

# POTENTIAL FAILURE MODE AND EFFECTS ANALYSIS

☐ Design FMEA

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## Part Certification

	System	X	Subsystem		Component	Page 1	FMEA Number COMPONENTS ELECTRONIC ASSY (e-FMEA DOC ID 5218366)																
Part Number (Delphi:15514473)						Design or Process Responsibility BRIONES, DIEGO ALBERTO						Prepared by MENDOZA, ERIK						Telephone # null					
Model Year(s)/Vehicle(s) COMPONENT						Key Date 2017-02-22 00:00:00						Original FMEA Date 2016-02-27 00:00:00						FMEA Revision Date 2020-03-04 13:24:16					
Core Team CHAVARRIA, VICTOR, INGENIERO DE PROCESOS +52 844 4115500 FLORES, LUIS G, SUP. ING. INDUSTRIAL +52 844 4115500 DOMINGUEZ, SALOME, RELIABILITY SUPERVISOR +52 RAMIREZ, FABIAN HORACIO, QUALITY ENGINEER +52 844 4115500 ZARTUCHE, JOSE LUIS, MATERIALS ENGINEER CENTEC II +52 844 4389060 MEDINA, EDUARDO, MANUFACTURING SUPERVISOR T"A" PLANT 8400 CENTEC 3 86-63-400 ext 5420 DAVID, CARRANZA, TECNICO AMBIENTAL PLANT 8400 CENTEC 3 +52 844 866 3400 Ext 3420																		Supervisor's Approval RUBIO, BERNARDO U					
Action Results																							
Item/Process Function Requirements	Potential Failure Mode	Potential Effect(s) of Failure	Sev	Class	Potential Cause(s)/ Mechanism(s) of Failure	Occ	Current Design/Process Controls	Detection	RPN	Recommended Actions	Responsibility & Target Completion Date	Actions Taken	Sev	Occ	Det	RPN							
10) RECEIVING MATERIAL IN DOCKS	SUSPECT MATERIAL	ASSEMBLY PROBLEMS	6	N/A	SUPPLIER PROBLEMS	2	(D) -VISUAL INSPECTION TO VERIFY THE CONTAINER CONDITION ACCORDING WORK INSTRUCTION - MATERIALS DEPARTMENT INSPECTS AND SEGREGATE DAMAGE MATERIAL -INSPECTION BY INCOMING INSPECTION	7	84	None													
10.1)	DAMAGED COMPONENT	-RAW MATERIAL CAN NOT BE USED -ASSEMBLY PROBLEM	6	N/A	-INCORRECT HANDLING DURING TRANSPORTATION -OPEN CONTAINER	2	(P) -CLOSED CONTAINER AND BOX -DOCK OPERATOR (D)VERIFY CONTAINER OR BOX IN GOOD CONDITION -VISUAL AID DISPLAYED	7	84	None													
10.11)	DAMAGED MATERIAL	ASSEMBLY PROBLEMS	6	N/A	IMPROPER MATERIAL HANDLING	2	(D) -VISUAL INSPECTION TO VERIFY THE CONTAINER CONDITION ACCORDING WORK INSTRUCTION - MATERIALS DEPARTMENT INSPECTS AND SEGREGATE DAMAGE MATERIAL -INSPECTION BY INCOMING INSPECTION	7	84	None													
20) VISUAL INSPECTION OF MATERIAL RECEIVED TO VERIFY PHYSICAL CONTAINER CONDITION AND COMPARE AGAINST MANIFEST	MISSING LABEL	RAW MATERIAL CAN NOT BE USED	4	N/A	-INCORRECT HANDLING DURING TRANSPORTATION -MISSING LABEL FROM SUPPLIER	2	(D) VISUAL INSPECTION AGAINST MANIFEST ACCORDING TO WORK INSTRUCTION	7	56	None													
20.1)	ILLEGIBLE LABEL	RAW MATERIAL CAN NOT BE USED	4	N/A	-DAMAGE DURING TRANSPORTATION -PRINTING PROBLEMS	3	(D) VISUAL INSPECTION AGAINST MANIFEST AND MATERIAL IS SEGREGATED ACCORDING THE WORK INSTRUCTION	6	72	None													
20.11)	MISSING MANIFESTED CONTAINER	-AFFECTS INVENTORIES - INTERRUPTED MANUFACTURING FLOW	4	N/A	MISSING FROM SUPPLIER -LOST DURING TRANSPORTATION	3	(D) VISUAL INSPECTION WITH MANIFEST, DISCREPANCY IS GENERATED ACCORDING THE WORK INSTRUCTION - SCANNING	7	84	None													
20.12)	DAMAGE CONTAINER	SUSPECT MATERIAL	4	N/A	-DAMAGE DURING TRANSPORTATION -INCORRECT HANDLING DURING TRANSPORTATION -BAD STACKED	3	(D) -VISUAL INSPECTION TO VERIFY THE CONTAINER CONDITION ACCORDING WORK INSTRUCTION - MATERIALS INSPECTS AND SEGREGATE DAMAGE MATERIAL -INSPECTION BY INCOMING INSPECTION	7	84	None													
20.13)	MATERIAL UNDER QUALITY ALERT	SUSPECT MATERIAL	4	N/A	-SUPPLIER REPORTS -MATERIAL OUT OF SPECIFICATION	2	(D) VISUAL INSPECTION ACCORDING TO WORK INSTRUCTION AND MATERIAL IS SEGREGATED TO BE SORTED OR RETURNED TO THE SUPPLIER QUALITY ALERT LIST FOR SUSPECT MATERIAL	8	64	None													
20.14)	DAMAGED MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	IMPROPER MATERIAL HANDLING INCORRECT FROM SUPPLIER	2	(D) VISUAL INSPECTION TO VERIFY THE CONTAINER CONDITION ACCORDING WORK INSTRUCTION - MATERIALS DEPARTMENT INSPECTS AND SEGREGATE DAMAGE MATERIAL -INSPECTION BY INCOMING INSPECTION	8	64	None													
25) CHECK OF THE AMOUNT OF RAW MATERIAL IN PARTS UNIQUE BOUGHT	MISSING VERIFICATION	DISCREPANCY IN INVENTORY	4	N/A	SUPPLIER	2	(P) INSTRUCTION, WORK INTRUCTION OPERADOR CERTIFICATE	7	56	None													
30) LOAD MATERIAL IN SYSTEM (SAP/QAS)	MISSING LOAD	-DISCREPANCY IN THE INFORMATION -AFFECTS INVENTORIES	4	N/A	-IMPROPER INFORMATION HANDLING -MISSING OPERATION	2	(P) -WORK INSTRUCTION FOR MATERIALS OPERATOR -(D)SCANNING OF THE MATERIAL	7	56	None													
