STUDEBAKER-PACKARD CORPORATION

Service Bulletin

MAY 1957 NO. 324

SOUTH BEND 27, INDIANA

Studebaker and Packard Clipper

FRONT END NOISE- 1957 STUDEBAKER AND PACKARD CLIPPER MODELS

Please record this article on the Service Bulletin Reference page of your 1957 Studebaker and Packard Clipper Supplements.

A chuckling noise from the front end of the car on rough city streets, or a sharp cracking noise as the car stops or starts, may indicate a looseness of the lower support arm inner shaft attaching bolt nuts. Examination may reveal that movement at this point has resulted in abrasion of the normally black painted surfaces around the inner shaft-to-crossmember contact area.

Development of looseness has been found to be caused by a lack of flatness in some bosses of the hardened inner shaft against which the self-locking hug nut contacts. Thus, if seated on an uneven surface of high spots, the face of the nut may "wear-in" and lose its initial torque.

Should you encounter such a condition, remove the hug nuts, one at a time, and place a Part No. 1539073 plain hardened washer on the bolt against the inner shaft boss and install a new hug nut (Part No. 911882X8) and tighten to a torque of 60-65 ft-lbs. The special washer presents a hard smooth surface against which the new nut will be able to maintain proper tightness.

The hardened washer entered production with the following serial numbers:

57H - 7204271	57L - 5246
57G - 1391816	57H-K - 6103570
57B - 8468068	

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PRIMARY BRAKE SHOE LINING LENGTH - 1957 STUDEBAKER AND PACKARD CLIPPER MODELS

Please record this article on the Service Bulletin Reference page of your 1957 Studebaker and Packard Clipper Supplements.

Shorter linings are now being used on the primary shoes of all models. The lining lengths in respect to the drum size are as follows:

9" Drum (57G Rear)	7-1/4" lining
10" Drum (57G Front, 57B, 57H and 57L Rear)	8-5/32" lining
11" Drum (57B, 57H and 57L Front)	9" lining

To avoid the possibility of installing lined shoes with linings of unequal lengths in service, the Parts Depots will stock only the former full-length lined shoes as are now listed in the Parts Catalog. However, they will be available only in pairs and must be serviced accordingly.

When relining shoes, the shorter linings must be positioned on the lower portion of the shoe.

Complete lining sets are interchangeable. Therefore, when present stock of the former full-length lining sets are exhausted, substitution will be made as follows:

For 536732 use 1543964 - Brake Lining Set - 57G
537978 use 1543966 - Brake Lining Set - 57G (Canada)
536733 use 1543965 - Brake Lining Set - 57B, 57H,57L
537990 use 1543967 - Brake Lining Set - 57B, 57H,57L (Canada)

The following is a list of Bendix central distributors for Stromberg carburetors and Bendix vacuum power items.

ALABAMA

Birmingham Elec. Battery Co.
2230 Second Ave. So.
Birmingham,

ARIZONA

C.C. Jones Batt. & Elec. Co.
318-22 W. Jefferson St.
Phoenix,
(Carburetors Only)

Hydraulic Brake Supply Co.
33-35 S. 3rd. Ave.
at Jefferson
Phoenix,
(Vacuum Power Items Only)

