



Part Submission Warrant

23-EPPAP202464

Part Name Shield Assembly, 54 POSN, 0.64mm BLK Cust. Part Number 1924337-1

Shown on Drawing Number C-1924337 Org. Part Number 1924337-1

Engineering Change Level A3 Dated 05/01/2016

Additional Engineering Changes N/A Dated N/A

Safety and/or Government Regulation ☐ Yes ☒ No Purchase Order No. N/A Weight (kg) 0.0083

Checking Aid Number N/A Checking Aid Engineering Change Level N/A Dated N/A

ORGANIZATION MANUFACTURING INFORMATION

TE Connectivity Empalme /999103179

Organization Name and Supplier Code

Carretera Int, KM 1969, Guadalajara-Nogales Km 2

Street Address

Empalme **n/a** **85340** **Mexico**

City

Region

Postal Code

Country

CUSTOMER SUBMITTAL INFORMATION

Nursan Otomotiv Ltd.

Customer Name/Division

N/A

Buyer/Buyer Code

All Models

Application

MATERIALS REPORTING

Has customer-required Substance of Concern information been reported
Submitted by IMDS or other customer format

☒ Yes ☐ No ☐ n/a

74556336 / 10

Are polymeric parts identified with appropriate ISO marking codes?

☐ Yes ☐ No ☒ n/a

REASON FOR SUBMISSION (Check at least one)

- ☒ Initial submission
- ☐ Engineering Change(s)
- ☐ Tooling: Transfer, Replacement, Refurbishment, or additional
- ☐ Correction of Discrepancy
- ☐ Tooling Inactive > than 1 year

- ☐ Change to Optional Construction or Material
- ☐ Sub-Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Parts Produced at Additional Location
- ☐ Other - please specify

REQUESTED SUBMISSION LEVEL (Check one)

- ☐ Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- ☒ Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- ☐ Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- ☐ Level 4 - Warrant and other requirements as defined by customer.
- ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for ☒ dimensional measurement ☒ material and functional tests ☐ appearance criteria ☐ statistical process package

These results meet all design record requirements: ☒ Yes ☐ No (If "No" - Explanation Required)

Mold / Cavity / Production Process

Assembly

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of / hours

I also certify that documented evidence of such compliance is on file and is available for review.

I have noted any deviations from this declaration below.

EXPLANATION/COMMENTS

Is each Customer Tool properly tagged and numbered?

☐ Yes ☐ No ☒ N/A

Organization Authorized Signature

Jorge Passareiro

Date

19/01/2023

Print Name

Jorge Passareiro

Phone No. (+351)266248624

Fax n/a

Title

Quality Engineer

Email

jorge.passareiro@te.com

FOR CUSTOMER USE ONLY (IF APPLICABLE)

PPAP Warrant Disposition :

☐ Approved ☐ Rejected ☐ Other

Customer Signature

Date

Print Name

Customer Tracking Number (optional)



ENGINEERING SAMPLE EVALUATION REPORT

PART NAME:		PART NO.: 9U5T-14489-TA; CU5T-14489-ZA; JU5T-11489-RA; BU5T-14489-AA; 9U5T-14489-WA; CU5T-14489-YA; CU5T-14489-BA			
SUBMITTED BY: CHRIS SCHMID		CURRENT MANUFACTURING SITE:		TOOL MOVE:	CHECK APPLICABLE:
		Empalme, MX		<input type="checkbox"/>	
		FUTURE MANUFACTURING SITE:		PROCESS CHANGE:	
		Empalme, MX		MATERIAL/MATERIAL SUPPLIER CHANGE:	
SUPPLIER: TE CONNECTIVITY		DATE SUBMITTED: 1/26/2021		CAPACITY TOOL:	MADE TO DRAWING DATED:
CHANGE DETAILS:					
<p>In order to improve the quality of product shipped to customers and meet the increasing demand of the LAC Shield Assemblies, TE Connectivity has brought online an automated assembly machine. This machine installs the lever to the shield housing and then 100% inspects the product for proper lever position.</p> <p>Previous assembly method was a manual process.</p> <p>This affects the 40 way, 52 way and 54 way Generation Y LAC Shield Assemblies. Ford part numbers: 9U5T-14489-TA; CU5T-14489-ZA; JU5T-11489-RA; BU5T-14489-AA; 9U5T-14489-WA; CU5T-14489-YA; CU5T-14489-BA</p> <p>(TE part numbers: 2098633-1, 1924346-1, 1924346-3, 1924337-1, 1924337-2, 1924337-3 & 1-1924337-3)</p>					
APPROVED:	<input checked="" type="checkbox"/>	PRODUCT ENGINEERING SIGNATURE: <i>Michael S. Santos</i>		DATE: 1-26-21	
REJECTED:	<input type="checkbox"/>	IDENTIFY WITH ▽ REMARKS AFFECTING PRODUCT ENGINEERING CRITICAL REQUIREMENTS			

