1. VSR VIPER JET TECHNICAL RULES

This set of rules shall be read in conjunction with other rule sets defining the running of THORL race events.

Cars eligible for the Viper Jet Class are:

VSR V-Jet ((Item:V1-VSR-RTR)(VSR040)).

The Stock VSR V-Jet differs to the Stock VSR Viper V-Spec in the following:
Traction Magnets replaced by Cylindrical Brass Weights.
Brass Weights added to the front of the Chassis.
Low Profile Pickups.
Lighter Stainless Steel Pickup Springs.
Different size rear Tyres.
The V1 Medium Chassis or V1 Stiff Chassis as per the table in Sports Prototype may be used as a replacement.

1. RACE FORMAT

1. GT Jet class will run on a track voltage, as determined by race control (typically 12-15v).
2. Sports Prototype heats will typically be Segmented style racing where all lanes totals are accumulated into a final score.
3. There will be four heats per session (six when a six lane track is used), with the total of all scores determining the competitors finishing order. In the event of a tie, fastest lap will determine positions.
4. Practice before or during heats is at Race Controls discretion, and will be announced before the session commences.
5. There will be no working on, other than tyre cleaning between heats, but a chassis may be switched once as per 2.7, and only once during the session (all 4 heats).
6. On completion of a heat, the competitors finish position will be recorded by Race Control. Cars should remain on track until all positions have been recorded.

2. BODIES

1. Bodies are free choice, but must be closed wheel. Bodies must be based on, and identifiable as cars which have raced in an organised national or international race series or event.
2. Bodies must feature accurate or at least prototypical race car colour schemes (race numbers, sponsors etc). 'Fantasy' repaints and re-decorations are permitted. Windows must be clear or painted to contrast with body. Where wings were featured on the real car, they must be present at the start of the

session, but Lexan and other lightweight bodies may feature moulded in wings.

3. Lexan bodies may run without front wheel cut-outs but these must be clear. The body must cover at least 75% of Rear Tyres/wheel, and the tyre/wheel must not protrude more than 2mm from the body. Front tyres must not protrude more than 2mm from the body. A portion of the front tyre must be covered by body when viewed from above.
Bodies may be ballasted, but ballast must be glued firmly in place. Bodies may be lowered, lightened, and otherwise worked on to improve clearances, but must maintain the original outward integrity of the original. Any method of body fitment other than bonding is permitted with any chassis. Devices designated as clips are not considered a chassis part and must not be glued to chassis although the use of booger glue is permitted. They can but do not have to be glued to bodies. Aftermarket body posts may be used.

Acceptable GT Jet Bodies.

3. VSR V-JET

1. VSR V-Jet with stock Pro 4 motor magnets and stock VSR brass weights and stock VSR 6 Ohm armature. Only the motor magnets, armatures and brass weights supplied with the chassis platform may be used.

4. CHASSIS and ELECTRICAL

1. Cars must start all races with the body securely attached, four wheels and tyres and all the chassis constituent parts. There must be no sharp edges on the cars. Race control reserve the right to ignore any laps completed by cars that do not comply.

2. All entered cars must fit through a THORL metal 34mm width gauge and be 17mm from centreline to side.
3. Only parts which are, or have been commercially available may be used as replacement items on cars. Items must be available through suppliers, and listed. One off and/or specially produced items are not permitted, unless supplied by race control.
4. Any make of plain motor bush may be used. Rolling-element (ball) bearings are not permitted.
5. Any make of pick-up shoe, shoe hangar and spring is permitted. Shunts are not permitted. Parts may be reshaped but no material may be added or removed.
6. Dust guards, and axle retainers may be removed.
7. Any gear ratio is permitted and may use any make of pinion and gear.
8. Any make of gear boss and axle spacers are permitted. Spacers must solely perform a genuine spacing function that restricts the travel of the axle. Spacers must have parallel sides, and these must be acted on by the components they are spacing. Spacers of any width and diameter can be used where they are made from non-metallic materials. Metallic washers (2 per axle) may be used up to a maximum diameter of 4mm and each 1mm width.
9. Timing brackets must be unmodified.
10. Traction magnet clips must be stock, fitted and unmodified.
11. VSR Thrust rings may be used.
12. The VSR body posts may be cut at any length to allow fitment of bodies.
13. Tyres must be single compound. Sidewall writing and detailing based on real tyres is permitted (must be class-correct and body-correct). Front tyres must be Black or Clear in colour.
14. Black or Clear 'thinnies', or Black O-Rings may be used as front tyres. All permitted tyre types may be re-shaped or reduced in diameter and width.
15. Any make of single piece wheel(s) and solid, constant diameter axle is permitted as replacements to stock items. Independent Front ends are not permitted. No sharp edges will be permitted.
16. No parts may be added to the chassis or any of it components, which were not part of its original makeup, unless specifically permitted. Chassis must not be ballasted.
17. All 4 tyres must touch the track.
18. Wheels may be built up with tape to aid tyre retention.
21. No part of the chassis may be cut, sanded, drilled or otherwise interfered with. The exception is to cut the VSR body posts which may be cut to any length and the threading of any chassis to accept aftermarket screw in body posts. The threaded section must be in exactly the same as the original post position. All wear must be by natural means only. No components other than pinions, gear

bosses and crown gears may be glued in place. Brass weights may be glued into place to aid retention.

5. MOTOR

1. Armatures must be stock and therefore not be 'worked up' in any way (examples: commutator tied-off, windings or comm epoxied, windings removed, commutator cut or diamond-trued, solder on tabs beyond factory-applied). Race control may ask for the armature to be removed to be measured for resistance (Ohms)

2. Armatures with balance marks or material removed from rotors by any means are not permitted. Armature timing may not be altered other than the use of the movable timing bracket.