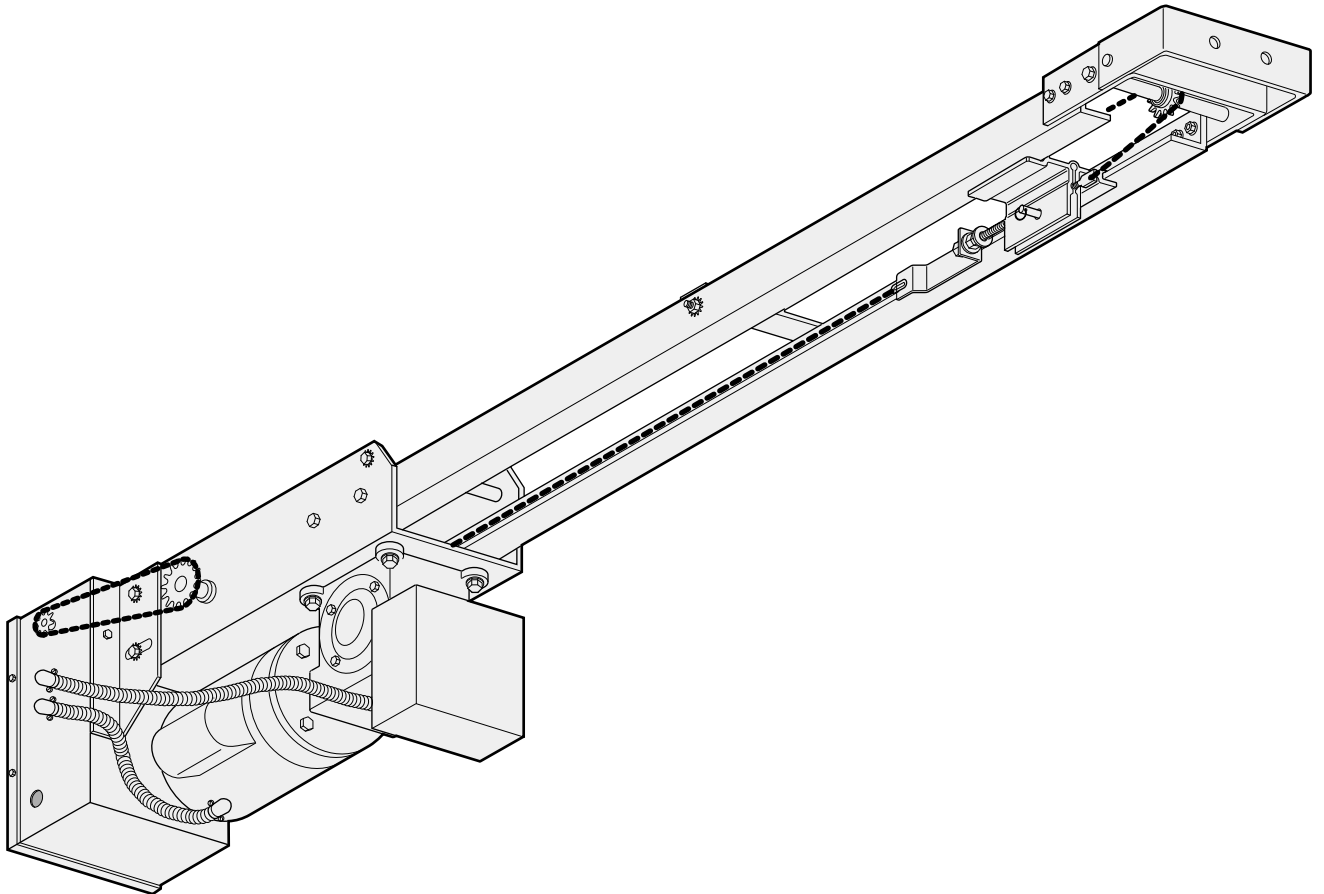


OWNER'S MANUAL
MODEL GT
SOLID STATE
INDUSTRIAL DUTY
GEARHEAD TROLLEY OPERATOR



Serial # _____
(located on electrical box cover)

Installation Date _____

Wiring Type _____

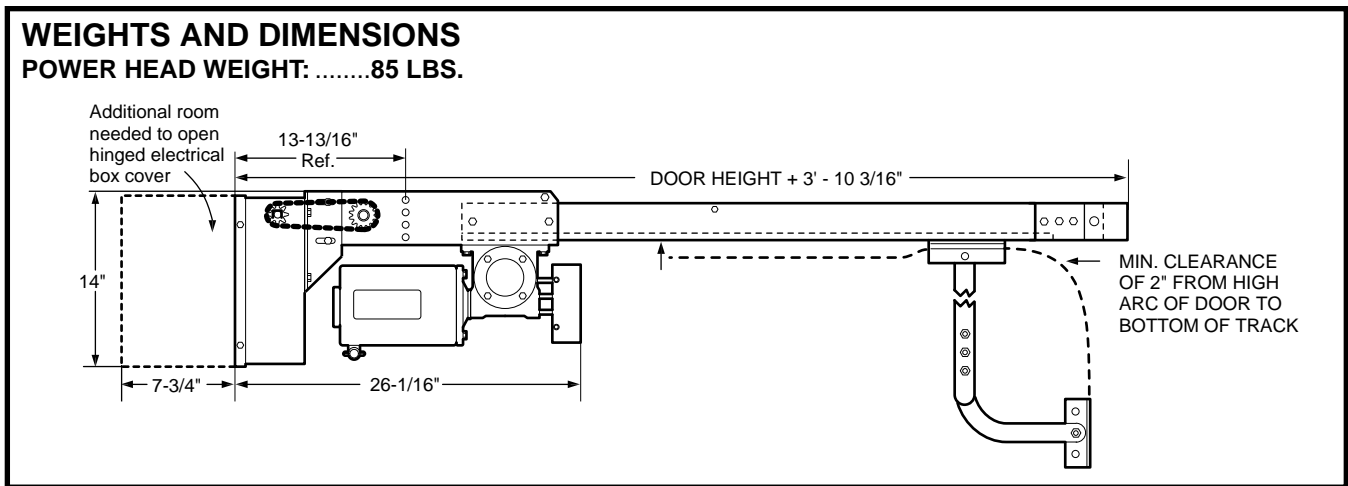


**COMMERCIAL DOOR OPERATOR
LISTED
NOT FOR RESIDENTIAL USE**

SPECIFICATIONS

MOTOR	ELECTRICAL
TYPE:Continuous duty	CONTROL VOLTAGE:5V dc
HORSEPOWER:1/2, 3/4 & 1 HP Single or Three phase	AUXILIARY VOLTAGE: ..24V dc
SPEED:1725 RPM	CONTROL STATION:3 Button OPEN/CLOSE/STOP NEMA 1
VOLTAGE:115/208-230 Single phase 208-230 Three phase	WIRING TYPE:B2 (Standard) Momentary contact to OPEN/CLOSE/STOP plus wiring for sensing device to reverse and auxiliary devices to open and close with open override. (Other types available. See chart.)
CURRENT:See motor nameplate	LIMIT ADJUST:Linear driven, fully adjustable screw type cams. Adjustable to 22 feet.

MECHANICAL	SAFETY
DRIVE REDUCTION: 1st Reduction:10:1 Gear reducer 2nd Reduction:#41 Chain and sprockets Output:#41 Chain OUTPUT SHAFT SPEED: .100 R.P.M. DOOR SPEED:11 inches per sec. BEARINGS:Ball bearings on output shaft BRAKE:Solenoid drum brake	DISCONNECT:Spring loaded trolley Disconnect arm CLUTCH:Adjustable friction type REVERSING EDGE:(Optional) Electric or pneumatic sensing device attached to the bottom edge of door. A REVERSING EDGE IS STRONGLY RECOMMENDED FOR ALL COMMERCIAL OPERATOR INSTALLATIONS. REQUIRED WHEN THE 3 BUTTON CONTROL STATION IS OUT OF SIGHT OF DOOR OR ANY OTHER CONTROL (AUTOMATIC OR MANUAL) IS USED. SEE PAGES 5 & 8.



HOW TO ORDER REPAIR PARTS

OUR LARGE SERVICE ORGANIZATION
SPANS AMERICA
INSTALLATION AND SERVICE INFORMATION
ARE AVAILABLE 6 DAYS A WEEK
CALL OUR TOLL FREE NUMBER 1-800-528-6563
HOURS 7:00 TO 3:30 p.m. (Mountain Std. Time)
MONDAY Through SATURDAY

IN CANADA
CALL OUR TOLL FREE NUMBER 1-800-654-4736

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

ADDRESS ORDER TO:
THE CHAMBERLAIN GROUP, INC.
Electronic Parts & Service Dept.
2301 N. Forbes Blvd., Suite 104
Tucson, AZ 85745

ASSEMBLE TRACK AND OPERATOR



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 OR DEATH. CALL A PROFESSIONAL DOOR SERVICEMAN TO MOVE OR ADJUST DOOR SPRINGS OR HARDWARE.



