Oleo-Mac

PRODUCT INFORMATION

NO.	108
DATE	12 - 2007
SUBJECT	GS 720 - GS 820

NEW GS 720 - GS 820 CHAINSAWS

Mod. GS 820

Mod. GS 720

The new **GS 720** and **GS 820** chainsaws are powerful professional machines, designed for felling and cutting up trees of appreciable size into planks and boards.
Numerous leading edge solutions - new cylinder and piston geometry, carburettor isolated from the crankcase by a bracket with 4 anti-vibration mounts, digital coil with rpm limiter, metal crankcase (GS 720 Magnesium, GS 820 Aluminium), anti-vibration system with springs and rubber stops - ensuring:

- **High performance** under all operating conditions.
- **Long-term reliability and strength.**
- **Ease of use and comfort** guaranteed to minimize muscle fatigue after long hours at work.
- **Ease of maintenance** for simplified cleaning and routine servicing.

- ADVANTAGES -

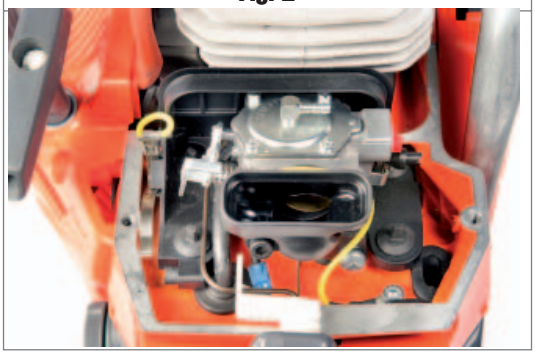
1 - PERFORMANCE AND ENGINEERING SOLUTIONS

• **Professional grade 2-stroke engine of 70.8 – 80.7 cm³ displacement** (fig. 1): 3-piece forged steel crankshaft, machined and balanced, diamond-machined aluminium piston with 2 rings, forged connecting rod, 2 roller bearings, metal crankcase, all guaranteeing high performance, mechanical strength and long-term durability.

Fig. 1

• **Starter housing** of **new design** with large air intake slots: ensures increased air flow and consequently optimum engine cooling.

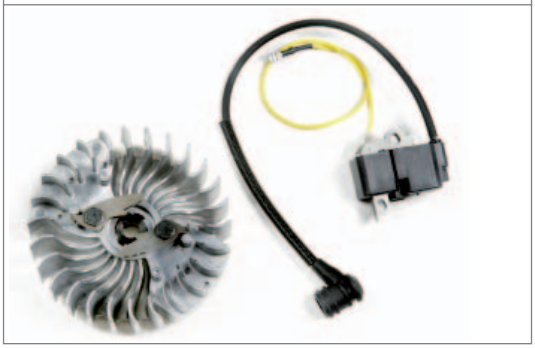
Fig. 2



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

• **Digital coil** with **variable ignition advance** and **rpm limiter** (fig. 3), and flywheel with new fin geometry: engine guaranteed to run more smoothly with cooling rendered more efficient, at whatever speed, even in difficult climatic conditions (high temperatures).

Fig. 3



• **Magnesium chain guard**: ensures optimum protection of chain brake and clutch, maximum strength combined with minimal weight (fig. 4).

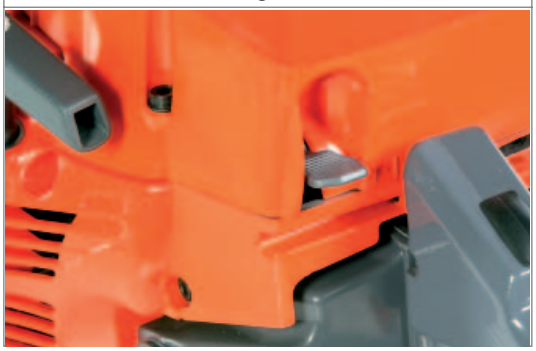
Fig. 4

• **Fuel tank** of **new design**: whatever the position in space during operation, the fuel filter will always be ideally positioned to give a steady fuel burn.

