

1. Dimensions are ensured by tool.
2. Operating conditions.
operating medium - oils, fuels.
Temperature range -50°C to +80°C.
3. Technical requirements are according to
Ty 38005204-71, group B, table 6, except tests.

CODE	DESIGNATION	MATERIAL
45 7392 1226	CN17-3802016	RUBBER 7-HO-68-1 TY38 005 204-71.
45 7392 1227	CN17-3802016-T	RUBBER 7-HO-68-1 TY38 005 204-71. T III H 100 GOST 15152-69.

EXPLANATORY NOTE:-

4. REFERENCE MATERIAL QUOTED: CHLOROPRENE RUBBER + CKH 7 - HO - 68 - 1 - OF TY 38 005 204-71.

PARAMETERS

- a) GRADE OF RUBBER STOCK ----- 7-HO-68-1
- b) TYPE OF RAW RUBBER ----- CHLOROPRENE RUBBER + CKH
- c) HARDNESS ON INSTRUMENT TYP (CONVENTIONAL UNIT) ----- 55 - 70
- d) TENSILE STRENGTH Kgf/cm² (NOT LESS THAN) ----- 90
- e) RELATIVE ELONGATION % (NOT LESS THAN) ----- 250
- f) RELATIVE RESIDUAL ELONGATION AFTER RUPTURE % (NOT MORE THAN) ----- 12
- g) AGEING CO-EFFICIENT IN 144 HOURS AT 70°C AS PER RELATIVE ELONGATION (NOT LESS THAN) ----- 0.7
- h) BRITTLINESS TEMPERATURE AT FREEZING °C (NOT MORE THAN) ----- -55
- i) FROST RESISTANCE CO-EFFICIENT AS PER FLEXIBILITY RESTORATION AFTER COMPRESSION (NOT LESS THAN) ----- 0.10
- j) DENSITY (THEORETICAL SPECIFIC GRAVITY g/cm³) ----- 1.24
- k) CHANGE AFTER THERMAL AGEING AT 70°C OR 100°C (DEPENDING UPON WORKING CONDITIONS IN 70 HOURS)
 - i) HARDNESS CONVENTIONAL UNIT ----- ±5
 - ii) STRENGTH % ----- ±15
- l) RELATIVE RESIDUAL STRAIN AT CONTEST COMPRESSION VALUE % (NOT MORE THAN)
 - iv) COMPRESSION % ----- 30 - 30
 - i) MEDIUM ----- AIR, OIL AMF-10, v) VALUE OF RESISTIVE RESIDUAL STRAIN ----- 35 - 60
 - ii) TEMPERATURE °C ----- 70 - 100
 - iii) TIME, HOURS ----- 22 - 70
- m) WEARABILITY, cm³/kwh, (NOT MORE THAN) ----- 600
- n) TECHNOLOGICAL FEATURES OF RUBBERS (FOR REFERENCE) ----- MOULDED GLAZED EXTRUDED

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

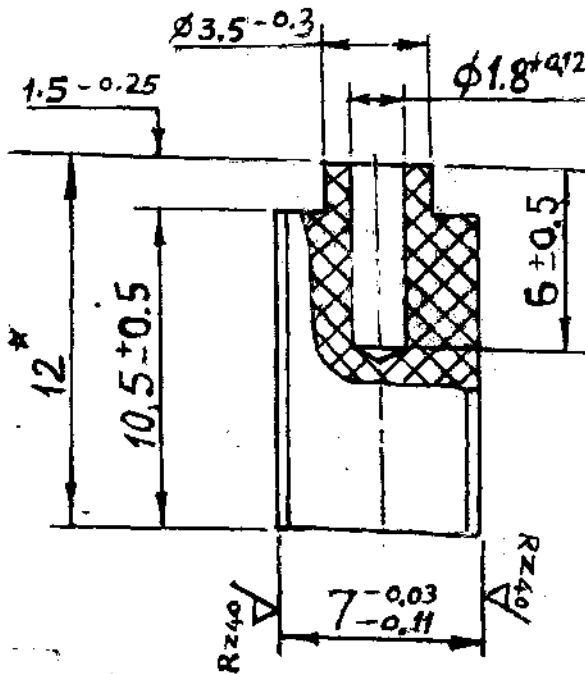
EST. MASS 0.3-g	TO BE STAMPED OR MARKED WHERE INDICATED THUS * LETTERS!
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE-EQUIVALENT CHAMFERS ARE PERMISSIBLE	

MATERIAL :- SEE TABLE	
ALL SHARP EDGES & CORNERS TO BE BOUNDED OFF	ALL THREADS TO CONFORM TO SPECIFICATION
ORG. NOT TO BE REPRODUCED	STAMP OR ETCH PART NO. MANUFACTURE IT MORE A YEAR
SCALE: 5:1	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
DATE: 22-7-92	USED ON: M3 3015 200CB
DRN: S. Somu	
TD: S. Somu	
CHD: S. Somu	
APD: S. Somu	
BUSH	
CN17-3802016	
CONTROLLERATE OF QUALITY ASSURANCE	
INFANTRY COMBAT VEHICLES	
ISSUE	DATE
47 OF 47	

DRAWING NUMBER

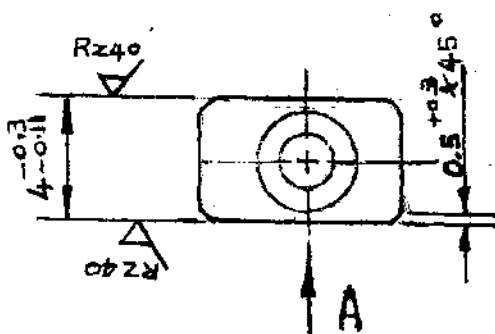
Ø 37 654 1023

Rz 80 ✓(✓)



NOTE:-

1. DIMENSION FOR REFERENCE
2. POSITION TOLERANCE OF HOLE AXIS OF ϕ 0.3mm.
3. MARKING

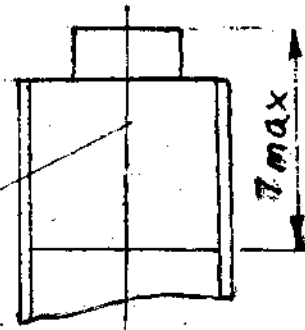


4 CHAMFERS

VIEW A



PARA 3



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

MATERIAL :
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF

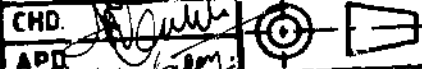
DRG. NOT TO BE SCALED

SCALE :- 4 : 1

DATE :- 22-7-92

DRN. *S. Romulus* WT :- (Kg)

TCD. *S. Romulus* 0.34 g



ALL THREADS TO CONFORM TO SPECIFICATION

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED

STAMP OR ETCH, PART NO. MANUFACTURERS NAME & YEAR OF MFR.

