



2012 Rules and Procedures

The following specifications have been prepared as guidelines for the construction of an Outlaw Sprint Warrior sprint car. No warranty of safety is expressed or implied as a result of this publication of rules. These rules are intended as a guide and are in no way a guarantee against injury or death to participants, spectators, or others. Anything not covered by these specifications should be approved by the track officials and placed in writing. Continuous developments in auto racing and technology may mandate changes in these specifications. However, it is our intent to enforce and police these rules throughout the season. If a change is necessary, technical bulletins will be prepared and distributed in advance.

This division is being developed for the fun of racing in a low cost fashion. This requires limits in various areas to keep competition equal and fair for all participants. In order to accomplish this, if it does not say you can -- don't... With the help and consideration of the participants, this can be accomplished. Try to live within the spirit of the rules. If you have questions, please contact track officials before you are found illegal for competition. Track officials have the final say in determining the eligibility of each participant.



305 Engine Rules:

1. Stock GM production type 305 cast iron block (no Bow-Tie, Dart or any aftermarket block) approved casting #'s 355909, 361979, 460776, 460777, 460778, 14010201, 14010202, 14010203, 14088551, 14016381, 14010208, 14106375, 1416383, 14093627, 14101147, 14102057 engine must have all casting numbers for identification purposes.
2. No lightening of block of any type, blocks must retain all factory castings and be completely stock appearing.
3. Maximum of 316 cubic inches, overbore of .060 over (3.796") on a 305 block with stock stroke crank.
4. Crankshaft can be iron or steel with 3.48" maximum stroke (+/- .020") and must be a minimum weight of 46 lbs. (zero tolerance) with a main bearing diameter 2.450 -.030. No weight added to crank except balancing metal, which must be welded in place. No lightening, polishing or knife-edging of crank throws allowed.
5. Any steel connecting rod 5.7" stock length allowed, rod journal diameter must be 2.100 - .030, no titanium, aluminum or any other exotic lightweight materials allowed. Stock GM connecting rods can have the I-beam polished. Wrist pin diameter (.927") must remain stock. Oil pan inspection plug required or pan may be removed for inspection.
6. Flat top pistons with valve reliefs made from any material allowed. Cannot protrude from cylinder bore, lightweight materials for wrist pin not allowed. Stock wrist pin diameter (.927") required.
7. Crankshaft dampener or steel hub required. If a dampener is run, it must meet SFI spec approval.
8. Camshaft drive will be a chain only. No gear or belt drives. No device to vary running cam timing allowed.
9. Camshaft lifters must be flat tappet (solid) or hydraulic and must remain stock (.842) diameter. No rollers, mushroom or radius tappets or sleeving of lifter bores allowed.
10. No repositioning or boring of cam or lifter bores allowed. Maximum cam diameter will be 1.869 +.002.
11. Camshaft must be original cast material, stock configuration and firing order (18436572) No steel billet, hard face cams, or gun drilling allowed.
12. Maximum valve lift will be .510" intake and .535" exhaust at zero lash measured at the valve spring retainer.
13. Valve springs must be straight wound w/ flat damper with a maximum seat pressure of 130 lbs. and open pressure of 360 lbs at .500 lift. Installed height must be between 1.650" - 1.850" with an outside diameter of 1.255" +/- .005", free height is to be 2.165" maximum and 1.900 minimum with 5 - 5 1/2 full coils. No conical or tapered valve springs allowed.

14. Rockers arms must be individual mount on center and retained by 3/8" rocker studs. Roller rockers are allowed; any material can be used but cannot be a shaft system. No offset pushrods.

15. Pushrods must be no larger than 5/16" (stock diameter), any length allowed, guide plates are optional.

16. No stud girdles, rev kits, or valve train stabilizers allowed. Must have lifter valley access for inspection.

17. Intake valves must be stock length, have a stem diameter of 11/32" and head diameter of 1.94". A stem undercut of up to .315" is allowed.

18. Exhaust valves must be stock length, have a stem diameter of 11/32" and head diameter of 1.60". A stem undercut of up to .315" is allowed. No other alterations or hollow stems for intake or exhaust valves are allowed.

19. Lightweight materials for any valve train component will not be allowed; valves, seats, retainers, keepers, push rods, springs, tappets, cam, fasteners, main caps, or any other engine component must only be cast, forged, stamped or stainless steel. No titanium, aluminum or any other lightweight exotic materials.

