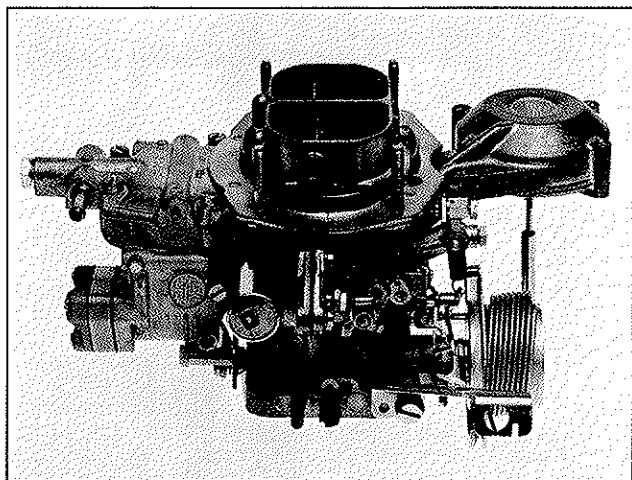


fuel systems



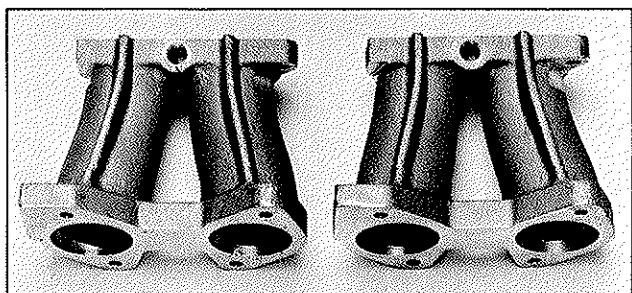
SOLEX DOWN-DRAFT CARBURETOR

The Solex 40mm EIES two barrel down-draft carburetor has been specifically selected and jetted for use in our complete GT Tuning Kit (part number 552550-6).

However, for those who wish to experiment on their own, each part is available separately. A listing of the major components is as follows:

Part No.	Qty.	Description
552554-8	1	Complete Solex 40 EIES carburetor
552555-8	1	Aluminum intake manifold with temperature stabilized by coolant
552552-2	1	Complete air filter and housing
552570-4	1	Air filter insert

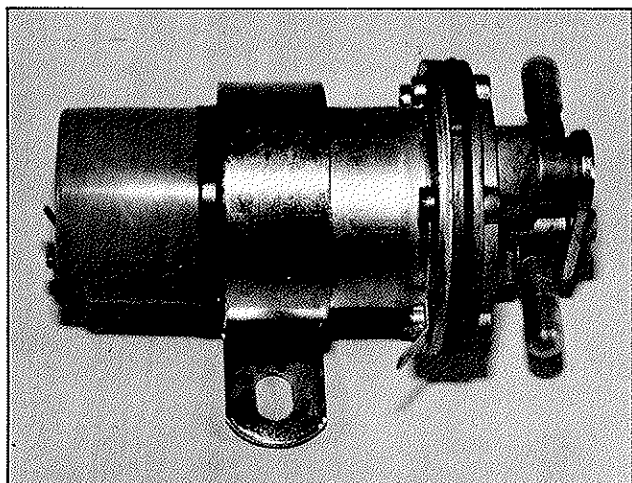
Note: For a complete listing of all parts used in the GT Kit, consult the Master Volvo R Sport Competition Parts catalog at your authorized Volvo dealer.



INTAKE MANIFOLDS

Specially cast aluminum alloy individual intake manifolds for Solex 45mm side-draft carburetors or other similar side-draft carburetors. Designed for maximum strength and efficiency with the B20 cylinder head.

Part No.	Description
419883-4	Front intake manifold
419884-2	Rear intake manifold



Stage III & IV MANIFOLDS

Same castings as above, but carefully ground and polished inner passages are perfectly matched to ports for maximum, undisturbed flow.

Part No.	Description
552613-2	Front intake manifold
552614-0	Rear intake manifold

ELECTRIC FUEL PUMP

Ultra high capacity electric fuel pump delivers 35 gallons an hour at 4.0 p.s.i. Eliminates risk of vapor lock in high temperatures when located near the tank. Stage IV engines used in racing should use two pumps in parallel. Part Number: 552004-4

HIGH CAPACITY FUEL PUMP

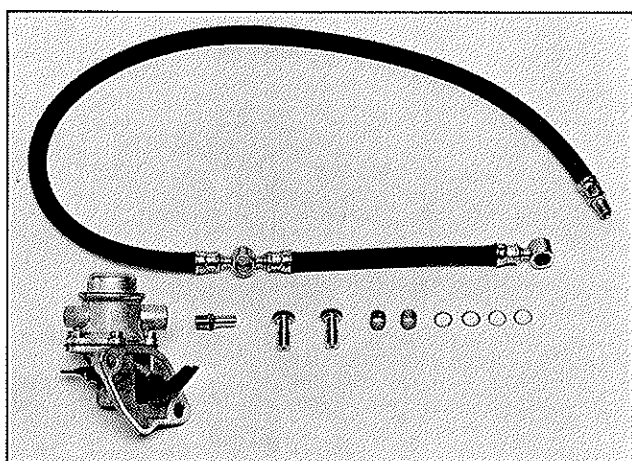
High capacity mechanical fuel pump as used in the GT and Stage I and II Tuning Kits. Part Number: 831092-2

FUEL HOSE

Specially fabricated fuel hose designed for use with twin Solex carburetors and mechanical fuel pump.

Part Number: 825856-8

Note: A complete listing of all fuel system components can be found in the Master Volvo R Sport Competition Parts catalog at your authorized Volvo dealer.



VOLVO exhaust systems

RALLY EXHAUST SYSTEMS

Complete exhaust systems utilizing larger 2 1/4" pipe and free-flow mufflers for minimum back-pressure.

Kit increases power by 5 to 9 h.p. DIN, depending on model, without an appreciable increase in noise level.

