



TB0066 New Kubota Engine

24 September 08	Author: Neil Savage	TB0066	
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Steelbro has changed the engine in the Sidelifter's power pack. The Kubota model V2403-M engine replaces the V2203 engine. Various engine related components have also been changed.

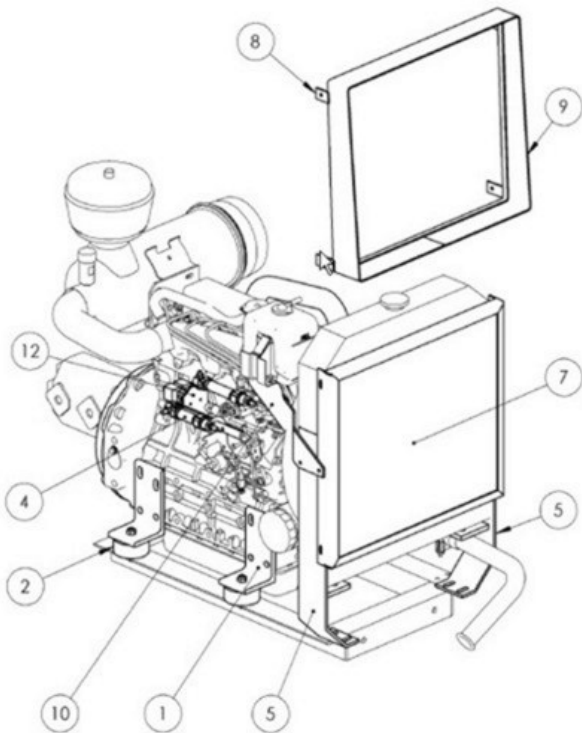
Models and Markets:

All markets and models of Sidelifters, except SE402, with standard engine power packs are affected.

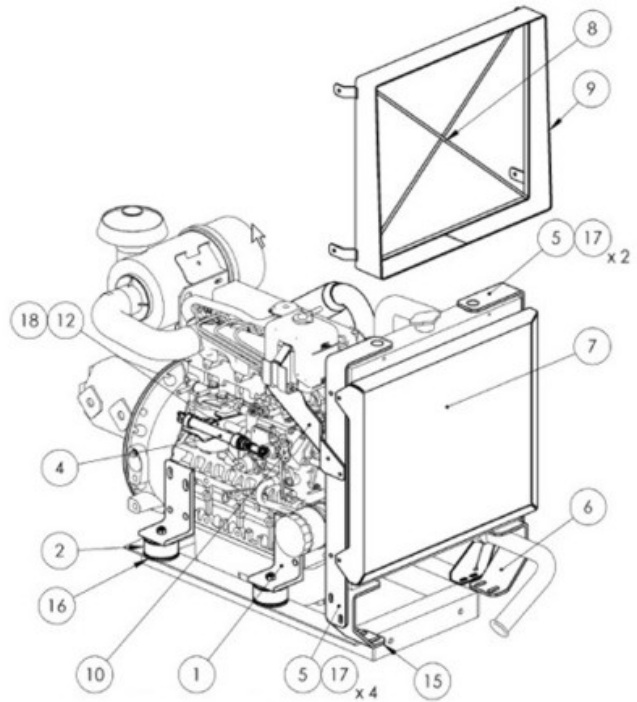
The following serial numbered units, if power pack driven, have been fitted with the V2403-M engine: SB8300, SB8301, SB8302, SB8303, SB8307, SB8320, SB8327, SB8338, SB8341, SB8344, SB8345, SB8349 onwards.

