



**AMPSEAL\* Automotive Contact 770520**

Socket Contact

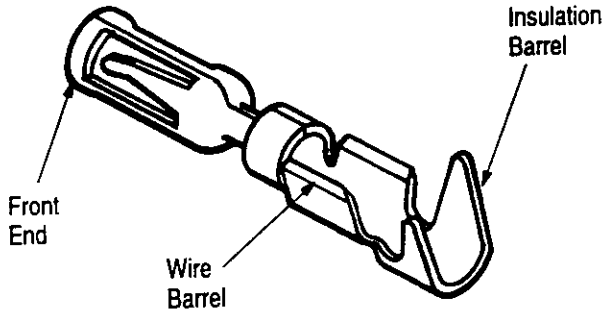


Figure 1

92-145

**1. INTRODUCTION**

This instruction sheet provides wire requirement and crimp inspection procedures for the AMP\* AMPSEAL Automotive Socket Contact shown in Figure 1.

Reasons for reissue are provided in section 6, REVISION SUMMARY.

**NOTE**

All dimensions on this sheet are in millimeters.

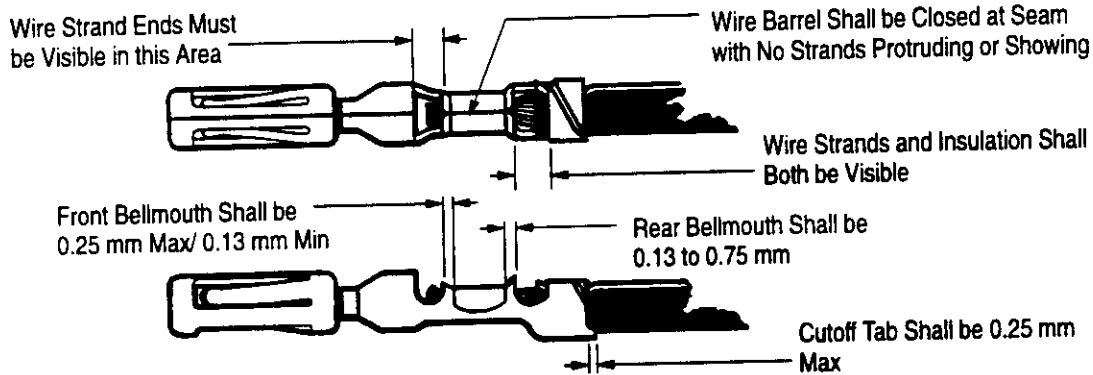
**2. WIRE REQUIREMENTS (Figure 2)**

The contact will accept wire ranging in size from 0.5 to 1.4 mm<sup>2</sup> (20 to 16 AWG). Wire insulation diameter shall be a minimum dimension of 1.7 mm and a maximum dimension of 2.7 mm.

Wire strip length shall be 5.1 ± 0.4 mm. Reasonable care shall be taken during the stripping operation to ensure the conductor is not nicked, scraped, or cut.

**3. CONTACT CRIMPING**

The contacts shall be crimped in accordance with the material packaged with the tooling; refer to the charts in Figure 2.



SIZE		WIRE		WIRE BARREL		INSULATION BARREL		APPLICATOR PART NUMBER**
mm <sup>2</sup>	[AWG]	INSULATION DIAMETER RANGE	STRIP LENGTH ± 0.4	CRIMP HEIGHT ±0.05	CRIMP WIDTH (Nom)	CRIMP HEIGHT MAX.	CRIMP WIDTH ± 0.1	
0.5	20	1.7 to 2.7	5.1	1.14	2.03	3.2	3.1	567333-2
0.8	18			1.27				
1.4	16			1.40				

\*\* Dash 1 is used in "T" Terminator with automatic equipment. Dash 2 is used in the AMP-O-LECTRIC\* Model "K" Machine 565435-5. Refer to Applicator Instruction Sheet 408-8040 for applicator information. Refer to Customer Manual 409-5128 for Model "K" Machine Information.

SIZE		WIRE		WIRE BARREL		INSULATION BARREL		HAND TOOL PART NUMBER
mm <sup>2</sup>	[AWG]	INSULATION DIAMETER RANGE	STRIP LENGTH ± 0.4	CRIMP HEIGHT ±0.05	CRIMP WIDTH (Nom)	CRIMP HEIGHT MAX.	CRIMP WIDTH ± 0.1	
0.5	20	1.7 to 2.7	5.1	1.22	2.03	3.2	3.1	58440-1 or 58529-1
0.8	18			1.22				
1.4	16			1.41				

Figure 2

91AS-63

**CAUTION**

Contacts are available in loose piece form for hand tool crimping. Do NOT cut strip form (reeled) contacts into loose piece form. This will produce burrs on the cut-off tab which will damage the wire seal in the plug assembly.

**4. CRIMP INSPECTION**

Inspect crimped contacts for conditions shown in Figure 2.

**NOTE**

Wire stripping tool jaws may leave corrugated indentations on the surface of the wire insulation. This is especially severe with cross-linked polyethylene (high temperature) insulation. If these indentations occur at the location of the wire seal, leakage may result. Insulation surface within 26 mm from the tip of the contact must be smooth and free of residual indentations.

**CAUTION**

It is important in any application that the far end of the cable be sealed or otherwise isolated from the environment, and that the insulation is not cut or damaged.

**NOTE**

Care shall be taken to ensure that the wire insulation is not cut or broken during the crimping operation, and to ensure that the insulation is not crimped into the wire barrel.

**NOTE**

The ends of the insulation barrel shall be wrapped around the wire insulation, leaving no sharp points to damage the rubber wire seal.

The axial concentricity of the crimped contact shall fall into an area defined by a 2.0 mm diameter cylinder whose center is the center line of the contact front end. See Figure 3.

Centerline of  
Circle and  
Contact

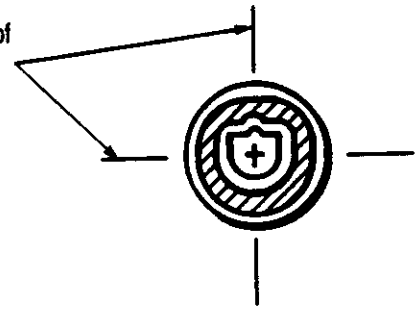


Figure 3

**5. ADDITIONAL INFORMATION**

For assembly procedures of the plug connector assembly, refer to instruction sheet 408-3229. For application information on the AMPSEAL product line, refer to Application Specification 114-16016.

**6. REVISION SUMMARY**

Revisions to this document include:

Per EC 0740-0032-95:

- Added hand tool number to chart in Figure 2

Per EC 0990-2552-93:

- Updated format
- Added revision summary