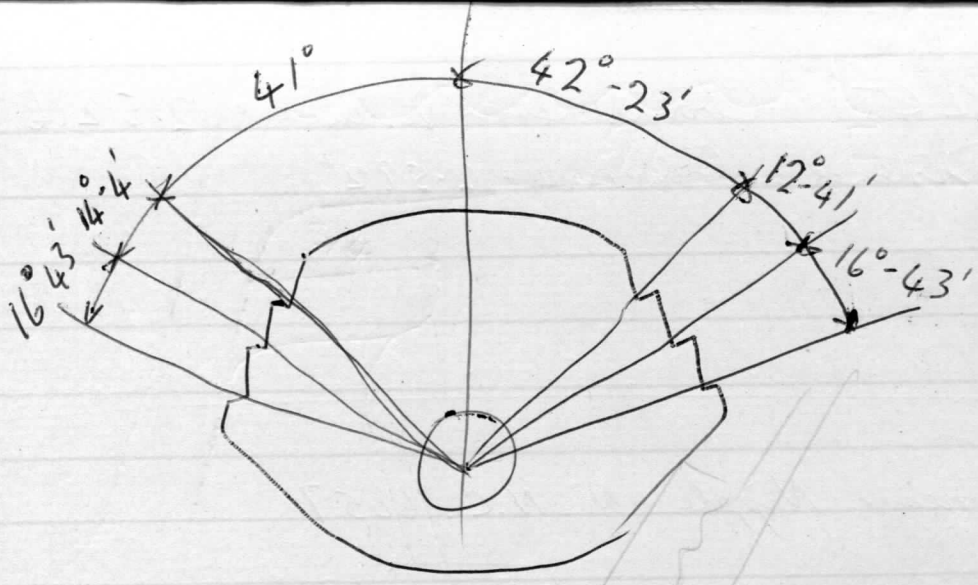
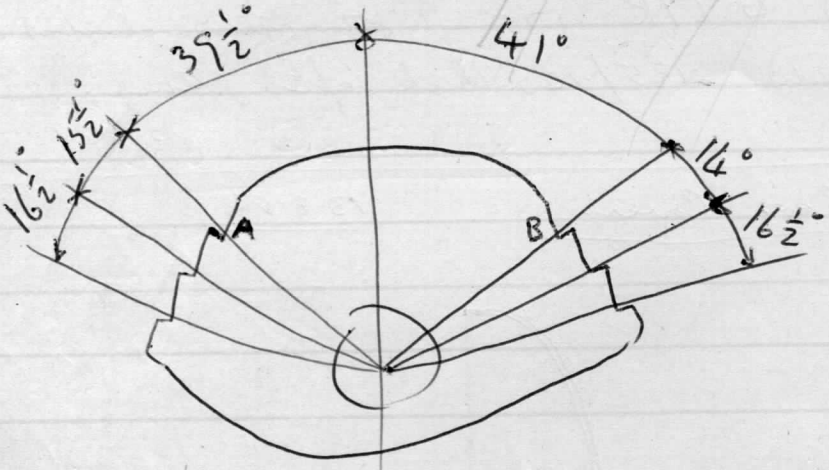
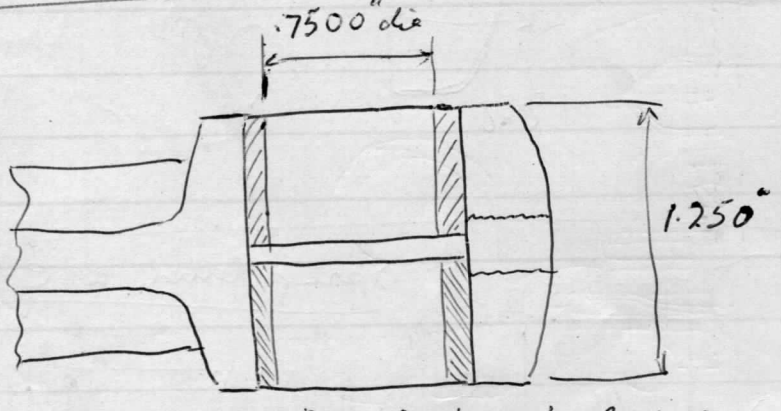


Redesigned C-6 Foot Change Ratchet 30-8-56
Dimensionally correct with original length pawls.



