# 1965 BUICK DEALER SERVICE INFORMATION LETTER INDEX

Through November 30, 1965

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BU	ICK
DEALER	SERVICE
INFORM	ATION

Dealer	File Under	
Letter No.	Group No.	
65-6	1-1	

September 14, 1964

### TO ALL BUICK DEALERS

SUBJECT: New Lubrication and Maintenance Recommendations for 1965 Buicks

To asssure complete maintenance of 1965 Buick Models, the following new recommendations are being called to your attention.

- Oil Filler Cap (except cars with closed PCV system) Check periodically for excessive accumulations of dirt, dust, and foreign materials. Clean as often as necessary. Regular maintenance at 6,000 mile intervals is suggested when dust conditions are not too severe. Wash in a suitable solvent and dip in engine oil prior to installation.
- 2. Oil Breather Assembly (closed PCV system California cars) Follow the above procedure for the oil filler cap.
- Engine Oil Recommendations Change engine oil every 60 days; however, never exceed 6,000 miles between changes. If engine is subjected to heavy duty usage, as described in the Owners Guide, the oil should be changed more often.

If a multi-viscosity oil is desired in areas where the temperature ranges between 32°F. and 0°F., SAE 10W-30 is now recommended rather than SAE 5W-20. The recommendation of SAE 10W for this range remains the same as in 1964.

- 4. Positive Crankcase Ventilator Valve Replacement The 1965 PCV systems feature a new "self-cleaning" replaceable valve. This permits a 12,000 mile replacement interval as opposed to the former 6,000 mile change. Cars equipped with V-8 engines use an AC Type CV-683 or equivalent, while cars with V-6 engines use an AC Type CV-684 or equivalent.
  - NOTE: The new type valve can be used on past model PCV systems to take advantage of the 12,000 mile replacement interval. Any engine with a displacement of 300 cubic inches or more will use CV-683 type valve, while those with a displacement less than 300 cubic inches will use the CV-684 type valve.

 Automatic Transmissions - All automatic transmission-equipped cars (except those with V-6 engines) are equipped with transmission oil filters. Replacement interval is 24,000 miles at the time of the transmission oil change. Procedures for removal and installation of the filters can be found in the 1965 Chassis Service Manuals, Group 1.

For replacement filters, use an AC Type PF-162 or equivalent on Super Turbine 300's and an AC Type PF-160 or equivalent on Super Turbine 400's. Also at this time, the Low Band on Super Turbine 300's should be adjusted.

- NOTE: Any vehicle subjected to heavy duty service (taxis, fleet cars, salesmen, etc.), the above recommendations should be performed at 12,000 mile intervals.
- 6. <u>Manual Steering Gear</u> Check lubricant level at 24,000 miles rather than 6,000 miles as recommended in 1964. Check lubricant by removing the lower attaching bolt on the gear cover. If lubricant must be added, use long-effectiveness chassis lubricant.
- 7. LeSabre Positive Traction Rear Axle In 1965, LeSabres equipped with "Positive Traction" rear axles will carry an embossed tag reading "USE LIMITED SLIP DIFF LUBE ONLY." It will be attached to a lower bolt on the axle rear cover. This same method is also used on Special, Skylark, and Sportwagon models. On all other series, this same tag is attached to the axle filler plug as in 1964.

J. Hresko

Manager, Technical Service

WGH

Positive Cronoccae Ventilator Valve Replacement. The 1965 PCV system is atum a new "self-cleaning" replaceable volve. This permits a 12, 000 mile replacement interval at append to the former 6, 000 mile change. Car equipped with V-8 engines use an AC (yee CV-683 or equivalent, while can with V-6 engines us on AC Type CV-684 or equivalent.

MOTE: The new type valve can be used an past model PCV system to take advantage of the 12,000 mile replacement interval. Any asgine with a displacement of 300 cubic Inches or more will use CV-683 type valve, while these with a asplacement less than 300 cubic Inches will use the CV-684 type valve.

# BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

October 23, 1964

### TO ALL BUICK DEALERS

SUBJECT: New Lubrication and Maintenance Recommendations for 1965 Buicks REVISED TO CORRECT USAGE

To assure complete maintenance of 1965 Buick Models, the following new recommendations are being called to your attention.

- <u>Oil Filler Cap (except cars with closed PCV system)</u> Check periodically for excessive accumulations of dirt, dust, and foreign materials. Clean as often as necessary. Regular maintenance at 6,000 mile intervals is suggested when dust conditions are not too severe. Wash in a suitable solvent and dip in engine oil prior to installation.
- 2. <u>Oil Breather Assembly (closed PCV system California cars)</u> Follow the above procedure for the oil filler cap.
- Engine Oil Recommendations Change engine oil every 60 days; however, never exceed 6,000 miles between changes. If engine is subjected to heavy duty usage, as described in the Owners Guide, the oil should be changed more often.

If a multi-viscosity oil is desired in areas where the temperature ranges between  $32^{0}$ F. and  $0^{0}$ F., SAE 10W-30 is now recommended rather than SAE 5W-20. The recommendation of SAE 10W for this range remains the same as in 1964.

- 4. Positive Crankcase Ventilator Valve Replacement The 1965 PCV systems feature a new "self-cleaning" replaceable valve. This permits a 12,000 mile replacement interval as opposed to the former 6,000 mile change. Cars equipped with V-8 engines use GROUP 1.745 - 6421131 or equivalent while cars with V-6 engines use GROUP 1.745 - 6421132 or equivalent.
- 5. Automatic Transmissions All automatic transmission-equipped cars (except those with V-6 engines) are equipped with transmission oil filters. Replacement interval is 24,000 miles at the time of the transmission oil change. Procedures for removal and installation of the filters can be found in the 1965 Chassis Service Manuals, Group 1.

- <u>Manual Steering Gear</u> Check lubricant level at 24,000 miles rather than 6,000 miles as recommended in 1964. Check lubricant by removing the lower attaching bolt on the gear cover. If lubricant must be added, use longeffectiveness chassis lubricant.
- 7. LeSabre Positive Traction Rear Axle In 1965, LeSabres equipped with "Positive Traction" rear axles will carry an embossed tag reading "USE LIMITED SLIP DIFF LUBE ONLY." It will be attached to a lower bolt on the axle rear cover. This same method is also used on Special, Skylark, and Sportwagon models. On all other series, this same tag is attached to the axle filler plug as in 1964.

E. J. Hresko

## Manager, Technical Service

WGH 5,000 miles between changes, if engine is subjected to nonvy d usage, as aveccibed in the Gwmers Guide, the oil should be changed more

It is sufit-viscosity off is desired in aroas where the temporature ranges retween 32°F, and 0°F, SAE low-30 is now recommended rather than SAE 5W-30. The recommendation of SAE 10W for this range remains the same as in type.

Positive Crankcase Ventilator Valva Replacement - The 1965 PCV systems feature a pew "self-cleaning" replaceable valve. This permits a 12,000 mile représent interval as appased to the former 6,000 mile change. Cars equipped with V-8 angines use GROUP 1.745 - 6421131 or equivalent while cars with V-6 angines use GROUP 1.745 - 6421132 or equivalent.

Automatic Indexions - All automatic transmission-equipped care (ancept Those with v-5 engines) are equipped with transmission oil filters. Replecement interval is 20,000 miles at the time of the transmission oil change. Procedures for removal and installation of the filters can be found in the MASS changes incyted Manuals, Group 1.



October 2, 1964

TO ALL BUICK DEALERS

SUBJECT: Factory Engine Oil Recommendations

In recent months, failed parts being returned to the factory indicate, in some cases, that engine oils meeting the Service MS requirements and passing car makers'tests (such as GM 4745M) are <u>not</u> being used by customers. Today's modern Buick engines create higher operating temperatures because of high speed and stop-go driving, increased number of engine-powered accessories (such as air conditioning), and higher compression ratios.

In addition, when short-trip operation occurs regularly during the winter months, engine oil does not always have a chance to completely warm up. When this happens, rapid oil dilution is encountered with consequent corrosion of internal parts. Detrimental effects of this nature can only be minimized by using oils which are marked, "For Service MS" and "Passes Car Makers' Tests".

The following definitions of engine oil types, as set forth by the petroleum industry, will further clarify the reasons for recommending only Service MS oils.

Designation

### Definition

- ML Service typical of gasoline and other spark ignition engines operating <u>under light and favorable service</u> <u>conditions</u>, the engines having no special lubrication requirements and having no design characteristics sensitive to deposit formation.
- MM Service typical of gasoline and other spark ignition engines operating <u>under moderate to severe service</u> <u>conditions</u>, but presenting problems of deposit or bearing corrosion control when crankcase oil temperatures are high.

MS

Service typical of gasoline or other spark ignition engines operating <u>under unfavorable or severe types of</u> <u>service conditions</u>, and where there are special lubrication requirements for deposit or bearing corrosion control, due to operating conditions or to fuel or to engine design characteristics.

It should be stressed to customers that the recommendations in the Owner Guides regarding oil selection are the results of years of testing and experience, and should be kept in mind when selecting a motor oil. Incorrect oil selection can result in premature piston ring and bearing wear, oil sludging, and excessive oil consumption.

E. J. Hresko

Manager, Technical Service WGH



October 9, 1964

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 300 and 400 Automatic Transmission Oil Filter Change Recommendations

Field reports on Super Turbine 300 and 400 transmissions indicate that some difficulty is still being encountered by repeat failures due to inoperative oil filters.

It is recommended that the oil filter be changed and cooler lines flushed at every <u>MAJOR</u> <u>OVERHAUL</u>. Also, at 24,000 mile intervals, it is recommended that the oil pan be removed and cleaned and a new filter be installed. Under heavy duty operation the filter should be changed at 12,000 mile intervals.

NOTE: On V-6 model transmissions merely clean the strainer, DO NOT replace.

The Super Turbine 300 transmission uses a PF-162 carried by the Parts Department under Group 4.197, Part 6435574 or equivalent while the Super Turbine 400 transmission uses a PF-160 carried by the Parts Department under Group 4.197, Part 5579822, or equivalent.

When changing transmission oil use automatic transmission oil having the following recommendation: Type A having AQ-ATF and identification number Suffix "A" embossed on the lid of the container.

Manager, Technical Service



January 22, 1965

TO ALL BUICK DEALERS

SUBJECT: 1965 Engine Coolant Change Interval

NOTE: This letter supersedes information published in <u>Dealer Letter 65-84</u> which should be destroyed.

The 1965 Buick Owners Guides state that the cooling systems on all models contain coolant formulated to withstand two full years of service. Correspondingly, a coolant change interval of two years is recommended.

Please note that this information supersedes the recommendations published in the Maintenance Section - Group 1 - of the 1965 Chassis Service Manuals. In the event that water must be used as a coolant in an emergency, it is extremely important that Buick Heavy Duty Cooling System Protector and Water Pump Lubricant meeting GM Specification 1894-M be added to the cooling system as soon as possible. In all cases, however, it is intended that a permanent type coolant, meeting GM Specification 1899-M be used.

the

E. J. Hresko Manager, Technical Service



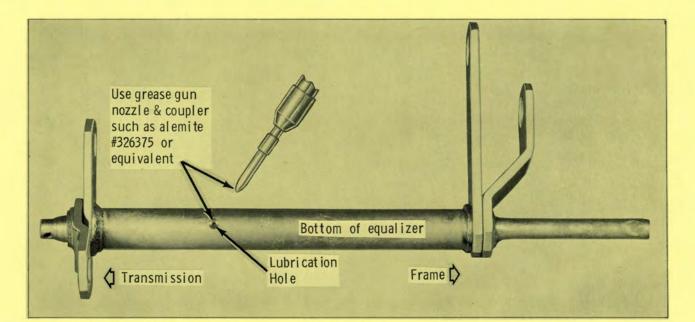
May 14, 1965

### TO ALL BUICK DEALERS

SUBJECT: Lubrication of 3-Speed Manual Transmission Shift Linkage Equalizer - All 1964-65 Models

The Guardian Maintenance recommendations specify that the shift linkage on manual transmission car be lubricated every 6,000 miles. To satisfactorily lubricate the 3speed linkage equalizer, an Alemite #326375 nozzle and coupler, or equivalent, should be attached to the grease gun. This is the same nozzle and coupler used to lubricate the propeller shaft slip spline and constant velocity joint on 1963-65 Rivieras.

It is important that this area should not be overlooked as a part of the periodic lubrication. The critical function of this part in determining ease of shifting dictates that a regular lubrication interval be followed.



Manager, Technical Service



BUICK DEALER SERVICE INFORMATION Dealer Letter No. 65-14 File Under Group No. 2-1

BUICK MOTOR DIVISION, GENERAL MOTORS CORPORATION, FLINT 2, MICHIGAN

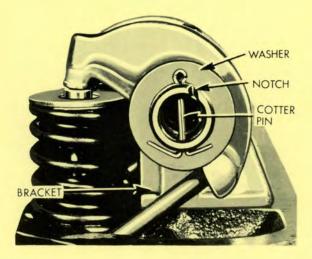
September 25, 1964

TO ALL BUICK DEALERS

SUBJECT: Correct Installation of Rocker Arm Shafts -401 and 425 Engines

As a possible cause of oil consumption, the improper installation of the rocker arm shafts is often overlooked. If installed upside down, the rocker arm lubrication holes face upward and allow oil to pass between the rocker arm and the shaft. Since the oil is under pressure, it spurts into the overhead, drains down the valve stems and into the combustion chambers.

This illustration shows a correctly installed shaft. The notch on the end of the shaft <u>must</u> be in the position shown to properly position the lubricating holes at the bottom of the rocker arm.



J. Hresko

Manager, Technical Service

BUICK DEALER SERVICE INFORMATION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

October 23, 1964

## TO ALL BUICK DEALERS

SUBJECT: 1965 Buick Engine Identification and Foreign Travel Information

Listed on the reverse side are the various engines used in the 1965 Buick automobiles.

Owners contemplating travel outside the United States should be cautioned to check on the quality of fuel available before their trip. For your convenience, the engine chart will serve as a guide in determining engine identification, compression ratio, fuel octane requirements, etc. Zone Service Managers have a publication listing the octanes of the fuels found in most countries of the world.

If satisfactory fuels cannot be assured, the compression ratio should be lowered by installing lower compression ratio pistons as indicated on the chart.

NOTE: Engine damage caused by detonation as a result of the use of low octane fuels is not considered a defect in material or workmanship; therefore, cannot be considered for warranty adjustment.

J. Hresko

Manager, Technical Service

Engine Mfg. Code No. Prefix	Series	Engine Description and Carburetor Equipment	Compression Ratio	Octane Requirement	Horsepower at RPM	Piston and Pin Part No.
LH	43-44	225 cu. in. V-6 - 1 barrel	9.0 to 1	85 Motor 93 Research	155 at 4400	1399524
LK	43-44	225 cu. in. V-6 - 1 barrel (export low compression)	7.6 to 1	74 Motor 83 Research	140 at 4400	1399610
LL	43-44-45	300 cu. in. V-8 - 2 barrel	9.0 to 1	85 Motor 93 Research	210 at 4400	1399524
LM	43-44-45	300 cu. in. V-8 - 2 barrel (export low compression)	7.6 to 1	74 Motor 83 Research	195 at 4600	1399610
LP	43-44-45	300 cu. in. V-8 - 4 barrel	10.25 to 1	90 Motor 99 Research	250 at 4800	1399525
LT	46-48 <b>-</b> 49	401 cu. in. V-8 - 4 barrel	10.25 to 1	90 Motor 99 Research	325 at 4400	1388538
LV	46-48-49	401 cu. in. V-8 - 4 barrel (export low compression)	8.75 to 1	85 Motor 93 Research	315 at 4400	1388539
LW	<b>46-48-4</b> 9	425 cu. in. V-8 - 4 barrel	10.25 to 1	90 Motor 99 Research	340 at 4400	1399211
LX	46-48-49	425 cu. in. V-8 - 2-4 barrel	10.25 to 1	90 Motor 99 Research	360 at 4400	1399211



December 11, 1964

TO ALL BUICK DEALERS

SUBJECT: Discontinuance of Valve Stem Seals 1965 - 401 and 425 Engines

Since the beginning of 1965 production, all 401 and 425 engines have been equipped with lead-coated valve stem keys and valve stem seals. The addition of these items greatly improved oil economy by preventing the flow of oil along the valve stems. However, recent tests conducted by the Engineering Department have shown that the seals are unnecessary when the lead-coated keys are used. Therefore, all engines built after approximately December 1, 1964, will be assembled without valve stem seals.

**É.** J. Hresko Manager, Technical Service

BUICK DEALER	<b>699</b>	Dealer Letter No.	File Under Group No.
SERVICE	BUICK Authorized	65-68	2-4
INFORMATION	Service		

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December 11, 1964

TO ALL BUICK DEALERS

SUBJECT: Changes in the 1965 Chassis Service Manuals

A. Engine Code Number Prefix Correction Reference: 1965 Chassis Service Manual

Please change manual accordingly.

Chart - Page 2-11 - Paragraph 2-4 - Subparagraph a

- 1. 49000 Series cars equipped with 401 engines will have an engine code number prefix "LT" rather than "LW".
- 2. 46000, 48000, and 49000 Series cars equipped with 425 engines and <u>one</u> 4-barrel carburetor, will have code number prefix "LW".

These changes should be noted as soon as possible to prevent any confusion when identifying Upper Series engines.

B. Cleaning V-6 Engine Valve Guide Bores Reference: 1965 Special Chassis Service Manual

Please change manual accordingly.

Paragraph 2-6, Subparagraph a, Step No. 5

- Now reads "Clean carbon and gum deposits from valve guide bores. Use Reamer J-5830-1".
- Change to "Clean carbon and gum deposits from valve guide bores. Use Reamer J-8814".

Hresko

Manager, Technical Service



December 28, 1964

TO ALL BUICK DEALERS

SUBJECT: Hydraulic Valve Lifter Replacement Because of Wear Pattern

Approximately 45% of all hydraulic valve lifters returned to the factory by Clear Signal Dealers have been replaced because of supposedly incorrect wear patterns. However, after testing these lifters in normal production engines, it has been found that 30% of these lifters are satisfactory. Therefore, it is important that Dealers learn to distinguish between normal and abnormal wear patterns.

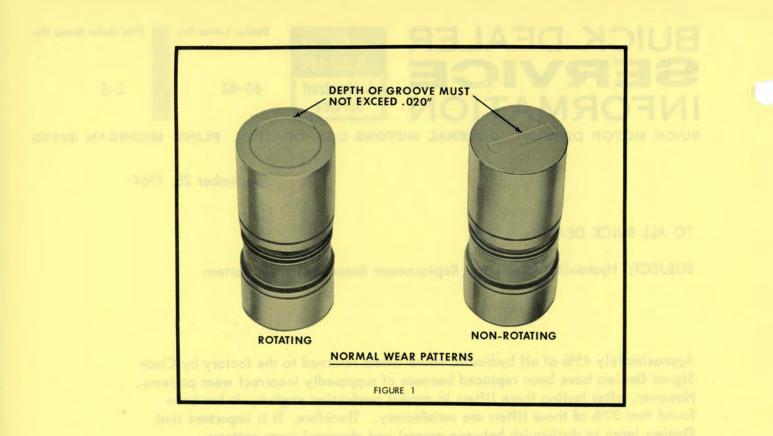
Figure 1 illustrates normal wear patterns of rotating and non-rotating lifters. Since both of these conditions are normal, lifter replacement is not warranted unless the depth of the groove formed by the cam lobe is in excess of .020", or the lifter does not operate properly.

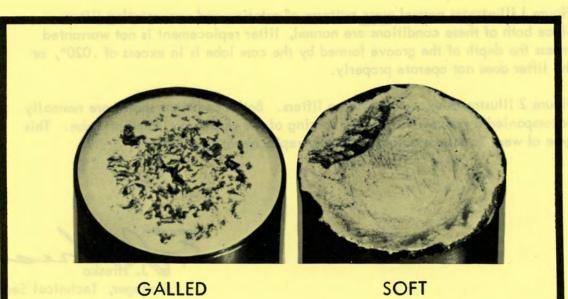
Figure 2 illustrates excessively worn lifters. Both conditions shown are normally accompanied by excessive wear or scoring of the respective camshaft lobe. This type of wear is unsatisfactory and lifter replacement is necessary.

Hresko

Manager, Technical Service

EJH/ mdp





SOFT

INCORRECT WEAR PATTERNS

FIGURE 2

# BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

January 8, 1965

TO ALL BUICK DEALERS

SUBJECT: Oil Consumption Thru Intake Manifold 1964 - 65 225 & 300 Engines

It has been found that insufficient torque on intake manifold bolts permits engine oil circulating in the vacinity of the lifter galleries to be drawn into the intake manifold. Therefore, it is important that the torque on these bolts be checked whenever oil consumption complaints are received.

In addition, torque on intake manifold bolts has been raised to  $\underline{35-45}$  lb. ft. on 1964 engines and  $\underline{45-55}$  lb. ft. on 1965 engines. Please note these changes in all 1964 - 65 Chassis Service Manuals.

J. Hresko

Manager, Technical Service

# BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 26, 1965

TO ALL BUICK DEALERS

SUBJECT: Supplement to Dealer Letter 65-87 - "Oil Consumption Through Intake Manifold - 1964-1965 225 and 300 Cu. In. Engines"

Dealer Letter 65-87 listed revised bolt torques for intake manifolds in connection with oil consumption complaints. It is felt that the following additional information regarding oil consumption through the intake manifold will be of value to dealers encountering complaints of this nature.

### I. Inspection

If a car has accumulated at least 4,000 miles and oil consumption is still a complaint, one of the more important items to check is the amount of torque on the intake manifold attaching bolts. In some cases, the bolts may be found to be loose, not allowing the manifold gaskets to seal properly. However, other cars may have correctly torqued manifold bolts and still draw oil from the crankcase into the cylinder head ports. Therefore, in order to check for this condition, the intake manifold should be removed so that the cylinder head ports can be checked for the presence of oil.

II. Replacing the Intake Manifold and Gaskets

Before re-installing the manifold, new gaskets should be obtained from the Parts Department under Group 3.270:

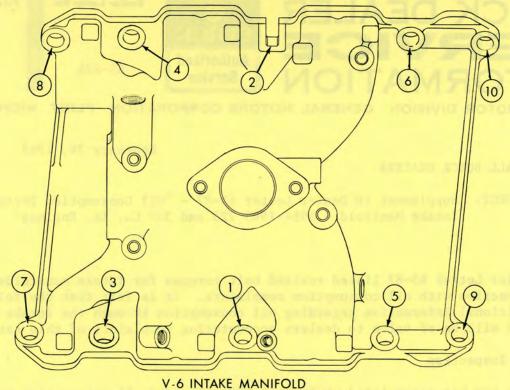
Year	Engine	Part Number
1964-65	225 V-6	1357866
1964	300 V-8	1357870
1965	300 V-8	1367106

When installing the manifold, <u>be certain to center it carefully before</u> tightening any bolts.

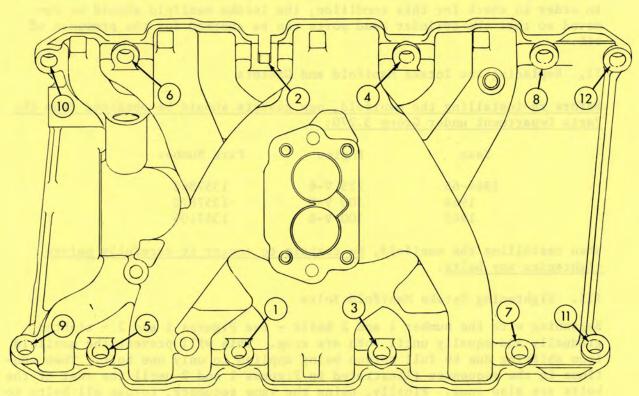
### III. Tightening Intake Manifold Bolts

Beginning with the number 1 and 2 bolts - See Figures 1 and 2 - tighten gradually and equally until both are snug. This will prevent the manifold from shifting due to full torque being applied to only one bolt. Then continue in the sequences illustrated in Figures 1 and 2 until the rest of the bolts are also snug. Finally, using the same sequence, torque all bolts to the specified ratings - 35-45 lb. ft. on 1964 engines and 45-55 lb. ft. on 1965 engines.

 J. Hresko Manager, Technical Service



V-6 INTAKE MANIFOLD BOLT TIGHTENING SEQUENCE FIGURE 1



2 & 4 BARREL V-8 INTAKE MANIFOLD (300 ENGINE) BOLT TIGHTENING SEQUENCE FIGURE 2

SERVICE Authorized	Inder Group No.       READ AND INITIAL         2-6       Dealer         iler Letter No.       Serv. Mgr.         9arts Mgr.       Others         0thers       Others
BUICK MOTOR DIVISION • GENERAL MOTORS CORPORATION • FLINT, M	ICHIGAN 48550

October 8, 1965

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TO ALL BUICK DEALERS

SUBJECT: Supplement to Dealer Letter 65-87 - "Oil Consumption Through Intake Manifold - 1964-1965 225 and 300 Cu. In. Engines"

REISSUED TO INCLUDE INFORMATION ON NEW INTAKE MANIFOLD GASKETS FOR 1964 and 1965 300 V-8 ENGINES

Dealer letter 65-87 listed revised bolt torques for intake manifolds in connection with oil consumption complaints. It is felt that the following additional information regarding oil consumption through the intake manifold will be of value to dealers encountering complaints of this nature.

### I. Inspection

If a car has accumulated at least 4,000 miles and oil consumption is still a complaint, one of the more important items to check is the amount of torque on the intake manifold attaching bolts. In some cases, the bolts may be found to be loose, not allowing the manifold gaskets to seal properly. However, other cars may have correctly torqued manifold bolts and still draw oil from the crankcase into the cylinder head ports. Therefore, in order to check for this condition, the intake manifold should be removed so that the cylinder head ports can be checked for the presence of oil.

IMPORTANT: New intake manifold gaskets manufactured from a composition material are available from the Parts Department for Service use on 1964 (Part #1378453) and 1965 (Part #1378454) 300 Cu. In. engines. These gaskets are thicker than the metal gaskets and give improved sealing between the intake manifold and the cylinder heads.

II. Replacing the Intake Manifold and Gaskets

Before re-installing the manifold, new gaskets should be obtained from the Parts Department under Group 3.270:

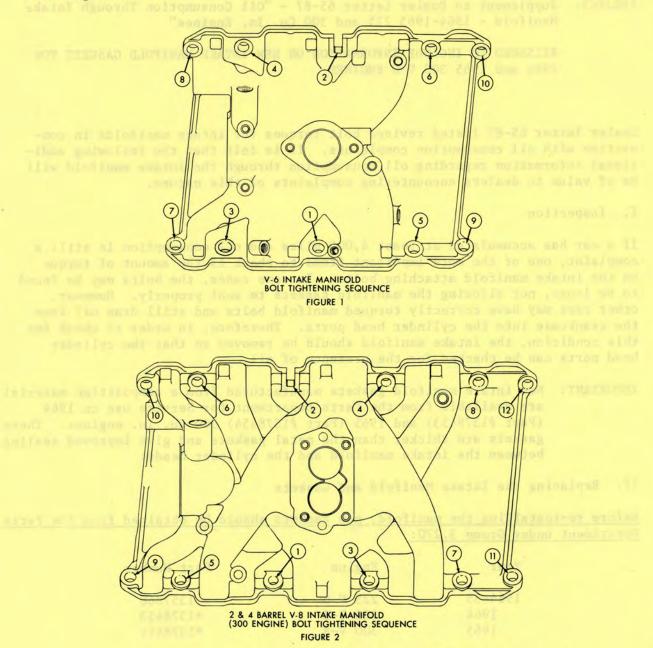
Year	Engine	Part Number
1964-65	225 V-6	1357866
1964	300 V-8	*1378453
1965	300 V-8	*1378454

\*New composition type gasket.

When installing the manifold, <u>be certain to center it carefully before</u> tightening any bolts.

### III. Tightening Intake Manifold Bolts

Beginning with the number 1 and 2 bolts - See Figures 1 and 2 - tighten gradually and equally until both are snug. This will prevent the manifold from shifting due to full torque being applied to only one bolt. Then continue in the sequences illustrated in Figures 1 and 2 until the rest of the bolts are also snug. Finally, using the same sequence, torque all bolts to the specified ratings - 35-45 lb. ft. on 1964 engines and 45-55 lb. ft. on 1965 engines.



J. Hresko

Manager, Technical Service

BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 12, 1965

### TO ALL BUICK DEALERS

SUBJECT: Heat Control Valve Anti-Rattle Spring & Valve Package 1964 - 65 401 and 425 Engines

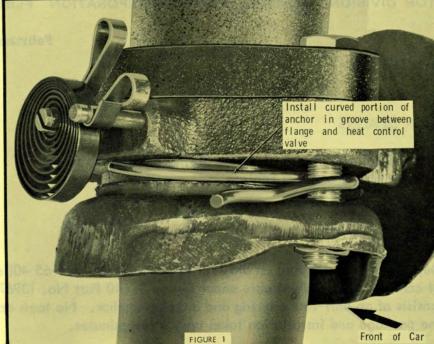
The Parts Department has released an anti-rattle package for 1964-65 401 and 425 engine heat control valves. Available under Group 3.640 Part No. 1396716, this package consists of an anti-rattle spring and a spring anchor. No tools are needed to install the package and installation takes only a few minutes.

The anchor is installed first, as shown in Figure 1. Then place the long end of the anti-rattle spring over the valve shaft with the curved end facing the valve body. See Figure 2. Slip the other end of the spring over the anchor and installation is complete.

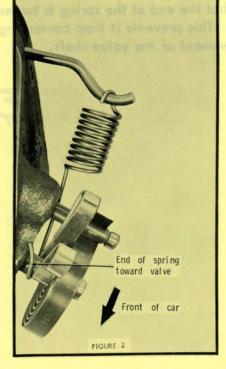
CAUTION: Be certain that the end of the spring is turned toward the valve as shown in Figure 2. This prevents it from contacting the stop spring and restricting movement of the valve shaft.

E. J. Hresko

Manager, Technical Service



stricting move





March 19, 1965

TO ALL BUICK DEALERS

SUBJECT: Piston Ring Installation - ALL 1965 ENGINES

The following information should be used to supplement and clarify the piston ring installation procedures outlined in the 1965 Chassis Service Manual.

### References

Engine	Service Manual Location
225 V-6	1965 Special Chassis Service Manual Par. 2-7, Subpar. h, Step 8
300 V-8	1965 Special Chassis Service Manual Par. 2-16, Subpar. h, Step 8
401 & 425 V-8's	1965 Chassis Service Manual Par. 2-19, Subpar. f, Step 7

Piston Ring Installation - 225 and 300 Engines

- Top Compression Ring When installed, the bevel on the I.D. of the ring is facing <u>down</u> with the manufacturer's identification mark ("0" or "T") facing up.
- 2. Second Compression Ring When installed, the bevel on the I.D. of the ring is facing up, as is the manufacturer's identification mark ("O" or "T").
- 3. Oil Ring Can be installed with either rail facing up.
- 4. Ring Gaps All three ring gaps must be 90° apart and located as shown in Figure 1.

Piston Ring Installation - 401 and 425 Engines

- 1. Top Compression Ring When installed, the bevel on the I.D. of the ring is facing up, as is the manufacturer's identification mark ("0" or "T").
- Second Compression Ring When installed, the bevel on the I.D. of the ring is facing <u>down</u>, and the manufacturer's identification mark ("O" or "T") is facing up.
  - NOTE: The 425 engine incorporates an expander behind the 2nd compression ring. There is no expander on 401 engines.
- 3. Oil Ring Can be installed with either rail facing up.

 Ring Gaps - All three ring gaps must be 90° apart and located as shown in Figure 2.

J. Hresko

Manager, Technical Service

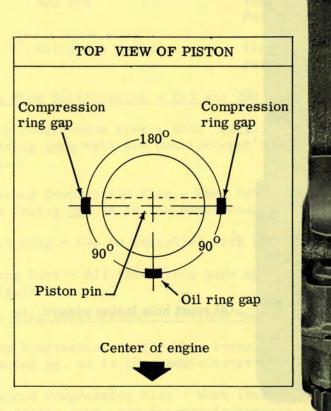
HWR

Oil ring gap 90<sup>0</sup> from compression ring gaps and on camshaft side of piston

Notch toward front of engine (left bank piston shown)

Compression ring gap in line with centerline – of piston pin

> Compression ring gap in line with centerline of piston pin



Oil spurt hole facing inboard

225 AND 300 PISTON RING GAPS

FIGURE 1

Oil ring gap 90<sup>0</sup> from compression ring gaps and on camshaft side of piston Compression ring gap in line with centerline of piston pin Compression ring gap in line with centerline of piston pin TOP VIEW OF PISTON Compression Compression ring gap ring gap 1800 900 900 Piston pin-Oil ring gap Oil spurt hole facing inboard Oil spurt, hole facing inboard Center of engine

401 AND 425 PISTON RING LOCATIONS

FIGURE 2



April 2, 1965

TO ALL BUICK DEALERS

SUBJECT: Discontinuance of Camshaft Thrust Button and Spring 1965 - 225 Cubic Inch V-6

Production has discontinued the use of a thrust button and spring on 1965 225 cubic inch V-6 camshafts. The assembly has been replaced by a washer similar to the one now used on the 300 cubic inch engine. All V-6 engines built after production code number LH 276 will incorporate the washer.

AFA's will not be accepted for installation of missing thrust buttons on engines built after this code number.

Manager, Technical Service

HWR

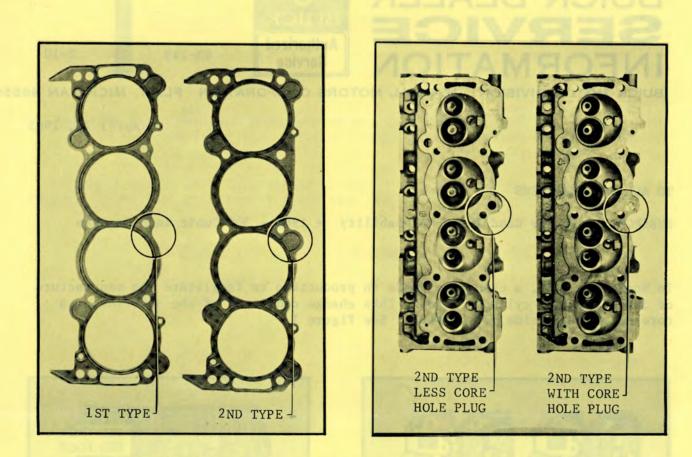


FIGURE 3

FIGURE 4

#### PRODUCTION ENGINES

Due to the fact that the cylinder head change was completed before the cylinder blocks and head gaskets were modified, some engines were built using the second type heads with first type blocks and gaskets. This was accomplished by plugging the core holes in the heads as illustrated in Figure 4.

Current engines use the new block, heads, and gaskets. The plug is not required since the cylinder head core hole is sealed by the gasket and the boss on the cylinder block.

#### PARTS INTERCHANGEABILITY

Because of the above variations, a dealer may encounter three different versions of the 1965 - 300 cubic inch engine:

A - 1st Type Engine
B - 2nd Type Heads with 1st Type Gaskets on 1st Type Block
C - 2nd Type Engine

So that dealers may service all three combinations, the Parts Department has released the following parts:

GROUP	PART NUMBER	DESCRIPTION		
0.033	1396315	Cylinder Block-2bb1.		
0.033	1396372	Cylinder Block-4bbl.		
0.033	1396371	Cylinder Block-Export		

The above are 1st Type blocks. They can be used with 2nd Type heads provided the core holes in the heads are plugged. All 2nd Type heads supplied by the Parts Department will be plugged.

NOTE: DO NOT USE <u>ANY</u> OF THE ABOVE BLOCKS TO REPLACE 2ND TYPE BLOCKS. <u>ENGINES</u> USING THE 2ND TYPE BLOCK DO NOT HAVE THE CYLINDER HEAD CORE HOLES PLUGGED. TO REPLACE 2ND TYPE BLOCKS, USE ONE OF THE FOLLOWING:

GROUP	PART NUMBER	DESCRIPTION
0.033	1396700	Cylinder Block-2bb1.
0.033	1396702	Cylinder Block-4bbl.
0.033	1396701	Cylinder Block-Export

B. CYLINDER HEAD

GROUP	PART NUMBER	DESCRIPTION
0.269	1374720	Cylinder Head

This is the 2nd Type head and is supplied by the Parts Department with the core hole plugged; therefore, it can be used with either 1st or 2nd Type blocks. 1st Type cylinder heads will not be stocked.

C. HEAD GASKETS

GROUP	PART NUMBER	DESCRIPTION
0.289	1366796	Head Gasket

The above gasket must be used only with 1st Type heads or 2nd Type heads with plugged core holes.

0.289 1374869

Head Gasket

This gasket must be used with 2nd Type engines less core hole plug in heads.

D. CORE PLUGS

Additional core plugs are available from the Parts Department under Group 0.253, Part Number 1374438.

firesko

Manager, Technical Service

HWR



April 16, 1965

TO ALL BUICK DEALERS

SUBJECT: Cylinder Head Interchangeability - 1965 - 300 Cubic Inch Engines

In November, 1964, a change was made in production to facilitate the manufacture of 300 cubic inch cylinder heads. This change consisted of the addition of a core hole to one side of the head. See Figure 1.

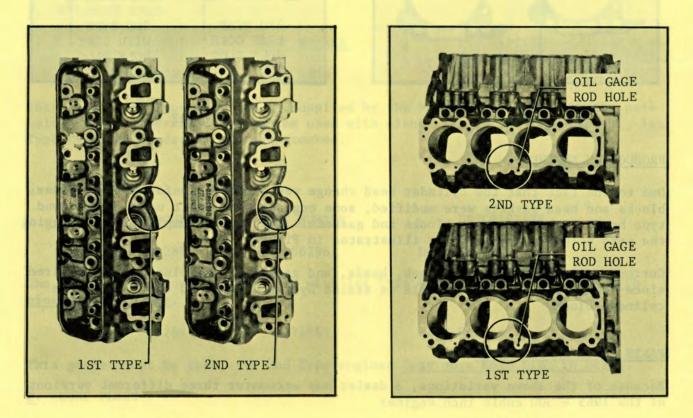


FIGURE 1 FIGURE 2

This modification also necessitated changing the cylinder block and the cylinder head gasket. See Figures 2 and 3.

# BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

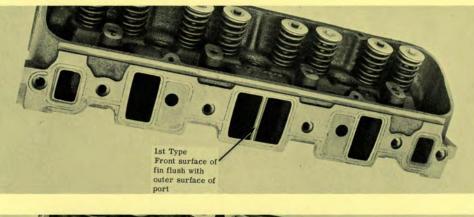
May 14, 1965

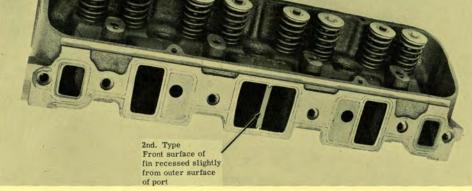
TO ALL BUICK DEALERS

SUBJECT: Cylinder Head Casting Revision - 1965 300 Cubic Inch Engines

Because of a manufacturing revision in 300 cu. in. engine cylinder heads, many dealers are replacing supposedly defective heads in their efforts to correct intake manifold gasket leaks. The thin web between the two center intake ports may appear to be broken off or recessed back too far to effect a seal between the head and the intake manifold. See illustration of 2nd type. Actually, the web has been recessed to facilitate machining operations in this area. The location of the web does <u>not</u> affect the seal between the intake manifold and the cylinder head and has no adverse effect on engine operation.

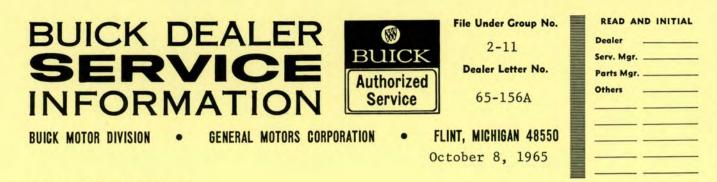
Refer to Dealer Letter No. 65-87A for replacement procedures for intake manifold gaskets.





Hresko

Manager, Technical Service



TO ALL BUICK DEALERS

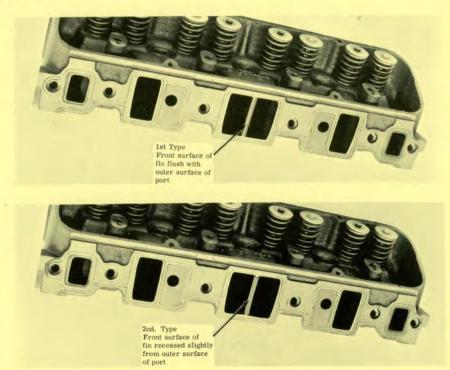
SUBJECT: Cylinder Head Casting Revision - 1965 300 Cubic Inch Engines

REISSUED TO EMPHASIZE REVISED CYLINDER HEADS

Because of a manufacturing revision in 300 cu. in. engine cylinder heads, many dealers are replacing supposedly defective heads in their efforts to correct intake manifold gasket leaks. The thin web between the two center intake ports may appear to be broken off or recessed back too far to effect a seal between the head and the intake manifold. Se illustration of 2nd type. Actually, the web has been purposely recessed to facilitate machining operations in this area. The recessed web does <u>not</u> contribute to leaks between the intake manifold and the cylinder head and has no adverse effect on oil consumption or engine performance.

Effective immediately AFA's will not be accepted for replacement of revised cylinder heads unless approved by the Zone Service Manager.

Refer to Dealer Letter No. 65-87B for replacement procedures for new type intake manifold gaskets.



Hresko

Manager, Technical Service



## BUICK DEALER SERVICE INFORMATION

Dealer	File Under	
Letter No.	Group No.	
65 <b>-</b> 5	3-1	

BUICK MOTOR DIVISION, GENERAL MOTORS CORPORATION, FLINT 2, MICHIGAN

OCOLLI & LLI) CETVIES SOUTH

September 14, 1964

TO ALL BUICK DEALERS

SUBJECT: Throttle Rod Adjustment - 1965 All Series

To obtain proper accelerator pedal position  $(65^0 \text{ from horizontal} - \text{Upper Series}, \text{ or } 67^0 \text{ from horizontal} - \text{Lower Series})$  the simplest adjustment is by means of a measurement from the upper end of the throttle operating lever horizontally to the front of the dash.

Adjust Upper Series cars as shown below and Lower Series cars as shown on the reverse side of this bulletin.

