



## NASA Autocross Car Classification Form (NXR-NXH)--2015 (v15.1)

Owner's Name \_\_\_\_\_ Date \_\_\_\_\_ Region \_\_\_\_\_

Car Number \_\_\_\_\_ Car Color \_\_\_\_\_ e-mail \_\_\_\_\_

Car Year \_\_\_\_\_ Make \_\_\_\_\_ Model \_\_\_\_\_ Trim \_\_\_\_\_

NASA-X Base Class \_\_\_\_\_ Base Weight Listing (from NASA-X Rules) \_\_\_\_\_ lbs.

2015 Declared Minimum Competition Weight (with driver) \_\_\_\_\_ lbs.

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Proceed to calculate your vehicle's modification points assessment for up-classing purposes. Fill in the blanks with the number of modification points assessed for each item that affects your vehicle. You may leave the lines blank next to modifications that your vehicle does not have. Proceed to Page 2, and calculate all modification points' assessments, then fill in total points below. **ALL Factory Options and Parts Not on the Base Trim Model Must Be Assessed Points!!!**  
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\_\_\_\_\_ Total Number of Modification Points from assessments listed on pages 2 through 4 of this document

\_\_\_\_\_ Total Number of Points from \* (+7) or \*\* (+14) from section 1.2 of the NASA-X Classing document

\_\_\_\_\_ Forced Induction Vehicles automatically enter +5 here (all turbocharged and/or supercharged cars)

\_\_\_\_\_ Total Modification Points for Up-classing

20 thru 39 points - Up ONE Class	100 thru 119 points - Up FIVE Classes
40 thru 59 points - Up TWO Classes	120 thru 139 points - Up SIX Classes
60 thru 79 points - Up THREE Classes	140 thru 159 points - Up SEVEN Classes
80 thru 99 points - Up FOUR Classes	160 thru 179 points - Up EIGHT Classes
(180 or more points - up NINE classes)	

**2015 Base Class: NX\_\_\_\_\_ 2015 Final Competition Class: NX\_\_\_\_\_**

Any vehicle that exceeds the maximum points assessment set forth in this document (i.e. beyond class NASA-X R with 19 points added) may be excluded from the official event results and run only in an "EXPO" class, as determined by the NASA-X National Director or any NASA-X Regional Director.

For purposes of NASA-X points assessments, the term OEM will be defined as follows: Any part that is identical in size, shape, and functional characteristics compared to the part that originally came on the vehicle, from the manufacturer, as a standard feature of the base trim model (BTM) as it is listed in section 1.2 of the current NASA-X

National Classes document (factory options and specialty model parts are considered non-OEM) or is listed as a standard replacement part by the OEM manufacturer. Some parts that are produced by aftermarket manufacturers as generic replacement parts may not require a points assessment provided that: they are the same size and shape, and have the same functional characteristics as the OEM part, and that they provide no significant improvement in performance, longevity, or reliability. If you have any questions about the modification points, consult your Director.

Errors and omissions could result in disqualification and other penalties.

This current Classing Form summarizes the current NASA-X National Classes document available from [drivenasa.com](http://drivenasa.com). Participating drivers may be required to file this form with regional or national NASA-X Officials before a specific season or event, TBA in advance. Otherwise please fill it out and save it for self-classing purposes before entering any NASA-X event.

## **TIRE POINTS:**

- \_\_\_\_\_ 1) The following DOT-approved R-compound tires: BFG R1S, [Goodyear Eagle RS AC \(autocross\)](#), [Hoosier A7](#), [Hankook Z214 \(C90 & C91 compounds only\)](#), Hoosier Wet DOT (if used in dry conditions) +22
- \_\_\_\_\_ 2) The following DOT-approved R-compound tires: Hoosier A6 +17
- \_\_\_\_\_ 3) The following DOT-approved R-compound tires and those with a UTQG treadwear rating of 40 or less not listed otherwise in these rules: BFG R1, Goodyear Eagle RS, Hankook Z214 (C71, C70, C51, C50), Hoosier [R7](#), Kumho V710 +10
- \_\_\_\_\_ 4) The following DOT-approved R-compound tires: [Hoosier SM7](#) +9
- \_\_\_\_\_ 5) The following DOT-approved R-compound tires: [Hoosier R6](#), [Hoosier SM6](#) (note: Continental Tire Sportscar Challenge EC-Dry tires (225, 245, 275) OK) +8
- \_\_\_\_\_ 6) The following DOT-approved R-compound tires: [Toyo Proxes RR](#), [Hankook TD](#) +7
- \_\_\_\_\_ 7) The following DOT-approved R-compound tires and those with a UTQG treadwear rating [over 40](#): Maxxis RC-1 (examples: Kumho V700, Michelin Pilot Sport Cup & [MPS Cup 2](#), Nitto NT01, Pirelli PZero Corsa, Toyo R888, Toyo RA-1, Yokohama A048, etc.) +6
- \_\_\_\_\_ 8) DOT-approved (non-R-compound) tires with a UTQG treadwear rating of 120-200 (examples: [BFG g-Force Rival](#), Toyo R1R, Dunlop Direzza Sport Z1 Star Spec, Bridgestone Potenza RE070, Kumho Ecsta XS, Yokohama Advan A046 & Neova AD08, Hankook R-S3) +2
- \_\_\_\_\_ 9) Non-DOT-approved racing slicks +30 (of any origin--re-caps and re-treads are not permitted)

