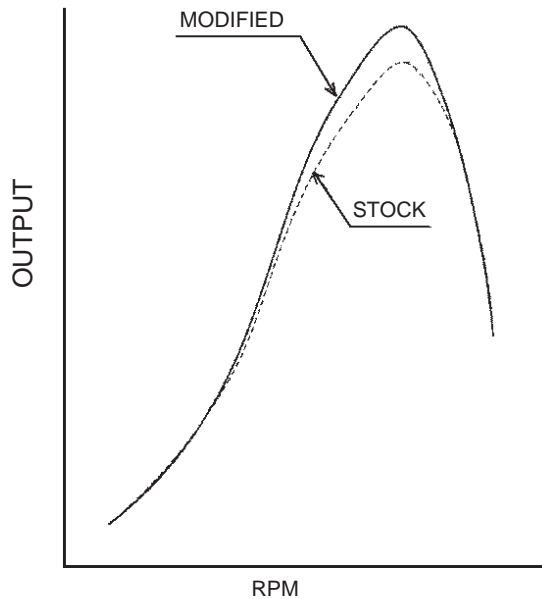


**RACE TUNING INFORMATION**

**Subject**

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



**Modification Procedures**

**Cylinder:**

The following modification increases midrange and high speed power while retaining low speed power.

- Grind and smooth the shaded areas of the exhaust, intake, and scavenging ports as shown.
- Polish the surfaces of the exhaust, intake, and scavenging passages, especially near the port into the cylinder with emery cloth to allow smoother gas flow.
- Smooth the area of the intake passage indicated in the thicker dotted ( - - ) line.
- Shorten the cylinder height by removing 0.2 mm from the top surface.
  - o *The resulting surface finish must be as smooth as the original to insure that the head gasket will not leak.*
  - o *The 0.2 mm cut of the cylinder top surface raises the compression ratio as shown in the table when the original 0.2 mm thick cylinder head gasket is installed.*

**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.**

Model	Compression Ratio	
	Stock	Modified
KX80-W1/2/3	9.4	10.0
KX100-C1/2/3	8.8	9.4

- Measure the levels of the ports and grind them to match the illustration.