ARKANSAS

555, Incorporated
711 West 8th St.
Little Rock,

CALIFORNIA

Electric Equipment Co.
1601-11 S. Hope St.
Los Angeles 15,

Wetmore Motor Service
1200 India St.
San Diego 1,

Frank Edwards Co.
Autom. Service Division
382-4 Sixth St.
San Francisco 3,

COLORADO

Quinn & McGill Motor Supply Co.
P.O. Box 1498 (Mail)
437 Broadway
Denver 1,

CONNECTICUT

W.J. Connell Co. of Hartford
85 Airport Road
Hartford 5,

FLORIDA

Spencer Electric Inc.
40 W. Beaver St.
Jacksonville 1,

Spencer Auto Elec., Inc.
607 E. Cass St.
Tampa 1,

GEORGIA

John A. Harris & Son, Inc.
525 Peters St., S.W.
Atlanta 3,

HAWAII

Autom. Service Co., Ltd.
South & Kawaiahao Sts.
Honolulu,

ILLINOIS

Illinois Auto Electric Co.
2011-37 Indiana Ave.
Chicago 16,

INDIANA

Gulling Auto Elec., Inc.
450 N. Capitol Ave.
Indianapolis 4,

IOWA

Lally's, Inc.
118 4th St.
Des Moines,

KANSAS

E.S. Cowie Elec. Co.
230 So. Topeka St.
Wichita,
(Vacuum Power Items Only)

KENTUCKY

Central Service & Sales Div.
737 So. 3rd. St.
Louisville 2,

LOUISIANA

John M. Walton, Inc.
1050 Carondelet
New Orleans 13,

Chain Batt. & Autom. Supply, Inc.
Spring & Fannin
P.O. Box 14
Shreveport 1,

MASSACHUSETTS

Harvey Sales & Service Co.
1375 Boyleston St.
Boston 15,

MICHIGAN

Knorr-Maynard, Inc.
5743 Woodward Ave.
Detroit 2,

MINNESOTA

Reinhard Bros. Co., Inc.
4301 Highway #7
Minneapolis 16,

MISSOURI

Electric Products Co., Inc.
1718-24 Oak St.
Kansas City 8,
(Carburetors Only)

E.S. Cowie Elec. Co.
1819-23 Wyandotte St.
Kansas City 8,
(Vacuum Power Items Only)

Borbein-Young & Co.
3663 Forest Park Ave.
St. Louis 8,

MONTANA

Original Equipment, Inc.
423 N. Broadway
Billings,

NEBRASKA

Carl A. Anderson, Inc.
16th & Jones Sts.
Omaha 2,

NEW JERSEY

Wheels, Inc.
300 Allwood Rd.
Clifton,
(Vacuum Power Items Only)

Tire Trading Co., Inc.
239 Halsey St.
Newark 2,
(Carburetors Only)

NEW MEXICO

Wheels & Brakes, Inc.
1600 Second, N.W.
Albuquerque,

NEW YORK

Wheels, Inc.
Simmons Lane, Menands
Albany,

E.A. Wildermuth, Inc.
1102 Atlantic Ave.
Brooklyn 38,

Wheels, Inc.
222 W. 65th St.
New York 23,

F.A. Crossman, Inc.
943 W. Genesee St.
Syracuse 4,

NORTH CAROLINA

Carolina Rim & Wheel Co.
306 N. Graham St.
Charlotte 2,

OHIO

Auto & Aero Supply Co., Inc.
1711 Race St.
Cincinnati 10,

The Elec. Power Maint. Co.
Prospect Ave. at
E. 30th St.
P.O. Box 5029
Cleveland 15,

The Elec. Power Maint. Co.
26-30 17th St.
P.O. Box 637
Toledo 2,

OKLAHOMA

J.C. Hamilton Co.
23 N.W. 10th St.
P.O. Box 1515
Oklahoma City 1,

Magneto Ignition Co., Inc.
P.O. Box 2449 (Mail)
701 W. Fifth St.
Tulsa 1,
(Carburetors Only)

Tulsa Auto Spring Co.
3 So. Lansing St.
Tulsa 3,
(Vacuum Power Items Only)

OREGON

The Stevens Corp.
1411 N.W. Flanders St.
Portland 9,

PENNSYLVANIA

Allentown Br. & Wheel Service
Route 22 - Kuhnsville
R.D. 3
Allentown,

Safety Sales & Service Corp.
88-92 Cameron St.
Harrisburg,
(Vacuum Power Items Only)

United Autom. Service Inc.
236 S. Cameron St.
Harrisburg,
(Carburetors Only)

