

EXPLANATORY NOTE

MATERIAL QUOTE: STEEL 38 X C  
 COST 4543-71  
 38 X C CHROMIUM SILICON QUALITY STEEL

CHEMICAL COMPOSITION:

GRADE OF STEEL	CONTENT OF ELEMENTS %						
	C	Si	Mn	Cr	P	S	NI
38 X C	1.2-1.4	1.0-1.4	0.3-0.6	1.3-1.6	0.035	0.035	0.30
	MAXIMUM						
38 X C	1.2-1.4	1.0-1.4	0.3-0.6	1.3-1.6	0.035	0.035	0.30

MECHANICAL PROPERTIES

GRADE OF STEEL	YIELD POINT PCN	ULTIMATE TENSILE STRENGTH Kgf/mm <sup>2</sup>	RELATIVE ELONGATION %	RELATIVE REDUCTION ALONG CROSS SECTION	IMPACT STRENGTH Kgf/cm <sup>2</sup>
38 X C	75	95	12	58	7

- INSPECTION GROUP III AS PER IT-11.
- HRC 28-32.
- UNSPECIFIED LIMIT DEVIATIONS OF DIMENSIONS HOLES AS PER H 14, SHAFTS AS PER h 14, OTHERS ± IT 14.
- THE FACE SPLINES SHOULD BE CHECKED WITH A SPECIAL GAUGE IN 3 POSITIONS THROUGH 120° ON A MANDREL WHICH IS MADE TO SUIT MAXIMUM DIMENSION ON THE MATING COMPONENT.
- ENGAGEMENT OF SPLINES SHOULD BE ACCEPTED AS PER TEST SPECIMEN.
- RELATIVE POSITION OF SURFACE B IS TO BE CHECKED BY SPECIAL GAUGE MANUFACTURED AS PER MAXIMUM DIMENSIONS OF MATING COMPONENTS.
- COATING, CHEMICAL OXIDIZING OIL FINISHING.
- TO BE MARKED ON TAG FOR THE BATCH OF COMPONENTS WITH SEALING.
- \* DIMENSIONS TO BE CHECKED BEFORE ROLLING FACE SPLINES.
- \* 1 DIMENSIONS TO BE ENSURED WITH TOOL.
- HARDNESS MAY BE CHECKED ON BLANK ON EACH HEAT TREATED BAR BHN 255-265.
- SLOT MAY BE MADE AS PER ALTERNATIVE 2 INSTEAD OF ONE FROM HOLE B.

(A) Alt. Material: STEEL 709M40 (EN-19) TO BS-970 Pt-1-1983

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

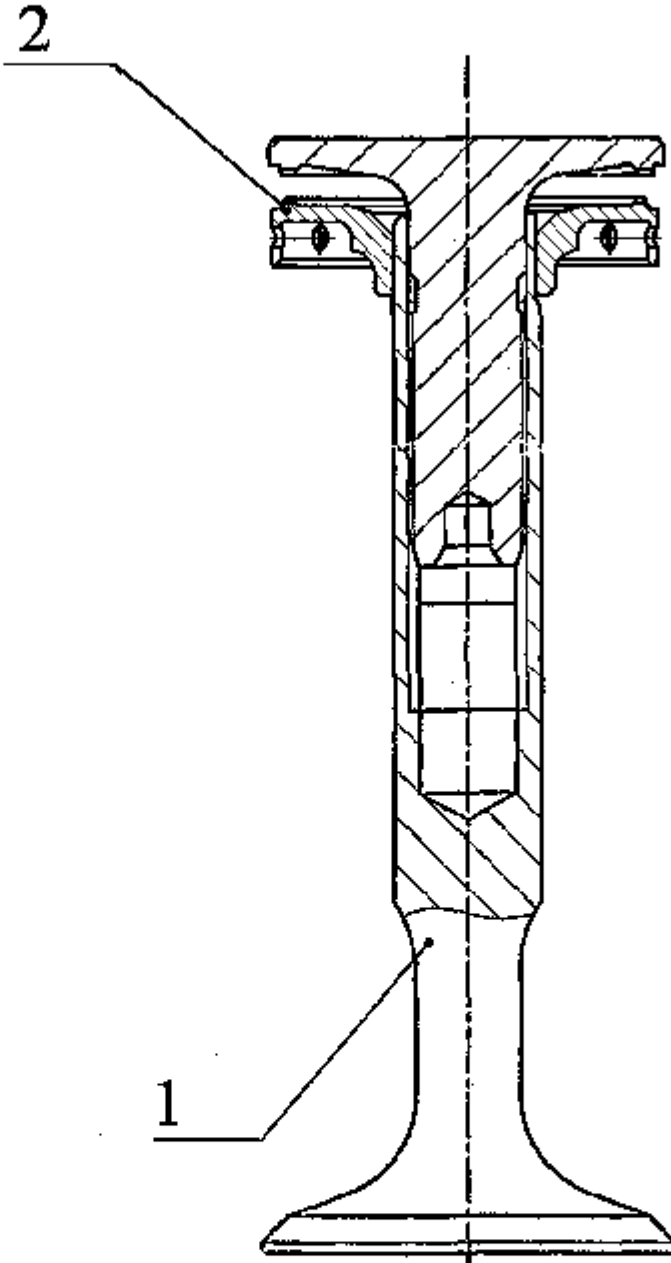
EST. MASS TO BE STAMPED OR MARKED WHERE INDICATED THIS \* LETTERS  
 0.05 Kg  
 ALL SHARP EDGES AND CORNERS TO BE REMOVED UNLESS OTHERWISE STATED MACHINED CORNERS TO HAVE R OUTSIDE R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE

