FEDERAL TRUCKS-1933 AND 1934



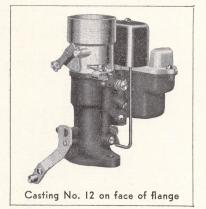
Federal Trucks—Models E3-E4-G5
BB Model Updraft Carbureter—No. 257S
(List Price \$12.00)

Federal Milk Truck—Model DM

BB Model Updraft Carbureter—No. 262S

(List Price \$12.00)

(This carbureter to be used in conjunction with Body Flange Assembly No. 1-79S. See Parts List, Page 3)



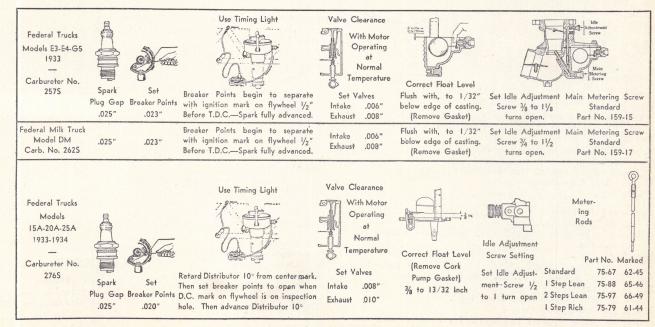
Federal Trucks—Models 15A-20A-25A WI Model Downdraft Carbureter—No. 276S (List Price \$12.00)

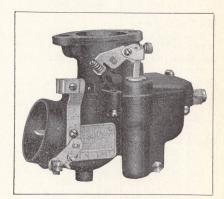
A \$2.00 exchange allowance is deducted from the list price if buyer turns in the carbureter which is replaced by a 276S.

MOTOR TUNE-UP

Be Accurate! Always Use Feeler Gauges!

CAUTION: Change worn or leaky flange gaskets. Tighten ma nifold bolts and test compression before adjusting carbureter.





CARBURETER SPECIFICATIONS

Federal Truck—Carbureter No. 257S. Federal Milk Truck—Carbureter No. 262S.

(Note: Carbureter No. 262S to be used in conjunction with body flange assembly No. 1-79S. See parts list.)

Flange size, 11/4 inch S. A. E. Throttle bore, 1-7/16 inch 1. D. Dimensions: (Both models)

Float Setting:

Top of float flush to 1/32 inch below top (Both models) surface of lower body casting.

Vent: (Both models)

(To float chamber) Outside: No. 30 drill size.

Gasoline Intake Needle:

Triangular, horizontal. No. 38 drill in (Both models) needle seat.

Idle Orifice Tube:

(No. 257S) Jet size, .0256 to .0276 inch drill. Jet size, .0236 inch drill.

(No. 2625) Air bleed through venturi, to idle passage .085 to .087 inch diameter drill.

Idle Ports: (Both models) Lower port size: .062 to .064 inch diameter. Top of port located .005 to .009 inch below lower edge of valve.

(Both models)

Upper port size: .053 to .057 inch diameter (for idle adjustment screw).

Idle Adjustment Screw:

1/4 to I turn open. For richer mixture turn (No. 2575) screw out.

(No. 262S)

3/4 to 11/2 turns open. For richer mixture turn screw out. (Do not idle engine below 300 rpm or 6

miles per hour idle speed).

Main Metering Screw:

Calibrated to flow 222 CC per minute. No. 257S Calibrated to flow 198 to 202 CC per. (No. 2625) minute.

(Do not gauge for size. If in doubt, re-

place with new part.)

Nozzle:

No. 30 drill size. (No. 257S)

2-.0394 inch drill 1/16 inch from shoul-

1-.051 inch drill 3/8 inch from shoulder. 1-.051 inch drill 23/32 inch from shoul-Accelerating Jets 1-.051 inch drill 1-1/16 inch from shoul-

der.

(No. 262S) No. 33 drill size.

2-.0394 inch drill 1/16 inch from shoul-Accelerating Jets

1-.051 inch drill 3/8 inch from shoulder. (1-.063 inch drill 23/32 inch from shoul-

der. Accelerating Jets 1-.051 inch drill 1-1/16 inch from shoulder.

Air Bleed to Nozzle:

Size: .0275 to .0295 inch drill. (Both models)

Step-up Jet: (Power Orifice)

.0236 inch drill size. (No. 257S) .0256 inch drill size. (No. 262S)

Main venturi, I inch I. D.

Accelerating Pump:

Type, low pressure, delayed action. Both models) Stroke: Summer setting (inner hole, short (Both models) stroke) 9/16 inch.

Winter setting (outer hole, long stroke)

I inch.

Pump intake check valve, size 1/8 inch. (Both models) Pump (discharge) metering screw: Jet size (No. 257S) No. 52 drill.

Pump (discharge) valve check: Retainer, (No. 262S) jet size, No. 52 drill.

Pump bleed back, size .067 inch drill. (No. 262S)

Choker:

Butterfly type with compensating air valve. (Both models) Lever on left side.

Throttle Lever Dog:

Adjustable. On left side. (No. 262S)

Throttle Lever:

(Viewing carbureter from side opposite air intake.)

