



WHEN IS A REPAIR ORDER COUNTED?

There is some question as to when a repair order should be counted in order to obtain the correct total for what is called "Total Customer Repair Orders." Several explanations have been given and we should like to mention this again.

In the first place, by "total customer repair orders" we mean the total number of *customer contacts*.

It is recommended that only one repair order be written for each customer contact. The standard repair orders are so designed that "no charge" items and "charge" items can be written on the same order. It is also recommended that lubrication items be written on standard repair order forms along with "charge" or "no charge" items. This makes only one type of order going through and eliminates confusion.

If the customer has a coupon book the lubrication item is written up as—"Lubrication Service Coupon No. 4, Book No. 1030." This item is not priced on the invoice copy of the Repair Order since the customer has already paid for the work.

If the customer orders some lubrication work but does not have a coupon book, the item is written on the Repair Order and priced.

If there is "no charge" work to be done the item is written on the order and in the price column use the words "no charge."

You are familiar with the distribution of cost on "charge" items. The only difference between such a distribution and one covering "no charge"

or coupon lubrication items is that on the DSA-504 form you indicate that account 152 Contract Deposit Account is to be used in the column headed "Charge Customer" for both material and labor cost.

On a "no charge" item charged to policy you would show both material and labor costs charged to account 54.

On the PD-104 form, cost distribution is made on the back of the accounting copy, the top part of the form being used for "charge" work and the bottom being used for "no charge" or internal work. The cost distribution is therefore a simple matter and can be handled quickly even though the three different kinds of items appear on the same order.

With this procedure a count of Customer Repair Orders will always represent a count of customer contacts.

Using separate forms for "no charge" or lubrication items increases the amount of paper work to be handled and increases your cost of forms. Use the "one order" method. It will simplify your routine, reduce your cost and give you accurate figures on the number of customer contacts, average labor sales per Repair Order and average parts sales per repair.

These are important figures to every service manager. They are the gauge of your efforts. They tell you where you stand and where increased effort should be made to increase your profit.

HAVE YOU SEEN IT?

SERVICE MEETING

Date _____ Time _____ Place _____

PACKARD SERVICE TRAINING PROGRAM

A NEW LINE
ON
WHEEL ALIGNMENT

TIRES—

How and why they wear
and what to do about it.

FRONT END ALIGNMENT—

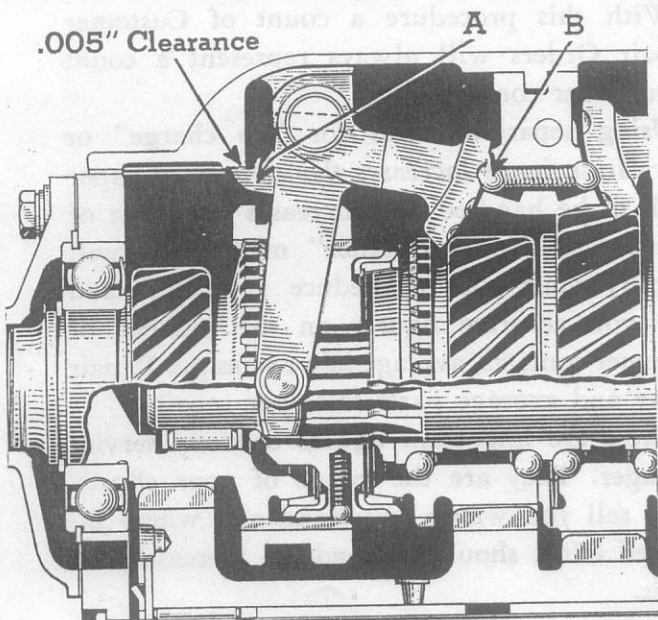
Its effect on tire wear,
steering and ride.



TRANSMISSION ADJUSTMENT

1700-1-2-3-5

The travel of the direct and second speed gear shifter fork is limited by the finger A contacting a boss on the transmission cover. When the detent ball B is seated in the high gear position in the sector, there should be .005" clearance between the finger and the boss.



Too little clearance will not permit the detent ball to seat permitting the direct drive and second speed clutch ring to slip out of mesh.

