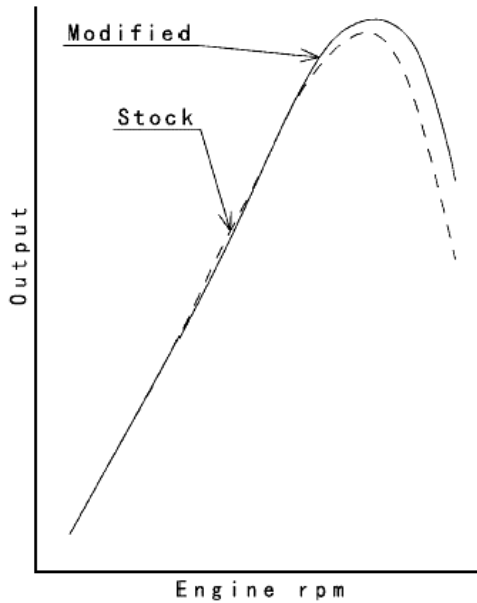


RACE TUNING INFORMATION

Subject

The following modifications increase midrange and high-speed power, making the vehicle more competitive for the experienced racer.



CAUTION

Kawasaki cannot accept any responsibility for the results of the modifications described in this bulletin.

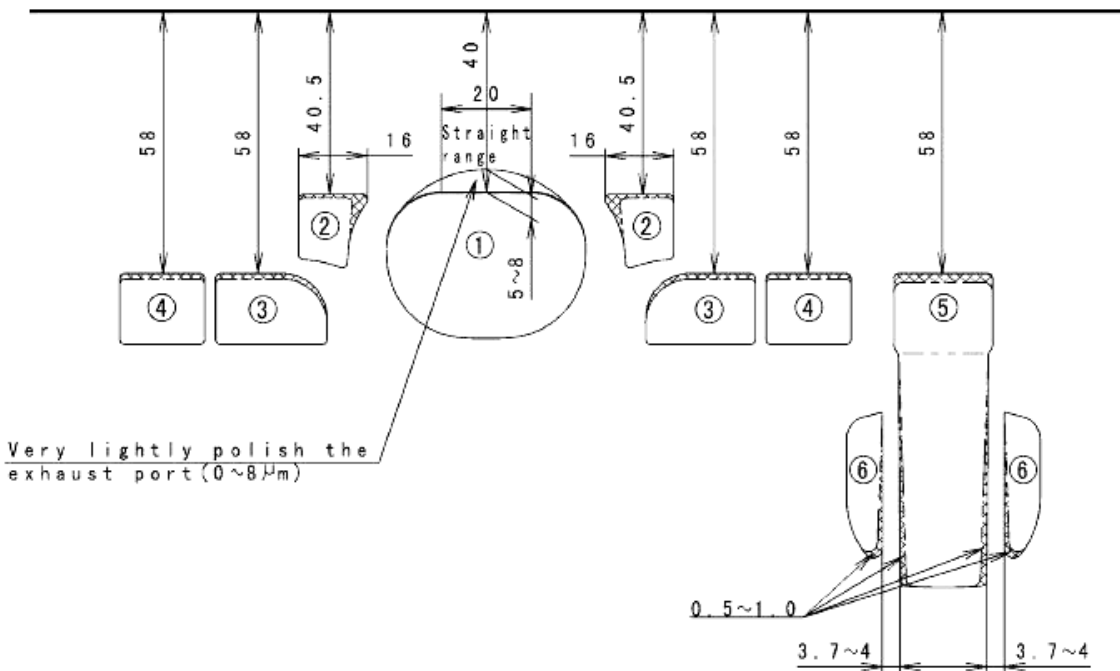
Whenever the power output of an engine is increased, the reliability and durability of the engine decrease. This is especially true of competition engines, which are highly stressed even in stock form.

For best results, engine modifications should be made by an experienced engine tuner.

Modification Procedures

Cylinder:

- Polish and smooth the shaded areas in the intake, exhaust, and scavenging ports (the areas in each port near the cylinder bore in particular)
- Chamfer the main/sub exhaust ports as shown.



