

Installing Door Interlock Kit on GT75

Overview:

Magnetic Reed switch goes in series with spindle fault line at TB1 between 26 and 27; since about April 1998 there is jumper to remove because GTJr hatch is wired there.

Magnet on door holds switch closed while door is closed.

Key operated bypass is installed on spindle drive door and wired in parallel with reed switch to allow qualified service personnel to operate machine with door open.

Parts list:

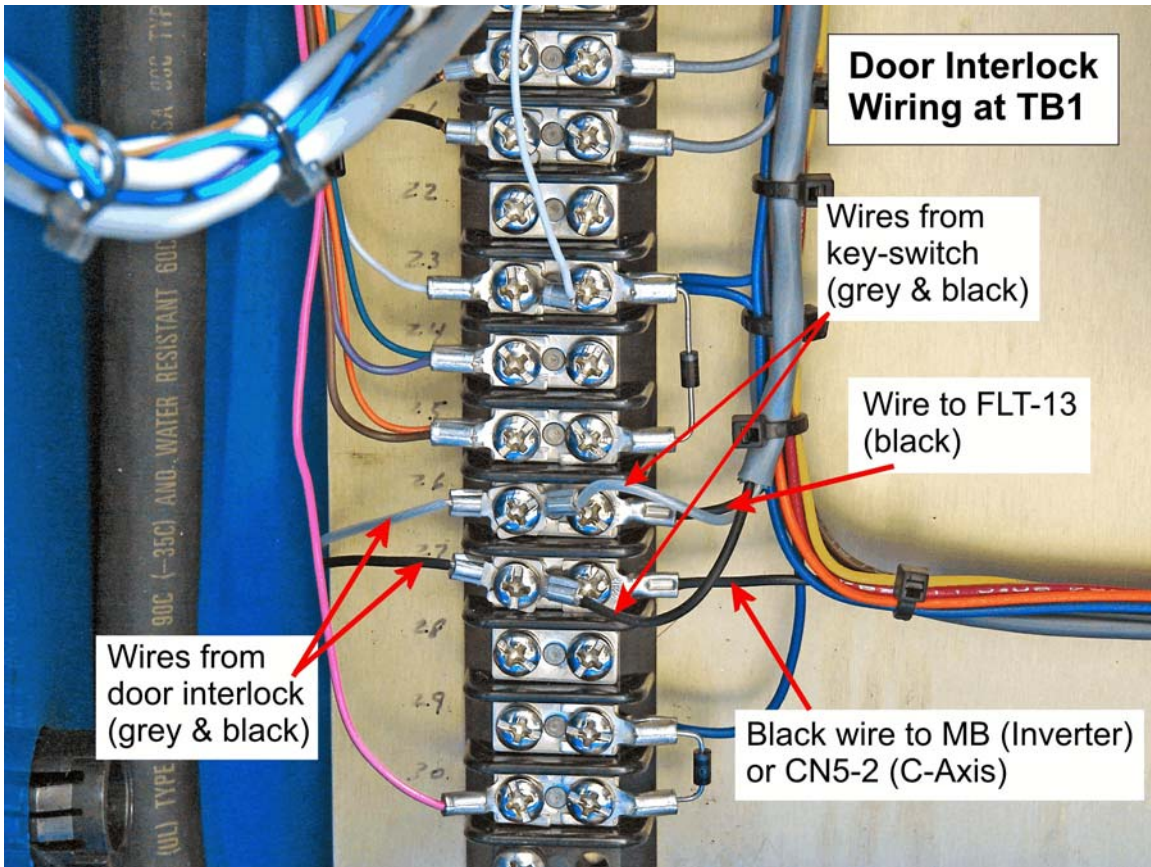
Screw, 10-32 x 3/4	3	Reed Switch	1
Nut, 10-32	2	Key Switch with cable	1
Screw, 8-32 x 3/4	2	Liquid-tight feed-thru	1
Screw, 8-32 x 1	2	Standoff, #8 x 1/2	2
Nut, 8-32	4	Standoff, #10 x 1/8	2
Cable, 2 cond 22 ga	11'	Cable Tie, Screw Mount	3
Label, "Door Interlock"	1	Cable Tie, small	6
Label, "Interlock Override"	1	Self-adhesive zip-tie mount	2
		Cable Tie, medium	3
		Rubber plug for feed thru	1

