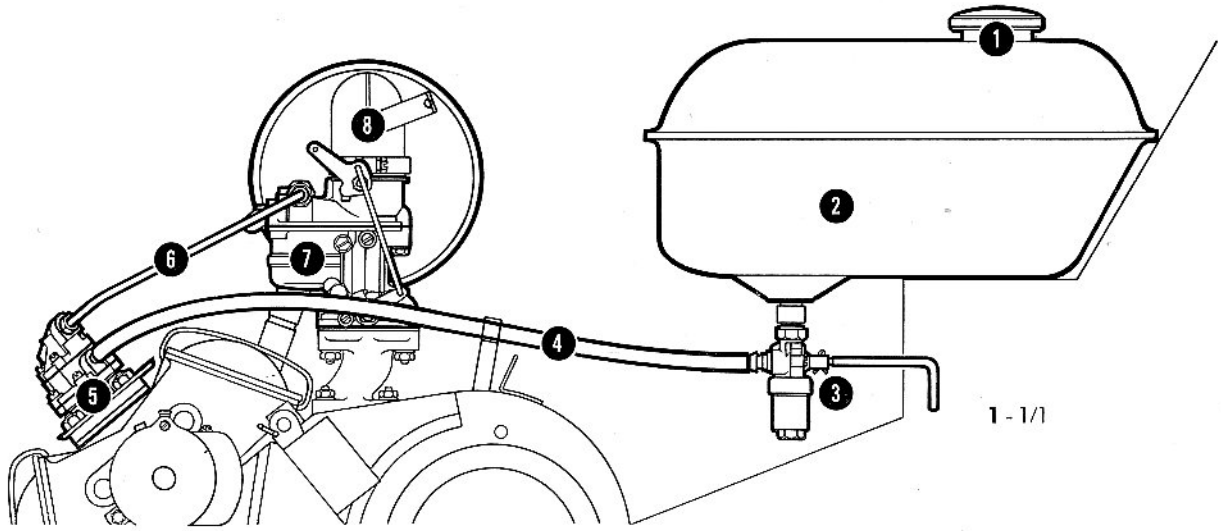
Fuel and Exhaust System

Main Group FE

Fuel and exhaust system

Fuel System

Exhaust System



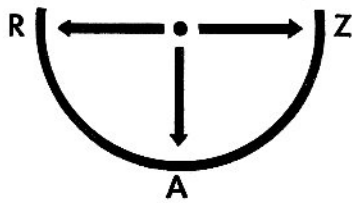
1 - 1/1

1 – Filler Cap
2 – Fuel Tank
3 – Fuel Cock with Rods
4 – Fuel Hose
5 – Fuel Pump
6 – Fuel Pipe
7 – Carburetor
8 – Air Filter

The fuel system of the Lloyd 600 comprises the fuel tank with filler cap, fuel cock with rods, fuel hose, fuel pump with pipe and carburetor with air filter.

The fuel tank is located below the engine hood at the dashboard, its capacity being 25 liter (5.5 gall.) (LP/LS 600 and Alexander) or 31 litres (6.823 gall.) (LT/LTK 600).

The fuel cock is screwed onto a welded-on nozzle at the discharge opening of the fuel tank. Three different switch positions of the fuel cock: "Closed", "Open" and "Reserve" may be selected from the driver's seat by means of a control rod.



1 - 1/2

The fuel reserve is about 3 litres (0.66 gall.) for the LP/LS 600 and Alexander and about 5 litres (1.1 gall.) for the LP/LTK.

At first, the fuel flows to the filter cup disposed at the bottom of the fuel cock and is then passed through the screwed-in fine-mesh basket strainer from without to within. Foreign matters (including water) or impurities which may exist in the fuel, even in the case of a careful drawing off or refuelling, and which may cause clogging of the carburetor nozzles, are accumulated in the strainer where they may be easily removed after taking off the filter cup.

Description of the fuel system

From the fuel cock fuel is passed through the fuel hose to the fuel pump which delivers it to the carburetor.

The servicing of a part of the fuel system described in the following section: fuel tank, fuel cock is confined to the cleaning of the filter cup and of the basket strainer at regular intervals during the routine service work specified in the Customer's Service Booklet.

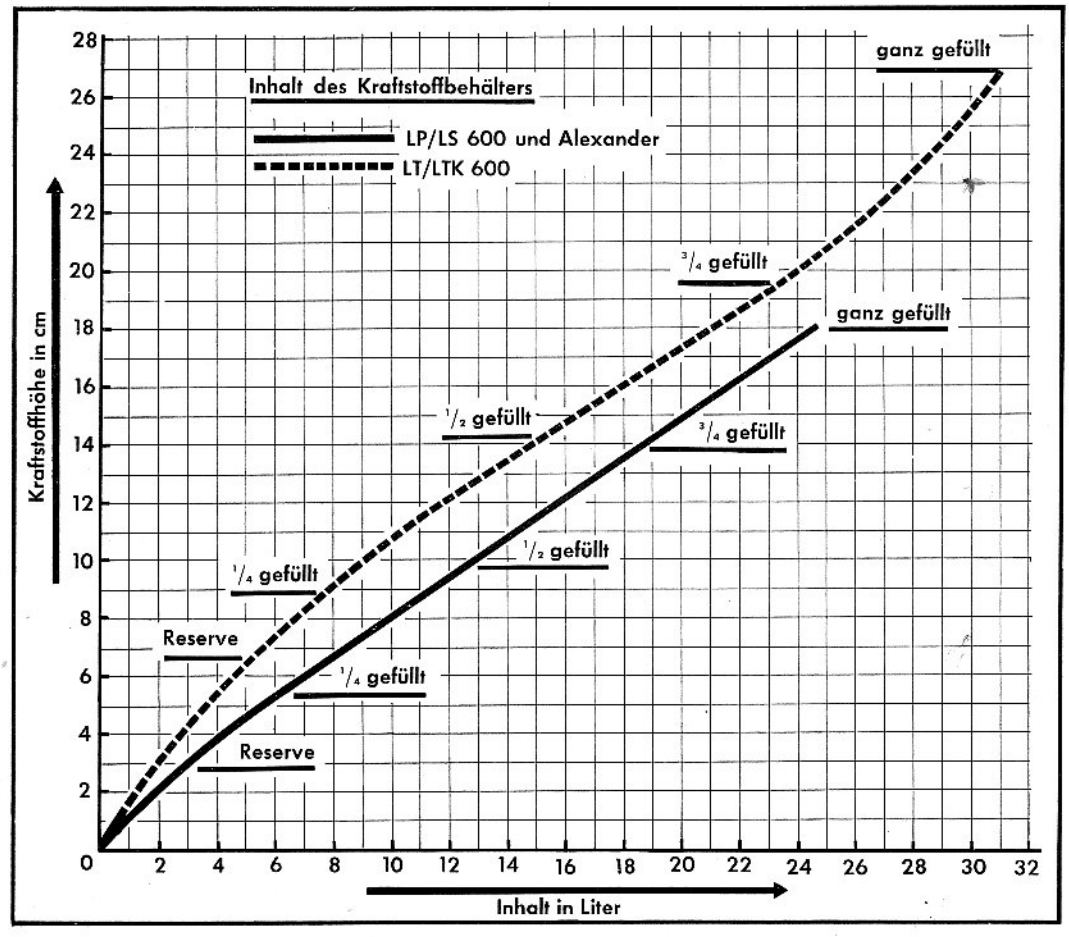
The remaining part of the fuel system: fuel pump and carburetor with air filter is treated in detail in the Main-Group M Engine, Sub-Groups 6, 5 and 4.

Measuring the fuel tankage: The three-way cock is a reliable safeguarding against unexpected emptying of the fuel tank, provided this cock is properly operated (moving the fuel cock regularly back to position "Open"). Therefore, our serial cars are not equipped with a tank measuring gauge.

