

Norway Speedway

2019 Bink's Coca-Cola Late Model Rules

All 2019 revisions are listed in (red)

The Guidelines and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These guidelines shall govern the condition of events and participation therein. They are intended as a guide for the conduct of events and are in no way a guarantee against injury or death to a participant, spectator, or official. The Director of competition, or his authorized designate, shall be empowered to permit minor deviation from any of the guidelines and or regulations herein, or impose any further restriction, which, in his or her opinion, does not alter the purpose of the organization. Deviation of these guidelines and or regulations will be the responsibility of the Norway Speedway officials, whose decisions are final. All Present and Future rules regarding the Crate Motor cars will be made by the DCRA Board. A penalty for violating any of the below rules will result in the driver/owner losing voting privileges for one (1) calendar year from the date of infraction. Late Model Driver or Car Owner who competes in 3 or more races will be entitled to one vote regarding Late Model rules

I. Eligible Cars and Bodies

- A. All competing cars will be full-sized, stock American manufactured passenger car bodies, 1999 or newer. The A-B-C Body Guidelines will be posted at www.fivestarbodies.com
- B. Cars must use (basic) ABC Body Rules Guidelines.
- C. **The Gen 6 Five Star Body will be permitted at Norway Speedway.**
- D. Roof heights, Nose heights, ¼ heights. Spoiler heights. Windows Basic Dimensions and other BASIC dimensions.
- E. Spoilers- 6.5" x 60" max. Clear Lexan is recommended
- F. 103 min. wheelbase plus or minus 2"
- G. Tread Width- MAX 66" Tread Width, Anything over 66" is automatic disqualification.

II. Engines

Statement- It is in the best interest of the Norway Speedway to allow various engine combinations to compete in weekly events. Providing, your engine combination is approved for competition by the Norway Speedway office if otherwise not stated in the rules and regulations. There will be three (3) engine combinations approved for all events, at all times. (9 to 1 Aluminum, A.C.E. and Norway Spec are the (3) preferred choices) "Other" types of engine packages will be approved for competition and listed in this section.

Weights for all engines will be listed below.

- A. Block must be cast iron. (Exception: Schwanke and Wegner Spec engines only)

- B. No 18 degree or SB2 Chevrolet Heads 5. Minimum Crank Height is 10 inches measured from the center of the forward crank bolt. Norway Spec and Crate engines 11 inches.

- C. Antifreeze is strictly prohibited First offense \$50.00 fine.

III. A.C.E. Head Engine

Must be able to sell Heads, complete for \$2500.00 (hardware, valves, valves springs, retainers, keepers and guide plates.) Heads must be stock out of box. Valves 11/32 Valve Stem or 5/16 Valve Stem may be used.

- A. Approved valve part numbers:
 - 1. GM-Ford Intake Exhaust
 - a. BRODIX- (BR81019) (BR81621)
 - b. Engine Tech- (BR810198) (BR81621)
 - c. FERREA- (F1121P) (F1476P)
 - d. MANLEY- (11818) (11595)
 - e. REV- (CL-1643) (CL-1604) (CL-8003) (CL-1171)
 - 2. Mopar
 - a. BRODIX- (BR60029) (BR60037)All valve spring sizes must be 1.55 MAX No shaft rocker arms allowed except on Mopar engines Steel or Titanium Valve Spring Retainers are Valve job may be blended into combustion chamber 3/8 inch from seat.

- B. ACE Engine MANIFOLDS. Any production type intake manifold allowed - provided it is readily available to all competitors from local race part suppliers. (Maximum cost \$375.00) Maximum height of manifold is 7.25" (including any carb spacer and gaskets) the manifold height will be measured from the base of carb to top of

cylinder block. Only one flat gasket with a maximum of .120 may be used between intake manifold and cylinder head - no spacer or wedge type gaskets allowed. No additional material may be added to manifold. No grinding or polishing of any part of the manifold - except you may match port the runners a maximum of 1".

- C. ACE Engine PISTONS Flat top pistons only - no part of piston may protrude above top of cylinder. (Maximum) compression ratio 10.5 to 1 (10.510 is illegal). Maximum Engine displacement for GM and Ford is 358 C.I. inches, Dodge will be 360 C.I. and Minimum 350 C.I. for GM, 346 C.I. for Ford.

- D. ACE Engine CAMSHAFT. The max lift on any roller cam is .625. Duration rule is 270 at 50 thousandths. No mushroom type lifters. Inlayed cams are prohibited. The maximum rocker ratio is 1.6 to 1. Rev kits of any type are prohibited. Only steel push rods (Titanium, aluminum or graphite are prohibited). No Roller bearing camshaft journals. Magnetic steel lifters no ceramic. 4. ACE Engine CONNECTING RODS Only ARCAMT approved steel rods allowed. No titanium, aluminum, graphite or stainless steel. Rods using 3/8" bolts are allowed.

