

# NCRS 1984 - 1989 Corvette Performance Verification Test

Owner's Name: \_\_\_\_\_ Membership #: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Area Code & Phone: \_\_\_\_\_

Chapter Affiliation \_\_\_\_\_

Location \_\_\_\_\_

Regional Meet     National Convention

Model Year: \_\_\_\_\_ Complete VIN: \_\_\_\_\_ Horsepower: \_\_\_\_\_

Exterior Color: \_\_\_\_\_ Interior Color: \_\_\_\_\_

Coupe                       Convertible

### LIABILITY INSURANCE VERIFICATION (Event Participation Requires Proof of In-force Liability Insurance)

Insurance Company Name: \_\_\_\_\_

Policy Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

**Important:** Prior to beginning test, owner and judge review Judging Reference Manual for test prerequisites and requirements including: Expected component function, seat belt use, engine RPM requirement, single malfunction repair and failure. Conduct test in order listed, circling each pass. Note specific reason for test failure. Conduct test in safe legal manner.

**Verifier is to score by circling "Pass" or "Fail" at right-hand column; one failure terminates test.**

#### PRETEST

Pretest: Owner, Third Flight, Liability Insurance, VIN Plate, Registration, License Plate(s),

Driver's License, Tire Type, Wheel Type ..... Yes      No

Pretest: Cold Engine Check ..... Yes      No

#### THE TEST STARTS NOW—Cold Engine Start & Idle

Pre-start Fluid Leaks ..... Pass      Fail

Automatic Transmission Starter Safety Switch (no cranking in forward & reverse ranges) ..... Pass      Fail

Manual Transmission Starter Interlock (no cranking unless clutch pedal is all the way to floor) ..... Pass      Fail

Start (no excessive cranking) (no starter drag) ..... Pass      Fail

Idle (engine must be cold) ..... Pass      Fail

Verify Engine Cooling Fans 'Off' ..... Pass      Fail

Check for Excessive Engine Belt Squeal (with A/C on & off) ..... Pass      Fail

Exhaust System (no leaks) ..... Pass      Fail

Normal Idle (check for smoke, misfire & noisy lifters) (with A/C on & off) ..... Pass      Fail

#### INTERIOR & EXTERIOR

Windshield Wipers: Speeds, Mist & Delay (check wiper pattern) ..... Pass      Fail

Windshield Washers (check coordination with wipers, even spray, no wiper streaking & shut-off) ..... Pass      Fail

#### *Stop Engine after Washer Test*

Clock (depress volume control to display, ign. off) & Reset - Time ..... Pass      Fail

Interior Courtesy Lamps (underdash & dome) (check door remotes & light switch lamp functions) ..... Pass      Fail

Map Light ..... Pass      Fail

Lighted Vanity Mirror ..... Pass      Fail

Seat Belt Warning Lamp & Chime ..... Pass      Fail

Seat Belt Adjustment & Buckle Function (& locking retractors) ..... Pass      Fail

Seat Track Fore & Aft Manual Adjustments (both seats) & Optional '6-way Power Driver Seat. .... Pass      Fail

