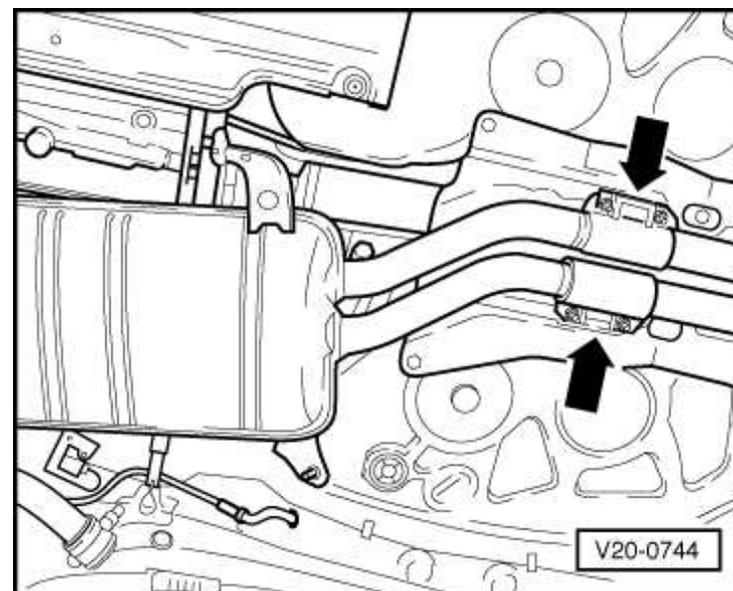


Servicing propshaft

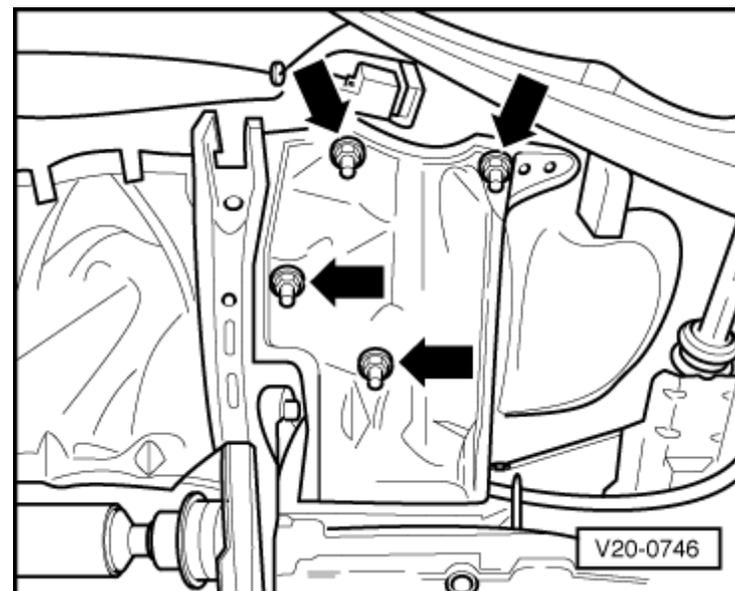
Balancing propshaft/flange at rear final drive

Notes:

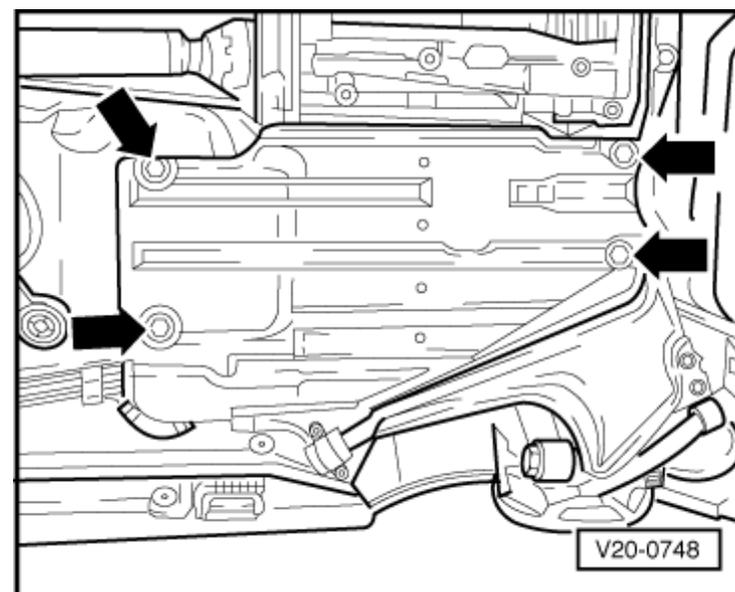
- ◆ Balancing can be used in order to eliminate any rumbling or droning noises and should be carried out with scrupulous care.
 - ◆ Inspect propshaft as well as flange for signs of any damage.
 - ◆ Observe notes=> Page [39-56](#).
 - ◆ Propshaft has to be properly set at centre bearing and be centred in longitudinal direction => Page [39-65](#).
 - ◆ If, after carrying out adjusting of propshaft, rumbling and droning noises still occur in speed range between 160 and 200 km/h, balance connection of propshaft/flange at rear final drive as described in sections which follow.
 - ◆ After carrying out measurement, replace base plates according to table => Page [39-75](#).
-
- - → Disconnect exhaust system at double pipe clamp -arrows-.
 - - Detach main and rear silencers from retaining loops.



