



Quest CT400 Money Manager Installation Guide

This installation guide will assist you with the connection of the Money Manager capability on your Quest CT400 device. You will be able to count coins and/or tokens on all of your car wash equipment **where the CT400 is installed**, should you wish to do so.

In order to achieve this, you will need read through this guide, then connect up the following wires on your CT400 loom:

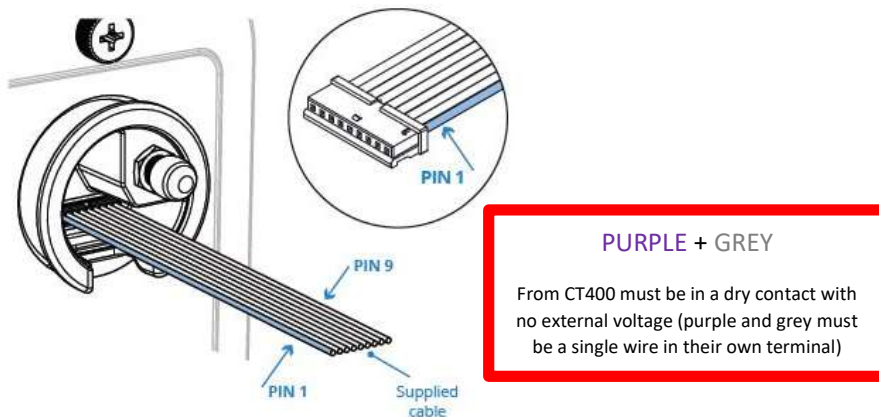
- Purple - CC TALK DATA
- Grey - CC TALK GROUND

These wires need to be connected to a dry contact that switches when a coin pulse is triggered on your equipment. **This contact must be dry and isolated from any other voltage or power in your equipment to prevent any damage to the CT400.** Dry contact; no other cables in the terminals apart from the grey and purple for Money Manager.

One way to gain a dry contact is to install a VAL 343 board. This board not only allows you to gain a dry contact but also contains a neat and easy to work with, 8-way terminal strip. Some of your equipment will already contain a dry unused contact, others will require the addition of a paralleled SPDT relay onto your current coin pulse.

If you are installing a CT400 from scratch please refer to the "Prowash CT400 Installation Guide using the following link

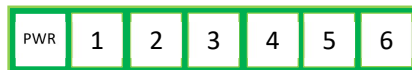
https://www.prowash.com.au/images/prowash/manuals/Prowash_CT400%20Installation%20Guide.pdf



CT400 Wiring		
Pin #	Colour	Detail
1	Yellow	Relay Contact
2	Yellow	Relay Contact
3	Orange	24VAC_N
4	Red	24VAC_A
<i>Terminals below for non-pulse applications (Auto Entry etc.)</i>		
5	Black	RS232_RXD
6	Brown	RS232_TXD
7	Blue	GND
<i>Terminals below are for Money Manager</i>		
8	Purple	CC TALK
9	Grey	GND

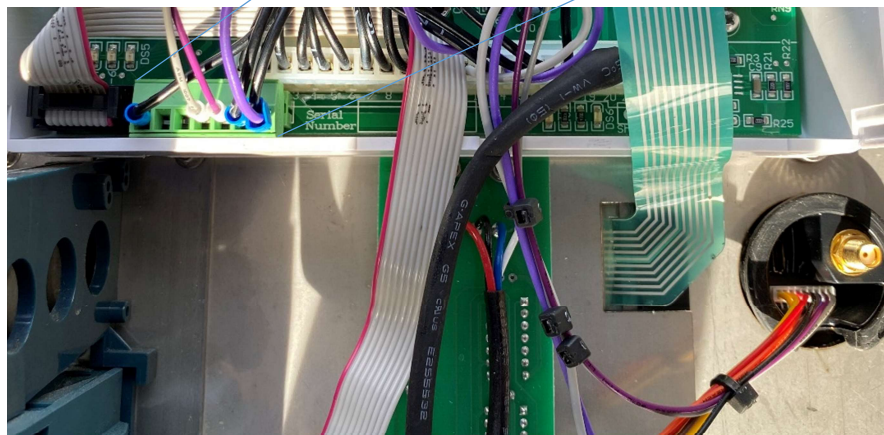
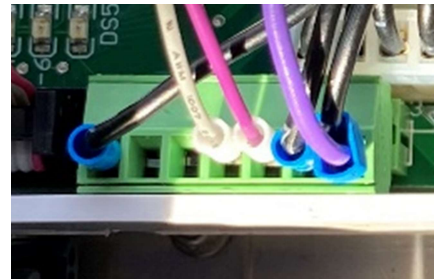
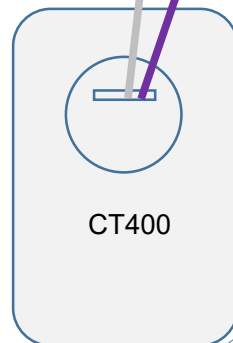
Prowash Touch Select Timer Coins/Tokens no Bonus Time