40) MOVE MATERIAL FROM RAMP TO SUPERMARKET AREA OR MATERIAL SUSPECT/ UNDER QUALITY ALERT TO INCOMING INSPECTION	DAMAGED MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	IMPROPER MATERIAL HANDLING	2	(P) -OPERATOR METHOD	8	64	None													
40.1)	MIXED MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	IMPROPER MATERIAL HANDLING	2	(P) -OPERATOR METHOD -CERTIFICATED OPERATOR	8	64	None													
41) MOVE MATERIAL SUSPECT OR UNDER QUALITY ALERT TO INCOMING INSPECTION AREA	MIXTED MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	-INCORRECT HANDLING OF THE MATERIAL	2	(P) WORK INSTRUCTION FOR MATERIALS OPERATOR	8	64	None													
41.1)	DAMAGE MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	IMPROPER MATERIAL HANDLING	2	(P) WORK INSTRUCTION FOR MATERIALS OPERATOR	8	64	None													
42) MATERIAL ARE INSPECTED IN INCOMING INSPECTION AREA	DAMAGE OR MISSING LABEL	PROBLEM TO SCAN THE CUSTOMER INFORMATION	4	N/A	-INCORRECT HANDLING - PROBLEMS OF SUPPLIER	2	(D) -VISUAL INSPECTION BY OPERATOR OF INCOMING INSPECTION AREA	7	56	None													
42.11)	DAMAGE CONTAINER	SUSPECT MATERIAL	4	N/A	DAMAGE DURING TRANSPORTATION - INCORRECT HANDLING - BOXES WRONG ALLOCATED	2	(D) VISUAL INSPECTION TO VERIFY THE CONTAINER CONDITION ACCORDING WORK INSTRUCTION - MATERIALS INSPECTS AND SEGREGATE DAMAGE MATERIAL -VISUAL AID DISPLAYED -INSPECTION BY INCOMING INSPECTION	7	56	None													
42.13)	DAMAGED MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	IMPROPER MATERIAL HANDLING - INCORRECT FROM SUPPLIER	3	(P) WORK INSTRUCTION FOR MATERIALS OPERATOR	7	84	None													
42.14)	MATERIAL OUT SPECIFICATIONS (ATTRIBUTES)	RAW MATERIAL CAN NOT BE USED	4	N/A	INCORRECT FROM SUPPLIER	3	(D) VERIFICATION ACCORDING THE DRAWING VISUAL INSPECTION	7	84	None													

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						Action Results									
Item/Process Function Requirements	Potential Failure Mode	Potential Effect(s) of Failure	S e v	C l a s s	Potential Cause(s)/ Mechanism(s) of Failure	O c c	Current Design/Process Controls	D e t P N	Recommended Actions	Responsibility & Target Completion Date	Actions Taken	S e v	O c c	D e t	R P N
43) MATERIAL INSPECTED IS MOVED RAMPS OR MNC IS SCRAPPED OR RETURNED TO THE SUPPLIER	MIXED MATERIAL	-RAW MATERIAL CAN NOT BE USED -ASSEMBLY PROBLEM	4	N/A	-INCORRECT HANDLING DURING TRANSPORTATION -OPEN CONTAINER	2	(D) CLOSED CONTAINER AND BOX -DOCK OPERATOR VERIFY CONTAINER OR BOX IN GOOD CONDITION - VISUAL AID DISPLAYED	7	56	None					
43.1)	MATERIAL WITH OUT IDENTIFICATION	-RAW MATERIAL CAN NOT BE USED -ASSEMBLY PROBLEM	4	N/A	IMPROPER MATERIAL HANDLING	2	(P) WORK INSTRUCTION	8	64	None					
50) STORE MATERIAL IN SUPERMARKET / SHOP STOCK AREA	WRONG MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	INCORRECT ALLOCATION -SIMILAR COMPONENT	2	(P) WORK INSTRUCTION FOR MATERIALS OPERATOR	8	64	None					
50.1)	DAMAGE MATERIAL	RAW MATERIAL CAN NOT BE USED	4	N/A	IMPROPER MATERIAL HANDLING	2	(P) WORK INSTRUCTION FOR MATERIALS OPERATOR	8	64	None					
50.12)	MATERIAL MISSING ALLOCATE	RAW MATERIAL CAN NOT BE USED	4	N/A	P/N NEWS -LACK OF CAPACITY IN SUPERMARKET	2	(P) OPERATOR METHOD STORE -SAP SYSTEM -MAP OF LOCATION	8	64	None					
50.13)	MATERIAL WRONG ALLOCATE	RAW MATERIAL CAN NOT BE USED	4	N/A	IMPROPER MATERIAL HANDLING	2	(P) OPERATOR METHOD STORE -SAP SYSTEM -MAP OF LOCATION	8	64	None					
60) PRINT SHIPPING LABELS AND PROCESS CARD ACCORDING TO THE REQUERIMENTS	WRONG INFORMATION (LABEL)	WRONG DESTINY CUSTOMER INSATISFACTION	5	N/A	WRONG INFORMARTION LOADED	2	(D) -VISUAL INSPECTION BY MATERIALS OPERATOR	8	80	None					
60.1)	WRONG INFORMATION (PROCESS CARD)	WRONG DESTINY CUSTOMER INSATISFACTION	5	N/A	WRONG INFORMARTION LOADED	2	(D) -VISUAL INSPECTION BY MATERIALS OPERATOR	8	80	None					
60.11)	ILLEGIBLE LABEL	PROBLEM TO SCAN THE CUSTOMER INFORMATION	5	N/A	PRINTING PROBLEM	2	(D) VISUAL INSPECTION BY MATERIALS OPERATOR	8	80	None					
60.12)	DAMAGED LABEL	PROBLEMS TO SCAN THE SHIPPING LABEL	5	N/A	IMPROPER HANDLING	2	(D) VISUAL INSPECTION BY MATERIALS OPERATOR	8	80	None					
70) MOVE SHIPPING LABELS TO WORK STATION (WHEN APPLY)	SHIPPING LABEL MIXED	ASSEMBLY PROBLEM	4	N/A	IMPROPER HANDLING	2	(P) OPERATOR METHOD -D-VISUAL INSPECTION OF SERVICE OPERATOR	8	64	None					
70.1)	MISSING SHIPPING LABEL	ASSEMBLY CAN NOT BE BUILD	4	N/A	INCORRECT HANDLING LOOSING DURING TRANSPORTATION	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION OF SERVICE OPERATOR	8	64	None					
70.11)	DAMAGE LABEL	LABEL CAN NOT BE USED	5	N/A	INCORRECT HANDLING	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION OF SERVICE OPERATOR	8	80	None					