USED ON:- Ø 3596 1023 C5

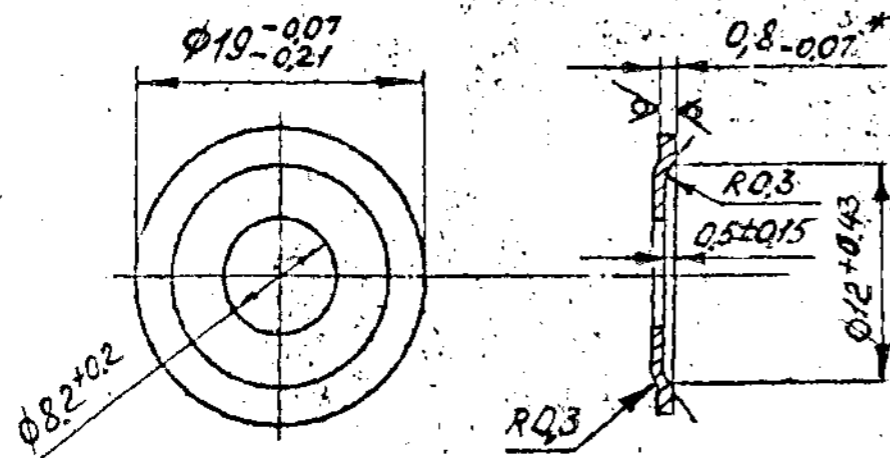
BRUSA

Ø 37 654 1023

CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)

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DRAWING NUMBER
M3 29 104-3



DESIGNATION	COATING	KOD CODE
M3 29 104-3	4.15 X 0.20 15 CHROMOTIZING	
M3 29-104-T	K0 15 X 0.20 15 CHROMOTIZING	

1. * DIMENSION FOR REFERENCE.

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

EST. MASS	TO BE STAMPED OR MAPPED WHERE INDICATED THIS (LETTERS)
1.95 g	1

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

EXPLANATORY NOTE:-

2. REFERENCE MATERIAL QUOTED: COLD ROLLED LOW CARBON STEEL EXTRA SOFT SECOND GROUP, NORMAL ACCURACY STEEL GROUP 0.8-0.07mm THICK GRADE 08Kn OF GOST 503-71.

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

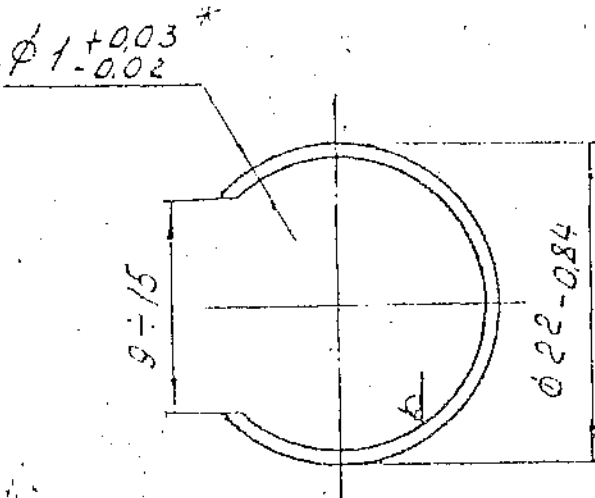
GRADE OF STEEL	CONTENT OF ELEMENTS %						
	C	Si	Mn	Cr	Ni	S	P
08Kn	0.05 - 0.11	0.03 (MAX)	0.25 - 0.50	0.10	0.25	0.04	0.035

b) MECHANICAL PROPERTIES AS PER GOST 503-71:-

GRADE OF STEEL	CONDITION OF MATERIAL	UTS Kgf/mm ²
08Kn	0M (EXTRA SOFT)	25 TO 40

MATERIAL :- BAND 08Kn-0M-HT-0-0-8 GOST 503-71		
ALL SHARP EDGES & CORNERS TO BE BOUNDED OFF	ALL THREADS TO CONFORM TO SPECIFICATION	STAMP OR ETCH PART NO. MANUFACTURERS NAME & YEAR OF MFR.
DRG. NOT TO BE SCALED	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED	USED ON:- M3 300 400 C5
SCALE :- 2:1	DATE :- 22-7-92	BEARING WASHER
DRN. S. Ponnus	VT :- (Kg) 1.95g	
TCD. S. Ponnus	CHD. S. Ponnus	M3 29 104-3
APD. S. Ponnus	CONTROLLERATE OF QUALITY ASSURANCE (INFANTRY COMBAT VEHICLES)	
		42 OF 47

