

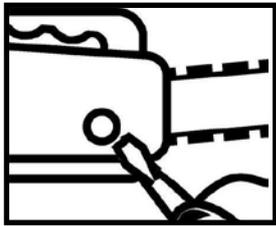
Product Information

Language	INGLESE
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Subject	GS 650



our **power**, your **passion**

NEW GS 650 PROFESSIONAL CHAIN SAW



GS 650

The new GS 650 is a powerful heavy-duty professional chain saw developed in conjunction with industry experts and designed for the most severe and lengthy of tasks in difficult environments.

The high power, the 18" to 30" interchangeable bars (stellite and with sprocket tip), make it a versatile machine that is specially suited to felling and cutting up large trees.

Equipped with numerous advanced solutions, including Nickel-plated cylinder, new piston geometry, carburettor isolated from the crankcase by a bracket with 4 anti-vibration mounts, digital coil, decompressor, aluminium crankcase, anti-vibration system with springs and rubber stops, automatic and adjustable aluminium oil pump, "INBOARD" clutch, nylon filter, and aluminium chain guard with side chain tensioner, this machine ensures:

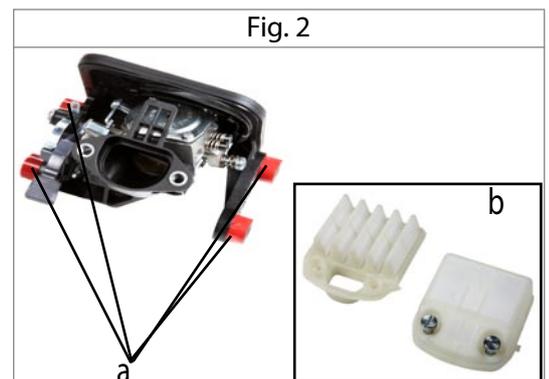
- Consistently high performance under all operating conditions.
- Long-term reliability and strength.
- Ease of use and comfort guaranteed to minimise muscle fatigue after long hours at work.
- Easy access for simplified cleaning and routine maintenance.

PERFORMANCE AND ENGINEERING SOLUTIONS

- **Professional Emak 2-stroke engine of 63.4 cc / 4.7 HP:**
 - 3 piece forged steel crankshaft
 - machined and balanced
 - diamond-machined aluminium piston with 2 rings, forged connecting rod, 2 roller bearings
 - Nickel-plated cylinder,
 - metal crankcase,
- all guaranteeing high performance, mechanical strength and long-term durability.

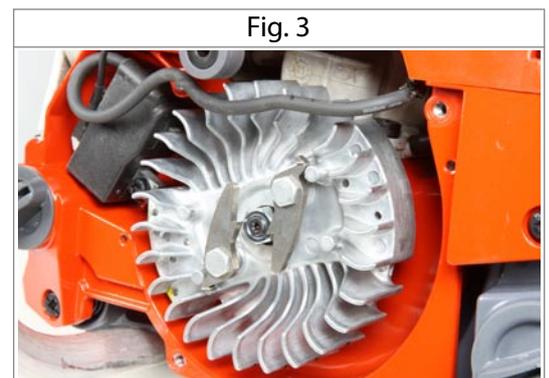


- **Carburettor bracket with 4 anti-vibration mounts (Fig.2a):** guarantees stable fuel burn under all operating conditions, and longer life of carburettor.

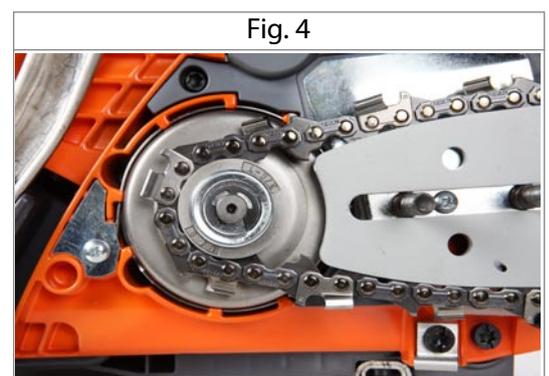


- **Large nylon filter, labyrinth air prefiltering system (Fig.2b)** with optimum filtering action, ideal for heavily dust-laden environments.

- **Digital coil (Fig. 3), flywheel with new fin geometry** and starter housing of new design with large air intake slots: engine guaranteed to run more smoothly with cooling rendered more efficient, at whatever speed, even in difficult climatic conditions (high temperatures)



- **"INBOARD" clutch (Fig.4)** with drum and brake belt built into the crankcase: prevents ingress of foreign matter between the centrifugal weights ensuring consistently perfect operation, facilitates disassembly of the chain guard and simplifies cleaning and/or routine maintenance.



