MOTORI SEVEN

www.motoriseven.it

YourRacingEngine

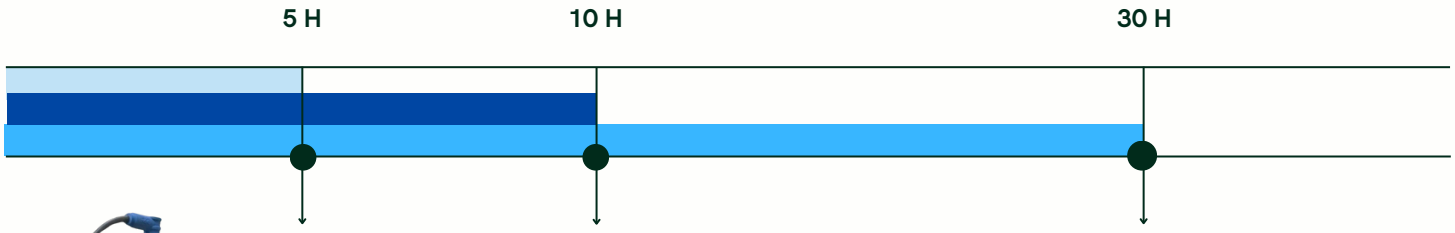
L9 A

USER MANUAL

TECHNICAL SPECIFICATIONS L9 A

TYPE	Single cylinder 2 stroke
INTAKE SYSTEM	Reed valve intake
BORE	54
STROKE	54,4
DISPLACEMENT	125cc
COOLING	Water cooled
GEARBOX	6 speed
GEAR SHIFT	Steering wheel paddle, cable-operated
SPARK PLUG	Brisk D10
CLUTCH	Dry multi-disc
IGNITION	Selettra with fixed timing
ENGINE RPM	14.800 RPM
CARBURETOR	Dell'Orto VHSH 30mm
SILINCER	Elto TD3
POWER	52CV

MAINTENANCE TIME L9 A



PISTON
PISTON CAGE

- OIL SEAL
- BEARINGS
- CRANKBEARING
- COUPLING SHAFT
- PISTON BEARING
- GASKET KIT
- ENGINE OIL
- CABLE PADDLE SHIFTER

- CONNECTING ROD
- CLUTCH DISCK
- CLUTCH SPRING
- LAMELLA

SPARE PARTS

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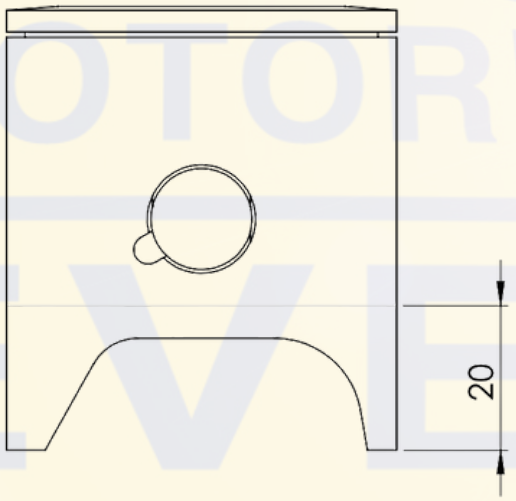
PISTON

The recommended clearance between piston and cylinder with a new piston is 0,07mm.

The piston replacement must be done at specific intervals.
MOTORI SEVEN suggest the piston replacement after 50lt of fuel (5h), or when the piston clearance is higher than 0,09mm.

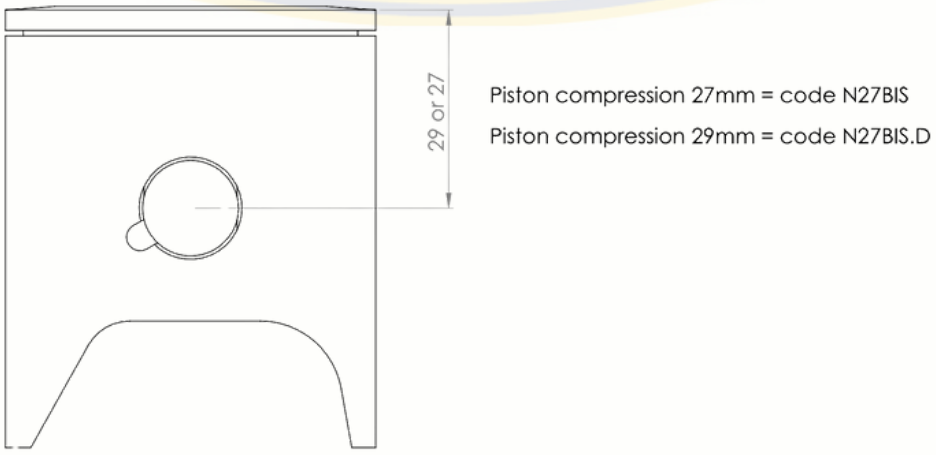
The reference diameter of the piston has to be check at 20mm from the base perpendicularly to the piston axle.



The measure marked on the head of the piston is the actual piston diameter.

The gap between the piston ring tips (installed into the cylinder) must be 0,35mm (0,25mm minimum).

Lapping the cylinder before installing a new piston is strongly recommended.



It is possible to choose between 27 compression pistons and 29 compression pistons. Please check the product carefully and select the correct one before purchasing.