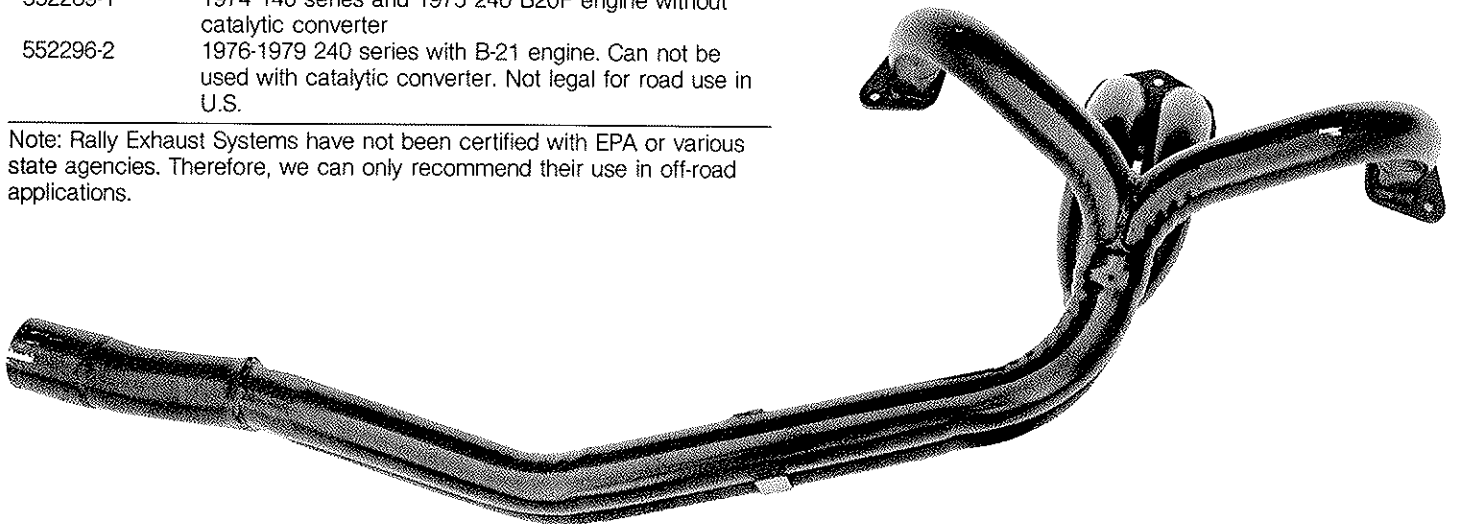
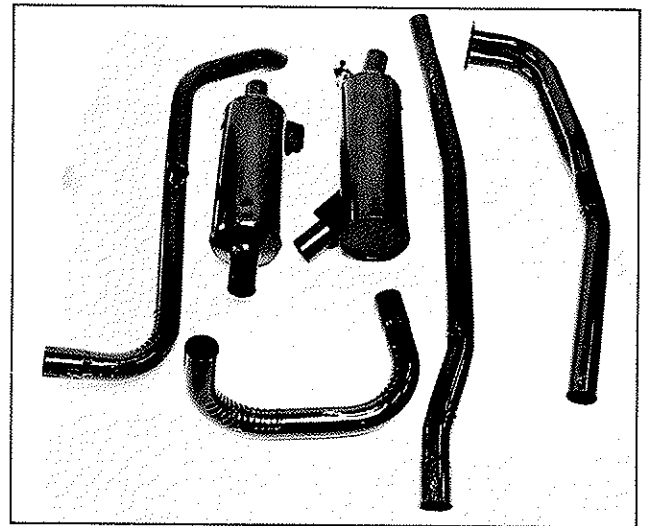
Heavy duty construction allows for trouble-free operation in competition rally and racing.

All kits fit in same exact location as the standard system, and come complete with gaskets, clamps, mounting brackets and instructions.

Note: Individual pipes, mufflers and brackets are listed in the Master Volvo R Sport Competition Parts catalog at your authorized Volvo dealer.

Part No.	Application
552299-0	120 series up to and including 1966. Does not fit the 220 wagon.
552300-6	120 series 1967-69. Does not fit the 220 wagon.
552298-2	All 140 series up to and including 1973
552289-1	1974 140 series and 1975 240 B20F engine without catalytic converter
552296-2	1976-1979 240 series with B-21 engine. Can not be used with catalytic converter. Not legal for road use in U.S.

Note: Rally Exhaust Systems have not been certified with EPA or various state agencies. Therefore, we can only recommend their use in off-road applications.



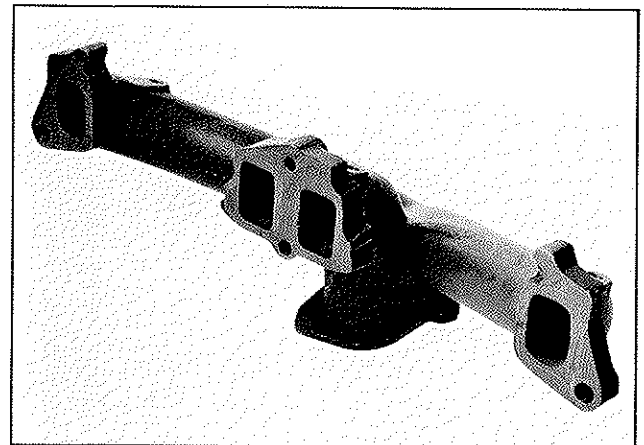
EXHAUST MANIFOLDS

Tuned steel tubular header designed for optimum torque in the low and mid RPM range. Ideal for street and rally use with K, F, and R cams. Fits all models with B18/B20 engine, but the front pipes of both the standard and rally exhaust systems must be modified to accept the 2" slip-joint type collector.

Part Number: 419381-9

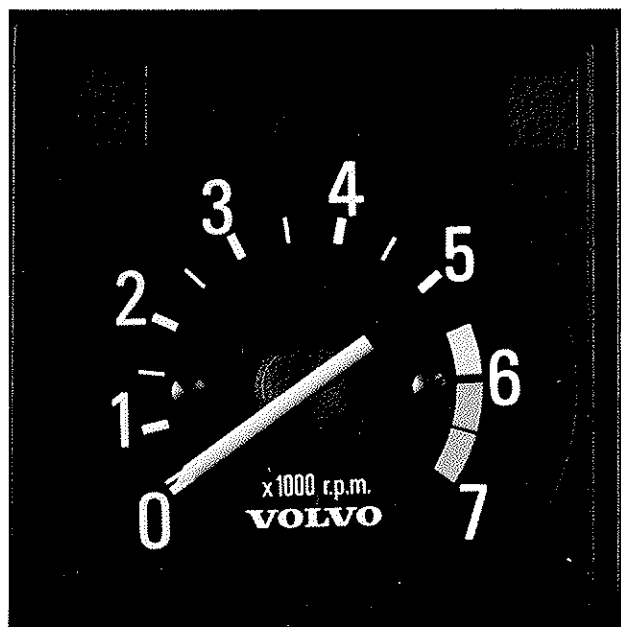
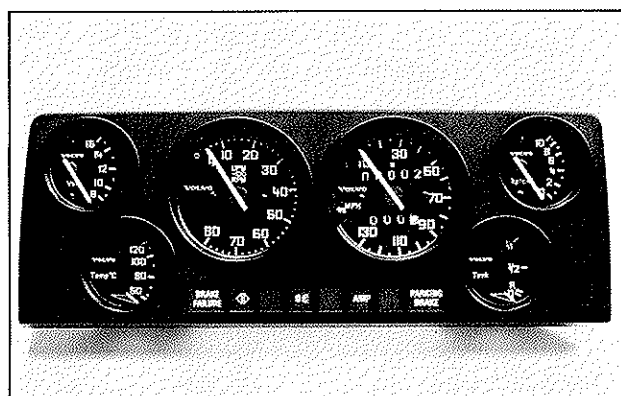
Cast iron production exhaust manifold as used on all fuel injected models, is recommended for Stage III and IV engines using "S" or "U" camshaft in high speed rally and racing. For optimum power at 7000 RPM, it is recommended that the separated twin pipe section of both the standard and rally front pipe be extended another 4 inches before joining into a single pipe.

