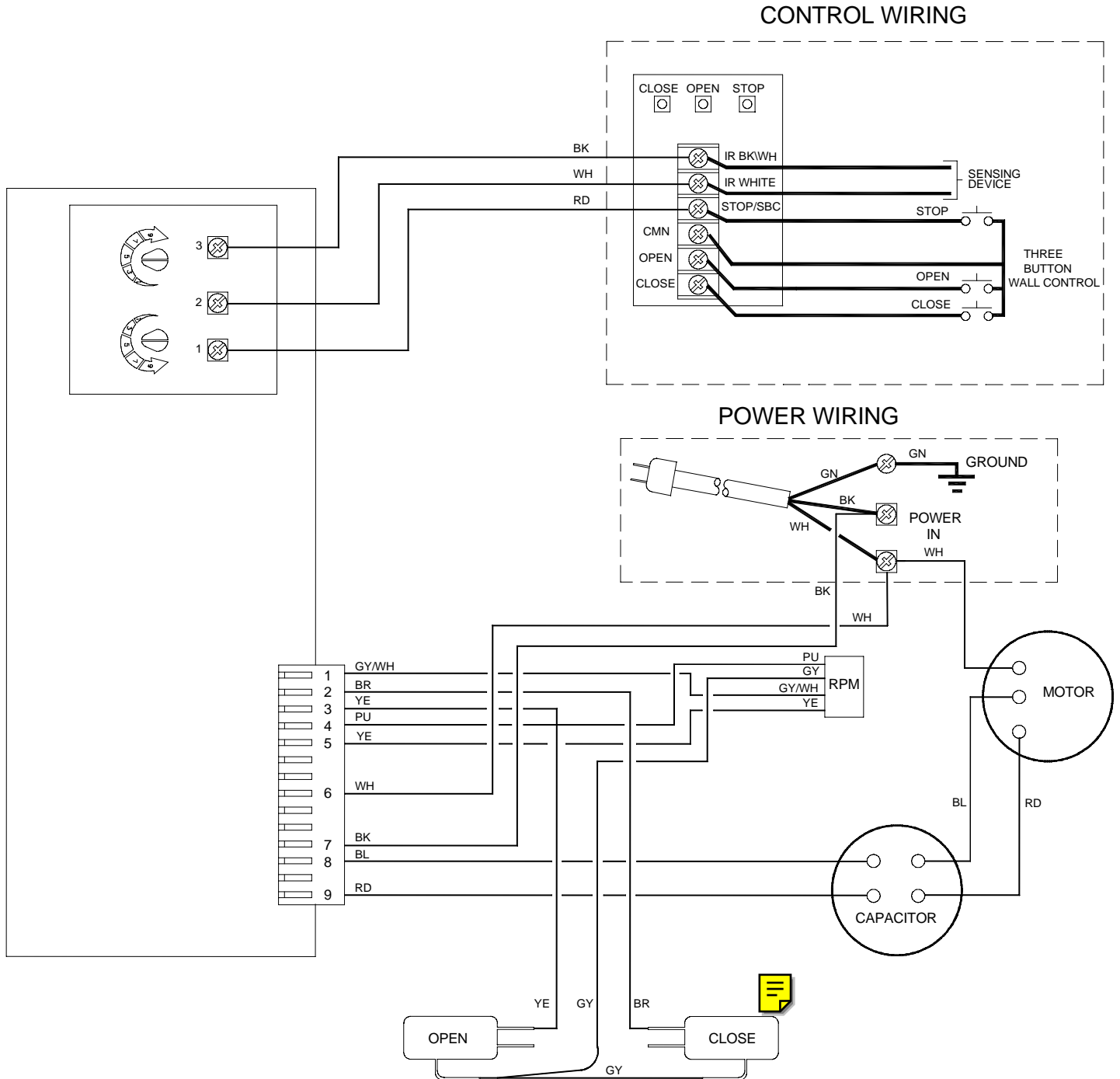
1. Adjust the drive force to minimum and the sensitivity to minimum.
2. Increase the drive force in 10 degree increments until the door travels freely from limit to limit.
3. Increase the sensitivity in 10 degrees until the door begins to reverse/stop in mid-travel.
4. Decrease the sensitivity by 10 degrees and run the door through a complete cycle to confirm normal operation. Refer to figure 13.