- E. ACE Engine BLOCKS must be standard factory production cast iron. (Only 010 or bowtie approved). No aluminum blocks permitted. No altering of Engine block permitted. * Absolutely NO Grinding or lighting of blocks. The use of aftermarket blocks will be allowed in ACE engines. The engine builder must be on the Approved Engine Builder List and a bond must be on file. No big bore short stroke ACE engines will be allowed.

- F. ACE Engine CRANKSHAFT Standard steel type only, Minimum allowed weight of 43 Lbs. Stock angle crankshaft allowed. Light weight, knife-edge, undercut counter weight crankshaft are prohibited. No Honda journal crankshafts. Stroke 3.400 Min to 3.500 Maximum. Minimum 1.980-rod journals or any under sized journals under factory dimensions.

- G. ACE INSPECTION a 1.5" plug must be installed in the oil pan for inspection purposes. This hole must be directly under or side of the rod journal. If a windage tray is used, a hole must be provided in line with the hole in the oil pan. Cylinder head removal after any race may be required for inspection purposes.

IV. 9 to 1 Aluminum Head Engines

- A. ENGINE BLOCK: Must be standard factory production cast iron. Stock appearing No aluminum blocks permitted.

- B. CRANKSHAFT:** Standard steel type only, minimum allowed weight of 38 lbs., stock angle crankshaft allowed.
- C. PISTONS:** Flat top pistons - no part of piston may protrude above top of cylinder. 9 to 1 aluminum headed motors will have a 9.5 to 1 compression ratio (a ratio of 9.6 to 1 or higher will not be allowed). Maximum engine displacement of 358 C.I. and minimum 347 C.I. Aluminum headed motors may use dished or inverted dome pistons.
- D. CONNECTING RODS:** Only ARCAMT approved steel rods allowed. No titanium, aluminum, graphite rods or Stainless steel are allowed.
- E. CAMSHAFT:** Only steel push rods (titanium, aluminum or graphite are prohibited). 9 to 1 Aluminum headed engines are allowed roller cams and rev kits.
- F. HEAD:** All cylinder heads must be approved by ARCAMT and all modifications must be submitted to ARCAMT before any proposed modifications will be approved. All cast in part numbers must remain unaltered. Painting and /or coating of the heads will not be permitted. No 18-degree heads. Heads that are already approved are:
1. General Motors
 - a. Air Flow Research (AFR 215) (AFR220)
 - b. All Pro (AP227)
 - c. Brodix (3941075)
 - d. Chevrolet (10051101)
 - e. Edelbrock (7755)
 - f. Pontiac (10033867)

 2. Ford
 - a. Brodix (3941078)
 - b. Ford (M-6049-C302) with 4-degree valve cant
*Ford and Dodge Heads - must call for approval

 3. Mopar
 - a. For all 9.5 compression motors the cylinder heads must be acceptable to Norway officials and meet the following requirements:
 - i. Only steel or titanium valves will be permitted
 - ii. Only magnetic steel valve springs will be permitted
 - iii. Only 2 valves per cylinder will be permitted
 - iv. There are no valve size restriction Internal polishing and porting will be permitted

- v. Spark plug holes must remain in stock location
- vi. Valve angle must remain within 2 degrees of stock angle
- vii. Valves must remain in the stock location in relation to the cylinder bore centerline

G. INTAKE MANIFOLDS: No Fabricated Intakes Only one flat gasket with maximum of .120 may be used between intake manifold and cylinder head No spacer or wedge type gaskets allowed. May be polished and ported Not permitted will be: Added directional devices will not be permitted inside the intake manifold Air holes will not be permitted to be opened in the intake manifold Painting and /or coating of the intake manifold will not be permitted.

H. MISC: No engine part maybe composite. All part numbers must remain on all engine parts. No crank fire Ignitions unless allowed in engine package.

I. CARBURETORS: Holley 2 bbl. carb. Carb numbers # 0-80583-1 or 2300hp or Dorton 2bbl 500cfm # 0-4412 or 2300 or 4412 2bbl 500cfm Carb must be used as it was cast from Holley. Choke horn cannot be removed or altered in any way. Choke plate may be removed. Body and all parts must have all part numbers as cast. No coatings applied to castings. Body must remain stock appearing. Boosters must be stock appearing and as cast for carb style and no extra holes maybe drilled and may not be tapered. Must also be in stock location in body. No modifications of boosters allowed. Metering blocks must be stock as cast for carb style and no extra holes maybe drilled. Block maybe plugged and maybe machined but must remain stock appearing no aftermarket blocks. The use of screw in air bleeds is allowed. No exotic style floats or float bowls. All parts must be Holley parts and must be available in Holley Catalog. These parts must be ARCAMT gauge legal, Throttle bores, Boosters and booster legs, Throttle plates, Throttle shafts, Main body, any throttle linkage may be used. Double return springs REQUIRED. ARCAMT approved air box allowed with rear cowl vent only. No grabbing of air allowed. Must meet ARCAMT approval. Spacer can be 1 1/2 inch max and bores must be perpendicular to the base and no taper or any holes or air flow devices. Spacer must also meet the ARCAMT rules as to maximum height rules. Air cleaners are required. No freezing of carb and no cooling of fuel. No additives may be applied to air cleaner. ARCAMT approved Holley carburetors only.