2 - EASE OF USE

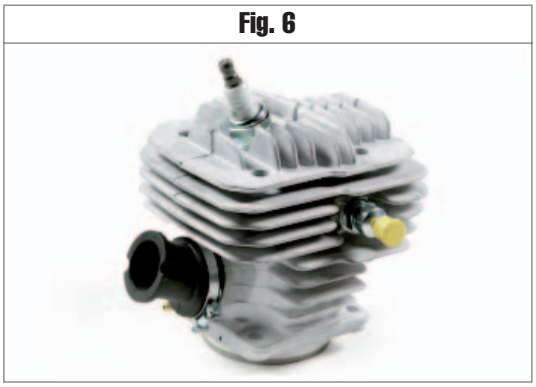
• **On/off switch**, **choke** and **half-throttle control** incorporated into a **single multifunction lever:** guaranteed practical and simple to use (fig. 5).

Fig. 5



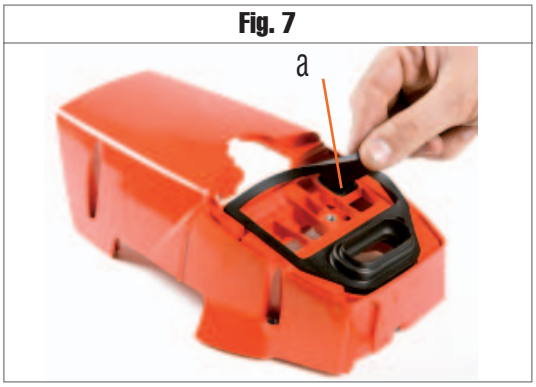
• **"Decompressor" valve** (fig. 6): when activated, reduces pressure in the combustion chamber to ensure the engine will start easily, even from cold.

Fig. 6



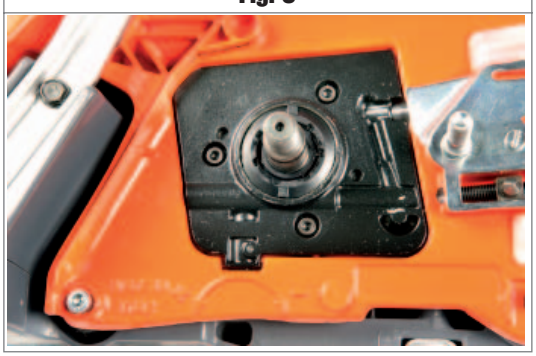
• **"Ice device"** (fig. 7): ensures the machine can operate without difficulty even at low temperatures (below 0 °C), avoiding the formation of ice on the air filter.

Fig. 7



• **Chain lubrication oil pump (metal)** 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 (fig. 8).

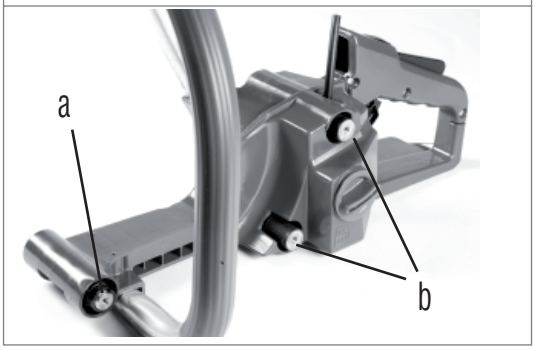
Fig. 8



3 - COMFORT

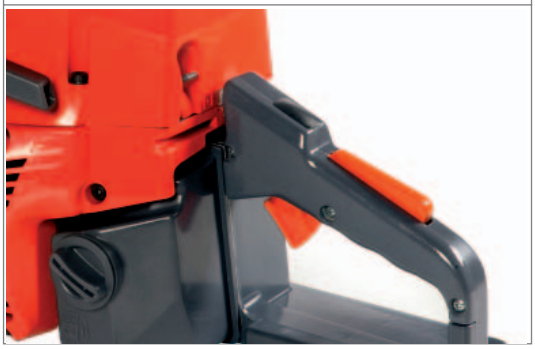
• **Anti-vibration system** using 6 mounts, comprising 2 spring dampers (fig. 9a) and 4 rubber stops (fig. 9b) located between the handle and the crankcase: with hands and body completely isolated from machine vibrations, the operator benefits through increased comfort.

