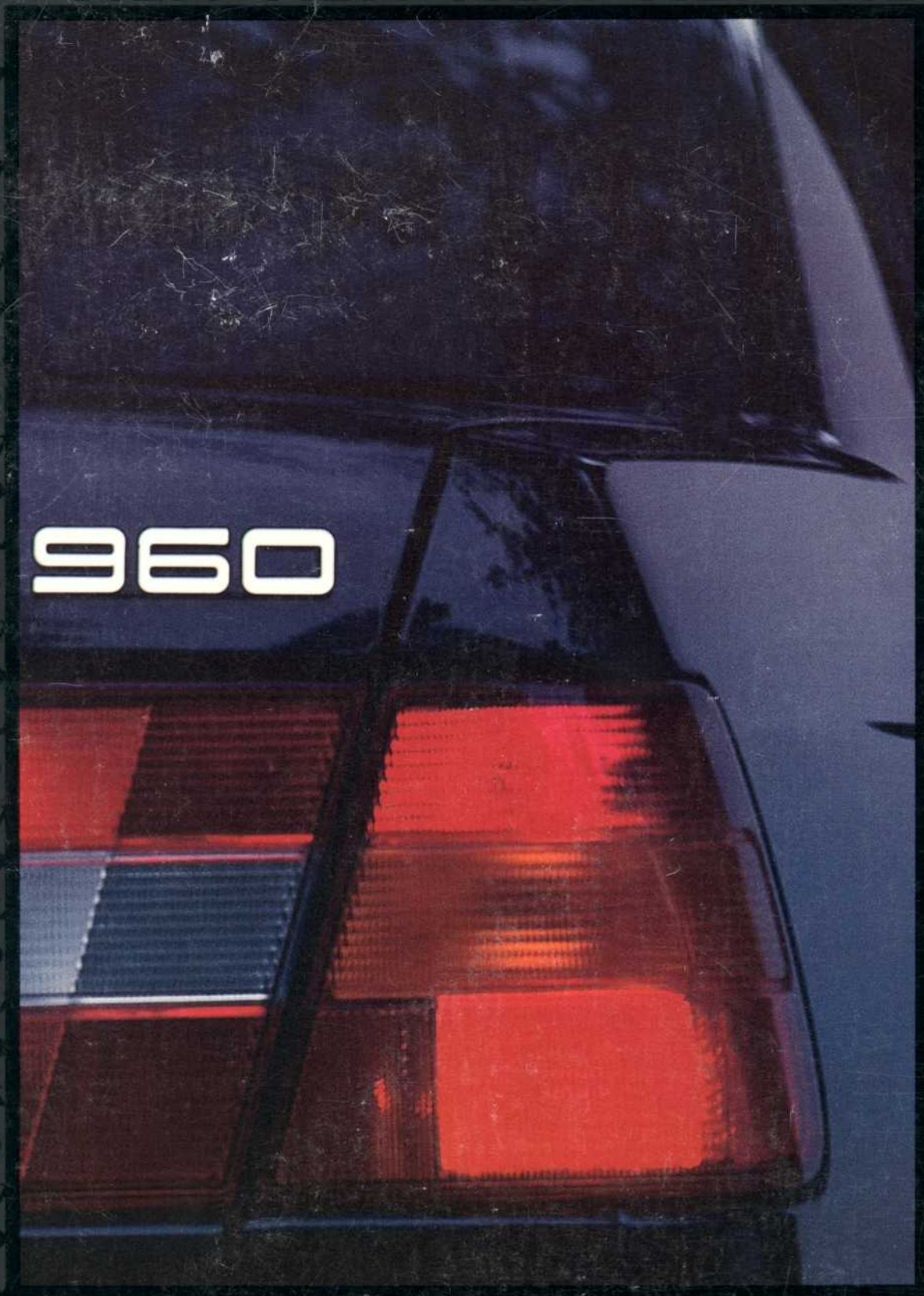

VOLVO

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VOLVO NEWS & INFORMATION

Contact: Bob Austin
Michael Guerra

For Immediate Release

VOLVO '92: NEW MODEL, NEW ENGINE AND A UNIQUE SAFETY INNOVATION

ROCKLEIGH, N.J. -- There is quite a lot of news from Volvo for the 1992 model year. Most people think of automotive news in terms of new models. For those people, Volvo introduces the new top-of-the-line 960, which combines the best of Volvo's traditional values with a plethora of luxurious appointments and a sophisticated 201 hp inline six-cylinder engine. Also new for 1992 is Volvo's Side Impact Protection System, or SIPS. This unique design, built into every 740, 940 and 960 Volvo, is designed to significantly reduce injuries in side impact accidents, which are second only to frontal impacts in frequency.

According to Joseph L. Nicolato, president and CEO of Volvo Cars of North America, SIPS is based on research work conducted by Volvo's Swedish based accident investigation team. "Almost everyone knows about Volvo's sturdy roll-cage-like passenger compartment and our front and rear crumple zones," Nicolato explained. "SIPS is Volvo's newest major safety innovation and promises to be one of the most significant in our proud safety history."

Providing additional protection from side impacts is a difficult problem because of the very small space between the occupant and the intruding car. In designing SIPS, Volvo engineers realized they would have to spread the impact forces over as much of the car's body structure as possible to dissipate the energy, and also

maintaining the integrity of the occupant compartment. The solution consists of reinforcements to the B-pillar, the body sills, the roof rails, and the floor. Test data indicates that SIPS equipped vehicles could reduce serious injuries or deaths in side impacts by cars by 25%. Furthermore, SIPS today surpasses by a wide margin the government's side impact regulations which will be required for model year 1994.

While on the topic of safety, Volvo is making ABS brakes standard equipment on all 1992 Volvo models. Similarly, two years ago the company made a driver's side air bag standard equipment on all models. Wherever you look in the Volvo line, it is obvious that safety is a primary design criterion.

Some automobile buyers want their safety in a luxurious and sophisticated package. For these discriminating buyers, Volvo has introduced the 960. Under its smooth body work, the 960 carries an impressive drivetrain which delivers the kind of performance you expect from a 201 hp engine, while producing EPA mileage figures of 18 mpg city and an impressive 26 mpg highway.

The 960 is powered by an inline six-cylinder 2.9 litre engine, designed and built by Volvo. For light weight, the engine is predominantly cast aluminum with cast-in iron cylinder liners for durability. Belt driven double overhead cams operate four valves in each cylinder via hydraulic tappets which require no maintenance. A Bosch Motronic 1.8 system handles both ignition timing and fuel injection functions. It includes a self diagnostic function to speed repairs. Long smooth runners in both the intake and exhaust manifolds contribute to the engine's ability to produce 80% of its maximum torque at a low 1000 rpm. Torque is what really makes a car feel responsive under most driving conditions and Volvo's new six-cylinder really delivers in this area.

The balance of the 960's powertrain is no less impressive. An electronically controlled four-speed automatic transmission, the AW40, has been tuned specifically for Volvo's new engine. The electronic control system senses road speed, engine speed, engine load and throttle position when determining shifts. The electronics help insure smooth shifting and permit the driver to select from one of three different driving modes. Economy provides the best fuel economy, shifting smoothly at relatively low engine speeds. Sport mode allows the engine to reach higher rpms before shifting and is optimized for performance. Winter mode locks out first and second gears so that starting off in low traction conditions can be more easily accomplished. Unique to Volvo's AW40 is the "Down Slope" mode which automatically determines when you are descending a hill and shifts to a lower gear to provide engine braking.

The 960 is flush with comfort and luxury features as well. Both driver and front seat passenger sit in Volvo's famous orthopedically designed bucket seats, power operated. All seating surfaces are leather. And don't forget Volvo's endearing touch of heating the front seats. An automatic climate control system regulates cabin temperature while a six-speaker AM/FM stereo cassette system fills the air with sound. Power operated features include, sunroof, windows, remote mirrors, and antenna. For those who need to carry bulky objects from time to time, Volvo offers a wagon version of the 960. This polished and well-mannered wagon has all the amenities of the sedan with the extra versatility of a wagon.

While the 960 is the biggest news from Volvo for 1992, the balance of the product line has not been ignored. Enhancements in the area of comfort and safety can be found on nearly every model.

The most basic Volvo is the 240 which is available in a four-door sedan or a wagon body style. This rugged product has proven itself on the roads of the world for over sixteen years. This year all 240s will be equipped with ABS, adding an anti-locking feature to their powerful four-wheel disc system. Powered by Volvo's trusty 2.3 liter fuel-injected four-cylinder engine, the 240 is the logical choice for those who value a simple no nonsense car with plenty of safety and durability. Back for 1992 is a GL version of the 240 sedan, bringing with it those extras some buyers appreciate, like sunroof, power/heated exterior mirrors and power antenna.

The 740 has been the volume model for Volvo for the past several years. For 1992 all 700 series cars will receive additions to their long list of standard safety features. These include Side Impact Protection System, seat belt pretensioners for both front seats, and automatic locking differential. The number of 740 versions has been reduced this year to three. The base 740 is available as a sedan or wagon powered by the 114 hp version of Volvo's 2.3 liter four-cylinder engine. For those wishing more performance, there is the 740 turbo wagon which proved its capabilities by being the only station wagon ever to have competed in a professional auto racing series.

The sleek 940 range which was introduced in 1991 has also received SIPS and pretensioners on the front seat belts. For 1992, a new entry level 940 model has been introduced and carries the badge 940 GL. Available in sedan or wagon body styles, it is powered by Volvo's rugged four-cylinder, 114 hp engine coupled to a four-speed automatic transmission. The GL is very well equipped with such features as air conditioning, power sunroof, and a six-speaker audio system.

Volvo has developed quite a following for its 162 hp turbo charged engines over the years. The 940 turbo is available in sedan and wagon body styles and is one of the most fun-to-drive combinations in the Volvo line. For 1992, all 940 models will be equipped with Volvo's automatic locking differential, a great help in poor traction conditions.

Of course, the 960 comes in at the top of the Volvo product line with its many luxury appointments and sophisticated drive train. Like the other cars in the Volvo line, the 960 is designed for safety and durability. It has also been priced to deliver value for the money. Looking across the Volvo line, it is obvious that concern for safety drives this company. For 1992, ABS brakes have become standard equipment on every Volvo sold in the U.S. Two years earlier, Volvo did the same with its SRS, a driver's side air bag. Often overlooked are other Volvo standard features like four-wheel power assisted disc brakes, power assisted rack and pinion steering, and the all steel roll-cage-like unit body with front and rear crumple zones.

