

Shock Absorber CAT-LVGAB-10



Jürgen Mehlis 08.2010

CAT-LVGAB-10 Cover



Catalogue Region: Europe

Total Number of References: 1467

Product Groups: Shock Absorber, Strut Mount Kits

Number of Applications: 47.550

Vehicle Range: Passenger Cars and Light Commercial

Park Coverage: 77,88 % Europe

CAT-LVGAB-10 Additional Content

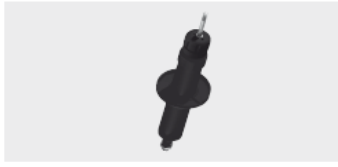


i Gabriel

Gabriel Shock Absorber Range



Complete MacPherson strut
Hydraulic 35000/55000 Gas G35000/G55000/G56000



Shock absorber with spring seat
Hydraulic 51000 Gas G51000



MacPherson strut insert
Hydraulic 44000 Gas G44000



Telescopic shock absorber
Hydraulic 42000 Gas 69000



Extra heavy duty shock absorber
Hydraulic 83000 Gas G63000



Load compensating shock absorber
Hydraulic 41000

Gabriel GB

Regular Check

Worn shock absorbers have a multitude of negative influences on the driveability of the vehicle and as a consequence on driver's safety.



A worn shock absorber reduces the contact between road and wheel. Steering is massively reduced!



Worn shock absorbers can affect everything from braking to handling:

- Braking distance increased by 15%
- 15% greater chance of aquaplaning
- Tyre life reduced by 25%
- Disruption of vehicle stability systems

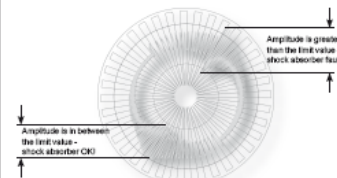
Worn shock absorbers can also cause stress on many other parts, from wheel bearings to steering system. Replacing them at the right time could prevent more costly repairs at a later date.

It is recommended that all four shocks are replaced at the same time. At the very least shock absorbers should be replaced in pairs, with either the front or rear pair changed at the same time. Shock absorbers with uneven wear or different types of shock absorbers on the vehicle will affect vehicle handling and performance.

Gabriel recommends to check the shock absorbers every 20,000 - 30,000 km and replace them at about 90,000 km in pairs to ensure a safer journey!

Workshop test

A visual check of a shock absorber can only give a partial hint of its technical condition. In order to determine, whether a shock absorber must be renewed, a test on a special test stand is necessary. Usually at least two shock absorbers are examined at the same time by being shifted in oscillation. These are then noted over the entire frequency range. The picture shows the recording of a defective (right side) and an intact (left side) shock absorber.



If the measured resonance amplitude is greater than the limit value given (area between the green circles), the damper is faulty. With such an instrument, the workshop is able to explain the necessity for a shock absorber change to its customer.

Diagnosis



Rubber block

The rubber block or bump stop is an essential part in many systems. Its function is to limit the piston travel during the compression phase. The elastic rubber block prevents the valve on the lower end of the piston from hitting the bottom of the shock and being destroyed.

If the rubber block is damaged it has to be replaced in axle sets.



Top mount

The top mount has two functions. The bearing inside allows the MacPherson strut to turn during steering. The bearing is vulcanised into a bracket. This rubber also dampens the vibrations from the road.

Successful Repair

- Utmost cleanliness is required when working on shock absorbers
- Shock absorbers must only be replaced in axle sets
- Always replace self-locking nuts, bolts and splints
- Replace all fitting parts delivered with the shock absorbers
- Welding and straightening work on steering and suspension parts is not permitted
- Always use the appropriate tools - do not use airtools for assembly
- Do not grip the piston rod in any way
- Always tight the screws and nuts with the correct torque and the wheels on the ground

Dust Cover

Rubber block and dust cover are the shield of the shock absorber.

The dust cover protects the piston rod from any outside "aggression" like stones, gravel, sand etc.

Protecting the piston rod helps to prevent leaking which is the main cause of shock absorber malfunction.



Uneven tire wear

Worn out spots along the centreline of a tire may be the indication of defect shock absorbers. The reduced contact between road and tire, caused by worn shocks, results in tire wear as shown on the picture above.

Always refer to the vehicle manufacturers guidelines when replacing shock absorbers!



