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SERVICE FOLLOW-UP

A few of our Dealers are taking advantage of the information and direct results which can be obtained by the Service Follow Up System.

Our Dealers, Dominion Motors, Edmonton, Alta., are certainly to be complimented on the systematic and thorough manner in which they have been carrying this out. Recently, they conducted a Service Follow Up from January 15th to February 23rd. In this Service Follow Up, they used two men, making a total of 610 calls on customers — **347 customers reported that they were satisfied with the service; 6 complaints on shop; 7 complaints on sales; 1 complaint on stockroom; 14 immediate overhauls secured; 23 overhauls promised in March and April; 76 other jobs promised in March and April; 162 cars stored for winter; 120 moved out of city; 98 sold their cars and 76 prospects for new sales.**

We want to call your attention particularly to the service which they were able to bring in through the follow up. While some of these customers would, no doubt, have come in to the Service Station in time to have their work performed, some of them might have gone elsewhere had they not been reminded of the service given by the Dominion Motors.

You cannot afford to pass up this opportunity of acquainting your customers with your service and invite them to call on you for all their Ford car adjustments.

This Follow Up from a Service angle can be taken care of to a great extent through the follow up portion of the shop copy of the Repair Order Form, illustrated by us on page 82 of March, 1924, Service Bulletin.

You may not know how many customers you are losing, until you actually make a survey of your territory. Through this you will also know whether your service is satisfactory or not, and be able to make any adjustments necessary for the betterment of this service in future.

HART BATTERY INSTRUCTION

Directions for Treatment of Automobile Batteries When Shipped Dry

Filling Cells With Acid

Remove the vent plugs and add sufficient sulphuric acid of specific gravity 1280 to give $\frac{1}{2}$ inch electrolyte above the plates.

Charging Circuit

Direct current only must be used, never alternating current. The positive terminal of the battery marked + must be connected with the positive of charging circuit, and the negative terminal of the battery marked N or - with the negative of the charging circuit. If connected reversed, the battery will be ruined. Arrange a rheostat rectifier or lamps in series with the battery so that the charging current can be regulated to the proper value.

Initial Charge

After filling with acid, the battery should be allowed to stand for 10 or 15 hours after which it must be put on charge as near as possible to rate given in table below, and charging should continue **WITHOUT INTERRUPTION** until the voltage on each cell ceases to rise. A fully charged cell should show from 2.5 to 2.7 volts with the charging current passing, but if temperature is high, the voltage may be as low as 2.4. If the correct ampere rate given below is maintained, **THE TIME REQUIRED SHOULD BE 96 HOURS**. At the end of charge the gravity of each cell should be adjusted to 1280 Temperature of electrolyte must not exceed 110 deg. Fahrenheit (43 deg. Cent.) on charge, and if this point is reached the ampere rate must be reduced and the time increased, so that the total ampere hours of charge remain the same. The charge completed replace vent plugs after making sure that the vent holes are free of obstruction.

Initial Charge Table

FFS 613	Charging Rate	Hours of Charge	Minimum Ampere Hours
	Amperes		
	4	96	384

The above instructions apply to domestic and export countries with temperate climates. For use in tropical countries, the batteries should be filled up with acid of specific gravity 1220 instead of 1280 but in all other respects

conditions of charge are identical, although the electrolyte at end of charge will have a specific gravity of about 1230.

Important Notice

In Bulletin No. 7, December, 1924, we printed instructions for charging Exide Batteries shipped dry. In Bulletin No. 9, February, 1925, we printed similar instructions for Prest-O-Lite Batteries.

The above article is the last of these instructions, and dealing with Hart Batteries, we wish to point out certain differences in these instructions, as it is most important that the batteries be prepared for service in accordance with instructions of their manufacturers.

Specific Gravity

The specific gravity of Electrolyte used in filling the Exide Battery is 1360; for Prest-O-Lite it is 1300; for Hart it is 1280.

Time of Standing Before Beginning Charge

The Exide Battery must be allowed to stand from 10 to 15 hours before starting the initial charge. The Prest-O-Lite instructions are to begin charging immediately after adding the acid, or within 2 hours thereof in case the temperature of the acid is above 100 deg. Fahrenheit, and the Hart instructions say to allow the batteries to stand 10 to 15 hours the same as shown in the Exide table.

