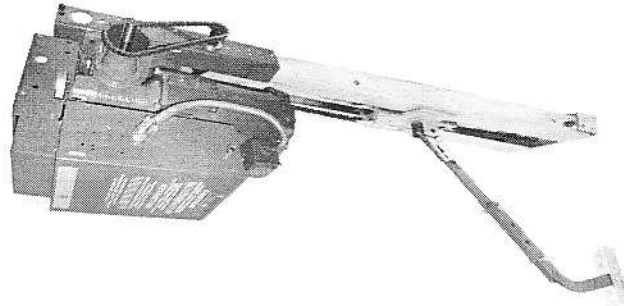




MICANAN SYSTEMS INC.

INSTALLATION AND INSTRUCTION MANUAL

MODELS: *PRO-GT*



Feb. 2009

2 YEAR WARRANTY

Model : _____

Serial # _____

Installation Date: _____

Wiring Diagram: _____

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OPTIONS	
MP00041-44	#40 Drive Chain
*	#50 reduction chain and sprockets
MP00045	Cast-iron Pillow block bearings on drive
PRO-GTW	Waterproof modification
PRO-GT4X	Corrosionproof modification
PRO-GTX	Explosion proof modification
MP00007	115 Volt control circuit
MP00001	Timer to Close
PRO-PL	Separate control panel
MP00036	Trolley hoist Disconnect
MP00030,78-80	Dual Trolley Assembly
MP00035	Minimum Depth modification

WARNING

DO NOT CONNECT TO ELECTRICAL
POWER DURING INSTALLATION
OR SERVICING OF OPERATOR

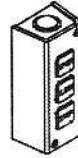
IMPORTANT

FOR ANY QUESTIONS CONCERNING THE SAFETY OR
OPERATION OF THIS OPERATOR PLEASE CONTACT
MICANAN SYSTEMS AT 1-877-888-1116

VERIFICATION OF OPERATOR AND HARDWARE

Upon delivery of your MICANAN SYSTEMS heavy-duty gearhead trolley door operator, please inspect the unit carefully for damage. Verify that operator horsepower, voltage, phase and amperage correspond to available power supply and door application. Check that along with your operator you have received the following standard hardware.

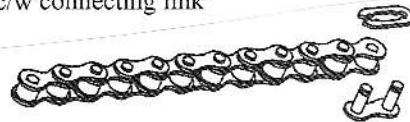
- 1 x OPEN/CLOSE/STOP 3-button control station:



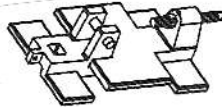
- 1 x Set of trolley tracks (door height + 2'6")



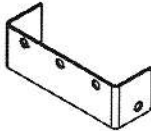
- 1 x Drive chain package (door height x 2 + 5' 6" (1.65m) c/w connecting link



- 1 x Trolley carriage and 3/8 take-up bolt assembly



- 1 x Trolley track end bracket



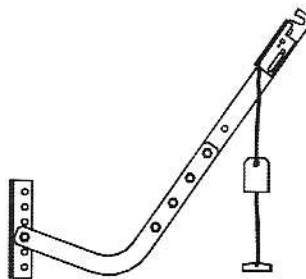
- 1 x Front idler



- 2 x Trolley spreader bars



- 1 x Trolley arm assembly



- 1 x Set of Warning signs



PRO-GT SPECIFICATIONS

PRO-GT heavy-duty gearhead trolley operator is designed for standard lift overhead sectional garage doors.

STANDARD OPERATOR WEIGHT: 95-150 Lbs.

MOTOR: Continuous duty 1725 RPM industrial type motor.

- Full overload protection
 - Horsepower range : 1/2HP, 3/4HP, 1HP, 1.5HP, 2HP(3-phase only)
- Voltage:
- | | |
|--------------|--------------|
| 115V 1-phase | 230V 3-phase |
| 230V 1-phase | 460V 3-phase |
| | 575V 3-phase |

REDUCTION: Primary: Heavy duty worm gear reducer 20:1 (standard) or 40:1 reduction
Secondary: #41 chain and sprockets.

OUTPUT SHAFT SPEED: 86 RPM **DOOR SPEED:** 10"/second

BRAKE: Solenoid actuated drum and brake shoe braking system to prevent coasting and maintain door position.

WIRING TYPE (STANDARD): C-2 Wiring constant pressure on close, momentary contact on open and stop. Wired to accept reversing edge, radio control, photocells, loops and OPEN/CLOSE devices.
NOTE: If momentary contact on close (B2) wiring is desired: Move "white" wire from terminal #5 to terminal #3.

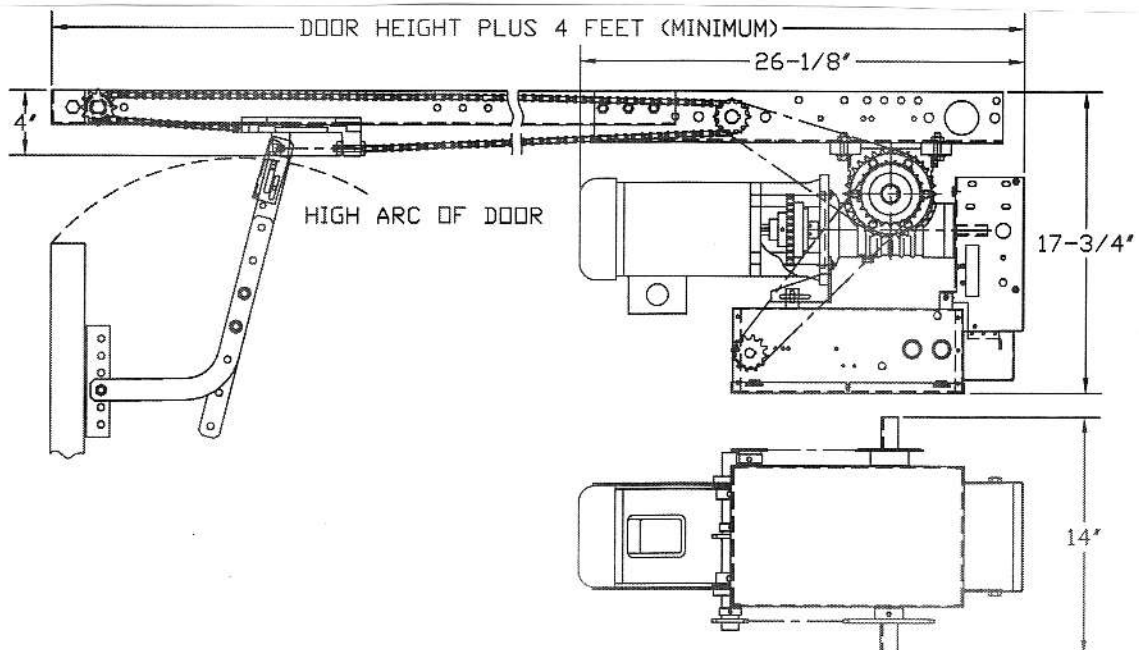
TRANSFORMER: 24VAC control circuit, supplies power to drive control relays with 15VA power available for external devices.

LIMIT ADJUSTMENT: 4 micro switches that control door travel. These limit switches are activated by fully adjustable screw type cams.

EMERGENCY DISCONNECT: Quick release disconnect door arm to allow person to disengage operator drive chain from door for manual operation.

CLUTCH: Adjustable in-line friction clutch to minimize damage to door operator, door or vehicles.

OPERATOR DIMENSIONS:



SAFETY INSTRUCTIONS**WARNING**

TO REDUCE THE RISK OF INJURY OR DEATH:
READ AND FOLLOW ALL INSTRUCTIONS

- Do not allow children to play with door.
- Before installation, be sure that operator is suited for type of door and application
- Connect a reversing device to prevent entrapment if door is located near pedestrian traffic.
- Place control device within clear sight of the door but at a minimum distance from the door so that user cannot reach moving door parts when operating.