*By signing this document, you state that you have verified the physical part/s with the drawing/s and agree with key dimensional data, notes and appearance.

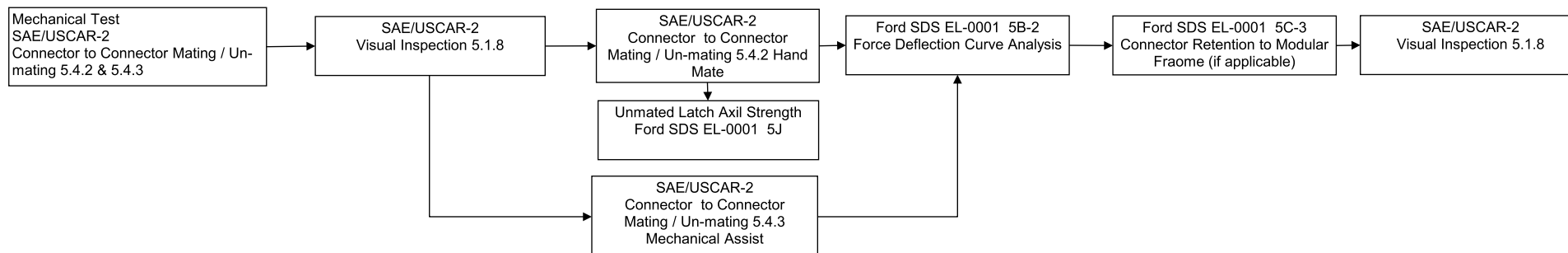


Design Verification Plan and Report

System: CPSC 18.01.07 Connectors			Ford part number (s): 9U5T-14489-TA; CU5T-14489-ZA; JU5T-11489-RA; BU5T-14489-AA; 9U5T-14489-WA; CU5T-14489-YA; CU5T-14489-BA			Model Year and Program:			Ford Design Engineer: <i>Michael Salomita</i>		
Temperature Class	T2	T1, T2, T3, T4 T5	Supplier: TE Connectivity						Ford Design Engineer Approval		
Vibration Class	V1	V1, V2,V3, V4, V5	Reason for Validation:	Capacity Tool	Part Level:	PV - production		Plan: 1-26-21	Report:		
Sealing Class	S1	S1, S2,S2.5, S3			Manual to Automated assembly machine, LAC, Lever to Hsg						

Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks
				Required	Tested	Sched.	Actual	

Group G -Mechanical Test Connector to Connector Mating / Un-mating 5.9.5



G-1. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples.	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	Pass			PV			25-Jan-21	Reference TE Test # WE-20210063ACL
G-2.i) Force to release latch from Pre-stage position (Mechanical Assist) USCAR-2, 5.4.3.3 B	USCAR-25 Table 4.1 Class 1 and 2 - 60N min Class 3 - 90N min USCAR-2, 5.4.3.4.3	40 way LAC Shield Assy			PV	10 min		25-Jan-21	Unmated, force to move lever from pre-stage/shipping position.
		Min 60.98 N	Max 87.09 N	Avg 78.00 N					
		52 way LAC Shield Assy							
		Min 93.04 N	Max 107.49 N	Avg 101.24 N					
		54 way LAC Shield Assy							
		Min 96.67 N	Max 115.10 N	Avg 103.83 N					



