

Matchless 250

Top & Seat Tube $1\frac{1}{2} \times 14g$

Front Down Tube $1\frac{1}{4} \times 14g$

Head Lug

Pressed steel cradle

James 250

Top Tube 1" dia

Down & Cradle Tube $1\frac{1}{4}$ dia

Strong pressed steel seat "tube"

Triumph 350

$1\frac{3}{4}$ dia \times 12g Top & seat tube

" " Down Tube

Head lug with tubes entering parallel.

Twin cradle tubes

Cosser Communications Co Ltd

Mid Rep.

MR B. MORRIS

143 HANGING LANE

BIRMINGHAM

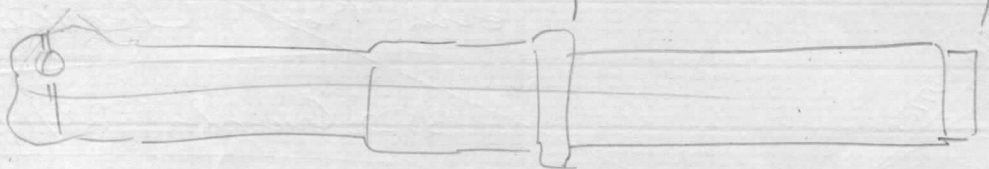
PRIORITY 4899

250cc models

(Huck B Qual Main Tubes)

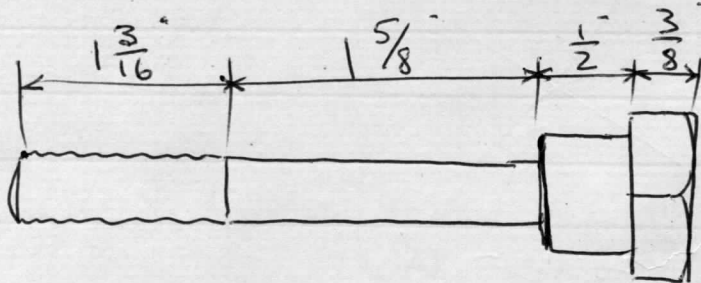
$13\frac{1}{4}$ extended

$8\frac{1}{2}$ compressed



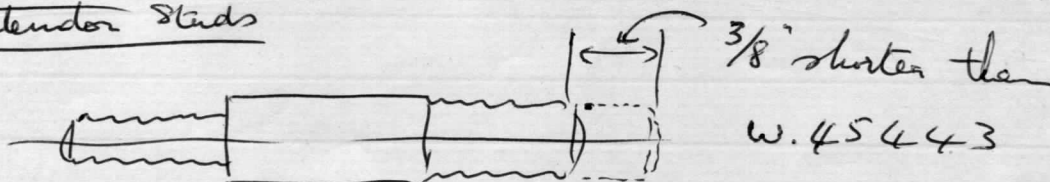
November 7th 1962

Breather Stud on Police Interceptors



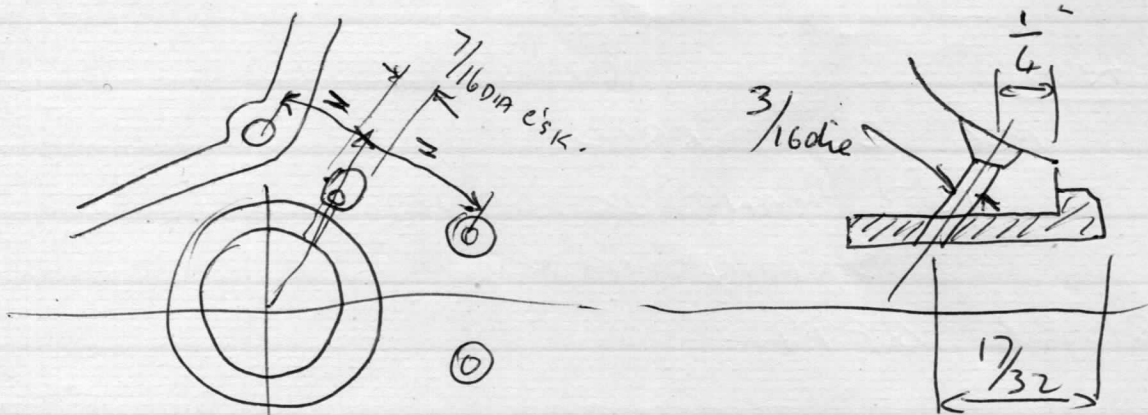
Other dimensions as W.45369/A (10011 in)

