# Installing the PBX-PIT07 Pit Bar in the 2020+ Police Interceptor Utility

25500631 Rev. A0 0320

# Safety Message to Installers and Service Personnel of Emergency Vehicle Safety Equipment

## **A** WARNING

People's lives depend on your proper installation and servicing of Federal Signal products. It is important to read and follow all instructions shipped with this product. Listed below are some other important safety instructions and precautions you should follow:

#### **Before Installation or Service**

#### Qualifications

• To properly install or service this equipment, you must have a good understanding of automotive electrical procedures and systems along with proficiency in the installation and service of safety warning equipment. Always refer to the vehicle service manuals when installing equipment on a vehicle.

#### Electrical Hazards

Never attempt to install aftermarket equipment that connects to the vehicle wiring without reviewing a
vehicle wiring diagram available from the vehicle manufacturer. Ensure that your installation will not affect
vehicle operation and safety functions or circuits.

#### **During Installation or Service**

- To avoid a battery explosion, always disconnect the negative battery cable first and reconnect it last. Avoid a spark when connecting near or to the battery. The gasses produced by a battery can cause a battery explosion that could result in vehicle damage and serious injury.
- Do not install equipment or route wiring or a plug-in cord in the deployment path of an airbag.
- Before mounting any components, check the manual to be sure that the component you are installing is suitable for use in that area of the vehicle. Many components are not suitable for use in the engine compartment or in other areas subject to extreme environmental exposure.
- When drilling into a vehicle structure, be sure that both sides of the surface are clear of anything
  that could be damaged. Remove all burrs from drilled holes to prevent electrical shorts, grommet all
  drilled holes through which wiring passes. Also ensure that mounting screws do not cause electrical or
  mechanical damage to the vehicle.

#### After Installation or Service

- If a vehicle seat is temporarily removed, verify with vehicle manufacturer if the seat needs to be recalibrated for proper airbag deployment.
- To ensure proper operation, test all vehicle functions, including horn operation, vehicle safety functions, and vehicle light systems. Ensure that installation has not affected vehicle operation or changed any vehicle safety function or circuit.
- After installation and testing are complete, provide a copy of these instructions to instructional staff and all operating personnel.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the product.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death.

### **Unpacking the Product**

After unpacking the product, inspect it for damage that may have occurred in transit. If it has been damaged, do not attempt to install or operate it. File a claim immediately with the carrier, stating the extent of damage. Failure to identify damage before installation could lead to rejection of any claim. Carefully check all envelopes, shipping labels, and tags before removing or destroying them. Ensure that the parts listed in Table 1 are included in the package. If you are missing any parts, contact Federal Signal Customer Support at 1-800-264-3578, 7 a.m. to 5 p.m., Monday through Friday (CT).

Item	Qty.	Description	Tools Needed
1	1	Driver Pit Bar	Ratchet
2	1	Passenger Pit Bar	Screwdriver
3	1	Driver Mounting Bracket	14 mm Wrench
4	1	Passenger Mounting Bracket	14 mm Socket
5	1	Driver Support Bracket	Allen Wrench
6	1	Passenger Support Bracket	15 mm Socket
7	2	Long M12 Bolt Plate	13 mm Socket
8	2	Short Spacer	10 mm Socket
9	2	Long Spacer	8 mm Socket
10	2	M12 Double Bolt Plate	6 mm Socket
11	2	Short M12 Bolt Plate	Ratchet Ext.
12	1	Driver Template	Torque Wrench
13	1	Passenger Template	Hammer
14	10	M12 Button Head Bolt	Utility Knife
15	10	M12 Serrated Flange Hex Nut	Hole Saw
16	10	M12 Belleville® Washer	
17	2	Drill Templates - Driver and Passenger (See Figures 5 & 6)	

Table 1 Kit contents and tools needed

## Installing the Pit Bar

## **▲** WARNING

PUSH BUMPER PRECAUTION: Installing a push bumper on a vehicle may raise the vehicle's minimum collision speed for airbag deployment. It is imperative that police officers wear safety belts when operating the motor vehicle. Failure to follow this warning may cause serious injury or death.

#### NOTICE

THREAD DAMAGE AND GALLING: Use anti-seize lubricant on all stainless steel fasteners to prevent thread damage and galling.

To install the pit bar:

1. Starting from step 10 on Instruction Sheet 25500630 for the push bumper, locate the mounting and support brackets (Items 3-6). Slide the double bolt plate (Item 10) inside the front of the frame. Mount the driver side brackets using the supplied M12 hardware while holding the bolt plate in place. See Figures 1-3. Repeat these steps on the passenger side.

