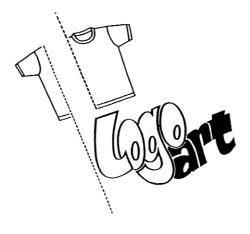


East Coast Four Wheel Drive Association, Inc.

2020

Competition Rules, Regulations, Classifications, On/Off Highway Safety Program and Sanctioning Rules for more than a quarter century we have spread the word of our sport by creating great impressions for you... your club...your event!



# 2019-20 COMPETITION RULES AND REGULATIONS

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For race information visit our Website at: www.EC4WDA.org

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\*\*\*Not responsible for errors or misprints in rules book.\*\*\*

#### East Coast Four Wheel Drive Association 2019-20 Competition Rules and Regulations

All drivers must belong to EC4WDA before they can race. Each individual EC4WDA member must pay Twenty Three (\$23.00) Dollars plus region dues to join. That individual may register at the race and their membership covers the entire racing season.

Whenever a question of rules or safety arises, the members of the Rules Committee - minimum of three (3) - may make a decision on the question, and that decision will be final.

All point figuring and classing should be done by the EC4WDA rules persons.

The decision of the Rules Committee will prevail on any situation not covered by these rules.

There will be no exclusion to participating in the event by reason of make of vehicle.

No express or implied warranty of safety shall result from publication of or compliance with these rules and regulations. They are intended as a guideline for the conduct of the sport and are in no way a guarantee against injury or death to spectator or participant.

If local laws exceed EC4WDA Rules, we shall adhere to local laws.

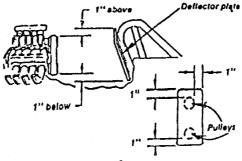
Any vehicle may be reinspected at any time, even if it holds a current region sticker. All vehicles must have a safety inspection at each race. Any vehicle involved in a collision, mishap, or rollover must be reinspected before the next round of competition. Any vehicle which rolls 360 degrees must stop and be reinspected before next round of competition.

#### BODY

Each vehicle shall have a minimum body as follows:

- A. Radiators, oil coolers, hoses, belts and fans must be shielded by a combination of shields and/or hood to protect spectators and drivers. Blowers with more than half of diameter of top pulley exposed above hood must be shielded. In the event the engine is exposed, driver must wear full fire protection and full face shield.
- B. Rear tire tread area must be shielded from driver.
- C. Remove all side and rear windows in all nonstreet legal cars. Obstacle only.
- D. All open body vehicles must have a foot restraint on the driver's side to keep driver's foot from slipping outside the vehicle.
- E. Excessive lightening of the body and/or frame are not permitted.
- F. Whip antennas, tow bars, and hub caps must be removed for competition. Tire chains are not permitted.
- G. Recommended that all vehicles have a marked tow point at the front and rear.
- H. The following will apply to home-made bodies:
  - 1. Metal with minimum thickness 22 gauge or fiberglass.
  - Front engine fire wall must extend from cowl to floor. Floor must extend from firewall to rear of driver's seat under driver's compartment.
  - Rear Engine; firewall must extend from the top of the valve cover(s) to the floor behind the driver's seat. The floor must extend from in front of the pedals to the rear firewall.
- Oil lines, fuel lines, water lines, transmission coolers and radiators are not permitted in the driver's compartment.

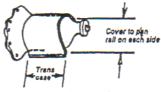
- J. Steering knobs are not to extend beyond three (3) inches above the steering wheel and must be at least two (2) inches in diameter. A standard tractor knob or solid plastic ball-bearing knob is sufficient.
- K. All rear engine cars must have a deflector plate to protect driver and fuel tank from engine. Plates must be made of .125" aluminum or .060" steel. It must extend from top blower pulley to bottom and be at least 1" wider than each pulley for supercharged cars. Other cars must have a plate covering from shoulder height to bottom of chassis. See Diagram.
- L. Roofs or roof net is recommended for all obstacle course vehicles.
- M. Throttle lines and cables, brake lines, fuel shut off and kill switch wires must be protected from drive line components on non-stock chassis. Hydraulic throttles must be plastic or rubber lines.



#### DRIVE LINE

- Definition of Four Wheel Drive: To classify as a four wheel drive vehicle, the vehicle must have automotive type front and rear axle housing, each containing a ring and pinion, gear, axles, and carrier assembly, and each must be propelled by an automotive type drive shaft. No hydraulic or starter motor drives. The vehicle must be capable of driving on its front wheels for a specific length of 100 yards to prove the vehicle has front wheel drive. All vehicles must have and use four wheel drive at all times. XA optional 4 wheel drive class. Must be XA legal with option to run 4 wheel drive. Club to decide to run class.
- All vehicles must have properly functioning brakes on all wheels. All vehicles must use a dual reservoir master cylinder.
- 3. All vehicles with manual transmissions with one (1) or more externals or one (1) or more internal changes, supercharged, turbocharged, or use nitrous oxide must have a steel scatter shield 1/4" x 6" with 360 degree protection of the bell housing securely bolted to the engine and frame or the engine and transmission with a minimum of six (6) points of attachment and minimum 3/8" grade 5 bolts or have an EC4WDA approved bell housing. Bell housing must be enclosed. (Block Plate)
- 4. All vehicles with two (2) or more externals or one (1) or more internal changes, with an automatic transmission, clutch flight, clutch turbo or lenco transmission: turbocharged, supercharged, or using Nitrous Oxide, must have a 360 degree EC4WDA approved blanket. In place of a blanket, it may be equipped with an EC4WDA approved shield or

with a 1/4" steel or 1/4" aluminum shield covering the unit on the top and sides from pan rail to pan rail. The shield must have two (2) 3/4 " wide by 1/4" thick steel or aluminum straps mounted to the shield, going from side to side passing under the pan or an EC4WDA approved transmission case can be used. See Diagram.

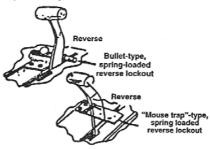


Automatic transmission shleid.

5. Recommended: Floor pan reinforcement with a minimum thickness of 0.100" or EC4WDA approved bell housing or blanket is required to guard the area between the back of the engine block and the start of the transmission shield or blanket on all vehicles with two (2) or more external or one (1) or more internal changes.

- All clutch automatics must have an enclosed blow proof bell housing or 360 degree scatter shield enclosed (Block Plate) and a blow proof blanket or transmission shield.
- 7. No neutral starts allowed.
- 8. All drive shafts must have drive shaft loops made of 1/4" x 1" steel or equivalent rigid steel located in the middle of the shaft. Carrier bearings and pillow blocks are not considered loops. Recommended: All Driveshafts be painted from yoke to yoke a bright color.

 Any floor mounted automatic transmission shifters, which shift toward reverse (i.e. 1-2-3-N-R-P) must be equipped with a positive reverse lockout device to prevent the shifter from accidentally being put into reverse gear. A spring loaded device is mandatory. See Diagram.



- 10. Any homemade drive line coupler that is not approved by EC4WDA must be shielded 360 degrees by a minimum of 1/8" thick steel the total length of coupler.
- 11. All vehicles must have a working reverse gear.
- 12. All moving drive line parts located in the driver's compartment must be safely shielded from the driver. All shields must be a minimum of 1/8" steel plate or 3/16" aluminum.
- 13. All vehicles that are chain or belt driven must have a scatter shield to protect the driver from broken chains or belts. Chains and belts must be covered on sides and top with 1/4" aluminum or 1/4" steel.

- 14. Any over stock length spring shackles must be reinforced.
- 15. Any tire considered unsafe by the Rules Committee will not be permitted to compete.
- 16. All automatic transmissions must have a dipstick that cannot be dislodges in the case of an accident. The dipstick can be safety wired (metal wire only, nylon wire ties not acceptable) or a locking dipstick may be used.

#### DRIVER SAFETY

1. EC4WDA approved 3" lap belt and two (2) shoulder strap 2" minimum harness belts are mandatory. Frayed or worn belts are not permitted. Aircraft belts are not permitted. Mandatory: 5 point harness. All harnesses and belts which must be bolted for installation, must use a minimum of 3/8" grade 5 harness steel bolts connecting to frame and (no non-hardened eve-bolts or welded open eve-bolts permitted) must be routed over or through seat no higher than three (3) inches from driver's shoulders. Then through a 1/4" minimum steel dowel rod welded to the back of a  $1 \frac{1}{2}$ " minimum O.D. tube of .120 wall thickness. This tube is welded or bolted to the rear hoop of the roll cage no more than 15" or no less than 10" from the bottom of the seat cushion but below the top of the seat. Harness or belts may be fastened as per manufacturers instructions, but if harness/belts must be bolted for installation, 3/8" grade 5 bolts must be used when connecting to frame.

- Anyone whose shoulder harness becomes disengaged must stop, reconnect his/her harness, then proceed: otherwise, he/she will be disqualified for that round. Drivers, while on hills, must remain in harness until safely off the course.
- All drivers of positive displacement blown machines and nitrous equipment vehicles must use full fire suit, gloves, socks, face masks and full face helmets or helmet skits with nomex lined full face hlemet (EC4WDA approved).

4.

a. All drivers of alcohol fueled and/or nitrous oxide machines must wear approved fire retardant suits SFI-3-2A/1 rated. All drivers of vehicles (12.2 factor and lower) must wear approved fire retardant suits SFI-3-2A/1 rated.

Recommended: Nomex underwear also be worn. Recommended: All drivers use fire retardant suits (SFI-3-2A/1 rated) in all competitive events.

- All vehicles must have EC4WDA approved fuel stickers distinctively displayed at locations as defined by sanctioning.
- 5. For all events in Region B-All Drivers must wear approved fire retardant suits SFI-3-2A/1 rated except Street Stock classes.
- 6
  - Any driver receiving any physical assistance during competition including co-driver operating any controls will be disqualified for that round.
  - b. Each driver must bring his/her own vehicle to the staging line unassisted, and is responsible for staging of said vehicle.
    - 1. No blocking will be done.
    - 2. It is recommended that all vehicles be equipped with a brake lock or hand brake for staging.
- 7. Any driver involved in an accident, rollover or severe stop, must be checked by ambulance crew or EMT.
- No smoking in vehicle while in staging area or while in competition.
- 9. Any driver using or under the influence of alcoholic beverages and or illegal drugs during competition hours, regardless of quantity, will be disqualified from the meet, and will be subject to suspension or revocation of competition privileges at the discretion of the Rules Committee.
- 10. No loose objects permitted inside vehicles during competition.
- 11. Each vehicle will carry attached to the vehicle, in plain view, a fully charged 2-1/2 lb. minimum dry chemical, Halon (with seal intact) or CO2 fire extinguisher with a dial gauge, approved by ICC, UL or

Coast Guard, and equipped with a suitable quick release bracket. A portable fire extinguisher should be maintained in or on their trailer for any fire emergency which might occur at that location.

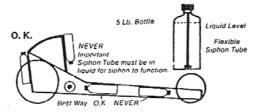
- 12. It is recommended that all vehicles competing in obstacle events be equipped with a suspension style racing seat specifically designed for off road racing.
- 13. Maximum of one (1) pillow between driver and seat. Seat must fit driver.
- 14. Exhaust systems shall be constructed so that engine exhaust is directed away from gasoline filter spout, spectators, drivers, and out of engine compartment and away from driver. Exhaust system components may not pass through the driver's compartments.
- 15. No part of the driver's body is allowed to protrude beyond the cage and/or body of vehicle. Driver will be disqualified from that round if he does so. (Example: holding onto the roll cage or side bars with hands.)
- 16. Full coverage (with ear and skull protection) racing type safety helmets are mandatory. All helmets must fit driver properly. Snell 2000 helmet or newer or equivalent. (Recommended Snell 2010).
- 17. It is recommended that all drivers wear approved eye protection.
- 18. All drivers must wear a minimum of a t-shirt, long pants, and shoes. Shoes that are defined as footwear which cannot slip off the feet.
- 19. All drivers, except street stock classes, must use EC4WDA approved stock car netting on the driver's side from the side bar to the top of the cage. It should be attached in a manner equivalent to the strength of the net. Center seaters must use netting on both sides. Vehicles with factory doors and windows must cover the window areas.