Procedure:

1. Drill two #15 holes and mount magnet on inside of upper right corner of lexan door according to dimensions on "Mounting the Door Interlock Switch".
2. Replace two 10-32 x 3/8 button heads holding upper door track with 10-32 x 3/4.
3. Make small loop with two zip-ties cut excess and secure to 3/4" screws with nuts.
4. Drill two #15 holes in front panel to mount door switch according to dimensions on "Mounting the Door Interlock Switch". Use 8-32 x 1 screws and #8 stand-offs.
5. Route cable from door switch through cable ties into spindle compartment.
6. Use two more cable ties secured to bulkhead according to "Routing the Door Interlock Cables".
7. Install Liquid-tight feed-thru in hopper to route cable through hopper.
8. **C-Axis:** Cut hole in rubber plug in spindle cabinet to route cable to TB1.
5hp: Punch 3/4" knock-out in side of cabinet and install rubber plug.
9. Drill 3/4" hole in spindle drive cabinet door to accommodate key switch.
10. Route cable with other wires along side of cabinet, down and over to TB1.
11. Remove jumper between TB1-26 and TB1-27.
12. Connect wires from each cable to TB1-26 and TB1-27
13. Install "Door Interlock" label on front panel to right of door opening.
14. Install "Interlock Override Switch" label on spindle cabinet above key-switch.

This completes the installation. Machine will not run unless door is closed. Machine will stop if door is opened. To run machine with door open, key switch must be "on". Key cannot be removed from switch in "on" position.

Door Interlock Wiring at TB1



Door Interlock Label

(print and laminate for front panel)

DOOR INTERLOCK

Door Interlock at this door will put machine into Soft E-Stop, same as Palm Box E-Stop.

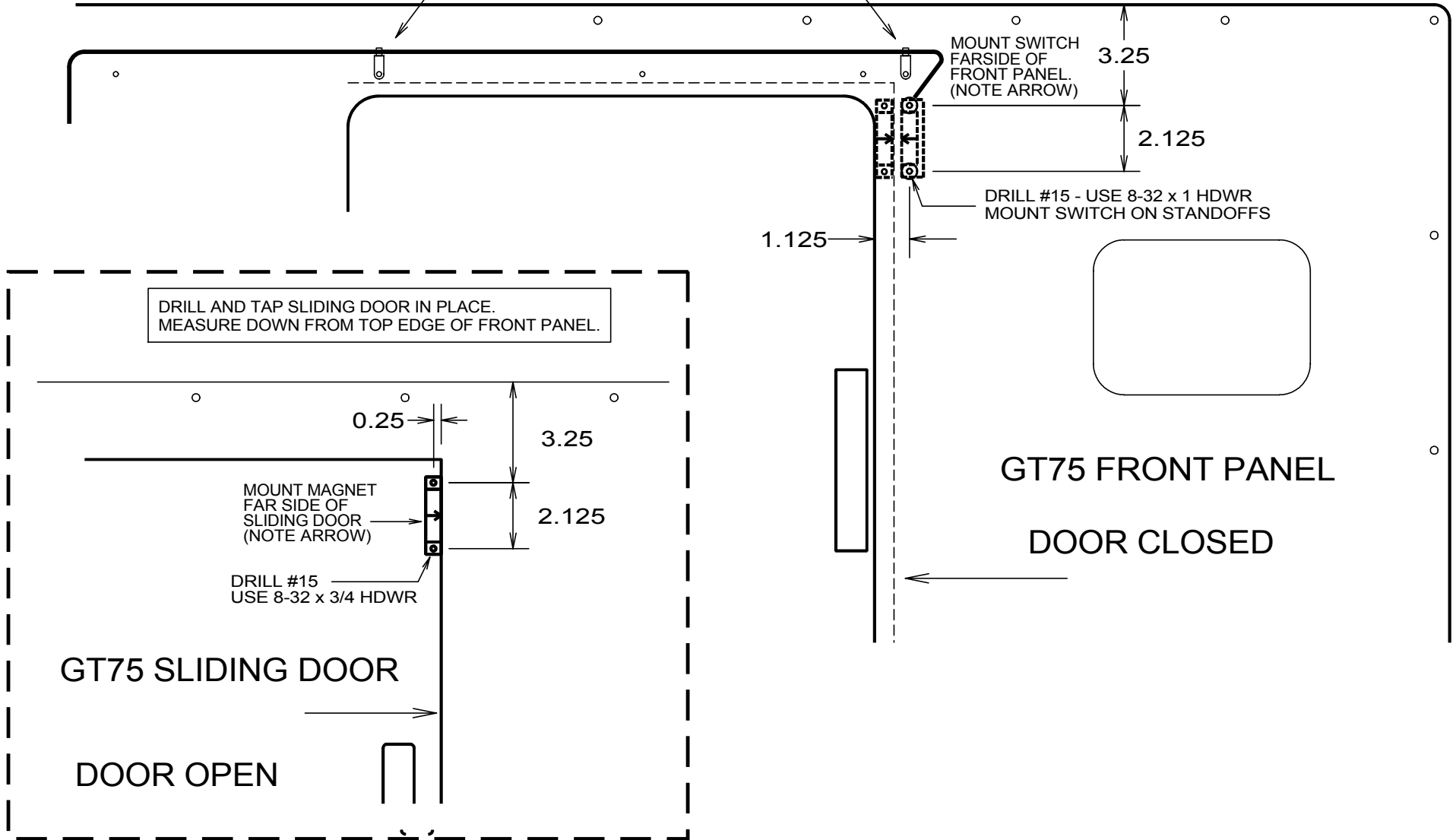
If door is open *before* pressing Cycle Start, program will not start: Main OmniTurn Menu will appear. Secure door, select Automatic Mode then press Cycle Start.

