

WRO Rule Appendix 1

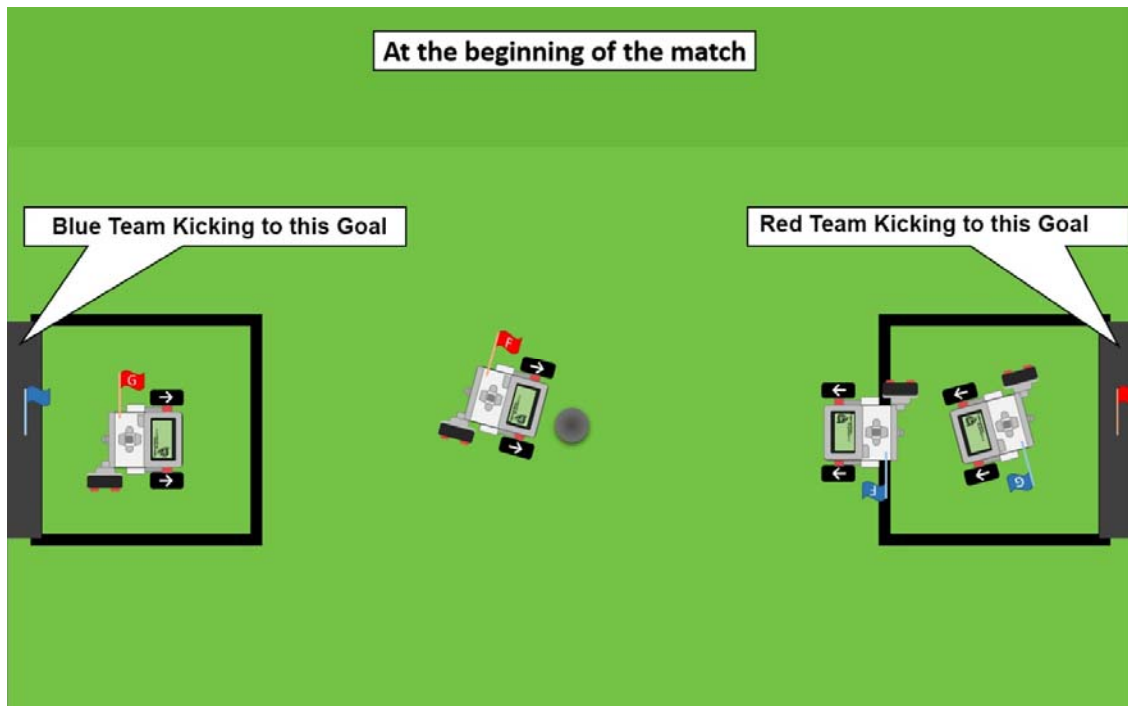
Minor adjustments and clarifications made to WRO Football rules:

- 8.4 Robots can only use one NXT or one EV3 Ultra Sonic Sensor. This must be placed on the rear of the robot with the sensor facing to the right when the robot is facing towards the goal it is kicking to.
- 8.5 Robots must only sample Ultra Sonic readings when the robot is facing towards the goal it is kicking to, or in the case of a goalie, as well as when its sensor is aimed at the goal it is defending. If a robot is deemed to be **intentionally** interfering with the Ultra Sonic readings of other robots, the offending robot will be removed and classed as damaged. If this is repeated the Ultra sonic Sensor will be disabled.

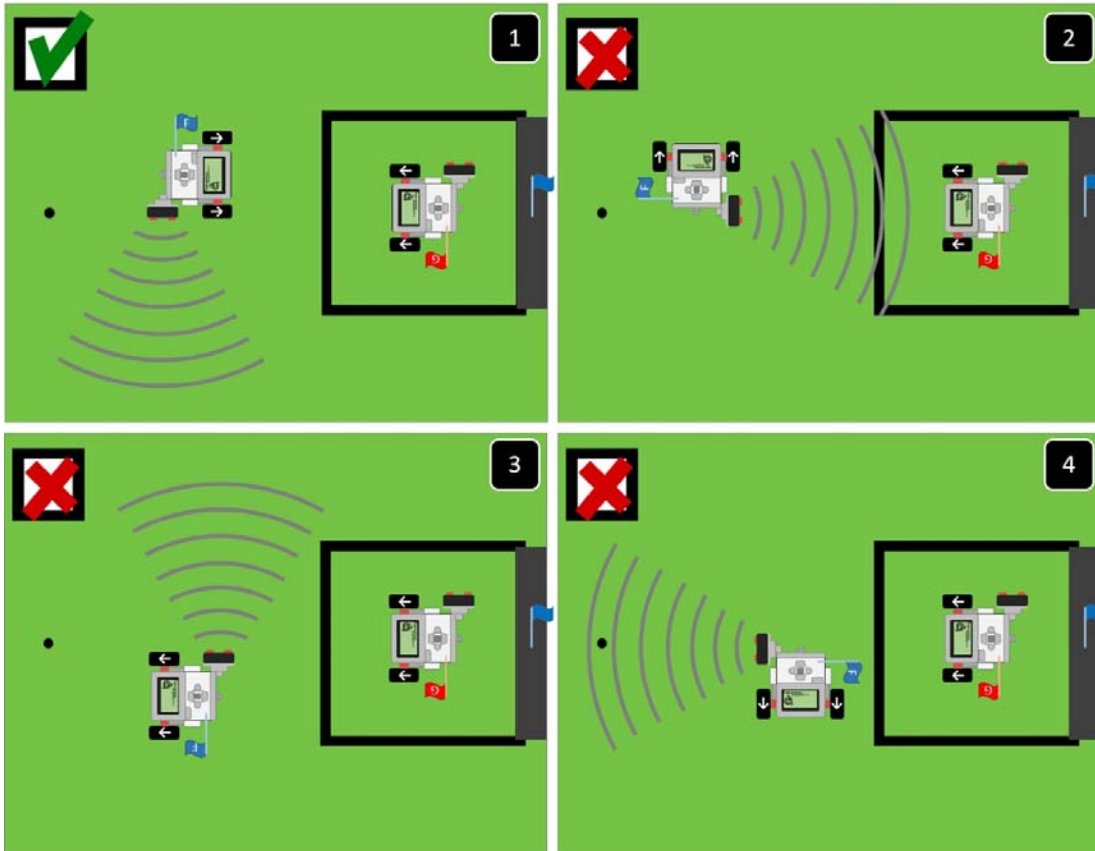
8.11 Control programs must be **Robolab**, LEGO® MINDSTORMS™ EV3 or LEGO® MINDSTORMS™ NXT software.