- 20. In lieu of side nets, EC4WDA approved arm restraints may be used.
- 21. Drivers whose sidenet or arm restraints become unattached must stop and reconnect before proceeding or they will be disqualified for that round.
- 22. All blower equipped cars must have an EC4WDA approved blower restraint system.

23. All vehicles that are supercharged/Roots-type blower equipped, have an enclosed driver's compartment (see glossary), are alcohol fueled, and/or nitrous oxide fueled, must be equipped with a manually controlled, on-board fire extinguisher system of Halon FE1301 or 1211, or approved system and mounted per manufacturer's specifications with the primary nozzle (s) directed to protect the driver (5 lb. bottle minimum mandatory). Bottles must be mounted in a position relative to the car (as shown in drawing on next page). In the case of more than one bottle, each bottle must have its own distribution tubing and nozzles. The use of nozzles or tubing, other than that recommended by the manufacturer is not permitted. Nozzle placement is extremely important. Two (2) nozzles are placed at the front of the engine, one (1) on each side, and one (1) nozzle is located in the driver's compartment next to the steering column. It is recommended that there be no more than three (3) nozzles per bottle. The bottle must be mounted in such a manner that should an explosion or failure of any mechanical component of the vehicle occur, the bottle will be protected from flying parts. Also, the position of the bottle in the vehicle must be high enough that it cannot come in contact with the track surface following loss of a tire or a wheel. It should also be protected from excessive temperature and mounted rigidly to the vehicle. Remote cable and sheath must be metallic and installed

so they are protected in the event of an upset or a collision. Follow the manufacturer's recommendations regarding installation, especially on bend radius and protection from crimping or kinking. All fire systems must use metal lines and must be equipped with a pressure gauge. Recommendation: On-board fire extinguishers for all vehicles.

24. No work may be done under any vehicle in the pit



area while the car is supported by only one jack. Additional safety devices such as jack stands are required to provide additional protection in the event of jack failure. Failure to observe this rule is grounds for immediate disqualification.

25. Steering systems with spring shaft must be fastened at both ends pinned and/or welded. Rear engine cars are required to have anti-blow back device on steering shaft.

#### ELECTRICAL

 Every vehicle must have an ignition kill switch within reach of the driver while he/she is fastened securely in the harness. Electric fuel pumps and magnetos must be wired to the system. The kill switch must be clearly labeled KILL SWITCH, ON and OFF. NO KEY TYPE KILL SWITCHES PER-MITTED! (Street legal vehicles exempt from toggletype kill switch). Recommended: X class vehicles have steering wheel mounted kill switch.

2. It is mandatory that all vehicles have a battery disconnect switch located at the right rear or right front of the vehicle. Battery disconnect switch will be on the right rear of all vehicles built as of November 1997. Switch disconnects battery terminal. The switch must be wired in such a manner as to disconnect battery and kill the engine. Switch must be clearly labeled KILL SWITCH, ON and OFF. -OBSTACLE ONLY. Switch must be Mounted

on Right Rear of vehicle. The switch must NOT BE MOUNTED facing the side of the vehicle.

 All vehicles with automatic transmissions and clutch automatics must have a neutral safety switch.
 All vehicles must have a functioning, continuous

duty starting system-exempt supercharged engines. 5. All batteries must be contained within the body of the cage of the vehicle and securely mounted. All liquid filled batteries outside engine compartment must be in a completely enclosed container. All batteries must have terminals protected from arching or shorting. All batteries must be secured by an automotive top type hold down device.

No portable batteries will be permitted in the staging area or return lanes unless fully enclosed.

- 7. All vehicles operating in non-competitive areas after dark must have a forward facing light (3 inch minimum or equivalent).
- 8. No use of electronic delay boxes.
- 9. Unsafe use of trans brake will be grounds for disqualification for the driver.
- 10. All vehicles competing at night must install taillight and turn it on during racing event. Minimum 3 sq. inches, or any DOT approved light.

#### FUEL SYSTEMS

 All fuel tanks, pumps and fuel lines must be located outside the driver's compartment. Front mounted fuel tanks permitted but must be SFI rated fuel cell and must be mounted behind the front axle and/or crossmember. All fuel tanks must be protected from collision. Any fuel system components located above the floor (excluding the fuel tank) must be enclosed. Maximum one (1) gallon capacity tank for nitrous enrichment systems. Tank must be mounted out of header area.

- 2. Nitrous oxide bottles and/or pressurized bottles used for shifting transmissions must be labeled as to content and securely fastened within the confines of the cage to protect the bottle from damage in all reasonable circumstances. Shut-off valve must be within reach of the driver while he/she is harnessed in the seat.
- When driver is not claiming Nitrous Oxide, the line must be disconnected from the inlet side of the nitrous solenoid.
- 4. Spare gas cans are not permitted.
- 5. All cable type fuel systems shut offs, recommended pull to the off position.
- 6. Carburetor must have a flash shield or an air cleaner.
- All relocated fuel tanks must be vented lower than the bottom of the tank. No vented caps permitted. All fuel cells exempt from outside vent. Any additional vents must be self-closing type.
- 8. Mandatory two (2) throttle return springs. Drive by wire computer controlled throttle bodies exempt
- All fuel cells must be SFI approved.

- 10. Rubber pressurized fuel lines are limited to max length of six (6) inch segments. Fuel injection systems exempted.
- 11. Four Classes (4) of fuel permitted: gasoline/ ethanol blends, alcohol, diesel fuel, and propane.
  - a. Gasoline any fuel with sp. gravity .792 and lower at 70 degrees F, includes ethanol blended fuels.
  - b. No two fuels may be used at the same time without claiming "performance additives". (Example- propane with diesel)
- 12. 10% of cubic inch for all performance additives added to fuel.

#### PROPANE FUEL SYSTEMS

- 1. All propane fuel tanks must be DOT (fork truck style only) or ASME certified. "gas grille style" tanks not allowed.
- 2. All tanks must be completely inside the confines of the roll cage to protect it from damage from roll over or collision.
- 3. Tanks not allowed in driver's compartment.
- Tanks will be mounted in a manner that emergency responders can easily access the shutoff valve mounted on the tank.
- 5. Tanks will be securely mounted to the roll cage or frame in a workmanship like manner.
- 6.Commercial quick change fork truck tank mounting brackets acceptable with the addition of a safety pin or equivalent to prevent the hasp from opening in competition.

- 7.All DOT tanks must be date stamped and not older than 12 years from manufacture date, unless recertified.
- Minimum of 250psi rated steel braided line with only JIC or AN fittings from tank to vaporizer/ regulator.
- 9. Propane lines must not be routed thru driver's compartment and mounted in a way to be protected from engine heat and or damage from an accident or rollover.
- 10. Carburetor/mixer must have at least 2 throttle return springs and a flash shield or air cleaner.
- 11. Must claim performance carburetor.

#### ROLL CAGES

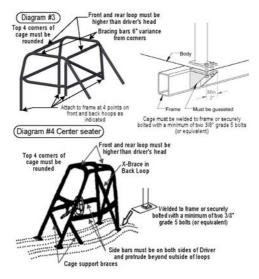
Roll cages shall be of sufficient strength to protect vehicle occupants in all reasonable circumstances and all cages must be attached to the frame. Vehicles with non-removable factory hardtop may use bolted cage. 1.

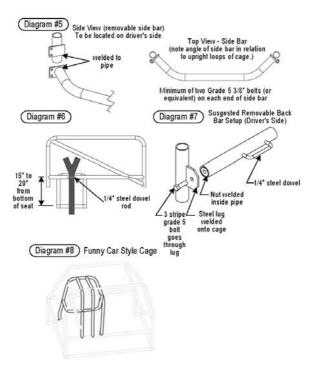
- a. All parts of roll cages as show in diagram must be steel 1 1/2" O.D. with .120 wall thickness minimum. 1-5/8" chrome-moly seamless tubing with .090 wall thickness may be used or any SEMA cage or chassis which meets EC4WDA specifications. Rear hoops on cage must extend above driver's head. All roll cages built after August 31, 1987 must have all parts constructed of a minimum of 1-5/8" x .120 wall tubing.
- b. Roll cages constructed with 1 <sup>1</sup>/<sub>2</sub>" OD x 0.120" wall steel tubing are allowed in vehicles with nonremovable factory hardtop, structurally unaltered doors, and class factor of 12.3 and higher.
- Bracing bars must connect to front and rear roll bars on both sides no lower than 6" from corners at top of roll cage.
- 3. Square tubing is not permitted.
- All joints must be completely welded, except vehicles with non-removable factory hardtop, using aftermarket bolted cage or equivalent.
- 5. The top four corners of the cage must be rounded. No welded tube corners will be allowed.
- Excessive grinding of welds is not permitted. All welded joints must be exposed for inspection, with no padding or tape covering welds.
- 7. No threaded pipe or threaded joints of any kind are permitted.
- All vehicles must have a roll cage attached to the frame at the supporting post position of the front

and rear hoops of the cage as in Diagram 3. The cage must be directly attached to the frame or mounted indirectly to the frame with a minimum of 1/4" thick by 2" wide steel -- gusseted to cage and frame. It must be mounted with a minimum of two (2) 3/8" bolts (or equivalent) on each mounting point.

- 9. Manufactured roll cages are permitted in hardtop vehicles. Example: Smitty-Built.
- A center seater must have an X-braced or EC4W-DA approved braced rear hoop.
- 11. Center seater cage must have two (2) front vertical supporting braces from a point at the side bar to the frame, and be braced either forwards or backwards from the back loop no lower than one-half the height of the rear loop.
- Driver's body must be totally enclosed by cage and/or body of vehicle as show in Diagram 4.
- 13. A minimum of 3/8" bolts, grade 5 hardness, must be used throughout the roll cage and side bar.
- 14. No holes or bolts are permitted in any tube except for 1/8" holes for snaps. These may be spaced no closer than 4" apart and can be drilled only in one side of the tube.
- 15. A side bar shall be securely mounted to the driver's outer side of the cage to protect the driver from a side roll and trees. Vehicles with factory steel doors do not need side bars. All center seaters are required to have side bars on both sides.
- 16. All vehicles must have a dash bar in the front hoop for driver's safety. Center seat vehicles are exempt.
- 17. In an event requiring a co-driver, the vehicle must have a side bar on passenger's side also. It must be affixed to cage in the same manner as on the driver's side.

- 18. All vehicles must have a diagonal bar from the top of the cage above the occupant (s) head to the opposite side of the cage at the frame mount. All vehicles that incorporate a funny car style roll cage (multiple hoops tied to the main cage at multiple points) into their drivers compartment rear hoop do not require a diagonal bar (see diagram 8).
- 19. Two (2) 1/8" test holes are required in cage. See Diagram 3 and 4 for hole locations. See shaded bars for the test hole locations.
- 20. Roll cage padding is required where the helmet may come into contact with the cage.





#### CLASSING Classes Of Vehicles For Competition

Changes are not permitted by any club, region, rule person, or individual. Rules people may clarify a class at a meet. Rules people will not be responsible for the misclassing of any vehicle.

 Vehicles will be classed according to a points factoring system.

- 2. It will take two (2) vehicles in open competition and two (2) vehicles in women's competition to make a class. A class will be determined at the time of inspection or at the beginning of each event. Bump ups will also be determined at the time of inspection or event.
- Each driver claims his/her own classification. In case of doubt, the inspectors will decide. Hoods may be opened on the inspection line.
- 4. Class factor will be determined by dividing the power points plus add-ons into vehicle weight with the driver. In figuring power points, all decimal points will be rounded to the next higher whole number.
- When figuring classes, class break is taken only to one (1) decimal point. The decimals are not rounded off. Everything after the first decimal point is dropped.

Long wheelbase includes 102" wheel base and over.
 7.

- a. Vehicle cannot be driven in the same class by more than one (1) driver, except in timed Obstacle Course. Limit two (2) drivers per class unless track permits three (3) drivers.
- b. A driver can enter a maximum of 2 different classes per vehicle as long as minimum/

maximum weight for the class is met. Points will only be awarded to the first class run.