M329-105



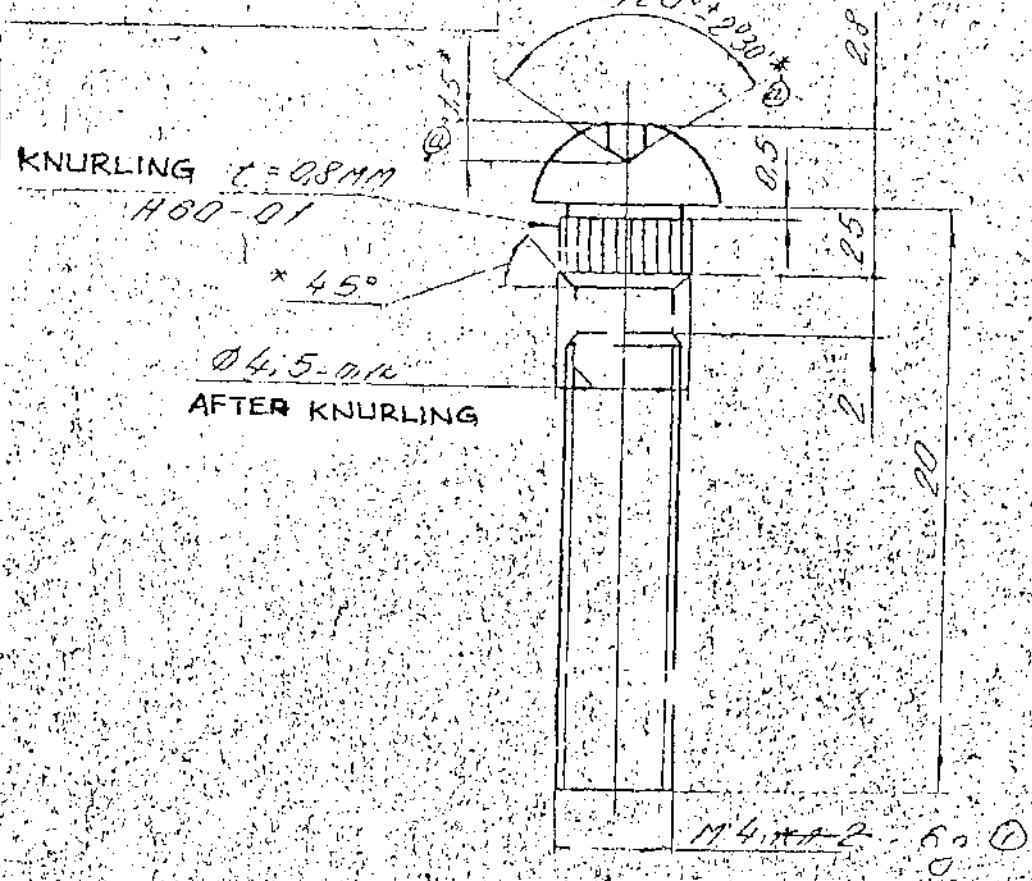
1. CARRY OUT NORMALISATION.
2. COATING: cd 9 CHROMATIZED.
3. *DIMENSION IS GIVEN FOR REFERENCE.

MATERIAL :- WIRE II-1, GOST 9389-75		
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF	ALL THREADS TO CONFORM TO SPECIFICATION	STAMP OR ETCH, PART NO. MANUFACTURERS NAME & YEAR OF MFR.
DRG. NOT TO BE SCALED	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED	USED ON:- M33015-21042 M3300-40100
SCALE :- 2:1	DATE :- 11-7-97	
DRN. <i>[Signature]</i>	WT :- (Kg) 0.42	M329-105 LOCKING RING
ECO. <i>[Signature]</i>		
CHD. <i>[Signature]</i>		
APP. <i>[Signature]</i>		

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

45 OF 47

811-676W



DESIGNATION	COATING
M29-113-T	0.9

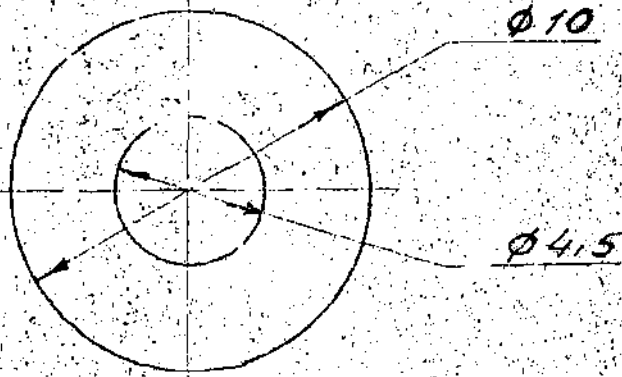
1. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE $\pm 7^{th}$ CLASS ACCURACY.
2. DIMENSIONS ARE ENSURED BY TOOLING.
3. CARRYOUT PICKLING (ETCHING).

MATERIAL :- WIRE TB 3-4; GOST 12920-67		
ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF	ALL THREADS TO CONFORM TO SPECIFICATION	STAMP OR ETCH, PART NO. MANUFACTURERS NAME & YEAR OF MFR.
DRG. NOT TO BE SCALED	TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED	USED DR:- M23015-20005
SCALE :- 4:1	DATE :- 11-7-97	M29-113 CONTACT SCREW
DRN. <i>[Signature]</i>	WT :- (Kg) 2.20	
TCD. <i>[Signature]</i>		
CHD. <i>[Signature]</i>		
APD. <i>[Signature]</i>		

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

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M329-115



1.5 ± 0.25



UNSPECIFIED LIMIT DEVIATION OF DIMENSION
 OF HOLES AS PER A7 AND SHAFTS AS PER
 B7.

MATERIAL - GLASS CLOTH BASE LAMINATE

POST 12652-74

ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF

ALL THREADS TO CONFORM TO SPECIFICATION

STAMP OR ETCH, PART NO. MANUFACTURERS NAME & YEAR OF MFG.

