

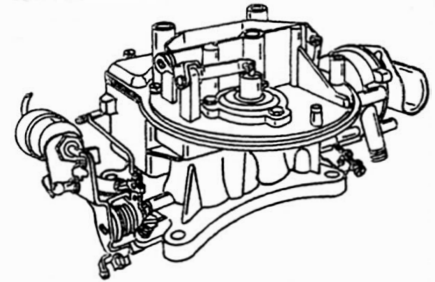
INSTRUCTION SHEET

MOTORCRAFT CARBURETOR—MODEL 2100-D

50-731

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: TO REMOVE PLASTIC LIMITER CAPS (50) INSTALL A SHEET METAL SCREW IN THE CENTER OF THE CAP AND TURN CLOCKWISE.

NOMENCLATURE

| REF. NO. | REF. NO. |
|---|---|
| 1. SCREW & LOCKWASHER - SOLENOID | 27. SCREW - PUMP DISCHARGE NOZZLE |
| 2. SOLENOID ASSEMBLY | 28. PLATE - AIR DISTRIBUTION |
| 3. PIN-VACUUM BREAK LEVER | 29. VENTURI CLUSTER ASSEMBLY |
| 4. LEVER - VACUUM BREAK | 30. GASKET - VENTURI CLUSTER ASSEMBLY |
| 5. SCREW (3) - VACUUM BREAK COVER | 31. WEIGHT - DISCHARGE CHECK BALL |
| 6. COVER - VACUUM BREAK | 32. BALL - DISCHARGE CHECK |
| 7. DIAPHRAGM ASSY.-VACUUM BREAK | 33. RETAINER - FLOAT PIN |
| 8. SPRING-DIAPHRAGM RETURN | 34. PIN - FLOAT HINGE |
| 9. SCREW & LOCKWASHER-CHOKE ROD LEVER | 35. FLOAT & LEVER ASSEMBLY |
| 10. LEVER - CHOKE ROD | 36. NEEDLE, SEAT AND GASKET ASSEMBLY |
| 11. SCREW & LOCKWASHER (4) - BOWL COVER | 37. JETS - MAIN METERING |
| 12. BOWL COVER ASSEMBLY | 38. RETAINER - PUMP ROD |
| 13. GASKET - BOWL COVER | 39. PUMP ROD |
| 14. SCREW (3) - STAT CLAMP | 40. SCREW (4) - PUMP COVER |
| 15. CLAMP - STAT | 41. PUMP COVER & LEVER ASSY. |
| 16. CHOKE COVER & SPRING ASSY. | 42. PUMP DIAPHRAGM ASSEMBLY |
| 17. GASKET - STAT COVER | 43. SPRING - PUMP DIAPHRAGM RETURN |
| 18. SCREW & LOCKWASHER - AIR SHIELD | 44. VALVE - PUMP INLET CHECK |
| 19. AIR SHIELD | 45. SCREW & LOCKWASHER (4) - ECONOMIZER VALVE COVER |
| 20. RETAINER - CHOKE ROD | 46. COVER - ECONOMIZER VALVE |
| 21. ROD - CHOKE | 47. GASKET - ECONOMIZER VALVE COVER |
| 22. SEAL - CHOKE ROD | 48. VALVE - ECONOMIZER |
| 23. RETAINER LOWER - FAST IDLE CAM ROD | 49. GASKET - ECONOMIZER VALVE |
| 24. SCREW & LOCKWASHER (3) - CHOKE HOUSING ASSEMBLY | 50. CAPS - IDLE LIMITER |
| 25. CHOKE HOUSING ASSEMBLY | 51. NEEDLE - IDLE ADJUSTING |
| 26. GASKET - CHOKE HOUSING | 52. SPRING - IDLE ADJ. |
| | 53. MAIN BODY ASSEMBLY |

CLEANING

CLEANING MUST BE DONE WITH CARBURETOR DISASSEMBLED. SOAK PARTS LONG ENOUGH TO SOFTEN AND REMOVE ALL FOREIGN MATERIAL. USE (1) A CARBURETOR CLEANING SOLVENT, (2) LACQUER THINNER OR (3) DENATURED ALCOHOL. 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 SUCH AS (2),(7),(28),(35),(42),(44),(48) 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

IDLE ADJUSTING NEEDLES (51) - TURN IN UNTIL SEATED, THEN BACK OUT 1 1/2-2 TURNS.

