

Historic drag racing vehicles operating and classification guidelines.

As the eventual goal of the Allard Chrysler restoration is an appearance of the car in the USA, the ACAG has made itself aware of guidelines for historic drag racing vehicles and cackle cars at sanctioned events in America. Some influenced the restoration process and safety requirements. As the Nostalgia drag racing scene is expanding in Europe we thought it might be useful to publish them on the ACAG site, along with current IOPD certification requirements.

The IOPD currently authorises 6 UK Drag and Sprint Venues where historic drag racing classes are welcome and are deemed "fit for purpose" following precedents set by the IOPD. And so it has been agreed that the IOPD will issue, under its statutory powers under the 1992 off road event regulations, a certificate stating that a vehicle is an Historic Drag Racing Vehicle if it:

- 1, Is designed and built prior to 1996.
- 2, Is of quality design and construction of the time when constructed.
- 3, Is of proven durability.
- 4, Has performed constantly at a number of events or venues.
- 5, Has achieved a creditable time and speed at the time.
- 6, Is of a tubular designed must use CDS or chrome molly to build regs of the time when it first operated.
- 7, Conform to the appropriate general construction rules of the time when first operated.
- 8, The driver must use the latest spec safety equipment where ever possible

The vehicle will be "accredited" by a "three wise men" system using adjudicator's from IOPD approved list of scrutineers.

An IOPD authorised certificate will not in any way warrant the safety of the vehicle and no representation is made that the certificate will in any way protect the driver or spectator from any injury or death. It is merely a casual inspection of the blatantly obvious and must be used only in conjunction with the IOPD's Operational Codes of Practice for Auto Leisure Events.

At the beginning of 2011 these were the NHRA cackle car guidelines.

CAKLE CAR GUIDELINES

1. **General:** All vehicles must be in good working order, with all components in proper mechanical condition including frame construction, brakes, steering, wheels and tires, etc.

2. **Ignition/Magneto:** Must have functional, positive action, ON/OFF switch located in driver's compartment capable of de-energizing the entire ignition system. Driver must be able to easily access and operate ignition switch when seated in normal driving position, with all belts secured. "Momentary contact" switch prohibited. Magneto switch is to be used to shut off engine only if fuel shut off does not function properly.

3. **Throttle / Linkage:** Each car must have a foot throttle incorporating a positive acting return spring attached directly to the carburettor/injector throttle arm. A positive stop or override prevention must be used to keep linkage from passing over centre and sticking in an open position. System must be free of binding.

4. **Fuel Shut Off / Cable:** Each car must be equipped with a fully functional, quick action, fuel shut off valve. Valve must be positioned at the outlet/pressure side of fuel pump. Valve must be controlled with positive action device/cable located where driver has full ON/OFF control. Driver must be able to easily access and operate fuel shut off system when seated in normal driving position, with all belts secured.

5. **Clutch / Linkage:** All cars must be equipped with automotive type clutch, using single or multiple disks. Fully centrifugal type clutches (Crowerglide, etc.) prohibited**. Use of supplemental counterweights prohibited. Spring pressure is not to exceed normal operation requirement to start engine. Clutch adjustment settings must provide for full disengagement at any and all RPM.

Clutch linkage must be in proper working order, and provide driver with full range of control. Driver must have adequate leverage/control of clutch pedal to easily and fully disengage clutch at any and all RPM.

***Cars equipped with fully centrifugal clutches would be allowed to perform static start only if driveline is fully disconnected.*

6. **Driveline:** Drivelines must be completely disengaged during any static starts when drive wheels are touching the ground either by disconnecting coupler, or use of an "In and out" device. Exception would be when undergoing a mandated tech inspection static start - in a designated, secure area.

Vehicles not equipped with driveline disconnect devices must have drive wheels off the ground using fixed position jack stand devices (not a floor jack), for static starts in populated areas.

7. **Apparel:** During any push start procedures, including practice starts, drivers must wear full apparel, including jacket, gloves, helmet, mask, and goggles. Full length pants required.

8. **Belts:** Seat belts and shoulder harnesses must be in good condition, and fully utilized during any push start procedure.

9. **Drivers:** All drivers participating in push start Cacklefest events must have demonstrated full capability to operate car, with multiple starts required to be included in feature events. Drivers may be asked to demonstrate ability to locate, and operate, all controls - even when blindfolded.

Drivers of all Cacklefest cars, and drivers of all push vehicles must possess valid State Driver's License.