CAT-LVGAB-10 Additional Content



Gabriel



G35226

X → Gabriel

G35207	G35214	G35216
Type 525 369 12x125x05 S	Type 536 369 M12x75 S	Type 495 331 14x150x64 S
<p>OPEL VECTRA B [36_]VECTRA B Estate [31_]...</p> <p>VAUXHALL VECTRA VECTRA Estate VECTRA Hatchback</p>	<p>FIAT PALIO (178BX)PALIO Estate (178DX)SIENA (17R_)...</p>	<p>ALFA ROMEO GTV [916C_]SPIDER [916S_]...</p>
G35217	G35218	G35219
Type 490 525 14x150x64 S	Type 534 369 12x125x05 S	Type 525 369 12x125x05 S
<p>ALFA ROMEO GTV [916C_]SPIDER [916S_]...</p>	<p>FIAT COUPE [FA/175]...</p>	<p>OPEL VECTRA B [36_]VECTRA B Estate [31_]...</p> <p>VAUXHALL VECTRA VECTRA Estate VECTRA Hatchback</p>
G35220	G35221	G35222
Type 479 328 12x125x06 S	Type 523 368 12x125x05 S	Type 692 490 14x150x66 S
<p>MITSUBISHI CARISMA [DA_]CARISMA Saloon [DA_]...</p> <p>VOLVO S40 [V5]V40 Estate [W]</p>	<p>OPEL ASTRA F CLASSIC Estate ASTRA F CLASSIC Hatchback...</p> <p>VAUXHALL ASTRA Mk II Convertible ASTRA Mk IV...</p>	<p>ALFA ROMEO 156 [932]...</p>
G35223	G35225	G35226
Type 541 373 14x150x29 S	Type 479 328 12x150x06 S	Type 523 368 12x125x05 S
<p>PEUGEOT 206 Hatchback [2A/C, 13E]...</p>	<p>MITSUBISHI CARISMA [DA_]CARISMA Saloon [DA_]...</p> <p>VOLVO S40 [V5]V40 Estate [W]</p>	<p>OPEL ASTRA F CLASSIC Estate ASTRA F CLASSIC Hatchback...</p> <p>VAUXHALL ASTRA Mk II Convertible ASTRA Mk IV...</p>

