

FUEL SYSTEM

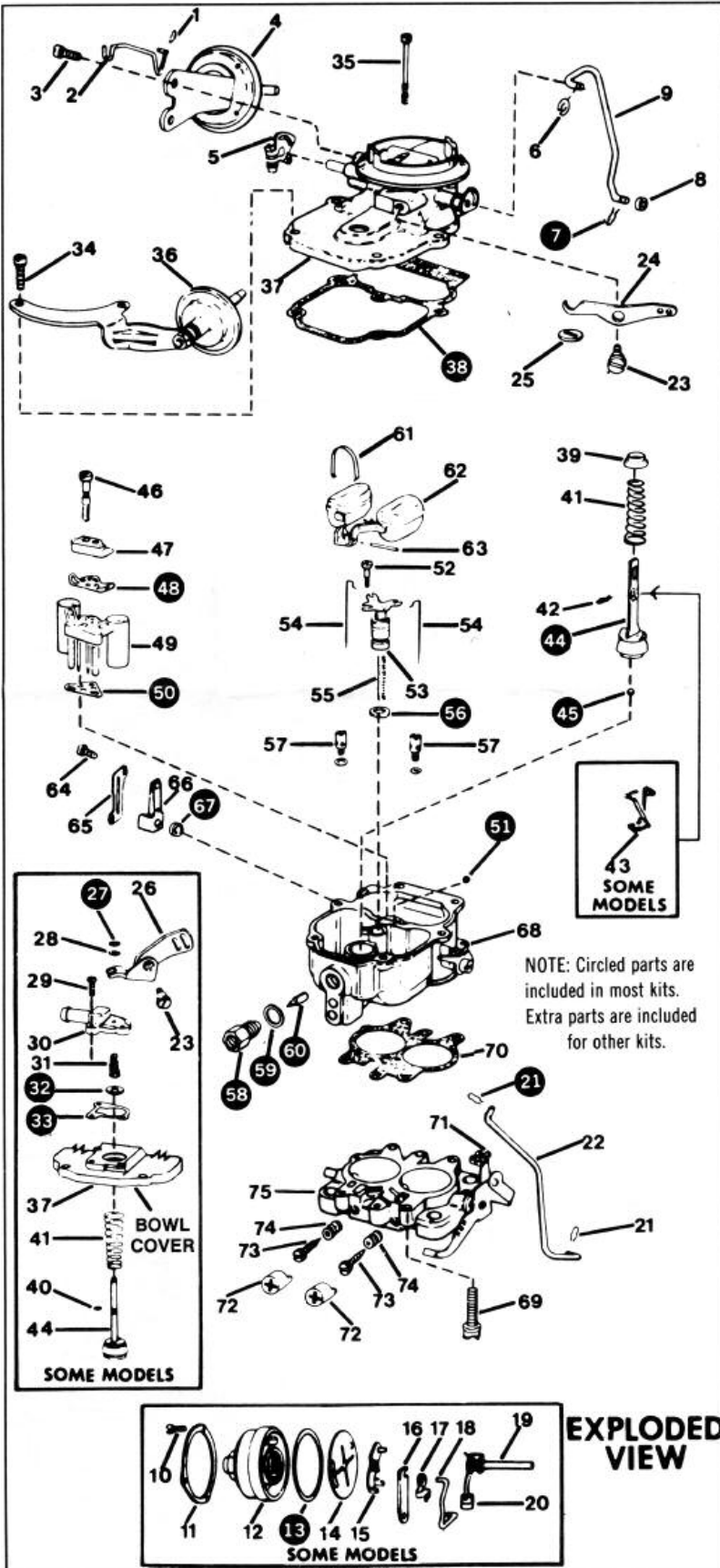
SERVICE INSTRUCTION WORKSHEET

TO REPAIR

GF3716-3

CARTER CARBURETOR

2 BARREL—MODEL BBD 1-1/4 (EARLY)



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 shown 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 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.

