

Vehicle Technical Specifications Required for Classification

Vehicle Parameters: Stock

Vehicle Manufacturer: ALFA ROMEO
Model Years: 1986
Wheelbase: 94.5" (2400 mm)
Wet Curb Weight: 2823 lbs 2823 lbs.
Rear Window Slope Angle: _____

Model Name: GTV-6 2.5
Body Style (2 door, etc.): 2 door w/ Hatch.
Track (F/R): 54"/53.2"
Windshield Slope Angle: _____

Engine Parameters: Stock

SAE Max Horsepower: 154 @ 5800 RPM
Rev-Limit Speed: 6200 RPM
Fuel Tank/Cell Capacity: 17.6 ~~16.5~~ US Gal.
Number of Cylinders: 6
Compression Ratio (max): 9.0:1

Max Torque: 154.7 @ 4000 RPM
Method: DIN
Engine Location (frt, mid, rear): FRT
Displacement (cc): 2492
Piston Stroke (max): 68.3 mm

Cylinder Block:

Block Material: Aluminum
Block Deck Height (min): _____
Cylinder Bore (max): 88 mm

Part Number: _____
Deck Clearance (min): _____

Cylinder Head:

Head Material: Aluminum
Part Number: _____
Total Combustion Chamber Volume (min) (cc): 52cc
Head Flow Type: Crossflow: _____ Non-crossflow: _____

Valve System:

Number of Valves per Cylinder:

Intake: 1

Exhaust: 1

Valve Head Diameter (max):

Intake: 41mm

Exhaust: 36.6mm

Valve Material:

Intake: _____

Exhaust: _____

Valve Actuation Type (pushrod, finger follower, etc...): OWC INTAKE, PUSHROD EXHAUST

Engine Internals:

Piston Type: Flat: _____ Dished: _____ Domed: ☒ Piston Mass (min): _____

Connecting Rod Length (Center to Center): _____

Connecting Rod Material: _____

Connecting Rod Mass: _____ Piston, Pin, Rod & Ring(s) Mass (min): _____

Crankshaft P/N: _____

Crankshaft Mass (min): _____

Camshaft P/N: RH: 119.00.03.200.25

Location & # of Camshafts: 2 1/Bar.

LH: 119.00.03.200.25

Lift @ Lobe (max): 9mm

Intake: 9mm Exhaust: 6.4mm

Lift @ Valve (max):

Intake: 8.5mm Exhaust: 6.15mm

Rocker Arm Ratio: _____

Tappet Type: _____

Intake Manifold:

Manifold Material: ALUMINUM

Part Number: _____

Type of Induction System: NORMAL

Location of Injectors: INTAKE RUNNER

Number of Injectors per Cylinder: 1

Throttle Body Bore Dia.: _____

Exhaust Manifold:

Manifold Material: Cast iron

Drivetrain: Transmission:

Number of Forward Speeds: 5

Manufacturer: ALFA ROMEO

Gear Ratios:

1st: 3.5 2nd: 1.956 3rd: 1.345
4th: 1.026 5th: 0.780 6th: N/A

Final Drive:

Differential Type: Open: _____ Limited Slip: _____ Torsen: _____

Differential Manufacturer: ALFA ROMEO Axle Ratio: 4.1:1

Ring Gear Outside Diameter: _____

Chassis: Suspension:

Spring Type (coil, leaf, etc.): Front: TORSION Rear: COIL

Spring Material Dia. / Thickness: Front: _____ Rear: _____

Overall Spring Dia. / Width: Front: _____ Rear: _____

Anti-roll Bar Diameter: Front: _____ Rear: _____

Anti-roll Bar Design (solid, tube, etc.): Front: SOLID Rear: SOLID

Bushing Material: _____

Brakes:

Rotor Diameter (max): Front: 26.5 CM Rear: 25 CM

Rotor Thickness (max): 22mm Front: 10mm (min) 10mm Rear: 9mm (min)

Rotor Type (vented, solid): Front: VENTED Rear: SOLID

Rear Drum Diameter (if so equipped): N/A Rear Drum Width (if so equipped): N/A

Caliper Type & Number of Pistons: Front: ATE 2 piston Rear: ATE 2 piston

Stock Tires & Wheels:

Tire Size: Front: 175/60 HR15 Rear: 175/60 HR15

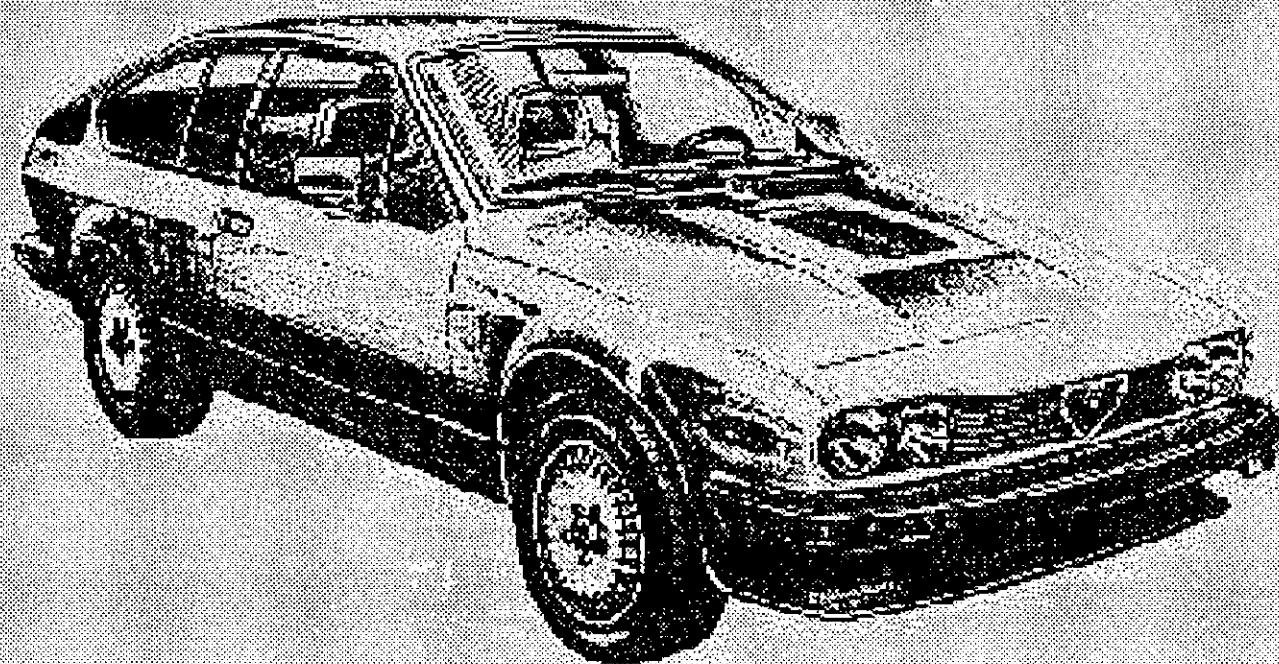
Wheel Diameter & Material: Front: 6JX15H2 Rear: 6JX15H2

