# CLUB RACING BOARD

# CLUB RACING BOARD MINUTES | January 5, 2016

The Club Racing Board met by teleconference on January 5, 2016. Participating were Jim Wheeler, Chairman; David Arken, Todd Butler, John LaRue, Kevin Fandozzi, Peter Keane, Sam Henry, and Pam Richardson, secretary. Also participating were: Bruce Lindstrand and Brian McCarthy, BoD liaisons; Eric Prill, Chief Operations Officer, John Bauer, Club Racing Technical Manager, Michael Annis, Club Racing Technical Coordinator, and Chris Albin, Consultant. The following decisions were made:

#### **Member Advisory**

#### ITA

1. #17741 (Charles Tanck) Reduction of Weight for Dodge Neon ACR

The CRB and ITAC request that competitors supply data about the 2001-03 Neon ACR including dyno plots and flow tests, technical analysis, or other information that can be used to support the IT power potential of this car. Please send data through the crbscca.com.

# 2. #18285 (Eric Sernau) DOHC Neon Weight

The CRB and ITAC request that competitors supply data about the 1995 - 99 Neon DOHC including dyno plots and flow tests, technical analysis, or other information that can be used to support the IT power potential of this car. Please send your data and comments through crbscca.com.

#### ΕP

1. #18634 (Steve Linn) Re-Classify Nissan Sentra SE-R (90-94) from EP to FP

Thank you for your letter. The requested change in class may require significant adjustments to this car's specifications. It is therefore important to determine how many of these cars are being campaigned at present so that the impact of the possible changes can be analyzed. Member input is sought on who is running or anticipating running one of these cars. Please submit data and information for consideration (dyno and track) through crbscca.com

# **No Action Required**

## **B-Spec**

1. #14626 (John Kish) Ford Fiesta Speed Limiter

The ECU is able to be reprogrammed, by the OEM or aftermarket. Please work within these allowances to remove the speed limiter programming.

#### F۷

1. #18747 (Bill Dennis) Grouping Formula Cars in SCCA Races - CRB Round Table

Thank you for your letter. The CRB understands the issues with combining both the large and small formula classes into a single run group on race weekends. Run groups are normally determined by each division and can be modified at the event by the Chief Steward. Your concerns merit discussion and have been forwarded to the Board of Directors.

#### Т1

1. #18686 (Joe Aquilante) Reconsider Restrictors on 7 Liter Corvettes in T1

Thank you for your letter. Changes have been made to T1, and the CRB will continue to monitor the performance of the class. Please see the response to letter #18562, January Fastrack Technical Bulletin.

# 2. #18719 (Michael Davis) ZR1 Gear Ratios?

Thank you for your letter. In T1, gear ratios are open as long as the gear set is listed on the vehicle's specification line. If you want a different gear set, please submit a letter with the requested set.

#### **T4**

1. #18598 (Philip Royle) T4 Civic Adjustments Based Solely on Runoffs Performance

Thank you for your request. Based on data, video (broadcast, and in-car), sector times, your dyno data, and other information reviewed, changes were made. Thank you for the feedback, the CRB will continue to monitor the performance of this car as raced in 2016.

#### 2. #18633 (David Mead) Re: 18387 Answer Miata Hardtop Weight Adder

Thank you for your letter. The Solstice was classified with the hardtop from its inclusion. The MX-5 was classified with the factory hardtop. The weight adder was done to ensure parity.

#### **Not Recommended**

## AS

1. #18511 (James Ray) Fire Bottle Acceptable for AS Restricted Prep Car?

Thank you for your letter. The CRB believes that fire safety for American Sedan cars is best served with a fire system, regardless of preparation (Full or Restricted). There are no plans to change the requirement for a fire system for AS cars.

#### **B-Spec**

## 1. #16499 (Chi Ho) Mazda 2 Weight

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin for changes to B-Spec (letters 17234, 18301, 17076, 18359). The CRB will monitor these changes and class parity in 2016.

# 2. #17077 (Brian Kelm) Remove or Increase the Inlet Restrictor on the Ford Fiesta

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17076. The CRB will monitor class parity in 2016.

# 3. #18249 (David Daughtery) Balance of Power

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

## 4. #18283 (David Daughtery) Rule Changes To Speed Up The Class

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin for changes to B-Spec (letters 17234, 18301, 17076, 18359). The CRB will monitor these changes and class parity in 2016.

The B Spec committee, made up of OEM representatives, have agreed that the class only required the change in this latest Fastrack. They will continue to monitor performance of the existing and new cars coming in.

## 5. #18445 (Mike Ogren) Please Reduce the 2014+ Weight

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin for changes to B-Spec (letters 17234, 18301, 17076, 18359). The CRB will monitor these changes and class parity in 2016.

#### FB

# 1. #18713 (Jeremy Hill) Restrictors or Rev Limiters

Thank you for your letter. The CRB is withdrawing the recommendation in letter 18344, January 2016 Fastrack Minutes.

While the FB rules have a provision for limiting horsepower through the use of a restrictor, the rules do not have a provision for, or statement of, intent to balance or create parity among the various engine platforms. At this time there is not a consensus within the class participants to limit horsepower.

The CRB thanks the following authors for their feedback: 18759 Palmer, 18732 Theilman, 18728 Cook, 18638 and 18693 Vollum, 18608 Clayton, 18620 Wald, 18619 Young, 18615 Prieto, 18700 Moore, 18698 LaBrie, 18629 Haas, 18659 Cook, 18704 Vardis, 18696 Mosteller, 18722 Mayer, 18723 Mayer, 18724 Hamilton, 18553 Livingston, 18599 Waymire, 18647 Armenoff, 18642 Prieto, 18649 Thielman, 18708 Haas, 18701 Hodges, 18605 Hickman and 18547 Mayer.