Time Required for Initial Charge

The Exide instructions specify an initial charge of 96 hours; the Prest-O-Lite instructions call for 52 hours initial charge; the time required for the Hart battery is 96 hours.

This initial charge is very important and, to be sure that this charge is complete, the Exide instructions state the initial charge is not complete until the Hydrometer reading in every cell goes as high as it will and then remains there for 10 hours.

One cannot be too careful in making sure that the initial filling and charging of a new battery is properly carried out. It will be

noted that in addition to allowing the plates to stand in the acid for 10 to 15 hours before starting the charge, the length of time required to complete the charge is always twice as great with the Exide and Hart as with the Prest-O-Lite battery, and these points should be carefully noted.

Battery Code

We give you herewith the Code marks placed on the batteries at the time they leave our factory:

	1924	Corresponding numbers for 1923
January.....	M 4	M 2
February.....	B 4	O 2
March.....	C 4	Q 2
April.....	D 4	R 2
May.....	E 4	E 2
June.....	F 4	F 3
July.....	G 4	G 3
August.....	H 4	H 3
September.....	I 4	I 3
October.....	J 4	J 3
November.....	K 4	K 3
December.....	L 4	L 3

Gearing Truck Worm Thrust Bearing Assembly

We have had several complaints here regarding the truck worm thrust bearing to the effect that it quickly cuts out. In making a check on these, we have found that this is due to the fact that owners and Service Stations are not careful enough to see that this bearing is kept well supplied with oil. The cap plug should be taken out frequently and this filled with a good grade of grease oil, similar to the oil placed in the axle. This is very important, as the worm exerts a heavy thrust on this bearing at all times and it will not stand up if allowed to run dry.

If this precaution is carefully carried out, we are confident that this trouble will not occur.

Balloon Tire Inflation

As we are now supplying Balloon Tire equipment, you have, doubtless, been at a loss to know just what pressure the different makes of tires should be pumped. We, therefore, give you the following list which should work satisfactorily for the tires which we are using as standard equipment:

Sedan 30 to 33 lbs. Touring 26 lbs.
Coupe 24 to 26 lbs. Roadster 22 lbs.

Before delivering cars to customers, every Dealer should put a gauge on each tire and see that it is the recommended inflation as per the above table; also impress upon the owners the importance of keeping their tires correctly inflated, which will go a long way towards making their tires stand up satisfactorily.

Light Design Piston

A new design piston has been adopted for use in both production and service which is known as the Light Design Piston. The new piston differs from the old type by having thinner side walls and smaller bosses and holes for piston pin bushings, and can readily be distinguished from the old type by the small flange that extends around the inside edge of the piston, at the bottom of the skirt. See "A", Fig. 1. The change in design reduces the weight of the new type piston to approximately 1 lb. 12 oz.

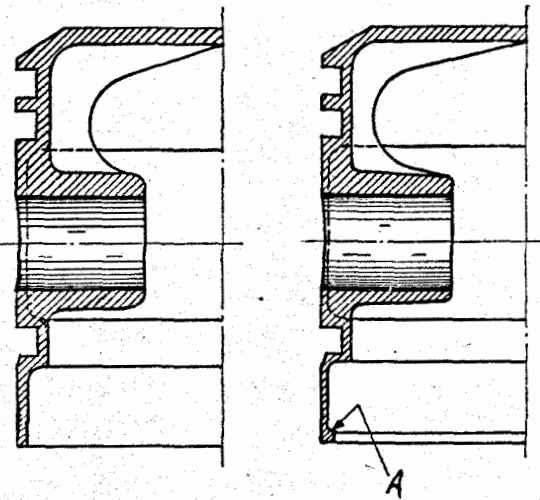


Fig. 1

When replacing pistons it is very important that the correct type piston be used. Persons performing their own overhaul work should be advised to bring in the old piston so that the dealer's stock man may see that they get the proper type piston to replace the one removed. If however, four new pistons are required for the same job the new design piston should be supplied.

