

## Regulatory Compliance

At the end of the usable life of Series 150 and 42 products, or prior to major boiler replacement, or building demolition, the mercury switches in these products must be removed and recycled in accordance with Local, State and Federal Regulations so that mercury does not find its way into the environment. If not removed, the entire product must be managed as a mercury-containing solid waste. Do not put in the trash.

For a list of mercury recyclers, refer to the following internet sites:

- [www.des.state.nh.us/nhppp/options.htm](http://www.des.state.nh.us/nhppp/options.htm)
- [www.nema.org/lamprecycle](http://www.nema.org/lamprecycle)

With an increasing number of states enacting mercury reduction laws, please refer to individual state statutes or contact the states' Departments of Environmental Protection to determine specific requirements.

More information on removal and disposal of switches as well as other relevant mercury facts may be found at our website:

- [www.mcdonnellmiller.com](http://www.mcdonnellmiller.com).

For over 80 years, McDonnell & Miller has been the leader in engineering and manufacturing boiler controls, flow switches and liquid level controls for commercial, industrial and residential applications.

With a number of environmental awards to its name, McDonnell & Miller is also dedicated to being a leader in environmental protection, human health, and safety. As part of ensuring the future protection of our shared environment, we encourage the use of mercury free boiler controls.

McDonnell & Miller is proud to provide a number of field proven products that are not only mercury free but are cost efficient alternatives for your customers and their applications.

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**McDonnell & Miller  
Guide to Mercury Free  
Boiler Controls**

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## More and more states are banning products containing mercury

Across the nation, states are passing legislation affecting the use and sale of products containing mercury. The majority of these laws focus on thermometers, thermostats, button cell batteries, high intensity discharge lamps and automotive switches. They also will apply to boiler controls with mercury switches.

## Seven states have current legislation banning the sale or distribution of mercury products:

Connecticut	July 1, 2004
Rhode Island	Jan. 1, 2006
California	July 1, 2006
Maine	July 1, 2006
Vermont	Jan. 1, 2007
Illinois	July 1, 2007
New York	Jan. 1, 2008

## How it affects McDonnell & Miller boiler controls

These laws also apply to mercury switches found in McDonnell & Miller's Series 150 and Series 42 low water cut-offs. McDonnell & Miller's alternative products offer excellent solutions for your residential, commercial and industrial boiler control needs.

## Old Mercury Switch Boiler Controls

### Series 150



Model Number	Part Number
150	171700
150M	172700
150-HD	173000
150-M-HD	173200
157	173500

### Series 42



Model Number	Part Number
42	129300
42-HD	129500

## Mercury-free Boiler Control Alternative Products

### With Snap-Action Switches

### Series 150S

- Primary and secondary low water cut-off protection and pump control for commercial and industrial steam boilers
- Best used for boiler applications with stable water levels, high fresh water makeup, or inconsistent boiler water chemical treatment
- Snap-action switches
- Maximum pressure 150 psi (10.5 kg/cm<sup>2</sup>)



Model Number	Part Number
150S	171702
150S-M	172702
150S-HD	173003
150S-M-HD	173203
157S	173502

### Series 42S

- For residential, commercial, and industrial low and medium pressure steam boilers
- Snap-action switches
- Maximum pressure 50 psi (3.5 kg/cm<sup>2</sup>)



Model Number	Part Number
42S	129302
42S-HD	129502

### Electronic Conductance Probe Type

### Series 150E

- Primary and secondary low water cut-off protection and pump control for commercial and industrial steam boilers
- Best used for applications with rapidly shifting water levels
- Ideal for vertical tubeless, water tube, process and smaller fire tube boilers
- Conductance probe level detection
- Maintains differentials throughout pressure range
- Internal diagnostics to monitor operation
- Field adjustable burner-off time delay that prevents nuisance shutdowns by compensating for shifting water lines
- CSD-1 compliant
- Maximum pressure – 150 psi (10.5 kg/cm<sup>2</sup>)
- Water column version (Model 157E)



Model Number	Part Number
150E	171600
150E-M	171610
150E-HD	171640
150E-M-HD	171650
157E	171620

Designed specifically for boilers with rapidly shifting water levels, the innovative **Series 150E** system compensates for changes in water levels, reducing rapid burner and pump cycling. That means you get more efficient operation from your boiler as system demands change. Series 150E heads can be installed on Series 150 or 157 float chambers without interrupting equalizing piping.

