HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160

1959 2-BARREL MODEL 2300

EDSEL	Ford or Holley No.
332" Engine (Synchro-mesh) ②	PB9E-9510-F
FORD	
292" Engine (Governor)	B9AE-9510-B
332" Engine (Auto. Trans.) ②	B9A-9510-D
MERCURY	
312" Engine ②③	B9ME-9510-A

1959 4-BARREL MODEL 4150

RAMBLER	
5920 Series	4150 R-1748-1A
5980 Series	4150 R-1312-1A

1960 2-BARREL MODEL 2300

MERCURY	
312" Engine (Early) ②	B9ME-9510-A
312" Engine (Late) ②	COME-9510-A
312" Engine (Synchro-mesh)	COME-9510-F
RAMBLER	
6020 & 6080 Series (Early)	R-2040A
6020 & 6080 Series (Late)	R-2040-1A

1960 4-BARREL MODELS 4150, 4160

FORD	
352" Engine (Police Special)	4160 COAE-9510-AA
DODGE	
383" Engine (Synchro-mesh)	4160 R-2052A
383" Engine (Auto. Trans.)	4160 R-1971A
RAMBLER	
6020 Series	4150 R-1958A, -1A
6080 Series	4150 R-1957A, -1A

1961 2-BARREL MODEL 2300

RAMBLER	
6120 Series	R-2228A
6180 Series	R-2228A

1961 4-BARREL MODELS 4150, 4160

FORD	
390" Engine, High Perf. (CCV)	4160 C1AE-9510-AM
RAMBLER	
6120 Series	4150 R-1958-1A
6180 Series	4150 R-1957-1A

1962 2-BARREL MODEL 2300

RAMBLER AMBASSADOR	
Synchro-mesh & Overdrive	R-2442A
Auto. Trans.	R-2463A

1962 4-BARREL MODELS 4150, 4160

FORD	
390" & 406" Eng. S.M. Trans. (CCV)	4160 C1AE-9510-AM
RAMBLER AMBASSADOR	
Synchro-mesh & Overdrive	4150 R-1957-1A
Auto. Trans.	4150 R-2464A

1963 2-BARREL MODEL 2300

RAMBLER AMBASSADOR	
Synchro-mesh & Overdrive	R-2442A
Auto. Trans.	R-2463A

1963 4-BARREL MODELS 4150, 4160

DODGE & PLYMOUTH	
426" Ramcharger	4160 R-2814A
426" Ramcharger	4160 R-2929A

1963 4-BARREL MODELS (Continued)

FORD & MERCURY	Ford or Holley No.
406" Engine (Early)	4160 C1AE-9510-AM
406" Engine (Late)	4150 C3AE-9510-A
406" Engine Dual Carb.	Two 4160 C2AE-9510-CB
427" Engine	4150 C3AE-9510-B
427" Eng. Dual Carb. (Early)	Two 4160 C2AE-9510-CB
427" Eng. Dual Carb. (Late)	Two 4160 C3AE-9510-C
RAMBLER AMBASSADOR	
Synchro-mesh & Overdrive	4150 R-1957-1A
Auto. Trans.	4150 R-2464A

1964 2-BARREL MODEL 2300

RAMBLER CLASSIC & AMBASSADOR V8	
Synchro-mesh & Overdrive	4150 R-2442-1A, -2A
Auto. Trans.	4150 R-2463-1A, -2A

1964 3-BARREL MODEL 3160

DODGE & PLYMOUTH	
426" Hemicharger Engine	Two R-3085A

1964 4-BARREL MODELS 4150, 4160

CORVETTE	
327" Engine (365 HP)	4150 R-2818A
DODGE & PLYMOUTH	
426" Ramcharger Engine	Two 4160 R-2973A
426" Hemicharger Eng. (Dual Carb.)	Two 4160 R-3116A
FORD & MERCURY	
427" Engine (410 HP)	4150 C3AE-9510-B
427" Engine (High Rise Man.)	4150 C4AF-9510-DA
427" Eng. (425 HP) Early	Two 4160 C3AE-9510-C
427" Eng. (425 HP) Late	Front 4160 C3AF-9510-BJ Rear 4160 C3AF-9510-BK
427" Eng. (High Perf.)	Front 4150 C4AF-9510-CU Rear 4150 C4AF-9510-CV
RAMBLER AMBASSADOR V8	
Synchro-mesh & Overdrive	4150 R-1957-1A
Auto. Trans.	4150 R-2464A

1965 3-BARREL MODEL 3160

DODGE & PLYMOUTH	
426" Hemicharger Engine	Two R-3085A

1965 4-BARREL MODELS 4150, 4160

CHEVELLE	
327" Engine (350 HP)	4150 R-3043A
CORVETTE	
327" Engine (350 & 365 HP)	4150 R-2818A
DODGE & PLYMOUTH	
426" Hemicharger Engine	Two 4160 R-3116A
FORD & MERCURY	
427" Engine (425 HP)	Front 4160 C3AF-9510-BJ Rear 4160 C3AF-9510-BK
427" Engine (425 HP)	Front 4150 C4AF-9510-CU Rear 4150 C4AF-9510-CV
RAMBLER CLASSIC & AMBASSADOR V8	
327" Eng. (Synchro-mesh & Overdrive)	4150 R-3044A
327" Eng. (Auto. Trans.)	4150 R-3045A

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

1966 4-BARREL MODELS 4150, 4160

CHEVY II	Model	Holley Carburetor No. Synchro-mesh	Auto. Trans.
327" 275 HP V8			
Without A.I.R.	4160	R3123A	R3230A
With A.I.R.	4160	R3265A	
327" 350HP V8			
Without A.I.R.	4150	R3245A	
With A.I.R.	4150	R3312A	
		R3265A	

CHEVELLE			
327" 275 HP V8			
Without A.I.R.	4160	R3123A	R3230A
With A.I.R.	4160	R3265A	
396" 325 HP V8			
Without A.I.R.	4160	R3139-1A	R3140-1A
With A.I.R.	4160	R3267A	R3268A
396" 360 HP V8			
Without A.I.R.	4160	R3419A	R3420A
With A.I.R.	4160	R3421A	R3608A
		R3609A	R3608A
396" 375 HP V8			
Without A.I.R.	4150	R3613A	
With A.I.R.	4160	R3609A	R3608A

CHEVROLET			
327" 275 HP V8			
Without A.I.R.	4160	R3123A	R3230A
With A.I.R.	4160	R3265A	
396" 325 HP V8			
Without A.I.R.	4160	R3139-1A	R3140-1A
With A.I.R.	4160	R3267A	R3268A
427" 390 HP V8	4160	R3327A	R3328A
427" 425 HP V8	4150	R3246A	

CORVETTE			
327" 300 & 350 HP V8			
Without A.I.R.	4160	R3367A	R3367A
With A.I.R	4160	R3605A	R3605A
396" 325 HP V8	4160	R3139-1A	R3140-1A
427" 390 HP V8			
Without A.I.R.	4160	R3370A	R3370A
With A.I.R.	4160	R3606A	R3606A
427" 425 HP V8	4150	R3247A	

DODGE DART			
273" V8 "GT Drag"	4160	R3778A	R3778A

RAMBLER CLASSIC, MARLIN & AMBASSADOR			
327" V8 (Standard)	4160	R3201A	R3202A
(With "Air Guard")	4160	R3391A	R3391A

FORD	Ford Part No.
427" High Perf. V8	4160 Front C5AF-9510-BD
	Rear C5AF-9510-BC

FAIRLANE & COMET 390" V8 "GT" & "GTA"		
Synchro-mesh	4150C	C6OF-9510-M
Auto. Trans.	4150C	C6OF-9510-N

1967 4-BARREL MODELS 4150, 4160

CHEVY II, CHEVELLE, CAMARO, CHEVROLET, & CORVETTE	Model	Holley Carburetor No. Synchro-mesh	Auto. Trans.
327" 325 HP V8			
Without A.I.R.	4150	R3806A	
With A.I.R.	4150	R3807A	
327" 300 & 350 HP V8			
Without A.I.R.	4160	R3810A	R3810A
With A.I.R.	4160	R3814A	R3814A
396" 350 HP V8			
Without A.I.R.	4160	R3837A	R3836A
With A.I.R.	4160	R3839A	R3838A
427" 390 HP V8			
Without A.I.R.	4160	R3811A	
With A.I.R.	4160	R3815A	R3815A
427" 425 HP V8			
Without A.I.R.	4150	R3418A	

CHRYSLER, IMPERIAL, DODGE & PLYMOUTH			
440" Std. V8			
(No "CAP") ①	4160	R3575A	R3667A

COMET, COUGAR, FAIRLANE, MUSTANG		Ford Carburetor No.
390" GT V8		
Synchro-mesh	4150C	C7OF-9510-A, C
Auto. Trans.	4150C	C7OF-9510-B, D

FORD		
427" V8	4160C	C5AF-9510-BV
427" V8 (Front)	4160C	C5AF-9510-BD
(Rear)	4160C	C5AF-9510-BC

① - Carter AFB carburetors used on "CAP" engines.

② - When used with Synchro-mesh Transmissions, remove dashpot and attaching parts.

③ - Adapter, Part No. B9ME-9A621-A must be used with this carburetor.

►CHANGES, CAUTIONS, CORRECTIONS

►*"A.I.R." & "AIR GUARD" CARBURETOR NOTE:* These carburetors are used on engines with "Air Injection Reactor" or "Air Guard" exhaust emission control systems and are special units with different jet calibrations and adjustment specifications.

►*1959 FORD POOR COLD PERFORMANCE CORRECTION (332" Engine with B9A-9510-A Carburetor):* On carburetors with first type choke assembly B8A-9849-C (With number 34R-1523-B cast on back of housing), correct complaint by setting automatic choke 1 or 2 Points Rich or install later choke assembly B7A-9849-B (number 34R-1523-B cast inside choke housing above center bushing). *NOTE* - Carburetors date coded "801" or later have been corrected and choke housing marked by daub of white paint on cover.