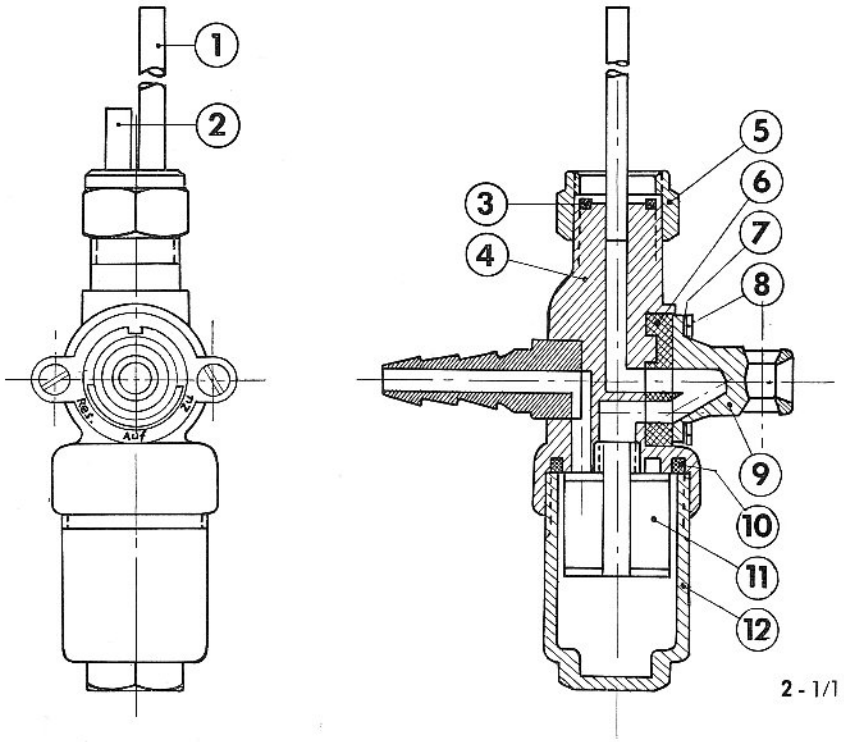
A measuring stick deliverable by LLOYD as accessory part (universally usable for 25- and 31-liter tanks) enables the fuel remaining in the fuel tank to be measured in a simple manner with the stationary car.

On request, a fuel gauge may be installed later on. For LLOYD LP/LS 600 and Alexander appropriate measuring devices can be had with Accessory Dealers; they enable the fuel in the tank to be supervised with the car running.

Kraftstoffhöhe in cm	= Height of fuel in cm	½ gefüllt	= ½ filled
Inhalt des Kraftstoffbehälters	= Capacity of fuel tank	¼ gefüllt	= ¼ filled
ganz gefüllt	= entirely filled	Reserve	= reserve
¾ gefüllt	= ¾ filled	Inhalt in Litern	= Capacity in litres



1 - 2/1



2 - 1/1

1 – Small outlet pipe "Reserve"
2 – Small outlet pipe "Open"
3 – Seal 14.5 x 10.5 x 1.2
4 – Fuel cock
5 – Screw cap with L. H. and R. H. threads
6 – Four-hole cork
7 – Seal for spring
8 – Spring gasket
9 – Cock plug
10 – Joint for filter cup
11 – Basket strainer
12 – Filter cup

Cleaning the Basket Strainer

1. Close fuel cock.

2. Unscrew filter cup with box wrench SW 17.

3. Screw out basket strainer by hand.

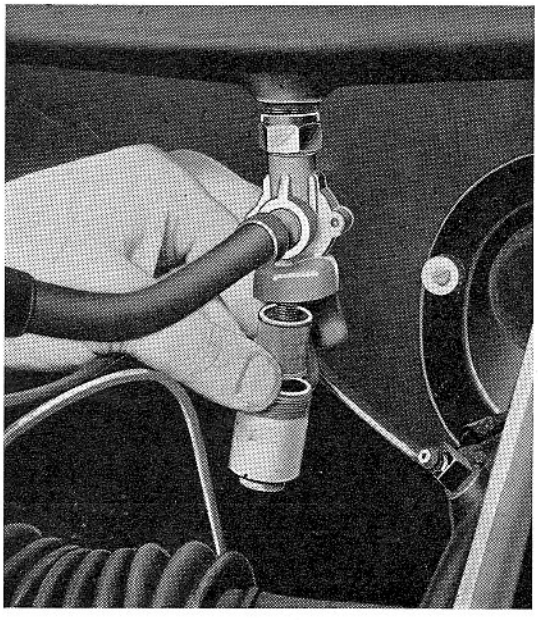
4. Empty filter cup; wash out basket strainer in gasoline and blow out both parts with compressed air.

Before reinstallation check by temporarily switching over the fuel cock to "Reserve" and "Open" whether the fuel admission at both small outlet pipes is free inside fuel tank.

Do not damage basket strainer by tightening it too strongly! Tighten filter cup only moderately and never tighten too excessively.

Previously moisten threading on the filter cup with graphited oil to prevent seizing of the threading.

After reassembly, check fuel cock for tightness.



2 - 1/2

Removal and Reinstallation of the Fuel Cock

Removal

1. Pull off fuel hose from pump nozzle and drain fuel tank.

2. Remove cotter pin between control rod and cock plug; take off control rod.

3. Loosen screw cap SW 19 between fuel cock and tank by turning to the left and remove fuel cock.
   Remove seal.

4. Thoroughly clean fuel tank.

Reinstallation

In reinstalling proceed in the reverse order, the following points have to be taken into account:

1. Before screwing into place, moisten threads on the tank nozzle, on the cock neck and inside nut with graphited oil. Screwing into place in dry condition means risk of seizing!

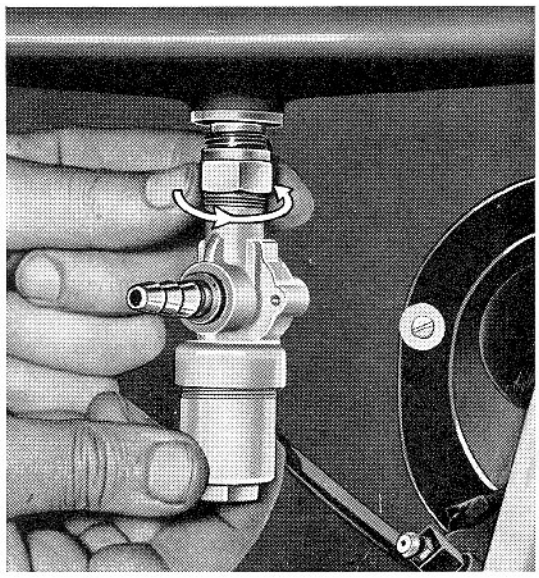
2. The interposed seal should be made of red hard fibre, its dimensions being 10.5 ⌀ x 14.5 ⌀ x 1.2. Be sure seal is correctly placed on the centering face of the cock neck. Do not use other than new original seals!

3. The screw cap nut has L. H. and R. H. threads. In reinstalling the fuel cock, screw the nut **evenly** on both threadings (on the cock and on the tank nozzle). In case of failure of the nut being screwed on evenly it may occur that the nut is already fully screwed into place at the one side, whereas this is not the case at the other side. In such a case, the fuel cock will have no fast seat. If someone being unaware of the cause of the bad seat intends to tighten the nut with violent force, this will inevitably cause damage to the thread.

A proper installation of the fuel cock should be effected in the following manner:

Put screw cap to the fuel cock by giving cap ½ turn or 1 turn (maximum).

Attention! L. H. thread! Then put fuel cock with nut to the tank nozzle and continue turning in the same direction. In doing so, give care that the nut on the tank nozzle will grip **immediately.** For this purpose put it to the nozzle in the proper way. Otherwise the aforementioned effect will happen (Fig. 2 - 2/1).