80) BUILD THE KIT ACCORDING TO THE REQUIREMENTS (WHEN APPLY)	WRONG TOOL	-ASSEMBLY PROBLEM	4	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD	7	56	None					
80.1)	WRONG MATERIAL	-ASSEMBLY PROBLEM	5	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD	8	80	None					
80.11)	WRONG SHIPPING LABEL	-ASSEMBLY PROBLEM	5	N/A	MISS OPERATION	2	(P) OPERATOR METHOD	8	80	None					
80.12)	WRONG IDENTIFICATION OF THE MATERIAL	-ASSEMBLY PROBLEM	5	N/A	INCORRECT HANDLING	2	(P) -OPERATOR METHOD	8	80	None					
80.13)	MIXED MATERIAL	-ASSEMBLY PROBLEM	5	N/A	MISS OPERATION	2	(P) OPERATOR METHOD	8	80	None					
80.14)	WRONG METHOD	MANUFACTURING FLOW INTERRUPTED INCORRECT ASSEMBLY	6	N/A	MISS OPERATION	2	(P) OPERATOR METHOD	8	96	None					
85) TO REQUEST SHIPPING LABEL FROM KIT PART NUMBER (WHEN APPLY)	WRONG INFORMATION	MANUFACTURING FLOW INTERRUPTED	6	N/A	MISS OPERATION	2	(P) OPERATOR METHOD	7	84	None					
90) MOVE MATERIAL, AND TOOL FROM KIT'S CENTER TO WORK STATION ACCORDING TO THE REQUIREMENTS (WHEN APPLY)	DAMAGED COMPONENT	ASSEMBLY PROBLEM	5	N/A	INCORRECT HANDLING DURING TRANSPORTATION	2	(P) USE OF CAR FOR TRANSPORTATION - OPERATOR METHOD	8	80	None					
90.1)	DAMAGED TOOL	ASSEMBLY PROBLEM	5	N/A	INCORRECT HANDLING DURING TRANSPORTATION	2	(P) USE OF CAR FOR TRANSPORTATION - OPERATOR METHOD	8	80	None					
90.11)	DAMAGED SHIPPING LABEL	SHIPPING LABEL CAN NOT BE USED	5	N/A	INCORRECT HANDLING DURING TRANSPORTATION	2	(P) USE OF CAR FOR TRANSPORTATION - OPERATOR METHOD	8	80	None					
100) MOVE MATERIAL, PACKING MATERIAL AND TOOL OF THE P/N CHANGE FROM WORK STATION TO KIT'S CENTER OR PACKING CAR (WHEN APPLY)	DAMAGED COMPONENT	ASSEMBLY PROBLEM	5	N/A	INCORRECT HANDLING DURING TRANSPORTATION	2	(P) USE OF CAR FOR TRANSPORTATION - OPERATOR METHOD	8	80	None					
100.1)	DAMAGED TOOL	ASSEMBLY PROBLEM	5	N/A	INCORRECT HANDLING DURING TRANSPORTATION	2	(P) USE OF CAR FOR TRANSPORTATION - OPERATOR METHOD	8	80	None					
105) TRANSFER MATERIAL FROM SUPERMARKET AND SHOP STOCK SLOCK (SLOCK 1) TO WIP SLOCK (SLOCK 2) IN SAP/QAS SYSTEM (SCANNING)	MISSING SCANNING	AFFECTED INVENTORY MANUFACTURING FLOW INTERRUPTED	4	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD	7	56	None					

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Item/Process Function Requirements	Potential Failure Mode	Potential Effect(s) of Failure	Severity	Class	Potential Cause(s)/ Mechanism(s) of Failure	Occurrence	Current Design/Process Controls	Defect Potential	RPN	Recommended Actions	Responsibility & Target Completion Date	Actions Taken	Severity	Occurrence	Defect Potential	RPN	
105.1)	MATERIAL WITH OUT IDENTIFICATION	MANUFACTURING INTERRUPTED FLOW	4	N/A	INCORRECT HANDLING OF THE MATERIAL	2	(P) -OPERATOR METHOD	7	56	None							
110) MOVE COMPONENT FROM SUPERMARKET, PARTS PURCHASED SHOP STOCK AND MOLDING SHOP STOCK AREA TO WORK STATION	DAMAGED COMPONENT	ASSEMBLY PROBLEM	4	N/A	INCORRECT HANDLING DURING TRANSPORTATION	2	(P) USE OF CAR FOR TRANSPORTATION (D)-SERVICE OPERATOR VERIFY CONTAINER GOOD CONDITION PERMITTED AMOUNT OF STACK MATERIAL IS INDICATED TO SERVICE	8	64	None							
110.1)	MIXED COMPONENT	-RAW MATERIAL CAN NOT BE USED -ASSEMBLY PROBLEM	4	N/A	-INCORRECT HANDLING DURING TRANSPORTATION	3	(P) -SERVICE OPERATOR METHOD	8	96	None				8			
110.11)	WRONG COMPONENT	-RAW MATERIAL CAN NOT BE USED -ASSEMBLY PROBLEM	4	N/A	-INCORRECT HANDLING DURING TRANSPORTATION	2	(P) -SERVICE OPERATOR METHOD	8	64	None							
140) MOVE BOXES, RETURNABLE CONTAINERS FROM SUPERMARKET AREA TO WORK STATION	DAMAGE CONTAINER	CONTAINER CAN NOT BE ISED	4	N/A	INCORRECT HANDLING	2	(P) -TRANSPORTATION IN CARS -OPERATOR METHOD	8	64	None							
140.1)	DIRTY CONTAINER	CONTAINER CAN NOT BE USED	4	N/A	INCORRECT HANDLING	2	(P) CONTAINER MUST BE CLEAN BY MATERIAL S OPERATOR BEFORE BE USED ACCORDING TO THE OPERATOR METHOD	8	64	None							
140.11)	WRONG CONTAINER OR BOX	CONTAINER CAN NOT BE USED	4	N/A	MISS OPERATION	2	(P) -MATERIAL OPERATOR METHOD	8	64	None							
145) MOVE FINISHED GOOD FROM INCOMPLETE CONTAINER AREA TO WORK STATION (WHEN APPLY)	INCOMPLETE FINISH GOOD CONTAINER INVENTORY HIGH	OVER STOCK	4	N/A	MISS OPERATION	2	(P) -WORK METHOD	8	64	None							
150) VERIFICATION OF SET-UP BY MANUFACTURING	INCORRECT VERIFICATION	MANUFACTURING FLOW INTERRUPTED	4	N/A	INCORRECT INFORMATION USE	2	(D) VERIFICATION OF SET-UP ROUTINE	8	64	None							
150.1)	MISSING METHOD	INTERRUPTED MANUFACTURING FLOW	6	N/A	INCORRECT HANDLING OF METHOD	2	(D) -MANUFACTURING INSPECTION	8	96	None							
150.2)	WRONG OR BAD STATE METHOD	INTERRUPTED MANUFACTURING FLOW	6	N/A	MISS OPERATION	2	(D) -MANUFACTURING INSPECTION	8	96	None							
150.3)	NOT RELEASED METHODS	INTERRUPTED MANUFACTURING FLOW	6	N/A	MISS OPERATION	2	(D) -MANUFACTURING INSPECTION	8	96	None							
