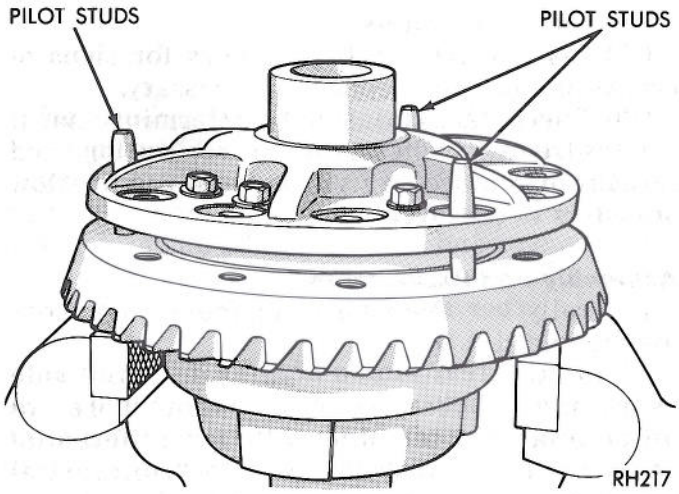

Fig. 19—Using Pilot Studs to Locate Case to Heated Ring Gear

Fahrenheit (149.0 degrees celcius). **DO NOT USE A TORCH.** It is advantageous to use pilot studs equally spaced in three positions to align the gear to the case (Fig. 19).

(7) Using new drive gear screws (left hand threads) insert through case flange and into drive gear.

(8) Position unit between brass jaws of a vise and alternately tighten each screw to 70 ft. lbs. (95 N·m) on all axles.

(9) Position each differential bearing cone on hub of differential case (Taper away from drive gear) and carefully install bearing cones. On 7-1/4 inch axles use Tool C-3716-A and C-4171 handle. On 8-1/4 inch axles use Tool C-4340 and C-4171 handle. An arbor press may be used in conjunction with installing Tool (Fig. 20).

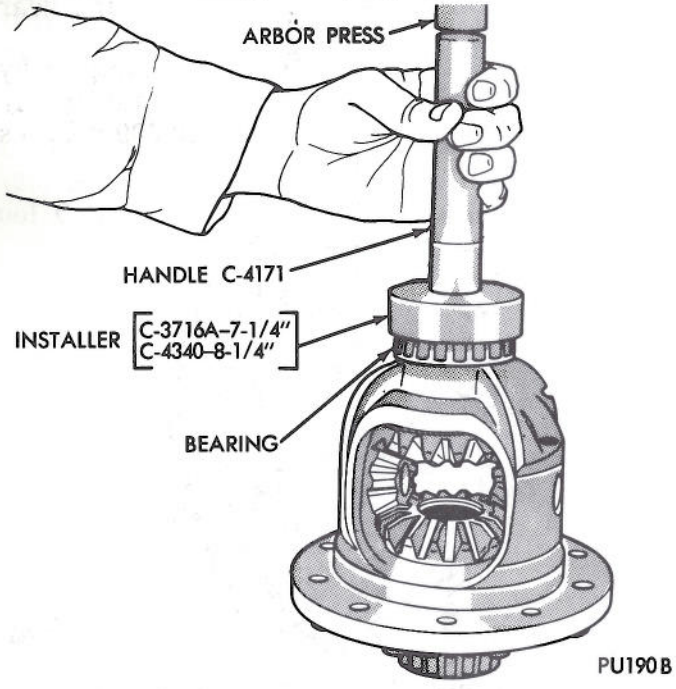

Fig. 20—Installing Differential Bearing Cone

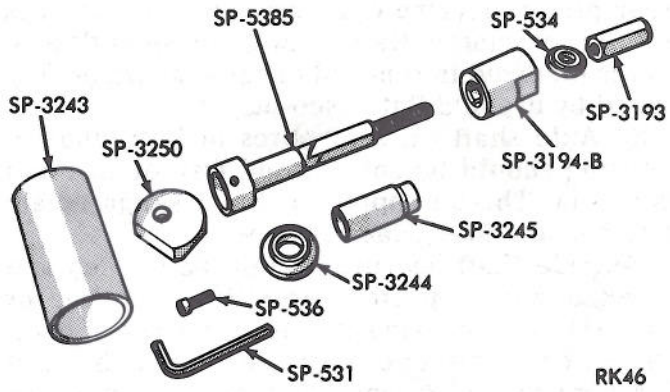

Fig. 21—7-1/4 Inch Axle Pinion Setting Gauge Tool

CAUTION: Never exert pressure against the bearing cage, since this would damage the bearing.

Select the proper rear axle pinion setting gauge set (Figs. 21 and 22) and proceed as follows.

(10) Start both drive pinion bearing cups into axle housing bores making sure they are not cocked.

(11) **On 7-1/4 inch axles** assemble pinion locating spacer SP-3244 over main body of Tool SP-5385 followed by rear bearing cone. Position tool in rear axle housing, then install shaft locating sleeve SP-3245, front bearing cone, compression sleeve SP-3194-B, centralizing washer SP-534 and compression nut SP-3193.

On 8-1/4 inch axles, assemble pinion locating spacer SP-6030 over main body of Tool SP-5385 followed by rear bearing cone. Position tool in rear axle housing, then install shaft locating sleeve SP-5382, front pinion bearing cone, SP-6022 washer followed by compression sleeve SP-3194-B, centralizing washer SP-534 and compression nut SP-3193.

(12) While holding compression sleeve from turning with Tool C-3281, tighten nut, thereby drawing pinion bearing cups into axle housing bearing cup bores. Permit tool to turn several revolutions during tightening operation to prevent brinnelling of bearing cups or cones (Fig. 23).

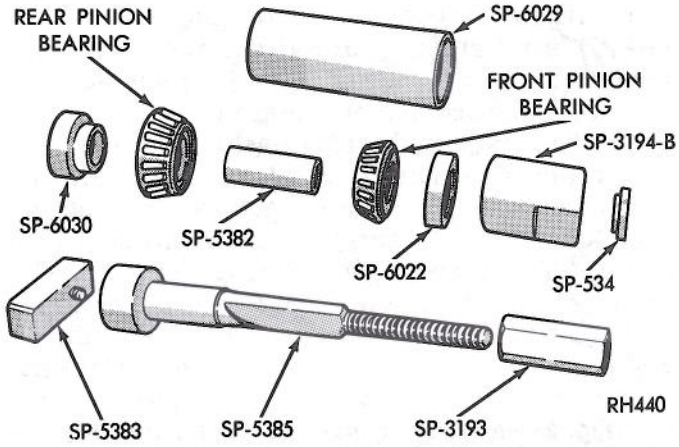

Fig. 22—8-1/4 Inch Axle Pinion Setting Gauge Tool