2014 WCF RULEBOOK ALL - MOTOR (DOMESTIC)

REVISED **9/03/14**

Class Designation: The class designation is: A/M

General Safety: All vehicles must conform with general IHRA safety rules.

Body: Any year vehicle is allowed. Lightweight components are limited to hood, front fenders, decklid, hatches, sunroofs, wings, ground effects, and bumpers only. Roof, Quarter panels, and doors must remain steel. One-piece front ends are not permitted. No body parts may be removed during competition.

Chassis: All cars must retain complete stock chassis, floorboard, firewall, and frame rails. Notching of chassis for clearance is permitted. Aftermarket "K" members are permitted.

Suspension: All cars must utilize stock front and rear suspension and mounts. Aftermarket front control arms, rear control arms, and sub-frame connectors are permitted. Aftermarket struts and shocks are permitted. Ladder bars, four links, and wheelie bars are prohibited on all cars.

Lights: Headlights and brake lights are required (one headlight may be removed for induction).

Windows: All windows must be OEM glass.

Interior: Stock dashboard and full interior from front seats forward is required (passenger seat may be removed). Aftermarket seats, gauges, and interior are permitted.

Exhaust: Muffler(s) are required unless vehicle is turbocharged. Exhaust may exit anywhere.

Electronics: Two-steps, data loggers, aftermarket ECU's, and engine management systems are allowed.

Driveline: Aftermarket axles, ring and pinions, final drive, spools, and differentials are permitted. Other OEM or aftermarket center sections and rear-ends may be replaced only if is a direct bolt in. IRS suspension cars may convert to straight axle only if it is a direct bolt in.

Transmission: Manual or Auto transmissions are permitted. Any style automatic transmission is permitted. Trans-brakes are permitted. Manual transmissions are permitted to use aftermarket stock-style clutchassisted transmissions. Sequential transmissions are prohibited. Aftermarket bell housings are permitted.

Clutch: Three discs maximum (any type of disk material is permitted). Clutch must be manually operated by driver's foot.

Shifter: Shifter must be H-pattern. Strain gauges are permitted. Air shifters are prohibited.

Fuel: Gasoline and E-85 permitted. Alcohol is prohibited.

Fuel System: Electric fuel pumps only are permitted. Aftermarket fuel cells are permitted, and may be mounted anywhere.

Oiling System: Dry sump oil system is only permitted if car was OEM equipped with a dry sump and car is using complete OEM oiling system.

Tires: Maximum size slick or bias ply tire is 28.0" x 11.5". Any size DOT radial tire is permitted, except 315/60/15, 325/50/15, 295/55/15, or 295/60/15.

8-Cylinder Engines – Chevy LS series

Engine: LS1, LS2, LS3, LS6, and LS7 series blocks permitted. No aftermarket blocks are permitted. Internal engine modifications are prohibited except for aftermarket camshaft, hydraulic lifters, valve train, and overbore (See chart below for max CID).

Description: This is a cam only class with bolt-ons.

Bolt-Ons: External bolt-on parts are permitted.

Camshaft: LS1, LS2, LS3, LS6, LS7 cars are permitted to run any hydraulic camshaft.

Induction: Engine must be EFI. All OEM intakes are permitted. The only aftermarket intakes permitted are: BBK intakes, Typhoon intakes, and Fast 78mm, 90mm, 92mm, and 102mm intakes.

Cylinder Heads: Un-Ported as cast cylinder heads only, porting prohibited. Any valve job is permitted. No milling of cylinder head. OEM cylinder heads only are permitted with the following casting

numbers: 241, 243, 317, 706, 799, 821, 823, 853, 862, 5364, 8452.