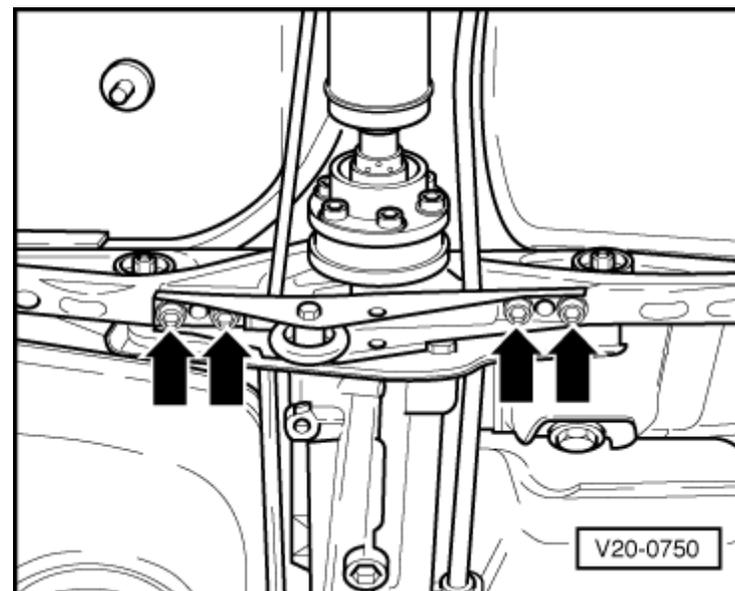
- - → Unbolt heat shield behind cross member -arrows-.



- --> Unbolt cover for fuel tank -arrows-.



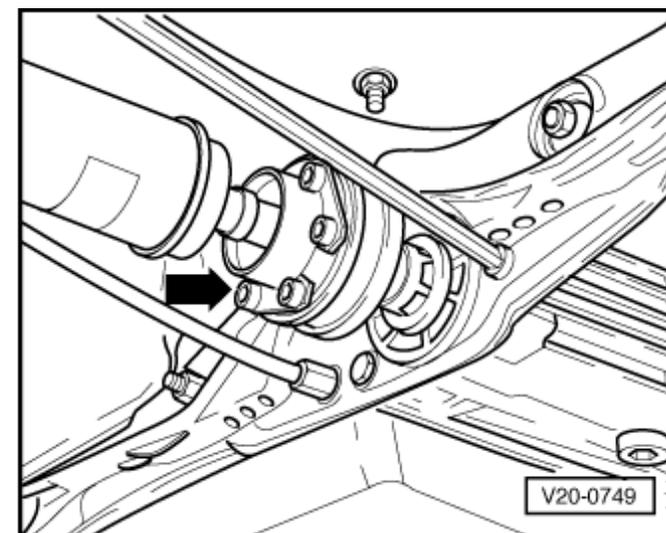
- --> Unbolt end plate -arrows-.



- -→ Remove securing bolts of propshaft at rear final drive.
- - Tie up propshaft tight.

Notes:

- ◆ Lower propshaft only sufficiently as is necessary for measuring radial run-out at output flange.
- ◆ Do not bend the propshaft more than 25° at the central joint, otherwise the universal joint will be damaged.



- -→ Secure universal dial gauge retainer VW 387 with dial gauge to cross member/final drive bolted joint.
- - Position the dial gauge to the ground diameter in propshaft flange - arrow- and set to "0" with a preload of 1 mm.

- – Rotate the differential by turning the two rear wheels (left and right-hand flange shafts) simultaneously in one direction until the propshaft flange has undergone one complete revolution.
- – Mark the position of greatest radial run-out on flange exterior (equates to greatest distance from rotational axis).
- – Remove old marking on flange shaft.

