

# TECH FACTS BULLETIN

## 280 Series Mechanical Heat Detector: Field Replacement Program



### Introduction

This bulletin informs you of a potential product issue impacting the performance of Edwards 280 Series mechanical heat detectors and tells you how to resolve it.

This bulletin requires a **mandatory** field replacement of the 280 series heat detectors identified in Table 1 of this bulletin, to the extent installed in applications listed in Table 2. If you are a building owner or facility manager please contact a fire alarm professional of your choice for replacement options and to complete the remediation process. Action will be required on your part if you have purchased and installed these products. Please share this bulletin with your Design, Installation, Service, and Purchasing personnel immediately.

Edwards will reimburse fire alarm professionals a fixed amount per unit, as determined by Edwards, covering the cost of the defective unit and the labor related to the unit's removal. Such amounts should be credited by the fire alarm professional to the end user as units are replaced.

### Issue

Edwards has identified a quality issue in certain mechanical heat detectors that could result in the detector not working as intended as they age. Edwards 280 Series mechanical heat detectors may fail to report an alarm condition within the temperature range allowed by their agency listings. Please note, however, that models with date codes prior to January 1, 2004 should be replaced per NFPA 72 and CAN/ULC S-536 requirements, which recommends replacement of heat detectors after fifteen years, and are therefore outside the scope of this bulletin. This bulletin only covers models installed in life safety applications manufactured on January 1, 2004 or after, and models installed in non-life safety applications manufactured on or after January 1, 2014. The affected models are listed in Table 1.

**Note:** This issue only affects the models listed in the Table 1. The 195F models of this heat detector *are not* affected.



Figure 1: 281B-PL Series mechanical heat detector



Figure 2: Location of manufacturing date code on detector. (August 18, 2017) Format: (YY = last two characters of calendar year, DDD = Ordinal/Julian number of the day of the calendar year)

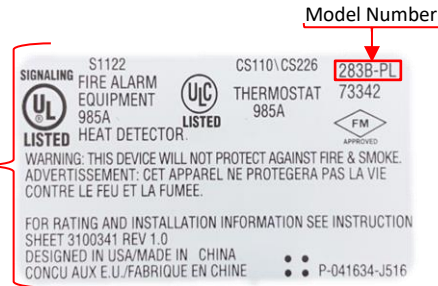


Figure 3: Product label (located on the back of the detector)

Table 1: Affected models

Catalog number	Description
281B-PL	Heat Detector, 135F, Rate of Rise and Fixed temperature, Edwards branded, Honeywell, JCI/Tyco, NAPCO
283B-PL	Heat Detector, 135F, Fixed temperature, Edwards branded, Honeywell, JCI/Tyco
104-13	Heat Detector, 135F, Rate of Rise and Fixed temperature, sold by Interlogix, NAPCO
104-15	Heat Detector, 135F, Fixed temperature, sold by Interlogix
1EYC2	Heat Detector, 135F, Rate of Rise and Fixed temperature, Edwards, Grainger P/N
1EYC4	Heat Detector, 135F, Fixed temperature, Edwards, Grainger P/N
281B-20pkg-OEM-UTC01	Heat Detector, 135F, Rate of Rise and Fixed temperature, Honeywell Security
281B-20pkg-OEM-UTC20	Heat Detector, 135F, Rate of Rise and Fixed temperature, Interlogix
281B-OEM-UTC01	Heat Detector, 135F, Rate of Rise and Fixed temperature, Honeywell Security
283B-20pkg-OEM-UTC01	Heat Detector, 135F, Fixed temperature, Honeywell Security
73340U	Heat Detector, 135F, Fixed temperature and Rate of Rise, Mirtone
73341U	Heat Detector, 135F, Fixed temperature, Mirtone
AI281B	Heat Detector, 135F, Fixed temperature and rate of rise, Edwards
AI283B	Heat Detector, 135F, Fixed temperature, Edwards
281A	Heat Detector, 135F, Fixed temperature and rate of rise, Edwards

**NOTE:** The above models are discontinued and no longer available, effective immediately.

The 280 Series mechanical heat detectors are not a life safety device. When life safety is a factor, the use of smoke detectors is recommended. However, there are a handful of commercial building code sections that allow the use of a heat detector in lieu of a smoke detector, as set forth on Table 2. In such instances, this product issue becomes of safety concern. If your devices are currently installed in such applications they must be replaced **immediately**. Affected models installed in non-life safety applications may present a property protection risk, and are also within scope of this remediation, to the extent manufactured on or after January 1, 2014, as Edwards is extending the warranty on such units to five years, instead of the original three-year warranty.

