PERFORMANCE BULLETIN

U. S. SUZUKI TECHNICAL SERVICE

SUBJECT: X6 Motocross Kit

Affected Models: T20, TC250

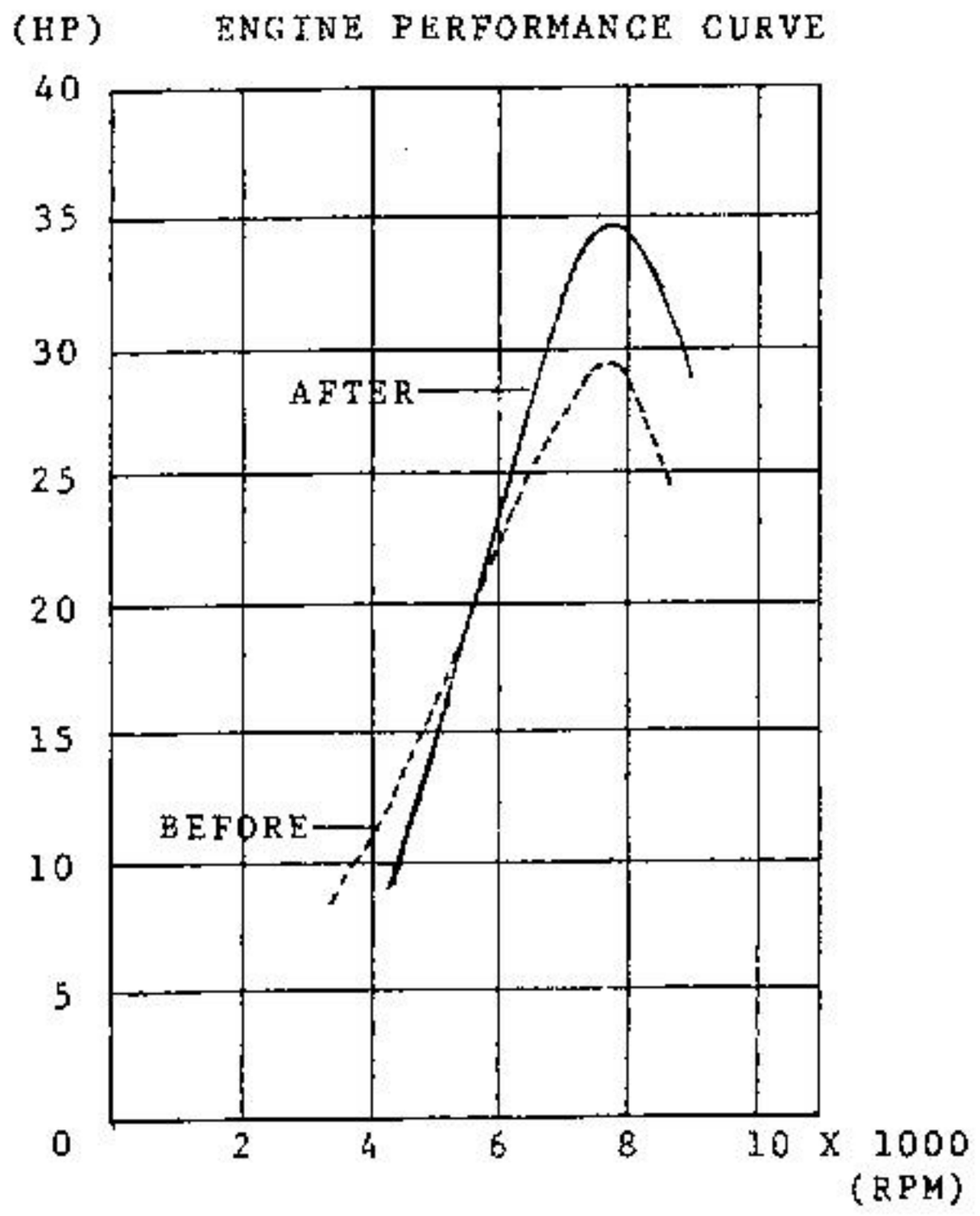
Effective Engine No.:

Reference:

