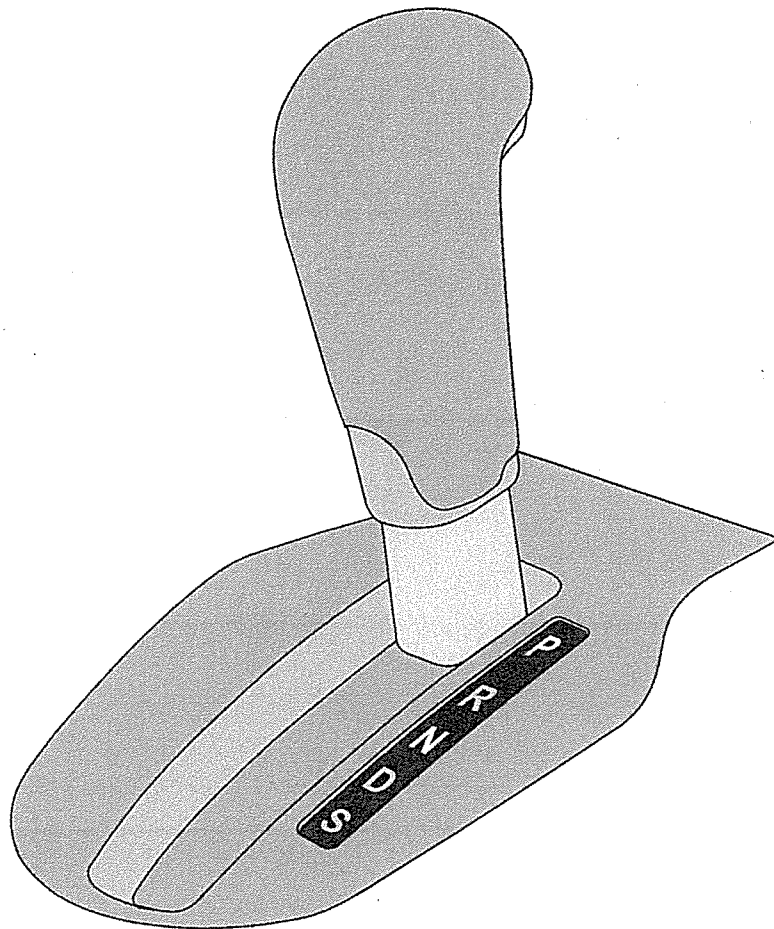
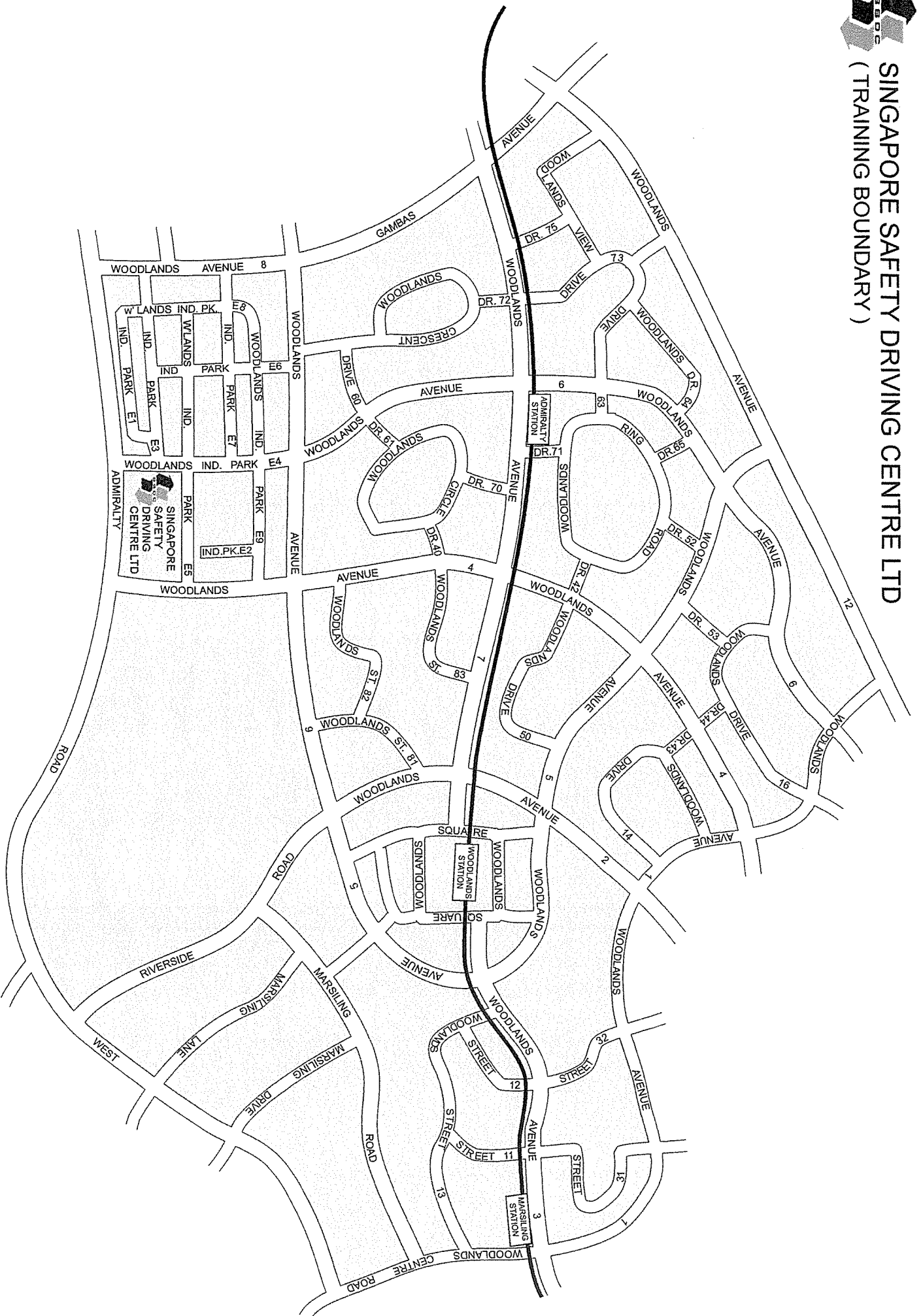


SINGAPORE SAFETY DRIVING CENTRE LTD

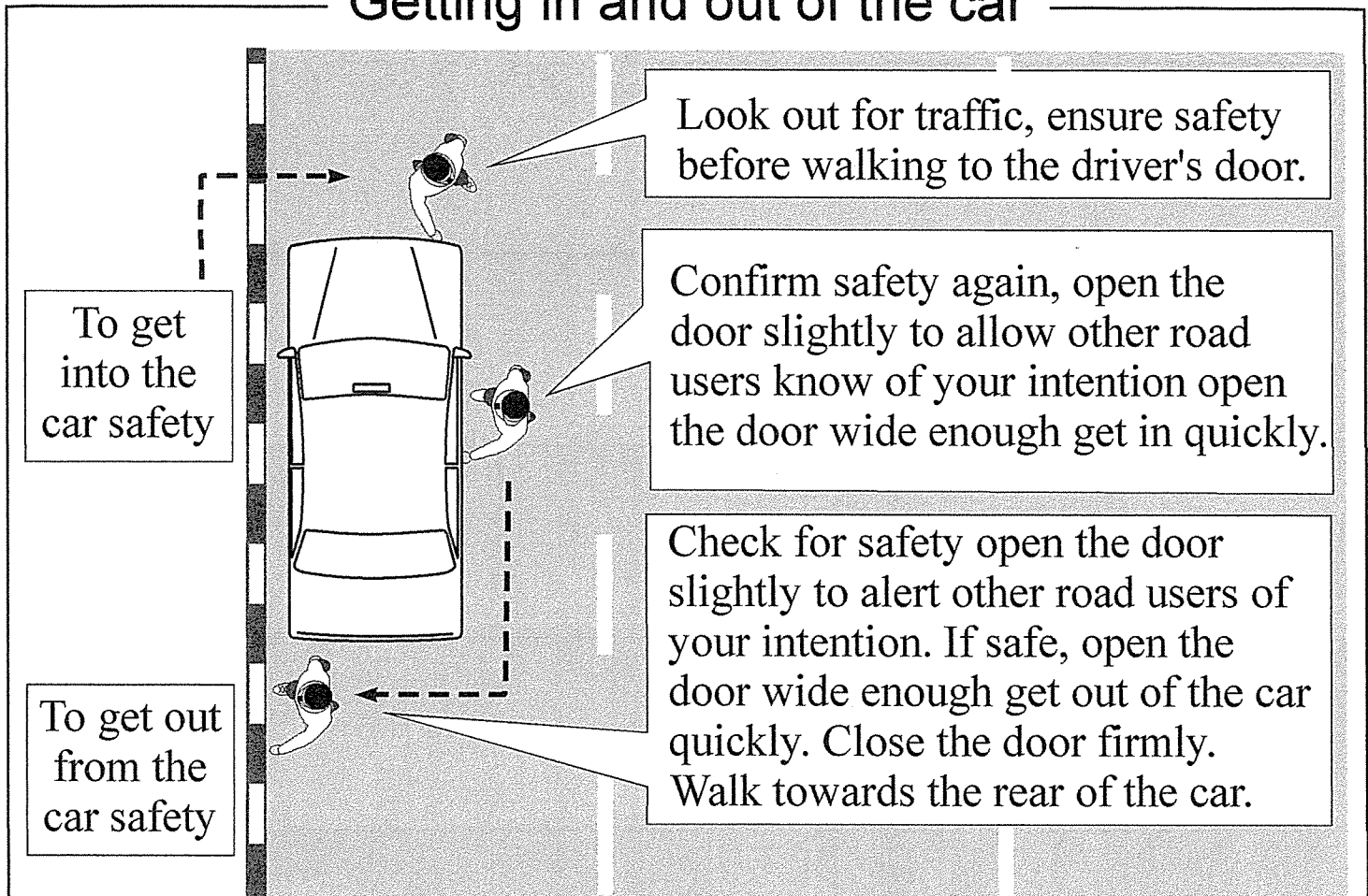


CLASS 3A
AUTO-TRANSMISSION

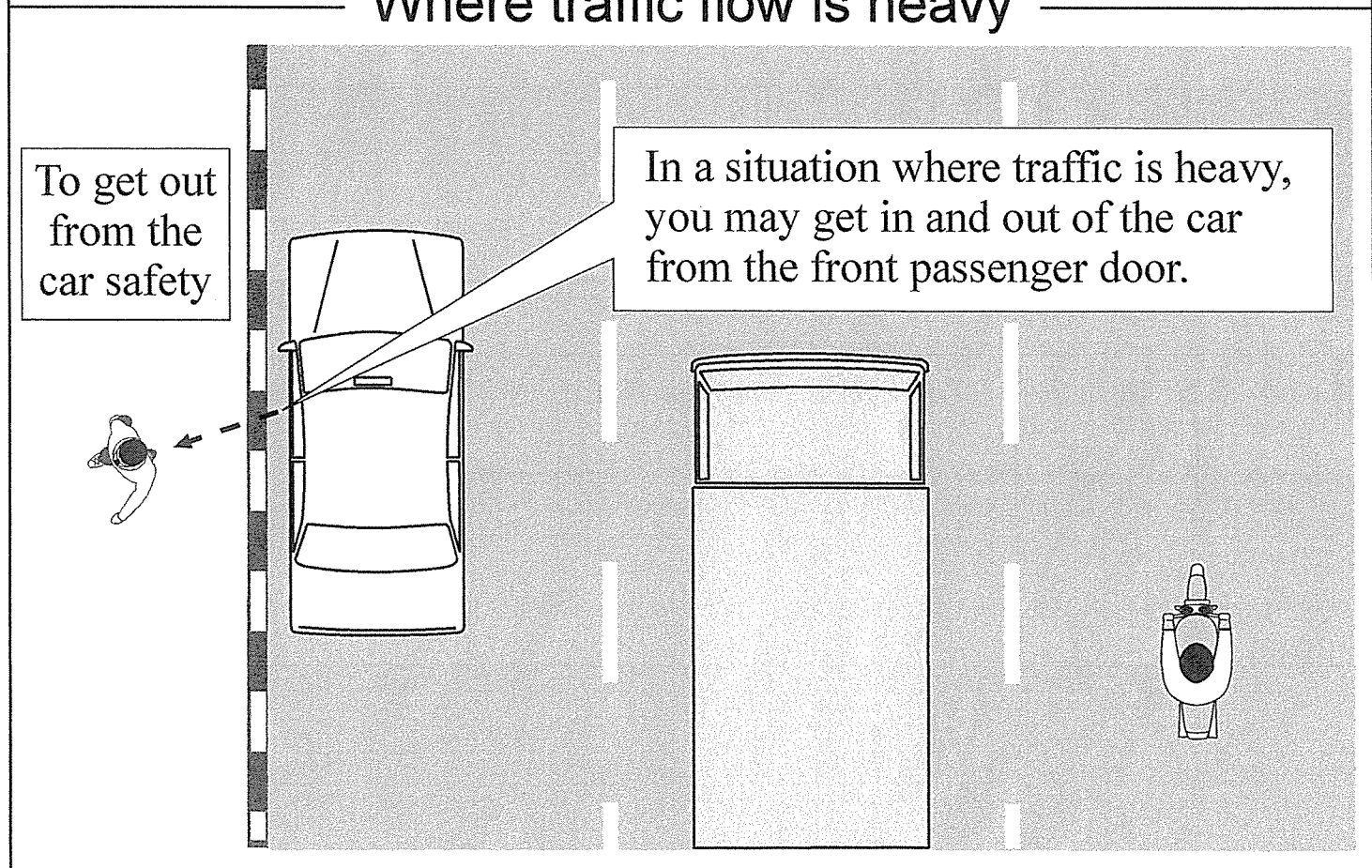




Getting in and out of the car

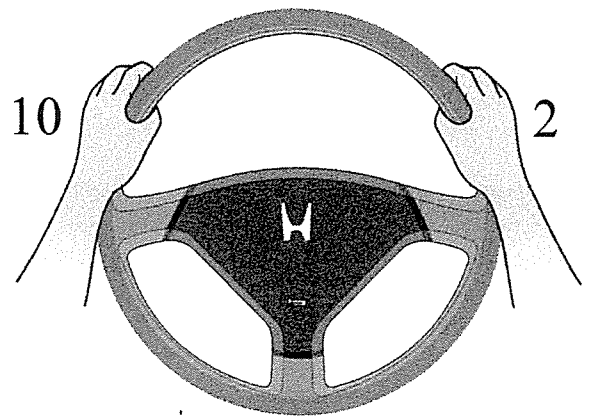
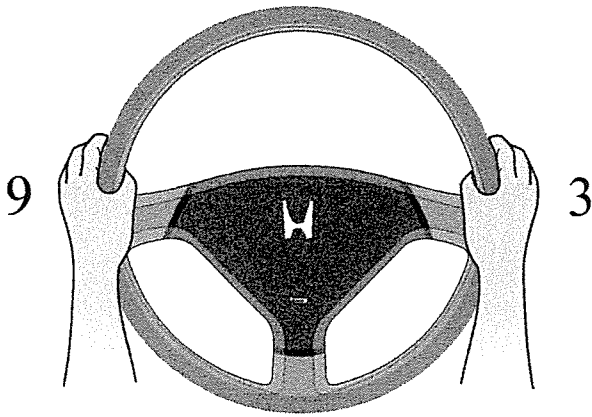


Where traffic flow is heavy



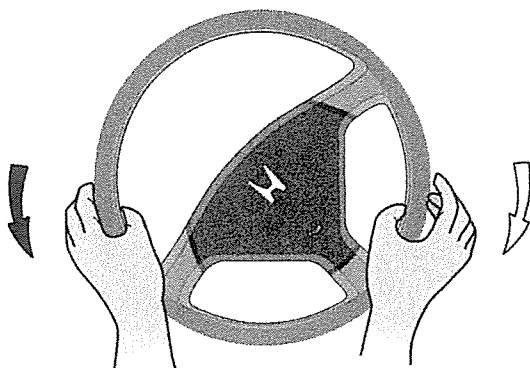
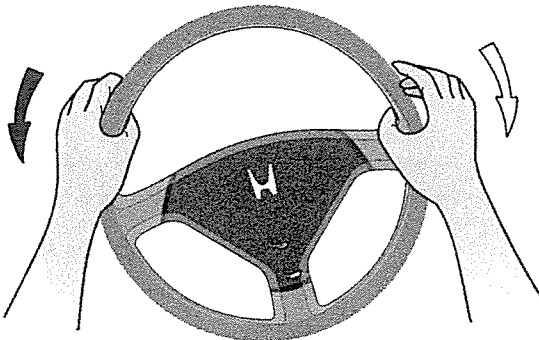
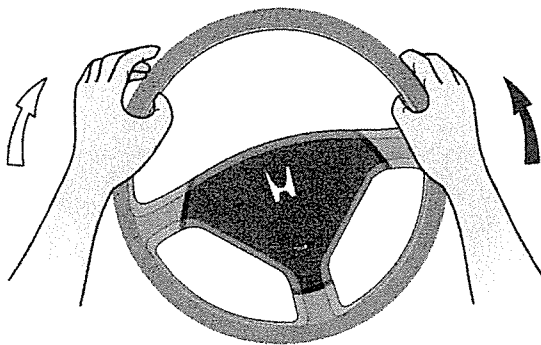


Holding of steering wheel

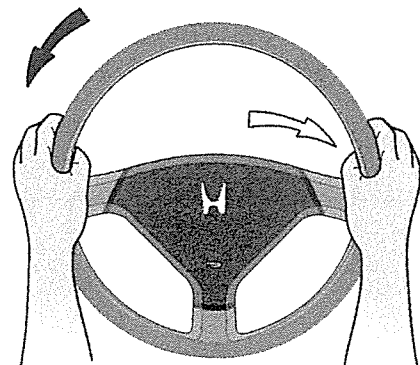
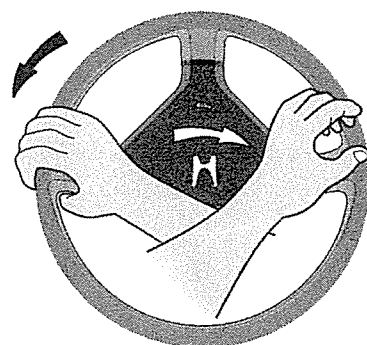


Turning of steering wheel

Push & pull



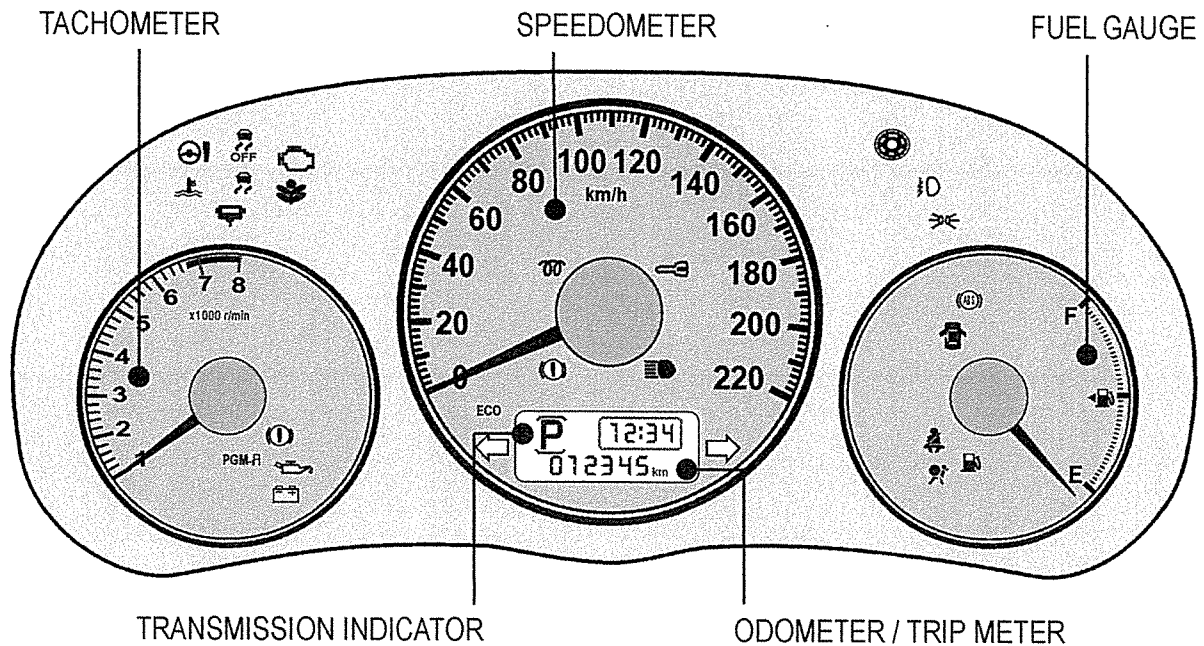
Hand over hand





SINGAPORE SAFETY DRIVING CENTRE LTD

Familiarization and pre-operative procedure (Instrument Panel)



