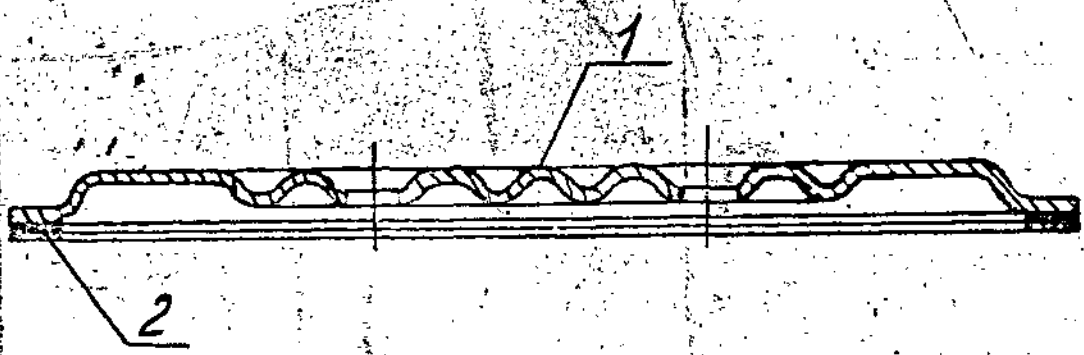
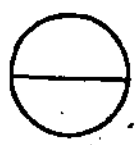


DRAWING NUMBER
CB 20-27-10-1

F
E
D
C



WITH
1. SECURE GASKET REF. NO. 2, VARNISH SEALANT
GOST 13489-79 OR TY 6-10-1010-70.

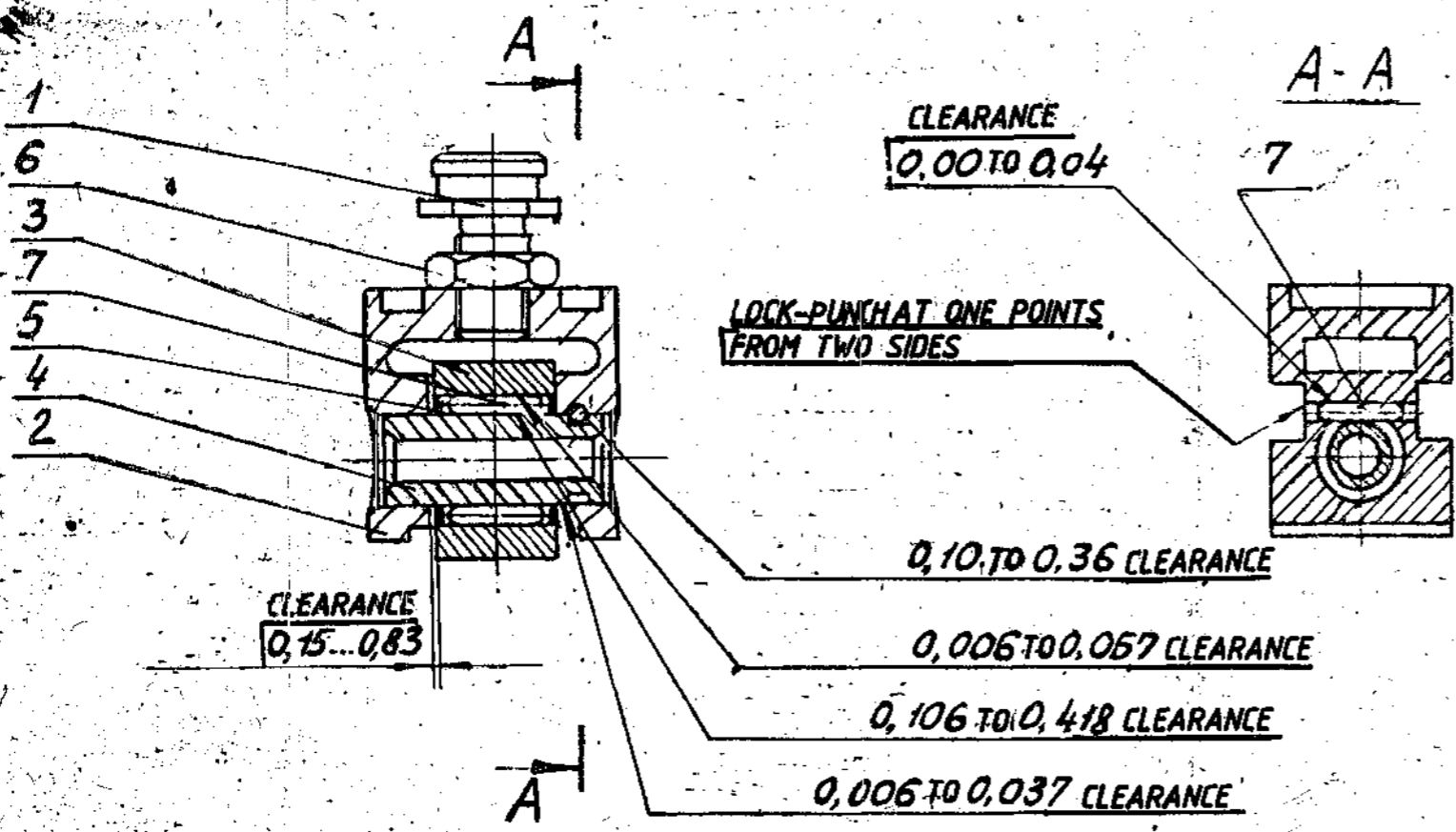


PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. WT. 0.231 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.	
		MATERIAL:-	USED ON CB 20-27-00-4
ISSUE DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI.	
DRN <i>Gray</i>	SCALE:- 1:1		
CHD <i>Gray</i>	DIMENSIONS IN mm	TITLE PUMP HOUSING COVER ASSY.	
TCD <i>Gray</i>	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69		
APD <i>Gray</i>	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER CB 20-27-10-1
DATE 4-5-87			
SIZE A4			

NO	ZC	RZ	DESIGNATION	DESCRIPTION	QTY	REMARKS
				TECHNICAL PAPERS		
			cb 20-27-15-1	TAPPET ASSY		
				P. A. R. T. S		
11	1		20-27-51	TAPPET BOLT	1	
12	2		20-27-91-1	TAPPET BODY	1	
11	3		20-27-92	TAPPET ROLLER	1	
11	4		20-27-93	TAPPET PIN	1	
11	5		20-27-94	TAPPET WASHER	2	
11	6		327-52	TAPPET LOCK NUT	1	
				STANDARD ARTICLES		
11	7			ROLLER 2.5X13.8 II 500-65 GOST 6870-72.	20	

ISSUE	DATE	NATURE OF AMENDMENTS	ISSUE	DATE	NATURE OF AMENDMENTS
DN			USED ON	cb 20-27-00-4	
CHD			CONTROLLERATE OF INSPEC. OF HEAVY VEHICLES (VAD)		
TCB			TITLE	TAPPET ASSY	
APPD			D. S. CAT. NUMBER	ITEM LIST FOR	
DATE: 7.05.87	SHT No 2 OFF 2		65 20-27-15-1		



1. IN ASSEMBLED TAPPET DIFFERENCE OF DIAMETER OF ROLLERS (REF. NO. 7.) SHOULD NOT EXCEED 0.003 mm.
2. TAPPET BOLT SHOULD BE ASSEMBLED WITH THE BODY AND LOCK NUT BY HAND SMOOTHLY WITHOUT SEIZING, SELECTION IS ALLOWED.

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

		EST. MASS 0.204 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	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN		SCALE :- 1:1	MATERIAL :- _____ USED ON :- CB 20-27-00-4
CHD		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
ICD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE :- TAPPET ASSY
APPD		ALL THREADS CONFORM TO	D S CAT NUMBER _____ DRAWING NUMBER CB 20-27-15-1
DATE	23-04-87		

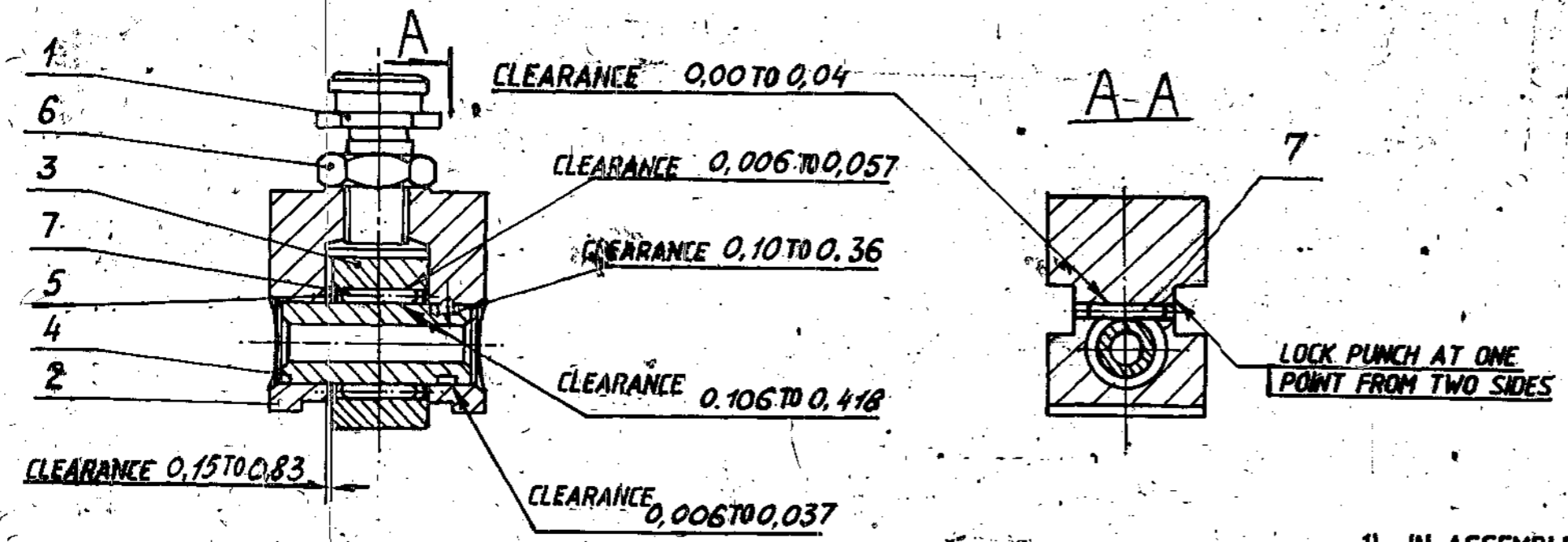
NO	ZC	RZ	DESIGNATION	DESCRIPTION	QTY	REMARKS
				TECHNICAL PAPERS		
			cb. 20-27-15-2	TAPPET ASSY		
				P A R T S		
11		1	20-27-51	TAPPET BOLT	1	
12		2	20-27-91-2	TAPPET BODY	1	
11		3	20-27-92	TAPPET ROLLER	1	
11		4	20-27-93	TAPPET PIN	1	
11		5	20-27-94	TAPPET WASHER	2	
11		6	327-52	TAPPET LOCK NUT	1	
				STANDARD ARTICLES		
11		7		ROLLER 2.5 X 13.8 ^{ET7} II-500-65		
				GOST. 6870-72	20	

