

During the Board of Directors meeting on December 18, 2004, the following items were approved. The Board requests that GCR Section 1.2.2.C be utilized for notification:

## GCR

### Item 1.

Effective 1/1/05, add to GCR Section 17.23.1 the following words:

1. Driving suits that effectively cover the body from the neck to the ankles and wrists, manufactured of fire resistant material, worn with underwear of a fire resistant material. One-piece suits are highly recommended. All suits and underwear shall be made of the following accepted fire resistant materials: Nomex, Kynol, FPT, IWS (wool), Fiberglass, Firewear™, Durette, Fypro, PBI, Kevlar, NASAFIL, or any suit carrying an SFI 3-2A/1 or higher certification patch. Underwear of PROBAN is approved. The following specific manufacturer(s) material combinations are also recognized: Simpson Heat Shield, Leston Super Protex, FPT Linea Sport, *Carbon X*, and Durette X-400. Underwear is not required with three-layer suits or with suits carrying *FIA standards of 8856-1986 or 8856-2000* or SFI 3-2A/5 or higher (e.g., /10, /15, /20) Certification Patch. FIA homologated driving suits and underwear are recommended.

### Item 2.

Effective 1/1/05, change GCR Section 17.3.2 to read as follows:

2. Only one Logbook shall be issued for each vehicle (other than as an ~~extension~~ *continuation of the original* or replacement). *When a continuation logbook is issued the original issuance date of the logbook shall be written on the front page of the continuation logbook. (It is not necessary to present all old logbooks for issuance of an annual inspection stamp or a the tech sticker)* The possession of two Logbooks for one vehicle shall be deemed a breach of the rules under 14.1.3., Breach of Rules (Fraud).

### Item 3.

Effective 1/1/05, delete the last sentence of GCR Section 17.31 as follows:

#### 17.31. TOWING EYES

All cars without an exposed roll bar shall have a towing eye or strap, front and rear that does not dangerously protrude from the bodywork when the car is racing, to be used for flat-towing or hauling the vehicle. A removable towing eye carried inside the car is not acceptable. These towing eyes or straps shall be easily accessible without removal or manipulation of bodywork or other panels. Towing eye minimum ID two (2) inches.

~~Showroom Stock, Touring and Improved Touring cars are not required to install towing eyes but it is highly recommended.~~

The required tow eyes must be strong enough to tow the car from a hazard such as a gravel trap. Front tow eye may be mounted in the driver / passenger side window openings, or any location forward of the windshield. If mounted in the driver/passenger side window openings, it must be attached to the forward roll cage down tube as close to the base of the windshield as possible. If the front tow eye is located in the side window openings there shall be one on each side of the car. Rear tow eyes must be accessible rearward of the rear axle centerline.

#### **Item 4.**

Effective 1/1/05, add paragraph 10 to GCR Section 20. Drivers Restraint System to read as follows:

*10. FIA certified 2-inch shoulder harnesses are allowed when the HANS<sup>®</sup> device is used by the driver. SFI 2-inch shoulder harnesses are not currently allowed. Should the driver, at anytime not utilize the HANS<sup>®</sup> device, then 3-inch shoulder harnesses are required. The replacement cycle for the FIA approved 2-inch harnesses shall be per GCR Section 20.8.*

#### **Item 5.**

Effective 1/1/05, change GCR Section 20.2 to read as follows:

2. A six-point system, recommended for use in automobiles where the driver is seated in a semi-reclining position, consists of a three (3) inch seat belt *or an FIA approved two (2) inch seat belt (SFI 2-inch seat belts are not currently allowed)*, approximately a three (3) inch strap over-the-shoulder type of shoulder harness, and two approximately two (2) inch leg or anti-submarine straps.

