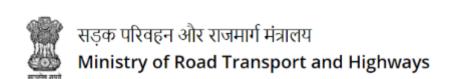
Vehicle Fitness Testing at Automated Testing Stations (ATS)

Guidelines for Vehicle Owners





Preface

The Voluntary Vehicle-Fleet Modernization Program (V-VMP) policy was launched by Ministry of Road Transport and Highways (MoRTH) aimed at creating an eco-system for phasing out of unfit and polluting vehicles in an eco-friendly manner. To enable successful implementation of this policy, a network of Automated Testing Stations (ATS) and Registered Vehicle Scrapping Facilities (RVSF) is being established nationwide.

In this context, MoRTH has developed this "Vehicle Fitness Testing at ATS" booklet summarizing ATS related information for all ecosystem stakeholders – vehicle owners, ATS operators etc. This booklets aims to provide comprehensive guidance as follows:

Overview of ATS

- Introduction to ATS
- Key advantages of testing at ATS

Fitness Testing Process at ATS

- Testing frequency and associated fees for testing at ATS
- Appointment booking process for ATS
- Process flow for vehicle testing at ATS

Description of Fitness Tests conducted at ATS

ATS FAQs

We trust this booklet shall serve as a ready reckoner and valuable resource guiding citizens to understand, utilize and take advantage of ATS services helping contribute to safer roads and a cleaner environment. In case of any gueries/clarifications, Please feel free to reach out sot-rth@nic.in (MoRTH Section Office).

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Glossary

Term	Description
ATS	Automated Testing Station; facility for conducting fitness test of vehicles using automated machines
Transport Vehicle	Vehicles used for transport of goods or passengers, such as public service vehicle, goods carriage or bus; commercial vehicles
Non-Transport Vehicle	Vehicles used for personal use; private vehicles
BS norms	Emissions standards followed by India are denoted as "Bharat Stage" suffixed by a number (II / III / IV / VI)
RVSF	Registered Vehicle Scrapping Facility; conduct scrapping of vehicles in an eco-friendly manner
AFMS	Automated Fitness Management System (portal - https://vahan.parivahan.gov.in/AFMS)
CMVR	Central Motor Vehicle Rules, 1989
MV Act	Motor Vehicle Act, 1988
RTO	Road Transport Office
MVI	Motor Vehicle Inspector; officer appointed by State Government to conduct vehicle fitness testing at RTOs
ELV	End of Life Vehicle; vehicles which are beyond repair and not eligible to ply on roads
RFID	Radio Frequency Identification (form of wireless communication)
Functional Test	Vehicle Fitness test which evaluates the functional capability of vehicle part or sub-system using machines
Visual Test	Vehicle Fitness test which evaluates the vehicle part or subsystem using the naked eye
GVW	Gross Vehicle Weight (Including load weight when stationary)

Glossary

Term	Description
OBD	On Board Diagnostics; Electric Control Unit inside of a vehicle that tracks and regulates its performance
MIL	Malfunction Indicator Lamp (Check engine light)
ECU	Electronic Control Unit; controls the electrical systems in a vehicle
AIS	Automotive Industry Standards (Technical automotive standards for India)
IS	Indian Standard (Standards established and published by BIS)
BIS	Bureau of Indian Standard (National Standard Body of India)
dB	Decibel – Measure of sound level
ABS	Anti-lock braking system
RUPD	Rear under run protection device are barriers or plates below the back of trucks; prevents smaller vehicles from becoming lodged underneath the truck or trailer in the event of a rear-end collision
LUPD	Lateral under run protection device are barriers or plates between axles of trucks; prevent road users from falling under the rear wheels of trucks
Type I bus	Medium and high-capacity vehicles with seated & standing passengers aimed at urban/sub-urban & cities
Mini bus	Low-capacity bus with seating capacity between 13 to 22 passengers
Midi bus	Medium capacity buses with seating capacity between 23 to 34 passengers
NDX bus	Non-Deluxe Bus (Designed for basic minimum comfort level)
G-lock of seatbelt	Locking mechanism of the seatbelt in 4-wheeler

Unfit vehicles
which are old and
in poor condition
cause more
pollution and pose
a risk to
passenger and
road safety

Road Safety



Vehicles which are **not maintained properly** are an **environmental and safety hazard** to society.

- Improper functioning of key vehicle components such as brakes, exhaust and steering increases the risk of road accidents and may cause injuries to passengers and road users
- Vehicle owners have a duty to ensure that their vehicles are regularly maintained and undergo mandatory fitness test

Regular fitness tests of vehicles helps ensure compliance with all safety norms and guidelines

Air Pollution



Older vehicles cause more **air pollution** than newer vehicles which must comply with more **stringent emission norms**.

- Total emissions from one old truck (manufactured in 2005-2010 as per BS II / BS III norms) are 6 times higher than new trucks (manufactured after 2020 as per BS VI norms)
- Total emissions from one old car (manufactured in 2005-2010 as per BS II / BS III norms) are 2.6 times higher than new cars (manufactured after 2020 as per BS VI norms)

Regular fitness tests of vehicles helps to identify such polluting vehicles

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Introduction to Automated Testing Stations (ATS) under Vehicle Scrapping Policy or V-VMP

Background of vehicle fitness testing

- As per Section 56 of The Motor Vehicles Act, 1988, a transport vehicle shall not be deemed to be validly registered unless it carries a certificate of fitness issued by the prescribed authority or by an Automated Testing Station (ATS) as per rules made by the Central Government. As per Section 39 of The Motor Vehicles Act, 1988, a vehicle is not permitted to be driven unless it is registered.
- For non-transport vehicles, fitness certificate on basis of fitness test is required at time of renewal of registration certificate (Form 25 as per CMVR, 1989).

Introduction to ATS

- Automated Testing Station (ATS) is a facility for testing fitness of vehicles without manual intervention. Citizens can get their vehicles tested at any ATS across the country and obtain a fitness certificate from them. This certificate is valid pan-India.
- Ministry of Road Transport and Highways (MoRTH) has released rules for vehicle fitness testing at ATS vide GSR 652 (E) dt. 23 Sep 2021 and its amendments vide GSR 797 (E) and GSR 195 (E).
- From 1st Oct 2024, it shall be **mandatory for all commercial vehicles** to get their fitness test completed from ATS only.

This booklet aims to **summarize information** as per The Motor Vehicles Act, 1988 and The Central Motor Vehicles Rules, 1989 **for fitness testing at ATS** in an easy-to-understand manner.