- Tokens differentiated with software if values \$3 and over
- \$1 and \$2 Tokens counted as coins
- No relay in this set up - direct connection to integrated VAL 343 board on the Prowash timer



3: CC Talk: Ground - GREY

4: CC Talk: Data - PURPLE

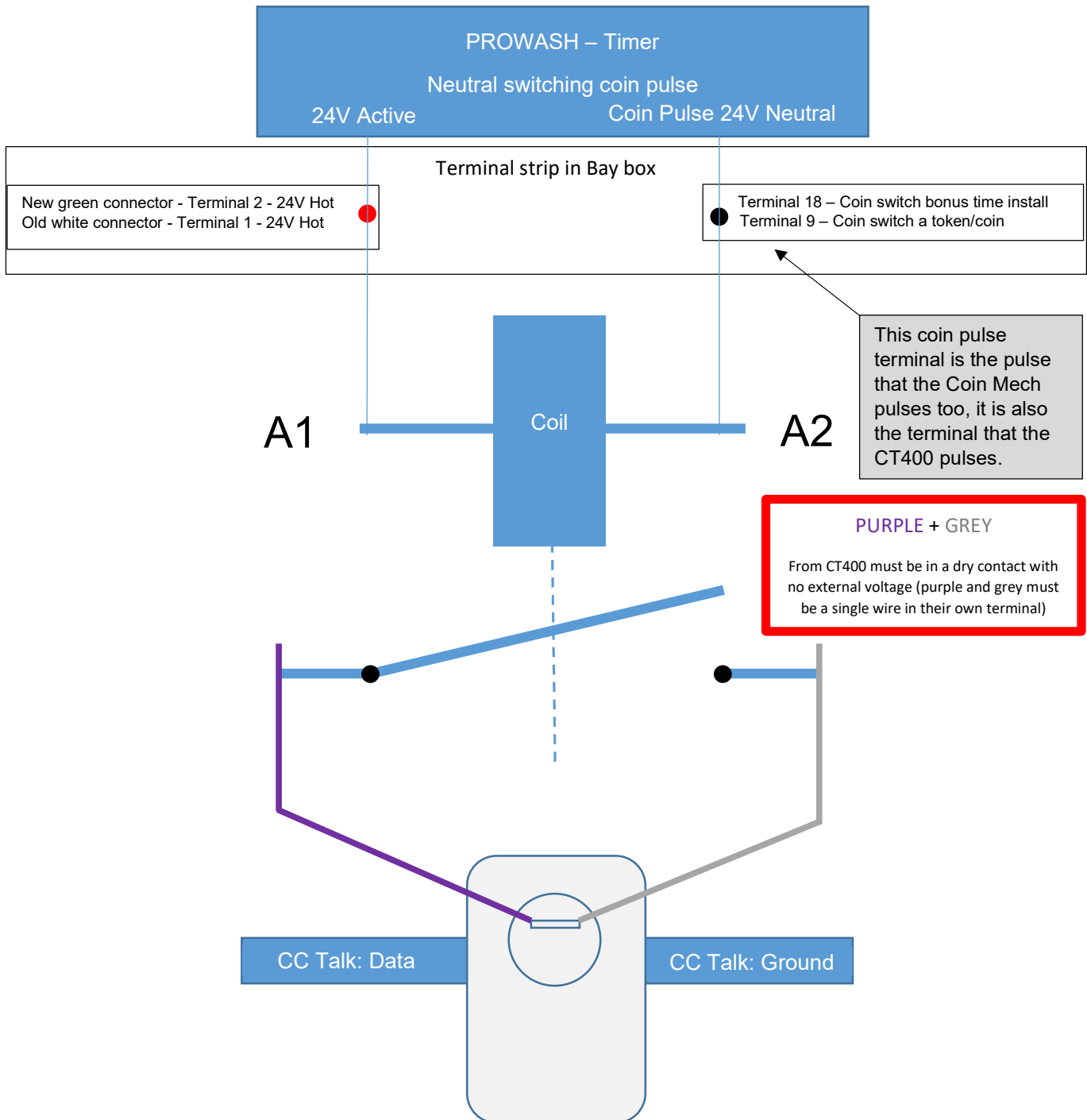


PURPLE + GREY

From CT400 must be in a dry contact with no external voltage (purple and grey must be a single wire in their own terminal)

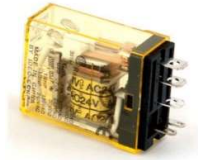
Prowash Touch Select Timer Coins/Tokens with Bonus Time

- Tokens differentiated with software if values \$3 and over
- \$1 and \$2 Tokens counted as coins
- Using single pole relay with 24VAC Coil