Ratchet used with pawls shortened by .020".
.020" (1°25') added to teeth "A" & "B" because of shortened pawls to ensure Top & Bottom gear engagement



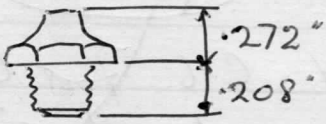
Armstrong Leading-link Front Fork Link Pivot Eye 4/12/56

3/8" pitch chain for camshaft drive - "C-6" 19-4-56

12 T to 24 T Correct Centre Distance = 2.5216"
Centre Distance on Crankcase = 2.582"

Tecalemit Grease Nipple N° N.C. 6057

¼ BSF x .340" A/F



Klinger insert (clutch) G.67K .198" before fitting.
" Ring (Albion Clutch) .135/.140" thick after fitting. } thickness

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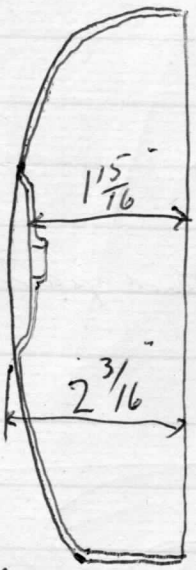
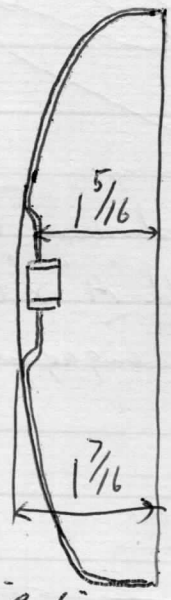
Modified Toolbox Covers 13-8-56

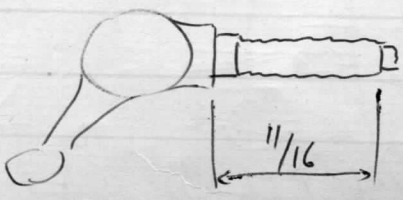


Meteor & G-28 J-S.

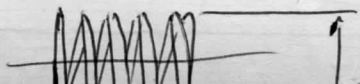


C-6

Done increased on drawing



Spring fitted to C-6 foot change



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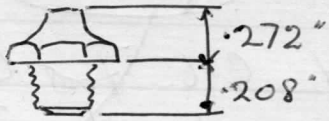
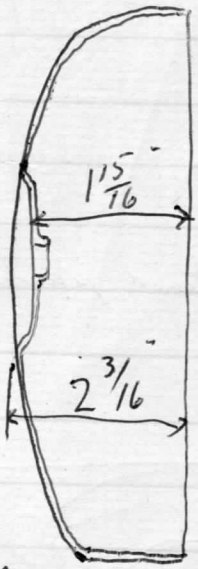
Tecalemit Grease Nipple N° N.C. 6057

¼ BSF x .340" A/F

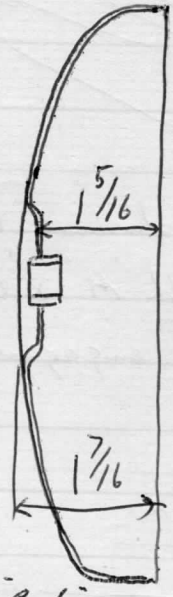


Klinger insert (clutch) G.67K .198" before fitting
" Ring (Albion Clutch) .135/.140" thick after fitting. } .175" a/c fitting (Albion clutches)

Modified Toolbox Covers 13-8-56

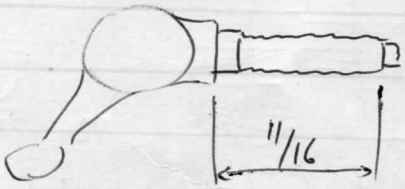


Meteor & G.28 J.S.



