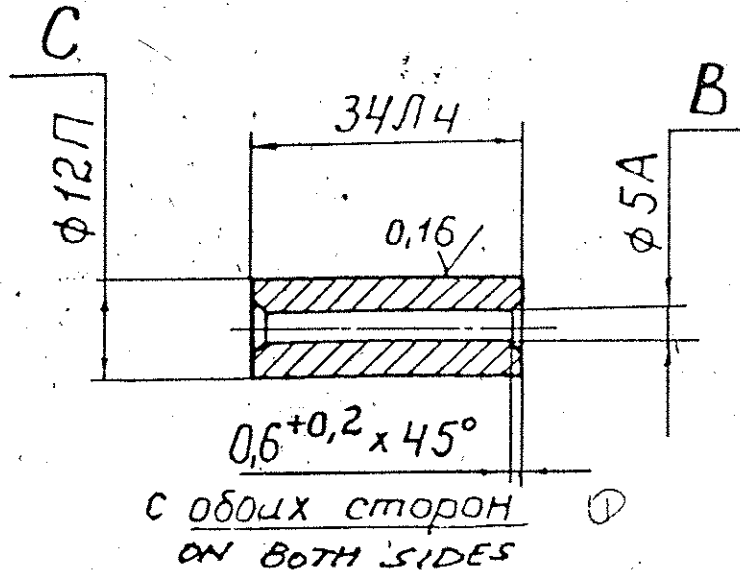


AK 150 . 011

✓ (✓)



1. DIMENSION B AND SURFACE FINISH $\sqrt{2.5}$ SHOULD BE ENSURED AT A DEPTH 7 ON BOTH SIDES.
2. RUN OUT OF SURFACE C RELATIVE TO SURFACE B SHOULD NOT EXCEED 0.4 mm.
3. OVALITY AND TAPER OF SURFACE C SHOULD NOT EXCEED 0.003 mm.
4. EDGES SHOULD BE BLUNTED TO 0.3 mm.
5. SURFACE C SHOULD BE CARBURIZED h 0.5 - 0.8mm.
HRC 58 - 62.
CORE HARDNESS HRC 28 - 39.
6. COATING: CHEMICAL OXIDIZING, PHOSPHATING.

ALTERNATE:

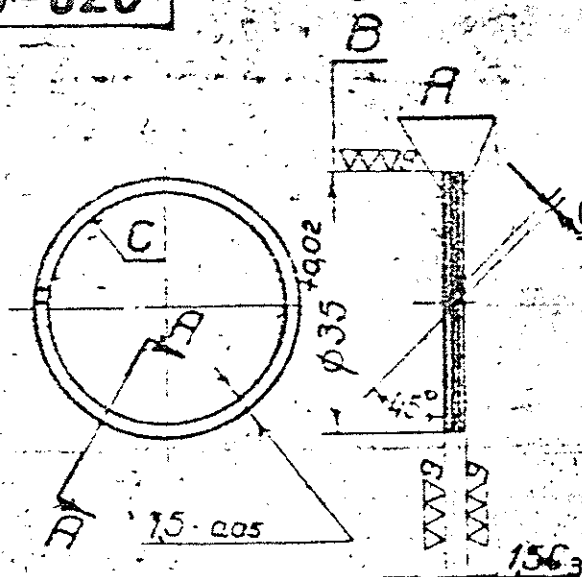
STEEL 13N13.CP80 TO IS: 4367-67
OR EN36B TO BS: 970-58-62 HRC

			EST. MASS 24,6	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 - STEEL 12X43A TY 14 1-950-74	USED ON - AK 150 2706
DRN	SCALE - 1:1		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD	DIMENSIONS IN mm.		TITLE - PISTON PIN	
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.		B S CAT NUMBER	
APPD	ALL THREADS CONFORM TO		DRAWING NUMBER AK150-011	
DATE 25.7.96				

DRAWING NUMBER

AK 150-020

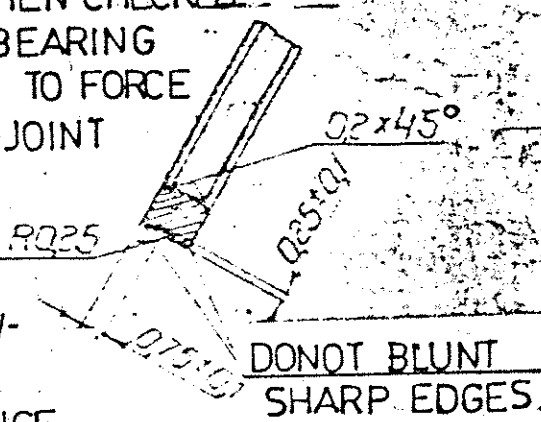
UNLESS OTHERWISE SPECIFIED.



CHECK CLEARANCE OF 0.05 TO 0.12MM IN WORKING POSITION IN RING GAUGE Ø B. CLEARANCE IN FREE POSITION MEASURED IN PLANE PERPENDICULAR TO CUT IS 3.9 TO 4.4MM.

SECTION AA
SCALE 5:1

LAP PLANES A AND SURFACE Ø B. DEVIATIONS FROM PARALLELISM OF SURFACES SHOULD NOT EXCEED 0.01mm. ELASTICITY OF RING, WHEN CHECKED WITH CONCENTRATED LOAD WITH THE RING BEARING UP AGAINST ONE POINT, SHOULD CORRESPOND TO FORCE OF 1.1 TO 1.6 Kg, WHEN COMPRESSING IT TO THE JOINT IN WORKING POSITION. CLEARANCE ALONG INTERNAL DIAMETER SHOULD NOT EXCEED 0.01mm IN TOTAL SECTOR OF 45°. OXIDIZED FILM CAUSED BY HEAT TREATMENT IS ALLOWED ON SURFACE C.



CHECK RING FOR FLATNESS IN SLOTTED GAUGE. WIDTH OF SLOT SHOULD BE $1.5^{+0.020}$ AND ITS DEPTH SHOULD BE AT LEAST $0.75^{+0.015}$ OF RING DIAMETER. RING SHOULD GO THROUGH THIS GAUGE UNDER GRAVITY.

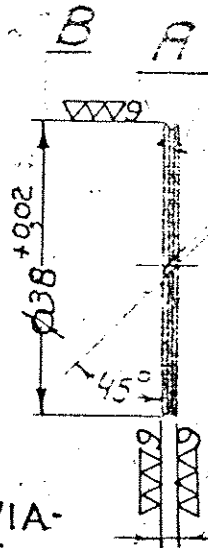
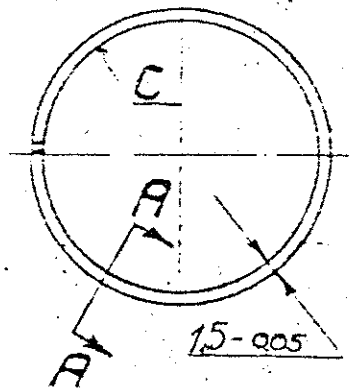
HARDNESS HB = 241 TO 285.
CARRY OUT CHECK IN RING POTS, AS PER INSTRUCTIONS NO. 8-53.

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

		EST. MASS. 1.6	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 :- CAST IRON X HB	USED ON :-
DRN A. P. P.	SCALE :- 1:1	OCT 1 90106 -73	AK 150H -32 CB
CHD B. P. P.	DIMENSIONS IN mm	CONTROLLER RATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD G. P. P.	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE: PISTON RING 3rd STAGE	
APPD L. P. P.	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK 150-020
DATE 22-7-86			

DRAWING NUMBER
AK150-021

√√6 UNLESS OTHERWISE SPECIFIED.

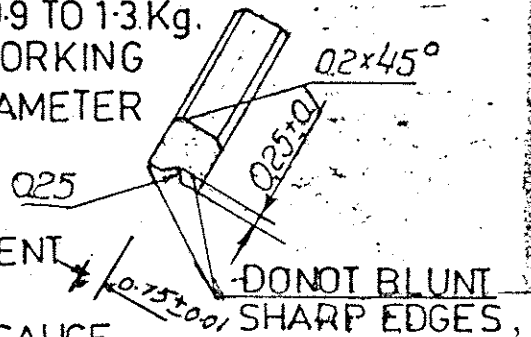


IN WORKING POSITION CHECK CLEARANCE OF 0.05 TO 0.12 mm. IN RING GAUGE ØB. CLEARANCE IN FREE POSITION MEASURED IN PLANE, PERPENDICULAR TO CUT IS 3.8 TO 4.6 mm.

LAP PLANES A AND SURFACE Ø B. DEVIATIONS FROM PARALLELISM OF SURFACES SHOULD NOT EXCEED 0.01mm. ELASTICITY OF RING, WHEN CHECKED WITH CONCENTRATED LOAD, WITH THE RING BEARING UP AGAINST ONE POINT, SHOULD CORRESPOND TO FORCE OF 0.9 TO 1.3Kg. WHEN COMPRESSING IT TO THE JOINT IN WORKING POSITION. CLEARANCE ALONG INTERNAL DIAMETER SHOULD NOT EXCEED 0.01mm IN TOTAL SECTOR OF 45°.

SECTION AA
SCALE 5:1

OXIDIZED FILM CAUSED BY HEAT TREATMENT IS ALLOWED ON SURFACE C. CHECK RINGS FOR FLATNESS IN SLOTTED GAUGE. WIDTH OF SLOT SHOULD BE 1.5 ± 0.020 AND $+0.015$. ITS DEPTH SHOULD BE AT LEAST 0.75 OF RING DIAMETER. RING SHOULD GO THROUGH GAUGE UNDER GRAVITY.



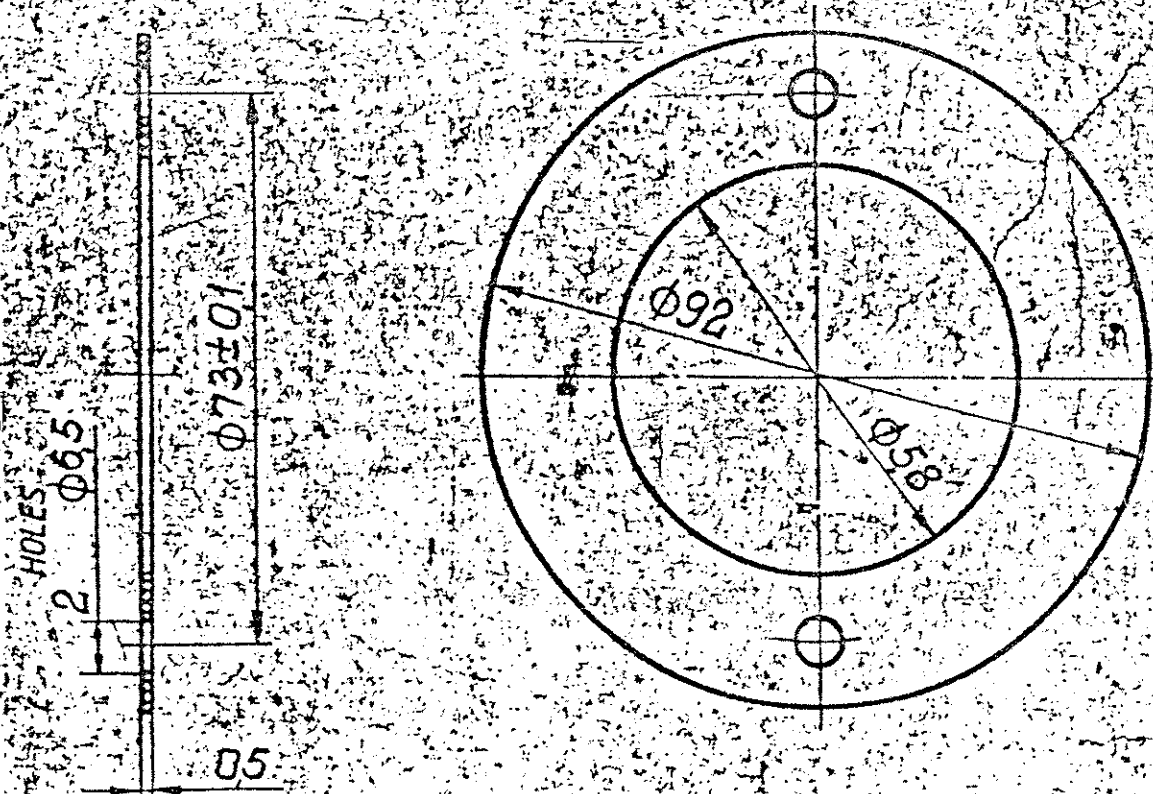
HARDNESS HB = 241 TO 285. CARRYOUT CHECK IN RING POTS AS PER INSTRUCTIONS NO. 8-53.

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

			EST. MASS. 1.8	TO BE STAMPED OR MARKED WHERE INDICATED THIS # 1
			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:- CAST IRON XHB	USED ON:- AK 150C 45 CB AK 150H 32 CB
DRW C.P.K.		SCALE - 1:1	POST. 120106-73	
CHK Bhatnagar		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD V. Ram		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE: PISTON RING	
APPD K		ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK150-021
DATE 22.7.86				

DRAWING NUMBER
AK 150.048

TOLERANCES ON FREE DIMENSIONS ARE
AS PER 121 ATY.



