

Northwest Pro4 Truck Series
Current Construction Rules 2024-2026

General

All rules and regulations contained herein shall be in effect for the 2024-2026 race season. If you do not see it in this rulebook, do not do it without contacting the Tech Director. Any addition and/or changes to the Construction Rules may be made by majority vote of the members present at any regular meeting.

1. Approved Trucks:

Any compact truck, e.g., Chevy S10, GMC S15, Ford Ranger, Ford Courier, Dodge D50, Datsun Nissan, Toyota, Mitsubishi, Chevy Luv, Mazda B series, Isuzu, etc. Foreign or American two-wheel drive only. No 4-wheel or front wheel drive trucks. Any other trucks must be approved. Extended cabs or extra cabs allowed. Extended and extra cab trucks must meet rear firewall rules (No cage or seat setback).

2. Bodies:

- a. All trucks are to be brightly painted with contrasting colors. Trucks must be maintained in a neat appearing manner.
- b. Truck numbers must be on both sides of the truck and on the roof. Numbers must be twenty (20) inches tall with a three (3) inch stroke. A minimum of four (4) inch numbers must be placed on the super right corner of the windshield and the upper left corner of the tailgate cover. All numbers are to be neat appearing, in contrasting colors. No taped or spray-painted numbers.
- c. Aftermarket truck racing bodies are allowed. No full-size truck bodies. Bodies to be centered on frame rails.
- d. Steel body panels may be skinned over or replaced with aluminum. Steel body panels may be lightened. Manufactured body panels are subject to Tech approval. No downforce style bodies.
- e. No open tailgates or vents allowed.
- f. Truck Bed may be removed.
- g. Truck box must be covered with fuel cell access.
- h. Rear spoiler may be no wider than the bed of the truck, with a maximum height of 6 inches.
- i. All windshields will be securely mounted with a minimum of two vertical bars. Lexan is highly recommended.
- j. Covering of side windows or any runners/spoilers running down truck bed are not allowed.

3. Engine Setback:

- a. Engine setback is not allowed to exceed the number one spark plug with the upper ball joint.

4. Engines (For Honda/Acura Specific Rules, See Section 9 Below):

- a. OEM Four Cylinder inline single camshaft motors. Any engine in any truck. MAXIMUM 2600CC. No rotary engines allowed.

5. Block:

- a. Must be a mass-produced 4-cylinder by OEM.
- b. Must use OEM Crankshaft for Block used. No aftermarket crankshafts of any kind allowed.
- c. Rods must be steel. No aluminum, titanium or other exotic rods allowed.
- d. Flat top pistons only.
- e. No V-8 or modified blocks
- f. Toyota 22R is allowed with factory pop up piston.

6. Cylinder Head:

- a. Must be mass-produced 4-cylinder by OEM.
- b. Heads may be milled.
- c. No SVO heads. No racing heads allowed.

7.Intake:

- a.Any aftermarket or stock intake manifold for motor used.
- b.No homemade intake.
- c.Stock intakes may be machined, no more than 3 inches between the plenum and carb. ¼ inch allowance for gaskets.
- d.OK to rotate carb. Welding of aftermarket intake allowed to turn carb.

8. Seals/CC:

- a.Engines will be CC'd and Sealed prior to racing***.

Rob Golden is the current seal provider and can be contacted at: **253-861-4399**

9. Honda/Acura Engines Section:

2006-2008 Acura TSX-S K24a2 Engine or Honda JDM K24A equivalent to US Market Engine.

****No other K series engines****

- 1.All internal engine components will remain OEM stock for the engine.
 - a.No Hybrid engine builds (i.e., using different cams in different formats, changing of v-tech cam gears)
 - b.No Porting or modifications to engine in any way.
 - c.Milling of head for head gasket purpose only (must declare the amount removed to tech before reinstalling. This will be monitored for any advantages and may have a weight penalty, subject to the Tech Committee and Board.
 - d.No lightening of internal components
- 2.Stock Oil Pump
- 3.Oil pan may be altered for capacity and frame clearance only. No aftermarket windage trays/plates.
- 4.Intake must remain stock with OEM throttle body (Part # 16400RBBA01).
- 5.Aftermarket Air Filter OK
- 6.Injectors will remain stock OEM.
 - a.No aftermarket injectors
 - b.No altering of injectors from stock CC flow.
- 7.Adapter plate and flywheel can be changed for adapting to transmission.
- 8.Flywheel, clutch, and transmission – follow construction rules.
- 9.Crank pulley will remain stock.
 - a.Alternator and power steering are optional.
 - b.Accessory pulleys can be changed as needed for belt clearance and adjustment.
 - c.The original water pump must be driven off the crank. No electric water pumps.
- 10.Crankcase venting to catch can is permitted. No other altering of factory crank case venting. (i.e., modifying valve cover, etc.)
- 11.Aftermarket or OEM header OK.
- 12.Exhaust – follow construction rules.
- 13.The truck's weight will be minimum 2350 lbs. with the driver.
- 14.Engine control unit will be Link ECU #237-400 only!.
 - a.No other form of engine management permitted.
 - b.ECU must be accessible for tech inspection and monitoring. This includes downloading or uploading.
- 15.The Link ECU will regulate fuel pressure.
- 16.Honda Claimer: \$2,000 Honda motor claimer fee. The claimer items include the block, head, intake, throttle body and injectors. The claimed motor needs to be put into the claimers truck and ran at the next truck race. It cannot be claimed and left to sit in a garage. Claimer is required to pay

