

DRAWING INDIANISED BASED ON RUSSIAN ORIGINAL ISSUE - 4

F-5
197
283

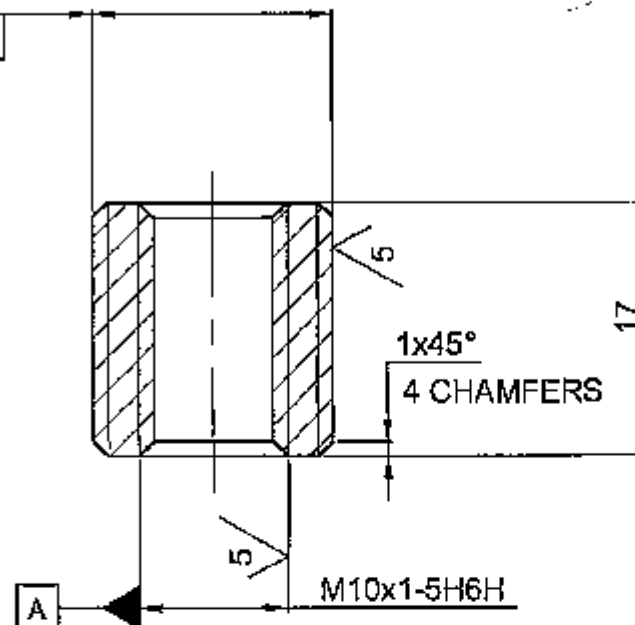
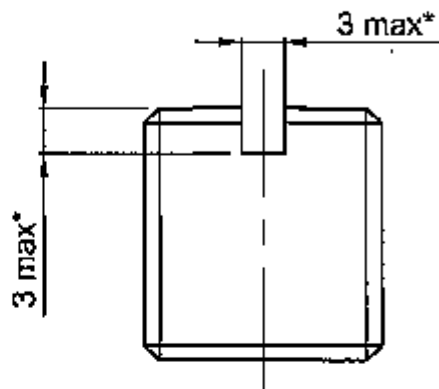
DRAWING NUMBER
3336-132

20
✓(✓)

M16x1.5-6g

⊙ R 0.3 (M) A (M)

ALTERNATIVE



1. Inspection group IV as per TT-11.
2. 28...35 HRC. *Measurement is allowed in samples-specimens.*
3. Unspecified limit deviations of dimensions as per h14
4. Carryout technical requirements for thread as per standard 82052-00.
5. Coating is carried out with a thickness of Zinc-6microns, chromium-1microns, Tungsten-1micron.
6. Put the final acceptance stamp and mark the symbol on tag.
7. * Dimensions are ensured by tool.

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

EST. WT.
0.014

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 :-

STEEL 38XC
GOST 4543-71

USED ON :-

Cb 3336-127-2

4A 19-8-08

D. O. CORRECTION.

ISSUE DATE

NATURE OF AMENDMENTS

DRN

SCALE :- 2 : 1

DIMENSIONS IN mm

CHD

TOLERANCE ON DIMENSIONS
UNLESS OTHERWISE STATED
IS : 2102 - 69

APPD

DATE

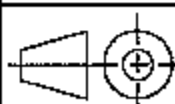
ALL THREADS TO
CONFORM TO

D S CAT NUMBER

DRAWING NUMBER

3336-132

SIZE A4



TITLE :-

4A

THREADED BUSHING

DRAWING NUMBER
301-160-4

3. REPAIR SIZE DIMENSIONS ARE ADDED, BASED ON LETTER NO: Rz 40/ (✓)
B2B47/0H/QA8/ED DH: 27 MAR '95 AS FOLLOWS:
REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THUS (✓)

8. EXPLANATORY NOTE:

MATERIAL QUOTED: 45 GOST 1051-74.

ALTERNATE MATERIAL QUOTED: STEEL 40 & 50 GOST 1050-74.

STEEL 40, 45 & 50 = GRADE OF STEEL.

(a) CHEMICAL COMPOSITION:

GRADE OF STEEL	CONTENTS OF ELEMENTS %							
	C	Si	Mn	Cr	P	S	Cu	Ni
	MAXIMUM							
40	0.37 - 0.45	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.040	0.25	0.25
45	0.42 - 0.50	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.040	0.25	0.25
50	0.47 - 0.55	0.17 - 0.37	0.50 - 0.80	0.25	0.035	0.040	0.25	0.25

(b) MECHANICAL PROPERTIES

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

(B) ALTERNATE MATERIAL : STEEL 080 MAD (EN 8) TO BS: 970
PL-1-1983 OR 45 CB TO IS: 1570

* CB 3336-127-2

- Coating: chem. oxidizing, oil finished.
- Sharp edges should be blunted.
- Dimensions without tolerances are to be implemented as per class 7 accuracy of OST 1010.
- Shift of axis of slot relative to axis of hole should not exceed 0.2mm (MMC).
- Absence of coating on surface A is permissible.
- Alternate material: Steel grades 40 and 50, GOST 1050-74.

