

# HUDSON MOTOR CAR COMPANY

## DETROIT, MICH., U. S. A.

CABLE ADDRESS  
HUDSON CAR

January 21, 1929

TO HUDSON DISTRIBUTORS AND DEALERS:

Effective with the 1929 models -- both Hudson and Essex -- the chassis lubrication system, as you know, was changed from the oil cup to the Alemite system. To are calling this to your attention for two reasons:

FIRST - The advisability of your cashing-in on this feature by establishing greasing service for the convenience of your customers, and -

SECOND - To advise you that the purchasing of the replacement nipples of the Alemite will not be supplied through the factory Parts Department, but through the Service Stations of the Alemite Corporation. A list of their Service Stations throughout the country is attached for your convenience.

The discount of 30% - 5% on Alemite fittings to Hudson-Essex distributors and dealers has been established by their firm.

The location of the Alemite fittings, together with the symbol numbers that have been assigned for your convenience in purchasing, are as follows:

\*\* ALEMITE FITTINGS - HUDSON \*\*

Location	No. Rqd.	Elbow Nipple angle	Symbol No.	1/8 str. Nipple length	Symbol No.	Assy. No	Remarks
Front Axle Spindle - upper	2			1-1/4	63429		
Front Axle Spindle - lower	2			1-1/4	63429		
Front Axle Brake Lever	2			1	63426		
Front Axle Tie Rod	2			1	63426		
Drag Link	2			1	63426		
Front Springs - front end	2			1	63426		
Front Springs - rear end - upper right	1	90°	63621	1-1/2	63629		

\*\* ALEMITE FITTINGS - HUDSON \*\*

Location	No. rqd.	Elbow nipple angle	Symbol No.	1/8 str. nipple length	Symbol No.	Assy. No.	Remarks
Front Springs - rear end - upper left	1	90°	63619	27/32	63618		
Front Springs - rear end - lower	2	90°		27/32	63427		Set up at angle 45° Point down.
Rear Springs - front end	2	90°		27/32	63427		
Rear Springs - rear end	4			1	63426		All cars except: Coupe & Roadster
Rear Springs - rear end	3			1	63426		
Rear Springs - rear end - right side upper	1	90°	63619	27/32	63618		
Rear Axle Spider	2			1	63426		
Fan Hub	1			1-1/4	63429		
Starting Shaft	1	90°		27/32		63427	

\*\* ALEMITE FITTINGS ESSEX \*\*

Front Axle Spindle-upper	2		1-1/4	63429			
Front Axle Spindle-lower	2		1	63426			
Front Axle Brake Lever	2		1	63426			
Front Axle Tie Rod	2		1	63126			
Drag Link - front end	1	90°	27/32		63427		
Drag Link - rear end	1		1	63126			
Front Springs - front end	2		1-1/4	63429			
Front Springs - rear end - upper	2		1	63426			
Front Springs - rear end - lower	2	90°	27/32		62427		Set up at angle 30° Point down.
Rear Springs-front end	2	90°	27/32		63427		
Rear Springs-rear end	4		1	63426			
Rear Axle Spider	2	25°	27/32		63617		Horizontal
Pan Hub	1		1-1/4	63429			

Yours very truly,

HUDSON MOTOR CAR COMPANY

Ser:1074

Service Department

# HUDSON MOTOR CAR COMPANY

## DETROIT, MICH., U. S. A.

February 28, 1929

CABLEADDRESS  
HUDSONCAR

SERVICE LETTER

-- ELECTRIC GASOLINE AND OIL GAUGE --

### SERVICE INSTRUCTIONS

This equipment consists of a voltmeter on the dash, a rheostat operated by cork float in the oil reservoir and another similar Unit in the gasoline tank, a selector switch to permit the connection of either unit to the dash gauge and the wire necessary to connect these parts (see Instruction or Parts Book for wiring diagram).

The current to operate the gauge is taken from the lower terminal on the electrolock head so that the ignition must be turned on to make the gauge operative

### TESTING

(Ignition must be turned on for all tests)

“A” -- Gasoline reading but no oil reading.