ISSUE DATE	NATURE OF AMENDMENTS	ISSUE DATE	NATURE OF AMENDMENTS
DP	USED OF	C5 20-27-00-4	
CHD	<i>[Signature]</i>	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD.	
TEC	<i>Namur polij</i>	TITLE	TAPPET ASSY
APUC	<i>[Signature]</i>	D'S CAT NUMBER	ITEM LIST FOR
DATE 7-05-87	SHT No 2 OFF 2		C5 20-27-15-2

2-51-17-07-90

REVISED BY: BUNEMCO

FROM THE NO. 1000-1000-1000

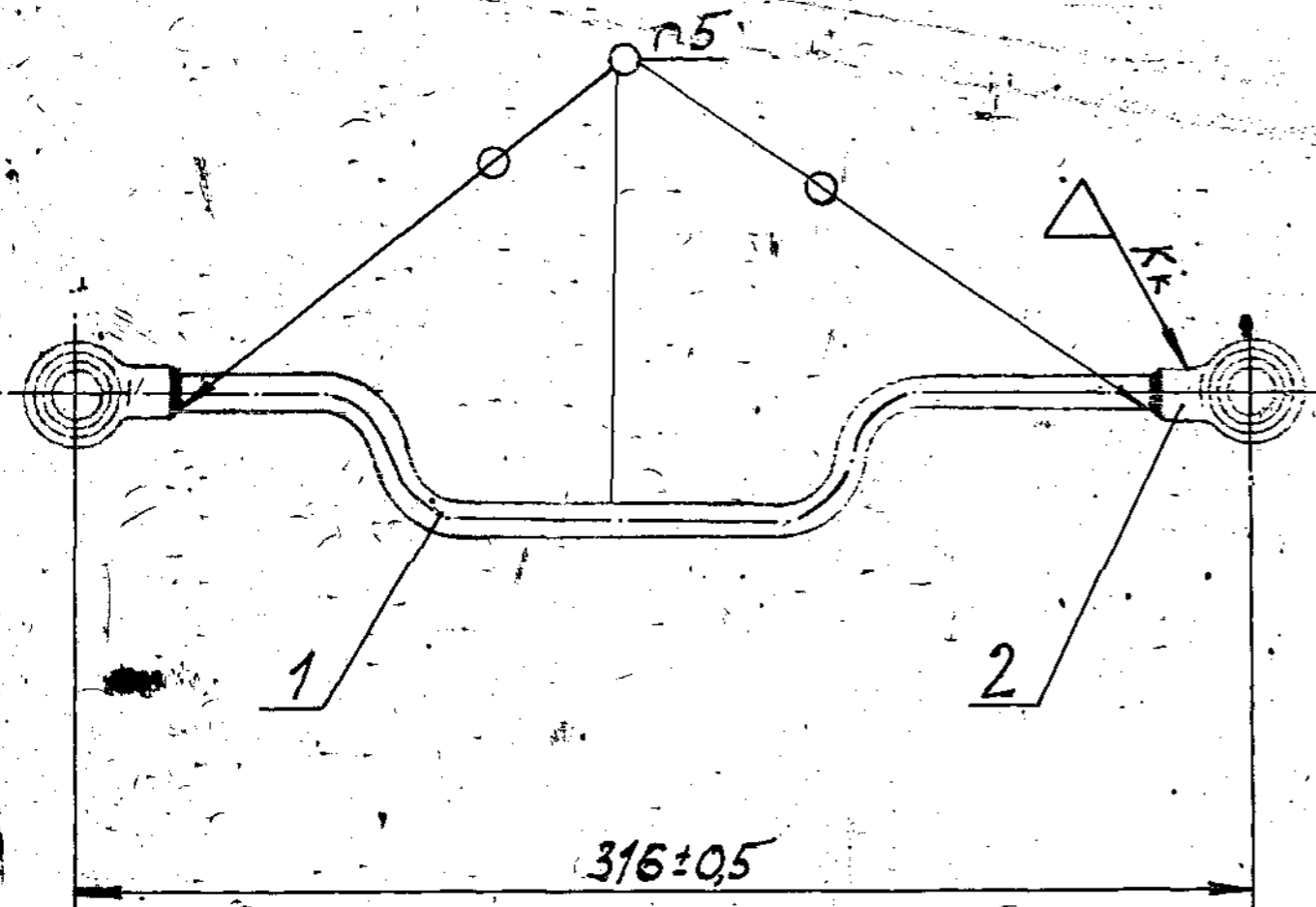


- 1) IN ASSEMBLED TAPPET DIFFERENCE OF DIAMETER OF ROLLERS (REF. NO. 7.) SHOULD NOT EXCEED 0.003 mm.
- 2) TAPPET BOLT SHOULD BE ASSEMBLED WITH THE BODY AND LOCK NUT BY HAND SMOOTHLY WITHOUT SEIZING, SELECTION IS PERMITTED.

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

		EST. MASS 0.214 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 P OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON :- CG 20-27-00-4
DRN	SCALE :- 1 : 1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD	
CHD	DIMENSIONS IN mm	TITLE :- TAPPET ASSY	
TCD	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	D.S CAT NUMBER	
APPD	ALL THREADS CONFORM TO	DRAWING NUMBER CG 20-27-15-2	
DATE 7-05-87			

5-11-17-0293
 CB 20-27-17-5

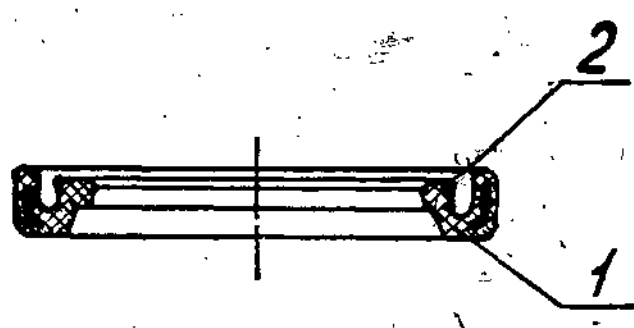


- 1 INTERNAL DIAMETER OF THE PIPE AND BRAZED POINTS OF SWIVEL ELBOWS SHOULD BE CLEANED FROM SCALE AND RUST.
- 2 AFTER FINAL MATCHING AS PER MOCK-UP, PIPE SHOULD BE WASHED WITH FILTERED DIESEL FUEL AT AN INLET PRESSURE OF 0,1 MPa (1 kgf/cm²) FOR TWO MINUTES. WHEN THE PIPE IS WASHED, KNOCK THE PIPE TO REMOVE REMAINING SCALE.
- 3 CHECK THE PIPE FOR CLEANLINESS BY USING BENZINE (BY RINSING PIPE) AND THEN PASS BENZINE THROUGH FILTER PAPER. FILTER PAPER SHOULD BE FREE OF DEPOSIT VISIBLE TO THE NAKED EYE. CHECK 10 % OF ASSEMBLIES.
- 4 CHECK THE PIPE FOR LEAKAGE BY SUPPLYING DIESEL FUEL AT A PRESSURE OF 0,5 MPa (5 kgf/cm²) FOR 2 MINUTES. FUEL LEAKAGE IS NOT PERMITTED.
- 5 BRAZE USING BRAZING SOLDER № 63, GOST 15527-70. BRAZED POINTS MAY HAVE SINGLE BLUNT PORES DETECTED AFTER APPLYING ZINC PLATING IF LEAK-PROOFNESS IS PROVIDED.
- 6 BEARING SURFACES OF SWIVEL ELBOWS SHOULD BE IN ONE END THE SAME PLANE.
- 7 COATING :- ZINC-PLATED, 15 MICRONS THICK, OILED. NO COATING ON INTERNAL SURFACES IS PERMITTED.

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

		EST. MASS 0,111 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	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON :- CB 20-27-00-4
DRN	SCALE :- 1: 2 °	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm	TITLE :- AIR BLEEDING PIPE ASSY	
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D S CAT NUMBER	DRAWING NUMBER CB 20-27-17-5
APPD	ALL THREADS CONFORM TO		
DATE 25-04-87			

Восстановлено с позиций
Верно: [Signature]



FORMAT	ZONE	REF.	DESIGNATION	DESCRIPTION	QTY.	REMARKS
				ASSEMBLY UNITS		
		1	сб 20-27-19 ✓	CUP BODY ASSY	1	
				PARTS		
		2	20-27-69 ✓	CUP SPRING	1	

KVD NO 634.00

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

KVD NO 634.00

EST. MASS		TO BE STAMPED OR MARKED WHERE INDICATED THIS #	
0.0255 Kg		1 (LETTERS)	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED-CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE			
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL -	USED ON -
DRY	SCALE - 1:1		сб 20-27-05-7 7
CHKD [Signature]	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
JCD [Signature]	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE -	CUP
APPR [Signature]	ALL THREADS CONFORM	D.S. CAT NUMBER	DRAWING NUMBER
DATE 25-04-87	19		сб 20-27-18