10. **Fire Extinguisher:** All participants making static starts, must have functional all purpose fire extinguisher near the car at any time engine is running. Extinguishers must be carried in all push vehicles.

11. **Pushboards** - A primary concern is that of incompatible pushboard to pushbar interface. Make sure the pushboard is securely mounted, of adequate size and height and of a hard surface. Soft wood or thin metal over a soft backing is not advised. An excellent choice is, ¼ inch or thicker polypropylene plate over a rigid backing.

Supplemental Information 2010 California Hot Rod Reunion:

In order to participate at the 2010 California Hot Rod Reunion push start Cacklefest, each team owner and/or driver was required to attend a pre-event instructional meeting at the track. Teams not attending this meeting were not included in Saturday's Cacklefest activity.

All Cacklefest participants meeting technical requirements were given time for practice starts, starting at 12 noon on the Thursday before the meeting.

Procedures

1. **Static starts/driveline engaged** - If necessary to make static start, with driveline engaged and tires on the ground, the car must be relocated to a designated remote area free of spectators.

2. **Speed Limit/Push Starts** - Maximum speed of 35 miles per hour. 20 is generally fast enough. The slower you can adequately push start the car the better.

3. **Qualifications** - All drivers - of both race car and push vehicle, must have demonstrated experience in order to participate in push start Cacklefest activity. A detailed guide will be available for push start procedures.

4. **Licenses** - Under consideration - licensing programme for Cacklefest drivers.
A. Push starts only
B. Burnouts and 300 ft. launch
C. Eighth mile runs

5. **Participant "Letter of Agreement"** - Owners and drivers will be sign an agreement to abide by any and all established guidelines prior to entry acceptance at Cacklefest events. Consequence of not adhering to accepted guidelines will be withdrawal of entry/participation privileges.

CHRR, NHRR & Other Push Start Events:

Push Vehicles - Each entrant must make arrangements to have a "period correct" push vehicle for the Cacklefest presentation.

Always make sure that the push bar lines up with vehicle's push apparatus. WOOD IS NOT A GOOD OPTION FOR PUSH BAR MATERIAL AND SHOULD NOT BE CONSIDERED. If you have a single point bar on car it will dig into the wood and not allow any side way movement on bar thus making the push vehicle steer the race car. Not a good idea. It also will break very easy. A bar made of aluminium or some material that is comparable is best. It also needs to have a sufficient amount of surface area horizontally and vertically.

Instruct the driver to slowly move forward until contact is made while the driver lightly holds the brake on the dragster so it doesn't bounce forward. When the push board is aligned to centre the dragster with the centre of the push car, the driver gives a signal with their hand in the air as to when to start accelerating. Instruct the push car driver not to react to anyone else's signal than the person in the race car.

Watch for signals from whoever is controlling the flow of cars down the push road. When it's your turn to go have the driver smoothly accelerate up to 30 MPH and hold it there. You can feel the car stop accelerating so you know you're at speed to dump the clutch. The push car driver's main job is to keep the dragster centred with the push car at all times, if for any reason the race car moves right or left the push car is to stay centred. The driver holds the 30 mph and stays in contact with the race car until the engine is fired and it accelerates away from him. Once the race car has driven away from the push car the driver is to slow down and give some space between the two vehicles as the dragster may decide to slow down or stop for a photo op and you don't want the push car climbing over the top of it!

Keep in mind that other vehicles could be push starting, and following close behind you. Do not stop the flow of push road traffic.

Follow the race car to starting line. After the race car makes its turn - DO NOT turn corner with vehicle like Jeff Gordon. Crew members will fall off, toolbox will slide and fall onto track and tools will be all over starting line pissing off track officials.

Last but not least if car fails to start on the first go don't push until you end up in the grandstands. NOT GOOD. **Just be careful and safe.**

ANATOMY OF A PUSH START: THE DRIVER

Push Starts - Bakersfield Cacklefest - Push starts will take place on fire-up road, at a starting point, approx. 300 ft. past scoreboards, towards starting line area. Rubber traffic cones will be placed on fire-up road, approx 8 ft. from fence line, as a guide to drivers, and to provide better view for spectators. **Headlights of push vehicles should be turned off** unless absolutely necessary to see the race car. (Other events will give similar instructions to fit the facility and time of day).

