

# **Junior Dragster Exhaust Requirements**

22OCT2012

It has been observed by ANDRA Officials that some competitors are not meeting the requirements for Silencers as per page 83 of the 2013 ANDRA Rulebook.

#### Exhaust Tip Requirement

Competitors are advised that they <u>must</u> have a **tip incorporating a 45 degree bend** welded to the end of exhaust pipes or mufflers, to redirect sound pressure waves in a downward direction away from officials as illustrated in the diagram on page 2 of this bulletin.

There have been reports that some competitors have simply cut a 45 degree angle on the end of their existing exhaust pipe in order to meet the rule changes, this is **not acceptable** and does not meet the requirements of the rule.

#### Exhaust Orientation

A diagram explaining exhaust pipe orientation is also on page 2 of this bulletin.

As stated in the rulebook, exhaust must be <u>'as near as practical'</u> to horizontal and the vehicles centreline. It is acceptable that if some other component of the vehicle is in the way and prevents the exhaust from being placed in the orientations requested, that this is deemed to be meeting the 'near as practical' requirement.

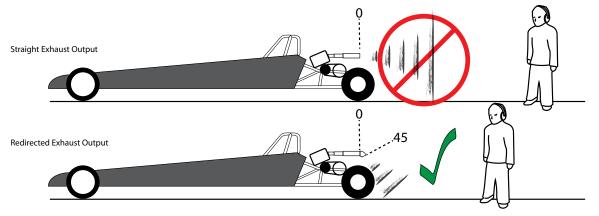
### Summary

Ample notice has been given to competitors of the rule changes and as such there will be zero tolerance for non compliance of these rule requirements. As of the date of this notice **non-compliance will result in officials disallowing the vehicle for any further competition** and making a notation in the vehicle logbook that "the vehicle was ejected from the event due to non-compliance of class requirements".

## Junior Dragster Exhaust

- Baffling Sound Pressure Wave Outputs

The single cylinder of a Junior Dragster it was discovered that the major issue was the impact the exhaust sound pressure wave outputs were having on track officials. In order to address the problem whilst considering the impacts on competitors such as financial requirements for fitting a muffler, a direction to 'baffle' the exhaust output by redirecting the exhaust sound waves away from officials and in a downward direction so as to scatter the pressure wave when it contacts the ground was adopted. The diagrams below are to demonstrate the sound pressure wave output differences between straight out exhausts and redirected exhausts.



#### **Junior Dragster Exhaust Orientation**

All junior dragsters are required to have an exhaust pipe or muffler fitted with an angled exhaust tip welded to the end, the tip must incorporate a 45 degree bend and the exhaust outlet must be directed downwards so as to 'baffle' the sound output by redirecting the sound pressure waves in a downward direction and away from track officials. Exhausts must be as <u>near as practical</u> to horizontal (parallel to ground) and parallel to the vehicle centreline.