- Outdoor external devices should have security features to prevent unauthorized operation of the door.
- Never cross under a moving door.
- Press the "OPEN" device or activate quick release disconnect device if a person is trapped under the door.

- Do not use disconnect mechanism or manually operate door unless power has been electrically disconnected.

- Keep doors properly maintained. Test door and service regularly. Have a qualified service person make repairs. *An unmaintained door system could cause injury or death.*

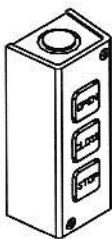
- The owner or users must understand the safety and operation of door system. Insure that this installation manual be located close to the door system.

INSTALLATION INSTRUCTIONS**WARNING**

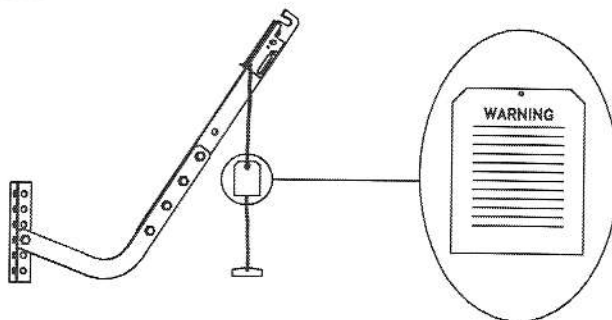
DO NOT INSTALL THIS OPERATOR
BEFORE READING THIS MANUAL CAREFULLY.

Note: Installation of operator must be done by a qualified installer. Door must be properly installed and working smoothly. Remove all door locks prior to installation.

1. Install control station away from all moving door parts, within sight of the door and a minimum of 5 ft (1.5 m) from the ground.
2. Install entrapment warning sign next to control station.

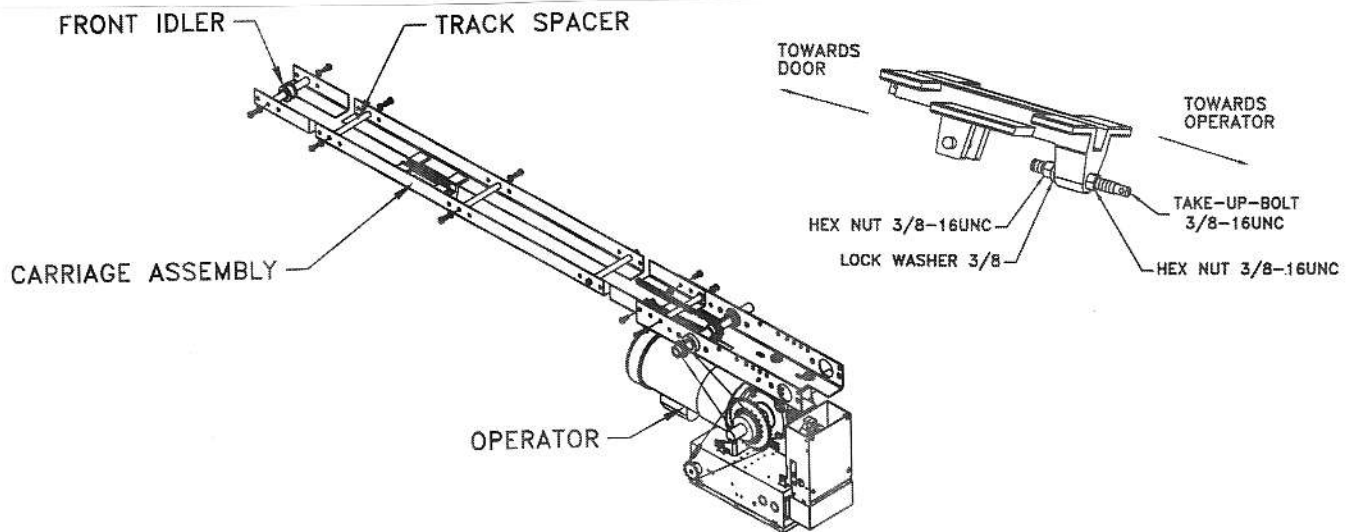


3. Do not remove emergency release tag attached to disconnect handle.

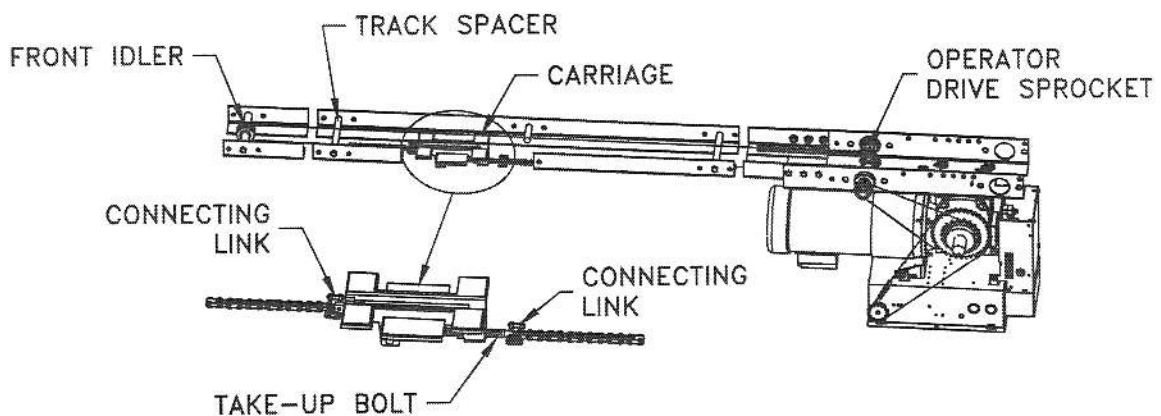


PREPARATION:

1. Lay out operator and trolley tracks on ground in front of door with door operator motor facing away from door.
2. Install track spacers evenly to track assembly.
3. Install 3/8" take-up bolt to carriage using two 3/8" hex nuts and lock washer provided.
4. Slide trolley carriage through end of tracks towards operator with take-up bolt facing operator.
5. Install front idler assembly to the second set of holes end of trolley tracks.
6. Bolt rail assembly to operator frame using four 3/8" x 3/4" bolts and 3/8" serrated hex nuts provided.



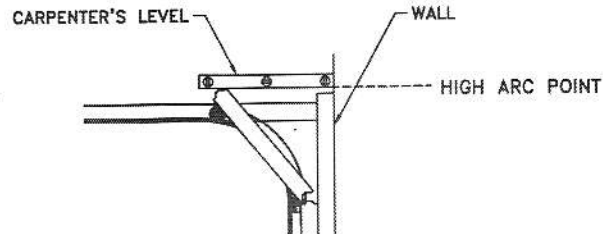
7. Attach one end of drive chain to carriage using connecting link provided. Run chain around front idler, over the track spacers, around drive sprocket and connect to take-up-bolt using connecting link provided. Adjust take-up-bolt so that chain sags approximately 3" (7.5 cm) at midpoint of tracks. Remove links from drive chain if necessary to make proper adjustment.



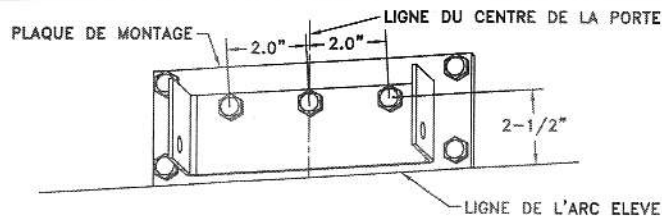
WALL MOUNTING BRACKET AND OPERATOR INSTALLATION:

NOTE: Trolley type operators should generally be mounted directly over the center of the door and the trolley tracks should clear the tracks by 2-1/2" (6.5 cm). However, if interfering structures or other reasons do not allow for centered mounting, it is possible to install it up to 18" off-center for torsion spring doors.