If the door stops normal travel of open/close to the limits, decrease the drive and sensitivity knobs to minimum and repeat steps 2 through 4.

FIGURE 13



WIRING DIAGRAM



TESTING THE OPERATOR

Turn on power. Test all controls and safety devices to make sure they are working properly. It will be necessary to refer back to page 9 for fine adjustment of the limit switches.

IMPORTANT NOTES:

1. Do not leave operator power on unless all safety and entrapment protection devices have been tested and are working properly.
2. Be sure you have read and understand all Safety Instructions included in this manual.
3. Be sure the owner or person(s) responsible for operation of the door have read and understand the Safety Instructions, know how to electrically operate the door in a safe manner, and know how to use the manual disconnect operation of the door operating system.



WARNING

DO NOT PLACE HANDS OR TOOLS IN OR NEAR THE OPERATOR WHEN THE POWER IS ON OR WHEN TESTING CONTROL OR SAFETY DEVICES. ALWAYS DISCONNECT POWER BEFORE SERVICING OR ADJUSTING THE OPERATOR.

TROUBLE SHOOTING

Situation	Probable cause & solution
The door operates from the door control, but not from the remote control	Are you in the correct operating mode? Is the remote programmed?
The door doesn't open completely	If the door has been working properly, but now doesn't open all the way, re-adjust the force setting
The door opens but won't close	Check the safety reversal system, check the sensitivity
The door reverses for no apparent reason	Remove any obstruction, and check the safety reversing system. In two-button mode, check for shorted wires to the reversing edge. Check drive force and sensitivity adjustments.
The operator does not operate from either the door control or the remote control	Are you in the proper operating mode for the wall control? Is the wall control properly wired to the interface board?

MAINTENANCE SCHEDULE

Check at the intervals listed in the following chart.

ITEM	PROCEDURE	EVERY 3 MONTHS	EVERY 6 MONTHS	EVERY 12 MONTHS
Drive Chain	Check for excessive slack. Check & adjust as required. Lubricate.*	●		●
Sprockets	Check set screw tightness	●		●
Fasteners	Check & tighten as required		●	●
Manual Disconnect	Check & Operate		●	●
Bearings & Shafts	Check for wear & lubricate	●		●

- * Use SAE 30 Oil (Never use grease or silicone spray).
- Repeat ALL procedures.
- Do not lubricate motor. Motor bearings are rated for continuous operation.
- Inspect and service whenever a malfunction is observed or suspected.
- CAUTION: BEFORE SERVICING, ALWAYS DISCONNECT OPERATOR FROM POWER SUPPLY.

