



Lamborghini

ISLERO S 400 GT

DRIVER'S HANDBOOK



THE LAMBORGHINI 400 GT 2 PLUS 2 ISLERO Automobili Lamborghini S.p.A. - (S.Agata Bolognese - Bologna)

DRIVING AND MAINTENANCE - Note

We advise a close study of this handbook and careful attention to driving maintenance instructions. Only in this way will the owner enjoy the full benefits of the technical innovations which went into the development and construction of this exceptional car.

All repairs and maintenance which the owner is unable or unwilling to undertake should be placed in the hands of the manufacturers or their authorized agents.

The services of our technical department are always at the disposition of owners requiring advice or instruction.

CAPACITY

- Cooling system (motor and radiator) . 4,2 US gallons (16 lts.)
- Fuel tank 21 US gallons (80 lts.)
- Oil (engine 16,5 pints - 9,5 Kos - filter 1,5 pts - 1 kg. -) 18 US pints (10,5 kos.)
- Differential 3 US pints (1,5 kos.)
- Steering box 0,6 US pints (0,3 kos.)
- Gearbox - Fill to plug level

GENERAL DATA

Chassis number: LAMBORGHINI 400 GT 2+2 +0000+ located forward on the right hand side near the distributor.

Engine number: +0000+ punched on the block between the cylinder heads.

PRINCIPAL CHARACTERISTICS

Engine

- Number of cylinder. 12
- Layout 60 "V"
- Bore 82 mm. (3,2")
- Stroke 62 mm. (2,4")
- Cubic capacity 3,929 cc.
- Compression ratio 10,5:1
- Maximum power at 6,500 revs. 350 CV DIN.

BODY

- Wheelbase 88,5 in. (mm. 2550)
- Overall length 178 in. (mm. 4525)
- Overall width 61 in. (mm. 1730)
- Overall height (with fuel) 49,5 in. (mm. 125)
- Ground clearance (with fuel). 5 in. (mm. 1250)



Track	} rear } front	54.5 in. (mm. 1380)
Turning circle		35 ft. 8 in. (m. 11,20)
Unladen weight		2,555 lb. (kg. 1240)
Maximum load 3,700 lb. front		1,740 lb. (kg. 790)
Maximum load 3,700 lb. rear		1,960 lb. (kg. 890)
Av. fuel consumption per 100 miles		7,5 US gallons (lt.17,5)
Av. oil consumption per 1000 miles		3,5 US pints (kg. 1)
Maximum speed		161 M.P.H. (km. 260/h)
Seating of capacity		2 plus 2
Tyres		GR 70- VR15
Tyres pressure	} front	- 28 lb/sq.in normal (kg/cm ² 2)
		- 34 lb/sq.in touring (kg/cm ² 2,4)
	} rear	- 31 lb/sq.in normal (kg/cm ² 2)
		- 37 lb/sq.in touring (kg/cm ² 2,6)
Electrical system		12 volt

GENERAL MAINTENANCE

Engine Oil Change

During the running-in phase the oil should be changed:

- 1) After the first 600 miles (1000 km).
- 2) Then every 3000 miles (5000 km).

Gearbox and differential oil changes

- 1) Change oil in gearbox and differential after 6000 miles (1000 km).
- 2) Then every 6000 miles (10.000 km).

Regular check list

Before driving check:

- 1) Radiator header tank
- 2) Engine oil level
- 3) Tyre pressures
- 4) Levels of brakes fluid supply tanks.

Fuel

Use only 98 - 100 octane petrol

Oil

Check dip-stick and top up if necessary. Always use the same oil.

Water

Fill to within 1 in (2-3 cm.) of the bottom of the filling neck.



Do not allow the level to drop more than 2 in. (5-6 cm.) below this point. Top up as required. To check level when the engine is hot, cover the cap with a cloth and open a quarter turn to allow pressure to escape. If it should be necessary to add a large quantity of water, pour in slowly with engine ticking over.

CONTROLS AND INSTRUMENTS

- 1) Windshield wiper
- 2) Speedometer
- 3) Oil pressure gauge
- 4) Revolution counter
- 5) Trafficator warning light
- 6) General operating switch (upper beam - lower beam - horns - trafficators - side lights)
- 7) Ignition key
- 8) Front bonnet opening lever
- 9) windshield wiper and water sprayer speed regulator
- 10) Water heating cock
- 11) Choke
- 12) Air inlet
- 13) Footrest
- 14) Clutch pedal
- 15) Brake pedal
- 16) Accelerator pedal
- 17) Upper beam warning light
- 18) Defroster control
- 19) Exterior lights switch
- 20) Parking lights warning light
- 21) Headlamps control
- 22) Left hand window control
- 23) Right hand window control
- 24) Ashtray
- 25) Cigar lighter
- 26) Heater fan switch
- 27) Dashboard lights switch
- 28) Foglamps switch
- 29) Alternator warning light
- 30) Rear window defroster switch
- 31) Clock
- 32) Anmeter
- 33) Rear-view mirror
- 34) Fuel level gauge
- 35) Water temperature gauge
- 36) Oil temperature gauge
- 37) Radiator fan warning light switch
- 38) Radiator fan warning light