EASE OF USE

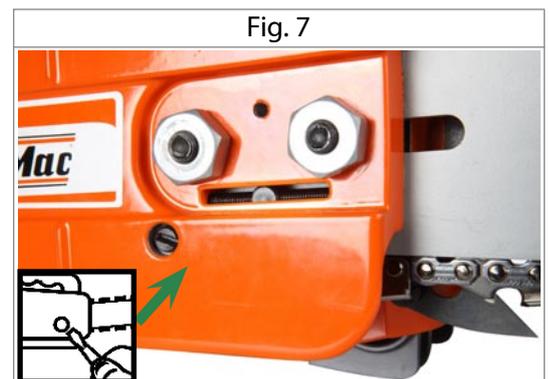
- On/off switch, choke and half-throttle control incorporated into a single **multifunction lever**: guaranteed practical and simple to use (Fig.5).



- “**Decompressor**” valve (Fig.6): when activated, reduces pressure in the combustion chamber to ensure the engine will start easily, even from cold.



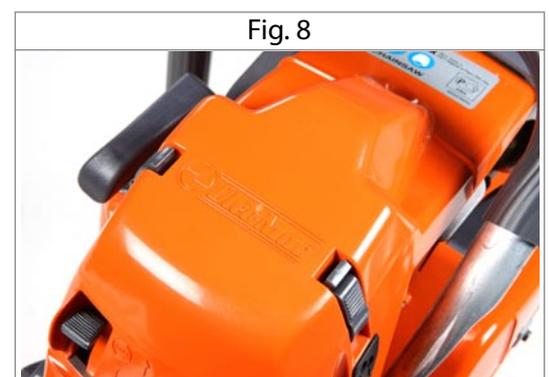
- “**Ice device**”: ensures the machine can operate without difficulty even at low temperatures (below 0 °C), avoiding the formation of ice on the air filter.



- **Lateral chain tensioner**: simplifies tensioning adjustments while avoiding any risk of contact with the chain (Fig.7).

- **Chain lubrication oil pump** (aluminium) with **adjustable flow rate**: facilitates the task of the operator by allowing variation of the oil feed to suit the workload on the machine and the type of wood.

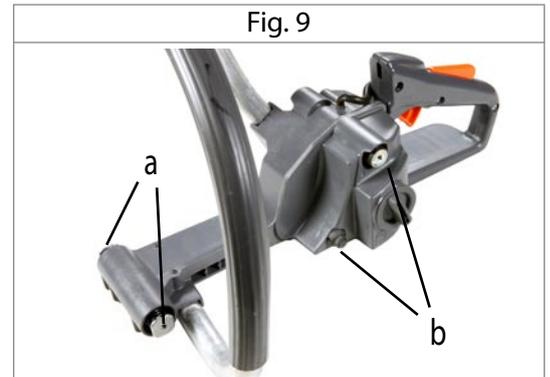
- **Filter cover** can be opened without tools thanks to **two flexible side springs**, making inspection easier (Fig.8).



COMFORT

- **Anti-vibration system using 6 mounts**, comprising 2 spring dampers (Fig. 9a) and 4 rubber stops (Fig.9b) located between the handle and the crankcase: with hands and body completely isolated from machine vibrations, the operator benefits through increased comfort.
- **Front handle** made of **aluminium** (Fig.9c), covered in soft rubber: ensures a firm, anatomically correct and comfortable grip.

Fig. 9



- **Ergonomic controls**: all functions of the machine are easily reachable with just one hand (Fig.10), so that the operator can work confidently without ever letting go of the handle.

Fig. 10



- **Flywheel with new fin geometry** and **starter housing** of **new** design with large air intake slots (Fig.11): engine guaranteed to run more smoothly with cooling rendered more efficient, at whatever speed, even in difficult climatic conditions (high temperatures).

Fig. 11



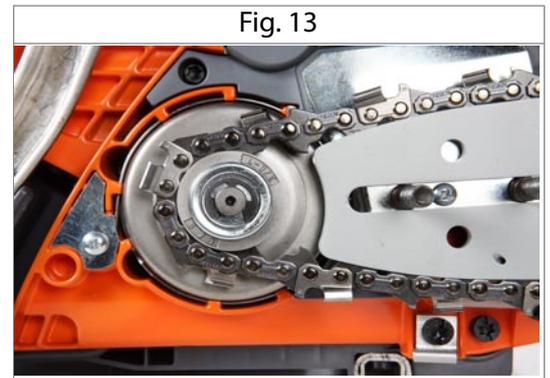
- **Reinforced muffler** (Fig.12) designed to reduce noise emissions even at maximum rpm.

