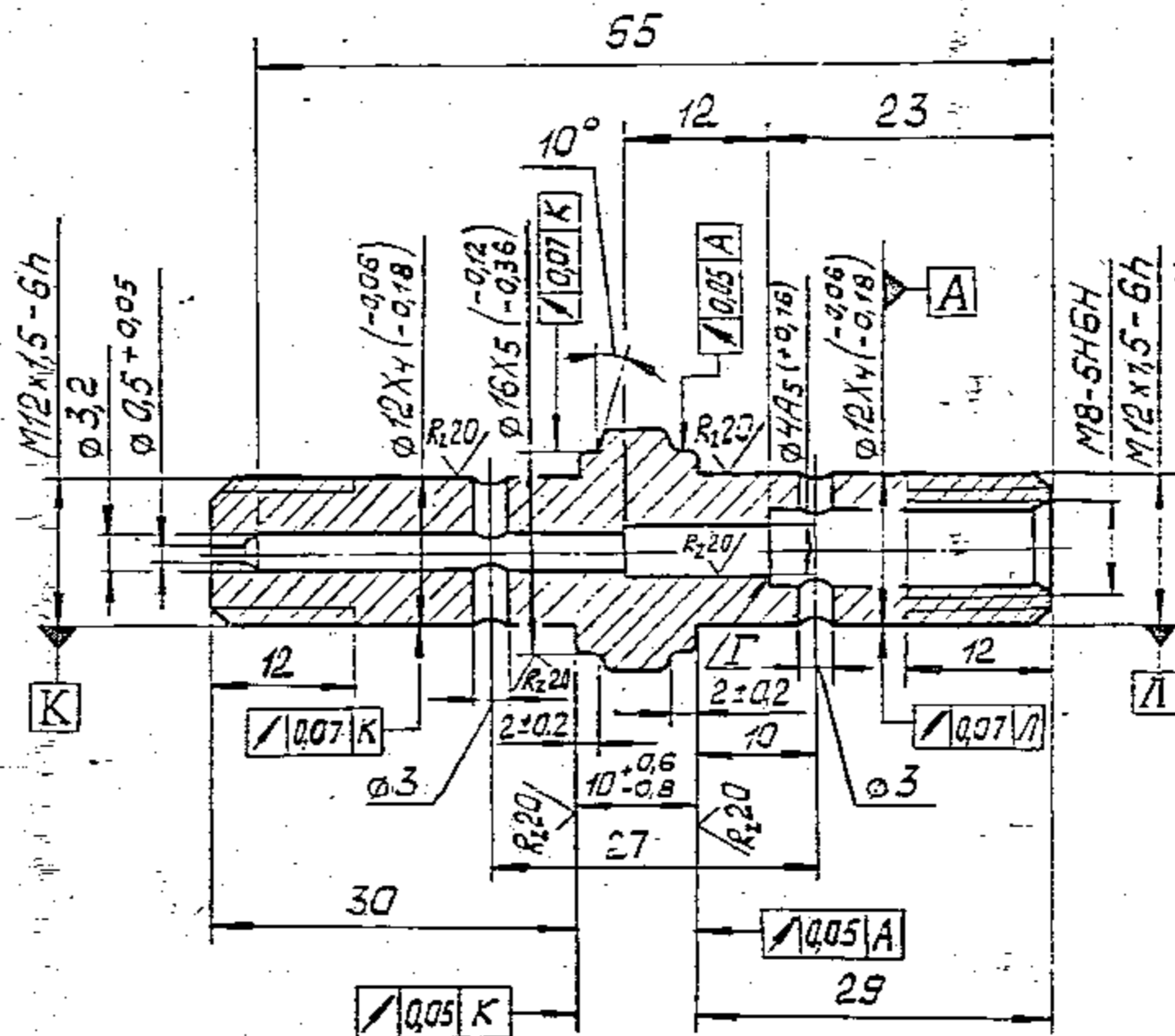


DRAWING NUMBER
20-29-64



EXPLANATORY NOTE :-

MATERIAL QUOTED : 45GOST 4543-71

45X = GRADE OF STEEL.

