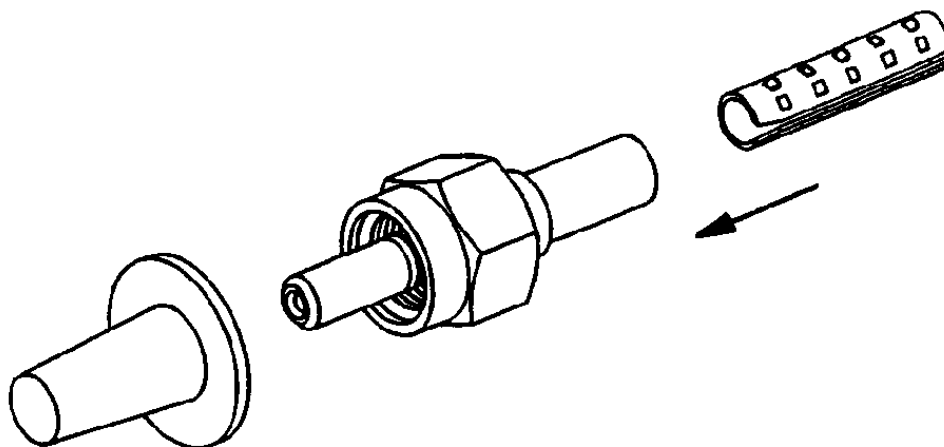


INSTRUCTIONS FOR OPTIMATE FSMA CONNECTOR FOR PLASTIC FIBRE
(PUSH AND POLISH VERSION)



Suitable connectors:

- 215803-5 : for 1000 um plastic fibre. (see fig. 1)
215803-6 : for 1000 um plastic fibre with front seal.

Fibre dimensions:

The fibre/cord for these connectors shall have following properties:

- * Fibre 1000 micron diameter over cladding.
- * All plastic.
- * Jacket diameter 2.2 mm PVC.

Connector description:

Partnumber 215803-5 is a screw-type connector with straight nose. An environmental front seal can be seated onto the mating tip -6. The rear side of the connector contains a retention clip which grips the fibre jacket. The result is a firm seated fibre into the connector. 40 N pulling force is allowed for internal equipment use.

Necessary assembling tooling:

- | | | |
|-------------------|--------------|-------------------------------|
| 1. Fibre stripper | pn. 501198-1 | (for use see 408-9394) |
| 2. Insertion tool | pn. 501215-1 | (see fig. 3 / 408-9342) |
| 3. Cutting gage | pn. 100279-1 | (see fig. 5) |
| 4. Cutting tool | pn. 215425-1 | |
| 5. Polishing disc | pn. 228025-1 | |
| 6. Polishing film | pn. 216480-3 | 5 micron (for 100 connectors) |
| Polishing film | pn. 216480-2 | 1 micron (for 100 connectors) |

Stripping the Fibre:

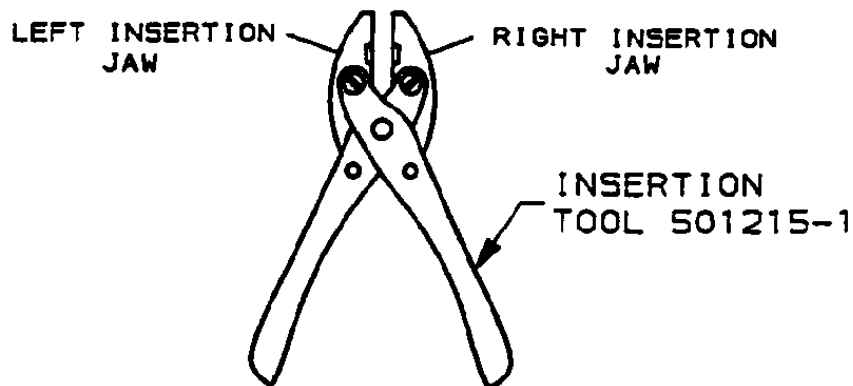
1. Strip the fibre over a length of 15-20 mm, use tool 501198-1 adjusted to proper depth. (see fig. 2)



FIGURE 2

A. Fibre to connector termination:

1. Clamp fibre firmly in insertion tool pn. 501215-1 (see fig. 3)



2. Pick up connector 215803 and push the clamped fibre into the connector from rear side until jacket bumps.
3. The plastic fibre is protruding at mating side of the connector (see fig. 3)

