

TORC SERIES

COMPETITION RULES FOR

V-8 PRO LIGHT 2 WHEEL DRIVE TRUCK

2010 SPEC ENGINE AND TRANSMISSION

DEFINED AS- Vehicles custom built or manufactured as a light duty two-wheel drive utility vehicle. Vehicle must be a standard manufacturer production model available to the general public in the United States and produced in amounts of a minimum of 5000. Manufacturer body styles and engines must all be from same manufacturer. The PRO Light 2 WD class is considered an open production class regulated only by Class, CCR, and Safety Rules. Division rules supersede CCR.

NOTE: In the interest of fairness and/or to improve competition and this being a highly competitive class please be advised that adjustments to the rules, motor, engine block, head, weight, plenums, and choke size may be announced within the racing season. Class competitors will be duly advised by TORC Series.

For the 2010 season TORC/USAC is developing an alternate engine concept to reduce costs. Rules and regulations for this package areas follows

1. CHASSIS

- A. The standardized PRO Light 2WD chassis must be constructed in accordance to approved TORC Series standardized chassis prints.
- B. Frame must be constructed of 3"x 2" rectangular tubing only with a minimum wall thickness of 1/8".
- C. Wheelbase 106 inches as measured with TORC Series certified gauge.
- D. Maximum overall width 74 inches as measured outside of tire to outside of tire at a ride height of 10 inches.
- E. Truck wheelbase and overall width will be measured with all tires inflated to 20 PSI Truck will be measured as they pass over a 10 inch ride height block.
- F. All trucks must be left side steer only. Steering wheel, seat and pedals must be in approximate stock location.
- G. All chassis information such as ride height and tracking width are included in the TORC Series standardized chassis prints.
- H. **The transmission and engine must fit within the frame rails without cutting or any modifications to the transmission pan or engine oil pan.**
- I. **The motor set back will be a maximum of 42" ± 2" measured from the spindle centerline to the back of the block at the bell housing mounting surface.**

2. SUSPENSION

- A. All four corners must be a coil over suspension.
- B. Sway bars are allowed.
- C. Front suspension "A" arm must be constructed symmetrical about the centerline.
- D. Front wheel travel limit: 12 inches. Rear wheel travel limit: 14 inches.
- E. Four bar suspension only. Rear axle may not rotate separately of the axle housing mounts

3. SHOCKS AND BUMP STOPS

- A. Maximum of two shocks per corner.
- B. One spring stack per corner, maximum of two springs on one shock.
- C. External bypass allowed on one shock per corner.
- D. Determination of air shock usage will be done in the following manner: Truck will be presented to TORC Series Technical, on level ground, at existing ride height. Truck height will be measured from a

given point on the chassis, all canisters will be purged of air, and nitrogen or other charged support. If truck droops more than 1 ½ inches, the truck will be illegal.

E. Bump stops may only be attached to the chassis of the truck. They cannot be attached to any moving suspension parts.

F. Bump stops will be allowed on front and rear of the truck. Bump stops will only be legal if they absorb the last 3 inches of upward compression.

4. RIDE HEIGHT OF TRUCK

A. 10 inches measured as vehicle drives over 10 inch ride height blocks.

B. Truck may be measured before and after competition.

C. Trucks will be measured with all tires inflated to 20 PSI ~~pressure in outer tire.~~

5. WEIGHT OF TRUCK

A. **All trucks must weigh a minimum of 2,900 pounds including driver.**

B. Minimum front axle weight is 45% of total truck weight.

C. All trucks must meet minimum weight and front percentage both pre and post race.

6. BODY

A. All fender and box side mounts must be a looped design only. Box sides must be full length including the taillight wrap around.

B. Roofline, Rocker panels and top of bed side must parallel to the horizontal frame members.

C. Tires must retract into fender wells.

D. Hood must be locked down with five positive pin fasteners equipped with clip cables. Three must be evenly spaced across the front of the hood and two placed in the rear corners of the hood.