5월 - 谢 Pedal Horizontal Front of Dash Position throttle operating lever from front of dash as shown. With carburetor at hot curb idle position, adjust throttle rod length to obtain free assembly of clevis pin thru bushings in upper end of throttle UPPER SERIES (45-46-48-49000) operating lever. E . Hresko Manager, Technical Service

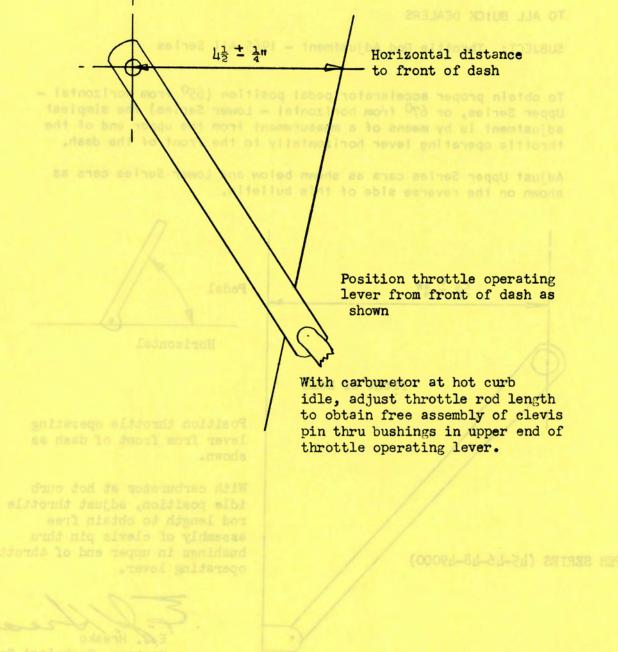


BUICK DEALER SERVICE INFORMATION



September 14, 1964

LOWER SERIES (43 & 44000)



Nanager, Technical Service

HEW

BUICK DEALER SERVICE INFORMATION	BUICK Authorized Service	File Under Group No. 2-12 Dealer Letter No. 65-198	READ AND INITIAL Dealer Serv. Mgr. Parts Mgr. Others
BUICK MOTOR DIVISION • GENERAL MOTORS CORPO	DRATION • F	LINT, MICHIGAN 48550	
	C	October 8, 1965	

TO ALL BUICK DEALERS

SUBJECT: Changes In The 1964 And 1965 Chassis Service Manuals

Valve Lifter Leak-down Rate

1965 (45, 46, 48, 49000, and Skylark Gran Sport Models) - Page 2-35 -

Paragraph 2-14 - Subparagraph g - Step 8

Change leak-down rate from "between 12 and 40 seconds" to "between 12 and 60 seconds".

1964 (44, 46, 47, 4800 Models) - Page 2-30 - Paragraph 2-14 - Subparagraph g -

Step 8

Change leak-down rate from "between 12 and 40 seconds" to "between 12 and 60 seconds".

J. Hresko

Manager, Technical Service

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Dealer	File Under	
Letter No.	Group No.	
65-13	3-2	

September 25, 1964

TO ALL BUICK DEALERS

SUBJECT: Bind in Throttle Linkage - 1965 V-6 Engine

On all single barrel carburetor equipped V-6 engines, make certain the throttle operating rod is installed as shown in the illustration. This rod is curved, and it is possible that the curved portion of the rod may be positioned toward the carburetor causing contact at the carburetor throttle lever. To insure free travel, make certain rod is installed as shown in the illustration on all V-6 engines prior to owner delivery. <u>Please add this operation to the new car Pre-</u> <u>delivery Inspection Schedule</u>.



E. J. Hresko Manager, Technical Service



October 16, 1964

TO ALL BUICK DEALERS

SUBJECT: First Start Stalls - Carter 4-Barrel Carburetors

Complaints have been received of hard starting of Carter carburetor equipped cars. This trouble generally occurs after the car was parked hot and left standing 12 hours or more. The engine starts briefly, but stalls immediately and then must be cranked for some time before it fires again.

A possible cause of the trouble is gasoline evaporation from the carburetor resulting in a low fuel level in the float bowl. However, if the carburetor is adjusted carefully to specifications and is operating properly, fuel should pick up from the bottom of the float bowl and the engine should keep running or, at the worst, re-start rapidly and keep running on the second start.

To minimize first start stalls, check the following adjustments:

- <u>Choke Adjustment</u> Index is specified on all except 300 engine automatic transmission cars (1 notch rich). Make sure choke valve is perfectly free and closes fully. (Rule of thumb, choke should be barely closed at 80<sup>0</sup> and proportionately tighter at colder temperatures.) For repeat complaints, adjust choke 1 or 2 notches richer; never go over 2 notches or cold weather flooding will result.
- <u>Choke Piston Adjustment</u> Make sure the choke valve is not open too much when the choke piston reaches the "vacuum break" slot in the bore. (This is the position the choke piston and valve assume immediately after starting.) See 1965 Buick Service Manuals for adjustments; lower series - Figure 3-53, upper series - Figure 3-76.
- 3. <u>Fast Idle Cam Adjustment</u> Make sure the fast idle cam rotates fully to its index mark when the choke valve is closed. (If fast idle screw is below index mark, fast idle speed will be too slow for all choke positions.) For lower series - see Figure 3-55; for upper series - see Figure 3-78.
- 4. <u>Fast Idle Adjustment</u> Make sure the fast idle speed is not too slow. Specification is 600 RPM in drive on lowest step of cam. (A too slow adjustment here will result in too little throttle opening on starting step of cam.)

Since a first start stall is the result of running out of fuel, pumping the accelerator will hasten the restart.

J. Hresko

Manager, Technical Service



December 11, 1964

TO ALL BUICK DEALERS

SUBJECT: Accelerator Pump Rod Setting Change - 1965 Rochester 2-Bb1. Carburetors

A change has been made in the accelerator pump rod setting in 1965 Rochester 2-bbl. carburetors. Although in early production cars this pump rod was installed in the outer hole, it has since been established that installing the pump rod in the inner hole and changing the pump rod adjustment to 1 5/32 inch will improve cold weather operation. The inner hole setting was used in all production cars built after approximately December 15, 1964.

Whenever a complaint is received of stumble on acceleration during the warmup period, it is recommended that the pump rod position be checked. If the pump rod is in the outer hole, move it to the inner hole and adjust the pump rod setting to 1 5/32 inch. See Figure 1.

Since the pump setting is changed, the pump gauge in the J-21946 Gauge Set will need to be reworked. This can be done by grinding off the "PUMP" leg to the new 1 5/32 inch dimension. See Figure 2.

ACE GAUGE ACROSS TOP 5/32 GAUGE LEG TOUCH TOP FULLY CLOSED FIGURE

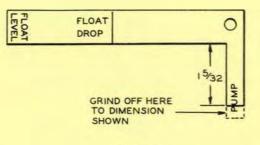


FIGURE 2

 J. Hresko Manager, Technical Service



December 18, 1964

TO ALL BUICK DEALERS

SUBJECT: Exhaust Roar - 1964-1965 Special, Special Deluxe, Skylark, and Sportwagon Series - Super Turbine 300 Equipped

An exhaust roar, occurring at 28 MPH in low range and 50 MPH in high range, can often be traced to insufficient torque on the rear exhaust manifold attaching bolts. To determine whether or not this is the cause, hit either the crossover pipe or the rear of the exhaust manifold with a rubber mallet. If bolt torque is insufficient, a noise similar to the exhaust roar will be heard.

This condition can be eliminated by tightening the rear attaching bolts to the recommended torque - 10-15 lb. ft.

E.J. Hresko Manager - Technical Service

## BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 12, 1965

SUBJECT: 1965 Carburetor Altitude Kits

Every Buick driven mainly at altitudes above 3500 feet should have an altitude kit installed in the carburetor. This kit provides improved performance and economy by metering the fuel approximately 6% leaner than standard to compensate for the decreased oxygen content of the air.

Altitude metering jet size information is available in the carburetor specification sections of the 1965 Chassis Service Manuals. Altitude kits can be ordered from the 1965 Chassis and Body Parts Book.

3.792 KIT, CARBURETOR ALTITUDE (ROCHESTER)

1965	225 ENG., ALL TRANS., 1 BBL.	7002960
1965	300 ENG., AUTO. TRANS., 2 BBL.	7002650
1965	300 ENG., MAN. TRANS., 2 BBL.	7002653
1965	401 ENG., AUTO. TRANS., 4 BBL.	7028656

3.858 KIT, CARBURETOR ALTIDUTE (CARTER)

1965	300 ENG., ALL TRANS., 4 BBL.	1375484
1965	400-401 ENG., AUTO. TRANS., 4BBL.	1360021
1965	400-401-425 ENG., MAN. TRANS., 4BBL.	1360268
1965	425 ENG., AUTO., TRANS., 4 BBL.	1360020
1965	425 ENG., ALL TRANS., 2-4 BBL., FRT.	1368240
1965	425 ENG., AUTO. TRANS., 2-4 BBL., RR.	1368241
1965	425 ENG., MAN. TRANS., 2-4 BBL., RR	1368242

E. J. Hresko Manager, Technical Service



March 5, 1965

TO ALL BUICK DEALERS

SUBJECT: Hot Surge Complaints - Carter 4-Barrel Carburetors

Under extremely hot operating conditions, you may get a complaint of a surge condition on a Carter 4-barrel carburetor equipped car. This surge, which is most pronounced at 35 to 40 MPH, occurs for a short time after restarting a very hot engine. In this case, surge is due to excessive heat in the float bowl causing violent boiling of the fuel. Instead of mixing solid fuel with air, the carburetor mixes fuel and vapor with air, resulting in a lean mixture to the engine.

A new carburetor to intake manifold gasket has been released which will help reduce this problem. This new gasket, which contains an insulating material, was installed in all 4-barrel carburetor equipped Buicks built after February 22, 1965.

If insulated gaskets are needed for a field fix of complaint cars, order Group 3.726 - Part #1375460 - Gasket.

Too much heat in the float bowl can also result in a slow start complaint; this is because an engine which is shut off while very hot may cause boil-off of most of the volatile (quick-starting) part of the fuel in the float bowl. The remaining low level of non-volatile fuel will result in slow starting. The new insulated gasket may help to reduce this type of complaint.

The new gasket is black with a smooth consistency all the way through; the old gasket is gray with a steel-asbestos mesh construction. To determine which gasket is installed on a certain car, remove the air cleaner and scrape the edge of the gasket with a sharp cornered screwdriver. If the gasket is of the early steelasbestos type, scraping will expose fine steel wires.

Flat Rate Time for replacing the gasket, including idle speed, mixture and fast idle adjustments, is .7 hr.

Hresko

Manager, Technical Service



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550 March 12, 1965

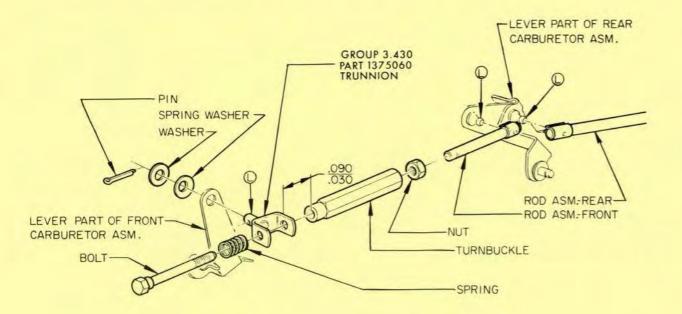
TO ALL BUICK DEALERS

SUBJECT: Linkage Sticking - Dual 4-Barrel Carburetor Engines

If a complaint is received that the throttle linkage sticks or binds in a car equipped with dual 4-barrel carburetors, remove the air cleaner and operate the throttle linkage by hand to determine the point where the sticking originates. If you find that the bolt is sticking where it slides through the front carburetor trunnion, replace the solid trunnion with a new open trunnion. See the illustration for identification of the new trunnion.

Order Group 3.430 - Part 1375060 - Trunnion

Before assembling the new trunnion, make sure the bolt and the trunnion are clean and dry. Just as carburetor linkage should never be oiled, throttle linkage, also, should never be oiled. Oil would only become gummy and collect dust and dirt. Lubricate only at points marked "L" using Lubriplate or a good chassis grease.



E. J. Hresko Manager, Technical Service

BUICK DEALER SERVICE INFORMATION

### BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

March 12, 1965

#### TO ALL BUICK DEALERS

SUBJECT: Hard Starting Due to Choke Sticking Open 1964-1965 Carter 4-Barrel Carburetors

When hard cold starting is found to be caused by the choke valve sticking open, the next step is to determine the exact location of the bind in the choke mechanism.

Trace location of bind as follows:

- 1. Remove air cleaner. Remove choke cover, gasket and baffle plate.
- Hold throttle open to clear fast idle cam. Close choke valve with finger and release; choke valve should fall open from its own weight.
- 3. If choke will not fall open, next disconnect upper end of rod to fast idle cam; also disconnect upper end of rod to choke piston housing. Again see if choke valve will fall open; if not, choke valve and shaft must be disassembled for a thorough cleaning.
- Next, see if fast idle cam mechanism will fall from its own weight. If not, this mechanism must be cleaned thoroughly. These parts, like all of the choke mechanism, must be assembled <u>without lubrication</u>.
- 5. Last, see if choke piston mechanism will allow piston to drop to bottom of bore from its own weight. If not, remove choke piston housing assembly, disassemble and clean thoroughly. If parts do not free-up, we are recommending replacement of the complete choke piston, linkage and housing assembly with a new service package.

The reason for recommending this replacement - some choke piston housings have been found with blisters in the bore; also some piston linkages have been found with binding rivets. The new service package listed below will provide a more positive and permanent correction for a choke which is sticking due to either of these two defects.

Order Choke Piston, Linkage and Housing Packages as follows:

Group	Part No.	Application	Carb. Nos.	Dealer Net
3.750	1376099	1964-65 All Dual 4-bbl.	36348-36468- 39248-39258	3.60
3.750	1376100	1964-401 & 425 Eng., All Trans. 1965-401 & 425 Eng., Man Trans.	36338-36358- 36658-39228	3.60
3.750	1376101	1965-401 & 425 Eng., Auto Trans.	39215-39235	3.60
3.750	1376102	1965-300 Eng., All Trans.	38265-38275	3.00

#### Install package as follows:

Remove old choke piston, linkage and housing assembly and install new package. This 1. can be done on the car. Make sure small round rubber gasket (from package) is installed in new piston housing.

-2-

- Install all linkage. Make choke piston linkage adjustment as outlined in the Buick 2. Chassis Service Manual which applies.
- Install baffle plate, new gasket and thermostatic coil assembly. Set choke per 3. specifications. Connect choke heat tube to housing.
- Set idle speed and mixture as described in service manual. Adjust fast idle at 600 4. RPM with engine at normal operating temperature, transmission in drive, and fast idle screw on lowest step of cam.

Flat Rate Time for installation of the package is .4 hour including adjustments. Dealer Net Price is shown above.

We are requesting that you return any defective choke housing assemblies along with the green "Parts Inspection Copy" of the AFA in Envelope S-728-1. Ship by parcel post to the following address:

Buick Motor Division General Motors Corporation Clear Signal Area Factory 02 Flint, Michigan - 48550

Manager, Technical Service

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March 26, 1965

TO ALL BUICK DEALERS

SUBJECT: Starting Cold Engines - All Buicks

Many cold starting complaints have been found to be due to improper starting technique on the part of the owner. Although the recommended starting procedure is in the Owners Guide, many owners do not read or follow these recommendations. If possible, observe the owner's method of starting; if not correct, demonstrate to him or suggest that he use the following procedure:

- Push accelerator pedal to floor once only, then take foot completely off pedal. (This produces one shot from the accelerator pump for proper priming of the engine. It also allows the choke valve to close fully and, in closing, to raise the fast idle cam so that the idle screw rests on the <u>starting</u> step of the cam.)
- 2. Next, crank engine by turning ignition switch to the right; release when engine starts. (<u>If fuel has evaporated from the carburetor</u>, it may take considerable cranking to refill the bowl before the engine will start. If engine does not start in 15 seconds cranking, something else may be wrong, such as engine flooded, no spark, no fuel, etc.)
- 3. When engine speed starts to increase, tap accelerator pedal to slow engine down to warm-up speed. (Leaving the carburetor on the <u>starting</u> step of the cam until the engine speed starts to increase should avoid any first start stalls. However, the fast idle cam should always be allowed to drop to a <u>warm-up</u> step of the cam to avoid building-up excessive speed during an extended warm-up with the engine idling.)

Manager, Technical Service

CEB

#### READ AND INITIAL BUICK DEALER File Under Group No. 889 Dealer 3-13 SERVICE BUICK Serv. Mar. Dealer Letter No. Parts Mgr. \_\_\_\_ Authorized Others INFORMATION Service 65-190 BUICK MOTOR DIVISION • GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550 •

September 3, 1965 =

TO: ALL BUICK DEALERS

SUBJECT: PART I - 1965 CARBURETOR PROBLEM INVESTIGATION PART II- HARD STARTING DUE TO CHOKE STICKING OPEN 1964-1965 CARTER 4-BARREL CARBURETORS

PART I - CARBURETOR PROBLEM INVESTIGATION

A recent investigation on 1965 Model Carburetor problems was conducted. All cases investigated were corrected using the information in one of the following Dealer Letters:

SUBJECT		BULLETIN #	DATE	FILE #
Starting Cold E All Buicks	ngines -	65-136	3-26-65	3-11
Hard Starting D Sticking Open - 4-Barrel Carburg	1964-65 Carter	65-129	3-12-65	3-10
NOTE: See Part	II in this letter	in regard to new ch	oke packages	
Hot Surge Compl. 4-Barrel Carburg		65-126	3-5-65	3-8

First Start Stalls - Carter 65-36 10-16-64 3-3 4-Barrel Carburetor

It was found, from the above investigation on 1964 and 1965 engines equipped with 4-barrel carburetors, that the following check list will correct most owner complaints of hard cold starts or first start stalls.

1. Instruct owner of proper start procedure (Dealer Letter 65-136).

- Check choke piston for sticking. Install new choke package if necessary. (Dealer Letter 65-129 and Part II of this letter).
- Set fast idle at 600 RMP in "Drive" (engine warmed-up) on first (lowest) step of fast idle cam.
- Check choke piston adjustment. Correct if necessary.

**IMPORTANT:** 

It is very important that the choke piston adjustment be properly made. It is recommended on 1965 - 401 or 425 cubic inch engine carburetors that the choke valve opening obtained when performing the piston adjustment be set at .101" (#38 drill) instead of the .105" specifications listed in the Service Manual.

Check fast idle cam index and correct as necessary.
 Check operation of transmission idle stator switch and correct as necessary.

#### PART II HARD STARTING DUE TO CHOKE STICKING OPEN -1964-1965 CARTER 4-BARREL CARBURETORS

To prevent choke housing blistering, all choke housing, piston and linkage packages covered in Dealer Letter 65-129 are now being built with aluminum housings. Orders not already filled, will be filled automatically with the new aluminum housing packages. Because of the different heat conductivity of aluminum, some of the new packages will contain a new baffle and other packages will contain both a new baffle and a new thermostat cover assembly. <u>All pieces found in the new packages</u> <u>must be installed</u>. The new packages, which replace the packages listed in Dealer Letter 65-129, are listed below:

Group	Part No.	Application	Carb. Nos.	Dealer Net
3.750	1378205	1965 - 300 Eng. All Trans.	38265-38275	\$2.85
	Package Contains:	Piston housing (marked 170-88 and linkage, coil housing gas housing gasket		
3.750	1378206	1965 - 401 & 425 Eng. Auto Trans.	39215-39235	\$3.90
i.	Package Contains:	Piston housing (marked 170-89 and linkage, baffle plate, co and piston housing gasket		
3.750	1378207	1964 - 401 & 425 Eng. All Trans.	36335-36355	\$5.19
		1965 - 401 & 425 Eng. Man. Trans.	36645-39225	
Р	ackage Contains:	Piston housing (marked 170-890 and linkage, baffle plate, the assembly, coil housing gasket gasket	ermostat cover	
3.750	1378208	1964-65 All Dual 4-Barrel	36345-36465 39245-39255	\$5.19
Р	ackage Contains:	Piston housing (marked 170-890 and linkage, baffle plate, the assembly, coil housing gasket gasket	ermostat cover	

#### Install packages as follows:

- 1. Remove old choke piston, linkage and housing assembly and install new package. This can be done on the car. Make sure small round rubber gasket (from package) is installed in new piston housing.
- Install all linkage. Make choke piston linkage adjustment as outlined in the Buick Chassis Service Manual which applies. IT IS VERY IMPORTANT THAT THE CHOKE PISTON ADJUSTMENT BE PROPERLY MADE.
- Install baffle plate, new gasket and thermostatic coil assembly. Set choke per specifications. Connect choke heat tube to housing.
- 4. Set idle speed and mixture as described in service manual. Adjust fast idle at 600 RPM with engine at normal operating temperature, transmission in drive, and fast idle screw on lowest step of cam.

Flat Rate Time for installation of the package is .4 hour including adjustments. Dealer Net Price is shown above.

> E. J. Hresko Manager, Technical Service

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DIPORTANTS

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BUICK DEALER SERVICE INFORMATION	READ AND INITIAL Dealer Serv. Mgr. Parts Mgr. Others
BUICK MOTOR DIVISION • GENERAL MOTORS CORPORATION • FLINT, MICHIGAN 48550	
October 8, 1965	

TO ALL BUICK DEALERS

SUBJECT: Gas Tank Baffles - Specials and Skylarks - 1961 Through 1965

This bulletin is to inform you that <u>none</u> of our Special or Skylark Series gas tanks have baffles. Any reference to gas tank baffles in the 1961 through 1965 Special Chassis Service Manuals is in error.

·Hresko

Manager, Technical Service

CEB:ms

BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

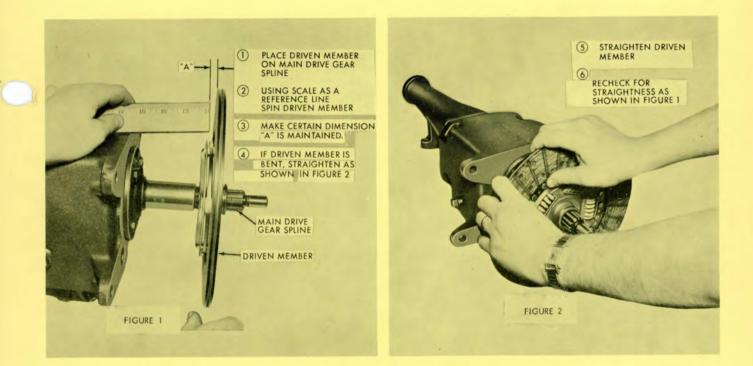
December 18, 1964

TO ALL BUICK DEALERS

SUBJECT: Straightening Clutch Driven Members - All Series

Many times a clutch driven member is replaced due to excessive run-out. If a case is encountered where excessive run-out exists, it is recommended that the driven member be straightened as shown in figures 1 and 2.

NOTE: Extreme care must be taken not to get grease or oil on clutch driven member.



E. J. Hresko Manager, Technical Service

BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 2, 1965

TO ALL BUICK DEALERS

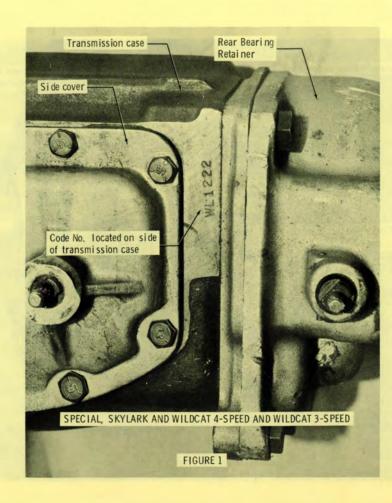
SUBJECT: 1964-1965 Special, Skylark, Gran Sport, LeSabre and Wildcat Manual Transmission Code Numbers

When submitting an AFA or when corresponding with the factory about a <u>manual</u> transmission, either 3 or 4 speed, the code number of the transmission must be included. See Figure 1 for location of the code number on all 4-speed transmissions and the Wildcat 3-speed transmission. See figure 2 for location of the code number on Special, Skylark and LeSabre 3-speed transmissions. See figure 3 for location of the code number on Skylark Gran Sport 3-speed transmissions.

Hresko

Manager, Technical Service

DEC



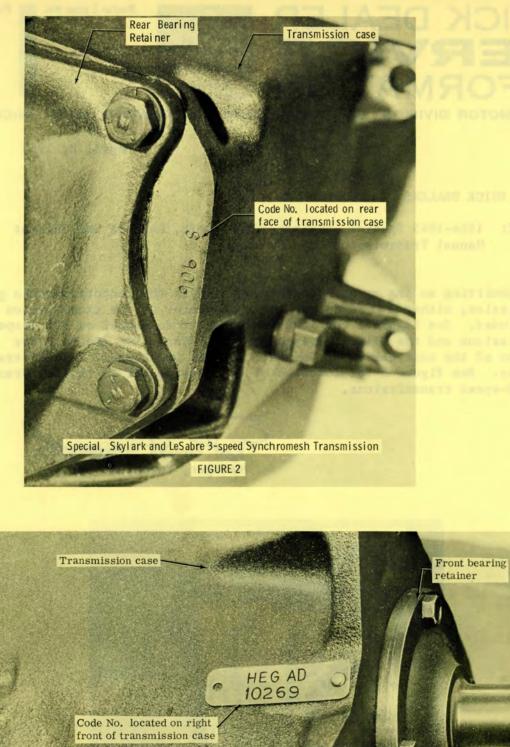


Figure 3



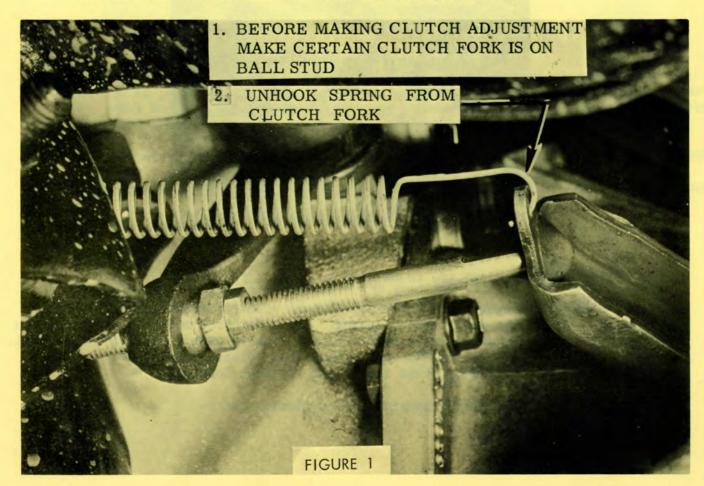
December 18, 1964

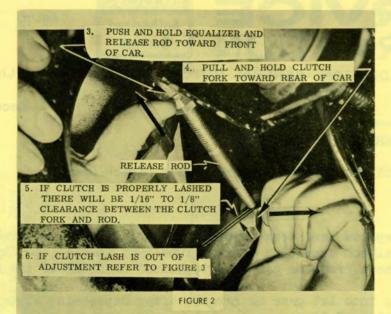
TO ALL BUICK DEALERS

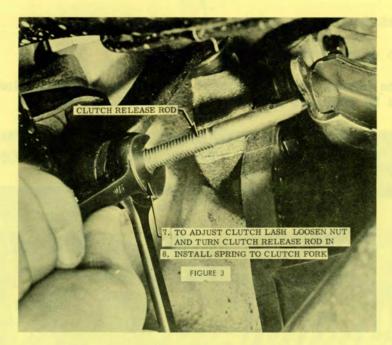
SUBJECT: 1964-1965 Special and Skylark Series Clutch Operation

Several product reports have been received which indicate some problems exist in obtaining proper clutch operation on some 1964-1965 Special and Skylark Series Cars. The majority of these problems can be categorized into one of the following:

- 1. Clashing going into 1st gear or reverse after depressing clutch and waiting a reasonable period of time.
- 2. Clutch slipping
- 3. Improper clutch feel
- 4. No clutch lash or excessive lash
- NOTE: It is of the utmost importance that clutch lash be maintained at all times. Lash should be adjusted as shown in Figures 1, 2, and 3.





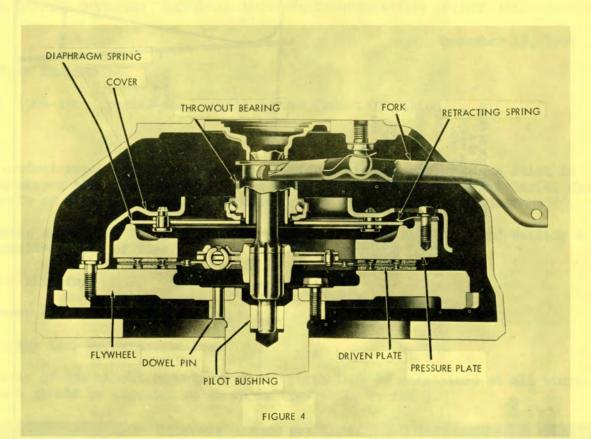


If one of the above problems are found then proceed as follows:

a. Check clutch fork operation. This can be done without removing the flywheel housing. Remove the pedal return spring. Check for free movement of the clutch fork. The release bearing must strike clutch fingers with a solid metallic feel. If springness or a soft feel is experienced when release bearing strikes clutch fingers, trouble can be expected inside the flywheel housing.

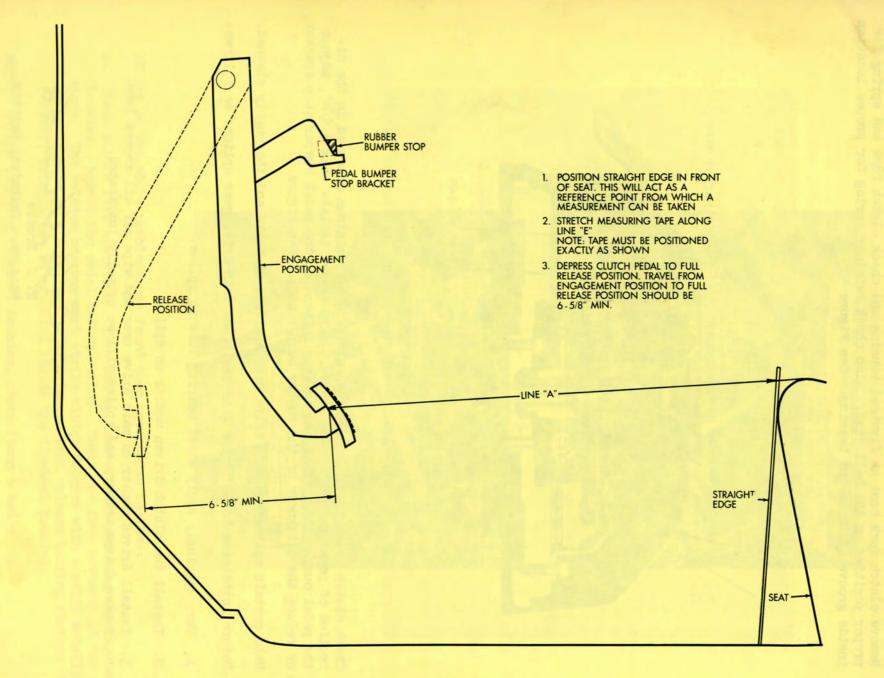
NOTE: Before removing flywheel housing, check items b and c.

b. Remove clutch fork boot at flywheel housing and check clutch fork and spring for proper position on the ball stud. Also check retainer spring for proper location inside groove of throw-out bearing. See Figure 4.



- c. Check clutch pedal travel. Travel should be 6 5/8" minimum measured in the direction of pedal movement. See Figure 5. If travel is less than 6 5/8", adjust the pedal bumper stop. This can be done by bending the pedal bumper stop bracket, or reduce the thickness of the rubber bumper stop. See Figure 5.
- d. Make certain splines on main drive gear are free of burrs and thoroughly cleaned.
- e. Before installing transmission into car, lube main drive gear splines as follows:
  - 1. Very sparingly apply wheel bearing lube to spline.
  - 2. Install the clutch driven member on spline.
  - 3. Install driven member on main drive gear and wipe off all excess lube. Remove driven member, and spline will be properly lubricated.

E. J. Hresko Manager - Technical Service





SER	DEALER VICE MATION	File Under Group No. 4-4 Dealer Letter No. 65-193	READ AND INITIAL Dealer Serv. Mgr Parts Mgr Others
BUICK MOTOR DIVISION	GENERAL MOTORS CORPORATION     Septemb	FLINT, MICHIGAN 48550 er 17, 1965	

TO ALL BUICK DEALERS

SUBJECT: Use of Guide Pins When Installing a Manual Transmission - All Models

When installing a manual transmission, it is of the utmost importance that guide pins be used. If guide pins are not used, the clutch driven plate can be bent due to the weight of the transmission during installation. To insure that damage will not result, it is recommended that the following procedure be followed:

- 1. On all models, except Skylark Gran Sport, equipped with a three-speed manual transmission, use two (2) guide pins having a 1/2-13 thread. Install guide pins in the upper and lower right side bolt locations of the flywheel housing. On skylark Gran Sport three-speed transmissions, install only one (1) guide pin with 7/16-14 thread in lower right side bolt location of flywheel housing.
- Place transmission in high gear. Install old propeller shaft yoke onto output shaft splines.
- 3. Turn yoke to engage main drive gear with splines on clutch driven plate and slide transmission into position.
- 4. Remove guide pins, slip yoke, and install transmission to flywheel housing bolts.

Manager, Technical Service

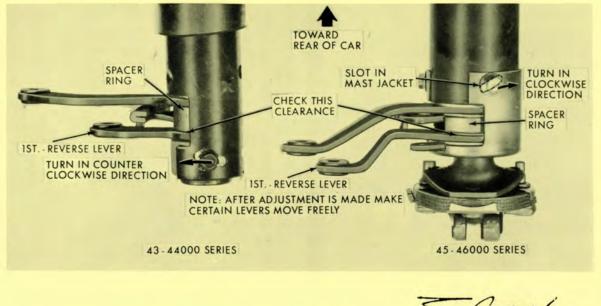


TO ALL BUICK DEALERS

SUBJECT: Shift Block-Out Going into any Gear - All 1965 Three-Speed Manual Transmissions with Column Shift

If a complaint of shift block-out going into any gear is encountered on a 1965 car equipped with a three-speed manual transmission with column shift, it is recommended that the clearance between the first-reverse lever and the lower mast jacket spacer ring be checked. Check clearance and, if necessary, adjust as follows:

- Check clearance between the first-reverse lever and the lower mast jacket spacer ring. See Figure 1. If clearance is in excess of .005", an adjustment has to be made.
- 2. Loosen the three (3) screws that retain the adjusting ring to the mast jacket.
- 3. Adjust ring and screw assembly on 43-44000 Series by turning assembly in a counterclockwise direction so a .005 maximum gap exists between the first-reverse lever and spacer. On 45-46000 Series, turn adjusting ring and screw assembly in a clockwise direction.
  - NOTE: Determine clockwise and counterclockwise directions by looking toward rear of car.
- 4. Tighten the three screws to 5 lb.ft.



Hresko

Manager, Technical Service



SUBJECT: 1965 4-Speed Manual Transmission Jumping out of Gear

Several cases of 1965 4-speed manual transmission jumping out of gear have been encountered. To help prevent this problem, a new detent poppet spring, Gr. 4.311, Part 1380012, Dealer Net \$.81 has been released for service. These springs are stronger than the original springs and will have a much greater load on the detent balls to reduce the tendency of the transmission to jump out of gear. See illustration.

Before any attempt is made to correct a complaint by using a new spring, it is important that the shift linkage be carefully adjusted and the rubber boot around the shift lever at the console and the floor be checked for proper installation.

It is not necessary to remove the transmission assembly to install the poppet spring. To install the spring, proceed as follows:

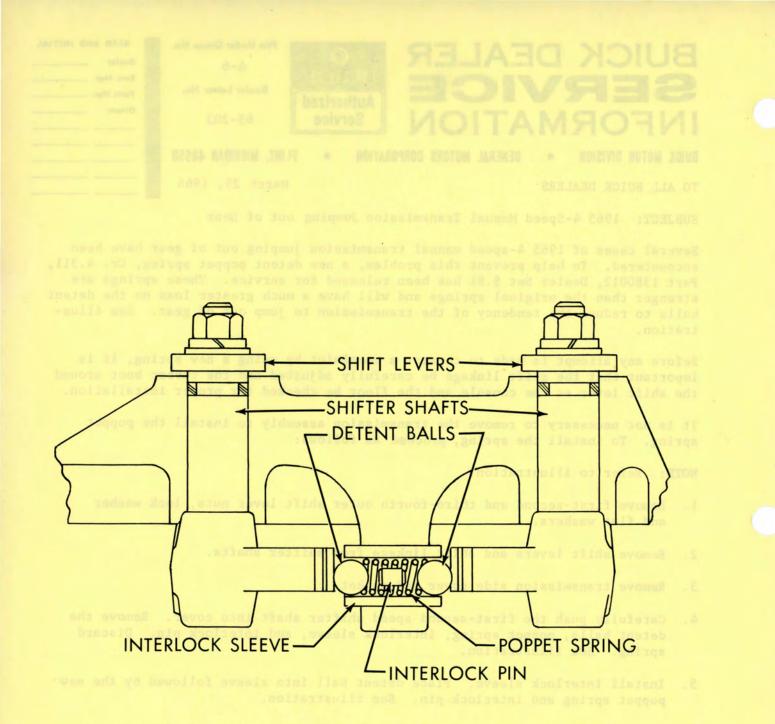
NOTE: Refer to illustration.

- 1. Remove first-second and third-fourth outer shift lever nuts, lock washer and flat washers.
- 2. Remove shift levers and shift linkage from shifter shafts.
- 3. Remove transmission side cover and gasket.
- Carefully push the first-second speed shifter shaft into cover. Remove the detent balls, poppet spring, interlock sleeve, and interlock pin. Discard spring. See illustration.
- 5. Install interlock sleeve. Place detent ball into sleeve followed by the new poppet spring and interlock pin. See illustration.
- Start the first-second speed shifter shaft into position and place second detent ball on poppet spring. Compress ball and spring with screwdriver and push shifter shaft fully in.
- Install new gasket and cover assembly. Install attaching bolts and tighten evenly to avoid side cover distortion. Torque bolts 15-20 lb. ft. NOTE: Use suitable sealer when installing the lower right bolt.
- 8. Install shift levers and linkage to transmission. Torque nuts to 15-25 lb. ft.

Flat rate time for the above operations is .7 hr.

Hresko

Manager, Technical Service



Start the first-second speed shifter shaft into position and place second detant ball on poppet spring. Compress ball and spring with screwdriver and bush shifter shaft fully in.

 Install new pasket and cover assoubly. Install attaching bolts and fighten avenly to avoid side cover distortion. Torque bolts 10 10 lb. ft NOTE: Use suitable sealer when installing the lower right bolt.

. Install ahift levers and linkage to transmission. Torque duts to 15-25 1b.

Fiat rare time for the above operations in . 7 hr.

Amager, Technical Service

BUICK DEALER SERVICE INFORMATION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 12, 1965

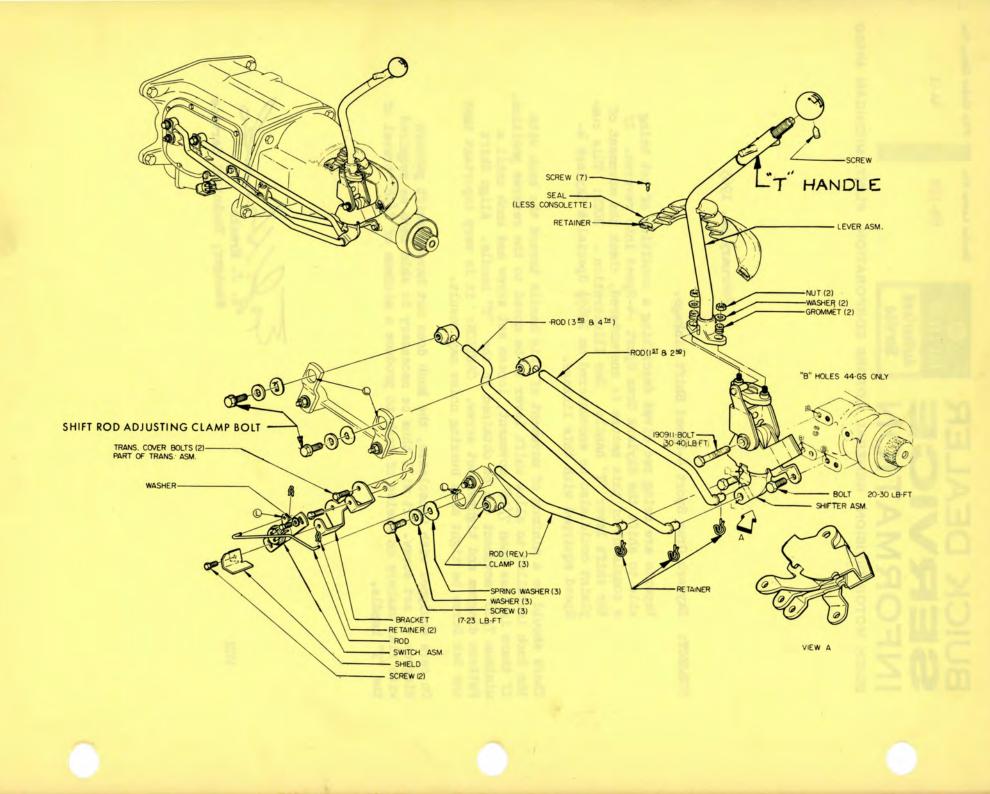
SUBJECT: Skylark Gran Sport 4-Speed Shift Linkage.

Reports are being rec eived describing a condition of not being able to shift the Skylark Gran Sport -4-Speed into reverse. If a complaint of this nature is encountered, check the movement of the shift lever "T" handle. See Illustration . NOTE: This complaint could also be encountered on 1965<sup>1</sup>/<sub>2</sub> Special & Skylark 4-Speed equipped with this linkage.

There should be a minimum of movement of this handle toward the knob with the knob installed to allow shift lever to be moved to the reverse position. If there is less than 7/16" movement, loosen set screw and knob until a minimum 7/16" movement can be obtained in the "T" handle. Align Shift Pattern diagram and tighten set screw. CAUTION: it is very important that the Set Screw be tight as a buzzing noise may result.

On cars equipped with Consolette, the **i**mob does not have a shift pattern diagram or set screw. It will thus be necessary to shim knob as required with flat washers on inside of knob to produce a minimum of 7/16" travel of the "T" handle.