150.4)	ASSEMBLY OUT SPECIFICATIONS (ATTRIBUTES)	MATERIAL CAN NOT BE USE	6	N/A	INCORRECT FROM SUPPLIER	2	(P) OPERATOR METHOD TRAINING OPERATOR	8	96	None							
150.5)	WRONG OR DAMAGE TOOL	ASSEMBLY PROBLEMS	6	N/A	MISS OPERATION INCORRECT HANDLING OF THE TOOL	2	(P) OPERATOR METHOD TRAINING OPERATOR	8	96	None							
150.51)	WRONG OR DAMAGE EQUIPMENT	ASSEMBLY PROBLEMS	6	N/A	MISS OPERATION INCORRECT HANDLING OF THE TOOL	2	(D) OPERATOR VERIFICATION OF SET-UP ROUTINE	8	96	None							
150.6)	NOT IDENTIFIED CONTAINER	MATERIAL CAN NOT BE USED	4	N/A	IMPROPER HANDLING OF THE MATERIAL MISS OPERATION	2	(P) OPERATOR METHOD	8	64	None							
160) PLACE SHIPPING LABEL ON CONTAINER/BOX	WRONG LABEL	MISS ID-CUSTOMER INSATISFACTION	4	N/A	MISS OPERATION, OPERATOR DOES NOT VERIFY THE SHIPPING LABEL AGAINST THE METHOD - SIMILAR COMPONENT	2	(P) OPERATOR METHOD -D- -MANUFACTURING VERIFY -Q.C FINAL AUDIT	8	64	None							
160.11)	DAMAGED LABEL	SHIPPING LABEL CAN NOT BE USED - MANUFACTURING FLOW INTERRUPTED	4	N/A	-INCORRECT HANDLING - INCORRECT PRINTING	2	(D) MANUFACTURING INSPECTION -D- Q.C FINAL VERIFY -VPS IN SHIPPING LABEL PRINTING AREA	8	64	None							
160.12)	WRONG PLACED LABEL	MANUFACTURING FLOW INTERRUPTED	4	N/A	MISS OPERATION	2	(D) Q.C FINAL INSPECTION OPERATOR METHOD	8	64	none							
162) SCANING, PROCESS CARD, TOOL NEST, COMPONENTS. ID OPERATOR AND SHIPPING LABEL.	WRONG WORK METHOD	INTERRUPTED MANUFACTURING FLOW - ASSEMBLY PROBLEM	4	N/A	MISS OPERATION	2	(P) OPERATOR METHOD -(D)SCANING WITH ELECTRONIC DETECTION	8	64	None							
162.1)	WRONG TOOL NEST	INTERRUPTED MANUFACTURING FLOW - ASSEMBLY PROBLEM	4	N/A	MISS OPERATION	2	(P) OPERATOR METHOD -(D)SCANING WITH ELECTRONIC DETECTION	8	64	None							
162.2)	WRONG COMPONENT	INTERRUPTED MANUFACTURING FLOW - ASSEMBLY PROBLEM	4	N/A	MISS OPERATION	2	(P) OPERATOR METHOD -(D)SCANING WITH ELECTRONIC DETECTION	8	64	None							
162.3)	WRONG SHIPPING LABEL	INTERRUPTED MANUFACTURING FLOW - ASSFMBLY PROBLEM.	4	N/A	MISS OPERATION	2	(P) OPERATOR METHOD -(D)SCANING WITH ELECTRONIC DETECTION	8	64	None							

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180) ASSEMBLY CPA ON CONNECTOR	DAMAGED CONNECTOR	ASSEMBLY PROBLEMS	5	N/A	7MPROPER MATERIAL HANDLING - BROKEN FROM SUPPLIER - IMPROPER PACKAGING	2	(P) OPERATOR METHOD -D- -MANUFACTURING INSPECTION -AUDIT PRODUCT OF FINAL ASSEMBLY- FIRST SAMPLE BY MANUFACTURING-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)	7	70	None							
180.1)	CONTAMINATED CONNECTOR BY FOOD	ASSEMBLY PROBLEMS	7	N/A	-FOOD AND DRINK IN WORK AREA - -LACK OF DISCIPLINE	2	(D) OPERATOR HAS AN SPECIFIC AREA AND TIME FOR LUNCH AWAY OF THE WORK AREA - VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)	7	98	None							
180.2)	WRONG CONNECTOR	ASSEMBLY PROBLEMS	7	N/A	-IMPROPER MATERIAL HANDLING - SIMILAR P/N	2	(P) OPERATOR METHOD -D-MANUFACTURING INSPECTION - AUDIT PRODUCT OF FINAL ASSEMBLY- FIRST SAMPLE BY MANUFACTURING IN EVERY STANDAR PACK -TOOL NEST-VERIFIACATION OF MATERIAL BY Q.C. (SYSTEM AVE) -CCA SYSTEM	7	98	None							
180.21)	DAMAGED CPA	ASSEMBLY PROBLEMS	7	N/A	IMPROPER MATERIAL HANDLING - BROKEN FROM SUPPLIER - IMPROPER PACKAGING	2	(P) OPERATOR METHOD -D- -MANUFACTURING INSPECTION -AUDIT PRODUCT OF FINAL ASSEMBLY- FIRST SAMPLE BY MANUFACTURING-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)	7	98	None							
180.3)	MISSING CPA	ASSEMBLY PROBLEMS	7	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD --D- -MANUFACTURING INSPECTION -TOOLING WITH ELECTRONIC DETECTION-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY.	5	70	None							
180.4)	WRONG CPA	ASSEMBLY PROBLEMS	7	N/A	-IMPROPER MATERIAL HANDLING - SIMILAR P/N	2	(P) OPERATOR METHOD -D-MANUFACTURING INSPECTION - AUDIT PRODUCT OF FINAL ASSEMBLY- FIRST SAMPLE BY MANUFACTURING IN EVERY STANDAR PACK -TOOL NEST-VERIFIACATION OF MATERIAL BY Q.C. (SYSTEM AVE) -CCA SYSTEM	5	70	None							
180.5)	BAD ASSEMBLED CPA	ASSEMBLY PROBLEMS	7	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD --D- -MANUFACTURING INSPECTION -TOOLING WITH ELECTRONIC DETECTION-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY.	5	70	None							
190) ASSEMBLY CABLE SEAL & RETAINER ON CONNECTOR - CPA	DAMAGE CABLE SEAL	ASSEMBLY PROBLEMS	7	N/A	IMPROPER MATERIAL HANDLING	2	(D) MANUFACTURING INSPECTION -AUDIT PRODUCT OF FINAL ASSEMBLY-VERIFICATION OF MATERIAL BY Q.C.(SYSTEM AVE)OPERATOR METHOD	7	98	None							
190.1)	WRONG CABLE SEAL	ASSEMBLY PROBLEMS	7	N/A	IMPROPER MATERIAL HANDLING - INCORRECT FROM SUPPLIER	2	(P) OPERATOR METHOD -D-MANUFACTURING INSPECTION -FIRST SAMPLE RELEASED -TOOL NEST- AUDIT PRODUCT OF FINAL ASSEMBLY-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE) -CCA SYSTEM - VISION SYSTEM	4	56	None							