\$2,000 cash at the track. Motor is to be removed at track. Claimer is required to pay any fees associated with truck's tow truck driver to pull motor at the track.

Honda Motors Additional Info:

K24 drive by wire works with C6 or BMW pedal or you can use the 60 mm throttle body with cable drive.

Link can lock these setting once we have confirmed tuning. Links states this can be verified remotely.

**Honda tune will be locked so that the motor cannot exceed 8200 RPM's

***Honda engines will not be subject to sealing at this time.

-----End Honda Specific Section-----

10. Carburetor:

- a. Any two-barrel carburetor can be used.
- b. The choke mechanism and choke horn may be removed.
- c. Air cleaners are mandatory.
- d. No side-drafts, blowers, injectors or turbos allowed.

11. Transmission:

- a. Any stock transmission with three, four, or five speeds.
- b. Automatic transmissions must use a torque converter.
- c. No in/out boxes

12. Flywheel and Clutch:

- a. Must use a disk clutch and pressure plate.
- b. No ram style couplers
- c. No direct boxes

13. Scatter Shield:

Scatter shields are mandatory. Must cover clutch and flywheel. Minimum 3/8" belt material.

14. Driveline:

- a. Drivelines are to be painted white.
- b. Drivelines must have a metal strap twelve inches maximum behind from universal joint.

15. Weight: Must be met at all times. All added weight must be painted white.

:: **2150 lbs.** with hydraulic head (tappets) ports must remain untouched in stock condition. No deburring, porting, or polishing.

:: **2250 lbs.** with solid head (tappets) ports must remain untouched in stock condition. No deburring, porting, or polishing.

:: **2350 lbs.** with ported and/or polished heads. Hydraulic or solid head.

:: **2350 lbs. - Roller Cams** Un-porting roller cams allowed – ports must remain untouched in stock condition. No deburring, porting, or polishing.

16. Roll Cage:

- a. Full roll cage made with minimum 1.5" steel tubing .095" wall thickness.
- b. Door bars must be installed (Three on drivers' side and two on passenger side)

- c. The main cage will be of standard roll bar tubing. No square, galvanized, water, gas, etc. tubing allowed.
- d. The right side of cage will not be left of inside frame rail.
- e. The cage must have a minimum of 20 ga. Steel on the outside of driver's side door bars from A pillar to B pillar.
- f. Must have center bar in halo.

17. Firewall and Floor pan:

- a. The firewall and floor pan will be fabricated of 20 gauge or thicker steel.
- b. All holes will be filled.
- c. The entire area surrounding drivers must be steel (no aluminum) from front to rear firewalls.
- d. Rear firewall may be of aluminum construction.
- e. The floor pan to be above top of the frame rail at all points. You may not cut or alter frame in any way for floor pan clearance.
- f. If using any or all of the stock firewall and floor pan, new steel must be welded (no rivets) and approved by Tech.
- g. Rear firewall to be no more than 75 inches from center of upper ball joints. 75 inches applied for extended cabs as well.
- h. Front firewall to be no more than 18 inches from center of upper ball joints.
- i. Drivers must be fully separated from outside and underneath the truck by interior panels. Crush panels may be of aluminum construction.
- j. Cabs of truck must be centered on frame rails.

18. Fuel Cells: Mandatory.

- a. Must be securely fastened in bed of truck between frame rails.
- b. Must be enclosed in a 22 ga. Steel box with top.
- c. Must be at least 12 inches in front of rear bumper, with hoop.
- d. Subject to tech approval.
- e. All trucks equipped with electric fuel pumps are required to have an oil pressure activated cutoff switch. Momentary bypass switch is allowed.

19. Battery:

- a. Must be securely fastened in bed of truck.
- b. Clearly labeled (ON/OFF) switch required on top of bed behind driver.
- c. An additional kill switch will be inside of the cab within reach of the driver while belted in.

