FIAT

FIAT MOTORS Ltd.,
37 & 38 Long Acre,
LONDON, W.C.

FIAT

FIAT

LIVE-AXLE CARS

THEIR CARE
LUBRICATION
- - - AND - - -
ADJUSTMENT

FIAT MOTORS, LTD.,

37 & 38, LONG ACRE,
LONDON, W.C.

Telephone:
7946 Gerrard (5 lines)
7947 ,,
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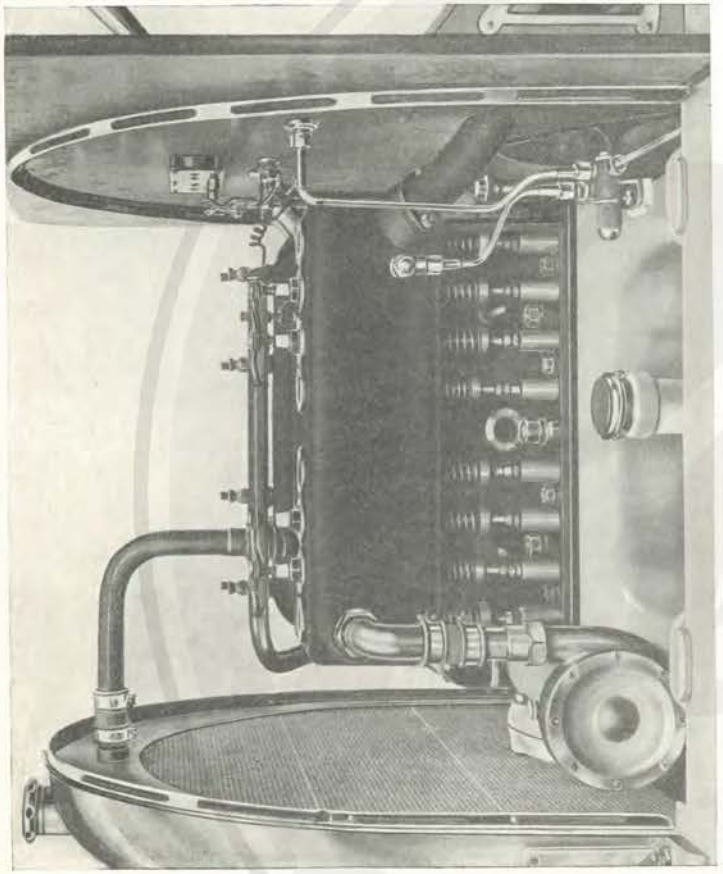
Telegrams:
"FIATISM,
RAND,
LONDON."

Codes used:
A.B.C. 5th Edition.
Lieber's Standard.

Works and Stores: WEMBLEY, MIDDLESEX.

Telegrams: "FIAT, WEMBLEY."
Telephone: 186, 187 & 188 Wembley.

March, 1915.



20/30 H.P. FIAT ENGINE, SHOWING VALVE SIDE WITH COVER PLATE REMOVED.

INSTRUCTIONS

AS TO THE

LUBRICATION, ADJUSTMENT AND RUNNING OF THE LIGHT 12/15, 15/20, 20/30 and 35 H.P. FIAT CARS.

1914 AND 1915 TYPES.

Introduction.

THE design and construction of the Fiat Car are so exceedingly simple that very little in the way of instruction is necessary.

It is essential, nevertheless, that proper care be exercised in the lubrication, adjustment and running of even the simplest machinery.

The object of these notes, therefore, is to direct the attention of drivers of Fiat Cars to those points which need occasional attention in order to ensure continuously satisfactory running.

LUBRICATION.

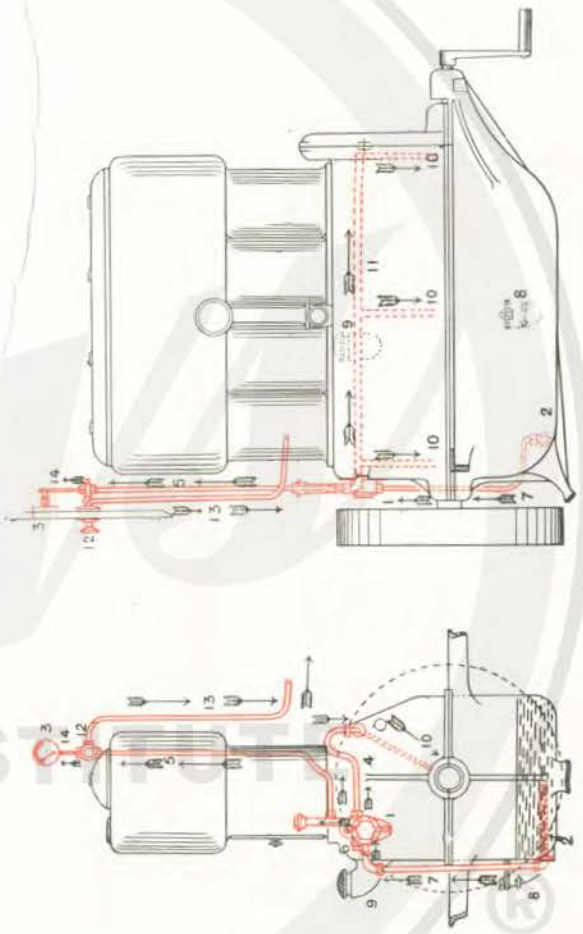
The quality of lubricating oil employed, more especially for the engine, is of primary importance. It is necessary with engines where forced lubrication is employed to use oil of thick consistency. We have arranged for the preparation of oils and grease especially suited to the Fiat Car, and these we unhesitatingly recommend our customers to adopt. Prices will be found at the end of the book. On no account should graphite or any solids be used in the lubricant.

The Engine. The quantity of oil necessary to ensure efficient lubrication is determined by the capacity of the reservoir formed by the bottom half of the base chamber of the engine. The right level is about one inch below the top of the oil level funnel for the light 12/15 h.p., whilst on all the other models the level is indicated by a shoulder cast in the funnel, which corresponds with an arrow cast outside. On the 35 h.p. model a plunger on the dash allows an extra flow of oil to be fed to the cylinder walls. It should be depressed occasionally for high speeds or severe work, negotiating hills, etc. No oil should be introduced into the base chamber without being first filtered, and the oil should be constantly tested and as soon as it is found that it is beginning to thin, all the oil should be washed out of the base chamber and the latter refilled with fresh oil.

The reservoir capacity of the various models is as follows:—

Light 12/15 H.P. - -	5 pints.	These are only approximate and may be varied slightly.
15/20 H.P. - - -	7 ,,	
20/30 H.P. - - -	7 ,,	
35 H.P. - - - -	8 ,,	

The following diagram and details will explain fully the various parts of the forced feed lubrication system.



REFERENCES:

1. Oil Pump.
2. Gauze Filter in oil base.
3. Oil pressure gauge.
4. Feed pipe to engine bearings.
5. Oil pipe to pressure gauge.
6. Pump regulator.
7. Supply pipe from sump.
8. Oil level funnel.
9. Oil filler.
10. Delivery tube to bearings.
11. Main delivery tube.

The Clutch. The plates in this run perfectly dry, no oil being required. It should be washed out every 500 miles with paraffin in order to remove any particles which may have worn from the plates.

