Mr. A. S. Kidder Studebaker-Packard Corporation General Service South Bend, Indiana A

1956

SERVICE BULLET

NO.

310

# WAX MAY DULL NEW CAR FINISH -1956 MODEL PASSENGER CARS

FEBRUARY

Please record this article on the Service Bulletin reference page at the end of the Body section of your 1956 Passenger Car Shop Manual.

From time to time we get reports of a haze, film or lack of luster on new Studebaker passenger cars. Investigation has indicated that such a condition may result where the finish was treated with wax or a polish containing wax when the car was new.

No wax or polish containing wax should be used on a new car within the first 60 days. "Lustur Seal" No. 1, or "Haze Cream" are the only products that are factory approved for application to the new car finish during the first 60 days of the car's life. Where wax or polishes containing wax have been used and the finish is dull, in most cases luster may be restored by thoroughly cleaning the finish with turpentine, then rubbing dry with a clean cloth. This will usually remove the wax residue. Following this, "Lustur Seal" No. 1, or "Haze Cream" can be applied.

While the dullness, haze or film is most noticeable on the black or darker colors, the same condition may prevail on any of the current enamels if wax is applied during the first 60 days.

The factory will not honor dealer's claims for refinishing to restore lustur where wax or wax polishes have been used.

### DETROIT GEAR AUTO. TRANS. LOW AND FORWARD BRAKE CYLINDER PLATE

The Low and Forward Brake Cylinder Plate, Part No. 535223, used in Studebaker automatic drive transmission was replaced in late production with Part No. 537723 Plate which has a .078" restricted hole feeding into the forward servo outer piston bore.

this issue BRAKE CYLINDER PLATE . AUTOMATIC DRIVE . 1 DOME LIGHT DOOR AND LENS REMOVAL . . . . 3 FLIGHTOMATIC DRAIN PLUG AND GASKET . FLIGHTOMATIC TRANSMISSION . 56G. . . . 3 HAND THROTTLE. . . . . . . . . . 6 PAINT FORMULAS - 1956 CARS . . . 2 PAINT FORMULAS - 1956 TRUCKS . 7 5 POWER TAKE-OFF CHART . . . RADIATOR DRAIN COCK. TRUCKS . 6 REAR WIRING HARNESS . TRUCKS 6 . TIRE PRESSURES . . . . . . . . . . . . . . 1 VIBRATION DAMPER FLYWHEEL INCORRECTLY MARKED . . . . . . . . . . . WAX MAY DULL NEW CAR FINISH. -1

TUDEBAKER

Part No. 537371 Gasket must be used with the latest plate and can be used with the old plate. The Parts depots will carry only the latest gasket. When installing gaskets, be sure that all bores or passages are open.

## TIRE PRESSURES IMPORTANT FOR SAFE DRIVING

Please record this article on the Service Bulletin Reference page at the end of the Wheels and Tires section of your 1956 Passenger Car Shop Manual.

Maintaining proper tire inflation pressures has always been important for maximum comfort and car performance as well as safety. In the modern cars with higher power engines and increased performance, it is now essential for safety reasons to make sure that tire pressures are maintained in accordance with factory recommendations which includes increased pressures for sustained high speed driving. Tire pressures below the recommended pressures, coupled with sustained high speed operation could result in loosening of the tire tread or extended tread separation.

Following a pattern established throughout the tire and automobile manufacturing industry. recommendations for Studebaker passenger car tire pressures have been changed in the Studebaker Owner's Guide booklet to read as follows:

'The tires with which your car is equipped are designed for normal driving such as encountered in average passenger car usage. For safety reasons, it is recommended that standard tires not be subjected to extreme driving conditions such as racing. The following starting tire pressure (cold) should be maintained. Tire pressures will build up with normal car operation. Pressures thus built up should not be reduced. Tire pressures for normal operating conditions should be adjusted only when tires are cold.

