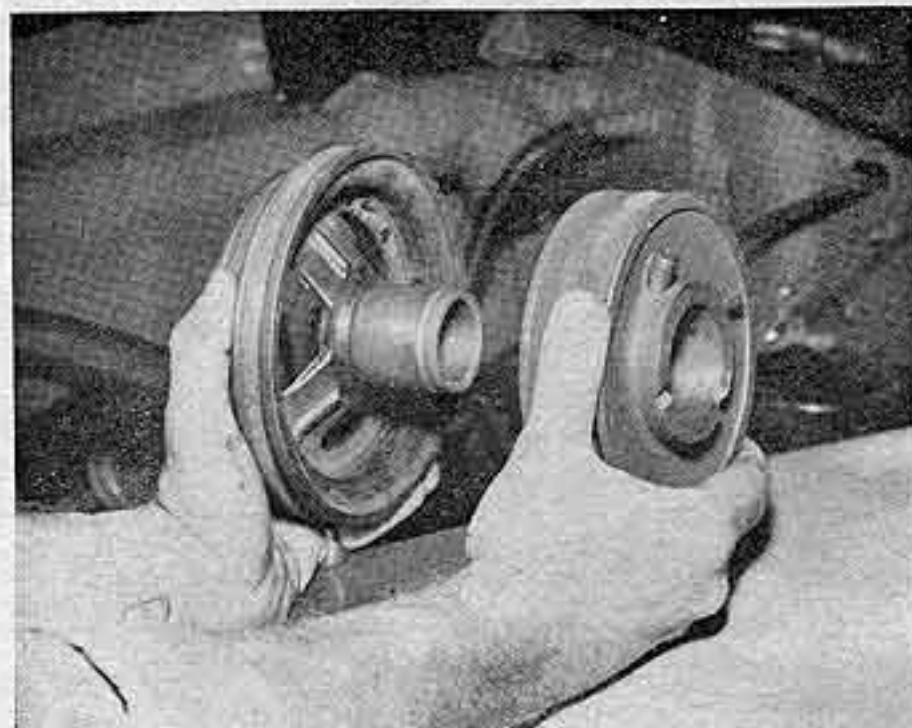
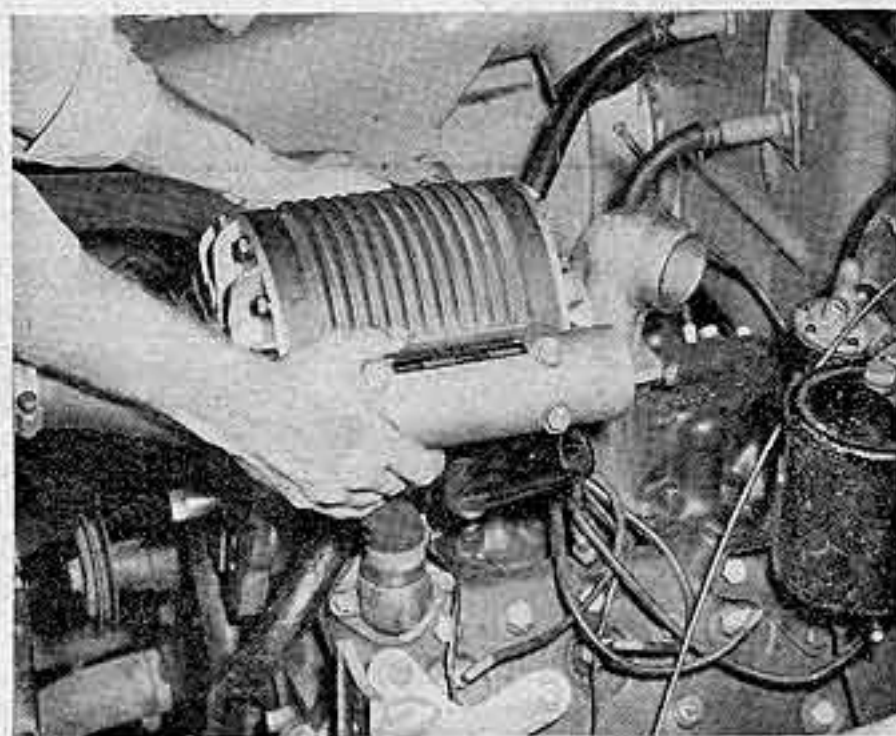
