### VOLVO... Bumper to Bumper





### VOLVO... BUMPER TO BUMPER

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### **Table of Contents**

SECTION I	Page Nos.
Proface	1
A Word Up Front	3
Who's Buying The Volvo?	5
Why Do They Buy A Volvo?	7
Where Are They Coming From?	9
You, Them, And Our Advertising	13
What's The Price?	15
SECTION II	
Position Selling	19
SECTION III	
A Tradition of Quality	27
SECTION IV	
Questions from the Car Handbook	39
SECTION V	
Model Description: A Digest of Standard Equipment	
264 GL	48
265 GL	49
242/244 DL	50
245 DL	51
The Volvo Body	52
The Volvo Interior	53
The Volvo Suspension, Tires, Steering & Brakes	55
The volvo Engine & Transmission	58

### BIBLIOGRAPHY

The following is a listing of magazines and printed matter published by Volvo and/or others which will assist you in learning more about Volvo, its competition and the automotive industry.

### VOLVO

Where Your Money Goes When You Buy A Volvo (1976 Edition) Car Handbook Sales Literature Volvo Warranties and Maintenance Booklet Owners Manual The Volvo Traveler

### COMPETITION

Showroom Manufacturers Consumer Information Competitor's Sales Literature Auto Buff Magazines

- Car & Driver
- Road & Track
- Motor Trends
- Road Test
- etc.

### INDUSTRY-

Automotive News Wards Auto World Newsweekly Magazines

- Time
- Newsweek
- Business Week
- etc.

### **SECTION I**

### PREFACE

In 1976 Volvo developed a sales training program titled, "Benefit Selling — The Benefit of Benefits". Since this publication received so much favorable attention from our dealer sales force, we have been encouraged to reprint a major section of that manual. This up-dated manual is a composite of information concerning our buyer and his motivations. It also is a training aid to test your understanding of the Volvo product as presented in the "Car Handbook".

Section II is new this year and devoted to Position Selling. Particularly helpful to the new salesman when structuring a logical step by step sales presentation, this section can also be used by experienced sales people to update and strengthen their product presentations.

In Section III we have reprinted the script to the filmstrip "Volvo... a tradition of quality". In case you have missed any of the information contained in the filmstrip you will be able to find it quickly in this section without having to set up the Dukane projector

Each 1977 Volvo model is described in terms of its benefits and features and then further described in regards to the buyer advantage of those features and benefits.

Lastly, a final test is included to test your understanding of the material presented in this manual. Sales people scoring 90% or higher will receive a "Certificate of Achievement" from Volvo to proudly display in the dealership. This will identify those salesmen and that sales team as being outstanding in Volvo product knowledge.





This is our most expensive Volvo sedan. It's equipped with every safety feature Volvo has become famous for plus most convenience and comfort features the thinking driver could wish for. Yet compared to expensive cars from Yet compared to expensive cars from

The car for people who think. D 1977

### A WORD UP FRONT

Let's begin with a simple fact of life most of us tend to forget.

People buy cars.

So when someone comes through that showroom door, it's not an up or a tire kicker.

That someone is a person with a load of personal problems (just like you and us), and doubts and questions about why they should buy our car.

You would have your questions, too, if you were asked to pay out six, seven or ten thousand dollars for a piece of merchandise.

The only thing you can be reasonably sure of is that the fact they walked into the showroom shows they're thinking about (or are already committed to) buying somebody's car.

What they most likely haven't done; is reached the decision on which car to buy.

But you can bet the car they end up with is the one they believe fits their financial means, and fits their wants and needs.

That's where you come in.

And it's not to sell them a Volvo, but to show them how the Volvo matches their needs, how the Volvo will give them what they are looking for in a car.

What they are looking to get out of a car, we call the benefits they want a car to deliver.

It's not as difficult or as complicated as it sounds.

We already know the two biggest benefits that have sold people on a Volvo and made them buyers.

The first (and most significant) is their belief in the quality of the Volvo.

The second is their belief in the Volvo as the safe car.

The third benefit is a relatively recent one, but it is beginning to gain weight as a factor in their thinking: They enjoy the prestige of owning a Volvo.

The fourth benefit is the interesting one. It's the unexpected bonus in this year's models. It may not help you so much to the close, as it will help to make that close stick: this year the handling and performance characteristics of the Volvo compare favorably to any of its competition.

Why have we given importance to people and the benefits they look for?

That's why they close on a car: because it gives them the benefits they are looking for.

Keep that in mind, and you'll get the most out of this handbook, and a lot more sales from the people who you talk to about Volvo.

### CHECK OUT OUR WAGON AND YOU MIGHT UNLOAD YOURS.

Our Volvo wagon is built to overcome the disgruntlement many people feel for their wagons. It's no bigger than a Volvo sedan. So handling in a crowded parking lot is no big ordeal.

While out on the road, it behaves like a sedan. A responsive fuel-injected engine, precise rack and pinion steering and four-wheel power disc brakes that can stop you in a shorter distance than the brakes on a BMW sedan all contribute to the feeling you're not driving a station wagon.

Which brings us to the wagon behind the sedan. Loading is a pleasure, not a trauma, because the rear door opening was designed with the knowledge that some objects are high as well as wide. So they fit inside in 77 cu. ft. of usable load space. Instead of sitting outside on the roof in the rain.

Bring in your wagon and go home in ours. We'll sell or lease you a Volvo and, either way, de-gruntle you.



### WHO'S BUYING THE VOLVO?

KNOWING YOUR PROSPECT IS AS IMPORTANT AS KNOWING YOUR PRODUCT, THIS NEXT SECTION WILL PROVIDE YOU WITH DETAILED INFORMATION CONCERNING THE VOLVO BUYER. UNDERSTAND YOUR PROSPECT AND HIS MOTIVATIONS AND YOU'LL SELL MORE CARS.

The median income of all Volvo buyers is \$28,000 a year.

The median income of the 264 buyer is \$39,700 a year.

POINT. These people can afford our Volvo, and will pay for it if you convince them it has what they want.

Their average age is the same as in the past: about 38. But most of them are between 25 to 44 years of age which is younger than for the car industry in general.

Put it this way. They're making a lot more money at a younger age than most people. Put it another way: They're successful.

Most of them are managers, or professional people (lawyers and doctors and engineers, etc.).

And they are educated.

88% of them have attended college, and a good hunk of them have taken postgraduate degrees. (The rest of the industry has about 30% of its buyers who are college graduates.).

Alright. They're making good money, at a young age, in good jobs and they've got the education to keep going on.

What does all this mean to you?

It means you're now selling to a class market that's looking for a class car.

And you can't sell a ten cent cookie cutter to a pastry chef.

So if you're still thinking about the "good old days" with its old way of doing things, you better take a good hard look at the new market we're selling to.

It means you have to know your product, and you have to know how to sell your product to them.

And that means you have to know what they're looking for when they're looking at a Volvo.

And that's what the next section is all about.

Look at it well. It'll take care of half your selling for you.

### THE LONGER WE BUILD THEM THE LONGER THEY LAST.

In 1966, the average life expectancy of a Volvo in Sweden was 12 years. Latest figures show it's up to 16 years.

If how long a car lasts is any indication of how well it's built, you'll be interested to know that Volvos have been lasting longer.

Latest figures from the Swedish Motor Vehicle Inspection Company show that in the last ten years, the average life expectancy of a Volvo in Sweden has increased by 37%.

We can't guarantee a Volvo will last the same length of time in this country. But it's nice to know the potential for survival is there.

Of course, reducing the speed with which a Volvo travels to the junkyard isn't the only improvement we've made in ten years. We've also found a lot of ways to make that trip safer and more enjoyable.

We've introduced rack and pinion steering because it's surer and more precise.

We've improved our entire suspension system. So you get a smooth ride, even over unimproved roads.

We've redesigned our engines to make them faster and more efficient. In high-

speed passing, the Volvo 264 with its overhead cam V-6—surpasses a BMW 320i. The Volvo 240—with its fuel-injected, overhead cam 4-cylinder engine—out-accelerates a Cutlass with a V-8.

We've also made the inside of a Volvo a more comfortable place to spend the years.

We've added a 12-outlet heating and ventilation system that keeps the air continuously fresh.

In 1964, we introduced orthopedicallydesigned bucket seats. Which we've been

> improving ever since. Volvo seats now adjust in eight different directions. They have lumbar supports that you can firm or soften against the small of your back. And on the Volvo 264, the driver's seat is heated.

When it comes to safety, no one demands more of Volvo than Volvo. Even the U.S. government is impressed by what we've accomplished. They recently bought 24 Volvos for a testing program

that will help establish safety standards for cars of the future. What all of this proves is simple. A Volvo may last a long time. But you'll get a lot more out of it than years.

The car for people who think.

### WHY DO THEY BUY A VOLVO?

We asked the people who bought one, why they bought it?

The most important reason: they felt the Volvo was a quality car.

So if you can reenforce that idea of the Volvo for them, you're halfway home to closing the sale.

The second most important reason: safety.

It used to be said that you can't sell safety to the American public. And that still may be true for many of them.

But not for the Volvo buyer.

The men and women who buy Volvos are in a special class by themselves. And it's a big enough class to help you sell Volvos. Nationally, over 35% of the people who were planning to spend \$5,000 or more for a car said they would consider a Volvo.

One simple fact of life.

Of those people surveyed, those who consider a Volvo plan to keep the car two years longer, and 20,000 miles further than people who don't consider a Volvo.

Two years longer.

Obviously they are people who want a comfortable car, a prestige car, but still want it to function like a good machine should. And still keep them and their family safe.

This you should know, too.

While no other reason came close to quality and safety as motivations for buying the Volvo, there were three more that played a role which you should know about (otherwise how can you sell them).

One: Low price. Don't laugh. This is for people who also were considering the Mercedes and BMW.

Two: Rational size of the car.

Three: Prestige. Our top line buyers perceive Volvo as being a prestigious car to own.

How about those who considered our Volvo and didn't buy it?

Reasonable question.

There were those who thought the price too high, or the gasoline mileage not good enough. Most of them tended to the Datsun and Toyota. Which kind of makes you think that they didn't know the Volvo very well to begin with, and maybe that should be where you start your qualifying procedure.

And there were those who weren't convinced of the Volvo quality story and walked to the Audi. And finding out their concern for quality should definitely be part of your qualifying procedure.

### A WAGON BUILT TO CARRY CARGO MORE PRECIOUS THAN GROCERIES.

Any station wagon can take a load of stuff from one place to another.

The Volvo wagon, on the other hand, was designed to take a load off your mind as a parent. Volvo realizes, for example, that it's impossible to keep both eyes on the road if

you have to keep one eye on the back seat.

So to keep the kids in place, we provide you with things like child-proof door locks on *all* the rear doors. Including the back one.

And to virtually guarantee that you can focus your attention on the road at all times, we give you defrosters

for the front side windows, and the rear window comes with its own wiper, washer, and defroster.

On the road, the first thing you'll notice is how quickly our overhead cam engine can put trouble behind you. Should trouble appear ahead, you'll appreciate the way our rack and pinion steering can help you steer clear of it. And the way

our four-wheel power disc brakes can stop you short of it. In spite of all these precautions, we realize that accidents

do happen. So we've planned for the unplanned.

Where many wagons may feature a front end designed to impress the neighbors, the Volvo wagon features a front end designed to help absorb the impact of a collision.

