

SOLARLOK* Locking Collar
NOTE


All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters. Unless otherwise specified, dimensions have a tolerance of ± 0.13 and angles have a tolerance of $\pm 2^\circ$. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

This specification covers the requirements for application of SOLARLOK locking collar is designed to be installed onto SOLARLOK connectors to prevent access to the release feature of a mated SOLARLOK connector (male cable coupler and female cable coupler) without the use of a tool. The installed locking collar enables SOLARLOK connectors to comply with National Electric Code (NEC) 2008: 690.33.

NOTE


NEC 2008: 690.33 states: Connectors that are readily accessible and that are used in circuits operating over 30 volts nominal, maximum system voltage for direct current (DC) circuits or 30 volts for alternating current (AC) circuits shall require a tool for opening.

The locking collar features a latch that properly locates and secures the locking collar onto the male cable coupler. When the cable couplers are mated, the finger grip windows accept the finger grips of the female cable coupler, locking the locking collar in place. The latch must be released using a flat-blade screwdriver.

When corresponding with personnel, use the terminology provided in this specification to facilitate your inquiries for information. Basic terms and features of this product are provided in Figure 1.

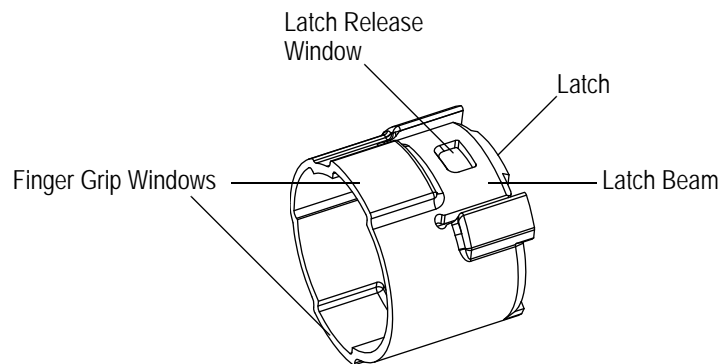


Figure 1

2. REFERENCE MATERIAL
2.1. Revision Summary

Initial release of application specification

2.2. Customer Assistance

Reference Product Base Part Numbers 2106207 and Product Code G923 are representative of SOLARLOK locking collar. Use of these numbers will identify the product line and expedite your inquiries through a service network established to help you obtain product and tooling information. Such information can be obtained through a local Representative or, after purchase, by calling PRODUCT INFORMATION at the number at the bottom of this page.

2.3. Drawings

Customer Drawings for product part numbers are available from the service network. If there is a conflict between the information contained in the Customer Drawings and this specification or with any other technical documentation supplied, call PRODUCT INFORMATION at the number at the bottom of this page.

National Electric Code and NEC are trademarks of the National Fire Protection Association.

2.4. Specification

Product Specification 108-2361 provides product performance and test information.

2.5. Instructional Material

Instruction Sheets (408-series) provide product assembly instructions or tool setup and operation procedures. Documents available which pertain to this product are:

408-10239 SOLARLOK Locking Collar 2106207-1

2.6. Standards and Publications

Standards and publications provide industry test and performance requirements. There are no documents available that pertain to this product (the locking collar is an accessory).

3. REQUIREMENTS

3.1. Safety

Do not stack product shipping containers so high that the containers buckle or deform.

3.2. Limitations

The locking collar is designed to operate in a temperature range of -40 to 90°C [-40 to 194°F] at full load.

3.3. Storage

A. Ultraviolet (UV) Light

The material of the locking collar is UL rated for UV light and outdoor exposure.

B. Shelf Life

Product should remain in the shipping containers until ready for use to prevent deformation. Product should be used on a first in, first out basis to avoid storage contamination that could adversely affect performance.

C. Chemical Exposure

Do not store product near any chemical listed below as they may cause stress corrosion cracking in the product.