#### FOR ALL NORMAL DRIVING

AND NO WARKS AND A STATE

#### TIRE SIZE

6.40x15			26 lbs. Front 24 lbs. Rear
6.70x15	)	(	26 lbs. Front 22 lbs. Rear
an d	)	(	except Station Wagon - 24-
7.10x15	)	(	lbs. Rear and President Clas-
			sic - 20 lbs. Rear

#### FOR SUSTAINED HIGH SPEED DRIVING

All Tires 30 lbs. Front 30 Lbs. Rear

NOTE: Under conditions where car loading in excess of four passenger weight.is considered normal with 4-ply tires, 26 lbs. (1,83 kg/cm<sup>2</sup>) pressure both front and rear is recommended. When special 6-ply tires are used and under conditions where loading in excess of four passenger weight is considered normal, 26 lbs. (1,83 kg/cm<sup>2</sup>) front and 30 lbs. (2,10kg/cm<sup>2</sup>) rear pressure is recommended."

It is recommended that dealer personnel acquaint Studebaker owners with the latest tire inflation recommendations.

# PAINT FORMULAS FOR 1956 MODEL PASSENGER CARS AND STATION WAGONS

Please record this article on the Serivce Bulletin reference page at the end of the Body section of your 1956 Passenger Car Shop Manual. FEBRUARY 1956

The following paint formulas are for the 1956 model passenger cars and station wagons:

#### COOK'S ≸1008 AIRFORCE BLUE (METALLIC) BAKING ENAMEL - SYMBOL BAI

Indo Blue	63.14%
Phthalo Blue	15.37
Non-Leafing Aluminum	21.49
	100.00%

### JONES-DABNEY ∦1010 CERAMIC GREEN (METALLIC) BAKING ENAMEL - SYMBOL BAK

% Pigment Composition		% Vehicle Com	position
75.50	Gold Plate	Alkyd Resin	90.00
12.50	Pht haloc yan ine	Melamine	19.00
	Green		100.00%
10.90	Aluminum		
.50	Lamp Black	Non-Volatile	= 43.00%
	Pht haloc yanine		
100.00%			

#### O'BRIEN'S ≸1005 DAYBREAK BLUE BAKING ENAMEL -SYMBOL BAF

Phthalocyanine Blue	. 23
Titanium Dioxide (Rutile)	16.3
Syn. Resin Alkyd	26.0
Melamine	7.6
Thinner	49.87
Traces - Indo Red	
Traces - Red Iron Oxide	
Traces - Lamp Black	
	100.00%

#### COOK'S ∦IOII DOESKIN BAKING ENAMEL -SYMBOL BAL

Rutile Non-Chalking Titar	ium Dioxide 97.16%
Yellow Iron Oxide	1.07
Red Iron Oxide	1.51
Lamp Black	.26
	100.00%

### JONES-DABNEY ¥1009 GLENBROOK GREEN (METALLIC) BAKING ENAMEL - SYMBOL BAJ

	52 House 2010		
% Pigi	ent Composition	% Vehicle Comp	osition
50.00	Pht haloc yani ne	Alkyd Resin	90.00
	Green	Melamine	10.00
14.00	Pht haloc yani ne		100.00%
	Blue		
8.00	Gold Plate	Non-Volatile =	43.00%
28.00	Aluminum		
Tint	Lamp Black		
100.00%			18 S

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#### FEBRUARY 1956

### JONES-DABNEY ∦1000 MIDNIGHT BLACK BAKING ENAMEL SYMBOL BAA

% Pigment Composition	% Vehicle Composition	
75.00 Carbon Black	Alkyd Resin 90.00	
25.00 Toning Blue	Melamine 10.00	
100.00%	100.00%	

Non-Volatile = 43.00%

### COOK'S #1012 MOCHA BAKING ENAMEL -SYMBOL BAM

Rutile Non-Chalking Titanium Dioxide	81.46%
Red Iron Oxide	9.85
Yellow Iron Oxide	6.95
Lamp Black	1.74
	100.00%