The following tire sizes will be used as the base tire size for each **Base Class** for all vehicles regardless of their OEM/BTM tire size(s). All vehicles in a given base class may use this tire size (or smaller) without a points assessment:

NXR: 335mm, NXU: 315mm, NXS: 305mm, NXA: 295 mm, NXB: 265mm, NXC: 255mm,

NXD: 245mm, NXE: 235mm, NXF: 215mm, NXG: 195mm, NXH: 175mm

Tire width points assessed or points credited are determined by the difference between the width of the **largest tire** on the vehicle and the assigned base tire size as follows:

Equal to or greater than: 10mm +1, 20mm +4, 30mm +7, 40mm +10, 50mm +13,  
60mm +16, 70mm +19, 80mm +22, 90mm +25, 100mm +28, 110mm +31, 120mm +34, etc.

Equal to or less than: -10mm -1, -20mm -4, -30mm -7, -40mm -10, -50mm -13, -60mm -16,  
-70mm -19, -80mm -22, -90mm -25, -100mm -28, -110mm -31, 120mm -34, etc.

Base Class Tire Size \_\_\_\_\_ mm Actual Tire Size \_\_\_\_\_ mm Difference \_\_\_\_\_ mm #Points \_\_\_\_\_

***Total Tire Modification Points***

## **WEIGHT REDUCTION POINTS:**

Weight reduction points are based on the actual vehicle minimum competition weight (with driver, able to be started and driven\*). Removal and lightening of non-essential parts is permitted unless stated otherwise in these rules. Modification of the OEM frame, sub-frame, and floor pan are not permitted (see 6.3.2). Removal or lightening of engine parts is permitted only as listed elsewhere in these rules. The exterior surface of the roof, hood, body panels, and doors must maintain their BTM size and shape unless listed otherwise in these rules.

If the base weight used for base classing purposes minus minimum competition weight (with driver, able to be started and driven) is greater than: 5 lbs +1, 20 lbs +2, 35 lbs +3, 50 lbs +4, 65 lbs +5, 80 lbs +6, 95 lbs +7, 110 lbs +8, 125 lbs +9, 140 lbs +10, 155 lbs +11, 170 lbs +12, 185 lbs +13, 200 lbs +14, 215 lbs +15, 230 lbs +16, 245 lbs +17, 260 lbs +18, 275 lbs +19, 290 lbs +20, 305 lbs +21, 320 lbs +22, 335 lbs +23, 350 lbs +24, 365 lbs +25, 380 lbs +26, 395 lbs +27, 410 lbs +28, 425 lbs +29, 440 lbs +30, 455 lbs +31, 470 lbs +32, 485 lbs +33, 500 lbs +34, 515 lbs +35, etc...

Base Wt. \_\_\_\_\_ lbs. minus Min. Comp Wt. \_\_\_\_\_ lbs. = \_\_\_\_\_ lbs = \_\_\_\_\_ points