MALFUNCTION INDICATOR



LIGHTS ON INDICATOR



LOW OIL PRESSURE
INDICATOR



HIGH-BEAM INDICATOR



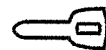
CHARGING SYSTEM
INDICATOR



TURN SIGNAL AND HAZARD
WARNING INDICATOR



HIGH TEMPERATURE
INDICATOR(RED)



IMMOBILIZER SYSTEM
INDICATOR



HIGH TEMPERATURE
INDICATOR(BLUE)



DOOR / BOOT OPEN
INDICATOR



BRAKE SYSTEM INDICATOR
(AMBER)



LOW FUEL INDICATOR



PARKING BRAKE AND BRAKE
SYSTEM INDICATOR (RED)



SEAT BELT REMINDER
INDICATOR



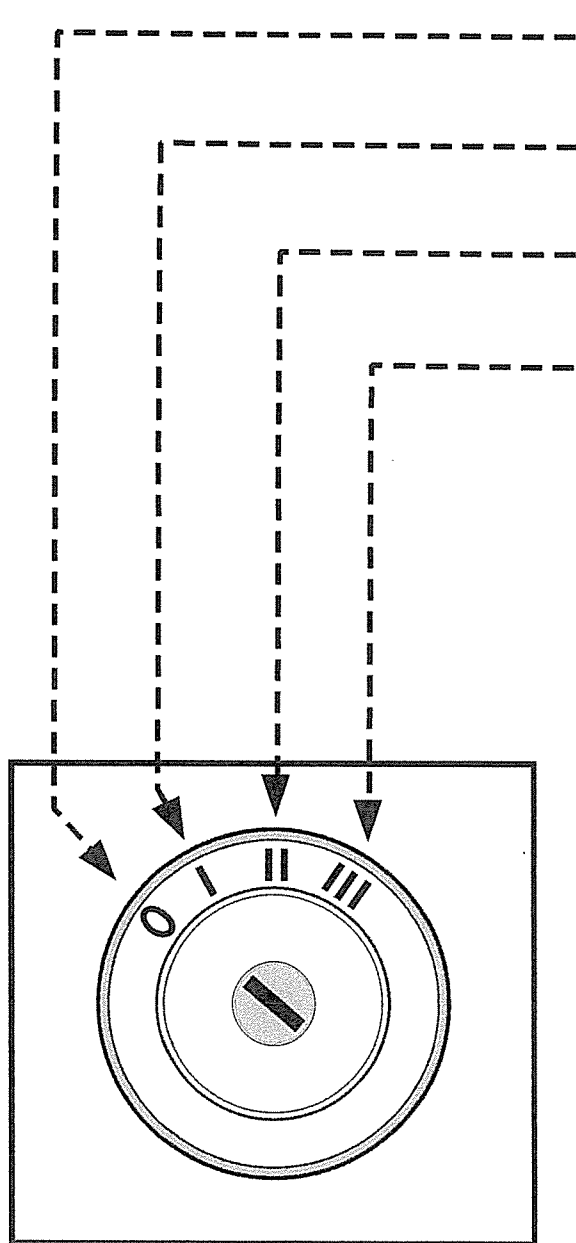
ELECTRIC POWER STEERING
(EPS) SYSTEM INDICATOR



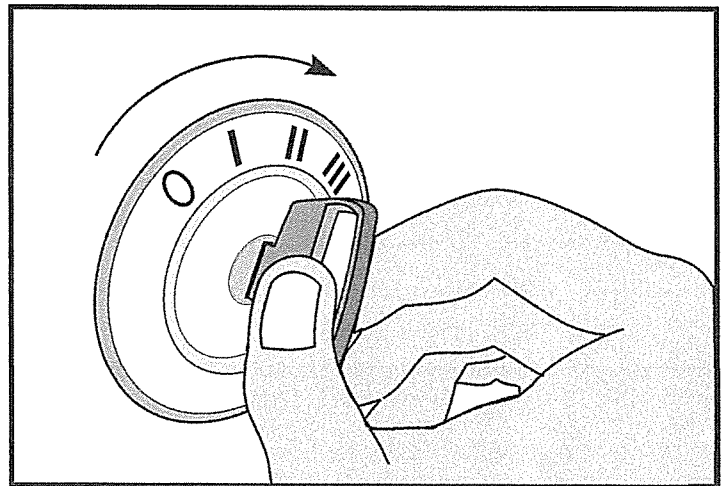
SUPPLEMENTAL RESTRAINT
SYSTEM INDICATOR



Ignition Switch



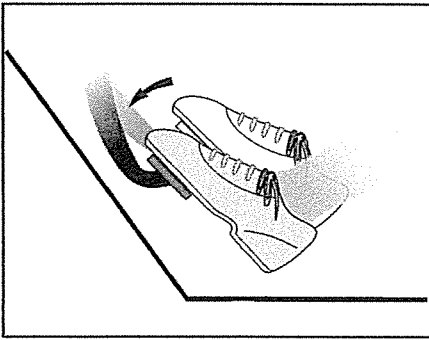
- 0** - Lock
- I** - Accessory
- II** - On
- III** - Start



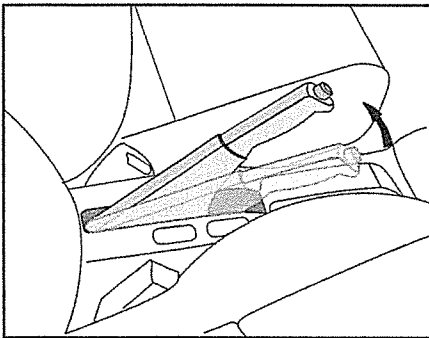
- 0** — LOCK / OFF - The engine is "OFF" and the steering wheel is locked.
- I** — ACC. - Engine is "OFF", electric current flows to accessory fixtures (e.g. Radio)
- II** — ON - Electric current flows to ignition system and the engine is ready to start.
- III** — START - This is start position and is a spring loaded device.
Once the engine has started and key released.
The key will automatically return to the "ON" position.



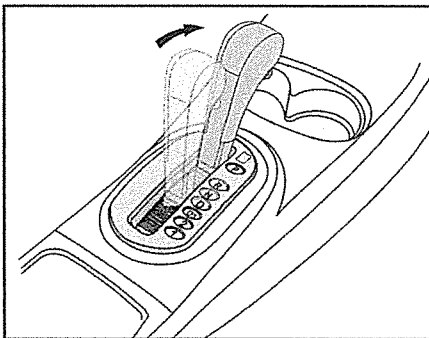
Before Starting the Engine



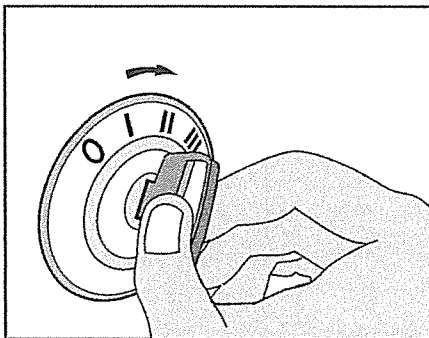
Step 1) Depress the brake pedal



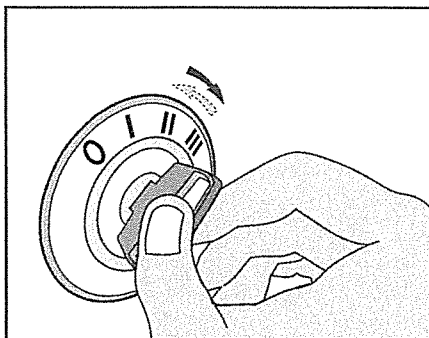
Step 2) Check handbrake is applied



Step 3) Ensure gear lever is at "P"(Park Position) OR "N"(Neutral Position)



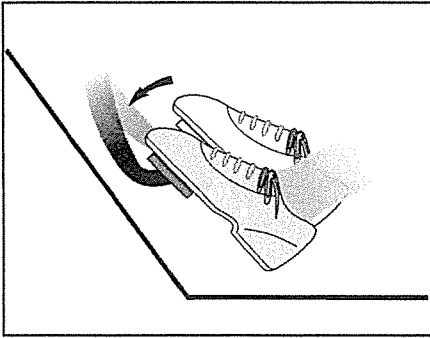
Step 4) Turn the ignition key clockwise direction once for electric current flow to ignition system and the engine is ready to start.



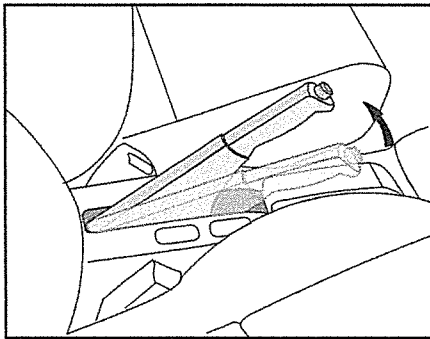
Step 5) Turn the key clockwise again to start the engine, once the engine has started then release. The key will automatically return to the "ON" position.



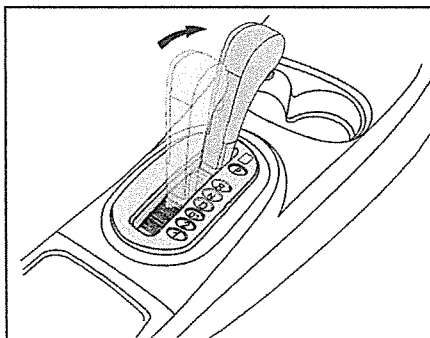
Before Stopping the Engine



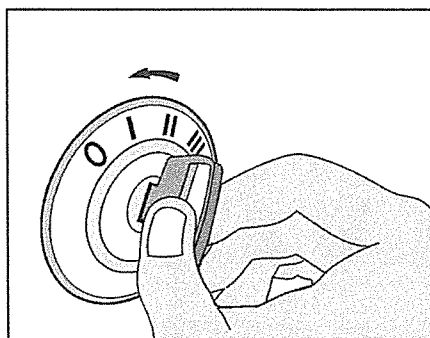
Step 1) After stopping, depress brake pedal and hold



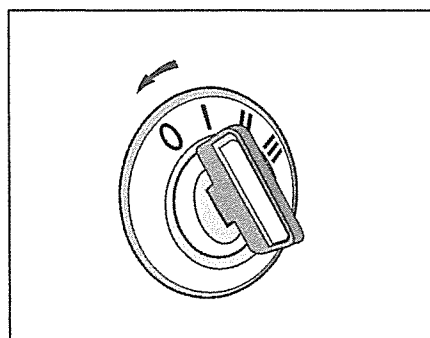
Step 2) Apply the handbrake



Step 3) Engage to "P" - Park Position



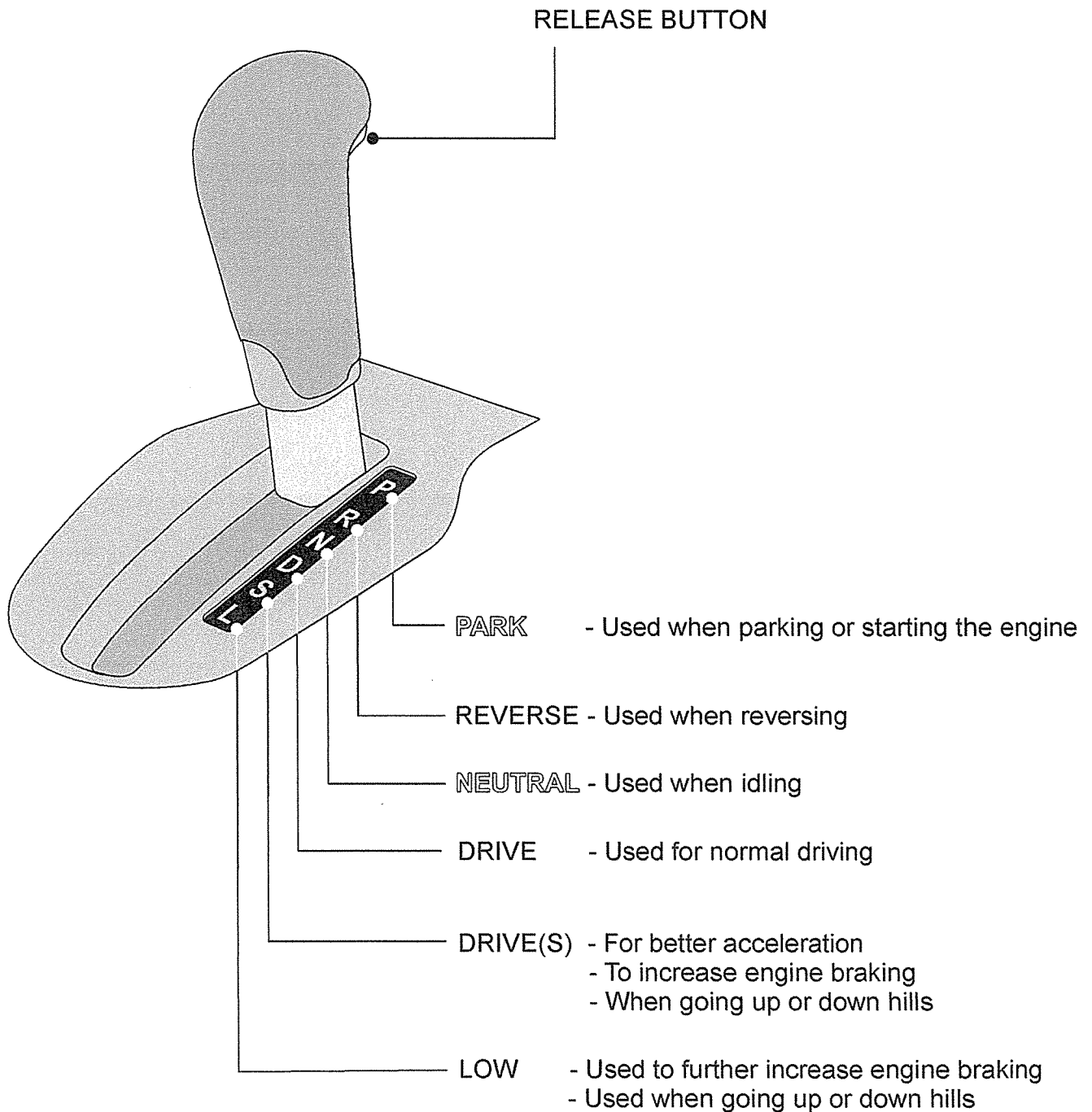
Step 4) Turn the ignition key anti-clockwise direction to switch off the ignition system and the engine is "Off"



Step 5) At LOCK / OFF position
-The engine is "OFF" and the steering wheel is locked.



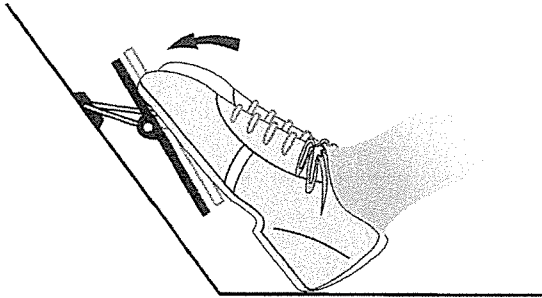
Shift Lever positions



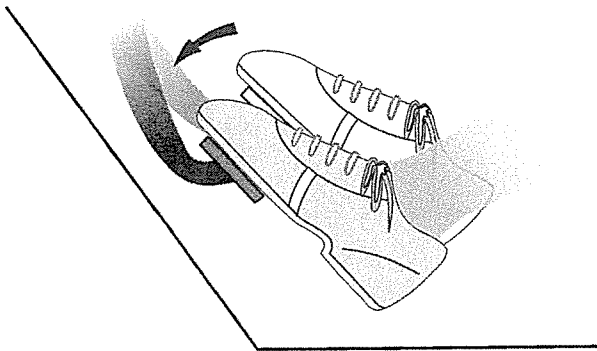


Pedals

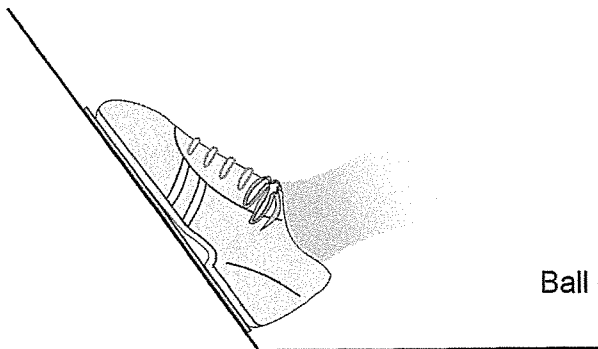
Accelerator pedal



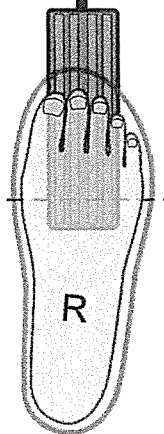
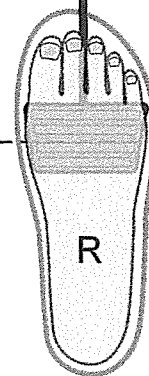
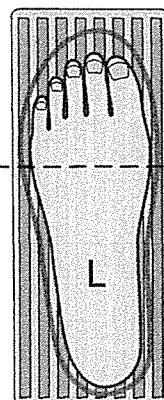
Brake pedal



Rest pedal



Ball of the foot

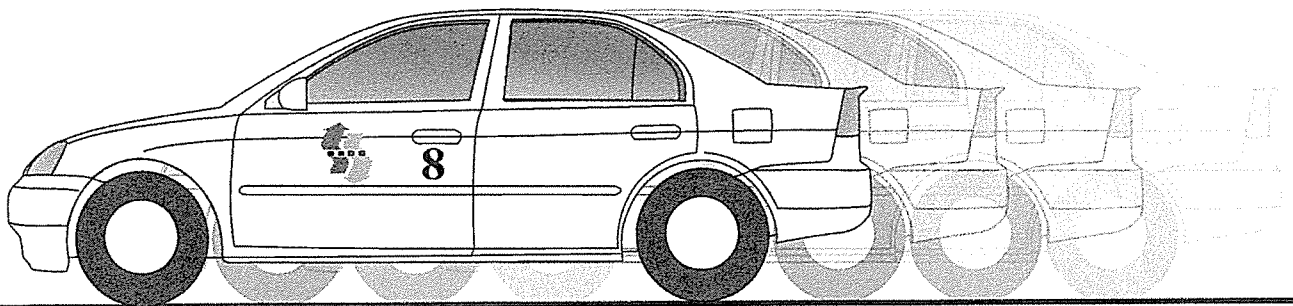




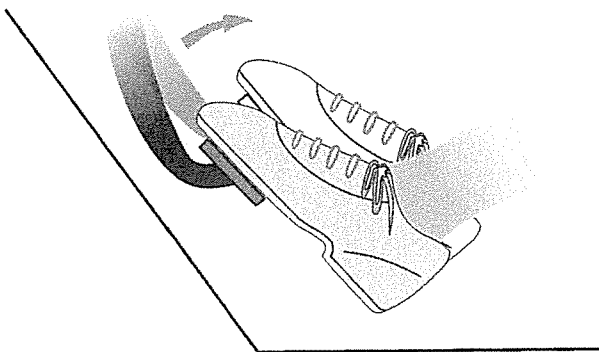
Auto Creep

What is auto creep?