#### **Item 6.**

Effective 1/1/05, change GCR Section 20. to read as follows:

### **20. DRIVER'S RESTRAINT SYSTEM**

All drivers in SCCA-sanctioned speed events shall utilize either a five, six or seven-point restraint harness meeting the following specifications. *A seven-point restraint harness is recommended.* Arm restraints are required on all open cars including open Targa tops, sunroofs and T-tops. The restraint system installation is subject to approval of the Chief Technical and Safety

Inspector. (~~Note: SFI requirements for Driver's Restraint System does not include arm restraints at this time. Window nets need not be dated.~~)

1. A five-point system, for use in automobiles where the driver is seated in an upright position, consists of a three (3) inch seat belt, an approximately three (3) inch strap over-the-shoulder type of shoulder harness, and an approximately two (2) inch anti-submarine strap. *A Five-point harness is considered a minimum restraint system. Six or seven-point systems are highly recommended in all cars including automobiles where the driver is seated in an upright position.*

2. A six *or seven*-point system, recommended for use in *all* automobiles ~~where the driver is seated in a semi-reclining position~~, consists of a three (3) inch seat belt *or an FIA approved two (2) inch seat belt*, approximately a three (3) inch strap over-the-shoulder type of shoulder harness, and two approximately two (2) inch leg or anti-submarine straps. *The seven-point system also has an approximately two (2) inch anti-submarine strap.*

3. The material of all straps shall be Nylon or Dacron polyester and in new or perfect condition. The buckles shall be of metal-to-metal quick-release type except in the case of leg straps of the six-point *or seven-point* systems where they attach to the seat belt or shoulder harness straps.

4. The shoulder harness shall be the over-the-shoulder type. There shall be a single release common to the seat belt and shoulder harness. When mounting belts and harnesses it is recommended that they be kept as short as reasonably possible to minimize stretch when loaded in an accident.

The shoulder harness shall be mounted behind the driver and supported above a line drawn downward from the shoulder point at an angle of twenty (20) degrees with the horizontal. The seat itself, or anything added only to the seat shall not be considered a suitable guide. Guides must be a part of the roll cage or a part of the car structure.

Only separate shoulder straps are permitted. ("Y"-type shoulder straps are not allowed.) "H"-type configuration is allowed.

5. The single anti-submarine strap of the five-point system shall be attached to the floor structure and have a metal-to-metal connection with the single release common to the seat belt and shoulder harness.

6. The double leg straps of the six-point *or seven-point* system may be attached to the floor as above for the five-point system or be attached to

the seat belt so that the driver sits on them, passing them up between his or her legs and attaching either to the single release common to the seat belt and shoulder harness or attaching to the shoulder harness straps. It is also permissible for the leg straps to be secured at a point common to the seat belt attachment to the structure, passing under the driver and up between his or her legs to the seat belt release or shoulder harness straps.

All straps shall be free to run through intermediate loops or clamps/buckles.

7. Each seat (lap) and shoulder belt of the harness (5, 6, or 7 points) shall have an individual mounting point (i.e. 2 for seat belt and 2 for shoulder belt minimum). *Six or seven point system* anti-submarine straps may share a mounting point with one or both seat (lap) belt(s). The minimum acceptable bolts used in the mounting of all belts and harnesses is SAE Grade 5. Where possible, seat belt, shoulder harness, and anti-submarine strap(s) should be mounted to the roll structure or frame of the car. Where this is not possible, large diameter mounting washers or equivalent should be used to spread the load. Bolting through aluminum floor panels, etc., is not acceptable.

8. *All driver restraint systems shall meet one of the following: SFI specification 16.1, FIA specification 8853/1985 including amendment 1/92 or FIA specifications 8853/98 and 8854/98.*

*A. Restraint systems meeting SFI 16.1 shall bear a dated 'SFI Spec 16.1' label. The certification indicated by this label shall expire on December 31st of the 2nd year after the date of manufacture as indicated by the label.*

*B. Restraint systems complying with FIA specification 8853/1985 including amendment 1/92 shall be no more than five (5) years old. (Not all manufacturers are dating every belt in a set. They may be dating one of a pair of shoulder or lap belts or may only be dating one belt in an entire set. Scrutineers are reminded that restraint systems need only one date label.)*

*C. Restraint systems homologated to FIA specifications 8853/98 and 8854/98 will not have a date of manufacture label. Instead they will have a label containing the Manufacturer's Name, Type of Harness Designation and Date of Expiration which is the last day of the year marked. All straps in this FIA restraint system will have these labels. FIA restraint systems with the certification 'D-####.T/98' are equal to FIA specifications 8853/98 and 8854/98, and are therefore, acceptable restraint systems. FIA two-inch seat belts with the certification 8853/98 are acceptable restraint systems when used in conjunction with their corresponding FIA shoulder harness and anti-submarine straps.*

D. If a restraint system has more than one type of certification label, the label with the latest expiration may be used.

