

**Fig. 9**  
View of underside of Ford motor showing how radius rods should be held down by a wooden block to remove oil pan.

pump drive gear and fuel pump actuating cam are mounted on the rear end of the camshaft while the distributor assembly is driven by a slot in the front end of the shaft.

**To remove the camshaft** to replace the camshaft gear it will be necessary to take off the radiator, the valve valley cover, both cylinder heads, valves and push rod and take off the distributor and timing gear cover plate. The camshaft can then be pulled out from the front.

The camshaft gear is pressed onto the camshaft hub. When a new gear is installed be sure the mark on the gear registers exactly with the line on the hub of the camshaft as shown in Fig. 1.

## How to Remove the Oil Pan

**All 1932 to 1934 Models Inclusive:** It is a fairly simple operation to remove the oil pan in these models. No difficulty will be encountered if the work is done in the following order.

- 1) Lift the front end of the car off the floor with a chain hoist attached to the bumper.
- 2) Remove the left exhaust pipe shown in Fig. 9.
- 3) Remove the radius rod ball cap and place a wooden block about 12" long between the radius rod ball and the frame cross member to hold the radius rods down out of the way.
- 4) Disconnect the front brake rods and let them hang down.
- 5) Disconnect starting motor cable. It will not be necessary to remove the starting motor to take the oil pan down.
- 6) Take out the 5/16" oil pan capscrews along the sides of the oil pan and the four 3/8" capscrews through the rear oil pan flange. Also remove the one 5/16" capscrew from the top right hand side just back of the starting motor. The oil pan can now be removed.

**Note:** It may be necessary to loosen the fan pulley and slide it ahead if it interferes with the pan.

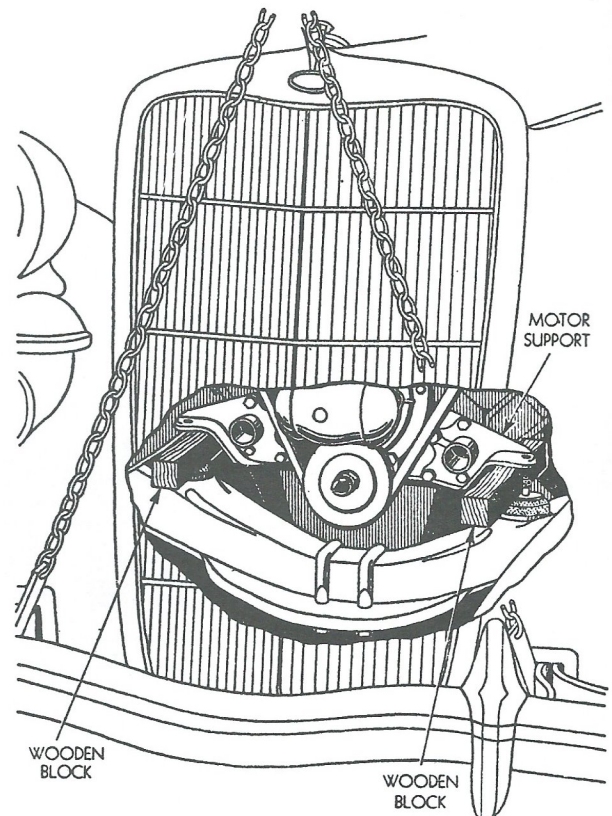
**All 1935 and 1936 Models Inclusive:** A mechanic who is not familiar with Ford V-8 repair procedure may have considerable difficulty removing the oil pan on these models if he does not follow the standard recom-

mended practice. Much time can be saved if the work is done by the following operations.

- 1) Drain the radiator, remove top radiator hoses and loosen clamps on lower hoses.
- 2) Disconnect front motor supports and remove generator so the fan blades will not puncture the radiator.
- 3) Jack up front end of motor as high as possible (approximately 2 1/2") and block in this position by placing wooden blocks between the motor supports and the frame as shown in Fig. 10.
- 4) Lift the front end of the car off the floor with a chain hoist attached to the bumper.
- 5) Remove the left exhaust pipe shown in Fig. 9.
- 6) Remove the radius rod ball cap and place a wooden block about 12" long between the radius rod ball and the frame cross member to hold the radius rods down out of the way.
- 7) Disconnect the front brake rods and let them hang down.
- 8) Loosen the fan pulley and pull it ahead far enough to clear the front end of the oil pan.
- 9) Disconnect the starting motor cable. It will not be necessary to remove the starting motor to take the oil pan down.
- 10) Take out all capscrews holding the oil pan in place. Do not overlook the 5/16" capscrew which is removed from the top and is located just behind the starting motor.
- 11) Place the crankshaft in such a position that the counterweights of the front throw will be in the down position. This position of the crankshaft will allow the greatest amount of clearance between the oil pan and the crankshaft. The counterweights will be in the down position when No. 1 piston is approximately 1 1/8" from the top of the block with No. 5 approximately 2 3/4" from the top of the block.

The oil pan can now be removed.

**Caution:** When a late type engine block assembly is to be installed in a 1932 or a 1933 model, the rear main bearing return pipe should be sawed off at least 1/2". If this pipe is not cut off there may not be enough clearance between the end of the pipe and the oil pan to allow the oil from the bearing to return to the oil pan freely. A rear main bearing oil leak would develop as the result.



**Fig. 10**  
Front view of Ford V-8 car with radiator cutaway to show location of motor supports. Wooden blocks should be placed between the motor supports and frame to get the oil pan down.