DRG. NOT TO BE SCALED

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED

USED ON: M33015-200C5

SCALE :- 5:1

DATE :- 11-7-97

DRN. [Signature]

WT. 0.12

M3 29-115

LED [Signature]

CHK [Signature]

WASHER

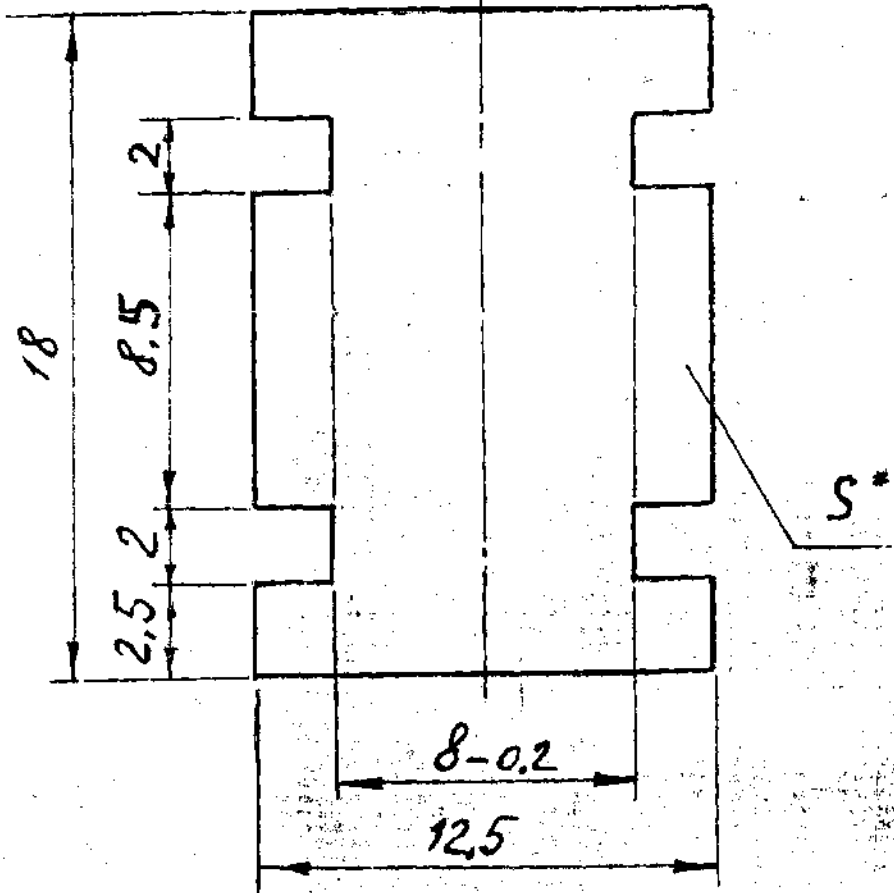
APP [Signature]

CONTROL RATE OF QUALITY ASSURANCE

COMBAT VEHICLES

45 OF 47

DRAWING NUMBER
M) 300 001



- * DIMENSION FOR REFERENCE.
- UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS FOR HOLES -A7, FOR SHAFTS -B7.

EXPLANATORY NOTE:-

2. REFERENCE MATERIAL QUOTED: ELECTRICAL INSULATION GLASS JEXTOHITE SHEET GRADE CT3 0-1 TO GOST 12652-75.

PARAMETERS

DENSITY g/cm³ ----- 1.60 TO 1.70
 RESISTANCE TO SHORT DURATION HEATING ----- 200°C (MIN)
 RESISTANCE ACTION OF OIL (TRANSFORMER OIL) --- 4 Hrs 130°C (MIN)
 WATER ABSORPTION ----- 1% (MAX)
 SURFACE RESISTIVITY ohms 1 X 10¹² (MIN) OF RELATIVE HUMIDITY 45 TO 75° AND TEMPERATURE 15 TO 35°C.
 1 X 10¹² AFTER SOAKING FOR 24 HOURS IN A HUMIDITY CHAMBER AT RELATIVE HUMIDITY OF 95±2% AND 20±2°C.
 VOLUME RESISTIVITY ohm cm (MIN).
 1 X 10¹³ AT A RELATIVE HUMIDITY OF 45 TO 75% AND 15 TO 35°C.
 1 X 10¹² AFTER SOAKING FOR 24 HOURS IN A HUMIDITY CHAMBER AT RELATIVE HUMIDITY 95±2% AND 20±2°C.
 DISSIPATION FACTOR AT 50HZ RELATIVE HUMIDITY 45 TO 75% AND 15 TO 35°C MAX. 0.03.
 DIELECTRIC STRENGTH PERPENDICULAR TO THE LAYERS AT 50HZ IN TRANSFORMER OIL AT 90±2°C (MIN) 27 KV. eff/mm.

CODE	DESIGNATION	MATERIAL	S* mm
45 7392 3822	M 300 001	FABRIC BASED LAMINATE ПТ1 GRADE 1 GOST 5-78.	1±0.10
		FABRIC BASED LAMINATE ПТ1 GRADE 2 GOST 5-78.	1±0.15
45 7392 3823	M 300 001--T	GLASS CLOTH BASE LAMINATE CT3 0-1 TO GOST 12652-74.	±0.25

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

EST. MASS. 0.3g 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 :- SEE TABLE

