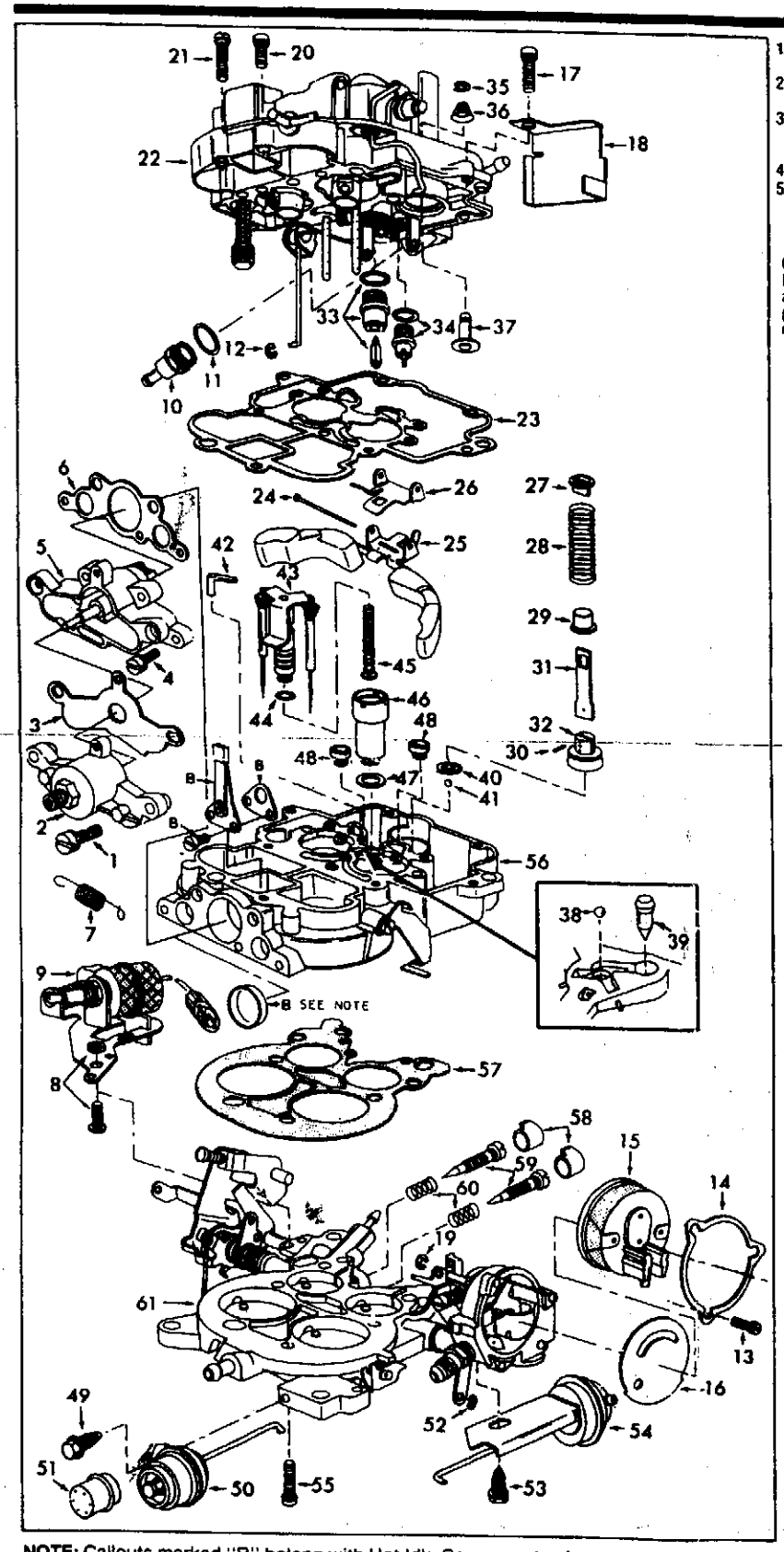
FUEL SYSTEM
SERVICE INSTRUCTION WORKSHEET

TO REPAIR

GF-3803-2

MOTORCRAFT CARBURETOR

4 BARREL—Model 4350



NOTE: Callouts marked "B" belong with Hot Idle Compensator Assembly. Do not remove unless replacements are required.