►*1959 FORD COLD DRIVEAWAY ACCELERATION IMPROVEMENT:* Change accelerating pump settin to No. 2 hole in pump cam and throttle lever. (Continued

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

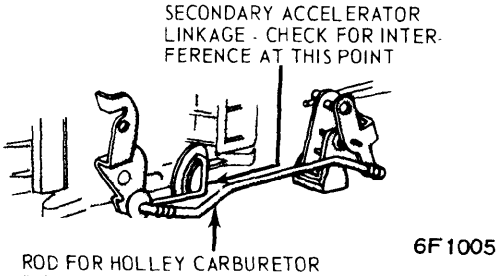
►*1966 COMET "GT" CYCLONE STALLING ON INITIAL TRANSMISSION ENGAGEMENT OR DRIVEAWAY CORRECTION:* On cars with Build Date prior to 12/21/65, correct this condition by making the following changes:

Automatic Choke - Install new Choke Bi-metal Spring (Cover & Coil Assembly) Part No. B8A-9848-E. Set this choke 1 Notch Rich.

Accelerating Pump Setting - Change pump adjustment to new settings: No. 1 Hole (Synchro-mesh Cars), No. 2 Hole (Auto. Trans. Cars).

Fast Idle Speed - Check setting and make certain fast idle speed set to following specifications: 1900 RPM (Synchro-mesh Cars), 1850 RPM (Auto. Trans. Cars).

►*1966 COMET "GT" ENGINE NOT RETURNING TO SPECIFIED IDLE SPEED:* If throttle linkage does not consistently return to correct idle speed position or if difficulty experienced in setting correct idle speed or obtaining wide open throttle, check accelerator rod (carburetor to bellcrank) for correct type and make certain no interference exists between rod and secondary throttle linkage (see illustration). Rod should have light yellow (dichromate) coating and is 6.66" long. Make certain that return spring bracket is properly installed on carburetor left rear mounting bolt (bracket spring hook hole should be toward front of car).



1966 COMET & FAIRLANE "GT" THROTTLE LINKAGE INTERFERENCE CORRECTION

►*1967 COMET, COUGAR, FAIRLANE, MUSTANG ENGINE STALLING AFTER COLD START (390" V8 GT engine):* If engine stalls after cold start with temperatures of 50-70°F on cars built prior to 10/12/66, correct by changing automatic choke setting to 3 Notches Rich (was 1 or 2 Notches Rich) to provide additional spring torque at choke valve.

CARBURETOR IDENTIFICATION

Ford Number - Carburetor number prefix and suffix (Example C3AE A) stamped on choke plate flange or on air horn section of main body or on tag attached to carburetor. *For Identification Number and Part Number tie-in, see Ford Identification Chart*

Holley Number - Stamped on fuel bowl. *NOTE* - Complete carburetor number (R-2442-A) may not appear on carburetor. Prefix "R" indicates carburetor and suffix "A" indicates assembly. A suffix figure ("-1", "-2" etc.) indicates modifications in production.

DESCRIPTION

Two and four barrel downdraft types consisting of a main body, throttle body, and side mounted metering block and fuel bowl. Metering jets, idle mixture adjusting screws, and vacuum controlled power valve are located in the metering block. Diaphragm type accelerating pump is located on bottom of fuel bowl and operated by throttle valve linkage. Four barrel carburetors have additional secondary metering block (Model 4150) or metering body (Model 4160) and secondary fuel bowl mounted on opposite side of carburetor main body. Carburetor models have following differences:

Three Barrel Model 3160 - This carburetor is similar to Model 4160 (4-barrel) except that a single large secondary barrel is used instead of two individual secondary barrels. Adjustments are the same as for 4-barrel carburetors.

Model 4150 - Primary and secondary metering blocks are used. Secondary metering block may or may not have Power Valve (power enrichment system).

Model 4150C - These carburetors are similar to other 4150 models except for the following features: "Center Hinged" Float with float hinge on side of float, External Vent Rod (primary fuel bowl vent valve operated by rod from throttle shaft lever), and External Fuel Distribution Tube (external line linking primary and secondary fuel bowls). *See Adjustments.*

Model 4160 - Has conventional primary metering block and a Secondary Metering Body mounted on side of main body within secondary fuel bowl. No secondary Power Valve is used.

CHEVROLET CARBURETOR NOTE - 4150 and 4160 carburetors have vacuum diaphragm type "Vacuum Break" (instead of choke vacuum piston) and separate automatic choke unit mounted in intake manifold well and linked to choke lever on main body. These units require special adjustment. *See Adjustments.*

CHRYSLER CORP. CARBURETOR NOTE - These carburetors have vacuum diaphragm type "Vacuum Kick" (instead of choke vacuum piston) and separate well type automatic choke linked to choke lever by a connecting rod. See Adjustments for these units.

ADJUSTMENT (ON ENGINE)

►*ADJUSTMENT NOTE:* If preliminary adjustment required to warm-up engine, set each idle mixture screw 1-1½ turns out from a lightly seated position. On air conditioned cars (except Chevelle, Corvette, & Rambler), operate air conditioner for 20 minutes and then set idle speed with air conditioning operating. On cars with Vacuum Parking Brake Release, disconnect vacuum line at vacuum power unit and plug this line (necessary so that idle speed can be set in "D" with brakes set). On cars with Alternator (except Chevelle, Corvette, & Rambler), turn on headlights to place alternator under load. On automatic transmission cars, idle speed should be set with selector lever in "D" (Drive) or "N" (Neutral) as indicated.

Idle Speed & Mixture (One Carb. Engines)

NOTE - Disregard "Std. Engine" procedure for car models listed separately (following). *(Continued)*

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

HOLLEY CARBURETOR ADJUSTMENT SPECIFICATIONS

Ford or Holley Carb. No.	Idle Speed (Engine RPM) Hot	Idle Speed (Engine RPM) Fast	Initial Idle Mixture	Fast Idle (Off Eng.) Setting	Float Level Primary	Float Level Secondary	Auto. Choke Setting	Unloader Setting
R-1312A	500 ⑪	.....	1	.025" ⑬	13/16"	3/4"	1 Lean	.....
R-1312-1A	500 ⑪	.....	1	.025" ⑬	13/16"	3/4"	1 Lean	.....
R-1748A	500 ⑪	.....	1	.016" ⑬	13/16"	3/4"	1 Lean	.....
R-1748-1A	500 ⑪	.....	1	.016" ⑬	13/16"	3/4"	1 Lean	.....
R-1957A	550 ⑪	1700 ⑭	1	.025" ⑬	⑨	⑨	1 Lean	3/16"
R-1957-1A	550 ⑪	1700 ⑭	1	.025" ⑬	⑨	⑨	1 Lean	3/16"
R-1958A	550 ⑪	1700 ⑭	1	.016" ⑬	⑨	⑨	1 Lean	3/16"
R-1958-1A	550 ⑪	1700 ⑭	1	.016" ⑬	⑨	⑨	1 Lean	3/16"
R-1971A	500	1400 ⑭	1	.015" ⑬	⑨	⑨	1 Rich	1/16"
R-2040A	550 ⑪	1700 ⑭	1	.024" ⑬	⑨	.....	1 Rich	3/16"
R-2040-1A	550 ⑪	1700 ⑭	1	.024" ⑬	⑨	.....	1 Rich	3/16"
R-2052A	500	1400 ⑭	1	.015" ⑬	⑨	⑨	1 Rich	1/16"
R-2228A	550 ⑪	1700 ⑭	1	.024" ⑬	⑨	.....	1 Rich	3/16"
R-2442A	550 ⑪	1700 ⑭	1	.024" ⑬	⑨	.....	Index	3/16"
R-2442-1A	550 ⑪	1700 ⑭	1	.024" ⑬	⑨	.....	Index	3/16"
R-2442-2A	550 ⑪	1700 ⑭	1	.024" ⑬	⑨	.....	Index	3/16"
R-2463A	500 ⑮	1700 ⑭	1	.024" ⑬	⑨	.....	Index	3/16"
R-2463-1A	500 ⑮	1700 ⑭	1	.024" ⑬	⑨	⑨	Index	3/16"
R-2463-2A	500 ⑮	1700 ⑭	1	.024" ⑬	⑨	⑨	Index	3/16"
R-2464A	500 ⑮	1700 ⑭	1	.025" ⑬	⑨	⑨	1 Lean	3/16"
R-2814A	1000	.....	.....	.....	⑨	⑨	.....	.....
R-2818A	⑰	2250 ⑭	1	.028" ⑬	⑨	⑨	1 Lean	3/16"
R-2929A	1000	.....	.....	.....	⑨	⑨	.....	.....
R-2973A	1400	.....	.....	.....	7/16"	9/16"	.....	.....
R-3043A	700	2250 ⑭	1	.028" ⑬	⑨	⑨	3 Lean	3/16"
R-3044A	550 ⑯	1700 ⑭	½-1½	.025" ⑬	⑨	⑨	1 Lean	3/16"
R-3045A	500 ⑮	1700 ⑭	½-1½	.025" ⑬	⑨	⑨	1 Lean	3/16"
R-3085A	1400	.....	.....	.....	7/16"	9/16"	.....	.....
R-3116A	1400	.....	½	.....	1/2"	5/8"	.....	.....
R-3123A	450-500	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3139-1A	450-500	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3140-1A	450-500	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3201A	550 ⑯	2000	½-1½	.....	⑨	⑨	1 Lean	3/16"
R-3202A	550 ⑯	2000	½-1½	.....	⑨	⑨	1 Lean	3/16"
R-3230A	450-500	2200	1½	.035"	.170"	.300"	⑤	.260"
R-3245A	650-750	2200	1½	.025"	.170"	.300"	⑤	.260"
R-3246A	750-850	2200	1½	.025"	.350"	.450"	⑤	.350"
R-3247A	750-850	2200	1½	.025"	.350"	.450"	⑤	.350"
R-3267A	450-550	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3268A	450-500	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3312A	700 ⑫	2200	1½	.025"	.170"	.300"	⑤	.260"
R-3327A	500-600	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3328A	500-600	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3367A	⑱	2200	1½	.035"	.170"	.300"	⑤	.260"
R-3370A	500-600	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3391A	550 ⑯	2000	½-1½	.....	⑨	⑨	1 Lean	3/16"
R-3416A	⑲	2200	1½	.035"	.170"	.300"	⑤	.260"
R-3418A	1000	2200	1½	.025"	.350"	.450"	⑤	.350"
R-3419A	500-600	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3420A	500-600	2000	1½	.035"	.170"	.300"	⑤	.260"