Automated Testing Stations (ATSs) improve the process of vehicle fitness testing and provide benefits to citizens



Automated and scientific testing

ATSs use latest equipment to conduct fitness testing of vehicles in an automatic and scientific manner



Increased transparency

Machine-based testing brings more transparency and objectiveness, and avoids discretion in manual testing at RTO level by Motor Vehicle Inspectors (MVI)



Integrity of results

ATSs maintain recordings of visual checks, conceal / mask individual test results till final report and undergo regular audits every 6 months



IT driven processes

Online portal (AFMS) for ATSs to update holidays, available slots, view bookings and upload test report and certificate; citizens can book fitness test slot, view result and download fitness certificate. The portal is seamlessly linked to RTOs and Vahan

system

The **vehicle fitness tests** which were conducted manually at RTOs will now be conducted at ATSs as per Indian standards through automated testing equipment

Frequency of renewing fitness of vehicles depends upon the vehicle category; non-renewal of fitness may lead to penalties

Commercial Vehicles (CVs)



- Registration of vehicles is linked to validity of the fitness certificate
- CVs undergo fitness test every 2 years for first 8 years and annually thereafter

Private Vehicles (PVs)



- Initial registration is valid for 15 years
- Valid fitness certificate is necessary for renewal of registration after 15 years. Renewal is valid for 5 years

Penalties for vehicle plying with invalid fitness certificate

- As registration of vehicle is linked to fitness, a vehicle without valid fitness is essentially without valid registration
- Driving a vehicle without registration is an offence, and attracts following fines as per Section 192 of The MV Act, 1988:
 - Up to Rs. 5,000 for first time offence
 - Up to Rs. 10,000 or one year of imprisonment for subsequent offence
- Presently, in districts having operational ATS, fitness test of commercial vehicles must be conducted at ATS
- 1st October 2024 onwards, fitness testing of all commercial vehicles must be conducted at ATS only

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Fees for conducting fitness test and granting or renewing certificate of fitness

As per Rule 81 of The Central Motor Vehicles Rules, 1989, vehicle owners are required to pay following fees related to vehicle fitness

- Fees for conducting fitness test of a vehicle
 - This is payable to authorized testing station. The fees varies for manual fitness test (at RTOs) and automated fitness test (at ATS).
- Fees for grant or renewal of certificate of fitness for vehicles

 This is payable towards issuing the fitness certificate after a fitness test is conducted.
- Penalty in case of delay in renewal of fitness

 States to impose penalty for each day of delay after expiry of certificate of fitness
- State-specific fees
 In some States, additional fee is also levied to cover the cost of automation and technology utilized for conducting tests or providing value added services.



Automated fitness testing fee and fitness certificate fee for Transport vehicles

- Fees for automated fitness test and fitness certificate can be paid online while booking a fitness test slot.
- Only automated fitness testing fee is payable at the time of re-test.

Automated Fitness Testing Fee for transport vehicles (fee for fitness report only; separate fee for fitness certificate)

Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	400	500
Three wheelers	600	1000
Light Motor Vehicle	600	1000
Medium Motor Vehicle	1000	1300
Heavy Motor Vehicle	1000	1500

Fees for grant of fitness certificate for transport vehicles (fees for government)

Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	200	1,000
Three wheelers	200	3,500
Light Motor Vehicle	200	7,500
Medium Motor Vehicle	200	10,000
Heavy Motor Vehicle	200	12,500



Manual fitness testing and fitness certificate fee for Transport vehicles

 Fees for manual fitness test and fitness certificate is paid offline at RTO

1st October 2024 onwards, fitness testing of all commercial vehicles must be conducted at ATS only

Manual Fitness Testing Fee for transport vehicles (fee for fitness report only; separate fee for fitness certificate)

Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	200	400
Three wheelers	400	800
Light Motor Vehicle	400	800
Medium Motor Vehicle	600	800
Heavy Motor Vehicle	600	1000

Fees for grant of fitness certificate for transport vehicles (fees for government)

Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	200	1,000
Three wheelers	200	3,500
Light Motor Vehicle	200	7,500
Medium Motor Vehicle	200	10,000
Heavy Motor Vehicle	200	12,500



Automated fitness testing and fitness certificate fee for Non-transport vehicles

- Fees for automated fitness test and fitness certificate can be paid online while booking a fitness test slot
- Only fitness testing fee is payable at time of re-test

Automated Fitness Testing Fee for Non-transport vehicles (fee for fitness report only; separate fee for fitness certificate)

Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	400	500
Three wheelers	600	1000
Light Motor Vehicle	600	1000

Fees for grant of fitness certificate for Non-transport vehicles (fees for government)

Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	200	1,000
Three wheelers	200	3,500
Light Motor Vehicle	200	7,500



Manual fitness testing and fitness certificate fee for Non-transport vehicles

 The fees for manual fitness test and fitness certificate is paid offline at RTO

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Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	200	400
Three wheelers	400	800
Light Motor Vehicle	400	800

Fees for grant of fitness certificate for Non-transport vehicles (fees for government)

Vehicle category	Vehicles <15 years (In Rs.)	Vehicles >15 years (In Rs.)
Two wheelers	200	1,000
Three wheelers	200	3,500
Light Motor Vehicle	200	7,500

Vehicle owners must book a fitness test online (in advance or onthe-spot) and keep important documents available

Appointment for fitness test can be booked only through AFMS portal (Automated Fitness Management System)

Citizens can also walk-in to an ATS and book a test on-the-spot on AFMS portal; ATS shall facilitate the booking process

Link to AFMS portal – https://vahan.parivahan.gov.in/AFMS

Steps involved in booking vehicle fitness test through AFMS portal are given on next page. A detailed user manual is available on the website

Link to user manual – https://vahan.parivahan.gov.in/AFMS/#/faq

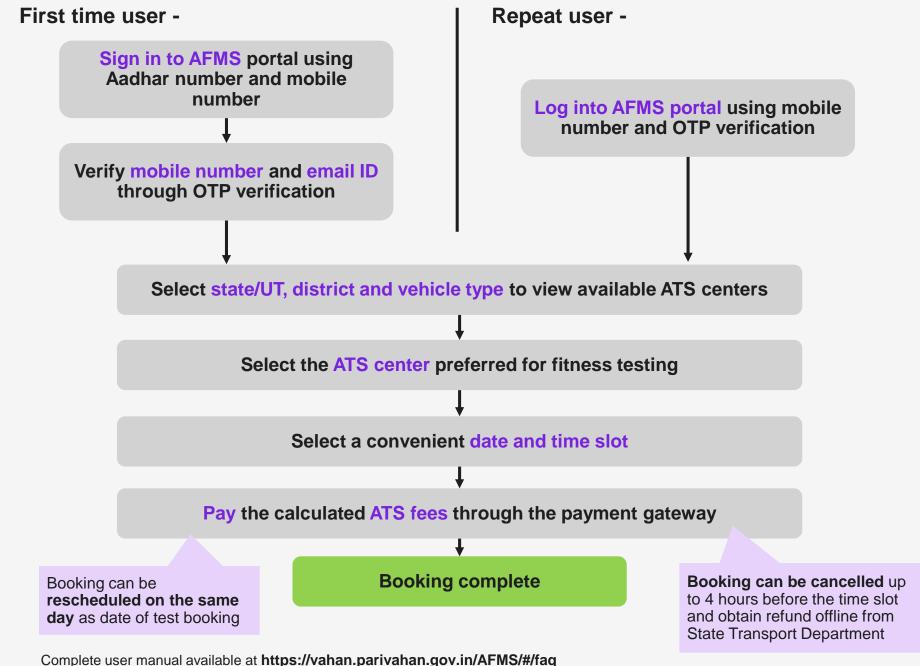
Following documents/ information are required during fitness testing:

- Registration Certificate
 (RC) of vehicle along
 with Form 25 of CMVR
 (as applicable)
- Valid Insurance
 Certificate
- Last valid Permit (as applicable)
- Mobile number and Email ID of the registered owner/ authorized signatory

- Vehicle owners can book fitness test up to 60 days prior to expiry of fitness
- New fitness certificate is valid from date of test or expiry of old fitness,
 whichever is later

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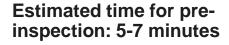
Steps involved in booking vehicle fitness test at an **ATS** through **AFMS** portal





Process flow of fitness testing at ATS

Pre-inspection



Exact process may vary for different ATSs



- Vehicle enters ATS facility at the booked time slot
- Vehicle documents are checked by ATS





- Authorized driver at ATS takes the vehicle from the owner
- Vehicle number plate is scanned and registration number is verified using NPR camera



 Photographs of vehicle and its chassis and engine number shall be captured by GPS-enabled camera, stored securely and uploaded along with the test report on AFMS



Token is created in the system and vehicle is sent for visual testing in the designated area

During inspectionVisual Tests

Estimated time: 8-10 minutes

Visual Tests



- Visual tests are performed by ATS staff in the designated bay area under CCTV surveillance.
- Photographs of visual tests are captured and stored by ATS for at least 6 months for audit purposes.

List of visual tests¹

- 1. Headlamps assembly
- 2. Lights
- 3. Suppressor cap/ High tension cable
- 4. Rear view mirrors
- 5. Safety glass (windscreen)
- 6. Horn
- 7. Silencer
- 8. Windscreen wiper
- 9. Dashboard equipment
- 10. Breaking system
- 11. Joint Play Test
- 12. Speedometer
- 13. Rear under run protection device (RUPD)
- Lateral under run protection device (LUPD)
- 15. FASTag

- 16. Priority Seats (only for buses)
- 17. Wheel Chair (only for buses)
- 18. Vehicle Location Tracking (VLT) device
- 19. High Security Registration Plate (HSRP)
- 20. Battery
- 21. Safety belt (seatbelt)
- 22. Speed Governor
- 23. Spray suppression devices
- 24. Tyres
- 25. Retro-reflector and reflective tapes
- 26. Protection against electric shock (for EVs only)
- 27. State of Charge (SOC) Indicator (for EVs only)
- 28. Malfunction indicator lamp MIL (part of OBD scan tool)

Process flow of fitness testing at ATS

During inspectionFunctional Tests

Estimated time for testing: 8-12 minutes for LMV and 10-14 minutes for HMV

Functional Tests



- Vehicle is taken inside the facility to perform functional tests in the lane across 3 stations.
- All test results are masked on the test lane with encrypted data and test report is generated automatically after completion of test

Station 1 Station 2 Station 3 Under body visual **Emission test** Side slip test inspection using axle Front and rear Horn test play detector suspension test Exhaust noise test Steering angle test Service brake & Speedometer test Headlamp test parking brake test Speed governor test

The actual tests in each station may vary as ATS operator is free to choose a different combination of tests to be conducted at each station in a lane, depending on layout of lanes and throughput.

Testing procedures for **Trailers and Semi-Trailers** at ATS –

- **Trailer bodies** can be measured and **verified visually** (e.g., dimensions, fitment of RUPD, LUPD, etc.) before entering the test lane.
- Pullers are required to meet the test threshold and obtain pass result for all applicable tests as specified in ATS Rules.



Typical site plan and block diagram for

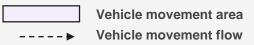
Illustrative site plan and block diagram

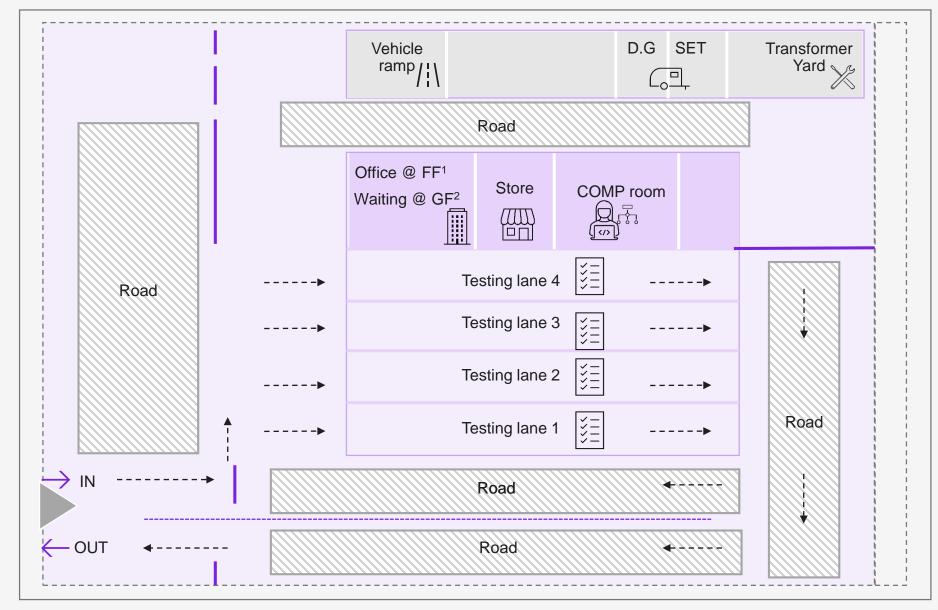
Min. dimensions of test lane, as per ATS rules:

Minimum Dimensions of a Test Lane (in m)	2- Wheeler	3- Wheeler and Light Motor Vehicle	Medium and Heavy Motor Vehicle
Length	15	32	32
Width	5	7	7
Minimum length for turning at entrance	3	10	18
Minimum length for turning at exit	3	10	18

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A typical ATS has demarcated lanes for testing and designated areas for office, storage, computer room





1. FF- First floor, 2- GF- Ground floor Source: Ministry of Road Transport and Highways RT-25004/01/2017-RS



Process flow of fitness testing at ATS

Post-inspection



Vehicle is taken to the **parking bay** by the ATS lane driver



ATS **test report is generated** & stored in ATS server automatically within few minutes



- ATS test report and fitness certificate are issued and handed over to the customer duly signed digitally by the authorized person
- The documents are also uploaded on AFMS portal and can be viewed online by vehicle owners
- Fitness status of the vehicle is updated in Vahan

Each vehicle must undergo three types of tests at an ATS

There are 3 types of tests depending on the severity and impact on vehicle fitness status



Information only tests

- These tests are only for information purpose and provide information regarding health of the vehicle.
- Failing an information only test does not impact vehicle fitness status.



