



**48.1-3, 51-52
UNIVERSAL BRACKET**

The front mounted universal bracket enables installation of extra equipment such as cooling compressor or hydraulic pump. The kit includes bracket and fittings.

Pos.no.	Part no.
48.1	858049-0 1)
48.2	3581051-4 2)
48.3	861369-7 2)
48.51	3581049-8 2), 3)
48.52	3581050-6 2), 3)

- 1) Pulley and drive belt included.
- 2) Pulley and drive belt ordered separately, see below.
- 3) For engines with S-drives, see separate information in the table guide.

Pos.no.	Part no.	Greatest width (mm)
48.1	858049-0	Width of the engine
48.2	3581051-4	634
48.3	861369-7	Width of the engine
48.51	3581049-8	582
48.52	3581050-6	634

Pos.no.	Part no.	The total length of the engine increases by (mm)
48.1	858049-0	191
48.2	3581051-4	140-240 4)
48.3	861369-7	210
48.51	3581049-8	140-205 4)
48.52	3581050-6	140-205 4)

4) The increase in the length of the engine is dependent on the way the bracket is fitted. Add-on equipment may further increase the length.



**48.4-6, 54-56
EXTRA V-BELT PULLEYS**

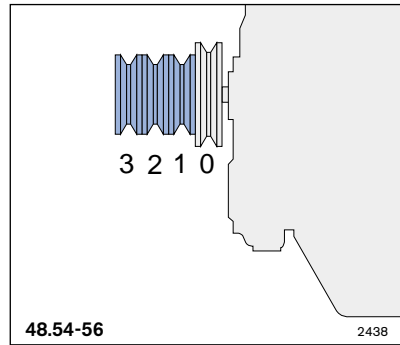
Extra equipment that is driven by the pulley on the engine's crankshaft increases the load on the crankshaft. It is therefore important that the axial location of the pulley on the crankshaft and the location of the equipment in relation to the crankshaft are adjusted in accordance with the additional power requirement of the extra equipment. The maximum power consumption depends on the direction and type of belt and the type of engine.

Pos.no.	Part no.	V-belt groove	No. of grooves/pulley
48.4	840777-7	HC38	1
48.5	861157-6	HC50	3
48.6	861158-4	B	3
48.54	3581048-0	HC38	1
48.55	3581053-0	HC50	1
48.56	3581054-8	HC50	1

Pos.no.	Part no.	Outer Ø, mm	Width, mm
48.4	840777-7	131	23
48.5	861157-6	165	90
48.6	861158-4	165	102
48.54	3581048-0	120	19
48.55	3581053-0	120	19
48.56	3581054-8	131	19

Note! The following table is merely a guide as to the amount of power that can be derived from a maximum of three extra belt grooves on the front end of the crankshaft. See the Volvo Penta installation manual for more details.

Pulley Engine	1	2	3
	kW/pulley		
2020	6.5	2.5	-
2030	6.5	-	-
2040	7.4	7.4	7.4
MD22L	7.8	3.9	2.4
MD22	10.5	5.3	3.2
TMD22	11.6	5.8	3.6
TAMD22	11.6	5.8	3.6



Power calculation

2000-series

The following power can be taken from the **MD2020**: 6.5 kW from the first additional pulley and 2.5 kW from pulley number two. A total of 9.0 kW can be used.

Note! The highest power consumption must be taken from additional pulley number one (nearest the engine).

On the **MD2030** up to 6.5 kW can be taken from additional pulley number one (nearest the engine). On the **MD2040** the same amount of power can be taken from each pulley, e.g. 7.4 kW + 7.4 kW + 7.4 kW, which gives a total of 22.2 kW.

22-series

Up to 7.8 kW can be taken from the first additional pulley on the **MD22L** (nearest engine), 3.9 kW from pulley number two and 2.4 kW from pulley number three.

Note! If only one additional pulley is fitted then 7.8 kW can be used. If two additional pulleys are fitted then 3.9 kW can be taken from each pulley. The total output is thus 3.9 kW + 3.9 kW = 7.8 kW. If three additional pulleys are fitted then 2.4 kW can be taken from each pulley. The total output is thus 2.4 kW + 2.4 kW + 2.4 kW = 7.2 kW.

The same calculation method also applies to the other 22-series engines. Use the relevant values for the engine in question. See table of power outputs.