190.2)	BAD ASSEMBLED CABLE SEAL	ASSEMBLY PROBLEMS	7	N/A	- MISS OPERATION - WORN RETAINER - DAMAGED RETAINER	2	(P) -OPERATOR METHOD -D- MANUFACTURING INSPECTION -TOOL NEST-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT FINAL ASSEMBLY -VISION SYSTEM	4	56	None							
190.3)	CABLE SEAL CONTAMINATED BY FOOD	ASSEMBLY PROBLEMS - INTERMITENCE	5	N/A	FOOD AND DRINK IN WORK AREA - LACK OF DISCIPLINE	2	(P) OPERATOR HAS AND SPECIFIC AREA AND TIME FOR LUNCH AWAY OF THE WORK AREA	8	80	None							
190.4)	MISSING CABLE SEAL	ASSEMBLY PROBLEMS	7	N/A	- MISS OPERATION	2	(P) -OPERATOR METHOD - MANUFACTURING INSPECTION -VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY -FIRST SAMPLE RELEASED -TOOL NEST -VISION SYSTEM	4	56	None							
190.5)	MISSING RETAINER	ASSEMBLY PROBLEMS	7	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD --D- -MANUFACTURING INSPECTION -TOOLING WHIT ELECTRONIC DETECTION-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY -VISION SYSTEM	4	56	None							
190.6)	DAMAGE RETAINER	ASEMBLY PROBLEMS	7	N/A	IMPROPER MATERIAL HANDLING - DAMAGE FROM SUPPLIER	2	(D) MANUFACTURING INSPECTION -VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY-FIRST SAMPLE RELEASE	7	98	None							
190.7)	WRONG RETAINER	ASSEMBLY PROBLEMS	7	N/A	INCORRECT MATERIAL HANLING - MIX MATERIAL	2	(P) -OPERATOR METHOD -MANUFACTURING INSPECTION -Q.C. FINAL INSPECTION-VISUAL - VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE) AUDIT PRODUCT OF FINAL ASSEMBLY -CCA SYSTEM -VISION SYSTEM	4	56	None							

# POTENTIAL FAILURE MODE AND EFFECTS ANALYSIS

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## Part Certification

	System	X	Subsystem		Component		Page 1	FMEA Number COMPONENTS ELECTRONIC ASSY (e-FMEA DOC ID 5218366)								
Part Number (Delphi:15514473)				Design or Process Responsibility BRIONES, DIEGO ALBERTO				Prepared by MENDOZA, ERIK				Telephone # null				
Model Year(s)/Vehicle(s) COMPONENT				Key Date 2017-02-22 00:00:00				Original FMEA Date 2016-02-27 00:00:00				FMEA Revision Date 2020-03-04 13:24:16				
Core Team CHAVARRIA, VICTOR, INGENIERO DE PROCESOS +52 844 4115500 FLORES, LUIS G, SUP. ING. INDUSTRIAL +52 844 4115500 DOMINGUEZ, SALOME, RELIABILITY SUPERVISOR +52 RAMIREZ, FABIAN HORACIO, QUALITY ENGINEER +52 844 4115500 ZARTUCHE, JOSE LUIS, MATERIALS ENGINEER CENTEC II +52 844 4389060 MEDINA, EDUARDO, MANUFACTURING SUPERVISOR T*A* PLANT 8400 CENTEC 3 86-63-400 ext 5420 DAVID, CARRANZA, TECNICO AMBIENTAL PLANT 8400 CENTEC 3 +52 844 866 3400 Ext 3420								Supervisor's Approval RUBIO, BERNARDO U								
												Action Results				
Item/Process Function Requirements	Potential Failure Mode	Potential Effect(s) of Failure	Sev	Cla ss	Potential Cause(s)/ Mechanism(s) of Failure	Occ	Current Design/Process Controls	D et t N	R P N	Recommended Actions	Responsibility & Target Completion Date	Actions Taken	Sev	Occ	D et t N	
190.8)	BAD ASSEMBLY RETAINER	ASSEMBLY PROBLEMS	7	N/A	MISSING OPERATION. INCORRECT TOOL NEST	2	(P) -OPERATOR METHOD -TOOL NEST TO ASURE THE CORRECT ASSEMBLY -D- -MANUFACTURING INSPECTION -VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY -VISION SYSTEM	4	56	None						
190.9)	CONTAMINATED RETAINER BY FOOD	ASSEMBLY PROBLEMS - INTERMITENCE	5	N/A	FOOD AND DRINK IN WORK AREA - LACK OF DISCIPLINE	2	(P) OPERATOR HAS AND SPECIFIC AREA AND TIME FOR LUNCH AWAY OF THE WORK AREA	8	80	None						
195) ASSEMBLY SEAL	TWISTED SEAL	ASSEMBLY PROBLEMS	7	N/A	-MISS OPERATION-WRONG FIXTURE-IMPROPER LUBRICATION IN SEAL	2	(P) -OPERATOR METHOD -D- MANUFACTURING INSPECTION -VERIFICATION OF MATERIAL BY Q.C.(SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY -TOOL NEST	5	70	None						
195.1)	DAMAGED SEAL	ASSEMBLY PROBLEMS	7	N/A	-IMPROPER MATERIAL HANDLING- INCORRECT MOLDING	2	(P) -OPERATOR METHOD -D- MANUFACTURING INSPECTION -VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY	7	98	None						
195.11)	TWISTED SEAL (YAZAKI SYA DPRTS ID: 364536 P/N: 15514821)	ASSEMBLY PROBLEMS	7	N/A	-MISS OPERATION-WRONG FIXTURE-IMPROPER LUBRICATION IN SEAL - WRONG POSITIONED SEAL IN HOLDER.	3	(P) -OPERATOR METHOD -D- MANUFACTURING INSPECTION -VERIFICATION OF MATERIAL BY Q.C.(SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY -TOOL NEST	7	147	PLACE A FORWARD STOP (GUIDE) TO PREVENT THAT THE OPERATOR SLIDE THE CONNECTOR INTO THE SEAL HOLDER.	CHAVARRIA, VICTOR 2017-12-04 00:00:00	PLACE A FORWARD STOP (GUIDE) TO PREVENT THAT THE OPERATOR SLIDE THE CONNECTOR INTO THE SEAL HOLDER.	7	2	5	70