Part Number: 460894-9



VOLVO

electrical equipment



GT Instrument Panel

Tachometer, speedometer, oil pressure gauge, voltmeter, odometer/tripmeter, water temperature and fuel level gauges are all clustered together in one panel located directly in front of the driver.

Designed with highly visible yellow lettering on matte black finish and reflection free anti-glare glass. Mounts in same manner as standard instrument panel for quick and easy installation.

Part No.	Application	Part No.	Application
283150-1†	1977-79 242/244	283069-3*	1976 262/264
283148-5†	1977-79 245	283142-8*	1976 265
283149-3*	1977-79 265	283072-7	1973-75 164
283067-7†	1975-76 242/244	283151-9*	1977-79 262/264
283065-1†	1975-76 245		

GT Instrument panel with km/h (kilometer) speedometer for use in Canada only.

283144-4† 1977-79 240

283147-7* 1978-79 260

† Requires oil plug 809109-2

* Requires oil plug 464592-5 and 809109-2

Note: Separate components for the above GT Instrument Panels and older (1967-72) Rally Instruments Panels, (Part Number 552703-1 and 552723-9) can be found at your authorized Volvo dealer.

Tachometers

Designed for simple installation in the standard instrument panel. Fully transistorized for instant response and accuracy.

Part No.	Application
283546-0	1975-79 240
283547-8	1975-79 260
282772-3	1973-74 140
282773-1	1973-75 164

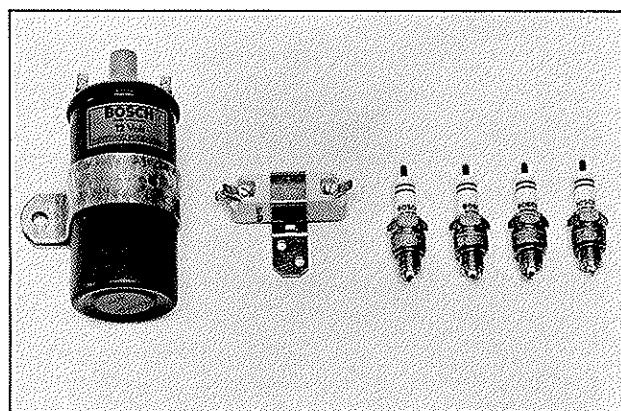
Ignition Coil

High energy ignition coil for use with any engine using cold spark plugs and turning high RPM's.

Part Number: 826490-5 and accompanying resistor, part number 241612-1

Spark Plugs

Part No.	Qty.	Description	Application
75053-9	4	Bosch W200 T35	Std. production for all B18 & B20B & F
273524-9	1	Kit of 4 Bosch W200 T35	
238624-1	4	Bosch W240 T1	Stage I & II engines for normal driving
75055-4	4	Bosch 225T1	Used in B20 GT Kit. Recommended for B20E & tuned engines up to 130 h.p.
273536-3	1	Kit of 4 Bosch 225T1	
552029-1	4	Bosch W280S1S "Sport"	Stage II & III for normal and rally driving
552499-6	4	Bosch W310S1S "Sport"	Stage III & IV for fast rally and racing



electrical equipment

Halogen Fog Light Kit

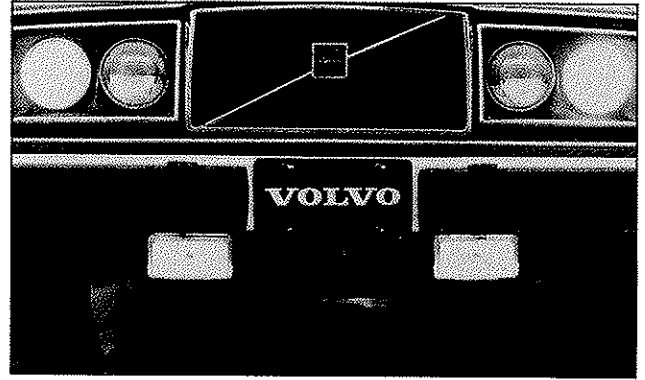
Quartz-iodine fog lights mount under the front bumper of all 140/160, 1800 and 240/260 models.

Low mounting point and widespread pattern with sharp cut-off at top insures superior visibility without reflective glare.

Complete with 55W H3 bulbs, wiring harness, switch, relay, adjustable mounting brackets, and installation instructions.

Part Number: 284005-6

1128507-9 (Canada only) Not in kit form. Each lamp sold separately.

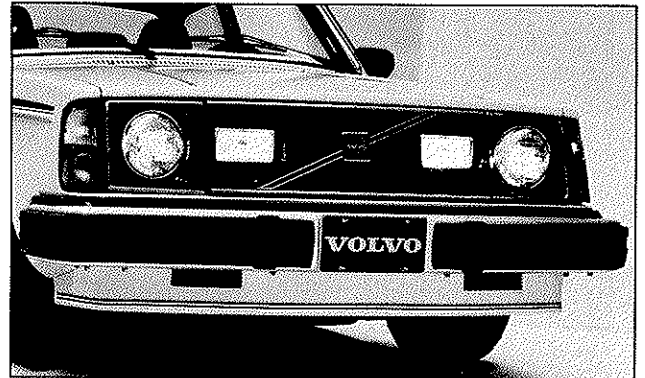


Grille Fog Light Kit

Auxillary driving lamps neatly recessed into a special grille for that GT appearance, while providing extra protection for the lamps.

Kit comes complete with new grille and emblem, clear lens fog lamps, bulbs, wiring harness, relay, dash mounted rocker switch, adjustable mounting brackets, and detailed installation instructions.

Part Number: 1128683-8 1978-79 242 only
283665-8 1975-77 242, 244, 245
283666-1 1975-77 242, 244, 245
(Spotlight, Canada only)
283803-5 1975-77 242, 244, 245
(Amber Fog, Canada only)



Rally Driving Light

The world renowned "Calle Orrenius" competition driving light by Bosch. The 180mm lead crystal lens coupled with a 100W H3 quartz-iodine bulb projects 240,000 candlepower for a reflective range of 1.4 miles. The choice of rally champions all over the world.

Designed to mount on bumpers of all 140, 160 and 1800 models.