20. Minimum Ride Height: Minimum frame height will be 3 ¾" at all times without driver. No lifting or jacking permitted. Drivers are to stay in their trucks until directed to get out by a tech official. There will be ZERO tolerance so adjust accordingly. Trucks found to be below the minimum will be given last place points and money for that event.

19. Suspension Front:

- a. Stock unmodified OEM lower control arms of frame used, mounted in the stock location.
- b. May use aftermarket bushings.
- c. May use aftermarket upper control arms with mounting optional.
- d. Any OEM Spindle allowed. No aftermarket drip spindles.
- e. IMCA stock spec Pinto spindles allowed.
- f. Weights jacks allowed.
- g. Front frame may be cut up to 6 inches back for bumper mounting purposes only.
- h. Any type of rack and pinion, steering box and steering quickeners allowed.

21. Suspension Rear:

- a. Front mount on rear springs to remain in stock location and parallel to frame.
- b. Pan hard rod or watts linkage allowed but must be parallel to axle.

c.No torque or traction devices of any kind allowed.

d. Must use suspension for year and make of truck.

22. Rear Ends: Any rear end allowed.

a. Welding of gears and spooling are permitted.

b. If the rear end is changed it must be remounted with stock component of truck.

c. No traction devices of any kind.

d. No limited slips.

23. Wheel base: Minimum wheel base will be 101 inches.

a. Width: Maximum 74" from outside of wheel to outside of opposite wheel.

24. Springs: : 1 spring per corner. Bump springs allowed.

:: **Front:** You may cut or heat. Aftermarket Springs allowed.

:: **Rear:** No fiberglass leaf springs allowed. Aftermarket leaf springs allowed.

25. Shocks: Any shock at or below \$375 retail value.

26. Sway bar: Any sway bar may be used. Mounting optional.

27. Brakes: Trucks must have all four-wheel brakes in working order.

a. Only stock parts allowed on front spindles.

b. May use aftermarket master cylinder, pedal assembly, and brake bias valves.

c. Aftermarket rear disc brakes are O.K.

28. Exhaust and Muffler:

a. Header may be used.

b. Exhaust to exit behind cab of trucks.

c. All trucks must have a working muffler with sound output no more than 95 db at 100ft.

29. Radiator: Will remain in the front of the engine and have an overflow can, 1 qt minimum. No antifreeze, no glycol-based products.

30. Fire Extinguisher:

a. Securely mounted with in drivers reach 2lb minimum. Fire control system is highly recommended.

b. Every pit must have a fully charged 10lb class B fire extinguisher at all times.

31. Seat:

a. Metal seat and headrest required. Must meet racing specs. Mounted by manufacture's specifications. No homemade, fiberglass, or plastic seats.

b. Seats must be mounted to roll cage.

c. Approved carbon fiber style seats allowed. (Call Tech first)

32. Seat Belts: Three-inch lap and shoulder harness. (5point recommended)

a. Other belt sizes to accommodate head and neck restraints should be to manufacturers specifications.

b. All belts to be mounted to manufacturer's specifications. Belts to be mounted to roll cage.

c. No running shoulder belts up the back of seat.

d. Belts expire 5 years from date of manufacture.

33. Window Net: Window nets are mandatory.

a. Must cover tightly from B pillar to steering wheel with one easy connection at top left.

b. Connection must be clearly marked for easy removal by track officials, and of sturdy construction.

c. Minimum ¾ inch belt material.

34. Tires:

a. Hoosier 700 series only

b. Tire soaking or similar treatment is allowed.

- c. Tech reserves the right to reject any tire they feel is unsafe.
- d. Tire may be grooved for rain and/or dirt races.
- e. Tires will be marked prior to qualifying. You must run the same tires you qualify on, in any points event for that evening. If you need to change a tire for any reason, after qualifying tech approval is required.
- f. If tires are changed after qualifying (ie. from grooved to non-grooved or vice versa) the competitor will start in the back of the race in the appropriate order based on qualifying.

35. Wheels: Approved 13-inch diameter racing wheels of 8 inches maximum width. No aluminum wheels.

356. Fuel: Pump gas, Aviation fuel, and Racing fuel are allowed. No exotic fuels allowed such as alcohol, E85, nitromethane, etc.

37. Radios: Allowed. No driver-to-driver communication during any points event. Racechief required for tracks that use them.

38. Head and Neck Restraint: SFI 38.1 minimum rated Head and Neck Restraint are highly recommended. Minimum of donut style neck helmet support required.

39. Frame: Any new construction, as opposed to crash repair or excessive frame removal of front frame horns shall be subject to a 25 lbs. weight penalty. With weight to be placed in front of the foot box as well as included in the overall weight of the truck.

Disclaimer

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the conditions of all events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury of death to a spectator, participant or official.