SPECIAL NOTES:

1. Idle mixture screws (73) are not removable on C.A.P. carburetors.
 2. On other carburetors, before removing idle mixture screws (73), turn screws until lightly seated, counting number of turns. Use this figure when re-assembling carburetor.
 3. Pump plunger clip (42) or (27) should be assembled onto center groove of pump plunger as standard setting.
 4. Pump piston cup (44) must be lightly lubricated with clean engine oil then flared before installation.
 5. Make float adjustment before installing parts 56, 55, 54, 53, 52.
- Caution:** Do not allow needle (60) to be pressed into seat (58) when making the adjustment as it may damage the needle's tip.

PARTS LIST

- | | |
|------------------------------------------------------------|----------------------------------------|
| 1. Clip, Retainer | 38. Gasket, Air Horn |
| 2. Link, Choke Diaphragm | 39. Ferrule, Pump Spring |
| 3. Screw, Choke Diaphragm (2) | 40. "E" Clip, Pump Plunger* |
| 4. Choke Diaphragm (Choke Pull-Off Assy. - C.P.A.) | 41. Spring, Pump Return |
| 5. Lever, Slotted, Choke | 42. Clip, Pump Plunger |
| 6. "E" Clip, Choke Rod | 43. Retainer, Pump Plunger* |
| 7. Clip, Retainer, Choke Rod | 44. Plunger Assy., Pump |
| 8. Spacer, Choke Rod | 45. Ball Check, Intake (Large) |
| 9. Rod, Choke | 46. Screw, Venturi Cover |
| 10. Screw, Thermostatic Cover Retainer* | 47. Cover, Venturi |
| 11. Retainer, Thermostatic Cover Assembly* | 48. Gasket, Cover |
| 12. Thermostatic Cover Assy.* | 49. Venturi Assy. |
| 13. Gasket, Thermostatic Cover* | 50. Gasket, Venturi |
| 14. Baffle, Choke Heat* | 51. Ball Check, Discharge (Small) |
| 15. Lever, Trip, Choke* | 52. Screw, Vacuum Piston Plate |
| 16. Link, Fast Idle* | 53. Vacuum Piston Plate Assy. |
| 17. Clip, Clevis* | 54. Rod, Main Metering (2) |
| 18. Link, Choke* | 55. Spring, Return, Vacuum Piston |
| 19. Choke Shaft & Piston Assy.* (Disassembly not required) | 56. Gasket, Vacuum Piston |
| 20. Piston, Choke Shaft* | 57. Jet, Main Metering (2) |
| 21. Clip, Retainer, Pump Rod | 58. Fitting, Fuel Inlet Seat |
| 22. Rod, Pump | 59. Gasket, Fuel Inlet Seat |
| 23. Screw, Shoulder Pump Lever | 60. Needle Valve, Fuel Inlet |
| 24. Lever, Pump | 61. Retainer, Float Hinge Rod |
| 25. Washer, Pump Plunger | 62. Float Assy. |
| 26. Arm, Pump* | 63. Rod, Float Hinge |
| 27. "E" Clip, Pump Plunger* | 64. Screw, Cover, Hot Idle Compensator |
| 28. Washer, Dust Cover* | 65. Cover, Hot Idle Compensator |
| 29. Screw, Vent Tube Connector (3)* | 66. Compensator Assy., Hot Idle |
| 30. Connector, Vent Tube Hose* | 67. Seal, Hot Idle Compensator |
| 31. Spring, Vent Valve* | 68. Main Body Assy. |
| 32. Valve, Vent* | 69. Screw, Throttle Body to Main Body |
| 33. Gasket, Vent Tube Connector* | 70. Gasket, Throttle to Main Body |
| 34. Screw, Air Horn (Short) | 71. Screw Adj., Idle Speed |
| 35. Screw, Air Horn (Long) | 72. Limiter Cap (2) |
| 36. Dashpot & Bracket Assy. | 73. Screw, Idle Mixture (2) |
| 37. Air Horn Assy. | 74. Spring, Idle Mixture (2) |
| | 75. Throttle Body |