☞ **PARTS LIST SHOWN DOES NOT REFLECT THE CONTENTS OF THE KIT.**

1. **Carefully read the text in the following pages to become familiar with the contents of this worksheet before performing carburetor overhaul.**
2. The exploded view is typical of the model carburetor this kit will service. The view may differ slightly from the actual carburetor being overhauled.
3. Use the exploded view as a guide. The numerical sequence of the parts list may generally be followed to disassemble the carburetor far enough to permit cleaning and inspection.
4. Parts list shown DOES NOT reflect the contents of the kit.
5. Kit may contain extra parts intended for other carburetors within this group. Substitute identical replacement parts for original worn parts found in carburetor.

CLEANING

Cleaning must be done with carburetor disassembled. Use spray cleaner and a stiff bristle brush to remove dirt and carbon deposits. Do not use abrasives and wires to clean parts and passageways. Wash off in suitable solvent, and clear all passageways with compressed air. **Caution:** When cleaning with solvent do not soak or spray parts containing rubber, leather, plastic and electrical components.

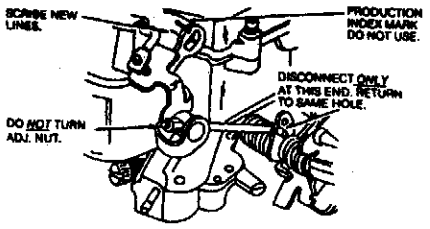
PARTS LIST

1. Screw, aneroid body (3)
2. Aneroid body
3. Gasket, aneroid body
4. Screw, poppet valve (3)
5. Poppet valve body
6. Gasket, poppet valve body
7. Spring, lever return
8. Screw & nut, solenoid bracket
9. Solenoid switch, throttle adjust.
10. Fuel fitting & filter assembly
11. Gasket, fuel fitting
12. Retainer, pump linkage
13. Screw, retainer (3)
14. Retainer, choke thermostat cover
15. Choke thermostat cover
16. Gasket, choke thermostat cover
17. Screw, choke thermostat cover barrier
18. Barrier, choke thermostat housing
19. Retainer, choke rod
20. Screw, air horn assembly (8)
21. Screw, air horn assembly (short-1)
22. Air horn assembly
23. Gasket, air horn assembly
24. Rod, float assembly
25. Float assembly
26. Float drop limiter (some models)
27. Retainer, pump spring
28. Spring, pump return
29. Retainer, collar, pin
30. Pin, pump piston
31. Shaft, pump
32. Cup, pump piston
33. Needle, seat & gasket (primary)
34. Needle & gasket (secondary)
35. Retainer, bowl vent spring
36. Sspring, bowl vent
37. Valve, bowl vent
38. Ball, pump vent check (small)
39. Needle, pump discharge
40. Retainer, ball check
41. Ball check, pump inlet (large)
42. Retainer vacuum piston assembly
43. Metering rod & vacuum piston assembly
44. O-ring, vacuum piston
45. Spring, vacuum piston spring
46. Cylinder sleeve, vacuum piston
47. Gasket, vacuum cylinder sleeve
48. Jets, main metering
49. Screw, choke pull-off assembly
50. Choke pull-off assembly
51. Filter cap
52. Retainer, throttle positioner rod (truck only)
53. Screw, throttle positioner (truck only)
54. Throttle positioner assembly
55. Screw, main body (6)
56. Main body
57. Gasket, main body to throttle body
58. Limiter cap (2) (some models)
59. Idle mixture screw (2)
60. Spring, idle mixture screw (2)
61. Throttle body assembly

DISASSEMBLY

Note: Before assembly, set throttle at fast idle position and scribe a new index line as shown.

Note: 1976 to 1978 Before removal of vacuum piston metering rod assembly. Lightly press down and measure the clearance between hanger and top of vacuum piston, record reading. (See Fig. B)



ADJUSTMENT DATA

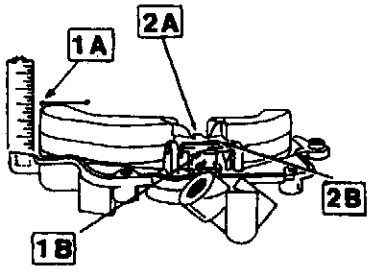
1A IN MAKING THIS ADJUSTMENT, DO NOT EXERT PRESSURE ON NEEDLE VALVE. WITH UPPER BODY INVERTED MEASURE FROM BODY GASKET SURFACE TO THE EDGE OF EACH FLOAT.