Our passenger compartment is surrounded by a protective steel cage.

Our doors have steel tubes running through their insides for added protection, instead of imitation wood running down their outsides for frivolous decoration.

There's also a padded dashboard. A collapsible steering wheel. A gas tank designed not to rupture in a rear end collision.

OF RACK OPTIONAL. @ 1977 VOLVO OF AMERICA CORPORATION. LEASING AVAILABLE

Look at it this way.

There's finally a wagon that shows as much concern for your children as you do.

**VOLVO** The car for people who think. Finally there were those who bought our quality and safety features, but didn't value them enough to pay the price and ended up with a domestic.

What do all these negatives mean to you?

That you can spot a definite prospect for a Volvo. You don't spot him by how he is dressed or by whether he smokes a pipe and carries a slide rule on his belt. You do it by knowing what the man or woman who will buy a Volvo wants in a car: quality and safety and a rational demonstration of these benefits. By knowing that they are willing to pay extra for these, and for the prestige a Volvo also offers.

What if they qualify on all these points but you still find price resistance? We'll handle that a little bit further on in this section.

### WHERE ARE THEY COMING FROM?

Knowing what kind of car that Volvo prospect is coming from is half your qualifying battle.

About 28% are people who are replacing a Volvo.

For them, a good guess is, the new handling and performance characteristics of the Volvo is an important point. (Rack and pinion steering, new engines, new transmission)

But about 43% of all Volvo buyers will be coming from the domestics.

They are people who will be buying an import car for the first time.

They are committed to an import, but which one is still up in the air.

It's a competitive sell you face here. The choice ranges from the Audi on one end to the Mercedes and the BMW on the other. (The wagons are the exception.)

With these people the correct benefit tours and the full use of the features that prove the benefits is important. What does proof come down to? To those features that add up to durability and reliability. Those features that add up to and prove our concern with safety. Those features that prove the new handling and performance capability of the Volvo. Qualify them well. Know what their main concern is. Then sell to those concerns.



Circumstance forces some would-be Cadillac and Mercedes sedan buyers to re-think their purchase. Not because they don't want to ride in luxury but because their family or possessions won't fit in it. For them we sell or lease the Volvo 265.

Up front, it's engineered and equipped in virtually the same manner as our Volvo 264, a sedan with prestigious credentials. The 265 has the same fuel injected V-6 engine, rack and pinion steering, four-wheel power-assisted disc brakes and power-assisted steering as the 264. So it handles just as easily and precisely out on the road. You'll think you're driving a sedan.

Until you look over your shoulder. That's where the wagon is...room for an optional third seat (increasing seating capacity to seven) or space for a six-foot antique sofa.

You can't get that in a Cadillac or Mercedes. But you can get it all in a Volvo showroom.



There's one more factor.

Know which Volvo model your prospect is interested in, and most likely you'll know what brand you're competing against.

And that comes down to the old admonition about knowing the competition with a refinement. You have to know what the competition is for the particular prospect, and you'll most likely know that by what model or models he's interested in.

### Ready?

The 240 Sedans are most likely competing against the Audi, Saab, the larger cars from V.W. or domestic models such as Granada, Monarch, Volare, and Aspen.

The 264 GL's against Mercedes, BMW, Cadillac, Lincoln and Jaguar.

With all this you still have to keep in mind the question: is this a first-time import buyer, or coming from another import?

Competition for our 265 wagon will come from the high ticket, down sized domestics, especially those from G.M.

For the 245 wagons, our domestic competition is the Aspen and Volare wagon, AMC Hornet Sportabout wagon and the mid-priced Ford and Chevrolet wagon. On the import side the Volkswagen Dasher wagon and the Audi Fox wagon.

What's all this come down to?

Even though we are now selling to the cream, the class, the best and most consistent buyers in the market, they are still people.

The models they are interested in will tell you what the competition is.

Where they are coming from will help you determine what benefits to sell to them.

And finally, class will tell.

If you're turned off by tire kickers and "just shoppers" they're turned off by ignorance and the "let's make a deal" approach.

If we're appealing to the thinking person (and we are), you had better be a thoughtful salesman.

### **BIG CARS ARE COMING DOWN TO VOLVO'S SIZE...NOT UP TO VOLVO'S STANDARDS.**

Have you noticed how some of the fat cars have reduced to almost Volvo-esque proportions? It's true. One major manufacturer has cut the size of his oversize models by an average of 700 pounds. But try as they might to copy our lines, they haven't managed to duplicate our features.

Standard equipment like four-wheel power-assisted disc brakes. And a dual braking system in which each circuit operates on three—not two—wheels. Plus orthopedically-designed bucket seats. And a 12-outlet heating/ ventilation system. They're on every Volvo we sell. (Or lease...an alternate way to finance your Volvo.) But conspicuously absent from Detroit's slimmed-down models.

Then there are the little things Volvo owners have come to expect which other car buyers expect to pay extra for. Like stereo door speakers. Steel-belted whitewall radials. And tinted glass all around.

All of which suggests it doesn't make much sense to buy a sensiblesize car unless there's a Volvo inside it. See us for both.

The car for people who think.

### YOU, THEM, AND OUR ADVERTISING

We plan to have a heavy national schedule on television this year, which means we'll be reaching many people in your market.

We'll also be a dominant force in those magazines that reach our kind of people: those who have the means and the will to spend \$6,000 or more on a car.

All that advertising pressure in the market place is nice to think about, but there is another consideration.

And it's just as important.

In fact, for where you sell, it's vital.

And that's what we'll be telling them.

Many of the people you'll meet will be first-time Volvo shoppers.

What they know about the present Volvo may have come from friends who own one, and most certainly it will have come from our advertising.

And our message about Volvo is straight-forward, and clear-cut.

It is this.

Because of its quality, its concern with safety, and its handling responsiveness; Volvo (both sedans and wagons) is a rational alternative for thinking people to other cars on the road.

And that is the way they will be thinking about Volvo when they walk into your showroom.

They don't know if their belief is correct, but they are willing to be shown.

If you accept this to be so (that they are looking for a factual demonstration of quality, safety and responsiveness); and you use this book as your basic guide for such a demonstration, then you have found a powerful ally in your sales presentation. Our advertising.

For then you are using its full force, you are using the persuasive climate of acceptance it has set up for your benefit tours.

You and our advertising. As a team you can't lose.

### IT'S VOLVO'S 50TH ANNIVERSARY. OUR PRICES HAVE FALLEN TO THE OCCASION.

If you've always wanted to buy a Volvo, now is the perfect time. During Volvo's Golden Anniversary sale, you can buy or lease a brand new Volvo sedan or station wagon famous for its comfort, engineering and safety features for much less than you'd expect to pay for Volvo quality. This is a limited offer. It will last only as long as dealer stocks last. So pick out a Volvo while the 50th Anniversary celebration sale is going on at a dealer near you. If you wait for an occasion of your own, his prices may

> have risen to it.

**VOLVO** The car for people who think.

### WHAT'S THE PRICE?

If someone walks in off the street, and he has his head set on just two things, and that's 43 mpg and a \$3,500 sticker, and nothing else in the world matters to him: sell him the used Chevette you've just taken in trade or walk him to the nearest 43 mpg and \$3,500 dealer.

Trying to convince him otherwise would be like telling your kid brother the girl he's in love with is an ugly witch, with bad breath.

All you can do is make somebody unhappy, you'll lose the sale anyway and a lot of goodwill besides.

What it comes down to is there are two kinds of price resistance problems.

One is real. The person simply can't or won't pay over \$3,500 for a car.

The second type of price resistance you can do a great deal about, so (naturally) it's a little more complicated.

It's a question of perceived worth: does that person think he's getting his money's worth from your car?

Before you make up your mind on whether your prospect's price resistance is a real price objection or just one of perceived value you better have qualified him well or else you will have lost a real sale because you settled on the wrong objection.

All of this raises the question: What does the prospect value?

If it's safety, the benefit tour of the Volvo safety systems certainly raises the perceived worth of the Volvo in his eyes. (And what price do you place on your family's safety?)

Is he sensitive to the total cost of ownership? Then a quality tour (durability and reliability) raises the perceived worth of a Volvo (and how about the price of the quality used Volvo on your lot?).

What if you add another factor to "does a Volvo give me my money's worth?"

The competition.

The question in his mind is: I can get luxury and performance from a Cordoba at a lower price than the 264?

Now you must know the competition.

Point out that with the 264 you have the complete luxury and performance of a Volvo as standard (but for the radio), but with the Cordoba, and many other cars that are being "called" luxury, the base price just gives you the right to buy all your luxury and performance options. (And the more specific you are the more persuasive you get.)

These are all examples of price objections based upon perceived worth.

The fundamental strategy to handle them boils down to two steps: (1) find out what the prospect values as worthwhile on a car, and (2) make the prospect perceive the worth of the Volvo by demonstrating just how it meets or exceeds his values.

### SPEND VOLVO'S SOTH ANNIVERSARY SAVING ON ONE.

Your Volvo dealer is celebrating Volvo's Golden Anniversary by making deals like never before on a specially tagged group of Volvo sedans and station wagons.

Right now, you can own a brand new Volvo famous for its engineering, safety features and comfort at a price you'd expect to pay for a car of much lesser quality.

It's the kind of opportunity that comes along maybe once every 50 years. And it will last only as long as dealer stocks last.

Stop in and see your nearby Volvo dealer today. While Volvo enjoys the anniversary it's spending, you can enjoy the money you're not.

**VOLVO** The car for people who think.

The Volvo 50th Anniversary Sale is going on at:

Take an example.

A simple equation:

 $\frac{\text{Benefit}}{\text{Price}} = \text{Perceived worth}$ 

Let's assume a price of \$10,000. But, the prospect doesn't perceive the car as being worth that price. What does this mean?

That he doesn't think the benefits he's getting out of that car are worth \$10,000.

If you ask him what he perceives the worth of the car to be, he might say \$7,000, which then would work out something like this:

\$ 7,000	(Benefit)	=	70% (Perceived worth)
\$10,000	(Price)		vs. Actual worth of car

Now you have two choices. You can either choose the path of least resistance and change the price of the car. Which, for the sake of the example looks like this:

This means you may have a sale, but you've cut your gross. It also means you're trying to sell a prestige car as if it were that "ten-cent cookie cutter." And most important, you really haven't satisfied your customer's needs. If he's concerned about quality, and we know he is, then he wants a car that will give him the quality he needs.

Your option then is not to shave the price, but to raise the value of that (those) benefit(s) is his eyes.

If you show him how all those things he values are standard on a Volvo, but optional on many other cars, you will raise his "perceived worth".

Now you've gotten full gross and he's gotten the satisfied feeling of getting the best value for his dollar.

There is one other benefit - the benefit of your own personal satisfaction as a salesman. You don't have to be a salesman to cut the price - the real satisfaction in selling comes from believing in your product and being able to communicate your products value to the prospect so that you don't actually sell him the product - he buys it.

### THE VOLVO PERFORMANCE FIGURE THAT BEATS EVERY CAR MADE IN AMERICA: OWNER SATISFACTION.

Between acceleration figures, mileage figures and braking figures, there are a number of ways to measure a car's performance.

But the ultimate measure of any car is how an owner feels about it.



AN INDEPENDENT RESEARCH STUDY SHOWS THAT VOLVO OWNERS ARE HAPPIER THAN THE OWNERS OF OTHER CARS.

Every year, the car companies find out.