V. GM 604 or 602* Crate Engine (as it comes from GM) and Ford D347SR Sealed Crate

This engine package is to be used as a cost-effective tool for Norway Speedway. The car and parts used with this engine package will be under the closest watch to not let the inexpensive cost of the engine effect the cost of the chassis and components thereof. This is a cost saving measure and needs to be used as that. Any chassis part used on a non-crate Norway car will be approved for GM Crate cars. **GM Crate Engine is subject to dyno at any time, at the expense of the D.C.R. A.**

- A.** Engines must meet all Whistler and P&G rules and Specs. Engine maybe pulled at any time for dyno testing by club officers and/or inspectors.

- B.** Must be Chevrolet. Part number Part # 88958604 or#19318604 or Ford D347SR

- C.** Engine must be used as stock as delivered from dealer. Norway Speedway's Exclusive Dealer is Gandrud or Badger in Niagara all future engines sales must be made from this dealer.

- D.** CARBURETOR: Holley 650 CFM 4150 HP carburetor, part number 80541. Carburetor must be securely fastened to the intake manifold and include one (1) .0625-inch (1/16") or smaller flange gasket. Drop-in spacers, alteration, physical changes, machining, re-shaping or tampering with any part of the original parts, internal or external, is prohibited. Following is a listing of tuning and replacement parts permitted for use on the Holley 4150 HP Carburetor. Only genuine Holley replacement parts are permitted and must match exactly parts replaced.
 - 1. Jets
 - 2. Bleeds
 - 3. Needle and Seat
 - 4. Emulsion bleeds
 - 5. Emulsion bleeds
 - 6. Accelerator pump nozzles
 - 7. Accelerator pump cam
 - 8. Floats include all offered by Holley for the (HP 4150/650 CFM) Carburetor
 - 9. Floats maybe modified/angel cut.

The use of any type Epoxy on the Holley 650 CFM 4150 HP carburetor, part number 80541-1 is prohibited. Coating of any type or the use of coatings on the Holley 650 CFM 4150 HP carburetor, part number 80541-1 is prohibited. Must meet all Norway Speedway Carburetor tools and measurements.

- E.** HEADERS: Any header with MSRP of less than \$450.00 may be used. No Tri Y headers will be allowed. No merge collectors. A header will consist off all parts inclusive to the final exhaust pipes.
 - 1. must have muffler and meet DCRA 95 DBA rule.

- F. Engine must remain completely stock with stock valve springs, and all components as shipped. No upgrades of ANY type. Exception: GM Bee Hive Valve Spring Conversion kit #19300952
- G. GM Crate Engine Cars will have a 11-inch Crank Shaft minimum height.
- H. The only Norway Speedway GM Crate Engine Rebuilder is Ron Linder or an approved S.E.A.L. engine rebuilder with board approval. NO REBUILDING FORD D347SR.
- I. The use of MSD Rev Limiting Chip must be factory marked 6400 and not to exceed 5004-5020 ohms will also be used. Norway Speedway may change chips at random and The DCRA may check chips at any time. All boxes must be wired correctly for inspection with the meter.
- J. All wiring must be sealed. No unplugged wiring. All ignition boxes must be mounted on the passenger side, in plain view, and out of reach of the driver...and...all wires to the distributor must be run separately and not part of a bigger loom or wiring harness
- K. Noncompliance to any of the above statements will void you from having a GM Crate Engine and the weight for a GM Crate Engine.

VI. **GM CRATE MOTOR INCENTIVE PROGRAM**

The GM Crate engine is used as a tool to make racing cost-effective at Norway Speedway. As an incentive to keep racing affordable and extend the opportunity to race to more people, the GM Crate Incentive Program was created. The only eligible motors will be GM crate engines that are stock as delivered from the manufacturer (No updated crate motors will be eligible). To qualify for the program, **THE DRIVER MUST RACE AT NORWAY SPEEDWAY FULL TIME** (80% of the scheduled races) **AND BE A D.C.R.A. CLUB CARD HOLDER IN GOOD STANDING. Subject to the discretion of the DCRA Executive Board. Terms of the GM Crate Incentive Program are as follows:**

- L. GM Crate cars are allowed a 6-inch engine set back **OR** be awarded a 25lb weight break if they choose to keep their engine set back to 4-inches or less.
- M. GM Crate Cars can run an 8-inch ring gear **OR** be awarded a 25lb weight break if they choose to run a 10-inch ring gear.
- N. GM Crate Cars can run at 62% Max left side weight.
- O. GM Crate Cars will be awarded a 25lb weight break for running a spool.