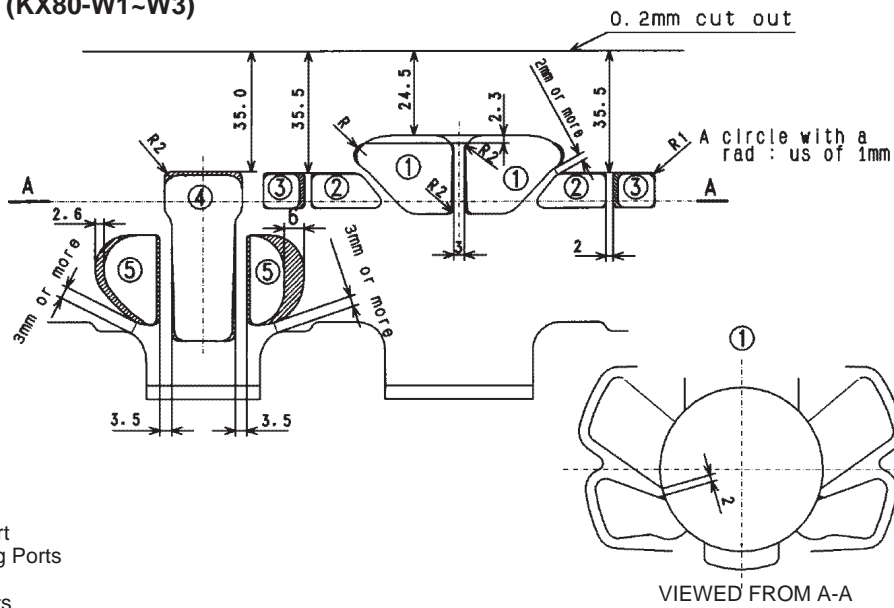
**CAUTION**

**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.**

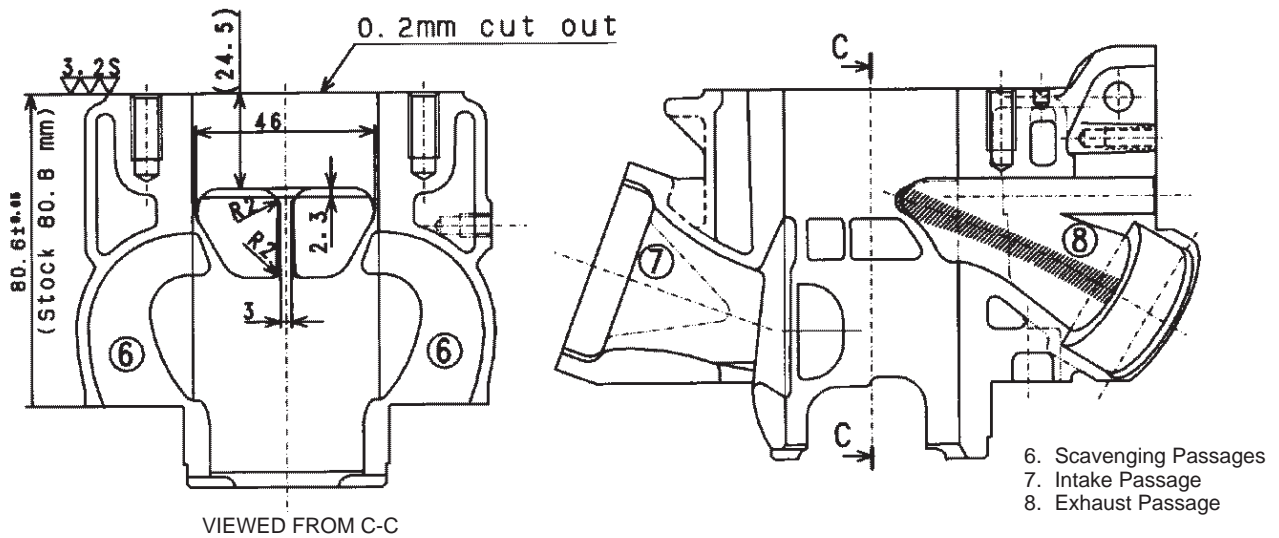
### Cylinder Ports (KX80-W1~W3)

