



NASA Super Touring (ST1-ST4) & Time Trial (TT1-TT4)

Car Classification Form 2017 (v11.5/14.1—12-27-16)

Driver or Team Name John George Date 5/1/17 Car Number 48
Region _____ e-mail John.cristian.george@gmail.com Car Color white

If a team, list driver's names (two maximum per team):

Vehicle: Year 2017 Make Factory Five Model Daytona Coupe Special Edition? R

Multiple ECU Maps? Describe switching method: SCT X4 Programmer

AWD using Mustang or Dyno Dynamics Dyno---> Avg HP _____ x 1.1 = _____ (enter below)

Min. Competition Wt. (w/driver) 2777 lbs. Average Dyno Horsepower (Avg HP) 356 whp
(Round both weight and Avg HP to the nearest whole number) (See ST/TT Rules Sections 8.2/9.2 for Avg HP calculation)

Adjusted Weight/Power Ratio (use worksheet below to calculate) 8.0

Super Touring 1 & Time Trial 1 (ST1 & TT1) = "Adjusted Wt/HP Ratio" equal to, or greater than 6.00:1

Super Touring 2 & Time Trial 2 (ST2 & TT2) = "Adjusted Wt/HP Ratio" equal to, or greater than 8.00:1

Super Touring 3 & Time Trial 3 (ST3 & TT3) = "Adjusted Wt/HP Ratio" equal to, or greater than 10.00:1

Super Touring 4 & Time Trial 4 (ST4 & TT4) = "Adjusted Wt/HP Ratio" equal to, or greater than 12.00:1

Super Touring/Time Trial Competition Class: ST/TT 2

Calculation of Adjusted Weight/Power Ratio (worksheet):

Unadjusted Wt/HP Ratio = Minimum Competition Weight divided by Avg HP = 7.8

If: The Minimum Competition Weight is less than 3000 lbs, find the weight on the table below, and SUBTRACT the number listed from the Wt/Power Ratio = - .1

2999-2600 lbs	= 0.1	
2599-2200 lbs	= 0.2	
2199 lbs or less	= 0.3	

If: The Minimum Competition Weight is greater than 3300 lbs, find the weight on the table below, and ADD the number listed to the Wt/Power Ratio = _____

3301-3400 lbs	= +0.1	3601-3750 lbs	= +0.4
3401-3500 lbs	= +0.2	3751-3900 lbs	= +0.5
3501-3600 lbs	= +0.3	3901 lbs or greater	= +0.6