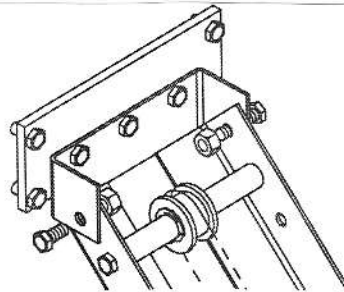
1. Locate the center of door by measuring door width and mark a vertical line above the door.
2. Determine the highest point of door travel by manually opening the door. Using a carpenter's level, project a line from where the top section of door reaches its highest point. Mark the spot where this line (high arc) intersects with the vertical line drawn earlier.



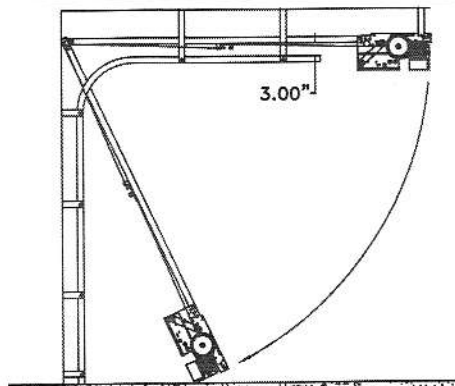
3. Mount a wood block or angle iron to the wall above the door opening as shown below. The wall mounting bracket has 3 holes for anchoring to wood block or angle iron. Bracket should be centered with door and positioned so that these holes are 2-1/2" (6.5 cm) above the high arc line of door. Secure wall mounting bracket using suitable hardware.



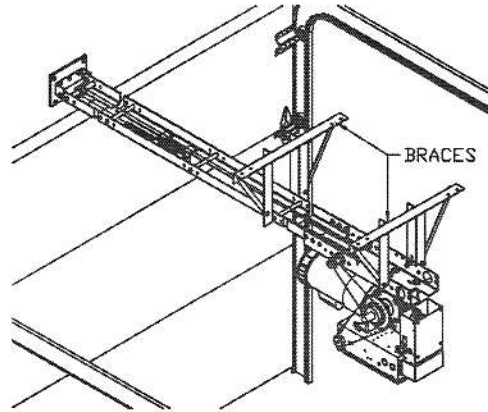
4. While allowing motor to rest on floor, raise front end of track assembly and secure (but not tighten) to wall mounting brackets with 3/8" bolts and nuts provided.



5. Swing the operator and track assembly above the level of the door tracks and temporarily secure in place with rope or chain. Carefully open door. Align operator and rails with center of door. Using the door as support, shim the operator so that there is 3" (7.5cm) clearance between door and bottom of operator. Tighten wall mounting bracket bolts.

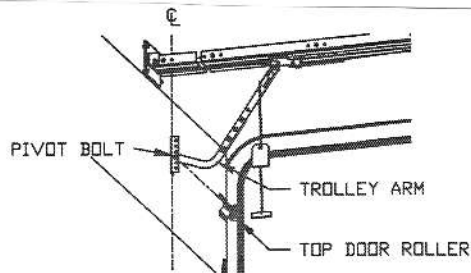


6. Install hanging brackets (braces) from ceiling or structure to any of the 3/8" holes located on operator frame. For tracks over 14' long it is recommended to install braces to the tracks at 4'(1.2m) to 5' (1.5m) from operator.

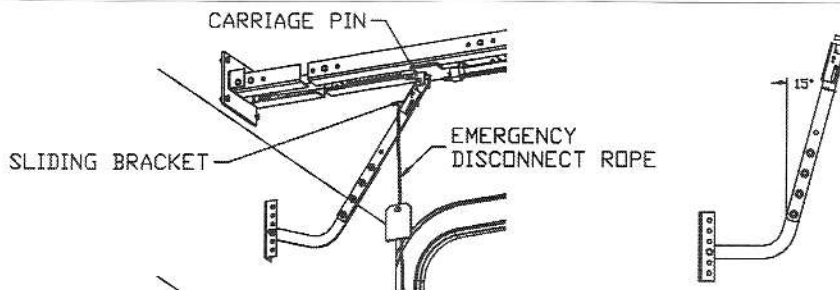


TROLLEY ARM INSTALLATION

1. Manually close door to fully closed position. Slide trolley carriage towards front idler and latch trolley arm to carriage spring pin by pulling on rope. When installed the open side of notch should face the door.
2. Using 3/8" bolts and nuts provided, align the mounting holes of straight arm and curved arm so that pivot bolt on door bracket is in line with the top rollers of the door. Align door bracket with centerline of door and secure to door using suitable hardware.

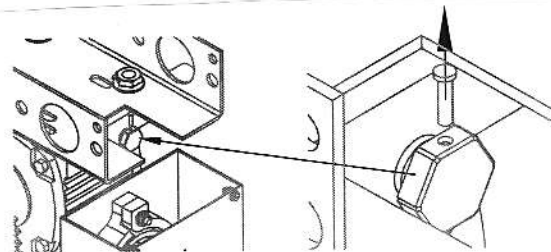


3. When properly installed the door arm should lean slightly away from door when door is fully closed.



4. At this time, check all bolts for tightness.
5. **After installation is complete, remove red activation pin on reducer breather plug.**

IMPORTANT



LIMIT SWITCH ADJUSTMENT

Adjustment of door travel is done by moving the limit cams on the threaded shaft. The position of the 4 limit switches are factory adjusted and should not be altered. The limit switches are:

- “Open” limit switch: End of door travel in the fully open position
- “Closed” limit switch: End of door travel in the fully closed position
- “Advanced Open” limit switch: Used for open/close devices or timer to close features
- “Advanced Closed” Limit switch: Used to prevent reversing device from reversing door when door is almost fully closed.

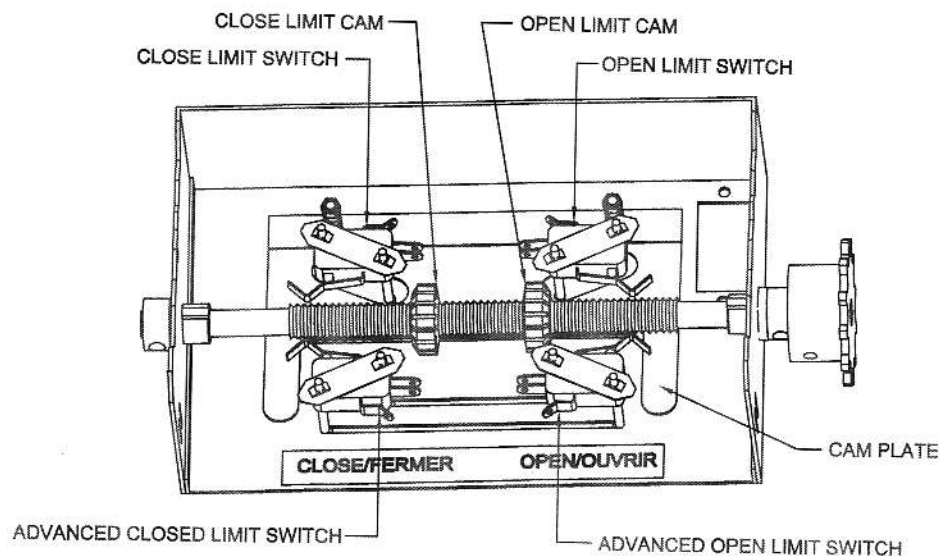
WARNING

TO REDUCE THE RISK OF INJURY OR DEATH:

DO NOT ATTEMPT TO MAKE LIMIT SWITCH ADJUSTMENTS
UNLESS POWER HAS BEEN ELECTRICALLY DISCONNECTED

To adjust door travel:

1. **Open cycle:** Depress cam plate and spin “Open” limit cam away from “Open” limit switch to increase door travel or spin “Open” limit cam towards the “Open” limit switch to decrease door travel. After each adjustment ensure that cam plate fully engages in slots of both limit nuts.
2. Adjust “Open” limit cam so that door stops at the desired fully open position.
3. **Close cycle:** Depress cam plate and spin “Close” limit cam away from “Close” limit switch to increase door travel or spin “Close” limit cam towards the “Close” limit switch to decrease door travel. After each adjustment ensure that cam plate fully engages in slots of both limit nuts.
4. Adjust “Close” limit cam so that door stops at the desired fully closed position.