- P. GM Crate Cars will be awarded a cash incentive at the end of the racing season (amounts to be determined).

VII. Fuel and Fuel cell

Fuel Cell must be located behind rear axle assembly and between frame rails. No oxygen bearing or performance enhancing additives may be introduced into the inductions or fuel supply, either at the fuel cell or upstream in the system. Violations will result in immediate disqualification from the event; forfeiture of Owner and Driver points, and monies/contingencies earned for the event. Ethanol (E-85) will be permitted on a test basis only. Fuel cells with rubber bladders mandatory. Fuel cell plates or fuel cell tubs are mandatory. Fuel cell protector plate 1/8 thick steel must be mounted on outside of frame rails. The plates must cover the sides and rear of the fuel cell and be official approved. Fuel cell minimum height 10 inches. Fuel cell must be banded both ways with two straps each way. 1-inch minimum straps. Fuel cell tub 1/8 thick steel with one-inch lip. Front, bottom and rear will be one piece. The top of the box will use current 18 or 20 gauge top with 1 inch by 1/8 straps with two in each direction. All fuel cell cans and plates must be magnetic steel. All fuel cells must have check balls in place. Racing pump fuel only. Any over the axle style rear tail style chassis must use approved 1/8-inch magnetic steel fuel cell can. Any chassis with incorrect fuel cell can will be asked to change or be disqualified. The cell must be bolted in with a minimum of 14-3/8 bolts with flat washers on top and lock washers on bottom. The top for this cell will be 18-gauge steel with straps in both directions. A sonic tester will be used to check fuel cell can thickness. Fuel cell can pictures will follow. 09 Fuel Cells OK.

VIII. Weight Combinations

- A. Any other engine combinations will need to be approved by the series office prior to entry of any event. Norway Speedway offers (3) engines as official engines of the club. 9 to 1, ACE, GM Crate (as it comes from GM).
- B. All other engines must be approved for competition
- C. All Cars will be 58% Max left side weight except the GM Crate Car (including Ford D347SR) at 60%. Before qualifying and after race.
- D. 2575 lbs. – GM 604 Crate Engine (GM part # 88958604 or #19318604)
- E. 2575 lbs. - Norway Spec Ford sealed D347SR engine with Holley 650 CFM 4150 HP part number 80541. Must remain stock. NO REBUILDING.
- F. 2700 lbs. – GM 604 Crate Engine with small balancer, updated springs, (CRA/JEGS Touring Series LM)

- G.** 2700 lbs. - WIR Late Model Spec. Engine with 4412 2bbl Holley - 500 CFM
- H.** 2750 lbs. - ACE Engines with 4412 2bbl Holley - 500 CFM
- I.** 2750 lbs. - McGunegill sealed engine with 4412 2bbl Holley - 500 CFM
- J.** 2750 lbs. - Schwanke sealed engine with 4412 2 bbl Holley - 500CFM
- K.** 2800 lbs. - All Wegner LS engines with 4412 2 bbl Holley - 500 CFM (exempt from ci rule)
- L.** 2800 lbs. - 9 to 1 Aluminum Engines with 4412 2 bbl Holley - 500 CFM
- M.** 2750 lbs. - Concept with 4412 2 bbl Holley - 500 CFM
- N.** 2750 lbs. - Ford sealed S374D engine with 4412 2 bbl Holley - 500 CFM (exempt from ci rule)
- O.** 2750 lbs. – Wegner 5.3L LS Engine with 4412 - 2-barrel carb or 650 HP (Crate) 4 barrel carb. per Wegner Specs.
- P.** 2800 lbs. - Any engine not listed above is considered an open engine. 4412 2 bbl Holley - 500 CFM
- Q.** Any motor over 358 cu add 200 more pounds, over compression add 100 more pounds - penalties a cumulative
- R.** 2800lbs- Southern Super Parts Engine- 2-barrel ONLY. There is a \$21,000.00 claim in effect for this type of engine.
- S.** 2500lbs- GM 602 Crate Engine as it comes from GM.*

*the GM 602 Crate Engine is allowed on a trial basis

IX. Mufflers and Headers

Mufflers are required for competition at the Norway Speedway. Any car not meeting the 95 decibels WILL NOT RACE. It is recommended for exhaust to exit under car to meet this requirement. All exhaust systems must have mufflers that are not tampered with or hollowed. No custom high dollar headers (no lightweight stainless, Titanium or Inconel) allowed. Any collector may be used without a cone style inserts. No one off custom header allowed. Norway Spec Engines see Spec rules. ***ANY CAR NOT MEETING THE 95 DECIBELS WILL NOT RACE***

X. Air Intake

- A. Forward intakes are not allowed. Air boxes are permitted. The back of the air box must be flat. 5 Star stock car body air box maybe used.
- B. No devices for directing the flow of the air into the air cleaner are permitted.
- C. No additives allowed in air filter.