195.12)	TWISTED SEAL	ASSEMBLY PROBLEMS	7	N/A	-MISS OPERATION-WRONG FIXTURE-IMPROPER LUBRICATION IN SEAL - WRONG POSITIONED SEAL IN HOLDER.	2	-OPERATOR METHOD -D- MANUFACTURING INSPECTION -VERIFICATION OF MATERIAL BY Q.C.(SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY -TOOL NEST -POKAYOKE	5	70	None						
195.2)	WRONG SEAL	ASSEMBLY PROBLEMS	6	N/A	-IMPROPER MATERIAL HANDLING - INCORRECT FROM SUPPLIER	2	(P) OPERATOR METHOD -D-MANUFACTURING INSPECTION -FIRST SAMPLE RELEASED -TOOL NEST- VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)- AUDIT PRODUCT OF FINAL ASSEMBLY-CCA SYSTEM	7	84	None						
195.3)	WRONG POSITIONED SEAL (ROUND SEAL)	ASSEMBLY PROBLEMS	7	N/A	-MISS OPERATION	2	(P) OPERATOR METHOD -D-MANUFACTURING INSPECTION -TOOL NEST-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY	7	98	None						
195.4)	SEAL NOT FULLY SEATED	ASSEMBLY PROBLEMS	7	N/A	-MISS OPERATION -WORN TOOL - DAMAGE TOOL - DOES NOT USE THE FIXTURE	2	(P) -OPERATOR METHOD -D-MANUFACTURING INSPECTION -FIRST SAMPLE RELEASED -TOOL NEST- VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)- AUDIT PRODUCT OF FINAL ASSEMBLY -TOOLING WHIT ELECTRONIC DETECTION.	5	70	None						
195.5)	DOUBLE SEAL	ASSEMBLY PROBLEMS IN MATING PART	7	N/A	-MISS OPERATION -OPERATOR DOES NOT USE THE FIXTURE	2	(P) -OPERATOR METHOD -D -MANUFACTURING INSPECTION -FIRST SAMPLE RELEASED FOR MANUFACTURING -TOOL NEST -AUDIT PRODUCT OF FINAL ASSEMBLY-VERIFICATION OF MATERIALBY Q.C.(SYSTEM AVE) -TOOLING WHIT ELECTRONIC DETECTION	5	70	None						
195.6)	CONTAMINATED SEAL BY DUST	ASSEMBLY PROBLEMS	5	N/A	-INCORRECT MATERIAL HANDLING	2	(D) MANUFACTURING INSPECTION -Q.C FINAL AUDIT -FIRST SAMPLE RELEASED BY Q.C	8	80	None						
195.7)	CONTAMINATED SEAL BY FOOD	ASSEMBLY PROBLEMS	5	N/A	-FOOD AND DRINK IN WORK AREA -LACK OF DISCIPLINE	2	(D) OPERATOR HAS AN SPECIFIC AREA AND TIME FOR LUNCH AWAY OF THE WORK AREA	7	70	None						
195.8)	MISSING SEAL	ASSEMBLY PROBLEMS, FOREING MATERIAL CAN GET INTO CONNECTOR	7	N/A	-MISS OPERATION -DAMAGE TOOL -DAMAGE FIXTURE	2	(P) -OPERATOR METHOD -MANUFACTURING INSPECTION -FIRST SAMPLE RELEASED FOR MANUFACTURING -TOOLING WITH ELECTRONIC DETECTION-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY.	7	98	None						
200) ASSEMBLY PLR	DAMAGE PLR	ASSEMBLY PROBLEMS	7	N/A	IMPROPER MATERIAL HANDLING	2	(D) MANUFACTURING INSPECTION -AUDIT PRODUCT OF FINAL ASSEMBLY-VERIFICATION OF MATERIAL BY Q.C.(SYSTEM AVE)OPERATOR METHOD	7	98	None						
200.1)	WRONG PLR	ASSEMBLY PROBLEMS	7	N/A	IMPROPER MATERIAL HANDLING - INCORRECT FROM SUPPLIER	2	(D) OPERATOR METHOD -D-MANUFACTURING INSPECTION -FIRST SAMPLE RELEASED -TOOL NEST- AUDIT PRODUCT OF FINAL ASSEMBLY-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-CCA SYSTEM	5	70	None						
200.2)	BAD ASSEMBLED PLR	ASSEMBLY PROBLEMS	6	N/A	MISS OPERATION - WORN FIXTURE - DAMAGE FIXTURE - INCORRECT TOOLING - PLR OUT OF SPECIFICATION	2	(P) -OPERATOR METHOD -D- MANUFACTURING INSPECTION -TOOL NEST-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT FINAL ASSEMBLY-ORDER OF PROGRAMED WORK OF MAINTENANCE -TOOLING WHIT ELECTRONIC DETECTION.	5	60	None						

# POTENTIAL FAILURE MODE AND EFFECTS ANALYSIS

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	System	X	Subsystem		Component		Page 1	FMEA Number COMPONENTS ELECTRONIC ASSY (e-FMEA DOC ID 5218366)								
Part Number (Delphi:15514473)						Design or Process Responsibility BRIONES, DIEGO ALBERTO		Prepared by MENDOZA, ERIK		Telephone # null						
Model Year(s)/Vehicle(s) COMPONENT						Key Date 2017-02-22 00:00:00		Original FMEA Date 2016-02-27 00:00:00		FMEA Revision Date 2020-03-04 13:24:16						
Core Team CHAVARRIA, VICTOR, INGENIERO DE PROCESOS +52 844 4115500 FLORES, LUIS G, SUP. ING. INDUSTRIAL +52 844 4115500 DOMINGUEZ, SALOME, RELIABILITY SUPERVISOR +52 RAMIREZ, FABIAN HORACIO, QUALITY ENGINEER +52 844 4115500 ZARTUCHE, JOSE LUIS, MATERIALS ENGINEER CENTEC II +52 844 4389060 MEDINA, EDUARDO, MANUFACTURING SUPERVISOR T"A" PLANT 8400 CENTEC 3 86-63-400 ext 5420 DAVID, CARRANZA, TECNICO AMBIENTAL PLANT 8400 CENTEC 3 +52 844 866 3400 Ext 3420								Supervisor's Approval RUBIO, BERNARDO U								
Action Results																
Item/Process Function Requirements	Potential Failure Mode	Potential Effect(s) of Failure	S e v	C l a s s	Potential Cause(s)/ Mechanism(s) of Failure	O c c	Current Design/Process Controls	D e t	R P N	Recommended Actions	Responsibility & Target Completion Date	Actions Taken	S e v	O c c	D e t	R P N
200.3)	PLR FULLY SEATED	ASSEMBLY PROBLEMS	6	N/A	PLR OUT OF SPECIFICATION - WORN FIXTURE - DAMAGE FIXTURE	2	(P) -OPERATOR METHOD - -D- MANUFACTURING INSPECTION -TOOL NEST-VERIFICATION OF MATERIALBY Q.C.(SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY-FIRST SAMPLE RELEASED - TOOLING WHIT ELECTRONIC DETECTION.	5	60	None						