Design Verification Plan and Report

System: CPSC 18.01.07 Connectors			Ford part number (s): 9U5T-14489-TA; CU5T-14489-ZA; JU5T-11489-RA; BU5T-14489-AA; 9U5T-14489-WA; CU5T-14489-YA; CU5T-14489-BA			Model Year and Program:			Ford Design Engineer: <i>Michael Salanter</i>		
Temperature Class	T2	T1, T2, T3, T4 T5	Supplier: TE Connectivity						Ford Design Engineer Approval		
Vibration Class	V1	V1, V2, V3, V4, V5	Reason for Validation:	Capacity Tool	Part Level:	PV - production		Plan:	1-26-21		Report:
Sealing Class	S1	S1, S2, S2.5, S3			Manual to Automated assembly machine, LAC, Lever to Hsg						
Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing		Remarks			
				Required	Tested	Sched.	Actual				
G-5. Visual Inspection - SAE/USCAR-2 5.1.8 To document the physical appearance of test samples.	The connectors assemblies must not show , with the aid of 10X magnification, any evidence of deterioration, cracks, deformities, etc., that could affect their functionality or distort their appearance. Connector locking mechanism must function without breaking	Pass	PV				25-Jan-21				

Test Part Inventory Page

	Male Connector Test	Female Connector Test
Terminal Test Part Numbers		
Seal Test Part Numbers		
Clip/Cover etc. Test Part Numbers		
Mating Device Used Part Numbers		
Terminal Test Part Numbers		



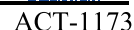
Design Verification Plan and Report

System: CPSC 18.01.07 Connectors			Ford part number (s): 9U5T-14489-TA; CU5T-14489-ZA; JU5T-11489-RA; BU5T-14489-AA; 9U5T-14489-WA; CU5T-14489-YA; CU5T-14489-BA			Model Year and Program:			Ford Design Engineer: <i>Michael Salomita</i>		
Temperature Class	T2	T1, T2, T3, T4 T5	Supplier: TE Connectivity						Ford Design Engineer Approval		
Vibration Class	V1	V1, V2,V3, V4, V5	Reason for Validation:	Capacity Tool	Part Level:	PV - production		Plan:	1-26-21		Report:
Sealing Class	S1	S1, S2,S2.5, S3			Manual to Automated assembly machine, LAC, Lever to Hsg						
Test Name/Source	Acceptance Criteria	Test Results	Design Level Tested	Sample Size		Timing					
				Required	Tested	Sched.	Actual				Remarks
Connector Test Part Numbers						9U5T-14489-TA; 9U5T-14489-WA; CU5T-14489-BA					
Wire Gauge and Type											



Section 9

Dimensional Results



DIMENSIONAL TEST RESULTS

March 2006 CFG-1003

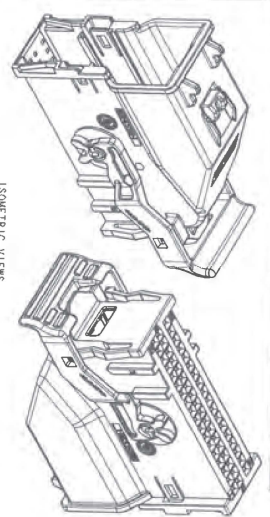
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SIGNATURE
OMAR SANCHEZ

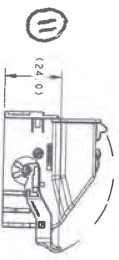
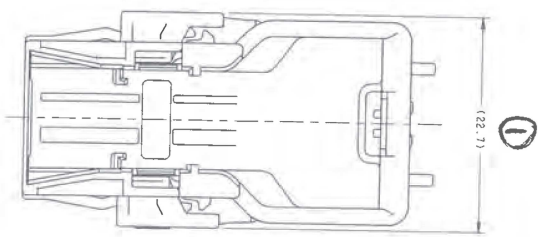
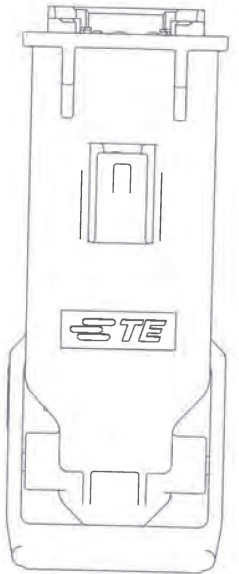
TITLE