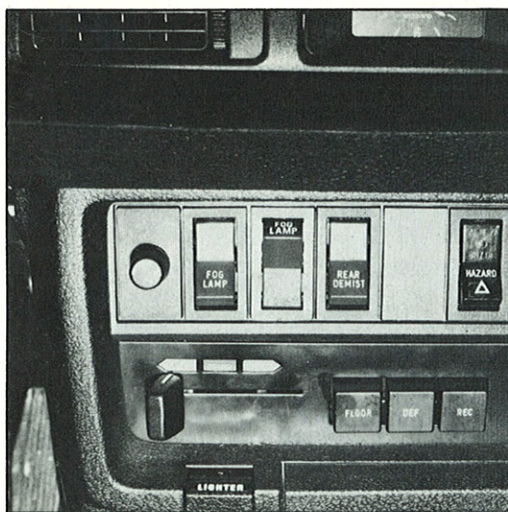
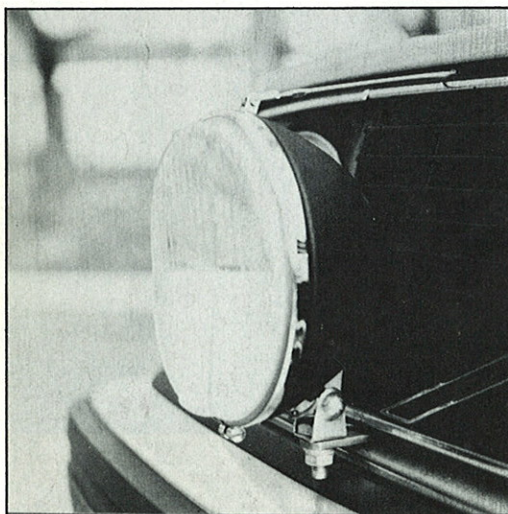
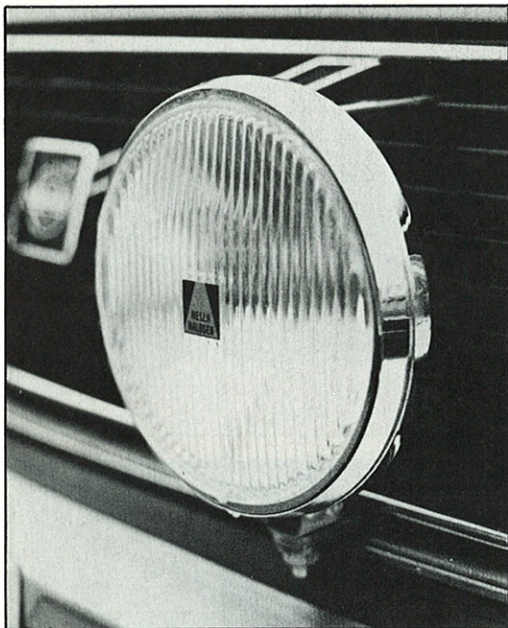
Each lamp is equipped with threaded mounting stud and protective plastic cover. Does not include H3 bulb.

Part Number: 552028-3

Note: Rally Driving Light is recommended for off-road use only.



electrical equipment



Auxiliary Driving Lights (Canada Only)

Halogen Lamps are 160mm (6") in diameter and are available in a long range (500 meters) pencil-beam spot lamp or a wide-spread clear Fog Light. Mounts to bumper on earlier models and special brackets (see below) on 240/260 model.

Does not include H-3 bulb.

Part Number: 1128268-8 Fog Light
1128269-6 Spot Light

Headlamp Inserts

Halogen H-4 Headlamps are available for all models in Canada only. See your authorized Canadian Volvo Dealer for a complete listing.

Adjustable Light Bracket

An 8" fully threaded rod that secures the top of the Rally Driving Light to the front body support of the car.

Eliminates light vibration for improved effectiveness and allows for extremely fine adjustments.

Part Number: 552031-7

Mounting Brackets

Special mounting brackets with adjusting stays have been designed to suspend driving lights over the retractable bumper of 240/260 series.

Each Kit includes one mounting bracket and one adjusting stay.

Part Number: 1128272-0

Special brackets are available separately to mount Fog Lights underneath the bumper to avoid damage (included in Kit 284005-6).

Each Kit includes two mounting brackets with bolts.

Part Number: 75190-9

Fog Lamp Switch

Dash mounted switch allows Fog or Driving Lights to operate independent of headlamps. Available in green rocker-switch to match other switches on '73 through '79 models, or black toggle switch for '62 through '72 models.

Part Number: 1210131-7 1973-79 140/160/240/260
75179-2 1962-72 ALL MODELS

Quartz-Iodine Bulbs

Halogen gas filled bulbs provide maximum filament brightness in a small, durable quartz envelope.

Popular H3 design fits quickly and easily into all Volvo Fog and Driving Lights.

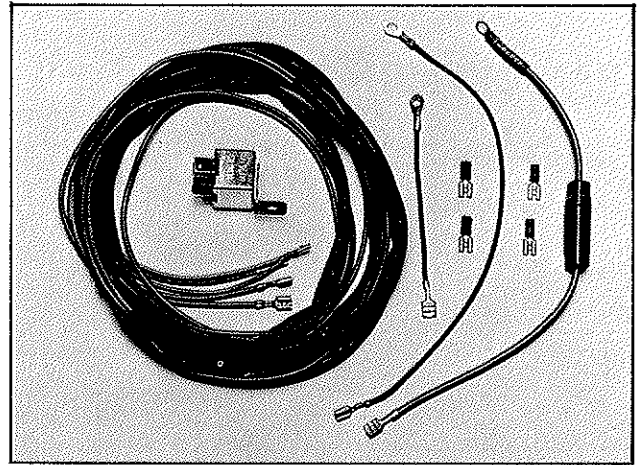
Part Number: 277751-4 55W bulb for fog lights.
552030-9 100W bulb for rally driving lights.

Auxiliary Light Wiring Harness

A complete wiring harness for two Rally Driving Lights or other bumper mounted auxiliary lamps.

Includes relay, terminals, connectors, and installation instructions.

Part Number: 283330-9

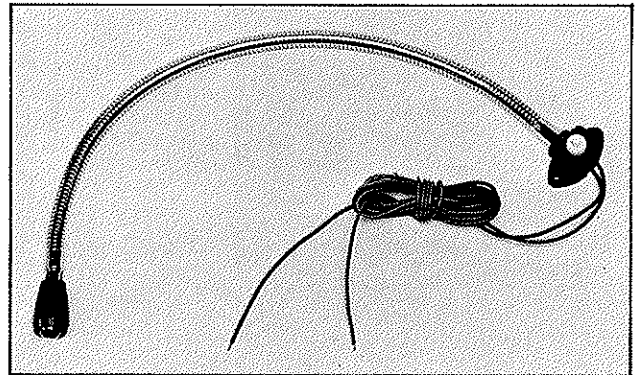


Map Reading Light

The flexible goose neck lamp is the most popular choice for rally navigators all over the world.

Features push-button switch, chrome plated shaft and an adjustable bulb shield to provide more or less localized light. Fits all models.

