



Synetek DS3-S/H

INSTALLATION INSTRUCTIONS

Manufacturer Speed Queen & Huebsch Channel Products
Model M413532
Mark 10DN-24-2-10-10-P3010

Parts List
Model DS1140CrA
2 ea Phillips head mounting screws
1 ea installation instructions

General Description

Model DS3-S/H is used to replace the following 24 VAC, DSI Controls in commercial laundry tumblers. Model DS3-S/H had been designed for simple installation and long lasting service in updating old analog type direct spark ignition modules with state of the art digitally based controls. Model DS3-SH eliminates most nuisance lockouts and provides simple visual diagnostic indication of failure.

Model DS3-SH plugs into the existing wiring harness of the following:

TOOLS AND MATERIALS REQUIRED

1. Installation Instructions
2. Phillips head screw driver.
3. Drill motor.
4. # 5/32" Drill bit.

SPECIFICATIONS

Input Voltage:	24 VAC (+10 to -15%) 60Hz	Re-ignition Trial:	10.0 seconds
Current Draw:	0.05A in Ignition Mode	Interpurge:	5.0 seconds
	0.35A in Flame Sense Mode	Lockout:	Reset by interrupting power for 5.0 seconds
Prepurge:	5.0 seconds		2 Flash: Trial Lockout
Ignition Trial:	10.0 seconds		False Flame
Temperature Range:	+175o to 40o	Steady Flash:	

CAUTION!

Only persons trained and qualified to service and repair commercial-laundry tumbler's ignition controls should attempt installation. Property Damage Injury or Death can result from replacing an ignition control not listed in these instructions.

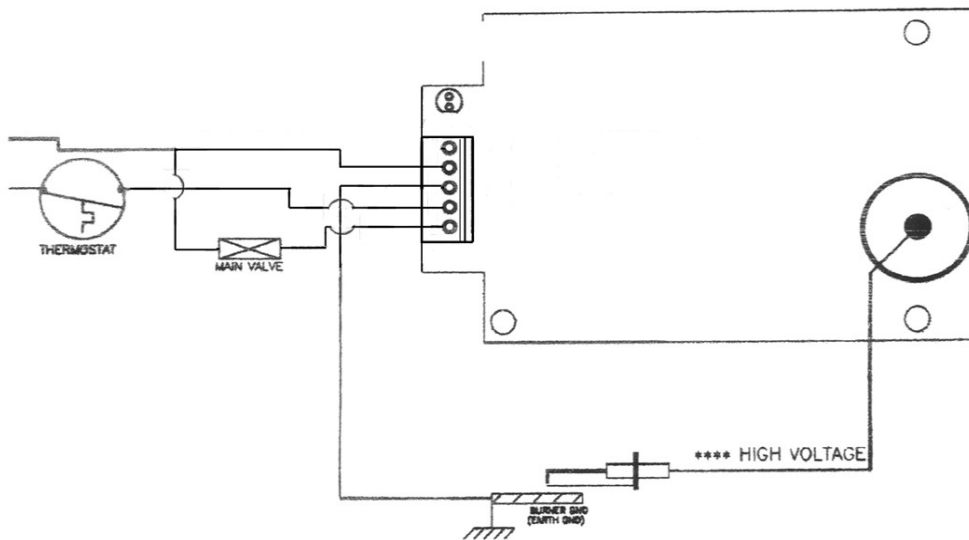
PRE-INSTALLATION INSTRUCTIONS

1. Read completely through the Installation Instructions before attempting installation.
2. Be certain that the dryer is operating correctly except for a failed ignition control. Repair malfunctioning items as required. Installation of Model DS3-S/H will not correct any other malfunction except for a failed ignition control.
3. Inspect the burner and burner compartment for sooting, cracks and corrosion. Repair and replace as necessary.
4. Inspect the electrode assembly for cracked ceramic insulators, burned electrode rods, misalignment and burned high voltage lead. Repair or replace as necessary.