If door is opened *while* program is running, all motion will stop and Main OmniTurn Menu will appear. Secure door, select Jog Mode then send slide Home (H,Z,X) before re-starting program.

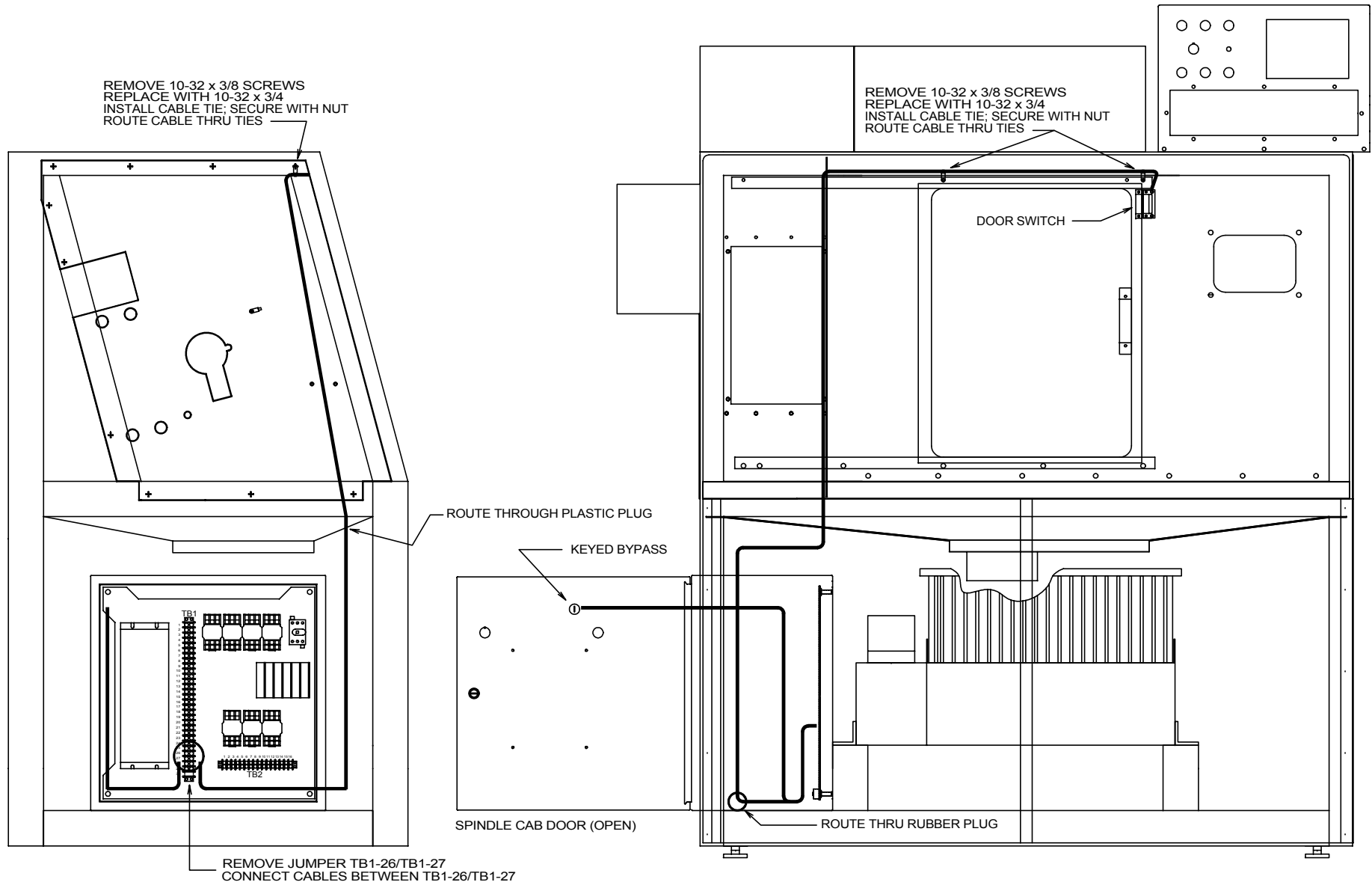
If door is opened during *threading cycle*, all motion will stop as above, but CNC Control must be shut off, then on to re-boot.

Service personnel: use keyswitch to bypass

REMOVE 10-32 x 3/8 SCREWS 2 PLCS
REPLACE WITH 10-32 x 3/4
INSTALL CABLE TIE ON STANDOFF; SECURE WITH NUT
ROUTE CABLE THRU TIES



