PHINIA	Machine Document	Format No.	PHM/E/001
		Rev. Level	0
		Rev. Date	01.03.2024

Model :	P703 (28667720)Rev009; U704(28667721)Rev006; FD(42027893)Rev006; SA(42032060)Rev003; Gnome 42049149 (Rev001)	WI No	FMA03-MD-35-003	Operatior Skill Level Required : 3	Document Dated : 18 Sept. 17	Revision Date:	20.06.2024
Machine name:	Umbrella valve and Clip Press to retainer	Operation no.	35	A: Alert Supervisor for Possible Machine Alignment B: Follow super visor instruction for proper handling			

Product Parameters

S. No	Product Characteristics (ड्राइंग में दिया गया है)	K P C	Product Spec./ Tolerance (पार्ट के माप का विशेष विवरण)	Measuring mode (पार्ट को चैक कैसे करें)	Sample size (कितने पार्ट चैक करने है)	Frequency (कितनी देर में चैक करना है)	Resp (कौन चैक करेगा)	Control method (प्रोसेस पर नियंत्रण रखने का तरीका)	Reaction plan (प्रोसेस गलत होने पर क्या करें)
1	Correct UV Clip Part Number		As per Model running (refer master Sample)	visual	Once	Start Of Shift/Every Changover/	Operator	DVIS(FMA03-DVIS-35-05)	If Non-conforming part is found, place it in reject cotainer and notify team leaderr
2	Correct Umbrella Valve Part Number		As per Model running (refer master Sample)	visual	Once	Start Of Shift/Every Changover/	Operator	DVIS(FMA03-DVIS-35-05)	
3	Correct Retainer Part Number		As per Model running (refer master Sample)	visual	Once	Start Of Shift/Every Changover/	Operator	DVIS(FMA03-DVIS-35-05)	
4	Umbrella Valve Presence Verification		UV Must seal against retainer	Visual / Flow & Vaccum Inspection	Once/100%	Start Of Shift/Every Changover/Every 2 hour.	Operator/Auto Controlled	DVIS(FMA03-DVIS-35-05) / PLC program Interlock	If machine does not detect process notify team leder
5	Snap lock Verification		Proper Locking of UV Clip with retainer snap window	Laser beam sensor	Once/100%	Start Of Shift/Every Changover	Operator/Auto Controlled	DVIS(FMA03-DVIS-35-05)/EPVS/Machine PLC program Interlock	If sensor does not detect process notify team leder

Process/Set up Parameters

S. No	Process Characteristics (प्रोसेस में चैक करना है)	K C C	Process Spec./ Tolerance (प्रोसेस के पैरामीटर का विशेष विवरण)	Measuring mode (प्रोसेस को चैक कैसे करें)	Sample size (प्रोसेस में कितने पार्ट चैक करने है)	Frequency (कितनी देर में चैक करना है)	Resp (कौन चैक करेगा)	Control method (प्रोसेस पर नियंत्रण रखने का तरीका)	Reaction plan (प्रोसेस गलत होने पर क्या करें)
1	Line Pressure		**4.5 - 5.5 bar**	Pressure Switch	Once	Start Of Shift/Every Changover	Operator	DVIS	If parameter is out of specification, do not use equipment and notify team leader
2	UV Vacuum Test range		-35 to '-43 Kpa	Pressure Switch	100%	Continuous	Auto Controlled	DVIS/ Machine PLC program controlled	
3	UV Flow input Test Pressure		13±2 Kpa	pressure Switch	Once/Cont.	Every Changeover/Start of Shift/Cont.	Operator/Auto Controlled	DVIS/ Machine PLC program controlled	
4	UV Flow Test Value		30 to 40 LPM	Flow Meter	5 pcs/100%	Every Changeover/Start of Shift/Cont.	Operator/Auto Controlled	DVIS/ Machine PLC program controlled	
5	Master Part Verification		NOK1. Verifier rejected OK1. Verifier Accepted	Master Cycle	Once	Every Changeover/Start Of Shift	Auto-Controlled	Machine logic tied with changeover	If machine does not ask for master cycle, inform to team leader
6	Bin Cleanliness		Should be free from dust and contamination	Visual	Once	Every Changeover of Bin	Operator	Part feeding WI PTGW_5.3_PC_GUR_03	Infrom supervisor and press alarm button
7	TPM checksheet Verification		As per TPM check-sheet	Visual	Once	Start Of Shift/Every Changeover	Line Leader / Supervisor	TPM check sheet PH/MAINT/FMA-03/018	If any abnormality, inform to supervisor

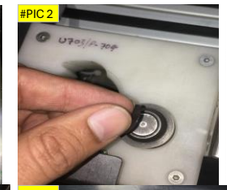
JOB ELEMENT SHEET

Work sequence | Safety for operator | Quality checks | Critical process for product | Error proofing