Changes to the BOM and Spare Parts

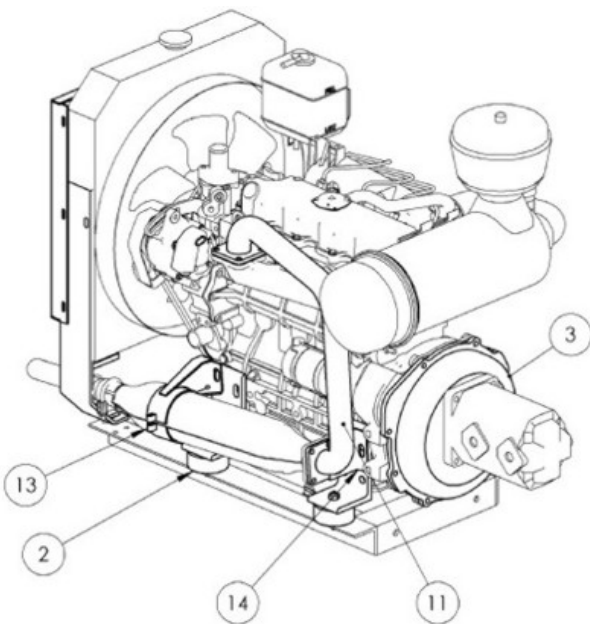
V2203 Engine - Front View



V2403-M Engine - Front View



V2203 Engine - Rear View



V2403-M Engine - Rear View

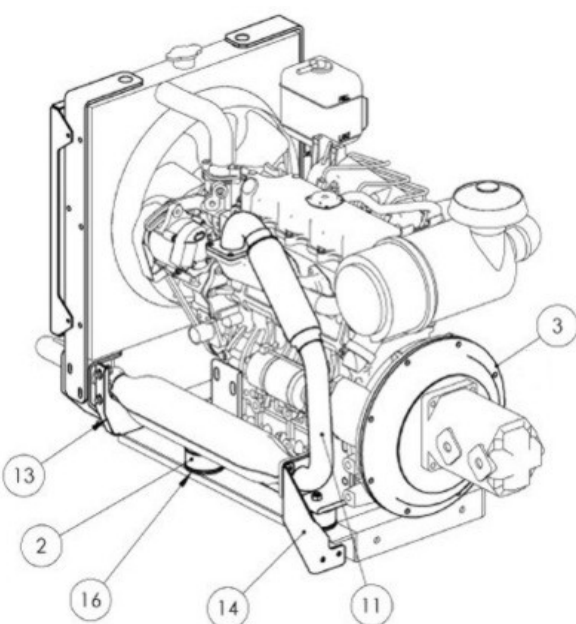




Table 1: Kubota engine components

		V2203 Component	V2403 Component
		Remove	Replace with/Add
	Engine	KU-V2203-B-EEC-1 x 1	KU-V2403-M-E3B-KEA-2 x 1
1	Engine Mount *	S1-02682 x 1*	S1-38081 x 1
2	Rubber Engine Mnt	S1-29001 x 4	S1-37996 x 4
	Wiring Loom	EL-31701 x 1 (Series 3a)	EL-38360 x 1
		EL-33882 x 1 (Smartlift 2.5m)	EL-38114 x 1
		EL-35798 x 1 (Smartlift 5m)	EL-38516 x 1
		N/A (Series 3a SB121M)	EL-38475 x 1
3	Bellhousing/Coupling Kit	HC-37078 x 1	HC-37968 x 1
	Kit Hyd Fittings Tank	HC-29364 x 1 (Centre Mount)	HC-38190 x 1
		HC-33840 x 1 (Side Mount)	HC-38361 x 1
4	Throttle Kit	PM-31520 x 1	PM-37971 x 1
5	Bracket Rad	S1-18433 x 2	S1-37972 x 2
6	Bracket Rad Lower LH		S1-37973 x 1
7	Screen Radiator	S1-20143 x 1 **	S1-37974 x 1 **
8	Frame - Rubber Shroud	S1-18721 x 1 ***	S1-38052 x 1 ***
9	Rubber Shroud	S1-18580 x 1 ***	S1-38073 x 1 ***
10	Bracket Coolant Overflow Tank	S1-37530 x 1	S1-37975 x 1
11	Exhaust Pipe	S1-31029 x 1	S1-37976 x 1
12	Bracket Throttle	S1-31413 x 1	S1-37977 x 1
13	Bracket Exhaust Clamp Mnt	S1-31028 x 1	S1-37994 x 1
14	Bracket Exhaust Manifold Mnt	S1-20247 x 1	S1-37999 x 1
15	Bracket Rad Lower RH		S1-38013 x 1
16	Packer - Engine Mount		S1-38032 x 4
17	Rivnut		FA-38115 x 7
18	Bolt M8x70		FA-28614 x 2

Notes:

- * Still require 3 of S1-02682 per new engine
- ** Only required on uncovered engines
- ** Only required on engines with fibreglass covers

Backward Compatibility:

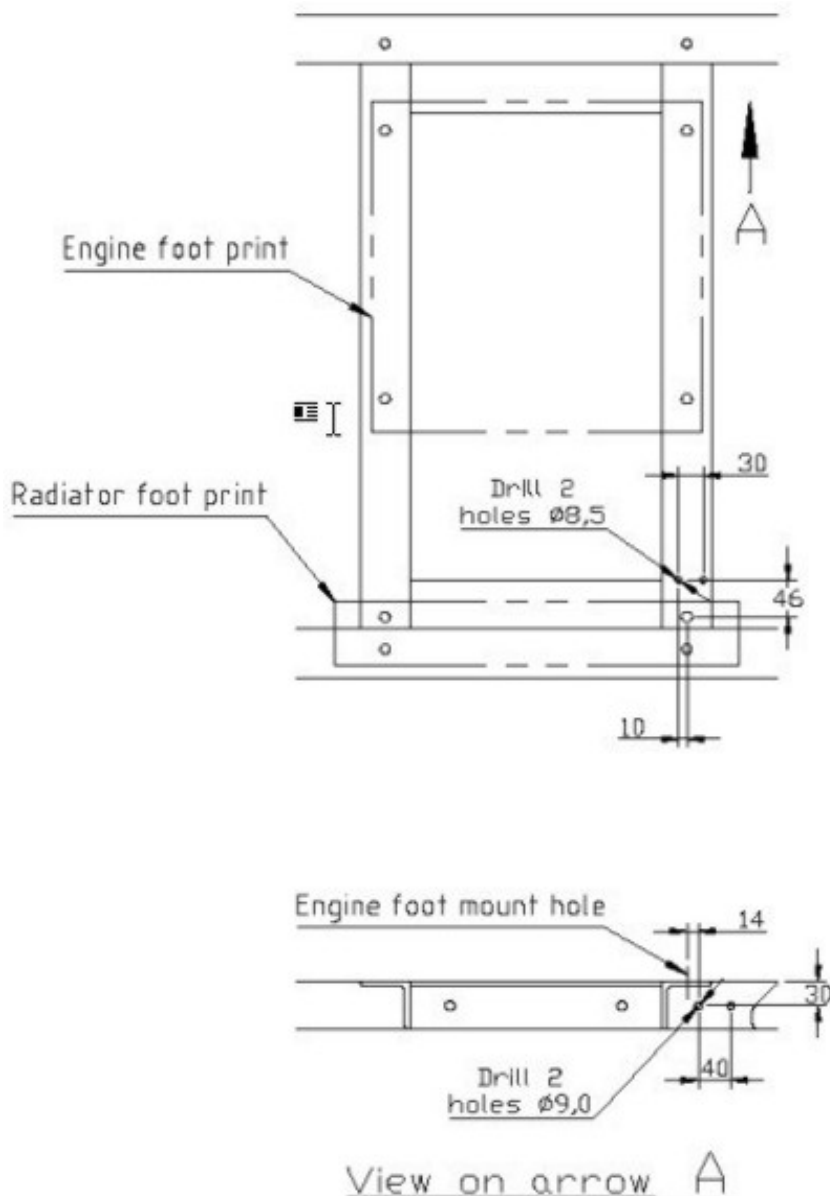


The sump on the V2403-M engine is deeper than the sump on the V2203 engine. If the V2403-M engine is used on an old engine frame the sump drain is the lowest part of the power pack. Ensure that the engine frame is sat on blocks if removed to prevent damage to the sump.

Combined Power Packs (one-piece frame including tank mounting)

The engine and mounting frame can be swapped complete into an existing installation. If just the engine is to be replaced then all the components shown in the Table 1 above must be changed and the engine frame modified as shown in the figure below.