→ If: Tire size 245 or smaller (DOT approved), add 0.7 = + .7

Tire size 275 to 250 (DOT approved), add 0.3 = _____

Tire size 9.5" (241mm) or smaller (non-DOT approved), add 0.7 = _____

Tire size 10.5" (267mm) to 9.6" (244mm) (non-DOT approved), add 0.3 = _____



- If: Non-DOT approved tires (ST1/TT1, ST2/TT2, ST3/TT3 only), subtract 0.5 = _____
ST4/TT4 Only: DOT-approved R-compound Autocross tires, subtract 1.0 = _____
 (Examples: A6, A7, R1S, RS AC, Z214-C90/91)
- If: Sports racer, "Prototype", monococoque race car (ST1/TT1 only), subtract 2.2 = _____
 Sports racer, "Prototype", monococoque race car (ST2/TT2 only), subtract 3.4 = _____
 Other Non-Production Vehicle (ST1/TT1, ST2/TT2, ST3/TT3 only), subtract 0.4 = -0.4 _____
 OEM Body Type 4-door Sedan or 5-door Wagon, add 0.2 = _____
 (Must be originally manufactured as a Production vehicle)
- If: Production Vehicle and:
 Modification of the OEM roof line/shape, and/or windshield/frame removal, subtract 0.3 = _____
 Modification of the floor pan for exhaust clearance only, and/or
 the rocker panel for side exit exhaust only, subtract 0.2 = _____
ST3/TT3 or ST4/TT4 Only: OEM Aero (see 7.3.2.D), add 0.4 = _____
- If: ST1/TT1 or ST2/TT2, with Dog-ring/straight-cut gears (non-synchromesh), and/or
 sequential/paddle shift/semi-automatic transmission, subtract 0.2 = _____
 ST3/TT3 or ST4/TT4, with OEM street-legal model available paddle shift/DCT/SMG,
 or sequential motorcycle gearbox, subtract 0.3 = _____
 ST3/TT3, with Dog-ring/straight-cut gears (non-synchromesh), subtract 0.6 = _____
 ST3/TT3, with all other sequential/semi-automatic transmission, subtract 1.0 = _____
 ST4/TT4, with Dog-ring/straight-cut gears (non-synchromesh), and/or
 sequential/semi-automatic transmission, subtract 1.0 = _____
 (*All classes—no assessment for automatic utilizing torque converter*)
- If: ST1/TT1, ST2/TT2, or ST3/TT3, with AWD drivetrain, subtract 0.3 = _____
 ST1/TT1, ST2/TT2, or ST3/TT3, with FWD drivetrain, add 1.0 = _____
 ST4/TT4, with AWD drivetrain, subtract 0.5 = _____
 ST4/TT4, with FWD drivetrain, add 0.6 = _____
- If: The vehicle is listed in Section 7.5 or Appendix A, use the Modification Factor listed
 to finish the calculation here. Otherwise, enter the calculated "Adjusted Weight/Power
 Ratio" in the top section of this Form and enter your competition ST/TT Class. _____

7.5 Non-Production Vehicles Approved for "Production" Vehicle Status

The following vehicles are approved to use "Production" vehicle status, **provided that the frame/chassis, body/aero remain in the original manufactured configuration** as specified by the manufacturer. The "Chassis" Modification Factors and the "Production Vehicle Body" Modification Factors shall not be assessed, but the vehicle specific Modification Factor listed below for each model will apply:

Allison Legacy = -0.2 (no additional aero) (ST4 approved)
 Baby Grand = -0.2 (no additional aero) (ST4 approved)
 Backdraft Cobra RT3 (TD, hardtop, or any aero mods) = -0.2
 Brunton Stalker (no aero) = -0.2
 Caterham 7, Lotus 7, Wesfield Super 7 (no aero) = -0.2
 Exomotive Exocet (no aero/wing/splitter) = -0.2
 Ferrrai 430, 458 Challenge = -0.2 (ST1 & ST2) (may have additional aero mods)
 Factory Five Roadster (if any aero mods, wing, or splitter) = -0.2
 Factory Five Type 65 Coupe = -0.2 (no additional aero)
 Lotus 2-Eleven = -0.2 (no additional aero)
 MNR VortX RT (no aero) = -0.2
 Panoz GTRA = -0.2 (may have additional aero mods) (ST4 approved)
 Panoz GTS = -0.3 (may have additional aero mods)
 Panoz GTWC = -0.2 (may have additional aero mods)
 Porsche 991 GT3 Cup = -0.2 (ST1 & ST2) (may have additional aero mods)
 Porsche 996 GT3 Cup & 997 GT3 Cup = -0.2 (ST3) (may have additional Aero mods)
 Pro Challenge = -0.2 (no additional aero) (ST4 approved)
 RSR (Renault Sport Racer) = -0.6 (ST3 & 4 approved with this Modification Factor only)
 Spec Racer Ford (1st & 2nd Gen.) = -0.6 (ST3 & 4 approved with this Modification Factor only)
 Spec Racer Ford (3rd Gen.) = -1.0 (ST3 approved with this Modification Factor only)
 Thunder Roadster ('08+ aero body/wing type) = -0.2 (may have additional aero mods including wing removal) (if N/A 1.6L motor or less, ST3 approved w/ -0.0 Mod Factor)





