

CAN A LADY LOVE A DIESEL ?

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CAN A LADY LOVE A DIESEL ?

Chapter 1. Why Should A Lady Even Consider A Loving Relationship With Any Car, Never Mind A Diesel ?

It is generally assumed, by women as well as men, that only men have, or can have, a close relationship with automobiles..... that women actively distrust cars, along with most other mechanical devices, and derive little if any pleasure from owning or driving them.

What utter nonsense!

Of course it was not so long ago that it was generally held that women derived little if any pleasure from sex.... or were supposed to. Indeed, the world is awash with assumptions that are "generally" accepted as Gospel but which quickly fade away like an old brown proof print in the sun if subjected to examination by the light of even a 50 candle power wit.

Women can't appreciate automobiles! This is shallow, thoughtless, sneering comment that is long overdue for debunking. As is the equally snide phrase, "America's love affair with the automobile". A cliché that is so often used disparagingly by writers of newsprint trivia and in superficial TV editorial efforts to denigrate American culture or to berate the motor car as the primary cause of much of our present day economic, social and environmental problems.

We Americans, men and women, are no more (but no less) enamored of our automobiles than are the citizens of England. Possibly less so than the French, Italians and Germans who have all kept reasonable high speeds legal on their super highways so they can make efficient use of them as well as to enjoy driving there.... instead of dawdling along at 55 as we are supposed to do, getting nowhere and being bored stiff. *

Indeed, all peoples seem to be equally intrigued and delighted by the much

* See page for an analysis of the 55 miles per hour National Speed Limit in the United States.

maligned motor car - even such economically and culturally disparate citizens of this world as an oil-rich Arab in his Cadillac, Mercedes or Rolls-Royce and a luxury-starved Russian factory worker on a three year waiting list for a frumpy Soviet-made FIAT that will be outmoded before it ever leaves the assembly line. A Harvard professor in the latest turbo Diesel Volvo is brother-behind-the-wheel to an impoverished carpenter in Lima, Peru clattering along cheerfully in the barely mobile remains of a rusted-out 1932 Chevrolet.

We Americans do indeed have a great affection for the automobile. Call it a "love affair" if you will, but it is a passion shared by the entire world.

Unquestionably, before the advent of the motor car Americans, along with the rest of the world, were equally enamored of other means of transportation. No doubt there were those who then commented scathingly upon our "Love Affair With The Horse".... the Bicycle, or Trains, Mississippi River Boats or even the Erie Canal. What about the Studebaker-built Praiare Schooners that took our great,great grand parents to the far west and California ? Surely we had a "love affair" with those vehicles too.

This is a very large nation and traveling about in its incredibly varied States is both necessary and entertaining. Of course we "love" the automobile for it is far and away the best way yet devised for getting around in our country - from Sea to Shining Sea on vacation, to Grandma's house for Christmas or just daily jaunts from home to market, school or work.

Man, equally meaning Woman, has come to highly value and enjoy mobility. Not just the mass mobility first made possible by trains and steamships, then street cars, busses and now airplanes, but true individual mobility. The marvelous freedom and capability of going almost anywhere, any time! Right now! Regardless of train, bus or airline schedules or available space. Get into your car, turn a key and GO! Right NOW! What further makes going by car so appealing

is that it enables us to travel either alone or in company of our own choosing. Which sure beats milling about in crowded terminals, standing in check-in lines moving at glacial speed and finally being jammed into far too cramped seats literally shoulder-to-shoulder with total strangers - many of them with bored and ill-behaved children.

Flying on commercial airlines at 35,000 feet may be a way to get to somewhere else in a hurry but it doesn't enable us or a visitor to America to see Virginia's apple orchards in snowy bloom, to roll down a window and and savor the smell of new-mown hay in Nebraska, to see antelope and sage grouse in Wyoming or the cliff dwellings at Mesa Verde. To really see, enjoy or truly visit this or any other country we have to travel over its roads, not over its clouds.

We must be able to pause or stop at the spur of the moment... where we want to, not just where there is a jet airport with a 10,000 foot runway. Even the Swiss Alps are best appreciated from a car winding leisurely up one of those magnificent passes while hearing the tinkle of the cowbells Heidi loved coming from flower-starred mountain meadows. There are equally good reasons to travel by car at our own pace and whim along the byways as well as highways of Spain, England, France... anywhere in Europe. Or Australia, Canada, Mexico. Wherever.