McCullough Distributing
Co., Inc.
1110 Germantown Ave.
Philadelphia 23,

Service Sales of
Pittsburgh, Inc.
4725 Centre Ave.
Pittsburgh 13,

TENNESSEE

John A. Harris & Son, Inc.
419 St. Paul St.
Knoxville 17,

Autom. Elec. Service Co., Inc.
982 Linden Ave.
Memphis 4,

TEXAS

J.C. Hamilton Co., Inc.
7th & Van Buren
P.O. Box 1367
Amarillo,

The Motor Mart
2116 S. Cockrell Ave.
Dallas 2,

Moore Bros. Electric Co., Inc.
1515 Milam St.
Houston 2,

Ace Brake Service
901 N. Alamo St.
San Antonio 2,

UTAH

Frank Edwards Co.
Motor Equip. Division
551 South State St.
Salt Lake City 10,

VIRGINIA

A. Wrenn & Sons, Inc.
420 Union St.
Norfolk,
(Vacuum Power Items Only)

Dixie Wheel Co., Inc.
916-18 North Blvd.
Richmond 20,
(Vacuum Power Items Only)

Richmond Battery & Ign. Corp.
2912 W. Leigh St.
Richmond 20,
(Carburetors Only)

WASHINGTON

Charles Stewart, Inc.
P.O. Box 3582 (Mail)
1741 First Ave., So.
Seattle 4,

Sunset Electric Co.
North 703 Division St.
Spokane 11,

WASHINGTON D.C.

Roberts Bros. Co.
17th & "U" Sts., N.W.

WEST VIRGINIA

Baker Equip. Engr. Co., Inc.
Box 1947 (Mail)
404 Morris St.
Charleston 27,
(Vacuum Power Items only)

MacFadden Ignition Co., Inc.
106-108 Broad St.
Charleston 22,
(Carburetors only)

WISCONSIN

Wisconsin Magneto Co.
918 N. Broadway
Milwaukee 2,

ANTI-FREEZE IN PASSENGER CARS AND TRUCKS

Effective with production starting on April 29, we have discontinued injecting anti-freeze into the cooling system of our passenger cars and trucks.

Studebaker

CAMSHAFT AND LIFTERS IN SHORT BLOCK ASSEMBLY PART NO. 534886 - 1951-1954 STUDEBAKER H, 3H, 4H and 5H MODELS

Please record this article on the Service Bulletin Reference page at the end of the Engine sections in the Shop Manuals covering the respective models.

Investigation of rapid valve lifter wear after installation of Short Block Assembly, Part No. 534886, has shown that incorrect lifters were used. That is, the camshaft was of the forged steel type and the step-type lifters were used instead of the straight 1" diameter lifters.

Most of the short block assemblies will have a forged steel camshaft, but some may have a cast iron camshaft. Therefore, an inspection should be made to determine the type of camshaft and then make certain that the proper lifters are used. The inspection can be made by looking downward between the cylinder banks through the cored hole located towards the rear of the engine. (This is the hole which provides crankcase ventilation.) Enough of the camshaft is visible through the cored hole to identify the camshaft. The forged steel camshaft is completely machined between the cam lobes and also has a copper color in these areas. The cast iron camshaft is not machined between the lobes and has the typical dull cast iron finish.

The straight, 1" diameter, chilled iron lifters, Part No. 531696 must be used with the forged steel camshaft.

The step-type, 29/32" - 1" diameter lifters, Part No. 536508 are to be used only with the cast iron camshaft.

Detailed information in regards to the lifters and camshaft types was given in Service Bulletin No. 304 - "Service Replacement Camshafts".

Packard Clipper

PUSH BUTTON RETAINING CLIP- 56th SERIES PACKARD

Please record this article in the Ultramatic Transmission - Push Button Control Section of your 1955-56 Packard Shop Manual.

The clip which retains the push button actuator in the control switch assembly has been released as a service item. This horse-shoe-shaped clip is also the means of completing the electrical circuit when the push button is depressed.

The clip is listed as the Push Button Actuator Retaining Clip, Part No. 1544121.