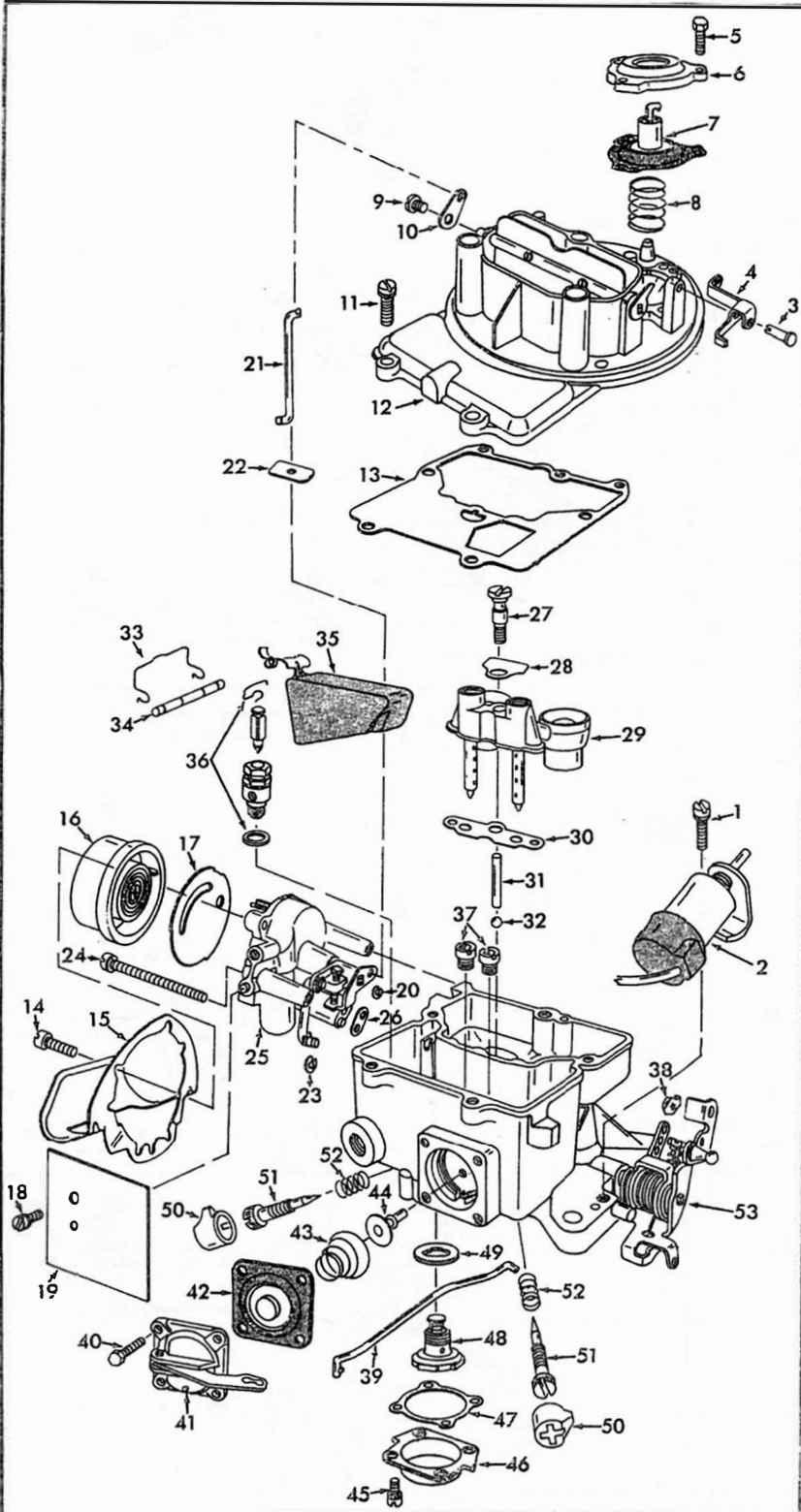
ECONOMIZER VALVE (48) - USE CARE WHEN TIGHTENING TO PREVENT DISTORTION OF GASKET (49).

PUMP INLET CHECK VALVE(44)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.