CHEMICAL COMPOSITION %:

CARBON = 0.41 - 0.49

SILICON = 0.17 - 0.37

MANGANESE = 0.50 - 0.80

CHROMIUM = 0.80 - 1.10

PHOSPHORUS = 0.035

SULPHUR = 0.035

COPPER = 0.30

NICKEL = 0.30

MAXIMUM

MECHANICAL PROPERTIES:

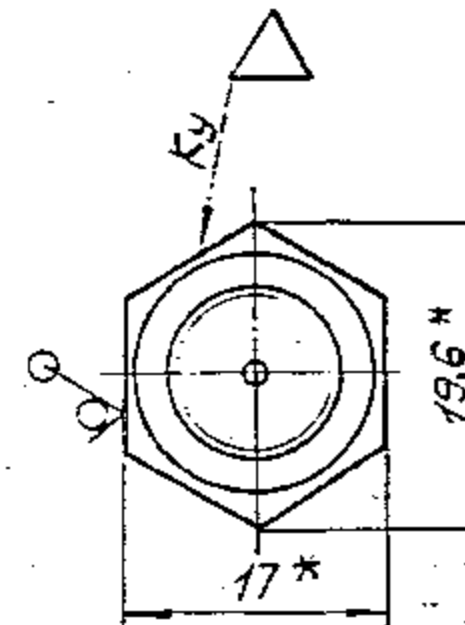
ULTIMATE TENSILE STRENGTH $\text{Kgf/mm}^2 = 105$ (MIN)

% RELATIVE ELONGATION = 9 (MIN)

YIELD POINT $\text{Kgf/mm}^2 = 85$ (MIN)

% REDUCTION ACROSS SECTION = 45 (MIN)

IMPACT STRENGTH $\text{Kgf.m/cm}^2 = 5$ (MIN)



1. All. Matl. is STEEL 40X GOST 4543-71.
2. HRC 26 TO 30.
3. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS FOLLOWS.

FOR HOLES - AS PER A7
FOR SHAFTS - AS PER B7
FOR OTHERS - AS PER CM7

4. EDGE τ SHOULD BE SHARP WITHOUT BURRS AND NICKS.
5. COATING : CADMIUM PLATED, 9MICRONS THICK, OILED
ZINC-PLATING 12 MICRONS THICK OILING IS PERMITTED.
6. ABSENCE OF THE COATING ON THE INTERNAL SURFACES IS PERMITTED.
7. * DIMENSIONS ARE GIVEN FOR REFERENCE.

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

EST. WT. 0.055 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 R IN-SIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.