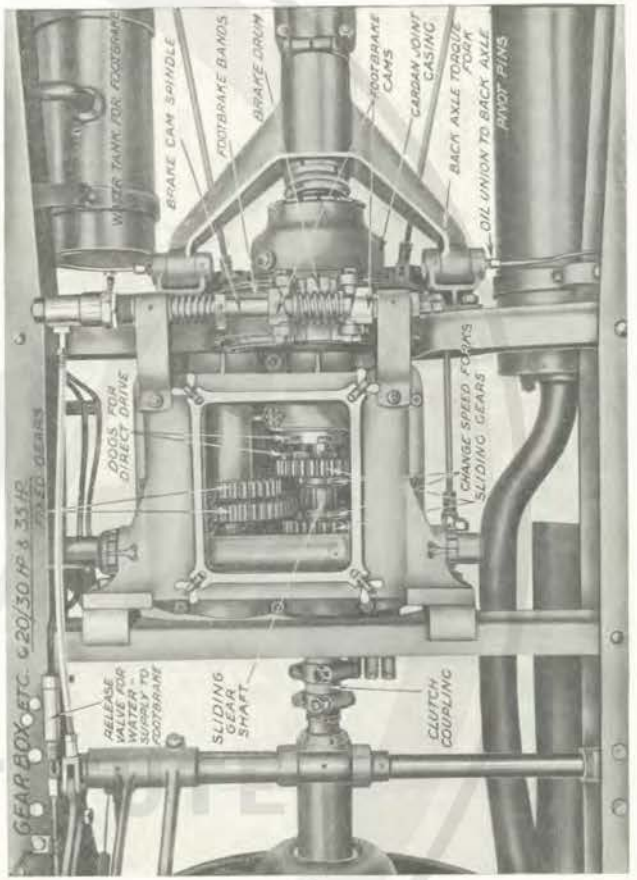
Steering Connections. These are all protected by leather covers which should be kept filled with grease of a medium consistency.

Steering Gear. The steering gear on all models is of the worm and pinion type, and irreversible. It is enclosed in an oil-tight casing and is lubricated by means of a grease cup on the Light 12/15 h.p. Model, and on all other models by means of oil forced through a pipe to the steering box when the plunger on the dash is depressed.

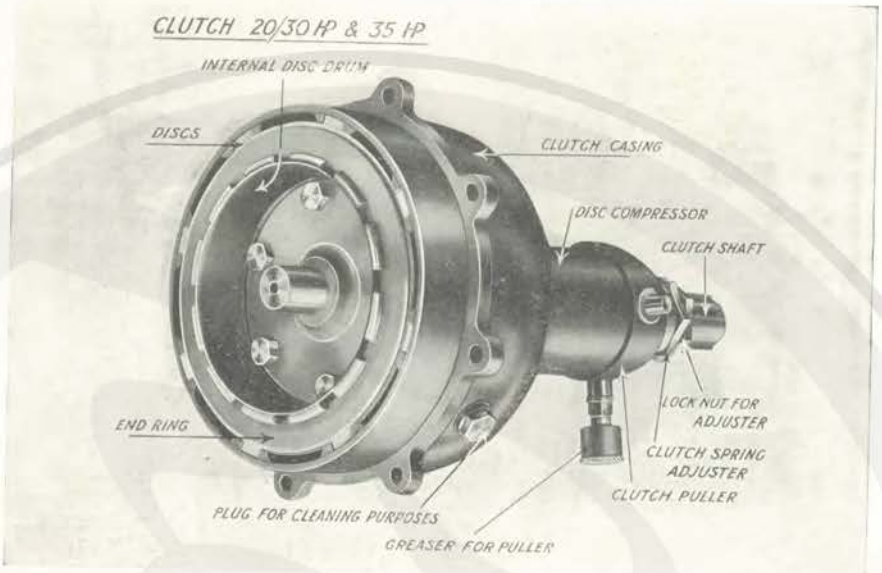
Axle Caps. The front axle caps should be filled with grease about every 1,000 miles, which is all the attention the wheel bearings need in the matter of lubrication. Care should be taken to replace the grub screw in the front axle caps on the 20/30 h.p. and 35 h.p. models, and that the axle caps are free from dirt or grit before being screwed on to the hub.

The Gear Box. This should be kept supplied with a mixture of gear oil and thick yellow grease to the level of the top of the gear shafts. An examination should be made occasionally to ascertain that a sufficiency of lubricant is maintained.

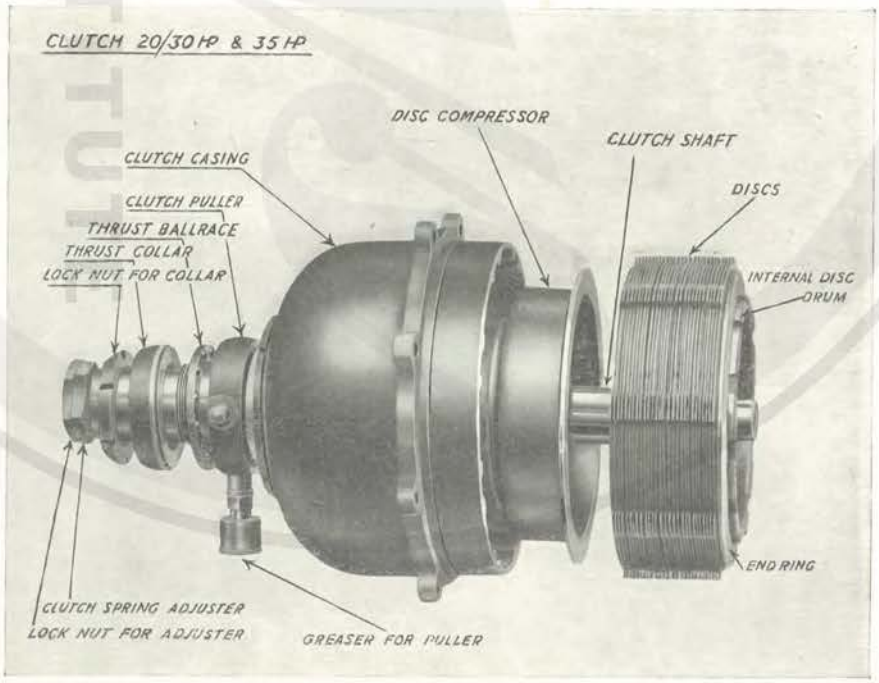
Back Axle. The back axle, bevel driving gears and differential are lubricated by means of a mixture of oil and grease as used for the gear box, inserted through the opening which will be found in the top of the axle casing. Occasional examination is advisable to ascertain that it contains a sufficiency of lubricant. The axle casing should be kept half full. The axle pivot pins are



GEAR BOX, ETC., 20/30 H.P. AND 35 H.P. FIAT.



FIAT CLUTCH.



FIAT CLUTCH, SHOWING COMPONENT PARTS.

FIAT

lubricated by forced oil, by means of the same plunger which is used for lubricating the steering box, on all models excepting the light 12/15 h.p.