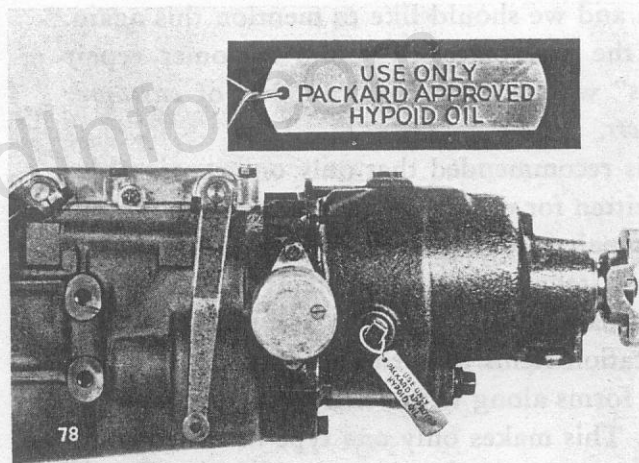
Too much clearance will allow the clutch ring to be shifted too far forward, uncovering the synchronizer balls in the clutch gear, permitting them to fall out. Without the detent balls the gears will not be synchronized and clashing will be experienced when shifting into second or direct gear.

When more than the specified clearance is found, it may be reduced without disassembling the fork from the cover by holding the fork in second speed position with the shifter lever and striking the finger a few sharp blows with a hammer.

Additional clearance can be provided when necessary by filing the boss.

ECONO-DRIVE LUBRICATION

1700-1-2-3-5

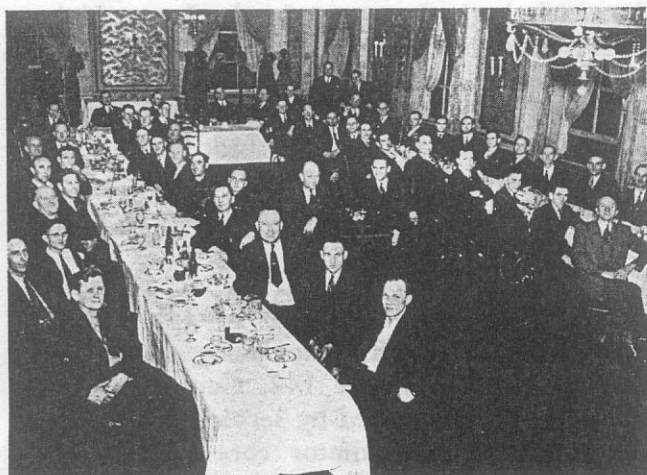


Experience has shown that we were over-cautious in the December 1st Service Letter article on this subject, in not recommending hypoid oil for use in all Econo-Drive units. The use of this oil has not proven injurious to the original type bushing and we can now specify its use in all Econo-Drive units.

It is recommended that when the early, un-tagged units are drained that both the transmission and Econo-Drive be refilled with hypoid oil S.A.E. 90. When this is done, new filler plugs with drilled heads should be used and the special tag attached.

338800	Econo-Drive Filler Plug	1 req'd
338801	Tag	2 req'd
6099	Transmission Filler Plug	1 req'd

NASHVILLE MEETING



BRAKE LINING SIX AND EIGHT

There has been some misunderstanding about the use of brake lining sets 338368 and 338369 on the earlier models due to difference in material and length of lining.

When Marshall 2201 lining was approved the lining combination for previous models was also changed and Marshall lining was specified for both the primary and secondary shoes. At the same time the length of the primary shoe lining was increased to the same length as that for the secondary shoe. This involved no change in brake shoes or rivet spacing.

Brake lining set 338368 should be used on all sixes 115C up to and including the 1700; brake lining set 338369 on all eights 120 up to and including 1701.

17TH SERIES RIDES 1703

The February 1, 1939 Service Letter gave the shock absorber valving combination for a softer ride on the 1700 and 1701.