Bulletin No. 3

Date August 1, 1969

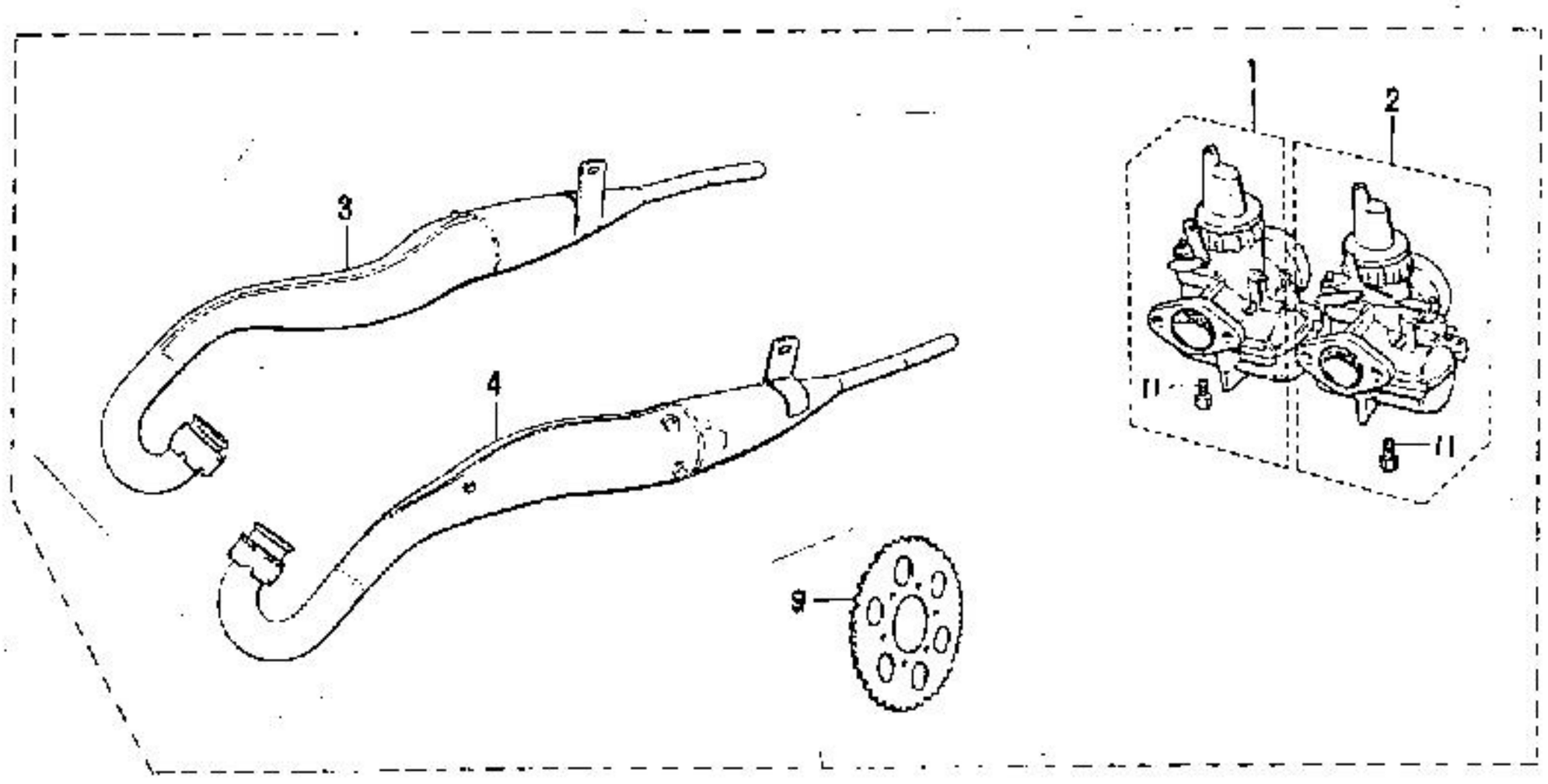
The T20 Motocross Kit is designed for the X6 and TC250. The kit increases standard X6 and TC250 output by 5 HP for T.T. and Scramble purposes, when properly installed. This kit, however, contains essential component parts only. Modification of standard parts is also required for a competitive motorcycle.