Mr. Nicolato and his colleagues at Volvo believe they are justifiably proud of their offering for 1992, with the introduction of the 960, they have a product they believe can compete with the finest luxury cars from around the world. The introduction of SIPS has allowed Volvo to again advance the frontiers of automotive safety and the additional content Volvo has brought to virtually every model has made them an even greater value.

"The 960 is definitely a car which will show itself handsomely when measured against its competitors for overall performance, safety, and value," Nicolato stated with conviction." Our Side Impact Protection System may well go down in automotive history as one of the major safety innovations. I guess you can't blame us for being a little proud this year."

Volvo has for years been the largest importer of European built cars in America. In spite of the increased competition and chaos in the automotive marketplace, Volvo has steadfastly held on to this enviable position.

VOLVO NEWS & INFORMATION

Contact: Bob Austin
Michael Guerra

For Immediate Release

THE VOLVO 960: IT SHOUTS INCONSPICUOUS CONSUMPTION

ROCKLEIGH, N.J. -- As the nineties unfold, a different world with new values is emerging. In place of opulence, today's automobile customers seek comfort and security. The raw power expected of engines in the past has been tempered by concerns for fuel efficiency and low emissions. Unchanged in this set of customer values is the demand for quality Volvo with its long history of producing high quality automobiles has shown itself more than able to address these stringent requirements. Enter the Volvo 960.

From the outside the 960 sedan shares the more fluid lines Volvo introduced on its 940 series in 1991. The distinguishing features of the 960 lie under its characteristically Volvo skin. Most outstanding are its all-new drivetrain and its Side Impact Protection System.

The inline six-cylinder engine which powers the 960 is the first in a new family of lightweight aluminum alloy engines designed and built by Volvo. The extensive use of aluminum and finite element design techniques have resulted in a very compact engine which is both strong and light. The cylinder head has four valves per cylinder for increased efficiency. They are operated by belt driven double overhead camshafts via hydraulic tappets which require no adjustments. A great deal of attention has been paid to the smooth flow of gases into and out of the engine. Both intake and exhaust manifolds have long individual runners for high torque at relatively low rpm.

A quick look under the hood of the 960 reveals a clean engine compartment with an amazingly small engine! The new inline six is only four inches longer than Volvo's proven four-cylinder engines. Absent from the engine is the conventional distributor, which has been replaced by individual ignition coils which sit immediately atop each of the six spark plugs. A Bosch Motronic 1.8 engine management system handles both the ignition timing and fuel injection functions. The Motronic system also includes a self diagnostic function for easy maintenance. This sophisticated engine management system, along with the new combustion chamber shape, permit this high output engine to operate without the need for premium unleaded fuel. EPA fuel economy figures are impressive at 18 mpg city and 26 mpg highway. No gas guzzlers here.

The principal attributes of inline six-cylinder engines are their inherent balance and smoothness. The B6304F engine delivers these qualities and a great deal of performance as well. Rated at 201 hp at 6,000 rpm, the engine delivers over 1 hp per cubic inch of displacement. A decade ago, this type of output was considered amazing. A medium size engine at 2.9 liters or 178 cubic inches, it delivers a very pleasant combination of performance and fuel economy. In most driving circumstances, it is really torque that makes a car feel responsive. With 1971b. ft. of torque available at 4,300 rpm, and 80% of that available from 1,000 rpm, the driving experience is very lively indeed.

To efficiently deliver the engine's output, Volvo has developed a new four-speed electronically controlled automatic transmission. The driver can select from three driving modes: economy, sport, or winter. In the economy mode, upshifts are gentle and executed at relatively low engine speeds for best fuel economy. Switching to sport mode allows the engine to rev higher before shifting for increased performance.

The winter mode will lock out first and second gear so that starting off in low traction conditions, like ice and snow can be accomplished with minimal wheel spin. The 960 also features an automatic locking differential which further assists starting traction in slippery driving conditions.

Another unique feature of this transmission is the "down slope mode" which senses when the car is descending a hill and automatically engages a lower gear to provide engine braking. This feature is typical of the attention to details that Volvo engineers are famous for.

Safety is always among the primary concerns in the design of a Volvo, and the 960 is no exception. Almost everyone knows about Volvo's front and rear crumple zones and safety cage design. Through their accident investigation work in Sweden, Volvo engineers determined the next important area for safety development was side impacts, which account for about one out of every five collisions. The problem here is more complex because the space between the occupants and the impact is relatively small.

The solution Volvo developed is called SIPS or Side Impact Protection System. Its concept is to transfer the forces of a side impact across as much of the structure of the car as possible, so that the energy may be absorbed and the occupant area remain largely intact. To accomplish this several of the structural members of the car had to be made even stronger and additional reinforcements added. Virtually none of this is obvious from the surface, but the changes include redesigned and strengthened B-pillars, reinforced door sills and roof rails, and redesigned floor members.

SIPS is designed to force the impact energy of a crash around the occupants of the car, so that the deformation is transferred from the doors and the B-pillars to the roof, floor, and sills. Volvo designers initially used mathematical modeling to determine the size and location of reinforcements. Laboratory testing of prototypes confirmed the design solutions. SIPS today surpasses by a wide margin the side impact government requirements that will be introduced in the U.S. for model year 1994.

The list of standard safety features on the 960 sedan is a long one including: driver's side air bag, pyrotechnique seat belt pretensioners for both front seats, self adjusting three-point seat belts in all five seating positions, and an integrated child safety booster cushion in the rear arm rest. Dynamic safety features are also numerous: power assisted rack and pinion steering, four-wheel power disc brakes with ABS, and an automatic locking differential are all standard.

Automobiles in this market segment are known for their creature comforts as well as their performance. The 960 also delivers on this front. Both orthopedically designed front bucket seats are power operated with three memory positions. All seating surfaces are leather. An automatic climate control system regulates cabin temperature, while a six-speaker AM/FM stereo cassette system fills the air with sound. Power-operated features include sunroof, windows, remote mirrors and antenna. For those who need to carry bulky objects from time to time, Volvo offers a wagon version of the 960. This well mannered wagon has all the amenities of the sedan and the extra versatility provided by a wagon.

The Volvo people are justifiably proud of the new 960. It demonstrates their continuing dedication to safety, the sophistication of their drivetrain technology, and their ability to produce a top-of-the-line car that will compete with the best cars from around the world. The 960 is not a car that will announce to your neighbor that you have just won the lottery. What it will do is provide you with a stylish way to transport your family in safety and comfort at a price that says you made a rational choice. Think of it as inconspicuous consumption ... a very satisfying concept in these times.

VOLVO NEWS & INFORMATION

Contact: Bob Austin
Michael Guerra

For Immediate Release

SIPS: A UNIQUE SAFETY SOLUTION FROM VOLVO

ROCKLEIGH, N.J. -- Once again Volvo has advanced the frontiers of automotive safety. For the '92 model year, all 700 and 900 series Volvos will feature a unique Side Impact Protection System (SIPS). The SIPS design is the direct result of research compiled by Volvo's accident investigation team based in Sweden.

Safety is one of the most important design criteria in all Volvo cars. No modification or change is made to the design of a Volvo without its effect on safety being evaluated and verified. Years of study and research have gone into the development of Volvo's SIPS. Side impacts are the second most common type of accident after frontal collisions, accounting for approximately one out of every five accidents. While most side impacts occur at relatively low speeds, they produce an extremely high number of serious injuries. Volvo's design objective was to significantly reduce both the number and severity of injuries in a side impact collision.

Almost everyone is familiar with how the crumple zones in the front and rear of Volvos deform to help absorb the energy of an impact before it reaches the occupants. In a side impact, the distance between the impact and the occupant is very small. Only the doors and the B-pillar separate the occupants from the impact site. Volvo designers realized the solution would require spreading the accident forces over a larger portion of the car's structure and reducing the intrusion into the passenger compartment. Properly done, this would also result in lower acceleration forces acting on the occupants. But how could this objective be met?

The solution, while largely invisible, consists of a further strengthening of the B-pillar, a reinforced door sill and roof rail, and strengthening of the floor members. These changes play an important role in dissipating the crash forces throughout the car's body by redirecting them around the safety cage. The B-pillar reinforcement also reduces the passenger compartment intrusion. The standard interior door panel on the car is sufficiently flexible to provide additional crash energy absorption.

Once the concept was devised, a mathematical model was constructed to determine which components should be reinforced and by how much. Following the calculations, prototypes were built and tested in Volvo's safety laboratory. The tests confirmed SIPS' ability to transfer the impact energy from the doors and B-pillars to the roof, floor and sills. Passenger compartment intrusion was significantly reduced, as was the acceleration passed on to the occupants. The testing also confirmed that SIPS today, surpasses by a wide margin, the side impact standards which the government will require for model year 1994. Further, the results indicated that in side collisions involving cars, a 25% reduction in the number of fatalities or serious injuries is possible in SIPS equipped cars.

SIPS is a unique Volvo safety development and is the latest in a long line of safety innovations which includes such ubiquitous items as the three-point self adjusting seat belt. Safety has been a primary design criterion at Volvo since the company produced its first car in 1927. If you wonder how a company can remain dedicated to one idea for so long, you should read the letters Volvo receives from its owners, each stating in their own way, "Volvo Saved My Life."

VOLVO NEWS & INFORMATION

Contact: Bob Austin
Michael Guerra

For Immediate Release

NEW SIX-CYLINDER POWERS VOLVO 960

ROCKLEIGH, N.J. -- Volvo's new top-of-the-line 960 is powered by a sophisticated new inline six-cylinder engine. It is the first of a family of modular engines designed and built by Volvo. Designated the B6304F, the engine is powerful, efficient, and smooth. It is capable of delivering the kind of performance people expect from a luxurious European car. At the same time, its relatively small displacement and high efficiency deliver very respectable fuel mileage. You might say the 960's new power plant is tuned for our times.