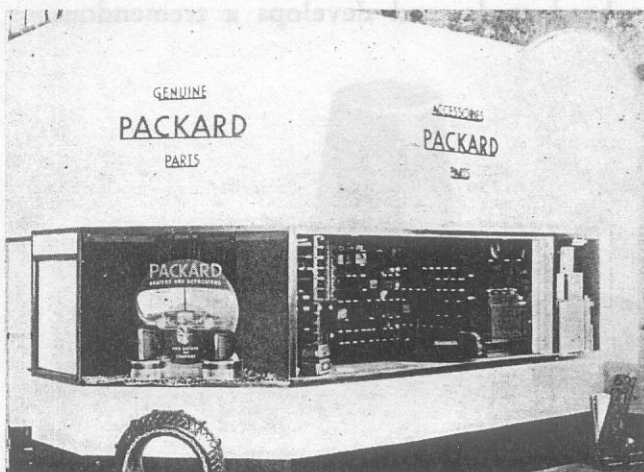
A new valving to produce a softer ride on the 1703 has now been approved.

For each car the following parts will be required:

- 2—No. 341480 Shock Absorber Rebound Front Valve $3\frac{1}{2}$ E6
- 2—No. 341481 Shock Absorber Compression Front Valve $3\frac{1}{2}$ B1
- 2—No. 341482 Shock Absorber Rebound Rear Valve .40 M4
- 2—No. 341483 Shock Absorber Compression Front Valve .70 B7

SELLING PARTS

Here is a new parts department that looks like it is going to do a good job for Mr.



Mattenlee. He recently took over the dealership in Red Bank, New Jersey, and it is quite apparent that he has studied the possibilities of service profits. How does your parts department compare with it?

COURTESY TAGS

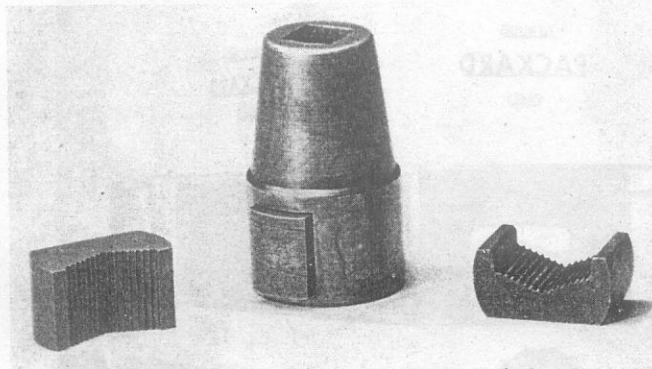
Courtesy Tags, No. 4, $2\frac{3}{4}$ " x $5\frac{1}{2}$ ", are printed in one color on two sides. The front side will get you out of a lot of trouble, and the reverse side will very often pick up an extra item of service business for you.



Without imprinting, the tags are 50c a hundred. Imprinted with your firm name and address, they are \$1.30 for the first hundred and additional hundreds are 65c.

STUD REMOVER AND DRIVER

This tool is something new in stud remover design. It works satisfactorily for removing cylinder head studs, and develops a tremendous



ST-5140 stud remover and driver \$3.50

gripping power which prevents slipping and quickly releases as soon as pressure is released.

The body and jaws are heat treated to make them tough and durable. With each tool there are three different sized jaws for removing $\frac{1}{4}$ to $\frac{5}{16}$ ", $\frac{3}{8}$ to $\frac{7}{16}$ " and $\frac{7}{16}$ to $\frac{1}{2}$ " studs.

Any standard "T" handle square drive or ratchet wrench can be used with this driver.

SERVICE LETTER CORRECTION

The article in the January 1 Service Letter, Vol. 13, No. 1, regarding connecting rod bearings contains an incorrect piece number.

The third paragraph should read as follows: "Forging No. 330613—requires thick bearing assembly—standard Piece No. 335827."

Will you please make this correction in your January 1 Letter.

PARTS BOOK CORRECTION

Piece No. 335366 Radiator core cradle assembly, as listed on page 142, Genuine Parts List, will not be furnished by service. Cross this item out and order radiator core cradle and belt assembly as listed directly below it.

BODIES

The Beckwith Holmes Company of Tampa, Florida is anxious to locate a body that will fit a 1700 and the Earle C. Anthony organization of Los Angeles, attention of L. P. Butts, would like to know of any 1600 touring sedan bodies for sale.

Please write direct on these, supplying full information as to condition of interior, exterior, paint scheme and price.