#### GCR

# 1. #17978 (Cliff White) Runoffs Champion Provisional Entry

Thank you for your letter. Your request was discussed by the Board of Directors in their December 2015 meeting. The Board did not recommend a rule change.

# 2. #18001 (Wade White) Request Change in GCR for National Champion Invitation to Runoffs

Thank you for your letter. Please see the response to letter #17978.

#### GT2/ST

#### 1. #18374 (Amir Haleem) TRD Intake Manifold Allowance for 1993-98 Toyota Supra

Thank you for your letter. Aftermarket intake manifolds are not permitted by the GT2/ST rules.

# 2. #18432 (Jon Anderson) C5 Corvette OEM LS3

Thank you for your letter. The OEM crate LS3 is classified properly.

## **GTL**

# 1. #18340 (Wilson Wright Jr.) Increase Honda Weight or Restrict Performance

Thank you for your letter. The CRB will continue to monitor performance at a wide range of tracks.

# 2. #18461 (Lans Stout) Spec Tire Letter 18099

Thank you for your letter. Your request is not consistent with GT class philosophy.

## 3. #18777 (Club Racing Board) Not Recommended Part of Letter #18030

Thank you for your letter. This is a limited preparation engine and this request would alter the original engine's architecture.

#### IT

#### 1. #17467 (Chris Sigmon) BMW E30 IT Classes

Thank you for your letter. The rules are correct as written.

## 2. #18146 (Robert Crawford) Reclassify the 95-99 Chrysler Neon DOHC From ITA to ITB

Thank you for your letter. The Neon is classified correctly in ITA though changes to the classified weight are appropriate. Please refer to letter #18285 for changes to vehicle classifications.

#### ITA

# 1. #18561 (Ron Shurie) Move All Non-Turbo Neons From ITA to ITB

Thank you for your letter. Please see the response to letter #18146 and 18285.

#### **ITB**

#### 1. #18558 (Robert Crawford) Move the Dodge Neon (All) from ITA to ITB

Thank you for your letter. Please see the response to letters 18146 and 18285.

#### EΡ

# 1. #18410 (Kevin Leigh) Re-Evaluate Car Weights in Regard to Engine Displacement

The CRB does not believe that the results of the 2015 Runoffs provide a good baseline for the adjustment of cars in 2016. Daytona is not typical of the majority of tracks used by SCCA. The performance of the BMWs in EP will be monitored in 2016 with respect to possible adjustments.

#### HP

# 1. #18556 (David Boles) 93-98 Volkswagen Golf to H Production

Thank you for your request. This car is new to FP. To consider this request, more competition history will be required. Based on its specifications this car appears to be a good fit in FP. The CRB will continue to monitor its performance.

#### 2. #18681 (David Stephens) Valve Lift Measurement

Thank you for your letter. The issue is not the design of the engine but the fact that the first generation of level 2 cars originally classed in EP measured lift with the lash included, while the approach to measurement for the second generation of level two cars is based on zero lash (without regard to the actual lash with which the car is run). If the first generation measurement approach was adopted for the second generation car, a significant number of competitors would purchase new cams. The added expense to competitors would not be justified.

#### Prd

# 1. #18516 (Anthony Cuthbert) Classification for the 2013 Fiat 500 Abarth

Thank you for your request. Production is not classifying turbocharged cars at this time. It is already classed in STU. If you want it classified in STL, please submit a letter for consideration.

#### SM

# 1. #18428 (John Adamczyk) Allow 94-97 1.8 the Same Exhaust Manifold Modifications

Thank you for your request. The CRB does not recommend this change at this time. The CRB will continue to monitor parity between model years and make adjustments as needed.

# 2. #18430 (John Adamczyk) Additional Allowance in Change 9.1.7.C.1.m.1.1. Proposal

Thank you for your request. The CRB does not recommend this change at this time. The CRB will continue to monitor parity among the model years and will make changes if needed in the future.

#### 3. #18439 (Kyle Webb) OEM Gaskets at the RP

Thank you for your letter. Two gaskets ensure a proper seal.

# 4. #18625 (Keith Tanner) Extended Lower Ball Joints

Thank you for your input. This change is not recommended at this time.

#### 5. #18635 (Joe Spaid) 94-97 SM Parity

Thank you for your letter. The CRB does not recommend this change at this time. The CRB will continue to monitor parity among the model years.

### STU

## 1. #18486 (Shandelle Leonard) Miata Subframe Modification or Alternatives

Thank you for your letter. Replacement of the OEM subfames with alternatives is not within the philosophy of the category.

2. #18662 (Chris Jurkiewicz) Make Stock E36 M3 a Viable Option for STU

Thank you for your request. The CRB does not recommend this change at this time. There were recent changes to STU for displacement to weight calculations. The CRB wants to monitor how this effects competition.

#### T2

1. #17281 (John Buttermore) Increase Restrictor Size of C6 LS3

Thank you for your request. Please see the response to letter #18560, January 2016 Fastrack Technical Bulletin.

#### **T4**

1. #17990 (Christopher Childs) Add Weight to MX 5

Thank you for your request. The CRB does not recommend this change at this time. The CRB will continue to monitor the performance of this car.

2. #18614 (Anthony Cuthbert) Replace Sunroof with Fiberglass

Thank you for your letter. 9.1.9.8.a.4.a allows the replacement with a metal panel only.

# Recommended Item for 2016

The following subject will be referred to the Board of Directors for approval. Address all comments, both for and against, to the Club Racing Board. It is the BoD's policy to withhold voting on a rules change until there has been input from the membership on the presented rules. Member input is suggested and encouraged. Please send your comments via the form at www. clubracingboard.com.

#### F5

1. #17960 (David Lapham) Dry Sump Systems: 4 Stroke

Thank you for your request. Change 9.1.1.D.15.H.: H. The lubrication system is unrestricted. Any oil pan and/or baffling are permitted. and the use of dry sumps is specifically not allowed. Accusumps or similar oiling assist systems are permitted.