Metrology Chief

DATE
OCT-18-2020



ISOMETRIC VIEWS
SCALE 2:1



LEVER IN UNACTED POSITION
SHOWN FOR REFERENCE ONLY
SCALE 1:1

Digitally signed
by: SAE
Date: 2008.10.06
15:09:32.0700

KEY IDENTIFIER REF	STATUS	SHIELD HOUSING	WIRE EXIT	WIRE EXIT ANGLE	KEYING OPTION	PART NUMBER
10	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL Z	20°	PER DETAIL AF	1-1924337-6
9	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL Z	20°	PER DETAIL CD	1-1924337-5
8	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL Z	20°	PER DETAIL BF	1-1924337-4
7	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL Z	20°	PER DETAIL AE	1-1924337-3
6	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL Y	45°	PER DETAIL CD	1-1924337-2
5	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL Y	45°	PER DETAIL BF	1-1924337-1
4	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL X	70°	PER DETAIL AE	1-1924337-8
3	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL X	70°	PER DETAIL CD	1-1924337-7
2	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL X	70°	PER DETAIL BF	1-1924337-6
1	PRELIMINARY - NOT RELEASED FOR PRODUCTION	TBD	PER DETAIL X	70°	PER DETAIL AE	1-1924337-5
	RELEASED	GRAY	PER DETAIL W	90°	PER DETAIL CD	1-1924337-4
	RELEASED	GRAY	PER DETAIL W	90°	PER DETAIL BF	1-1924337-3
	RELEASED	GRAY	PER DETAIL W	90°	PER DETAIL AE	1-1924337-2
	RELEASED	GRAY	PER DETAIL W	90°	PER DETAIL AE	1-1924337-1

THIS DRAWING IS A CONTROLLED DOCUMENT. FOR FULL INFORMATION, SEE THE REVISIONS SECTION.

REVISIONS

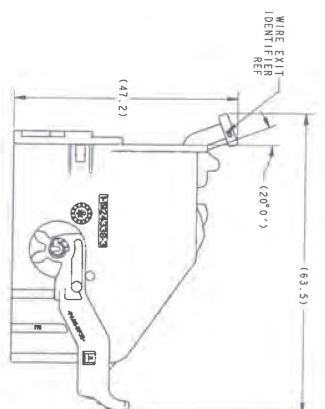
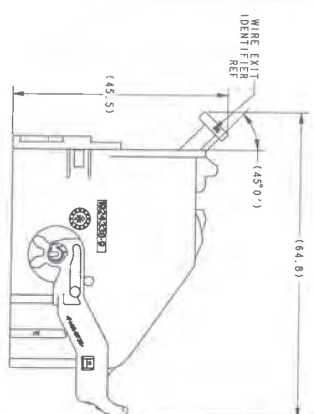
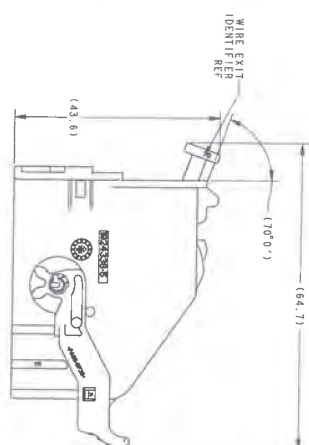
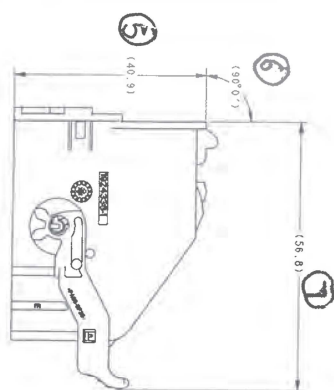
REV	DESCRIPTION	DATE	BY	CHKD
1	DESIGNED PER ESD-10-201786			
2	DESIGNED PER ESD-15-000111			