Status unfit upon failure tests

- These tests are important for smooth running of the vehicle.
- If a vehicle fails any of these tests, it will be **declared as Unfit**. The certificate of fitness will not be renewed, and the vehicle cannot ply on roads until it passes all failed tests at the time of re-test.



ELV (end-of-life vehicle) tests

- These tests are critical for road safety of all road users and smooth running of the vehicle.
- If a vehicle fails any of these tests, it will be declared Unfit. The
 certificate of fitness will not be renewed, and the vehicle cannot ply on
 road. In case the vehicle is not tested within 180 days from the date of
 previous test (excluding the date of test), the vehicle shall be declared
 as End-of-Life Vehicle (ELV) and flagged in Vahan as ELV.



Description of Fitness Tests – Information only Tests

For 3-wheelers and above

Test Name	Test Overview	Reference Images
Side Slip Test (Except 3 wheelers)	 Assesses the vehicle's ability to maintain stability while turning. It helps identify issues related to vehicle's wheel alignment, tyres and suspension. Process followed: Vehicle is driven in a straight line passing over the side slip tester plate. The sideslip tester measures the distance in meters over which a wheel of an axle is dragged sideways, when the other wheel of that axle runs straight for one kilometer. Testing equipment gathers data on the vehicle's lateral movements and stability characteristics and sends it to the central ATS server. 	
Suspension Test (only for 4 wheelers having GVW less than 3.5 tons)	 Measures significant difference between suspension system efficiency of left and right side of vehicle. Process followed: Vehicle is driven in a straight line on the test plate and brought to rest. The test plate vibrates at a set frequency for a fixed time period when the wheel is stationary. Suspension play of both right and left side of an axle is analyzed and differences are noted. 	



Description of Fitness Tests – Information only Tests

For 3-wheelers and above

Test Name	Test Overview	Reference Images
Joint Play Test	 A used car often shows wear and tear in ball joints, brushings, fixations, pivot points and shock absorber mountings. This test enables technician to detect play and wear in wheel guiding, steering and suspension components. Process followed: Vehicle is positioned on the testing platform. Controlled force or movement is applied to the specific joints of steering and suspension components being tested. Maximum movement under max load condition as specified is recorded. Visual data recorded is sent to the ATS central server. 	EICH!
Speedometer Test	Visually inspected for speedometer fitment, indicator illumination, dial cover condition, indicator needle condition. During testing on speedometer tester, vehicle is driven at specified speed on rollers & the actual speed of the vehicle is measured by speedometer tester.	



Description of Fitness Tests – Information only Tests

Test Name	Test Overview	Reference Images
Malfunction Indicator Lamp - MIL (part of OBD Scan Tool)	Identifies any malfunction in the vehicle system. If MIL is "On", it indicates the fault in any sensor/ critical safety component/ emission circuit discontinuity/ any other critical parameters. Process followed: The OBD scan tool is connected to the ECU of the vehicle dashboard. Any issues in the ECU system are highlighted on the tool indicating an error in that part of the system.	3 RPMx1000 5 2 CHECK 7



Test Name	Test Overview	Reference Images
Headlamp Assembly	 Visual inspection to check the following: Working of headlamp bulb and operating switch. Opacity of lamp lens (lens should not be broken, painted with colour or pasted with stickers). No moisture deposition on the inside surface of the lens. 	



Test Name	Test Overview	Reference Images
(a) Top Lights (b) Stop Lights (c) Parking Lights (d) Fog Lamp (if fitted) (e) Warning Lights (in Ambulance) (f) Number Plate Lights (g) End-Outline (h) Marker Lamps (i) Direction Indicators (j) Hazard Warning Signal lamp	 Visual inspection to check the following: Colored lens (should not be faded) Lens condition (should not be broken) Lamp working and condition (well illuminating) Stop lights must be working on actuation of brakes For the lamps with dual coloured lens, red lens should be oriented towards rear and white lens towards front No moisture deposition on the inside surface of the lens Lamps must be fitted securely Use of white light for illuminating number plate Flashing light emitted from direction indicators and hazard warning signal lamp must be amber in colour 	



Test Name	Test Overview	Reference Images
Suppressor cap/ High Tension cable	Visual inspection to check insulation and proper terminal connection of high-tension cables and condition of the suppressor caps.	Rushed mix
Rear View Mirrors	Visual inspection of mirror transparency and fitment according to vehicle class (as per AIS 002).	
Safety Glass (Windscreen)	 Visual inspection to check the following (as per Rule 100, IS:2553 - Part 2, and BIS license marking): Windscreen glass is transparent Bears clear and indelible markings such as "LW" or "II" or IV or II/P in addition to manufacturer's logo No damage, cracks and colored films on the glass 	



Test Name	Test Overview	Reference Images
Horn	 Visual inspection of horn fitment, functioning of horn, and check for presence of any unduly harsh, shrill, loud and alarming noise. Functional test to measure sound pressure levels of horn to comply with decibel levels as specified in IS: 15796 Process Followed Vehicle is positioned in the designated testing area Sound level meter is positioned at a specified distance from the vehicle's horn. Vehicle's horn is activated to record the noise level Data is recorded and sent to ATS central server 	
Silencer Test (a) Silencer (b) Exhaust Noise Test (dB)	 Visual inspection of silencer fitment, leakages and damages (rust, wear & tear). Inspection of exhaust noise is conducted at stationary phase as per IS10399:1998 	



Test Name	Test Overview	Reference Images
Windscreen Wiper (a) Windscreen Wiper Blades (b) Windscreen Wiper System	 (a) Visual inspection of wiper fitment working condition and wear and tear damages. (b) Functional inspection of wiper to observe operation of each wiper arm (to cover maximum area of the windscreen); in case of split type windscreen (other than three- wheelers), inspection for each windscreen wiper is conducted to observe its functioning Process Followed: Vehicle is positioned in the designated testing area Vehicle's engine is off but the electrical systems, including the wipers, are operable. Wipers are activated and their ability to effectively clear water from the windshield is assessed, ensuring adequate visibility. Various speed settings of the wipers (if applicable) are tested to evaluate their performance at different speeds. 	



Test Name	Test Overview	Reference Images
Dashboard Equipment	 Visual inspection of following: Dashboard fitment, mounting and illumination Insulation of wires Warning lights for ABS, lights, brake system, battery, OBD/engine malfunction, fuel label engine oil pressure, engine coolant temperature. 	BI-R
Braking System (b) Parking Brakes	 Measure the force exerted by the parking brake system to hold the vehicle stationary. Process followed – Parking Brakes: Rear axle of the vehicle is positioned on the roller brake tester. The rollers rotate the vehicle wheels at pre-defined speed. Parking brake is applied to stop the rollers. The engine is kept on during testing. Amount of force exerted by the parking brake system to hold the vehicle stationary using the testing equipment is measured and sent to the ATS central server. 	