Change 9.1.1.D.15.J.: J. The cooling system is unrestricted, however the stock engine water pump must be retained.

If approved, the CRB recommends this change be effective 5/1/2016.

# **Recommended Item for 2018**

The following subject will be referred to the Board of Directors for approval. Address all comments, both for and against, to the Club Racing Board. It is the BoD's policy to withhold voting on a rules change until there has been input from the membership on the presented rules. Member input is suggested and encouraged. Please send your comments via the form at www. clubracingboard.com.

## **GCR**

1. #18587 (Lee Hill) SRF (1.9L Cars) As A GCR Regional Class Effective 1/1/2018

Thank you for your letter. If approved, the CRB recommends this be published in the GCR 3/1/2016.

Change 9.1.8.E.2.A: A. SRF3 DEFINITION

It is the intent of the GEN3 conversion to update the current 1.9L SRF drivetrain for class longevity. SRF and SRF3 shall compete side by side, for respective points and championships, until the start of the 2018 Competition season, at which time SRF (1.9 powered cars) become part of SRF3 as one class. will become a Regional Only GCR Class (effective 1/1/2018).

# Taken Care Of

## **B-Spec**

1. #16408 (Marco Rocca) B-spec Performance Adjustment

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin for changes to B-Spec (letters 17234, 18301, 17076, 18359). The CRB will monitor these changes and class parity in 2016.

2. #16422 (Lee Niffenegger) Classify 2015 Honda Fit

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #18301.

3. #16929 (Darren Seltzer) Remove Speed Governor - Honda Fit

Thank you for your letter. HPD has released an updated ECU flash.

#### 4. #17853 (Charlie James) Chevy Sonic

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

## 5. #18251 (chi ho) Add Weight and Smaller Restrictor for Sonic

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, Letter #1723. The CRB will monitor class parity in 2016.

# 6. #18252 (Taylor Handwerk) Restrictor/Weight Adjustment

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

# 7. #18253 (Derrick Ambrose) Chevrolet Sonic Adjustments

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

# 8. #18254 (Kyle Keenan) Smaller Restrictor and More Weight for the Sonic

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor these changes and class parity in 2016.

## 9. #18255 (Travis Washay) Making the Sonic Compatible With All the Others

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

## 10. #18257 (Darren Seltzer) Chevrolet Sonic Performance Equalization

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

#### 11. #18258 (Ryan Hall) Chevrolet Sonic Weight and Restrictor Change

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

## 12. #18274 (Michael Tsay) Chevrolet Sonic in B-Spec

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

#### 13. #18302 (Derrick Ambrose) Balance This Class

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin for changes to B-Spec (letters 17234, 18301, 17076, 18359). The CRB will monitor these changes and class parity in 2016.

# 14. #18304 (David Daughtery) Updated Request

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin for changes to B-Spec (letters 17234, 18301, 17076, 18359). The CRB will monitor these changes and class parity in 2016.

# 15. #18309 (Brian Price) Class Parity Among all Cars

Thank you for your letter. Please see the December 2015 Fastrack Technical Bulletin, letter #17234. The CRB will monitor class parity in 2016.

#### **GCR**

# 1. #18232 (Terry Hanushek) Transmission Short Shift Kits

Thank you for your letter. The original Recommendation was withdrawn and a new definition of Short Shifter Kits is in the January 2016 GCR Technical Glossary.

# 2. #18263 (Eric Heinrich) Re Letter 16946 - Transmission Short Shift Kits

Thank you for your letter. The original Recommendation was withdrawn and a new definition of Short Shifter Kits is in the January 2016 GCR Technical Glossary.

## ITA

### 1. #18183 (Eric Sernau) ITA SOHC/DOHC Neon Weights

Thank you for your letter. Please see the response to letters 18285 and 18093 (Technical Bulletin).

# 2. #18318 (Ricardo Toro) Dodge Neon 1996 DOHC Weight

Thank you for your letter. Please see the response to letter #18285.

3. #18581 (John Morris) Follow Up for Letter 17841

Thank you for your letter. Please see the response to letter #17841 (Technical Bulletin).

4. #18748 (John Morris) 87 VW Golf 6V Classification

Thank you for your letter. Please see the response to letter #17841 (Technical Bulletin).

#### ITB

1. #17851 (Paul Curran) Short Shifter Proposed Rule Change

Thank you for your letter. The original Recommendation was withdrawn and a new definition of Short Shifter Kits is in the January 2016 GCR Technical Glossary. If you want short shifter kits to be applicable in IT, please submit another letter requesting that they be allowed.

#### T1

1. #18680 (Cheyne Daggett) Boss/Coyote Mustang OEM Throttle Body

Thank you for your letter. Please see the response to letter #18725, Technical Bulletin.

# What Do You Think

None.

#### **RESUMES**

1. #18485 (Dicken Wear) GT Advisory Committee

Thank you for your letter. The CRB thanks you for your resume and will keep your resume on file for future consideration.

2. #18707 (Nick Leverone) Submitting a Resume

Thank you for submitting your resume. Nick Leverone has been added to the STAC.

# CLUB RACING TECHNICAL BULLETIN

DATE: January 20, 2016 NUMBER: TB 16-02 FROM: Club Racing Board

TO: Competitors, Stewards, and Scrutineers

SUBJECT: Errors and Omissions, Competition Adjustments, Clarifications, and Classifications

All changes are effective 2/1/2016 unless otherwise noted.

#### **American Sedan**

None.

#### **B-Spec**

None.

## Formula/Sports Racing

FA

1. #18354 (Brian Novak) Allow Both Honda K20 Engines in FA Chassis at 1350 lbs Min Weight In GCR section 9.1.1.A.2.c., make the following changes:

"Honda Civic (K20Z3) Base Engine"

In GCR section 9.1.1.A.2.c.g.3.d.ii.9., add the following language:

"10. The timing chain tensioner may be replaced with an aftermarket alternative."

