Hubs & discs.

The first job is to mount the disc on the hubs. The hub was slightly too large to fit inside the top-hat section of the disc and required grinding at the edges. (Fig 3)

Fig 3

The stud PCD is the same on both the hub & disc, so no problem there but the disc uses M12 studs so the holes would be too large for a neat fit on the standard OEM studs. I had previously changed the studs on my car to M12 so it wasn't an issue.

The disc has 2 countersunk holes to allow it to be bolted to a hub. I used these, drilling & tapping the hub to accept M4 countersunk stainless set screws. This makes handling much simpler in the later stages when you're making the caliper brackets. (Fig 4)

Fig 4

Caliper brackets.

The brackets were fabricated from 6mm mild steel plate and the basic principle was to make everything as small and rigid as possible in the final application, but to initially make the individual sections larger than required so that they were cut to size as each one was constructed. There are 3 pieces to the constructions and I'll refer to them as follows;

1. **Carrier plate**. By this I mean the section of the bracket with 4 bolt holes and one axle hole and which is bolted to the hub carrier and trailing link arm.

2. **Spacer plate**. By this I mean the section which is horizontal across the hub carrier and spaced the carrier plate from the section which the caliper is bolted to.

3. **Caliper plate**. By this I mean the section to which the actual caliper mounting plate is bolted to.

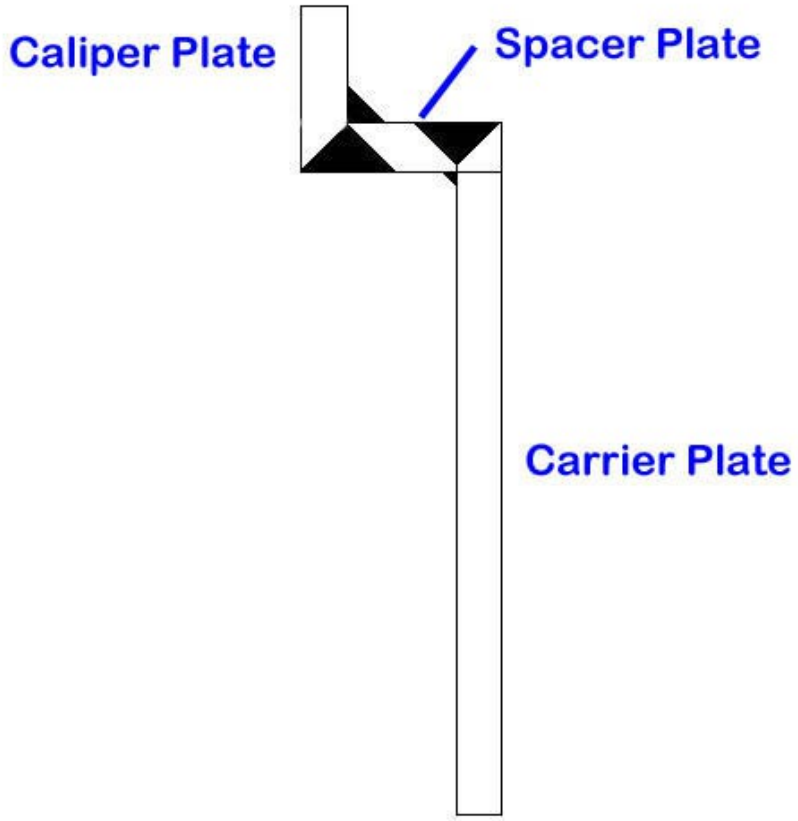

Fig 5

Carrier plate fabrication

This needs to have one large central hole for the axle to go through, with 4 x 5/16" holes for bolting to the hub carrier. I started off by cutting a rectangular plate roughly 3.5" wide by 5" long. By using the backing plate from the drum brakes, make a template to mark the 4 x 5/16" holes and central axle hole which you can then chain-drill & cut.

Once these are drilled, loosely mount the plate on the hub carrier and use the hub/disc assembly to mark where it needs trimming back (Fig 6).

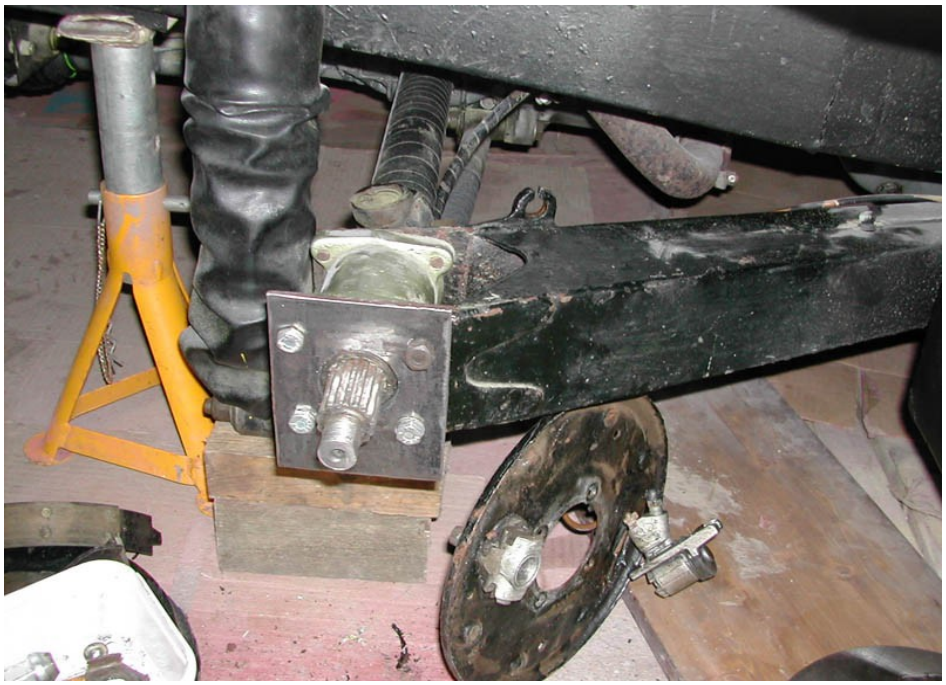

Fig 6

Fig 7

Once you're happy with this section, just do a check fit on the other side of the car and if everything is fine, it's relatively easy to clamp it to another plate section and drill through to produce a second carrier plate.

Spacer plate. With the carrier plate mounted and the hub/disc assembly in place on the axle shaft, drop the caliper on and estimate the approximate width of the spacer plate required, in this case it was around 1/2". I cut this to 1" as it was to be trimmed back to accurate dimensions after welding to the carrier plate.

Caliper plate. I made the caliper plate by simply using the mounting bracket from the calipers as a template, marking and drilling through. The caliper needs M12 bolts and I used a 13mm drill. This plate was cut to the final width as you know this from the caliper mounting holes, but deeper than required to allow for some vertical adjustment at the final stages. (Fig 8)

Fig 8