

# INSTRUCTION SHEET

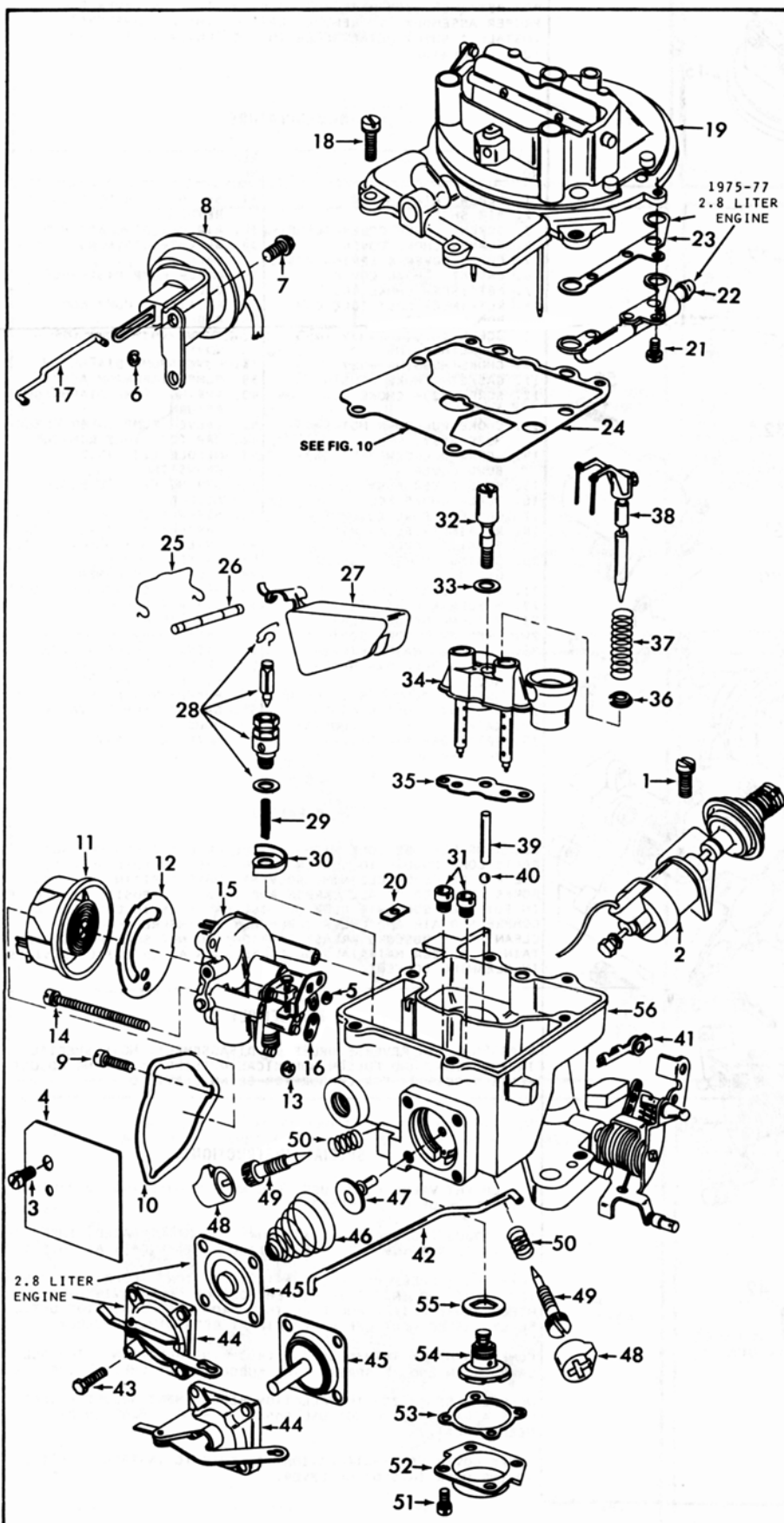
## OFF VEHICLE CARBURETOR SERVICE

### MOTORCRAFT MODEL 2150

50-500-4

#### GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO  
INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET



#### DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: WHEN REMOVING PUMP ROD RETAINER (41) MARK ROD HOLE POSITION ON LEVER FOR PROPER ASSEMBLY. TO REMOVE PLASTIC LIMITER CAPS (48) INSTALL A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

#### NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW-TSP & DASHPOT ASSY.	28. NEEDLE & SEAT ASSY.
2. TSP & DASHPOT ASSY.	29. SCREEN-NEEDLE SEAT
3. SCREW-AIR SHIELD	30. BAFFLE-NEEDLE SEAT
4. AIR SHIELD	31. JET(2)-MAIN METERING
5. RETAINER-CHOKE ROD	32. SCREW-PUMP DISCHARGE NOZZLE
6. RETAINER-CHOKE PULLDOWN LINK	33. GASKET-PUMP DISC. SCREW
7. SCREW(2)-CHOKE PULLDOWN ASSY.	34. VENTURI CLUSTER ASSY.
8. CHOKE PULLDOWN MOTOR & HOSE ASSY.	35. GASKET-VENTURI CLUSTER
9. SCREW(3)-CHOKE COVER CLAMP	36. RETAINER-AIR METERING ROD SPRING
10. CLAMP -CHOKE COVER	37. SPRING-AIR METERING ROD RETURN
11. CHOKE COVER & SPRING ASSY.	38. AIR METERING ROD ASSY.
12. GASKET-CHOKE COVER	39. WEIGHT-DISCHARGE CHECK BALL
13. RETAINER-FAST IDLE CAM ROD (LOWER)	40. BALL-PUMP DISCHARGE CHECK
14. SCREW & LOCKWASHER(3)-CHOKE HOUSING	41. RETAINER-PUMP ROD
15. CHOKE HOUSING ASSY.	42. ROD-PUMP
16. GASKET-CHOKE HOUSING	43. SCREW(4)-PUMP DIAPHRAGM COVER
17. LINK-CHOKE PULLDOWN	44. COVER-PUMP DIAPHRAGM
18. SCREW & LOCKWASHER(6)-BOWL COVER	45. PUMP DIAPHRAGM ASSY.
19. BOWL COVER ASSY.	46. SPRING-PUMP DIAPHRAGM RETURN
20. SEAL-CHOKE ROD	47. VALVE-PUMP INLET CHECK
21. SCREW & LOCKWASHER(3)-DECAL VALVE FITTING	48. CAP(2)-IDLE LIMITER
22. FITTING-DECAL VALVE	49. NEEDLE(2)-IDLE ADJUSTING
23. GASKET-DECAL VALVE FITTING	50. SPRING(2)-IDLE ADJ. NEEDLE
24. GASKET-BOWL COVER	51. SCREW & LOCKWASHER(4)-ENRICHMENT VALVE COVER
25. RETAINER-FLOAT PIN	52. COVER-ENRICHMENT VALVE
26. PIN-FLOAT HINGE	53. GASKET-COVER
27. FLOAT & LEVER ASSY.	54. VALVE-ENRICHMENT
	55. GASKET-ENRICHMENT VALVE
	56. MAIN BODY ASSY.

#### CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK PARTS CONTAINING RUBBER MATERIALS OR PARTS SUCH AS (2)(8)(11)(27)(30)(45)(54) IN CLEANING SOLVENTS.

#### REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS NECESSARY FOR CARBURETOR BEING SERVICED.

#### SPECIAL INSTRUCTIONS

ENRICHMENT VALVE (54)- USE CARE WHEN TIGHTENING TO PREVENT DISTORTION OF GASKET (55).

IDLE ADJUSTING NEEDLES (49)- TURN IN UNTIL SEATED, THEN BACK OUT 1½-2 TURNS. (DO NOT INSTALL LIMITER CAPS AT THIS TIME.)

PUMP INLET CHECK VALVE(47)INSTALLATION.-LUBRICATE TIP OF NEW VALVE AND INSERT IN CENTER HOLE OF PUMP CAVITY. USE NEEDLE NOSE PLIERS AND PULL THRU FROM FUEL BOWL SIDE UNTIL FULLY SEATED. CUT OFF VALVE TIP AT RETAINING SHOULDER.

PUMP DIAPHRAGM RETURN SPRING(46)INSTALLATION.-INSTALL LARGE OPEN END OF SPRING OVER RUBBER INLET CHECK VALVE(47).

NEEDLE & SEAT INSTALLATION (28)- REPLACEMENT NEEDLE & SEAT USES A GASKET. EXCEPT 2.8L ENG. WHICH WILL USE THE BAFFLE. (DO NOT USE A GASKET & BAFFLE (30) UNDER NEEDLE SEAT.)