In GCR section 9.1.1.A.2.c.k., add the following language:

- "1. The intake manifold and throttle body assembly must be used as delivered from HPD.
- 2. Intake manifold may be machined for the purposes of port matching only. Any work done to the intake manifold must not reach beyond 1.00" into the ports.
- 3. The fuel rail and fuel injectors must be stock Honda Civic OEM parts (PN 16450-RBB-003)."

In GCR section 9.1.1.A.2.c.o.1., remove the following language:

"Water pump and water pump pulley must be stock Honda Civic parts. No modifications are permitted. Honda PN: 19200-RBC-013 Pump, Water."

In GCR section 9.1.1.A.2.c.p.5., make the following changes:

"The alternator and all drive system pulleys may be replaced except that the stock crankshaft pulley must be used must be stock Honda Civic. PN: 31100-RTA-023. The alternator drive pulley must be stock. Alternator connections must be through the HPD engine electrical harness only. The alternator must not be disabled and must be accessible to SCCA officials."

In GCR section 9.1.1.A.2.d., add a new engine classification section, then re-letter as follows:

"Honda Civic (K20Z3) Uprated Engine

# a. General

- 1. No modifications to this engine are allowed except where specifically authorized within these rules. This includes, but is not limited to, all fuel injection and engine management components, electrical, cooling and lubrication systems. All systems are subject to test procedures and must conform to OEM specifications as stated in the Honda Civic factory service manual, Honda PN 61SNA05 and all superseding years, or as specified in these rules. The factory service manual or its equivalent is required to be in the possession of each entrant. The manual may be the form of printed material, microfiche, CDs, DVDs and/or Internet access to manufacturer sponsored web-based databases.
- 2. Permitted engine maintenance includes the replacement, but not modification, of external engine and engine systems parts.
- 3. All rubber fluid lines may be replaced with braided metal covered (Aeroquip type) lines. Hose clamps maybe installed on the rubber coolant lines.
- 4. No balancing, lightening, polishing or other modification of moving parts of the engine is permitted.
- 5. Only stock Honda manufactured gaskets and seals as specified in the Honda Civic factory service manual are permitted (Including, but not limited to, head gasket, intake runner gaskets and O-rings, restrictor plate gasket, and intake and exhaust gaskets).
- 6. For all Honda part numbers in these specifications, superseding part numbers are considered equivalent.

#### b. Block

- 1. The only permitted cylinder block is Honda PN: 11000-RRB-810
- 2. Honing of cylinders is permitted to a maximum diameter of 86.070 mm (3.3886 inches). Fitting of cylinder sleeves is prohibited. Re-boring to over size is prohibited.
- 3. Block must use stock main bearing caps, girdle and hardware as supplied.

4. Minimum deck height from crank centerline: 211.95 mm (8.3445 inches).

#### c. Crankshaft

- 1. The stock Honda Civic crankshaft, Honda PN: 13310-PRBA00, must be used with no modifications allowed.
- 2. Minimum weight: 37.5 lbs. No pilot bearing or bushing.
- 3. Maximum stroke at piston: 86.1 mm (3.390 inches)
- 4. Main and rod bearings must not be modified in any way. OEM bearings must be used from within the standard range as allowed in the Honda Civic factory service manual.
- 5. The crank pulsar must not be altered in any way.
- 6. The crank pulley/balancer must not be altered or modified in any way.
  - a. Minimum weight: 3.90 lbs.
  - b. Honda PN: 13810-RRB-A01.

## d. Connecting Rods

- 1. Stock Honda Civic connecting rod must be used PN: 13320-PRB-A01.
- 2. Minimum connecting rod weight with cap and bolts: 580.0 grams (20.45 ounces).
- 3. Maximum connecting rod length center to center: 138.95 mm (5.470 inches).

#### e. Pistons

- 1. Honda Civic OEM standard size pistons, PN: 13010/13020-PRB-A01, must be used.
- 2. The use of oversize pistons is not permitted.
- 3. Piston dimensions and weights:
  - a. Maximum standard piston diameter, measured at a point 11mm from the bottom of the skirt: 85.990 mm (3.3854 inches).
  - b. Centerline of wrist pin to crown maximum: 32.7 mm (1.287 inches).
  - c. Maximum overall height from skirt to crown edge: 52.1 mm (2.051 inches).
  - d. Minimum weight: 320 grams (11.287 ounces).
  - e. Minimum weight of piston pin: 87 grams (3.07 ounces).
  - f. Combined minimum weight of piston, piston pin and connecting rod: 973 grams (34.32 ounces).
- 4. Piston rings must be as used in the K20Z3 engine. The only modification allowed is ring end gap width. Two compression rings and one 3 piece oil control ring must be used.
- a. The standard ring pack PN 13011-PRA-E02.
- b. No modification of the piston is permitted for the installation of rings.
- c. Ring groove widths.

Top ring groove: 1.240mm (0.0488 inches) +/- 0.01mm.

Middle groove: 1.235mm (0.0486 inches) +/- 0.01mm.

Oil ring groove: 2.015mm (0.0793) +/- 0.01mm.

# f. Cylinder Head

- 1. The only permitted heads are Honda PN: 12100-RBC-000.
- 2. The gasket face of the cylinder head may be resurfaced provided the maximum compression ratio is not exceeded or to a service limit of 0.2mm (0.008 inches) based on a height of 140mm (5.511 inches).
- 3. The cylinder head must not be ported, polished or machined. The original casting must not be modified in any way or polished.
- 4. Head gasket to be stock Honda Civic PN: 12251-RBC-004. Minimum compressed thickness of 0.70 mm +/- 0.05mm.

