VOL. 9 No. 13 JULY 1, 1935

NEW CAR FITTING AND DELIVERING

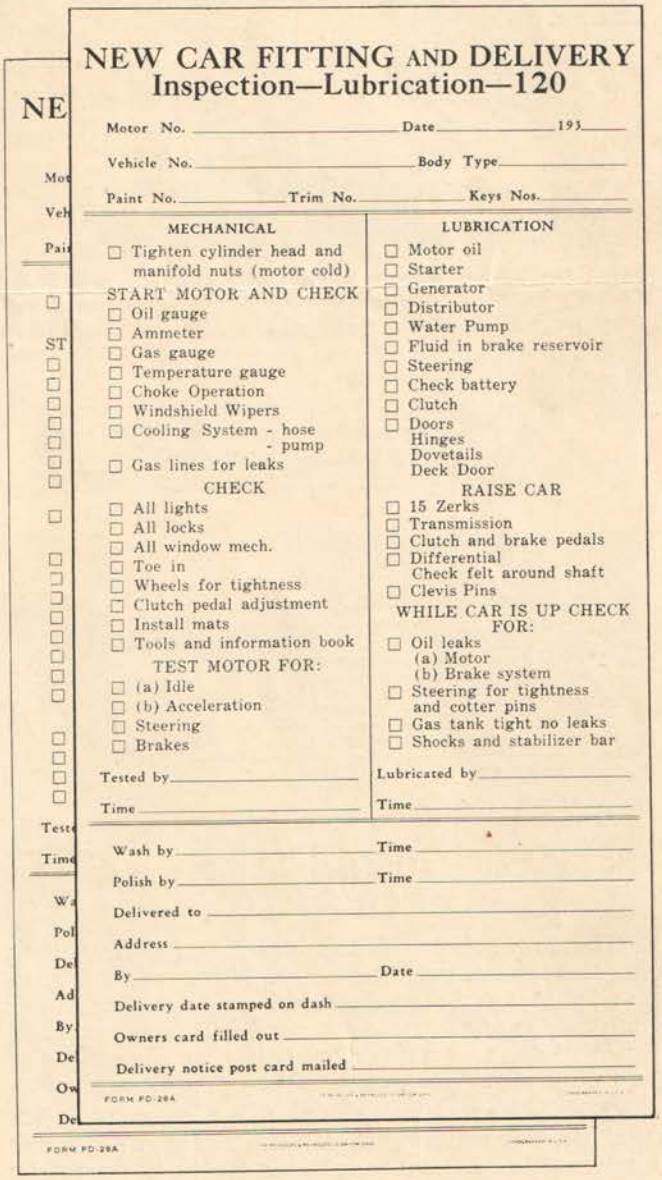
The preparation of new cars for delivery is, except in the case of very large organizations, one of the duties of the service department. If the job is well done, the service department gets off on the right foot with the customer. If the result is a poor one, due to insufficient information or carelessness, a most unsatisfactory relationship is established.

Satisfactory performance during the first few months of ownership is extremely important. In fact, it obtains for the Dealer that priceless asset—Good Will.

The largest share by far of your new car sales and profitable service business depends upon whether or not you keep this owner loyalty. Every car is carefully checked before leaving the factory. However, it is important that you re-check to make doubly sure that everything is in working order. The direct responsibility for the condition of the new car falls upon the service department.

In order that this work may be standardized, we have made available a new car fitting and delivery form. It is carried in stock by The Reynolds & Reynolds Co., of Dayton, Ohio, under form P. D. 28-A. It is supplied in two copies with space on the back for listing accessories installed at the time of delivery. We have reduced the items to include only the things we consider essential. We assume that when you check the window mechanisms you will inspect the glass. We feel that when you check the front compartment you will examine the upholstery, and that when you clean the car you will report any non-standard condition with regard to finish.

The object of this form is simply to make sure that you deliver the car in standard condition with regard to adjustment, lubrication and cleanliness. When the new car inspection is properly handled, it is the first step toward making the owner a regular service customer. Start building owner good will right now by delivering cars in satisfactory condition.