USED ON

CG 20-27-0146

NOTN-NO. 1677-853

ISSUE - MIL ON RUSSIAN ORIGINAL BASED

SI Section CG 20-27-27-1

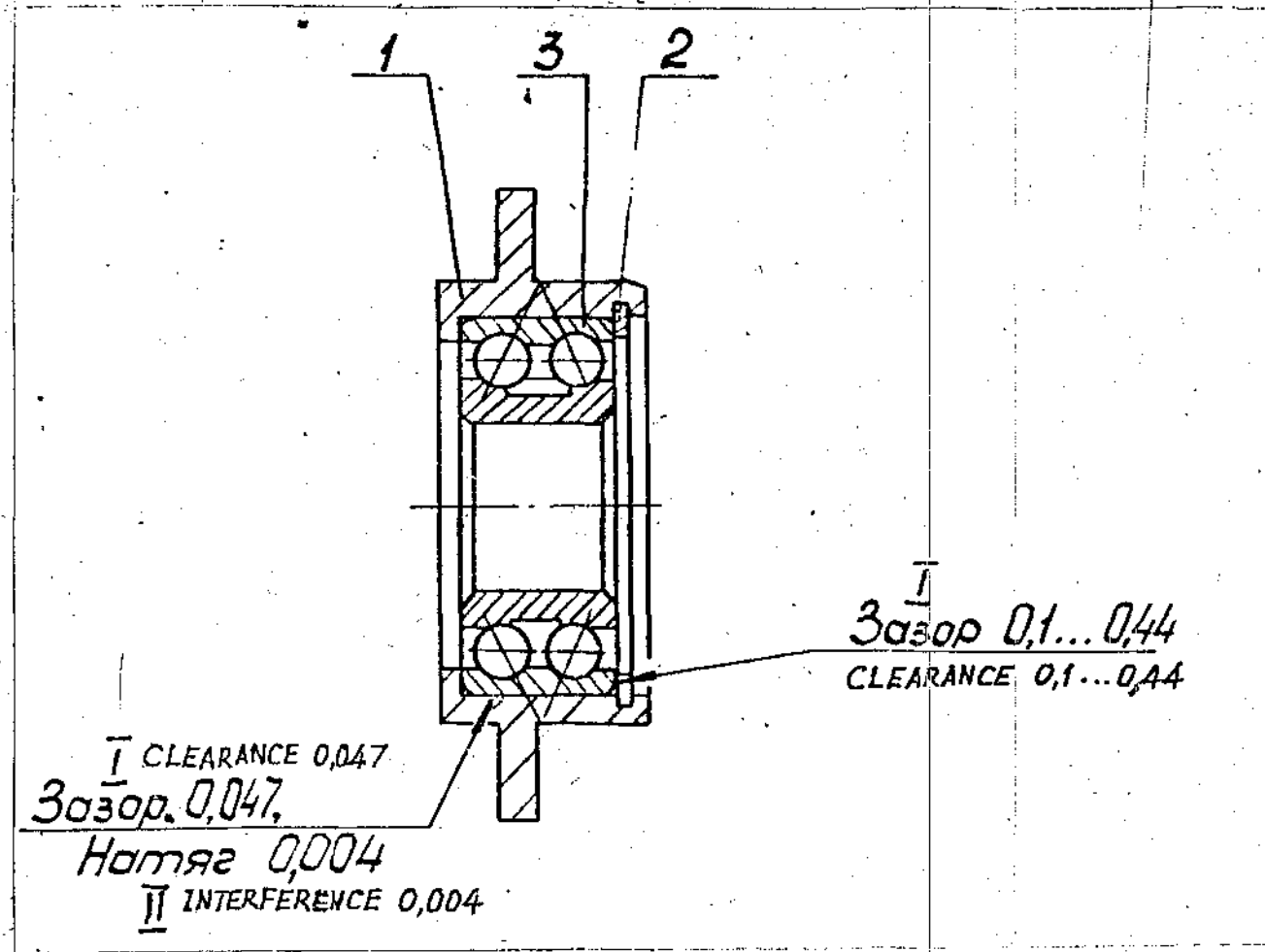
ITEM	DRAWING NUMBER	D'S CAT NUMBER	DESCRIPTION	No. OFF.	REMARKS
	CG 20-27-27-2		ASSY. THRUST BEARING SLEEVE		
	& ITEM LIST				
1	20-27-35-4		THRUST BEARING SLEEVE	1	
2	20-06-144-2		RING B-52 GOST 13943-68	1	
3	WITHOUT DRG.		BEARING 3056205		
			GOST 4252-75.	1	

ISSUE DATE	NATURE OF AMENDMENTS	ISSUE DATE	NATURE OF AMENDMENTS

<i>Alsaker</i> CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	
TITLE: ASSY. THRUST BEARING SLEEVE	
16 -2-93	SHT. No. OF D S CAT NUMBER ITEM LIST FOR CG 20-27-27-2

DRAWING NUMBER

CB 20-27-27-2



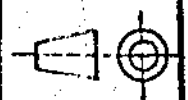
DRG. INTRODUCED BASED ON NOTN. 1677-853

DRG. DIVANISED BASED ON RUSSIAN ORIGINAL ISSUE - NIL.

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

FST. WT. (TO BE STAMPED OR MARKED WHERE INDICATED THUS $\frac{1}{2}$ (LETTERS) U.A.Kg.

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

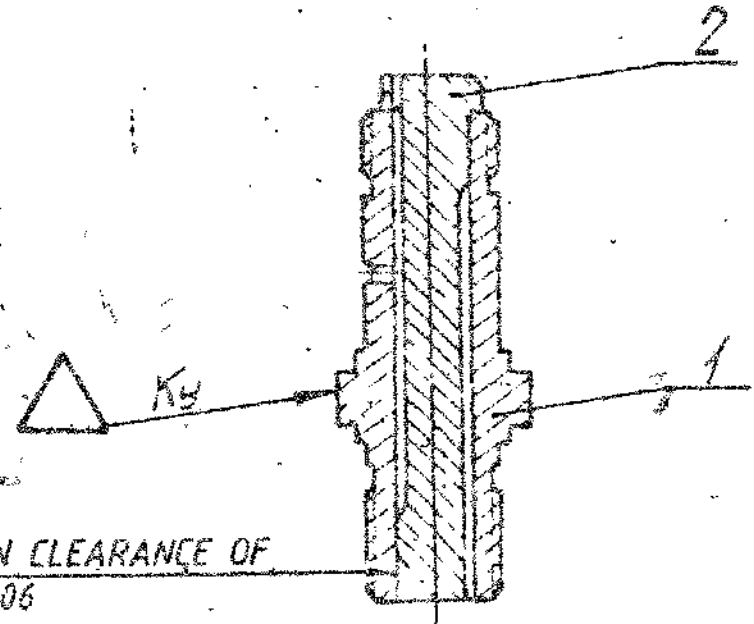
			DRN	<i>Albanke</i>	MATERIAL:-	USED ON
			CHD	<i>Albanke</i>		CB 20-27-04-6
			TCD	<i>Albanke</i>		
			APPD	<i>Albanke</i>		
			DATE	16-2-93	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
			SCALE:-	1:1	AVADI	
			DIMENSIONS IN mm		 TITLE ASSY. THRUST BEARING SLEEVE	
			TOLERANCE ON DIMENS UNLESS OTHERWISE STATED IS: 2102-69			
			ALL THREADS TO CONFORM TO		D S CAT NUMBER	DRAWING NUMBER
			ISSUE DATE			CB 20-27-27-2
			NATURE OF AMENDMENTS			



SIZE A3

1-8626

ВУСІДНОМОНАЕН С ПООСІ
 ВЕРНО: 1.1. 8. ПУМЕНА



INSTALLATION CLEARANCE OF
0.03 TO 0.06

1. BEFORE ASSEMBLING ALL PARTS SHOULD BE THOROUGHLY WASHED IN BENZINE WITH HAIR-BRUSH.

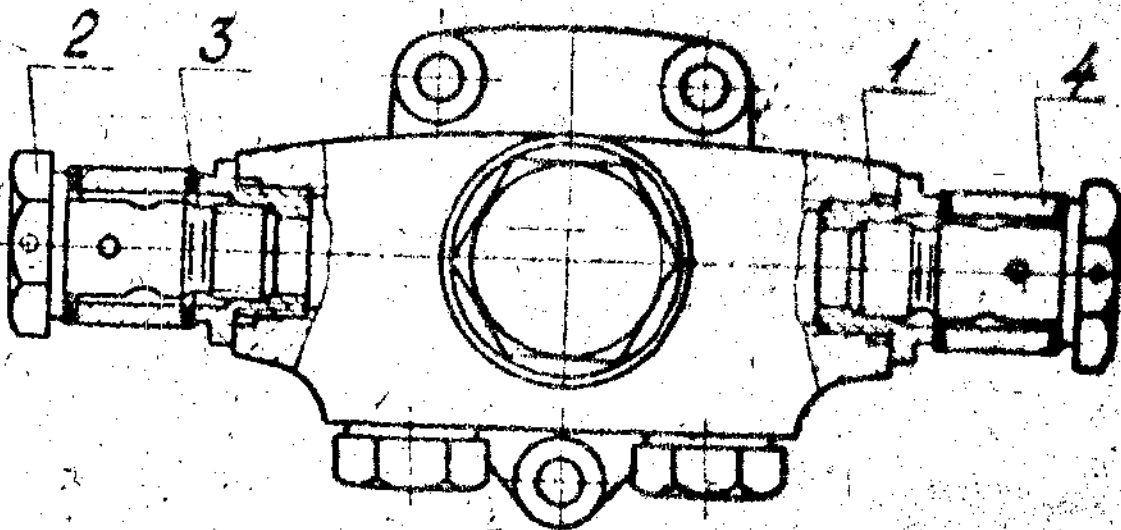
KVD NO 63401

FORMA	ZONA	REF. NO.	DESIGNATION	DESCRIPTION	QTY	REMARKS.
		2	20-27-334	FILTERING ELEMENT	1	
		1	20-27-332-2	FILTER BODY	1	
				PARTS.		

