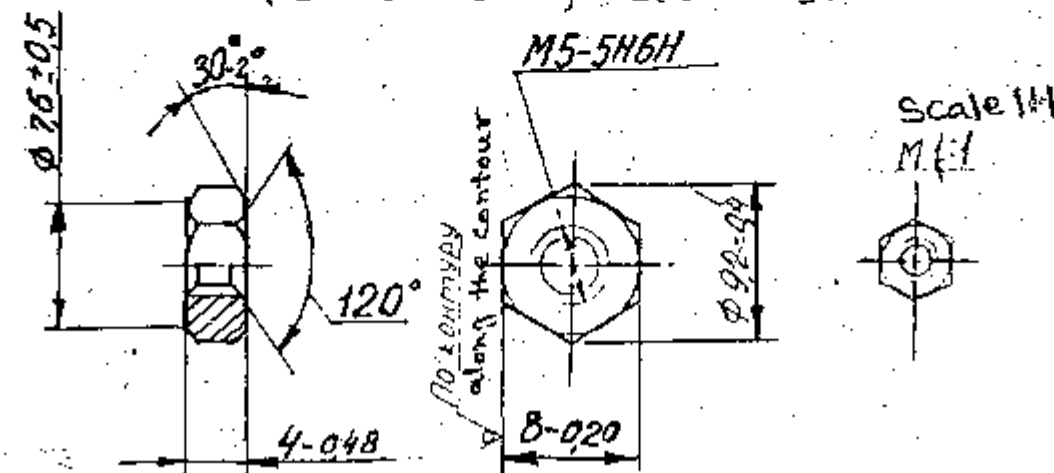


rolled stock of group B class 4 GOST 1051-73 may be used. To ensure high quality of coating, it is allowed to eliminate surface defects of rolled stock with decrease of dimension as per accuracy class - 5.



- The component may be manufactured from Steel GOST 1050-74.
- Chamfer 120° should be made up to the major diameter of thread.
- Shift of hole axis up to 0.25 mm. is permitted.
- The thread may be checked before coating.
- Coating :- Cd 9, Chromating as per UZS-104 with elimination of Hydrogen embrittlement.
- The rest of the technical requirements as per standard 82052-00.
- Alternate material :- Steel, grades 40 and 50 GOST 1050-74.

**EXPLANATORY NOTE**

9. a) REFERENCE MATERIAL QUOTED:  
 GAUGED HEXAGONAL STEEL BAR CLASS OF ACCURACY 4, 0.01-0.100mm A/F TO GOST 8560-78 FROM HIGH GRADE SIZED STEEL SURFACE QUALITY '6' TO GOST 1051-73 AND MANUFACTURED IN ACCORDANCE WITH QUALITY CARBON STRUCTURAL STEEL GRADE 45 TO GOST 1050-74
- b) REFERENCE NOTE ON ALTERNATE MATERIAL : QUALITY CARBON STRUCTURAL STEEL GRADES 40 AND 50 TO GOST 1050-74
- a) CHEMICAL COMPOSITION : AS PER GOST 1050-74

GRADE OF STEEL	CONTENT OF ELEMENTS %						REMARKS
	C	Si	Mn	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 Kgf/cm <sup>2</sup>	HARDNESS B H N MAX	REMARKS
45	61	36	16	40	5	229	REF MATL
40	58	34	19	45	6	217	ALT MATL
50	64	38	14	40	4	241	ALT MATL

Material: STEEL 709M40 (EN-19) TO BS-970 Pt-1-1983

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

EST. MASS. 0.0812 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 OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

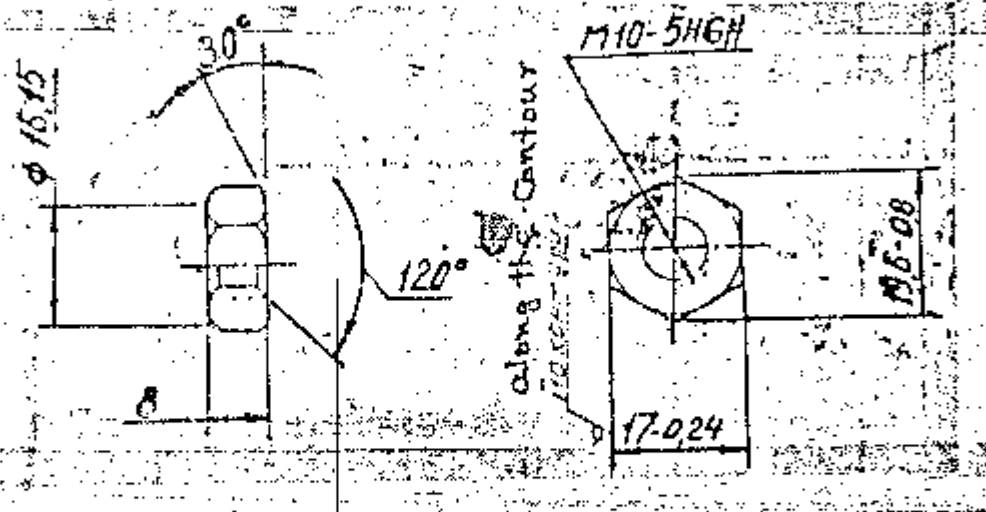
DRN	DRN	MATERIAL: HEXAGON BAR	USED ON:
CHD	CHD	84 GOST 8560-78	CE-20-35-00-5
TCD	TCD	45 B GOST 1051-73	CB 3335 00 24
APPD	APPD		
DATE	DATE		
SCALE - 2 : 1		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
DIMENSIONS IN mm.		TITLE:-	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.		NUT M5	
ALL THREADS CONFORM TO	A	D S CAT NUMBER	DRAWING NUMBER
ISSUE	DATE		351 13





DRAWING NUMBER

351-50



1. CHAMFER 120° SHOULD BE MADE UP TO THE MAJOR DIAMETER OF THREAD.
2. THE THREAD MAY BE CHECKED BEFORE COATING.
3. COATING : CADMIUM 9, CHROMATIZING AS PER 144A-104 WITH ELIMINATION OF HYDROGEN EMBRITTLEMENT.
4. THE REST OF THE TECHNICAL REQUIREMENTS - AS PER STANDARD 82052-00.
5. ALTERNATE MATERIAL : STEEL, GRADES 40 AND 50 GOST 1050-74.
6. ROLLED STOCK OF GROUP 'B' CLASS 4 GOST 1051-73 MAY BE USED. TO ENSURE HIGH QUALITY OF COATING, IT IS ALLOWED TO ELIMINATE SURFACE DEFECTS OF ROLLED STOCK WITH DECREASE OF DIMENSION AS PER ACCURACY CLASS 5.

ⓑ Material: STEEL 709M40 (EN-19) TO BS-970 Pt-1-1983

EXPLANATORY NOTE:

HEXAGONAL BAR: 17-4 GOST 8560-78 ⓑ  
456 GOST 1051-73

ALTERNATE MATERIAL QUOTED: 40 & 50, GOST 1050-74  
BRIGHT, STEEL HEXAGONAL BAR 17mm ACROSS FLATS,  
CLASS OF ACCURACY-4 TO GOST 8560-78, GRADE 45, GOST 1051-73  
E = WITH SURFACE QUALITY

(a) CHEMICAL COMPOSITION:

GRADE OF STEEL	CONTENTS OF ELEMENTS %						
	C	Si	Mn	Cr	P	S	Cu Ni
40	0.37 - 0.45	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.040	0.25 0.25
45	0.42 - 0.50	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.040	0.25 0.25
50	0.47 - 0.55	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.040	0.25 0.25

(b) MECHANICAL PROPERTIES

GRADE OF STEEL	TENSILE STRENGTH Kgf/mm <sup>2</sup> (min)	YIELD POINT Kgf/mm <sup>2</sup> (min)	ELONGATION % (min)	REDUCTION IN AREA % (min)	IMPACT STRENGTH Kgf/cm <sup>2</sup> (min)
40	58	34	19	45	6
45	61	36	16	40	5
50	61+	38	14	40	4