TECHNICAL DATA SUMMARY TABLE

DESCRIPTION	DATA	NOTE
FUEL MIXTURE	4%	RSK-BLU PRINT
GEARBOX OIL	250 ml	ATF DEXTRON III
OPERATING TEMPERATURE ENGINE	min.48°C / max.54°C	
TIMIN ADVANCE	1.65mm	Before the T.D.C.
COMBUSTION CHAMBER VOLUME	13.15cm^3	13cm min
SQUISH WHITH "I4" - "O" - "2A" - "G1" cylinder head	1,00mm	Measured with "bridge" (2 simultaneous points) D. 1.5mm tin
PISTON RING GAP	0,30mm (0,25mm min.)	Installed into the cylinder
STANDARD SPARK PLUGS	NGK B10EG	
RACING SPARK PLUGS	NGK R7282 - 105 NGK R7282 -11 BRISK D10	Use with specific spark plug cap

FASTENER TORQUE VALUE

FASTENER NAME	NOM.SIZE	VALUE (METRIC SYS)	VALUE (IMPERIAL SYS)
SPARK PLUG	Ex. 20.8	20Nm	175 lb-in
HEAD CYLINDER NUTS	M8	20Nm	175 lb-in
CYLINDER NUTS	M8	20Nm	175 lb-in
SCREW TCEI MISCELLANEOUS	M6	12Nm	105 lb-in
IGNITION STATOR FIXING SCREWS	M5	8Nm	70 lb-in
IGNITION ROTOR FIXING NUT	M12x1	20Nm	175 lb-in
CLUTCH SPRING RETAINING NUTS	M6x1	10Nm	90 lb-in
CLUTCH DRUM RETAINING NUT	M16x1	70Nm	620 lb-in

CARBURATOR BASE SETUP - OPTION 1

BASIC SETUP MOTORI SEVEN L9		
MAIN JET = 180	ATOMIZER = DQ 264	FUEL NEEDLE = 300
IDLE JET = 52	NEEDLE = K100 (3,5 notch)	THROTTLE VALVE = 50
IDLE TUBE = B48	STARTER JET = 60	FLOATS = 9g

The base carburetor setup is intentionally generic, as environmental temperature and fuel characteristics are not known.

SUGGESTED CARBURETTOR SETUP FOR COMPETITION

OUTSIDE TEMPERATURE	NEEDLE	NOTCH	ATOMIZER	JET MAX	EMULSION TUBE	THROTTLE GAS	AIR SCREW MIN
T>22°C	K100	3,5rd	DQ263	170	B52-48	50	2,5
T=10-20°C	K100	4rd	DQ264	180	B55-50	50	1,5
T=2-10°C	K100	4,5rd	DQ265	195	B60-52	50	1,5
Rain	K100	3rd	DQ264	175	B52-48	55	2

CARBURATOR BASE SETUP - OPTION 2

BASIC SETUP MOTORI SEVEN L9		
MAIN JET = 140	ATOMIZER = DQ 264	FUEL NEEDLE = 300
IDLE JET = 52	NEEDLE = K4 (3 notch)	THROTTLE VALVE = 50
IDLE TUBE = B48	STARTER JET = 60	FLOATS = 9g

SUGGESTED CARBURETTOR SETUP FOR COMPETITION

OUTSIDE TEMPERATURE	NEEDLE	NOTCH	ATOMIZER	JET MAX	EMULSION TUBE	THROTTLE GAS	AIR SCREW MIN
T>22°C	K4	3rd	DQ263	130	B52-48	50	2,5
T=10-20°C	K4	4rd	DQ264	138	B55-50	50	1,5
T=2-10°C	K4	4,5rd	DQ265	142	B60-52	50	1,5
Rain	K4	2,5rd	DQ264	130	B52-48	55	2

SPEED CALCULATOR BY GEAR RATIO

ENGINE SPROCKET	REAR SPROCKET	RATIO	SPEED Km/h
14	30	2,143	94,29
14	29	2,071	97,54
14	28	2,000	101,03
15	30	2,000	101,03
15	29	1,933	104,51
14	27	1,929	104,77
16	30	1,875	107,76
15	28	1,867	108,24
14	26	1,857	108,80
16	29	1,813	111,48
15	27	1,800	112,25
14	25	1,786	113,15
17	30	1,765	114,50
16	28	1,750	115,46
15	26	1,733	116,57
14	24	1,714	117,87
17	29	1,706	118,45
16	27	1,688	119,74
15	25	1,667	121,23
18	30	1,667	121,23
17	28	1,647	122,68
14	23	1,643	122,99
16	26	1,625	124,34
18	29	1,611	125,41
15	24	1,600	126,29
17	27	1,588	127,22
19	30	1,579	127,97
14	22	1,571	128,58
16	25	1,563	129,32
18	28	1,556	129,89
15	23	1,533	131,78
17	26	1,529	132,11
19	29	1,526	132,38
14	21	1,500	134,70
16	24	1,500	134,70

SPROCKET	REAR SPROCKET	RATIO	SPEED
18	27	1,500	134,70
20	30	1,500	134,70
19	28	1,474	137,11
17	25	1,471	137,40
15	22	1,467	137,77
20	29	1,450	139,35
18	26	1,444	139,88
16	23	1,438	140,56
19	27	1,421	142,19
17	24	1,412	143,12
15	21	1,400	144,33
20	28	1,400	144,33
18	25	1,389	145,48
16	22	1,375	146,95
19	26	1,368	147,66
17	23	1,353	149,35
20	27	1,350	149,67
18	24	1,333	151,54
19	25	1,316	153,56
16	21	1,313	153,95
20	26	1,300	155,43
17	22	1,294	156,13
18	23	1,278	158,13
19	24	1,263	159,96
20	25	1,250	161,64
17	21	1,235	163,57
18	22	1,222	165,32
19	23	1,211	166,92
20	24	1,200	168,38
18	21	1,167	173,19
19	22	1,158	174,50
20	23	1,150	175,70
19	21	1,105	182,81
20	22	1,100	183,69
20	21	1,050	192,43