1. INTRODUCTION

This instruction sheet covers the use of CORELINK Splice Workstation 503605-1 for terminating CORELINK Fiber Optic Mechanical Splices 503577-1 and 503901-1. The workstation enables the operator to enhance the reliability and ease of producing low-loss splices.



Dimensions on this sheet are in millimeters [with inch equivalents in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

Reasons for reissue are in Section 4, REVISION SUMMARY.

2. DESCRIPTION

The workstation consists of a frame with a mounting nest to hold the splice body in place and fiber pads to hold one end of the fiber in place while the operator guides the other end into the splice fiber channel.

3. OPERATING PROCEDURE

Prepare the fibers according to Instruction Sheet 408-4019 packaged with the splice. Place the workstation on a flat surface and proceed as follows:



Always wear eye protection when working with optical fibers. Never look into the end of terminated or unterminated fibers. Laser radiation is invisible but can damage eve tissue. Never eat. drink, or smoke when working with fibers. This could lead to ingestion of glass particles.

- 1. Center the splice, with the logo on the left, in the mounting nest of the workstation. Refer to Figure 1.
- 2. Remove spreader keys from the key card supplied with the splice and insert the keys into the key entry ports (holes closest to the edge of the splice body). The key handle tabs should be parallel to the flat side and pointing away from the splice body. Insert the keys all the way to the shoulder of the key.
- 3. Turn both key handle tabs 90° upward, as shown in Figure 1. The splice is now open.
- 4. Grasp either fiber with both hands and position the fiber into the slot between the fiber pad and the frame of the workstation, as shown in Figure 1. Pull the fiber toward the splice until the fiber is taut and the tip is approximately 12.7 mm [.50 in.] from the splice body. Repeat this step for the other fiber.
- 5. Align each fiber with its fiber entry port nearest the center of the end face. Insert each fiber slowly, ensuring the fiber travels smoothly through the channel into the aluminum element. Refer to Figure 2.

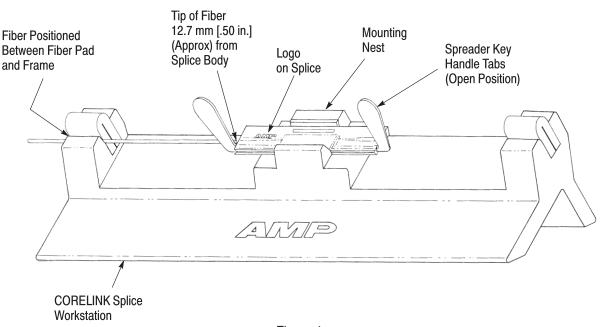


Figure 1

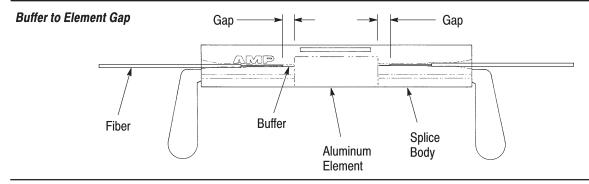


Figure 2



A 250-μm fiber coating will stop at the edge of the aluminum element, whereas a 900-μm fiber buffer will stop at the end of the wide part of the channel

- 6. Slide the fibers left or right and visually check that both gaps between the buffer and the aluminum element are equal. See Figure 2.
- 7. Rotate the keys 90° downward, *one key at a time*. Make sure that there is a slight buckle in each fiber in order to maintain an inward pressure on the fiber. Refer to Figure 3.
- 8. Slide the keys out from the splice body.
- 9. Remove the splice body from the nest of the workstation and slide the fibers from the fiber pads. Inspect the splice by *gently* pulling the fibers to make sure the fibers remain in the splice fiber channel.

10. To tune the splice, unlock one of the fibers and pull it back slightly, rotate the fiber 90°, then push it forward and re–lock it. Tuning is usually not necessary.



The interior material of the CORELINK splice contains index matching gel. If the interior material comes in contact with skin or with eyes, it may cause irritation. If contact occurs, wipe off the material and flush the area with water immediately. Consideration must be given to safety requirements of this gel. Refer to the manufacturer's Material Safety Data Sheet (MSDS), which is available by contacting the Tooling Assistance Center at the number listed at the bottom of page 1.

4. REVISION SUMMARY

- Updated document to corporate requirements
- New format

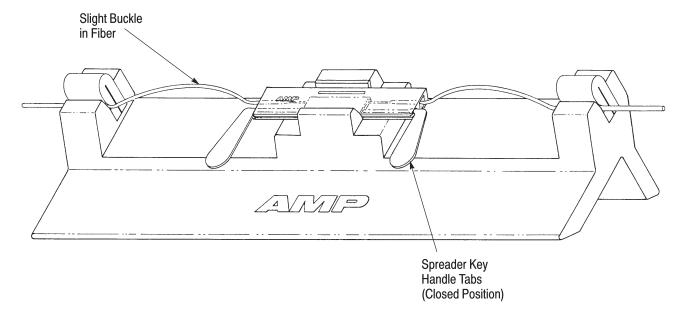


Figure 3