Volvo engineers believed it would take an engine of about three liters displacement to provide the kind of performance they wanted for their new flagship model 960. Realizing that buyers in this segment are very sensitive to noise and vibration, they decided to build a six cylinder. An inline configuration was chosen because it is inherently well balanced and smooth. The one drawback to an inline six is typically its length, but Volvo engineers have been able to hold the length of the new engine to just four inches more than their proven 2.3 liter four cylinder.

Weight was an important consideration in achieving the high fuel efficiency the 960 should have, so aluminum alloy was selected as the material for all major castings. The use of aluminum, in combination with finite element analysis techniques, has produced a very compact engine which is both light and strong. To help insure the kind of durability Volvo engines are famous for, the cylinders

have cast-in iron liners. A very sophisticated casting technique also allows the use of cast iron reinforcements in the main bearing caps which are cast into a single lower crankcase. All the main bearing caps are cast into one lower crankcase unit for additional strength and durability. This design is often found in racing engines.

The engine is composed of five major sections, like the layers of a cake. Starting from the top, they are: the camshaft housing, cylinder head, cylinder block, lower crankcase, and oil pump. These five cast aluminum sections are fastened together with bolts and assembled with liquid gaskets instead of traditional gasket materials to assure close tolerances.

The cylinder head has been designed to maximize flow and to optimize combustion. A toothed belt drives two overhead camshafts which operate the valves via hydraulic tappets that require no adjustment. Each of the pent-roof combustion chambers has four valves for good breathing. The shape of the chamber allows a high 10.7:1 compression ratio which is good for efficient burning. By carefully controlling the combustion process, Volvo engineers have been able to make this high compression engine operate on regular unleaded fuel.

The complex job of engine management is controlled by a Bosch Motronic 1.8 system which handles both the fuel injection and ignition functions. The traditional distributor is absent, replaced by six individual coils sitting directly atop their respective plugs. The Motronic system has a self diagnostic function to speed repair in the unlikely event of a failure.

To capture all the potential of the new engine, the entire path of gases flowing into and out of combustion chambers was studied. The result was a large spherical intake plenum with long, smooth, individual runners to each cylinder. On the

exhaust side, twin exhaust manifolds combine with twin double walled exhaust pipes that curve smoothly to meet at the catalytic converter. Easy in, Easy out.

That's enough of the engineering talk. Now you probably want to know how it performs. In a word, great! From its 2.9 liters or 178 cubic inches of displacement, the robust little engine delivers 201 hp at 6000 rpm. That is over one horsepower per cubic inch! A decade ago, you had to look at race car engines to see that kind of output. The horsepower number is impressive. At 201, this is the most powerful engine Volvo has ever put into production. In everyday driving, it is really torque, not horsepower that makes a car feel responsive. With 197 lb. ft. of torque at 4300 rpm, this engine should feel very responsive indeed. Adding to the pleasant driving experience, is the fact that 80% of that torque is available from only 1000 rpm. Another impressive achievement.

And let's consider fuel economy. The 960 delivers 18 mpg city and 26 mpg highway on the EPA test cycle. No gas guzzlers here. Of course, it is not only the engine but the transmission which contributes to this fine performance, and Volvo has news here as well.

The AW40 is a four-speed electronically controlled automatic transmission, developed and programmed specifically for the Volvo's new six-cylinder engine. The transmission senses throttle position, road speed, engine speed, and engine load, then it calculates the correct gear, appropriate shift point, and converter lock-up status. The electronic control unit provides smooth gear changes, improved fuel economy and a choice of driving modes.

The 960 driver can select from three driving modes : economy, sport, or winter. In the economy mode, upshifts are gentle and executed at relatively low engine speeds for best fuel economy. Switching to sport mode allows the engine to rev higher before shifting for increased performance. The winter mode will lock out first and second gear so that starting off in low traction conditions, like ice and snow can be accomplished with minimal wheel spin. The 960 also features an automatic locking differential which further assists starting traction in slippery driving conditions.

Another unique feature of this transmission is the "down-slope mode" which senses when the car is descending a hill and automatically engages a lower gear to provide engine braking. This feature is typical of the attention to details that Volvo engineers are famous for.

Volvo's new six-cylinder engine and four-speed electronically-controlled transmission are extremely impressive on paper. But that is only half the story. The best way to really appreciate the performance, low noise level and smoothness of the 960, is to drive it! Then you can determine for yourself how well the Volvo designers achieved their goals.

VOLVO NEWS & INFORMATION

Contact: Bob Austin
Michael Guerra

For Immediate Release

VOLVO 1992

TECH &SPEC

ROCKLEIGH, N.J. -- The following pages contain technical information about Volvo's 1992 models designed for the U.S. market. The information is accurate as of September 25, 1991. However, the manufacturer reserves the right to alter specifications at any time without notice.

NEW MODEL

960 SERIES: The introduction of the 960 series marks Volvo's return to the luxury/prestige market segment. Featuring an all new aluminum alloy inline six-cylinder engine, mated to an electronically controlled four-speed automatic transmission, Volvo's 960 will replace the 940 SE as the top-of-the-line model. The Volvo built B 6304F engine is rated at over 200 horsepower and develops nearly 80% of its maximum torque at a very low 1000 rpm. The design criteria for the 960 series drivetrain focused on qualities such as low vibration, quieter operation at all engine speeds, increased torque at low rpm, and improved fuel efficiency over present drive lines. The 960 series sedan features Volvo's multi-link independent rear suspension system, SIPS (Side Impact Protection System), electronic climate control, and three-memory power seats as standard equipment. Volvo's 960 series will be available in sedan and wagon versions.

940 GL: Volvo's most affordable 900 series model, the 940 GL sedan, will become Volvo's volume car for 1992. Powered by the durable 2.3 liter, single overhead cam, four-cylinder fuel-injected engine, the 940 GL sedan features Volvo's constant track live rear axle suspension system. Standard equipment includes Volvo's SIPS

(Side Impact Protection System), power sunroof, six-speaker audio system, automatic locking differential for improved wet-weather traction, and an integrated child cushion/armrest for the center rear-seating position. The 940 GL will replace the 940 GLE which was sold during 1991.

SUMMARY OF CHANGES BY MODEL

240 SERIES: Joining Volvo's entry level 240 series after a two-year absence, is the tastefully appointed 240 GL sedan. The 240 GL is equipped with many standard features including a sunroof, power/heated outside mirrors, rear hat-shelf audio speakers, power antenna and heated front seats. All 240s will be equipped with ABS brakes for 1992 as part of their standard equipment. Other enhancements to all 240 series models include: a new heat control valve for more efficient control and distribution of heat, a larger diameter front anti-sway bar for improved handling, and re-valved front and rear shock absorbers for enhanced ride comfort. The 240 series sedans and wagons feature a matte black grille and trim package while the 240 GL sedan carries a chrome grille and bright trim package.

740 SERIES: The Volvo 740 series gains numerous new safety features for 1992 including ABS as standard equipment on every variant. The most significant new development is Volvo's SIPS (Side Impact Protection System) designed to significantly reduce injuries in the event of lateral collisions. Also new, as standard features, are pyrotechnique seat belt pretensioners, an integral padded head rest for the front seats, and Volvo's automatic locking differential for enhanced wet-weather traction. Additional changes include a more powerful alternator and battery, and power remote-controlled outside mirrors. Volvo's proven 740s are available as normally aspirated sedans and wagons and in a turbo-charged wagon version. Manual transmissions will no longer be available on any 740 series models.

940 SERIES: The 940 series will acquire additional safety features, for 1992 including: SIPS (Side Impact Protection System), pyrotechnique seat belt pretensioners, and a newly styled integral padded head rest for the front seats all contributing to the 940's occupant protection capabilities. All 940 series sedans are equipped with an integrated child cushion/armrest in the center rear seating position.

Completing the changes to the 940 are: a reduction of the diameter of the front anti-sway bar (from 23 mm to 21mm) for improved ride quality, a more powerful battery and alternator, and newly styled power seat control for 940 turbos. All 940 sedans and wagons are based on Volvo's predictable handling, constant track rear axle suspension system and include an automatic locking differential.

COUPE: Introduced in 1987, Volvo's Bertone designed coupe has been discontinued at the end of the 1991 model year.

TECHNICAL HIGHLIGHTS

B6304F ENGINE

This all new Volvo designed and built 201 hp engine is the first of a new family of modular engines. Its compact inline six-cylinder design uses double overhead camshafts and four valves per cylinder. Both the cylinder head and the engine block are aluminum alloy for light weight. By connecting all of the main bearing caps together in one solid lower casting, Volvo engineers have used a technique often found in racing engines to enhance engine strength. Delivering over 200 hp, the new Volvo engine is quiet, efficient, and very responsive to drive. A Bosch Motronic 1.8 engine management system handles fuel injection and ignition functions. The

engine is designed to run on unleaded regular and delivers an impressive 1$ MPG city, 26 MPG highway according to EPA test procedures.

AW40

The four-speed electronically controlled automatic transmission has been developed to work specifically with the B6304 engine. A switch allows the driver to select one of three driving modes: economy for best fuel mileage and comfort, sport for maximum performance, and winter for best traction in slippery situations. The transmission's unique programming also includes a "down-slope mode" which automatically determines when you are descending a hill and shifts to a lower gear to provide engine braking.

SIPS

Volvo's SIPS or Side Impact Protection System is a redesign of the main body structure to enhance its occupant protection capabilities in the event of a lateral or side impact. Side impacts are the second most frequent type of accident after frontal impacts. The government has set standards for side impact protection which will come into effect in a few years. Beginning this model year, all 740, 940 and 960 Volvos offer a system which can easily meet this safety level. Volvo's SIPS consists of reinforcements to the rocker panels, roof rails, B-pillars, and floor pan transverses which have been designed to spread side impact forces across as much of the car's structure as possible. The SIPS system resists intrusions and transfers forces across the width of the body. Volvo engineers have designed this system to help reduce injuries in side impact collisions with cars by 25%.

INTEGRATED CHILD SAFETY CUSHION

Volvo 940 and 960 series sedans will feature as standard equipment an integrated child safety cushion/armrest in the center rear seating position. Doubling as an armrest, the child safety cushion can quickly and easily be transformed into a comfortable seating position for children in the 50 to 80 lb. range. This novel design is convenient and is designed to work in conjunction with another safety-first feature - the rear center seat with lap/shoulder belt and head rest. The safety cushion is high enough to allow good visibility so children will enjoy using it.