SYM	No.	Major process step	key points	Reason	EP Applicable
○	1	Pick up Umbrella Valve from SS tray **as shown in pic#1** **Umbrella Valve को SS tray से उठाये**	Correct Umbrella Valve (Part Number As Per Model Running)	Correct Umbrella valve	Visual Aid
○	2	Load Umbrella Valve into the stage 1 nest Pin **as shown in pic#2** **Umbrella Valve को stage 1 nest Pin में load करें**	Correct Orientation	Proper Allignment	Visual Aid
○	3	Pick up retainer from bin **as shown in pic#3** **retainer को bin से उठाये**	Correct Retainer (Part Number As Per Model Running)	Component Matches Master Sample	Visual Aid
○ ◆ ▼	4	Load Retainer over umbrella Valve in fixture **as shown in pic#4** **Retainer को umbrella valve के ऊपर से fixture में लोड करें**	Correct Orientation	Proper Allignment	Confirmation Sensor
○ ◆ ▼	5	Push Retainer from top side by hands to assemble umbrella valve in to Retainer **as shown in pic#5** **Umbrella valve को असेंबल करने के लिए Retainer को ऊपर की तरफ से दबाए**	1. No damage to Umbrella Valve 2. Umbrella valve stem has to be fully inserted	Correct Assembly	Fixture Design
○	6	Get UV Clip from SS tray **as shown in pic#6** **SS Tray से UV Clip उठाये**	Correct UV Clip (Part Number As Per Model Running)	Correct UV Clip	Visual Aid
○ ▼	7	Insert UV Clip into the Top Tool **as shown in pic#7** **UV Clip को Top Tool में लगाएं**	Correct Orientation	Proper Allignment	Visual Aid
○ ▼	8	Unload Retainer from nest 1 and load on nest 2 for clip insertion **as shown in pic#7** **Retainer को Nest 1 से निकालकर nest 2 में लगाएं**	Correct Orientation	Proper Allignment	
○ ✚ ▼ ▼	9	Activate m/c cycle: Fixture slide in forward direction thenTop Tool press clip into Retainer **Pic#8** & then Umbrella Valve test start. **M/c cycle activate करें : fixture forward direction में slide करेगा Top tool UV Clip को Retainer में press करेगा और उसके बाद Umbrella Valve टेस्ट स्टार्ट होगा**	Umbrella valve presence	Umbrella Valve working	Flow and Vacuum Inspection
			UV Clip Snap Lock	Tabs Fully engaged	Laser beam sensor
○ ◆ ▼	10	**Automatic :**Slide Return to home condition for unloading . **Automatic :slider वापस आएगा, part unloading के लिए**	No broken/damaged tabs UV Clip snap fully locked the Retainer	Tabs Fully engaged	Visual Aid
○ ◆	11	Unload sub assy.from nest & do visual inspection **sub assy. को unload करें और उसका visual inspection करें**	No damaged/dropped parts	Good part verification	
▼	12	Scrap Rejected Part. Load into Properly Identified scrap Bin. **as shown in pic#10** **rejected part को reject chute में डालें**	Proper Handling of Part	Reject Part Verification	Reject chute interlocked sensor
○	13	Move acceptable part to WIP. **As shown in pic#11** **acceptable part को WIP में रखें**	No Damage/Drop Parts	Drop part policy	WIP Design

#PIC 1

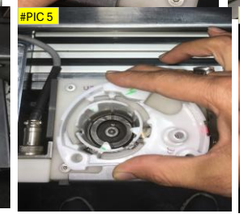
#PIC 2



#PIC 3

#PIC 4

#PIC 5



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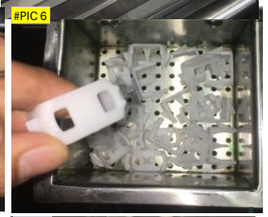

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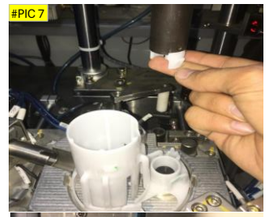

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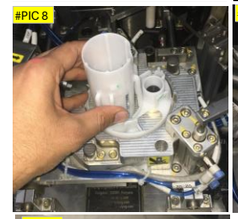

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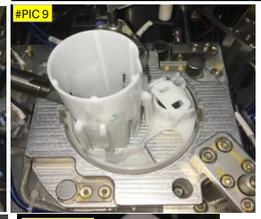


#PIC 9

#PIC 9

#PIC 10&11

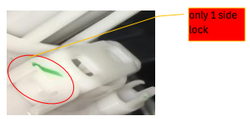
Pic 12

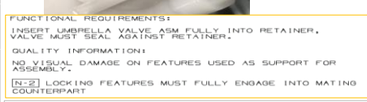
Pic 13

VISUAL AIDS

OK

NG





Unplanned Interruption Action: If any child part or sub assy fallen down on floor or there is electricity , or any other unplanned break down in between part processing. Take out part from machine & put it into rejection box.

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