Edwards 280 Series Mechanical Heat Detector

IMPORTANT SAFETY NOTICE – ACTION REQUIRED

Please instruct your Sales, Design, Purchasing, Installation, and Service personnel to carefully read this notice and complete the required action.

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 commercial applications listed in Table 2 or installed in residential attics or residential garages. If you are a building owner, facility manager or home owner please contact a fire or security 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 or security alarm professionals a fixed amount per unit or a flat fee per residential site, 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 to the end user by the fire or security alarm professional 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 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.

Within the scope of this bulletin are models that are either:

• Installed in commercial life safety applications manufactured on January 1, 2004 or after
• Installed in residential attics or residential garages manufactured on January 1, 2004 or after
• Not installed in commercial life safety applications, residential attics or residential garages manufactured on or after January 1, 2014

This issue only affects the models listed in the Table 1. The 195 °F models of this heat detector are not affected.
Figure 1 through Figure 3 shows the location of the manufacturing date code and product label on a 281B-PL Series mechanical heat detector.

The manufacturing date code (see Figure 2) may be a either 4-digit or a 5-digit number written as follows:

- YYWW where YY is the year and WW is the week. For example, 0649 is the 49th week of 2006.
- YYDDD where YY is the year and DDD is the day. For example, 17230 is the 230th day of 2017 (August 18th)

Table 1: Affected models

<table>
<thead>
<tr>
<th>Catalog number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>281B-PL</td>
<td>Heat Detector, 135 °F, Rate of Rise and Fixed temperature, Edwards branded, Honeywell, JCI/Tyco, NAPCO</td>
</tr>
<tr>
<td>283B-PL</td>
<td>Heat Detector, 135 °F, Fixed temperature, Edwards branded, Honeywell, JCI/Tyco</td>
</tr>
<tr>
<td>104-13</td>
<td>Heat Detector, 135 °F, Rate of Rise and Fixed temperature, sold by Interlogix, NAPCO</td>
</tr>
<tr>
<td>104-15</td>
<td>Heat Detector, 135 °F, Fixed temperature, sold by Interlogix</td>
</tr>
<tr>
<td>1EYC2</td>
<td>Heat Detector, 135 °F, Rate of Rise and Fixed temperature, Edwards, Grainger P/N</td>
</tr>
<tr>
<td>1EYC4</td>
<td>Heat Detector, 135 °F, Fixed temperature, Edwards, Grainger P/N</td>
</tr>
<tr>
<td>Catalog number</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
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</tr>
<tr>
<td>281B-20pkg-OEM-UTC01</td>
<td>Heat Detector, 135 °F, Rate of Rise and Fixed temperature, Honeywell Security</td>
</tr>
<tr>
<td>281B-20pkg-OEM-UTC20</td>
<td>Heat Detector, 135 °F, Rate of Rise and Fixed temperature, Interlogix</td>
</tr>
<tr>
<td>281B-OEM-UTC01</td>
<td>Heat Detector, 135 °F, Rate of Rise and Fixed temperature, Honeywell Security</td>
</tr>
<tr>
<td>283B-20pkg-OEM-UTC01</td>
<td>Heat Detector, 135 °F, Fixed temperature, Honeywell Security</td>
</tr>
<tr>
<td>73340U</td>
<td>Heat Detector, 135 °F, Fixed temperature and Rate of Rise, Mirtone</td>
</tr>
<tr>
<td>73342U</td>
<td>Heat Detector, 135 °F, Fixed temperature, Mirtone</td>
</tr>
<tr>
<td>AI281B</td>
<td>Heat Detector, 135 °F, Fixed temperature and rate of rise, Edwards</td>
</tr>
<tr>
<td>AI283B</td>
<td>Heat Detector, 135 °F, Fixed temperature, Edwards</td>
</tr>
<tr>
<td>281A</td>
<td>Heat Detector, 135 °F, Fixed temperature and rate of rise, Edwards</td>
</tr>
</tbody>
</table>

**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 few commercial building code sections listed in Table 2 that allow the use of a heat detector in lieu of a smoke detector. In such instances, this product issue becomes a safety concern. If your devices are currently installed in such applications they must be replaced immediately. Residential attics or garages, although not considered life safety, could pose an unmonitored risk, therefore models installed in such applications are within the scope of this recall.

Affected models not installed in commercial life safety applications, residential attics, or residential garages, may present a property protection risk, and are also within scope of this remediation, to the extent manufactured on or after January 1, 2014. Edwards is extending the warranty on these units to five years instead of the original three year warranty.

