

# NEW PINS SOLENOID INSTALLATION MANUAL





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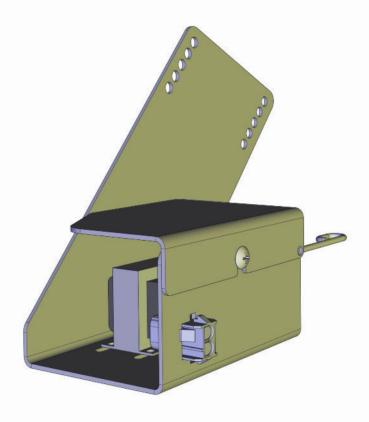
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# **NEW PINS SOLENOID INSTALLATION**

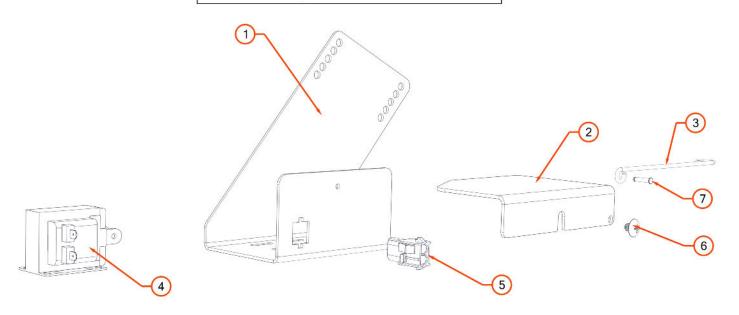
### **NEW PINS SOLENOID KIT**

715091 - Complete New Pins Solenoid Kit



## INDIVIDUAL PARTS LIST

715091 - Complete New Pins Solenoid Kit



Description	BOM ID	Qty
8-32X3-16 Truss Head Machine Screw	6	1
715082 New Pins Solenoid Bracket	1	1
715082-C New Pin Solenoid Cover Plate	2	1

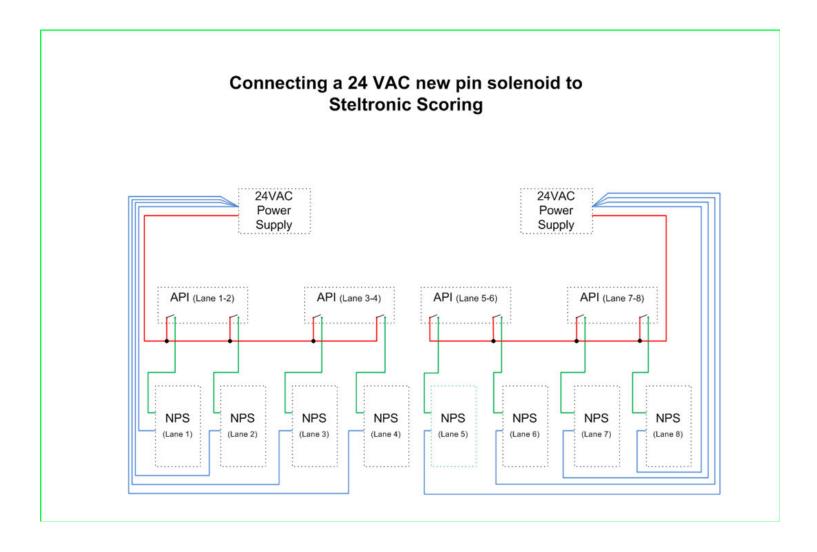
Description	BOM ID	Qty
715083 - Link	3	1
715084 - Solenoid	4	1
717452 AMP Connector	5	1