9. Harness Threading: Assemble in accordance with manufacturers instructions.

10. FIA certified 2-inch shoulder harnesses are allowed when the HANS® device is used by the driver. Should the driver, at anytime not utilize the HANS® device, then 3-inch shoulder harnesses are required. The replacement cycle for the 2-inch harnesses shall be per GCR Section 20.8.

#### **Item 7.**

Effective 1/1/05, change GCR sections 18.1.2 and 18.1.3 to read as follows:

2. A system of head rest to prevent whiplash and rebound, and also to prevent the driver's head from striking the underside of the main hoop shall be installed on all vehicles. Racing seats with integral headrests shall also meet this requirement and have a support to the main hoop. Seats homologated to, and mounted in accordance with FIA standard 8855-1999 or higher need not have the seat back attached to the roll structure. The head rest on non-integral seats shall have a minimum area of thirty-six (36) square inches and be padded with a non-resilient material such as Ethafoam® Ensolite®, ~~or other similar material~~ with a minimum thickness of one (1) inch. ~~Padding~~ It is strongly recommended that padding meet SFI spec 45.42 *or FIA Sports Car Head Rest Material.* ~~is recommended~~—The head rest shall be capable of withstanding a force of two-hundred (200) lbs., in a rearward direction. The head rest support shall be such that it continues rearward or upward from the top edge in a way that the driver's helmet cannot hook over the pad. ~~The padded surface shall touch the helmet; it shall not be under fiberglass or other hard material.~~

3. Forward braces and portions of the main hoop subject to contact by the driver's helmet (as seated normally and restrained by seatbelt/shoulder harness) shall be padded with non-resilient material such as Ethafoam® or Ensolite®, ~~or other similar material~~ with a minimum thickness of one-half (1/2) inch. Padding meeting SFI spec 45.1 *or FIA 8857-2001* is *strongly* recommended.

#### **Item 8.**

Effective 1/1/05, change GCR Section 11.2.1.BB. to read as follows:

BB. Cool suits are allowed in all classes. Water tank mounts shall be of a safe and secure design. ~~Showroom Stock and Touring cars shall meet minimum weight with the system totally removed.~~

## **Production**

### **Item 1.**

Effective 1/1/05, change the wording of PCS Section 17.1.1.D.1.b.1.A. to read as follows:

A. Mounting of alternate carburetors: Where an alternate carburetor is specified on a vehicle specification line or is otherwise allowed by the Production Category Specifications, an adapter plate may be fitted *in addition to a spacer*. Material for the adapter plate is unrestricted. No adapter plate may serve any purpose other than to mate the approved alternate carburetor to the approved intake manifold (no plenum, no change of orientation, etc.) ~~No such adaptor plate may be thicker than 1.25" or have a bore larger than the throttle bore of the approved alternate carburetor~~ *The maximum thickness for the spacer, adapter (isolator) or combination of both for any approved alternate carburetor shall be 1.25" unless specifically allowed on the vehicle specification line.* Downdraft approved alternate carburetor adapters may have a bore larger than the throttle bore of the approved alternate carburetor. No modifications to the bodywork are allowed for the fitment of an approved alternate carburetor.

### **Item 2.**

The Club Racing Board is recommending that effective 1/1/05, the PCS Section 17.1.1.D.9.a.11 be amended to add the following language to it.

*Openings may be cut in the front valance to allow the passage of up to a three (3) inch diameter duct leading to each front brake. These openings shall serve no other purpose.*

**Item 3.** Based on the performance potential of the Volkswagen Scirocco (1715/1780cc), the Production Advisory Committee and the Club Racing Board are recommending that the car be reclassified from EP to FP with its current specs, effective 1/1/05.

**Item 4.** Based on the performance potential of the 1971-74 Toyota Corolla, the Production Advisory Committee and the Club Racing Board are recommending that the car be reclassified from FP to GP with its current specs, effective 1/1/05.