ALT. MATL:-
COMPRESSED ASBESTOS FIBER JOINING
Gde A/1 TO IS: 2712-79

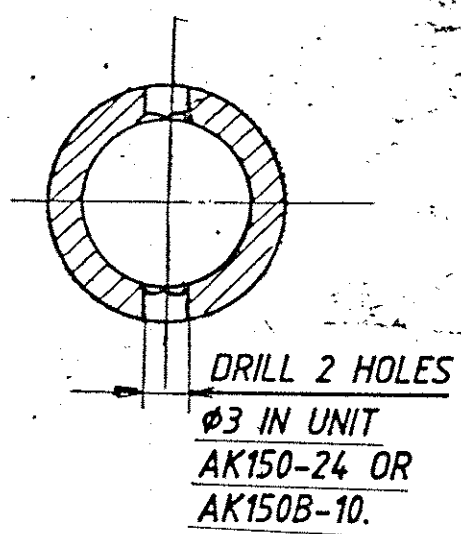
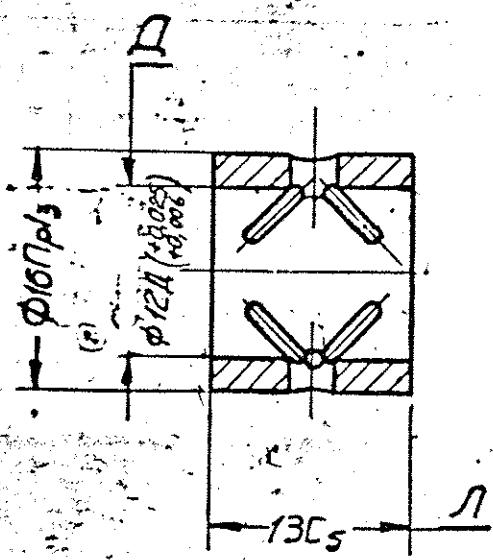
TOLERANCES ON DIMENSIONS ARE GIVEN FOR DIE.

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

			EST. MASS. 1.8	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.	
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL: PARONITE NM6 GOST 481-71	USED ON:- AK150C-0105
DRW J. Mahdy		SCALE - 1:1	CONTROLLER RATE OF INSPECTION (HEAVY VEHICLES) AVAD	
CHK R. Hattar		DIMENSIONS IN mm	TITLE: GASKET	
TCD J. Mahdy		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	D S CAT NUMBER	
APPD Viz		ALL THREADS CONFORM TO	DRAWING NUMBER AK150-048	
DATE 25/7/86				

DRAWING NUMBER
AK 150 -023

VV5



PROVIDE DIMENSIONS A AND L IN
UNIT AK150-24 OR AK150B-10
BLUNT SHARP EDGES R 0,3.

ALT. MATL:-
COPPER & COPPER ALLOY Gde CA 104
TO BS: 2874 -86.

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

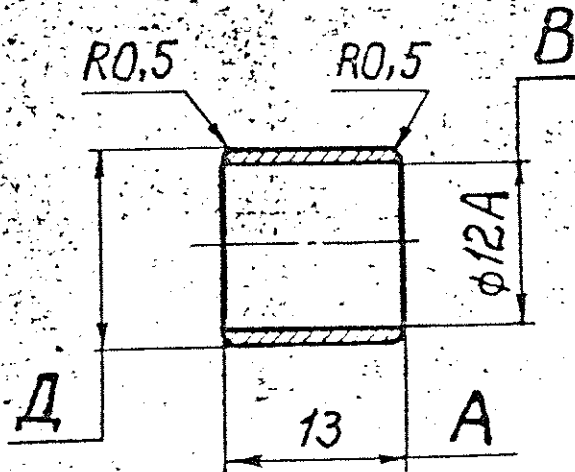
			EST. MASS. 9	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
			ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED. MACHINED CORNERS TO HAVE R OUT- SIDE P. INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS		
DRN		SCALE - 2:1	MATERIAL:- BRONZE БРАЖН-10-4- 4 GOST 1628 - 72	USED ON:- AK 150B -10C5
CHD		DIMENSIONS IN mm		
TCD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
APPD			TITLE: BUSH FOR MASTER CONNECTING ROD	
DATE		ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK 150 - 023
	22.7.96.			

DRAWING NUMBER

AK150-024

2.5/

UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS PER 22 AT 52 CLASS 7.



DIMENSION A	GROUP
$\phi 14$ GP	I
$\phi 14.1$ GP	II
$\phi 14.2$ GP	III

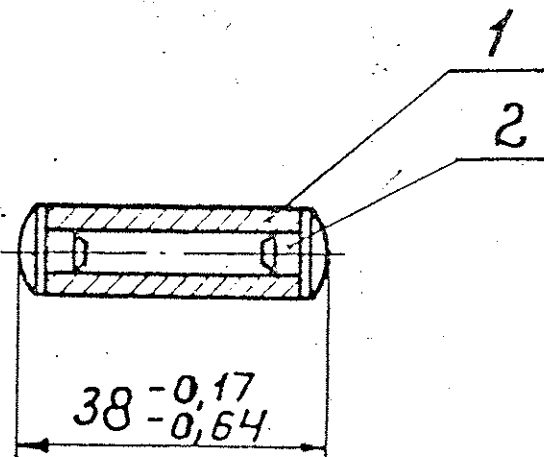
PROVIDE DIMENSION A AND ϕB FINALLY IN UNITS AK150-09, AK150-11, AK150B-22 AND AK150B-30 AFTER PRESS-FITTING THE BUSH.

ALT. MATL:- COPPER & COPPER ALLOY Gde CA 104 TO BS: 2874-86

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

		EST. MASS. 3.5	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	CPR	SCALE - 2:1	MATERIAL: - $\phi 10$ BPA \times H10-4-4 USED ON:- AK 150 C-100 C5
CHD	Shastri	DIMENSIONS IN mm	GOST 1628-78
TCD	V. Rao	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD	Shastri		TITLE: BUSH
DATE	22-7-86	ALL THREADS CONFORM TO	D S CAT NUMBER
			DRAWING NUMBER AK150-024

AK 150 27 CB

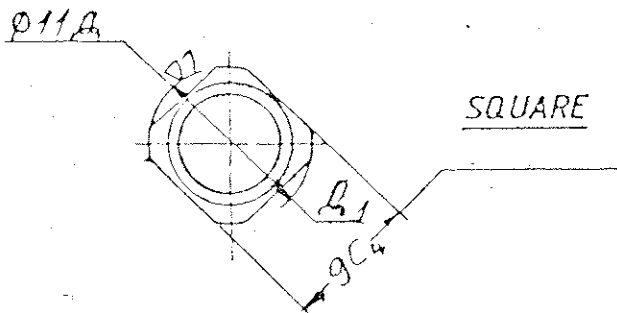
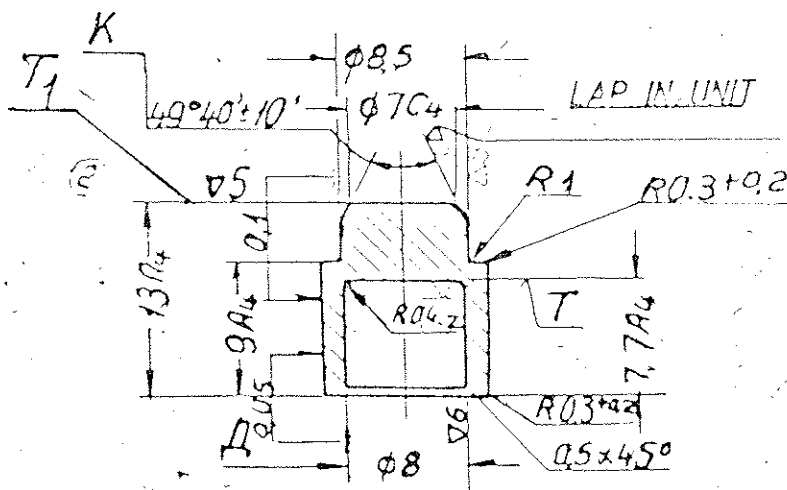


			EST. MASS 2.6	TO BE STAMPED OR MARKED WHERE INDICATED THIS (LETTERS)
				ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.
ISSUE	DATE	NATURE OF AMENDMENTS	MATERIAL :-	USED ON:- AK150C-0105
APPROVED		SCALE - 1:1		
		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADL	
		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE:- PISTON PIN ASSY	
		ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK150-27CB
	DATE 25.7.80			

DRAWING NUMBER
AK150-031

✓4 UNLESS STATED OTHERWISE

TOLERANCES ON FREE DIMENSIONS ARE
AS PER 22AT52.



RUN-OUT OF SURFACE T WITH RESPECT TO A SHOULD NOT EXCEED 0.05

RUN-OUT OF SURFACE K WITH RESPECT TO A₁ SHOULD BE CHECKED
WITH GAUGE BY BLUEING; THE BEARING PATTERN OF SURFACE K
SHOULD NOT BE LESS THAN 50% WITHOUT BREAKS ALONG CIRCUMFERENCE.

DRILLING OF SURFACE T TO A DEPTH UPTO ϕ 2 IS ALLOWED.

PARKERIZE WITH OXIDATION, EXCEPT SURFACES K AND D₁. ALT. MATL:-

SURFACES T₁ AND D MAY BE FREE OF PARKERIZING.

STEEL EN36 TO
BS: 970. 48-52 HRC

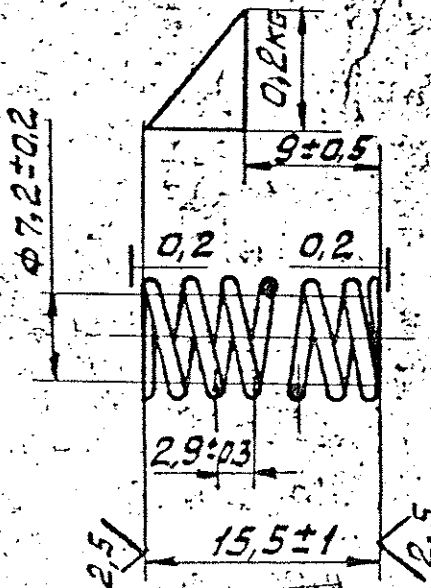
HARDNESS RC = 48 TO 52.

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

			EST. MASS. 4g	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.
ISSUE	DATE	NATURE OF AMENDMENTS		
DRG		SCALE - 2:1	MATERIAL - STEEL 40XHMA TY14-1-950-74	USED ON:- AK-150B-33CB AK-150B-38CB
CHK		DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TIT		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE: DELIVERY VALVE	
DATE		ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK150-031

DRAWING NUMBER
AK 150-035

NO. OF WORKING TURNS	5
TOTAL NO. OF TURNS	7
DIRECTION OF WINDING	RIGHT HAND



1. TECHNICAL SPECIFICATION ARE AS PER OST 1 00793-75.
2. DIMENSIONS ARE GIVEN AFTER THE SPRING IS PRESSED TURN TO TURN 10 TIMES.
3. INSPECTION GROUP 3.
4. COATING : CADMIUM-PLATED , 9 MICRONS THICK.

ALT. MATL :
SPRING STEEL WIRE Gd 3
TO IS : 4454 (pt-1) - 81

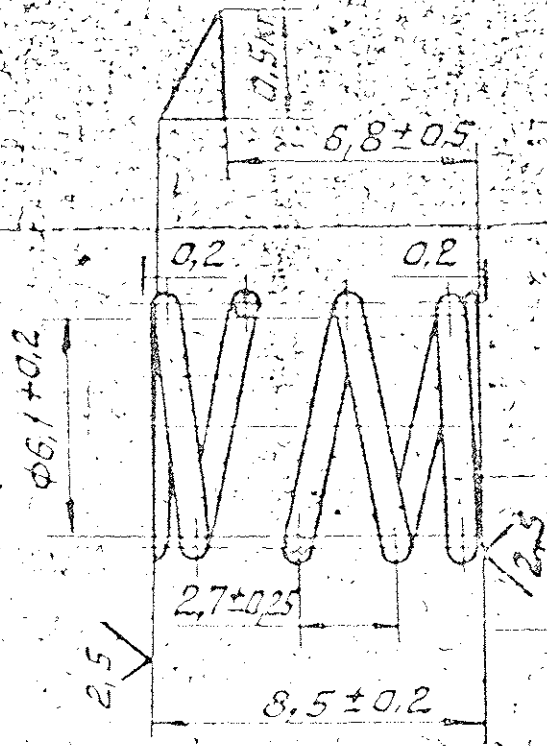
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. MASS. 0.4	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.	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN	CPA	SCALE - 2:1	MATERIAL :- WIRE II A-0.5 GOST 9389-75 CM 70 GOST 1050-74
CHO		DIMENSIONS IN mm	USED ON:- AK150B-36CB
TCD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPO			TITLE: SPRING
DATE		ALL THREADS CONFORM TO	D S CAT NUMBER
22.7.96			DRAWING NUMBER AK 150-035

AK 81 db-1

DRAWING NUMBER
AK150-036

NO. OF WORKING TURNS	2.75
TOTAL NO. OF TURNS	4.75
DIRECTION OF COILING	RIGHT HAND



1. TECHNICAL SPECIFICATIONS ARE AS PER OST1 00793-75.
2. DIMENSIONS ARE GIVEN AFTER 10 TIMES COMPRESSION OF SPRING UPTO HEIGHT OF 5.0 mm.
3. INSPECTION GROUP 3.

ALT. MATL:-
SPRING STEEL GDE-3
TO IS: 4454 (Pt-1)-81

COATING : CADMIUM-PLATED, 9 MICRONS THICK.

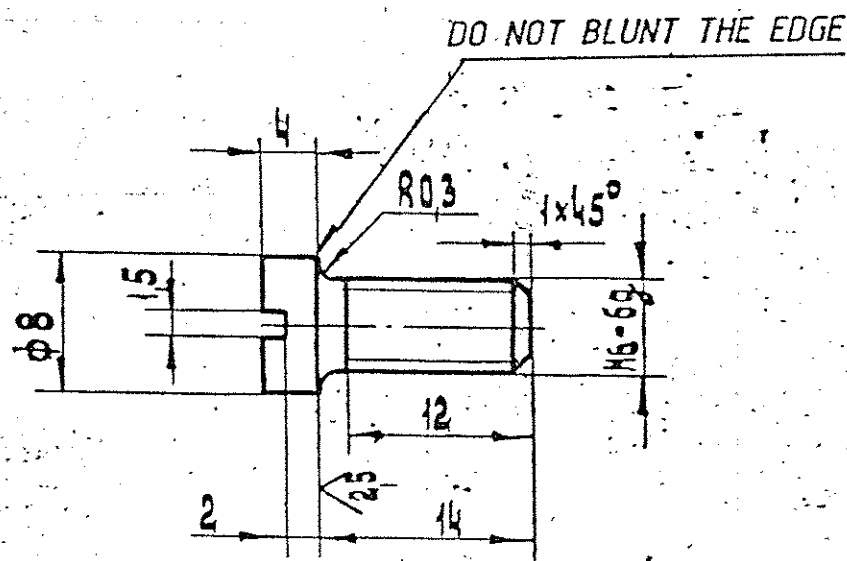
PILOT SAMPLE SHOULD BE APPROVED BY A H'S P BEFORE BULK PRODUCTION

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
		0.3	
		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	MATERIAL:-	USED ON:- AK 150B-32-C6
20.0.80	SCALE - 5 : 1	WIRE II A-0.7 GOST 9389-62	AK 150B-38C6
CHKD	DIMENSIONS IN mm	STEEL 70 GOST 1050-74	
TCD	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
APPD		TITLE: SPRING	
DATE	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK150-036
20.0.80			

DRAWING NUMBER

AK 150-040

V (V)



1. H R C 27 TO 34.
2. COATING:- CHEMICALLY OXIDIZED.
3. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS PER 22 AT 52 CLASS 7.
4. THREAD MAY BE MADE BY ROLLING.
5. THREADS RUN-OUT CHAMFERS AND RECESSES ARE AS PER OST 1000 10-71.