PILOT SAMPLE SHOULD BE APPROVED BY AHS BEFORE PRODUCTION

KVD NO 63401

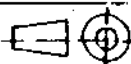
ISSUE DATE	NATURE OF AMENDMENTS	NET MASS	TO BE STAMPED OR MARKED WITH INDICATED THIS
DRN-	SCALE 1:1	0,110 Kg	
CHD	DIMENSIONS IN mm		LETTER
APPD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED		ALL SQUARE EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT SKIN R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
DATE	ALL TITLES COMPL	MATERIAL	USED ON - CS 20-27-00-4
		CONTROL RATE OF INSPECTION (HEAVY VEHICLES - AVAL)	
		TITLE	FILTER
		ISSUE NUMBER	UNAWAS 01/05 CS 20-27-78-2



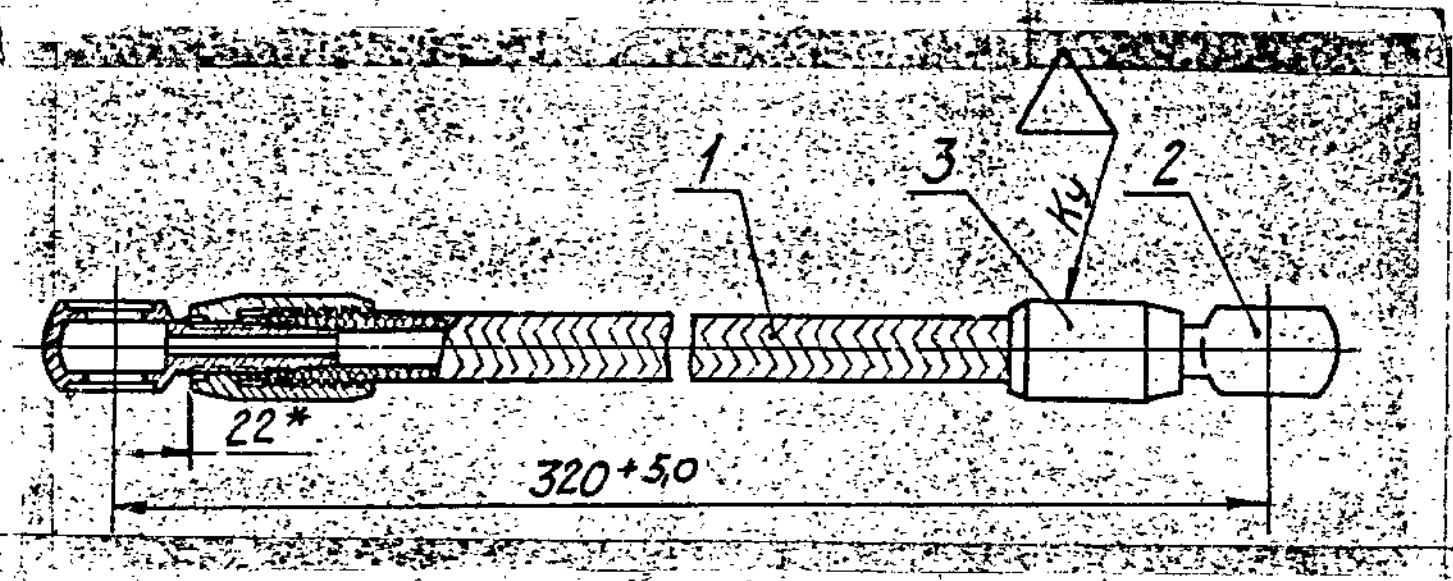
1. CARRY-OUT DE-PRESERVATION OF THE PUMP AS PER THE INSTRUCTIONS OF THE PLANT.

KVD No. 63395

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

		EST. MASS	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)	
		0,713 Kg		
		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		SCALE :-	MATERIAL :-	USED ON :- C5 20-27-00-4
CHD		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI.	
ICD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED		TITLE :- FUEL FEED PUMP
APPR		ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER C5 20-32-00-4
DATE	17-2-87			

DRAWING NUMBER
CB 20-35-70-4



1. When hose is assembled, swivel elbows, internal surfaces of couplings and mandrel of fixture should be generously lubricated with oil MT-16 (ГОСТ 6360-58).
2. Before screwing the swivel elbow into the hose it is necessary to straighten out the ends of the hose with the mandrel.
3. Subject the hose to the pressure test by supplying diesel fuel at a pressure of 1.5 MPa (15 kg/cm²) for two minutes. Leakage is not permitted.

4. Run filtered fuel through the hose for 1 minute. Thoroughly drain diesel fuel, blow the hose inside and outside with compressed air, and wrap the ends of the hose with paper.
5. * Dimension is given for reference.

Pl. don't Issue

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

EST. WT. 0.315 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 INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DRN	<i>Gargya</i>	MATERIAL:-	USED ON CB20-27.00-4
CHK	<i>Sharma</i>		CB 20-35-00-4
TCO	<i>Gargya</i>		
APPO	<i>V. Ramani</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
DATE	22-3-91	AVADI	
SCALE:-	1:2		
DIMENSIONS IN mm			TITLE
TOLERANCE ON DIMMS UNLESS OTHERWISE STATED IS: 2102-69			FUEL SUPPLY FLEXIBLE HOSE ASSY.
ALL THREADS TO CONFORM TO		D S CAT NUMBER	DRAWING NUMBER
			CB 20-35-70-4

SIZE A3

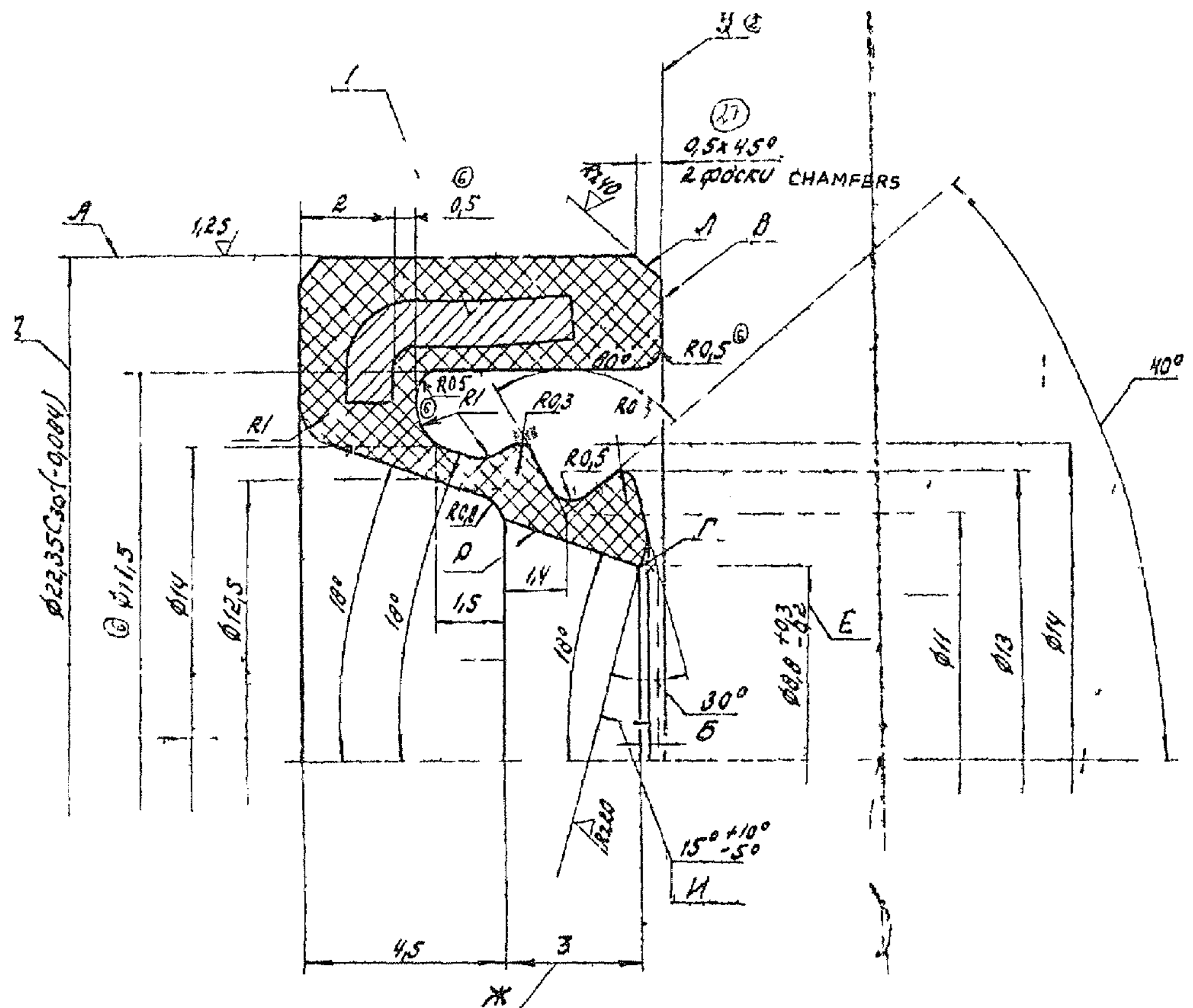
8 7 6

ISSUE DATE NATURE OF AMENDMENTS

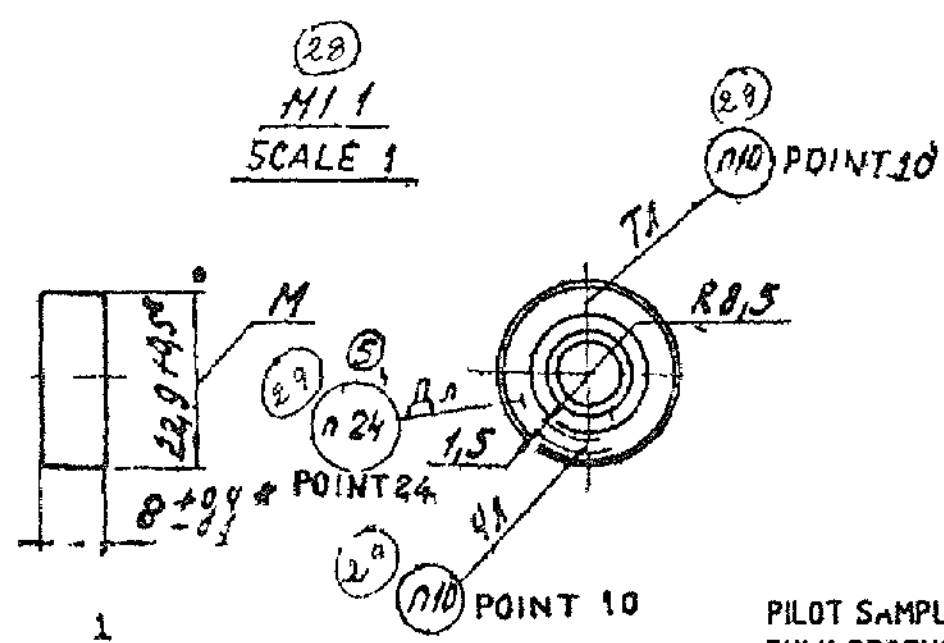
QTY	ITEM	DESCRIPTION	OFF	REMARKS
	TRL - SB 315-666 & ITEM LIST	CUP BODY ASSY		
1	315-667	Stiffening Ring		
2		MATERIAL RUBBER 3025 LY 005216 75 VITON RUBBER		