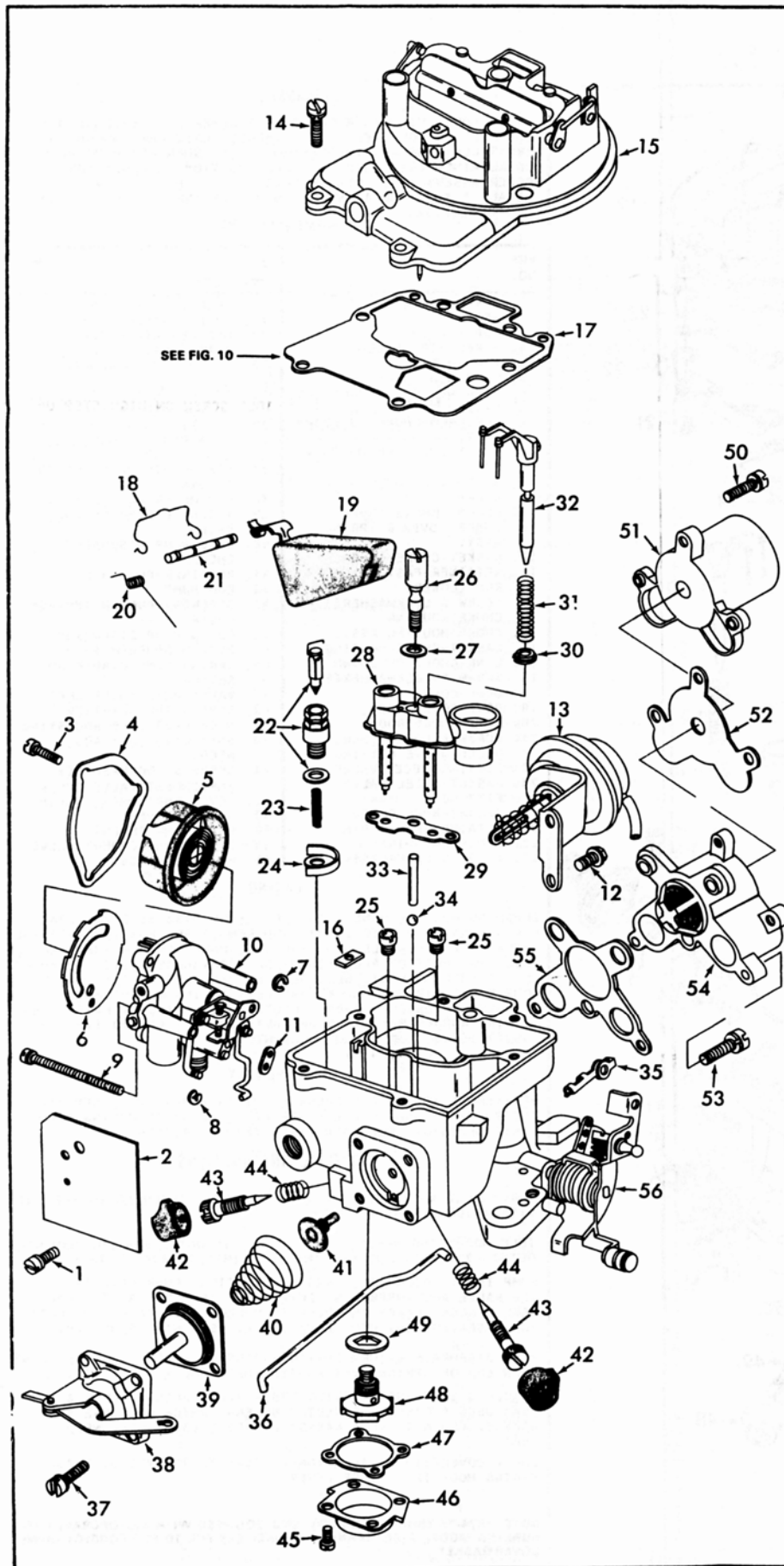
CHOKE COVER(11)INSTALLATION-BE SURE TO INSTALL BI-METAL SPRING HOOK IN SLOT OF LEVER.

NOTE: 1974-75 TRUCK USING 330" ENG. EQUIPPED WITH MOTORCRAFT CARBURETOR MODEL 2100. (MANUAL CHOKE). SEE FIG. 10 FOR CORRECT BOWL COVER GASKET.

# MOTORCRAFT CARBURETOR-MODEL 2150 WITH / ALTITUDE COMPENSATOR

## GENERAL EXPLODED VIEW

THE GENERAL DESIGN AND PARTS SHOWN WILL VARY TO  
INDIVIDUAL UNITS COVERED ON THIS INSTRUCTION SHEET



## DISASSEMBLY

USE EXPLODED VIEW AS A GUIDE. THE NUMERICAL SEQUENCE MAY GENERALLY BE FOLLOWED TO DISASSEMBLE UNIT FAR ENOUGH TO PERMIT CLEANING AND INSPECTION. NOTE: WHEN REMOVING PUMP ROD RETAINER (35) MARK ROD HOLE POSITION ON LEVER FOR PROPER ASSEMBLY. TO REMOVE PLASTIC LIMITER CAPS (42) INSTALL A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