Auto creep is the natural tendency of the car to move by itself, according to the desired gears(forward or reverse gear), you can feel that the car wanted to creep forward when you release the brake pedal slightly. This is to enables the driver to move smoothly without a strong jerk and also provide the direction which the gear is engaged and it is also know as "idling drag".

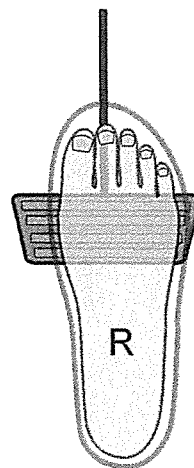


Release the brake pedal slowly
until the car started to move-off



Brake pedal

Accelerator pedal





What is auto creep?

"Auto creep" is the natural tendency of the car to move by itself, according to the desired gears(forward or reverse), you can feel that the car wants to creep forward unless you depress the brake pedal. This is to enable the driver to move smoothly without a strong jerk and also provide the direction which the gear is engaged, it is also know as "idling drag".

What is Kick Up?

"Kick Up" is a term used in an automatic transmission vehicle, which allows the transmission to switch to a higher gear smoothly and automatically to the speed range. With a gradual acceleration, you can feel the gears shifting from one to another without much jerking or slipping, only a slight change in the engine tone.

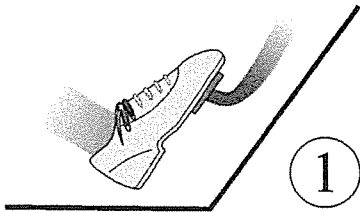
What is Kick Down?

"KickDown" a term been used for a force downshift in the automatic transmission, which allows the driver to switch to a lower gear without moving the gear selector manually, by simply depressing down hard on the accelerator. When the accelerator pedal is fully depressed, the transmission automatically shifts down to a lower gear to give this extra boost during hill climbing, the need of sudden movement or to pass other vehicles. This gear shifting is sometimes called as "passing gear"



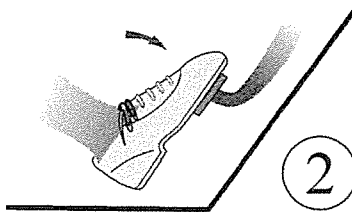
Braking Technique

Incorrect braking



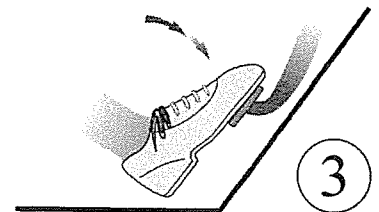
1

1)Depress late



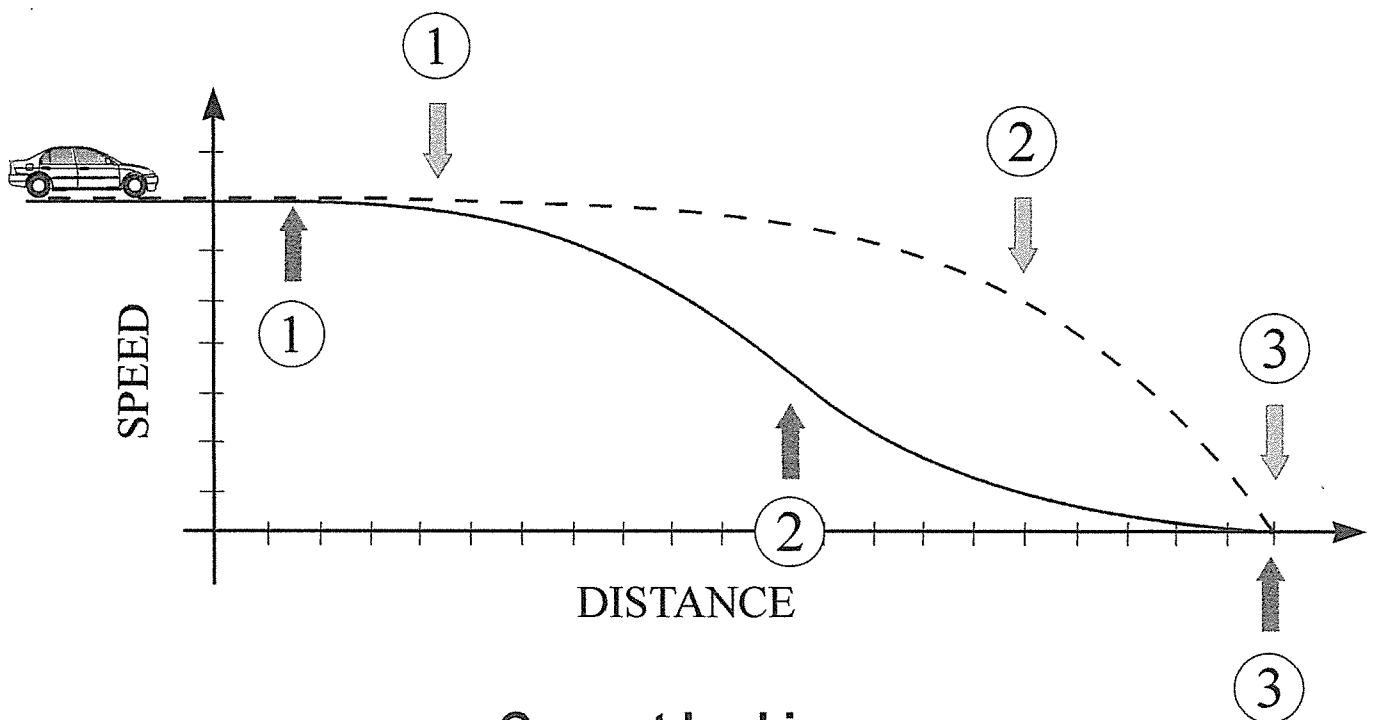
2

2)Depress hard

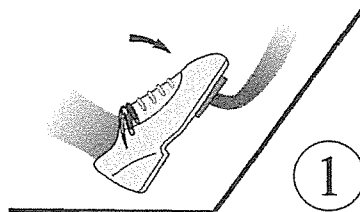


3

3)Increase pressure further

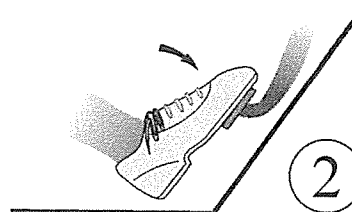


Correct braking



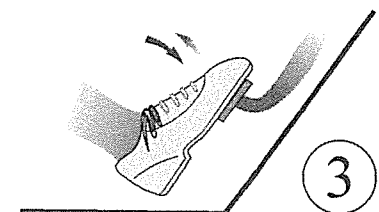
1

1)Depress early



2

2)Depress hard

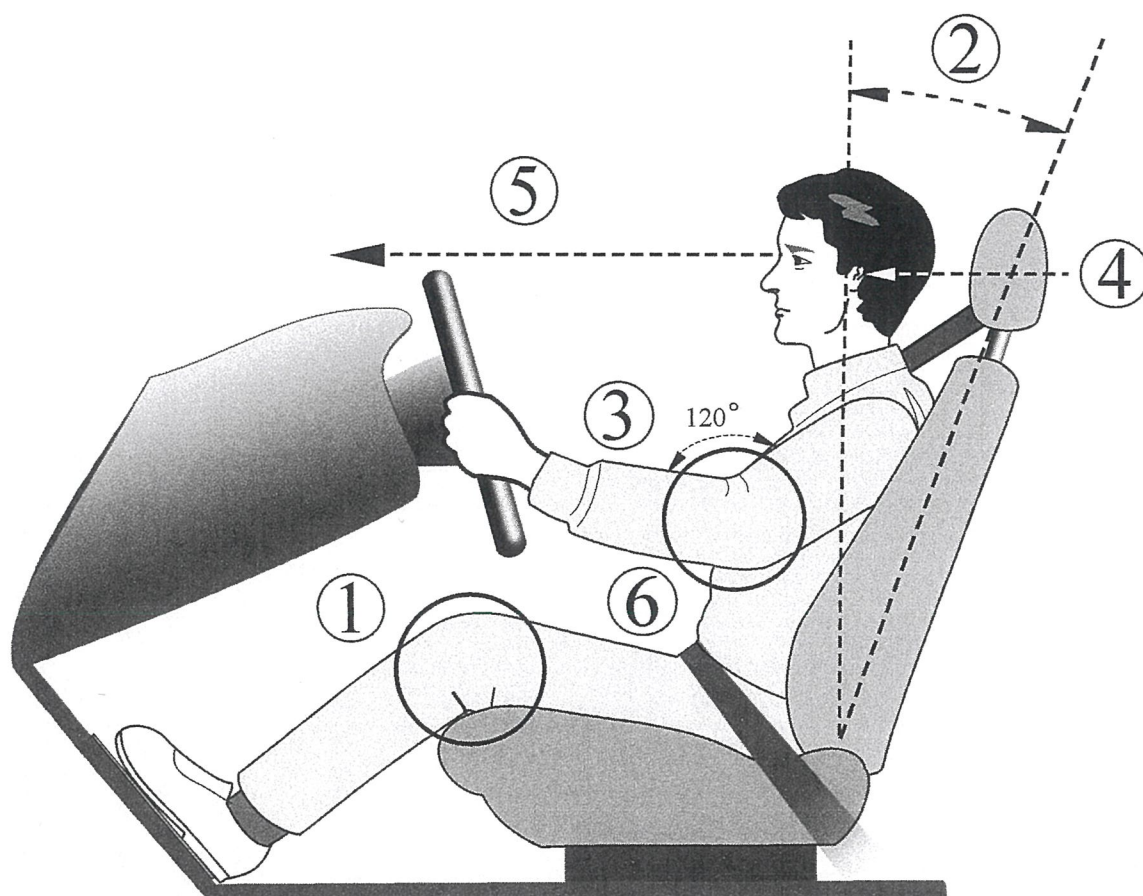


3

3)Reduce pressure gradually



The Correct Driving Posture

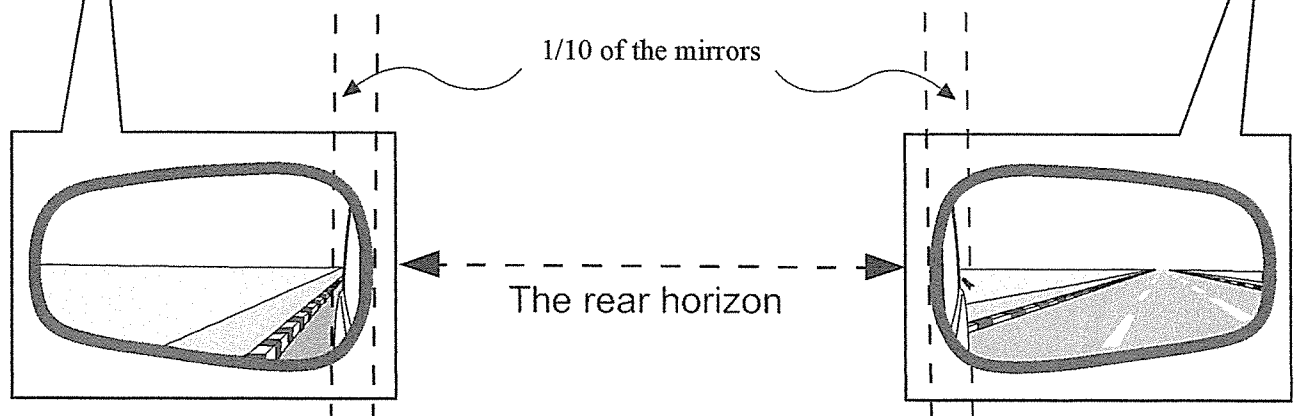
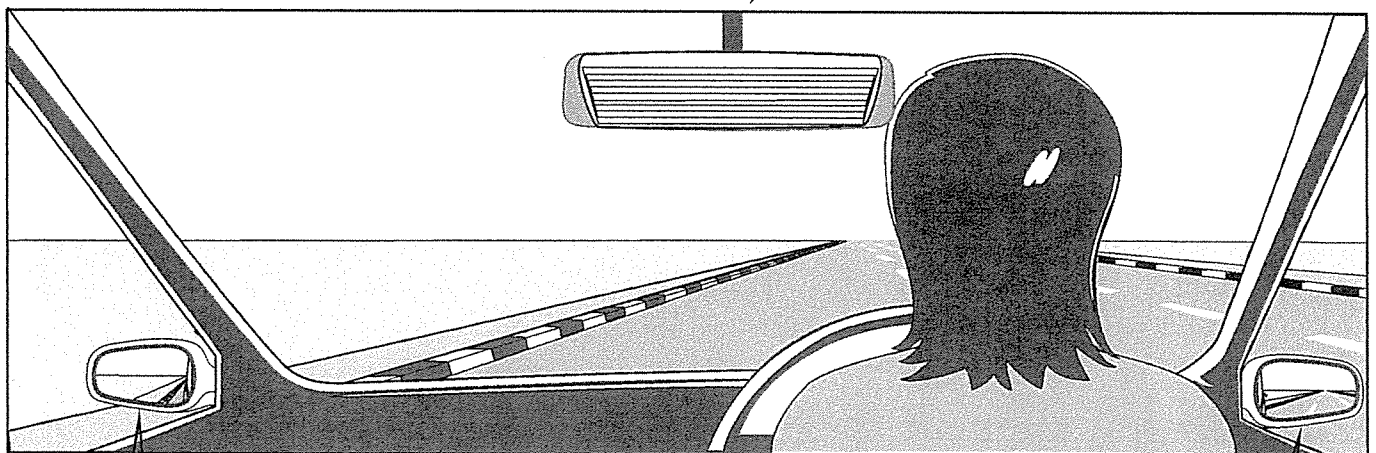
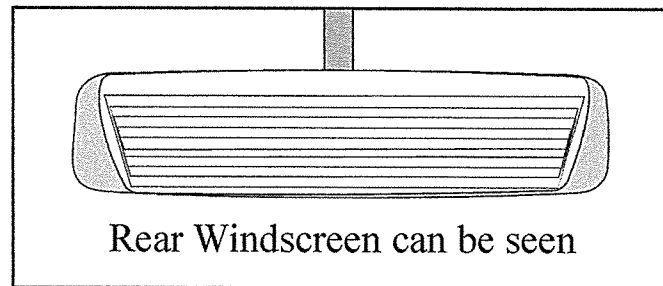


- 1) Put your left foot on the rest-pedal with the left knee almost straightened.
- 2) Body is seated upright with the back leaning on the backrest.
- 3) The arms form an angle of about 120 degrees when holding the steering wheel.
- 4) Adjust the headrest to the ear level.
- 5) Facing the centre of the steering wheel and the eye level above the dashboard.
- 6) Fasten the seatbelt only after adopting the correct sitting posture by pulling the belt across your chest and insert the latch plate into buckle.



Adjustment of mirrors

Hold the edge of the rear view mirror with both hands and adjust until you have a good view of the rear through the rear windscreen without moving our body.



Adjust the side mirrors until the rear horizon is slightly above the centreline of the mirrors with the car body occupying 1/10 of the mirrors



Side Mirrors

Actual lane coverage based on your mirror adjustment



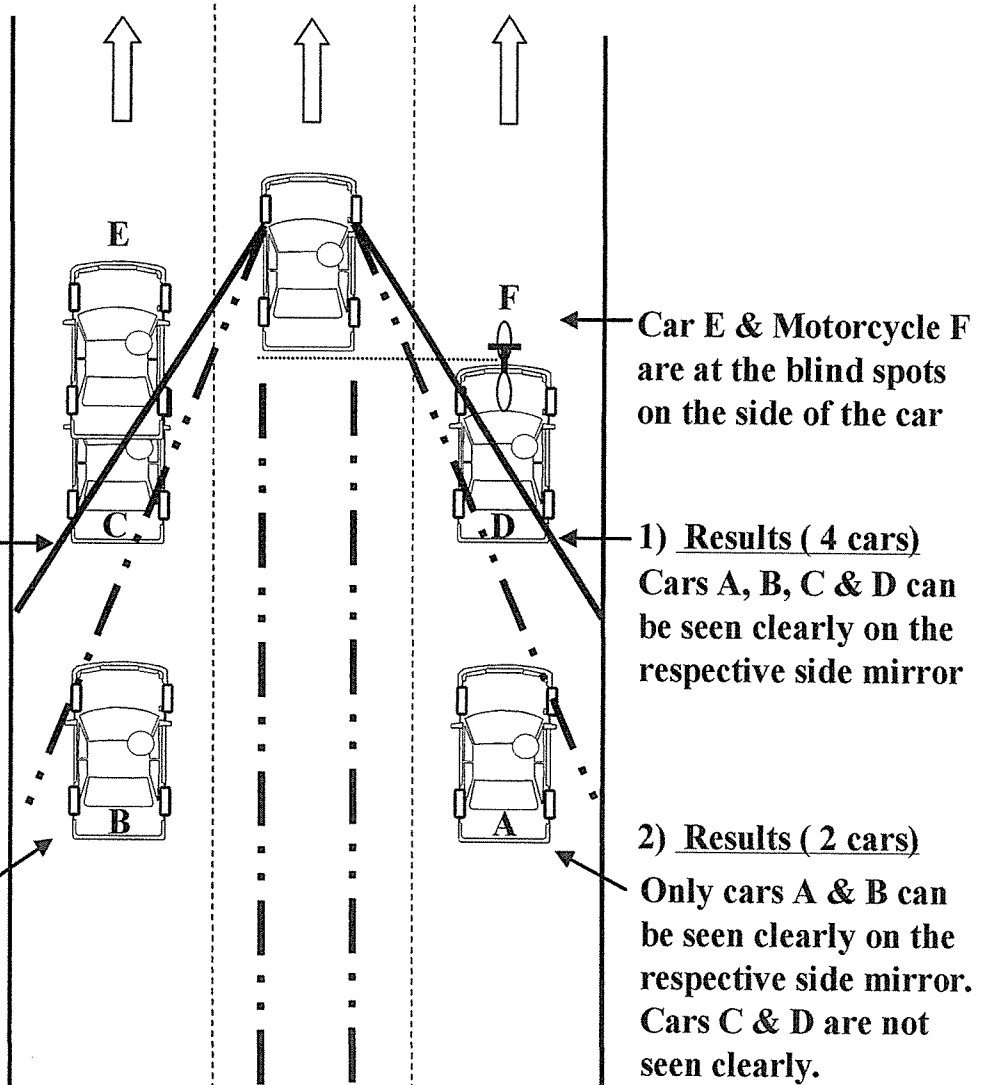
1) Proper Adjustment

Wider lane coverage when the mirror shows minimum (about 1 cm) of the car body.



2) Improper Adjustment

Less lane coverage when the mirror shows too much of the car body.

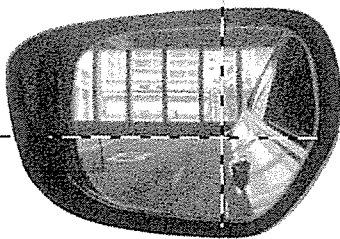


Note: Do not attempt to change lane when you can see car C or D in the mirror.