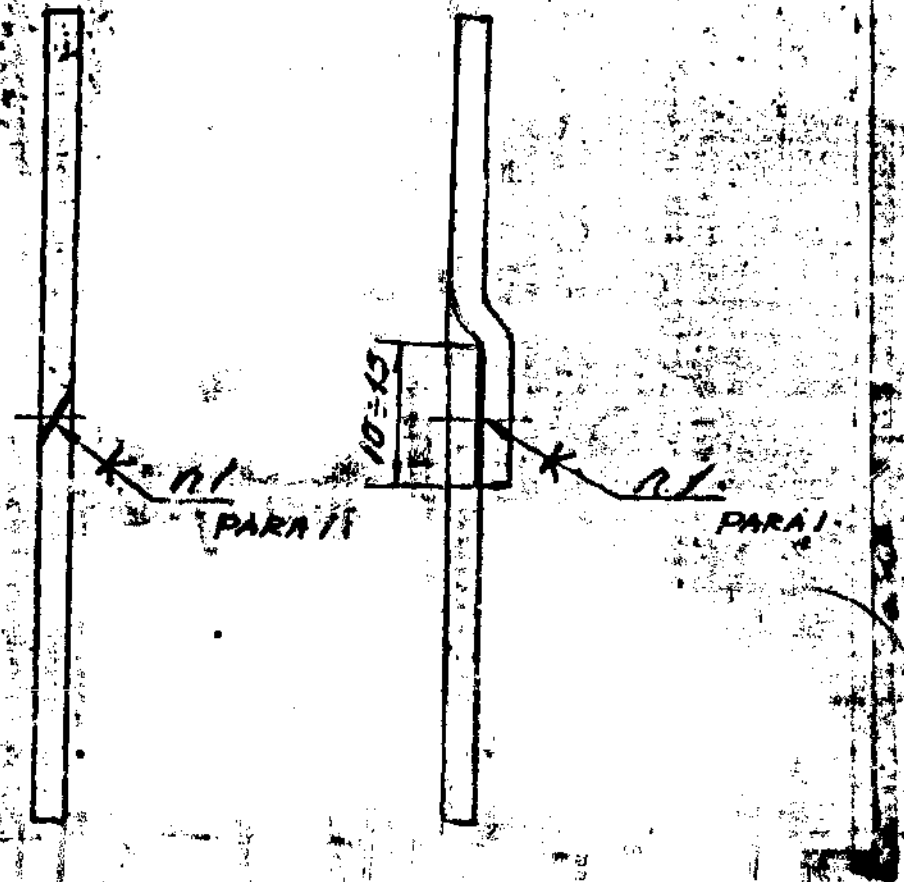
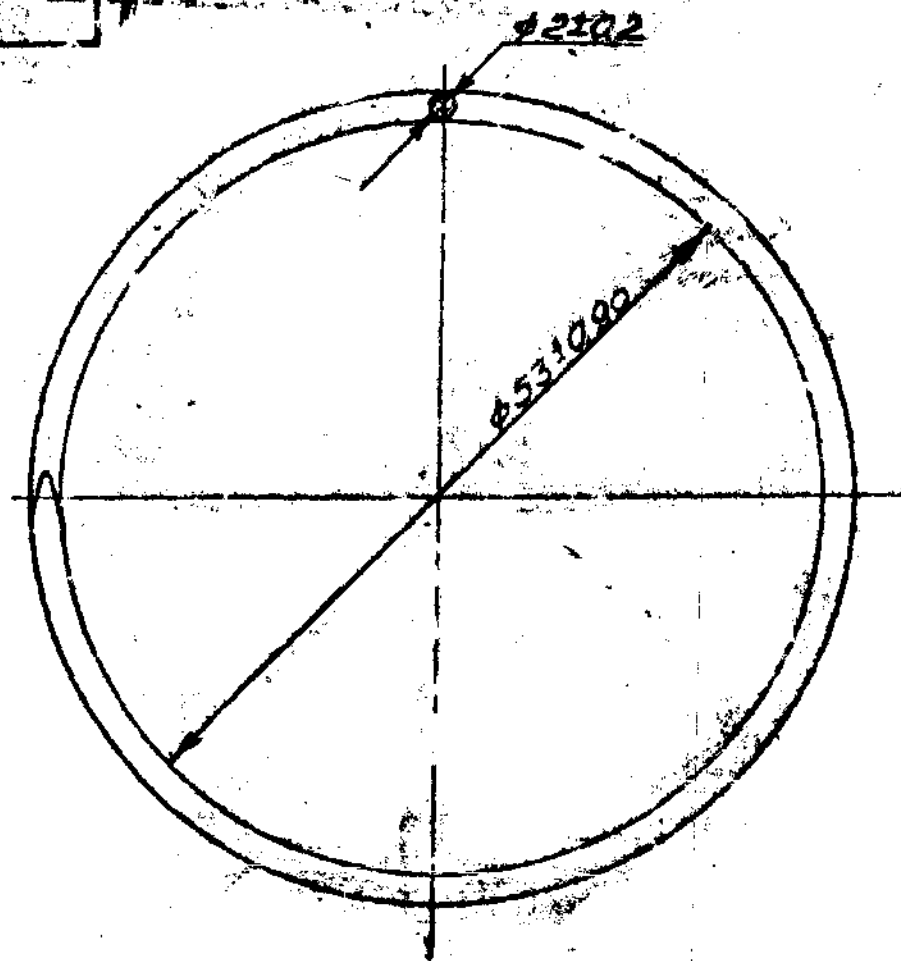
ALL SHARP EDGES & CORNERS TO BE REMOVED OR	ALL THREADS TO CONFORM TO SPECIFICATION	STAMP OR MARK PART NO. NAME & YEAR
DRG. NOT TO BE SEALED	TOLERANCE ON DIMENSIONS -SS OTHERWISE SPECIFIED	M) 3015-3730010CB
SCALE :- 5:1		
DATE :- 22-7-72		
DRN. [Signature]	WT :- (Kg) 0.3g	
CD. [Signature]		
APD. [Signature]		

GASKET

M) 300 001

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

250F47



EXPLANATORY NOTE:-

1. ADHESIVE N68 MPTY 74
5-88-66, TY 58. 105. 1061-82

2. REFERENCE MATERIAL QUOTED:- VULCANIZED RUBBER ROUND
CROSS SECTION 210.2mm DIA. USED FOR THE SEALING OF FIXED
DETACHABLE JOINTS WITH PRESSURE OF THE WORKING MEDIA
UPTO 5Kgf/cm².