- c. A driver can only enter once per class.
- d. Each vehicle may run unlimited amount of classes but only two classes per driver as long as minimum/maximum weight for vehicle class is met.
- If two drivers in one vehicle, one driver may move up one class without meeting maximum weight limits.
- 8. Drivers may register in either open competition or women's competition, but not for both in the same week end, unless there is no class, then they may move to open or women's competition but for that event only.
- 9. Competitor may be asked to make a full power test run in their competition vehicle upon request witnessed by three (3) rules persons.
- 10. Only licensed drivers 16 years of age and over may compete. Any driver under 18 years of age must have a signed permission from parent or guardian to enter competitive events. Proof of valid driver license will be required, except for Junior Racers Class.
- 11. Co-drivers are permitted in all events
  - a. Vehicle must meet class weight without the codriver
  - b. Co-driver must meet all the safety rules of the driver (arm restraints, fire suit, ect.)
  - c. Co-driver must be at least 16 years old and be a member of EC4WDA
  - d. Co-driver does not need to have a valid driver's license
  - e. Co-drivers under 18 years of age must have a signed permission from their parent or guardian to enter competitive events.

- 12. Any driver that has been bumped up may request two (2) rules persons for reclassification.
- 13. There will be no switching of registration after close-off time. Close-off time for registration and safety inspection is one hour before each event.

14. Coming to inspection with blank inspection sheet will result in competitor being moved to end of inspection line.

#### **OPTIONAL JUNIOR RACERS**

- ATV Junior dragster class
- Ages 5-17 years old NO Driver's License
  - Age 5-11 7.00 seconds and slower
  - Age 12-17 6.00 seconds and slower

## SAFETY RULES

1. Helmets are required by all drivers. Eye protection is recommended.

- 2. Long sleeve shirt and pants required.
- 3. A kill switch or disconnect is required:
- a) A vehicle you sit in must have a kill switch the driver can reach.
- b) A vehicle you sit on must have a tether kill switch.
- 4. Vehicle must have functioning brakes
- Vehicles must pass inspection by EC4WDA rules person.

6. Junior Racers must wear a fire suit if they are running alcohol or additives.

7. Seat belts are required for vehicles with cage. No cage must have tether switch.

# STREET STOCK CLASSES Stock Classes May Run Drags Only!

Street Stock Full Size Class F=Full Size# = Class

Cubic inch	Add-ons	
0  to  250 = 0  pts.	Headers5 pts.	
251  to  300 = 10  pts	4 barrel Carb5 pts.	
301  to  335 = 15  pts.	After-market intake	
336  to  360 = 20  pts.	manifolds15 pts.	
361  to  400 = 25  pts.	Camshaft15 pts.	
401  up = 35  pts.	Throttle body	
	injection5 pts.	
	Port fuel injection10 pts.	
	Compact with V815 pts.	
	Turbo10 pts.	

Class - Points F1 = 0- to 20 F2 = 21 to 40 F3 = 41 to 60 F4 = 61 and up F5 = Diesel only (single fuel only)

Compact vehicle with V8, such as 304 Jeep will run full size class with 15 add-on points. Full size trucks includes: Pickups, full sized Blazers and Broncos, Dodge and Plymouth Trail Dusters and Ram Chargers, etc. Street Stock Compact Class C = Compact # = Class

Cubic inch	Add-ons	
0  to  150 = 0  pts.	Headers	.5 pts.
151  to  200 = 10  pts	Carb	.5 pts.
201  to  250 = 15  pts.	Intake	.15 pts.
251  to  300 = 20  pts.	Camshaft	.15 pts.
301  up = 25  pts.	4 cyl fuel injection	.5 pts.
* *	Throttle body	.5 pts.
	Port fuel injection	.10 pts.
	Turbo	10 pts.
Class - Points		-
C1 = 0- to 15		
C2 = 16  to  30	Compact classes cannot bump	
C3 = 31 to 50	up to full size classes	
C4 = 51 and up	•	
1		

Compact class includes S10's, Bronco II's, Rangers and most foreign trucks and Jeeps with 6 and 4 cylinder. Compact vehicles with V8 engines will run full size class with 15 add on points.

# Street Stock General Rules

- All Vehicles MUST Have:
  - a) Fire extinguisher
  - b) Seat Belts
  - c) Helmet
  - d) Full Floors
  - e) No threaded rod U bolts
  - f) Batteries must be secured
  - g) Canvas top or no top vehicles must have roll bar
  - h) Must have stock windshield
- 1. All tires must be DOT approved tires.
- 2. No alcohol, nitrous, or exotic fuels may be used.
- 3. No vehicle in street class will run a time faster than 6.0 seconds on a 100 yard track or 5.7 seconds on an 80 yard track.
- 4. Must be licensed and street legal.
- 5. Club option to run two (2) wheel drive.

#### UTV CLASSES

- UTV's may run in their own classes only (Drags, Hill, & Obstacle) no other vehicle may run in these classes.
- 2. UTV's must follow rules:
  - a. Driver Safety: 2,6,7,8,9,10,11,13,14,15,16,17, 18,19,21,24.
  - b. Electrical: 7,10
- Minimum 4 point harness required, preferred—5 point belt system.
- Full roll cages required (factory roll cages acceptable). Aftermarket high strength roll cage recommended.
- Doors or foot restraint required to keep occupant(s) foot from slipping outside the vehicle.
- Only allowed fuel for all classes is pump or race gasoline. No Nitrous allowed.
- <u>Classes</u> Open & Women's classes; Two vehicles will make a class. Bump up(s) allowed.
- <u>UTV Limited 800</u>: 0 to 800cc production Non Turbo 4x4 models. Only the following items can be changed: Wheels, Tires, Bumpers, Tie-rods, radius rods, skid plates, air box, air filter, exhaust, springs, shocks, axel shafts, and brakes.
- <u>UTV Limited 1000</u>: 801 to 1000cc production Non Turbo 4x4 models. Only the following items can be changed: Wheels, Tires, Bumpers, Tie-rods, radius rods, skid plates, air box, air filter, exhaust, springs, shocks, axel shafts, and brakes.
- <u>UTV Modified Class</u>: No limitations with the exception that the Engine & Drivetrain used must have been originally available on a production 4x4 UTV. UTVs with a Turbo (OEM or Aftermarket) must run this class.

#### **2WD BUGGIES**

- Buggies are defined as 2 wheel drive open wheeled vehicles with the engine mounted behind the driver and a transaxle type transmission. (Super modified class chain/belt drive allowed in place of the transaxle type transmission for transverse mounted engines).
- No other vehicle may run in the buggy classes (Drags, Hill, & Obstacle). Buggies may compete in EC4WDA 2wd "XX" classes (driver's choice at inspection) as long as the meet all rules for the class they are registering in.
- 3. Buggies must follow the following rules
  - a. Body: A,D,E,F,H,I,K,L
  - b. Drive Line: 7,13,15
  - c. Driver Safety: 2,6,7,8,9,10,11,12,13,14,15,16, 17,18,19,21,24,25
  - d. Electrical: 1,2,4,5,6,7,8,10
  - e. Fuel System: 1,4,5,6,7,8,9,10
  - f. Roll Cage: 3,4,5,6,7,12,13,14,15,16,17,20
- 4. Minimum 5 point harness, belts must be fastened to a structural member and be attached by a minimum of 3/8" grade 5 bolts.
- 5. The only fuel allowed in buggy classes is pump or race gasoline and diesel. Nitrous, Alcohol, and propane are allowed only if the buggy is competing in EC4WDA 2wd "XX" classes.
- 6. All roll cages (steel or chrome-moly) will be a minimum of (1-1/4" OD x .090" wall for vehicles weighing under 1300 lbs. without the driver or 1-1/2" OD x .090" wall for vehicles weighing 1300 lbs. and greater). All Cages will be composed of a minimum of 2 hoops (one in front of the driver and one to the rear), 2 bars connecting the hoops, and 2 supporting back braces. At no time will any portion

of the driver(s) extend beyond the confines of the cage. All cages will be attached directly to the frame. The inspectors can reject any vehicle if they feel the cage is unsafe for any reason.



- Floors must be metal (aluminum or steel) with a minimum thickness of 18 gauge (22 gauge if factory VW floor is used). All floors must extend from front of pedals to behind the driver's seat.
- Sides or foot restraints are required to keep occupant(s) foot from slipping outside the vehicle. Hoods are recommended.
- 9. A firewall must be behind the driver and extend from the floor to the shoulder height or 3" about the fill spout of the fuel tank (if present). It must be constructed of metal (aluminum or steel) with a minimum of 20 gauge thickness.

<u>Classes</u> - Open & Women's classes; Two vehicles will make a class. Bump up(s) allowed.

 Limited: 4 cylinder air or water cooled engine with a production transaxle transmission (must have a working reverse gear). Front Volkswagen beam type axle and rear swing axle suspension. No turbo or nitrous.

- Modified: 4 cylinder air or water cooled engine with a transaxle type transmission. Any front or rear suspension allowed. No turbo or nitrous.
- 3.Super Modified: No engine size restrictions. Chain/ belt drive allowed in place of a transaxle type transmission for transverse mounted engines.

### WEIGH-IN

- 1. Addition of weight will permit a vehicle to move to any factor group.
- 2. Any additional weight must be located outside of the driver's compartment and a maximum of 100 pounds can be located above the floor. All weights must be welded or securely bolted to the frame. If weights are bolted to the frame they must be attached with a minimum of two 1/2" grade 5 bolts or one 3/4" grade 5 bolt per 100 pounds of additional weight. Threaded rod is not permitted to attach weights to the frame. Liquid weights are not allowed.
- 3. Two (2) weigh-ins maximum permitted at each meet or event.
- 4. Weight check must be within 100 lbs. of class limits in the event of a protest. All re-weighs will be done in finished race condition. Re-weighs will be done by the tech committee and the club scales person.
- 5. All vehicles will be weighed with their driver.
- 6. All sanctioned races must use scales.
- All vehicles must be race ready for technical inspection except for weight adjustments.
- Addition or deletion of weight not allowed during the running of your class without Tech Committee approval.
- In the event of a re-weigh and vehicle is out of class, driver will be fined \$300 and all other protest penalties will apply.

#### ENGINES

1. This is the breakdown for factor points on all engines. Factor points are determined by actual cubic inches of engine.

a. All 4 cylinders up to 162 cu. in. without cross flow head will use 4 cylinder add on points, all others will use V8 add ons. Naturally aspirated (no nitrous oxide) flat head and f head Jeep engines will have a separate class. No other engine can move down to these classes.

b. More than 4 cylinders use V8 add on points.

c. High performance engines are those with a stock compression ratio of 10.25 to 1 and over.

d. If using a motor with 10.25 to 1 stock compression ratio and over, OEM pistons, OEM head castings, and OEM valves must be claimed.

Engine components must match year and horsepower claimed as listed in the EC4WDA Spec Book or available factory specifications.

#### 3. Engine Factor Points:

Any engine claiming OEM stock or modified head castings built 1986 or earlier will take 5% off the cubic inch factor % or points. (For example 4-cylinder up to 160 cu in overhead is 76 points and V-8 and up is 75% x actual cu. in.)

a. 4-Cylinder

1. Up through 150 cu in. flathead..... 70 points

- 3. 161 cu. in. and more..... 55% x actual cu. in.

#### b. 5 & 6 Cylinder (Straight)

1. Up through 290 cu. in..... 57% x actual cu. in.

2. 291 cu. in. and over...... 80% x actual cu. in.

c. 6-Cylinder (V6)\*\*\*225 Jeep V6 engine is allowed .060 clean up and still claim 60% x actual cu. in.\*\*\*
1. Up through 225 cu. inc...... 60% x actual cu. in.

2. 226 through 290 cu. in......65% x actual cu. in.

3. 291 cu. in. and over..... 75% x actual cu. in.

Rotary engines..... 175% x actual cu. in.

d. V-8 and up...... 80% x actual cu. in.