# g. Camshaft

1. The only permitted camshafts are PN: 14110-RRB-A00

(Intake) & 14120-PRB-A01 (Exhaust); must not be modified.

- 2. The Cam, TDC, & Crankshaft pulse plates must be as supplied, Honda PN 14113-PNA-003 (Cam), 14114-PNA-003 (TDC) & 13622-RAA-A01 (Crankshaft).
- 3. The camshaft and crankshaft sprockets must be as supplied, Honda PN: 14310-RBC-003 (Intake VTC Actuator Sprocket), 14210-PRB-A00 (Exhaust Camshaft Sprocket) and 13620-RAA-A02 (Crankshaft Sprocket). Cam timing must not be altered; the timing chain must be installed as specified in the Honda Civic factory service manual. The timing chain cover and crankshaft pulley may not be altered. With the engine at TDC (No. 1 cylinder), the TDC marks on the camshaft sprocket must line up with the each other horizontally and the indicator on the crankshaft sprocket or crank pulley should line up with the arrow in the cylinder block or timing chain case (respectively).
- a. Timing chain Honda PN: 14401-PNA-004.
- b. Cam Chain Case PN: 11410-RRA-A00
- c. Pulley comp. crankshaft, PN: 13810-RRB-A01
- d. Cam timing at 1mm after opening to 1mm before closing on center / VTEC lobes (+/- 2.0 degrees):
  - i. Exhaust:
  - 1. Open: 139 degrees ATDC
  - 2. Peak Lift: 258.5 degrees ATDC (total cycle) or 101.5 degrees BTDC (partial cycle degree wheel indication)

- 3. Closing: 377 degrees ATDC (total cycle) or 11 degrees ATDC (partial cycle degree wheel indication)
- ii. Intake
- 1. Open: 15.5 degrees ATDC
- 2. Peak Lift: 135.5 degrees ATDC
- 3. Closing: 253 degrees ATDC (total cycle) or 107 degrees BTDC (partial cycle degree wheel indication)
- 4. Camshaft profile and lobe centers shall be checked using the official procedure published by the SCCA.
- 5. Cam lobe heights:
  - a. Exhaust PRI (front): 32.772 mm
  - b. Exhaust MID: 34.768 mm
  - c. Exhaust SEC (rear): 32.661 mm
  - d. Intake PRI (front): 32.791 mm
  - e. Intake MID: 35.534 mm
  - f. Intake SEC (rear): 32.678 mm
- 6. Maximum valve lift measured at the retainer:
  - a. Exhaust PRI (front): 6.90.
  - b. Exhaust MID: 10.70
  - c. Exhaust SEC (rear): 7.10
  - d. Intake PRI (front): 7.20.
  - e. Intake MID: 12.00.
  - f. Intake SEC (rear): 7.00
- 7. Valve Duration above 1mm measured at the retainer (+/- 2 degrees):
  - a. Exhaust PRI (front): 94 degrees
  - b. Exhaust MID: 116.5 degrees
  - c. Exhaust SEC (rear): 96.5 degrees
  - d. Intake PRI (front): 90.5 degrees
  - e. Intake MID: 118.5 degrees
  - f. Intake SEC (rear): 92.5 degrees
- 8. Valve rockers must not be modified in any way.
  - a. Honda PN: 14620-PNA-040 Arm Assy, rocker.
- 9. The VTEC system must be stock. The VTEC activation valve must be stock. The HPD ECU will activate the VTEC at 4000 RPM. Honda PN: 15810-PRB-A03.
- 10. The timing chain tensioner may be replaced with a suitable aftermarket alternative.
- h. Valves
  - 1. OEM valves must be as used in the Civic.
  - 2. Dimensions
    - a. Inlet PN: 14711-PRB-A01, Exhaust PN: 14721-PRBA00
    - b. Maximum diameter:
      - i. Inlet: 35.15mm
      - ii. Exhaust: 30.15mm
    - c. Maximum overall length:
      - i. Inlet: 109.10mm
      - ii. Exhaust: 109.00mm
    - d. Minimum stem diameter:
      - i. Inlet: 5.445mm
      - ii. Exhaust: 5.420mm
  - 3. Valve location or angle must not be moved.
  - 4. Reshaping of the valves is strictly prohibited.
  - 5. Valve guides may be replaced provided the position of the valve is not changed and the replacement guides are Honda OEM parts.
    - a. Inlet PN: 12204-PNA-305 (over size)
    - b. Exhaust PN: 12205-PNA-305 (over size).
  - 6. It is permitted to replace or re-cut valve seats provided the valve seat angles are stock Honda three angle cut per the Honda Civic factory service manual.
  - 7. Valve stem installed height must be per the Honda Civic factory service manual:
    - a. Intake maximum: 44.7mm.
    - b. Exhaust maximum: 44.8mm.
  - 8. Valve stem seals must be Honda OEM parts.
    - a. Honda PN: Intake: 12210-PZ1-004 seal A.
    - b. Honda PN: Exhaust: 12211-PZ1-004 seal B.
- i. Valve Springs
  - 1. Valve springs are Honda OEM as specified in the Honda Civic factory service manual.
    - a. Intake PN: 14761-PRB-A02, free length: 49.77mm.

- b. Exhaust PN: 14762-PRB-A02, free length: 50.39mm.
- 2. Valve spring shims are not permitted.

# j. Compression Ratio

1. The maximum compression ratio is 11.0:1 utilizing Honda Civic factory service manual limits. Carbon may be removed.

# k. Intake Manifold and Fuel System

- 1. The intake manifold and throttle body assembly must be used as delivered from HPD.
- 2. The fuel rail and fuel injectors must be stock Honda Civic OEM parts (PN 16450-RBB-003).

#### I. Fuel Pump

1. The fuel pump is unrestricted.

# m. Exhaust Manifold

- 1. The Lambda sensor placement must be within 24 48 inches from the head mating surface.
- 2. Exhaust coatings and wraps and heat shields may be used to control engine bay temperatures and protect other components.