REFER MECHANICAL AND OTHER DETAILS FROM SPECN.
GOST 6467-

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

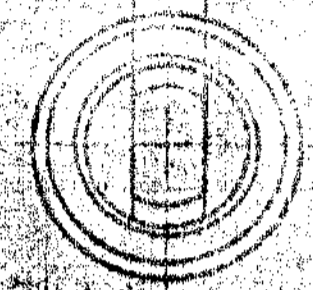
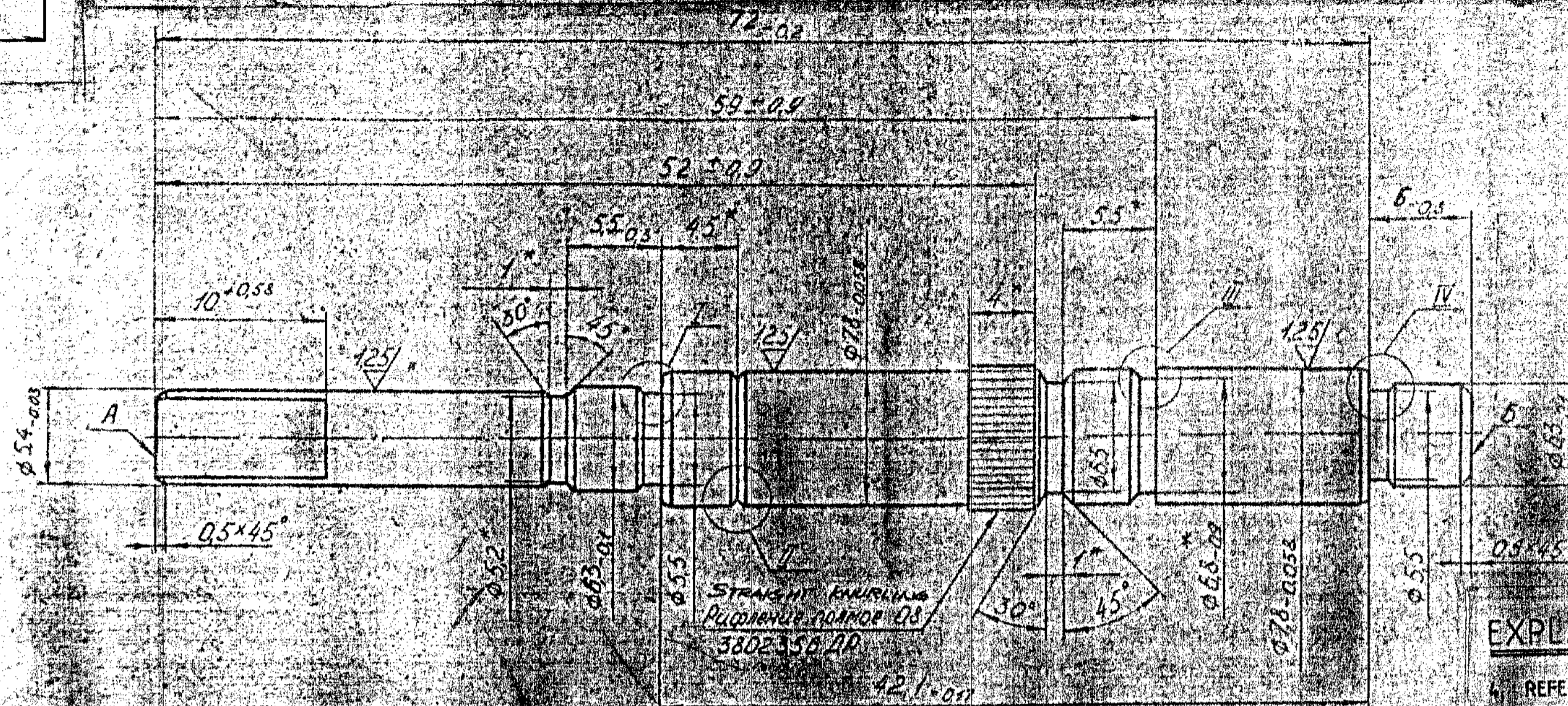
EST. MASS. TO BE STAMPED OR MARKED WHERE
INDICATED, THIS # (LETTERS)

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

MATERIAL :- CORD 1MΦ 2 GOST 6467-79		STAMP OR MARK WHERE INDICATED
ALL SHARP EDGES & CORNERS TO BE REMOVED		ALL DIMENSIONS TO CONFORM TO SPECIFICATION
ORG. NOT TO BE SEALED		TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
SCALE :- 2:1	DATE :- 22-7-92	ISSUE NO. M3.3016-375001000
DRN. <i>S. Srinivas</i>	WT :- (Kg)	<p>GASKET</p> <p>M3 300 002</p>
TCD. <i>S. Srinivas</i>		
CHD. <i>S. Srinivas</i>		
APD. <i>S. Srinivas</i>		

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES)

DRAWING NUMBER
MЭ 300 1015



EXPLANATORY NOTE

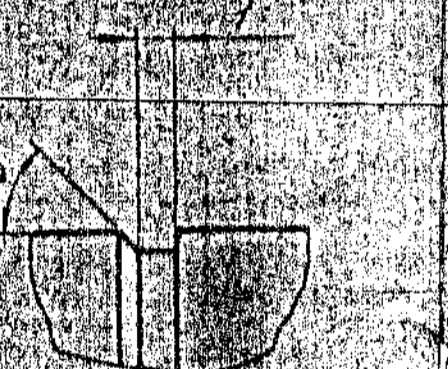
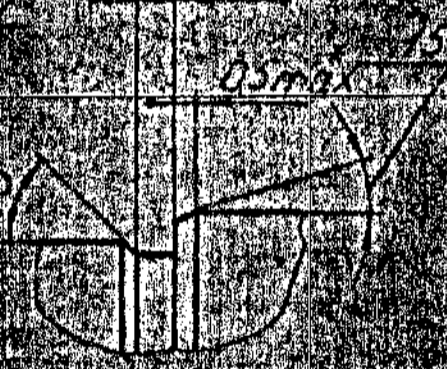
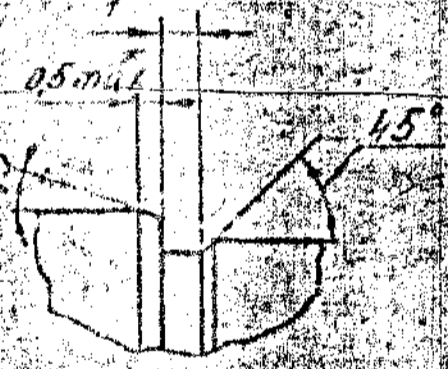
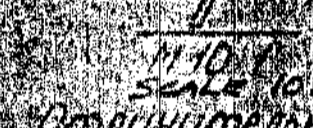
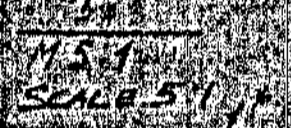
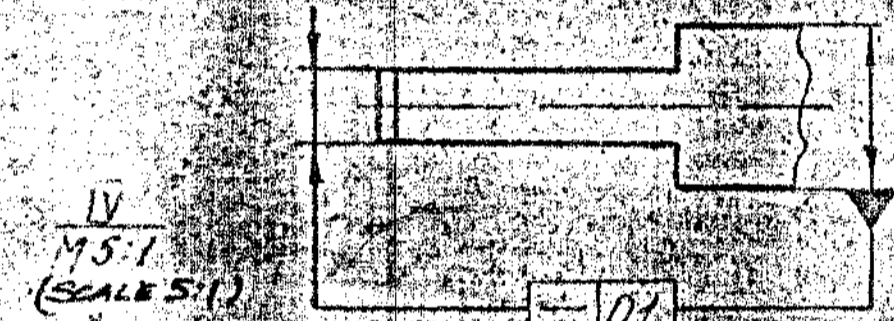
a) REFERENCE MATERIAL QUOTED BY SIZED ROUND SECTION FREE CUTTING STEEL BAR OF Ø 8.0 mm GRADE AC14 TO TY 14-1-1256-74.