ST No	R1	R2	REMARKS
1	-0.035 φ10.5	-0.035 φ11	ALL OTHER CONDITIONS AS PER STD DRG MARK REPAIR SIZE

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

EST. WT. 0.008 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 INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DRN
CHK
TCD
APPO
DATE 15-6-87
SCALE: 1:1
DIMENSIONS IN mm
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS: 2102-69
ALL THREADS TO CONFORM TO

MATERIAL: STEEL 45
GOST 1051-74

USED ON CB 3301-15-44
* CB 3301-15-30 (A)

CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)
AVAGI

TITLE
NOZZLE

D S CAT NUMBER
DRAWING NUMBER
301-160-4

3rd ALTERATION COMM. MINUTES
POINT B, DATE 27-2-09
USED ON NUMBER ADDED
NATURE OF AMENDMENTS

COMMON TO V-92S2 ENGINE

A-2
SIZE A3



- 1 Hardness ≥ 80 HB
- 2 Requirement, presented for casting, as per TTM-65-78
- 3 Casting accuracy 9-0-0-9 GOST 26945-85
- 4 Draft angle 2° degree, maximum
- 5 Unspecified casting radii are 3... 5 mm
- 6 Unspecified thickness of wall is (5 ± 1) mm
- 7 Make the radius R on section P
- 8 Surface of cavity K and channel H should be clean and smooth, burrs are not permitted
- 9 In cavity K, ensure the smooth passage between given radii
- 10 * Dimensions are ensured with tool
- 11 Coating of non-machined surfaces by bakelite varnish JEC -1 as per WJ-965-86
- 12 Check the cavity K and channel H for air-tightness with air in water bath for 5 minutes, Min. Cavity K with pressure 200... 250 kPa ($2... 2,5$ kgf/cm 2), channel H with pressure 100... 150 kPa ($1... 1,5$ kgf/cm 2) Passing of air is not permitted
- 13 Unspecified deviation of dimensions of mechanical machined surface H14, h14, $\pm 0,14$
- 14 Technical requirement for thread as per standard 82021 - 00
- 15 Blister on the surface L and V is not permitted
- 16 Mark as per GOST 2171-90, letter size 10 - Пз3 26 008-85
- 17 On section A1, thickness of wall $(6,2 \pm 0,1)$ mm is permitted
- 18 Surface B1 sockets IO and YI check during machining
- 19 Carry out checking of channel H with steel balls $\phi: (14 \pm 0,5)$ mm, ball should be pass through all channel for the effect of dead weight

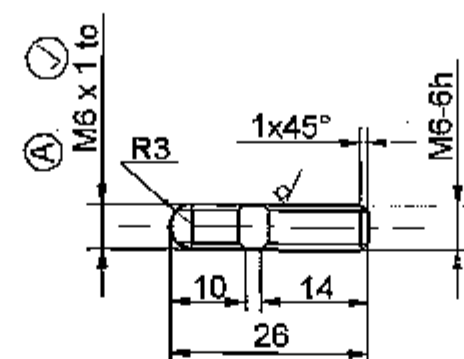
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DRAWING NUMBER
350 - 02

SHEET No. 1 OF 1

Rz 80 (✓)



1. TECHNICAL REQUIREMENTS FOR THREADS AS PER STANDARD 82021-00.
2. DIMENSIONS WITH UNSPECIFIED TOLERANCES AND THE REST OF THE TECHNICAL REQUIREMENTS AS PER STANDARD 82052-00.
3. COATING: CADMIUM 3. CHROMATIZING AS PER IIIT-104 WITH SUBSEQUENT ELIMINATION OF HYDROGEN EMBRITTLEMENT.
4. THREAD MAY BE MADE BY ROLLING WITH THE DIAMETER OF UNTHREADED PORTION WITHIN THE PITCH DIAMETER OF THREAD.
5. MECHANICAL DAMAGES OF CADMIUM COATING SUCH AS SCRATCHES, NICKS AND DENTS ARE ALLOWED ON ASSEMBLY UNITS, PROVIDED THE STEEL IS NOT EXPOSED.
6. ALTERNATE MATERIAL: STEEL, GRADES 40 AND 50 GOST 1050-74.

