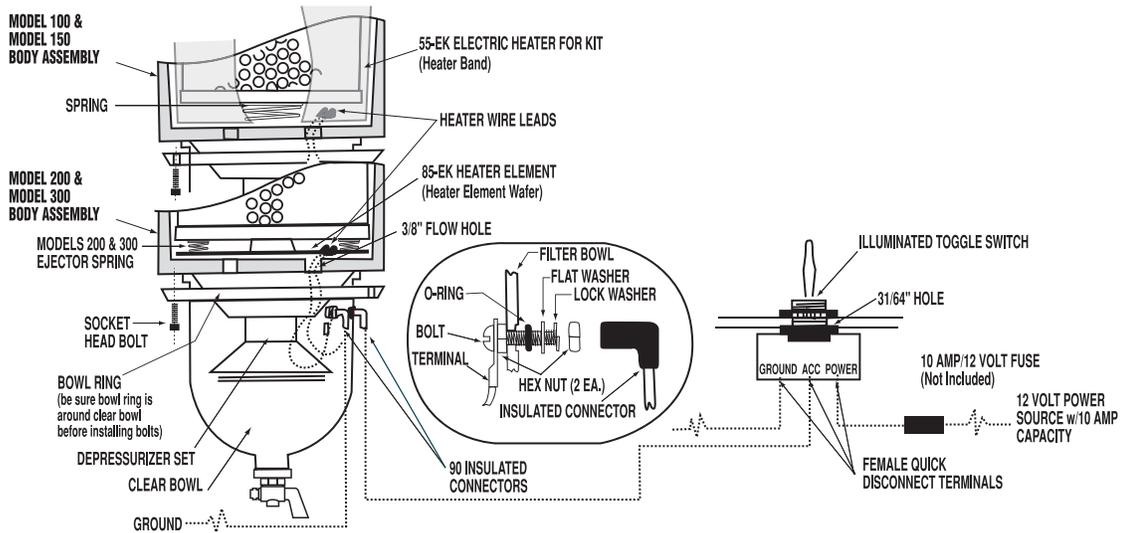


# DAHL 55-EK and 85-EK In-Filter Heater Kit Installation

For Retrofitting Models 100, 150, 200 & 300 Series with Heater  
Included with 100-H, 150-H & 200-H



## MATERIALS NEEDED

In addition to the furnished parts, an appropriate length of 16 gauge electrical wire and a 10A 12V in-line fuse assembly is needed. (Use 10A fuse for 24V.)

## 55-EK & 85-EK RETROFIT ASSEMBLY

(DAHL diesel fuel filter/water separators with an -H suffix come already assembled.)

1. If installing the kit in an used unit, drain and remove the DAHL body assembly.
2. Disassemble the body assembly.
  - a. Remove the filter element.
  - b. Remove the socket head bolts around the bowl ring. Lift off the bowl ring, then the clear bowl.
3. Install the heater element into the body assembly:

### For 55-EK on Models 100 & 150 Series

- a. Place the heater band into the body with the wire lead side down. The heater band fits within the wall of the unit body.
- b. Run the lead wires through one of the 3/8 inch flow holes at the bottom of the body and then through the depressurizer set.
- c. Gently push the heater band into the body.

### For 85-EK on Models 200 & 300 Series

- a. Place the heater element wafer into the body with the wire lead side up. The center hole of the heater element fits around the centerpipe in the unit body.
- b. Bend the wire down at the heater element wafer notch, then run it through one of the 3/8 inch flow holes at the bottom of the body and then through the depressurizer set.
- c. Align the holes in the heater element wafer with the ejector springs and gently push the element to the bottom of the body.

## LEAD WIRE CONNECTIONS

1. Connect the lead wire to the clear bowl.
  - a. Make sure the bowl ring is around the clear bowl before installing the bolts. (It will not fit over the bolts after they are installed.)
  - b. Insert the #8-32 bolts through the terminals of the heater wire leads. Secure the terminal with one #8 nut. (Note: Be sure the terminal's flush side is facing the bowl.)
  - c. Secure the #8-32 bolts to the clear bowl. Be sure the O-Ring is between the outside of the bowl and the flat washer.
2. Reassemble the new clear bowl to the filter body and reinstall the body assembly. (Note: Replace and grease the bowl gasket.)