Fig. 12



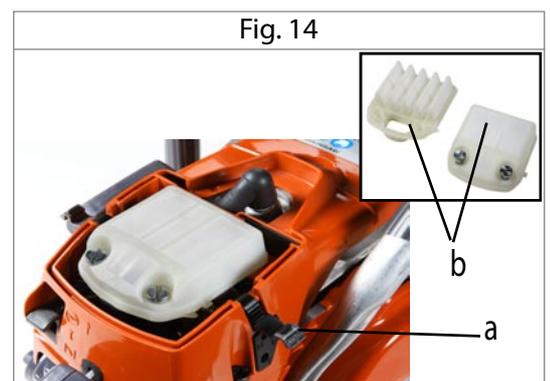
EASE OF MAINTENANCE

- **"INBOARD" clutch** (Fig.13) with drum and brake belt built into the crankcase: prevents ingress of foreign matter between the centrifugal weights ensuring consistently perfect operation, facilitates disassembly of the chain guard and simplifies cleaning and/or routine maintenance.



- **Filter cover** can be opened without tools thanks to **two flexible side springs**, making inspection easier (Fig.14a).

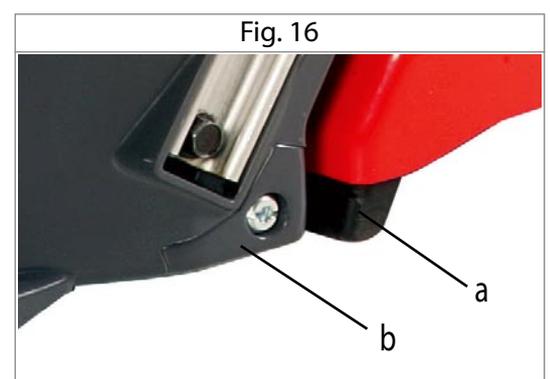
- **Large nylon filter, labyrinth air prefiltering system** (Fig.14b) with optimum filtering action, ideal for heavily dust-laden environments.



- **Automatic chain lubrication oil pump** with adjustable flow rate (Fig.15): zero flow with engine at idling speed ensures less caking of chips and dust, consequently less time spent on maintenance, and longer intervals between cleaning/servicing operations.



- **Chain guard with wide outlet section** (Fig.16): designed to facilitate clearance of chips and dust (less caking), so that the part needs cleaning and servicing less frequently. The two shields, rubber on the chain guard (Fig.16a) and plastic on the tank (Fig. 16b), offer maximum strength in the event of the chain dropping off.



TECHNICAL SPECIFICATIONS

MODEL	OM	GS 650
ENGINE		
TYPE		Emak 2-stroke (EURO I)
DISPLACEMENT	cm ³	63.4
BORE x STROKE	mm x mm	48 x 35
MAXIMUM POWER OUTPUT	HP/kW (rpm)	4.7 / 3.5 (9000)
MAXIMUM TORQUE	Nm (rpm)	4.1 (6000)
IDLING SPEED	rpm	3000
MAXIMUM NO LOAD SPEED with limiter	rpm	13000
HOURLY FUEL CONSUMPTION (at max power output)	g/h (rpm)	1850 (9000)
CRANKCASE		Aluminium
IGNITION SYSTEM		
TYPE		Capacitive electronic
COIL		Digital electronic
SPARK PLUG		Champion RCJ-4
ICE DEVICE SYSTEM		Yes
DECOMPRESSOR		Yes
FUEL & LUBRICATION SYSTEM		
CARBURETTOR		Walbro HD 48A
AIR FILTER		Nylon
FUEL		Mix 4% with PROSINT oil 2% (50:1)
FUEL TANK CAPACITY	l	0.8
PRIMER		No
TRANSMISSION SYSTEM		
TRANSMISSION		Ring Power Mate - Clutch ON-BOARD
CLUTCH		3 parts
N° SPROCKET TEETH		7
CHAIN SPEED	m/s	21
TYPE TEST APPROVALS		
SOUND PRESSURE (LpA av EN 11681-1, EN 22868)	dB(A)	103
SOUND POWER (LwA 2000/14/EC, EN 22868, EN ISO 3744)	dB(A)	115
VIBRATION LEVEL (EN 11681-1, EN 22867, EN12096)	m/s ²	5.3 (SX) - 5.3 (DX) (with bar/chain 20°)
UNCERTAINTY (EN 12096)	m/s ²	1.7 (with bar/chain 20°)
ERGONOMICS		
FRONT HANDLE		Rubber covering
REAR HANDLE		Plastic
ANTI-VIBRATION SYSTEM		2 spring dampers and 4 rubber stops
BAR AND CHAIN CUTTING SYSTEM		
BAR LENGTH	(inch) cm	18"-20"-24"-28"-30" - (46-51-61-71-76)
CHAIN PITCH	inch	3/8 x .058"
CHAIN BRAKE		Inertia-activated
CHAIN GUARD		Aluminium
CHAIN TENSIONER		Lateral (on side)
OIL RESERVOIR CAPACITY	l	0.45
OIL PUMP		Metal
OIL PUMP		Adjustable
BUCKING SPIKE		Steel
TYPE TEST APPROVALS		
WEIGHT (without bar/chain)	kg	6.3
POWER-TO-WEIGHT RATIO	kg/kW	1.826



It's an Emak S.p.A. trademark Member of the Yama Group
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