

#### **Instruction Sheet**

**411-5094** (Was IS-094J) 25 OCT 01 Rev. O1

取扱説明書

# AMP\* POSITIVE LOCK CONNECTOR ポジティブ ロック コネクタ

#### **Contents**

First 6 pages following this top sheet :

English version

Next 6 pages

Japanese version

When only one of above versions is supplied to customers, this top sheet shall be attached.

## 目次

このシートに続く最初の6ページ

: 英語版

次の6ページ

: 日本語版

カストマーに英語または日本語版の片方のみを提出する場合は、このトップシートが必ず添付されなければならない。

# Revision Record (改訂記録)

Revision Letter

EC number

Date

(改訂記号)

(改訂記録番号)

(日付)

01

FJ00-2508-01

25 OCT 2001

# Outline of the latest revision (最新改訂の概要)

Combine two language versions into one document. No change was made on product specification. Change document number to current format.

2 7国語の文書を一括管理とした。仕様内容に変更なし。



#### INSTRUCTION SHEET

411-5094 (was IS-094J)	
Released 4-27-79	
Revised	25 OCT 01

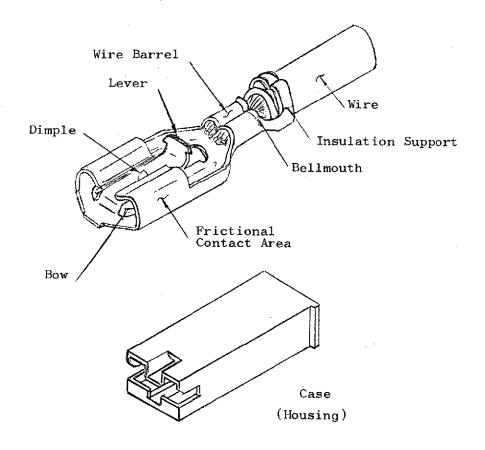
FJ00·2508·01

#### Rev. O1

#### 1. INTRODUCTION:

AMP Positive Lock Connector has been designed to provide reliable termination of discrete wires to tab contacts fixed on electric equipment for automotive vehicles.

This instruction sheet covers important notes to be abided during the process of crimping and assembly of harnesses. Read this instruction sheet carefully, before you start assembly.



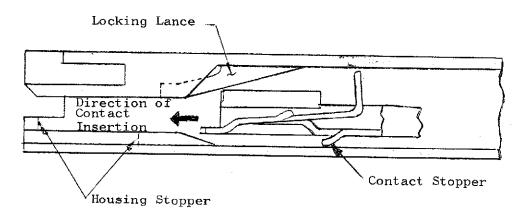
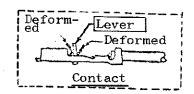
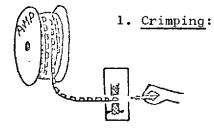


Fig. 1





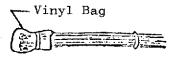
During crimping operation, care must be taken not to have contact strip entangled or hooked on machine edges and other projecting items around the working area. Do not force to separate entangled parts, lest it should cause deformation of contact.



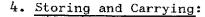
#### 2. Lead Bundling:

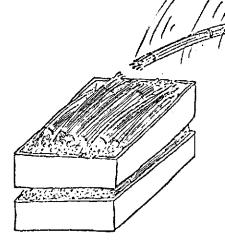
Before bundling contact-crimped wire leads, never attempt to put the ends in order, by dropping roughly on the bench top. This often causes deformation of contacts. Wire leads must be handled moderately.

### 3. Wrapping Lead Ends:



Ends of bundled leads should be wrapped with vinyl bag or warpping paper of appropreate size. This will protect contacts from contamination of foreign particles and also from detrimental affection by physical shocks.

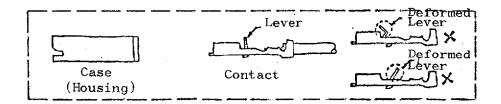




Do not throw lead bundle roughly into a container when to store them. One careless, rough handling spoils all the prior efforts to keep good quality.

Stacking containers with bundles of leads put inside is also a matter to be avoided. Because, weight of containers will often affects contacts to be deformed unanticipatedly.

#### ( 2 ) HOUSING ASSEMBLY WORK

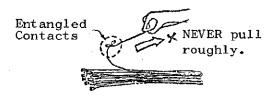


#### 1. Removal of Wrapping Materials:



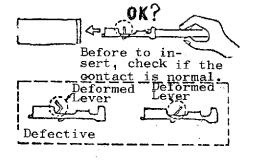
When unwrapping cover materials, take off moderately. Never force to remove caught vinyl cover.