So we children of the 20th century rightly put a high value on our freedom of travel and on our privacy even while traveling. Rather than live in a beehive-like apartment building with two hundred other families, most of us prefer a house of our own. The motor car extends this needed privacy into the outside world, even when we share the streets and highways with many others. Especially in the U.S., who wouldn't rather drive to work in one's own vehicle with perhaps an agreeable neighbor, than to stand in a crowded, hot, graffiti-defaced subway train, hanging grimly onto a strap to remain on one's feet as

the filthy cars clank and thunder deafeningly under the city.

God bless Nikolaus Otto, Gottlieb Daimler, Karl Benz, Andre Citroen, Ettore Bugatti, Henry Ford, Sir Henry Royce and Fred Duesenberg. And, of course, Rudolf Diesel!

Much as some women of past centuries may have benefitted from using a horse as a means of personal transport, it was far from an ideal solution to their need to get from place to place; even when they were permitted to travel by their family or husband. The horse, then as now, was undeniably smelly, uninhibited in the exercise of its bodily functions, needed feeding, grooming and was sometimes put out of action if only a stone bruised a hoof. All too often it was dangerously ill-tempered or easily frightened. Oh, yes, it also attracted flies like the dung it so liberally deposited along the way.

No wonder so many women the world over welcomed with such enthusiasm the introduction of the "safety" bicycle with pneumatic tires about 1890. It needed little care and no feeding, never passed wind in your face, never tried to bite or kick its rider or became frightened by a train whistle, a barking dog or a piece of paper blown across the road. And it never attracted flies.

Even though some of those turn-of-the-century Ladies considered wheels to be a girl's best friend they were, nevertheless, only fair weather friends. It didn't even require snow, high winds or a torrential downpour to render a bicycle more liability than asset. An April shower, already past, often left the two-wheeler prone to sliding out from under its rider or, at the very least, subjecting her to splattering from its own or other passing wheels and hoofs.

Even in her primitive open motor car that arrived soon after the bicycle became popular, a woman was far better protected from road dirt, the elements and other traffic. Soon she was to be free to come and go at will without the rather dirty and time consuming business of saddling or harnessing a horse....

or having the expense of servants to do it for her. Even if a bicycle was better than walking, it was not exactly a dignified way to travel and a woman was likely to arrive at her destination somewhat dishevelled and in a rather unladylike sweat. Indeed, it was probably a motor car of her own almost as much as "the vote" or even contraception that finally liberated women at last from a life of semi-permanent house arrest.

So why shouldn't a woman consider a "Loving Relationship" with a car. Her car. It is as loyal as a dog, no less affectionate than a cat, stronger than a horse and almost certainly as faithful as any husband or lover. It is willing and ready to take you to market, the movies, to work, library or hairdresser at any time, rain, shine or snow, without protest or grumbling and, what's more, to cheerfully wait there at curb or in parking lot until you are ready to return.

Let me further expound upon upon your car's companionable virtues. You can gaily chat with it on the way to work or to lunch with friends. In it you can let your emotional hair down on your way home from an entertaining (or otherwise) evening out. Unburden your soul tearfully or in fury without the slightest worry that anything said will ever be repeated to your subsequent distress. Your car understands and abides by your every mood; by your touch on a switch it will sing your favorite love song, play an ennobling symphony or read one of the classics to you while stuck in a traffic jam. It will, in a sense, enable you to cruise the Cosmos with Carl Sagan as you cruise down Interstate 81, the M4, the Strada Del Sol, or the Autobahn. Whatever. Wherever.

Or, perhaps even better, whisk you 50 miles or 1500 in cloister-like isolation and understanding silence to let you think out all those things that can only be thought out in solitude. A sort of mobile nunnery... but only for a period of your own choosing.

Your motor car will not, of course, cook your dinner or warm your bed. Don't expect too much in this life; few husbands will do the former and not all succeed in the latter.... to judge by the reports of cold marriage beds.

But beyond living companionably with your car there is the act of driving it to consider. The rewarding daily experience that makes a Loving Relationship possible and worth while. Far too much drivel has been written and said about the macho aspect of driving. That only men can really understand the true essence of an automobile - its mechanism, power, speed and response to the drivers every wish. That few women can appreciate the motor car for itself. That women only look upon a car as a comfortable and convenient means of transportation. That women are virtually bored to death by cars and driving.

Nonsense and more nonsense! If some women are bored by cars or driving it isn't necessarily because they are women; it may be that they have been taught that cars and driving are really for men and that it isn't womanly to have an interest in such an established male activity. Perhaps they were always stuck with too big or rather boring cars. Possibly they were afraid when at the wheel and never learned to drive well enough to take pleasure in what they were doing.

