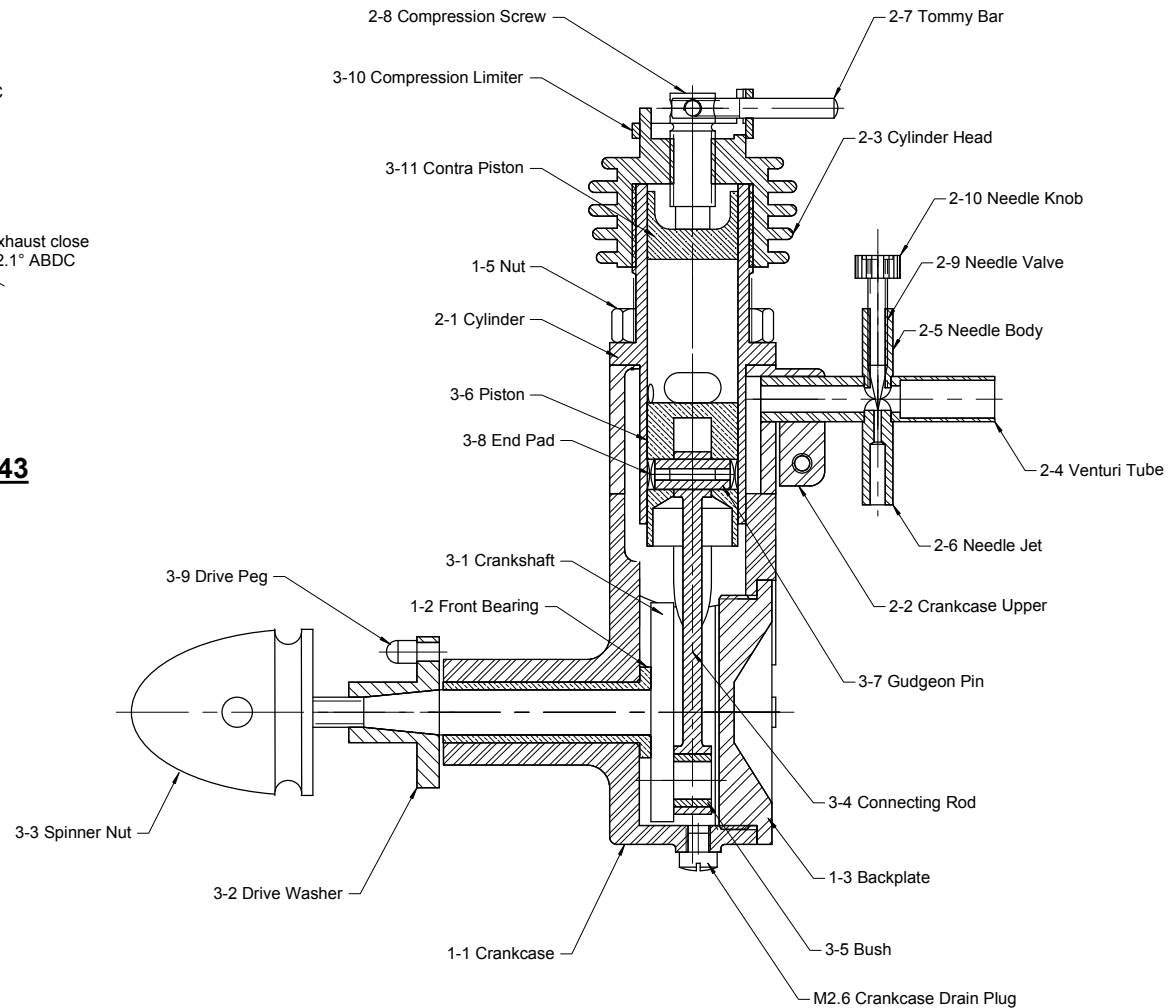

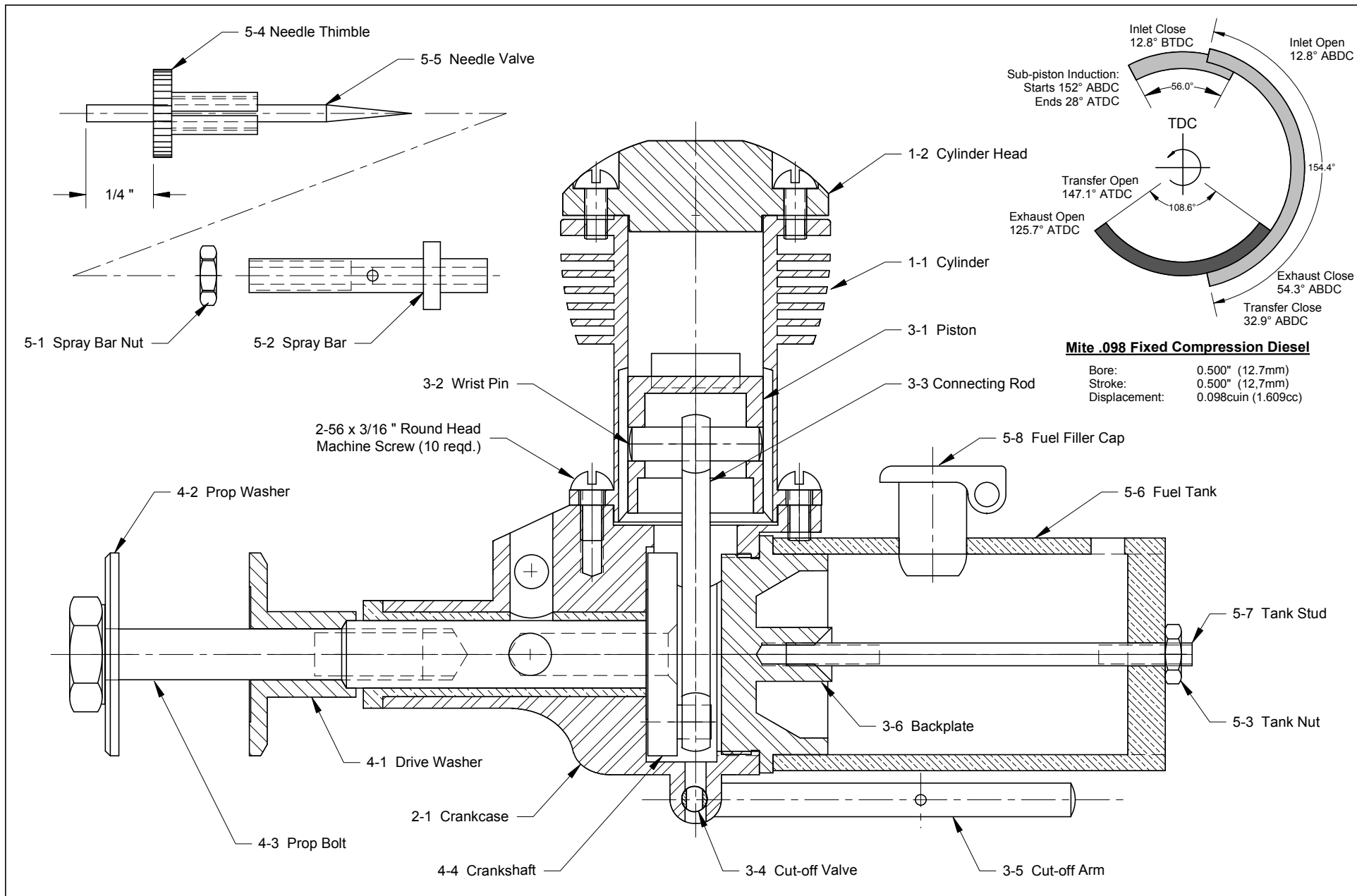



### Klemenz-Schenk DYNO 1 circa 1943

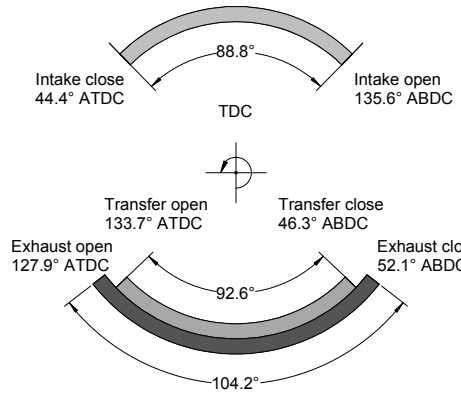
Bore: 12mm (0.472")  
 Stroke: 18mm (0.709")  
 Displacement: 2.04cc (0.124cuin)