1. Back down engine with a "turn over" wrench by cranking backwards. Check to see if mag switch is OFF (push-pull switches are not a good idea - driver can bump switch getting into car and turn mag on) toggle switches are best. Make sure the fuel shut off is in the CLOSED position. **"NEVER TURN THE MOTOR OVER BY HAND OR WITH STARTER IF THESE ITEMS ARE IN ANY OTHER POSITIONS BUT OFF"**. You don't need to turn it over more than three times. Cranking it for the next thirty minutes will only make your arm sore. If three times won't take any fuel out of the cylinder thirty minutes won't either. (Every time you walk by the car always look to see if this is done. Never taking anything for granted).
2. Prior to pushing off, make sure the magneto kill switch is in the OFF position, and that the fuel shut-off handle or lever is in the ON position.
3. Fully depress the clutch pedal (just the opposite with a Crowerglide).
4. When the push vehicle gets the race car up to approx. 25 MPH, release the clutch pedal.
5. Allow the engine to turn over for at least 5 seconds (to get fuel at least up to the pump) and make sure you have oil pressure.
- 6 Driver will then open throttle, count to three, prime motor, close throttle, turn on mag switch and "WAHOO" - motor should start. Stay with car until motor is running on all eight and driver pulls away from the push vehicle.
7. Depress the clutch pedal. The engine RPM should be at a slightly high idle. As soon as the engine has built sufficient heat, release the throttle pedal to the normal idle position.
8. Use the hand brake to slow as necessary. If additional forward motion is needed to carry the car ahead, slightly release the clutch pedal. Some light additional throttle may be needed if travelling at an extremely slow speed. (This will be important when making turns, etc.)

BLOWER STARTING:

1. Always check to make sure the mag switch is OFF and Fuel Shut OFF is in the CLOSED position. **"NEVER TURN THE MOTOR OVER BY HAND OR WITH STARTER IF THESE ITEMS ARE IN ANY OTHER POSITIONS BUT OFF"**. Make sure all fuel

fittings are tight. (Every time you walk by the car always look to see if this is done. Never taking anything for granted).

2. Back down engine with turn over wrench by cranking backwards. You don't need to turn it over more than three times. Cranking it for the next thirty minutes will only make your arm sore. If three times won't take any fuel out of the cylinder thirty minutes won't either.

3. Make sure car is on proper jack stands or coupler is unhooked - with driver in the car - wearing jacket on and helmet.

4. Attach the starter, snug it down and then spin the engine with someone watching the oil pressure gauge. When the oil pressure reaches 60 or so pounds the person watching the gauge gives the person spinning the engine the "thumbs up". If no pressure is indicated - STOP RIGHT THERE. (Put oil in motor)

5. The starter is then re-tightened to the blower mount; the fuel shut off valve is opened to the ON position.

6. Then injectors are opened (usually by the guy spinning the starter) and he squirts about half a pint of gas in the hat. (Gas is better to start with than methanol, because it has a low flash point and will light quickly).

7. He then looks at who is going to switch on the mag to make eye contact, then starts spinning the starter and in around 3 seconds nods his head which signals the person to turn the mag switch to the ON position. As the engine begins to light he squirts more gas at the base of the closed injectors to make sure it lights (It is important to keep your finger on starter button until motor is running completely).

8. Should engine BANG, POP, FART, or does not START...DO NOT start at the top of this list and repeat - STOP! SOMETHING IS WRONG! Check out all systems - Fuel, Mag, and Timing before continuing. One of the worst mistakes people make is to keep trying to start an engine that has something wrong. Know when to stop.

Self-Starts/Blower Starts - All cars, regardless of class, not being push started will be positioned at the starting line area, and will be fired up simultaneously prior to push start vehicles.

Crew members - With the exception of one designated "crew chief" for each vehicle (if required), all other personnel must remain off the track, behind guard walls, until ALL ENGINES OF ALL CACKLEFEST PARTICIPANTS have been shut off.

CHRR Entry - Participation in Cacklefest is a privilege. Each entrant must conform to the fixed regulations and conduct themselves in the spirit the category was intended.

General

If you are considering a Cacklefest restoration or recreation other than one you have previously owned, the subject project must have the ongoing approval and cooperation of the original principles (or their heirs). Cars of no original prototype must have a strong connection to the era. There are qualified, knowledgeable people willing to freely advise you in all matters relating to Cacklefest cars, their safety, appropriateness, and correctness.

Supplemental Guidelines

Using the recommendations of knowledgeable individuals, we will publish notebooks, with periodic updates, concerning specific functions and procedures. The topics will include:

1. Starting procedures/precautions for supercharged/nitro engines (see above).
2. Detailed linkage installations for throttle and clutch functions.
3. Push starts - Detailed tips for push vehicle drivers (see above).