XI. Clutch

- A. The 5.5 inch or bigger will be the only clutch allowed. Max price MSRP. \$1600
- B. Absolutely no carbon fiber or poly clutches allowed. Bell housing must have a minimum 2 1/2" hole at bottom (to allow a clear view of clutch).

XII. Transmissions

- A. Bert or Brinn Style Transmissions add 50 pounds overall weight. Not allowed on Norway Spec Engines.
- B. No bottom load transmissions.
- C. Must have two forward and 1 reverse working gears minimum.
- D. Standard type or made for racing shifters may be used. No 1/8" push/pull rods may be used. Must be self-starting.

XIII. Brakes

- A. All cars must have functioning brakes on each wheel.
- B. No more than 4 piston brake calipers.
- C. Fix mounted or floating rotors are the only steel rotors allowed. Maximum \$500.00 limit on brake calipers for all.

XIV. Shocks

Norway Speedway adopted ARCAMWT Shock/Spring Rules.

- A.** Maximum cost on racing shocks is MSRP \$850 for a complete unit.
- B.** The following shock (bodies) may be used: JRI ST-08, SC-07 (SC-07 must be on approved list by JRI) Ohlins TTX 36 Series Penske 7300, 7500, 8300 Series
- C.** All conventional type other shocks that are now in use may be used. Any new JRI, Ohlin's, Penske, or redesigned shock body from these companies will not be allowed in Norway Speedway competition. The limit on shock cost will stay the same or as listed above.
- D.** Conventional shocks now in use: Afco, Bilstein, Integra, Koni, Pro, QA1
- E.** Any other shock will need official approval before use.
- F.** Any of these companies making new products not in use at this time will also have to be approved. (12/17/13) Please contact the tech director for questions.
- G.** The use of bump springs will be allowed. A bump spring must act like a bump rubber and may not be larger than 2 inches in diameter and 3.75 inches tall. No other types of bump springs may be use. The car may have 4 springs, one for each wheel and 4 shocks, one for each wheel. A bump spring should look like the ones sold at www.bumpspring.com as of 12/17/13. A bump spring maybe used on a remote shock eliminator type set up, but again must look and act like a bump rubber.
- H.** No air blow up bump stops or nonconventional style bump stops.*All springs for suspension must be magnetic steel including bump springs.
- I.** All shocks must be Norway Tech Approved. • One shock and coil spring per wheel and or corner.
- J.** Use of eliminators is allowed.
- K.** No shock blankets or covers allowed.
- L.** No electronic shocks permitted.
- M.** Shocks must be mechanical, and no part of the shock or suspension may utilize electricity. No Magnetic Shocks.
- N.** No four (4) way adjustable shocks permitted.
- O.** No three (3) way adjustable shocks permitted.

- P. Only single shaft shocks with one rebound adjuster and one compression adjuster allowed.

XV. Suspension

Coil over or leaf allowed. - No computer or hand operated controlled suspension. - No aluminum axle tubes, no titanium axle shafts, no aluminum rotors, no carbon fiber rotors.

XVI. Roll Cage Construction

Following are the minimum specification requirements for roll cage construction approved for Norway Speedway competition. Norway Speedway Officials reserve the right to sonic test any or all, structural chassis members at any time during a sanctioned event. Structural chassis member(s) found in violation of minimum requirements render that chassis ineligible for competition until minimum standards are met or exceeded. Drilling holes to lighten any part of the body, chassis, suspension or bolts is not permitted. Only steel round; rectangular or square tube is approved for roll cage or chassis construction of any main or supporting sub-structures. Wall thickness; size and/or diameters are specified where necessary.

A four-point (4) roll cage structure utilizing a minimum 1.75-inch x .090- inch (1-3/4" x .090") OD D.O.M. steel tubing is mandatory. The entire structure must be welded to the primary frame structure with a minimum of four (4) horizontal driver side door bars. A minimum of 2" x 3" x .095" wall steel tubing is mandated for main frame rails. Main frame rails are identified as Mid-Section Rails. Main frame rails and side rails must be located within the normal Tread width of the car. A minimum of 2" x 3" x .083" wall steel tubing is optional for Front Clip Rails, Rear Clip or Kick-up Rails. No material substitution permitted. Roll cage structure must be braced to the front frame stub, with the hoop section surrounding the engine compartment; running rearward with diagonal member's connection to the rear frame section. Nose, right side kick outs and rear bumper cover supporting structures must be a minimum 1.500-inch x .063-inch OD steel tube. No material substitution permitted. ABSOLUTELY NO Aluminum allowed on the structure of the chassis.