			MAT'L	As Noted	<b>DO NOT SCALE DRAWING</b>	 <b>MOTOR BOYS</b> (INTERNATIONAL)	NAME <b>Klemenz-Schenk DYNO 1</b>
2007-08-14	Timing diagram corrected and standardized	BMBI	SCALE	<b>Full Size</b>	WORK TO DIMENSIONS ALL DIMENSIONS ARE IN INCHES		NUMBER <b>Sheet 4 - General Arrangement</b>
Jan 5 2000	Timing diagram added	BMBI	DRAWN	Nov 1 1999	NEXT ASSEMBLY		
DATE	CHANGE	BY	CAD	<b>PMB</b>			



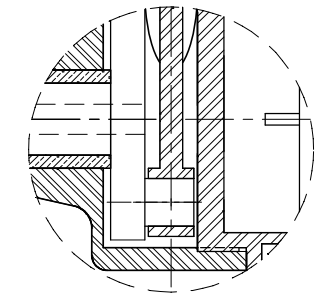
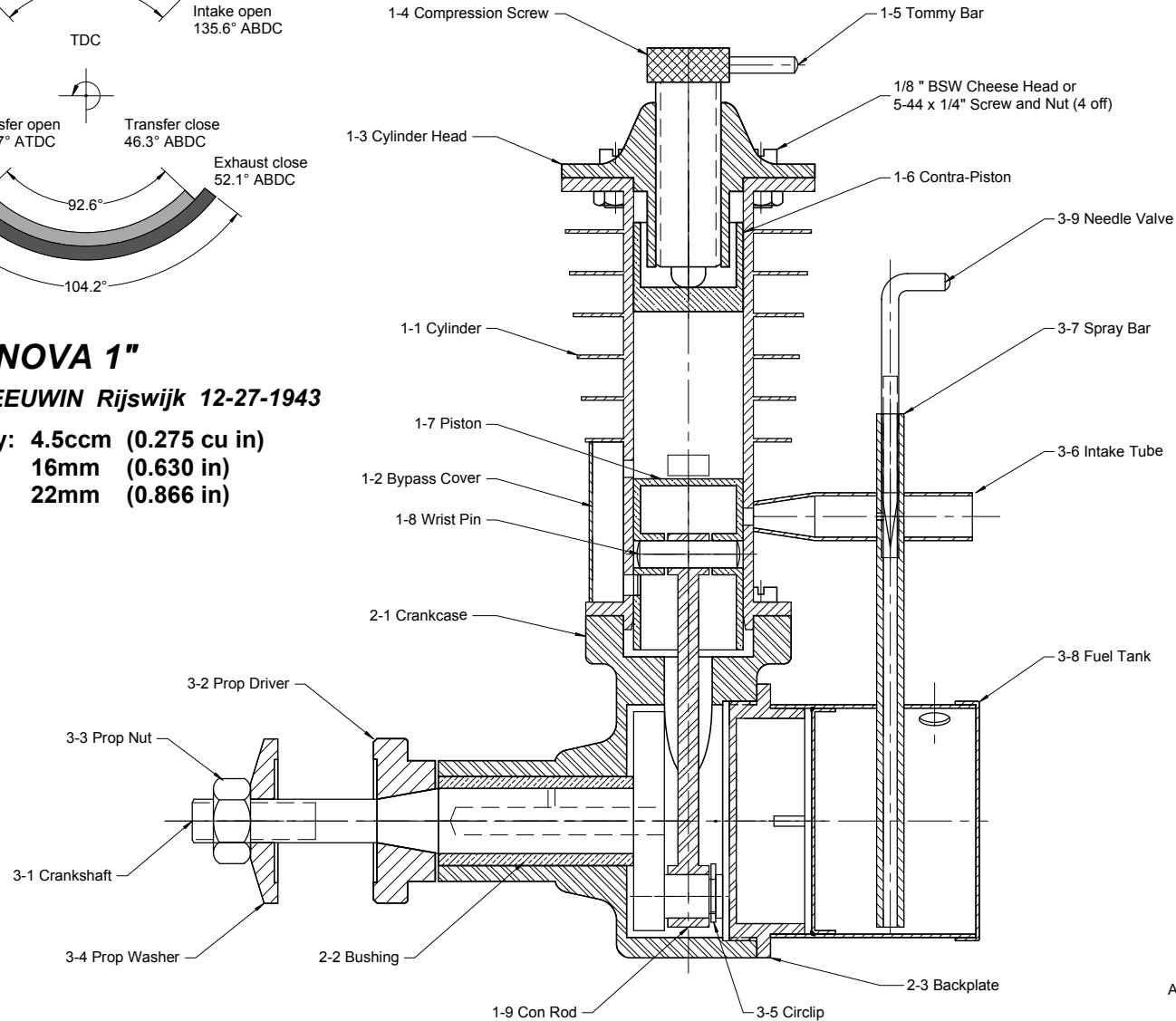
2007-08-14	Revise and standardize timing diagram	BMBI	MAT'L	As Noted	DO NOT SCALE DRAWING WORK TO DIMENSIONS ALL DIMENSIONS ARE IN INCHES	 <b>MOTOR BOYS</b> (INTERNATIONAL)	NAME
			SCALE	<b>2 X SIZE</b>			Mite Mfg Co .098 Diesel 1949
			DRAWN	<b>PMB 1-31-1998</b>	NEXT ASSEMBLY		NUMBER
DATE	CHANGE	BY	CAD	<b>PMB 2-22-1998</b>			<b>Sheet 7 - General Arrangement</b>