B	08 6 08	AUTHY LT No TC/GEN/IND III OT 02 04 08		
A	24 7-97	AJTHY BK 90-46		

ISSUE	DATE	NAME OF PERMITS	ISSUE	DATE	NAME OF AMMUNITION
DRN	<i>Prayer</i>	CONROLL 2			
CID	<i>Hyphala</i>	OF QUALITY			
TCO	<i>Manon P...</i>	URNL (1 VY V HELL) AVAF			
APPD	<i>...</i>	CUP BODY ASSY			
DATE	7 05 81	5 01 11			ISSUE CB 315-666



- 1 DIMENSIONS EXCEPT HOSE D SIGN/TEJ BY THE MARK * ARE ENSURED BY THE TOOL
- 2 ϕ - WORKING SURFACE
- 3 ENSURE STRONG ADHESION OF THE RUBBER COMPOUND WITH THE STIFFENING RING No 1
- 4
- 5 THE COMPONENT IS SUPPLIED WITH THE ALLOWANCE E ON THE DIMENSION E AND WITH THE EXTENSION L D AMETFI M
- 6 QUALITY OF THE SURFACE A IS ALLOWED UPTO 0.2 mm (BEFORE GRINDING)
- 7 MAKING OF CHAMFER ϕ AND FINISHING TO THE DIMENSIONS E AND ϕ ARE CARRIED OUT AT THE FACTORY OF THE CUSTOMER
- 8 FACING OF THE END FACE B UPTO 0.5 mm IS ALLOWED AT THE FACTORY OF THE CUSTOMER
- 9
- 10 MARK BY LETTERING ACCORDING TO GOST 2930-62 WITH THE PROJECTION OF THE LETTERING ABOVE THE SURFACE OF THE COMPONENT BY 0.1 - 0.2 mm
- 11
- 12 REMAINING REQUIREMENTS ACCORDING TO TY 05216-75 ON THE ARTICLE OF CODE 253131
- 13 EDGE Γ MUST BE SHARP AND REGULAR, SURFACE SHRINKAGE CRACKS, PITS, BURRS, ARE NOT ALLOWED
- 14 RADIAL RUN-OUT OF THE SURFACE Γ RELATIVE TO THE SURFACE P NO MORE THAN 0.2 mm
- 15 ANGLE ψ IS DETERMINED BY THE INSTRUMENT
- 16 DIMENSION Δ CAN BE KEPT ON THE MIDDLE OF THE SURFACE A, REDUCTION UP TO 0.2 IS ALLOWED TOWARDS THE EDGES
- 17 INSTEAD OF MAKING CHAMFER ϕ SHARP EDGES CAN BE BLUNTED
- 18 ROUGHNESS OF THE SURFACES THAT ARE MACHINED IS ACCEPTED ACCORDING TO THE STANDARD
19. CHECK THE DIMENSION, Δ BY THE GAUGE UNDER A WEIGHT OF 50 gm
- 20 CHECK THE DIMENSION E BY THE GAUGE UNDER A WEIGHT OF 50 gm
- 21 DIMENSION χ IS NOT CHECKED AFTER MACHINING
- 22 POINTS 13 TO 17 AND 19 TO 21 ARE FOR THE FACTORY OF THE CUSTOMER
- 23 BURRS AND SHOULDER FROM THE PARTING LINE OF MOULD UPTO 0.5 mm ARE ALLOWED ON THE END FACE B
- 24 YEAR OF MANUFACTURE IS TO BE MARKED



** MATERIAL : VITON RUBBER
With mechanical properties equivalent to Russian grade or better grade

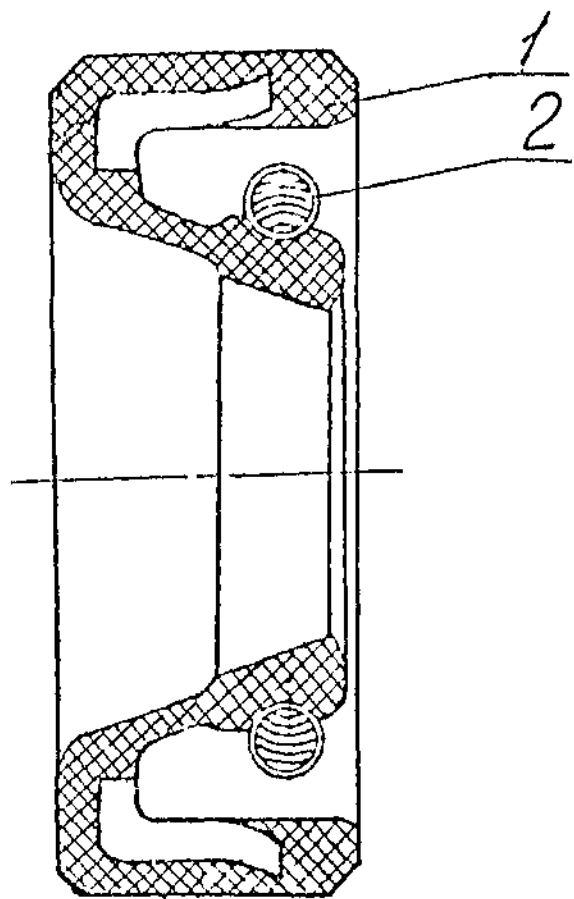
(B) ALT MATL RUBBER GRADE N4 TO SPECN COA(HV)NBR

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

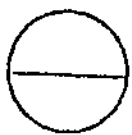
EST WT 0.0045 kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)								
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT-SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.		B	08.06.08	LI No TC/GEN/IND III DI 02.04.08					
		A	24.4.97	AUTHY BK 90-46					
		ISSUE	DATE	NATURE OF AMENDMENTS					

DRN	22.35	MATERIAL -	RUBBER 3825	USED ON -	CS 315-668
CHD	1.25				
TCO	1.25				
APPO					
DATE	30.06.97	CONTROLLER	E OF QUANTITY ASSURANCE (HEF)		'EHICLES
SCALE	1:1				AVADI
DIMENSIONS IN mm		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 210.69		TITLE	
				CUP BODY ASSY	
ALL THREADS TO CONFORM TO		D S CAT NUMBER		DRAWING NUMBER	
				TRL - SB 315-668	

DRAWING NUMBER
TRL- CB 315-668



KVD NO 63410

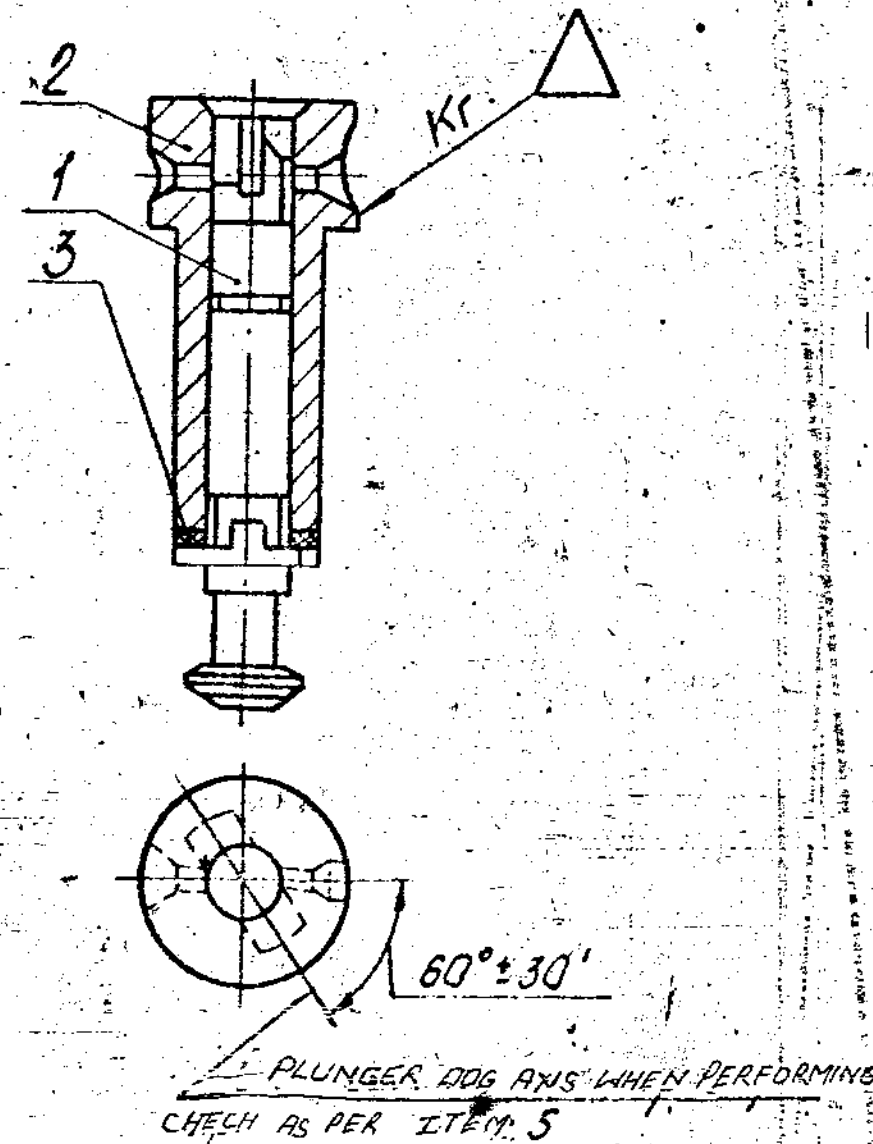


PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

EST WT 0,0047Kg	TO BE STAMPED OR MARKED WHERE INDICATED THUS \neq (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	
MATERIAL -	USED ON CB 315-663-21 CB 20-15-663-4
CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	
TITLE SEALING RING ASSY	
D S CAT NUMBER	DRAWING NUMBER TRL - CB 315-668

ISSUE	DATE	NATURE OF AMENDMENTS
DRN	ll	SCALE.- 5:1
CHD	Amr	DIMENSIONS IN mm
TCD	Passy	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69
APPD	sof	ALL THREADS CONFORM TO
DATE	4-5-87	