All partial cubic inches will be moved to the next highest inch. Example: 301.2 cu. in. will the 302 cu. in.

## ADD-ON POINTS

1. External Add On Points	6-8 Cyl.	4 Cyl
		Ion Cross
	Fl	ow Head
A. Stock 4-barrel manifold	5	5
B. Stock 4-barrel carburetor		
C. Performance intake or modifie	d stock	
(with carburetor or fuel injection	n) 15	5
D. Performance carburetor/ Propane	Mixer.15.	5
E. Two (2) or more carburetors	25 max.	10 max
F. OEM Throttle Body Injection .		
G. OEM Port Injection		
H. Fuel Injection	40	40
I. Increase of Throttle Body Size.	10	10
J. Alcohol or any fuel with specif	ic	gravity
above 0.792 10.	10	• •
K. Supercharger5	0% of cub	ic inches
L.		
1) Turbocharger with a carburet	or	
5	0% of cub	ic inches
2) Turbocharger with electronic	fuel	
management6		ic inches
3) Minimum points for turbocha	rger 125	5 60
M. Second Turbocharger1	0% of cub	ic inches
N.Non-stock carb. Or throttle bod	y	
adapter or spacer unless carb. in	take,	
turbo, or nitrous oxide or afterm	arket	
fuel injection are claimed	5	5
O. OEM Multiple Carb. Intake		
P. OEM Multiple Carburetor		5

2. Internal Add On Points	, F	4 Cyl Non Cross Flow Head
A. Valves		5
<ol> <li>Any valve configuration n</li> </ol>		
ing OEM for engine being of		
2) Valve or Plug Angle and c		
modification unless valves		
claimed		
B. Aftermarket Heads >>>		
C. Porting		5
Polishing sand blasting or		
of any port area or combu	stion	
chamber		
D. Milling		
<ol> <li>Reducing combustion characteristic</li> </ol>		
volume to less than factor		
fications for engine being		
a. If piston not claimed		5
2) Cylinder block deck heigh		
ing deck to less than facto		
fications for engine being		_
unless pistons are claimed		
E. Pistons	20	10
1) Non-stock configuration		
2) Includes ring and wrist pir	1	
F. Camshaft	1 1 1.0	1 \
(Lift measured by gross int		t only)
1) Hydraulic or Solid Cam .5		~
under		
Not considered inter		7
2) Hydraulic cam .501570.		
<ul><li>3) Hydraulic cam .571 and or</li><li>4) Hydraulic roller cam .500</li></ul>		
,, <b>- u</b> iii 1000		

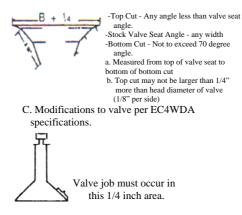
5) Solid cam or Hydraulic roller .50159910
6) Solid cam or Hydraulic roller
.600 and over
7) Mechanical roller cam
G. Variable cam timing10
H. OEM High Performance engine with production
engine components (10.25 to 1 compression ratio
or higher) must claim
1) OEM Valves
2) OEM Head Castings
3) OEM Piston
All stock small block Chevrolet heads with OEM
2.02 and 1.60 valves must claim OEM valves and
OEM head castings. (OEM pistons must also be
claimed if that engine is over 10.25 to 1 compres-
sion ratio)
I. More than 2 valves per cylinder and/or dual cam must claim OEM valves
J. Nitrous Oxide
1. 0-200 total points
2. 201-300 total points
3. 301 and up total points
(All Nitrous Oxide points will be rounded to the
next highest point. Example: 89.3 will be 90).

# 3. Non Performance Modifications (Modifications

not requiring add on points)

A. Port matching of gasket area not to exceed 1/4" from gasket surface measured by depth.

## B. Modifications to valve pocket.



- D. When aftermarket pistons are claimed, the removal of the flame propagation lump in the combustion chamber is allowed without claiming porting. The milling or grinding must be limited to the length and width of the lump, and in no way shall touch any other part of the combustion chamber.
- E. Dry sump oiling system
- F. Fly cut stock pistons. Valve relief only.
- G. Non stock rocker arm with the same ratio as year engine being claimed.
- H. O-ring to block and/or head
- I. Non stock valve retainers and keepers of stock configuration.
- J. Heat risers may be blocked or filled but most be 1/4" from valve pocket.

# CLASSES

Super Pro EV Electric Vehicl		
XXA Optional 4WD		
XXB		
XXC		
XXD		
XA	Less than 4.0	
XB	4.1 - 5.1	
XC	5.2 - 6.2	
XD	6.3 - 7.3	
Pro Modified		
А	7.4 - 8.4	
В	8.5 - 9.5	
С	9.6 - 10.6	
D	10.7 - 12.2	
Super Modified		
Ē	12.3 - 13.7	
F	13.8 - 15.3	
G	15.4 - 18.8	
Modified Stock		
Н	18.9 - 22.7	
Ι	22.8 & Over	
J	F Head & Flat 4 Cyl.	
Classes for move up:		
a) Class J can move all the way to XA.		

b) All Super Pro classes at club discretion to run 4WD optional classes XXD - XXA.

Warning: Any false statements concerning engine powers and /or modifications will be grounds for finding the vehicle illegal, and barring the competitor from competition.

# CLASS GROUPING FOR OBSTACLE COURSE

AA	Drivers option to enter with no class factor
	requirements

- A 9.5 or less
- B 9.6 12.2
- C 12.3 15.3
- D 15.4 18.8
- E 18.9 22.7
- F 22.8 and up
- G F Head & Flat 4 Cyl.
- H Long wheelbase 12.2 and under
- I Long wheelbase 12.3 and over
  - 1. Long wheelbase has option to run with their short wheelbase class.
  - 2. Driver must claim his obstacle course class during inspection.
  - 3. During Bump Up, I class moves to H and H will move to appropriate letter class.
  - 4. Class AA will be run after all other classes have completed the event.

WARNING: Any false statements concerning engine powers and/or modifications will be grounds for finding the vehicle illegal, and barring the competitor from competition.

### MOTOCROSS

Definition: An obstacle course event with 2 vehicles going the same direction on the same track at the same time, with passing allowed.

- a. Any club running a Motocross must advertise this in advance of the race.
- b. Standard obstacle course procedure will be used.
- c. Vehicle must meet EC4WDA rules and regulations along with Wheel to Wheel Requirements (D,G,&H). If vehicle has a factory steel driver side door exempt from requirement D.

#### WHEEL TO WHEEL REQUIREMENTS

Definition: More than two (2) vehicles going in the same direction at the same time.

- A. Vehicle must meet EC4WDA rules and regulations.
- B. Must have white light that faces to the rear. Minimum shoulder height. This light must remain on during all competition and practice. Must have clear lens (not colored) and be rated at least 50 watts. Vehicle will not be allowed on track if light is not on.
- C. Must have two (2) working brake lights with red lens facing to the rear. (DOT approved lights).
- D. Vehicles must have three (3) side bars on the left side of vehicle, and one (1) side bars on right side of vehicle. Left side bars may be two (2) horizontal and one (1) vertical or one (1) horizontal and two (2) vertical. Horizontal bar or bars must connect to front and rear hoops of cage. Center seaters must have three (3) bars on both sides.
- E. All vehicles must have a diagonal bar from the top of the cage above the occupant(s) head to the oppo-

site side of the cage at the frame mount.

- F. Fuel cells are required and must be protected from side or rear end collisions. A substantial cross member or crash bar must protect the cell. Bars should be similar in construction, size and type as used in cage.
- G. All rub rails and other exposed metal thicker than 16 gauge must be radiused or have rounded corners. No sharp, square corners are permitted on anything that might come in contact with a tire.
- H. All drivers are required to use approved form of eye protection (goggles/shield). NO sunglasses allowed.
- I. Short wheelbase obstacle classes will be used (A thru G).
- J. Drivers are required to know the flag definitions and rules. See flag rules in this book.
- K. Drivers are required to know bumping and blocking definitions and penalties. See bumping and blocking in this book.
- L. Vehicles will have their running numbers on both sides and one facing to the rear. Numbers will be minimum of 8 inches high and no lower than shoulder height.

#### FLAG DEFINITIONS AND RULES

- 1. Green: Go. Also, that the track is clear. However, a red flag anywhere on the track supersedes all green flags.
- 2. Yellow: Area caution. NO passing in immediate area. When clear of the immediate area that is obstructed, continue racing. Anyone caught passing after the caution flag is out will be subject to loss of one or more positions. If flagrant, violator will be placed at scratch position. Second Offense:

violator will start next race in scratch position. Aggressive Driving on the Yellow: Black flag warning is possible. Second offense: Violator will start the next race in the scratch position.

- 3. Red: Stop racing immediately. Applies to full track. Anyone caught passing or not slowing down will go to scratch position. Continue around the track at parade lap speed (15 MPH). Vehicles may pit under the red, but must go to scratch position when they return to the track.
- 4. Blue with Red: Courtesy. You are swing blocking or are a lapped car Faster cars are trying to pass, give them racing room. You will be given a black flag stop and given a penalty for ignoring this flag.
- 5. White Crossed With Green: Flags rolled tight race is half over.
- 6. White Plus Green Straight Up: Flag rolled tight 2 laps to go.
- 7. White: Flag alone rolled tight or waving 1 lap to go.
- 8. Black: Flag unfolded or waving either you or your machine is in violation. Pull into pits and check with an official. Flag Rolled Tight and Pointed At You - This is a warning that you are doing something wrong bumping, blocking, jumping the flagger, etc.) Further violation and you will be black flagged (disqualified) from the race.
- 9. Checkered: Finish. No matter what lap you are on, the race is finished. Laps will be counted by the lead vehicle. When the lead vehicle completes his last lap, that lap becomes the last lap for all vehicles. Positions will be determined by laps complete and position with other vehicles completing the same lap as you. (Grand National Scoring).

# BUMPING

# DEFINITION:

- 1. Car 1: Means a vehicle in front of another vehicle.
- 2. Car 2: Means a vehicle following and trying to pass car 1.
- 3. Visual Position: Means when car 2 has pulled along side car 1, such that the hood of car 2 is beside the driver of car 1.
- 4. Groove: A normal course followed by a race car. On a straight, this is a straight line either wide or tight to the upcoming corner. On the corner, this groove is either wide or tight (it should not be both).
- 5. Groove change: Moving from wide to tight on a straight (in relation to the upcoming corner) or moving from a wide groove on a corner to a tight groove or moving from a wide groove on a straight to a tight groove on the corner or vice-versa in all cases.
- Blocking: Means car 1 making groove changes when there is a car 2 close enough to pass. This is an illegal action.
- Swinging Blocking: Means car 1 power sliding for no apparent reason except to block car 2. This is an illegal action.
- 8. Bumping: any contact with another vehicle can be considered bumping by a flagger. Bumping includes negligent contact as well as intentional contact. If a flagger sees bumping and feels it was avoidable, one or both cars involved in the bumping will be penalized.
- Bumper Tapping: Considered the same as bumping. Bumper tapping is harassment and illegal. Car 1 has the right to the groove he is in and car 2 must

wait for car 1 to make a mistake or take the long way around.

#### **RIGHTS-OF-WAY**

Car 1 has the right of way over car 2. Flaggers will be instructed that in cases of bumping where there is in any doubt as to who was at fault. In most cases, it is up to car 2 to avoid bumping. Car 1 has the primary right of way. \*Speed ability has nothing to do with right of way (it is up to car 2 to find a way around car 1 without bumping).

\*Visual position established by car 2 changes right of way. Once car 2 gets visual position of car 1, right of way becomes equal. It is then the responsibility of car 1 to leave a lane open for car 2.

#### **BUMPING PENALTIES**

- Serious bumping or blocking loss of one position or a full black flag, or both. This penalty is given for hard contact with another vehicle (intentional or due to negligence) or blocking, that in the opinion of the flaggers, is intentional. Position penalties can be given more than once if incidents continue after the flagger's warning.
- Spinning or disabling another vehicle penalty is same as above. The tower flagger will display a warning board with the violator's number, act accordingly.