U. S. SUZUKI motor corporation

SUZUKI TC250 MOTOCROSS KIT

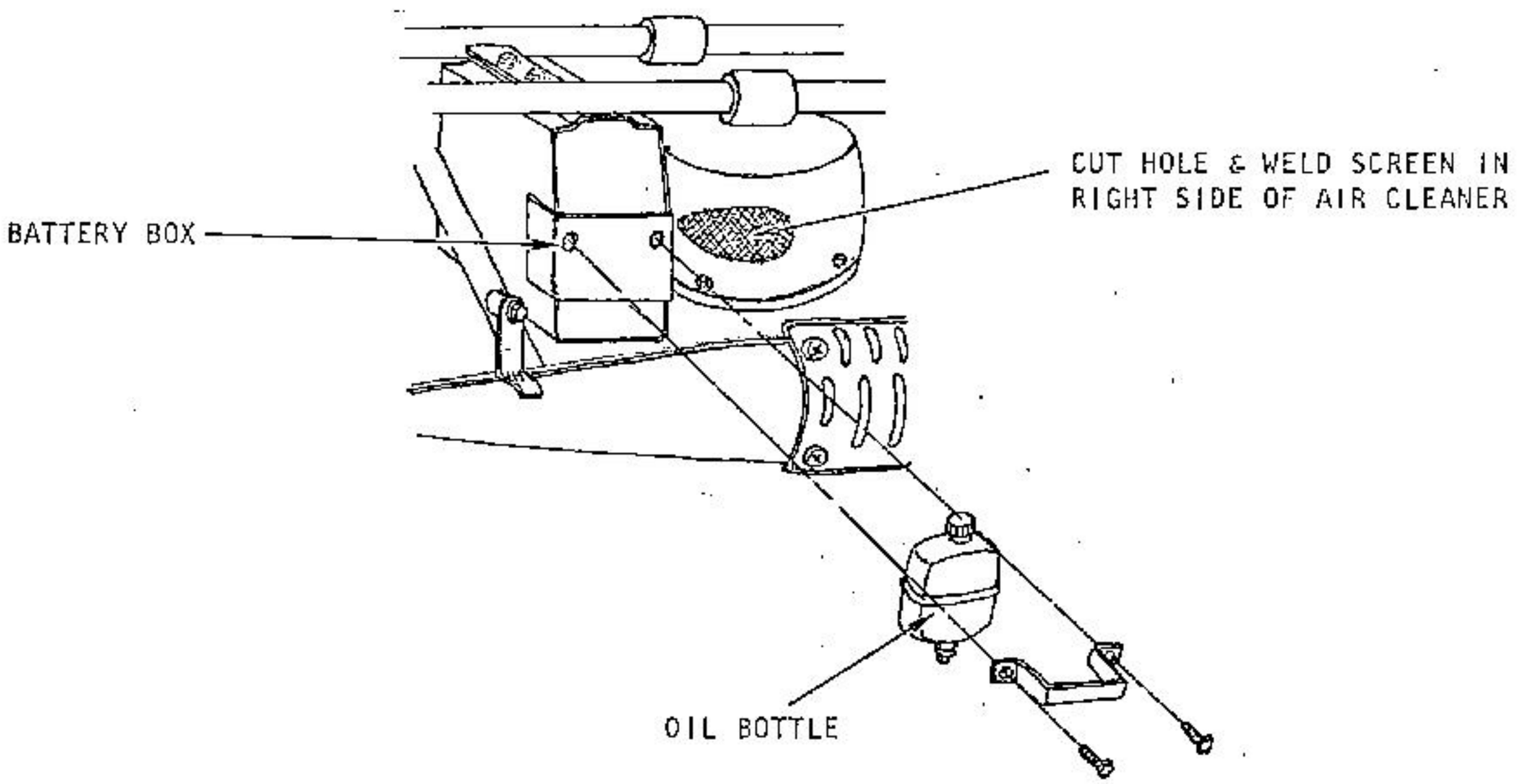
REF.	PART NUMBER	DESCRIPTION	QTY.	REMARKS	RETAIL
	10000-17300	Motocross Kit TC250	1	Includes Ref. #1 to 4,9	$140.00
1	13201-17310	Right Carburetor Assy.	1	Main Jet #130	
2	13202-17310	Left Carburetor Assy.	1	Main Jet #130	
3	14301-17300	Right Expansion Chmbr.	1		
4	14302-17300	Left Expansion Chmbr.	1		
5	27511-11700	Engine Sprocket 13T	1	Standard T20	2.30
6	44610-17010	Oil Tank Assembly	1	Standard T10	.57
7	44821-17000	Oil Tank Holder	1	Standard T10	.15
8	45100-07620	Seat Assembly	1	Standard B105P	23.19
9	64511-17680	Rear Sprocket 56T	1	Included in Kit	9.61
10	09482-00003	Spark Plug B-77HC	1	Standard	1.10
	09482-00015	Spark Plug B-8HN	1	Option	2.75
	09482-00016	Spark Plug B-9H	1	Option	1.10
	09482-00018	Spark Plug B-9HN	1	Option	2.75
11	09491-26003	Main Jet #130	1	Standard	.61
	09491-24002	Main Jet #120	1	Option	.61
	09491-28002	Main Jet #140	1	Option	.65