(Continued

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

HOLLEY CARBURETOR ADJUSTMENT SPECIFICATIONS (Continued)

Ford or Holley Carb. No.	Idle Speed (Engine RPM) Hot	Idle Speed (Engine RPM) Fast	Initial Idle Mixture	Fast Idle (Off Eng.) Setting	Float Level Primary	Float Level Secondary	Auto. Choke Setting	Unloader Setting
R-3575A	550	700 ⑥	1-1¼	#53	7/64"	15/64"	2 Rich	5/32"
R-3605A	⑲	2200	1½	.....	.170"	.300"	⑤	.260"
R-3606A	550	2000	1½	.035"	.170"	.300"	⑤	.260"
R-3608A	550	2000	1½	.....	.170"	.300"	⑤	.260"
R-3609A	550	2000	1½	.....	.250"	.375"	⑤	.260"
R-3613A	500-600	2000	1½	.....	.350"	.450"	⑤	.350"
R-3667A	550	700 ⑥	1-1¼	#53	7/64"	15/64"	2 Rich	5/32"
R-3778A	800	.....	.....	.....	.....	.....	.....	.....
R-3806A	700	2200	1½	.025"	.170"	.300"	⑤	.265"
R-3807A	750	2200	1½	.025"	.170"	.300"	⑤	.265"
R-3810A	⑱	2000	1½	.035"	.170"	.300"	⑤	.265"
R-3811A	550	2200	1½	.035"	.170"	.300"	⑤	.265"
R-3814A	⑲	2000	1½	.035"	.170"	.300"	⑤	.265"
R-3815A	③	2200	1½	.035"	.170"	.300"	⑤	.265"
R-3836A	550	2200	1½	.035"	.170"	.300"	⑤	.265"
R-3837A	550	2200	1½	.035"	.170"	.300"	⑤	.265"
R-3838A	500	2200	1½	.035"	.170"	.300"	⑤	.265"
R-3839A	700	2200	1½	.035"	.170"	.300"	⑤	.265"

FORD (HOLLEY) CARBURETOR ADJUSTMENT SPECIFICATIONS

Ford Carburetor Number	Idle Speed (Engine RPM) Hot	Idle Speed (Engine RPM) Fast	Initial Idle Mixture	Fast Idle (Off Eng.) Setting	Float Level Primary	Float Level Secondary	Auto. Choke Setting	Unloader Setting
B9A-9510-D	450 ②	.....	1½	.005-.008" ⑧	7/8"	.....	1 Rich	.....
B9AE-9510-B	450	.....	1½	.005-.008" ⑧	7/8"	.....	1 Rich	.....
B9ME-9510-A	500 ①	625 ⑥	1¼	.005-.008" ⑧	7/8"	.....	2 Rich	.....
C0AE-9510-AA	500	.....	1½	¼-½ ⑦	⑨	⑨	Index	.....
C0ME-9510-A	500 ②	625 ⑥	1-1½	.005-.008" ⑧	7/8"	.....	2 Rich	.....
C0ME-9510-F	500	700 ⑥	1-1½	.005-.008" ⑧	7/8"	.....	2 Rich	.....
C1AE-9510-AM	600	1800 ⑭	1-1½	¼-½ ⑦	⑨	⑨	Index	.....
C2AE-9510-CB	750	1800 ⑭	1-1½	.008" ⑧	⑨	⑨	⑩	.....
C3AE-9510-A	700	1800 ⑭	1-1½	.008" ⑧	7/8"	3/4"	Index	.....
C3AE-9510-B	750	1800 ⑭	1-1½	.....	⑨	⑨	Index	1/16"
C3AE-9510-C	750 ②	1800 ⑭	1-1½	.008" ⑧	⑨	⑨	⑩	.....
C3AF-9510-BJ	750 ②	1800 ⑭	1-1½	.....	⑨	⑨	Index	1/16"
C3AF-9510-BK	750 ②	.....	1-1½	.....	⑨	⑨	.....	.....
C4AF-9510-CU	750 ②	1800 ⑭	1-1½	.....	⑨	⑨	Index	1/16"
C4AF-9510-CV	750 ②	.....	1-1½	.....	⑨	⑨	.....	.....
C4AF-9510-DA	700	1800 ⑭	1-1½	.....	⑨	⑨	Index	1/16"
C5AF-9510-BC	750	.....	1-1½	.....	⑨	⑨	None	.....
C5AF-9510-BD	750	.....	1-1½	.....	⑨	⑨	㉑	.....
C5AF-9510-BV	750	.....	1-1½	.....	⑨	⑨	Index	.....
C6OF-9510-M	575-600	1200	1-1½	.....	⑤	⑤	1 Rich ⑳	.....
C6OF-9510-N	475-500	1300	1-1½	.....	⑤	⑤	1 Rich ⑳	.....
C7OF-9510-A	600	1850	1-1½	.....	⑨	⑨	1 Rich	.....
C7OF-9510-B	525	1900	1-1½	.....	⑨	⑨	1 Rich	.....
C7OF-9510-C	625	1850	1-1½	.....	⑨	⑨	2 Rich	.....
C7OF-9510-D	550	1900	1-1½	.....	⑨	⑨	2 Rich	.....

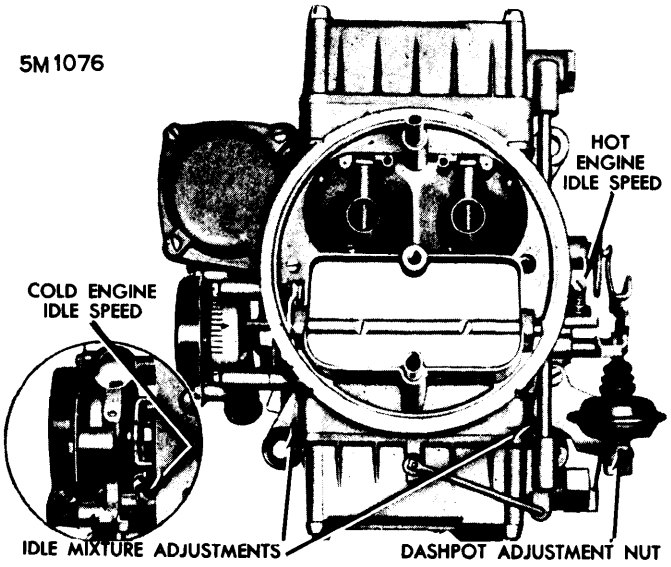
See Page 2-176 for footnotes.

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

HOLLEY CARBURETOR ADJUSTMENT SPECIFICATION TABLE FOOTNOTES

① - 450 RPM for Auto. Trans. Cars (In "D").
② - With Auto. Trans. in "D".
③ - 700 RPM (Synchro-mesh), 550 RPM (Auto. Trans.). Air Cond. ON (when used).
④ - 475 RPM for Auto. Trans. Cars (In "N").
⑤ - See text for adjustment procedure.
⑥ - Fast idle screw on LOW step of fast idle cam.
⑦ - Fast idle idle screw backed off (turns) from low step of fast idle cam.
⑧ - Clearance between fast idle screw and low step of fast idle cam.
⑨ - Lower side of float parallel to fuel bowl floor.
⑩ - Index (Front Carb.), 90° from index (Rear Carb.).
⑪ - 475 RPM for Auto. Trans. in "N". 500 RPM for Air Conditioned Cars.
⑫ - With Air Conditioner OFF.
⑬ - Throttle valve opening or clearance.
⑭ - Fast idle screw on HIGH step of fast idle cam.
⑮ - Auto. Trans. in "N". Air Conditioner ON.
⑯ - 500 RPM with Air Conditioner ON.
⑰ - 1964 - 800 RPM. 1965 - 650-750 RPM (Hydraulic Lifters), 750-850 RPM (Mechanical Lifters).
⑱ - **300 HP Eng.** - 450-500 RPM (All Trans.).
350 HP Eng. - 650-750 RPM (Synchro-mesh) with Air Conditioner ON.
⑲ - **300 HP Eng.** - 700 RPM (Synchro-mesh), 600 RPM (Auto. Trans.). All with Air Conditioner OFF,
350 HP Eng. - 750 RPM (Synchro-mesh) with Air Conditioner OFF.
⑳ - With Choke No. B8A-9848-E. Supersedes "Index" setting with first type choke.
㉑ - 3 Lean (1966), Index (1967).

ADJUSTMENTS (Continued)



CARBURETOR ADJUSTMENTS (TYPICAL)

Std. Engines - With the engine at normal operating temperature, adjust throttle stopscrew for correct engine speed (see specifications). Turn both idle mixture screws in equally until engine runs rough from lean mixture, then turn screws out until engine rolls from rich mixture, finally turn screws in just enough for smooth idling and highest RPM and vacuum. Recheck engine idle speed and reset if necessary. This setting will provide slightly rich mixture.

Chevy II, Chevelle, Camaro, Chevrolet, & Corvette - *On automatic transmission cars, place transmission lever in Drive, turn Air Conditioner ON (except as noted in Specifications).* With engine at normal operating temperature (choke valve wide open and fast idle inoperative), adjust throttle stopscrew for correct idle speed (see Specifications), adjust both idle mixture screws equally for highest steady vacuum and smooth idling. On A.I.R. cars, turn both mixture adjusting screws in until engine speed drops off 20-30 RPM (this is "lean roll" point), then turn screws out exactly ¼ turn for final setting. Recheck idle speed. If necessary to readjust idle speed, repeat idle mixture adjustment.

Chrysler, Imperial, Dodge, Plymouth - On cars with automatic transmission, loosen nut in sliding link of carburetor-to-bellcrank rod, turn air conditioning ON. With engine at normal operating temperature with choke valve wide open and fast idle not operating, adjust throttle stopscrew for correct idle speed (see Specifications), adjust each idle mixture screw equally for maximum engine RPM. Readjust idle speed, then turn each mixture adjusting screw in to lean mixture until slight drop in engine RPM noted, finally turn screws out just enough to regain lost engine RPM. Recheck idle speed. If necessary to readjust idle speed, repeat idle mixture adjustment. Move transmission rod sliding link to rear against stop and tighten nut securely.

