

SECTION VI—FUEL AND EXHAUST SYSTEM

Servicing of carburetors on 1959 models is essentially the same as on carburetors used on prior models. Complete servicing procedures can be obtained by referring to the 1957-58 *Plymouth Service Manual*. When servicing units refer to Data and Specifications Charts in this supplement for settings on 1959 model carburetors.

1. CARBURETOR

BALL AND BALL DUAL (CARTER)

The Ball and Ball Dual (Carter) carburetor used on the

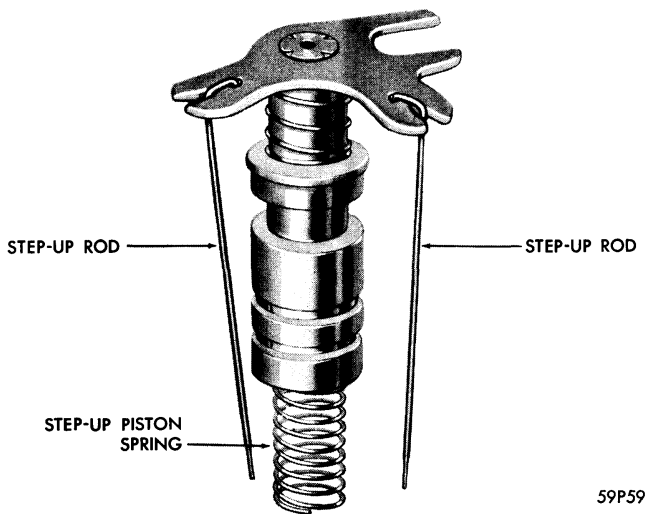


Figure 1—Step-up piston—Ball and Ball dual (Carter)

Fury V-800 (318 cu. in.) engine incorporates a three stage main metering system which provides improved fuel metering for greater fuel economy under most operating conditions. The new system consists of a double spring controlled vacuum piston and a stepped metering rod. Under part throttle acceleration or higher car speeds, the new system provides an intermediate mixture without utilizing a full rich wide open throttle mixture, see Figure 1.

AFB—FOUR BARREL—CARTER

A four-barrel AFB Carter carburetor is available as optional equipment on Fury V-800 engines (318 cu. in.) and is standard on Golden Commando engines, see Figures 2 and 3. Refer to Data and Specifications for float settings and other adjustment settings.

CROSS-OVER CHOKE

A cross-over choke is used on all two-barrel and four-barrel carburetors. Other than an occasional cleaning, if necessary, the automatic choke requires no servicing. It is important that the choke operating rod works freely at the choke shaft and also at the coil housing. Move the choke rod up and down to check for free movement of the coil housing on the shaft. Make certain that the coil housing does not contact the sides of the well. Any contact will cause the choke to open late and may cause the choke to stay open after the engine has cooled—thus causing hard

