Replacing the front brake discs and pads.



The intension of this document is to give you some additional picture information by the replacing of the front brake discs and pads on a none-ABS Musso 2.9 D.

Use the manual and the pad chance instructions and if you have no technical experience let the work do by qualified persons or a garage.

It has not the intention of a work instruction.

If you use this information it is totally for your own risk and I or the Ssang Yong Club will take any responsibility for using this information.

10 October 2004

Walter



Jack up the car and removed the wheel.



Push the calliper piston totally inn.



Remove the bias spring. Be careful for the force.



Take the bias spring of.



Pull out the pad keeper.



The pad keeper and the bias spring.



Rotate the calliper housing whit pads of.



Take of the calliper and pads.



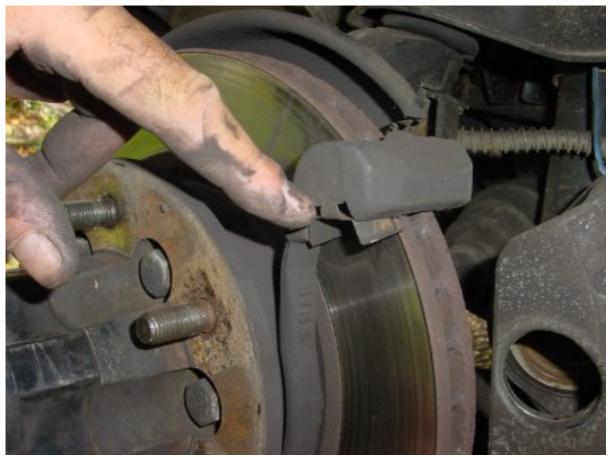
Remove the inner pad out of the calliper.



Remove the outer pad of the calliper.



Hang up the calliper with a piece of wire.



Remove the wear shims at both sides. You have to clean an re-use them.



Block the brake disc with a screwdriver and loose the hub bolts.



Remove carefully the hub cover.



Remove the retainer ring.



Take the retainer ring of.



Now you can pull of the hub housing.



View on the back side of the hub.



View on the front side of the hub. The bleu part is a locking spring.



Between the retainer ring and the hub inner part sits one or more shims.



Lose the bolts of the brake disk.



Remove the three locking screws.



Remove the locking plate. You have to use some force to get the lips over the axle.



Loose the bolts of the brake bracket.



Take the brake bracket of.



Mark the nut with a centre point so you now how tight it was.



Turn the nut anti clockwise of.



Take the nut of.



Now you can take of the hub and disc assembly.



You see it was time.



Remove the disc from the hub.



Take the hub out.



Clean everything very well. I covered the bearing at both sides to keep dust outside. Clean the bracket, pad keepers and if you don't have new one the bias springs.



Mount the new disc on the hub and tighten the bolts with the right torque. Torque see manual.



Remove the protection paint of the disc. Clean the inner side of the hub.



Fill the hub with wheel bearing grease. A look at the inner side.



A look at the outer side.



Replace the hub on the axle. Put the outer bearing in. Screw the nut on till the mark of the centre point is on his place. Check the hub on play. If yes tighten the nut a bit till the play is out. Replace the locking plate with the three screws. Torques see manual.



Clean the hub with a towel, inspect and put some new grease in. Put a thin film of grease on the outer o-ring.





Place the hub careful and put the shim in his place.



Replace the circlip.



Check that the circlip is good in his positioning.



Put a little bit grease at the inside of the cap.



Place the cap. Remount the bracket and tighten al the bolts with the right torque. Torque see manual. I choose to spray the cappiler bracket and cappiler red.



Replace the cleaned wear shims.



Put some cupper grease on the brake bracket and wear shims. Place the brake pads in the calliper and place the calliper on the bracket. DO NOT GET GREASE ON THE FRICTION SURFACES.



Put the cleaned pad keeper in place.



Bring the bias spring in position.



Push the bias spring over the bracket and check that he it in the good positioning.



Here you see the brakes ready. Push the break pedal so long that you feel good brake pressure. Check that the hub is rotating free. Check that every thing is mounted correctly. Check the torques of the bolts. For torques see the manual.

Put the wheel on and take the car from the jack.

Do a careful brake test by low speed. It is important to brake carefully the first 500 km to give the pads time to set. Avoided panic stops. It is also no good taking it for MOT until you have done some miles.

Again I must stress that if you do not have experience or mechanical aptitude this job could be too much for a novice.

When working on vehicles and jacking them up you must use all safety precautions, if you are not sure, get some help.