Consider once again the Lady Rider. To one not at ease with horses they are even more frightening than are motor cars to a novice driver. But English and New England fox hunting clubs of today, as a century ago, abound with women, young and not so young, who really know and appreciate horses, enjoy riding and can take their mounts over five barred gates and tricky water jumps as well as any men in the hunt. And enjoy doing so for the same reasons men do. So it is with cars and driving. Or it can be.

But right from its beginnings motoring was held to be an exclusively male province according to male opinion. Some doctors flatly claimed that women were both emotionally and physically quite unsuited to the complex and

demanding task of controlling such a complicated and dangerous mechanism as an automobile!

Granted that few ladies knew as much about the mechanical aspects and foibles of a 1904 motor car as did some men. Yet most men of that day drove their cars with very little real knowledge or understanding of the machinery they had acquired. Of course such technical expertise, then as now, had little to do with the effective control of a motor car or the pleasure to be derived from driving one. We gently eased the clutch pedal out to get under way without a jerk, pressed upon the throttle or gas pedal to obtain the power needed to accelerate and cruise along at the desired speed and we trod upon the brake pedal lightly or heavily depending upon how rapidly one wanted to slow. Then as now, knowledge of what the clutch mechanism actually looks like, how an engine produces the needed power, exactly how the brakes work and even why the front wheels react to the movement of the steering wheel has little or nothing to do with the way a vehicle responds to a driver. Just so can a man or woman become a superb performer at skeet or trap shooting without knowledge of or interest in ballistics or the mechanism of the shotgun. What enables a shooter to consistently break those challenging, fast flying clay targets is not mechanical ability, ballistic know-how or physical strength but the combination of timing and eye-muscle coordination.

Very much the same qualities that a driver brings to bear upon the task of guiding an automobile smoothly and safely, yet rapidly, through the curves and bends of a mountain road. Or in city traffic. Knowledge of how an automobile functions certainly doesn't hurt... but it isn't vital either. One does not have to be a violin maker before learning to play the instrument or to enjoy the music it produces.

Nor is there anything of necessity that is "macho" involved in the handling

or the enjoyment of a motor car from a walking pace on a country lane right up to the limit of tire adhesion in a 70 mph curve. It is an activity that can be equally rewarding to a 220 pound NFL running back or a 105 pound ballerina. Indeed, the smooth, almost fluid movement of a car at speed, sweeping through a series of bends, is far more like the ballet than trying to carry a football through the Steeler's line by brute force!

In fact, the very essence of driving a motor car with genuine skill is to be smooth. Stirling Moss, one of the best-ever sports car and grand prix race drivers, makes this very point. Saying that the heavy footed, ham handed driver sawing away at the wheel will never be as fast through a given curve or corner as the "gentle" driver with a sensitive feeling for both road and car; almost floating his vehicle through the corners with the minimum movement of the steering wheel and an easy foot on the throttle so as not to provoke more power sliding than is needed. Thus the technique for getting the absolute best from a car at speed is far more feminine-grace than macho-brawn!

If feminine characteristics are so well suited to getting good road performance from a car, then so are other feminine sensitivities equally well suited and attuned to appreciate other qualities of a motor car... how it accelerates with a rush akin to starting down an exciting ski slope, how it sweeps through an S-curve with the grace of good dancers in an old fashioned waltz, how the sounds of the myriad engine parts combine at high revs to create a muted symphony of mechanical perfection and power, how the tenuous grip of tires on a slippery road can be felt and interpreted by sensitive fingers on a steering wheel. Yet for all this elegance of movement and delicate balance in the guidance of a car, there is also a truly sensual gratification

in the controlling of sheer brute force in the range of 50 to 300 horsepower merely with the light touch of toes on the accelerator that is even more rewarding than the response from digging one's heels into the flanks of a horse. If a strong man gets a thrill from unleashing the surging power of a motor car then surely a relatively frail woman should find the control of this power even more rewarding.

Chapter 2.

ON BUYING A NEW CAR.

Yet the essence of an automobile is something more than its power or the control and utilization of it. There are other/equally important, though static, aspects the appreciation of which may well be more fully realized by a woman because of her basically superior appreciation of the nuances of color, form and materials. Not all women may bring these admirable feminine abilities to bear upon the selection of a new car - but they should. Just as they would when considering the purchase of a piece of furniture, a ceramic bowl or a winter outfit.

