

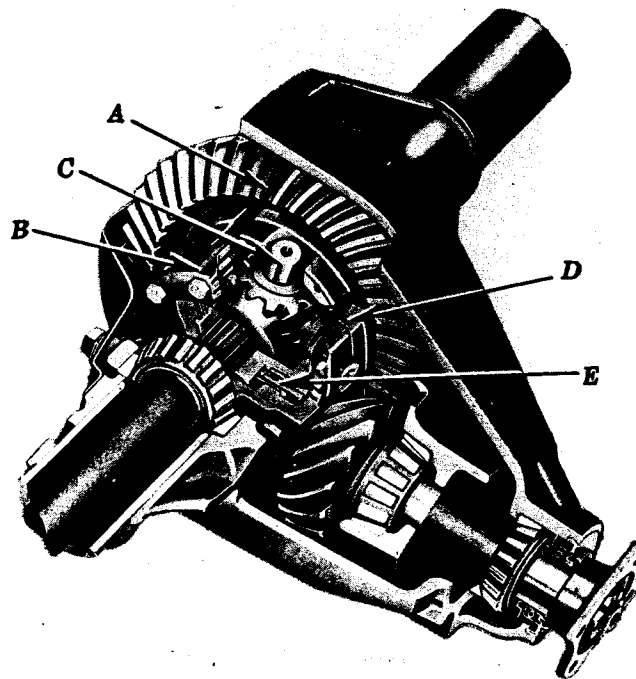
Connected to left axle

free to spin relative to left axle

(supported by left axle thru bearing)

FIGURE P10-3

Automotive differential planetary gear train for problem 10-27



SPIRAL BEVEL GEARS

Figure 8.19 Limited-slip automotive differential. Engine power is transmitted to the large hypoid gear (A), which drives the differential case (planet carrier B). The driving force moves cross pins (C) up cam surfaces (D), engaging disk clutches (E). This type of differential applies the greatest amount of torque to the wheel with the most traction to prevent the other wheel from spinning on ice or snow. (SOURCE: Dana Corporation.)