## NOMENCLATURE

REF. NO.	REF. NO.
1. SCREW- AIR SHIELD	31. SPRING- AIR METERING ROD RETURN
2. AIR SHIELD	32. AIR METERING ROD ASSY.
3. SCREW- CHOKE COVER CLAMP	33. WEIGHT- DISCHARGE CHECK BALL
4. CLAMP- CHOKE COVER	34. BALL- PUMP DISCHARGE CHECK
5. CHOKE COVER & SPRING ASSY.	35. RETAINER- PUMP ROD
6. GASKET- CHOKE COVER	36. ROD-PUMP
7. RETAINER- CHOKE ROD	37. SCREW (4)- PUMP DIAPHRAGM COVER
8. RETAINER- FAST IDLE CAM ROD (LOWER)	38. COVER PUMP DIAPHRAGM
9. SCREW & LOCKWASHER (3)- CHOKE HOUSING	39. PUMP DIAPHRAGM ASSY.
10. CHOKE HOUSING ASSY.	40. SPRING- PUMP DIAPHRAGM RETURN
11. GASKET- CHOKE HOUSING	41. VALVE- PUMP INLET CHECK
12. SCREW (2)- CHOKE PULldOWN ASSY.	42. CAP (2)- IDLE LIMITER
13. CHOKE PULldOWN MOTOR & HOSE ASSY.	43. NEEDLE (2)- IDLE ADJUSTING
14. SCREW & LOCKWASHER (6)- BOWL COVER	44. SPRING (2)- IDLE ADJ. NEEDLE
15. BOWL COVER ASSY.	45. SCREW & LOCKWASHER (4)- ENRICHMENT VALVE COVER
16. SEAL- CHOKE ROD	46. COVER- ENRICHMENT VALVE
17. GASKET- BOWL COVER	47. GASKET- COVER
18. RETAINER- FLOAT PIN	48. VALVE- ENRICHMENT
19. FLOAT & LEVER ASSY.	49. GASKET- ENRICHMENT VALVE
20. SPRING- DAMPER (WHERE USED)	50. SCREW & LOCKWASHER (3)- ANEROID ASSY.
21. PIN- FLOAT HINGE	51. ANEROID ASSY.
22. NEEDLE & SEAT ASSY.	52. GASKET- ANEROID ASSY.
23. SCREEN- NEEDLE SEAT	53. SCREW & LOCKWASHER (4)- POPPET VALVE ASSY.
24. BAFFLE- NEEDLE SEAT	54. POPPET VALVE ASSY.- ALT
25. JET (2)- MAIN METERING NOZZLE	55. GASKET- POPPET VALVE HOUSING
26. SCREW- PUMP DISCHARGE	56. MAIN BODY ASSY.
27. GASKET- PUMP DISC. SCREW	
28. VENTURI CLUSTER ASSY.	
29. GASKET- VENTURI CLUSTER	
30. RETAINER- AIR METERING ROD SPRING	

## CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE A CARBURETOR CLEANING SOLVENT. MAKE CERTAIN THE THROTTLE BORES ARE FREE OF ALL CARBON AND VARNISH DEPOSITS. RINSE OFF IN SUITABLE SOLVENT. BLOW OUT ALL PASSAGES IN CASTINGS WITH COMPRESSED AIR AND CHECK CAREFULLY TO INSURE THOROUGH CLEANING OF OBSCURE AREAS. CAUTION: DO NOT SOAK PARTS CONTAINING RUBBER MATERIALS OR PARTS SUCH AS (5)(13)(19)(51)(54) IN CLEANING SOLVENT.

## REASSEMBLY

REASSEMBLE IN REVERSE ORDER OF DISASSEMBLY. NOTE SPECIAL INSTRUCTIONS AND FOLLOW NUMERICAL OUTLINE IN MAKING ADJUSTMENTS NECESSARY FOR CARBURETOR BEING SERVICED.

## SPECIAL INSTRUCTIONS

ENRICHMENT VALVE (48)- USE CARE WHEN TIGHTENING TO PREVENT DISTORTION OF GASKET (49).

IDLE ADJUSTING NEEDLES (43)- TURN IN UNTIL SEATED, THEN BACK OUT 1 1/2-2 TURNS. (DO NOT INSTALL LIMITER CAPS AT THIS TIME)