CAUTION

DO NOT CONNECT ELECTRIC POWER UNTIL INSTRUCTED TO DO SO.

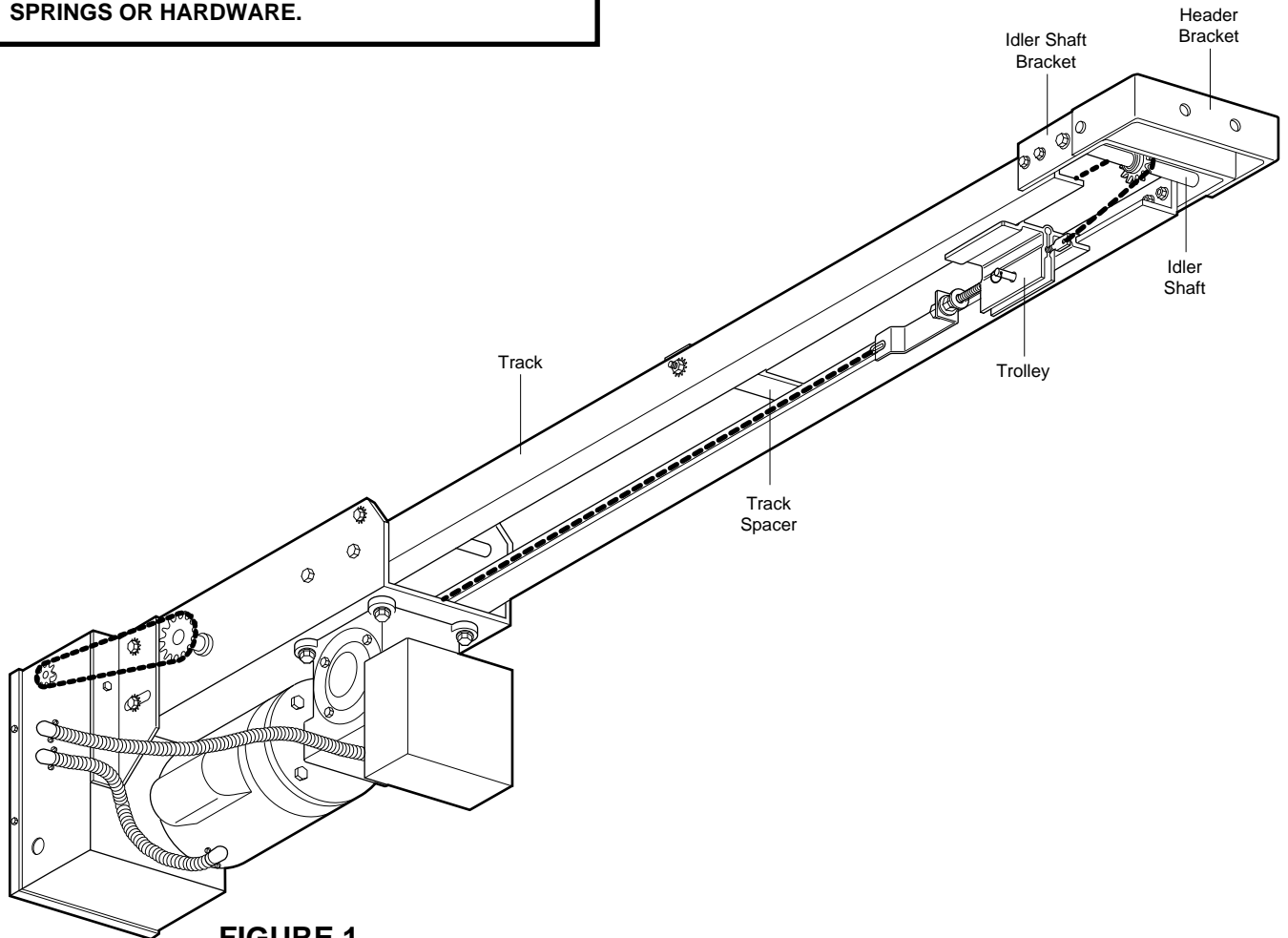



FIGURE 1

Check the identification tag mounted on the electrical box to be sure the voltage, phase and h.p. are correct for your needs.

1. Fasten track to the operator frame. **DO NOT TIGHTEN BOLTS.** See Figure 1.
2. Position the trolley on the track. Attach track spacer(s).
3. Place idler shaft bracket over end of track. There are two holes on each side of bracket (Figure 1). Fasten shaft bracket to end of rail assembly.
4. Align track so that trolley moves easily and does not bind. Tighten all bolts.
5. Run chain around front and rear sprockets and attach to trolley assembly with master links. Adjust chain only until excessive slack is removed. To retain proper tension, tighten 3/8" lock nut.

INSTALL OPERATOR

CAUTION: AT LEAST TWO PERSONS AND A STRONG, SAFE WORKING PLATFORM ARE REQUIRED FOR THE INSTALLATION OF OPERATOR.

**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 RUN THE OPERATOR BEFORE MAKING LIMIT SWITCH ADJUSTMENTS.

FOR METAL BUILDINGS ONLY: A strong mounting surface for the operator front header bracket is needed. On the wall above the center stile, weld or bolt a 2"x2"x1/4" piece of angle iron or another suitable, heavy-duty material as shown in Figure 2.

6. Draw a vertical line on header (or reinforcement material) above center stile of door.
7. Raise the door to its high arc point. Use a carpenter's level to locate high arc point on wall above door center stile as shown in Figure 3. Make a horizontal line, intersecting the vertical centerline mark.

FIGURE 2

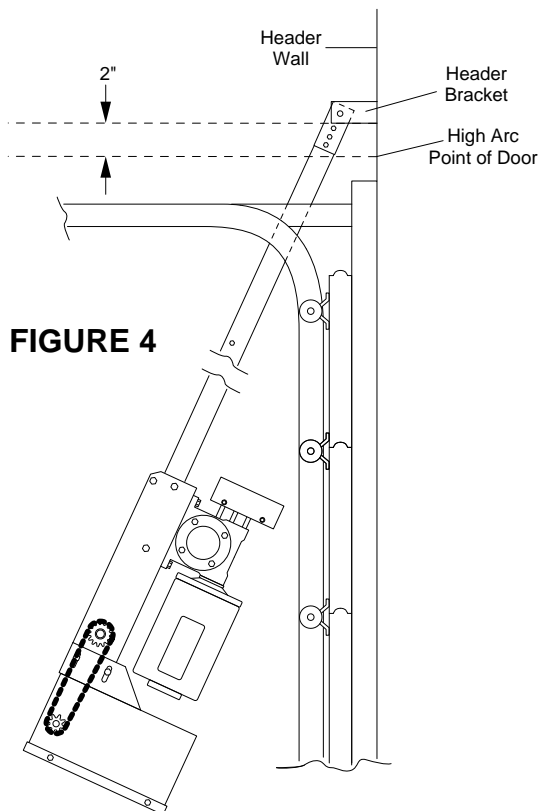
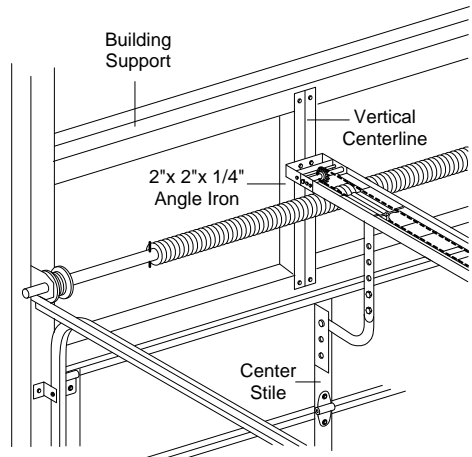


FIGURE 4

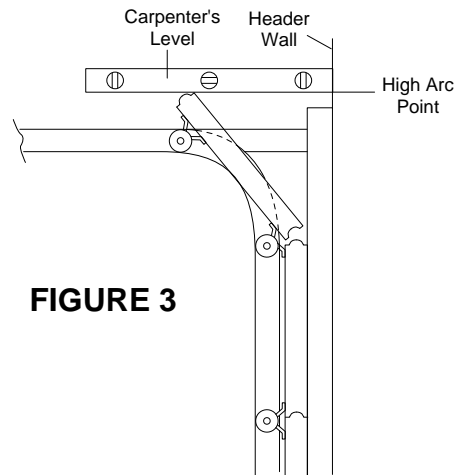


FIGURE 3

8. Close the door and refer to Figure 4. Position operator chassis on the floor with the bottom edge of header bracket 2" above horizontal mark and centered on vertical line. Mark mounting holes.

