

USED ON

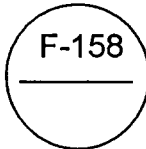
Cb.3308-15-2

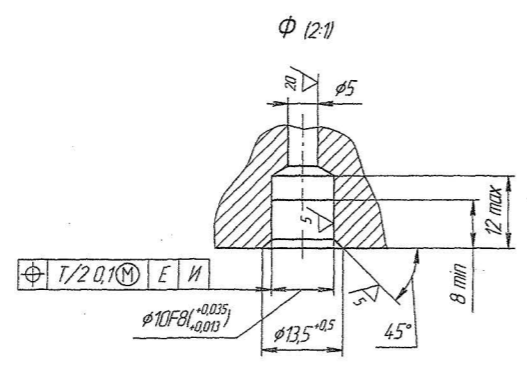
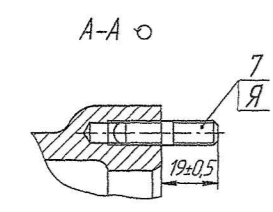
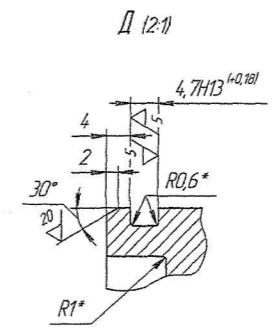
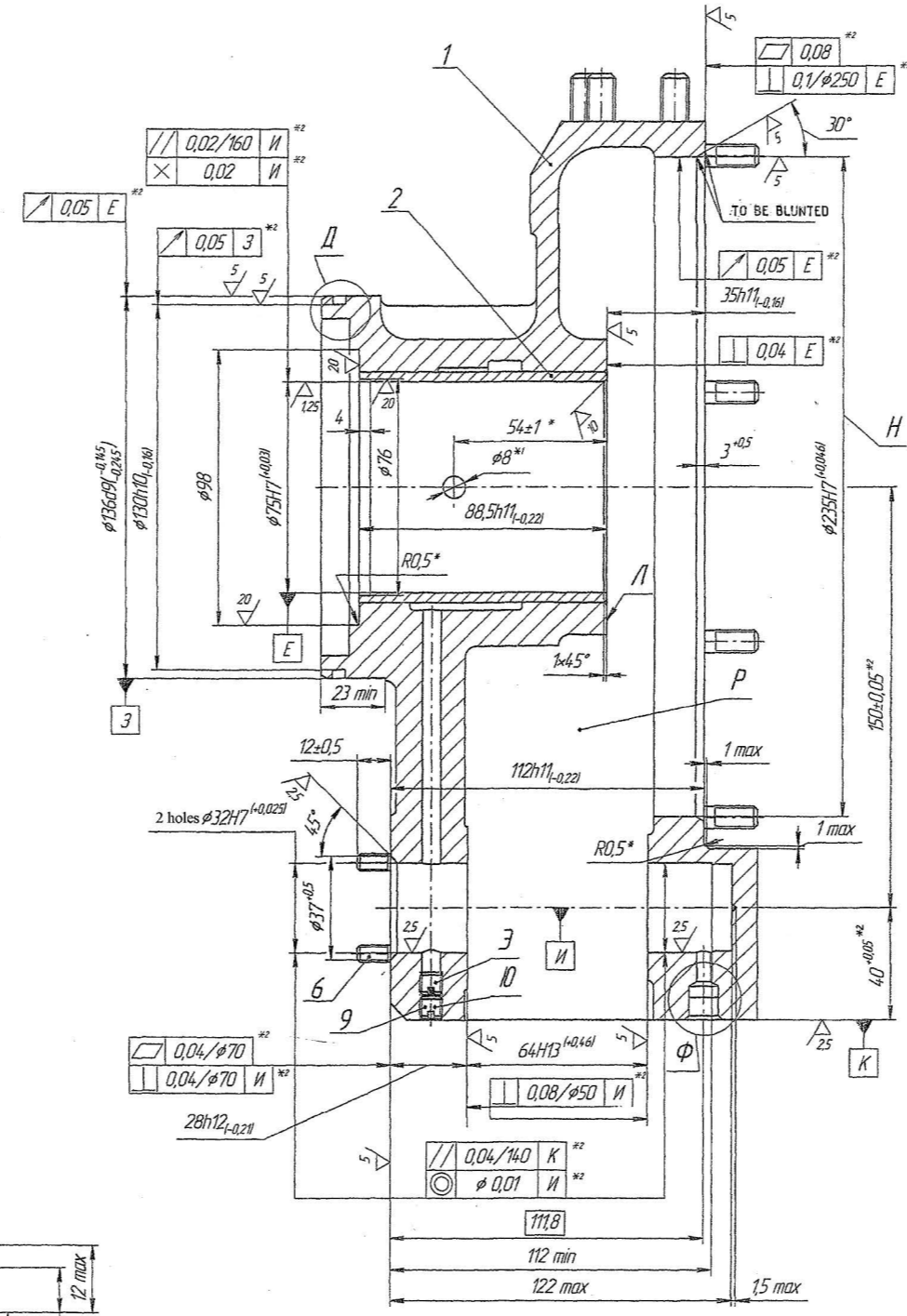
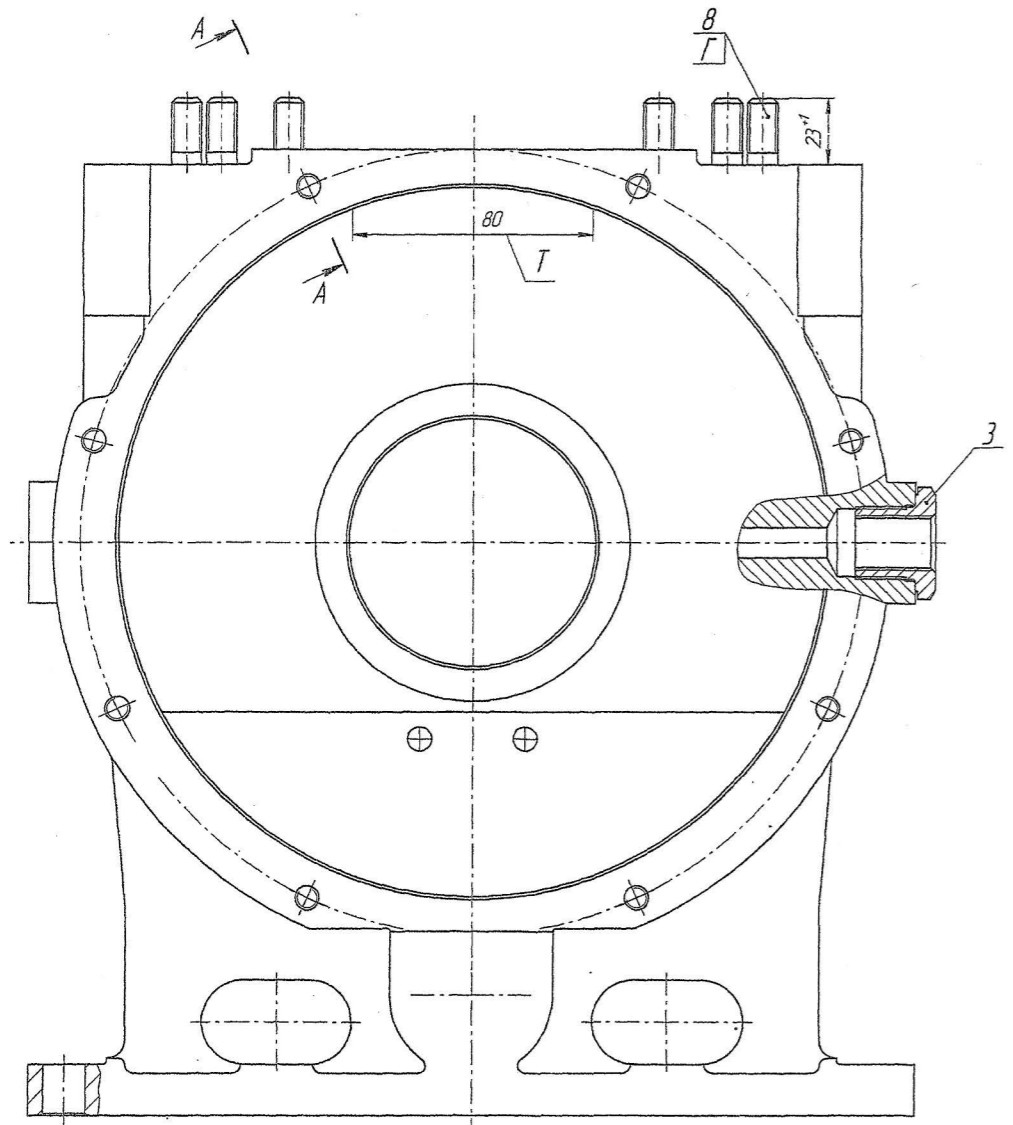
I/L CREATED BASED ON RUSSIAN ORIGINAL ISSUE - NIL
 I/L REPLACES VIDE ISSUE-NIL., NOTN.No. 144-06