|  |      |      |
|--|------|------|
| Seat Back Tilt (latching & release function) (both seats) .....                                      | Pass | Fail |
| Glove Compartment Lock & Latch Function .....  | Pass | Fail |
| Glove Compartment Lamp .....   | Pass | Fail |
| Coupe Luggage Area Storage Compartment Doors Open & Latch Functions .....                            | Pass | Fail |
| Coupe Rear Storage Compartment Lock & Key Function (oval-head key) .....                             | Pass | Fail |
| Coupe Rear Security Shade .....  | Pass | Fail |
| Coupe Rear Hatch Operation .....   | Pass | Fail |
| Inside Door Locks & Door Handle Open & Latch Functions (inside handles inoperative when locked)..... | Pass | Fail |
| Warning Light (off unless fuel supply less than 2 gallons) .....                                     | Pass | Fail |
|  |      |      |
| Generator Indicator Lamp (activate with ignition on, engine off) .....                               | Pass | Fail |
| “Check Engine” light or the “Service Engine Soon” light .....  | Pass | Fail |
| Cigarette Lighter Element (must pop out & glow) .....  | Pass | Fail |
| Ash Tray (door opens & closes smoothly) (tray snaps securely into place) .....                       | Pass | Fail |
| Ignition Switch & Key Function (including accessory position) .....                                  | Pass | Fail |
| Ignition Key Warning Chime (activate by opening left door) .....                                     | Pass | Fail |
| Anti-Theft Ignition & Steering Lock .....  | Pass | Fail |
| Tilt-Telescopic Steering Column .....  | Pass | Fail |
| Inside Rearview Mirror Pivoting & Day/Night Adjustments (must hold position during drive) .....      | Pass | Fail |
| Hood Release & Latching Function (must remain latched during test drive) .....                       | Pass | Fail |
| Underhood Lamps .....  | Pass | Fail |
| Hood Hinges & Support .....  | Pass | Fail |
| Horn Button (check for total horn button circumference contact) .....                                | Pass | Fail |
| Horns (dual horns all years) .....   | Pass | Fail |
| Outside Door Latch Mechanism Open & Close Function (both doors) .....                                | Pass | Fail |
| Outside Door Lock & Key Function (oval key only, both doors) .....                                   | Pass | Fail |
| Door Hinges Operation (left & right) .....   | Pass | Fail |
| Outside Rearview Mirror Adjusting Operation (must maintain position during drive) .....              | Pass | Fail |
| Coupe Removable Roof Panel Latches (check lock & release functions) .....                            | Pass | Fail |
| Coupe Roof Panel Storage Brackets .....  | Pass | Fail |
| Convertible Top Operation (if applicable).....   | Pass | Fail |
| Fuel Filler Door Catch (spring-loaded hinge) & Gas Cap (ratcheting mechanism) .....                  | Pass | Fail |
| Anti-Theft Alarm (check arm/disarm w/oval key; doors, hatch remote switches) .....                   | Pass | Fail |
| Spare Tire Carrier .....   | Pass | Fail |
| Jack & Cranking/Lug Wrench Tool.....   | Pass | Fail |
| Spare Tire Illumination Lamp (activates with interior courtesy lamps) .....                          | Pass | Fail |
|  |      |      |
| <b>DRIVING LAMPS &amp; ACCESSORIES</b>   |      |      |
| RESTART Engine (Optional).....   | Pass | Fail |
| Headlamp Doors .....   | Pass | Fail |
| Low Beam Headlamps .....   | Pass | Fail |
| High Beam Headlamps .....  | Pass | Fail |
| Headlamp Bright Beam Indicator (blue) .....  | Pass | Fail |
| Fog Lamps .....  | Pass | Fail |
| Front Parking Lamps (must use amber bulbs; must operate with headlamps on) .....                     | Pass | Fail |
| Front & Rear Turn Signals (with & without park lamps on) (front side markers must integrate).....    | Pass | Fail |
| Cornering Lamps .....  | Pass | Fail |
| Direction Signal Pilot Indicators (must flash green) (must operate with hazard flasher .....         | Pass | Fail |
| Emergency Hazard Flasher Switch & Lamps .....  | Pass | Fail |
| Brake Lights .....   | Pass | Fail |
| Tail Lights & License Lamp .....   | Pass | Fail |
| Front & Rear Side Marker Lamps (front side markers integrate with turn signals) .....                | Pass | Fail |
| Back-Up Lights .....   | Pass | Fail |

**Cover Windows to Facilitate Interior Light Checks**

|  |      |      |
|--|------|------|
| Instr. Panel Gauge, Radio & Clock Illum. (check light sw. brightness regulator & display dimming)..... | Pass | Fail |
| Console Illumination (auto trans, shift quadrant & heater-A/C control) .....                           | Pass | Fail |