Balancing weights (base plates) available

Determine base plates from table. Part numbers

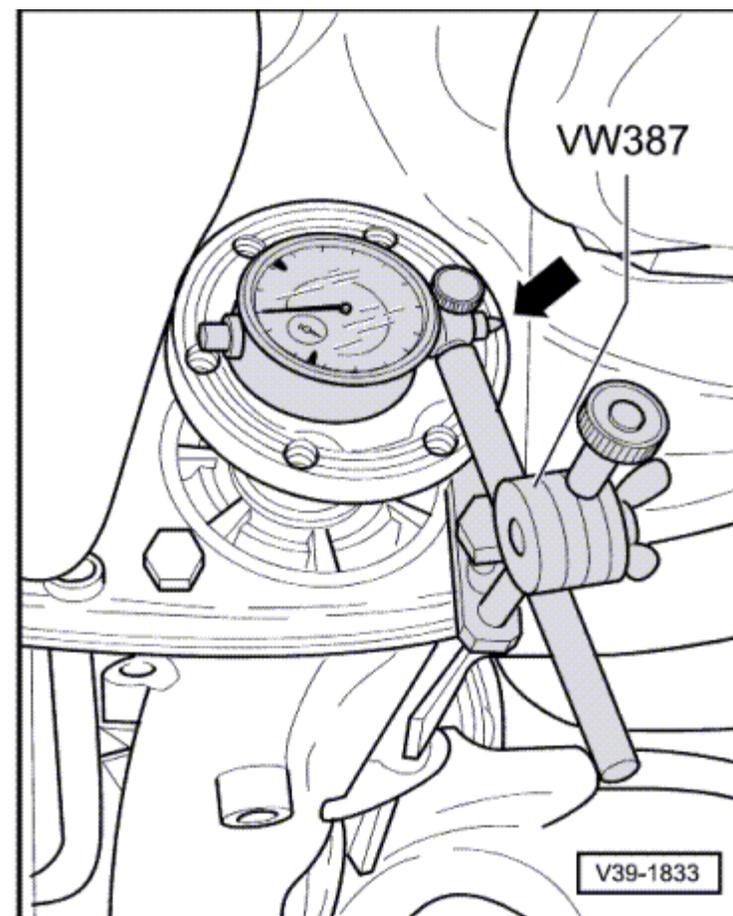
=> Parts Catalogue

Radial run-out (mm)	Propshaft without coloured marking or with green coloured marking		Propshaft with yellow coloured marking		
	mm	Weight class	Weight (g)	Weight class	Weight (g)
0.00 ... 0.01		4	9.2	2	7.6
0.02 ... 0.03		5	10.0	3	8.4
0.04 ... 0.05		6	10.8	4	9.2
0.06 ... 0.07		7	11.6	5	10.0
0.08 ... 0.09		8	12.4	6	10.8
0.10 ... 0.11		9	13.2	7	11.6
0.12 ... 0.13		10	14.0	8	12.4
0.14 ... 0.15		11	14.8	9	13.2

Note:

The propshaft balancing set consists of 3 base plates with different coloured marking (1 yellow and 2 white base plates).

- – Install propshaft balancing set:
 - – → Connect propshaft to rear final drive.
 - – Marking of propshaft -arrow A- should be aligned with marking of radial run-out measured at flange of final drive -arrow B-

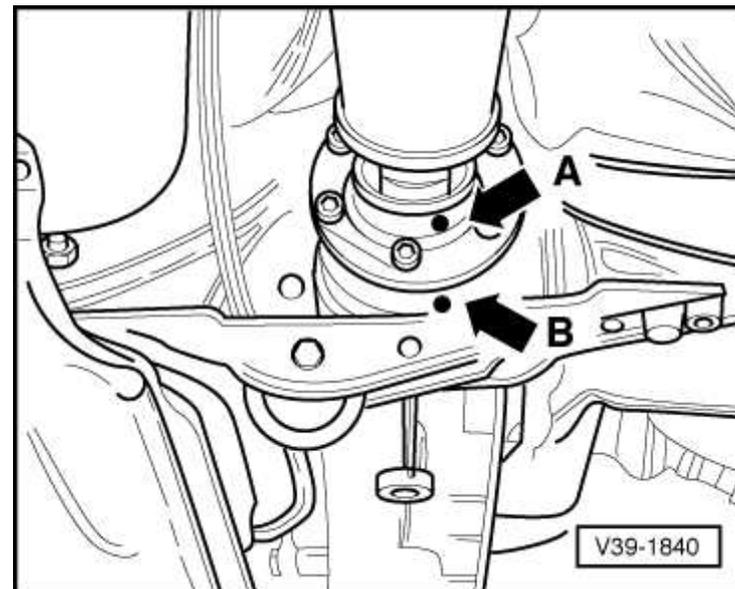


- – Install calculated size of base plate (with yellow coloured marking) opposite maximum radial run-out.
- – Distribute remaining 2 base plates with white coloured marking (weight class 5) over remaining bolts
- – The remaining installation steps are carried out in reverse sequence:
- – Install exhaust system free of stress

[=> 5-cyl. fuel injection engine \(4-valve turbo\), Mechanics; Repair group 26; Removing and installing parts of exhaust system](#)

[=> 5-cyl. diesel engine, Mechanics \(2.5 l engine\); Repair group 26; Removing and installing parts of exhaust system; Aligning exhaust system free of stress](#)

[=> 8-cyl. fuel injection engine, Mechanics; Repair group 26; Removing and installing exhaust system; Aligning exhaust system free of stress](#)



Tightening torques

Component	Nm
Prop shaft to final drive (input flange) M8	55
Propshaft centre mounting to body	23
End plate to cross member	55
Cross member 11 to rear final drive	45
Cover for fuel tank	20