The following penalties depend on severity. They are also subject to official discretion.

 a. Passing on the yellow: First offense - down on position. Second offense will start 2 vehicle lengths behind all classes racer is registered in.

- b. Bumping First offense if possible, black flag warning and a written warning. Second offense will start 2 vehicle lengths behind all classes racer is registered in.
- c. Blocking: First offense black flag warning and written warning. Persistent blocking will result in disqualification. Second offense racer will take scratch position in next race.
- d. Aggressive Driving on the Yellow: First offense black flag warning. Second offense - racer will start at scratch position in next race.

## PROCEDURE FOR CHALLENGING

- 1. Only the original of the inspection form will be used for challenging of vehicle.
- Only class trophy and/or money winners may be challenged.
- Any competing driver may request to check the paperwork of a vehicle in question in his or her class.
- 4.
  - a. Any competing driver may challenge the classification of the class winners in his/her class only and within ten (10) minutes after the entire class has run. The hosting club should record the time each class has finished.
  - b. For a fee of \$50.00 any competitor must submit to a fuel test. If competitor is found legal, he or she will receive the \$50.00. If found illegal, EC4WDA Rule Book applies concerning penalties including \$300.00 fine and loss of points. A variance of plus or minus 3 points permitted. No additives allowed. Testing to be performed following the instructions provided by the manufacturer of the equipment.
  - c. For the fee of \$50.00 any competitor must submit to being weighed to make sure that he or she is legal for their class. If he or she is found to be legal, he or she will be paid the \$50.00 that has been put up. If he or she is found to be illegal, he or she must comply with all of the procedures that apply in being found out of class.
  - d. For the fee of \$75.00 any competitor must submit to a cubic inch check. This does not include removing the head.
  - e. For the fee of \$300.00 any competitor must

submit to a removal of a head and an inspection of all visual parts. Bore and stroke will be checked also.

- f. For the fee of \$400.00 any competitor must submit to a complete tear down.
- 5. The challenging driver must register the complaint with the announcer or any track official in communication with the announcer, present the challenging fee in CASH, and who they wish to challenge in writing. Challenging fee shall be \$400.00 and will cover a total Tech Committee inspection.
- The challenged vehicle is then immediately impounded in a finished race condition.
- 7. The challenged vehicle will be checked immediately or at the convenience of the Tech Committee.
- 8. The challenged driver is responsible for the disassembly and reassembly of his or her own vehicle. If engine has to be removed for the removal of the oil pan, this is also their responsibility.
- 9. There will be a three (3) hour maximum time period for the challenged driver to disassemble the parts required by the Rules Committee, unless Rules Committee determines additional time is required. If he or she does not have the vehicle ready to be checked within the 3 hour time period, He or she will be found illegal.
- 10. If the challenged driver refuses to disassemble the vehicle on request of the Tech Team, he or she is automatically considered guilty of challenge charges and must pay a \$400.00 fine. He or she will be barred from further EC4WDA competition until the fine is paid, and the driver reclassifies the vehicle.
- 11. If the challenged vehicle is found to be illegal

according to the Test Equipment, EC4WDA Tech Book, or available Factory Specifications, the driver will be disqualified. The driver must pay a \$400.00 fine. Void position and move other vehicles to fill void where applies.

- 12. If the challenged vehicle is proven to be legal, the challenger must pay the money to the challenged driver.
- 13. If after a protest, the vehicle is found to be illegal, the challenged driver may compete again only by changing his or her registration to the proper class and paying the fine. The challenged driver may not compete again in the same weekend.
- 14. If the challenged driver has been proven to be illegal, and refuses to pay the \$400.00 fine, he or she will be barred from further EC4WDA competition until the money is paid. All fines must be paid at the current rate.
- 15. The challenger will get back the challenge money if the challenged driver refuses to tear down the vehicle or if the challenged driver is proven illegal.
- 16. If the Tech Committee finds anything over and above what is marked on the inspection form by the challenged driver, the vehicle is found illegal.
- 17. A committee of three (3) rules persons, including the general rules chairperson, or rules cochairperson, if present at the meet, will make decisions concerning testing and classification. EC4WDA Tech Book or any available factory specification books will be used as references.
- Any person found illegal will not be permitted to be a rules person for two (2) years. To be subject to review by Rules Subcommittee. Second of-

fense will be barred indefinitely.

- 19. If any time during a meet, the rules committee chairperson or co-chairperson, plus two additional rules committee members, believes a driver is illegal, they may request the driver to disassemble his or her vehicle. If the vehicle is found to be illegal, other than move-ups, the driver will be disqualified from competition until he or she pays the \$400.00 fine and re-classifies the vehicle. If after inspection of a challenge by the Tech Team, the vehicle has been found to be classified as claimed, the driver will be paid the same \$400.00 as in a competitor's challenge by EC4WDA. Driver will be paid \$75 for cubic inch check.
- 20. At the meets, the Tech Committee has the option to select by lottery or class, trophy/money winners vehicles for a strict visual inspection for conformity to class including fuel and weight checks, waiving the challenge fee. Although, if found illegal, all fines and penalties will be imposed. The intention of this check is to "KEEP THEM HONEST".
- 21. \$400.00 payment structure: When a \$400.00 fine is paid for a challenge. \$50.00 of the amount will go to the EC4WDA treasury. The remaining will go to the treasury of the Region in which the challenge was filed.
- 22. The challenging driver may be present at a teardown; but may not view the engine or its parts, except if the challenging driver and he or she is a rules person and is needed to assist in that teardown.
- 23. If a driver and vehicle are protested in any one class, the vehicle cannot run in the same class

until the protest is satisfied.

- 24. If a driver and vehicle are protested, the actual cubic inches claimed must be no more than 1 cubic inch per cylinder under or 1/2 cubic inch per cylinder over
- 25. If the event of a re-weigh and vehicle is out of class, driver will be fined \$400.00 and all other protest penalties apply. If a driver fails to reweigh as instructed by track officials, he/she will be disqualified for that round. Trophy winners will be found illegal.
- 26. Any vehicle may be reinspected at any time even if it holds a current region sticker.
- 27. All fines must be paid to the Rules Chairperson of the region in which the penalty was assessed. Each Region Rules Chairperson shall maintain a log of all protests and re-weighs in his region. This log will be passed from one Region Chairperson to another at the end of a term, will be notified of all protests and re-weighs and maintain a master log for all three regions. When a fine is paid, it will be recorded in the region log and in the master log before being forwarded to the Treasurer for disbursement.
- Any club found purposely in violation of rules procedures will be fined \$400.00 for the first offense, doubled for the same violation thereafter.
- Region Rules Chairperson to contact Region Points Chairperson of person being found illegal.

#### SUGGESTED TEAR DOWN SCHEDULE

- 1. Only the original of the inspection form will be used for challenging of vehicle.
- 2. Vehicle will be weighed. Driver will not be told the weight.
- Any part which is claimed on inspection sheet, will not have to be removed, except to check another part or parts.
- 4. Driver or crew will remove head, rod, piston, and possibly the cam.
- 5. In some cases, it may be necessary to remove both heads.
- 6. Cam will be checked, in engine, for lift.
- 7. During the removal of parts, an EC4WDA Tech Person must be present.
- Nothing will be checked, until all required parts are removed.
- 9. The following tolerances will be allowed:
  - a. Cylinder head or piston volume = 1% or 1 cc
  - b. Deck clearance = .001
  - c. Overbore = .002 or 1/2 cu. in. per cylinder
  - d. Port area cc's = 1%
  - e. Gross valve lift = .002
  - f. Valve angle =  $+/- 1^{\circ}$

## GLOSSARY OF TERMS

<u>Aftermarket Components</u> - any components that were not available in any production vehicle must be claimed in applicable situations. (Production limit constitutes 500 or more vehicles minimum production.)

<u>Aftermarket Heads</u> - Includes Valves and Porting Blower - includes intake manifold.

Blower, Turbos and Nitrous - blowers, turbos and nitrous are considered internal modifications.

Camshaft - gross valve lift as measured at valve stem.

<u>Performance Carburetor</u> - any carburetor which was not available on the specific engine being claimed. Including year, horsepower, cid, etc.

<u>Stock Carburetor</u> - must be correct year, make and model specified for vehicles engine. Fuel or air bleed passages may be resized. No other modifications allowed. Replacement carburetor allowed provided they are same as original equipment:make, model, type, throttle bore and venturi size.

\*\*\* NOTE: If the choke plate is removed from a stock carburetor, it is considered a performance carburetor.

<u>Compression Ratio</u> - If you raise the compression ratio of your engine above 10.25 to 1, the pistons, reduction of deck height, or reduction of c.c. volume may have to be claimed. To determine the compression ratio of an engine, use the following formula:

P.D. + C.V. - C.R. Where P.D . = Piston Displacement of one cylinder = .7854 x (Bore Diameter) squared x stroke

C.V.	= Clearance volume for one cylinder
	= C.H.V E.D.V. + H.G.V.
	C.H.V. = Cylinder Head Volume
	(Published or measured)
D.C.V.	= Deck Clearance Volume
	(Below Block)
	= .7854 x (Bore Diameter)
H.G.V.	= Head Gasket Volume
	.7854 x (gasket I.D.)
	squared x compressed
	gasket thickness
E.D.V.	= Effective Dome Volume

- <u>Confines of Cage</u> This area is defined as inside of the physical restraints of the roll cage when pertaining to carbon dioxide and nitrous oxide bottles. When pertaining to the driver, this area is defined as inside of the physical restraints of the roll cage and/or body.
- <u>Crankshaft</u> Any crankshaft in any engine no points for crank, but you must claim proper inches and be aware of compression ratio changes that may occur.
- Cubic Centimeters to Cubic Inches Multiply Cubic Centimeters times .061. Example: A head with 61.2 cubic centimeters would have 3.73 cubic inches.
- <u>Cubic Inch Formula</u> "Bore x bore x stroke x .7854 x number of cylinder cu. in.
- <u>Deck Height Volume</u> The volume of the deck shall be the volume of the compressed gasket thickness and the cylinder volume with the piston at top dead center.

- <u>Drive Shaft</u> Any shaft transmitting power which has a U joint and/or CV joint.
- <u>Driver's Compartment</u> This area shall extend from the front firewall to the plane of the rear of the driver's seat, from body side to opposite body side and from floor to top of roll cage.
- Enclosed Body Any vehicle with a body enclosing the driver's compartment that cannot be opened from the inside.
- Engine Classes limited to automotive engine only. Each driver must claim exact cubic inch displacement of engine used. No allowance for overbore. Any part of a cubic inch is rounded

off to the next highest inch. Example: 350.2 - 351.

- <u>After Market Fuel Injection</u> Includes intake manifold and throttle body.
- <u>Full Fire Suit</u> Full Nomex-type suit, gloves, socks head sock, or helmet skirt with Nomex type lined full face helmet. Full fire suit must be worn by drivers with positive displacement blown machines or Nitrous equipped vehicles and/or exposed engines.
- <u>Gaskets</u> Any replacement or aftermarket gasket allowed. If thinner than stock head gaskets are used, thickness loss must be made up with additional deck clearance.
- <u>Gasoline</u> Any fuel with sp. gravity .792 and lower at 70 degrees F, includes ethanol blended fuels.
- <u>Nitrous Oxide</u> Direct port type includes stock intake manifold provided the manifold has only been tapped to handle installation of nozzles. Plate type includes plate under carburetor.

- <u>OEM Fuel Injection</u>No airflow or volume changes permitted. Fuel control may be changed. If airflow is modified, must claim fuel injection not OEM injection. If only throttle body size is changed must claim increased throttle body size and OEM injection points.
- <u>OEM Production</u> minimum of 500 vehicle produced. All OEM components claimed must match engine being claimed.
- Pistons OEM or EC4WDA accepted aftermarket replacements allowed. Aftermarket pistons may be forged or cast and must retain the ascast or as-forged head configuration. The manufacturer or i.d. number must remain unaltered and fully visible to determine correct application. Piston may not be remachined for special rings, deck height adjustment, or to modify dome or dish. Piston must be of the same overall design with the same dome/dish configuration as OEM piston with the correct number, location, depth and width ring grooves. Rings must meet OEM width and thickness. Wrist pins must be of the same diameter and length as originally supplied with OEM pistons and must remain in correct location. Assembly weight (piston and pin) must meet or exceed OEM assembly weight. Any lightening of pistons or pins beyond that necessary for normal balancing is strictly prohibited. Wrist pins may be floating type if aftermarket piston is used.

