

# PERFORM PRE-DELIVERY INSPECTION

After completing this module, you are expected to be capable of:

- Define Pre-Delivery Inspection.
- Enumerate the list of vehicle checklist in a pre-delivery inspection.
- Identify the category of the PDI Checklist for inspecting the vehicle's function.
- Know the importance of pre-delivery inspection.

## Definition of Pre-Delivery Inspection

A Pre-delivery inspection is a conventional approach to ensuring the vehicle is in its best possible condition. It is one important phase in the method of purchasing a new automobile. Throughout the inspection, the dealer analyzes closely in the vehicle's appearance, interior, mechanical, electrical, fluid levels, and any other accessories. To find any possible problems, the car is then given a quick test drive.

Example of Pre-delivery Inspection Checklist:

HONDA Pre-Delivery Inspection Checklist – Cars					
MODEL	YEAR	COLOR	VIN	DATE	TECHNICIAN
KEY CODE	RADIO CODE	NAVI CODE	STOCK NUMBER		
<b>Instructions:</b> Use the appropriate service manual, owner's manual, and service bulletin to do all checks listed here, and mark the <input type="checkbox"/> after each check. Remove cell phones, wristwatches, jewelry, etc., and cover belt buckles to prevent damaging the vehicle.					
<b>Before Starting PDI</b>					
<input type="checkbox"/> Fill up fuel tank; check fuel fill door					
<input type="checkbox"/> Remove exterior protective covering					
<input type="checkbox"/> Do water leak test					
<input type="checkbox"/> Wash vehicle thoroughly					
<input type="checkbox"/> Check paint finish for dents, dings, scratches, blemishes					
Drive onto lift and raise vehicle to a comfortable height to do sections 1, 2, and 3					
<b>1. Vehicle Interior (Part 1)</b>					
<input type="checkbox"/> Release hood and trunk					
<input type="checkbox"/> Check hood latch operation					
<input type="checkbox"/> Remove items from trunk					
<input type="checkbox"/> Remove interior protective plastic					
<input type="checkbox"/> Check sun visors					
<input type="checkbox"/> Install floor mats*					
<input type="checkbox"/> Install interior fuses*					
<input type="checkbox"/> Check child-proof locks					
<input type="checkbox"/> Check trunk pass-through operation*					
<input type="checkbox"/> Check seat belts and operation					
<b>2. Vehicle Exterior (Part 1)</b>					
Walk-around					
<input type="checkbox"/> Check paint finish for dents, dings, scratches, blemishes					
<input type="checkbox"/> Check body fit and alignment					
<input type="checkbox"/> Check hinges, lids, latches (lubrication and operation)					
<b>3. Under-Hood - Engine Cold</b>					
<input type="checkbox"/> Install under-hood fuses					
Check fluid levels					
<input type="checkbox"/> Engine oil					
<input type="checkbox"/> Brake					
<input type="checkbox"/> Clutch					
<input type="checkbox"/> Automatic transmission*					
<input type="checkbox"/> Coolant (level and concentration)					
<input type="checkbox"/> Power steering					
<input type="checkbox"/> Windshield washer; top off					
<input type="checkbox"/> Check battery cables, terminal tightness, and battery charge					
<input type="checkbox"/> Check wing, hose, and hose clamp condition					
<input type="checkbox"/> Check for water hose leaks					
<input type="checkbox"/> Check drive belt tension					
Raise vehicle to full height					
<b>4. Under Vehicle (On-Hoist)</b>					
<input type="checkbox"/> Remove brake covers					
<input type="checkbox"/> Check body panels (low view)					
<input type="checkbox"/> Check tires for defects or damage					
<input type="checkbox"/> Check CV boots					
<input type="checkbox"/> Check brake lines					
<input type="checkbox"/> Check suspension and brakes					
<input type="checkbox"/> Check manual transmission fluid level*					
<input type="checkbox"/> Check rear differential fluid level (50000)					
<input type="checkbox"/> Check for fluid leaks					
<input type="checkbox"/> Check steering gearbox and linkage					
<input type="checkbox"/> Check driveline/axle					
<b>5. Under Vehicle (On-Hoist) cont'd</b>					
<input type="checkbox"/> Check exhaust components					
<input type="checkbox"/> Check clips on fuel lines					
<input type="checkbox"/> Check suspension bolts and torque					
<input type="checkbox"/> Check underbody					
<input type="checkbox"/> Install body plugs; remove spring spacers*					
<input type="checkbox"/> Install front/rear strakes (50000, height)					
<input type="checkbox"/> Install splash guards, chin spoilers*					
<b>6. Vehicle Exterior (Part 2)</b>					
Lower vehicle to half-height					
<input type="checkbox"/> Inspect and adjust tire pressures (see tire placard)					
<input type="checkbox"/> Install license plate holder(s)					
<input type="checkbox"/> Check body fit and alignment					
<input type="checkbox"/> Check paint finish for dents, dings, scratches, blemishes					