ZONE	ITEM NO	DRAWING NUMBER	D S CAT NUMBER	DESCRIPTION	QTY	REMARKS
		Cb.3308-04-24		FUEL PUMP DRIVE		
		ITEM LIST		HOUSING ASSY		
	1.	308-30-25		FUEL PUMP DRIVE	1	
				HOUSING.		
	2	3308-68		BUSH	1	
	3	402-28-1		BUSH	1	
	6	350-03		STUD M6 x 24	4	
	7	350-15		STUD M8 x 35	8	
	8	350-94		STUD M10 x 42	6	
	9	356-63-3		PLUG	2	

ISSUE	DATE	NATURE OF AMENDMENTS	ISSUE	DATE	NATURE OF AMENDMENTS

DRN	<i>B. Leonard Bab</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.			
CHD	<i>Praveen Devaraj</i>	TITLE :			
APPD	<i>R. Lakshminarayanan</i>	FUEL PUMP DRIVE HOUSING ASSY			
DATE	21 - 01 - 09	SHT. NO. 1 OF 1	D S CAT NUMBER	ITEM LIST FOR Cb.3308-04-24	





1. Cool the part item 2 in liquid nitrogen before press-fitting in part item 1. Set up to coincidence with end face JL, projection is not permitted.
2. Protect the oil pipe of part item 1 from falling of chips during boring of holes. Oil pipe should be clean.
3. Unspecified limit deviation of dimensions: H14; h14; ±IT14.
4. Check the deviation from planeness of surface K "by paint", prepared and put as per instruction IJL-613-85. Distribution of paint should be uniform and put not less than 70% of surfaces. Check selectively, not less than 10% parts.
5. Dimension H=235, 115, maximum on section T is permitted.
6. Set bush item 3, stud Я and Г on sealing compound Аи-5МД ТУ6-01-1288-84 as per ИЛ-652-86.
7. Turn plug 3 up to support to runout of threads. Fill the space between end faces of plug 3 and IO by epoxy glue No. 1 for cold consolidation as per ИЛ-745-88. Volume of glue between plugs should be with such order during turning of plug IO would be outlet of glue through thread from outside. Projection of plug is not permitted.
8. Test for airtightness of oil pipe and cavity P by oil, used on engine for two minutes minimum, temperature of oil 80...100 °C. Oil pipe- with pressure (1.1±0.1) MPa ((11±1) kgf/cm²). Cavity P - with pressure (0.3±0.5) MPa, ((3±5) kgf/cm²). Leakage of oil is not permitted. Test the cavity P for airtightness by air in water. With pressure 0.1...0.2 MPa (1...2 kgf/cm²) for two minutes minimum. Passing of air is not permitted.
9. * Dimensions are ensured by tool.
10. *1 Dimension for references.
11. *2 Ensure before setting of pins item 6: item 7.

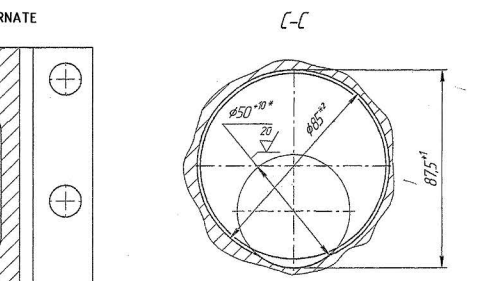
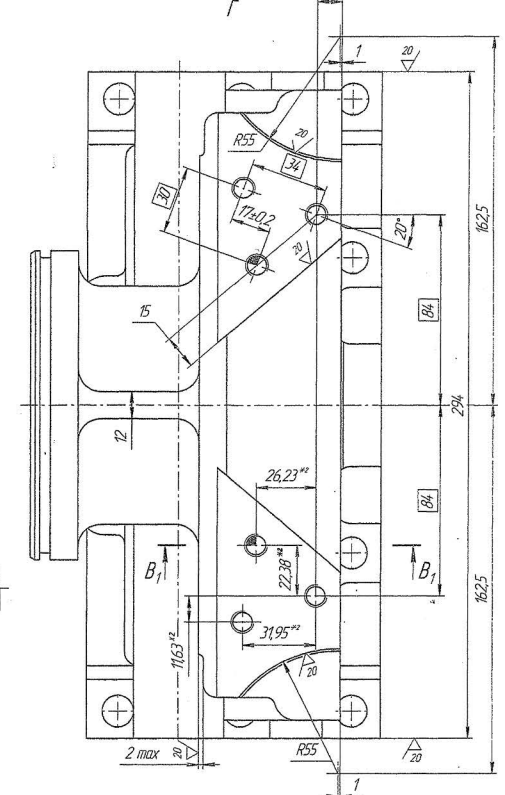
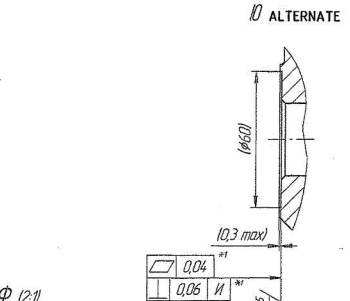
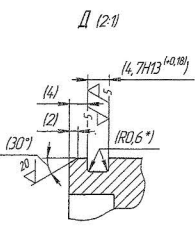
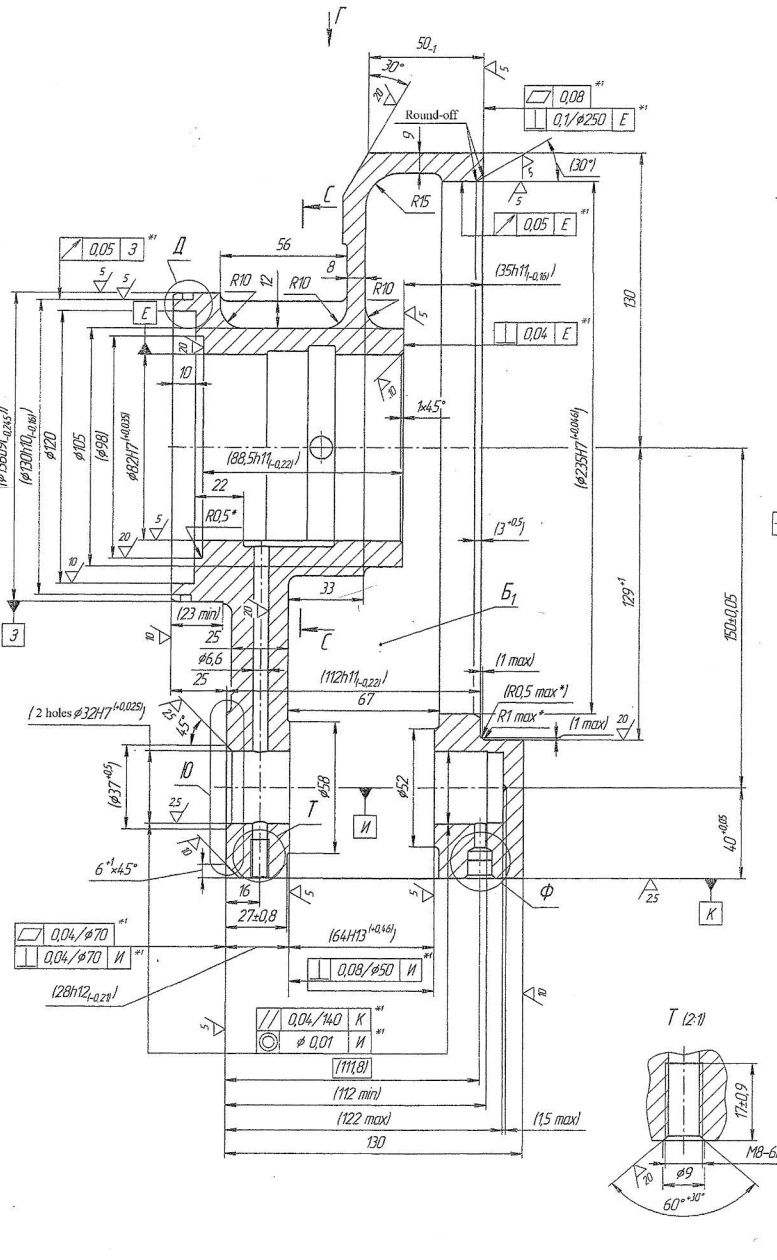
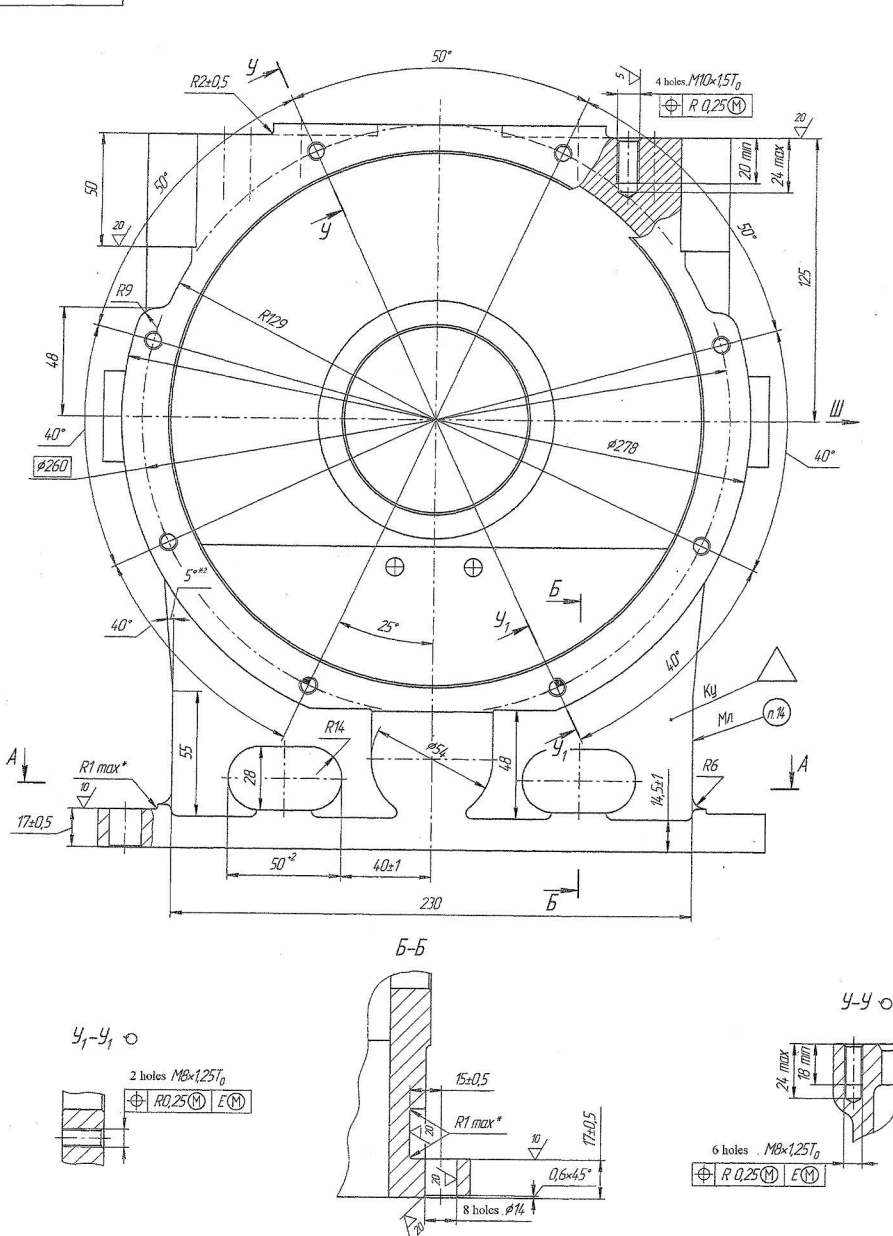
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST. WT. (kg) 8.35