CONNECTION OF POWER SUPPLY AND CONTROL STATION

WARNING

COMPARE AVAILABLE POWER SUPPLY VOLTAGE TO OPERATOR NAMEPLATE PRIOR TO ELECTRICAL CONNECTION. FAILURE TO CONNECT APPROPRIATE POWER SUPPLY VOLTAGE MAY CAUSE SERIOUS DAMAGE TO OPERATOR.

Refer to electrical diagrams inside control box cover or at the end of this manual prior to connection of power supply or control station.

WARNING

TO REDUCE THE RISK OF INJURY OR DEATH:

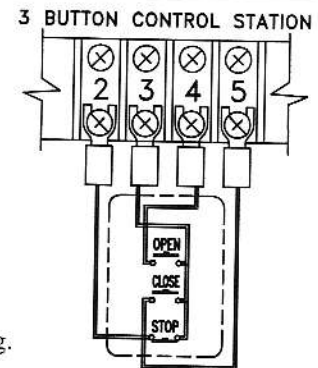
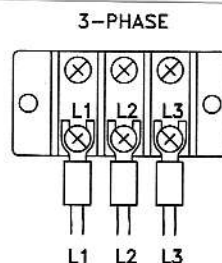
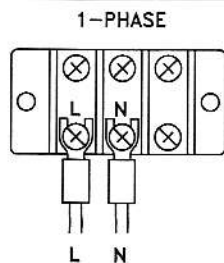
ALL ELECTRICAL CONNECTIONS SHOULD BE MADE BY A QUALIFIED SERVICE PERSON

DO NOT ATTEMPT TO MAKE ELECTRICAL CONNECTIONS TO OPERATOR UNLESS
POWER SUPPLY HAS BEEN DISCONNECTED AT FUSE BOX

OPERATOR MUST BE CONNECTED IN ACCORDANCE TO LOCAL ELECTRICAL CODES
AND GROUNDED TO GREEN GROUND LUG LOCATED INSIDE CONTROL BOX

POWER WIRING: Use 1-1/8" (2.85 cm) diameter holes for all power wiring.

1. Single phase: Connect single phase power supply to terminals L (line) and N (neutral) on three-pole power terminal strip.
2. Three-phase: Connect three phase power supply to terminals L1, L2 and L3 on three-pole power terminal strip.



CONTROL WIRING: Use 7/8" (2.22 cm) diameter holes for all control wiring.

Note: Do not run control wires and power wires in same conduit.

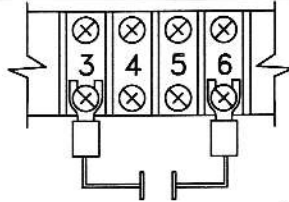
- Install control station within clear sight of door but away from all moving parts of door or hardware. Install Entrapment warning sign next to control station. Connect 3-button (open/close/stop) push button station to terminals 2, 3, 4 and 5. Refer to electrical diagram for connection of two 3-button stations.

NOTE: After electrical connections are made, manually move door to mid-position and, using the control station press the "Open" button for several seconds and then press the "Stop" button. If door did not move in correct direction verify wiring control station. For 3-phase operators, if door still moves in wrong direction reverse any two of the three incoming power supply leads to correct rotation.

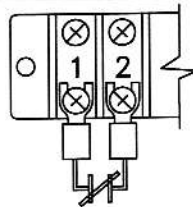
CONNECTION OF A REVERSING EDGE DEVICE AND CONTROL ACCESSORIES

1. **Reversing Edge device** (must be normally open contact):

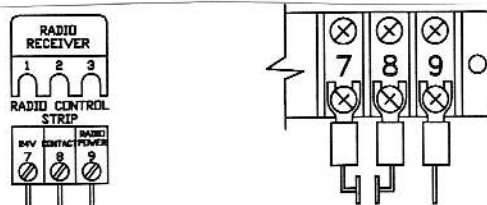
Note: If the door is controlled by any device or wired in such a manner that the door is not controlled by constant pressure on close then an appropriate reversing edge must be installed.



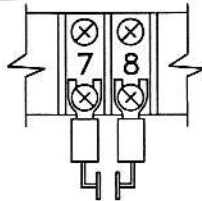
2. **External interlock:** Remove jumper between terminals 1 and 2 and wire interlock between these two terminals.



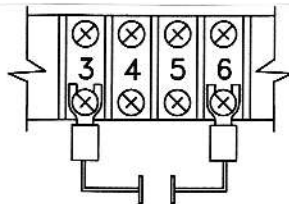
3. **Radio control receiver:** Wire standard radio receiver to separate radio strip on side of control box or to terminals 7, 8 and 9 on control terminal strip inside control box.



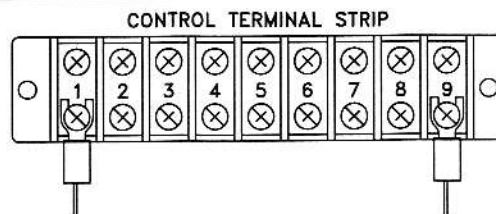
4. **Single button open/close device:** Wire to terminals 7 and 8 on control terminal strip.



5. **Loop detectors, photocells and other reversing devices:** Wire to terminals 3 and 6 on control terminal strip.

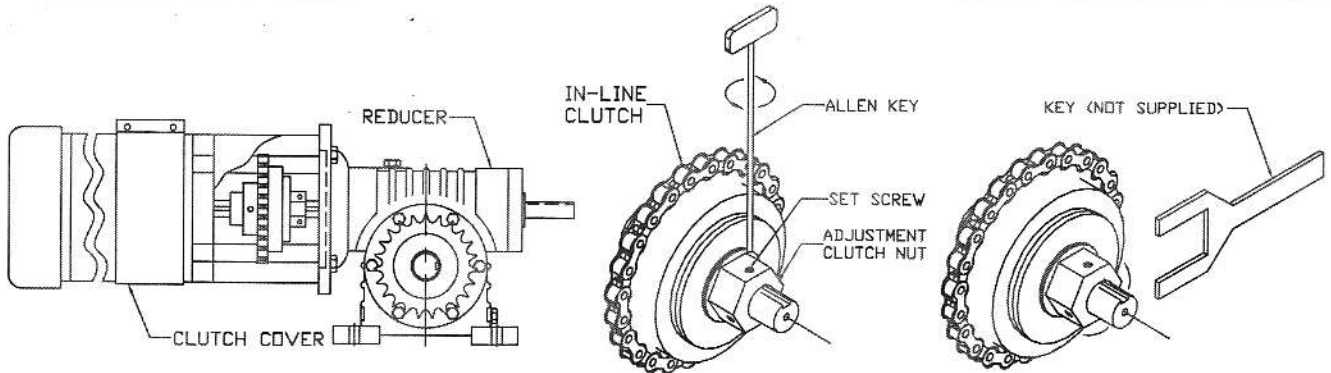


6. **24 Volt power:** Wire to terminals 1 and 9 on control terminal strip



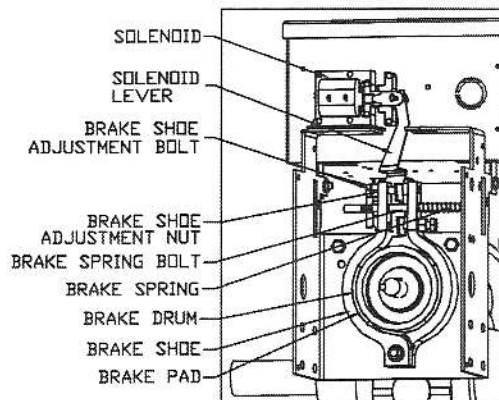
CLUTCH ADJUSTMENT

1. Loosen bolts on clutch cover and slide cover towards motor to access clutch.
2. Loosen the two set screws on clutch adjustment nut.
3. Rotate clutch nut counterclockwise (loosen) until there is insufficient tension to permit clutch to drive door. NOTE: When adjusting nut, make sure to secure input shaft to not allow shaft to rotate when tightening or loosening nut.
4. Gradually tighten clutch nut (adjust ¼ turn at a time) until the tension is sufficient to permit clutch to drive door smoothly but will allow clutch to slip if door is obstructed. It should be possible to stop moving door by hand if clutch is properly adjusted.
5. Tighten the 2 set screws after each time the unit is tested for clutch adjustment. After adjustment is completed make sure set screws are locked in place. Re-install clutch cover.