The outside dimensions of T-668 Piston Pin Bushing, have been changed. It is therefore, necessary to carry two bushings, to be listed as 3022½ 668 AR and 3022C 668 B. Both the heavy and light design pistons now

being produced are being equipped with 3022C 668 B Bushing. The 3022½ 668 AR will, therefore, only be carried for rebushing old heavy design pistons.

Prior to being adopted as standard equipment the new design pistons were subjected to exhaustive tests, and thoroughly proved their efficiency. The principal advantages gained from their use are faster acceleration and a smoother running motor.

The new type pistons are of exceptionally high quality and long life and possess none of the objectionable features that characterize many of the so-called light weight pistons that are advertised for Ford cars.

Use Correct Type Transmission Triple Gear Shafts

When necessary to remove transmission triple gear shafts, the original shafts (see "A", Fig. 2) should not be replaced in the flywheel, but new shafts, part 3315, should be used, these shafts being .003" larger on the part that

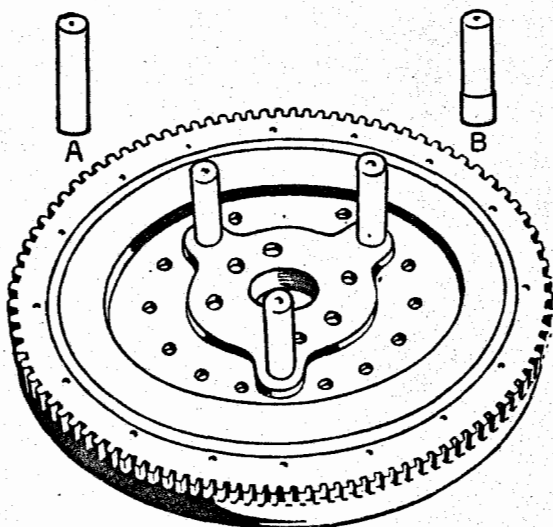


Fig. 2

fits into the flywheel, (see "B") than the original shafts.

If the shafts which were removed are again installed in the flywheel it will result in a loose fit, as the holes in the cast iron flywheel become slightly enlarged when the steel shafts are withdrawn, and it is for this reason that 3315 shafts, which as stated above are .003" over-size on the part that fits into the flywheel, must be used for replacement purposes.

Replacing the original shafts and attempting to make them fit tightly by peening the flywheel around the edge of the shaft is very poor practice as this alters the distances between the shafts and as a result the gears are thrown off center, resulting in poor fitting gears and a noisy transmission.

Magneto Coil Shims

Recently several improvements have been made in the design of the Magneto Coil Support Shim, which is used for regulating the gap between the Coil and Magnets.

Magneto Coil Support Shim, part No. 3272 has been obsolete and we are now using four types of Shims—parts Nos. 3272-B, 3272-C, 3272-D and 3272-E.

No. 3272-B is a paper shim .007 to .008 inches thick—two of these shims are specified per car and sometimes it is only necessary to use one, while again it may be necessary to use more than two, in order that the gap between the Coils and the Magnets may be set to exactly $\frac{1}{32}$ ".

Occasionally, also, there is a slight variation of the width of the gap between the Magneto Coil and Magnets, i. e., the gap will be greater at one side of the Coil Support than it is at the other. It is to regulate this variation and make the gap uniform at all points that No. 3272-C and 3272-D Shims are used. These Shims are made of steel and are .015 and .025 inches thick respectively.

No. 3272-C is a small thin "U" shaped paper Shim, see E, Fig. 3, which is used for the same purpose as the 3272-C and 3272-D Shims, when it is necessary to obtain extremely close adjustments in getting the gap at exactly $\frac{1}{32}$ of an inch.

New 17-Inch Steering Gear Spider and Rim

We have changed the size of the steering wheel from 16" to 17", the part number remaining the same—No. 3503-E.

The number for the new design Spider is No. 3503-E and the new design rim is No. 3501-D. The old design Spider and Rim will still be carried under their old numbers. This change was made in order to make the controlling of the direction of the car easier, along with the new design 5 to 1 gear ratio.