Wheel Width: Front: _____ Rear: _____

WORKSHOP MANUAL

GTV6 2.5

1986 model year
(50 STATE VERSION)



DIREZIONE ASSISTENZA TECNICA

Alfa Romeo 

COMPLETE CAR

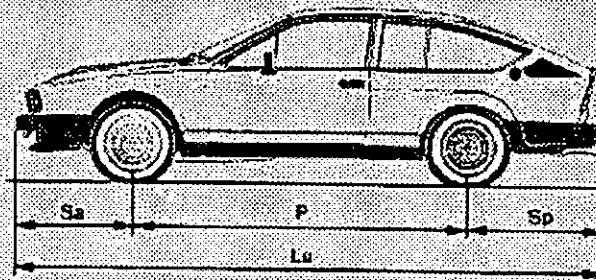
DIMENSIONS - LOADS - WEIGHTS

Units of measure (unless otherwise stated)

— Dimensions: mm (in)

— Weights: kg (lbs)

Wheelbase	P	2400	(84.6)
Track	Front	Ca	1373 (54)
	Rear	Cp	1352 (53.2)
Overall length	Lu	4350	(171.2)
Overhang	Front	Sa	892 (35.1)
	Rear	Sp	1058 (41.6)
Overall width	La	1664	(65.5)
Overall height (unladen)	H	1330	(52.4)
Minimum turning circle		10000	(393.7)
Curb weight		1280	(2823)
Gross vehicle weight (GVWF)		1822	(5578)
Payload		342	(753)
Gross axle weight (GAWP)	Front	758	(1671)
	Rear	864	(1905)
Towing gross weight		1000	(2204)
Seating capacity	Front	2	
	Rear	2	



WHEELS AND TIRES

Tire pressure with tires cold - PSI

Tyres	Rim size		F	R
195/60 HR 15	6J x 16 H2	N	29	31
		V	31	35

N = Reduced load (up to 2 occupants)
V = Full load (4 occupants + 50 kg (110 lbs))

with no limiting speed

COMPLETE CAR

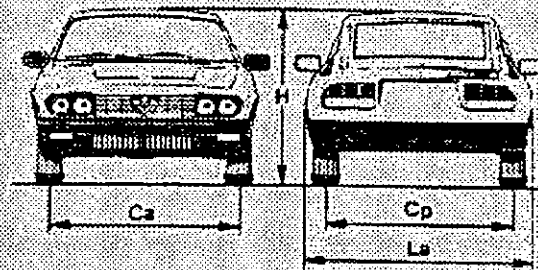
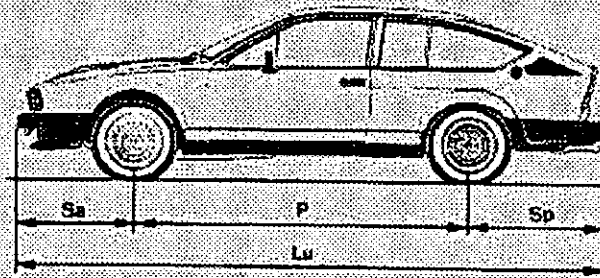
DIMENSIONS - LOADS - WEIGHTS

Units of measure (unless otherwise stated)

— Dimensions: mm (in)

— Weights: kg (lbs)

Wheelbase	P	2400	(94.6)
Track	Front Ca	1373	(54)
	Rear Cp	1352	(53.2)
Overall length	Lu	4350	(171.2)
Overhang	Front Sa	692	(35.1)
	Rear Sp	1058	(41.6)
Overall width	La	1664	(65.5)
Overall height (unladen)	H	1330	(52.4)
Minimum turning circle		10000	(393.7)
Curb weight		1280	(2823)
Gross vehicle weight (GVWR)		1822	(3578)
Payload		342	(753)
Gross axle weight (GAWR)	Front	758	(1671)
	Rear	864	(1095)
Towing gross weight		1000	(2204)
Seating capacity	Front	2	
	Rear	2	



WHEELS AND TIRES

Tire pressure with tires cold - PSI

Tyres	Rim size		F	R
195/80 HR 15	6J x 15 H2	N V	29 31	31 35

N = Reduced load (up to 2 occupants)

V = Full load (4 occupants + 50 kg (110 lbs))

with no limiting speed

SERVICE DATA AND SPECIFICATIONS

TECHNICAL DATA

ENGINE

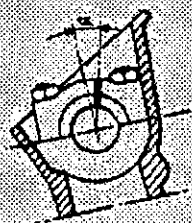
Cycle		ODOH stroke
Number of cylinders and layout		6 in V, 60° angle
Cylinder numbering	Running direction 	RH cylinder block  LH cylinder block 
Bore and stroke	mm (in)	80 x 68.3 (3.148 x 2.69)
Cylinder capacity	cm ³ (cu in)	2492 (152.1)
Combustion chamber capacity	cm ³ (cu in)	52 (3.17)
Compression ratio		9
Mean effective piston speed (1)	m/s (ft/s)	12.7 (41.67)

(1) At peak r.p.m.