Test Name	Test Overview	Reference Images
Rear under run protection device (RUPD) for goods vehicles and trailers with GVW more than 3.5 tons	Visual inspection of Rear Under run Protection Device fitment, condition (corrosion/damages/wear and tear), sufficient ground clearance and dimensions as per IS-14812-2005.	
Lateral under run protection device (LUPD) for goods vehicles and trailers with GVW more than 3.5 tons	Visual inspection of Lateral Under run Protection Device fitment, condition (corrosion/damages/wear and tear), sufficient ground clearance and dimensions as per IS-14682-2004.	
FASTag	Visual inspection of placement of FASTag on the front windscreen and condition of the FASTag.	



Test Name	Test Overview	Reference Images
Priority Seats, Signs, securing of crutches/canes/ walker, hand-rail/ stanchions, controls at priority seats for differently abled passengers and passengers with reduced mobility (only for buses)	 Visual inspection test parameters: Visibility of the pictogram (in case of priority seats of buses) in front nearside of the bus and adjacent to relevant service door(s) Pictogram placed internally adjacent to the priority seat Passenger seats designated as priority seats for persons with disabilities. (Type I buses shall have at least two passenger seats in case of Mini and Midi buses and four passenger seats in case of other buses) Forward-facing type priority seats and preferably be located behind the driver's seat Appropriate facility for securing the crutches, canes, walkers etc. to facilitate convenient travel for persons with disabilities. Handrails or stanchions at the entrance of all Type I buses. Controls adjacent to priority seats for requesting stops and which alert the driver that a mobility aid user wishes to disembark for all Type I NDX buses. Communication devices placed adjacent to any priority seat. 	



Test Name	Test Overview	Reference Images
Wheel chair entry/ housing/ locking arrangement for wheel chair for differently abled passengers and passengers with reduced mobility	 Visual inspection test parameters: Pictogram visibility for the wheelchair both on the front nearside of the bus and adjacent to relevant service door(s) Placement of the pictograms shall be adjacent to each wheelchair space indicating whether the wheelchair is to be positioned facing the front or the rear of the bus. Presence of wheel-chair restraint system. Sufficient space available for the wheelchair user to maneuver without the assistance of a person. Type I vehicles to accommodate at least one wheelchair. Placement of Communication devices for identified wheelchair area. 	
Vehicle Location Tracking (VLT) Device	Visual inspection of installation of Vehicle Location Tracking device and working condition of emergency alarm button	



Test Name	Test Overview	Reference Images
High Security Registration Plate (HSRP)	Visual inspection of fitment and condition of High Security Registration Plates installed at the front & rear of the vehicle	FICH ER
Battery	Visual inspection test parameters • Secured mounting • Ensure no leakage • Ensure top is clean, dry, free of dirt and grime	



Test Name	Test Overview	Reference Images
Safety belt (Seatbelt)	Visual inspection of safety belt on following parameters is conducted - • Mandatory safety belts shall be available and securely fitted • Safety belts shall not be damaged • Safety belt anchorage shall not be loose • Seatbelt reminder system, if available, should be functioning • G-lock of seatbelt should be functioning	



Test Name	Test Overview	Reference Images
Speed Governor	Visual inspection of speed governor for secure and sealed fitment, connection of wirings of speed governor is conducted. Functional inspection measures the vehicle speed while the speed governor is activated. The vehicle speed should be well contained within the specified limits mentioned below: • 80 kmph for goods and passenger vehicles having at least 4 wheels manufactured on or after 1st Oct 2015 • 60 kmph for other transport vehicles manufactured on or after 1st October 2015 that are dumpers, tankers, school buses, those carrying hazardous goods or any other specified category of vehicles. Process Followed • Vehicle is positioned on the testing platform • Speed governor is activated by adjusting settings or through vehicle's control panel. • Testing equipment is connected. • Vehicle's speed is recorded using the testing equipment while the speed governor is activated. • Recorded data on vehicle's speed readings obtained and sent to ATS server.	



Test Name	Test Overview	
Spray Suppression Devices	Visual inspection is conducted of spray suppression devices to ensure its secure fitment. Spray suppression devices include mudguards, mudflaps, rain flaps and valances to reduce pulverization of water thrown upwards by the tyres of vehicle in motion.	



Test Name	Test Overview	
Times	 Visual inspection of tyres is conducted to check the following specifications - Tyres shall not have any serious damage (patched or repaired by an outside gaiter patch other than a vulcanized repair) or cut Tyres should have minimum non-skid depth as per specifications, and must not be too smooth 	
Tyres	 Tyres shall be properly inflated Tyres shall not show signs of incipient failure by local deformation or swelling Tyre casing fabric shall not be exposed due to wear of the tread or by any unvulcanised cut or abrasion in any of its parts Temporary spare wheel or tyre puncture repair kit shall be available 	



Test Name	Test Overview	
Retro- Reflector and reflective tapes	 (A) Reflectors Visual inspection of reflector fitment, physical condition (cleanliness / damages / scratches), color (as per rule 104 i.e., red colour to the rear or white to the front) is conducted. (B) Reflective Tapes Visual inspection of reflective tapes, location where tapes are pasted, physical condition (cleanliness / damages / scratches), visibility of the marks on the outside of the material, size and color (as per rule 104) is conducted. 	



For Two-wheelers (2W) only

Test Name	Test Overview	Reference Images
Braking system	 Measures the braking force required to stop the vehicle. Procedure followed: Front axle of the vehicle is positioned on the roller brake tester The rollers rotate the vehicle's wheel at pre-defined speed Brakes are applied to stop the rollers Maximum brake force required to stop the wheel is measured by the equipment Same steps are repeated for rear axle Service Brake efficiency of a vehicle measured as per AIS 128 	
State of Charge (SOC) Indicator on Dashboard	Visual inspection to check that manufacturer supplied SOC indicator is in working condition and clearly displays charging status of battery	10:10 AM 10:



For petrol, diesel and CNG vehicles (3-wheelers and above)

Test Name	Test Overview	Reference Images
Braking System (a) Service Brakes	 Measures the braking force required to stop the vehicle. Procedure followed: Front axle of the vehicle is positioned on the roller brake tester The rollers rotate the vehicle wheels at pre-defined speed Brakes are applied to stop the rollers Maximum brake force required to stop each wheel is measured by the equipment Same steps are repeated for rear axle 	
Steering Gear	 Measures the steer play and back-lash in the steering gear of the vehicle. Process followed: Position the vehicle on turn table plates of electronic steering play detector & keep the engine on. Ensure the wheels are straight and the steering wheel is centered. Movement of the wheel against the steering movement is recorded. 	ELSTROWC THYRANG GLAD ALP STICCON DOG STOT



Exhaust gas emission test a, b, c, d, is applicable only in case of non-diesel vehicles (3-wheelers and above)

Test Name	Test Overview	Reference Images
Exhaust Test (1/2) (a) Exhaust gas emission – CO% (b) Exhaust gas emission – HC (ppm) (c) Exhaust gas emission (High idle emission) – CO% (d) Exhaust Gas Emission (High idle emission) – Lambda	 Measures the idle and running exhaust emission of a vehicle. Process followed: The vehicle is placed in a designated testing area and allowed to idle while connected to an emissions testing machine. The emissions testing equipment is connected to the vehicle's exhaust pipe to measure the emissions produced during idling. This test measures the concentration of pollutants emitted while the vehicle is stationary, and the engine is running at idle and high idle (as applicable). 	



