

for big car performance...

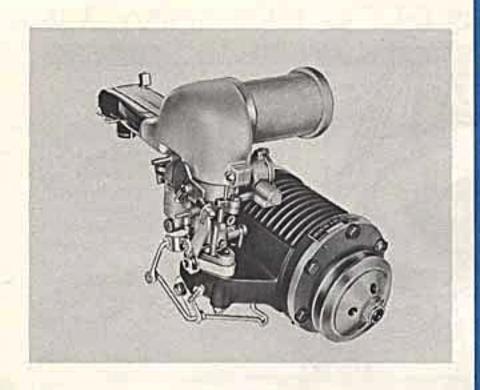
# SUPERCHARGE WITH JUDSON

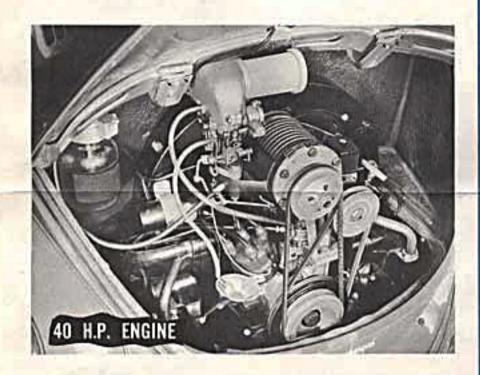


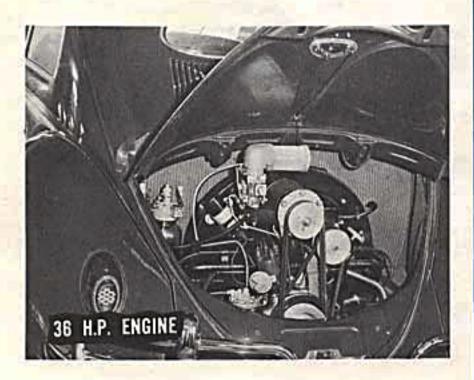
Imagine cutting your acceleration time in half... having 50% more horsepower at your command... cruising along at a higher speed with less engine effort... passing when you want to... shifting gears half as much in city driving... the engine responding immediately to the touch of your foot on the accelerator. You can pass when you want to and have extra power when you need it. The lumber-

ing pace up steep hills will be a thing of the past. A Judson Supercharger on your Volkswagen will give you this improved performance and surging power smothly, dependably and without sacrificing engine life in any way. Only Judson gives you a complete supercharger installation in the form of a bolt-on kit designed specifically for the Volkswagen.

50% more horsepower • amazing acceleration • surging passing ability • higher cruising speed • eliminates loss of power on hills • better control for safer driving of your Volkswagen







### the

## AIBO

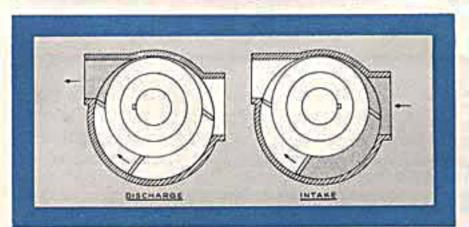
# of supercharging your VOLKSWAGEN

The power output of any engine is limited by its ability to take in air or breathe. Supercharging is a mechanical method of forcing the air gas mixture into the cylinder under pressure instead of using the piston to suck it into the cylinder. A supercharger simply places more of the fuel mixture behind each power stroke of the piston and distributes the mixture evenly thus increasing the power of the engine. Supercharging is the positive and dependable method of obtaining more power. It is done by making the engine more efficient through increased torque and not increased speed. The engine develops more horsepower at the same speed. Because of the increased efficiencies afforded by supercharging practically all transcontinental trucks, busses, locomotives and airliners are supercharged. The Volkswagen engine is more than rugged enough to take low pressure supercharging without affecting its traditional economy and reliability in any way.

The Judson Supercharger is an automatic device that replaces the vacuum in the intake manifold with a pressure only when and as additional power is required. The engine is not constantly supercharged as the extra power afforded by the supercharger is not required at normal cruising speeds, idle or general traffic driving. When the accelerator is suddenly depressed, however, the engine immediately becomes supercharged and the car takes off like a rocket. The engine is not continuously supercharged but only when you need and want additional power to pass, maintain power on hills or for rapid acceleration. Supercharging your car is just like adding two more cylinders to the engine and you will have as much power or torque available in fourth gear as you now have in third gear. Supercharging, unlike engine modification (special heads, camshaft, crankshaft, etc.) does not change the natural characteristics of the engine nor is it necessary to completely disassemble the engine to install new components. With a supercharger it is only necessary to bolt the parts furnished with the supercharger kit to the engine making it even unnecessary to remove the engine from the chassis. A comparison in performance between supercharging and engine modification clearly shows that the mildly supercharged engine will outperform the modified engine by as much as 25% and cost one-third as much.

Supercharging is a matter of degree. Racing cars that are supercharged operate on a manifold boost pressure of 15 psi to 30 psi. This is high pressure supercharging and the engines are specifically designed for it. The Judson supercharged Volkswagen operates on a manifold boost pressure of only 6 psi. This conservative amount of supercharge provides up to 50% more horsepower on demand and enables the engine to operate well within the safety factor built into the engine by the manufacturer. The fact that the engine is supercharged automatically in proportion to the load placed on it, together with the low pressure eliminates the possibility of the Judson Supercharger damaging the engine in any way. There are over 65,000 Judson model VW superchargers in operation bringing improved performance and complete satisfaction to their owners everywhere. Many of these have been in continuous service for over five years. Testimonials from owners and extensive road tests made by every leading automotive magazine in the world prove conclusively the efficiency and reliability of the Judson Supercharger.