Part Number: 283651-8



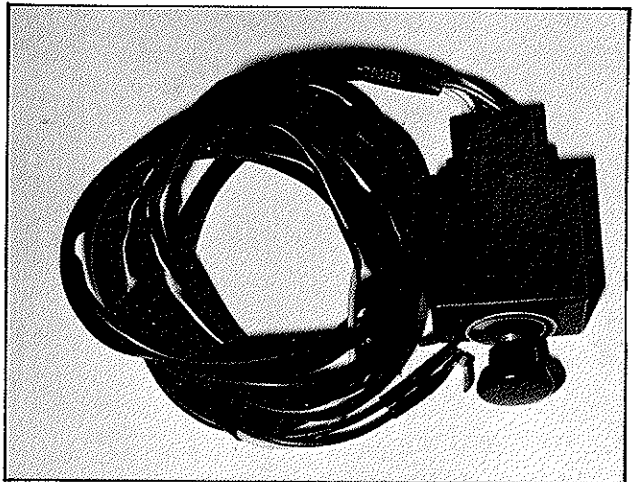
Interval Wiper Switch

An easy to install plug-in unit that allows variable control of the time lapse between wiper sweeps.

Conveniently located on the dash, the control knob regulates sweep intervals from normal speed (1 sweep per second) to 1 sweep every half minute, and anywhere in between.

Keeps your hands on the wheel and your mind on the road during those wet misty conditions.

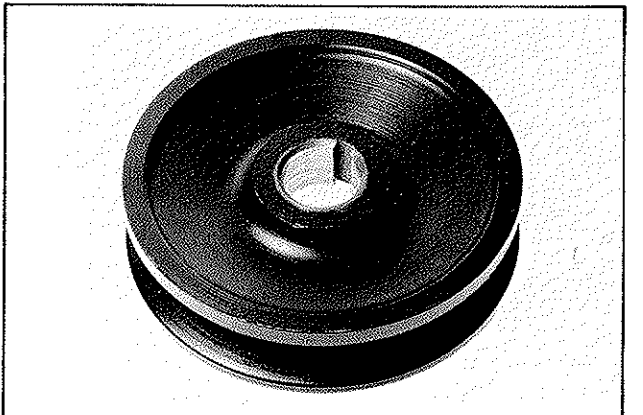
Part No.	Application
282880-4	1973-77 140/164/240/260



Large Alternator Pulley

Continuous engine operation between 6000-7000 RPM can over-rev the alternator, causing overheating and premature wear. Larger 86mm pulley reduces alternator RPM by 20%.

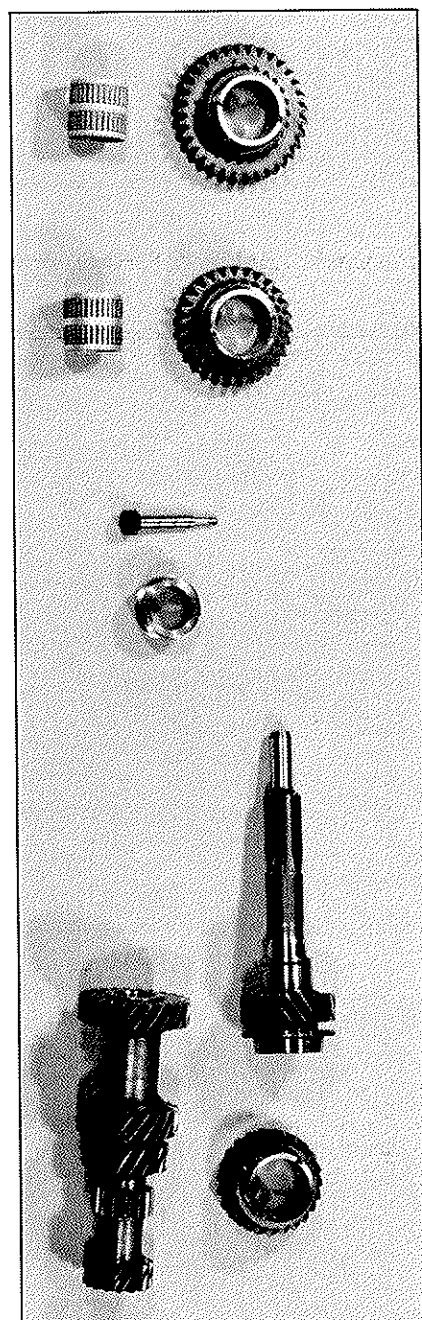
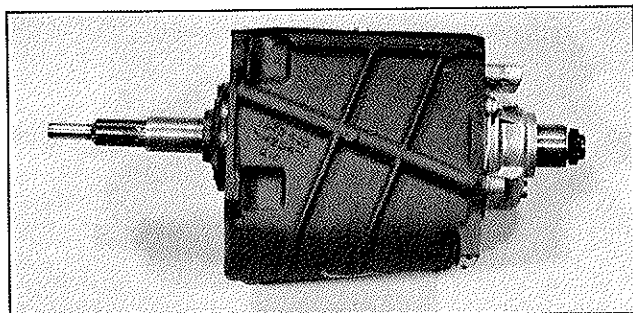
Part Number: 552884-9



VOLVO

power train

TRANSMISSION



Production standard gearboxes used on all 4 cylinder engines from 1960 through 1975 were designated either M40 for 4 speeds without overdrive, or M41 for 4 speeds with overdrive.

Most M41 gearboxes use needle bearings in the gears located on the long mainshaft that join to the overdrive. The M40 generally used bronze bushings for the gears, but there are exceptions with both gearboxes.

The production gear ratios are the same for both the M40 and M41 gearboxes (except the final fifth speed of overdrive). These ratios were designed for efficient performance and economy with standard production engines and camshafts.

When improving the performance of an engine, a camshaft of higher output is generally selected. Unfortunately, as camshafts become more powerful, the power band (or optimum operating RPM) becomes narrower. To keep the engine operating in this limited RPM range, close-ratio gears have been designed to fit both the M40 and M41 gearbox.

To reduce friction, improve shifting, and provide further dependability, the extra strong close-ratio gears are designed for use with needle bearings instead of the bronze bushings.

Therefore, a gearbox with bronze bushings must first be converted over to a needle bearing type before close-ratio gears can be installed. To convert to needle bearings and close-ratio, refer to the parts listed in Tables B and C.

If the gearbox already has needle bearings, then only the parts listed in Table C need be used.

Table A: Close-Ratio Versus Standard Ratio

M40	RATIO					
	1st	2nd	3rd	4th	5th-O.D.	
Close-ratio	2.62:1	1.67:1	1.24:1	1:1	Early Type D	0.756:1
M40/M41	2.50	1.63	1.27	1:1	Late Type J	0.797:1
Standard M40/M41	3.13:1	1.99:1	1.36:1	1:1	Early Type D	0.756:1
up to 1973						
Standard M40/M41	3.41:1	1.99:1	1.36:1	1:1	Late Type J	0.797:1
1973-1975						

Table B: To convert a non-needle-bearing M40 gearbox to a needle-bearing type.