TORSION LEVEL CONTROL SWITCH - 1955 PACKARD MODELS

Please record this article on the Notes page at the end of the Suspension and Steering Section and in the Electrical section of your 1955-56 Packard Shop Manual.

When installing a 1956 Torsion Level Control Switch, Part No. 472239 on a 1955 Packard Model, it is necessary to use a Jumper Harness, Part No. 6489374. This information was given in the Service Counselor, Vol. 30, No. 6 of June 1956. However, there seems to be a question as to the proper wire connections. As indicated in the illustration (Fig. 1) the wires are connected as follows:

Blue of jumper to pink of harness and pink

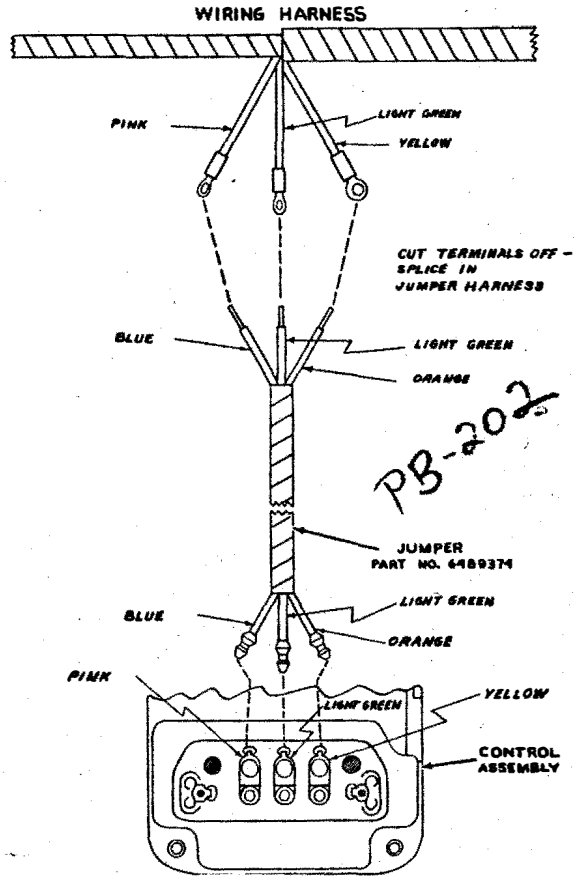


Fig. 1

terminal of switch. Orange of jumper to yellow of harness and yellow terminal of switch. Light green of jumper to light green of harness and light green terminal of switch.

TIME ALLOWANCE CHANGE - 1957 PACKARD CLIPPER TIME GUIDE

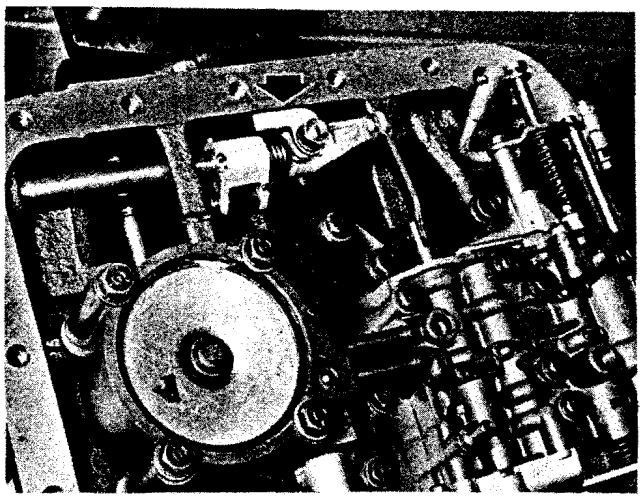
The time shown for Operation F140 (5.3 hrs.) in the 1957 Packard Clipper Time Guide represents the time allowance for installation of headlining on the station wagon (P) models. The time allowance for the sedan (Y) models should be 6.8 hours. Therefore, please make the change to read as follows:

F140 - Headlining, install new P models - 5.3 Hrs.
Y models - 6.8 Hrs.