INSTALLATION PROCEDURES

Model DS3-S/H (Speed Queen & Huebsch)

1. Turn OFF gas and electrical power to the dryer.
2. Locate the Ignition Control to be replaced. Verify that the model number is listed under the General Description heading.
3. Remove the existing wiring harness and high voltage lead from the old control.
4. Remove the old control from the dryer. Mount the DS3 control in the same position as the old control. If necessary drill new holes to mount Model DS3-S/H, using the old mounting screws.
5. Reconnect the existing wiring harness connector to Model DS3-S/H. The connector must be in the same position as on the old control.
6. Connect the high voltage extension to Model DS3's high voltage terminal. Connect the existing 90o High Voltage boot to the male end of the HV extension.
7. Check each lead connection made in the previous steps by gently pulling on lead. Correct any loose connections. If you are satisfied that the previous steps are correct and complete go to Check Out Sequence and continue the installation.



CHECK OUT SEQUENCE

1. Turn ON power to the dryer. (Gas is still OFF) and start the tumbler. Observe the following:
 - A) 5 seconds after the dryer starts high voltage sparking starts.
 - B) Sparking continues for 10 seconds.
 - C) Sparking stops for 5 seconds.
 - D) Sparking starts for another 10 seconds.
 - E) Sparking stops for 5 seconds.
 - F) Sparking starts for another 10 seconds.
 - G) Sparking stops and the LED flashes 2 times.
2. Reset safety lockout by opening the dryer door until tumbler stops and then reclosing the dryer door and restarting the dryer observe that Model C follows the same sequence as in #1 above.
3. Turn ON the gas supply to the dryer
4. Start the dryer and observe the following:
 - A) Green LED is ON
 - B) Model C starts the ignition spark and the flame is established within a few seconds.
 - C) Spark shuts off after the burner flame is established.
 - D) Main burner Flame shuts off after the thermostat is satisfied and reignites when the temperature drops.

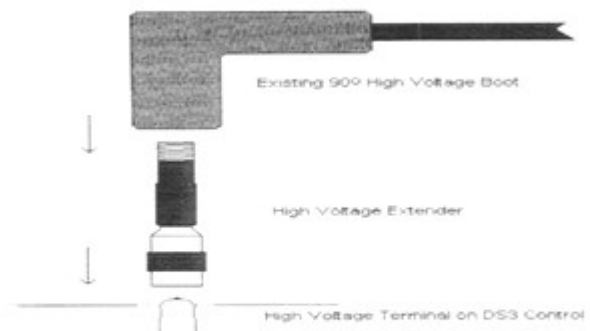


Diagram #2

CAUTION!

If you smell gas immediately turn the gas supply OFF and repair the gas leak. If you are uncertain or unqualified to repair the gas leak, contact a qualified Repair Technician. DO NOT continue the check our procedure until the gas leak has been repaired.

TROUBLESHOOTING

PROBLEM: No ignition spark, No gas, DS3's LED is OFF.

SOLUTION: No power to the control. 1) Be sure the accumulator has time on it, the door is closed and the thermostat is calling for heat. Check the thermostat airflow switch and high limit switch. Repair or replace as necessary. Check the wiring harness connector to the control and all connections. Repair or replace as necessary.

PROBLEM: No ignition spark, No gas, DS3's LED is flashing two times.

SOLUTION: Control is safety lockout. Reset by opening he dryer door until the tumbler stops and then restarting the dryer.

PROBLEM: Ignition sparks but main burner will not ignite.

SOLUTION: Check that the spark is arching across the spark gap. Check the high voltage lead for shorting, replace as necessary. Check the ceramic igniter/sensor for cracks. Replace as necessary.

PROBLEM: HV lead is burned at the igniter/sensor connector.

SOLUTION: Check the lint screen, ducting and fan. Clean, repair or replace as necessary. Check the airflow switch for correct operation. Replace as necessary.

IMPORTANT

DS3 is not field repairable. Attempts to repair or tampering with the control could result in property damage, personal injury or death.

WARRANTY

Synetek Controls, Inc., guarantees to the first retail purchaser that should be defective, within the first 24 months of manufacture, and it's our fault; Synetek will repair or replace the control to the first retail purchaser. Synetek is not responsible for equipment down time, labor costs or any other expense associated to the failure of our control.

Synetek Controls, Inc.

Wellington, CO Phone; (970) 568-7880 Fax: (970) 568-9460
www.synetek.us