Fig. 9



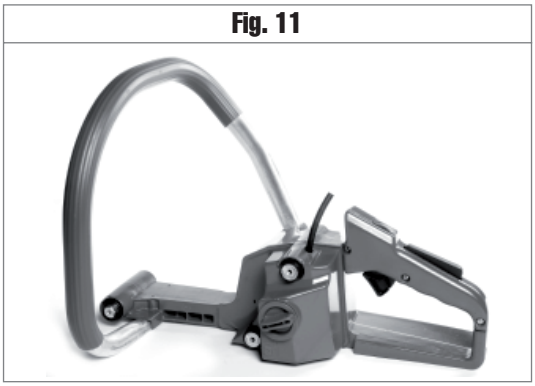
• **Ergonomic controls**: all functions of the machine are easily reachable with just one hand (fig. 10), so that the operator can work confidently without ever letting go of the handle.

Fig. 10



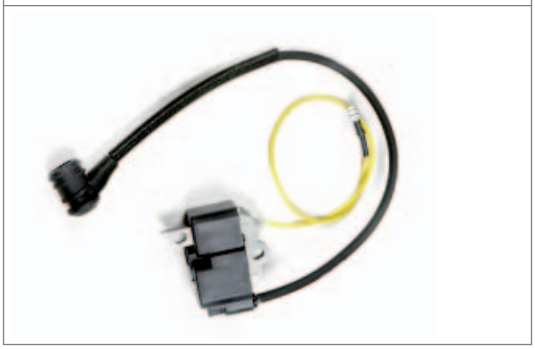
• **Front handle made** of **aluminium** (fig. 11), covered in **soft rubber**: ensures a firm, anatomically correct and comfortable grip.

Fig. 11



• **Digital coil** with **variable ignition advance**: easy starting guaranteed, even at low revolutions (fig. 12).

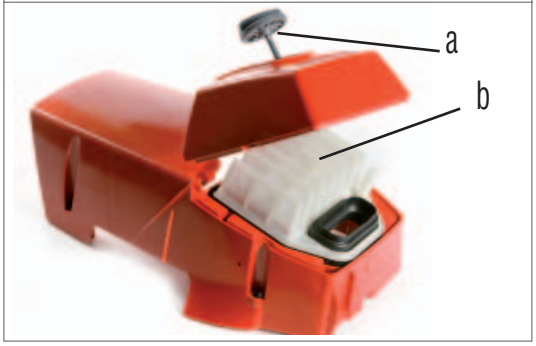
Fig. 12



4 - EASE OF MAINTENANCE

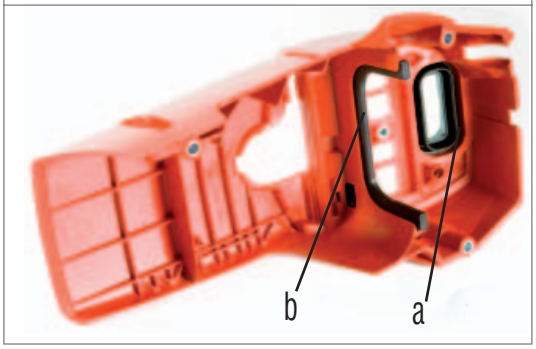
• **Filter cover** with **knob**: gives swift access to the filter, the "ice device" and the spark plug recess, with no tools required (easy servicing) (fig. 13a).
• **Nylon filter**, easy to clean: longer interval between one filter servicing operation and the next, thanks to a generously proportioned filtration surface (fig. 13b).

