

1st Europe CHAdeMO Meeting

The Status of Supply CE Version DC Charge Coupler in Europe

10th December 2010

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High Voltage Business Division



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1. About YAZAKI



(As of Jun.20,2010)

	Japan	Europe Africa	Americas	Asia Oceania	Total
Countries & Regions	1	19	8	11	39
Locations	249	45	68	56	418
Employees	22,000	25,300	48,600	91,000	186,900

Corporate Policy

A Corporation in Step with the World

A Corporation Needed by Society



World hdqrs. in Shizuoka-Pref., Japan 3

1. About YAZAKI

Yazaki Corporation is an independent automotive component maker founded in 1941. As well as automotive wire harnesses, our core product for which we command a top share in the global market, we develop and manufacture meters, electronic components and a host of other products for automotive use.



Wire Harness



High-Voltage Wire Harness



Combination Meter



Tachograph



Taxi Meter



1. About YAZAKI

Yazaki provides living environmental equipment, mainly to the Japanese domestic market.



Life Environment Equipment Sector Products

Air-conditioning Equipment



"Super Aroace"
Absorption Chiller-Heater

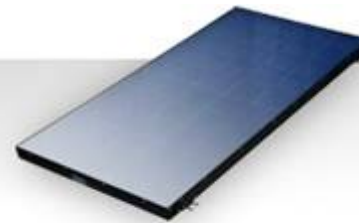


"Bio-Aroace"
Wooden Pellet Fired Absorption Chiller-Heater

Solar Equipment



Solar Water Heater



Commercial-use Solar System

Gas Equipment



Ultrasonic Gas Meter



Residential Fire Alarm



LP Gas Alarm

Electric Wire and Cable



Power Cables (High & Low Voltage),
Communication & Instrumentation Cables



Branch Cables for building (left) and residential use (right)



2. DC Charge Coupler History

1990's

Since 1993

1st Edition



DC600V,150A

Destination : Japan

2009

2nd Edition



DC600V,150A

Destination : Japan

2010

New Version



CHAdeMO



DC500V,120A

Destination : EU,US

August 2010

Certification



TUV Certificate Number: J 50187255 0001
UL Certificate Number: E176488B

3. DC Charge Coupler



1. Rated Current and Voltage: DC120A, DC500V
2. Environmental Condition: Temperature Range -40~60°C
3. Lever assisted insertion
4. Capable of 10,000 mating cycles
5. Terminals are finger-proof to prevent contact
6. No functional damage after Vehicle Drive-over testing
7. Conforms to the UL2251



 **YAZAKI**


CHAdeMO

3-1. Robust Body

Previous



Aluminum Case



New



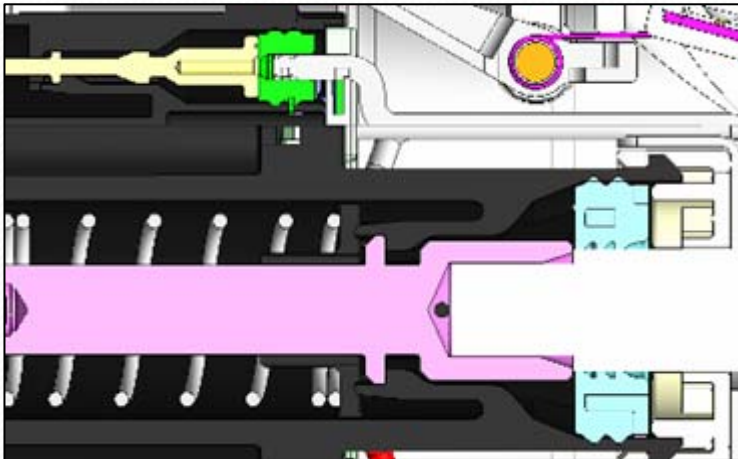
Plastic Housing

We have passed the
Vehicle Drive -over test!

