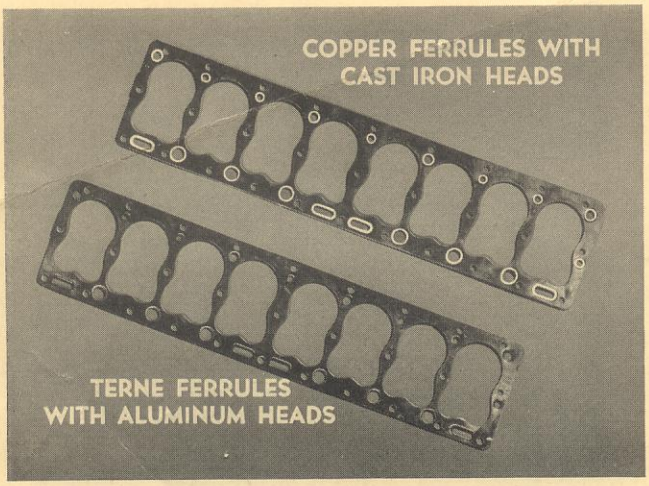
VOL. 12 No. 19 OCTOBER 1, 1938

CYLINDER HEADS—EIGHT AND SUPER EIGHT

The current Seventeenth Series Eight and Super Eight are fitted with cast iron cylinder heads instead of aluminum as previously used.

The new cylinder head gaskets having copper ferrules are used with the new cylinder heads. The gaskets previously used had terne-plated ferrules to reduce the possibility of electrolytic corrosion between the aluminum cylinder heads and cast iron blocks.

It is important that the new gaskets not be used with aluminum heads. Using the copper-ferruled gasket with the aluminum head will increase the possibility of corrosion.



The different gaskets can be readily identified. On the new gaskets the copper ferrules contrast sharply in color with the material of the body of the gasket. On the old gaskets the ferrules and body of the gasket are of the same material, terne plate, and are of the same color.

302736—(Aluminum) Cylinder Head Gasket
Model 120-120B-120C-1602

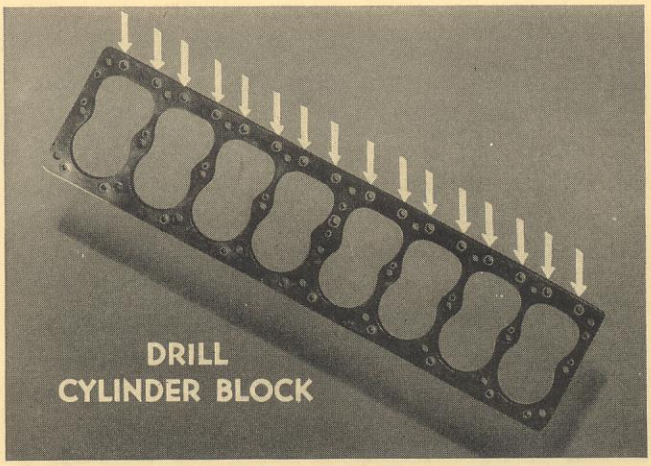
335676—(Cast Iron) Cylinder Head Gasket
Model 1701-2

215430—(Aluminum) Cylinder Head Gasket
Model 1603-4-5

335442—(Cast Iron) Cylinder Head Gasket
Model 1703-5

Use only terne-plated gaskets with aluminum cylinder heads.

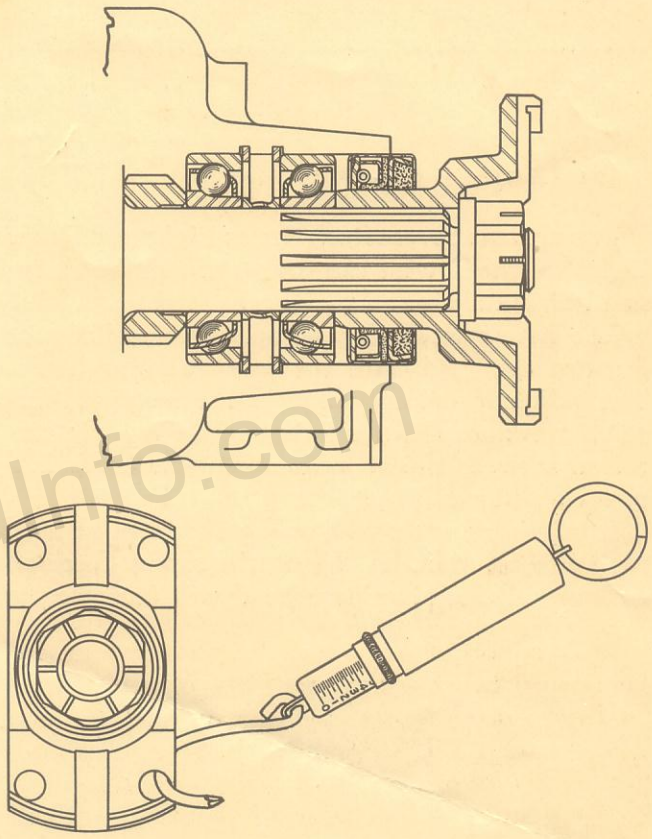
Cylinder head stud spacing is the same, and where desired cast iron cylinder heads may be installed to replace aluminum heads on all 120 and Super Eight cars back through the 12th Series. On the Super Eight, however, the water passages have been relocated to provide a better bearing on the gasket. When installing the 17th Series cast iron head on earlier cars new water passages must be drilled in the block and a 17th Series gasket used.