20. The use of high tech performance enhancing specialized coatings on any engine component is not allowed. The **ONLY** exception is the specialized coating that some camshaft manufacturers are using to aid in the break in procedure because of low zinc content in some of today's non-racing motor oil. Racing oil and break in additives are recommended to avoid this additional unnecessary expense.

21. Water pumps must remain in the stock location and be belt driven, any brand or material allowed.

22. A wet sump internal stock location oil pump is the only style oil pump allowed, no dry sump or external belt driven oil pumps or crankcase vacuum systems allowed.

23. Oil pan can be steel or aluminum, but must have a 1" inspection plug or pan removal will be required for tech.

24. Point type magnetos such as a Vertex or Mallory only. External coils are allowed. MSD Pro Mags, crank trigger or any other ignition system using an external control box is not allowed.

25. Mechanical Style fuel injection only, no timed electronic, single throttle body or plenum type style injections or carburetors allowed. No down nozzles allowed and one nozzle per cylinder only.

26. Any size injector is allowed, but 2 3/16" has been found to be the best performance match for the spec cylinder head, if large injectors are used stack sleeves are allowed. Stacks must be removal for technical inspection.

27. Cylinder heads must be Brodix Spec or All-Pro Aluminum (305-23).

28. BRODIX spec head requirements are: Part number SP ST (bare), SP ST PKG (complete), both part numbers are the same casting (casting marks and stampings). Head must remain as cast. Absolutely no changes. no machining, angle milling, grinding, polishing, welding, acid or caustic work, shot peening, glass beading, coating, or any other process that will alter the machined surfaces or the natural sand cast finish. Must retain all original

dimensions & configurations including; Valves, springs, retainers, stems, & guides. The only work allowed is reseating the valves. No porting or polishing of any kind in the intake or exhaust ports, under or behind the valves. No port matching. Combustion chamber must remain untouched. No top cuts that extend into the aluminum of the chamber. No under the seat relief cuts. No alterations to as delivered throat size, 1.810 Int. & 1.345 Ex. (+ .000 - .005). No bowl changes. No changes period. Brodix stamped identification marks may not be altered. Any changes to the cylinder head will result in disqualification.

29. ALL PRO spec head requirements are: ALL PRO Head (305-23) must be remain as cast. The same rules apply as those of the Brodix head. All Pro heads will have marks in the ports similar to the Brodix. Head must remain as cast. Absolutely no changes. no machining, angle milling, grinding, polishing, welding, acid or caustic work, shot peening, glass beading, coating, or any other process that will alter the machined surfaces or the natural sand cast finish. Must retain all original dimensions & configurations including; Valves, springs, retainers, stems, & guides. The only work allowed is reseating the valves. No porting or polishing of any kind in the intake or exhaust ports, under or behind the valves. No port matching. Combustion chamber must remain untouched. No top cuts that extend into the aluminum of the chamber. No under the seat relief cuts. No bowl changes. No changes period. All Pro stamped identification marks may not be altered. Any changes to the cylinder head will result in disqualification.

30. Straight cut surface milling of cylinder heads to reduce combustion chamber size or repair a damaged head is allowed. Compression ratio must still not exceed 10.25 to 1. Angle milling is not allowed.

31. Compression ratio will be 10.25 to 1 absolute maximum, checked with a Whistler, or by pouring the assembled cylinder to achieve a minimum of 70cc's total cylinder volume.

32. A tech inspector will approve all components prior to final motor assembly and will be present during final assembly to place seals on opposite side pairs of intake bolts and timing cover.



5.3L EFI Engine Rules:

1. Engine may be rebuilt by the engine builder of your choice, but must be resealed according to the rules by an appointed tech inspector. Check for technical approval prior to assembly. Engine must remain unchanged and/or unmodified as it was originally purchased from Schwanke. No modifications whatsoever are allowed.

2. Maximum cubic inch allowed is 329 (3.800 bore).

3. 1999-2006 5.3L GM Truck engine cast iron blocks only. No lightening of block of any type, blocks must retain all factory castings and be completely stock appearing. No repositioning or sleeving of lifter bores allowed.

