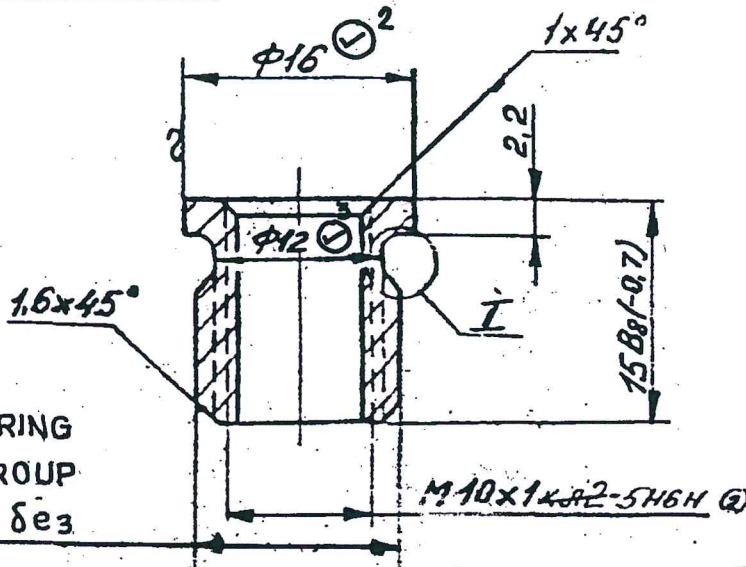


Cb 406-08-3 (B)  
Cb 306-09-8

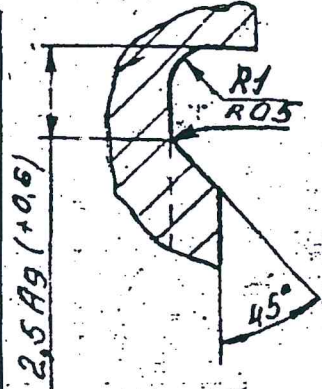


NOT CONSIDERING  
ACCURACY GROUP  
1 M14 X1.5 T1.2 δe3

I  
M5-1 Scale 5:1

REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THUS (C) BASED ON Lt. NO. 82847/0H/QAD/ED DT. 13-1-95

S.No	R1	R2	REMARKS
1	M16x1.5T1.2δ23 φ 15.026 +0.062 (MEAN)	M18x1.5T1.2δ23 φ 17.026 +0.062 (MEAN)	1. MARK REPAIR SIZE CATEGORY R1, R2. 2. ALL OTHER SIZES SURFACE FINISH, MATERIAL AND TECHNICAL REQUIREMENTS ARE SAME.
2	φ 18	φ 20	
3	φ 13.8	φ 15.8	



- TECHNICAL REQUIREMENTS FOR THREAD SHOULD IN ACCORD WITH STANDARD 82021-00.
- DIMENSIONS WITH UNSPECIFIED TOLERANCES SHOULD BE MAINTAINED AS PER ACCURACY CLASS 7 OST 1010.
- SHARP EDGES SHOULD BE BLUNTED.
- COATING : Zn 3, CHROMATIZING IN ACCORDANCE WITH U1 483-82. (A5)

(A) ALTERNATE MATERIAL: STEEL 080 M40 (EN 8) TO BS: 970

PL-1-1983 OR 45 CB TO IS: 1570

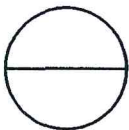
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

C	28.12.21	SHEET 2 CREATED.	EST. MASS 0.009 kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS # LETTERS
B	19.12.19	USED ON NUMBER ADDED.	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
A	7/19/09	3rd ALTN. COMM. MIN POINT B DT. 27-2-09		
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL - 16.50ST7417-75 RD BAR 45.50ST 1051-73	USED ON - Cb 306-08-8 ** Cb 306-09-10
DWN	lls	SCALE: 2:1	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) A V A U I	
CHD	lls	DIMENSIONS IN mm	TITLE: BUSH	
TCD	lls	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D'S CAT NUMBER	
APPD	lls	ALL THREADS TO CONFORM TO	DRAWING NUMBER: 306-157 Sht 1 of 2	
DATE	28-1-88			

COMMON TO V46-6 & V92S2

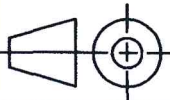
SHEET 2 CREATED ISSUE "C", BASED ON CQA(HV) NOTING No. 111909/CQA(HV)/DB/ENGT-90/ALT.COMM dt. 05 Aug 2020 & POINT No.3 OF 14TH ACM