#### 2. Undoing Lead Bundle:



When undoing lead bundle, Care must be taken not to have contact caught each other, and release them moderately if they are caught.

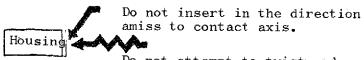
#### 3. Contact Insertion into Housing:



Before inserting contact into housing cavity, check it if it is crimped normally without deformation and damage.

If any deformation is found, especially on lever portion of contact, replace it with a good one.





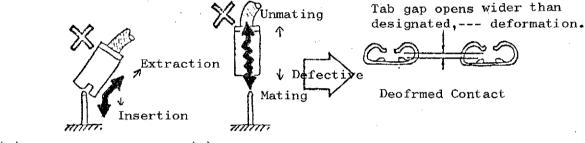
Do not attempt to twist and force the wire at insertion.

Insert contact straight into housing cavity without twisting and bending.

#### ( 3 ) INSERTION AND EXTRACTION OF POSITIVE LOCK CONTACT

At insertion and extraction of positive lock contacts, do not apply a forcing stress to contact in the direction amiss to contact working axis.

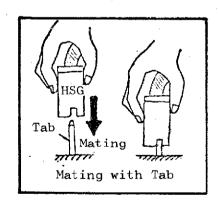
This forcing action is called a "Kojiri" motion in Japanese. "Kojiri" often causes deformation of contacts, resulting malfunction of terminating parts.



(1) Inclination to Axis (2) "Kojiri"

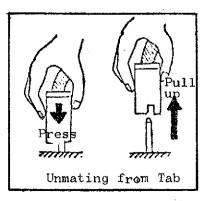
### ( 1 ) MATING WITH TAB CONTACT:

Push straight down the housing over the tab contact so that the receptacle contact mates normally along the contact working axis.



#### ( 2 ) UNMATING FROM TAB CONTACT:

Before to extract connector from tab contact, be sure to press down the housing toward tab contact, then pull up the housing straight along the contact working axis.



#### ( 4 ) HARNESS ASSEMBLY AND WIRING INSTRUMENTATION:

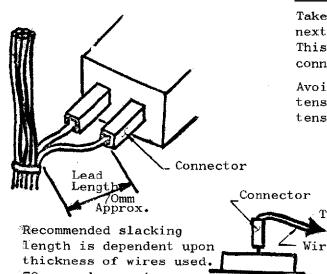
Wires running out from Positive Lock Connector should have proper slack by bending in a gentle arch as shown in the figure below. This slack is useful to relieve tensive shock when the wires are jerked excessively.

An excessively applied jerking force causes bend of contacts resulting malfunction of related terminating parts.

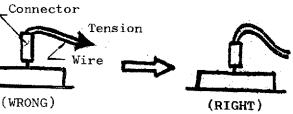
#### (1) Slack of Wire:

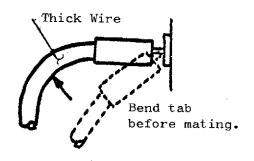
Take an extra slack of wire in the area next to wire outlet of connector housing. This will allow you to insert and extract connector freely with ease.

Avoid leaving connector mounted under tensive condition resulted from unsupported tension of wires.



70mm or longer is recommendable.





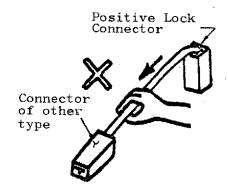
#### (2) Thick Wire Application:

When a thick wire is used for crimping, lead end tends to keep straight, becoming uneasy for bending. In this case, it is recommended that you bend the wire intentionally or bend tab contact to a proper angle before insertion of contact into connector.

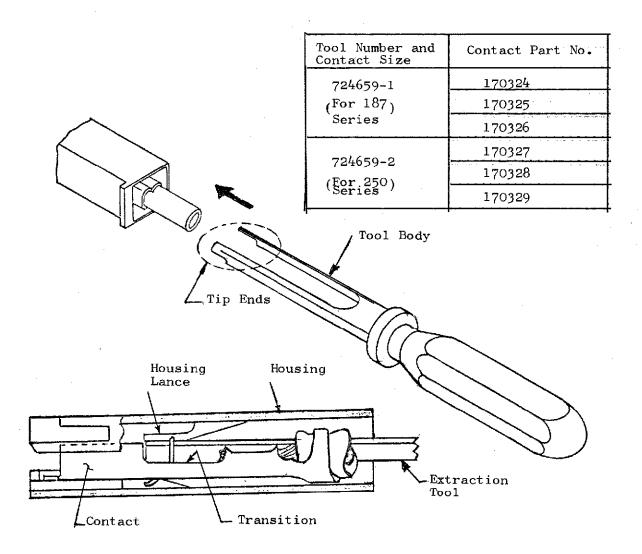
#### Insertion and Extraction of Connector: (3)

At the time of insertion and extraction of other type connector connected on the same harness assembly, care must be taken not to apply tension to the leads terminated on positive lock connector.