FOR METAL BUILDINGS: Drill 3/8" holes for fastening bolts. **FOR CONCRETE BUILDINGS:** Drill 3/8" holes for anchor bolts, following manufacturer's instructions.

NOTE: Be sure header bracket is level before tightening the bolts.

9. Raise operator straight up until the door can be raised to the full open position. See Figure 5. Temporarily secure to ceiling or rafters with rope or other suitable means.



WARNING

FAILURE TO SUSPEND THE OPERATOR SECURELY MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH, AND/OR PROPERTY DAMAGE.

10. Raise door to full open position. Place a 2x4 board on top of leading edge of door. Lower operator to rest on 2x4 board.

Make four hangers from 2"x2"x1/4" angle iron. **IT IS RECOMMENDED THAT RAIL BE CENTER-SUPPORTED AS WELL.** Bolt the operator into place.

**COIL CORD (OPTIONAL)
REFER TO (A) IN ILLUSTRATION**

Connect operator end of coil cord to junction box (not supplied) fastened to the wall approximately half-way up the door opening.

Electrician must hardwire the junction box to the operator electrical box in accordance with local codes.

**REEL (OPTIONAL)
REFER TO (B) IN ILLUSTRATION**

Take-up reel should be installed 12" above the top of the door.

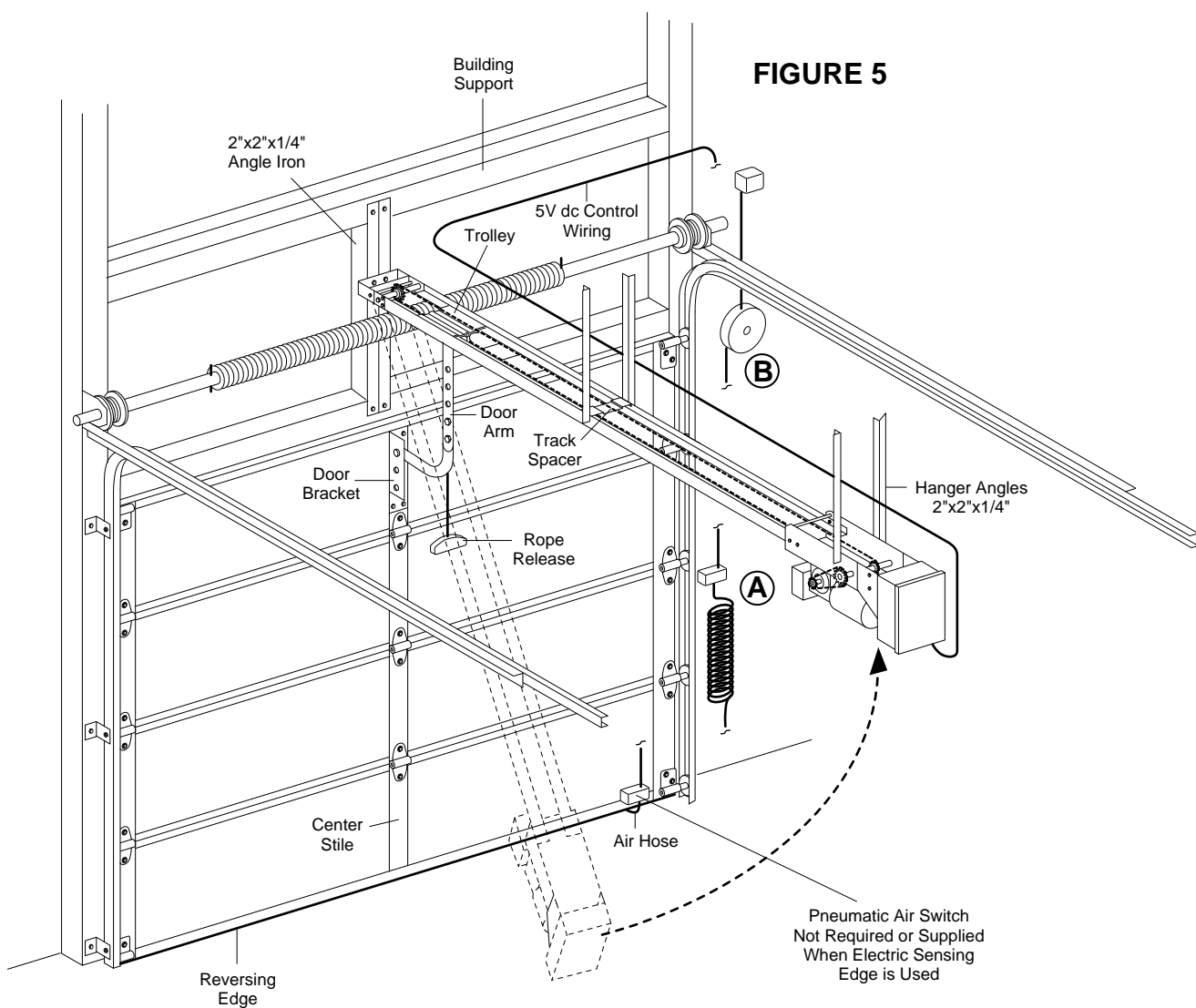


FIGURE 5

CONNECT OPERATOR TO POWER SUPPLY AND INSTALL CONTROL STATION



WARNING

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.



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.



WARNING

INSTALL THE CONTROL STATION WHERE THE DOOR IS VISIBLE, BUT AWAY FROM THE DOOR AND ITS HARDWARE. IF CONTROL STATION CANNOT BE INSTALLED WHERE DOOR IS VISIBLE, OR IF ANY DEVICE OTHER THAN THE CONTROL STATION IS USED TO ACTIVATE THE DOOR, A *REVERSING EDGE MUST BE INSTALLED ON THE BOTTOM OF THE DOOR*. FAILURE TO INSTALL A REVERSING EDGE UNDER THESE CIRCUMSTANCES MAY RESULT IN SERIOUS INJURY OR DEATH TO PERSONS TRAPPED BENEATH THE DOOR.



CAUTION

DO NOT ALLOW TROLLEY TO OVERRUN FRONT IDLER SPROCKET OR RUN INTO OPERATOR HEAD. LIMIT SWITCHES MAY NOT BE IN THE PROPER POSITIONS. (See Limit Adjustments).

REFER TO MASTER WIRING DIAGRAM.

MAKE CONNECTION THROUGH THE 1-1/16" DIA. LABELED HOLE. DO NOT RUN CONTROL WIRES IN THE SAME CONDUIT AS THE POWER WIRES.

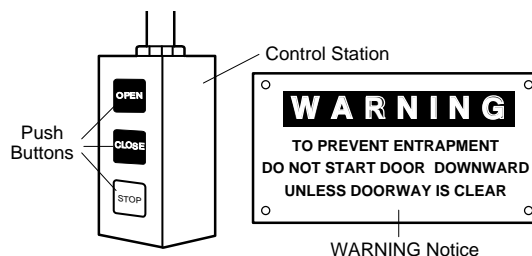
- Complete the electrical connections to operator and control station (Refer to Control Connection Diagram, Pg. 20). Fasten the control station to the wall.

FASTEN THE WARNING NOTICE BESIDE OR BELOW THE PUSH BUTTONS.

- Apply power to operator. Press either the OPEN or the CLOSE push button and observe direction of trolley travel. Press the STOP button.

If trolley did not move in the correct direction, check for improper wiring at control station or between opener and control station.

If the operator is three phase and control station wiring is correct, exchange any two of the three incoming power leads.



If electrical problems persist, call our Toll Free number (1-800-528-6563) for assistance.

- Operate push button so that the trolley moves forward (toward close position). Press STOP button when trolley is approximately 10" from front wall.

CONNECT DOOR ARM AND BRACKET



CAUTION

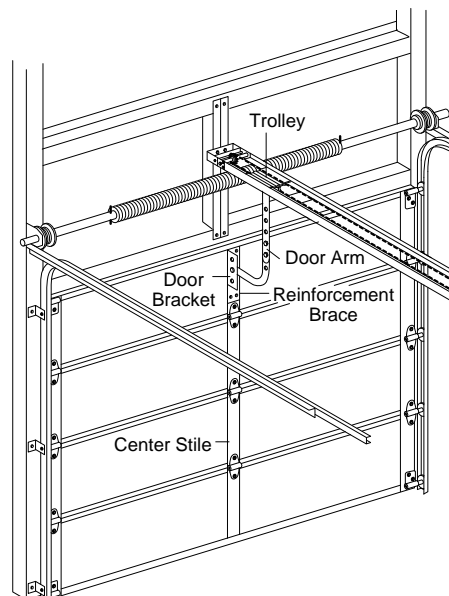
REINFORCE CENTER STILE WITH A VERTICAL BRACE. USE A PIECE OF ANGLE IRON THAT WILL SPAN THE HEIGHT OF TOP PANEL. DO NOT CUT HORIZONTAL STRUT.