EXPLANATORY NOTE :-

7. REFERENCE MATERIAL QUOTED: COLD DRAWN STEEL ROD Ø6 mm TO GOST 7417-79, GRADE OF STEEL 45 TO GOST 1051-73 AND NOTE 'B' ON ALTERNATE MATERIALS STEEL Gdes 40 & 50 AND MANUFACTURED IN ACCORDANCE WITH QUALITY CARBON STRUCTURAL STEEL Gdes 40,45 & 50 TO GOST 1050-74.

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

GRADE OF STEEL	CONTENT OF ELEMENTS IN %						REMARKS
	C	Si	Mn	Cr	S	P	
40	0.37-0.45	0.17-0.37	0.50-0.80	0.25	0.040	0.035	Ref. Matl.
45	0.42-0.50	0.17-0.37	0.50-0.80	0.25	0.040	0.035	Ref. Matl.
50	0.47-0.55	0.17-0.37	0.50-0.80	0.25	0.040	0.035	Ref. Matl.

RESIDUAL CONTENT OF COPPER & NICKEL SHOULD NOT EXCEED 0.25% EACH

b) MECHANICAL PROPERTIES UNDER NORMALISED CONDITION AS PER GOST 1050-74.

GRADE OF STEEL	TENSILE STRENGTH Kgf/mm ²	YIELD POINT Kgf/mm ²	ELONGATION %	REDUCTION IN AREA %	IMPACT STRENGTH Kgf/mm ²	HARDNESS BHN MAX	REMARKS
40	58	34	19	45	6	217	Ref. Matl.
45	61	36	16	40	5	229	Ref. Matl.
50	64	38	14	40	4	241	Ref. Matl.

8. REPAIR SIZE DIMENSIONS ARE ADDED WHERE INDICATED THUS (✓) BASED ON OVERHAUL SPECIFICATION PART III REPAIR DRAWINGS.

SL.No.	R	REMARKS
1	M8 x 1.25 TO	ALL OTHER CONDITIONS AS PER STD. DRG.
2	+0.152 PCD = 7.188 +0.082	

9. HARDNESS :- 27-32 HRC.

* ALT. MATERIAL :- STEEL 709 M40 (EN-19) TO BS:970 PT.-1-1983.

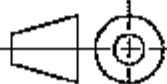
© EQUIVALENT MATERIAL STEEL
45C8 TO IS:1570

**
Cb 3327-05-22
Cb 3336-127-2

USED ON:- Cb 308-04-13
Cb 3336-404-7
Cb 447-01-1
Cb 3327-05-12
Cb 308-08-8
**

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

EST. WT. (Kg)	TO BE STAMPED OR MARKED WHERE INDICATED THUS # (LETTERS)
0.004	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.	

			DRN	Sd/=	MATERIAL :- ROUND BAR GOST 7417-75 * 45 GOST 1051-73	Cb 447-01-1 Cb 3327-05-12 Cb 308-08-8 **
			CHD	Sd/=		
			APPD	Sd/=		
			DATE	15.06.89	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	
			SCALE:- 1 : 1			
			DIMENSIONS IN mm			
C	12-8-10	4 th Alt. Comm. Meeting Minutes Point No.11 Dt: 26-10-09	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102 - 69			TITLE :- STUD M6 x 26
B	22.01.08	AUTHY-MIN. OF ALT. COM. MEET POINT No. - 2. 12 Dt.07.02.07	ALL THREADS TO CONFORM TO			
A	02.9.95	REPAIR SIZE ADDED.			D S CAT NUMBER	DRAWING NUMBER
ISSUE	DATE	NATURE OF AMENDMENTS				350 - 02