BMW (...)	Gabriel	BMW (...)	Gabriel	CHRYSLER (...)	Gabriel	CITROEN (...)	Gabriel
31 21227256	G447 99	2352 125770	G51330	4656196	G65690	794000085	44867
31 21229612	G95227	2352 125802	G51330	4694760	G63426	794000086	44867
31 21229613	G95228	2352 126551	G51330	4694761	G63426	794011276	36637
31 21232359	G95473	2352 127491	G9725	4694762	G63426	794011593	51408
31 21232360	G95474	2352 128241	G51330	4695627	G63426	849523630	61320
31 212323102	G95470	2352 130311	G9725	4695628	G65697	9495194380	36637
31 2123282400	G95470	2352 131395	G61426	4743125	G63426	9495300946	51320
31 216750785	G95471	2352 131213	G9725	4743127	G63426	9495300947	51320
31 216750786	G95472	2352 132297	G61330	4743128	G63426	9495301644	51316
31 216750787	G95467	2352 132489	G9725	4743413	G63426	9495301911	51316
31 216750788	G95468	2352 132560	G9725	4743641	G65694	9495304363	51320
31 216750789	G95473	2352 132651	G51426	4743642	G65694	9495305166	51320
31 216750790	G95474	2352 133367	G51426	4743643	G65694	9495327880	36637
31 216750791	G95467	2352 133510	G51330	4743695	G63426	9611056680	26696
31 216750792	G95468	2352 133564	G9725	4766124	G63426	9611056680	26696
31 216750905	G95475	2352 133601	G61346	4797643	G65697	920676	69914
31 216750906	G95476	2352 134813	G61346	5272033	G63426	5202AZ	G36422
31 216750907	G95473	2352 135636	G9725	5272035	G63426	5202CA	G36423
31 216750908	G95474	2352 135696	G51346	5272096	G63426	5202CC	G36428
31 216750951	G95473	2352 135868	G9725	4656426A	G6473	5202CE	G36429
31 216750952	G95474	2352 137474	G61346	4656426B	G6473	5202CF	G36422
31 212104954	G44497	2352 137479	G61346	46567142D	G6473	5202CG	G36423
31 212104956	G44493	2352 137591	G6438	4656794A	G6473	5202CX	G36431
31 212104957	G44497	2352 138669	G61346	4742272AA	G63426	5202CL	G36432
31 212104958	G44493	2352 139871	G6438	4742273AA	G63426	5202CS	G36431
31 212104959	G44497	2352 139839	G61346	4742234AA	G63426	5202ES	G36431
31 212111916	G4713	2352 225664	G51330	4742235AA	G63426	5202EV	36341
31 212112854	G4713	2352 226194	G51426	4742415AC	G63426	5202EX	G36431
31 212112855	G4713	2352 226952	G61346	4743698AC	G63426	5202FF	G36410
31 212112419	G4713	2352 227258	G6438	510611AAA	G6473	5202FB	G36411
31 212112448	G44920	2352 227480	G9683	5106115AA	G6473	5202GH	36341
31 212112525	G44920	2352 229126	G51216	527282AC	G6473	5202GQ	36341
31 212112959	44920	2352 229146	G51216	G0060062	G63426	5202GW	G36392
31 212112963	44920	2352 229299	G9628	G0060063	G63426	5202GX	G36399
31 2121129243	G44920	2352 282461	G9628	G0060186	G63693	5202GY	G36394
31 212113324	G44745	2352 282761	G9627	G0088895	G63424	5202GZ	G36395
31 212113220	G44776	2352 282762	G9627			5202H1	G36350
31 212113465	G44931	2352 282763	G9627			5202H2	36341
31 212113473	G44991	2352 282764	G9627			5202H3	G36402
31 212113545	G44776	2352 282765	G9628			5202H4	G36403
31 212113565	G44660	2352 282766	G9628			5202J3	36363
31 212113667	G44497	2352 282767	G61346			5202J6	36364
31 212113683	G44493	2352 282768	G61346			5202J7	36972
31 212113943	G44498	2352 282769	G61346			5202J9	G36441
31 212113944	G44498	2352 282770	G61346			5202K8	36365
31 212113949	G44497	2352 282771	G61346			5202K9	G36442
31 212103571	G4713	2352 282772	G51346			5202L2	G36403
2352109026	G9663	2352 282773	G51346			5202L6	44485
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23521091629	G9903	2352 282780	G93257			5202PJ	G36340
23521091630	G9903	2352 282781	G93257			5202PK	G36339
23521091637	G51426	2352 282782	G51426			5202PL	G36410
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23521091999	G9903	2352 282784	G51216			5202PS	36341
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23521095097	G9999	2352 282797	G51216			5202S3	G36424
23521095091	G9629	2352 282798	G51216			5202S4	G36443
23521096266	G9627	2352 282799	G51216			5202S5	G36444