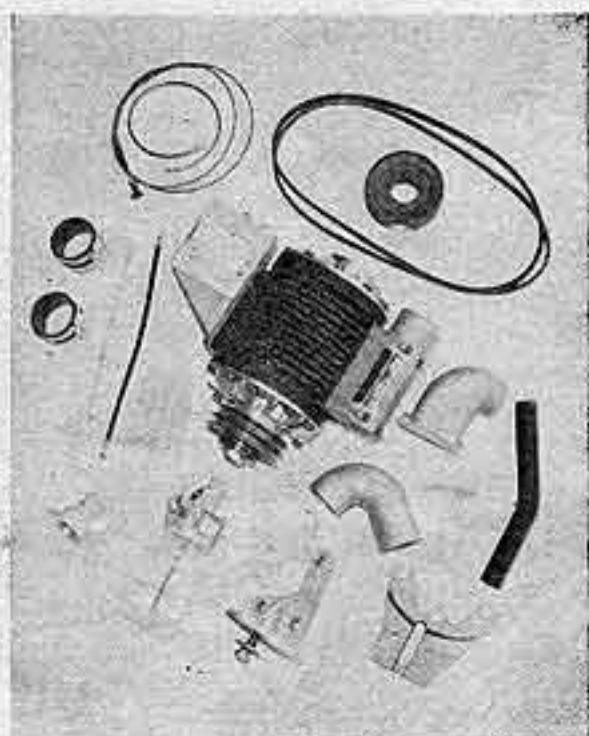


