REAR AXLE

eral Design

e Rear Axle is of the semi-floating type carried ne piece hot rolled steel housing which provides d mounting for the malleable differential carrier he wheel bearings.

is construction gives easy accessibility for serv- the wheel hubs, wheel bearings, and axle shafts e removed without disturbing any other parts. the axle shafts have been removed, the differ- carrier assembly can be removed as a unit by ving the 10 mounting stud nuts, and disconnect- ie rear universal joint. All service replacements djustments can then be made on the bench.

Gears, Pinions and Shafts

e Helical bevel drive gear and pinion are made ckel molybdenum electric furnace steel, heat- d and case hardened while the axle shafts are ome-molybdenum steel.

ngs

e drive pinion, differential and axle shafts are d on six heavy duty taper roller bearings, all of are adjustable for proper end play and also for t gear mesh.

ential

e differential is of the two pinion type carried olit housing. The side gears are splined to accept lines of the axle shaft. Their bearings are ground inside of the housing while the thrust is taken kelite washers.

e differential pinions are carried on a hardened round shaft. The 1937 pinions are bushed while te thrust washers are used in all models.

e spacer for the pinions passes over the shaft so takes the end thrust of the axle shafts. The n the spacer is sufficiently larger than the shaft vent the end thrust from being thrown on the shaft. Care must be taken however when ing axle shaft end play to keep the shim packs e wheel bearing caps approximately the same ess so that the spacer will be held in a central on and will not contact the pinion shaft.

cation

differential gears and pinions are drilled so he meshing of the teeth forces lubricant to the g and thrust surfaces.

differential and rear pinion bearings are ated by direct splash from the rotation of the gear.

front pinion bearing is lubricated by lubricant n by the drive gear into a pocket cast into the

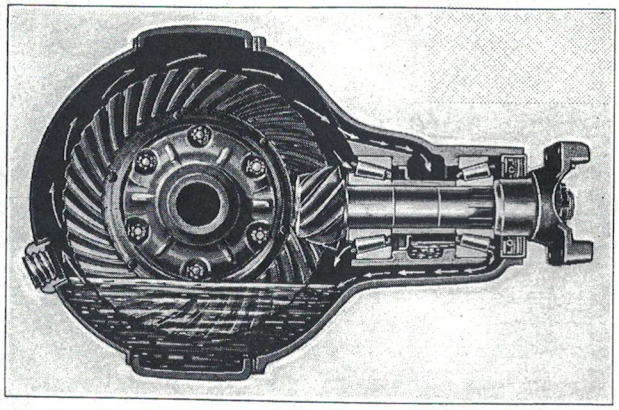

Figure 1302—Circulation of Lubricant in Differential Carrier

differential carrier as shown in Figure 1302. The lubricant is led from this pocket through a passage and emptied into the pinion housing between the bearings. A baffle located just ahead of the rear pinion bearing prevents the lubricant from returning through the rear bearing so that flow is through the front bearing lubricating it with a constant flow and the return to the axle housing being through the lower passage cast in the carrier.

The wheel bearings are packed with grease.

The lubricants recommended and the quantities required will be found in Section No. 1 on Lubrication.

Oil Seals

An oil seal of the plain leather type is used inside each wheel bearing to prevent the differential lubricant reaching the bearing.

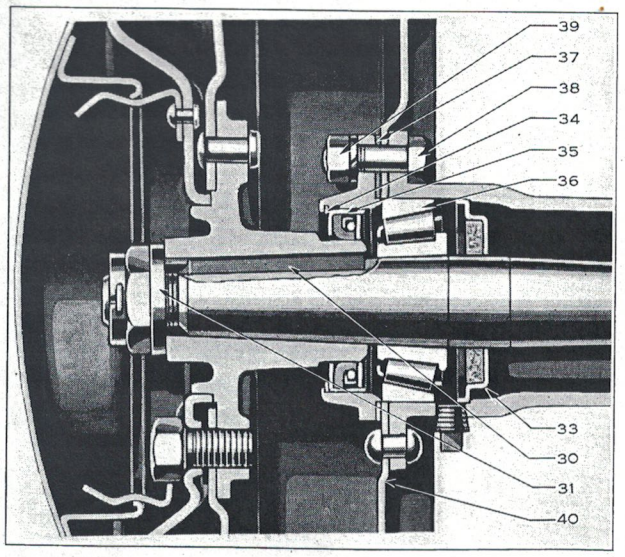

Figure 1303—Detail of Oil Seal Installation