b) CHEMICAL COMPOSITION AS PER TY 14-1-1256-74:-

GRADE OF STEEL	CONTENT OF ELEMENTS %					
	C	Mn	Si	S	P	Fe
AC 14	0.10 - 0.17	1.00 - 1.40	0.12 (MAX)	0.15 - 0.30	0.10 (MAX)	0.15 - 0.30

b) MECHANICAL PROPERTIES AS PER TY 14-1-1256-74:-

GRADE OF STEEL	U T S	YIELD POINT	ELONGATION	HARDNESS
	Kgf/mm ²	Kgf/mm ²	%	H K B
AC 14	50 - 70	60 (MIN)	10 (MIN)	75 - 94



- UNSPECIFIED LIMIT DEVIATIONS OF HOLE DIMENSIONS ARE ACCORDING TO A7, THOSE OF SHAFTS-B7, OTHERS CM7
- * DIMENSIONS ARE ENSURED BY TOOL
- THERE MAY BE CENTERING HOLES ON FACES. THEIR DIA. ON SURFACE A MAY BE 1.5mm MAX, THOSE ON SURFACE B -2.5mm MAX.

CODE	DESIGNATION	COATING
45 7392 3713	MЭ 300 1015	Zn 21, CHROMOTIZING
45 7392 3714	MЭ 300 1015-T	Cd 21, CHROMOTIZING

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

EST. MASS 21 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

ISSUE	DATE	NATURE OF AMENDMENTS

MATERIAL: - ROUND BAR 82 AC14 TY 14-1-1256-74

ALL SHARP EDGES & CORNERS TO BE ROUNDED OFF

ALL THREADS TO CONFORM TO SPEC. 1000

STAMP OR MARK PART NO. MЭ 300 100 CB

SCALE: 4:1

DATE: 22-7-92

DRW: S. Gurus

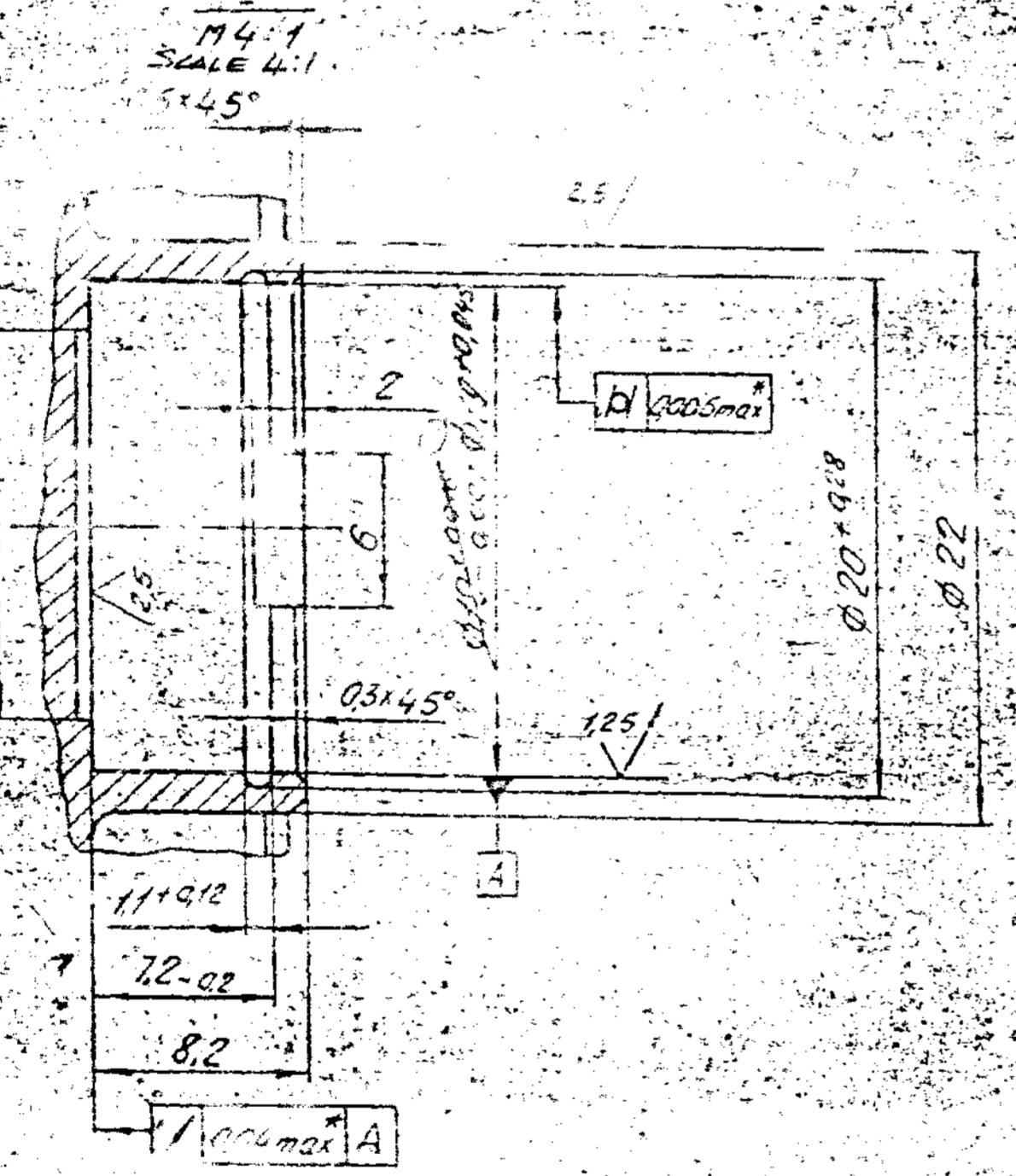
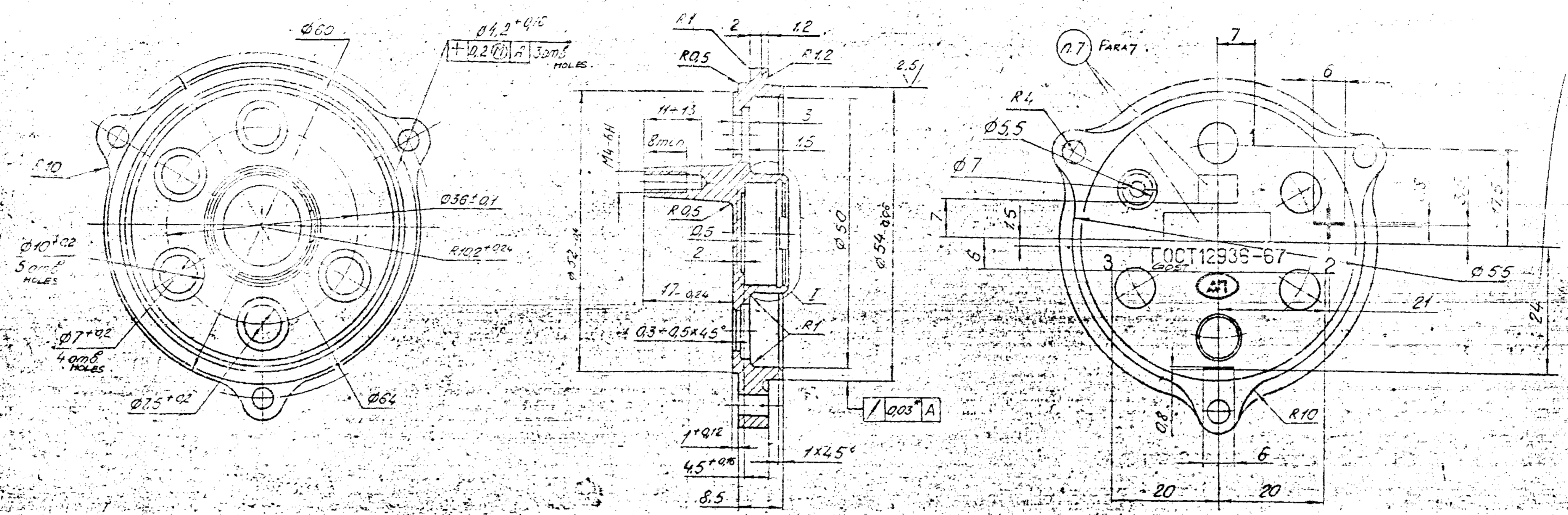
TCO: S. Gurus

CHD: S. Gurus

APD: S. Gurus

SHAFT
MЭ 300 1015

CONTROLLERATE OF QUALITY ASSURANCE
(INFANTRY COMBAT VEHICLES) 27 OF 47



1. * LIMIT DEVIATIONS ARE ENSURED BY TOOL.
2. UNSPECIFIED LIMIT DEVIATIONS FOR DIMENSIONS OF HOLES ACCORDING TO A7, SHAFTS -B7, OTHER CM.