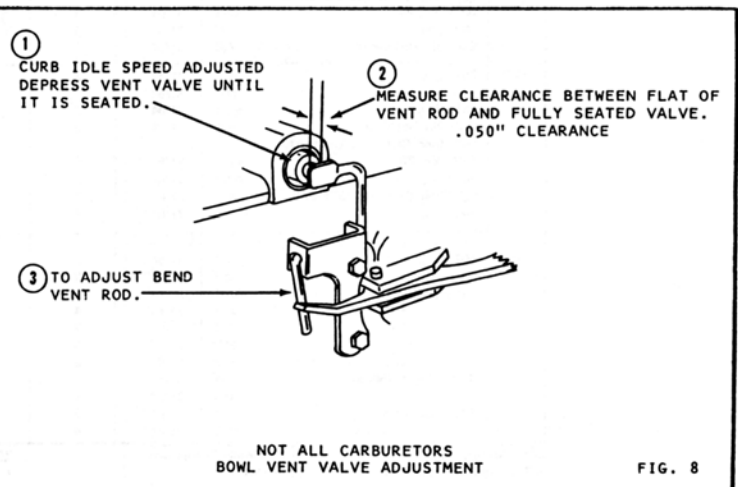
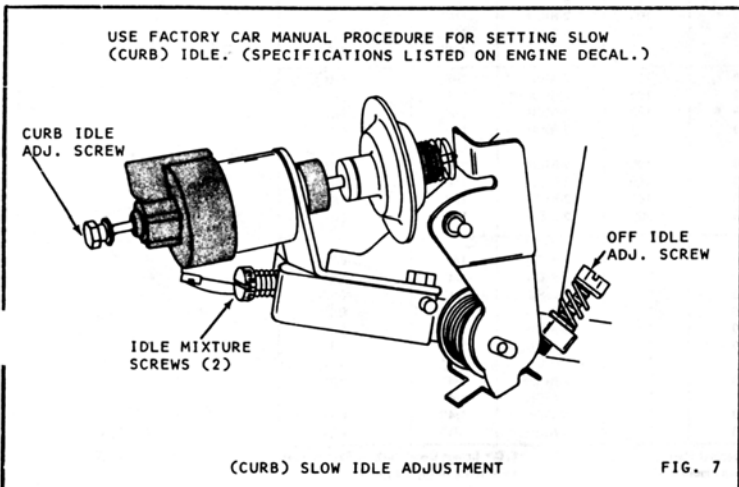
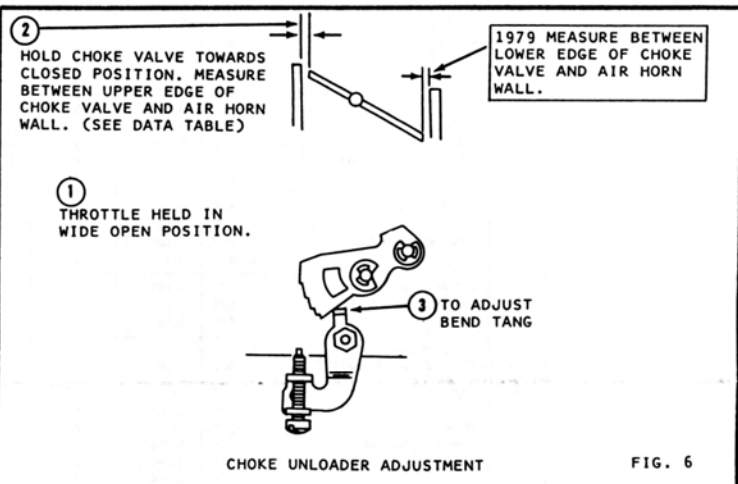
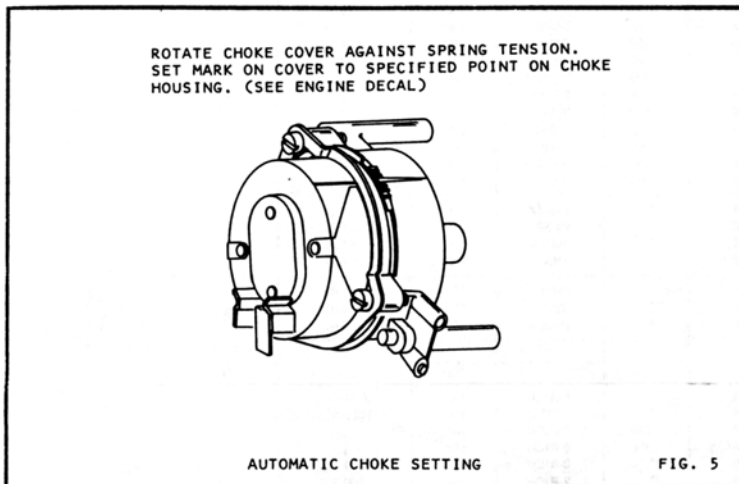
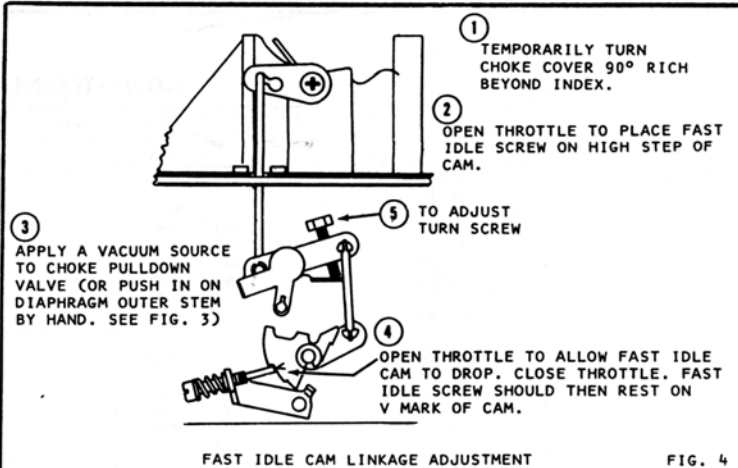
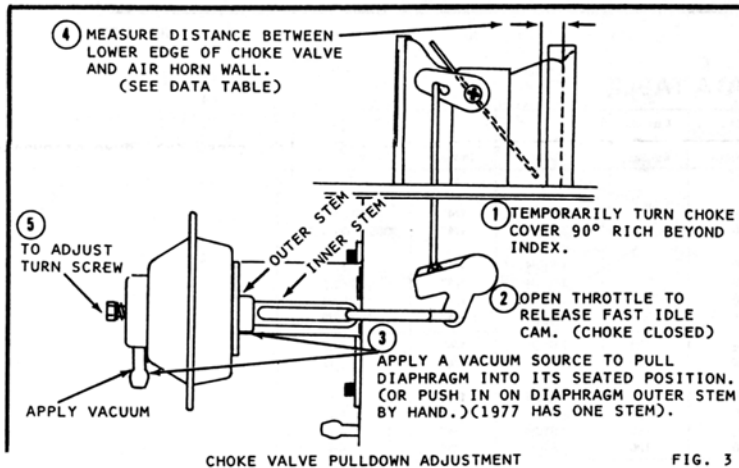
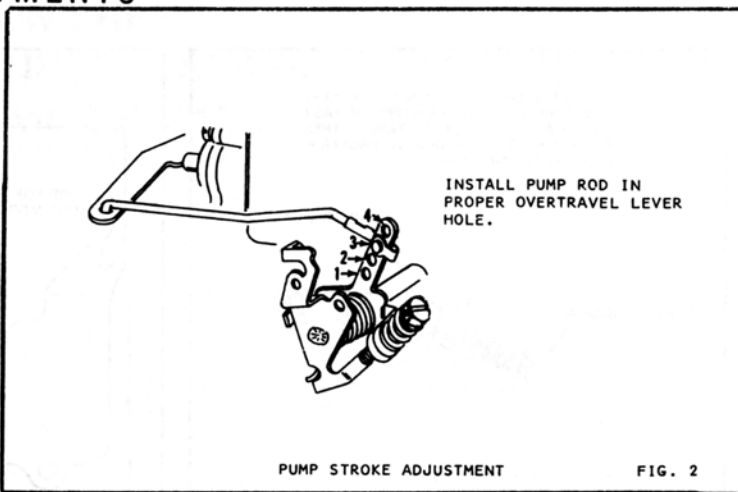