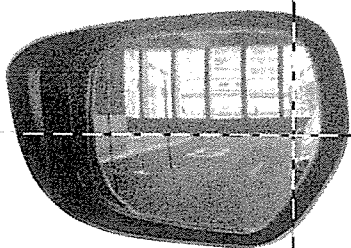
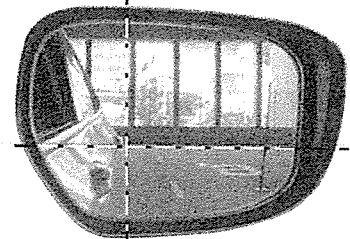
Left mirror

FROM DRIVER VIEW

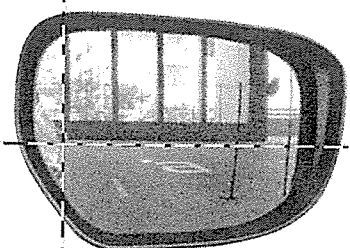
Right mirror



Improper Adjustment
Lesser lane coverage on both sides
increase blind spot areas

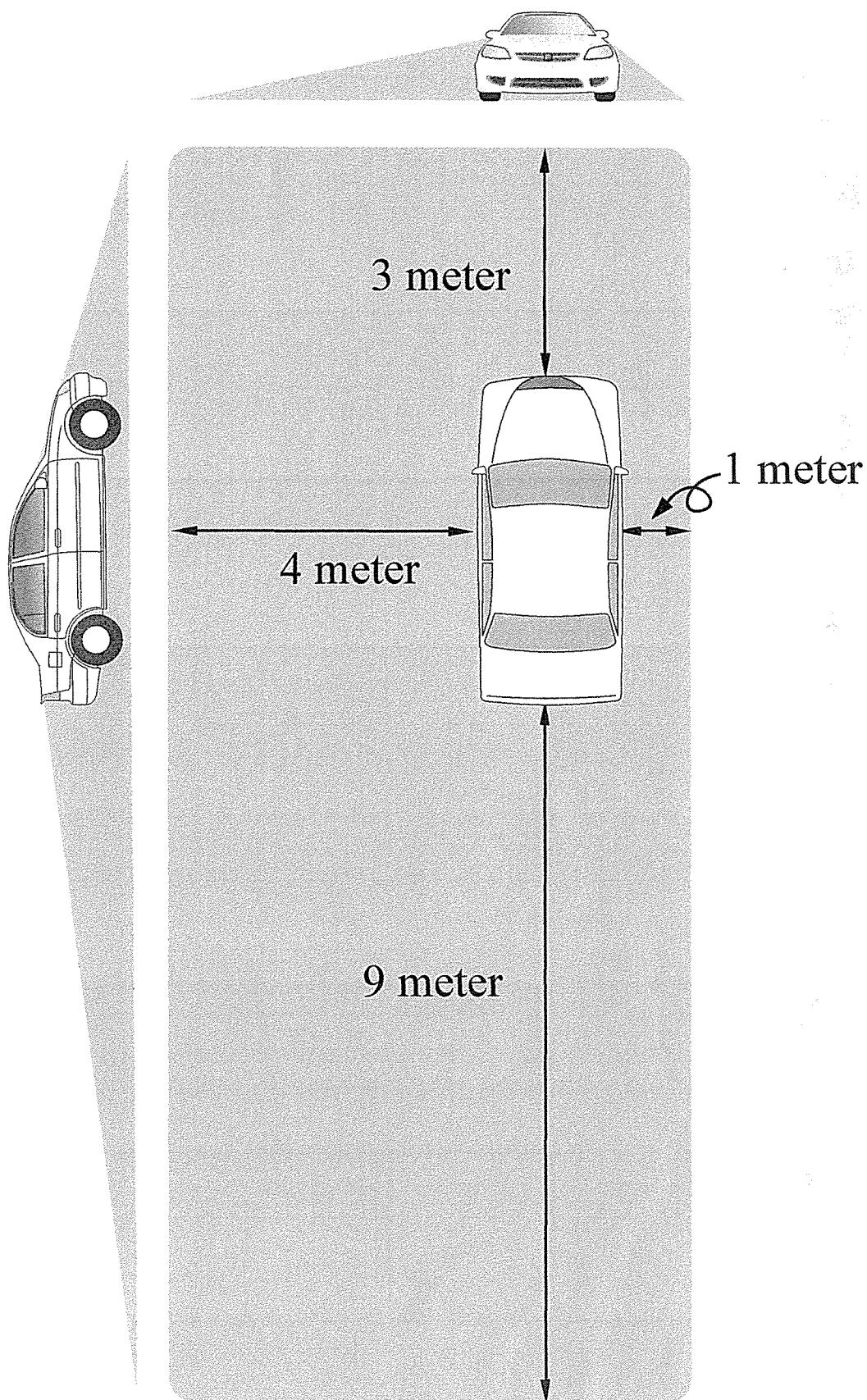


Proper Adjustment
Wider lane coverage on both sides
reduce blind spot areas





Blind Areas

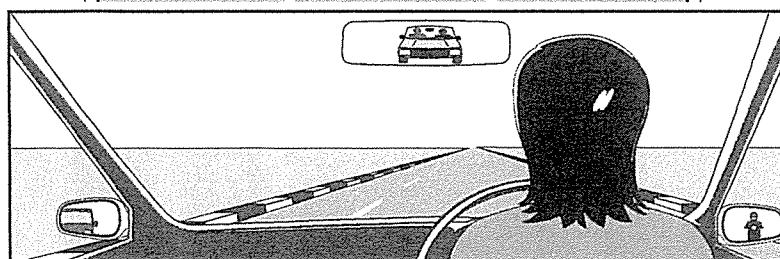
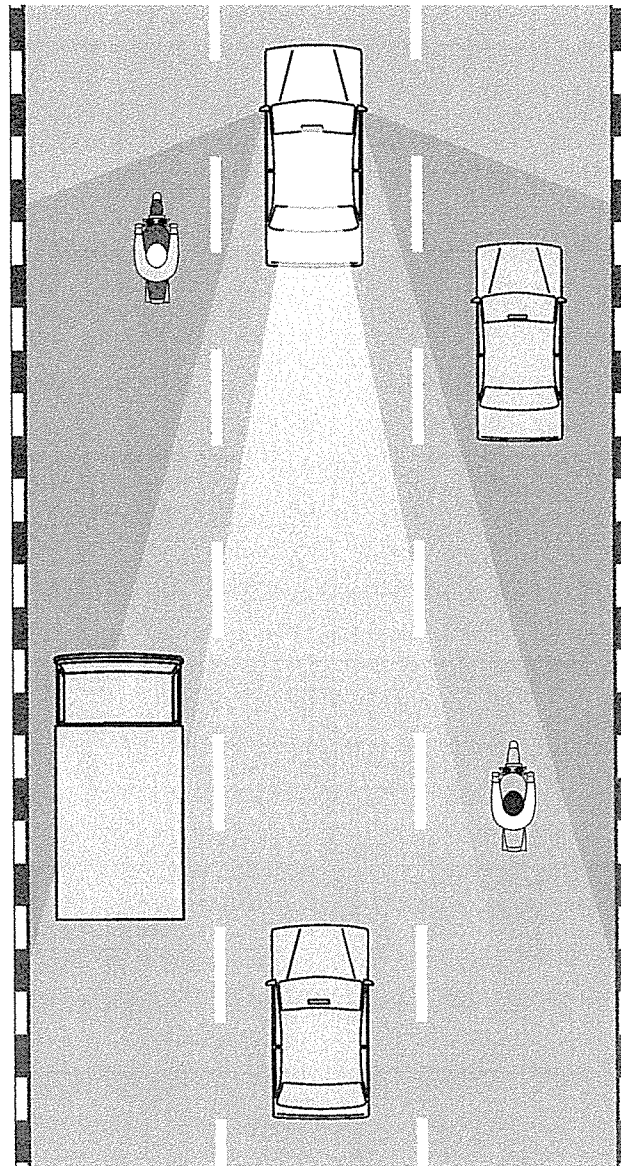




Blindspots area

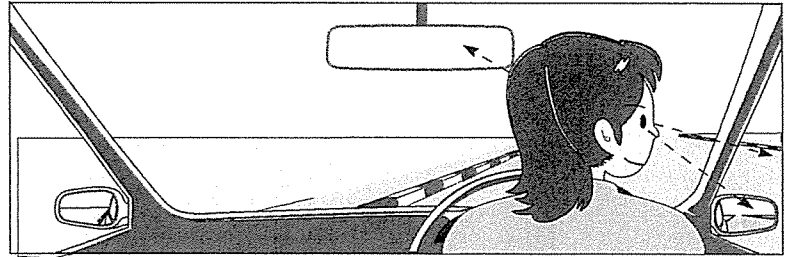
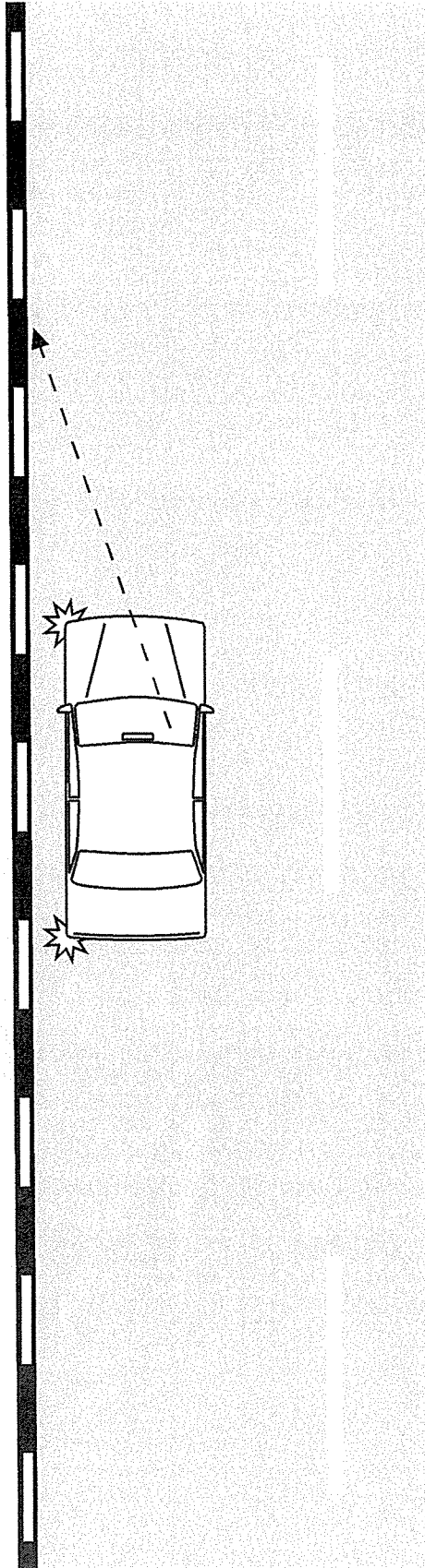


Look over your shoulder

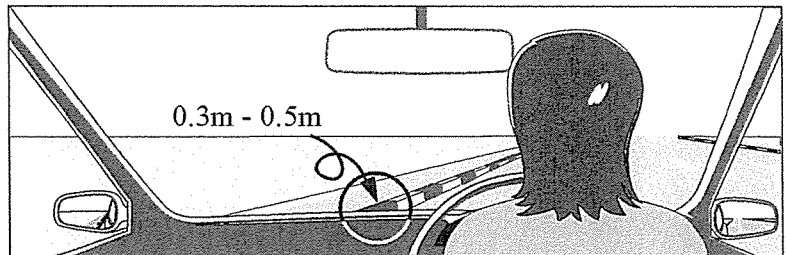


This is what you see

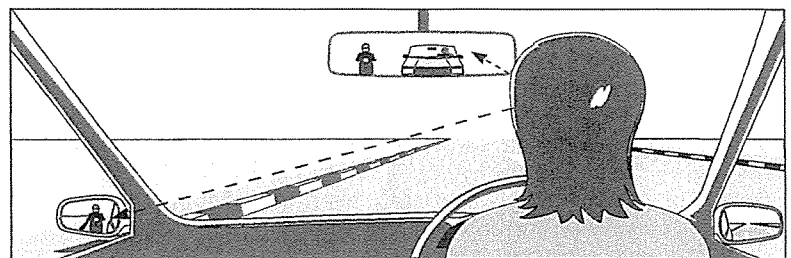
Stopping / Moving off at the kerbside



Moving off



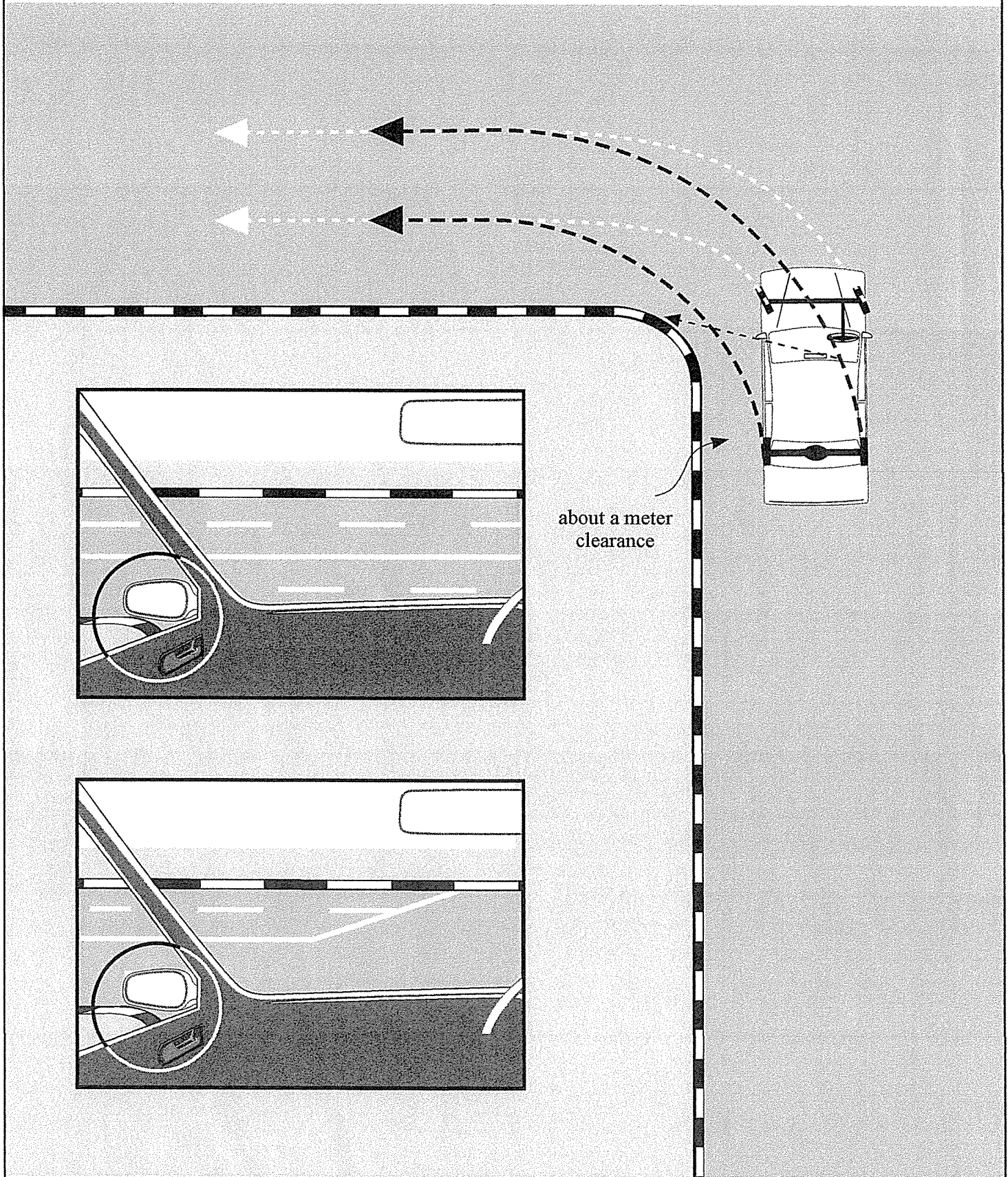
Stopping



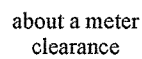
Before stopping



Wheel trace differential

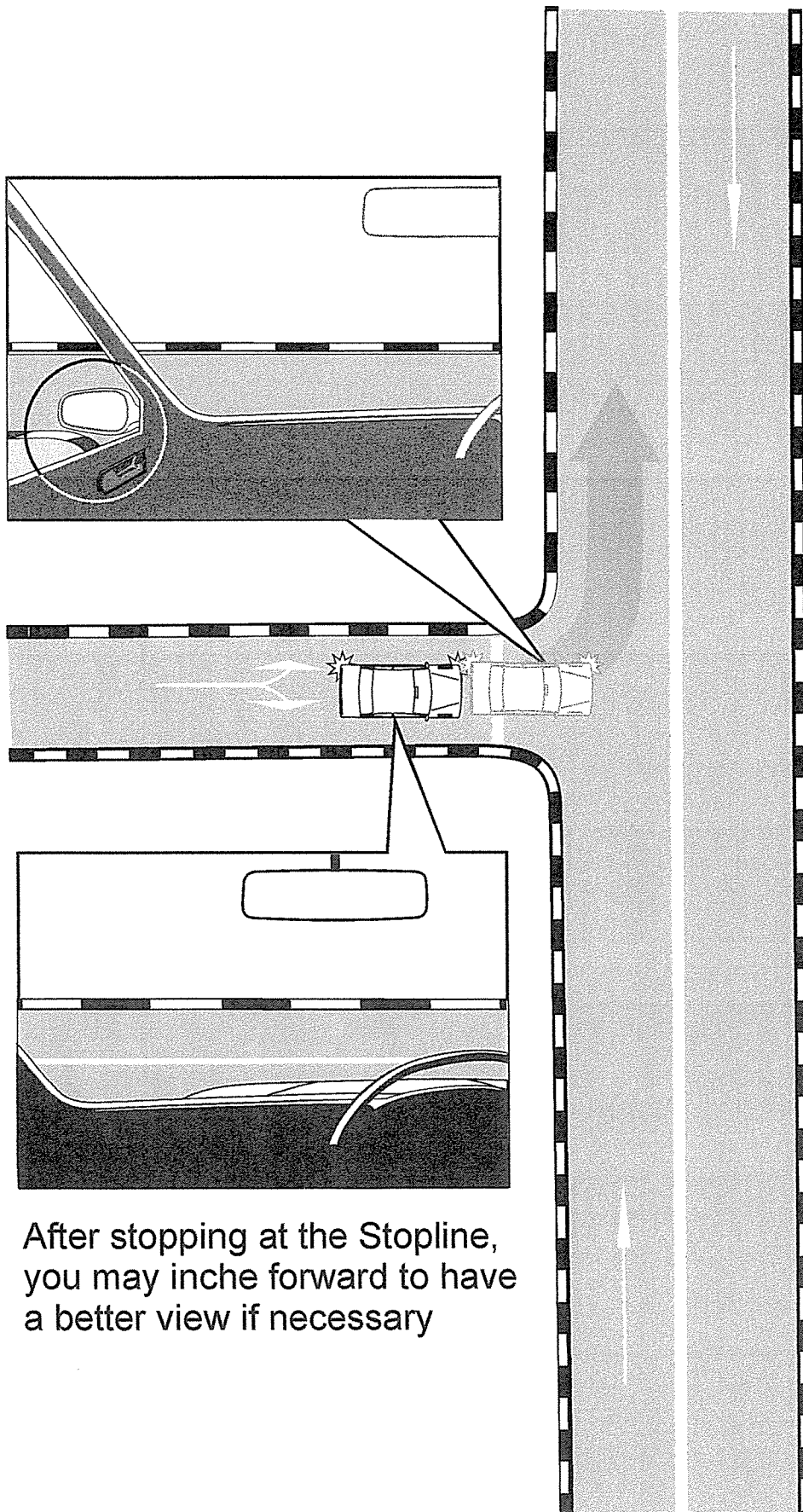


(Circuit)





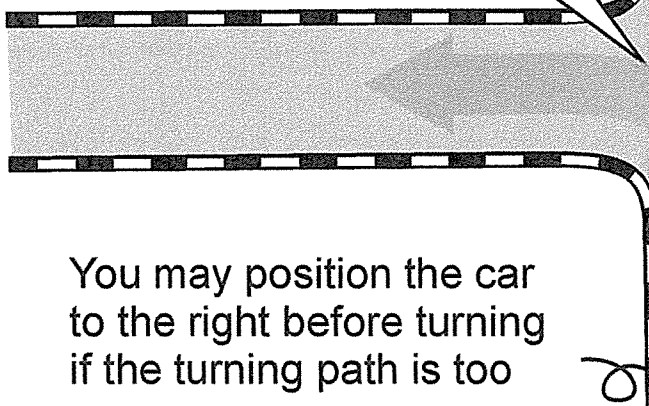
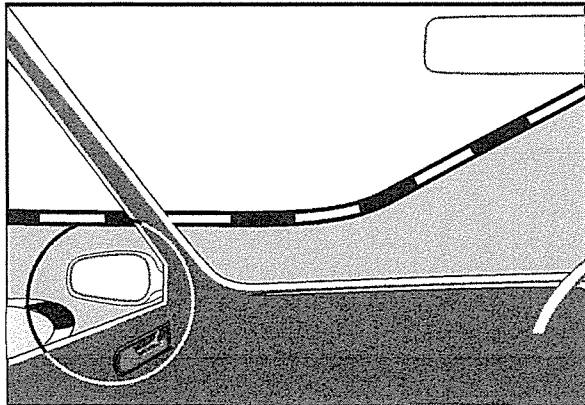
Left Turn (Circuit)