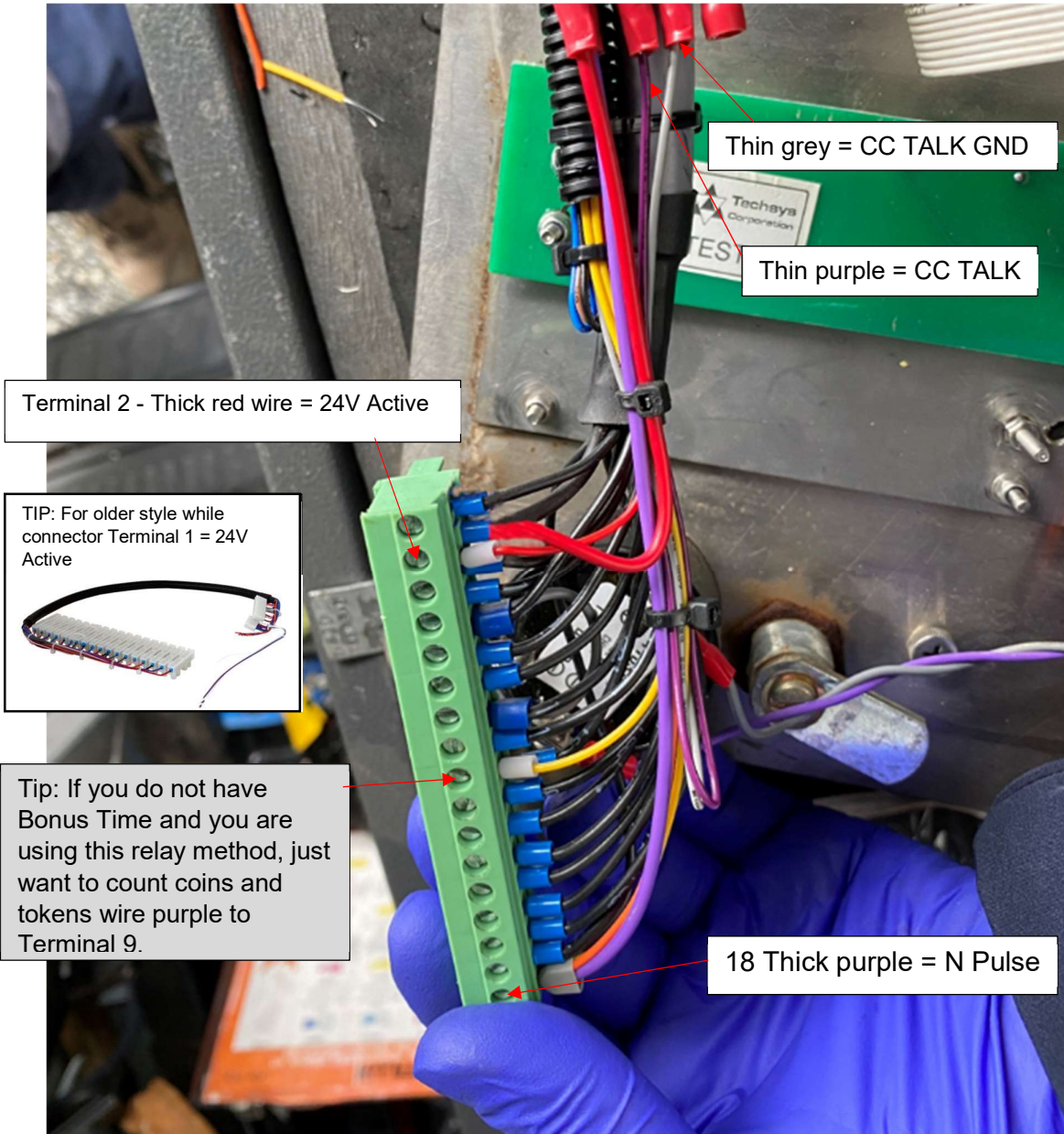
Prowash Touch Select Timer Cont...

Relay EM SPDT 24 VAC 10 A – Prowash Code: PDQ32017



PURPLE + GREY

From CT400 must be in a dry contact with no external voltage (purple and grey must be a single wire in their own terminal)



Fragramatics SAV/SAV-F and Laurel Vendors Coins / Tokens

- Can also be used for generic VAL 343 install on bays, iVac or other equipment
- Tokens differentiated with software if values \$3 and over
- \$1 and \$2 Tokens counted as coins