Qty.	Part No.	Description	Note
1	380217-0	1st speed gear	Production part
1	380218-8	2nd speed gear	Production part
2	181330-2	Needle bearing	Production part
1	181331-0	Needle bearing	Production part

Table C: To convert a needle-bearing type M40 gearbox to a close-ratio gearbox.

TYPE	GEAR CLUSTER	PART NO.		
		1st speed gear	3rd speed gear	INPUT SHAFT
M40 model years 67-70	380422-6		380423-4	380382-2
M40 model years 71-72	380824-3		380423-4	380382-2
M40 model years 73-75	380824-3	380217-0	380423-4	380382-2

HEAVY DUTY CLUTCH

Designed for hard street driving, trailer towing, and competition use with engines up to 165 DIN h.p. 20% higher clamping force with very little increase in pedal pressure.

Part No.	Description
418930-4	Pressure Plate 1200 #
418871-0	Clutch Disc
380569-4	Release Bearing

COMPETITION CLUTCH

Designed for race and rally driving where maximum pressure and durability are required. 80% increase in clamping force.

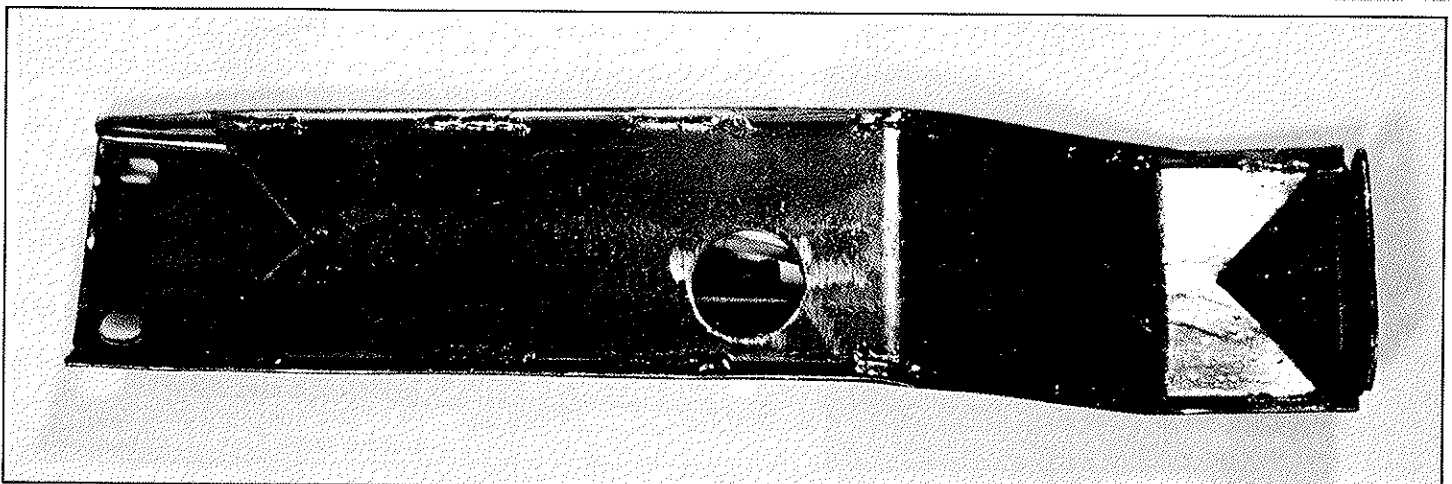
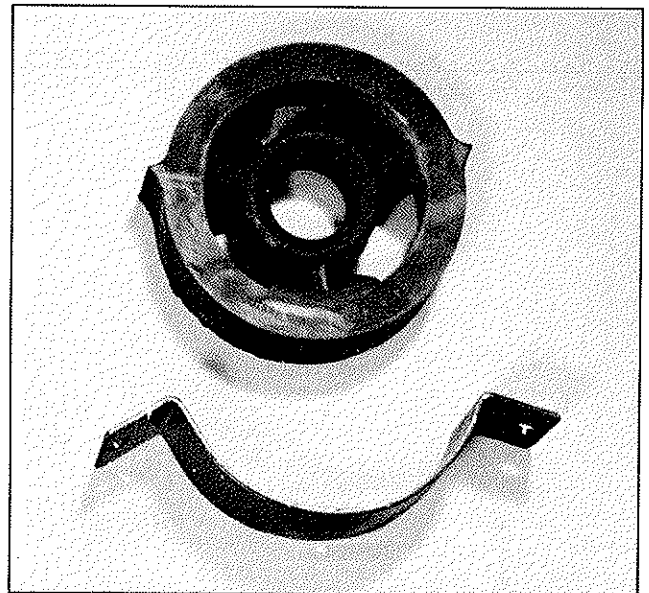
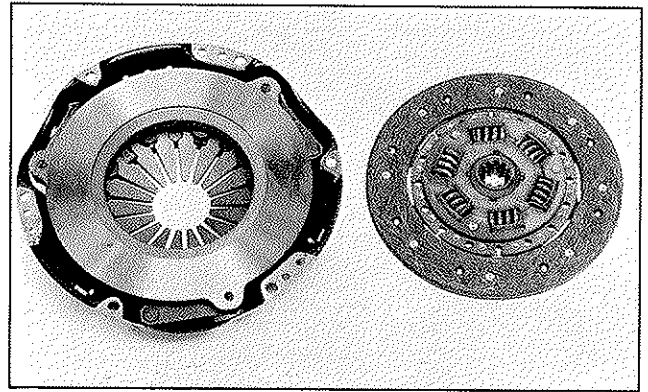
Part No.	Description
552145-5	Pressure Plate 1750 #
552146-3	Clutch Disc
672122-9	Release Bearing

HEAVY DUTY DRIVE SHAFT SUPPORT AND CROSSMEMBER

Extra hard rubber support for center drive shaft bearing insures minimum flex under hard acceleration and off-road use. Extra strong steel collar protects center support in rally and off-road use.

Reinforced and boxed rear crossmember eliminates bending and deformation caused from rally and off-road use. Fits M40 gearbox without overdrive only.

Part No.	Description	Application
552154-7	Rubber Support	140 with B20B up to chassis #112399
552155-4	Rubber Support	140 with B20B&E&F from chassis #112400. All 164
552158-8	Extra Strong Support Collar	1967-74 140 series. All 164
552156-2	Extra Strong Rear Crossmember	1967-74 140 with M40 gearbox



power train

REAR AXLE RATIOS



Perhaps the most significant factor in improving acceleration is changing the standard rear axle ratio to that of one numerically higher. The higher the number, the greater the acceleration but, of course, at the expense of maximum top speed. In track racing, for instance, the proper selection is very important, as top speed is a major consideration.

When selecting an alternate rear axle ratio for street use, engine RPM at highway speeds is important, as this has a definite effect on fuel economy, noise level, and to a lesser degree, engine wear. General recommendations are as follows:

Track Racing

Since course characteristics vary widely, the ratio is generally dependent upon the maximum speed in the longest straight. Normally a 4.88:1 or 4.56:1 are used.