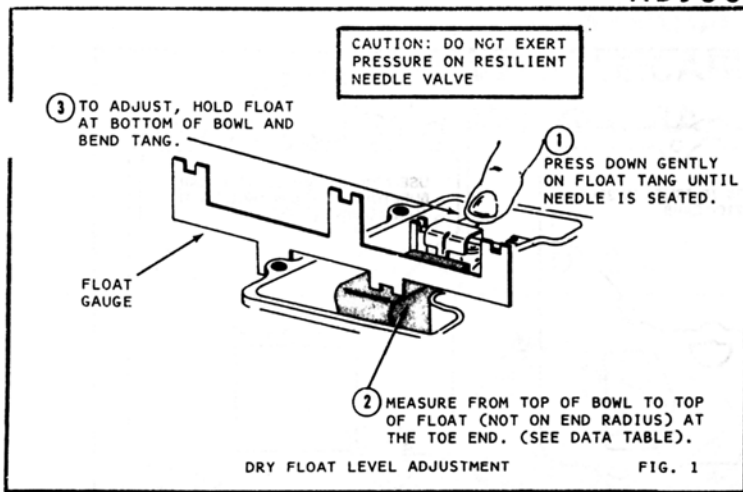
PUMP INLET CHECK VALVE (41)- INSTALLATION.- LUBRICATE TIP OF NEW VALVE AND INSERT IN CENTER HOLE OF PUMP CAVITY. USE NEEDLE NOSE PLIERS AND PULL THRU FROM FUEL BOWL SIDE UNTIL FULLY SEATED. CUT OFF VALVE TIP AT RETAINING SHOULDER.