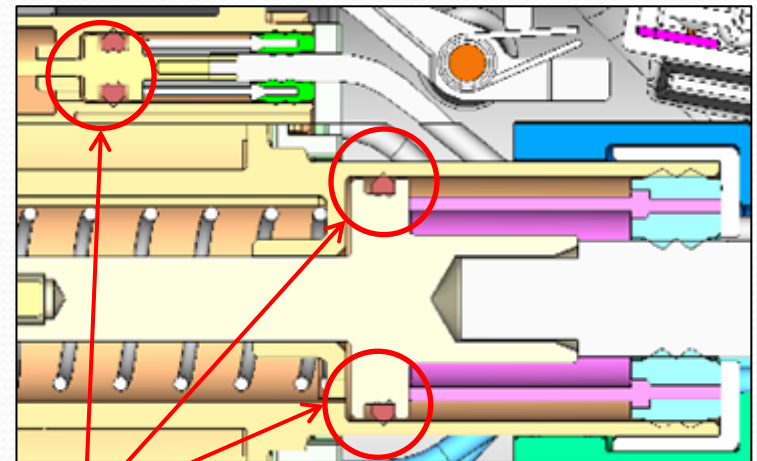


3-2. Waterproof

Previous



New



Seal

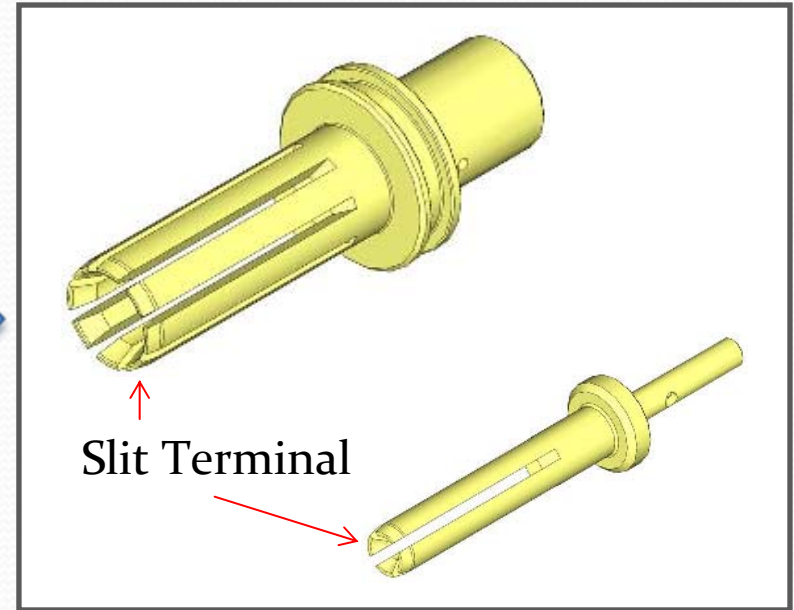
To prevent water entry into terminal crimping area.

3-3. New Connection Systems

Previous



New



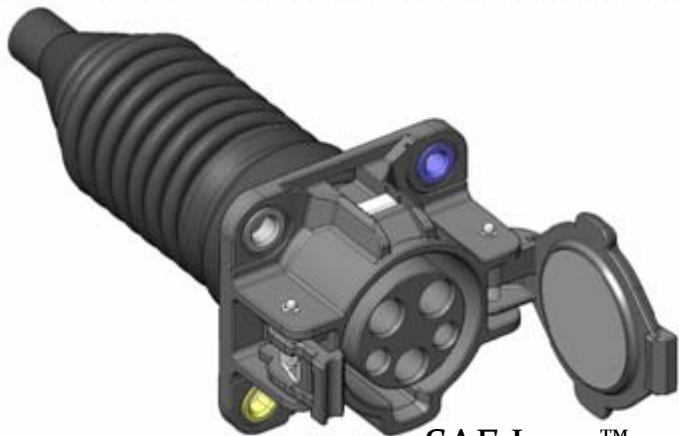
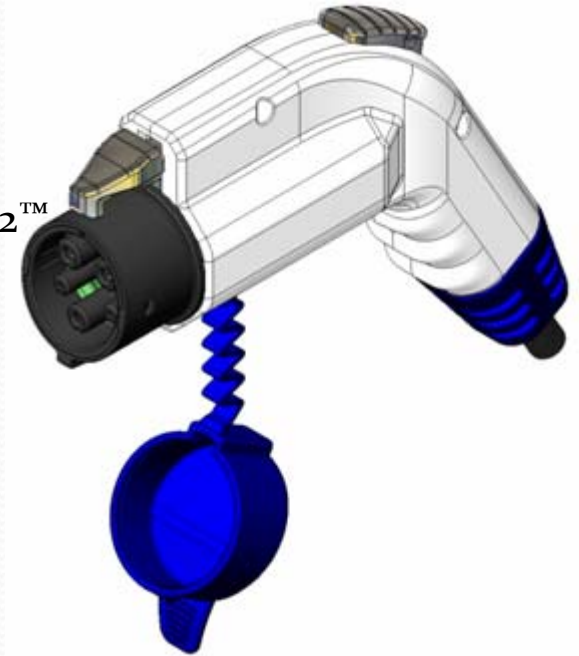
- Removal of contamination
- Prevent increase of insertion force