All dimensions in mm

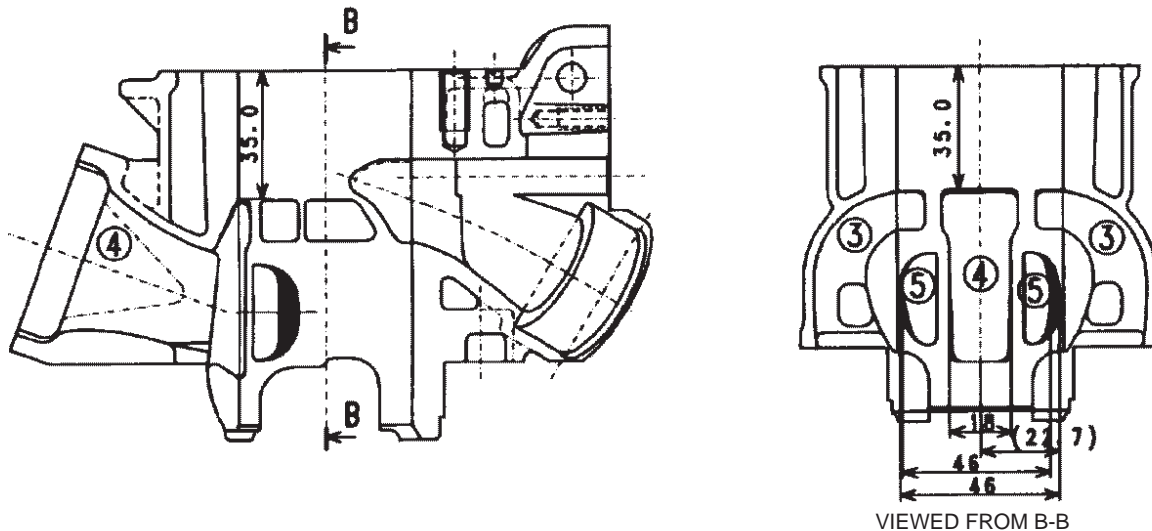


1. Exhaust Port
2. Scavenging Port
3. Sub-scavenging Ports
4. Intake Port
5. Sub-Intake Ports

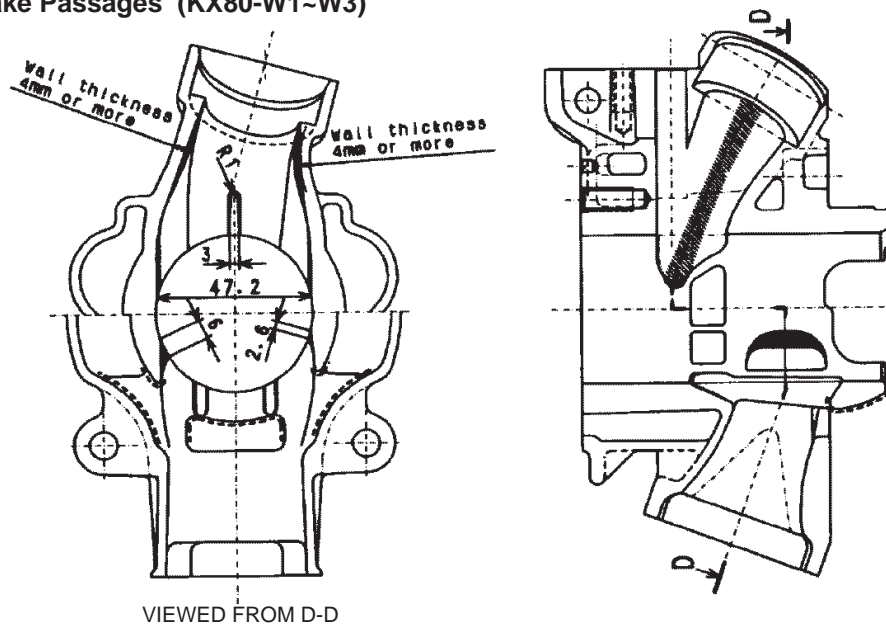
### Exhaust Port and Passages (KX80-W1~W3)



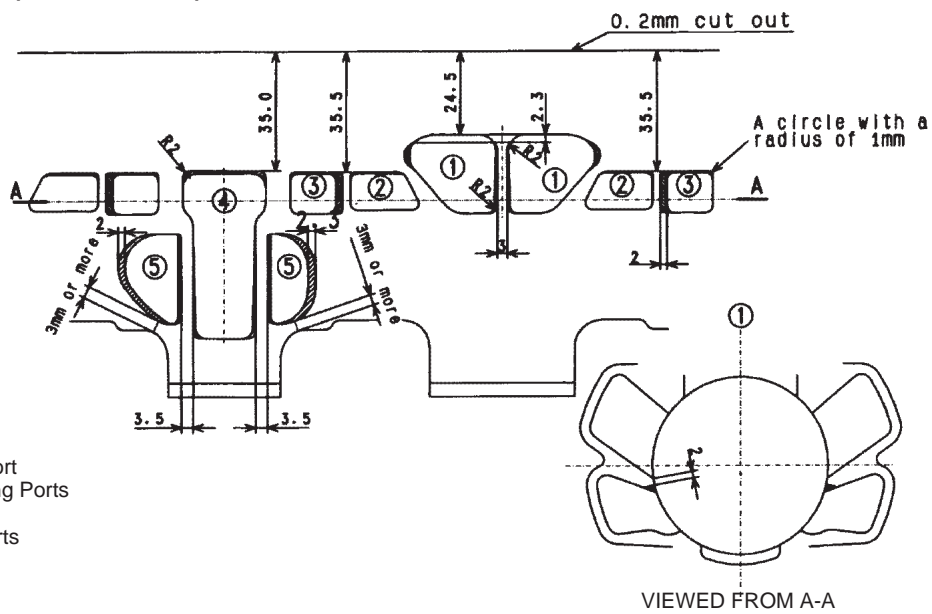
### Intake Ports (KX80-W1~W3)



Exhaust and Intake Passages (KX80-W1~W3)