Deciding upon a new car should be done with all the serious consideration one would bring to the choosing of a new house or apartment. Not only is your car a place in which you will also spend a goodly part of your daily life, but here you have almost as much opportunity to express your own special feminine individuality and taste. Even though you can't hang curtains in the windows.

Just as some of us have our housing needs met by an attractive one-room apartment, so too can many of us, men as well as women, have our automotive requirements fully served by a sprightly two-seater/sport roadster or coupe. Even a mother of two doesn't always have to settle for a lumbering 7 passenger station wagon as her own car; a dashing 2+2 hatchback might not only enable her to carry out her duties as family transport officer but make it all much more fun.... as it should be. And save fuel besides. However, in determining whatever size her car should be, a woman is only making a start on the host of

entertaining choices and decisions involved.

Having dealt with the carrying capacity of her car - 2-seater, 4 or 5 or 6 or even 9 passenger - there is then the matter of body configuration; 2 or 4 door sedan (perhaps with hatchback), a coupe of some type, a station wagon or possibly a van (the new Mini-vans are a managable size). Perhaps a convertible! Surprisingly these are coming back into favor with the motoring public despite the disapproval of Ralph Nader and those who frown upon the very idea of a car being designed, even partially, for "fun" as well as a means of transportation.

Regardless of what the car haters may wish to believe, cars are fun. All cars, though in varying degrees. Do not overlook or disregard this aspect when making your choice... any more than when picking a husband. Besides having an adequate fun quotient, your car should have style. Or character, just like a prospective husband or lover.

Blandness may be a fine recommendation for an ulcer diet but it will surely lead to terminal ennui in either a motor car or life-mate. As you approach your car each morning, key in hand, it should be with an anticipatory glow at the thought of the delightful minutes or hours the two of you will now share, unwinding those miles of highways or even city streets that lie between you and your destination. Half the fun of going to wherever it is that we are going should be in the going. Just as we should enjoy the daily unwinding of the hours and years of our lives on our way to wherever it is that we are all headed.

And just as those of us who greet each day with pleasurable anticipation will get more joy and laughter from that day (and more than likely live longer because of it), so too will those of us who drive our cars with genuine pleasure and near-total involvement in the act of driving, have a far better chance of

surviving the many deadly dangers that lurk in wait, like dragons of old, along every mile of every highway ready to strike unwary travelers - those unsuspecting motorists too uninterested in their cars and the road to ever be aware of unseen dragons or accidents only a split-second away... yet easily avoidable if sensed before they fully materialize.

Forgive me if this seems a long way round to say that those of us who enjoy motor cars and the driving of them can better survive out there on the real asphalt jungle simply because we are more attuned to the reality of the highway than are those people who are bored by it all and have their minds somewhere else. Drivers like that all too often became dead before they were ever aware of the developing accident that killed them. An accident they almost certainly might have avoided had they been more involved with driving than with rehashing the morning's family squabble, planning a business coup or were just simply wool gathering and bored... to death.

It is worth saying once again - if your car is fun to drive, and you thoroughly enjoy being at the wheel of it, you are far less likely to have accidents. The "fun quotient" of a motor car may, therefore, just be the greatest safety feature of all in automotive design. If you do your part by putting or keeping the directly related "fun factor" in your driving of that car the two of you may survive the many perils of the highways of your life.

End of lecture on "The Philosophy Of Driving".

Despite a number of somewhat unattractive cars still in production today, not only do our Detroit auto makers maintain large and costly "styling" departments in their efforts to catch your eye and beguile your fancy, but there are also the acknowledged geniuses (Italian) of automotive design - the establishments of Bertone, Pininfarina, Guigiaro, Vignale and Ghia that not only design but actually build bodies for Ferrari, Maserati, Alfa Romeo,

Lamborghini, Lancia and FIAT. These artists in metal also do design and styling work for other European, Japanese and American auto makers who then build those bodies in their own factories - Peugeot, Ford, Volkswagen, Isuzu, and Rolls-Royce for example - some of whom do not always give credit where credit is due. Ford actually owns Ghia but rarely takes full advantage of the talents of this group of artists and engineers. Michelotti, Zagato and Touring are ^{and builders} body designers/noted for their lightweight sports car coachwork.

In any event, there is almost as much variety in automotive styling as in clothing. Even the in-house designs of Jaguar, BMW, Mercedes-Benz, Aston Martin, Rolls-Royce, Mazda, Datsun, Porsche are often of great interest. In recent years the General Motors styling people (having evolved beyond the fin stage of the 1950s) have been surprisingly creative and many of their designs far and away the best and most tasteful of all large cars done anywhere. Their Seville is certainly a great credit to Cadillac and General Motors, even though the sharp-edged lines and the trunk are derived from the elegant custom bodies produced in England for Rolls-Royce and Daimler by such coachbuilders as Mulliner and Hooper in the 1930s. A period of automotive grandeur that could serve as the inspiration for other types of bodies for present day manufacturers.