MINIMUM Cacklefest Drivers Safety Apparel

Helmet - Open Face

Goggles - Metallic Frames / Glass Lenses

Face Shield - Aluminized Cotton (with breathers)

**Suit - Multiple Layer Nomex (one or two piece) SFI 3.2A/5 Spec.

Gloves -Aluminized Cotton / Leather Palms or Nomex / Leather Palms

Shoes - Leather

Boots - Aluminized Cotton (optional)

Socks - Cotton

Undershirt - Cotton

Undershorts – Cotton

***firesuit spec pants optional for push starts, but required for burnouts and/or runs.*

Please try to adhere to **all** the guidelines that pertain to your car(s) so we can insure that Cacklefest will be around for a long time to come. Please keep in mind that one serious mishap could ruin this for everyone and doom your \$100K restoration to life in a museum.

Recently new guidelines about vehicle classification have been published by Project 1320.

VINTAGE DRAG RACE VEHICLE DESIGNATION

INTRODUCTION:

The following presentation constitutes a series of recommendations dedicated to sorting out the many and varied approaches to an increasingly popular movement – the return of historically relevant cars to nostalgia/vintage drag racing events. Contributors to the results of this effort are neither rules makers nor event sanctioners. Each person participated agenda-free. Should event-holders and/or service professionals choose to adopt these contents, such is their free will choice.

FOUNDATION:

The increasing population of returning-to-the-sport vintage drag race vehicles is a really good thing.

However, the methods and means by which such vehicles are discovered and returned to the sport has – as usual – experienced growing variance between claimed origination, results and reality. The duplication capability of modern digital equipment and machines adds to the potential confusion.

As the value of such vehicles increases, and the creativity of their owners grows, so too will the results of those choices. In an effort to avoid future conflict at check-in; bracket, class or event placement and valuation results – a group of concerned individuals recently created guidelines for individuals bringing vintage drag race vehicles back into the sport. It is to those who have created the current population, and those who now seek to, reflect and preserve our sport's history through glorious physical examples, that these guidelines are dedicated.

Thank you!

THE CONTRIBUTORS:

Steve Gibbs -- Former NHRA Vice President - Competition, Member, Board of Directors of the Wally Parks NHRA Motor Sports Museum, co-founder of the National and California Hot Rod Reunions and the "Cacklefest" concept.

Jon Lundberg -- Former drag race announcer, drag racing historian, performance aftermarket (SEMA) industry veteran, owner of Southwest Valuations, LLC and credentialed as an Accredited Senior Appraiser by the American Society of Appraisers.

Carl Olson -- Former champion drag racer, former NHRA Vice President, performance aftermarket (SEMA) industry veteran and Motorsports Manager at the SFI Foundation, restorer of both oval track and drag race cars.

Bill Pitts -- Attended his first drag race in 1964, restorer of the Fuller "Magicar" - the vehicle which launched a national wave of restoration and return of many former drag race competition vehicles to the sport.

Greg Sharp -- Curator of the Wally Parks NHRA Motor Sports Museum, drag racing historian, co-founder of the National and California Hot Rod Reunions and the "Cacklefest" concept.

SUGGESTIONS TO INTENDERS:

It is with profound interest in enabling more veteran drag race vehicles' return to drag racing that the following suggestions/ recommendations are presented to those considering such a project.

1. Learn all you can about the vehicle and its history. Then pick a focused timeframe and avail yourself of all the pertinent magazine stories and photographs you can find of the vehicle AT THAT MOMENT and create what you will from that information. Race cars change and evolve almost from that minute the paint dries. Restoring an individual's or team's vehicle lacking a specific build target – time-wise – and proper authentication/support may result in your expensive investment being classified or valued in an identity class that presents a cruel surprise. Be able to put forth such documentation upon request by officials.
2. Make every attempt to obtain an endorsement(s) from the original builder, participant(s), team or extended family of such and involve them in the project. Such folks can help you identify components, special vendors and can endorse – and thereby enhance – the vehicle's authenticity. They are part of the resulting project's history – and of the sport. Their involvement is a value-adder both to drag racing history and the vehicle's "Provenance" (aka the origin and performance accomplishments resume back to the builder).
3. Contact all individuals and companies involved in the construction and sale of all vehicle components to determine and memorialize their correctness for the particular timeframe and vehicle. Further, attempt to chronicle all changes and modifications made subsequent to the original sale. Keep the records you create handy for inspection – document, document, document.
4. Conduct and record interviews with anyone either involved with the vehicle or those who observed it in competition at motor sports events. Retain those recordings and/or transcripts for future reference. Keep documentation for your vehicle, and your claims for it, available for inspection upon request by event officials or contract professionals.
5. Take all necessary steps to prevent unnecessary deterioration of any component, with particular attention to such items as tires, fuel lines, polished metal, etc.
6. Beware of "over-restoration". Modern finishes and techniques create glorious results. However, they do not necessarily enhance your project's correctness.