PUMP DIAPHRAGM RETURN SPRING (40)- INSTALLATION.- INSTALL LARGE OPEN END OF SPRING OVER RUBBER INLET CHECK VALVE (41).

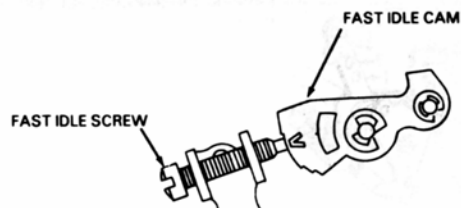
NEEDLE & SEAT (22) INSTALLATION-REPLACEMENT NEEDLE & SEAT USES A GASKET. (DO NOT USE GASKET & BAFFLE (24) UNDER NEEDLE SEAT.)

CHOKE COVER (5) INSTALLATION- BE SURE TO INSTALL BI-METAL SPRING HOOK IN SLOT OF LEVER.

# ADJUSTMENTS

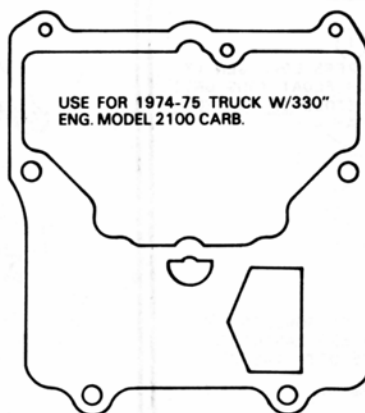


ADJUST SLOW IDLE, THEN PLACE FAST IDLE SCREW ON PROPER STEPS OF FAST IDLE CAM. (SEE DATA TABLE) THEN ADJUST FAST IDLE SCREW TO PROPER R. P. M. (SEE ENGINE DECAL).

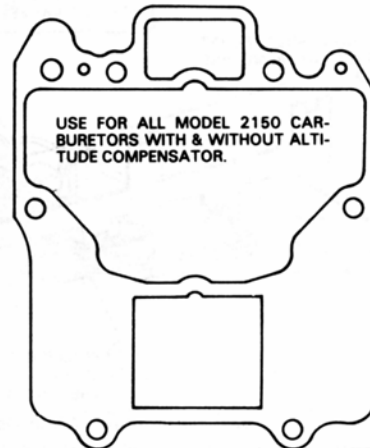


FAST IDLE ADJUSTMENT

FIG. 9



USE FOR 1974-75 TRUCK W/330" ENG. MODEL 2100 CARB.



USE FOR ALL MODEL 2150 CARBURETORS WITH & WITHOUT ALTITUDE COMPENSATOR.