BRAKE ADJUSTMENT

- The brake adjustment is factory set and should only require minor adjustment after extensive use.
- Verify brake adjustment by manually holding in solenoid plunger. When brake is properly adjusted, the brake shoe pads should make complete contact with brake drum with sufficient brake spring tension to stop and maintain door when solenoid is de-energized. When solenoid is energized, brake shoes should release from drum with sufficient clearance to avoid contact between shoes and drum.
- To adjust brake tension, tighten (to increase) or loosen (to decrease) nylon lock nut on brake spring bolt. Observe solenoid during electrical testing of brake. Brake spring tension must be adjusted so that solenoid should pull and release smoothly and quietly. Too much or too little tension on brake spring may cause solenoid to burn out.
- To adjust individual brake shoes, loosen nut on brake shoe adjustment bolt and adjust bolt. When properly adjusted, there should be a small clearance between adjustment bolt and solenoid bracket when solenoid is de-energized. When solenoid is energized, brake shoes should move away from drum with sufficient clearance to avoid friction between brake shoe pad and drum. After adjustments are made be sure to tighten nuts on brake shoe adjustment bolts.



EMERGENCY MANUAL OPERATION

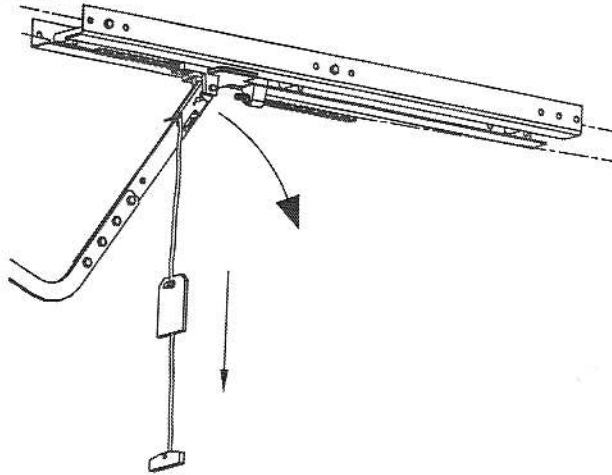
- The operator is equipped with a quick release disconnect system to manually operate door in case of emergency. This feature should not be used to manually operate a malfunctioning door.

WARNING

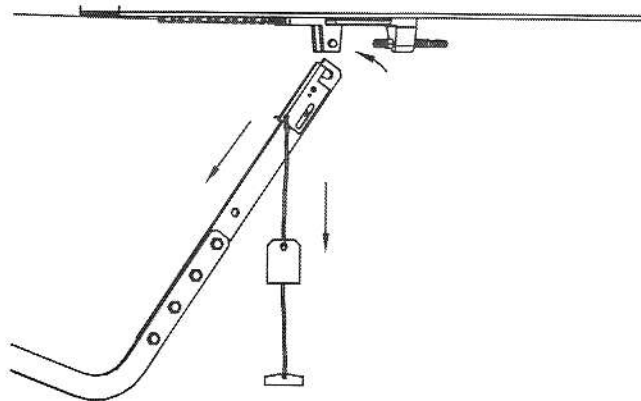
TO REDUCE THE RISK OF INJURY OR DEATH:

DO NOT ATTEMPT TO USE EMERGENCY DISCONNECT SYSTEM WHILE OPERATOR IS RUNNING.

TO AVOID BEING STRUCK BY DOOR ARM, DO NOT STAND DIRECTLY UNDER THE RELEASE ARM WHEN PULLING THE RELEASE CORD.



1. Pull the release cord downwards to disconnect trolley arm from carriage and manually operate door.
2. To reconnect door arm to carriage, pull emergency release cord and re-insert trolley arm to trolley carriage spring pin.



OPERATOR MAINTENANCE**WARNING**

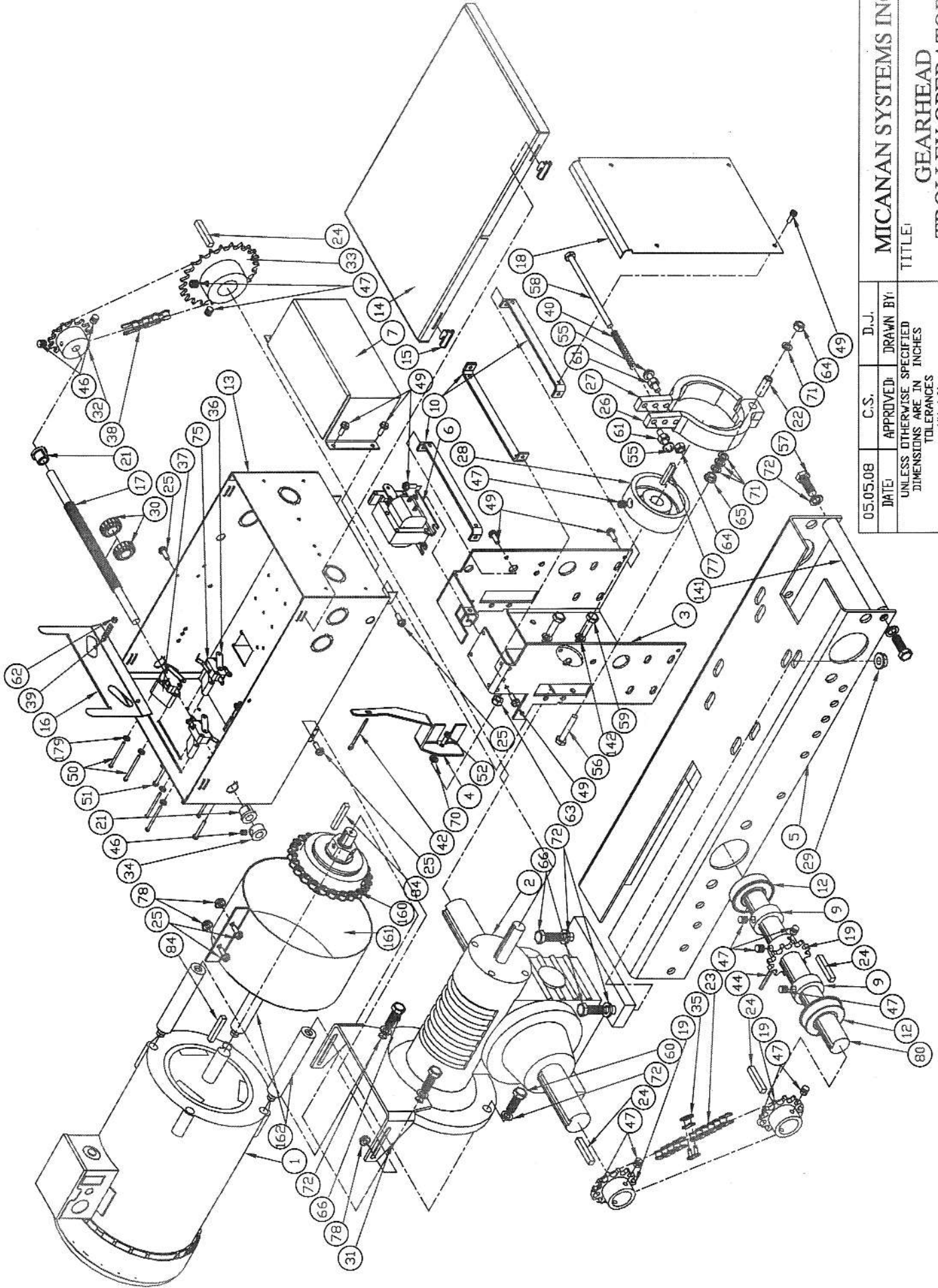
TO REDUCE THE RISK OF INJURY OR DEATH:
DO NOT ATTEMPT TO SERVICE THE OPERATOR UNLESS
POWER SUPPLY HAS BEEN DISCONNECTED

- Inspect manual function of the door every 3-months. Make sure that door runs smoothly. If door does not manually open or close freely, have a qualified service person make repairs. Do not attempt to electrically operate a malfunctioning door.