200.4)	PLR CONTAMINATED BY FOOD	ASSEMBLY PROBLEMS - INTERMITENCE	6	N/A	FOOD AND DRINK IN WORK AREA - LACK OF DISCIPLINE	2	(P) OPERATOR HAS AND SPECIFIC AREA AND TIME FOR LUNCH AWAY OF THE WORK AREA	7	84	None						
200.5)	MISSING PLR	ASSEMBLY PROBLEMS	7	N/A	- MISS OPERATION - PLR OUT OF SPECIFICATION - WRONG TOOL.	2	(P) OPERATOR METHOD - MANUFACTURING INSPECTION - TOOLING WITH ELECTRONIC DETECTION-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE)-AUDIT PRODUCT OF FINAL ASSEMBLY -FIRST SAMPLE RELEASED -TOOL NEST	5	70	None						
290) FIRST SAMPLE RELEASED BY Q.C. PROCESS AUDIT BY Q.C.	ASSEMBLY OUT OF SPECIFICATION	ASSEMBLY PROBLEM	7	N/A	MISS OPERATION - MATERIAL OUT SPECIFICATION	2	(D) FIRST SAMPLE RELEASED WORK INSTRUCTION - INSPECTION ACCORDING TO THE DRAWING	7	98	None						
290.02)	INCORRECT AUDIT	MANUFACTURING FLOW INTERRUPTED	7	N/A	INCORRECT INFORMATION USE	2	(P) WORK INSTRUCTION OPERATOR TRAINING	7	98	None						
290.03)	MISSING AUDIT	INTERRUPTED MANUFACTURING FLOW	6	N/A	INCORRECT INFORMATION USE	2	(P) WORK INSTRUCTION OPERATOR TRAINING	7	84	None						
310) FINISH ASSEMBLY IS PACKAGED BAG IS CLOSED	DAMAGE MATERIAL	ASSEMBLY PROBLEM	7	N/A	INCORRECT MATERIAL HANDLING IMPROPER PACKING	2	(D) MANUFACTURING INSPECTION - Q.C. FINAL AUDIT	7	98	None						
310.1)	INCOMPLETE STD PACK	CUSTOMER INSATISFACTION	6	N/A	MISS OPERATION	2	(P) PACKING INFORMATION ELECTRICAL ACCOUNT IN WORK STATION	7	84	None						
310.111)	WRONG SHIPPING LABEL	INTERRUPTED MANUFACTURING FLOW	6	N/A	MISS OPERATION	2	(D) SCANNING WITH ELECTRONIC DETECTION (P) - OPERATOR METHOD	7	84	None						
310.13)	WRONG CONTAINER OR BOX	ASSEMBLY PROBLEM	6	N/A	-INCORRECT HANDLING IMPROPER PACKING	2	(D) -MANUFACTURING INSPECTION -Q.C FINAL AUDIT	7	84	None						
310.15)	WRONG PACKING	CUSTOMER INSATISFACTION	6	N/A	MISS OPERATION	2	(D) -MANUFACTURING INSPECTION -Q.C FINAL AUDIT	7	84	None						
310.16)	WRONG SHIPPING LABEL	INTERRUPTED MANUFACTURING FLOW	6	N/A	MISS OPERATION	2	(D) SCANNING WITH ELECTRONIC DETECTION (P) - OPERATOR METHOD	7	84	None						
316) MOVE FINISH GOOD CONTAINER FROM WORK STATION TO INCOMPLETE CONTAINER AREA (WHEN APPLY)	FINISHED GOOD IS NOT SENT TO INCOMPLETE CONTAINER AREA	CUSTOMER INSATISFACTION	5	N/A	MISS OPERATION	2	(P) WORK METHOD	8	80	None						
318) RELABELING WHEN APPLY	WRONG SHIPPING LABEL	CUSTOMERS INSATISFACTION	4	N/A	IMPROPER MATERIAL HANDLING - SYSTEM PROBLEM	2	(P) OPERATOR TRAINING (D) VISUAL INSPECTION	8	64	None						
318.1)	DAMAGE SHIPPING LABEL	ASSEMBLY PROBLEMS	4	N/A	IMPROPER MATERIAL HANDLING - SYSTEM PROBLEM	2	(P) OPERATOR TRAINING (P) VISUAL INSPECTION	8	64	None						
318.2)	INACTIVE SHIPPING LABEL	SHIPPING LABEL CAN NOT BE READ	4	N/A	IMPROPER MATERIAL HANDLING - SYSTEM PROBLEM	2	(P) OPERATOR TRAINING (P) VISUAL INSPECTION	8	64	None						
320) FINISHED GOOD CONTAINERS ARE MOVED TO MANUFACTURING INSPECTION AREA WHEN APPLY	DAMAGED MATERIAL	ASSEMBLY PROBLEMS	4	N/A	-IMPROPER MATERIAL HANDLING - THERE IS NOT METHOD	2	(D) -MANUFACTURING INSPECTION -Q.C FINAL AUDIT	8	64	None						
320.1)	DAMAGE LABEL	LABEL CAN NOT BE USED	4	N/A	INCORRECT HANDLING	2	(P) OPERATOR METHOD	8	64	None						
320.11)	MISSING SHIPPING LABEL	ASSEMBLY CAN NOT BE BUILD	4	N/A	INCORRECT HANDLING LOOSING DURING TRANSPORTATION	2	(P) OPERATOR METHOD	8	64	None						
320.13)	DAMAGE CONTAINER	SUSPECT MATERIAL	4	N/A	DAMAGE DURING TRANSPORTATION	2	(P) OPERATOR METHOD	8	64	None						
325) VERIFICATION OF SET-UP IN MANUFACTURING INSPECTION AREA	INCORRECT VERIFICATION	SUSPECT MATERIAL	5	N/A	MISS OPERATION	2	(D) VERIFICATION OF ROUTINE OF SET UP IN MANUFACTURING INSPECTION AREA	8	80	None						
330) MANUFACTURING INSPECTION (CONTAINMENT IS APPLIED WHEN APPLY)	FIRST SAMPLE MISSING	MATERIAL CAN NOT BE INSPECTED BY Q.C	6	N/A	-MISS OPERATION -FELT DOWN DURING TRANSPORTATION	2	(P) -OPERATOR METHOD (D) -VISUAL INSPECTION	8	96	None						
330.1)	ASSEMBLY OUT OF SPECIFICATION ACCORDING ATTRIBUTES	ASSEMBLY PROBLEMS	7	N/A	-INCORRECT MATERIAL HANDLING -INCORRECT USE OF VERIFIERS WHEN APPLY	2	(P) -OPERATOR METHOD (D) -VISUAL INSPECTION	7	98	None						
330.11)	WRONG CONTAINER	SUSPECT MATERIAL	5	N/A	IMPROPER INFORMATION HAND	2	(D) -OPERATOR METHOD (D) -VISUAL INSPECTION	8	80	None						
330.13)	DAMAGE SHIPPING LABEL	LABEL CAN NOT BE USED	5	N/A	INCORRECT HANDLING	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION OF SERVICE OPERATOR	8	80	None						
