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Clutch Disc Installation Chevy II Engines

As previously covered in the November 1961 issue of Service News, the clutch driven discs for both the four and six cylinder Chevy II engines should be installed so that the extended end of the hub and the dampener springs are toward the flywheel (Fig. 1). The flywheel is recessed to receive the dampener springs and hub.



Fig. 1-Clutch Discs for Chevy II Engines

Unfortunately, the service replacement clutch driven disc assemblies of early manufacture, in error, had the words "FLYWHEEL SIDE" stamped on the rear face of the disc. If the driven disc assemblies for the four or six cylinder engines were installed according to this marking, the hub and dampener spring retainer plate would interfere with the clutch pressure plate and prevent full disengagement of the clutch.

The source furnishing the Service clutch disc assemblies is now painting out or deleting the incorrect marking from parts of late manufacture. Chevrolet Parts installations are inserting an instruction sheet in all warehoused units of early manufacture. Installation instructions being enclosed warn that the "FLYWHEEL SIDE" markings should be disregarded, and the service disc assembly installed so that the side with the paint marking on the hub is toward the pressure plate.

Corvair Engine Rear Main Bearing

To prevent the possibility of mismatch of the thrust flanges of the Corvair and Corvair "95" engine rear main bearings, with the resulting reduction in crankshaft end play, engines produced after April 16, 1962, (date stamped T 0416) will have a flanged rear bearing in the left half of the case only. An unflanged bearing will be installed in the right half of the crankcase.

Service Parts stock rear main bearing units will be packaged with one flanged and one unflanged bearing half in each unit when current stocks having both bearing halves flanged are exhausted.

348 and 409 Truck Engine Overheating

A check of the lower radiator hose should be made in cases of engine overheating on early 1962 truck 348 and 409 cu. in. engines. The reinforcing wire inside the hose may have moved into the pump inlet allowing the hose to collapse at the radiator end, thereby restricting water flow. To prevent reoccurrence of hose collapse with hose (Part #3768953), reposition the spring wire reinforcement in the hose and spread the pump end of the spring so that it will rest against the pump inlet to restrict spring movement.

Push Rods—1962 Engines

In reviewing the valve push rods currently available as service replacement for 1962 Chevrolet engines, in all cases when a replacement push rod has a paint stripe at one end, this painted end of the push rod must be installed in contact with the rocker arm. To provide desired durability a hardened insert is incorporated in the rocker arm end of these push rods.

On both the 348 and 409 cu. in. engines, the exhaust valve push rods are longer than the inlet valve push rods used in these engines. In each of these engines, the exhaust valve push rod is further

Push Rods Serviced For 1962 Engines

| ENGINE | PUSH ROD ASSEMBLY | USAGE | PAINT* MARKING |
|---|----------------------|--------------------|-------------------|
| 153 Cu. In. 194 Cu. In. (Chevy II) | 3788495 | inlet & Exhaust | None |
| Corvair Corvair ''95'' | 6255649 | Inlet & Exhaust | Blue |
| 235 Cu. In. 261 Cu. In. (All) | 3836260 | Inlet & Exhaust | None |
| 283 Cu. In. (All) | 3837152 | Inlet & Exhaust | None |
| 327 Cu. In. (250 & 300 H.P. Pass. & Corvette) | 3817616 | Inlet & Exhaust | None |
| 327 Cu. In. (Truck) | 3796243 | Inlet & Exhaust | Blue |
| (340 & 360 H.P. Corvette) | | | |
| 409 Cu. In. (Pass.) | 3795627 3795629 | Inlet Exhaust | Black Blue |
| 409 Cu. In. 348 Cu. In. (Truck) | 3755545 3755543 | Inlet Exhaust | Green Yellow |

*Color Striped End to be at Valve Rocker Arm in Engine

distinguished from the inlet valve push rod by use of different paint colors on the rocker arm end of the push rod.

The Corvair and Corvair 95 engines use push rods 6255649 at both the inlet and exhaust valve locations. Near the color striped end of the push rod a .050" lubricant metering hole exists in the side wall. The push rod end having this hole must be assembled toward the rocker arm to provide lubricant flow to the valve train.

Chevy II Transmission First and Reverse Block-out

Instances of Chevy II three-speed transmission block-out in first and reverse, or reports of severe shift linkage deflection, can in most cases be attributed to improper positioning of the lower mast jacket seal. The lower seal should fit inside the mast jacket abont $\frac{7}{32}$ inch to provide support for the lower end. That part of the seal on the outside of the mast jacket will be within $\frac{1}{4}$ inch of the opening in the outer tube of the mast jacket when properly installed (Fig. 2).

Before transmission shift linkage adjustments are made, the seal should be checked and positioned by using the side of a screwdriver or other suitable tool. Shift linkage can then be adjusted according to the 1962 Chevy II Shop Manual, Page 7-4.



Fig. 2-Chevy II Steering Mast Jacket Lower Seal

Corvair 4-Speed Transmission

Instances of Corvair 4-speed transmission hard shifting and gear clash in 1st and 2nd can be caused by installation of the wrong synchronizer blocker rings. Some of these transmissions have apparently been assembled with the 3-4 blocker



Fig. 3–Corvair 4-Speed Transmission Synchronizer Blocker Rings

rings installed at either the 1st or 2nd gear location, or at both locations. As shown in Figure 3, the 1-2 synchronizer blockers are wider than the 3-4 blocker rings. If the 3-4 blockers are in error used with the 1st or 2nd speed gears, these narrower blockers will slide off the synchronizer keys and tend to block engagement, or cause gear clashing.