E. J. Hresko Manager, Technical Service



### **BUICK MOTOR DIVISION**

General Motors Corporation FLINT 2, MICHIGAN

### ZONE SERVICE BULLETIN

NUMBER 603

TO Zone Service Managers Zone Managers Asst. General Sales Managers Regional Managers Internal List

SUBJECT Super Turbine 300 Transmission Low Band Rattle DATE April 23, 1965

Several reports have been received indicating a rattling condition exists on some Super Turbine 300 transmissions. This noise has been traced to the low band and will occur only at temperatures below  $40^{\circ}$ F, with the transmission in Park or Neutral. The noise is caused by the forward clutch drum picking up <u>cold</u> oil and dragging it between the face of the drum and the friction surface of the low band. When cold oil is in this area, the band tends to move toward the apply position. Because the band is anchored, it snaps back to its full release position. This tendency to apply and release in rapid succession causes the rattling condition. As soon as the transmission is placed into Drive or Low, the forward clutch drum stops turning, thus eliminating the rattling condition.

There is a great deal yet to be learned about this problem to effect a 100% correction. However, approximately 75% of the cases encountered here at the factory have been corrected by performing the following low band modification:

- 1. Remove low band from transmission.
- 2. Using a 1/16" drill as a guide, scribe marks on both sides of the band as shown in Figure 1.
- 3. Make two cuts in the low band as shown in Figure 2.
- 4. Place band in vise as shown in Figure 3. Apply sufficient pressure so band will pinch together in area shown in Figure 3.
- 5. Grasp band as shown in Figure 4. If the band has been pinched properly, it will take a minimum of 10 pounds to separate the straps in direction of arrows as shown in Figure 4.
- NOTE: Normally, a good rule of thumb would be the maximum force exerted by finger grip will barely separate the straps.

Flat Rate Information:

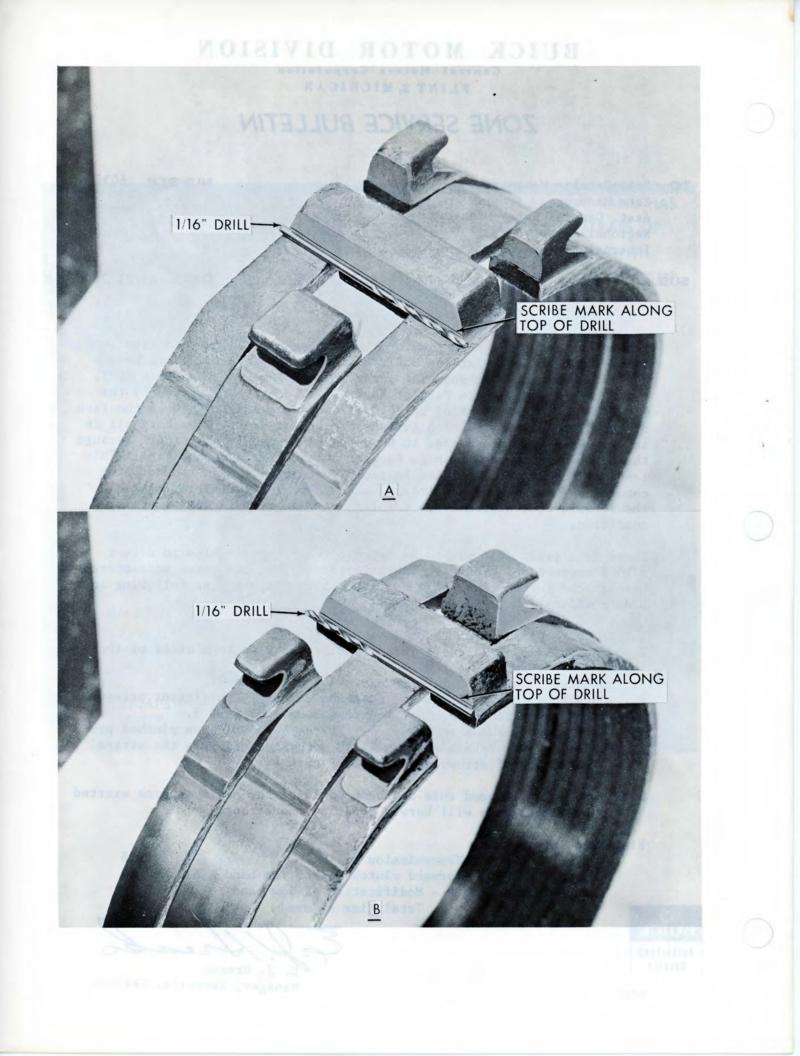
Operation 7-60 - Transmission R & R1.8Operation 7-80 - Forward clutch and/or low band R & R.5No operation number - Modification of low band.1Total time allowed2.4

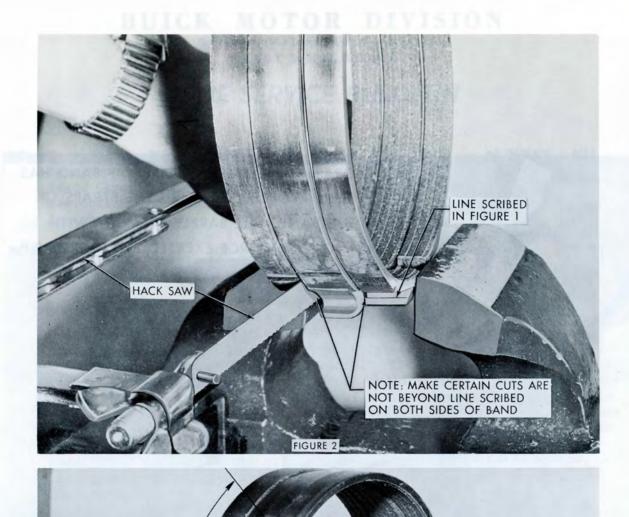
E. J. Hresko

Manager, Technical Service



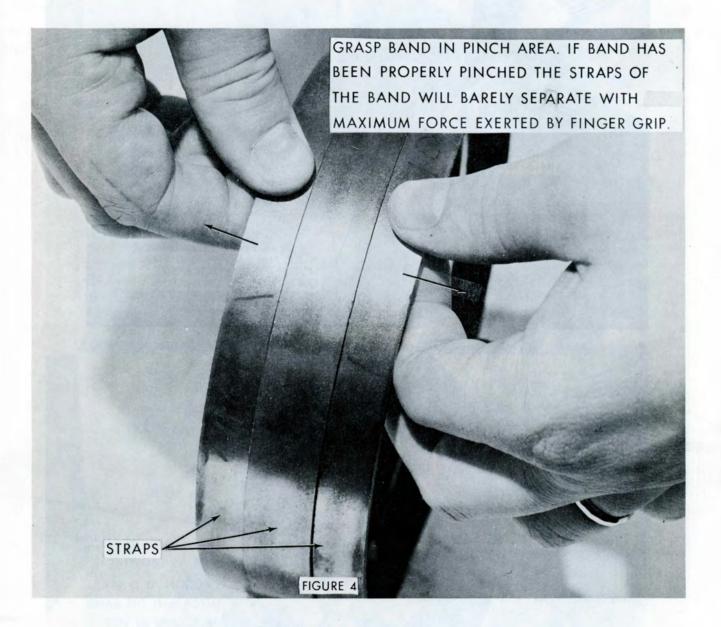
DEC





APPLY SUFFICIENT PRESSURE SO BAND WILL PINCH TOGETHER IN THIS AREA PLACE BAND IN VICE AS SHOWN CAUTION: IT IS VERY IMPORTANT THE BAND BE PLACED IN VICE EXACTLY AS SHOWN

FIGURE 3





October 2, 1964

TO ALL BUICK DEALERS

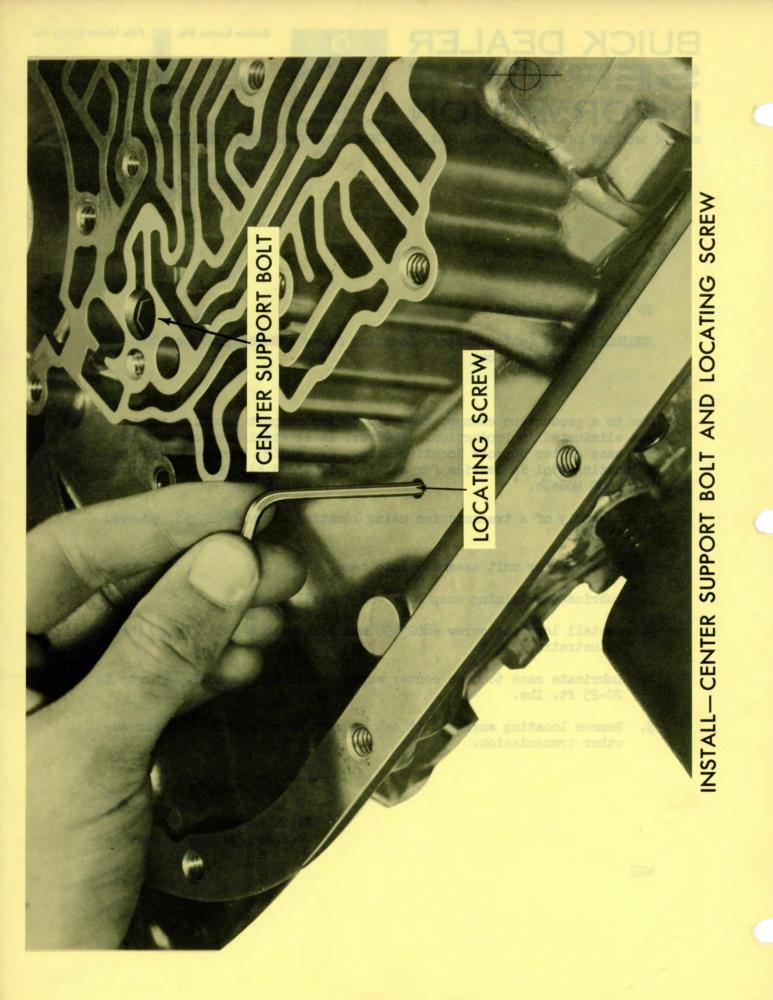
SUBJECT: Case Center Support Locating Screw - Super Turbine 400 Transmission

Due to a production change, the case center support locating screw was eliminated in Production. However, it is still necessary to use the case center support locating screw, Gr. 4.162, Part #8623498, as a locating tool in Service for all late 1964 and all 1965 Super Turbine 400 Models.

For assembly of a transmission using locating screw #8623498, proceed as follows:

- 1. Install gear unit assembly into case.
- 2. Lubricate retaining snap ring and install.
- 3. Install locating screw #8623498 and torque to 4-6 ft. lbs. (See Illustration)
- 4. Lubricate case to case center support bolt and install. Torque to 20-25 ft. lbs.
- 5. Remove locating screw so it can be used as a locating tool on another transmission.

E. J. Hresko Manager, Technical Service





October 2, 1964

TO ALL BUICK DEALERS

SUBJECT: Transmission Oil Leak At Breather Pipe - Super Turbine 400 Transmission

There have been several cases reported of transmission oil coming out of the breather pipe on super turbine 400 transmissions. Due to the difficulty in properly diagnosing the cause of the leak, the following possibilities are listed:

- 1. Transmission oil level to high
- 2. Strainer "O" ring cut
- 3. Strainer intake pipe improperly welded
- 4. Case porosity above intake pipe "O" ring seal
  - NOTE: The above defects will cause the transmission oil to aerate (foam). This can be seen on the dipstick in the form of small bubbles.
- 5. Pump to case gasket mispositioned
- 6. Porosity in case at the outer edge of the pump mounting pad that may go through the cooler hoses
- 7. Chip or dirt between pump cover and pump body

J. Hresko

Manager, Technical Service



October 2, 1964

### TO ALL BUICK DEALERS

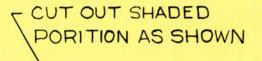
SUBJECT: Super Turbine 300 Automatic Transmission Part Throttle Downshift

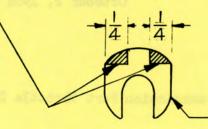
1964 Super turbine 300's starting with Code #317, and all 1965 Super Turbine 300 Transmissions incorporate a new shift valve assembly. If a complaint is encountered where the transmission shifts into low at part throttle at speeds up to 40 miles per hour, proceed as follows:

- 1. Remove the pan and main valve body.
- 2. Depress the shift control valve sleeve and remove the retaining pin. Remove the shift control valve sleeve, shift control valve, spring, retainer, and shift valve.
- 3. Rework retainer as shown in Figure 1. The rework of this retainer will minimize the possibility of blocking the exhaust oil passage.
- 4. Install spring and shift control valve. See Figure 2. Install shift valve into valve body, then sleeve and valve assembly.
- 5. Install valve body, making certain valve body bolts are torqued 8-11 ft. lbs.
- 6. Install oil pan.

Flat rate time for above operations is .7 hr.

E. J. Hresko Manager, Technical Service





NOTE: CUT SHADED PORTION ONLY. CUT MUST BE FLAT AND FREE OF BURRS.

FIGURE I FIGURE I

RETAINER

INSTALL SPRING & SHIFT CONTROL VALVE INTO SLEEVE. DEPRESS SPRING & VALVE & INSERT RETAINER IN GROOVE SHOWN. NOTE: MAKE CERTAIN RETAINER IS INSTALLED BETWEEN IST & 2ND LANDS OF THE VALVE.

INSTALL RETAINER IN THIS GROOVEN

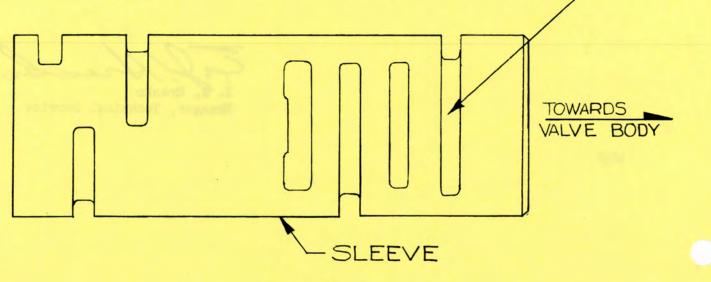


FIGURE 2

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

October 30, 1964

TO ALL BUICK DEALERS

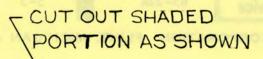
SUBJECT: Super Turbine 300 Automatic Transmission Part Throttle Downshift REISSUED TO CHANGE FLAT RATE ALLOWANCE

1964 Super turbine 300's starting with Code #317, and all 1965 Super Turbine 300 Transmissions incorporate a new shift valve assembly. If a complaint is encountered where the transmission shifts into low at part throttle at speeds up to 40 miles per hour, proceed as follows:

- 1. Remove the pan and main valve body.
- 2. Depress the shift control valve sleeve and remove the retaining pin. Remove the shift control valve sleeve, shift control valve, spring, retainer, and shift valve.
- 3. Rework retainer as shown in Figure 1. The rework of this retainer will minimize the possibility of blocking the exhaust oil passage.
- 4. Install spring and shift control valve. See Figure 2. Install shift valve into valve body, then sleeve and valve assembly.
- 5. Install valve body, making certain valve body bolts are torqued 8-11 ft. olbs.
- 6. Install oil pan.

Flat rate time for above operations is .8 hr.

E. J. Hresko Manager, Technical Service



NOTE: CUT SHADED PORTION ONLY. CUT MUST BE FLAT AND FREE OF BURRS.

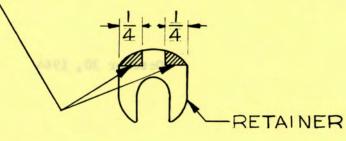


FIGURE I

INSTALL SPRING & SHIFT CONTROL VALVE INTO SLEEVE. DEPRESS SPRING & VALVE & INSERT RETAINER IN GROOVE SHOWN. NOTE: MAKE CERTAIN RETAINER IS INSTALLED BETWEEN IST & 2ND LANDS OF THE VALVE.

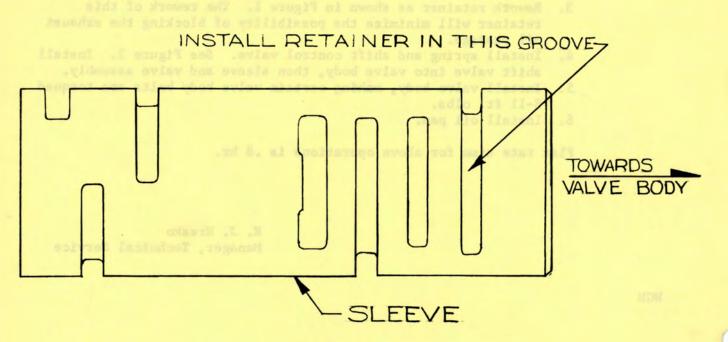


FIGURE 2

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

October 2, 1964

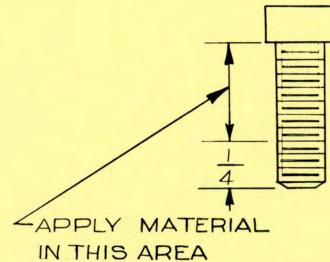
TO ALL BUICK DEALERS

SUBJECT: Super Turbine 400 Case to Case Center Support Bolt

The case to case center support bolt is designed to have an interference thread engagement. It has been found that on repeat disassemblies, this interference engagement is reduced. A failure would occur if the bolt should become loose.

It is recommended that a material like Lok-Tite (Type "AV" or "AA") or equivalent be used on the bolt when reassembling.

The mating parts should be absolutely clean and the material applied on the bolt threads  $\frac{1}{4}$ " above the lead thread. See illustration below.



E. J. Hresko Manager, Technical Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

October 9, 1964

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 300 and 400 Transmission Case Porosity

Super turbine 300 and 400 transmission leaks caused by case porosity have successfully been repaired with the transmission in the car by using the following recommended procedures:

- 1. Road test and bring the transmission to operating temperature, approximately 170°.
- 2. Raise car on a hoist or jack stand, engine running, and locate source of oil leak. On super turbine 400, check for leaks with the transmission in low range 1st gear and low range 2nd gear. On super turbine 300, check for oil leaks in low, drive, and reverse.

NOTE: Use of a mirror is helpful in finding leaks.

- 3. Shut engine off and thoroughly clean area to be repaired with a cleaning solvent (fabric cleaner) and a brush air dry.
  - NOTE: A clean, dry soldering acid brush can be used to clean the area and also to apply the epoxy cement.
- 4. Using instructions of the manufacturer, mix a sufficient amount of epoxy, Gr. No. 0.423, Part No. 1360016, to make the repair.

NOTE: Observe cautions in handling.

- 5. While the transmission case is still HOT, apply the epoxy to the area to be repaired.
- 6 NOTE: Make certain the area to be repaired is fully covered.
- 6. Allow cement to cure for 3 hours before starting engine.
- 7. Road test and check for leaks.

Hresko

Manager, Technical Service



October 9, 1964

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 300 and 400 Transmission Items Reported on Early 1965 Model Cars

The following items were reported on early 1965 Super Turbine 300 and 400 transmissions. It is recommended that these be checked out and corrected, if necessary, at New Car Pre-Delivery.

Super Turbine 300 Transmissions

- 1. Low oil level
- 2. External shift lever not properly aligned on selector shaft and/or nut loose. Torque nut to 20-30 ft. 1b.

Super Turbine 400 Transmissions

- 1. Low oil level
- 2. Vacuum line connection to carburetor loose (Causes late shafts). Torque 72-108 in. lb.
- 3. Vacuum line not piloted in vacuum stem of modulator but held together by the connector only.
- 4. External shift lever not properly aligned on selector shaft and/ or nut loose. Torque nut 20-30 ft. lb.

J. Hresko

Manager, Technical Service



October 16, 1964

TO ALL BUICK DEALERS

SUBJECT: 1965 Super Turbine 400 Automatic Transmission L<sup>2</sup> and L<sup>1</sup> Ranges

To aid the new car salesman and the service salesman in further understanding the  $L^2$  and  $L^1$  ranges in the Super Turbine 400 transmission, the following information is being published:

The 1965 Super Turbine 400 transmission has been designed for greater driving flexibility. Instead of just one Low range, as used in 1964, we now have two low ranges,  $L^2$  and  $L^1$ .

The most frequent use of these two new low ranges would be for braking down long, steep grades. The choice of which low range should be used would depend upon the severity of the grade.

If traveling down a moderate grade, and it is desired to have a slight braking action without applying the brakes, move the transmission selector into  $L^2$  position. When the selector lever is moved from D to  $L^2$  the transmission shifts into second gear. The transmission will remain in second gear until the car reaches a speed of 10 MPH, when it will shift into first gear. Under no circumstance will the transmission again up-shift into direct Drive while the selector lever is in  $L^2$  range.

If traveling down a severe grade, and it is desired to have maximum braking from the transmission, move the transmission selector lever into  $L^1$  position. When the selector lever is moved from D to  $L^1$  at speeds above 45 MPH the transmission will down-shift into second gear. When slowing down to a speed of approximately 45 MPH, the transmission will shift into first gear giving maximum transmission braking. Automatic up-shift will not occur while the selector lever is in L<sup>1</sup> position. The transmission selector lever must be put into Drive range before the transmission will again up-shift into direct Drive.

Wm mc Corklas

W. M. McCrocklin General Service Manager

#### BUICK DEALER Dealer Letter No. File Under Group No. 150 BUICK SERVICE Authorized 65-58 5-8 INFORMATIO Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

November 30, 1964

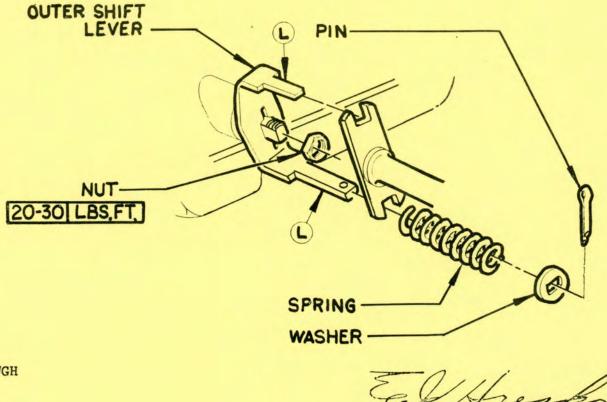
TO ALL BUICK DEALERS

SUBJECT: Outer Shift Lever Nut Torque - Super Turbine 300 and 400 Transmissions

It is recommended that, on all Super Turbine 300 and 400 transmissions, the outer shift lever nut not be tightened with an impact wrench. There is a possibility that the inside manual linkage parts can become damaged by overtorquing.

Torque the outer shift lever nut, on both the Super Turbine 300 and 400 transmissions, to 20-30 ft. obs.

CAUTION: Hold shift lever while tightening nut to prevent valve body damage.



J. Hresko Manager, Technical Service

 Dealer Letter No.
 File Under Group No.

 65-102
 5-9

# SERVICE BUICK 65-102 5-9

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 12, 1965

TO ALL BUICK DEALERS

BUICK DEALER

SUBJECT: Low Sprag Assembly - Super Turbine 400 Transmission

Starting with transmission serial numbers listed below, the drag strips will be removed from the low sprag assembly on all Super Turbine 400 Transmissions.

Model	Serial Number
BJ	30852
BN	4603
BQ	1351
BR	6200
BS	1704
BT	1734
BU	14567

The first and second type low sprag assemblies are interchangeable; however, the second type sprag, without the drag strips, will not require installing tool J-21367.

The second type sprag must be installed on the Case Center Support with the ridge up. See illustration.

J. Hresko

Manager, Technical Service



65-106

Dealer Letter No. 🗮 File Under Group No.

5-10

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

**Ø** BUICK

Authorized

Service

February 12, 1965

SUBJECT: Front Internal Gear Ring - late 1964 and All 1965 Super Turbine 400 Transmission.

**BUICK DEALER** 

SERVICE

INFORMATION

Late in 1964 production, a new front internal gear ring was added to the Super Turbine 400 transmission. The new ring is located on the internal gear of the output carrier assembly. See figure 1. The sequence of service disassembly and assembly will not be affected by the addition of the ring.

In order to accommodate the new ring, the output and reaction carriers were modified. See figure 2. The part numbers of the carriers were not changed.

In the event that some early output or reaction carriers are used on late transmissions, which have the ring, the ring must be discarded.

E. J. Hresko

Manager, Technical Service

WGH

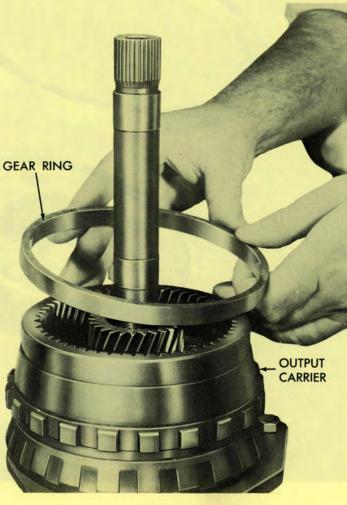
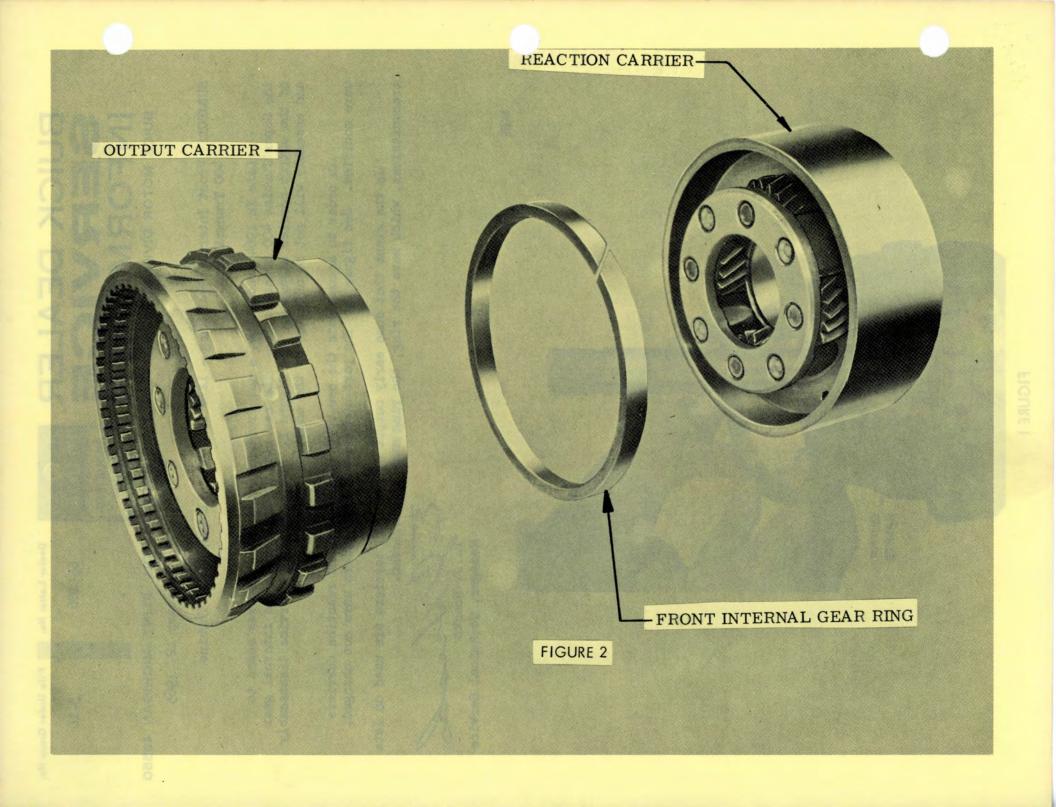


FIGURE I



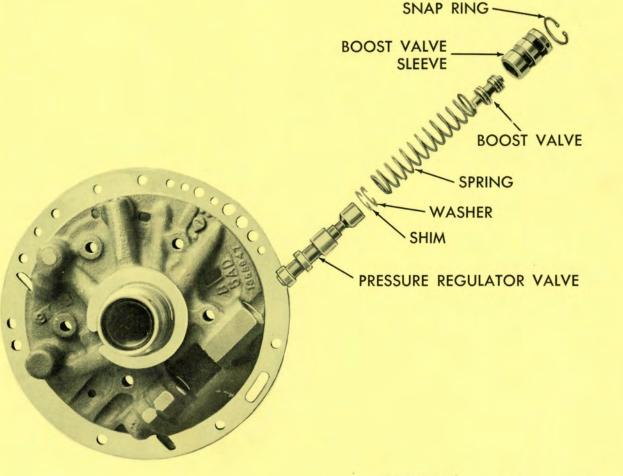
BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 12, 1965

SUBJECT: 1965 Super Turbine 300 Transmission Pressure Regulator Valve.

In the 1965 Chassis Service manuals, Special and Upper Series, the Pressure regulator valve is shown out of position in figures 5-193 and 5-203. The valve should be in the position shown in illustration below.

This correction should be noted in your 1965 Service manuals.



J. Hresko

Manager, Technical Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

March 26, 1965

#### TO ALL BUICK DEALERS

SUBJECT: Broken Rear Servo Pistons - Super Turbine 400 Automatic Transmissions

Field product reports have indicated that some rear servo pistons have been broken which results in no reverse operation.

The reason for the piston breaking is an extreme high pressure in the transmission which can be caused by several conditions, namely:

- 1. Sticking pressure regulator valve.
- 2. Sticking modulator valve.
- Water in modulator assembly either in vacuum or oil side of diaphragm.

Item number three (3) appears to be a common cause for reports of pistons breaking when the vehicle has remained overnight in freezing temperatures and the reverse position is selected soon after starting the engine. Frozen water in the modulator assembly can also be the cause of complaints of no upshift until transmission warms up.

In correcting the above complaint, first the modulator should be checked, then the modulator valve and pressure regulator valve. The modulator assembly should be checked for presence of water (after sufficient thawing time) and water drained if present. The modulator assembly need <u>not</u> be changed, but all vacuum lines and fittings should be checked for possible areas that could allow water to enter the system.

Hresko

Manager, Technical Service

DEC

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

March 26, 1965

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 300 Automatic Transmissions - Model MR with "Day Built" Code Numbers Higher Than 700; and Model MM Transmissions with any "Day Built" Code Number

A very few late production 1965 cars will be assembled with after job ST-300 transmissions incorporating parts which will not be available through the Parts Department.

Therefore, if any difficulty is experienced with either of the above models of ST-300 transmissions that cannot be corrected with linkage adjustment, the complete transmission must be replaced and the original transmission returned to Buick using one of the labels included with Bulletin #65-70. Please note on the label:

A	TT:	A.	J.	Pane	<b>#</b> 05	s.	Dock	(See	Figure	1)
	FRO	м:	HO	METOWN	BUICK	AN	Y TOWN	U.S.A	•	
	(		)	CLEA	AL MOT	NAL	OR DI CORPOR		N	
				FLIN	т, міс	HIG	GAN 48 Pane	<b>550</b> #05 S.	Dock	

FIGURE 1

Model MR transmissions with "Day Built" code numbers 700 and higher will be assembled only in <u>Sportwagons</u>. See Figure 2.

Replacement of a Model MR 700 or higher transmissions should be made by ordering and installing GR 4.003, Part #1370376 (Dealer Net Price \$240.00).

Model MM transmissions with any "Day Built" code numbers will be assembled only in LeSabres. See Figure 2.

Replacement of a Model MM transmission should be made by ordering and installing GR 4.003, Part #1370373 (Model MJ) Dealer Net Price \$240.00. An AFA should be submitted in the usual manner for labor and the transmission installed.

-2-

In addition, a form #PC-659 should be filled out in triplicate to obtain the exchange allowance on the original unit.

 Furnish AFA # submitted on replacement part and specify that the transmission was sent to:

> BUICK MOTOR DIVISION General Motors Corporation Clear Signal Area Factory #02 Flint, Michigan

ATTN: A. J. Pane #05 S. Dock

2. Distribute copies as follows:

Original Copy -

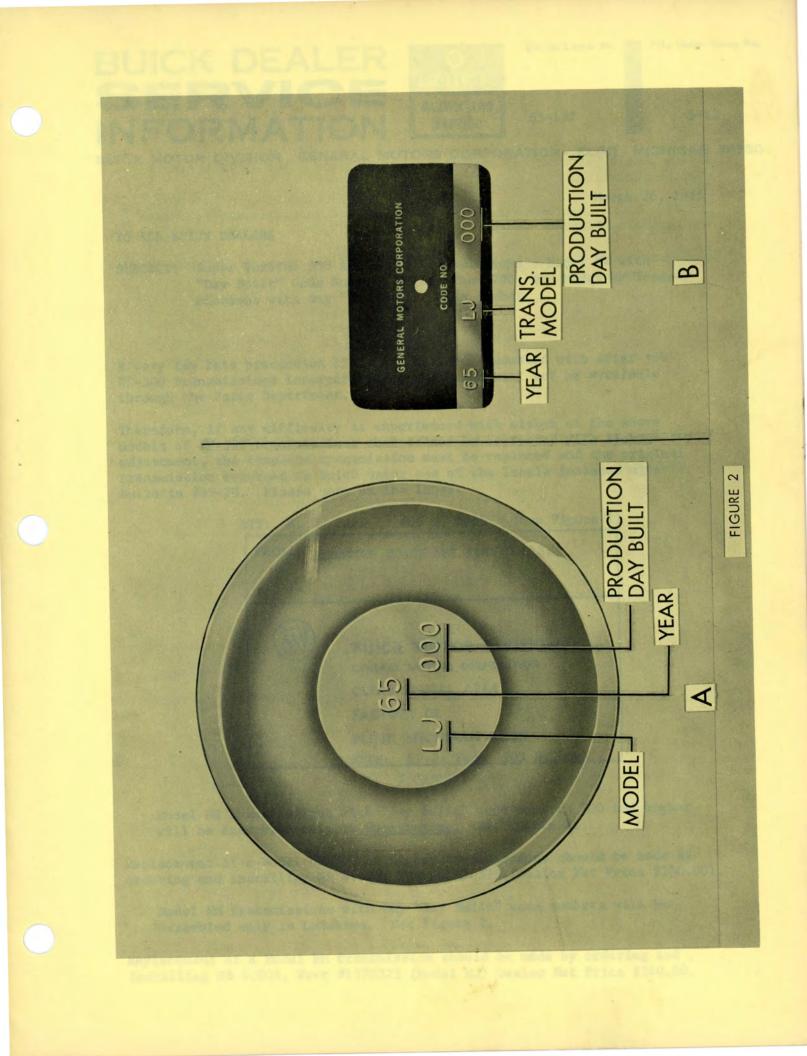
BUICK MOTOR DIVISION General Motors Corporation Hamilton Avenue Flint, Michigan 48550

ATTN: Billing Department Supervisor

First Copy (Packing Slip) travels with material

&. J. Hresko

Manager, Technical Service



BUICK DEALER SERVICE	<b>Ø</b> BUICK	File Under Group No. 5–13 Dealer Letter No.	READ AND INITIAL Dealer Serv. Mgr
INFORMATION	Authorized Service	65-137A	Parts Mgr.           Others
BUICK MOTOR DIVISION • GENERAL MOTORS CORPO		LINT, MICHIGAN 48550 August 20, 1965	

#### TO: ALL BUICK DEALERS

SUBJECT: Super Turbine 300 Automatic Transmissions - Model MR with "Day Built" Code Numbers Higher Than 700; and Model MM Transmissions with any "Day Built" Code Number

REISSUED TO ADD TO POSSIBLE REPAIR PROCEDURES AND INCLUDE GENERAL WORK ORDER NUMBER 581167

A very few late production 1965 cars will be assembled with after job ST-300 transmissions incorporating parts which will not be available through the Parts Department. Therefore, if any difficulty is experienced with either of the above models of ST-300 Transmissions that cannot be corrected with:

- 1. Linkage adjustment,
- 2. Correction of leaks around the oil pan or filler pipe "O" ring,
- 3. Replacement of rear bearing retainer oil seal,
- 4. Vacuum Modulator replacement,
- 5. Cleaning and freeing up of valves in valve body,
- 6. Band adjustment,
- 7. Cleaning of oil strainer or replacement of oil strainer "O" ring

The complete transmission must be replaced and the original transmission returned to Buick using one of the labels included with Bulletin 65-70B. Please note on the label

ATTN: A. J. Pane #05 S. Dock (See Figure #1)

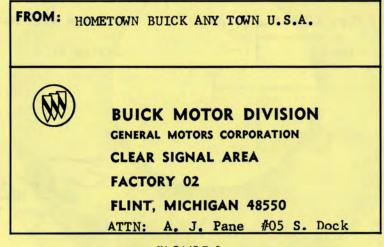


FIGURE 1

Model MR transmissions with "Day Built" code numbers 700 and higher will be assembled only in <u>Sportwagons</u>. See Figure 2.

Replacement of a model MR 700 or higher transmission should be made by ordering and installing GR. 4.003, Part 1370376 (Dealer Net Price \$240.00).

Model MM transmissions with any "Day Built" code numbers will be assembled only in LeSabres. See Figure 2.

Replacement of a model MM transmission should be made by ordering and installing GR. 4.003, Part 1370373 (Model MJ). Dealer Net Price \$240.00.

Your Zone Service Manager may be able to assist you in ordering and expediting the replacement transmission.

An A.F.A. should be submitted in the usual manner for labor and the transmission installed. The A.F.A. should bear the following notation, however - Charge GWO 581167.

In addition, a form PC-659 should be filled out in triplicate as explained below to obtain the exchange allowance on the original unit.

1. Furnish A.F.A. number submitted on replacement part and specify that the transmission was sent to:

> BUICK MOTOR DIVISION General Motors Corporation Clear Signal Area Factory 02 ATTENTION: A. J. Pane #05 S. Dock

2. Distribute copies as follows:

Original Copy

BUICK MOTOR DIVISION General Motors Corporation Hamilton Avenue 48550 Flint, Michigan ATTENTION: Billing Department Supervisor

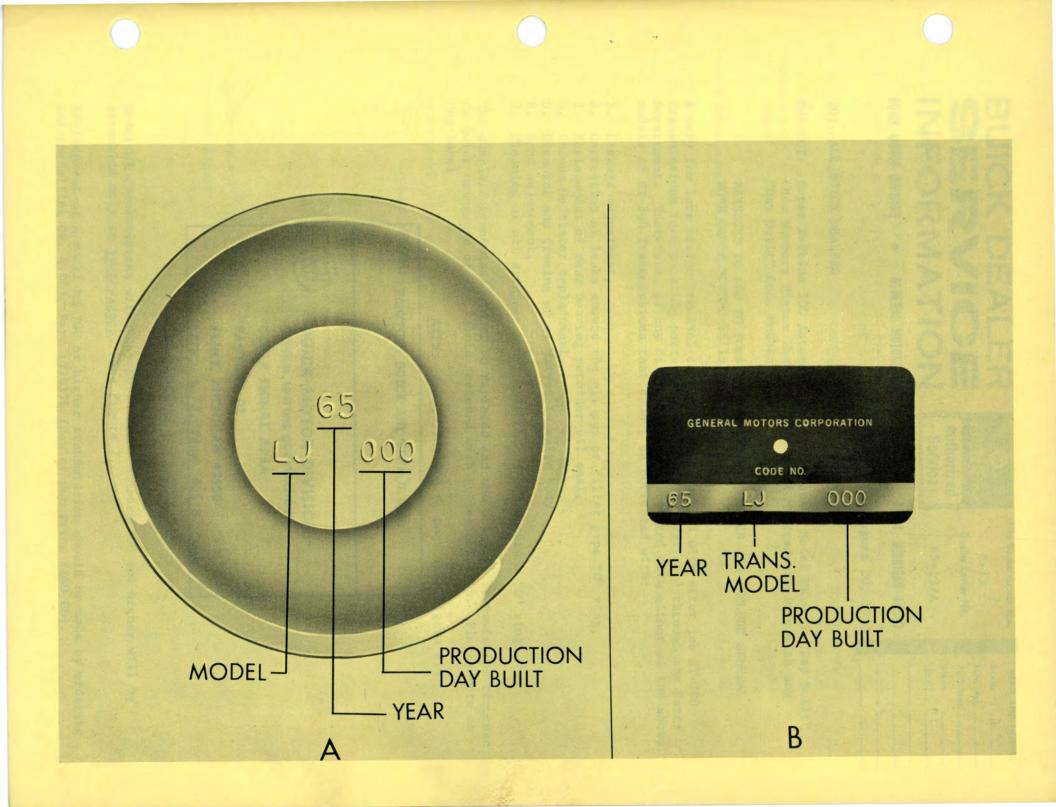
First Copy (Packing Slip) - Travels with Material

Second Copy

Dealer File

Hresko

Manager, Technical Service



BUICK DEALER SERVICE Authorized File Under Group No. 5-13 Decler Letter No.	READ AND INITIAL Dealer Serv. Mgr. Parts Mgr.
INFORMATION Service 65-137B	Others
BUICK MOTOR DIVISION • GENERAL MOTORS CORPORATION • FLINT, MICHIGAN 48550	
April 29, 1966	

TO ALL BUICK DEALERS

SUBJECT: 1965 Super Turbine 300 Automatic Transmissions - Model MR with "Day Built" Code Numbers 700 and higher; and Model MM Transmissions with any "Day Built" Code Number

> REISSUED TO RESCIND AUTHORIZATION FOR REPLACEMENT OF COMPLETE TRANSMISSION ASSEMBLIES

A very few late production 1965 cars were assembled with after job Super Turbine 300 Transmissions incorporating 1966 parts which were not available through the Parts Department at that time. Therefore, if a serious malfunction occured, the policy was to return the transmission to Flint following the procedures outlined in Dealer Letter 65-137A.

Starting approximately October 1, 1966 all of these parts were made available through normal parts channels. Therefore, if any trouble is encountered with either the MR or MM transmissions they are to be serviced as follows:

a. Model MM Transmissions

Model MM Transmissions are to be serviced as 1966 Units.

- b. Model MR Transmissions are to be serviced as 1965 Units except for the following 1966 Parts.
  - 1. Pump body and gears.
  - 2. Pump cover and stator shaft.
  - 3. Stator valve, spring, plug and retaining pin.
  - 4. Pump to case gasket.
  - NOTE: The Model MR transmission uses a 1965 pressure boost valve and sleeve and pressure regulator valve spring. If a pressure boost valve, sleeve, or pressure regulator valve spring needs replacement it is of the utmost importance that these <u>1965</u> parts be used or transmission malfunction will result.

5. Stator solenoid, gasket, clip and retaining bolts.

NOTE: Routing of stator solenoid wires is the same as 1966 routing.

- 6. Detent solenoid assembly on valve body.
  - NOTE: Model MR transmissions with "Day Built" code numbers 700 and higher were assembled in <u>Sportwagons only</u>.

Model MM transmissions with any "Day Built" code numbers were assembled in LeSabres only.

1966 Flat Rate Times and Operation Numbers will apply to the MM Transmission.

1965 Flat Rate Times and Operation Numbers will apply to the MR Transmissions except for the pump assembly. The times and operations for the pump can be found in the 1966 Flat Rate Manual.

E.J. Hresko

Manager, Technical Service

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- . Bodel MR Transmissions are to be serviced as 1965 Units except for the following 1956 Parts.
  - 1. Pump body and gears.
  - Pamp cover and stator shaft.
  - Stator valve, spring, plug and retaining pin.
    - . Fump to case gasket.
- NOTE: The Model MK transmission uses a 1965 pressure boost valve and sleeve and pressure regulator valve spring. If a preesure boost valve, alceve, or pressure regulator valve spring peeds replacement it is of the utmost importance that these 1965 parts be used or transmission malfunction will result.

