



Figure 1

89-145A

1. INTRODUCTION

AMP* WRENCH-LOK Grounding Grid Connectors provide a quick, easy, and reliable method of making connections in various line construction, line maintenance, and grounding grid applications. Only one connector, along with a common wrench or equivalent, is required to make every type of connection in an entire grounding grid. Read these instructions thoroughly before attempting any assembly.

Reasons for reissue are provided in Section 4, REVISION SUMMARY.

2. DESCRIPTION (Figure 1)

Each WRENCH–LOK connector consists of a shear–head bolt, a wedge, a body, and a nest. The bolt has a small diameter area near its head; when a specified torque is reached during the tightening process, the head shears from its body, indicating completion of the connection. The body possesses spring–like qualities that ensure a positive, permanent grip on the wire or rod. The wedge is tapered; when forced into the connection, it causes the body to spring open and create a positive, permanent grip on the wires and rod. Each nest is designed to accommodate specific wire and/or rod size combinations.

3. APPLICATION PROCEDURE (Figures 1 and 2)

The steps which follow are recommended to apply a WRENCH-LOK connector in a wire-to-wire or wire-to-rod application. Proceed as follows:

1. Check to make sure that the wire and/or rod sizes match the connector which will be used in the application. The most frequently used sizes appear on both sides of the nest.

2. Mechanically clean outer surface of conductor/ rod with wire brush or equivalent. The use of inhibitor compound is at the decision of the customer. AMP tests do not indicate any difference of performance with or without the use of inhibitor.

3. Remove the connector from the sealed bag.

4. Back out the shear-head bolt manually until the bottom of the bolt is flush with the front of the connector body. Refer to Figures 1 and 2.

5. Place wedge of connector against the top ground wire or ground rod, as shown Figure 2A.

6. Pull bottom wire into J-portion of connector as shown in Figure 2A.

7. Place center nest between the two wires or between the wire and the ground rod. See Figure 2A.



Figure 2

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NOTE If the copper center nest is not symmetrical, that is, if the one side has a large groove and the other side has a small groove, place the side with the large groove against the wire or rod that is next to the wedge. The side with the small groove, thus, should be against the small wire which is next to the J-portion of the connector body.

CAUTION

Do not drive ground rod after connector has been installed.

8. Push wedge into connector and pre-tighten shear-head bolt manually.

9. Using a socket wrench (or equivalent) tighten shear-head bolt until hex head shears off,

completing the connection. A completed application is shown in Figure 2B.

4. REVISION SUMMARY

Since the previous release of this sheet, the following changes were made:

Per EC 0990-0361-95:

- Removed note in Section 3 regarding crossreferenced part numbers in Figure 2.
- Removed cross-reference chart and note in Figure 2.
- Added Caution to Section 3.
- Updated wedge component artwork in Figure 2.