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	APPD	DATE	MATERIAL	USED ON
					Cb.3308-15-2
SCALE: 1:1				CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	
DIMENSIONS IN mm				TITLE: FUEL PUMP DRIVE HOUSING ASSY	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS .2102-69				D S CAT NUMBER	
ALL THREADS TO CONFORM TO				DRAWING NUMBER Cb.3308-04-24	
ISSUE	DATE	NATURE OF AMENDMENTS			

DRG. INDANISED BASED ON RUSSIAN ORIGINAL ISSUE - NIL. DRAWING REPLACES Cb.3308-04-24 ISSUE - 1. NOTIN. No. 144-06

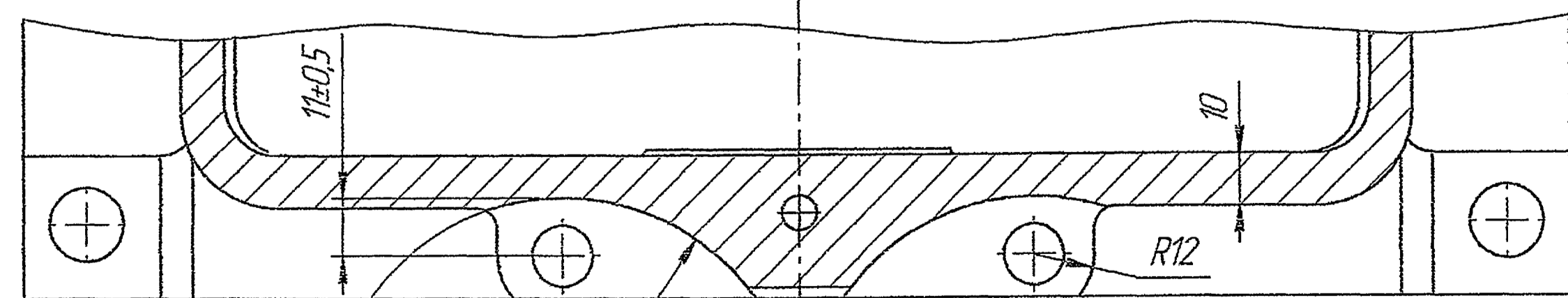
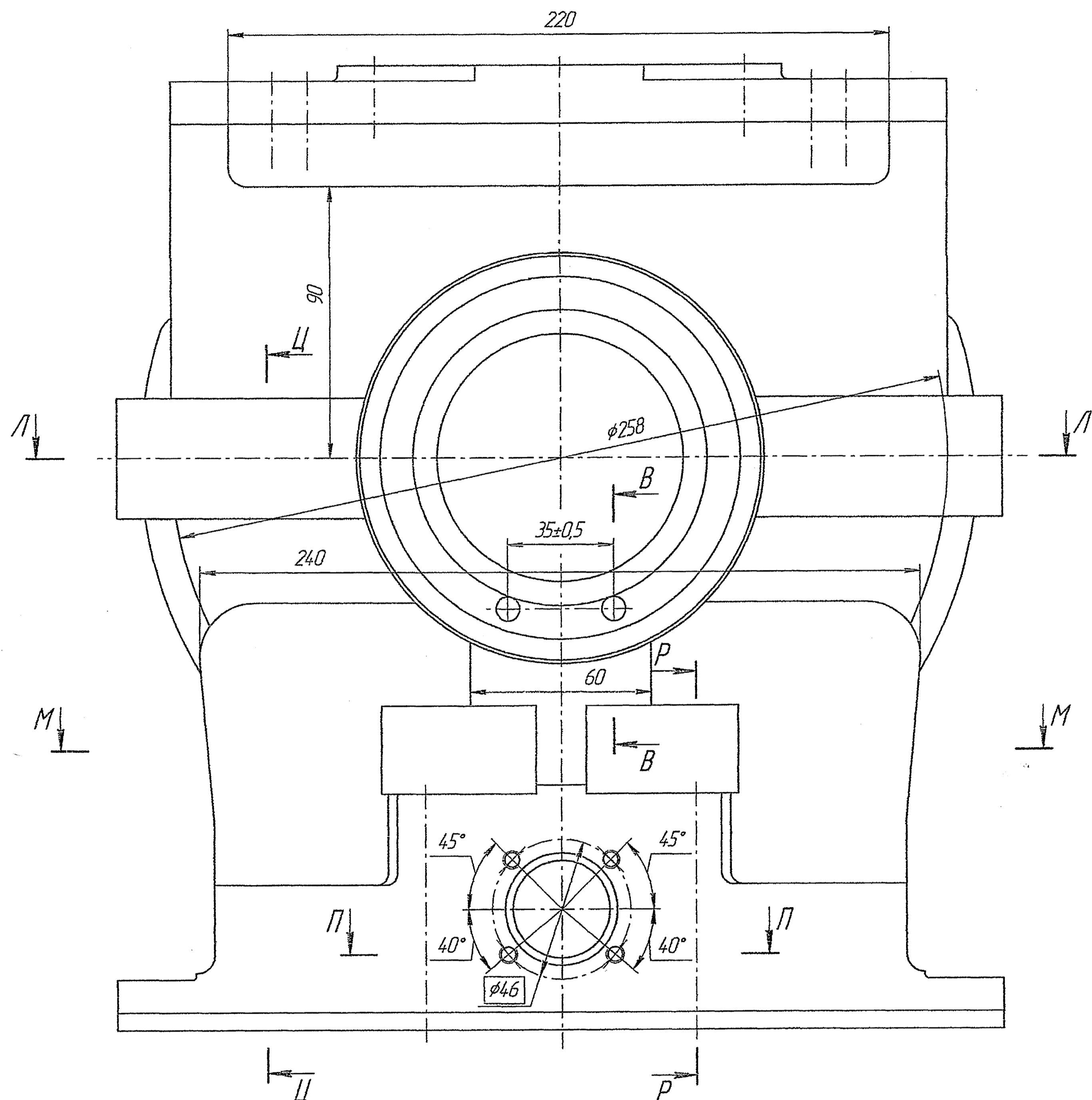