- With door CLOSED, snap door arm onto operator trolley. Position door bracket against reinforced center stile of top section of door. Make sure arm is straight and centered on stile. Mark bracket holes. Drill and fasten with 5/16" bolts.

NOTE 1: Choose a set of holes which aligns door arm in a near vertical position.

NOTE 2: If door strut interferes with placement of door bracket, position bracket below strut. DO NOT CUT OR MODIFY STRUT.

Attach door arm to door bracket using 3/8"-16x1" screw and lock nut.





WARNING

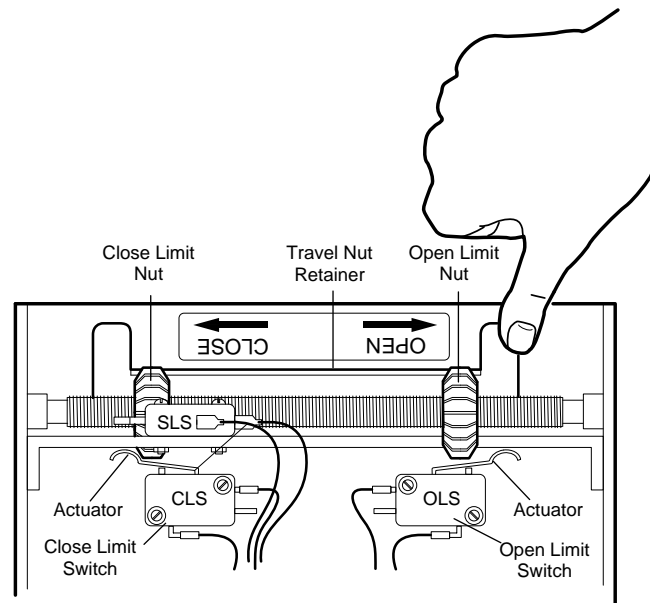
TO AVOID SERIOUS PERSONAL INJURY OR DEATH FROM ELECTROCUTION, DISCONNECT ELECTRIC POWER BEFORE PROCEEDING WITH THE FOLLOWING ADJUSTMENTS.

ADJUST LIMITS

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

1. Depress open limit switch. The operator should stop.
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 top in open position with the bottom of the door even with the top of the door opening.
4. Repeat Steps 1 and 2 for close cycles. Be sure close limit actuator is engaged as door fully seats at the floor.

If other problems persist, call out toll-free number for assistance: 1-800-528-6563.



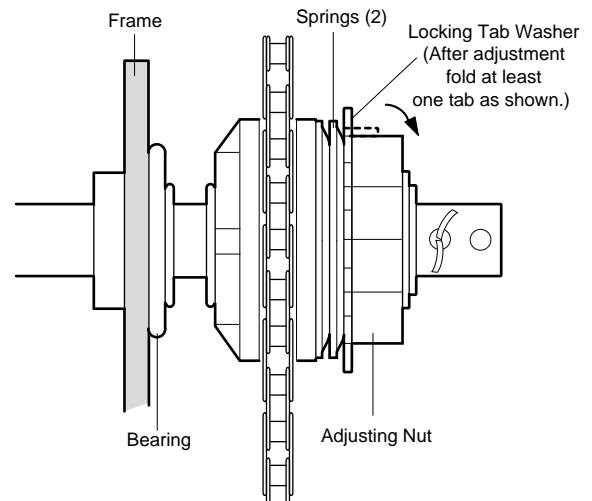
ADJUST THE TORQUE LIMITER

1. Press OPEN button and observe door and operator.
2. If door does not move due to slippage of Torque Limiter, press STOP button.
3. Adjust Torque Limiter as follows:
 - a. Bend down tab on tab washer.
 - b. With a 1-7/8" wrench, tighten adjusting nut 1/8th turn.
4. Repeat Steps 1, 2 and 3b until door operates properly.
5. Bend up at least one tab on tab washer against adjusting nut to retain setting.

NOTE: The torque Limiter will require periodic inspection and possibly readjustment.

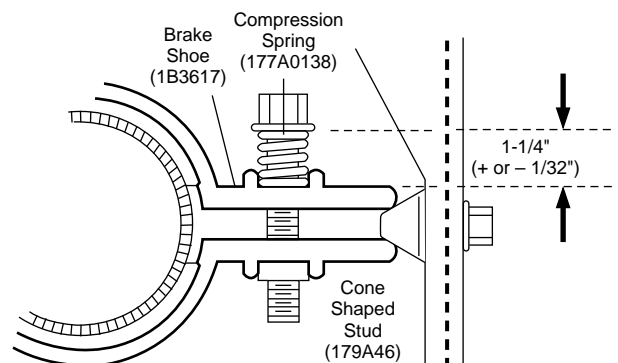
CAUTION: The Torque Limiter is not intended to be a reversing device. A pneumatic or electric reversing edge may be added for that purpose.

If properly adjusted, the Torque Limiter will provide a degree of protection for the door and operator by slipping under overload conditions.

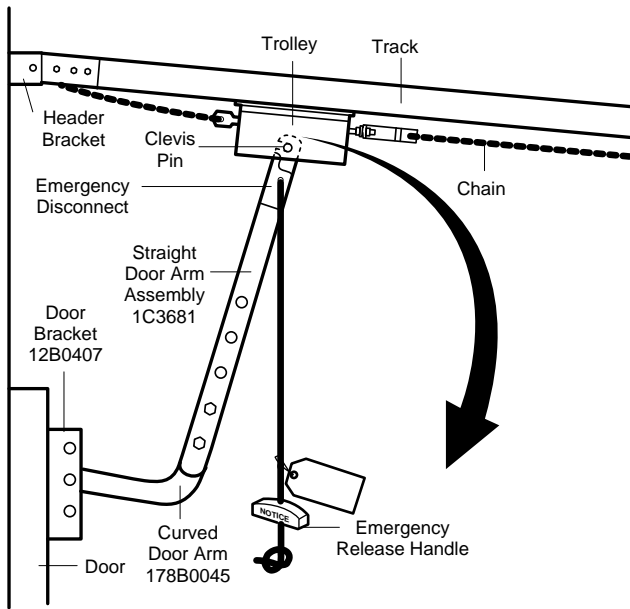


ADJUST THE BRAKE COMPRESSION SPRING

1. Compress spring to the 9/16" dimension by turning screw. Do **NOT** spread brake shoes with cone shaped stud while adjusting spring height.
2. Test for proper brake operation and replace brake housing cover.
3. The brake assembly is self-adjusting and should not require further adjustment until brake shoes or drum are replaced due to wear. Check for wear every 3 months.



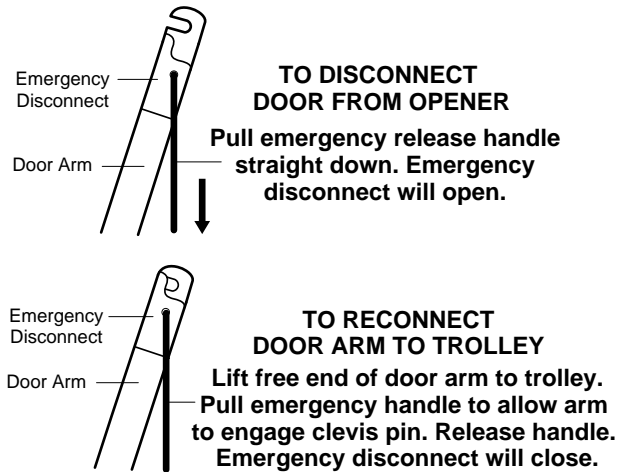
EMERGENCY DISCONNECT SYSTEM



WARNING

DOOR ARM IS RELEASED FROM TROLLEY WHEN EMERGENCY DISCONNECT OPENS.

TO AVOID BEING STRUCK BY DOOR ARM, DO NOT STAND UNDER THE ROPE OR DOOR ARM WHEN PULLING THE EMERGENCY RELEASE.