(No. 257S) Adjustable. On left side, length 11/2 inch when open points up.

Loose. On right side, length 3/4 inch. On right side, length 3/4 inch.

(No. 262S)

Tube Clamp: On air intake. Also under body attach-

(No. 257S)

ing screw.

(No. 262S) On air intake.

Federal Truck—Carbureter No. 276S

Dimensions:

Flange size, 11/4 inch S.A.E. Primary venturi, 11/32 inch I. D. Secondary venturi, 11/16 inch I. D. Main venturi, 1-3/16 inch I. D.

Distance from float (at free end) to float chamber cover to be 3/8 inch to 13/32 inch when needle is seated.

Outside Vent:

No. 50 drill size. No inside vent.

Gasoline Intake:

Square vertical needle. No. 38 drill size in needle seat.

Gasoline Line Connection: 5/16 inch.

Low Speed Jet Tube:

Jet, No. 72 drill size. By-pass in body, No. 55 drill size; Economizer in body, No. 48 drill size.

Idle Port:

Dumb-bell type. Length, .185 inch. Width, .029 inch. Top, .052 inch diameter. Bottom, .046 inch diameter.

Idle Port Opening:

.035 to .038 inch with valve closed tight.

Idle Adjustment Screw:

Correct setting 1/2 to I turn open. For richer mixture turn Do not attempt to idle engine below 360 rpm.

Main Nozzle:

In primary venturi, angle 30°. Size, No. 40 drill.

Metering Rod:

(Standard) Economy step, .062 inch diameter. Middle step, .060 inch diameter. Power step, .045 inch diameter. Length 3-25/64 inches.

Metering Rod Jet: .087 inch diameter.

Metering Rod Setting:

Use Gauge 2.795 inch. (Part No. T109-25.)

Accelerating Pump:

Low Pressure type with adjustable stroke. Discharge Jet: No. 72 drill size. Intake ball check, No. 62 drill size Discharge ball check, No. 45 drill size. Relief Disk check, No. 65 drill size.

Throttle Lever:

At left. Length, 1-3/16 inch. In center of travel points down.

Choker:

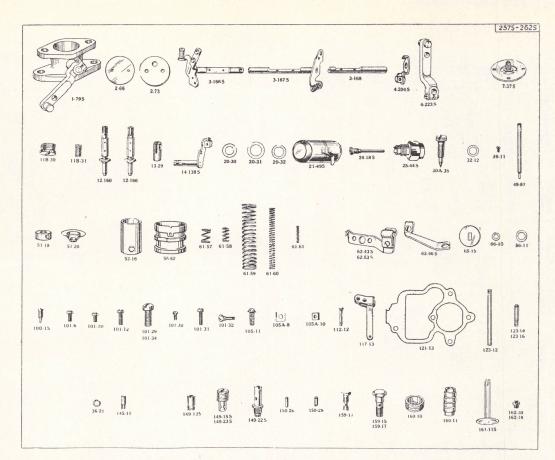
In air horn; butterfly type with compensating air valve.

Choker Lever:

At left. When open, points down.

Tube Support Bracket: At left on air horn.

Viewing carbureter from side opposite air intake



Federal Trucks, 1933—Carbureters Nos. 257S-262S—List Price \$12.00

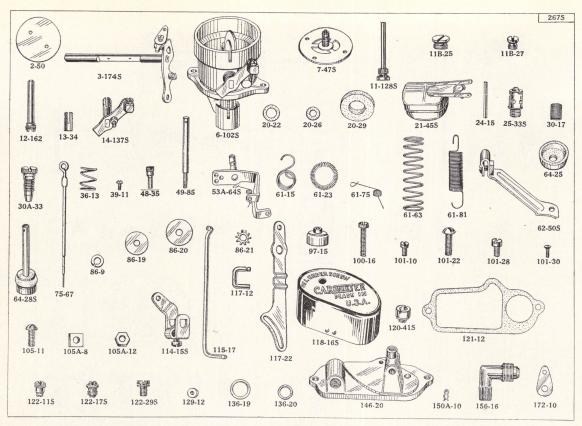
Part No.	PART NAME	List Price	Part No.	PART NAME	List Price
1-79S 2-66 2-73 3-166S 3-167S 3-168 4-204S	*Body flange assembly Throttle valve		65-15 86-10 86-11 100-15 101-6 101-10	*Pump link cover plate Lock washer Lock washer **Collar screw Choke bracket attaching screw Wire clamp screw	.01 .01 .05 .05
4-223S 7-37S 11B-12 11B-26 11B-30 11B-31 12-160	**Throttle lever assembly (loose) *Throttle lever assembly (Body flange assem Choker valve assembly Rivet plug	.60 .50 .02 	101-12 101-29 101-30 101-31 101-32 101-34	Clamp screw	.05 .05 .05 .05 .05
12-166 13-29 14-138S 20-30 20-31 20-32 21-49S 24-18S 25-44S 30A-35	*Nozzle Choker shaft (stub) Choker assembly with clamp and screw Nozzle gasket Needle seat gasket Metering screw gasket Float and lever assembly Float lever pin and plug assembly Needle and seat assembly Idle adjustment screw	.60 .15 .40 .05 .05 .05 .05 .80	105A-8 105A-10 112-12 117-13 121-13 123-12 123-14 123-16 136-21 145-11	**Tube clamp nut	
32-12 39-11 49-87 51-18 51-20 52-16 58-62 61-57	Pump rod gasket		149-11S 149-13S 149-15\$ 149-22S 149-23S 150-26 150-29 159-11	**Step-up valve assembly **Check valve cage assembly **Pump valve cage assembly *Step-up valve cage assembly *Pump valve cage assembly Pump collar pin Venturi pin **Pump metering screw	
61-58 61-59 61-60 61-61 62-43S 62-46S 62-53S	Throttle lever adjusting screw spring		159-15 159-17 160-10 160-11 161-11S 162-10 162-14	**Main metering screw *Main metering screw Pump piston Step-up piston Pump rod plate and rod assembly **Power orifice (Step-up jet) *Power orifice (Step-up jet)	30 30 40 20 30 10