***Total Weight Reduction Modification Points***

## **ENGINE/DRIVETRAIN POINTS:**

- \_\_\_\_\_ 3) Aftermarket computer system (any non-OEM/BTM “stand-alone” or “piggyback”): +3 naturally aspirated, +10 forced induction
- \_\_\_\_\_ 4) Modification of the OEM/BTM air intake/box, air filter location, air piping to the turbo/supercharger/intercooler/throttle body/carburetor, or hood/fascia/fender air inlet(s), outlets, or vents +1
- \_\_\_\_\_ 5) Non-OEM/BTM, deleted, or modified/porting throttle body +2; indep throttle bodies +4
- \_\_\_\_\_ 6) Non-OEM/BTM or modified carburetor, fuel rail, fuel injectors, fuel pump(s), and/or fuel pressure regulator +2 (no points for fuel pump alone if using OEM/BTM fuel and timing maps, sensor inputs and ignition timing)
- \_\_\_\_\_ 7) Non-OEM/BTM, modified/porting, or deleted intake manifold: 4 cyl. +1, 6cyl. +2, 8 cyl. +3, 12A & 13B rotary +2, all other rotary +3
- \_\_\_\_\_ 8) Water injection system +6 (alcohol-water mixtures are not permitted)
- \_\_\_\_\_ 10) Replacement pulleys (other than for supercharger) or non-electrical fan removal +1
- \_\_\_\_\_ 11) Replacement pulley for OEM/BTM supercharger or replacement of any pulley that affects supercharger speed +4
- \_\_\_\_\_ 12) Aftermarket boost controller or modification/alteration of OEM/BTM vacuum lines that serve to function as a boost controller +4
- \_\_\_\_\_ 13) Aftermarket or modified wastegate actuator, wastegate, or vacuum line(s) that serve to control the wastegate actuator function or increase peak boost +3
- \_\_\_\_\_ 14) Add aftermarket intercooler +7
- \_\_\_\_\_ 15) Non-OEM/BTM or modified intercooler +4 (Intercooler sprayers are not permitted unless they came on the OEM/BTM base trim model of the vehicle).
- \_\_\_\_\_ 16) Increased displacement by: <1.5% +0, 1.5% to <5.5% +4, 5.5% to <7% +6, 7% to <10% +8, 10% to <15% +10, 15% to <20% +15, > 20% +20.
- \_\_\_\_\_ 17) Modified or non-OEM/BTM camshaft(s), rocker arms, push rods, or cam timing gears +6 (for one or more)
- \_\_\_\_\_ 18) Valve size change, modified, ported or polished OEM/BTM head (other than simple shaving of the head only) +6
- \_\_\_\_\_ 19) Any modifications that result in increased engine compression ratio (including shaving the head or decking the block to factory specs): 0.50 or less +0, >0.50 +3, >1.0 +6, >2.0 +10, >3.0 +15
- \_\_\_\_\_ 20) De-stroked engine +4
- \_\_\_\_\_ 21) Added dry sump oil system +7 (+14 if motor is lowered from OEM/BTM location)
- \_\_\_\_\_ 22) Modification or porting of the exhaust manifold +2
- \_\_\_\_\_ 23) Aftermarket or modified header +2
- \_\_\_\_\_ 24) Non-OEM/BTM or modified exhaust piping, resonators, or mufflers downstream from the header, exhaust manifold, or turbo.(does not include catalytic converter removal/upgrade) +2
- \_\_\_\_\_ 25) Removal, upgrade, or modification of catalytic converter(s). +1
- \_\_\_\_\_ 26) Non-OEM/BTM sequential (semi-automatic) or dog-ring (non-synchromesh) transmission (includes altered gear ratios) +7 (does not include automatic transmissions utilizing a torque converter)
- \_\_\_\_\_ 27) Upgrade number of forward gears in transmission or altered gear ratios +3
- \_\_\_\_\_ 28) Final drive ratio modification +3 (includes OEM/BTM sport package differentials for cars not listed separately in section 1.2 Base Classing)
- \_\_\_\_\_ 29) Added paddle/electronic shift +3
- \_\_\_\_\_ 30) Added limited slip differential or welded/locked differential +3
- \_\_\_\_\_ 31) Changed or modified limited slip differential (or welded/locked OEM/BTM LSD) +1
- \_\_\_\_\_ 32) Added traction control +3 (no points if proven disabled during competition)
- \_\_\_\_\_ 33) Relocation of engine/transmission between 1 and 10 inches of the OEM/BTM location +7
- \_\_\_\_\_ 34) Modification/upgrade from a fixed to a floating rear axle +3
- \_\_\_\_\_ 35) Modification/upgrade/replacement of flywheel or torque converter with any lightened or non-OEM/BTM part +1 (note: balancing/resurfacing a stock flywheel is still +1)

### ***Total Engine/Drivetrain Modification Points***

## **SUSPENSION/BRAKE/CHASSIS/CAGE POINTS:**

- \_\_\_\_\_ 1) Non-OEM/BTM shocks/struts/dampers with an external reservoir or more than two ranges of adjustment—must still take points for springs below +10 (example: compression (bump) and both high & low rebound adjustments).
- \_\_\_\_\_ 2) Non-OEM/BTM shocks/struts/dampers with a “Piggy Back” external reservoir (fixed reservoir without a connecting hose) OR with shaft diameter 40mm or greater—must still take additional points for the springs +7