Alkalies	Ammonia	Citrates	Phosphates	Citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulfur Nitrites		Tartrates

3.4. Installation

The locking collar must be installed onto the male cable coupler before the cable couplers are mated. Installation of the locking collar must meet the following requirements:



To avoid personal injury, the circuit load must be DISCONNECTED BEFORE a cable coupler is unplugged. A cable coupler MUST NOT be unplugged under load.

1. The locking collar must face the mating end of the male cable coupler with the latch of the locking collar aligned with the pockets of the male cable coupler, then slid onto the male cable coupler until the latch sits in the first pocket. See Figure 2, Detail A.
2. The female cable coupler must be properly aligned with the male cable coupler, then mated. See Figure 2, Detail B. When the cable couplers are fully mated, there will be an audible "click." See Figure 2, Detail C.

3.5. Installation Inspection

To ensure that the locking collar is locked into place, an attempt to twist or slide the locking collar must be made. The locking collar must not move in any way. The cable couplers must be straight and parallel.

Installation of Locking Collar

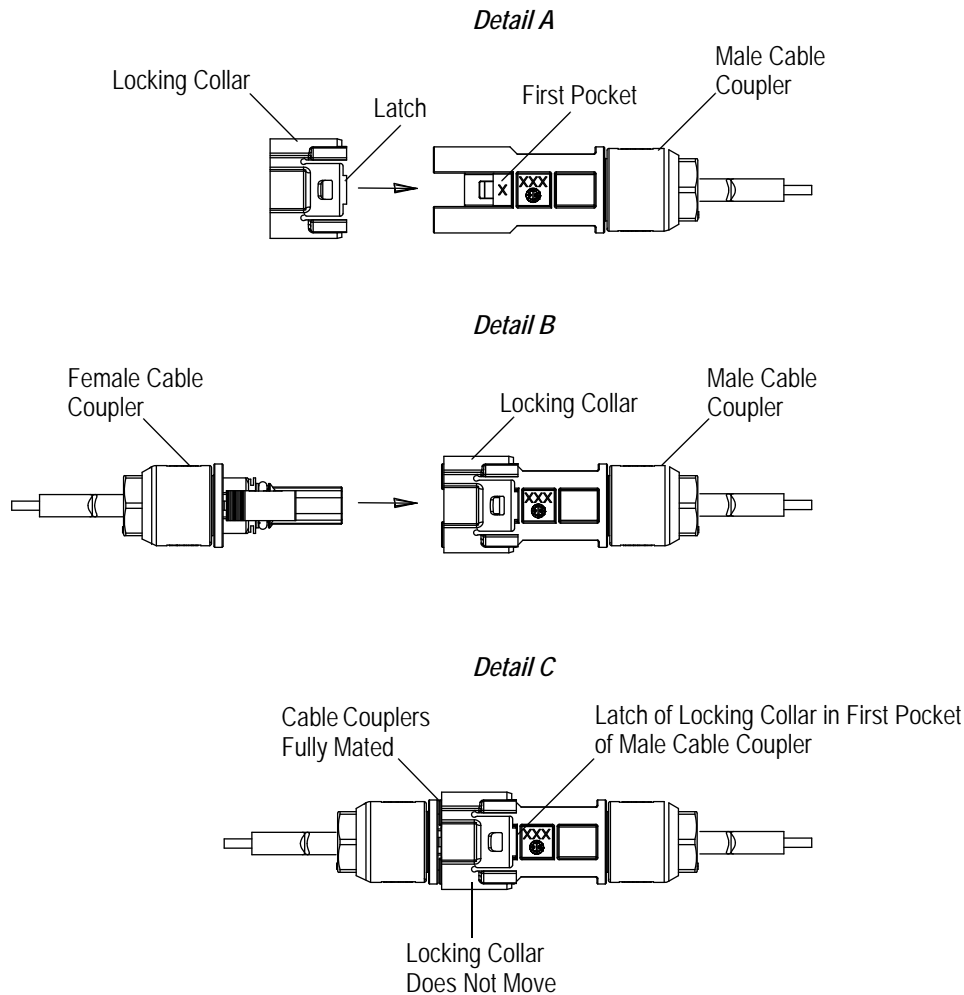


Figure 2

3.6. Removal

The locking collar can only be removed after the cable couplers are unmated. Removal of the locking collar must meet the following requirements:

1. From the female cable coupler side, the tip of a flat-blade screwdriver must be inserted into the latch release window of the locking collar. See Figure 3, Detail A.
2. The screwdriver must be rotated and slightly pushed until the latch of the locking collar lifts over the first pocket of the male cable coupler and into the second pocket. The locking collar must be pushed axially toward the male cable coupler until the latch is against the end of the second pocket. See Figure 3, Detail B.
3. The cable couplers must be unmated by depressing the finger grips of female cable coupler and pulling the female cable coupler away from the male cable coupler. See Figure 3, Detail C.
4. The tip of the screwdriver must be inserted under the latch of the locking collar, then rotated so that the latch and the latch beam deflects away from the male cable coupler. Then, the locking collar must be pulled off of the male cable coupler. See Figure 3, Detail D.

Removal of Locking Collar

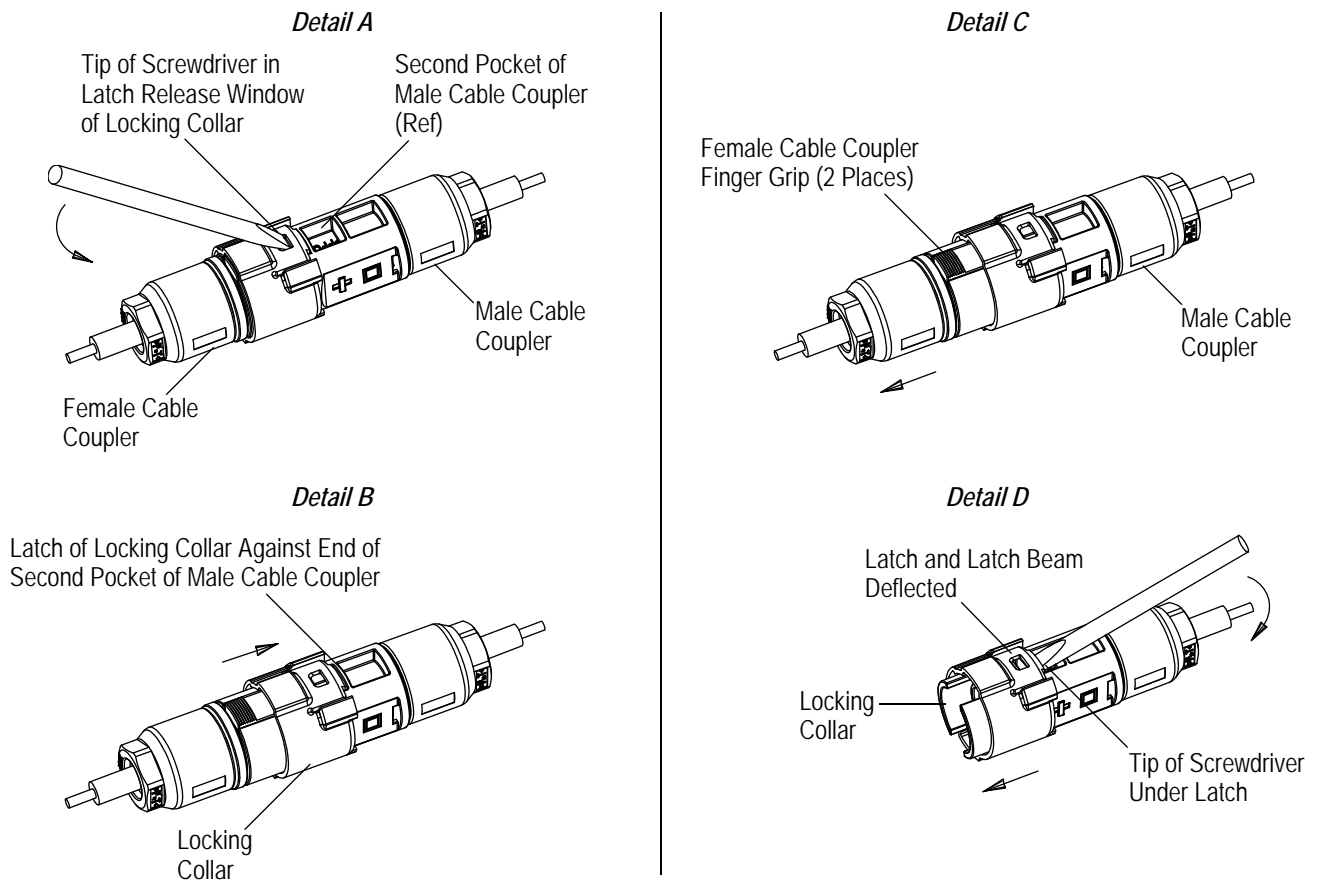


Figure 3

3.7. Repair

The locking collar is not repairable. Damaged or defective product **MUST NOT** be used. The locking collar must be replaced after 5 installation cycles.

4. QUALIFICATION

No qualifying support for the SOLARLOK locking collar was defined at the time of publication of this document.

5. TOOLING

A flat-blade screwdriver is required for releasing the latch of the locking collar.

6. VISUAL AID

The illustration below shows a typical application of this product. This illustration should be used by production personnel to ensure a correctly applied product. Applications which DO NOT appear correct should be inspected using the information in the preceding pages of this specification and in the instructional material shipped with the product or tooling.

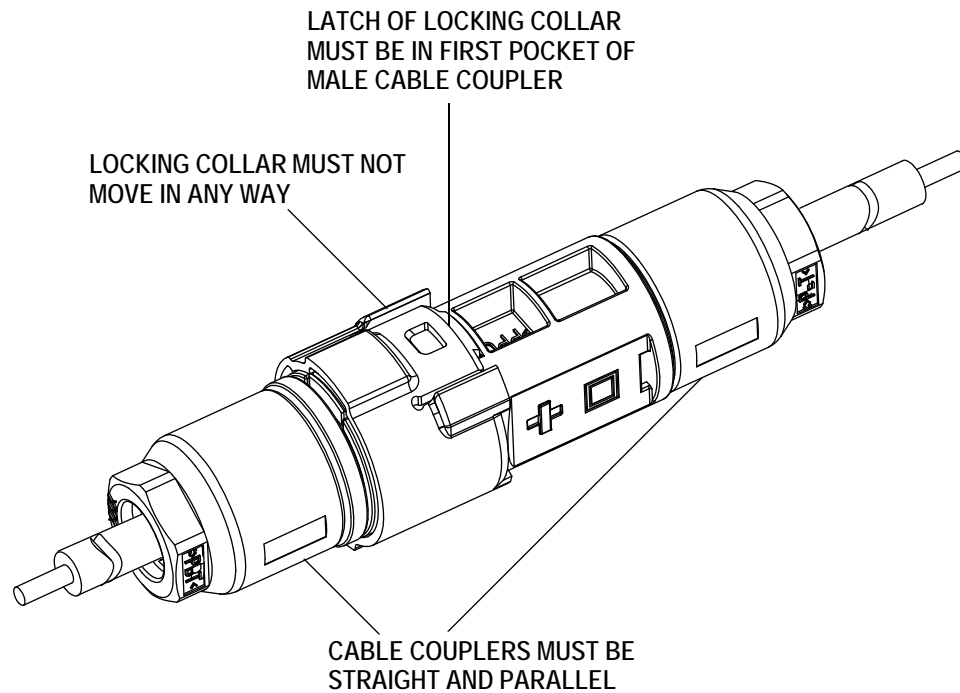


FIGURE 4. VISUAL AID