330.14)	MISSING SHIPPING LABEL	ASSEMBLY CAN NOT BE BUILD	5	N/A	INCORRECT HANDLING LOOSING DURING TRANSPORTATION	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION OF SERVICE OPERATOR	8	80	None						

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System		<input checked="" type="checkbox"/>	Subsystem	Component		Page 1		FMEA Number COMPONENTS ELECTRONIC ASSY (e-FMEA DOC ID 5218366)						
Part Number (Delphi:15514473)				Design or Process Responsibility BRIONES, DIEGO ALBERTO				Prepared by MENDOZA, ERIK		Telephone # null				
Model Year(s)/Vehicle(s) COMPONENT				Key Date 2017-02-22 00:00:00				Original FMEA Date 2016-02-27 00:00:00		FMEA Revision Date 2020-03-04 13:24:16				
Core Team CHAVARRIA, VICTOR, INGENIERO DE PROCESOS +52 844 4115500 FLORES, LUIS G. SUP. ING. INDUSTRIAL +52 844 4115500 DOMINGUEZ, SALOME, RELIABILITY SUPERVISOR +52 RAMIREZ, FABIAN HORACIO, QUALITY ENGINEER +52 844 4115500 ZARTUCHE, JOSE LUIS, MATERIALS ENGINEER CENTEC II +52 844 4389060 MEDINA, EDUARDO, MANUFACTURING SUPERVISOR T"A" PLANT 8400 CENTEC 3 86-63-400 ext 5420 DAVID, CARRANZA, TECNICO AMBIENTAL PLANT 8400 CENTEC 3 +52 844 866 3400 Ext 3420								Supervisor's Approval RUBIO, BERNARDO U						
Action Results														
Item/Process Function Requirements	Potential Failure Mode	Potential Effect(s) of Failure	S e v	C l a s s	Potential Cause(s)/ Mechanism(s) of Failure	O c c	Current Design/Process Controls	D e t P N	Recommended Actions	Responsibility & Target Completion Date	Actions Taken	S e v	O c c	D e t P N
330.16)	WRONG SHIPPING LABEL	-ASSEMBLY PROBLEM	6	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD (D) -VISUAL INSPECTION	8	96	None				
340) MOVE FINISH GOOD CONTAINER TO Q.C. INSPECTION AREA WHEN APPLY	DAMAGED MATERIAL	ASSEMBLY PROBLEMS	6	N/A	- IMPROPER MATERIAL HANDLING	2	(D) Q.C. FINAL AUDIT	8	96	None				
340.1)	DAMAGE CONTAINER	SUSPECT MATERIAL	6	N/A	DAMAGE DURING TRANSPORTATION	2	(P) OPERATOR METHOD	8	96	None				
340.11)	DAMAGE SHIPPING LABEL	LABEL CAN NOT BE USED	6	N/A	INCORRECT HANDLING	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION OF SERVICE OPERATOR	8	96	None				
340.12)	MISSING SHIPPING LABEL	ASSEMBLY CAN NOT BE BUILD	6	N/A	INCORRECT HANDLING LOOSING DURING TRANSPORTATION	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION OF SERVICE OPERATOR	8	96	None				
351) AUDIT PRODUCTS OF FINAL ASSEMBLY	WRONG IDENTIFICATED ASSEMBLY	ASSEMBLY PROBLEMS	6	N/A	IMPROPER MATERIAL HANDLING - ASSEMBLY IS NOT INSPECTED ACCORDING THE DRAWING	2	(P) LABELING AND PACKAGING WORK INSTRUCCION FOR Q.C (D) -VISUAL AID OF THE COMPONENT	8	96	None				
351.1)	MISSING SHIPPING LABEL	ASSEMBLY CAN NOT BE BUILD	6	NA	INCORRECT HANDLING LOOSING DURING TRANSPORTATION	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION OF SERVICE OPERATOR	8	96	None				
351.11)	ASSEMBLY OUT OFF SPECIFICATION ACCORDING ATTRIBUTES	ASSEMBLY PROBLEMS	6	NA	INCORRECT MATERIALHANDLING - INCORRECT USE OF VERIFIERS WHEN APPLY	2	(P) OPERATOR METHOD -D- VISUAL INSPECTION	8	96	None				
351.3)	WRONG SHIPPING LABEL	-ASSEMBLY PROBLEM	6	N/A	MISS OPERATION	2	(P) -OPERATOR METHOD	8	96	None				
351.4)	DAMAGE CONTAINER	SUSPECT MATERIAL	6	N/A	DAMAGE DURING TRANSPORTATION	2	(D) OPERATOR METHOD	8	96	None				
351.5)	WRONG CONTAINER	SUSPECT MATERIAL	5	N/A	IMPROPER INFORMATION HAND	2	(P) -OPERATOR METHOD (D) -VISUAL INSPECTION	8	80	None				
352) INSPECTION LAY OUT ANNUAL	DIMENSION IN TENSION OUT SPECIFICATION (WHEN APPLY)	CUSTOMER INSATISFACTION - NOT CAN USED	6	N/A	MISS OPERATION	2	(D) INSPECTO BY Q.C. SYSTEM PPAP	8	96	None				
370) CONTAINER IS CLOSED	INCORRECTLY CLOSE CONTAINERS	-DAMAGED COMPONENT - FOREIGN MATERIAL CAN GET INTO CONTAINER	6	N/A	-MISS OPERATION -DAMAGE BOX	2	(P) WORK METHOD TO CLOSE CONTAINERS	8	96	None				
380) MOVE FINISH GOOD CONTAINERS TO SHIPPING AREA.	DAMAGED MATERIAL	-DAMAGED COMPONENT - FOREIGN MATERIAL CAN GET INTO CONTAINER	6	N/A	-MISS OPERATION	2	(P) WORK METHOD TO CLOSE CONTAINERS	8	96	None				
390) FINISH GOOD CONTAINERS ARE SEGREGATED BY DESTINATION	SEGREGATION WRONG OR MISSING	CANT NOT ELABORATE MANIFIESTO	6	N/A	-MISS OPERATION	2	(P) OPERATOR METHOD	8	96	None				
400) MANIFEST (PUSH DELIVERY) IS ELABORATED	MISSING PUSH DELIVERY	CUSTOMER INSATISFACTION	5	N/A	-MISS OPERATION	2	(P) WORK METHOD	8	80	None				
410) MOVE FINISH GOOD CONTAINERS FROM SHIPPING AREA TO DISTRIBUTION CENTER	DAMAGED MATERIAL	CUSTOMER INSATISFACTION	5	N/A	-MISS OPERATION	2	(P) WORK METHOD	8	80	None				
740)	WRONG CPA	ASSEMBLY PROBLEMS	7		IMPROPER MATERIAL HANDLING - INCORRECT FROM SUPPLIER		OPERATOR METHOD -D-MANUFACTURING INSPECTION -FIRST SAMPLE RELEASED -AUDIT PRODUCT OF FINAL ASSEMBLY-VERIFICATION OF MATERIAL BY Q.C. (SYSTEM AVE) -CCA SYSTEM			None				