Power Adders: Turbochargers, Superchargers, and Nitrous Oxide are prohibited. All nitrous bottles and solenoids must be removed from car and nitrous nozzles must be capped.

| Driveline | Block | Cylinder Heads | Max Displacement | Car & Driver Minimum Weight |
|----------------------|-------|----------------------------|------------------|-----------------------------|
| Straight Axle or IRS | LS1 | LS1, LS2, LS3 or LS6 heads | 348ci. Max | 2750 lbs. |
| Straight Axle or IRS | LS6 | LS1, LS2, LS3 or LS6 heads | 348ci. Max | 2750 lbs. |
| Straight Axle or IRS | LS2 | LS1, LS2, LS3 or LS6 heads | 366ci. Max | 2850 lbs. |
| Straight Axle or IRS | LS3 | LS1, LS2, LS3 or LS6 heads | 380ci. Max | 3050 lbs. |
| IRS Only | LS7 | LS7 heads | 427ci. Max | 3050 lbs. |

Manual transmission: Deduct 100 lbs.

8-Cylinder Engines - Ford 302W

Engine: Any 302 style 8.2 deck block is permitted. Roller Rockers are permitted. Factory stroke is required. Max CID is 313ci

Bolt-Ons: External bolt-on parts are permitted.

Camshaft: Maximum camshaft lift .550 intake and .550 exhaust any duration as checked at valve.

Induction: Engine may be EFI or carbureted. All aftermarket EFI intakes are permitted. Spyder and Sheetmetal Intakes are prohibited. Carburetor Induction is limited to a single plane or dual plane intake. Maximum carb size 750cfm.

Cylinder Heads: All cylinder heads must retain stock valve angle. Any valve job is permitted. Only the following cylinder heads permitted:

Power Adders: Turbochargers, Superchargers, and Nitrous Oxide are prohibited. All nitrous bottles and solenoids must be removed from car and nitrous nozzles must be capped.

| Cylinder Heads | Max Displacement | Car & Driver Minimum Weight |
|---|------------------|-----------------------------|
| OEM E7 heads | 313ci. Max | 2600 lbs. |
| Cast Iron GT-40, and Aluminum GT-40X | 313ci. Max | 2650 lbs. |
| AFR 165cc Heads: 1402, 1472, and 1399 | 313ci. Max | 2850 lbs. |
| AFR 185cc Heads: 1388, 1422, 1387, 1492, and 1420 | | |
| Holley Aluminum Heads | | |
| Brodix: 1051004, 171cc Cylinder Head | | |
| Edelbrock: 60329, 60229, 60379, and 60289 only | | |
| Dart: Pro 1 Aluminum 175cc Head | | |
| RHS Pro Action: 35014-01, 35014-02, 35010-02, and 35010-01 | | |
| World Products (Cast Iron Windsor JR): 053030-1 and 053030-2 | | |
| Trickflow Twisted Wedge: 51400002, 51400004, 51400003, 51400005, 51400010, and 51400011 | 313ci. Max | 2900 lbs. |

^{*} Automatic overdrive transmissions: Deduct 100 lbs.

MARYLAND INT'L RACEWAY

WORLD CUP FINALS

^{*} Cars with IRS: Deduct 50 lbs.

^{*} Cars equipped with LS3 Heads: Add 50 lbs.

^{*} LS7 cars equipped with aftermarket cam: Add 150 lbs.

^{*} Un-Ported cylinder heads: Deduct 100 lbs.

^{*} Manual Transmission Cars: Add 75 lbs.

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8-Cylinder Engines - Ford 5.0 Modular

Engine: OEM 5.0 modular blocks only are permitted. Max CID is 321ci.

Bolt-Ons: External bolt-on parts are permitted.

Camshaft: Maximum camshaft lift .550 intake and .550 exhaust any duration as checked at valve.

Induction: Engine must be EFI. All OEM intakes are permitted. The only aftermarket intakes permitted is a Boss Intake.

Cylinder Heads: Any valve job is permitted. Un-Ported or Ported OEM cylinder heads only.

Power Adders: Turbochargers, Superchargers, and Nitrous Oxide are prohibited. All nitrous bottles and solenoids must be removed from car and nitrous nozzles must be capped.

| Cylinder Heads | Max Displacement | Car & Driver Minimum Weight |
|-------------------|--------------------|-----------------------------|
| Un-Ported as cast | Up to 313ci. | 3150 lbs. |
| Porting Permitted | Up to 313ci. | 3225 lbs. |
| Un-Ported as cast | 314ci – 321ci. Max | 3250 lbs. |
| Porting Permitted | 314ci – 321ci. Max | 3325 lbs. |

8-Cylinder Engines - Ford 4.6 Modular (4-Valve)

Engine: OEM 4.6 modular blocks are permitted. Max CID is 302ci.