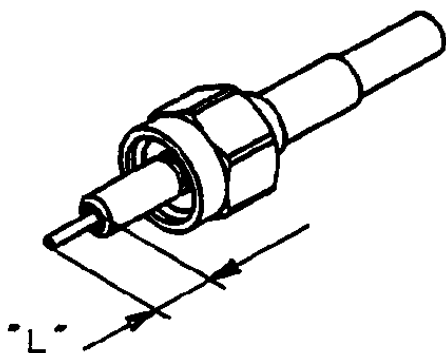


FIGURE 3

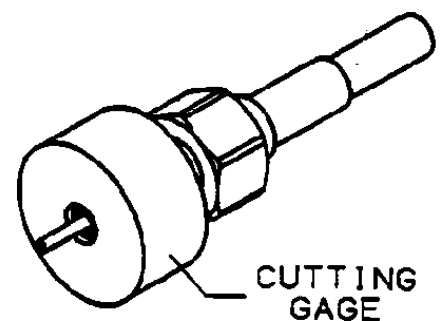


FIGURE 4

4. Position cutting gage (fig. 5) over protruding length "L" and cut down flush with gage. (see fig. 4)

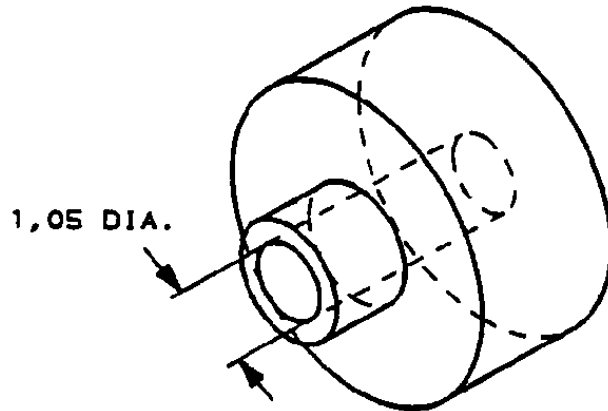


FIGURE 5

5. Polishing procedure.

The polishing bushing is permanent to set to proper height 9.800 mm. This can be done by applying some drops of acetone or heat to the bond where screw threads and bushing come together. Then use a screw driver to turn the screw until the bond breaks. Turn the adjustment screw until overall height of the bushing is 9.800 mm. Bond screw to bushing base using several drops of Loctite* 430 super bonding. Allow bond to cure for 2 hours before using bushing.

Polishing the connector. See figure 6.

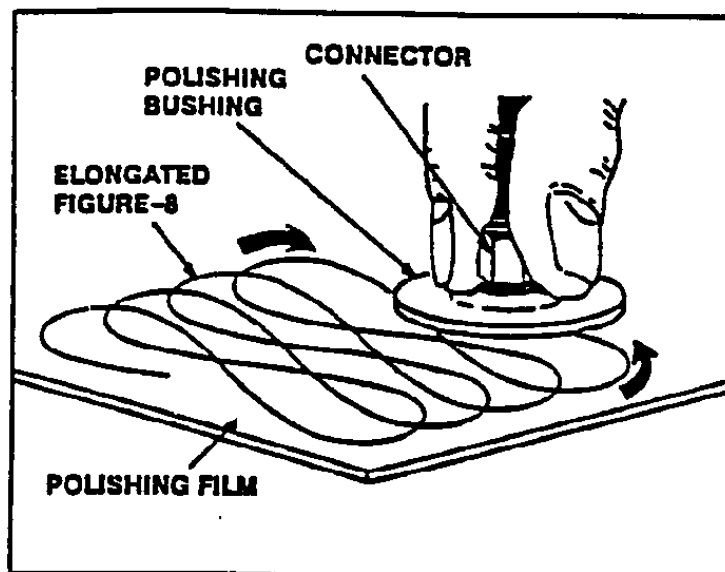


FIGURE 6

1. Screw polishing bushing securely onto threaded end of connector.
2. Place a sheet of 5 micron grid polishing film on a clean, firm, flat surface.
3. Hold connector and bushing firmly between thumb and forefinger; polish in an elongated figure 8 motion until Fibre end is about flush with polishing bushing (20 seconds).
4. Change to 1 micron film and buff until there are no apparent rough areas or scratches (10 seconds).

Inspect the Assembly.

Inspect polished and cleaned Fibre under magnifier. Figure 7 shows requirements for an acceptable Fibre end surface. If unacceptable, the Fibre may need further polishing.

* Trademark of Loctite Corp.

