



**YANMAR**

MIDI-EXCAVATOR

**B7-5B**

8030/8080 kg





## > COMPACTNESS

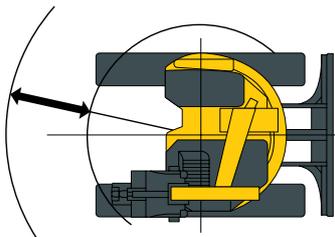
### B7-5B

Yanmar's unique  $\Sigma$  boom : a breakthrough in the concept of the ultra tight turning machine.

The B7 $\Sigma$  is for users who want to dig deeper and more efficiently. It is ideal for jobs in restricted urban sites and densely built-up areas. Some suggested usage areas include water, sewage and gas piping work and laying communications cables.

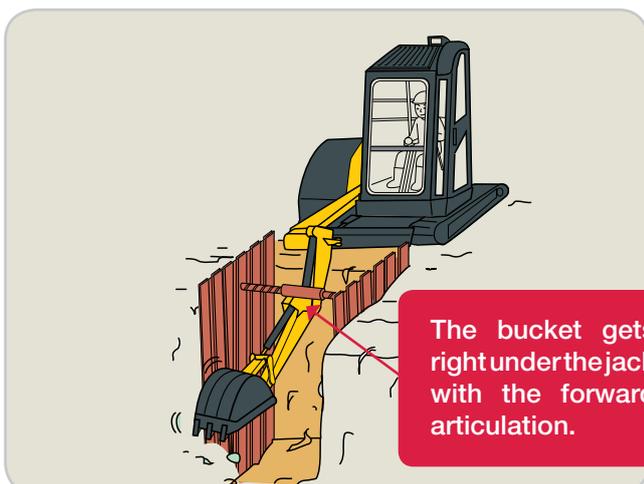
#### Advantages of the $\Sigma$ boom

- > When working at boom offset in narrow trenches, the second part of the boom does not strike the left-hand shoring plate, as tends to occur with traditional "ultraswing" excavators, so providing:
  - Increased digging depth.
  - Reduced layering at the bottom of the trench.
- > Efficient excavation, even below the dividers between the shoring plates of a trench.
- > Increased productivity when loading trucks: the bucket can reach the back of the dump vessel, so optimising the filling process and reducing trucks rotation.
- > Efficient when working at height (demolition).



#### Ultra-short swing radius

- > Complete rotation (upper frame and equipment) within the crawler width.
- > Perfectly suited to excavating in urban environments: pipe-laying, road works...



The bucket gets right under the jack with the forward articulation.

#### Neat earth levelling on the truck

The  $\Sigma$  boom reaches to the corners of the truck for neat levelling, making unloading easier, too.

# > HIGH PERFORMANCE

## B7-5B



Efficiency and stability beyond your regular ultra-tight turning machine.

### « VIPPS® » hydraulic circuit (ViO Progressive 3 Pumps System):



Hydraulic circuit fitted with a variable-flow dual piston pump, a gear pump and a multiple combination directional control valve:

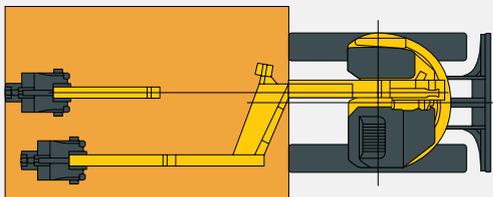
- > Increased working speed due to the cumulative pump capacities.
- > Smooth, simultaneous operation of all functions, even when travelling.



The  $\Sigma$  boom is made from high tensile steel, which is about 1.5 times stronger than the ordinary steel. The lower weight and optimum center of gravity produce a stable balance.



High tensile steel for superior work, stability and weight reduction



### Exceptional stability and lifting strength



The combination of a wide counterweight, asymmetric crawlers (system patented by Yanmar VICTAS®), and excellent weight distribution provide the B7-5B with an impressive level of stability and exceptional lifting capacities.

The VICTAS® system consists in increasing the bearing surface by increasing the track path and using asymmetric crawlers:

- > Increased lateral stability and lifting capacity.
- > Reduced ground damage and track wear.
- > Quiet, vibration free movement.