3 off Attender Studs

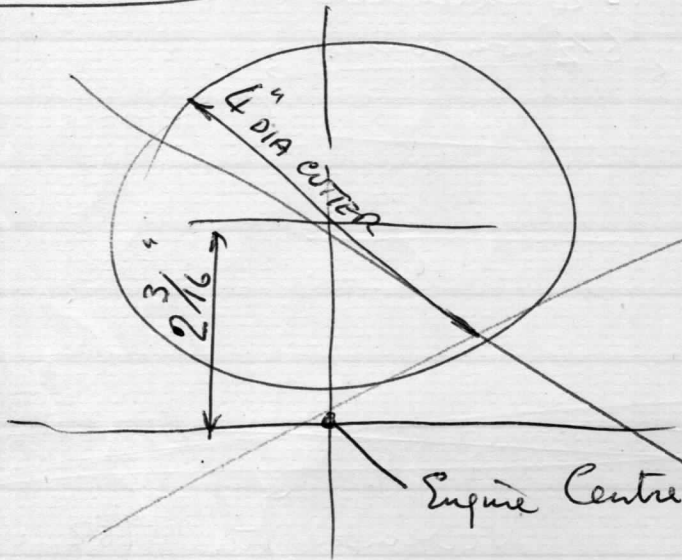


350 Crusader . 1st Prod Model

22/11/62

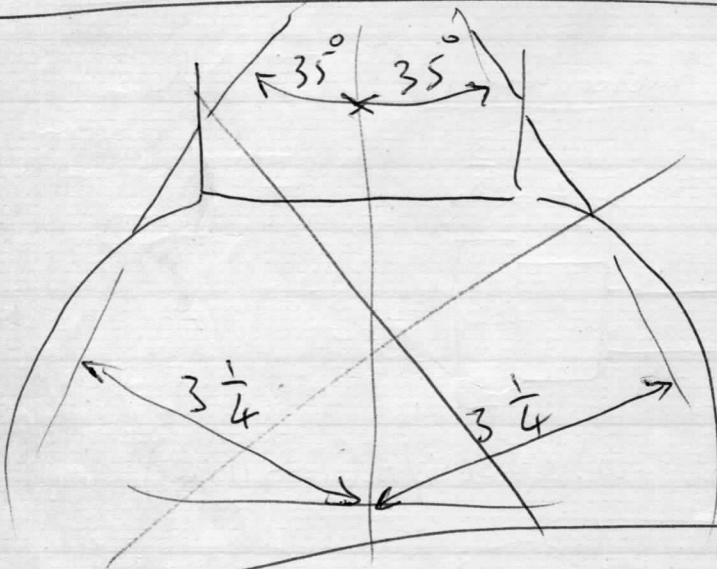