. Stator solenoid, gaskst, ollp and retaining bolts.

NOTE: Routing of stator solenoid wires is the same as 1966 routing.

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 2, 1965

SUBJECT: 1964-65 Super Turbine 400 Transmission "Clunk"

A few dealer product reports have been received referring to a "clunk" in some 1964-65 Super Turbine 400 transmissions. This condition will occur when the throttle is released suddenly with the transmission in third gear.

In many instances, complaints of the above nature have been corrected using the following procedures:

- 1. Dash pot adjustment. Adjust the dash pot with the engine at normal operating temperature and with idle speed and mixture correctly adjusted.
  - a. While observing dash pot, open carburetor and allow throttle to snap closed. If dash pot does not delay closing action just before throttle is closed, adjust dash pot for more interference. If return to idle drags out excessively (more than two seconds), adjust dash pot for less interference.
  - b. As a final check, hold car with brakes and put transmission in drive, then jab accelerator pedal. If car stalls, adjust dash pot for slightly more interference and recheck as necessary.
  - c. Tighten lock nut securely.

At first glance, there may be some doubt as to what the correct dash pot adjustment has to do with a "clunk" condition. If the dash pot was misadjusted so that it was not contacting the throttle lever at curb idle position, this would allow the throttle to go back to curb idle without the advantage of the cushion offered by the dash pot. Without this cushion, a big torque change is experienced from a driving RPM to curb idle. This big torque change will cause the "clunk" condition. If the dash pot is correctly adjusted, the throttle lever will contact the dash pot and the throttle will be cushioned back to curb idle.

- 2. If the dash pot adjustment is found to be correct, then lubricate the splines between the transmission output shaft and the propeller shaft front slip yoke. It is recommended that wheel bearing grease be used.
- 3. In addition to the above, if necessary, apply wheel bearing lubricant between the crankshaft pilot bore and converter hub.

Hresko

Manager, Technical Service

DEC

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 2, 1965

SUBJECT: Installation of Service Converter on 1964-65 Super Turbine 400 Transmissions

When installing a converter on 1964-65 Super Turbine 400 transmissions, extreme care must be taken to prevent damage to the converter bushings and/or splines. To facilitate installation of the converter, the following procedure is recommended:

- 1. Place transmission in a vertical position, pump up.
- 2. Gently position converter into pump making certain that the converter is aligned. (Slide hammer bolts can be used as handles in the converter.)
- 3. Rotate converter until the shafts are piloted and the converter lugs are indexed in the pump gear.

Manager, Technical Service

DEC

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 2, 1965

SUBJECT: Super Turbine 400 Transmission

- 1. Case Center Support to Reaction Carrier Thrust Washer
- 2. Front Internal Gear to Reaction Carrier
- 3. Forward Clutch Hub to Direct Clutch Housing

1. CASE CENTER SUPPORT TO REACTION CARRIER THRUST WASHER

A new center support to reaction carrier thrust washer, see figure 1, has been released for production on all Super Turbine 400 transmissions. The new thrust washer is made of a phenolic asbestos material, replacing the present bronze washer.

For service, the presently released bronze thrust washer is to be used as a replacement until all stock is exhausted. At such time, the new phenolic asbestos material thrust washer will be released for service.

#### 2. FRONT INTERNAL GEAR TO REACTION CARRIER

A new front internal gear to reaction carrier thrust washer, see figure 2, has been released for production and service on all Super Turbine 400 transmissions. The new washer is made of a phenolic asbestos material, replacing the present bronze washer. This new washer is used between the front internal gear and reaction carrier ONLY.

The new washer is released under Group 4.176, Part Number 8624077.

CAUTION: Under no circumstances should this thrust washer be used between the output shaft and the transmission case.

3. FORWARD CLUTCH HUB TO DIRECT CLUTCH HOUSING

A new forward clutch hub to direct clutch housing thrust washer, see figure 3, has been released for production on all Super Turbine 400 transmissions. The new washer is made of a phenolic asbestos material, replacing the present bronze washer.

For service, the presently released bronze thrust washer is to be used as a replacement until all stock is exhausted. At such time, the new phenolic asbestos material thrust washer will be released for service.

J. Hresko

Manager, Technical Service



FIGURE 1

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carrier threat weeker, wee figure 2, service on all Super Turbius 400 creame a phenolic asbeatom marerial, replacing weeker is used wetween the front internal



FIGURE 2

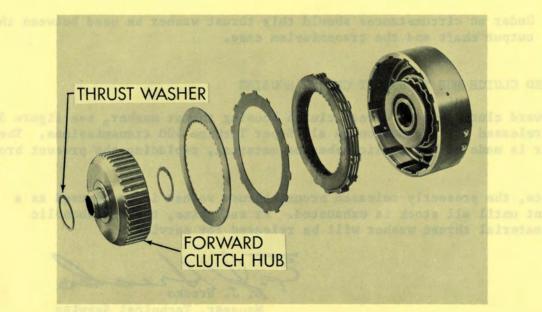


FIGURE 3

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Dealer Letter No. 🚞

File Under Group No.

BUICK DEALER SERVICE BUICK 65-151 5-17 Authorized INFORMATION Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 23, 1965

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 300 and 400 Transmission Oil Checking Procedure

Before diagnosis of any transmission complaint is attempted, there must be an understanding of oil checking procedures and what appearance the oil should have. Many times a transmission malfunction can be traced to low oil level, improper reading of dipstick, or oil appearance; therefore, a careful analysis of the condition of oil and the level may eliminate needless repairs.

When checking oil level in the Super Turbine 300 or 400 transmission, the following procedure should be observed to obtain the most accurate reading:

Bring transmission oil to operating temperature of 170°F. Usually driving 1. five (5) miles with frequent stops and starts will bring the transmission to operating temperature. Before oil is checked the selector lever should be moved through all driving ranges.

NOTE: Prior to road testing car, oil level must be visible on dipstick.

- 2. Oil level must be checked with the selector lever in Park (P) or Neutral (N) position ONLY, engine running, and the vehicle on LEVEL pavement.
  - NOTE: If oil level is checked in any other driving range, a lower reading will result.
- 3. Dipstick should always be inserted into the oil filler tube so that the oil level indicator markings are toward the center of the car.

Also, when the dipstick is removed, it should be noted whether the oil is devoid of air bubbles or not. Oil with air bubbles gives an indication of an oil leak in the suction lines, which can cause erratic operation and slippage. Water in the oil imparts a milky, pink cast to the oil and can cause "spewing".

· Hresko

Manager, Technical Service

DEC

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

May 21, 1965

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 400 Transmission Stator Solenoid Wire Retaining Clips

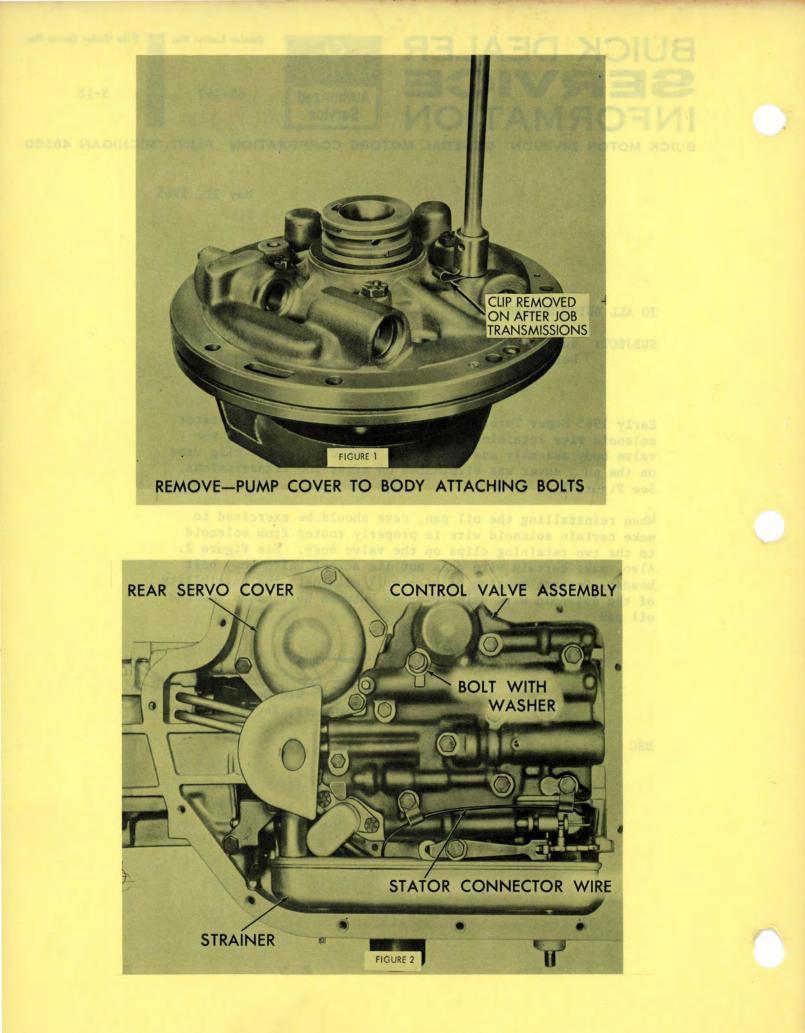
Early 1965 Super Turbine 400 transmissions used three stator solenoid wire retaining clips. Two clips were used on the valve body assembly and one on the pump cover. The clip used on the pump cover was eliminated on after job transmissions. See Figure 1.

When reinstalling the oil pan, care should be exercised to make certain solenoid wire is properly routed from solenoid to the two retaining clips on the valve body. See Figure 2. Also, make certain wire does not lie across valve body bolt heads. Correct routing of wire will eliminate the possibility of the solenoid wire being pinched between bolt heads and the oil pan.

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Manager, Technical Service

DEC



Dealer Letter No. File Under Group No.

65-167A

5-18

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

BUICK

Authorized

Service

June 18, 1965

TO ALL BUICK DEALERS

BUICK DEALER

SERVICE

INFORMATION

SUBJECT: Super Turbine 400 Transmission Stator Solenoid Wire Retaining Clips

Reissued To Revise Clip Information

Early 1965 Super Turbine 400 transmissions used three stator solenoid wire retaining clips. Two clips were used on the valve body assembly and one on the pump cover. The clip used next to the detent solenoid on the valve body was eliminated on after job transmissions. See illustration. It will not be necessary to replace this clip on early transmissions if it is removed for any reason.

When reinstalling the oil pan, care should be exercised to make certain stator solenoid wire is properly routed from the stator solenoid to the retaining clip on the valve body. See illustration. Also, make certain wire does not lie across valve body bolt heads. Correct routing of wire will eliminate the possibility of the solenoid wire being pinched between bolt heads and the oil pan.

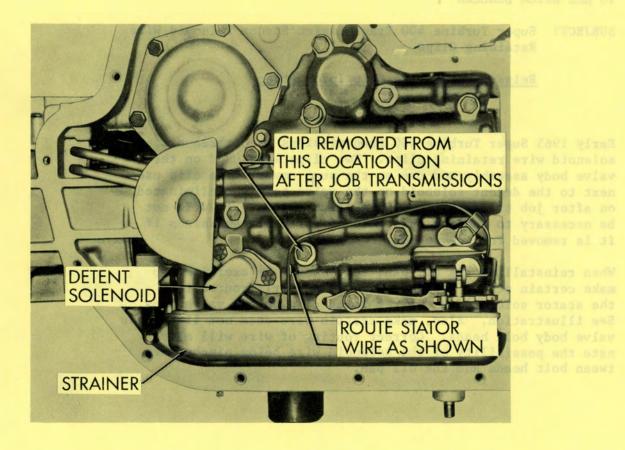
· Hresko

Manager, Technical Service

DEC



June 18, 1965



BUICK DEALER SERVICE INFORMATION BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

May 21, 1965

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 300 Transmission Speedometer Drive Gear

Starting with transmission code numbers listed below, the Super Turbine 300 transmission will incorporate a new nylon speedometer drive gear. The new gear is not interchangeable with gears used prior to the listed transmission code numbers. No special Kent-Moore tools are required for removal and installation of the nylon gear. To install and remove the nylon gear, proceed as shown in figures 1, 2 and 3.

#### Code Numbers

Transmission Model

Code Number

080
195
195

NOTE: As soon as stock of the steel gear is depleted in production, Model LJ transmission will incorporate the nylon gear.

The new parts are released for service as follows:

Name

Group

Part Number

Retainer Clip Speedometer Drive Gear

4.345 1373122 See figure 4

Because of the different axle ratios involved, refer to Group 4.343 for the proper speedometer drive gear part number.

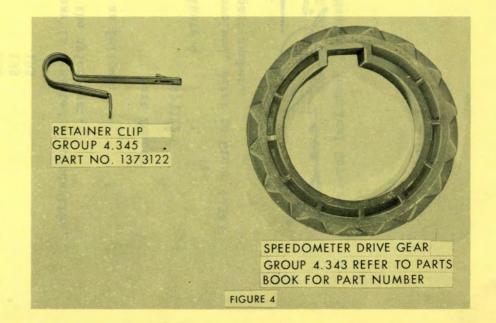
E.J. Hresko

Manager, Technical Service

DEC









June 4, 1965

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 300 Transmission Planetary Gear Set

- 1. Input Sun Gear Thrust Washer
- 2. Long Planet Pinion Rear Thrust Washer

#### 1. Input Sun Gear Thrust Washer

A new input sun gear thrust washer, Gr. 4.176, Part # 1373336, has been released for production on all Super Turbine 300 transmissions. The new type washer has three (3) locating tangs as shown in figure 1. To facilitate installation of the washer, three holes were drilled in the rear face of the planet carrier. When installing, make certain tangs on thrust washer are indexed with holes in planet carrier. Second type carriers must use second type thrust washers and first type carriers must use first type washers, Gr. 4.176, Part # 1359022.

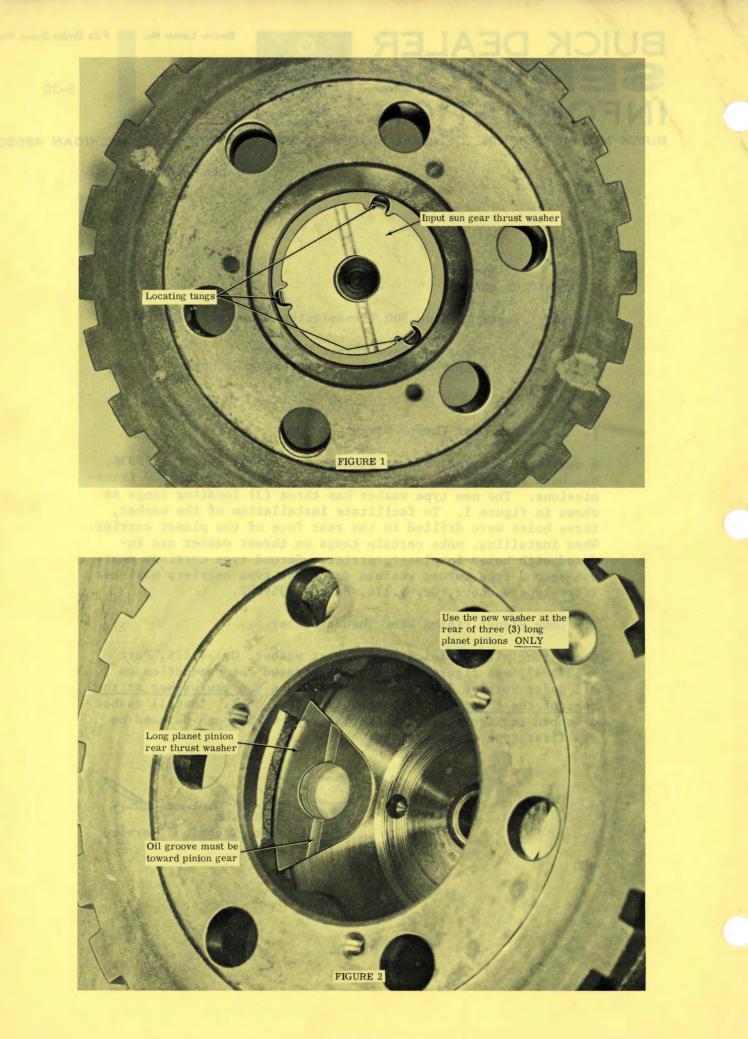
2. Long Planet Pinion Rear Thrust Washer

A new long planet pinion rear thrust washer, Gr. 4.176, Part # 1373337, see figure 2, has been released for production on all Super Turbine 300 transmissions. <u>Use the new washer at the</u> rear of the three (3) long planet pinions ONLY. Install washer as shown in figure 2. This second type washer can be used on all first type transmissions.

J. Hresko

Manager, Technical Service

DEC





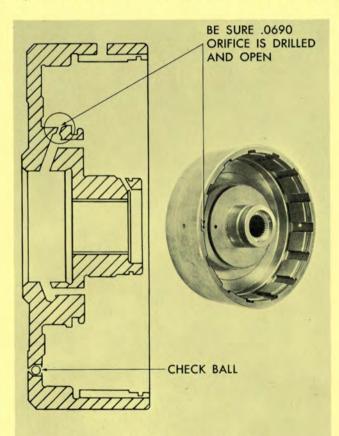
June 11, 1965

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 400 Transmission Forward Clutch Failure

If a forward clutch failure is encountered in a Super Turbine 400 transmission, it is very important that the forward clutch feed orifice (see figure 1) be checked for being blocked or partially restricted. It is recommended that a small wire be inserted through this feed orifice to make certain it is open. There is a possibility that a limited number of 1965 transmissions were built without the feed orifice drilled. If a case is encountered where the feed orifice was not drilled, a new forward clutch housing, Group 4.169, Part No. 8623791, must be installed.

NOTE: A failure caused by feed orifice not drilled will be an early failure.



FORWARD CLUTCH HOUSING

Manager, Technical Service



June 11, 1965

TO ALL BUICK DEALERS

SUBJECT: Super Turbine 400 Transmission Repair Procedure for Oil Leak at Parking Pin Bore

If an oil leak is encountered on a Super Turbine 400 transmission at the parking pin bore, it can be repaired with the transmission in the car by using the following procedure:

- 1. Raise car on a hoist or jack stand; thoroughly clean area around parking pin bore (See Figure 1) with a cleaning solvent and brush; air dry.
- Apply small quantity of Special Thread Sealer and Lube, Group 8.800, Part No. 1050026 or equivalent to a .38 diameter cup plug, Group 4.294, Part No. 8620318.
- 3. Position cup plug with open end facing front of transmission. See Figure 2.
- 4. Using a 3/8" diameter rod, drive plug into parking pin bore until it is flush with case.

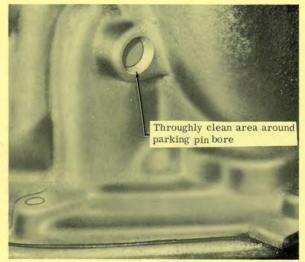


FIGURE 1

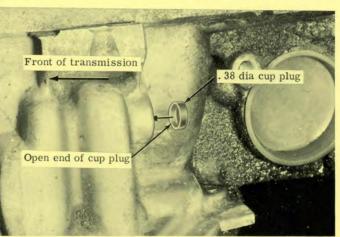


FIGURE 2

. Hresko

Manager, Technical Service



June 14, 1965

TO ALL BUICK DEALERS

SUBJECT: Deceleration and Acceleration "Clunk" - 1964 and 1965 Upper Series Cars

Dealer product reports indicate a "clunking" noise exists during acceleration or deceleration on some 1964-65 Upper Series cars. This noise can best be described as a backlash type of noise. In many instances, complaints of the above nature have been corrected using one or more of the following procedures:

1. Check dash pot adjustment. At first glance, there may be some doubt as to what the correct dash pot adjustment has to do with a "clunking" noise. If the dash pot is misadjusted so that it does not contact the throttle lever at curb idle position, the throttle returns to curb idle without the advantage of the cushion offered by the dash pot. Without this cushion, a quick torque change is experienced from a driving RPM to curb idle. This quick torque change can cause a "clunking" noise. If the dash pot is correctly adjusted, the throttle lever will contact the dash pot and the throttle will be cushioned back to curb idle. Check dash pot adjustment as follows:

NOTE: Before adjusting dash pot, make certain the throttle linkage, idle speed and mixture is correctly adjusted and the engine is at normal operating temperature.

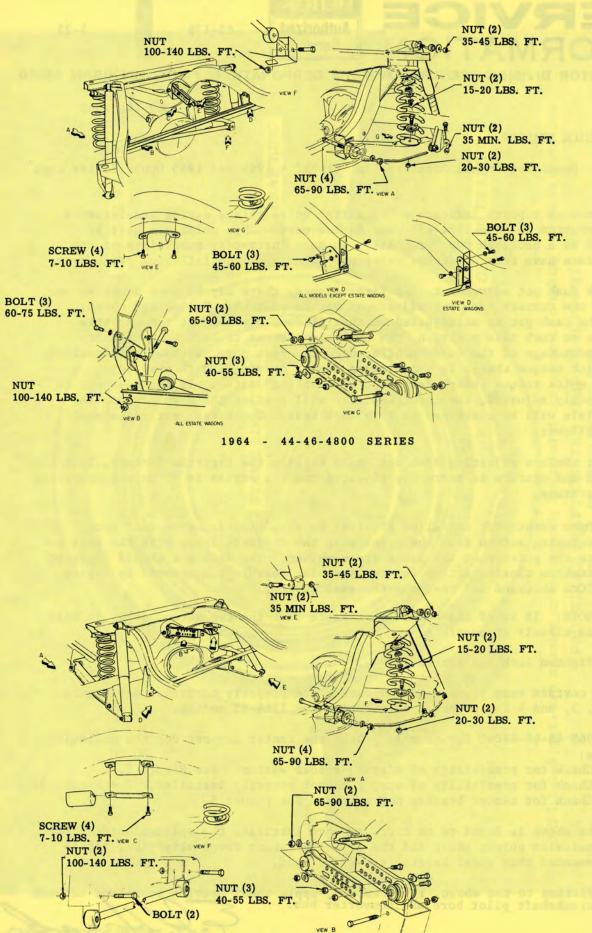
 Open carburetor and allow throttle to snap closed. Time dash pot delaying action from the point when the throttle lever hits the dash pot to the point when the lever stops moving. The dash pot should delay or cushion closing action for two seconds; measure two seconds by saying, "One thousand and one, one thousand and two."

NOTE: It is of the utmost importance that the two second delay is held as closely as possible.

- b. Tighten lock nut securely.
- Make certain rear suspension components are properly torqued. See Figures
  1, 2, 3, and 4 for proper specification for 1964-65 models.
- 3. On 1965 45-46-48000 Series only, check the center support for the following items:
  - a. Check for possibility of missing spacer washer. See Figure 5.
  - b. Check for possibility of snap ring not properly installed. See Figure 5.c. Check for center bearing not staked. See Figure 5.
- 4. If the above is found to be correct, then lubricate the splines between the transmission output shaft and the propeller shaft front slip yoke. It is recommended that wheel bearing grease be used.
- 5. In addition to the above, if necessary, apply wheel bearing lubricant between the crankshaft pilot bore and converter hub.

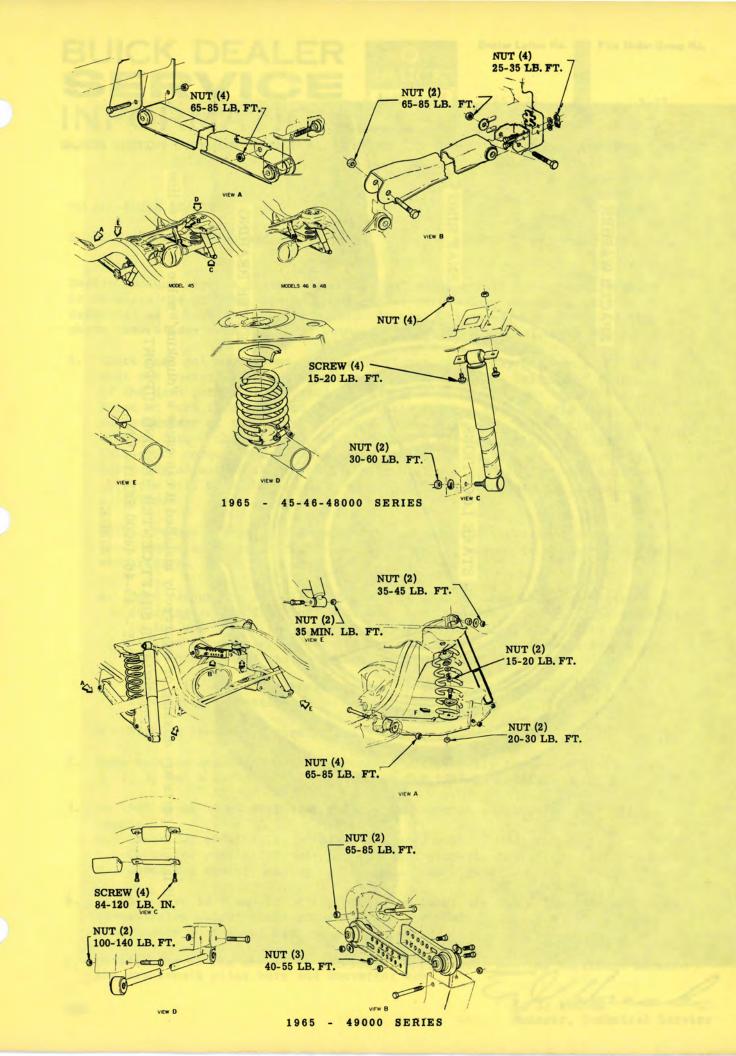
J. HRESKO

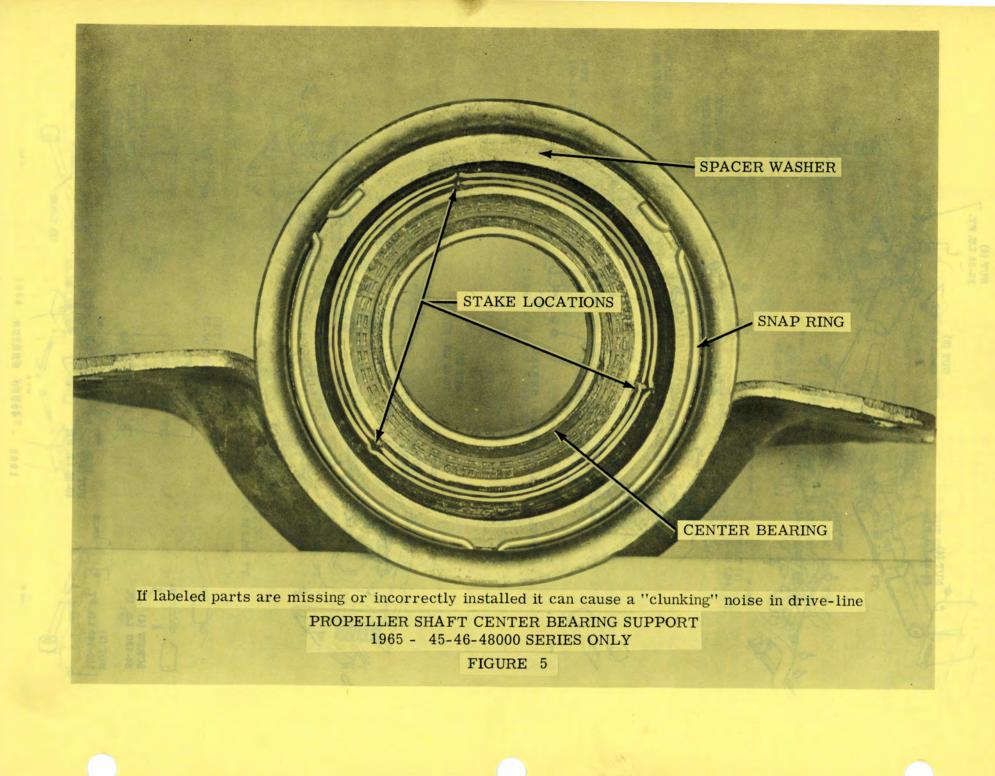
## BUICK DEALER



1964 - 4700 SERIES

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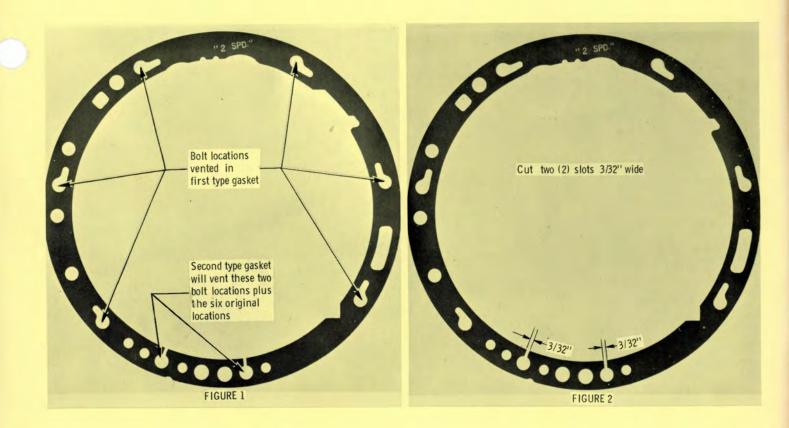


TO ALL BUICK DEALERS

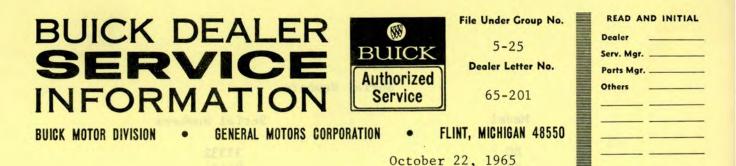
SUBJECT: 1965 Super Turbine 300 Pump to Case Gasket Modification

Starting with 1965 transmission code number 214, a revised pump to case gasket went into production on all Super Turbine 300 transmissions. The gasket used before transmission code number 214 provided for venting six of the eight pump to case attaching bolts. The new gasket provides venting for the remaining two locations. See figure 1. Because of space limitations, the additional two bolt holes are vented with radical cuts rather than elongated slots. Venting the attaching bolt locations reduces the possibility of an oil leak in this area.

Before installing a first type service gasket, it should be modified as shown in figure 2.



Manager, Technical Service



TO ALL BUICK DEALERS

SUBJECT: Super Turbine 400 Rear Servo Piston

Starting with the serial numbers listed below, the Super Turbine 400 transmission will have a new style rear servo piston, cover and rear band apply pin. This change was made to provide a stronger rear servo piston.

If it becomes necessary to change a rear servo piston, cover or rear band apply pin on a 1965 transmission, the following information should be noted.

When only a replacement band apply pin is required to service 1965 transmissions built BEFORE the serial numbers listed below, order the first type apply pin determined by the band apply selection gage as follows:

Group	Part Number	Length	No. of Rings
4.241	8623657	Short	1
4.241	8623658	Medium	2
4.241	8623659	Long	3

To service 1965 transmissions built BEFORE the listed serial numbers, when a replacement piston is required, order second type service package Gr. 4.241 Part #8624943. This package contains:

Group	Part Number
4.241	8624138 Rear Servo Piston
4.241	8624136 Rear Servo Cover
4.241	8623174 Gasket, Rear Servo Cover

NOTE: A new second type rear band apply pin must also be ordered at this time. Order the pin determined by the band apply selection gage.

Group	Part Number	Length	No. of Rings
4.241	8624139	Short	1
4.241	8624140	Medium	2
4.241	8624141	Long	3

To service 1965 transmission built AFTER the listed serial numbers, order the second type parts individually as they are required.

#### Serial Numbers

Mode1	Serial Numbers
BU	33332
BJ	84494
BN	10037
BR	16727
BS	2627
BT	3016

Manager, Technical Service

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a stronger rear serve histon

#### DEC

by pin on a 1965 transmission, the following information should be noted

When only a replacement band apply pin is required to service 1965 transmissions built BEFORE the serial numbers listed below, order the first ty apply pin determined by the band apply selection gage as follows:

To service 1965 transmissions built BEFORE the listed serial numbers, when a replacement platon is required, order second type service package Gr. 4.241 Part #8624943. This package contains:

NOTE: A new second type rear band apply pin must also be ordered at this time. Order the pin detarmined by the band apply selection sage.

To service 1965 transmission built AFTER the listed serial numbers, order the second type parts individually as they are required.

## BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 12, 1965

SUBJECT: 1965 Gear Ratios, Speedometer Gears and Gear Adapters

Attached are charts indicating 1965 gear ratios and corresponding speedometer gears used on the various models with the different transmission and tire options.

This is merely for your information if such should be needed.

Hrésko

Manager Technical Service

WGH

# BUICK DEALER

#### SPEEDO RIVING WORM 1965 46-48-49000 SPEEDO DRI TRANSMISSION ASM. DRIVEN GEAR AXLE TIRE NºOF NºOF RATIO IDENTIFYING SIZE TYPE MODEL CODE COLOR TEETH TEETH 39 38 38 8.15 X 15 8.45 X 15 19 BROWN 19 BLUE AUTOMATIC BJ, BN, BQ 19 BLUE 8.85X15 2.78 (3-SP)KB 9 18 BROWN 8.15 X 15 384-SPEED 9 BROWN 8.45 X 15 8.85 X 15 8.15 X 15 8.45 X 15 8.45 X 15 8.85 X 15 18 SYNCHROMESH 9 BROWN (4-SP)KS 18 19 43 19 42 GREEN AUTOMATIC BJ, BN, BQ 19 41 YELLOW 3.07 8.15 X 15 8.45 X 15 8.85 X 15 18 20 19 (3-SP)KA (4-SP)KT 89 BROWN 384-SPEED BLUE SYNCHROMESH 9 (3-SP)KB (4-SP)KS NATURAL BLACK BLACK 40 8.15 X 15 8.45X15 8.85X15 40 17 AUTOMATIC BR, BT 17 BROWN 3.23 (3 SP) KA (4 SP) KT (3 SP) KB (4 SP) KS 8.15 X 15 8.45 X 15 19 NATURAL 89 384-SPEED RED SYNCHROMESH SP)KA (4 SP)KT 13 8 18 BROWN 8.85 X 15 8.15 X 15 8.45 X 15 8.85 X 15 42 GREEN YELLOW 17 BR, BT AUTOMATIC 17 40 BLACK 3.36 20 BLUE 8.15 X 15 8.45 X 15 8.85 X 15 88 (3-SP)KA 384-SPEED SYNCHROMESH 19 (4-SP)KT 8 NATURAL 17 43 PURPLE 8.15 X 15 GREEN 8.45X15 8.85X15 AUTOMATIC BR, ES, BT 17 41 3.42 8 20 20 BLUE 8.15 X 15 8.45 X 15 (3-SP)KA 384-SPEED SYNCHROMESH (4-SP)KT NATURAL 8 19 8.85X15 8.15 X 15 8.45 X 15 8.85 X 15 PURPLE 19 43 19 BJ, BN, BQ 42 GREEN AUTOMATIC 41 3.58 21 RED (3-SP)KA (4-SP)KT 87 8.15 X 15 384-SPEED 8.45X15 8.85X15 SYNCHROMESH (3-SP)KC (4-SP)KR 7 BROWN 18 19 19 8.15 X 15 8.45 X 15 BLACK 40 39 39 20 20 19 AUTOMATIC BJ, BN, BQ BROWN BROWN 8.85X15 8.15X15 19 3.91 BLUE (3-SP)KC 384-SPEED 8.45 XI5 8.85 XI5 BLUE NATURAL 7 SYNCHROMESH (4-SP)KR AUTOMATIC 4.45 8.15 X 15 8.45 X 15 8.85 X 15 20 (3-SP)KD BLUE NATURAL 6 384 - SPEED 6 SYNCHROMESH (4-SP)KP 19 NATURAL 6

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RATIO	TYPE	MODEL CODE	NO OF		IDENTIFYING COLOR		GEAR	DATIO	TYPE	MODEL CODE	NO OF	NO OF		TIRE SIZE	GEAR					
	2-SPEED	MJ	17	38	BLUE	8.15 X 15	1367641	1. 1	2-SPEED	MJ	17	42	GREEN	8.15 X 15	NONE					
	AUTOMATIC	IVIO	17	38	BLUE	8.45 X 15	1507041		AUTOMATIC	WIO	17	41	YELLOW	8.45 X 15	INUNE					
2.56	3-SPEED	BU	19	40	BLACK	8.15 X 15	1367642	3.36	TC 3-SPEED	BU	19	40	BLACK	8.15 X 15	9775436					
2.56	AUTOMATIC	BU	19	39	BROWN	8.45 X 15	1367642	5.56	AUTOMATIC	во	19	40	BLACK	8.45 X 15	9115436					
	3-SPEED					8.15 X 15			3 - SPEED	QD	8	20	BLUE	8.15 X 15	NONE					
4	SYNCHROMESH					8.45 X 15			SYNCHROMESH	QD	8	19	NATURAL	8.45 X 15	NONE					
15.00	2-SPEED	MJ	17	39	BROWN	8.15 X 15	NONE		2- SPEED	MJ	17	38	BLUE	8.15 X 15	9775436					
	AUTOMATIC	NI U	17	38	BLUE	8.45 X 15	NONE		AUTOMATIC	IVIO	17	37	RED	8.45 X 15	9115456					
2 70	3-SPEED	DU	19	43	PURPLE	8.15 X 15	NONE	3.55	3-SPEED	BU	19	43	PURPLE	8.15 X 15	9775436					
2.78	AUTOMATIC	AUTOMATIC BU 19	42	GREEN	8.45 X 15	NONE	5.55	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	AUTOMATIC	во	19	42	GREEN	8.45 X 15	9/15456	
	3-SPEED	QE	9	18	BROWN	8.15 X 15			3-SPEED	QD	8	21	RED	8.15 X 15						
	SYNCHROMESH	V.E.	9	18	BROWN	8.45 X 15	NONE	·	SYNCHROMESH	QK	7	18	BROWN	8.45 X 15	NONE					
1	2-SPEED		17	36	WHITE	8.15 X 15	NONE		2-SPEED		17	40	BLACK	8.15 X 15						
	AUTOMATIC	MJ	17	36	WHITE	8.45 X 15	NONE		AUTOMATIC	MJ	17	39	BROWN	8.45 X 15	9775436					
2 00	3-SPEED		19	41	YELLOW	8.15 X 15	NONE	NONE 3.73	3-SPEED		19	42	GREEN	8.15 X 15						
2.92	AUTOMATIC	BU	19	40	BLACK	8.45 X 15	NONE	5.15	AUTOMATIC	BU	19	41	YELLOW	8.45 X 15	1367643					
	3-SPEED	05	9	19	NATURAL	8.15 X 15			3-SPEED	QG	8	22	GREEN	8.15 X 15						
	SYNCHROMESH	QE	9	19	NATURAL	8.45 X 15	NONE		SYNCHROMESH	QK	7	19	NATURAL	8.45 X 15	NONE					
	2-SPEED		17	38	BLUE	8.15 X 15			2-SPEED		17	39	BROWN	8.15 X 15						
	AUTOMATIC	MJ	17	37	RED	8.45 X 15	NONE		AUTOMATIC	MJ	17	38	BLUE	8.45 X 15	1367643					
7 00	3-SPEED	011	19	43	PURPLE	8.15 X 15		7.00	3-SPEED	DU	19	40	BLACK	8.15 X 15	1000					
3.08	AUTOMATIC	BU	19	42	GREEN	8.45 X 15	NONE	3.90	AUTOMATIC	BU	19	39	BROWN	8.45 X 15	1367644					
	3-SPEED	QD	8	18	BROWN	8.15 X 15	NONE		3-SPEED	QG	8	23	BLACK	8.15 X 15						
	SYNCHROMESH	QE	9	20	BLUE	8.45 X 15	NONE		SYNCHROMESH	QK	7	20	BLUE	8.45 X 15	NONE					
	2- SPEED		17	40	BLACK	8.15 X 15			2- SPEED		17	39	BROWN	8.15 X 15	-					
	AUTOMATIC	MJ	17	39	BROWN	8.45 X 15	NONE		AUTOMATIC	MJ	17	38	BLUE	8.45 X 15	1367644					
the second secon	3- SPEED		19	45	LT. BLUE	8.15 X 15		4.30	3- SPEED		19	43	PURPLE	8.15 X 15						
3.23	AUTOMATIC	BU	19	45	LT. BLUE	8.45 X I5	NONE 4.30		4.30 AUTOMATIC							BU	19	43	PURPLE	8.45 X 15
	3-SPEED	QD	. 8	19	NATURAL	8.15 X 15			3-SPEED	QI	6	19	NATURAL	8.15 X 15						
1.0	SYNCHROMESH	QE	9	21	RED	8.45 X 15	NONE		SYNCHROMESH	QG	8	25	ORANGE	8.45 X 15	NONE					

