

# Riverside Drift / LINK ECU Summer 50K Showdown Rules and Regulations

## 1. Competition Vehicles

### 1.1 Vehicle Classification

- A. Vehicles used for competition must be production vehicles utilizing the OEM unibody structure (i.e. must remain in factory frame configuration between front and rear strut towers/mounting locations)
- B. Trucks, Offroad Vehicles and Pickup Configurations are not permitted with the exception of Holden UTE

### 1.2 Vehicle Inspection

- A. Vehicle inspections will take place Friday July 8th (07/08/2022) Between the hours of 10AM-3PM EST prior to the start of Friday Practice sessions.
- B. It is the responsibility of the driver/team to bring the vehicle to the Technical Inspection Area, Riverside Drift Staff will not perform vehicle inspections outside of this designated location.
- C. Vehicles passing technical inspection must display Inspection Passed decal on Drivers side roll cage main hoop for the duration of the event.
- D. Only vehicles passing technical inspection prior to the start of practice sessions will be allowed to compete unless otherwise cleared with the event director.
- E. All further mechanical repairs following technical inspections must conform with Riverside Drift rulebook and Riverside Staff hold the right to re inspect the vehicle at any given time throughout the course of the event, including but not limited to conclusion of finals within 30 MIN. Any vehicle found to be outside of required guidelines will have their technical credential revoked and will be removed from competition.
- F. During technical inspection only one person from the given team is permitted to remain with the vehicle, this allows a streamlined and simplified inspection process.
- G. Riverside Drift technical inspectors may require removal of parts for inspection if it is required to complete a full inspection. This includes but is not limited to, wheels, body panels, suspension components etc.

### 1.3 Vehicle Operation

- A. The event coordinator, track marshal and technical inspector have the right to stop any vehicle if it is determined the action is needed by event staff.
- B. If the vehicle is stopped for a mid event inspection, the driver is expected to follow direction of event staff and wait in the paddock pending further action.

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## 2. Vehicle Modification Limitations

### 2.1 Chassis Modifications

- A. The vehicles original frame and unibody must remain as delivered from factory between front and rear subframe mounting locations as well as strut upright mounting locations.
- B. The chassis and frame may be stitch welded or seam welded.
- C. Exceptions to this modification include: transmission tunnel modifications to facilitate swapped transmissions/dogbox/sequential options.
- D. Mounting points for unused factory components may be removed including wiper mounting tabs/bosses, HVAC blower assembly mounting locations, unused interior trim etc.
- E. Air Jacks are not allowed to be fitted to the vehicle or used during competition.

Exceptions to the above:

S Chassis seat mounting structure may be trimmed in the hump area for seating clearances.

BMW chassis may have weld in subframe mounting location reinforcement plates installed.

### 2.2 Roll Cage

- A. The roll cage shall attach to the vehicle in 6 points (minimum required)
- B. Gussets are allowed for reinforcement in A pillar, B pillar and roof areas only.
- C. No portion of the roll cage shall extend past the vehicle firewall(s).
- D. Roll cages must include a dual bar door bar, this may be in either an X or "NASCAR"/ Ladder bar configuration.
- E. Padding is required in any area that the drivers head may contact, as well as the area along the bottom of the driver side cage structure where bodily contact is possible (variable by chassis/cage design).
- F. Main Hoop section of roll cage shall be one continuous piece of tubing and have no evidence of fatigue, modification, joining or crimping due to bending which may weaken the bar and its effectiveness.

#### 2.2.1 Welding

- A. All welds will be visually inspected during vehicle technical inspection.
- B. Welds shall be continuous around the entire tube end and structure.

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- C. Welds are not permitted to have any visual signs of cracking.
- D. All weld craters must be filled to prevent cracking during possible impact.
- E. Undercut must be under 1/16" if measured during inspection in a finished state.
- F. Minimum tubing size of 1.5"x.095" required.
- G. Each end of tubing making contact with vehicle chassis shall be attached to a mounting plate or box no thinner than 1/8" and be fully welded to vehicles chassis.
- H. Diagonal brace required to be installed in main hoop with contact point being within 6" of lower passenger side mounting point and within 6" of radius bend located by the drivers head at the upper most corner of the main hoop.
- I. Harness bar is required and shall reach both vertical legs, installed no higher than drivers shoulder belt mounting holes on the vertical seat back.
- J. 2 of the 6 points must be rearward supports reaching from the main hoop to the rear unibody frame structure, joining at the body with mounting plates.