Fig. 13



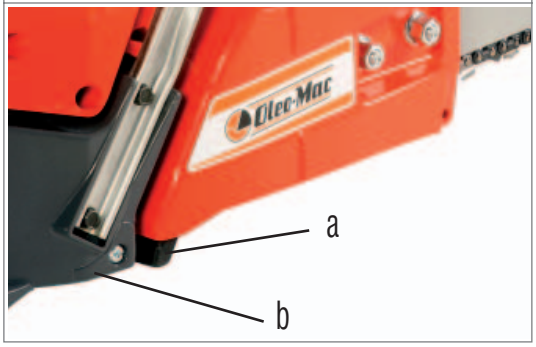
• **Engine shroud** designed for **easy removal**, with 3 retaining screws, and a new two-piece inlet manifold (fig. 14a). Bottom gasket (fig. 14b) ensures better sealing action and lower cleaning and maintenance requirement for pre-filter compartment.

Fig. 14



• **Chain guard** with wide **outlet section** (fig. 15): 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. 15a) and plastic on the tank (fig. 15b), offer maximum strength in the event of the chain dropping off.

Fig. 15



• **Automatic chain lubrication oil pump** (fig. 16): 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.

Fig. 16

-TECHNICAL SPECIFICATIONS-

MODEL		GS 720	GS 820
ENGINE			
TYPE		Emak 2-stroke (EURO I)	
DISPLACEMENT	cm^3	70.8	80.7
BORE x STROKE	mm x mm	50 x 36	52 x 38
MAXIMUM POWER OUTPUT	HP/kW (rpm)	5.4 / 4.0 (9000)	6.0 / 4.4 (9000)
MAXIMUM TORQUE	Nm (rpm)	4.5 (6000)	5.1 (6000)
IDLING SPEED	rpm	3000	
MAXIMUM NO LOAD SPEED with limiter	rpm	13500	12500
HOURLY FUEL CONSUMPTION (at max power output)	g/h (rpm)	1770 (9000)	1950 (9000)
CRANKCASE		Magnesium	Aluminium
IGNITION SYSTEM			
TYPE		Capacitive electronic	
COIL		Digital electronic with variable ignition advance and limiter	
LIMITER	rpm	13500 (+/-200)	12700 (+/-200)
SPARK PLUG		NGK BPMR8Y	
ICE DEVICE SYSTEM		Yes	
DECOMPRESSOR		Yes	
FUEL & LUBRICATION SYSTEM			
CARBURETTOR		WALBRO WJ-121	
AIR FILTER		Nylon	
FUEL		Mix 4% with PROSINT oil 2% (50:1)	
FUEL TANK CAPACITY	l	0.80	
PRIMER		N°	
TRANSMISSION SYSTEM			
TRANSMISSION		Sprocket	
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)	102	101
SOUND POWER (LwA 2000/14/EC, EN 22868, EN ISO 3744)	dB(A)	114.6	114.3
VIBRATION LEVEL (EN 11681-1,EN 22867,EN12096)	m/s^2	6.1 (SX) - 6.1 (DX) (with bar/chain 20")	6.5 (SX) - 6.1 (DX) (with bar/chain 20")
UNCERTAINTY (EN 12096)	m/s^2	0.9 (with bar/chain 20")	1.6 (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	cm (inch)	46-51-58-64-76 (18-20-23-25-30)	51-58-64-76 (20-23-25-30)
CHAIN PITCH	inch	3/8 x .058	
CHAIN BRAKE		Inertia-activated	
CHAIN GUARD		Magnesium	
CHAIN TENSIONER		Front	
OIL RESERVOIR CAPACITY	l	0.45	
OIL PUMP		Metal	
OIL PUMP		Adjustable	
BUCKING SPIKE		Steel	
TYPE TEST APPROVALS			
WEIGHT (without bar/chain)	kg	6.8	7.1
POWER-TO-WEIGHT RATIO	kg/kW	1.7	1.6

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