### COOK'S ¥1003 ROMANY RED BAKING ENAMEL -SYMBOL BAD

Cadmium Red Medium Light	100.00%
Indo Maroon	Trace

### COOK'S #1004 SEASIDE GREEN BAKING ENAMEL -SYMBOL BAE

Rutile Non-Chalking Titanium Dioxide	99.18%
Phthalo Green	.69
Rhthalo Blue	.13
1 N N N N N N N N N N N N N N N N N N N	100.00%

### COOK'S ∦1006 SNOWCAP WHITE BAKING ENAMEL -SYMBOL BAG

Rutile Non-Chalking Titanium Dioxic	ie 100.00%
Raw Sienna	Trace
Yellow Oxide (Iron)	Trace
Lamp Black	Trace

### JONES-DABNEY #1002 SUNGLOW GOLD BAKING ENAMEL -SYMBOL BAC

% Pig	ment Composition	% Vehicle Composition
88.00	Titanium Dioxide	Alkyd Resin 88.00
12.00	Ferrite Yellow	Melamine 12.00
Tint	Lamp Black	100.00%
Tint	Red Iron Oxide	still terð r
100.00%	डी में पर का र	Non-Volatile = 50.00%
	1	The article and

### JONES-DABNEY ∦1015 TANGERINE BAKING ENAMEL -SYMBOL BAP

% Pig	ment Composition	% Vehicle Composition
59.00	Titanium Dioxide	Alkyd Resin 84.00
31.00	Molybdate Orange	Melamine 16.00
5.00	Chrome Yellow	100.00%
4.3	Indo Orange	
.7	Indo Maroon	Non-Volatile = 50.00%.
Tint	Lamp Black	
100.00%		

### JONES-DABNEY #1013 YELLOWSTONE BAKING ENAMEL -SYMBOL BAN

% Pig	ment Composition	% Vehicle Com	position
72.00	Titanium Dioxide	Alkyd Resin	90.00
26.00	Sun Yellow N.	Melastne	10.00
1.8	Fast Yellow		100.00%
<u>.2</u>	Indo Orange		
100.00%		Non-Volatile	- 52.00%
			×

# FLIGHTOMATIC TRANSMISSION DRAIN PLUG AND GASKET ASSEMBLY

Please record this article on the Service Bulletin Reference page at the end of the Transmission section of your 1956 Passenger Car Shop Manual.

It has been our practice to service drain plugs and all related gaskets as separate items. Accordingly, Part No. 1540938 Drain Plug, and Part No. 1540939 Gasket were released as service items.

It is not practical to carry these separate pieces since the gasket must be assembled to the plug by a special process. We will now, therefore, service only the plug and gasket assembly Part No. 1540937.

# FLIGHTOMATIC TRANSMISSION -56G MODEL CARS

Please record this article on page 31 of  $\frac{1}{100}$   $\frac{1}{100}$ your 1956 Passenger Car Shop Manual.

The Studebaker Automatic Drive is no longer used in production. Starting with car serials G-1360743 (C&K) and G-1361697 (W, F, D), South Bend produced 56G model passenger cars equipped with automatic will have the Flightomatic transmission installed. The service procedure is the same as covered in the Flightomatic. portion of the Transmission section in the 1958 Passenger Car Shop Manual.

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SECTION

# DOME LIGHT DOOR AND LENS REMOVAL - 1956 HAWK SERIES MODELS

Please record this article on the Service Bulletin reference page at the end of the Body section of your 1956 Passenger Car Shop Manual.

Removal of the dome light door and lens assembly must be carefully performed to avoid damage to the hard board headlining panel. The door and lens assembly must be *parted* rather than pried off.

#### Removal Procedure

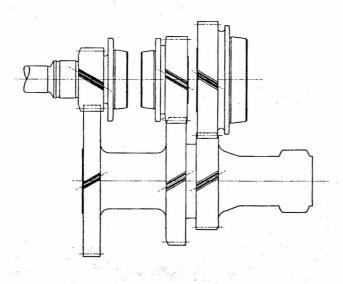
Grasp the dome light door and lens near the switch end and gently pull outward. Insert a long, thin screw driver blade or sharp awl about 1/2" to the rear of the switch from the lower edge, between the door and lens and light body assemblies. Twist or pry to part the door and lens from the body. Be careful not to damage the headliner. When separation has taken place, use a larger screw driver in the same manner to complete the removal.

