

# SAE J3016™ LEVELS OF DRIVING AUTOMATION™

Learn more here: [sae.org/standards/content/j3016\\_202104](https://www.sae.org/standards/content/j3016_202104)

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|                                                      | SAE<br>LEVEL 0™                                                                                                                           | SAE<br>LEVEL 1™ | SAE<br>LEVEL 2™ | SAE<br>LEVEL 3™                                                                                                              | SAE<br>LEVEL 4™                                                            | SAE<br>LEVEL 5™ |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-----------------|
| What does the human in the driver's seat have to do? | You <u>are</u> driving whenever these driver support features are engaged – even if your feet are off the pedals and you are not steering |                 |                 | You <u>are not</u> driving when these automated driving features are engaged – even if you are seated in “the driver's seat” |                                                                            |                 |
|                                                      | You must constantly supervise these support features; you must steer, brake or accelerate as needed to maintain safety                    |                 |                 | When the feature requests,<br>you must drive                                                                                 | These automated driving features will not require you to take over driving |                 |

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|                            | These are driver support features                                                                                                               |                                                                                                                 |                                                                                                                                   | These are automated driving features                                                                                      |                                                                                                                                        |                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| What do these features do? | These features are limited to providing warnings and momentary assistance                                                                       | These features provide steering <b>OR</b> brake/acceleration support to the driver                              | These features provide steering <b>AND</b> brake/acceleration support to the driver                                               | These features can drive the vehicle under limited conditions and will not operate unless all required conditions are met | This feature can drive the vehicle under all conditions                                                                                |                                                                                                                         |
| Example Features           | <ul style="list-style-type: none"> <li>• automatic emergency braking</li> <li>• blind spot warning</li> <li>• lane departure warning</li> </ul> | <ul style="list-style-type: none"> <li>• lane centering <b>OR</b></li> <li>• adaptive cruise control</li> </ul> | <ul style="list-style-type: none"> <li>• lane centering <b>AND</b></li> <li>• adaptive cruise control at the same time</li> </ul> | <ul style="list-style-type: none"> <li>• traffic jam chauffeur</li> </ul>                                                 | <ul style="list-style-type: none"> <li>• local driverless taxi</li> <li>• pedals/steering wheel may or may not be installed</li> </ul> | <ul style="list-style-type: none"> <li>• same as level 4, but feature can drive everywhere in all conditions</li> </ul> |