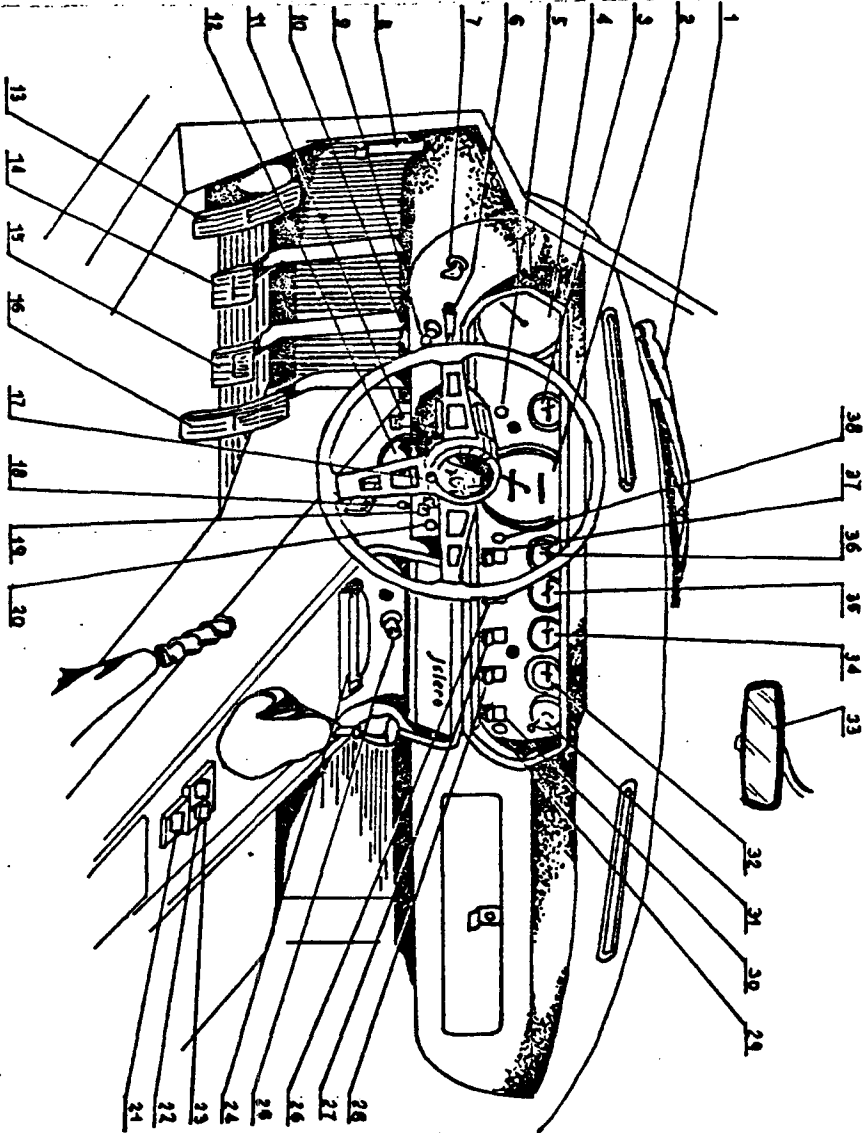


LAMBORGHINI
AUTO S.p.A.

Foglio

Data

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Tyres

Check every 1,000 miles (1500 km) for uneven wear and cuts.

TO START

From cold

The controls should be set as follows:

- gear lever in neutral.
- choke control towards the driver. As the engine warms up, it should be gradually moved back to rest.
- to start twist ignition switch in clockwise direction.
- depress clutch to reduce load on starter motor.
- do not press accelerator until the motor is running evenly.

WARNING

- do not accelerate a cold engine. Allow oil to circulate first or damage will be caused to moving parts and to the oil radiator.
- check that oil pressure at tick-over with the engine hot is not less than 15-20 lb/sq.in. (1-1,5 atm.).
- check that the alternator warning light cuts out at 900 revolutions.

Hot engine

- Leave choke lever at rest.
- gently depress the accelerator (do not pump the accelerator as this will activate the booster pumps which will give a rich mixture).

Failure to start can result from:

- flat battery.
- defective high tension circuit (dirty plug, damaged coils, pitted or incorrectly set contact breaker points).
- damaged electrical circuits.
- blocked idle jets in carburettors.
- petrol pump not working.

Running instructions

- do not exceed 6,500 revs. in any gear.
- watch the oil pressure gauge and switch off if the pressure fails to stay above 70 lb/sq.in. (5 atm) at maximum revs.
- do not race the engine until the oil temperature has reached 140° F. (60° C).