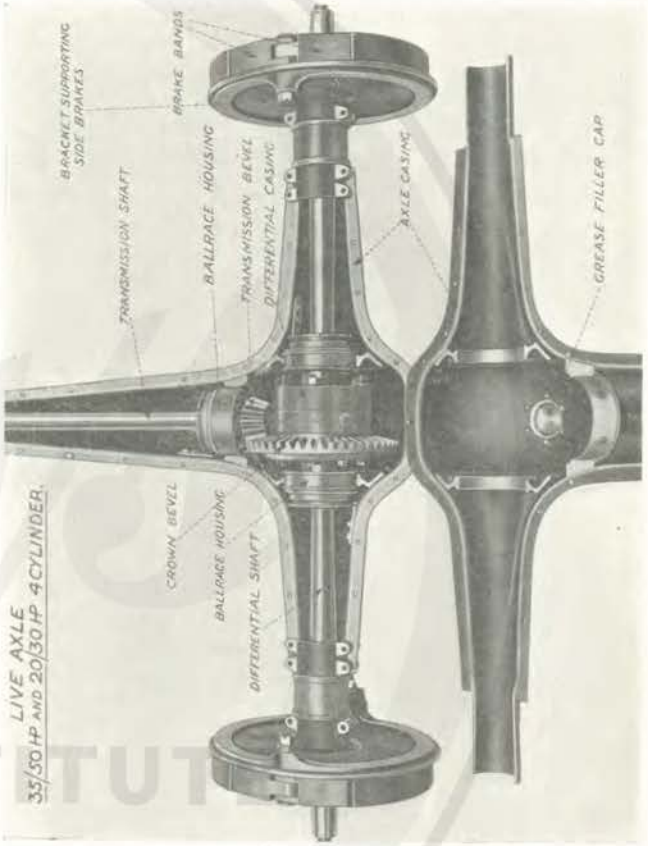
Cardan Joint. In all models a plug will be found in the cardan joint casing. This can be removed, allowing the joint to be filled up with gear oil or thin grease. One filling should last for a considerable mileage, but a frequent examination is advisable in order to ascertain that the parts are being thoroughly lubricated. The casing should be kept nearly full, but not quite, otherwise the oil when warm will be forced out. Care must be taken to replace the plug after filling.

Magneto. The magneto requires very little oil; a few drops only at each bearing occasionally being sufficient.

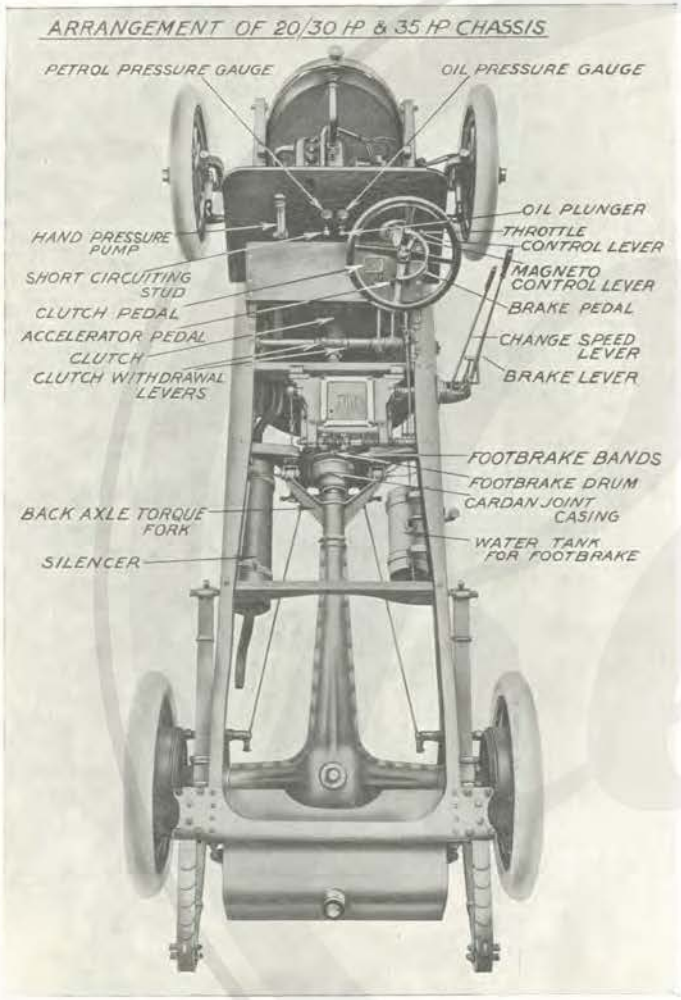
Grease Cups and Oilers. In addition to those parts specifically mentioned in the foregoing notes, grease cups and oilers are provided at other points where friction occurs.

Other Parts which require occasional attention, but which are not provided with grease cups or oilers, are:—

VALVE TAPPETS.
CHANGE SPEED SHAFT.
BRAKE SHAFTS AND BRACKETS.
CLUTCH AND BRAKE PEDAL GEAR.
STARTING HANDLE BEARING.
ACCELERATOR PEDAL GEAR.
BRAKE LEVERS AND FORKS.



FIAT LIVE AXLE AND DIFFERENTIAL.



ARRANGEMENT OF 20/30 H.P. AND 35 H.P. CHASSIS.

ADJUSTMENT.

Providing reasonable care be exercised and periodical attention paid to the car, very little adjustment will be necessary.

Brakes. To adjust the foot-brake, all that is ordinarily necessary is to lengthen or shorten the brake operating rods, the method of effecting which will be obvious on examining the connection.

After a certain amount of wear has taken place on the brake lining, however, it may be advisable to adjust the band itself. This is readily effected by means of the steel nuts on the near side of the brake cam spindle, and the brass nuts on the extension of the offside brake spindle bracket. The nuts on the near side of the spindle adjust the brake cam. The brass nuts on the bracket extension control the end movement of the brake cam spindle. This adjustment applies to the 20/30 h.p. and 35 h.p. models. On the light 12/15 h.p. and 15/20 h.p. models all adjustments are effected by means of the operating rod and lever.

In adjusting the band, care should be taken not to tighten it to such an extent that there is the slightest binding on the drum when the brake pedal is in the "off" position, otherwise unnecessary friction and consequent wear will result.

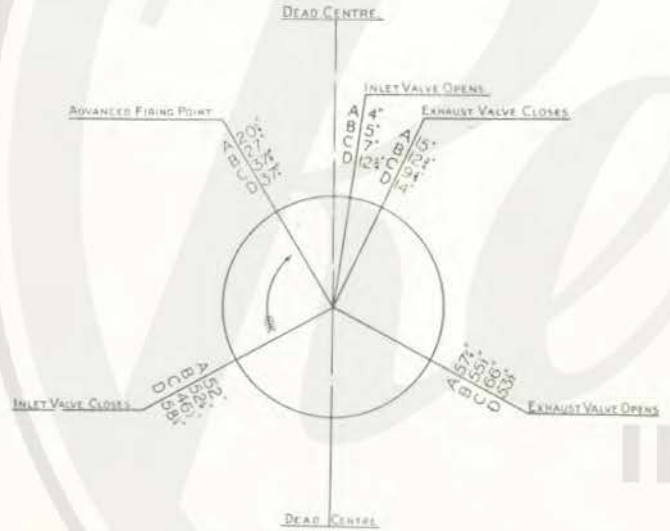
On no account should the wear on the brake lining be allowed to proceed too far, or the band itself is likely to be damaged, which would involve a much more costly renewal than the replacement of the cast iron liners.