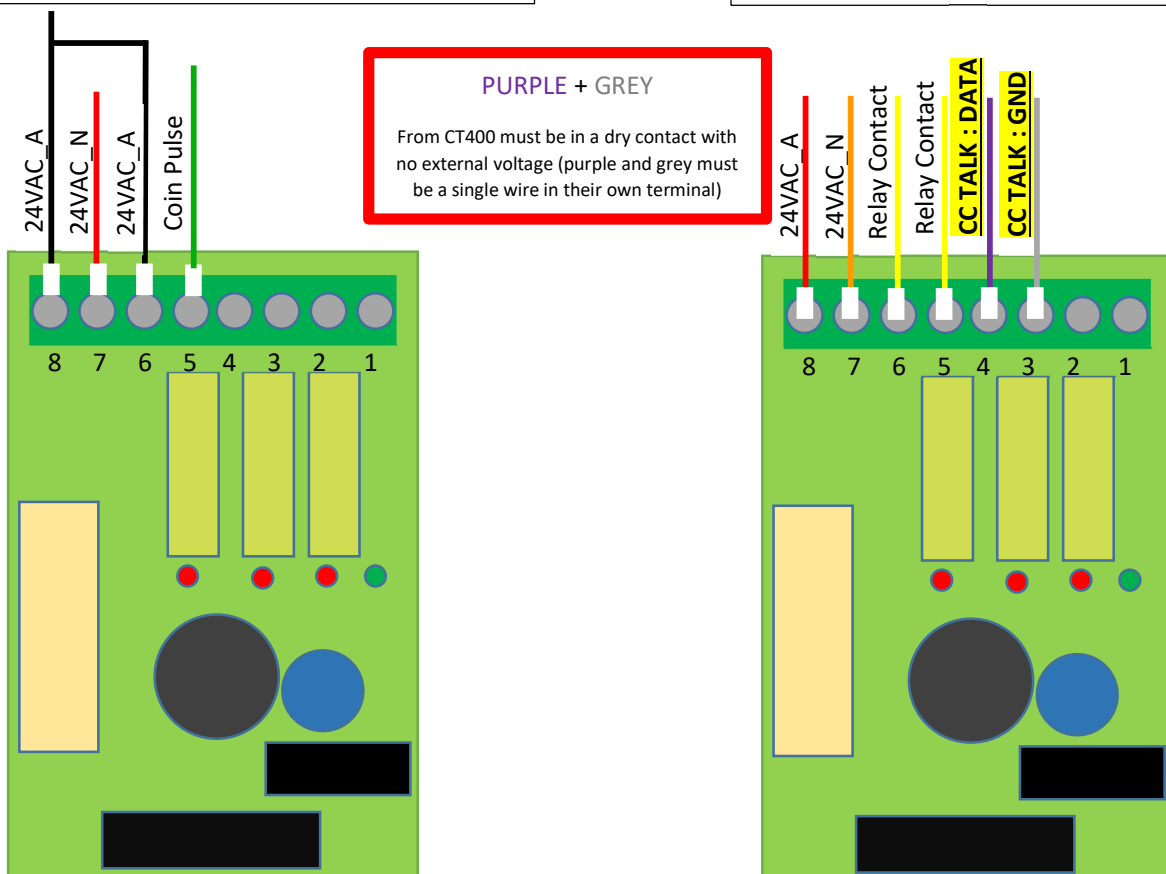
Fragramatics Vacs and Laurel Vendors come standard with a VAL 361, this only offers one dry contact. By removing the VAL 361 and installing the VAL 343 we gain an additional 2 x dry contacts.

Note: iVac and iVac TURBO comes standard with VAL 343 board installed so you will only need to add the following to the CT400 loom connections.

Cut the multi-core cable as close to the VAL 361 as possible – this will allow you to use the cables to connect direct to the VAL 343 Board – *Using the Framagramatics loom.* You can wire in as per the diagram below.

CT400 loom connections on the same 343 board.

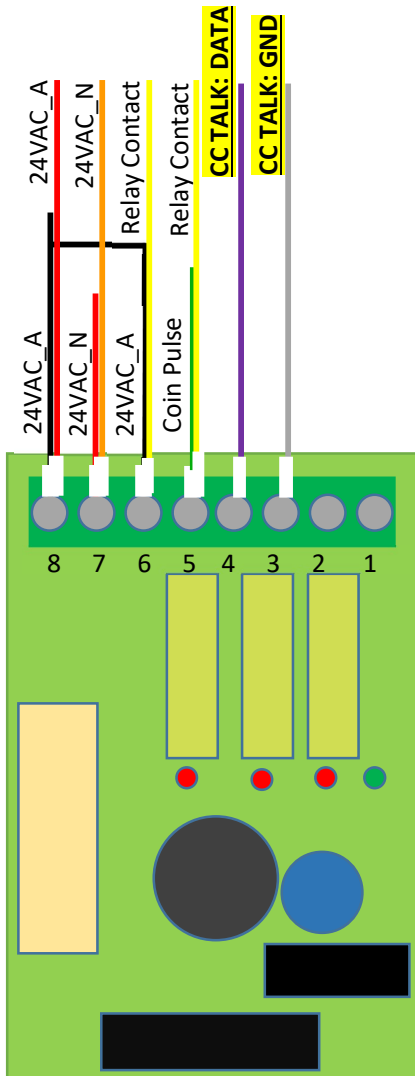
Show in two diagrams to make it clear.