Winter conditions

Whenever temperatures below 32° F. (0°C) are anticipated anti-freeze should be added to the cooling system.

Ventilation

Air can be introduced into the interior of the car by which



opening the air inlet (No. 12 on the diagram). These controls are worked by the external air pressure. At slow speeds (town driving etc.) switch on the booster fan (No. 26 on the diagram).

Heating

To introduce warm air to the interior open the water heater control (No. 10 on the diagram) and adjust the side air vents (No. 12 on the diagram). At slow speed switch in the booster fan (No. 26 on the diagram).

Seat adjustment

Longitudinal adjustment is controlled by a lever under each seat. The angle of the seat back can be varied by depressing the lever to the side of the seat and leaning gently backwards.

Window controls

The side windows are electrically operated by the respective switches on central part of the control panel.

Push up to raise-down to lower. In case of malfunction of the electrical system the windows can be operated by the recessed handles on the doors.

The windscreen wiper

There is a double windscreen wiper. It has two speeds.

Bonnet release

The bonnet is hinged at the front and is released by pulling the lever below the instruments panel. The prop is located under the bonnet on the left hand side.

hand side. To close, return the prop to rest, lower the bonnet and allow to drop the last 8-10 in under its own weight.

Luggage compartment

The luggage compartment is opened from inside the car by a lever situated on the rear door pillar. The boot lid remains open automatically. To close, raise fully to release the locking device and allow to drop from 12-14 in (30 - 35 cm).

The compartment contains:

- the spare wheel under the floor. To remove it raise the mat, unscrew the locating nut and remove the cover.
- tool kit containing tools and jack.

A removable division at the back of the compartment, held in place by two butterfly nuts, conceals the battery and brake fluid supply tanks. The battery is held in place by two tie-reds.

Jacking procedure

Put the movable jack surface under the special chassis supports nearby the front and rear doors positions. Be sure that the



handbrake is firmly on.

Wheel removal

Unscrew the wheel nuts by tapping in the direction of travel with the lead-hammer supplied in the tool-kit.

Washing the car

Care should be taken in washing so as not to damage the paint work.

Do not wash when the paint work is hot or in strong sunlight. Use plenty of water and dry with a chamois cloth.

Do not use synthetic detergents.

Occasionally the car may be wax polished.

After washing the car should be driven and the brakes applied gently until they are dry.

LUBRIFICATION

Periodic maintenance

Every 300 miles (500 km)

1) check the oil level in the sump.

Every 3000 miles (5000 km).

2) change engine oil and filter.

3) check oil level in gearbox.

4) check oil level in the differential.

5) check oil level in steering box.

6) grease rear halfshafts.

7) grease transmission joints.

Every 6,000 miles (10000 km)

8) change gearbox oil

9) change differential oil.

10) change steering box oil.

Every 12,000 miles (10.000 km)

11) grease wheel hubs.

ENGINE

The oil is circulated under pressure by a pump geared to the crankshaft. It circulates through the filter into the radiator and then into the sump. The level of oil should be maintained between the marks on the dip-stick. Allow the car to stand before checking the oil level. Change the filter element every 3,000 miles (5.000 km). Check oil loss around the filter seal after replacing.

Oil pressure is controlled by a valve in the oil pump itself.



For satisfactory lubrication the pressure should be within the following limits:

REV.	OIL PRESSURE	
	Max	Min.
6,500	120-130 lb/sq.in. (8-9 atm.)	90-100 lb/sq.in. (6-7 atm.)
1,000		20-30 lb/sq.in. (1,5-2 atm.)

Draining the oil

- 1) run the engine for several minutes to warm the oil.
- 2) unscrew the drain plug on the sump.
- 3) dismantle the filter and change the element.

Addling new oil

The oil filter cap is at the forward end of the engine.

Recommended lubricants

Engine	: AGIP F.1 SUPERMOTOROIL 20W/50
Gearbox	: AGIP F.1 ROTRA SAE 90
Differential	: AGIP F.1 ROTRA MP SAE 90
Steering box	: AGIP F.1 ROTRA MP SAE 90
Wheel bushes and bearings	: AGIP F.1 GREASE 33 FD
Transmissions joints	: AGIP F.1 GR 3M

Warning:

topping up always use the same oil.

MAINTENANCE

Check regularly:

- 1) water level
- 2) engine oil
- 3) tyre pressure
- 4) brake fluid supply tanks
- 5) clutch fluid supply tank

Every 300 miles (500 km)

- 6) check water level
- 7) check tyre pressure

Every 3,000 miles (5000 km)

- 8) check electrolyte level in battery
- 9) check clutch pedal movement
- 10) check tension of alternator drive belt.
- 11) check brake pedal movement.
- 12) rotate tyres and check for wear.
- 13) clean and adjust contact breaker points.