2A BEND PRIMARY FLOAT TAB TO ADJUST.

1B NOTE: AIRHORN HAS TO BE IN UPRIGHT POSITION TO PERFORM AUX. FLOAT LEVEL ADJUSTMENT

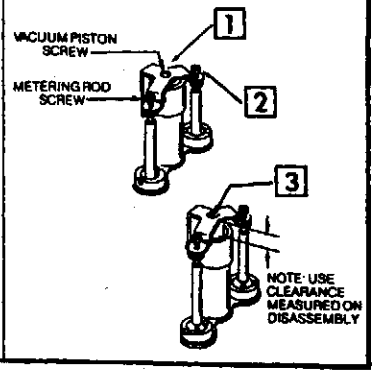
2B BEND AUXILIARY FLOAT TAB TO ADJUST.

FIG. A
DRY FLOAT LEVEL ADJUSTMENT (PRIMARY NEEDLE AND SEAT)
& FLOAT LEVEL ADJUSTMENT (AUXILIARY NEEDLE AND SEAT)



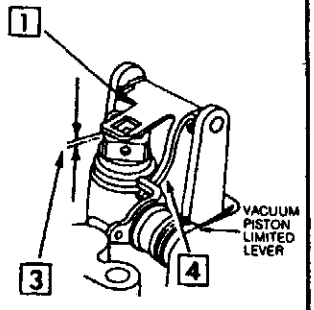
1. WITH VACUUM PISTON HELD IN DOWN POSITION, BACK OUT METERING ROD SCREWS AND VACUUM PUMP SCREW UNTIL METERING ROD IS FULLY SEATED IN VACUUM PUMP CYLINDER.
2. TURN EACH METERING ROD SCREW UNTIL HANGER JUST STARTS TO RISE.
3. ADJUST VACUUM PISTON SCREW UNTIL SPECIFIED CLEARANCE IS GOTTEN BETWEEN HANGER AND TOP OF VACUUM CYLINDER. NOTE: USE CLEARANCE MEASURED ON DISASSEMBLY.

FIG. B
METERING ROD ADJUSTMENT



1. REMOVE FLOAT AND INLET NEEDLE. REINSTALL FUEL INLET NEEDLE DROP LIMITER, AND THE HINGE PIN WITH THE EDGE OF THE LIMITER BEHIND THE TANG ON VACUUM PISTON LIMITER LEVER.
2. LINE UP MARKS SCRIBED ON PUMP LEVER AND HOUSING AT DISASSEMBLY. (TAPE TO HOLD IN PLACE)
3. MEASURE CLEARANCE BETWEEN FUEL INLET SEAT AND NEEDLE DROP LIMITER. CLEARANCE SHOULD BE .005.
4. BEND LONG FOOT ON THE NEEDLE DROP LIMITER TO ADJUST. RECHECK BY GOING THRU STEPS 2 AND 3. KEEP FOOT OF NEEDLE DROP LIMITER *BEHIND* TAB OF VACUUM PISTON LIMITER LEVER. REINSTALL FLOAT AND NEEDLE.

FIG. C
FLOAT DROP ADJUSTMENT

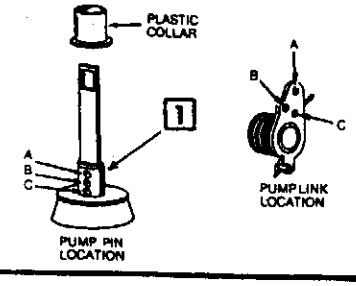


2 See Detail View, Front Page

1. PUT PIN IN SPECIFIED HOLE. SLIDE ON COLLAR TO HOLD IN PLACE.

NOTE: THIS IS THE ONLY ADJUSTMENT FOR PUMP TRAVEL.

