REPLACING A 294-002-505 CONTROL BOX WITH A 294-002-529 CONTROL BOX v10.01 & USB

Remember to copy your existing programs for downloading into the new Control Box prior to removing the malfunctioning box from your machine! Read these instructions in its entirety prior to installation!

With the demise of the serial ports from most computers we have added a USB port on the New Control box 294-002-529 and compatibility in the New PROGRAMMER 4.0 to utilize this feature. However PROGRAMMER 4.0 and the control box still have the older 9-Pin serial interface.

The New Improved PROGRAMMER 4.0 can only be installed and run on <u>Windows XP, Vista,</u> and above operating systems. Programmer 3.1 will still work with the new control box, but you will not be able to use the USB interface or the LOG book feature. Programmer 3.1 runs with Windows 3.1 to Windows 98 operating systems and, may not be reliable on Windows ME, XP, Vista and above, however it might work, but we do not guarantee that it will, nor can we troubleshoot and help you run Programmer 3.1 on these systems.

The 20 PROGRAM file structure is the same from Programmer 3.1 to PROGRAMMER 4.0, therefore your Patterns in Programmer 3.1 are readable and writable in PROGRAMMER 4.0 and PROGRAMMER 4.0 can read and write to Programmer 3.1. <u>The new CD installation 294-002-472 with PROGRAMMER 4.0 will not overwrite the older Programmer 3.1. Additionally PROGRAMMER 4.0 will work with 294-002-505 control boxes.</u>

We have provided you with a new Control box USB to DASH interface cable 294-002-508 that will replace the existing 9-Pin Box to Dash ribbon cable (This cable should be installed prior to installing the new control box) and a new USB download cable 294-002-509.

We highly recommend you install the new USB cables and PROGRAMMER 4.0. This helps utilize the PROGRAMMER 4.0 simultaneously with the Lane Reader while testing and setting up your lane pattern. If you cannot install PROGRAMMER 4.0 then leave the 9-Pin ribbon cable installed and retain the USB cables for future upgrading of your machine.

For All Installations:
    A) **Load Programmer 4.0 on computer, if it has XP and above OS.**
    B) **Install USB to Dash cable if A is done. (Optional)**
    C) **Install BOX**
    D) **Download your patterns to your new box if needed.**

This Control Box is designed for use in all QAMF Summit S Series (Spray Cleaning) Machines without any modifications. It is a "drop in" replacement:

For use with QAMF HVO Summit and Magnums with the drip cleaning system (not spray), this Control Box will need the additional simple adjustments:

    E) **Menu Function 97: set from Spray to Drip**
    F) **Menu Function 89: set from OFF to ON**
    G) **Menu Function 85: Change from HVO Summit to HVO Magnum if using in a Magnum**

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Listed below are the menu functions and Default settings in (**BOLD**):

MENU's For New 294-002-529 USB Control Box with Version 10.01 firmware.

Menu Function #	Category Description
01	PROGRAM Retrieve Program
02	PROGRAM View Program
03	PROGRAM Edit Program
10	CLOCK Display Clock
11	CLOCK Edit Clock **(Current Date/Time)**
30	SECURITY Set Security
31	SECURITY Set Passwords
32	SECURITY Enter / Exit Security Mode
41	LANE Odometer
50	LANE LOG Book **(NEW, Interpret via Windows Programmer V4.x First in First Out)**
63	LANE CYCLE TIMER **(RECONFIGURED** Set per each run. Times 1 cycle)
66	CONFIG Machine Type (Replaces Machine ID Jumpers) **(NEW & DEFAULT = Current Production SUMMIT S)**
67	CONFIG Select Drive Motor Type **(NEW & DEFAULT = -10 to 10V)**
70	ADJUSTMENT Set Encoder Factor **(NEW & DEFAULT = 1.02)**
80	ADJUSTMENT Pass 2 Start Distance **(DEFAULT = 01.0)**
81	ADJUSTMENT Adjust Foul Line Stop **(DEFAULT = 00.5)**
82	ADJUSTMENT Reversing Switch Brake Delay **(DEFAULT = 0.10)**
83	ADJUSTMENT Calculate Speed Factor
84	ADJUSTMENT Edit Speed Factor **(DEFAULT** = **1.00)**
85	CONFIG Change to HVO Summit or HVO Magnum Select **(DEFAULT = HVO Summit)**
86	ADJUSTMENT Select 1, 2, or 3 Vac Head Shakes **(DEFAULT = 1)**
87	ADJUSTMENT Cleaner Pre-Stop Distance **(DEFAULT = 08.0)**
88	ADJUSTMENT Cleaner Pre-Start Distance **(DEFAULT = 00.0)**
89	CONFIG Cleaner Drip Mode Recharge **(DEFAULT = OFF)**
90	CONFIG Set Switch Type **(DEFAULT = HANDLE)**
91	ADJUSTMENT Test Function
92	ADJUSTMENT Saturate **(DEFAULT = 100%)**
93	ADJUSTMENT Adjust Oil
94	ADJUSTMENT Adjust Buffer
95	ADJUSTMENT Adjust Cleaner Pad / Vacuum Head
96	ADJUSTMENT Cleaner Presoak
97	CONFIG Cleaner Drip or Spray Mode **(DEFAULT = 1-SPRAY)**
98	CONFIG Set Oil Delay 0, 1, or 2 Feet **(NEW & DEFAULT = 0)**

NEW DEFAULT 5 digit PASSWORDS, 11111 = Mechanic, 22222 = Owner. Xyyyy where X = Level & y = 4 digit editable password.

Below is a generic explanation for Passwords on this document. Please see section 6 in your Programming Manual 294-005-022, supplied with Kit 294-115-340, for complete instructions on the usage of Security.

Example below: IF Both Mechanics and Owner's 4 digit editable part of the password (yyyy) were set to the same number say 2345.

By entering Password #12345, gains access to Mechanic level. If 1yyyy is not equal to 12345 then Password = "None" or
By entering Password #22345, gains access to Owner level. If 2yyyy is not equal to 22345 then Password = "None".

Now both passwords do not conflict as they did with the old control box with v9.x firmware and earlier iterations.