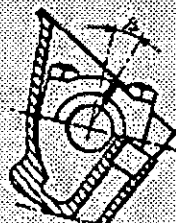
CHECKS AND ADJUSTMENTS

TIMING DATA (1)

TIMING MARKS ON CAMSHAFT BEARINGS CAPS
(Viewed from front of engine)

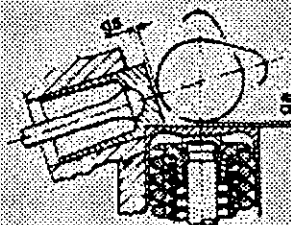


RH cylinder head



LH cylinder head

VALVE CLEARANCE

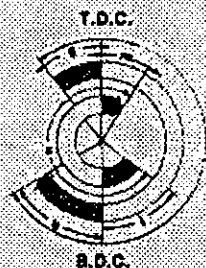


		Unit: mm (in)
Camshafts	RH cylinder head	118.00.03.200.25
	LH cylinder head	118.00.03.201.25
Nominal cam lift	Intake cam	9 (0.35)
	Exhaust cam	8.4 (0.25)
Angle of timing mark on camshaft bearing cap	RH cylinder head (α)	15°
	LH cylinder head (β)	15°
Clearance between heel of cam and top of bucket	Intake ga	0.475 to 0.500 (0.019 to 0.020)
	Exhaust ga	0.225 to 0.250 (0.009 to 0.010)

(1) All values are with engine cold

VALVE TIMING DIAGRAM

(Clockwise crankshaft rotation when viewed from the front)

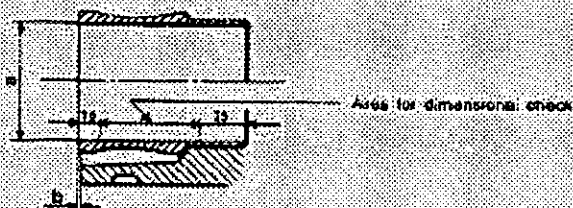


Intake	Opening (before T.D.C.)	g	34°50'
	Closing (after B.D.C.)	h	60°50'
	Duration (intake)	i	277°40'
Exhaust	Opening (before B.D.C.)	l	58°55'
	Closing (after T.D.C.)	m	23°55'
	Duration (exhaust)	n	263°50'

ENGINE ASSEMBLY

CYLINDER LINERS, COMPRESSION RINGS, PISTONS AND PINS

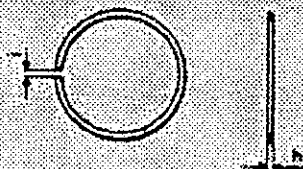
Cylinder liners



Check dimensions		Unit: mm (in)
Cylinder liner bore (a)	Grade A (Blue)	87.985 to 87.994 (3.4640 to 3.4643)
	Grade B (Pink)	87.995 to 88.004 (3.4644 to 3.4647)
	Grade C (Green)	88.005 to 88.014 (3.4650 to 3.4651)
Protrusion of cylinder liner beyond cylinder block (1) (b)		0.01 to 0.06 (3.94·10 ⁻⁴ to 23.62·10 ⁻⁴)
Maximum cylinder liner ovality and taper		0.01 (3.94·10 ⁻⁴)

(1) When measuring apply the liner clamping tools, and tighten nuts to the torque at 10 to 15 N·m (1 to 1.5 kg·m; 7.23 to 10.84 ft·lb)

Compression rings



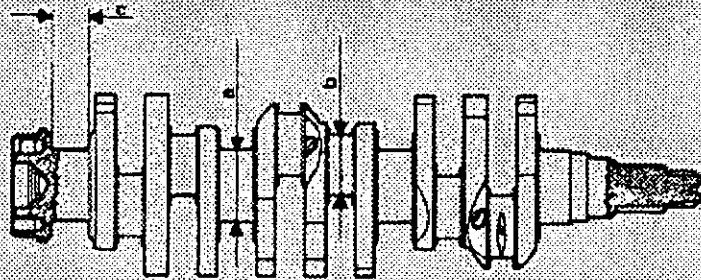
Check dimensions		Unit: mm (in)
Ring thickness (h)	Compression ring no. 1	1.478 to 1.490 (0.05819 to 0.05866)
	Compression ring no. 2	1.728 to 1.740 (0.06803 to 0.06850)
	Oil scraper ring	3.978 to 3.990 (0.15661 to 0.15708)
Ring gap (1) (f)	Compression ring no. 1	0.30 to 0.45 (0.01181 to 0.01772)
	Compression ring no. 2	0.30 to 0.45 (0.01181 to 0.01772)
	Oil scraper ring	0.25 to 0.40 (0.00984 to 0.01574)

(1) To be measured in checking fixture or in the cylinder liner

ENGINE ASSEMBLY

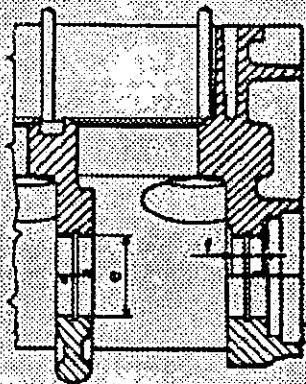
CRANKSHAFT, CRANKCASE, CONNECTING RODS, BEARINGS AND FLYWHEEL

Crankshaft



Check dimensions		Unit: mm (in)
Main journal diameter (a)	Red	59.961 to 59.971 (2.36067 to 2.36106)
	Blue	59.951 to 59.961 (2.36028 to 2.36067)
Crankpin (b)	Red	51.990 to 52.000 (2.04685 to 2.04724)
	Blue	51.960 to 51.990 (2.04646 to 2.04685)
Length of rear main journal (c)		31.300 to 31.335 (1.23228 to 1.23366)
Maximum permissible ovality for main journals and crankpins		0.004 ($1.575 \cdot 10^{-3}$)
Maximum permissible taper for main journals and crankpins		0.01 ($3.937 \cdot 10^{-3}$)
Maximum variation in parallelism between main and crankpins		0.015 ($5.905 \cdot 10^{-3}$)
Maximum eccentricity between main journals		0.04 ($1.575 \cdot 10^{-3}$)

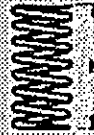
Crankcase



Check dimensions		Unit: mm (in)
Main bearing support bore diameter (e)		83.657 to 83.676 (2.50616 to 2.50993)
Length of rear main bearing support shoulder (f)		26.45 to 26.50 (1.04134 to 1.04331)

ENGINE ASSEMBLY

Springs



Check dimensions			
Length of valve spring, valve open (h)	Outer spring	mm (in)	23.6 (0.92520)
	Inner spring	mm (in)	21.6 (0.84646)
Spring load at length h	Outer spring	kg (lb)	47.85 to 49.75 (105.71 to 109.58)
	Inner spring	kg (lb)	22.87 to 23.53 (49.99 to 51.87)