FIG. D
PUMP ADJUSTMENT



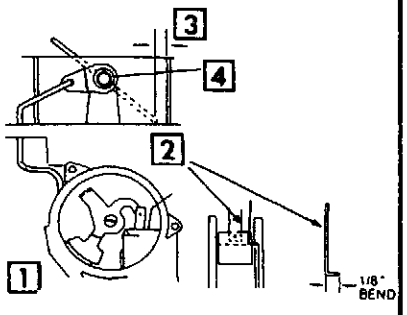
1 PLACE FAST IDLE SCREW ON HIGH STEP OF CAM.

2. MAKE GAUGE FROM PAPER CLIP. WITH ¼ INCH BEND. INSERT GAUGE BETWEEN PISTON SLOT IN CHOKE HOUSING. ROTATE CHOKE LEVER COUNTERCLOCKWISE UNTIL GAUGE IS HELD SNUG IN PISTON SLOT

3 MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN VALVE.

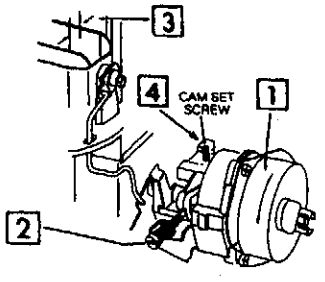
4. LOOSEN HEX HEAD SCREW (LEFT HAND THREAD) ON CHOKE SHAFT. ROTATE CHOKE SHAFT TIGHTEN SCREW.

FIG. E
CHOKE VALVE PULLDOWN ADJUSTMENT



1. TURN CHOKE COVER 90 DEGREES RICH BEYOND INDEX.
2. PLACE FAST IDLE SCREW ON SECOND STEP OF FAST IDLE CAM NEXT TO HIGH STEP.
3. MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL.
4. ADJUST IDLE CAM SET SCREW.

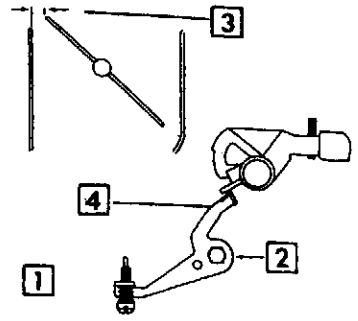
FIG. F
FAST IDLE CAM LINKAGE ADJUSTMENT



ADJUSTMENT DATA (Cont'd)

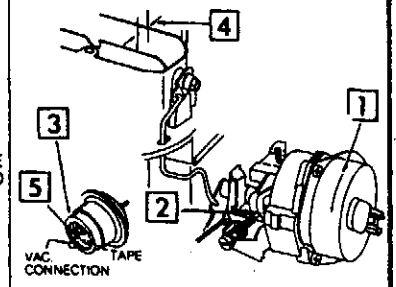
1. TURN CHOKE COVER 90 DEGREES RICH BEYOND INDEX.
2. HOLD THROTTLE VALVES WIDE OPEN.
3. MEASURE DISTANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND AIR HORN VALVE.
4. BEND UNLOADER TANG TO ADJUST.

FIG. G
CHOKE UNLOADER ADJUSTMENT



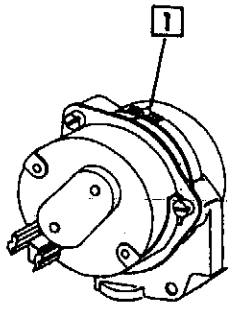
1. TURN CHOKE COVER 90 DEGREES RICH BEYOND INDEX.
2. PUT FAST IDLE SCREW ON HIGH STEP OF CAM.
3. TAPE SMALL PURGE HOLE AT REAR OF DIAPHRAGM HOUSING. APPLY VACUUM SOURCE TO PULL DIAPHRAGM TO SEATED POSITION. FAST IDLE SCREW SHOULD PULL DOWN TO SECOND STEP OF CAM.
4. MEASURE DISTANCE BETWEEN LOWER EDGE OF CHOKE VALVE AND AIR HORN WALL. SHOULD READ .190"–.210"
5. TURN SCREW AT REAR OF DIAPHRAGM HOUSING TO ADJUST.