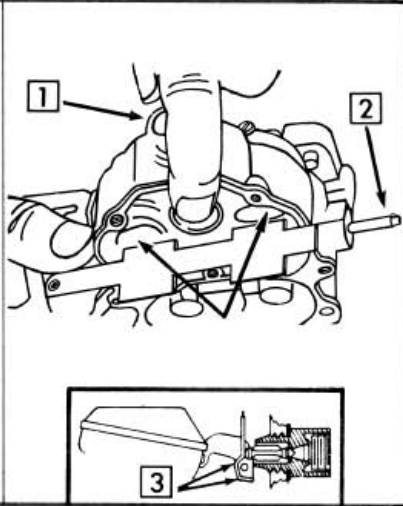
*Some Models

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

ADJUSTMENT DATA

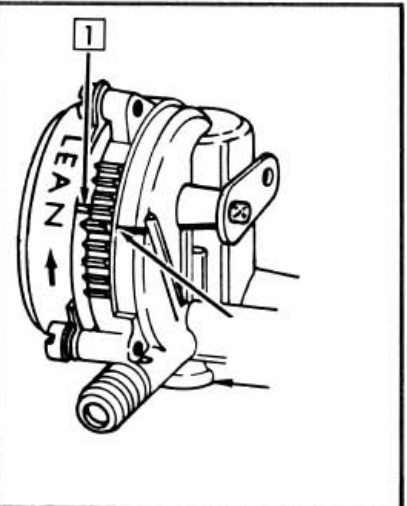
**FIG. A
FLOAT LEVEL ADJUSTMENT**

1. INVERT MAIN BODY SO THAT ONLY WEIGHT OF FLOAT IS FORCING NEEDLE AGAINST SEAT.
2. HOLD FINGER AGAINST RETAINER TO ASSURE PIN IS FULLY SEATED.
3. MEASURE FROM THE SURFACE OF THE FUEL BOWL TO THE CROWN OF EACH FLOAT.
4. TO ADJUST, BEND TAB ON FLOAT ARM.



**FIG. D
AUTO CHOKE**

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

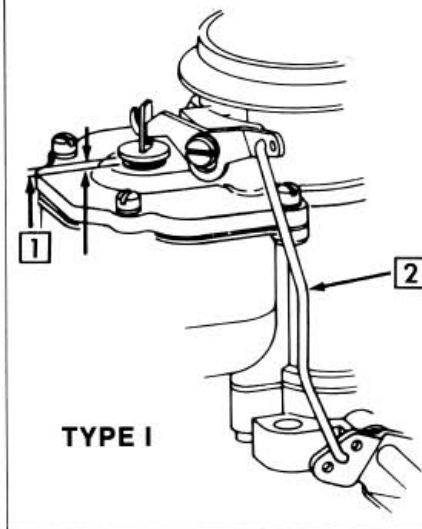


**FIG. B
PUMP TRAVEL &
BOWL VENT ADJUSTMENT**

NOTE: THROTTLE VALVES AT CURB IDLE AND CONNECTOR ROD IN CENTER HOLE OF THROTTLE LEVER AND INNER HOLE OF PUMP ARM, ALSO PIN SPRING MUST BE LOCATED IN CENTER GROOVE ON PLUNGER SHAFT (UNLESS NOTED DIFFERENTLY IN SPECIFICATION CHART).