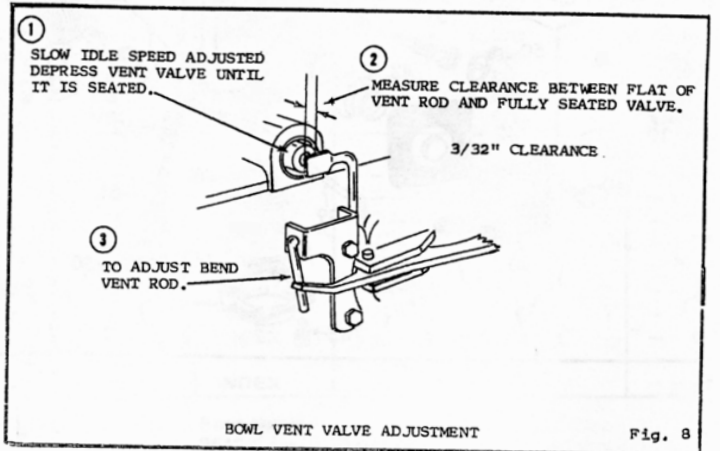
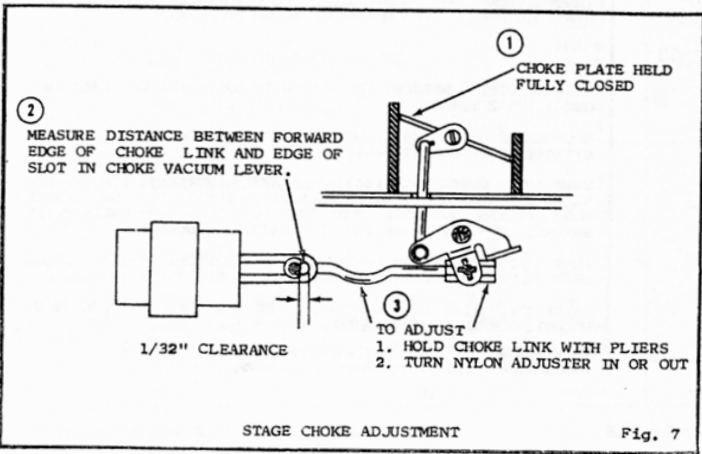
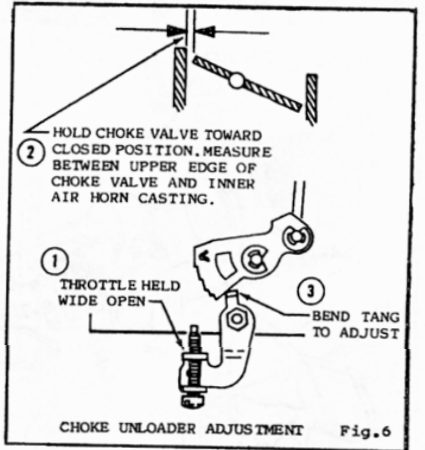
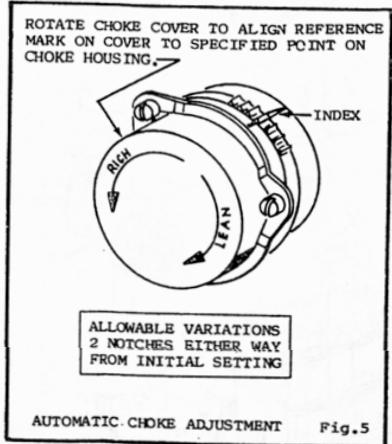
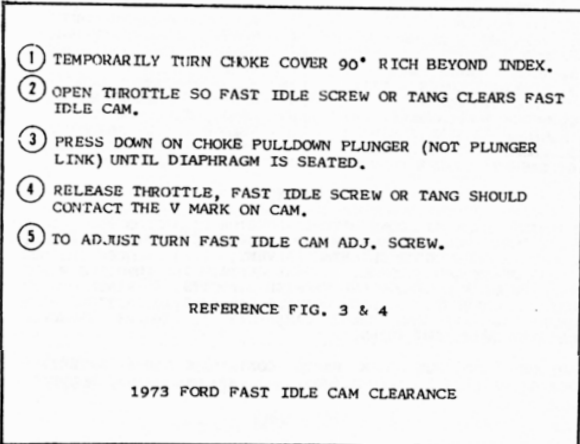
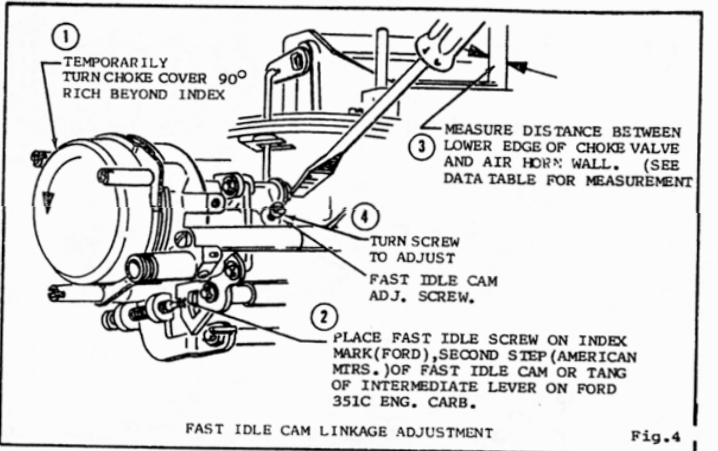