DRG. RE-INDIANISED BASED ON 350-02 ISSUE 'B'
COMMON TO V-92S2 ENGINE

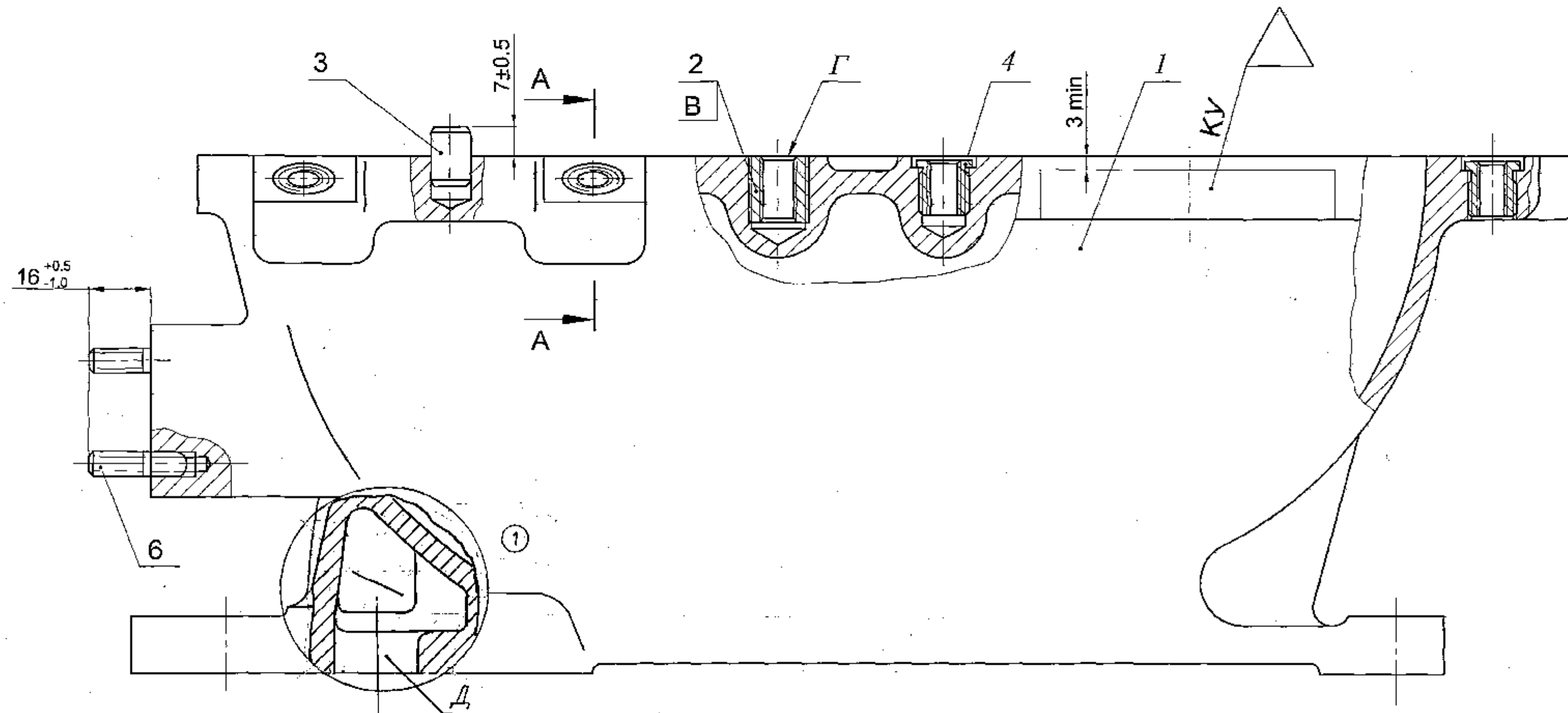
DRG. RE-INDIANISED BASED ON 350-02 ISSUE 'B'
COMMON TO V-92S2 ENGINE

F-11

SIZE A2

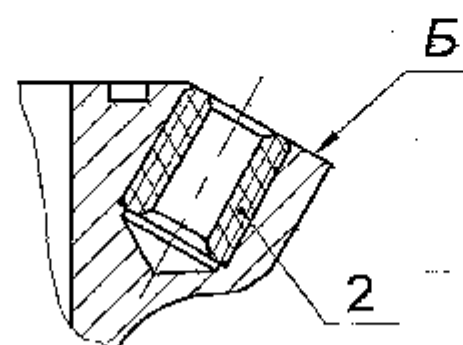
DRAWING NUMBER
Cb.3336-127-2

SHEET No. OF



1. Mount the part item 2 by using sealant AH-5M Δ TY-6-01-1288-84 as per instruction ИЛ-652-86.
2. Projection of part item 2 with respect to plane B is allowed maximum by 1mm.
3. Screw the part item 4 in part item 1 till backing.
4. Projection of two parts B item 2 with respect to the plane Γ is not allowed.
- ① 5. Carryout checking of channel Δ by steel ball (φ14^{+0.5}_{-0.5}) mm, Ball should pass through all channels under the effect of actual weight.

A-A



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

EST. WT. (kg) TO BE STAMPED OR MARKED WHERE
4.2 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.

DRN	CHD	APPD	DATE	SCALE:- 1:1	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102-69	ALL THREADS TO CONFORM TO	DRN	CHD	APPD	DATE	SCALE:- 1:1	DIMENSIONS IN mm	TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102-69	ALL THREADS TO CONFORM TO	MATERIAL :-	USED ON :- Sb.3336-00-11	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI	TITLE :- RECEIVER ASSY.	D S CAT NUMBER	DRAWING NUMBER Cb.3336-127-2
1	19.11.08	NOTN. NO: 2002-314 (F-158)	ISSUE	DATE	NATURE OF AMENDMENTS																