HOW TO ORDER REPAIR PARTS

DEK CANADA INC

1928 ST-REGIS BLVD.

DORVAL, QC

H9P 1H6

TEL: 514-685-5800

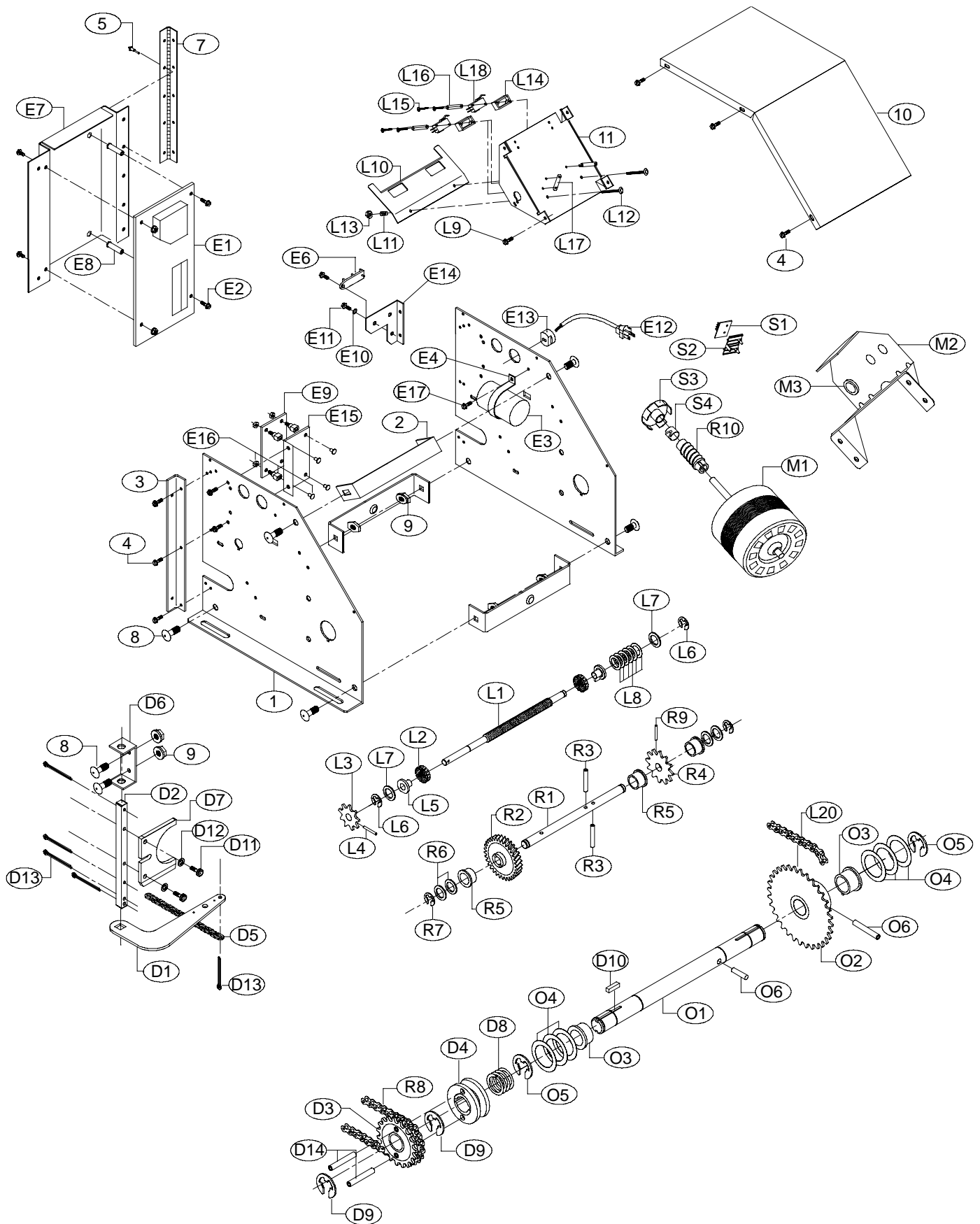
TOLL-FREE: 1-800-361-3198

FAX: 514-685-5804

www.dekcanada.com

**WHEN ORDERING REPAIR PARTS
PLEASE SUPPLY THE FOLLOWING INFORMATION:
PART NUMBER DESCRIPTION MODEL NUMBER**

ILLUSTRATED PARTS – MODEL LGO



REPAIR PARTS KITS – MODEL LGO

Refer to the parts lists below for replacement kits available for your operator. If optional modifications and/or accessories are included with your operator, certain components may be added or removed from these lists. Individual components of each kit may not be available. Please consult a parts and service representative regarding availability of individual components.

