Rear Axle (Cont'd)

DIFFERENTIAL

Figure 1 illustrates the method of removing the differential bearing cup with the BV-302 puller.

Differential bearing cups are assembled to the two axle housings by means of the BV-306 puller as shown in Fig. 2.

Differential bearing cups are removed with the BV-330 puller.

Differential bearing cups are installed with the BV-93 driver.

Assembly

The rear axle shaft should be placed in the right hand half of the differential case.

Place the spider to which the pinions have been added in the differential case. The pinions should turn freely on the spider (approximately .005″ clearance). The other axle shaft and the other half of the differential case and the driver gear should be installed and the whole bolted together tightly and a locking wire installed. (The joints of the differential case must be free from burrs or anything which would prevent them from joining correctly.)

Back lash in the axle shaft gears may now be checked. This may be done by holding one shaft securely in a vise and turning the other as far as possible by hand first in one direction and then the opposite. The amount of free travel will indicate the total amount of back lash in the assembly. The amount of travel allowable checked at the key way of the axle shaft should not exceed .010″. If the back lash exceeds this the end play of the shaft should be checked. This should not exceed .015″ on either shaft. Greater end play is an indication that some of the parts are worn excessively and have not been replaced or that the assembly has been incorrect—probably the halves of the differential case not seated properly. However, if the end play is not excessive and the back lash is more than designated it is usually an indication of excessive wear on the teeth of some of the gears.

After the drive pinion has been installed in the differential housing assemble the left hand axle housing to the differential housing using 18-4035-A gasket which is .008″ to .010″ thick.

The differential assembly should then be installed at the left hand housing.

The **left** axle housing should then be assembled to the differential housing with an 18-4035-A gasket which is .008″ to .010″ thick and all housing bolts securely tightened.

The differential bearing clearance may now be checked. Two men are necessary to do this. Each should turn one of the axle shafts; both shafts must be turned in the same direction

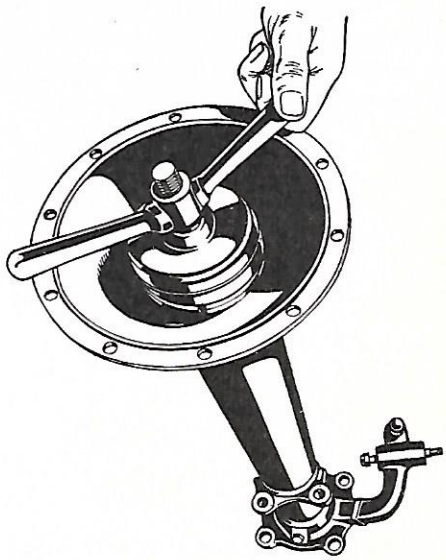


Fig. 1

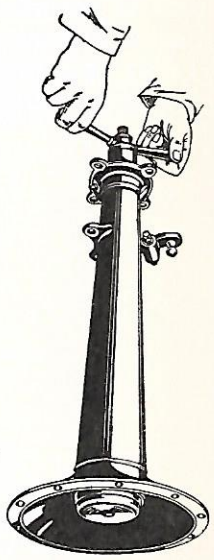


Fig. 2

EQUIPMENT USED

KRW—BV-93 DIFFERENTIAL CONE DRIVER	$1.50
KRW—BV-302 AXLE HOUSING RACE PULLER	3.20
KRW—BV-306 AXLE HOUSING RACE PRESS	3.20
KRW—ABV-311 AXLE HOUSING GREASE RETAINER PLACER	3.00
KRW—BV-330 DIFFERENTIAL CONE AND PINION PULLER	4.35

ABOVE APPLIES TO MODELS:

FORD V-8 SINCE 1932

LINCOLN-ZEPHYR PRIOR TO 1938

Printed in U.S.A.

Copyright 1938
FORD MOTOR COMPANY
DEARBORN, MICHIGAN
All rights reserved