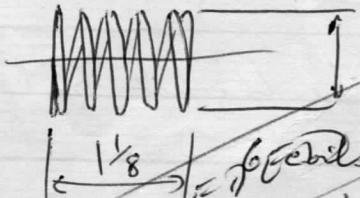
E-6

Done incorrect on drawing



W. 41860 S28 J S

Spring fitted to E-6 Dust change



SUPERSEDED 16 coils, point to point. 16½ gauge wire

10-6-55. 248 cc OHV MODEL C-6 (MWP 4)

Weight of machine unloaded = ~~341 lbs.~~ 312 lbs ✓

Load on Front Wheel without rider = 158 lbs.

" " " " with rider weighing 142 lbs = 196 lbs.

Load on Rear wheel without rider = 180 lbs.

Distance between wheel centre and bottom of head-lamp casing, unloaded = 19 3/4

" " " " " " " " " " " with rider = 19 1/4

Distance between bottom of bottom bearing of steering stem and ground,

unloaded = 27 1/2"

" " " " " " " with rider = 27"

19-3-56 Model "C-6"

3/16" dia hole from chaincase to crankcase 2" from vertical & 2 1/4" from horizontal ℄.

✓ Drain hole in Cam housing cover. 1/2" dia hole, 3/8 up from Camshaft & 13/16" out from Camshaft.

✓ Drain hole from Cam housing to crankcase deleted?

✓ Filler Hole in Chaincase cover deleted?

✓ Move oil release valve from crankshaft to top of crankcase

✓ Do not fit N.S. Engine mainshaft oil seal. (sleeve not to be gro

✓ 1/8 dia hole from top of oil tank to top of chaincase

✓ No vent hole in Oil tank filler cap.

Alter Engine arrangement..

~~Spares alterations~~

Bottom " .925"

Spares list Alterations

Oil Cleaner Cap 42281 replaces ~~39969~~

" " Nut ~~36908~~ } added

" " " Washer ~~37129~~ }

24-4-56 C-6 alterations

Alter Engine Arrangement.

Alter idler hub in Primary Chaincase.

Sted Clipper Engine Revs/mile = 5,095

Crusader with 49T Rear Wheel Sprocket = 4,952 Engine revs/mile

" " 50T " " " = 5,054 " " "

" " 51T " " " = 5,155 " " "

" " 49T " " & 17T C/shaft sprocket

= 5,244 Engine Revs/mile.

Spares list Alterations C-C

~~Valve Spring Outer 39660~~

~~Con Rod Bolt Washer 42663~~

~~Camshaft (Complete) 3~~

~~Camshaft only 38695 (was 39139)~~

~~Tappet Cam follower 38697~~

~~Pushrod " " 38696~~

Primary Chaincase, a/c to first 250 sets, 42644

Chaincase Insp Cover " " " 40640 (was 35762)

" " Washer " " " 40641 (was 35863)

Wiper Insert G-67K on Clutch plates.

~~Casa~~

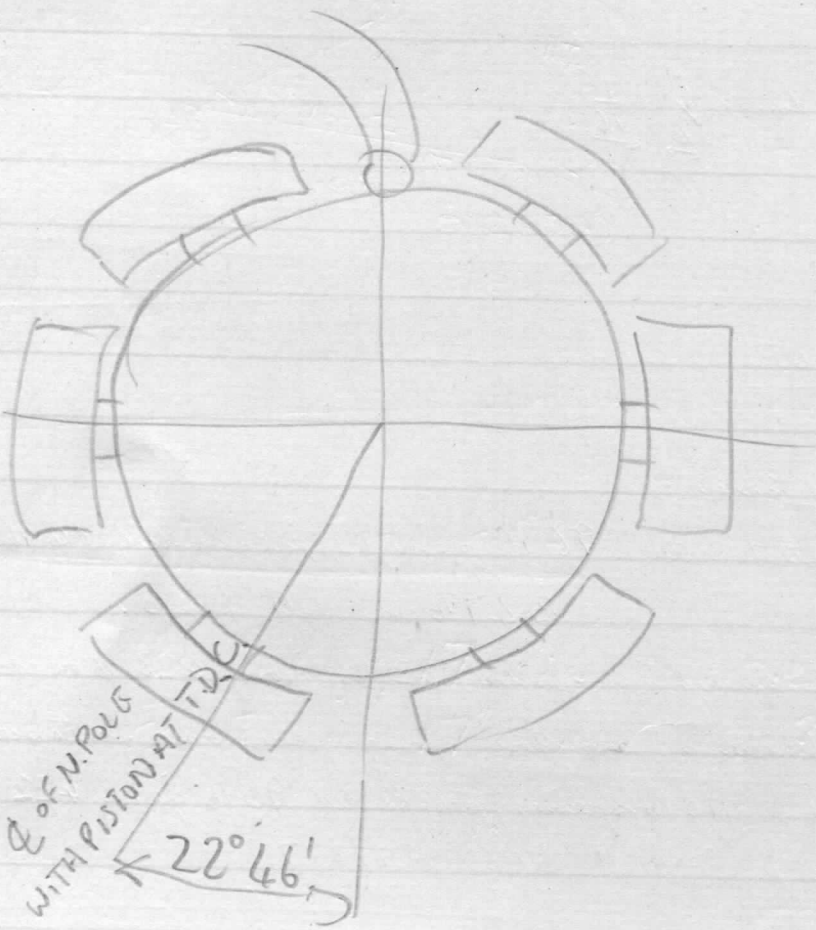
~~Primary Chain Case Back Cover Gasket 42503 added~~.