### **Item 5.**

Effective 1/1/05, change PCS Section 17.1.1.D.9.a.8 and 17.1.1.D.9.a.9. to read as follows:

8. Windshield/Rear Windows - Closed Cars: Closed cars may retain their original windshields, and shall fit windshield retention clips per GCR Section 17. Windshields of alternate material (i.e. Lexan MR-5/MR-7/MR-10 or FMR102) are permitted. Alternate windshields must be of 6mm minimum thickness. Alternate material windshields must be identical in size and curvature to the original glass component. Alternate material windshields must have in addition, three (3) inner supports to prevent the windshield from collapsing inward. These supports must be 0.75" by .125" minimum straps of aluminum. Spacing between these inner supports must be eight (8) inches minimum. Closed cars may replace the rear window and side windows with clear, untinted polycarbonate material having a minimum thickness of ~~0.125"~~ 3mm. The rear window shall be retained by means of straps per the GCR Section noted immediately above.

9. Door Glass (All Cars): All door window glass, channels, vent windows, and window winding mechanisms shall be removed. Resultant window slots may be covered. Four (4) door cars may install untinted polycarbonate material having a minimum thickness of ~~0.125"~~ 3mm in place of the removed glass in the rear doors. Rear side windows and rear door windows may be run in their original open or closed position.

## GT

### Item 1.

Effective 1/1/05, change the last sentence in the first paragraph of GTCS Section 17.1.2.F.2. to read as follows:

Cars classified in GT2-Lite that retain the original Front Wheel Drive (FWD) configuration may retain the original type rear suspension *with no penalty or use a beam axle.*

Change the second paragraph to read as follows:

Cars classified in GT2-Lite running Front Engine, Rear Wheel Drive (RWD) may use Independent Rear Suspension (IRS), by choice at a weight increase of ~~100 lb~~ *equal to 2.5% of the car's specified weight.*

### Item 2.

Effective 1/1/05, change GTCS Section 17.1.2.D.7.a.3. to read as follows:

3. Wheels shall have a maximum width of twelve (12) inches. (13) inch maximum width rear wheels may also be used at a ~~50lb weight penalty.~~

**Item 3.**

Effective 1/1/05, change the first paragraph of GTCS Section 17.1.2.D.8.a.9. to read as follows:

9. The rear quarter (side) and rear windows may be made of clear, transparent, and uncolored polycarbonate material having a minimum thickness of ~~0.125"~~ 3 mm.

Effective 1/1/05, change GTCS Section 17.1.2.F.4.b.8. to read as follows:

8. All driver and front passenger door window glass shall be removed. Window cranks and mechanisms may be removed. Rear quarter, rear side, and rear windows may be of transparent (clear) polycarbonate material, minimum thickness ~~1/8 inch~~ 3 mm, but shall remain in the same position in the frame or opening as the original glass it replaces; rubber molding optional. Rear windows/hatchbacks and deck lids shall be completely closed. No bumper blocks or other means of poor alignment of bodywork will be permitted. Rear quarter (side) windows may be run in their original open or closed position.

**TOURING**

**Item 1.**

Effective 1/1/05, change TCS Section 17.1.8.E.1.a. to read as follows:

**1. Weight**

- a. The weight, as listed on an automobile's Specification Line, shall be with driver and required ballast. Refer to GCR Section 17.9., "Weight." *If a cool suit system is utilized, it shall be weighted with the car as it came off the track.*

**Item 2.**

Effective 1/1/05, add to the TCS specification section the following:

**T3 (Regional only, cars also eligible as specified in National T2 Class)**

<u>Car</u>	<u>Weight</u>
Mazda RX-8	2980
Saturn Ion Redline	2890

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Ford Mustang GT 01-04	3480
Subaru WRX	3085
BMW Z4 2.5	3125
Mazda6 s	3360
Lexus IS300	3255
Scion tC	2905
Chevrolet Cobalt SS	2991
Mazdaspeed Miata	2549
Audi TT coupe	3390
Audi TT coupe Quattro	3390

Also amend GCR Section 17.1.8 to read as follows:

**17.1.8 Touring Category Class:**

Touring 1	(T1)
Touring 2	(T2)
<i>Touring 3</i>	<i>(T3) Regional Only, Cars also eligible for T2 National races</i>

**NOTE:** Section 17.1.8., continues in the Showroom Stock and Touring Category Specifications Book.

**Item 3.** Based on observed performance in T1 the Advisory Committee and the Club Racing Board are recommending that the 2001-03 BMW M3 be reclassified to T2 with all T1 noted allowances removed and at a weight of 3400lbs.

**Item 4.** Based on observed performance in T1 the Advisory Committee and the Club Racing Board is recommending that the 2004 Subaru WRX STi be reclassified to T2 at its current T1 weight with an inlet restrictor to be determined.