Reinstall the door and lens assembly carefully in the usual manner.

# TRUCK SERVICE ITEMS

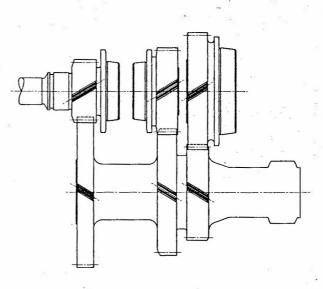
# TRANSMISSION - 4 SPEED SYNCHROMESH - 2E SERIES TRUCKS

A change has been made in the 4 speed





synchromesh T98 transmission to reduce end thrust on the main and countergear shafts. In the T98 transmission, the spiral on the main drive pinion, countershaft, and mainshaft gears runs from the right front toward the left rear of the transmission case (see Fig. 1). On the



#### FIG. 2 - T98A

new T98A transmission the spiral is reversed and runs from the left front toward the right rear (see Fig. 2). The transmissions are interchangeable as a unit except where the truck is equipped with a power take-off in which case a different power take-off will be required. (See chart page 5).

The T98A transmission is identified by a metal tag stamped "A" attached on the right side by the center, shift tower base, retaining cap screw. It can also be identified by a code number stamped at the left rear on the case adjacent to the shift tower base.

The letter designates the month; the digits indicate the day, year, and shift on which the transmission was built. For example: G1253. The "G" is the seventh letter - July; 12 - the twelfth day; 5 - the year 1955, and the 3 - the third shift.

The T98A transmission entered production with the following engine numbers;

Model	Engine No.		
2E7, 2E12	2E-8336		
2E28	3E-1652		
2E38	5E-3926		

48.00	8	1			ev. to	No.of	Rotation of		1
Company	P.T.O. Model	Туре	High	Low	Rev.	Gears	P.T.O. Drive Shaft	Adapter	Spacer
N. C. J				1					
Braden Winch Company	KHW7A-1	LD	490	1			Eng. Rot.	None	None
Broken Arrow, Oklahoma	FNW7A-1	MD	490				Eng. Rot.	None	None
P.T.O. made by	GHW7A-1	MD	830				Opp. Eng. Rot.	None	None
Arrow Gear Company	GLHW7A-1	MD	376	1			Opp. Eng. Rot.	None	None
Broken Arrow, Oklahoma	RHF7A-1B	HD		402	593		Eng. Rot. & Rev.	None	None
	RHF7A-2F	HD	8	402	593		Eng. Rot. & Rev.	None	None
	BHW7A-1B	HD	872	402	593		Eng. Rot. & Rev.	None	None
	BHF7A-2F	HD	872	402	593		Eng. Rot. & Rev.	None	None
	WHW7A-1BA *	HD		402	593		Eng. Rot. & Rev.	None	None
	(S.S. Shaft)		836				Opp. Eng. Rot.		
	WRHW7A-6FA *	HD		402	593		Eng. Rot. & Rev.	None	None
	(S.S. Shaft)		836				Opp. Eng. Rot.		
Chelsea Products Company	1CF; 1CF2	LD	510			1	Eng. Rot.	None	None
Chelsea, Michigan	1CFN; LCFWN $\triangle$	MD	510			1	Eng. Rot.	None	None
Used by the following:	41CF-C4	HD	650			2	Opp. Eng. Rot.	None	None
The Anthony Company	41KCF-C4	HD	810			2	Opp. Eng. Rot.	lione	None
Edwards Iron Works	45CF-A2 * 🔺	HD	580				Opp. Eng. Rot.	None	None
The Galion Allsteel Body Co.	35CF-B2	HD	750		580		Eng. Rot. & Rev.	None	None
The Heil Company Hercules Steel Products	55CF-B2	HD	750	270	580- 210		Eng. Rot. & Rev.	None	None
Marion Metal Products Co.	95CF-B2	ID	580	210		-	Opp. Eng. Rot.	None	None
	R35CF *	HD	750		580		Eng. Rot. & Rev.	None	None
	(S.S. Shaft)	1.0	100	3	000		Opp. Eng. & Rev.	None	Mone
* II.V.	65CF *	HD	580	210	750-		Opp. Eng. & Rev.	None	None
2			000		270		opp. Ing. a nev.	None	None
	(S.S. Shaft)		680		21.7		Opp. Eng. Rot.		
	×						а – U		
Gar Wood Industries, Inc.	90-HOOOFA-Rev.								
Farma Michigar	** ▲	1D	490				Eng. Rot.	None	None
Wayne, Michigan	92-HOOOFA-Rev.		593				Opp. Eng. Rot.	None	None
Ised by the following:	84YHOOOFA-Rev.		889	372			Opp. Eng. & Rev.	None	None
Edwards Iron Works	93-14000FA-Rev.▲	HD	902		602	3	Eng. Rot. & Rev.	None	None
picer Mfg. Company	AANF7-12	MD	527				Eng. Rot.	None	None
Coledo, Ohio	GNF7-12	HD	618				Opp. Eng. Rot.	None	None
Used by the following:	HNF7-12		1094	- +			Opp. Eng. Rot.	None	None
fulsa Winch Company	KANF7-11	HD	625	-			Opp. Eng. Rot.	None	None
I. S. Watson Company	RNF7-12	HD	720	+	576		Eng. Rot. & Rev.	None	
				372			LAND . HUW, OF MEY.	none	23P6