ALT. MATL:-

STEEL Gde 40Cr4Mo3 TO IS: 5517-78

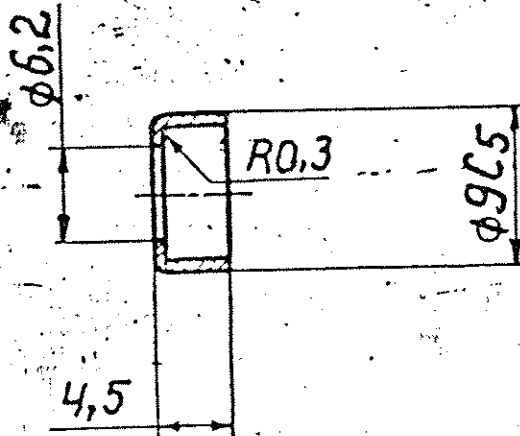
OR En19 TO BS: 970. HRC- 27-34.

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

		EST. MASS. 3.8	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:- STEEL 38 X A TY-14-1-950-74	USED ON:- AK 150 H- 38 C B
DRN <i>[Signature]</i>	SCALE - 2:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD <i>[Signature]</i>	DIMENSIONS IN mm	TITLE: SCREW	
TCD <i>[Signature]</i>	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	D S CAT NUMBER	
APPO <i>[Signature]</i>	ALL THREADS CONFORM TO	DRAWING NUMBER AK 150-040	
DATE 22.7.86			

DRAWING NUMBER
AK 150-041

^F
UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS
ARE AS PER 22 AT 52 CLASS 7.



DRESS BURRS.

PERFORM HEAT TREATMENT BY ANNEALING CLARITY.

ALT. MATL:-

BRASS Gde CuZn37 TO 1/4 HARD TO
IS: 410-77

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

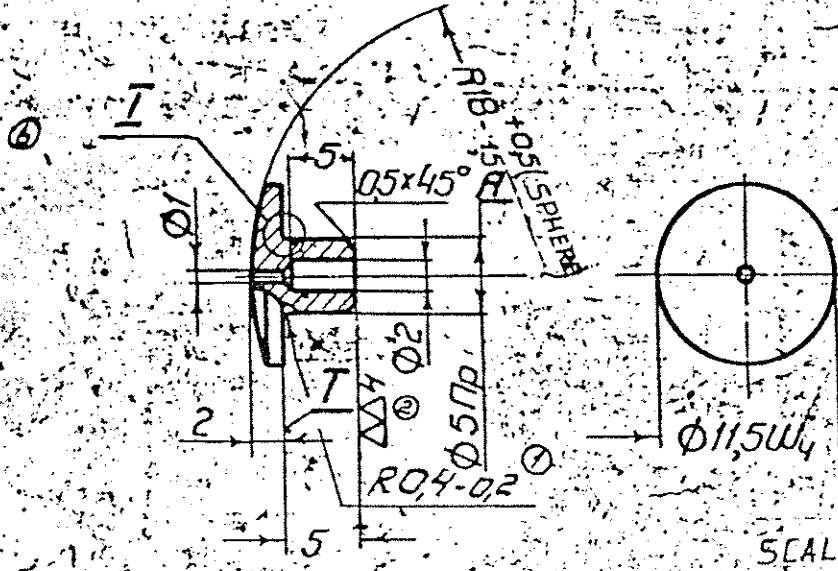
		EST. MASS. 0.4	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT- SIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL:- BAND M4 0.45 Q63 GOST 2208-75.	USED ON:- AK 150H-38CB
DRN <i>Mr</i>	SCALE:- 2:1	CONTROLLER RATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD <i>Chatt...</i>	DIMENSIONS IN mm	TITLE: LOCKING WASHER	
TCD <i>S...</i>	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	D S CAT NUMBER	
APPD <i>V...</i>	ALL THREADS CONFORM TO	DRAWING NUMBER AK 150-041	
DATE 22.7.86			

DRAWING NUMBER

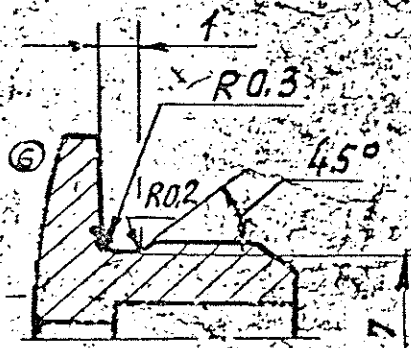
AK 150.044

▽6

UNLESS OTHERWISE SPECIFIED.
TOLERANCES ON FREE DIMENSIONS ARE
AS PER 22AT52 CLASS 7.



I
SCALE 5:1

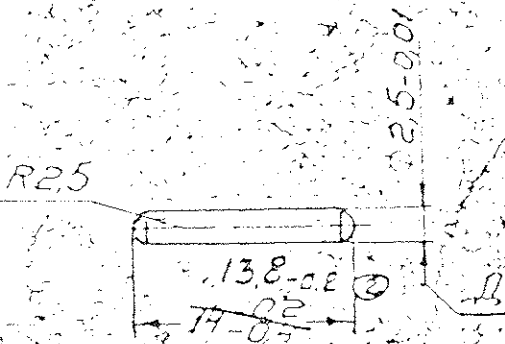


DEVIATION FROM SQUARENESS OF SURFACES
Φ A AND T SHOULD NOT EXCEED 0,05mm
GROOVE MAY BE MADE ACCORDING TO
SECTION I.

ALT. MATL. - AL. ALLOY Gde 24345 W (HE 15W) TO IS: 733-83

		EST. MASS 0.7	TO BE STAMPED OR MARKED WHERE INDICATED THIS # 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.	
ISSUE DATE	NATURE OF AMENDMENT	MATERIAL - ALUMINIUM, ALLOY P.1.T GOST-21488-76	USED QTY - AK 150 2705
SCALE - 2:1		CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AM...	
DIMENSIONS IN mm		TITLE - PLUG	
TOLERANCE ON DIMS UNLESS OTHERWISE STATED		D S CAT NUMBER	DRAWING NUMBER
ALL THREADS CONFORM TO			AK 150-044

DRAWING NUMBER
AK150-046



DIMENSION ϕA	GROUP
25 to 2,498	I
2,498 to 2,496	II
2,496 to 2,494	III
2,494 to 2,492	IV
2,492 to 2,490	V

ALT. MATL:-

STEEL Gde 103Cr2Mn70 TO IS: 4398-72
OR EN 31 TO BS: 970 HRC 61-65

ROLLERS ARE CLASSIFIED IN GROUPS IN COMPLIANCE WITH TABLE. DURING ASSEMBLY USE ROLLERS OF SAME GROUP FOR ONE UNIT.

AS PER ϕA

HARDNESS RC = 61 to 65
POLISH THE PART.

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

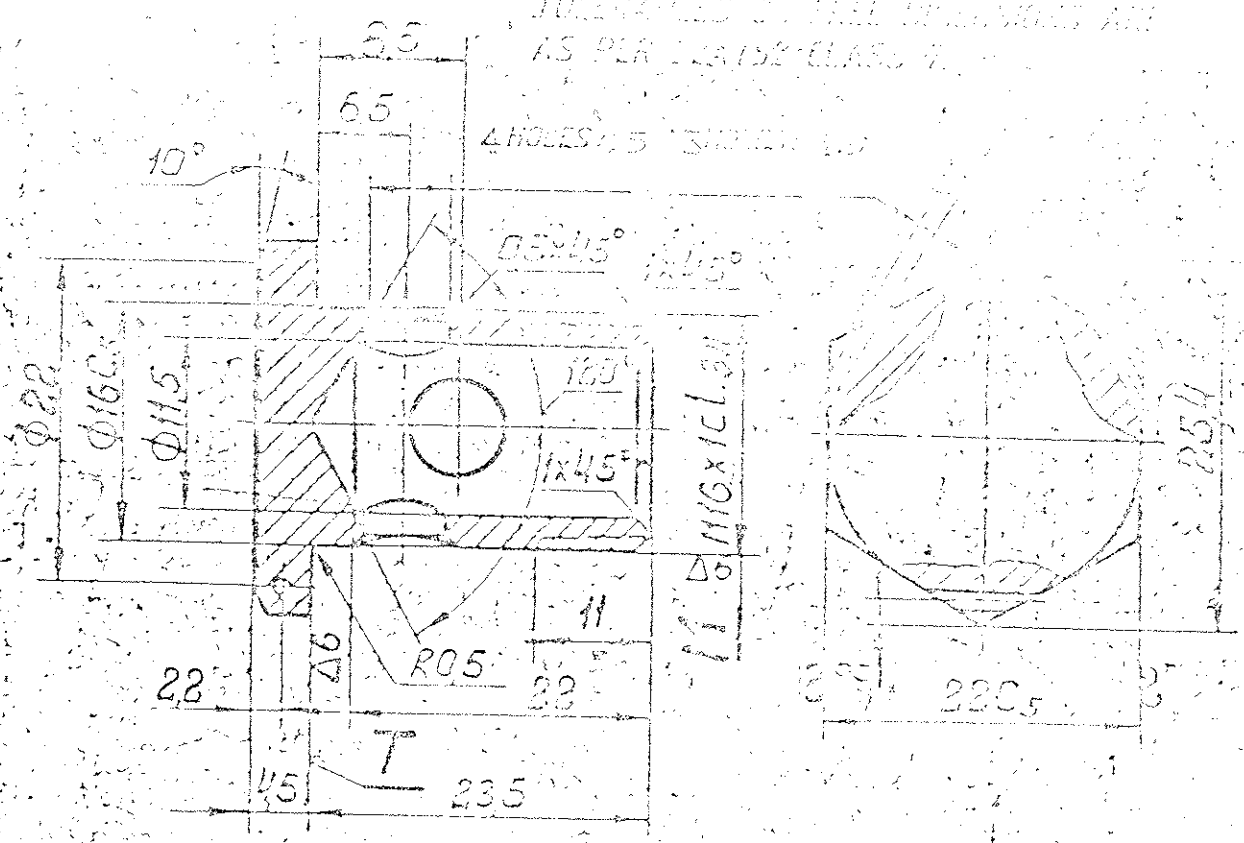
		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THIS BY (LETTERS)
		0.5g	
A 19.2.02	D.O CORRECTION	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL:-	USED ON:-
DRN	SCALE:- 2:1	STEEL W X 15	AK 1500-5205
CHD	DIMENSIONS IN mm	GOST 801-60	
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROLLER RATE OF INSPECTION (HEAVY VEHICLES) AVAD:	
APPD		TITLE	(A) ROLLER 2.500/2.498 X 13.8 mm, GR-I
DATE	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER: AK150-046

DRAWING NUMBER
AK-150-049

UNLESS OTHERWISE SPECIFIED

TOLERANCES ON ALL DIMENSIONS ARE AS PER IS:152 CLASS 7.

4 HOURS @ 500°C MINIMUM



DEVIATION FROM PERPENDICULARITY OF SURFACE T TO ANGLE DIAMETER OF THREAD M SHOULD NOT EXCEED 0.1 mm.

LOCKING HOLES MAY BE STOP-DRILLED AS PER 152 AT.

THREAD BEFORE COATING IS AS PER 214 AT.

ALT-MATL:-

HARDNESS HRC 26 TO 32.

STEEL 40Cr4Mo3 TO IS:5517

78 OR EN19 TO BS:970

COATING : CADMIUM PLATED, 9 TO 13 MICRONS THICK

26-32 HRC.