1. COMPOUND-LAPPED PARTS, i.e., PLUNGER AND PLUNGER BARREL COMPRISE A PRECISION PAIR, IN WHICH REPLACEMENT OF ONE PART WITH A SIMILAR PART FROM SOME OTHER PRECISION PAIR IS NOT PERMITTED.
2. DIAMETER OF THE HOLE OF THE COMPOUND-LAPPED PLUNGER BARREL SHOULD BE 10 ± 0.1 mm.
3. THERE SHOULD NOT BE NICKS AND CRACKS ON THE EDGES AND CHIPPED EDGES ON THE COMPOUND-LAPPED SURFACES OF THE PARTS OF THE PRECISION PAIR ARE NOT ALLOWED. COMPOUND-LAPPED SURFACES SHOULD HAVE UNIFORM LUSTER OVER THE ENTIRE SURFACE. TRACES OF GRINDING ARE NOT ALLOWED. MINUTE SCRATCHES, HARDLY VISIBLE TO THE NAKED EYE ARE PERMITTED. FINISH OF THE COMPOUND-LAPPED SURFACES SHOULD NOT BE WORSE THAN STANDARD. THE SURFACE MAY HAVE NON-UNIFORM LUSTER IN THE LOWER PART OF THE PLUNGER (NOT ABOVE OIL GROOVE).
4. THE PLUNGER PRELIMINARILY WASHED TOGETHER WITH THE PLUNGER BARREL IN DIESEL FUEL, SHOULD SMOOTHLY DESCEND DOWN TO THE STOP BY GRAVITY WHEN IT MOVES OUT OF THE BARREL IN THE VERTICAL POSITION BY 40 TO 50 mm. CHECK IN DIFFERENT POSITIONS AGAINST THE ANGLE OF TURN OF THE PLUNGER IN THE BARREL WHEN THE PLUNGER MOVES IN THE BARREL, NO LOCAL RESISTANCES STOPAGES AND BUILDING IN ANY POSITION OVER THE ENTIRE LENGTH AND ANGLE OF TURN ARE NOT PERMITTED.
5. USE THE TEST SET MADE IN COMPLIANCE WITH DRAWING BC 5071 TO PERFORM CLOSE FIT CHECK AGAINST STANDARD PRECISION PAIRS AS SPECIFIED IN INSTRUCTIONS UB 46-1 BY USING MIXTURE OF OIL AND DIESEL FUEL, HAVING ENGLER VISCOSITY OF 1.9 ± 0.1 AT TEMPERATURE OF 50°C . MIX THE MIXTURE PROPERLY BEFORE FILLING THE TANK. SURFACES OF PLUNGER AND BARREL SHOULD BE KEPT FREE FROM PETROLEUM AND GREASE OF OTHER GRADES.

THE WEIGHT OF THE TEST SET SHOULD CREATE A PRESSURE OF 29.5 ± 0.5 MPA (300 ± 5 Kg/cm²) IN THE PLUNGER BARREL, WASH THE PRECISION PAIR THOROUGHLY IN FILTERED DIESEL FUEL BEFORE THE TEST.

THE PRECISION PAIR IS CONSIDERED TO BE FIT FOR SERVICE AS PER CLOSE FIT IN THAT CASE WHEN THE WEIGHT DROPS FOR THE TIME BEING WITH THE STANDARD READING LIMITS.

NOTE: BEFORE TAKING THE FIRST MEASUREMENTS, IT IS NECESSARY TO SLIGHTLY PRESS THE END CAP OF THE PLUNGER BARREL AND FORCE FUEL OUT OF THE BARREL BY LOWERING THE WEIGHT BY HAND, THIS DONE, RELEASE THE PLUNGER BARREL, BRING UP THE WEIGHT, SINK THE PLUNGER AND TAKE THE FIRST MEASUREMENT.

6. INSTALL PART 340-183 OR 329-31A (REF. NO. 3) TO PREVENT THE UPPER EDGE OF THE PLUNGER FROM CRUSHING IN STORAGE, TRANSPORTATION AND WHEN DELIVERED AS SPARE-PARTS.

REMOVE GASKETS BEFORE INSTALLING THE PRECISION PAIR ON TO THE PUMP.

7. PRESERVATION AND STORAGE OF PRECISION PAIR SHOULD BE AS PER MANUFACTURER'S INSTRUCTIONS DEPENDING UPON THE STORAGE LIFE.

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

		EST. MASS 0,140 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 P. INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON :- CB 20-27-00-4
DRN	SCALE :- 1 : 1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHKD	DIMENSIONS IN mm	TITLE :- PUMP ELEMENT	
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D S CAT NUMBER	DRAWING NUMBER
APPD	ALL THREADS CONFORM TO		CB 327-07-1
DATE 6/3/67			

QTY REMARKS

C5 327-07-1

PUMP ELEMENT ASSY
PARTS

1 327 - 57 - 1

PLUNGER

1

2 327 - 58 - 1

PLUNGER BARREL

1

3 340 - 183 ✓ OR
329 - 31A ✓

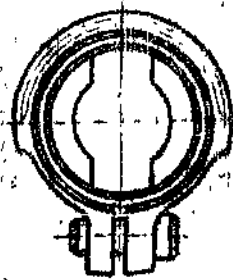
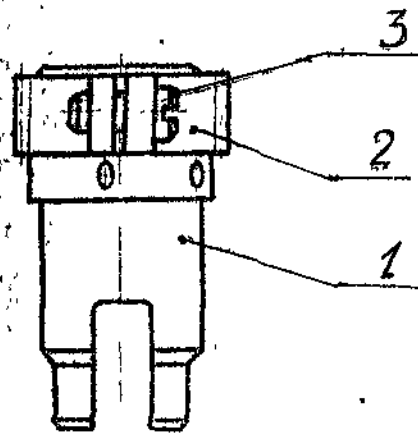
GASKET

1

ISSUE	DATE	NATURE OF AMENDMENTS	ISSUE	DATE	NATURE OF AMENDMENTS
DRY		USED ON		C5 20-27-00-4	
CHD		CONTROL RATE OF INSPECTION HEAVY			CS AVAD
TCD		TITLE		PUMP ELEMENT ASSY	
APPL		ITEM LIST FOR			
DATE	7-05-87	SHT No 2 OFF 2		C5 327-07-1	

DRAWING NUMBER

CB 3327 06

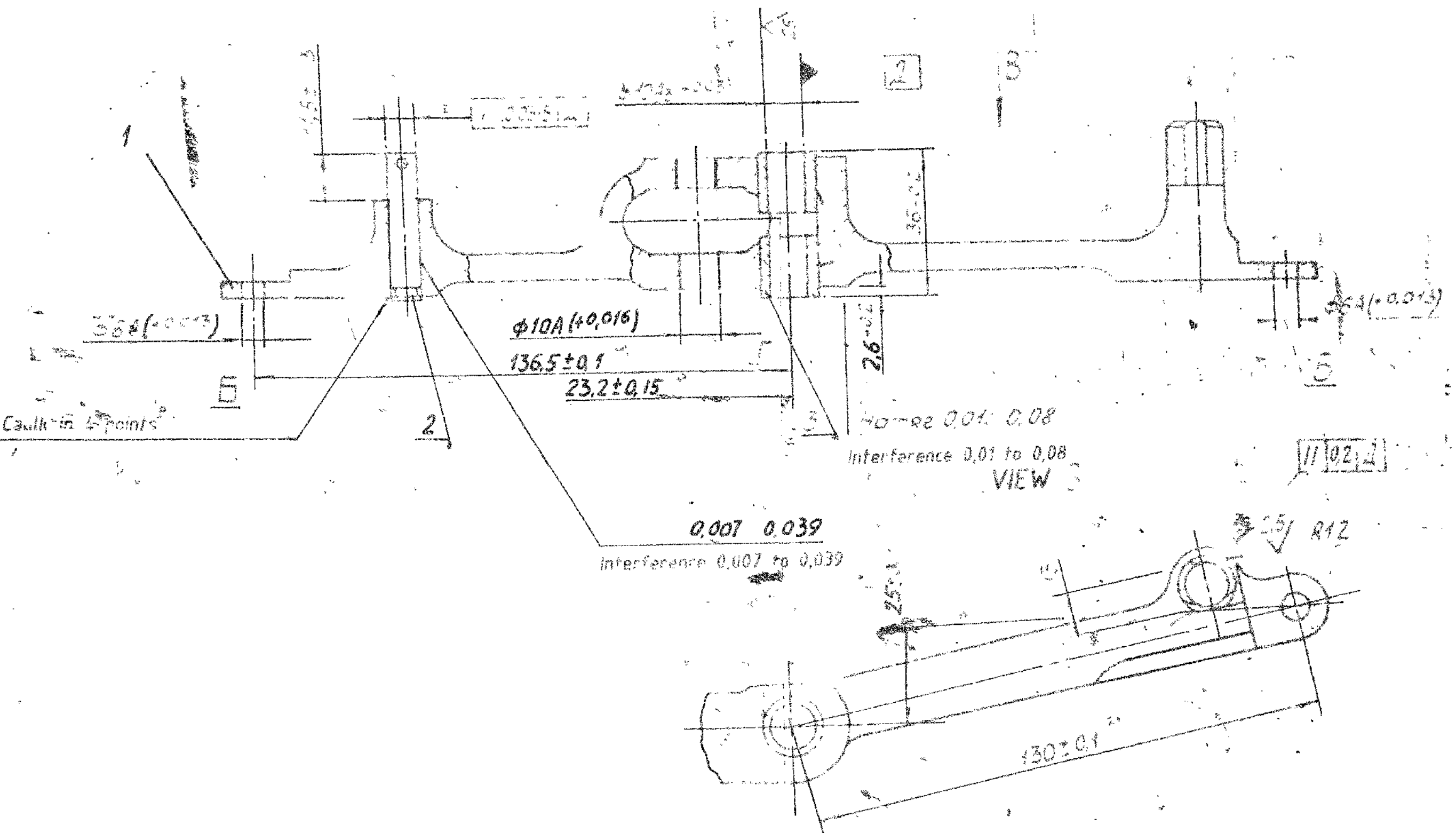


PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

A-8

		EST WT 0.063 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	
		MATERIAL	USED ON CB 20-27-00-4 CB 327 00 45
ISSUE DATE	NATURE OF AMENDMENTS	CONTROLLERATE OF INSPECTION(HEAVY VEHICLES) AVADI	
DRN	SCALE : 1 : 1		
CHD <i>18/Jan</i> <i>Dariba</i>	DIMENSION IN mm	TITLE: CONTROL SLEEVE ASSY	
TCD <i>N. Subram</i>	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.		
APPD <i>K. Subram</i>	ALL THREADS TO CONFORM TO	D S CAT NUMBER	DRAWING NUMBER CB 3327 06
DATE <i>08-5-86</i>			