### **2.3 Bumpers**

- A. All vehicles must be equipped with front and rear structurally safe bumpers. If not OEM these must be made of a mild/carbon steel or chromoly material.
- B. Bumper tubing must be between 1-1 3/4" and be hollow tubing.
- C. Bumpers must be mounted to both vehicle frame ends on the front and rear of vehicle. Sleeve tube with pin as well as bolt on are both acceptable means of fastening.
- D. Open ends of bumpers must be rounded or capped if exposed to limit piercing potential of another vehicle or track barrier in a collision.
- E. Bumpers and Bash Bars must fit behind vehicle body panels.

### **3. Suspension**

- A. No in cockpit driver adjustment of suspension is allowed.
- B. No adjustment of suspension is allowed between runs, including remotely.
- C. Original suspension design styling must remain the same as factory (no change subframe pickup points, must remain double wishbone or McPherson).
- D. Modified suspension components including control arms, spindles/knuckles, struts, tie rods, hubs are allowed.
- E. All strut mounting bolts must be utilized in their designed locations in the body structure (offset tophats in use for angle kits/cooilovers are allowed).
- F. Front Subframes may ONLY be modified for Oil Pan and or starter clearance as well as steering rack relocations.

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## **3.1 Steering**

A. Steering component modifications are open regarding racks, tie rods, etc.

## **4. Brakes**

A. Driver accessible brake bias is allowed.

B. Only bias adjustment front to rear is allowed, no side to side bias adjustment is permitted.

C. Brake light pressure sensor if installed must be within 1 foot of the master cylinder front line fitting.

D. Foot Brake pedal must actuate all 4 wheel braking systems.

E. E Brake must actuate rear calipers only.

## **5. Subframes**

A. All subframe no chassis mounts must remain in their factory locations. No cutting, drilling, welding or slotting is permitted.

B. Rear subframes may be modified solely in differential mounting locations for clearances of differential swaps such as Winters. However subframe must still have one solid length of material present between each vehicle side to maintain frame dimensions.

## **6. Wheels**

A. Bead Locks, Screws and other tire to wheel attachment devises are not permitted.

B. The Space between the Wheel and the Tire must be filled with air only, not form of internal support is permitted.

## **7. Driveline**

### **7.1 Engine**

A. Engine modifications are open

### **7.2 Cooling**

A. Cooling modifications are open, however system MUST be free of any leaks.

B. Automatic vehicle mounted sprayers are allowed, you may not have team members present at start line to spray cooling system.

C. If cooling system components pass through the driver compartment all parts must be either hard plumbing or shielded to prevent rupture from spraying the occupants.

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D. Radiators mounted in the rear of the vehicle must be separated with a barrier from the driver.

E. Cooling systems must be filled with Water ONLY - "Keep Cool" and "Water Wetter" additives are allowed.

F. All cooling components must be within the metal structure of the vehicle (behind lines of bumpers and frame structure) to prevent puncture. Skid Plates are allowed for protection.

### **7.3 Oil System**

A. Oil system modifications are open, however MUST be free of any leaks.

B. All oil system components must be within the vehicle structure in the same manner as stated in 7.2 - Cooling

### **7.4 Fuel System**

A. Design of fuel system is open.

B. If the fuel tank is removed and relocated from its factory location, a fuel cell must be used.

C. Fuel Cell Support structures must be welded to chassis and can not be bolt on.

D. Floor Pan may be modified to fit fuel cell and fuel lines.

E. Fuel may not leak on ANY track surface including but not limited to track, starting line and grid area.

F. Fuel lines must be sufficiently attached to the vehicle chassis and engine where applicable. No contact with moving parts is allowed.

G. No fuel lines are allowed inside the drivers compartment.

### **7.5 Nitrous**

A. Nitrous Oxide bottles must be securely mounted inside the body line and protected within the frame rails and bumper or bumper structure.

B. All Nitrous bottles must be recertified every 5 years and stamped to indicate the last inspection date.

C. All Nitrous bottle must be stamped with minimum DOT -1800 pound rating. The use of off the shelf manufactured bottle warmers is accepted. The use of any other method of externally heating nitrous bottles is not allowed.

### **7.6 Exhaust**

A. Exhaust modifications are open, however the design must exit behind and away from the driver, past the rear axle.

### **7.7 Starting**

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A. All vehicles must be equipped with self sufficient forms of starting, no bump starting/roll starting.