## n. Lubrication System

- 1. The oil sump and pump must be as supplied by HPD. No modifications are permitted.
- 2. Hose routing and filter system are unrestricted.

# o. Cooling System

- 1. Water pump and water pump pulley must be stock Honda Civic parts. No modifications are permitted. Honda PN: 19200-RBC-013 Pump, Water.
- 2. Thermostat is unrestricted provided the housing is not modified. The thermostat bypass may be plugged using the HPD Mechanical Water Pump Dress Kit PN: 19220-F25S-A200.
- 3. Drive belt manufacture is unrestricted.
- 4. Radiator is unrestricted.

# p. Electrical Equipment

- 1. The ECU and engine electrical harness must be as supplied by HPD. No modifications are permitted.
- 2. The ECU will be a sealed unit supplied by HPD. The ECU maps and inputs must not be modified The ECU is capable of being swapped in the case of a protest.
- 3. Ignition coils must be stock Honda Civic, PN: 30520-RRA-007. No modifications are permitted.
- 4. All sensors related to engine operating parameters and/or supplied by HPD must be used. These sensors, their locations and mounts, and their wiring harness leads may not be altered or "piggy backed". Any sensors required for analog type gauges must be in addition to the HPD supplied sensors.
- 5. The alternator and all drive system pulleys may be replaced except that the stock crankshaft pulley must be used. The alternator must not be disabled and must be accessible to SCCA officials.

#### g. Miscellaneous

- 1. All emission control devices must be removed and blocked off by the blanking hardware provided by HPD, except the VTEC activation solenoids. The VTC & VTEC activation solenoids must be retained and functioning in the original conditions.
- 2. Air filter is unrestricted.
- 3. The use of unleaded premium "pump" gas with a minimum of 91 RON is required. Leaded race fuel is not allowed and can cause serious damage to the engine.
- 4. The use of the following non-standard replacement parts is permitted provided their use does not result in any unauthorized modification of any other component.
  - a. Fasteners nuts, bolts, screws, washers, studs, etc. Head bolts, rod bolts, flywheel bolts, and crank pulley bolt may be substituted by sufficiently designed, direct, of the shelf replacements.
  - b. Gaskets and seals, except those specified in the above rules.
  - c. Spark plugs.
  - d. Mechanical tachometer and analog gauges.
- df. Honda Civic (K20Z3) Engine for Swift 016 only"

#### In FA, make the following changes:

	Table 1											
FA Spec Line	Engine Series	Max. Displ. (cc)	Max. Valves / Cyļ.	Notes	Req'd Restrictor	Min. Weight (lbs)						
A.	Toyota 4age	1615	4	DOHC	n/a	1200						
B.	Toyota 4age	1800	4	DOHC	31 SIR	1205						
C.	Ford BD Series	1600	BD Series 4-valve	Any BD series iron or alloy cylinder block and alternate crankshaft permitted with max. displacement of 1615cc	n/a	1200						
D.	Mazda MZR	2500	4	displacement of 1615cc DOHC	29 SIR	1400						

E.	Volkswagen	1835cc		SOHC. FI restrictors – between cylinder	Unrestricted	1190
			2	head and butterflies.	carbs	
				Alt block and crankshaft permitted with max.	or F.I.	
				displacement of 2135cc,		
				Restrictors TRD		
F.	Mazda 12A	n/a	n/a	no peripheral port or bridgeport	n/a	1230
	Streetport					
G.	Rotary Mazda 12A	n/a	n/a	Bridgeport. One (1) auto-type 2 bbl carb	36mm	1230
G.		II/a	II/a		3011111	1230
	Rotary			or one (1) 2 bbl throttle body. Restrictors/		
				venturis shall be no more than 4 inches		
				from the center line of the throttle butterfly		
				shaft. All intake air shall pass through the		
				required restrictors and the throttle body or		
				carburetor body. Intake manifold for either		
				carburetion or injection shall have individual		
				runners connecting one throttle plate to one		
				rotor, only. No balance tubes or other device		
	Manda 40D			shall connect runners between rotors. One (1) 2-bbl auto-type carb or throttle body.	44	4000
H.	Mazda 13B	n/a	n/a		44mm	1230
	Streetport			Intake manifold shall have individual runners		
	Rotary			connecting one throttle plate/butterfly to		
				one rotor, only. No balance tubes or other		
				devices shall connect runners between		
I.	Mazda 13B	NA	NA	rotors. Peripheral Port	36 mm SIR	1230
1.		INA	INA	Felipheral Fort	30 IIIIII SIK	1230
J.	Rotary Mazda Renesis	n/a	n/a	Porting not permitted. Unmodified OEM	70mm	1230
	Rotary			lower intake manifold required, upper	Throttle	
				manifold unrestricted. Balance tube not	Body.	
				permitted. Apex seals unrestricted. Fuel	,	
				injection only		
K.	Honda K20Z3	2000	4	See section 9.1.1.A.2.c.	NA	1200
	Base engine					
L						
_	Honda K20Z3	2000	4	See section 9.1.1.A.2.d.	NA	1275
	Uprated engine Ford Duratec/					1050
М		1615	4	2.0L engine destroked to 1615cc.	NA	1250
N	Mazda Ford Duratec/	2296	4	Maximum compression permitted 14.0:1.	32mm SIR	1345
/ /		2200		Maximum compression permitted 14.0.1.		10-10
0	Mazda Honda B16	1600	4		NA	1160

#### F۷

In GCR section 9.1.1.C.5.D.15., add the following language:

"Rocker arms may be lightened to a minimum weight of 80.0 grams. VW parts must be used, from 1200, 1300, 1500 or 1600 Type 1 engines; 1:1 or 1.1:1 ratios only. Valve adjuster screws are open. The end of the screw that contacts the valve may be profiled but must maintain the design and integrity of the original VW part. Swivel feet, elephant's feet, rollers or any other similar pieces are not allowed."