An independent research company goes out and asks thousands of new car owners across the country to evaluate their purchases.

The latest research results are in. A higher percentage of Volvo owners said they were completely satisfied or very satisfied with their cars than did the owners of any American car. And that included all 56 domestic makes from G.M., Ford, Chrysler and American Motors.

So if you're in the market for one of these 56, this study



could give you pause. Time enough to visit us and look into buying one of our Volvos. You could be completely satisfied you did.

The car for people who think.

### SECTION II

We are going to review a general method by which a complete; all-out, fullbore product presentation can easily be organized. In outline, it will be familiar to many of you. It has often been termed "Position Selling".

Now, there is no intent to "lock you into a system", to dictate how you sell. Rather, this method simply organizes opportunities for you to plan your selling situation, as we discussed earlier.

Let's walk through such a presentation, with particular attention to the features and benefits you might logically explain while you and your prospect are in various positions around and in the car.



It's usually most natural to begin at the front of the car, with your prospect at or near the right wheel opening. From this positioning. . .

... You can point out the Volvo's 104 inch wheelbase. It's long enough for a smooth and stable ride; there's none of the "choppiness" associated with smaller cars.

Emphasize that the car's 192.6 inch length is about mid-way between "a kiddie car length that could make you feel cramped inside or vulnerable on the road", and some other domestic and import cars that sacrifice maneuverability and parking ease with 10 to 18 inches of useless added length.

When you're presenting a 245 or 265 wagon, emphasize how closely it resembles the sedan — same length and comfort features, and when empty it weighs only a little more. Make the point that despite the wagon's big payload (about the same as some much bigger domestic station wagons), because of its weight there's very little added fuel consumption.

Use this first position around the car to tell the Volvo power-assisted front disc brake story. Point out that these brakes resist the effects of heat build-up and road splash, and retain much more efficiency under repeated braking.

When presenting a 264 or 265 wagon, reinforce the front disc brake story by pointing out that the ventilated rotors contribute to dissipating heat even more rapidly.

You'll certainly want to mention that the tires are steel-belted radial ply, for longer life and fuel economy because they're easier rolling. And point out that the white walls are standard; "some other cars have them as an extra-cost option".

Volvo's independent front suspension is your next selling point. Explain that the spring-strut design takes maximum advantage of the steel-belted radials' outstanding features — and that the suspension is set close to the wheels for more effective spring and shock absorber action. Emphasize the use of coil springs front and rear: reliable and maintenance-free construction that provides an extremely smooth and comfortable ride".

Next, point out the quality of Volvo's attention to rustproofing: the use of hotdip galvanized sheet metal for many exposed body members, the ventilated door sills to prevent moisture build-up, use of special rustproofing compounds on the underbody and enclosed cavities in body members.

Make your quality rustproofing story pay off for you by telling the prospect that Swedish Government figures show the average life expectancy for a Volvo in that climatically rugged country is 16.6 years! That's really surprising, and welcome, new to people whose cars show rust within 3, 4 or 5 years.

Point out how the wrap-around bumper effectively protects front panel sheet metal. It's an impressive fact that these bumpers will withstand a 30 degree angular collision up to 3 miles per hour *without* body damage. And, of course, you'll want to mention that the hard rubber strips that face the metal is Volvo's standard bumper; "many other cars have rub strips and bumper guards as an extra-cost option". Your second position would bring you and your prospect to the front of the car. You might begin selling here by pointing out . . .

... That at 67.1 inches, Volvo is wider than some of its competitors to assure comfortable interior roominess — but not as bulkily wide as the car's domestic competitors.

Don't short-cut or rush your presentation of the facts that support Volvo's reputation as a safe automobile. Explain how strategically located "yield points" provide controlled crumpling that ensures maximum safety. Point out that projections and depressions in the hood are so arranged that it will crumple without being forced into the windshield.

Keep your safety story going by explaining the advantages of Volvo's unitized body construction. Point out that this design consists of fewer but larger panel sections, for a rugged but lighter-weight body with very few joints. Emphasize that each of the spot welds joining the panels is strong enough to support the entire weight of the body.

Then, still standing at the front of the car, raise the hood and get into the engine compartment story.

Your prospect very possibly doesn't know much about a 4-cylinder engine or, if you're presenting a series 260 vehicle, the double overhead camshaft V-6. Take time to point out that the B21F engine is quiet, smooth running, and provides outstanding performance at all speeds — and particularly, exceptional performance at lower speeds where some smaller engines are sluggish or erratic.

You have a strong EPA mileage story to tell. The figures themselves are impressive, and so is a reminder to your prospect that Volvo's fuel consumption is lower than the Audi 100LS, lower than all of the domestic competitors excepting only the Granada/Monarch smallest engine.

Make sure the prospect doesn't misunderstand the benefits of Volvo's continuous fuel injection. It contributes not only to improved engine performance, but to fuel economy as well. You might compare its exactness in adjusting the fuel supply to a neurosurgeon's tiny cranial saw, as against a standard mechanical carburetion system that's like a big chain saw.

You have a clear competitive advantage in Volvo's solid-state ignition, and you'll certainly want to point this out. Explain that the system produces a strong spark of uniform quality for very accurate timing, and the system isn't subject to such factors as breaker point wear. Service requirements are greatly reduced. And wouldn't you want to mention just in passing that unlike Volvo — BMW, Saab, and Audi have conventional ignition?

Before you close the hood, point out the sealed cooling system and explain that the coolant will not boil unless it reaches a highly unlikely temperature of 248 degrees fahrenheit. Demonstrate that the coolant level is easily checked in the transparent expansion tank.

Make a final point after closing the hood: the lightweight but solid and rubber faced bumper construction. Explain how the hydraulic impact absorber unit is activated and controlled by expansion and contraction of the fluid and gas that absorb impact energy.

Then, move with your prospect to the third position, near the driver's door.

Continue your safety story by pointing out Volvo's reinforcing roof box pillars, and explain that they and other box-type sections totally surround the passenger compartment, forming a rigid safety cage to further protect occupants from injury. Mention the roof roll bar, too.

Show that Volvo's glass areas provided a 90 percent horizontal field of vision, and that the width of the windshield pillars is less than the normal distance between a person's eyes so a driver sees "around" them.

And, of course, point out that all the glass is tinted to soften glare.

As you're about to open the driver's door, point out the recessed design of the door handle. The Audi and Saab have less safe exposed handles, you're sure to mention.

Then, with the door opened, tell your prospect about the added protection against side impact from the tubular steel bars built into each door.

Demonstrate that the width and height of the door opening, and the far forward angle of the door when fully opened make it extremely easy to get in and out. You might want to mention that a recent *Road and Track* test panel ranked Volvo first among seven competing sports sedans for ease in getting in and out, both in the front and rear.

Point out that our Volvo comes with door-mounted stereo speakers as standard — the only car in its general price range that does. And to further improve audio system performance, the antenna is in the windshield, safer than a fender mounted antenna subject to accidental damage or vandalism.

Then, point out your Volvo's handsome, full interior carpeting. (for 260 cars, mention that the carpeting is deep pile.)

Volvo's high degree of front compartment occupant comfort is one of your strong selling points. Both driver and passenger seats are fully reclining, as you'll be sure to demonstrate. Don't neglect pointing out that these orthopedically designed front seats are adjustable *nine* ways, offering more different comfort positions that most competitors'. And the *lumbar support*, for relief of muscular strain and lower spinal pressure, is unique to Volvo and a much more expensive Mercedes model.

Remember, that your feature-by-feature, benefit-by-benefit presentation is designed to build a total image of Volvo. So you'll want to point out that as with so many safety features, Volvo was first to incorporate three-point safety belts. Show your prospect how the inertia-reel design requires no individual adjustment, and that the belt retracts fully so there's no fumbling his way past a dangling obstacle when getting in or out.

Rear passenger compartment roominess and comfort is another of your strong selling points. When presenting a 242, demonstrate how easy it is to get in.

With a 244, you'll point out how wide and high the rear opening is, and how far the door opens, just as you did for the driver's door.

Emphasize that Volvo's deep 56 inch-plus wide rear seat provides comfortable seating for three adults. Although the BMW 320i claims to seat five, its rear seat is 4 inches narrower than Volvo's and *Road & Track* specifications list the BMW as a 4-seater.

And Volvo has a wide, folding center armrest standard — not all the cars in its size-price class do.

Rear passenger comfort is to a great extent determined by the amount of *legroom* — it's not comfortable to have your knees and shins rubbed by a front seat. Volvo 240 cars have more rear legroom than any competitor who is willing to publish a figure for this critical dimension — more than Saab, Audi, Cordoba, Granada/Monarch; even as much as the Caprice 2-door. There's more legroom in the 245 than in the Volare wagon.

It's the same story for the 264 — there's more rear legroom than in five Mercedes models, than in Lincoln-Mercury's new Versailles, and a bare half-inch less than in Seville.

In a Volvo, rear passengers also have the convenience of handy storage pockets in both front seat backs — and forward vision that isn't blocked off, due to the unique "see-through" design of the front head restraints.

Your Volvo prospect is probably more safety-oriented than most people. Point out that your car has childproof safety door locks, to keep doors closed and occupants safer even if the body is deformed or the car rolls over.

In a 245, demonstrate how easily the rear seat folds completely flat to provide full-length cargo storage.

Then, guide your prospect to the fourth position, at the rear of the car. First, tell him about Volvo's large crumple zone, like that at the car's front. Stress the added safety of the controlled deformation in the event of a rear impact.

Point out that the rear bumper, like the front, is fully rubber faced and wraps around the body sides to protect sheet metal from rear side impacts. Explain that the bumper has the same impact absorbing design principle as the front bumper.

As you open the trunk lid, point out its easy operation, the trunks generous size and efficient contour — perhaps mentioning that the *Road & Track* panel rank Volvo first in luggage space and loading. Point out the back-saving low liftover, and the convenience of the spare tire location.

Be sure to emphasize that the fuel tank is located for maximum safety close to the rear axle, far away and completely separated from the rear passenger and luggage compartments. Point out that its location and functioning as part of the evaporative emission control system prevent gas fumes from escaping into the air or back into the car.

Working with a 245, open the liftgate in a manner that demonstrates how the gas cylinder makes it easy to operate. Point out that the full-width liftgate and the generous 74.9 cubic feet of cargo capacity provide maximum payload that can be loaded and unloaded conveniently. You might just want to mention that the effective width between wheelhouses is considerably more in Volvo than in the Volare wagon.

With the trunk lid or liftgate again lowered, emphasize the rear visibility and safety benefits of Volvo's rear window defroster. Remind your prospect that it's standard on your car — an extra-cost option for the domestic makes, and that the Audi's standard feature is merely a defogger, not a defroster.

On a 245, stress the rear visibility and safety benefits of the washer wiper — mentioning that this feature is not available at any cost on the Volare wagon.

Explain that stale air is vented from the passenger compartment out through the escape vents located beneath the rear window — and that check valves prevent exhaust gases from being drawn back into the car. Point out that special drain hoses prevent accumulation of rain water which could result in rusting.

Emphasize that the rear wheel brakes, like those on the front, are power assisted discs. Reinforce the total braking effectiveness story by pointing out that *four*-wheel disc brakes provide more reliable straight-line stopping power than a disc-and-drum system.