**Table 2: Potential safety applications**

<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
<th>Code References</th>
</tr>
</thead>
</table>
| Elevator power shutdown | Mechanical heat detectors can be used for:  
- Elevator power shutdown applications  
- Elevator Phase I recall operations when protecting the elevator hoist way and pit | 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:  
- Health care facilities  
- Buildings up to and including six (6) stories in building height with residential occupancies  
- Hotels | 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:  
- In environment conditions not suitable for smoke detectors | IBC (2015) 907.4,  
NFPA 72 (2019) 10.4.5, 21.3.10  
CAN/ULC-524-2019 8.3.11.4 |
<table>
<thead>
<tr>
<th>Application</th>
<th>Description</th>
<th>Code References</th>
</tr>
</thead>
<tbody>
<tr>
<td>In lieu of sprinklers</td>
<td>Mechanical heat detectors can be used in lieu of sprinklers:</td>
<td>IBC (2015) 7.2.1.6.1.1</td>
</tr>
<tr>
<td></td>
<td>• In attics of R-4 occupancies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Existing apartment buildings with only an automatic fire detection system using Option 2</td>
<td></td>
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<tr>
<td></td>
<td>• New and existing residential board and care occupancies, attic extinguishing requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• 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</td>
<td></td>
</tr>
<tr>
<td>For Releasing Door Locks</td>
<td>Mechanical heat detectors can be used to for releasing delayed egress locking systems</td>
<td>IBC (2015) 7.2.1.6.1.1</td>
</tr>
<tr>
<td></td>
<td>• 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.</td>
<td></td>
</tr>
<tr>
<td>In Lieu of Manual Pull Stations</td>
<td>Mechanical heat detectors can be used in lieu of manual pull stations:</td>
<td>IBC (2015) 907.2.3</td>
</tr>
<tr>
<td></td>
<td>• Group E with voice/alarm communication systems – In auditoriums cafeterias and gymnasiums.</td>
<td></td>
</tr>
</tbody>
</table>

**Affected units not eligible for refund**

**Detectors manufactured before January 1, 2004 (date code lower than 04001) installed in commercial life safety applications, residential attics, or residential garages**

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

**Detectors manufactured before January 1, 2014 (date code lower than 14004) installed in non-life safety applications, residential attics, or residential garages**

For detectors manufactured before January 1, 2014 installed in non-life safety applications are outside of Edwards’ extended warranty of five years. Therefore, these older models are outside the scope of this remediation and are not eligible for a refund but should be replaced.
Affected units eligible for refund

Detectors manufactured January 1, 2004 or after (date code 04001 and higher) installed in commercial life safety applications

Detectors manufactured after January 1, 2004* installed in any application listed in Table 2 must be replaced and destroyed immediately. Please follow the steps below 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.

Detectors manufactured January 1, 2004 or after (date code 04001 and higher) installed in residential attics or residential garages

Detectors manufactured after January 1, 2004* installed in any residential attic or residential garage must be replaced and destroyed immediately.

Note: A photo of the unit installed in a residential attic or residential garage prior to being removed must be submitted as part of the claim process. Please follow steps below for product destruction in the field. Proof of these actions must be submitted for a refund.

Detectors manufactured January 1, 2014 or after (date code 14004 and higher) not installed in commercial life safety applications, residential attics, or residential garages

Detectors not installed in commercial life safety applications, residential attics or residential garages and manufactured on or after January 1, 2014 are also within the scope of this remediation. Please follow the steps below for product destruction in the field. Proof of these actions must be submitted for a refund.

Instructions for destroying products in the field

Follow the steps below to destroy products in the field. Proof of these actions must be submitted for a refund.

This remediation should only be completed by licensed fire or security alarm professionals due to technical requirements and safety concerns.

Step 1: Contact a licensed fire or security alarm professional of your choice to perform Steps 2-5 below.

Step 2: Identify the affected product.

• Locate product information on the side of the detector. See Figure 4.
• Make sure detector has 135 written in large font (item A).
• Verify the manufacturing date code is 0400 or higher (item B).

Figure 4: Affected product identification

Step 3 (if applicable): Take photo of residential attic or residential garage installation
If your unit is installed in a residential attic or residential garage, take a photo of the installation prior to removing the unit. Proof of the installation must be submitted for a refund.

**Step 4:** Remove the detector from the ceiling.

**Step 5:** Remove the collector disk.

**Caution:** Personal injury hazard. The edge of the disk is sharp. To avoid injury, use pliers or similar tool to remove the collector disk from the detector.

- Using pliers or similar tool, remove the collector disk attached to the top of the detector by folding the disk over at multiple points around the circumference until it separates from the device. See Figure 5.
- Ensure the collector disk is completely separated from the detector.

**Figure 5:** Collector disk

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**Step 6:** Take a photo evidence of proof of destruction.

- Place the collector disk upside down on top of the detector. See Figure 6 below.
- Take a photograph showing the details printed on the side of the detector as shown below.

**Figure 6:** Evidence of destruction
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 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.
  
  Form Registration Code: [Refer to the safety notice you received for the registration code]

- Please immediately notify your customers of this product issue.

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

For more information about this important announcement, please visit the website listed below. Please reference this bulletin (SN00017) on the request.

Contacting support

Tel: +1 (800) 505-5088
edwardsheatdetector.rsvpcomm.com
www.edwardsfiresafety.com