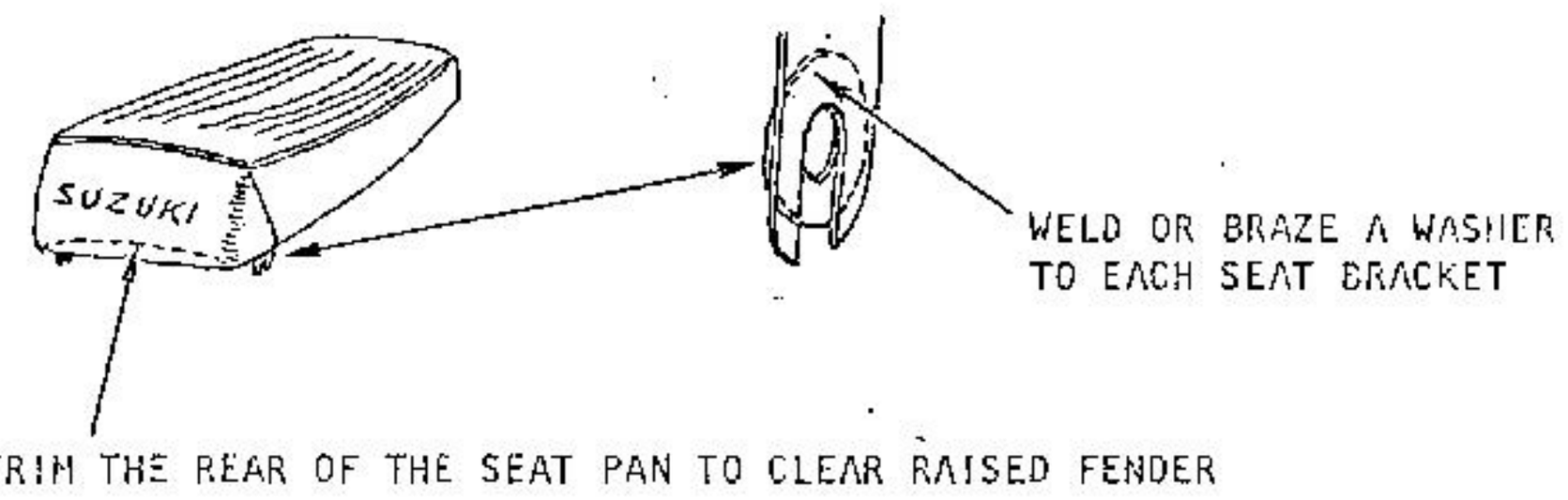
3. FRAME AND ENGINE MODIFICATIONS FOR RELIABILITY.

The following is an additional recommendation for extra performance.

A. Oil tank - Take off the regular oil tank and use the kit oil bottle instead as illustrated below. Install on right side of the battery box.