SUPPLEMENTAL RESTRAINT SYSTEM

Since model year 1990, 100% of all new Volvos sold in the U.S. have been equipped with Volvo's Supplemental Restraint System consisting of a driver's side air bag and knee bolster. Again for 1992, all U.S. Volvos will be so equipped. All 740, 940, and 960 models will also be equipped with pyrotechnique seat belt pretensioners on both front seat positions.

ABS BRAKES

Anti-lock brakes will be standard equipment on all 1992 Volvos sold in the United States.

AUTOMATIC LOCKING DIFFERENTIAL

Designed to aid traction when accelerating in slippery conditions, this differential unit works like other limited slip or locking differentials at low speeds. At speeds over 25 miles per hour, the unit automatically disengages itself to help assure

predictability at highway speeds. The automatic locking differential is standard on all 740 , 940 and 960 Volvos.

ANTI-THEFT RADIOS

All Volvo audio systems in 1992 models will be equipped with anti-theft code protection.

CONSUMER PROTECTION FEATURES

VOLVO LIMITED NEW CAR WARRANTY: Volvo offers a comprehensive warranty package designed to protect the owner's investment. The New Car Limited Warranty coverage is described in detail on the separate warranty page, which is the last page in this section.

VOLVO

960

ENGINE - B-6304F

Type ... In-line 6-cyl. all aluminum with cast in iron liners, DOHC, 24 valves, pent-roof combustion chambers.
HP (SAE Net) ..... 201 @ 6000
Torque ..... 197 ft lbs @ 4300
Cylinder Block ..... Aluminum
Cylinder Head ..... Aluminum
Bore & Stroke ..... 83 X 90 mm
Displacement ..... 2922 cc (178 cu. in.)
Compression ratio 10.7:1
Fuel Requirements .. 87 (R + M) /2 or higher
Ignition ..... Electronic, microprocessor controlled, direct ignition coils
Fuel Injection ..... Motronic (Electronic)
Main Bearings ..... 7-shell type
Valve ..... Overhead cam
Operations ..... direct acting
Battery/Alternator ..... 600/120 amp
Crankcase Capacity (incl filter) .. 6.0 U.S. qts.
Fuel Tank Capacity
..... 21.8 U.S. gallons (4-door)
..... 15.8 U.S. gallons (5-door)
Max. Engine Speed ..... 6200 rpm

DRIVETRAIN

Transmissions
AW-40 ..... electronically-controlled, 4-speed automatic with 3-selective gear-change programs (sport, economy, winter)
Transmission ratios
Automatic 2.80:1/1.53/1.00/0.70/2.35
Final Drive Ratio 3.31:1
Automatic Locking Differential

CHASSIS and SUSPENSION

Chassis - SIPS (Side Impact Protection System)
Suspension
Front MacPherson strut with eccentrically mounted coil springs, stabilizer bar, and hydraulic shock absorbers
Rear 4-door: Volvo multi-link: individually sprung wheels with lower trailing arm, upper wishbone, lower link and track rod, single coil spring per side and self-leveling shock absorbers and sway bar. 5-doors: constant track: linkage consisting of live axle, two trailing arms, wishbone sub-frame, panhard rod, coil springs, and self-leveling shock absorbers
Steering
Type ..... Power assisted rack and pinion
Ratio 16.9:1
Turns, lock-to-lock 3.5
Turning circle ..... 32.2 ft.
Brakes
System Four-wheel disc with vacuum assist ABS2; Bosch Anti-Lock Braking System with electronic sensors front & rear brake circuits.
Front: Vented discs, 280 x 26 mm, sliding calipers,
Rear: Solid discs, 281 x 9.6 mm, fixed calipers, drum type parking brake mechanically operated
Swept area: 421 sq. in.
Wheels ..... 6 x 15 s 20-spoke alloy
Tires 195/65 R15V

EQUIPMENT	Sedan /	Wagon
Sway Bars, F/R (mm)	24/18	21/0
SRS Drivers Air Bag	S	S
Electronic Climate Control	S	S
Cruise Control	S	S
Anti-lock Braking System	S	S
Power Windows	S	S
CR-814 6 speaker anti-theft AM/ FM cassette /radio CD compat. .	S	S
Dash Front/Rear Door Speakers	S	S
Sunroof	S	S
Dome light with front map lights and delay	S	S
8-way power controlled 3-way programmable dri ver seat) ...	S	S
Heated Front Seats	S	S
Instrumentation:		
140 m/240 k speedometer ...	S	S
4-digit trip meter	S	S
fuel & coolant temp gauges .	S	S
large diameter clock	S	S
Power Remote Controlled Outside Mirrors	S	S
Automatic Locking Differential	S	S
Visor Vanity Mirrors	S	S
Central locking	S	S
Upholstery: Leather	S	S
Head Restraints, front/rear	S	S
Paint: Solid, Metallic, Clear ...	S	S

Key:
S = Standard X = Avail. at extra cost
N/A = Not Available O = Optional

DIMENSIONS & CAPACITIES	Sedan /	Wagon
Wheelbase (in.)	109.1 ..	109.1
Track, front (in.)	57.9 ...	57.9
Track, rear (in.)	59.8 ...	57.5
Overall length (in.)	191.7 ..	189.3
Overall width (in.)	69.3 ...	69.3
Overall height (in.)	55.5 ...	56.5
Leg room, front (in.)	41.0 ...	41.0
Leg room, rear (in.)	34.7 ...	34.7
Head room, front (in.)	38.6 ...	38.6
Head room, rear (in.)	37.1 ...	37.6
Int. vol (EPA cu. ft.) Total ...	110.7 ..	134.7
(EPA cu. ft.) Front ...	51.7 ...	52.7
(EPA cu. ft.) Rear ...	42.0 ...	42.6
Trunk cap (cu. ft.)	16.6 ...	N.A.
Cargo cap, seat. up (cu. ft.) ...	N.A. ...	39.3
Cargo cap, seat down (cu. ft.) .	N.A. ...	74.9
Cargo area, max. width (in.) ..	63.0 ...	59.4
max. length (in.)	41.6 ...	71.5
max. depth (in.)	19.6 ...	32.4
Ground clear. (fully loaded) (in)	4.1	4.1
Front overhang (in.)	36.2 ...	36.2
Rear overhang (in.)	43.1 ...	43.1
Aver. curb wt (lbs)	3460 ...	3370
Wt. distribution, F/R (%)	53/47 ..	52/48
EPA Mileage: Adj. MPG Sedan	/ .	Wagon
..... Auto only.	....	Auto only
City 18	.....	18
Highway 26	.....	26
Single Est. 20	.....	20

VOLVO

1992 SPECIFICATIONS

940 TURBO

ENGINE - B-230FT GENERATION 3

Type	In-line 4-cyl. SOHC; water cooled turbo with intercooler
HP (SAE Net)	162 @ 4800
Torque	195 @ 3450
Cylinder Block	Cast iron
Cylinder Head	Aluminum
Bore & Stroke	96/80 mm
Displacement	2316 cc (141 cu. in.)
Compression ratio	8.7:1
Fuel Requirements	87 (R + M) /2 or higher
Ignition	Breakerless, solid state
Fuel Injection	LH Lambda (Electronic)
Main Bearings	5-shell type
Valve	Overhead cam
Operations	direct acting
Battery/Alternator	510/100 amp
Crankcase Capacity (incl filter)	4.7 U.S. qts.
Fuel Tank Capacity	15.8 U.S. gallons
Max. Engine Speed	6100 rpm

DRIVETRAIN

Transmissions
- Automatic: AW-71 .... 4 speed automatic

Transmission ratios
- Automatic 2.45/1.45/1.0/0.69

Final Drive Ratio ..... Auto. 3.73:1
Automatic Locking Differential

CHASSIS and SUSPENSION

Chassis - SIPS (Side Impact Protection System)
Suspension
- Front MacPherson strut with eccentrically mounted coil springs, stabilizer bar, and hydraulic shock absorbers
- Rear Constant track: linkage consisting of live axle, two trailing arms, wishbone sub-frame, Panhard rod, coil springs, stabilizer bars (4-door only) and gas shock absorbers

Steering
- Type ..... Power assisted rack and pinion
- Ratio 16.9:1
- Turns, lock-to-lock 3.5
- Turning circle ..... 32.2 ft.

Brakes
- System Four-wheel disc with vacuum assist ABS2; Bosch Anti-Lock Braking System with electronic sensors front & rear brake circuits.
- Front: Vented discs, 280 x 26 mm, sliding calipers,
- Rear: Solid discs, 281 x 9.6 mm, fixed calipers, drum type parking brake mechanically operated
- Swept area: 421 sq. in.