WARNING

IF CONTROL STATION CANNOT BE INSTALLED WHERE DOOR IS VISIBLE, OR IF ANY DEVICE OTHER THAN THE CONTROL STATION IS USED TO ACTIVATE THE DOOR, A REVERSING EDGE MUST BE INSTALLED ON THE BOTTOM OF THE DOOR. FAILURE TO INSTALL A REVERSING EDGE UNDER THESE CIRCUMSTANCES MAY RESULT IN SERIOUS PERSONAL INJURY OR DEATH TO PERSONS TRAPPED BENEATH THE DOOR.

CONNECT REVERSING EDGE DEVICE (OPTIONAL)

The operator has been pre-wired to accept connection of a reversing edge device. Connect the normally open contacts to terminals T4 and T8 on the low voltage terminal block. A cut-off switch will deactivate the safety device during the last few inches of the door's downward travel.

MAINTENANCE SCHEDULE

Check at the intervals listed in the following chart.

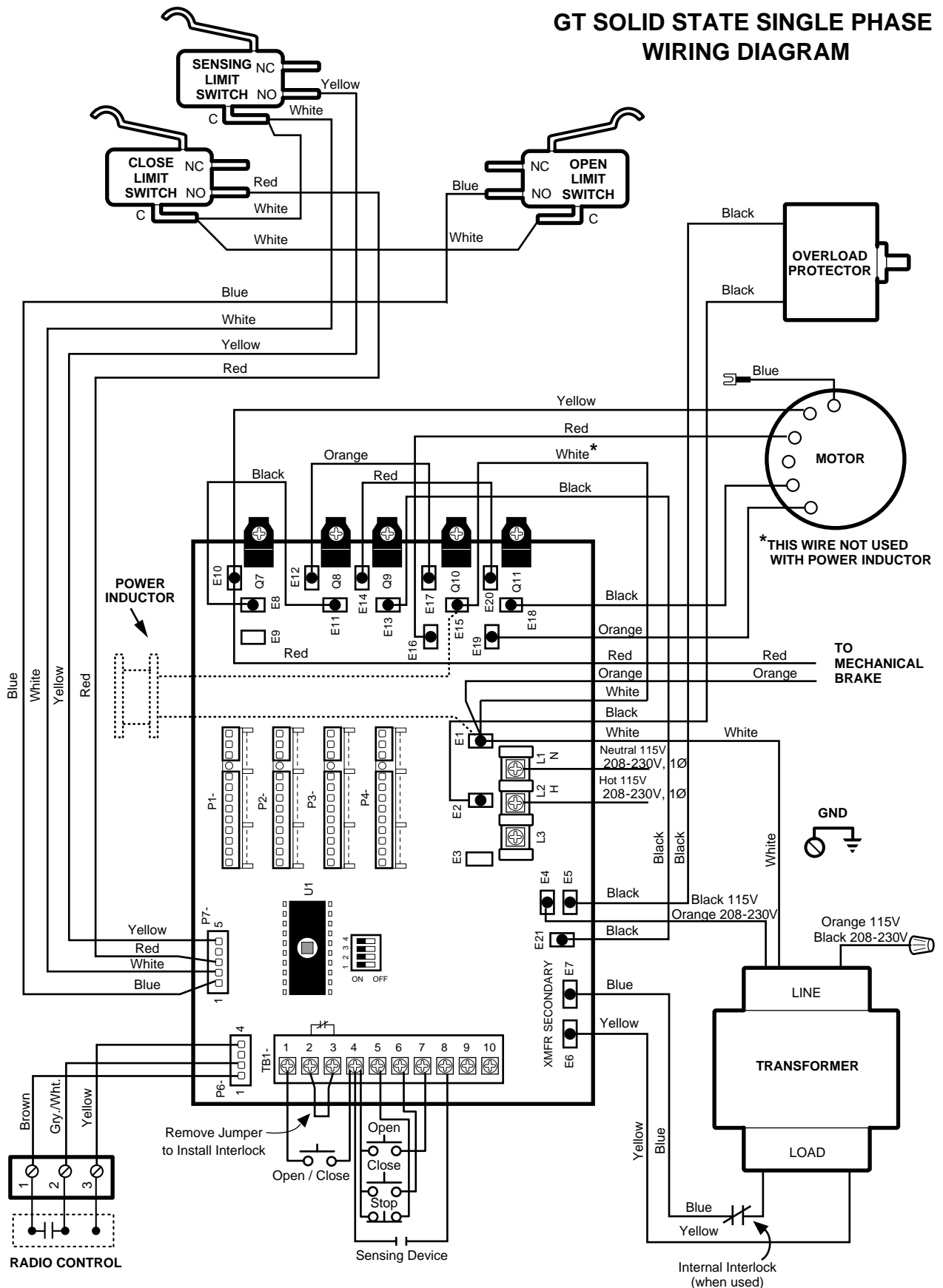
ITEM	PROCEDURE	EVERY 3 MONTHS	EVERY 6 MONTHS	EVERY 12 MONTHS
Drive Chain	Check for excessive slack. Check & adjust as required. Lubricate.*	●		✓
Sprockets	Check set screw tightness	●		✓
Torque Limiter and Brake	Check & adjust as required	●		✓
Gear Reducer**	Check for leaks and replace seals as needed		●	✓
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.
- Do not lubricate clutch or V-belt.
- Inspect and service whenever a malfunction is observed or suspected.
- CAUTION: BEFORE SERVICING, ALWAYS DISCONNECT OPERATOR FROM POWER SUPPLY.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

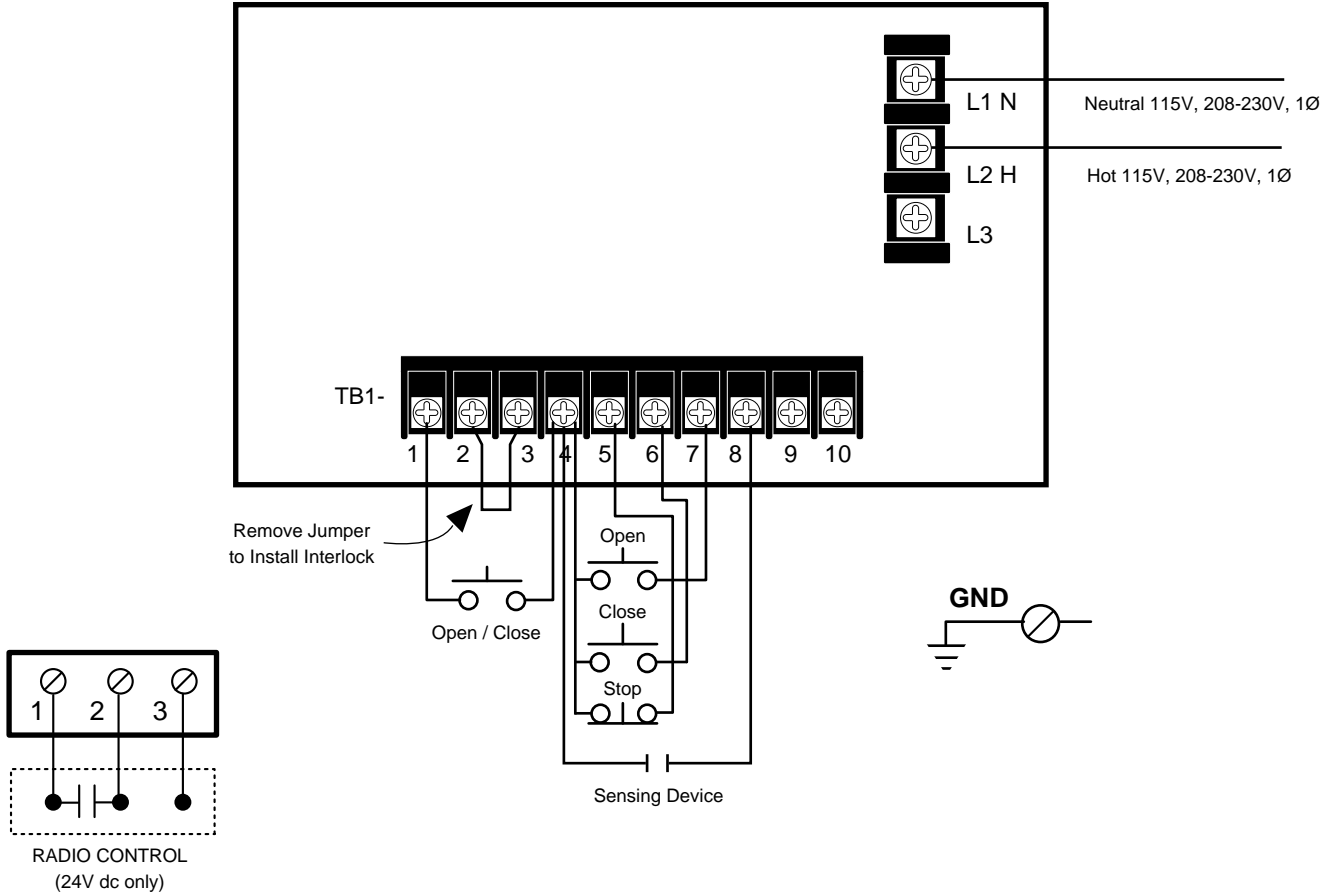
MEMO:

GT SOLID STATE SINGLE PHASE WIRING DIAGRAM



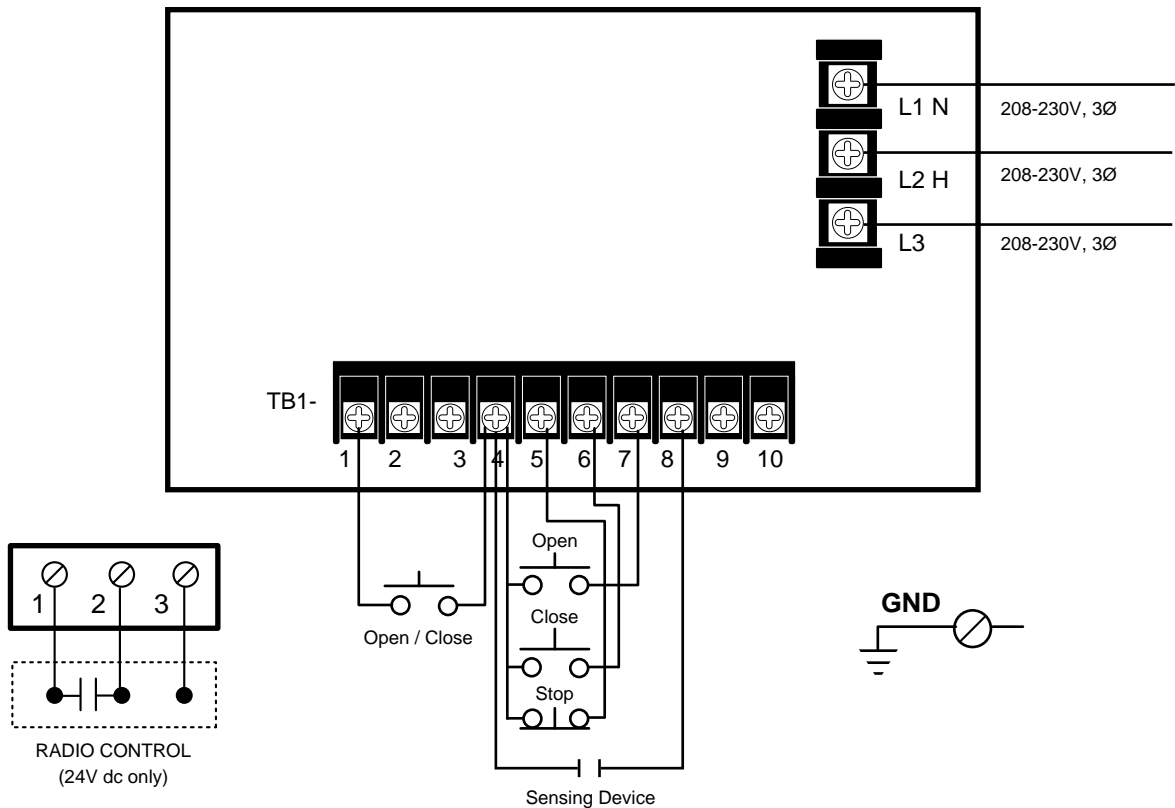
STANDARD POWER AND CONTROL CONNECTION DIAGRAM

(Solid State Board CDO - 115V, 208-230V, 1Ø)



STANDARD POWER AND CONTROL CONNECTION DIAGRAM

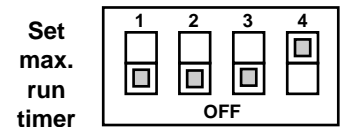
(Solid State Board CDO - 208-230V, 3Ø)



OPTIONAL SETTINGS

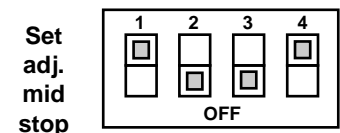
Set Maximum Run Timer

Begin with door in closed position. Set dip switch to max. run timer mode. Press control station open button to operate door from closed to full open position without stopping. Set dip switch to desired operating mode (B2, C2, D1, E2, T, TS).



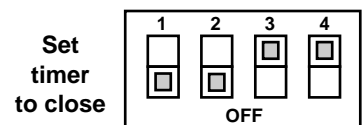
Set Adjustable Mid Stop

Begin with door in closed position. Set dip switch to adj. mid stop mode. Press control station open button to operate door from closed to mid stop position and stop with control station stop button. Set dip switch to desired operating mode (B2, C2, D1, E2, T, TS).



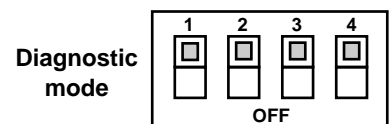
Set Timer to Close (NOTE: Requires P/N 1A4811 CPSII Option Board with Timer to Close Function)

Set dip switch to timer to close mode. Momentarily press control station open button to set timer duration in 5 second increments. (Red diagnostic L.E.D. will flash to indicate the entry of each 5 second increment into memory). To re-set timer memory to zero, press control station close button. Set dip switch to (T or TS) operating mode after timer is programmed.



Diagnostic Mode

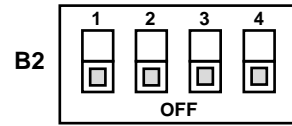
Set dip switch to diagnostic mode. Flashing red diagnostic L.E.D. indicates proper microprocessor function. If the diagnostic L.E.D. does not light, the control logic board requires replacement.



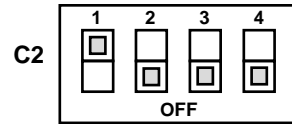
OPERATING MODE

TYPE STATION

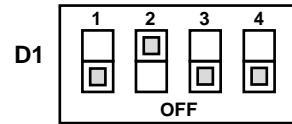
B2 3 Button, 1 Button, 1 & 3 Button Radio Control
Function: Momentary contact to open, close and stop, plus wiring for sensing device to reverse and auxiliary devices to open and close with open override.



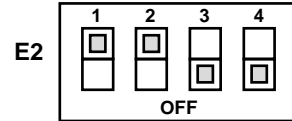
C2 3 Button, 3 Button Radio Control
Function: Momentary contact to open and stop with constant pressure to close, open override plus wiring for sensing device to reverse.



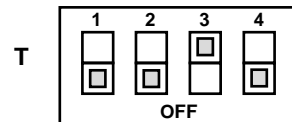
D1 2 Button, 3 Button Radio Control
Function: Constant pressure to open and close with wiring for sensing device to stop.



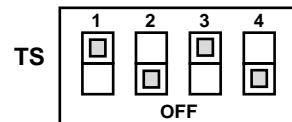
E2 2 Button, 3 Button Radio Control
Function: Momentary contact to open with override and constant pressure to close. Release of close button will cause door to reverse (roll-back feature) plus wiring for sensing device to reverse.



T* 3 Button, 1 Button, 1 & 3 Button Radio Control
Function: Momentary contact to open, close, and stop, with open override and timer to close. Every device that causes door to open, except a reversing device, activates timer to close. Auxiliary controls can be connected to open input to activate the timer to close. If the timer has been activated, the open button and radio control can recycle the timer. The stop button will deactivate the timer until the close button is used to close the door. **(NOTE: Requires P/N 1A4811 CPSII Option Board with Timer to Close Function.)**



TS* 3 Button, 1 Button, 1 & 3 Button Radio Control
Function: Momentary contact to open, close, and stop with open override and timer to close. Every device that causes door to open, including a reversing device, activates timer to close. Auxiliary controls can be connected to open input to activate the timer to close. If the timer has been activated, the open button and radio control can recycle the timer. The stop button will deactivate the timer until the close button is used to close the door. **(NOTE: Requires P/N 1A4811 CPSII Option Board with Timer to Close Function.)**



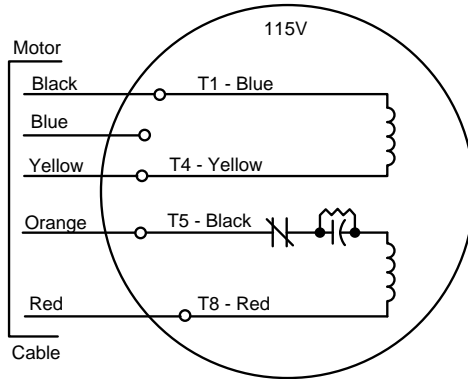
NOTE:

1. External interlocks may be used with all functional modes.
2. Auxiliary devices are any devices that have only one set of contacts. Examples are: photocell, loop detector, pneumatic or electrical treadles, residential radio controls, one button stations, pull cords, etc.
3. Open override means that the door may be reversed while closing by activating an opening device without the need to use the stop button first.