Every 6,000 miles (10.000 km)

- 14) check the tension of the timing chains
- 15) check wheels for alignment and toe-in
- 16) adjust idling and butterfly valves
- 17) check brake pads for wear
- 18) Change plugs
- 19) clean air filters

Every 9,000 miles (15.000 km)

- 20) check valve clearances
- 21) check camber and toe-in

Every 12,000 miles (20.000 km)

- 22) check clutch pads for wear
- 23) check play on steering
- 24) clean petrol filter
- 25) check shock-absorbers and silentblocs.

ENGINE MAINTENANCE

The twin heads of the engine are in a 60° "V" formation. The valves are operated directly by a rocker arm to each valve stem with adjusting nuts for valve clearance settings.

Timing data

Inlet	Starts to open 32° before T.D.C. Starts to close 76° after T.D.C.
Exhaust	Starts to open 64° before T.D.C. Starts to close 32° after T.D.C.
Valve clearance (cold)	Inlet and Exhaust 010 in. (0,25 mm.)

Timing

The timing is correctly phased when:

- a) piston No. 1 is at T.D.C.
- b) the mark on each rocker arm is aligned with mark on the corresponding cam.

Timing is independent on each head. Each is governed by the crankshaft via reduction gearing and a triple chain. To reduce or increase tension on the chains it is necessary to unscrew and remove the nut on the top of the timing case, remove the cover and remove the locking pin; turn the eccentric in the desired direction and replace the locking pin in whichever hole is now aligned.



FUEL SYSTEM

Fuel pumps

Petrol is supplied to the carburettors by one Bendix 12 V pump with serial working.

The filters are located:

- 1) where the fuel pipes enter the tank
- 2) in the pumps
- 3) after the pumps

Fuel starvation can be caused by:

- 1) pumps defective or damaged
- 2) blocked filters.
- 3) leakage.

CARBURETTORS

The engine is served by 6 twin choke Webers type 40 DCOE with the following specification:

- Diffusor 30
- Centralisor. 45
- Rich jet 115
- Idle jet 45F9
- Adjusting screws 210
- Pump jet 35
- Pump stroke 0,3937 in. (10 mm.)
- Float chamber F3
- Float 8,5

Carburettors adjustment

The carburettors are adjusted before leaving the factory and normally require no attention.

Adjustments should be made only if the engine misses or stalls when ticking over. Before adjusting the carburettors first check that the plugs are working properly, that the carburettors floats are not punctured and that the idle jets are clean. Adjustment should be carried out by an authorised agent. It should be done in the following manner:

- 1) detach the connecting rods at the spring-leaded spherical joints from all the carburettors except the front one at the right (serving cylinders 1-2);
- 2) screw fully home the two screws on all the carburettors which control the idle jets. Then unscrew them back 3/4 of a turn.
- 3) remove the idle jets from all the carburettors previously disconnected.



- 4) start the engine and adjust the screw regulation the butterfly valve on the carburettor being tuned until the engine is running as slowly as it will on the two cylinders served by this carburettor;
- 5) then adjust the two idle jet adjusting screws until the engine is running as slowly as it will. Made sure that the two screws are equally adjusted;
- 6) slowly unscrew the butterfly valve adjuster screw (1/8th of a turn approximately) until the engine stalls;
- 7) take out the idle jets from carburettor n. 1 and replace those of carburettor 2 and so on;
- 8) repeat the operation for each carburettor leaving the idle jets only in the carburettor under adjustment;
- 9) when all the jets have been replaced the engine may tick-over too fast. In this case turn back all the butterfly valve adjusting screws by the same amount until the tick-over is normal;
- 10) this completes the adjustment. If backfiring occurs, it can be eliminated by gradually unscrewing the idle jet adjustment on the carburettor serving the cylinder which is back-firing.

Carburettor tuning with the "Motometer" synchronising equipment

This equipment simplifies the tuning process. Follow the above instructions as far as point 5. Place the instrument over the throat of the carburettor and adjust the depression valve until the float in the glass tube is in a central position. Then adjust the idle jet screws as described above under point 6. This method of adjustment obviously requires the air filter to be removed.

Air filters

Each carburettor has its own air filter, with a separate filter for each barrel. The filter is fitted in, its own container and is easily removed by undoing the three screws.

Cleaning the air filters

Every 6,000 miles (10,000 km.) remove air filters and wash in petrol. To dry use an air line and blow from the engine side of the filter outwards. Before replacing add a small amount of clean engine oil to the filters.

Warning

Never run the engine with the air filters removed.

IGNITION

Ignition is by battery via two distributors and two coils (one for each head). Both distributors are fitted with automatic advance mechanism.

**FIRING ORDER**

1 - 7 - 5 - 11 - 3 - 9 - 6 - 12 - 2 - 8 - 4 - 10.