**Item 5.** Based on observed performance in T2 the Advisory Committee and the Club Racing Board is recommending that the 2004 Saturn Ion Redline be reclassified to T3 at its current weight in T2.

**Item 6.** Based on observed performance in T2 the Advisory Committee and the Club Racing Board is recommending that the 2004 Mazda RX8 be reclassified to T3 with its current specifications in T2.

**Item 7.** Based on an analysis of performance potential the Advisory Committee and the Club Racing Board is recommending that the 2003-04 Mitsubishi EVO be reclassified to T2 with its current specifications in T1.

**Item 8.** Based on an analysis of performance potential the Advisory Committee and the Club Racing Board is recommending that the 2001-04 Ford Mustang GT be reclassified to T3 at a weight of 3480lbs and with the SCCA approved brake duct kit.

## SHOWROOM STOCK

### Item 1.

Effective 1/1/05, change SSS Section 17.1.3.E.17. to read as follows:

17. Weight: The minimum weight as listed on the SSS line is with driver and required ballast. ~~Ballast is not permitted other than as required on the SSS line for competition adjustment.~~ *If a cool suit system is utilized, the cool suit system shall be weighed with the car as it came off the track.*

### Item 2.

Effective 1/1/05, adjust the language of SSCS Section 17.1.3.E.10. to read as follows:

10. ~~Fuel, coolant, oil~~ Fluid hoses and clamps, oil filters, fuel filters, and belts (fan, alternator, etc.) may be substituted with others of equivalent OEM specifications.

## IMPROVED TOURING

**Item 1.** Based on recommendations from the IT Advisory Committee, the Club Racing Board is recommending that the 1990-91 BMW 318i/is be reclassified from ITS to ITA.

### Item 2.

Effective 1/1/05, change ITCS 17.1.4.B as follows:

It is the intent of these rules to restrict modifications to those useful and necessary to construct a safe race car. This class is intended to allow a variety of popular, inexpensive cars to be eligible; however, those determined by the Club to be outside of these parameters will not be

classified. Entrants shall not be guaranteed the competitiveness of any car, and competition adjustments, other than *as outlined in section 17.1.4.C, reclassification*, are not allowed. Other than those specifically allowed by these rules, no component or part normally found on a stock example of a given vehicle may be disabled, altered, or removed for the purpose of obtaining any competitive advantage.

**Item 3.** Based on recommendations from the IT Advisory Committee the Club Racing Board is recommending that the 1986-88 Honda Accord LXi be reclassified from ITA to ITB at a weight of 2,550lbs, effective 1/1/05.

**Item 4.** Based on recommendations from the IT Advisory Committee the Club Racing Board is recommending that the 1984-87 Honda CRX Si and the 1986-87 Civic Si be reclassified from ITA to ITB at a weight of 2,130lbs, effective 1/1/05.

### FORMULA

#### Item 1.

Effective 1/1/05, change various sections of the FCS section 17.1.6.F.1.e. to read as follows:

#### 3. Engine

A. The spec engine shall be the six (6) port Mazda 13B Rotary (eligible for Regional and National competition) *or four (4) port Mazda Renesis Rotary in regional competition only*, as approved by SCCA Inc. Said engine is to be sealed by an approved engine builder and shall remain so with no modifications to the engine or any of its accessories or components.

All engines shall be returned to an SCCA approved engine builder to be dynoed and resealed with the new generation engine seals by the following dates:

National Competitors: September 1, 2003

Regional Competitors: January 1, 2005

B. No engine may be rebuilt except by a rebuilder approved by SCCA Club Racing.

Approved Engine Builders:

1. Daryl Drummond Enterprises, Inc.  
2333 2nd St., Unit A, Eureka, CA 95501  
(707) 445-3786

C. The use of any impregnating material in the engine is expressly prohibited.

D. Engine drain plugs shall be safety wired.

E. Alternate Headers STAR RACE CARS P/N 050-133 *or Star Race Car system provided with Renesis conversion kit* is permitted.

F. Minimum flywheel weight - 8.5 lbs.

G. Alternate one-piece intake manifold (part # 050-142) is permitted. *If the Renesis motor is used, the standard, unmodified factory fuel injection must be used.*

H. Spark plugs are unrestricted

#### **4. Fuel System**

A. All carburetor jets are unrestricted, but no other modifications shall be made to the carburetor (50mm DCO/sp or 48mm DCO modified to 50mm, as supplied). Chokes 44mm. F.15 emulsion tubes are required.