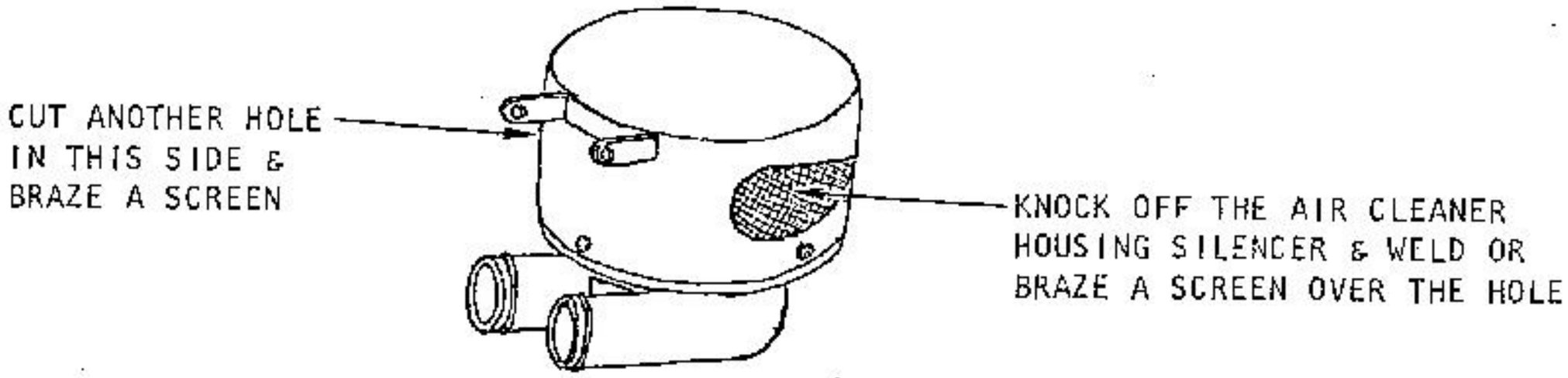


B. Seat - The recommended seat is standard B105. Remove the sponge rubber inside of the seat and make the most comfortable cushion for you. Cut off the rear part of bottom panel of seat in order to avoid hitting the rear fender. Weld $\frac{1}{4}$ - $\frac{1}{2}$ inch diameter washer in the rear for reinforcement. See illustration below:



D. Carburetor - The carburetors in the kit are VM26 instead of the standard VM24. This carburetor is designed specifically for racing purposes. Standard built-in main jets are #130.

E. Air Cleaner - Take off the air cleaner and weld a wire screen on the cover. You must cut a similar hole on the other side of the air cleaner and install a screen. Use Filtron Element. This is available from Webco Inc., 218 Main Street, Venice, California. Parts number is Webco 1896. Price is $5.50.



AIR CLEANER

F. Sprockets - Rear sprocket 56 N.T. is included in the kit. An engine sprocket 13 N.T. is recommended for best gearing.

G. Lubrication - Remove the oil pump cable and lock the oil pump control lever in the idle position. This supplies oil to the out side main bearings.

H. Fuel - Use premixed 20:1 gas: oil fuel.

2. FENDERS, TIRES, ETC.

A. You can chop off the front fender and attach it to the underside of fork stem.

B. You can drill rear fender attachement holes for a different position in order to get more clearance between rear tire and fender.

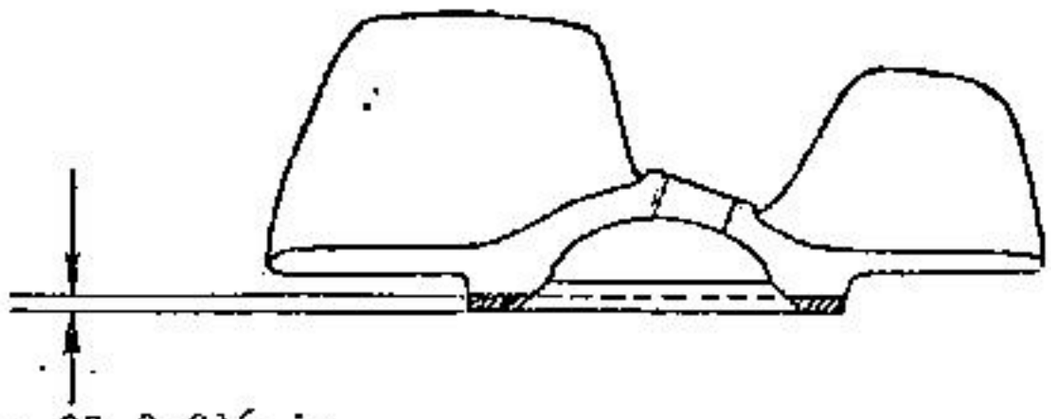
C. Recommended tire sizes are:

Front: 2.75 - 19
Rear : 4.00 - 18 Motocross tire

Rim locks must be used: one in front and two in the rear tire.

