

**NH  
RL**

**FIGHT  
FIGHT RULES  
RULES**



230118

## OBJECTIVE

Utilize your robot to disable your opponent's robot by any means allowable by the tournament and design rulesets. The duration of each match is 3 minutes. If both entrants are still mobile at the end of the 3 minute timer, the winner will be declared by judges decision.

These rules only cover head-to-head fights. NHRL does occasionally run fights with more than two competitors ("rumbles"), but they are run as exhibitions. Exceptions for exhibition fights are listed below.

## FIGHT START

The beginning of a match is signaled by an 8 second countdown followed by the words "*Fight, Robots, Fight!*" The match officially begins at the enunciation of the first "F" in "Fight." During the countdown, robots must be at a full stand-still.

Robots must start the match in their assigned corner of the arena and must be oriented such that they fit within the constraints of their classes' respective bounding box size as outlined in **Robot Design Rules**.

## FALSE STARTS

A false start occurs when any bot begins moving or activating their weapon before the match start countdown is complete.

False starts are considered to be unsportsmanlike and may be subject to penalty. False starts may additionally trigger a match reset, additional repair time for the bot that did not false start, or in extreme cases, a forfeit loss for the offending robot.

## FIGHT END

A fight can end in these ways:

### KNOCKOUT

Any robot that is unable to demonstrate **controlled motion** will receive a 10 second count-down. If the countdown is completed, the robot will be considered knocked out and the fight ends.

If the robot successfully demonstrates controlled motion during the 10 seconds or the robot is directly engaged by their opponent, the count-down ends and the match continues.

A robot is considered to be displaying controlled motion if they are capable of moving to a desired quadrant of the cage in a reasonable amount of time and can turn to face the opponent favorably.

For a multibot, a knockout countdown will start if more than 51% of the robot is immobile.

A knockout ends the fight immediately. Any further engagement or attacks will be considered unsportsmanlike behavior and may be subjected to penalty via demerit system.



## TAP OUT

All competitors have the option to “tap out” of their match. This immediately ends the match, giving their opponent the victory. Note that tap out is not considered a “forfeit.” A forfeit implies that the fight was never contested. Tap outs are considered knockouts in NHRL statistics.

Competitors tap out by hitting the TAP OUT button on their side of the cage. If the button doesn’t work, they should inform the referee immediately that they are tapping out.

## JUDGE’S DECISION

If a fight runs the full 3 minutes without a knockout, tap out, or other way of ending, it ends. Competitors must immediately stop engaging their opponent; however, as long as the cage door is not open or in the process of being opened, a competitor may drive around or spin their weapon without engaging their opponent to show which systems on their bot are still functional.

The winner of the fight will be determined by a panel of judges. There are usually 3 judges on a panel, but sometimes there may only be a single judge, if circumstances dictate that.

## DOUBLE KNOCKOUT

If both robots are disabled simultaneously, the referee may choose to count them both out at the same time.

If the countdown finishes uninterrupted, and neither bot shows signs of movement, then the fight will be treated as a **Judge’s Decision**, as above.

## FIGHT STOPPED BY REFEREE

The referee has the option of stopping a fight before the full 3 minutes is over. This generally happens if both bots are stuck together and cannot be easily separated, or there is a safety issue like an arena breach. In this case, the fight will be treated as a **Judge’s Decision**, as above.

## FIGHT RESETS

A fight reset may occur at the referee, event organizer, or production team’s discretion. This could be for a variety of reasons including but not limited to technical faults within the box or facility, safety concerns, or false starts.

When a fight reset is called, robots must stop fighting immediately. Both robots are then repositioned to their starting corners, and the fight timer is reset.

## UNSTICK ATTEMPTS

During the course of a fight, robots may get flipped or stuck in an orientation such that they cannot demonstrate controlled movement. In each match, competitors are entitled to one **unstick attempt** from the house bot. However, in the event that the house bot is unable to perform an unstick whether by faults or malfunctions internal or external to the house bot, the referee will notify the competitors and their allotted unstick attempt will be waived.