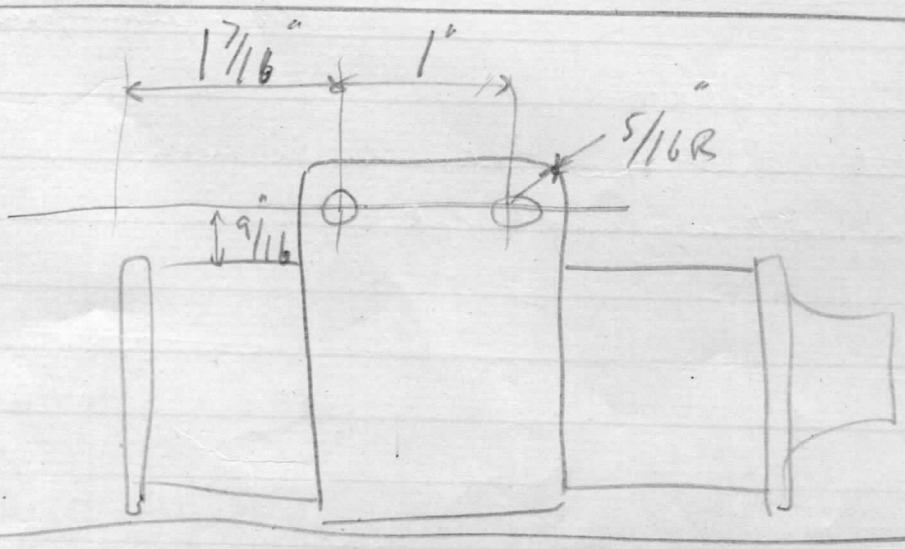
Camshaft Thrust Washer W. 42506

Assembly of 1st Prototype 248cc Engine. Nov 7th 1953

C'shaft tight in N'side Ball-race. Shaft - 1·3783 / 1·3777 } ·0008" interference
Bearing = 1·3780 / 1·3775 } ·0003" clearance

Oil leaking from main bearings, mill slots in bushes.
Oil pipe connections = c'bore for Allen Screws.

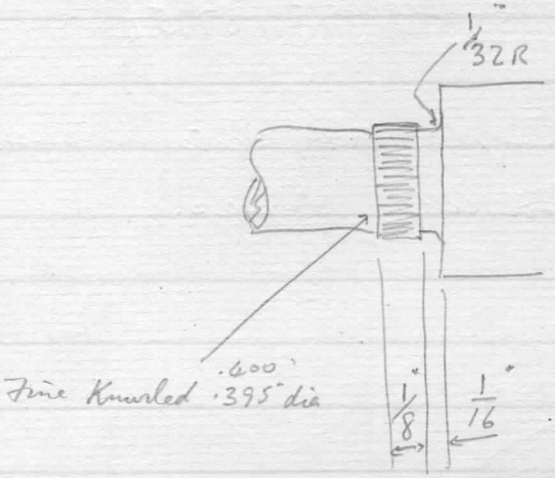




Cylinder Head Steady on Prototype was 5 7/8" ers.