4. Flat top pistons only.

5. *Original connecting rods must be used, no titanium, aluminum or any other exotic lightweight materials allowed.*
6. *Crank forging must be the original #12552216 crankshaft only. No lightening, polishing or knife-edging of crank throws allowed. Only modification allowed is provision for balancing.*
7. *Cylinder head casting numbers must be #706, # 862 or #799 only; heads must remain untouched, no porting, polishing or machining of any kind is allowed. Lightweight materials for any valve train component will not be allowed; valves, seats, retainers, keepers, push rods, springs, tappets, cam, fasteners, main caps, or any other engine component must only be cast, forged, stamped or stainless steel. No titanium, aluminum or any other lightweight exotic materials. Valve seat and face angles must be between 44.5 and 47 degrees. ARP cylinder head bolts allowed*
8. *The original Isky camshaft #271280290 and matching lifters must be used, no other camshafts or lifters allowed.*
9. *Original GM # 12499224 (yellow or blue) single conical valve springs only. A valve spring upgrade is available. Contact Tim Schwanke for the springs. Phone 800-423-6571.*
10. *Maximum compression ratio of 10.0 to 1 must be maintained and will be checked with a whistler.*
11. *Computers may be re-flashed to raise the RPM limit to 7000 but must be done by Schwanke Engines (\$85.00 plus freight). Documentation required. PCM # 09354896 prepared by Schwanke Engines is the only ECU allowed.*
12. *Mass Air Flow Sensor must be #25168491 only. No aftermarket Mass Air Flow Sensors allowed.*
13. *The original "black" crankshaft sensor must be used. The gray sensor from GM is illegal.*
14. *The original 3 bolt throttle body is the only throttle body allowed, 4 bolt or any other enlarged opening throttle bodies are not allowed.*
15. *All external engine components such as water pump, alternator, power steering pump, fuel pump in the tank must be the original style as used by Schwanke. Original oiling system must be retained, no dry sumps or external driven oil pumps allowed.*
16. *No tampering of engine seals or electronics allowed.*
17. *Track officials reserve the right to exchange a Schwanke flashed and approved "house" computer with any competitor's computer at any time. No reason or explanation is required by any official. Refusal will result in disqualification and suspension. Any exchanged computer found to be illegal will result in indefinite suspension.*
18. *A technical inspector will approve all components prior to final motor assembly and will be present during final assembly to place seals on the engine in four places, both valve covers, right front corner of intake and timing cover lower right front.*
19. *Any legality questions of a change/modification/addition must be answered by a tech official. Any car found not having mandated parts will lose all monies and points on that race night.*



Combined Rules for Both Engine Classes:

1. Exhaust headers with a 1 3/4" maximum primary tube diameter are the only headers allowed. Any brand or material can be used, with exception of no Tri-Y or Merge Collector style headers.
2. Mufflers are required and both mufflers must be attached at the conclusion of a race or the car will be scored to the tail of the field. Must be externally and securely attached after collector and internally inspectable. Minimum requirement is Schoenfeld 11" Part # 112535. No muffler inserts.
3. No nitrous oxide, nitro methane or any other performance enhancing add on components or additives allowed.
4. Traction control or any other device to retard ignition timing is not allowed. Traction control violation will result in indefinite suspension.
5. A tachometer or oil pressure/water temp indicator lights are the only electronics allowed. Water temp and oil pressure gauges allowed.
6. Any car our technical inspectors deem suspicious may have any or all of their mandated parts taken for further inspection.
7. Engines must be sealed prior to race night. Competitive racing groups sealed engines may be legal and eligible, subject to pre-race inspection and tech. Call ahead to determine eligibility, but calling ahead does not guarantee eligibility to race without inspection and approval of tech inspector. Prior arrangements **MUST** be made.
- 8. Non-sealed motors will not be eligible to compete.**
9. Tampering with, removing or altering the engine seals or being in possession of a tampered engine may result in a suspension up to one year for both the car owner and driver. Failure to surrender the engine for inspection will automatically result in a one year suspension. If you buy a used sealed engine from a questionable source, it is recommended that you have it checked by a track technical inspector before racing.
10. Any of the preceding rules may be subject to revision if it is felt that the change would be in the best interest of safety and competition of the division. Track Officials have the right to make decisions and to rule accordingly in the interest of safety and competition without recourse from drivers and/or owners. Track Officials will decide anything not covered in the preceding rules and regulations if, and when, it becomes necessary.