Now that you've reintroduced the subject of safe braking — nail it down by telling your prospect about Volvo's exclusive triangular-split dual hydraulic system. Make the benefit come across loud and clear that this hydraulic circuitry provides 2 to 3 times the reserve braking capability of the conventional dual system used by all other makes. Emphasize that if one of the circuits should fail, the Volvo driver can depend on 80% of normal braking effectiveness — contrasted with the average 30% capability available from other systems. And repeat that only a Volvo has it!

Finish up at the rear by explaining the benefits of Volvo's "live" rear axle design. Emphasize that the rear suspension is designed for constant ground clearance and fixed track and wheel angles — this all translates into very good roadholding characteristics and safety. Ride quality is assisted by a rear stabilizer and road impact-damping coil springs.

Moving to the fifth position around the car — open the passenger door and point out that this occupant gets every seating comfort and convenience benefit the driver receives — including the fatigue-reducing, adjustable lumbar support. Demonstrate that this seat, too, is adjustable to nine different positions.

Point out the added convenience of the door storage pocket, and the large assist handle; they're niceties not offered by every car in Volvo's size/price class.

Remind your prospect that your car has the convenience and security of a good-sized glove box that's lighted and lockable — not all of your competitors offer these features as standard.

Point out that Volvo has a precision quartz clock, not merely the conventional electric that's standard in some competitive cars.

Next, tell the benefit story of Volvo's thermostatically governed heating and ventilation system. Emphasize the unusual number of outlets — 12 — that distribute warm or fresh air throughout the interior — including 2 under the front seats for rear passenger comfort. Again, those outlets aren't found in some other cars.

In presenting a 260 car, of course, you'll tell the integral air conditioning benefit story — no doubt pointing out that air is a \$550 option on the Audi 100LS, and costs a whopping \$898 on the Mercedes 240D or 230.

The sixth position around the car puts you in the driver's seat with your prospect beside you. Start by pointing out the scientifically-derived geometry of the steering wheel, the convenience of its size and angle. Explain how the well-padded wheel provides multiple stages of protective collapsability, even in the event of repeated impact.

Don't assume your prospect knows the superior benefits of rack-and-pinion steering. He may be accustomed to a less responsive recirculating ball or other conventional system. Emphasize how the Volvo's steering provides sure, precise, directional control with good road feel — there's no "wandering".

Mention that rack-and-pinion comes with power assist for automatic transmission models — and with all 260 cars.

And, of course, you'll point out that Volvo's 32 foot turning circle is by far the tightest in its class — a greatly appreciated benefit when parking, cornering, maneuvering in any way.

Then, demonstrate the convenient floor-mounted position of the transmission selector lever, whether automatic or manual. Demonstrate the easy operation of the overdrive button when the model is equipped with this transmission — and tell your prospect that only Volvo among the imports in this class offers a choice of three transmissions, including the gas-conserving overdrive.

Next, another opportunity to introduce the Volvo braking effectiveness story — point out that the parking lever actuates a separate drum brake on each wheel, entirely independent of the car's rear disc brakes. The obvious implication is that a master rear brake failure will not affect the parking brake operation, as it might if the brake were tied into standard rear drum brakes (as on some competitors).

Then, demonstrate how the Volvo's headlight/turn signal and wiper/washer controls are conveniently mounted right on the steering column — the driver doesn't have to shift his eyes and attention from the road.

Point out the high visibility arrangement of the warning lights that feed the driver information — including Volvo's unique bulb integrity sensor that warns if a low beam headlight, tail or brake light goes out.

The logic of the Volvo instrument panel's completeness and convenience makes good sense to your prospect when you take a few minutes to check him or her out on all functions and locations — including, by all means, the floor pedals. Not every prospect is accustomed to a manual clutch.

If the vehicle you're presenting comes with sunroof, naturally you'll want to demonstrate its operation, and sell this feature's benefits. If the particular car isn't equipped with one, by all means conclude your presentation by walking to one that is and demonstrating the sunroof. Don't pass up the chance to sell it.

Just as you close as an inevitable, smoothly developing step in the selling conversation — so a demonstration ride follows from a thorough and effective presentation. You've whetted the prospect's appetite. He's seen the car. He's smelled it. Now, he wants to try it.

Nothing could be finer than to be in Volvo in the morning — or afternoon, or evening. No presentation is really complete if it doesn't result in getting your prospect behind the wheel. And if you've done a thorough, professional job up to that point — he or she isn't likely to turn you down.

ANTER MERICAN TRANSPORT

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### **SECTION III**

In this section we have reproduced the recording script for the enclosed filmstrip, A Tradition of Quality.

You may find it helpful to read this script after viewing the filmstrip as it contains much product information.

To assist you in learning more about our product the script has been cross referenced with the Volvo Car Handbook. Refer to those sections in the handbook for further details of information presented in the filmstrip.

The abbreviations used in cross referencing are:

240 - for the 240 series car handbook

260 --- for the 260 series car handbook

AE — for the Automotive Engineering Handbook



### VOLVO A TRADITION OF QUALITY

"In the interest of fair play and abiding in the belief of equal time we'd like to devote the next 20 seconds to letting you see and hear what our competition is going to be talking about . . . We think you'll find it enlightening."

"And this year NEW front disc brakes . . . "

"... So when you get a hold of our new rack and pinion steering, you'll feel ..."

 $^{\prime\prime}.$  . . Plus with our new improved suspension you'll be able to take to the road in real comfort.  $^{\prime\prime}$ 

"Well . . . There it is. It's really the same old thing every year isn't it? Manufacturers claiming 'new' this and 'new' that. . . Making it sound like they've reinvented the wheel.

And the really interesting thing is when you look at a Volvo you're going to see a lot of familiar features and components, introduced by Volvo over the years, that other manufacturers are just *now* discovering. So on this year's Volvo you're going to see Buick's 'new' front disc brakes...

Ford's 'new' welded construction and Mercedes-Benz 'new' fuel injection.

But the fact is. . . Disc brakes, were standard on all Volvos back in 1962 and have been ever since.

And our strong steel safety cage and unitized construction was a Volvo trademark as early as 1944 . . .

Not to mention the fact that Volvo's advanced fuel injection system was first introduced over 7 years ago."

"And while other manufacturers have been 'rediscovering' Volvo advancements... Volvo has been continuously involved in... Research... . Development... and testing to *further improve* on Volvo 'firsts'.

You see we believe that people. . . are the most important part of a Volvo. .

. That's why continuous product improvements and engineering advancements have always been part of Volvo's history. . . and will continue to be an important part of our future.

- 240 56-66 A good example of the kind of continuous product development we've
- 260 56-65 been involved in can be seen in our advanced overhead cam engines...
- AE 47-71 engines that deliver outstanding performance. . . and a lot more!

But. . .

What more could an engine be designed for other than performance?

Consider this. . . The V-6 that powers our 260's not only has a higher horsepower rating than the engine of a Mercedes 280. . . our overhead six has also been. . . designed and built to last

... engineered for economy

- ... and developed to offer improved
  - handling!

"First. . . our overhead cam design eliminates pushrods. . . and fewer parts to wear out means long engine life.

Cast iron sleeves in each cylinder reduce wear... that means longer life and lower maintenance costs.

An since an engine lasts longer if it runs cooler. . .

... There are cooling ducts in the cylinder heads to keep valves and valve seats from heating up. . .

... The engine block and cylinder heads also run cooler since they're made from an aluminum alloy. You see, aside from metals like gold and silver, aluminum is one of the best conductors of heat there is! Aluminum is also light weight... So the overall engine weight is reduced... which cuts down on fuel consumption.

Or to put it another way. . .

A lightweight engine means more miles per gallon!

Another figure you should think about is. . . 'pounds per wheel'.

No. . . not the pressure in the tires. . . the actual weight carried by each wheel. You see a conventional heavy cast iron engine 'unbalances' a car by putting a lot more weight on the front wheels, and that makes it a lot harder for the rear wheels to grip the road.

But with our lightweight V-6. . . the weight is evenly distributed over all four wheels. A Volvo is 'balanced'!

You get all the traction you need from the rear wheels...and you'll never see a Volvo take a nose-dive in sudden stops.

And since our four cylinder engine also has an aluminum alloy cylinderhead and overhead cam design. . . the Volvo trademarks of performance, durability, and economy are all here!

And so is this!

AE 58-61 Volvo's refined continuous fuel injection system!

A system that further improves power output and fuel economy! And although it's more expensive than conventional carburetors, it's standard on our 6 cylinder and 4 cylinder engines.

### AE 56-57

But that was really just the beginning. During the next six years Volvo engineers compiled and analyzed on-the-road performance figures and conducted further research and testing. Efforts that led to the development of Volvo's refined continuous fuel injection system.

A system that precisely controls the fuel/air mixture that provides optimum performance. . . good fuel economy. . . as well as. . . less emission pollutants.

Volvo first introduced electronic fuel injection in 1970.

Also, when compared to an 'electronic' injection system, like the one in Cadillas Seville, Volvo's continuous fuel injection system has a significant advantage. Our system functions in a relatively simple, strictly mechanical way. . .

"You won't find a complex electronic "brain" that's difficult and expensive to repair. So. . . in addition to getting the most out of our engines. . . Volvo's continuous fuel injection system is designed for reliability."

240 64 "Reliability... that's the key word here too. Volvo's advanced solid state260 64 ignition system!

AE 90-93

Here. . . there's no breaker points to wear out or condensor to replace.

Cl and sold state ignition. . . designed and engineered to maximize the potential of our advanced overhead cam engines. . . and to last. But. . . that's really only part of it. Because any engine, no matter how advanced or well equipped, is only as good as the transmission that transmits it's

AE 75-81 power to the rear wheels.

Convert 'horsespower' into 'miles per hour'... efficiently and effectively. ... that's what transmissions must do. And that's exactly what ours do!

Volvo engineers look at the engine and transmission as a system. . . where each component works with, not against the other.

So our automatic and manual transmissions have actually been engineered to function most effectively in the torque output range of our overhead cam engines. . ."

240 69-70 "... and that means maximum power efficiency... and smooth... quiet... reliable... running. A four-speed manual available with overdrive... or a responsive automatic that can also be down-shifted at speeds up to
 240 71-72 35MPH... two different approaches to driving, but each representing the

**260** 67-68 optimum engine/transmission combination.

Driving . . . that's what a Volvo is all about. . .

... smooth riding...

... responsive...

- ... and just plain comfortable.
- AE 10-17 and *this* has a lot to do with all of *that*. It's a coil spring... and Volvo used coil springs in both the front and rear suspension. But since the front and rear suspension actually perform differently. we've designed them differently.

240	31-32	In the front shock absorbers are fitted inside the coil springs forming
		one unit that's referred to as a spring strut. This combination allows the

- 260 30-31 front wheels to move somewhat forward and back. . . and it's that controlled movement which reduces impact harshness. . . that means smooth riding."
- 240 32-33 "Our spring strut front suspension also closely controls the amount of
- 260 31-32 wheel camber and tread changes... for excellent road holding and very responsive steering. Coil springs... they're part of the rear suspension as well... a suspension that also includes... double acting shock absorbers... control arms... track rod... and a rear stabilizer bar. This type of rear suspension, known as a 'live' rear axle, maximizes the contact between the rear tires and the road since spring movement doesn't change the track... and wheel angles are kept constant. It also provides outstanding stability by controlling body movement during hand cornering.

Here's a rear suspension designed for smooth riding. . . and superior traction and road holding.

That means safety!