Comet, Cougar, Fairlane, Mustang & Ford - *Operate engine for 20 minutes with air conditioner ON, then adjust idle with air conditioner ON. Turn on headlights (to place Alternator under load), and on automatic transmission cars, place transmission selector lever in Drive.* With engine at normal operating temperature (choke valve wide open and fast idle inoperative), adjust throttle stopscrew for correct idle speed (see Specifications), turn each idle mixture screw in until engine speed begins to drop due to lean mixture, then turn screws out equally until engine speed increases and again begins to drop due to rich mixture. On Thermactor engines, this is final setting of mixture screws. On other engines, finally turn screws in for maximum engine RPM and smooth idling (this will favor a slightly rich mixture). Final position of mixture screws should be equal within 1/8 turn of each other. Recheck idle speed.

Rambler - On Automatic transmission cars, place transmission selector lever in Neutral, turn Air Conditioner ON. With engine at normal operating temperature (choke valve wide open and fast idle screw not contacting fast idle cam), adjust throttle stopscrew for correct idle speed (see Specifications), adjust both idle mixture screws equally for highest steady vacuum and smooth idling, turn screws out until engine speed begins to fall off, then turn screws in for leaner mixture to obtain maximum engine RPM and continue to turn screws in until engine speed begins to fall off, finally turn screws out just enough to regain maximum engine

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

RPM (this will provide "Lean as Possible" setting). Recheck idle speed. If necessary to readjust idle speed, repeat idle mixture adjustment.

Idle Speed & Mixtures (Two Carb. Engines)

NOTE - Headlights must be turned ON so that alternator is under load for correct idle speed setting. On air conditioned cars, operate air conditioner for 20 minutes, then proceed as follows with air conditioner ON:

Ford & Mercury (Two Carbs.) - With engine at normal operating temperature and transmission lever in "N", adjust idle speed to 750 RPM (turn throttle stopscrew on each carburetor equally and alternately). Adjust each idle mixture screw (front carburetor first, rear carburetor last) by turning screw in until engine runs rough from a lean mixture, then turn screw out until engine runs rough from a rich mixture. Finally turn screw in just enough for smooth operation (will provide a slightly rich mixture). *NOTE - Final setting of adjusting screws must be equal within 1/8 turn.* Readjust engine idle speed to correct RPM (see "Specification Table").

Carburetor Interconnecting Linkage Synchronization

Ford & Mercury (Two Carbs.) - **1)** Disconnect interconnecting linkage at front and rear carburetors and at bellcrank lever. Disconnect accelerator rod at left side bellcrank on manifold.

2) Adjust primary carburetor rod to a length of 4 3/16" (from center of hole to center of bent end), then install rod on bellcrank lever and upper stud of front carburetor lever. Move bellcrank lever so front carburetor throttle valves are in wide open position and hold in this position.

3) Install slotted end of secondary carburetor throttle rod on rear carburetor throttle lever, then move lever to wide open position and adjust rod so that hole in rod engages stud on bellcrank lever freely, and connect rod.

4) Move left side of bellcrank assembly (on manifold) so that throttle valves on both carburetors are wide open. *CAUTION - Accelerator lever must be engaged between pin and pad of accelerator pedal.* Have someone press accelerator pedal to floor and hold pedal in this position. Accelerator rod pin should engage bellcrank lever. Adjust as necessary.

Throttle Linkage & Dashpot (Auto. Trans. Cars)

See CARBURETION on car model Tune-Up pages.

Fast Idle Speed (On Engine)

If specification not listed, see "Fast Idle (Off Engine)"

NOTE - Make this adjustment after hot or slow idle speed and idle mixture adjustment have been made. Adjust each model as follows:

Chevy II, Chevelle, Camaro, Chevrolet, & Corvette - With engine at normal operating temperature and idling with choke valve wide open, position fast idle lever on high step of fast idle cam, bend fast idle lever as required for correct fast idle speed (see Specifications).

Chrysler, Imperial, Dodge, Plymouth (1967) - With engine at normal operating temperature (off), and transmission selector lever in Park or Neutral, open throttle slightly, close choke valve about 20°, close throttle valve. This will place fast idle speed tang on lowest step of fast idle cam. Start engine. Adjust fast idle speed (see Specifications) by bending fast idle tang **perpendicular** to contact surface of fast idle cam *(CAUTION - Bending tang in any other manner will change Fast Idle Cam Position adjustment (see "Off Engine" adjustments).*

Dodge (1960) - With engine at normal operating temperature, position fast idle screw on high step of fast idle cam, turn fast idle screw in or out for correct fast idle speed (see Specifications).

Mercury (1959-60) - With engine at normal operating temperature, position fast idle screw on low step of fast idle cam, turn fast idle screw in or out for correct fast idle speed (see Specifications).

Comet, Cougar, Fairlane, Mustang, Ford & Mercury - With engine at normal operating temperature with transmission in Neutral, Headlights On, and Air Conditioner On, position fast idle adjusting screw on kickdown step of fast idle cam and adjust screw for correct fast idle speed (see Specifications).

Ford & Mercury (Two Carbs.) - Adjustment required on front carburetor only. With engine at normal operating temperature and idling with Headlights turned on, and Air Conditioner ON, position fast idle screw adjacent to shoulder of highest step on cam and aligned with arrow mark on cam, adjust fast idle screw for correct fast idle speed (see Specifications).

Rambler - With engine at normal operating temperature and idling with transmission in neutral, position fast idle screw on high step of fast idle cam and adjust screw for correct fast idle speed (see Specifications).

Fuel Level

NOTE - See "Float Level" for adjustment on carburetors without Adjustable Type Inlet Needle.

Chrysler, Imperial, Dodge, Plymouth - Before checking fuel level, make certain that fuel pump pressure is 5 lbs. *(CAUTION - Fuel level will vary 1/32" for each 1 lb. variation in pressure).* Remove lower bolt from fuel bowl furthest from fuel inlet, install C-4051 Wet Fuel Level Gauge in this bolt hole. Start or crank engine to refill bowl (some fuel will be lost when gauge installed). Read fuel level on gauge which should be 9/16" (primary bowl), 13/16" (secondary bowl). If adjustment required, *see "Float Level (On Bench)" for removal of float bowl and float adjustment.*

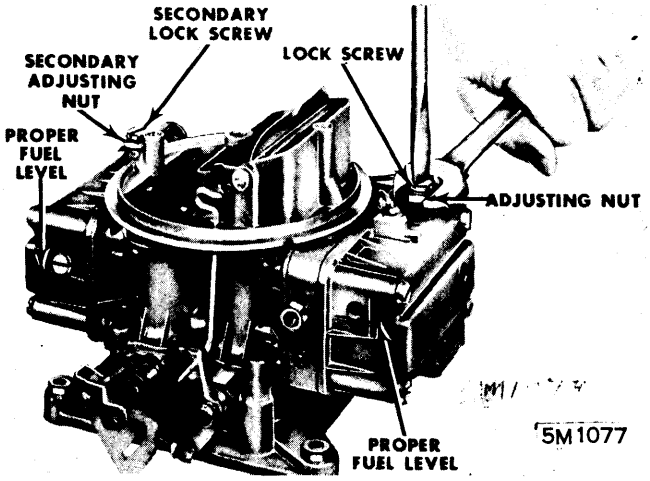
All Other Carburetors - Bring engine to normal operating temperature, then remove air cleaner and stop engine. Remove sight plug in end of fuel bowl (use a container to catch fuel). Fuel level within bowl should be at lower edge of sight plug hole (± 1/32"). To adjust, proceed as directed below. *NOTE* - When checking secondary float level, first accelerate primary throttles slightly and operate secondary throttle by hand to stabilize secondary fuel level.

Fuel Level Too High - With engine stopped, loosen lockscrew on top of fuel bowl just enough to allow rotation of nut underneath. *CAUTION - Do not unlock*

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

lockscrew or attempt to adjust fuel level with engine running. Turn adjusting screw ½ turn clockwise to lower fuel level below specifications. Tighten lockscrew, then run engine to stabilize fuel level. Check fuel level at sight plug hole. If level is not below specified level, repeat above step. With fuel level below specified level, turn adjusting nut in increments of 1/6 turn until correct fuel level is obtained. *NOTE - 1/6 turn of adjusting nut will change fuel level at sight plug opening 3/64".*

Fuel Level Too Low - Proceed as for "Fuel Level Too High" except that it will not be necessary to initially decrease fuel level below specifications.



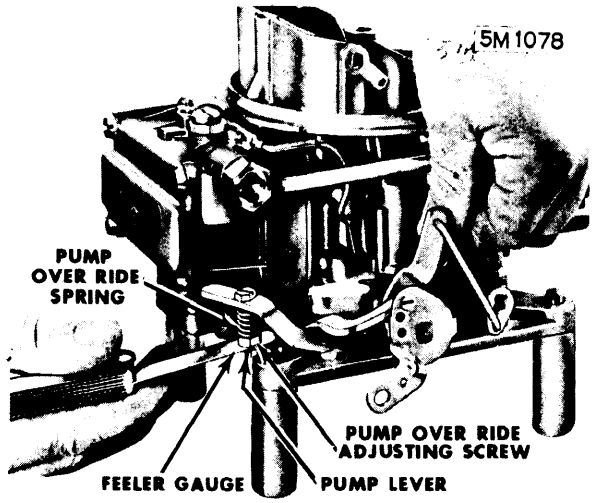
FUEL LEVEL ADJUSTMENT

► *RAMBLER NOTE:* On carburetors without sight plug, check fuel level by removing one lower bowl attaching screw and installing Gauge J-10193 in screw hole (tighten gauge just enough to prevent leakage). Run engine to fill bowl and gauge. Use depth gauge or scale to measure down from top of gauge standpipe to fuel level at center of gauge, then place scale on calibrated face of gauge standpipe and measure down from top edge of standpipe, read fuel level indicated at lower end of scale. Adjust fuel level as directed above.