# BOLT - ON POWER

*A new model supercharger features long life, ease of installation, up to 50 percent power increase.*



1. Remove generator, fan, carb, water outlet, oil tube, crank pulley. Put Judson pulley over sleeve of original pulley.

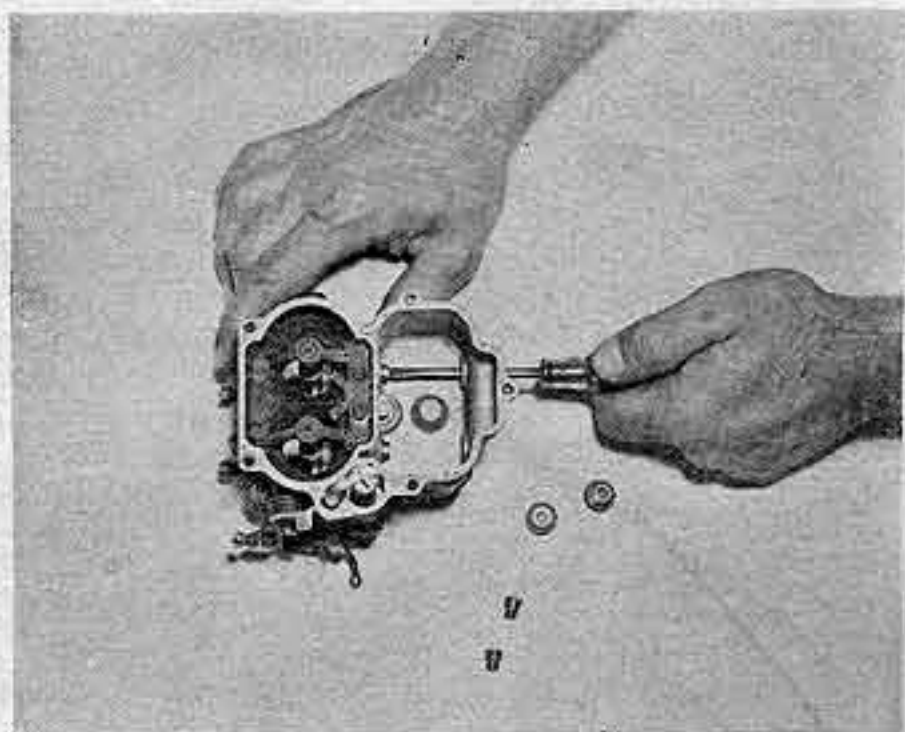


4. Remove seals from supercharger and mount on engine using manifold slot and bolt which formerly positioned generator.

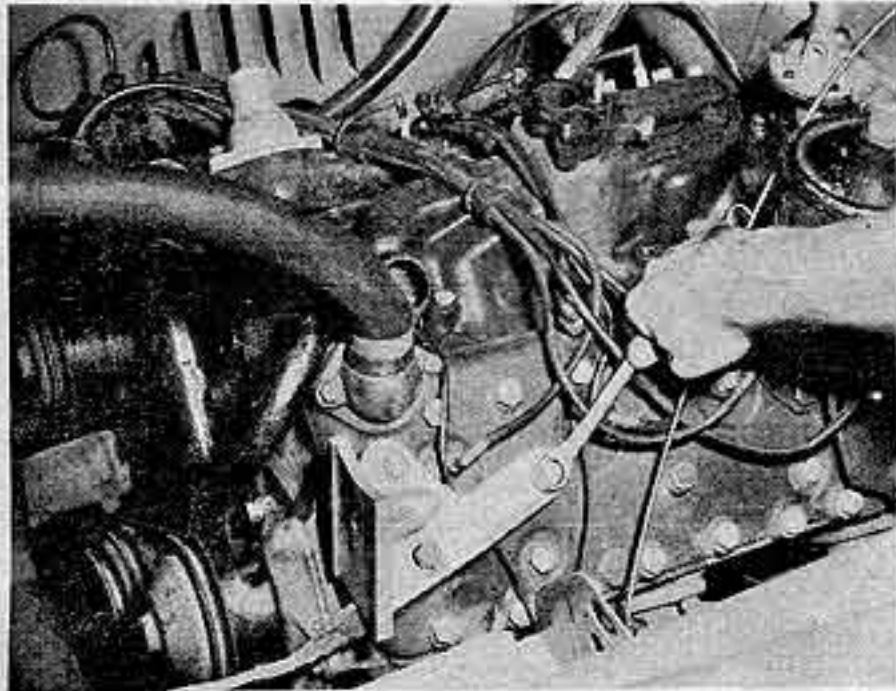
**P**ASSENGER CAR supercharging, mysteriously out of favor with car owners during the last two decades, is coming back with a bang—or maybe the word should be whoosh. Based on the simple principle of supplying the gas-air mixture to the engine under constant pressures, instead of relying upon manifold vacuum, late model superchargers are offering car owners horsepower increases up to 50 percent—without any sacrifice in fuel economy, engine life, or without making too sizeable a dent in the enthusiast's pocketbook.

Latest entrant in the manufacturer's rush to supply "blowers" for this reawakened interest is the recently-announced Judson M-178 model. When mounted on a stock 1952 Ford V-8 by the manufacturer, this new model increased the horsepower at the rear wheels from 48 at 2000 rpm to 70 at 2000 rpm. It was an increase of 45 per cent. Tests run on the same car show that the 0-60 mph acceleration time was 20.5 seconds before the installation, 12 seconds flat after the supercharger was installed.

