



XT6 Service Barrier Installation Instruction Guide

Suitable for the Lug Range: 2/0 AWG-400MCM

Introduction

This Installation Guide should be used when installing service entrance barrier kit for XT6 Breaker having cable range capacity 2/0 AWG-400MCM (3 Cable per lug).

These barriers are required when the breaker is used as a single service entrance main device inside a lighting panel, in compliance with UL67/2018, Clause 6.4. Barrier installation is required on the line side of the main device prior to energizing in forward or reverse feed applications, ensuring isolation from live parts on the line side when the main breaker is turned off.

If a lug barrier is removed from a circuit breaker for maintenance while the incoming line is shut off, it must be reinstalled prior to reenergizing in order to maintain isolation.

Contents per Installation Kit

XT6P3SB1 – XT6-3P Lug Service Barrier Kit

Description	Qty.
XT6 Lug Barrier	3
Barrier Plug	6

XT6P2SB1 – XT6-2P Lug Service Barrier Kit

Description	Qty.
XT6 Lug Barrier	2
Barrier Plug	4

Installation

A service entrance panelboard with XT6 as a main circuit breaker will require three lug barriers. Use one of each part per pole.

Figure 1 depicts the Lug Barrier included in the kit.

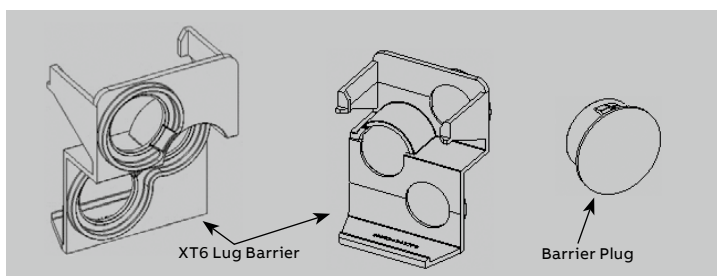


Figure 1: XT6 Kit Components



NOTICE: These instructions do not purport to cover all details or variations in equipment or to provide for every possible contingency to be met in connection with the installation, operation or maintenance. Should further information be desired, or should particular problems arise which are not covered sufficiently for the purposes, the matter should be referred to ABB. These instructions are intended for use by qualified and trained personnel only.

Hazard Classifications

The following important highlighted information appears throughout this document to warn of potential hazards or to call attention to information that clarifies a procedure.

Carefully read all instructions and become familiar with the devices before trying to install, operate, service or maintain this equipment.



DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.



CAUTION: Indicates that if the hazard is not avoided could result in minor or moderate injury.



NOTICE: Is used to notify of practices not related to personal injury.



DANGER: Electrical arc flash hazard. Personal protection equipment required. Turn off power to the equipment before working inside.

Kit Installation Steps

To install Finger Safe Barrier follow steps provided under this installation procedure.

This Finger Safe Barrier must be installed prior to the wire connection to the circuit breaker.

- Item A Terminal Cover Screw
- Item B Terminal Cover
- Item C Lug Barrier
- Item D Barrier Plug

Step 1: Remove Item A and B

Step 2: Assemble Item C, ensure the snap fit as shown in Figure 3

Step 3: Assemble Item D (Mandatory for unutilized port)