### **7.8 Transmission**

A. All vehicles must be capable of moving under their own power in reverse.

B. Transmission type is open, including sequential, h pattern dog box, factory or swapped transmission options. HOWEVER, vehicles must be RWD only.

C. Driveshaft loop must be installed to prevent injury in the case of failure. Loop must be made of 1/4" or thicker metal.

### **7.9 Traction Control**

A. Traction control and traction control devices are not allowed.

## **8. Electrical**

A. Vehicle Battery must be securely mounted with the positive post covered.

B. Batteries can be relocated and do not have to stay in factory locations.

C. Plastic battery mounting solutions are not allowed.

D. No bare wiring or loose hanging wiring is allowed in the engine compartment or under the vehicle.

## **9. Body Panels**

A. Body panels must be securely attached to the vehicle, in a manner which they may not separate under standard operating conditions.

B. Overfenders are permitted and must be mounted via fastener (nutsert + hardware, rivets, etc.) no adhesive only mounting is allowed.

C. Wings using standoffs must be mounted to the trunk and have one tether to the vehicle on each end of the deck portion of the spoiler.

## **10. Windshield/Windows**

A. Windshield must be either OEM glass or a lexan/polycarbonate

B. Side and rear windows must be clear, wrapping windows a body color/graphic is not allowed.

C. One functioning wiper is required for windshield.

## **11. Mirrors**

A. Vehicle is required to have 2 side mirrors - OEM recommended

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## **12. Decals**

- A. Riverside Drift Decals including a windshield banner and door placards on both vehicle doors.
- B. Riverside Drift holds the right to have any decals covered or removed at their discretion.
- C. Technical inspection decals to remain on vehicle for the duration of the event.
- D. Participants may be required to carry event sponsor or contingency decals.

## **13. Towing**

- A. Vehicle must have one tow point front and rear, either in a contrasting color or marked by "TOW"

## **14. Lights**

- A. All factory headlights and taillights are required to be present and working for headlight, taillights and brake light functions.
- B. The use of any device to change, modify or interrupt brake light function is not allowed.

## **15. Tires**

- A. Acceptable tire sizes range from 225 to 295 width. Tire size must be present on sidewall of all tires used in duration of the event.
- B. Tires may be measured at any time during the event, measurements will be made with tires on the ground in a resting state 2" from ground surface using width gauge.

## **Drivers Safety Equipment**

### **1. Helmets**

- A. All occupants must wear a helmet during on-track sessions. Only helmets certified to meet the following standards are permitted:
  - a. Snell Memorial Foundation – SA2010, SA2010, SA2015, SA2020
  - b. SFI Foundation – Spec 31.2A
  - c. FIA 8860-2004, 8860-2001
- B. Full-faced helmets are required.
- C. Helmet visors must be closed during on-track sessions.
- D. Helmet chin straps must be buckled or fastened while on course.

### **2. Safety Belts**

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- A. All Participants must use a 4 point or greater harness.
- B. Harness points seal share a single release point.
- C. Frayed and cut webbing is not permitted.
- D. Bent and cracked hardware is not permitted.
- E. Lap belts must be mounted rearward of the pelvis.
- F. Lap Belts and shoulder belts must pass through belt bosses and mounting holes seat frame.
- G. When possible, belts shall be wrapped around roll structure using a 3 bar adjuster. If not able Grade 5 or better bolts and hardware must be used.

### **3. Seats**

- A. Seats must include surrounded pass thru bosses for lap and shoulder belts.
- B. Seats must be mounted to factory locations with the exception of S Chassis cat hump removal as stated prior.
- C. Seats must be a one piece fixed back construction.
- D. Seats must be firmly mounted in such a way that they can not be moved in their bracketry.

### **4. Apparel**

- A. Close toed shoes are required, flame resistant is recommended however it is not required.
- B. Drivers are required to wear corrective vision devices if prescribed, during any driving session. Contacts and Glasses both apply. Glasses must be of a shatter proof construction.



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## Competition Format and Process

### 1. General Procedures

A. A chicane shall be used to start for each and every battle as well as qualifying passes. The design of the chicane will be in a manner which requires the lead driver to momentarily lift off throttle.

B. Initiation point is marked via 3, 2, 1 cones placed on the lefthand side of the run up near the track edge. Vehicles are to be initiated and at angle by the single cone, if failure to initiate by the cone occurs the run will be counted as an incomplete.