ⓐ CQA(HV)S.06.605E  
CQA(HV)S.06.609E

ⓑ CB 3335-00-9, CB 3336-00-11, CB 3342-00-21, CB 20-13-00-9, CB 20-34-00-1, CB 3301-00-37, CB 3301-15-30, CB 3320-00-33, CB 3301-00-44, CB 3301-15-44, CB 3320-00-43, CB 329-75-1

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

EST. WT. 0.012 Kg TO BE STAMPED OR MARKED WHERE INDICATED THIS # 1 LETTERS

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

ISSUE DATE	NATURE OF AMENDMENTS
C 15.7.15	Pt. 11, 7 <sup>th</sup> Alt. Comm. Meeting Dt. 11.4.12
B 18.5.09	Authy: Third Alt. Comm. Minutes Point: 5 Dated 27-02-2009.
A 25.8.08	USED ON NUMBER ADDED

DRM  
CHD  
TED  
APPO  
DATE 15-7-89  
SCALE: 1:1  
DIMENSIONS IN mm  
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS: 2102-69  
ALL THREADS TO CONFORM TO

MATERIAL: ⓑ  
HEXAGON BAR  
17-4 GOST 8560-78  
45-6 GOST 1051-73

USED ON: CB 20-35-00-5, CB 20-06-01-5, CB 306-04-2, CB 20-06-02-5, CB 20-06-04

CONTROLLERATE OF QUALITY ASSURANCE HEAVY VEHICLES  
AVADI

TITLE  
NUT M10

D S CAT NUMBER  
DRAWING NUMBER  
351-50

A-11  
42  
SIZE A3

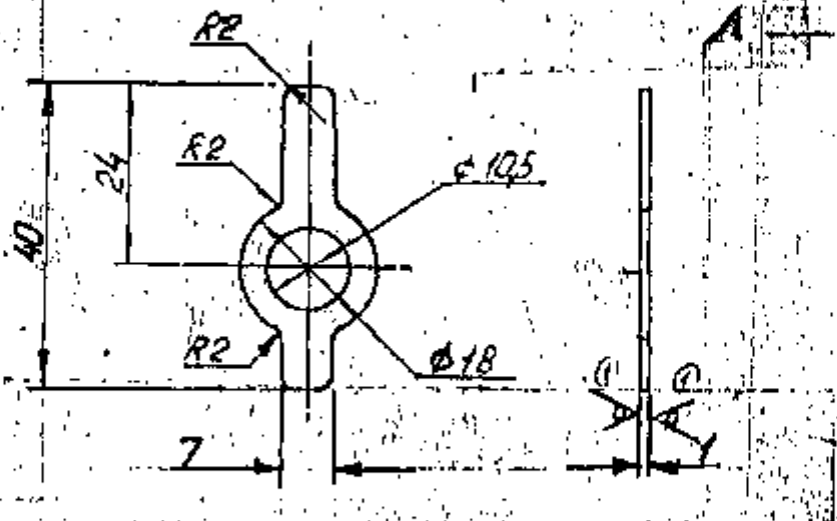
COMMON TO V-92S2 & UTD-20 ENGINES



DRAWING NUMBER  
353-19

Rz80 / (✓) 00

F  
E  
D  
C



2. REQUIREMENTS FOR STAMPING AS PER STANDARD 8205D-16.
3. THE COMPONENT SHOULD BE STRAIGHTENED AFTER STAMPING.
4. BURRS ARE NOT ALLOWED.
6. COATING : Cd 9, CHROMATIZING AS PER UUA-104 WITH ELIMINATION OF HYDROGEN EMBRITTEMENT.
7. REQUIRED FINISHING OF SURFACES BEING STAMPED SHOULD BE ENSURED BY TOOL.

KVP - 63630

A-11  
67

(A) EQUIVALENT MATERIAL.  
Gr. © IS: 513-1994.

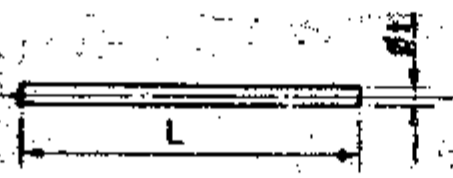
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

			EST. WT. 0.0025 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS ≡ I LETTERS)
			ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
A	17.3.10	4 <sup>th</sup> Alt. Comm. Meet. Minutes Point No.1. Dt:26-10-09.	MATERIAL:- STRIP 08nc-M-2-1, GOST 903-71.	USED ON C620-06-04 CB 20-35-00-5 CB 306-04-2.
ISSUE	DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.	
DRN		SCALE:- 1 : 1	TITLE <b>LOCK WASHER-10</b>	
CHD		DIMENSIONS IN mm		
TCD		TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69	D'S CAT NUMBER	
APPO		ALL THREADS CONFORM TO		
DATE	27/7/88		DRAWING NUMBER <b>353-19</b>	

SIZE A4



DRAWING NUMBER  
354-22



KVD NO	L mm	LMY DEVIATIONS mm	USED ON
	50	±1.5	
78705	60	±1.5	CB 3338-401-10 CB 3330-200
78706	80	±2	CB 3334-00-7 CB 327-00-45
78707	100	±2	CB 3338-00-16 CB 327-00-45 CB 3335-00-24 CB 3334-00-8CB
78708	120	±2	CB 419-00-4 CB 310-00-7 CB 20-22-00-7 CB 322-00-4CB
78709	160	±2	CB 327-00-45 CB 3335-00-24 CB 3334-00-2
78710	200	±2	CB 327-00-45 CB 3334-00-27
78711	260	±3	CB 3334-10-27 CB 20-29-00-8
78712	350	±3	CB 3334-407-4 CB 3329-00-13
78713	430	±3	CB 411-00-41
78714	500	±3	CB 327 00 45
	600	±3.5	
	800	±5	

**ADDITIONAL REQUIREMENTS**

- PER MANUFACTURE OF LOCK WIRE AS PER DRAWING 354-22
1. THE WIRE SHOULD BE PROVIDED WITH ZINC COATING. DIAMETER OF WIRE AFTER COATING SHOULD BE 1.38 mm
  2. QUALITY OF WIRE SHOULD NOT EXCEED HALF OF THE TOLERANCE ON DIAMETER
  3. THE WIRE SHOULD BE MANUFACTURED FROM LOW CARBON ROLLED STEEL AS PER GOST 1050-74
  4. ULTIMATE RUPTURE STRENGTH OF ZINC PLATED WIRE SHOULD NOT BE LESS THAN MPa ( 37 Kg/mm<sup>2</sup> )
  5. THE WIRE SHOULD WITHSTAND NOT LESS THAN 7 BENDINGS THROUGH 180° AND NOT LESS THAN 25 TWISTINGS THROUGH 360°
  6. THE SURFACE OF WIRE SHOULD NOT HAVE BLOW HOLES, CRACKS, MARKS, BLACK FILMS, OXIDE SPOTS, BURRS AND RUST. THERE SHOULD NOT BE ANY UNCOATED AREAS ON THE WIRE.
  7. ON WIRE FRACTURE, THERE SHOULD NOT BE ANY CRACKS, BUCKLES, FISSURES, BLISTERS, AND SHRINKAGE CAVITIES
  8. WIRE ZINC COATING SHOULD BE BOUND TO THE STEEL WHEN WOUND ON CYLINDER WITH DIAMETER EQUAL TO WIRE FIVE FOLD DIAMETER, THE WIRE SHOULD NOT HAVE ANY PEELINGS AND FISSURES OF ZINC COATING.

**EXPLANATORY NOTE:-**

REFERENCE MATERIAL QUOTED:- LOW CARBON STEEL  
To GOST 1050-74.

**CHEMICAL COMPOSITION %**

GRADE	C	Si	Mn	MAXIMUM				
				Cr	P	S	Cu	Ni
15	0.12-0.19	0.17-0.37	0.35-0.65	0.25	0.035	0.040	0.25	0.25

**MECHANICAL PROPERTIES**

1. ULTIMATE TENSILE STRENGTH Kgf/mm<sup>2</sup> (min) = 38
2. YIELD POINT Kgf/mm<sup>2</sup> (min) = 23
3. PERCENTAGE ELONGATION % (min) = 27
4. REDUCTION IN AREA % (min) = 55
5. HARDNESS BHN (MAX) = 149

COMMON TO V-92S2 & UTD-20 ENGINES

(E) EQUIVALENT MATERIAL IS: 549

(D) \*\* ITEM USED IN VARIOUS LENGTHS ON VARIOUS ASSEMBLIES OF V46-6, V92-S2, & UTD-20, ENGINE.