## ELECTRICAL HOOKUP

1. Install the toggle switch. Drill a 31/64 inch hole in the desired location.
2. Connect the wire to a 12 volt power source capable of delivering 10A. (Use 16 gauge wire.) (Note: 24V systems use 10A fuses.)
  - a. Splice the 10A fuse assembly to the 16 gauge wire between the power supply and the toggle switch. Position the fuse assembly for accessible servicing.
  - b. Connect the other end of the 16 gauge wire to the power terminal of the toggle switch with a female quick disconnect terminal. (One for each toggle switch is included.)
3. Connect the ground wire. Use a second length of 16 gauge wire to ground the terminal of the toggle switch. Connect the other end to a suitable ground such as the engine block or steel frame.
4. Connect the third length of the 16 gauge wire to the "ACC" terminal of the toggle switch. Insert the other end into one of the 90° insulated connectors. Plug the 90° insulated connector into one of the heater terminal #8-32 bolts.
5. Plug the remaining 90° insulated connector to the second heater terminal #8-32 bolt. Find suitable ground for the other end of the wire.

The toggle switch should light up when the heater is on.

# DAHL 55-EK and 85-EK In-Filter Heater Kit Installation (Cont'd.)

For Retrofitting Models 100, 150, 200 & 300 Series with Heater  
Included with 100-H, 150-H & 200-H

## 55-EK KIT CONTENTS

Item	Part Number	Qty.	Description
1		1	55-EK Electric Heater for Kit
2		2	90° Insulated Connectors
3		1	Illuminated Toggle Switch
4		3	Female Quick Disconnect Terminals
5		2	#8-32 Stainless Steel Bolts
6		4	#8-32 Stainless Steel Hex Nuts
7		2	#8 Stainless Steel Flat Washers
8		2	#8 Stainless Steel Lock Washers
9		2	O-Rings
10		2	Ring-Type Terminals
11	100-21H	1	55-EK Clear Bowl with Heater Probes
12	Incl. In 100-GK	1	55-EK Bowl Gasket
13	Form 4011	1	Installation Instructions

## 85-EK KIT CONTENTS

Item	Part Number	Qty.	Description
1		1	85-EK Heater Element Wafer
2		2	90° Insulated Connectors
3		1	Illuminated Toggle Switch
4		3	Female Quick Disconnect Terminals
5		2	#8-32 Stainless Steel Bolts
6		4	#8-32 Stainless Steel Hex Nuts
7		2	#8 Stainless Steel Flat Washers
8		2	#8 Stainless Steel Lock Washers
9		2	O-Rings
10		2	Ring-Type Terminals
11	200-21H	1	85-EK Clear Bowl with Heater Probes
12	Incl. In 200-GK	1	85-EK Bowl Gasket
13	Form 4011	1	Installation Instructions

## HEATER ELEMENT DISASSEMBLY INSTRUCTIONS

1. Drain and remove the DAHL diesel fuel/water separator body assembly.
2. Remove the filter element.
3. Remove the clear bowl by removing the socket head bolts around the bowl ring.
4. Lift the clear bowl far enough to hold the #8-32 bolts while removing the #8-32 nuts.
5. Remove the #8 washer and O-Rings. Push the #8-32 bolts to the inside of the clear bowl and remove the clear bowl and ring.
6. To remove the heater element, reach inside the body and gently pull the heater element up, making sure the wires do not get caught on anything.
7. Before reassembly, check the O-Rings and gaskets for any cuts, cracks or excessive swelling. If in doubt, replace them.
8. See assembly instructions in Form 4100 (Model 100 & 150 Series) or Form 4230 (Model 200 & 300 Series) to reassemble the diesel fuel/water separator.

### BALDWIN LIMITED WARRANTY

Baldwin Filters warrants each new Baldwin or DAHL Filter Product to be free from defects in workmanship and material as follows:

1. **Housings** one year from date of user's purchase.
2. **Electronics, Pumps and Motors** 90 days from date of user's purchase.
3. **Replaceable Elements, Spin-ons, Etc.** during equipment manufacturer's recommended filter service interval, if properly installed in a Baldwin recommended application.

Baldwin will replace or repair at its option, free of charge, any part still in the Baldwin warranty period found by

Baldwin's inspection to be defective when such product is returned to place of purchase or to Baldwin Filters with transportation charges prepaid.

Specifically excluded from this warranty is damage resulting from excessive force, negligence, abuse, misuse, misapplication, tampering, improper installation, fire or accident. The warranty will not apply to any filter which has been cut apart or subject to tampering. Also, damage to plastic parts of fuel/water separators caused by the use of fluids containing alcohol is not covered by this warranty.

Full details of this warranty are in the Policy and Procedures Manual at the Baldwin or DAHL distributor or may be obtained from Baldwin's Service Engineering Department.

### DAHL Products Division

**BALDWIN FILTERS®** 

a CLARCOR company

4400 East Highway 30 • P.O. Box 6010  
Kearney, Nebraska 68848-6010  
Phone: (308) 234-1951 • Toll Free: (800) 822-5394  
Fax: (800) 828-4453 • Int'l Fax: (308) 237-9769  
Internet: www.baldwinfilter.com