**NASA Super Touring (ST), Performance Touring (PT), and
Time Trial (TT) Official Dyno Certification Form** (rev 12-16)

Car Information:

Owner/Competitor: John George Class: ST2 Car # 48 Log Book # 014329
Vehicle Make: Factory Five Racing Model: Daytona Coupe R Year: 2017
Forced Induction? Y ☒ (circle one) Restrictor Plate? If yes, what is the size: _____
Method of switching ECU Fuel/Timing Maps (if applicable): SCT X4 Programmer

Dynamometer Information (name/address/phone ink stamp okay here):

Shop Name: Granite State Dyno
Shop Address: 120 Ferry St, Hudson, NH, 03051 Shop Telephone # 603-886-0827
Dynamometer Manufacturer/Type (circle one):

FWD/RWD: Dynojet (only) AWD: Dynojet Mustang Dyno Dyno Dynamics Dynapack

(Note: All Mustang and Dyno Dynamics results will be multiplied by 1.1 for calculations)

Dyno Testing Procedures:

- 1) At least three (3) separate, reproducible tests shall be made for each Fuel/Timing Map/boost controller setting.
- 2) The vehicle must be at normal operating temperature (as when on track).
- 3) The tires must be inflated to at least 28 psi (but should be at normal operating track tire pressure if higher.)
- 4) The hood shall be open, with a cooling fan placed in front of the engine/radiator during testing.
- 5) The vehicle must be tested in the gear producing the highest horsepower readings (typically the gear closest to a 1:1 ratio—commonly 5th gear for BMW M3's, Honda S2000's, Mazda RX-8's, Nissan 350/370Z's)
- 6) SAE J1349 Rev JUN 90 correction shall be used, along with a smoothing factor of 5.
- 7) Dyno graphs shall show horsepower and torque on the Y-axis (vertical), and engine RPM on the X-axis.
- 8) An inductive pickup or other direct sensor shall be used to measure engine RPM (not via the ECU/OBD port or from calibration from the vehicle's tachometer.)*
- 9) The numeric table of horsepower and RPM (in 50 rpm increments) must be printed out for the highest HP graph.
- 10) Testing Range (check one):
 - ☐ Dyno graph shows decreasing power for 1500 rpm from the peak horsepower level
 - ☐ Engine reached the rev limiter during these dyno runs
- 11) Engine, ECU, boost controller, etc. settings shall only be altered between Dyno runs to obtain the required additional sets of three Dyno tests for alternate ECU Fuel/Timing maps and/or boost controller settings.

* If it is not possible to obtain RPM data from an inductive pickup or direct sensor due to vehicle configuration making it impossible, the Dyno operator must note on the Dyno sheet the method used for obtaining RPM data, and the reason for not using an inductive pickup or direct sensor.

Dyno Results (from test with highest Max HP—all numbers rounded to nearest whole number):

Max HP 366 Max Tq. 376 RPM at Max HP 6400

Horsepower at 500 rpm increments above/below Max HP: (circle three highest)

Above: 500 rpm 340 1000 rpm 340 1500 rpm 340 2000 rpm 340 2500 rpm 340 3000 rpm 340
Below: 500 rpm 354 1000 rpm 361 1500 rpm 343 2000 rpm 314 2500 rpm 262 3000 rpm 213