MANUAL VALVE CONTROL LEVER INNER STOP - 55th SERIES ULTRAMATIC

Please record this article on the Notes page at the end of the Ultramatic Transmission section of your 1955-56 Packard Shop Manual.

The Manual Valve Control Lever Inner Stop, Part No. 470082 used in the Ultramatic of the 55th Series has been superseded by Part No. 6480965 which is used in the 56th Series. When installing the latest stop in the 55th Series



PB-203

Fig. 2

Ultramatic it must be turned 90° from its position when used in the 56th Series and installed as illustrated in Fig. 2.

HOOD ORNAMENT STUD STRIKES RADIATOR CAP - 57L MODELS

Please record this article on the Service Bulletin Reference page of your 1957 Packard Supplement.

There is a possibility of the hood ornament rear mounting stud striking the radiator cap when the hood is closed. To correct this condition, remove the stud and install a 1501X1 self-tapping cap screw. Reinstall the cup washer which was used with the stud.

This change entered production with Serial No. 57L-5570.

STEERING WHEEL SHAKE - 57L MODELS WITH POWER STEERING

Please record this article on the Service Bulletin Reference page of your 1957 Packard Clipper Supplement.

The following modification may be made when you encounter a complaint of steering wheel shake. First, of course, make sure that the steering gear and its mounting bracket are tight on the frame; the retaining bracket at the instrument board is tight, and the front suspension and steering system operation is normal.

The parts required for the modification are:

1 - 1321222-R Steering Post Bracket-to-Cowl Brace Rod (right)
1 - 1321223-L Steering Post Bracket-to-Cowl Brace Rod (left)
1 - 1321224 Instrument Board Lower Reinforcement Bracket
2 - G-271184 Brace Rod Nut and Lock Washer Assembly