Number 1 cylinder (from the driving seat) is the front cylinder on the right hand head. Numbering progresses down this head. Number 7 is the back cylinder on the left hand head and 12 is therefore the front left hand cylinder.

DISTRIBUTOR	Fixed advance	Maximum advance effected from
Type		19°+20°
S 85 C 12 V	19°	2,000 - 6,500 revs.

Anticlockwise

Contact Breaker gap

The maximum setting should be .012 - .0016 in. (mm. 0,35 - 0,05)
The contacts should be cleaned regularly and if necessary the faces should be levelled with a fine file.

MAINTENANCE ADJUSTMENT**Timing check**

The righthand distributor

- remove the distributor cap and check that the contact breaker cap is correct (.012 - .0016 in.) (mm. 0,35 - 0,05);
- rotate the flywheel until the timing mark "D" is aligned with the mark on the block; in this position the points should be about to open. The rotor arm should now be serving No. 1 cylinder.

The lefthand distributor

Rotate the flywheel 60° in the direction of drive from the above position so that the timing mark "S" is aligned with the mark on the block; Repeat the above operation. The rotor arm should now be serving No. 7 cylinder.

IGNITION

The ignition is advanced or retarded in the following way:

- slacken the nuts on the distributor flange;
- turn the distributor clockwise to advance and anti-clockwise to retard;
- tighten the nuts making sure the distributor does not move.

Timing after the engine has been stripped down

Remove the distributor cap and turn the cam by hand until the rotor arm is touching the contact for the No. 1 cylinder. Check



that the points are about to open. If the timing drive mechanism has not been moved, drop the distributor into its sleeve locating the fixing bolts in the distributor flange. Screw the locking nuts hand tight. Adjust the timing as indicated above and tighten the nuts fully.

Spark plugs

Every 3,000 miles (5,000 km) clean the plugs and check the gap setting (.014 in. - 0,35 mm.); every 6,000 miles (10.000 km) replace all spark plugs. The plugs recommended are Bosch W 235 P.21 or other plugs of similar specification.

The cooling system

The circuit is composed of a water pump, a thermostatic valve, an expansion tank, radiator and fans.

Water pump

Is a centrifugal pump driven by the timing chain. Every 12,000 miles (20,000 km) check the pump for leakage.

Thermostat

The valve is located in the return circuit and is set to allow the temperature of water in the block to remain at the optimum level.

Expansion tank

Provides expansion capacity for the system and an easy filling point. It contains the thermostatic contacts for the water temperature gauge and the warning light.

Radiator

Every 300 miles (500 km) check the level and if necessary add water. If there is a noticeable loss check the tap on the expansion tank. The circuit functions at a pressure of 15 lb/sq. in. (1,05 kg/cm²); if it is necessary to check the water level when the engine is hot, cover the cap with a cloth and open about a 1/4 turn and allow any pressure to escape before removing completely.

Watch for build up of calcium deposits in the circuit and if necessary flush the system with a de-scaling additive:

- add the correct mixture of de-scaler and water to the system
- run the engine for about 10 minutes
- drain
- fill with fresh water and run engine briefly
- drain again
- fill with fresh water.



Cooling fans

At the rear of the radiator there are two fans powered by independent electric motors. One is automatically governed by the thermostatic control to the water temperature gauge. The second is controlled by the switch on the instrument panel.

Warning

When the air flow through the radiator is minimal (in town or queues) it is advisable to switch in the second fan without waiting for the water temperature warning light to come on.

The gearbox

The gear-box has five forward gears and reverse: all synchromesh. The ratios are as follows:

First	1:2,52
Second	1:1,735
Third	1:1,225
Fourth	1:1
fifth	1:0,815
Reverse	1:2,765

Every 3,000 miles (5,000 km) check that the oil in the gearbox is up to the level of the filling plug.

Every 6,000 miles (10,000 km) replace the oil.

The clutch

The clutch is a single dry plate operated hydraulically. The system comprises of a hydraulic pump activated by the clutch pedal, a clutch fluid supply tank and a thrust plate bears on the pressure plate.

Clutch travel

- the clutch pedal should have a free movement of 0,4 - 0,6 in. (10-15 mm.)
- every 3,000 (5,000 km) re-set this movement on the adjusting nut on the side of the bell housing.

Propellor shaft

Every 3,000 miles (5,000 km) grease the couplings with AGIP F.1 GR SM.

Every 6,000 miles (10,000 km) carry out a careful check for wear on the drive joints and couplings.

The differential

The differential is attached through spring couplings to the chassis. The ratio normally supplied is 10/45. Ratio of 11/45 can be supplied on request.

**Final drive ratios**

Gear	10/45 Differential
First	1:11,66
Second	1: 7,86
Third	1: 5,51
Fourth	1: 4,49
Fifth	1: 3,66
Reverse	1:12,45

Every 3,000 miles (5,000 km) check the oil level via the plug on the side of the housing. If necessary refill to plug level.