Exhaust gas emission test (e) Smoke density test is applicable only in case of diesel vehicles (3-wheelers and above)

Test Name	Test Overview	Reference Images
Exhaust Test (2/2) (Performed only in case of diesel vehicles) (e) Smoke Density (Free Acceleration test applicable for Diesel vehicles)	 Measures the smoke density of the vehicle. Process followed: The free acceleration test carried out using smoke meter (opacimeter). Three times flushing by free acceleration is undertaken with or without the sampling probe in the vehicle exhaust, and average maximum rpm of the flushing is recorded. Thereafter, with sample probe inserted in vehicle exhaust during each free acceleration, maximum no load rpm reached shall be within the bandwidth of ±500 rpm of the average value for 3-wheeled vehicles and ±300 rpm of average value for all other categories of vehicles. The free acceleration test is repeated minimum three times. The smoke density to be recorded shall be arithmetic mean of these three readings. In case the smoke density recorded is not within the limits then, the test may be repeated with engine oil temperature measured by a probe in the oil level dipstick tube to be at least 60°C Provided that the above test shall not be carried out if the On-Board Diagnostic (OBD) Malfunction Indication Lamp (MIL) of BS-IV or BS-VI vehicle (as applicable) is noticed to be in switched on condition after starting of engine and in such cases, the vehicle shall be re-submitted for the above test after repair or servicing. 	



Exhaust gas emission test (e) Smoke density test is applicable only in case of diesel vehicles (3-wheelers and above)

Test Name	Test Overview	Reference Images
Headlamp Test - Dipped Beam	 Measure the deviation of headlamp beam from the centerline both vertically and horizontally. Process followed: Headlight of the vehicle is positioned parallel to the headlamp tester. Beam projection angle of the headlight is tested against the machine. Readings are recorded and sent to the central ATS server directly. 	



For Two-wheelers (2W) only

Test Name	Test Overview	Reference Images
Headlight	Measure the deviation of headlamp beam from the centerline both vertically and horizontally. Process followed: Headlight of the vehicle is positioned parallel to the headlamp tester. Beam projection angle of the headlight is tested against the machine. Readings are recorded and sent to the central ATS server directly.	



For Two-wheelers (2W) only

Test Name	Test Overview	Reference Images
Emission (a) Exhaust gas emission – CO% (b) Exhaust gas emission – HC (ppm) (c) Exhaust gas emission (High idle emission) – CO% (d) Exhaust Gas Emission (High idle emission) – Lambda	 Measures the idle and running exhaust emission of a vehicle. Process followed: The vehicle is placed in a designated testing area and allowed to idle while connected to an emissions testing machine. The emissions testing equipment is connected to the vehicle's exhaust pipe to measure the emissions produced during idling. This test measures the concentration of pollutants emitted while the vehicle is stationary, and the engine is running at idle and high idle (as applicable). 	



For electric vehicles (EV) & hybrid-electric power train vehicles and electric two-wheelers

Test Name	Test Overview
Protection against electric shock test (if system voltage is >60 V DC or 30 V AC)	 Identifies residue voltage difference which could lead to electrical shocks. The test kit contains a digital meter with voltage function, finger bender test probe and a neutral test probe. Process followed: Both the test probes are connected to the digital voltage meter which is connected to a power source. The neutral probe is attached to the electrical chassis (neutral point) while the finger bender probe is put in contact with different points on the electric vehicle to ensure that there is no residue voltage difference or shock. If the test fails, the light lamp on the digital meter will light up along with beeping sound.
Insulation Resistance Measurement Test (If system voltage is >60 V DC or 30 V AC)	Measures insulation resistance value at different points in the vehicle. The test kit contains a digital reading device similar to multimeters used for electrical equipment along with 2 probes. Process followed: The neutral probe needs to be attached to the ground while the other tester probe is put in contact near the battery, cables, engine and other important points to ensure that insulation resistance value is greater than 500 Ohm/V



For electric vehicles only

Test Name	Test Overview	Reference Images
Speedometer Test (for E- rickshaw or E- cart)	 Measures the maximum speed of the vehicle (must not be more than 25 km/hr) Process followed: The vehicle shall be driven in unladen condition (with full charge and at full accelerator position) on straight, flat road or roller When the vehicle attains full speed, the maximum speed shall be calculated by measuring time taken to travel fixed distance (viz 50 metres) 	## 19979 1945 3 ton 1970 29

Overview of fitness test report and fitness certificate

Physical copy of the fitness test report (Form 69) and fitness certificate (Form 38 / Form 25) is provided to the vehicle owner at the ATS after test completion

Fitness test report generated by ATS

The test report includes the following:

- ATS name and details
- Date and time of the test; overall result
- Vehicle details Registration number,
 Type, Make and Model
- Date of calibration of each equipment on which tests are conducted
- Inspection results:
 - Measured values of functional tests along with result (pass / fail)
 - Observation for visual tests along with result (pass / fail)
- Geo-tagged photographs of vehicle, chassis and engine number

View fitness certificate and status

Data of tests conducted, and reports uploaded on AFMS portal is **integrated** with VAHAN portal

- Citizens can view test results,
 download fitness certificates from AFMS portal.
- The fitness status is updated and can be viewed on other VAHAN applications such as mParivahan, VAHAN citizen services, e-challan and RTO portal.