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

EST. WT. TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)

ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	CHO	TCD	APPD	DATE	SCALE	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 2102-69	CONTROL RATE OF QUALITY ASSURANCE (HEAVY VEHICLES)
				18-3-86			AVADI
F	15-7-15	Pt. 11 of 7th Alt. Comm. Meeting Dt: 11-4-12					
E	8-7-10	4th ALT. COMM. Mtg. MINUTES POINT No. 5 Dt. 26-10-09					
D	28.8.08	USED ON NUMBER ADDED					
C	30.6.01	AUTHY 90211/AKSP/ED dt 27.3.01					
B	15.1.02	AUTHY LE No. 11002671NB-II, 722 dt 12.1.02					
A	15-2-88	AUTHY NOTN NO. BK 81-406					
ISSUE	DATE	NATURE OF AMENDMENTS					

CQA(HV)5.06.607E (F)  
CB 20-06-00-2

USED ON: CB 20-35-00-5  
CB 3338-402-4 CB  
SEE TABLE \*\*

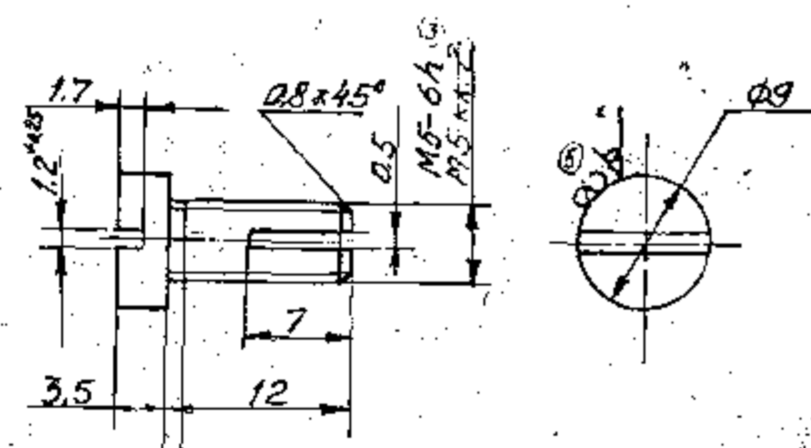
**LOCK WIRE**

DRAWING NUMBER  
**354-22**



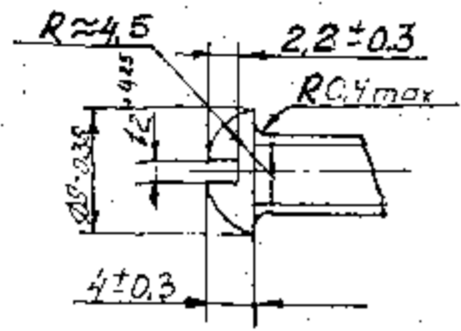
DRAWING NUMBER  
356 22

Rz 80  
✓(✓)



Допускается отсутствие и неполнота резьбы на длине не более 2 мм.  
Absence of thread or incomplete thread is allowed on a length not exceeding 2 mm.

M11  
Sketch 'A'  
Скрутка



1. Deleted
2. Radius from milling cutter  $R \geq 30$  mm. is allowed to be left after cutting of slot for screw driver.
3. Shift of shank slot axis relative to the axis of thread should not exceed 0.2 mm.
4. The position of slot for screw driver and shank slot is arbitrary.
5. It is allowed to manufacture the head of screw according to sketch 'A'.
6. The thread may be made by rolling with the diameter of unthreaded portion within the pitch diameter of thread.
7. Sharp edges should be blunted.
8. The rest of the technical requirements - as per standard 82052-00
10. Coating: - Cd 9 Chromating, as per 24201-104 with elimination of Hydrogen embrittlement.
11. Dimensions should be checked before coating.
12. Alternate material: - Steel, grades 15, 20 and 25 GOST 1050-74.
13. Rolled stock of group B class 4 GOST 1051-73 may be used. To ensure high quality of coating it is allowed to eliminate surface defects of rolled stock with decrease of dimension as per accuracy class 5.

**EXPLANATORY NOTE:**

14. REFERENCE MATERIAL QUOTED:
- COLD DRAWN SIZED STEEL BAR, CLASS OF ACCURACY 4, 9.0 (0.100)mm TO GOST 7417-75 FROM HIGH GRADE SIZED STEEL OF NORMAL SURFACE QUALITY TO GOST 1051-73 AND MANUFACTURED IN ACCORDANCE WITH QUALITY CARBON STRUCTURAL STEEL GRADE 20 TO GOST 1050-74.
- i) REFERENCE NOTE 12 ON ALTERNATE MATERIAL QUALITY CARBON STRUCTURAL STEEL GRADES 15 AND 20 TO GOST 1050-74.
- a) CHEMICAL COMPOSITION: AS PER GOST 1050-74.

GRADE OF STEEL	CONTENT OF ELEMENTS %						REMARKS
	C	Si	Mn	Cr	S	P	
20	0.17 - 0.24	0.17 - 0.37	0.35 - 0.65	0.25	0.040	0.035	Ref,Matl
15	0.12 - 0.19	0.17 - 0.37	0.35 - 0.65	0.25	0.040	0.035	Alt,Matl
25	0.22 - 0.30	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 Kg/mm <sup>2</sup>	YIELD POINT Kg/mm <sup>2</sup>	ELONGATION %	REDUCTION IN AREA %	IMPACT STRENGTH Kg/cm <sup>2</sup>	HARDNESS			REMARKS
						B	H	N	
20	42	25	25	55	-	163			Ref,Matl
15	38	23	27	55	-	149			Alt,Matl
25	46	28	23	50	9	170			Alt,Matl

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

EST. MASS. 100 PIECES: 0.3 Kg  
TO BE STAMPED OR MARKED WHERE INDICATED THUS # LETTERS)  
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