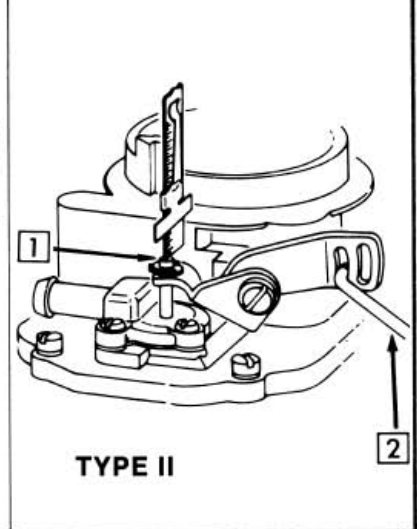
TYPE I

1. MEASURE AS SPECIFIED BETWEEN VENT VALVE AND BUSHING.
2. TO ADJUST, BEND CONNECTOR ROD.



TYPE II

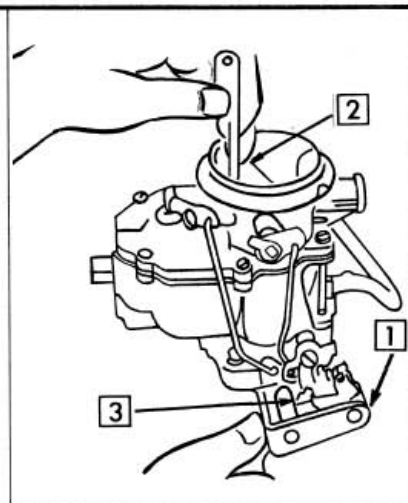
1. MEASURE AS SPECIFIED FROM SHOULDER OF AIR HORN TO TOP OF PLUNGER ROD.
2. TO ADJUST, BEND CONNECTOR ROD.



**FIG. C
UNLOADER ADJUSTMENT**

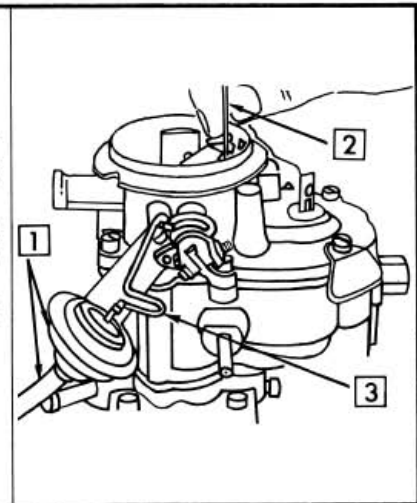
1. HOLD THROTTLE VALVES IN WIDE OPEN POSITION.
2. MEASURE BETWEEN TOP OF CHOKE VALVE AND AIR HORN WALL; WHILE LIGHTLY HOLDING CHOKE VALVE IN CLOSED POSITION.
3. ADJUST BY BENDING TANG ON THROTTLE LEVER.

NOTE: ON 1955 & EARLY 1956 MODELS-TO ADJUST, BEND TRIP LEVER INSIDE CHOKE HOUSING (NOT SHOWN).



**FIG. E
CHOKE DIAPHRAGM LINK
(CHOKE PULL OFF)**

1. APPLY AT LEAST 10" OF VACUUM FROM AN EXTERNAL SOURCE TO DIAPHRAGM ASSEMBLY.
2. MEASURE BETWEEN TOP OF CHOKE VALVE AND WALL OF AIR HORN.
3. TO ADJUST, BEND CHOKE OPERATING LINK.



ADJUSTMENT DATA (CONT'D)

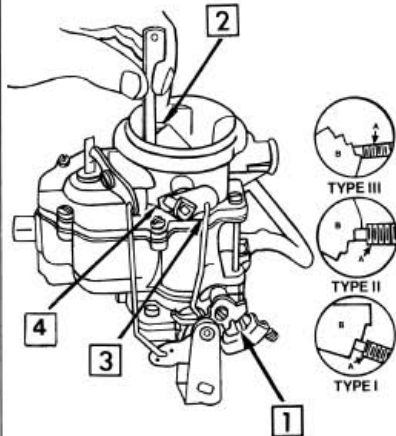
**FIG. F
FAST IDLE LINK
ADJUSTMENT**

TYPE I & II (PROCEDURE A)

1. SET IDLE SPEED SCREW ON CAM AS INDICATED ON SPECIFICATION CHART.
2. MEASURE CLEARANCE BETWEEN UPPER EDGE OF CHOKE VALVE AND INNER WALL OF AIR HORN.
3. TO ADJUST, LATE MODELS — BEND CHOKE ROD.
4. FOR EARLIER MODELS — BEND TANG ON CHOKE LEVER COLLAR.