- Requirement, present to casting as per TTM 65-78.
- Hardness $\geq 80HB$.
- Unspecified limit deviations of casting dimensions:
 - up to 50 mm ± 0.15 mm
 - from 50 mm to 250 mm ± 0.2 mm
 - from 250 to 500 mm ± 0.2 mm
 - thickness of wall ± 0.2 mm
 - radius up to 10 mm ± 0.15 mm from 10 mm to 30 mm ± 0.15 mm, from 30 mm to 80 mm ± 0.2 mm, above 80 mm ± 0.2 mm.
- Unspecified casting radii 3...5 mm.
- Unspecified casting inclines up to 3° .
- Unspecified limit deviation of dimensions of machining: H14, h14, $\pm IT/2$.
- Dimensions, given in bracket - after assembly.
- Check the deviation from planeness of surface K "by paint", preparation and putting as per instruction ИП-613-85. Adjoining should be even and occupy not below 70% of surface, check selectively not below 10% of parts.
- Technical requirement on thread is carried out as per standard 82021-00.
- It is permitted to carry out element ϕ in part 308-30-25.
- Check the cavity B1 for airtightness by air in water with pressure $0.1...0.2$ MPa (1...2 kgf/cm 2) for two minutes minimum. Passing of air is not permitted. It is permitted to carry out checking for airtightness by water at temperature $60...80^\circ C$ with pressure 0.3 ± 0.05 MPa (3 ± 0.5 kgf/cm 2) for five minutes minimum. Leakage of water is not permitted.
- Check oil pipe for airtightness by air in water with pressure 0.2 ± 0.1 MPa (2 ± 1.0 kgf/cm 2) for two minutes minimum. Passing of air is not permitted.
- Coating of non-machined surfaces by bakelite varnish as per ИП-665-86. Absence of coating during manufacturing in metallic form is permitted.
- Mark the grade of material of casting as per GOST 2171-90 having letter size 10-Ир3 as per GOST 26.008-85. Marking by impact method is permitted.
- * Dimensions are ensured by tool.
- *1 Ensure after assembly.
- *2 Dimensions for references.