Description	BOM ID	Qty
811086 - X-Pin	7	1

#### **NEW PINS SOLENOID CONNECTIONS**

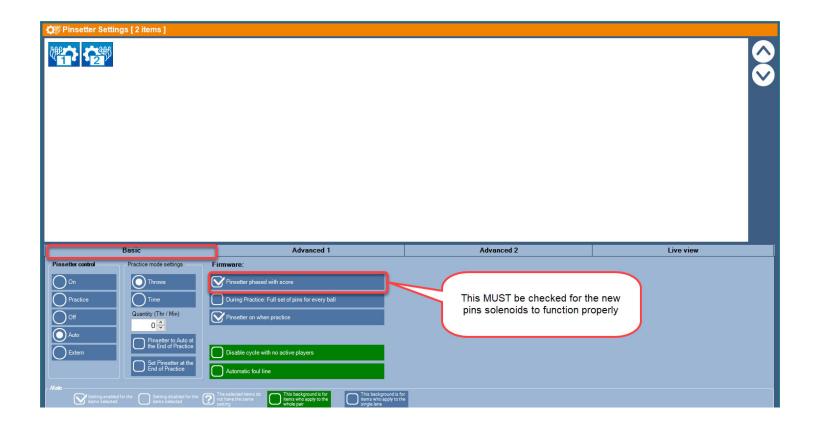
#### **ELECTRICAL CONNECTIONS AND SCHEMATIC**

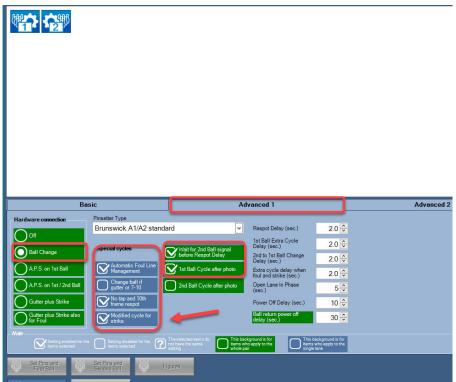
Connect the new pin solenoids (24 volts A/C) using the schematic wiring diagram below. Each power supply is capable to connect up to four pinsetter NPS (new pins solenoid) kits.



#### SETTING UP THE PARAMETERS IN FOCUS

Change the settings below in Focus for each pair of lanes, or you can do this on a global change to all lanes if all solenoids are connected and installed.





Change the settings (Shown on the left) in Focus for each pair of lanes, or you can do this on a global change to all lanes if all solenoids are connected and installed.

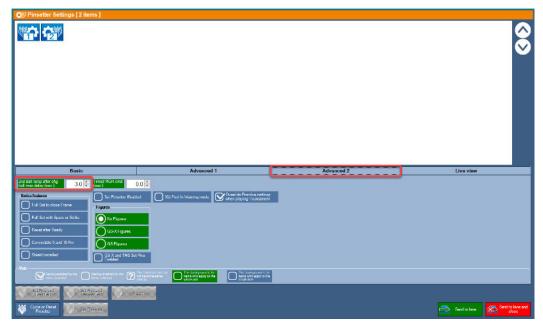
Additionally, you need to set a timer in Focus to monitor the 2<sup>nd</sup> ball lights. When you are using the NPS kits, the scoring system is monitoring the 2<sup>nd</sup> ball light to trigger the NPS.

For example: Let's say the bowlers have pin tap set to 9 pins makes a strike. The bowler rolls a ball, knocks over 9 pins, the scoring will display a special

X with a square around it to signify it was a pin tap strike, and now the Steltronic advanced pinsetter interface (API) will attempt to energize the NPS. If the solenoid is working and connected, the pinsetter will move into 2<sup>nd</sup> ball, AND THIS IS THE KEY to making it all work properly. Once the pinsetter is set to 2<sup>nd</sup> ball, now the API knows the pinsetter was physically changed to 2<sup>nd</sup> ball, the pinsetter will now be cycled by the API.

However, what happens if the NPS was sent the 24 VOLT signal to be energized, but the NPS was NOT able to place the pinsetter into 2<sup>nd</sup> ball? The Steltronic API is now waiting until a 2<sup>nd</sup> ball light signal to complete the process, but it never happened.

If you set this timer to 3 seconds (shown below), the API will inform the pinsetter to cycle regardless of the 2<sup>nd</sup> ball light because the NPS was not able to get the pinsetter into 2<sup>nd</sup> ball for some electrical or mechanical reason.

