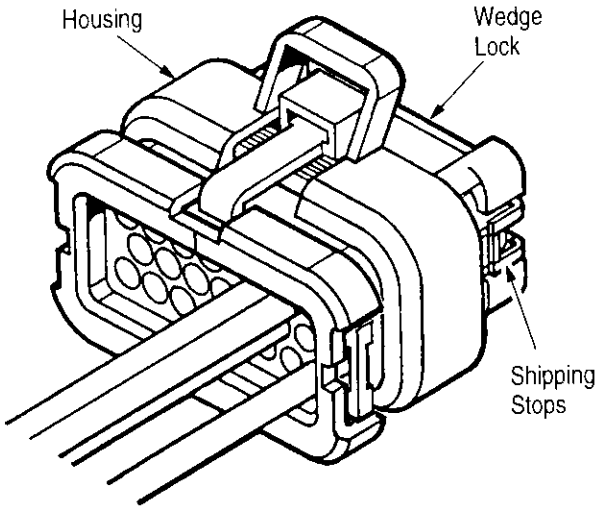
AMPSEAL* Automotive Plug Connector Assembly 770680



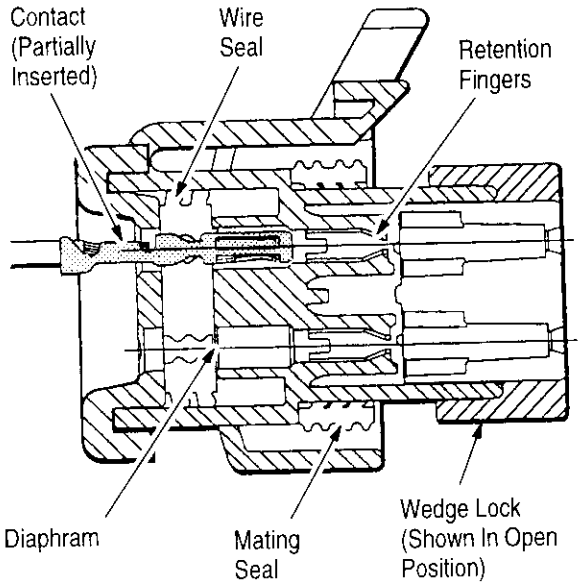


Figure 1 92–146

1. INTRODUCTION

This instruction sheet provides assembly and disassembly procedures for the AMP* AMPSEAL Automotive Plug Connector Assembly shown in Figure 1.

NOTE *All dimensions are in millimeters.*

Reasons for reissue of this sheet are provided in Section 9, REVISION SUMMARY.

2. DESCRIPTION

The plug assembly is shipped in one piece, with the wedge lock in the open position. The assembly consists of a housing, a cover, a wedge lock, a wire seal, and a mating seal.

Contacts are available in strip–form or in loose piece. Strip–form contacts are designed to be crimped with AMP Mini–Applicator 567333–2. Loose piece contacts are designed to be crimped with AMP Hand Tool 58440 or AMP PRO–CRIMPER* Tool 58529–1.

3. ASSEMBLY PROCEDURES

Check to be sure the wedge lock is in the **open**, or as–shipped, position (see Figure 1). If the wedge lock is closed, see Section 7. Then, proceed as follows:

1. To insert a contact, push it straight into the appropriate circuit cavity as far as it will go (see Figure 2).

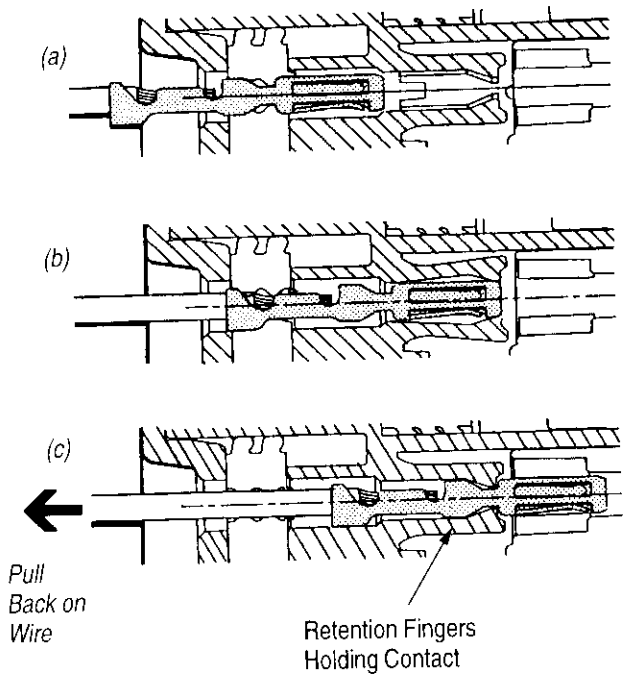


Figure 2 91–591A

2. Pull back on the contact wire with a force of about 4 to 9 Newtons [1 or 2 pounds] to be sure the retention fingers are holding the contact (see Figure 2).

3. After all required contacts have been inserted, the wedge lock must be closed to its **locked** position. Release the locking latches by squeezing them inward (see Figure 3).

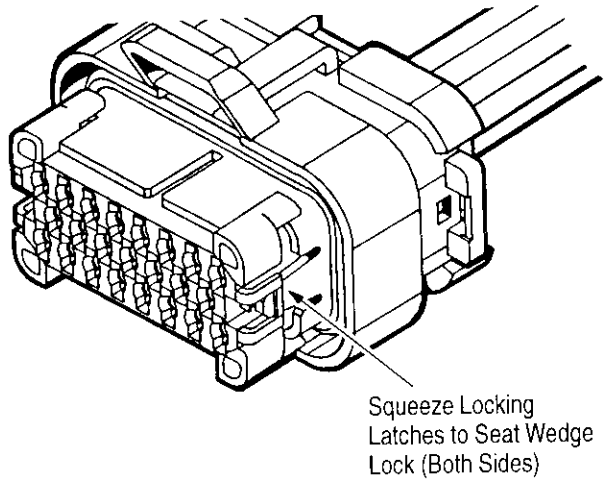


Figure 3 91–591b

4. Slide the wedge lock into the housing until it is flush with the housing (see Figure 4).

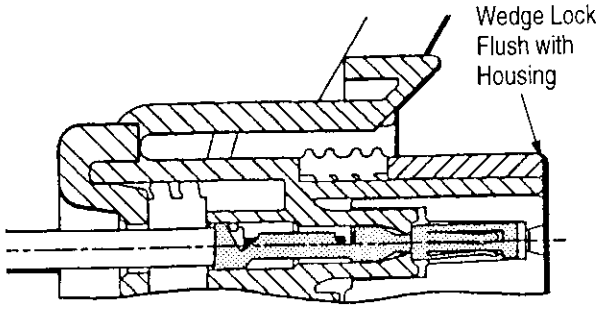


Figure 4 92–147

4. SEAL PLUG (Figure 5)

All circuits are sealed by a diaphragm in the rubber wire seal. When assembling the connector, the diaphragm is pierced as the contact passes through it. Unused circuit cavities will remain sealed, unless perforated by accidently inserting and removing a contact in the wrong cavity. AMP Seal Plug 770678–1 is designed to keep out contaminants if the diaphragm is pierced. Insert seal plug, **large end first**, into the circuit cavity as far as it will go. An insertion tool is generally **not** required for this procedure.

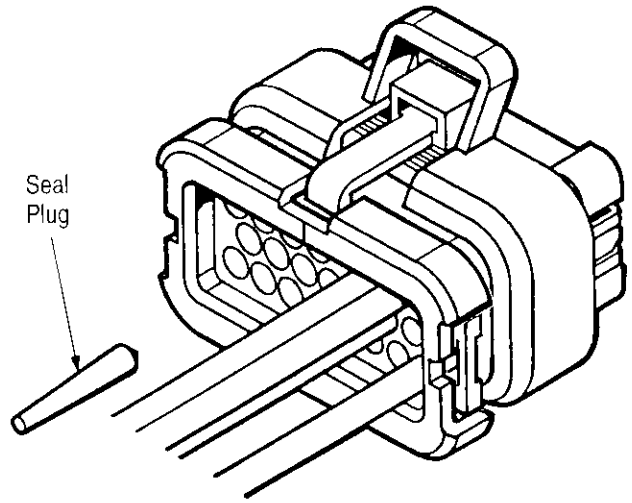


Figure 5 92–148

5. DISASSEMBLY PROCEDURES (Contact Removal)

Refer to Figure 6 and proceed as follows:

1. Insert a screwdriver blade between the mating seal and one of the red wedge lock tabs.

2. Pry open the wedge lock to the open (as shipped) position.

3. While rotating the wire back and forth over a half turn (1/4 turn in each direction), gently pull the wire until the contact is removed.

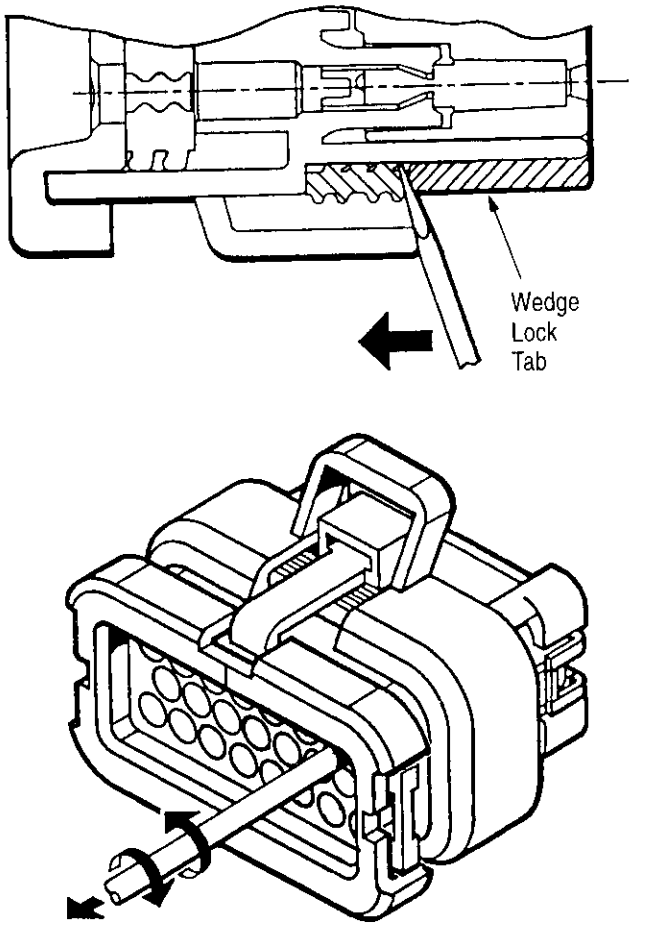
NOTE *The wedge lock should never be removed from the housing for insertion or removal of the contacts.*

6. ADDITIONAL INFORMATION

For information on contact crimping, refer to the instructions packaged with the tooling. For inspection information on crimped contacts, refer to instruction sheet 408–3284. For panel cutout dimensions, printed circuit board layout, etc. for the header assembly, refer to 408–3285. For application information on the AMPSEAL product line, refer to Application Specification 114–16016.

7. OPENING WEDGE LOCK

It is possible during adverse shipping conditions that some wedge locks may get bumped into the closed position (see Figure 4). If so, refer to Section 5, DISASSEMBLY PROCEDURES, Steps 1 and 2.



92–149

Figure 6

8. CURRENT RATING

Refer to Figure 7 for current ratings of special–use connectors, AMPSEAL Series 770669 (headers) and 770680 (plugs).

SINGLE–CIRCUIT PLATING	WIRE SIZE (AWG)	CURRENT RATING (MAX.)
Tin	16, 18, and 20	8A
Gold	16	14.5A
	18	13A
	20	11.5A

Figure 7

9. REVISION SUMMARY

Revisions to this document include:

Per EC 0740–0073–95:

- Added PRO–CRIMPER Tool and part number to Section 2
- Deleted two NOTES from Section 2