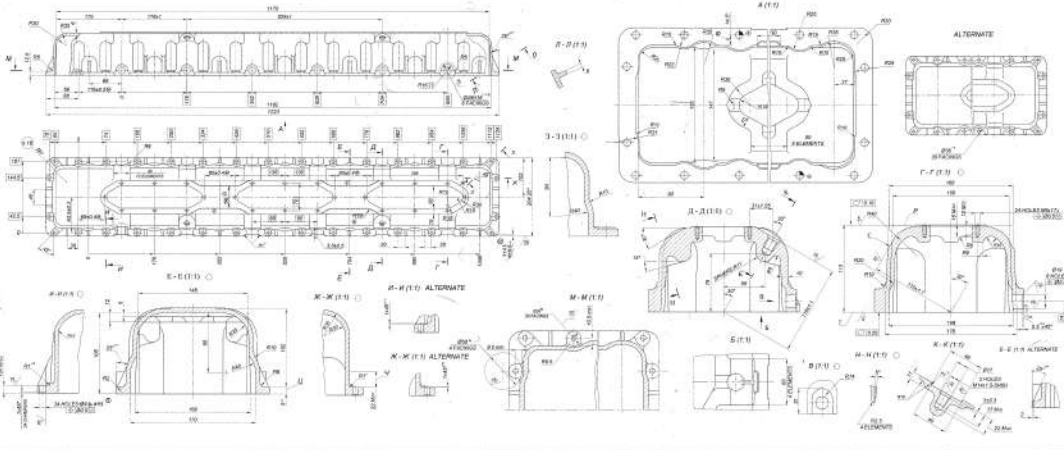
COMMON TO V46-6 & V92S2 Engines



4	3	2	1					
DRAWING NUMBER <b>306-157</b>		SHEET No. 2 OF 2						
<b>EXPLANATORY NOTE:</b>								
Material Quoted: Round Bar $\frac{16.5 \text{ GOST 7417-75}}{45 \text{ GOST 1051-73}}$								
Killed Steel :								
Grade of Steel : 45 as per GOST 1051-73								
Dia of Round Bar - 16.5 mm								
Chemical & Mechanical properties as per GOST 1050-74 according to GOST 1051-73.								
<b>CHEMICAL COMPOSITION: AS PER GOST 1050-74</b>								
<b>CONTENT OF ELEMENTS %</b>								
GRADE OF STEEL	C	Si	Mn	Cr	S	P	Cu	Ni
	MAXIMUM							
45	0.42 - 0.50	0.17 - 0.37	0.50 - 0.80	0.25	0.040	0.035	0.25	0.25
<b>MECHANICAL PROPERTIES: AS PER GOST 1050-74</b>								
GRADE OF STEEL	Yield Point Kg/mm <sup>2</sup>	Ultimate Tensile Strength Kg/mm <sup>2</sup>	% of Elongation	Reduction of Area %	Impact Strength Kg.m/cm <sup>2</sup>			
	Minimum							
45	36	61	16	40	5			
<p>Note : Any other parameters given in specification to be adhered in ToTo.</p> <p>PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION</p>								



			EST. WT. Refer Sht 1 of 2	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (      LETTERS )
			<b>ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.</b>	
			MATERIAL :-  Refer Sht 1 of 2	USED ON :-  Refer Sht 1 of 2
ISSUE	DATE	NATURE OF AMENDMENTS	<b>CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI</b>	
DRN		SCALE :- —	<b>BUSH</b>	
CHD		DIMENSIONS IN mm		
APPD		TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS : 2102 - 69		TITLE :-
DATE		ALL THREADS TO CONFORM TO	D S CAT NUMBER	DRAWING NUMBER <b>306-157</b> SHT 2 of 2
SIZE	A4			

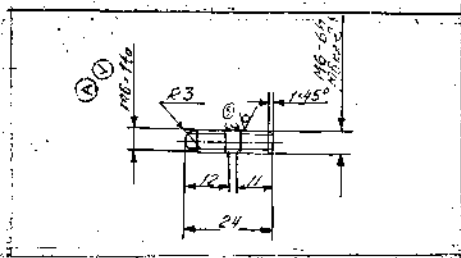


1. Prepared for casting should be as per 17002147
2. Casting: Aluminum alloy 7075-T6
3. Dimensional accuracy: as per drawing
4. Surface finish: as per drawing
5. Material: Aluminum alloy 7075-T6
6. Heat treatment: as per drawing
7. Inspection: as per drawing
8. In the event of any change in the drawing '1'
9. In the event of any change in the drawing '1'
10. In the event of any change in the drawing '1'
11. In the event of any change in the drawing '1'
12. In the event of any change in the drawing '1'
13. In the event of any change in the drawing '1'
14. In the event of any change in the drawing '1'
15. In the event of any change in the drawing '1'
16. In the event of any change in the drawing '1'
17. In the event of any change in the drawing '1'
18. In the event of any change in the drawing '1'
19. In the event of any change in the drawing '1'
20. In the event of any change in the drawing '1'
21. In the event of any change in the drawing '1'

