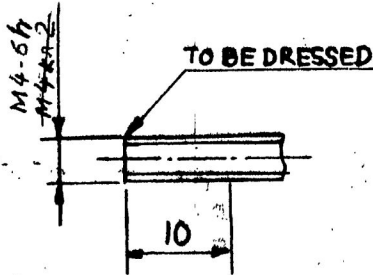


DRAWING NUMBER

356-57

Rz 80 (✓)



SCALE-1:1

- 1.
- 2.
3. OTHER TECHNICAL REQUIREMENTS SHOULD BE CARRIED OUT AS PER STANDARD 82052-00.
4. TO BE CUT FROM THE BAR TO SUIT THE PLATE AFTER SETTING IN COMPONENT OR UNIT.
5. SHARP EDGES ARE TO BE BLUNTED.
6. ALTERNATE MATERIAL; 63 GOST 15527-70.

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

EST. WT. 0.0011 Kg TO BE STAMPED OR MARKED WHERE INDICATED THUS #1 LETTERS)

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

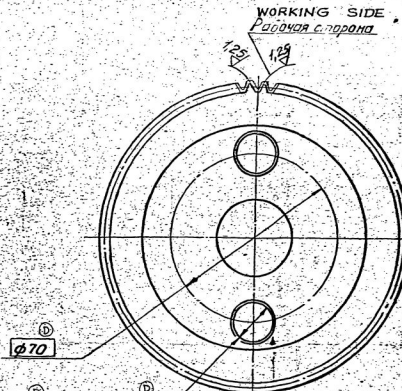
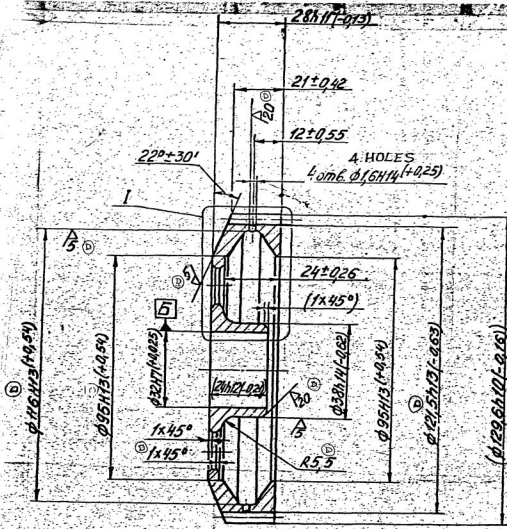
DRN	m. D. [Signature]	MATERIAL:- BRASS AC 59-1, GOST 15527-70.	USED ON:- C 6 3338-100, C 6 3338-400, C 6 3338-402-4, C 6 3338-82
CHD	[Signature]	CONTROLLERATE OF QUALITY ASSURANCE AVADI. (HEAVY VEHICLES)	
TCD	m. D. [Signature]		
APPD	[Signature]	TITLE LOCKING WOOD SCREW	
DATE	11-07-96		
SCALE: 2:1		D'S CAT NUMBER DRAWING NUMBER 356-57	
DIMENSIONS IN MM TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS: 202-69.			
ALL THREADS TO CONFORM TO			
ISSUE	DATE	NATURE OF AMENDMENTS	
A	11-7-96	AUTHY. NOTR. NO. BK 87-300	

6 7 6



DRAWING NUMBER
3338-145

2.5
(✓)



2 HOLES
2xφ6.0(3H7(4.025))
φ0.02 B

1/172.1
SCALE 2:1

VIEW A
BUD A
1/15.1
SCALE 5:1

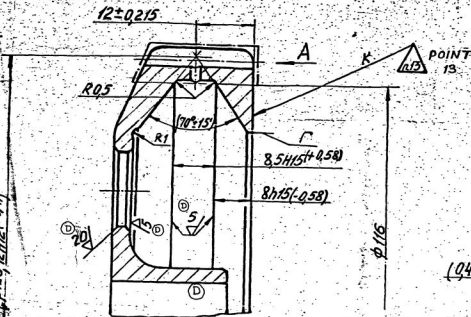
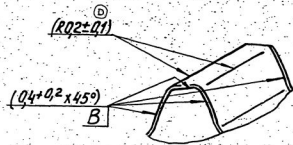