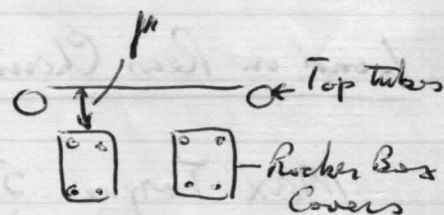
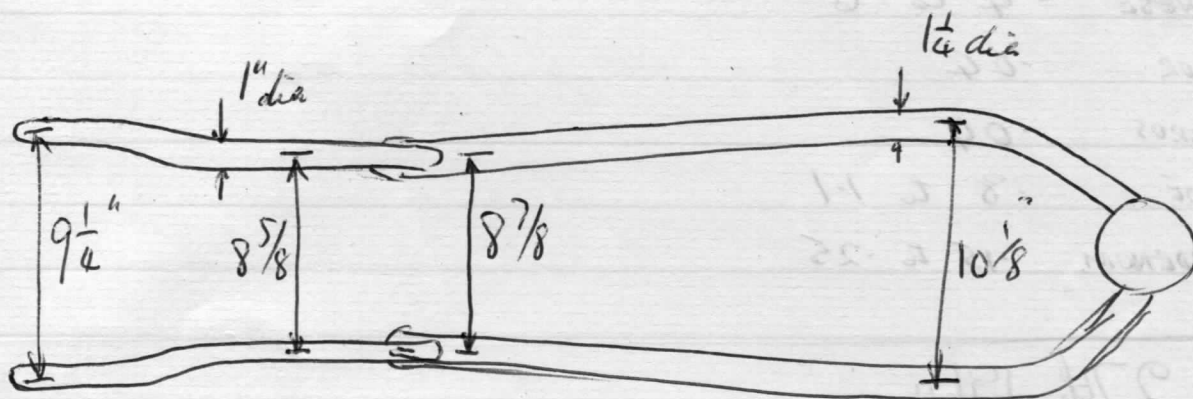
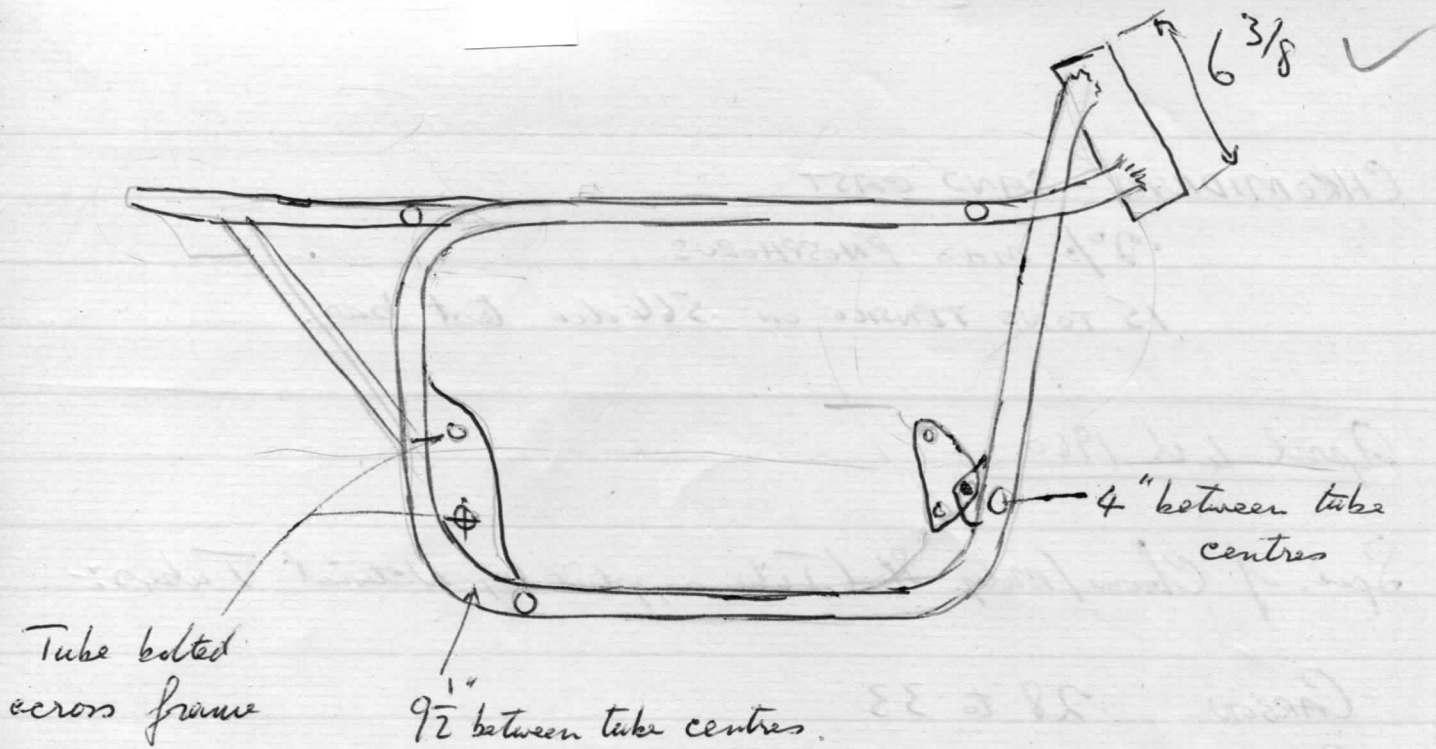
Tuning Sete Crankcase Main Bearing