The new gasket may be used as a template for drilling the sixteen 11/32" holes.

ECONO-DRIVE REAR BEARINGS RENEWING AND PRELOADING 1700-1-2-3-5

1. Drain Econo-Drive and transmission.
2. Remove transmission and Econo-Drive assembly, clean up and place on bench.
3. Remove five cap screws holding Econo-Drive case to adapter plate. Do not remove bolts holding adapter plate.
4. Slide Econo-Drive case to rear and off the unit. The tail shaft and bearings, overdrive shifter fork, and clutch sleeve, will come away with the case.
   Note: Some of the rollers in over-running clutch will drop out when case is removed, and these should be watched to see that none are lost or left in case. (12 rollers).
5. Remove universal joint flange.
6. Remove speedometer driven pinion.
7. Remove speedometer drive gear and tail shaft.
8. Tap out inner tail shaft bearing with brass rod and remove the collapsible spacer which separates the two bearings and provides the preload.
9. Tap out outer or rear bearing from the inside which will also bring the oil seal, without damage.
10. Install new rear bearing with wide face of outer race toward the front.
11. Replace oil seal.
12. Install new bearing spacer and front bearing with wide face of outer race facing the rear (wide faces of outer races should face each other.) A new spacer should always be used when the bearings are replaced.
13. Replace clutch sleeve and reverse rod in case. End of clutch sleeve with square openings should be toward front. Renew gasket on adapter plate if it is damaged.
14. Place all rollers in over-running clutch holding them in place with small rubber band.
15. Slide tail shaft over rollers by rotating slightly in anti-clockwise direction, and remove rubber band with hooked wire. Be sure this is done.
16. Be sure speedometer drive gear is in place on tail shaft with chamfered section toward rear. Align the teeth in tail shaft with its mating member.
17. Slide Econo-Drive case and clutch sleeve over main shaft, watching for interference of rear bearing spacer at splined end of tail shaft, cocking of clutch sleeve or interference at forward end of reverse rod.
    Note: Clutch sleeve can be prevented from cocking by inserting finger through drain plug hole, and as soon as tail shaft splines come through bearings far enough, use universal flange to rotate the tail shaft slightly in either direction to match teeth and allow clutch sleeve and case to slide forward. Hook on end of reverse rod should be steered into its slot in adapter plate.
    Case should be seated against gasket in adapter plate before cap screws are tightened.



18. Install universal joint flange and nut but do not draw nut up tight against flange. Hook fish scale in bolt hole in flange and carefully check the pounds drag of oil seal on flange hub, pulling at right angles. Now tighten nut to preload bearings until five pounds additional drag is obtained on scale. For example: If drag of oil seal registers three pounds, the total drag on scale should show eight pounds when nut has been tightened to the proper point.

ECONO-DRIVE INSTALLATION

It is practically out of the question from a cost standpoint to consider installing the Econo-Drive after a car has left the factory.

Installing the Econo-Drive in the field would require the purchase of a complete new trans-

mission with Econo-Drive attached, a new propeller shaft with universal joints, and a lower gear ratio differential. In addition to this the time required in the field would be approximately fourteen to sixteen hours.

The factory's commitment on parts and materials is such that no credit could be given on any parts returned and, of course, transportation costs would also be involved.