Lower vehicle to ground					
<input type="checkbox"/> Install antenna mast*					
<input type="checkbox"/> Inspect wheel nut torque: 80 lb-ft (108 N-m)					
<input type="checkbox"/> Check keys; check keyless remote transmitter operation*					
<input type="checkbox"/> Check security system operation*					
<b>7. Trunk/Axles</b>					
<input type="checkbox"/> Check trunk lock					
<input type="checkbox"/> Check trim appearance and carpet fit					
<input type="checkbox"/> Check trunk light operation					
<input type="checkbox"/> Inspect spare tire pressure and check mounting					
<input type="checkbox"/> Check location of jack and tools					
<input type="checkbox"/> Check emergency trunk opener operation					
<input type="checkbox"/> Install cargo net*					
<b>8. Under-Hood - Engine Idling</b>					
<input type="checkbox"/> Close hood					
<input type="checkbox"/> Cold start engine					
<input type="checkbox"/> Check cooling fan operation					
<input type="checkbox"/> Do idle learn procedure					
<input type="checkbox"/> Indicate IMA battery level gauge (Insight, Civic Hybrid)					
<input type="checkbox"/> Check throttle operation and idle return					
<input type="checkbox"/> Check engine idle speed - A/C on/off*					
<input type="checkbox"/> Check for abnormal noise/vibration, in and out of gear					
<b>9. Vehicle Interior (Part 2)</b>					
<input type="checkbox"/> Check door and trunk latches					
<input type="checkbox"/> Check seat adjustments, and tilt/tilt-coping* (steering column operation)					
<input type="checkbox"/> Install shift lock release cover					
<input type="checkbox"/> Enter nav/radio codes*					
<input type="checkbox"/> Check radio settings/operation					
<input type="checkbox"/> Activate IMA's satellite radio demo service*					
<input type="checkbox"/> Check navigation system*					
<input type="checkbox"/> Check audio system steering wheel controls*					
<input type="checkbox"/> Set clock					
<b>10. Vehicle Interior (Part 2) cont'd</b>					
<input type="checkbox"/> Check blower fan operation					
<input type="checkbox"/> Check heating/AC controls, including modes/fuel controls*					
<input type="checkbox"/> Check seat heater operation*					
<input type="checkbox"/> Check instrument panel brightness and adjustment					
<input type="checkbox"/> Check instrument panel indicators					
<input type="checkbox"/> Check passenger's airbag off indicator*					
<input type="checkbox"/> Check battery level gauge and IMA charge/discharge gauge*					
<input type="checkbox"/> Check mileage displays*					
<input type="checkbox"/> Check exterior lights: headlights, taillights, brake lights, turn indicators, hazard lights, fog lights*, parking, side marker, license plate					
<input type="checkbox"/> Check headlight aim					
<input type="checkbox"/> Check windshield/water* window wipers/washers					
<input type="checkbox"/> Check rear window defogger operation					
<input type="checkbox"/> Check window operation; moonroof; auto up/down*					
<input type="checkbox"/> Check interior lights: ceiling, spotlight (courtesy, glove box, vanity mirror*)					
<input type="checkbox"/> Check fuel gauge					
<input type="checkbox"/> Check temperature gauge					
<input type="checkbox"/> Check outside temperature gauge*					
<input type="checkbox"/> Check HomeLink transceiver*					
<input type="checkbox"/> Check horn					
<input type="checkbox"/> Check power mirror operation*					
<input type="checkbox"/> Check accessory power sockets					
<input type="checkbox"/> Check beverage holder operation					
<input type="checkbox"/> Place glove box materials in glove box					
<input type="checkbox"/> Check interior cleanliness					
<b>11. Road Test</b>					
<input type="checkbox"/> Initialize navigation system*					
<input type="checkbox"/> Check engine performance under all driving conditions					
<input type="checkbox"/> Check IMA performance, ch/glass/it*					
<input type="checkbox"/> Check automatic transmission operation*					
<input type="checkbox"/> Check M/T clutch operation and shift smoothness*					
<input type="checkbox"/> Verify shift lock-out and key interlock					
<input type="checkbox"/> Check brake pedal free play and parking brake adjustment					
<input type="checkbox"/> Verify steering wheel is centered and free from vibration (tire balance)					
<input type="checkbox"/> Verify vehicle tracks straight					
<input type="checkbox"/> Check for abnormal noise/vibration, wind noise					
<input type="checkbox"/> Check for squeaks and rattles					
<input type="checkbox"/> Check gauges, speedometer, check tachometer*					
<input type="checkbox"/> Check cruise control operation*					
<input type="checkbox"/> Check climate control system/AC operation*					
<b>12. Final Inspection</b>					
<input type="checkbox"/> Wash and clean vehicle prior to customer delivery					
<input type="checkbox"/> *if applicable					