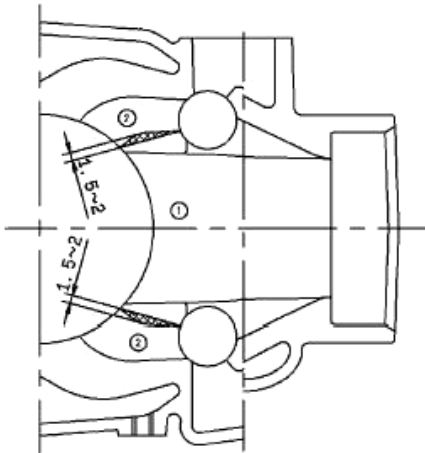
- | | |
|----------------------|-------------------------|
| 1. EXHAUST PORT | 4. SUB-SCAVENGING PORTS |
| 2. SUB-EXHAUST PORTS | 5. INTAKE PORT |
| 3. SCAVENGING PORTS | 6. SUB-INTAKE PORTS |

- Chamfer the main/sub intake port as shown.
- Adjust the main/sub scavenging ports timing to match the illustration.

CAUTION

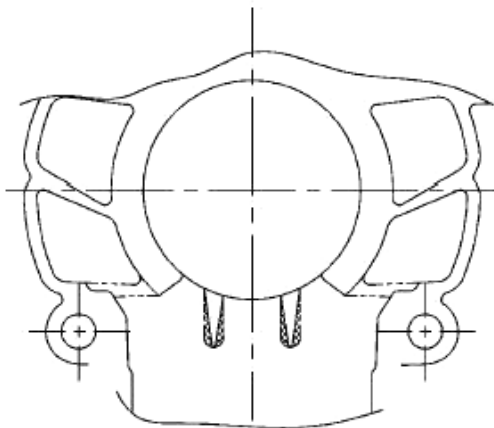
Maintain the original shape of the ports, and chamfer the sharp edges to prevent ring damage.

Removing more material than specified may result in a loss of power.



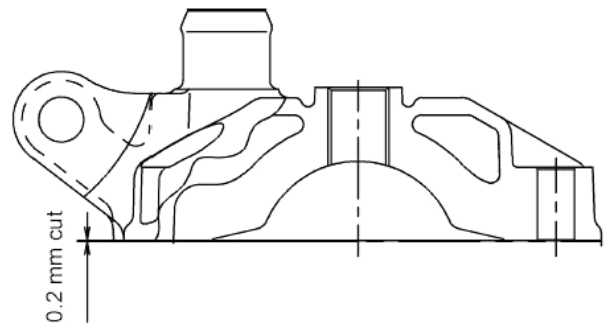
1. EXHAUST PORT

2. SUB-EXHAUST PORTS



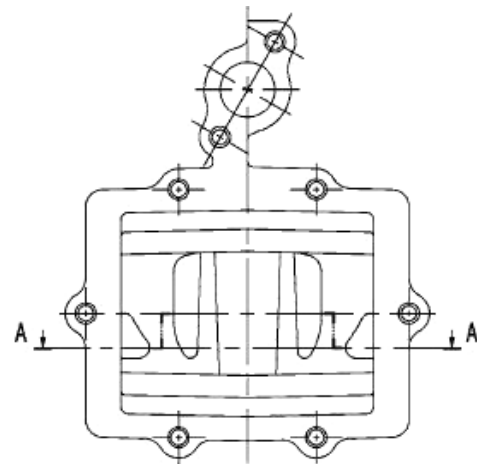
Cylinder Head:

- Cut 0.2 mm from the gasket surface of the cylinder head to raise the compression ratio.



NOTE:


- o Use a fuel with Research Octane Number (RON) 105 or higher, to help prevent abnormal combustion.



Optional Parts

Flywheel Rotor:

- Five (5) optional rotors are available. The standard flywheel can be substituted with one of the optional rotors in the following chart to better suit the track conditions.

Part Number	Inertia Moment (kg·cm ²)	Racing Conditions
21007-1424	4.5	(STD)
21007-1425	4.0	Increase in throttle response  Increase in rear wheel traction
21007-1429	4.9	
21007-1426	5.3	
21007-1427	5.6	
21007-1428	5.9	

Spark Plug:

- Use the specified racing spark plug.

Spark Plug	Part Number
R7376-8 (NGK)	92070-1275

CAUTION

Use of leaded fuel is illegal in some countries, states or territories. Check local regulations before using leaded fuel.

Optional Carburetor Jets:

No particular change in the carburetor setting should be required as a result of the engine tuning described on this service information. However, the setting may need to be adjusted according to the track conditions, temperature, atmospheric pressure, rider preference or other factors. The optional parts for the 2004 model KX250-M2 are shown in the last page of this service information.