Say for example a driver went into a turn too fast and tried to correct. The natural reaction would be to take his foot off the gas."

"Under these conditions an 'independant rear suspension' used by some manufacturers, would be more likely to 'break loose' than Volvo's 'live' rear axle. . . which would continue to track through the turn. A rear suspension actually designed to help a driver out of a problem. . . that's Volvo safety!

AE 21-30 And to help the driver steer clear of problems in the first place. . . there's

240 34-38 Volvo's rack and pinion steering. Here's a steering system that's standard

260 33-37 on every Volvo. . . and . . . a. . .

Rolls Royce Silver Shadow. It's a system that *combines* both *safety* and *performance*. It has a steering ratio large enough to insure easy steering but also *small* enough to insure quick response.

And a turning circle of 32.2 feet means a Volvo will turn inside such sports cars as a Porsche 911, Ferrari G.T.B., and all subcompacts in the *Datsun* and *Toyota line*.

"Rack and pinion steering also dampens the forces acting on the wheels so that the driver, while maintaining a good 'feel' for the road, doesn't have to make corrections for every bump. And to make it easy to get out of those 'tight spots'... there's power assist that provides additional

Rack and pinion steering, it's... precise... responsive... and provides

**240 36** steering assistance in proportion to the steering force that's required.

260 35

AE 25-27 excellent maneuverability.

Engine. . . transmission. . . suspension. . . steering gear. . . designed to work together as a complete system. . . A system that's continually refined to give a Volvo owner the best ride ever!

When your customer test drives a Volvo, he'll know what we mean. . .He'll also discover another Volvo trademark...Volvo's advanced braking system. . .

- AE 31-38 "It's called a dual triangular-split braking system and it's one of the most
- 240 39-44 sophisticated systems in the industry. Why is it called a dual system?
- 260 38-43

Simple...! Every Volvo has two, completely independent, brake circuits. Why triangle-split? Each brake circuit controls both front wheels and one rear wheel... But why two systems... and why two front wheels and one rear wheel?

Well. . . a quick look at the basic spells it out.

When a car comes to a full stop... it's momentum shifts the weight of the car over the front wheels... obviously then, full braking control over the front wheels is needed for a safe, complete stop. So, if for any reason... one brake system should fail in a Volvo... the other system still has control over *both* front wheels *plus* one rear wheel! Now other manufacturers also equip their cars with separate brake system. But which system is better?

AE 37 Well, if one circuit failed in this system, or if only the two wheel brake system was operating here, these cars would be left with approximately 50% of their full braking effectiveness.

But. . . a Volvo, with one system failed, still has 80% of it full braking effectiveness. That means if a Volvo started braking from sixty miles an hour, and one circuit happened to fail, buy the time the Volvo had come to a complete stop. . . a Mercedes 280 for example, would still be traveling at about 26 MPH.

- 240 42-43 But there's more. . . after developing the dual triangle-split circuit, 260 42-43 Volvo engineers refined this already advanced system by introducing the stepped bore master cylinder. A device that eliminate the 'panic potential' that could develop when a driver had to pump the brake pedal or push it to the floor because of a brake fluid leak in one of the brake circuits. You see, the master cylinder actually keeps pedal pressure constant, so if a leak developes and brake fluid is lost in either brake circuit... the driver could bring his Volvo to a complete, controlled stop by exerting little more than normal pressure on the brake pedal. He might not even be aware that one circuit had failed... except, of course, for the brake warning lamp on the dash... that will light up. Volvo engineers also recognized another potential problem resulting from the shifting of weight over the front wheels during severe braking. Such a shift causes the load on the rear wheels to decrease... and increased pedal pressure can cause the unweighted rear wheels to lock. . . causing the car to skid.
- 240 41-42 So Volvo introduces the relief valve as part each rear wheel brake circuit.
- 260 41
- AE 35-36 During hard braking these two valves limit the amount of pressure applied to the rear wheels by limiting the amount of brake fluid going to them. This causes a greater percentage of braking effort to be applied to the front wheels.

"The result? Good braking effectiveness and a smooth...straight...stop with little risk of skidding due to locked rear wheels. Further refinements of this advanced system included power assisted disc brakes on *all four wheels*. Disc brakes that are more efficient and reliable than drum brakes.

AE 31-33

### Why?

Well. . . it has to do with heat. . . the heat generated by braking friction. Since disc brakes are not 'enclosed' like drum brakes, and have a larger surface area, they dissipate heat much faster. So disc brakes can withstand repeated braking. . . unlike conventional drum brakes which would tend to fade. And since we've seen that the front wheels receive a greater percentage of braking effort, Volvo engineers when one step further and put cooling vents in the front disc brakes for maximum safety and reliability. Now there are many cars around with some of the features found on Volvo's advanced breaking system. . . but the only one with all the advantages and refinements found on a Volvo... is a Volvo! And if you're thinking it costs more to develop and build this kind of braking system. . . you're right. But we believe the safety of every Volvo driver and passenger is worth it. Safety... it's the underlying philosophy that can be seen in every Volvo we make! That's why Volvo has always been a leader in the field. . . because for us, safety is something that we build in. . . not added on!

240 47-49 The driver's seat. . . you might not look at it as a safety feature. . . naturally

260 47-49

AE 40-41

it's been designed and built for comfort... but if comfort were all we were concerned about, we could have put an overstuffed arm chair behind the wheel.

We knew that an *alert* driver is a *safe* driver, so this driver's seat has been designed and built to give every driver the kind of support they need.

Extensive tests were conducted. . . and the conclusion drawn that firm support was needed for the lower back. . . especially if a person remained seated for an extended period.

Working with medical specialists, Volvo engineers then designed a seatback frame that included a lumbar support. So the driver's seat acutally helps to relieve tension or pressure on the driver's back. And since no two people are exactly alike... our driver's seat not only moves forward and back, as well as up and down, but the slope of the seat cushion can also be adjusted as can the angle of the backrest *and* the stifness of the lumbar support. Comfortable? of course! But also built for safety!

- 240 53-55 Now here's an obvious safety device... but what isn't so obvious is it was
  260 54-55 developed by Volvo to also be *comfortable*. Why? Well... if it wasn't
- AE 41-43 comfortable. . . no one would use it. . . so what good would it be?

That's why Volvo developed the inertia reel safety belt. . . it's self adjusting. . . and no matter who's in the drivers seat. . . it's always correctly tensioned. Plus this belt allows the wearer to "move freely since the belt plays out and retracts in response to slow movements. *But.* . . . should a sudden stop occur. . . the 3 point lap and diagonal belt immediately lock in place. . . and can withstand loads of over seven thousand pounds. And right now we're evaluating even more advanced occupant restraints that, when combined with other safety features, have shown the potential of saving passenger lives in head-on collisions at closing speeds approaching 90 to 100 miles per hour! So you can see that ever since Volvo introduced the seat belt as standard equipment, way back in 1959, we've been improving on it ever since. And when you sit in the drivers seat of a Volvo, here's another you can see. . .

Everything!

240 26
 25 The driver of a Volvo not only has a commanding view of the road... but also has over 90% all round visibility. You won't find any non functional opera windows or blind spots in a Volvo because our engineers and designers have gone to unusual lengths to provide an exceptional field of view while not sacrificing any structural strength.

The pillars used for the windshield, for example have been turned so the narrow edge, not the wide edge, faces the driver. . . and special road pillars were designed that are narrow and strong.

Obviously, the driver of a Volvo can see what safety is all about!

240 27 But what he or she won't see is that Volvo engineers went one step
260 26 further and insured the safety of occupants by using an improved 'high impact' type of glass. It's a vinyl film sandwiched between two layers of glass so a crack on one side is less likely to break through to the other side. Plus to reduce injury, the glass has unusual elasticity and actually flexes on impact.

"And every sheet of glass that goes into a Volvo is tinted. . . to make things easy on the eyes. Also. . . since bright sunlight can create some annoying reflections the wind shield wipers have been painted black to reduce glare.

A small item. . . but it works!

- 240 26 And to reduce night time glare, Volvo engineers specified another kind of
  260 25 glass. It's used on the side view mirrors and it actually cuts down on the distracting glare of the headlights behind you.
- 240 71 To further insure safe night time driving, all critical controls are
  260 75-76 illuminated for quick identification. The illuminated instrument panel is controlled by a dimmer. There's also Volvo's unique bulb integrity sensor
  ... where an easy to spot amber lamp will come on if. ..

any brake light, taillight or lowbean headlight should fail."

"A red lamp will also indicate a malfunction in one brake circuit and another light informs the driver his EGR valve is due for its 15,000 mile service.

240 36-38 The steering wheel has also been positioned so all the instruments are
260 36-37 easy to read... and should an accident occur... the steering wheel's also
AE 22-23 heavily padded and has been designed to gradually yield under pressure, to prevent injury to the driver. And for added protection, the steering wheel will also align itself with the driver's body... thereby spreading the force of the impact! The steering column will also yield under pressure... having been designed to collapse in three distinct stages.

- AE 7
- 240 20-22 And to protect all occupants, in case an accident occurs, there's Volvo's
- 260 19-21 three 'zones' of safety.
- 240 23 The first zone being the front and rear impact-absorbing bumpers!

260 22-23 Bumpers that can withstand the impact of a low speed collision since they're connected to hydraulic impact-absorber units that act in much the same way that the shock absorbers in the suspension do.

The second zone of safety includes the front and rear sections of the body. . . sections designed to absorb the impact of a collision at a controlled rate. This second zone of energy absorption reduces the amount of collision force that's transferred to the passenger compartment by actually 'crumpling' at a controlled rate. To understand how this actually happens. . . take a look under the hood.

No. . . not the engine. . .

The underside of the hood.

See this pattern? Well. . . the sheet metal in front and rear, along with reinforcing members, has been stamped with a special pattern to create 'yield' points. And under impact forces these weaker 'yield' points will 'give'. . . allowing the front and rear sections to collapse, or crumple, at a controlled rate. The third zone of safety is Volvo's proven strong steel protective cage. A cage that completely surrounds the passenger compartment where each of the six vertical pillars is strong enough to support the weight of the entire car!

240 22 "And every steel pillar and panel of this cage is welded. And for further protection from side impact, there area tubular steel bars built into each door.

We should also mention that Volvo not only welds the members of the steel protective cage. . . but *every* section of the entire body and shell is also welded.

This advanced process is called 'unitized construction' and it requires thousands of welds in making the body, shell and frame *one* exceptionally strong, integrated unit. So you can see that Volvo has actually taken a dual approach to safety.

"These elements and systems have been designed to prevent injury as a result of an accident. . . and these components and systems. . . by providing responsive steering. . . reliable and effective braking. . . superior traction and all-round visibility... help the driver of a Volvo avoid an accident in the first place.

Accident avoidance. . . that's active safety. Injury avoidance. . . that's passive safety. The two reasons that make a Volvo one of the safest cars on the road!

AE 8-9 And that becomes even more important when you consider that a Volvo will probably put in more time 'on the road' than many of our competitors. . . because a Volvo is built to last! Every critical joint and highly exposed part is galvanized. . . which means it's coated with zinc.

Why zinc?

240 28-29 Simple! Zinc doesn't rust! and we use over six pounds of zinc on every260 27-28 Volvo.

Now lately it seems that other manufacturers are 'introducing' zinc as a 'new' way of rustproofing. . . when the fact is, we've been protecting Volvo's with zinc for years. But. . . for us. . . that's just a start!