# "NOVA 1"

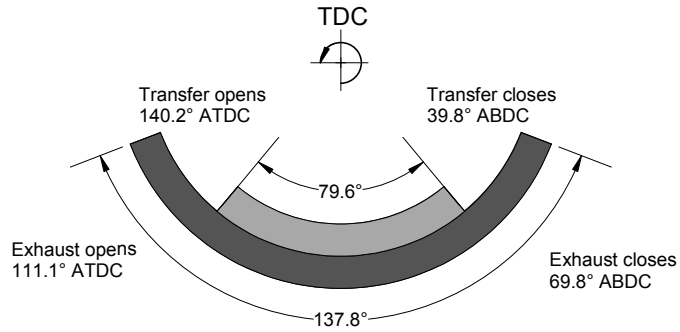
by I.J. v.LEEUWIN Rijswijk 12-27-1943

Capacity: 4.5ccm (0.275 cu in)  
 Bore: 16mm (0.630 in)  
 Stroke: 22mm (0.866 in)



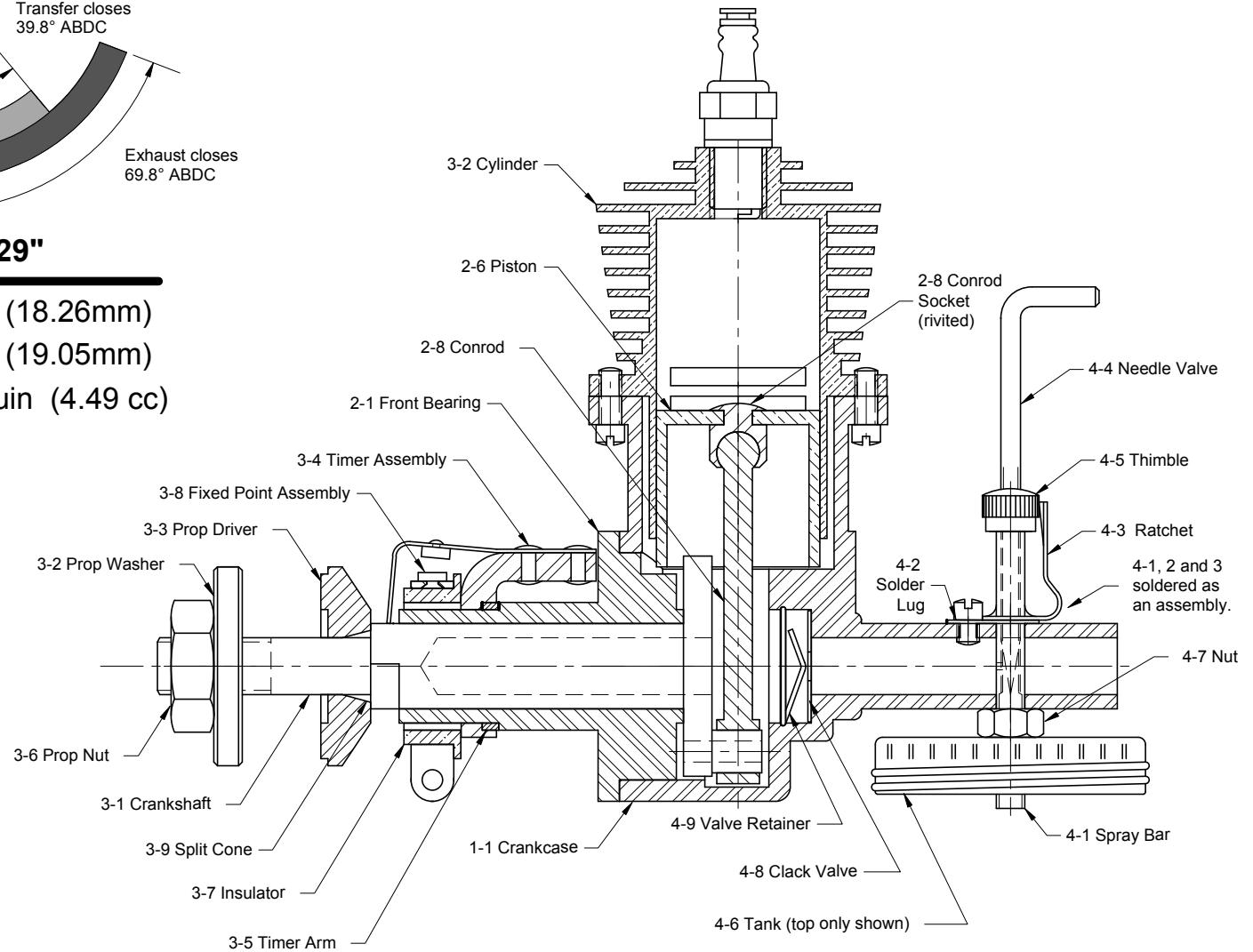
Alternate design to facilitate assembly of connecting rod:  
 Shorten crank pin at forward end of circlip groove.  
 Increase depth of back plate by 2mm (0.080") and cut deeper thread in crankcase to suit.