OFFICIALS DECISIONS ARE FINAL!

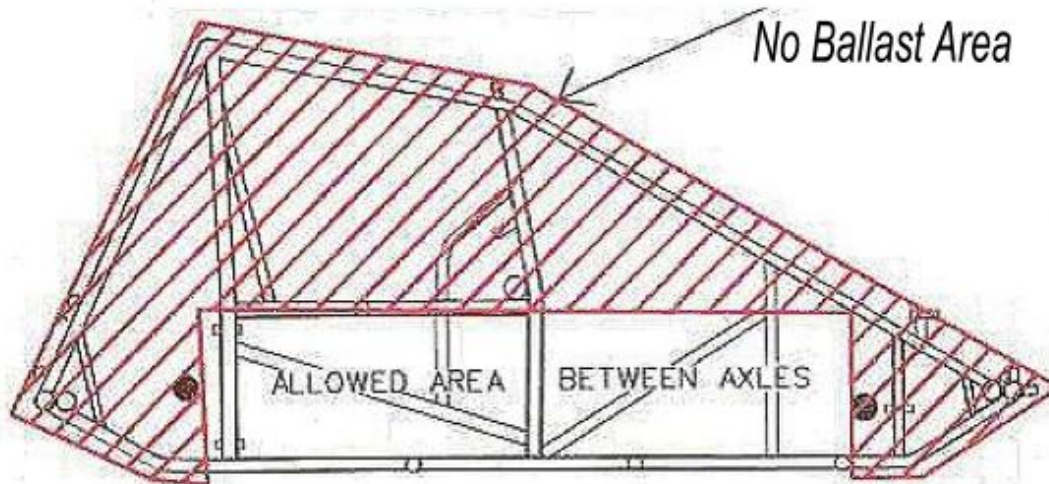


Car Rules:

1. Car must resemble a Sprint car: hood, fuel tank, etc. No non-winged cars. No rear engine cars. Triangular side panels on roll cage allowed. Must be within roll cage. No turnouts or any other airfoils. No part of the car should extend past front bumper. Inspectors have final say on all bodywork. Car number must be displayed on top wing in a legible manner: 18" minimum is recommended. (Scorers have final say on numbers.) Car must weigh a minimum of 1585 pounds, with driver, on speedway scales at completion of race (heat race, b-main and feature). The top five (5) finishers will be the minimum required to weigh. Track scales are official so weigh your car before racing starts. The driver's right-side opening must be at least 12 inches vertically at any point and a minimum of 21 inches horizontally at any point. Left side opening must remain free of panels for safe exit and access by safety crews.

2. Cars must meet satisfactory requirements as to roll bars and cage.

3. Wheel base must be 80" minimum and 90" maximum. Minimum weigh with the driver will be 1585 lbs. after the race. Ballast must be located between the front and rear axle as shown in diagram. Any bolt-on weight must be painted white and the car number must be on the weight, minimum of two bolts with bolt size a minimum of 3/8" to secure the weight. Loss of any bolt-on weight during competition will disqualify the individual from the event. Bolt-on weight can only be added in the areas designated in the accompanying diagram. The weight must be securely attached and must remain in place during a race. It must not be moved or removed during a red flag situation. We reserve the right to disqualify any individual whose weight mounting procedure does not meet the rules specifications. (See illustration)



4. Rear bumpers and nerf bars are required and must be steel only, .095 maximum wall thickness and cannot contain ballast.

5. A right rear bead lock is required. Aluminum wheels allowed; maximum width of 18" for RR and 15" LR.

6. A top wing is mandatory. The wings must be a minimum of 15 sq. ft and a maximum size of 25 sq. ft. Dished or flat wings are allowed with an optional maximum 1" wicker bill. Triangular side panels on roll cage allowed. Must be within roll cage and template. No body panel turn-outs allowed. 30 in x 70 in will be the maximum area allowed for sideboards. Max wing width will be 61 inches. No wing adjustments from the cockpit will be allowed. No hydraulic cylinders or valves, no levers or cables for adjustments will be allowed. Number must appear on both sides of the wing in sizes suitable for scoring purposes. Numbers should be 18 inches tall.

7. Front wings or nose wing will be allowed, the maximum size is 6 sq. ft. The leading edge of nose wing must be within 20" of leading edge of the front axle.