3. UNSPECIFIED LIMIT DEVIATIONS OF ANGULAR DIMENSIONS ACCORDING TO 10 DEGREE OF ACCURACY GOST 8908-58.
4. ALL INSCRIPTIONS SHOULD BE POSITIONED SYMMETRICALLY TO AXIAL ONE, DIGITS LETTERS AND SIGNS ARE RAISED, HEIGHT IS 0.3mm.
5. TYPE DO-3 GOST 2930-62 IS USED FOR DIGITS 1,2,3.
6. TYPE NO-3 GOST 2930-62 IS USED TO MARK GOST 12936-67.
7. MARK VOLTAGE AND TYPE OF INSTRUMENT (SEE TABLE 2) TYPE OF INSCRIPTIONS "12V" AND "24V" IS DO-5 GOST 2930-62 THAT FOR LETTER "B" IS DO-3 GOST 2930-62.
8. TYPE OF LETTERS AND DIGITS OF INSTRUMENTS TYPE INSCRIPTIONS IS NO-5 GOST 2930-62.
9. FACTORY TRADE MARK IS H 2.5, 30C2226 AT.
10. COATING: CHROMOTIZING.
11. ALTERNATE MATERIAL IS ALLOY UAM4-1 GOST 19424-74.

DESIGNATION	ADDITIONAL REQUIREMENTS
MЭ 301B - 211-T	PAINT EXTERNAL SURFACE WITH SILVERY ENAMEL X13-125 GOST 10144-74. APPEARANCE IS ACCORDING TO STANDARD PIECE.

CODE	DESIGNATION	MARKING
45 7392 3761	MЭ 301B - 211A-T	24V MЭ 301E

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

EST. MASS 65	TO BE STAMPED OR MARKED WHERE INDICATED THUS #
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED. MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS AND RADIUS.	

MATERIAL - ALLOY UAM4 GOST 19424-74	
DRG. NOT TO BE SCALE	
SCALE	2:1
DATE	22-7-92
DRY	S. Ponomarev
TC	S. Ponomarev 658
CHD	
APD	
COVER	
MЭ 301B 211A	
CONTROLLERATE OF QUALITY ASSURANCE	
FEDERATION OF RUSSIA	
ISSUE	40 OF 47