DIAGRAM OF BLUNTING TEETH
Схема затупления зубьев



- INSPECTION GROUP III AS PER TT-11
- GEAR TEETH ARE TO BE CASE HARDENED FOR TOOTH PROFILE 4.0-6 TO 1.00 MM FOR TIP CIRCLE, 4.0-5 TO 1.0 MM FOR FACE OF TEETH, 4.0-6 MM MIN FOR TEETH SPACE DIA. 6.08 TO 1.1 MM; HRC ≥ 59 (AFTER ASSEMBLY)
- 33 TO 43 HRC ± NON-CARBURISED SURFACES
- BEFORE CASE HARDENING THERE SHOULD NOT BE SICK CUTS AND TOOL MARKS ON SURFACE A. AFTER CARBURISATION AND CASE HARDENING MACHINING OF SURFACE A, IS NOT ALLOWED.
- DIMENSION IN BRACKET AFTER ASSEMBLY
- QUALITY OF MESHING OF TEETH IS TO BE CHECKED BY BLUEING BY ROLLING WITH MEASURING GEARS: TOTAL CONTACT AREA ALONG ADDENDUM SHOULD NOT BE LESS THAN 55% ALONG LENGTH NOT LESS THAN 75%. QUALITY OF IMPRINT AS PER INSTRUCTION UB-89.3A (AFTER ASSEMBLY)
- IN THE ABSENCE OF CHECKING TOOTH TO TOOTH COMPOSITE ERROR DOUBLE FLANK ADDITIONALLY TO THE DATA SPECIFIED IN TABLE FOLLOWING ARE TO BE CHECKED: RADIAL RUN-OUT OF TOOTHED RIM $F_{r1} = 0.030$ MM; DEVIATION OF BASE PITCH $f_{p1} = 0.01$ MM. MAXIMUM DIFFERENCE OF BASE PITCHES ALONG SIMILAR PROFILES FOR ONE WHEEL 0.01 MM. ERROR OF TOOTH PROFILE $f_{p2} = 0.012$ MM (AFTER ASSEMBLY)
- TOTAL ERROR OF DISTORTION SHOULD BE CHECKED IN THE ABSENCE OF CHECKING TEETH BY BLUEING
- ON SURFACE Γ CUTS AND NICKS ARE NOT ALLOWED
- BURN ON GROUND SURFACE OF TEETH PROFILE IS NOT ALLOWED.
- CHAMFERS B SHOULD BE MACHINED BEFORE CASE HARDENING AND FINISHING.
- COMPONENT SHOULD BE CHECKED ON MAGNETIC FLAW DETECTOR AS PER TT UB-17. ed 6.
- TO BE MARKED BY ETCHING OR BY ELECTRO CHEMICAL METHODS.

MODULE		m	2.25
COEFFICIENT OF BASIC RACK	NUMBER OF TEETH	Z	56
	PROFILE ANGLE	α	20°
	ADDENDUM	h _a	0.8
	LIMITING HEIGHT	h _δ	1.6
COEFFICIENT OF	CURVE RADI OF FILLET CURVE	r _δ	0.3
	BOTTOM CLEARANCE	c*	0.2
COEFFICIENT OF ADDENDUM MODIFICATION		X	0
ACCURACY AS PER GOST 1643-81			
BASE TANGENT LENGTH		F _w	44.94 ^{-0.24} _{-0.08}
TOLERANCE FOR BASE TANGENT LENGTH		F _w	0.022
COMPOSITE ERROR	TOTAL	F _t	0.058
DOUBLE FLANK TOOTH TO TOOTH		F _t	0.022
TOLERANCE FOR TOTAL ERROR OF DISTORTION		F _B	0.012
REFERENCE DIAMETER		d	126
CURVE RADI OF WORKING PROFILE OF TEETH IN BOTTOM AREA		r _δ	17
BASE DIAMETER		d _B	118.401
BASE PITCH		p _B	6.642

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

EST. MASS TO BE STAMPED OR MARKED WHERE INDICATED THUS II (LETTERS)
0.054 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.

DRN	CHD	TCD	APPD	DATE	SCALE	DIMENSIONS IN mm. TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 2102-89.	MATERIAL - STEEL 12X	USED ON -
				20.02.92	1:1		244 A GOST 4543-71	CE 3338-104 CB
CONTROLLERATE OF QUALITY ASSURANCE HEAVY VEHICLES A V A D I						TITLE	HIGH GEAR OF GEAR TRAIN	
ISSUE DATE NATURE OF AMENDMENTS						D S CAT NUMBER	DRAWING NUMBER 3338-145	



DRAWING NUMBER
3338 - 146

EXPLANATORY NOTE:-

MATERIAL QUOTED :- BRONZE BPO 10 C10 TTM 55-78.
PERTAINS TO BRONZE CASTING.

B-PO 10 C10 : GRADE OF BRONZE ALLOY.