B. Only the standard Weber 48 DCOE intake horns are permitted.

C. Fuel pump, fuel filter(s), fuel pressure regulator are unrestricted. Fuel lines shall be -6 metal braided hose, otherwise unrestricted.

*D. Only the factory fuel injection can be used with the Renesis motor. (no carburetor.)*

#### **6. Weight and Dimensions**

A. Maximum wheelbase – 94-5/8”

B. Maximum track front – 59-1/4”

C. Maximum track rear – 57-3/4”

D. Minimum weight with driver = 1350 lbs *w/6 port 13B, 1400lbs w/ 4 port Renesis.*

E. Ballasting is permitted. Ballast shall be mounted forward of the fuel cell but aft of the instrument panel bulkhead and/or aft of the nose pole but ahead of the master cylinder bulkhead. Ballast shall be mounted securely.

## Item 2.

Effective 1/1/05, add the following language to FCS Section 17.1.6.B.4.d.13. as follows:

13. It is permitted, as a means of repair, to replace damaged valve seats and cylinder bores by replacement cast iron valve seat inserts and cast iron cylinder liners; valve guides may be replaced with cast iron or bronze, all to standard dimensions. *Repairs to the cam towers to facilitate replacement of cam bearing and/or replacements of broken or cracked towers is permissible as long as the cam bearing center line is not changed and that one original cam tower is retained. Line boring of cam bearing caps is permitted.*

Effective 1/1/05, change selected portions of FCS 17.1.6.B.4. to read as follows, portions of the selected items not shown shall remain unchanged:

B.4.d.1. ~~The camshaft and rockers shall remain entirely unmodified; they shall be fully manufactured and ground by the Ford Motor Company. Alternate manufacturers may be used as long as the original materials and dimensions are the same. Camshafts must be from Ford Motor Company or from the approved supplier. Camshaft geometry shall be the stock. Offset keys are permitted. It is prohibited to grind from blanks, regrind, or reprofile. Tuftriding or Parkerizing is permitted. Maximum valve lift at determined points by camshaft rotation will be established. The use of a low rate substitute valve spring is permitted. Load characteristics of special checking spring: twelve (12) lbs., at 1.417 inches, thirty (30) lbs. at 1.000 inches. Maximum valve lift against cam angle with zero tappet clearance: 0.400 +/- 0.005.~~

B.4.d.4.B. Standard Ford gasket or *Ferrea part number GAS G50100 may be used. Gaskets will have a minimum thickness of 0.9mm, and a cylinder aperture minimum diameter of 92mm.*

B.4.d.6. Pistons shall be stock Ford ~~production pistons~~, *Mahle, AE Hepolite, or J&E.* Pistons must be unmodified in any way except for balancing and modifications detailed herein.

The following combinations are permitted:

A. *Mahle* Piston P/N 80HM6102LA with rings, pin, *connecting rod (with bolts), but without bearings*: Minimum permitted weight = 1332.5 grams

B. *Mahle* Piston P/N 85HM6102DA with rings, pin, *connecting rod (with bolts), but without bearings*: Minimum permitted weight = 1255 grams.

NOTE: This piston may have either casting #90V108 or #90V118.

C. *AE Hepolite* P/N 21426, casting P/N 21426 with rings, pin, *connecting rod with bolts but without bearings*: Minimum permitted weight = 1255 grams.

D. *J&E* Piston P/N M-6102-B200 with rings, pin, *connecting rod with bolts but without bearings*: Minimum permitted weight = 1255 grams.

**NOTE:** M-6102-B200 piston assembly is now made by JE and is visually different. I.D. Marks: M-6102-B200, Ford racing logo. All marks pin stamped on wrist pin bosses.

All three (3) piston rings shall be fitted, compression rings and scraper (second) shall be one piece, single homogeneous material-type with conventional plain gaps. Chromium plating of the top ring is optional; oil control rings shall be either single piece twin-land type or apex three piece (two rails and an expander).