Modification to combined power pack engine frame required to suit new engine

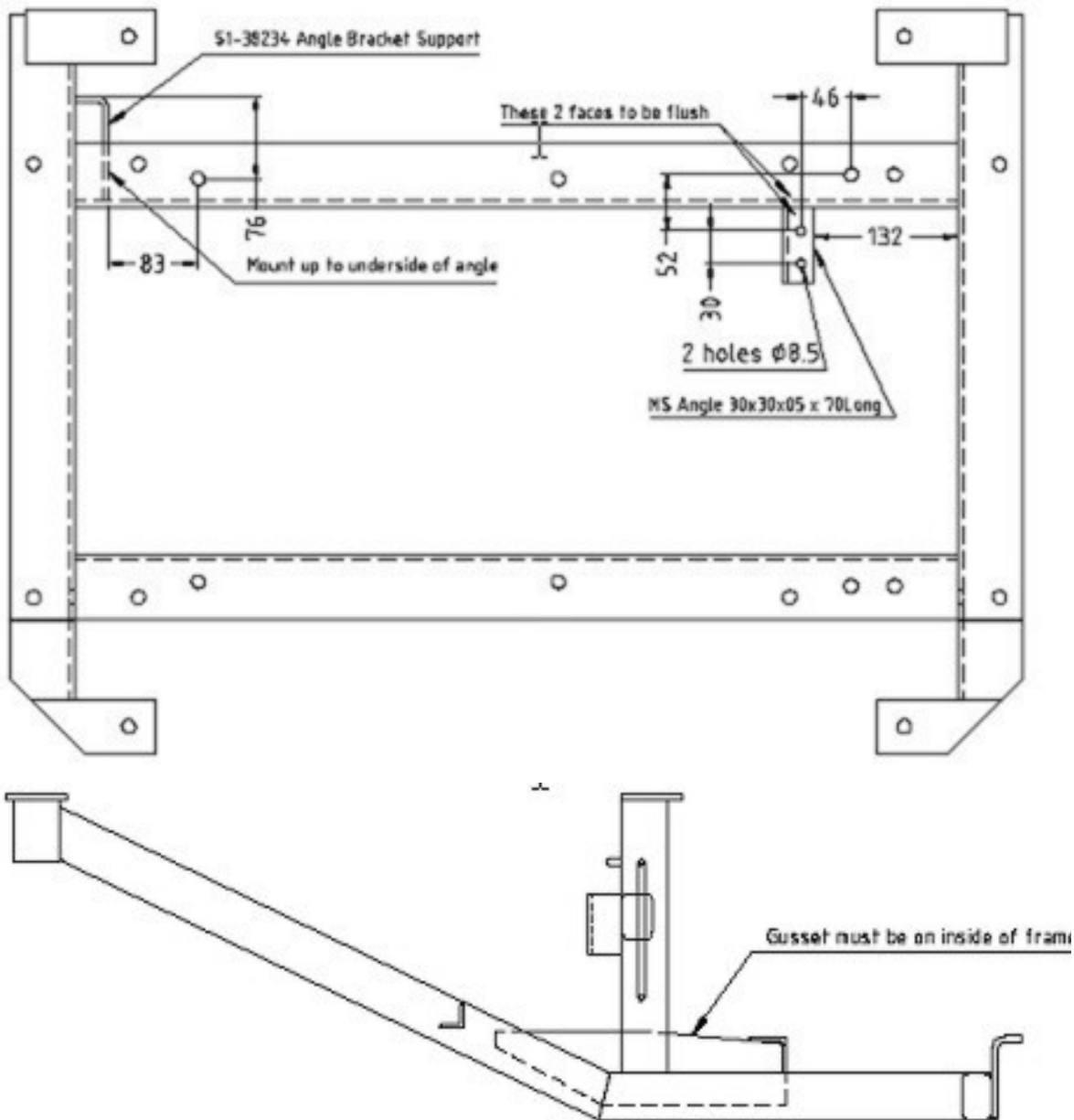




Non-Combined Power Packs (two-piece frame where tank mounts are welded to chassis)

The engine and mounting frame can be swapped complete into an existing installation. If just the engine is to be replaced then all the components shown in the Table 1 above must be changed and the engine frame modified as shown in the figures below.

Modification to non-combined power pack engine frame required to suit new engine



Benefits and Advantages to Change:

The benefits and advantages of the V2403-M engine are:

- Improved performance in high temperature/high altitude environments
- Reduction in exhaust muffler vibration
- Easier engine restart if run out of fuel due to the improved fuel system set-up
- Improved cooling system