Application Part



Gabriel					
			Alternative		
ALFA ROMEO (.../...)					
156 (932) (.../...)					
2.4 JTD	10.00-09.05	/	∅ (+)	G51231	636288
	10.00-09.05	/	∅ (+)	G51217	636288
2.5 V6 24V	09.97-10.00	/	∅ (+)	G51231	636288
	09.97-10.00	/	∅ (+)	G51217	636288
	10.00-09.05	/	∅ (+)	G51231	636288
	10.00-09.05	/	∅ (+)	G51217	636288
3.2 GTA	03.02-09.05	/	∅ (+)	G51231	636288
	03.02-09.05	/	∅ (+)	G51217	636288
156 Estate (932)					
1.6 16V T.SPARK	05.00-05.06	/	∅ (+)	G51231	636288
	05.00-05.06	/	∅ (+)	G51217	636288
1.8 16V T.SPARK	05.00-05.06	/	∅ (+)	G51231	636288
	05.00-05.06	/	∅ (+)	G51217	636288
1.9 JTD	05.00-05.06	/	∅ (+)	G51231	636288
	05.00-05.06	/	∅ (+)	G51217	636288
JTD 16V	11.02-05.06	/	∅ (+)	G51231	636288
	11.02-05.06	/	∅ (+)	G51217	636288
2.0 16V T.SPARK	05.00-01.02	/	∅ (+)	G51231	636288
	05.00-01.02	/	∅ (+)	G51217	636288
JTS	03.02-05.06	/	∅ (+)	G51231	636288
	03.02-05.06	/	∅ (+)	G51217	636288
2.4 JTD	05.00-05.06	/	∅ (+)	G51231	636288
	05.00-05.06	/	∅ (+)	G51217	636288
2.5 V6 24V	05.00-10.00	/	∅ (+)	G51231	636288
	10.00-05.06	/	∅ (+)	G51217	636288
	10.00-05.06	/	∅ (+)	G51217	636288
3.2 GTA	03.02-05.06	/	∅ (+)	G51231	636288
	03.02-05.06	/	∅ (+)	G51217	636288
164 (164)					
2.0 T.S.	06.87-09.92	/	∅-04.90, Ch. -> 6183988	G35100	GK141
	06.87-09.92	/	∅-05.90, Ch. 6183989->	G35195	GK141
	09.92-09.98	/	∅-04.90, Ch. 6183989->	G35195	GK141
Turbo	10.87-09.98	/	∅-04.90, Ch. -> 6183988	G35100	GK141
	10.87-09.98	/	∅-05.90, Ch. 6183989->	G35195	GK141
V6 Turbo	03.91-09.98	/	∅-04.90, Ch. 6183989->	G35195	GK141
2.5 V6	09.92-09.98	/	∅-04.90, Ch. 6183989->	G35195	GK141
2.5 TD	06.87-09.92	/	∅-04.90, Ch. -> 6183988	G35100	GK141
	06.87-09.92	/	∅-05.90, Ch. 6183989->	G35195	GK141
	09.92-09.98	/	∅-04.90, Ch. 6183989->	G35195	GK141
3.0 24V/24V QV/V6	09.92-09.98	/	∅-04.90, Ch. 6183989->	G35195	GK141
I.e. QV	09.92-09.98	/	∅-05.90, Ch. 6183989->	G35195	GK141
	06.87-09.92	/	∅-04.90, Ch. -> 6183988	G35100	GK141
	06.87-09.92	/	∅-05.90, Ch. 6183989->	G35195	GK141
166 (936)					
2.0 T.SPARK	09.98-10.00	/	∅	G51238	651238
V6	09.98-10.00	/	∅	G51238	651238
2.4 JTD	07.05-10.00	/	V1,ESP(-)	G51238	651238
2.5 V6 24V	09.98-10.00	/	∅	G51238	651238
3.0 V6 24V	09.98-10.00	/	∅	G51238	651238
3.2 V6 24V	10.03-10.00	/	∅	G51238	651238
ALFASUD Coupe (902.A)					
1.4	07.79-12.89	J	∅ 01.84-	G35983	60828
		J		G35984	60828
1.5	07.79-12.89	J	∅ 01.84-	G35983	60828
		J		G35984	60828

ALFA ROMEO

Gabriel					
			Alternative		
NISSAN (.../...)					
ALMERA TINO (V10) (.../...)					
2.0	08.00-09.03	/	∅	G51299	
2.2 dCi	09.03-09.00	/	∅	G51299	
2.0		/	∅	G51299	
BLUEBIRD (910)					
1.6	01.80-11.82	/	∅	44889	
1.8	01.80-12.82	/	∅	44889	
2.0 I	01.82-12.82	/	∅	44889	
2.0 D	01.80-12.82	/	∅	44889	
TD	01.83-09.82	/	∅	44889	
BLUEBIRD (T72, T12)					
1.6	03.86-06.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
1.8 I 16V	02.89-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
Turbo	12.85-05.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
2.0	12.85-12.87	/	∅	G4470	FKG228,GP071 -4GK227,GP071
I	12.85-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
2.0 D	03.86-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
BLUEBIRD (U11)					
1.6	11.82-06.88	/	∅	G4470	FKG228,GP071 -4GK227,GP071
Turbo	04.84-05.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
2.0 I	04.84-01.88	/	∅	G4470	FKG228,GP071 -4GK227,GP071
2.0 D	04.84-01.88	/	∅	G4470	FKG228,GP071 -4GK227,GP071
BLUEBIRD Estate (W910)					
1.6	01.80-05.84	/	∅	44889	82.82-12.82, 82.82-12.82, 82.82-12.82, 82.82-12.82
2.0 D	01.80-05.84	/	∅	44889	82.82-12.82, 82.82-12.82, 82.82-12.82, 82.82-12.82
BLUEBIRD Estate (WU11)					
2.0	04.86-09.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
I	04.84-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
	09.88-09.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
2.0 D	04.84-01.88	/	∅	G4470	FKG228,GP071 -4GK227,GP071
	03.86-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
BLUEBIRD Hatchback (T72, T12)					
1.6	03.86-06.91	/	∅	G4470	FKG228,GP071 -4GK227,GP071
1.8 I 16V	02.89-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
Turbo	12.85-05.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
2.0	12.85-12.87	/	∅	G4470	FKG228,GP071 -4GK227,GP071
I	12.85-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071
2.0 D	03.86-12.90	/	∅	G4470	FKG228,GP071 -4GK227,GP071

NISSAN