#### **P2**

1. #18646 (Eric Wallgren) Request 1,060# Minimum Weight for P2 Spec Line Radical Clubsport In P2, Table 1, Radical Club Sport, Pro-Sport, PR-6, reduce the weight: Stock Engine

<del>1300</del>1160 lb

1370 cc max

# **GCR**

1. #17306 (SCCA Staff) Add Language Regarding Rules Clarifications In section 8.1.4, add the following language to the end of the section:

"Formal rule clarifications may be submitted to the Club Racing Board at www.clubracingboard.com."

<sup>1. #17575 (</sup>Guy Bellingham) Valve Adjuster Screws

# **Grand Touring**

#### GT2/ST

1. #18398 (Kyle Jackson) Add the GM L76 Engine

In GT2/ST. Chevrolet Corvette, add to the notes:

"GM LS2/L76. May use the LSX cast iron block with OEM LS2 bore and stroke."

In GT2/ST, Cadillac CTS/CTS-V, Chevrolet Camaro, Pontiac Fiero, Pontiac Firebird, Pontiac GTO, Pontiac Solstice, add to the notes:

"GM LS2/L76. May use the LSX cast iron block with OEM LS2 bore and stroke."

#### GT3

1. #18573 (Samuel Fouse) Add Mazda 2.5

In GT3, classify the Mazda engine as follows:

Engine Family	Engine Type	Bore (mm)	Stroke (mm)	Disp. (cc)	Head Type	Valves / Cyl.	Fuel Induction	Weight (lbs)	Notes
MZR/L5-VE	DOHC	89.0	100.0	2488	Alum, Crossflow	4	31mm SIR	2195	Direct injection not permitted.

## GTL

1. #18030 (Tim Linerud) GTL VW Head Request

In GTL, Engines-Volkswagen, water cooled SOHC 1780, add language to the notes:

"8 valve aluminum crossflow head may be used. Must run 24mm SIR at 2050 lbs. as this is a change to the original engines architecture."

In GTL, Engines-Volkswagen, water cooled (Production Limited Prep Level 2), SOHC 1780:

NR This is a limited prep engine and this request is altering the original engines architecture. Please see Letter #18777.

# **Improved Touring**

#### ITA

1. #18093 (Greg Anthony) Combine the SOHC and DOHC Neon Weights

In ITA, reduce the weight of the Chrysler Neon SOHC (2 & 4 door) (incl. ACR) (95-99) as follows:

24502345

Thank you for your letter. For the rest of your request please see the response in letter #18285.

# ITB

1. #17841 (John Morris) VW Golf Weight

Classify the Volkswagen Golf GTI 16V (87-89) as follows:

ITA	Engine	Bore x	Valves	Stock	Wheel-	Wheel	Gear Ratios	Brakes Std.	Weight	Notes:
	Type	Stroke	IN &	Comp.	base	Dia.		(mm)	(lbs)	
		(mm)/	EX	Ratio	(inch)	Max				
		Displ. (cc)	(mm)			(inch)				
Volkswagen	4 Cyl	81.0 x ` ´	(1) 32.0	10.0	97.3	` 15 ′	3.45, 2.12,	(F) 239 x 20	2185	
Golf GTI 16V	DOHC	86.4	(E)				1.44,	Ventilated		
(87-89)		1780	28.0				1.13, 0.91	Disc		
								(R) 226 x 10		
								Solid Disc		

Classify the Volkswagen Jetta GLI 16V (87-89) as follows:

ITA	Engine Type	Bore x Stroke (mm)/ Displ. (cc)	Valves IN & EX (mm)	Stock Comp. Ratio	Wheel- base (inch)	Wheel Dia. Max (inch)	Gear Ratios	Brakes Std. (mm)	Weight (lbs)	Notes:
Volkswagen Jetta GLI 16V (87-89)	4 Cyl DOHC	81.0 x 86.4 1780	(l) 32.0 (E) 28.0	10.0	97.3	(inch) 15	3.45, 2.12, 1.44, 1.13, 0.91	(F) 256 x 20 Ventilated Disc (R) 226 x 10 Solid Disc	2185	

Classify the Volkswagen Scirocco 16V (86-88) as follows:

ITA	Engine Type	Bore x Stroke	Valves IN &	Stock Comp.	Wheel- base	Wheel Dia.	Gear Ratios	Brakes Std. (mm)	Weight (lbs)	Notes:
		(mm)/ Displ. (cc)	EX (mm)	Ratio	(inch)	Max (inch)				
Volkswagen Scirocco 16V (86-88)	4 Cyl DOHC	81.0 x 86.4 1780	(l) 32:0 (E) 28.0	10.0	94.5	(inch) 15	3.45, 2.12, 1.44, 1.13, 0.91	(F) 256 x 20 Ventilated Disc (R) 226 x 10 Solid Disc	2185	

#### ITS

1. #16985 (Cameron Conover) Classify A5 VW Golf/Rabbit Classify the 2008-09 VW Rabbit 2.5L in ITS as follows:

ITS	Engine Type	Bore x Stroke (mm)/ Displ. (cc)	Valves IN & EX (mm)	Stock Comp. Ratio	Wheel- base (inch)	Wheel Dia. max (inch)	Gear Ratios	Brakes Std. (mm)	Weight (lbs)	Notes:
Volkswagen Rabbit 2.5L (08-09)	5 cyl DOHC	82.5 x 92.8 2480	(I) (E)	10.5:1	101.5	17	3.78, 2.12, 1.36, 0.97,	(F) 288 x 25 Vented Disc (R) 260 x 12 Solid Disc	2560	

