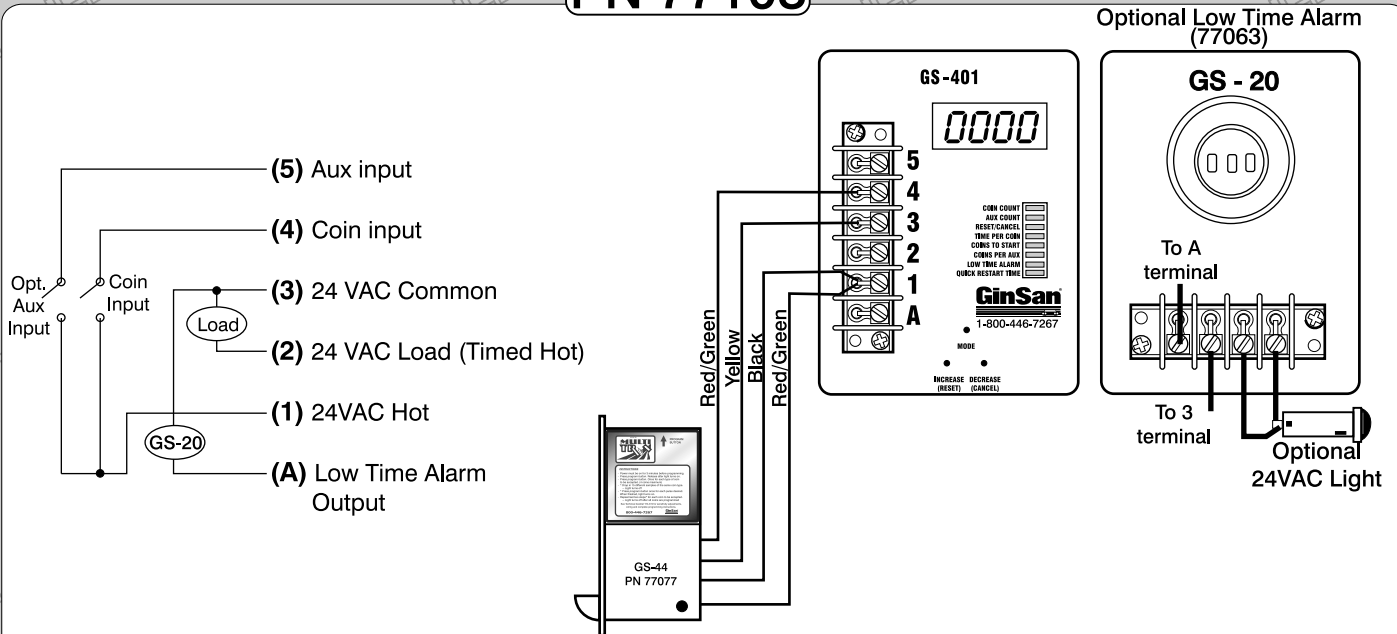


## Wiring Instructions and Information for GS-401 with optional GS-20 Low Time Alarm Buzzer

PN 77108



**Timer Modes** - Press the "MODE" button until the LED is lit next to the desired mode. The display will show the count or setting of that mode.

**Coin Count** - Displays the total amount of coins deposited. The amount will change each time a coin is deposited. "Coin Count" ranges from 0 to 9999.

**Aux Count** - Displays the total amount of pulses received on the Aux input. The amount will change each time an Aux input is received. "Aux Count" ranges from 0 to 9999.

**Reset/Cancel** - While in the Reset/Cancel mode, the timed cycle will be cancelled when the Decrease (Cancel) button pressed. The Coin and Aux counts will be reset when the Increase (Reset) button is pressed and held until the display reads  $r5t$  (takes about 3 seconds).

**Time per Coin** - Time per Coin is the amount of time in seconds each coin is worth. Press the "Increase" or "Decrease" button to change the value between 1 to 511 seconds.  
i.e. A wash cost \$1.25 for 4 minutes. Therefore  $4 \text{ minutes} \times 60 \text{ seconds} = 240 \text{ seconds}$ . Take 240 sec divide by 5 coins to start = 48 sec per coin.