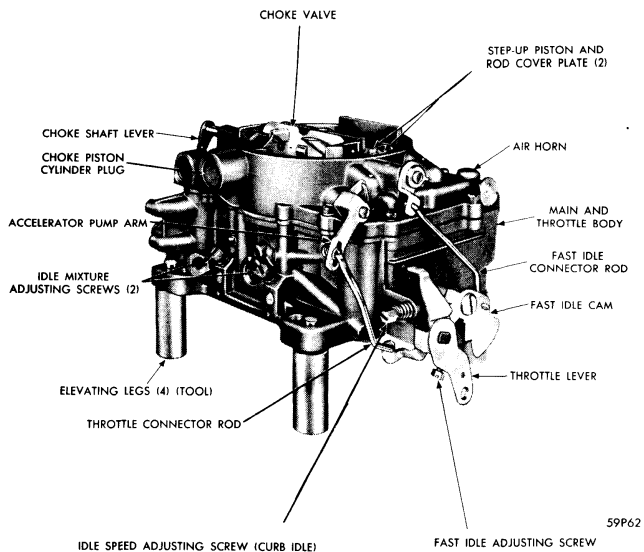


Figure 2—Four-barrel carburetor—Model AFB (Carter)—left front view

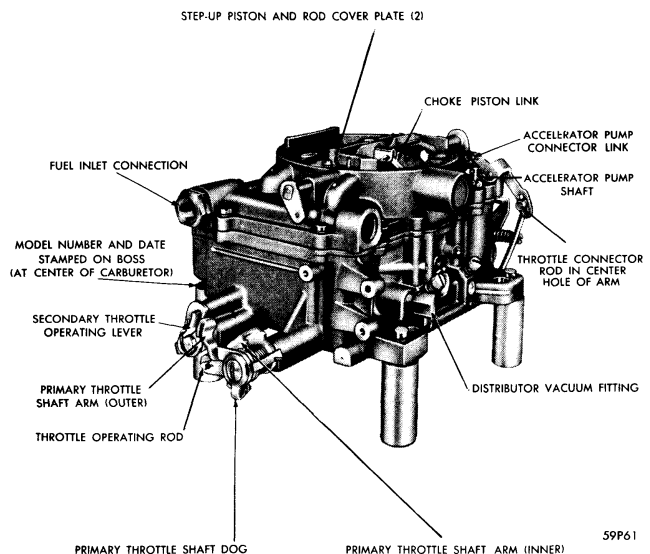


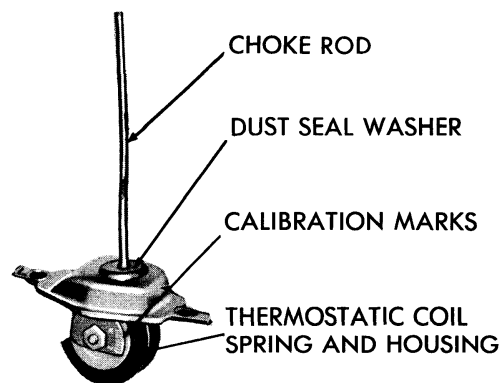
Figure 3—Four-barrel carburetor—model AFB (Carter)—right front view

**FUEL SYSTEM
DATA AND SPECIFICATIONS**

Model		M 1	M 2		
		6-Cyl.	V-8 Engine (318 cu in)		
Carburetor	Type	Downdraft (single)	Downdraft (dual)		
		Carter	Carter	Stromberg	
	Model No.	Standard	BBS-2567S (A)	BBD-2864S (C)	WW 15-38 (D)
		Overdrive	BBS-2568S (A)	BBD-2865S (C)	WW 15-39 (D)
PowerFlite		BBS-2569S (B)	BBD-2866S (C)	WW 15-40 (D)	
Choke Control		Integral Automatic	Cross-over Automatic		
Carburetor Adjustments	Float Setting	7/32 in.	9/32 in.	7/32 in.	
	Accelerator Pump	27/32 in.	1-1/8 in.	1/4 in.	
	Fast Idle	.016 in.—.020 in.	.015 in.	7-1/2 turns 1/4 in.	
	Fast Idle (rpm)	1400 (engine hot)		1300 (engine hot)	
	Unloader	9/64 in.	1/4 turn	15/64 in.	
	Idle Mixture	1/4 drill	1/4 turn	1-1/8 turn	
	Overdrive Kickdown Switch	1/64 in.-3/64 in.			
	PowerFlite Dashpot	3/32 in.	— —	— —	
Fuel Pump	Type	Mechanical Diaphragm			
	Pressure	6-7 psi			
	Make	Carter			
Fuel Tank Capacity		20 gals.—22 gals. (Suburban only)			
Manifold Heat Control		Thermostatic—Automatic			
Air Cleaner		Paper Element			
Choke Unit (Carter No.)		(C) 170-AV-464S (A) 170-N-312S (B) 170-X-312S (D) 387806			

starting. Do not lubricate any parts of the choke since this would cause dirt accumulation and result in binding of the choke mechanism. Check operation of choke piston by working choke valve back and forth. Check the small plug at the end of the choke piston. An air leak at this point would prevent proper operation of the choke blade and result in hard starting and poor fuel mileage.

The choke control unit can be disassembled for service by removing the hairpin clip and nut. Care should be used when assembling parts so that the coil spring is properly positioned on the shaft. Generally the choke will function properly if the index mark is set at a point half way between the L and R mark. If need be, set the mark toward rich or lean as required, see Figure 4.