Step 4: Assemble Item B and A

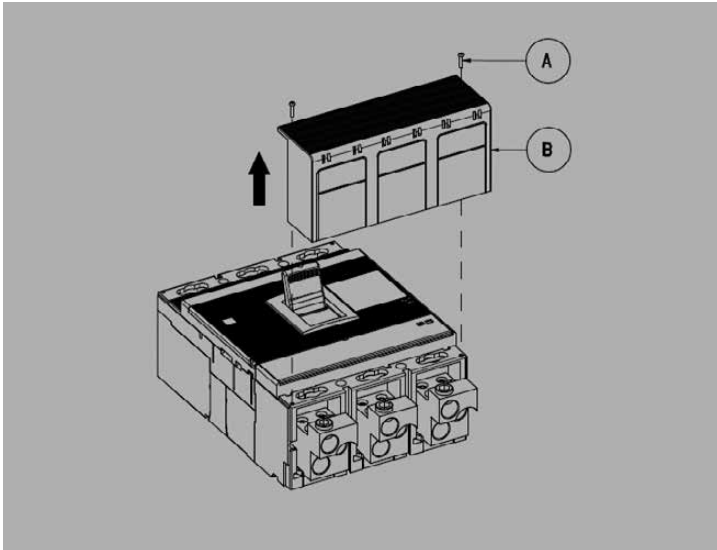


Figure 2: Remove the Item A and B from Circuit Breaker

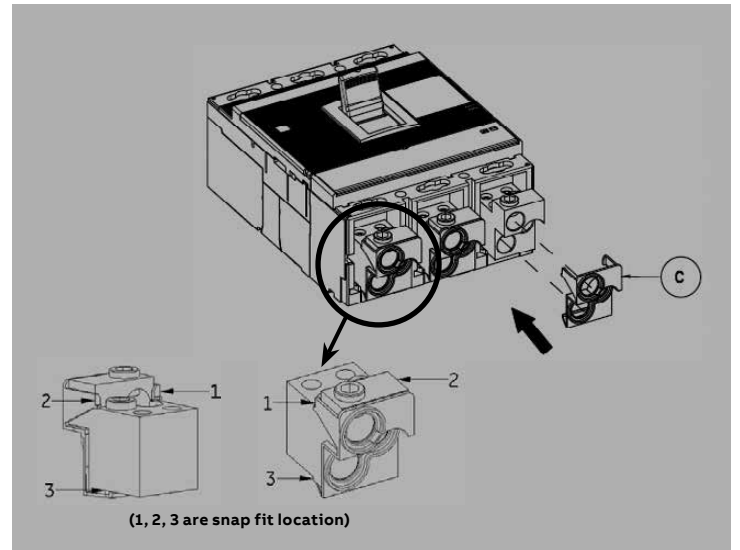


Figure 3: Assemble the Item C, snap fit at 3 places as shown in view

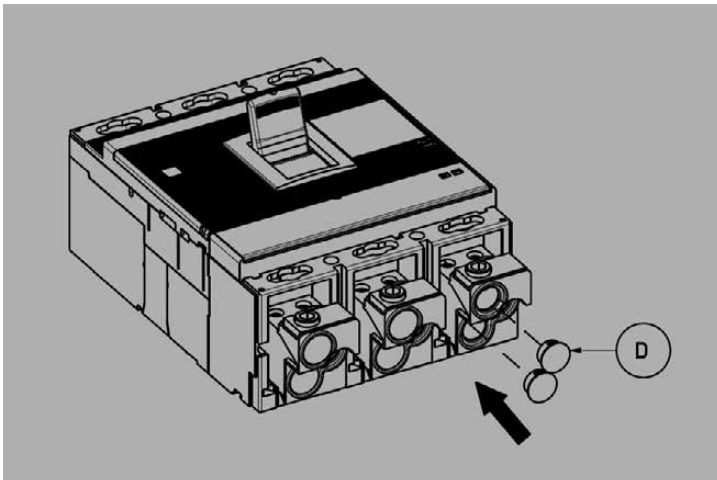


Figure 4: Assemble Item D

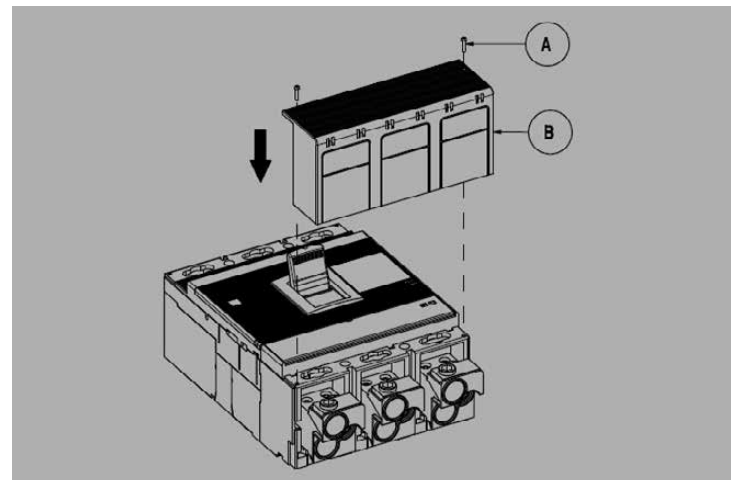


Figure 5: Assemble the Item B and A on Circuit Breaker

WARNING: Lug service barriers must be correctly installed on the line side of a main device in ABB Lighting Panels.

WARNING: Installing size wire other than the specified sizes for each circuit breaker frame will negate the barrier's ability to protect personnel from exposed live components.

Cable Installation

Before installing the cable, remove necessary knock outs from the terminal cover as shown in Figure 7.