7. Do not employ the use of vinyl graphics or “wraps”, other than period-correct equipment maker or sponsor decals. Graphics should be hand-applied as they were during original build and the original artist should be retained for such work where possible.
8. Retain all invoice copies, bills of sale and any other fringe part or component “tailoring” that takes place during your project. Should something unthinkable happen, you’re going to need them – organized.
9. Should you decide to make the car operational, spare no expense when it comes to safety. Read the current rules and follow them to the letter.
10. Should you wish to exhibit or “compete” in an event or demonstration your vehicle must pass all safety regulations in effect for that occasion (e.g. to enter a Cacklefest, your car MUST be fitted so as to allow positive clutch and/or driveline-to-engine disconnect).
11. Should your goal be to attend demonstration or public events, seriously consider extra “spectator” insurance coverage for those occasions.
12. **Fire-up your vehicle on a regular basis** so that it remains easily operational while both the fire-up techniques and attendant safety precautions become “muscle memory”.

VEHICLE CLASSIFICATION: Effective June 1, 2011.

(HV) HERITAGE VEHICLE (aka Barn Find, Survivor™, Unrestored Original): Such vehicles represent the classic “barn find”. Such a car is in exactly the same condition as when it was last operated. Preparation should involve merely a thorough clean-up, detailing and replacement only of damaged or unsafe components. Should the vehicle’s finish be deteriorated to the point where fresh paint and protective finishes are mandated, such is allowed but restricted to those colors and livery congruent with the vehicle’s chosen timeframe.

- (HV 1) Functional condition
- (HV 2) Non-functional

(RO) RESTORED ORIGINAL: Such cars are based upon varying degrees of available components from the original vehicle. Builders will provide photographs of the car – so as to illustrate the car’s original and/or timeframe appearance – which was used as target for the restoration.

- Degree of Original Components Used:
 1. (RO 1) Complete vehicle with documentation or authenticity evidence.
 2. (RO 2) Significant Components – A majority of original car’s structural parts on the subject with documentation or authenticity evidence.
 3. (RO 3) Limited – Identified primary components from original car exist on the subject with documentation or authenticity evidence.

(RR) RECREATED / REPLICATED: Cars built to replicate an earlier vehicle that was no longer in existence or unavailable for restoration. Classified in terms of race history (provenance), authenticity execution of workmanship and the degree of involvement from the original team and/or family.

1. (RR 1) Built with validation/endorsement plus active participation of original team member(s) and/or original builder(s).
2. (RR 2) Built with Validation/endorsement of family and/or original team member(s).
3. (RR 3) Does not have Validation/Endorsement.

(TC) TRIBUTE CAR: A vehicle constructed of what might be period-correct parts but from other vehicles wherein the fit, finish and livery characterize a tribute to a specific (earlier) year's individual or team.

1. (TC 1) With validation/endorsement of original by original team members.
2. (TC 2) No validation/endorsement.

(PC) PERIOD CORRECT: A vehicle built from period-correct, but dissimilar, components from several donor vehicles finished to resemble a vehicle of its genre (dragster, funny car, gasser, etc.).

1. (PC 1) Because of the finished subject's general nature, no validation or authenticity requirement exists. However, event participation will be determined by the individual sponsoring/sanctioning organization.

(UN) UNIQUE: A finished subject that resembles earlier era race cars but with completely unique construction standards, details and livery. As such these vehicles are unable to be classified in any of the above categories.

1. (UN 1) At the time of this writing (May 2011) but one example is complete.

FINAL NOTE -- *IMPORTANT*:

The foregoing will take effect beginning June 1, 2011, and will be strictly adhered to commencing with the 2011 California Hot Rod Reunion at Bakersfield in October. These guidelines will be subject to continuing review and will be updated on an annual basis published February 1st of each following year.

Contact Jon Lundberg for more details about the classification guidelines on jon@aris-us.com