SHIELD ASSEMBLY
54 POSITION, 0.54mm GENERATION Y,
CONNECTOR

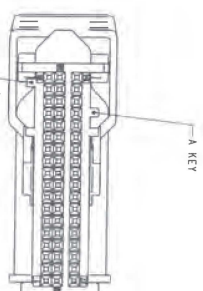
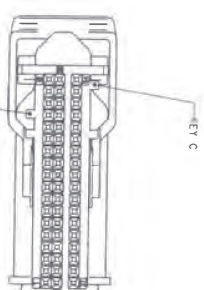
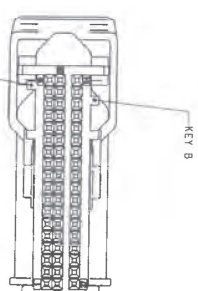
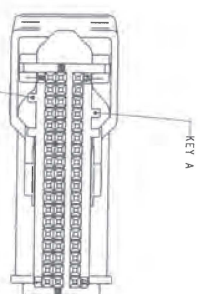
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REV: 1

REV: 2



WIRE EXIT OPTIONS
FOR REFERENCE ONLY



KEYING OPTIONS
FOR REFERENCE ONLY

[illegible][illegible]



Section 10

Material, Performance Test Results

Certificate of Analysis

Customer:	Product Number	: 52506291
TE CONNECTIVITY CORPORATION	Product Name	: ULTRAMID® A3EG7 UNCOLORED
8000 PIEDMONT TRIAD PKWY		POLYAMIDE 726KG FIBREBOARD IBC
GREENSBORO NC 27409-9407	Vehicle	:
	Batch/Lot	: WF9311073
	Manuf.Date	: Nov-07-2019
Attention:	Shipped Date	:
FAX:	Shipped Quantity	: 28,810.008 LB
Cust Prod: 702661-2	Delivery Date	: Dec-10-2019
Cust Prod Name: ULT.A3EG7 UN 726KG 11G	Order Number	: 117268954 000010
Cust P.O.: 2710475333		
Cust P.O. Line: 1	Delivery Note	: 144050423 900001

Inspection Certificate 3.1 according to EN 10204

Characteristic	Result	UOM	-----Specification-----		Test Method
			Minimum	Maximum	
Ash / Filler Content	35.12	%	33.00	37.00	ASTM5630/ISO3451
Moisture Content	0.03	%		0.12	ASTM D6869 / ISO 15512B
Viscosity Number for Polyamides	152	ml/g	130	160	ISO 307

Comments :

Results shown are the means of individual test values for those samples taken during production.

This product is approved for the following specifications:

MS-DB41 CPN2224
MS-DB41 CPN3695
WSK-M4D673-A
GMP.PA66.013
GMW16802P-PA66-GF35
100-1302
M53122
M5600

NSF Standard 51 Listed
NSF Standard 61 Listed

Thank you for choosing a BASF Product

Certificate of Analysis

Customer:	Product Number	: 52505496
TE CONNECTIVITY CORPORATION	Product Name	: ULTRAMID® A3EG7 GREY 22930
8000 PIEDMONT TRIAD PKWY		POLYAMIDE 726KG FIBREBOARD IBC
GREENSBORO NC 27409-9407		(11G)
	Vehicle	:
Attention:	Batch/Lot	: 0208616210
FAX:	Manuf.Date	: Jan-21-2020
Cust Prod: 702661-8	Shipped Date	:
Cust Prod Name: ULT.A3EG7 GR22930 726KG 11G	Shipped Quantity	: 1,600.556 LB
Cust P.O.: 2711092071	Delivery Date	: Feb-21-2020
Cust P.O. Line: 1	Order Number	: 117376328 000010
Inspection Certificate 3.1 according to EN 10204	Delivery Note	: 144273902 900001

Characteristic	Result	UOM	---Specification---		Test Method
			Minimum	Maximum	
Ash / Filler Content	35.94	%	34.00	38.00	ASTM5630/ISO3451
Moisture Content	0.06	%		0.15	ASTM D6869 / ISO 15512B
Viscosity Number for Polyamides	144	ml/g	130	160	ISO 307

Comments :

Results shown are the means of individual test values determined on samples taken during production of the lot specified.