Every Volvo is then covered with three coats of rustproofing fluids and compounds. That's over sixty pounds of body protection! Even the *inside* of every door and the trunk lid are rustproofed and the outside of the door sills are also special-coated to guard against chips from flying gravel (this coating is the reason the lower-outside part of the door sills have a slightly rough appearance).

And here's the beginning of a Volvo paint job. . . The first of sixty-six different operations that's needed to put on the kind of finish that will last.

From galvanizing to undercoating. . . over 100 separate operations. . . each designed to keep every Volvo looking good and on the road. . . for a long. . . long. . . time.

Quality. . . the one word that really says it all!

Inside and out. . . it's there!

240 62-63 And here's something 'inside' that has a lot to do with the 'outside'...air quality. Volvo's revolutionary Lambda-Sond emission control system. The most technologically advanced system available from any automotive manufacturer on a production basis. Now, air pollution is a subject that most car manufacturers would just as soon not talk about. . . But we have a different point of view. . . we think people are the most important part of a Volvo. . .

"And we feel we have certain responsibilities. That's why Volvo engineers set out to design an emission system that, without decreasing performance and economy, would dramatically reduce the pollutants in the exhaust. The result?

It's called the Lambda-Sond emmission control system. . . and in California, the state that has taken the lead in air pollution control, only one car on the road can meet their tough emissions standard. . . Volvo!

That's how good this system is!

And in the future, when those same strict California regualtions are enforced nationwide, Volvo will be ready...because we're ready today!

And we're the only car manufacturer who can make that statement!

So you can see. . . this Lambda-Sond system is a good example of the quality of product improvements that Volvo has introduced over the years. Improvements that include. . .

... High strength wrap around bumpers faced with hard rubber strips to keep dents and scratches from appearing...

... A fuel tank that's positioned as far foreward as possible for protection from rear end collision. . .

...equiping every Volvo with radial tires to further improve handling and performance. . .

... the introduction of child proof door locks...

...and a family size trunk measuring over 13 cubic feet to go with our family sedan.

Product improvements. . . that's what we've been talking about.

Improvements that mean quality! the kind of improvements that not only meet today's standards. . . but improvements like the Lambda-Sond, that *will be the standard* for years to come.

It's why big cars may be coming down to Volvo size. . . but they're not coming up to Volvo's standard!

We build a better car. . . and we want people to know that. That's why we offer an unlimited mileage warranty on parts and labor for the first 12 months of ownership.

Research...testing...continuous product development...that's what it takes. That's why Volvo's been a leader in the industry.

"And while other manufacturers are just 're-discovering' advancement introduced by Volvo over the years. . . we're setting new industry standards by further improving on Volvo 'first'.

So. . . if you take a good look at a Volvo today. . .

You'll see what's going to be 'new' tomorrow!"

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### **CAR HANDBOOK**

Read the following section in the Car Handbook before answering these questions:

240 Book 1-29 260 Book 1-28 Automotive Engineering (AE) 1- 9

- Remove slider from back of book and place over answers in the right-hand column.
- Write your answers in the space below the questions.
- Pull down the slider to reveal the answers to only that question.
- If your answer is incorrect review the Car Handbook to determine why. . . . then proceed.

1. Maximum trailer weight for all Volvo cars is

a) 1800 lbs c) 2500 lbs b) 2000 lbs d) 3000 lbs

В

Questions 2-4: Under each feature write a corresponding advantage to the buyer.

2. Spot - welded, unitized body	<ol> <li>light weight, economical</li> <li>torsioned rigidity for excellent road handling</li> </ol>
3. Thorough rust-proofing	<ol> <li>Car lasts longer</li> <li>Lower maintenance costs</li> <li>Safety - body not weakened by rusting and rot</li> </ol>
4. Safety body with crumple zones	<ol> <li>1) Impact energy is absorbed</li> <li>2) Passengers well protected</li> <li>3) Less risk of injury in collision</li> </ol>
5. Describe the safety design location of the Volvo fuel tank.	<ol> <li>It is located near the rear axle away from the rear bumper</li> <li>It is completely separate from the passenger and luggage compartments</li> <li>Chance of fire is minimized</li> </ol>

a) 100% b) 90% c) 80% d) 70%	В
Return now to your handbook and read the sections of 240 Book 30-44 260 Book 29-43 AE 10-38	on Suspension Steering and Brakes before continuing:
Under each feature write a corresponding advantage	to the buyer.
1. Spring-Strut front suspension	<ol> <li>Best suited to steel-belted radial tires</li> <li>Smooth comfortable ride</li> <li>Compact</li> </ol>
2. Live Rear Axle	<ol> <li>Constant track</li> <li>No variation in wheel angle</li> <li>Simple construction</li> <li>Consistant road handling</li> </ol>
3. Coil springs on all four wheels	1) Reliable 2) Maintenance free 3) Superb riding comfort
4. Rack and pinion steering	1) Precise 2) Easy steering 3) Good control/rapid response
5. Four wheel disc brakes	1) Effective cooling - less fade 2) Uniform braking action
6. Triangle-split system	<ol> <li>1) Extremely safe</li> <li>2) 80% of total braking capacity with</li> </ol>

7. Rear wheel relief valves	<ol> <li>Prevents premature rear wheel lock up</li> <li>Reduces the risk of skidding due to locked rear wheels</li> </ol>
8. Stepped-bore master cylindar	<ol> <li>Under brake failure conditions maintains almost normal brake pedal travel</li> <li>Reduce the risk of driver panic. (Pedal will not go all the way to the fire wall.)</li> </ol>
Return now to your handbooks and read the section on Interior before co 240 Book 45-55 260 Book 44-55 AE 39-46 1. All upholstery and trim are made with	ontinuing:
materials.	(flame resistant)
2. The Volvo front seats have been designed in collaboration with	(medical experts)
<ol> <li>The Volvo front seats have a unique</li></ol>	(lumbar support)
4. Ergonomics refers to	(the design and layout of all driving controls and their relation to the driver)
<ol> <li>The thermostatically controlled heated air is evenly distributed through different nozzles.</li> </ol>	(12)
<ol> <li>Volvo safety belts do not require adjustment and the wearer can mov freely due to the use of</li> </ol>	ve (inertia reels)

	240 Book 260 Book AE	56-66 56-65 47-71	
1. What ed v	at does it mean whe vith regard to outpu	en it is said that the B21F engine is well o at?	lesign- (All components carry mod- erate load for longer service life.)
2. The	B21F, which power block and a	rs our 240 series cars has a a cylinder head.	(cast iron/light alloy)
3. Vol and	vo B21F engines ha the exhaust system	ve the induction system on one side of th 1 on the other. This design is referred to a — .	e engine as (cross flow)
4. Wha	at is the advantage	of a cross flow design?	(The fuel system is on the "Cool" side of the engine - isolated from the hot exhaust manifold.)
5. The can	e valves are in-line a 1 shaft.	and actuated by an over	head (directly)
6. The	e B27F is a V-6 engi	ne which powers our series o	f cars. (260)
7. Bot	h the block and cyli	inder head are made of light weight	(aluminum)
8. The	e B27 is of	cam type.	(overhead)
9. Wh	at are the advantag	es of our modern V-6 engine?	(compact, light weight, excel- lent low speed performance, convenient to drive)

	(continuous fuel injection (CI
11. What advantages does CI offer your customers?	
	(high power with low-octane fuel, simple design and con- struction reliable and easy to maintain)
12. All Volvos come equipped with a ignition system.	(solid state transistorized)
13 How does the Volve far reduce raise and rewer loss?	and the second division of the second divisio
13. How does the volvo fail reduce hoise and power loss?	(the fan has a slip coupling that limits fan speed to about 2500 rpm.)
Return now to your handbook and read the sections on Transmissions and Electrical Systems before continuing	
240 Book67-76260 Book66-73AE72-93	
<ol> <li>A manual transmission (is/isnot) available with the 1977 260 series Volvo.</li> </ol>	
	(is not)
2. Volvo's automatic transmission can be manually downshifted into first gear at speeds up to mph. Why is this import- ant to your customer?	
	(35 mph/Quick low speed ac- celeration, maximum engine braking effect.)
3. What are the advantages of an over drive transmission?	
	(lower engine noise, less fuel consumption, less engine wear.)

Questions 4-7 Under each feature write a corresponding advantage to the buyer.

4. 55 amp alternator	(provides more than ample charging current, even at low speeds. Able to handle all accessories.)
5. Bulb Integrity Sensor.	(Eliminates the risk of driving without knowing that lights have burned out.
6. Electrically heated rear window	(good visibility in all weather conditions.)
7. Rear window wiper and washer (on wagons)	(easy to keep rear window clear improved visibility.)
<ol> <li>The electrically heated drivers seat (standard equipment on all 1977 260 models) will activate as soon as power is turned on and temperature drops below When temperature reaches it will automatically shut down.</li> </ol>	(57°/79°F)
9. Both the front and rear windows on the 1977 260 models are power windows. True or False	
	(true)

Return now to your handbooks and finish reading the remaining sections.



### **SECTION V Product Information** 6 244 DL

### Model Description 264 GL

### Quality

- Sealed Cooling System with Anti-freeze
- Aluminized Mufflers
- Metallic Paint
- Two seperate undercoats
- Thorough Rust-proofing
- Shock Absorbing Bumpers
- Weather-proof Electrical Components
- Aluminum Distributor
- No Mileage Warranty
- Oil Cooler on Automatic Transmission

### Safety

- Unitized Body
- Collapsible Steering Column
- Power Assisted Four-wheel Disc Brakes Front Discs are Ventilated
- Separate Drum Brake for Parking
- Dual-Circuit Brake System with Triangular Division
- · Inertia Reel, Self-adjusting Safety Belts
- Light Integrity Sensor
- Child proof Rear Door Locks

### Luxury/Comfort/Convience

- Power Assisted Steering is Standard
- Electrically Heated Rear Window
- Quartz Clock
- Engine and Luggage Compartment Light
- Full Interior Carpeting Deep Pile
- Leather Faced Upholstery Velour on Selected 264 GL Model
- Carpeted Trunk
- Infinitely Adjustable Front Bucket Seats
- Adjustable Lumbar Support
- Heated Drivers Seat
- All Tinted Glass
- · Locking Glove Compartment w. Light
- Day/Night Rearview Mirror
- Storage Pockets Front Door, Back of Front Seats
- Passenger Assist Handles
- Power Door Windows
- Wheel Trim Rings
- Duel electrically operated outside mirrors

- Trunk Capacity 13.8 cu. ft. SAE
- 12 Outlet Heating and Ventilation System
- Radio Antenna in Windshield
- Stereo Speakers in Front Doors
- Sun Roof with Wind Deflector Selected Models
- GL Steering Wheel
- Make-up Mirror
- Air Conditioning
- Tachometer

### Handling/Performance

- Engine B27F, Aluminum Alloy V-6 2.7 liter, 163 cu. in.
- Maximum Output 125 hp. SAE-net at 5500 rpm (121 Calif.)
- Maximum Torque 150 lb. ft. SAE-net at 2750 rpm (148 Calif.)
- Compression Ratio 8.2:1
- Continuous Fuel Injection
- Evaporative Emission Control
- Positive Crankcase Ventilation
- Exhaust Gas Recirculation
- Air Injection Reactor System (Calif. Cars)
- Catalytic Converter
- Solid State Ignition
  - 12 Volts, Battery: 70 amp. hours. Alternator: 55A-770W Starter Motor 1.1 hp.
- Transmission Automatic with 3.54.1 Rear Axle.