Why not supercharge your Volkswagen? It will provide you with the performance you need. You can pass when you want to and have extra power when you need it.



The Judson Supercharger is a positive displacement rotary vane type compressor. This is the principle used in most aircraft fuel pumps and many industrial compressors. The mixture enters the supercharger through the carburetor and is compressed. The pressurized mixture is then forced into the manifold. The Judson Supercharger utilizing the exclusive and patented principle of balanced pressure with non-metallic vanes is efficient, dependable, silent and is subject to less wear than other accessories now on the engine. It is acknowledged by automotive engineers everywhere as the standard of quality and performance.

#### a bolt-on kit for the

#### **VOLKSWAGEN**

installed in **4** easy steps

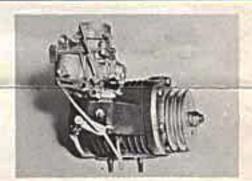
Here is a complete supercharger installation in the form of a bolt-on kit designed specifically for the Volkswagen. Everything is furnished. It can be installed within two hours using standard tools by following the detailed instructions furnished with each kit.



Remove air cleaner, fuel line, vacuum line and carburetor from engine. Install pulley on end of crankshaft, replace front flange on generator and fasten automatic lubricator to fire wall. Illustration shows 40 hp engine as used in 1961 Volkswagen.



Replace studs and jet in carburetor, fasten carburetor to supercharger and connect throttle linkage. Illustration shows supercharger and carburetor as used on Volkswagen engines manufactured prior to 1961.



Bolt supercharger with carburetor to engine, install drive belt, connect throttle and supercharger support brace. Connect manual choke on 36 hp models.



Install new gas line, vacuum advance line, connect automatic lubricator to supercharger, install air cleaner and connect heat hose to air cleaner on 1961 models. Installation is complete.





dependable
efficient • silent
guaranteed
quality & performance

#### performance data JUDSON model VW supercharger

	1955	engine — 1960 ed-Supercharged	40 HP engine 1961 — Unsupercharged-Supercharged	
Acceleration in seconds:	1006,600.000	Section while		( W W
0-30 mph	7.5	4.2	6.5	4.
0-40 mph	13.5	7.0	11.0	6.
0-50 mph	20.0	10.2	17.	9.5
0—60 mph	30.5	15.5	28.	13.
Maximum speed	70	85	71	85
Maximum HP at rear wheels	24	42	31	49
Rear wheel HP @2000 RPM	14	23	19	30
Maximum engine brake HP	36	57	40	59
Weight to power ratio	44	28	41	26
Fuel consumption, mpg	31	29	31	29
Noise level (Decibels)	55	55	55	55
All performance figures a	re averages of	several runs.		7

#### SPECIFICATIONS

TYPE—Rotary vane, positive displacement MANIFOLD BOOST PRESSURE-6 lbs. per sq. in.

DRIVE-"V" belt drive

DRIVE RATIO-1:1.3

CARBURETION—Stock carburetor, revised jet

LUBRICATION-Independent lubricator uses ordinary motor oil which is fed to the supercharger in proportion to engine load.

AIR CLEANER—Special for supercharged induction

DIMENSIONS-51/2" x 9" long

WEIGHT-17 lbs.

#### GENERAL DATA:

ENGINE RELIABILITY—Supercharging at low pressure does not affect the reliability of the engine in any way. Dependability, starting ease, idling or engine life is not sacrificed. The Judson Supercharger installation is in complete keeping with the Volkswagen's reputation of reliability.

FUEL CONSUMPTION—Gasoline consumption is increased five to ten percent depending on the driving habits of the individual.

DEPENDABILITY-The Judson Supercharger is precision automotive equipment designed, engineered and manufactured by America's leading manufacturer of superchargers. High capacity precision bearings and alloy material assure years of efficient and dependable service.

NOISE-Judson Superchargers are famous for their silent operation and tests shows that the noise of the engine is not raised by the installation of the supercharger.

SERVICE—The only service required is the occasional checking of the oil level in the automatic lubricator. One filling is sufficient for one thousand miles. The drive belts are a standard size available everywhere. Complete service data is included with each set of installation instructions.

WARRANTY—Every Judson Supercharger carries a standard manufacturers ninety day warranty. In addition to this product warranty, the Judson VW supercharger is guaranteed to increase the horsepower and performance of your Volkswagen by at least 45%.

#### PRICE

Complete supercharger kit for Volkswagen Sedan, Convertible, Station wagon and commercial vehicles.....\$144.00\*

\*Prices F.O.B. Conshohocken, Pa.

Complete supercharger kit for Karmann Ghia Volkswagen Coupe and Convertible.....\$159.00\*

Specify year and model Volkswagen in placing order as a different kit is used on the 36 hp and 40 hp Volkswagen engines.

read what the world's leading auto magazines say about the JUDSON model VW supercharger



DAS AUTO (Germany) "The Judson Supercharger AUTO VISIE (Holland) "The difference in performhas greatly impressed us . . . it truly allows a new experience in motoring".

ROAD & TRACK "The car is completely transformed with absolutely no objectionable features . . . the supercharger gives the Volkswagen a kick where it's needed".

ance between the supercharged and unsupercharged Volkswagen is greater than one would believe possible".

MOTORSPORT "After putting the car through its paces and comparing notes on its present vs past performance, there can be no doubt about the value of supercharging".



JUDSON RESEARCH AND MFG. CO., CONSHOHOCKEN, PENNSYLVANIA