INDIVIDUAL COMPONENTS			
ITEM	PART #	DESCRIPTION	QTY
1	10-15643	Frame	2
2	10-15637	Frame, Spacer	3
3	10-15645	Bracket, Panel Shield Mtg.	1
4	82-WX08-06T	Screw, #8-32 X 3/8" long	14
5	80-487-7	Rivet	3
6	82-WS08-08C	Screw, Captive Mounting	2
7	80-15636	Hinge	1
8	82-RN31-08	Bolt, Carriage Head, 5/16-18 X 1"	6
9	84-FN-31	Nut, Serrated Flange, 5/16-18	6
10	10-15644	Cover	1
11	10-15642	Limit Frame	1

K72-16421 LIMIT SHAFT KIT			
ITEM	PART #	DESCRIPTION	QTY
L1	11-15647	Shaft, Limit 3/8"	1
L2	13-10024	Limit Nut	2
L3	15-48B9A1	Sprocket, 9 Tooth	1
L4	86-RP04-100	Roll Pin, 1/8" dia X 1"	1
L5	12-10028	Bushing, 3/8" I.D., Keyed	2
L6	87-E-038	E-Ring, 3/8"	2
L7	80-10025	Shim Washer, 3/8" dia. X .050 Thk	2
L8	80-10026	Shim Washer 3/8" dia. X .010 Thk	6

K74-16420 LIMIT SWITCH KIT			
ITEM	PART #	DESCRIPTION	QTY
L9	82-WX10-08T	Screw, #10-32 x 1/2"	4
L10	10-10013	Depress Plate	1
L11	18-10036	Spring, Depress Plate	2
L12	82-PX06-16	Screw, Depress Plate	2
L13	84-LH-06	Nut, Depress Plate	2
L14	31-12542	Standoff, Limit Switch	2
L15	82-PX04-20	Screw, Limit Switch	4
L16	10-12806	Nut Plate, Through	2
L17	10-12553	Nut Plate, Threaded	2
L18	23-10041	Limit Switch	2

K72-16425 REDUCTION SHAFT KIT			
ITEM	PART #	DESCRIPTION	QTY
R1	11-15645	Shaft, Reduction, 1/2"	1
R2	081B0045	Drive Gear, 1/2" I.D.	1
R3	146A0053	Roll Pin, .187 X 15/16" Long	2
R4	15-48B12CXX	Sprocket, 1/2" I.D., 12 Tooth	1
R5	011S0041	Bushing, 1/2" I.D., Keyed	2
R6	216A0148	Shim Washer, 1/2" I.D., .030 Thk	4
R7	158A0030	E-Ring, 1/2"	2
R8	022A0003	Chain, #48, 54 Pitch	1
R9	146A0053	Roll Pin, 3/16" X 15/16" Long	1
R10	081C0179	Worm Gear	1

K75-16426 RPM SENSOR KIT			
ITEM	PART #	DESCRIPTION	QTY
S1	001B3000	PCB	1
S2	093D0148	Bracket, PCB	1
S3	158A0062	Interrupter Cup	1
S4	158A0040	Ring, Interrupter Cup	1

K72-16423 DISCONNECT SHAFT KIT			
ITEM	PART #	DESCRIPTION	QTY
D1	10-11394	Lever, Release	1
D2	11-15648	Shaft, Disconnect	1
D3	75-11377	Sprocket Assy	1
D4	07-11419	Disconnect Hub	1
D5	19-8A-12	Sash Chain, 12'	1
D6	10-11358	Support Bracket	1
D7	10-11023	Bevel Gear Yoke	1
D8	18-10467	Spring, Compression	1
D9	87-E-100	E-Ring, 1", Plated	2
D10	80-11416	Key, Disconnect, 1/4 X 1/4 X 7/8"	2
D11	82-SH10-12	Screw, #10-32, H.H. Socket	2
D12	85-LS-10	Lock Washer, #10, ZP	2
D13	86-CP04-112	Cotter Pin, 1/8 X 1-3/4" Long	4
D14	86-RP04-100	Roll Pin, 1/8" dia X 1" Long	2
D15	80-206-11	Washer, 1" I.D. X 1-1/16" Thk	1