TYPE II (PROCEDURE B)

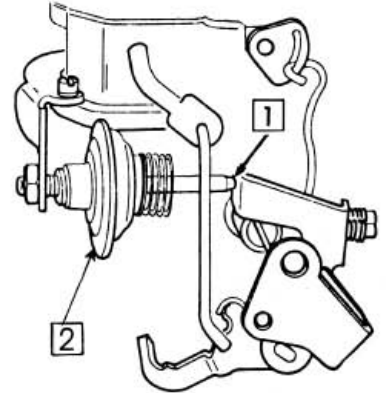
NOTE: WITH CHOKE VALVE CLOSED AND TANG ON INNER CHOKE CONTACTING LUG, IDLE SCREW SHOULD ALIGN WITH INDEX MARK ON CAM. BEND TANG (4) TO ADJUST.



**FIG. H
DASHPOT ADJUSTMENT**

NOTE: START ENGINE, CONNECT TACHOMETER AND POSITION THROTTLE LEVER TO 2500 RPM.

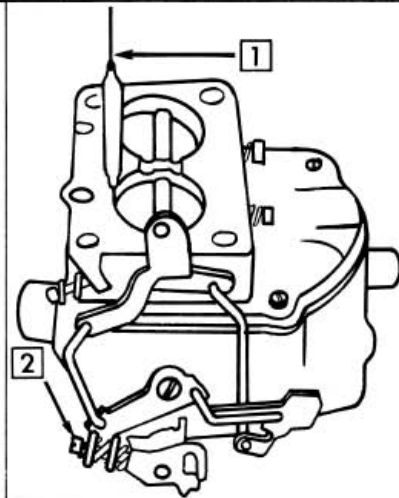
1. LOOSEN LOCKNUT.
2. ADJUST DASHPOT UNTIL THE STEM JUST CONTACTS TANG ON THROTTLE LEVER. BE SURE ENGINE RETURNS TO IDLE AFTER MAKING THIS ADJUSTMENT.



**FIG. G
THROTTLE VALVE
CLEARANCE**

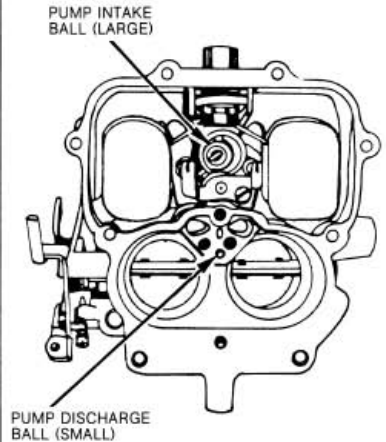
NOTE: WITH CHOKE VALVE CLOSED PLACE FAST IDLE SCREW ON APPROPRIATE STEP OF CAM. (SEE SPECIFICATION CHART)

1. MEASURE BETWEEN LOWER EDGE OF THROTTLE VALVE AND BORE OPPOSITE IDLE MIXTURE SCREWS.
2. TO ADJUST, TURN FAST IDLE SCREW.



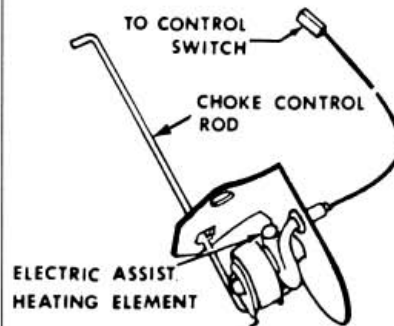
**PUMP CHECK BALL
LOCATION**

NOTE: CHECK BALLS MUST BE INSTALLED IN THEIR PROPER LOCATIONS. FAILURE TO DO SO WILL CAUSE HARD STARTING AND OR INABILITY TO ACCELERATE.