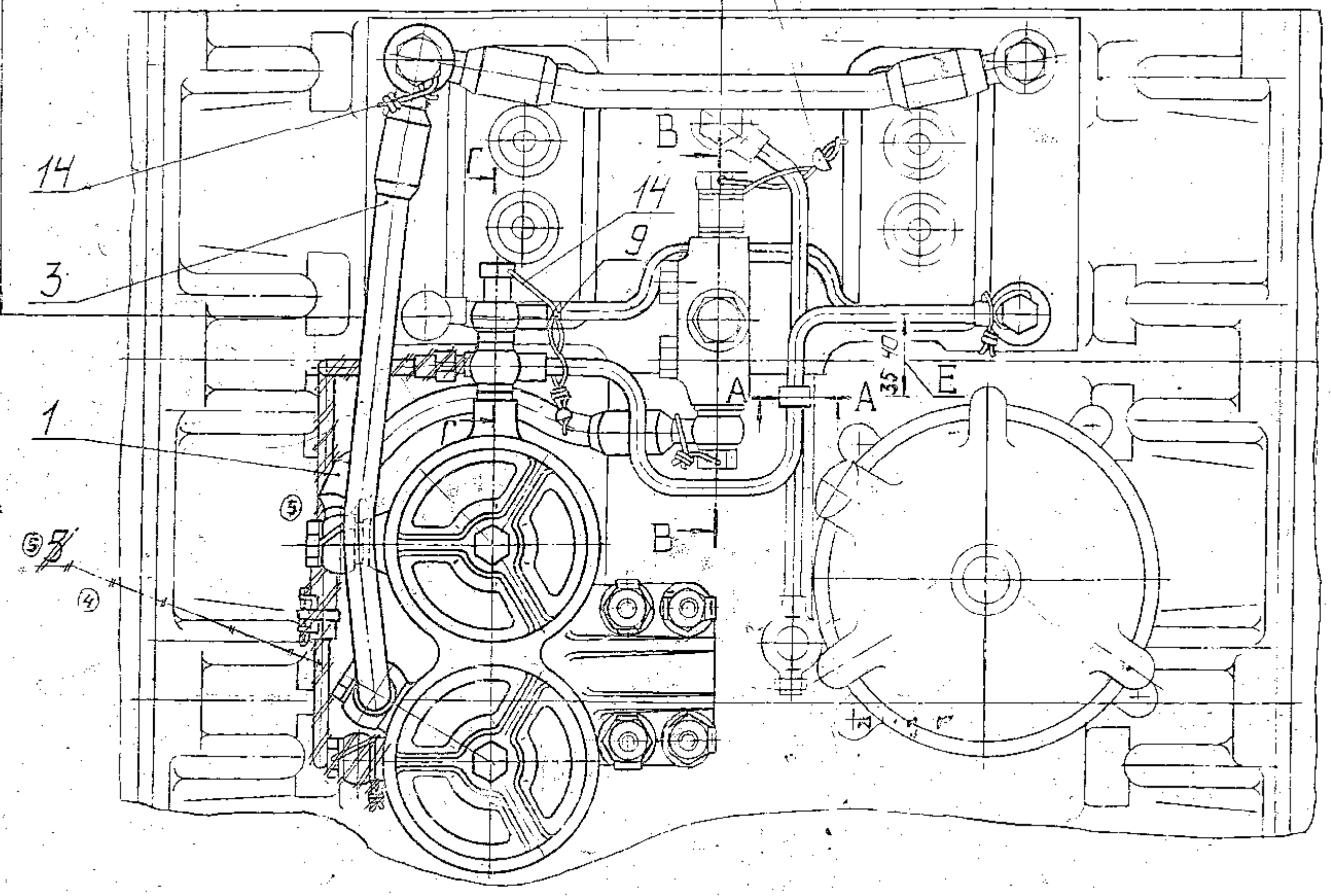
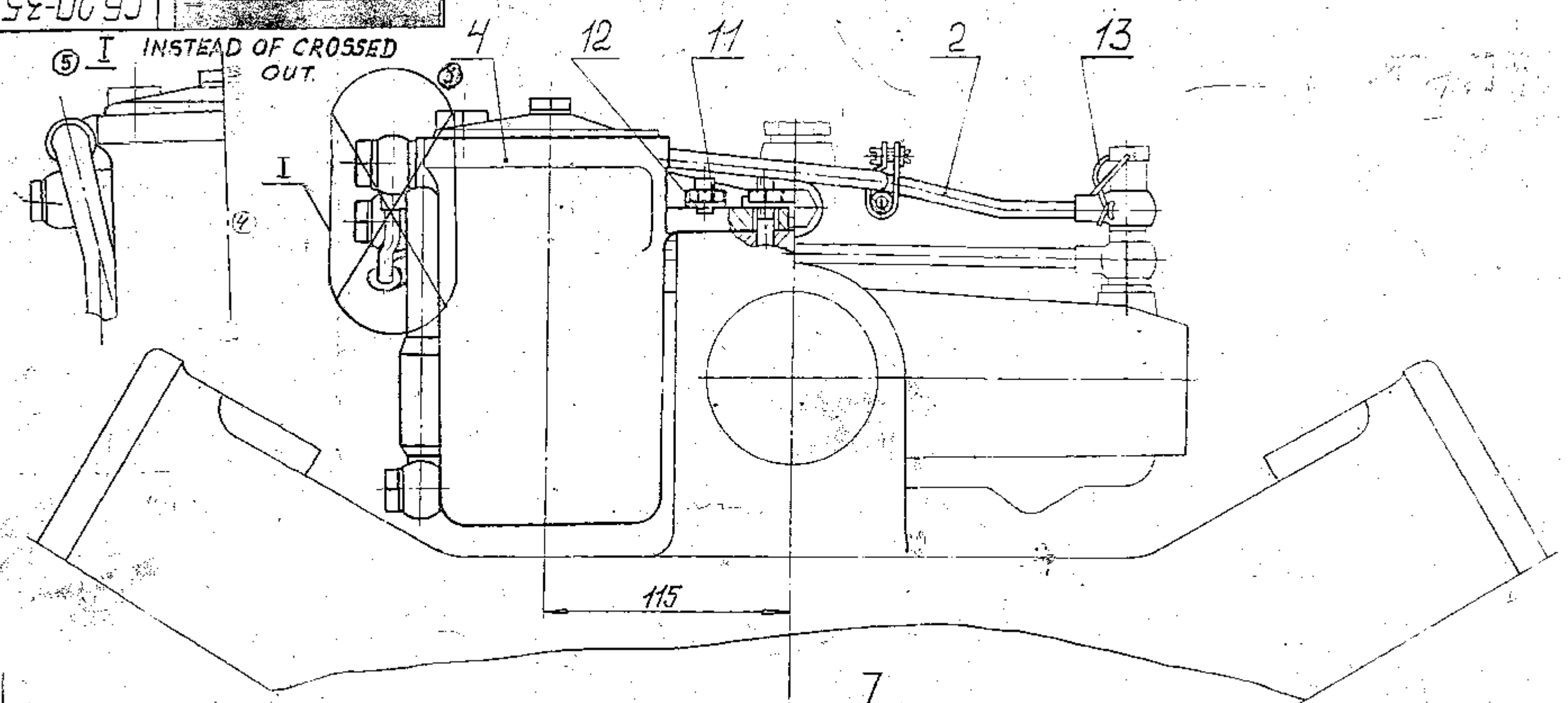
DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	ALL THREADS CONFORM TO
					-2 : 1			
MATERIAL - ROUND BAR					USED ON 26 3567-00-6-00			
9-6-GOST 7417-75					08 3330-00-342050 373-347-00			
20 GOST 1051-73					05 333-33-4-00 00 307-35-4			
CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI					TITLE:-			
					SCREW M5 x 12			
D S CAT NUMBER					DRAWING NUMBER			
					356 22			
ISSUE	DATE	NATURE OF AMENDMENTS						



5-00-35-00-5

SUPERSEDES THE DRG NO CB 20-35-00-1  
PRG. INDICATED BASED ON ORIGINAL ISSUE-1  
AUTHY - 011-86

IV FROM 1-st CYLINDER AXIS  
155 (по осю I цилиндра)

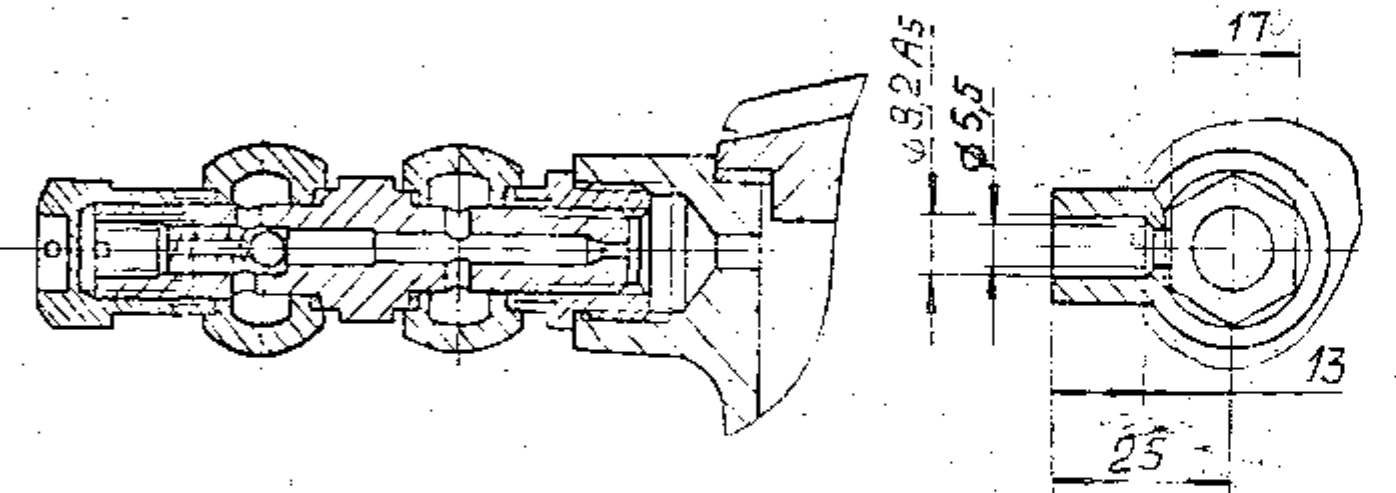


III FROM CRANKSHAFT AXIS  
374 (от осю коленчатого вала)