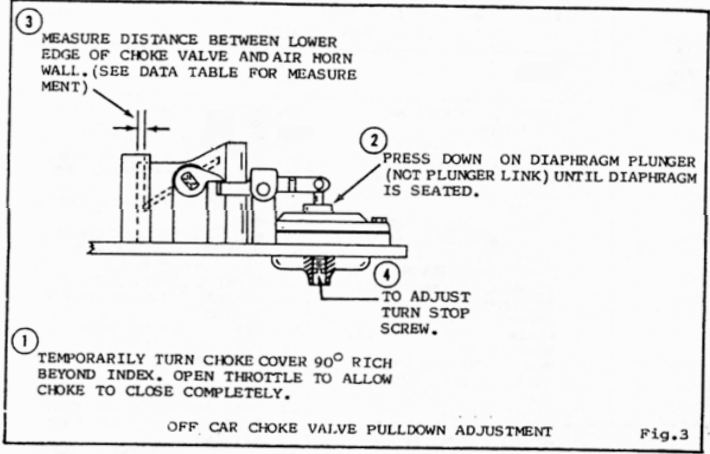
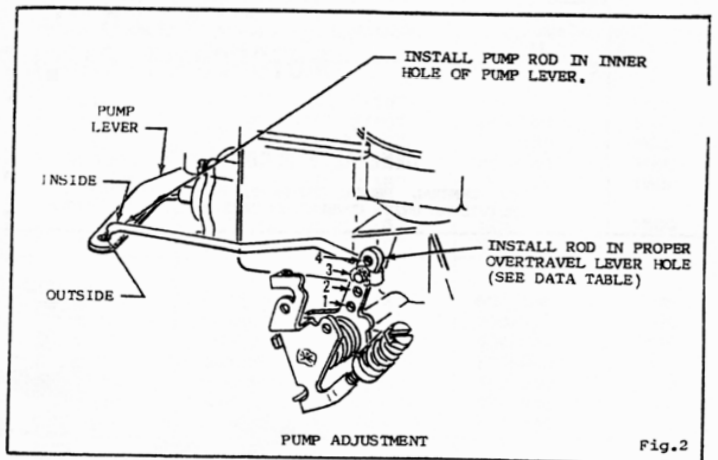
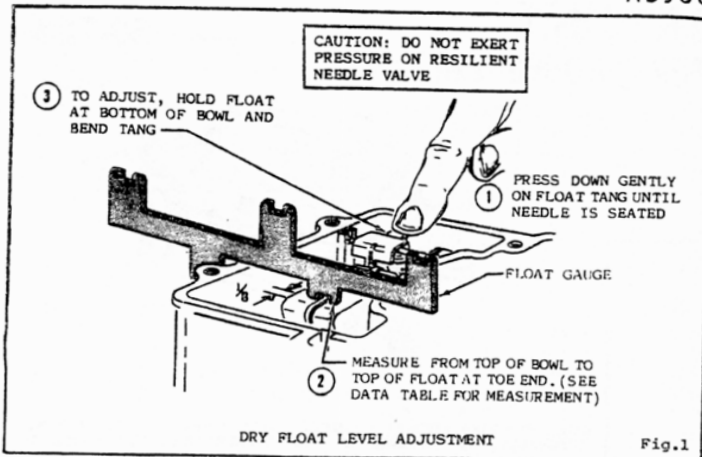
PUMP DIAPHRAGM RETURN SPRING(43)INSTALLATION. INSTALL LARGE OPEN END OF SPRING OVER RUBBER INLET CHECK VALVE (44).