- \_\_\_\_\_ 3) Non-OEM/BTM or modified/re-valved shocks/struts/dampers +3 (all others)(springs not included)
- \_\_\_\_\_ 4) Changing the mounting orientation/design of the OEM/BTM shock and/or spring perch in order to invert the shocks/struts (includes non-OEM/BTM inverted shocks/struts) +1
- \_\_\_\_\_ 5) Non-OEM/BTM or modified coil springs, leaf springs/spacers/brackets, or torsion bars +2
- \_\_\_\_\_ 6) Conversion of torsion bar/leaf spring suspension to coil spring and strut/shock suspension +2
- \_\_\_\_\_ 7) Add, replace, remove, or modify anti-roll bars or end links ("sway" bars—front, rear, or both—may have spherical joints on the end links and/or relocation of the mounting points without additional points assessment) +2
- \_\_\_\_\_ 8) Non-OEM/BTM driver/cockpit adjustable sway bar or suspension settings +4
- \_\_\_\_\_ 9) Replace or modify control arms (other than plates, shims, slots, or eccentric bolts/bushings for simple camber/caster adjustment only) or RWD/AWD rear trailing arms (may have spherical/metallic joint for the connection to the spindle/knuckle) +4
- \_\_\_\_\_ 10) Non-OEM/BTM rear control arms on FWD vehicles (for stiffness and wheel alignment only, no change in suspension mount or pick-up points from stock) +1
- \_\_\_\_\_ 11) Non-OEM/BTM rear trailing arms on FWD vehicles (for stiffness only, no change in suspension mount or pick-up points from stock) +1
- \_\_\_\_\_ 12) Using the alternate control arm mounting location on cars equipped OEM/BTM with multiple choices (example: to increase track width) +6
- \_\_\_\_\_ 13) Changing the orientation or design of an OEM/BTM mounting point or pick-up point of a control arm for a panhard bar or trailing arms +1
- \_\_\_\_\_ 14) Replaced or modified K-members that change the location of the lower control arms +8
- \_\_\_\_\_ 15) Tubular K(cross)-members that do not change the location of the lower control arms +2
- \_\_\_\_\_ 16) Relocation of front suspension mounting points +6
- \_\_\_\_\_ 17) Relocation of rear suspension mounting points +6
- \_\_\_\_\_ 18) Bump steer kits or shimming of the steering rack +2
- \_\_\_\_\_ 19) Alteration of ball joints/dive angles +2
- \_\_\_\_\_ 20) Add panhard rod or Watts link (regardless of whether or not the Watts link replaces an OEM/BTM panhard rod or the panhard rod replaces an OEM/BTM Watts link) (may have spherical joints without an additional points) +4
- \_\_\_\_\_ 21) Replace/modify an OEM/BTM panhard rod or Watts link (may have spherical joints without additional points) +2
- \_\_\_\_\_ 22) Add torque arm +4
- \_\_\_\_\_ 23) Replace or modify an OEM/BTM torque arm +2
- \_\_\_\_\_ 24) Metallic and/or spherical-design replacement suspension bushings +3 (except for pillow ball camber plate joints, sway bar end links already assessed points in 7) above, control arm spindle/knuckle joints already assessed points in 9) above, and panhard rod or Watts links already assessed in 20) or 21) above.)
- \_\_\_\_\_ 25) Add front lower stress/arm brace (two attachment points maximum) +1
- \_\_\_\_\_ 26) Add front strut tower bar (two attachment points—bolted in or as component of the cage) +1
- \_\_\_\_\_ 27) Add rear strut tower bar (two attachment points—bolted in or as a component of the cage) +1
- \_\_\_\_\_ 28) Add a third (or more) attachment point to front or rear strut tower bar (or replace an existing OEM/BTM three point bar) +1
- \_\_\_\_\_ 29) Add or modify other chassis stiffening devices or fabricated parts (such as lower strut braces or lower arm braces (with greater than 2 attachment points), subframe connectors, subframe braces, subframe mounts/bushings, etc) +3
- \_\_\_\_\_ 30) Non-OEM/BTM, modified, or relocated brake calipers and/or brake caliper brackets +2
- \_\_\_\_\_ 31) Seam or stitch welding of the body/chassis +5
- \_\_\_\_\_ 32) Increase in track width greater than four (4) inches due to non-OEM/BTM axles, control arms, brake rotors/hats, wheel spacers, hubs, wheel offset, and/or camber adjustment +6
- \_\_\_\_\_ 33) One or more rollcage bars that penetrate the front bulkhead/firewall +2
- \_\_\_\_\_ 34) One or more rollcage bars that are welded to the chassis (directly or with a plate) anywhere farther than 6" from the end of one of the above 6 or 8 listed tubes where it terminates at a plate +2

\_\_\_\_\_ ***Total Suspension/Brake/Chassis/Cage Modification Points***

\_\_\_\_\_ **Grand Total Of All Modification Points (Enter this number on page 1)**

**No-points modifications are listed in the NASA-X Classing document.**