**ELECTRICAL ASSIST
CHOKE
TROUBLESHOOTING
(INOPERATIVE IGNITION
CIRCUIT)**

NOTE: CONTROL SWITCH (VIA IGNITION CIRCUIT) PROVIDES ELECTRICAL INPUT TO ACTIVATE HEATING ELEMENT. A SHORT IN WIRING OR WITHIN HEATER ITSELF COULD RESULT IN SHORTING OUT IGNITION CIRCUIT.



SPECIFICATIONS BY APPLICATION (Cont'd)

Year	MODEL	Float Level Fig. A	Pump Travel ¹⁶ Fig. B	Bowl Vent Fig. B	Un-loader Fig. C	Auto. Choke Setting Fig. D	Choke Diaph. Link Fig. E	Dash-pot Fig. H	Fast Idle Link Fig. F	Throttle Valve Clear Fig. G	Idle Speed	
											Hot	Fast ¹¹

DODGE, PLYMOUTH — SPECIFICATION I.D.-B

1970	318 Eng.—Exc. Cal.—A.T.	1/4	1/32	—	—	Index	5/32	—	3/32 S	—	700	2000 S
	—M.T.	1/4	1/32	—	—	Index	5/32	—	3/32 S	—	750	1600 S
	—Cal.—A.T.	1/4	15/64 ¹⁸	—	1/4	Index	5/32	See text	3/32 S	—	700	2000 S (A)
	—Export	1/4	1/32	—	—	Index	5/32	—	3/32 S	—	9	1600 S (M)

DODGE TRUCK —

1971-70	318 Eng.—A1—Exc. Cal.—A.T.;	1/4	1/32	—	—	Index	5/32	—	3/32 S	—	700	2000 S
	D1—Exc. Cal.—A.T. Service Carb.	1/4	1/32	—	—	Index	5/32	—	3/32 S	—	750	1600 S
	—M.T.	1/4	1/32	—	—	Index	5/32	—	3/32 S	—	9	2000 S
	—M.T.—D1—Exc. Cal.—A.T.	1/4	1/32	—	—	Manual	—	—	—	—	9	1600 S
	—M.T.	1/4	1/32	—	—	Manual	—	—	—	—	9	1600

DODGE, PLYMOUTH — SPECIFICATION I.D.-C

1973	318 Eng.—A.T.—Export	1/4	1/32	—	1/4	Index	5/32	See text	3/32 S	—	9	2000 S (A)
	—M.T.	1/4	1/32	1/32	1/4	Index	5/32	See text	3/32 S	—	9	1600 S (M)
1972	318 Eng.—A.T.—Export	1/4	1/32	1/32	1/4	Index	5/32	See text	3/32 S	—	9	2000 S
	—M.T.—Export	1/4	1/32	1/32	1/4	Index	5/32	See text	3/32 S	—	700	1600 S
1971	318 Eng.—Export	1/4	1/32	1/32	1/4	Index	5/32	See text	3/32 S	—	9	{2000 S (A)} {1600 S (M)}