Corn Root Clearance

350 Crusader 28/1/62





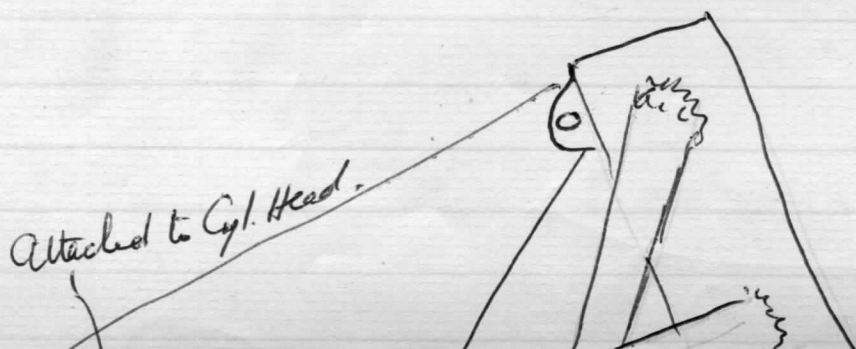
Engine centre to ground level 11 ¹/₄"

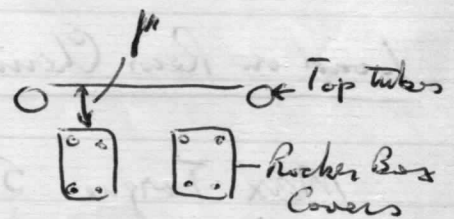
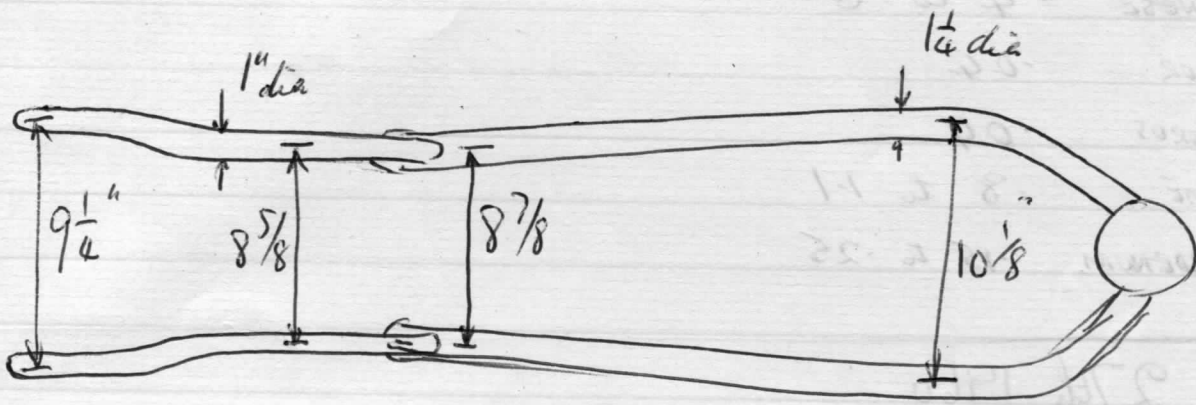
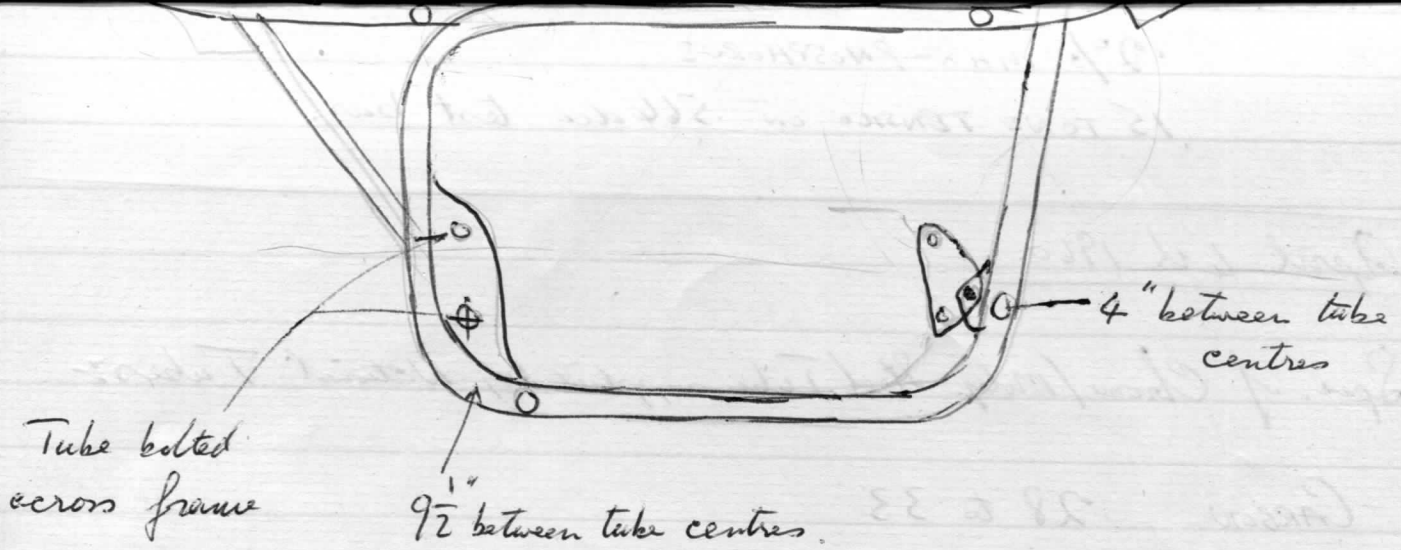
Rear Tyre 3.50 x 19 Universal on WM 2 Rim