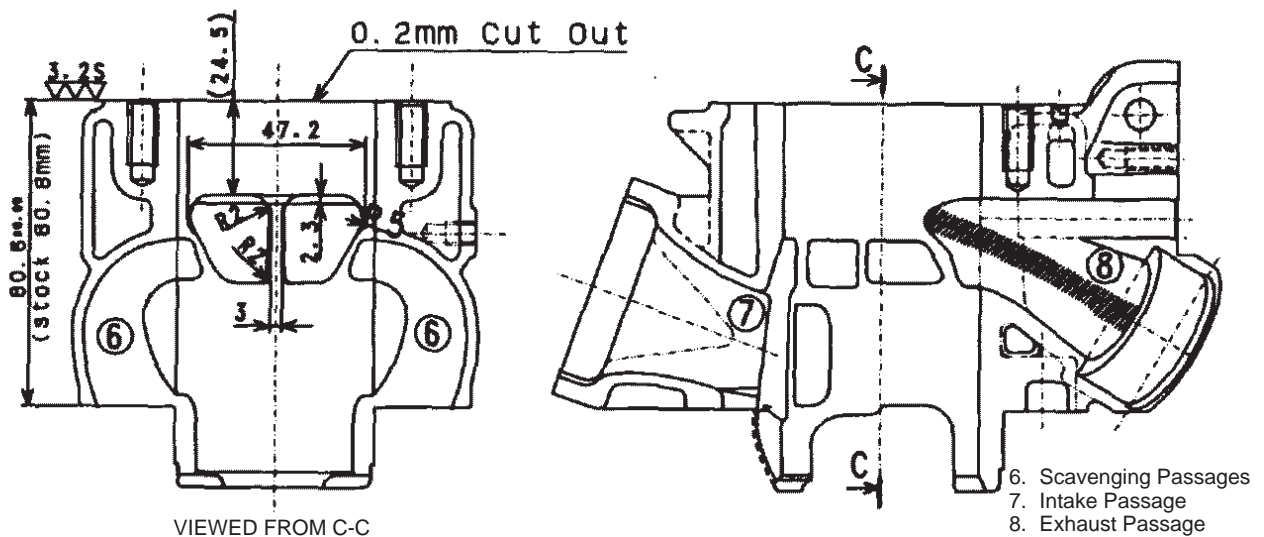


Cylinder Ports (KX100-C1~C3)



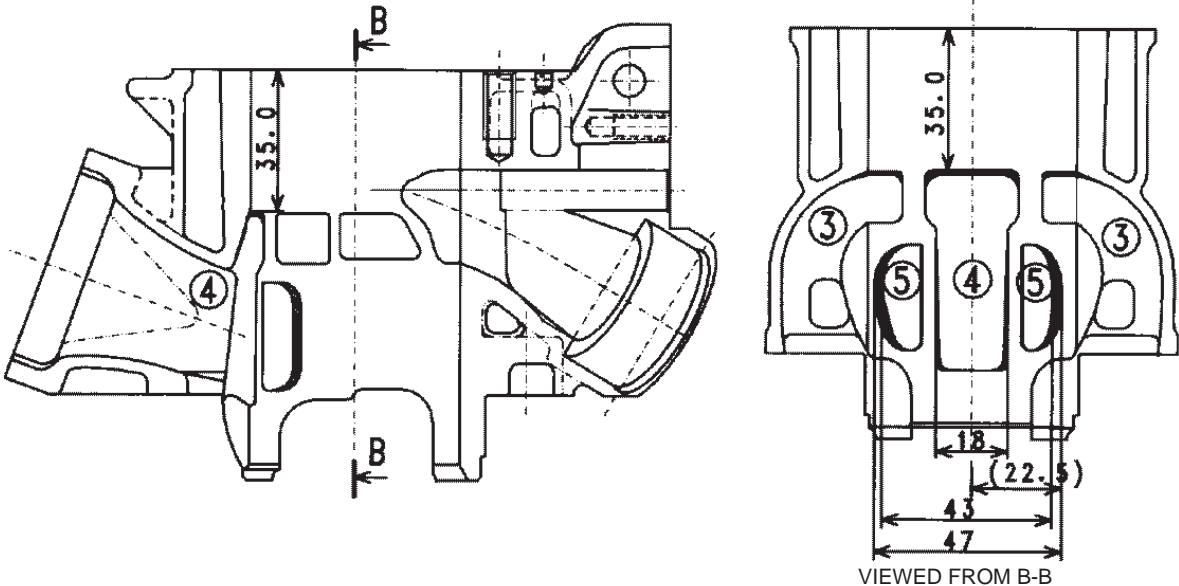
- 1. Exhaust Port
- 2. Scavenging Port
- 3. Sub-scavenging Ports
- 4. Intake Port
- 5. Sub-Intake Ports