Combining long experience and unrivalled expertise, YANMAR's diesel technology ensures environmental performance and high efficiency

### efficiency

The YANMAR TNV direct injection diesel engine was built for clean emissions and powerful output. With its improved fuel injection system, it meets Stage III A emissions regulations of the European Commission (EC). Its quiet operation makes it both people- and planet-friendly.



**4TNV98-ZWBV**



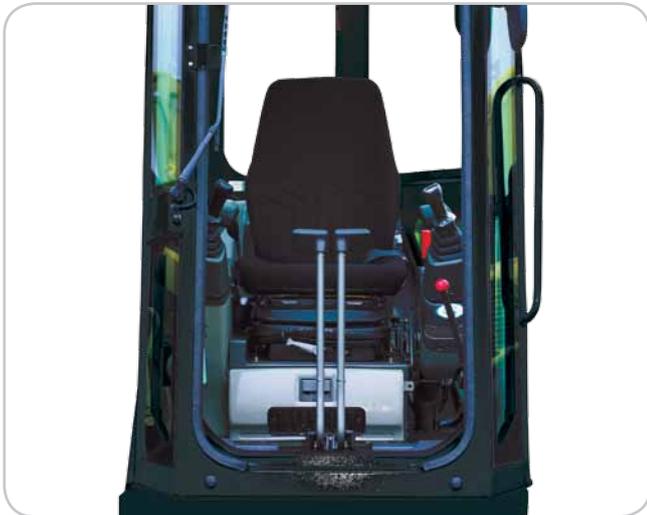
## > COMFORT

### B7-5B

Friendly to users and the environment. Comfortable operation unique to B7Σ.

#### Spacious operator's area for comfortable operation

The operator's space is wider thanks to the Σ boom. Both the seat sides and legroom are spacious. The big operator's area makes lengthy work less fatiguing.



#### Combination of a high-performance Yanmar engine and the VIPPS® hydraulic system:

- > Less noise.
- > Reduced fuel consumption.
- > Less exhaust fumes.
- > Exhaust gas vented vertically.



#### Ergonomic pilot system

Comfortable, multi-adjustable seat: sliding seat, reclining backrest and weight adjustment.

- > Large surface with windows for superb all-round visibility.
- > Windscreen in 2 parts, stored overhead.



# > SECURITY

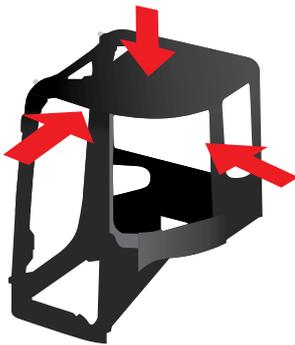
## B7-5B



Dependability and confidence which are critical to work going smoothly. The B7-5B delivers the protection that gives you breathing room.

### ISO-conforming cabin with sharply enhanced rigidity for safety and confidence

The cabin's use of a high-strength, high-rigidity ROPS enhances protects operator space in the event of a rollover. It also conforms to the FOPS 1 standard for structures protecting the operator from falling objects. This sturdy cabin lets you work in comfort and confidence.



#### ROPS

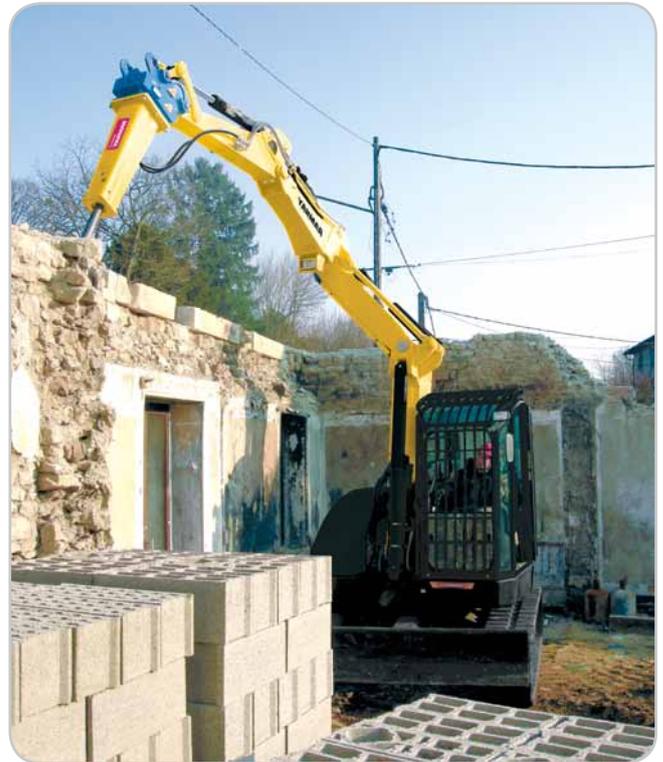
Roll Over Protective Structure  
ISO 3471

