CHEVROLET
SUPER CHEVROLET SERVICE
SERVICE NEWS

VOLUME 25 MARCH, 1953 NUMBER 3

Windshield Wiper Cable Adjustment

Correct windshield wiper cable tension is important for efficient operation of the windshield wiper mechanism. Tight cables cause slow wiper operation and possible stall at the center of travel on wet windshields. Loose cables result in blade slap and over travel at the end of stroke. Wipers should operate on a wet windshield with vacuum of 4 lbs. minimum.

Where improper wiper operation is experienced, the condition should be corrected by applying the procedure outlined below:

1. On early production models having an auxiliary drive lever on the motor, move the wiper arms by hand up into the center of the arc, midway between the two extremities of travel (fig. 1). With the arms in this position, the motor auxiliary drive lever should be in a vertical position and should *remain in vertical position during all steps of adjustment procedure.*
2. Vehicles produced after approximately February 2, 1953 will have a spiral drive in place of the auxiliary drive lever on the motor and will not require positioning of the blades to perform the following adjustment.
3. Remove one wiper arm and blade without altering the position of the transmission shaft.
4. Loosen the screw in the end of the transmission shaft approximately ¾ turn (fig. 2). Tap end of screw lightly to insure full cable tension.
5. Reach up under cowl and take the cables between the thumb and forefinger and increase finger pressure until one notch movement of the transmission serrations can be felt and/or heard (fig. 3). While holding the cables in this position, retighten the tension screw in end of transmission shaft (this step is a two man operation).

NOTE: *Serration contact is lost if tension screw is loosened excessively.*

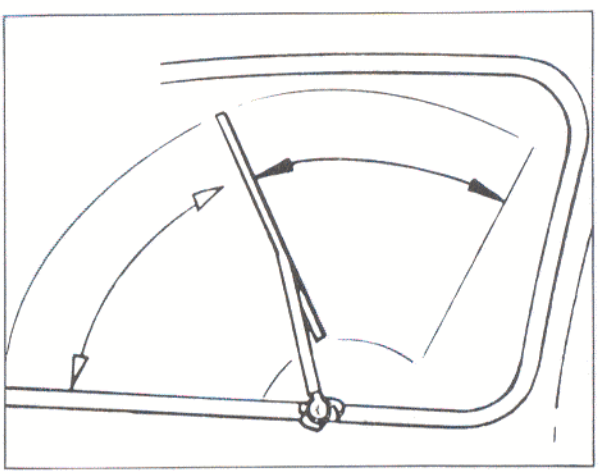

Fig. 1

REMEMBER:

A CUSTOMER is not an interruption of our work—he is the purpose of it.

CHEVY ACRES REPRINT

6. Repeat the above steps 3, 4 and 5 on opposite wiper transmission and cables.

7. After tensioning as indicated above, start the engine to operate wipers. With engine running, turn wiper control off to park the wiper under vacuum. Reinstall the arms and blades along cowl in park position.

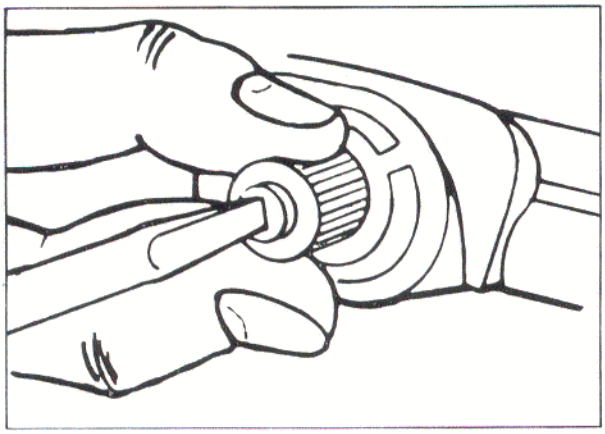

Fig. 2

8. Check wiper operations; when correctly tensioned, wipers should not stall on a wet windshield nor should there be excessive blade slap.

   a. If wiper blades still tend to stall, repeat the preceding steps and add an additional notch reduction at each transmission.

   b. If there is excessive blade slap, repeat above steps 1, 2, 3 and 4, on one or both wiper transmissions. This will provide full tension to the transmission cables. Retighten tension screw in end of transmission shaft.