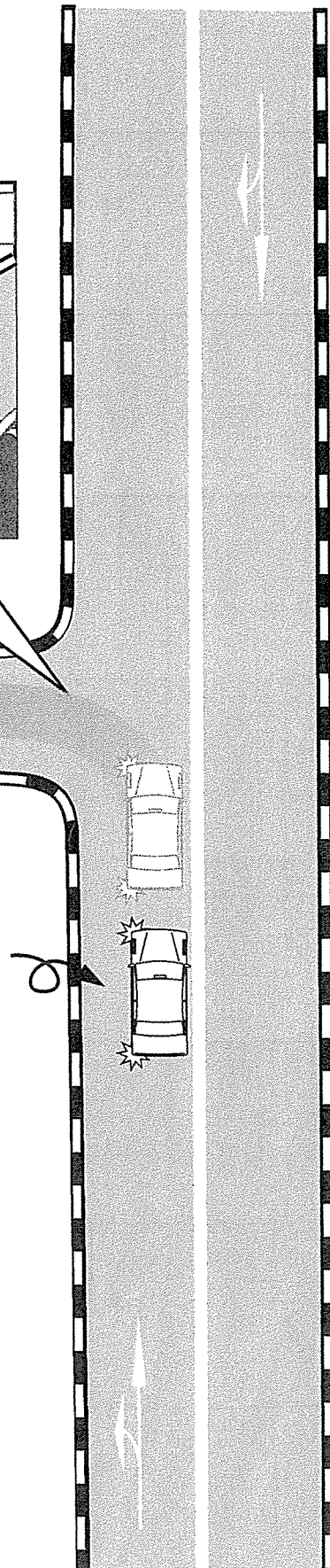
After stopping at the Stopline,
you may inch forward to have
a better view if necessary



Left Turn (Circuit)

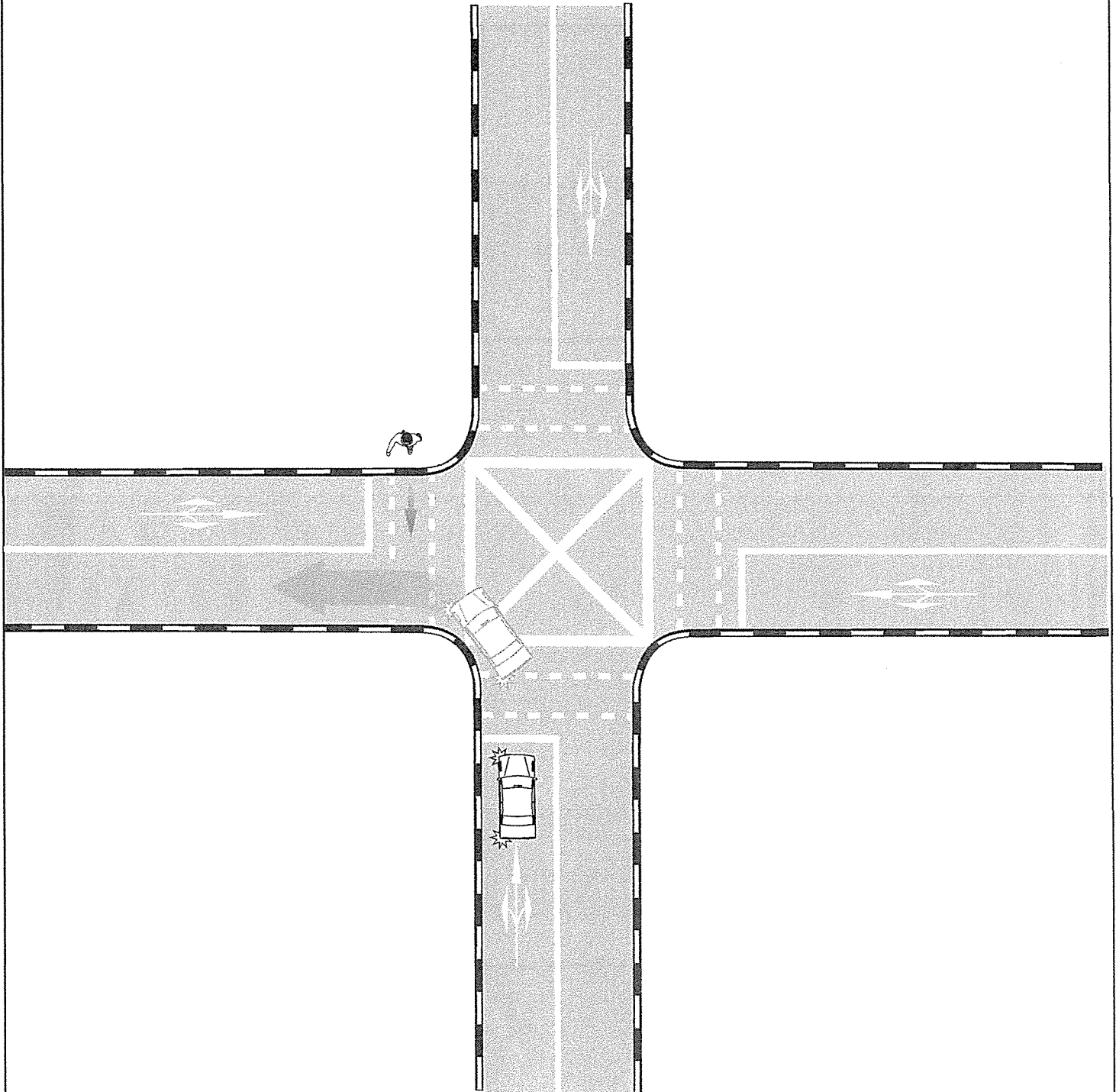


You may position the car to the right before turning if the turning path is too narrow



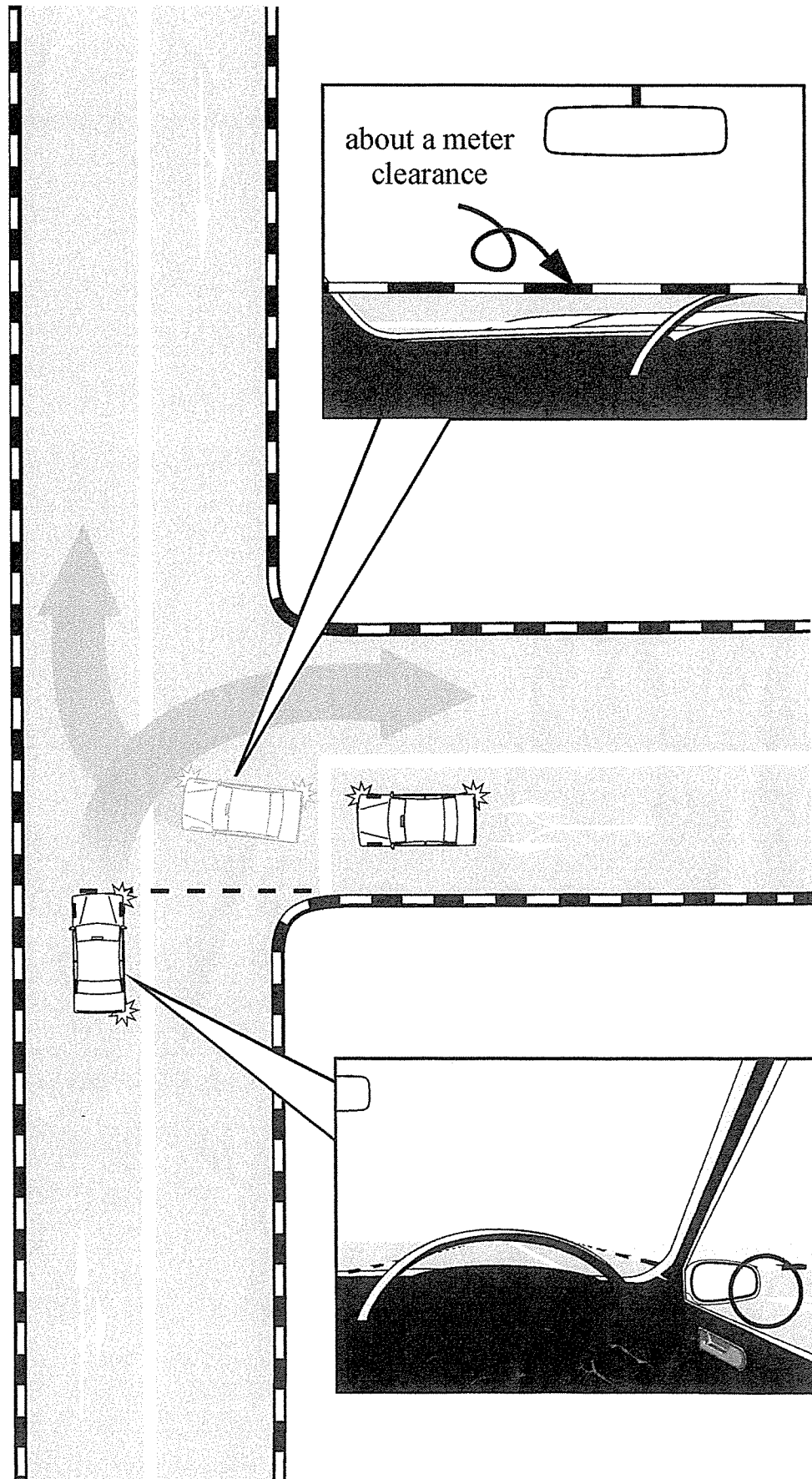


Left Turn At Traffic Junction (Circuit)



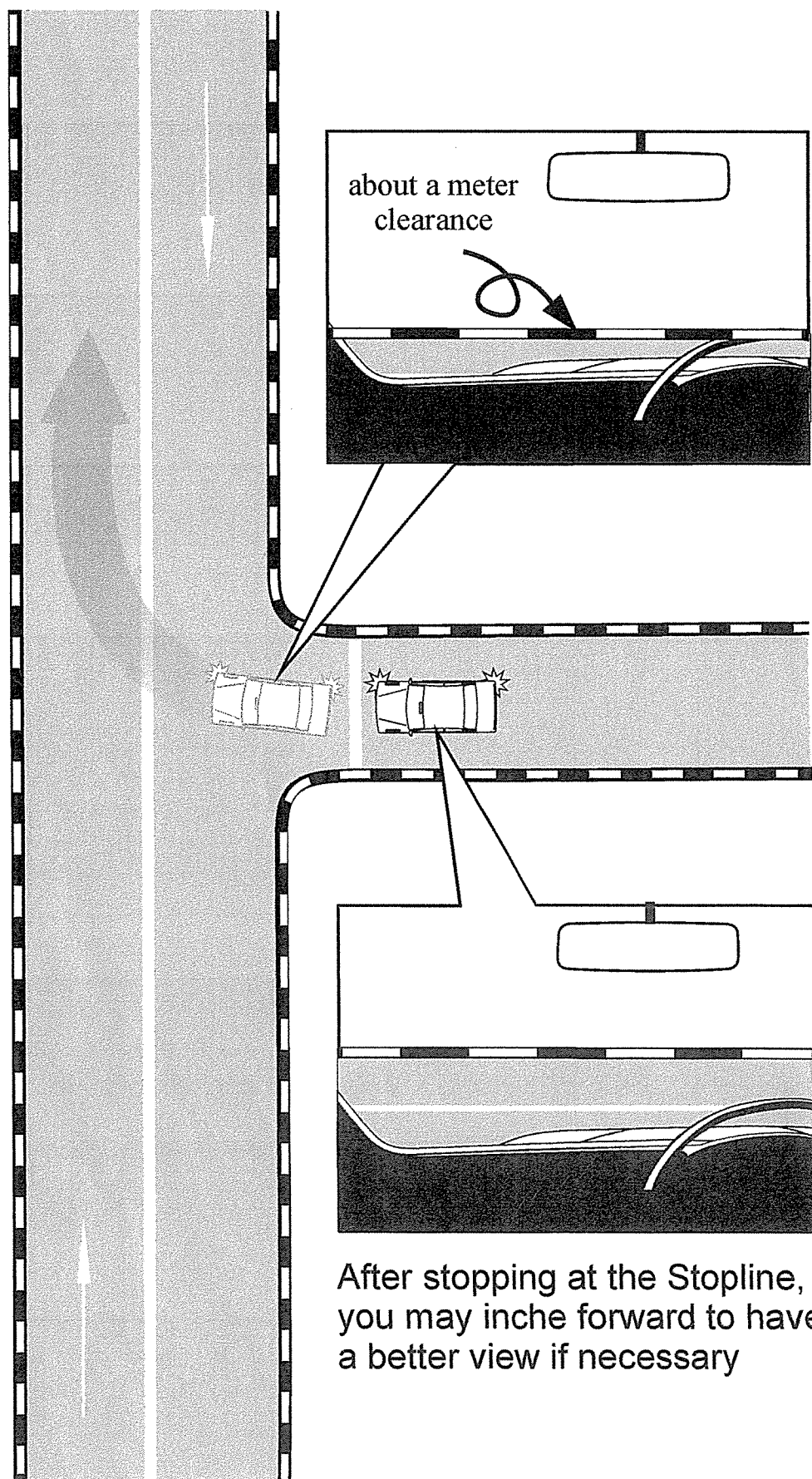


Right Turns (Circuit)



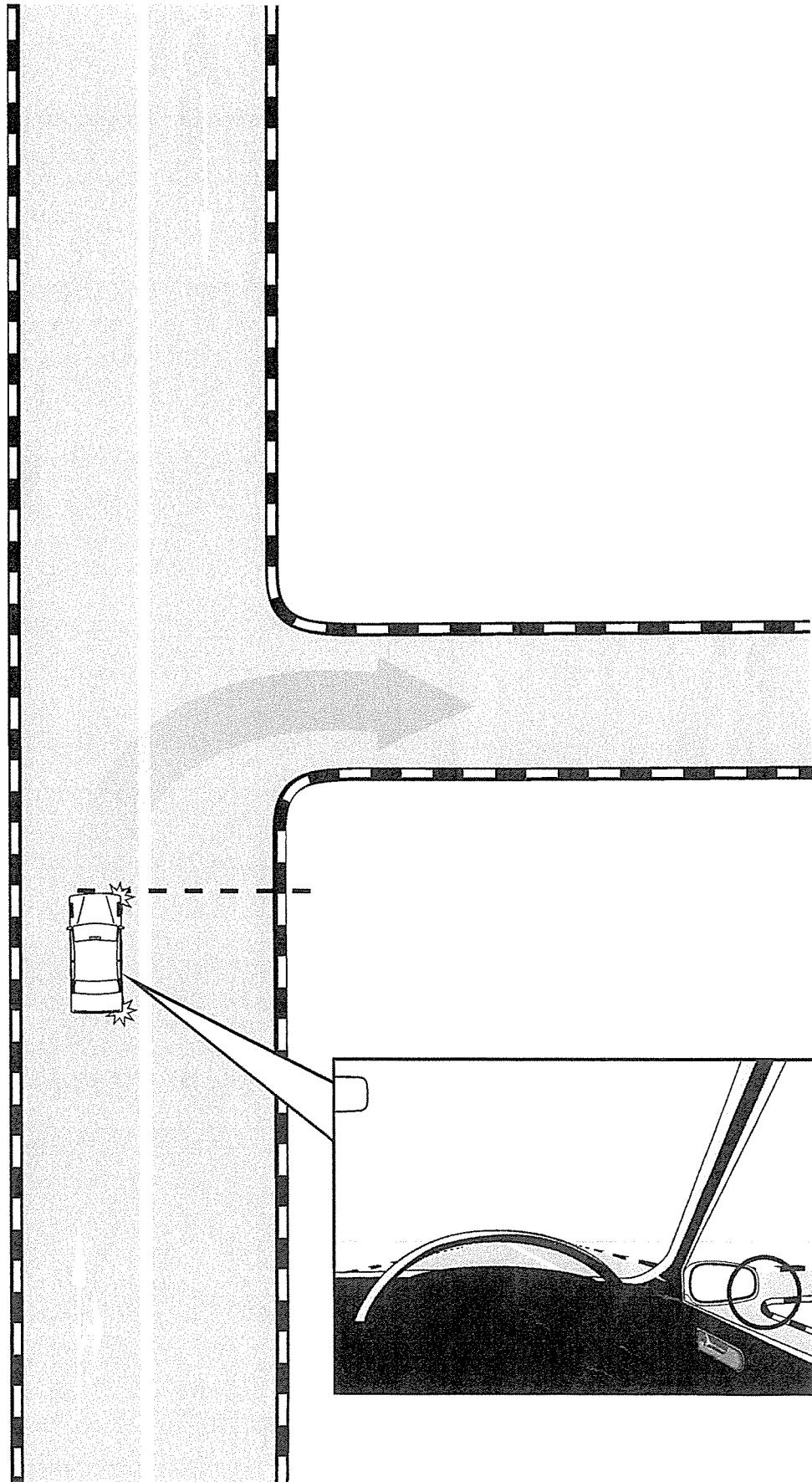


Right Turn (Circuit)



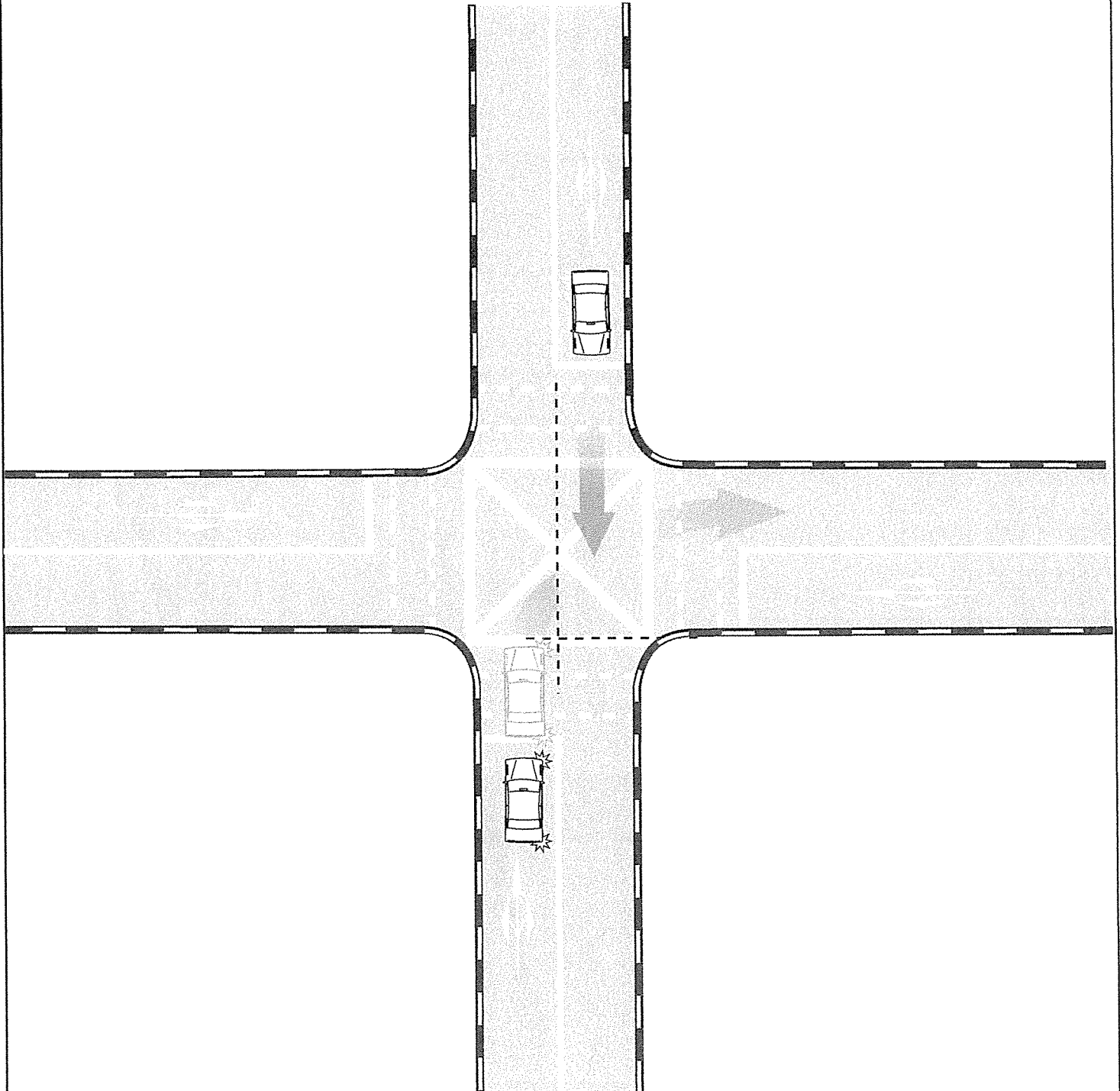


Right Turn (Circuit)





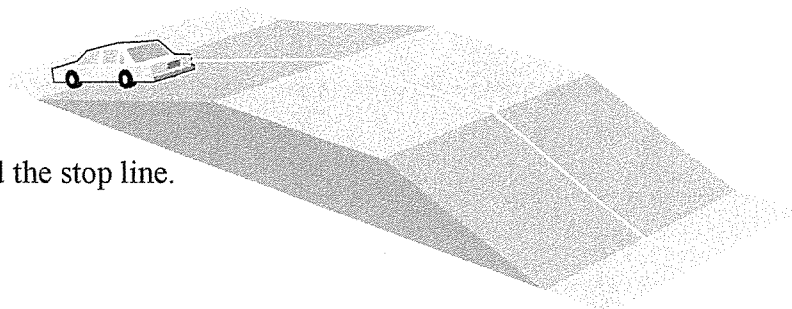
Right Turn At Traffic Junction (Circuit)





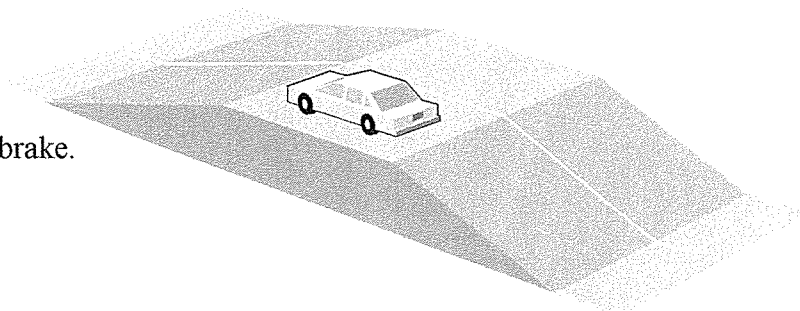
Stopping / Moving off at the slope (Circuit)

Step 6) Check the mirrors and stop behind the stop line.

