

Submitted for recognition as an American National Standard

Automatic Transmission Functions—Terminology

1. **Scope**—The following is a list of the most common terminology used in describing automatic transmission functions.
2. **References**—There are no referenced publications specified herein.
3. **Definitions**
 - 3.1 **Friction Start**—The use of a friction driving member in starting a vehicle from a standing position.
 - 3.2 **Fluid Start**—The use of a hydrodynamic or hydrostatic drive unit in starting a vehicle from a standing position.
 - 3.3 **Converter Clutch Engagement**—The transition from hydrodynamic to mechanical drive normally accomplished through the application of a friction element.
 - 3.4 **Shift**—A control system actuated change in the functioning of the torque transmitting drive (this could be a gear train, a hydrodynamic or hydrostatic drive unit, electrical or friction drive mechanism, and so forth) which results in a change in torque ratio and speed ratio.
 - 3.5 **Upshift**—A shift which results in a decrease in torque ratio and an increase in speed ratio.
 - 3.6 **Downshift**—A shift which results in an increase in torque ratio and a decrease in speed ratio.
 - 3.7 **Power Shift**—A shift which occurs without interruption of drive.
 - 3.8 **Nonpower Shift**—A shift which occurs while the drive is interrupted.
 - 3.9 **Overlap Shift**—A shift during which the torque transmitting elements of more than one driving ratio are engaged simultaneously for a short interval.
 - 3.10 **Freewheel Shift**—A torque shift in which a one-way clutch is involved as an element of one of the drive ratios from which or to which a shift is made.
 - 3.11 **Hydrodynamic Shift**—A shift in which a hydrodynamic unit is either filled or emptied to effect its torque transmitting capacity.

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SAE J649 Reaffirmed MAY2000

- 3.12 **Blade Angle Shift**—A shift in which the angle of the blades of a hydrodynamic element is changed to affect its torque capacity.
- 3.13 **Manual Shift**—A shift which results from the action of the manually operated part of the control system.
- 3.14 **Automatic Shift**—A shift which results from the action of the automatically operating part of the control system.
- 3.15 **Inhibited Shift**—A manual shift which is automatically prevented under certain predetermined conditions of operation.
- 3.16 **Overrun Shift**—A shift which occurs at less than road load throttle opening with vehicle in motion.
- 3.17 **Part Throttle Shift**—A shift which is obtained at a throttle position short of full throttle.
- 3.18 **Forced Shift**—A shift which is obtained at maximum throttle position.

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