So do you like the efficient aerodynamic look of many of the new Ford products and the latest Audi 5000, or do you prefer the crisper lines of the Volvo 760, the latest GM cars, Datsun's Maxima and Toyota's Camry? As yet the Japanese have produced no true National styling innovations of their own but, nevertheless, have several tasteful and attractive variations of good European and American designs. Without being new or spectacular, Honda got it right some years ago with their Accord, both in coupe and in 4-door form, and these cars still please the eye. Their latest newer models are almost equally successful.

Whether Italian, Japanese, German, American, British, French, Scandinavian.... there is surely a style to please any eye and even purse.

Having decided upon the shape and look of the car you think you might want to live with, what about color? There seem to be more hues in the car catalogs than any rainbow has seen, so surely there is one somewhere to delight every eye. However, do consider this, dear Ladies, a car that is easy for other drivers to see is unquestionably less likely to be involved in an accident; day or night, rain or shine. It is a fact that at dawn and dusk, or on a grey day, on a grey road, under a grey sky, and in the rain, all cars of whatever color (even red) tend to appear grey at no great distance and then merge into the road and landscape. In most two-car accidents someone gets out of a car saying, "Jeese, Officer, I never saw her (or him)". In reality it is just as important to make certain that we are visible to others as it is to see other road users ourselves.

Beyond any doubt or question, white is the most quickly and easily seen and therefore the safest color for a car. Fortunately, almost all cars, large or small, big sedans or little sports cars, look very handsome in white. Yellow is equally "seeable" under difficult conditions. Black is great in snow but not so visible at other times and certainly not at night. White may not be ideal in snow but it is safer at night and best overall by a wide margin.

My own personal feeling is that all cars appear to their best advantage in white, red or black. Though I must admit that some are exceptionally attractive in silver and certainly a Mercedes in their special tobacco brown is stunning. However, if you simply cannot abide white or yellow, if you must have some shade of maroon, grey, blue, tan, green, brown you can effectively enhance your visibility on street or highway, in all conditions of light and weather, by always having your headlights turned on (but on low beam) as do Greyhound and other busses. That company discovered some 40 years ago that even these huge vehicles were

involved in appreciably fewer accidents when they did so. Indeed, white or yellow cars should also be driven on low beams in daylight in the interest of surviving out there. Most certainly so on rural two or three lane roads.

Ah, but color inside your car is another matter. Here you can give free rein to your personal taste and special likes. Fortunately, the selection offered by the manufacturers (especially the Americans) is remarkably wide. Happily, seats and trim of almost any color look right in a white car - red, tan, brown, blue.... even white or black!

Now, if the makers of the car you fancy for a Loving Relationship don't offer the interior in the color or material you really want, just remember that for no more than the cost of recovering a sofa and a couple of chairs you can do the same with the seats and trim of your car in interesting high quality fabric, vinyl or leather. As you will live with and in that car for some time and pay somewhere between seven and forty thousand dollars for it, it should genuinely please and pleasure you; not only when you are at the wheel and bowling merrily down the open road but even when in town waiting for a red light to change or seeing it through your living room window as it stands patiently awaiting you at the curb. To get your \$15,000 investment just right it might very well be worth an additional \$1000 or \$1500 to do so. You would spend that much for just the right drapes or carpets for your living room; why consider doing less with your car if it needs it to truly become your car.

I did say that color inside your car should be whatever you like because it has no bearing upon your safety. However, there is one area which is an exception - the top of the dash or facia. Because this is reflected in the windshield it should always be black. When the sun shines in on this area when it is finished in red, blue, green, whatever, the world you will be seeing through your windshield will be seen through a haze of that color. Not only is

this esthetically unpleasing, it results in eye strain and it impairs your vision of where an accident may be developing. Most really well designed, driver oriented, cars come with this area finished in matt black or dark brown regardless of the color of the rest of the interior. This looks quite right because the dash or facia is functionally a separate entity from the rest of the interior inasmuch as it is really an extension of the engine room which it monitors. Detroit had (and still has) a regrettable tendency to make this area look more like part of a boudior than what it^{really}/is. The Europeans and Japanese generally use instruments and controls with taste and respect to give the facia a beauty derived from and appropriate to its function. And its color should be black or at least non-reflective. So if the top of the dash in the car you want to buy has it done in something brighter that reflects in the windshield, you might want to insist that the dealer carefully spray it flat black to make it the way it should have been done in the first place. If he demurs, have him move the car outside so the sun shines through the windshield and ask him if he would pay \$7,000 (or \$20,000) for the dubious pleasure of driving around in a red haze.