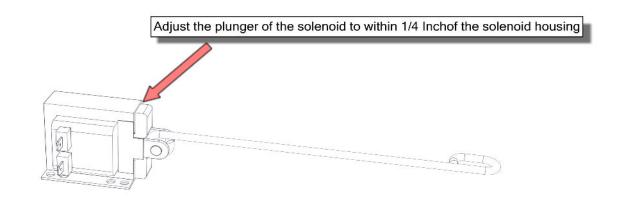


#### ADJUSTING THE MECHANICAL SOLENOID

#### 715091 - Complete New Pins Solenoid Kit

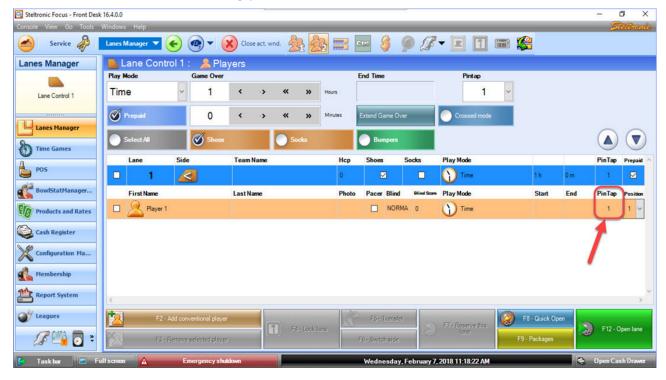
When the new pin solenoid is installed onto your Brunswick A or A-2 detector, adjust it so that 1/4 inch of gap is obtained when the pinsetter is on 1st ball.

The 24 volt A/C solenoid works best when MOST of the plunger is inside of the solenoid.



#### **TESTING THE NEW PINS SOLENOID (NPS)**

The best way to test the Steltronic NPS is to open a lane, and set the pin tap for each player to a 1. By doing this, for every ball you throw and hit at least one bowling pin, you will receive a pin tap strike, and the NPS will inform the pinsetter to be placed in 2<sup>nd</sup> ball, the pinsetter will just sweep away the deadwood, and set a new set of bowling pins.



#### **REAL STRIKE OPTIONS**

There are two different options for the NPS (New Pins Solenoid) to function during a real strike, meaning all pins are knocked down on ball #1.

- 1. Sweep the pins immediately for a real strike and set new pins onto the pin deck.
- 2. Let the pinsetter operate normally for a real strike and lower the pinsetter deck assembly to detect any standing pins. This means the NPS will NOT be used for a real strike.

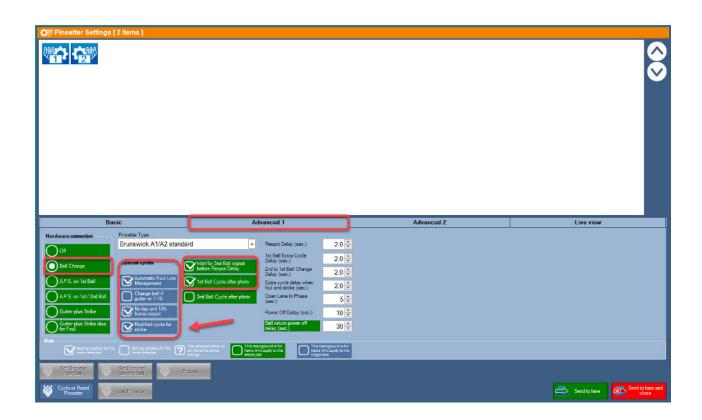
**Option #1 above:** If you prefer to have the pinsetters operate with less wear and tear, this means you are going to let the camera decide if it was a real strike, the NPS will be energized and the pinsetter will be placed onto 2<sup>nd</sup> ball and sweep the deadwood away and set a new set of pins.

**Option #2 above:** If you prefer to let the pinsetter operate normally for a strike, when the camera reports a strike, the pinsetter will cycle normally, lowering the deck to mechanically detect for any standing pins, and then mechanically the pinsetter will decide what to do.

NOTE: The reason for the two different options above is to let the mechanic/management decide how the pinsetter will operate for a real strike. There are advantages and disadvantages to both options above. If you decide to use option #1, you're allowing the camera to detect the strike, and if the camera does not see any standing pins, it will assume a strike and sweep away the pins. So what happens if the camera sees it as a strike, but there is a wobbly pin that remained standing? Now you have to respot pins and the bowler does not understand.

To use option #1, you need to check this box (shown below with the red arrow) for sweeping pins immediately for a real strike.

If you prefer to have the pinsetter operate without the NPS feature for a real strike, remove the option below displayed with the red arrow.



© Steltronic – Real strike options