Lubrication Tips

• CHEVY II FRONT SPRING SEAT—The pivoting lower seat utilized for each front suspension coil spring is provided with a pressure type fitting to accept chassis lubricant for the seat pivot shaft. In many instances these fittings have been overlooked at regular chassis lubrication due to servicemen being unfamiliar with this type suspension. At each spring lower seat, the grease fitting is located on the underside of the pivot shaft bearing housing (Fig. 4) and can be reached easily through the large opening in the upper control arm. In cases where the pivot



Fig. 4-Chevy II Front Spring Seat Pivot

shaft is not receiving lubricant, a noise similar to that produced by a mispositioned front spring or worn control arm ball joint may emanate from the dry pivot shaft bearing.

- FOUR CYLINDER ENGINE DIPSTICK—When inserting the crankcase dipstick on the Chevy II four cylinder engine, the dipstick must be pushed down firmly to insure that the felt seal on the dipstick washer is placed in solid contact with the top of the dipstick retaining tube. Failure to seat the crankcase dipstick as outlined above can result in severe loss of engine oil through the dipstick retainer tube.
- **TRUCK VACUUM SPINNER GOVERNOR**—Upon completion of carburetor overhaul on a truck equipped with a vacuum spinner type governor, Lubriplate or equivalent should be applied at the hook ends of the governor spring. This spring is utilized in the carburetor-mounted portion of the engine governor (Fig. 5).



Fig. 5-Vacuum Spinner Truck Engine Governor

• CAMSHAFT INSTALLATION—When installing a replacement camshaft in any Chevrolet engine, one-16 ounce can of "E.O.S." (Engine Oil Supplement Part #3755788) should be added to the crankcase. When practical pour 2 or 3 ounces of the E.O.S. directly onto the newly installed camshaft. In addition it is recommended, especially on high performance engines, that molybdenum disulphide ("Molykote" or equivalent) be applied to the foot of each valve lifter at time of camshaft installation. When engine rebuild is complete, the crankcase should be brought to the proper level using a good quality MS-DG grade engine oil of a viscosity suitable

for seasonal conditions. On 409 cu. in. passenger car engines, it is recommended that the engine oil containing "E.O.S." be drained after the vehicle with the new camshaft installed has been driven 1,000 miles; other engines may be operated to the normal oil change period, if desired.

• FUEL FILTER WITH "AFB" CARBURETORS—A bowl type fuel filter is used with Carter "AFB" carburetors on 1962 Chevrolet Series passenger cars and Corvettes. The treated paper element installed in the glass bowl should be replaced at 5,000 mile intervals.

Corvair Convertible Seat Belt Installation

The location of the outboard belt anchors for front seat belts on the Corvair convertible has recently been added to the Seat Belt Instruction Sheet that is included in the Accessory packages. However, numerous Seat Belt Accessory Units already distributed will not contain this information.

The outboard belt anchor on the Corvair convertible is located on the side wall of the rocker inner panel (Fig. 6). The rubber plug at that location can be detected by feeling the surface of the floor carpet. Anchors for the inboard belts on the convertible are provided at the same underbody locations utilized for other 1962 Corvair body styles.



Fig. 6-Seat Belt Anchor Location-Convertibles

Galvanized Rocker Panels

Galvanized rocker outer panels are used in production of all 1962 Chevy II, Corvair, and Chevrolet Series bodies. Galvanized rocker panels are also serviced for replacement and these panels will be unprimed when received. Experience has shown that galvanized metal, which is actually zinc-coated steel, must be properly conditioned and primed to obtain satisfactory paint adhesion. Major suppliers of automotive refinish paints have recently issued bulletins informing personnel in facilities using their products, that special surface preparation and materials are required in the finishing of these galvanized rocker panels. Failure to follow the supplier's recommendation could result in poor paint adhesion.

Truck Air Conditioner Performance Data Revised

The following performance test specifications for 1962 truck Cool Pack air conditioners should be used in place of performance test data previously published for these units. The results of checks made on numerous units already in operation indicated the necessity for this revision in test specifications.

| Temperature of Air Entering Condenser | 70° | 80° | 90° | 100° | 110° | 120° |
|--|------------|------------|------------|------------|------------|------------|
| Engine R.P.M. | | | | 1500 | | |
| Compressor Head Pressure | 145 165 | 115 185 | 180 200 | 190 210 | 225 245 | 240 260 |
| Suction Pressure** | 14 | 14 | 14 | 15 | 16 | 17 |
| Dischorge Air Temp.** | 39° 41° | 39° 42° | 41° 43° | 42° 44° | 45° 47° | 48° 50° |

**When compressor clutch disengages.

Service Publication Corrections

- The fuel pump on all 409 cu. in. engines should, on test, produce fuel pressures between $5\frac{1}{4}$ and $6\frac{1}{2}$ psi, at engine idle to 1,000 rpm.
- The correct breaker point dwell setting range for distributors on both the Chevy II four and six cylinder engines is 31°-34°. The cam angle shown in Step 6 on page 6Y-41 of the Chevy II Shop Manual is incorrect.

Due to the single bearing design of all Chevy II engine distributors, proper dwell or point gap settings can be made only with the distributor installed in the engine.

- The Chevy II Shop Manual should be corrected as follows: On page 2-5, Horizontal Tramming Dimension "Q" should read 27¹⁵/₃₂" instead of 25¹⁷/₃₂".
- The April 1962 issue of Chevrolet Service News requires correction within the left column of page 25. Corvair engine cylinder numbering and firing order should read:

| Cylinder Left Bank | | 2-4-6 | |
|--------------------|------------|-------------|--|
| (Rear to Front) | Right Bank | 1-3-5 | |
| Firing Order | | 1-4-5-2-3-6 | |