The side brakes are adjusted in a similar manner to that described above, namely, by shortening or lengthening the rods. On the light 12/15 h.p. model a wing nut is fitted on the front end of the main brake rod for this purpose. Periodical attention should be given to the levers operating

the internal expanding brakes on the road wheels, as, owing to their somewhat exposed position, they are liable to become rusted or clogged up with mud, which would materially interfere with the action of the brakes.

The Clutch. To adjust the clutch spring, slacken the nut furthest from the clutch levers; it will then be found a perfectly simple matter to adjust the concealed spiral spring by turning the nut-shaped end of the spring container inwards or outwards, according to whether it is desired to increase or relieve the pressure.

TIMING DIAGRAM, 1914 AND 1915 TYPES.



Reference.		Break of Magneto Armature with Ignition fully advanced. (E on illustration of magneto).		Equivalent to 1° measured on Flywheel Periphery.	
Light 12/15 h.p.	A	A	1.5 m/m	A	2.97 m/m
15/20 h.p.	B	B	4.5 m/m	B	4.24 m/m
20/30 h.p.	C	C	1 m/m	C	5.15 m/m
35 h.p.	D	D	1 m/m	D	5.15 m/m

Valve Lifters. These should be adjusted by means of the adjusting nut on same, so that when each valve is properly closed, there should be $\frac{1}{10}$ m/m clearance between the valve and the valve lifter.

Inspection and Adjustment of Valves. Both inlet and exhaust valves are readily accessible for examination by removing the inspection caps which are screwed in immediately over the valves. On the preceding page is shown a timing chart for the various models. Occasionally a very slight variation in the normal setting indicated above may improve the running, but this can best be ascertained by experiment. It is advisable, however, to adhere as closely as possible to the standard setting.

Timing the Engine. Only the light 12/15 h.p. model has fixed ignition, all the other models having variable hand controlled ignition.

The new type Bosch magneto has an indicator by means of which the exact firing point may be ascertained. This only shows the point for No. 1 cylinder, which is all that is necessary, as the others fire in rotation. To ascertain if the magneto is set correctly turn the engine until the figure one shows in the end inspection window. The marked tooth should register in the top inspection window at the same time. With the hand control ignition lever in the fully advanced position (this does not of course apply to the Light 12/15 h.p. model), the engine should be turned until the piston of No. 1 cylinder is rising on the compression stroke, and stopped when the marked tooth in the magneto registers. The flywheel dead centre mark should then be the specified number of degrees before dead centre. Slight adjustment of the contact breaker is obtained by means of the coupling rod, but if the firing point varies considerably from standard, the relative positions of the magneto shaft and driving shaft must be altered by means of the magneto coupling. This may be released by removing the two grub

screws in same, and the engine turned to the correct number of degrees before dead centre, keeping the magneto shaft stationary, when the coupling must be locked. Care must be taken to connect the high tension leads to the plugs in the correct order.

The cylinders of the Fiat engine fire in this order :—

No. 1. Second from the radiator.
No. 2. Next to the radiator.
No. 3. Third from the radiator.
No. 4. Fourth from the radiator.

The magneto terminals must be connected to the plugs in this order :—

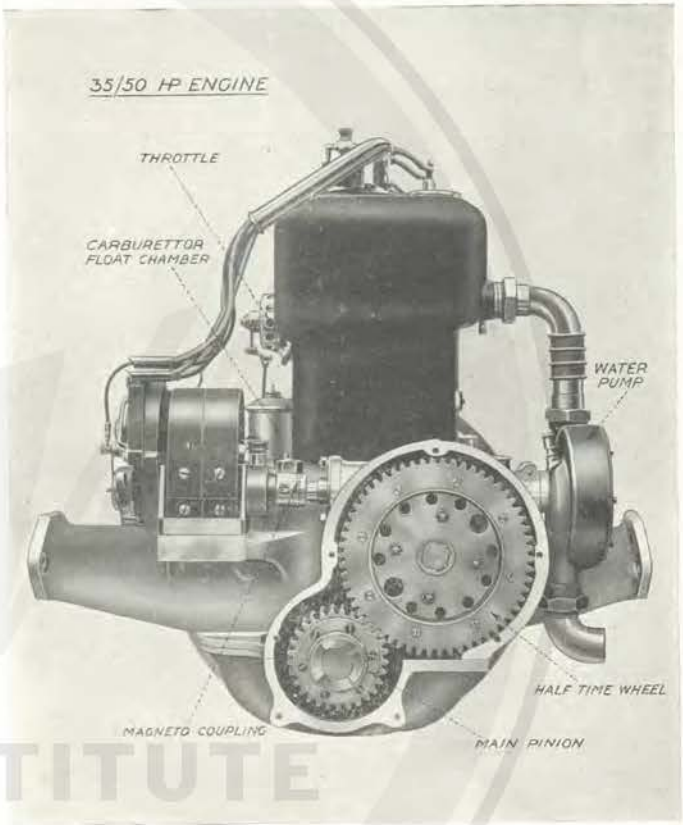
No. 1 Terminal to the plug of No. 1 Cylinder in the order of firing, and so on.

NOTE.—The magneto runs clockwise, when viewed from the contact breaker end.

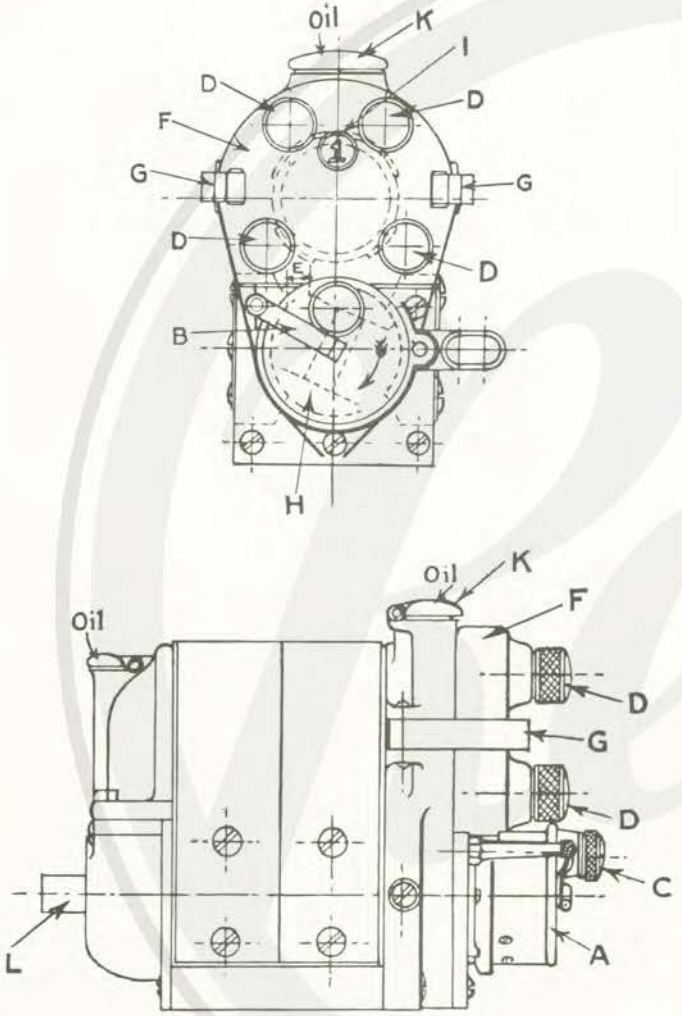
Carburettor. In all the 1914 and 1915 models the normal level of the petrol in the jet should be barely flush with the top of the jet, but as engines vary slightly in this respect, a slight departure below the level indicated may effect an improvement in the running in case the original adjustment has been altered. The petrol level may be altered by moving the collar carrying the governor, up or down the spindle.