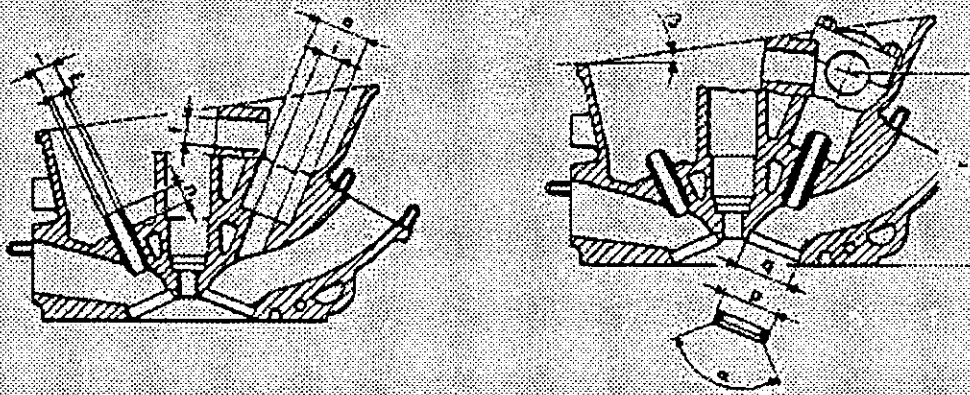
Valves



Check dimensions		Unit: mm (in)
Valve stem diameter (d)	Intake	8.672 to 8.687 (0.35323 to 0.35382)
	Exhaust	8.635 to 8.660 (0.35181 to 0.35276)
Valve head diameter (D)	Intake	40.85 to 41.00 (1.60827 to 1.61417)
	Exhaust	38.40 to 38.60 (1.43307 to 1.44094)

ENGINE ASSEMBLY

Cylinder head



Check dimensions			Unit: mm (in)
Bowl seat diameter, intake valve	(e)		36.000 to 36.025 (1.37795 to 1.37894)
Bowl seat diameter, exhaust valve	(f)		22.000 to 22.021 (0.86614 to 0.86687)
Valve guide seat diameter	(i)		13.990 to 14.018 (0.55079 to 0.55189)
Valve guide external diameter	(j)		14.033 to 14.044 (0.55248 to 0.55291)
Valve guide bore diameter (reamed)	(m)		9.000 to 9.015 (0.35433 to 0.35492)
Protrusion of valve guide	(n)		10.2 to 10.6 (0.40157 to 0.41732)
Valve seat external diameter	Standard size	Intake	42.065 to 42.100 (1.65810 to 1.65748)
		Exhaust	37.065 to 37.100 (1.45625 to 1.46063)
	Oversize	Intake	42.365 to 42.400 (1.66791 to 1.66929)
		Exhaust	37.365 to 37.400 (1.47106 to 1.47244)
Valve seat bore diameter	Standard size	Intake	42.000 to 42.025 (1.65354 to 1.65453)
		Exhaust	37.000 to 37.025 (1.45869 to 1.45788)
	Oversize	Intake	42.300 to 42.325 (1.66535 to 1.66834)
		Exhaust	37.300 to 37.325 (1.46850 to 1.46969)
Valve seat taper	(o)		90°
Minimum height of cylinder head after planing (dimension between camshaft centre line and cylinder head lower face)	(1)	(p)	124.5 (4.90157)
Maximum flatness tolerance of cylinder head lower face			0.05 (1.969·10 ⁻³)
Angle of cylinder head top face	(q)		8°

(1) The planing of the cylinder heads must always be carried out on both cylinder heads

Group 01 — ENGINE CRANK GEAR

②

Valve timing data (all figures apply to a cold engine)

Camshaft	{ RH camshaft	119.00.03.200.25
	{ LH camshaft	119.00.03.201.25

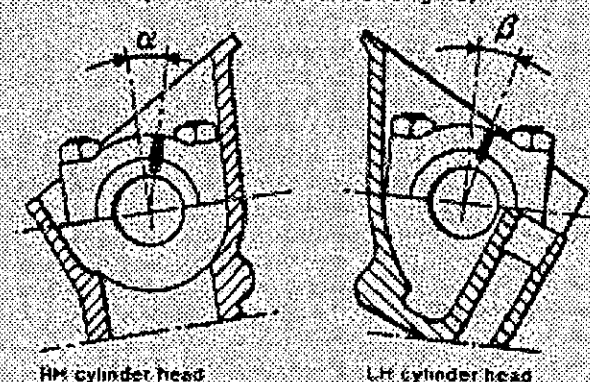
Nominal lift	{ Inlet cam	9
	{ Exhaust cam	6.4

Angle of timing mark on camshaft bearing cap	{ RH cylinder head α	15°
	{ LH cylinder head β	15°

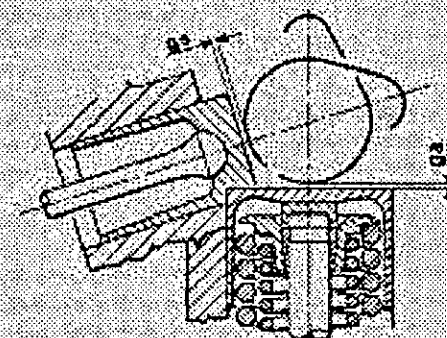
Clearance between heel of cam and top of bucket	{ Inlet	gs	0.475 — 0.500
	{ Exhaust	gs	0.225 — 0.250

Inlet	{ Opening (before TDC)	g	36°50'
	{ Closing (after BDC)	h	60°50'
	{ Duration (inlet)	i	277°40'
Exhaust	{ Opening (before BDC)	l	59°55'
	{ Closing (after TDC)	m	23°55'
	{ Duration (exhaust)	n	263°50'

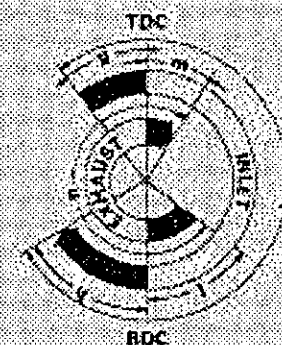
TIMING MARKS ON CAMSHAFT BEARING CAPS
(Viewed from front of engine)



TAPPET CLEARANCE



VALVE TIMING DIAGRAM
(Clockwise crankshaft rotation when viewed from the front)