4. AC Charge Coupler

SAE J1772™

Significant characteristics of AC Charge Coupler

1. Rated Current and Voltage: AC20A~30A ,AC100~250V.
2. Environmental Condition: Temperature Range -40~60°C
3. Mating effort is less than 70N
4. Capable of 10,000 mating cycles
5. Terminals are finger-proof to prevent contact
6. No functional damage after Vehicle Drive-over testing
7. Conforms to the UL2251



SAE J1772™

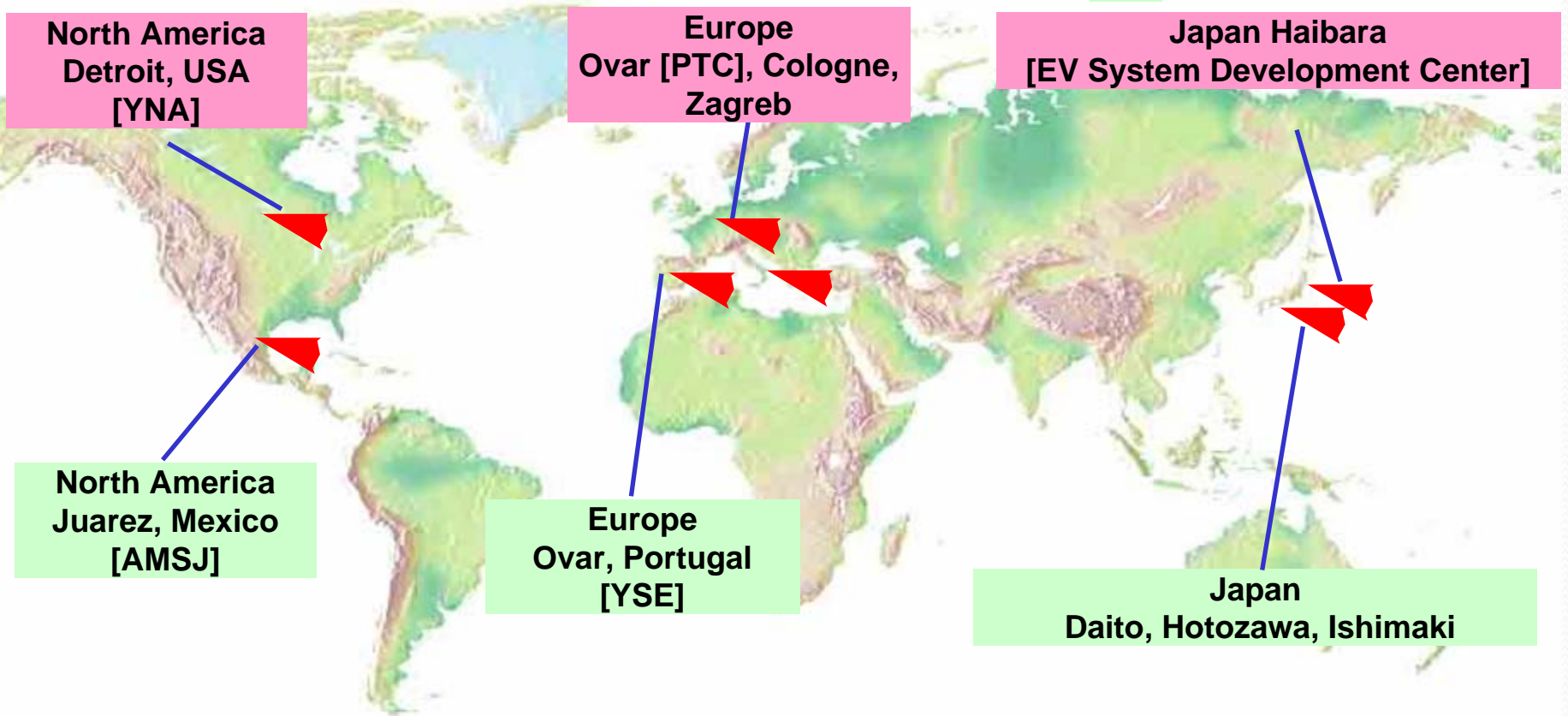
TUV Certificate Number : J 50186408 0001
UL Certificate Number : E176488A