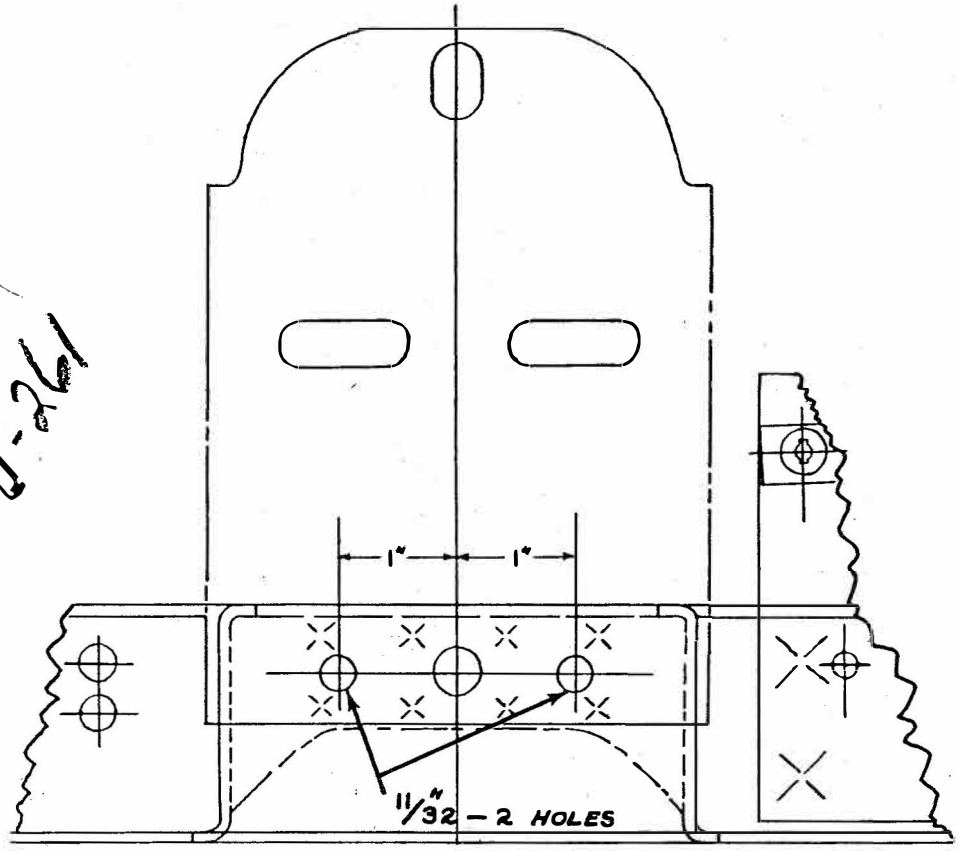


Fig. 3

2 - Brace Rod-to-Bracket Bolts - 5/16" x 7/8"
2 - Brace Rod-to-Bracket Bolt Nuts
6 - Plain Washers - 5/16"
2 - Lock Washers - 5/16"
1 - Shakeproof Washer - 5/16"
1 - Plain Hex Nut - 5/16" - 18

1. Remove the two rear bolts which retain the steering gear mounting bracket to the frame and loosen the front bolt.

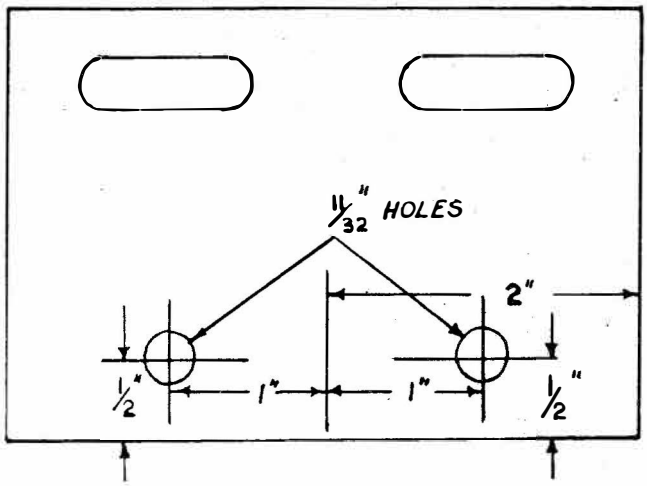


Fig. 4

J-260

2. Loosen the steering post bracket clamp bolt and remove the stud nuts. Slip the bracket down out of the way, remove the spacers (shims) and remove the plate with studs. Move the steering post assembly out of the way.
3. Drill two 11/32" holes in the instrument board flange on the centerline of the existing hole at the dimensions shown in Fig. 3.
4. Drill two 11/32" holes in the Instrument Board Lower Reinforcement Bracket, Part No. 1321224 as shown in Fig. 4.
5. Drill the two 11/32" holes for the steering post bracket-to-cowl brace rods in the cowl top panel at the locations shown in Fig. 5.
6. Remove the steering post bracket bolt. Install the shakeproof washer on the bolt and install in the bracket using a plain nut instead of the crown nut which was used originally.
7. Insert the brace rod-to-bracket bolts with plain washers in the set of elongated holes in the bracket and install the nuts loosely. The bolts must be placed in the bracket before it is installed because the clearance under the bracket does not permit their installation after the bracket is in position.
8. Place the bracket on the instrument board flange so that the brace rod bolt nuts are on top. Slip the plate with studs through the bracket and flange. Place three shims from the original shim pack on the studs,