			MAT'L	As Noted	<b>DO NOT SCALE DRAWING</b>	 <b>MOTOR BOYS</b> (INTERNATIONAL)	NAME
2007-08-16	Standardize timing diagram	BMBI	SCALE	<b>Full Size</b>	WORK TO DIMENSIONS ALL DIMENSIONS ARE IN INCHES		"NOVA 1" 4.5ccm Tweetakt Diesel
July 4, 1998	Alternate design detail added.	PMBI	DRAWN	IJvLeeuwen 12.27.43	NEXT ASSEMBLY		NUMBER
DATE	CHANGE	BY	CAD	<b>PMB</b> 3.14.1998			<b>Sheet 4 - General Arrangement</b>

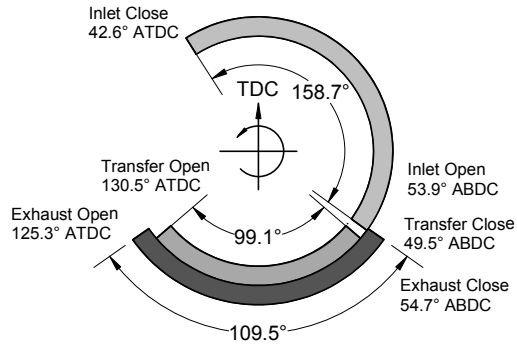


### Scrapper "29"

Bore: 0.719 " (18.26mm)  
 Stroke: 0.750 " (19.05mm)  
 Capacity: 0.304 cuin (4.49 cc)



2007-08-10	Correct timing diagram and rearrange layout	BMBI	MAT'L	As Noted	<b>DO NOT SCALE DRAWING</b> WORK TO DIMENSIONS ALL DIMENSIONS ARE IN INCHES NEXT ASSEMBLY		NAME <b>SCRAPPER .29</b>
			SCALE	<b>1.5 x Full Size</b>			NUMBER
DATE	CHANGE	BY	DRAWN	<b>RMB 1997-12-21</b>			<b>Sheet 5 - General Arrangement</b>
			CAD	<b>PMB 1998-01-01</b>			