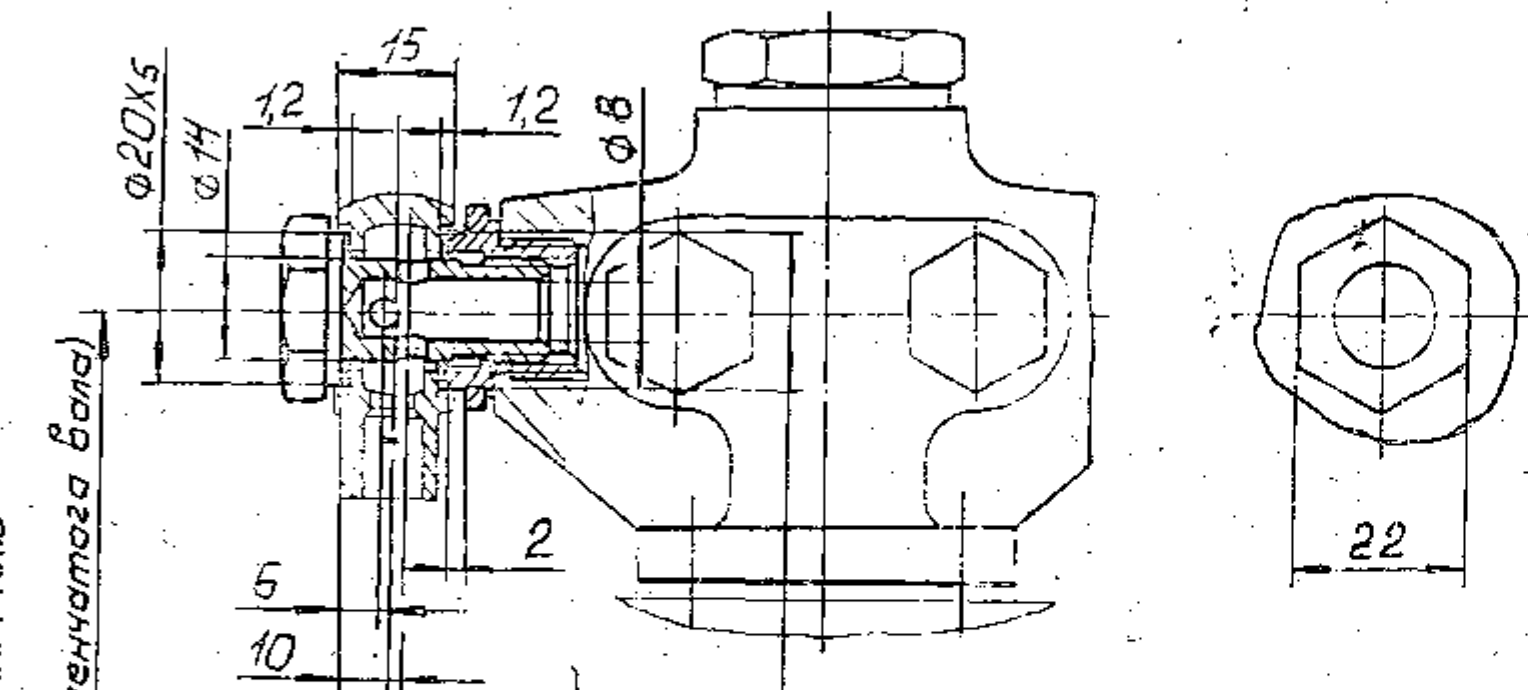
FROM 1-st CYLINDER AXIS

100 (от осю I цилиндра)

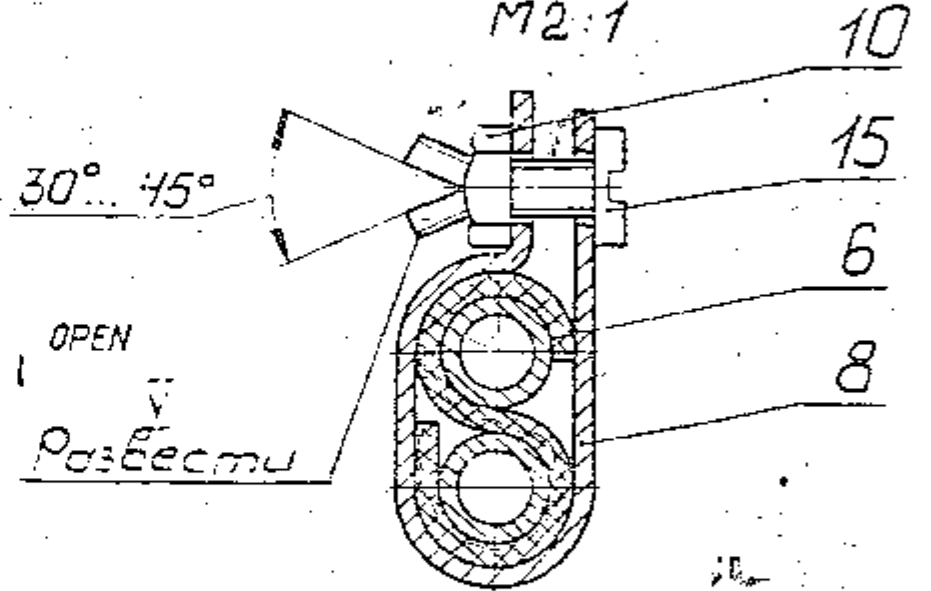
I-I TURNED  
M 1:1 повернуто



B-B TURNED  
M 1:1 повернуто



A-A  
M 2:1



1. трубопроводы топливной системы должны проходить на расстоянии не менее 5 мм от сборочных единиц и деталей двигателя.  
2. указанные размеры на чертеже (кроме размера E) для справок.

- FUEL SYSTEM PIPELINES SHOULD BE AT DISTANCE NOT LESS THAN 5mm FROM ASSEMBLY UNITS AND PARTS OF DIESEL ENGINE.
- INDICATED DIMENSIONS ON THE DRAWING ( EXCEPT ' E' DIMENSION ) ARE FOR INFORMATION.

EST MASS	TO BE STAMPED OR MARKED WHERE INDICATED THIS $\Phi$
5 21-00 AUTHY No. 912-87	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MALIGNED CORNERS TO HAVE R. OUT SIDE
ISSUE DATE	INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
SCALE - 1:2	MATERIAL - USED ON -
CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVAD	TITLE - MOUNTING THE FUEL FILTER ON ENGINE
TO S CAT NUMBER	DRAWING NUMBER
CB 20-35-00-5	CB 20-35-00-5



USED ON

I/L CREATED BASED ON ORIGINAL ISSUE-4

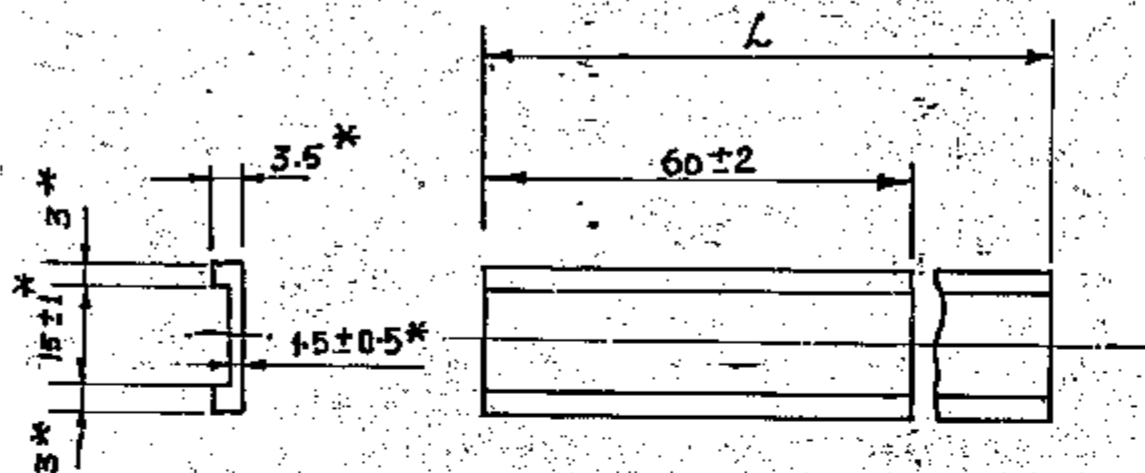
SUPERSEDES THE I/L OF DRG No CB 20-35-00-4

