



# TOP ALCOHOL FUNNY CAR

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### **IHRA Top Alcohol Funny Car (TAFC) Rules Summary Class Overview**

- Designation: TAFC (Top Alcohol Funny Car); car number precedes class.
- Reserved for alcohol-burning and injected nitromethane/methanol-burning Funny Cars built solely for drag racing.
- All cars are weighed post-run with the driver included.

### **Class Weights**

#### ***IHRA Specifications:***

- **Roots Supercharged Methanol:**
  - Min. weight: 2,200 lbs
  - Max displacement: 565 ci
- **Screw Supercharged Methanol:**
  - Min. weight: 2,300 lbs
  - Max displacement: 528 ci
- **Non-Supercharged Nitromethane:**
  - Weight: 5.35 lbs/ci
  - Displacement: 410–456 ci
  - Min. weight: 2,300 lbs

### **Fuel Regulations**

- Altitude  $\geq$  3,500 ft: 100% nitromethane allowed
- Other Events:
  - Max 95% nitro (rear gear ratio 3.20 or higher)
  - Max 92.5% nitro (rear gear ratio 3.19 or lower)

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- Only methanol and nitromethane permitted

### Oildown Policy

- Fines and penalties apply per IHRA regulations if a competitor causes an oildown.

### Engine Regulations

- Cylinder Heads: Billet allowed; max 2 valves/2 plugs per cylinder. Must meet IHRA specs.
- Engine Specs:
  - Single camshaft, automotive-type I.C. engine
  - Bore spacing: Hemi/Chevy 4.840"; Ford Boss 4.900"
  - Dry-sump and OEM OHC allowed
  - SFI 7.1 ballistic lower-engine device required
  - Must retain OEM-like specs (crank, cam, bolt pattern, etc.)
  - No exotic materials; standard metals only
  - Redesigns require IHRA approval

### Fuel System

- No pressurized tanks; vented externally
- Fuel  $\geq 50^{\circ}\text{F}$  at all times
- Max two pumps; no nitrous or propylene oxide
- Driver-area fuel lines: steel or braided only

### Headers & Injector Scoop

- Headers: Double-pipe, insulated,  $32^{\circ}$  min. angle, 2.75" max O.D.
- Scoop: Max 1 sq. ft. opening, 24" wide; height = top of windshield

### Oil Systems

- High-pressure oil lines: crimped/tested (750 psi, 30 sec); no plastic lines
- Retention tray required (.050" aluminum or .040" carbon/Kevlar)

### Supercharger

- Overdrive Limits: PSI – 1.92; Roots – 1.50
- Roots: Max 14-71 size, billet allowed, internal airflow mods banned
- Screw: Only PSI 206D allowed; billet banned;
- SFI 23.1 burst panels & 14.2/14.21 restraints mandatory

### Throttle & Valve Covers

- Mechanical throttle only; dual springs required
- Valve covers: metal only; SFI 14.4 restraints (non-supercharged nitro)

### Breather & Crankcase

- Vent system with 1.25" min hose ID, 1–2 gal. catch-can
- No vacuum crankcase systems

### Clutch, Driveline, and Transmission

- Clutch: SFI 1.3/1.4 required; max 3 discs (methanol), 4 (nitromethane)
- Driveline: 360° covers front/rear; anti-blowback required
- Transmission:
  - Prohibited for non-supercharged nitro
  - Max 3-speed auto/planetary for blown combos
  - No lockup converters, OD units, or auto-shift systems
  - Electric-only transbrake allowed if IHRA-accepted
  - Required safety items: SFI shields (6.1/6.2/6.3, 29.1, 4.1)

### Brakes & Steering

- Four-wheel carbon-fiber disc brakes; dual master cylinder
- Quick-disconnect steering (SFI 42.1); no plated parts

### Suspension & Wheelie Bars

- Front suspension optional; wheelie bars required (max 4" off track)

### Chassis & Frame

- Ballast: Max 250 lbs; see IHRA Gen. Reg. 4:2
- Helmet Shroud: .075" titanium / .090" steel / IHRA-accepted composite
- Ground Clearance:
  - 3" front to 12" behind axle
  - 2" elsewhere
- Parachutes: Dual, with bright-colored spring chutes
- Roll Cage: Must meet SFI 10.1; external wiring; recert yearly
- Wheelbase: 100"–125"; max 2" side-to-side variation
- Tow Hooks: Required at lower front chassis

### Wheels & Tires

- Tires: Max width 18", circumference 108"–118"
- Wheels: Rear SFI 15.3; beadlocks or liners mandatory; no wire/disc covers

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### Interior

- **Materials:** Aluminum or steel only (except carbon scoop)
- **Seat:** Foam padded, flame-retardant covered

### Body Specifications

- **Must be IHRA-approved mold** (1969+ sports/coupe/sedan, ≥63" wide)
- **Max overhang:** 40"; rocker panel 18" past rear axle
- **Window, grille, bumper, spill plates, and wickers** must meet strict specs
- **Transparent escape hatch** not allowed; size: 18"x17", front-hinged
- **Wheelwells** must meet min opening specs
- **Body** must be removable with marked T-handle release

### Electrical & Ignition

- **Allowed:** Ignition, data loggers, RPM-based fuel control
- **EFI:** Only with blown alcohol, must be IHRA-approved
- **Ignition:** Programmable allowed; coil-on-plug only for blown alcohol
- **Banned:** Multi-point rev limiters, performance-based adjustments

### Fire Safety & Shutoff

- **Fire System:** 20 lb SFI 17.1 system; 15 lbs engine, 5 lbs driver
- **Shutoff:** Electrimotion TAFC system (SB001TAFC + RF001) required

### Driver Requirements

- **Must have current IHRA level 2B license** for TAFC.
- **Arm Restraints & Restraints:** SFI 16.1 6-point, flame-resistant-covered
- **Helmet:** Full-face SA2015+ or FIA equivalent; Eject system or Lid Lifter
- **Protective Gear:** SFI 3.2A/20 suit, 3.3/20 gloves/boots, fire-retardant underlayers
- **Fresh Air System:** Mandatory; constant-pressure only
- **HANS Device:** SFI 38.1 required anytime in vehicle