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STAT	DESIGNATES SI FION WAGONS DESIGNATES SI	EDANS & STANDARD PORTWAGON	WUOON B B SPEED O	1965 43-	-44000 L	ESS (	GRAN SPOR	т	PEEDO ING WORM						
AXLE	TRANSMI	SSION ASM.	DRIVEN GEAR	TIRE SIZE	DRIVEN	AXLE	TRANSMIS	SION ASM.	SP	DRI	PEEDO VEN GEAR		DRIVEN		
RATIO	TYPE	* MODEL CODE	N POF NOF IDENTIFYING	TIRE SIZE	ADAPTER	the sub-transfer in the	TYPE	* MODELCODE	Nº OF	1000	IDENTIFYING COLOR	TIRE SIZE	GEAR		
	AUTOMATIC	MJ&MR	17 42 GREEN 17 41 YELLOW 17 40 BLACK	6.95 X 14 7.35 X 14 7.75 X 14	1367641		AUTOMATIC	MJ&MR	17	40 39 38	BLACK BROWN BLUE	6.95 X 14 7.35 X 14 7.75 X 14	9775436		
	AUTOMATIC	LJ	16 39 BROWN 16 39 BROWN	6,95 x 14 7.35 X 14 7.75 x 14	1367641		AUTOMATIC	LJ	16 16 16	43 42 41	PURPLE GREEN YELLOW	6.95 X 14 7.35 X 14 7.75 X 14	NONE		
2.56	3-SPEED SYNCHROMESH	(R) QE	9 18 BROWN 9 18 BROWN	6.95 X 14 7.35 X 14 7.75 X 14		3.36	3-SPEED SYNCHROMESH	(R) QG (R) QD (E) QC (R) QK (E) SM	8 8 7	22	GREEN RED BROWN	695 X 14 7.35 X 14 7.75 X 14	-		
	4-SPEED SYNCHROMESH	KY	9 18 BROWN 9 18 BROWN	6.95 x 14 7.35 x 14 7.75 x 14	NONE		4-SPEED SYNCHROMESH	KX KZ KV	8	22	GREEN RED BROWN	6.95 X 14 7.35 X 14 7.75 X 14	NONE		
	AUTOMATIC	LJ	16 40 BLACK 16 39 BROWN 16 38 BLUE	6.95 X 14 7.35 X 14 7.75 X 14	1367642		AUTOMATIC	MJ& MR	17	42	GREEN YELLOW BLACK	6.95 X 14 7.35 X 14 7.75 X 14	9775436		
	AUTOMATIC	MJ&MR	16 38 BLUE 17 38 BLUE 17 37 RED 17 36 WHITE	6.95 × 14 7.35 × 14 7.75 × 14	NONE		AUTOMATIC	LJ	16 16 16	39 38	BLUE RED	6.95 X 14 7.35 X 14 7.75 X 14	9775436		
2.78	3 - SPEED SYNCHROMESH	(R) QD (R) QE (E) QF	8 18 BROWN 9 20 BLUE	6.95 X 14 7.35 X 14 7.75 X 14		3.55	3-SPEED SYNCHROMESH	(R)QG (R)QK (E)SM	8	23 22 19	BLACK GREEN NATURAL	6.95 X 14 7.35 X 14	_		
	4-SPEED SYNCHROMESH	KZ KY	9 19 NATURAL 8 18 BROWN 9 20 BLUE 9 19 NATURAL	6.95 X 14 7.35 X 14 7.75 X 14	NONE	4-SPEED SYNCHROMESH	KX KV	8	23	BLACK GREEN NATURAL	7.75 X 14 6.95 X 14 7.35 X 14	NONE			
	AUTOMATIC	LJ	16 42 GREEN 16 41 YELLOW 16 40 BLACK	6.95 X 14 7.35 X 14 7.75 X 14	1367642		AUTOMATIC	MJ& MR	17	41 40 39	YELLOW BLACK BROWN	7.75 X 14 6.95 X 14 7.35 X 14	1367643		
	AUTOMATIC	MJ&MR	17 40 BLACK	6.95 X 14 7.35 X 14	NONE 3.73	and the second second	95 X 14 NONE		AUTOMATIC	LJ	16 16 16	41 40 39	YELLOW BLACK BROWN	7.75 X 14 6,95 X 14 7.35 X 14	9775436
2.92	3 - SPEED SYNCHROMESH	(R)QD (E)QC (R)QE (E)QF	9 21 RED	7.75 X 14 6.95 X 14 7.35 X 14 7.75 X 14			3-SPEED SYNCHROMESH	(R)QG (E)QH	8	24 23 23	YELLOW BLACK BLACK	7.7 5 X 14 6.9 5 X 14 7.35 X 14 7.75 X 14	-		
	4- SPEED SYNCHROMESH	(R) QD (E) QC KZ KY	8 19 NATURAL 9 21 RED	6.95 X 14 7.35 X 14	NONE	NONE	INE		4-SPEED SYNCHROMESH	кх	8	24	BLACK BLACK BLACK	695 X 14 7.35 X 14	NONE
	AUTOMATIC	κz LJ	16 39 BROWN 16 39 BROWN	7.75 x 14 6.95 x 14 7.35 x 14			AUTOMATIC	MJ& MR	17	23 43 42	PURPLE GREEN	7.75 X 14 6.95 X 14 7.35 X 14	1367643		
	AUTOMATIC	MJ & MR	16 37 RED 17 42 GREEN 17 41 YELLOW	7.75 X 14 6.95 X 14 7.35 X 14			AUTOMATIC	LJ	17 16 16	41 40 39	BROWN	7.75 X 14 6.95 X 14 7.35 X 14	1367643		
3.08	3-SPEED SYNCHROMESH	(R) QD (E) QC	17 40 BLACK 8 20 BLUE 8 19 NATURAL	7.75 X 14 6.95 X 14 7.35 X 14	NONE	390	3-SPEED SYNCHROMESH	(R)QI (E)QJ	16 6 6	38 19 18	BROWN	7.75 X 14 6.95 X 14 7.35 X 14	_		
	4- SPEED SYNCHROMESH	ĸz	8         19         NATURAL           8         20         BLUE           8         19         NATURAL           8         19         NATURAL	7.75 X 14 6.95 X 14 7.35 X 14 7.75 X 14			4-SPEED SYNCHROMESH	ĸw	00 00	18 19 18	BROWN NATURAL BROWN	7.75 X 14 6.9 5 X 14 7.35 X 14	NONE		
	AUTOMATIC	LJ	B         19         NATORAL           16         41         YELLOW           16         40         BLACK           16         39         BROWN	6.95 × 14 7.35 × 14 7.75 × 14	NONE	-	AUTOMATIC	MJ&MR	17	43 42 41	BROWN PURPLE GREEN YELLOW	7.75 X 14 6.95 X 14 7.35 X 14 7.75 X 14	1367644		
	AUTOMATIC	MJ & MR	17 38 BLUE 17 43 PURPLE 17 42 GREEN	6.95 X 14 7.35 X 14 7.75 X 14	9775436 NONE 4.30	AUTOMATIC	LJ	16 16 16	40 40 38	BLACK BLACK BLUE	6.95 X 14 7.35 X 14 7.7 5 X 14	1367644			
323	3- SPEED SYNCHROMESH	(R) QD (E) QC	8 21 RED 8 20 BLUE 8 20 BLUE	6.95 X 14 7.35 X 14 7.75 X 14		4.30	NONE		3-SPEED SYNCHROMESH	(R)QI (E)QJ	6 6	21 20 20	BLUE BLUE	6.95 X 14 7.35 X 14 7.75 X 14	-
	4-SPEED SYNCHROMESH	кz	8 21 RED 6 20 BLUE	6.95 X 14 7.35 X 14 7.75 X 14			4-SPEED SYNCHROMESH	ĸw	6 6	21 20 20	BLUE BLUE BLUE	6.95 X 14 7.35 X 14 7.75 X 14	NONE		

## 1965 44000 GRAN SPORT

196	5 44000 GR	AN SPOI	₹Ţ	SPEEDO DRIVING WORM				
AXLE	TRANSMISS		SM.		DRIV	SPEEDO EN GEAR	TIRE SIZE	DRIVEN
	TYPE	MODEL	CODE		TEETH 40		7.75 X 14	ADAPTER 1367641
2.56	3 - SPEED SYNCHROMESH	KF		8	19	NATURAL	7.75 X 14	9775739
	4 - SPEED SYNCHROMESH							
	AUTOMATIC	NK		17	36	WHITE	7.75 X 14	
2,78	3 - SPEED	KF		8	19	NATURAL	7.75 X 14	540474
	SYNCHROMESH 4 - SPEED	KS		9	19	NATURAL	7.75 X 14	
	SYNCHROMESH	NK	•.	17	38	BLUE	7.75 X 14	
	AUTOMATIC	INK		17	30	BLUE	1.15 ^ 14	
2.92	3 - SPEED SYNCHROMESH	KF		8	18	BROWN	7.75 X 14	
	4 - SPEED	кт		8	18	BROWN	7.75 X 14	
	SYNCHROMESH AUTOMATIC	NK		17.	40	BLACK	7.75 X 14	
1								
3.08	SYNCHROMESH	KF		8	19	NATURAL	7.75 X 14	
	4 - SPEED SYNCHROMESH	кт		8	19	NATURAL	7.75 X 14	
	AUTOMATIC	NK		17	42	GREEN	7.75 X 14	
3.23	3 - SPEED	KF		8	20	BLUE	7.75 X 14	
	SYNCHROMESH 4 - SPEED	KT		8	20	BLUE	7.75 X 14	
	SYNCHROMESH	NK		17	38	BLUE	7.75 X 14	9775436
	AUTOMATIC					BLUL		
3.36	3 - SPEED SYNCHROMESH	KF		8	20	BLUE	7.75 X 14	
	4 - SPEED	KR		7	18	BROWN	7.75 X 14	
	AUTOMATIC	NK		17	40	BLACK	7.75 X 14	9775436
7 6 6								
3.55	3 - SPEED SYNCHROMESH	KF		8	19	NATURAL	7.75 X 14	535617
	4 - SPEED SYNCHROMESH	KR	_	7	19	NATURAL	7.75° X 14	
	AUTOMATIC	NK		17	39	BROWN	7.75 X 14	1367643
3.73	3 - SPEED	KF		8	20	BLUE	7.75 X 14	535617
	SYNCHROMESH 4 - SPEED	KR		7	20	BLUE	7.75 X 14	
	SYNCHROMESH AUTOMATIC	NK		17	41	YELLOW	7.75 X 14	1367643
								1001040
3,90	3 - SPEED	KF		8	19	NATURAL	7.75 X 14	535616
	4 - SPEED	KR		7	21	RED	7.75 X 14	
	SYNCHROMESH AUTOMATIC	NK		17	41	YELLOW	7.75 X 14	1367644
4.30	3 - SPEED	KF		8	21	RED	7.75 X 14	535616
4.50	4 - SPEED SYNCHROMESH	KP		6	20	BLUE	7.75 X 14	

## BUICK DEALER SERVICE INFORMATION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

June 11, 1965

TO ALL BUICK DEALERS

SUBJECT: 1965 Gear Ratios, Speedometer Gears and Gear Adapters

SUPERCEDES DEALER LETTER 65-101, DATED FEBRUARY 12, 1965

Attached are charts indicating 1965 gear ratios and corresponding speedometer gears used on the various models with the different transmission and tire options.

This is merely for your information if such should be needed.

Manager, Technical Service

PHH

### 1965 - 46-48-49000

1965	- 46-48-4900	00	SPEEDO				
AXLE	TRANSMIS	SION ASM.	SP	DRI	VEN GEAR	TIRE	DRIVEN
RATIO	TYPE	MODEL CODE		NºOF TEETH	IDENTIFYING COLOR	SIZE	ADAPTER
2.78	AU.TOMATIC	BJ,BN,BQ	19 19 19	39 38 38	BROWN BLUE BLUE	8.15 X 15 8.45 X 15 8.85 X 15	
2.10	384-SPEED SYNCHROMESH	(3-SP)KB (4-SP)KS	999	18 18 18	BROWN BROWN BROWN	8.15 X 15 8.45 X 15 8.85 X 15	
3.07	AUTOMATIC	BJ,BN,BQ	19 19 19	43 42 41	PURPLE GREEN YELLOW	8.15 X 15 8.45 X 15 8.85 X 15	
5.07	384-SPEED SYNCHROMESH	(3-SP)KA (4-SP)KT (3-SP)KB (4-SP)KS	8 9 9	18 20 19	BROWN BLUE NATURAL	8.15 X 15 8.45 X 15 8.85 X 15	
202	AUTOMATIC	BR, BT	7  7  17	40 40 39	BLACK BLACK BROWN	8.15 X 15 8.45 X 15 8.85 X 15	
3.23	384-SPEED SYNCHROMESH	(3 SP) KA (4 SP) KT (3 SP) KB (4 SP) KS (3 SP) KA (4 SP) KT	8 9 8	19 21 18	RED BROWN	8.15 X 15 8.45 X 15 8.85 X 15	
770	AUTOMATIC	BR, BT	7  7  7	<b>4</b> 2 41 40	GREEN YELLOW BLACK	8.15×15 8.45×15 8.85×15	
3.36	384-SPEED SYNCHROMESH	(3-SP)KA (4-SP)KT	8 8 8	20 19 19	BLUE NATURAL NATURAL	8.15 X 15 8.45 X 15 8.85 X 15	
7.40	AUTOMATIC	BR, BS, BT	17 17 17	43 42 41	PUPPLE GREEN YELLOW	8.15 X 15 8.45 X 15 8.85 X 15	
3.42	3 8 4 - SPEED SYNCHROMESH	(3-SP)KA (4-SP)KT	8 8 8	20 20 19	BLUE BLUE NATURAL	8.15 X 15 8.45 X 15 8.85 X 15	
7.50	AUTOMATIC	BJ, BN, BQ	19 19 19	43 42 41	PURPLE GREEN YELLOW	8.15×15 8.45×15 8.85×15	9775436
3.58	384-SPEED SYNCHROMESH	(3-SP)KA (4-SP)KT (3-SP)KC (4-SP)KR	8 7 7	21 18 18	RED BROWN BROWN	8.15 X 15 8.45 X 15 8.85 X 15	
7.01	AUTOMATIC	BJ, BN, BQ	19 19 19	40 39 39	BLACK BROWN BROWN	8.15 X 15 8.45 X 15 8.85 X 15	1367644
3.91	384-SPEED SYNCHROMESH	(3-SP)KC (4-SP)KR	7 7 7	20 20 19	BLUE BLUE NATURAL	8.15 X 15 8.45 X 15 8.85 X 15	
	AUTOMATIC						
4.45	384-SPEED SYNCHROMESH	(3-SP)KD (4-SP)KP	6 6 6	20 19 19	BLUE NATURAL NATURAL	8.15 X 15 8.45 X 15 8.85 X 15	

		1965	45000	

	<b>Z</b> • 6	Lung 11	SPEEDO DRIVING WORM				1965	45000	1	「	SPEEDO DRIVING WORM				
AXLE	TRANSMIS	SION ASM.	DRIV		PEEDO EN GEAR	TIRE SIZE	DRIVEN	AXLE	TRANSMIS	SION ASM.	DRIV		VEN GEAR	TIRE SIZE	DRIVEN
RATIO	TYPE	MODEL CODE	NO OF	NO OF TEETH	IDENTIFYING COLOR	TINE SIZE	GEAR	RATIO	TYPE	MODEL CODE	NO OF			TIRE SIZE	GEAR ADAPTER
	2-SPEED AUTOMATIC	MJ	17 17	38 38	BLUE BLUE	8.15 X 15 8.45 X 15	1367641		2-SPEED AUTOMATIC	MJ	17 17	42 41	GREEN YELLOW	8.15 X 15 8.45 X 15	NONE
2.56	3-SPEED AUTOMATIC	BU	19 19	40 39	BLACK BROWN	8.15 X 15 8.45 X 15	1367642	3.36	3-SPEED AUTOMATIC	BU	19 19	40 40	BLACK BLACK	8.15 X 15 8.45 X 15	9775436
	3 - SPEED SYNCHROMESH		-					-1	3 - SPEED SYNCHROMESH	QD	8	20 19	BLUE NATURAL	8.15 X 15 8.45 X 15	NONE
	2-SPEED AUTOMATIC	MJ	17 17	39 38	BROWN	8.15 X 15 8.45 X 15	NONE		2- SPEED AUTOMATIC	MJ	17 17	38 37	BLUE RED	8.15 X 15 8.45 X 15	9775436
2.78	3- SPEED AUTOMATIC	BU	19 19	43 42	PURPLE GREEN	8.15 X 15 8.45 X 15	NONE	3.55	3-SPEED AUTOMATIC	BU	19 19	43 42	PURPLE GREEN	8.15 X 15 8.45 X 15	9775436
	3-SPEED SYNCHROMESH	QE	9	18 18	BROWN. BROWN	8.15 X 15 8.45 X 15	NONE	NONE	3-SPEED SYNCHROMESH	QD QK	8	21	RED BROWN	8.15 X 15 8.45 X 15	NONE
	2-SPEED AUTOMATIC	MJ	17	36 36	WHITE	8.15 X 15 8.45 X 15	NONE		2-SPEED AUTOMATIC	MJ	17	40	BLACK	8.15 X 15 8.45 X 15	9775436
2.92	3-SPEED AUTOMATIC	BU	19 19	41	YELLOW BLACK	8.15 X 15 8.45 X 15	NONE	3.73	3-SPEED AUTOMATIC	BU	19	42	GREEN YELLOW	8.15 X 15 8.45 X 15	1367643
	3-SPEED SYNCHROMESH	QE	9	19 19	NATURAL	8.15 X 15 8.45 X 15	NONE		3-SPEED SYNCHROMESH	QG QK	8	22	GREEN	8.15 X 15 8.45 X 15	NONE
	2-SPEED AUTOMATIC	MJ	17	38 37	BLUE RED	8.15 X 15 8.45 X 15	NONE		2-SPEED AUTOMATIC	MJ	17	39 38	BROWN	8.15 X 15 8.45 X 15	1367643
3.08	3-SPEED AUTOMATIC	BU	19	43 42	PURPLE GREEN	8.15 X 15 8.45 X 15	NONE	3.90	3-SPEED AUTOMATIC	BU	19 19	40	BLACK	8.15 X 15 8.45 X 15	1367644
	3-SPEED SYNCHROMESH	QD QE	8	18 20	BROWN	8.15 X 15 8.45 X 15	NONE	NONE	3 - SPEED SYNCHROMESH	QG QK	8	23	BLACK	8.15 X 15 8.45 X 15	NONE
	2-SPEED AUTOMATIC	MJ	17	40	BLACK	8.15 X 15 8.45 X 15	NONE		2- SPEED AUTOMATIC	MJ	17	39 38	BROWN	8.15 X 15 8.45 X 15	1367644
3.23	3- SPEED AUTOMATIC	BU	19	45	LT. BLUE	8.15 X 15 8.45 X 15	NONE	4.30	3- SPEED AUTOMATIC	BU	19	43	PURPLE	8.15 X 15 8.45 X 15	1367644
1	3-SPEED SYNCHROMESH	QD QE	8	19	NATURAL	8.15 X 15 8.45 X 15	NONE		3 - SPEED SYNCHROMESH	QI QG	6	19 25	NATURAL	8.15 X 15 8.45 X 15	NONE

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#### 1965 43-44000 LESS GRAN SPORT

STAT	DESIGNATES SI TION WAGONS DESIGNATES SI	EDANS & STANDARD PORTWAGON	PEEDO NG WORM			1965 43-	-44000 I	ESS	GRAN SPOR	т	NG WORM	
AXLE	TRANSMI	SSION ASM.	1 S S	SFRIV	EEDO EN GEAR	TIRE SIZE	DRIVEN	AXLE	TRANSMIS	SION ASM.	SPEEDO CORIVEN GEAR DRIVEN	
RATIO	TYPE	* MODEL CODE	NºOF N TEETH TE		IDENTIFYING COLOR	TIRE SIZE		APTER PATIO	TYPE	* MODEL CODE	N * OF N * OF IDENTIFYING TIRE SIZE GEAR TEETH TEETH COLOR	
	AUTOMATIC	MJ&MR	17	42 41 40	GREEN YELLOW BLACK	6.95 X 14 7.35 X 14 7.75 X 14	1367641		AUTOMATIC	MJ&MR	17         40         BLACK         6.95 X 14         9775436           17         39         BROWN         7.35 X 14         9775436           17         38         BLUE         7.75 X 14         9775436	
0.50	AUTOMATIC	LJ	16	39 39 37	BROWN BROWN RED	6.95 x 14 7.35 X 14 7.75 x 14	1367641	and the second se	AUTOMATIC	LJ	16         43         PURPLE         6.95 x 14           16         42         GREEN         7.35 x 14           16         41         YELLOW         7.75 x 14	
2.56	3-SPEED SYNCHROMESH	(R) QE	9	18	BROWN	6.95 X 14 7.35 X 14	NONE	3.36	3-SPEED SYNCHROMESH	(R) QG (R) QD (E) QC	8 22 GREEN 695 X 14 8 21 RED 735 X 14 9 21 RED 735 X 14	
	4-SPEED SYNCHROMESH	KY		18 18	BROWN	7.75 × 14 6.95 × 14 7.35 × 14 7.75 × 14	NONE		4-SPEED SYNCHROMESH	KX KZ KV	8         22         GREEN         6.95 x 14         NONE           8         21         RED         7.35 x 14         7           7         18         BROWN         7.75 x 14         7	
	AUTOMATIC	LJ	16	40 39 38	BLACK BROWN BLUE	6.95 X 14 7.35 X 14 7.75 X 14	1367642		AUTOMATIC	MJ&MR	17         42         GREEN         6.95 x 14           17         41         YELLOW         7.35 X 14         9775436           17         40         BLACK         7.75 X 14         9775436	
0.70	AUTOMATIC	MJBMR	17	38 37 36	BLUE RED WHITE	6.95 × 14 7.35 × 14 7.75 × 14	NONE	1	AUTOMATIC	LJ	16         39         BROWN         6.95 X 14           16         38         BUE         7.35 X 14         9775436           16         37         RED         7.75 X 14         9775436	
2.78	3 - SPEED SYNCHROMESH	(R) QD (R) QE (E) QF	8 9 7	18 20	BROWN BLUE NATURAL	6.95 × 14 7.35 × 14 7.75 × 14	NONE	3.55 NE	3-SPEED SYNCHROMESH	(R)QG (R)QK (E)SM	8 23 BLACK 6.95 X 14 8 22 GREEN 7.35 X 14 7 19 NATURAL 7.75 X 14	
	4-SPEED SYNCHROMESH	KZ KY		18 20 19	BROWN BLUE NATURAL	6.95 X 14 7.35 X 14 7.75 X 14			4-SPEED SYNCHROMESH	KX KV	8         23         BLACK         6.95 X 14         NONE           8         22         GREEN         7.35 X 14         19         NATURAL         7.75 X 14	
	AUTOMATIC	LJ	16	42 41 40	GREEN YELLOW BLACK	6.95 X 14 7.35 X 14 7.75 X 14	1367642		AUTOMATIC	MJ& MR	17         41         YELLOW         6.95 X 14           17         40         BLACK         7.35 X 14         1367643           17         39         BROWN         7.75 X 14         13677643	
	AUTOMATIC	MJ & MR	17	40 39	BLACK	6.95 X 14 7.35 X 14	NONE		NONE 3.73 NONE	AUTOMATIC	LJ	16 41 YELLOW 6,95 X 14 16 40 BLACK 7.35 X 14 9775436
2.92	3 - SPEED SYNCHROMESH	(R) QD (E) QC (R) QE (E) QF (R) QD (E) QC	9	38 19 21 18	BLUE NATURAL RED BROWN	7.75 X 14 6.95 X 14 7.35 X 14 7.75 X 14				3-SPEED SYNCHROMESH	(R)QG (E)QH	8 24 YELLOW 6.95 X 14 8 23 BLACK 7.35 X 14 8 23 BLACK 7.55 X 14
	4- SPEED SYNCHROMESH	KZ KY KZ	8	19 21 18	NATURAL RED BROWN	6.95 X 14 7.35 X 14 7.75 X 14	NONE			4-SPEED SYNCHROMESH	кх	B         24         YELLOW         6.95 X 14         NONE           8         23         BLACK         7.35 X 14         NONE           8         23         BLACK         7.75 X 14         NONE
	AUTOMATIC	LJ	16	39 39 37	BROWN BROWN RED	6.95 X 14 7.35 X 14 7.75 X 14			AUTOMATIC	MJ& MR	17         43         PURPLE         6.95 X 14           17         42         GREEN         7.35 X 14         1367643           17         41         YELLOW         7.75 X 14         1367643	
	AUTOMATIC	MJ & MR	17	42 41 40	GREEN YELLOW BLACK	6.95 X 14 7.35 X 14 7.75 X 14	NONE	700	AUTOMATIC	LJ	16 40 BLACK 6.95 X 14 16 39 BROWN 7.35 X 14 16 38 BLUE 7.75 X 14 16 38 BLUE 7.75 X 14	
3.08	3-SPEED SYNCHROMESH	(R) QD (E) QC	8	20 19 19	BLUE NATURAL NATURAL	6.95 X 14 7.35 X 14 7.75 X 14	NONE	390	3-SPEED SYNCHROMESH	(R)ÓI (E) OJ	6 19 NATURAL 6.95 X 14 6 18 BROWN 7.35 X 14 6 18 BROWN 7.25 X 14	
	4- SPEED SYNCHROMESH	ĸz	8	20 19 19	BLUE NATURAL NATURAL	6.95 X 14 7.35 X 14 7.75 X 14			4 - SPEED SYNCHROMESH	ĸw	6 19 NATURAL 6,95 x 14 6 18 BROWN 7.35 x 14 6 18 BROWN 7.75 x 14	
	AUTOMATIC	LJ	16 16 16	41 40 39	YELLOW BLACK BROWN	6.95 × 14 7.35 × 14 7.75 × 14	NONE 9775436		AUTOMATIC	MJ&MR	17         43         PURPLE         6.95 x 14           17         42         GREEN         7.35 x 14         1367644           17         41         YELLOW         7.75 x 14         1367644	
323	AUTOMATIC	MJ & MR	17	38 43 42	BLUE PURPLE GREEN	6.95 X 14 7.35 X 14 7.75 X 14		4.30	AUTOMATIC	LJ	16         40         BLACK         6.95 X 14           16         40         BLACK         7.35 X 14           16         38         BLUE         7.75 X 14	
225	3- SPEED SYNCHROMESH	(R) QD (E) QC	8	41 21 20	YELLOW RED BLUE	8.25 x 14 6.95 x 14 7.35 x 14 7.75 x 14	NONE	4.50	3-SPEED SYNCHROMESH	(R)QI (E)QJ	6         21         RED         6.95 x 14           6         20         BLUE         7.35 X 14         NONE           6         20         BLUE         7.75 X 14         NONE	
	4-SPEED SYNCHROMESH	(E) QC KZ	8 8 8	20 21 20 20	BLUE RED BLUE BLUE	7.75 X 14 6.95 X 14 7.35 X 14 7.75 X 14			4-SPEED SYNCHROMESH	ĸw	6         21         RED         6.95 X 14         NUNE           6         20         BLUE         7.35 X 14         14           6         20         BLUE         7.75 X 14         14	

## 1965 - 44000 GRAN SPORT

AXLE	TRANSMISS	SION ASM.	DRIVIN	DRIV	SPEEDO EN GEAR		DRIVEN
RATIO	TYPE	MODEL CODE		Nº OF TEETH	IDENTIFYING	TIRE SIZE	GEAR
	AUTOMATIC	NK	17	40	BLACK	7.75 X 14	1367641
2.56		KF	8	19	NATURAL	7.75 X 14	9775739
	4 - SPEED						
	SYNCHROMESH						
	AUTOMATIC	NK	17	36	WHITE	7.75 X 14	
2.78	3 - SPEED SYNCHROMESH	KF	8	19	NATURAL	7.75 X 14	540474
	4 - SPEED	KS	9	19	NATURAL	7.75 X 14	
	SYNCHROMESH AUTOMATIC	NK	17	38	BLUE	7.75 X 14	
	AUTOMATIC			50	BLUE	1.10 × 14	
2,92	3 - SPEED	KF	8	18	BROWN	7.75 X 14	
2.52	SYNCHROMESH						
	4 - SPEED SYNCHROMESH	кт	8	18	BROWN	7.75 X 14	
	AUTOMATIC	NK	17	40	BLACK	7.75 X 14	
			-				
3.08	3 - SPEED	KF	8	19	NATURAL	7.75 X 14	
	4 - SPEED	кт	8	19	NATURAL	7.75 X 14	
	SYNCHROMESH						
	AUTOMATIC	NK	17	42	GREEN	7.75 X 14	
7 0 7							
3.23	3- SPEED SYNCHROMESH	KF	8	20	BLUE	7.75 X 14	
	4 - SPEED	кт	8	20	BLUE	7.75 X 14	
	SYNCHROMESH AUTOMATIC	NK	17	38	BLUE	7.75 X 14	9775436
3.36	3 - SPEED	KF	8	20	BLUE	7.75 X 14	
	SYNCHROMESH 4 - SPEED						
	SYNCHROMESH	KR	7	18	BROWN	7.75 X 14	
	AUTOMATIC	NK	17	40	BLACK	7.75 X 14	9775436
3.55	3 - SPEED SYNCHROMESH	KF	8	19	NATURAL	7.75 X 14	535617
	4 - SPEED	KR	7	19	NATURAL	7.75 X 14	
	SYNCHROMESH AUTOMATIC	NK	17	70		7.75 X 14	1367643
	AUTOWATIC	IAIV	17	39	BROWN	1.1.5 × 14	1301043
3,73	3 - SPEED	KF	8	20	BLUE	7.75 X 14	535617
5.15	SYNCHROMESH						000017
	4 - SPEED SYNCHROMESH	KR	7	20	BLUE	7.75 X 14	
	AUTOMATIC	NK	17	41	YELLOW	7.75 X 14	1367643
3.90	3 - SPEED	KF	8	19	NATURAL	7.75 X 14	535616
	SYNCHROMESH 4 - SPEED	KR	7	21	RED	7.75 X 14	
	SYNCHROMESH						
	AUTOMATIC	NK	17_	41	YELLOW	7.75 X 14	1367644
4.30	3 - SPEED	KF	8	21	RED	7.75 X 14	535616
4.00	4 - SPEED	KP	6	20	BLUE	7.75 X 14	
2	SYLICHROMESH						

BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 19, 1965

TO ALL BUICK DEALERS

SUBJECT: Rear Axle Failures Due to Loss of Lubricant -All 1964-1965 Models

Failure on the part of some dealers to securely tighten rear axle filler plugs during New Car Pre-Delivery Service is resulting in an increasing number of axle failures due to loss of lubricant. <u>Failure to perform this simple check can</u> <u>destroy not only the rear axle, but customer satisfaction as</u> well.

The New Car Pre-Delivery Schedule specifically states that axle lubricant level should be checked and brought to the proper level if necessary. At this time, the filler plug should be tightened to the recommended torque of 30 ft. 1bs.

Because this check is a dealer responsibility, AFA's will not be accepted for failed rear axles caused by insufficient lubricant due to dealer not checking level, or to a missing or loose filler plug, unless the failure occurred prior to New Car Pre-Delivery Service.

TIM mc Orocken

W. M. McCrocklin General Service Manager

EJH:dm

## BUICK DEALER SERVICE INFORMATION



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File Under Group No.

6-10 Dealer Letter No.

65-185

FLINT, MICHIGAN 48550

READ A	ND INITIAL
Dealer	The set in the set
Serv. Mgr	
Parts Mg	
Others	
-	12.11
	N TO DE LA

July 30, 1965

TO: ALL BUICK DEALERS

BUICK MOTOR DIVISION

SUBJECT: Rear Axle Housing Bracket Welds - 1965 Skylark Sportwagons (Product Improvement Modification)

**GENERAL MOTORS CORPORATION** 

Sportwagons Involved: All 1965 - 44255-44265-44465 Models up to and including Vehicle Identification #H293588 Flint and Z127117 Fremont

Operations to be Performed:

Rear axle housing bracket weld inspection. Welding of brackets if required.

Mailings to Dealers:

Two separate mailings will be made:

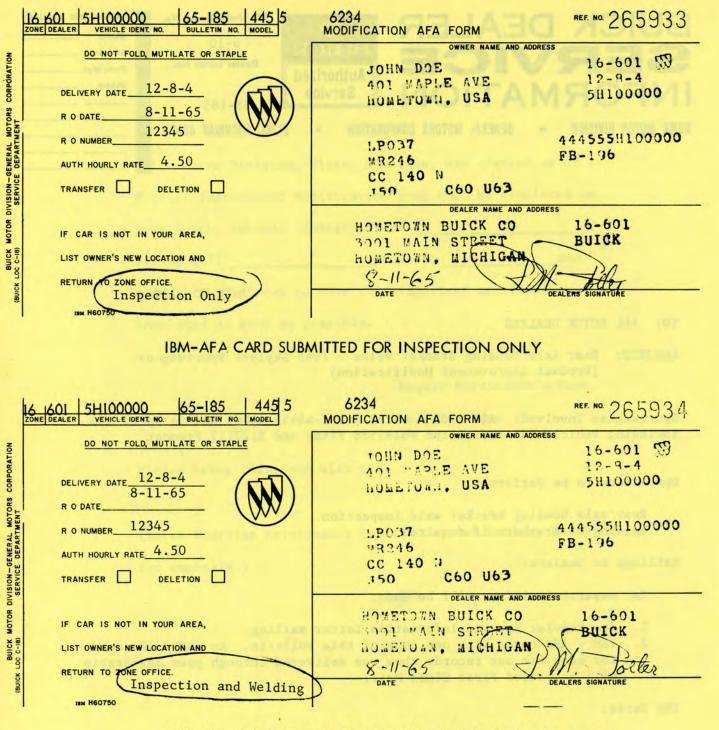
- 1. The regular Service Information Letter mailing.
- IBM AFA cards with one copy of this bulletin. An IBM AFA card for each car our records show was delivered through your dealership will be mailed First Class Mail.

IBM Cards:

This card is your AFA for the .3 hour labor involved to inspect the bracket welds on the cars involved. If the brackets must be welded, a notation on the card to this effect, will allow 1.2 hours labor for the welding operation. See illustrations below for examples.

AFA Credit Allowances:

- 1. Inspection of bracket welds .3 hours.
- 2. Welding if necessary 1.2 hours additional (1.5 hour total).



IBM-AFA CARD SUBMITTED FOR INSPECTION AND WELDING

MAIL THE CARD TO YOUR ZONE SERVICE MANAGER-DO NOT MAIL TO FLINT Cards must be completely filled out, signed and received by your Zone Service Manager free of tears, wrinkles, folds or staples before Dealer Parts Account can be credited.

If, for some reason you do not wish to submit an AFA (using the IBM card) or you cannot locate the vehicle owners, <u>do not destroy card</u> but return it to your Zone Service Manager with appropriate notation.

Cars Traded or Transferred to Another Dealer:

If a card is received for a car that has been transferred or traded to another dealer in the same zone, or if the owner resides in some other locality, the card should be immediately sent to the dealer to whom the car was traded or transferred. He will then perform the work, change the dealer code number on the IBM card and thus receive AFA credit for the work performed. If the owner of the car resides in or has moved to a location outside the selling dealer's zone, the card should be sent to your zone office for transfer to another zone. <u>DO NOT SEND THEM</u> BACK TO FLINT.

Procedure:

 Inspection - Cars are to be inspected for welding of both left and right axle housing mounting brackets for the lower control arms and shock absorbers. See illustration. If any of the three radial welds of the bracket to the axle housing are omitted, refer to the attached illustration for welding instructions.

NOTE: No welds are necessary <u>inside</u> the box section of the bracket.

- 2. Welding
  - a. Raise car on hoist.
  - b. Arc weld for approximately 2" the three radial attachments of the bracket to axle housing as shown in the illustration.

Welding Technique and Material

Welding Rod - 5/32" drag type - Mild Steel Powder Arc Welder Setting - 140 to 190 Amps

(1) D.C. Reverse Polarity - Class E 6010

Typical Brands of Class E 6010 welding rod:

14 Airco	(Easy Arc)
5 Lincoln	(Fleet Weld)
14 A. O. Smith	(F.W.)

(2) A.C. - D.C. Class E 6014 or 7014

Typical Brands of Class E 6014 or 7014 welding rod:

14 Airco	(Easy Arc)
14 Lincoln	(Fleet Weld)
15 A. O. Smith	(F.W.)

Surface must be clean and free of rust or paint - do not weld over previous weld.

CAUTION: PROTECT CHASSIS SPRINGS FROM WELD SPATTER. WELD SPATTER ON CHASSIS SPRINGS CAN CAUSE EARLY FAILURE:

AS THIS OPERATION MUST BE PERFORMED NEAR THE FUEL TANK, PRE-CAUTIONS MUST BE TAKEN TO SAFEGUARD AGAINST FIRE.

An approved sample letter that may be used to contact owners is included with this letter.

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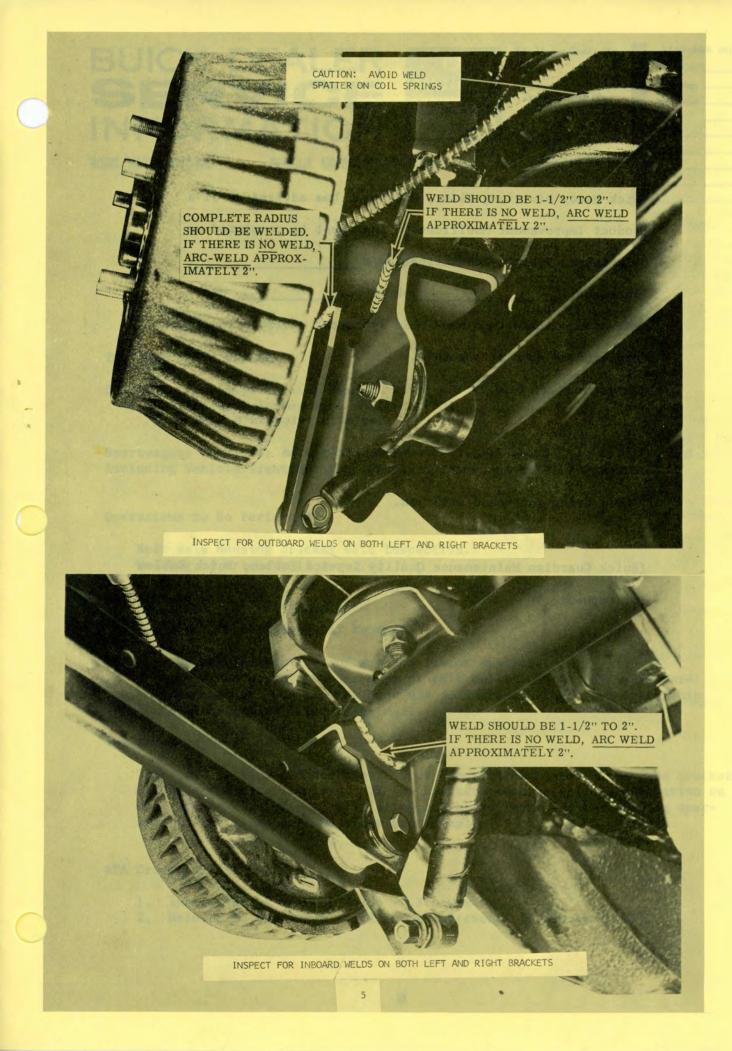
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W. M. McCrocklin General Service Manager

WMMcC/mp

Attachments

4



Buick Motor Division, Flint, Michigan, has advised us of a Product Improvement Modification that must be completed on your Buick, Vehicle Identification #\_\_\_\_\_\_. Please call\_\_\_\_\_\_phone no.\_\_\_\_\_and make an appointment to have this important modification completed as soon as possible.

> Dealer Serviceman's Name Dealer's Name

Please bring this card with you.

(Buick Guardian Maintenance Quality Service Emblem, Buick Emblem for emphasis.)



## BUICK DEALER SERVICE INFORMATION

Dealer	File Under
Letter No.	Group No.
65-7	7-1

#### BUICK MOTOR DIVISION, GENERAL MOTORS CORPORATION, FLINT 2, MICHIGAN

September 18, 1964

#### Important Information for Your New Car Pre-Delivery Department

TO ALL BUICK DEALERS

#### SUBJECT: 1965 Skylark Wheel Cover Installation

The 1965 Skylark standard wheel covers may be damaged during installation if the following procedure is not used.

Step 1. If wheel cover is difficult to install and cannot be installed as indicated in Figure 1, it will be necessary to bend the edge of the retaining flange as shown in Figures 2 and 3.



Step 2. If necessary, rework cover flange at the eight locations shown in Figure 2 and 3. Then install cover following instructions in Figure 1.

E. J. Hresko Manager, Technical Service

Bend edge of cover retaining flange as shown in Figure 3 at the eight (8) locations indicated by arrows.



Suptember 18, 1964

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wheel caves dicated in Figure 1, It will be necessary to band the orige of



Bend f lange down toward center of cover as shown — (8 places).

FIGURE 3

Dealer Letter No. File Under Group No.

65-100

7-3

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

BUICK

Authorized

Service

February 12, 1965

TO ALL BUICK DEALERS

BUICK DEALER

SERVICE

VFORMATION

SUBJECT: Interference Between Brake Drum Balance Weights and Optional Chrome Wheels - 1965 43000 - 44000

The Engineering Department, advised us that a small percentage of the brake drums used on Specials and Skylarks will have two layers of balance weights as shown in Figure 1. When a drum balanced in this manner is installed on a car equipped with optional chrome-plated wheels, it is possible that an interference condition may exist between the wheel and the balance weight. This interference will not permit the wheel to seat properly and could cause car shake, improper tracking, tire wear, and etc.

#### CORRECTIVE ACTION

It is recommended that all Specials and Skylarks equipped with chrome wheels be checked during the New Car Pre-Delivery service in the following manner:

- 1. Note the number of balance weights on the drum by looking through the slots between the spokes of the wheel. See Figure 2.
- If two or more weights have been used to balance the drum, remove wheel and check for two layers of weights.
  - A. If two layers of weights have been used, replace the drum with one using a single layer of weights.
  - B. If the original drum has only a single layer of weight, re-install wheel.

7-3

3. Steps 1 and 2 should be performed at all 4 wheels.

#### EARLY GRAN SPORT MODELS

no bel fadi

It is possible that some early Gran Sport Skylarks with the chrome wheel option may have this interference condition. Therefore, it is recommended that cars built prior to the serial numbers listed below be checked when they are brought in for servicing.

ASSEMBLY PLANT
Baltimore
Kansas City
Fremont
Flint

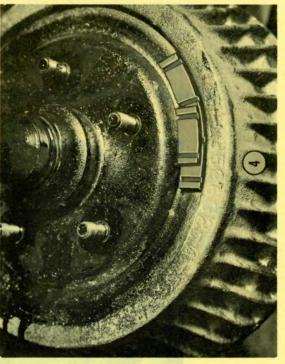
E.J. Hresko

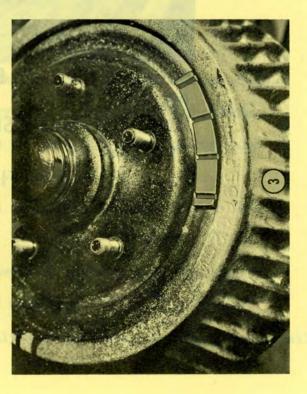
Manager, Technical Service

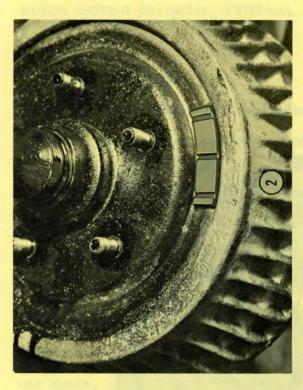
WGH



# DO NOT USE WITH CHROME WHEELS







DRUMS BALANCED WITH ONE LAYER OF WEIGHTS AS SHOWN IN 1, 2, AND 3, CAN BE USED WITH CHROME WHEELS.

COUNT NUMBER OF BRAKE DRUM WEIGHTS BY LOOKING THROUGH SLOTS IN WHEELS.

FIGURE 2

### Dealer Letter No. 🗮 File Under Group No. BUICK DEALER N BUICK SERVICE Authorized 65-152 8-2 INFORMATION Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 23, 1965

### TO ALL BUICK DEALERS

SUBJECT: Rubber Spacer Located Between Mast Jacket and Toe Pan Plate Slips Out of Place

1965 Models 45000, 46000 and 48000 Series With Tilt Columns and

43000 and 44000 Series With 3 Speed Manual Transmissions

If a customer complains of one or more of the following symptoms it is suggested that the position of the rubber spacer (see illustration) be checked.