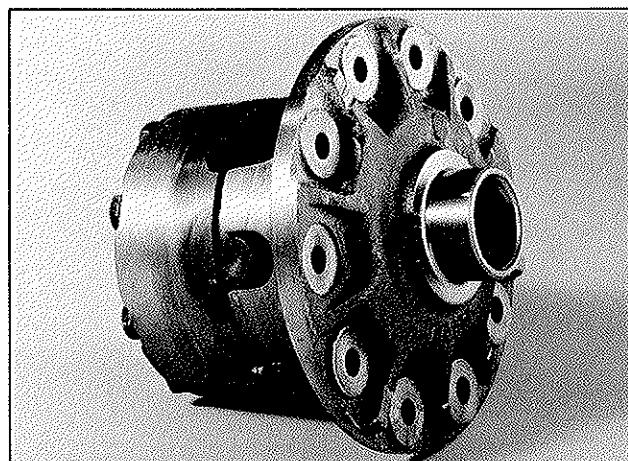
Rally

Since speeds are generally slower and the terrain more varied, a 5.38:1 is usually best, especially with overdrive.

Street

Most 4 cylinder models after 1969 used a standard 4.10:1 or 4.30:1 rear axle ratio. Therefore, either a 4.56:1 or 4.88:1 can be used. The latter preferably with overdrive.

Part No.	Description	Specification
552144-8	5.38:1 axle gears	1967-79 M30 rear axle 13.5 MPH at 1000 RPM
500984-0	4.88:1 axle gears	1962-68 M27 rear axle 14.9MPH at 1000 RPM
525880-1	4.88:1 axle gears	1967-79 M30 rear axle 14.9 MPH at 1000 RPM
273127-1	4.56:1 axle gears	1967-79 M30 rear axle 16.9 MPH at 1000 RPM
380789-8	Output shaft gear	Reduction gear for M40/M41 to give correct speedometer reading with 4.88:1 ratio
380305-3	Speedo gear	Small plastic gear used in conjunction with above gear.



LIMITED SLIP DIFFERENTIAL

Transfers the power to the wheel with the highest friction, thus improving acceleration in any situation causing lose of traction to one wheel.

A must for rally and racing, but also highly recommended for use in snow and off-road. Also eliminates spinning of inside rear wheel during hard cornering, especially if large rear anti-sway bar is installed.

Part No.	Qty.	Description	Application
279951-8	1	Limited Slip Differential	All models from 1970 (M30 axle) 270
384509-6	2	Spacer Sleeve	Used in conjunction with 279951-8 to fit 1966-69 M30 rear axle
942654-5	1	Tensioner Pin	Used in conjunction with 279951-8 to fit 1966-69 M30 rear axle
384727-4		Limited Slip	All models from 1970 (M30 axle) (Canada only)

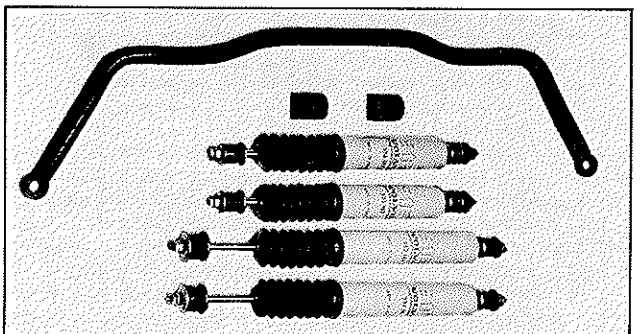
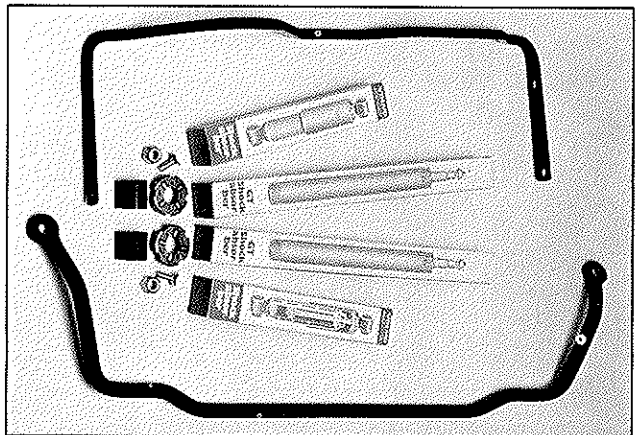
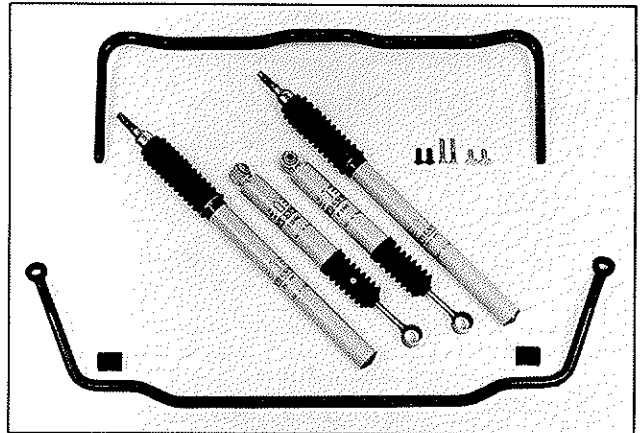
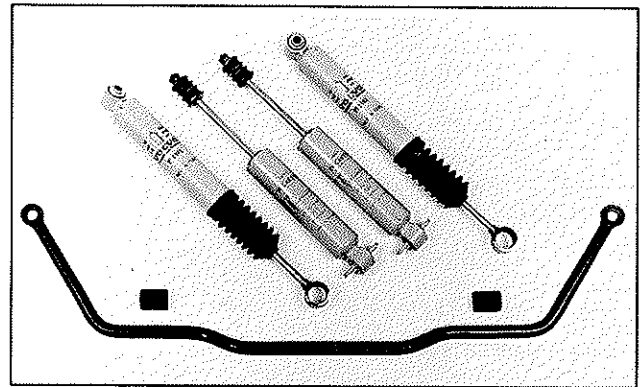
HANDLING KITS

Suspension tuning may be the most popular area of car preparation but quite often it is the least understood.

Volvo has taken the guess work out of this "black art" by designing suspension kits that offer outstanding road holding ability without totally sacrificing ride comfort and predictable (safe) behavior.