- Every 3 months:
 1. Verify that door area is kept clean. Remove any obstructions that would prevent proper door operation.
 2. Check for any excessive slack in chains. If chain adjustment is required verify and adjust limit switches, if necessary.
 3. Verify and adjust clutch and brake (Do not lubricate).
 4. Lubricate chains, bearings and limit shaft.
 5. Verify that motor, solenoid and operator runs smoothly and quietly. Verify that carriage runs smoothly on tracks.

- Every 6 months:
 1. Verify tightness of all fasteners and set screws.
 2. Verify that operator is properly secured.
 3. Inspect manual disconnect.

- Every 12 months:
 1. Perform a complete service check.
 2. Verify that inside of control box is clean and that grounding wires, terminations and power terminations do not show signs of corrosion.
 3. Verify tightness of all terminal strip screws and electrical connections.
 4. Verify power supply, voltage of input terminals during operation.
 5. Verify that current consumption of operator corresponds to nameplate information



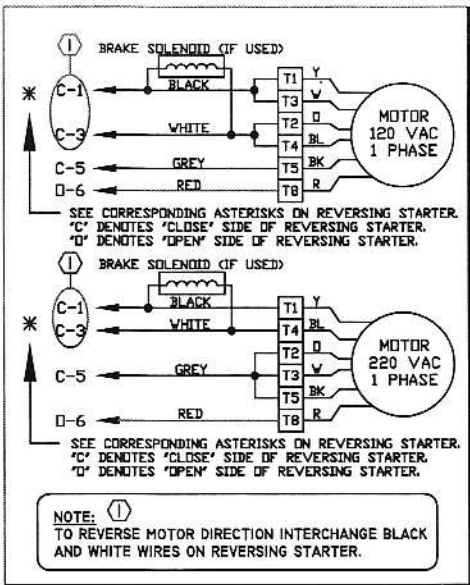
05.05.08	C.S.	D.J.
DATE	APPROVED	DRAWN BY
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES XX=±.01 ANGLES=±30°		

MICANAN SYSTEMS INC.
 TITLE:
 GEARHEAD
 TROLLEY OPERATOR
 PRO-GT R55
 WEIGHT: 1lb SIZE: B PAGE: 1/1
 CAD FILE:3D-PROGT R55-XE SCALE: 1:6

REVISION:A

Replacement parts list PRO-GT

CODE	PART #	DESCRIPTION (PRO-GT)	QTY
*	1	MOTOR	1
MC00044	2 A	GEAR REDUCER CH 55 20:1 (1/2, 3/4, 1HP)	1 *
MC00045	2 B	GEAR REDUCER CH 70 20:1 (1.5, 2HP)	1 *
MM00004	3	FRAME GEARHEAD MSI0030	1
MM00015	4	SOLENOID LEVER GEARHEAD MSI0031	1
MM00009	5	GT TUNNEL FRAME MSI0047	1
MK00026	6 A	SOLENOID 120V	1 *
MK00027	6 B	SOLENOID 220V	1 *
MK00028	6 C	SOLENOID 460V	1 *
MK00029	6 D	SOLENOID 575V	1 *
MM00012	7	SOL-COVER GEARHEAD MSI0032	1
MH00007	9	COLLAR 1" ID	2
MM00007	10	GEARHEAD FRAME SUPPORT C-BRACKETS MSI0036	3
MH00009	12	FLANGE BEARING 1" IDx2"OD	2
MM00002	13	CONTROL BOX MSI0001	1
MM00001	14	CONTROL BOX COVER MSI0005	1
MM00046	15	CONTROL BOX HINGE	2
MM00024	16	CAM PLATE MSI0013	1
ME00001	17	LIMIT SHAFT 3/8-1/2 x 9.75"	1
MM00005	18	BACK COVER (FRAME PRO-G) MSI0037	1
MD00300	19	SPROCKET 41B14 X 1"	3
MH00001	21	BRONZE T-BUSHING 3/8" ID	2
MH00002	22	MILD STEEL BUSHING 9/32ID x 13/32OD x1-1/16	1
MD00029	23	#41 DRIVE CHAIN (63 LINKS (#55 RED), 65 LINKS (#70 RED))	1
ME00017	24	KEYWAY 1/4" SQ. x 1-1/4" LG	4
MF00046	25	H.H. SLOTTED SELF ROUNDING WASHER HEAD SCREW 10-32 UNF x 1/2"	7
MJ00001	26	BRAKE SHOE LEFT	1
MJ00002	27	BRAKE SHOE RIGHT	1
MJ00003	28	BRAKE DRUM	1
MG00013	29	RIBBED HEX NUT 3/8" - 16UNC	4
MG00030	30	LIMIT CAM 1/2-20 UNF	2
MM00027	31	REAR BRACKET GH (RED 55, 63, 70, 80) (MSI0038)	1
MD00005	32	SPROCKET 410B12 X 3/8"	1
MD00025	33	SPROCKET 410B23 x 1" bore	1
MH00006	34	COLLAR 3/8 ID	1
MD00036	35	CONNECTING LINK #41	1
MG00003	36	DOUBLE NUT FOR LIM-SW.	4
MJ00006	37	LIMIT SWITCH DOUBLE SPACER 3/4" LONG	4
MD00225	38 A	#410 ROLLER CHAIN 67 LINKS C/W CON. LINK (FOR REDUCER #55)	1 *
MD00226	38 B	#410 ROLLER CHAIN 69 LINKS C/W CON. LINK (FOR REDUCER #70)	1 *
MO00001	39	CAM PLATE COMPRESSION SPRING (.178IDx.032GX.55L)	2
MO00002	40	BRAKE COMPRESSION SPRING (5/16"ID-.05G-2.50L)	1
MQ00001	42	COTTER PIN 1/8 x 1.5	1
MQ00005	44	SPRING PIN 3/16" x 1-1/2" Long	1
MQ00009	46	SET SCREW 1/4" - 20	3
MQ00008	47	SET SCREW 5/16" -18	12
MF00045	49	H.H. SLOTTED SELF ROUNDING WASHER HEAD SCREW 8-32UNF x 3/8"	18
MF00003	50	R.H. PHILLIPS MACHINE SCREW 4-40 UNCx1-1/2	8
MF00004	51	R.H. PHILLIPS MACHINE SCREW 6-32 UNC x1	2
MF00005	52	R.H. PHILLIPS MACHINE SCREW 10-32 UNF x 5/8"	1
MF00048	55	ROUND HEAD SLOTTED BOLT 1/4-20UNCx1-1/4" (Full thread)	2
MF00076	56	HEX HEAD BOLT 1/4-20UNC x 2" (full thread)	1
MF00011	57	HEX HEAD BOLT 3/8" - 16UNC X 3/4"	2
MF00044	58	HEX HEAD BOLT 1/4-20UNC x 4" (Not full thread)	1
MF00032	59	H.H. BOLT 5/16"-18UNC X 3/4" LONG	4
MF00019	60	HEX HEAD BOLT 3/8-16UNC x 1 (Full thread)	2
MG00006	61	HEX NUT 1/4-20UNC	2
MG00007	62	HEX NYLON LOCK NUT 6-32UNC	2
MG00008	63	HEX NYLON LOCK NUT 10-32 UNF	1
MG00009	64	HEX NYLON LOCK NUT 1/4-20UNC	2
MG00011	65	RIBBED HEX NUT 1/4-20UNC	1
MF00020	66	HEX HEAD BOLT 3/8-16UNC x 1-1/4" (Full thread)	6
MG00016	70	#10 FLAT WASHER	1
MG00017	71	1/4" FLAT WASHER	4
MG00018	72	LOCK WASHER 3/8"	10
MK00004	75	LIMIT SWITCH (STANDARD)	4
ME00018	77	KEYWAY 3/16 SQ. x 1-1/4" LONG	1
MG00010	78	RIBBED HEX NUT 10-32 UNF	4
ME00006	80	INTERMEDIARY SHAFT (PRO-HHD/GT) 1" X 10-7/16"	1
ME00055	84	KEYSTOCK 3/16" X 1-3/4" LONG	2
ME00050	141	FRAME SUPPORT SHAFT 3/4" X 6" LONG	1
MG00042	142	LOCK WASHER 5/16"	4
MX00031	160	IN-LINE TORQUE CLUTCH ASSEMBLY	1
MM00198	161	CLUTCH COVER (MSI0199)	1
ME00051	162	IN-LINE CLUTCH SUPPORT SHAFT	4
MG00093	179	FLAT WASHER #8	4