DODGE TRUCK —

1973	318-1 Eng.—D2-3, W2-3, B3 Van—Exc. Cal.	1/4	1/32	1/32	1/4	¹⁰	5/32	See text	3/32 S	—	750	{1900 S (A)} {1700 S (M)}
	318-3 Eng.—H.D.—S6	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I
	361 Eng.—(Exc. S6)—Exc. Cal.	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	600	1700 I
	—S6	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I
1972	318 Eng.—L.D.—D2-3, W2-3, B3 Van, G4	1/4	1/32	1/32	1/4	¹⁰	5/32	See text	3/32 S	—	750	{1900 S (A)} {1700 S (M)}
	318-3 Eng.—H.D.—(Exc. M-3, S-6)	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	700	1900 I
	—M3	1/4	1/32	1/32	1/4	2 Rich	—	—	3/32 S	—	9	1800 S
	—S6	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I
	361 Eng.—(Exc. S6)	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	600	1700 I
—S6	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I	
1971	318 Eng.—D2-3, W2-3—M.T.	1/4	1/32	1/32	1/4	Index	5/32	See text	3/32 S	—	9	1600 S
	—D4-6, W5, C5, L6—Service Carb.	1/4	13/64 ¹⁸	—	—	Manual	—	—	Closed I	—	9	1900 I
	—S5-6—Service Carb.	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I
	—M3-4—w/Hot Air Choke	1/4	1/32 ¹⁵	1/32	1/4	2 Rich	—	—	3/32 S	—	9	1800 S
	—w/Electric Choke	1/4	1/32	1/32	1/4	2 Rich	—	—	3/32 S	—	9	1800 S
361 Eng.	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I	
—S6—M.T.—Service Carb.	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I	
1970	318 Eng.—D2-3, W5, C5, L6—Service Carb.	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I
	—S5-6—Service Carb.	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I
	—M3-4	1/4	1/32 ¹⁵	1/32	1/4	2 Rich	—	—	3/32 S	—	9	1800 S
	361 Eng.—(Exc. S6 Service Carb.)	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I
—S6 Service Carb.	1/4	1/32	1/32	—	Manual	—	—	Closed I	—	9	1900 I	

DODGE, PLYMOUTH — SPECIFICATION I.D.-D

1967-65	273 Eng.—A.T.	1/4	1/16	1/16	1/4	—	1/8	—	3/32	.031	500	700
	318 Eng.—A.T.—Can.	1/4	—	1/16	1/4	—	1/8	—	3/32	.015	500	700
	—M.T.—Can.	1/4	1/16	1/16	1/4	—	9/64	—	3/32	.015	500	700
1964	318 Eng.	1/4	1/16	1/16	1/4	Index	3/16	—	1/4 L	.015 S	500	700 L
1963	318 Eng.	1/4	1/16	1/16	1/4	Index	—	—	Proc. "B"	.015 I	500	1400 I
1962-60	318 Eng.	1/4	1/16	1/16	1/4	Index	—	—	Proc. "B"	.015 I	500	1400 I

DODGE TRUCK —

1959	Clark Cortez M.H.—Carb. No. 4564	—	—	—	—	—	—	—	—	—	—	—
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DODGE, PLYMOUTH — SPECIFICATION I.D.-E

1973	318 Eng.—A.T.—Exc. Cal.; M.T. Cal.	1/4	15/64 ¹⁸	15/64	1/4	Fixed	5/32	See text	3/32 S	—	750	1700 S
	—Cal.; M.T.—Exc. Cal.	1/4	15/64 ¹⁸	15/64	1/4	Fixed	5/32	See text	3/32 S	—	700	1700 S
1972	318 Eng.—A.T.—Exc. Cal.	1/4	17/64 ¹⁸	17/64	1/4	Fixed	5/32	See text	3/32 S	—	750	1900 S
	—Cal.	1/4	17/64 ¹⁸	17/64	1/4	Fixed	5/32	See text	3/32 S	—	700	2000 S
	—M.T.—Exc. Cal.	1/4	17/64 ¹⁸	17/64	1/4	Fixed	5/32	See text	3/32 S	—	750	1700 S
	—Cal.	1/4	17/64 ¹⁸	17/64	1/4	Fixed	5/32	See text	3/32 S	—	750	1800 S
1971	318 Eng.—(Exc. Export)—A.T.	1/4	13/64 ¹⁸	13/64	1/4	Index	5/32	See text	3/32 S	—	700	2000 S
	—M.T.	1/4	13/64 ¹⁸	13/64	1/4	Index	5/32	See text	3/32 S	—	750	1600 S
1970	318 Eng.—Cal.	1/4	15/64 ¹⁸	15/64	1/4	Index	5/32	See text	3/32 S	—	700 (A) 750 (M)	{2000 S (A)} {1600 S (M)}