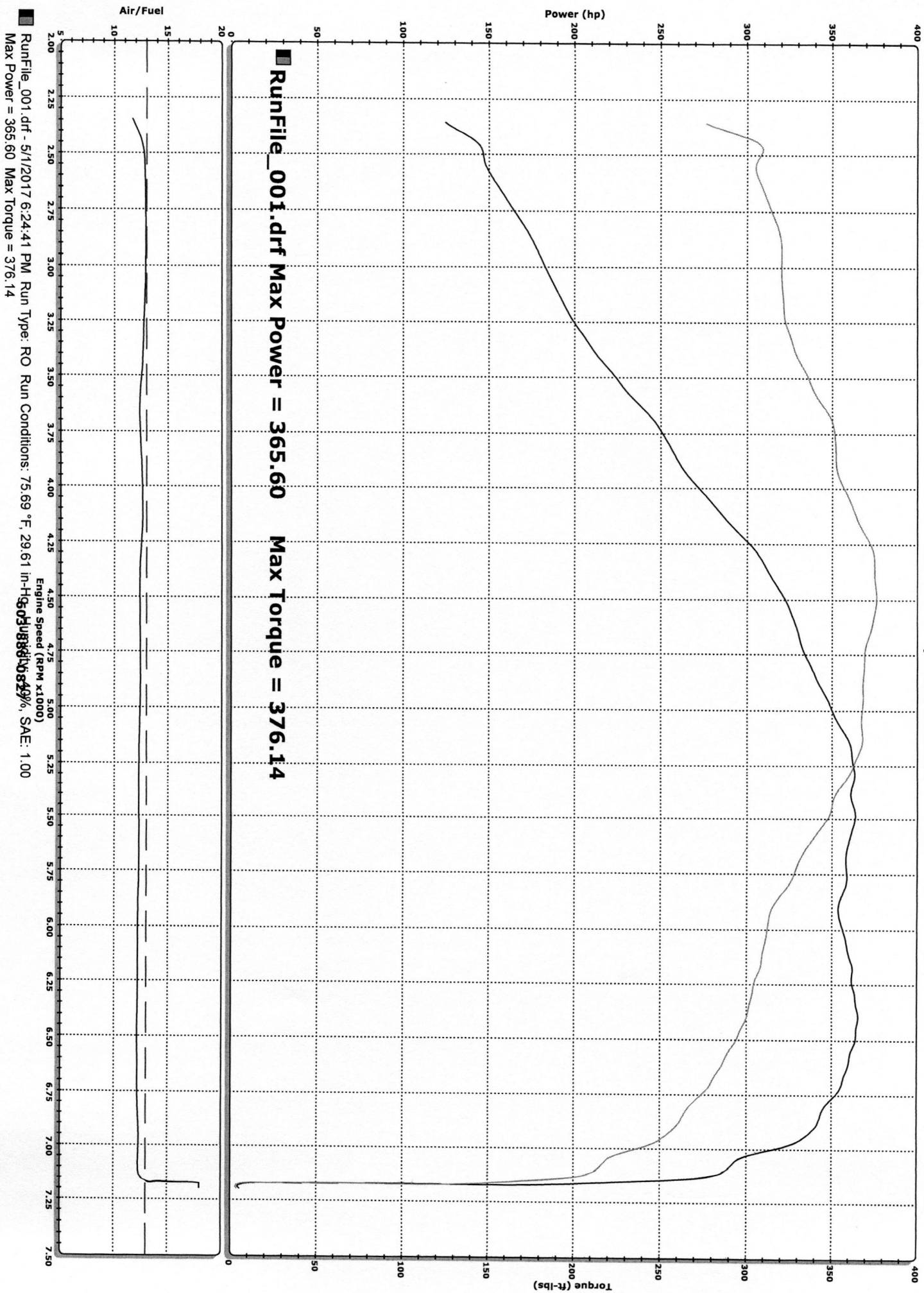
Avg HP = (sum of Max HP plus three highest other data points) 1424 / 4 = 356

The Dyno results attached and the information on this form are certified as being true and correct by both the competitor and the Dyno operator:

John George
Owner/Competitor Signature

John George
Dyno Operator Name/ Signature

4/27/17
Date



Dynojet Research Inc.
Run Name: C:\DynoRuns\DaytonaCoupe-April127 2017\RunFile_001.drf
Run Title:
Run Notes:
Run Date: 5/1/2017 6:23:00 PM

RunFile_001.drf: 75.69 °F 29.61 in-Hg Humidity: 40 % SAE: 1.00 Average Gear Ratio: 53.42

