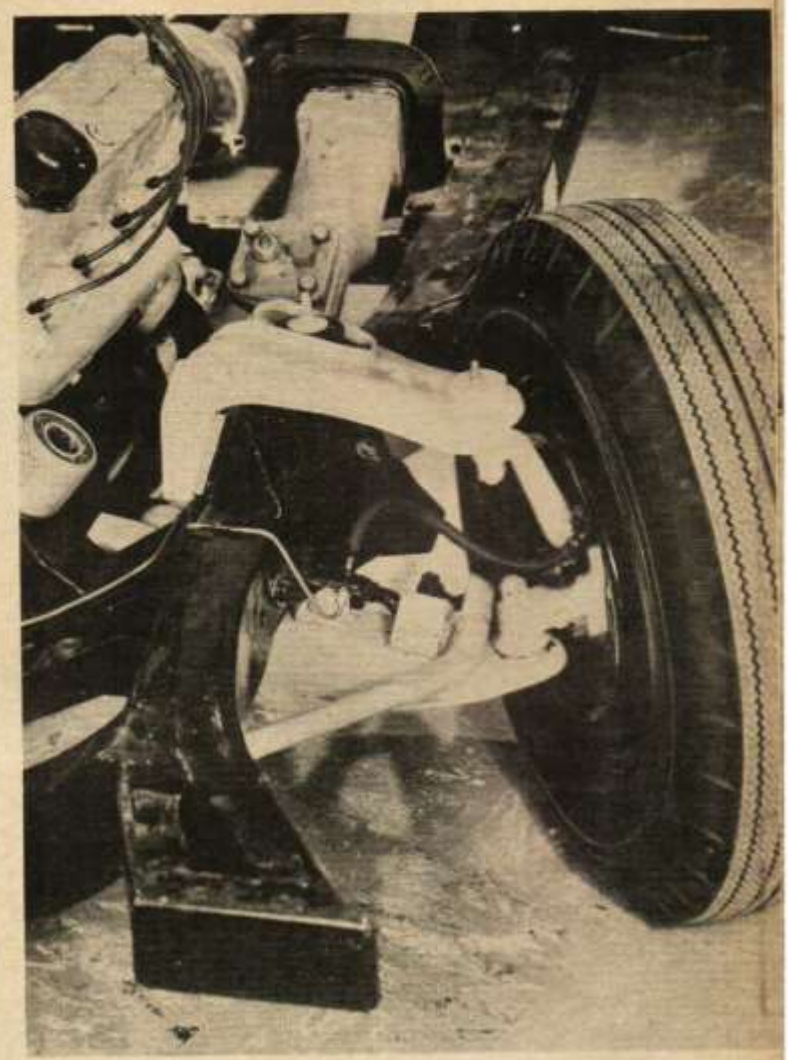
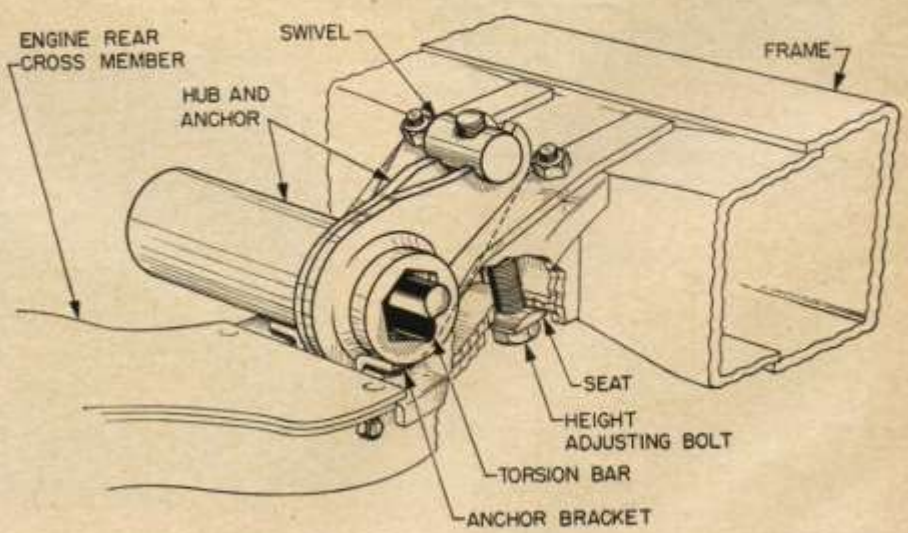
Looking forward from the right side, steering arm and tie rod are shown. Brakes are 11-inch, two-leading shoe type.



Torque-absorbing strut from lower arm ties into front cross-member. Angular mounting of upper arm counteracts "nosedive."

coil spring are absorbed by the spring as torsional forces just as surely as if the coil were a straight length anchored at one end with a twisting force applied to the other end. However, a coil spring in either compression or extension forms, is regarded as a constant rate spring. A straight torsion bar is also a constant rate spring but by virtue of the method of attachment to the front suspension components, it becomes a spring of variable rate. This means that as the load applied to a straight torsion bar is increased, the resistance of the bar increases and the mechanical advantage of the attached lever arm decreases, giving the effect of a varying spring rate. In other words, the spring rate increases with the amount of wheel deflection, a very desirable feature. Actually, the same thing occurs in a front coil spring installation but not to such a marked degree.

There are other advantages to a straight torsion bar as well. For example, space requirements, particularly in a vertical plane, are greatly reduced by the elimination of the coil spring. The torsion bar is usually located close to the frame and parallel to it, although it can be mounted in a transverse direction. In either case, space is gained. Thus mounted, the torsion bar moves from the "unsprung" to the "sprung" category. In a normal coil spring application, the majority of the actual weight of the coil moves with other sus-



TORSION BAR REAR ANCHOR (MANUAL HEIGHT CONTROL)

Cutaway shows details of rear torsion bar mounting and screw-type height adjustment.