Exhaust Port and Passages (KX100-C1~C3)

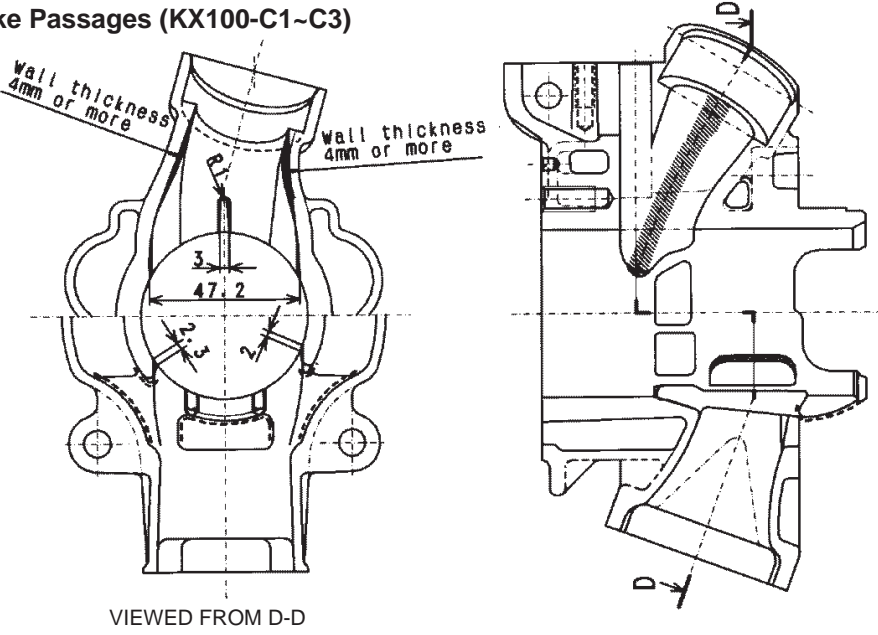


- 6. Scavenging Passages
- 7. Intake Passage
- 8. Exhaust Passage

**Intake Ports (KX100-C1~C3)**



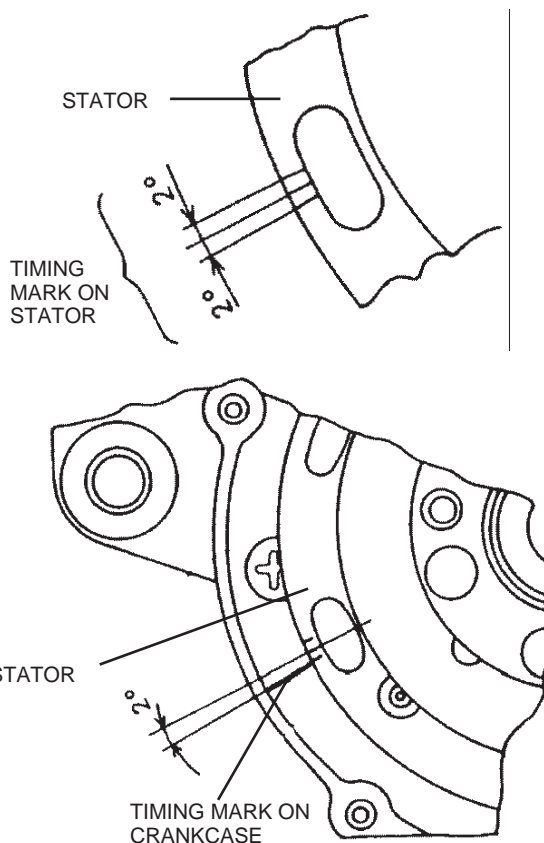
**Exhaust and Intake Passages (KX100-C1~C3)**



**Ignition Timing:**

<b>Stock</b>	BTDC 9° @ 12000 rpm
<b>Modified</b>	BTDC 11° @ 12000 rpm

- Modify the ignition timing by turning the stator 2 degrees clockwise (advance) as shown.
- *There are three timing marks on the stator in 2 degree interval; the stock machine uses the center of the marks. Shifting one mark changes the ignition timing by 2 degrees.*

**CAUTION**

Use a racing fuel with Research Octane Number (RON) 105 or higher, to help prevent abnormal combustion caused by the increased compression pressure from this modification.