C. Qualifying will occur to seed drivers into the head to head bracket. Qualifying procedures are outlined in Competition section 2.

### 2. Qualifying Procedures

A. Qualifying runs consist of 2 non consecutive passes, in reverse alphabetical order of last name of registrant.

B. Scoring will be broken down into 3 segments:

- Line - 40 Points
- Angle - 30 Points
- Style - 30 Points
  - Initiation - 10 Points
  - Fluidity - 10 Points
  - Commitment - 10 Points

### C. Judging Criteria

Drivers are expected to start with a committed, high angle initiation, drift through all of the outside zones and reach all of the inner clips with the maximum degree of angle and pace, while making quick, aggressive transitions with no corrections or mistakes. Driving at the high difficulty level described by the judges, the driver is showing their level of vehicle control.

Qualifying run will be scored, when the driver finish drifting in controlled way crossing a finish line. Drivers that do not fill the outside zones, reach inner clips, or do so at a low degree of angle while making mistakes or corrections will receive deductions.

LINE (40 points)

Drivers will be judged on their ability to adhere to the line stipulated by the judges during the driver's briefing. Points will be allocated to outside zones and inner clips, but

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may also be allocated to “touch & go” areas. Line points will be broken up by sectors at each track.

### ANGLE (30 points)

Drivers will be judged on their ability to achieve and maintain a high level of angle with capability of gain or maintain speed outside of deceleration zones, as described by the judges during the driver's briefing. The judges may indicate on the track drawing areas where high angle is not required. Angle points will be broken up by sectors at each track.

### STYLE (30 points)

The judges score Style using the following areas of focus.

- INITIATION (10 points)
  - o Early – Initiation cones will be used for reference
  - o Rate to angle - Quickly getting to the desired angle
  - o Smooth - Reductions in angle and corrections
- FLUIDITY (10 points)
  - o Smooth rotation during transition
  - o Lock to lock angle - High degree of angle to high degree of angle
  - o Car is settled and flows through the course smoothly
- COMMITMENT (10 points)
  - o Consistent throttle application
  - o Maintaining pace throughout- using momentum to fill zones & width of course
  - o Approach barriers and track edge with confidence

### D. Deductions

Deductions include the following items:

Double initiation  
Tire off course  
Missing zones and clips  
Short Straightening (correction) Off line  
Lack of Angle

### E. Incompletes

If a driver does any of the following mistakes in a qualifying run, the driver will not receive a score for that run and therefore the run will be considered INCOMPLETE RUN

Spinning Out  
Opposite drift - Drifting with the opposite angle required at that point on course  
Stop drifting  
Two wheels off the marked track

### F. Tied Scoring Results

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In the result of a tied score, the following will break down the tiers used to determine the higher qualifying driver

High Qualifying Score  
Low Qualifying Score  
HQS Line Score  
HQS Angle Score  
HQS Impact Score  
LQS Line Score  
LQS Angle Score  
LQS Impact Score

### 3. Tandem Competition Procedures

- A. The higher qualifying driver will be the lead position for the first of 2 battle runs.
- B. If a vehicle is unable to make it to the start line for battle, the opposing driver must complete a “full pull” bye run, this run is not judged and is used only to verify mechanical abilities of the vehicle.
- C. Any driver with a tire that has de-beaded on the course will not be able to leave the start line, and tires may not be changed in between runs of battle. If this results in a driver being unable to return to the start line the opposing driver will advance.
- D. Rear tires are required to make two consecutive runs, front tires may be replaced only due to collision damage if required to continue battle.
- E. Vehicles may not be touched or serviced between battle runs. Including tire pressure.
- F. Initiations may be either Side by Side or Single File and must be completed by both drivers when they pass the “1” cone.

#### 3.1 Protests

- A. Protests are expected to be reasonable, well founded, and based on sound evidence contrary to the decision in question.
- B. Protests will be made formally in writing on one of the Protest Request Forms available to drivers.
- C. Protest form MUST be completely filled out, including specification of which rule/regulation/action is being questioned. Form must be signed by the driver, spotter or team filing the request. ANY INCOMPLETE FORM WILL BE AUTOMATICALLY REJECTED.
- D. The protest form must be accompanied by the associated NON- REFUNDABLE fee based on when the protest is filed, ANY protest not filed following the timeline chart below will be rejected. Fees are CASH ONLY

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### Protest Fees

Round	Time Limitation	Protest Fee
Top 64	5 Minutes After Battle	\$250.00
Top 32	5 Minutes After Battle	\$300.00
Top 16	Before Start of Top 8	\$350.00
Top 8	Before Start of Final 4	\$400.00
Final 4	Before Start of Finals	\$500.00

E. The protest will be reviewed by the event director and judges with a decision as soon as the event allows to be possible. Both involved parties will be reached to allow comment if desired.