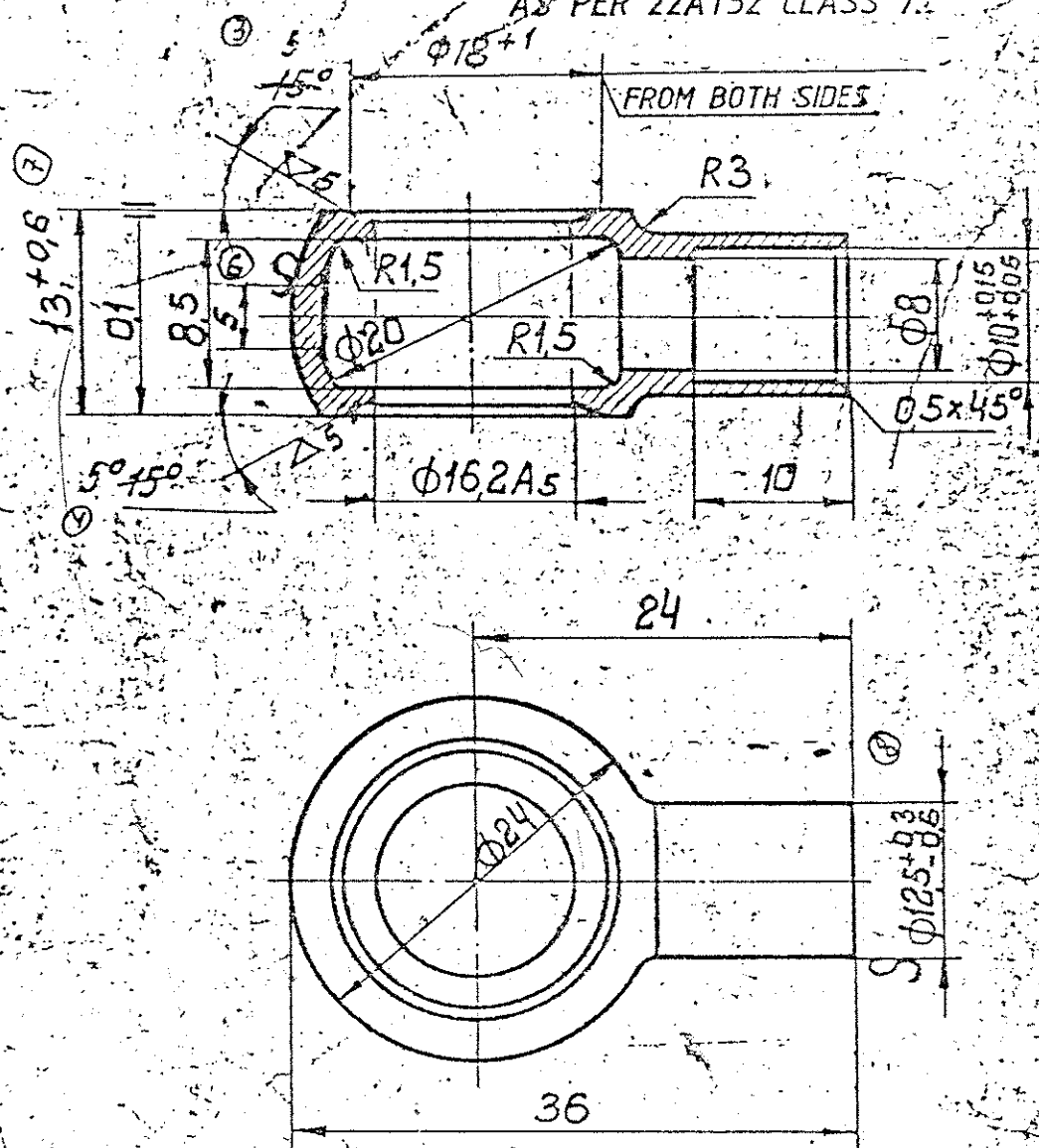
PROT. SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS (LETTERS)
		2.9	
ISSUBGATE	NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
DRN	SCALE:- 2:1	MATERIAL:- STEEL 35X4 TYPED OR - AK1500-0126 TY14-1-950-74	
CHS	DIMENSIONS IN mm		
TCO	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAIL	
APPD	ALL THREADS CONFORM TO	TITLE	BOLT CLAMPING
DATE	TC	D S CAT NUMBER	DRAWING NUMBER AK150-049

DRAWING NUMBER

AK 150 - 051

UNLESS OTHERWISE SPECIFIED,
TOLERANCES ON FREE DIMENSIONS ARE
AS PER 22AT52 CLASS 7.



ALT. MATL:-
STEEL En90REn8
TO BS: 970.

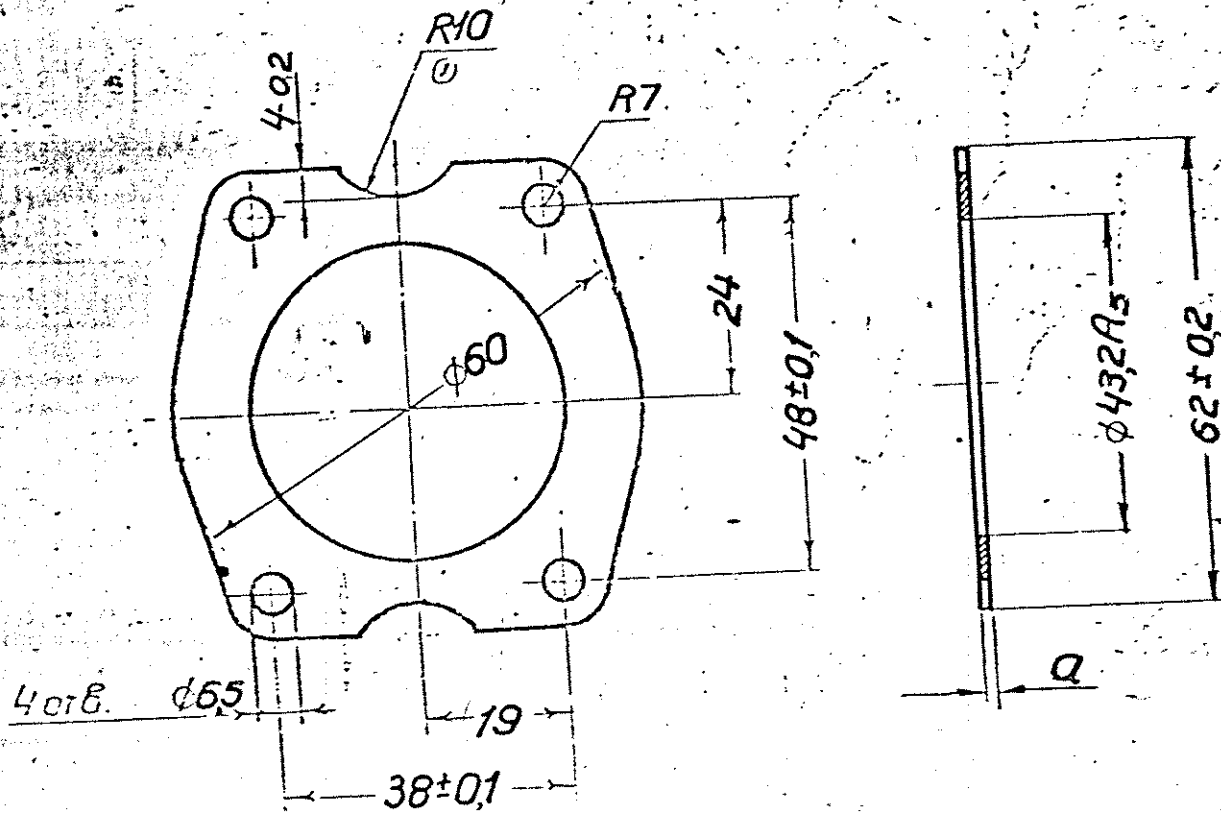
CADMIUM PLATING IN UNIT

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

		EST. MASS. 16	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
ISSUE DATE	NATURE OF AMENDMENTS	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 CPR	SCALE:- 2:1	MATERIAL:- STEEL 45 TY 14-1-151-7Z	USED ON:- AK 150 C - 15 CB AK 150 B - 59 CB
CIP Shallachy	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD V. Ravi	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE: SWIVEL NIPPLE	
APPD M	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK 150 - 051
DATE 22.7.86			

DRAWING NUMBER
AK 150.056

TOLERANCES ON FREE DIMENSIONS ARE
AS PER 22AT52 CLASS 7.



TOLERANCES FOR DIMENSIONS ARE FOR DIE.

a	QTY.
0.11	1 TO 5
0.3	1 TO 5

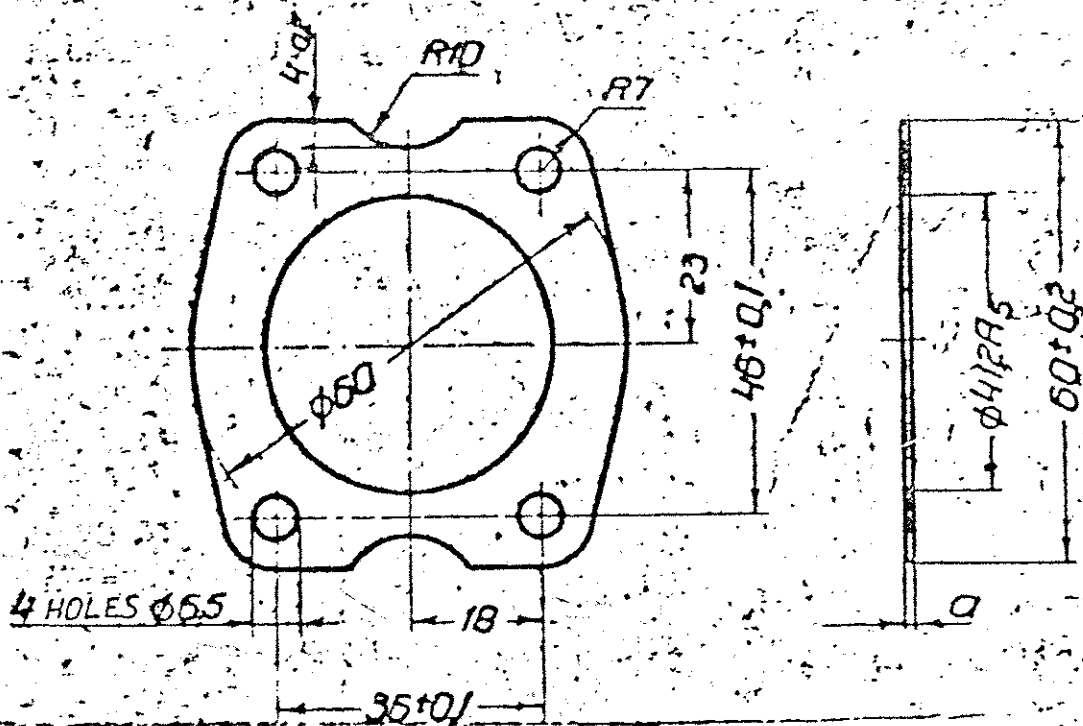
KVD 74819

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

		EST. MASS. 0.3	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	
DRM		SCALE - 1:1	MATERIAL:- GASKET BOARD USED ON:- AK150C-0105
CHD		DIMENSIONS IN mm	GRADE, VIAKAD TY-1-92-44-76
TCD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD			TITLE: GASKET
DATE		ALL THREADS CONFORM TO	D S CAT NUMBER
25/7/80			DRAWING NUMBER AK150.056

DRAWING NUMBER
AK 150.057

TOLERANCES ON FREE DIMENSIONS ARE
AS PER 22AT52 CLASS 7.



a	QTY.
0.11	1 TO 5
0.3	1 TO 5

MATERIAL:-
PACKING CARD BOARD GRADE
VIKAD™ TY.1 92 44-76.

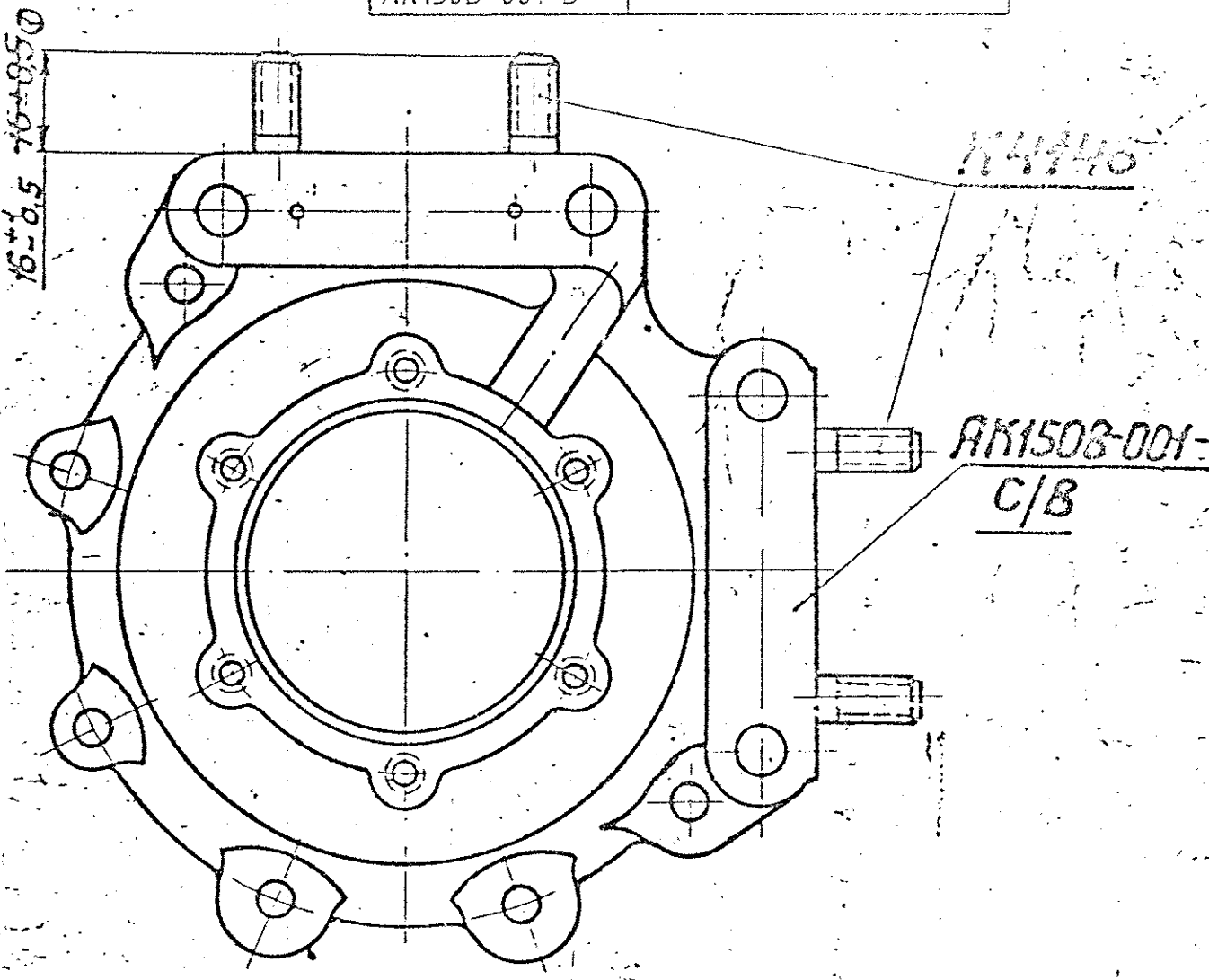
TOLERANCES FOR DIMENSIONS ARE GIVEN FOR DIE.