2 - 2/1

4. Tighten nut only moderately. After a long time retighten slightly connection.

5. After installation of the cock check connection for tightness.

6. Reinstall control rod properly. Be sure that the grip shows downwards when set to "Open"!

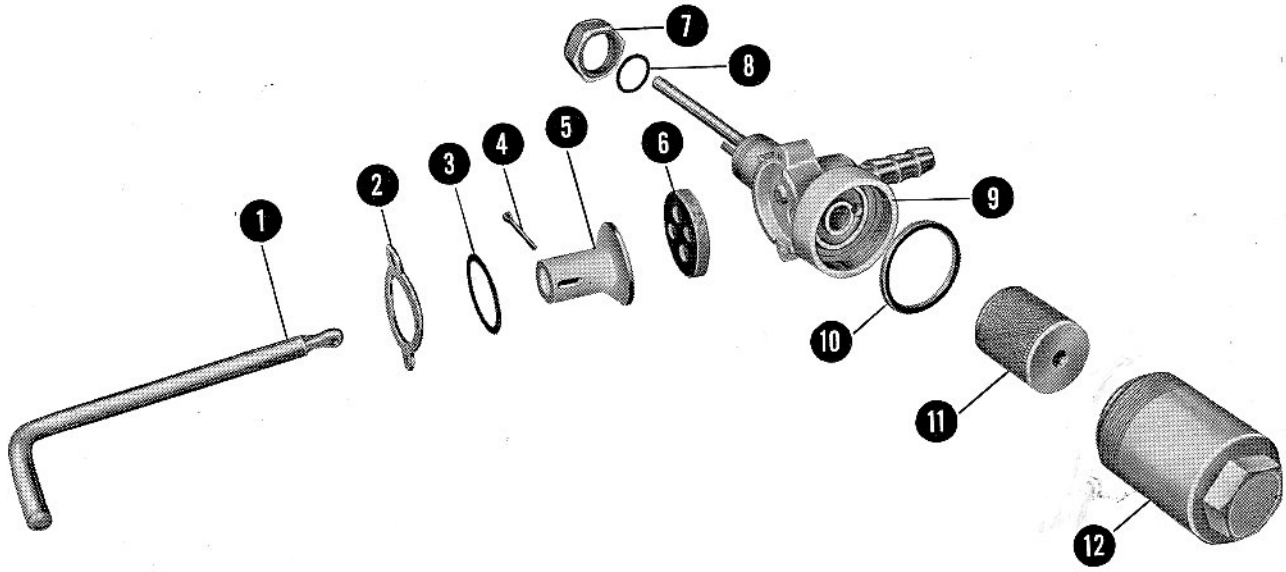
Attention. Fuel cocks and fuel hoses of the models LP/LS 600/Alexander and LT/LTK 600 differ from each other and must not be confounded.

	LP/LS 600/Alexander	LT/LTK
Length of outflow pipe for reserve	62 mm (2.44")	77 mm (3.03")
Length of control rod	80 mm (3.15")	190 mm (7.48")
Position of nozzle for fuel hose (cock fitted)	front	at the side
Length of fuel hose	660 mm (25.98")	710 mm ((27.59")

Disassembling and Reassembling Fuel Cock

Disassembling

1. Dismantle fuel cock; remove screw cap and seal.
2. Unscrew spring gasket; take off cock plug. (Seal between spring gasket and cock plug is now free!)
3. Remove four-hole cork joint.
4. Unscrew filter cup and basket strainer; remove seal.
5. Clean and check components. Replace seals.



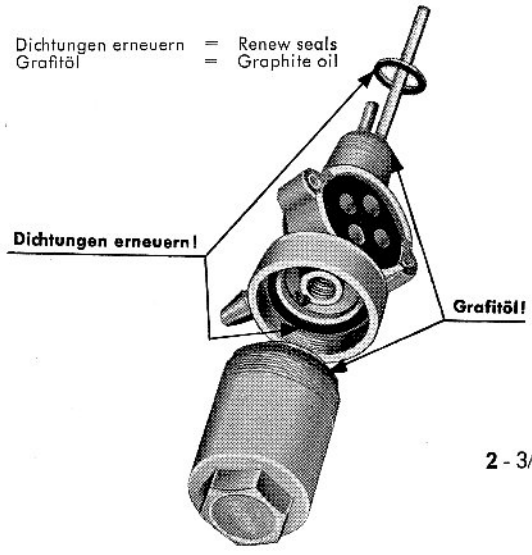
2 - 3/1

1 – Control rod
2 – Spring gasket
3 – Seal for spring gasket
4 – Cotter pin
5 – Cock plug
6 – 4-hole cork
7 – Screw cap
8 – Seal 14.5 x 10.5 x 1.2
9 – Fuel cock
10 – Gasket for filter cup
11 – Basket strainer
12 – Filter cup

Reassembling

Reassembling must be done in the reverse order by taking into account the following points:

1. Insert four-hole cork joint with its graphited side outwards, that is: towards cock plug.
2. Lubricate well with graphite oil threadings on the cock neck, filter cup, and in the cap screw before reassembling (Fig. 2 - 3/2).
3. Do not forget seal between cock plug and spring gasket. Screw on spring gasket so that the stop nose is above, the inscriptions "Reserve", "Open" and "Closed" showing downward.



2 - 3/2

Removal and Reinstallation of Fuel Tank

The fuel tanks of the LP and LT models differ from each other as far as their form, size (capacity) and type of fastening to the frame dashboard is concerned.

LP/LS 600 and Alexander

Removal

1. Close fuel cock.

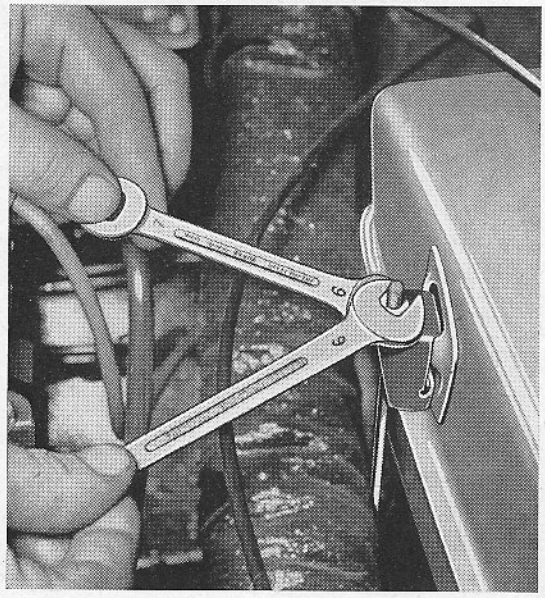
2. Pull bonnet supporting stick out of its holding device fastened to the fuel tank. Swing back bonnet cover. (Put cleaning rag, as cushion between roof and bonnet in order to prevent damage to the windscreen wiper-tandem bearings and to the bonnet cover itself!).

3. Bend open sheet-metal clips at the fuel tank and remove cables for starter, defroster, heating and speedometer spiral. Unhook cable for heating from exhaust heating manifold.

4. Pull fuel hose from fuel cock.

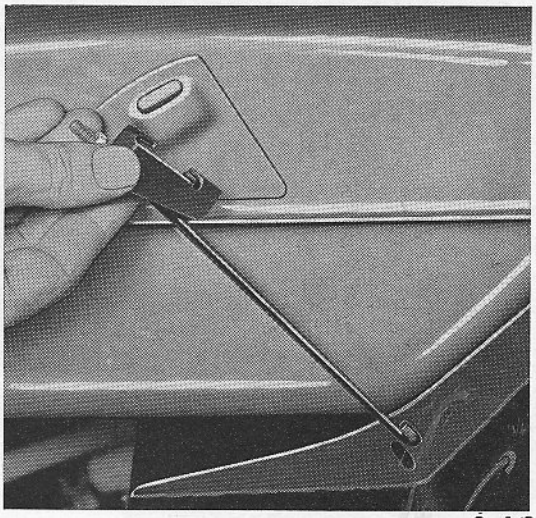
5. Remove cotter pin between cock plug and control rod. Remove control rod from within the car.