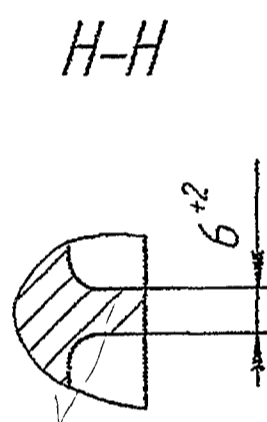
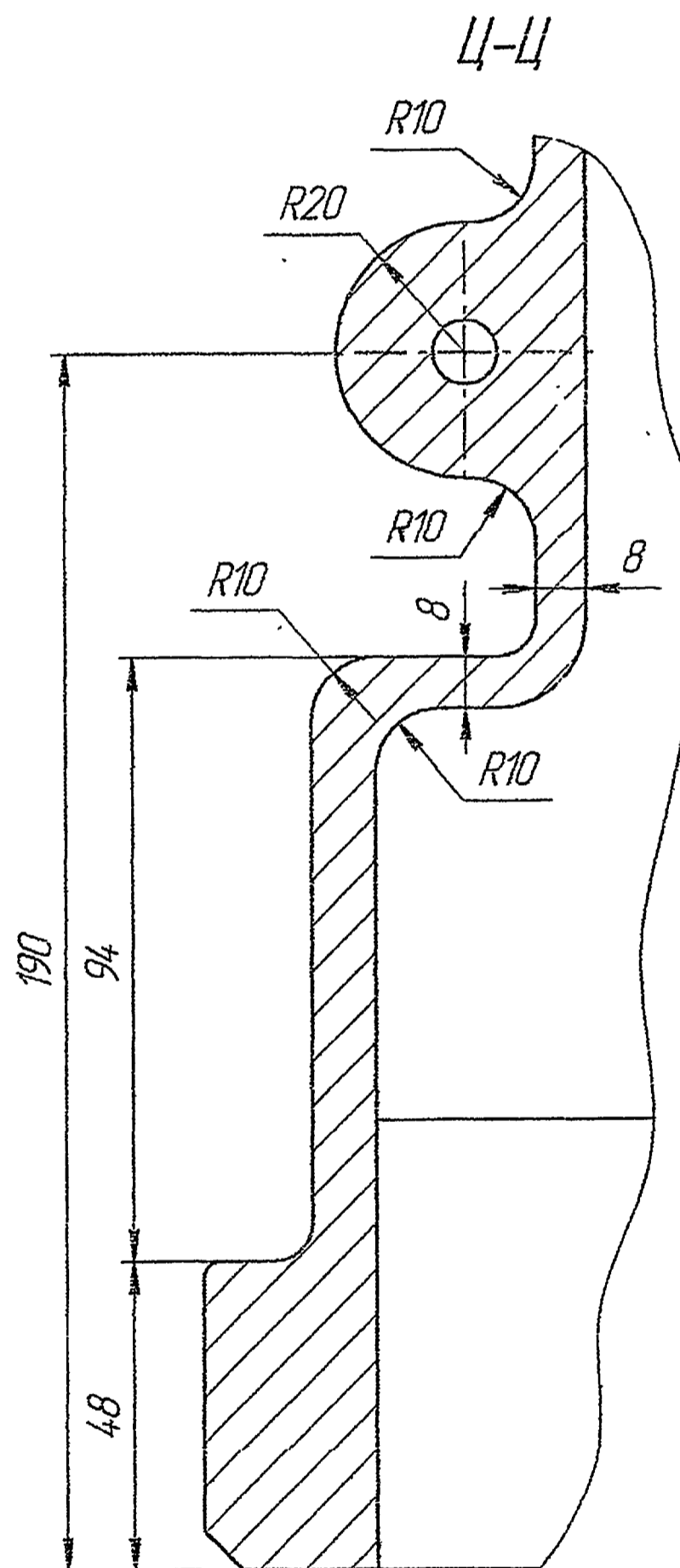
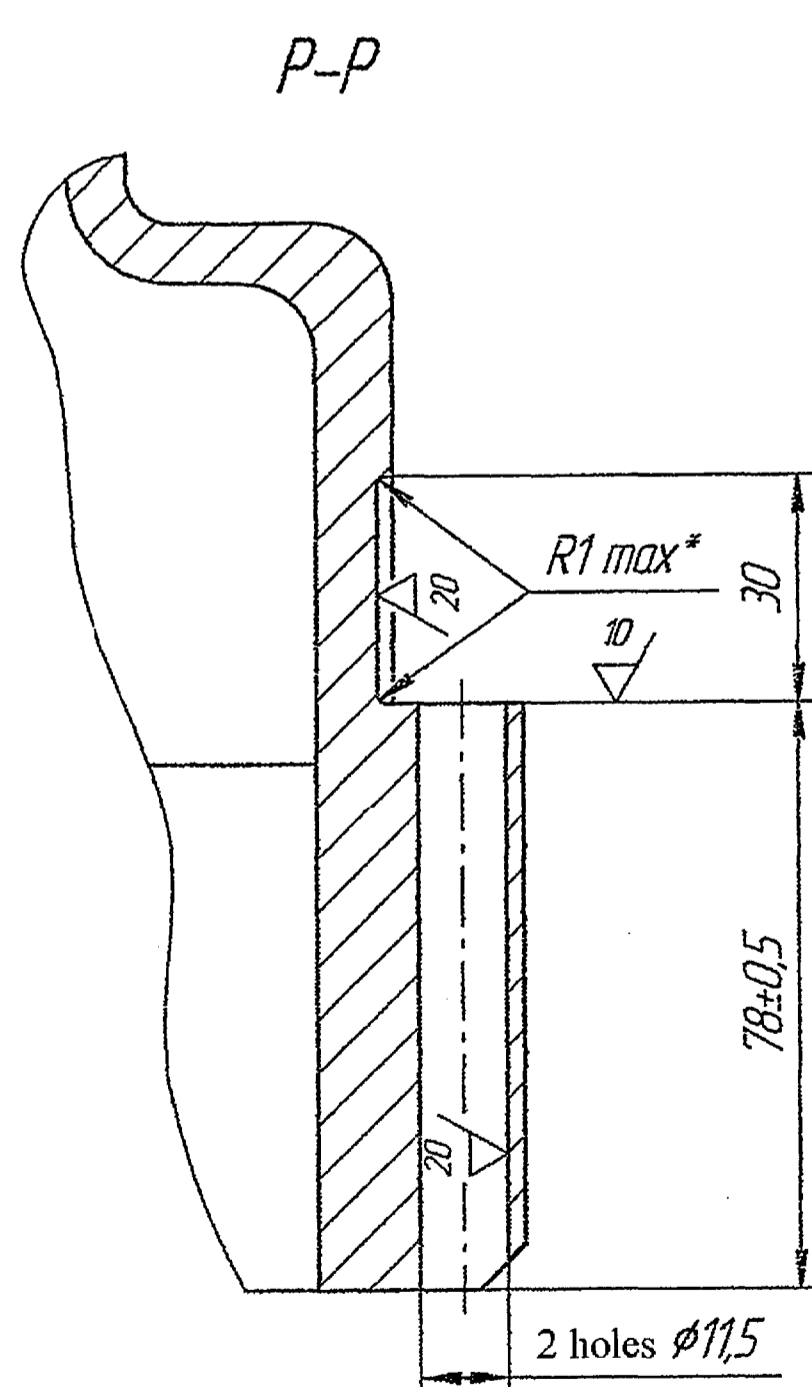
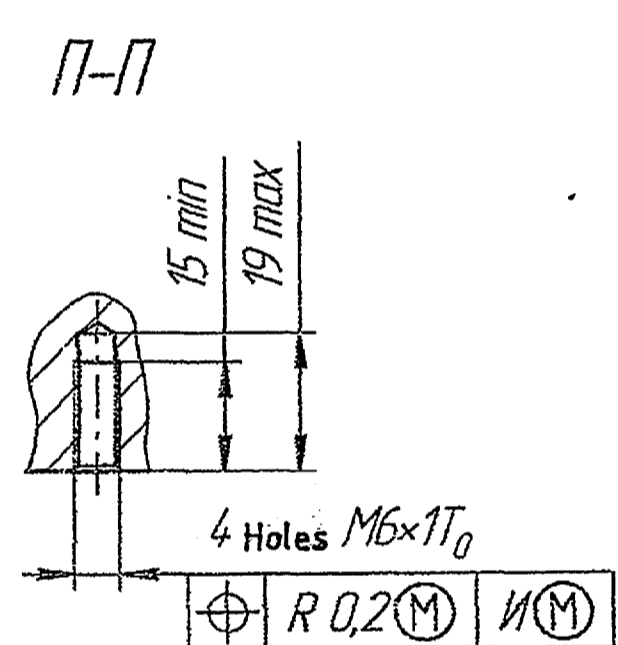
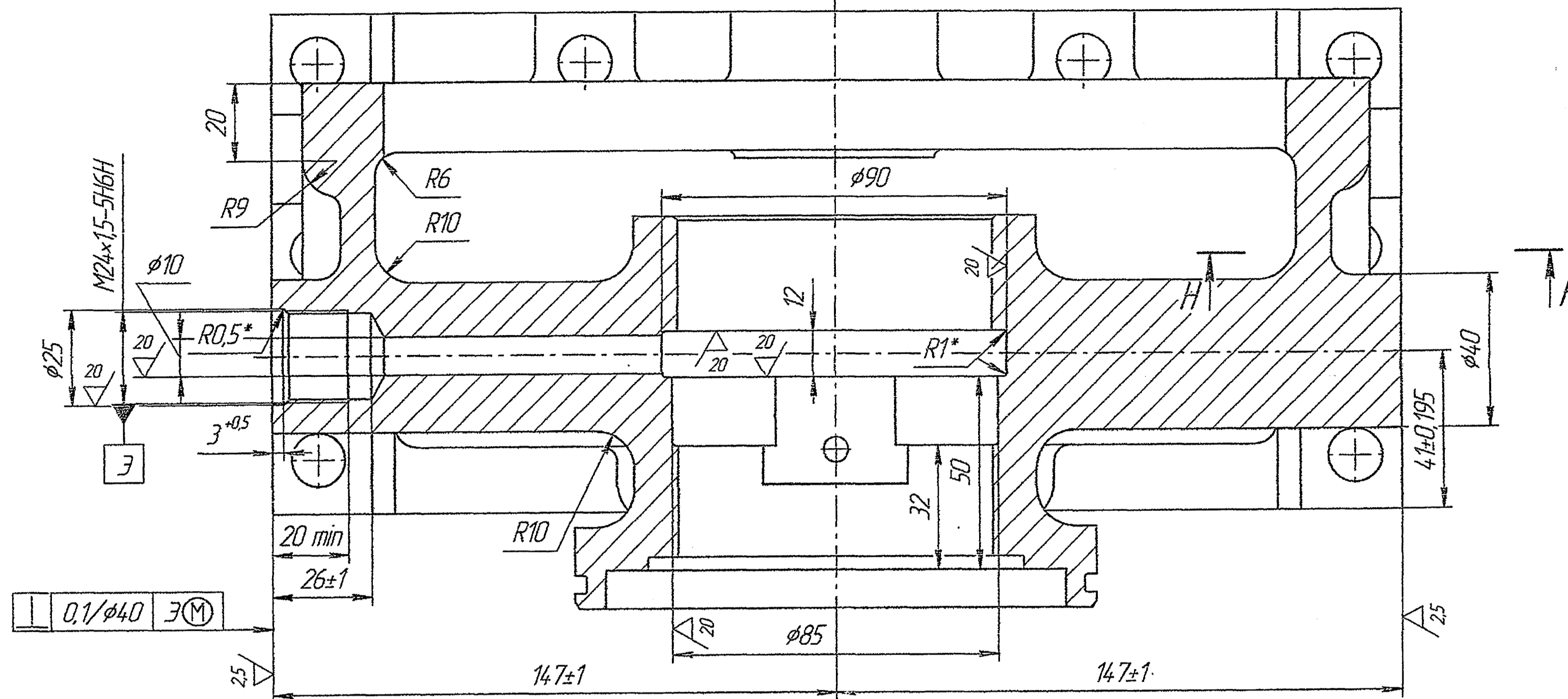
DRN <u>9-A-1</u>		MATERIAL: AK7/1A/7/1 GOST 523-93	USED ON: Ch. 3308-04-24
CHD	<u>10/11/1</u>	CONTROLLETTORATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	AVADT
APPD	<u>10/11/1</u>	TITLE: FUEL PUMP DRIVE HOUSING	
DATE	<u>05.2.09</u>	D S CAT NUMBER	
SCALE: 1:1			
DIMENSIONS IN mm			
TOLERANCE ON DDNS			
UNLESS OTHERWISE STATED IS 200-09			
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	DRAWING NUMBER 308-30-25 SHEET 1 OF 2

DRG. INDANISED BASED ON RUSSIAN ORIGINAL ISSUE-NIL DRAWING REPLACES 308-30-25 ISSUE-AMOTNI, No. 88-06 (F-198)