CHEMICAL COMPOSITION:- %

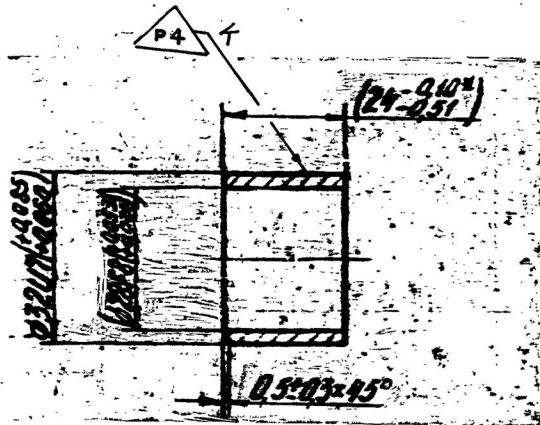
TIN = 9.0-11.0.
LEAD = 8.0-11.0.
Cu = REMAINDER.

IMPURITIES (MAXIMUM) %

ZINC = 0.5. PHOSPHORUS : 0.05.
IRON = 0.2. ALUMINIUM : 0.02.
Si = 0.02. TOTAL : 0.9.
ANTIMONY : 0.30.

MECHANICAL PROPERTIES:-

METHOD OF CASTING	Chilled C (MIN)	Sand S (MIN)
ULTIMATE TENSILE STRENGTH:	20	18
RELATIVE ELONGATION AFTER FRACTURE	6	7
HARDNESS AS PER BRINNEL	78	65



NOTE:-

1. REQUIREMENTS FOR CASTING AS PER TTM-55-78.
2. DIMENSIONS GIVEN IN BRACKETS SHOULD BE OBTAINED AFTER ASSEMBLY.
3. * DIMENSION FOR REFERENCE.
4. TO MARK BY COMPOUND N7 AS PER UA-581-85 OR ELECTROCHEMICAL METHOD.

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

EST. WT. 0.04 kg. TO BE STAMPED OR MARKED WHERE INDICATED THUS (LETTERS)

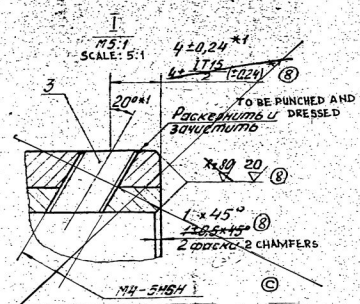
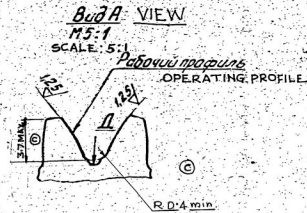
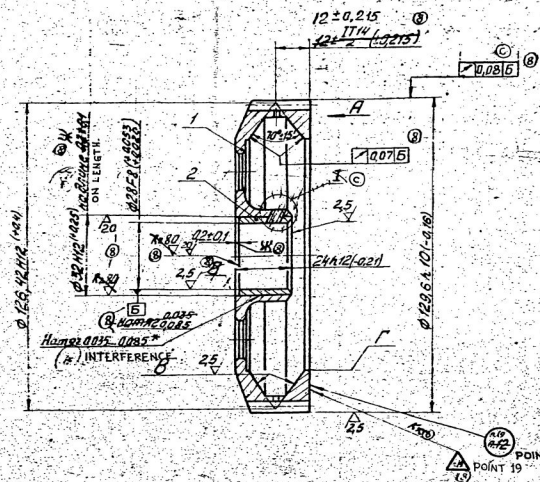
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT SIDE INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	AWAD	MATERIAL:- BRONZE BPO 10 C10 AS PER TTM 55-78.	USED ON CS 3338 - 109 C5
CHKD	AWAD		
TED	AWAD		
APPD	AWAD		
DATE	23-2-89	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	
SCALE:-	1:1		
DIMENSIONS IN mm		TITLE BUSH	DRAWING NUMBER 3338-146
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS: 2102-69			
B	10-2-96 AUTHY BK 88-226.	D S CAT NUMBER	DRAWING NUMBER 3338-146
A	11-7-88 AUTHY BK 85-634.		
ISSUE	DATE	NATURE OF AMENDMENTS	