Care should be exercised to avoid bending the spindle, otherwise continuous flooding may occur.

Of carburettor adjustments the most vital is the level of petrol in the jet. Next in importance is the size of aperture in the jet. In our experience, in ninety-nine out of every hundred Fiat cars passing through our hands, the aperture of the jet as supplied gives the most satisfactory results. *On no account should the size or shape of the auxiliary air ports be altered.*



FRONT VIEW OF ENGINE OF 35 H.P. FIAT.



MAGNETO. FOR EXPLANATION SEE NEXT PAGE.

ADJUSTMENT—continued.

The carburettors on all the 1914 and 1915 models have two jets. The larger jet is covered and is not used when the engine is running light. As the throttle is opened and the speed accelerated thereby, the smaller jet is covered and the larger one brought into use. All models have an adjuster fitted behind the float chamber, by means of which the supply of extra air to the small jet may be varied. A filter is fitted to the float chamber on all models. This filter should be frequently removed and cleaned.

Clients are strongly advised to leave well alone where the adjustment of carburettors is concerned, as the proper knowledge necessary to carry out the work is only obtained after considerable experience, and the unpractised mechanic may, and usually does, effect more harm than good by interfering with the carburettor.

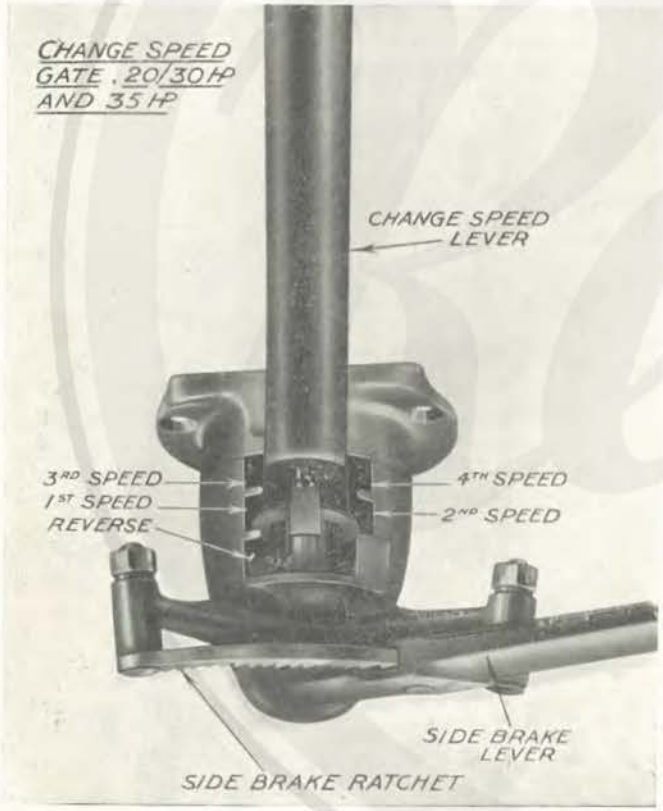
Magneto. The illustrations on the preceding page represent the ZU4 type Bosch magneto, the general principles of which are the same as the ZF4 and ZR4 types, fitted to some of the Fiat models.

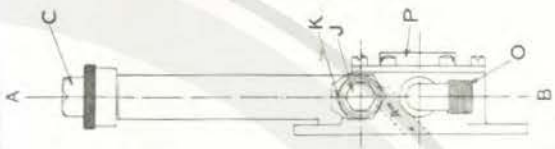
A. Cover of Contact Breaker.
B. Clip for same.
C. Nut for Short Circuiting Cable.
D, D, D, D. Terminals for High Tension Leads.
E. Break of Armature at Advanced Firing Point.
F. Distributor Disc.
G,G. Clips for same.
H. Armature.
I. Inspection Window.
K. Oil Cover which encloses Top Inspection Window.
L. Armature Spindle.

Oil Pump. This is fitted on the rear end of the crank-case and there is a valve to regulate the oil supply. A cap is screwed in the pump body to regulate the pressure of the spring of this valve. To increase the supply of oil to the bearings, screw this cap inwards; to decrease

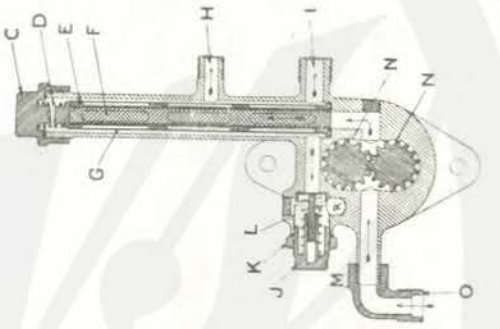
the supply, unscrew it. Care should be taken that the lock nut on the valve cap is loosened before attempting to adjust the cap itself, and tightened again when the adjustment is finished. A pressure gauge is fitted on the dashboard to indicate the pressure of oil on the circuit.

The pressure should be from 1½ to 2 metres when the engine is running. Both the filter in the neck of the oil pump and in the base chamber should be removed periodically and cleaned.

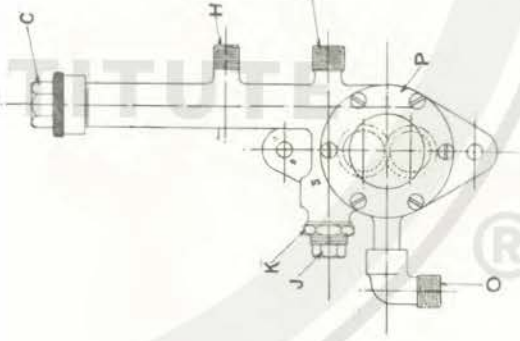




SIDE VIEW.



SECTION ON LINE A.B.



FRONT VIEW.

FLAT OIL PUMP.

C. Cap for filter case.
D. Spring holding slotted tube E in position.
E. Slotted tube.
F. Coarse mesh gauze, inside tube E.
G. Fine mesh gauze, outside tube E.
H. Union to oil pipe for oil gauge.
I. Union to pipe for main bearings.
J. Adjuster for regulating oil supply.
K. Lock-nut for adjuster.
L. Check valve.
M. Spring, keeping check valve on the seating.
N. Pump wheels.
N. Pump wheels.
O. Union to suction pipe.
P. Cover for pump wheels.
R. Return passage to sump.
S. Pump body.

The arrows indicate the direction of the flow of oil. To allow more oil to be fed to the bearings, unscrew lock-nut K, screw adjuster J into pump body S, and lock with locking-nut K. To allow less oil to be fed to bearings, screw adjuster J out of pump body S, and lock with locking-nut K. When the adjuster J is unscrewed, the pressure on the check valve L is reduced, and the oil forcing the valve open, returns to the sump through the passage R. The quantity of oil returned to the sump varies with the tension of the spring M.