(13A) EQUIVALENT MATERIAL STEEL 709M40
(EN19) BS:970/40Cr4Mo3 IS:1570

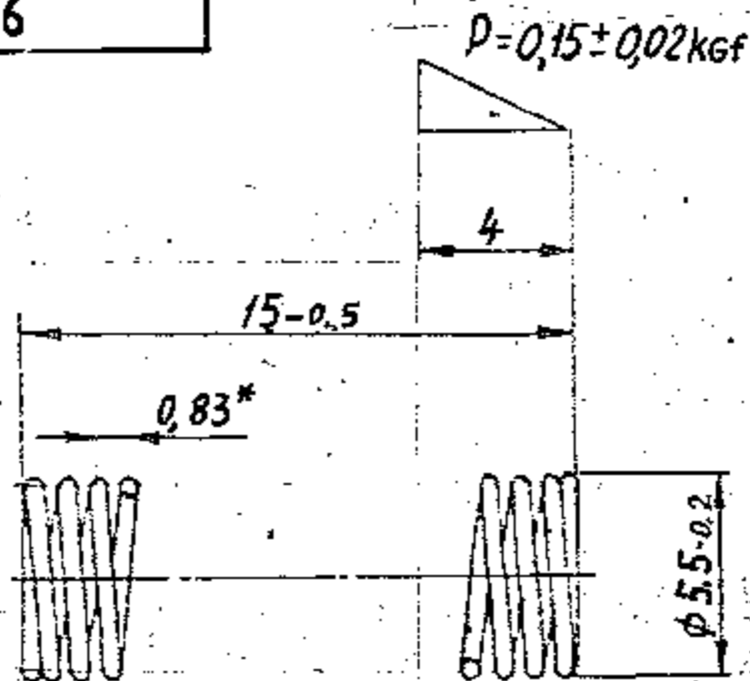
DRN	W. H.	MATERIAL -	USED ON -
END	22/08/59	45X GOST 4543-71	C6 20-29-59
TCC	20/08/59	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
APFD	20/08/59	A V A D I	
DATE	17-3-90	TITLE	
SCALE	- 2:1	NON-RETURN VALVE BODY	
DIMENSIONS IN mm.		D S CAT NUMBER	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS 2102-69		DRAWING NUMBER	
ALL THREADS TO CONFORM TO		20-29-64	
ISSUE	DATE	NATURE OF AMENDMENTS	
13A	12-8-10	4 th A.H. Comm. Meeting Minutes	
13		Point No: 11 Dt: 26-10-09	
		1457- B1	

EXPLANATORY NOTE ADDED ON 27-3-92





DRAWING NUMBER
1227-76



1. TOTAL SPRING LENGTH L IS APPROXIMATELY 270 mm.
2. NO. OF WORKING COILS - 15.
3. TOTAL NUMBER OF COILS - 17.5.
4. COILING DIRECTION IS ARBITRARY.
5. RESIDUAL DEFORMATION IS NOT ALLOWED, AFTER THE SPRING IS COMPRESSED TO BRING THE COILS IN FULL CONTACT WITH ONE ANOTHER.
6. EXTERNAL DIAMETER OF BEARING COILS MAY BE INCREASED UP TO 5.7 mm.
7. WIRE LAMINATION IS NOT ACCEPTABLE WHEN THE MANUFACTURED PART IS TESTED FOR TWISTING.
8. COATING: CHEMICALLY OXIDIZED, OILED.
- 9.* DIMENSION IS GIVEN FOR REFERENCE.

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

EST. WT. 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

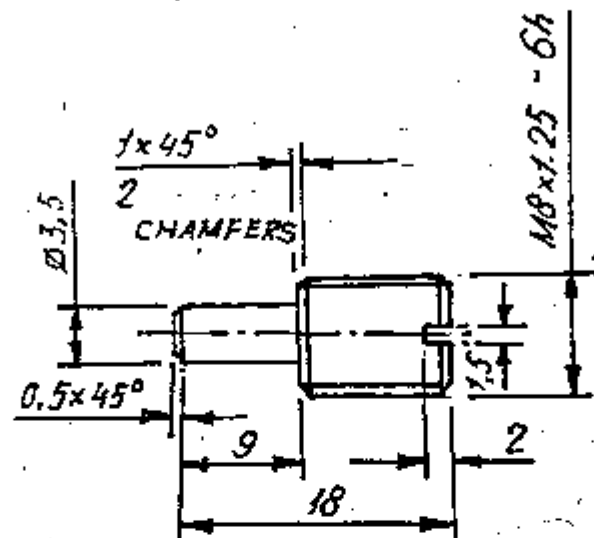
DRN: <i>[Signature]</i>	MATERIAL: - WIRE II - 0.5	USED ON
CHK: <i>[Signature]</i>	GOST 9389-75.	CB 20-29-59
TCD: <i>[Signature]</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES)	
APPD: <i>[Signature]</i>	AVADI	
DATE: 30-12-87	TITLE	
SCALE: - 5:1	SPRING	
DIMENSIONS IN mm	D S CAT NUMBER	
TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS: 2102-69	DRAWING NUMBER	
ALL TREATMENTS TO CONFORM TO	1227-76	
ISSUE DATE	NATURE OF AMENDMENTS	