~~Standard Ford connecting rod without bearing; any rod bolt and nut may be used provided no modification is made to the connecting rod. Alternate connecting rods and big end bolt assembly (P/N M-6200-C200) is permitted.~~

Localized machining of the gudgeon pin bosses to achieve balance and weight by simple machining; all external surfaces, dimensions, and profiles shall remain standard with the exception of the top surface of the piston crown which may have simple machining to achieve balance, and as required in Section 17.1.5.B.5.d.3.

B.4.d.7. Valves *may be of Ford manufacture or Ferrea part numbers VSOIN200 VSOEX2000*. Valves shall remain standard; no reprofiling or polishing is permitted.

The original forty-five (45) degree seat angle shall be maintained.

Maximum face diameter inlet 42.2mm.

Maximum face diameter exhaust 36.2mm.

Maximum valve stem diameter 8.4mm.

B.4.d.8. ~~Connecting rods shall be standard Ford parts.~~ *Full Connecting rods may be standard Ford, Cosworth, Oliver, or Crower. The approved Crower part numbers are SP93230B-4 or SP93230PF-4. Any rod bolts may be used. Floating piston pins may be used. Standard rod length must be 5.00 inches (+.005" minus .010").* Machining is permitted to remove metal from the balancing bosses to achieve balance only. Tuftriding, Parkerizing,

shot peening, shot blasting, polishing, etc., are permitted. ~~It is permitted to radius the area around the big end cap retaining bolts. Big end bolts, P/N 905500, are permitted.~~

B.4.d.24. Gaskets and seals are unrestricted except for the head gasket, ~~carburetor to inlet manifold gasket, and inlet manifold to head gasket which shall be standard Ford manufacture for the engine. Carburetor to inlet manifold gasket as used with Holly 5200 is allowed.~~ *that has the requirements listed in B.4.d.4.B. and the intake gasket. The intake gasket thickness must not exceed 1.1mm. Intake gasket is not to be construed as a spacer.*

### Item 3.

Effective 1/1/05, change paragraph 3 of FCS Section 17.1.6.C.1. to read as follows:

No component of the engine, power train, front suspension or brakes shall be altered, modified or ~~changed, nor be of other than VW manufacturer, unless specifically authorized.~~ *substituted unless specifically authorized. Mass-produced, direct replacement components may be substituted for VW transmission components, rear axle components, front suspension and brake components so long as they are of the same material and dimensionally identical to the original VW components they replace. These replacement parts must be generally available to all competitors and must offer no competitive advantage over the original VW parts. Replacement engine components are allowed as described in section C.5. of the FV FCS.*

Effective 1/1/05, change paragraph 5 of FCS Section 17.1.6.C.5. to read as follows:

Replacement of intake and exhaust valve seats is allowed for the purpose of repair only. Valve seats may not be moved from their original position. ~~Welding is not allowed.~~ *Welding is allowed to facilitate repair and installation of the replacement seat. The original shape and size of the compression chamber must be maintained.* Installed seats may neither be proud or recessed of the combustion chamber surface.

Effective 1/1/05, change FCS Section 17.1.6.C.5.22. to read as follows:

Installation of a spark plug hole repair utilizing standard thread repair methods such as Helicoil, *or welding and rethreading is permitted* providing that the spark plug centerline is not changed.

Effective 1/1/05, add to FCS Section 17.1.6.C.5. as follows

new section #34

*34. In addition to the original VW manufactured valve, an alternative intake valve, Ozvat part number 113-109-601B, is allowed.*

## SPORTS RACER

### Item 1.

Effective 1/1/05, add the following language to SRCS Section 17.1.5.B.5.m. as follows:

m. It is permitted, as a means of repair, to replace damaged valve seats and cylinder bores by replacement cast iron valve seat inserts and cast iron cylinder liners; valve guides may be replaced with cast iron or bronze, all to standard dimensions. *Repairs to the cam towers to facilitate replacement of cam bearing and/or replacements of broken or cracked towers is permissible as long as the cam bearing center line is not changed and that one original cam tower is retained. Line boring of cam bearing caps is permitted.*

Effective 1/1/05, change selected portions of SRCS 17.1.5.B.5. to read as follows, portions of the selected items not shown shall remain unchanged:

B.5.a. ~~The camshaft and rockers shall remain entirely unmodified; they shall be fully manufactured and ground by the Ford Motor Company. Alternate manufacturers may be used as long as the original materials and dimensions are the same. Camshafts must be from Ford Motor Company or from the approved supplier. Camshaft geometry shall be the stock.~~ Offset keys are permitted. ~~It is prohibited to grind from blanks, regrind, or reprofile.~~ Tuftriding or Parkerizing is permitted. Maximum valve lift at determined points by camshaft rotation will be established. The use of a low rate substitute valve spring is permitted. Load characteristics of special checking spring: twelve (12) lbs., at 1.417 inches, thirty (30) lbs. at 1.000 inches. Maximum valve lift against cam angle with zero tappet clearance: 0.400 +/- 0.005.