SPECIFICATIONS BY APPLICATION (Cont'd)

Year	MODEL	Float Level Fig. A	Pump Travel ¹⁶ Fig. B	Bowl Vent Fig. B	Un-loader Fig. C	Auto. Choke Setting Fig. D	Choke Diaph. Link Fig. E	Dash-pot Fig. H	Fast Idle Link Fig. F	Throttle Valve Clear Fig. G	Idle Speed	
											Hot	Fast ¹¹

DODGE TRUCK — SPECIFICATION I.D.-E

1977-74	318 Eng.	1/4	13/64 ¹⁸	13/64	1/4	—	—	—	3/32	—	—	1700S
1973	318 Eng.—H.D.—Cal.; L.D.—Cal., Fed.	1/4	15/64 ¹⁸	15/64 ¹³	1/4	Index	5/32	See text	3/32 S	—	9	1700 S
	318-3 Eng.	1/4	13/64 ¹⁸	13/64	—	Manual	—	—	Closed I	—	9	1900 I
	361 Eng.	1/4	13/64 ¹⁸	13/64	—	—	—	—	—	—	9	1400 S
1972	318 Eng.—A.T.—Exc. Cal.	1/4	15/64 ¹⁸	15/64	1/4	Fixed	5/32	See text	3/32 S	—	750	1900 S
	—Cal.	1/4	15/64 ¹⁸	15/64	1/4	Fixed	5/32	See text	3/32 S	—	700	2000 S
	—M.T.—Exc. Cal.	1/4	15/64 ¹⁸	15/64	1/4	Fixed	5/32	See text	3/32 S	—	750	1700 S
	—Cal.	1/4	15/64 ¹⁸	15/64	1/4	Fixed	5/32	See text	3/32 S	—	700	1800 S
1971	318 Eng.—E.C.S.—A.T.	1/4	13/64 ¹⁸	13/64	1/4	Index	5/32	See text	3/32 S	—	700	2000 S
	—M.T.	1/4	13/64 ¹⁸	13/64	1/4	Index	5/32	See text	3/32 S	—	750	1600 S
1970	318 Eng.—Cal.	1/4	9/16 ¹⁸	9/16 ¹⁴	1/4	Index	5/32	See text	3/32 S	—	9	2000 S
	—Carb. No. 4819	1/4	13/64 ¹⁸	13/64	1/4	Manual	—	See text	Closed	—	9	1600 I
	318 Eng.—Chrysler Industrial	1/4	13/64 ¹⁸	—	—	Manual	—	—	3/32 S	—	9	1700 S

FOOTNOTES

9. See Decal in Engine Compartment.
10. Automatically-Thermostatically controlled with fixed setting.
11. Adjust with Choke Valve wide open.
12. Vehicles with A/T set 1/8.
13. Carb. No. 6363, 64 set 13/64.
14. Carb. No. 4820 set 13/64.
15. Install connector rod in outer hole of pump arm.
16. Refer to type II unless otherwise specified.
17. Refer to type I.
18. Refer to type III.

ABBREVIATIONS

(A) or A.T. Automatic Transmission	H Set Idle Speed screw on high cam.
(M) or M.T. Manual Transmission	I Align Idle Speed screw with Index mark on cam.
A.C. Air Condition	L Set Idle Speed screw on low cam against shoulder of second.
Cal. California	L.D. Light Duty
(Can. Canada	M.D. Medium Duty
C.A.P. Clean Air Package	M.H. Motor Home
E.C.S. Emission Control System	Reg. Regular
Exc. Except	S Set Idle Speed screw on second cam against shoulder of first.
Fed. Federal	w/o Without