DESIGN	MATERIAL	USED ON
ENR	STEEL 38XC COST 4543-71	405 16-2
DATE	CONTROLERATE OF QUALITY ASSURANCE HEAVY VEHICLES	406-17-2
SCALE	AYAD1	
TOLERANCE ON DIMS UNLESS OTHERWISE STATED IS 2002-49	TITLE	
	VALVE DISC LOCK	
ISSUE	DATE	NATURE OF AMENDMENTS
A	18.5.09	Authy: Third Alt. Comm. Minutes Point: 2 Dated 27-02-2009.
		ALL THREADS TO CONFORM TO
		DRAWING NUMBER
		306-48-7



DRAWING NUMBER  
CQA(HV) 506 614E

SHEET No. 1 OF 1



**TECHNICAL REQUIREMENTS**

1. CIRCUMFERENTIAL PLAY OF THE VALVE DISC LOCK 306-48-7 (ITEM No.2) ON FLATS OF THE EXHAUST VALVE STEM Cb 306-51-01 \* SHOULD NOT EXCEED 0.3 ON 50 DIA.
2. VALVE DISC LOCK 306-48-7 SHOULD MATCH CLOSELY WITH VALVE DISC 306-47-2 \* BY ALL THEIR SPLINES, 100% CHECKING IS TO BE ENSURED.
3. ASSY. EXHAUST VALVE WITH DISC LOCK IS TO BE PROCURED/ REPLACED AS A SET.
4. THE PARTS SHOULD BE CLEAN, FREE FROM DUST, DIRT AND OILED TO PREVENT RUST.

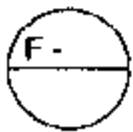
\* PART OF ITEM No.1

DRG. CREATED BASED ON 11<sup>TH</sup> ALT. COMM. NEW POINT No.7

PILOT SAMPLE SHOULD BE APPROVED BEFORE BULK PRODUCTION.

EST. WT. (Kg) 0.420 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 R INSIDE EQUIVALENT CHAMFERS ARE PERMISSIBLE.



SIZE A3

			DRN	<i>[Signature]</i>	MATERIAL :-	USED ON :-	
			CHD	<i>[Signature]</i>	---	V92S2 ENGINE	
			APPD	<i>[Signature]</i>	CONTROLLERATE OF QUALITY ASSURANCE (HEAVY VEHICLES) AVADI		
			DATE	09 JAN 2016			
			SCALE:-	1 : 1	TITLE :- <b>ASSY. EXHAUST VALVE WITH DISC LOCK</b>		
			DIMENSIONS IN mm				
			TOLERANCE ON DIMNS UNLESS OTHERWISE STATED IS : 2102 - 69		D S CAT NUMBER		
			ALL THREADS TO CONFORM TO IS:4218.PART- 4				
			ISSUE	DATE	NATURE OF AMENDMENTS	DRAWING NUMBER CQA(HV) 506 614E	