REV	DESCRIPTION	DATE
1	ISSUED FOR CASTING	10/10/2010
2	ISSUED FOR CASTING	10/10/2010
3	ISSUED FOR CASTING	10/10/2010
4	ISSUED FOR CASTING	10/10/2010
5	ISSUED FOR CASTING	10/10/2010
6	ISSUED FOR CASTING	10/10/2010
7	ISSUED FOR CASTING	10/10/2010
8	ISSUED FOR CASTING	10/10/2010
9	ISSUED FOR CASTING	10/10/2010
10	ISSUED FOR CASTING	10/10/2010
11	ISSUED FOR CASTING	10/10/2010
12	ISSUED FOR CASTING	10/10/2010
13	ISSUED FOR CASTING	10/10/2010
14	ISSUED FOR CASTING	10/10/2010
15	ISSUED FOR CASTING	10/10/2010
16	ISSUED FOR CASTING	10/10/2010
17	ISSUED FOR CASTING	10/10/2010
18	ISSUED FOR CASTING	10/10/2010
19	ISSUED FOR CASTING	10/10/2010
20	ISSUED FOR CASTING	10/10/2010
21	ISSUED FOR CASTING	10/10/2010

4/10

DRAWING NUMBER  
350 03



**① EQUIVALENT MATERIAL STEEL**  
45C8 TO IS:1570

1. DELETED.
  2. TECHNICAL REQUIREMENTS FOR THREADS AS PER STANDARD 82021-00.
  3. DIMENSIONS WITH UNSPECIFIED TOLERANCES AND THE REST OF THE TECHNICAL REQUIREMENTS AS PER STANDARD 82052-00.
  4. COATING: CADMIUM 3, CHROMATIZING AS PER ULLA-104 WITH SUBSEQUENT ELIMINATION OF HYDROGEN EMBRITTLEMENT.
  5. THE THREAD MAY BE MADE BY ROLLING WITH DIAMETER OF UN-THREADED PORTION WITH IN THE PITCH DIAMETER OF THREAD.
  6. MECHANICAL DAMAGES OF THE CADMIUM COATING SUCH AS SCRATCHES, NICKS AND DENTS ARE ALLOWED ON ASSEMBLY UNITS, PROVIDED THE STEEL IS NOT EXPOSED.
  7. ALTERNATE MATERIAL: STEEL GRADES 40 & 50 GOST 1050-74.
  8. HARDNESS:- 27-32 HRC.
- \* ALT MATERIAL:-  
STEEL 709 M40 (EN-19) TO  
BS-970 PT.-1-1983

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

EST WT 0.004 Kg TO BE STAMPED OR MARKED WHERE INDICATED THIS # LETTERS

ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

**EXPLANATORY NOTE:**

**a) REFERENCE MATERIAL QUOTED:**

COLD DRAWN SIZED ROUND BAR, 6.0 (-0.025)mm DIA TO GOST 7417-75 FROM HIGH GRADE SIZED STEEL NORMAL SURFACE QUALITY TO GOST 1051-73 AND MANUFACTURED IN ACCORDANCE WITH QUALITY CARBON STRUCTURAL STEEL GRADE 45 TO GOST 1050-74.

REFERENCE NOTE '7' ON ALTERNATE MATERIAL: QUALITY CARBON STRUCTURAL STEEL GRADE 40 AND 50 TO GOST 1050-74.

**a) CHEMICAL COMPOSITION: AS PER GOST 1050-74.**

GRADE OF STEEL	CONTENT OF ELEMENTS %						REMARKS
	C	Si	Mg	Cr	S	P	
45	0.42 - 0.50	0.17 - 0.37	0.50 - 0.80	0.25	0.040	0.035	Ref.Matl
40	0.37 - 0.45	0.17 - 0.37	0.50 - 0.80	0.25	0.040	0.035	Alt.Matl
50	0.47 - 0.55	0.17 - 0.37	0.50 - 0.80	0.25	0.040	0.035	Alt.Matl