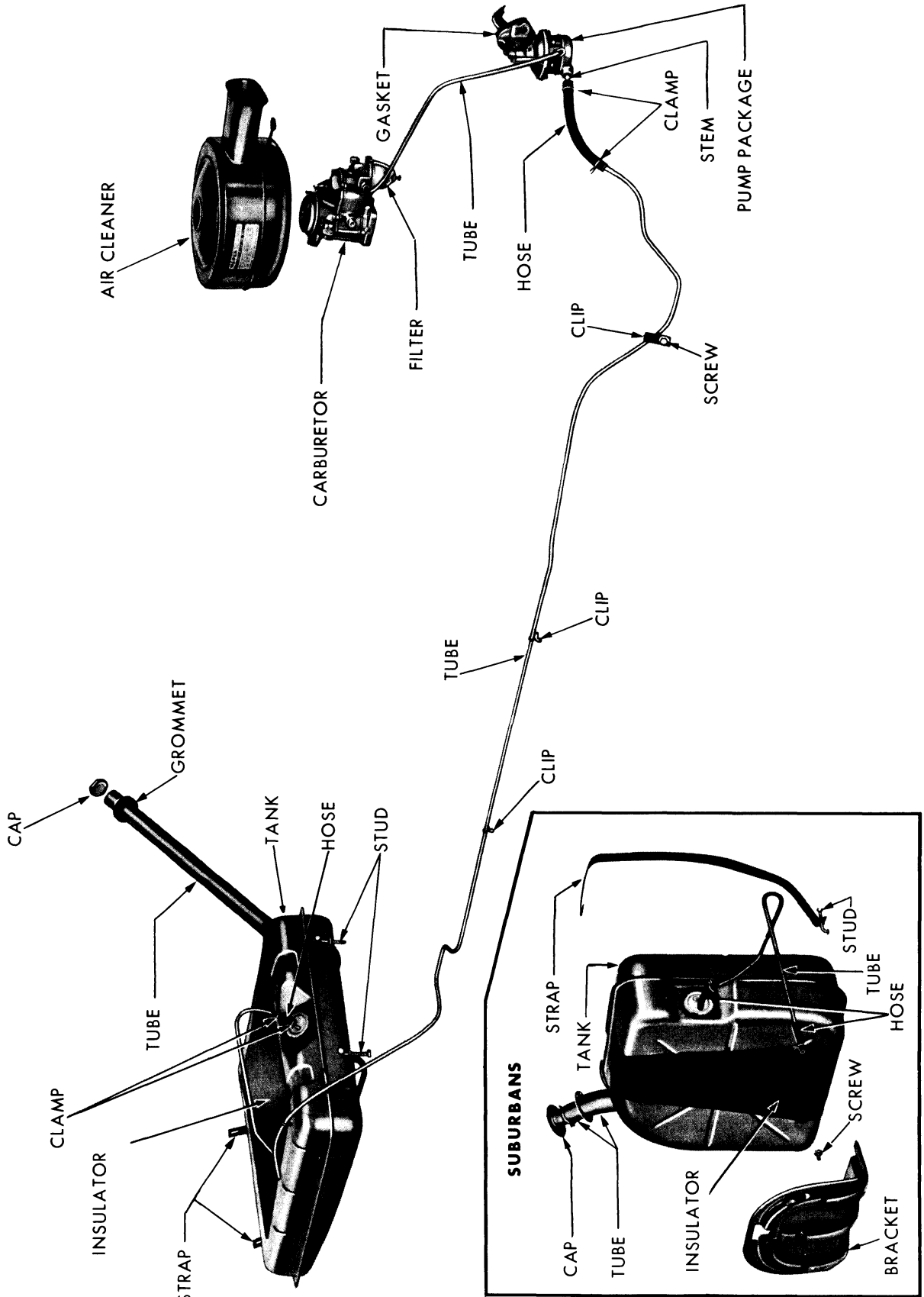


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Figure 4—Cross-over type choke

**FOUR BARREL CARBURETOR
DATA AND SPECIFICATIONS**

MODEL		M2 SUPER-PAK (318 cu. in.)	M2 GOLDEN COMMANDO (361 cu. in.)	
Carburetor	Downdraft Four Barrel			
	Model Number	Standard	AFB-2813S (A)	AFB-2855S (B)
		Overdrive	AFB-2813S (A)	— — —
		Automatic	AFB-2812S (A)	AFB-2856S (B)
Choke Control		Cross-over Type—Automatic Set at Center Index Mark		
Carburetor Adjustments	Accelerator Pump Adjustment	7/16 in. from top of the bowl cover to the top of plunger shaft rod in center hole of pump arm		
	Fast Idle Throttle Valve Clearance	.012 in.		
	Choke Unloader	¼ in.		
	Lever Adjustment	When lower edge of primary valve is 3/8 in. from bore (opposite idle port) secondary valves begin to open. .010-.030 in. between closing shoes when primary and secondary valves are closed		
	Idle Mixture	¼ turn		
	Idle Speed	500 rpm		
	Float Level Setting	7/32 in.		
	Float Drop	23/32 in.		
Fast Idle on Car	1400 rpm (engine hot)			
Choke Unit (Carter No.)		(A) 170—AU—516S	(B) 170—AU—515S	



59P46