Group 01 — ENGINE CRANK GEAR

m) Piston pin diameter	Black	21.994 — 21.997
	White	21.997 — 22.000

n) Piston pin bush diameter	22.005 — 22.015
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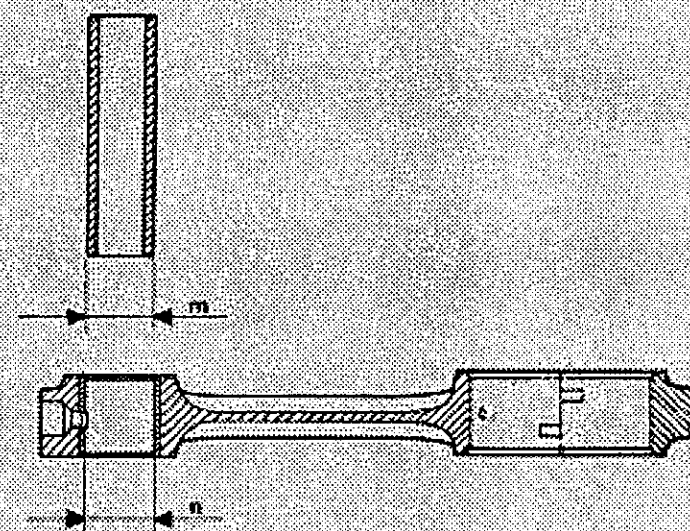
ASSEMBLY FITS AND TOLERANCES

— Piston clearance in cylinder	0.040 — 0.059
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— Piston ring clearance in groove	Compression ring no. 1	0.035 — 0.067
	Compression ring no. 2	0.035 — 0.067
	Oil control ring	0.025 — 0.057

— Piston pin clearance in piston	0.016 — 0.012
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— Piston pin clearance in small end bush	Black	0.008 — 0.021
	White	0.005 — 0.018



DIMENSIONS

①

Gear ratios

Differential ratio

Overall gear ratios

Speed per 1000 rpm

1st	3500 : 1
2nd	1.956 : 1
3rd	1.345 : 1
4th	1.026 : 1
5th	0.780 : 1
REV.	3.000 : 1
Differential ratio	
10/41	
Overall gear ratios	
Speed per 1000 rpm	
1st	14.350 : 1
1st mph	4.848
(kmh)	(7.803)
2nd	8.019 : 1
2nd mph	8.677
(kmh)	(13.964)
3rd	5.514 : 1
3rd mph	12.627
(kmh)	(20.321)
4th	4.206 : 1
4th mph	16.555
(kmh)	(26.642)
5th	3.198 : 1
5th mph	21.781
(kmh)	(35.053)
REV.	12.300 : 1
REV. mph	5.859
(kmh)	(9.107)

②

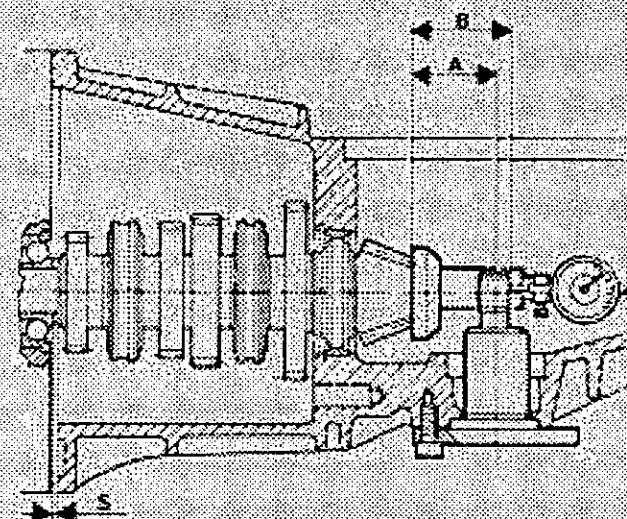
Clearance between differential wheels and pinions

in
mm

0.003 — 0.006
0.08 — 0.15

③

Determining the thickness S of shim between the bush of 4th-speed gear the bearing inner race



$$S = \pm L - (\pm C)$$

Where:

L = Crown wheel axis reading with dial gauge

C = Dimension stamped on pinion (plus or minus)

NOTE: The distance must correspond to the nominal distance plus or minus the figure stamped on the pinion face (expressed in hundredths)

Nominal distance between crown wheel centre and bevel pinion head
A =
Dimension of tool C-6.0193 for zero setting the dial gauge
B =

in
mm
in
mm

2.463 — 2.465
62.6 ± 0.03
2.858
72.6

Note: The amount of metal removed should be the same on both sides of the brake disc

Technical drawing of a cross-section of a metal structure. The drawing shows a central rectangular cavity with a horizontal section line. Dimensions are indicated: a total width of $0,4 + 1,6$ on the left, and a height of $0,03$ for the top flange. Labels include "Roule" (Roller) pointing to a small circular feature on the right, and "Circumferential" pointing to the outer edge of the structure. The drawing is a detailed cross-section showing internal features and tolerances.

C	{	New	in	0.86
			mm	22
		Minimum after machining	in	0.78
			mm	20
	{	Minimum serviceable limit	in	0.74
			mm	19

Technical drawing of a mechanical part, likely a shaft or housing, showing dimensions and tolerances. The drawing includes a cross-section view and a side view. Key dimensions and tolerances are indicated:

- Overall length: 94 ± 1.6
- Dimension A: 0.03
- Dimension B: 0.05
- Dimension C: 0.03
- Dimension D: 0.03
- Dimension E: 0.03
- Dimension F: 0.03
- Dimension G: 0.03
- Dimension H: 0.03
- Dimension I: 0.03
- Dimension J: 0.03
- Dimension K: 0.03
- Dimension L: 0.03
- Dimension M: 0.03
- Dimension N: 0.03
- Dimension O: 0.03
- Dimension P: 0.03
- Dimension Q: 0.03
- Dimension R: 0.03
- Dimension S: 0.03
- Dimension T: 0.03
- Dimension U: 0.03
- Dimension V: 0.03
- Dimension W: 0.03
- Dimension X: 0.03
- Dimension Y: 0.03
- Dimension Z: 0.03

D	{	New	in	0.39
			mm	10
		Minimum after machining	in	0.35
			mm	9
		Minimum serviceable limit	in	0.31
			mm	8