- 1, Check with bayonet gauge to see that oil in reservoir is at proper level.
2. "Ground" fourth (counting from top) terminal of junction block on front of dash and push button on instrument panel.
  - (a) No reading on dash instrument indicates loose connection or broken wire from junction block to gauge switch or no contact in gauge switch when button is pushed in.
    - (1a) Check connection by "grounding" left switch terminal and pushing instrument panel button. If reading is obtained, the fault is in the switch and can be checked by "grounding" right switch terminal. Cleaning of contacts should be sufficient to obtain normal operation,
    - (b) If reading is obtained with "ground" in fourth terminal, look for a loose connection or broken wire from junction block to reservoir unit, poor contact between unit and reservoir or reservoir unit inoperative.
    - (1b) “Ground” terminal at unit and push dash instrument button, No reading indicates loose connection from unit to junction block or broken wire,

- (2b) If reading is shown under test (1b) "ground" unit case to reservoir, being sure to scrape away paint to get good contact and push dash instrument button, Reading indicates poor contact of unit with reservoir. Remove screws holding unit in place, clean thoroughly, scrape paint and dirt from unit flange around screw holes and replace,
- (3b) If no reading is shown under test (2b) unit is inoperative. Remove screws and withdraw unit from reservoir (oil must first be drained). "Ground" unit and with dash instrument button pushed in, move float up and down. If reading is obtained float arm is probably bent, preventing movement when Installed. Straighten arm and install and test as before.
- (4b) If no reading can be obtained by moving float as described under (3b) replace unit with new one,

"B" -- Oil reading but no gasoline reading

1. See that gasoline tank is at least half tall.
2. Test as explained under "A", using top terminal on Junction block for first test instead of fourth and using middle terminal of instrument panel switch instead of right terminal, Do not push instrument panel button when testing gasoline gauge,

"C" -- No reading on either gasoline or oil,

- 1, See that ignition switch is turned on#
2. Check connection from lower terminal of electrolock head to right terminal of dash gauge.
3. Check connection from left terminal of dash gauge to right terminal of selector switch.
4. If no reading can be obtained after checking 1, 2 and 3, "ground" left terminal of dash gauges No reading indicates inoperative instrument and it should be replaced,
5. If reading is obtained by 4, instrument is not at fault and tests "A" and "B" should. both be followed as faulty connections or inoperative rheostat units exist in both the gasoline and oil gauges,



# HUDSON MOTOR CAR COMPANY

## DETROIT, MICH., U. S. A.

CABLE ADDRESS  
HUDSONCAR

March 5, 1929

SERVICE LETTER

TO HUDSON DISTRIBUTORS AND DEALERS:

Is the Battery" on your check list for the car before delivery to the customer? Most battery complaints have their origin either in the storage of car's without proper attention being given to the battery or in lack of proper and intelligent servicing after delivery to the owner. A storage battery discharges slowly even though it is not in use and if allowed to remain in a discharged or even partially discharged, condition, serious injury may result which usually manifests itself in early battery failure. To avoid this condition, certain definite steps should be taken as outlined below:

When a new car is received from the factory, the storage battery should be checked by taking readings of the specific gravity of all three cells. If the specific gravity is 1.250 or Below, the battery should be recharged.

If cars are stored for any period of time, the battery should be checked every thirty days and if the gravity is 1.250 or below, it should be recharged.

Batteries on cars which have been in the show room should be checked when the car is taken from the show room regardless of whether or not it has been there for an extended period of time, as lights, horns and starters are used which discharge the battery. If the specific gravity is below 1.250, recharge the battery.

Just before delivery of the car to -the customer, the battery should be checked to be sure that the battery is fully charged. it is essential to trouble free battery operation that no car be delivered to the owner with the battery reading less than. 1.275.

Provision should be made for recording the readings taken our standard forms. This will, first insure the readings being taken by the individual charged with this duty and second, clear you of responsibility should trouble develop later.

In taking readings of specific gravity, it is essential that a good hydrometer be used. Cheap hydrometers may be in error as much as 25 or 30 points which make the readings taken valueless.