6. On both sides unscrew lock and fastening nuts SW 9 from the tension hooks (Fig. 3 - 1/1).



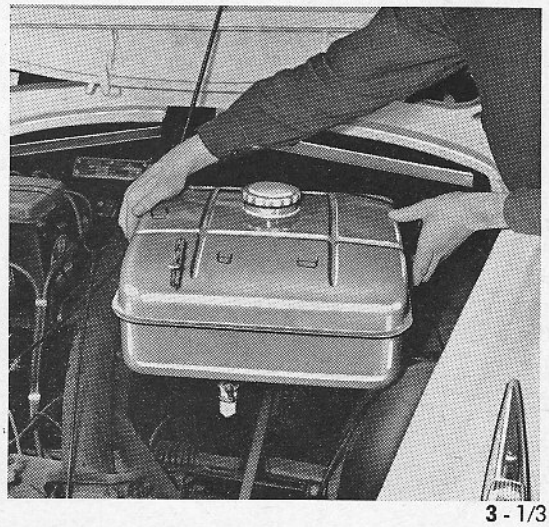
3 - 1/1

7. Unhook holding hook at top and tensioning hook at bottom (Fig. 3 - 1/2).



3 - 1/2

8. Lift out fuel tank (Fig. 3 - 1/3).



3 - 1/3

9. Remove filler cap; drain fuel.

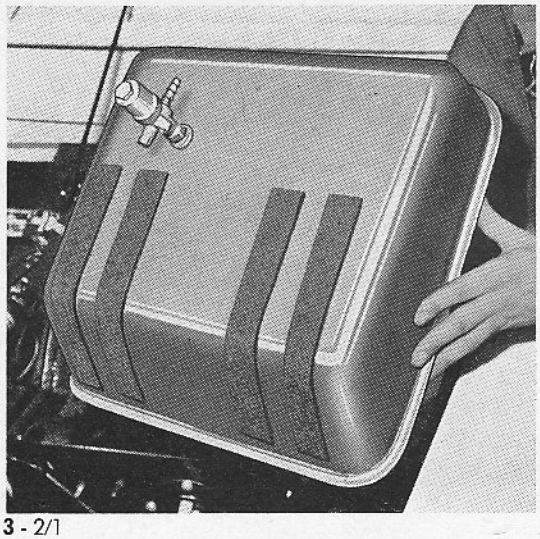
10. Unscrew fuel cock.

11. Flush fuel tank thoroughly with fuel and blow out with compressed air.

Reinstallation

The installation should be made inversely by taking into account the following points:

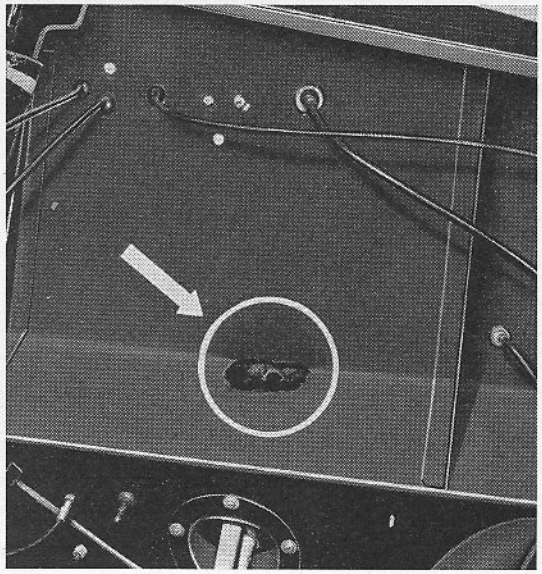
1. Replace damaged or remove detached felt pads on fuel tank by new ones or glue them again on the tank (Fig. 3 - 2/1).



3 - 2/1

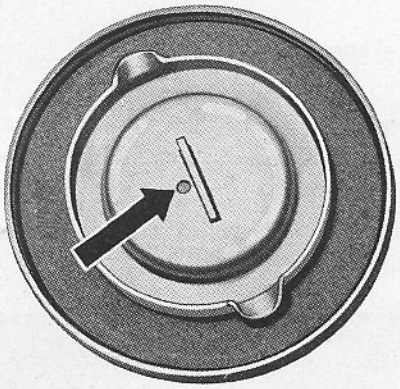
2. Install fuel cock according to instructions. Use a new seal! For more details see under section "Fuel cock".

3. The special screw M 6 (serving to fasten the end plate for steering column and shifting) secured to the dashboard below fuel tank is made tight with Terokal-luting material to prevent water leakage. Do not remove luting material! (Fig. 3 - 2/3).



3 - 2/2

4. Check whether the vent hole in the filler cap is opened. Filler caps for LP/LS and Alexander fuel tanks have indirect venting. Venting hole in the inner part of the cap. Replace damaged or hardened cork seals by new ones (Fig. 3 - 2/3).

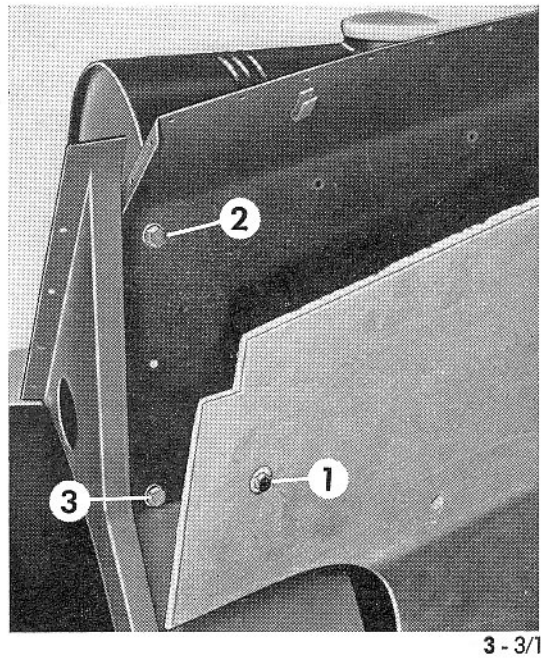


3 - 2/3

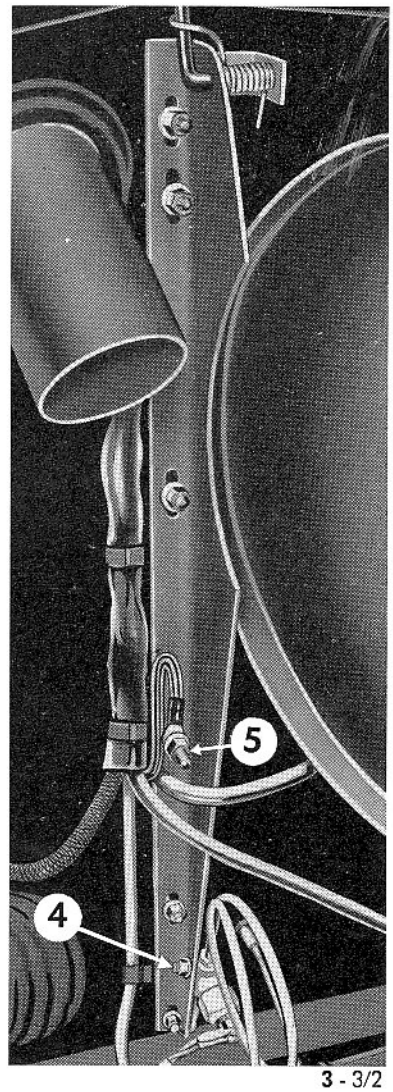
LT/LTK 600

Removal

1. Close fuel cock.
2. Unhook support for bonnet cover. Swing back bonnet cover.
   (Put a cleaning rag as a cushion between bonnet decoration and roof to prevent damage to the lacquer finish!)
3. Pull fuel hose off fuel cock.
4. Remove cotter pin fitted between fuel cock and control rod from within the car.
5. Dismantle fuel tank.
   a) Unscrew holding angle on the right side. Unscrew 3 hex. bolts SW 10 from the interior of the car. First screw out center bolt (1) which simultaneously serves to fasten the front wall to the dashboard. Then unscrew the free bolts (2) and (3) after bending back the covering (Fig. 3 - 3/1).
   b) Unscrew (long) holding angle on the left side. Remove defroster hose from pipe nozzle on the dashboard, the brake line distributor (4) (with brake line switch) fastened to the lower part of the holding angle and loosen the 6 hex. bolts SW 10 (Fig. 3 - 3/2).
   c) Lift out fuel tank. In cars of the most recent types there are screwed to the center bolt (5) of the holding angle at an eye ring three mass cables (head light, instruments) which should never be forgotten in reinstalling the fuel tank!
6. Remove filler cap and drain fuel.
7. Screw off fuel cock.
8. Flush tank thoroughly with fuel and blow out with compressed air.



