


VE COMMERCIAL VEHICLES LIMITED. (UNIT : EICHER ENGINEERING COMPONENTS; DEWAS)					
CONTROL PLAN NO : 1024 / 100					
EFF. DATE	17.01.12	EFF. DATE	20.12.12	EFF. DATE	10.03.13
PROTO-TYPE	<input checked="" type="checkbox"/>	PRE-LAUNCH	<input checked="" type="checkbox"/>	PRODUCTION	<input checked="" type="checkbox"/>
O.E.	<input checked="" type="checkbox"/>	EXPORT			
PART NO. ED 1024 (LVU23558)					
PART NAME	SHIFT COLLAR CARRIER			OPN. NO.	100
CUSTOMER	JOHN DEERE				
OPERATION	AFTER HEAT - TREATMENT INSPECTION				
CELL [OPTIONAL]	M/C.		M / C NO. [OPTIONAL]		
	INSP. DEPTT.				
FIXTURE	FIX. NO.	TOOL	NO.		

CONTROL PLAN		PREV. OPN.	NEXT. OPN.	SURFACE FINISH:	DOC. NO. :
		090 - HEAT TREATMENT	110 - FINAL INSPECTION		AP04 : 160 : 20 REV- 01 (DATE : 05.10.17)
KEY CONTACT PERSON :- ALM		CORE TEAM :- ALM, SK, SRS, SNP, IDS, MM, RK, RSC, NKS, VS, RJ			REVISION
LOCATION →	REST →→→	CLAMP — N →	SPL CHAR. (CRITICAL DIMN.)	<input checked="" type="checkbox"/> B EECd	<input checked="" type="checkbox"/> CUSTOMER.
MATERIAL - : 20 Mn Cr5 COMP. WT. = 0.345 KG.					
		<p>SECTION - 'A-A'</p>			
<p>NOTE :-</p> <p>1. IF CASE DEPTH FOUND LOWER OR HIGHER LIMIT OF SPECIFICATION TWO PART CHECK.</p> <p>2. SAMPLE SHOULD BE CHECK BEST & WORST LOCATION FOR CASE DEPTH & MICROSTRUCTURE.</p> <p>3. IN CASE RA IS MORE THAN 25% CHECK HARDNESS (WITH 100 GM LOAD VICKER HARDNESS) AT 0.1mm. IN SHOULD BE 58 HRC. Min.</p>		<p>FOR REFERENCE ONLY</p>			

SR. NO.	CHARACTERISTIC		SPL CHAR CLASS	PRODUCT / PROCESS SPECIFICATIONS	EVALUATION MEASUREMENT TECHNIQUE		SAMPLING		RESP.	CONTROL METHOD	CORRECTIVE ACTION / REACTION PLAN	
	PRODUCT	PROCESS			INSTRUMENT	NO.	SIZE	FREQ.				
1.	SURFACE HARDNESS			58 - 64 HRC.	ROCK WELL HARDNESS TESTER	---	1 PC.	PER CHARGE	~ INSP.	SELF INSPECTION	SORT / REWORK ;	
2.	CUT PART FOR CASE DEPTH ON PCD			0.9 ~ 1.1 mm. (AT515Hv)	AUTOMATIC VICKER HARDNESS TESTER	---	1 PC.	PER CHARGE	~ INSP.	SELF INSPECTION		
3.	CUT PART FOR CASE DEPTH ON RCD			0.4 mm. Min (AT515Hv)	AUTOMATIC VICKER HARDNESS TESTER	---	1 PC.	PER CHARGE	~ INSP.	SELF INSPECTION		
4.	CORE HARDNESS AT RCD			25 ~ 45 HRC.	ROCK WELL HARDNESS TESTER	---	1 PC.	PER CHARGE		SELF INSPECTION		
5.	MICROSTRUCTURE AT CASE			TM WITH 25% RA Max. (FREE FROM CARBIDES)	MICROSCOPE AT 500X	---	1 PC.	PER CHARGE	~ INSP.	SELF INSPECTION		
6.	MICROSTRUCTURE AT CORE			LCM + BANITE	MICROSCOPE AT 500X	---	1 PC.	PER CHARGE	~ INSP.	SELF INSPECTION		
7.	IGO & NMTP (Max. IN MICRON)			<_ 25 MICRON	MICROSCOPE 100X	---	1 PC.	PER CHARGE	~ INSP.	SELF INSPECTION		
8.	ITP (Max. IN MICRON)			0% AT SURFACE 5% Max. AT ECD/2 AT PCD 5% Max. AT ECD/4 AT RCD	MICROSCOPE 100X	---	1 PC.	PER CHARGE	~ INSP.	SELF INSPECTION		
9.	SPLINE FITMENT 			SLIDING FIT	SPLINE PLUG GAUGE	GO NO GO	SPG-117-1-1023 SPG-117-2-1023	100 % CONT.	~ OPER.	SELF INSPECTION		
DRN BY		M. PATEL		CHKD BY		R. PATHAK		APRD BY		B. LEVA		PAGE 01 / 01