DRAWING NUMBER

3314-65



1. UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS ARE AS FOLLOWS: FOR HOLES - AS PER A7
SHAFTS - AS PER B7,
OTHERS - AS PER C7

2. COATING: CHEMICALLY OXIDIZED/OILED.

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

EST. WT. TO BE STAMPED OR MARKED WHERE INDICATED THIS \equiv 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	<i>[Signature]</i>	MATERIAL:-	USED ON
CHK	<i>[Signature]</i>	45 GOST 1050-74	SE. 20-29-59
TEL	<i>[Signature]</i>	CONTROLLERATE OF QUALITY ASSURANCE(HEAVY VEHICLES)	
APPD	<i>[Signature]</i>	AVAJI	
DATE	17-3-90	TITLE	
SCALE:-	2:1	SCREW	
DIMENSIONS IN mm		D S CAT NUMBER	
TOLERANCE ON DIMS		DRAWING NUMBER	
UNLESS OTHERWISE		3314-65	
STATED IS:2102-69			
ALL THREADS TO			
CONFORM TO			
ISSUE DATE	NATURE OF AMENDMENTS		



SIZE A3



DRAWING NUMBER
CB 20-29-59

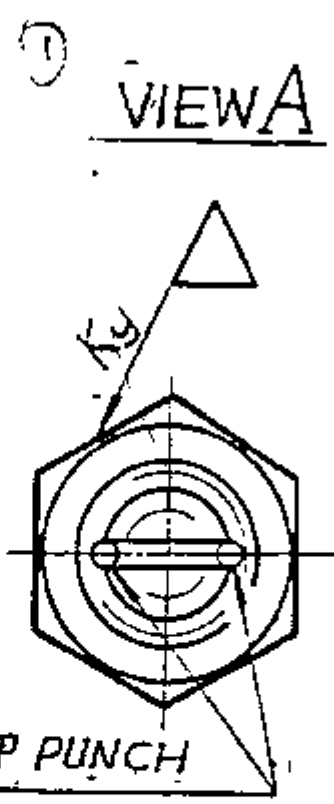
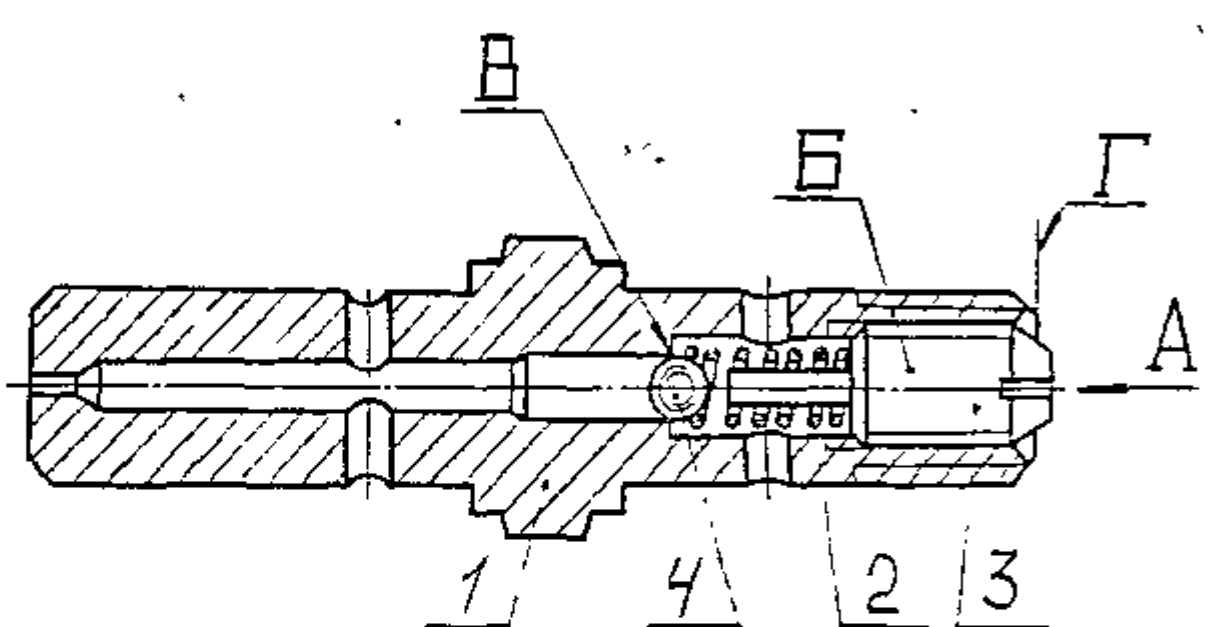
EXPLANATORY NOTE : FOR ITEM No: 4