Pivot for Swinging arm to ground level 12 ⁷/₈"

Engine centre to Swinging Arm Pivot Centre 17 ¹/₈"

Length of Rear Spring boxes, extended, 12 ⁷/₈"





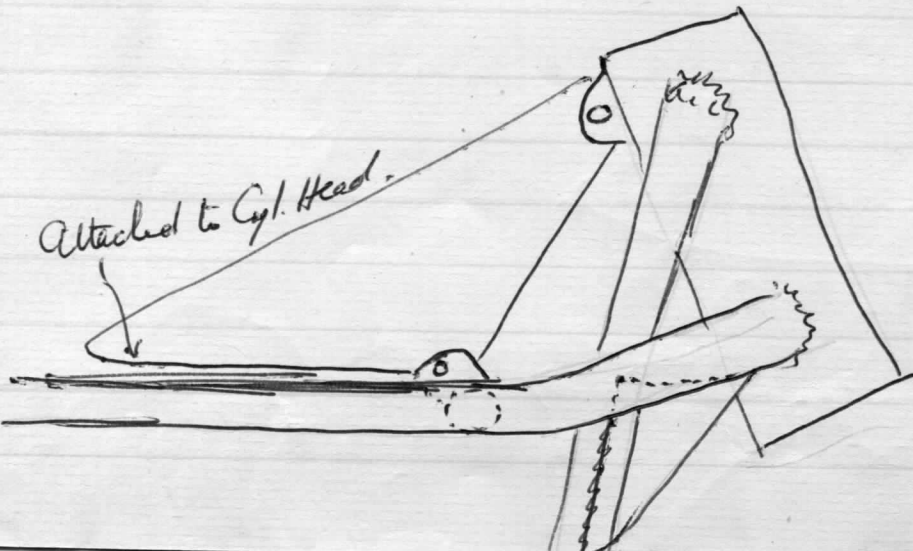
Engine centre to ground level $11 \frac{1}{4}$ "

Rear Tyre 3.50 x 19 Universal on WM 2 Rim

Pivot for Swinging arm to ground level $12 \frac{7}{8}$ "

Engine centre to Swinging Arm Pivot Centre $17 \frac{1}{8}$ "

Length of Rear Spring boxes, extended, $12 \frac{7}{8}$ "



CHROMIUM - SAND CAST

2% MAX PHOSPHORUS.

