

# New Transmission Case for 1/4-Tons

PLUS A NEW SEAL FOR YOUR PRESENT TRANSMISSION WHEN IT GETS OVERHAULED

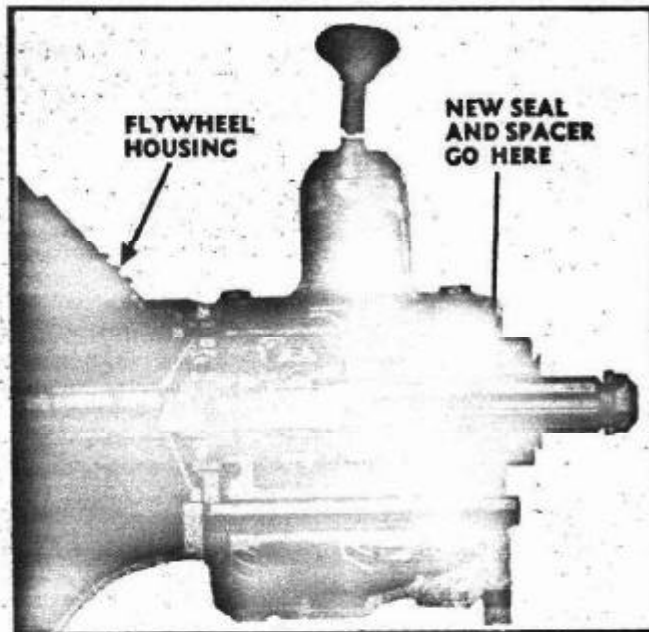
An improved transmission case is now in production for 1/4-ton jeeps. The new case holds a full quart of oil (instead of the present 3/4-quart), which helps maintain a lower oil temperature. What's more, a positive leather seal has been installed just ahead of the transmission-mainshaft rear bearing—to stop the old familiar business of oil migrating between transmission and transfer case.

Along with the new case go these other transmission improvements: Flat spots machined on the countershaft-gear shaft and reverse-idler-gear shaft. Bushings grooved differently for better lubrication. Recesses cast in the bosses of the transmission case, to make it easier for oil to get to those shafts and bushings.

The filler plug is an inch higher than before, and you can recognize the new transmission case by a big letter "H" on the left side where the filler plug used to be.

Willys jeeps with engine 489482 or higher, and Fords with engine 235470 or higher, have had the new transmission cases put on at the factory. They'll be issued as field replacements, too, as soon as the stock of present transmissions is used up.

In the meantime, don't worry about your jeep transmission unless you're having an overdose of trouble with oil pumping into it from the transfer case. In that case, you need a higher-echelon treatment as prescribed by TB 1803-1 (8 Dec. 43). Or, still better, if the new parts are available the next time your transmission is overhauled, you can have the new Oil Seal (Willys Part No. A-15428) and Spacer (A-15427) installed in your old transmission case. These parts replace the Oil Slinger (Willys Part No. A-410) and Spacer (A-738) now on the rear end of the mainshaft, ahead



The new jeep transmission wouldn't pose for its picture, but this shot of the old one shows where the new seal gets installed.

of the rear bearing.

Now, if those higher-echelon mechanics are listening, here's how to install the new oil seal and spacer in the old-style transmission case:

Remove the transmission and transfer case and put them up on the workbench. (Hold the transmission mainshaft in the transmission with a wire, so the second-high speed-synchronizing unit won't come apart and drop the synchronizer shifting-plates into the bottom of the case.)

Take off the transmission-mainshaft rear bearing, remove the oil slinger and the spacer. Install the new leather oil seal first, with the lip of the seal toward the transmission. With a piece of pipe a

little less than 2 1/4" outside diameter, drive the seal through the bearing hole in the rear of the transmission until the seal is flush with the face of the case.

Install the spacer with the recessed end toward the transmission, to fit over the mainshaft snap-ring. Then slip on the mainshaft bearing with the shield toward the transmission.

Put back the transfer case and interlock pin, then the oil slinger (A-410) with the flat side toward the bearing, then the transfer case main-drive gear, washer, nut, and cotter pin—tightening the nut securely before installing the cotter pin. Finish the job by adding the transfer-case rear-cover gasket.