Street Legal Vehicle - A currently licensed vehicle.

Must have a valid registration and insurance.

Supercharger Restraint Device - A device to prevent rootstype superchargers from being blown free of the engine will be required on all supercharged engines. The restraint device must be approved by EC4WDA.

- <u>10.25 to 1 Engine</u> Any of the following parts which are used from a motor rated at 10.25 to 1 and over by EC4WDA Tech Book, and not available on an engine rated at lower than 10.25 to 1, must be claimed:
  - a. Intake manifold
  - b. Carburetor
  - c. Heads (Valves and Porting)
  - d. Pistons
  - e. OEM Injection

The Block, Crankshaft, Cam and Rod are not included.

- <u>Transmission Shields</u> EC4WDA approved, means approved by NHRA, SFL, IHRA or Snell, or by any other components approved by the Rules Committee.
- <u>Valve</u> When not claiming valves, stock valve configuration must match OEM for engine being claimed. OEM replacement stainless valves may be used. Keeper location may vary, = or -0.50. Swirl polish allowed on stainless steel replacement valves.
- Definition of Engine Being Claimed Stock internal and external engine components must match Year, Make, Original Cubic Inch, Original Horsepower as marked on inspection form.
  - a. Carburetor
  - b. Intake Manifold

c. Heads (includes Valves)

d. Pistons

e. OEM fuel injection.

The block, crankshaft,

cam, and rods are not included The competition Rules and Regulations and Classes of Vehicles for competition herein are the sole property of the East Coast Four Wheel Drive Association, Inc. EC4WDA extends the use of these rules to all clubs and four wheel drive associations as a gesture of goodwill on our part in behalf of the sport of four wheeling. Use of these rules does not imply sanctioning by EC4WDA, Inc. Any organization, except EC4WDA, Inc. attempting to copyright these rules will be prosecuted.

### DRAG STRIP PROCEDURES

- 1. Each class will be run from low number to high number
- 2. Left lane will always be low number.
- 3. Once the first vehicle has staged, the second vehicle has 30 seconds to stage.
- 4. Bye-run drivers will take their bye-run and will then return to the staging lanes, falling in line at the beginning of the previous round winners. On double eliminations, the highest number in the class will move to first run of second round. There will be bye runs in the first round only. May make bye runs after first round when running NHRA style rounds. When running two separate drag events, the club has the option to move the highest number in the class to the first run of the second event.
- 5. Once two vehicles are called from staging, they are the only two vehicles that can compete in that round and must stage within 3 minutes. If one cannot make it to the line within 30 seconds after the first vehicle stages, the lights will be run down and the first vehicle will be run, then fall in line at the end of the winners lane.
- If a club is not running double eliminations, then the last round for trophy/money will pay first to the winner and second to the runner up.
- 7. A red light will be the same as a loss. First foul only per run counts.
- If the last round for trophy/money a competitor should red light, he will be paid second place.
- Clubs must give reasonable amount of time after grooming the track for driver to prepare for competition.

### HILL CLIMB AND OBSTACLE COURSE PROCEDURE

- 1. Run by class.
- 2. If running two at a time, then the drag strip procedure should be followed.
- 3. The last two (2) vehicles in class will be awarded first and second place.

## BRACKET/INDEX RACES

A club who so chooses may run bracket or index classes in place of letter classes. To do so, it must abide by the following rules:

- The club putting on a bracket type race must have a set of timing lights which are in good working order.
- A timing system with timers that can give the appropriate spot between vehicles.
- 3. A period of time must be given for time trials.
- 4. Brackets will be run in rounds.
- 5. Bracket or indexes to be determined by club.
- 6. 6.00 and slower brackets may use street stock rules.
- 7. EC4WDA Rules and Sanctioning requirements must be in order.
- Any club running brackets or indexes must advertise this in advance of the race. This is so that all racers are aware of the type of race to be run.
- 9. Recommendations for Index Classes

А	0 - 3.199
В	3.200 - 3.599
С	3.600 - 3.999
D	4.000 - 4.399
Е	4.400 - 4.799
F	4.800 - 5.199
G	5.200 - 5.599
Η	5.600 - 5.999
I	6.000 and Slower

### EC4WDA MUD BOGG RULES AND SAFETY GUIDE

## CLASSES

Factory Stock

FS Vehicle must be as manufactured. Any DOT tire up to 31"

### Street Legal

Must be inspect able and street able, currently registered, original make engine, naturally aspirated, (unless originally equipped) exhaust may be opened, single carburetor, no excessive cutting or lightening of vehicle. Must be willing to drive on nearest paved road and will do so when asked. Any vehicle that is street legal other than engine may run in SC class.

SA DOT tires max diameter 33"

SB max diameter 38.5"

SC max diameter 44"

## Modified

Any street legal may enter without additional requirements. All vehicles must have a minimum body designed to protect the driver from flying debris and spilled fluids. (Recommend use EC4WDA body guidelines). MA class must be naturally aspirated and no pressurized fuel.

#### SAFETY RULES

All classes 1-6 only Modified, all rules

- 1. Helmets and seat belts required by all drivers. Eye protection recommended.
- 2. No passengers or loose items permitted.
- 3. All vehicles will have a secure cable hood up.

- 4. Must have functioning brakes.
- 5. All relocated batteries must be fully enclosed and securely mounted away from driver.
- 6. All open cab or cutout vehicles must have roll protection.
- All modified must have drive shaft loops, scatter shield, transmission blankets, or blow proof bell housing, U-joint shields and blower straps.
- 8. All modified must have fire extinguishers, 2 lb. minimum.
- Fire suits are required if running alcohol, nitrous, blowers, or any exposed engines.
- All modified will have a minimum 4 point shoulder and seat belt.
- 11. Modified will have 6 point roll cage.
- 12. All open engines will shield the fan, and any other moving parts of engine from spectators.

# TRACK OPERATION RULES

- 1. Each vehicle may place only once in a class.
- 2. Each driver may register more than once but clubs may limit any registrations over two.
- 3. Each vehicle may have unlimited registrations.
- 4. Drivers cannot be forced to bump up.
- Money winners may move to next class. All others may move at discretion of club.

### EC4WDA 2XWD RULES

2XWD is at host club's option. Dirt drags, unlike asphalt drags, are designed to be run on uneven sand or dirt tracks. In building, preparing or modifying your vehicle for dirt racing, a competitor should keep in mind that the promoter will try to maintain a suitable racing surface. However, there may be holes at the starting line or in the track surface, ridges down the track, uneven surfaces and rocks, mud or other debris on the track. These obstacles are not intended to make the race any more difficult, but are part of the sport. The promoter will endeavor to remove all the problems before the race. It is the option of the racer to race or not, if the track is deemed suitable and the racer chooses to race or not. If the track is deemed suitable and the racer chooses not to race, he/she will loose that race, but will not be disqualified from further competition.

- Membership in EC4WDA is mandatory for racers and officials.
- 2. All EC4WDA meetings shall include a time for EC42WD classes.
- 3. All 2XWD meetings shall include a time for EC4WDA section.
- 4. EC4WDA sanctions four wheel drive events and 2XWD.

## AGE

Competitors must be a minimum of 16 years of age, and have proper identification and must have a current home state driver's license. All competitors must have present proof of age upon request of an official. Failure to do so will result in disqualification.

## DRAGS AND HILL ONLY

Shut down length 200 yards minimum or double drag strip length. Shut down must be maintained as good as the racetrack.

### CLASSES

## XXA, XXB, XXC, XXD

# **GENERAL 2XWD RULES**

All entrants MUST attend drivers meeting and make themselves aware of the racing circumstances as to not hinder the flow of the racing program. No tracks or cars grandfathered. Rules may be changed as necessary for safety and competitive reasons. Wheelie bars will be required when deemed necessary.

Wheelie bars must support the weight of the vehicle. Parachutes will be mandatory on all vehicles with an elapsed time of 2.80 seconds or quicker except cars with 4 wheel brakes.

- Throttle linkage: All mechanical throttles must have positive return device such as return springs. Toe loop on the throttle pedal is recommended.
- All cars MUST have four wheels. No trikes. 2 wheel drive and 4 wheel drive will not run each other except bracket.
- Wheel base: Minimum of 102" and longer. 300" maximum in X2WD class.
- All EC4WDA rules for classing will apply. Any conflicts will be addressed at the time of the race and could be decided race by race.
- 4 wheel drive in 2 wheel drive class: If vehicle has a transfer case, case must be in 2 wheel drive. Front shaft must be REMOVED! or mechanically disable axle drive flanges or hubs. Cars with chain or belt drive will have to be removed and any rotating sprocket or pulley, etc. will have to be guarded.
- All 2XWD cars have met all EC4WDA rules and sanctioning regulations and 2XWD rules or whichever is the greater (safer).

## GENERAL SANCTIONING CHAIRPERSON Ira (Sput) Wilkinson 458 E. Shamokin St Trevorton, PA 17881 570-797-3351 sput@ptd.net

## REGION A SANCTIONING CHAIRPERSON Matt Twaddle 496955 Quay Rd Negley, OH 44441

REGION B SANCTIONING CHAIRPERSON Larry Keim 117 Greenwood St. Trevorton, PA 17881 570-797-4307

# REGION C SANCTIONING CHAIRPERSON Karen Reinhardt 10255 Joslin Lake Rd. Gregory, MI 48137 734-475-8465

\*\*\*Not responsible for errors or misprints in rules book. \*\*\*

#### 2019-20 SANCTIONING RULES

EC4WDA sanctions four wheel drive and all approved 2wd classes. All competitors must be EC4W-DA members to participate in sanctioned events.

Sanctioning will only sanction one race in EACH region per weekend!

a. Seniority of event date will prevail.

b. If it is an unused date, seniority of joining East Coast prevails.

All junior racer events must be run as nonsanctioned events and must follow all rules required to run such events.

This booklet contains rules used by the EC4WDA. Sponsoring clubs are to use these rules to prepare the grounds for sanctioning approval.

The purpose for EC4WDA sanctioning is to provide consistent track safety for the competitors, spectator, and meet sponsoring club. If a safety concern should arise, any three (3) sanctioning members may make a decision on the question and THEIR decision is final.

Meeting the sanctioning requirements does not imply that all safety measures are included. EC4WDA or its representatives assume no liability for the meet and its events whatsoever.

All EC4WDA events must be awarded points unless, due to extenuating circumstances, the regional SANCTIONING chairpersons decide to eliminate points for that event.

Clubs may hold non-sanctioned competition or exhibitions during an EC4WDA sanctioned meet, providing there is a conspicuous 2'x2' sign posted AT the track entrance stating what events will be sanctioned

by EC4WDA and those exhibition and/or competition that will not be sanctioned by EC4WDA. Verifiable written announcements must be announced on the public address system prior to the beginning of the non-sanctioned event. Non-Sanctioned events can only be inserted during a sanctioned event with the majoring approval of the regional sanctioning chairpersons, at least a week in advance of the event. EC4WDA accepts no liability for any accident or injury that may occur for the running of any non-approved and non-inspected vehicle.

If a sponsoring club plans to run any other vehicles in competition or exhibition other than an EC4WDA approved and inspected vehicle and/or event, it must be clearly and conspicuously stated on any promotional material or advertising.

An official sanctioning form will be distributed to the club requesting sanctioning at the spring regional meeting. Contact your Regional Sanctioning Chairperson. The club sanctioning person must have their sanctioning papers filled out and signed prior to the inspection of the first vehicle. When the sanctioned race schedule is finalized at the regional meeting, events must be declared at that time.

The following list of rules must be completed and followed for sanctioning of an event. All will be strictly enforced.