**Table 2: Potential Safety Applications**

Application	Description	Code References
Elevator Power Shutdown	Mechanical heat detectors can be used for: <ul style="list-style-type: none"> <li>Elevator power shutdown applications</li> <li>Elevator Phase I recall operations when protecting the elevator hoist way and pit</li> </ul>	NFPA 101 (2018) 9.6.3.2.1 NFPA 72 (2019) 21.3.8, 21.4 CAN/ULC-524-2019 8.3.14
Reduction in Fire Barrier Resistance of Construction Materials	Mechanical heat detectors can be used to reduce fire resistance rating: <ul style="list-style-type: none"> <li>Health care facilities</li> <li>Buildings up to and including six (6) stories in building height with residential occupancies</li> <li>Hotels</li> </ul>	NBCC (2015) 9.4.2.5, 9.4.2.6, 9.5.2.6, 9.5.2.9, 9.5.4.3, 9.9.2.2, 9.9.2.9, 9.9.4.2, 9.9.4.5
In Lieu of Smoke Detectors	Mechanical heat detectors can be used in lieu of smoke detectors: <ul style="list-style-type: none"> <li>In environment conditions not suitable for smoke detectors</li> </ul>	IBC (2015) 907.4, NFPA 72 (2019) 10.4.5, 21.3.10 CAN/ULC-524-2019 8.3.11.4
In Lieu of Sprinklers	Mechanical heat detectors can be used in lieu of sprinklers: <ul style="list-style-type: none"> <li>In attics of R-4 occupancies</li> <li>Existing apartment buildings with only an automatic fire detection system using Option 2</li> <li>New and existing residential board and care occupancies, attic extinguishing requirements</li> <li>Buildings higher than six (6) stories in building height with residential occupancies - storage rooms, locker rooms, service rooms, machinery rooms, heating rooms, incinerator rooms, linen and refuse chute intake compartments, janitors' closets and refuse storage rooms, at the tops of elevator shafts and exit stair shafts and in any room or area where hazardous or combustible materials may be used or stored, unless sprinklered</li> </ul>	IBC (2015) 7.2.1.6.1.1

Application	Description	Code References
For Releasing Door Locks	<p>Mechanical heat detectors can be used to for releasing delayed egress locking systems</p> <ul style="list-style-type: none"> <li>Low and ordinary hazard content areas may contain delayed egress locking systems. If heat detectors are used in the fire detection systems their activation response must include releasing the delayed egress locking systems.</li> </ul>	IBC (2015) 7.2.1.6.1.1
In Lieu of Manual Pull Stations	<p>Mechanical heat detectors can used in lieu of manual pull stations:</p> <ul style="list-style-type: none"> <li>Group E with voice/alarm communication systems – In auditoriums cafeterias and gymnasiums.</li> </ul>	IBC (2015) 907.2.3

## Solutions

### I. AFFECTED UNITS ELIGIBLE FOR REFUND -

#### a. FOR DETECTORS INSTALLED IN LIFE SAFETY APPLICATIONS MANUFACTURED JANUARY 1, 2004 OR AFTER (DATE CODE 04001 AND HIGHER)


Detectors manufactured after January 1, 2004\* installed in any application listed on Table 2 must be destroyed and replaced **immediately**. Please follow the steps below on Table 3 for product destruction in the field. Proof of these actions must be submitted for a refund.

**\*Note:** The date code range for detectors in a life safety application is fifteen years. Not to be confused with the extended warranty period of five years, discussed below for units in non-life safety applications.