Added Weight: Any added weight must be securely fastened to the car. Only permitted material for use as added weight is lead. Lead must be painted white and have cars number listed on it.

Cars may be weighed prior to event or immediately following any event with inspector's discretion. Cars losing lead on track are subject to \$5.00 per pound payable to DCRA.

XVII. Driver Side Door Plates

Left side driver support bars or plates are mandatory. See Option A or B listed. No material substitution is permitted. All support bars or plate installation is subject to approval. See Illustration A.1 Plan - A – 0.125-inch, 1/8" solid steel plate bolted to the left side door portion of the roll cage. Doorplate must be bolted to the roll cage using a minimum of six (6) each 3/8" (.375-inch) aircraft quality bolts and washers. Welding of the plate to the roll cage is prohibited. Plan - B – Minimum 0.125-inch (1/8") thickness steel plate must be welded to the space between each left-side door bar. Offset chassis right side door bars commonly called The Outrigger or The Kick-Up Bar, must be constructed of a minimum 1.250-inch x .065-inch wall round or square steel stock. All supporting Sub-structure must be constructed of 1-inch x .063-inch wall round or square steel stock. No material substitutions permitted.

XVIII. Driveshaft

The driveshaft shall be made of steel or aluminum. Carbon-fiber driveshaft's are not permitted. Containment hoops (2 required), constructed of a minimum 0.1875-inch thick steel, are mandatory and the forward most loop must be 4-5 inches minimum behind front yoke.

XIX. Front Suspension

Independent front suspension with articulated upper and lower control arm(s) is mandatory. The type of shock absorbers and suspension springs are optional. One (1) shock absorber per corner of the car is permitted. Front suspension adjustment must be done from under the car or by lifting the hood. No holes in the hood, fenders or other body parts from the windshield forward to adjust front suspension component(s) are permitted. No suspension adjustment devices are permitted in the driver's compartment area. Knob- type brake bias adjusters are recommended. Weight transfer or suspension adjustment devices, adjustable while the car is under way are prohibited. Spring rubbers are permitted and must be removed manually. No removal devices may extend outside the body of the car or be accessible in the driver's compartment.

XX. Rear Suspension

Non-independent, live axle type rear suspension is mandatory. Rear ends may be Quick- change with full-floating hubs or 9-inch Ford type. Rear axle tubes must be steel. No open tube rear ends permitted. Maximum rear camber is + or - 1 degree measured with the rear axle level. Material used for rear end center section is at the discretion of the team, but hub pins must be steel. Rear end coolers are recommended. Remote rear suspension adjusters are permitted when accessible through the rear window. A maximum of three (3) one-inch (1") diameter holes are permitted in the rear window. Each hole can allow access to one adjustment device only. No adjuster may extend forward of the rear window area. All pumps used to

circulate fluid for the purpose of cooling the rear end, must be mounted in the center of the car. No bird cage set ups of any kind. No part of trailing arm mounting bracket may rotate or move.

XXI. Wheels

Approved wheels must be 15-inch diameter; five-lug (5) steel; 5" x 5" hub or wide 5 patterns; 10-inch rim width. Bleeder and/or pop-off valve devices are not permitted; alteration or defacing of wheel identification numbers; labels; code numbers or serial numbers is not permitted. Wheel(s) failing to meet these criteria will be ineligible for competition. A minimum weight of 17lbs is required

XXII. Wheel Studs and Spacers

A minimum of five (5) lug nuts per wheel, minimum 0.625-inch (5/8") solid steel nuts, showing a minimum of two (2) threads through the nut, must extend through the lug nut when clamping the wheel to the hub. Wheel Spacers, if used, must be made of steel or aluminum and a minimum 6.75 inches in diameter. Shims are not permitted when mounting wheel studs to hubs.

XXIII. Safety

In all matters pertaining to safety, Car Owners, Drivers and Crew members must review and educate themselves in all safety standards. It is the responsibility of the Car Owners, Drivers and Crew members to install, wear and maintain all safety equipment as specified by manufacturer's instructions. This includes, but is not limited to, helmets, fires suits, racing suits, gloves, shoes, flame-resistant underwear, flame-resistant head sock, head and neck restraint systems, driver's racing seat and safety belts. Any Safety infraction will deem the car ineligible for competition until the infraction has been repaired or corrected and the car re-inspected. Drivers wearing dental plates or dentures are required to remove them for any hot-track activity