**Uncover Windows**

|   |      |      |
|---|------|------|
| Brake System Warning Light (check using park brake lever) .....                                     | Pass | Fail |
| Park Brake Lever Apply & Release Function .....   | Pass | Fail |
| Radio Volume & Tone Controls (must sound clear with no static) .....                                | Pass | Fail |
| Radio AM-FM- Selector Function .....  | Pass | Fail |
| Radio Display Function (digital readout/AM-FM-indicator) .....                                      | Pass | Fail |
| Stereo Radio Reception Indicator Light & Speaker Balance Control (must play in stereo) .....        | Pass | Fail |
| Stereo Tape Player (cassette) .....   | Pass | Fail |
| Radio Scan & Seek Functions .....   | Pass | Fail |
| Power Antenna (extends with radio on; retracts with radio or ignition off) .....                    | Pass | Fail |
| Heater & A/C Fan Speeds .....   | Pass | Fail |
| Heater & A/C Temperature Control.....   | Pass | Fail |
| Air/De-Ice Control (non-A/C) (airflow from off to floor to windshield defroster duct) .....         | Pass | Fail |
| Air Conditioning System (must blow cold in “norm” & “max” [inside air] positions) .....             | Pass | Fail |
| A/C Air Flow Duct Outlets Positioning (center & outboard) .....                                     | Pass | Fail |
| Coupe & Convertible Hardtop, Rear Window Defogger (timed indicator light & element operation) ..... | Pass | Fail |

**TEN-MILE ROAD TEST**

|  |      |      |
|--|------|------|
| Trip Odometer (reset to “0000” & check operation/accuracy during test drive) End ..... | Pass | Fail |
| Odometer (check operation/accuracy during test) Begin & End .....                      | Pass | Fail |
| Acceleration (check for engine misfire & stumble) .....                                | Pass | Fail |
| Deceleration (check for backfire) .....  | Pass | Fail |
| Cruise Control (if equipped) .....   | Pass | Fail |
| Speedometer .....  | Pass | Fail |
| Tachometer .....   | Pass | Fail |
| Verify “Check Engine” or “Service Engine Soon” light off.....                          | Pass | Fail |
| Oil Pressure (30 to 70 lbs.) .....   | Pass | Fail |
| Oil Temperature .....  | Pass | Fail |
| Engine Coolant Temperature (normal 195-250; 250 max; check for overheating) .....      | Pass | Fail |
| Voltmeter .....  | Pass | Fail |
| Fuel Gauge .....   | Pass | Fail |
| Turbo Boost Gauge (1987, 1988, 1989 B2K only) .....                                    | Pass | Fail |
| Direction Turn Signal Cancel (left & right) .....                                      | Pass | Fail |
| Direction Signal ‘Lane Change’ Function (left & right) .....                           | Pass | Fail |
| Sunshades (move freely & maintain position on test) (vanity mirror lights) .....       | Pass | Fail |

**MANUAL TRANSMISSION**

|   |      |      |
|---|------|------|
| Excessive Noise (including clutch throw-out bearing) .....                                    | Pass | Fail |
| Gear Engagement (no grinding) .....   | Pass | Fail |
| Upshift & Downshift Operation (must be smooth) .....  | Pass | Fail |
| Clutch Action (no slippage) .....   | Pass | Fail |
| Clutch Pedal Adjustment (check for free play) .....   | Pass | Fail |
| Clutch Spin Down Time (disengage clutch, wait 9 seconds, shift to reverse; no grinding) ..... | Pass | Fail |
| Acceleration & Deceleration (no popping out of 2 <sup>nd</sup> & 3 <sup>rd</sup> gears) ..... | Pass | Fail |
| Reverse Gear (reverse lockout) .....  | Pass | Fail |