### INSURANCE

An insurance policy or binder will be available to show sanctioning inspectors. A copy of the insurance policy will be attached to the sanctioning papers and will remain on file with the EC4WDA sanctioning chairperson. The policy will have the club name and the race listed on the policy.

# FEES

A \$25.00 sanctioning fee will be pre-paid at the regional spring meeting. This is non-refundable for cancelling a race, except for an act of GOD.

# INSPECTION STATION

- 1. The inspection station must be near to but separate from the camping area.
- There will be enough space to sufficiently and safely test brakes on vehicles.

### SAFETY

- Speed limit of 5 MPH in campground and access roads must be posted. Speed limit will be enforced by the club.
- Safety marshals will be used in all events, placed at the critical areas on the track as required by the three (3) sanctioning officials.
- 3.
  - a. Where spectators and competitors can get dangerously close to competing vehicles in events, there must be a 1/2 inch restraining cable to contain the

vehicle in the course and a secondary adequate restraint to keep spectators at a safe distance from the primary cable. A 20' minimum cable, rope, ribbon, etc. will be used to keep spectators at a safe distance from the secondary cable. (Total distance of 30 feet). The cable is to be securely anchored (2 clamps minimum and approximately 30 inches high). These must be in position. Guide rail may be substituted for 1/2 inch cable. See Sketch #2.

- b. In the event of an accident or rollover, only official track workers, EMT's, paramedics, and firefighters should respond to the accident or rollover. If anyone else goes onto the track the driver involved in the accident/rollover will be disqualified and lose points for the event (ie. obstacle, figure 8, drags, ect.).
- 4. Attendants with fire extinguishers must be posted at intervals in all competitive events. Extinguishers must have a current sticker one (1) year or less. CO2 or dry chemical types are recommended. One (1) Halon FE 1301 or 1211 or equivalent is required.

IT IS RECOMMENDED IF ATTENDANTS ARE USING ATV'S, THEY MUST WEAR A HEL-MET WHEN RESPONDING.

5. If a licensed fire truck with a minimum of three (3) properly trained personnel is legally obtainable, it must be present during all sanctioned competitive events. If said truck is not obtainable, documented proof must be attached to the sanctioning form and then other suitable fire fighting equipment as defined must be on the grounds. Suitable fire fighting equipment is defined as: a stand-by truck equipped

with four (4) CO2 or dry chemical type extinguishers with a 10 lb. minimum charge, with a minimum of two (2) fire fighters with a vehicle at all times during competition event.

- 6. All stumps, stones, or other objects protruding more than 6 inches above the ground must be removed from the competition area.
- A person must be on duty at the starting line in all events to check for loose objects and other obvious safety defects.
- 8. SEE SECTION PERTAINING TO PETS ON PAGE 74.
- Adequate lighting is mandatory in the staging area, running area, and shutdown area where night competition is held.
- 10. No one connected with a safety aspect of an event may consume or be under the influence of alcoholic beverages or illegal substance while on duty.
- 11. No refueling in competition area except at designated areas. Anyone doing so will have their racing privileges revoked for that event with no refund of any money paid. The designated area will be in the secondary staging area only.
- 12. Security personnel must be available at the meet site during the time sanctioning is in effect. They must be able to handle and expel undesirables. The club will designate an area where the guards may be contacted.
- Water will be next to the race track for all events in strategic locations in case of battery acid spills.
- 14. Campgrounds should be mowed, and free of animal waste and debris.
- 15. All fireworks are banned from the grounds unless a display is provided by a professional fireworks

company. This should appear in the brochure.

- 16. All clubs putting on sanctioned events must post "NO FIREARMS PERMITTED" signs at the gate and on all advertisements and fliers.
- 17. An accident report will be filed for any accident reported to the Region Chairperson and the East Coast Sanctioning Chairperson. This report will be filed by the club sanctioning person and the two (2) sanctioning people assigned to the race.
- 18. There must be two (2) toilets available for each camping, competitor, and spectator area. In case of one (1) day event, four outhouses will be required. They should be strategically placed. It is the club's duty to see they are properly maintained and clean.
- 19. Any vehicle moving after dark must have at least one (1) operating clear light or equivalent facing front.
- 20.Camper(s), Racer(s), and Crew(s) must obey all Sanctioning rules from the time they enter the grounds until the time they leave. The club sanctioning person keeps track records of potential camper(s), racer(s), and crew(s) safety hazards by sending a written letter to their regional sanctioning CHAIRPERSON. The region sanctioning CHAIRPERSON will send a copy of this to person (s) involved and the EC4WDA sanctioning CHAIRPERSON. The EC4WDA sanctioning CHAIRPERSON will send a copy to each regional sanctioning CHAIRPERSON. Each region sanctioning CHAIRPERSON will then send a copy to their club sanctioning persons. The will be a system to monitor potential safety hazards and/or possible violations. If an individual receives a written sanctioning warning they will lose all points for event weekend or week. If 3 sanctioning

people think infraction warrants they can suspend said individual up to three attended sanctioned races. If any future infraction(s) occur, this person (s) will be barred from participating in EC4WDA events in the future, with the majority vote of the region Sanctioning CHAIRPERSONS.

- 21. No smoking in refueling, staging, and pit areas. No smoking signs will be displayed in these areas.
- 22. Safety vehicles shall be placed so they have a clear access to all competition areas.
- 23. All safety personnel involved with the race must be informed of the different fuels used, kill switch location, and any other hazards.
- 24. All vehicles will be clearly marked with a sticker on both sides of the race vehicle to let the safety people and spectators know what type of fuel is being used. Recommended a fuel sticker be installed at the kill switch area.

a. Red "G" - Gasoline

b. Orange "A" - Alcohol

c. Green "N" - Nitrous Oxide or Nitro Methane

d. Yellow "D" - Diesel

e. White "P" - Propane

All fuel containers must be marked accordingly.

- 25. A \$150.00 penalty fee will be assessed to any club whose sanctioning paperwork has not been completed and returned to their regional sanctioning chairperson at least one week prior to the fall regional sanctioning meeting.
- 26. While Sanctioning is in effect the use of ATV's and Golf Carts shall be used by the club for official use only. Only at club discretion may golf carts and ATV's be used with a posted sign at registration with rules pertaining to their use. ATV's used

for towing purposes shall be used only for towing purposes. No Jr. racer vehicles to be used except during Jr. racer competition or using same for towing purposes.

### PETS

- 1. No pets will be allowed in the spectator area.
- All pets in campground must be on a short leash. The leash must be held or attached to an unmovable object.
- 3. Aggressive pets All complaints about aggressive pets must be handled at the club level. The Region Sanctioning Chairperson must be informed of the problem and monitor it at future events. If the same problems occur at future events, it will be handled by the Sanctioning Committee. If a Suitable solution cannot be obtained, the pet must be removed from grounds and will be barred from any future EC4WDA events

# FIRST AID AMBULANCE

- A state certified or licensed ambulance will be on the grounds with qualified personnel in attendance during events. If this is not possible, the alternative would be first response (fire department) with at least two (2) qualified EMT's. Attending EMT's to make call for the ambulance. First response would be defined as a rescue vehicle equipped with complete life support and rescue equipment as well as manned by state certified EMT/Paramedics with/ without the ability of transportation.
- 2. THE FIRST AID must be clearly marked with a large RED CROSS or a large sign to identify its location.
- 3. There must be a first aid station and personnel on the grounds 24 hours a day while sanctioning is in

effect.

 All racing must stop until emergency medical personnel are ready to respond to any additional emergency.

# DRAG RACES

- Drag racing track must be 100 yards or less (approx. 100 paces). Minimum width per lane is 30 feet. Exceptions: All tracks sanctioned before 1984 should be allowed to hold races if they cannot change their grounds due to circumstances beyond their control.
- 2. If a starter is used on the track, there must be a safety barrier in the middle of the track sufficient to protect the starter from objects thrown by the cars.
- 3. The finish line must be plainly marked so that drivers can lay off without going out of the shut down area.
- Shut down area will be twice the length of the drag strip and the same width as the drag strip. SEE SKETCH #1.
- 5. Outer lane restraint cables must be tight and not more than 4 inches from the top of the pole. Clamp each side of cable every 40 feet. Poles are not to be more than 20 feet apart and less than 6 inches in diameter. Approximate height of poles is to be 36 inches above the ground level and must have a dead anchor at both ends (see Sketch #3). If guide rail is used, the post must be cut off even with the top of the rail.
- a. No gap GREATER than 6 inches between bottom of top rail to ground. For flat drags only.
- Highway type concrete barriers (minimum 30" in height) may be used in place of other restraints on

drag strip.

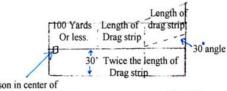
- Center dividers are optional and can be retained by tracks currently having them. It is suggested that a center barrier extend from starting line 15 feet or so to protect the starting lights and tree.
- Race tracks are not to be oiled for any reason! Tracks previously oiled must be worked to remove oil from the surface.
- 9. Dirt banks may be used instead of cable or guide rail, or concrete barrier. (See Sketch #4).
- Accept the 2XWD package as amended by the sanctioning committee.

# HILL CLIMB

- 1. All requirements under the safety section must be met.
- 2. Finish line must be plainly marked.

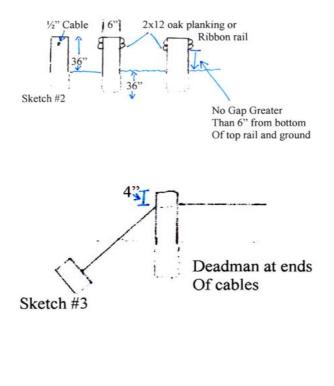
#### UPHILL DRAGS

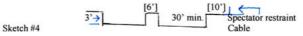
The uphill drags have the same requirements as the drags, with the exception of the shut down, which can be as short as the drag strip.



Barrier for Person in center of Strip. Barrier to be strong enough To protect person from out of control Vehicle or flying objects.

Sketch #1





### **OBSTACLE COURSE**

- 1. Spectators must be kept at a safe distance from race course. Refer to sanctioning's SAFETY item #3.
- If a starter is used, a safety barrier must be provided sufficiently to keep people from being hit by objects thrown by the cars.
- 3. Water for rinsing off battery acid spills must be required by the sanctioning officials.
- 4. The track must be designed so that the driver can tell where the track goes.
- 5. Tire barrier (minimum 30" in height with tires laying flat) may be used in place of other restraints on obstacle course only.
- a. If using single tires 30" or higher with a diameter of no less than 4' to form a wall, tires must be connected together with cable or equivalent. It is also recommended that holes be cut in bottom of tires to eliminate free standing water.
- b. If using stacks of tires or single tires less than 4' in diameter, tires must be filled in center and a dirt wall must extend from top of tire wall to ground at no less than a 45 degree angle.

# MUD BOG SAFETY AND TRACK RULES TRACK SAFETY

- 1. Spectators are not allowed in shut down area or starting line area.
- Available shut down area to be equal to the length of pit or more. Ribbon may rope off part of area to mark a disqualification zone.
- 3. Pit should have three foot side walls or use cable (1/2 inch min. width) on 6 inch post, spaced on 20 ft. centers. Cable to be 24 to 36 inches high.

- 4. Spectators should be kept a safe distance from pit area restraints.
- 5. Club will provide a minimum of two (2) ten pound fire extinguishers at the pit.
- Track officials and workers will not consume or be under the influence of alcoholic beverages/illegal substance during the race.

7. Any driver using alcohol or illegal substance before competition will not be allowed to compete.

#### MUD BOGS AND / OR MUD HOPS

- All requirements listed under the safety section must be met except item #3 on tracks that have steep banks one (1) foot or more above the mud and water line.
- 2. A minimum of 3/8" diameter steel cable must be used to retrieve the vehicles from the pit or track.
- 3. Spectators must be kept at a reasonable and safe distance from the track.
- 4. Mud Bog pits should be designed to keep the vehicles in the pit. Where pits or tracks are less than one (1) foot deep, or are fully or partially above ground level, spectators must be protected under #3 of the SAFETY section of this book.
- ALL persons must be kept at a safe distance from the cable when removing a competitors vehicle from the pit or track.