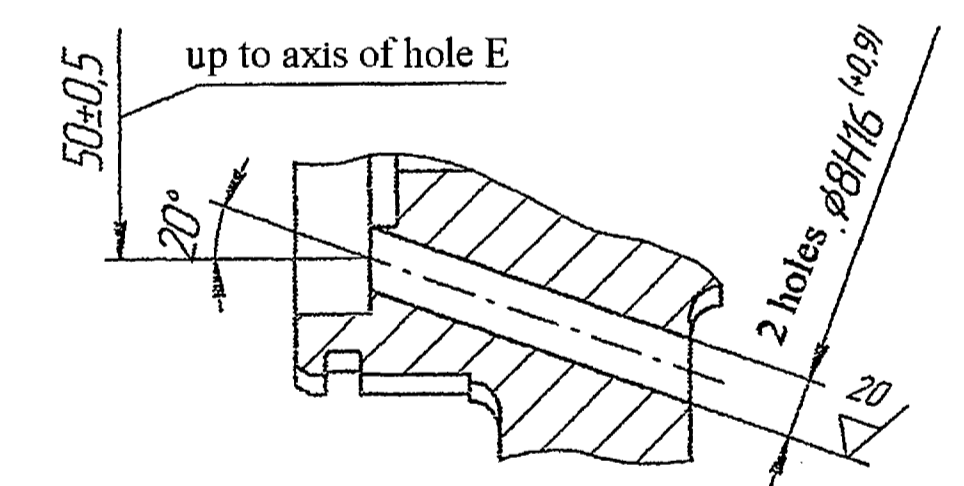
sheet 1



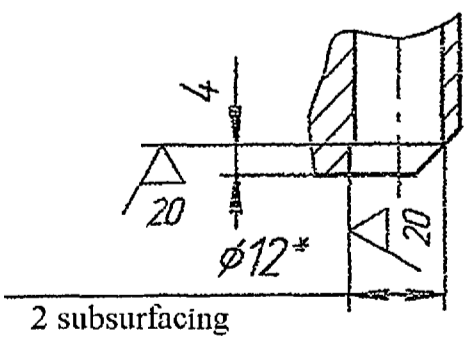
R4.5 ± 10*



B-B



P-P ALTERNATE



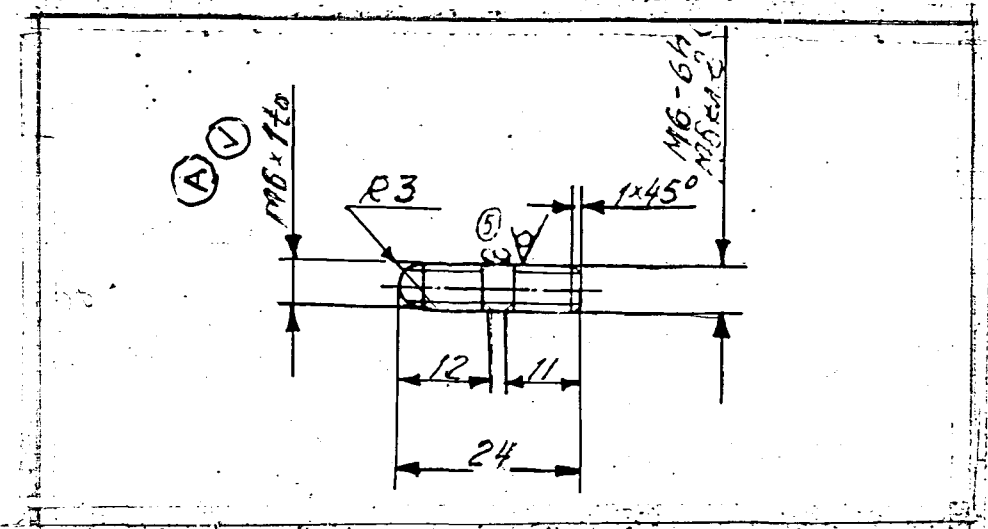
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST. WT. (G) 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	AK 74(A/19)1583-93	MATERIAL: GOST	USED ON: Cb.3308-04-24
CHD			
APPD			
DATE	03-2-09	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	AVADI
SCALE: DIMENSIONS IN mm		TITLE: FUEL PUMP DRIVE HOUSING	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS: 2102-69		D S CAT NUMBER	
ALL THREADS TO CONFORM TO		DRAWING NUMBER 308-30-25 SHEET 2 OF 2	
ISSUE	DATE	NATURE OF AMENDMENTS	

DRAWING NUMBER
350 03



(D) 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 ULS-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 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

EXPLANATORY NOTE:

8. 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 ²	YIELD POINT Kgf/mm ²	ELONGATION %	REDUCTION IN AREA %	IMPACT STRENGTH Kgf/cm ²	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

- (A)** 9. REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THUS **(A)** 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 ± 0.082	

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

DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSIONS	TOLERANCE	ALL THREADS	D S CAT NUMBER	DRAWING NUMBER
				30-5-86	1:1	IN mm	UNLESS OTHERWISE STATED	CONFORM TO		350 03
12-8-10 4 th Alt. Comm. Meeting Minutes Point No.11 Dt: 26-10-09 25.8.08 USED ON NUMBERS ADDED AUTHY:- MIN. OF ALT. COM. MEET. 11.01.08 POINT No.-2.12 Dt.- 07-02-07 6.9.95 REPAIR SIZE DIMENSION ADDED					MATERIAL: ROUND BAR GOST 7417-75 * 45 GOST 1051-73 USED ON Cb 3301-15-44 Cb 3338-402-4 Cb 3329-01-11 CONTROLLERATE OF INSPECTION(HEAVY VEHICLES) AVADI TITLE: STUD M6 x 24					
ISSUE	DATE	NATURE OF AMENDMENTS								

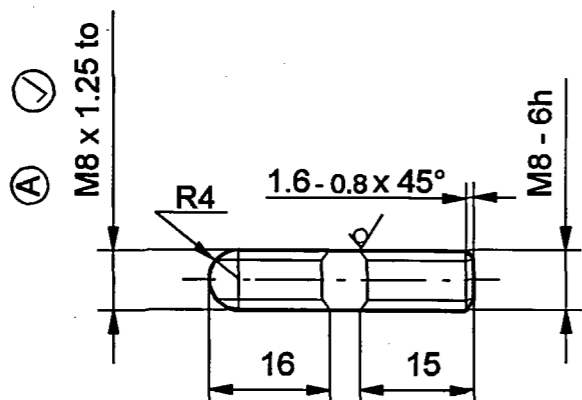
COMMON TO V-92S2 ENGINE

(A-11)
SIZE A3

Rz 80/ (✓)

DRAWING NUMBER
350 - 15

SHEET No. 1 OF 1



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 II.II-104 WITH ELIMINATION OF HYDROGEN EMBRITTEMENT.
5. THE THREAD MAY BE MADE BY ROLLING WITH THE DIAMETER OF UNTHREADED PORTION WITHIN THE PITCH DIAMETER OF THREADS.
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 AND 50 GOST 1050-74.
8. HARDNESS :- 27 - 32 HRC.

8. EXPLANATORY NOTE :-

MATERIAL QUOTED :- ROUND BAR ~~GOST 7417-75~~ 45 GOST 1051-73

ALTERNATE MATERIAL QUOTED :- 40, 50 GOST 1050-74
PERTAINS TO SIZED COLD ROLLED OR COLD DRAWN STEEL WITH ROUND SECTION
40, 45 AND 50 ARE GRADES OF STEEL GOST 1051-73

CHEMICAL COMPOSITION :

GRADE OF STEEL	CONTENT OF ELEMENTS IN %							
	C	Si	Mn	Cr	P	Cu	S	Ni
40	0.37 - 0.45	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.25	0.04	0.25
45	0.42 - 0.50	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.25	0.04	0.25
50	0.47 - 0.55	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.25	0.04	0.25

MECHANICAL PROPERTIES :

GRADE OF STEEL	TENSILE STRENGTH Kgf/mm ² (min)	YIELD POINT Kgf/mm ² (min)	ELONGATION % (min)	REDUCTION IN AREA % (min)	IMPACT STRENGTH Kgf/mm ² (min)
40	58	34	19	45	6
45	61	36	16	40	5
50	64	38	14	40	4

9. REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THUS BASED ON OVER HAUL SPECIFICATION PART III REPAIR DRAWINGS.

SL.No.	R	REMARKS
1	M 10 x 1.5 to	ALL OTHER CONDITIONS AS PER STD. DRG.
2	PCD = 9.026 ^{+0.170} / _{+0.095}	

- * MATERIAL :- STEEL 709 M40 (EN-19) TO BS : 970 PT. -I-1983.

** Cb 306-01-36 Cb 306-01-20
Cb 306-02-36 Cb 306-02-20
Cb 3301-15-44 Cb 406-05-3
Cb 3308-04-24 Cb 3301-15-30
Cb 3321-14-1

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

EST. WT. (Kg)	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
0.012	

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

DRN	Sd/=	MATERIAL :- ROUND BAR GOST 7417-75 * 45 GOST 1051-73 ①	USED ON :- Cb 3338-402-4 **
CHD	Sd/=	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	
APPD	Sd/=	TITLE :- STUD M8 x 35	
DATE	02.05.87	D S CAT NUMBER	
SCALE:- 1 : 1		DRAWING NUMBER	
D	20-05-09	350 - 15	
C	25.8.08		
B	11.01.08		
A	06.9.95		
ISSUE	DATE	NATURE OF AMENDMENTS	

DRG. RE-INDIANISED BASED ON 350-15 ISSUE 'B' COMMON TO V-9252 ENGINE

F-11

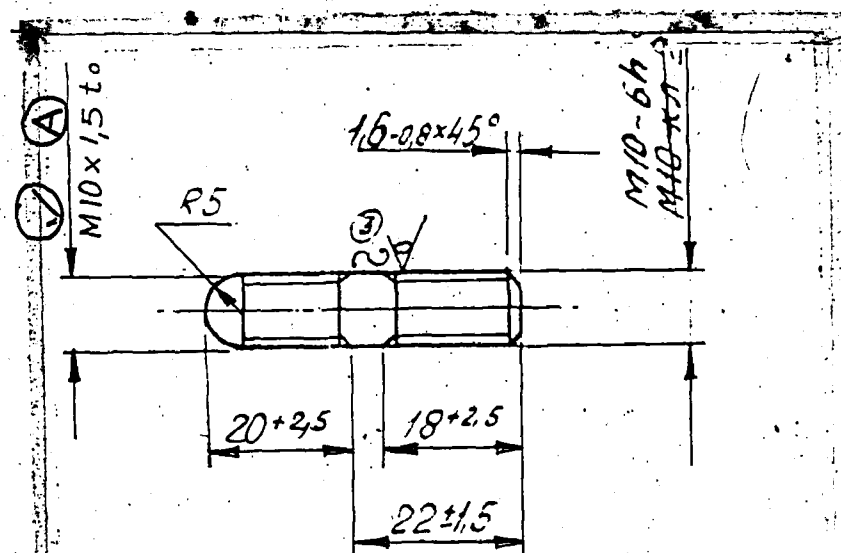
SIZE A2

DRAWING NUMBER

350-94

RZ80/ (✓)