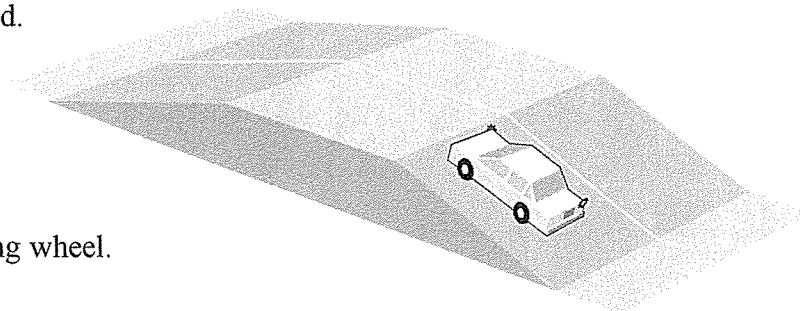


Step 5) When on the top of the slope, release the accelerator pedal and apply the brake pedal when going down the slope.

Step 4) Check blind spot over the right shoulder, if safe, release the handbrake. When the car move hold.

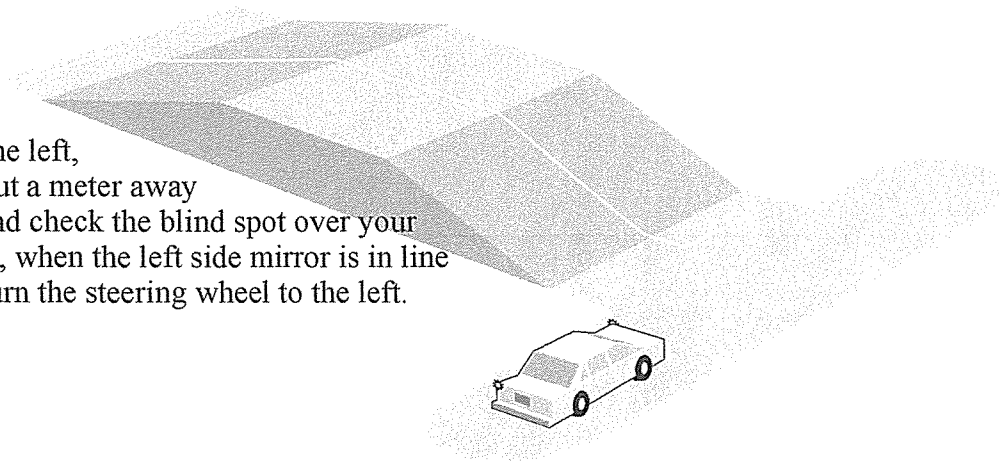


Step 3) Check the mirrors, signal intention to the right, Then depress the accelerator pedal slightly to increase the engine revolution OR you feel a pull of the car forward or drop in engine revolution and hold.



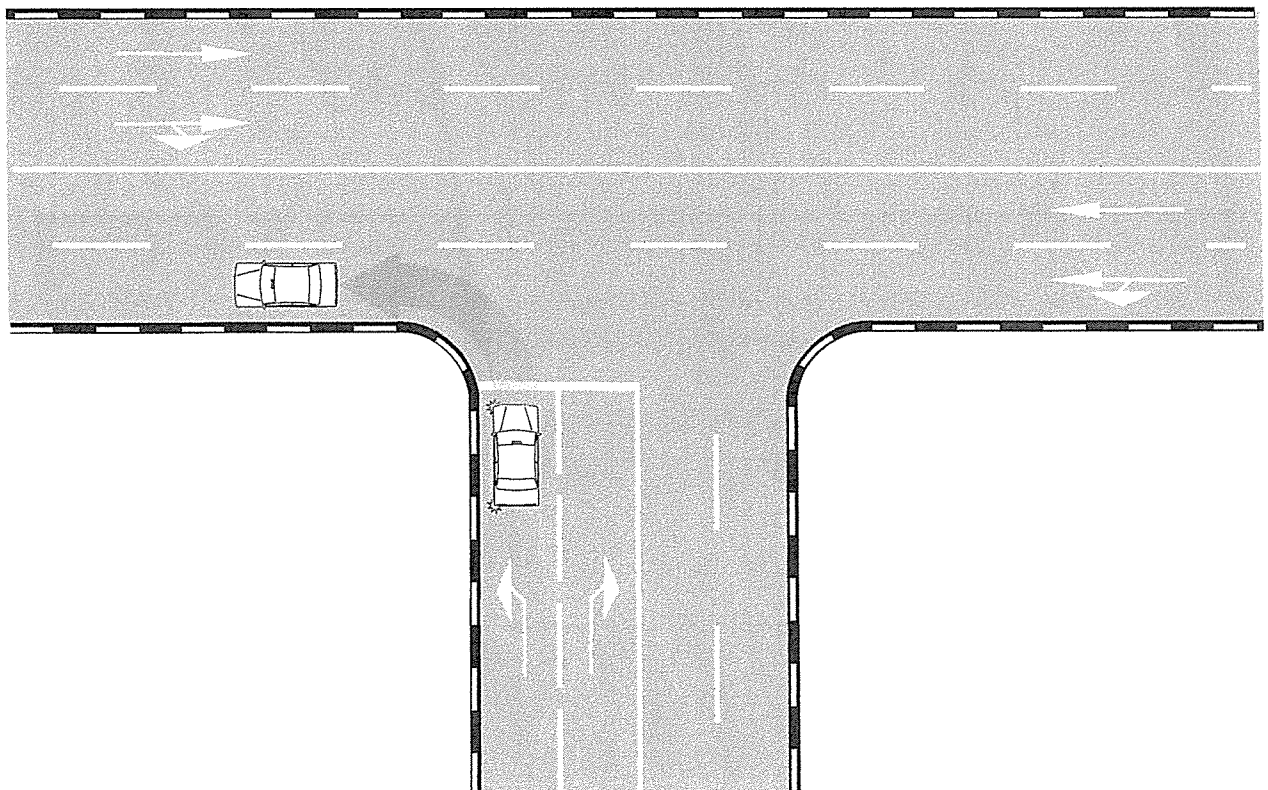
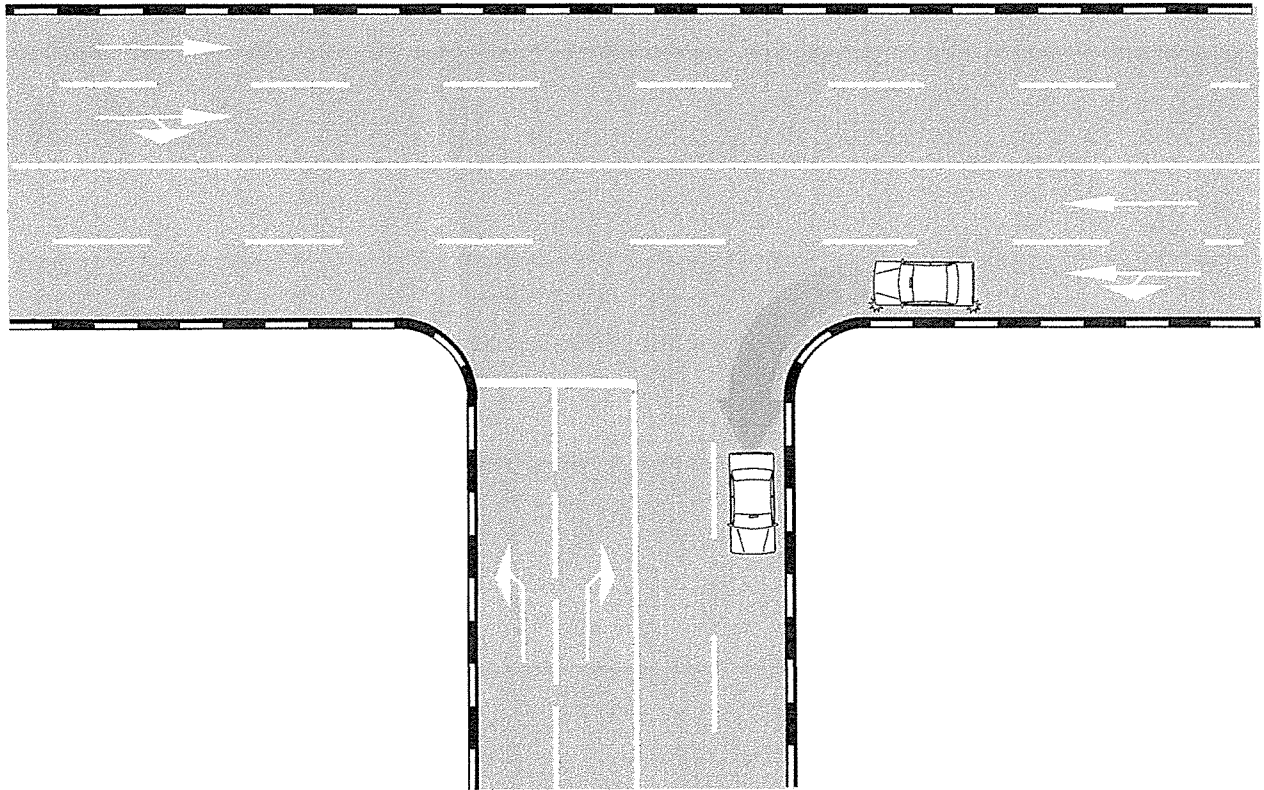
Step 2) Upon entering, straighten steering wheel. Depress the brake pedal fully. Then apply the handbrake.

Step 1) Check the mirrors, signal intention to the left, position the car about a meter away from the left kerb and check the blind spot over your left shoulder. If safe, when the left side mirror is in line with the left kerb, turn the steering wheel to the left.



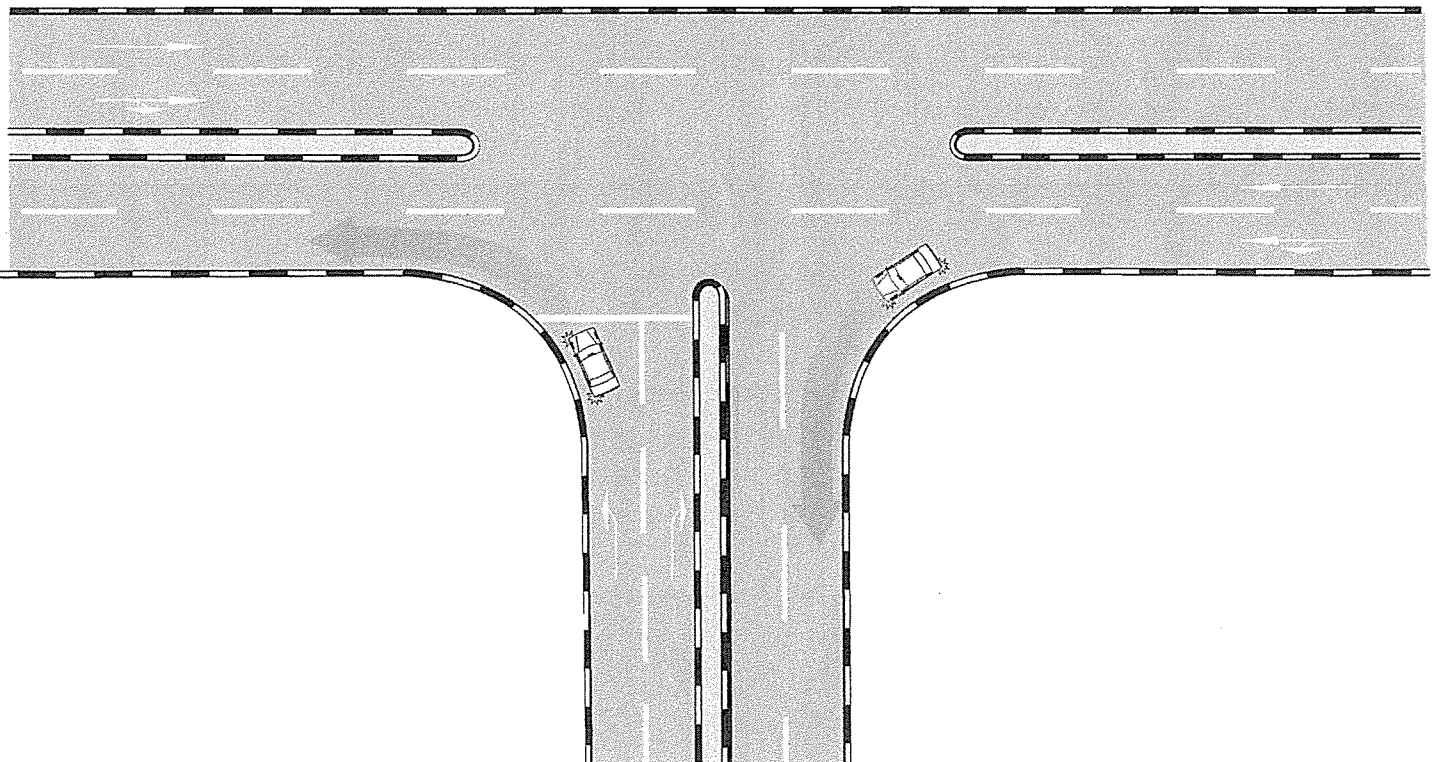
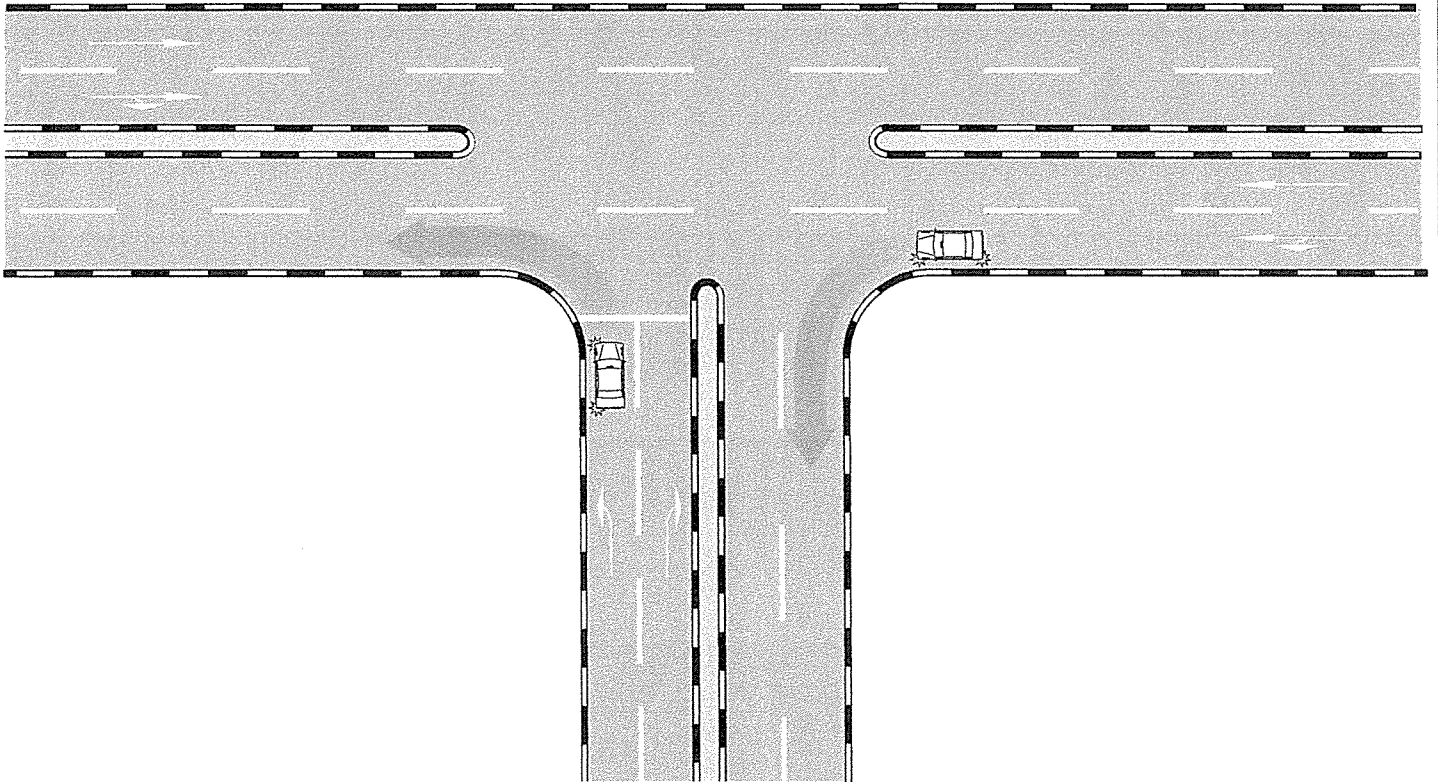


Left turn at 'T' junction (Road)





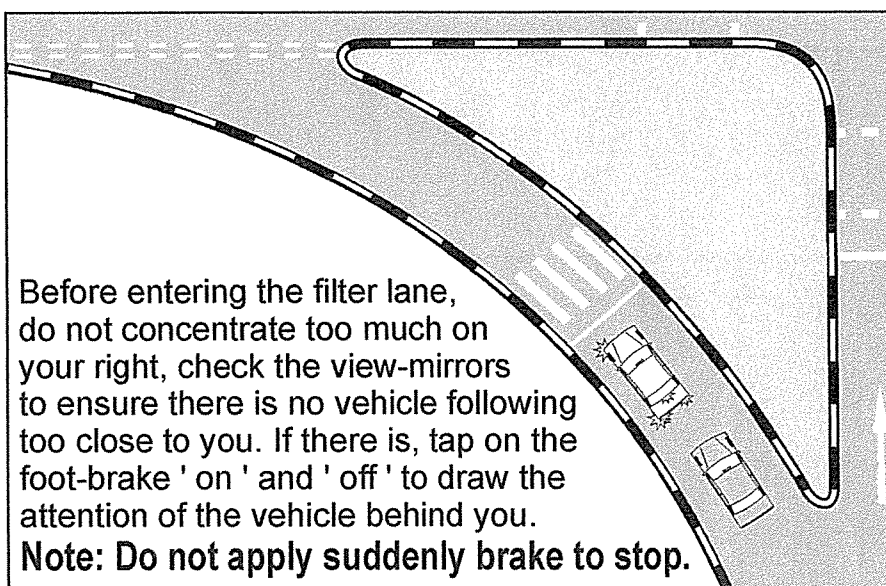
Left turn at 'T' junction (Road)





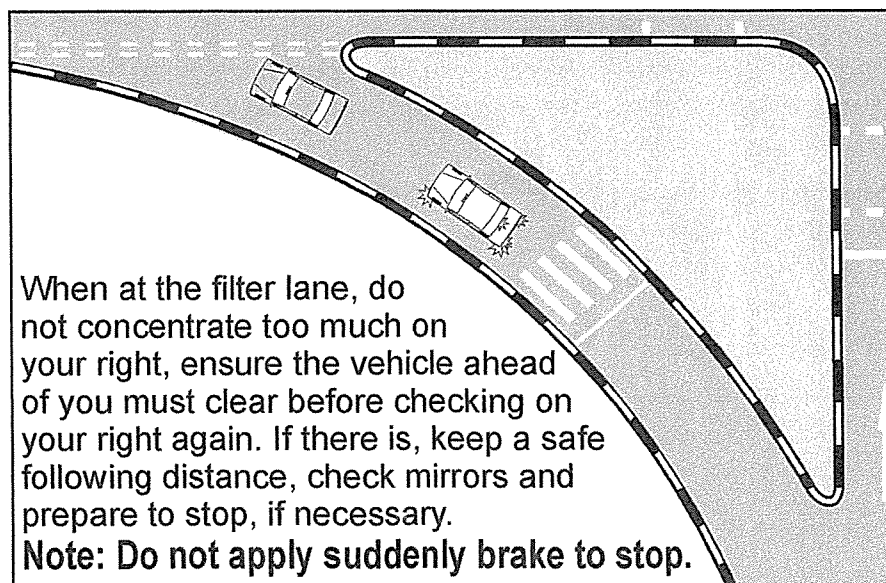
Filter Lane

Scenario One



Before entering the filter lane, do not concentrate too much on your right, check the view-mirrors to ensure there is no vehicle following too close to you. If there is, tap on the foot-brake 'on' and 'off' to draw the attention of the vehicle behind you.
Note: Do not apply suddenly brake to stop.