11 Facillitum

 **FARRAR**

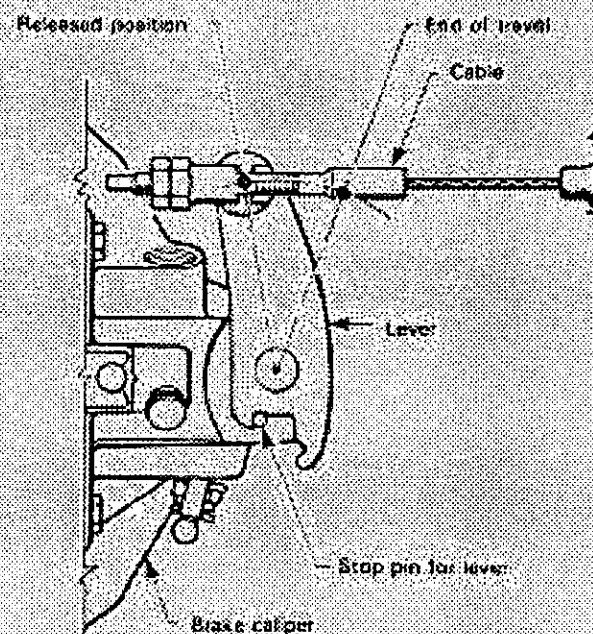
1. Background

PSI
kg/cm²

40 - 49
2.8 - 3

5

4-6



1) Clearance between rear brake pads and disc should as specified in item 1 "Dimensions".

2) The cable should not have any end float.

3) The levers on the brake caliper should rest against the stop lever.

RECOMMENDED FUEL

Octane rating

A gasoline's resistance to detonation or «knock» is noted by its octane rating. Purchase and use of correct octane fuel is essential to prevent «knock» which may eventually be harmful to your car's engine. The higher the rating, the higher the ability to resist «knock». Regular fuels have an octane rating range from 91 to 95 RON (Research Octane Number) or 86 to 90

PON (Pump Octane Number). PON ratings appear on gasoline pumps in the U.S. This rating is determined in the following manner:

$$\frac{\text{RON} + \text{MON}^*}{2} = \text{PON}$$

* Motor Octane Number

For example: Research Octane Number and Motor Octane Number divided by 2 equals Pump Octane Number.

The P.O.N. octane rating is usually 5 points less than the RON rating:

91 RON = 86 P.O.N.

95 RON = 90 P.O.N.

Use of fuel with octane ratings lower than 91 RON or 86 P.O.N. should be avoided.

APPROXIMATE REFILL CAPACITIES

Fuel tank		gals. (l)		17.0 (67)	
Fuel reserve		gals. (l)		2.1 to 2.6 (8 to 10)	
Engine oil pan	lb (kg)	With filter		13 (6)	
		Without filter		12 (5.5)	
Camshaft support pumps (*)		lb (kg)		0.99 (0.450)	
Gearbox - Differential oil		lb (kg)		5.67 (2.570)	
Coolant	Min T °C (°F)	Concentrated antifreeze	gals. (l)	1.1 (4.2)	
	-20 (-4)	Distilled water	gals. (l)	2.1 (7.8)	
		Antifreeze ready to use	gals. (l)	3.2 (12)	
	Min T °C (°F)	Concentrated antifreeze	gals. (l)	1.6 (6)	
	-35 (-31)	Distilled water	gals. (l)	1.6 (6)	
		Antifreeze ready to use	gals. (l)	—	

(*) Replacement to be carried out only in the case of disassembly

To: Jeremy Thoennes

From: Allen Mitchell #294075-01

Voice: 843-813-4088

Subj: Alfa GTV6 gear ratios

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Gear Ratios:

I	3.50:1
II	1.956:1
III	1.345:1
IV	1.026:1
V	0.78:1
Final drive ratio	4.10:1

1981

CHASSIS

Suspension:

Front:

independent, 4 link transverse with torsion bars and anti-sway bar.

Rear:

De Dion axle, converging side members with Watt's parallelogram, helical springs and anti-sway bar.

Differential type:

hypoid

Steering type:

rack and pinion

Turning radius:

30.8 feet

Brake System:

Front/Rear:

F. Ventilated disc type—10.5 in. diam.

R. in-board disc type—9.8 in. diam.

Dual circuit with power assist.

Wheels:

"Elektron" alloy 6J15

Tires:

195/60 HR 15

EPA FUEL ECONOMY

⑰ EPA EST. MPG. 28 EST. HIGHWAY MPG.

Use EPA EST. MPG. for comparison. Your mileage may vary depending on speed, weather and trip length. Actual highway mileage will probably be less.

STANDARD EQUIPMENT

aluminum alloy high performance V6 engine—Bosch L-Jetronic fuel injection—rear mounted 5-speed overdrive gearbox—double disc clutch—De Dion rear suspension—torsion bar front suspension—rack and pinion steering w/adjustable column—front and rear anti-sway bars—4 wheel disc brakes—"Elektron" alloy wheels—Pirelli P-6 tires—front spoiler—tinted glass—electric rear window defogger—dual electrically controlled outside mirrors—power front windows—complete sports instrumentation w/ tachometer—leather interior w/ adjustable bucket seats—hatchback w/ enclosed cargo area—air conditioning.

\$16,983.00 Manufacturer's Suggested Retail Price, 1981 P.O.E. Inland transportation, dealer preparation, local taxes, and optional equipment are not included. Price includes air conditioning, leather interior, power windows and electric rear view mirrors and Pirelli P-6 radial tires on cast alloy wheels.

Alfa Romeo
Tecnologia vincente. Da sempre.



ALFA ROMEO GTV 6. SPORTS GT FOR THE 80'S.

"Some day you'll be asked to define the term 'sports car.' When that time comes, just show 'em this Alfa Romeo!"

Car and Driver, June, 1981



The heritage of the Alfa Romeo GT is proud, unique and deeply steeped in racing. The GTV 6/2.5 represents the best of Alfa Romeo performance, both in speed and road-holding. It's also the most powerful Alfa Romeo ever sold in America. A luxury sports car of the highest standard, our GTV 6 has been honored by Road & Track as the Best Sports GT, one of the 10 best cars for the 80's.