AUTHY 011-86

ITEM	DRAWING NUMBER	D.S. CAT NUMBER	DESCRIPTION	OFF	REMARKS		
			<u>PAPERS</u>				
	CB 20-35-00-5		MOUNTING THE FUEL FILTER				
	& ITEM LIST		ON ENGINE				
			<u>ASSEMBLY UNITS</u>				
1	CB 20-35-09-4 & I/L		FLEXIBLE HOSE	1			
2	CB 20-35-10-11 & I/L		PIPE	1			
3	CB 20-35-70-5 & I/L		FLEXIBLE HOSE	1			
4	CB 20-29-00-7 & I/L		FUEL FILTER	1	FOR REF. ONLY		
5	CB 20-35-11-1 & I/L		PIPE	1			
			<u>PARTS</u>				
6	20-35-85		GASKET	1			
7	315-141		SEAL	2			
8	322-66		CLAMP	1			
9	340-19		PLUG	1			
10	351-13		NUT M5	1			
11	351-50		NUT M10	4			
12	353-19		LOCK WASHER 10	4			
13	354-22		LOCK WIRE L = 150mm	65			
14	354-22		LOCK WIRE L = 200mm	2			
15	356-22		SCREW M5 x 12	1			
3	CQA(HV)507729 E		FLEXIBLE HOSE	1			
5A	29.9.11	Authy: 1 <sup>st</sup> ALT. COMM. Meeting Minutes Pt No.1. Dt. 29.9.2006					
5	7.2.00	AUTHY Motn. No. 912-87					
ISSUE	DATE	NATURE OF AMENDMENTS		ISSUE	DATE	NATURE OF AMENDMENTS	
DRN		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI					
CHD	<i>VCL</i>	TITLE: <b>MOUNTING THE FUEL FILTER ON ENGINE</b>					
TCD	<i>Narasimha Purin</i>						
APPD	<i>S.S.O.1</i>	SHT 1 OFF 1.		D S CAT NUMBER		ITEM LIST FOR	
DATE	17-9-86					CB 20-35-00-5	



DRAWING NUMBER  
20-35-85



1. \* DIMENSIONS ARE PROVIDED WITH TOOLS.
2. MARK ON THE LABEL.
3. OTHER REQUIREMENTS ARE AS PER TECHNICAL SPECIFICATIONS TY 005-216-75 FOR THE ITEMS, CODE 254112.
4. LENGTH OF BAND L IN DELIVERABLE STATE IS NOT LIMITED.

**MATERIAL QUOTED:**

RUBBER HO 68-1 TY 005-216-75

HO 68-1 = GRADE OF RUBBER

**PARAMETERS:**

1. WORKING MEDIUM = AIR, FUELS, OILS AND GASOLINE
2. WORKING TEMPERATURE = -50°C TO +100°C
3. ULTIMATE STRENGTH AT RUPTURE  $\text{Kgf/cm}^2$  (MIN) = 90
4. ELONGATION AT RUPTURE % (MIN) = 250
5. HARDNESS AGAINST HARDNESS GAUGE TYP UNITS = 65-70
6. DENSITY  $\text{g/cm}^3$  = 1.24 ± 0.05
7. RESIDUAL ELONGATION AFTER RUPTURE (MAX) = 12

(A) ALT. MATL.: RUBBER GRADE BNC TO SPECN. CQA(HV)/NBR+CR

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

EST. WT. TO BE STAMPED OR MARKED WHERE INDICATED THIS # LETTERS!

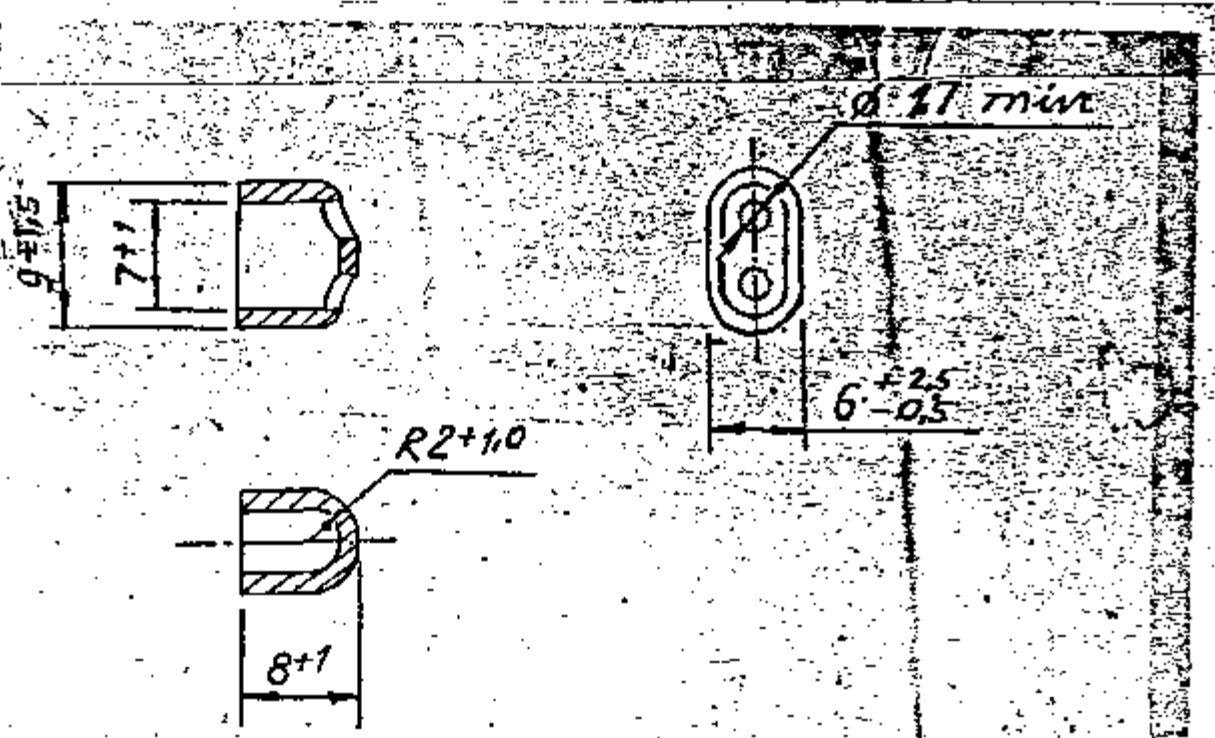
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT SIDE INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DRN	<i>[Signature]</i>	MATERIAL:- RUBBER	USED ON
CHK	<i>[Signature]</i>	HO-68-1 TY 005-216-75	CB.20-35-00-5
TED	<i>[Signature]</i>		
APPD	<i>[Signature]</i>		
DATE	15-4-91	CONTROLLERATE OF QUALITY ASSURANCE(HEAVY VEHICLES)	
SCALE	1:1	AVADI	
DIMENSIONS IN mm		TITLE	GASKET
TOLERANCE ON DIMMS UNLESS OTHERWISE STATED IS:2102-69			
ALL THREADS TO CONFORM TO		D S CAT NUMBER	DRAWING NUMBER
A 30.05.08 LI.No. TC/GEN/IND-III DT. 02.04.08			20-35-85
ISSUE DATE	NATURE OF AMENDMENTS		

SIZE A3



DRAWING NUMBER  
315-141



1. REQUIREMENTS PLACED UPON STAMPING ARE AS PER STANDARDS RD 82050-16.
2. HOLES 1.7mm IN DIAMETER MAY HAVE BURRS.
3. ALTERNATE MATERIAL IS M2, GOST 859-78.