8. EXPLANATORY NOTE :



1. INSPECTION GROUP IV TT-11
2. HRC \ni 28 ----- 35
3. TECHNICAL REQUIREMENTS FOR THREADS AS PER STANDARD 82021-00.
4. COATING: CADMIUM 3, CHROMATIZING AS PER $\cup\cup\cup$ -104 WITH SUBSEQUENT ELIMINATION OF HYDROGEN EMBRITTLEMENT.
5. MECHANICAL DAMAGE OF CADMIUM COATING SUCH AS SCRATCHES, NICKS AND DENTS ARE ALLOWED ON ASSEMBLY UNITS, PROVIDED THE STEEL IS NOT EXPOSED.
6. DIMENSIONS WITH UNSPECIFIED TOLERANCES AND THE REST OF THE TECHNICAL REQUIREMENTS AS PER STANDARD 82052-00.
7. THE THREAD MAY BE MADE BY ROLLING WITH THE DIAMETER OF UN-THREADED PORTION WITHIN THE PITCH DIAMETER OF THREAD.
9. REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED
 (A) \ni \checkmark BASED ON OVERHAUL SPECIFICATIONS PART III REPAIR DRAWINGS. * *

8. REFERENCE MATERIAL QUOTED:

COLD ROLLED SIZED STEEL ROUND ϕ 10mm, CLASS OF ACCURACY 4 (-0.100)
 TO GOST 7417-75 FROM HIGH GRADE STEEL 38XA GOST 1051-73 AND MANUFACTURED IN ACCORDANCE WITH CHROME ALLOY STEEL 38XA HIGH QUALITY A TO GOST 4543-71.

a) CHEMICAL COMPOSITION:

GRADE OF STEEL	CONTENT OF ELEMENTS %						
	C	Si	Mn	Cr	P	S	NI
	MAXIMUM						
38xA	0.35-0.42	0.17-0.37	0.50-0.80	0.80-1.10	0.025	0.025	0.30

b) MECHANICAL PROPERTIES

GRADE OF STEEL	ULTIMATE TENSILE STRENGTH Kg/mm ²	YIELD POINT Kg/mm ²	ELONGATION %	REDUCTION IN AREA %	IMPACT STRENGTH Kgm/cm ²	HARDNESS BHN MAX
38xA	95	80	12	50	9	207

(C) EQUIVALENT MATERIAL
 STEEL 709M40 (EN19) TO BS:970
 40Cr4Mo3 TO IS:1570

SL.No	R	REMARKS	**
1	M 12 x 1.5 to	ALL OTHER CONDITIONS AS PER STD DRGS.	(B) Cb 3301-15-30 Cb 3301-15-44 Cb 3308-04-24 Cb 3321-14-1
2	PCD = 11.026 \pm 0.170 \pm 0.095		

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

EST WT 0.026 Kg TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)

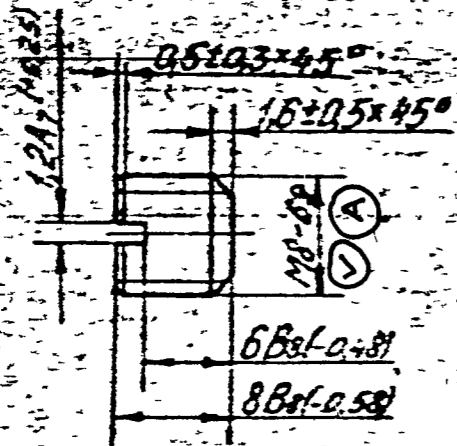
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	<i>[Signature]</i>	MATERIAL: ROUND BAR	USED ON: **
CHD	<i>[Signature]</i>	10-4 GOST 7417-75	Cb 3311-05-1
TCD	<i>[Signature]</i>	38xA GOST 1051-73	C620-01-02-9
APPD	<i>[Signature]</i>	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
DATE	25-3-86	TITLE: STUD M10x42	
SCALE:	1 : 1	D S CAT NUMBER	
DIMENSIONS IN mm		DRAWING NUMBER	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102-69		350 94	
C	15-7-10	4 1/2 ALT. COMM. Mtg. MINUTES	
B	25.8.08	POINT No. 10 DT. 26-10-09	
A	2-11-95	USED ON NUMBER ADDED.	
ISSUE	DATE	NATURE OF AMENDMENTS	
		ALL THREADS TO CONFORM TO IS 4218 PART IV	

COMMON TO V-92S2 & UTD-20 ENGINES

A-11

ZE A3



6. EXPLANATORY NOTE:

Material quoted: Brass ρ c 59-1 GOST 15527-70
 ρ c 59-1 : grade of brass, hard drawn

Alternative material quoted: Bar A 16T GOST 21488-76
 A 16 : grade of aluminium alloy
 T : Hardened and naturally aged.

Chemical composition (as per GOST 15527-70.)

Copper = 57.0-60.0	Iron = 0.5 (max)
Lead = 0.8-1.5	Antimony = 0.010 (max)
Zinc = Remaining	Bismuth = 0.003 (max)
	Phosphorus = 0.02 (max)
	TiN = 0.30 (max)
	Total = 0.75 (max)

Mechanical properties (as per GOST 2060-73)

ultimate tensile strength kgf/mm^2 (min) = 50
 Relative elongation % (min) = 5

Chemical composition (as per GOST 4784-74.)

Basic constituent = Aluminium
 Copper = 3.8-4.9
 Magnesium = 1.2-1.8
 Manganese = 0.3-0.8

Impurities (maximum)

Iron = 0.5
 Silicon = 0.5
 Nickel = 0.1
 Zinc = 0.3
 Titanium = 0.1
 Other impurities = 0.05 each

Mechanical properties: (as per GOST 21488-76)

Tensile strength kgf/mm^2 = 40 (min)
 Yield Point kgf/mm^2 = 28 (min)
 Elongation % = 10 (min)