FIG. 10

REV. 3-83

## ADJUSTMENT DATA TABLE

Year	Application	Float Level (Dry)	Pump Overtravel Lever	Choke Valve Pulldown	Fast Idle Cam Linkage	Auto Choke	Unloader	Fast Idle R. P. M.
1975	Ford Motor Products							
	2.8L, Eng.	3/8"	2	.145	*	2-RICH	1/4"	1600 2/S
	302" Eng.	7/16"	2	.140	*	3-RICH	1/4"	2000 2100 H/S
	302" Eng. Carb. No's. D5DE-AEA, AFA, D5WE-FA	All/T	7/16"	.135	*	3-RICH	1/4"	E/D
	351M Eng.	A/T	7/16"	.125	*	3-RICH	1/4"	1350 2/S
	351W Eng.	A/T	7/16"	.140	*	3-RICH	1/4"	1400 2/S
1976	400" Eng.	A/T	7/16"	.125	*	3-RICH	1/4"	1500 2/S
	2.8L, Eng.	All/T	3/8"	.110	.130	3-RICH	1/4"	E/D
	2.8L, Eng. Calif.	M/T	13/32"	.110	.130	3-RICH	1/4"	E/D
	302" Eng. Carb. No's. D5DE-AEA, AFA, D5WE-FA	All/T	7/16"	.135	*	3-RICH	1/4"	E/D
	312" Eng.	All/T	7/16"	.160	.160	3-RICH	1/4"	E/D
	351M, 351W Eng.	A/T	7/16"	.160	.180	3-RICH	1/4"	E/D
1977	400" Eng.	A/T	7/16"	.160	.180	3-RICH	1/4"	E/D
	2.8L, Eng.	M/T	3/8"	.114	.134	INDEX	1/4"	E/D
	302" Eng.	A/T	3/8"	.122	.142	2-RICH	1/4"	E/D
		M/T	7/16"	.157	.177	INDEX	1/4"	E/D
		A/T	7/16"	.142	.162	INDEX	1/4"	E/D
	CANADA	A/T	7/16"	.140	.160	3-RICH	1/4"	E/D
	351M, Eng.	A/T	3/8"	.167	.187	2-RICH	1/4"	E/D
		A/T	7/16"	.180	.200	2-RICH	1/4"	E/D
		Calif.	A/T	.164	.184	2-RICH	1/4"	E/D
		Canada	A/T	.150	.170	2-RICH	1/4"	E/D
		Altitude	A/T	.170	.190	1-RICH	1/4"	E/D
	351W Eng.	A/T	7/16"	.185	.205	1-RICH	1/4"	E/D
	400" Eng.	D70E-HA, HB	A/T	.185	.205	3-RICH	1/4"	E/D
		D7AE-TA	A/T	.175	.195	INDEX	1/4"	E/D
		Calif.	A/T					
1978	2.8L Eng. Federal	M/T	7/16"	.114	*	INDEX	1/4"	E/D
		A/T	7/16"	.122	*	INDEX	1/4"	E/D
	2.8L Eng. Federal Capri	M/T	7/16"	.114	*	INDEX	1/4"	E/D
		A/T	3/8"	.122	*	2NR	1/4"	E/D
1979	Bobcat/Pinto 2.8L Eng.	A/T	7/16"	.118	*	INDEX	**	E/D
	Capri/Mustang 2.8L Eng.	M/T	7/16"	.138	*	INDEX	**	E/D
		A/T	7/16"	.118	*	INDEX	**	E/D
Trucks (Bronco)								
1974-75 330" Eng. With Model 2100 Carb. M/C		M/T	7/16"	4	----	----	----	----
1975	302" Eng.	A/T	31/64"	2	.160	*	3-RICH	1/4"
		M/T	31/64"	2	.135	*	INDEX	1/4"
	351W Eng.	All/T	31/64"	2	.160	.180	3-RICH	1/4"
	Carb. No. D6UE-JA	A/T	31/64"	2	.180	.200	3-RICH	1/4"
	360" Eng.	A/T	31/64"	3	.180	*	3-RICH	1/4"
		M/T	31/64"	3	.180	*	2-RICH	1/4"
	360" Eng. Carb. No's. D5TE-AAF, BYA, YF, ZB	All/T	31/64"	3	.140	.160	2-RICH	1/4"
	390" Eng.	A/T	31/64"	3	.180	*	2-RICH	1/4"
	Carb. No. D5TE-8EB	A/T	31/64"	3	.140	.160	2-RICH	1/4"
1976	302" Eng.	A/T	31/64"	2	.140	.160	3-RICH	1/4"
		M/T	31/64"	2	.140	.160	INDEX	1/4"
	351W Eng.	All/T	31/64"	2	.160	.180	3-RICH	1/4"
	Carb. No. D6UE-JA	A/T	31/64"	2	.180	.200	3-RICH	1/4"
	360" Eng. Carb. No's. D5TE-AAF, BYA, YF, ZB	All/T	31/64"	3	.140	.160	2-RICH	1/4"
	360" Eng.	All/T	31/64"	3	.180	.200	2-RICH	1/4"
	390" Eng. Carb. No. D5TE-8EB	A/T	31/64"	3	.140	.160	2-RICH	1/4"
	390" Eng.	A/T	31/64"	3	.180	.200	2-RICH	1/4"
1977	302" Eng.	A/T	31/64"	2	.140	*	3-RICH	1/4"
		M/T	31/64"	3	.140	*	3-RICH	1/4"
	351M Eng. F100	All/T	31/64"	3	.160	*	INDEX	1/4"
	F150/350	All/T	31/64"	4	.160	*	3-RICH	1/4"
	351W Eng. E100	A/T	7/16"	2	.170	*	3-RICH	1/4"
		M/T	7/16"	3	.170	*	3-RICH	1/4"
		A/T	7/16"	3	.170	*	INDEX	1/4"
	Calif.	A/T	7/16"	3	.170	*	2-RICH	1/4"
	351W, Eng. E-150/300	A/T	31/64"	4	.170	*	1-RICH	1/4"
		M/T	31/64"	4	.170	*	INDEX	1/4"
	400" Eng. F100	A/T	31/64"	3	.160	*	INDEX	1/4"
	F150/350	All/T	31/64"	4	.160	*	3-RICH	1/4"

M/C = Manual Choke

A/T = Automatic Transmission

M/T = Manual Transmission

H/S = High Step

2/S = Second Step

\* = See Figure 4

E/D = Engine Decal Carb. & Fast Idle Info.

\*\* = Refer to Engine Decal