FOR 220V: REMOVE BLACK WIRE FROM C6 AND PLACE ON O4 JUMPER NOT REQUIRED (PLEASE REMOVE)

NOTE:

- MOTOR RELAY(M), TRANSFORMER AND SOLENOID (IF APPLICABLE) MUST BE 220V.
- CIRCUIT BREAKER MUST BE APPROPRIATE AMPERAGE.
- MOTOR MUST BE WIRED FOR 220V AS SHOWN ABOVE.

IF STOP BUTTON NOT USED, ADD JUMPER BETWEEN 2 & 3.

TIME DELAY UPON REVERSE. (OPTIONAL)
 IF 1.5 SEC TIME-DELAY UPON SAFETY REVERSE IS REQUIRED. REMOVE THE PURPLE WIRE FROM TERMINAL #4, AND CONNECT TO ONE END OF TIME-DELAY AND OTHER END, BACK TO TERMINAL #4.

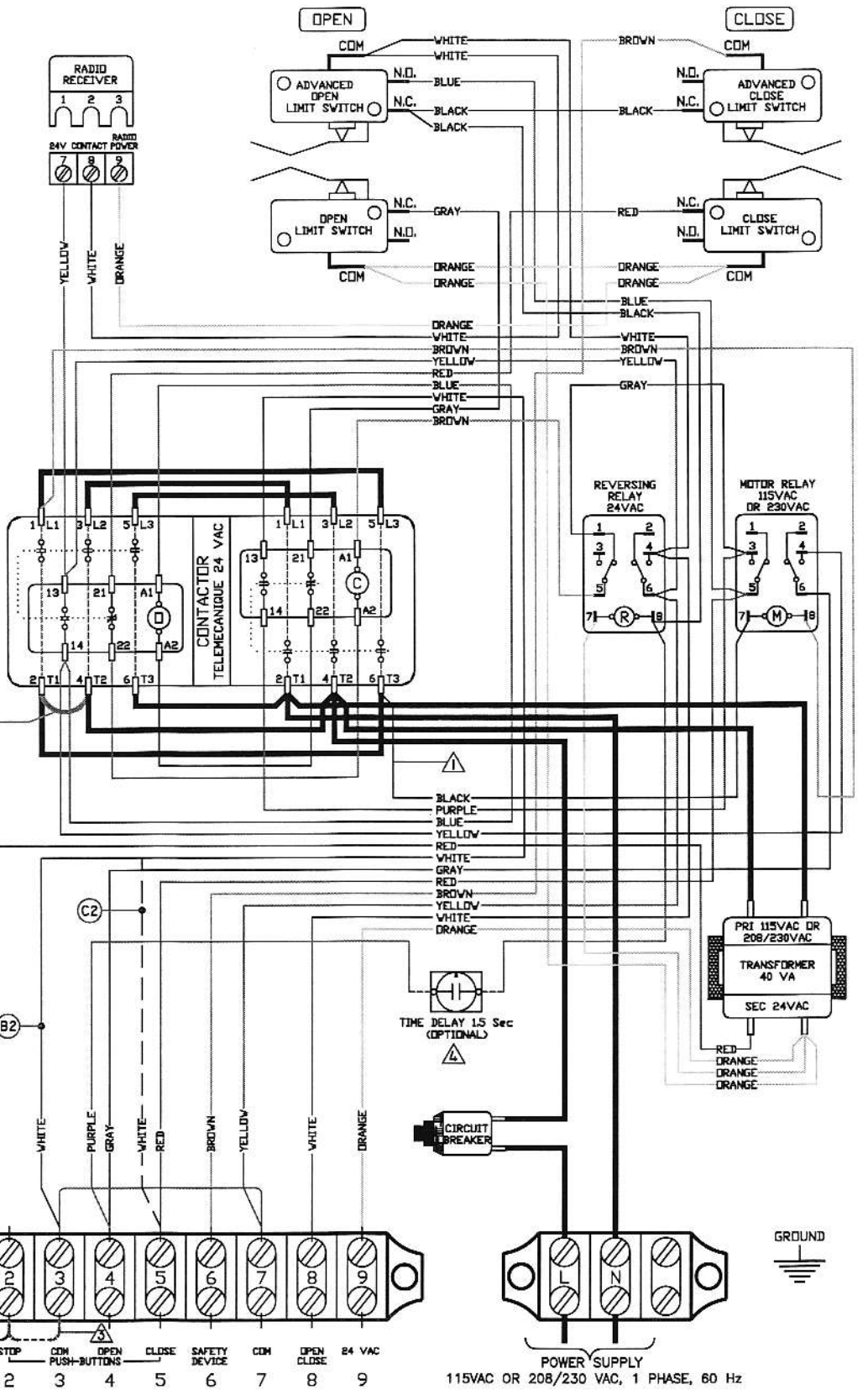
NOTE: (C2/B2)
 CONTROL WIRING OPTION ON CLOSE:

(C2) THIS OPERATOR LEAVES THE FACTORY WITH A 'C2' WIRING - MEANING THAT CONSTANT PRESSURE IS REQUIRED TO CLOSE THE DOOR.

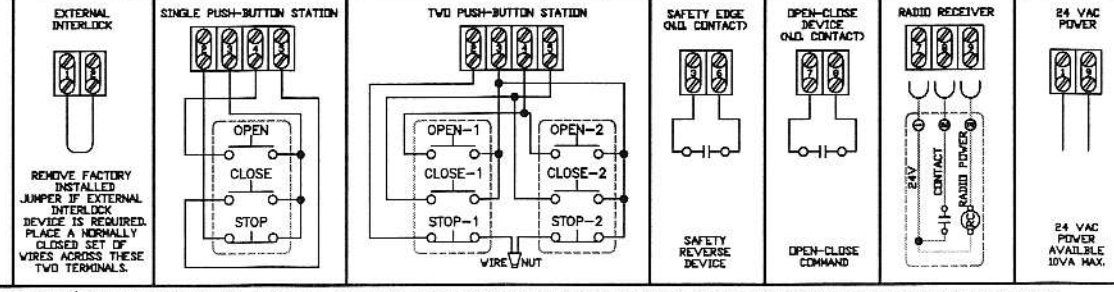
(B2) IF MOMENTARY OPERATION ON CLOSE ('B2' WIRING) IS DESIRED, THEN REMOVE THE WHITE WIRE FROM TERMINAL #5 AND PLACE IT ON TERMINAL #3.