3 - 3/1



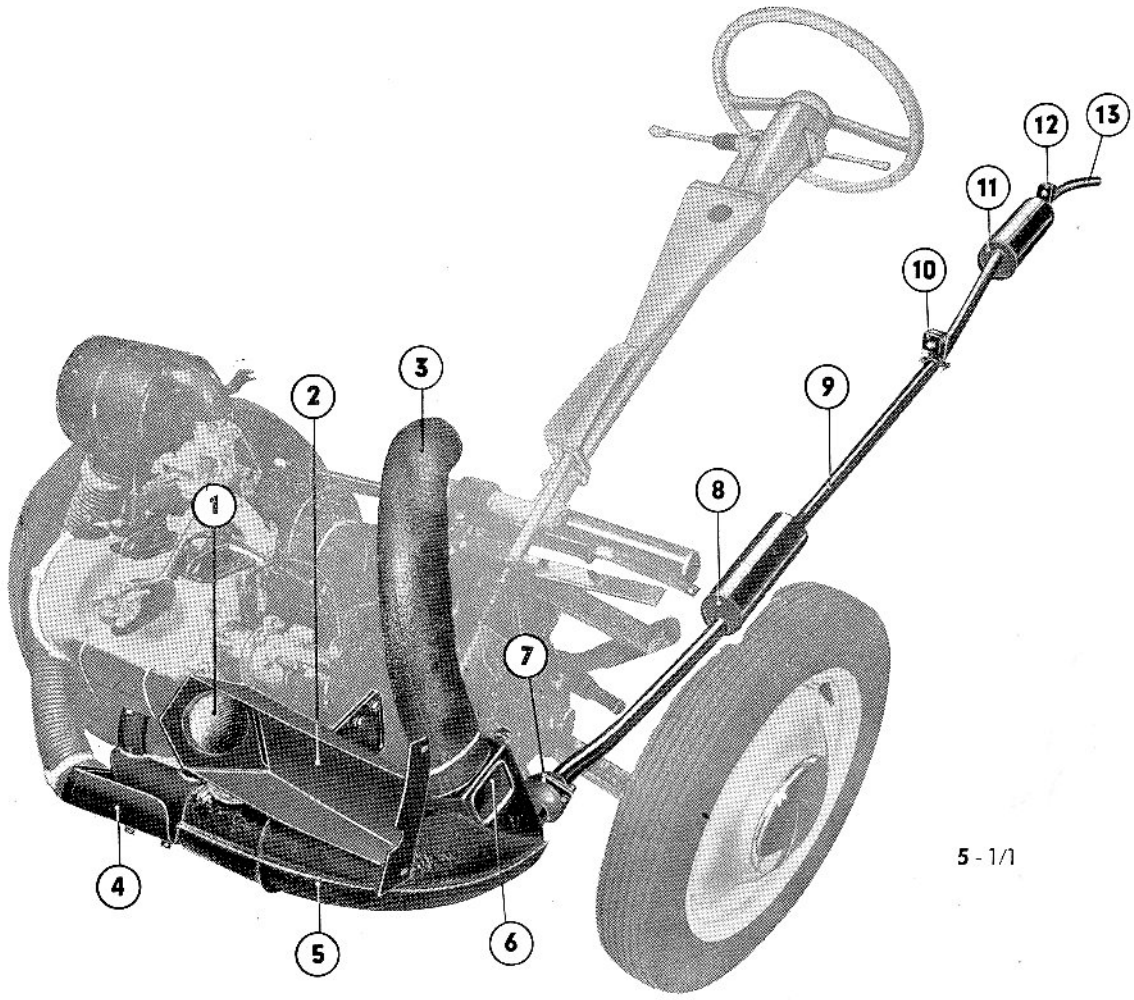
3 - 3/2

Reinstallation

The installation is to be effected in the reverse order by taking account of the following points:

1. Install fuel cock according to instructions. (See Sub-Group "Fuel Cock").
2. Check vent hole in the filler cap for free opening.
3. Replace damaged or hardened cork seals by new ones.
4. Give care that all nuts serving to fasten the long holding angle can be freely turned (oil bolt threads and threads of the nuts!) in order to prevent the bolts from turning – the bolt heads are covered by the front wall covering so that they cannot be held in a wrench.

Exhaust System of LS 600



5 - 1/1

1 – Heating hose (short) for air intake
2 – Air intake
3 – Heating hose (long)
4 – Suction scoop
5 – Exhaust heating manifold
6 – Flap for heating
7 – Ball flange connection
8 – Primary silencer
9 – Exhaust pipe
10 – Front rubber suspension
11 – Secondary silencer
12 – Rear rubber suspension
13 – Exhaust pipe

The exhaust system of the Lloyd 600 comprises the following main components:

1. Exhaust manifold. From model 1957 designed as series exhaust heating manifold. Cars destined for export into "hot countries" are fitted with a normal manifold, instead of an exhaust heating manifold)
2. Ball flange connection (from model 1957) *)
3. Exhaust pipe

The ball flange connection interposed between exhaust manifold and exhaust pipe is a plug-in type which simultaneously permits longitudinal and angular displacements between manifold and exhaust pipe.

*) Installed as from model 1957. The intermediate flange connection (with washer) in cars of older type – see Main-Group M Engine, pages 2 – 4 and 5 – may be converted without difficulty into a ball flange connection. For conversion see instructions KD-Circular No. 208.

Description of the exhaust system

The two half ball flanges – the right half is welded to the exhaust pipe – constitute as a unit the housing of the movable ball (sliding piece) which in consequence of its shape and position can take up the angular movement of the engine. The calibrated bore of the sliding piece serves as a guide for the sliding tube pertaining to the exhaust heating manifold and allows a displacement of this sliding tube in longitudinal direction so that neither the length nor the angular movements of the engine or those of the exhaust heating manifold are able to influence the exhaust pipe. (Fig. 5 - 2/1).
The exhaust pipe is welded to the primary and secondary silencers and is elastically suspended at the frame at 2 points by means of a rubber-metal element. As replacement part the exhaust pipe will be supplied only as a complete assembly.