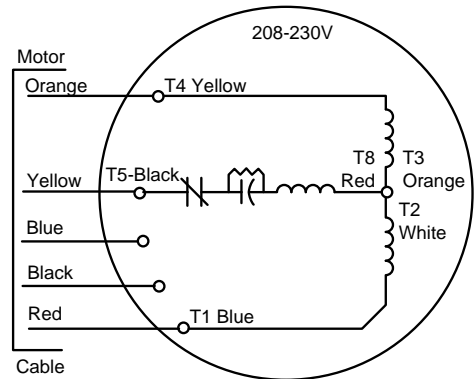
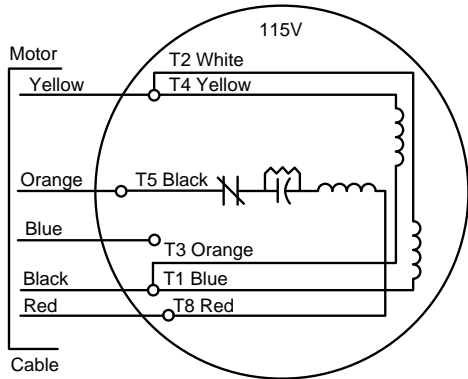
NEMA MOTOR WIRING DIAGRAMS

SINGLE VOLTAGE

1/3 & 1/2HP 115V only

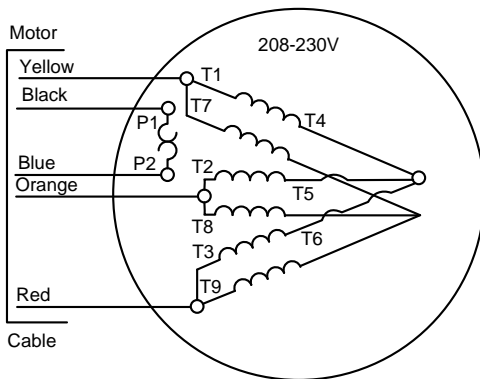


1 PHASE

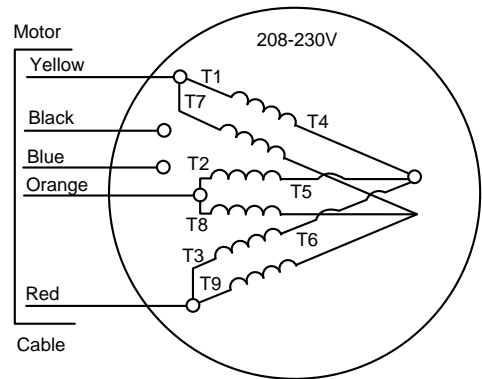


3 PHASE

1/3 & 1/2HP

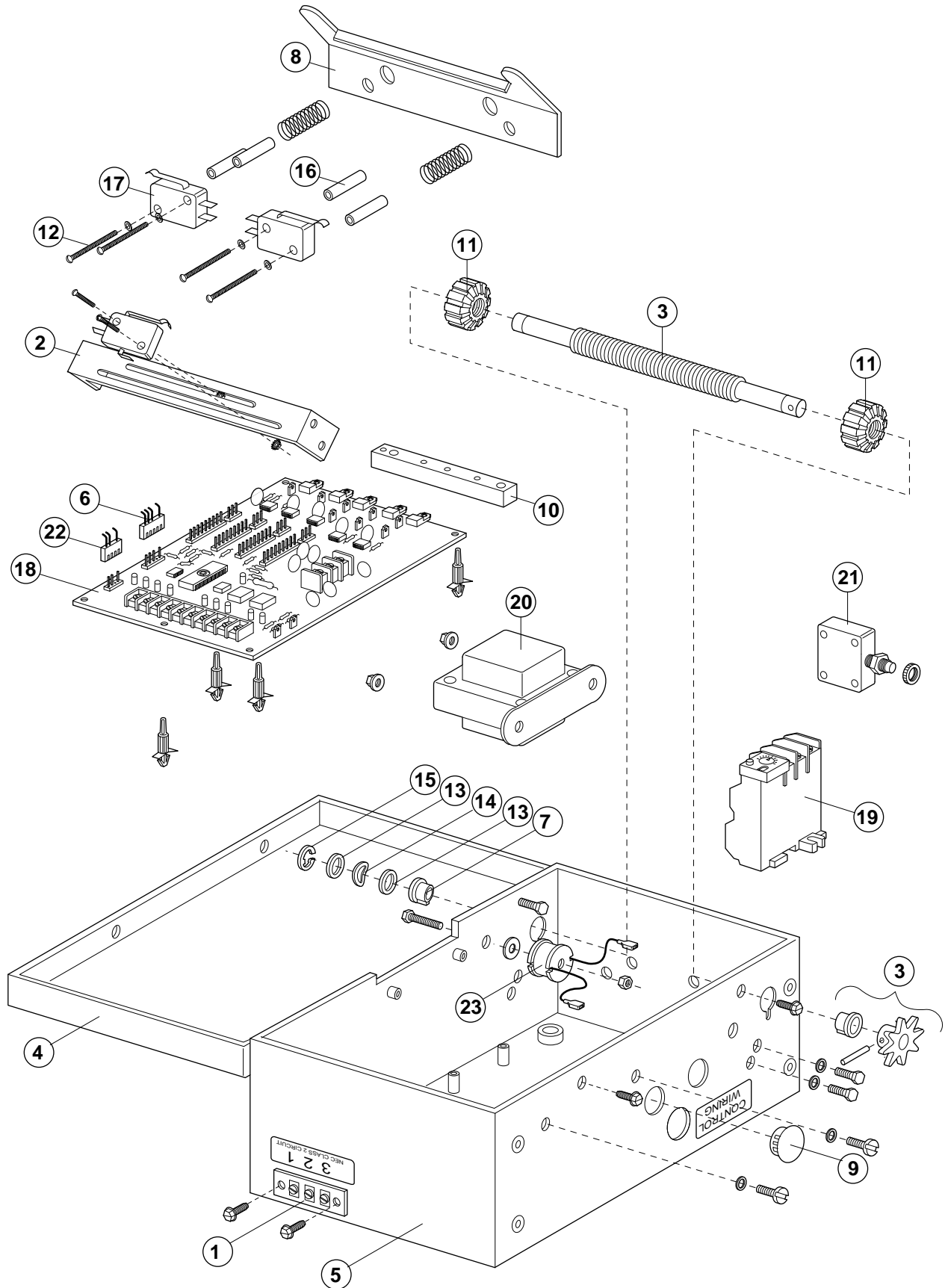


3/4HP & OVER



○ DENOTES WIRENUT CONNECTION

ILLUSTRATED PARTS - SOLID STATE ELECTRICAL BOX



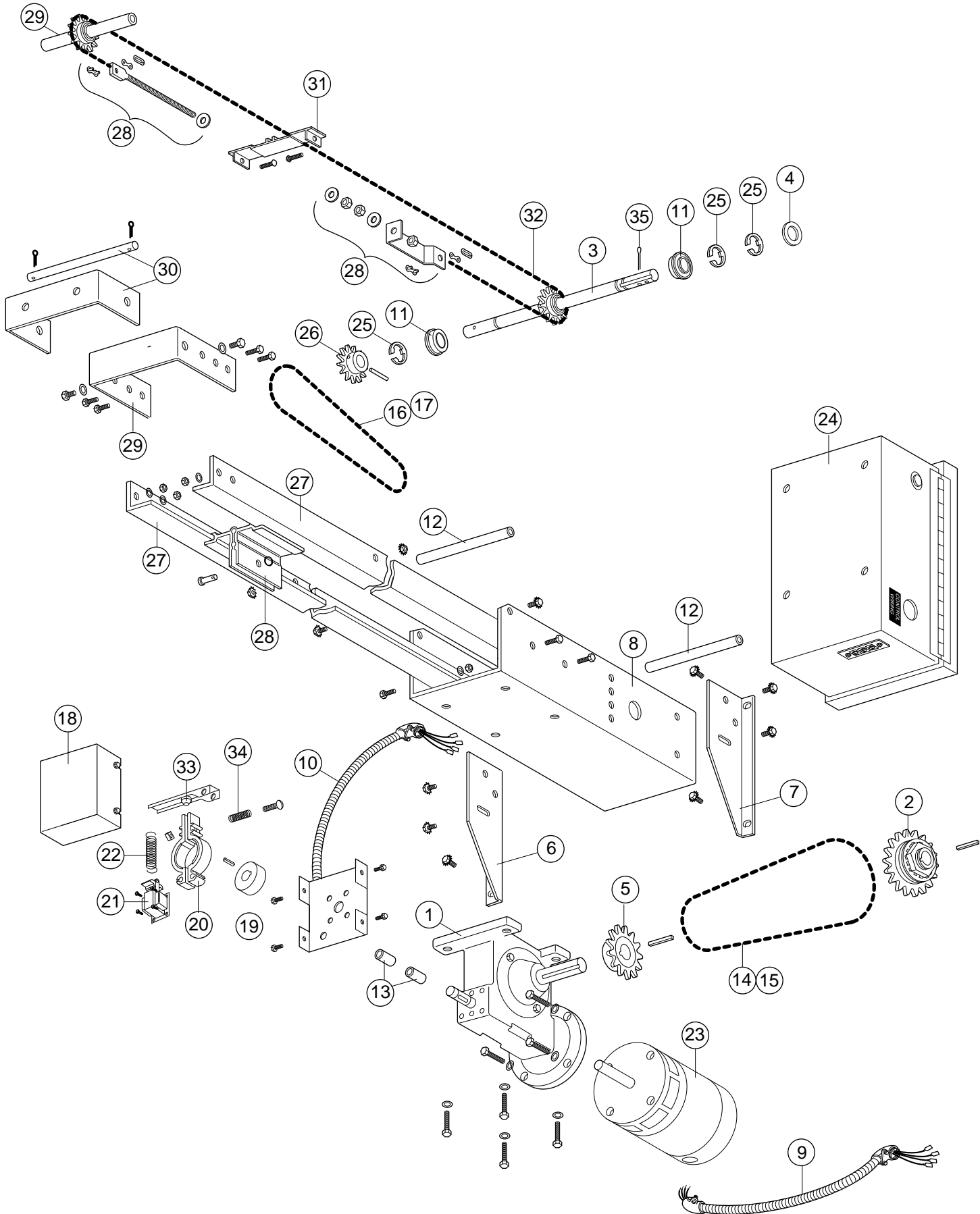
REPAIR PARTS - SOLID STATE ELECTRICAL BOX

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	1B3727	1	Terminal Assy. 3-Lug
2	41K4304	1	Switch Bracket Assy. (Aux. & Sensing)
3	1B3796	1	Ltd. Shaft-Sprocket Assy.
4	1B4681	1	Cover & Hinge Assy.
5	1C4691	1	Electric Box Assy.
6	1B4683	1	Wire Harness Limit Switch
7	11A012	1	Flanged Sleeve Bearing
8	12B552	1	Limit Bracket
9	31A388	1	Dome Plug
10	155B16	1	Heat Sink
11	133A182	2	Limit Nut 1/2"
12	171A411	4	Screw 4/40 x 1-1/2" Pan Head
13	216A184	2	Thrust Washer
14	216A191	1	Washer, Spring Curved
15	158A49	1	Retaining Ring 3/8"
16	184A109	4	Spacer - Stand Off - Round
17	180B133	2	Limit Switch

ITEM	PART NO.	DESCRIPTION	DESCRIPTION									
			MOTOR P/N	1/2 HP, 115V, 1 PHASE 123D135	1/2 HP, 230V, 1 PHASE 123D135	1/2 HP, 230V, 3 PHASE 123D138	3/4 HP, 115V, 1 PHASE 123D136	3/4 HP, 230V, 1 PHASE 123D136	3/4 HP, 230V, 3 PHASE 123D139	1 HP, 115V, 1 PHASE 123D137	1 HP, 230V, 1 PHASE 123D137	1 HP, 230V, 3 PHASE 123D140
M		Motor	1	1	1	1	1	1	1	1	1	
18	1D4650	PCB Assy.	1	1	1	1	1	1	1	1	1	
19	180C104-3	Overload 2.8 - 4.4A*						1			1	
20	204B134	Transformer 115V/230V	1	1	1	1	1	1	1	1	1	
21	180B159-0	Overload 3.5A										
	180B159-1	Overload 5A		1								
	180B159-2	Overload 7A					1					
	180B159-3	Overload 8A								1		
	180B159-4	Overload 10A	1									
	180B159-5	Overload 15A							1			
	180B159-9	Overload 12A				1						
22	1B4682	Radio Control Harness	1	1	1	1	1	1	1	1	1	
23	1B4824	Inductor Power Assembly	1	1	1	1	1	1	1	1	1	

REMARKS: *Overload to be set at 115% maximum of motors rated current.

ILLUSTRATED PARTS – OPERATOR MODEL GT



REPAIR PARTS – MODEL GT

ITEM NO.	PART NO.	QTY	DESCRIPTION
1	80D6	1	10:1 Gear Reducer
2	2A403	1	Torque Limiter
3	1B4314	1	Drive Shaft Assembly