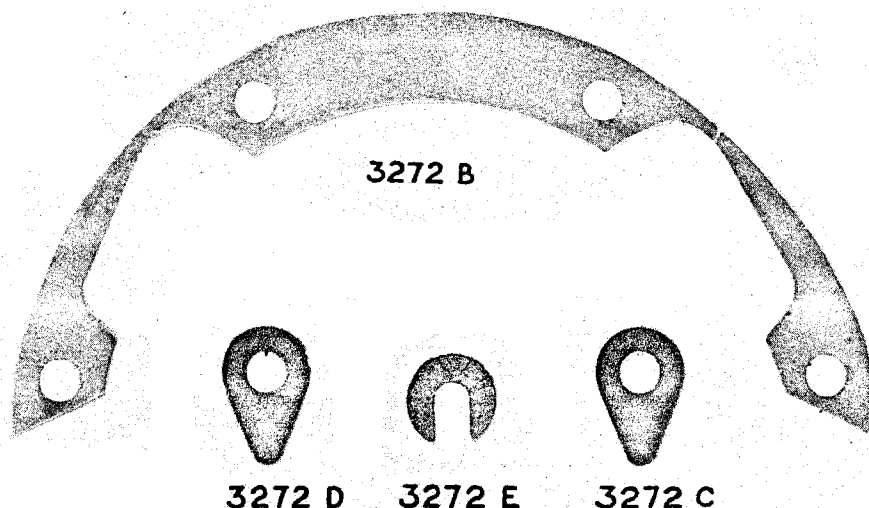


Fig. 3

New Design Transmission Band Assembly No. 3413 for Left Hand Control Cars

The new design Transmission Band Assembly with the detachable ear (see Fig. 4) has been adopted to simplify the operation of changing Bands. In making this change, the slow speed shaft No. 3427 is shorted, leaving only about $\frac{7}{8}$ " projecting past the slow speed notch No. 3428. This shaft was shorted to make it possible to install the new Band and is sufficiently long to support one end of the Spring No. 3425. The other end of the Spring is supported by a new design Transmission Band Adjusting Screw No. 3419. This new Adjusting Screw instead of being hollow on the inside end, has the end turned down projecting $\frac{3}{4}$ " into the Spring.

Removing New Design Band Assembly

To remove New Style Bands, first pack sufficient rags under end of reverse and brake shafts to prevent the dropping of nuts and washers into the Crankcase. Remove Nuts

No. 3426, Washers No. 3415 and Adjusting Screw No. 3419. Work the reverse and Brake Shaft out to the left as far as possible and remove all three Springs No. 3425.

To remove detachable ear, start with the reverse Band: place Screw Driver in square hole A, Fig. 4, pry up and back. This unlocks the ear, after which it may be easily removed. Pull the Band out and work the other two Bands forward on the reverse Drum, one at a time, and remove them in a similar manner.

Replacing Bands

To replace Bands, proceed in reverse to instructions given for removing them: first work Bands around as shown in Fig. 5 until the end can be reached by a hook and pulled up on top. Install ear by slipping it in place over Pinions and with a Screw Driver placed between the Pinion and hole in the ear, as shown in Fig. 6, the ear may be easily worked into place.

Now position this Band as far back on the Brake Drum as possible and install the other two Bands in a similar manner: Next install Springs, Lock Washer and Adjusting Nut and installation is complete.

Removing Bands from Covers having old type Slow Speed Shaft

To remove old style Bands, when replacing with new, proceed as follows:

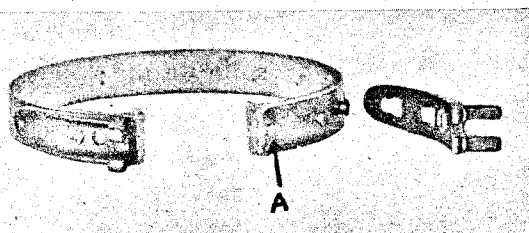


Fig. 4



Fig. 5

Remove Nuts, Washers and Springs from reverse and Brake Shaft, as before described.