CHOKE COVER (16) INSTALLATION: BE SURE TO INSTALL BI-METAL SPRING HOOK IN SLOT OF LEVER.

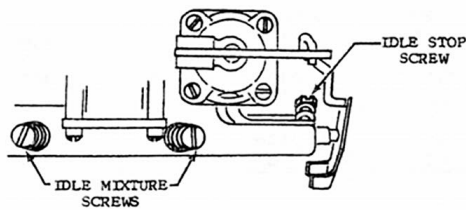
CARBURETOR HOLD DOWN NUTS-TORQUE TO 14 FT. LBS. AIR CLEANER STUD-TORQUE TO 10 FT. LBS.



ADJUSTMENTS



USE FACTORY CAR MANUAL PROCEDURE FOR SETTING SLOW IDLE IF IF AVAILABLE, AND SPECIFICATIONS LISTED ON ENGINE DECAL.



SUPPLEMENT

SLOW IDLE ADJUSTMENT PROCEDURE WITH AND WITHOUT THROTTLE SOLENOID POSITIONER.

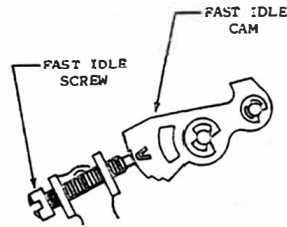
1. SET IGNITION TIMING PER CAR FACTORY SPECIFICATIONS AND PROCEDURE.
2. ENGINE AT OPERATING TEMPERATURE, CHOKE FULLY OPEN.
 - A. AIR CLEANER INSTALLED
 - B. HEADLIGHTS ON HIGH BEAM.
 - C. AUTOMATIC TRANSMISSION IN DRIVE.
 - D. HOT IDLE COMPENSATOR VALVE CLOSED.
3. ADJUST THROTTLE STOP SCREW TO SPECIFIED IDLE SPEED R.P.M. USING A TACHOMETER.

NOTE: WHEN USED, ADJUST SOLENOID THROTTLE POSITIONER TO SPECIFIED IDLE SPEED (SOLENOID LEAD MUST BE CONNECTED SO SOLENOID WILL BE ENERGIZED.)
4. ADJUST IDLE MIXTURE NEEDLES TO OBTAIN THE HIGHEST R.P.M. AT THE LEANEST BEST IDLE SETTING.
5. READJUST IDLE SPEED IF NECESSARY.

NOTE: DISCONNECT SOLENOID THROTTLE POSITIONER AT BULLET CONNECTION THEN ADJUST THROTTLE STOP SCREW FOR LOWER R.P.M. WITH AUTOMATIC OR MANUAL TRANSMISSIONS IN NEUTRAL. CONNECT SOLENOID, OPEN THROTTLES AND RELEASE, RECHECK HIGHER IDLE SPEED.

SLOW IDLE ADJUSTMENT

Fig. 9

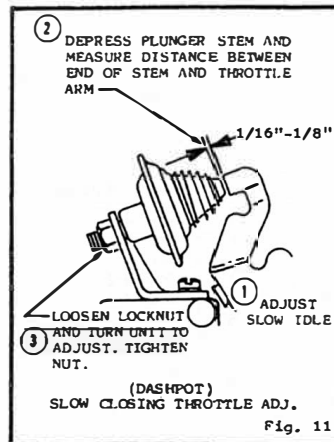


ADJUST SLOW IDLE, THEN PLACE FAST IDLE SCREW OR LEVER TANG ON SECOND STEP OF FAST IDLE CAM AND ADJUST FAST IDLE SCREW TO PROPER R.P.M.

NOTE: ELECTRONIC SPARK CONTROL OR TRANSMISSION REGULATED SPARK SYSTEM WITH AMBIENT TEMPERATURE ABOVE 55° F, CONNECT A VACUUM LINE DIRECTLY FROM CARBURETOR SPARK PORT TO ADVANCE SIDE OF DISTRIBUTOR (i.e. BY PASSING THE SPARK CONTROL SYSTEM.) DISCONNECT THE VACUUM SUPPLY LINE TO THE EGR VALVE AND PLUG THE LINE.

FAST IDLE ADJUSTMENT

Fig. 10



2. DEPRESS PLUNGER STEM AND MEASURE DISTANCE BETWEEN END OF STEM AND THROTTLE ARM

1/16"-1/8"

1. ADJUST SLOW IDLE
3. LOOSEN LOCKNUT AND TURN UNIT TO ADJUST. TIGHTEN NUT.

(DASHPOT)
SLOW CLOSING THROTTLE ADJ.