Wheels ..... 6.5 x 16 swept 5-spoke alloy
Tires
- Sedan and Wagon 205/55 R16V

EQUIPMENT	Sedan / Wagon
Sway Bars, F/R (mm)	21/16 .... 21/0
SRS Drivers Air Bag	S ..... S

EQUIPMENT (continued)	Sedan / Wagon
Air Conditioning climate contr.	S ..... S
Cruise Control	S ..... S
Anti-lock Braking System	S ..... S
Power Windows	S ..... S
CR-814 4 speaker anti-theft AM/FM cassette /radio CD compat.	S ..... S
Dash Front/Rear Door Speakers	S ..... S
Power Sunroof	S ..... S
Dome light with front map lights and delay	S ..... S
Heated front seats	S ..... S
Power Driver seat (leather only)	O ..... O
Instrumentation	
120 m/200 k speedometer	S ..... S
4-digit trip meter	S ..... S
fuel & coolant temp gauges	S ..... S
large diameter clock	S ..... S
Voltmeter	S ..... S
Turbo Boost Gauge	S ..... S
Power Remote Controlled Outside Mirrors	S ..... S
Automatic Locking Differential	S ..... S
Visor Vanity Mirror (Pass.)	S ..... S
Central locking	S ..... S
Upholstery: Plush Velour	S ..... S
Leather	O ..... O
Head Restraints, front/rear	S ..... S
Paint: Solid	S ..... S
Metallic + Clear	X X

Key:
S = Standard — X = Avail. at extra cost
N/A = Not Available — O = Optional

DIMENSIONS & CAPACITIES	Sedan / Wagon
Wheelbase (in.)	109.1 .. 109.1
Track, front (in.)	57.9 ... 57.9
Track, rear (in.)	57.5 ... 57.5
Overall length (in.)	191.7 .. 189.3
Overall width (in.)	69.3 ... 69.3
Overall height (in.)	55.5 ... 56.5
Leg room, front (in.)	41.0 ... 41.0
Leg room, rear (in.)	34.7 ... 34.7
Head room, front (in.)	38.6 ... 38.6
Head room, rear (in.)	37.1 ... 37.6
Int. vol (EPA cu. ft.) Total	110.7 .. 134.7
(EPA cu. ft.) Front	51.9 ... 52.7
(EPA cu. ft.) Rear	42.0 ... 42.6
Trunk cap (cu. ft.)	16.8 ... N.A.
Cargo cap, seat up (cu. ft.)	N.A. ... 39.3
Cargo cap, seat down (cu. ft.)	N.A. ... 74.9
Cargo area, max. width (in.)	63.0 ... 59.4
max. length (in.)	41.6 ... 71.5
max. depth (in.)	19.6 ... 32.4
Ground clear. (fully loaded) (in)	4.1 .... 4.1
Front overhang (in.)	36.2 ... 36.2
Rear overhang (in.)	43.1 ... 43.1
Aver. curb wt (lbs)	3067-3073 3177-3194
Wt. distribution, F/R (%)	57/43 .. 51/49
EPA Mileage: Adj. MPG	Sedan / Wagon
	Auto only. .... Auto only
City	19 19
Highway	22 22
Single Est.	21 21

VOLVO

1992 SPECIFICATIONS

940 GL SEDAN

ENGINE - B-230F

Type	In-line 4-cyl. SOHC
HP (SAE Net)	114 @ 5400
Torque	136 @ 2150
Cylinder Block	Cast iron
Cylinder Head	Aluminum
Bore & Stroke	96/80 mm
Displacement	2316 cc (141 cu. in.)
Compression ratio	9.8:1
Fuel Requirements	87 (R + M) /2 or higher
Ignition	Breakerless, solid state
Fuel Injection	Regina
Main Bearings	5-shell type
Valve	Overhead cam
Operations	direct acting
Battery/Alternator	510/100 amp
Crankcase Capacity (incl filter)	4.7 U.S. qts.
Fuel Tank Capacity	15.8 U.S. gallons
Max. Engine Speed	6100 rpm

DRIVETRAIN

Transmissions
- Automatic: AW-70L .. 4 speed automatic

Transmission ratios
- Automatic 2.45/1.45/1.0/0.69

Final Drive Ratio ..... Auto. 4.10:1
Automatic Locking Differential

CHASSIS and SUSPENSION

Chassis - SIPS (Side Impact Protection System)
Suspension
- Front MacPherson strut with eccentrically mounted coil springs, stabilizer bar, and hydraulic shock absorbers
- Rear Constant track: linkage consisting of live axle, two trailing arms, wishbone sub-frame, Panhard rod, coil springs, stabilizer bars and gas shock absorbers

Steering
- Type ..... Power assisted rack and pinion
- Ratio 16.9:1
- Turns, lock-to-lock 3.5
- Turning circle ..... 32.2 ft.

Brakes
- System Four-wheel disc with vacuum assist ABS2; Bosch Anti-Lock Braking System with electronic sensors front & rear brake circuits.
- Front: Vented discs, 280 x 26 mm, sliding calipers,
- Rear: Solid discs, 281 x 9.6 mm, fixed calipers, drum type parking brake mechanically operated
- Swept area: 421 sq. in.

Wheels ..... 6 X 15 black paint steel; full wheel covers

Tires
- Sedan and Wagon 185/65H R15T

EQUIPMENT	Sedan
Sway Bars, F/R (mm)	21/16
SRS Drivers Air Bag	S
Air Conditioning climate contr.	S
Cruise Control	S
Anti-lock Braking System	S
Power Windows	S
CR-814 4 speaker anti-theft AM/FM cassette /radio CD compat.	S
Dash Front/Rear Door Speakers	S
Sunroof	S
Dome light with front map lights and delay	S
Heated front seats	S
Power driver seat (leather)	O
Instrumentation	
120 m/200 k speedometer	S
4-digit trip meter	S
fuel & coolant temp gauges	S
large diameter clock	S
Manual Remote Controlled Outside Mirrors	S
Automatic Locking Differential	S
Visor Vanity Mirror (Pass.)	S
Central locking	S
Upholstery: Trico plush	S
Leather	O
Head Restraints, front/rear	S
Paint: Solid	S
Metallic + Clear	X

Key:
S = Standard — X = Avail. at extra cost
N/A = Not Available — O = Optional

DIMENSIONS & CAPACITIES	Sedan
Wheelbase (in.)	109.1
Track, front (in.)	57.9
Track, rear (in.)	57.5
Overall length (in.)	191.7
Overall width (in.)	69.3
Overall height (in.)	55.5
Leg room, front (in.)	41.0
Leg room, rear (in.)	34.7
Head room, front (in.)	38.6
Head room, rear (in.)	37.1
Int. vol (EPA cu. ft.) Total	110.7
(EPA cu. ft.) Front	51.9
(EPA cu. ft.) Rear	42.0
Trunk cap (cu. ft.)	16.8
Cargo cap, seat up (cu. ft.)	N.A.
Cargo cap, seat down (cu. ft.)	N.A.
Cargo area, max. width (in.)	63.0
max. length (in.)	41.6
max. depth (in.)	19.6
Ground clear. (fully loaded) (in)	4.1
Front overhang (in.)	36.2
Rear overhang (in.)	43.1
Aver. curb wt (lbs)	3009-3029
Wt. distribution, F/R (%)	54/46
EPA Mileage: Adj. MPG	Sedan
	Auto
City	20
Highway	28
Single Est.	22

VOLVO

1992 SPECIFICATIONS

740 SERIES

ENGINE - B-230F

Type	In-line 4-cyl. SOHC
HP (SAE Net)	114 @ 5400
Torque	136 @ 2750
Cylinder Block	Cast iron
Cylinder Head	Aluminum
Bore & Stroke	96/80 mm
Displacement	2316 cc (141 cu. in.)
Compression ratio	9.8:1
Fuel Requirements	87 (R + M) /2 or higher
Ignition	Breakerless, solid state
Fuel Injection	Regina
Main Bearings	5-shell type
Valve	Overhead cam
Operations	direct acting
Battery/Alternator	520/100 amp.
Crankcase Capacity (incl filter)	4.7 U.S. qts.
Fuel Tank Capacity	15.8 U.S. gallons
Max. Engine Speed	6100 rpm

DRIVETRAIN

Transmissions
- Automatic: AW-70 L .. 4 speed automatic

Transmission ratios
- Automatic 2.45/1.45/1.0/0.69

Final Drive Ratio ..... Auto. 4.10:1
Automatic Locking Differential

CHASSIS and SUSPENSION

Chassis - SIPS (Side Impact Protection System)
Suspension
- Front MacPherson strut with eccentrically mounted coil springs, stabilizer bar, and hydraulic shock absorbers
- Rear Constant track: linkage consisting of live axle, two trailing arms, wishbone sub-frame, Panhard rod, coil springs, stabilizer bars and gas shock absorbers

Steering
- Type ..... Power assisted rack and pinion
- Ratio 16.9:1
- Turns, lock-to-lock 3.5
- Turning circle ..... 32.2 ft.

Brakes
- System Four-wheel disc, Anti-lock Braking System (ABS) (available)
- Front: Vented discs, 280 x 26 mm, fixed calipers
- Rear: Solid discs, 281 x 9.6 mm, fixed calipers, drum type parking brake mechanically operated
- Swept area: 421 sq. in.

Wheels
- 6 x 15 Black Paint Steel; Full Wheel Covers

Tires
- Sedan and Wagon 185/65R15T

EQUIPMENT	Sedan /	Wagon
Anti-roll bars F/R (mm)	21/16	21/0
SRS Drivers Air Bag	S	S

EQUIPMENT (continued)	Sedan /	Wagon
Air Conditioning	S	S
Cruise Control	X	X
Anti-lock Braking System	S	S
Power Windows	S	S
CR-718 4 speaker anti-theft AM/FM cassette /radio CD compat.	S	S
Front/Rear Door Speakers	S	S
Sunroof	N/A	O
3-position int. dome light with delay	S	S
Heated front seats	S	S
Instrumentation		
120 m/200 k speedometer	S	S
4-digit trip meter	S	S
fuel & coolant temp gauges	S	S
large diameter clock	S	S
Power Remote Controlled Outside Mirrors	S	S
Automatic Locking Differential	S	S
Visor Vanity Mirror (Pass.)	S	S
Central locking	S	S
Upholstery: Trico Plush	S	S
Leather	O	O
Head Restraints, front/rear	S	S
Paint: Solid	S	S
Metallic + Clear	X	X

Key:
S = Standard — X = Avail. at extra cost
N/A = Not Available — O = Optional

DIMENSIONS & CAPACITIES	Sedan /	Wagon
Wheelbase (in.)	109.1	109.1
Track, front (in.)	57.9	57.9
Track, rear (in.)	57.5	57.5
Overall length (in.)	189.3	189.3
Overall width (in.)	69.3	69.3
Overall height (in.)	55.5	56.5
Leg room, front (in.)	41.0	41.0
Leg room, rear (in.)	34.7	34.7
Head room, front (in.)	38.6	38.6
Head room, rear (in.)	37.1	37.6
Int. vol (EPA cu. ft.) Total	110.7	134.7
(EPA cu. ft.) Front	51.9	52.7
(EPA cu. ft.) Rear	42.0	42.6
Trunk cap (cu. ft.)	16.8	N.A.
Cargo cap, seat. up (cu. ft.)	N.A.	39.3
Cargo cap, seat down (cu. ft.)	N.A.	74.9
Cargo area width (in.)	63.0	59.4
max. length (in.)	41.6	71.5
max. depth (in.)	19.6	32.4
Ground clear. (fully loaded) (in)	4.1	4.1
Front overhang (in.)	36.2	36.2
Rear overhang (in.)	43.1	43.1
Aver. curb wt (lbs)	2954-2996	3082-3131
Wt. distribution, F/R (%)	54/46	53/47

