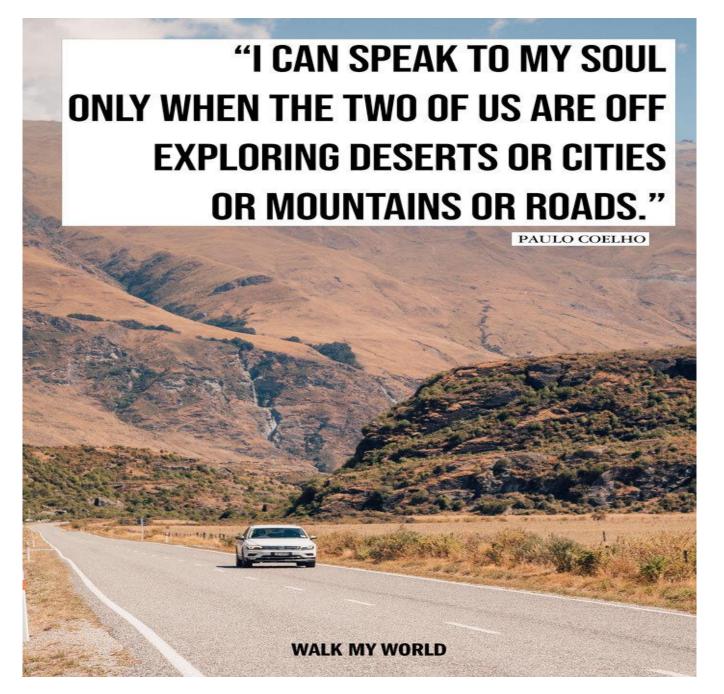
Hill Driving: A Matter of Road Safety

"To move, to breathe, to fly, to float, to gain all while you give, to roam the roads of lands remote, to travel is to live."

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Abstract- There is nothing better than a drive through the hills to take in the beauty offered by nature and bask in its serenity. As enjoyable as this exercise is though, one needs to make sure it is done in a safe fashion so as not to spoil the experience. Despite the deceptive serenity of the hills, the path is usually hazardous, especially during the monsoon. Here are a few safety tips on what to expect and how to remain safe during such a journey. Hill starts in a manual car takes patience and practice

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The only thing preventing your automobile from rolling backward is the engine's braking force, and even that force is gone if you're using a clutch. Gravity begins to pull you back down the hill, directly at the bumper of the automobile in front of you.

If you live in an area with hills, this function will be necessary. But, unless you intend to drive exclusively on flat roads, you will ultimately have to perform a hill start – it is an acknowledged part of regular driving.

The hill start is part of the practical driving test as well. Your examiner will request that you pull over to the side of the road and then pull away again, including standard roadside stops, pulling out from behind a parked car, and a hill start. Additionally, you may be required to conduct an emergency stop.

When learning how to drive a car, two things are essential. First, you need to understand how to change gears properly. Doing that will provide you with better control over the car. Furthermore, when learning how to drive a car, you also need to understand how to choose the right gear for different road conditions.

Generally, the automatic transmission has five gears in all; one reverse gear and four forward gears. As for most manual cars, they often come with 4 forward gears, one reverse gear, and one neutral gear.

The 1st gear is one of the most perfect gears for driving uphill. Other gears you can consider using are the 2nd and third gears. 1st gear, also called the lowest forward gear, is ideal for starting a vehicle from a stationary position. It provides the strongest pulling power and the least speed when driving your car.

PREPARATIONS:

Coming "round the mountain" sure sounds like fun, but the fact is that traveling steep slopes on narrow mountain roads can be challenging for motorists and their vehicles. However, with some sure-footed driving skills, you'll be better prepared to drive through mountain ranges safely.

Steep uphill and downhill grades may put an extra strain on your vehicle's main components, from your engine to your brakes. Fortunately, you can take certain precautions to help your vehicle, whether you're going up or down a mountain road.

PREVENT OVERHEATING:

Use lower gears to go downhill

When you start to head back downhill, use your engine and transmission to slow the car down instead of the brakes. <u>Shift to a lower gear</u> before you start heading downhill, as this will help slow down the car without you having to ride the brakes,

If your vehicle has an automatic transmission, use "L" or "2." However, if you do need to brake frequently, pull over if you start to smell the brakes burning (this will be a pungent burning smell.) Let them cool off before you start driving again, but do not continue if you think there may be an issue with your brakes.

Once you're on level ground again, shift back into drive and use your brakes as you would normally.

BE PREPARED FOR MOUNTAIN ROADS: KEEP AN EYE ON ROAD/SIGN BOARDS NO DISTRACTIONS:

Winding mountain roads can be narrow, with dramatic curves that make it difficult to see what's around the next bend. As a result, it is recommended to take the following precautions:

- Stay on your side of the road, and give some extra space between your vehicle and others that you're following, since sudden stops can strike at any time.
- Mind the posted speed limits, and look for signs that warn you about the steep grades that may lie ahead.
- Keep an eye out for animals, especially at night.
- Keep all
- Make sure that you have enough gas if you're traveling through remote areas.
- If you're driving slowly, pull into a turnout or on a straightway let faster-moving traffic pass.
- Only pass slower-moving traffic when you've got a clear view of the road ahead. Never pass another car on a blind curve or when your visibility is compromised.
- If you're stopping to take in the view, use your parking brake and put rocks behind your tires to help keep your car from rolling downhill.