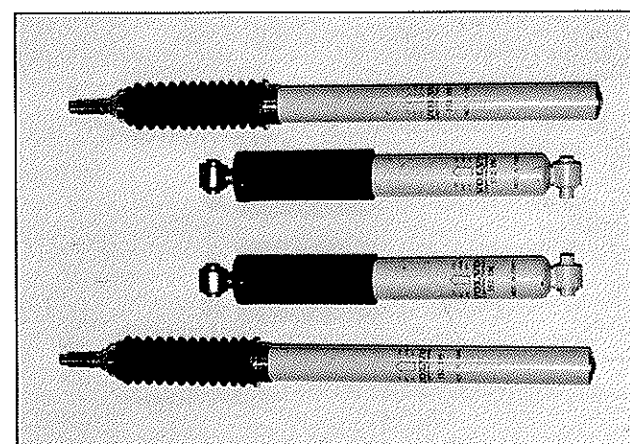
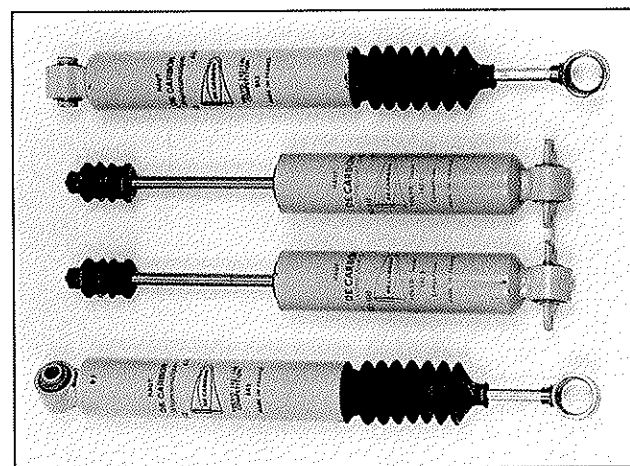
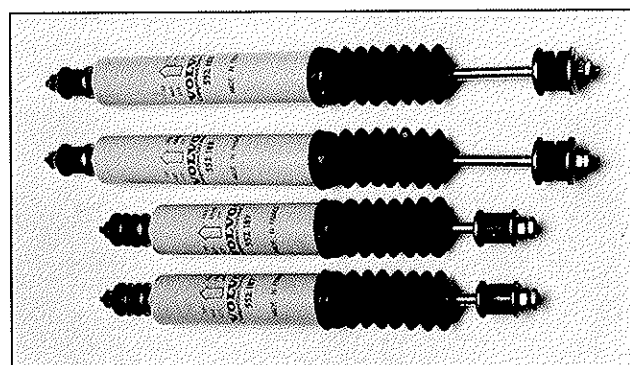
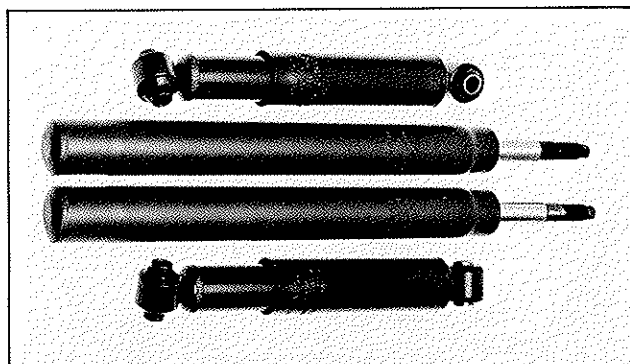
Each handling kit includes special front and rear shocks and larger anti-sway bar(s) to improve overall stability, reduce tire roll over (and wear) during hard cornering, add a more neutral steering characteristic, greatly reduce body roll during cornering, and make the car more responsive to driver input.

Suspension handling kits are designed for those who enjoy spirited driving on winding back roads or just desire a more responsive behavior from their car. Experienced racers and rallyists may want to choose suspension components individually to better suit various driving conditions and preferences.



Part No.	Description	Application
552119-0	120/1800 Series Handling Kit	1962-68 120 Series 1962-73 1800 Series (without air conditioner crankshaft pulley) Special gas pressure shocks and 24mm front anti-sway bar reduces body roll and improves stability.
552179-4	140 Series Handling Kit	1976-74 140 Excellent for both road and rally use. Special gas pressure shock absorbers and larger 20mm front anti-sway bar can be used with either std. springs or progressive rate front spring, P.N. 552105-9.
552095-2	240 Series Handling Kit	1975-76 240 Special gas pressure shocks and 21mm front, 25mm rear anti-sway bars change handling characteristics to a more neutral attitude. Body roll and sway greatly reduce without loss of ride comfort.
552483-0	260 Series Handling Kit	1977-79 260 Special gas pressure shocks and 21mm front, 23mm rear anti-sway bars, and 35% firmer front springs, result in the ultimate 260 series handling package. Significant reduction in body roll with little loss of ride comfort.
1128795-0	GT Road Holding Kit	1977-79 240 Series. 21mm front anti-sway bar and 23mm rear, coupled with 35% firmer front springs. Standard in 1979 242 GT. Gas shock kit, part number 552093-7, is recommended along with this kit.

suspension



SHOCK ABSORBERS

A simple but effective way to improve the handling of a vehicle is to upgrade the quality and dampening characteristics of the shock absorber.

Volvo offers a large variety of shock absorbers to suit both individual driver preference and the most demanding road conditions.

Two basically different types of shock absorbers are available; the GT shock is designed like the production hydraulic shock, but with firmer dampening characteristics, while special gas pressure shock absorbers offer exceptional fade-free dampening and extreme durability.

GT Shock Absorbers

Part No.	Qty.	Description	Application
282697-2	2	Front GT Shock	1967-75 140/160
*282698-0	2	Rear GT Shock	1967-75 140/160
283085-9	2	Rear GT Shock	1975-77 240/260
273662-7	2	Front GT Shock	1975-79 240/260
1128656-4	2	Rear GT Shock	1978-79 240/260

RALLY GAS PRESSURE SHOCK ABSORBERS

Gas pressure design utilizes single monotube construction for fast heat dissipation and superior fade free performance. Unique design provides for a comfortable ride during normal street driving, but becomes progressively firmer the more they are used. The only shocks recommended for performance rally and racing.

Part No.	Qty.	Description	Application
552199-2	1	Gas Shock Kit	1962-68 120 series 1962-73 1800 series. Moderately firm for road and rally.

Above kit contains following:

552187-7	2	Front Gas Shock
552188-5	2	Rear Gas Shock

552186-9	1	Road Gas Shock Kit	1967-74 140/160 series. Moderately firm for road.
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Above kit contains following:

552191-9	2	Front Gas Shock
*552192-7	2	Rear Gas Shock

552185-1	1	Rally Gas Shock Kit	1967-74 140/160 series. Extra firm setting for rally and racing.
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Above kit contains following:

552189-3	2	Front Gas Shock
*552190-1	2	Rear Gas Shock

552093-7	1	Road Gas Shock Kit	1975-79 240/260 series. Moderately firm setting for road and rally.
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Above kit contains following:

552195-0	2	Front Gas Shock
552196-8	2	Rear Gas Shock

*All 140/160 models up to 1972 must use late type lower rear shock mount. An adaptor kit is available under part number 282761-6.