Fig. 11

ADJUSTMENT DATA TABLE

| Year | Make | Dry Float Level | Pump Overtravel Lever Hole | Choke Valve Pulldown | Fast Idle Cam Linkage Adj. | Automatic Choke Setting | Unloader | Slow Idle R. P. M. * | Fast Idle R. P. M. | |
|--|-------------|-----------------|----------------------------|----------------------|----------------------------|-------------------------|----------|----------------------|----------------------------|--------------|
| Bronco, Comet, Cougar, Falcon, Fairlane, Ford Mercury, Montego, Mustang, Tori no | | | | | | | | | | |
| 1970 | 302" Eng. | All/T | 7/16" | No. 3 | 5/32" | 1/8" | 1 - RICH | 1/16" | 800/500 S/T 600/500 A/T | 1500 1500 |
| | 351" W Eng. | A/T | 7/16" | No. 4 | 13/64" | 11/64" | 2 - LEAN | --- | 600/500 | 1600 |
| | | S/T | 7/16" | No. 3 | 15/64" | 3/16" | 2 - LEAN | --- | 800/500 | 1300 |
| | 351" C Eng. | A/T | 7/16" | No. 3 | 3/16" | 1/8" | 1 - RICH | 1/16" | 600/500 | 1500 |
| | | S/T | 7/16" | No. 4 | 7/32" | 3/16" | INDEX | 1/16" | 700/500 | 1500 |
| 390" Eng. | A/T | 7/16" | No. 3 | 13/64" | 5/32" | 2 - RICH | 1/16" | 600/500 | 1500 | |
| | S/T | 7/16" | No. 3 | 7/32" | 11/64" | 1 - RICH | 1/16" | 750/500 | 1400 | |
| 429" Eng. | A/T | 7/16" | No. 3 | 13/64" | 5/32" | 2 - RICH | 1/16" | 600/500 | 1400 | |
| Comet | | | | | | | | | | |
| 1971 | 302" Eng. | All/T | 7/16" | No. 3 | 11/64" | 5/32" | 1 - RICH | 1/16" | 600/500 A/T 800/500 S/T | 1400 1400 |
| | 351" C Eng. | All/T | 7/16" | No. 3 | 13/64" | 11/64" | 1 - RICH | 1/16" | 600/500 A/T 800/500 S/T | 1500 1500 |
| Cougar | | | | | | | | | | |
| 1971 | 302" Eng. | All/T | 7/16" | No. 3 | 11/64" | 5/32" | 1 - RICH | 1/16" | 600/500 A/T 800/500 S/T | 1400 1400 |
| | 351" C Eng. | A/T | 7/16" | No. 3 | 3/16" | 11/64" | 1 - RICH | 1/16" | 600/500 | 1500 |
| | | S/T | 7/16" | No. 3 | 15/64" | 3/16" | INDEX | 1/16" | 750/500 | 1500 |
| Carb. No. D1ZF-UA | A/T | 7/16" | No. 3 | 11/64" | 1/8" | 1 - RICH | 1/16" | 625/500 | 1500 | |
| Ford | | | | | | | | | | |
| 1971 | 302" Eng. | A/T | 7/16" | No. 3 | 11/64" | 5/32" | 1 - RICH | 1/16" | 600/500 | 1400 |
| | | S/T | 7/16" | No. 2 | 5/32" | 1/8" | INDEX | 1/16" | 800/500 | 1500 |
| | 351" W Eng. | A/T | 7/16" | No. 3 | 13/64" | 5/32" | 1 - RICH | 1/16" | 580 | 1500 |
| | | S/T | 7/16" | No. 3 | 7/32" | 3/16" | 1 - RICH | 1/16" | 500/500 | 1300 |
| | W/ AC | A/T | 7/16" | No. 3 | 3/16" | 1/8" | INDEX | 1/16" | 600/500 | 1600 |
| | 390" Eng. | A/T | 7/16" | No. 3 | 13/64" | 5/32" | INDEX | 1/16" | 900/500 | 1500 |
| | 400" Eng. | A/T | 7/16" | No. 3 | 3/16" | 5/32" | 1 - RICH | 1/16" | 600/500 | 1500 |
| | 429" Eng. | A/T | 7/16" | No. 3 | 13/64" | 5/32" | 1 - RICH | 1/16" | 590 | 1400 |