F. If any driver or team is found to be providing false information regarding the decision, the protest will automatically fall in favor of the other party. Factual information is required by all involved regardless of the desired outcome for the party.

### 3.2 Tandem Judging Criteria

Judges are looking for the driver that performs better overall in the tandem battle competition. However, if the judges are unable to find a clear winner, a One More Time may be called. The Judges will watch both Run 1 and Run 2. They will also compare both lead runs and both chase runs and then determine which driver was the better overall driver once both runs have been completed. If the Judges cannot make a decision from the OMT both battles will be compared from both sets of runs to determine a winner, there will not be more than ONE OMT per pair of drivers in any given segment of competition.

#### Lead Driver

The lead driver is expected to do the following:

- Run on the qualifying line
- Run their best 100 Point qualifying run
- Run a chaseable lead run, not “parking” on inner points or sacrificing angle to run away from the chase.
- Accurately follow the accel/decel map provided

A Chaseable Lead Run will fill all zones, hit all inner clips while maintaining consistent speed and braking in the given areas. Giving the chase driver a fair opportunity to complete a good follow and maintain proximity with lead driver.

An Unchaseable Lead Run will include a wide range of errors from the lead driver, making it excessively difficult for the chase driver to complete a follow run given the circumstances provided by the lead driver.

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## Chase Driver

Chase driver goals include but are not limited to the following:

- Initiate no later than the lead driver
- Maintain good proximity with the lead driver for the most time possible
- Match or better the lead drivers angle
- Mimic the transitions of the lead driver, completing them at the same time/location on the course.

Incomplete runs during tandem competition include Spinning, Stopping Drift, 2 wheels off of the marked track, Opposite drift (drifting with vehicle facing the opposite direction required for the course, hood or doors opening during the run, ANY collision with the other driver that is unsportsmanlike or considered avoidable, inactive chase from the chase driver following a large deficit from previous run of opposing driver, 3 failed attempts to clear the start chicane, performing an illegal pass (Incomplete for chase driver), and being passed legally (incomplete for lead driver).

Passes may be performed by the chase driver if ALL following items occur: the lead driver is off line or off course completely, the pass must be completed at an INNER clipping point, the pass must occur on the inside of the lead drivers vehicle and cannot occur on the outside line, the chase driver becomes the lead driver once completely past the lead drivers vehicle. If the pass is performed legally the chase driver will become the lead driver and must complete the run as such.

If a driver makes an error causing the opposing driver to incomplete, this can be called against the at fault driver (parking at an inner clip causing loss of drift for the chase driver, colliding with lead drivers vehicle in the chase position, etc.) and is at the final discretion of the judges.

## 3.3 Collisions

While collisions are an inherent possibility in drifting, the circumstances must be reviewed by the judges to determine correct outcomes. Criteria for collisions is as follows:

Lead Driver may not straighten, lose drift, go off line, reduce speed other than in correct areas, reduces speed too drastically, or over rotate to the point that a large decal or correction occurs. If any of these actions occur the lead driver could be deemed at fault.

Chase Driver contact of the Lead Driver while the Lead Driver is fulfilling their goal will result in an at fault decision against the chase driver.

If damage occurs as a result of the collision, the at fault driver must use their competition time out to repair damages. If the at fault driver is unable to repair the vehicle in the time allotted they will forfeit their run and the not at fault driver will continue. The driver deemed NOT at fault will be allowed 10 minutes to make repairs to their vehicle. If the driver who is not at fault must change tires in order to make repairs, the at fault driver may request to do the same at this time if they are using a 5 minute. Allowing both drivers to be at the same wear point and not have an advantage.

Any further questions not outlined in the above information may be directed to the Event Director at the event PRIOR to starting qualification.

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Each driver must review the rulebook in its ENTIRETY, failure to do so may result in an unsound protest, inability to pass technical inspection, misconduct on track. Etc.