4	216A182	1	Washer
5	81B84	1	#41 14Tooth Sprocket
6	12C506	1	Electric Box Mtg. Brkt.
7	12C506-1	1	Electric Box Mtg. Brkt.
8	1D4392	1	Frame Assembly
9	1B4686	1	Motor Cable Assembly
10	1B4689	1	Brake Conduit Assembly
11	41K4300	1	Ball Bearing (3/4") I.D. Kit
12	184B97	2	Spacer
13	184A123	2	Spacer
14	1A4283	1	#41 Chain, 61 Pitches
15	109A21	1	#41 Master Link
16	1A3971	1	#48 Chain, 49 Pitches
17	109A11	1	#48 Master Link
18	031C399	1	Brake Housing Cover
19	44A3	1	Brake Drum
20	1B3617	2	Brake Shoe Assembly
21	See Chart	1	Solenoid
22	177B128	1	Extension Spring
23	See Chart	1	Motor
24	See Detail	1	Electric Box
25	158A53	3	E-Ring
26	81C151	1	Sprocket
27	See Chart	2	L-Rail
28	1B4001	1	Trolley Assembly
29	1C3993	1	Bracket Assembly
30	41K4302	1	Header Assembly
31	184D113	Varies	Spacer T-Rail #41 Chain
32	See Chart	1	Chain Assembly, Master Link Kit
33	179A46	1	Brake Release Stud
34	177B127	1	Compression Spring
35	146A67	1	Cotter Pin

ITEM 21	
PART NO.	DESCRIPTION
204B118	115V. Solenoid
204B118-1	230V. Solenoid

Door Hts.	ITEM 27		ITEM 32		ITEM 32		ITEM 31	
	Rail	Qty.	Chain Assembly	Qty.	#41 Chain Master Link Kit	1 Set Qty.	Spacer Kit	Qty.
8 Feet	183C137	2	1A4026	1	1A4034	1	1A4005	2
10'	183C137-1	2	1A4027	1	1A4034	1	1A4005	2
12'	183C137-2	2	1A4028	1	1A4034	1	1A4005	2
14'	183C137-3	2	1A4029	1	1A4034	1	1A4005	3
16'	183C138	2	1A4030	1	1A4034	1	1A4005	3
18'	183C138-1	2	1A4031	1	1A4034	1	1A4005	3
20'	183C138-2	2	1A4032	1	1A4034	1	1A4005	4
22'	183C138-3	2	1A4033	1	1A4034	1	1A4005	4

CONTROL CONNECTION DIAGRAM



ATTENTION: The 3-Button Control Station provided must be connected for operation.

3 BUTTON STATION OR 3 POSITION KEYSWITCH WITH SPRING RETURN TO CENTER AND STOP BUTTON	
<p>STANDARD</p>	<p>2 OR MORE</p>
<p>KEY LOCKOUT</p>	
2 BUTTON STATION OR 3 POSITION KEYSWITCH WITH SPRING RETURN TO CENTER	
<p>STANDARD</p> <p>D1 & E2 MODE ONLY</p>	<p>2 OR MORE</p> <p>D1 & E2 MODE ONLY</p>
1 BUTTON STATION OR ANY AUXILIARY DEVICE	RESIDENTIAL RADIO CONTROLS
<p>OPEN / CLOSE</p> <p>B2, T & TS MODE ONLY</p>	<p>OPEN TIMER TO CLOSE</p> <p>RADIO CONTROL (24Vdc only)</p>
SENSING DEVICE TO REVERSE OR STOP	EXTERNAL INTERLOCK
	<p>REMOVE JUMPER</p> <p>ONE 2 OR MORE</p> <p>WIRING TYPES - ALL</p>