FIG. H
DELAYED CHOKE PULLDOWN ADJUSTMENT



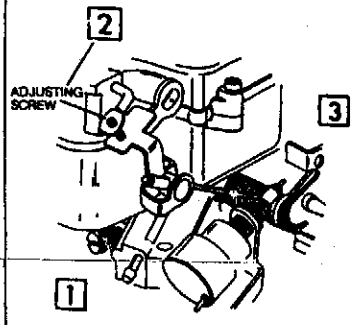
1. ROTATE CHOKE COVER AGAINST SPRING TENSION TO SPECIFIED POINT ON CHOKE HOUSING.

FIG. I
AUTOMATIC CHOKE SETTING



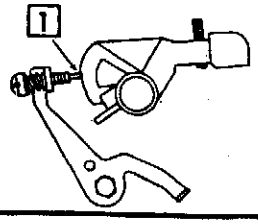
1. SEE CAR MANUAL FOR SETTING SLOW IDLE. ADJUST SLOW IDLE TO SPECIFICATIONS.
2. WITH ENGINE RUNNING (TSP ENERGIZED) ADJUST SCREW UNTIL IT LIGHTLY CONTACTS CONTROL SHAFT TANG. (NO SLACK IN VENT VALVE SHAFT.) THEN TURN SCREW ONE TURN CLOCKWISE.
3. CHECK ADJUSTMENT: VENT SHOULD BE CLOSED AT CURB IDLE; OPEN WHEN ENGINE IS SHUT OFF.

FIG. J
FUEL BOWL VENT ADJUSTMENT (MODELS WITH TSP SOLENOID)



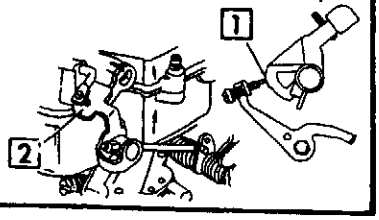
1. ADJUST CURB IDLE. PLACE FAST IDLE SCREW ON SECOND STEP OF FAST IDLE CAM. ADJUST FAST IDLE SCREW TO PROPER R.P.M.

FIG. K
FAST IDLE ADJUSTMENT



1. ENGINE OFF, SET FAST IDLE R.P.M. TO SPECIFICATIONS. SET FAST IDLE SCREW ON HIGH STEP OF CAM.
2. TURN ADJUSTING SCREW UNTIL IT JUST LIGHTLY CONTACTS CONTROL SHAFT TANG. (NO SLACK IN VENT VALVE SHAFT.) THEN TURN SCREW ONE TURN CLOCKWISE.

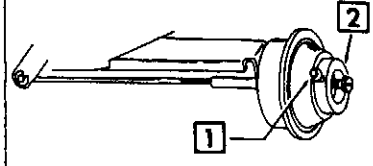
FIG L
FUEL BOWL VENT ADJUSTMENT (MODELS WITHOUT TSP SOLENOID)



NOTE: ENGINE MUST BE AT OPERATING TEMPERATURE, CURB IDLE ADJUSTED, AND TRANSMISSION IN NEUTRAL.

1. DISCONNECT VACUUM HOSE TO THROTTLE POSITIONER AND PLUG. CONNECT OUTSIDE VACUUM SOURCE OF AT LEAST 10 INCH HG. TO VACUUM POSITIONER AND CHECK R.P.M.
2. ADJUST BY TURNING SCREW UNTIL 1900 R.P.M. IS OBTAINED.
3. REMOVE VACUUM SOURCE AND ENGINE SHOULD RETURN TO CURB IDLE. RECONNECT VACUUM HOSE.

FIG. M
THROTTLE POSITIONER ADJUSTMENT (TRUCK ONLY)



