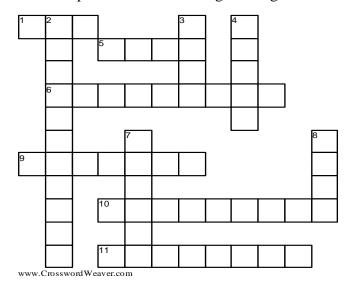


## Automotive Electrical and Engine Performance 9th Edition Chapter 45 - Module Programming



## ACROSS DOWN

1 J2534: A standard developed by SAE for reprogramming vehicle modules through a pass-through device, ensuring compatibility across manufacturers. 5 \_\_\_\_\_-the-Air (OTA): A method of updating vehicle softw are wirelessly through the internet, eliminating the need for in-shop updates. \_\_\_\_ ID: A registration number 6 required for technicians to access security-related information during module reprogramming or key programming. Maintainer: A device that ensures the vehicle's battery remains charged during module reprogramming, preventing voltage drops that could interrupt the process. 10 SAE J2534 Version 5.00: The latest version of the J2534 standard, providing updated and features for module reprogramming. **11** SAE J2534-1: A subset of the J2534

standard focusing on the reprogramming

of \_\_\_\_\_-related systems.

- Programming Interface (API): A set of protocols and tools that allow different softw are applications to communicate w ith each other, often used in automotive systems to facilitate diagnostics and data exchange.
- 3 \_\_\_\_ (Programmable Read-Only Memory): A type of memory chip that stores permanent data and can be reprogrammed to update vehicle modules.
- 4 (National Automotive Service Task Force) An organization that provides access to vehicle manufacturers' service information and reprogramming tools for independent repair facilities.
- 7 \_\_\_\_\_ (Electronically Erasable Programmable Read-Only Memory): A memory type that retains data when power is lost and can be reprogrammed electronically, commonly used in engine control modules.
- 8 \_\_\_\_-through Device: A tool used between a vehicle and a computer to facilitate software reprogramming or diagnostics.