NEW CAR FITTING AND DELIVERY
Inspection—Lubrication—120

Motor No. _____ Date _____ 193_

Vehicle No. _____ Body Type _____

Paint No. _____ Trim No. _____ Keys Nos. _____

MECHANICAL

☐ Tighten cylinder head and manifold nuts (motor cold)

START MOTOR AND CHECK

☐ Oil gauge
☐ Ammeter
☐ Gas gauge
☐ Temperature gauge
☐ Choke Operation
☐ Windshield Wipers
☐ Cooling System - hose - pump
☐ Gas lines for leaks

CHECK

☐ All lights
☐ All locks
☐ All window mech.
☐ Toe in
☐ Wheels for tightness
☐ Clutch pedal adjustment
☐ Install mats
☐ Tools and information book

TEST MOTOR FOR:

☐ (a) Idle
☐ (b) Acceleration
☐ Steering
☐ Brakes

Tested by _____

Time _____

LUBRICATION

☐ Motor oil
☐ Starter
☐ Generator
☐ Distributor
☐ Water Pump
☐ Fluid in brake reservoir
☐ Steering
☐ Check battery
☐ Clutch
☐ Doors
Hinges
Dovetails
Deck Door

RAISE CAR

☐ 15 Zerks
☐ Transmission
☐ Clutch and brake pedals
☐ Differential
Check felt around shaft
☐ Clevis Pins

WHILE CAR IS UP CHECK FOR:

☐ Oil leaks
(a) Motor
(b) Brake system
☐ Steering for tightness and cotter pins
☐ Gas tank tight no leaks
☐ Shocks and stabilizer bar

Lubricated by _____

Time _____

Wash by _____ Time _____

Polish by _____ Time _____

Delivered to _____

Address _____

By _____ Date _____

Delivery date stamped on dash _____

Owners card filled out _____

Delivery notice post card mailed _____

FORM PD-28A

Form P.D. 28-A—60c Per Hundred

REAR SPRING SHACKLE—120

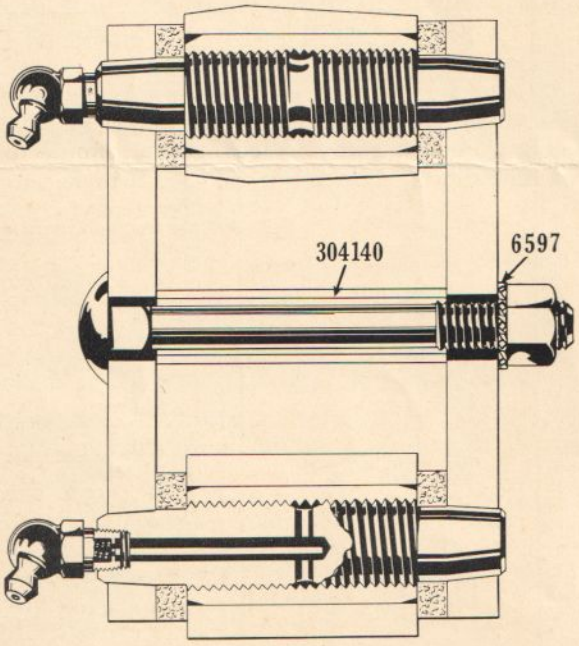
The illustration shows the construction of the rear spring rear shackle on the 120. The side plates are held in position by the bolt passing across the center of the shackle.

It is necessary that this bolt be properly tightened. If it is too loose the nut may work off, and if it is pulled up too tight the side plates may be forced inward, resulting in damage to the spring bolts and to the cork washers.

In order to simplify the assembly we are now surrounding the carriage bolt with a spacer as illustrated. When the nut on the carriage bolt is pulled up tight the load is taken by the spacer and the side plates of the shackle are held in their proper position.

The spacers are covered by Pc. No. 304140 and the lock washers which were formerly used under the nut have been superseded by shakeproof washers, Pc. No. 6597.

When any work is performed on these rear shackles we believe that the simplest and best procedure will be to install the spacers because they will provide definite assurance against a misadjustment of the shackle.



REMOVING REAR SPRING FRONT BOLT—120

The front bolt on the rear spring is difficult to get at in case replacement is necessary. We have found, however, that if you cut a slot 1 inch long out of the lower inside edge of the running board splasher directly in line with the rear spring front bolt, that you can get at it quite easily.

It will save you time, since it will allow you to drive the bolt out of the hanger. The slot will be on the underneath side of the splasher where it cannot be seen. These instructions apply to both the right and left side.