MAP-IT-OUT:

While cellphones, vehicle navigation systems and GPS are helpful tools, in many situations, they may note work well (or at all) in the mountains. Take the time to map your route the old-fashioned way, with a paper map, especially if you're piloting an RV or towing a trailer. Most maps will show which roads are steeply graded, which will allow you to chart out the least difficult path. Whether you're trekking through the Rockies or headed to the Appalachian Trail, using some common sense and knowing your vehicle's limits will help keep you safe on our nation's majestic mountain motorways.

MORTH-MINISTRY OF ROAD TRANSPORT & HIGHWAYS-GOVERNMENT OF INDIA. GUIDELINES REGARDING FORMATION WIDTH, GEOMETRICS IMPROVEMENT AND SAFETY MEASURES ON HILL ROADS.

- 1. It has been decided with the approval of competent authority in the Ministry that the overall formation width of National Highways in hilly/mountainous terrain may be kept as 12 m, comprising 7 m wide carriageway flanked with 2.5 m wide shoulders. The drain and parapet/safety railings will be accommodated within the width of the shoulders.
- 2. The increased formation width will enhance operations on the road and traffic movement due to the following --
- (i) More space would be available for the parking of disabled vehicles, without interfering with two way movement.

- (ii) Two lane movement of traffic would be possible in the event of some stretches being affected by Land Slides etc.
- (iii) Movement of heavy/large size Military and Commercial Vehicles would be easier.
- (iv) Capacity of the road is expected to increase due to large space becoming available for maneuverability.
- 3. However, it has been, felt that considering extra cost of hill cutting involved due to increase in the width of the formation, the revised standard could be implemented in stages. Priority may be given to provide 12 m formation on new National Highways and on the existing National Highways stretches, where widening of the carriageway is to be carried out. The widening of formation to 12 m on 2 lane National Highways already having 10 m formation width may be accorded lower priority.
- 4. All other geometric design standards for the hill roads, except the formation width may continue to be followed as recommended in IRC Special Publication No. 48: 1998 'Manual for Hill Roads'.
- 5. The requirement of road safety measures for National Highways in hill roads were also reviewed and it has been found that the existing guidelines and standards prescribed by the Ministry appear to be adequate, however, these are not being provided/implemented by the implementalny agencies.

The Implementing Agencies are, therefore, advised by the Ministry to give due importance to safety aspects of National Highways in hill roads and ensure that safety measures, such as mandatory, cautionary and informatory signboards, parapet walls; railings, crash barriers, slope protection, delineators, drains, extra widening at curves, passing places at suitable intervals, rock stabilization, treatment of land slides are provided at critical locations.

HILL DRIVING-ENDORSEMENT ON EXISTING DRIVING LICENCE IS AN ADDED VALUE FOR YOUR DRIVING LICENCE AND MATTER OF ROAD SAFETY:

For adding a new category of vehicles in the existing driving license, you need to apply for an Additional Endorsement of Driving License (AEDL). In this article, we look at the procedure for obtaining AEDL in detail.

Eligibility for AEDL:

Eligibility criteria for obtaining Additional Endorsement of Driving License (AEDL) are explained in detail below:

- If you want to add light motors vehicle license to your existing motorcycle license or vice versa, you will have to apply for AEDL.
- In order to drive a transport vehicle carrying hazardous goods, a person holding a valid Driving License with a transport category class of vehicle is entitled to apply for necessary endorsement in the driving license.
- To drive a motor vehicle in the hill region, the person holding a valid driving license will have to apply for a driving license.

Documents Required:

The following documents are needed to be submitted, to apply for Additional Endorsement of Driving License (AEDL).

- Proof of Address: Aadhaar Card, Passport, Ration Card or House agreement
- Proof of Age: Pan card, Birth Certificate, Transfer certificate or 10th Class mark sheet
- Application Fees for Driving License
- Medical Certificate Form 1 which is to be signed by a certified Government doctor
- Endorsement of transport category driving license
- A valid original Lerner's License
- An effective original driving license (original)
- Driving certificate, Form 5, 14 & 15 (for transport vehicles license)

Additional Endorsement of Driving License (AEDL) Application Procedure:

The application procedure for obtaining an Additional Endorsement of Driving License in India is explained in detail below: Access Sarathi Parivahan Portal:

- **Step 1:** You have to access the home page of MORTH- (Parivahan web portal).
- Step 2: Click on Apply Online on the left side of the Parivahan home page and select the Services on Driving License option.

REFERENCES:

1. www.morth.nic.in