MATERIAL BALL 5 $\sqrt{5}$ mm
 P, GOST 3722-60.

CHEMICAL COMPOSITION : % AS PER GOST 801-78

Gde	C	Si	Mn	Cr	S	P	Ni	Cu	Ni&Cu
WXTS	0.95-1.05	0.17-0.37	0.20-0.40	1.30-1.65	M A X I M U M				
					0.20	0.027	0.30	0.25	0.50

ULTIMATE TENSILE STRENGTH Kgf/cm^2 60-73
 (GOST 4727-83)



1. BLUNT SHARP EDGE B USING A BALL UNTIL A CHAMFER IS OBTAINED.
2. TURN SCREW 4 TILL IT IS ALIGNED WITH PLANE A OF BODY 1, THEN BACK OUT THE SCREW THROUGH ONE REVOLUTION.
3. SUBJECT THE VALVE TO A PRESSURE TEST FROM THE SIDE OF THE SPRING, THE VALVE BEING IN THE HORIZONTAL POSITION FEEDING DIESEL FUEL UNDER A PRESSURE OF 0.05 TO 0.15 MPA (0.5 TO 1.15 KGF/CM^2) FOR TWO MINUTES.

4. STOP PUNCH AFTER CHECKING (SEE VIEW A)

KVD No-63504

PILOT SAMPLE SHOULD BE APPROVED BY A H S P BEFORE BULK PRODUCTION		DATE 17-3-90		SCALE - 2:1		MATERIAL:-		USED ON CB 20-29-00-8	
EST. WT. 0.045 kg.		TO BE STAMPED OR MARKED WHERE INDICATED THIS \equiv ! LETTERS!		DIMENSIONS IN mm		TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS: Z162-69		TITLE NON-RETURN VALVE ASSY.	
ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUT SEE INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE		6 - 1432-01		5 - 890-28		ALL THREADS TO CONFORM TO		D S CAT NUMBER	
ISSUE DATE		NATURE OF AMENDMENTS		DRAWING NUMBER		CB 20-29-59			

SIZE A3



USED ON
CB 20-
29-00-8

ITEM	DRAWING NUMBER	D S CAT NUMBER	DESCRIPTION	No. OFF	REMARKS
	CB 20-29-59		NON-RETURN VALVE		
	8: ITEM LIST		ASSY		
			<u>DETAILS</u>		
1	20-29-64		NON-RETURN VALVE		
			BODY.	1	
2	1227-76		SPRING	1	
3	3314-65		SCREW	1	
			<u>STANDARD ITEMS</u>		
4.			BALL 5 X 5mm		For Matl. Details
			P QOST 3722-60	1	See Assy Drg.

ISSUE	DATE	NATURE OF AMENDMENTS	ISSUE	DATE	NATURE OF AMENDMENTS

DRN	<i>[Signature]</i>	CONTROLLER OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI			
CHO	<i>[Signature]</i>	TITLE: NON-RETURN VALVE ASSY.			
TCD	<i>[Signature]</i>	D S CAT NUMBER		ITEM LIST FOR	
APPD	<i>[Signature]</i>	SHT. No. 1 OF 1		CB 20 29-59	
DATE	17-3-90				