METHOD FOR REMOVING THE STEERING CRANK ON THE "120"

1. Hoist car and place ST-154 Jacks under support arm.
2. Remove both front wheels.
3. Disconnect both steering cross tubes (at steering crank), use ST-5058 Ball Joint Pullers.
4. Disconnect steering connecting rod (at steering crank).
5. Disconnect both torque arms (rear end only).
6. Remove both shock absorber support bolt and nut.
7. Disconnect brake oil tubes. Use ST-5006 and bleed brakes when reassembling.
8. Remove bolts from wheel support arm (at center of the frame).
9. Attach chain falls to the front bumpers and hoist car. The safety-flex assembly and coil springs will drop on the floor.
10. Remove steering crank and bracket assembly, toward the radiator.
11. For reassembling: Reverse the method of doing this operation.
12. Check steering for proper toe-in.
13. Place the steering gear on the high point. Locate the gauge in the large hole in the front frame cross member, used when removing the center bell crank bolt, and in the small $\frac{9}{16}$ hole which is directly in front of it. This will center the gauge.
14. Adjust each steering cross tube so that the distance between the brake drum and the centering gauge is the same on both sides. If this does not give you a toe-in of $\frac{1}{16}$" to $\frac{1}{8}$", adjust both steering cross tubes the same amount, using the Duby Gauge ST-128, to measure the toe-in.

SERVICING COMMERCIAL CARS

When a commercial chassis with special body is delivered by one of the listed National Business Concerns in the Distributer's territory, we pay the Distributer a certain per cent of the chassis list price. This applies to the Packard Eight 1200-A, Super Eight 1203-A and 120-A Series.

This percentage is to cover guarantee and policy work on the chassis, along with minor service operations on the body, such as—tightening of body bolts, adjustment of door bumpers and door locks.

When they are delivered in the Dealer's territory, the Distributer pays the Dealer 5 per cent of the chassis list price.

It is important that the guarantee and policy work on these sales be promptly and adequately handled. Do not overlook the fact that the sale of a Packard hearse helps create a market for not only Packard Commercial Sedans and Limousines for business use, but for regular body styles for family use. The majority of funeral directors standardize their equipment.

The National Business Concerns are as follows:

Knightstown Body Company.....Knightstown, Ind.
The A. J. Miller Company.....Bellefontaine, Ohio
The Eureka Company.....Rock Falls, Ill.
The Sayers & Scoville Co.....Cincinnati, Ohio
The Henney Motor Company.....Freeport, Ill.
James Cunningham Son & Co.....Rochester, N. Y.

TAPPET HOLE REAMER—120

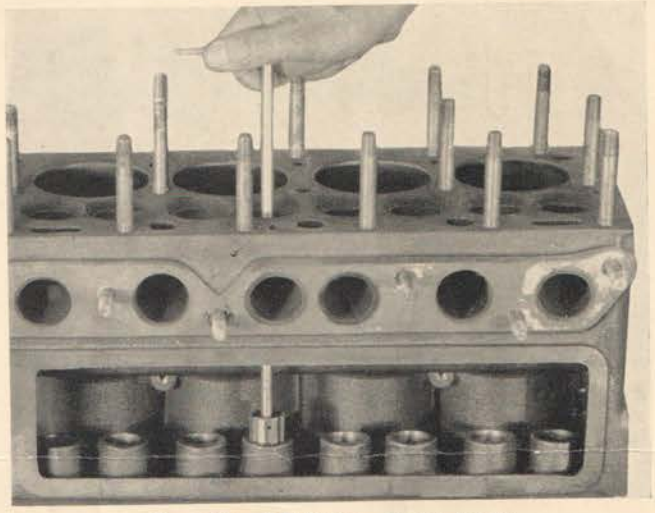
Line reaming equipment is absolutely necessary when installing .005" oversize tappets.

This special reamer is designed to ream the tappet hole in cylinder block oversize for installing Valve Tappet—piece number 303834. It has a pilot which fits into the old hole as illustrated in the above picture, and the other end of the reamer does the cutting.

The pilot stem acts as a turning handle. It is placed through the valve guide and engages into the reamer slot.

This method insures the new hole being perfectly aligned with the valve guide.

Remove lower oil pan and place rags over the camshaft to prevent the metal chips or dust from falling over the camshaft.



Tool No. ST-5065—Price $3.80

Tappet hole reaming can be done without removing the camshaft.