EPA Mileage: Adj. MPG	Sedan / Auto.	Wagon Auto
City	20	20
Highway	28	28
Single Est.	22	22

VOLVO

1992 SPECIFICATIONS

740 TURBO WAGON

ENGINE - B-230FT GENERATION 3

Type	In-line 4-cyl. SOHC; water cooled turbo with intercooler
HP (SAE Net)	162 @ 4800
Torque	195 @ 3450
Cylinder Block	Cast iron
Cylinder Head	Aluminum
Bore & Stroke	96/80 mm
Displacement	2316 cc (141 cu. in.)
Compression ratio	8.7:1
Fuel Requirements	87 (R + M) /2 or higher
Ignition	Breakerless, solid state
Fuel Injection	LH Lambda (Electronic)
Main Bearings	5-shell type
Valve	Overhead cam
Operations	direct acting
Battery/Alternator	520/100 amp
Crankcase Capacity (incl filter)	4.7 U.S. qts.
Fuel Tank Capacity	15.8 U.S. gallons
Max. Engine Speed	6100 rpm

DRIVETRAIN

Transmissions
- Automatic: AW-71 .... 4 speed automatic

Transmission ratios
- Automatic 2.45/1.45/1.0/0.69

Final Drive Ratio ..... Auto. 3.73:1
Automatic Locking Differential

CHASSIS and SUSPENSION

Chassis - SIPS (Side Impact Protection System)

Suspension
- Front MacPherson strut with eccentrically mounted coil springs, stabilizer bar, and hydraulic shock absorbers
- Rear Constant track: linkage consisting of live axle, two trailing arms, wishbone sub-frame, Panhard rod, coil springs, stabilizer bars and gas shock absorbers.

Steering
- Type ..... Power assisted rack and pinion
- Ratio 16.9:1
- Turns, lock-to-lock 3.5
- Turning circle ..... 32.2 ft.

Brakes
- System Four-wheel disc with vacuum assist. ABS2; Bosch Anti-Lock Braking System with electronic sensors front & rear brake circuits. (available)
- Front: Vented discs, 280 x 26 mm, sliding calipers,
- Rear: Solid discs, 281 x 9.6 mm, fixed calipers, drum type parking brake mechanically operated
- Swept area: 421 sq. in.

Wheels ..... 6 x 15 20-spoke alloy

Tires
- Wagon 195/60 15R

EQUIPMENT	Wagon
Sway Bars, F/R (mm)	21/0
SRS Drivers Air Bag	S
Air Conditioning climate contr.	S
Cruise Control	X
Anti-lock Braking System	S
Power Windows	S
CR-718 4-speaker anti-theft AM/ FM cassette /radio CD compat.	S
Dash Front/Rear Door Speakers	S
Power Sunroof	S
Dome light with front map lights and delay	S
Heated front seats	S
Instrumentation	
120 m/200 k speedometer	S
4-digit trip meter	S
fuel & coolant temp gauges	S
large diameter clock	S
Voltmeter	S
Turbo Boost Gauge	S
Manual Remote Controlled Power Outside Mirrors	S
Automatic Locking Differential	S
Visor Vanity Mirror (Pass.)	S
Central locking	S
Upholstery: Trico-Plush	S
Leather	O
Head Restraints, front/rear	S
Paint: Solid	S
Metallic + Clear	X

Key:
S = Standard ..... X = Avail. at extra cost
N/A = Not Available ..... O = Optional

DIMENSIONS & CAPACITIES	Wagon
Wheelbase (in.)	109.1
Track, front (in.)	57.9
Track, rear (in.)	57.5
Overall length (in.)	189.3
Overall width (in.)	69.3
Overall height (in.)	56.5
Leg room, front (in.)	41.0
Leg room, rear (in.)	34.7
Head room, front (in.)	38.6
Head room, rear (in.)	37.6
Int. vol (EPA cu. ft.)	134.7
(EPA cu. ft.)	52.7
(EPA cu. ft.)	42.6
Trunk cap (cu. ft.)	N.A.
Cargo cap, seat up (cu. ft.)	39.3
Cargo cap, seat down (cu. ft.)	74.9
Cargo area, max. width (in.)	59.4
max. length (in.)	71.5
max. depth (in.)	32.4
Ground clear. (fully loaded) (in)	4.1
Front overhang (in.)	36.2
Rear overhang (in.)	43.1
Aver. curb wt (lbs)	3177-3194
Wt. distribution, F/R (%)	51/49
EPA Mileage: Adj. MPG	Wagon Auto
City	19
Highway	22
Single Est.	21

VOLVO

1992 SPECIFICATIONS

240 GL SEDAN

ENGINE - B-230F

Type	In-line 4-cyl. SOHC
HP (SAE Net)	114 @ 5400
Torque	136 @ 2750
Cylinder Block	Cast iron
Cylinder Head	Aluminum
Bore & Stroke	96/80 mm
Displacement	2316 cc (141 cu. in.)
Compression ratio	9.8:1
Fuel Requirements	87 (R + M) /2 or higher
Ignition	Breakerless, solid state
Fuel Injection	LH Lambda (Electronic)
Main Bearings	5-shell type
Valve	Overhead cam
Operations	direct acting
Battery/Alternator	450/80 amp
Crankcase Capacity (incl filter)	4.7 U.S. qts.
Fuel Tank Capacity	15.8 U.S. gallons
Max. Engine Speed	6100 rpm

DRIVETRAIN

Transmissions
- Manual: M-47 ..... five speed
- Automatic: AW-70 .... 4 speed automatic

Transmission ratios
- Manual 4.03/2.16/1.37/1.0/0.83
- Automatic 2.45/1.45/1.0/0.69

Final Drive Ratio Manual: 3.31:1 Auto. 3.73:1

CHASSIS and SUSPENSION

Suspension
- Front MacPherson strut with eccentrically mounted coil springs, stabilizer bar, and hydraulic shock absorbers
- Rear Four-link, live axle, panhard rod, coil springs, stabilizer bars and hydraulic shock absorbers

Steering
- Type ..... Power assisted rack and pinion
- Ratio 17.3:1
- Turns, lock-to-lock 3.5
- Turning circle ..... 32.2 ft.

Brakes
- System Four-wheel disc, Anti-lock Braking System (ABS) available
- Front: Vented discs, 263 x 24 mm, fixed calipers
- Rear: Solid discs, 281 x 9.6 mm, fixed calipers, drum type parking brake mechanically operated
- Swept area: 398 sq. in.

Wheels
- 5.5 x 14 Black Paint Steel; Full Wheel Covers

Tires
- Sedan 185/70R14T

EQUIPMENT	Sedan
Anti-roll bars F/R (mm)	21/19
SRS Drivers Air Bag	S

EQUIPMENT (continued)	Sedan
Air Conditioning	S
Cruise Control	X
Anti-lock Braking System	S
Power Windows	S
TD-613 AM/FM Anti-Theft Radio/Cassette	S
Front Door Speakers	S
Hat shelf mounted audio speakers	S
Sunroof	S
3-position int. dome light with delay	S
Heated front seats	S
Instrumentation	
120 m/200 k speedometer	S
4-digit trip meter	S
fuel & coolant temp gauges	S
large diameter clock	S
Power Remote Controlled Outside Mirrors (heated)	S
Central locking	S
Upholstery: Trico Plush	S
Leather	O
Head Restraints, front/rear	S
Paint: Solid	S
Metallic + Clear	O

Key:
S = Standard ..... X = Avail. at extra cost
N/A = Not Available ..... O = Optional

DIMENSIONS & CAPACITIES	Sedan
Wheelbase (in.)	104.3
Track, front (in.)	56.3
Track, rear (in.)	53.5
Overall length (in.)	189.9
Overall width (in.)	67.3
Overall height (in.)	56.3
Leg room, front (in.)	40.1
Leg room, rear (in.)	36.4
Head room, front (in.)	37.9
Head room, rear (in.)	36.1
Int. vol (EPA cu. ft.) Total	104.3
(EPA cu. ft.) Front	49.2
(EPA cu. ft.) Rear	41.1
Trunk cap (cu. ft.)	14.0
Cargo cap, seat up (cu. ft.)	N.A.
Cargo cap, seat down (cu. ft.)	N.A.
Cargo area,max. width (in.)	61.0
max. length (in.)	44.5
max. depth (in.)	19.7
Ground clear. (fully loaded) (in)	4.3
Front overhang (in.)	36.9
Rear overhang (in.)	47.0
Aver. curb wt (lbs)	2919-2954
Wt. distribution, F/R (%)	53/47

EPA Mileage: Adj. MPG	Sedan Man/Auto.	
City	21	20
Highway	28	25
Single Est.	24	22

VOLVO

1992 SPECIFICATIONS

240 SERIES

ENGINE - B-230F

Type	In-line 4-cyl. SOHC
HP (SAE Net)	114 @ 5400
Torque	136 @ 2750
Cylinder Block	Cast iron
Cylinder Head	Aluminum
Bore & Stroke	96/80 mm
Displacement	2316 cc (141 cu. in.)
Compression ratio	9.8:1
Fuel Requirements	87 (R + M) /2 or higher
Ignition	Breakerless, solid state
Fuel Injection	LH Lambda (Electronic)
Main Bearings	5-shell type
Valve	Overhead cam
Operations	direct acting
Battery/Alternator	450/80 amp
Crankcase Capacity (incl filter)	4.7 U.S. qts.
Fuel Tank Capacity	15.8 U.S. gallons
Max. Engine Speed	6100 rpm

DRIVETRAIN

Transmissions
- Manual: M-47 ..... five speed
- Automatic: AW-70 ..... 4 speed automatic

Transmission ratios
- Manual 4.03/2.16/1.37/1.0/0.83
- Automatic 2.45/1.45/1.0/0.69

Final Drive Ratio Manual: 3.31:1 Auto. 3.73:1

CHASSIS and SUSPENSION

Suspension
- Front MacPherson strut with eccentrically mounted coil springs, stabilizer bar, and hydraulic shock absorbers
- Rear Four-link, live axle, panhard rod, coil springs, stabilizer bars and hydraulic shock absorbers

Steering
- Type ..... Power assisted rack and pinion
- Ratio 17.3:1
- Turns, lock-to-lock 3.5
- Turning circle ..... 32.2 ft.