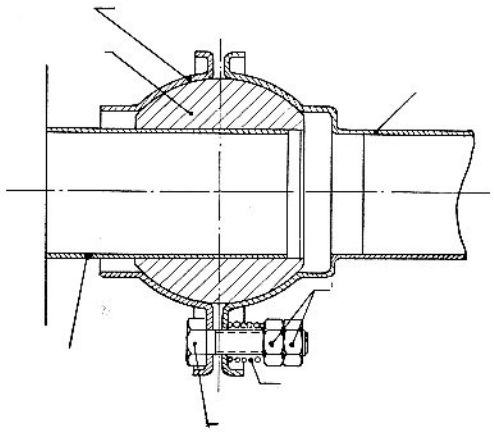
Exhaust pipe for LP-model:

Straight blow-out pipe

Exhaust pipe for LS-model:

Blow-out pipe bent to the side

Kugelflanschhälfte = Half of ball flange
Gleitstück = Sliding piece
Abgasrohr = Exhaust pipe



Gleitrohr der Auspuffheizung = Sliding pipe of exhaust line
Sechskantmutter M 6 = Hex nut M 6
Druckfeder = Compression spring
Sechskantschraube M 6 x 25 = Hex bolt M 6 x 25

5 - 2/1

With cars destined for export the regulations and rules in force in the respective countries have been taken into account so that, e. g., all cars (including LT/LTK 600) for Sweden are equipped exclusively with exhaust pipes having straight blow-out pipes.

Alterations to the series exhaust system

The exhaust system is designed so that not only best possible silencing but also best engine performances will be achieved. The production of noise lies below the maximum noise level prescribed by the authorities for motor vehicles, at present 85 phons. Alterations to the exhaust system with a view to increase the output (removal of the secondary silencer, taking out baffle plates, etc.) are suited to impair the optimum tuning-in between intake and exhaust line as determined during tests and may result in an increase of the fuel consumption and always in an insufficient dampening of the exhaust noises. Such vehicles do not comply with the provisions of the Road Traffic Regulations. The car owner must be prepared for rejections at traffic controls.

General

From type 1957 all models of Lloyd 600 are equipped with an exhaust heating manifold. Manifold and heater form a complete unit.

The exhaust pipe of the manifold, to which – in front of the heater (heat exchanger) – is bolted the scoop serving the purpose of heating the intake air, is surrounded by the protective tube of the heater. In way of the heater the exhaust pipe is, therefore, fitted with a double wall (with a narrow interstice between both tube walls) so that in case of leakage of the exhaust pipe (burning out, corrosion) exhaust gases are prevented from being passed to the heater respt. to the interior of the car.

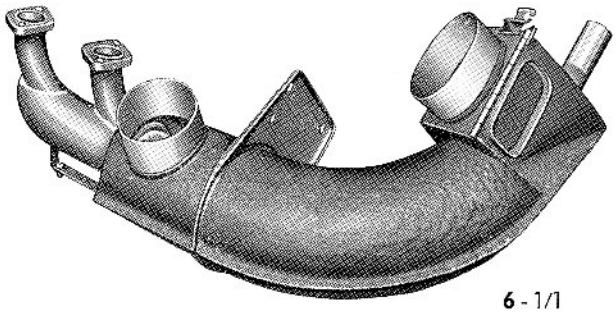
When driving, fresh air is led through the air intake (fitted in way of the highest dynamic pressure at the car). This fresh air is heated up in the heater by the exhaust gases and is then passed through a hose under overpressure (depending upon the car speed) into the car.

The heater has two openings at the air outlet side. Above the one opening the heating hose is fastened to a nozzle, the other opening leading to the atmosphere. A valve flap operated by the driver by means of a Bowden control regulates on its upper and under parts both openings so that either the air outlet is opened to the heating hose, whereas the opening to the atmosphere is closed (heating is turned on), or the air outlet to the heating hose is covered; in this case warm air flows unutilized to the atmosphere (heating turned off). By intermediate positions of the valve flap the amount of warm air may be regulated as required within certain limits.

A coat of sound-absorbing mass of abt. 3 mm (0.118") thick protects the heater against heat radiation and is simultaneously made insonorous.

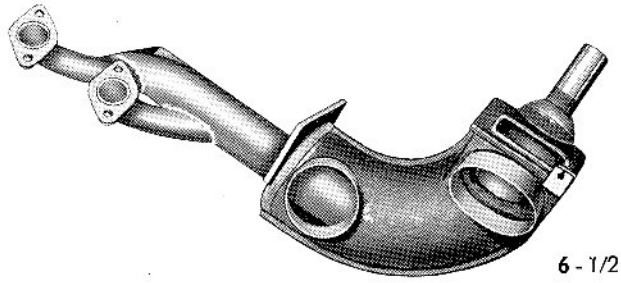
The exhaust heating manifolds in the LP and LT models cannot be exchanged on account of the different structural dimensions of the two car types. These differences may be noticed from the following reproductions.

LP/LS 600



6 - 1/1

LT/LTK 600



6 - 1/2

Installation of the Exhaust Heating System afterwards

In older models it is possible to install the exhaust heating manifold with the pertaining components of the heating system. The complete exhaust system can be obtained as KD assembly from our Replacement Parts Service. The installation has to be made according to the instructions given in the KD Circular 209 (LP/LS 600) or 212 (LT/LTK 600).

Exhaust heating manifold

Performance of the Exhaust Heating System

The performance of the exhaust heating system is governed by two variable factors:

1. Temperature of the heat exchanger and
2. Car speed.

The temperature of the heat exchanger depends on the speed of and load on the engine. With increasing speed of the car, the dynamic pressure and thus the rate of heated fresh air will increase.

The efficiency of the exhaust heating is therefore tied up with the actual driving conditions, the best possible heating of the car being obtained in a speedy long-distance travel. Test drives have shown that with the LP/LS 600 approximately from 70 km/h (40 miles/hr.) the temperature of the air in the car will be increased by abt. 25° C (77° F) above the existing outside temperature of the air.

The rate of hot air is increased when the driver helds slightly open a window while driving. Thus it is avoided that an overpressure is built up in the car, which under circumstances renders impossible any entrance of warm air from the heating.

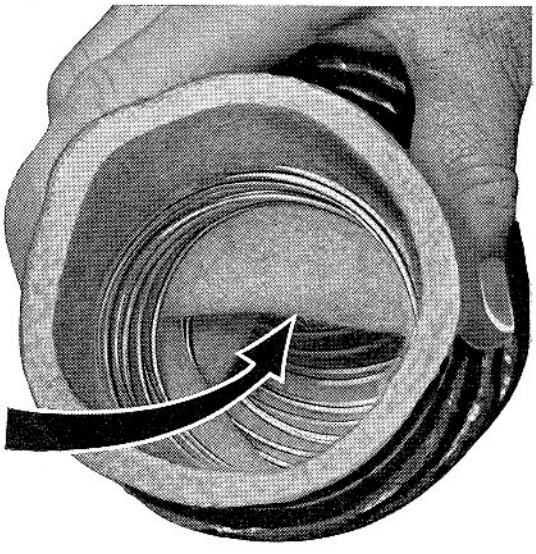
In winter use only front coverings which do not cover the louvre slots in way of the air intake!

Servicing

The exhaust heating system requires no special care. At certain intervals only the hinge on the valve flap should be oiled and the free motion of the Bowden cable be checked and, if necessary, put in good working condition.

Should the heating performance be insufficient, check:

* Hose connections – if necessary, retighten clips –
* Hoses for damage or for breaks –
  Improper treatment of the long heating hose, excessive bending, buckling, etc. may result in a permanent reduction of the sectional area of the hose which, in turn, results in a decrease of the heating effect (Fig. 6 - 2/1).
* Valve flap attached to the heater –
  The flap, especially in the position "Heating turned on" should close perfectly tight. Straighten bent flap lever. Put Bowden control and flap hinge in good condition. Remove dirt or insulating material projecting from the joint.
* Insulation of the heater unit –
  If the insulation should be heavily damaged, then heat will also be lost. In this case the heater requires to be repaired. For this purpose, use only the original insulating material "Schallschluck" 163/32 B *) (resistant to heat) which is obtainable from our Replacement Parts Service as 5 kg-parcels under Parts No. 44 87 10 – 0. Sheet metal exposed for inspection has to be degreased and "Schallschluck-material" should be applied with a brush in a layer of at least 3 mm (0.1181") thick. The material is soluble in water and dries in the air. After repair has been finished, the heating is allowed to be put into service immediately, thus accelerating the drying and hardening process.