**EXPLANATORY NOTE:**

**MATERIAL QUOTED:**

A A1 M-1 GOST 21631-76  
 A A1 = GRADE OF ALUMINIUM SHEET  
 M = ANNEALED  
 1 = THICKNESS

**CHEMICAL COMPOSITION% (AS PER GOST 4784-74)**

BASIC CONSTITUENT ALUMINIUM = 99.50  
 IMPURITIES (MAX)  
 Fe = 0.30 ; Si = 0.30 ; Cu = 0.02 ;  
 Mn = 0.025 ; Zn = 0.1 ; TITANIUM = 0.1 ;  
 Mg = 0.05 ; TOTAL = 0.50 ; OTHER IMPURITIES INDIVIDUALLY = 0.02

**MECHANICAL PROPERTIES (AS PER GOST 21631-76)**

TENSILE STRENGTH  $\text{kgf/mm}^2$  (MIN) = 6.0  
 % ELONGATION (MIN) = 28

REVISION NOTE ADDED ON 26-10-91

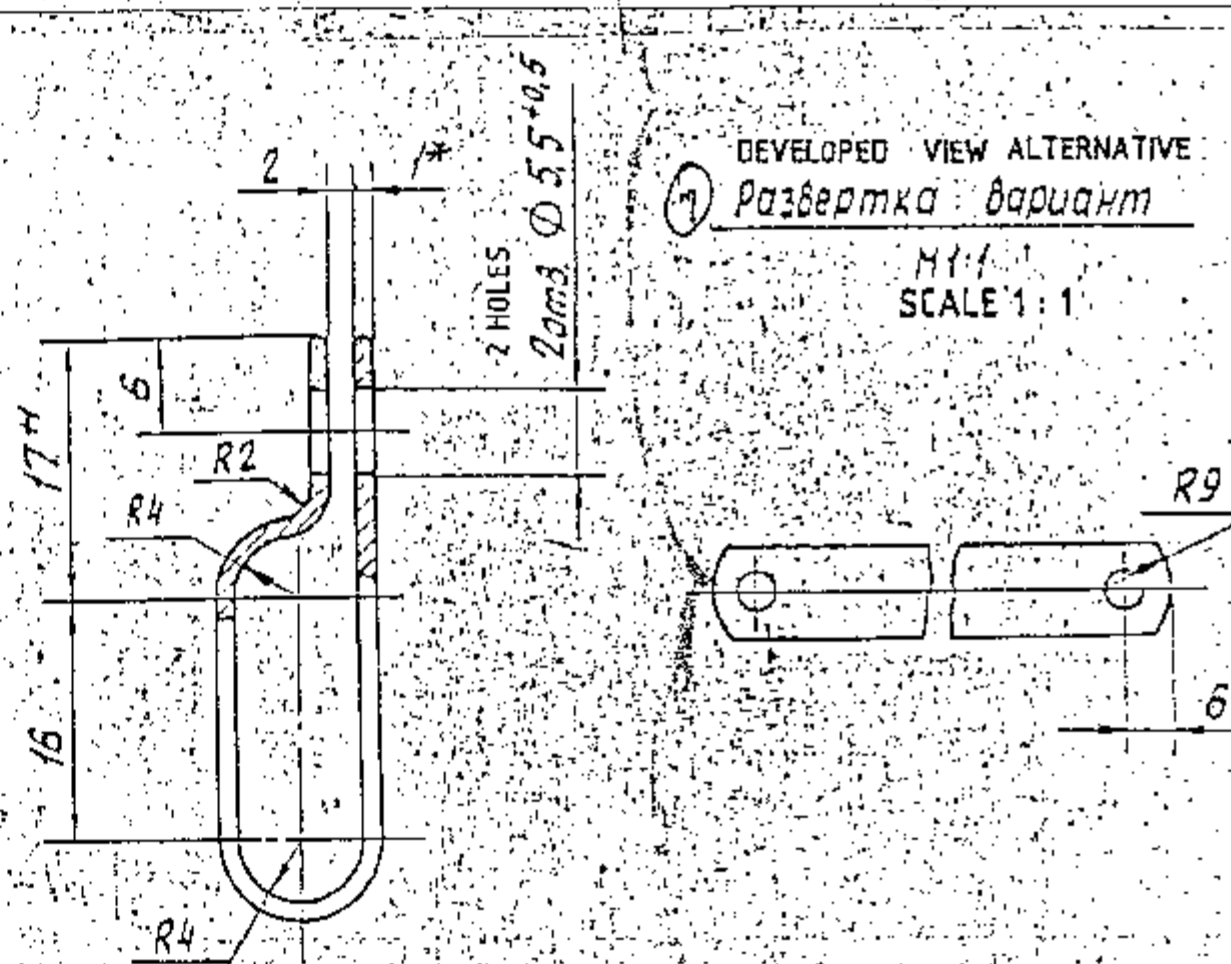
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

EST. WT. 0.004 kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # ( LETTERS)

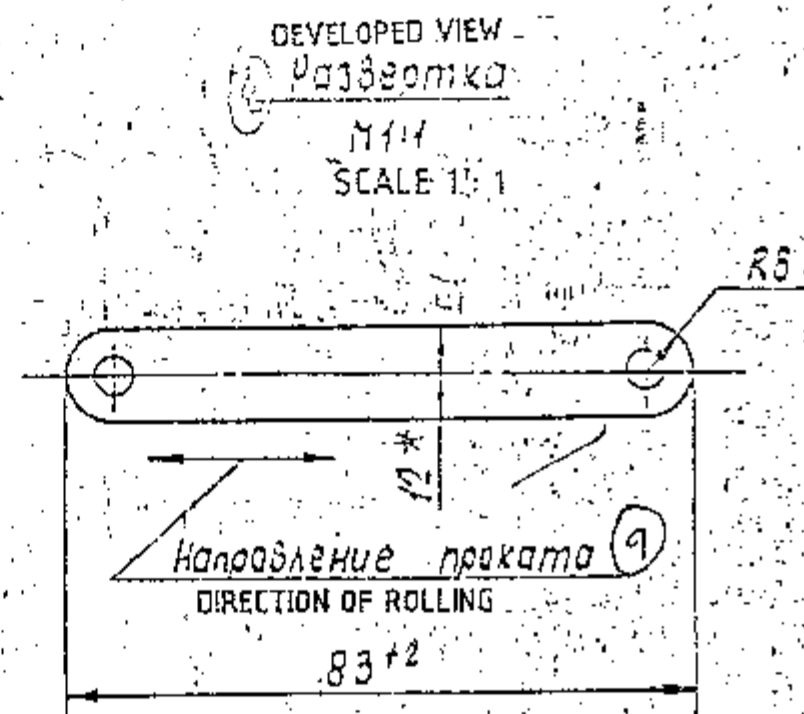
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN		MATERIAL - A A1 M-1	USED ON CB 20-01-00-8
CHD	<i>sh</i>	GOST 21631-76	CB 330-221-3A
TCD	<i>sh</i>		CQA(HV)5.06.001E (A)
APPD	<i>sh</i>		
DATE	4-4-86	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
SCALE	2:1	AVADI.	
DIMENSIONS IN mm		TITLE	SEAL
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102-69.			
ALL THREADS TO CONFORM TO		D S CAT NUMBER	DRAWING NUMBER
			315-141
ISSUE	DATE	NATURE OF AMENDMENTS	
A	18-03-15	Pl. 11 of 7th Alt. Comm. Meeting Dt. 11-4-12	





DEVELOPED VIEW ALTERNATIVE  
Развертка вариант  
M1:1  
SCALE 1:1



DEVELOPED VIEW  
Развертка  
M1:1  
SCALE 1:1

1. Заменяемый материал сталь марок 08, 08кп, 10кп ГОСТ 1050-74. Допускается изготавливать из листа ГОСТ 19904-74.

2. Требования, предъявляемые к штамповке, по нормам 82050-16.

3. Покрытие Zn 12...24 хр по ИЛ-483-82 с удалением водородной хрупкости или лак ГФ-95 по ИЛ-09-73.

4. В тропическом исполнении покрытие КВ9 хр по ИЦЛ-104 с удалением водородной хрупкости или лак ГФ-95 по ИЛ-09-73.

5. Размеры - для справки.