LICENSE DATA AND CAPACITY INFORMATION

Series	No. of Cylinders	Cylinder Bore	H. P. A. M. A. Rating	Piston Displacement	Stroke	Wheelbase	Crankcase	Transmission	Rear Axle	Cooling System	Fuel System
1200-1-2	8	$3\frac{3}{16}$	32.5	320	5	127-134-139	8 Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	5 Gals.	25 Gals.
1203-4-5	8	$3\frac{1}{2}$	39.2	384.8	5	132-139-144	$9\frac{1}{2}$ Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	$5\frac{1}{2}$ Gals.	25 Gals.
1207-8	12	$3\frac{1}{16}$	56.7	473	$4\frac{1}{4}$	132-139-144	10 Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	10 Gals.	30 Gals.
1400-1-2	8	$3\frac{3}{16}$	32.5	320	5	127-134-139	8 Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	5 Gals.	25 Gals.
1403-4-5	8	$3\frac{1}{2}$	39.2	384.8	5	132-139-144	$9\frac{1}{2}$ Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	$5\frac{1}{2}$ Gals.	25 Gals.
1407-8	12	$3\frac{1}{16}$	56.7	473	$4\frac{1}{4}$	139-144	10 Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	10 Gals.	30 Gals.
1500-1-2	8	$3\frac{3}{16}$	32.5	320	5	127-134-139	8 Qts.	$4\frac{1}{2}$ Pts.	$6\frac{1}{2}$ Pts.	6 Gals.	25 Gals.
1506-7-8	12	$3\frac{7}{16}$	56.7	473	$4\frac{1}{4}$	132-139-144	10 Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	10 Gals.	30 Gals.
120	8	$3\frac{1}{4}$	33.8	257	$3\frac{7}{8}$	120	6 Qts.	1 Qt.	$4\frac{1}{4}$ Pts.	$4\frac{1}{8}$ Gals.	20 Gals.
120-B	8	$3\frac{1}{4}$	33.8	282	$4\frac{1}{4}$	120	6 Qts.	1 Qt.	$4\frac{1}{4}$ Pts.	$4\frac{1}{2}$ Gals.	20 Gals.
120-C	8	$3\frac{1}{4}$	33.8	282	$4\frac{1}{4}$	120	6 Qts.	1 Qt.	5 Pts.	4 Gals.	20 Gals.
115-C	6	$3\frac{1}{16}$	28.36	237	$4\frac{1}{4}$	115	6 Qts.	1 Qt.	5 Pts.	$3\frac{3}{4}$ Gals.	17 Gals.
1600	6	$3\frac{1}{2}$	29.4	245.34	$4\frac{1}{4}$	122	6 Qts.	2 Pts.	6 Pts.	$3\frac{3}{4}$ Gals.	18 Gals.
1601-2	8	$3\frac{1}{4}$	33.8	282.05	$4\frac{1}{4}$	127-148	6 Qts.	2 Pts.	6 Pts.	4 Gals.	21 Gals.
1603-4-5	8	$3\frac{3}{16}$	32.5	320	5	127-134-139	8 Qts.	$4\frac{1}{2}$ Pts.	$6\frac{1}{2}$ Pts.	5 Gals.	24 Gals.
1607-8	12	$3\frac{1}{16}$	56.7	473	$4\frac{1}{4}$	134-139	10 Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	10 Gals.	30 Gals.
1700	6	$3\frac{1}{2}$	29.4	245.34	$4\frac{1}{4}$	122	5 Qts.	2 Pts.	6 Pts.	3.8 Gals.	18 Gals.
1701-2	8	$3\frac{1}{4}$	33.8	282.05	$4\frac{1}{4}$	127-148	6 Qts.	2 Pts.	6 Pts.	4 Gals.	21 Gals.
1703-5	8	$3\frac{3}{16}$	32.5	320	5	127-148	$7\frac{1}{2}$ Qts.	2 Pts.	6 Pts.	$5\frac{1}{2}$ Gals.	21 Gals.
1707-8	12	$3\frac{1}{16}$	56.7	473	$4\frac{1}{4}$	134-139	10 Qts.	$4\frac{1}{2}$ Pts.	6 Pts.	10 Gals.	30 Gals.

Supplement to License Data and Capacity Information printed in the Service Letter of June 1, 1934.

SUGGESTIONS OR QUESTIONS ARE ALWAYS WELCOME.

• ADDRESS—THE EDITOR, PACKARD SERVICE LETTER