| Year | Make | | Dry Float Level | Pump Overtravel Lever Hole | Choke Valve Pulldown | Fast Idle Cam Linkage Adj. | Automatic Choke Setting | Unloader | Slow Idle R. P. M. ° | Fast Idle R. P. M. |
|--|----------------------------|-------|-----------------|----------------------------|----------------------|----------------------------|-------------------------|----------|----------------------|--------------------|
| Mercury | | | | | | | | | | |
| 1971 | 351" W Eng. | A/T | 7/16" | No. 3 | 3/16" | 1/8" | INDEX | 1/16" | 575 | 1600 |
| | | S/T | 7/16" | No. 3 | 7/32" | 3/16" | 1 - RICH | 1/16" | 800/500 | 1300 |
| | W/AC | A/T | 7/16" | No. 3 | 3/16" | 1/8" | INDEX | 1/16" | 600/500 | 1600 |
| | 400" Eng. | A/T | 7/16" | No. 3 | 3/16" | 5/32" | 1 - RICH | 1/16" | 600/500 | 1500 |
| | | S/T | 7/16" | No. 3 | 15/64" | 13/64" | INDEX | 1/16" | 750/500 | 1500 |
| | Carb. No. D1ZF-UA | | | | | | | | | |
| | D1OF-YA | A/T | 7/16" | No. 3 | 11/64" | 1/8" | 1 - RICH | 1/16" | 625/500 | 1500 |
| | 429" Eng. | A/T | 7/16" | No. 3 | 13/64" | 5/32" | 1 - RICH | 1/16" | 590 | 1400 |
| Montego | | | | | | | | | | |
| 1971 | 302" Eng. | A/T | 7/16" | No. 3 | 11/64" | 5/32" | 1 - RICH | 1/16" | 600/500 | 1400 |
| | | S/T | 7/16" | No. 3 | 11/64" | 5/32" | 1 - RICH | 1/16" | 800/500 | 1400 |
| | W/AC | A/T | 7/16" | No. 2 | 5/32" | 1/8" | INDEX | 1/16" | 600/500 | 1500 |
| | Carb. No. D1AF-BA | S/T | 7/16" | No. 2 | 5/32" | 1/8" | INDEX | 1/16" | 800/500 | 1500 |
| | 351" C Eng. | A/T | 7/16" | No. 3 | 3/16" | 11/64" | 1 - RICH | 1/16" | 600/500 | 1500 |
| | | S/T | 7/16" | No. 3 | 15/64" | 3/16" | INDEX | 1/16" | 750/500 | 1500 |
| | Carb. No. D1ZF-UA | A/T | 7/16" | No. 3 | 11/64" | 1/8" | 1 - RICH | 1/16" | 625/500 | 1500 |
| Mustang - Torino | | | | | | | | | | |
| 1971 | 302" Eng. | A/T | 7/16" | No. 3 | 11/64" | 5/32" | 1 - RICH | 1/16" | 600/500 | 1400 |
| | | S/T | 7/16" | No. 2 | 5/32" | 1/8" | INDEX | 1/16" | 800/500 | 1500 |
| | W/AC | A/T | 7/16" | No. 2 | 5/32" | 1/8" | INDEX | 1/16" | 600/500 | 1500 |
| | 351" C Eng. | A/T | 7/16" | No. 3 | 3/16" | 11/64" | 1 - RICH | 1/16" | 600/500 | 1500 |
| | | S/T | 7/16" | No. 3 | 15/64" | 3/16" | INDEX | 1/16" | 750/500 | 1500 |
| | Carb. No. D1ZF-UA | | | | | | | | | |
| | D1OF-YA | A/T | 7/16" | No. 3 | 11/64" | 1/8" | 1 - RICH | 1/16" | 625/500 | 1500 |
| Comet, Cougar, Ford, Maverick, Mercury, Meteor, Montego, Mustang, Thunderbird, Torino | | | | | | | | | | |
| 1972 | 302" Eng. | A/T | 7/16" | No. 2 | 5/32" | 1/8" | 1 - RICH | 1/16" | 600/500 | 1400 |
| | | S/T | 7/16" | No. 2 | 9/64" | 1/8" | 1 - RICH | 1/16" | 800/500 | 1400 |
| | 351" W Eng. | A/T | 7/16" | No. 3 | 9/64" | 1/8" | INDEX | 1/32" | 600/500 | 1500 |
| | 351" C Eng. | A/T | 7/16" | No. 3 | 3/16" | 5/32" | 1 - RICH | 1/32" | 800/500 | 1500 |
| | | S/T | 7/16" | No. 3 | 15/64" | 13/64" | 1 - RICH | 1/32" | 750/500 | 1400 |
| | 400" Eng. | A/T | 7/16" | No. 4 | 3/16" | 5/32" | 1 - RICH | 1/16" | 625/500 | 1500 |
| Ford Truck | | | | | | | | | | |
| 1972 | 302" Eng. | A/T | 7/16" | No. 2 | 9/64" | 7/64" | 1 - RICH | 1/16" | 600/500 | 1450 |
| | Calif. | A/T | 7/16" | No. 2 | 9/64" | 1/8" | 2 - RICH | 1/8" | 600 | 1500 |
| | Bronco | S/T | 7/16" | No. 2 | 9/64" | 7/64" | 1 - RICH | 1/16" | 800/500 | 1100 |