Scenario Two



When at the filter lane, do not concentrate too much on your right, ensure the vehicle ahead of you must clear before checking on your right again. If there is, keep a safe following distance, check mirrors and prepare to stop, if necessary.
Note: Do not apply suddenly brake to stop.



Filter Lane

STEP 7 -

After turning and adjust your speed to the traffic condition ahead.

STEP 6 -

Confirm safety on the right again, check your blindspot over your left shoulder. If safe, increase your speed gradually and turn to the left lane.

STEP 5 -

If safe, look out for the hazards after the filter lane, if there is prepare to overtake or change lane if necessary.

STEP 4 -

Look out traffic on your right, prepare to stop and give way if necessary.

STEP 3 -

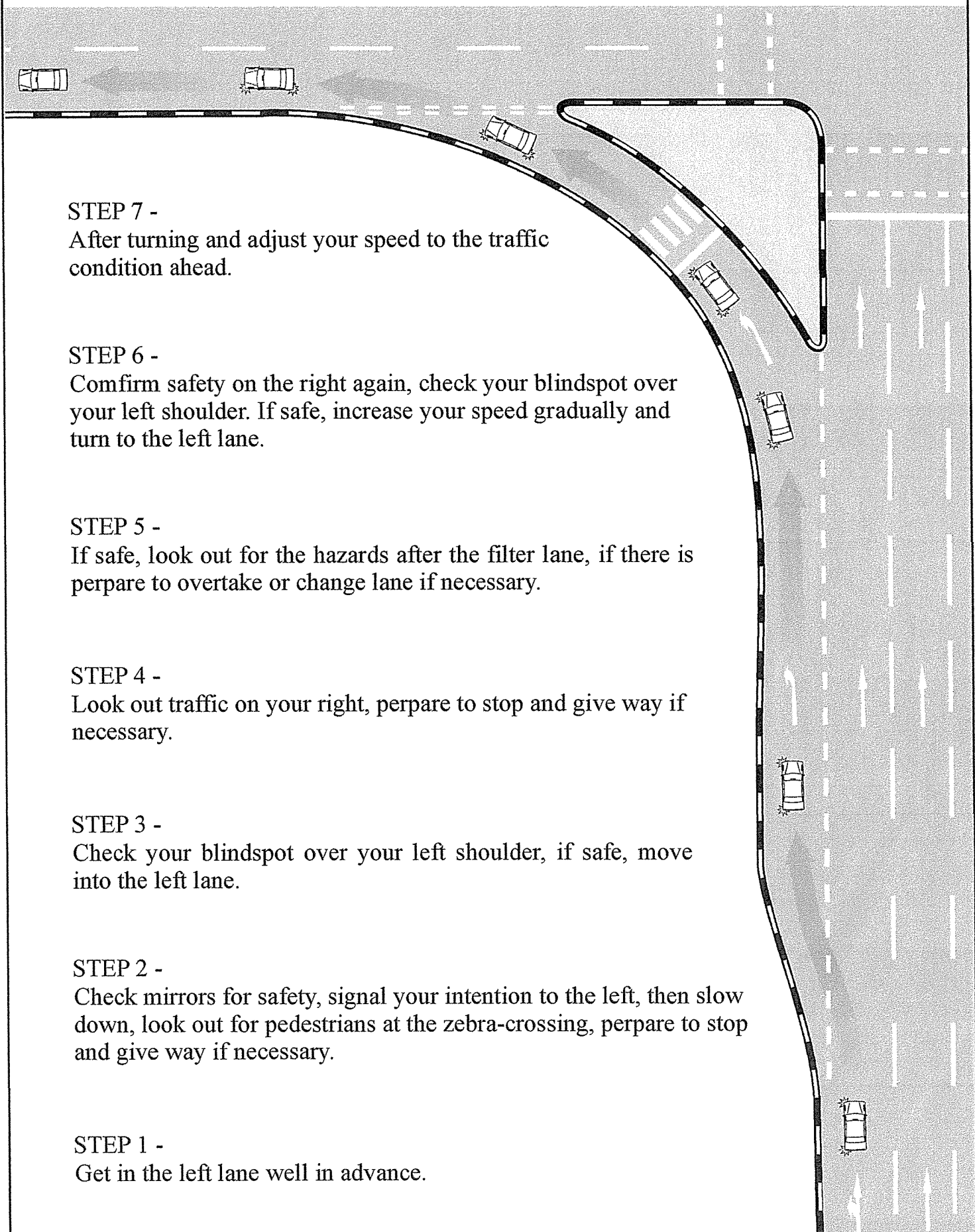
Check your blindspot over your left shoulder, if safe, move into the left lane.

STEP 2 -

Check mirrors for safety, signal your intention to the left, then slow down, look out for pedestrians at the zebra-crossing, prepare to stop and give way if necessary.

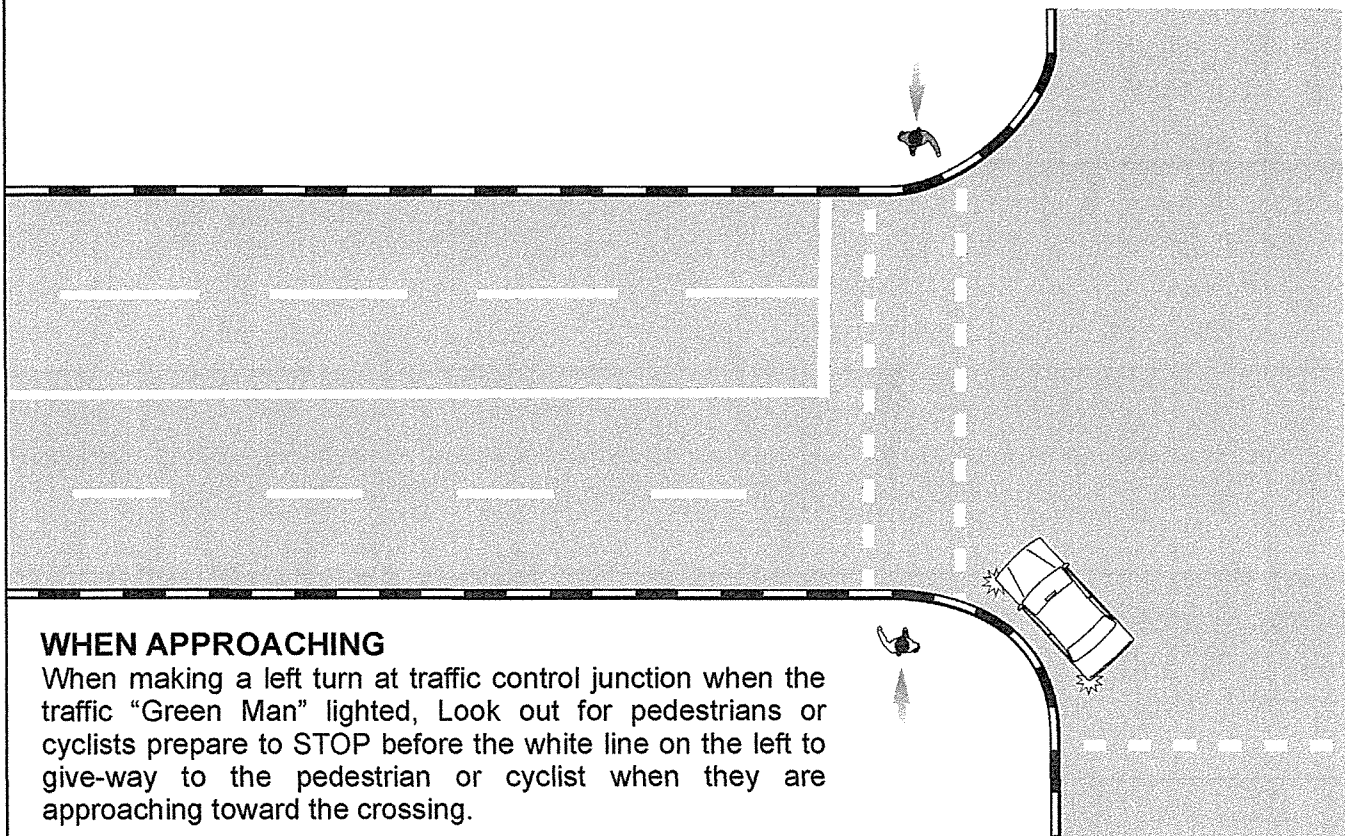
STEP 1 -

Get in the left lane well in advance.



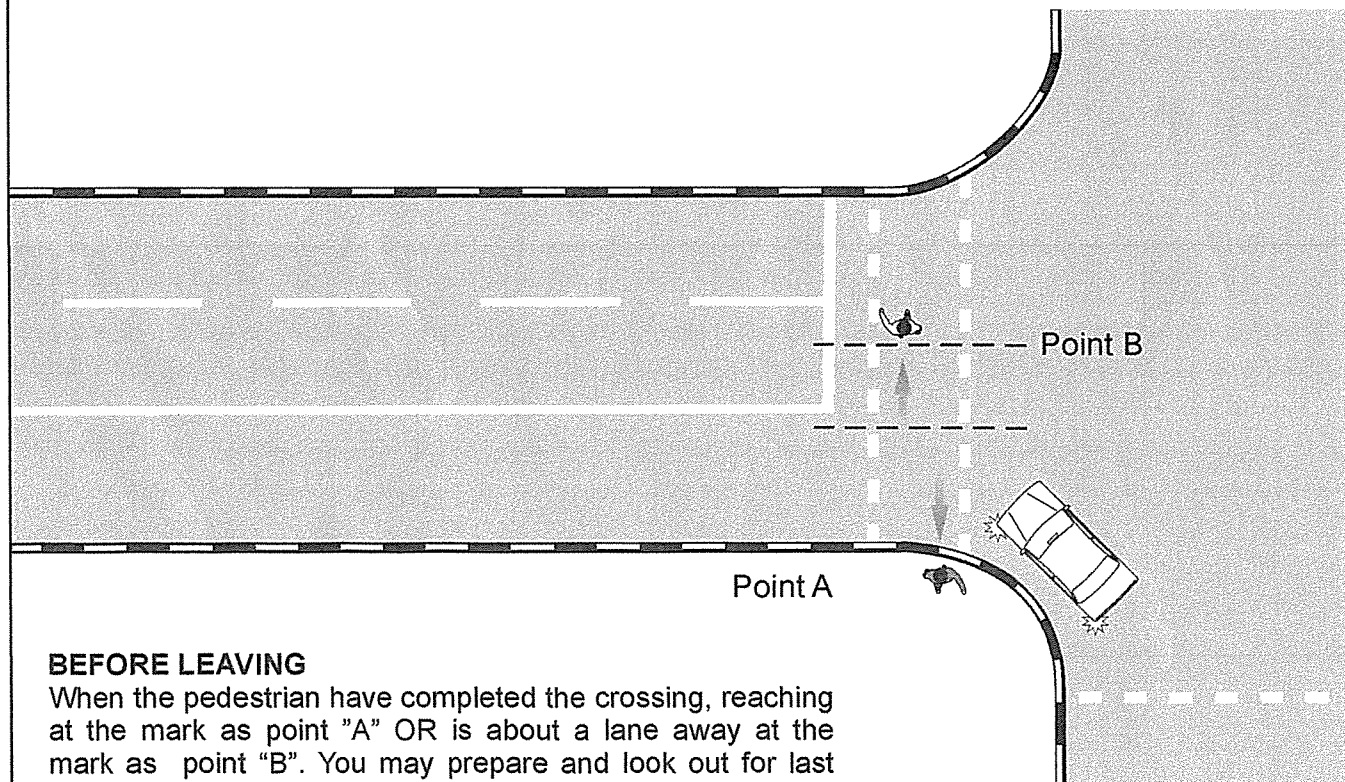


Pedestrian Crossing (Left turn)



WHEN APPROACHING

When making a left turn at traffic control junction when the traffic "Green Man" lighted, Look out for pedestrians or cyclists prepare to STOP before the white line on the left to give-way to the pedestrian or cyclist when they are approaching toward the crossing.



BEFORE LEAVING

When the pedestrian have completed the crossing, reaching at the mark as point "A" OR is about a lane away at the mark as point "B". You may prepare and look out for last minutes pedestrian or cyclist. If safe, check the left blindspot before moving off.



Pedestrian Crossing (Left turn)

Point C

Point B

SCENARIO ONE

WHEN VEHICLE - A IS MAKING A LEFT TURN AND PEDESTRIAN IS APPROACHING POINT (B), VEHICLE - A TO STOP AND GIVE WAY AND WAIT FOR PEDESTRIAN TO COMPLETE THE CROSSING.

PEDESTRIAN IS CROSSING AND APPROACHING POINT (C) - ONE LANE AWAY FROM VEHICLE - A, VEHICLE - A CAN PROCEED WITH LEFT TURN.

Point C

Point B

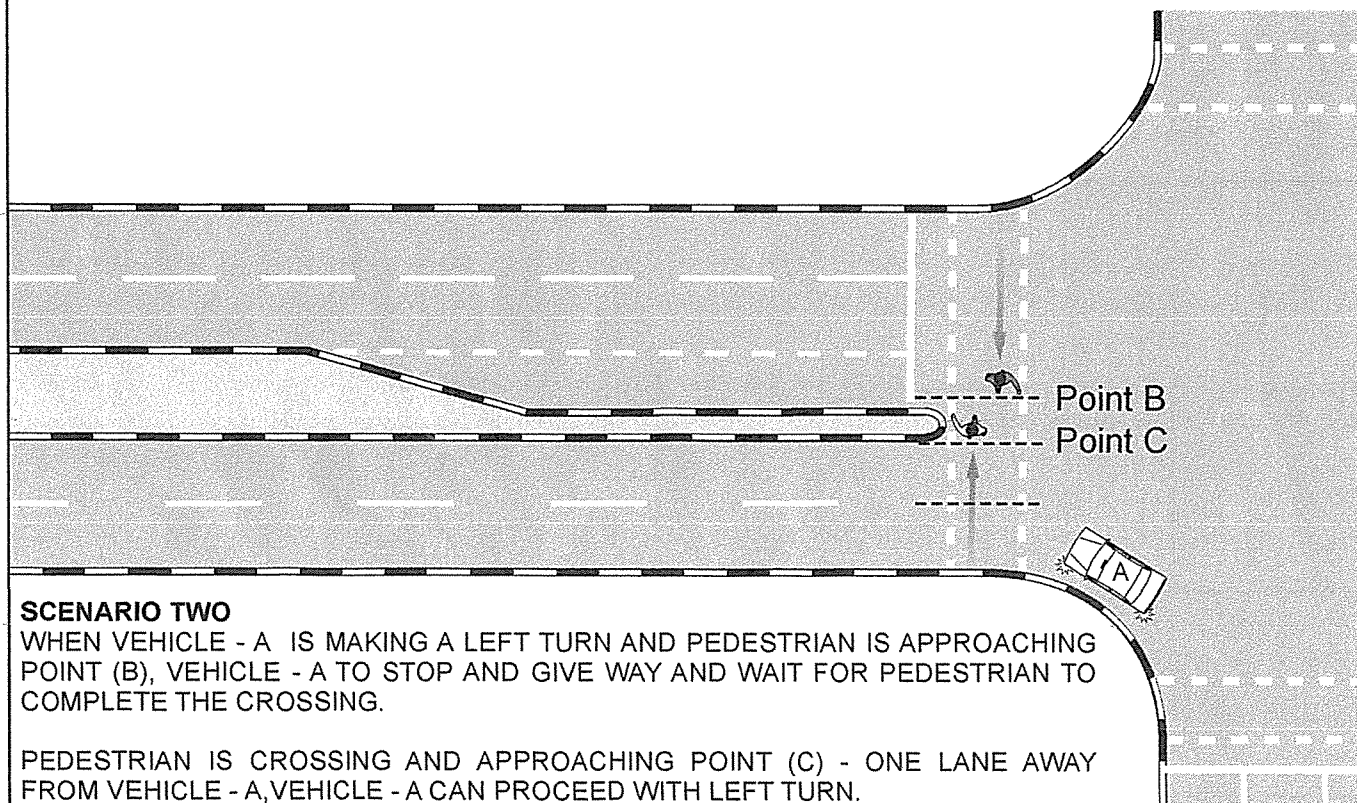
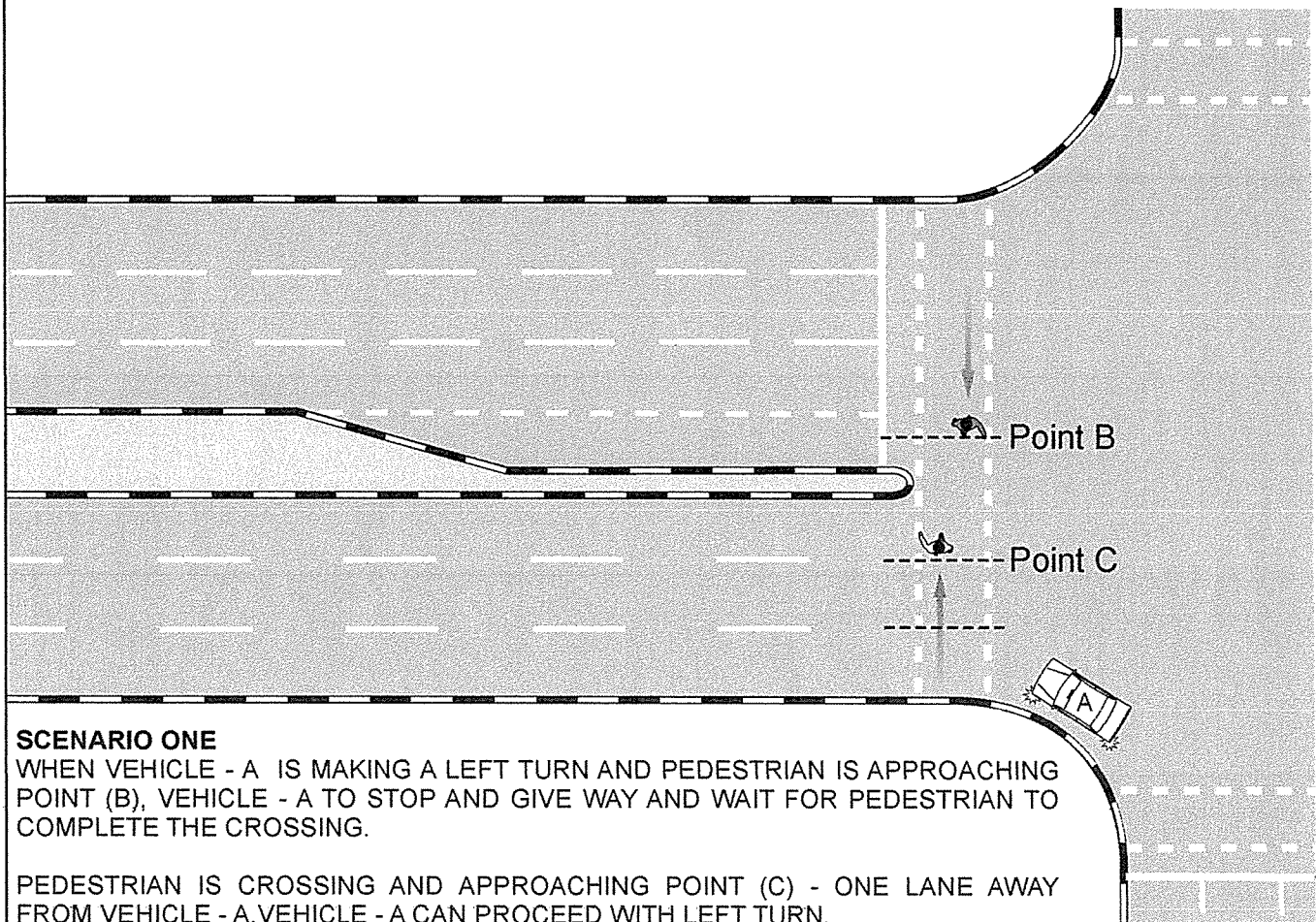
SCENARIO TWO

WHEN VEHICLE - A IS MAKING A LEFT TURN AND PEDESTRIAN IS APPROACHING POINT (B), VEHICLE - A TO STOP AND GIVE WAY AND WAIT FOR PEDESTRIAN TO COMPLETE THE CROSSING.