GENERAL HINTS.

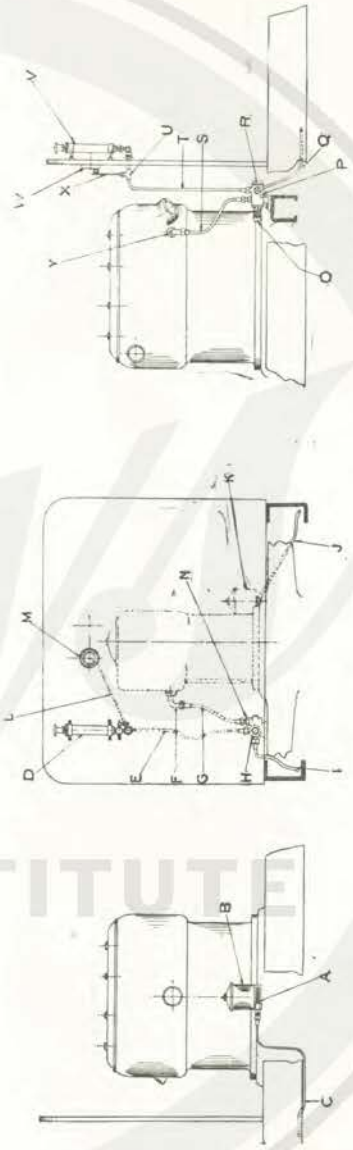
It is advisable, before starting for a run, to be satisfied that the oil, water and petrol tanks are full, and that all necessary tools and spares are on board. Make a practice of putting on the side-brake and placing change-speed lever in neutral position when stopping the car, but do not forget to release the side-brake before starting again. Before changing speed, withdraw clutch fully and be sure that the lever is in its proper position before letting the clutch in. Allow car to come to a standstill before putting change-speed lever into reverse position, or from reverse into a forward speed. Simultaneously with de-clutching, gradually reduce the speed of the engine by relieving the pressure on accelerator pedal to prevent engine from racing, accelerating immediately the change has been effected and clutch let in.

In starting or changing speed, let the clutch in gradually *but it should never be slipped*, as the clutch is constructed to permit automatically all the slip which is necessary or advisable. Never drive with a slipping clutch; rectify matters at once. Never run the engine longer than is absolutely necessary after the slightest indication of slackness in any of the bearings manifests itself. Have them seen to at once, otherwise considerable damage may occur. Do not drive the car if it emits any unusual noise, but stop at once and ascertain the cause and remedy the defect. Never race the engine nor run it unnecessarily.

If the compression is found to be getting weak, examine the valves, more especially the exhaust valves, and if there is any sign of pitting, re-grind the valves on their seats.

(It should be borne in mind that cleanliness is of the utmost importance, and especially does this apply to valves and their operating mechanism).

Loss of compression may also occur through wear on the piston rings, in which case the latter should be replaced. Periodically examine the exhaust box, which may become choked with burnt oil.



VIEW FROM NEAR SIDE.

BACK VIEW OF DASHBOARD, ETC.

VIEW FROM OFFSIDE.

PETROL SUPPLY SYSTEM.

A. Gauze filter in bottom of float chamber. This should be removed occasionally and cleaned with petrol.
B. Carburettor float chamber.
C. Pipe from petrol tank to float chamber.
D. Hand pump for supplying initial pressure in petrol tank.
E. Pressure pipe between valve and Tee piece.
F. Exhaust elbow on cylinders.
G. Pressure pipe from cylinders to valve.
H. Pressure valve casing.
I. Pressure pipe from valve to petrol tank.
J. Pipe from petrol tank to float chamber.
K. Float chamber.
L. Pressure pipe to gauge from Tee piece.
M. Gauge indicating pressure in petrol tank.
N. This union should be removed occasionally and the gauze filter in it cleaned with petrol.
O. Cap over stem of pressure valve. This cap must be removed to allow valve to be adjusted.

NOTE.—The pressure valve and seating should be washed out occasionally with petrol, and if necessary, the valve should be ground in with fine emery.

P. Pressure valve casing.
Q. Pressure pipe from valve to petrol tank.
R. This cap to be unscrewed to allow pressure valve to be removed.
S. Pressure pipe from cylinders to valve.
T. Pressure pipe between valve and Tee piece.
U. Tee piece.
V. Hand pressure pump.
W. Pressure gauge.
X. Pressure pipe from Tee piece to gauge.
Y. Exhaust elbow on cylinders.

To ascertain if this is so, disconnect the exhaust pipe, and if engine runs appreciably better apply the obvious remedy.

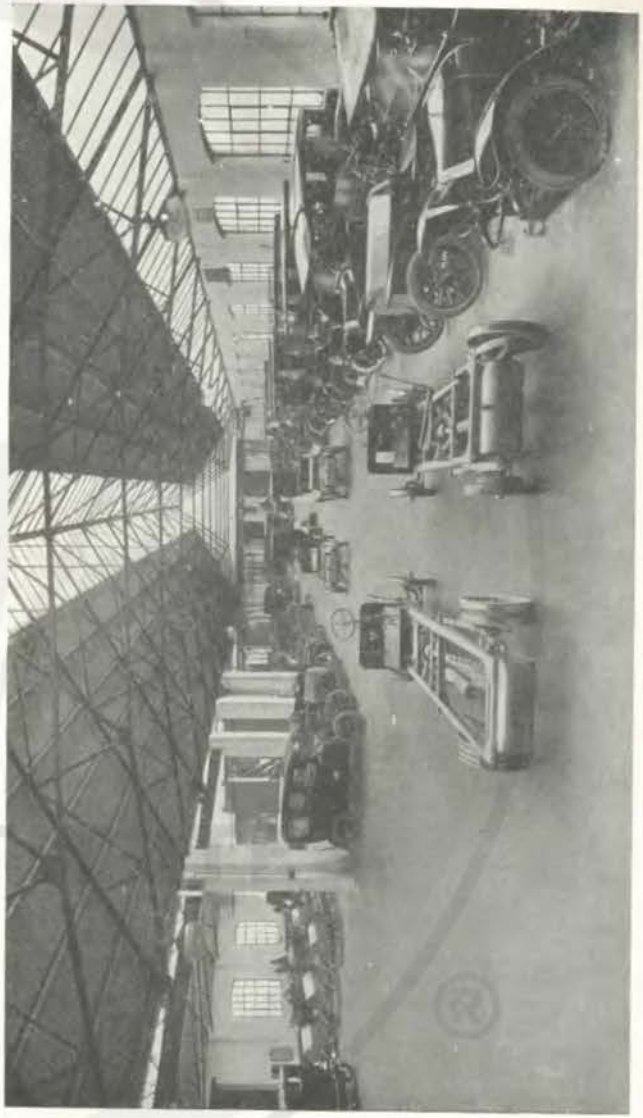
Should the air pressure in petrol tank be found to leak, examine all joints in the pipe system, and if these are tight the leakage will probably be due to a leakage at the air pressure valve of the engine. The mushroom valve should be taken out and cleaned, and if necessary ground into its seating. Adjustment of balance—that is to say, the correct pressure necessary to allow the exhaust pressure to actuate the valve properly—is then easily obtained by means of the nut on the valve spindle which lessens or increases the pressure of the spring according to the direction in which it is turned. A perfect adjustment can be best obtained by running the engine and watching the air pressure gauge—the adjustable nut being tightened or loosened until the indicating needle of the pressure gauge remains stationary. The gauge should show a pressure of 2 to 3 metres when the engine is running.