### Additional Specifications

- Wheels 51/2 J-14"
- Radial White Sidewall Tires 185 DR 78-14 - Steel
- Fuel Tank 15.8 Gallons
- Approximate Curb Weights 264 GL: 3145-3170 lbs.

The factory reserves the right to make changes at any time, without notice, in prices, colors, materials, equipment, specifications and models and also to discontinue models.

### Model Description Volvo 265 GL

### Quality

- Sealed Cooling System with Anti-freeze
- Aluminized Mufflers
- Two Separate Undercoats
- Thorough Rust-Proofing
- Shock Absorbing Bumpers
- Weather-proofed electrical components
- Aluminum Distributor
- No Mileage Warranty
- Oil Cooler on automatic transmission

### Safety

- Unitized Body
- Collapsible Steering Column
- Power Assisted Four-wheel Disc Brakes (front discs are ventilated)
- Separate Drum Brake for Parking
- Dual-Circuit Brake System with Triangular Division
- Inertia Reel, Self-adjusting Safety Belts
- Light Integrity Sensor
- Child Proof Rear Door and Tailgate Locks

### Luxury/Comfort/Convience

- Power Assisted Steering is Standard
- Electrically heated Rear Window
- Quartz Clock
- Tinted Glass
- Engine and Cargo Compartment Light
- Full Interior Carpeting Deep Pile
- Leather Upholstery
- · Carpeted Cargo Area color coordinated
- Infinitely Adjustable Front Bucket Seats
- Adjustabl : Lumbar Support
- All Tinted Glass
- Locking Glove Compartment w. Light
- Day/Night Rearview Mirror
- Storage Pockets Front Door -Back of front seat
- Electric Rear Window Defroster and Wiper
- Electrically heated Drivers Seat
- Power Door Windows

- Dual electrically operated outside mirrors
- Metallic Paint
- Passenger Assist Handles
- Cargo Capacity 74.9 cu. ft. SAE
- 12 Outlet Heating and Ventilation System
- Radio Antenna in Windshield
- Stereo Speakers in Front Doors
- Air Conditioning
- Wheel Trim Rings
- Appearance Striping

### Handling/Performance

- Engine B27F, Aluminun Alloy V-6 2.7
- liter, 163 cu. in.
- Maximum output 125 hp. SAE-net at 5500 rpm. (121 Calif.)
- Maximum Torque 150 lb. ft. SAE-net at 2750 rpm. (148 Calif.)
- Compression Ration 8.2:1
- Continuous Fuel Injection
- Evaporative Emission Control
- Positive Crankcase Ventilation
- Exhaust Gas Recirculation
- Air Injection Reactor System (Calif. cars)
- Catalytic Converter
- Solid State Ignition 12 Volts, Battery: 70 amp. hours
- Alternator: 55A-770W Starter Motor 1.1 hp.
- Transmission: Automatic with 3.54:1 Rear Axle

### Additional Specifications

- Wheels 51/2 J-14"
- Radial White Sidewall Tires 185 DR 78-14 -Steel
- Fuel Tank 15.8 Gallons
- Approximate Curb Weights: 265 GL: 3270-3300 lbs

The factory reserves the right to make changes at any time, without notice, to prices, colors, materials, equipment, specifications and models and also to discontinue models.

### Model Description Volvo 242/244

### Quality

- Sealed Cooling System with Anti-freeze
- Two separate Undercoats
- Aluminized Mufflers
- Thorough Rust-Proofing
- Shock Absorbing Bumpers
- Weather-proofed electrical components
- Aluminum Distributor
- No Mileage Warranty
- Oil Cooler on automatic Transmission

### Safety

- Unitized Body
- Collapsible Steering Column
- Power Assisted Four-wheel disc Brakes
- Separate Drum Brakes for Parking Brakes
- Dual-Circuit Brake System With Triangular Division
- Inertia-reel, Self-adjusting Safety Belts
- Light Integrity Sensor
- Childproof Rear Door Locks on 244

### Comfort/Convenience

- Power Assisted Steering is Standard with Automatic Transmission
- Electrically Heated Rear Window
- Quartz Clock
- Tinted Glass
- Full Interior Carpeting
- Indefinite Adjustable Front Bucket Seats
- · Locking Glove Compartment w. Light
- Day/Night Rearview Mirror
- Storage Pockets on Front Doors
- Passenger Assist Handles
- Trunk Capacity 13.8 cu. ft. SAE
- 12-Outlet Heating and Ventilation System
- Radio Antenna in Windshield
- Stereo Speakers in Front Doors
- Carpeted Trunk

### Handling/Performance

- Engine: B21, Four Cylinder 130 cu. in. Overhead cam, Cross Flow Aluminum Alloy Head
- Output: 107 hp SAE-net at 5200 rpm (101 Calif.)
- Torque 117 lb. ft. SAE-net at 2500 rpm. (111 Calif.)
- Compression Ratio 8.5:1
- Evaporative Emission Control
- Positive Crankcase Ventilation
- Catalytic Converter
- Solid State Ignition, 12 volts
- Battery: 60 amp. hours, Alternator: 55A-770w: Starter Motor 1.1 hp.
- Rear Axle Ratio 3.91.1
- Turning Circle 32 ft. 2 inches
- Steering Turns lock-to-lock 4.3 Manual, 3.5 Power
- Steering Ratio 21.3:1 (Manual) 17.1:1 (Power)
- Exhaust Gas Recirculation (models)
- Lambda-Sond System (Calif. Cars)

### Additional Specifications

- Wheels 51/2 -14"
- Radial White Sidewall Tires 175 CR78-14 Steel
- Fuel Tank 15.8 gallons
- Approximate Curb Weight: 242: 2840-2925 lbs.
- 242: 2840-2925 lbs. 244: 2870-2970 lbs.

The factory reserves the right to make changes at any time, without notice, to prices, colors, materials, equipment, specifications and models and also to discontinue models.

### Model Description Volvo 245

### Quality

- Sealed Cooling System with Anti-freeze
- Vinyl Upholstery
- Two Separate Undercoats
- Aluminized Mufflers
- Thorough Rust-Proofing
- Shock Absorbing Bumpers
- Weather-proofed electrical components
- Aluminum Distributor
- No Mileage Warranty
- Oil Cooler on automatic transmission

### Safety

- Unitized Body
- Collapsible Steering Column
- Power Assisted Four-Wheel Disc Brakes
- Separate Drum Brakes for Parking Brakes
- Dual-Circuit Brake System with Triangular Division
- Inertia-reel, Self-adjusting Safety Belts
- Light Integrity Sensor
- Child-proof Rear Door and Tailgate
   Locks

### Comfort/Convenience

- Power Assisted Steering is Standard
- Electrically Heated Rear Window
- Quartz Clock
- Tinted Glass
- Full Interior Carpeting
- Indefinite Adjustable Front Bucket Seats
- Adjustable Lumbar Support
- Locking Glove Compartment w. Light
- Day/Night Rearview Mirror
- Storage Pockets on Front Doors
- Passenger Assist Handles
- 12 Outlet Heating and Ventilation System
- Radio Antenna in Windshield
- Stereo Speakers in Front Doors
- Carpeted Cargo area

- Electric Rear Window Washer and Wipers
- Cargo Capacity 74.9 cu. ft. SAE

### Handling/Performance

- Engine: B21, Four Cylinder, 130 cu. in. Overhead Cam, Cross Flow Aluminun Alloy Head
- Output: 104 hp. SAE-net at 5200 rpm (101 Calif)
- Torque 117 lb. ft. SAE-net at 2500 rpm. (111 Calif)
- Compression Ratio 8.5:1
- Continuous Fuel Injection
- Evaporative Emission Control
- Positive Crankcase Ventilation
- Exhaust Gas Recirculation
- Catalytic Converter
- Solid State Ignition, 12 volts
- Battery: 60 amp. hours, Alternator: 55A 770W Starter Motor 1.1 hp.
- Rear Axle Ratio 3.91.1
- Turning Circle 32 ft. 2 inches
- Steering Turns lock-to-lock 4.3 Manual, 3.5 Power
- Steering Ratio: 21.3:1 (Manual) 17.1:1 (Power)
- Exhaust Gas Recirculation (Federal Models)
- Lambda-Sond System (Calif. Cars)

### Additional Specifications

- Length 74", width 5.9" Tailgate Opening-30.7" by 45.7"
- Fuel Tank 15.8 Gallons
- Wheels 51/2 J 14"
- Radial White Sidewall Tires 185 DR 7S-14 Steel
- Approximate Curb Weight: 3045-3070 lbs.

The factory reserves the right to make changes at any time, without notice, to prices colors, materials, equipment, specifications and models and also to discontinue models.

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ADVANTAGE TO BUYER	<ul> <li>Strong and lightweight: (no heavy frame)</li> <li>Better protection should an accident occur.</li> <li>Lowerweight means increased fuel economy.</li> </ul>	<ul> <li>Long life.</li> <li>Less replacement of body components— good resale value</li> <li>Correct amount of spray in the right places ensures best possible rust protection.</li> </ul>	<ul> <li>Protection in an accident.</li> <li>Less risk of injury, due to effective energy-absorbing front and rear ends should an accident be unavoidable.</li> </ul>	<ul><li>Protection in a side collision.</li><li>Minimized risk of injury.</li></ul>	<ul> <li>Withstand a 5 mph front or rear impact without damage to the body.</li> <li>Less costly body repairs.</li> </ul>	<ul> <li>Less risk of damage in a rear-end accident.</li> <li>Minimize fire hazard.</li> </ul>	<ul> <li>Strength and resilience.</li> <li>Vision not impaired if hit by stones.</li> <li>Increased safety in accidents.</li> </ul>	<ul> <li>Will keep the door locked even if the car body is deformed.</li> <li>In an accident, the driver and passenger will be kept inside the car.</li> </ul>
BENEFIT	Safety	Quality	Safety	Safety	Quality	Safety	Safety	Safety
FEATURE	Spot-welded unitized body.	Thorough rust-proofing: •Exposed body parts hot-dip galvanized. •Ventilated door sills (unique Volvo feature). •Factory treatment of closed body sections.	Body with safety cage design and crumple zones.	All Doors are strengthened with built-in tubular steel side impact bars.	Shock-absorbing bumpers.	Protected fuel tank location. Completely separated below the body floor close to rear axle.	High-impact laminated type glass in windscreen.	Safety type door catches.

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ADVANTAGE TO BUYER	<ul> <li>Combination of ergonomic and safety features.</li> <li>Comfort - relaxation - less driving fatigue and correct body support.</li> <li>Good rear visibility because of open-type head restraints.</li> </ul>	<ul> <li>Can be adjusted to most driver's body configurations and driving habits.</li> <li>Range of adjustments based on results of medical studies of muscular work performed when driving.</li> </ul>	<ul> <li>Withstand high pressure.</li> <li>Effective protection in case of an accident.</li> <li>In a head-on collision the front seat can be subjected to the extra load of the rear seat passenger being thrown forward. In a rear end collision the front seat is subjected to the load of the seat occupant.</li> </ul>	<ul> <li>Protection against "whiplash" injuries to head and neck.</li> <li>Good rear visibility for driver.</li> <li>Good forward visibility for rear passengers.</li> </ul>	•Driver avoids the discomfort of a cold seat.	<ul> <li>Comfort especially noticeable on long trips.</li> <li>Seat retains its shape.</li> </ul>	<ul> <li>Minimizes risk of fire - should fire occur, the material is "slow-burning".</li> </ul>
BENEFIT	Luxury	Comfort	Safety	Safety	Luxury	Luxury	Safety
FEATURE	Seats are designed in conjunction with orthopedic specialists.	Wide range of seat adjustments. • back & forward • up and down • seat inclination • backrest inclination • adjustable lumbar support	Exceptionally strong floor attachments and seat frame.	Built in heat-restraints of "see-through" type for the front seats.	Electrically heated driver's seat. (NOTE: 260 GL's only)	Seat firmness increased - based on medical research and on "professional" driving demands (taxis - police cars).	All interior materials are flame-resistant.