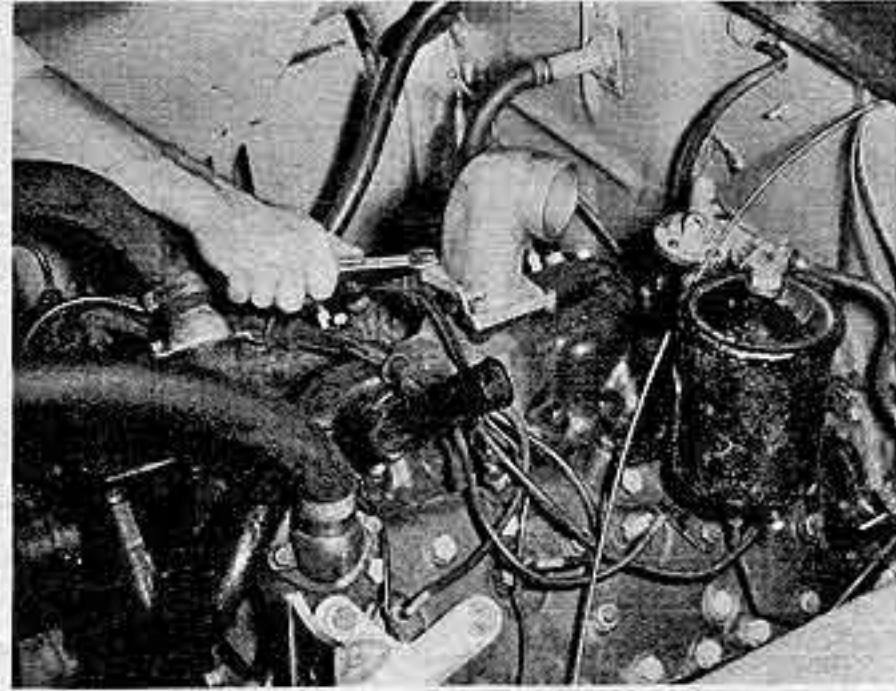
The new model, like all Judson superchargers, is a positive displacement rotary vane type blower which is designed  
(Continued on page 57)



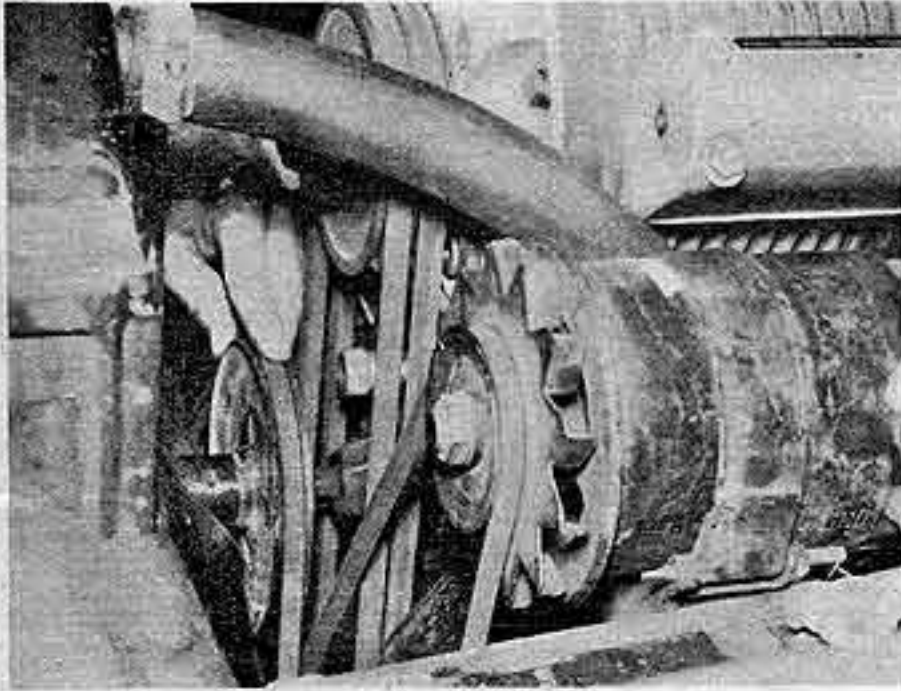
7. Replace stock main metering jets in carburetor with the new jets furnished. Bolt the carburetor to the supercharger.