After delivery of the car to the owner regular inspections should be made every two weeks or 500 miles, whichever comes first. Usually these periodic inspections can be made when the car is in for greasing or other service. The gravity of all three cells should be read and recorded and if the water level is below normal, water should be added after the gravity reading is taken. If the gravity is between 1.250 and 1.225 reference should be made to the record of gravity on the previous inspection. If two successive readings are below 1.250, the battery should be removed from the car and recharged. If the gravity is 1.225 or below, the battery should be removed from the car immediately and recharged.

The best battery, like the best car, cannot do itself full justice unless properly used. INSURE BATTERY SATISFACTION BY:

1. Properly caring for the battery while in your possession.
2. Making sure the battery starts out fully charged.
3. Seeing that the battery is securely fastened in the cradle with terminal connectors clean and tight.
4. Insisting that energy used from the battery be promptly replaced and the battery thus kept fully charged.

Yours very truly,

HUDSON MOTOR CAR COMPANY

Ser: 1093

Service Department.

THIS LETTER HAS BEEN MAILED TO YOUR DEALERS.

# HUDSON MOTOR CAR COMPANY

## DETROIT, MICH., U. S. A.

April 18, 1929

CABLE ADDRESS  
HUDSONCAR

SERVICE LETTER

TO HUDSON-ESSEX DISTRIBUTORS AND DEALERS:

### LUBRICATION INSTRUCTIONS

	QUANTITY	
	<u>HUDSON</u>	<u>ESSEX</u>
<u>MOTOR</u>		
1. Oil Reservoir:		
(a) When drained through reservoir drain plug, your medium heavy bodied motor oil into reservoir through oil filler on left side of motor base.	8 qts.	5 qts.
(b) When oil reservoir has been removed pour medium heavy bodied motor oil into dip troughs before replacing or pour through valve tappet chamber after replacing reservoir. (Fill reservoir as in (a) and prime pump if necessary.)	2 qts.	1-½ qts
2. Pour medium heavy bodied oil through 1/8th inch pipe plug hole on back of oil pump and distributor support housing -- (necessary only after housing has been removed and replaced.).	No	½ pt.
3. Fill distributor housing with motor oil.	To oiler level	To oiler level
4. Fill oil cups on generator and starter motor	4 drops	4 drops
5. Fill water pump grease cup with Number 3 cup grease - turn down and refill.	Fill	No
6. When installing, coat flywheel and starter gear teeth with 600-W -- all other wearing surfaces on motor parts lubricated with motor oil before installing.	Yes	No
7. Put sufficient oil on top of pistons to give good compression seal after installing pistons, cleaning carbon or grinding valves.	Yes	Yes

CLUTCH

1. Clutch Housing:
  - (a) Use mixture of one half motor oil and one half kerosene.
  - (b) Use medium motor oil.

HUDSON

ESSEX

3/4 pt.

1/2 pt.

2. Clutch throwout bearing - pack with fibre grease.
3. Dip clutch disc in motor oil before installing.

Fill

Fill

Dip

Dip

TRANSMISSION

Fill to level plug with gear oil.

4 lbs. 3 oz.

1 lb. 12 oz

UNIVERSAL JOINTS

Use fibre grease.

Fill

Fill

FRONT AXLE

1. Hubs - use cup grease.
2. Hub Caps - use cup grease,
3. When assembling use rear axle compound on spindle pivot pins - brake operating shafts - brake lever pins.

3 oz.

3 oz.

3 oz.

3 oz.

Dip

Dip

REAR AXLE

1. Use rear axle oil to level of filler plug when assembling.
  - (a) Fill rear wheel bearing housing with light cup grease.
  - (b) Gears, bearings, differential housing and all moving parts - use rear axle oil.
  - (c) When installing rear wheels remove rust and flush gear axle shaft taper with motor oil.

4 lbs.

4 lbs

4 oz. each

4 oz. each

Dip

Dip

Cover

Cover

BRAKES

1. No oil or grease must be used on cams or pins of the brakes and shoes must be free from oil and grease.
2. Before mounting wheels\$ the drums and shoes must be inspected and any oil or grease removed.