Source: Prezi.com

A pre-delivery inspection involves an extensive evaluation of the vehicle. All issues are recorded and immediately fixed once the external structure is evaluated for condition, panel, and attachment installation. The internal structure of the car is also examined, including the state and positioning of panels and other components. Documentation of errors is pertinent in this stage. After starting the engine and bringing it up to normal operating temperature, the manufacturer's guidelines must be adhered to to make any necessary changes and assess the fluid levels, leaks, and component tightness.

All vehicle's key components will be extensively inspected during pre-delivery inspection (PDI) tests, however, the exact process may differ depending on the manufacturer. According to Team Ackodrive, here are some of the list of inspections of the vehicle:

### **Car Exterior's PDI Checklist**

- To allow for a thorough examination of the outside, park the vehicle in an open, well-lit place throughout the day.
- Examine the car's exterior thoroughly for any dents, scratches, or other body markings.
- Inspect several areas of the external appearance to find any flaws or discrepancies in the paint finish.
- Make sure all the doors lock securely and operate smoothly by opening and locking them.
- Verify that the boot lid and hood open and close smoothly.
- Verify that the engine bay is clear of debris, corrosion, and grime.
- Examine the underside of the bonnet for any cracked or damaged plastic parts, twisted cables, or indications of oil leaks.
- Make sure the spare wheel and tire are in perfect condition.
- Examine the boot to make sure the electrical cords are intact and free of cuts or patches, look for any broken or damaged plastic components, and look for a jack, spanner, and OEM-provided tools.
- Check all window glass for damage, and look for scratches or cracks on the front and rear windshields.
- Verify that the tires are brand new, have enough tread depth, and are in good condition. Make that the tire pressure is also in line with the suggested limits from the manufacturer.

### **Car Interior's PDI Checklist**

- Look closely for any scratches, defects, or indications of damage on the dashboard, seats, and door panels.
- Make sure the interior satisfies high standards of quality by assessing its overall fit and finish.
- Verify the glove box's smooth opening and closing by testing it.
- Look for any stains or discolorations on the front and rear seats, the carpets, and the mats.
- Check the cabin for signs of water entry by lifting the rugs or matting.
- Examine each window's functionality, paying special attention to power windows, to make sure they roll up and down smoothly.