Should You Buy a Diesel ?

Now don't rush things. We're not yet ready to discuss engines. There are still many other factors that also affect your choice of the car you may come to love and which can enhance your pleasure in being with it. What about the transmission or gearbox of your new car? Should it be a stick shift or an automatic? Of course a manual or stick shift does give you a little better fuel economy (gas or Diesel) on the highway, especially if it is a 5-speed or overdrive unit. Acceleration is also slightly enhanced. But unless you really enjoy shifting gears and using a clutch, even in traffic, go automatic. The latest automatics have (or should have) an overdrive top gear and torque converter lock-up and so now give very nearly the same good mileage as do stick shifts.... often within

1 mile per gallon.

Driving should never be an aggravation, and an automatic transmission certainly takes a lot of the "irk" out of irksome stop-and-go traffic. Surprisingly, there is still a machomystique clinging to the stick shift... but it's phony. Anyone with enough wit to come in out of the rain and sufficient manual dexterity to operate a can opener or a lawn mower can quickly learn to shift a modern transmission having synchromesh on all the gears. In the days before about 1930 making smooth and crunchless shifts did take some skill and one needed to be reasonably adept at the art of "double clutching" in order to execute a downshift from top to second without producing embarrassing noises or missing the shift entirely. That racing driver par excellence, Stirling Moss, has said that while a manual gearbox is needed in a racing car to obtain the absolute maximum performance, any road car he drives for pleasure must have an automatic. I don't live and drive in London but I quite agree.

You may not realize it, Ladies, but with all automatic transmissions you actually do have a choice of how the gears are shifted and when. You can shift them manually if and when you want to - overriding the completely programmed operating cycle of "D" or "Drive". But most of today's automatics are so cleverly coordinated with an engine's performance characteristics and the weight of a car that we can only improve slightly upon the acceleration obtained automatically in "Drive" when we hold each gear a little longer by shifting manually. It is hardly worth this effort to knock a mere half second off the 0 to 60 time.

However, there are other very good and more valid reasons for shifting an automatic gearbox in certain circumstances. For example: if approaching a sharp climbing turn at the foot of a hill with the gear selector in "Drive", the transmission will automatically be in top gear as you lift off the throttle coming into the curve - even though you want to be in "Second" a moment later for better

control of the car going through the curve and for more power coming out of it and on up the hill. So pull the selector back into a lower gear just before entering the turn and leave it there as long as you need this extra power.

Coming down a mountain grade in "D", and using no throttle, the gearbox will naturally be in top gear, which provides little engine-braking and leaves the car feeling rather unstable through any curves. Shift the gearbox into a lower gear and it remains there, even when you lift off the throttle, providing better engine-braking and balance in negotiating the curves. This is the professional way of dealing with this situation. Don't go down twisty mountain grades in top gear and on your over-heated brakes.

If you are following a slower car or truck, awaiting an opportunity to safely pass on a two or three lane road, "Drive" will yet again have you in top gear or overdrive which will not provide the power you want and need to accelerate and execute this move quickly. If you leave the transmission in "D" you can, of course, floor the throttle to get it to "kick-down" automatically into the next lower gear as you pull out to pass. But this usually takes a second or two and very often even such a small delay may be dangerous. Furthermore, if you should for some reason find it necessary to lift off the throttle a bit (even for a second) as you pull out, the gearbox will instantly go back into top gear leaving you without full performance just when you urgently want it again. We should never remain on the "wrong" side of a 2-lane highway for longer than necessary, even when passing an ordinary car; when passing a long truck or bus the situation is especially fraught with potential danger. So manually shift your automatic into its "passing" gear while you are still following a slow vehicle in front of you and watching for the opportunity to get by. Then you have the needed power and gearing for quick acceleration instantly available - enabling you to pass quickly and get back to

your side of the road before another car appears from the other direction or the truck swerves or something else unexpectedly happens and finds you in this exposed position. Never just slowly ooze pas the vehicle you are passing in top gear, taking half a minute to do so. Unfortunately, too many drivers, men as well as women, are reluctant to shift down for passing at 30 to 50 mph with either manual or automatic transmissions, probably because then they hear the engine running more rapidly and apparently fear it may be damaged. Not so! Use those gears and higher engine revolutions for the purpose they were intended... and for your own good health and long life.