S	RPM	x1000	hp	N/A	ft-lbs	Air/Fuel
0.27	2.35					11.73
0.36	2.40					12.19
0.44	2.45					12.57
0.53	2.50					12.76
0.61	2.55					12.83
0.69	2.60					12.86
0.77	2.65					12.88
0.85	2.70					12.90
0.94	2.75					12.91
1.02	2.80					12.92
1.10	2.85					12.92
1.18	2.90					12.92
1.26	2.95					12.92
1.34	3.00					12.91
1.42	3.05					12.89
1.50	3.10					12.87
1.58	3.15					12.84
1.66	3.20					12.80
1.74	3.25					12.76
1.81	3.30					12.72
1.89	3.35					12.69
1.97	3.40					12.66
2.04	3.45					12.62
2.11	3.50					12.54
2.18	3.55					12.45
2.25	3.60					12.39
2.33	3.65					12.36
2.40	3.70					12.38
2.47	3.75					12.42
2.54	3.80					12.46
2.61	3.85					12.51
2.68	3.90					12.55
2.75	3.95					12.59
2.82	4.00					12.62
2.89	4.05					12.63
2.95	4.10					12.64
3.02	4.15					12.63
3.09	4.20					12.60
3.15	4.25					12.54
3.22	4.30					12.47
3.28	4.35					12.42
3.35	4.40					12.39
3.41	4.45					12.38
3.48	4.50					12.39
3.55	4.55					12.39
3.62	4.60					12.40
3.69	4.65					12.41
3.76	4.70					12.42
3.83	4.75					12.42
3.90	4.80					12.43
3.96	4.85					12.44
4.03	4.90					12.44
4.10	4.95					12.43
4.17	5.00					12.41
4.24	5.05					12.38
4.31	5.10					12.36
4.39	5.15					12.34
4.46	5.20					12.32
4.54	5.25					12.31
4.61	5.30					12.30
4.69	5.35					12.30
4.76	5.40					12.29
4.84	5.45					12.30

4.92	5.50	363.53	347.15	12.31
5.00	5.55	361.92	342.50	12.32
5.08	5.60	360.10	337.74	12.32
5.16	5.65	358.60	333.35	12.32
5.24	5.70	358.21	330.07	12.32
5.32	5.75	358.72	327.66	12.31
5.40	5.80	358.26	324.42	12.29
5.48	5.85	355.65	319.32	12.26
5.55	5.90	353.80	314.96	12.24
5.63	5.95	354.56	312.98	12.23
5.70	6.00	356.50	312.06	12.22
5.79	6.05	358.19	310.95	12.22
5.87	6.10	359.42	309.46	12.22
5.97	6.15	361.39	308.62	12.23
6.06	6.20	361.99	306.65	12.23
6.15	6.25	362.02	304.22	12.23
6.24	6.30	363.59	303.12	12.22
6.33	6.35	364.46	301.45	12.21
6.43	6.40	365.57	300.00	12.20
6.53	6.45	364.41	296.74	12.18
6.62	6.50	364.03	294.15	12.17
6.72	6.55	361.40	289.80	12.18
6.81	6.60	360.12	286.58	12.20
6.91	6.65	357.99	282.75	12.21
7.02	6.70	355.90	278.99	12.20
7.12	6.75	352.00	273.90	12.20
7.22	6.80	346.01	267.25	12.23
7.32	6.85	343.03	263.02	12.27
7.43	6.90	340.07	258.86	12.32
7.54	6.95	332.82	251.52	12.35
7.67	7.00	315.13	236.46	12.35
7.80	7.05	294.08	219.09	12.30
7.93	7.10	287.94	213.00	12.29
8.10	7.15	243.72	179.04	12.55
8.58	7.20	5.36	3.67	18.00
MAX: 8.58	7.20	365.57	376.13	18.00
MIN: 0.27	2.35	5.36	3.67	11.73