Place sufficient rags under Slow Speed Shaft

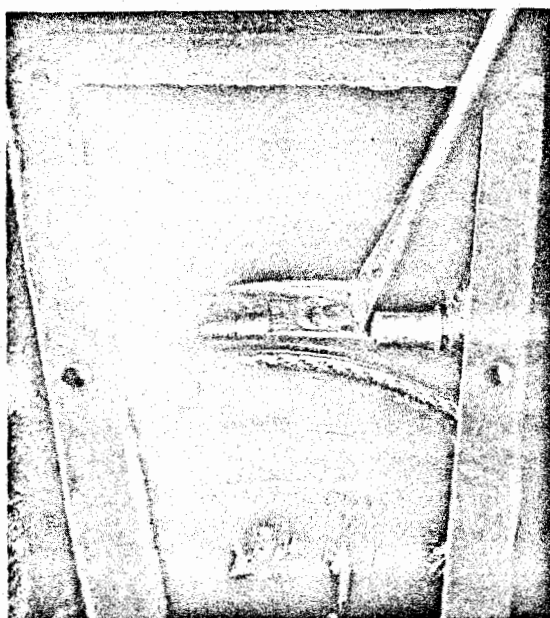


Fig. 6

to keep cuttings from Transmission and cut Shaft off about 1" from notch No. 3428; for cutting off Shaft, use a saw, shown in Fig. 7.

Now remove the cut-off end and spring and

with a 0 size Bolt Cutter, Fig. 8, and attempt peening the Bands in two, close to the left ear. It is very



Fig. 7

it possible to remove them without removing Transmission Cover.

To install new Bands, proceed as previously described.

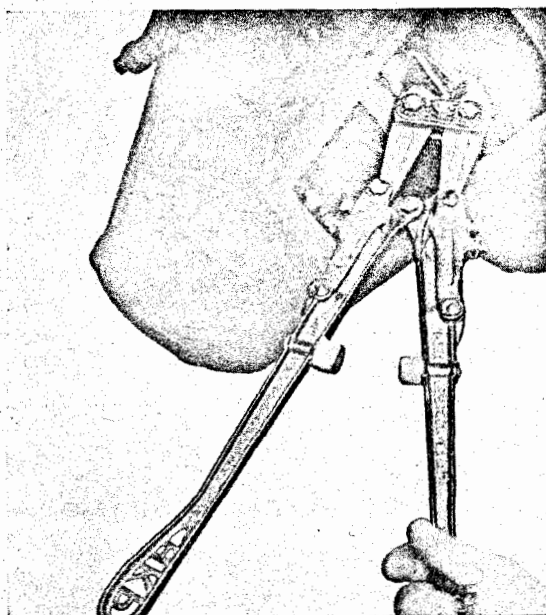
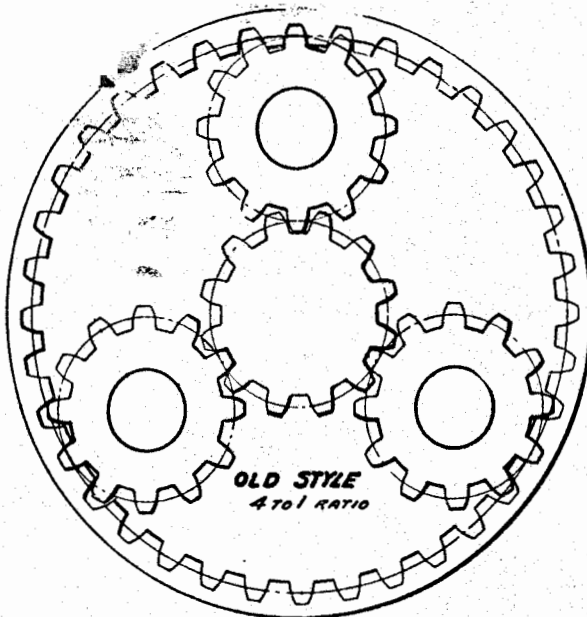
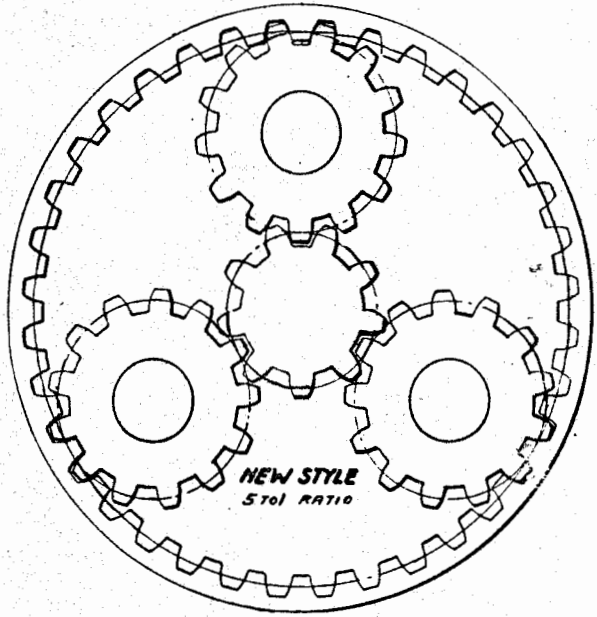