19-3-56

Rear Hub Driving Pin 41000 (9093a)



20-3-56 "C-6"

Girling Rear Spring Boxes.

1st Prototype fitted with 96 lb springs, pre-loaded 84 lbs giving 347 lb. on full bump.

Replaced by 120 lb springs, pre-loaded 63 lbs giving 423 lb on full bump.
(Girling technicians say these springs are over-stressed)

Girlings recommend 110 lb springs, pre-loaded 90 lb giving 412 lbs on full bump
(Spring N° P/N 9054/277)?

20-3-56 C-6 Notes from Summary of Defects found on 1st Prod. Model
(Mr Wilson-Jones)

1/16" longer crankshaft stud?

5/16 B.S.F. Extractor thread on automatic advance mech?

Gear Change lever return spring weak.

Leading Link Front Forks 16-6-59

Springs.

Rate	65 lbs	54 lbs
Mean Dia	1·25"	1·225"
Min Inside Dia	1·025"	1·01
Max Outside Dia	1·475"	~~1·45~~ 1·44"
Free Length	9·000"	9·000"
Min Working Length	5·25"	5·25"
Wire Dia	·212" (5 swg)	·202" (5½ swg)
Working Coils	23	24½
Total Coils	24½	26

Capacity equivalents in cu ins. 7-7-59

148 ccs —— 9·028 cu ins
248 ccs —— 15·128 " "
346 ccs —— 21·106 " "
499 ccs —— 30·439 " "
496 ccs —— 30·256 " "
692 ccs —— 42·212 " "

7-7-59

Lawes Rabjohns. Ltd. (Mr Gilmore) West Bromwich 2478
(Send orders to West Bromwich)

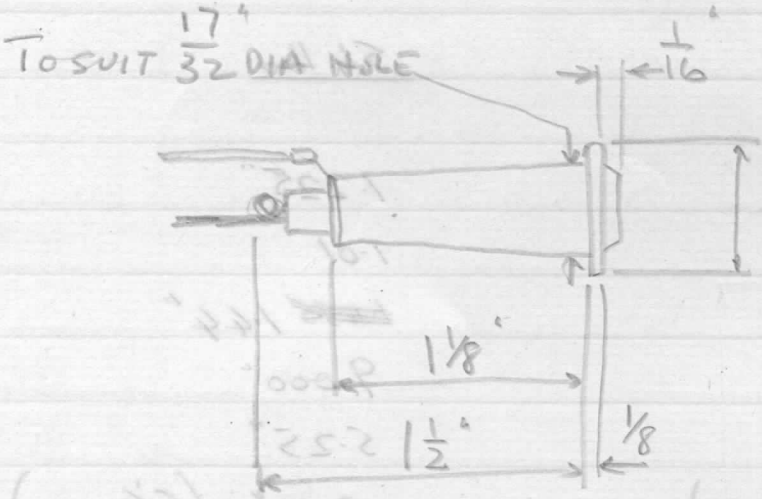
Half-tones reproduction papers.

Matt Finish — B.M.T. 30" x 10yds 28/- 40" x 10yds 37/-
Gloss Finish — B.G.T. ~~40" x~~ 40" x 10yds 52/-
(Also made in sheets)

nmo Black Line (or blue line) Ref 90/8
(similar to valid)

CAMCO FASTENER Co. 2-10-59

SKETCH OF INDICATOR LIGHT



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nmo Black Line (or blue line) Ref 90/8

346cc Short-Stroke Engine

Balance weight on present 500cc Single
= 1lb 5oz 8drms on each flywheel. (56%?)

Throw = 1.7717 ins
= 38.092 in/ozs.

Throw on Short Stroke 350cc = 1.2303"

Balance weight for each flywheel = ~~[illegible]~~

= 1lb 5oz 8drms
= 26.451 in/ozs + weight of heavier pin etc

To balance at 70% would need 33.095 in/oz

Balance weight on present 350cc Single
= 1lb 0ozs 8drms on each flywheel (52%?)

Throw = 1.7717 ins
= 29.233 in/ozs