PEDESTRIAN IS CROSSING AND APPROACHING POINT (C) - ONE LANE AWAY FROM VEHICLE - A, VEHICLE - A CAN PROCEED WITH LEFT TURN.



Pedestrian Crossing (Left turn)



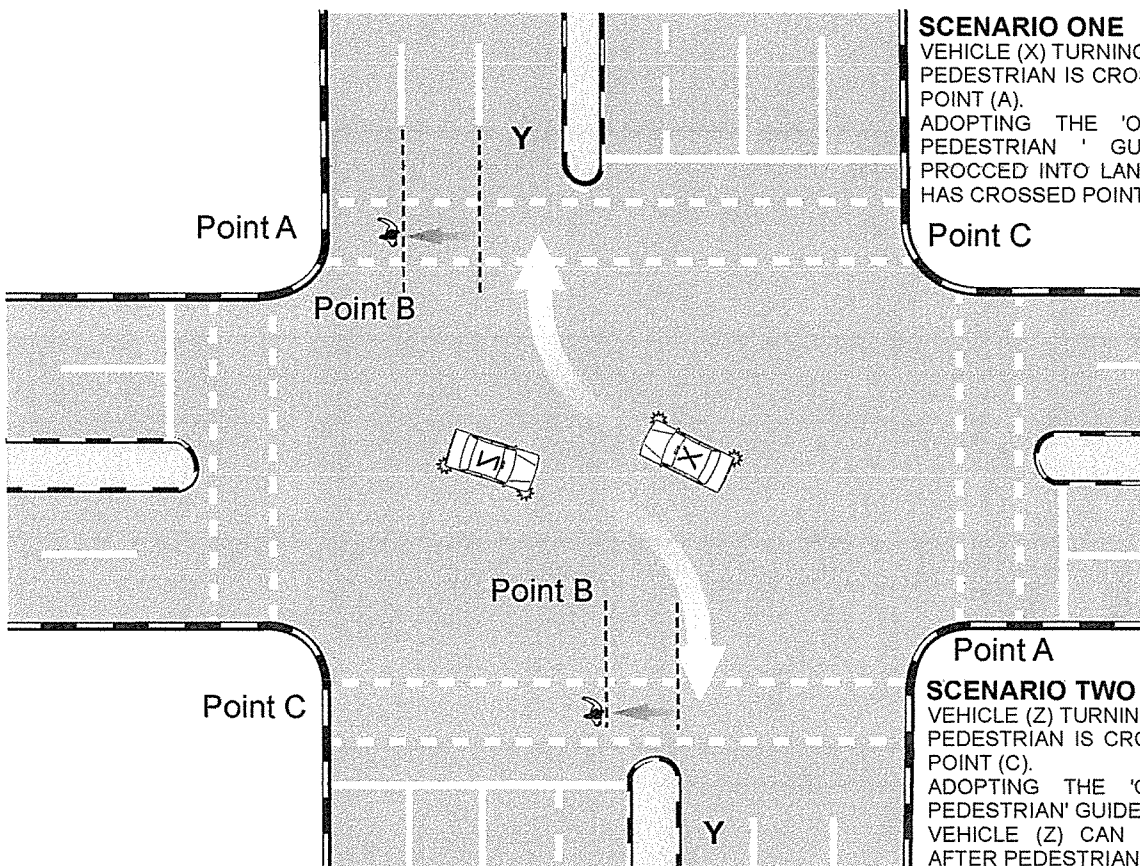


PEDESTRIAN CROSSING (Intersection)

SCENARIO ONE

VEHICLE (X) TURNING RIGHT AT INTERSECTION. PEDESTRIAN IS CROSSING FROM POINT (C) TO POINT (A).

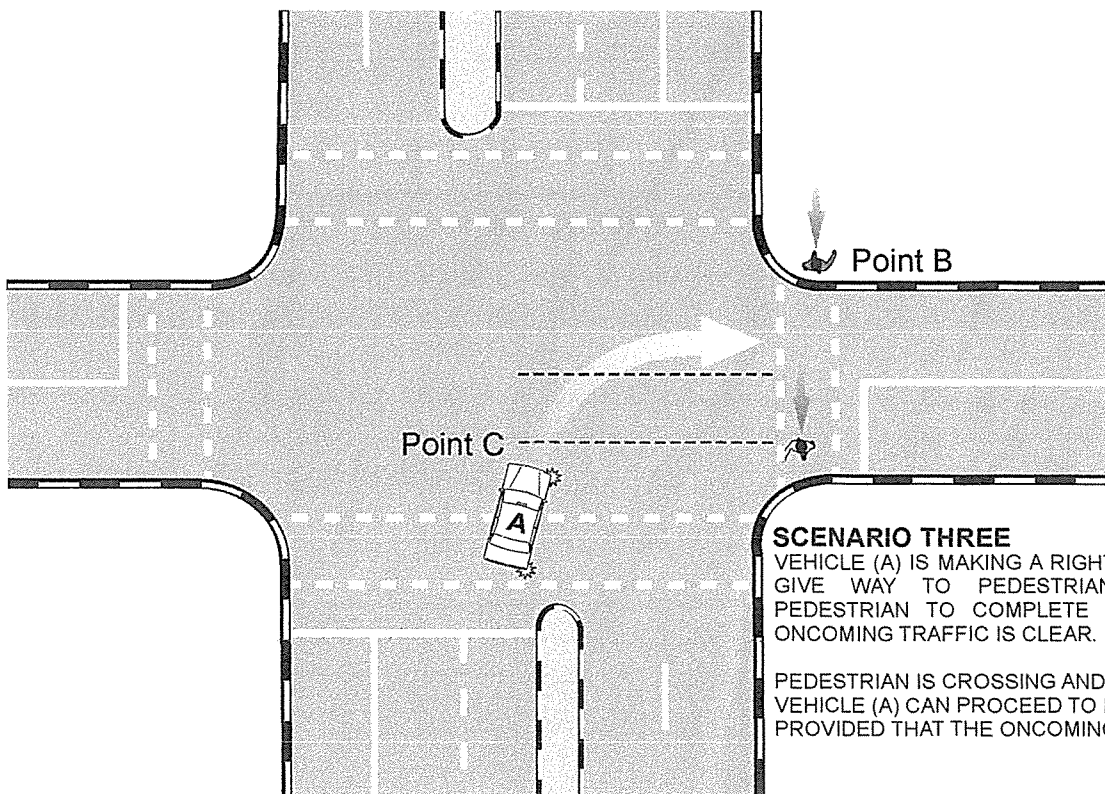
ADOPTING THE 'ONE LANE BEHIND THE PEDESTRIAN' GUIDE, VEHICLE (X) CAN PROCEED INTO LANE (Y) AFTER PEDESTRIAN HAS CROSSED POINT (B).



SCENARIO TWO

VEHICLE (Z) TURNING RIGHT AT INTERSECTION, PEDESTRIAN IS CROSSING FROM POINT (A) TO POINT (C).

ADOPTING THE 'ONE LANE BEHIND THE PEDESTRIAN' GUIDE, VEHICLE (Z) CAN PROCEED INTO LANE (Y) AFTER PEDESTRIAN HAS CROSSED POINT (A).



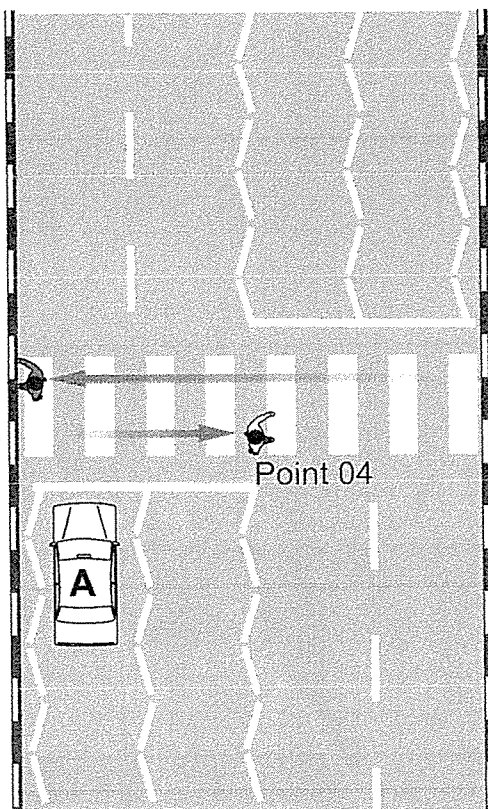
SCENARIO THREE

VEHICLE (A) IS MAKING A RIGHT TURN HAS TO STOP AND GIVE WAY TO PEDESTRIAN (B) AND WAIT FOR PEDESTRIAN TO COMPLETE THE CROSSING EVEN IF ONCOMING TRAFFIC IS CLEAR.

PEDESTRIAN IS CROSSING AND APPROACHING POINT (C), VEHICLE (A) CAN PROCEED TO MAKE A RIGHT TURN PROVIDED THAT THE ONCOMING TRAFFIC IS CLEAR.



ZEBRA CROSSING



SCENARIO ONE

PEDESTRIAN IS CROSSING FROM POINT 01 TO POINT 02, VEHICLE - A TO STOP AND GIVEWAY AND WAIT FOR PEDESTRIAN TO COMPLETE THE CROSSING.

Point 02

Point 03

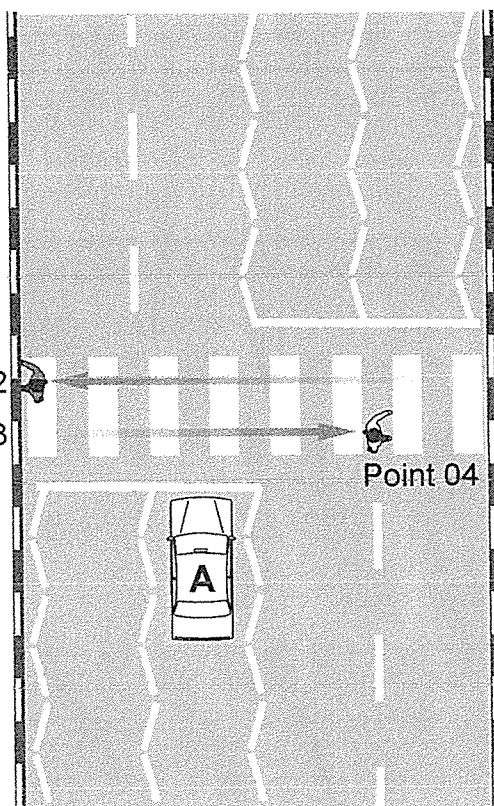
Point 04

Point 01

Point 05

PEDESTRIAN IS CROSSING FROM POINT 03 TO POINT 05. WHEN PEDESTRIAN IS AT POINT 04. (ONE LANE AWAY FROM VEHICLE - A), VEHICLE - A CAN PROCEED STRAIGHT.

NOTE : VEHICLE - A IS ON THE LEFT LANE.



SCENARIO TWO

PEDESTRIAN IS CROSSING FROM POINT 01 TO POINT 02 , VEHICLE - A TO STOP AND GIVEWAY AND WAIT FOR PEDESTRIAN TO COMPLETE THE CROSSING.

Point 02

Point 03

Point 04

Point 01

Point 05

PEDESTRIAN IS CROSSING FROM POINT 03 TO POINT 05. WHEN PEDESTRIAN IS AT POINT 04. (ONE LANE AWAY FROM VEHICLE - A), VEHICLE - A) CAN PROCEED STRAIGHT.

NOTE : VEHICLE - A IS ON THE RIGHT LANE.

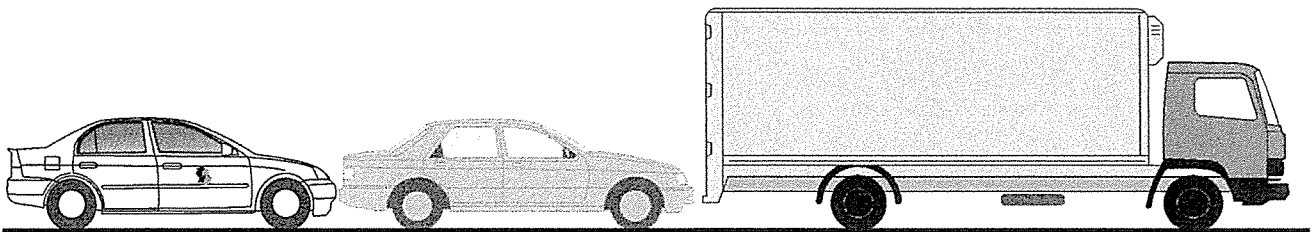


A Safe Distance

Stopping Distance

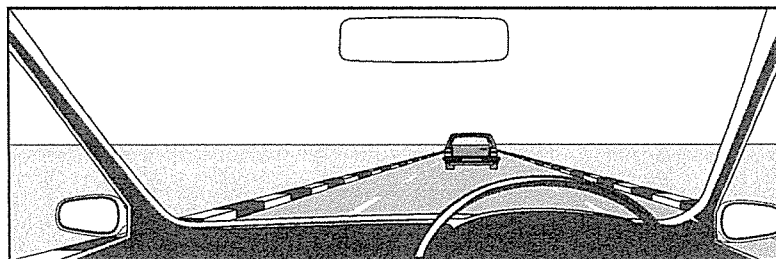


When stopping behind a light vehicle, you should stop $\frac{1}{2}$ car length (2m) behind the front car. Where you can see the rear wheelbase of the front car in contact with the road surface.



When stopping behind a heavy vehicle, as the blind area is larger, you should stop 1 car length (4.5m) in order to gain better view.

Following Distance



When driving on the road, you should always keep a safe following distance by maintaining one car length for every 16 km/h behind the front vehicle.

Following too close to the front vehicle, you might be unable to see the traffic condition ahead of the front vehicle and if any of the front vehicles stop suddenly, you may be unable to react in time.

16 km/h



32 km/h



48 km/h



64 km/h



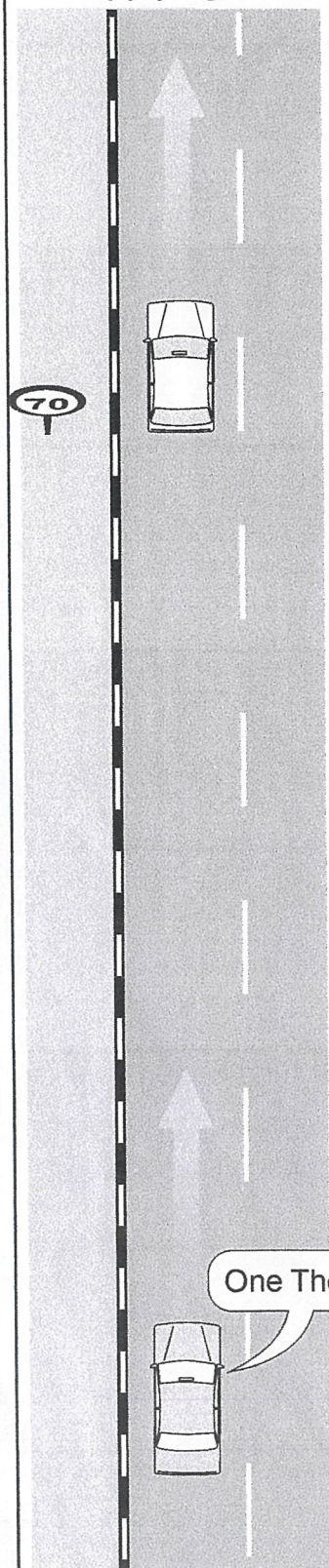
80 km/h



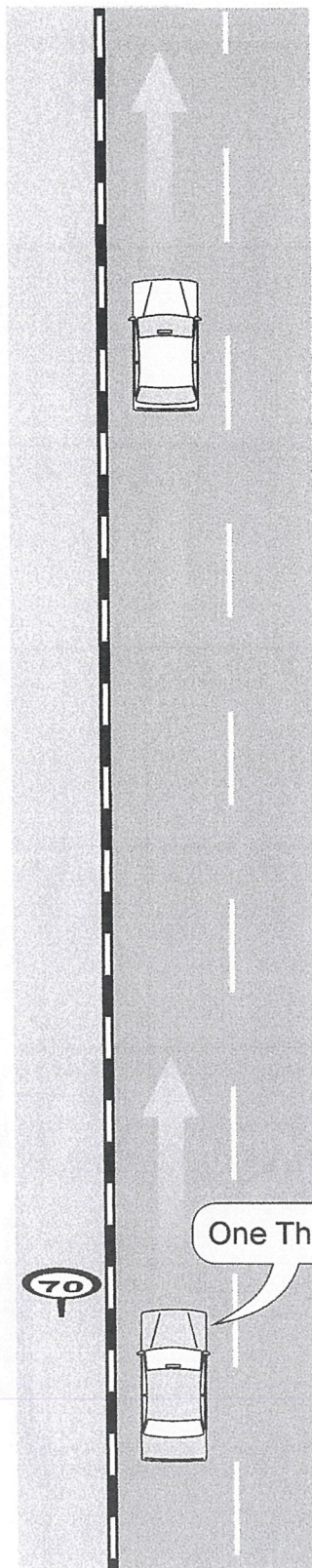


Safe Following Distance (2 second rule)

- When following behind a vehicle, we have to keep a safe following distance by applying the 2 second rule.



- To apply the 2 second rule, when the front vehicle passes a fixed object, example :- a traffic sign, we start to count "one thousand and one, one thousand and two."



If we reach the same spot after counting the eight words, it means that we are in the safe following distance to the front vehicle.

- This can apply to any vehicles at any speed