NOTE:

- o Refer to the owner's manual for the correction factor information.

Other Optional Parts:

For the conditions described bellow, the following parts can be utilized effectively.

Condition	Optional Parts	
	Description	P/N
(1) When the rear sprocket with 52-or- more teeth is installed.	Engine sprocket 12T	13144-1293
	Chain guide (for 12T)	13053-1465

Warranty Information

This bulletin is racing support information only, not warranty authorization.

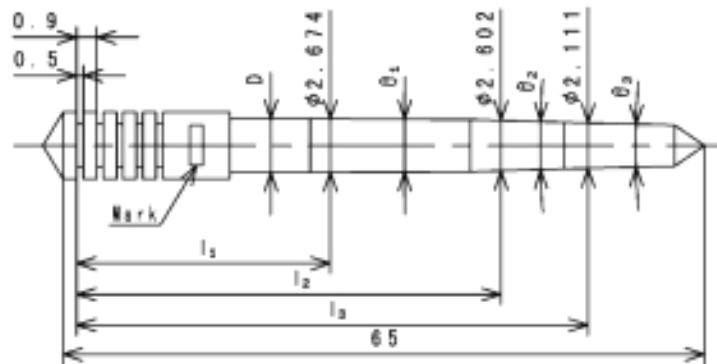
Carburetor Setting and Optional Parts

'04 KX250-M2

1) Base Jetting

Markets	Body	MJ	PWJ	JN	CA	SJ	AS	NJ			BPP	POP	BP	PO	ID Mark
								Height	Choke Height	Well Dia					
ALL	PWK 38S	#165	#50	NALF-2	#8.0 (2.5 × 1.0)	#52	2 1/2	0 mm	7.45 (With Slit)	φ 3.6	5.0	10.5	φ 0.8	φ 1.5 φ 0.7	J009A

2) JN Optional Parts



P/No.	ID Mark	D	l ₁	l ₂	l ₃	θ ₁	θ ₂	θ ₃	A/F Condition
16187-1154	NALD	φ 2.685	27.15	30.95	46.95	0° 45' 58"	1° 34' 40"	3° 0' 0"	Richer
16187-1155	E	φ 2.695	27.15	30.95	46.95	0° 45' 58"	1° 34' 40"	3° 0' 0"	STD (Clip Position 2nd)
16187-1156	F	φ 2.705	27.15	30.95	46.95	0° 45' 58"	1° 34' 40"	3° 0' 0"	
16187-1157	G	φ 2.715	27.15	30.95	46.95	0° 45' 58"	1° 34' 40"	3° 0' 0"	
16187-1158	H	φ 2.725	27.15	30.95	46.95	0° 45' 58"	1° 34' 40"	3° 0' 0"	Leaner
16187-1129	NAFD	φ 2.685	27.60	31.40	47.40	0° 45' 58"	1° 34' 40"	3° 0' 0"	Richer
16187-1160	E	φ 2.695	27.60	31.40	47.40	0° 45' 58"	1° 34' 40"	3° 0' 0"	Leaner
16187-1161	F	φ 2.705	27.60	31.40	47.40	0° 45' 58"	1° 34' 40"	3° 0' 0"	
16187-1162	G	φ 2.715	27.60	31.40	47.40	0° 45' 58"	1° 34' 40"	3° 0' 0"	
16187-1163	H	φ 2.725	27.60	31.40	47.40	0° 45' 58"	1° 34' 40"	3° 0' 0"	

* NAL is richer than NAF (0.5 Clip Position).

3) CA Optional Parts

P/No.	Number	Remark
16025-1217	#8(2.5 × 1.5)	STD
16025-1215	#6(2.5 × 1.5)	OP
16025-1216	#7(2.5 × 1.5)	OP

4) PWJ Optional Parts

P/No.	Number	Remark
16159-1060	#45	OP
16159-1058	#48	OP
16159-1053	#50	STD
16159-1055	#52	OP
16159-1054	#55	OP

5) SJ Optional Parts

P/No.	Number	Remark
92064-1143	#48	OP
92064-1144	#50	OP
92064-1130	#52	STD
92064-1145	#55	OP
92064-1146	#58	OP

6) MJ Optional Parts

KHI No.	Number	Remark
92063-1368	#160	OP
92063-1369	#162	OP
92063-1370	#165	STD
92063-1371	#168	OP
92063-1372	#170	OP
92063-1374	#175	OP