Vehicle owners must check the following:

- All details mentioned above are captured accurately in the fitness test report
- Fitness test report and fitness certificate are visible on AFMS portal
- Updated fitness status is reflecting correctly in other Vahan applications (after 1 hour of uploading status on AFMS)

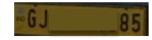


Sample Fitness Test Report (1/2)





Form 69
[See rule 181 (7)]



FORM FOR VEHICLE TEST REPORT

Lat.: 72.945351 /Lon.: 23.603160

General Details of Automated Testing Station								
Registration No.	RTO	Location District	State	Operating Agency Name		Date Of Test (DD-MM-YYYY)	Time Of Test	Test Status
FINAL ATO 14		14.CAB			0.1000004044600	16/04/2024	18:04:14	Initial Test

Due Date of Fitness Test/Retest 15/05/2024

	Details of Vehicle									
Registratio n No.	Vehicle Class	Make	Model	Chassis Nunber	Engine Number	Fuel Type	Emission Norms	Speed Governer No.	GVW(KG)	Year of mfg.
5	Goods Carrier (LGV)	TATA MOTOR S LTD	TATA ACE HT BS3	MAT4450 56DVA08 176	275IDI06 AWYS220 84	Diesel	BHARAT III		1550	2013

1.Automated Equipment Calibration Details

#	Equipment Name	Equipment ID	Calibration Frequency	Calibration Due On
1	Roller Brake Tester - LD	2301004	12 Months	31/05/2024
2	Diesel Smoke Meter-LD	2023/NEC/03-138	4 Months	29/05/2024
3	Gas Analyser-LD	2023/NEC/03-138	4 Months	29/05/2024
4	Sound Meter-LD	221222575	12 Months	31/05/2024
5	Speedo Meter-LD	2301031	12 Months	31/05/2024
6	Suspension Tester-LD	2301020	12 Months	31/05/2024
7	Steering Play Detector-LD	2301075	12 Months	31/05/2024
8	Side Slip Tester-LD	2301015	12 Months	31/05/2024
9	Joint Play Detector-LD	2301035	NA	NA
10	Axle Weight Measurement	2301004	12 Months	31/05/2024
11	Head Light Tester-LD	1656	12 Months	31/05/2024
12	Mulfunctional Indicator Lamp-MIL (part of OBD Scan Tool)	968190094542	NA	NA
13	Test Finger	2023/NAM/TF10	NA	NA

2.Inspection Result

SIN	lo.	Name of Test	As per rule 189 table D	Applicable YES/NO	Values/	Result P-PASS F-Fail
Par	tA:	Automated Tests Defining ELV or Fitness				
1	(a)	Left headlamp dipped beam vertical deviation(%)	1(a)	YES	-1.45	Р

Overall Results: FAIL Token: 100000083606 Operator Name: Page No. 1

1	(b)	Right headlamp dipped beam vertical deviation (%)	1(b)	YES	-1.36	Р
	(a)	Exhaust gas emissionCO %	11(a)	NO	N/A	N/A
	(b)	Exhaust gas emissionHC (ppm)	11(b)	NO	N/A	N/A
2	(c)	Exhaust gas emission(high idle emission)CO%	11(c)	NO	N/A	N/A
	(d)	Exhaust gas emission(high idle emission)Lambda λ	11(d)(iv)	NO	N/A	N/A
	(e)	Smoke density (m-1)	11(e)	YES	5.9470	F
3		Service brake efficiency (%)	12(a)	YES	52.7	Р
4		Steering gear free play (°)	13	YES	48.0	F
Par	tB:	Automated Tests Defining Fitness				
	5	Speed Governer(KMPH)	27	YES	52.0	Р
Par	t C :	Automated Tests Addition information about he	alth of th	e vehicle		
6	6	Side Slip Test	14	YES	-2	N/A
7	7	Suspension Test	15	Not Applicable		N/A
8	3	Joint Play Test	16	YES	RECORDED	N/A
ç	9	Parking Brake efficeincy (%)	12(b)	YES	28.4	N/A
1	0	Speedometer Test	17(a)	YES	25.0	N/A
Par	t D :	Non-Automated Tests (for electric vehicles(EV) & Defining ELV or Fitness	hybrid-el	ectric power	train vehicles	5)
1	1	Protection againt electric shock (for electric & hybrid-electric power train vehicles only if system voltage is >60V DC or 30V AC)	31	NO		N/A
1:	2	Insulation Resistence Measurement Test (for electric & hybrid-electric power train vehicles only if system voltage is >60V DC or 30V AC)	32	NO		N/A
Part	E:1	Non-Automated Tests Defining Fitness				
1	3	Headlamp Assembly	2	YES	OK	Р
1	4	Lights	3	YES	ОК	Р
1	5	Suppressor Cap / High tension cable	4	YES	OK	Р
10	6	Rear view mirrors	5	YES	OK	Р
1	7	Safety Glass (Windscreen)	6	YES	OK	Р
1	8	HORN	7	YES	OK	Р
19	9	Silencer	8 (a)	YES	OK	Р
20)(a)	Windscreen wiper blades	9 (a)	YES	OK	Р
20)(b)	Windscreen wiper system	9 (b)	YES	OK	Р

Token: 100000083606

Operator Name:

Page No. 2

Overall Results: FAIL



Sample Fitness Test Report (2/2)

21	Dashboard equipment	10	YES	ОК	Р
22	Rear under run protection device (RUPD) For N2,N3,T3 and T4	18	YES	ок	Р
23	Lateral under run device (LUPD) For N2,N3,T3 and T4	19	YES	ок	Р
24	FAST tag	20	YES	OK	Р
25	Priority seats, Signs, Securing of cruches/canes/walkers handrail/stanchions, controls at priority seats for differently abled passengers and passangers with reduced mobility (Only for Buses)	21	NO	N/A	N/A
26	Wheel chair arrangements for differently abled passengers and passangeres with reduced mobility (Only for Buses)	22	NO	N/A	N/A
27	Vehicle Location Tracking (VLT) Device	23	YES	ОК	Р
28	High Security Registration Plate (HSRP)	24	YES	ОК	Р
29	Battery	25	YES	ОК	Р
30	Safety Belt (Seat Belt)	26	YES	OK	Р
31	Spray Suppression Devices (for all N, T3 and T4)	28	YES	ОК	Р
32	Tyres	29	YES	OK	Р
33	Retro-Reflectors and reflective tapes	30	YES	ОК	Р
34	State of Charges (SOC) indicator on Dashboard (For Electric Vehicles)	33	NO	N/A	N/A
Part F :	Non-Automated Tests Addition information abo	ut health	of the vehicl	е	
35	Malfunction Indicator Lamp- MIL Part of OBD Scan Tool	39	YES	ОК	Р
36	Exhaust Noise Test (dB)	8(b)	YES	88.6	N/A
18	HORN(dB)	7	YES	102.2	Р

3.Overall Results : FAIL

4.Summary (Issues Identified):

EMISSION DISQUALIFICATION

5.Inspection Photos (to be Uploaded):







Left front 45 degree photo

Overall Results: FAIL

Right rear 45 degrees photo

Operator Name:

Token: 100000083606

Chassis Number Photo

Page No. 3



Engine Number Photo

6.Inspecting officer notes:

Signature:

Digitally For: M I Signed			

Overall Results: FAIL Token: 100000083606 Operator Name: Page No. 4



Sample Certificate of Fitness

FORM 38

[See. rule 62 (1)]

CERTIFICATE OF FITNESS

(APPLICABLE IN THE CASE OF TRANSPORT VEHICLES ONLY)

Vehicle No is certified Motor Vehicles Act, 1988, and the rules material on 16/07/2025. Date:- 17/07/2023. Time:- 04:30 PM.	as complying with the provisions of the de thereunder. The certificate will expire
	Signature and designation of holder of the letter of authority of the Authorised Automated Testing Station.
The certificate of fitness is hereby renewed : From	



Key situations after a failed fitness test

- Vehicle owner can apply for multiple re-tests on failing status unfit tests or failing ELV tests (re-test available only within 180 days from date of last test)
- Full fee is payable for each re-test

Failing a Status Unfit test

 If a vehicle fails any status unfit test, it will be declared unfit and cannot ply on roads.