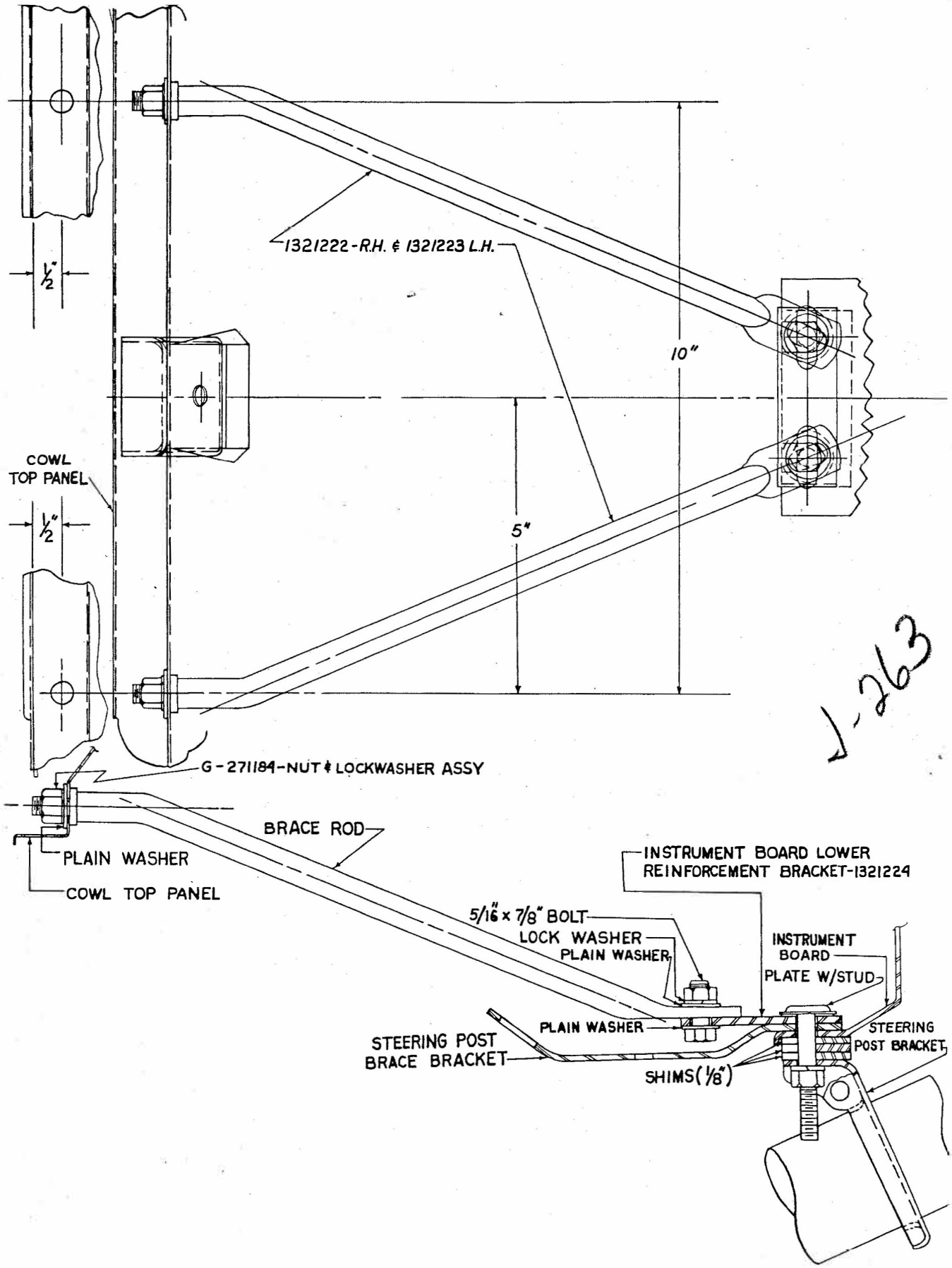

1321222-R.H. & 1321223 L.H.
1/2"
10"
5"
COWL TOP PANEL
1/2"
J-263
G-271184-NUT & LOCKWASHER ASSY
BRACE ROD
PLAIN WASHER
COWL TOP PANEL
INSTRUMENT BOARD LOWER REINFORCEMENT BRACKET-1321224
5/16" x 7/8" BOLT
LOCK WASHER
PLAIN WASHER
INSTRUMENT BOARD
PLATE W/STUD
PLAIN WASHER
STEERING POST BRACE BRACKET
SHIMS(1/8")
STEERING POST BRACKET

Fig. 5

slide the bracket up into the new position and slip the studs into the bracket and install the stud nuts but do not tighten.