Accelerating Pump

Over-ride Adjustment - Hold throttle valves in wide open position, move pump arm to compress pump plunger fully. Clearance between face of adjusting screw nut on pump operating lever and pump arm should be .015". Adjust by turning adjusting screw while holding adjusting nut (1/2 turn of adjusting screw will change clearance .015"). Check pump action by fully closing throttle valves and then opening valves to operate pump. Slightest movement of throttle lever should cause corresponding movement of pump lever (any lag will result in a tip-in stumble or flat spot). Correct by lengthening adjusting screw.

Seasonal Setting - *See CARBURETION on car model Tune-Up pages for recommended settings and seasonal changes.*



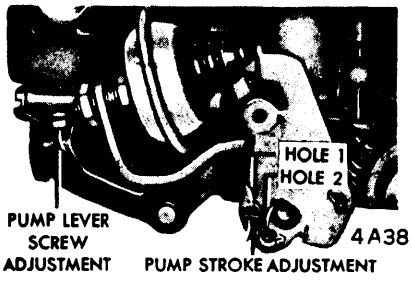
ACCELERATING PUMP OVER-RIDE ADJUSTMENT

Fuel Bowl Vent

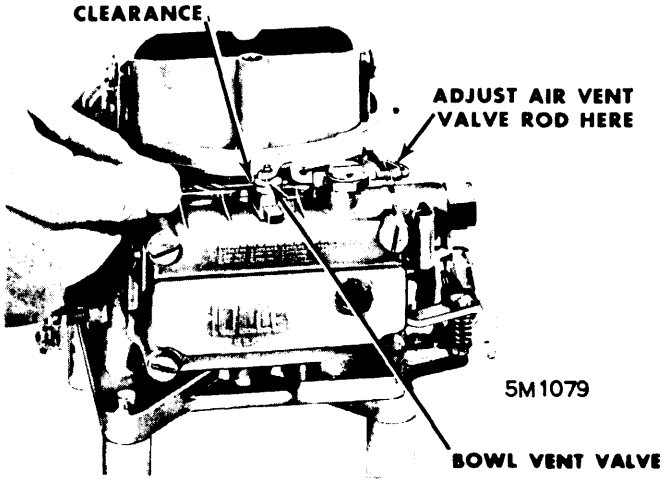
NOTE - Bowl vent not used on all carburetors (located on primary side only on 4-barrel carburetors).

Chevrolet (All Carburetors) - With throttle stopscrew backed off and throttle valves fully closed, clearance between vent valve button and seat on bowl cover should be .065". Adjust by bending vent valve rod at lower end (at throttle lever contact). Reset throttle stopscrew 1½ turns in from point of initial contact with throttle lever as a preliminary setting (make final idle speed setting with engine running).

Chrysler, Imperial, Dodge, Plymouth - With idle speed properly set and throttle valves closed to curb idle



ACCELERATING PUMP SEASONAL SETTING



BOWL VENT ADJUSTMENT (TYPICAL)

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

position, check vent valve opening or clearance between valve and top surface of primary fuel bowl with a 3/32" drill rod. If clearance not correct, adjust by bending vent rod to change contact arc on throttle lever.

Comet, Cougar, Fairlane, Mustang, Ford & Mercury - With engine running at normal hot or slow idle speed, check clearance between bottom of rubber vent valve and top of primary fuel bowl. Clearance should be .070-.090". Adjust by bending the vent rod at lower angle adjacent to throttle lever.

Rambler - With throttle valves fully closed, distance between top of fuel bowl and vent button should be .050-.070". Adjust by bending vent arm at accelerating pump lever *(CAUTION - Do not bend vent valve rod).*

ADJUSTMENT NOTE - On vents actuated by pump operating lever (vent rod piloted in vertical hole in bowl casting), adjust by bending vent arm end of pump operating lever (do not bend rod). On vents actuated by throttle lever arm (vent rod piloted in clip on top of bowl), adjust by bending rod at long arc adjacent to throttle lever arm.

Vacuum Kick (Choke Vacuum Diaphragm)

Chrysler, Imperial, Dodge, Plymouth - *NOTE* - Auxiliary vacuum source (distributor tester or another vehicle engine) must be used to supply vacuum of 10" of Hg. minimum for this adjustment. Disconnect vacuum hose at carburetor fitting *(CAUTION - Disconnecting hose at diaphragm requires excessive force which may cause damage),* and connect vacuum source to this hose.

Checking - With vacuum applied to diaphragm, insert drill rod of correct size (see table below) between choke valve and air horn wall, apply sufficient closing pressure on choke rod lever to provide minimum choke valve opening without distorting diaphragm link *(CAUTION - Diaphragm internal spring must be compressed which will be noted by extension of diaphragm stem).* At this point, slight drag should be noted as drill withdrawn from choke valve. If choke valve position not correct, adjust diaphragm link length as necessary.

Vacuum Kick Setting

Carburetor	Choke Valve Opening
R3575A	#39 Drill (.0995")
R3667A	#53 Drill (.0595")

Adjustment - Change link length by opening or closing the link bend *(CAUTION - Do not apply twisting or bending force to diaphragm).*

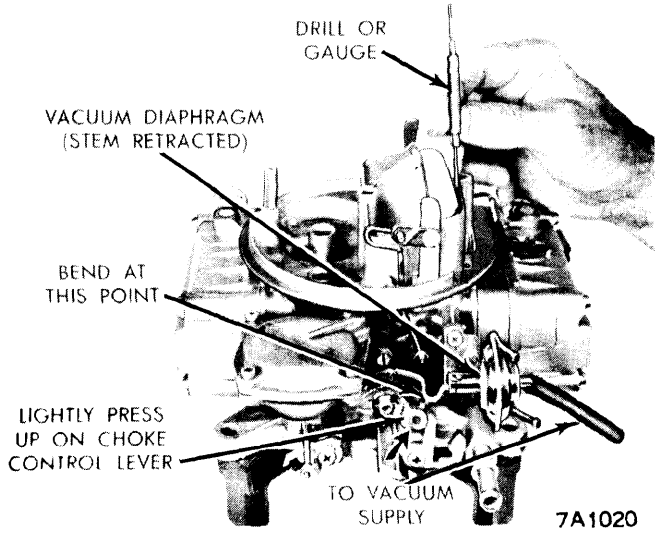
Final Check - With no vacuum applied, choke valve must move freely between open and closed positions.

Vacuum Break

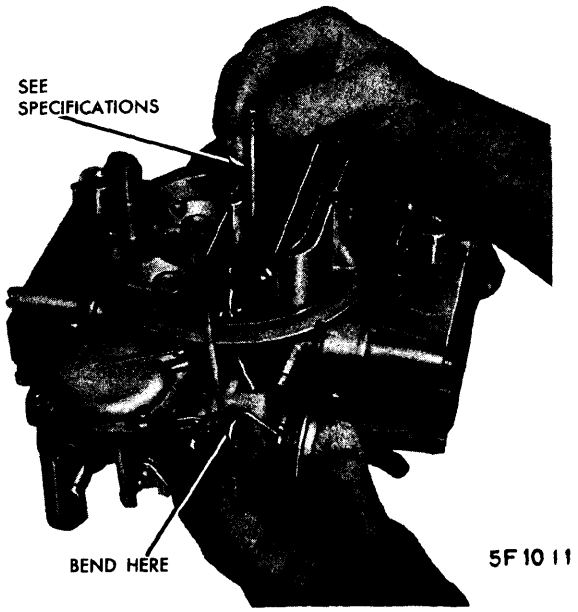
Chevy II, Chevelle, Camaro, Chevrolet, Corvette - Hold vacuum break diaphragm plunger in against the stop, close choke valve as far as possible, measure clearance between lower edge of choke valve and air horn wall. If clearance not correct (see table below), adjust by bending vacuum break link as necessary.

Vacuum Break Setting

Carburetor	Choke Valve Opening
R3123A, R3230A	.170"
R3139-1A, R3140-1A, R3327A, R3328A	.180"
R3245A, R3312A, R3367A	.190"
R3246A, R3247A	.350"
R3267A, R3268A, R3370A	.180"
R3416A	.190"
R3418A	.350"
R3419A, R3420A	.180"
R3605A, R3606A, R3608A	.180"
R3609A	.200"
R3613A	.350"
R3806A, R3807A, R3810A	.190"
R3811A, R3814A, R3815A	.175"
R3836A, R3837A, R3838A, R3839A	.175"



VACUUM KICK ADJUSTMENT (CHRYSLER CORP. CARBURETORS)



VACUUM BREAK ADJUSTMENT (ALL CHEVROLET DIV. CARBURETORS)

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

Automatic Choke (Well Type)

Chevy II, Chevelle, Camaro, Chevrolet & Corvette - With carburetor installed on engine and choke rod connected, see that choke valve and rod operate freely. Disconnect choke rod at choke lever. Hold choke valve closed and pull up on choke rod to limit of its travel. Top of choke rod should be ½-1 rod diameter above top of hole in choke valve lever. Adjust by bending rod at the offset. Reconnect rod. *CAUTION - Rod must enter choke lever hole freely.*

Chevrolet (327" 275 HP Engine Carburetors) - Adjust in same manner as on other carburetors (see above) except press **down** on choke rod to limit of travel and adjust rod so that top of rod is ½-1 rod diameter **below** top of hole in choke lever.

Chrysler, Imperial, Dodge, Plymouth - *This unit is serviced as a complete assembly. Do not attempt to repair unit or change the adjustment.*

Automatic Choke (Integral Type)

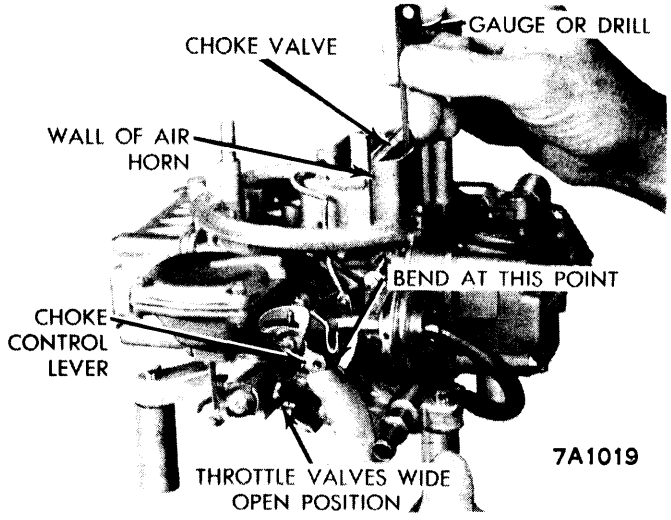
Loosen choke cover screws and rotate cover and coil assembly to align reference mark on cover with correct graduation of scale on choke housing. See "Specifications".