# WHEEL TO WHEEL

- 1. There must be 25 feet of lane width in all area of track
- 2. No water areas are permitted, except for water caused by recent rain.
- 3. There is to be a flag person in every corner exceeding 30 degrees.
- 4. Each flag person must have a yellow flag.
- 5. Spectators must be at least 30 feet from side of track.

#### SUGGESTIONS

EC4WDA has, over the past several years, developed a tradition of safe, considerate, and fun racing. The list of suggestions should be used by clubs that are sponsoring an event so that we can maintain the pride in our organization that has been built over the years with hard work and devotion.

- Is there a person on duty at all times during the night to help park campers and assist in possible emergencies.
- 2. Is a brochure distributed at least one (1) month prior to the event.
- 3. Are snacks and drinks available on the grounds.
- 4. Are sandwiches and hot meals available on the premises.
- 5. Is adequate notice given in advertising material whether ice, firewood, and showers are available at the campsite.
- Have you considered using GUIDE rail or heavy oak planking on your race course instead of cable alone.
- 7. Phone service should be on the grounds if possible.

- 8. The club's sanctioning person's name should be posted.
- Have you placed direction signs at strategic positions so that the grounds is easier to find. Use large red 4"x 4" arrows.
- 10. Does the road accommodate cars with trailers as well as four wheel drives.
- 11. Is the road traversable in bad weather? It's suggested that the club widen the road and check with local and state laws.
- 12. Steep roads and grades should be slagged with #2 gravel.
- 13. Are all roads to and from the grounds controlled so traffic can move at all times.
- 14. Are campsites reasonably level.
- 15. Are the ruts and holes filled in or plainly marked.
- 16. Is the area cleared of poison ivy and bees.
- 17. Are camping spaces marked so as not to block in any camper or interfere with any event.
- 18. Is there a repair pit area available to minimize fire hazards? A man with a fire extinguisher should be in attendance during any welding, brazing or cutting.
- 19. Is there a refueling area that is not near spectators and campers.
- 20. Will there be adequate garbage facilities and receptacles available? Each camper should receive two (2) garbage bags.
- 21. Will a large simple map be posted at the registration area which shows the location of gas stations, pay phones, swimming pools, lakes and food stores.
- 22. Will a large time schedule and map of the grounds be posted.

- 23. Are you banning ATV's and motorcycle from the grounds.
- 24. Are entrants notified that excessive noise is to end at 1:00 a.m.? This notice should appear in the brochure.
- 25. Unmufflered vehicles should not be permitted to run after 10:00 p.m. unless in competition.
- 26. Are outhouses lighted or marked with luminescent paint or tape for easy finding at night.
- 27. Is portable water located in the camping area at all times during the meet.
- 28. Is water tested (and suitable) if from a well or spring.
- 29. Do food handlers comply with the local regulations.
- 30. Is ice available.
- 31. Inspection area should be closed off to only those persons directly associated with the race.
- 32. Sanctioning person should be at all drivers meetings.
- 33. Sanctioning and Rules people should have free camping at the races they are assigned, but must pay their own competitor fees.

## SANCTIONING VIOLATIONS

Any sanctioning violation occurring during an event shall cause a sanctioning official to stop the event until the violation is corrected. Only after three (3) sanctioning officials confirm to their satisfaction that it is safe to proceed, will racing begin again. A fine will result if the three (3) sanctioning officials feel the club was negligent. The club has the right to appeal the fine to the Sanctioning Committee. A recommendation will be made there and a vote will be taken at the sanctioning meeting of the EC4WDA Annual Convention. Refusal to comply with sanctioning directions will result in suspension of EC4WDA sanctioning and removal of association property. No points for the event will be earned. Amount must be paid and corrections made before the next meeting of the EC4WDA. Inc. All sanctioning violations will result in a \$150.00 fine which must be paid and appeals submitted within ten (10) days of the violation (s) occurrence. Failure to comply will result in withdrawal of sanctioning and points from this race. Failure to comply will result in the refusal of any other further sanctioning of that club's events. Reinstatement will occur when payment of twice the amount of the fine is received by EC4WDA and accepted by majority vote at the next annual EC4WDA meeting.

# ON/OFF HIGHWAY SAFETY PROGRAM EC4WDA RECREATIONAL SAFETY PROGRAM

SAFETY SHOULD BE TAUGHT on an association, region, club and individual level. Each region should try to give one (1) safety clinic per month and handson training courses should be given four (4) times a year. Safety inspections should be accomplished prior to a major event and/or run. Safety clinics and inspections can be a great way to increase club and association membership, making folks more aware of the association and United. REGIONS SHOULD AP-POINT safety chairpersons, as well as the clubs. Safety programs will succeed if all the persons involved work hard and think safety all the time. SAFE-TY FIRST...WHATEVER IT TAKES!

# TRAINING AIDS

#### VIDEOS

- a. Ramsey Winch
- b. The Safe Route/CA4WDC
- c. Four Times Four Equals Fun/CA4WDC
- d. The World of Four Wheeling/Chrysler
- e. Tread Lightly Video/Tread Lightly, Inc.

### WRITTEN MATERIAL

- a. Off Roader's Handbook/HP Handbooks
- b. California 4WD Safety Ed Program/CA4WDC
- c. Safe Operation Best Route 4WD Fun/CA4WDC
- d. Tips for All-Weather Driving/CA4WDC
- e. Safe Winching You've Got Pull/CA4WDC
- f. Vehicle Checklist/CA4WDC
- g. Safety Clinic Packet/CA4WDC

# EQUIPMENT REQUIRED

- a. Roll bar or full cage (on all vehicles with removable tops)
- b. Parking brake/micro/lock
- c. Tow strap/rope (no chains)
- d. First aid kit
- e. Jack and lug wrench
- f. Spare tire
- g. Fire extinguisher
- h. Seat belts for all
- i. Lights (all must work)
- j. Horn
- k. Wipers and blades
- 1. Service brakes (must not need pumping)
- m. Proof of insurance
- n. Flashlight (fresh batteries)
- o. Battery hold-downs (no bungee cords)
- p. No chipped/cracked glass
- q. Water jug
- r. Antenna/C.B. radio
- s. One gallon of water per person per day
- t. Tow hooks/front and rear

# **RECOMMENDED EQUIPMENT**

- a. Highway tires
- b. Shovel
- c. Axe and hatchet
- d. Spare parts
- e. Set of tools
- f. Tire air pump
- g. 5 gallon gas can/filled
- h. WINCH
  - 1) Check cable for frays and snags
  - 2) Check hooks for cracks/fatigue

3) Cable blanket

- 4) Winching accessory kit
- 5) Gloves

i. SURVIVAL KIT

- 1) Waterproof matches/WP container
- 2) Solar blankets/at least two
- 3) Mirror
- 4) Military fold-up can opener
- 5) Chapstick/sunscreen/mosquito repellent
- 6) Water purification tablets
- 7) MRE's/meals ready to eat
- 8) Canned foods/one or two cans
- 9) Tarp (one)
- 10) Personal Items
- j. DON'T GO ALONE/two vehicle minimum

k. NO DRINKING & DRIVING/could cause a life threatening accident.

# PRE-TRIP INSPECTION

- a. BE PREPARED FOR THE WORST, EXPECT THE BEST!
- b. Leave word as to where you are going and estimated time of return. Never go alone
- c. Always check weather before leaving. Leave no room for error to become a disaster.
- d. During pre-trip inspection it is a good time to check for:

1) Oil leaks-transmission, transfer case and differentials

2) Belts, hoses, radiator/level too

### ON THE ROAD AND TRAIL

- a. When moving on the road (two or more vehicles) during daylight, headlights ON, so you can be seen. Lead vehicle should be someone who knows the way, knows when to quit when he/she gets tires.
- b. On the road everyone should watch the vehicle behind so the convoy doesn't separate or get lost. CB radios are a good way to stay in touch. If one vehicle stops, all should.
- c. On the trail, use the idea of TREAD LIGHTLY!
   T-Travel only where motorized vehicles are permitted—don't blaze your own trail.
  - **R** Respect the rights of hikers, skiers, campers and others to enjoy their activities.
  - **E** Educate yourself by obtaining maps and regulations from public agencies, complying with all signs/ barriers, asking owners permission to cross private property.
  - A- Avoid streams, lakeshores, meadows, muddy roads, trails, steep hillsides, wildlife and livestock.
  - **D**-Drive respectably, protect the environment, preserve opportunities to enjoy your vehicle on wild and public lands.
- d. Trail etiquette is as much a part of smart offroading as well as being thoughtful of other trail users.
  - Observe TREAD LIGHTLY! whenever off-road and DON'T LITTER. Pack it in - Pack it out.
- 2) Don't leave a DOWN VEHICLE without help. LIMIT TIRE SPIN/don't tear up the land.
- 3) DON'T BLOCK THE TRAIL. If possible, pull to one side or the other.

- 4) On a grade/hill and two vehicles meet, vehicles coming down the hill must back up to a safe point to permit the vehicle coming up the hill to pass.
- 5) NOTIFY TRAIL BOSS when stopping/leaving the run.
- 6) Don't lose sight of vehicle in front or behind you, and STAY TOGETHER AS A GROUP!
- Lead vehicle always WARNS THE GROUP of on-coming traffic. When horsemen approach, shut off your vehicle and allow them to pass.
- 8) PICK UP LITTER, even if it isn't yours. AVOID TALL GRASS. It's a fire hazard.
- DON'T BLOCK stream crossings. Clear the stream completely.
- 10) Before towing another vehicle, KNOW WHAT YOU ARE DOING. Check for proper hookup.
- 11) When approaching a disabled vehicle, see if you/your group can help in repairing.
- 12) Carry extra provisions even if you won't need them. Someone else might.
- 13) On dangerous or steep hills, wait at bottom until vehicle ahead reaches the top.
- 14) KEEP VEHICLES BEHIND YOU IN SIGHT when coming to a fork in the road or making a turn.

### FIRST AID KITS

First Aid Kits should be more than a box of bandaids. They need to be adequate for the type of operation they will be used for. Following is a multi-functional kit designed for minor cuts and major wounds, for the home, office, car, boat, camper and disaster preparedness programs. All materials should be kept in a sanitary and usable condition and a frequent inspection should be made of all first aid supplies.

1 - 40" Triangular Bandage

1 - Bloodstopper Compression Band

1 - 5" x 10" Instant Ice Pack

10 - 3" x 3" Sterile Gauze Pads

10 - Alcohol Wipes

1 - 8' x 8" x 5" Corduar Bag

1 - Spool 1/2" x 5 yds. Tape

1 - 5 1/2" Bandage Scissors

1 - Box Latex Gloves (100)

10 - Large Knuckle Bandages

16 - 1" x 3" Bandage

1 - 3" x 5 yds. Stretch Gauze

1 - 2" x 5 yds. Co-Wrap Bandage

2 - 5" x 9" Lamino Trauma Pads

10 - Large Fingertip Bandages

10 - Tincture Green Soap Wipes

#### EACH CLUB SHOULD HAVE A COMPLETE

FIRST AID KIT to use on club outings, or made available to its members. Training in first aid should be taught on a club level, perhaps during a meeting at the beginning of the year. American Red Cross has instructors/classes for a small fee.

ONE PERSON IN EACH CLUB SHOULD BE CER-TIFIED IN FIRST AID. Check the contents of your first aid kit every six (6) months. Replace items that have been used ASAP!

# THE POST TRIP INSPECTION

A "PTI" is very important and should be accomplished when the trip has ended. In the case of an extended or overnight trip, make a check after the day's travel should repairs be necessary before continuing. The PTI is simply an intensive/detailed inspection of the vehicle for structural integrity, security, wear and tear items.

WHEN ARRIVING AT PAVEMENT, it would be a good idea to do a quick once-over before hitting the highway following a rough and tough trip. Check the underside for fluid leaks, damage to tires, undercarriage, tubing (brake & fuel) and wiring. This quick check could prevent a serious or critical failure of brakes, cooling system, tires, engine and/or drive train components. NOTES