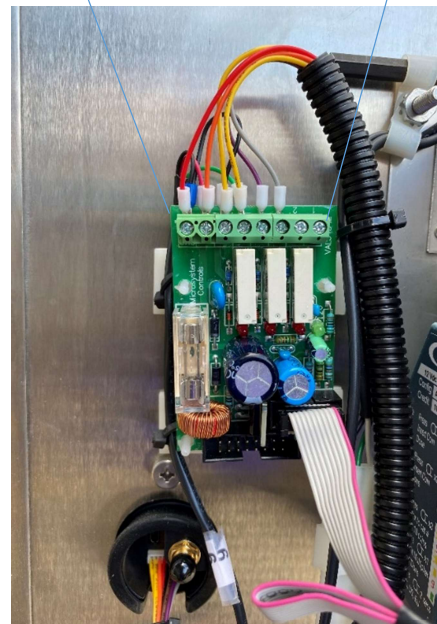
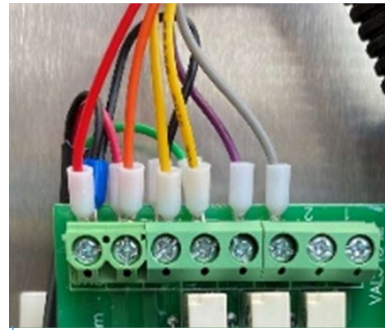
Only use 1 x VAL 343 per vacuum / vendor, two shown for illustration purposes only. See next page for photo and overlaid diagrams

Fragramatics SAV/SAV-F and Laurel Vendors Cont...

Machine loom and CT400 loom
overlayed



Machine loom and CT400
loom overlayed



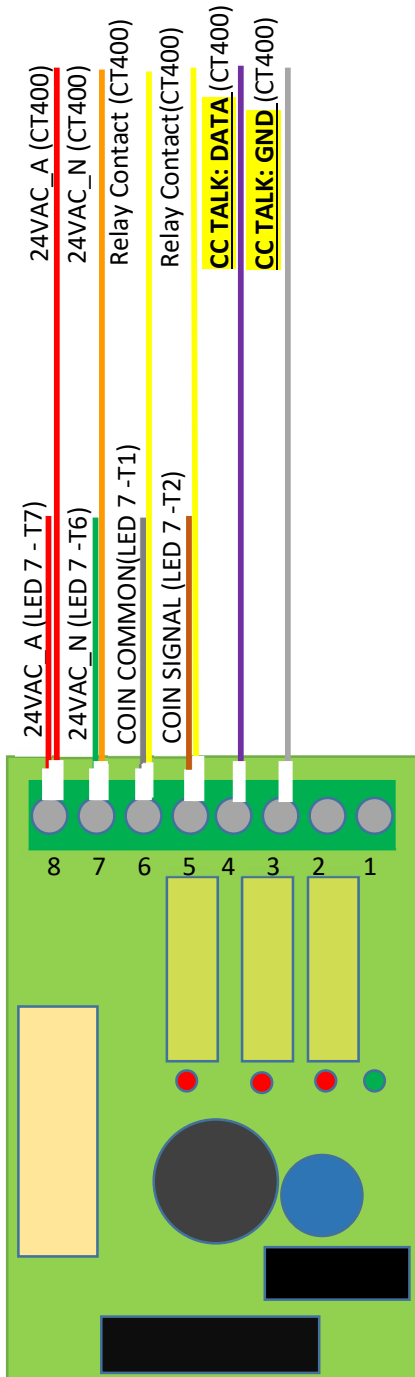
PURPLE + GREY

From CT400 must be in a dry contact with
no external voltage (purple and grey must
be a single wire in their own terminal)



LED7 WIRING

10	WHITE	TIMED LOAD	TO ROTARY SWITCH OR RELAY
9	WHITE/BLACK	COUNT-UP	SHORT TO 24 VAC COMMON FOR COUNT-UP
8	YELLOW/BLACK	AUX INPUT	TO BILL VALIDATOR OR 2d COIN ACCEPTOR
7	RED	24 VAC HOT	TRANSFORMER
6	GREEN	24 VAC COMMON	
5	ORANGE	HORN POSITIVE	2 VOLT DC HORN
4	BLUE	HORN NEGATIVE	
3	BROWN	COIN SIGNAL	TO COIN ACCEPTOR
2	GREY	COIN COMMON	
1			



VAL 343 - INTERFACE BOARD ELECTRICAL CONNECTIONS

P/N: MC6003431

Electrical connection	General Function	Terminal #
Output 1 Line	Coin Line 1	1
Output 1 Load		2
Output 2 Line	Money manager	3
Output 2 Load		4
Output 3 Line	Accumulated (most commonly used output)	5
Output 3 Load		6
N-Common	-24VAC	7
L-Active	+24VAC	8