#### FOPS 1

Falling Object Protective Structure  
ISO10262-2 / Level 1

### Lock lever includes engine neutral start mechanism to prevent danger of accidental operation

The engine will not start unless the lock lever is completely locked, which prevents equipment from moving suddenly if the lever is accidentally operated when the engine is started.



The alarm monitor checks the engine oil, cooling water temperature and battery level. Potential troubles are indicated well in advance.

### Other enhancing equipment

Lock lever



Evacuation hammer





## > RELIABILITY & ACCESSIBILITY

### B7-5B

Simple maintenance structure for fast and easy access wherever it's needed.



#### Daily checks

Large rear bonnet allowing access to all engine components and hydraulic pumps.

- > Troublesome maintenance is now a thing of the past. Take satisfaction in quicker checks and the advanced durability they produce.
- > Covers open easily, with no special tools needed, enabling fast and smooth checks and minimizing maintenance and cleaning time.



- > Side hood housing the hydraulic oil level, control of battery, top up for oil, water and diesel, etc...



- > Arm cylinder on the back of the boom is protected from damage.



- > To prevent damage to the hydraulic hoses, they are covered for safety.



- > Iron plate hood is highly durable and makes damage repair easy.
- > Ridged crawler frame easily sheds soil, reducing cleanup time and effort.



# TECHNICAL SPECIFICATIONS

## B7-5B

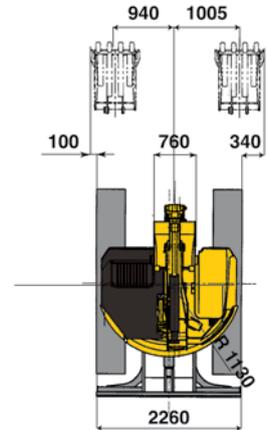
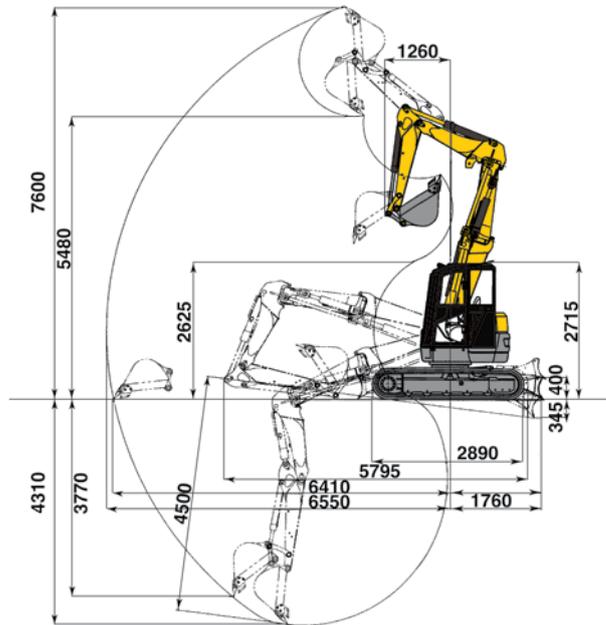
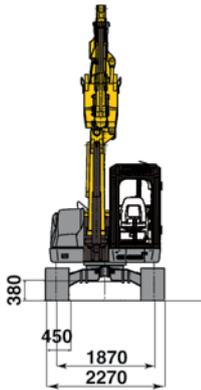


### Operating weight +-2% (EC Norms):

- > 8030/8080 kg (rubber crawlers/ steel crawlers)

### Transport weight +-2% (EC Norms):

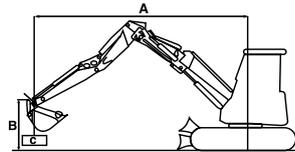
- > 7955/8005 kg (rubber crawlers/ steel crawlers)



Subject to any technical modifications.