8. No cockpit adjustable weight jacks or shocks.

9. No titanium, carbon fiber, or ceramic brakes allowed.

10. No titanium or carbon fiber rotating parts larger than 1.5" diameter.

11. Driveline must be completely enclosed and must have driveline hoop or strap.

12. Floor pan must be either steel or aluminum.

13. Drag link tether is mandatory. Steel drag link and steel heim ends are highly recommended.

14. Any brand shock absorber can be used as long as it's not gas charged, either internally or with a reservoir. Must be a typical hydraulic style racing shock. No cockpit adjustable shocks allowed.

15. Adjustable valved shocks are allowed as long as they are hydraulic and not gas charged.

16. A fuel bladder is required.

17. Pure ethanol or pure methanol fuel only. No additives or top lube allowed. Fuel is subject to testing and review.

18. Protective rock screen must be installed in front of driver, maximum of 4" square openings. Roll cage must have protective padding.

19. No mirrors or transmitting device other than a Raceceiver allowed.

20. All safety equipment related topics fall under the track safety procedures and requirements.

21. Must have high back racing seat securely mounted with at least 4 bolts: NO dzus buttons. Driver's seat fuel/fume deflector is highly recommended. Must be wider than seat. Must extend from floor pan, underneath seat, and then turn up behind seat.

22. SFI approved racing-style 5-point harness racing seat belt and shoulder harness with 3" wide straps highly recommended. Belts should not be older than 3 years (manufacturer dated). Track rules apply.

23. Raceceiver and transponder are required to race.

24. Tire rules will be specified at each individual track (see track rules). Where there are no specified rules any tire will be allowed. The intention of this rule is to allow for the use of inexpensive used tires. Tire siping, grinding or grooving is allowed.

25. Minimum age driving requirement will be determined by track rules.

26. All rules are written in the spirit of maintaining the economics and intentions of providing a class of affordable sprint car racing. Stretching the rules or finding intentional gray areas counteracts that purpose or intent and won't be tolerated. Infractions will result in fines and suspension; officials will have the final say. By no means will you be able to run illegal parts at any time. If an infraction is found on race day, at the track, it must be resolved before car will be allowed to race that day. No car will be given a grace period to get legal. Have your car legal. If you have a question ask before race day.



RULES INFRACTIONS & PROTEST PROCEDURES:

Mercer Raceway Park suspensions will be upheld at any special events run by Outlaw Sprint Warriors at Mercer Raceway Park or any other track that engages participation in the Outlaw Sprint Warriors rules and procedure.

FIRST INFRACTION: *Any car may be inspected after an event at the Tech Director's discretion. If a car is found to be illegal during tech inspection after an event, the illegal car will lose its finish position, points, and money for that event. The remainder of the field will be advanced to cover that position. A two event suspension will be imposed on the car owner and driver. The suspension does not count rainouts. A \$500.00 fine will also be imposed, and must be paid prior to racing in any future events*

SECOND INFRACTION: *Upon the occurrence of a second infraction, all points earned for the year up to that date will be forfeited as well as the points and money for that event. The car owner and driver will be suspended for one year of competition. A \$1,000.00 fine will be imposed and must be paid prior to racing in any future events.*

THIRD INFRACTION: *The owner and driver will be banned from racing with the Outlaw Sprint Warriors permanently.*

ENGINE PROTEST PROCEDURE: *Notification of an engine protest must be made directly to the track tech Inspector. Notification must be made within 20 minutes of completion of the feature. Procedures are listed below for who can protest and the steps that are taken.*

- a.) *Only a car owner or driver of that division may protest.*
- b.) *They must have finished in the top 5 of the winners feature.*
- c.) *Must be in the top 15 in points.*
- d.) *Presents the track tech inspector with a protest fee of \$500.00 cash. The engine tech inspector will receive \$150.00 out of the \$500.00 for the tear down and inspection. If the engine is found to be illegal, the protest fee will be returned and winner will be disqualified. The car owner or driver of the disqualified car will be required to pay the \$150.00 tear down and inspection cost prior to getting engine back. The car owner and driver will also fall under the appropriate infraction penalties. If the engine is legal, the winner will receive \$350.00 of the protest fee.*
- e.) *The owner/driver will have the option of removing the engine on the spot or having the whole car impounded. If car is impounded the owner/driver and tech inspector will mutually determine a time that both parties can be present to have the engine removed for inspection.*