Rule 8.5 Explanatory Diagrams

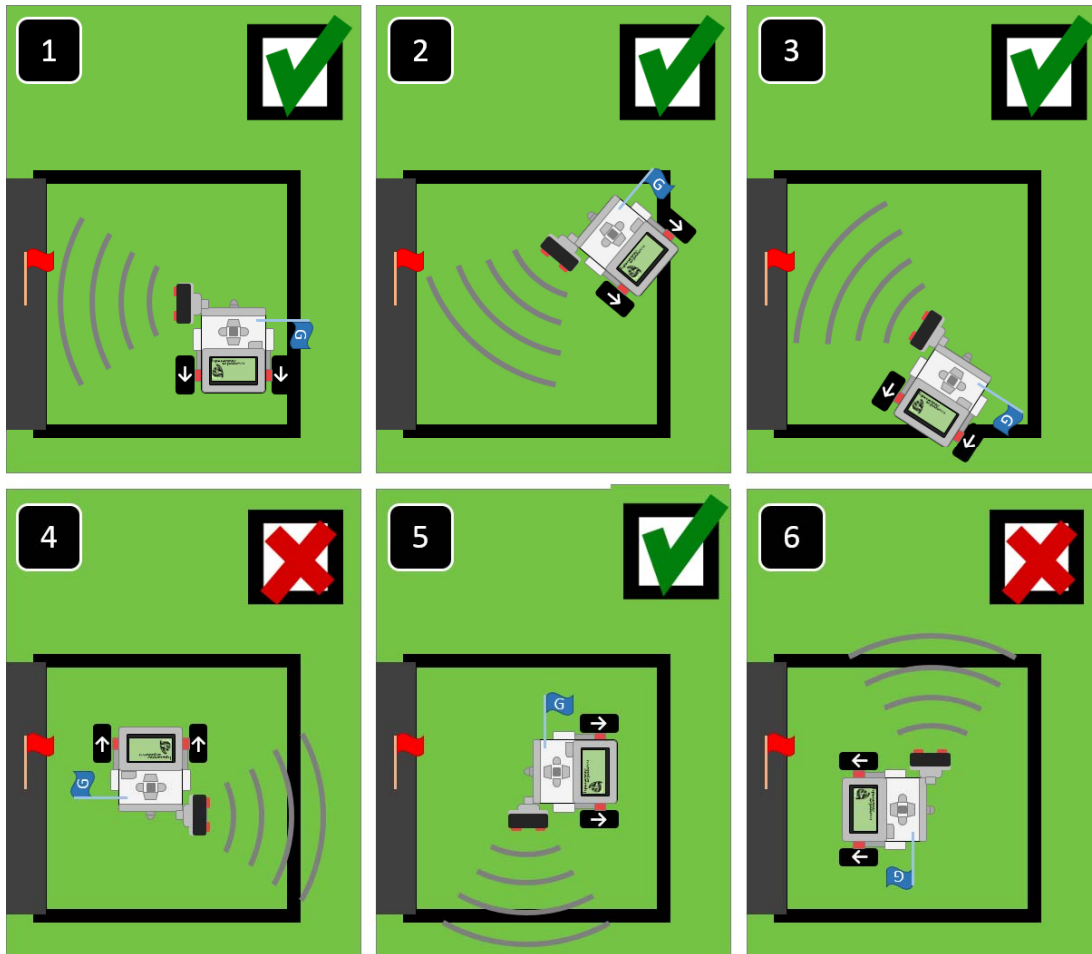
Many thanks to Rustam Kagapov for supplying these diagrams.



Restrictions of Ultrasonic readings of a Forward



Restrictions of Ultrasonic readings of a Goalie



If an out of position goalie **remains** forward of the 45cm penalty box line, it would be considered as intentionally interfering with any robot that passes it and therefore removed as damaged. See example 3.

Cases of interfering ultrasonic readings