B.5.d.2. Standard Ford gasket *or Ferrea part number GAS G50100 may be used. Gaskets will have a minimum thickness of 0.9mm, and a cylinder aperture minimum diameter of 92mm.*

B.5.f. Pistons shall be stock Ford ~~production pistons~~, *Mahle, AE Hepolite, or J&E*. Pistons must be unmodified in any way except for balancing and modifications detailed herein.

The following combinations are permitted:

1. *Mahle* Piston P/N 80HM6102LA with rings, pin, *connecting rod (with bolts), but without bearings*: Minimum permitted weight = 1332.5 grams

2. *Mahle* Piston P/N 85HM6102DA with rings, pin, *connecting rod (with bolts), but without bearings*: Minimum permitted weight = 1255 grams.

NOTE: This piston may have either casting #90V108 or #90V118.

3. *AE Hepolite* P/N 21426, casting P/N 21426 with rings, pin, *connecting rod with bolts but without bearings*: Minimum permitted weight = 1255 grams.

4. *J&E* Piston P/N M-6102-B200 with rings, pin, *connecting rod with bolts but without bearings*: Minimum permitted weight = 1255 grams.

**NOTE:** M-6102-B200 piston assembly is now made by JE and is visually different. I.D. Marks: M-6102-B200, Ford racing logo. All marks pin stamped on wrist pin bosses.

All three (3) piston rings shall be fitted, compression rings and scraper (second) shall be one piece, single homogeneous material-type with conventional plain gaps. Chromium plating of the top ring is optional; oil control rings shall be either single piece twin-land type or apex three piece (two rails and an expander).

Localized machining of the gudgeon pin bosses to achieve balance and weight by simple machining; all external surfaces, dimensions, and profiles shall remain standard with the exception of the top surface of the piston crown which may have simple machining to achieve balance, and as required in Section 17.1.5.B.5.d.3.

B.5.g. Valves *may be of Ford manufacture or Ferrea part numbers VSOIN200 VSOEX2000*. Valves shall remain standard; no reprofiling or polishing is permitted.

*The original forty-five (45) degree seat angle shall be maintained.*

*Maximum face diameter inlet 42.2mm.*

*Maximum face diameter exhaust 36.2mm.*

*Maximum valve stem diameter 8.4mm.*

B.5.h. ~~Connecting rods shall be standard Ford parts. Full Connecting rods may be standard Ford, Cosworth, Oliver, or Crower. The approved Crower part numbers are SP93230B-4 or SP93230PF-4. Any rod bolts may be used. Floating piston pins may be used. Standard rod length must be 5.00 inches (+.005" minus .010").~~ Machining is permitted to remove metal from the balancing bosses to achieve balance only. Tuftriding, Parkerizing, shot peening, shot blasting, polishing, etc., are permitted. ~~It is permitted to radius the area around the big end cap retaining bolts. Big end bolts, P/N 905500, are permitted.~~

B.5.x. Gaskets and seals are unrestricted except for the head gasket, ~~carburetor to inlet manifold gasket, and inlet manifold to head gasket which shall be standard Ford manufacture for the engine. Carburetor to inlet manifold gasket as used with Holly 5200 is allowed. that has the requirements listed in B.4.d.4.B. and the intake gasket. The intake gasket thickness must not exceed 1.1mm. Intake gasket is not to be construed as a spacer.~~

**Item 2.** Effective 1/1/05, add the following language to SRCS Section 17.1.5.D. SPEC RACER FORD SPECIFICATIONS as follows:

### **TRANSMISSION**

A. Seals: Seals intact, SCCA Enterprises and Roush.

B. Gear Ratios: STD

1st	3.42 : 1
2nd	1.84 : 1
3rd	1.29 : 1
4th	.97 : 1
5th.	.73 : 1 or .77:1

Final Drive Ratio: 3.62 : 1 No limited Slip