15 TONS TENSILE ON .564 dia test bar.

April 4th 1960

Spec. of Chrome/Moly. Steel Tube supplied by National Tubes -

CARBON .28 to .33
SILICON .2 to .35
MANGANESE .4 to .6
SULPHUR .04
PHOSPHORUS .04
CHROME .8 to 1.1
MOLYBDENUM .15 to .25

April 27th 1960

Load on Rear Chain (Bottom Gear) - Constellation

Max Torque 550 in lbs.

Primary sprocket ratio 29T to 56T

Bottom gear ratio 2.78

C/Shaft Sprocket 20T - $\frac{5}{8}$ Pitch (3.995" Ptd. Dia)

$$550 \times \frac{56}{29} \times \frac{2.78}{2^{\text{(Radius of Sprocket)}}} = 1,476 \text{ lbs}$$

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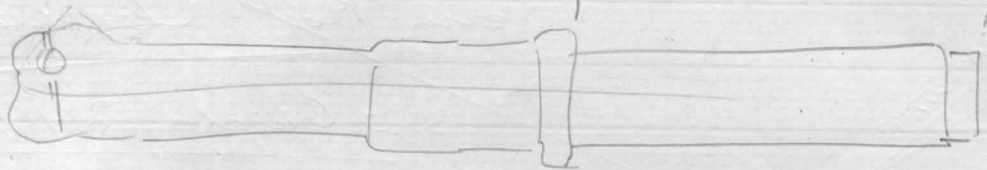
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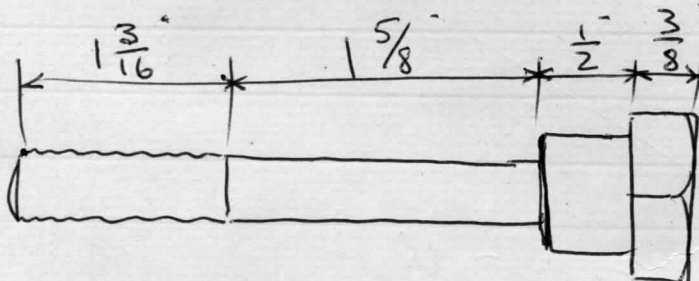
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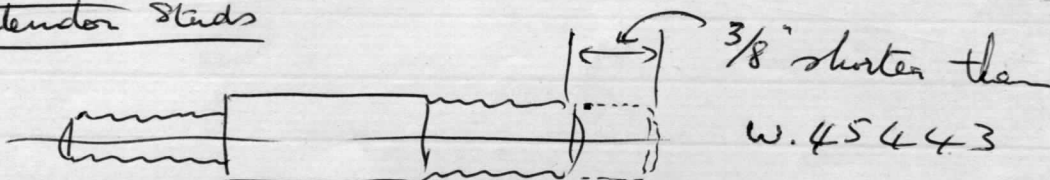
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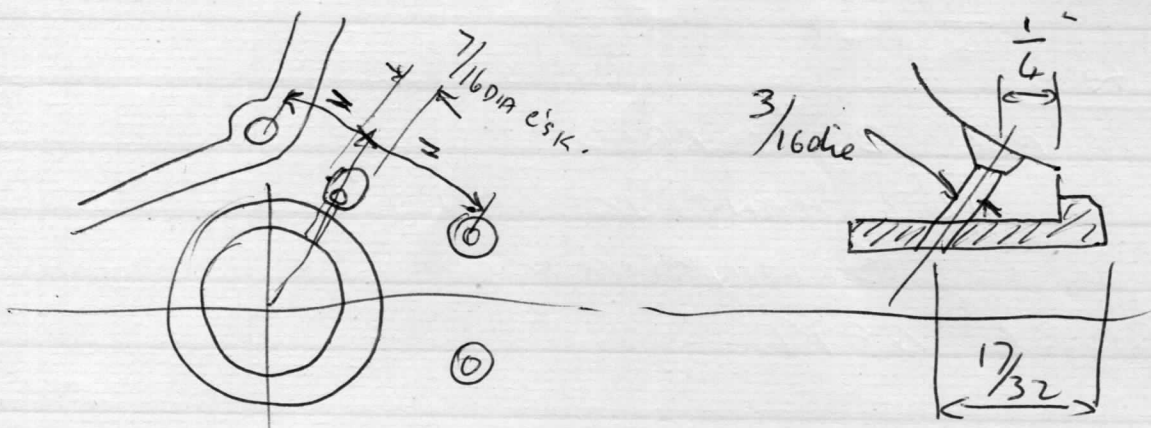
3.0 Attenuator Studs