Figure 1

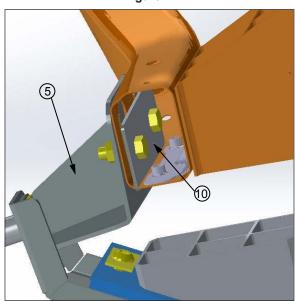


Figure 2

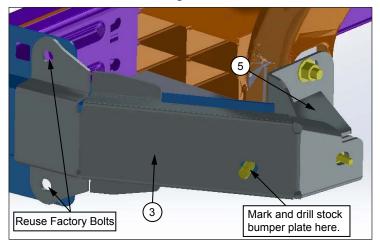
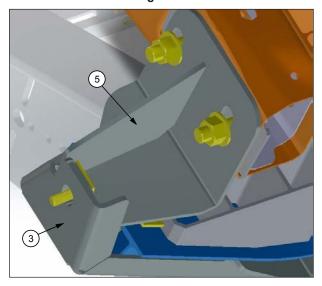


Figure 3



- 2. Referring to step 11 on Instruction Sheet 25500630 push bumper, test fit the push bumper and pit bar brackets with the fascia off. Tighten all the M12 hardware to 50-55 ft-lb.
- **3.** Make a mark on the stock bumper plate as indicated in Figure 2 and drill a 9/16-inch hole on both the driver and passenger sides.
- 4. Reinstall the fascia but leave the fender area open so you can access the mounting brackets. See Figure 4.

Figure 4



**IMPORTANT:** Trimming is required on the front fascia.

**5.** Measure the reference units on the template to ensure that it is the correct size. Trim and tape the supplied template on to the front fascia per the instructions on the template. Make sure the template is aligned correctly before trimming the fascia. See Figures 5 and 6.

Figure 5

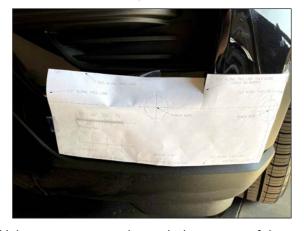


Figure 6



**6.** Using a center punch, mark the center of the two specified holes on the template. Remove the template; using a 1.5-inch hole saw, cut out the two holes and then clean the edges. See Figure 7. Repeat this process on the passenger side.

Figure 7



**7.** Going between the driver inner fender and fascia, install the short and long M12 bolt plates into the brackets. Place the spacers into the previously cut holes, and screw the spacers into each bolt plate. See Figures 8 and 9. Do the same on the passenger side.

Figure 8

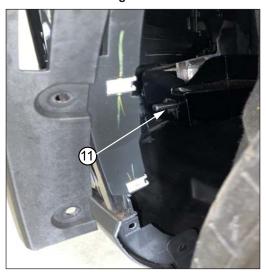
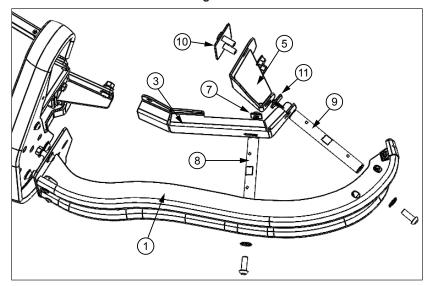


Figure 9



Items 14-16

8. Once the push bumper is installed, install the pit bar sides using the supplied M12 hardware. See Figure 10.

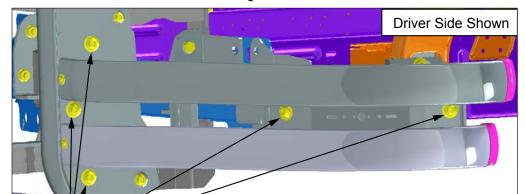


Figure 10

9. Align and adjust the pit bars as necessary. Tighten all remaining hardware: M12 to 50-55 ft-lb.



Figure 11

## Maintaining the Pit Bar Assembly

Regularly clean stainless steel and glossy black finishes with a mild soap and water. Apply a non-abrasive wax or polish. To polish small scratches on stainless steel, use stainless steel polish. To avoid making scratches on the stainless steel surfaces, follow the grain of the steel while polishing.

## **Getting Technical Support**

For technical support, please contact:

Federal Signal Corporation Service Department Phone: 1-800-433-9132

Email: empserviceinfo@fedsig.com

### **Getting Repair Service**

The Federal Signal factory provides technical assistance with any problems that cannot be handled locally. Any product returned to Federal Signal for service, inspection, or repair must be accompanied by a Return Material Authorization (RMA). Obtain a RMA from a local Distributor or Manufacturer's Representative. Provide a brief explanation of the service requested, or the nature of the malfunction.

Address all communications and shipments to the following:

Federal Signal Corporation Service Department 2645 Federal Signal Dr. University Park, IL 60484-3167

## **Limited Warranty**

This product is subject to and covered by a limited warranty, a copy of which can be found at www.fedsig. com/SSG-Warranty. A copy of this limited warranty can also be obtained by written request to Federal Signal Corporation, 2645 Federal Signal Drive, University Park, IL 60484, email to info@fedsig.com or call +1708-534-3400.

This limited warranty is in lieu of all other warranties, express or implied, contractual or statutory, including, but not limited to the warranty of merchantability, warranty of fitness for a particular purpose and any warranty against failure of its essential purpose.

PBX-PIT07 Pit Bar 7



2645 Federal Signal Drive University Park, Illinois 60484-3167

www.fedsig.com

Customer Support

Police/Fire-EMS: 800-264-3578 • +1 708 534-3400
Work Truck: 800-824-0254 • +1 708 534-3400
Technical Support: 800-433-9132 • +1 708 534-3400

© Copyright 2020 Federal Signal Corporation All trademarks are property of their respective owners.