| | 330" Eng. | S/T | 7/16" | No. 4 | 11/64" | --- | --- | --- | --- | 1200 |
| | 360" - 390" Eng. | A/T | 7/16" | No. 4 | 5/32" | 9/64" | 1 - RICH | 9/64" | 550 | 1500 |
| | | S/T | 1/2" | No. 4 | 5/32" | 9/64" | 2 - RICH | 9/64" | 650 | 1250 |
| | Carb. No. D2TF-FC | S/T | 1/2" | No. 2 | 5/32" | 5/32" | 1 - LEAN | --- | 750/500 | 1200 |
| Comet, Cougar, Ford, Maverick, Mercury, Meteor, Montego, Mustang, Rancho, Torino | | | | | | | | | | |
| 1973 | 302" Eng. | S/T | 7/16" | No. 2 | None | --- | 1 - RICH | --- | E/D | 1250 |
| | Carb. No. D3GF-AF | A/T | 7/16" | No. 2 | None | --- | 3 - RICH | --- | E/D | 1400 |
| | Carb. No. D3OF-EA | A/T | 7/16" | No. 2 | None | --- | 1 - RICH | --- | E/D | 1400 |
| | 351" C Eng. | A/T | 7/16" | No. 3 | None | --- | 3 - RICH | --- | E/D | 1500 |
| | 351" W Eng. | A/T | 7/16" | No. 2 | 5/32" | --- | 2 - RICH | --- | E/D | 1500 |
| | 400" Eng. | A/T | 7/16" | No. 3 | None | --- | 3 - RICH | --- | E/D | 1500 |
| Comet, Cougar, Ford, Maverick, Mercury, Meteor, Montego, Mustang, Rancho, Torino | | | | | | | | | | |
| 1974 | 302" Eng. | S/T | 7/16" | No. 2 | --- | --- | 3 - RICH | --- | E/D | --- |
| | | A/T | 7/16" | No. 2 | --- | --- | 3 - RICH | --- | E/D | --- |
| | 351" Eng. | A/T | 7/16" | No. 2 | --- | --- | 3 - RICH | --- | E/D | --- |
| | Carb. No. D4AE-DA | A/T | 7/16" | No. 2 | --- | --- | 1 - RICH | --- | E/D | --- |
| | 400" Eng. | A/T | 7/16" | No. 3 | --- | --- | 3 - RICH | --- | E/D | --- |
| Ford Truck | | | | | | | | | | |
| 1973 | 302" Eng. Bronco | S/T | 1/2" | No. 3 | None | --- | 2 - RICH | --- | E/D | 1100 |
| | | A/T | 1/2" | No. 2 | None | --- | 2 - RICH | --- | E/D | 1500 |
| | E - 300 Van & F100 | S/T | 7/16" | No. 3 | None | 7/64" | 2 - RICH | --- | E/D | 1100 |
| | | A/T | 7/16" | No. 2 | None | 7/64" | 2 - RICH | --- | E/D | 1400 |
| | Except E-300 Van | S/T | 7/16" | No. 3 | None | --- | 2 - RICH | --- | E/D | 1100 |
| | | A/T | 7/16" | No. 2 | None | --- | 2 - RICH | --- | E/D | 1500 |
| | 330" Eng. | S/T | 7/16" | No. 4 | 11/64" | --- | MANUAL | --- | E/D | 1200 |
| | 360" - 390" Eng. F100 | S/T | 1/2" | No. 2 | None | 5/32" | INDEX | --- | E/D | 1200 |
| | | A/T | 7/16" | No. 4 | None | 1/8" | INDEX | --- | E/D | 1500 |
| | 360" Eng. F-250-350 | S/T | 1/2" | No. 4 | None | 1/8" | INDEX | --- | E/D | 1250 |
| | | A/T | 7/16" | No. 4 | None | 1/8" | INDEX | --- | E/D | 1500 |
| Ford Truck | | | | | | | | | | |
| 1974 | 302" Eng. Bronco | All/T | 1/2" | No. 3 | --- | --- | 3 - RICH | --- | E/D | --- |
| | F-100 | S/T | 7/16" | No. 3 | --- | --- | 2 - RICH | --- | E/D | --- |
| | | A/T | 7/16" | No. 3 | --- | --- | 2 - RICH | --- | E/D | --- |
| | Econoline | S/T | 7/16" | No. 3 | --- | --- | 2 - RICH | --- | E/D | --- |
| | | A/T | 7/16" | No. 2 | --- | --- | 2 - RICH | --- | E/D | --- |
| | 330" Eng. M/D | S/T | 7/16" | No. 4 | 11/64" | --- | MANUAL | --- | E/D | --- |
| | 360" Eng. F-100 | S/T | 1/2" | No. 3 | --- | --- | INDEX | --- | E/D | --- |
| | | A/T | 7/16" | No. 4 | --- | --- | INDEX | --- | E/D | --- |
| | 360", 390" Eng. F-250, 350 | All/T | 1/2" | No. 4 | --- | --- | INDEX | --- | E/D | --- |

° Note: Higher R. P. M. (Solenoid Energized)
Lower R. P. M. (Solenoid De-energized)

E/D = Engine Decal

Ford Motors
351" C Eng. - 12 Stud Manifold
351" W Eng. - 16 Stud Manifold