SIZE A4



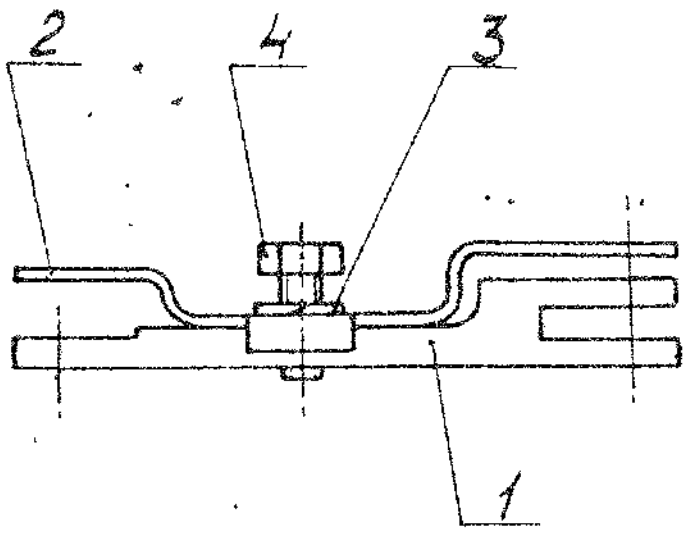
With respect to the axis of holes F non-parallelity of axis of holes F should not exceed the length of 50 mm. non-parallelity and misalignment of holes B should not exceed 0.25 mm length of 50 mm (qualified toleran.

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

EST. MASS 0.469 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	
ISSUE DATE	NATURE OF AMENDMENTS
DRN	SCALE: 1:1
CHK	DIMENSIONS IN MM
APPD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED
DATE 2/13/57	ALL TIMES CONFORM TO
MATERIAL	USED ON CB 20-15-662-5
CONTROLLER OF INSPECTION (HEAVY VEHICLES) AVAD	TITLE: GOVERNOR LEVER
D'S LAY NUMBER	DRAWN BY: CB 20-15-665-5

ITEM	DRAWING NUMBER	D'S CAT	DESCRIPTION	No OF	REMARKS
	CE 20-15-671 & ITEM LIST		LINK WITH PLATE		
1.	20-15-44-5		RACK LINK	1	
2.	20-15-685		PLATE	1	
3.	353-23		WASHER GT. 65-G 06		
			GUST 6402-70	1	
4.	356-134		BOLT M6 X 12	1	

ISSUE DATE	NATURE OF AMENDMENTS	ISSUE DATE	NATURE OF AMENDMENTS
DRN	<i>G. Narayana</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	
CHD	<i>H. Narayana</i>	TITLE: LINK WITH PLATE	
TCO	<i>G. Narayana</i>	D'S CAT NUMBER	
APPD	<i>V. Ramana</i>	ITEM LIST FOR	
DATE	23-3-92	SHT. No. 1 OF 1	
		CE 20-15-671	



1. TIGHTEN BOLT 4 AND WASHER 3 IN THE FUEL PUMP ASSEMBLY.

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

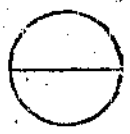
	EST. WT. 0.067Kg.	TO BE STAMPED OR MARKED WHERE INDICATED THUS \neq (LETTERS)
	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
NATURE OF AMENDMENTS SCALE:- 1:1 DIMENSIONS IN mm	MATERIAL:- -	USED ON C5 20-27-00-4
TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED IS 2102 -69 ALL THREADS CONFORM TO		TITLE: LINK WITH PLATE
	D'S CAT NUMBER	DRAWING NUMBER C5 20-15-671

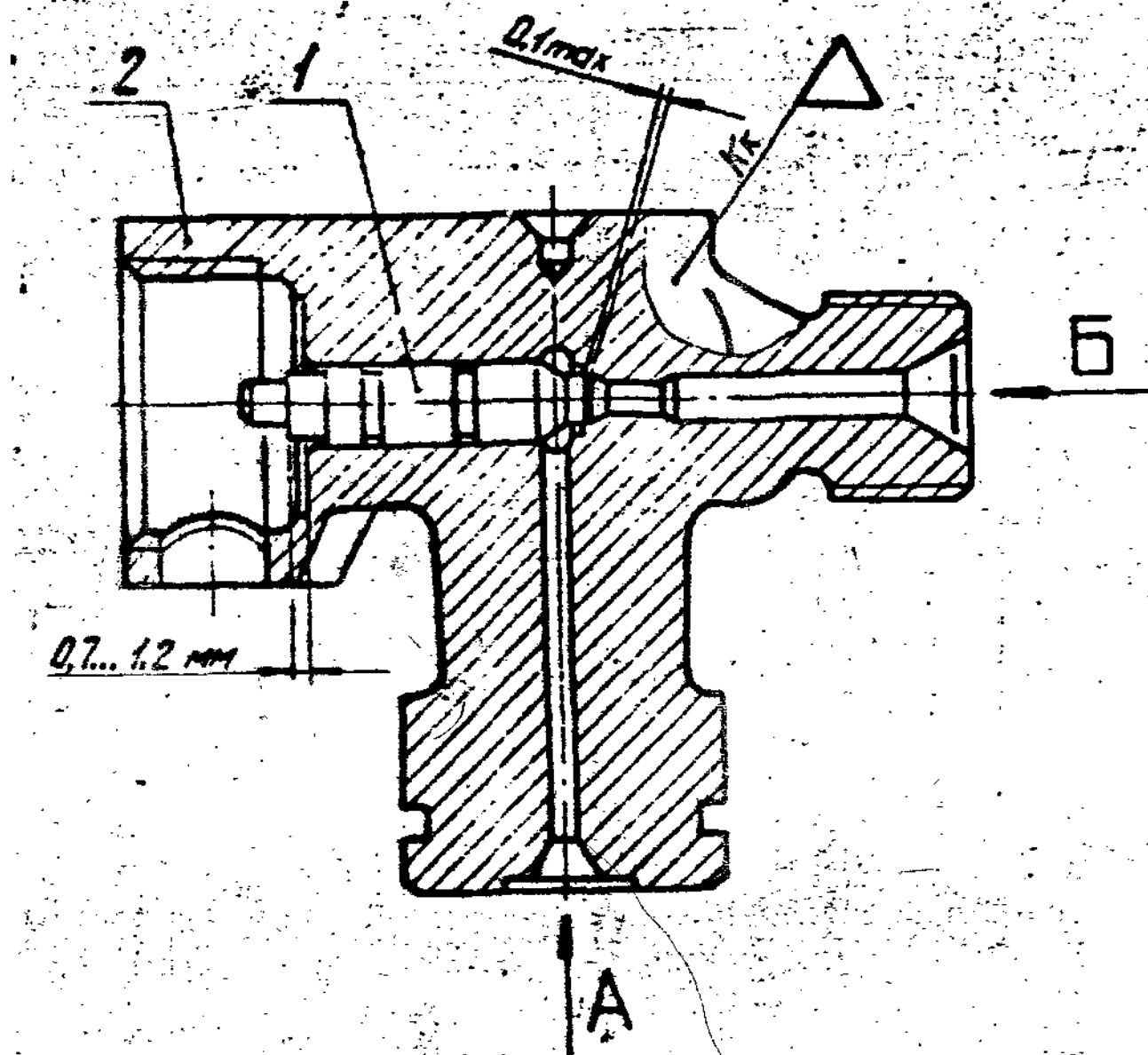
USED ON
cb 20-27-05-7

SUPERSEDES C6 20-27-01-4
I/L CREATED BASED ON RUSSIAN ORIGINAL ISSUE - I NOTIFICATION No 1677-853

	C6 20-27-01-7		FUEL PUMP BODY	
	& ITEM LIST			
	U 240-280/75		INSTRUCTION FOR PART INSTALLING ON THE SEAL 33 W.	
1	20-27-20-7		FUEL PUMP BODY	1
2	20-27-330-1		SLEEVE	1
3	20-27-335-2		BUSHING	1
4	20-29-35		BUSHING	2
5	20-29-36		BUSHING	2
6	327-21		BUSHING	4
7	352-47		DOWEL PIN 5mm x 20	1
8	20-52-01		DOWEL PIN 4 x 10	1

ISSUE	DATE	NATURE OF AMENDMENTS	ISSUE	DATE	NATURE OF AMENDMENTS
DRN	<i>Jalovskis</i>		CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI		
CHD			TITLE:		
TCO	<i>Jalovskis</i>		FUEL PUMP BODY		
APPD	<i>[Signature]</i>		SHT. No. 1 OF 1	D-S-CAT NUMBER	ITEM LIST FOR:
DATE	16-2-93				C620-27-01-7





THE FUEL TEMPERATURE RANGES FROM 10° TO 20°C. THE TEST ACCUMULATOR CAPACITY Q IS EQUAL TO $60 \pm 1 \text{ cm}^3$. WHEN 37 MPa (380 kgf/cm²) IS APPEARED TO THE VALVE, THE PRESSURE DROP FROM 34 MPa (350 kgf/cm²) TO 29 MPa (300 kgf/cm²) SHOULD TAKE PLACE FOR 11 TO 30s. THE CONE LEAKAGE IS NOT ACCEPTABLE. IT IS POSSIBLE TO CHECK THE VALVE FOR CLOSE-FIT BY COMPARING WITH REFERENCE VALVES SELECTED AS PER INSTRUCTIONS V B 20-47.

7. CHECK THE CONE FOR AIR-TIGHTNESS BY PRESSURIZING FROM SIDE B FOR 40s AT THE PRESSURE RANGING FROM 11,7 TO 12,7 MPa (120 TO 130 kgf/cm²). PRIOR TO PRESSURIZING, RINSE OUT THE PARTS CAREFULLY WITH GASOLINE. DURING PRESSURING THE PAIRS, THE WORKING CONE SHOULD NOT LEAK.