RESIDUAL CONTENT OF COPPER AND NICKEL SHOULD NOT EXCEED 0.25% EACH

**b) MECHANICAL PROPERTIES: AS PER GOST 1050-74.**

GRADE OF STEEL	ULTIMATE TENSILE STRENGTH Kgf/mm <sup>2</sup>	YIELD POINT Kgf/mm <sup>2</sup>	ELONGATION %	REDUCTION IN AREA %	IMPACT STRENGTH KJm/cm <sup>2</sup>	HARDNESS B H N M A X	REMARKS
45	61	36	16	40	5	207	Ref.Matl
40	58	34	19	45	6	197	Alt.Matl
50	64	38	14	40	4	217	Alt.Matl

**② 9. REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THIS ② BASED ON OVERHAUL SPECIFICATIONS PART III REPAIR DRAWINGS**

Sl.No.	R	REMARKS
1	M6 X 1.25 TO	ALL OTHER CONDITIONS AS PER STD. DRG.
2	PCD = 7.188 ± 0.15	

Cb 306-08-8, Cb 306-09-10, Cb 401-03-6, Cb 3301-15-30, Cb 306-08-13, Cb 306-09-13, Cb 3308-04-24

MATERIAL ROUND BAR : USED ON Cb 3301-15-44 GOST 7417-75 \* Cb 3338-402-4 ES GOST 1050-74 \*\* Cb 3329-01-11

CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI

TITLE: STUD M6 x 24

D S CAT NUMBER DRAWING NUMBER 350 03

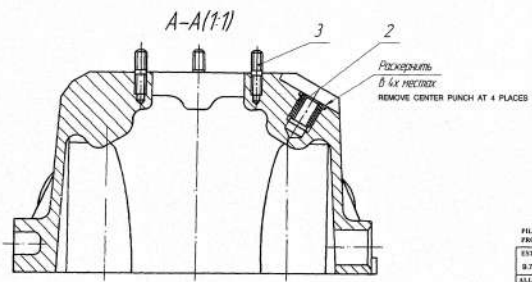
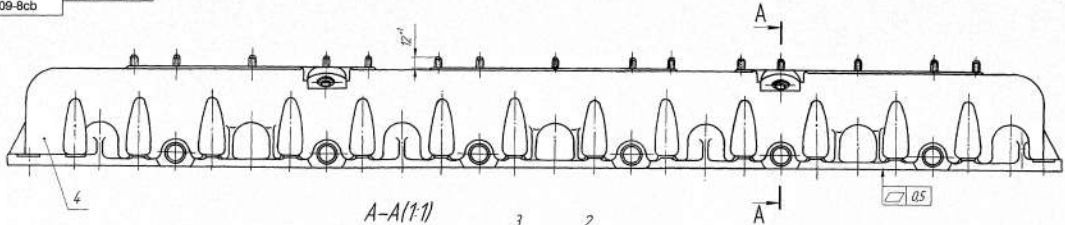
ISSUE	DATE	NATURE OF AMENDMENTS
D	12-8-10	4 <sup>th</sup> Alt. Com. Meeting Minutes Point No.11 Of: 26-10-09
C	25.8.08	USED ON NUMBERS ADDED AUTHY:- MIN. OF ALT. COM. MEET.
B	11.01.08	POINT No.-212 Of: 07-02-07
A	6.9.95	REPAIR SIZE DIMENSION ADDED

COMMON TO V-9252 ENGINE

SIZE A3



DRAWING NUMBER: Cb306-09-8cb SHEET No 1 OF 1



1. SET THE BUSH ITEM No.2 ON SEALING COMPOUND  
ANAGROBIC ANATERM TY 2257-339-0208947-0000 No.161-652-86.

PILOT SAMPLE SHOULD BE APPROVED BEFORE BULK PRODUCTION.  
EXT. WT. (MG) TO BE STAMPED ON MARKED WHERE INDICATED THIS # ( LETTERS)  
B70  
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED INCLUDING CHAMFER TO HAVE R. OUTSIDE R. INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	CB-306-09-8cb	MATERIAL	USED ON
CRD	V 02-5		CO406-13-75
TYPE	102	CONTROLLEDATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	AVADH
DATE	21 FEB 1974		
SCALE	1 : 2	TOLERANCE ON DIMS	
DESIGNED BY		UNLESS OTHERWISE STATED IS: 1961-65	
ISSUED BY		ALL THREADS TO CONFORM TO	
DATE		IS-4218-PART-4	
TITLE		D S CAT NUMBER	DRAWING NUMBER
L.H.HEAD COVER ASSY.			Cb306-09-8cb

DESIGNED BASED ON ORIGINAL DESIGN. ALL DIMS. INTRODUCED AND REPLACES CB 306-09-1303 With Note No. 194-09.  
 SIZE A4 x 4