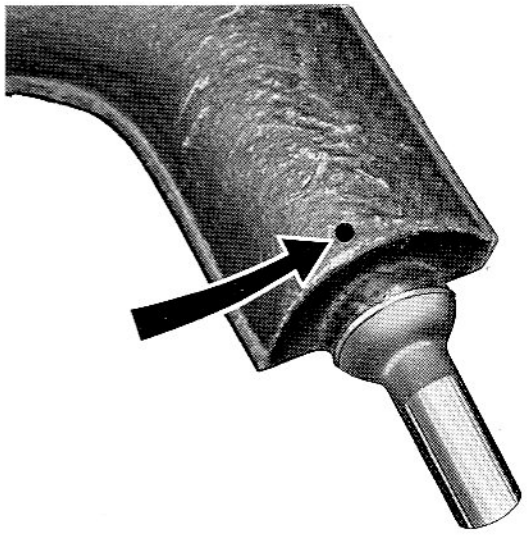


Attention! The mass is soluble in water before it is fully dried out!

*) Schallschluck 163/32 B can be also be used as anti-drum coat for frame and body.
(Schallschluck = Sound-absorbing material).

* The water drain hole in the heater –

  The 4 mm hole at the underside of the heater should be checked for free opening to ensure that water which possibly may enter the heater when washing the car etc. can flow out again. (Fig. 6 - 3/1)



6 - 3/1

Removal and Reinstallation of the Exhaust Heating Manifold

Removal

1. Unscrew scoop for preheating.

2. Remove both hoses from heater. Unscrew Bowden control for heater from the abutment. Pull nipple off flap lever.

3. First unscrew exhaust heating manifold at the cylinder heads, thereafter

4. at the heater holder.

5. Take out exhaust heating manifold from beneath to the right. While doing so, pull sliding tube out of the ball flange connection of the exhaust pipe.

Reinstallation

When reinstalling give care to the following hints and proceed in the following sequence of order:

1. Insert sliding tube into the ball flange connection at the exhaust pipe.

   In order to avoid any distortion which, under circumstances, may result in a breaking of the cylinder head flange, first

2. screw heater loosely to heater holder, thereafter:

3. screw exhaust heating manifold tightly at cylinder heads (2 mkg); only then

4. **tighten** heater on heater holder.

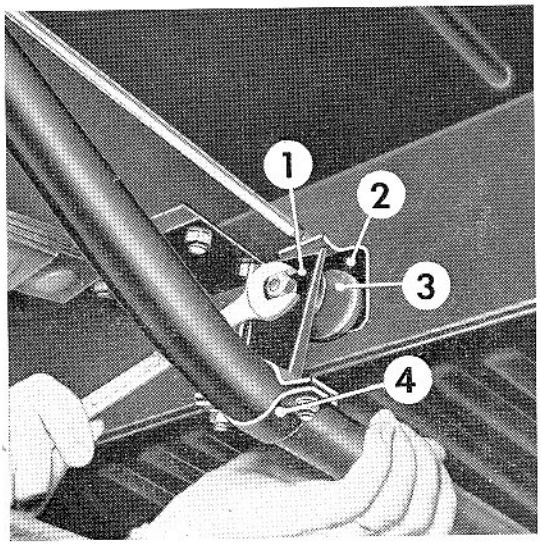
5. Always replace flange packings.

Removal and Reinstallation of Exhaust Pipe

LP/LS 600

Removal

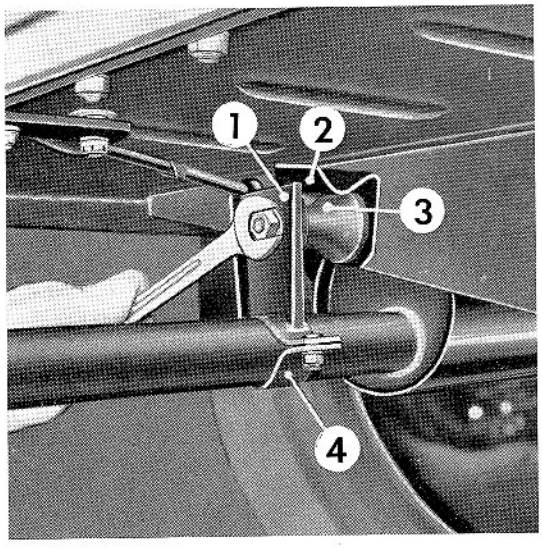
1. Unscrew exhaust pipe from front rubber suspension. (Loosen hex nut SW 14) (Fig. 7 - 1/1).



7 - 1/1

1 – Holder
2 – Limiting plate, short type
3 – Rubber suspension front (40 mm)
4 – Holding plate

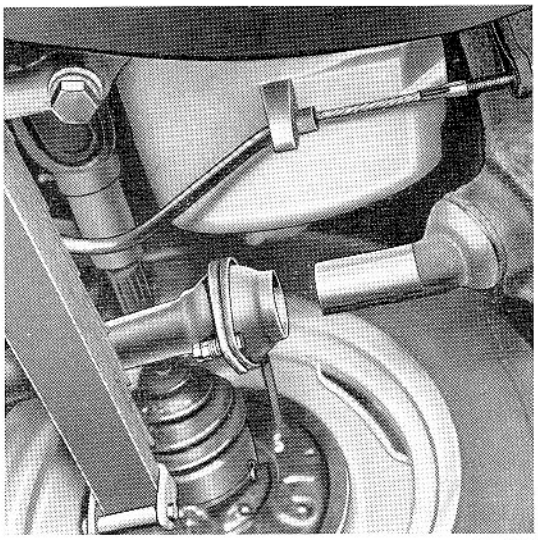
2. Unscrew exhaust pipe from rear rubber suspension. (Loosen hex nut SW 14) (Fig. 7 - 1/2).



7 - 1/2

1 – Holder
2 – Limiting plate, long type
3 – Rubber suspension, rear (50 mm)
4 – Holding plate

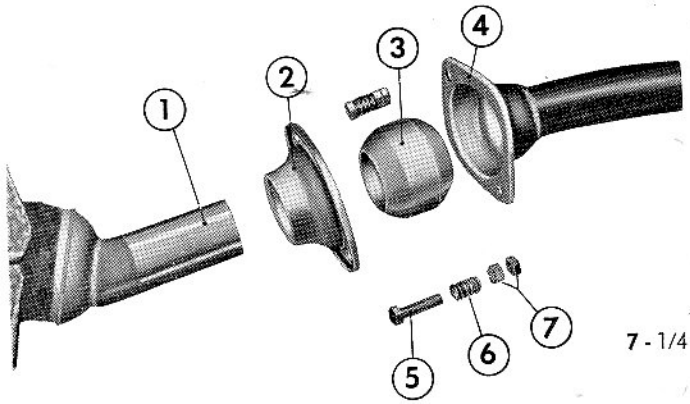
3. Pull exhaust line off sliding tube of exhaust heating manifold and take out rearward. The half ball flanges need not be separated when dismantling the exhaust pipe (Fig. 7 - 1/3).



7 - 1/3

4. Unscrew front and rear holder from exhaust pipe. (Each of the two hex bolts SW 10 is interposed with a spring washer).
Remove holding plates.
Both plates are identical to each other!

5. Disassemble ball flange connection.
Unscrew lock nut and fastening nut SW 10. Remove compression springs and hex bolts M 6 x 25. Front half ball flange and sliding piece are now free. (Fig. 7 - 1/4).