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

		EST. MASS 0.3	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.	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL:- SEE ABOVE	USED ON:- AK 150C. 01C6
DRW S. Mahajan	SCALE - 1:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD	
CHKD S. Mahajan	DIMENSIONS IN mm	TITLE:- GASKET	
TCD S. Mahajan	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	B S CAT NUMBER	
A:POD	ALL THREADS CONFORM TO	DRAWING NUMBER AK150-057	
DATE 25/78			

DRAWING NUMBER
AK 150 B-03-C/B-CB

PART NO'S.	INCORPORATED IN
AK150B-001-C	AK150B-03-C
AK150B-001-B	AK150B-03-B

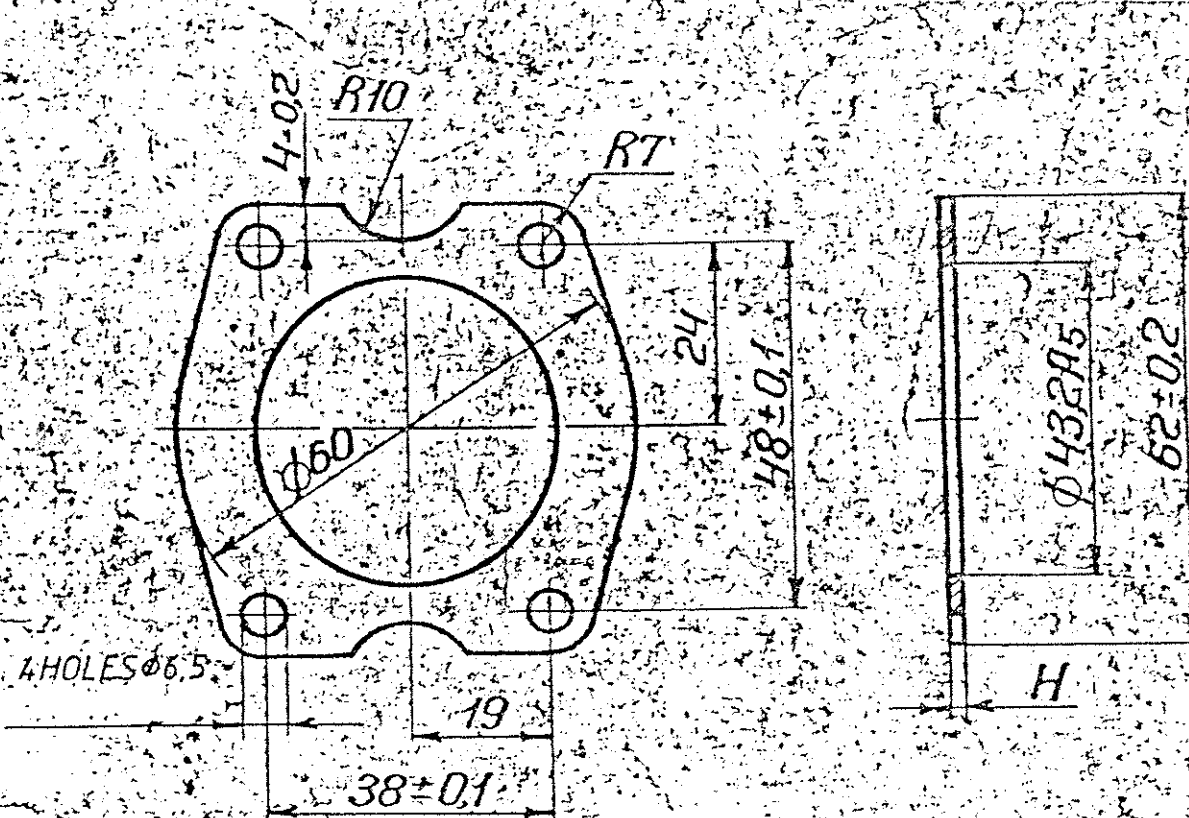


PROT. SAMPLE SHOULD BE APPROVED BY A. H. S. P. BEFORE BULK PRODUCTION.

		EST. MASS. 355	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.
ISSUE	DATE	NATURE OF AMENDMENTS	
DRW CPR		SCALE - 1:1	MATERIAL:- -
CHK Chattachy		DIMENSIONS IN mm	USED OR:- AK 150 B-02 C/B-CB
TCD S.S. Satter		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADR
APPD V			TITLE: CRANK CASE ASSY (FRONT PART)
DATE 22.7.86		ALL THREADS CONFORM TO	D S CAT NUMBER DRAWING NUMBER AK-150 B-03-C/B-CB

DRAWING NUMBER
AK 150.089

TOLERANCES ON FREE DIMENSIONS ARE AS PER
F 22AT52.



H	QUANTITY
0,1	1
0,2	1
0,3	1
0,5	1

ALT. MATL: -
AL. ALLOY Gde 19000 D. TO.
IS: 737-86

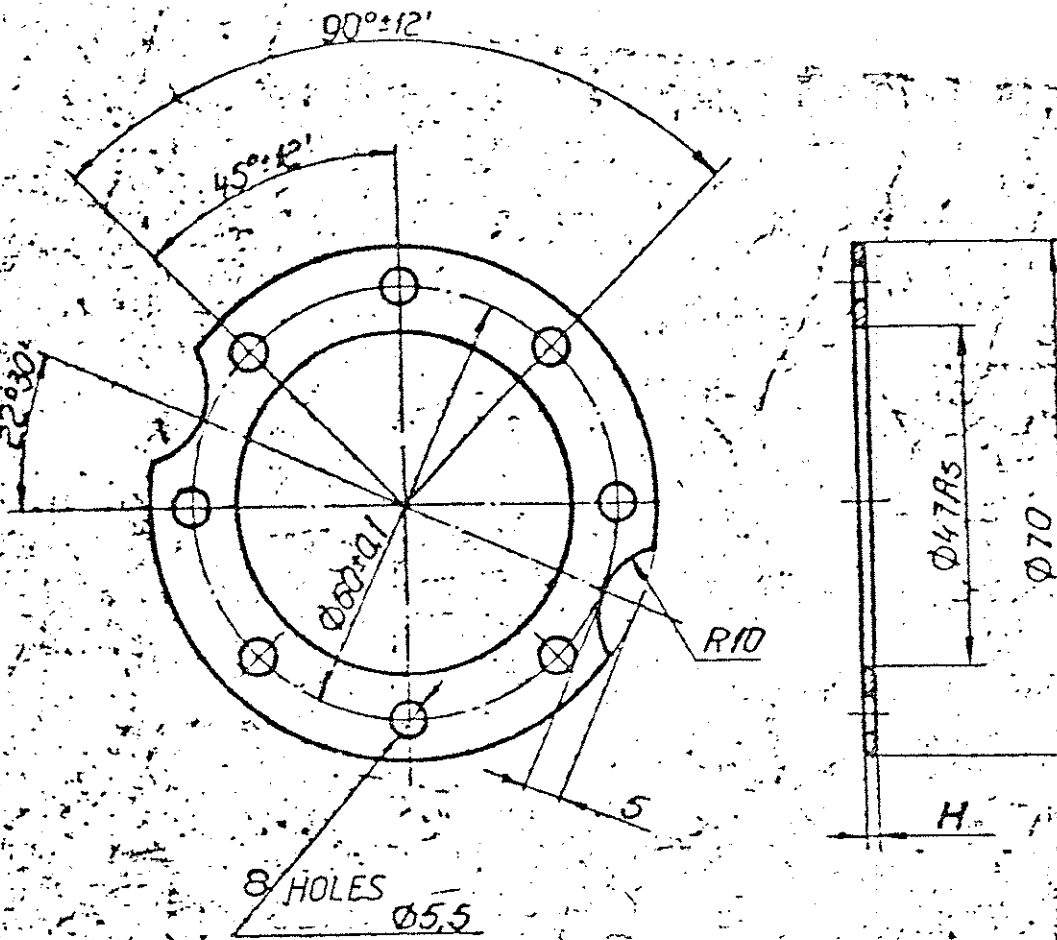
TOLERANCES ON DIMENSIONS ARE GIVEN FOR DIE.

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

		EST. MASS. 2,3	TO BE STAMPED ON 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: - ALUMINIUM ALLOY A, M GOST 21631-76	USED ON: - AK 150C-01CB
SCALE	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADR	
TOLERANCE ON DIMS UNLESS OTHERWISE STATED		TITLE: GASKET.	
DATE 25/7/86	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK 150-089

DRAWING NUMBER
AK 150-090

TOLERANCES FOR FREE DIMENSIONS ARE AS PER 121 ATY



H	QUANTITY
0.4	1
0.5	1
0.6	1

TOLERANCES FOR DIMENSIONS ARE GIVEN FOR DIE

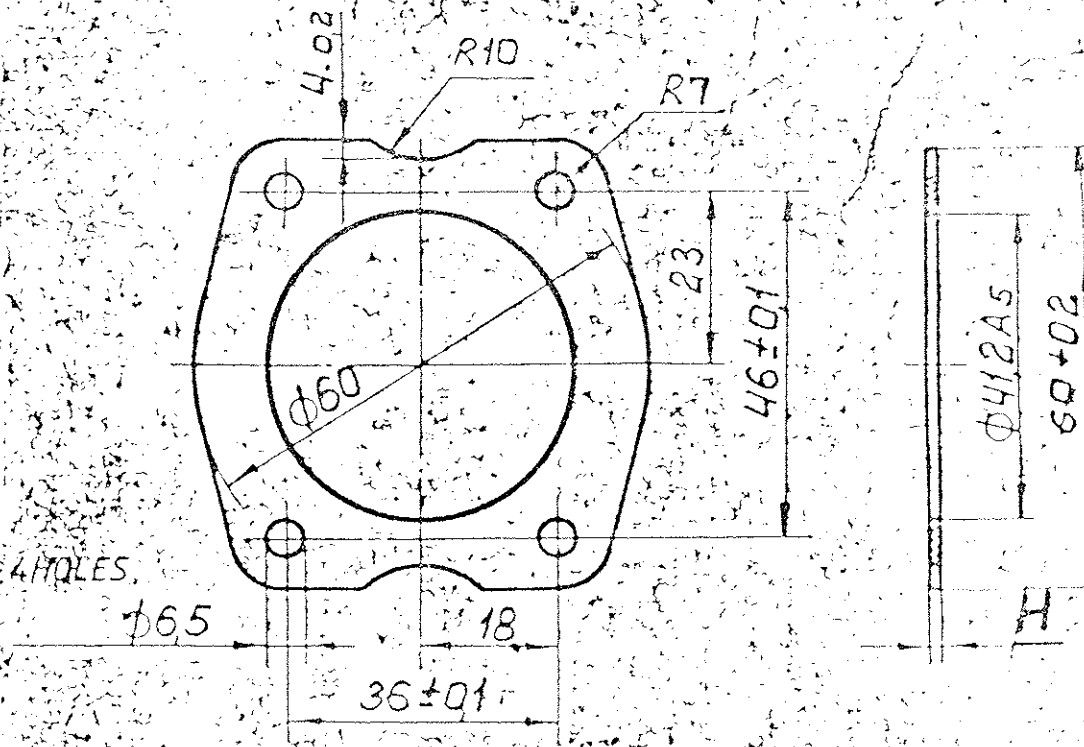
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

KVD. 75991

		EST. MASS 15	TO BE STAMPED OR MARKED WHERE INDICATED THIS \otimes 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 - PAROITE RME-7 GOST-481-71	USED ON:- AK150C-01CB
CHKD D. Phallicky	SCALE - 1:1	CONTROL RATE OF INSPECTION (HEAVY VEHICLES) AVADL	
TED S. Mohan	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	TITLE:- GASKET	
APPD WV	ALL THREADS CONFORM TO	B. S. CAT NUMBER	DRAWING NUMBER AK150-090
DATE 25/9/14			

DRAWING NUMBER
AK 150-091

TOLERANCES ON FREE
DIMENSIONS ARE AS PER
22A752-117



H	Quantity
0,1	1
0,2	1
0,3	1
0,5	1

ALT. MATL:--

AL ALLOY Gde 19000'0' TO IS: 737-86

TOLERANCES ON DIMENSIONS ARE GIVEN FOR DIE.

PROT SAMPLE SHOULD BE APPROVED BY A N S P BEFORE BULK PRODUCTION

		EST. MASS. 2,1	TO BE STAMPED ON MARKED WHEN INDICATED THIS \odot LETTERS?
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT- SIDE R BORE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE DATE	RATURE OF AMENDMENTS	MATERIAL - ALUMINIUM ALLOY AA M GOST 21631-76	USED SW - AK 150 C. 0105
SCALE - 1:1	DIMENSIONS IN MM	CONTROL RATE OF INSPECTION (HEAVY VERTICALS) AVAD	
TOLERANCE ON DIMENSIONS UNLESS OTHERWISE STATED		TITLE: GASKET	
ALL THREADS CONFORM TO	U S CAT ALUMINUM		AK150-091

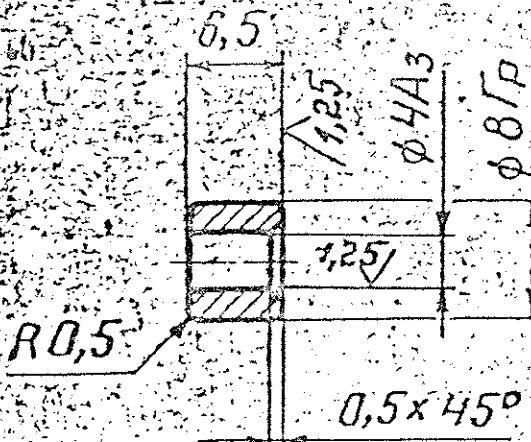
DRAWING NUMBER

AK150B - 004

45 (✓)

105

UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS PER 22 AT 52. CLASS 7.



MAINTAIN DIMENSIONS 6.5 AND $\phi 4A_3$ FINALLY IN UNIT AK150B-05.

H R C 27 TO 34.