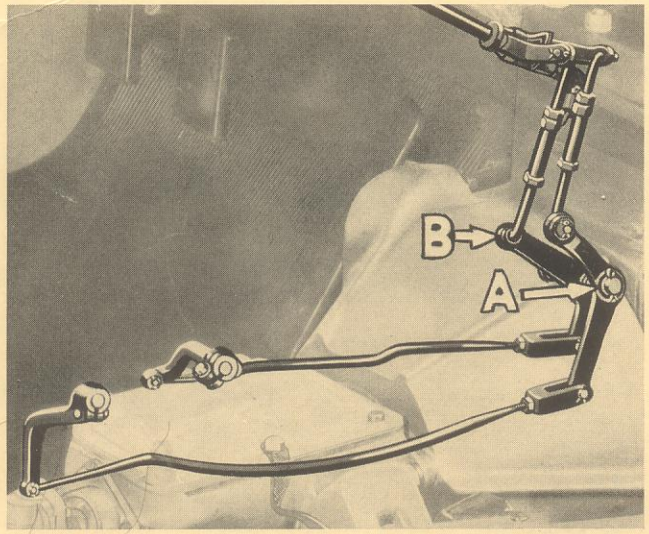
In other words, the Econo-Drive must be installed during production or not at all.

SERVICE ON 1939 CLOCKS

Our 1939 clocks are built by a different vendor and we believe they are superior to any clocks we have previously supplied. If the instructions for installing, which are packed with each clock, are followed, we are confident the clock will give satisfactory service. To receive prompt attention when service is required, both distributers and dealers will please pack the clock carefully and ship it, transportation prepaid, direct to the clock manufacturer, the George W. Borg Corporation, 469 East Ohio Street, Chicago, Illinois. They will repair or replace it, no charge, during the warranty period of twelve months, and return it to you within forty-eight hours, transportation paid. If you do not get prompt and satisfactory service on these clocks, please notify the factory General Accessory Department at once.

GEAR SHIFT LEVER RATTLE
1700-1-2-3-5

It is important that you do not lubricate the Handishift bell cranks, which are located just below the brake master cylinder spring. Friction washers are provided on the pivot bearings to provide a dampening effect. Lubrication will of course reduce the dampening effect which will



permit considerable free movement of the shift lever and possible rattle.

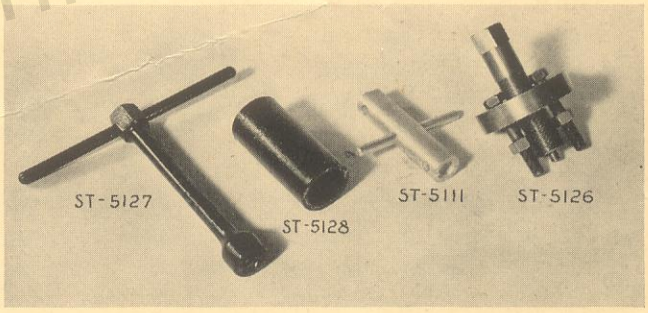
If a rattle of the Handishift lever should develop the bell cranks should be inspected and if oily the bearings should be washed in gasoline and wiped dry. With all rods disconnected the friction drag can be measured with a small spring scale hooked in the top hole of the longest lever at B. A pull of two to three pounds should be required to move the lever. The friction drag is adjusted by adding or removing special spring washers under flat washer at A.

STEERING CRANK GAUGE

A change should be made in your ST-5105, steering crank aligning gauge, shown on page 48 in the tool catalog. By drilling a 9/32" hole through the center hex nut, as shown in the above illustration, this tool will be adaptable to the Seventeenth Series Cars, 1700, 1701, 1702, and 1703.

TOOLS—SEVENTEENTH SERIES

Every dealer should have these tools ready for service. The investment is so small you cannot afford to be without them.



ST-5126 Steering wheel puller.....$3.25 List
Used with steering post shift, 1700-1-3.
ST-5127 Conn. rod lock nut wrench.... 1.15 List
New style Pal nuts, 1700-1.
ST-5128 Str. knuckle spacer sleeve..... .80 List
Used with old and new style bushings, 1600-1–1700-1-3.
ST-5111 Inst. board reading light and starter switch wrench..... 2.20 List
Combination for 1600-1-3-8–1700-1-3-8.

SPECIAL ACCESSORY NOTICE

Please change both motor numbers in the Accessory Price List, dated September 1, 1938, as they appear under the PA-335375 De Luxe Steering Wheel

Change "B-1551 to B-3551"; "B4551 to B-6565"
Under PA-335376, De Luxe Steering Wheel
Change motor number "B-4552 to B-6565"

INSTALLING 17TH SERIES HOT WATER HEATERS—DEFROSTERS
HEATERS DE LUXE PA-324927 AND STANDARD PA-324928

Six and Eight 1700-1-2

The installation is the same as for models 1600-1-2 (instructions enclosed in Heater Package) except the switch is mounted on the lower flange of the instrument board in hole provided.