In the event of the car remaining unused for several days it is strongly recommended to draw off the water from the radiator, otherwise the impurities in the water will tend to corrode the brass radiator tubes. Especially is this precaution necessary in winter time to avoid the risk of the water being frozen in the cylinder water jacket.

Finally, the importance of absolute cleanliness cannot be too strongly emphasized, an item which would appear to be overlooked to a considerable extent, with frequently serious results.

Excessive petrol consumption is often due to dirty valves or valve gear. Misfiring, occasioned by foul plugs, also conduces to heavy consumption. Pre-ignition, resulting sometimes in a broken crankshaft, invariably arises from carbon deposit being allowed to accumulate in the cylinders.

Many other more or less serious troubles may be avoided by the exercise of proper care in the matter of cleanliness.



WEMBLEY WORKS—MAIN GARAGE.

REPAIRS, GUARANTEE, Etc.

All cars sold by Fiat Motors, Ltd., are vended subject to the following guarantee:

"We will repair or supply free of charge a new part or parts in exchange for any part or parts of a Fiat chassis which may be or become defective through faulty material or bad workmanship providing such part or parts is or are within six months of delivery of the chassis, sent carriage paid to Fiat Motors, Ltd., Lancelot Road, Wembley, Middlesex, stating the number of chassis, horse power and date of purchase. Failing compliance herewith no notice will be taken of anything which may arrive, but such articles will be here at the risk of the senders; and this guarantee and any implied guarantee shall not be enforceable. This guarantee is limited to goods manufactured by us or the Fiat Co., of Turin, and to chassis or cars which have been purchased either direct from us or from one of our duly authorised agents, and have not been let out on hire, and it does not apply to defects attributable to wear and tear, improper adjustment, dirt, misuse, neglect or accident nor to chassis which have been repaired by others without our previous written consent, or the equipment of which differs from our standard specification. We do not guarantee goods manufactured by other firms, such as tyres, chains, lamps, magnetos, accumulators and other electric fittings, bodywork, etc., supplied with our cars or otherwise. This guarantee is given in lieu and to the exclusion of all warranties implied by Statute or otherwise, and our liability hereunder is limited to the free replacement of such defective parts as above mentioned, and no Purchaser shall be entitled to claim any consequential loss or damage."

In case of accident or breakdown we strongly recommend our customers to place themselves in communication with our Works at Wembley, where motor lorries are kept in readiness to pick up cars from within a day's journey from London.

When a car is being sent by rail it should be addressed to Fiat Motors, Ltd., Wembley, Middlesex, and consigned to Willesden Junction Station, L. & N. W. Railway. If, at the same time, advice is sent as to despatch, arrangements will be made to collect the car on arrival at Willesden Junction.

Communications on the subject of repairs, replacements, or storage should be addressed to:

FIAT MOTORS, LTD.,

WEMBLEY, MIDDLESEX.

Telephone:—186, 187 & 188 WEMBLEY.
Telegrams:—"Fiat, Wembley."

DIMENSIONS OF FIAT CHASSIS.

H.P.	CYLINDERS. No.	CYLINDERS. Bore.	CYLINDERS. Stroke.	WIDTH OF FRAME. Front.	WIDTH OF FRAME. Rear.	Wheel Base.	Wheel Track.	Space for Body Work.
		m/m	m/m	ft. ins.	ft. ins.	ft. ins.	ft. ins.	ft. ins.
Light 12/15	4	70	120	2 2	2 7½	8 8⅜	4 0⅜	7 1⅜
15/20	4	80	140	2 2 3/16	2 10⅝	8 11⅞	4 7¾	8 1⅜
20/30	4	100	140	2 7½	2 11½	10 3¾	4 7¾	8 6½
20/30 Sporting	4	100	140	2 2⅜	2 11½	9 6¾	4 6¾	7 10½
35	4	110	150	2 7½	2 11½	10 3¾	4 7¾	8 6½

PRICES OF "FIAT" OILS AND GREASE.

Fiat Engine Oil - - -	3/6 per gallon tin.
„ Clutch Oil - - -	4/6 „ „ „
„ Gear Oil - - - -	4/- „ „ „
„ Grease - - -	9d. per lb. in 7 lb. tins.

Prices of the above in bulk may be had on application.

RAILWAY CHARGES FOR MOTOR VEHICLES.

No petrol or inflammable liquid or vapour must be carried either in tank or elsewhere.

General charge:—6d. per mile per car at owner's risk, with minimum charge of 7s. 6d.; 25 per cent. added if at Company's risk, by passenger train.

Maximum weight allowed, 50 cwt., by passenger train.

Covered trucks cost 5/- extra up to 50 miles, and 10s. beyond, by passenger train.

GOODS TRAIN RATES FOR MOTOR CARS.

(Station to Station.)

Miles.	Weight up to 1 Ton. £ s. d.	Each extra ¼ Ton. £ s. d.
10 - -	0 7 7	0 1 6
50 - -	1 7 7	0 8 2
100 - -	2 1 6	0 13 10
250 - -	4 1 6	1 9 6
500 - -	7 8 2	2 15 6

Old cars sent to the makers to be exchanged for new ones are carried at owner's risk for half rates, minimum charge 3s. 9d., but the exchange must be made within three months and the conveyance be between the same places.

ROAD SIGNS

UNDER THE MOTOR ACT, 1903.

Ten miles or lower limit of speed:—A round white ring, 18 inches in diameter, with plate giving limit in figures.

Prohibition: Red solid disc, 18 inches in diameter.

Caution, Dangerous Corners, Cross Roads, or Precipitous Places: Hollow red equilateral triangle.

All other notices under the Act to be on diamond-shaped boards.

All notices to be on one side of the road and approaching driver; and all Prohibition or Caution Boards to be 50 yards from the spot to which they apply.

MOTOR REGISTRATION, ETC.

	£	s.	d.
Registration	1	0	0
Changing Ownership	0	5	0
Driving Licence, renewable annually	0	5	0
Replacing Lost or Defaced Licence	0	1	0
Male Servant's Licence, renewable annually	0	15	0

TAXES ON FIAT CARS.

Nominal H.P.	Bore of Cylinders in inches.	H.P. by Treasury Formula.	Tax. £	s.	d.
12/15 (light)	$2\frac{3}{4}$	12·1	4	4	0
15/20	$3\frac{5}{32}$	15·9	4	4	0
20/30	$3\frac{15}{16}$	24·8	6	6	0
20/30 Sporting	$3\frac{15}{16}$	24.8	6	6	0
35	$4\frac{5}{16}$	30·0	8	8	0

MEMORANDA.

Licence No.....

Registration No.....

H.P.....

Name..... FIAT

Weight unladen.....

Cylinders .....

Size of Back Tyres.....

,, Front ,, ...

Insurance Policy No.....

.....

.....

Name.....

Address.....

LIST OF FIAT AGENTS.

ENGLAND AND WALES.