Fig. 8



Correctly Assembled

Fig. 9



Correctly Assembled

Fig. 10

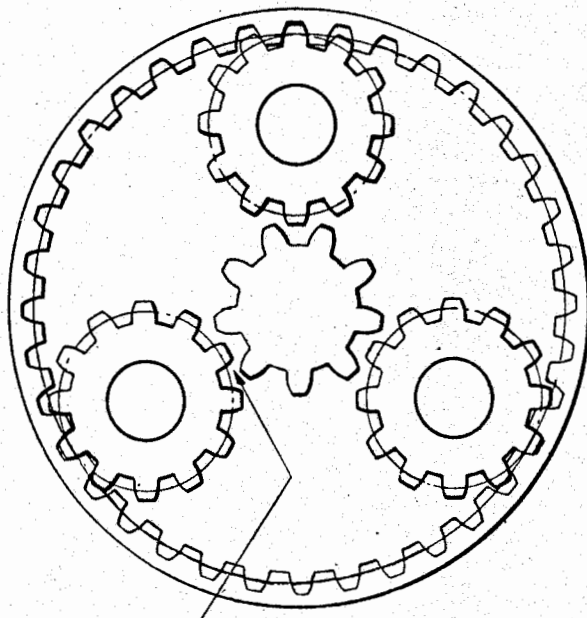
New Design Steering Gear

We have recently changed the gear ratio in the steering gear from 4 to 1 to 5 to 1. This has been accomplished by a new design steering gear Pinion No. 3517, having 13 teeth instead of 12, as in the old design, and by a new design steering gear Drive Pinion No. 3519, having 9 teeth instead of 12, as in the old type.

The new gear may be installed in a car

formerly equipped with old gear ratio by replacing the old style steering post with the new design post and a new Pinion, Figures 9 and 10 illustrate the old and new gears.

It is very important that you do not attempt to install a new design steering gear drive pinion in an assembly having the old design steering post and gears, as shown in Fig. 11, as the gears will not mesh properly, causing the steering to lock, as shown in Fig. 12.



Incorrect Assembly. Old style planetary cars in relation to new style steering gear driving pinion—DANGEROUS

