SKF Pole Position

RENAULT

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VKJA 5342

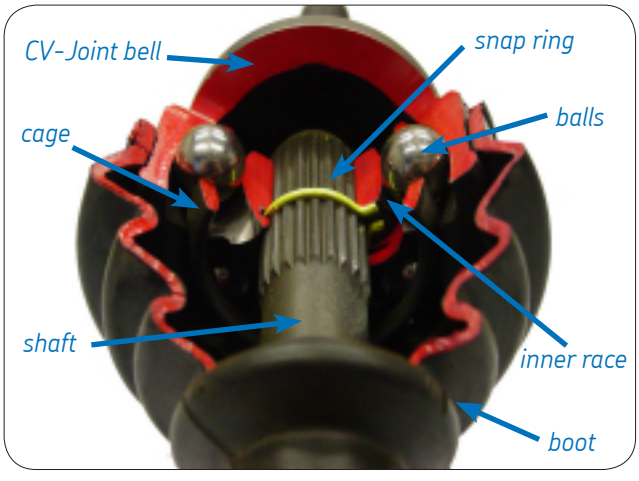
Replacement of the CV-joint VKJA 5342

This bulletin describes the replacement guidelines of a CV-joint on a Renault Laguna I 1.8. It also highlights the CV-joint locking system used in this type of CV-joint design.

In some cases, replacing CV-joints could create a number of time consuming problems – that's why some mechanics prefer to replace the complete driveshaft, rather than just the CV-joint. However, even if such a replacement could potentially save around 15 minutes – it is both more costly for the car owner and is less profitable for the garage. Why? Because it is the labour charge and not the parts that generate the most income.

The VKJA 5342 kit supplied by SKF contains all of the components needed for the repair (see picture 1). This, coupled with the step-by-step replacement guidelines on the following pages – you can be sure that you will carry out a trouble free CV-joint replacement and that you will save money for the car owner and make more profit for your business.

Cross-section of the CV-Joint

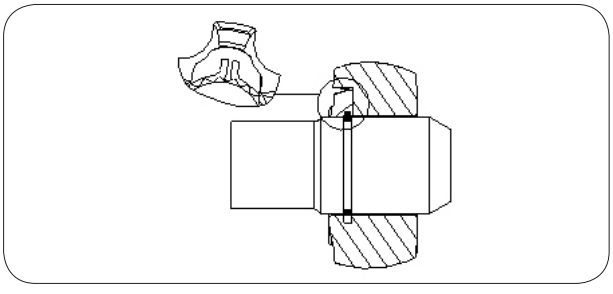


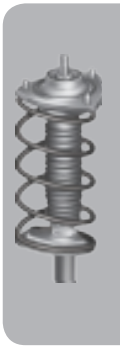
Picture 1: VKJA 5342 kit containing a pre-greased CV-joint with pre-installed snap-ring, boot, short and long clamps, grease bag and wheel nut.

The CV-Joint design

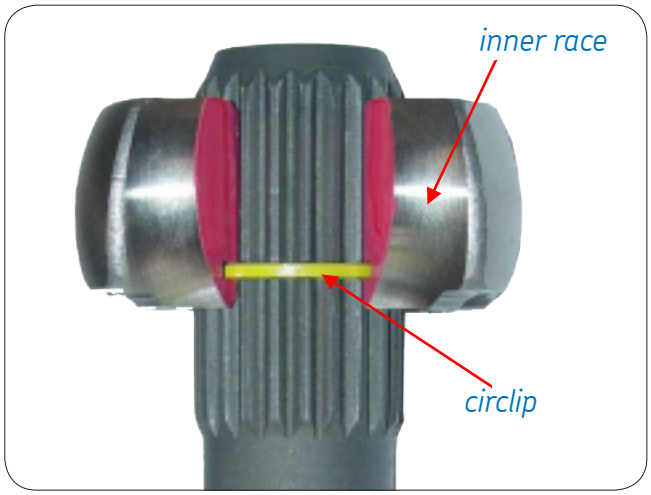
The Renault Laguna has a CV-joint fitted to the shaft and locked into place by a snap ring which is positioned in a circular groove, on the front side of the inner race of the CV-joint. This design allows the CV-joint to be removed from the shaft by expanding the snap ring and tapping with a hammer on the joint's face. The replacement guidelines described below relate to the Renault Laguna I 1.8, but can also be applied to other applications with a similar CV-joint locking system.