# Production

1. #18636 (Glen McCready) Extend the '06-'11 Mazda MX-5 Classification to Include '12-'14 In EP, Mazda MX-5 (06-11), update the model years as follows: Mazda MX-5 (06-11/4)

#### Spec Miata

1. #18503 (david wheeler) Floor Drop Plate Clarification

In GCR section 9.1.7.7.a., make the following change:

"The driver's seat shall be replaced with a one-piece bucket-type race seat. All seat mountings shall be reinforced. Factory seat tracks/ brackets may be modified, reinforced, and/or removed to facilitate replacement mountings provided they perform no other function. The passenger seat must be removed. The transmission tunnel may be modified for the purpose of installing a competition driver seat. The driver's side floor pan may be modified to accommodate larger/taller drivers. All modifications shall be contained between the transmission tunnel, driver's side rocker, rear bulkhead and no more than 24" forward of the rear bulkhead. The modification shall not extend below the factory floor stiffener/frame rail. The steel used in the modification shall be no thinner than  $\frac{.060^{\circ}.058^{\circ}}{.058^{\circ}}$ . All modifications shall be welded in place. This modification shall serve no other purpose other than seating position."

# **Super Touring**

ST

1. #18702 (Chris Jurkiewicz) Define Cylinder Head

In GCR section 9.1.4.G.6, add the following language:

"Rocker arm, lifter, follower, pushrod, valve spring, keeper, retainer, guide, seat, and valve materials are free; Titanium is not permitted, except for retainers or OEM parts. The head *and camshaft carrier* may be machined to fit valve train components."

#### **Touring**

T2

1. #18044 (Todd Lamb) Add 2011-2012 Cayman

In T2, Porsche Cayman S, update/add model years as follows:

Porsche Cayman S (2010-2012)

2. #18694 (Lothar Kremer) Chevrolet Corvette C-5 incl. fxd cpe (98-04) Z06 (hardtop) (01-04) In T2, Chevrolet CorvetteC-5 Incl. Fxd Cpe (98-04) Z06 (hardtop) (01-04), classify new spec line:

T2									
	Bore x Stroke(mm)/ Disp. (cc)	Wheel- base (mm)	Max Wheel Size (inch)	Tire Size (max)	Gear Ratios	Final Drive	Brakes (mm)	Weight (lbs)	Notes:
Chevrolet Corvette C-5 Incl. Fxd Cpe (98-04) Z06 (hardtop) (01- 04)	99.0 x 92.0 5666	2655	17x9.5 F, 18x10.5 R OEM only	295 F, 295 R	(C5): 2.66, 1.78, 1.30, 1.00, 0.74, 0.50 (Z06): 2.97, 2.07, 1.43, 1.00, 0.84, 0.56	3.42	Stock calipers, and rotors. 325 (F), 305 (R)	3350	GM Motorsports T1 suspension pkg. (Part # 12480062) is permitted. Parts for Z06 upgrade: LS6 Engine Assy.: P/N 88894057, Engine components if using LS1 block: LS6 cylinder head: P/N 12560801, LS6 intake manifold: P/N 88890524 or 12480075, LS6 camshaft: P/N 12560950, LS6 valve springs: P/N 12565117, LS6 valve shims: P/N 12565118, Lifter valley cover: P/N 12568002, PCM: P/N 12200411, LH Exh manifold: P/N 12561255, RH Exh manifold: P/N 12561256. C-5 exhaust system may be modified to mate to Z06 exhaust manifolds. Cage attachments points may be on the frame. Floor may be modified to facilitate installation of cage mounting plates. Wrapping of tie-rod ends to shield heat is permitted. This max. tire supersedes TCS 9.1.10.D.7.b. C6 calipers permitted. Alternate wheel bearings SKF Part # BAR 5049C permitted. OEM or equivalent carbon fiber hood is allowed. The A.I.R air pump system may be removed. A 55 mm flat plate restrictor is required. 3.0 degrees MAX front camber. ARE dry sump kit #3021S, or Aviad dry sump kit #3021S, or Aviad dry sump kit #008-10001 allowed

<sup>3. #18725 (</sup>Touring Committee) Clarify 05-10 Mustang spec line

In T2, Ford Mustang Coupe GT & Shelby GT 5.0L (05-10), change the notes as follows:

"The following parts are allowed: Strut tower brace part #M20201-S197, Radiator #M-8005-S197, Ford Spring kit M- 5300-K, sway bars M-5490-A, damper kit M-18000-A. 2005-2010 Mustang GT 4.6L may be converted to 2011-20122014 5.0 liter specifications. with 59mm flat plate restrictor; if done, all drivetrain components must updated to the later model; If converting to the 11-14 5.0 engine, car must use the 11-14 spec line in its entirety (notes, weight, restrictor, etc.) no mixing and matching. VIN number will be disregarded for this conversion. Maximum spring rate 500 lbs (front), 300 lbs (rear)."

In T3, Ford Mustang Coupe GT & Shelby GT 4.6L (05-10), change the weight as follows: 35003400

# T2-T4

1. #18601 (david mead) Year Clarification for RX8 in T3 and T4 In T3, Mazda RX-8 Base/R3 (04-09), update the model years as follows: Mazda RX-8 Base/R3 (04-<del>09</del>12)

In T4, Mazda RX-8 Base/R3 (04-09), update the model years as follows: Mazda RX-8 Base/R3 (04-<del>0912</del>)

# **T3**

1. #18695 (Touring Committee) Nissan 350Z rear rotor diameter is incorrect in GCR In T3, Nissan 350Z Track/ Touring/ Standard/ Nismo (03-08), correct rear rotor size as follows: (F) 296/324 Vented Disc

(R) 292/<del>332</del>323 Vented Disc

In T3, Nissan 350Z Track/ Touring/ Standard/ Nismo (03-08) Spec Z, correct rear rotor size as follows: (F) 296/324 Vented Disc

(R) 292/<del>332323</del> Vented Disc