SPECIFICATION BY APPLICATION

Year	MODEL	Float Level Fig. A		Float[2] Drop Limiter Fig. C	Choke Pulldown Fig. E	Fast Idle Cam. Fig. F	Accel. Pump Setting Fig. D	Unloader Fig. G	Auto Choke Setting Fig. I	Bowl Vent Valve Fig. J, L	Idle Speed Engine R.P.M.	
		Primary Valve	Auxiliary Valve								Slow	Fast Fig. K
A.M.C.												
1976	360, 401 Eng. —(Exc. Police)	29/32 [1]	3/64 [1]	1/64	9/64	9/64	E	21/64	2 Rich	—	700	1600[4]
	—Police			1/64	9/64	9/64	E	21/64	2 Rich	—	700	1600[4]
1975	360, 401 Eng. —(Exc. Police)	29/32	3/64	1/64	9/64	11/64	C	21/64	2 Rich	—	700	1600[4]
JEEP												
1978-76	360, 401 Eng.	29/32	3/64	1/64	9/64	9/64	—	21/64	2 Rich	—	—	1600
1975	360, 401 Eng.	3/32	3/64	1/64	9/64	9/64	A	21/64	2 Rich	—	—	1600
FORD TRUCK												
1978	460 Eng. —D8TE-AKA, AMA; D8UE-AA, CA	1	1/32	1/64	—	5/32	—	—	Index	—	[3]	[3]
1977	460 Eng. —D7TE-BJA, BLA	1	1/32	1/64	—	11/64	—	19/64	Index	—	[3]	[3]
	—D7UE-AFA, AGA, AFA, ASA	1	1/32	1/64	—	5/32	—	—	Index	—	[3]	[3]
	—D7TE-BLB; D7UE-AFC, AGB	—	—	—	—	—	—	—	—	—	—	—
1976-75	460 Eng. —D5TE-ARC, BBA; D5UE-NA, SA	15/16±1/32	1/16±1/64	1/64	5/32±1/64	11/64	A	19/64	Index	—	—	1900
	—D5TE-ARD, BBC; D5UE-NC, SB; D6TE-NA, UA; D6UE-KA, LA	1±1/32	1/32±1/64	1/64	5/32±1/64	11/64	A	19/64	Index	—	—	1900
FORD												
1978	460 Eng. —D8VE-FA, GA	1	7/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	[3]	[3]
1977	460 Eng.	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	650	1350
	—Hi-Altitude —Calif.	1	1/32	1/64	5/32	9/64	B	19/64	2 Lean	1 Turn	[3]	1350
	—Police	[1]	[1]	1/64	5/32	5/32	A	19/64	2 Rich	1 Turn	650	1350
1976	460 Eng.	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	650	1350
	—Hi-Altitude —Calif.	1	1/32	1/64	5/32	9/64	B	19/64	2 Lean	1 Turn	[3]	1350
1975	460 Eng. —(Exc. Police)	15/16 [1]	1/16 [1]	1/64	5/32	5/32	A	19/64	2 Rich	—	600	1350
	—Police			1/64	5/32	5/32	A	19/64	2 Rich	—	650/600	1350
LINCOLN												
1978	460 Eng. —D8VE-FA, GA	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	[3]	[3]
1977	460 Eng.	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	650	1350
	—Hi-Altitude —Calif.	1	1/32	1/64	5/32	9/64	B	19/64	2 Lean	1 Turn	[3]	1350
1976	460 Eng.	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	650	1350
	—Hi-Altitude —Calif.	1	1/32	1/64	5/32	9/64	B	19/64	2 Lean	1 Turn	[3]	1350
1975	460 Eng.	15/16	1/16	1/64	5/32	5/32	A	19/64	2 Rich	—	600	1350
MERCURY												
1978	460 Eng. —D8VE-FA, GA	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	[3]	[3]
1977	460 Eng.	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	650	1350
	—Hi-Altitude —Calif.	1	1/32	1/64	5/32	9/64	B	19/64	2 Lean	1 Turn	[3]	1350
	—Police	[1]	[1]	1/64	5/32	5/32	A	19/64	2 Rich	1 Turn	650	1350
1976	460 Eng.	1	1/32	1/64	5/32	9/64	B	19/64	Index	1 Turn	650	1350
	—Hi-Altitude —Calif.	1	1/32	1/64	5/32	9/64	B	19/64	2 Lean	1 Turn	[3]	1350
1975	460 Eng. —(Exc. Police)	5/16 [1]	1/16 [1]	1/64	5/32	5/32	A	19/64	2 Rich	—	600	1350
	—Police			1/64	5/32	5/32	A	19/64	2 Rich	—	650/600	1350

FOOTNOTES:

[1] Police models use independent floats, measure each float separately.
Primary Valve 1" Auxiliary Valve 1/32"

[2] Limiter not used on all models.

[3] Set to Specification shown on engine, Tune-Up Decal.

[4] Engine at operating temperature. Screw on second step of cam.
Also EGR & TCS must be disconnected.