## Removing and Installing Cylinder Heads

(Engine removed from car)

23 EN

Special Tools: P 23

Carburetor wrench 12 mm SW

P 3

Spark plug wrench

VW 157 Allen wrench socket used with VW 118 for cylinder head nuts

VW 118 Torque wrench used with VW 157 for cylinder head nuts

## Removal

1. Remove lower air guide, side duct plates, cylinder duct plates, carburetor, and intake manifolds.

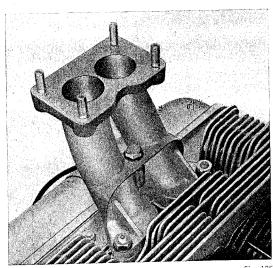


Fig. 135

- 2. Remove rocker box covers and rocker brackets (19 or 21 EN).
- 3. Remove cylinder head nuts with allen wrench and remove washers. See Fig. 136 for position of 8 nuts.



The installation is accomplished in the reverse order of removal observing the following points:

- 1. There are no cylinder head gaskets between the cylinders and heads.
- 2. Install push rod tubes. To insure a proper seal to the cylinder head and crankcase the bellows on the tubes must be expanded carefully avoiding ruptures.

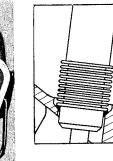


Push rod tube "a" = 159 to 160 mm ( $6^{1}/_{4}$  to  $6^{11}/_{32}$  in.).

3. Install cylinder head insuring a good fit with the push rod tubes using new seals. Align tubes with seams up.

## Crankcase seal

## cylinder head seal



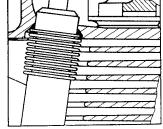


Fig. 138

Fig. 136

4. Remove cylinder head.

4. The push rod tube seals are trapezoidal in crosssection.