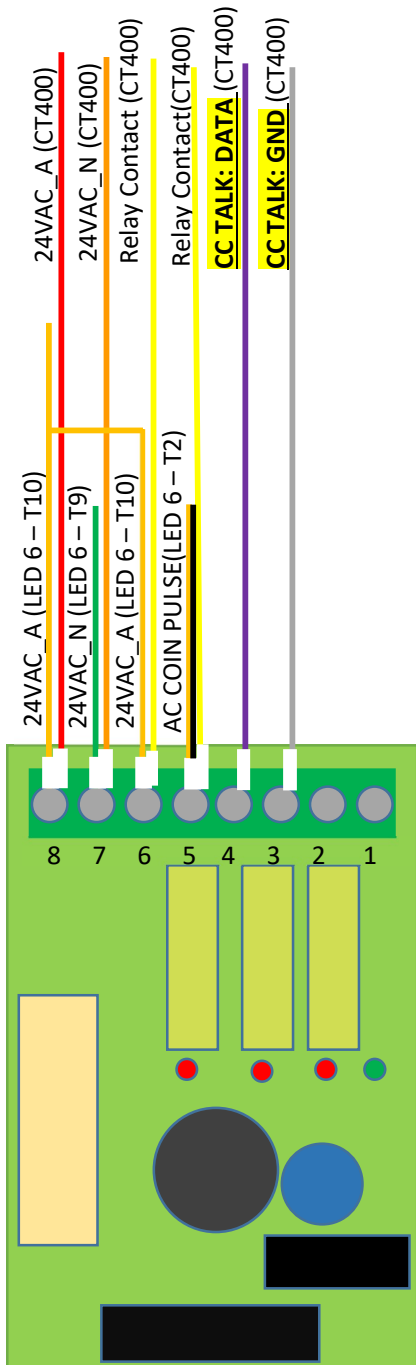
PURPLE + GREY

From CT400 must be in a dry contact with no external voltage (purple and grey must be a single wire in their own terminal)



LED 6/6s Wiring

1	PURPLE	24 VAC COUNTER PULSE	24VAC COUNTER
2	ORANGE/BLACK	AC COIN PULSE	COIN ACCEPTOR
3	GREEN/BLACK		HORN NEGATIVE 12VDC HORN
4	RED/BLACK		HORN POSITIVE 12 VDC HORN
5	GREEN/WHITE		EARTH GROUND
6	BLUE/BLACK		TIMED OUTPUT TO ROTARY SWITCH
7	YELLOW/BLACK	AUX INPUT PULSE (DC)	BILL VALIDATOR
8	WHITE/BLACK	CREDIT CARD INPUT	SHORT TO GROUND FOR COUNT UP
9	GREEN		24 VAC COMMON
10	ORANGE		24 VAC HOT



VAL 343 - INTERFACE BOARD ELECTRICAL CONNECTIONS P/N: MC6003431

Electrical connection	General Function	Terminal #
Output 1 Line	Coin Line 1	1
Output 1 Load		2
Output 2 Line	Money manager	3
Output 2 Load		4
Output 3 Line	Accumulated output (most commonly used)	5
Output 3 Load		6
N-Common	-24VAC	7
L-Active	+24VAC	8

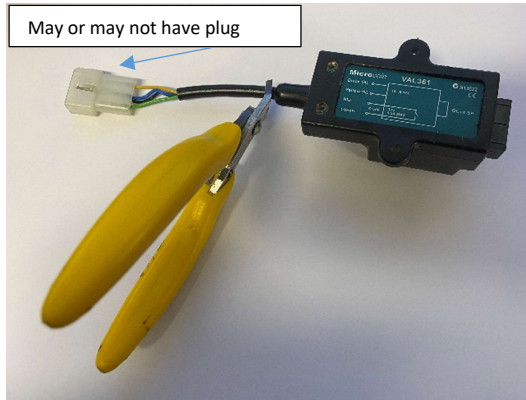
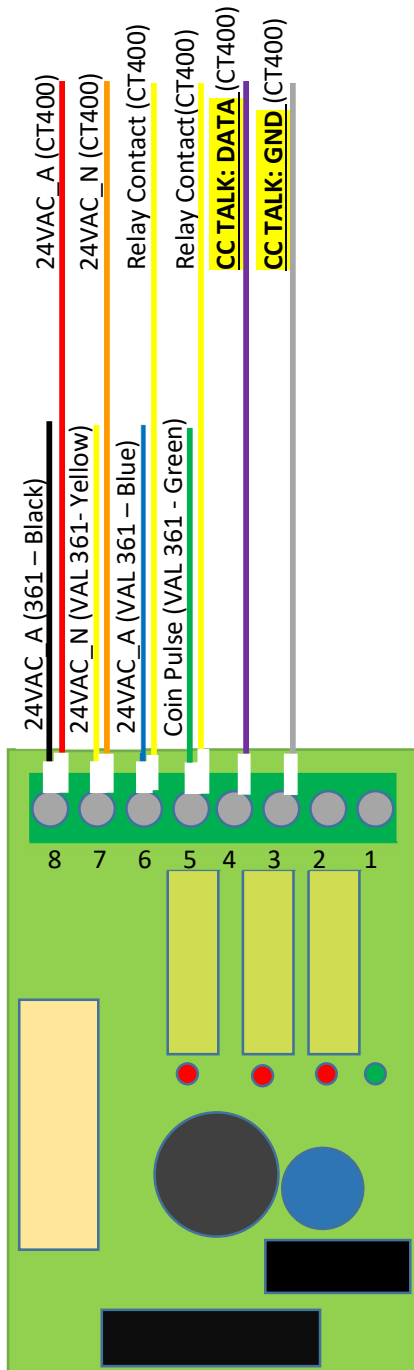