Brakes
- System Four-wheel disc, Anti-lock Braking System (ABS) available
- Front: Vented discs, 263 x 24 mm, fixed calipers
- Rear: Solid discs, 281 x 9.6 mm, fixed calipers, drum type parking brake mechanically operated
- Swept area: 398 sq. in.

Wheels
- 5.5 x 14 Black Paint Steel; Full Wheel Covers

Tires
- Sedan, Wagon 185/70R14T
- Wagon 185/R 14T

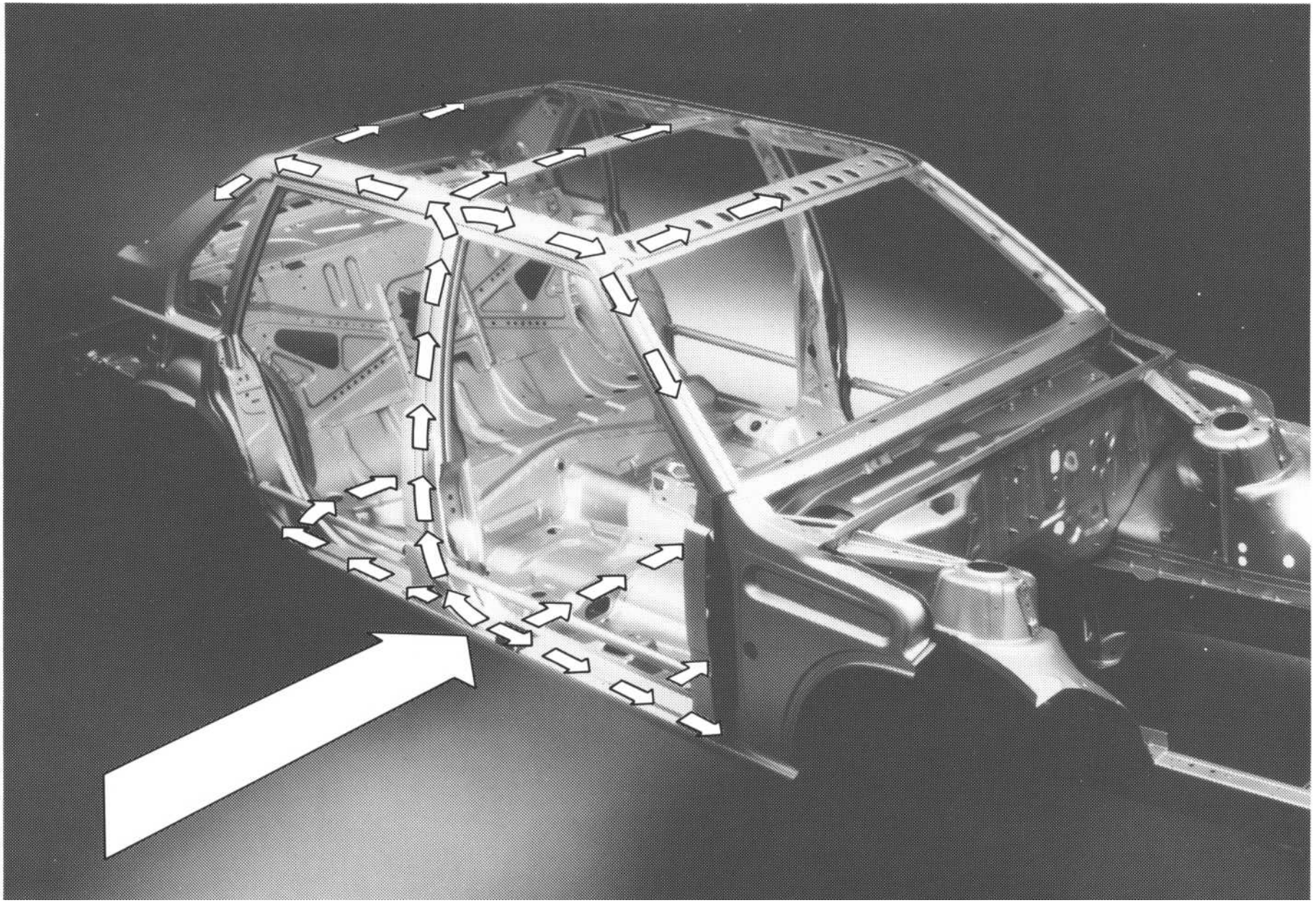
EQUIPMENT	Sedan / Wagon
Anti-roll bars F/R (mm)	21/19 ... 21/16
SRS Drivers Air Bag	S ..... S

EQUIPMENT (continued)	Sedan / Wagon
Air Conditioning	S ..... S
Cruise Control	X X
Anti-lock Braking System	S ..... S
Power Windows	S ..... S
TD-613 AM/FM Anti-Theft Radio/Cassette	S ..... S
Front/Rear Door Speakers	S ..... S
Sunroof	N/A .... N/A
3-position int. dome light with delay	S ..... S
Heated front seats	O ..... O
Instrumentation	
120 m/200 k speedometer	S ..... S
4-digit trip meter	S ..... S
fuel & coolant temp gauges	S ..... S
large diameter clock	S ..... S
Manual Remote Controlled Outside Mirrors	S ..... S
Central locking	S ..... S
Upholstery: Trico Plush	S ..... S
Vinyl	N/A ..... O
Leather	O ..... O
Head Restraints, front/rear	S ..... S
Paint: Solid	S ..... S
Metallic + Clear	O ..... O

Key:
S = Standard — X = Avail. at extra cost
N/A = Not Available — O = Optional

DIMENSIONS & CAPACITIES	Sedan / Wagon
Wheelbase (in.)	104.3 .. 104.3
Track, front (in.)	56.3 ... 56.3
Track, rear (in.)	53.5 ... 53.5
Overall length (in.)	189.9 .. 190.7
Overall width (in.)	67.3 ... 67.7
Overall height (in.)	56.3 ... 57.5
Leg room, front (in.)	40.1 ... 40.1
Leg room, rear (in.)	36.4 ... 36.4
Head room, front (in.)	37.9 ... 37.9
Head room, rear (in.)	36.1 ... 36.8
Int. vol (EPA cu. ft.) Total	104.3 .. 132.8
(EPA cu. ft.) Front	49.2 ... 49.9
(EPA cu. ft.) Rear	41.1 ... 41.1
Trunk cap (cu. ft.)	14.0 ... N.A.
Cargo cap, seat up (cu. ft.)	N.A. ... 41.7
Cargo cap, seat down (cu. ft.)	N.A. ... 76.0
Cargo area, max. width (in.)	61.0 ... 55.9
max. length (in.)	44.5 ... 74.0
max. depth (in.)	19.7 ... 32.7
Ground clear. (fully loaded) (in)	4.3 .... 4.7
Front overhang (in.)	36.9 ... 36.9
Rear overhang (in.)	47.0 ... 47.8
Aver. curb wt (lbs)	2919-2954 3051-3084
Wt. distribution, F/R (%)	53/47 .. 51/49

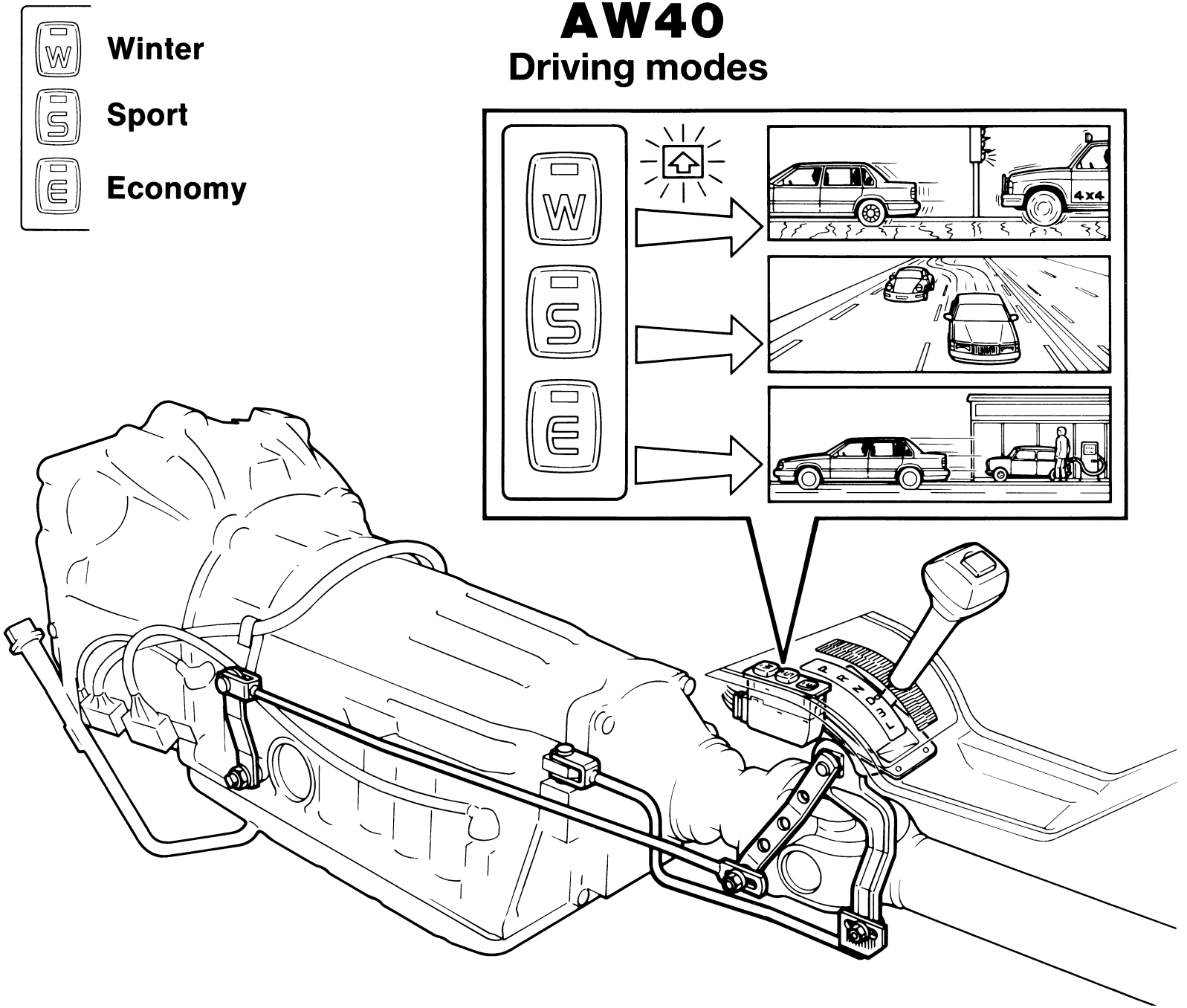
EPA Mileage: Adj. MPG	Sedan Man/Auto	Wagon Man/Auto
City	21 20	22 20
Highway	28 25	28 25
Single Est.	24 22	24 22