XXIV. Driver Seat

All driver seats must be manufactured by a recognized manufacturer of seat and safety equipment, multi-layer aluminum seat and approved by Norway Speedway Officials. Seats must remain "as purchased and produced", no holes or other modifications made for weight reduction. Homemade seats or sprint car type seats are not permitted. Seat construction must be solid aluminum sheet material from the seat bottom to above the driver shoulder area; must be fully padded, with padded pelvis, rib and shoulder

supports on both the left and right side. Exception – LaJoie seat where construction is such that rib supports are not required. A head restraint system, manufactured by a recognized manufacturer of seat and safety equipment, is "highly recommended" and subject to Norway Speedway Officials approval. Bolt on systems are approved for competition. Seats must be equipped with left and right leg extensions, fully padded, running from the edge of the seat to the entrance of the foot box area. Recommendation – a minimum 1/8" (.125- inch) thick steel plate be mounted on the front of backside of the rear hoop of the mid- section in front of the left rear wheel. Plate should extend from the horizontal shoulder bar downward the height and width of the driver seat.

XXV. Seat Belt and Shoulder Harness Installation

All seat belt and shoulder harness systems must me SFI Specification 16.1, type 1. Y-type shoulder belts are not approved for use. Seat belts and shoulder harness systems must have a production date within (5) years of the event date. A minimum five-point harness system is mandatory. Competitors using the HANS Device may use a standard three-inch (3") or the Schroth Racing two inch (2") wide should strap. The Schroth Racing shoulder strap system has been specifically designed for use with the HANS Device. Schroth part numbers are Profi III-6FH; Hybrid III-H; Profi III-6H. Shoulder harness belts shall not be mounted lower than the shoulder line of the driver or 10 degrees. All lap belt and shoulder harness mounting must be done with aircraft-quality bolts and washers. See Illustration A.2 and A.3

XXVI. Driver Helmet

Effective with the 2014 season, all driver helmets must reflect a Snell 2010 certification. SFI or Snell approval sticker must be visible for Norway Speedway Officials inspection. Eye protection is mandatory at all times.

XXVII. Left Side Widow Net

Left side driver window net is mandatory. Construction may be either wide-mesh or web-type safety net with mechanical release. Net bar must be a minimum of .1875-inch (3/16") flat steel or .375-inch (3/8") round stock and run the entire length of the window net between mounting points. Mechanical release must be welded to the front or "A" pillar end of the bar. Spring-loaded releases are not approved for competition. Driver net must be secured in place and centered in the door area and must be secured to the upper roll cage horizontal member.

XXVIII. Fire Suppression System

A minimum five-pound (5) on-board fire suppression system, with multiple discharge points is highly recommended for competitors.
Cold Fire recommended for cockpit usage.

XXIX. Driver Head/Neck Restraint System and Driver Uniform

Use of head and neck restraint devices is highly recommended for all hot-track activity. Approved devices are the HANS Device, LFT Technologies R3, Simpson and the Hutchens II Device. Driver uniform must be a multi-layer, full-coverage, (one-piece fire-retardant uniform HIGHLY RECOMMENDED) specifically designed for racing; fire retardant gloves; socks; underwear; and shoes.

XXX. Tires

Hoosier Tires are the official tire of the Norway Speedway.
The Hoosier 3035 on the left side and the Hoosier 3045 on the right side will be required.
For the 2019 season, Late Model Drivers Will be allowed:

- A. Four (4) new tires on opening night of the season
- B. Two (2) new tires per week shall be permitted every week of the 2019 race season.
- C. **Week #1-** Drivers will be permitted four (4) new tires or they can run four (4) used Norway Speedway tires from the 2018 season. Spare tire can be a new tire (until the races end) or a Norway scanned tire from the 2018 season. No new tires will go to impound without being run.
- D. **Week #2 forward-** Late Model Drivers shall be permitted two (2) new tires per week, every week, for the duration of the 2019 racing season.
- E. Spare tires must be previously scanned to the Norway Speedway tire database from the 2018 season and be approved by the Tire Official or the DCRA board.
- F. Any Late Models that do not attend week 1 must present a left and right-side tire to the board and tire marshal for approval for use as spare tires prior to the beginning of qualifying.
- G. Any Late model driver that does not attend week 1 can run 4 Norway scanned/used tires from the 2018 season with approval from the DCRA Board or the Tire Official.
- H. Any Late Models that do not attend both weeks 1 & 2 must present a left and right-side tire to the board and tire marshal for approval for use as spare tires prior to the beginning of qualifying.