PURPLE + GREY

From CT400 must be in a dry contact with no external voltage (purple and grey must be a single wire in their own terminal)

VAL 361 – VAL 343

Generic installation



When converting the VAL 361 – 343 you can simply cut off the loom and use the 361 loom to simplify installation . *See image above*

VAL 343 - INTERFACE BOARD
ELECTRICAL CONNECTIONS
 P/N: MC6003431

Electrical connection	General Function	Terminal #
Output 1 Line	Coin Line 1	1
Output 1 Load		2
Output 2 Line	Money manager	3
Output 2 Load		4
Output 3 Line	Accumulated <small>(most commonly used output)</small>	5
Output 3 Load		6
N-Common	-24VAC	7
L-Active	+24VAC	8

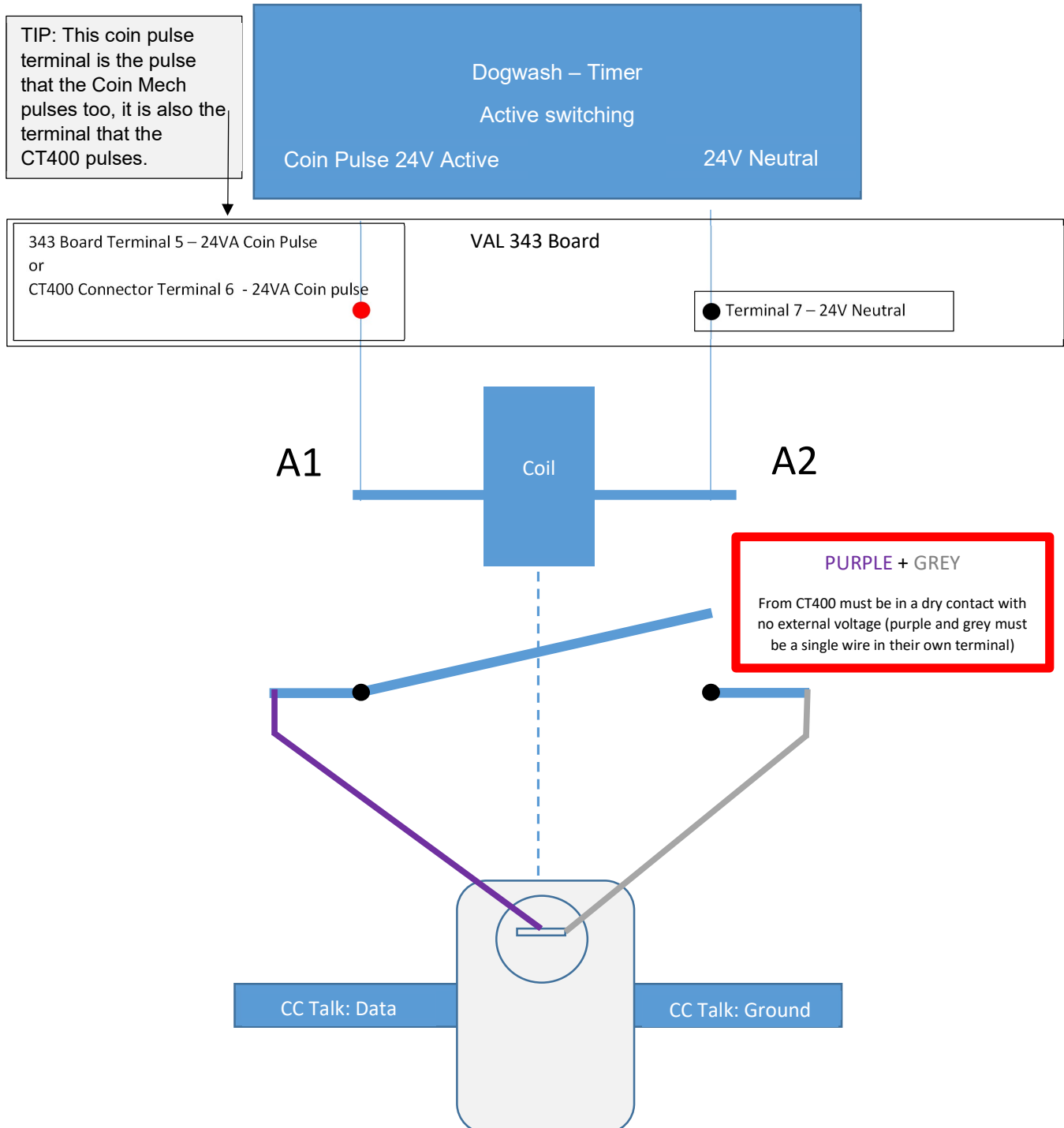


PURPLE + GREY

From CT400 must be in a dry contact with no external voltage (purple and grey must be a single wire in their own terminal)