- 1) ALTERNATE MATERIAL : STEEL, GRADES 08, 08KP, 10KP, GOST 1050-74 MAY BE MANUFACTURED FROM SHEET GOST 19904-74 .
- 2) REQUIREMENTS FOR STAMPING IN ACCORDANCE WITH STANDARD 82050-16 .
- 3) COATING : Zn 12 ... 24 CHROMATIZING AS PER ИЛ - 483-82 WITH ELIMINATION OF HYDROGEN EMBRITTLEMENT OR VARNISH ГФ-95 , AS PER ИЛ -09-73 .
- 4) IN TROPICALIZED CONSTRUCTION COATING : Cd 9, CHROMATIZING IN ACCORDANCE WITH ИЦЛ -104 WITH ELIMINATION OF HYDROGEN EMBRITTLEMENT OR CLYPTAL VARNISH ГФ 95 IN ACCORDANCE WITH ИЛ -09-73 .
- 5) \* DIMENSIONS FOR REFERENCE .

(A) EQUIVALENT MATERIAL  
G.Y.DD IS: 513-1994

8	кон.	РЗ-714	19.02.77	19.01.77
10	кон.	А.В.С.А.М.	19.02.77	19.01.77

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

EST. WT. 0.0065 Kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # LETTERS)

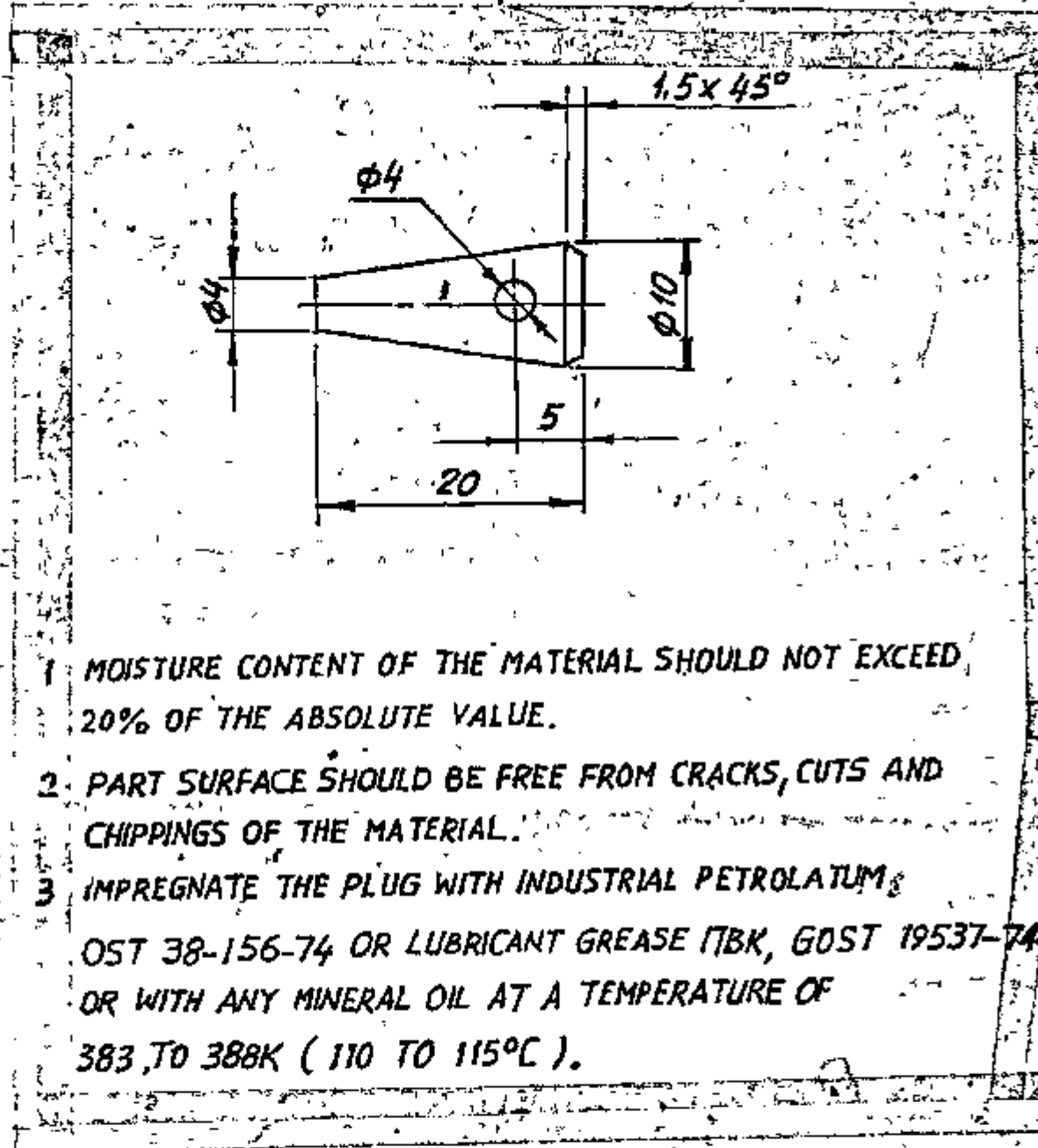
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DATE	19.03.77	4th Alt. Comm. Pt. Minuteg Pt. No. 1 Dt. 26.10.09	NATURE OF AMENDMENTS
ISSUE	DATE	NATURE OF AMENDMENTS	
MATERIAL :- STRIP 08ЛС-М-2-1x12 GOST 503-81		USED ON :- CB 20-35-00-5 CB 322-14-4	
SCALE :- 2:1		DIMENSIONS IN mm.	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 2102-69		TITLE CLIP OF 3 PIPES	
D S CAT NUMBER		DRAWING NUMBER 322-66	



DRAWING NUMBER

340-19



1. MOISTURE CONTENT OF THE MATERIAL SHOULD NOT EXCEED 20% OF THE ABSOLUTE VALUE.
2. PART SURFACE SHOULD BE FREE FROM CRACKS, CUTS AND CHIPPINGS OF THE MATERIAL.
3. IMPREGNATE THE PLUG WITH INDUSTRIAL PETROLATUM, OST 38-156-74 OR LUBRICANT GREASE (TBK, GOST 19537-74) OR WITH ANY MINERAL OIL AT A TEMPERATURE OF 383 TO 388K (110 TO 115°C).

EXPLANATORY NOTE :

RZ 800

MATERIAL QUOTED PINE WOOD 2 GRADE ( OR GRADE 1 ) GOST 8486-66

1 OR 2 GRADES SAWH TIMBER.

TECHNICAL REQUIREMENTS

	1st GRADE	2nd GRADE
1. KNOTS	DEFECTS ARE PERMISSIBLE DIMENSIONALLY IN FRACTION OF SIDE WIDTH AND NUMERICALLY IN ANY LINEAR METER OF LENGTH ON EACH OF THE SIDES	
2. INTERNALLY BLOCK ( INTERNALLY RED )	PERMISSIBLE IN FORM OF STRIPS AND SPOTS OF TOTAL AREA IN % (max)	
	10	20
	OF THE AREA OF SAWH TIMBER.	
3. SAP WOOD FUNGUS COLOURS	PERMITTED SURFACE COLOURS IN THE FORM OF SPOTS AND STRIPS AND DEEP ONES OF TOTAL AREA IN % (max)	
	10	20
4. CRACKS	a) CRACKS ON SURFACES AND EDGES, INCLUDING VENT AT THE FACE END ARE PERMISSIBLE TO A DEPTH (max)	
	1/5	1/4
	b) THICKNESS OF SAWH TIMBER AND TOTAL LENGTH (max)	
	1/4	1/3
	c) CRACKS ON FACE AND INCLUDING CONTINUOUS ONES ARE PERMISSIBLE WITH TOTAL LENGTH ON BOTH ENDS in mm (max)	
	150	200
5. RESIN POCKET	PERMISSIBLE ON ANY LINEAR METER OF LENGTH IN A PIECE (max)	
	2	4

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

EST. WT. 0.0004kg TO BE STAMPED OR MARKED WHERE INDICATED THIS # 1 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

ISSUE	DATE	NATURE OF AMENDMENTS

DRN	<i>Schubert</i>	MATERIAL:- PINE	USED ON
CHK	<i>Shankar</i>	GOST 8486-66	CB 20-35-00-5
TCD	<i>G. Narayana</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
APPD	<i>V. Ramana</i>	AVADI	
DATE	22-4-91	TITLE	
SCALE	2:1	<b>PLUG</b>	
DIMENSIONS IN mm TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 2102-69		D S CAT NUMBER	DRAWING NUMBER
ALL THREADS TO CONFORM TO			340-19



SIZE A3