ALT. MATL :-

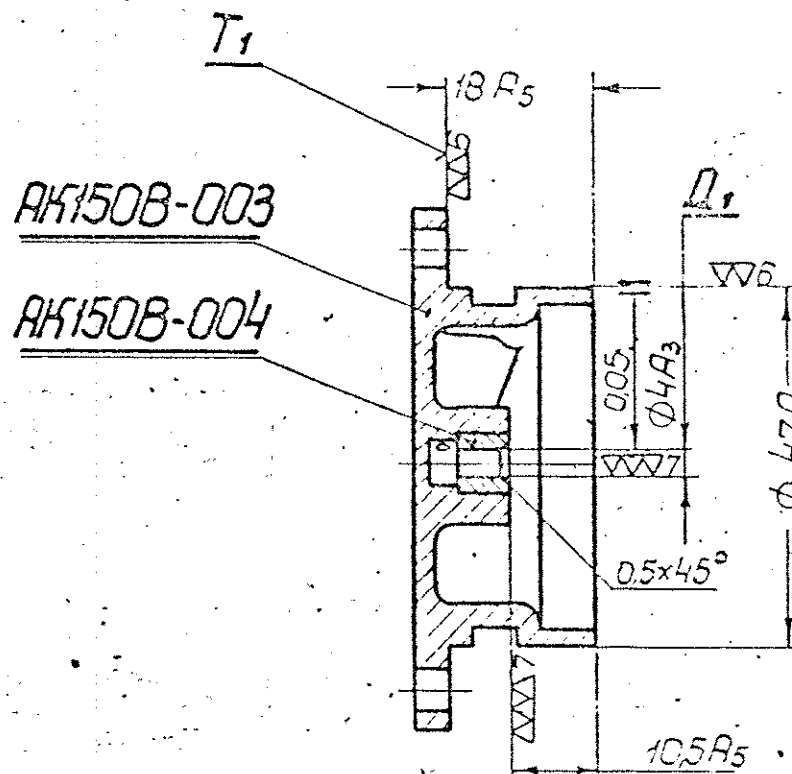
STEEL Gde 40Cr4Mo3 TO IS:5517-78
OR En 19 TO BS:970. HRC 27-34

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

		EST. MASS	TO BE STAMPED OR PLACED WHERE INDICATED THAT OF LETTERS!
		3	
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED ROUNDED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS	
CPK		SCALE - 2:1.	MATERIAL :- STEEL 38XA TY14-1-950-74.
CPK		DIMENSIONS OF THE	USED (AK150B-0506).
CPK		TOLERANCE PER DIMS UNLESS OTHERWISE STATED	COST RELATE OF INSPECTION (HEAVY VEHICLES) A.V.A.D.
CPK		ALL THREADS COMPLY TO	TITLE:- BUSHING
DATE			D S CAT NUMBER
22-7-86			AK150B - 004

DRAWING NUMBER
AK150B - 05CB

/ VV6, VV7 /



RUN-OUT OF SURFACE T, WITH RESPECT TO SURFACE A₁, SHOULD NOT EXCEED 0.05 mm.

BLUNT SHARP EDGES. WITH R0.3.

2	AK150B-004	BUSH	1	
1	AK150B-003	COVER	1	
REF.NO.	DESIGNATION	DESCRIPTION	QTY.	REMARKS

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

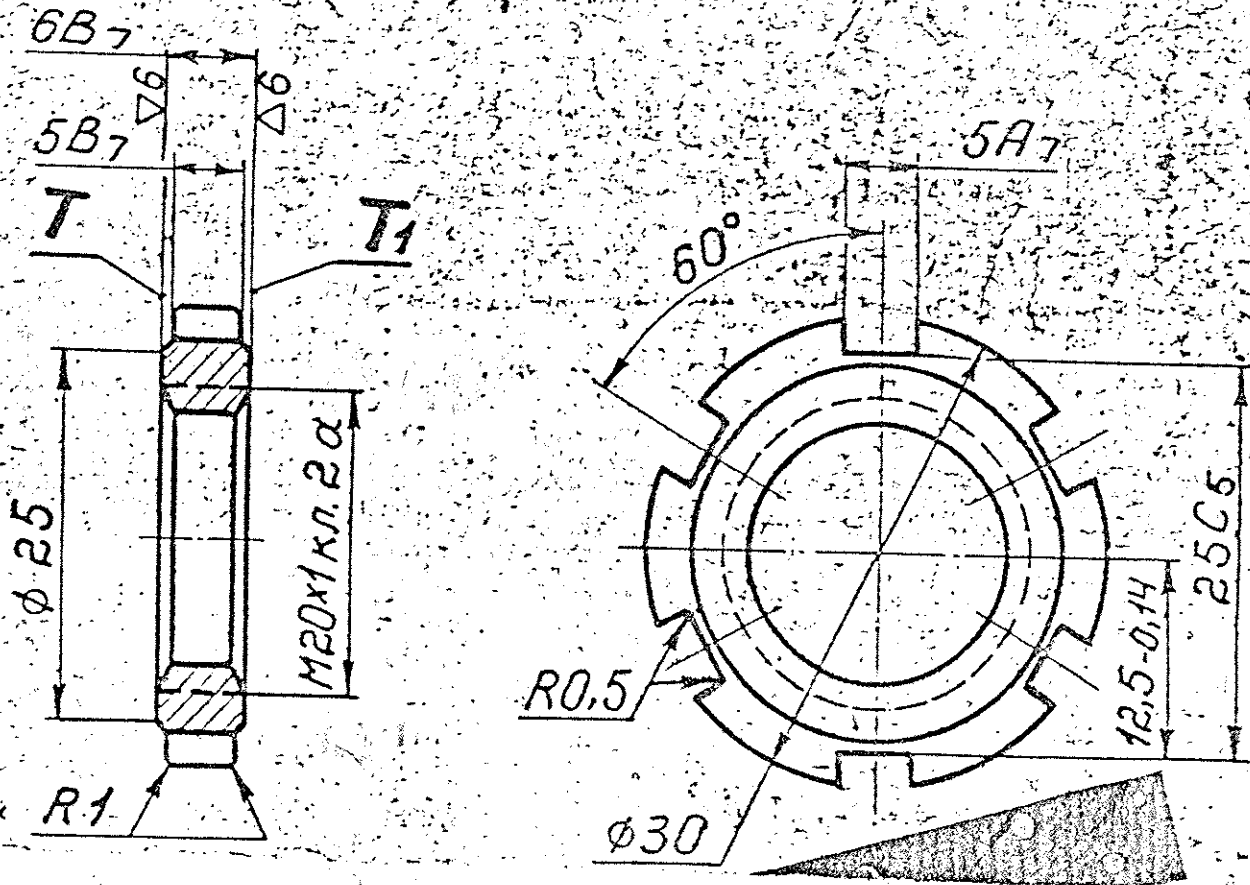
		EST. MASS. 73	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN	CPR	SCALE - 1:1	MATERIAL:- USED ON:- AK150C-01CB
CHK	Chattopadhyay	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
TCD	V. Ravi	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE: COVER ASSY.
APPD	K	ALL THREADS CONFORM TO	D S CAT NUMBER
DATE	22.7.8		DRAWING NUMBER AK150B - 05CB

DRAWING NUMBER

AK 150 B.009

√4 UNLESS STATED OTHERWISE.

TOLERANCES ON FREE DIMENSIONS ARE AS PER-22 AT 52 CLASS, 7.



RUN-OUT OF SURFACES T AND T₁ WITH RESPECT TO ANGLE DIAMETER OF THREAD SHOULD NOT EXCEED 0.1 mm.

MAKE CHAMFERS TO A DEPTH OF THREAD AT AN ANGLE 120°. THREAD BEFORE COATING IS AS PER 257A.

HARDNESS HRC 26 TO 32.

COATING PLATING 6 TO 9 MICRONS THICK

ALT. MATL:-

STEEL Gde 40Cr4Mo3 TO

IS:5517-78 OR EN19 TO BS:970

HRC 26-32.

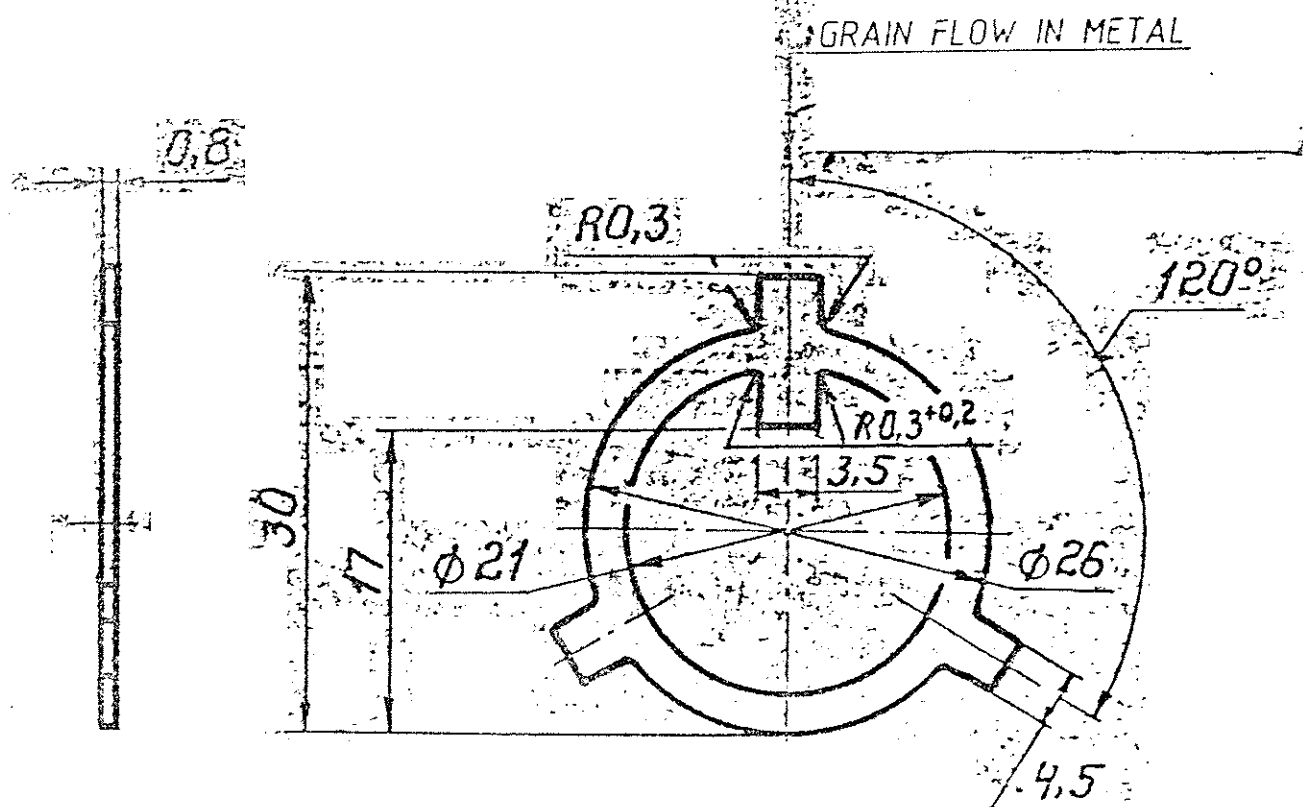
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. MASS 13	TO BE STAMPED OR MARKED WHERE INDICATED THIS \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.	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL :- TUBE B-32x8 -32-A GOST 21729-76	USED ON:- AK150C-01C6
CHKD Chatturaj	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADL	
APPD Subhas	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	TITLE:- NUT	
DATE 25/7/80	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK150B-009

DRAWING NUMBER
AK 150 B.010

UNSPECIFIED LIMIT DEVIATIONS
OF DIMENSIONS ARE AS PER 22AT52 CL. 7.

d



DRESS THE BURRS.

COATING : CADMIUM PLATING 9 TO 15 MICRONS THICK.

ALT. MATL.:

STEEL Gde 'D' TO IS: 513-86

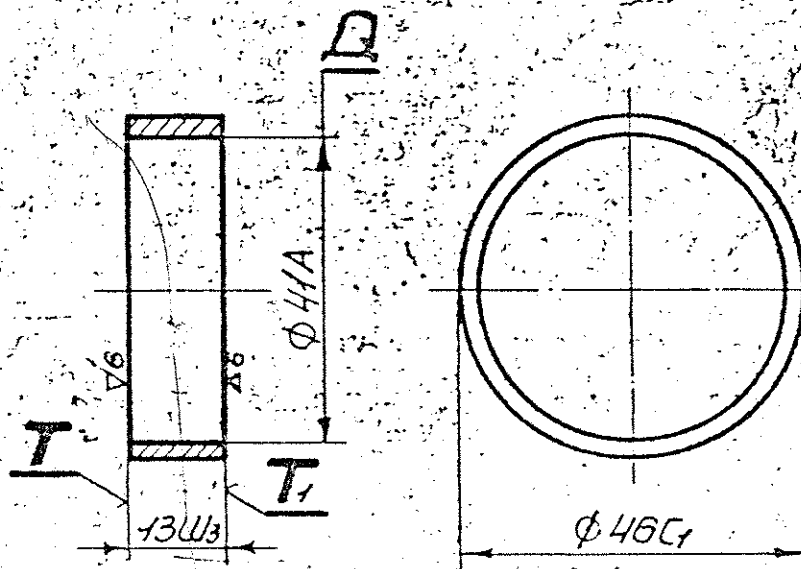
KVD 74781

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

		EST. MASS. 2	TO BE STAMPED OR MARKED WHEN 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	
ISSUE DATE	MATURE OF AMENDMENTS	MATERIAL - STEEL 10 GOST 16523-70	USED ON:- AK150C.01C5
DR. <i>[Signature]</i>	SCALE - 2:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES AVAD)	
APP. <i>[Signature]</i>	DIMENSIONS IN mm	TITLE: LOCK WASHER	
DATE 25/7/8	TOLERANCE OR DEVIATIONS UNLESS OTHERWISE STATED	D S CAT NUMBER	DRAWING NUMBER AK150B-010
	ALL THREADS CONFORM TO		

DRAWING NUMBER
AK150B-013

UNLESS STATED OTHERWISE.