- I. Out of town drivers can run used, one-night tires from ANY track. It must be verified that the tire was scanned at another track and pass a visual inspection by the Tire Official or DCRA Board-one time only-the first time you visit the track.
- J. Any driver that is new and shows up on a 4-tire night (per Norwayspeedway.com Schedule) may run up to four (4) new tires or four (4) used tires from ANY track that have been scanned, verified, used for one night of racing, and visually inspected by the Tire Official or the DCRA Board.
- K. If there are no tires available from this year, can use a Norway scanned/used tire from last year with board and tire marshal approval.
- L. New tires may be replaced with new tires thru the heat race until the features begin (In-case of damage) with Tire Marshal/Board approval on new tire nights.
- M. On the night of the Stateline Challenge will the late model drivers will be permitted to run four (4) new tires.
- N. On the night of the Stateline Challenge the late model drivers will be permitted to use ANY scanned, used tire, from ANY track, for a spare. This can be used at ANY point in the night of the Stateline Challenge.
- O. In the absence of the Tire Official, the Late Model Inspector shall serve in his place.
- P. Procedure:

All tires must be purchased from the Norway Speedway exclusive tire dealer – Dickinson County Racing Association Tire Sales. No Cars may compete in an event without the previous weeks impound tires. The ONLY exceptions are the first race event of the season. **Within ten (10) minutes of completion of the semi-feature and feature events, every competitor in that event must report to tire impound area with two (2) hot tires to impound.** The semi-feature bump up car will not have to impound tires until the completion of their feature event. All tires must be branded, scanned or both before leaving impound for the next event you wish to use them for. **Two (2) and ONLY two (2) hot tires will be impounded until the next event you run at Norway Speedway.** You must wait in impound area until your tires have been branded/scanned. NO DUMPING AND RUNNING. You may NOT use another teams/car/drivers impounded tires without board approval. This is for tires currently in impound. Impound tires must stay with the car number that those tires accumulated points for. If you cut a tire in the feature you must replace with a used Branded/Scanned tire previously run at Norway. You CANNOT use a new tire, except on opening night. If you cut a tire in the feature event, you must impound that tire. **Failure to impound tires will result in running the four (4) hot tires from the night you refused to impound and run at the back of the slowest race.**
- Q. Rain out, power outage or any uncontrollable event that would cause a race night to be stopped: If such an event occurs all four (4) tires will be impounded at the race track.

- R. Alteration of tire(s) is not permitted and defined as changing the physical and/or chemical composition of the tire by cutting, grinding, buffing, warming, cooling or the use of chemicals whereby the tread area or interior surfaces of the tire is changed from the manufacturer's specifications; alterations or defacing of tire identification numbers, labels, code numbers or serial numbers. Any violation of this nature causes the tire(s) to be deemed ineligible for competition. It is the responsibility of each competitor to make sure his car has proper tires. Cars from the evening's events and lose all points and pay for that evening
- S. TIRE OFFICIAL/ TECH OFFICIAL WILL MAKE FINAL DECISION ON ANY TIRE DISCREPANCY NOT COVERED IN THESE PROCEDURES.

XXXI. Traction Control and On-Board Computer or Analysis Equipment

No equipment of this nature is permitted on any car or located in the pit area of any event and will subject the team(s) to confiscation of equipment and penalties by the Norway Speedway.

XXXII. Ignition

All ignition systems must be 12 volts. MSD or Crane boxes may be switched by Norway Speedway from car to car or swapped with Clubs house MSD or Crane box.

- A. MSD Boxes approved: MSD 6A, MSD 6T, MSD 6AL, MSD 6ALN, MSD 6TN MSD Connector: The 6-wire harness must be 24" long Maximum and have a female 6 pin, weather pack connector. SIX PIN WIRING DIAGRAM. 6 pin connector is Mandatory!!
- B. ARCA Midwest Tour Crane approved boxes only.
- C. IGNITION Switch 12v (SMALL RED)
- D. POINTS PICK-UP (SMALL WHITE) brown gm boxes
- E. COIL NEGATIVE (SMALL BLACK)
- F. COIL POSTIVE (SMALL ORANGE)
- G. BATTERY POSITIVE (LARGE RED)
- H. BATTERY NEGATIVE (LARGE BLACK)
- I. Two pin optional for these two:
 - 1. BATTERY POSITIVE (LARGE RED)
 - 2. BATTERY NEGATIVE (LARGE BLACK).

*NON - COMPLIANCE WITH THE SPECIFICATIONS OUTLINED HEREIN MAY SUBJECT THE PARTICIPANTS (OWNER/DRIVER) TO DISQUALIFICATION, LOSS OF MONIES AND POINTS EARNED AT THE EVENT. FURTHERMORE, THE OWNER MAY BE FINED UP TO \$5000 AND ALL NON-COMPLYING COMPONENTS WILL BE SEIZED BY THE SERIES TECHNICAL INSPECTOR. OWNER/DRIVER MUST PROVIDE TOOLS TO REMOVE PARTS.

Addendum: Changed title to 2017 Bink's Coca-Cola Late Models to reflect new sponsor for division on 01/14/14.

Addendum: ~~No air blow up bump stops or nonconventional style bump stops. Added to the shock rules per winter rules meeting decision. 7/12/17

Addendum: **2019 Rule additions are in Red!**