

# Introduction <u>Kirk Key lock Kit</u>



#### WARNING

Potential arc flash and shock hazard Turn Off and Lockout power prior to working on equipment Gear shall be de-energized or breaker shall be in test position for performing the quality checks on new Kirk lock assemblies

### Kit Contents

- 1. Master Cam Pt. No. 10108106P1
- 2. Wrench Pt. No. 10110040P1
- 3. Distance spacer Pt.No.10109838P1
- 4. Installation instruction DEH-41500

The Kirk key lock will come with 7/8" nut, Cam spacer and M11 nut.

The cassette mounted key lock is an optional accessory, which will keep the breaker in the trip free state and access to prevents the rackina mechanism while locked. A maximum of 2 key locks can be used. The kit supplies the cams, distance spacer, custom wrench and installation instructions for the cassette. Order 2 kits if 2 locks are to be installed. The key locks must be ordered separately from Kirk Key. Ordering instructions can be found in table 1 and table 2.

### Catalog Number

Catalogue number	Description
GCKIRK	Kirk Key lock Kit (1 lock), Factory installation
GCKRKR	Kirk Key lock (1 lock), Field installation

## DEH41500 Installation instructions

EntelliGuard G ® Circuit Breaker Accessories –<u>Kirk Key lock kit</u>

### Key lock ordering information

Reference to Key lock ordering number									Remarks	Key removable E/W	
К	С	Α	М	х	х	х	1	0	S	CW to trap	E
К	С	A	М	х	х	X	1	1	S	CCW to trap	W

#### Table 2

## Installation into cassette

1. Remove the dummy lock on the cassette front panel, if installed using an M5 Allen wrench when installing one lock in left hole, see Fig. 1. If installing two locks, remove plastic knockout and clean the flash with any sharp pointed tool. Ensure no flash or projections left and cavity is free for insertion of lock. Transfer the dummy lock kit after removal to the right hole if breaker is not having two lock kits



Fig. 1

 Place the distance spacer in the cavity as shown in exploded assembly view Fig.
Insert 1 lock or 2 locks into the front panel cutouts as shown in fig's 2 and 3.



Fig. 2

3. Assemble the kirk lock to the base plate by tightening the big nut by hand. After hand tightening rotate wrench by quarter turn to maintain 105~120 Lb-In torque. Be careful not to over tighten the large nut. Over tightening will damage the front panel. Slide cam spacer and cam onto rear of key lock and tighten M11 nut with wrench provided to maintain torque of 120~160 Lb-In. Refer to fig's 2 and 4 to identify correct cam orientation.

4. Assemble cam for extended "E" type locks as shown in Fig. 4. "W" marking will be visible from front of cassette when cam is assembled for extended locks.

5. Locate "W" on cam towards rear of cassette for withdrawn, "W" type locks (See Fig. 4)



Fig. 3





The key is removable when key is rotated counter clockwise to the left for extended Locks (E Type).

The key is removable when the key is rotated clockwise to the right for withdrawn locks (W Type)

### Key lock Operation

When operating the key locks, turn both keys quickly from one position to the other and remove the key at the end of the rotation.

"W" and "E" locks operate similar to a 2 barrel key lock. When one lock is rotated, it causes the other lock to rotate.

The key is removable from the "E" lock when the key is turned counterclockwise to the left and the breaker is open. See Fig. 5. The key is removable from the "W" lock when the key is turned to the right. See Fig. 5.

Locks Rotated	Breaker	Racking Door
CW	Open or Closed	Can be opened
CCW	Locked Open	Locked closed



Fig. 5

# Quality checks for lock operations with breaker racked to Test position

Press the "OPEN" button on the breaker fascia and open the breaker as shown in Fig. 6. With the "OPEN" button in pressed condition turn the keys on the key locks counter clockwise by 90 degree till they reach dead stop (Fig. 7). Remove the key from extended lock and breaker is now locked out in the trip free condition.



Fig. 6



Fig. 7

It should not be possible to open the racking handle shutter. Verify this by taking a screwdriver and attempt to open the shutter drive by rotating the quarter turn screw clockwise as shown in Fig. 8. Quarter turn screw should not rotate and shutter should not open.





It should not be possible to switch the breaker 'ON'. Verify this by charging the mechanism and attempting to close the breaker by depressing the "CLOSE" button as shown in Fig. 9. Breaker should not close.

Ordering form to the Kirk lock company is available at <a href="http://pdf.kirkkey.com/pdfs/KKIC\_Ordering\_Form.pdf">http://pdf.kirkkey.com/pdfs/KKIC\_Ordering\_Form.pdf</a>





These instructions do not purport to cover all details or variations in equipment not to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

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imagination at work

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