

SCRAMBLER VEHICLE KIT MODIFICATION

GUIDANCE 2027

KIT MODIFICATION RECOMMENDATIONS

If a team chooses to build their Scrambler using a kit, the 2027 Scrambler rules require teams to make two functional modifications during the build process, with at least two changes made to the Vehicle from the Kit Modification List. This document provides additional guidance on the recommended modification list on the required form.

The changes are not required or intended to be used with Launcher kits. Modifications to the Launcher kit will not be assessed but may need to be made to accommodate the vehicle changes.

KIT MODIFICATION LIST WITH RECOMMENDATIONS

Making the same modification more than once will only count as one modification

1. Change the alignment method
 - change open sight to scope,
 - move the alignment from the vehicle to the launcher or vice versa).

(Changing location of the current alignment hardware on the vehicle is not a valid modification.)
2. Change wheel diameter *
Recommended to be at least 1 cm difference.
3. Change front-to-rear axle spacing
Recommended to be at least 10 cm difference.
4. Change wheel-to-wheel spacing width (side to side) *
Recommended to be at least 4 cm difference.
5. Change the braking system location
Move the braking system from front axle to back axle or vice versa.
6. Change the launch energy transfer method to vehicle
Change from pulling vehicle to pushing vehicle or vice versa.
7. Change the drive string attachment method
Changing to a loop & pin or hook or other attachment method.
(Changing the size of the hook or loop at the end of the string by itself is not a valid modification.)
8. Change the mass of the vehicle
Recommended to be at least 100-gram difference.

* Making the same modification more than once will only count as one modification