*Used on carbureter No. 262S only.

List price of \$3.00 per 100 applies to parts listed at \$0.05 each. List price of \$1.25 per 100 applies to parts listed at \$0.02 each.

**Used on carbureter No. 257S only.

List price of \$1.75 per 100 applies to parts listed at \$0.03 each. List price of \$0.50 per 100 applies to parts listed at \$0.01 each.



Federal Truck, 1933-34—Carbureter No. 276S—List Price \$12.00

WHEN SERVICING, USE GASKET ASSORTMENT No. 105-List Price \$0.30

		A A	330KINILIAI	110. 105—List Frice \$0.50	
Part No.	PART NAME	List Price	Part No.	NAME PART Lis	t Price
2-50	Throttle valve		75-79	Metering rod—one step rich (.061"059"-	
3-1865	Throttle shaft and lever assembly	60		.044")	.30
6-1085	Air horn assembly	2.20	75-88	Metering rod—one step lean (.065"063"-	
7-47S	Choker valve assembly	50	le chi	.046")	,.30
118-12	Low speed jet assembly	30	75-97	Metering rod—two steps lean (.066"064"-	
11B-12	Rivet plug	02		.049")	30
11B-26	Rivet plug	10	86-9	Lock washer	01
11B-27	Passage plug	02	86-19	Plunger washer (Inner)	03
12-162	Nozzle	30	86-20	Plunger washer (Outer)	03
13-34	Choker shaft stub		86-21	Lock washer	1
14-1445	Choker assembly with clamp and screw		97-15	Plunger cup	15
20-22	*Needle seat gasket		100-16	Throttle lever adjusting screw	05
20-26	*Metering rod jet gasket	05	101-10	Wire clamp screw	
20-29	Pump cylinder bushing gasket—upper		101-22	Attaching screw	05
21-45S	Float and lever assembly	.80	101-28	Clamp screw	05
24-15	Float lever pin.		101-30	Choke valve screw	05
25-42S	Needle and seat assembly.		101-59	†Air horn and body attaching screw	05
30-17	Strainer gauze		105-11	Tube clamp screw	.05
30A-33	Idle adjustment screw		105A-8	Tube clamp nut	05
36-13	Adjustment screw lock spring		105A-12	Hex nut	
39-11 48-35	Valve attaching screw		114-155	Throttle shaft arm and screw assembly	
49-85	Pump jet	15	115-17	Throttle connector rod	
53 A-64S	Plunger shaft	.20	117-12	Connector link	.05
3371-013	(Superseded by 53-89S)	40	118-165	Dust cover assembly	50
53A-89S	Pump arm, spring and countershaft assemb		120-415	Metering rod jet assembly	.30
61-15	Choker spring		121-12	Bowl cover gasket	.10
61-23	Plunger spring		122-115	Discharge ball check assembly	25
61-52	Pump spring		122-175	Intake ball check assembly	25
61-75	Metering rod spring		122-295	Check valve assembly.	
62-39\$	Tube clamp assembly (Superseded by 62-79	(5)20	129-12	Metering rod disk	02
62-795	Tube clamp assembly		136-19	Plug washer	01
64-25	Plunger leather		136-20	Plug washer	.01
64-285	Plunger and rod assembly	.90	146-20	Bowl cover	
75-67	Metering rod—Standard (.062"060"045"	30	150A-10	Pin spring	.01

†This screw, with nut and lock washer, used only on production starting approximately June 1, 1934.

Metering rods are marked with step dimensions in thousandths, thus: rod part No. 75-67 (steps, .062"-.060"-.045"), marking "62-45." Rods should be ordered by part number.

List price of \$3.00 per 100 applies to parts listed at \$0.05 each. List price of \$1.25 per 100 applies to parts listed at \$0.02 each.

List price of \$1.75 per 100 applies to parts listed at \$0.03 each. List price of \$0.50 per 100 applies to parts listed at \$0.01 each.

^{*}Gaskets so marked must be soaked in 90 proof denatured alcohol for 15 minutes, installed on part, and let dry before using.