The wires must be stripped to the correct length to maintain isolation. After stripping the wires to the required length, the wires can be installed as shown in Figure 8. The lug barrier must be correctly installed to maintain electrical isolation from accidental contact. Torque the wires according to the torque specification on the breaker.

Table 1: Shows the allowable wire sizes for the barrier.

Lug	Range	Strip Length
800 A	2/0 AWG to 400MCM Cu/Al (3 Cable per Lug)	1.22"

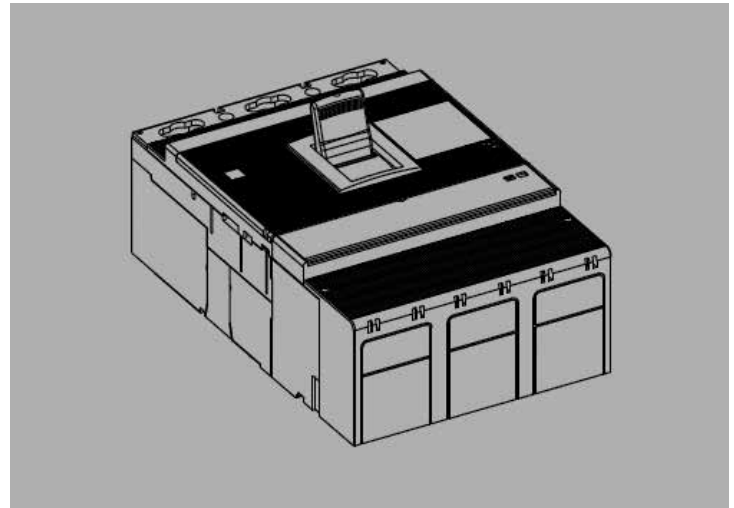


Figure 6: After assembly of Item A to D

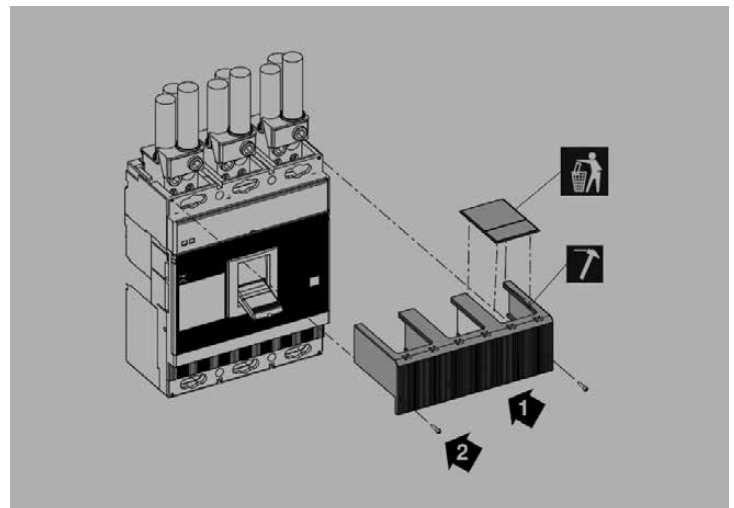


Figure 7: Removing knock outs on terminal cover after wiring installation

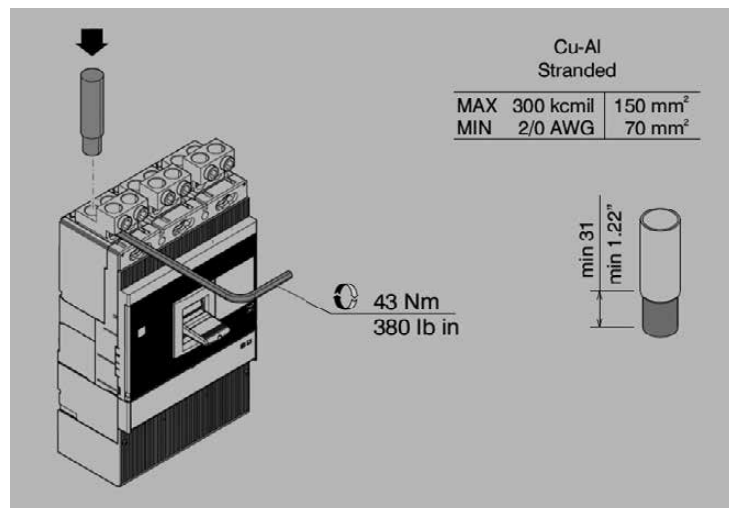


Figure 8: Maximum Wire Strip Length

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