△- With Band Brake Only.

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▲ - With Band Brake or Tru-Stop Brake.

\*\* - With Tru-Stop Brake use Short "U" Joint similar to Neapco 1663G3.

LD - Light Duty.

MD - Medium Duty.

HD - Heavy Duty.

\* - Dual Shafts.

SS - Single Speed Shaft.

#### SERVICE BULLETIN

## REAR WIRING HARNESS 1/2 3/4 AND I TON 2E MODEL TRUCKS

No. 310

The 1/2, 3/4 and 1 ton 2E model trucks are being produced with two types of rear wiring harness. One type has a single wire protruding from the harness, the other type, 2 wires.

The reason for this is that many states now require that trucks be equipped with class A turn signal lights when placed in service. An equal number of states do not have this requirement. Therefore, trucks being produced with pick-up boxes installed will have the one wire protruding from the harness which provides for connecting the second or dual tail light.

All chassis and cab units (minus body) are produced with two wires protruding from the harness since the type of body to be installed is unknown. The two wires provide convenient connection for class A turn signals in which the stop light is also used as the turn signal.

The wiring harness with the two wires protruding will be used on trucks equipped with pick-up boxes where the request for class A turn signals appears on the original order.

### HAND THROTTLE

Occasionally, inquiries are received concerning the parts needed to install a hand throttle on E Series V8 engines equipped with 2-barrel carburetors. While the requests are too few to release the parts in a kit form, individual pieces are available through your regular parts depot.

The parts required are as follows:

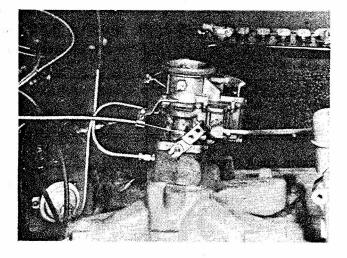
1 -	68457	0 bra	icket
-----	-------	-------	-------

- 1 684359X2 button and wire
- 1 684360X2 sleeve and tube
- 1 G124934 nut
- 1 G103344 plain washer
- 1 G135629 washer, shakeproof
- 1 G218318 screw
- 1 184294 collar
- 1 G131949 screw
- 1 677683 lever

Figure 3 shows the hand throttle installed.

