



Synetek DS3-F

INSTALLATION INSTRUCTIONS

Manufacturer

Fenwal
Fenwal

Model

05-16 (Dexter, Maytag, Cissell)
05-29 (9857-16-001 Dexter)

Parts List

1ea DS1290A Control
2ea Mounting Screws
1ea Installation Instructions

General Description

Model DS3-F is used to replace the following 24Vac DSI Controls in commercial laundry tumblers. Model DS3-F is designed for simple installation and long lasting service in updating old analog type direct spark ignition controls with state of the art digitally based controls. Model DS3-F eliminates most nuisance lockouts and provides simple diagnostic indication of failure.

TOOLS AND MATERIALS REQUIRED

Installation Instructions for Model DS3-F

Phillips head screw driver
Drill motor
#5/32" drill bit

SPECIFICATIONS

Input Voltage: 24Vac, 60Hz, (+10% to -15%)
Current Draw: .2A flame sense modes
.35A ignition mode

Prepurge: 5 seconds
Ignition Trial: 10 seconds
Temp. Range: -40F to +175F

Reignition Trial: 10 seconds
Interpurge: 5 seconds
Lockout: Reset by power interruption of 5 sec.

PRE-INSTALLATION INSTRUCTIONS

1. Read completely through the Installation Instructions before attempting installation.
2. Be certain the dryer is operating correctly except for a failed ignition control. Repair malfunctioning items as required. Installation of DS3-F will not correct any malfunction except for a failed ignition control.
3. Inspect the burner and burner compartment for sooting, cracks and corrosion. Repair or replace as necessary.
4. Inspect the electrode assembly for cracked ceramic insulators, burned electrode rod, misalignment and burned high voltage lead. Repair or replace as necessary Note: Spark Gap must be 3/16" to 1/4".

INSTALLATION PROCEDURES

1. Turn OFF Gas and Electrical Power.
2. Locate the ignition control to be replaced. Verify that the model number is listed in these instructions.
3. Remove the old control from the dryer. Mount the new control module DS1290A in the same place as the old. If necessary drill new holes to mount the new control.
4. Plug the existing edge connector into the J1 slot on the new control.
5. Plug the high voltage lead into the new control. It may be necessary to trim 1/4" off the existing 90o insulating boot to allow a correct fit onto the high voltage terminal.
6. If you are satisfied that the previous steps are correct and complete go to Check Out Sequence.

CHECK OUT SEQUENCE

1. Turn ON Power to the tumbler, (Gas is OFF) and start the tumbler. Observe the following:
 - A) Green LED is ON.
 - B) 5 seconds after the tumbler starts high voltage spark starts.
 - C) Spark continues for 10 seconds.
 - D) Sparking stops for 5 seconds
 - E) Spark continues for 10 seconds.
 - F) Sparking stops for 5 seconds
 - G) Spark continues for 10 seconds.
 - H) Spark stops and control goes into Lockout. LED flashes 2 times.
2. Reset Lockout by opening the tumbler door until it stops. Close the door and restart the tumbler. Observe the same sequence as in 1. above.
3. Turn ON the Gas Supply to the dryer.
4. Start the tumbler and observe the following:
 - A) Green LED is ON.
 - B) Model DS1290A starts the ignition spark and that flame is established within a few seconds.
 - C) Spark shuts OFF after flame is established.
 - D) Main burner flame shuts OFF after thermostat is satisfied and reignites when temperature drops.

TROUBLESHOOTING

PROBLEM: No ignition spark. LED is OFF.

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

PROBLEM: No Main Burner Flame, LED is flashing 2 times.

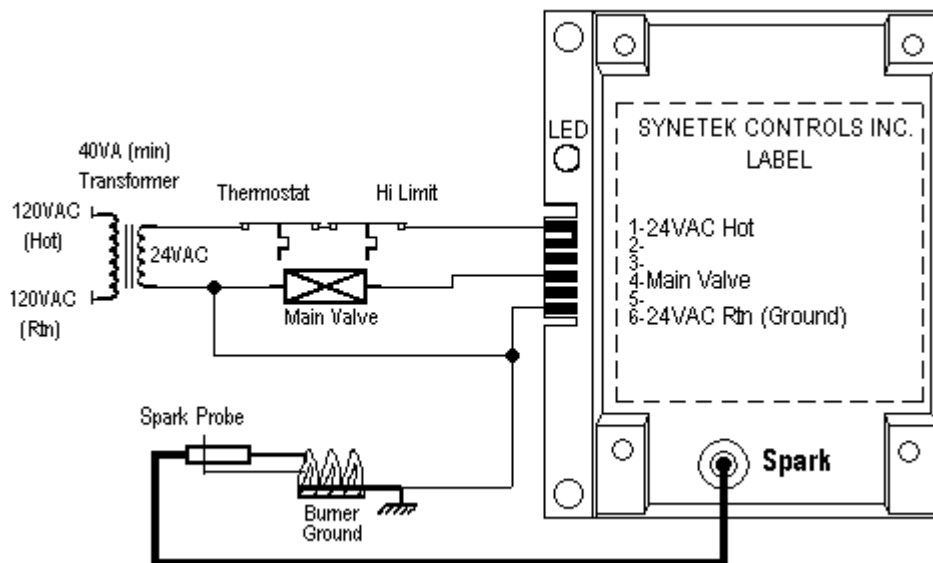
SOLUTION: Control is in Safety Lockout. Reset by opening the dryer door until the tumbler stops and restarting the dryer.

PROBLEM: Ignition Sparks but doesn't ignite the burner.

SOLUTION: Check that the spark is arching across the spark gap. Check the high voltage lead for shorting to the chassis. Replace as necessary. Check the ceramic insulator on the electrode for cracks. Replace as necessary.

PROBLEM: High voltage lead is burned at the ignitor/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.



WARRANTY

Synetek Controls Inc., guarantees to the first retail purchaser that should the control 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 with the failure of our control.

Synetek Controls, Inc.

Wellington, CO Phone: 970-568-7880 Fax: 970-568-9460

www.synetek.us