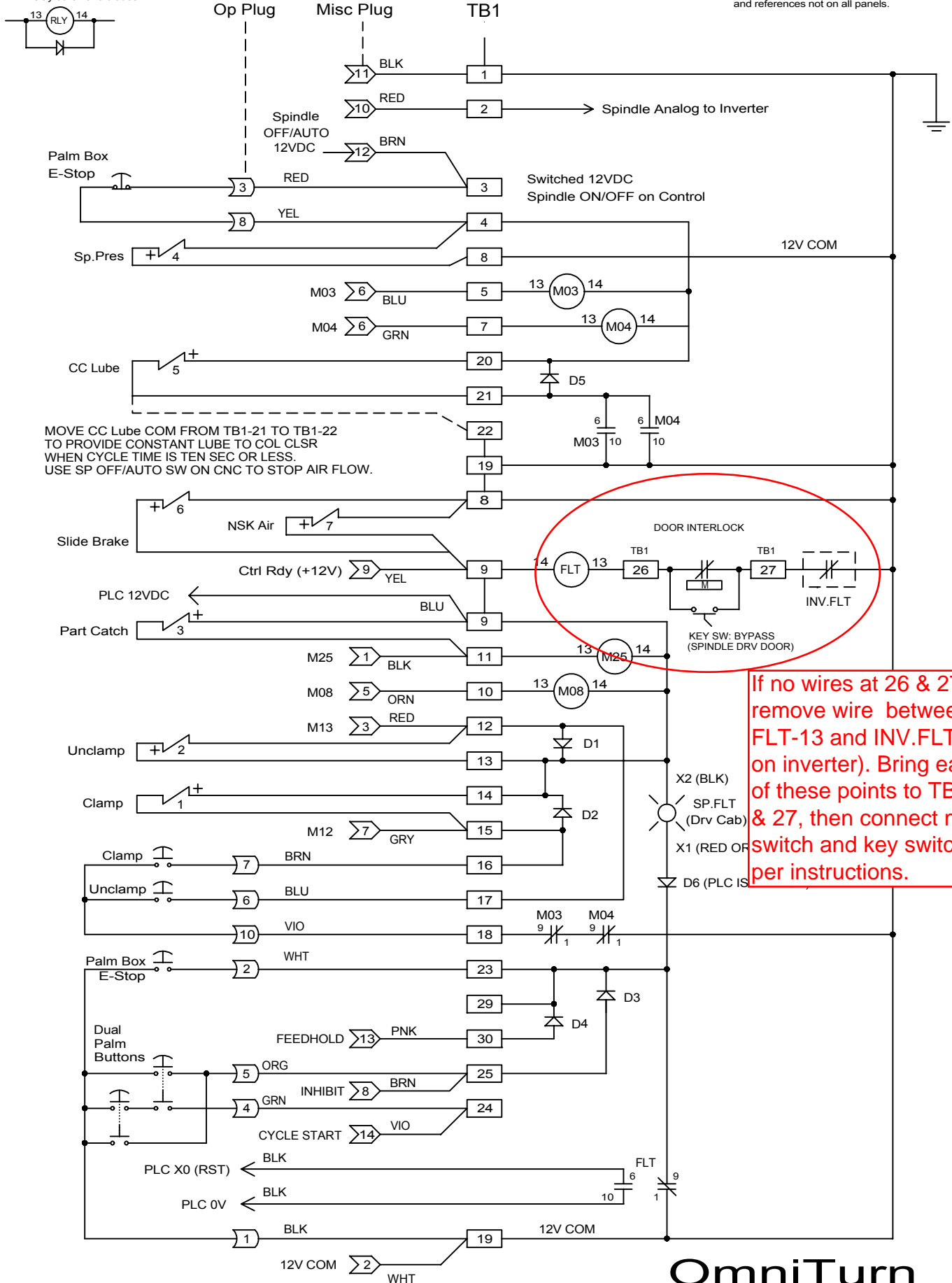
MOUNTING THE DOOR INTERLOCK SWITCH OmniTurn GT-75