**Coins to Start** - Coins to Start is the amount of coins it takes to start the timer. Press the "Increase" or "Decrease" button to change the value between 1 to 31 coins.

**Coins per Aux** - Coins per Aux is the amount of coins it takes to equal one aux pulse; i.e. 1 aux pulse = \$1.00 = 4 quarters, therefore the Coins per Aux = 4. Press the "Increase" or "Decrease" button to change the value between 1 to 31 coins.

**Low Time Alarm** - Low Time Alert mode allows you to adjust how much time is left when the Low Time Alarm turns on. Press the "Increase" or "Decrease" button to change the value between 1 to 120 seconds.

**Quick Restart Time** - During the Quick Restart Time, customer can insert 1 coin to restart the wash after the timer has turned off. Press the "Increase" or "Decrease" button to change the value between 1 to 60 seconds.

## Wiring Instructions and Information for GS-401 with optional GS-20 Last Coin Alert Buzzer

### GS-401 Timer Basics

#### Checking Power to the Timer

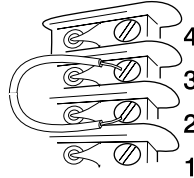
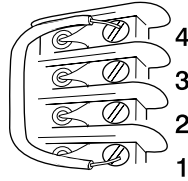
Using a voltmeter, check the AC voltage to the timer. There should be 24 to 28 volts AC across terminals 1 & 3 at all times; the same voltage should be across terminals 2 & 3 when the timer is running.

#### Bypassing the Timer

In order to bypass the timer connect a jumper wire across terminals 1 & 2. This will mimic the timer being on.

#### Starting the Timer

Touch and release a jumper wire across terminals 1 & 4. Each touch and release simulates a coin being put in to the coin acceptor. The timer should start when the number of touch and releases equals your coins to start.



#### Stopping the Timer

Pushing the mode button until the "Reset/Cancel" mode is selected then press & release the "Decrease (Cancel)" button to stop the timer. Another option is to hold a jumper across terminal 2 and terminal 3.

#### Timer Specs:

Input Power: 20-32 Volts AC, 50/60 Hz  
 Loads Timed Hot: 3 Amps AC Continuous  
 4 Amps AC Max  
 Temp Range: -40° to +65° C, -40° to +149° F  
 Input Pulse: ≥ 25ms  
 Time between Pulses: ≥ 30 ms  
 Time per Coin: 1-511 seconds  
 Coin to Start: 1-31 pulses  
 Aux Input: 1-31 pulses per coin  
 Low Time Alarm: 1-120 seconds  
 Quick Restart Time: 1-60 seconds

## Troubleshooting Your Timer

### Timer will Not Start

CAUSE	SOLUTION
The Coins to Start is not set correctly.	Follow the "Coins to Start" instructions and verify that it is correct for your installation. The Coins to Start might be set higher than the desired amount.
Coin switch on the coin acceptor is shorted or a wire is shorted across terminals 1 & 4 or 1 & 5.	Remove all wire(s) from terminals 4 & 5. Try to turn on the timer by following the "Starting the Timer" instructions. If the timer starts then you may have a shorted output on your coin acceptor or a short in the wiring.
Timed Hot (terminal 2) and 24 VAC Common (terminal 3) is shorted.	Remove all wire(s) from terminal 2 and start the timer by following the "Starting the Timer" instructions. Now check the voltage across terminals 2 & 3 with a voltmeter to verify the timer is on. If the timer starts with the wire(s) off terminal 2 then there might be a short between terminals 2 & 3.
If the timer doesn't work after performing the previous two test then the timer might be bad, replace the timer.	

### Timer will Not Stop (even after trying to cancel the time)

CAUSE	SOLUTION
Time per Coin or Coins per Aux is set for longer than it should be.	Follow the Time per Coin and/or Coins per Aux instructions and verify that it is correct for your installation.
Timed Hot (terminal 2) and 24 VAC Hot (terminal 1) are shorted.	Remove all wire(s) from terminal 2. If the equipment is still on with the wire(s) removed from terminal 2 of the timer, then there is a short somewhere in the wiring. If the equipment shuts off after removing the wire(s) from terminal 2, then the timer might be bad.