Front suspension

Is independent with swinging arms, coil springs, telescopic shock absorbers and torsion bars.

Rear suspension

Is independent with swinging arms and co-axial coil springs and telescopic shock absorbers. The arms are manufactured from specially milled steel.

Checks

Every 12,000 miles (20,000 km) check the rubber absorbers.
Every 15,000 miles (25,000 km) check the working of the telescopic shock absorbers.

Steering mechanism

The steering box is of the worm and cam type .
Every 3,000 miles (5,000 km) check the oil level.
Every 12,000 miles (20,000 km) check the play on the steering box and adjust.
All the joints on the steering are self lubricating. The minimum radius lock to is 18 ft. 9 in. (mt. 5,70).

Front wheels

Every 9,000 miles (15,000 km) check camber and toe-in to ensure good road holding and even tyre wear.

Method

The car should carry a normal fuel load. The correct instruments for measuring camber and toe-in are essential.

Camber	0°	
Toe-in	0,76 in. (mm. 2)	front wheels
Camber	- 30'	
Toe-in	-0,76+0,78 in. (mm. 2-3)	rear wheels
Caster	2° C	frontally



Toe-in

- a) set the front wheels straight ahead
- b) check that the mark on the steering box is aligned with the mark on the steering arm
- c) turn the adjustment on the track rod the required amount.

Camber

- a) jack up the car
- b) take off the wheels
- c) slacken off the four nuts which lock the upper steering joint to the upper steering rod and adjust to the appropriate hole. Tighten the locking nuts and check the camber again.

The brakes

- The braking system consists of:
- hydraulic disc brakes on all wheels
- two separate circuits for front and rear brakes
- two servo vacuum systems
- mechanical hand brake to rear wheels

The hydraulic system

Every 3,000 miles (5,000 km) check the oil in the fluid supply tanks. If the level shows a noticeable drop add more fluid and check all joints and pipes for leakage.

Use AGIP F.1 Brake fluid super HD.

Do not use inferior fluid or fluid from badly sealed cans. Take care to allow no impurities (water) to enter the system when filling since this can cause corrosion.

Bleeding the brakes

For maximum efficiency there must be no air in the system. The presence of air is indicated by a feeling of sponginess when the pedal is pressed.

Method

The job requires two people, a glass bottle with a book to hang over the brake caliper and a length of plastic tube with an internal diameter of 1/4 in. (6 mm;).

- 1) check that the brake fluid supply tanks are full, if not replenish. During the operation check that the level does not drop more than a quarter of the way down the tanks. Keep the caps screwed on.

- 2) Front calipers

Slip the end of the plastic pipe over the bleeding screw and put the other end into the bottle. The other person should now press the brake pedal and keep it pressed. The bleeding screw should now be undone, this will release a jet of air and fluid into the bottle. The screw should be tightened before the brake pedal is released. Then the pedal is released and pressed down again. Repeat this sequence until none



of the fluid expelled contains air bubbles.

- 3) Repeat operation for rear calipers.
- 4) When bleeding is completed, top up the fluid supply tanks.
- 5) Check circuit for leaks and road rest the brakes.
- 6) If necessary repeat the bleeding operation until all sponginess has gone from the pedal.

The brake pedal should have a free movement of 1/4 in. (5-6 mm) before the servo units come into operation. If necessary there is adjustment on the linkage between the brake pedal and the servo units to obtain the correct free movement.

Brake friction pads

The correct pads are:

- front brakes Girling ferodo 2431
- rear brakes Girling ferodo 2431

They should be replaced when they are down to a thickness of 3/16 in. (4 mm.). All pads should be changed together.

Warning

If the wear on the pads is uneven, the brakes should be checked by an authorised agent. If braking becomes irregular, bleed the system. If this does not cure the problem, check the pads and rubber seal on the cylinders.

Wheels

The wheels are supplied correctly balanced. Check occasionally that the wheels weights are in place. Unbalanced wheels not only contribute to tyre wear, but also affect the stability of the car. Every 12,000 miles (20,000 km) grease the wheel hubs.

Tyres

The recommended tyres and pressure are:

TYRES	Rear		Front		
	kg/cmq.	lbs/sq.in.	kg/cmq.	lbs/sq.in.	
PIRELLI cinturato	2.0	28.4	2.2	31.3	normal running
HS GR/70 VR/15	2.4	34.1	2.6	37	fast touring

Correct pressure permits maximum contact between tread and road giving regular wear. Too high pressure gives a hard ride, the tread wears faster in the middle shortening the life of the tyre. Too low pressure causes the tyre to overheat leading to distortion and fracture of the tyre cords. Moderate speed should be observed when new tyres are fitted.



