



SURFACE VEHICLE STANDARD

J1772™

JAN2024

Issued 1996-10
Revised 2024-01

Superseding J1772 OCT2017

(R) SAE Electric Vehicle and Plug-in Hybrid Electric Vehicle
Conductive Charge Coupler

RATIONALE

The SAE J1772 document has been updated to refine the language of the standard; better define the AC connector dimensions; correct typographical errors found in the previous version; address changes needed in Y-capacitor limitations due to supporting charging at up to 1000V; address harmonization with IEC 61851 and ISO 15118 series documents related to DC charging, safety improvements and interoperability; and to reflect liquid cooling of cable/plug to support high current DC fast charging.

FOREWORD

Energy stored in a battery provides power for an electric vehicle (EV) or plug in hybrid electric vehicles (PHEV). Conductive charging is a method for connecting the electric power supply network to the EV/PHEV for the purpose of transferring energy to charge the battery and operate other vehicle electrical systems, establishing a reliable equipment grounding path, and exchanging control information between the EV/PHEV and the supply equipment. This document describes the electrical and physical interfaces between the EV/PHEV and supply equipment to facilitate conductive charging. Functional and performance requirements for the EV/PHEV and supply equipment are also specified. This document contains 183 pages, including this page, and should not be used as a design tool if any of the pages are missing.

NOTE: This SAE Standard is intended as a guide toward standard practice and is subject to change in order to harmonize with international standards and to keep pace with experience and technical advances.

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