During the re-test,

- If a vehicles passes all status unfit upon failure and ELV tests, then it will be declared Fit
- If a vehicle fails any status unfit upon failure test only it will be declared as Unfit and cannot ply on roads. However, it can apply for multiple retests.
- If a vehicle fails any ELV test, it cannot ply on road.

Failing an ELV test

 If a vehicle fails any ELV test, it is declared unfit for first 180 days but cannot ply on roads.

During the re-test,

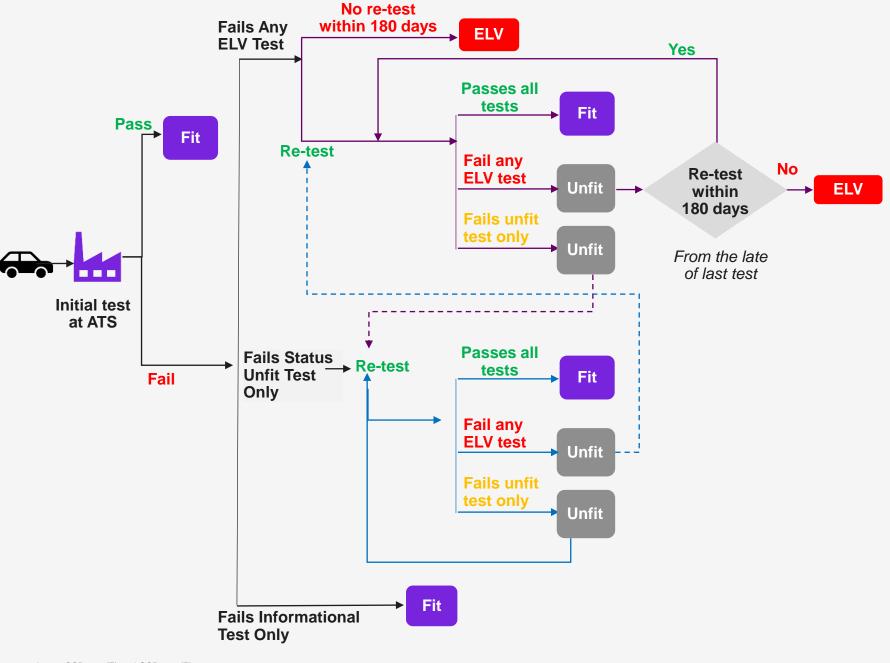
- If vehicle passes all tests in the re-test, it will be declared as Fit.
- If vehicle fails status unfit upon failure test only, it will be declared Unfit and cannot ply on roads. However, it can apply for multiple retests.
- If the vehicle fails any ELV test within 180 days from date of last test, it will be declared Unfit and cannot ply on roads. However, it can apply for multiple re-tests.
- If the vehicle which has failed an ELV test does not complete a re-test within 180 days from date of last test, it will be declared as ELV and can not apply or a re-test, except under special circumstances.



11

Process flow for re-test of vehicle fitness testing at ATS facility

Test can be conducted multiple times by paying applicable fees each time





About fitness testing

1 Why should I get my vehicle's fitness test done?

As per Section 56 of The Motor Vehicles Act, 1988, it is compulsory for all vehicles to have a valid fitness certificate. In case a vehicle is not fit, it will not be deemed to be validly registered, and cannot be driven on road.

2 When should I get my vehicle's fitness done?

For commercial (transport) vehicles, fitness test is required every 2 years for first 8 years, and annually thereafter. For private (non-transport) vehicles, fitness test is required at the time of renewal of certificate of registration, i.e., after 15 years.

- What will happen if I forget to get my vehicle fitness certificate renewed?

 If your fitness certificate is expired, please visit AFMS website

 (https://vahan.parivahan.gov.in/AFMS) or your nearest ATS to book your fitness test.
- 4 Is there a fine for driving a vehicle without a fitness certificate?

Driving a vehicle without fitness is treated same as driving a vehicle without valid registration. This attracts fines up to Rs. 5,000 for first time offence and up to Rs. 10,000 or one year of imprisonment for subsequent offence



Finding an ATS

1 Which are the available ATS centers in my area where I can test the fitness of my vehicle?

Please visit https://vahan.parivahan.gov.in/AFMS and enter the state, district and vehicle type details to view all ATS centers available in your area for your vehicle. Additionally, the entire list of available ATS centres is also available in the same link

- 2 How will I get to know the exact address of the test center?

 The complete address of the ATS center along with the timings are visible on https://vahan.parivahan.gov.in/AFMS
- 3 How can I get in touch with the ATS operator?
 You can contact the ATS using the phone number available on AFMS portal
 - Where can I get tested?

 Fitness test for your vehicle can be conducted in any ATS center in the country irrespective of the state of vehicle registration.



Booking a test slot

1 Is online test slot booking mandatory?

Yes, as per Rule 181 of CMVR, 1989, it is mandatory to book your fitness test slot at an ATS through the online website. This helps to avoid over-crowding and promotes transparency. In case you fail to book a slot in advance, you can also walk-in at an ATS and they can help you book on-the-spot for the given hour depending upon availability.

- 2 How early should I book the test?

 Fitness tests can be conducted up to 60 days before expiry of current fitness certificate.
- I forgot to book a slot but have arrived at the ATS. Can I book a test slot immediately? Fitness tests for any particular time slot can be booked till the end of that time slot. For example, you can book a slot for 4-5 pm time slot even at 4:55 pm on the same day.
- 4 Can I cancel or reschedule a booked slot?

Booked fitness test slots can be cancelled up to 4 hours in advance. The refund for the online payment made must be obtained offline from the State Transport Department. Booked slots can be rescheduled on same day at the same ATS up to two times. No additional fees is required for rescheduling.



After getting fitness test

1 How long will the result generation take?

The fitness test results are generated immediately after the test is completed at the ATS center. The fitness test report and certificate are uploaded on AFMS portal by the ATS.

2 How long will it take for the fitness results to be reflected in the tolls/traffic police devices?

Latest fitness status is updated on all Vahan services within 1 hour of uploading data on AFMS portal.

3 What happens if I fail any test – can I re-test my vehicle?

Yes, vehicle which fails a fitness test can be re-tested provided certain conditions are met. The complete retest procedure has been detailed <u>here</u>.

4 When is the next fitness test due?

The due-date for the next fitness test is mentioned on the fitness test report generated by the ATS center.

Thank you