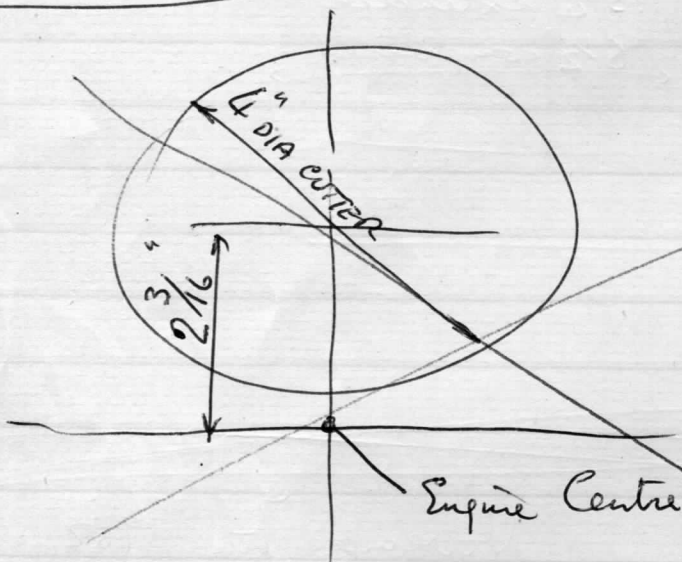
350 Crusader - 1st Prod Model

22/11/62

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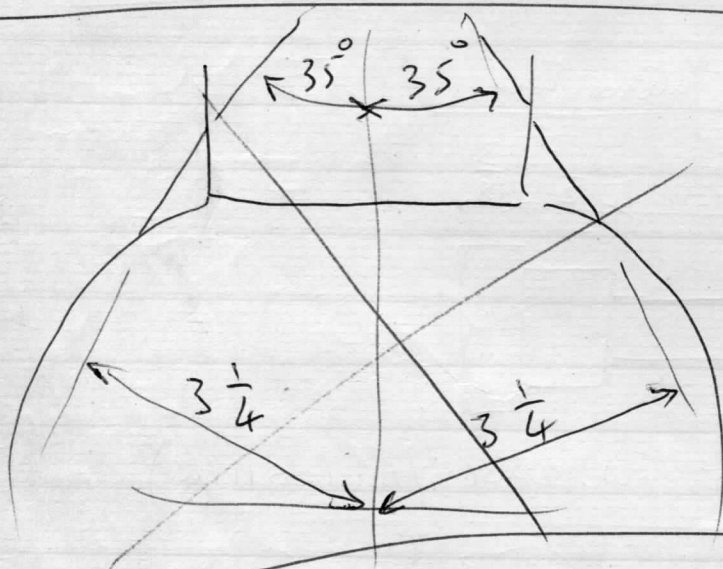


Tuning Sete Crankcase Main Bearing



Corn Rod Clearance

350 Crusader 28/11/62



Coventry Climax 8 Cylinder

3-12-62

2.48" bore x 2.36" stroke = 1.5 litre

Gas Velocity in main tract of inlet ports .450650 ft/sec.
1/8" dia ex. pipes.

Max Piston acceleration 100,000 ft/sec/sec.

Con Rod Crs = 4.2"

.625" dia g/pin.

1 5/8" dia x 3/4" wide Big-end bearings. Cap 1/16" a side narrower than rod, side location on rod only.

Valve included angle = 60°

Valve Head dia = 1.3" IN, 1.24" EX.

Cast Iron camshaft with chilled cams.

In opens 45° before T.D.C, closes 65° after B.D.C.

Ex opens 65° " B.D.C, closes 45° " T.D.C.

Valve Lift = .350"

350 Crusader

21-12-62

Machined from

D/Side Bush — Compo SN 518 x 1" long.

Assemble with 1.8132" dia mandrel.

Bore before Assembly 1.8162"
1.8152"

Ø as ~~the Bronze Bush~~ 2.0655"
2.0650"

Compo Bush 3/9.7d each per 100.

2 1/4" dia Bronze bush + 3 1/4" width = 1.1221" thick