7. ENGINE BLOCK

A. **The engines approved for this class are:**

General Motors	88958604	GM Performance Parts
Ford Racing	D347SR	Ford Racing
Mopar	ASA75360	Stanton Racing

Only TORC or factory authorized agents will be allowed to sell new engines or perform any internal maintenance or repairs and re-certify with factory seals.

The TORC authorized agents for these engines are:

General Motors	Earnhardt/Childress	336-853-4943
Ford Racing	Roush/Yates	704-658-1540
Mopar	Stanton Engines	859-885-7354

B. Engine must be of the same type as installed or optioned by the original manufacturer for stated series of race truck.

C. Centerline of crankshaft cannot be less than eight inches above the lowest part of the frame rail, as measured from the front of the engine.

D. Engine must remain in front of truck, no rear engine trucks will be allowed.

E. Mandatory that the engine block and head be positioned between frame rails as viewed from the top.

8. ENGINE OILING SYSTEMS

Engines may be wet or dry sump. Dry sump systems must use a 4 stage (3 scavenge, 1 pressure) gear pump and a steel pan with a maximum width of ten inches. Recommended oil tank capacity is 3 gallon minimum.

Any wet sump pan is allowed.

9. CARBURETOR

A. **A single 650 Holley 80541-1 650 CFM carburetor is mandated.**

B. **Typical adjustments to maintain performance levels, or tailor the metering system, are permitted.**

- C. Adjustments which are not perceived as modifications are: idle speed, idle mixture, power valve, jets, air bleeds and float level.
- D. No other modifications are allowed.
- E. A single 1.0" spacer is allowed. Spacer must have 4 holes and tapering is permitted.

10. HEADERS

- A. Headers must be mild steel with 1¾" primaries, 4 into 1 formed canister collector (not merged) and 3" secondaries with a muffler. No side to side connecting pipes of any size are allowed. Maximum decibels are 95 at 100ft.

11. MUFFLERS

- A. Magnaflow #14159 Race Mufflers are required and will be provided by Magnaflow Exhaust Products.

12. IGNITION SYSTEMS

- A. A MSD ignition with module 6AL #6420 (or ALN) will be required with a 6000 RPM limit.

13. ENGINE COOLING SYSTEM

- A. One radiator of any size may be used.
- B. Radiator must be placed in the rear.

14. DRIVE TRAIN PARTS

- A. Engine crankshaft must be connected to the transmission input shaft via a conventional clutch assembly or vane type torque converter.
- B. Must be in stock order, engine, transmission, and differential via a drive shaft.
- C. Rear differential must be spool type only, and approved by TORC Series technical director.
- D. Rear differential must have a minimum of one inspection hole 1 ½ inch diameter located in such a manner that TORC Series tech can see and identify spool. If inspection hole does not exist, crew chief will remove differential for TORC Series technical inspection.

15. TRANSMISSION

- A. A GM turbo 400 transmission with standard gearing will be the only transmission allowed. Aftermarket short extension housing is allowed.
- B. Transmission must operate through a conventional torque converter.
- C. Manual shifting of transmissions is mandatory, unless other method need be employed for handicap condition of driver. TORC Series Technical Director must approve all non-manual shifting procedures.
- D. Remote accessory drives are not allowed.

16. TIRES

- D.O.T. tires are mandatory. Refer to COMBINED CLASS RULES (CCR), paragraph 33.
- A. Maximum tire size will be 32" X 11.50" as indicated on tire. Metric tires may be used so long as they do not exceed the maximum tire size indicated above.
- B. Tires will not be allowed if circumference exceeds 101".
- C. Tires will be measured without load of vehicle.
- D. Tires will be measured from their widest and highest point, inflated to 35 PSI, mounted on a ~~standard~~ 8 inch wheel race ready wheel.
- E. No inner liner allowed.

17. WHEELS

- A. All wheels must be in excellent condition free from cracks or defects that could cause wheel failure.
- B. All bead lock rings must have recessed bolts.

18. RADIOS

- Frequency must be registered with TORC Series.
- All PRO trucks must be equipped with a two-way radio and a spotter.
- Refer to COMBINED CLASS RULES (CCR), paragraph 37.

ALL CCR APPLY AS SET FORTH IN THIS TORC SERIES RULEBOOK.

