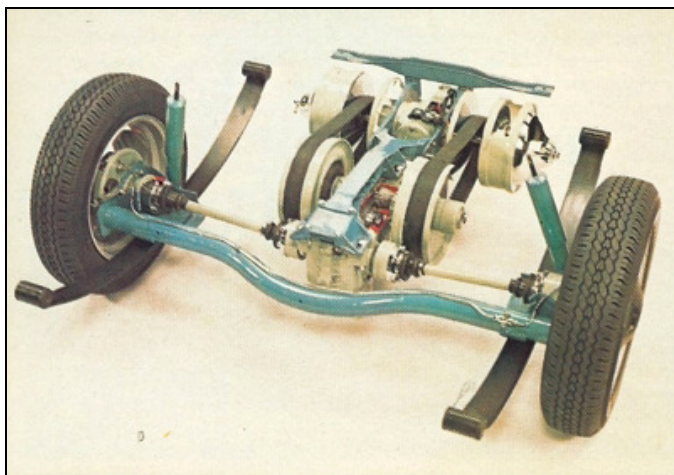


Technical topics

Changing the drive belts on a 66



You need to have the car raised to allow you to get underneath it to work so a four post ramp is ideal as is a pit in the garage floor.

If you only have drive on ramps to raise the rear wheels, it can be done but the job is harder. This is because towards the end of the process you will need to roll the car forwards and backwards to let the belts settle into their natural position between the spring loaded pulleys. Over a pit or on a four post ramp the car can easily be rolled back and forth whereas on a pair of rear wheel ramps you do not have the room to move the car.

You could roll it off the ramps onto the ground and you could roll it but then you would not be able to get it back onto the ramps to complete the work.

I am not saying it is impossible but it will be that much harder.

If this is your only option be aware that after rolling the belts into position you will need to fine tune the adjustment and finally tighten all of the nuts and bolts associated with adjusting/changing the belts so it is a job that can be done albeit with a little discomfort under the rear of the car.

Once completed you will be able to reverse back onto the ramps to replace the vac pipes and the undertray.

Start by removing central plastic guard tray to give access to the primary and secondary units.

Between the primary and secondary units there are two angle iron plates one each side which is maintaining the space between the two units. Slacken these irons at both ends (four nuts and bolts) just enough for the plates to rattle when wriggled.

Slacken the four bolts holding the secondary unit to the saddle piece which sits over the transmission. Again just slacken them.

Next loosen the lock nut on the adjuster bolt and then undo the adjusting screw to allow the secondary unit to slide nearer the primary unit.

You really must ensure all of these nuts and bolts are loose.

Now it gets tricky.

You need to force apart the rear pulleys to give some slack on the belt.

On the smaller DAFs I can swing my body weight on the belts and achieve the desired opening but I cannot do this against the stronger springs in the 66.

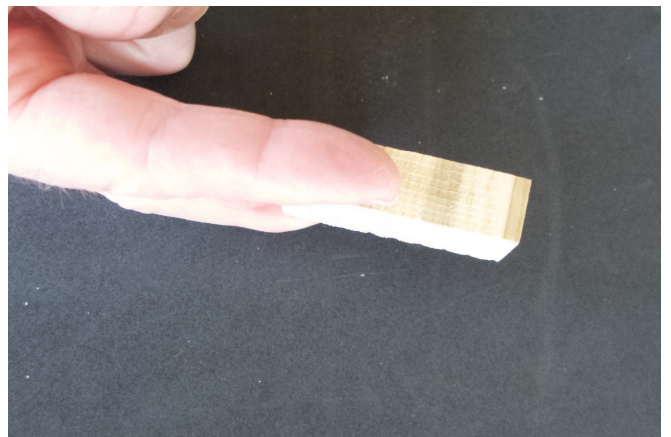
The idea is to open each pulley and to wedge it open by inserting a piece of wood into the pulley between the two halves so that it sits up tight against the central shaft and holds the pulleys apart.



The knack is to hold the pieces of wood between your index and middle finger in such a way that the wood prevents your fingers getting crushed if the pulleys close. Think about holding a matchbox between your fingers.



I have a factory G cramp to open the pulleys but some workshops have a modified car jack to do the job - basically it is an early VW Beetle jack made by Bilstein and modified to spread the pulleys.



I have seen others use a tapered piece of wood and to jack the wood between the pulleys to separate them using the weight of the car to force the wood into the pulley gap.

However you do this, you have to open the pulleys to get the block of wood in place and pinned between the pulleys.

Do both sides.

Next take off the vac hoses at the ends of the primary unit.

It's worth marking them to get them back in the right place but they are or should be different diameters to help you.

Next pull hard downwards on the belt to open the primary pulley and grip the belt to hold the pulley open and use the slack in the belt to help you ease the belt off of the secondary pulley. If it is a bit tight against the floorpan slacken the vertical mounting bolts a bit more to give a bit more clearance.

Do the same on each side.

Once the belt is off the secondary unit you can "walk" it off the primary unit.

To fit the new belts first give the pulley faces a wipe down to remove any dust etc but do not get any oil on the pulley faces.

Fit the belt over the primary pulley and again pull down on the belt to gain some slack and then ease the belt over the secondary pulley.

Do both sides.

Now you need to remove the blocks of wood which are holding the secondary pulleys open. You must do both sides.

If you are on a four post ramp or over a pit you can push the car back and forth to walk the belt onto/into the pulley.

Now you need to check the gap in the middle of the pulley faces and you need to be looking for about 1.5 to 2.0 mm.

A good guide is to make sure the belts are sitting between the pulley faces on the secondary unit and leaving about 1/8" on the circumference. It is important that the pulley halves don't touch and adjusting the adjuster bolt will make the gap you need.

At this point if you had forgotten to adequately slacken the angle iron plates they would cause the aluminium cast spine over the transmissions to break, and then you have got some serious work on your hands.

Once the adjustment is OK tighten up all of the slack mounting studs and lock nut the adjuster.

Refit the vac pipes and put back the plastic undertray.

Job done.



The blocks of wood that I use to hold open the secondary pulleys are cut from old off cuts of scrap wood and measure 50mm x 20mm x 15mm and it is the 15mm face that holds the pulleys open.

The pulleys can snap shut and give you a nasty nip so to avoid trapped fingers there is a technique to holding the blocks when inserting them as shown in the photo. Basically hold the block between the index and middle finger with your fingers along the 15mm faces and if the pulley does shut the block will prevent trapped fingers.

Steve Bidwell