	<u>HUDSON</u>	<u>ESSEX</u>
3. Use motor oil on all linkage not provided with fittings for lubrication.	Flush	Flush
<u>STEERING GEAR</u>		
1. Housing - use fibre grease.	12 oz.	12 oz.
2. Steering column tubes - use graphite grease.	Light coat	Light coat
<u>DRAG LINK</u>		
Pack sockets with fibre grease	Yes	Yes
<u>BONNET LOCKS</u>		
Pull handle as far up as possible to insert oil in plunger barrel	20 drops	20 drops
<u>CHASSIS</u>		
1. Inject soft cup grease in each fitting with pressure gun supplied with car.	Fill clearance	Fill clearance
2. Lubricate all moving parts such as pedals, levers, spark and throttle controls, clevis pins, ball joints, rocker shaft, brackets, et cetera, with motor oil.	Cover wearing surfaces	Cover wearing surfaces

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Very truly yours,

HUDSON MOTOR CAR COMPANY

Ser: 1118

Service Department

P.S. This letter has been forwarded to all your dealers

**HUDSON MOTOR CAR COMPANY**  
**DETROIT, MICH., U. S. A.**

June 11, 1929.

CABLE ADDRESS  
HUDSONCAR

SERVICE LETTER

TO HUDSON DISTRIBUTORS & DEALERS:

-- Attention: Service Manager --

We are listing below the correct spark plug gap for Hudson and Essex engines which we request you to adopt:

DISTRIBUTOR CONTACT GAP

Hudson .018 to .020  
Essex .018 to .020

SPARK PLUG GAP

Hudson .022 to .025  
Essex .018 to .020

We are bringing this to your attention because after investigating reports of engines missing at high speeds or on long pulls we have found the distributor and spark plug gaps set as wide as .040 and wider. Narrowing the gap corrected the trouble in practically every case.

A narrow distributor gap increases the time between contact, and thus gives the coil a better chance to build up the necessary voltage. A narrow spark plug gap means a shorter jump through the highly compressed dense atmosphere of the combustion chamber; hence, a more certain spark at high speed.

The result of too wide a gap is that the engine misses at high speed or on hills and hard pulls.

The above recommendations will meet both low speed and high speed conditions, and give most satisfactory engine performance.

In tuning up engines prior to car delivery, we recommend that the distributor contact and spark plug gaps be set properly, and in accordance with the above instructions.

Yours very truly,

HUDSON MOTOR CAR COMPANY

Ser: 1131

Manager Technical Service.

P.S. THIS LETTER HAS BEEN MAILED TO YOUR DEALERS.

HUDSON MOTOR CAR COMPANY  
DETROIT, MICH., U. S. A.

July 17, 1929.

CABLE ADDRESS  
HUDSONCAR

SERVICE LETTER

TO HUDSON DISTRIBUTORS & DEALERS:

-- CONTROLLING SPRING ACTION --

Because of the general use of spring control devices, it seems to be the general opinion that the control of spring action -- particularly on the rebound -- is entirely dependent on the "shock absorbers". This is erroneous as the operation of these devices is only auxiliary to the control that is inherent in the multiple leaf type spring.

When the multiple leaf spring is deflected, the leaves slide over each other. This introduces friction with the operation of the spring and tends to reduce the violence of rebound and to shorten the period of oscillation, This is exactly the purpose of the spring control device and it is necessary only because sufficient control cannot be obtained in the spring itself without restricting the spring deflections too greatly.

It is essential that both sources of spring control be preserved or the riding qualities built into the car will be destroyed. It is, therefore, necessary to keep the shock absorbers in good mechanical condition and full of the proper oil. It is equally important to maintain the original internal friction of the springs.

All Hudson and Essex spring leaves are polished and lubricated with a light coat of graphite grease before the springs are assembled. The resistance offered by the shock absorbers is correct with the springs in their original condition but insufficient if the springs are oiled.

DO NOT USE LUBRICATING OIL ON, SPRINGS. A small amount of penetrating oil to prevent spring squeaks is permissible.

Spring covers incorporating oil pads are not recommended. Suitable spring covers which will preserve the original lubricant almost indefinitely may be obtained from our Accessory Department at very attractive prices.

Very Truly Yours,

HUDSON MOTOR CAR COMPANY

Ser: 1148

General Service Manager.

P.S. THIS LETTER HAS BEEN MAILED TO YOUR DEALERS.