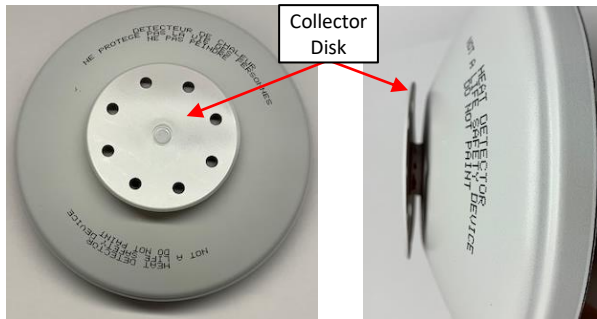
#### b. FOR DETECTORS INSTALLED IN NON-LIFE SAFETY APPLICATIONS MANUFACTURED JANUARY 1, 2014 OR AFTER (DATE CODE 14004)

Detectors in non-life safety applications and manufactured on or after January 1, 2014 are also within the scope of this remediation. Please follow the steps below on Table 3 for product destruction in the field. Proof of these actions must be submitted for a refund.

**Table 3: Field destruction**

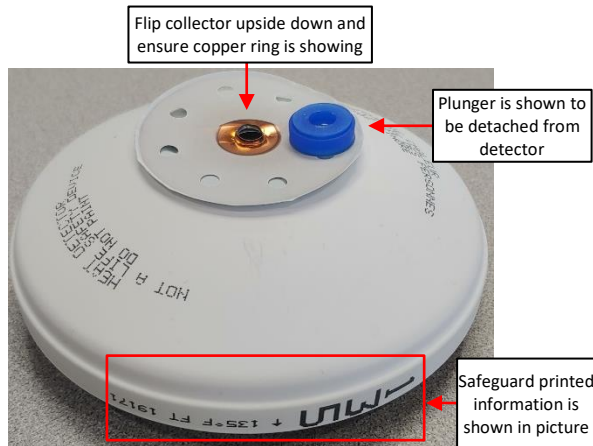
<p><b>Step 1:</b> Contact a licensed fire alarm professional of your choice to perform Steps 2-5 below.</p>	<ul style="list-style-type: none"> <li>This remediation should only be completed by licensed fire alarm professionals due to technical requirements and safety concerns.</li> </ul>
<p><b>Step 2:</b> Identify affected product</p> 	<ul style="list-style-type: none"> <li>Locate product information on the side of the detector</li> <li>Make sure detector has written 135 in large font size (item A)</li> <li>Verify the manufacturing date code is 04001 or higher (item B)</li> </ul>
<p><b>Step 3:</b> Unhook detector from ceiling</p>	

**Step 4: Rip off collector disk**



- Rip off collector disk attached to the top of the detector
- Ensure collector disk is completely separated from the detector

**Step 5: Take a photo evidence of proof of destruction**



- Place collector disk upside down on top of the detector
- Take a photograph showing the details printed on the side of the detector as shown on the left

**Required actions for fire alarm professionals:**

- Segregate, hold, and stop sale of all models listed in Table 1.
- Work with any impacted sites and plan for removal and replacement.
- Submit a claim through [edwardsheatdetector.rsvpcomm.com](http://edwardsheatdetector.rsvpcomm.com) using the Form Registration Code provided below. A written certification and photo evidence will be required as proof of destruction for a refund of your purchase price per website instructions (see Table 3 for more details).
- Please immediately notify your customers of this product issue.

Form Registration Code  
can be found here

## II. AFFECTED UNITS NOT ELIGIBLE FOR REFUND -

### **a. FOR DETECTORS IN LIFE SAFETY APPLICATIONS MANUFACTURED BEFORE JANUARY 1, 2004 (DATE CODE LOWER THAN 04001)**

Detectors installed in life safety applications manufactured before January 1, 2004 should no longer be in service, as NFPA 72 and ULC S-536 require replacement after fifteen years. These alarms are therefore outside of the scope of this remediation and not eligible for a refund.

### **b. FOR DETECTORS IN NON-LIFE SAFETY APPLICATIONS MANUFACTURED BEFORE JANUARY 1, 2014 (DATE CODE LOWER THAN 14004)**

Detectors installed in non-life safety applications manufactured before January 1, 2014 are outside of Edwards' extended warranty of five years. Therefore, such older models are outside the scope of this remediation and not eligible for a refund.

Regardless of eligibility for a refund, Edwards instructs that all affected units in the field should be removed and replaced.

For more information about this important announcement, please visit the website listed below. Please reference this bulletin (TF00008) on the request.

## Contacting support

Tel: +1 (800) 505-5088

[edwardsheatdetector.rsvpcomm.com](http://edwardsheatdetector.rsvpcomm.com)

[www.edwardsfiresafety.com](http://www.edwardsfiresafety.com)