9. Insert the threaded end of the brace rod (1321222-R; 1321223-L) through the hole in the cowl top panel. Remove the nuts from the bolts at the bracket. Install the rod, plain washer, lock washer and nut on the bolt. Install both rods. Install the brace rod nuts and washers (G-271184). Do not tighten the retaining nuts.
10. Install the two steering gear housing bracket rear bolts loosely. These must be in position before tightening the bolts at the instrument board.
11. Tighten the stud nuts securely. Then, tighten the steering post bracket clamp bolt. snug-up the brace rod nuts at the cowl top panel just enough to make sure the shoulder (washer) of the rod rests against the cowl panel. Tighten the brace rod nuts at the bracket; then, at the panel.
12. Tighten the steering housing bracket-to-frame bolts to position the gear on the frame. Then, loosen to check the alignment, Shims may be required between the bracket and the frame to secure alignment and prevent a bind in the system. Generally some shimming is required at the upper rear bolt. Plain washers may be used as shims.
13. Check the relationship of the steering gear high spot with the straight ahead position of the front wheels. Adjust, if necessary, as outlined under Toe-In in the Front Suspension and Steering System section of your 1956 Studebaker Passenger Car Shop Manual. Change the position of steering wheel if necessary so that the wheel spoke is straight across when the front wheels are in the straight ahead position.
14. Make certain both front wheels are balanced. Obviously, this modification will not prevent steering wheel shake caused by an unbalanced condition of the front wheels.

AIR CONDITIONING KITS - 57L-Y MODELS

Please record this article on the Service Bulletin Reference page of your 1957 Packard Clipper Supplement.

When making a field installation of an air conditioning unit in a 1957 Packard Clipper sedan without power steering, only Air Conditioning Kit, Part No. PA484653 is required. However, if the vehicle is equipped with power steering, in addition to the Kit, Part No. PA484653, it is necessary to install the Generator and Power Steering Pump Kit, Part No. PA1543816.

TRUCKS

PROPELLOR SHAFT AND UNIVERSAL JOINT ASSEMBLIES - 3E SERIES TRUCKS

Please record this article on the Service Bulletin Reference page in your Supplement covering 3E Series Trucks.

The Cleveland type propeller shaft and universal joint assemblies entered production with the following serial numbers:

Serial No.	Model and W.B.	Propeller Shaft No.	Trans.
E7-8371	3E7-122"	1686783 - Front 1686463 - Rear	Automatic
E6-16070	3E6-112"	1686391	3-speed
E6-16098	3E6-112"	1686557	4-speed
E6-16072	3E6-122"	1686785	3-speed
E11-12608	3E11-122"	1686785 - Front 1686464 - Rear	3-speed
E12-3217	3E12-122"	1686783 - Front 1686464 - Rear	Automatic
E13-1758	3E13-131"	1686509 - Front 1686465 - Rear	4-speed
E14-2453	3E14-131"	1686513 - Front 1686465 - Rear	4-speed
E28-5904	3E28-155"	1686737 - Front 1686707 - Rear	4-speed

While the complete propellor shaft and universal joint assemblies are interchangeable with the Spicer propellor shaft and universal joint assemblies previously used, the individual propellor shaft or universal joint is not. The Cleveland universal joint is the clamp type (see Fig. 6).

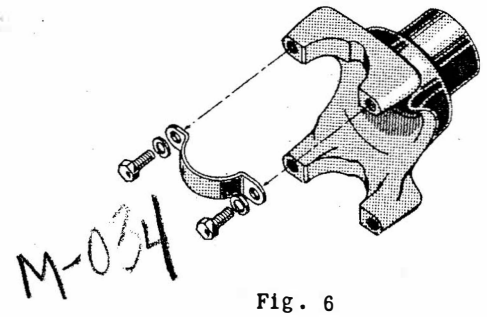


Fig. 6

STUDEBAKER-PACKARD CORPORATION
SOUTH BEND 27, INDIANA

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