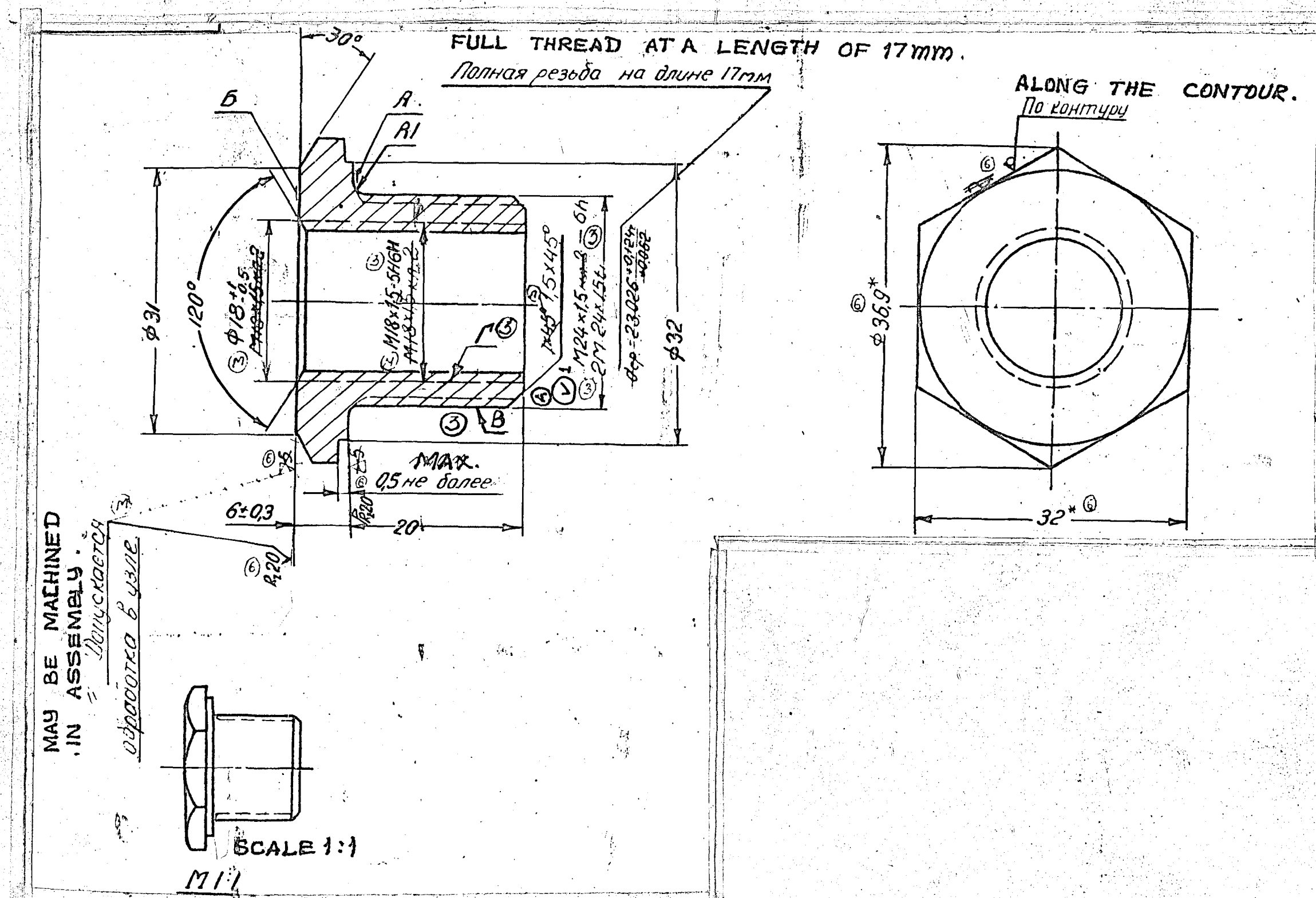
* *

SL No	R	REMARKS
1	M 10 - 6g	ALL OTHER CONDITIONS AS PER STD DRG.

1. Inspection group V TT-11.
 2. Radius from milling cutter R30mm, minimum is allowed to be left after cutting of slot for screw driver eccentricity of slot relative to the axis of plug should not exceed 0.25 mm.
 3. The rest of the Technical requirements - as per Standard 82052-00.
 4. The Component may be manufactured from bar A16T GOST 21488-76.
 5. Sharp edges are permitted on the surfaces of slot
 7. REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED
- (A) THUS \checkmark BASED ON OVERHAUL SPECIFICATIONS PART III REPAIR DRAWINGS. * *

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

EST MASS	0.0027 Kg	TO BE STAMPED OR MARKED WHERE INDICATED THIS	LETTERS
ISSUE DATE	1.1.96	REPAIR SIZE DIMS ADDED	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
SCALE	2:1	NATURE OF AMENDMENTS	MATERIAL - BRASS ρ c 59-1 GOST 15527-70
DIMENSIONS IN mm			USED ON - CB 3338-402-4
TOLERANCE ON DIMS UNLESS OTHERWISE STATED			CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD
ALL THREADS CONFORM TO			TITLE - PLUG
D S CAT NUMBER			DRAWING NUMBER 356-63-3



EXPLANATORY NOTE:

10. REFERENCE MATERIAL QUOTED: GAUGED HEXAGONAL STEEL BAR 32mm A/F, CLASS OF ACCURACY '5' (-0.340) TO GOST 8560-70, HIGH GRADE STEEL 45 NORMAL SURFACE QUALITY TO GOST 1051-73 AND REFERENCE NOTE '5' ON ALTERNATE MATERIALS STEEL GRADE 40 & 50, MANUFACTURED IN ACCORDANCE WITH CARBON STRUCTURAL STEEL GRADES 45, 40 & 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 MAXIMUM	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 UNDER NORMALISED CONDITION AS PER GOST 1050-74.

GRADE OF STEEL	ULTIMATE TENSILE STRENGTH Kgf/mm ²	YIELD POINT Kgf/mm ²	ELONGATION %	REDUCTION IN AREA %	IMPACT STR-ENGTH Kgm/cm ²	HARDNESS BHN MAX	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.

- DIMENSIONS WITH UNSPECIFIED TOLERANCES ARE TO BE OBTAINED AS PER ACCURACY CLASS 7 OST 1010.
- NON-SQUARENESS OF SURFACE 'A' WITH THE AXIS OF THREAD 'B' AND OF SURFACE 'B' WITH AXIS OF THREAD 'A' SHOULD NOT EXCEED 0.1mm.
- SPECIFICATIONS FOR THREAD AS PER STANDARD 82021-00.
- SHARP EDGES SHOULD BE BLUNTED.
- ALTERNATE MATERIAL : STEEL, GRADE 40 & 50 GOST 1050-74.
- FACES MAY BE TURNED $\phi 35.5$.
- DURING FACING OF END FACE 'A' WITH A CUTTER CUTTING-IN ON STEP 0.3mm, MAX IS ALLOWED ON CYLINDRICAL SURFACE. ABSENCE OF COATING ON INNER SURFACES OF THE COMPONENTS IS ALLOWED. THREAD CALIBRATION IS PERMITTED.
- COATING: Cd, CHROMATIZING AS PER 4.1-104 WITH HYDROGEN EMBRITTLEMENT ELIMINATED. THREAD MAY BE CALIBRATED.
- * DIMENSION FOR REFERENCE.

11. REPAIR SIZE DIMENSIONS ARE ADDED BASED ON LT. NO. 82847/OH/QAS/ED DT. 27 MAR 95 AS FOLLOWS:
 REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THUS (A).

Sl. No.	R	REMARKS
1	2M27 x 1.5 ± 1 +0.124 +0.062 PCD 26.026	1. ALL OTHER CONDITIONS AS PER STD. DRG. 2. MARK REPAIR SIZE.

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

EST WT 0.056 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	Doc	MATERIAL	HEXAGON	USED ON
CHD	Doc	32-5 GOST 8560-70	45 GOST 1051-73	CB 447-01-1
TCD	Doc	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES)		
APPD	Doc	AVADI		
DATE	09-4-82	TITLE		
SCALE	1:1	UNION PIPE		
DIMENSIONS IN mm		D S CAT NUMBER		
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED		DRAWING NUMBER		
ALL THREADS TO CONFORM TO		402-28-1		
A	5-9-95	REPAIR SIZE ADDED		
ISSUE	DATE	NATURE OF AMENDMENTS		

A-3

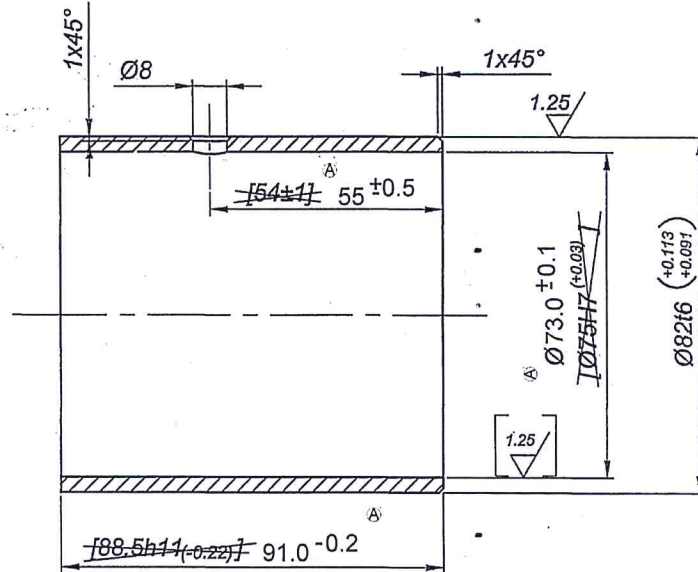
SIZE A2

DRAWING NUMBER
3308-68

SHEET No. 1 OF 1

10/ (✓)

DRG. INDIANISED BASED ON RUSSIAN ORIGINAL ISSUE - 7



1. Unspecified limit deviations of dimensions: H14.
2. Dimension and surface finish in brackets are after assembly.
3. Alternative material for bronze 010L12 Gost-613-79;
bronze Ep 010C10 Gost 613-79 Ep A10K3Mu2 Gost 493-79,
4. Requirement for casting as per TTM 92-85.

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

EST. WT. (Kg) 0.65 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.

F-3
136
166

SIZE A3

			DRN	<i>As</i>	MATERIAL:- BRONZE	USED ON:-
			CHD	<i>P. Balab. 10/25/85</i>	Ep A9K3M GOST-493-79.	CB 3308-04-24
			APPD	<i>[Signature]</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
			DATE	17/2/85	AVADI	
			SCALE:-	1:1	TITLE:-	
			DIMENSIONS IN mm			
			TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS: 2102-69			
			ALL THREADS TO CONFORM TO		D S CAT NUMBER	DRAWING NUMBER
			ISSUE	A		3308-68
			DATE	25-05-18	Ref. No. EFA/P/MPS/014	
			NATURE OF AMENDMENTS		Dated 25-05-2018	