RUN-OUT OF SURFACE T AND T₁ WITH RESPECT TO A SHOULD NOT EXCEED 0,06.
 COYALITY AND CONCENTRICITY OF SURFACE A SHOULD NOT EXCEED 0,02.
 CHECK USING MAGNOFLUX.
 BLUNT SHARP EDGES R 0,3.

KVD 74782

FINALLY MACHINE SURFACE A IN UNIT AK150H-30.

ALT. MATL:

STEEL Gd& 103Cr2Mn70 TO IS: 4398-72

OREn31 TO BS: 970 HRC 58-62

HARDNESS Rc= 58 TO 62.

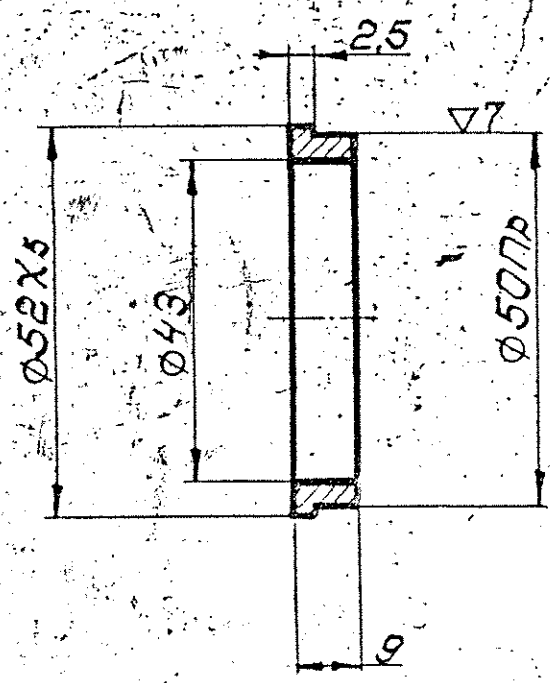
PILOT SAMPLE SHOULD BE APPROVED BY A M S P BEFORE BULK PRODUCTION.

		EST. MASS. 34g	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	
DRW		SCALE - 1:1	MATERIAL:- STEEL WX15 GOST 801-60.
CHK		DIMENSIONS IN mm	USED ON:- AK150H-30CB
TCD		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVAD
APPD			TITLE: HOLDER
DATE	22.7.86	ALL THREADS CONFORM TO	D S CAT NUMBER
			DRAWING NUMBER AK 150B-013

DRAWING NUMBER
AK 150B-014

112

▽4 UNLESS STATED OTHERWISE,
TOLERANCES ON FREE
DIMENSIONS SHOULD BE
AS PER 22AT 52-CLASS.7.



152

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

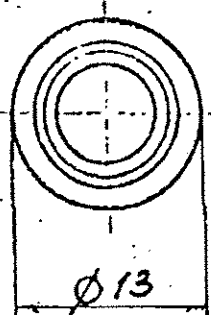
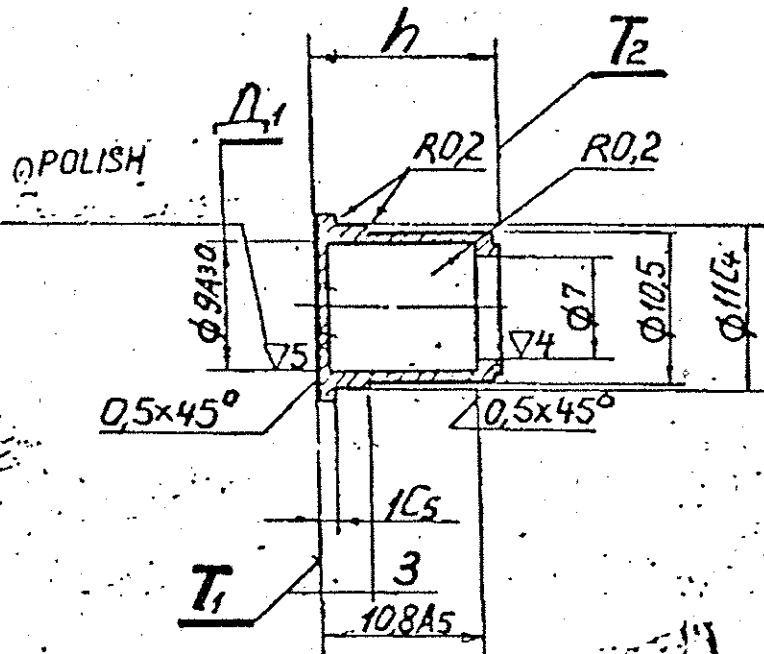
		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THIS #
		42	(LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRN C.P.		SCALE - 1:1	MATERIAL:- BRONZE 6P.0φ7-0.2 GOST 10025-62
CHD Bhattacharya		DIMENSIONS IN mm	USED ON:- AK 150H-35CB
TCD Sudha		TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
APPD K			TITLE: BUSHING
DATE 22.7.82		ALL THREADS CONFORM TO	D S: CAT NUMBER
			DRAWING NUMBER AK 150B-014

NA

77

AK 150B-U10

UNLESS SPECIFIED OTHERWISE, TOLERANCES ON FREE DIMENSIONS AS PER 22AT52- CLASS 7



DIMENSION hC3a	QTY	DIMENSION hC3a	QTY
12,3	1	12,6	1
12,5	1	12,8	1
12,7	1	12,1	1
12,9	1	11,9	1
13,1	1	12,4	1

ALT. MATL:-
STEEL EN 56 C TO BS:970
HRC. 24-32.

RUN-OUT OF SURFACES T1 AND T2 WITH RESPECT TO A1 SHOULD NOT EXCEED 0,1mm.

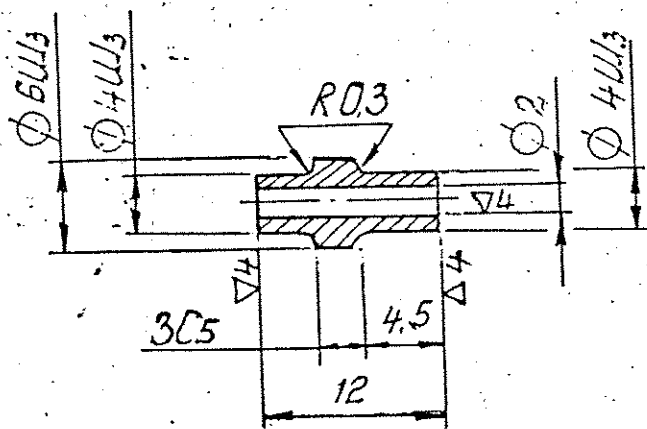
HARDNESS Rc=24 TO 32.
ELECTROPOLISHING,
EXCEPT SURFACE A1

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

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS *
		3	(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:-	WELD ON:-
OWN h. P. R. M.	SCALE - 2:1	STEEL 20x13 f	AK 150B 60 C6
CHKD B. S. S. S.	DIMENSIONS IN mm	TY 14-1-378-72	
TEC h. P. R. M.	TOLERANCE ON DIMS UNLESS OTHERWISE STATED.	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
APPD h. P. R. M.		TITLE: SPRING GUIDE	
DATE 22.7.86	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK 150B-018

DRAWING NUMBER
AK 150 B 025

UNLESS OTHERWISE SPECIFIED
TOLERANCES ON FREE
DIMENSIONS AS PER
22AT52-



VARIATION IN WALL THICKNESS OF BUSH
SHOULD NOT EXCEED 0,2.

ALT. MATE:-

COPPER & COPPER ALLOY Gde CA-104
TO BS 2874-86

KVD 74785

ANQDIZE.

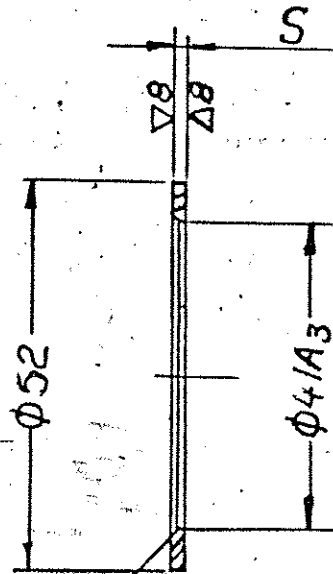
PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION.

		EST. MASS. 1.5	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.	
ISSUE DATE	NATURE OF AMENDMENTS	MATERIAL:- ALUMINIUM ALLOY A 1-T GOST 21488-76	USED ON:- AK 150C 01 CB
DRN C.R.K.	SCALE - 2:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHD Bhattacharya	DIMENSIONS IN mm	TITLE: BUSH	
TCD S. Mahan	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	D S CAT NUMBER	
APPD V.V.	ALL THREADS CONFORM TO	DRAWING NUMBER AK 150B-025	
DATE 25/2/80			

DRAWING NUMBER

AK 150B-033

Δ4 UNLESS OTHERWISE SPECIFIED TOLERANCES ON FREE DIMENSIONS ARE AS PER 22AT52.



$0.6^{+0.2} \times 45^\circ$

S	QTY
1,5 W3	2
1,6 W3	2
1,7 W3	2

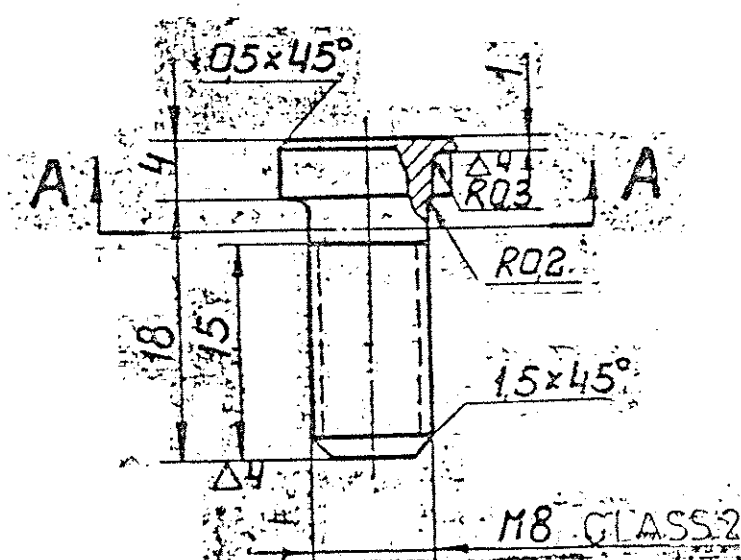
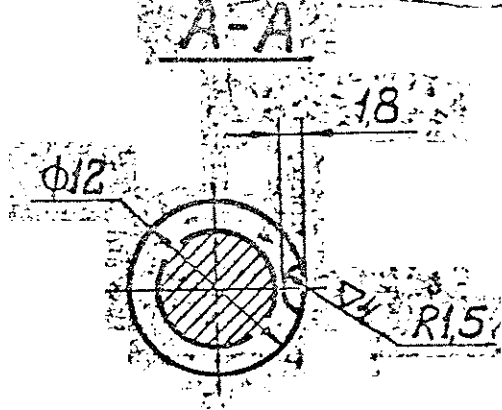
ALT-MATL:-
COPPER & COPPER ALLOY
Gde CA 104 TO BS:2874-86

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

		EST. MASS. 11	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:- BRONZE БРАЖН-10-4-4 GOST 1208-73.	USED ON:- AK 150C-52C5
CHD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
TCD	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	TITLE: WASHER	
APPD	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER AK 150B-033

DRAWING NUMBER
AK 150B - 034

0.75 UNLESS OTHERWISE STATED
TOLERANCES ON FREE DIMENSIONS
ARE AS PER 22AT52 CLASS 7



- 1. HARDNESS HRC 26 TO 32.
- 2. OXIDIZE

ALT. MATL:-
STEEL Gde 40Cr4Mo3 TO IS: 5517-78
OR En19 TO BS: 970. HRC 26-38

2. CYLINDRICAL PART OF SCREW MAY BE REDUCED TO ANGLE DIA. OF THREAD.

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

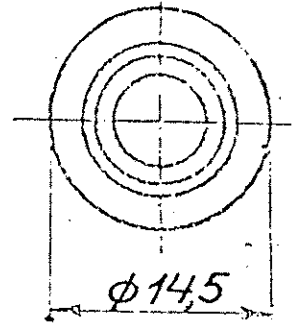
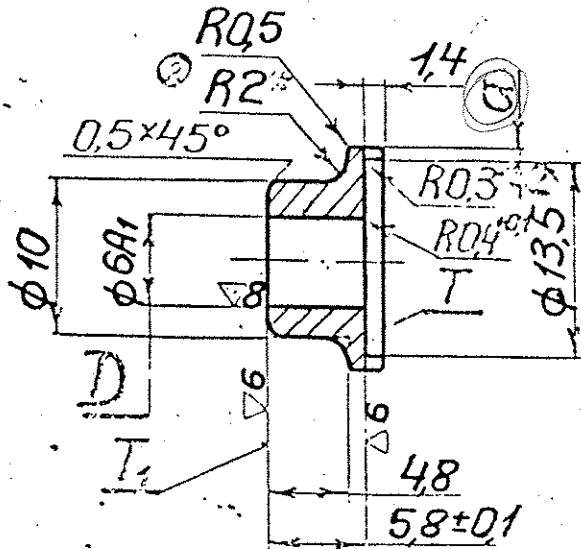
		EST. MASS. 9	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
		ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	
ISSUE	DATE	NATURE OF AMENDMENTS	
DRW <i>AK</i>		SCALE - 2:1	MATERIAL:- STEEL 38 XA TY 14-1-950-74
CHKD <i>Bhattacharya</i>		DIMENSIONS IN MM	USED ON:- AK 150C-52 C5
APPD <i>AK</i>		TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI
DATE		ALL THREADS CONFORM TO	TITLE: SCREW
		D S CAT NUMBER	DRAWING NUMBER AK 150B - 034

DRAWING NUMBER
AK 150B -035

UNLESS OTHERWISE SPECIFIED.

TOLERANCE ON FREE DIMENSIONS ARE AS PER 22 AT 52 CLASS 7.

