# LASER<sup>®</sup>

# **Pipe Connector Insertion Tool**

## Instructions





#### Introduction

The 6933 has been developed to allow the replacement or repair of the common sizes of hard plastic pipe and connector found on modern vehicles. The 6933 enables the technician to produce an effective, professional repair that is in keeping with the OEM product.

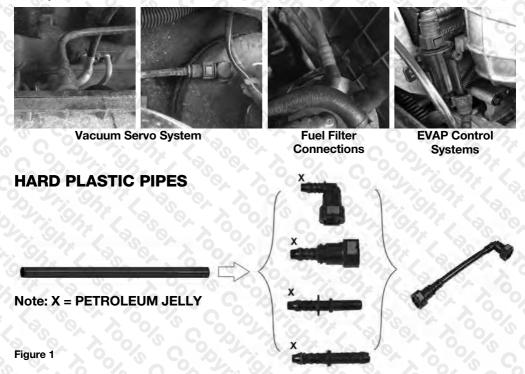
The 6933 uses an innovative design, hand operated force tool combined with specifically machined adaptors to clamp the relevant fuel pipe and fit the connector in to the pipe.

The traditional method used in service/repair garages for fitting this style of connector to hard plastic pipe uses hot water to soften and expand the pipe and then relies on the technician to force the connector up the pipe by hand. This can prove an arduous task which does not always result in a perfect or even usable result.

Using tool 6933 forms the perfect fit every time, quickly and simply ensuring no parts are wasted and the job does not need to be repeated.

- \*\*The 6933 is recommended by Laser Tools for the Connect 37011 connector pipe kit.
- Applications fuel /air and vacuum pipes fitted with snap type connectors.
- Snap Connector sizes covered: 6.30mm, 7.89mm, 9.49mm, 9.89mm, 11.80mm.
- Always lubricate the connector with petroleum jelly or similar to assist assembly
- · Suitable for on vehicle use.
- · EU Registered Design.
- See Figure 1 for example of snap connector and plastic pipe use.

#### Examples of use



## Components



Ref.	Pipe Size	Description	
С	6mm I.D. plastic	6.30mm, straight female insertion adaptor	
	8mm I.D. plastic	7.89mm, straight female insertion adaptor	
D	8mm I.D. plastic	9.49mm, straight female insertion adaptor	
EQ	8mm I.D. plastic	9.89mm, straight female insertion adaptor	
F.	10mm I.D. plastic	11.2mm, straight female insertion adaptor	
16	6mm I.D. plastic	6.3mm, 90° angle female insertion adaptor	
6	8mm I.D. plastic	7.89mm, 90° angle female insertion adaptor	
G	8mm I.D. plastic	9.49mm, 90° angle female insertion adaptor	
0	8mm I.D. plastic	9.89mm, 90° angle female insertion adaptor	
н	10mm I.D. plastic	11.8mm, 90° angle female insertion adaptor	
0	6mm I.D. plastic	6.30mm, straight male insertion adaptor	
0, 7	8mm I.D. plastic	7.89mm, straight male insertion adaptor	
	6mm I.D. plastic	8mm, straight, plastic to rubber insertion adaptor	
	8mm I.D. plastic	8.3mm straight, plastic to rubber insertion adaptor	
, 95	8mm I.D. plastic	9.49mm, straight male insertion adaptor (large dia. hole)	
J	8mm I.D. plastic	9.89mm, straight male insertion adaptor (small dia. hole)	
	10mm I.D. plastic	11.8mm, straight male insertion adaptor (small dia. hole)	
		Fitting Tools	
Α	6, 8, 10mm I.D.	Pipe Clamp + bolts	
В	Tighten clamp	5mm Hex Key	
К	All	Force Tool	