7 - 1/4

1 – Sliding tube of exhaust heating manifold
2 – Front half ball flange
3 – Sliding piece
4 – Rear half ball flange (welded to exhaust pipe)
5 – Hex bolt M 6 x 25
6 – Compression spring
7 – Hex nuts M 6

Installation

The installation is made in the reverse order by taking into account the following points:

1. Check pipes, silencers and their weldings for leakage or damage.
   Straighten bent or squeezed blow-out pipe.

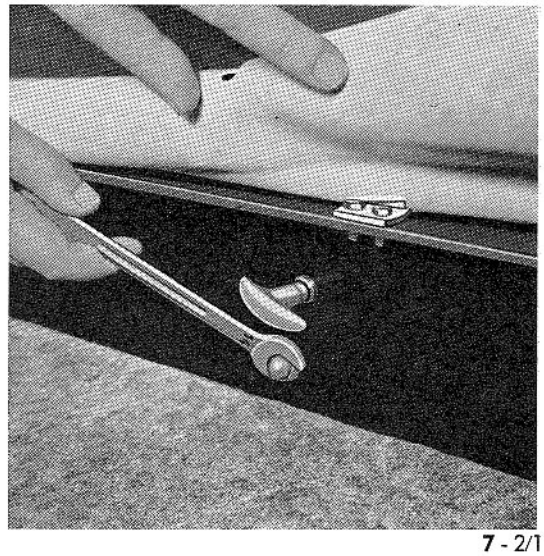
2. Clean components of the ball flange connection and check components for wear.

   The following dimensions are applicable to new components:

Sliding piece – inside dia.	32.20 – 32.25 mm (1.2669 – 1.2688")
Sliding tube – outside dia.	31.85 – 32.05 mm (1.2539 – 1.269")
Clearance	0.15 – 0.40 mm (0.0059 – 0.0157")

   If heavily worn (out of round) or in the case of excessive clearance (clapping, blow-by), the sliding piece must be replaced by a new one. In case of need, saw off worn sliding tube, too, and install new sliding tube by welding (Parts No. 13 36 117 – 0). Give sliding tube, bore of sliding piece and outer surface an initial coat of graphite. Instead of graphite, you may use in this case a molybdenum bisulphite preparation, e. g. molybdenum bisulphite varnish, in a profitable manner. Normal grease is unsuitable! When bolting together the half ball flanges do not tighten hexagon nuts too excessively! The coils of the two compression springs must not contact each other so that the flexibility of the ball flange connection is maintained. The spring is properly tensioned if lock nuts are just flush with the bolt ends.

3. Check rubber suspensions or exhaust pipe for wear or damage; if necessary, replace with new ones.
   The hat nut serving to fasten the front rubber suspension is in the rear compartment of the car and is accessible after removal of the rubber mat.
   (Fig. 7 - 2/1).

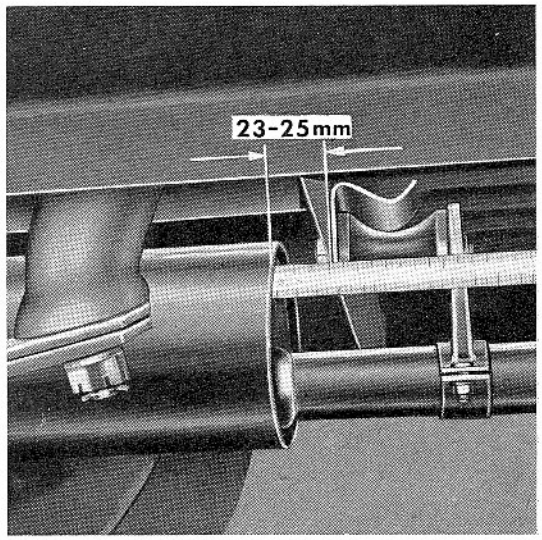


7 - 2/1

4. After putting the ball flange connection onto the sliding tube of the exhaust heating manifold, first install the rear suspension:

   a) Fasten holder to blow-out pipe. Do not yet tighten nuts.

   b) Level out exhaust pipe in longitudinal direction as well as in the sense of rotation. Between rear edge of secondary silencer and frame end carrier plate there must be a distance of from 23 mm (0.9055") to 25 mm (0.98425") (Fig. 7 - 2/2).



7 - 2/2

The blow-out pipe should lie strictly perpendicularly below its suspension point.

c) Tighten nuts at the holding plate.

5. Install front rubber suspension.

Attention! The rubber suspension of the front and rear suspensions differ in their length and must not be confounded!

Front rubber suspension	40 mm
Rear rubber suspension	50 mm

Do not confound limiting plates! The longer plate belongs to the rear rubber suspension.

Be sure that the limiting plates are not bent and are placed horizontally above the rubber suspension.

After installation of the exhaust pipe make certain that the rubber suspensions are not distorted, that is, they should neither be stressed nor get twisted.

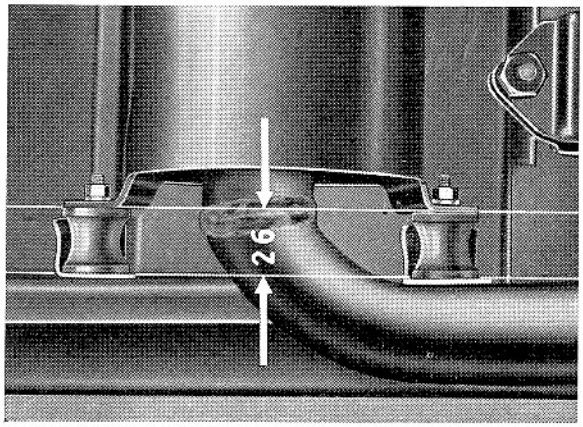
In case of any incorrections the suspensions require to be corrected.

A distorted exhaust system may be the cause of drum noises!

LT/LTK 600

On principle, the exhaust system in the LT/LTK models are the same as those installed in the LS/LP models. There are only differences as to the exhaust heating manifold (see Fig. 6 - 1/2) and the suspension of the exhaust pipe.

Whereas for the front suspension the same rubber pad as in the LP/LS is used (40 mm long), the secondary silencer is bolted to the end carrier plate of the frame by means of two short rubber-metal elements (Parts-No. 436 409–0) with the aid of angles welded to the secondary silencer. Even in this case there is provided a limit plate at each of the rubber metal elements, which prevents the secondary silencer from striking at the frame bottom. When installing the rear suspension care is to be given to ensure that both rubber suspensions while bolting together are neither distorted nor twisted. The distance between outer edge of angle plate and end carrier plate shall be 26 mm (Fig. 7 - 3/1).



7 - 3/1

Modified Exhaust Heating Manifold for LP/LS 600

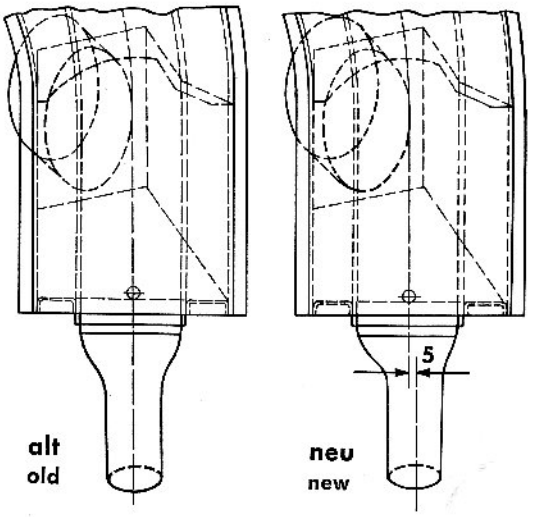
(From Chassis-No. 6/288 851)

In connection with the use of the four-speed synchromesh drive the exhaust heating manifold was modified.

The modification consisted principally in that the outlet pipe on the heater has been displaced outwards for the purpose of better accessibility to the four-speed synchromesh drive. (Fig. 8 - 1/1) on the right.

As the modified type can be used also in cars with three-speed gearboxes only the new type of manifold will be delivered as replacement-part (from June 1957).

In the case of repair the original type (with symmetrically built-on outlet pipe) shall be installed only in cars fitted with three-speed drives (Fig. 8-1/1 on the left side).



8 - 1/1