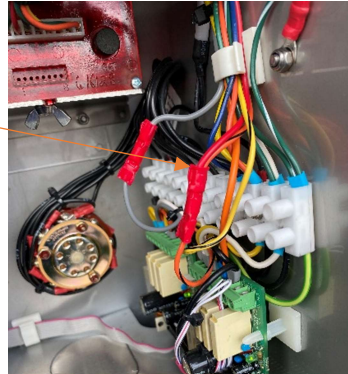
Dogwash

- Coins / Tokens as one (Differentiated with software)
- Using single pole relay with 24VAC Coil
- Tokens differentiated with software if values \$3 and over



Older Dogwash – Without CT400 terminal strip

VAL 343 – Board is heavily populated may need to connect to wires with splice, since you will not fit addition cables in VAL 343 board terminals.



Most True Blue dog wash will have wire colours:

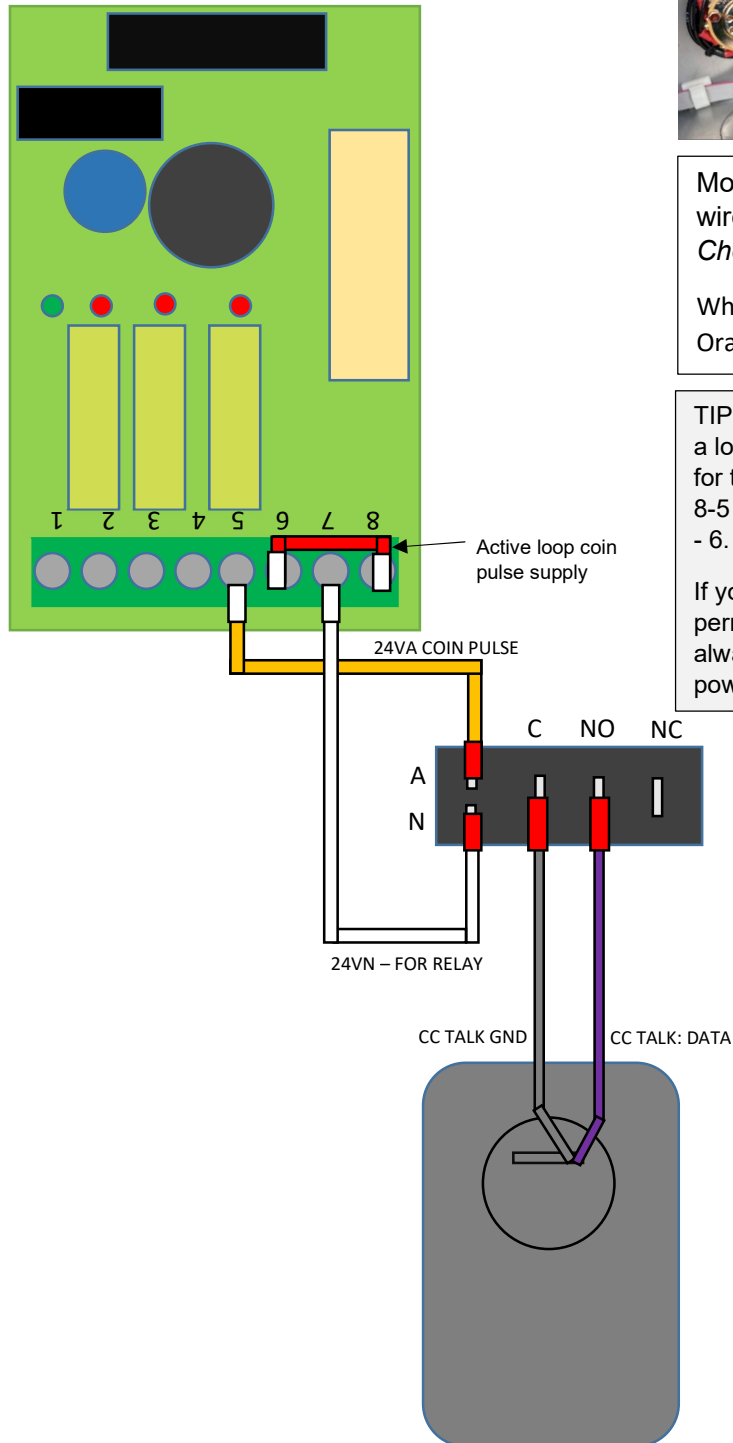
Check with multimeter

White – Neutral

Orange/Black- Active coin pulse

TIP: Most Dog wash 343 boards will have a loop from 8-6 and this is an Active supply for the coin pulse. If you see the loop from 8-5 you will then have to tap in off Terminal - 6.

If you have the relay connected to the permanent supply it will result in the relay always having power when the dog wash is powered up.



PURPLE + GREY

From CT400 must be in a dry contact with no external voltage (purple and grey must be a single wire in their own terminal)

Newer Dogwash – With CT400 terminal strip