8. SEAT BELT STRONG POINTS

- A - Internal seat belt
- B - Seat belt strong point bolt*
- C - External 2 points seat belt
- D - Seat belt strong point bolt
- E - Seat belt strong point bolt

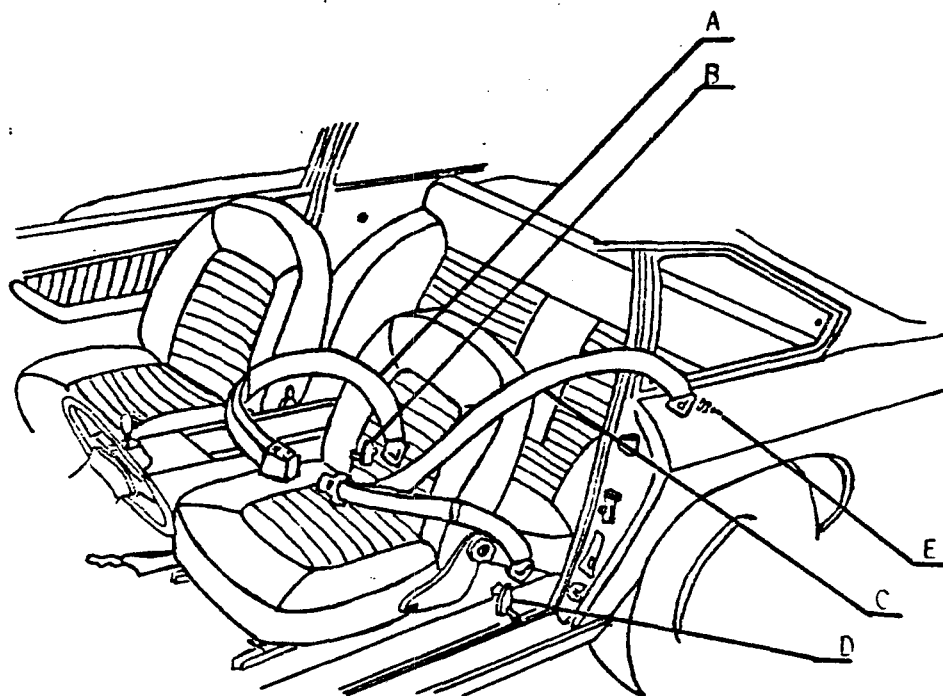
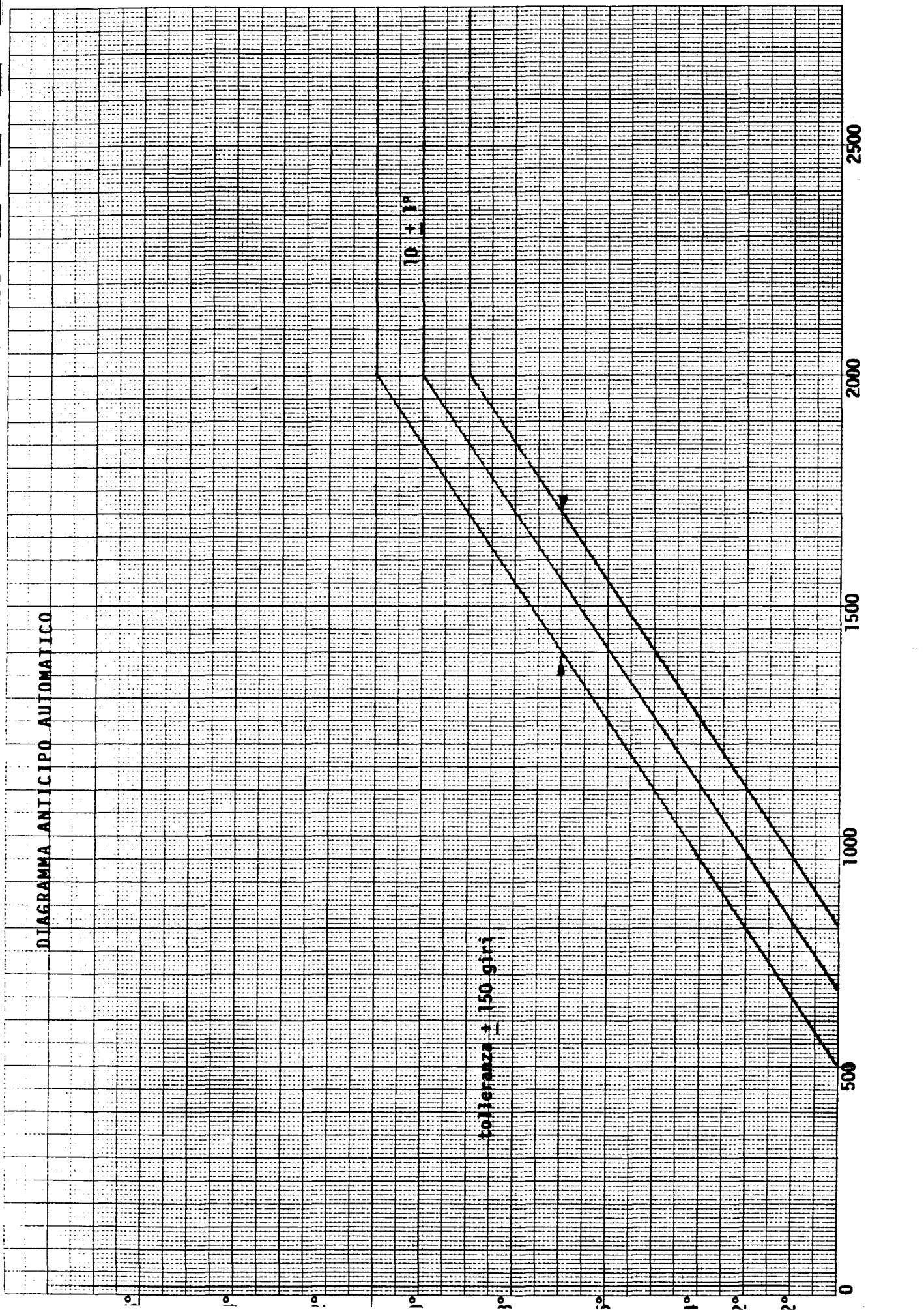