See illustration No. 1

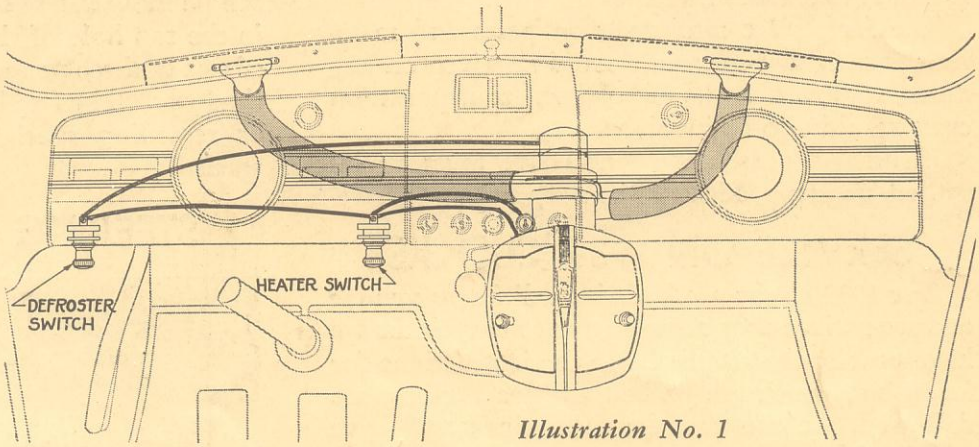


Illustration No. 1

NOTE: When installing both Heater and Defroster attach Defroster wire to right switch or if preferable splice Defroster wire so it will reach the left hand switch.

Super Eight 1703-5

The installation is the same as for models 1603-4-5 (instructions enclosed in Heater Package) except the steel tube is mounted on the right side of the cylinder block and the switch on the lower flange of the instrument board in hole provided.

New tube equipment PA-335803 required.

See illustrations No. 2-3

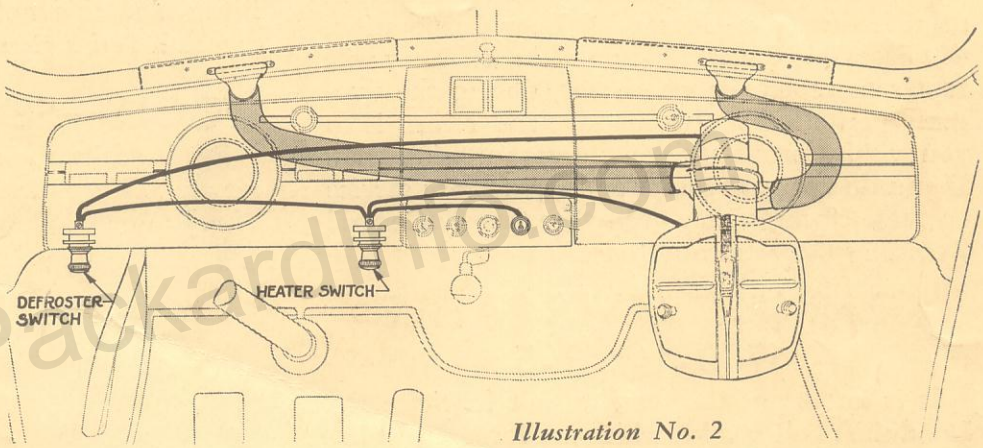


Illustration No. 2

Twelve 1707-8

Installation same as for models 1607-8 (instructions enclosed in Heater Package).

Defrosters PA-324899 for Six and Eight 1700-1-2

The installation is the same as for models 1600-1-2 (instructions enclosed in Defroster Package) except the switch is mounted on the lower flange of the instrument board in hole provided.

See illustration No. 1

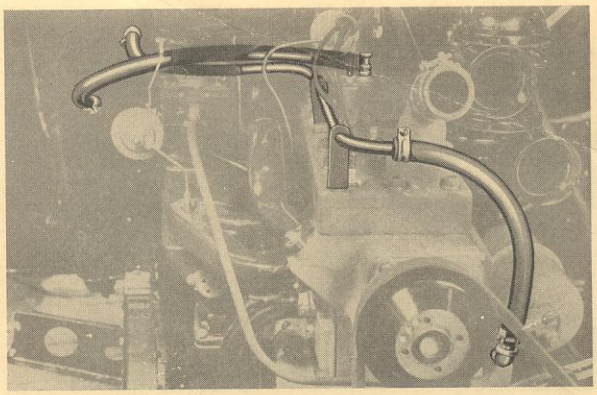


Illustration No. 3

Defroster PA-335149 for Super Eight 1703-5

The installation is the same as for models 1603-4-5 (instructions enclosed in Defroster Package) except switch is mounted on the lower flange of the instrument board in hole provided.

See illustration No. 2

Defroster PA-239695 for Twelve 1707-8

Installation same as for models 1607-8 (instructions enclosed in Defroster Package).

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