Do not attempt to extract connectors by merely pulling by the terminated wires, no matter what type of connector you are to unmate.



#### (5) EXTRACTION OF CONTACTS BY USING EXTRACTION TOOL:



#### Contact Extraction Procedure:

- (1) Insert tool tip end from wire side of connector until the tool tips reach and rest on contact transition. When you feel the tips reach there, make sure if the tool position is right for resting evenly.
- (2) With the tip ends resting on contact transition, lift up the tip end slightly, and pull back the contact and tool altogether. Now the contact is released and extracted.
- (3) If you feel it uneasy to pull out, confirm and correct tool position, and repeat extraction without applying excessive force.



### ポジティブ ロック コネクタ

**Instruction Sheet** 

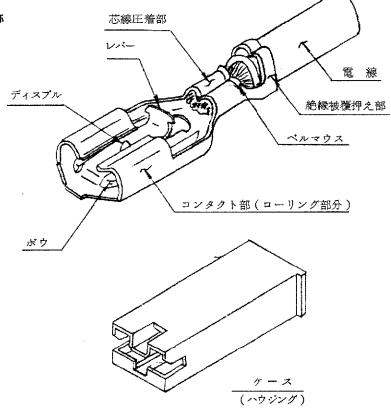
取 扱 説 明 書

411·5094 (was IS·094J) 作成年月日 4-27-79 改訂年月日 25 OCT 01

> FJ00-2508-01 Rev. O1

この取扱説明書は、ポジティブ・ロック・コネクタの取扱方法について 説明しています。御使用の前によくお読み下さい。

#### 部品各部の名称



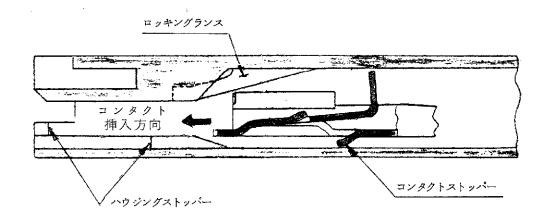
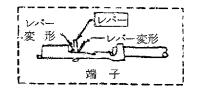
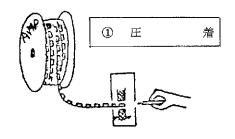