**Optional Carburetor Jets**

The optional carburetor jets for the '98-'00 KX80-W1/2/3 and KX100-C1/2/3 are listed on the last page of this bulletin.

**Warranty Information**

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

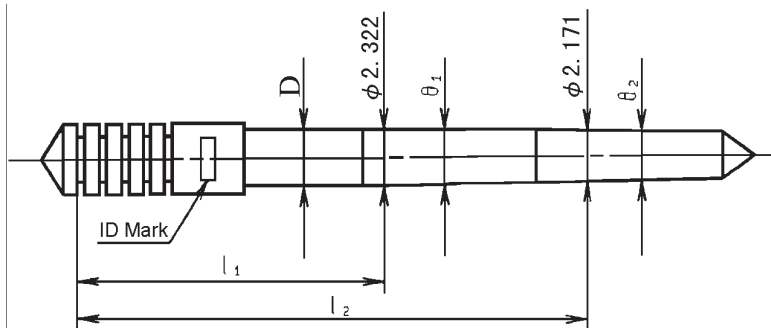
## Carburetor Setting and Optional Parts

'98-'00 KX80-W1-W3/KX100-C1-C3

### 1) Base Setting

Markets	Carb Body Type	MJ	SJ	JN	CA	AS	NJ					BPP	BP	PO	ID Mark
							AB								
							1	2	3	4	5				
ALL	PWK28	#138	#45	NAEC-3	#3.5	1¼	φ0.6×2	φ0.6×2	-	φ0.6×2	φ0.6×2	4.5	φ0.8	φ0.4	G616A

### 2) JN Optional Parts



P/No.	ID Mark	D	l <sub>1</sub>	l <sub>2</sub>	θ <sub>1</sub>	θ <sub>2</sub>	A/F Condition
16187-1144	NADA	φ 2.355	28.25	33.25	1°34'40"	2°45"	↑ Richer
↓ -1145	↓ B	φ 2.365	↓	↓	↓	↓	↑
↓ -1146	↓ C	φ 2.375	↓	↓	↓	↓	STD (Clip position 3rd)
↓ -1147	↓ D	φ 2.385	↓	↓	↓	↓	↓
↓ -1148	↓ E	φ 2.395	↓	↓	↓	↓	↓ Leaner
16187-1149	NAEA	φ 2.355	27.80	32.80			↑ Richer
↓ -1150	↓ B	φ 2.365	↓	↓	↓	↓	↑
↓ -1151	↓ C	φ 2.375	↓	↓	↓	↓	STD (Clip Position 3rd)
↓ -1152	↓ D	φ 2.385	↓	↓	↓	↓	↓
↓ -1153	↓ E	φ 2.395	↓	↓	↓	↓	↓ Leaner

\* NAE is richer than NAD (0.5 Clip Position)

### 3) MJ Optional Parts

P/No.	Number	Remark
92063-1336	#130	OP
↓ -1337	#132	OP
↓ -1338	#135	OP
↓ -1359	#138	STD
↓ -1360	#140	OP
↓ -1361	#142	OP
↓ -1362	#145	OP
↓ -1363	#148	OP

## 4) SJ Optional Parts

P/No.	Number	Remark
92064-1139	#38	OP
-1140	#40	OP
-1141	#42	OP
-1142	#45	STD
-1143	#48	OP
-1144	#50	OP
-1130	#52	OP

**NOTE :**

AB is the Air Bleed : the size is of the hole in mm. The position is countered from the upper to the lower.

BPP is the Bypass Pitch : the distance in mm from the center of the main nozzle to the center of the Bypass hole.

BP is the Bypass : the size of the hole in mm.

PO is the Pilot Outlet : The size of the hole into the carburetor throat in mm.