THE VOLVO INTERIOR (Continued)

FEATURE	BENEFIT	ADVANTAGE TO BUYER
Three-point inertia reel safety belts for front and rear out board seating positions.	Safety	•Belt needs no readjustment for different drivers or seat positions.
Single-webbing type safety belts are used.	Safety	<ul> <li>Increased elasticity.</li> <li>Load spread over upper and lower parts of the webbing due to a slipjoint.</li> <li>One-hand operation of belt facilitates usage.</li> </ul>
Front seat belt locks illuminated.	Convenience	•Locks easily located in the dark.
Padded dashboard. No projecting controls (knobs etc.).	Safety	<ul> <li>Energy-absorbing when hit.</li> <li>Minimize risk for injury.</li> <li>All controls within easy reach for safe and more comfortable driving.</li> </ul>
Information/warning lamps on dashboard.	Safety	<ul> <li>Driver provided with selected and important information at all times.</li> <li>Easy-to-read information means safer and more relaxed driving.</li> </ul>
Efficient heating and ventilation system, with thermostatically controlled heater.	Luxury	<ul> <li>Well designed for different climates.</li> <li>Excellent comfort for all occupants.</li> <li>Temperature set by driver remains constant-no need for readjustment during driving.</li> </ul>
Through-flow ventilation by means of separate air outlets below rear window. (On station wagon below right side rear window.)	Luxury	<ul> <li>Outlets positioned within correct "low pressure" area of car.</li> <li>Outlet area matches incoming amount of air.</li> <li>Controlled ventilation, draft free and comfortable.</li> </ul>
Integrated heating and ventilation unit.	Convenience	•Cars fully prepared for air conditioning.

THE VOLVO INTERIOR (Continued)

FEATURE

BENEFIT ADVANT

ADVANTAGE TO BUYER

Air conditioning.	Luxury	<ul> <li>Climate control. In hot weather cools the interior. In humid climate, can can be used to dry or dehumidify the air inside car.</li> <li>Shuts out external noise.</li> <li>Helps climinate external pollution.</li> </ul>
Sun roof. (Stn. on selected 264 GL Optional on 240's.)	Luxury	<ul> <li>Full ventilation.</li> <li>Built-in wind deflector.</li> <li>Adds to resale value of car.</li> </ul>
Tinted glass.	Luxury	•Reduces sun heat in the car.
Child-proof rear door locks. (Same device on station wagon's tailgate.	Safety	•Prevent children from opening rear doors for increased safety and peace of mind.
Illuminated rear ashtray.	Luxury	<ul> <li>Easy to find ashtray in the dark.</li> <li>Avoids ashes being dropped on carpets.</li> </ul>

# THE VOLVO SUSPENSION, TIRES, STEERING & BRAKES

ADVANTAGES FOR BUYER	<ul> <li>The right type of suspension for best possible adaption to the characteristics of the steel belted radial tires.</li> <li>Smooth ride even with steel radial tires</li> <li>Space saving.</li> <li>Improved accessibility in the engine compartment, so there's more space for options such as air conditioning, power steering.</li> </ul>	<ul> <li>Constant track, no camber change.</li> <li>Uncomplicated and trouble-free design.</li> <li>Car easy to control, especially on slippery roads.</li> <li>Under extreme conditions (fast cornering) no sudden changes in behavior on the road. Easy to get used to for safer driving.</li> </ul>
ENEFIT	Handling/ Performance	Handling/ Performance
FEATURE B	Front, spring strut suspension.	Live rear axle controlled by separate elements.

THE VOLVO SUSPENSION, TIRES, STEERING & BRAKES (Continued) ADVANTAGES FOR BUYER

BENEFIT

FEATURE

 Minimized risk for driver in a head-on collision. •Large area absorbs body energy under impact. •Reduced body roll. •Improved car behavior when cornering and during high speed driving. •Less effort when parking and in city traffic. •Gives under impact from outside or inside. •Good steering response and "road feeling". tires for good loading capacity, traction •Facilitates getting in and out of the car. •Good driving position. Less tiresome on long journeys. •Station wagon is equipped with large •Improved road holding and handling. •Good riding comfort. Reliability. Fast steering response.
Precise control. Quick response.
Easy steering. •Lower rolling resistance. •Improved fuel economy. •Reduced steering efforts. and mobility. Handling/ Performance Handling/ Performance Handling/ Performance Handling/ Performance Luxury Safety Safety Safety Padded steering wheel aligns with the driver's Power steering (standard on all models except the 242/244 with manual transmission). Stabilizers front and rear on all sedan models. Safety type steering: - Two-way collapsible steering column. Coil springs on all four wheels. Correct steering wheel angle. Steel belted radial ply tires. Rack and pinion steering. body.

## THE VOLVO SUSPENSION, TIRES, STEERING & BRAKES (Continued)

FEATURE	BENEFIT	ADVANTAGES FOR BUYER
Turning circle only 32 feet 2 inches	Handling/ Performance	•As easy to park and handle in congested traffic as most small cars.
Disc brakes standard on all four wheels.	Safety	<ul> <li>Good cooling, thus less fading.</li> <li>Efficient also under tough conditions like mountainous driving or when pulling trailers.</li> <li>Even braking effects on all four wheels.</li> <li>Minimized risk of car pulling sideways.</li> </ul>
Triangular-split dual braking system.	Safety	<ul> <li>Should one circuit fail, about 80% braking efficiency is retained and the car stops in about half to one third of the stopping distances needed for most other makes of cars under the same conditions.</li> <li>Should one system fail, two front wheels and one rear wheel always brake.</li> <li>Car brakes in a straight line.</li> </ul>
Brake failure warning lamp.	Safety	•No risk of driving with one brake circuit out of function.
Relief valve in each braking circuit.	Safety	<ul> <li>Prevent rear wheels from locking.</li> </ul>
Stepped bore master cylinder.	Safety	<ul> <li>Should one circuit fail, very little increase in pedal pressure needed.</li> <li>No panic situation will occur.</li> </ul>
Ventilated front discs on the 264.	Safety	<ul> <li>Provide additional cooling effect, because of car's greater speed potential.</li> </ul>

### THE VOLVO ENGINES AND TRANSMISSIONS

FEATURE different basic engines.	BENEFIT Handling/	ADVANTAGES FOR BUYER •Right engine for type of performance needed.
our cylinder, overhead cam engine, uminum cylinder head.	Performance Handling/ Performance	<ul> <li>Smooth, quiet running.</li> <li>Higher output and torque.</li> <li>Good low speed characteristics.</li> <li>High cruising speeds.</li> <li>Very good passing ability.</li> </ul>
6 overhead cam engine, with alum- cylinder heads and aluminum alloy block.	Handling/ Performance	<ul> <li>Compact space saving design.</li> <li>Powerful six-cylinder engines without increasing body length or weight.</li> <li>Very low weight for size of engines.</li> <li>High output.</li> <li>Very good performance for high speed crusing.</li> </ul>
rless, transistorized ignition	Handling/ Performance	<ul> <li>Very stable ignition setting.</li> <li>Long life and reduced maintenance.</li> <li>Full voltage of all engine rpm.</li> <li>Improved performance (e.g., cold starting - high speed).</li> </ul>
o alternator.	Quality	<ul> <li>Ensures full battery charging in adverse conditions.</li> <li>Ample power for "extras" like air conditioning.</li> </ul>
injection.	Handling/ Performance	<ul> <li>Simple design.</li> <li>Good performance.</li> <li>Easy to service.</li> </ul>
gines fitted with sealed cooling system	Quality	<ul> <li>System can withstand overpressure and excessive heat without loosing coolant.</li> <li>Reliability and less refilling of coolant.</li> </ul>
oarent expansion tank.	Quality	<ul> <li>Very easy to check coolant level.</li> <li>Minimized risk of engine trouble.</li> </ul>

### THE VOLVO ENGINES AND TRANSMISSIONS (Continued)

FEATURE

BENEFIT ADVANTAGES FOR BUYER

<ul> <li>Car prepared from factory for severe conditions.</li> <li>No risk of damage to engine or radiator in cold climate.</li> <li>Avoids winter problems.</li> </ul>	•Lower noise level.	<ul> <li>Limited rpm.</li> <li>Less power-consumption.</li> <li>Lower noise level.</li> <li>Less fuel consumption.</li> </ul>	<ul> <li>Transmissions to meet different driver perferences.</li> <li>Type to meet any driving conditions.</li> </ul>	<ul> <li>Reliable.</li> <li>Easy to handle.</li> <li>Long life.</li> <li>Easy to service.</li> <li>More powerful.</li> <li>Simplified service and spare part stocks.</li> </ul>	<ul> <li>Increased starting traction.</li> <li>Less load on clutch.</li> <li>Facilitates starting up hills and with trailer.</li> <li>Longer life - less service.</li> </ul>	•Avoids inadvertent selection of reverse gear.	<ul> <li>Overdrive unit reduces engine rpm at a set speed in 4th gear - with unchanged road speed.</li> <li>Less engine wear.</li> <li>Lower noise level.</li> <li>Reduced fuel consumption.</li> <li>Valuable for high speed crusing.</li> </ul>
Quality	Luxury	Quality	Handling/ Performance	Quality/ Handling/ Performance	Handling/ Performance	Safety	Quality
Coolant contains anti-freeze and anti- corrosion substances from factory.	Nonsymmetrically positioned blades on fan.	Slip coupling on fan.	Wide range of transmissions.	M45 four speed manual gearbox.	Lowered gear ratio.	Positive reverse lockout on all manual gearboxes.	M46 Manual gearbox.

### THE VOLVO ENGINES AND TRANSMISSIONS (Continued)

FEATURE	BENEFIT	ADVANTAGES FOR BUYER
BW55 modified design with disc clutches, idler wheels.	Handling/ Performance	<ul> <li>Faster response.</li> <li>Smoother operation.</li> <li>Excellent shifting quality.</li> </ul>
Shifts down to 1st gear at speeds up to 35 mph.	Handling/ Performance	<ul> <li>Maximum engine braking.</li> <li>Useful in hilly country to avoid overheating of brakes (fading) especially when towing trailer.</li> </ul>
BW55 fitted with oil cooler.	Quality	<ul> <li>Will keep oil temperature, in the gearbox, within correct limits.</li> <li>The automatic gearboxes will stand up to hard service like towing boats, trailers, etc.</li> </ul>
60 amp/hour Battery.	Quality	•Supply more than required power for years.
1.1 hp. Starter motor.	Quality	•Ensures quick starts even in adverse conditions.
Weatherized Electrical components.	Quality	•Ensures electrical operations even under wet or damp conditions.