**AUTOMATIC TRANSMISSION**

|                                 |      |      |
|---------------------------------|------|------|
| Shift Lever Detent Button ..... | Pass | Fail |
| Gear Engagement .....           | Pass | Fail |

|                                      |      |      |
|--------------------------------------|------|------|
| Smooth Shifts .....                  | Pass | Fail |
| Ability to Shift Manually .....      | Pass | Fail |
| Torque Converter Slippage .....      | Pass | Fail |
| Throttle Acceleration Kickdown ..... | Pass | Fail |
| Reverse .....                        | Pass | Fail |

**REAR AXLE**

|  |      |      |
|--|------|------|
| Check for Excessive Axle or Wheel Bearing Noise .....        | Pass | Fail |
| Check for Universal Joint Noise & Driveshaft Vibration ..... | Pass | Fail |
| Check for Positraction Chatter .....                         | Pass | Fail |

**BRAKES**

|   |      |      |
|---|------|------|
| Check for Squeal & Rotor Pulsation .....      | Pass | Fail |
| ABS Brakes.....                               | Pass | Fail |
| Check for Pull to Left or Right .....         | Pass | Fail |
| Check Brake Pedal Travel & Power Assist ..... | Pass | Fail |

**STEERING & HANDLING**

|   |      |      |
|---|------|------|
| Steering Wheel Center .....   | Pass | Fail |
| Tracking Ability (check for left or right wander, account for road crown) ..... | Pass | Fail |
| Ability in Right & Left Turns .....   | Pass | Fail |
| Check for “Shimmy” & Excessive Free Play in Steering Wheel .....                | Pass | Fail |
| Check for Wheel Balance .....   | Pass | Fail |

**GENERAL PERFORMANCE**

|  |      |      |
|--|------|------|
| Check for Excessive Rattles .....  | Pass | Fail |
| Check for General Tightness of Vehicle (does it shake & rattle over bumps, etc.) ..... | Pass | Fail |
| Check for Excessive Wind Drafts Due to Improper Side Window Fit or Top Sealing .....   | Pass | Fail |

**FOLLOWING ROAD TEST**

|   |      |      |
|---|------|------|
| Automatic Transmission Parking Detent (without park brake assist) .....                           | Pass | Fail |
| Automatic Transmission Driveline “Clunk” (shifting from D to R, indicating faulty U-joints) ..... | Pass | Fail |
| Parking Brake Ability (in neutral; hill or slow roll) .....                                       | Pass | Fail |
| Parking Brake Ability (car in gear) .....   | Pass | Fail |
| Power Steering Ability While Stopped (check for excessive pump/belt noise while turning) .....    | Pass | Fail |
| Check for “Dieseling” ( <i>STOP ENGINE</i> ) .....  | Pass | Fail |
| Check Headlamp Remind Buzzer (ign. off, light sw. on, park & headlamps).....                      | Pass | Fail |
| Note Time of Day on Clock Since Initial Check & Notation .....                                    | Pass | Fail |
| Check for Closed Hood.....  | Pass | Fail |
| Check for Engine Oil, Gas, or Coolant Leaks .....   | Pass | Fail |
| Check for Power Steering Pump & Rack & Pinion Leaks .....   | Pass | Fail |
| Check for Brake Master Cylinder Leaks (underhood & underdash) & Wheel Caliper Leaks) .....        | Pass | Fail |
| Check for Transmission Leaks .....  | Pass | Fail |
| Check for Rear Axle Leaks (pinion seal) .....   | Pass | Fail |
| Check ECM (jump terminals A & B to activate trouble code system) .....                            | Pass | Fail |
| Verify No ECM Trouble Codes Stored .....  | Pass | Fail |
| Has Anything Fallen Off or Come Loose? .....  | Pass | Fail |
| Note Any Unusual Occurrences During Test .....  | Pass | Fail |
| Any Necessary Rechecks .....  | Pass | Fail |

**END OF TEST**

Performance Verifier: \_\_\_\_\_ Test: PASS \_\_\_\_\_ FAIL \_\_\_\_\_  
 (Signature) \_\_\_\_\_