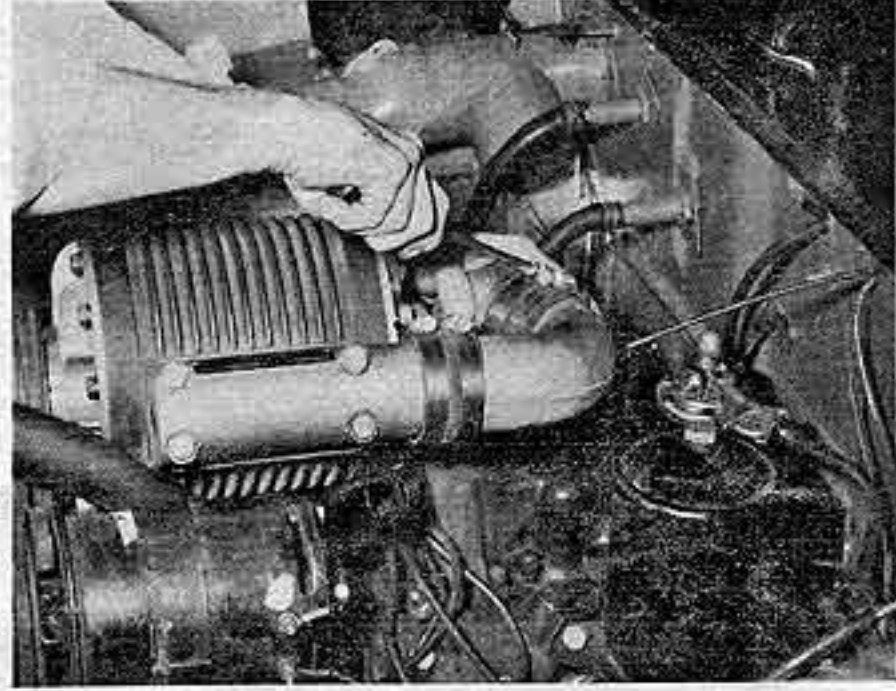
2. Relocate generator bracket and newly-furnished right water outlet to the engine as shown. Bracket was removed with generator.



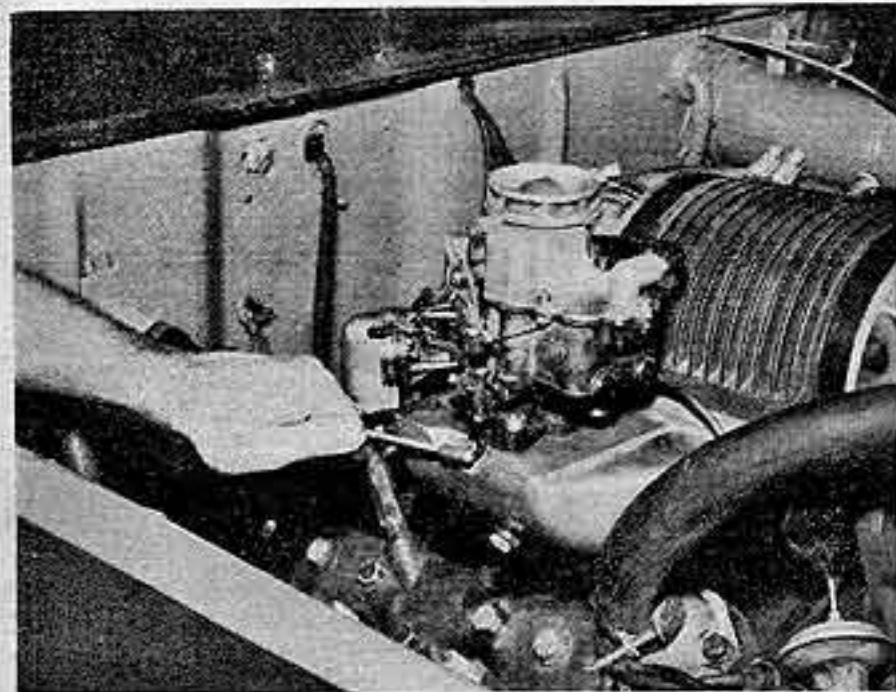
3. Bolt manifold adaptor to intake of engine manifold using the original studs. Insert special oil filler tube into manifold.