1982 ALFA ROMEO GTV 6/2.5 COUPÉ SPECIFICATIONS

MEASUREMENTS

Wheelbase	94.5 inches
Overall length	171.2 inches
Overall width	65.5 inches
Height	52.4 inches
Track, F/R	54.0/53.2 inches
Legroom, F/R	39.3" Max./28.9" Min.
Curb weight	2823.0 pounds
Cargo volume	6.5 cubic feet
Fuel capacity	17.0 gallons

POWERTRAIN

Layout	front engine, rear drive
Engine type	6 cylinder 60° vee type with one overhead camshaft per bank
Engine/head construction	aluminum alloy

Displacement	2492 cc
Compression ratio	9:1
Horsepower (SAE net @ RPM)	154 @ 5500
Torque (SAE net ft. lb. @ RPM)	151.9 @ 3200
Performance	Top Speed: 130 mph (approx.) 0 to 60 mph... under 9 seconds
Fuel System	Bosch L-Jetronic fuel injection, Solid State Ignition
Fuel Requirement	Unleaded Regular
Transmission type	Alfa Romeo 5-speed manual w/overdrive, 5th gear. Rear-mounted.

Gear Ratios: 1st, 3.50:1; 2nd, 1.95:1; 3rd, 1.26:1; 4th, 0.95:1; 5th, 0.78:1. Final drive ratio, 3.42:1.

CHASSIS

Suspension	
Front	independent, 4 link transverse with torsion bars and stabilizer bar
Rear	deDion axle, converging side members with Watt's parallelogram, helical springs and stabilizer bar

Differential type	hypoid
Steering type	rack and pinion
Turning radius	32.8 feet
Brake System	
Front/Rear	F Ventilated disc type—10.5 in. diam. R. in-board disc type—9.8 in. diam. Dual circuit with power assist
Wheels	light alloy 6R5
Tires	195/60 HR 15

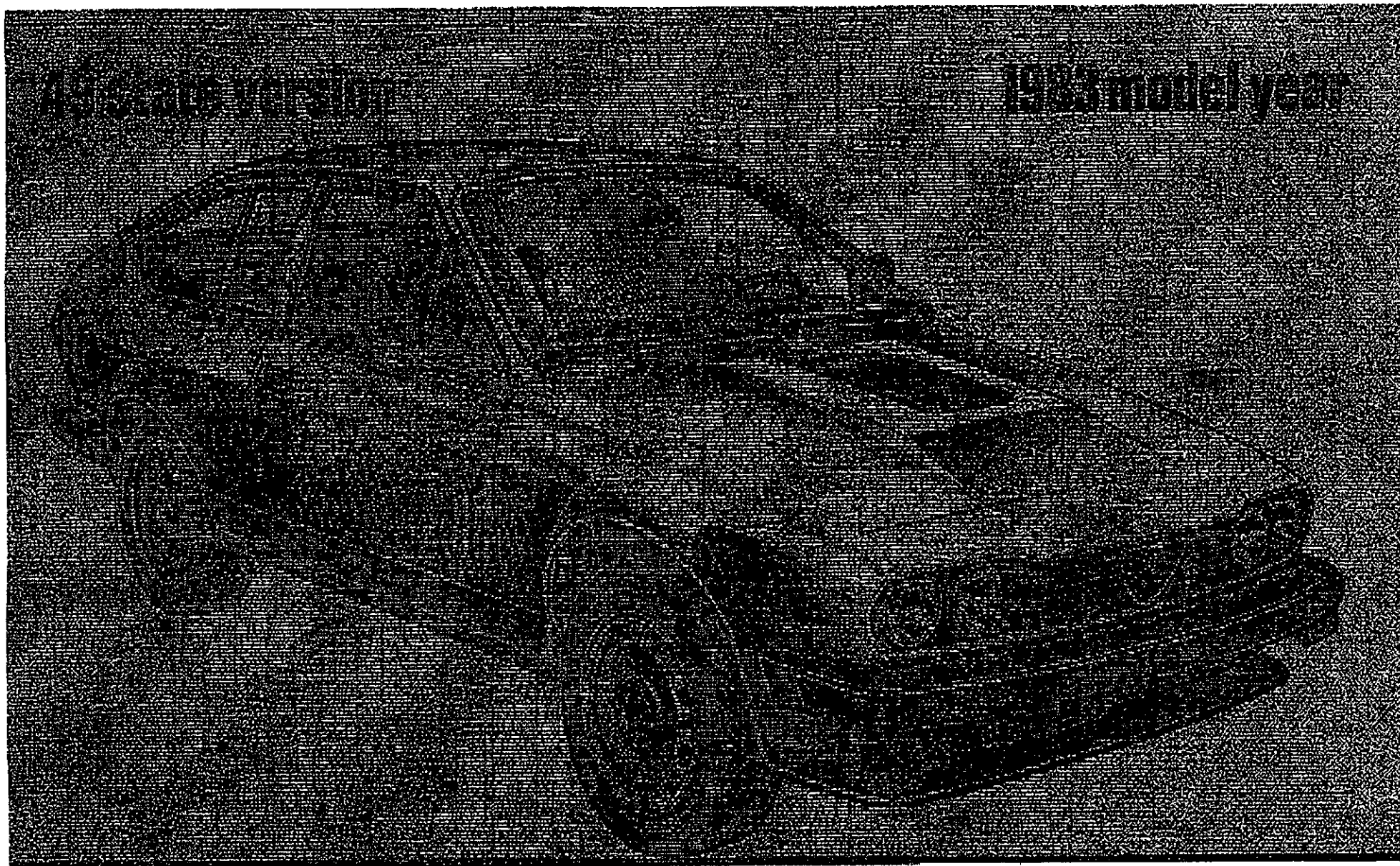
EPA FUEL ECONOMY

(18) EPA EST. MPG: 31 EST. HIGHWAY MPG:

STANDARD EQUIPMENT

aluminum alloy high performance V6 engine—Bosch L-Jetronic fuel injection—rear mounted 5-speed overdrive gearbox—double disc clutch—deDion rear suspension—torsion bar front suspension—rack and pinion steering w/adjustable column—front and rear stabilizer bars—4 wheel disc brakes—light alloy wheels—Pirelli P6 tires—front spoiler—tinted glass—electric rear window defogger—dual electrically controlled outside mirrors—power front windows—complete sports instrumentation w/tachometer—adjustable leather-faced seats—hatchback w/enclosed cargo area—air conditioning

*Use EPA EST. MPG. for comparison. Your mileage may vary depending on speed, weather and top length. Actual highway mileage will probably be less.



owner's operational manual

ALFA ROMEO *gtv 6* **2.5**

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1782+1983 *teh fuen***VALVE TIMING**

Intake valves:

Opening: 36°50' before TDC

Closing: 60°50' after BDC

Exhaust valves:

Opening: 59°55' before BDC

Closing: 23°55' after TDC

VALVE CLEARANCE (cold engine)

