

What follows is an article sent to us by Peter Bourne from Perth on how to fit a Sigma diaphragm clutch into your Traction. Many people have asked about diaphragm clutches in Traction

and I believe there was a kit available from someone in the US. Peter has done a comprehensive job of detailing the parts required to be made and part numbers needing to be acquired. Why go to a diaphragm clutch? Well as we know the Traction would have one of the heaviest flywheel and clutch assemblies known to the automotive world, even when you remove the bit that sticks out the front as Jack Weaver

advises, [see drawing] you are still stuck with the clutch pressure plate and it's extremely heavy mounting ring, this modification does away with that heavy component.



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I know there are the purists among us who will argue that a modification such as this is departing from the original and may upset the harmonics of the car. I am not prepared to argue the point on these matters because in the case of all of the modifications that can be carried out on Traction it is in the eye of the beholder and if you are happy with your car then nothing else matters.

Lightening a flywheel is of course an easy way to make your engine more responsive, it takes more energy to accelerate a 20kg flywheel than a 10kg one. I have removed

modification is working very well. One thing to be recommended is most definitely have the flywheel and clutch assembly balanced if you are going to use this modification as

this is the most crucial step to be taken and if you are over-

hauling your engine at any time the money spent on balancing is an extremely wise investment. You can see in the drawing of the flywheel and clutch assembly how the original pressure plate is bolted onto the flywheel using the mounting ring.

Rob Little

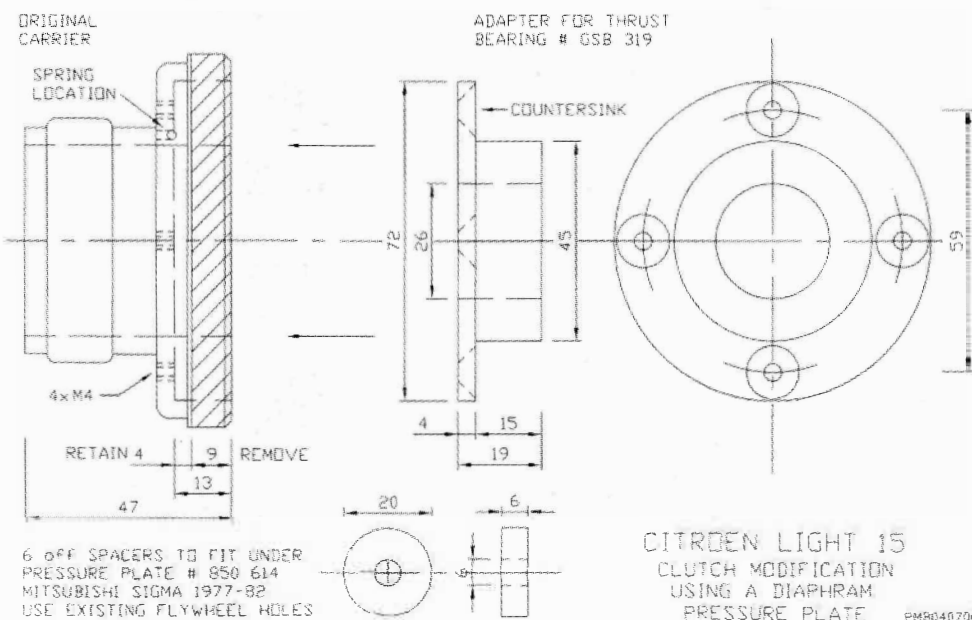
Peter Bourne writes

I. Manufacture 6 off spac-

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the bit that sticks out the front on my car and personally find very little difference in hill climbing ability, smoothness of idle or any other characteristic of the engine's behaviour: but it will certainly accelerate quicker.

I have not fitted this type of clutch to my car but certainly will in the future when the opportunity arises. Peter assures me his car with the



ers 20mm o.d. x 6mm i.d. x 6mm thick from mild steel. Spacers must be of identical thickness.

2. Manufacture thrust bearing carrier adapter from 75mm dia mild steel. The 45mm dia is critical to allow an interference fit with the new thrust bearing, do not countersink holes at this stage.

3. Remove 9mm from the thrust bearing face of the original thrust bearing carrier.

4. Place the new thrust bearing carrier adapter into the modified original thrust bearing carrier & mark the position of the 4 off holes in the carrier for the m4 countersunk holding screws by spot drilling through the adapter.

5. Remove the adapter & drill & tap the m4 holes into the original carrier.

6. Countersink the 4mm dia holes in the adapter.

7. Drill 2 off 2mm dia holes at right angles to each other for locating the return spring.

8. Fit the adapter to the modified original carrier using m4 countersunk screws. Treat screws with Loctite.

9. Fit thrust bearing # gsb 319 to the modified carrier & mount the assembly into the bellhousing. Connect the return spring to the carrier using the 2mm holes.

10. Fit the clutch plate & pressure plate to the flywheel using the

original fixing holes & placing 6 off 6mm spacers between the flywheel & pressure plate. Line up the clutch plate as normal. Use new 8.8 grade bolts with spring washers. Clutch plate is standard light 15, 8mm thick.

11. With the bellhouse fitted, set the position of the clutch lever to 160mm from the centre of its connection hole to the engine face of the bellhousing.

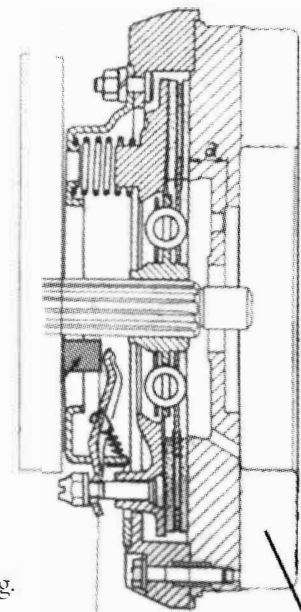
The pressure plate used is from a Mitsubishi Sigma 1977-82. # 850 614.

Pressure plate and thrust bearing can be obtained from 'Clutch & Brake Australia Pty.Ltd' [CBA]. They can also reface the clutch plate if required.

It is recommended that the flywheel should be lightened at this time. This, along with the weight lost with the clutch modification, will assist with gear changing and engine braking.

Peter Bourne.

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This is the bit that sticks out the front.