### SYMPTOM FOR 45000, 46000 & 48000 SERIES WITH TILT WHEEL

Hard steering moments or binding when the steering wheel is turned

### SYMPTOM FOR 43000 & 44000 SERIES WITH 3 SPEED MANUAL TRANSMISSION

Difficulty in shifting gears and noticeable shake at steering wheel when shift lever is placed in gear, or rattling noise from area where mast jacket goes through floor.

On 45000, 46000 & 48000 Series cars the effect of hard steering moments or binding when the steering wheel is turned may result from lack of support at the lower end of the mast jacket. This happens when the rubber spacer is not correctly located during installation of the mast jacket, and becomes pushed forward when the toe pan plate is screwed in place. In this situation the mast jacket rests against the neck of the toe pan plate and is not centered about the steering shaft (see upper portion of illustration). When the steering shaft rotates it rubs against the shift tube.

On 43000 & 44000 Series cars the difficulty in shifting and excessive steering wheel shake is again a result of a lack of support at the lower end of the mast jacket, and is caused by the rubber spacer being incorrectly located. Under these circumstances, a large part of the support of the lower end of the mast jacket is transferred to the flexible coupling (rag joint coupling). Also to a limited extent, the stress of support is transferred to the shift linkage, and this creates the possibility of binding.

To check location of rubber spacer on 45000, 46000 & 48000 Series cars move the rubber boot up the mast jacket and observe if outer edge of spacer is visible. On 43000 & 44000 Series cars, no rubber boot is used, therefore location of spacer is clearly visible.

To correct either situation, proceed as follows:

- On 45000, 46000 & 48000 Series cars unscrew toe pan plate and move it up mast jacket. Pull rubber spacer back, coat spacer with silicone grease, and slide toe pan plate over spacer. <u>Center mast jacket</u> about steering shaft and secure to floor. Be sure spacer is located approximately as shown in lower portion of illustration.
- 2. On 43000 & 44000 Series cars pry off plastic cover, unscrew toe pan plate, and move it up mast jacket. Reposition rubber spacer and coat it with silicone grease. Slide toe pan plate back over rubber spacer and secure it to floor.
  - NOTE: Do not force mast jacket out of line in order to get screw holes in toe pan plate to line up with screw holes in floor of car. The holes in toe pan plate are oversize to provide for variations in assembly.

Also check flexible coupling by rotating it and observing that there is no flexing or undue stress condition between coupling halves.

Flat Rate Time Allowable: .4 Hour

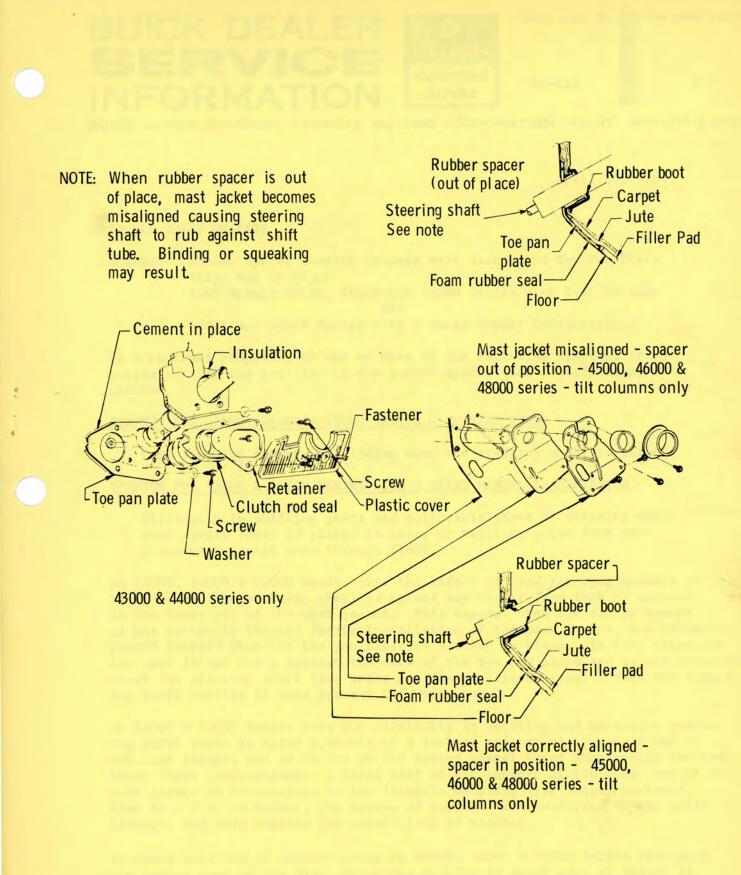
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. J. Hresko

Manager, Technical Service

On =3000 & 4A000 Series cars the difficulty in shifting and excessive stanting wheel state is again a rowale of a lack of support at the lower and of the entri (acket, and is dauged by the rubber spacer being incorrectly locate these sircumstances, a large part of the support of the lover end of t meet jacket is transferred to the flexible coupling (rag joint coupling). Mice to a limited extent, the stream of support is transferred to the shift itseaps, and (its created to the flexible doupling (rag joint coupling).

The server location of public sphere on 45000, 40000 6 48000 Series outs move the subbar boot up the mest inclus and charrys if outs' edge of spanes in misible. On 40000 & 44000 Series case, as remost book is kand, Sheverare Security of spares is classic costs.





BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 30, 1965

TO ALL BUICK DEALERS

SUBJECT: Squeak in Front End Linkage 1962 thru 1965 Models - 43-44-45-46-48000 Series SUPERSEDES BULLETIN NO. 63-113

If a customer complains of a squeak in the steering linkage which cannot be corrected by lubrication, it may be due to a dry intermediate rod ball stud or studs. Inasmuch as there are no grease fittings at these points, correction of the problem requires two fittings to be installed (see illustration).

The following procedure outlines the steps necessary to affect a correction:

- Obtain two 1/4 28 self-tapping lube fittings (Group No. 6.230, Part No. 1350444).
- Determine if car is equipped with Saginaw or Thompson linkage (see illustration).
  - NOTE: Thompson type intermediate rods are easily recognizable by their tapered sockets.

On 1964 Specials, a first and second type Saginaw intermediate rod was used during assembly. The second type rod has a larger socket. If there is any question on what linkage is used, refer to illustration.

- Place wheels in straight ahead position and center punch indentations into socket ends of intermediate rod at the applicable point as specified in illustration.
- 4. Using a 7/32" drill, carefully drill hole through wall of intermediate rod socket until drill bottoms on stud inside socket. IMPORTANT: Drilled hole must be open to inside of socket in order to lubri-

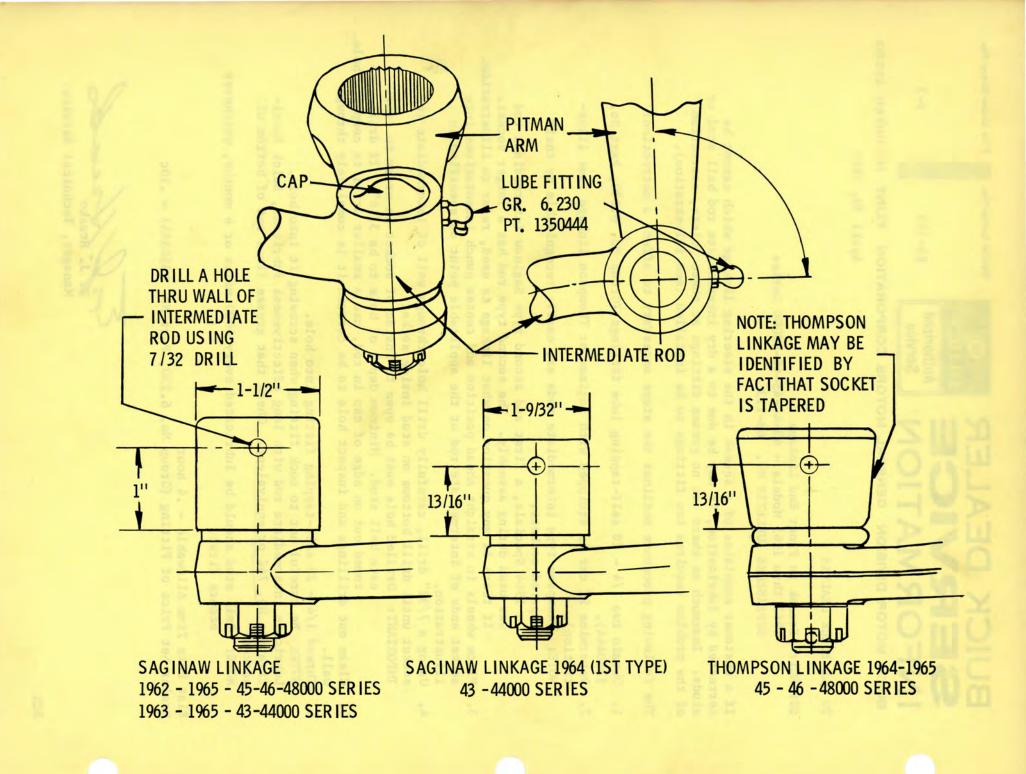
cate ball stud. Minimum depth of hole to be 3/16". If drill bottomed out on edge of cap in rod, use a smaller drill to complete hole.

- Clean out drillings and inspect hole to be certain it is completely through wall.
- 6. Thread 1/4 28 self-tapping fitting into hole.
- NOTE: Be careful not to cock fitting when screwing it into hole.
- Lubricate intermediate rod with long effectiveness lubricant, Buick Specification No. 742 or equivalent. Check that grease flows out of bottom of socket.
  - NOTE: Ball stud should be lubricated every 6000 miles or 6 months, whichever occurs first.

Flat Rate Time Allowable - .4 hour Dealer Net Price of Fitting (Group No. 6.230, Part No. 1350444) - .10¢

J. Hresko

Manager, Technical Service



BUICK DEALER	READ AND INITIAL Dealer
SERVICE Authorized Dealer Letter No.	Serv. Mgr Parts Mgr Others
INFORMATION Service 65-196	
BUICK MOTOR DIVISION • GENERAL MOTORS CORPORATION • FLINT, MICHIGAN 48550	
October 1, 1965	

TO ALL BUICK DEALERS

SUBJECT: A New Design Shift Lever Spring - 1965 43-44000 Series Tilt Steering Wheel Cars

The leaf spring used to provide load on shift lever has been found to fail in one of two ways: The head of the screw securing the spring in place breaks, or the spring itself breaks.

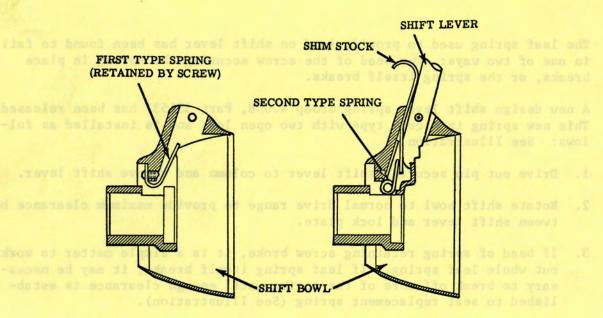
A new design shift lever spring Group 4.008, Part 391537 has been released. This new spring is a coil type with two open legs and is installed as follows: See Illustration.

- 1. Drive out pin securing shift lever to column and remove shift lever.
- Rotate shift bowl to normal drive range to provide maximum clearance between shift lever and lock plate.
- 3. If head of spring retaining screw broke, it is a simple matter to work out whole leaf spring. If leaf spring itself breaks, it may be necessary to break off more of the spring until enough clearance is established to seat replacement spring (See Illustration).
- 4. Insert replacement spring as shown.
- 5. Using a piece of shim stock approximately 3/8 inch wide by 1/16 inch thick, place it over top of new spring; then install shift lever using shim to work underside of shift lever over top of spring.
- 6. Install shift lever pin and work lever through various positions to check operation.

Hresko

Manager, Technical Service

GLS



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

TO ALL BUICK DEALERS

February 24, 1965

Product Improvement Modification

SUBJECT: Brake-Fuel Line Clip Installation and Brake Line Inspection

CARS INVOLVED: 1964 Skylark Station Wagons and Flint Built 1965 Sportwagons up to and including Vehicle Identification No. 5H186706.

MECHANICAL OPERATION TO BE PERFORMED:

A. Install furnished brake-fuel line clip (Group 3.162 - Part #3753771) as follows:

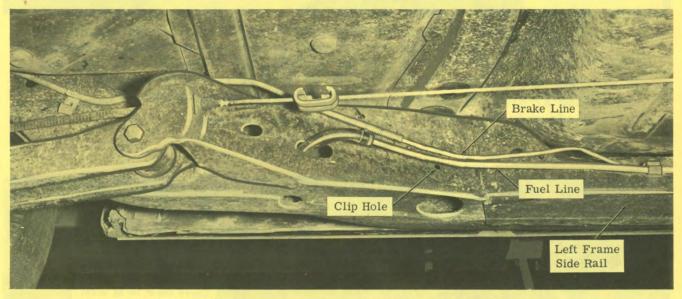


Illustration 1 - With car on hoist, locate hole in left frame side rail

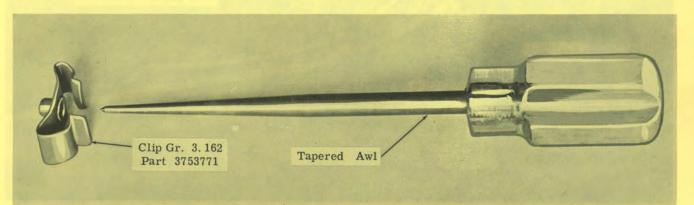


Illustration 2 - Clip to be installed and installation tool

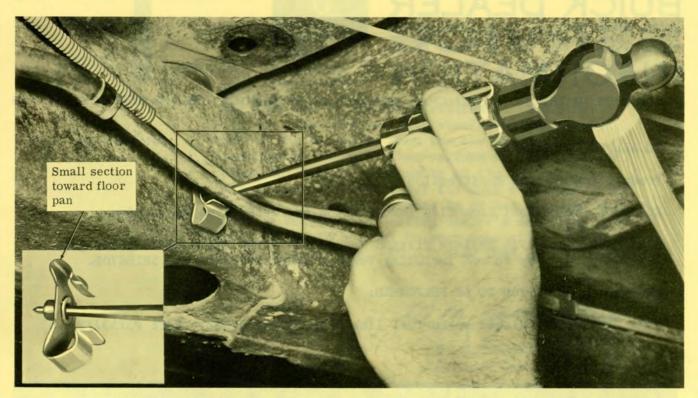


Illustration 3 - Position clip in hole as shown. Insert awl through small hole in clip and rap awl with hammer several times to expand clip. Remove awl from clip by working handle from side to side and pulling outward. Check clip to be sure it is firmly attached to frame side rail. If necessary repeat installation procedure.

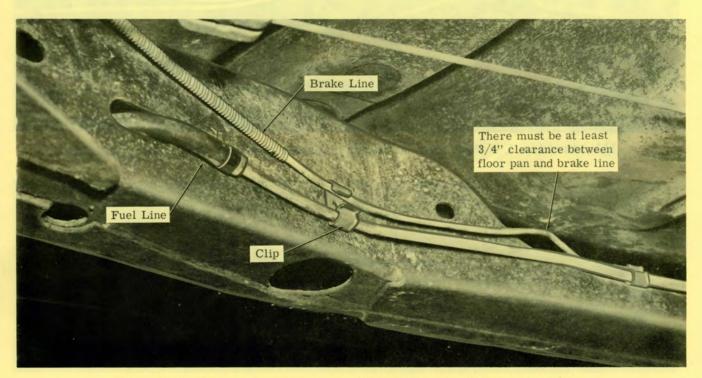


Illustration 4 - Secure brake line and fuel line into clip.

в. Inspect all brake lines to be sure they are properly installed in clips and for any possible wearing contact, especially in the area on the left frame side rail. (There should be five clips, including one just installed, retaining line to frame rail.) Provide clearance from area of contact. There must be at least 3/4" clearance between floor pan and brake line at all areas along left frame side rail. If a line has loss of metal due to rubbing, brake line must be replaced.

- MAILING TO DEALERS: Two separate mailings will be made to each dealer. 1. The normal Dealer Service Information Letter mailing (third class mail).
  - 2. AFA-IBM cards for each Buick delivered through your dealership and requiring this modification and a brake-fuel line clip for each of these vehicles.
    - Note: We are sending two (2) extra clips to each dealer for emergency or tourist use. Zone Service managers will be given additional surplus clips.

Do not lose or mutilate these cards; besides being your AFA form, they are necessary for transfers and for later evidence to prove that the work was performed.

IBM CARDS:

This card is your AFA - no other AFA form is necessary. Merely complete card and sign when the work has been completed. Mail the card to:

> Mr. R. E. Piornack Buick Motor Division General Motors Corporation Service Claims Department Building #78 Flint, Michigan - 48550

AFA CREDIT: Buick dealers will be credited \$.02 for the part. This represents 25% of the dealer net price of the clip which is \$.06. The flat rate labor allowance will be .3hr.

IDENTIFYING VEHICLE: To establish that a particular vehicle has had this modification performed, a punch mark should be made on the left front body hinge-pillar vehicle identification number plate below the "U" of the word "Buick". See illustration.

CARS TRADED OR TRANS-FERRED TO ANOTHER DEALER:

If a card and clip are received for a car that has been transferred or traded to another dealer in the same zone, or if the owner resides in some other locality, the card and clip should be immediately sent to the dealer to whom the car was traded or transferred. He will then perform the installation, change the dealer code number on the IBM card and thus receive AFA credit for the work performed. If the owner of the car resides in or has moved to a location outside the selling dealer's zone, <u>the card</u> <u>AND clip</u> should be sent to your zone office for transfer to another zone. DO NOT SEND THEM BACK TO FLINT.

Wm me crocklas

W. M. McCrocklin General Service Manager

WMMcC/mdp



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

March 11, 1965

TO ALL BUICK DEALERS

Product Improvement Modification

SUBJECT: Rear Brake Pipe Inspection and Repositioning to Avoid Contact With Tail Pipe(s)

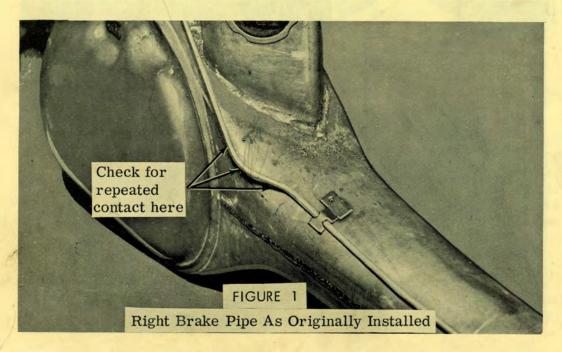
CARS INVOLVED:

Flint Factory 04	1965	46000	and	48000	up	to	and	including	5H183706
Flint Factory 44	1965	11			=		11		5H918802
Atlanta Assy. Plant	1965	11		11	"	"	н	11	5D109676
Kansas City Assy. Plant	1965	11		u		**	11	11	5X128786
South Gate Assy. Plant	1965	11	11	"	"	11		п	5C110254
Wilmington Assy. Plant	1965		"	"				11	5Y122968

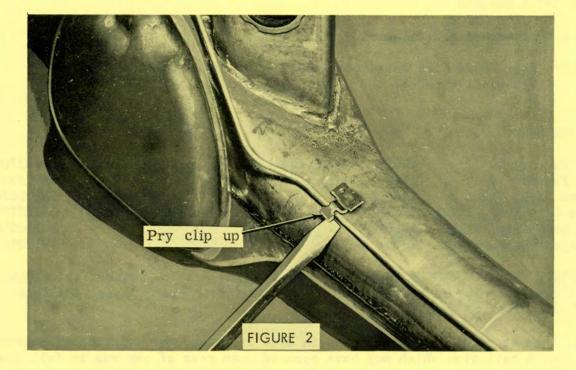
MECHANICAL OPERATION TO BE PERFORMED: Steps A and B below which will result in the repositioning or replacement of <u>all</u> right rear brake pipes, and left rear brake pipes on dual exhaust jobs.

A. Inspect right rear brake pipe in area indicated for evidence of contact with tail pipe which may have occured when rear of car was in full downward position; also inspect left brake pipe in same area on dual exhaust jobs. See Figure 1. Use a mirror, if necessary, to check brake pipe on its upper surface.

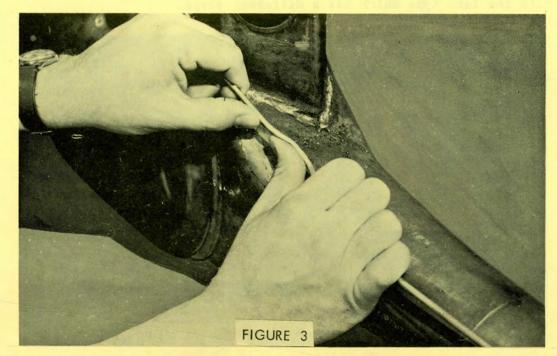
If there are signs of repeated contact, the brake pipe must be replaced with the late type which has a different shape.



B. If no contact is evident, or if only an occasional contact is evident the brake pipe need not be replaced; however, it still <u>must</u> be repositioned.



 Pry up clip to disengage pipe. See Figure 2. Bend pipe or pipes forward against axle housing and re-engage in clip. See Figures 3 and 4. Bend clip down to original position to firmly hold pipe against axle housing.



-2-

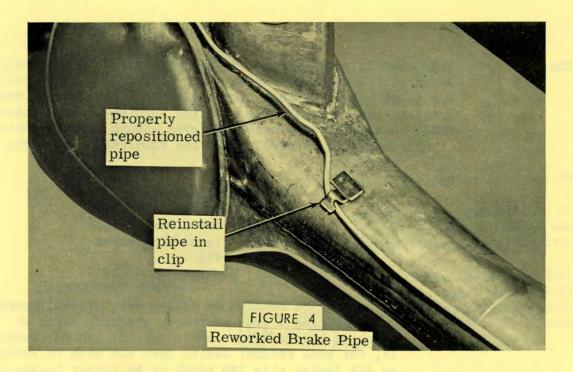
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2. Inspect <u>all</u> brake lines to be certain they are properly routed and installed in clips.

MAILING TO DEALERS:

RS: Three separate mailings will be made to each dealer.

 AFA-IBM cards for each Buick delivered through your dealership and requiring modification. (First Class Mail)

Do not lose or mutilate these cards; besides being your AFA form, they are necessary for transfers and for later evidence to prove that the work was performed.

- 2. The normal Dealer Service Information Letter mailing. (Third Class Mail)
- 3. A small supply of right brake pipes and, if sufficient dual exhaust jobs were delivered through your dealership, a small supply of left brake pipes.

It is anticipated that less than 10% of the brake pipes will have contact with tail pipes. Therefore, to insure stock availability in case contact is encountered, we are sending you brake pipes for approximately 10% of the vehicles delivered through your dealership. If all these pipes are not required by you to complete this program, your Zone Service Manager will advise disposition. We have also made arrangements to have stock of these parts available at all parts warehouses in case the dealer finds he needs more than the 10% allotment. Dealers may order these on a No Charge Basis from their local Parts Warehouse.

Right brake pipe	-	Group 4.685	Part #1375734
Left brake pipe		Group 4.685	Part #1375735

IBM CARDS:

This card is your AFA for the <u>labor</u> involved in examining and repositioning both brake pipes on a dual exhaust job. For <u>labor only</u> on either a single or dual exhaust job merely complete the card and sign when the work has been completed. NOTE: A signature is necessary even though protect-o-plate imprinter is used. Mail the completed and signed card to:

> Mr. R. E. Piornack BUICK MOTOR DIVISION General Motors Corporation Service Claims Department Building #78 Flint, Michigan 48550

Cards must be completely filled out, signed, received by Mr. Piornack free of tears, staples, folds or wrinkles before dealer parts account can be credited. If, for some reason, dealer does not wish to submit an AFA (using this IBM card) or he cannot locate the vehicle owner, DO NOT DESTROY CARD, but return it to the Zone Service Manager with an appropriate notation.

AFA CREDIT:

 LABOR ONLY for examining and repositioning brake pipe: Dealers submitting AFA-IBM cards will be credited at flat rate allowance of .3 hour for either a single or dual exhaust job.

2. PARTS AND LABOR for replacement of right or left brake pipe assembly:

If a brake pipe is replaced, in addition to the .3 hour allowed on the AFA-IBM card, an AFA should be submitted to obtain additional credit.

- A. One pipe replaced .6 hour labor plus 25% of dealer net price of either 1375734 or 1375735.
- B. Both right and left pipes replaced .9 hour labor plus 25% of dealer net price of both 1375734 and 1375735.
  - NOTE: Dealer net price (for record purposes) of 1375734 and 1375735 is \$.48. Orders of these parts will be handled on a No Charge Basis.

Submitting AFA:

List group number 4.865, but do not list part number of brake pipes. List \$.12 under net items for the one pipe replaced or \$.24 for two pipes replaced. List straight time .6 hour for one pipe or .9 hour for both pipes under flat rate operation number.

As explanation, state that this work was done per Dealer Letter 65-125 <u>AND</u> show IBM card reference number which appears in upper right hand corner of IBM card.

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

March 12, 1965

TO ALL BUICK DEALERS

SUBJECT: Replacement Brake Pipes

Since brake pipe assemblies are not regularly available as service parts, it is therefore necessary to order service bulk tubing and make up any pipe assembly as needed. All brake pipes <u>must</u> be made of steel tubing with the <u>ends</u> double lap flared.

<u>CAUTION:</u> <u>Never use copper tubing because it is subject to fatigue cracking</u> which would result in brake failure.

To make up a brake pipe assembly, proceed as follows:

- A. Procure the recommended tubing and <u>steel</u> fitting nuts of the correct size. Use outside diameter to specify size. Steel tubing is available under Part No. 8.964 - 1341894 (3/16"). Steel fitting nuts are available under Part No. 8.963 - 137396 (3/16"). When splicing in a section, it is necessary to use an inverted flare union. The 3/16" union is not available from the Parts Department but is available from jobbers using Weatherhead - Part No. 300 x 3, or Imperial - Part No. 42W 3/16".
- B. Cut tubing to length.
  - 1. The correct cutting length may be determined by measuring the old pipe using a cord and adding 1/8" for each double lap flare.
  - 2. When replacing a <u>section</u> of a pipe, 1/8" for <u>each</u> double lap flare must be added to splice section. Example: A 12" section is being replaced. An additional 1/4" must be added to the new section for flaring the new section, <u>PLUS</u>, 1/4" for flaring cut ends of the original pipe. The total cutting length of new section before flaring will be 12-1/2".
- C. Double lap flare tubing ends using a suitable flaring tool such as Kent-Moore J-8051 or Imperial-Eastman 93FB. Be sure to follow manufacturer's instructions for particular tool used.
  - NOTE: Double lap flaring tool <u>must</u> be used as single flaring tools cannot produce a flare strong enough to hold the necessary pressure.

D. Bend new brake pipe assembly to match old brake pipe using a tubing bender.

E. J. Hresko

Manager, Technical Service

PHH

BUICK DEALER SERVICE INFORMATION	BUICK Authorized Service	File Under Group No. 65–180 Dealer Letter No. 9–6	READ AND INITIAL Dealer Serv. Mgr Parts Mgr Others
BUICK MOTOR DIVISION • GENERAL MOTORS CORP	ORATION • FL	LINT, MICHIGAN 48550	1w 9 1965

TO ALL BUICK DEALERS

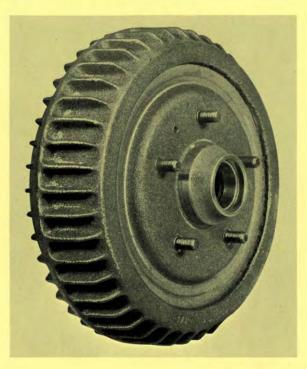
SUBJECT: New Front Brake Drum Assembly - 1965 Special and Skylark Series

A new front brake hub and drum assembly was released for production during the month of May, 1965, for use on all Special and Skylark Series. This new drum has an outside configuration closely resembling the 1965 LeSabre front drum and has a central rib with fins on each side as shown in illustration.

These new drums have replaced the first type drums for Service use and will be available through the Parts Department approximately July 15, 1965, under Group 6.306, Part #1377136.

The late type drums are compatible and interchangeable with the first type drums, either singularly or in pairs.

If an occasion should occur where a warranty replacement of a drum assembly is required, Zone approval must be obtained.



J. Hresko

Manager, Technical Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

October 2, 1964

TO ALL BUICK DEALERS

SUBJECT: 1965 Gas Gauge Tank Units (All Series)

Gas gauge tank units in 1964 and prior Buicks had a 30 ohm resistance to ground when the float was at the full position. In all series 1965 Buicks, however, the tank units have a 90 ohm resistance at the full position.

Some cases have been found where a 1964 tank unit was accidentally installed in a 1965 Special or Skylark. During New Car Pre-Delivery Inspection, if you find a Special in which the gas gauge read approximately 1/3 full with a full tank, you may have this difficulty.

To check, open the circuit to the tank unit (tan wire). If the dash unit now reads full or overfull, the trouble is probably in the tank unit. Remove the tank unit. If it is a 1965 unit, "90 OHMS" will be printed clearly on the rheostat. A 1964 tank unit will not have any marking.

To re-emphasize:

- 1. All 1965 gas gauge tank units are new. 1964 units have a "full" resistance of 30 ohms and are unmarked; 1965 units have a "full" resistance of 90 ohms and are so marked.
- 2. When replacing either a dash or a tank unit in a 1965 Buick, make certain it is not a past model part.
- 3. When using a tank unit for testing purposes in a 1965 Buick, make certain it is a 1965 part.

E. J. Hresko Manager, Technical Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

November 30, 1964

TO ALL BUICK DEALERS

SUBJECT: Repair of Flat Wiring - 1963, 1964 and 1965 Styles with Flat Wire

The following procedures are recommended for repairing damaged areas in flat body wire harnesses.

### A. Minor Repair

Scraped insulation with little or no damage to copper wire.

- 1. Disconnect battery cable.
- 2. Carefully separate damaged strand(s) from each other.
- 3. Strip back insulation around damaged area, (View A, Figure I) and clean exposed copper wire.

NOTE: If a small crack or hole is visible, solder damaged area.

- 4. Tape each damaged strand(s) separately (View B, Figure I).
- 5. Connect battery cable.

### B. Major Repair

If a wire harness is damaged beyond a point where it is practical to perform a minor repair, splice in a new section of round wire as follows:

- 1. Disconnect battery cable.
- 2. Separate damaged strand(s) from each other.
- 3. Cut damaged wire(s) from harness.

NOTE: If two (2) or more strands require splicing, stagger cut strands to provide a flat finished splice.

- 4. Strip back insulation 3/8" on each end of damaged strand.
- 5. Cut 14 gauge replacement wire(s) to length and strip back insulation 3/8" on each end.
- 6. Tin and solder round wire(s) to flat wire(s), (View C, Figure I).
- 7. Tape each strand separately (View D, Figure I).
- 8. Connect battery cable.

MINOR REPAIR TAPE VIEW "B" STRIP INSULATION VIEW "A" MAJOR REPAIR **14 GAUGE WIRE** hole is visible TAPE VIEW "D" - SOLDER VIEW "C"

### FIGURE I

E. J. Hresko Manager, Technical Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

December 18, 1964

TO ALL BUICK DEALERS

SUBJECT: Distributor Condensers - Part Nos. 1932004 and 1928111

A quantity of the above part numbers (1932004 and 1928111) ignition condensers may be in your parts stock which may result in an open condenser under low temperature conditions.

An open condenser results in inability to start the car; however, when the condenser is warm it will check out and operate satisfactorily.

In view of the above, we are requesting that you check your inventory of replacement condensers according to the following information to make certain they are the proper type.

 Any carton containing 300 condensers, or any carton containing 10 individual packages of condensers having markings circled in Figure 1 will contain known good condensers.

IMPORTANT: There is no identification on the small individual condenser cartons to indicate good condensers.

- Any condenser having a small daub of paint on can, regardless of color, is good. These condensers may have either brass or silver colored wire terminals.
- 3. Any condenser having a silver colored wire terminal, whether it has paint markings or not, is good.
- NOTE: The Parts Department has issued a P & A Product Information Bulletin No. 63, dated December 18, 1964, outlining the procedure for the return of condensers that are not of known good quality.

### Service Recommendations

Whenever burned distributor points and/or failed condensers are encountered, it is recommended that known good condensers identified according to the above procedure are used.

Return of Failed Condensers

It is requested that all failed condensers and failed distributor points be returned, properly tagged, to the Factory at the following address:

> Buick Motor Division Clear Signal Area Factory #02 Flint, Michigan 48550

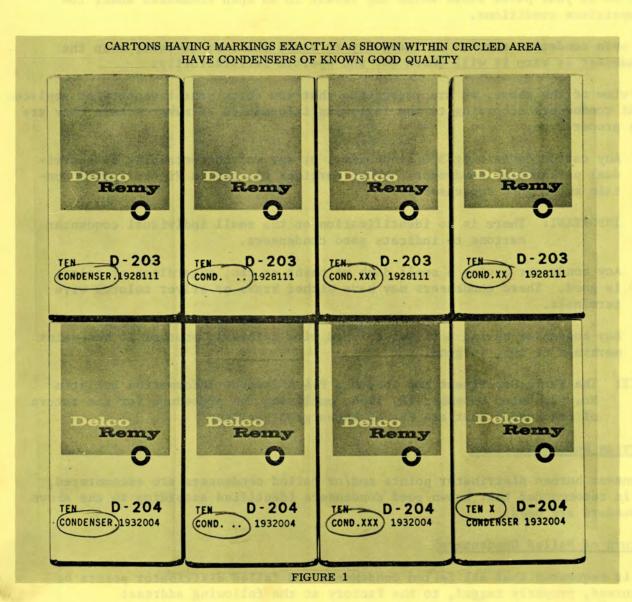
### Method of Shipment of Failed Condensers to the Factory

Packages weighing less than 6 oz. - Ship First Class Mail Packages weighing between 6 oz. and 20 lbs. - Ship Parcel Post Packages weighing over 20 lbs. - Ship REA Collect

Accumulate evidence of shipping costs incurred and submit a separate AFA to recover these shipping costs.

J. Hresko

Manager, Technical Service





BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

January 29, 1965

### TO ALL BUICK DEALERS

SUBJECT: Engine Idle and Timing Adjustments - 1959 Through 1965

- 1. Adjust contact point dwell angle to 30 degrees.
- 2. Adjust engine idle to specifications below.
- 3. Disconnect distributor vacuum hose.
- 4. Adjust engine timing to the following specifications:

Id	<u>le</u>	<u>1959</u>		Timir	ng	and a	Idl	e	<u>1960</u>		<u>Timing</u>
	RPM RPM			(Auto. (Man. 2	Trans.) Trans.)			RPM RPM			(Auto. Trans.) (Man. Trans.)
		<u>1961</u>							<u>1962</u>		
	RPM RPM				Series) Series)			RPM RPM			(Upper Series) (Lower Series)
		<u>1963</u>							1964-5		
500	RPM RPM RPM		50	(Upper	Series AT) Series MT) Series)		500	RPM RPM RPM	2 2	10	(V-6 Engine) (300 Cu.In.V-8) (401 & 425 V-8Exc. Dual 4-B Auto.Trans.) (Dual 4-B Auto.Trans.)

NOTE: If car is equipped with an air conditioner, add 50 RPM to idle specification (with air conditioner turned off). In 1963, 1964 and 1965 automatic transmission cars, adjust idle in drive range.

E. J. Hresko Manager, Technical Service

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 26, 1965

TO ALL BUICK DEALERS

SUBJECT: 1965 Wiring Diagram

We are enclosing one complete set of wiring diagrams for the 1965 Buicks. You will observe that these have been enlarged for greater visibility and convenience. They should be displayed in a prominent place for all the Service Technicians to use.

We have only a small supply of these diagrams left so we are sending them to the Buick Instructors of the General Motors Training Centers. Dealers needing an extra copy could ask one of their technicians to obtain a set while at the training center.

J. Hresko

Manager, Technical Service



Dealer File Under Letter No. Group No. 65-9 A 11-1

BUICK MOTOR DIVISION, GENERAL MOTORS CORPORATION, FLINT 2, MICHIGAN

March 12, 1965

### TO ALL BUICK DEALERS

SUBJECT: Buick Finish Guard Machine Glaze Revised to change Part Number

Do you spend too much time in your dealership preparing the finish of a new Buick for delivery? And, even after a considerable amount of time has been spent, are you completely satisfied with the "luster"? How would you like to "reduce polishing time" and still have one of the finest preparations available with a minimum risk of "rubbing off" too much paint? If you are interested in saving money and time - use the following suggestion.

### IT'S A FACT!

### BUICK FINISH GUARD MACHINE GLAZE, PART No. 1050235 WILL DO THE JOB

### QUICKLY

### EASILY

### ECONOMICALLY

Finish Guard Machine Glaze does such an outstanding job it will be most pleasing to owners and new car prospects. If you want to attract attention by making these 1965 Buicks sparkle, here's the material that reflects on first impression the quality of our 1965 Buicks and the quality of your New Car Pre-Delivery Service.

Buick Finish Guard does not contain silicone or wax, and if necessary, paint can be applied over machined surfaces.

Another benefit obtained in using Finish Guard Machine Glaze is that it does not have abrasive agents other polishes contain, and as a result, it greatly reduces "burn through." From this you can see it removes a minimum amount of paint and yet provides a very high luster finish in only one buffing operation.

Our testing has proved so conclusively that Finish Guard Machine Glaze will lessen the need for paint repairs and lower the cost of New Car Make-Ready that I have asked your Service Representative to contact you to discuss the use of this new car finish conditioning in your dealership. He will have available for you a free sample of Buick Finish Guard Machine Glaze in a reusable plastic applicator, sufficient to handle a minimum of three (3) cars. We think so much of this Finish Guard Product we are adding it to the Factory recommended New Car Pre-Delivery Inspection Schedule. We have for your convenience attached a Parts Order Form.

### ARE YOU INTERESTED IN OBTAINING MORE CUSTOMER LABOR SALES?

If so, your Service or Parts Representative will also show you how the Finish Guard Machine Glaze can lead to selling your owners the Finish Guard Hard Plate Wax treatment for long-lasting luster.

Wm mc Crockin

W. M. McCrocklin General Service Manager

WMMcC/df

### IT'S A FACT.

BUICK FINISH GUARD MACHINE GLAZE, PART No. 1050235 WILL DO THI

### OUICKLY

### EASILY

### **ECONOMICALLY**

Finish Guard Machine Glaze does such an autstanding job it will be most pleasing to owners and new car prospects. If you want to attract attention by making these 1965 Buicks sporkle, here's the material that reflects on first impression the quality of our 1965 Buicks and the quality of your New Car Pre-Delivery Service.

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Our testing has proved so conclusively that Finish Guard Machine Glaze will lessen the need for paint repairs and lower the cost of New Car Make-Ready that I have asked your Service Representative to contact you to discuss the use of this new car finish conditioning in your depletzhip. He will have available for you a free sample of Buick Finish Guard Machine Glaze in a reveable plastic applicator, sufficient to handle a minimum of three (3) care.

## PARTS AND ACCESSORIES ORDER

### TO GENERAL MOTORS PARTS DIVISION

GENERAL MOTORS CORPORATION

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ARD	DEALER B.O. NUMBER	CONTROL NUMBER	1.	PPD	COLL.	DATE	SCHE	p.	DLR.	ORDER	NO.	MW				
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2		0.2.2										:				-
3	8.800	980	500	M 1	ACHI /2 G	NE GLAZE al. Can							7	20		1
4				(,	Pkg'	d. 6 cans	per o	ase)								-
5							LINE									1
6	8.800	980	499	1	Gal	NE CLEANER . Can	F						7	20		1
7				(	Pkg	d. 4 cans	per 2	ase)				_				
8	8.800	980	501	1	4 02	PLATE WAX	T NAME						3	00	5	00
9				(	Pkg'	d. 6 cans	per i	ase)								
10	8.800	980	502	6	02.	PLATE WAX Can							i	35	2	25
11				(	Pkg'	d. 12 cans	per	display	cas	e)						1
12	8.800	980	181	1	pt.	AND GLAZE Can							1	20	2	bo
13				(	Pkg	d. 12 cans	per	case)								1
14	8.800	10502	223	1	pt.	ER & GLAZE Can							1	20	2	bo
15				(	Pkg	d. 12 cans	per	case)			_					1
16				-			-		-							1
17	200															1

THIS ORDER IS SUBJECT TO THE TERMS AND CONDITIONS OF DEALER'S CURRENT SELLING AGREEMENT AS SUPPLEMENTED AND THE PARTS AND OR ACCESSORIES ORDERED HEREON WILL BE INVOICED AT DEALER NET PRICES IN EFFECT AT THE TIME OF SHIPMENT.

SIGNED\_

PER\_

(FOR WAREHOUSE USE ONLY)

THANK YOU

PURCHASER'S FIRM NAME

PC-66 REV. 4-62

(INDIVIDUAL)



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

TO ALL BUICK DEALERS

Lack of Vacuum For Air Conditioning System, or Sluggish Operating SUBJECT: Air Conditioning Components 1965 Early Production Air Conditioned Models, 43000, 44000, 45000 46000, and 48000 Series

If a customer complains of unsatisfactory operation of air conditioning controls (i.e. air doors do not open sufficiently) it is recommended that the main (master) vacuum switch on the instrument panel control assembly be lubricated. It has been found that this switch will stick in the closed position, thereby partially or entirely limiting the vacuum to the vacuum diaphragms, suction throttling valve, and water valve.

To correct switch malfunction, lubricate part as follows using Ethylene Glycol type Permanent Antifreeze (Group #1.175, Part #980216):

- 1. Partially withdraw control assembly from instrument panel.
- 2. Disconnect vacuum hose from out port of switch.
- 3. Start engine and place FAN switch at HI position.
- 4. Using a pointed object (i.e. matchstick, toothpick, etc.), dip it in Antifreeze and touch tip to outlet port of switch as shown in illustration, until 2-3 drops of lubricant have entered port.
- 5. Work switch plunger in and out several times to distribute lubricant.
- Check operation of switch by depressing and releasing plunger and 6. noting if vacuum is correspondingly controlled at outlet port of vacuum switch.

Flat rate time allowable - .5 hr. (43000 and 44000 Series) - .6 hr. (45000, 46000 and 48000 Series)

J. Hresko

Manager, Technical Service

Main (Master)
 Vacuum Switch

Using ethylene glycol type permanent anti-freeze, dip pointed object (i.e. match stick, tooth pick, etc.) in anti-freeze and apply to outlet port of switch until liquid is drawn into port.