WARNING
 MICANAN STRONGLY RECOMMENDS THE USE OF ENTRAPMENT PROTECTION SYSTEMS WHEN B2 (MOMENTARY CONTACT) WIRING IS USED.

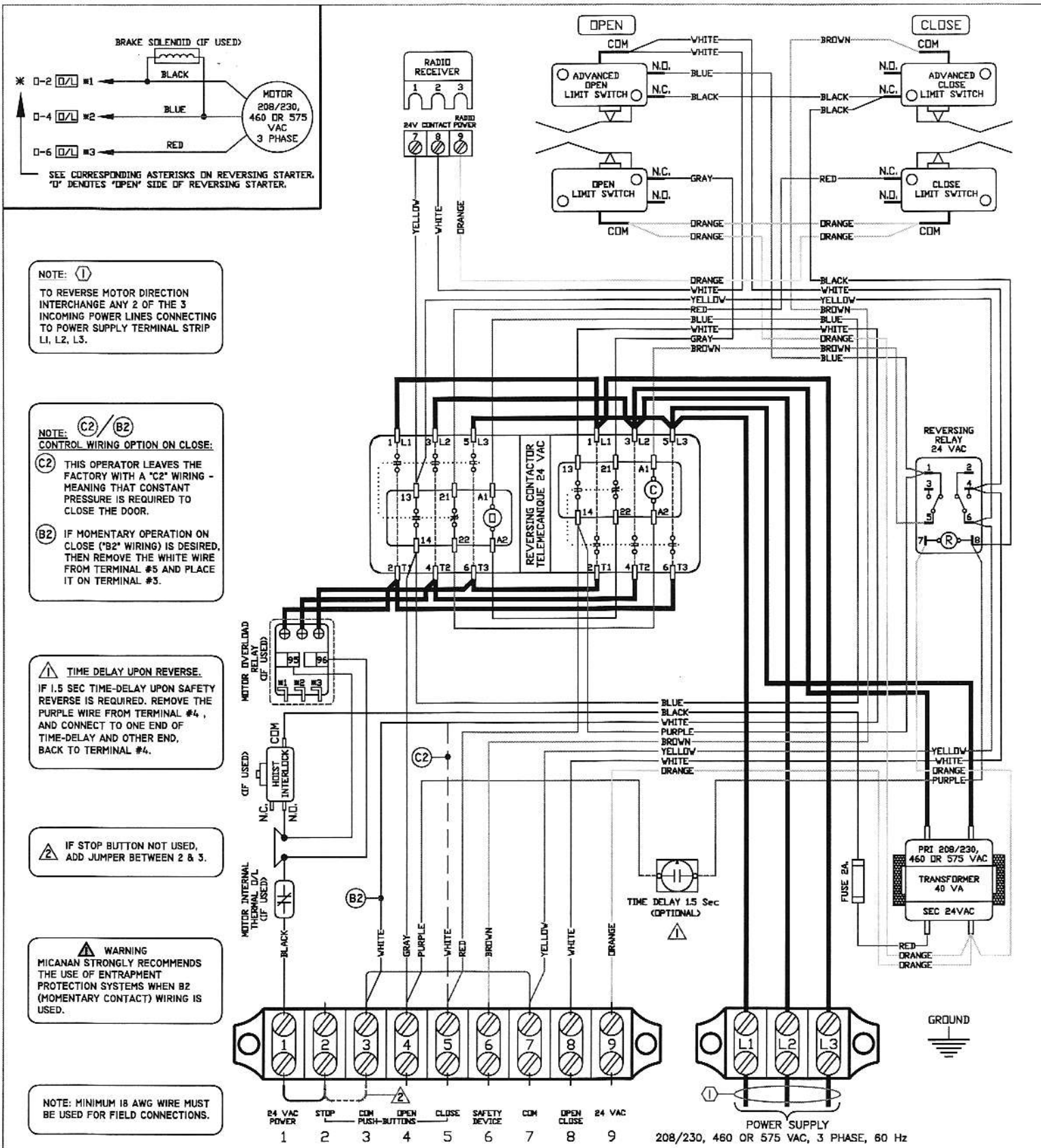
NOTE: MINIMUM 18 AWG WIRE MUST BE USED FOR FIELD CONNECTIONS.



I- PHASE WIRING DIAGRAM
 MSI00-WW
 REV. F DATE: 07.01.07
 TECH. HELP LINE:
 CANADA: 1-(877) 888-1116
 USA: 1-(888) 816-8584



THE INFORMATION CONTAINED HEREIN IS PROPRIETARY TO MICANAN SYSTEMS INC. AND SHALL NOT BE REPRODUCED OR DISCLOSED OR USED FOR ANY DESIGN OR MANUFACTURE EXCEPT WHEN USER POSSESSES DIRECT WRITTEN AUTHORISATION FROM MICANAN SYSTEMS INC.



NOTE: ①
 TO REVERSE MOTOR DIRECTION INTERCHANGE ANY 2 OF THE 3 INCOMING POWER LINES CONNECTING TO POWER SUPPLY TERMINAL STRIP L1, L2, L3.

NOTE: C2/B2
CONTROL WIRING OPTION ON CLOSE:
C2 THIS OPERATOR LEAVES THE FACTORY WITH A "C2" WIRING - MEANING THAT CONSTANT PRESSURE IS REQUIRED TO CLOSE THE DOOR.
B2 IF MOMENTARY OPERATION ON CLOSE ("B2" WIRING) IS DESIRED, THEN REMOVE THE WHITE WIRE FROM TERMINAL #5 AND PLACE IT ON TERMINAL #3.

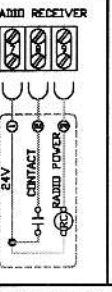
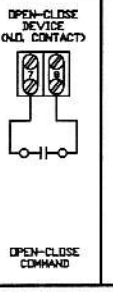
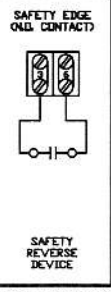
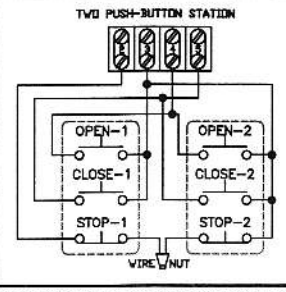
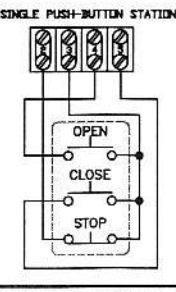
⚠ TIME DELAY UPON REVERSE.
 IF 1.5 SEC TIME-DELAY UPON SAFETY REVERSE IS REQUIRED. REMOVE THE PURPLE WIRE FROM TERMINAL #4, AND CONNECT TO ONE END OF TIME-DELAY AND OTHER END, BACK TO TERMINAL #4.

⚠ IF STOP BUTTON NOT USED,
 ADD JUMPER BETWEEN 2 & 3.

⚠ WARNING
 MICANAN STRONGLY RECOMMENDS THE USE OF ENTRAPMENT PROTECTION SYSTEMS WHEN B2 (MOMENTARY CONTACT) WIRING IS USED.

NOTE: MINIMUM 18 AWG WIRE MUST BE USED FOR FIELD CONNECTIONS.

3-PHASE WIRING DIAGRAM
MS300-WW
 REV. F DATE: 07.01.07
 TECH. HELP LINE:
 CANADA: 1-(877) 888-1116
 USA: 1-(888) 816-8584



WARRANTY

MICANAN SYSTEMS warrants that materials and workmanship are free from defects for a period of two years from the date of invoice. Materials returned to Micanan deemed defective after examination will be returned at the option of Micanan with repaired, new or re-manufactured parts.

MICANAN SYSTEMS will not be responsible for any extra charges incurred in the process of returning defective material. All returned material must be received pre-paid or it will not be accepted.

This warranty is limited, and in lieu of all other warranty expressed or implied. There is no expressed liability due on the part of the seller.



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