- Inspect the door seals and roof liner for any wear, damage, or cracks.

### **Car's Electrical Components' PDI Checklist**

- To evaluate its performance, start the engine and turn on the air conditioner. Make sure the cabin cools rapidly and effectively.
- Look for any debris or dust accumulation in the AC vents and listen for any odd smells emanating from the air.
- To make sure everything is working correctly, test the infotainment or music system, including all connectors, control buttons, and speakers.
- Check to make sure the wipers and horn are functioning properly.
- Verify that every light is functioning properly by looking at the headlights, taillights, indicator lights, fog lights, and interior lights.
- Examine the battery by opening the bonnet. Verify that the connections are tight and check the terminals for indications of rust. Request the battery warranty paperwork in addition to your records.

### **Car's Crucial Fluids PDI Checklist**

- To physically check the engine oil level, open the bonnet and take out the dipstick. Additionally, check the reading on the dashboard if the car has a digital engine oil gauge.
- Verify that the coolant level in the coolant reservoir tank is within the range suggested by the manufacturer. It ought to be in the middle between the "minimum" and "maximum" markers.
- Verify that the power steering and brake fluid levels are within the proper range and sufficient.
- Make sure the washing fluid is optimally supplied by checking the reservoir of the windscreen washer.

### **Car's Test Drive PDI Checklist**

- To guarantee seamless operation, test the car's brakes and acceleration. When pressing the brakes, there shouldn't be any strange noises or jerking when accelerating.
- Make sure the vehicle stays on course when the steering wheel is momentarily disengaged. It is necessary to change the wheel alignment if it sways to one side. (This test should only be conducted when it is safe to do so.)
- While driving, pay attention to any strange sounds coming from the chassis or suspension.
- Verify that the clutch, brake, and accelerator pedals all work properly and without any problems.
- Verify that the gearbox runs smoothly and that the gear lever shifts as it should. Make sure the handbrake engages and releases smoothly by testing it as well.



### **Car's Safety Inspection**

From the book of Erjavec, J. (2019), the pre-delivery inspection involves the following safety inspection of specific car parts/systems:

#### **Windshield and Glass**

- Inspect for cloudiness, distortion, or vision obstructions.
- Check for cracks, scratches, or broken glass.
- Verify the condition of window tinting.
- Test the operation of the front door glass.

#### **Windshield Wipers and Washer**

- Confirm wipers are in good operating condition.
- Check the condition of the wiper blades.

#### **Windshield Defroster**

- Ensure the defroster is functioning properly.

#### **Mirrors**

- Verify the rigidity of mirror mountings.
- Check the reflecting surface for clarity.
- Ensure a clear view of the road behind.

#### **Horn**

- Test electrical connections, mounting, and horn button.
- Confirm the horn emits a sound audible from 200 feet.

## **Driver's Seat**

- Check for secure anchorage.
- Inspect the seat's location and condition.

## **Seat Belts**

- Ensure all seat belts are in good condition.

## **Headlights**

- Verify the headlights' type, aim, and output.
- Check the wiring and switch condition.
- Test the beam indicator operation.

## **Other Lights**

- Test all lamps for proper operation.
- Verify lens color and condition.
- Check the aim of fog and driving lamps.

## **Signal Devices**

- Ensure indicators function correctly (visual or audible).
- Verify illumination, lens color, and lens condition.

## **Front Doors**

- Test handles for functionality from both inside and outside.
- Verify the latching system secures the door properly.

## **Hood**

- Confirm the hood latch operates smoothly.

## **Fluids**

- Check all fluid levels to ensure they meet specifications.

## **Belts and Hoses**

- Inspect belts for proper tension and wear.
- Check hoses for damage or leaks.

## **Pollution Control System**

- Ensure the emissions system is present and functional.
- Verify no parts are removed, disconnected, or inoperative.

## **Battery**

- Check for proper anchorage.
- Inspect connections for looseness or damage.

## **Fuel System**

- Verify all components are securely fastened.
- Check for liquid fuel leaks.
- Confirm the presence of a fuel tank filler cap.