8. PRESERVE AND STORE AS PER INSTRUCTIONS DEPENDING ON THE STORAGE TERM.

1. THE COMPOUND-LAPPED PARTS, VIZ:- DELIVERY VALVE BODY (REF.NO.2) AND THE VALVE (REF.NO.1) ARE ONE PAIR. THEREFORE REPLACING OF ONE OF THEM BY THE OTHER IS NOT PERMITTED.
2. THE COMPOUND-LAPPED DIAMETER OF THE DELIVERY VALVE BODY HOLE SHOULD BE $6 \pm 0,1 \text{ mm}$.
3. THE SEALING BELT ON THE WORKING CONE SHOULD BE NEAR THE BASE OF THIS CONE. IT SHOULD BE NOT MORE THAN 0,1mm IN WIDTH.
4. THE COMPOUND-LAPPED SURFACES OF THE VALVE AND ITS BODY SHOULD HAVE EVEN LUSTER OVER THE WHOLE SURFACE. TRACES OF GRINDING AND LOBBING NOT PERMITTED. ONLY THE THINNEST LINES WHICH CAN HARDLY BE VISIBLE ARE ACCEPTABLE ON THE COMPOUND-LAPPED SURFACES, WHERE FINISH SHOULD NOT BE WORSE THAN THOSE OF THE STANDARD.
5. THE MOVEMENT OF THE VALVE IN THE DELIVERY VALVE BODY (BOTH HAD TO BE PRELIMINARILY WASHED IN THE FILTERED FUEL) SHOULD BE SO THAT THE VALVE PROJECTED OUT OF THE BODY FOR 1/3 OF ITS LENGTH AND INCLINED AT 45° WITH RESPECT TO THE HORIZON DROPS BY GRAVITY. THE LOCAL JAMS WHICH CAN BE DETECTED BY FEEL AND WHICH PREVENTS THE FREE MOVING OF THE VALVE ARE NOT ACCEPTABLE.
6. USE THE TEST SET TO CHECK THE PAIR FOR CLOSE-FIT BY PRESSURIZING FROM SIDE A WITH THE AID OF THE CAREFULLY FILTERED FUEL WHOSE ENGLER'S VISCOSITY SHOULD BE WITHIN THE LIMITS OF $1,45 \pm 0,05$. THE OIL MAY BE ADMIXED TO PROVIDE FOR THE PROPER VISCOSITY.

KVDNO 63397

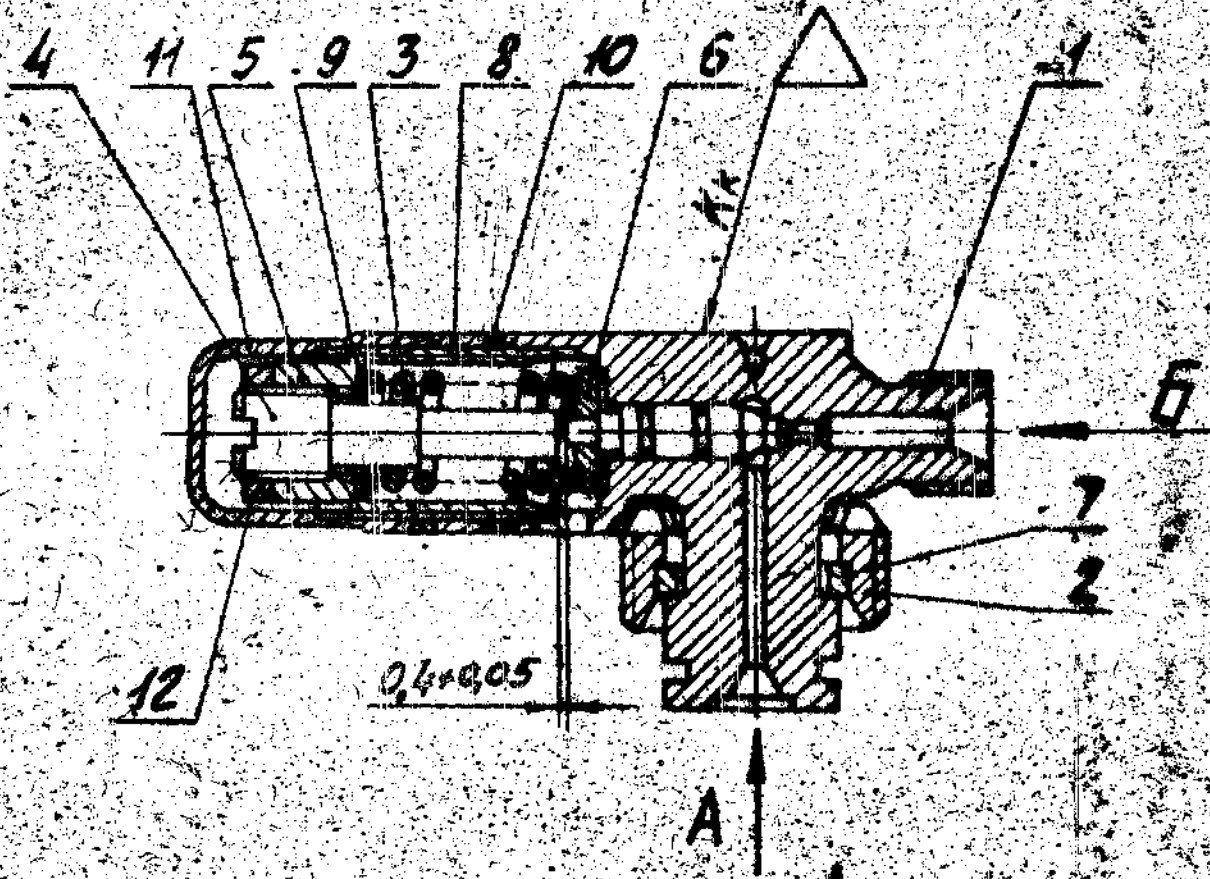
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION

		EST. MASS 0,242 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	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON :- C6 20-27-09
DRN	SCALE :- 2 : 1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm	TITLE :- DELIVERY VALVE	
TED	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	D S CAT NUMBER	
APPB	ALL THREADS CONFORM TO	DRAWING NUMBER C6 20-27-08	
DATE 4/3/87			

FORMAT	ZONE	REF NO	DESIGNATION	DESCRIPTION	QTY	REMARKS
				<u>TECHNICAL PAPERS</u>		
			Cb 20-27-09	DELIVERY VALVE ASSY		
				<u>ASSEMBLY UNITS</u>		
		1	Cb 20-27-08	DELIVERY VALVE	1	
				<u>PARTS</u>		
		2	20-27-77-5	NUT	1	
		3	20-27-78	SPRING FOR DELIVERY VALVE	1	
		4	20-27-121-1	STOP	1	
		5	20-27-122-1	NUT	1	
		6	20-27-301	SPRING PLATE	1	
		7	20-27-302	RING	1	
		8	20-27-306	LOCK NUT	1	
		9	20-27-313	RING CARRIER RING	1	
		10	20-27-314	SEALING RING	2	
		11	20-27-315	PROTECTIVE CAP	1	
		12	327-52	TAPPET LOCK NUT	1	

ISSUE DATE	NATURE OF AMENDMENT	ISSUE DATE	NATURE OF AMENDMENT
DR- CHE TOP APPE	USCIB CB 20-27-00-4		
CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD		TITLE	
. DELIVERY VALVE ASSY		ITEM LIST NUMBER	
DATE 7-05-871 SET NO 20FF-2		CB 20-27-09	

2947
 KVD NO. 63398
 17-2-96
 AUTHY NOTN. NO 1671-81
 NATURE OF AMENDMENTS
 SCALE 1:1
 DIMENSIONS IN mm
 TOLERANCE ON DIMS UNLESS OTHERWISE STATED
 ALL THREADS CONFORM
 EST. MASS 0.433 Kg
 TO BE STAMPED OR MARKED WHERE INDICATED THUS # LETTERS
 ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED (CORNERS TO BE ROUNDED OUT SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
 MATERIAL -
 USED ON - CB 20-27-00-1
 CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAIL
 TITLE - DELIVERY VALVE ASSY
 D S CAT NUMBER
 DRAWING NUMBER CB 20-27-09



- 1 BEFORE ASSEMBLY, PARTS SHOULD CAREFULLY BE WASHED IN FILTERED GASOLINE.
- 2 ADJUST THE COMPRESSION OF SPRING (REF.NO.3) TO PROVIDE FOR PRESSURE REQUIRED TO OPEN THE VALVE A ($9.8 \pm 0.5 \text{ MPa}$ OR $100 \pm 5 \text{ kgf/cm}^2$) IN CASE OF ATMOSPHERIC PRESSURE APPLIED FROM SIDE B.
- 3 THE ASSEMBLED DELIVERY VALVE SHOULD BE RUN-IN TOGETHER WITH TECHNOLOGICAL FUEL PUMP FOR 2 HOURS AT $n = 1300 \pm 50$ REVOLUTION/MINUTE AND THE RACK OUT COME OF 10 mm.
- 4 THE STOP NUT SHOULD BE ASSEMBLED WITH THE BODY AND THE STOP MANUALLY. JAMMING IS NOT PERMITTED. SELECTION IS ACCEPTABLE.
- 5 AFTER RUNNING-IN THE DELIVERY VALVE SHOULD BE FINALLY ADJUSTED AND CHECKED. THE PRESSURE TO OPEN THE VALVE FROM SIDE A SHOULD BE EQUAL TO $7.3 \pm 0.5 \text{ MPa}$ (A) ($75 \pm 5 \text{ kgf/cm}^2$) AND FROM SIDE B WITHIN THE LIMITS OF 9.8 TO 13.2 MPa (100 TO 135 kgf/cm^2). THERE SHOULD BE A SHARP SOUND WHILE OPENING THE VALVE.
- 6 THE CONE AIR-TIGHTNESS SHOULD BE CHECKED FOR 40 SECOND FROM SIDE B UNDER 7.8 TO 9.8 MPa (80 TO 100 kgf/cm^2) PRESSURE.

PILOT SAMPLE SHOULD BE APPROVED BY A H S ? BEFORE BULK PRODUCTION			
		EST. MASS	TO BE STAMPED OR MARKED WHERE INDICATED THUS #
		0.433 Kg	1 LETTERS!
A	17-2-96	Authy Notn.No 1671-81	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED (CORNERS TO BE ROUNDED OUT SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE
ISSUE DATE	NATURE OF AMENDMENTS		MATERIAL -
DIRN	SCALE 1:1		USED ON - CB 20-27-00-1
CD	DIMENSIONS IN mm		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAIL
CD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED		TITLE - DELIVERY VALVE ASSY
APPL	ALL THREADS CONFORM		D S CAT NUMBER
			DRAWING NUMBER
			CB 20-27-09