

THE MOUNTING OF JAGUAR INDEPENDENT REAR SUSPENSION

RADIUS RODS:

Radius rods should always be installed to support the lower control arms of the Jaguar I.R.S.

There is only one geometrically correct position for them to be mounted. The radius rods must be installed with the forward end located on the axis of the lower control arm pivot. (The centre line of the shaft that connects the lower control arm to the differential housing). This axis and radius rod combine to make a right angle triangle with the lower control arm. This allows full suspension travel without bind. (See diagram). Mounting the forward end of the radius rod anywhere else other than on the axis line causes partial or total bind and undue stress on lower pivot bracket bolts which can break.

The recommended minimum size of tubing for radius rod fabrication is 1-1/8" O.D. The type of pivot used on radius rod ends should be of such design to allow adequate twist under full suspension travel, such as stock Jaguar rubbers on control arm ends and independent suspension strut rubbers on the forward end.

The other method of fitting radius rods is where the radius rods cannot be fitted in the same axis as the lower control axles, and the rods are mounted directly forward of the lower control arm connecting point, (as with stock Jaguar). If this type of system is used, the rubbers both for and aft should have sufficient movement to allow full travel without bind.

TIE BARS:

Tie bars or plates should be fitted between the lower control arm pivots; both front and back. Also a tie plate should be fitted underneath between pivot brackets.

TORQUE REACTION STRUTS:

These must be fitted between lower control axles and chassis to prevent the differential from twisting.

SHOCK ABSORBERS AND SPRINGS:

Mounting points for shocks should be the same dimensions as they were in the parent car. If this cannot be done for clearance reasons a minimum distance between top mounts would be 21". A correctly installed Jaguar I.R.S. would have shock centres of 11 1/2" and horizontal half shafts. Car height under normal load, should be altered by changing springs, not relocating shock mounts. Chroming of springs is not recommended, but if they are, they should be heat treated or sagging and/or breakage will result.

CAMBER:

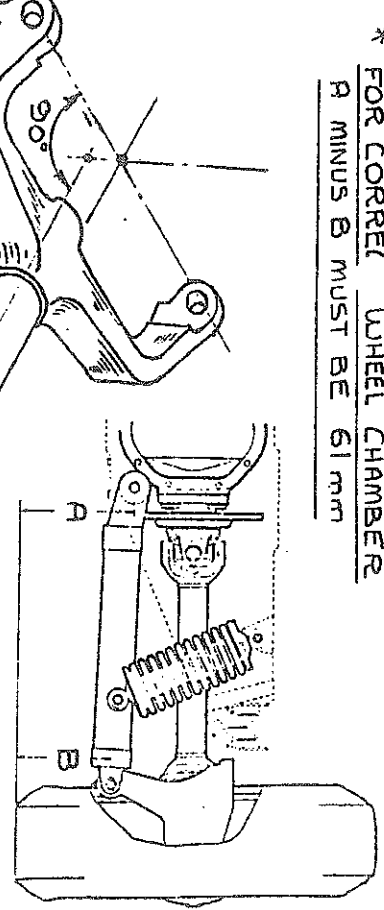
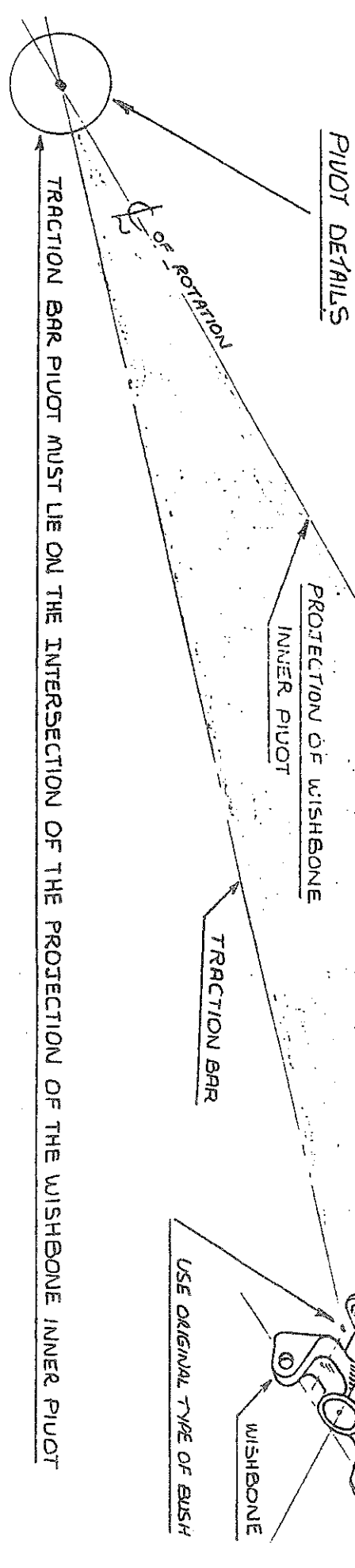
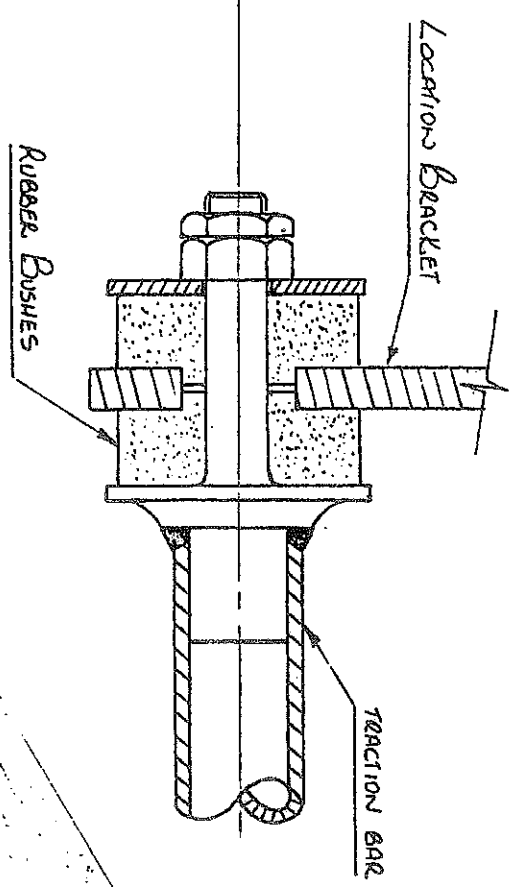
Camber is adjusted by the use of shims between drive flange and half-shaft, and bottom pivot bracket and differential case. Correct camber is $3/4^{\circ} \pm 1/4^{\circ}$ negative.

WHEEL BEARINGS:

It is very important to adjust bearings correctly. This is done with varying size shims to accomplish an end float of .002" to .006". These bearings are not preloaded. If they are, severe damage to the hubs will result.

SAFETY LOCKING:

Lock wire, lock washers and self locking nuts are strongly recommended on all fastenings.



— INSTALLATION OF JAGUAR REAR END TRACTION RODS SHOWING RIGHT ANGLE TRIANGLE —