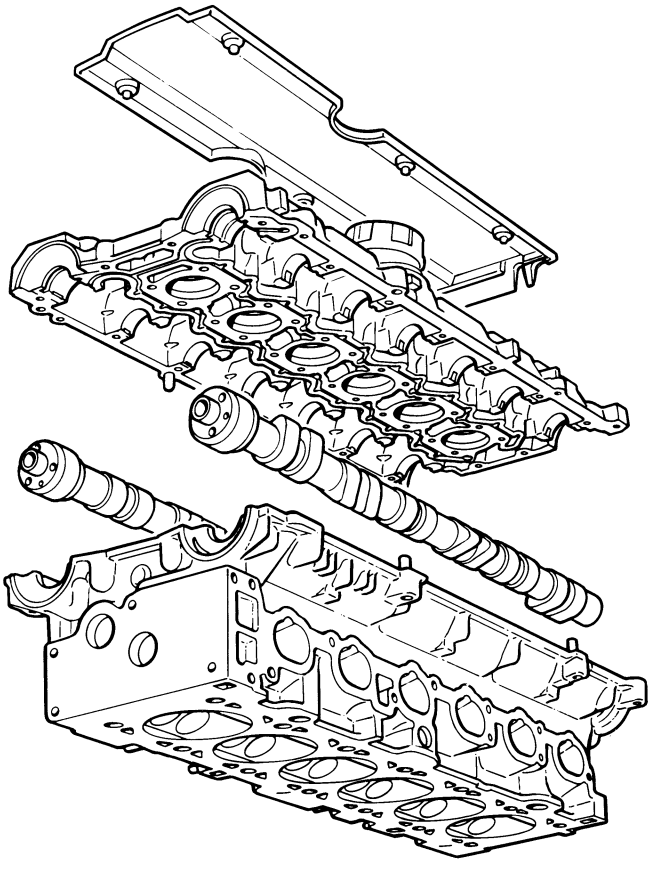


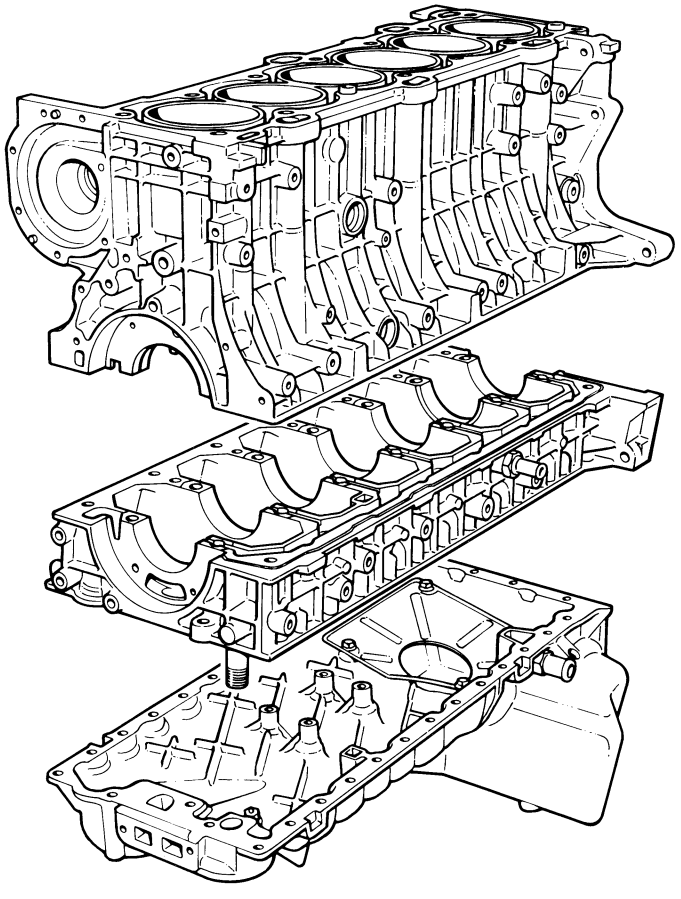
VOLVO SIPS: SIDE IMPACT PROTECTION SYSTEM

AW40

Driving modes

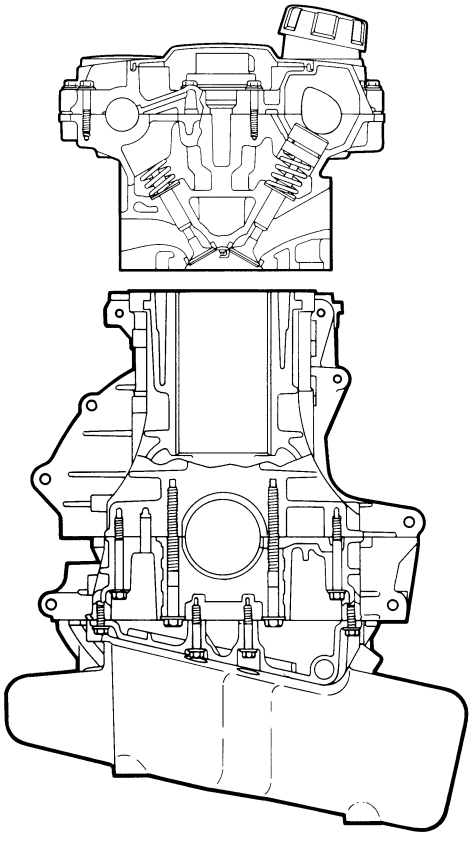


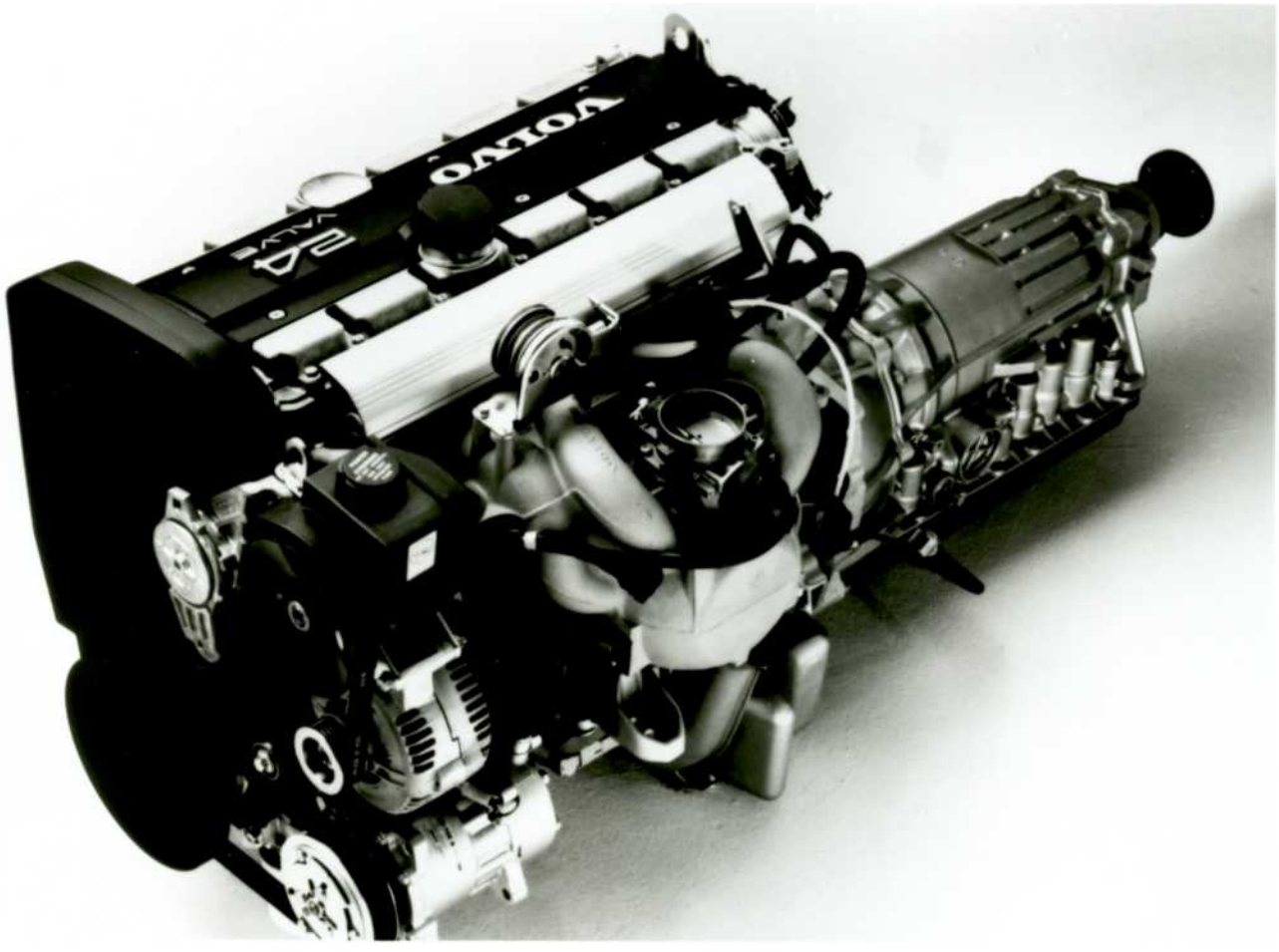




VOLVO

B6304F Engine
Aluminum Alloy
In-Line 6 Cylinder
3 Liter 24 Valve
201 HP at 6000 RPM
197 lb ft at 4300 RPM





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