1. MODIFICATION OF ENGINE.

A. Cylinder Head - Machine the base of the cylinder head by 0.4mm (.016 in). This increases the compression ratio to 7.8:1. See illustrations below. Do not machine more than this for more compression--this will cause excess heat and unnecessary damage.

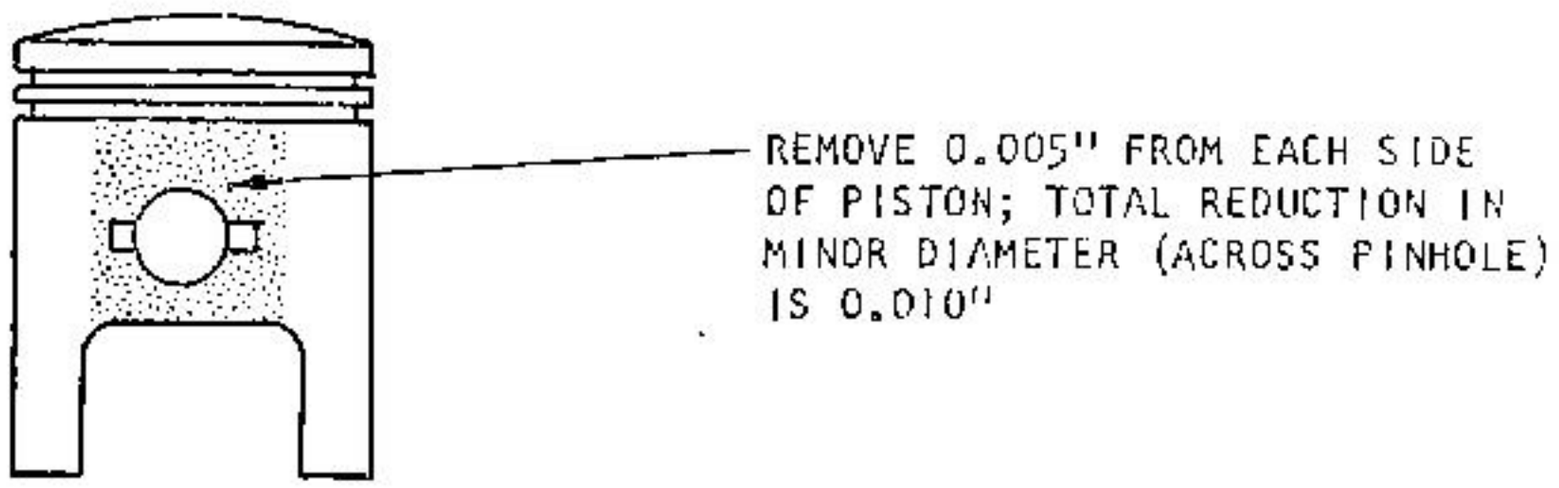


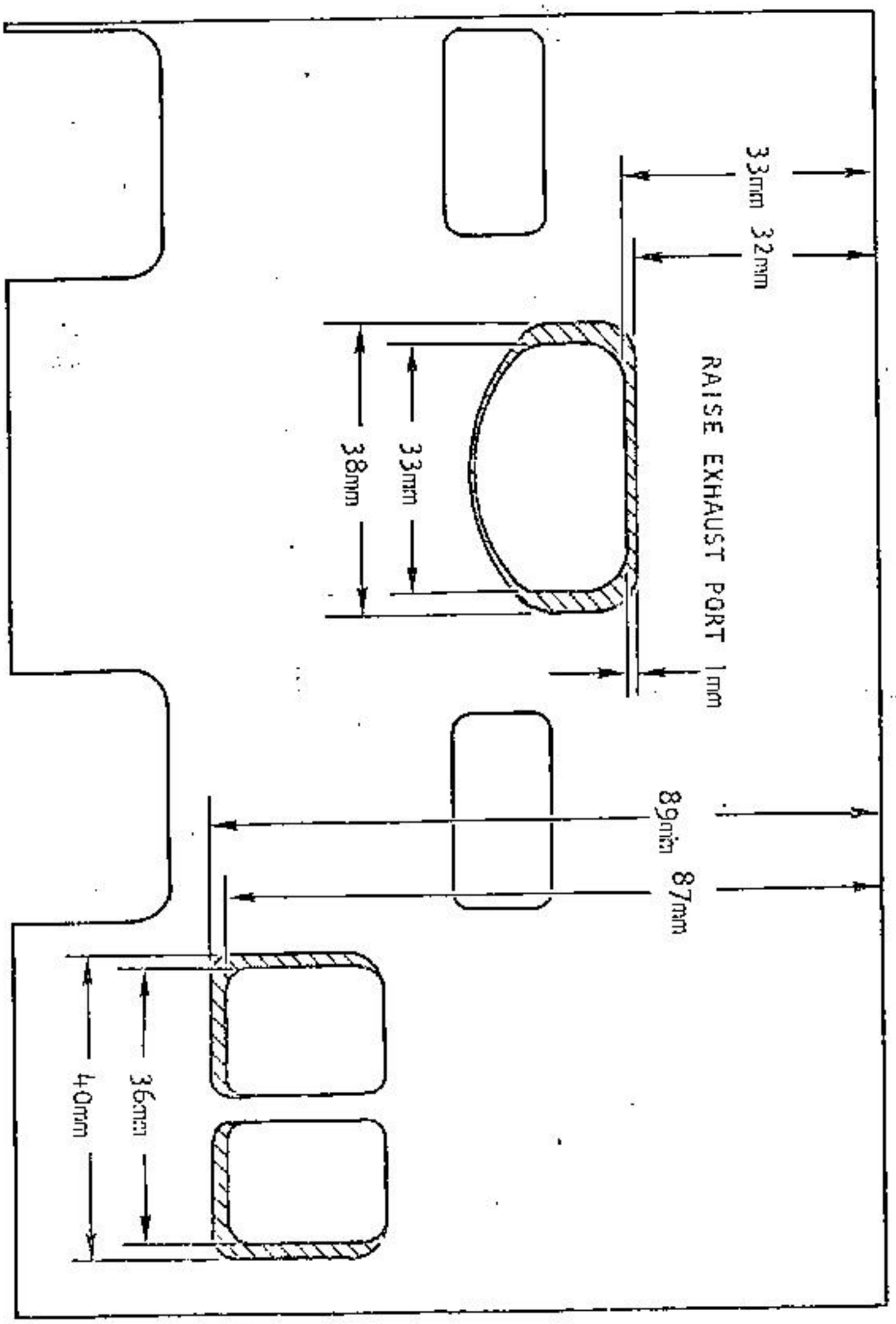
0.4mm OR 0.016 in.

B. Cylinder - Modification of exhaust and intake ports is necessary for competition port timing. Also, carburetor port should be enlarged by 2mm in diameter for VM26 carburetor to be used. Polishing and cleaning of ports promotes better performance. Be sure to chamfer port edges after modification.

1. Widen intake port by 4mm (0.16") total.
2. Lower bottom edge of intake port by 2mm (0.08").
3. Raise top edge of exhaust port by 2mm (0.08").
4. Enlarge exhaust port total width by 5mm (0.20"). Taper bottom edge of exhaust port to match new width.
5. Match intake port to kit carburetor size: 24mm to 26mm inside diameter.

C. Piston - In order to minimize the possibility of piston seizure, piston clearance is modified by sanding the sides of the piston skirt in the area of the piston pin hole. It is recommended to remove .010 inch from the piston diameter across the pin hole. This works out to .005 inch on each side. Front-to-back piston clearance is same as standard X6.




33mm
32mm
RAISE EXHAUST PORT 1mm
38mm
33mm
89mm
87mm
40mm
36mm