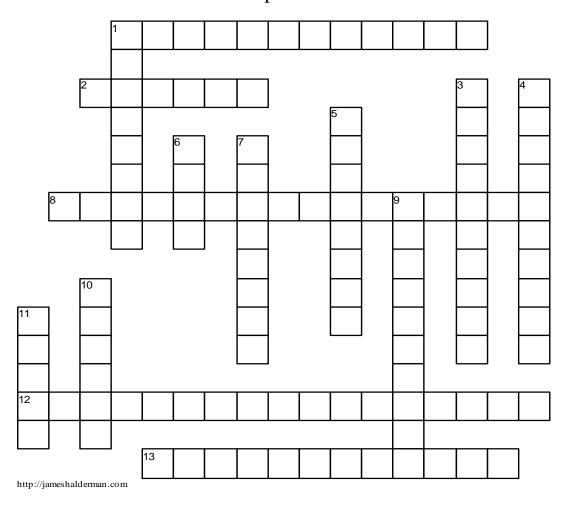
EV And HEV Transmissions

Chapter 131



ACROSS

1 In a four-wheel-drive (4WD) or all-wheel-drive (AWD) vehicle, a _____ or rear electric motor is used to distribute power to all four wheels. 2 To move a vehicle, ____ must be applied to the drive wheels. __storage accumulator is used 8 to provide fluid pressure as the ICE restarts after the idlestop mode. 12 In order to adapt a conventional automatic transmission to a hybrid powertrain, an _ pump is used to maintain fluid pressure in the transmission during ICE idle-stop. 13 All vehicles, regardless of the power source, require the use of a transmission to achieve reasonable _____ and efficiency.

DOWN

1	Routine service is all that is needed or required of the
	transmission.
3	Some full-hybrid systems have a of
	operation, using a single planetary gear set to split
	engine power to drive the wheels or charge the
	battery.
4	In rear-wheel-drive (RWD) applications, it is most
	common to use a transmission along with a
	and differential at the rear axle to transmit
	torque to the drive wheels.
5	The two-mode unit is effectively an electronically
	transmission (EVT).
6	An ICE is most efficient when it is operating near its
	torque
7	In mode the engine stops, which will in
	turn stop the transmission oil pump and cause the
	transmission to go to "neutral."
9	The Toyotatransaxle is a series-
	parallel hybrid technology.
10	Transmission service for the 4L60E model M33 is
	limited to fluid and changes.
11	HEV transmissions are different based on the
	of the hybrid vehicle in which they are installed.