Fig. 11

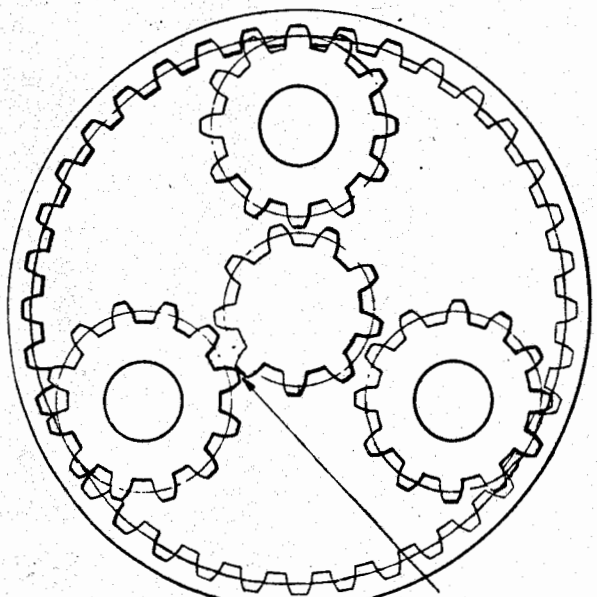


Fig. 12

Locked Gears—result of incorrect assembly—DANGEROUS

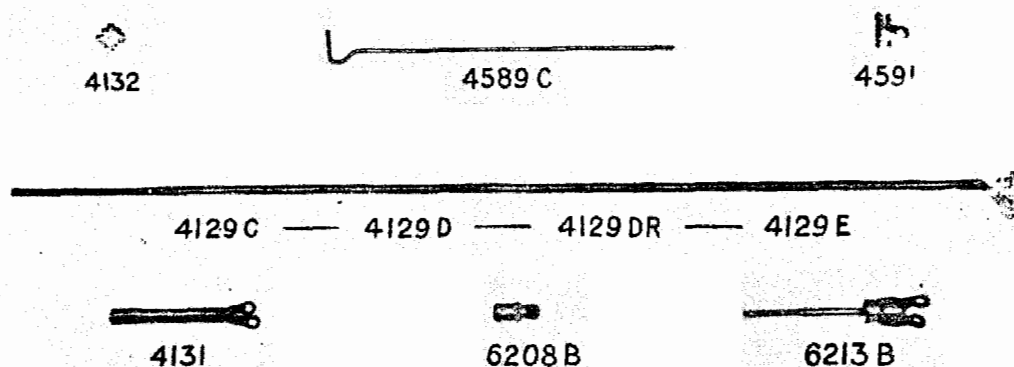


Fig. 13

New Style Carburetor and Adjusting Rod

The new style Carburetor Priming and Adjusting Rod has been adopted on all models. It serves both as a Carburetor adjustment, by turning the knob of the Primer to right or left, and as a Priming Rod, by pulling the knob outward.

When installing this assembly on cars equipped with old style dashes, it will be necessary to drill or cut a hole in the dash to allow the Rod to pass through. It will be a simple matter to get the measurements for this from a dash on a new style car which you have already received.

When ordering parts, use the following numbers 4129-C, Carburetor Adjusting Rod for all closed models; 4129-D, Carburetor Adjusting Rod and Knob for Touring Cars, Roadsters and open cab Truck, left-hand control; 4129-DR, Carburetor Adjusting Rod and Knob for Touring Roadster T Commercial and TT right-hand control; 4129-E for TT Chassis and T Commercial, left-hand control; 4131, Carburetor Adjusting Rod Sleeve; 4132 Carburetor Rod Universal Joint Spider; 4591 Priming Rod Lift; 4589-C Priming Rod Lift to Choke Lever; 6208-B, Adjusting Metal Clamp Nut; 6213-B, Spray Needle Assembly.

The design of the Carburetor has also been changed slightly. However, this will not interfere in any way with adapting the new style

Spray Needle Assembly No. 6213-B, as the Adjusting Needle Clamp Nut No. 6208-B may be used with the old design Carburetor, see Fig. 13 for illustration of the parts mentioned.

Lincoln Valve Timing

Cars which have the new style camshaft have no change in valve timing as some mechanics have been led to believe by the change in the valve setting marks on the clutch ring. The change in the position of these markings is caused entirely by the change in the contour of the cam.

All Lincoln engines built to date have had the same valve timing as illustrated in Fig. 14.

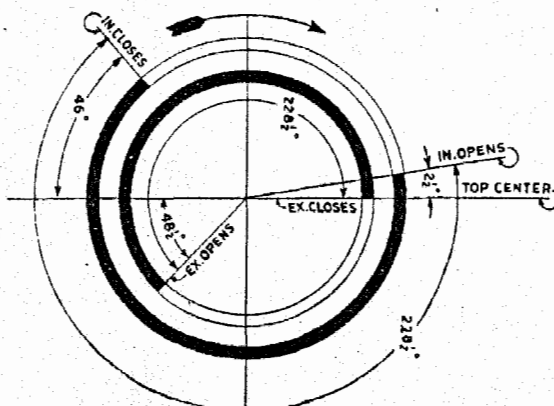


Fig. 14