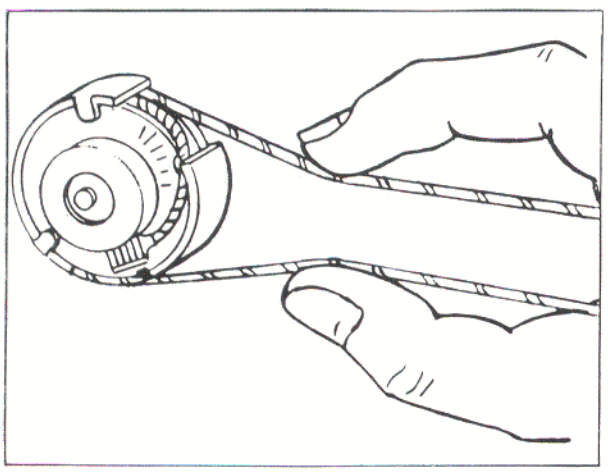

Fig. 3

Fan Belt Tension

In order to obtain durability and quietness with the new narrow fan belts used in 1953 on passenger cars, ½, ¾ and 1 ton truck models, it is very important that the belt have adequate tension. The narrow belt is much more critical with regards to tension than was the wide belt used on all models in 1952 and on the 1½ and 2 ton truck models in 1953.

The narrow fan belt should be adjusted to provide 7/16"-½" deflection at a point midway between

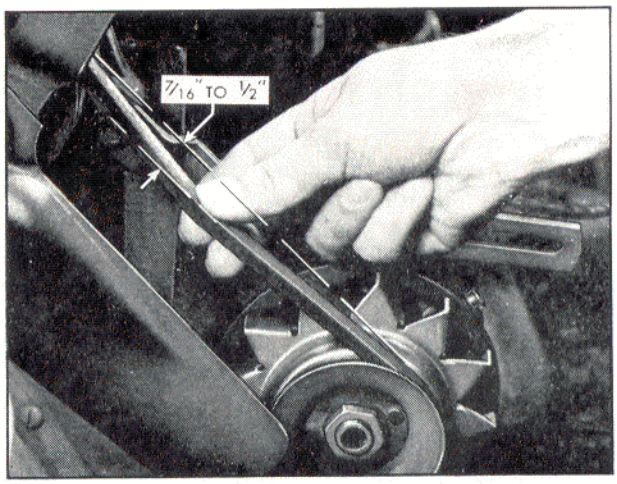

Fig. 4

fan and generator pulleys (fig. 4). Proper adjustment for the wide fan belt remains at ¾" deflection.

To insure that the narrow fan belts have sufficient tension after their initial stretch, the tension of the belt should be checked at the 1000 mile inspection. If the belt deflects more than ½" resisting approximately a 15 lb. load midway between the generator and fan pulleys, it should be retensioned.

Propeller Shaft Coupling Fit

A loose fit of the rear axle pinion shaft to the coupling of the propeller shaft has been incorporated into all passenger, sedan delivery and one-half ton axles. This is a change from the hard press fit used in 1952. At the same time, the pinion bearing nut has been redesigned and a propeller shaft coupling spring has been added to provide fore and aft tension on the propeller shaft. The change went into effect approximately the first of the year according to the following rear axle serial numbers:

Model	*Axle Ratio*	*Buffalo*	*G&A*
Passenger Conventional	3.70:1	LM1217	LL1224
Passenger Powerglide	3.55:1	LT106	LS113
½ Ton*	4.11:1	—	LU1230
Sedan Delivery	4.11:1	—	LA1224

Parts	*Part Number*	
	Before Change	*After Change*
Pinion Bearing Nut	595904	3703782
Propeller Shaft Coupling Spring	—	3703792

*Coupling spring not used.