211837472

Certificate of Analysis

Customer:	Product Number	: 52568990
	Product Name	: ULTRAMID® A3EG7 BLACK 23189 POLYAMIDE 726KG FIBREBOARD IBC
MAQUILAS TETAKAWI SA DE CV CARRET INT KM 1969 85340 EMPALME SON	Vehicle	: C: 220350 P: 53-UF-2
	Batch/Lot	: A520073C1
	Manuf.Date	: Mar-16-2020
Attention:	Shipped Date	: Jul-08-2020
FAX:	Shipped Quantity	: 9,603.336 LB
Cust Prod: 702661-9	Delivery Date	: Jul-08-2020
Cust Prod Name: ULT.A3EG7 BK23189 726KG 11G	Order Number	: 117497787 000010
Cust P.O.: 2711746481		
Cust P.O. Line: 1	Delivery Note	: 144637696 900003
Inspection Certificate 3.1 according to EN 10204		

Characteristic	Result	UOM	----Specification----		Test Method
			Minimum	Maximum	
ASH-A	35.333	%	33.000	37.000	ASTMD5630
Moisture	0.05	%	-	0.15	ASTM6869 / ISO15512B
VN-PA	144	ml/g	130	160	ISO 307

Comments :

Results shown are the means of individual test values determined on samples taken during production of the lot specified.

This product is approved for the following specifications:

MS-DB41 CPN 2224
MS-DB41 CPN 3695
M5600
M53122

Page 1 of 1



Section 12

Qualified Laboratory Documentation

Certificate of Registration

QUALITY MANAGEMENT SYSTEM - IATF 16949:2016


This is to certify that:

TE Connectivity
Global Automotive Division
Americas North
Carretera Internacional, KM 1969
Guadalajara-Nogales Km 2
Empalme
Sonora
85340
Mexico

operates a Quality Management System which complies with the requirements of IATF 16949:2016 for the following scope:

Design and manufacture of electrical interconnecting devices.

For and on behalf of BSI:


Carlos Pitanga, Chief Operating Officer Assurance – Americas

BSI Certificate Number: 514458-003

IATF Number: 0315420



Certification Date: 2018-07-11

Latest Issue: 2018-07-11

Page: 1 of 2

...making excellence a habit.™

Expiry Date: 2021-07-10

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Further clarifications regarding the scope of this certificate and the applicability of IATF 16949 requirements may be obtained by consulting the organization.

IATF Contracted Office: BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.

Americas Headquarters: BSI Group America Inc., 12950 Worldgate Drive, Suite 800, Herndon, VA 20170-6007 USA

A Member of the BSI Group of Companies.

Location

TE Connectivity
Global Automotive Division
Americas North
Carretera Internacional, KM 1969
Guadalajara-Nogales Km 2
Empalme
Sonora
85340
Mexico

Registered Activities

Manufacture of interconnecting devices.

Including the following remote support functions:

TE Connectivity
Global Automotive Division
Americas North
900 Wilshire Boulevard
Suite 150
Troy, MI 48084
Design and Development.

TE Connectivity
Global Automotive Division
Americas North
Fulling Mill Road
Middletown, PA 17057
Design and Development, Product Testing and Customer Service.

TE Connectivity
Global Automotive Division
Americas North
3800 Reidsville Road
Winston-Salem, NC 27102
Design and Development, Product Testing and Calibration, Business Office (Quote Process) and Purchasing.

TE Connectivity
Global Automotive Division
Americas North
20 Esna Park Drive
Markham, Ontario
L3R 1E1 Canada
Design and Development and product testing (optics lab)

TE Connectivity
Global Automotive Division
Americas North
2100 Paxton Street
Harrisburg, PA 17111
Provision of Product Testing to TE Connectivity Manufacturing Sites.

TE Connectivity North Carolina
Distribution Center
8000 Piedmont Triad Parkway
Greensboro, North Carolina 27409
Receiving Inspection, Storage / Inventory.

BSI Certificate Number: 514458-003

IATF Number: 0315420



Certification Date: 2018-07-11

Latest Issue: 2018-07-11

Expiry Date: 2021-07-10

Page: 2 of 2

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Americas Headquarters: BSI Group America Inc., 12950 Worldgate Drive, Suite 800, Herndon, VA 20170-6007 USA

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