Vehicle Module Unit Tests:

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| Test Number | Test Description | Justification | Expected results |
| 1 | Hold the “W” key to check if the Tank will move forward | Vehicle movement is an important aspect of vehicle use | The vehicle should move forwards locally to where it is facing |
| 2 | Hold the “S” key to check if the Tank will move backwards | Similarly to test1, vehicle movement is critical to the module | The vehicle should move backwards locally to where it is facing |
| 3 | Press the “1” key to test whether the Tank can correctly target an object | Vehicle targeting will be needed for vehicle combat in-game | The vehicle’s turret should rotate and point towards the front left building |
| 4 | Press the “2” key to test whether the Tank can change targets | Swapping targets will be required of the vehicles in game for combat | The vehicle’s turret should rotate and point towards the front right building |
| 5 | Hold the “W” key to determine whether the Tank can target an object whilst moving | Vehicles will have to be moving whilst in combat, so this aspect will need to be tested | The vehicle’s turret should stay pointing at the assigned target |
| 6 | Hold the “Q” key to rotate the Tank anti-clockwise | Vehicle movement will rely on its ability to rotate and orientate properly | The vehicle body should rotate anti-clockwise |
| 7 | Hold the “E” key to rotate the Tank clockwise | Vehicle movement will rely on its ability to orientate towards it’s selected target | The vehicle body should rotate clockwise |
| 8 | Hold both the “E” key and the “W” key to test whether the vehicle can rotate and move at the same time | Vehicles will need to rotate and orientate at the same time to better represent realistic movement | The vehicle should move forward locally to where it is facing, and so should move around in a large circle |

Integration tests:

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| Test Number | Test Description | Justification | Expected results |
| 1 | Press the “1” key to assign a target to the tank | The integrated modules will affect the Tank’s firing function, so this will need to be re-tested | The Tank’s turret should rotate towards the building forward and to the right relative to the Tank |
| 2 | Once the target has been locked, wait for the tank to fire a shot at the target | The integrated module includes a process of vehicle attacks, and so must be tested with the vehicle module | The tank should fire a small pellet from its turret towards the target. Once the pellet reaches the target, it should create an explosion particle system, emitting from the target |
| 3 | One the target has received an attack from the vehicle, it should emit smoke to indicate damage | Part of the damage model will involve smoke to indicate damage, and so is a part of the particle module which will be tested | A smoke system should emit from the target, and should increase in intensity over a short length of time |
| 4 | Press the “2” key to change the target | Multiple particle systems are critical to the system, as many different game agents may have active particle systems | Like test 1, the tank turret should rotate to point at the target, which this time is back and to the right of the tank |
| 5 | Once the target has been locked, the tank should fire a shell at the new target | Similarly to the justification to test 4, the system needs to be tested for multiple particle system instances | The outcome should be identical to the expected results of test 2, with a pellet from the turret and an explosion system upon impact |
| 6 | Once the second target has been shot, a smoke system should emit from the target | This test is to ensure that multiple instance of multiple particle systems are supported, and that the performance of the program is not affected | Smoke particle systems should be updating on both targets without a significant hit to frame rate |
| 7 | Hold the “W” key to check if Tank movement is still supported | Despite the second module not effecting the vehicle movement, this test is to ensure that movement has not be compromised during integration | The vehicle should move forward locally to where it is facing |
| 8 | Hold the “Q” key to ensure that the Tank rotation is still functioning | Similarly to test 7, the particle system module integration should not have affected tank rotation, however this test is to check this is the case | The vehicle should rotate anti-clockwise |