ELECTRONICS			
ITEM	PART #	DESCRIPTION	QTY
E1	79-16088	PCB Assy, LGO April Logic	1
E2	82-WX08-06T	Screw, #8-32 X 3/8" Long	2
E3	030B0432	Capacitor, Motor	1
E4	10-10351	Bracket, Capacitor	1
E5	171A0384	Screw, #8-32	1
E6	001B3878	Terminal Block, 120 Volt	1
E7	10-15639	Shield, PCB Panel	1
E8	80-15649	Standoff, End Panel	2
E9	79-15491	PCB, 3 Button Interface	1
E10	216A0149	Washer, Term. Cup #8, Ground	1
E11	171A0453	Ground Screw	1
E12	026B0073	Power Cord, 4 Foot	1
E13	028A0078	Strain Relief, Power Cord	1
E14	10-15641	Bracket, 120 Volt Terminal Block	1
E15	10-15640	Bracket, PCB Interface	1
E16	75-13705	Standoff Assy. PCB Interface	4
E17	171A0384	Screw, #8-32	3

K72-16422 OUTPUT SHAFT KIT			
ITEM	PART #	DESCRIPTION	QTY
O1	11-15646	Shaft, Output, 1"	1
O2	15-48B32LXX	Sprocket, 1" I.D., 32 Tooth	1
O3	12-10715	Bushing, 1" I.D., Keyed	2
O4	80-206-10	Shim Washer, 1" I.D., .015 Thk	6
O5	87-E-100	E-Ring, 1"	2
O6	86-RP10-200	Roll Pin, 5/16" X 2" Long	1

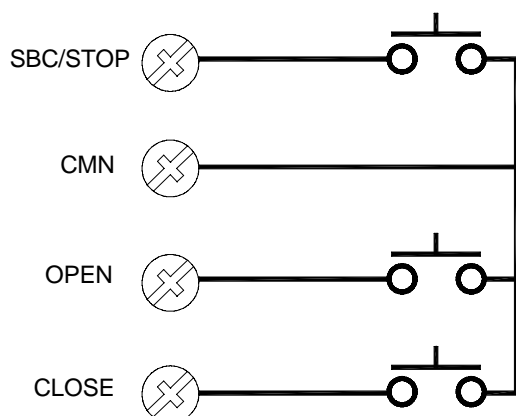
K75-16424 MOTOR KIT			
ITEM	PART #	DESCRIPTION	QTY
M1	123D0155	Motor	1
M2	012D0381	Bracket, Motor Assy	1
M3	011A0034	Bearing, Oil Impregnated	1

CONTROL CONNECTIONS

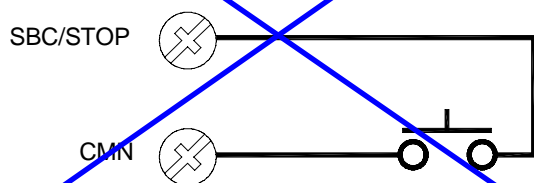


ATTENTION ELECTRICIAN
USE 16 GAUGE OR HEAVIER
FOR ALL CONTROL WIRING.

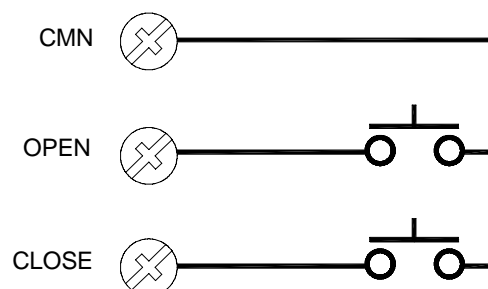
THREE BUTTON STATION



SINGLE BUTTON STATION



TWO BUTTON STATION



SENSING DEVICES