4. *Only two representatives from each car along with the technical inspector and track officials are the only ones allowed to be present during technical inspection or protest.*

5. *Track officials will have the final say in determining the validity of a protest or rules infraction. Track officials reserve the right to rule and penalize any infractions as they deem necessary. All decisions by track officials will be final.*

RULE BOOK DISCLAIMER

*The rules 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 rules shall govern the condition of all events, and, by participating in these events, all participants are deemed to have complied with these rules. **No expressed or implied warranty of safety shall result from the publication of or compliance with these rules and/or regulations.** They are intended as a guide for the conduct of the sport and in no way a guarantee against injury or death to a participant, spectator, or official.*

*The race director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his opinion do not alter the minimum acceptable requirements. **No expressed or implied warranty of safety shall result from such alterations of specifications.** Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.*

On occasion when situations arise that are not covered by written rules, special rulings and penalties may be put into effect by the track officials. Once such rulings are acted upon, they become an act of policy and will be added to the existing rules of procedures. As we move forward, any suggestions with regards to the Outlaw Sprint Warriors, must be presented in writing or email to Mercer Raceway Park. The owner and driver names must be included. The information will then be taken under advisement by the Competition Committee.



OUTLAW SPRINT WARRIORS PROCEDURES AND CONTACTS

It is the intent of the Outlaw Sprint Warriors to run a competitive division at a lower cost with minimal disruption to the race track. With this in mind, we require all questions and protest to follow a simple procedure. Drivers and car owners are required to contact one of the

Outlaw Sprint Warriors Competition Committee members with any questions, concerns or problems that may occur during the race season. Under no circumstances should the track owners or promoters be disrupted during a race event or at their offices. It is our intentions to police ourselves. It is the job of the Competition Committee to resolve any issues or protests with the track. Deviation from this chain of command could result in penalties being assessed.

Appeal and protest procedures are as follows: 1.) Engine protest procedures listed in rules. 2.) Any appeals must be submitted to Mercer Raceway Park by 5:00 pm on Monday following race, either in writing or by phone. 3.) The appeals will be taken by officials and presented to the Competition Committee. A ruling will not be made immediately. Once the competition committee has researched and unanimously come up with a decision it will be discussed with the track officials. The protester may be required to appear before the Competition Committee to discuss appeal. Only once all this is done will the ruling for the appeal be released.

OUTLAW SPRINT WARRIORS COMPETITION COMMITTEE

Guy Griffin – 5.3L Engine Specialist & Driver Rep (724) 588-6238, guysprinter11@aol.com
Kenny Hardy – Track Tech Inspector (724) 651-8515, khardy8515@hotmail.com
Kip Riffe – Engine Tech Inspector (724) 272-7950, criffe@neo.rr.com
Rusty Wheeler – Engine Tech Inspector (440) 858-9605

OUTLAW SPRINT WARRIORS ENGINE SEAL PROCEDURES

Prior to engine assembly the crank must be weighed and marked by an engine tech inspector. When short block is brought for inspection the following parts must be present: head gaskets, intake gaskets, rocker, pushrod and lifter- for one cylinder, gasket sealer, and torque wrench, tools, etc. for head and injection assembly. Anything to assemble the motor quickly and efficiently. Only bring two representatives per motor during engine sealing procedure. We recommend that motors that are professionally built, the engine builder be present or the inspection be done at builders shop. Seal procedure: 1.) Short block assembled with no oil and pan off so crank can be inspected. 2.) Heads off motor for inspection. Upon approval owner installs heads and intake. Heads and intake are then sealed by engine tech inspector. 3.) Timing cover is to be bolted on block. Timing chain will be inspected. Cam shaft lift will be inspected. Then timing cover will be sealed by engine tech inspector. The magneto will be inspected at track to insure correct usage.

The cost for the engine sealing procedure is \$100.00 plus seals at the engine technicians shop. Engine technician is able to travel on request. The engine tech inspector will be reimbursed an additional travel expense of \$1.00 per mile (one way).

Outlaw Sprint Warriors Engine Seal Technicians
Kip Riffe (724) 272-7950, Rusty Wheeler (440) 858-9605