1953 Powerglide Carburetor

Powerglide Carburetors produced after January 1, 1953 have been enriched slightly making their flow characteristics the same as the 1953 conventional carburetor. This change was made to overcome a lean feeling or a surge condition, experienced on some early Powerglide carburetors, on part throttle acceleration just before the power jet comes into operation.

Carburetors built to the leaner specifications may be identified by the date stamped on the bowl cover gasket L-2 or M-2 (November or December, 1952). All carburetors built to new specifications will be dated A-3 (January 1953) or later.

If the above condition is experienced on any of the early 1953 Powerglide models, it may be corrected in the field by replacing the presently installed Main Well and Power Valve Support Assembly, with assembly, Part No. 7005422. This is the same Main Well and Power Valve Support Assembly as used in the carburetor for conventional models and has the correct main metering jet and power jet to meet the new flow curve for Powerglide models.

Service Pistons

Service aluminum pistons are available in standard sizes and .020", .030" and .040" oversize. The standard sizes consist of regular and high limit sizes so that proper clearances can be obtained for slightly worn cylinder bores and blocks requiring slight honing to clean up the bores.

For identification, the cartons of all pistons are stamped with the size of the enclosed pistons and in addition, each standard size piston is identified by an ink stamp on the piston top. All pistons are unitized in a carton of six according to size. Unitizing for weight is not necessary with aluminum pistons because of the close tolerance to which the weight is held.

The standard size piston part numbers and available sizes are as follows:

Part No.	*Size Stamp*	*Size Range*
3704873	S4	3.5625-3.5630
	S5	3.5630-3.5635
*3703846	S6	3.5635-3.5640
	S7	3.5640-3.5645

*High Limit Standard Piston

Oil Pump Pressure

In order to get more oil at higher pressure to the hydraulic lifter gallery to overcome possible lifter leak down at sustained high speeds, the following changes have been made and are now in production.

A new 45 lb. Oil Pump Relief Spring, Part No. 3702367, went into effect on Powerglide Engine, Serial No. LAQ63342. This 45 lb. spring replaces 35 lb. spring, Part No. 3835896.

A new widened groove in the rear camshaft bearing entered production on Powerglide Engine, Serial No. LAQ73522.

Main bearings having widened grooves in both upper and lower shells entered production starting with engine Serial No. LAQ96435.

Wire Harness Interference

As a precautionary measure on 1953 Chevrolet Convertible, check the left door lower hinge box

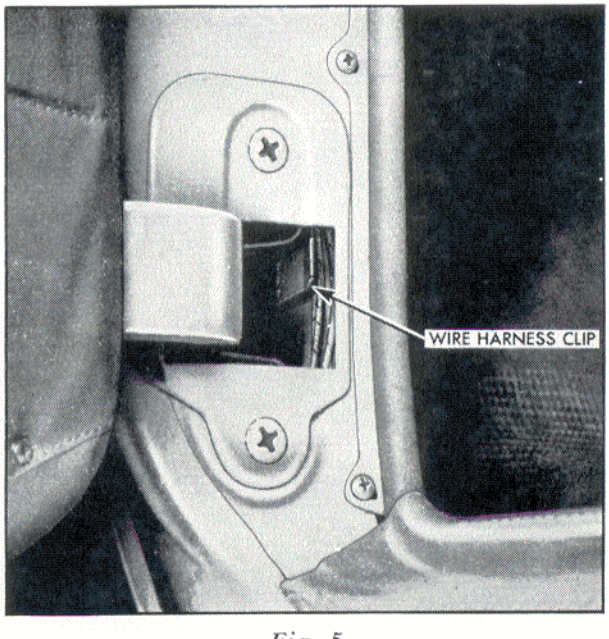

Fig. 5

(fig. 5) to make sure that the body wire harness is placed behind the wire harness clip attached to the right side of the hinge box. In the event there is not enough slack in the harness to perform this operation, remove the left cowl kick pad to gain access to the other harness clips.

Steering Gear Bracket Reinforcement

A steering gear bracket reinforcement which increases the stability of the steering gear bracket on Forward Control Models is now in production and may be obtained from parts stock for installation on earlier models.