Intake:

.0187-.0197 in. (.475-.500 mm)

Exhaust:

.0088-.0098 in. (.225-.250 mm), on cam

.0122-.0134 in. (.310-.340 mm), on valve

FRONT WHEEL TOE-OUTToe-out as measured on a 390 mm dia. circle: ± 1 mm ± 1 mm
(with car under static load).**TRANSMISSION RATIOS**

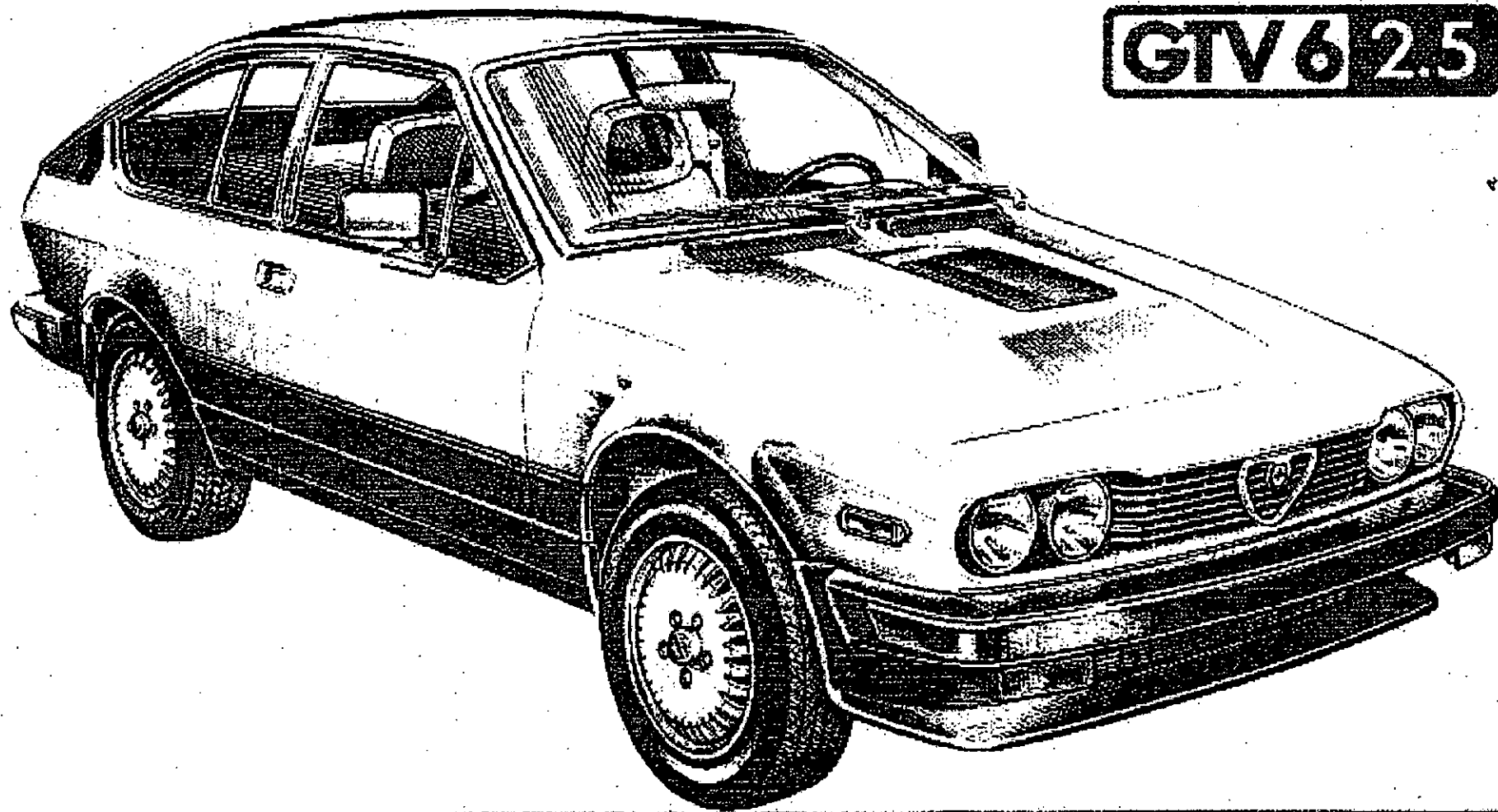
(41 : 12 final drive)

Speed	Gearbox	Overall
1st	3.500 : 1	11.958 : 1
2nd	1.956 : 1	6.683 : 1
3rd	1.258 : 1	4.298 : 1
4th	0.946 : 1	3.232 : 1
5th	0.780 : 1	2.665 : 1
REV.	3.000 : 1	10.249 : 1

50 state version

1986 model year

GTV 6 2.5



owner's manual by *Alfa Romeo* 

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.0122-.0134 in. (.310-.340 mm), on valve

FRONT WHEEL ALIGNMENT

Definition/Function

Camber: inward or outward tilt of the wheel at the top, measured in degrees, is the amount the wheel is tilted from «true vertical».

■ Insures uniform load distribution across the tire face to prevent uneven wear.

Caster: forward or rearward tilt of steering spindle and is the amount the center line of the spindle is tilted from the vertical; measured in degrees.

■ Provides «trailing effect» for positive steering control.

■ Provides ease of steering and straight line tracking.

Toe-out: the difference in distance between the front of the wheels and the rear of the wheels; measured in inches or millimeters.

Specifications

Camber (α): $-1^\circ \pm 30'$

Camber is adjusted by changing the adjustment shim B

Caster (θ): $3^\circ \pm 30'$

Caster is adjusted by changing the length of the strut, connected between the steering spindle and chassis, with the adjuster C.

Toe out

To avoid uneven and premature tire wear, and to ensure positive and stable steering, front wheel toe-out must be set to the prescribed values and according to the adjustment procedure given in the workshop manual.

Have these checks performed by your Dealer or any other qualified mechanic equipped with accurate wheel alignment equipment.

TRANSMISSION RATIOS

Speed	Gearbox	Overall 4.1 : 1 Final drive
1st	2.875 : 1	11.787 : 1
2nd	1.720 : 1	7.052 : 1
3rd	1.228 : 1	5.027 : 1
4th	0.946 : 1	3.879 : 1
5th	0.780 : 1	3.198 : 1
REV.	3.000 : 1	12.300 : 1