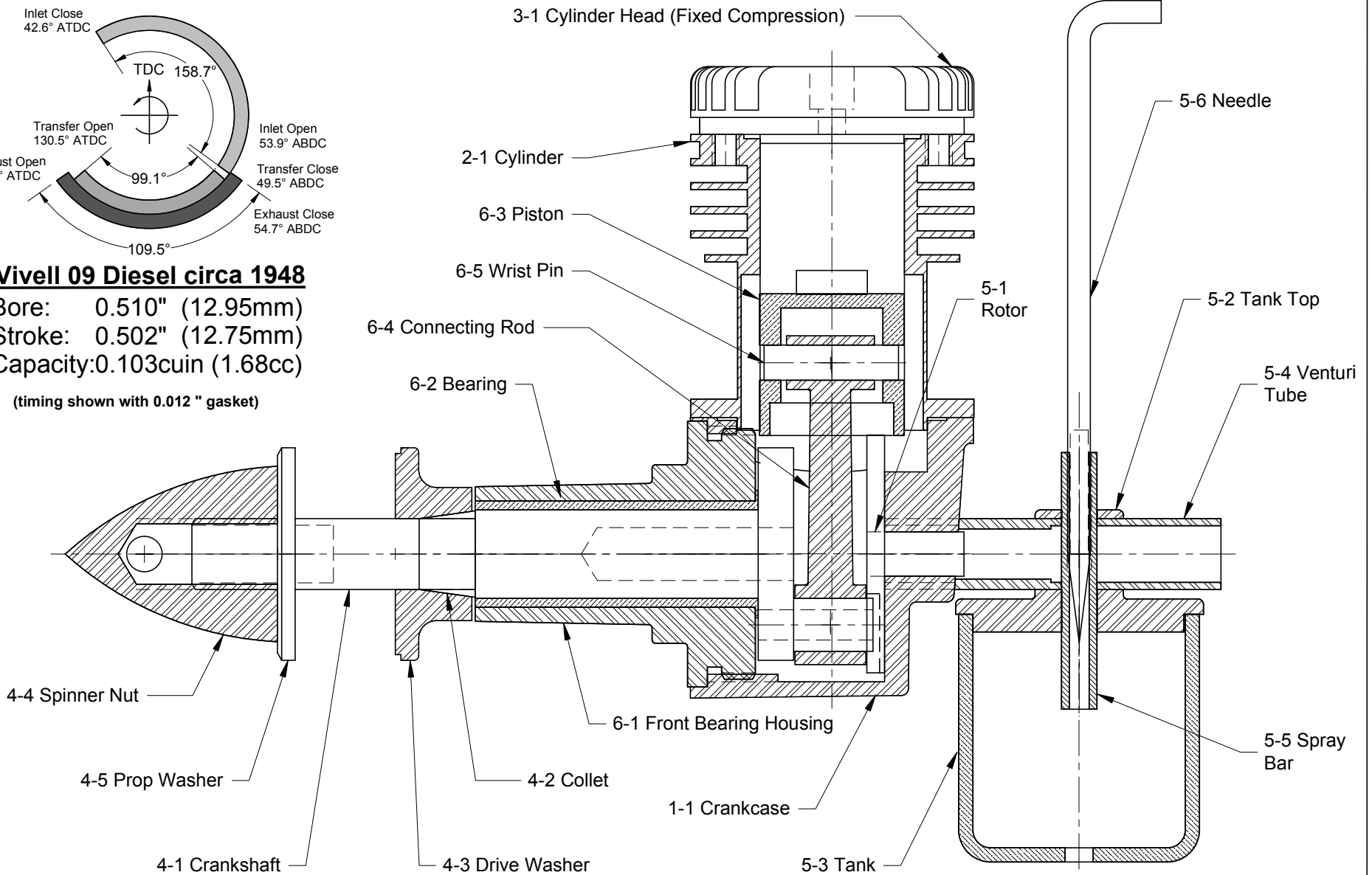
**Vivell 09 Diesel circa 1948**


Bore: 0.510" (12.95mm)

Stroke: 0.502" (12.75mm)

Capacity: 0.103cuin (1.68cc)

(timing shown with 0.012" gasket)



2007-08-14	Revise and standardize timing diagram	BMBI	MAT'L	DO NOT SCALE DRAWING	 <b>MOTOR BOYS</b> (INTERNATIONAL)	NAME <b>VIVELL 09 DIESEL</b>
			SCALE <b>2 X SIZE</b>	WORK TO DIMENSIONS ALL DIMENSIONS ARE IN INCHES		NUMBER
DATE	CHANGE	BY	DRAWN <b>RMB</b> 12-21-97	NEXT ASSEMBLY		<b>Sheet 7 - General Arrangement</b>
			CAD <b>PMB</b> 1-1-98			