5. Supply Chain

5-1. Global Operation

 Development location
 Production location



5. Supply Chain

5-2. Sale Window Information

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5. Supply Chain

5-3. European Production Operation

AC Coupler SAE J1772™:

Localization to Europe (Portugal) presumably end of 2011 / 2012

DC Charge Coupler CHAdeMO type:

Localization to Europe in 2012 pending European demand trends

5. Supply Chain

Manufacturing Capabilities Yazaki Saltano de Ovar P.E. Lda (YSE)

- Established in Jul. 1986
- Employees: 1312
- Wire Harness Manufacturing
- Components Manufacturing
 - Injection Moulding & Assy
 - JB, RB/PPSS Meter Assy
 - Optical W/H, Most & Squib connectors/HEV
- Porto Technical Centre
 - Data Management
 - WHE
 - CAD Systems
 - Software Development
 - Digital Factory/JB Layout
 - Component Design
 - Manufacturing Engineering



1-Phase Charge Coupler INLET



High Voltage Harness



Busbar Module



Yazaki Eyelet
















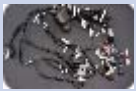


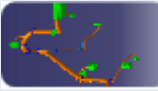


5. Supply Chain

5-3. European Production Operation



PORTFOLIO

<p>AUTOMOTIVE WIRE, PVC & PP (halogen free) insulation</p>			
<p>Injection Molding CONNECTORS (PBT, PA, HPA) & Battery Fuse Terminals</p>			
<p>JUNCTION & RELAY BLOCKS INSTRUMENTS & Modular PERMANENT SLIDING DOORS SYSTEMS</p>			
<p>HV Products, OPTICAL SYSTEMS (Wire Harness & Connections), AIR BAG Connectors & Assemblies</p>			
<p>LV Wire Harness (Cars, Trucks & Forklifts), including Prototype capability</p>			 
<p>PTC - ENGINEERING / R&D (CAD Systems, DATA Management, Component Design, WH Design, Crimping Centre, Laboratories)</p>			

5. Supply Chain

5-3. Parts Number / Lead-Time



Continuous Stock in YEL-BL till mid of 2011

Version	Gender	P/N	Current	wire length	Market	Requested Stock Quantity
J1772 - AC Slow Charge Coupler	Inlet	X1DT003500	30A	5 m		10
	Infra	7335-8764	20A	5 m	EU-market	10
JEVS G105 - DC Quick Charge Coupler - New version	Inlet - cap left	X1DT0027		1 m	US/EU-market	10
	Infra	7335-8926-3R	120A	6 m	EU-market	30

5. Supply Chain

P/N	Gender	Current	Wire Length	Wire Spec / Wire Size	Specification
JEVS G105 - DC Quick Charge Coupler - New version					
X1DT0027	Inlet - cap left		1 m	40 sqmm	UL/CE
X1DT0028	Inlet - cap left		3 m	40 sqmm	UL/CE
X1DT0029	Inlet - cap left		5 m	40 sqmm	UL/CE
X1DT0030	Inlet - cap right		1 m	40 sqmm	UL/CE
X1DT0031	Inlet - cap right		3 m	40 sqmm	UL/CE
X1DT0032	Inlet - cap right		5 m	40 sqmm	UL/CE
7335-8925-3R	Infra	120A	4 m	35 sqmm	CE-Mark
7335-8926-3R	Infra	120A	6 m	35 sqmm	CE-Mark
7335-8927-3R	Infra	120A	8 m	35 sqmm	CE-Mark
7335-8928-3R	Infra	120A	10 m	35 sqmm	CE-Mark
7335-8922-3R	Infra	120A	4.57m (15feet)		UL-Mark
7335-8923-3R	Infra	120A	6.10 m (20feet)		UL-Mark
7335-8924-3R	Infra	120A	7.62 m (25feet)		UL-Mark

5. Supply Chain

5-3. Parts Number / Lead-Time

- Initial lead time to supply the DC Quick Charger without a confirmed forecast:

- Boat shipment: 12 weeks

- Air freight: 8 weeks

- To shorten the lead time to 4 weeks we need:

- the confirmed forecast from the customer of min. 12 weeks

- or a contract to build dedicated safety stock

Thank you for your attention!

The special website of Yazaki charge coupler will be available from the end of December.

<http://charge.yazaki-group.com/>