

'Ferodo' Imp 3-speed semi-automatic gearbox experiment

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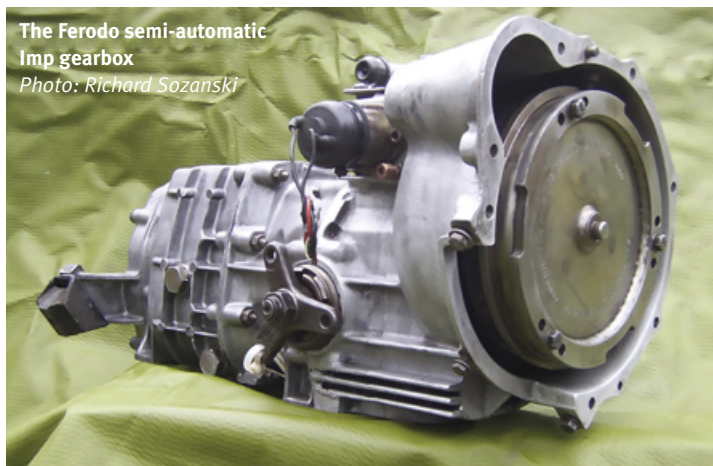
After 27 years of other priorities, Antoni finally decided to push on with the semi-auto project for the Imp's 60th Anniversary – but we had a dilemma. Do we go in for an extensive resto not knowing if

the auto transmission will work?

Dale came up with a plan that he would loan us a roadworthy Imp as a donor car and not only that he would also respray the special rear transom and engine lid to match the donor car. These parts were non-standard as the auto-gearbox is about 3"

The Ferodo semi-automatic Imp gearbox

Photo: Richard Sozanski



longer than the standard item so the engine sits closer to the modified transom and engine lid. The latter has a flat vertical surface for the number plate rather than being indented. The extra

length necessitated longer cables being made ready for fitting at the show. (Thanks to Graham Anderson for this info. GP)

To put on a great experience for the visitors and guests to the Practical Classics Classic Car & Restoration Show, Dale and Antoni worked out a plan to do the transmission transplant over the weekend of the show and hopefully drive the car out of the show on the Sunday evening.

Over the three days with the much appreciated help of Nicola Sephton on the Saturday, they were in a position to do a static test on Sunday morning before the public were let in.

The car was jacked up off its wheels and the transmission was tested. All seemed to work as expected after the hydraulically actuated wet clutch released and so the decision was made to push on. Sunday was then spent finishing various other jobs off, generally ancillaries, with the challenge that the Imp must be driven out of

Auto 'box some 3" longer than standard necessitating modified transom and engine lid

Photo: Dale Bishop



Engine removed, soon to be followed by standard gearbox

Photo: Dale Bishop

the hall at the end of the show awaiting us.

As the show closed the Imp was started up and, yes the semi-auto worked! The car was driven out of Hall 5 and to the lorry trailer park about a mile away and the dynamic duo even did a lap each of the car park.

The car is now in Stratford as there are various tweaks to be made, for example it seems very sensitive to idle speed.

Some things we will leave as it's only a donor car on loan – for example we will leave the battery at the back instead of relocating it in the front boot and of course we will leave the disconnected clutch pedal *in situ*.

We have a lot head-scratching to do on the gear lever switching, etc, as the original is not switching reliably, so a temporary switch has been fitted. But for now, it is what it is and hopefully it will be in Coventry for Anniversary celebrations.

Brief description: the 'Ferodo' Imp has a Ferodo semi-auto system, mated to an Imp gearbox with first blanked off. The Ferodo element has a torque converter, hydraulic pump,



Engine mated to auto 'box

Photo: Dale Bishop



Dale, Antoni and Nicola discuss the lengthened throttle and choke cables required
Photo: Richard Sozanski

wet hydraulic clutch controlled by a solenoid-operated two-position valve set. The switch in the gear lever mechanism operates the solenoid which allows hydraulic pressure to activate the clutch, much like pressing the clutch pedal normally, allowing for gear changes. But in theory you can leave it in 'drive' (3rd) and just drive like that due to the torque convertor.



Nicola fits the lengthened throttle cable
Photo: Richard Sozanski



John Simister visits the stand for the lowdown on the auto 'box
Photo: Richard Sozanski

This was tried and tested by the factory as a Ryton experimental project. The intention was to incorporate it in the proposed 1968 facelift line-up along with the 930 cc engine upgrade among a host of other things, but for reasons known only to Chrysler, it was cancelled and we ended up with a different and far less radical '68 line-up, a modernised dashboard being about as good as it got, though whether this was an improvement is a moot point.



Antoni beaming ear-to-ear after after a successful lap in nearby lorry trailer park after the show
Photo: Dale Bishop