Bolt-Ons: External bolt-on parts are permitted.

Camshaft: Maximum camshaft lift .550 intake and .550 exhaust any duration as checked at valve.

Induction: Engine must be EFI. Only OEM intakes are permitted.

Cylinder Heads: Any valve job is permitted. Un-Ported or Ported OEM cylinder heads only.

Power Adders: Turbochargers, Superchargers, and Nitrous Oxide are prohibited. All nitrous bottles and solenoids must be removed from car and nitrous nozzles must be capped.

| Valves | Cylinder Heads | Max Displacement | Car & Driver Minimum Weight |
|---|-------------------------------|------------------|-----------------------------|
| 4-valve | OEM Heads (Un-Ported as cast) | 302ci. Max | 3025 lbs. |
| 4-valve | OEM Heads (Porting Permitted) | 302ci. Max | 3125 lbs. |
| * Automatic overdrive transmissions: Deduct 100 lbs | | | |

8-Cylinder Engines - Ford 4.6 Modular (3-Valve)

Engine: OEM 4.6 modular blocks are permitted. Max CID is 302ci.

Bolt-Ons: External bolt-on parts are permitted.

Camshaft: Maximum camshaft lift .550 intake and .550 exhaust any duration as checked at valve.

Induction: Engine must be EFI. All OEM intakes are permitted. The only aftermarket intakes permitted are: C&L, JPC, and FRPP. Fabricated sheetmetal intakes are prohibited.

Cylinder Heads: Any valve job is permitted. Un-Ported or Ported OEM cylinder heads only.

Power Adders: Turbochargers, Superchargers, and Nitrous Oxide are prohibited. All nitrous bottles and solenoids must be removed from car and nitrous nozzles must be capped.

| | Valves | Cylinder Heads | Max Displacement | Car & Driver Minimum Weight |
|---|---------|-------------------------------|------------------|-----------------------------|
| | 3-valve | OEM Heads (Un-Ported as cast) | 302ci. Max | 2925 lbs. |
| | 3-valve | OEM Heads (Porting Permitted) | 302ci. Max | 3025 lbs. |
| * Automatic overdrive transmissions: Deduct 100 lbs | | | | |

8-Cylinder Engines - Ford 4.6 Modular (2-Valve)

Engine: OEM 4.6 modular blocks are permitted. Max CID is 302ci.

Bolt-Ons: External bolt-on parts are permitted.

Camshaft: Maximum camshaft lift .550 intake and .550 exhaust any duration as checked at valve.

Induction: Engine must be EFI. All OEM intakes are permitted. The only aftermarket intakes permitted are: Bullitt, Trickflow, P51, and Professional Products intakes. Fabricated sheetmetal intakes

Cylinder Heads: Any valve job is permitted. Un-Ported or Ported OEM cylinder heads are permitted. Ford Racing SVO 2v or Trickflow 2v Un-Ported aftermarket cylinder heads are permitted. Power Adders: Turbochargers, Superchargers, and Nitrous Oxide are prohibited. All nitrous bottles and solenoids must be removed from car and nitrous nozzles must be capped.

| Valves | Cylinder Heads | Max Displacement | Car & Driver Minimum Weight |
|--|--|------------------|-----------------------------|
| 2-valve | OEM Heads (Un-Ported as cast) | 302ci. Max | 2925 lbs. |
| 2-valve | OEM Heads (Porting Permitted) | 302ci. Max | 2975 lbs. |
| 2-valve | Ford Racing SVO 2v Heads (Un-Ported as cast) | 302ci. Max | 2975 lbs. |
| 2-valve | Trickflow 2v Heads (Un-Ported as cast) | 302ci. Max | 3075 lbs. |
| * Automatic overdrive transmissions: Deduct 100 lbs. | | | |