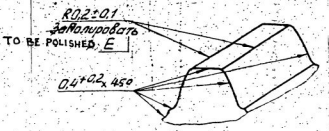
A-9
SIZE A3



DRAWING NUMBER
C6 3338-109



TEETH BLUNTING DIAGRAM
Схема закругления зубьев
M5:1



- CARRISED DEPTH FOR THE PROFILE OF TEETH - 0.6 TO 1.0 mm. FOR THE TOP CIRCS - 0.5 TO 1.0 mm, R C = 59.
- BEFORE PRESSING BY MUSHING THE GEAR SHOULD BE HEATED IN OIL UP TO A TEMPERATURE OF 100° TO 120°C.
- TECHNICAL REQUIREMENT FOR THREAD AS PER STANDARD 82021-00.
- TOLERANCE FOR QUALITY AND CYLINDRICITY OF SURFACE 5 SHOULD BE 0.005 mm. (SEMI DIFFERENT DIAMETERS).
- RELATIVE POSITION OF SURFACES 'B' SHOULD BE TAKEN AS PER MEURING WITH GAUGES, CARRIED OUT AS PER NOMINAL DIMENSIONS, ADJOINING SHOULD NOT BE LESS THAN 75% ALONG EACH SURFACE.
- QUALITY OF MESHING OF TEETH SHOULD BE CHECKED BY MEURING BY ROLLING WITH MEASURING GEAR; TOTAL CONTACT SPOT ALONG ADDENDUM WEN SHOULD NOT BE LESS THAN 50%; ALONG LENGTH - NOT LESS THAN 60%, TYPE OF MARKING - AS PER INSTRUCTION U 3 - 89-3/1.
- CHECKING THE DIRECTION OF TEETH SHOULD BE CARRIED OUT IN THE ABSENCE OF MEURING.
- ELEMENTS OF TOOTHING SHOULD BE CHECKED RELATIVE TO THE AXIS OF SURFACE 'G'.
- ON MUSHING AROUND WOOD SCREW OF SPLIT OF THREAD TURNS MAY BE ABSENT.
- GEAR SHOULD BE CHECKED ON MAGNETIC AGENTS SCOPE AS PER TR. US-17 ADD.
- ON SURFACE 'I' NOTCHES AND NICKS ARE NOT ALLOWED.
- BURN OUT ON GROUND SURFACES OF TOOTH PROFILE IS NOT ALLOWED.
- MACHINING, NICK AND INCISIONS ON SURFACE 'A' ARE NOT ALLOWED.
- * DIMENSIONS ARE TO BE ENSURED BY TOOL.
- RADIUS 'M' MAY BE TAKEN AS PER TEST SAMPLES.
- ON SURFACE '5' LONGITUDINAL TRACE FROM TOOL BY DEPTH NOT EXCEEDING 0.03 mm IS ALLOWED.
- IN THE ABSENCE CHECKING COMPOSITE ERROR DOUBLE FLANK TO ELEMENT IS NECESSARY, SPECIFIED IN TABLE, FOLLOWING ARE TO BE CHECKED: RADIAL RUN OUT OF TOOTHED WORN $F_2 \pm 0.030$ mm, DEVIATIONS OF BASE PITCH $p_b = \pm 0.01$ mm, MAXIMUM DIFFERENCE OF BASE PITCH ALONG UNIFORM PROFILE FOR ONE WHEEL (GEAR) 0.01 mm; ERROR OF TOOTH PROFILE $f_2 = -0.012$ mm.
- SERIAL No. OF THE COMPONENTS SHOULD BE MARKED AND TO BE STAMPED BY KIBURO CHEMICAL METHOD.
- * DIMENSIONS FOR REFERENCE.

MODULE		m	2.25
NORMAL BASIC RACK	NUMBER OF TEETH	Z	56
	PROFILE ANGLE	α	20°
	COEFFICIENT OF ADDENDUM	h_a^*	0.8
	COEFFICIENT LIMITING HEIGHT OF IN MESH CURVE	h_{α}^*	1.6
	COEFFICIENT RADIUS CLEARANCE	c^*	0.2
ADDENDUM MODIFICATION COEFFICIENT		x	0
DEGREE OF ACCURACY AS PER GOST 1643-81		f	-
BASE TANGENT LENGTH		W	44.94 - 0.88
TOLERANCE FOR BASE TANGENT LENGTH		F_{Wv}	0.022
TOLERANCE FOR COMPOSITE ERROR DOUBLE FLANK		$F_{L''}$	0.058
TOOTH TO TOOTH COMPOSITE ERROR DOUBLE FLANK		$F_{i''}$	0.022
TOLERANCE FOR TOTAL ERROR OF DISTORTION		F_{β}	0.012
REFERENCE DIAMETER		d	126
CURVE RADIUS OF ACTIVE PROFILE OF TEETH IN BOT TOM POINT		ρ_p	17
BASE DIAMETER		d_b	118.401
BASE PITCH		p_b	6.642

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

EST. MASS 0.894 kg TO BE STAMPED OR MARKED WHERE INDICATED THIS IN LETTERS)
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R. INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

DRN	02.01.01	MATERIAL	USED ON - C6 3338-412-2
CHD	105	CONTROLLERATE OF QUALITY ASSURANCE (M/V VEHICLES) A V A D I	
TCO			
APPD	22.03.89		
DATE	22.03.89		
SCALE	1:1		
DIMENSIONS IN mm		TITLE	SUB ASSY LARGE GEAR TRAIN
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 2102-89		P S CAT NUM BER	06A01
ALL THREADS TO CONFORM TO		DRAWN	
ISSUE	DATE	NATURE OF AMENDMENT	C6 3338-109