Picture 2: Snap ring





CV-Joint replacement guidelines for Renault Laguna



Picture 3: the snap ring is positioned on the front side of the inner race

Removal of the CV-Joint

1. Remove the driveshaft in accordance with the vehicle manufacturer's workshop manual. **Tip:** Add protection to the CV-joint on the gearbox side to prevent the CV-joint from sliding off the shaft.

Note: ALWAYS follow workshop health & safety procedures when carrying out repairs.

2. Place the driveshaft in a vice. **Tip:** Always use a vice with aluminium or protective jaws to prevent the shaft from being damaged.

3. Remove both the inner and outer clips. Then, cut the boot and remove it.

4. In order to clearly see the snap ring, remove the grease from around the base of the shaft. Then with suitable pliers, hold the snap ring open. The CV-joint is then ready to be removed from the shaft.

5. Hold the CV-joint and pull it off the shaft. Lightly tapping with a hammer may help.

Installation procedure of the new CV-joint

1. Put the short boot clamp on to the shaft first and then slide the boot on to the shaft.

2. Locate the CV-joint on to the spline on the end of the shaft, then tap the CV-joint on the shaft with a plastic hammer, until the snap ring locks into its groove in the inner race. Make sure that the CV-joint is locked onto the shaft correctly by moving the joint back and forth, to ensure the snap ring is correctly engaged in the retaining groove.

Tip: Screw the nut onto the end of the CV-joint to avoid damaging the thread.

3. Slide the boot into position ready for mounting and fill with all of the supplied grease.

4. Fit the short clamp onto the boot and tighten it with a suitable tool, then pull the boot onto the CV-joint locating it into the correct position on the bell. Fit the long clamp and tighten it with the same tool. The clamp tightening operation must be performed by using special pliers with an integrated hold-down device; this prevents the unintentional opening of the clamps after tightening.

5. Install the driveshaft according to the vehicle manufacturer workshop manual.

6. After having completed the installation, rotate the driveshaft to make sure the clamps do not touch any surrounding components. Also check that the ABS sensor works correctly.

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CV-joint replacement: 18 % profit for your garage and a 59 % saving for your customer.

In a move that clearly illustrates the benefits of this approach for the car owner and the garage, SKF has calculated that by replacing the CV-joint (and not the entire driveshaft) garages can significantly increase their labour sales profit and car owner save a lot on the parts cost.

Price comparison Driveshaft versus CV-joint replacement: Renault Laguna I 1.8:

	Retail price list	Labour cost/h	Time for replacement*	Total labour cost	Total cost
Driveshaft Replacement 	£280	£40	1.7h	£68	£348
CV-joint VKJA 5342 Replacement 	£61	£40	2.0h	£80	£141
Garage profit				**£12 (18 %)**	
Customer saving					**£207 (59 %)**

**Time for replacement based on specifications in Autodata.*

SKF driveline videos on YouTube

As of January 2011, recently produced driveline videos by SKF have been posted to YouTube for public viewing.

The videos show how to replace the CV-joints on 3 different vehicles. The first two videos are relevant to the Toyota Avensis 1.8 and Peugeot 206 1.4i, where car manufacturers do not provide any fitting recommendations for the replacement of the CV-joint alone and where the procedure is actually quite complex. The third video relates to the Renault Laguna I 1.8. Each video features a step-by-step guide to removing the CV-Joint carefully and successfully. You can find the videos on the SKF aftermarket website www.vsm.skf.com as well as on www.youtube.com.

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