### **Connector Reference**

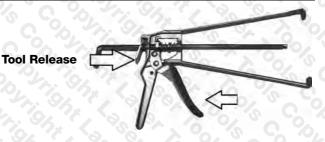
Ref.	Connect ID	Pipe Type & Size	Description
c	37213	8mm I.D. plastic	7.89mm, straight female
	37212	6mm I.D. plastic	6.30mm, straight female
D	37215	8mm I.D. plastic	9.49mm, straight female
E	37214	8mm I.D. plastic	9.89mm, straight female
F	37216	10mm I.D. plastic	11.2mm, straight female
G	37207	6mm I.D. plastic	6.3mm, 90° angle female
	37211	8mm I.D. plastic	7.89mm, 90° angle female
	37208	8mm I.D. plastic	9.49mm, 90° angle female
	37209	8mm I.D. plastic	9.89mm, 90° angle female
Н	37210	10mm I.D. plastic	11.8mm, 90° angle female
1 6	37200	8mm I.D. plastic	6,30mm, straight male
i	37201	8mm I.D. plastic	7.89mm, straight male
	37205	6mm I.D. plastic to 7.5mm I.D. rubber	8mm, straight, plastic to rubber
	37206	8mm I.D. plastic to 7.5mm I.D. rubber	8.3mm straight, plastic to rubber
J	37202	8mm I.D. plastic	9.49mm, straight male
	37203	8mm I.D. plastic	9.89mm, straight male
	37204	10mm I.D. plastic	11.8mm, straight male

#### **Preparation**

- Select the appropriate connector and pipe to be joined.
   If the connector is intended to connect to an existing connector on the vehicle always check the fitment of the connector before cutting and forming the pipe.
- Lubricate the connector barbed end with petroleum jelly or similar, try to avoid getting lubricant on the
  outside of the pipe where it is to be clamped by the tool.

#### **Instructions for Use of the Force Tool**

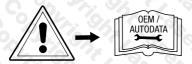
- To apply force and push the force tool shaft forward pull the trigger lever backward.
- To release the pressure or pull the force tool shaft back press the release lever and gently pull the force tool shaft backward.
   N.B: ensure the trigger is fully released when trying to pull the force shaft back.



#### Instructions

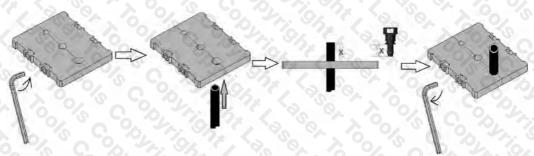
The following instructions are for guidance only. Please refer to OEM derived data such as the vehicles manufacturers own data or Autodata.

The use of this tool is purely down to the user's discretion and The Tool Connection Ltd. cannot be held responsible for any damage caused what so ever.



#### Setting the pipe in the clamping block:

- Loosen both fixing screws using the 5mm hex key provided (B).
- Insert the pipe into the pipe clamp (A)
- Set the depth of protrusion of the pipe to match the length of the barbed section of the connector as shown by X below (approx. 25mm). Tighten the clamping plate screws until the clamps are fully closed.



Assemble the tool as shown below according to type of connector

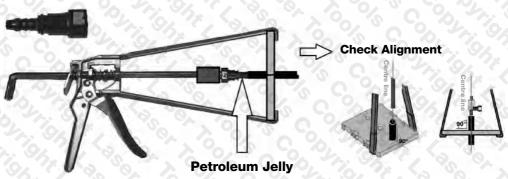
**IMPORTANT:** ensure the pipe, connector and the force tool are all aligned correctly. The feet of the force tool (K) should sit in the notches on the block (A) adjacent to the hole the pipe is clamped in as shown.

- Gently pull the trigger on the tool to so the end of the connector starts to enter the pipe.
- Re-check alignment and lubrication then use the trigger to smoothly push the connector into the pipe until the connector is pushed in to the pipe.

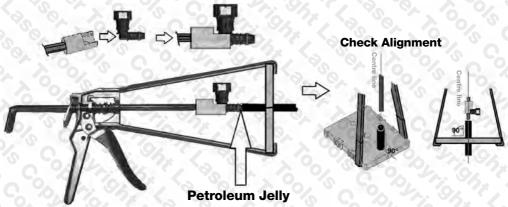
N.B: Do not try to push the connector through the clamping block.

## **Instructions**

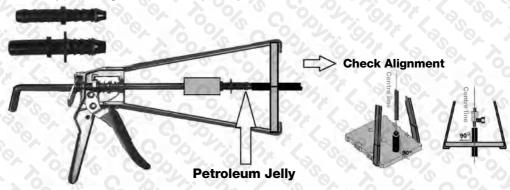
Assembly for straight connector (FEMALE):



Assembly for 90° connector (FEMALE):



Assembly for straight connectors (MALE):



## Recommended for use with Connect Consumable Part 37011 - Assorted Fuel and Pipe Connector Kit



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It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.





6933\_Instructions\_V6



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