CV joint spacers

This is for all of us who lift the van, whether you have a Syncro or not.

It is quite common, when lifting the van, that over time certain bearings fail: Why? Well, for several reasons:

-The first is that it no longer works at the usual angle, but we force it to work at a more open angle, closer to the limit, therefore in curves, roundabouts, potholes ... the CV can stop and "eat" the ball bearing races. Unfortunately, the only way to change the working angle is to install new CV joints. Those of the normal T3 and those of the Syncro 14" have a working angle of 17°. The only possibility of increasing would be to mount those of the Porsche 924-944 which have the same stripes, and which also measure 100 mm and also have an angle of 22°... although it is a bit expensive.

-The second reason is that when lifting, we lengthen the bearings. If you have ever had a CV joint near you, you will have seen that the splined area moves in and out. This is to absorb the up and down movements of the wheel. What is going on?? If we raise the van, we eliminate part of the possible movement, and when the wheel goes down, it stops immediately... This has a solution: The Syncros, which are already higher as standard, have spacers between the CV joint and the gearbox, once again shortening the travel of the driveshaft and leaving it as it should be. I'll give you a diagram with the reference.



So if we get into the van again we can place another one on the wheel side, or if we get into a van that is not a Syncro, that is the so-called Prerunner, because depending on the climb, one or two supplements can be placed, and this way we ensure that we will have a homokinetic much longer...

Maybe it's better in this drawing:



-In the 1st, the van would go in the original position, the white rectangles are the CV joints and the green ones are the CV joint cage, where the balls go, which moves axially in and out, absorbing the length differences that occur. occur when the suspensions are operating.

-In 2nd position, we increased the height of the van, so we "forced" the cages to go more outwards as a starting point. They have less useful travel, so they will be able to stop easily in suspension extensions.

-In 3rd position we placed separators between the CV joints and the box, and between the CV joints and the wheels, correcting the previous difference.

Here are the supplements:



And so they remain. They have longer screws. We went from M8x48 to M8x55, and respecting the original hardness, which is 12.9.

Besides, taking the opportunity to clean and grease the constant velocity joints is not a bad idea...

The problem is that over time one of two things usually happens: the grease dries out, forming deposits in certain areas, or water enters and liquefies. Either way, you end up losing properties.



If we want to protect the CV joints and at the same time our wallet, one afternoon when we are bored, we dismantle a transmission shaft and even without dismantling the CV joints or dismantling the balls or anything, we remove the dust cover towards the rear and this way we can clean it well with a brush and diesel, then blow out all the remains and re-lubricate with lithium grease (about 80 or 100 g per CV joint)

This every... let's say five years, it's not too long, and our van and our wallet will thank us.

It will always be better to do it at home and control it, rather than breaking one in the middle of nowhere, right?