図 - I

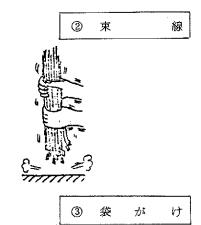
# 





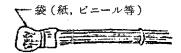
#### ① 圧 着

圧着作業時,レバー部を機械その他の部分に ひっかけないように注意して下さい。



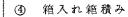
#### ② 束 線

束線で先端をそろえる時、むやみにたたきつ けるとレバー部が変形してしまうことがあり ます。



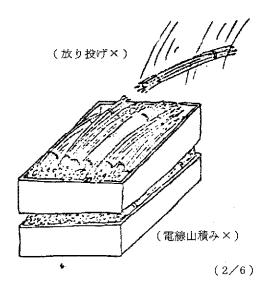
#### ③ 袋 が け

束ねたら、端子部に袋がけをして下さい。

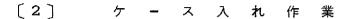


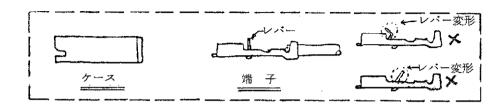
#### ④ 箱入れ・箱積み

箱入れの際, 乱暴に束を放り投げないように 注意して下さい。



箱に束になった電線を山積みした場合,箱積みの際,端子に重みがかかりすぎ,レバー部が変形してしまうことがあります。





① 袋の取りはずし

# 



② 束線のほぐし

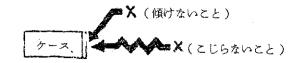


③ ケース入れ









#### ① 袋の取りはずし

袋を取りはずす際、端子のレバー部を 変形させない様に注意して下さい。

#### ② 束線のほぐし

束線をほぐし、束から電線を取り出す 時、端子どうしがからんだら無理に引 張らないで下さい。

#### ③ ケース入れ

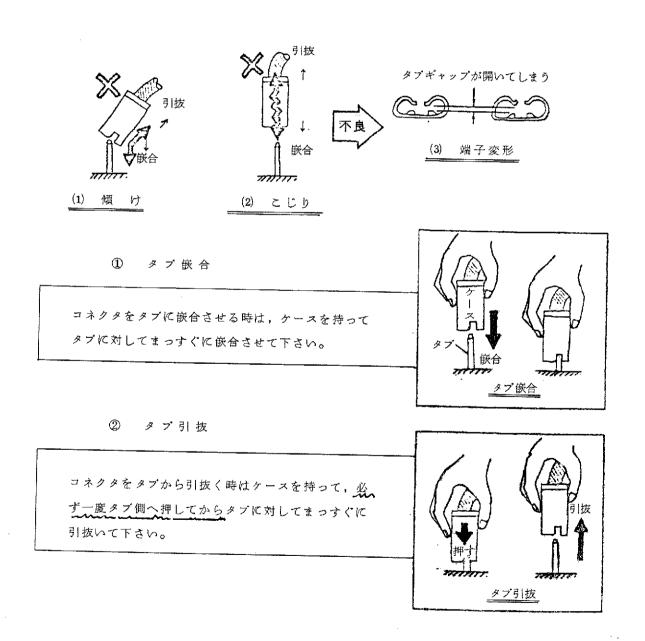
端子をケースに入れる前に,端子 を見て,レバー変形をチェックし て下さい。 ■

レバー部が変形している製品は不良品です。"使用しないで下さい"

端子のケース入れは、電線を持って、 まっすぐに入れて下さい。

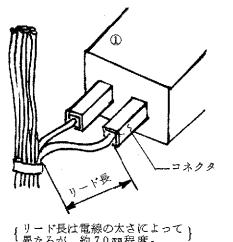
# [3] タブ嵌合・引抜作業

コネクタのタブ嵌合、引抜作業において、コネクタを傾けたり<sup>(1)</sup>、こじりらがら<sup>(2)</sup>作業すると、端子を変形させてしまい<sup>(3)</sup>、接触不良発生の原因となります。



#### [4] ハーネス 実

ポジティブ・ロック・コネクタの、ハーネス実装状態において、コネクタにテンションが か」ると、接触部及びロック機能に悪影響を及ぼすことがあります。



#### ① 電線のリード長

コネクタが、容易に抜き差し可能なように、リード長を 充分とって下さい。

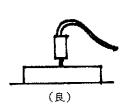
コネクタに常にテンションが,からっている状態は避け て下さい。

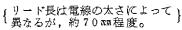


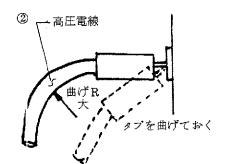


(不可)

コネクタ



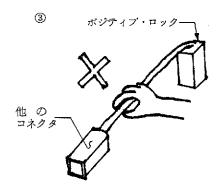




#### 太い電線使用時

電線が太いと、テンションが大きくなる傾向があるため その場合は,

- 電線の曲げ Rを大きくとるか,
- タフをあらかじめ曲げて下さい。



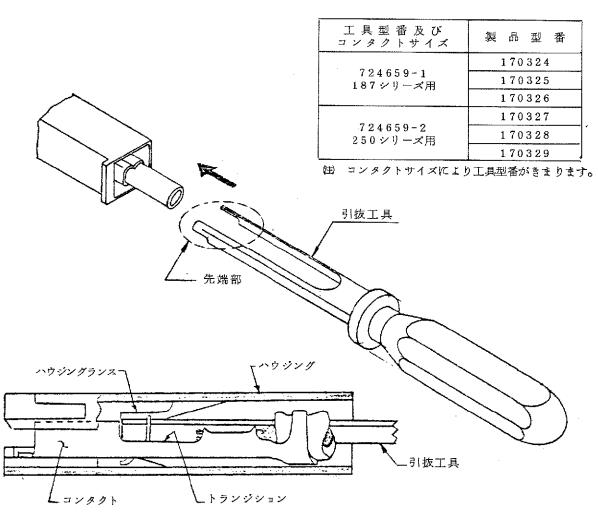
#### ③ コネクタの抜き差し作業

他のコネクタを抜き差しする際, 電線が引張られて, ポ ジティブ・ロック・コネクタにテンションがからる場合 があります。

作業時、電線を強く引張らないように注意して下さい。

#### ポジティブ ロック コネクタ [5] 引 抜 工 具 取 扱 い 説 明 書

適用型番



#### コンタクト引抜方法

- 1. 工具をワイヤー側より差し込み、先端部がコンタクトに軽く触れるまで差し込みます。とのとき先端 部がコンタクトのトランジションの上に必ず両側共のるようにして下さい。
- 2. 先端部でハウジングランスを持ち上げ、そのままの状態で電線と一緒に工具をハウジングから引くと コンタクトは抜け出てきます。
- 3. 抜けないときは無理に引かず上記 1,2が守られているかどうか確認して下さい。