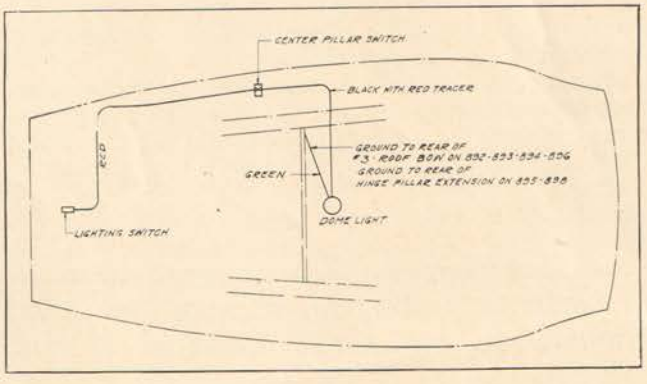
1. Run the cutter through the regular way until it strikes the camshaft.
2. Turn the cutter upside down, and turn it anti-clockwise so that it will make the hole up to size. A little oil on the cutter will prevent chattering.

Before assembling, wipe out the guide hole with clean rags to make sure all cast iron dust is removed.

Carefully remove rags from camshaft and inspect to see that all chips and dust are removed thoroughly.

Always be sure that your reamer is in good condition before doing this work.

BODY WIRING—120



IGNITION TIMING—120

Remove inspection hole cover in flywheel housing. Attach Timing Light ST-724 to flywheel housing. Have one light shine inside of flywheel housing and the other outside. Attach the light wire that is nearest the flywheel to a live wire such as horns, generator or starter. This causes the light to burn and makes it easy to read the marking on the flywheel.

Attach the wire that is connected to the outside light to the primary lead wire, where it is connected to the distributor. The object of this is that when the breaker points have just opened the light will burn.

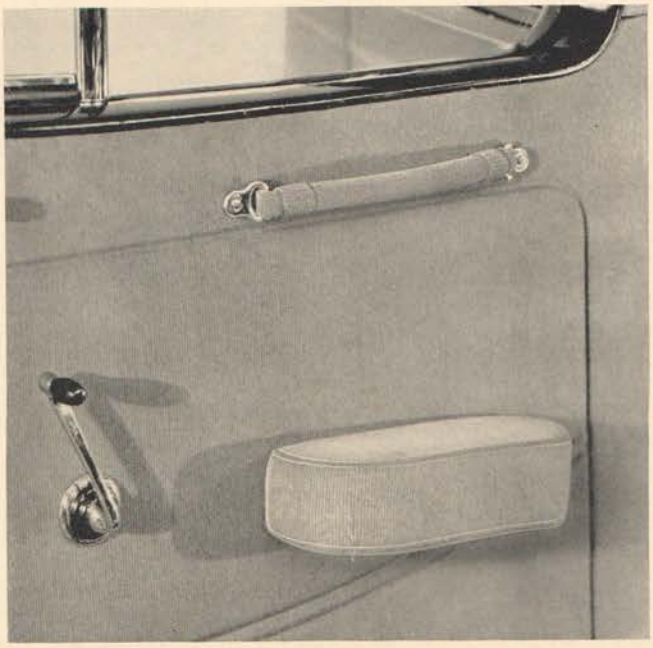
(a) Turn engine over until No. 1 cylinder is coming up on compression stroke. This can be determined by removing spark plug, or watching the opening and closing of the intake valve.

(b) Turn engine until the marking on the flywheel appears in line with the pointer in the housing. The spark advance should be 7°, although the timing mark on the early cars will be at 5°.

(c) After the marks on the flywheel line up with the pointer, the distributor cap should be removed to check the rotor for being in line with No. 1 spark plug wire. Set the fuel compensator to zero mark and turn the ignition switch on. Then loosen distributor clamp and move distributor clockwise or anti-clockwise as needed, just enough to open breaker points until the timing light is just flashing on. The distributor clamp should then be securely tightened.