Unloader

This adjustment not required on all carburetors (see Specifications for carburetor application).

Chrysler, Imperial, Dodge, Plymouth - With throttle valves in wide open position, insert correct size drill rod (see Specifications) between upper edge of choke valve and air horn wall, move choke valve toward closed position with light finger pressure on choke lever. Slight drag should be noted as drill rod removed. Adjust by bending unloader lever at undercut portion near throttle shaft.

All Other Carburetors - With throttle valves in wide open position, move choke valve toward closed position against unloader tang on throttle shaft, then measure clearance between lower edge of choke valve and air horn wall with a gauge or drill rod of correct size (see Specifications). If clearance not correct, adjust by bending tang on throttle lever which contacts fast idle cam (1965 and earlier carburetors), by bending choke rod at offset bend near choke lever (1966 and later carburetors).

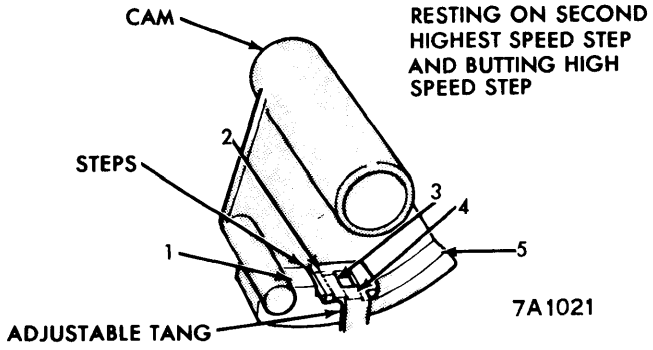


UNLOADER ADJUSTMENT (CHRYSLER CORP. CARBURETORS)

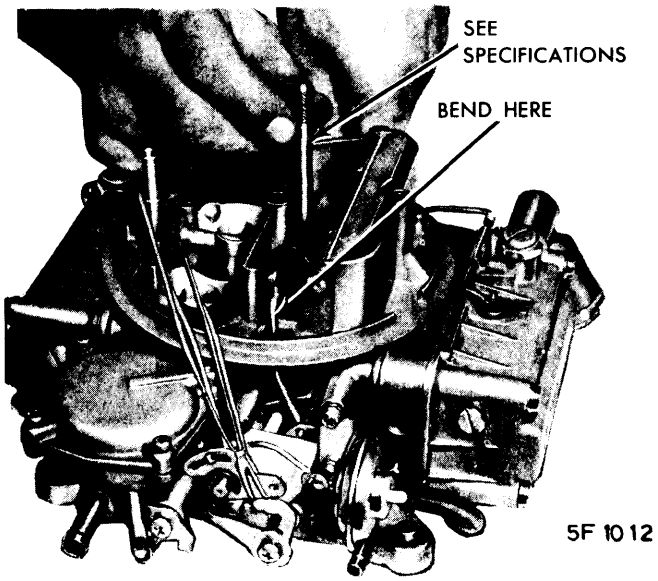
ADJUSTMENT (OFF ENGINE)

Fast Idle Cam Position

Chrysler, Imperial, Dodge, Plymouth 1967 - With fast idle adjusting tang contacting second highest step on fast idle cam (see illustration), move choke valve toward closed position with light pressure on choke control lever. Measure choke valve opening by inserting drill rod of correct size (see Specifications) between valve edge and air horn wall. If slight drag not noted as drill withdrawn, adjust by bending fast idle speed tang **parallel** to cam contact surface. *CAUTION - Bending tang in any other manner will change Fast Idle Speed adjustment (see "On Engine" adjustments).* *(Continued)*



FAST IDLE CAM POSITION ADJUSTMENT (CHRYSLER CORP. CARBURETORS)



UNLOADER ADJUSTMENT (EXCEPT CHRYSLER CORP. CARBURETORS)

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

Dodge 1960 - Hold choke valve closed by pressing on choke lever. Measure distance from center of hole in lever (at fast idle cam) to lower face of carburetor throttle body. This distance should be 1¾". Adjust by bending choke connector rod at "U" bend at upper or choke lever end of rod.

Fast Idle Setting

NOTE - This setting should give correct engine fast idle RPM when carburetor installed on engine. Where a fast idle engine RPM specification is listed, this fast idle RPM should be checked after carburetor installed on engine with engine running. See "Fast Idle Speed (On Engine)". Different types of "Off Engine" adjustments are used as listed below (see Specifications for applicable procedure).

Fast Idle Adjusting Screw Clearance - With choke valve open and throttle valves closed so that fast idle adjusting screw in line with low step of fast idle cam, turn fast idle adjusting screw in until it just contacts low step of fast idle cam, then back screw out the specified amount or until clearance between end of screw and fast idle cam is correct (see Specifications).

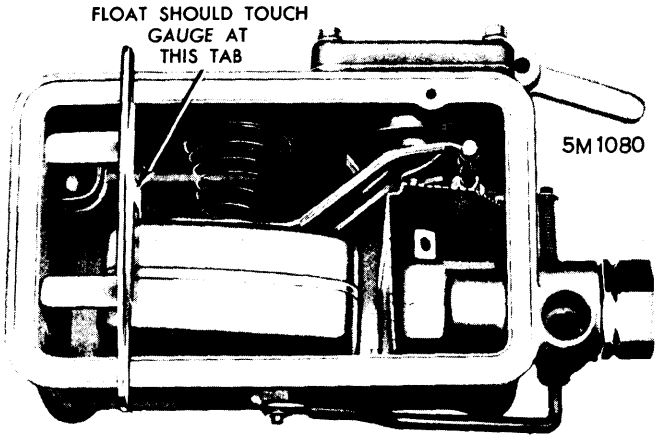
Fast Idle Throttle Opening - Close choke valve fully to rotate fast idle cam so that high step of cam is aligned with fast idle screw, turn screw in until it just touches high step of fast idle cam and, where a fast idle throttle valve opening is specified, turn screw in further until clearance between edge of throttle valve and carburetor wall is correct (see Specifications). *NOTE* - On some carburetors, adjustment is made by bending fast idle lever tang which contacts fast idle cam.

Float Level

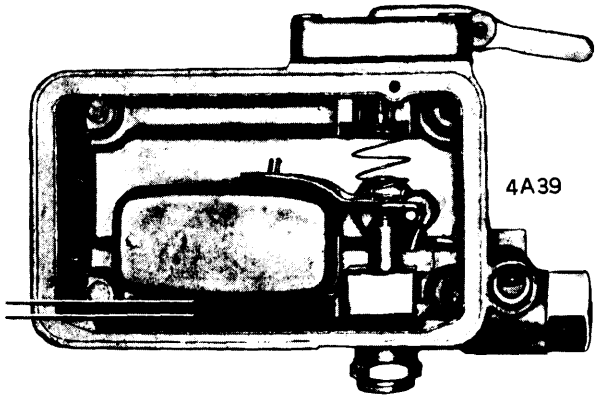
NOTE - This setting is an initial bench adjustment only. After carburetor installed on engine, Fuel Level should be checked and adjusted as necessary. See "Adjustment (On Engine)."

Chevy II, Chevelle, Camaro, Chevrolet & Corvette - Invert fuel bowl and float assembly with weight of float resting on seated intake needle, measure distance from lower edge of float bowl to lower edge of float (at free end on "end-hinged" floats, both ends on "side-hinged" floats). Adjust by bending small tab on float lever ("end-hinged" floats), or by loosening lockscrew and turning adjusting nut on adjustable needle seat ("side-hinged" floats).

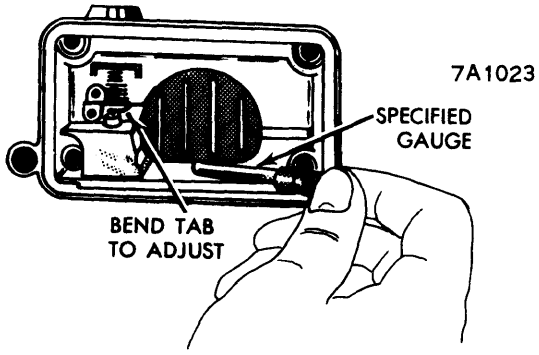
Chrysler, Imperial, Dodge, Plymouth 1967 - Invert fuel bowl and float assembly with weight of float resting



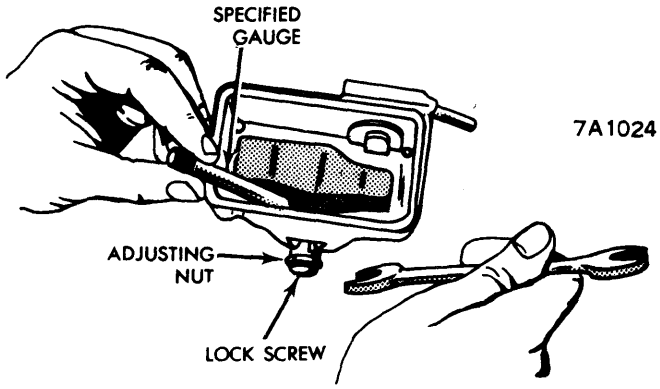
FLOAT LEVEL ADJUSTMENT (GAUGE OR SCALE MEASUREMENT)



FLOAT LEVEL ADJUSTMENT (END-HINGED TYPE - PARALLEL SETTING)



FLOAT LEVEL ADJUSTMENT (CHEVROLET DIV. CARBURETORS)



FLOAT LEVEL ADJUSTMENT (TYPICAL) SIDE-HINGED FLOATS)

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

on seated intake needle, measure distance between toe of float and lower surface of fuel bowl (primary fuel bowl), heel of float and lower surface of fuel bowl (secondary fuel bowl). See Specifications. Adjust by bending float lever tang.