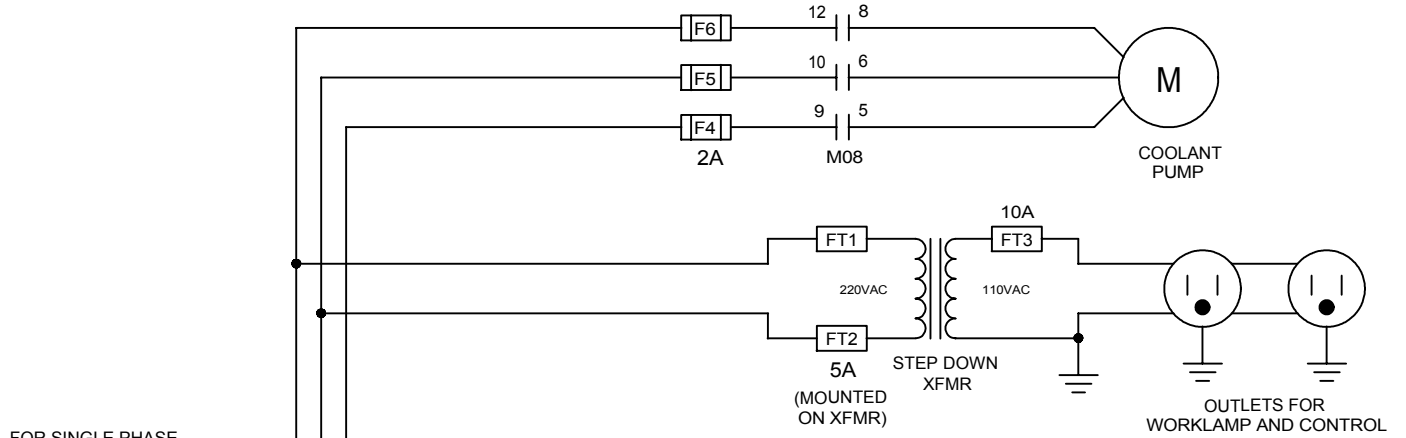


ROUTING THE DOOR INTERLOCK CABLES

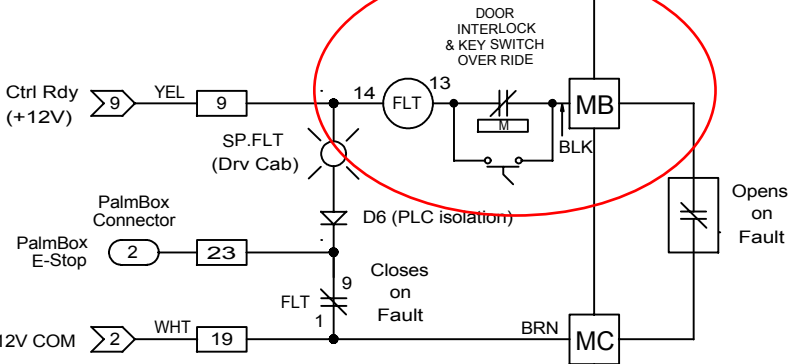
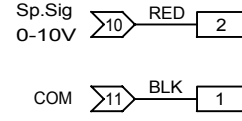
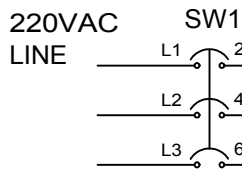
NOTE: All relay coils have diodes:

NOTE: This drawing includes optional components and references not on all panels.

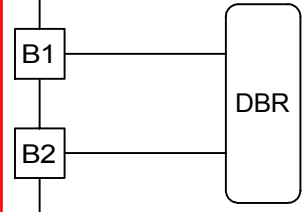
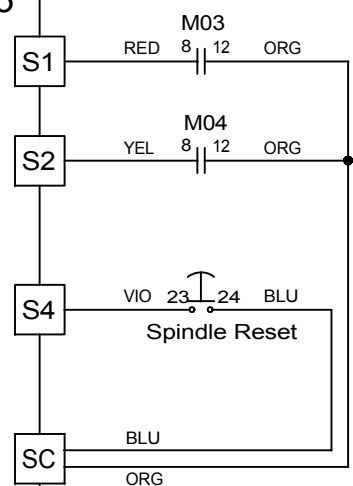
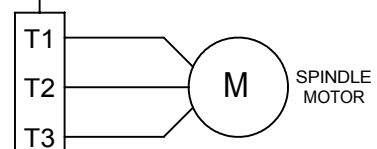




FOR SINGLE PHASE
CONNECT LINE TO
L1 AND L2.



If no wires at 26 & 27,
remove wire between
FLT-13 and MB on
inverter. Bring each of
these points to TB1-26 &
27, then connect mag
switch and key switch
per instructions.



DBR = 30 OHMS 500W
[DBR = 30 OHMS 250W]

Parameters w/5hp WEG GT75 & GTJr

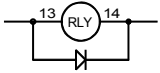
Accel = No 19: Set to 2.0 for Attachments
with Vari-Speed pulleys
Decel = No 20: Set to 2.0 for Attachments
with Vari-Speed pulleys

To re-initialize: set No 1 to 8
After initialization set as follows:

- | | |
|-----------------|-----------------|
| 002 = 1 | 019 = 1.0 [2.0] |
| 003 = 1 | 020 = 1.0 [2.0] |
| 004 = 2 | 036 = 12.9 |
| 007 = 1 | 058 = 3 |
| 011 = 135 [120] | 106 = 1.7 |
| 012 = 230 | 109 = 250 |
| | 110 = 23 |

After setting, set No 1 to 3

NOTE: All relay coils have diodes:



NOTE: This drawing includes optional components and references not on all panels.