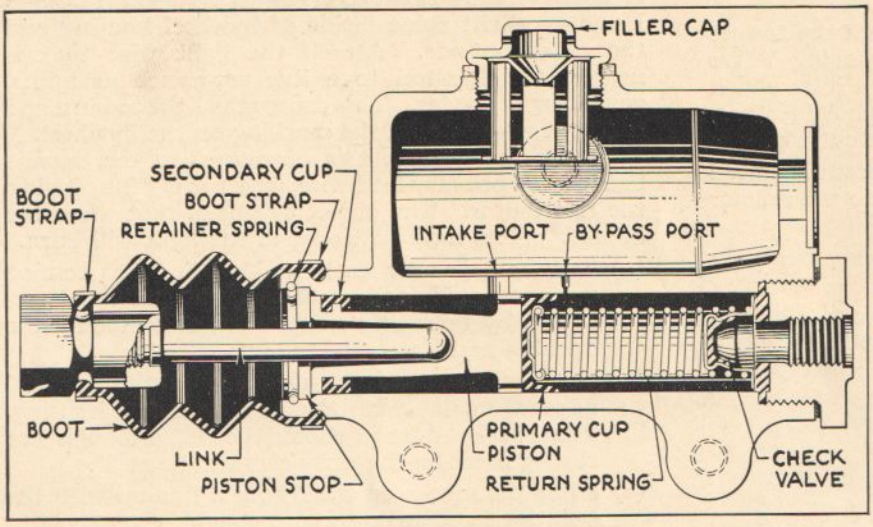
DOOR PULL—120

This is made of a woven lace material, similar to the robe rail, and is ten inches long. It is attached to the front door in a conveneint location by two screws—the installation takes only a few minutes. We are confident that every owner will appreciate this added convenience. It is primarily for use on the front right door, but can be used on both doors if desired. It is made in two colors to match the upholstery. Specify upholstery set number when ordering.



PA-5328-UPH-1792 PA-5329-UPH-1876
$1.25 a pair list installed

BRAKE MASTER CYLINDER ADJUSTMENT—120



We have had one or two cases of brakes in the 120 remaining engaged after the pedal is released. This indicates, generally, that the adjustment of the master cylinder rod is incorrect and will not allow the by-pass to open when the pedal is released to allow the oil from the system to return to the reservoir.

The proper adjustment will give $\frac{3}{8}$" free drop in the brake pedal before pressure is created in the lines. There should never be less than $\frac{3}{8}$" free pedal drop when the car is new. This, of course, will increase slightly as the brake lining wears in. This clearance is obtained by adjusting the master cylinder operating rod.

Be sure never to use anything but genuine hydraulic brake fluid in the master cylinder. If cylinder oil is used it will not only cause the brakes to act the same as an improper master cylinder adjustment, but will also deteriorate the rubber cups in the cylinders.

Check the vent holes in the filler cap. If they are plugged a result similiar to that caused by an improperly adjusted cylinder rod will be noted. It is a good idea to check these vents each time brake fluid is added to the master cylinder.

FRONT END CHAIN—120

You will find it is a great deal simpler and quicker by lining up the crankshaft gear, the camshaft gear, and chain, and assemble these together on the bench. Remove the key that drives the crankshaft gear, and slip the complete assembly in place. Then turn the crankshaft until the key in the gear and keyway in the shaft line up, and put in the crankshaft gear key. This will eliminate any trouble you have in trying to line up the crankshaft and camshaft keyways, in placing the two gears in the proper position.

KOOL KOOSHION SEAT PAD

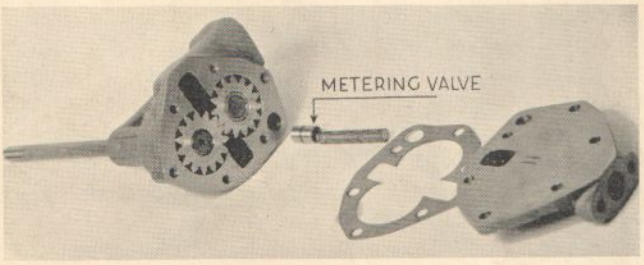
List $2.95

There is nothing like this seat pad to keep you cool and comfortable in warm weather. It is made of a durable, braided fabric, woven in a porous, basket weave, which permits a free circulation of air between the cushion. The inner construction consists of an assembly of rust-proof coil springs. You will be safe in selling this pad on a three-day trial basis—very few will give this up after having used it one warm day.

OIL PUMP—PACKARD TWELVE

In the case of noisy valve mechanism in the Packard Twelve, when the motor is first started after standing, the metering valve in the oil pump should be checked for freeness.

The Twelve oil pump is a different design than the Eight, there being two outlets, one going to the crankshaft main and connecting rod bearings, the other to the camshaft and valve mechanism.



If the metering valve in the pump which feeds oil to the valve mechanism is stuck, it will not allow sufficient oil to go into the valve take-up mechanism to quickly close up the clearance.

In any case of noisy Twelve valve mechanism, before dismantling to examine the valve take-up mechanism, remove the oil pump, dismantle it and see that the metering valve which feeds the valve mechanism is free.

SUGGESTIONS OR QUESTIONS FROM READERS ARE ALWAYS WELCOME. HOW CAN WE MAKE THE SERVICE LETTER OF MORE VALUE TO YOU? ADDRESS LETTERS—*NORM. LULL—EDITOR PACKARD SERVICE LETTER.*

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