GROUP. NO	DIMENSION. D
I	$06 + 0.004$
II	$0.6, 0.04 + 0.004$



MAINTAIN THICKNESS OF WALL NOT LESS THAN 0.2. RUN OUT OF SURFACE T WITH RESPECT TO D SHOULD NOT EXCEED 0.05
RUNOUT OF SURFACE T1 WITH RESPECT TO D SHOULD NOT EXCEED 0.1

PROVIDE DIMENSIONS BY TOOLING

ACT. MATL: -

STEEL EN 56C TO BS: 970
HRC 24 - 32.

HARDNESS HRC 24 TO 32

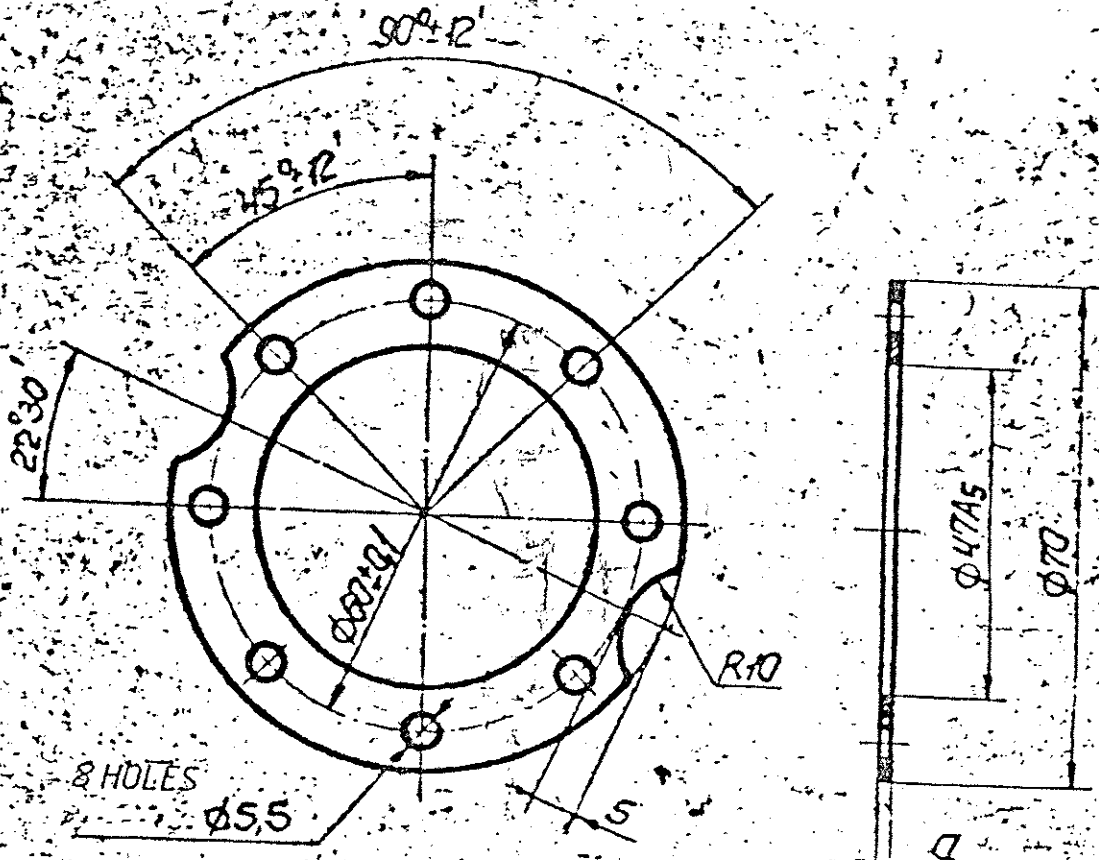
ELECTRO POLISH EXCEPT SURFACE D.

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

			EST. MASS. 4	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:- STEEL 20X13 TY 14-1-378-72	USED ON:- AK 150B 60CE
DRW G. P. ...		SCALE - 2:1	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CHK Bhattacharya		DIMENSIONS IN mm	TITLE: BUSH	D S CAT NUMBER
TCC G. P. ...		TOLERANCE ON DIMS UNLESS OTHERWISE STATED		
APPO V. ...		ALL THREADS CONFORM TO		
DATE 22.7.86				

DRAWING NUMBER
AK 150B-053

TOLERANCES ON FREE DIMENSIONS
AS PER 22AT52 CLASS 7.



TOLERANCES ON DIMENSIONS ARE GIVEN FOR DIE.

a	QTY.
0.1	1T05
0.2	1T05

ALT. MATL: -
AL. ALLOY SHEET GDE.
19000 'O' TO IS: 737:86

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

EST. MASS	1	TO BE STAMPED OR MARKED WHERE INDICATED THIS 1 LETTERS
ISSUE DATE	NATURE OF AMENDMENTS	ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.
DRG	SCALE:- 1:1	MATERIAL:- FOIL A5-M USED ON:- AK 150C. 01CB
CHS	DIMENSIONS IN mm	GOST 618-73
TCD	TOLERANCE ON DIMS UNLESS OTHERWISE STATED	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AYADI
APPD	ALL THREADS CONFORM TO	TITLE: GASKET
DATE	25/7/86	D S CAT NUMBER
		DRAWING NUMBER AK 150B-053

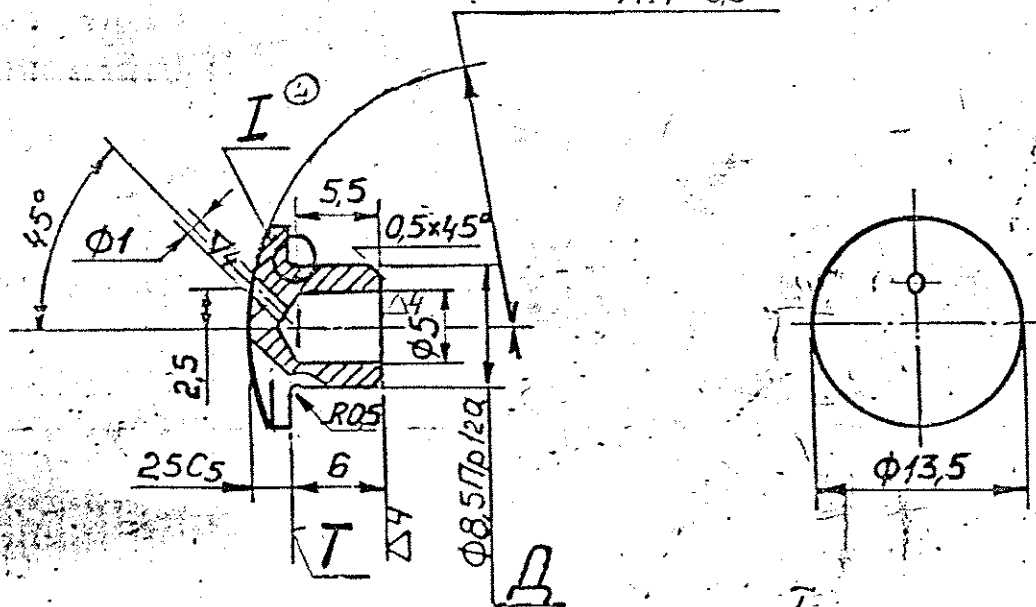
DRAWING NUMBER

AK 150H-095

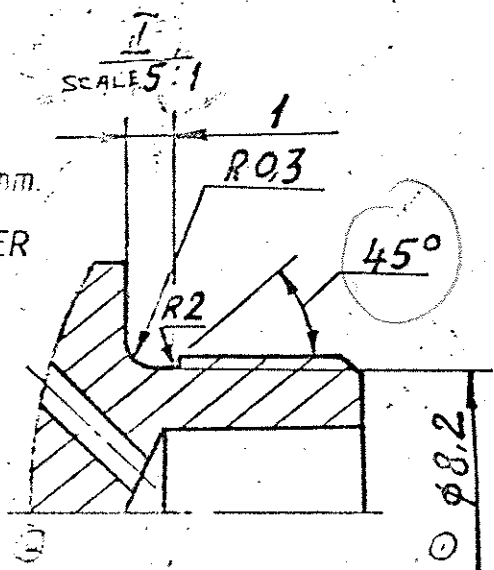
UNLESS SPECIFIED OTHERWISE

TOLERANCES ON FREE DIMENSIONS ARE AS PER 22 AT 52.

SPHERE $R17^{-0.2}_{-0.5}$



NON-SQUARENESS OF SURFACE WITH RESPECT TO T SHOULD NOT EXCEED 0.05 mm. IT IS ALLOWED TO PROVIDE GROOVE AS PER SECTION I.



MATERIAL

ALUMINIUM ALLOY A 1-T 21488-76, AK 150-044.

ALT. MATL: AL ALLOY Gde. 24345 W (HE 15W) TO IS: 733-83

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

		EST. MASS.	TO BE STAMPED OR MARKED WHERE INDICATED THUS #
		7.5	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:-
FORM 8. Mohr	SCALE:- 2:1	SEE ABOVE	AK 150H-36 C 6
NO 8. Mohr	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AVADI	
CD 8. Mohr	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED	TITLE: PLUG	
APPO 8. Mohr	ALL THREADS CONFORM TO	D S CAT NUMBER	DRAWING NUMBER
DATE 25/7/86			AK 150H-095

FROM 1st JANUARY, 1971. DO NOT USE STANDARD 3002A FOR NEW DESIGNS. FROM 1st JANUARY, 1978. DO NOT USE STANDARDS 3001A, 3003A, 3005A, 3006A. FROM 1st JANUARY 1982 FOR NEW DESIGNS. USE OST 1 31102-80, OST 1 31103-80, OST 1 31107-80, OST 1 31108-80 CORRESPONDINGLY.

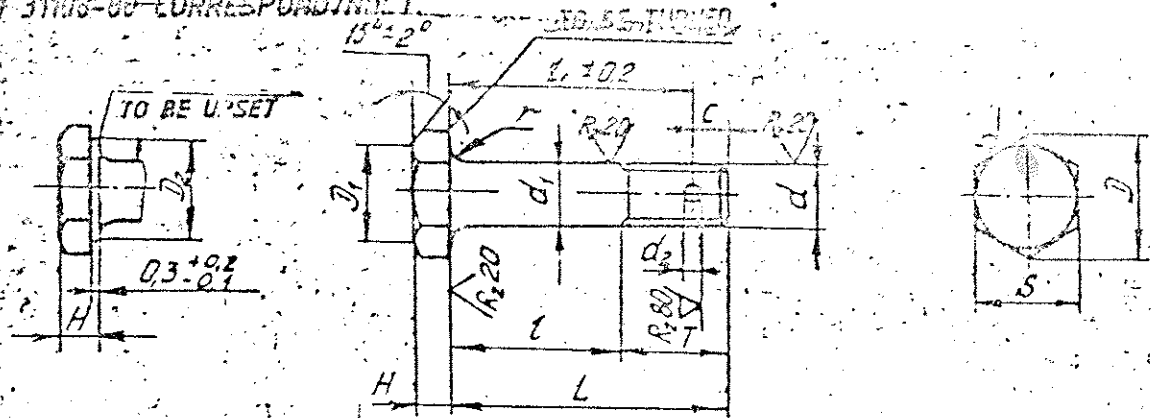


TABLE: 1

GRADE OF STEEL OR ALLOY	DIAMETER	EXAMPLE OF DESIGNATION BOLT WITH DIMENSIONS $d_1 = 8$ AND $L = 36$ mm	
		WITHOUT HOLE FOR COTTER PIN	WITH HOLE FOR COTTER PIN (C = 4 mm)
45	FROM 2.5 TO 18	3001A-8-36	3001A-8-36-4
38XA	FROM 4 TO 18	3002A-8-36	3002A-8-36-4
30XCCA	FROM 3 TO 24	3003A-8-36	3003A-8-36-4
A1 T OR A1 M	FROM 5 TO 12	3005A-8-36	3005A-8-36-4
63 T OR C59-1	FROM 4 TO 12	3006A-8-36	3006A-8-36-4

TABLE: 2

d (PERMISSIBLE DEVIATION AS PER C5)	2,5	(2,6)	3	4	5	6	8	10	12	14	16	18	20	22	24
THREAD d	M2,5	M2,6	M3	M4	M5	M6	M8	M10	M12x1,5	M14x1,5	M16x1,5	M18x1,5	M20x1,5	M22x1,5	M24x1,5
H (permissible deviation as per B7)	1,8		2	2,8	3	4	5	6	7	9	10	11	12	13	14
S (permissible deviation as per C5)	5		5,5	7	8	10	14 ^U	17 ^U	19 ^U	22	24	27	30	32	36
D (permissible deviation as per B7)	5,8		6,3	8,1	9,2	11,5	16,2	19,6	21,9	25,4	27,7	31,2	34,6	36,9	41,6
D1 (permissible deviation as per B7)	5		5,5	7	8	10	14 ^U	17 ^U	19 ^U	22	24	27	30	32	36
D2, MIN	4,3		4,8	6,3	7,3	9,2	13 ^U	16 ^U	18 ^U	21	23	26	29	31	35
J REF	8		9	10	12	14	18	20	22	24	26	28	30	32	
r (permissible deviation ±0,2)	0,4				0,5		0,8		1		1,5				2
d2 (PERMISSIBLE DEVIATION) +0,12 (-0,06)	-			1	1,6	2		2,5			3,2				
C REF.	-			2,5	3		4	4,5		5		5,5	6,5	7	

DIA OF BOLT GIVEN IN BRACKETS, ARE CANCELLED FROM 1-1-1964.
 BOLTS FROM BRASS WITH DIA d = 8, 10 AND 12mm ARE MADE WITH CORRESPONDING DIMENSIONS. S = 12, 14 AND 17mm D₁ = 12, 14 AND 17mm D₂ = 11, 13 AND 16 mm.

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

		EST. MASS.	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:-
25/7/81	SCALE -	SEE ABOVE	AK 150C .01C6
CHD	DIMENSIONS IN mm	CONTROLLERATE OF INSPECTION (HEAVY VEHICLES) AV 6 DI	
TCD	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED.	TITLE: BOLT HEXAGONAL	
APPD	ALL THREADS CONFORM TO	D S CAT NUMBER	
DATE		DRAWING NUMBER	
25/7/81		3001A: 3002A: 3003A 3005A: 3006A	