The Steering Gear Bracket Reinforcement, Part No. 3702183, may be installed on earlier Forward Control Units as follows:

1. Remove necessary body parts to make area at rear of the steering gear housing and frame in that vicinity accessible for the reinforcement installation.
2. Enlarge the two holes in section of reinforcement which mounts on the frame to approximately 5/8" diameter so that the frame rivets will enter holes allowing reinforcement to set flat against frame.
3. Bolt reinforcement to steering gear housing and bracket using a 7/16-20 x 1½" hex head bolt. Clamp reinforcement to frame and weld to frame and bracket as shown in Figure 6.

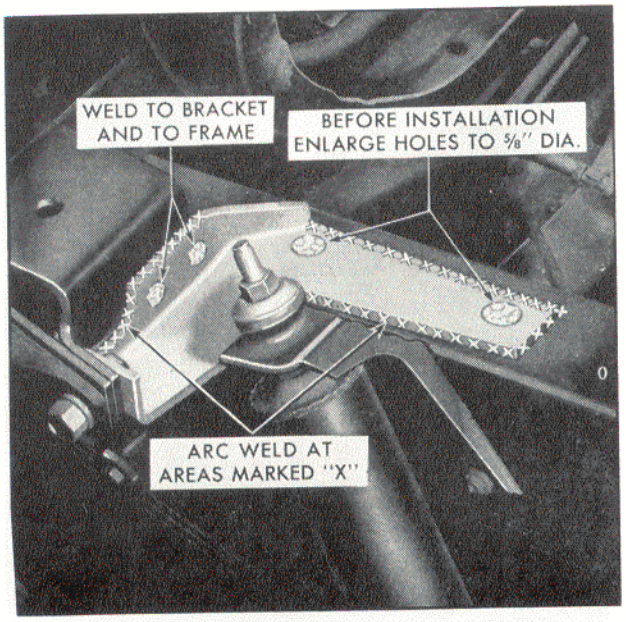

Fig. 6

Transmission Gear Rattle

A change to eliminate gear rattle in four speed transmissions has been made and went into production starting with transmission Serial No. WP 34357. This change provides for the addition of a groove and a dampner in the first and reverse sliding gear hub. The hub of this gear now incorporates a .120" - .125" annular groove in the splined I.D. which accommodates a synthetic rubber friction strip and a steel friction ring. The friction ring is waved to prevent fore and aft movement and has four teeth which engage the splines of the mainshaft. The rubber friction strip increases the radial tension of the steel friction ring. Some transmissions built prior to transmission Serial No. WP 34357 had the groove in the gear hub and when compliants are experienced the friction ring and the rubber friction strip may be installed. The gear assembly is also interchangeable on earlier transmissions. These parts, as well as the gear assembly, are available as follows:

First and Reverse Sliding Gear Assy.	3705458
Steel Friction Ring	591956
Rubber Friction Strip	591955

1953 Passenger Brakes

Hydraulic brake adjustment on 1953 passenger brakes has been revised from the adjustment procedure described in the 1950-51 Passenger Car Shop Manual. After expanding the brake shoes by turning the adjusting screw with tool J-4707 until a light uniform drag is felt on the brake drum, the adjusting screw is then backed off 7 notches of the star wheel to insure running clearance. CAUTION: *Care should be taken to avoid drum drag.*

Toe-In Adjustment

Specifications for the toe-in adjustment have been revised for 1953 passenger cars. The new setting of ¼" plus or minus 1/16" replaces the previous specifications of 0" to ⅛". This change was incorporated into car production on March 6, 1953. These revised toe-in settings are necessary to accommodate the sensitivity of the vehicle spring rate and will improve vehicle handling during adverse weather conditions and when fully loaded. When making this adjustment, make sure tires are at the recommended pressures and vehicle is at curb weight (unloaded).

Generator Field Coil Service

Generator field coil unit, Part No. 1925691, has been released for servicing the 45 ampere generator used on '53 passenger cars and 3000 series trucks. Field coil unit, Part No. 1921356, should not be used on the aforementioned generators.