## **Exhaust System**

- Inspect for damage to the exhaust manifold, gaskets, pipes, and mufflers.
- Check for gas leaks from the engine to the discharge point.

## **Steering and Suspension**

- Test for play in the steering wheel.
- Check bushings, kingpins, ball joints, wheel bearings, and tie-rod ends for wear.
- Inspect the gearbox, drag link, and steering arm for looseness.
- Verify wheel and axle alignment.
- Look for broken spring leaves, worn shackles, or damaged shock absorbers.
- Inspect for a broken frame or missing engine mounts.
- Check the condition of lift blocks.

## **Floor Pan**

- Check for holes that allow exhaust gases to enter the cabin.
- Inspect for hazards to vehicle occupants.

## **Brakes**

- Look for worn, damaged, or missing brake components.
- Inspect linings, drums, disc pads, and discs for wear or contamination.
- Verify fluid levels and check for leaks.
- Test pedal play for proper adjustment.

## **Parking Brake**

- Confirm proper adjustment and functionality.

## **Tires, Wheels, and Rims**

- Verify tires are properly inflated.
- Check for loose or missing lug nuts.
- Inspect tire condition, including tread depth.
- Ensure tires are not a mix of radials and bias-ply types.

- Inspect wheels for cracks or damage that could affect safe operation.

## **Significance of Pre-Delivery Inspection**

Pre-delivery inspection (PDI) is an essential procedure for reducing production line delays, avoiding reoccurring problems, and guaranteeing the efficacy of corrective measures. Given its importance in product assurance and control, it is imperative to comprehend and adhere to the PDI process. The PDI provides a last chance to ensure that products are adequately produced in compliance with requirements and permits a last quality control inspection before shipment.

## **Wrap Up**

Before a car is given to a customer, a Pre-Delivery Inspection (PDI) is a crucial procedure used by auto mechanics to ensure that it is secure, completely operational, and up to standard. This involves making sure the doors, bonnet, and boot open and close smoothly and checking the outside for dents, scratches, or uneven paint. The dashboard, seats, seat belts, and windows are among the interior parts that are inspected for damage and tested to ensure they are operating properly. Along with checking the levels of all the fluids—engine oil, coolant, brake, power steering, and windshield washer—the engine bay is examined for any leaks, corrosion, or rust.

The PDI also includes a driving test to evaluate the vehicle's performance, including alignment, suspension, braking, acceleration, and the seamless working of the handbrake, pedals, and gearbox. Tests are performed to ensure that electrical components including lights, the infotainment system, air conditioning, and wipers operate as intended. Signs of water seepage, odd sounds, or smells are dealt with. By ensuring that the vehicle is in top condition, this comprehensive inspection upholds industry standards while offering the client safety, dependability, and satisfaction.

## References:

Bhardwaj, Y. (2024, August 2). How to perform a pre-delivery inspection (PDI) of a car. Spinny Post; Spinny. <https://www.spinny.com/blog/how-to-perform-a-pre-delivery-inspection-pdi-of-a-car/>

Crouse, W. H., & Anglin, D. L. (1993). *Automotive Mechanics* (10th ed.). Glencoe Division of Macmillan/McGraw-Hill School Publishing Company.

Erjavec, J. (2019). *Automotive Technology: A Systems Approach* (7th ed.). Cengage Learning US. <https://bookshelf.vitalsource.com/books/9798214337982>

Radaideh, H. (2016, July 18). Pre Delivery Inspection (PDI). Prezi.com. <https://prezi.com/k0dzobp2ruqs/pre-delivery-inspection-pdi/>

Team Ackodrive. (2021, July 16). Pre-delivery Inspection (PDI) Checklist For New Cars. AckoDrive. <https://ackodrive.com/car-guide/pre-delivery-inspection-checklist-for-new-cars/>

What is a Pre-Delivery Inspection? - Private Fleet Car Broker. (2016). Private Fleet Car Broker. <https://doi.org/1072303087/oL89CJv9peMBEO-XqP8D>