Remember now, your automatic is, in effect, also a stick shift.... but it never is the other way round.

One last point in favor of the automatic. With it you can get the maximum acceleration from your car (when you want or need it) somewhat more easily and smoothly than with a stick shift, which introduces a break in the forward momentum of both car and passengers as the power is cut momentarily at each shift point and then brought on again. This often unpleasant lurching as we shift each gear is largely eliminated with an automatic that make possible a more sustained and steadier push forward.... right through all the shift points. A stick shift version of your car may have slightly quicker acceleration in very skilled hands but you will usually utilize more of your car's performance with an automatic. And do so without discomodng your passengers.

Another Major Choice.

Now we come to an even more important decision - will your new car be pulled or will it be pushed ? Will it be front wheel drive or of conventional design with the rear wheels propelling the car? Most of the recently designed family cars are now pulled along by their front wheels but Citroen went this route way back in 1934 and quickly won the hearts of 50 million Frenchmen with

back in 1934 and quickly won the hearts of 50 million Frenchmen with "traction avant". The famous "MINI" did it for the English soon after WW11, as did SAAB for the Scandinavians and AUDI for the Germans. The mystery is why, with the exception of the short-lived, low volume, Cord and Ruxton cars, it took the manufacturers here in the U.S. so long to see the advantages provided by front wheel drive - more room inside the body (both in front and back), a lower center of gravity, plus improved stability and traction on slippery roads.

It is true that such noted high performance cars as Mercedes-Benz, Jaguar, Alfa Romeo, BMW, Maserati, Ferrari, Lamborghini, Lotus, Aston Martin and Corvette, all renowned for their acceleration, speed and roadholding, transmit their power to the highway via their rear wheels; and no front drive is faster through curves and corner than these.... as long as the roads are dry and free of snow or slush. Let there be a dusting of snow, a film of slush or patches of ice on the pavement and the difference between pulling and pushing quickly becomes evident.

Let us assume that we are on an Interstate highway following a couple of very slow cars in the right hand lane on a snowy day, driving a conventional rear drive car. Traffic has kept the snow from accumulating to any serious extent in this lane. The left lane is clear of traffic but by now covered with about 5 inches of wet snow in which we see the marks of only a couple of cars that have been out there trying to pass. As we start to accelerate and move over into the left lane, the driven rear wheels of our car begin to spin and the rear of our car instantly slews to the right; necessitating two corrective moves on our part.... lifting off the accelerator enough to prevent continued wheelspin and steering the front wheels to the right to keep the car from spinning completely around. If we are quick enough the front of the car will be brought back into alignment with the rear and directional stability restored. But with power to the rear wheels reduced to prevent wheelspin, forward progress has been slowed. Now great care must be

exercised in attempting to regain or even maintain speed in this snow covered lane, for a little too much throttle and the rear wheels will again spin (and start the rear end sliding) to begin the whole cycle over again. Passing has become impossible.

With exactly the same road conditions we can pull a front wheel drive car over into the left lane with its 5 inches of snow, even across the slushy ruts of other cars, and accelerate with spinning front wheels as we do so! Our car remains directionally stable because spinning front wheels do not induce a skid and will still pull the car in the direction we steer. Therefore, we can safely accelerate past the cars in the right lane and then pull back across the rutted snow ahead of them without once having had to deal with a developing skid. Of course in such circumstances one doesn't use more power than is required for we always get best traction and grip from tires that are not spinning. But even if one or both front wheels do lose traction and begin to spin, we have not provoked a skid or seriously affected the directional stability of our front-drive car. Steering response may have been somewhat slowed but it has not been lost and the rear end of our car docilely follows wherever the front leads.

On slippery roads, and especially on hills, a rear-drive car is constantly trying to push us into a rear end skid.... a front-drive, because it is pulling itself along, does not do this.

However, on a dry surface which provides sufficient grip to prevent wheelspin, rear wheel drive cars can climb a steeper grade than can cars with driven front wheels because on such an incline much of a car's total weight is, in effect, transferred toward the rear, effectively improving grip and traction; whereas on this same hill some weight is shifted away from the driving wheels of a front-drive car thus reducing their grip. Nevertheless, any modern front-drive can climb any mountain road you are likely to encounter, including those in the

Canadian Rockies or the Swiss Alps.... and enable you to sail right past skidding, stalled or ditched rear-drive cars if it is sleeting or snowing.