**IMPORTANT:** There is **no guarantee** that an unstick attempt will be successful. Additionally, it is possible that either robot may get damaged or end up in a less favorable position than they started when the unstick attempt was called.

When an unstick attempt is called, the housebot will drive to the impaired robot and try to right/free/reorient it. The effort will start slowly and deliberately, then gradually become more forceful.

Calling for an unstick attempt does not pause the match, or mandate that your opponent stop attacking.

Unstick attempts may be initiated automatically in the event that a robot cannot demonstrate controlled motion. Alternatively, competitors may verbally call for their unstick attempt at any point in the match when their mobility is impaired, unless they are being actively engaged by their opponent.

An unstick attempt officially starts once the house bot has made contact with the immobile robot and will generally last no longer than 20 seconds.

In the event that a competitor's opponent has impeded a house bot's unstick attempt, the house bot driver may spend additional time performing the unstick at their discretion. Additionally, the house bot may retaliate against any robot that takes aggressive action against it, regardless of whether or not it is with the intent of delaying an unstick.

## **DOUBLE-UNSTICK**

A Double-Unstick occurs when both robots are interfering, stuck on or impeded by each other in such a way that neither can demonstrate controlled motion. Double unsticks function similarly to standard unsticks, however a double-unstick counts for both robots' unstick attempt. A double unstick may be performed as long as one of the two robots still has an unstick attempt available to them.

## **PINS**

A pin occurs when a robot is actively preventing their opponent from moving. This includes, but is not limited to lifting, grappling, blocking, or forcing against a wall.

A pin may not last more than 10 seconds. At the end of the pin, the offending robot must release their opponent by giving them sufficient space to escape.

Holding a pin for longer than 10 seconds, or giving an opponent insufficient space, is considered unsportsmanlike behavior and may be penalized via demerit system. It is at the referee's discretion to determine how much space is sufficient.

## **DISENTANGLEMENT**

Though NHRL prohibits the design and use of entanglement devices, it is still possible that robots may become entangled with each other by accident. If entanglement lasts more than 10 seconds and cannot be rectified by the house bot, the match will be paused and the referee will attempt to separate the robots manually.



During disentanglement, the referee will attempt to free both robots such that both their drivetrains and weapon systems are in operable condition.

If the referee is unable to safely separate the robots, or if either robot is unable to drive at the end of the disentanglement, the match will end and the winner will be determined by judges' decision.

Additionally, if robots get entangled multiple times in the same match, the match will be ended and the winner will be determined by the judge's decision.

## **HAZARDOUS ROBOTS AND BEHAVIOR**

If the referee or event staff deem a robot to be a hazard to the crowd, crew or competitors, or if a robot is inflicting considerable damage to the arena, the referee may elect to end the fight early. In this case, the winner is determined by judges' decision.

Purposeful damage to the arena is considered to be both unsportsmanlike and unsafe, and will be subject to penalty. This includes but is not limited to a forfeit loss for the offending robot.

## **JUDGES' DECISIONS**

If a fight goes the full 3 minutes, or if the referee stops the fight early for any reason, the fight goes to the judges.

Judges score using the criteria Aggression (5 points), Control (6 points), and Damage (6 points). The bot that gets the most total points from a single judge gets that judge's vote. The bot with the most judges' votes wins.

We will almost always have a panel of 3 judges deciding fights. However, there may be times when we would be forced to use a single judge to decide a fight.

Judges' decisions at NHRL are final and cannot be appealed. Judges' names are not released with their scores.

During an event, competitors are not allowed to ask who judged a fight, nor are they allowed to talk to the judges, nor are they allowed to ask for an explanation of why the judges voted the way they did. Any competitor who confronts an NHRL staff member about their judges' decision risks a demerit.

After an event, competitors may request more information about a particular judges' decision. Information regarding this will be posted on the NHRL wiki.