43000 and 44000 Series - Air Conditioning Control

Main (Master)
 Vacuum Switch

Using ethylene glycol type permanent anti-freeze, dip pointed object (i.e. match stick, tooth pick, etc.) in anti-freeze and apply to outlet port of switch until liquid is drawn into port.

45000, 46000 and 48000 Series - Air Conditioning Control



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

November 20, 1964

TO ALL BUICK DEALERS

SUBJECT: Procedure For Trimming Antennas - 1965 Models - All Series

Internet and the later to the second

The following procedures should be utilized when trimming antennas on 1965 Models during new car pre-delivery inspection.

43000 - 44000 - 45000 - 46000 and 48000 SERIES

- 1. Adjust antenna to 31 inches high.
- 2. Tune radio to a station at or near 1400 Kilocycles which can barely be heard with volume turned fully up.
- 3. On rear speaker equipped cars shut ignition off.

CAUTION: Radios must not be operated with inner fader knob removed or output transistor will be destroyed.

- 4. Remove right hand inner and outer knobs and washer.
- 5. On cars equipped with rear speaker, fabricate and insert a jumper wire into center and bottom holes behind inner knob (See Illustration).
- 6. On rear speaker equipped cars, return ignition to "on".
- 7. On all jobs adjust trimmer screw until maximum volume is achieved.
- 8. Shut ignition off, remove jumper wire, if used, and reinstall inner and outer knobs and washer.

### 49000 SERIES

Same as above except Rivieras with rear speaker do not require insertion of a jumper wire to trim radio. In addition, it is not necessary to turn ignition off and on.

E. J. Hresko

Manager, Technical Service

OUTER KNOB WASHER - INNER KNOB (DUMMY) INNER KNOB (FADER) TRIMMER SCREW JUMPER WIRE (On Cars Equipped With Rear Speaker Only, Fabricate and Insert a Jumper Wire) 43000 AND 44000 SERIES INNER KNOB (DUMMY) ac OUTER KNOB WASHER / INNER KNOB (FADER) TRIMMER SCREW JUMPER WIRE (On Cars Equipped With Rear Speaker Only, Fabricate and Insert a Jumper Wire) 45000, 46000 AND 48000 SERIES WASHER INNER KNOB (FADER) WASHER OUTER KNOB 10 LINNER KNOB (DUMMY) TO GOLD TOWN LAND TRIMMER SCREW 49000 SERIES

# BUICK DEALER SERVICE INFORMATION BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

January 22, 1965

### TO ALL BUICK DEALERS

SUBJECT: List of Types of Failure Which May Occur When Main (Master) Vacuum Switch Malfunctions 1965 Air Conditioned Models, 43000, 44000, 45000, 46000 & 48000 Series

This bulletin is intended to supplement Dealer Letter No. 65-54 which concerned corrective procedures for lubricating a sticking main (master) vacuum switch. When this vacuum switch malfunctions, it may affect the system in a number of ways. The following data concerns the type of result which might occur should the main vacuum switch in the Heater-Air Conditioning System fail.

IF THE MAIN VACUUM SWITCH FAILS DURING HEATER MODE OF OPERATION, THE RESULT MIGHT BE AS FOLLOWS:

45000, 46000, and 48000 Series Only

The Heater-A/C diaphragm will not operate causing heat to come out A/C outlets.

43000, 44000, 45000, 46000 and 48000 Series

The Outside-Recirculated diaphragm (45000, 46000, 48000 Series) or the Outside Air Inlet diaphragm (43000, 44000 Series) does not operate causing system to remain completely in recirculate mode. The result will be an eventual excessive buildup of moisture accompanied by a fogging of the windows. This condition may not be readily obvious due to length of time involved to attain condition.

IF THE MAIN VACUUM SWITCH FAILS DURING AIR CONDITIONING MODE OF OPERATION, THE RESULT MIGHT BE AS FOLLOWS:

43000 and 44000 Series Only

The Suction Throttling Valve will be inoperative thereby making it difficult to attain the desired degree of air conditioning.

43000, 44000, 45000, 46000 and 48000 Series

The Outside-Recirculated diaphragm or Outside Air Inlet diaphragm will not operate causing the A/C system to be in 100% recirculated air. This condition will not be readily obvious except that it will be more difficult to achieve the desired degree of air conditioning. In addition, in the case of owners who smoke cigars or pipes, the car may develop a stale oder.

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E. J. Hresko Manager, Technical Service

a. 43000, 44000, 45000, 46000 5 48000 Ser

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This bulletin is intended to supplement Dealer Letter No. 65-54 which concerned corrective procedures for lubricating a sticking main (master) vacuum switch. When this vacuum switch malfunctions, it may affect the system in a number of ways. The following data concerns the type of result which might occur should the main vacuum switch in the Meater-Air Conditioning System fail.

IF THE MAIN VACUUM SWITCH FAILS DURING HEATER MODE OF OPERATION, THE RESERT MIGHT BE AS FOLLOWS:

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IF THE MAIN VACUUM SWITCH FAILS DURING AIR CONDITIONING MODE OF OPERATION, THE RESULT MIGHT BE AS FOLLOWS:

43000 and 44000 Series Only

The Suction Throttling Valve will be inoperative thereby making it difficult to attain the desired degree of air conditioning.

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

January 29, 1965

### TO ALL BUICK DEALERS

SUBJECT: Intermittent Radio Reception On Cars Equipped With Manual Antennas 1965 Models, 43000, 44000, 45000, 46000 and 48000 Series

If a customer complains that the sound on his radio seems to go on and off, it is probably due to the antenna. A rubber grommet, which seals the area between the black plastic antenna cap nut and the antenna itself, sometimes is either left off or becomes pushed in so that it will not keep out water. The end of the antenna corrodes and causes the radio to play intermittently.

To check for this situation unscrew the black plastic antenna cap nut and observe the condition of antenna end. To correct, proceed as follows:

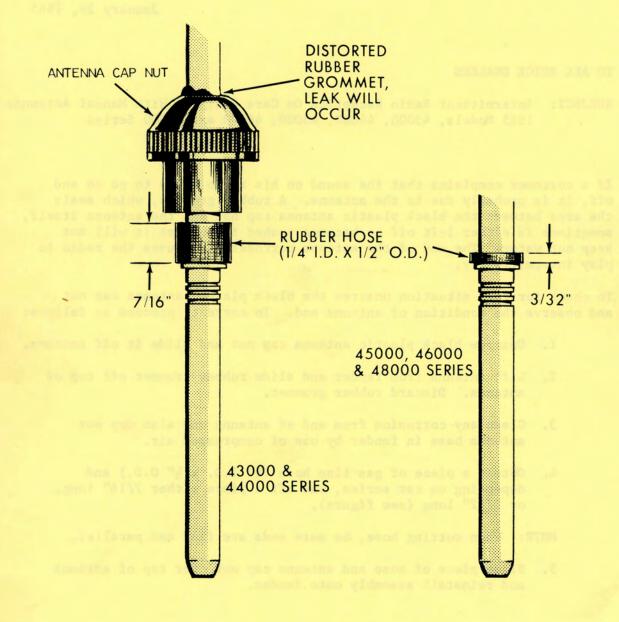
- 1. Unscrew black plastic antenna cap nut and slide it off antenna.
- Lift antenna from fender and slide rubber grommet off top of antenna. Discard rubber grommet.
- 3. Clean any corrosion from end of antenna and also dry out antenna base in fender by use of compressed air.
- Obtain a piece of gas line hose (½" I.D. x ½" O.D.) and depending on car series, cut off a piece either 7/16" long, or 3/32" long (see figure).

NOTE: When cutting hose, be sure ends are flat and parallel.

5. Slide piece of hose and antenna cap nut over top of antenna and reinstall assembly onto fender.

Flat rate time allowable 0.2 hour.

E. J. Hresko Manager, Technical Service



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 12, 1965

TO ALL BUICK DEALERS

## SUBJECT: Radio Failure Due To Antenna Lead Pulled Out At Antenna Base 1965 Models, 43000, and 44000 Series

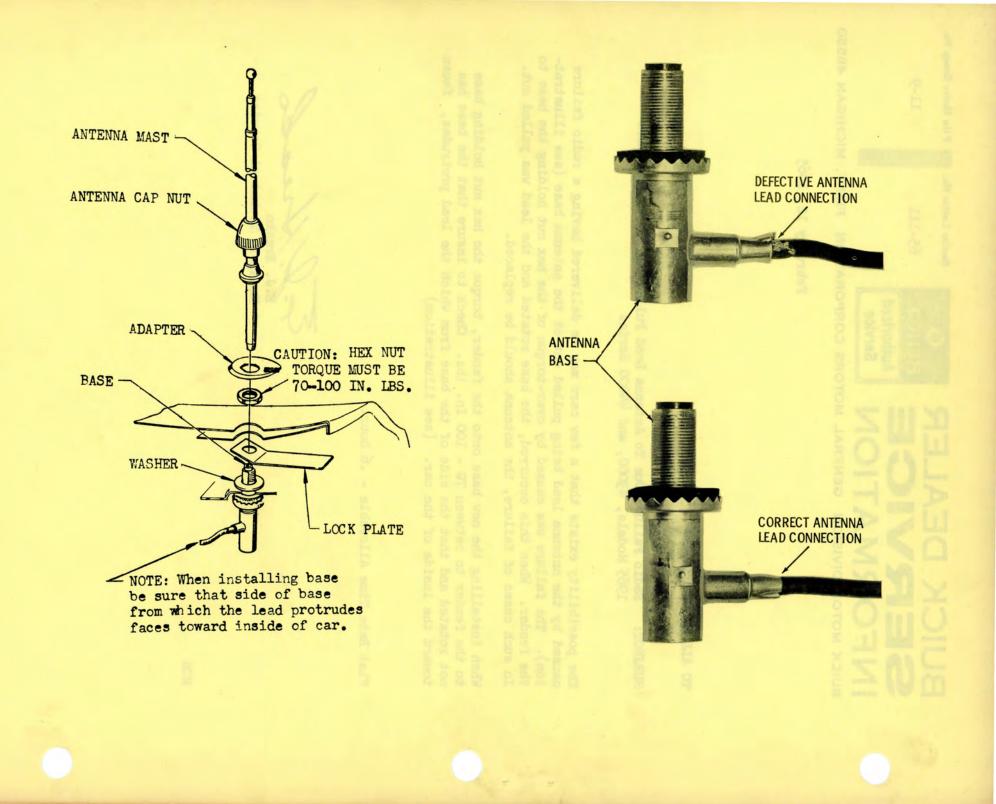
The possibility exists that a few cars may be delivered having a radio failure caused by the antenna lead being pulled out at the antenna base (see illustration). The failure was caused by over-torque of the hex nut holding the base to the fender. When this occurred, the base rotated and the lead was pulled out. In such cases of failure, the antenna should be replaced.

When installing the new base onto the fender, torque the hex nut holding base to the fender to between 79 - 100 In. lbs. Check to insure that the base has not rotated and that the side of the base from which the lead protrudes, faces toward the inside of the car. (see illustration)

Flat Rate Time Allowable - .6 hour.

É.J. Hresko Manager, Technical Service

WGH



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

February 19, 1965

TO ALL BUICK DEALERS

SUBJECT: -Introduction of New Pilot Operated Absolute (POA) Valve Replacing Suction Throttle Valve on Air Conditioned Cars -1965 Models, 43000, 44000, 45000, 46000, and 48000 Series

A new type Suction Throttle Valve (see figure 1) is being used on all (except 49000 Series) air conditioned equipped cars. This new valve is described as a Pilot Operated Absolute (POA) valve (Part No. 5910508 - 43000 & 44000 Series, Part No 5910521 45000, 46000, 48000 Series, Group 9.198).

The difference between the STV and the POA valve is that no neoprene or vacuum element diaphragms are used. The advantages are that there is no neoprene diaphragm which might fail, and that the valve will not change calibration when the system is operated at a higher altitude due to the effect of atmospheric pressure on the vacuum element diaphragm.

The POA valve cannot be disassembled or adjusted. If it is determined that the POA has failed, it should be replaced. The amount of freon charge and the functional test specifications remain unchanged. It is important that greater emphasis be given to maintaining a clean, dry system. Replacement parts should not be uncapped until just prior to installation.

NOTE: When replacing a POA valve, the serviceman should check the interior of the valve for corrosion or crystalization of salts. This should indicate excessive moisture in the system. If this condition exists, the receiver-dehydrator should be replaced and the system evacuated for one hour.

When leak testing the POA valve, it is necessary to check only the hose coupling ends. When using the low <u>sensitivity</u> propane torch leak detector, no evidence of freon should be present at the POA valve.

Due to the elimination of the vacuum element diaphragm, the interior pressure of the valve is isolated from the exterior atmospheric pressure. As a result, the controlling element (bronze bellows) of the POA valve is able to operate independently of the effect of atmospheric pressure. <u>However</u>, any gage used to check the valve pressure will not be free from the effect of atmospheric pressure. For this reason, it might appear (when considering the fact that the POA valve pressure gage reading varies with the altitude changes) that it is the pressure within the valve that is changing. Actually the reverse is true. The pressure within the valve remains unaffected by atmospheric variations, while the gage used to read these pressures is affected by atmospheric pressure. It is important to remember when checking pressures on a POA valve that the altitude effect on the gage must be taken into account when interpreting a reading. The gage pressure increase exists not because the internal pressure in the system varies, but because the performance of the gage is affected by the altitude. The table shown in figure 2 indicates the gage pressures which will be obtained at various altitudes. If readings are obtained other than these, the valve is malfunctioning.

Aresto

Manager, Technical Service

### WHAT MAKES THE POA VALVE WORK -

#### Fact No. 1:

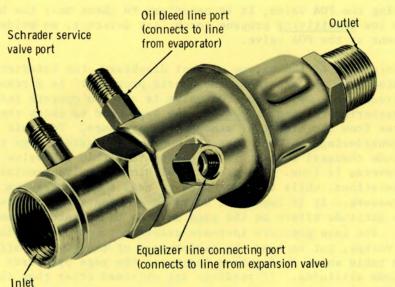
A bronze bellows is used to control a small needle valve, which in turn controls a large piston. The bellows is con-structed so that it has a tendency to expand when the pressure surrounding it goes below 28.5 psig, or contract when the pressure goes above 28.5 psig. Each time bellows expands and closes needle valve - pressure surrounding bellows increases. When pressure in-creases sufficiently bellows contracts and opens needle valve, then pressure surrounding bellows drops. When pressure drops sufficiently bellows expands ..... etc.

#### Fact No. 2:

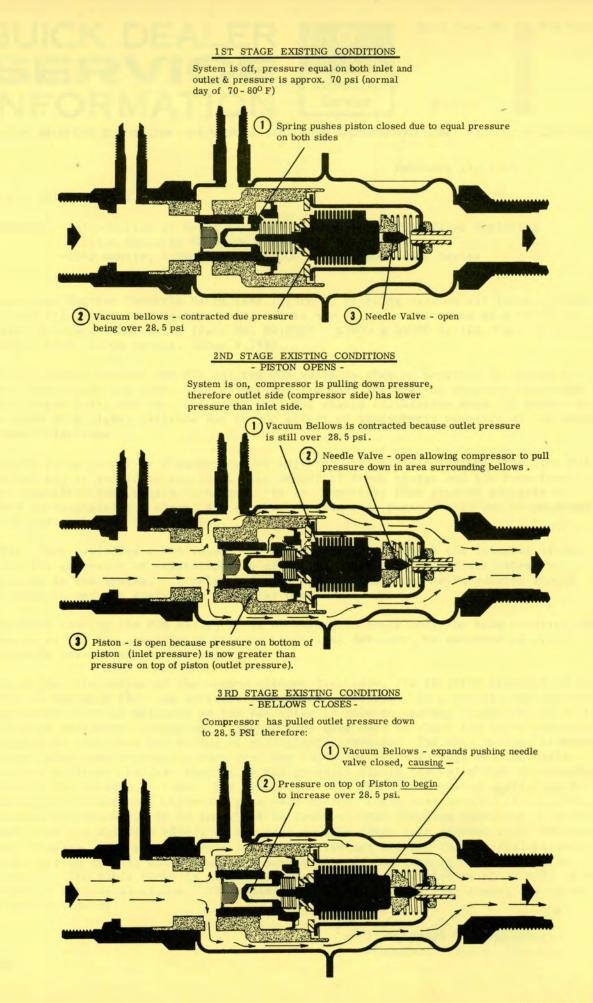
Because of the compressor drawing on the outlet end of the POA, a lower pressure exists at the outlet then at the inlet, When the bellows expands and the pressure around bellows starts to increase, simultaneously the lower pressure on the top side of the piston approaches the pressure on the under side. The closer the two pressures become equal, the more the spring pushes the piston closed. The more the two pressures become unequal, the more the bottom (higher) pressure pushes the piston open.

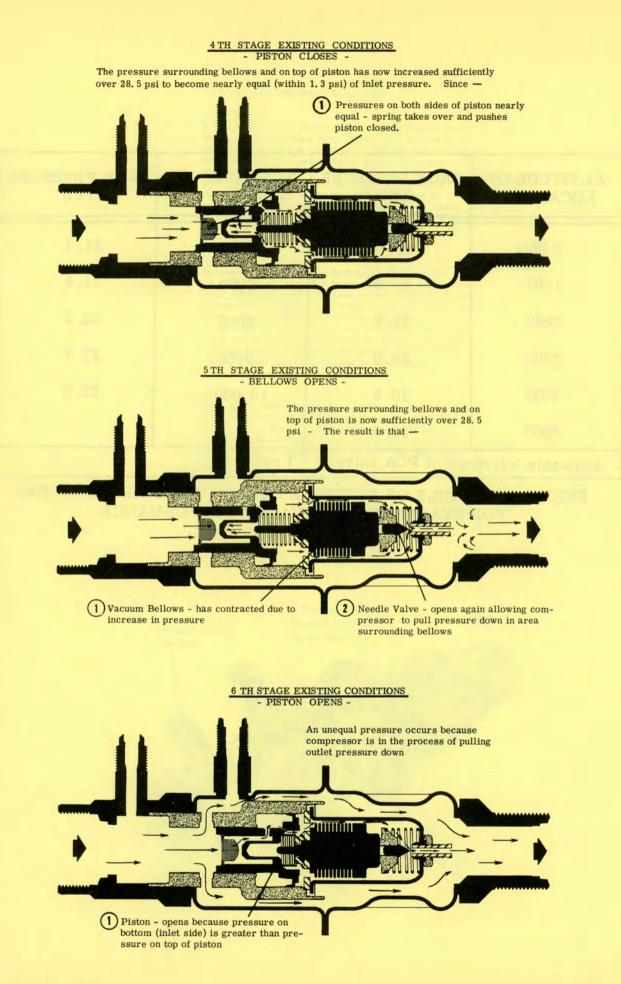
#### Summary:

When the bellows expands, the pressure increases on top of piston to nearly equal the pressure below the piston with the result that the spring pushes the piston closed. When the bellows contracts and the pressure drops on top of the piston, the higher pressure below the piston pushes it open.



Inlet





ALTITUDE OF LOCAL (FT)	GAGE PRESSURE (PSI)	ALTITUDE OF LOCAL	GAGE PRESSURE (PSI)	
0 (Sea Level)	28.5	6000	31.4	
1000	29.0	7000	31.8	
2000	29.5	8000	32.3	
3000	30.0	9000	32.7	
4000	30.5	10,000	33.2	
5000	31.0	The second second	4.4	
Allowable tolera	nce of POA valve is	<sup>+</sup> 1 psi		

FIGURE 2. TABLE OF ALTITUDE CORRECTED GAGE PRESSURES FOR EVALUATING POA VALVE PERFORMANCE

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 9, 1965

TO ALL BUICK DEALERS

SUBJECT: Faulty Diagnosing of Radio Failures

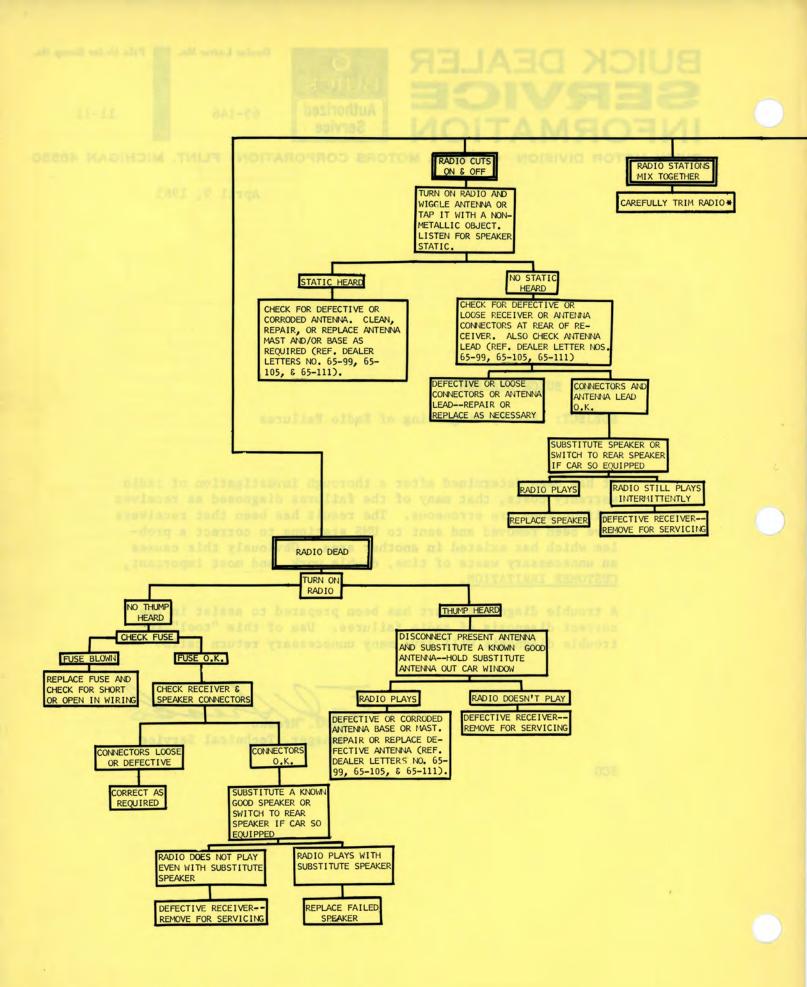
It has been determined after a thorough investigation of radio warranty costs, that many of the failures diagnosed as receiver malfunctions are erroneous. The result has been that receivers have been removed and sent to UMS stations to correct a problem which has existed in another area. Obviously this causes an unnecessary waste of time, double work, and most important, CUSTOMER IRRITATION.

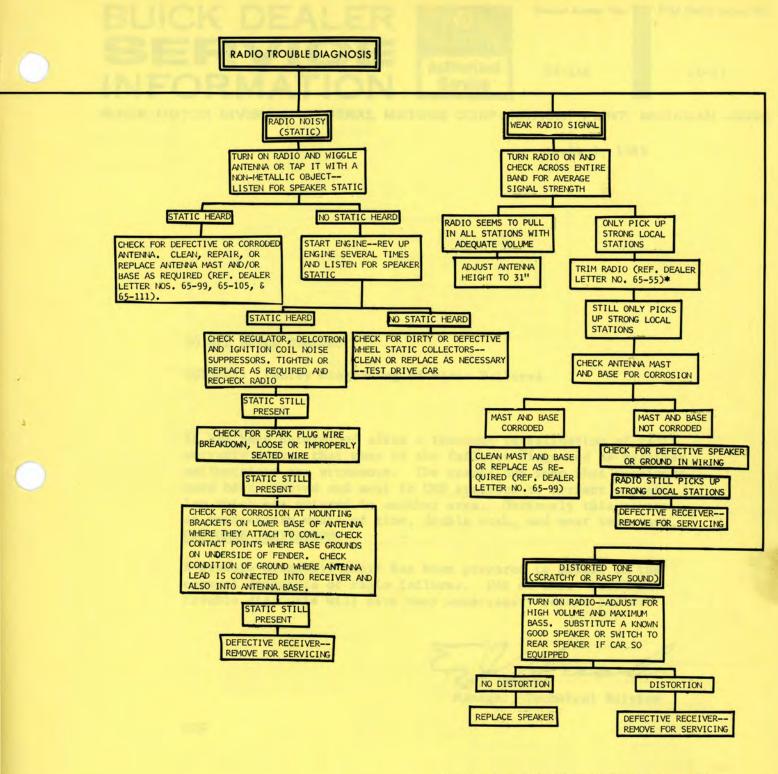
A trouble diagnosis chart has been prepared to assist in the correct diagnosis of radio failures. Use of this "tool" in trouble diagnosis will save many unnecessary return calls.

J. Hresko

Manager, Technical Service

SCG





\*NOTE: ON AM-FM RADIOS, ANTENNA TRIMMING IS ALWAYS PERFORMED ON AM AND NEVER ON FM STATIONS. FM STATION TRIMMING IS ACCOMPLISHED BY ADJUSTING ANTENNA HEIGHT TO 31 INCHES.

Dealer Letter No.

BUICK DEALER BUICK SERVICE Authorized 65-150 11-12 INFORMATION Service BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 23, 1965

TO ALL BUICK DEALERS

SUBJECT: Improved Diaphragm for Suction Throttle Valve 1965 Model 43, 44, 45, 46, 48, and 49000 Series

An improved diaphragm is being used in the Suction Throttle Valve on air conditioned cars. It is made from a neoprene material which has a much greater life expectancy. Although the neoprene diaphragm is made of a tougher material than the polyurethan diaphragm, it is not as able as the polyurethan diaphragm to hold back the molecules (particles) of freon gas.

When checking for leaks on a Suction Throttle Valve (STV) having a neoprene diaphragm, the serviceman must evacuate the vacuum element of the STV. This precaution avoids the possibility of detecting a false leak indication due to accumulated freon gas in the vacuum element.

This precaution should also be applied when checking older type NOTE: STV's having polyurethan diaphragms. Freon gas over a period of time normally accumulates in the vacuum element. Many STV's are erroneously condemned due to a failure to purge any accumulation of freon from the vacuum element.

STV's having neoprene diaphragm may be easily recognized by the fact that the outer edge of the diaphragm protrudes from the center of the valve (see illustration).

To leak test a STV having a neoprene diaphragm, proceed as follows:

- Ignite propane torch leak detector (J-6084) and adjust flame 1. until the light blue center cone is ½ inch high. The outer cone should be cherry red in color.
  - NOTE: If the copper ring around the orifice of the torch is dirty or corroded, it will be difficult to obtain proper colored flame.
- 2. Place a piece of tape over 3 of the 4 holes on the vacuum element (see illustration).
- 3. Using a vacuum pump, place vacuum hose against 4th hole and draw out air from inside vacuum element for approximately 1 minute.
- 4. Wait 2 minutes, then using propane torch leak detector, leak test at the 4th hole of the vacuum element. NOTE: If flame turns deep green or bluish black, replace diaphragm.

Part numbers for STV's containing new diaphragms are as follows: (Ref. P & A Product Information Letter, Dated January 7, 1965; Subject - Suction Throttle Valve)

1962-1963	Specials	Group No. 9.198	Part No. 5910551
1964-1965	Specials	W DANGING WOR	5910545
1965	LeSabre, Wildcat, Electra	11	5910544
1965	Riviera	н	5910559

Part number for Diaphragm and Piston Kits are as follows:

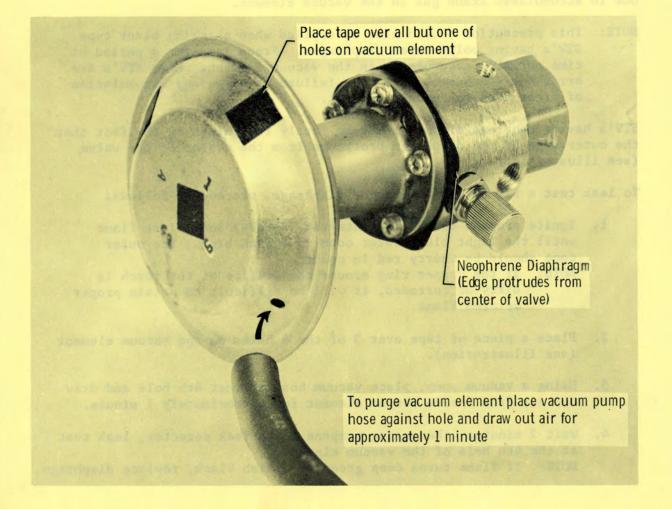
1962-1965 All Series

Group No. 9.199 Part No. 6550597

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Manager, Technical Service

SCG



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

April 30, 1965

TO ALL BUICK DEALERS

SUBJECT: New Knob for Remote Control Rear View Mirror 1965 Models - All Series

A new narrower knob (see illustration) for adjusting the remote control mirror is now available under Part No. 1376624, Group No. 10.185. It is recommended that these replacement knobs be used if a customer complains that he is unable to attain sufficient adjustment of his remote control mirror.

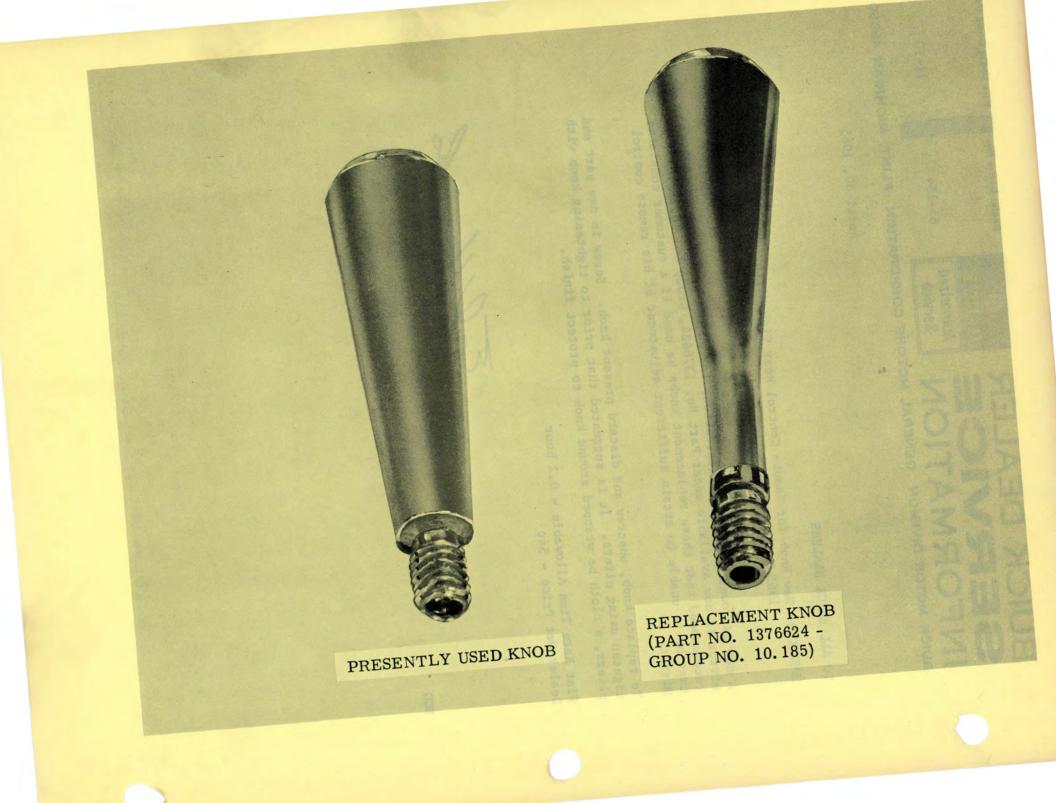
To replace knob, unscrew and discard present knob. Screw in new part and tighten using pliers. It is suggested that prior to tightening knob with pliers, a cloth be wrapped around knob to protect finish.

Flat Rate Time Allowable - 0.2 hour Dealer Net Price - 54¢

J. Hresko

Manager, Technical Service

SCG





BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

June 4, 1965

TO ALL BUICK DEALERS

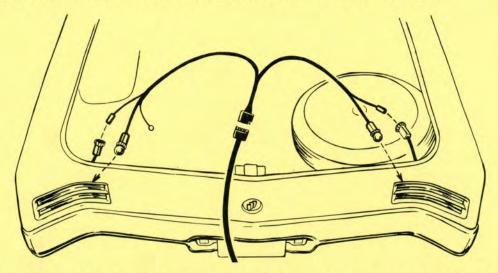
SUBJECT: TRAILER WIRING HARNESS

A trailer wiring harness has been developed for Buick which provides a means for operating trailer tail lights, stop lights and turn signal lights along with the regular car lights. This trailer harness is connected to the car wiring by simply plugging it in at the tail light locations in the trunk. A flat section in the trailer harness allows the trunk lid to be closed on the harness without damage to either harness or sponge rubber trunk seal.

Some advantages of the new trailer wiring harness are:

- 1. It can be placed out of sight in the trunk when not in use.
- 2. It can be transferred from one car to another in a few minutes.
- 3. No drilled holes or wire splices are required when used in models for which released.

Since three turn signal bulbs will be operating at once instead of the usual two, the flasher rate will speed up. It is therefore recommended that a heavy duty flasher be used; a heavy duty flasher will maintain a constant flasher rate whether operating two, three or four turn signal bulbs. The trailer wiring harness is available under Group 7.068, Part 980878 or 980893. Use a heavy duty flasher Group 2.892, Part 2399685 along with the trailer harness.



Installation instructions are included in each trailer wiring harness package.

- 1. Place trailer wiring harness across rear of trunk behind lock mechanism and trim panels.
- 2. Unplug a right and a left turn signal bulb and socket from car tail lamps.
- 3. Transfer two turn signal bulbs from car harness to trailer harness.
- 4. Plug two male connectors of trailer harness into vacated car harness sockets.
- 5. Install two trailer harness bulb and socket assemblies in car tail lamps.
- 6. Connect white ground wire of trailer harness to ground in trunk.

Hresko Manager, Technical Service

BUICK DEALER SERVICE INFORMATION	BUICK Authorized Service	File Under Group No. 11-16 Dealer Letter No. 65-202	READ AND INITIAL Dealer Serv. Mgr. Parts Mgr. Others
BUICK MOTOR DIVISION • GENERAL MOTORS CORPORATION • FLINT, MICHIGAN 48550			

TO ALL BUICK DEALERS

SUBJECT: Removal of Heater Assembly and Heater Core on Air-Conditioned and Non-Air-Conditioned Cars 1964-65, 43-44000 Series, Also Removal of Blower Motor 1964-65 Models, 43-44000 Series

(THIS BULLETIN SUPERSEDES DEALER LETTER NO. 64-163, GROUP NO. 11-11)

It has been brought to our attention that some difficulty is still being experienced by the field in the removal and installation of either the heater core or the blower motor. In order to update and re-emphasize the recommended procedures the following information is re-issued:

REMOVAL AND INSTALLATION OF HEATER CORE ON AIR CONDITIONED AND NON-AIR-CONDITIONED JOBS

#### REMOVAL

- Remove right front wheel and locate center point of hole to be drilled by drawing an arc on inside of skirt 12 3/8 inches from upper bolt of wheel house opening (see Figure 1). Draw another arc 17 1/2 inches from lower bolt of wheel opening (see Figure 2). Center punch hole at intersection of arcs.
- 2. Drill a 3/4 inch hole through fender skirt.
- 3. Remove lower right stamped nut from heater assembly stud.
- 4. Complete removal of remaining four stamped nuts.
- 5. Drain radiator and disconnect heater hoses from heater core.
- 6. On air conditioned cars only, remove glove box, disconnect air conditioner outlet hoses from distribution duct, remove screws securing duct to heater assembly and lower out duct.
- 7. Disconnect three control cables from heater assembly.
- 8. On non-air-conditioned cars only, disconnect electrical connector from blower resistor on heater assembly.
- 9. On air conditioned cars only, remove rear retainer and seal assembly.
- 10. Remove heater assembly and disassemble heater core from assembly.

### INSTALLATION

- 1. Install reverse of removal procedures and check for smooth operation of control cables.
- 2. Plug holes in fender skirt by using a 3/4 inch body plug (Group No. 12980, Part No. 4725594) and body sealer.

Flat Rate Time Allowable: Non-Air Conditioned Cars - 1.2 Hr. Air Conditioned cars - 1.3 Hr.

REMOVAL OF BLOWER MOTOR - AIR CONDITIONED CARS ONLY

#### REMOVAL

- 1. Take out two bolts securing compressor to mounting bracket and move compressor forward enough to provide clearance for access to blower motor. Do not discharge or disconnect refrigerant lines.
  - NOTE: Depending on engine option, it may <u>not</u> be necessary to remove the compressor from mounting bracket.
- 2. Take out five screws holding blower motor assembly onto Plenum Blower and Air Door Assembly and take out blower motor (see Figure 3).

Flat Rate Time Allowable: .2 Hr.

### INSTALLATION

REMOVAL OF BLOWER MOTOR - NON-AIR CONDITIONED CARS ONLY

On Standard heater equipped cars removal of the fender is required to gain access to the five screws holding the blower assembly (see Figure 4) onto the Blower and Air Inlet Assembly.

Flat Rate Time Allowable: 1.8 Hr.

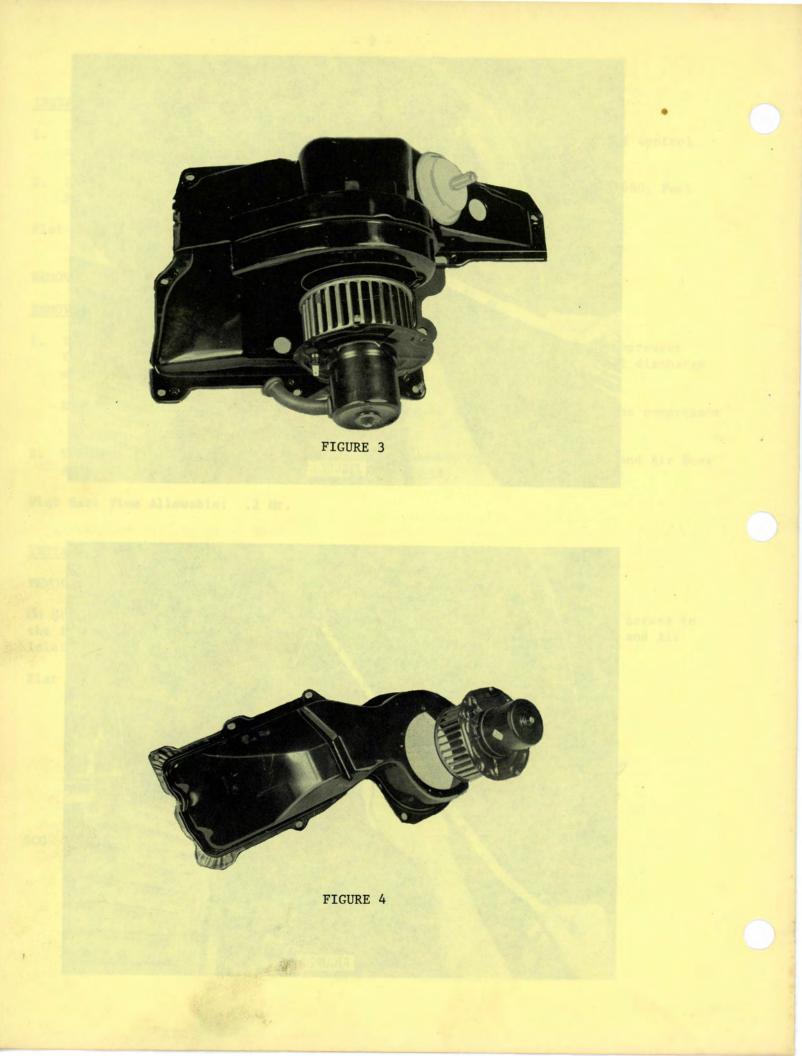
. Hresko

Manager, Technical Service

SCG



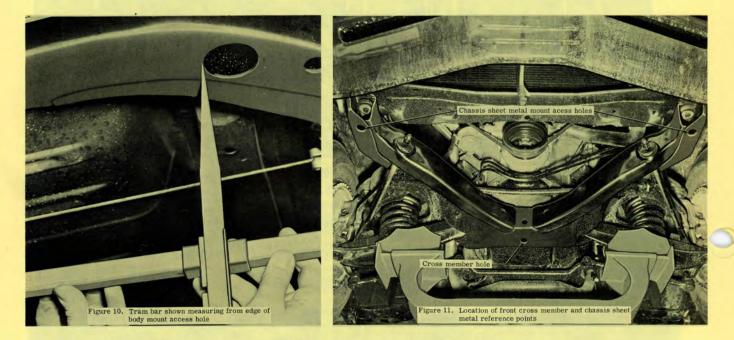




#### III. Procedure for Measuring Damaged Frames on Upper Series Except Riviera

### A. Taking Horizontal Measurements (Tramming)

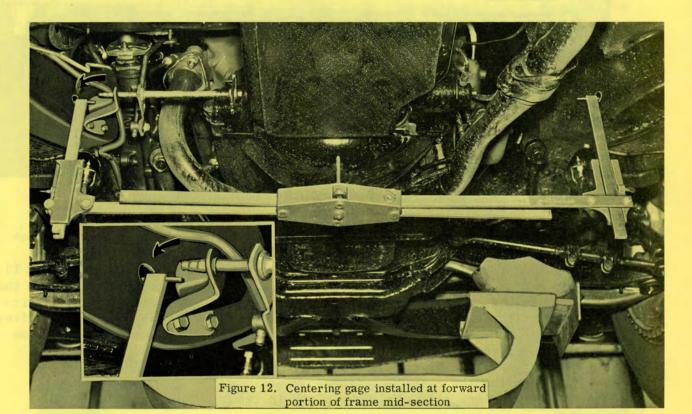
- 1. Jack up car and support securely on jack stands, or if available, raise car using twin post hoist.
- 2. All body bolt access holes are accessible from the bottom of the frame on the LeSabre, Wildcat and Electra Series. The edge of these holes serves as an accurate reference point, and it is not necessary to establish reference points as on the Riviera Series. Figure 10 and frame layout 24 show locations of these reference points.