Dimensions given in mm with standard Yanmar bucket.

		B7-5B
4-cylinder Yanmar engine	Type	4TNV98-ZWBV
	Rated output (DIN 6270B)	41.5 Kw / 56.4 HP / 2000 rpm
	Displacement	3,318 cm <sup>3</sup>
	Max. torque	249 N.m./1300 rpm
Hydraulic circuit	System capacity	100 l
	Max. pressure	250 bar
	2 variable displacement piston pump	2 x 74 l/mn
	1 fixed displacement gear pump	60.4 l/mn
Performances	1 gear pump	13 l/mn
	Travelling speed	2.5 / 4.7 km/h
	Swing speed	9.2 rpm
	Digging force (arm)	3925 kgf
Undercarriage	Digging force (bucket)	5590 kgf
	Grade ability	30°
	Ground pressure	0.356 / 0.360 kgf/cm <sup>2</sup>
	Shoe width	450 mm
Miscellaneous	Ground clearance	380 mm
	Blade (width x height)	2260 x 450 mm
	Fuel tank	100 l
Optional equipment	Cooling system	8.8 l
	Transport dimensions (L x w x h)	5795 x 2270 x 2715 mm
	Noise level (2000/14/EC & 2005/88/EC)	80 dBA (LpA) 98 dBA (LwA)
	3 <sup>rd</sup> hydraulic circuit lines to arm end	> Radio
4 <sup>th</sup> hydraulic circuit (on-off)	> Electric refuelling pump	
Kit of safety valves + overloading warning device	> Push-pull	
Anti-theft device (with keyboard, key)	> Hydraulic breaker	
	> Beacon light, yellow	
	> FOPS 2 protection bars on cab roof	



### Machine with cab, rubber crawlers and 195 kg bucket (750 mm).

A: Overhang from rotational axis (m).  
B: Height of hooking point (m).  
C: Safe working load (kg).

PTO	Theoretical data at 2000 rpm	
	Pressure	Oil flow
	0 ~ 245 bar	134.4 ~ 64 l/mn
	0 ~ 245 bar	134.4 ~ 64 l/mn

> The output reduces as the pressure increases.

Tipping load, rating over front

Tipping load, rating over side 90°

### Blade on ground

A	Maxi	5.0 m	3.5 m	2.5 m	
B					
5.0	1600	*1940	-	-	*2040 *2040 - -
4.0	1210	*1900	-	-	*2170 *2170 - -
3.0	960	*1850	-	-	2070 *2440 - -
2.0	860	*1810	1010	*1970	1870 *2710 3280 *3970
1.0	800	*1780	970	*2000	1680 *3010 2680 *3920
0	820	*1770	-	-	1580 *2840 2700 *3750
-1.0	870	*1710	-	-	1530 *2640 2680 *3450
-2.0	1070	*1610	-	-	1550 *2190 *2650 *2650

### Blade above ground

A	Maxi	5.0 m	3.5 m	2.5 m	
B					
5.0	1600	1610	-	-	*2040 *2040 - -
4.0	1190	1250	-	-	*2170 *2170 - -
3.0	960	1010	-	-	2060 2030 - -
2.0	830	870	1010	1050	1870 1960 3280 3300
1.0	800	820	950	980	1680 1760 2680 2820
0	820	850	-	-	1570 1650 2670 2820
-1.0	870	910	-	-	1510 1580 2660 2940
-2.0	1070	1100	-	-	1570 1580 *2650 *2650

The data contained in these tables represent the lifting capacity in accordance with ISO standard 10567. They correspond to 75% of the maximum static tipping load or 87% of the hydraulic lifting power. Data marked \* are the hydraulic limits of the lifting power.



**YANMAR**



Printed in France – Materials and specifications are subject to change from the manufacturer without notice – Please contact your local Yanmar Construction Equipment Europe dealer for further information.

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