Comet & Fairlane 1966 - With fuel bowl inverted, horizontal ridge on center of float should be an equal distance from top and bottom of fuel bowl (see illustration). Adjust by loosening lockscrew on needle and seat assembly and turning adjusting nut.

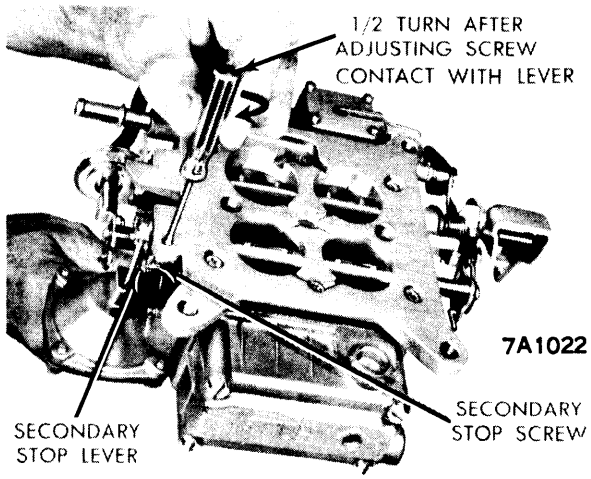
Ford & Mercury (All Carburetors except 1966 Comet & Fairlane) - With fuel bowl inverted, top of float should be parallel with top of. fuel bowl (see illustration). Adjust by bending tab on float arm (without adjustable fuel inlet needle), loosen locknut and turn fuel inlet needle), loosen locknut and turn fuel inlet needle needle adjusting nut (with adjustable fuel inlet needle).

Rambler 1959 - With fuel bowl assembly inverted, measure distance from inner surface of bowl to top of float at point approximately 3/4" from side of bowl and 1/2" in from gasket face of bowl (see Specifications). Adjust by bending tab on float arm.

Rambler 1960 & Later Carburetors - Top of float should be parallel with top of bowl. Adjust in same manner as Ford & Mercury (above).

Secondary Throttle Stopscrew

Back off secondary throttle lever stopscrew (located in throttle body flange directly below secondary throttle lever) until secondary throttle valves are tightly closed, turn screw in until it just contacts secondary throttle lever, then turn screw in an additional one-half turn to provide correct secondary throttle valve opening.



SECONDARY THROTTLE STOPSCREW ADJUSTMENT

OVERHAUL (2-BARREL CARBURETOR)

►*TRIPLE CARBURETOR NOTE: Front and rear carburetors used in "Triple Carburetor" installations are similar to other 2-Barrel carburetors except that they do not have automatic choke or fast idle mechanism. Overhaul data below applies to these carburetors except for the omitted items.*

Disassembly

1) Remove attaching screws and separate main body from throttle body, then remove air cleaner anchor screw and lockwasher. Remove fuel inlet fitting and screen, then remove fuel bowl, gasket, metering assembly and gasket from main body. Separate main metering assembly from main body and discard gasket.

2) Remove vent valve, idle adjusting screws and gaskets and the power valve and gasket from metering assembly. Remove external vent linkage retainer and spring, then remove linkage and vent. Remove accelerating pump cover and remove pump diaphragm and spring. Remove float retainer and float, then remove float spring and "O" ring seal from fuel valve seat assembly. Remove baffle plate, then remove fuel valve seat, valve, spring and pin.

3) Remove choke rod pin from choke housing shaft and lever assembly. Remove thermostat housing and gasket, then remove choke housing and gasket from main body. Remove nut, lockwasher and spacer from choke housing shaft, then remove shaft and fast idle cam assembly. Remove choke piston and lever assembly. Remove choke rod pin from choke plate shaft lever. Remove choke rod, washers and seal from main body, then remove choke valve from shaft and slide shaft and lever out of choke housing.

4) Remove pump discharge nozzle screw, then lift pump discharge nozzle and gasket out of main body. Invert main body and let pump discharge weight and ball fall into hand.

5) Remove dashpot assembly (if so equipped), then remove pump operating lever. Remove fast idle pick-up lever and fast idle cam lever and spring. If it is necessary to remove throttle valve, lightly scribe both valves along the throttle shaft and mark each valve with a number or letter for proper replacement. Remove throttle valve screws and remove valves. Slide throttle valve shaft out of throttle body.

Reassembly

Use all new gaskets. Reverse disassembly procedure and note the following:

Throttle Valve Installation - Refer to line scribed on throttle valves at disassembly and install valves in

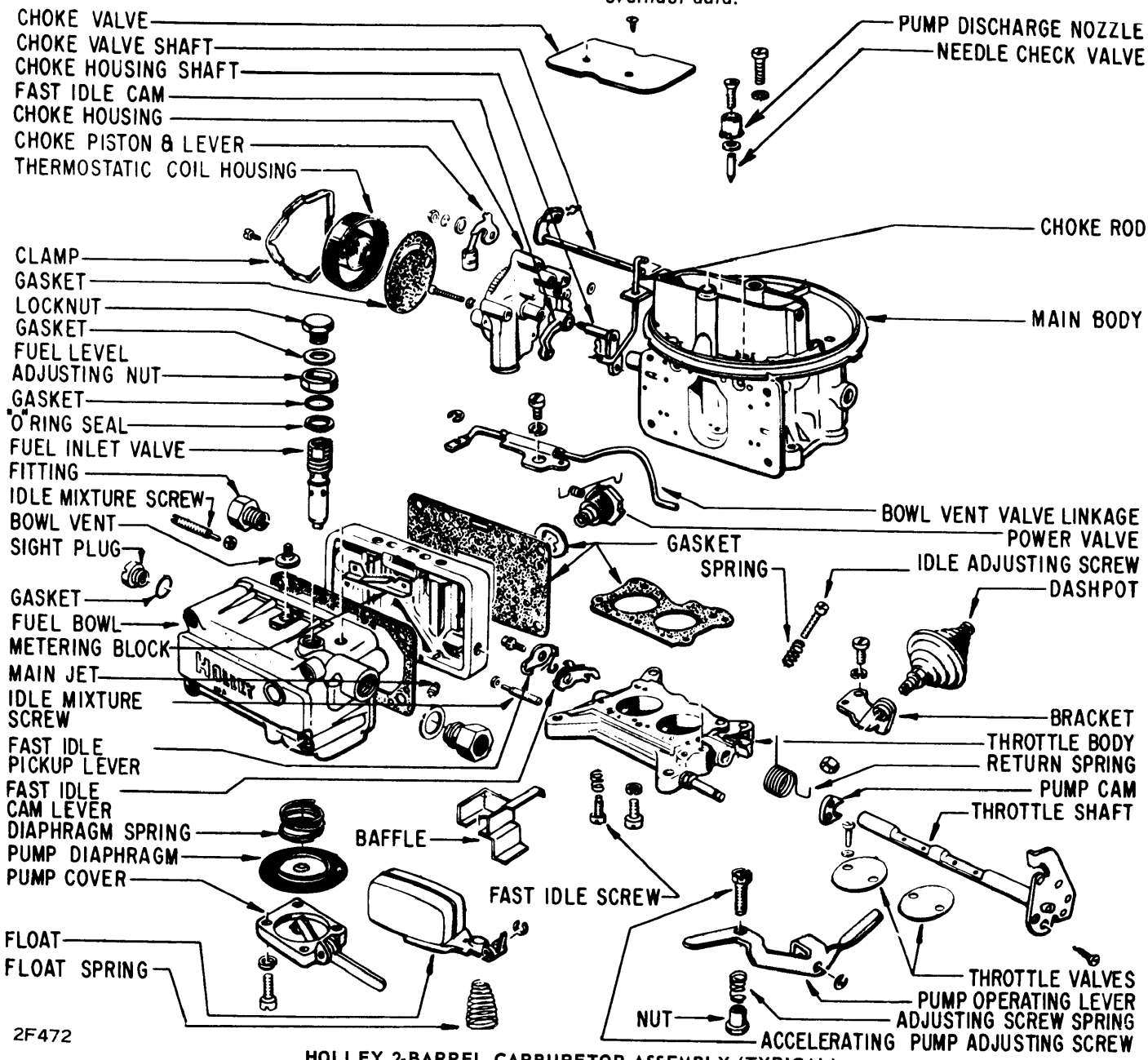
HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

their proper location with screws snug, but not tight. Little or no light should show between throttle valves and bores. Tap valves lightly to seat them, then tighten the screws.

Accelerating Pump Ball Check - Seat ball with a brass drift and a light hammer. Make sure ball is free, then proceed with reassembly.

OVERHAUL (3-BARREL CARBURETOR)

These carburetors overhauled in same manner as 4-barrel carburetors except for the secondary throttle valve (single oblong valve). See 4-Barrel carburetor overhaul data.



HOLLEY 2-BARREL CARBURETOR ASSEMBLY (TYPICAL)

OVERHAUL (4-BARREL CARBURETOR)

Disassembly

Before disassembly, loosen fuel inlet fitting, fuel bowl sight plugs, and needle and seat assembly lockscrews, then separate carburetor into main subassemblies and disassemble each of these subassemblies as follows:

1) On carburetors with external interconnecting fuel line, disconnect line at primary and secondary fuel bowls. Remove primary fuel bowl screws and remove fuel bowl, primary metering body, splash shield and gaskets, and fuel tube (fuel bowl connector) if used.