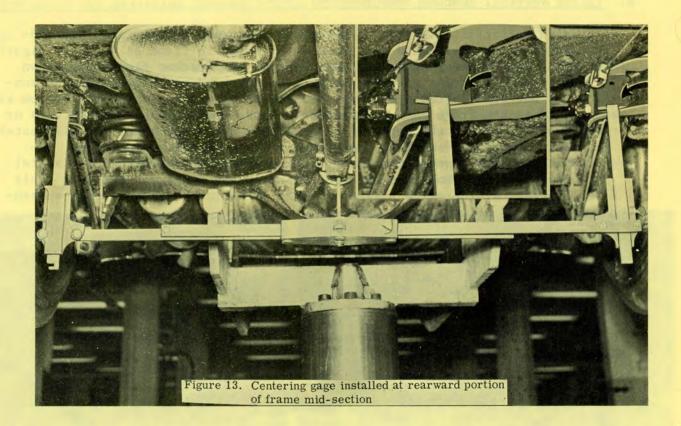


- 3. Two men are required to measure using tram bar method.
  - CAUTION: To get accurate measurements, it is important to grasp tram at the same point, both when setting pointers between frame reference points and when measuring between pointer tips after points are set and measurement is being taken. For example, slight flexing of the bar may change the distance between the pointer tips if the tram is held by the ends when taking a measurement on the frame and held by the middle when measuring between the tips.
- 4. To determine the extent of frame damage, measure car using frame layout 24 which indicates reference points, dimensions and tolerances. In addition to body bolt access hole locations, frame layout 24 shows chassis sheet metal mount access holes and the front cross member hole which are also used as reference points; figure 11 further illustrates the locations.

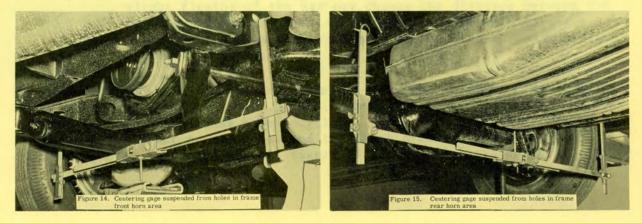
### B. Taking Vertical (Datum) Measurements

1. With car still on stands, suspend two centering gages from frame midsection. Hang forward gage from inner holes in frame as shown in figure 12. Hang rearward gage on lower control arm bracket flanges as shown in figure 13. The gage should then be adjusted so that either horizontal bar or adjustable pointers are the same distance below the bottom surface of the frame rail mid-section. Thus, the horizontal cross bars or pointers on the two gages will be aligned with each other and will establish a plane parallel to the bottom surface of the mid-section. Depending upon type of gage used, it is suggested that either horizontal cross bar or pointer be adjusted 5" below the frame mid-section. This distance will provide a line of sight below rear axle and front suspension for either type of gage.





- 2. After the first two gages are set, the third gage may be suspended from either the front or rear frame horn areas and adjusted vertically by sighting the alignment with the two center gages. See figures 14 and 15. The actual dimensions, front and rear, are found by measuring up from the top edge of the horizontal cross bar or adjustable pointers on the third gage to the bottom surface of the frame rail above. See figure 2. After one end is checked, the operation can be repeated in similar fashion on the opposite end.
- 3. To determine the extent of frame damage, compare actual measurements with dimensions and tolerances given in frame layout 24.



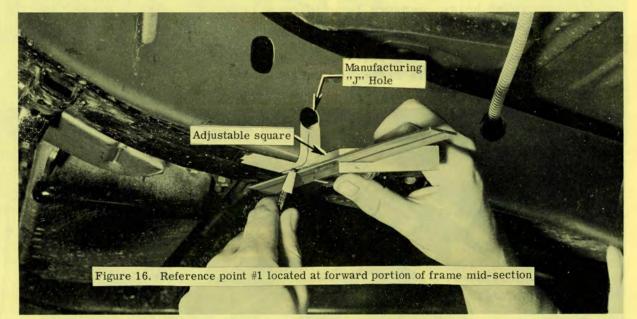
#### IV. Procedure for Measuring Damaged Frames on Riviera Series

## A. Taking Horizontal Measurements (Tramming)

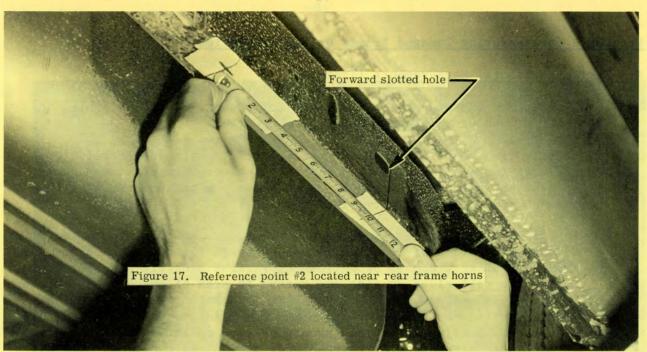
1. Jack up car and support securely on jack stands, or if available, raise car using twin post hoist.

(Before tram gages can be used to take measurements on underside of car, <u>reference points</u> - the points to which measurements are made - must be established since there are no holes on the underside of the frame rails that could serve this purpose.)

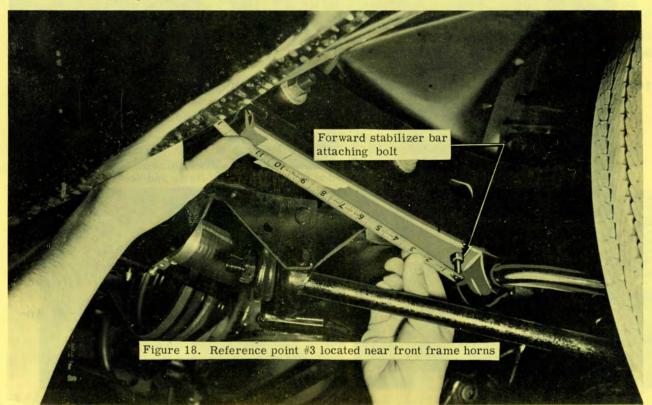
2. To establish reference points 1A and 1B, locate <u>centers</u> of manufacturing "J" holes on sides of frame rails. See figure 16 and frame layout 25. (The same procedure will be followed for right and left sides of frame.) Wipe frame rail clean on side and bottom in area of hole. Next, place masking tape on bottom of rail beneath "J" hole in order to provide a working surface on which marks can be seen readily. A square, preferably the small adjustable type, should be used to extend a line through the "J" hole perpendicular to the lower surface of the rail; still using the square, this line should be extended across the lower surface. Next, measure in exactly 3/4" from outside of frame and mark reference point (1A) as shown in figure 16. Point (1B) will be found by the same procedure.



3. Reference points 2A and 2B will be found by using forward slotted bumper holes. See figure 17. Wipe frame clean in hole area and place masking tape on cleaned surfaces. Using a tri-square, make a line perpendicular to bottom surface of frame and running through <u>forward edge</u> of slotted hole; extend this line across bottom surface by use of the square. Measure in exactly 3/4" from outside of frame and intersect line to locate point 2A. Point 2B will be found by the same procedure.

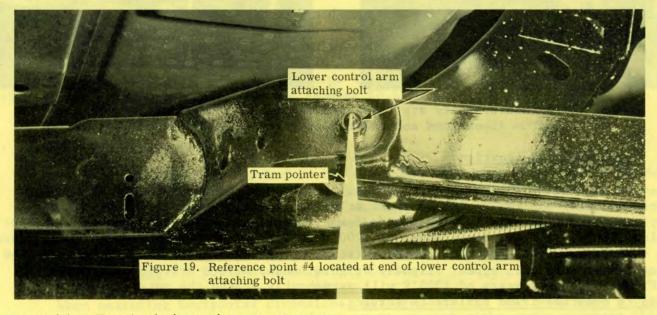


- 4. To establish reference points 3A and 3B, locate stabilizer bar front attaching bolts on right and left sides of frame. See figure 18 and frame layout 25. Wipe frame clean in an area approximately 10" forward of each bolt and place masking tape on cleaned surfaces. From center of bolts, measure forward exactly 10" and mark masking tape. Then measure in 3/4" from outside edges of frame and locate points.
- 5. The ends of the bolts which attach the lower rear control arms to frame will serve as reference points 4A and 4B. See figure 19 and frame layout 25.



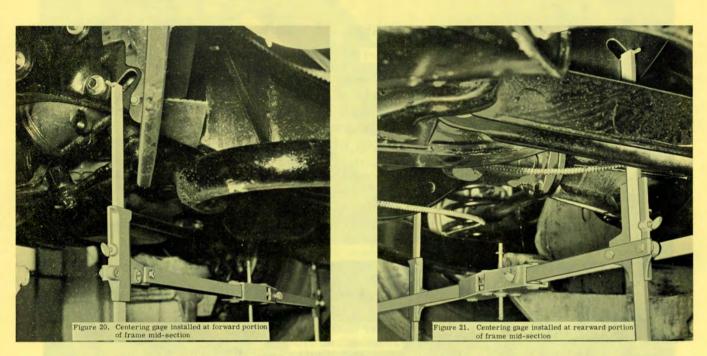
-10-

- 6. After reference points are established, two men are required to measure with a tram bar.
  - CAUTION: To get accurate measurements, it is important to grasp tram at the same point, both when setting pointers between frame reference points and when measuring between pointer tips after points are set and measurement is being taken. For example, slight flexing of the bar may change the distance between the pointer tips if the tram is held by the ends when taking a measurement on the frame and held by the middle when measuring between the tips.
- 7. After measurements are taken and recorded, they should be compared to dimensions and tolerances given in frame layout 25.



### B. Taking Vertical (Datum) Measurements

- 1. With car still on stands, suspend two centering gages from frame midsection. Hang forward gage from inner holes in frame as shown in figure 20. Hang rearward gage on lower control arm bracket flanges as shown in figure 21. The gage should then be adjusted so that either horizontal bar or adjustable pointers are the same distance below the bottom surface of the frame rail mid-section. Thus, the horizontal cross bars or pointers on the two gages will be aligned with each other and will establish a plane parallel to the bottom surface of the mid-section. Depending upon type of gage used, it is suggested that either horizontal cross bar or pointer be adjusted 6" below the frame mid-section. This distance will provide a line of sight below rear axle and front suspension for either type of gage.
- 2. After the first two gages are set, the third gage may be suspended from either the front or rear frame horn areas and adjusted vertically by sighting the alignment with the two center gages. The actual dimensions, front or rear, are found by measuring up from the top edge of the cross bar or adjustable pointers on the third gage to the bottom surface of the frame rail above. See figure 2. After one end is checked, the operation can be repeated in similar fashion on the opposite end.



-12-

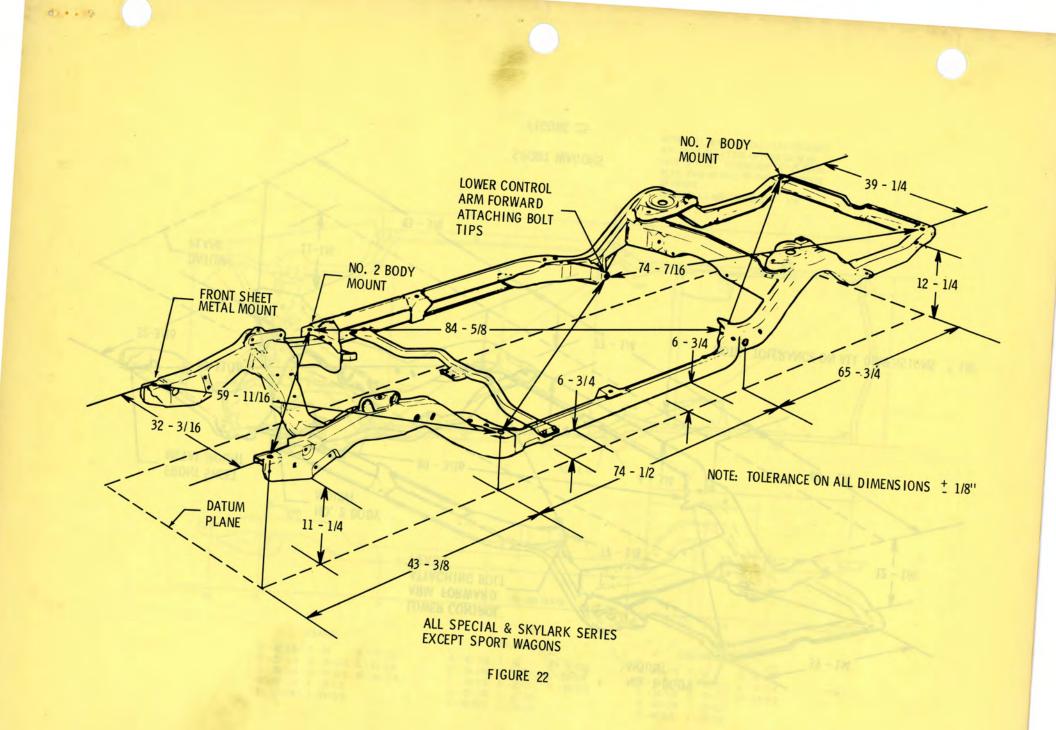
3. After measurements are taken and recorded, they should be compared to datum dimensions and tolerances given in frame layout 25.

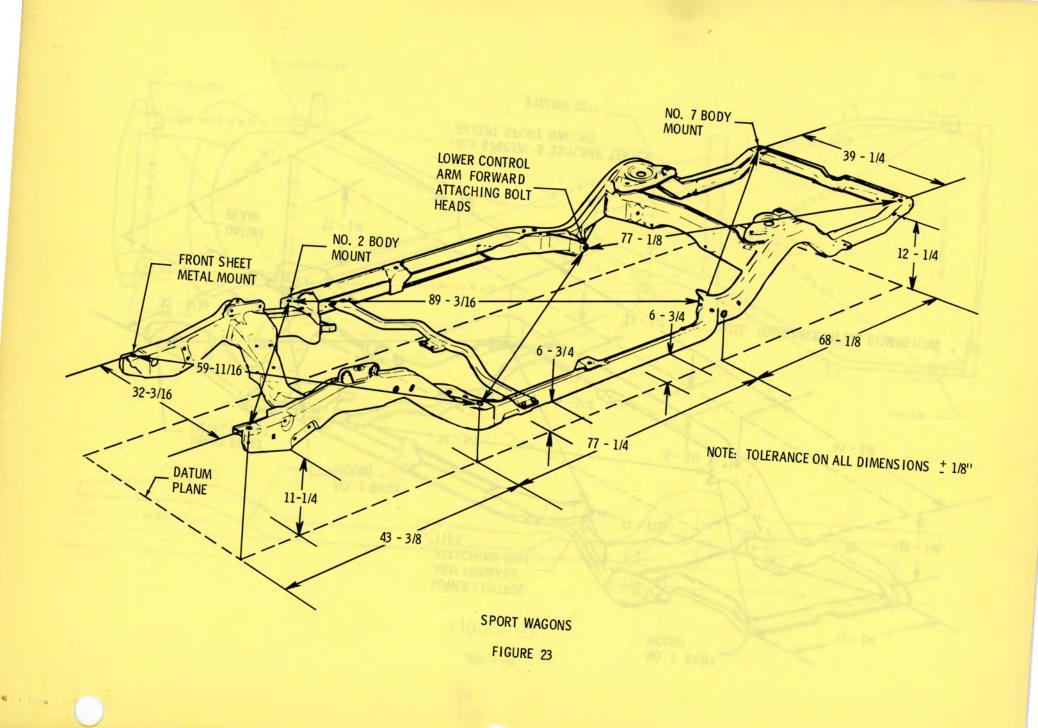
### V. Frame Repair Suggestions

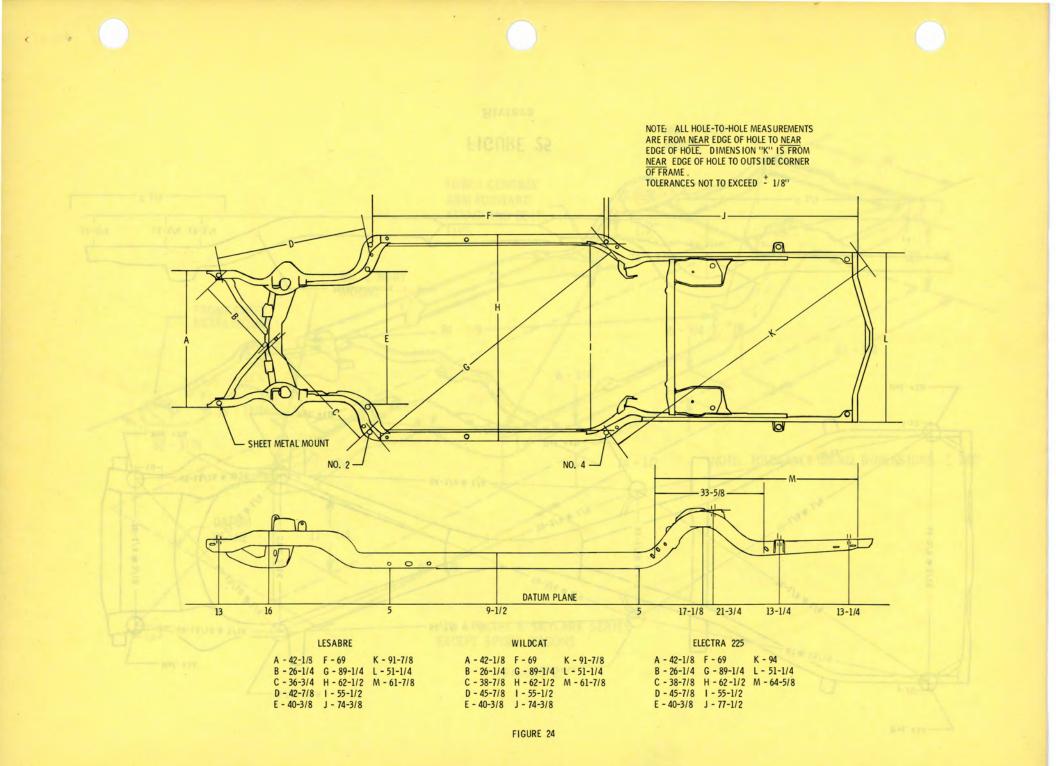
When straightening sharply buckled areas, it is common practice to use heat while force is being applied by use of jacks or suitable frame machines. Heat can be applied without materially weakening a frame, provided heating temperatures are kept below 1200°F. A steel temperature of 1200°F is seen as a deep cherry red when viewed in subdued daylight conditions which exist in an average repair shop. (Metal at the same temperature will appear slightly brighter under direct artificial light.) CAUTION: <u>Heat in excess of 1200°F will permanently weaken the metal structure and</u> lead to eventual frame failure in service.

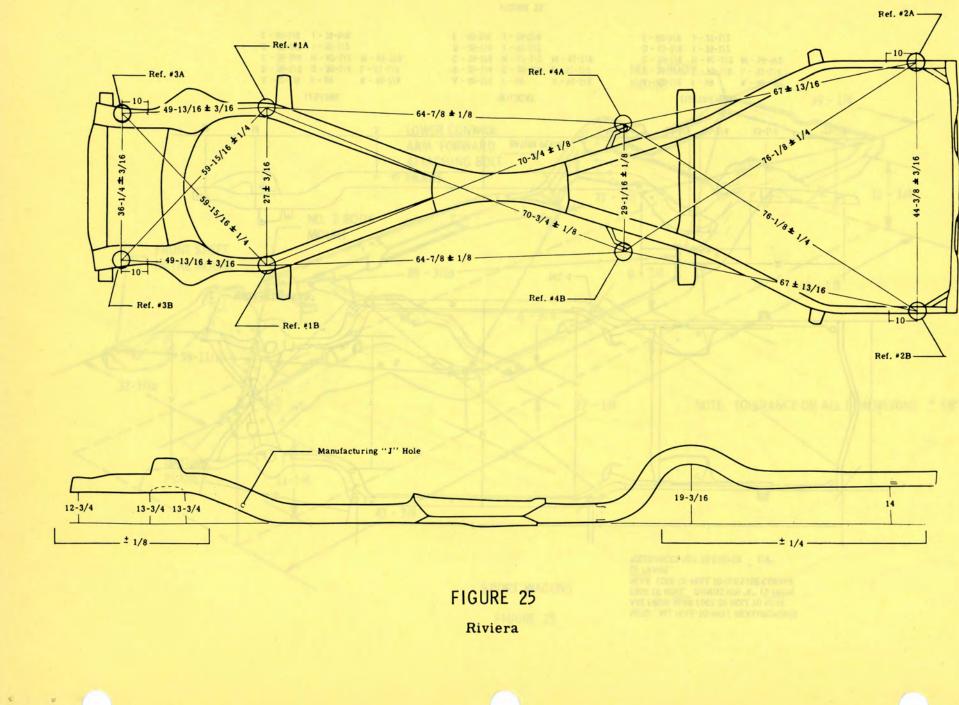
Manager, Technical Service

PHH









BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

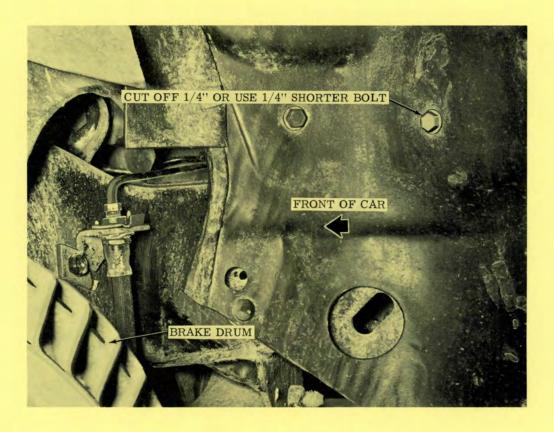
June 18, 1965

TO ALL BUICK DEALERS

SUBJECT: Squeaking or Grating Noise - Chassis Sheet Metal - 1965 43-44000

On some Special and Skylark series cars, a squeaking or grating noise that is not found by normal inspection of under the hood sheet metal components may be caused by interference between the lower rear front fender skirt to inner baffle bolt and the cowl.

If this condition is found, it can be corrected by either removing bolt and cutting off 1/4" or replacing bolt with one that is 1/4" shorter.



Hresko

Manager, Technical Service



BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

December 11, 1964

TO ALL BUICK DEALERS

SUBJECT: 1965 Body Service Manual Revisions

The following revisions, additions and deletions should be incorporated in the 1965 Buick Body Service Manual:

Body Manual Page No.

1C-1

Under WINDSHIELD GARNISH MOLDINGS, the description should read: "On "67" styles, the windshield garnish moldings consist of an upper, a right side and a left side molding." In Fig. 1C-2 - FRONT END MOLDINGS; Item "D" should be omitted. Step #3 of removal and installation should read: "On "67" styles, remove side moldings, sunshade supports, rear view mirror support and upper center molding."

Reverse "Clip Engaged" and "Clip Disengaged" nomenclature in Figure 1D-23.

1D-13

1D-11

Substitute enclosed Figure 1 for Figure 1D-27 and add the following new procedure: "CENTER PILLAR WEATHERSTRIP - 38-48-68000 Series "69" styles".

The center pillar weatherstrip has been made a separate section from the side roof rail weatherstrip on jobs built after date code 09C. This new weatherstrip is made of molded rubber as opposed to the foam rubber construction of the side rail weatherstrip. A seal is obtained where the two strips meet by the center pillar section overlapping the side rail section.

Although the center pillar weatherstrip is retained by the same type retainer used to retain

> 65-22 65-058

Body Manual Page No. 1D-13 (cont.)

the side rail weatherstrip, removal and installation is different.

To remove or install the new weatherstrip, slide it in or out of engagement with the center pillar retainer at retainer lower end.

Prior to installation, apply black weatherstrip adhesive along outboard edge of retainer to assure adequate retention and effect a seal between weatherstrip and retainer.

1D-20

Under "FRONT DOOR VENTILATOR ASSEM-BLY - All "11-35-45" styles, and all "69" styles except 38-48-68000 series" add the following to step 5:

"Disengage upper front end of glass run channel from door upper frame sufficiently to permit rearward movement and removal of ventilator from door frame."

1D-26

Substitute the following revised procedure under "FRONT DOOR WINDOW ASSEMBLY - All "11-35-45" styles and all "69" styles except 38-48-68000 series."

### REMOVAL AND INSTALLATION

- 1. Remove door trim assembly and detach inner panel water deflector.
- 2. On "35-45-69" styles only, remove front door ventilator as previously described.
- 3. Remove glass run channel lower adjusting stud nut (Fig. 1D-37).
- 4. On "11" styles, operate window to approximately 3" down from "full-up" position and remove lower sash channel cam attaching screws (Fig. 1D-37).

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57-04 Ber-01 65-22 65-058 Body Manual Page No.

1D-26 (cont.) 5. On "35-45-69" styles, lower window to 'fulldown" position and remove lower sash channel cam attaching screws through lower access holes.

> On "11" styles, remove glass from door by simultaneously pivoting glass (front edge down and rear edge up) and lifting glass upward and outboard of door upper frame. On "35-45-69" styles, remove glass by lifting it upward and outboard of door upper frame.

7. To install, reverse removal procedure. Check window for proper operation before installing water deflector.

1D-26

Delete "FRONT DOOR WINDOW REGULATOR -(Manual or Electric)" procedure for "37-57-67" styles and the same procedure for "39" styles and 38-48-68000 series "69" styles, then substitute the following:

"FRONT DOOR WINDOW REGULATOR - (Manual and Electric) "37-39-57-67" styles and 38-48-68000 series "69" styles."

## **REMOVAL AND INSTALLATION**

- Remove front door window assembly as previously described.
- 2. Remove ventilator division channel lower adjusting stud and nut (Fig. 1D-40).

3. On styles equipped with electric window regulators, disconnect wire harness connector at window regulator motor.

4. Remove window regulator attaching bolts (Fig. 1D-39).

5. Remove regulator through large access hole. On electric styles it will be necessary to

## Body Manual Page No.

1D-26 (cont.) press lower end of ventilator division channel outboard to permit removal.

6. To install, reverse removal procedure.

1D-27

Delete "FRONT DOOR WINDOW REGULATOR -(Manual and Electric) - all "11-35-45" styles and all "69" styles except 38-48-68000 series" and substitute the following procedures:

"FRONT DOOR WINDOW REGULATOR - (Electric) - "35-45" styles and all "69" styles except 38-48-68000 series"

## REMOVAL AND INSTALLATION

- 1. Remove front door window and ventilator as previously described.
- 2. On styles equipped with electric window regulators, disconnect wire harness connector at window regulator motor.
- 3. Remove window regulator attaching bolts (Fig. 1D-37) and remove regulator through access hole.
- 4. To install, reverse removal procedure.

"FRONT DOOR WINDOW REGULATOR - (Manual) - "11-35-45" styles and all "69" styles except 38-48-68000 series."

## **REMOVAL AND INSTALLATION**

- 1. Remove front door trim assembly and inner panel water deflector.
- 2. Operate window to 'full-up' position and secure in place with pieces of cloth-backed body tape applied over door frame.
- Remove inner panel cam as previously described.

65-22 65-080 Body Manual Page NO.

1D-27 (cont.)

4

5.

Remove ventilator division channel lower adjusting stud and nut and window regulator attaching bolts (Fig. 1D-37).

Press ventilator division channel outboard to permit disengagement of regulator spindle from inner panel, then run regulator balance arm roller and lift arm roller out of lower sash channel cam atfront. Remove regulator through large access hole.

6. To install, reverse removal procedure.

1D-28

Substitute the following procedure under "FRONT DOOR WINDOW GLASS RUN CHANNEL - 45269, 45469, 46269, and 46469 styles.

- 1. Remove door trim assembly and detach inner panel water deflector.
- 2. Lower window to approximately half-down position and tie or tape window so that front edge of window remains engaged in ventilator division channel.

 Remove glass run channel upper attaching bolt (at belt) and lower adjusting stud nut (Fig. 1D-43).

4. From outside door, insert a sharp pointed right angle tool (reveal molding clip disengaging tool J-21549 or equivalent) between outer edge of glass run channel and door upper frame as shown in enclosed Figure 2.

5. Beginning at front end of run channel, slide tool rearward until a clip is contacted, then engage point of tool under clip and carefully pry inboard to release clip tangs from door frame.

6. Repeat step 5 at each clip location until run channel is completely disengaged from door frame.

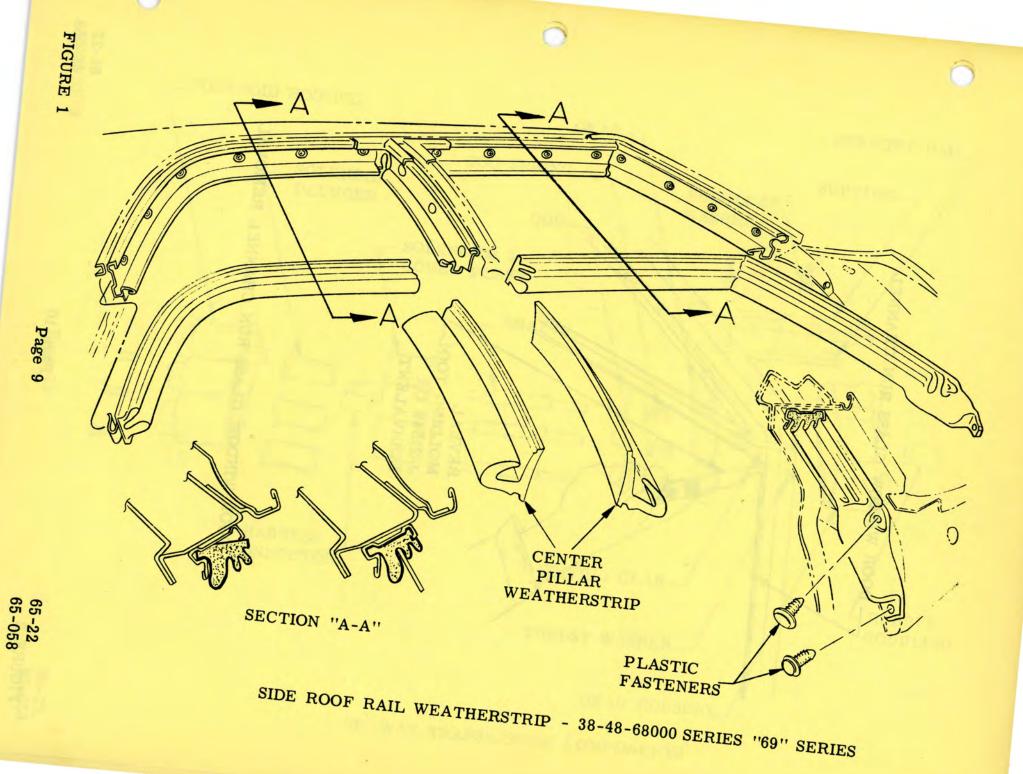
ABBUMBLY (MID

Remove rear pildguide sufficiently to

the quarter without and disease in or (ront guides indow introact or disindow introact or disintom came of internbowed of rout as and

Body Manual Page No.				
2K-30 thru	Revise Chart as follows:			
2K-33	Molding <u>Name</u> Styles	Retention	Remove Hardware, Trim or Molding	
	Front 55 & 65 Door Outer Panel Lower	Screws and Snap-on Clips	er center of door	
	Rear Door 55&65 Outer Panel Lower	Clip and Bolt and Snap-On Clips	in at dator support	
	Rear 55 & 65 Fender Outer Panel Lower	Clip and Bolt and Snap-On Clips	Quarter Trim on Left Side and Spare Tire Cover on Right Side	
	Tailgate 55 &65 Outer Panel Name Plate (Sport Wagon)	Studs With Attaching Nuts	Tailgate Inner Panel	
3D-12	Reverse "Clip Engaged" and "Clip Disengaged" nomenclature in Figure 3D-20.			
3K-4	Revise chart as follows:			
	Molding <u>Name</u> Styles	Retention	Remove Hardware, Trim or Molding	
	Quarter 49447 Belt Reveal	Clip and Bolt and Snap-On Clips		

0





December 11, 1964

## TO ALL BUICK DEALERS

SUBJECT: Procedure for Refinishing Paint on Vent-O-Parts or Other Chrome or Stainless Steel Parts

In response to requests for information on refinishing Vent-O-Parts on which the painted portion has peeled or raised, the following procedure is recommended. This procedure may be used when applying paint to any chrome or stainless steel parts. The various DuPont products recommended are available thru DuPont Distributors.

- Mask off work area and using DuPont Paint Remover (V-M 5662), remove old paint.
- After old paint is removed, wipe area thoroughly clean with a wet cloth.
- 3. Apply DuPont Metal Conditioner (V-M 5717) to area in accordance with instructions on container. Wipe area thoroughly clean with a wet cloth and then dry.
- 4. Apply Washprimer (2 parts DuPont 818-012 to 1 part Activator DuPont T-8539) to area and let air dry 30 minutes.
- 5. Apply a primer coat of Preparakote Primer (DuPont 65 Line) to affected area. Let coat air dry overnight, or force dry until the primer can be sanded without leading sand paper.
- 6. Apply sealer coat to area.
- 7. Apply exterior acrylic finish.

J. Hresko

Manager, Technical Service

WGH



December 18, 1964

TO ALL BUICK DEALERS

SUBJECT: Intermittent Power Window Operation - 1965 Models

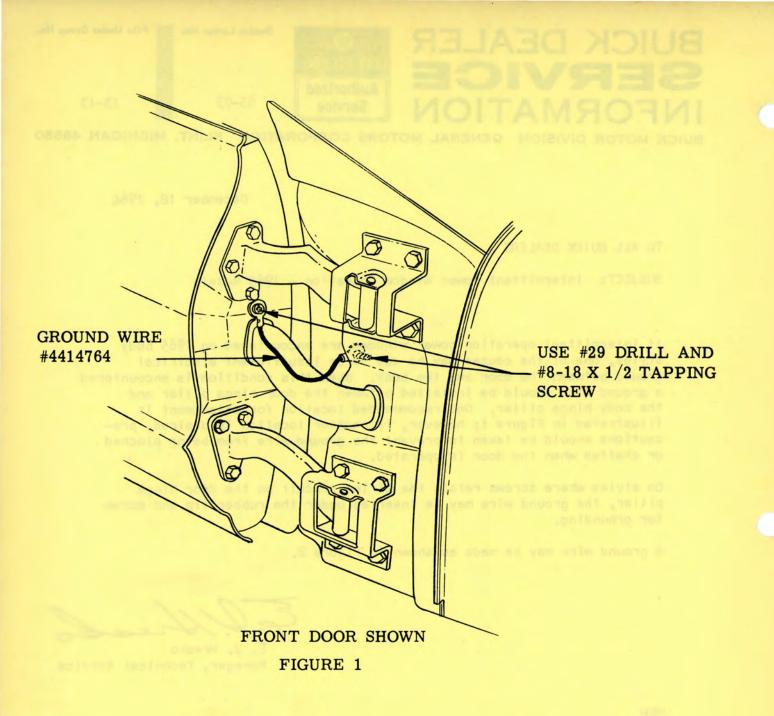
If intermittent operation power windows are encountered on 1965 body styles, one of the causes may be due to an insufficient electrical ground between the door and the body. When this condition is encountered a ground wire should be installed between the door hinge pillar and the body hinge pillar. One recommended location for attachment is illustrated in Figure 1; however, if another location is desired, precautions should be taken to prevent the ground wire from being pinched or chaffed when the door is operated.

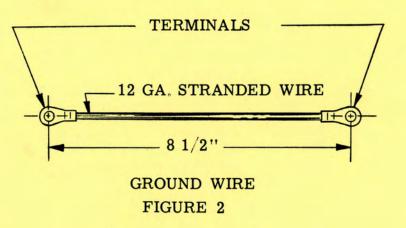
On styles where screws retain the wiring conduit on the door hinge pillar, the ground wire may be inserted under the rubber lip and screw for grounding.

A ground wire may be made as shown in Figure 2.

É. J. Hresko Manager, Technical Service

WGH





## BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

January 15, 1965

## TO ALL BUICK DEALERS

SUBJECT: Gasoline Fumes in Station Wagons

Reports are being received of gasoline fumes in station wagon bodies on both 1964 and 1965 models.

In order for fumes to be drawn into the body, they must enter from the area of the filler pipe pocket. To eliminate the entry of fumes, it is necessary to provide an airtight seal between the pocket and the passenger compartment. Fumes can enter either through the filler pocket to inner panel seams, between the inner and outer quarter panels, or through openings in the panels.

Use a flashlight mirror to determine location of all seams and openings.

Seal all seams with strips of caulking compound even through they appear to be factory sealed. Make sure the filler door attaching screw clearance holes in inner panel are sealed to prevent fumes being drawn into the body through the opening between the inner and outer panels. The best sealing method is to remove the attaching screws, one at a time, and pack caulking compound between the panels, then seal over clearance holes after screws are reinstalled. If chrome door guards are installed, make sure that attaching screws are sealed.

In a few 1965 station wagons, the drilling for the left quarter trim panel attaching screw may have pierced the filler pocket panel. (See View "B", Figure 2E8, in the 1965 Body Service Manual for location of screw.) Seal this hole, if present, and road test car with vent windows open to create a vacuum in the passenger compartment. If fumes are still present, remove the left rear quarter trim panel and have a helper blow smoke through a rubber hose to fill the filler pocket with smoke. The smoke will seep into the passenger compartment through any openings not properly sealed.

Manager, Technical Service

WGH

Dealer Letter No. File Under Group No.

65-160

13-23

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

BUICK DEALER

SERVICE

INFORMATION

TENT, MICHICAN 4000

May 21, 1965

TO ALL BUICK DEALERS

SUBJECT: Plant Try-Out of Aluminum Windshield Reveal Moldings - 1965 Buick Special & Skylark "69" Styles Built at Flint #1 Plant

BUICK

Authorized

Service

Beginning February 17, 1965, Flint #1 Plant started installing aluminum windshield reveal moldings on (500) Special and Skylark "69" style bodies to reduce body contact corrosion adjacent to moldings.

In case any of these moldings should require replacement, they may be obtained through the Parts Department under the following part numbers:

	Group Number	Part Number	
Upper Reveal Molding	10.093	449 2998	RT
Upper Reveal Molding	10.093	449 2999	LT
Lower Reveal Molding	10.093	449 3000	
Side Reveal Molding	10.093	449 2995	RT
Side Reveal Molding	10.093	449 2996	LT

The use of a magnet will provide positive identification of these moldings compared to stainless steel moldings.

Manager, Technical Service

GLS

## BUICK DEALER SERVICE INFORMATION

BUICK MOTOR DIVISION GENERAL MOTORS CORPORATION FLINT, MICHIGAN 48550

May 21, 1965

TO ALL BUICK DEALERS

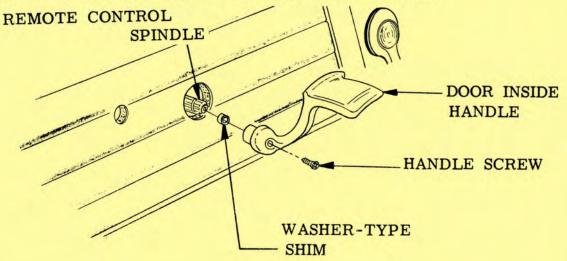
SUBJECT: Door Inside Handle Contacting Door Trim - 1965 Upper Series

Interference between the door trim pad and remote control paddle handle will eventually create a wear pattern in the trim if the interference is not relieved. If sufficient clearance is not being obtained, shim the handle inboard as described and illustrated in the following procedure.

- 1. Remove remote control paddle handle. Depending on body style this will require removal of arm rest (LeSabre and Wildcat Styles), or remote control cover plate and/or electric window switch cover plate (Electra 225 Styles).
- 2. Fabricate a washer-type shim that can be applied to the end of the remote control spindle and inside handle without restricting handle installation (See Illustration). Thickness of shim will depend on the amount of interference that was being encountered.

Any material such as rubber or leather can be used for shim.

3. Reinstall paddle handle and check clearance to trim pad. If interference is still encountered, increase shim thickness.



Hresko

Manager, Technical Service



May 21, 1965

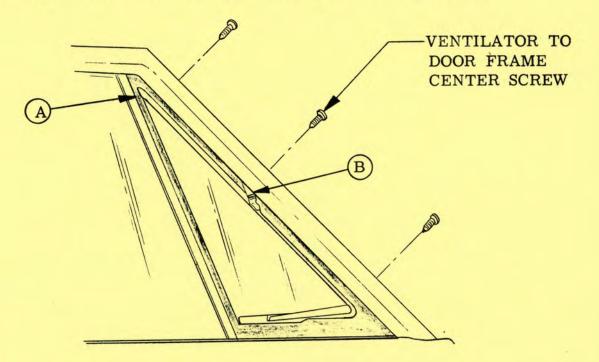
TO ALL BUICK DEALERS

SUBJECT: Ventilator Glass Hitting Division Channel - 1965 All Except Electra 225s and Rivieras

If the situation is encountered on 1965 all (except Electra 225 and Riviera) closed style bodies where the upper rear edge of the ventilator window contacts the ventilator division channel ("A" in Illustration), the problem may be the result of a partially tightened vent to door upper frame center attaching screw.

To determine if the screw is correctly installed, open the ventilator and, while carefully pressing the vent window in and out, check the movement (flexing) of the ventilator pivot support in relation to the door upper frame ("B" in Illustration).

If there appears to be excessive movement, the screw is probably not completely tightened even though it may appear to be. To tighten the screw will require considerable torque because screw is self-drilling type and is being inserted into a stainless steel pad on the vent frame.



J. Hresko

Manager, Technical Service

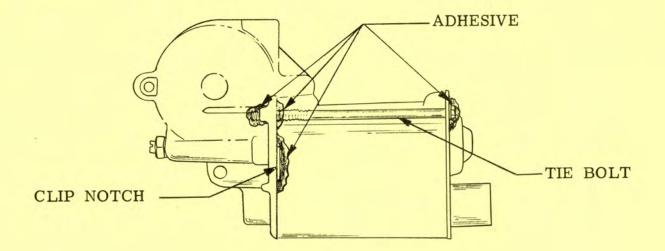


May 21, 1965

TO ALL BUICK DEALERS

SUBJECT: Sealing Power Window Motors - All Styles With Power Windows

A primary cause of power window motor failures has been due to the entry of water. As a precautionary measure to prevent water entry, the application of black weatherstrip adhesive at the "tie bolts" (upper and lower ends) and at brush holder clip notch (See Illustration) is recommended on all service replacement motors with two (2) "tie bolts". Improved motors with three (3) "tie bolts" will not require added sealing.



Hresko

Manager, Technical Service

BUICK DEALER SERVICE	Dealer Serv. Mgr
INFORMATION       Authorized Service       65-191         BUICK MOTOR DIVISION       GENERAL MOTORS CORPORATION       FLINT, MICHIGAN 4855	50 Others
September 10, 1965	

TO ALL BUICK DEALERS

SUBJECT: Power Window Motor Replacement - 1965 Models

Many of the power window motors that have been replaced in the field were returned to the factory for inspection. The inspection revealed that over 50% of the motors returned were satisfactory and were replaced unnecessarily.

Following the power window circuit checking procedure outlined in the 1965 Body Service Manual would have prevented these needless replacements. These checking procedures are located as follows:

LeSabre, Wildcat and Electra - Page 1L-10 Special, Skylark and Skylark Gran Sport - Page 2L-2 Riviera - Page 3L-1

We urge that all dealer personnel involved review and become familiar with these procedures to prevent these unnecessary motor replacements.

Manager, Technical Service

GLS