DIAGRAMMA ANIICIPO AUTOMATICO



10 ± 1%

tolleranza ± 150 giri

2500

2000

1500

1000

500

0



Lamborghini
Automobili s.p.a.

Lamborghini Isolero

400 Gt 2+2

- Front brake caliper clamping
- No ventilated disc pads
- Self ventilated disc pads
- Brake pads (U.S.A. type)

kgm 10

FREN - DO/FER/DS5SED

GIRLING FER 2426FFG

GIRLING FER 2426FFG



Lamborghini
Automobili s.p.a.

Lamborghini Isolero

400 Gt 2+2

Carburatation

- Choke	30 mm
- Auxiliary Venturi	4.50 mm
- Main jet	1,20 mm
- idling jet	F 9 / 0.45 mm
- Pump jet	0,35 mm
- Pump course	9 mm
- Starting jet	F 5 / 0,60 mm
- Emulsioning tubes	F 3
- Air corrector jets	2,10 mm
- Needle valve	1,75 mm
- Carburettor exhaust valve	0.70 mm
- Float	26 gr
- Float level	8.5 mm

Clutch

- Cylinder course	35 mm
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Torque settings:

- Main bearing stud	∅ 8	kgm	1,8
- " " "	∅ 12	kgm	3,5
- Cylinder head stud		kgm	2,5
- " " nuts		kgm	9
- Main bearing nuts	∅ 8	kgm	2,8
- " " "	∅ 12	kgm	9
- Connecting rod bearing bolts		kgm	6
- Crankchaft flywheel bolts		kgm	2,8
- Clutch plate bolts		kgm	2,8
- Camshaft support nuts		kgm	2,8
- Inlet and exhaust manifold bolts		kgm	3
- Front pulley bolts		kgm	3,5
- Crown and carrier bolts		kgm	7
- Out put shaft nut		kgm	14
- Wheel nuts		kgm	13
- " hub nuts		kgm	34
- Lower swivel pin bolts		kgm	15
- Rear axle shaft		kgm	25
- Drive shaft clamping		kgm	3
- Rear brake and handbrake caliper clamping		kgm	10



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400 Gt 2+2

Technical datas

Total displacemnt	3929 cm ³
Cylinder diameter	82 mm
Ø cylinders 1° oversize	82,2 mm
Ø cylinders 2° oversize	82,4 mm
Min. clearance between piston and cylinder	0,075 mm
Max. " " " " "	0,103 mm
Ø Crankshaft main bearing	62,979 mm
Ø " conn. rod	43,604 mm
Ø " main bearing 1° oversize	62,725 mm
Ø " conn. rod 1° oversize	43,354 mm
Ø " main bearing 2° oversize	62,471 mm
Ø " conn. rod 2° oversize	43,086 mm
Min. clearance between bearing & drive shaft	0,04 mm
End float clearance	0,15 mm
Clearance between conn. rod bearing & crankshaft	0,15 mm
" " " " when fitted together	0,10 mm
" of intake guide valve	0,035 mm
" " exhaust " "	0,055 mm
Adjustment clearance	0,25 mm
cylinders numeration	6 7 5 8 4 9 3 10 2 11 1 12 ant.
Firing order	1-7-5-11-3-9- 6-12-2-8-4-10
Degree of intake valve before P.M.S.	32°
" " " " after P.M.I.	76°
" " " " before P.M.I.	64°
" " " " after P.M.S.	32°
Ignition timing	18°
Automatic ignition advance	20°
Contact point gap	0,35/0,40 mm
Cam angle	48/50°
Spark plugs	Bosch 235 P 21
Ø and rack	14 x 1,25