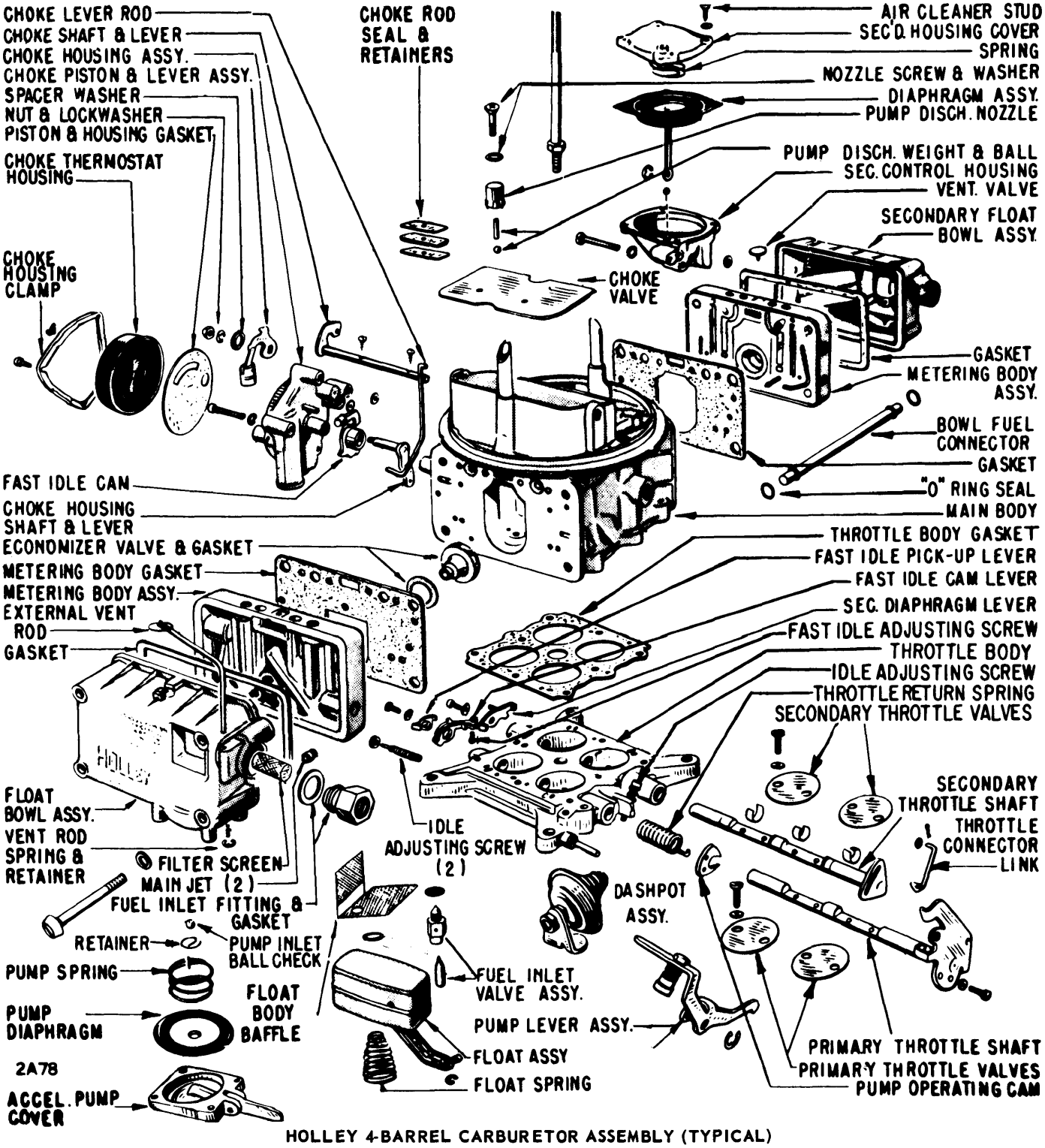
(Continued)

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

2) Remove secondary fuel bowl screws, remove fuel bowl, secondary metering body and gasket (Model 4150). On Model 4160, remove secondary metering body screws and lift out metering body and gasket.

3) Disconnect secondary throttle operating rod at throttle lever, then remove secondary throttle operating diaphragm assembly and gasket from main body. Disconnect vacuum break hose at vacuum break assembly (if used). Remove throttle body-to-main body screws, then remove throttle body and gasket from main body.

Fuel Bowls - 1) On carburetors with "end-hinged" floats, remove float hinge pin retainer, remove hinge pin and slide float from bowl. If necessary, remove spring from float assembly. Remove inlet baffle from bowl (if used). On carburetors with "side-hinged" floats, remove two float hinge screws, remove float



HOLLEY 4-BARREL CARBURETOR ASSEMBLY (TYPICAL)

HOLLEY 2, 3 & 4-BARREL MODELS 2300, 3160, 4150, 4160 (Continued)

assembly from bowl, slide hinge pin out, remove float and spring.

2) Remove sight plug and gasket. Remove inlet fitting, fuel filter, spring, and gaskets.

3) On primary fuel bowls only, remove air vent valve assembly, then take out pump diaphragm cover assembly screws and remove pump cover, diaphragm, and spring from bowl. Check pump inlet ball for damage and make certain ball is free. Any damage to ball, passage, or retainer will require replacement of fuel bowl.

Metering Bodies - Use wide-bladed screwdriver to remove main metering jets, use 12-Pt. socket to remove power valve, remove vacuum fitting. Remove idle mixture screws and seals (primary body only). On Model 4160 secondary metering bodies, remove plate and gasket from metering body dowel pins.

Secondary Throttle Operating Diaphragm Assembly - Take out screws and remove diaphragm cover, remove spring and diaphragm assembly from housing. Remove vacuum check ball from housing (when used).

Automatic Choke - **1)** Remove choke rod retainer from shaft and lever assembly, remove choke cover and thermostatic coil assembly and gasket, then remove choke housing and gaskets from main body.

2) Remove choke housing shaft nut, lockwasher, and spacer, then remove shaft and fast idle cam. Remove choke piston and lever assembly from housing. Remove choke rod and seal from main body.

3) If necessary to remove choke valve, file staking on retaining screws *(CAUTION - Use care not to damage choke shaft or venturi while filing screws)*, remove screws and slide choke valve out, remove choke valve shaft.

Main Body - On carburetors with vacuum break, take out retaining screws and remove vacuum break diaphragm assembly. Take out accelerating pump nozzle screw, remove discharge nozzle and gaskets, invert main body and catch pump discharge needle which will fall out.

Throttle Body - **1)** Remove accelerating pump operating lever, secondary throttle connecting rod, secondary throttle diaphragm lever, and fast idle cam lever. Remove throttle stopscrew and spring.

2) If necessary to remove primary or secondary throttle valves and shafts, lightly scribe all throttle valves along throttle shafts and mark each valve and corresponding bore to ensure correct reassembly, then file off staking on valve retaining screws *(CAUTION - Use care not to damage throttle shaft or venturi while filing screws)*, take out screws and slide throttle valves out, slide throttle shafts out. Remove Teflon bushings from secondary throttle shaft.

Cleaning & Inspection

Clean metallic parts and castings with carburetor cleaner or solvent (if throttle body not disassembled, clean this assembly and all non-metallic parts in alcohol or gasoline). Blow out all passages with compressed air. Inspect all parts for wear or damage. All mating surfaces must be smooth and not burred or gouged. Inspect needle and seat for burrs, ridges, or wear, and replace both parts as an assembly.

Reassembly

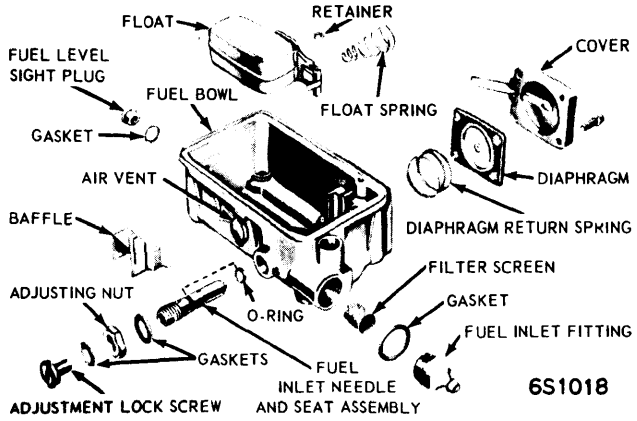
Use all new gaskets. Reverse disassembly procedure and note the following:

Throttle Valve Installation Assemble valves on shafts in accordance with marks made at disassembly, install but do not tighten retaining screws. Center valves by tapping lightly while holding valves closed (little or no light should show between edges of valves and carburetor bore), then tighten retaining screws securely and stake the screws *(CAUTION - Support shaft on soft metal bar to prevent bending shaft during staking operation)*.

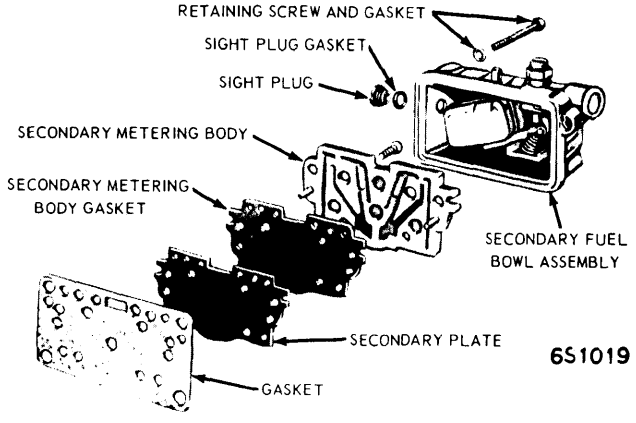
Accelerating Pump Discharge Needle Seat - If seat is rough, use an old discharge needle and tap needle lightly using a small brass rod and fibre mallet. Install new discharge needle and make sure it is free in passage.

Secondary Diaphragm Housing Assembly - Install vacuum check ball in housing (when used), install the diaphragm and position the spring on diaphragm (small end on boss on cover), tighten cover screws just snug, then pull diaphragm rod downward as far as possible while tightening cover screws securely. Install assembly on carburetor main body.

Choke Valve Installation - Assemble choke valve on shaft, install but do not tighten retaining screws, then close valve and tap lightly to center valve, hold valve closed while tightening screws securely, stake screws by squeezing with pliers. Check valve for free movement (valve should fall open freely of own weight).



FUEL BOWL ASSEMBLY (PRIMARY SHOWN) (WITH ADJUSTABLE NEEDLE VALVE)



SECONDARY METERING BODY ASSEMBLY (MODEL 4160 CARBURETORS)