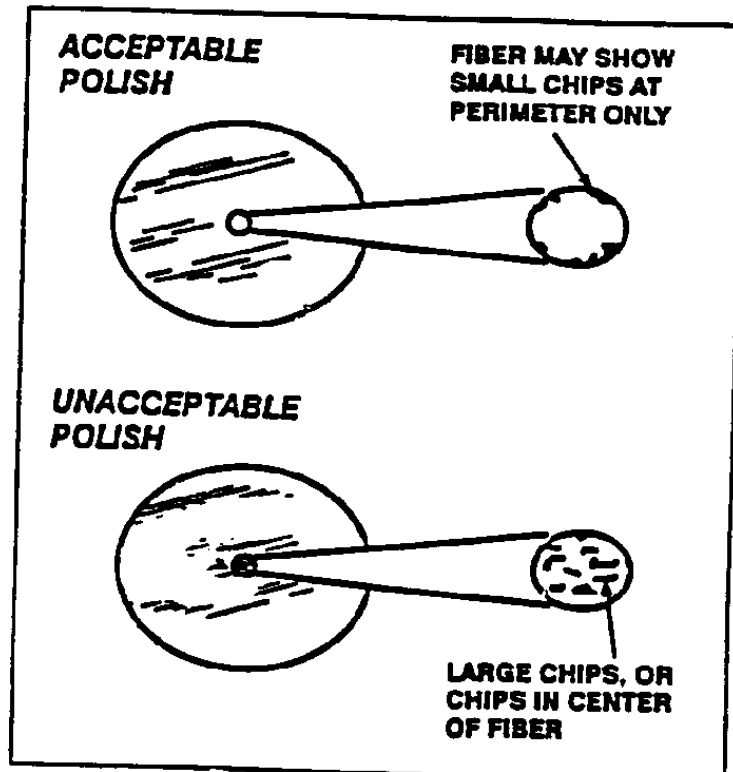
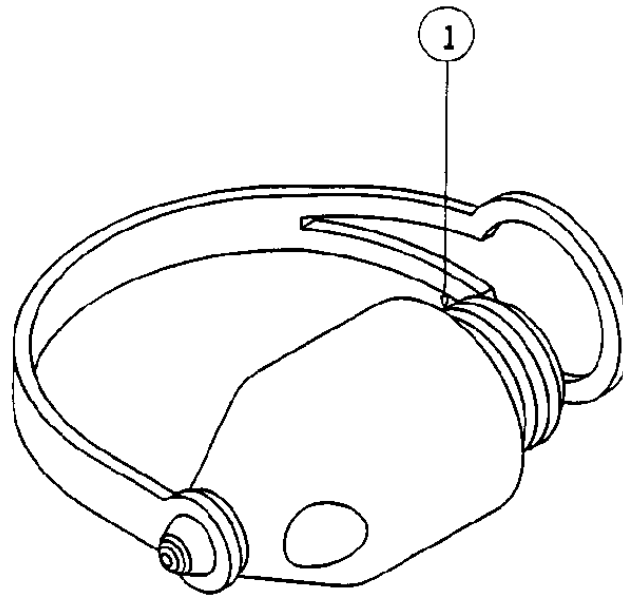
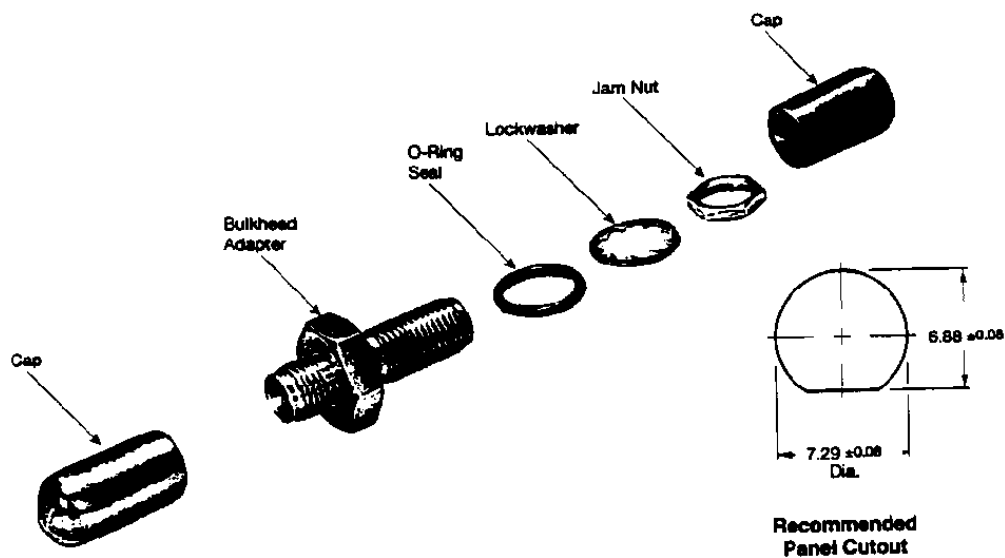


Figure 7.



Protective cap (1) is to be installed now.
AMP supplies a non-loosable protective cap (with tie) under partnrs
1-100790-1 black (100 pcs)
1-100790-2 red
A seal ring can be ordered separately under partnr 19195-2.



Using coupling receptacle kit.

The coupling receptacle can be used free hanging or it can be mounted on a panel.

To mount the receptacle in a panel:

Prepare the panel. See figure 8 for the cut-out dimensions.

Coupling bushing without O-ring seal: partnr 501049-1

Coupling bushing with O-ring seal: partnr 106223-1