LANCASHIRE, NORTH WALES & CHESHIRE	Sole Agent—James W. Haworth, A.M.I.E.E., M.I.A.E., 232, Deansgate, Manchester.
District Agents under James W. Haworth's Agency—	
LIVERPOOL AND DISTRICT.	R. H. New, 86, The Albany, Old Hall Street, Liverpool.
WIGAN	H. H. Timberlake, 6, King's Street, Wigan.
STOCKPORT AND DISTRICT	The Talbot Garage, Ltd., Mersey Square, Stockport.
PART OF DENBIGHSHIRE, CARNARVON, ANGLESEY AND MERIONETH	Philip Seed, Midland Garage, Colwyn Bay.
EAST LANCASHIRE	F. Groome, Ltd., Abbot Motor Works, Whalley.
OLDHAM AND DISTRICT	Oldham Motor Co., 36, Manchester Road, Oldham.
BLACKPOOL AND DISTRICT	Jackson Bros. (Blackpool), Ltd., Abingdon Street Garage, Blackpool.
ALTRINCHAM AND DISTRICT	H. & J. Quick, Warwick Garage, Chester Road, Old Trafford, Manchester.
YORKSHIRE	A. B. Wardman & Son, Ltd., Cambridge Street, Harrogate.
District Agent's under A. B. Wardman & Son's Agency—	
MIDDLESBROUGH	E. Hall, Wesley Street, Middlesbrough.
SCARBOROUGH	C. Bargna, Grand Garage, Scarborough.
NORTHUMBERLAND, DURHAM AND CUMBERLAND	R. E. Hale & Co., 27, Pilgrim Street, Newcastle-on-Tyne.
NOTTINGHAMSHIRE	M. Ross Browne & Co., Trinity Square, Nottingham.
STAFFORDSHIRE	(with the exception of Wolverhampton and district). C. W. F. Shakespeare, The Motor House, Burslem.

LIST OF FIAT AGENTS—continued.

NORTHAMPTON	Ransome Motor Co., Ltd., London Road, Far Cotton, Northampton.
BRIGHTON AND DISTRICT	Fiat Garages, 50, St. James' Street, Brighton.
CUCKFIELD AND DISTRICT	J. Denman & Co., Ltd., Cuckfield.
GLAMORGAN, MONMOUTH, CARMARTHEN, PEMBROKE, CARDIGAN AND BRECKNOCK	Hill's Garage, Westgate Street, Cardiff.
DEVON AND CORNWALL (except Plymouth and district).	Yeo & Davey, Ltd., 178, Sidwell Street, Exeter.
PLYMOUTH AND DISTRICT	A. C. Turner, 13, Tavistock Road, Plymouth.
BERKSHIRE	J. C. James, Wellington Hotel (Wellington College Station), Berks.

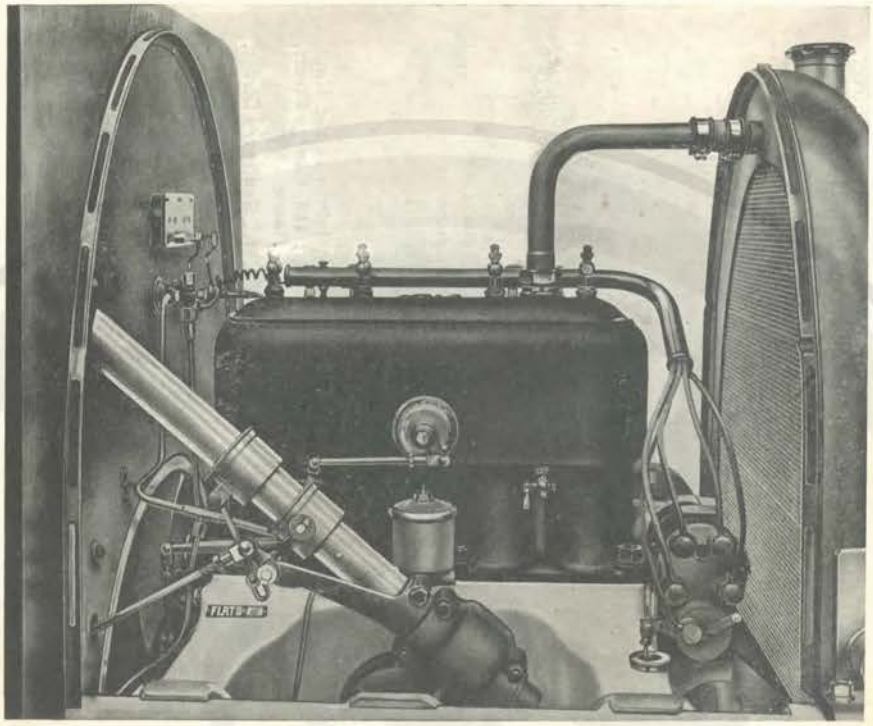
The Company has its own Depots at
101, Old Christchurch Road, Bournemouth;
And The Hannah More Hall, Bristol.

SCOTLAND.

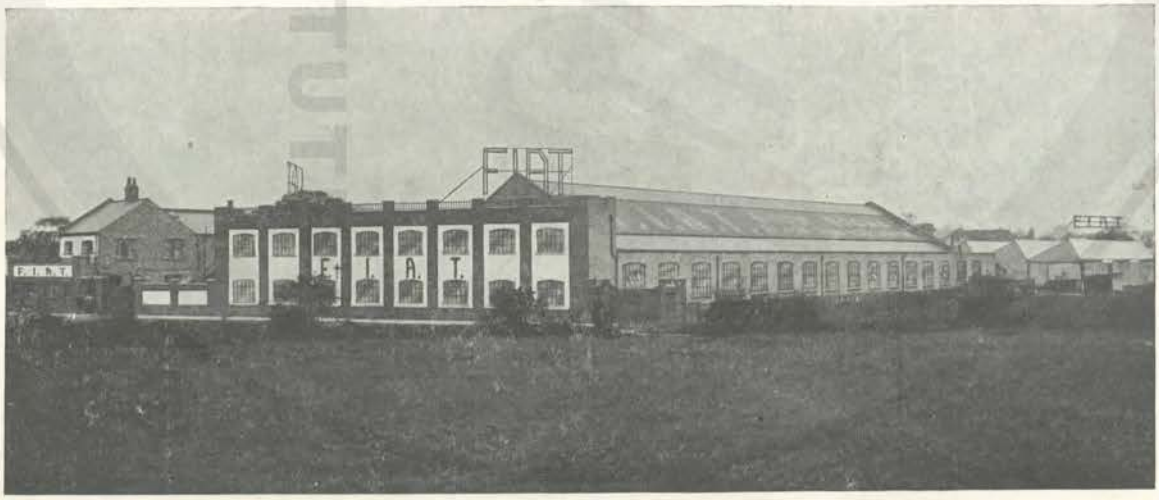
EDINBURGH & EAST OF SCOTLAND	Croall & Croall, Coachmakers to the King, York Lane, Edinburgh; 126, George Street, Edinburgh; Kelso and Hawick.
GLASGOW AND WEST OF SCOTLAND	Hendry & Co., 36/44, Renfrew Street, Glasgow.

IRELAND.

PROVINCE OF LEINSTER	Scallan & Berry, Ltd., 191, Great Brunswick Street, Dublin.



20/30 H.P. FIAT ENGINE, SHOWING CARBURETTOR, Etc.



FIAT WORKS, WEMBLEY.