If you are not adept at coping with skids and at ease on slippery roads, there is no question about it - you will get into less trouble with front wheel drive.

Besides such specialized off-road vehicles as the Range and Land Rovers, Blazers, Broncos, Ramchargers, Jeeps, etc, there is now a small but growing number of sedans and station wagons that can also have all four wheels driven when needed to provide better stability and traction on treacherous surfaces. Toyota and Subaru models are actually front wheel drive vehicles in normal usage and conditions but they can be instantly shifted to engage drive to the rear wheels as well when roads become exceptionally slippery or the snow, mud or sand rather deep. However, these cars should not be driven in 4-wheel drive on hard dry roads for they lack a differential between the front and rear "axles" and so are subject to "driveline wind-up" which results in excess tire wear and strain on the transmission/ ^{and} drive shaft as well as the front and rear differentials.

But the "Quattro" and some other Audi, VW and Porsche models feature a more advanced and sophisticated form of 4-wheel drive. These are "full time" 4-wheel drive cars, meaning that all four wheels are driven at all times. This is possible without "driveline wind-up" because these cars have a third differential between the front and rear axles to deal with this problem. These are cars with truly exceptional stability and traction that becomes more evident as road conditions deteriorate. The less expensive U.S.-made AMC "Eagle" is also available with such full time 4-wheel drive and so has excellent bad-road capability although it does not have the outstanding suspension and steering of the German cars.

In snow, slush, mud, sand, even wet grass, all 4-wheel drive cars have vastly superior traction as compared to those with only 2-wheel drive and are not easily

stuck. And they are even less prone to skidding than are front-drive cars. So for many drivers they are the safest of all motor cars and we shall surely be seeing more vehicles of this type.

It Is Even Important How You Sit.

A matter usually not given much thought, but of considerable importance to a woman's (or man's) enjoyment and safe handling of a car is the shape and construction of the seats.... primarily the driver's. Totally unacceptable and downright dangerous is the God-awful bench seat, once so beloved of Detroit car makers, for it provides no lateral support whatever. In a skid or violent swerve the driver can actually slide across the seat to the opposite side of the car, completely losing hold of the steering wheel and control of the car. ^{not} Or/being fully able to guide the car because of having to hang onto the steering wheel just to stay on the seat. Of course if you drive wearing your seat belt you will be held fairly well in place even on a bench seat. But we don't always wear our seat belts as we should and people having air bags in their cars are not likely to ever belt up. See box on page for some surprising and frightening facts about the inability of air bags to protect.

If/^abench seat is adjusted forward to give a woman of average height a comfortable and commanding driving position, a male companion of average height is almost certain to have his knees right up against the dash; a most uncomfortable way to travel. Being able to carry three or four people on a bench seat is no valid reason for having one in your car. If you want to sit on a sofa with friends, do so at home in safety.

Driving a car is always a very dangerous activity. To drive with even a reasonable chance to survive on street or highway requires that you not only give your full attention to this task but that you be seated in your car so as ^{to} best control it under all conditions.

This means not only a well shaped bucket or divided seat but one having adequate lateral support , along with fore and aft plus up and down adjustments of sufficient amplitude to place you (or anyone else who drives your car) in just the right position relative to the steering wheel and the floor pedals, Never rely upon a pillow to get you into a comfortable position. The matter of a near-perfect driving position is not merely a means of obtaining comfort while at the wheel of your car but it contributes directly to your safety. Indeed, the most talented grand prix race driver would never consider driving a car in competition unless the seat was built or fully adjusted to his exact requirements.

Most imported cars have well shaped bucket seats with quite good adjustments, usually without extra cost; including means for altering the angle or rake of the seat backs. Often there is a device for changing the firmness and shape of the seat-back in the lumbar area. Although the passenger's seat doesn't need all the adjustments that should be available to the driver, it definitely should also have the adjustment for the angle of its backrest. A bucket seat with a fixed back is truly an abomination as it is no more comfortable than a straight-back kitchen chair and so is no place for a nap when you are too tired to drive and switch places with your companion. I think all imported cars have this seat-back adjustment as standard. Unfortunately, and inexcusably, it is an extra-cost option on most American cars. On some Chrysler products it hasn't been available at all.

Although American cars have often been deficient in seat design as regards both comfort and safety aspects, Detroit's 6-way electric seat adjustment mechanism is certainly an option worth having, as is their tilt steering wheel which is such grand contribution to obtaining a perfect driving position and to reducing fatigue because it enables one to vary its angle after driving for some