## Section F (Front Suspension)

## WISHBONES

The wishbones are fabricated from metal pressings welded together to form a hollow sectioned construction. The king pin carrier of the steering knuckle, included in the hub and king pin assembly, is fitted in the hollow outer end.

The pivot points at the inner ends of the wishbones are spaced widely apart to give maximum rigidity and to reduce the transmission of road surface noise metal and rubber bonded bushes are pressed into each pivot. The centres of the four pivot points are parallel to the centre line of the car, thus a swing axle is formed.

The wishbones are attached to two support brackets mounted across the centre of the car, while the outer ends are attached to the lower extremities of the front spring and shock absorber assemblies mounted in the front wheel arches, thus each complete independent front suspension unit is formed.

## To remove and refit

- Remove the hub and king pin assembly but do not disconnect the rigid and flexible brake hydraulic pipes. See under "Hub and King Pin Assembly—To remove and refit". Stand the brake and hub assembly nearby without straining the flexible hose.
- Identify the lower end of the inner steering column to the splined pinion of the steering unit to facilitate refitting. Remove the pinch bolt and detach column by lifting up the steering wheel approximately 2in. (50 mm).
- 3. Slacken off the two nuts securing the pivot ends of the wishbones to the front and rear support brackets.
- 4. Detach the front and rear support brackets from the floor assembly by withdrawing four bolts and washers from the front bracket, four bolts and washers from the floor inside the car after the floor covering has been rolled back and lower the brackets down by withdrawing four bolts and washers from the front edge of the rear bracket beneath the car.
- 5. Detach the wishbone from the front and rear support brackets by removing two nuts and bolts. See under "Inner Wishbone Attachment".
- 6. Refitting is the reverse of the removal sequence, but particular attention must be given to the following:



Fig. 13 Under view showing inner ends of wishbones, pivot bolts and support brackets

- i. The nuts of the wishbone pivot bolts are renewed. See under "Inner Wishbone Attachment", and these together with the lower shock absorber bolt are not fully tightened until the weight of the car is on the road-wheels.
- ii. The front wheel alignment (Toe-in) is checked. See under "Front Wheel Alignment (Toe-in)— To check and adjust".

## **INNER WISHBONE ATTACHMENT** (See Fig. 13)

The nuts fitted to the pivot bolts at the inner ends of the wishbones are a special locking type with nylon inserts in their bodies.

These nuts can be re-used providing the threads and nylon inserts are in good condition and the inserts have not lost their locking properties.

The efficiency of the lock can be checked by running the nuts on the bolts by hand and if in good condition, resistance to their travel along the thread will be experienced. When little or no resistance is evident, they should be renewed.

These nuts are only fully tightened when the weight of the car is on the road-wheels.