# RADIATOR DRAIN COCK - 2E SERIES TRUCKS

Because of a variation in sheet metal shimming there is a possibility that an interference



#### FIG. 3

may occur between the rear flange of the bumper-to-grille splash guard and the radiator drain cock. Where the interference exists, vibration or operation over rough roads could cause the drain cock to shear off.

Therefore, 2E Series Trucks produced prior to the following serial numbers should be inspected to see that adequate clearance exists. To provide clearance, bend the rear flange of the splash guard down or cut a notch in the flange.

E5-121007	E12 -	2433	E28 -	4817
E7 - 6045	E13 -	938	E38 -	5745

The 2E5 models equipped with the standard radiator are not affected.

# INCORRECTLY MARKED VIBRATION DAMPER FLYWHEEL 2E7 AND 2E12 MODEL TRUCKS

There is a probability that some 224 cu. in. V8 engines used in the 2E7 and 2E12 model trucks were produced with a Vibration damper flywheel having incorrect timing marks.

Where this condition exists it would be impossible to accurately check valve timing and the ignition timing mark would be 12° BTC instead of the desired 4<sup>0</sup> BTC.

Should you receive a complaint of 'spark knock" or "pinging" or even poor engine per-formance on trucks with engine numbers from 2E-7312 to 2E-8926 inclusive, the vibration damper flywheel identification marks should be

6

- 1 172651 clip

# SERVICE BULLETIN FEBRUARY 1956



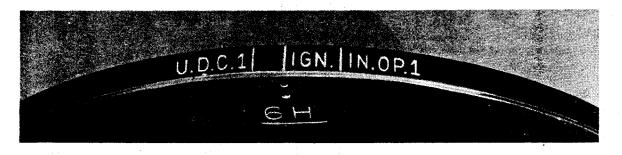
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checked before attempting any repairs or adjustments.

The correct damper flywheel will have 536563 (part number) stamped on the rim as shown in Fig. 4. The incorrect damper flywheel will have a 6H stamped on the face, approximately 3/4" from the rim, and adjacent to the timing marks as shown in Fig. 5.

No. 310

Whenever an incorrectly marked damper flywheel (6H) is found, it should be immediately replaced with the Part No. 536563 damper flywheel and the ignition set to the new timing mark.



#### F16.5

# PAINT FORMULAS FOR 1956 MODEL TRUCKS

The following paint formulas are for the 1956 model trucks:

### O'BRIEN'S ¥1005 DAYBREAK BLUE BAKING ENAMEL -Symbol baf

Phthalocyanine Blue	. 23%
Titanium Dioxide (Rutile)	16.3
Syn. Resin Alkyd	26.0
Melamine	7.6
Thinner	49.87
Traces - Indo Red	
Traces - Red Iron Oxide	
Traces - Lamp Black	· · ·
-	100.00%

#### JONES-DABNEY ¥1000 MIDNIGHT BLACK BAKING ENAMEL SYMBOL BAA

💈 Pig	ent Co	position	🐒 Vehic	le Composition
75.00	Carbon	Black	90.00	Alkyd Resin
25.00	Toning	Blue	10.00	Melamine
100.00%			100.00%	

Non-Volatile = 43.00%

### COOK'S #1003 ROMANY RED BAKING ENAMEL -Symbol bad

Cadmium Red	Mediu∎ Light	100.00%
Indo Maroon		Trace

### COOK'S #1004 SEASIDE GREEN BAKING ENAMEL -Symbol bae

Rutile Non-Chalking Titanium Dioxide	99.18%
Phthalo Green	. 69
Phthalo Blue	.13
	100.00%

### COOK'S ≢1021 SQUADRON BLUE NON-METALLIC BAKING ENAMEL - SYMBOL BAV

Rutile Non-Chalking Titanium Dioxide	57.48%
Iron Blue	38.81%
Red Iron Oxide	2.12
Indo Maroon	1.16
Lamp Black	.43
•	100.001

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SERVICE: BULLETIN

No. 310

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# STUDEBAKER DIVISION

### Studebaker-Packard Corporation

South Bend 27, Ind.

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