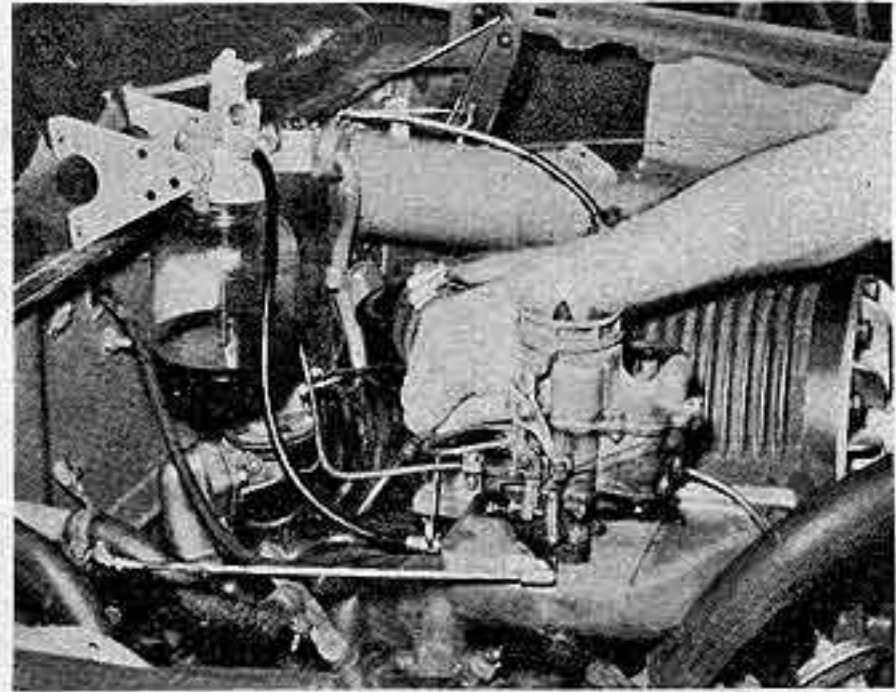
5. Bolt original fan assembly to supercharger bracket, mount generator on generator bracket, install drive belts and adjust.



6. Make connection between exhaust of supercharger and manifold adaptor using the curved tube and connections furnished with kit.



8. Connect throttle linkage and choke control (in kit) to carburetor. For cars with vacuum wipers, use special vacuum connection.



9. Install air cleaner. Mount lubricator on fire wall, connect oil line to supercharger. Fill lubricator with one quart of oil.

## BOLT-ON POWER

(Continued from page 46)

to deliver a measured amount of the gas-air mixture to the engine at each revolution. Driven from the crankshaft, the Judson output is automatically proportioned to the engine's requirements, offers a high torque characteristic over a wide speed range. The higher the engine winds, the more mixture is fed into the engine—under pressure, that pressure, a constant five pound boost.

Operation and theory of the Judson M-178 is quite simple: Mounted just behind the carburetor, the air-gas mixture is fed into the supercharger, compressed and thoroughly mixed. The rotary vane type supercharger utilizes vanes mounted in a drum which rotates inside the circular casing. The rotor is eccentric to the bore of the housing and the vanes, in addition to moving in a circular motion, also move in and out of the rotor within the housing. When the mixture enters the supercharger, space between two of the four vanes is reduced, which compresses the mixture. When this space reaches a minimum, the lead vane passes the supercharger exhaust port and releases the compressed mixture to the engine manifold. The entire assembly is driven from the crankshaft with two standard "V" belts. Protection is present in the form of an automatic lubrication device which spreads strategic oil films to moving parts. On the average, only one quart of oil is used every thousand miles.

The Judson blower, simple in operation, is also simple to install. With the Judson, only the carburetor metering jets have to be changed but the remainder of the carburetor can remain stock. For the models listed below, no body or engine alterations are required to make the installation on Ford and Mercury engines. It is truly "bolt-on" horsepower, and it can be used with every type of transmission.

Currently available as a complete installation for Fords and Mercurys of 1950-1953, and as a special adaptation to Fords and Mercs of 1942-1949 (plus a special "universal kit" which will fit any car with an engine displacement between 210 and 270 cubic inches), the Judson blower runs about \$250 f.o.b. at the Judson factory in Conshohocken, Pennsylvania.

Installation, at home, is quite easy, requires but a few hand tools and about four hours of working time. To show the simplicity of this installation, a step-by-step operation of this type is explained on these pages. The engine is a "flat-head" Ford V-8, but installation on other engines is as simple.

Supercharging could well make your stock car into a secret weapon—in four hours. •