

# INSTRUCTION SHEET

## OFF VEHICLE CARBURETOR SERVICE

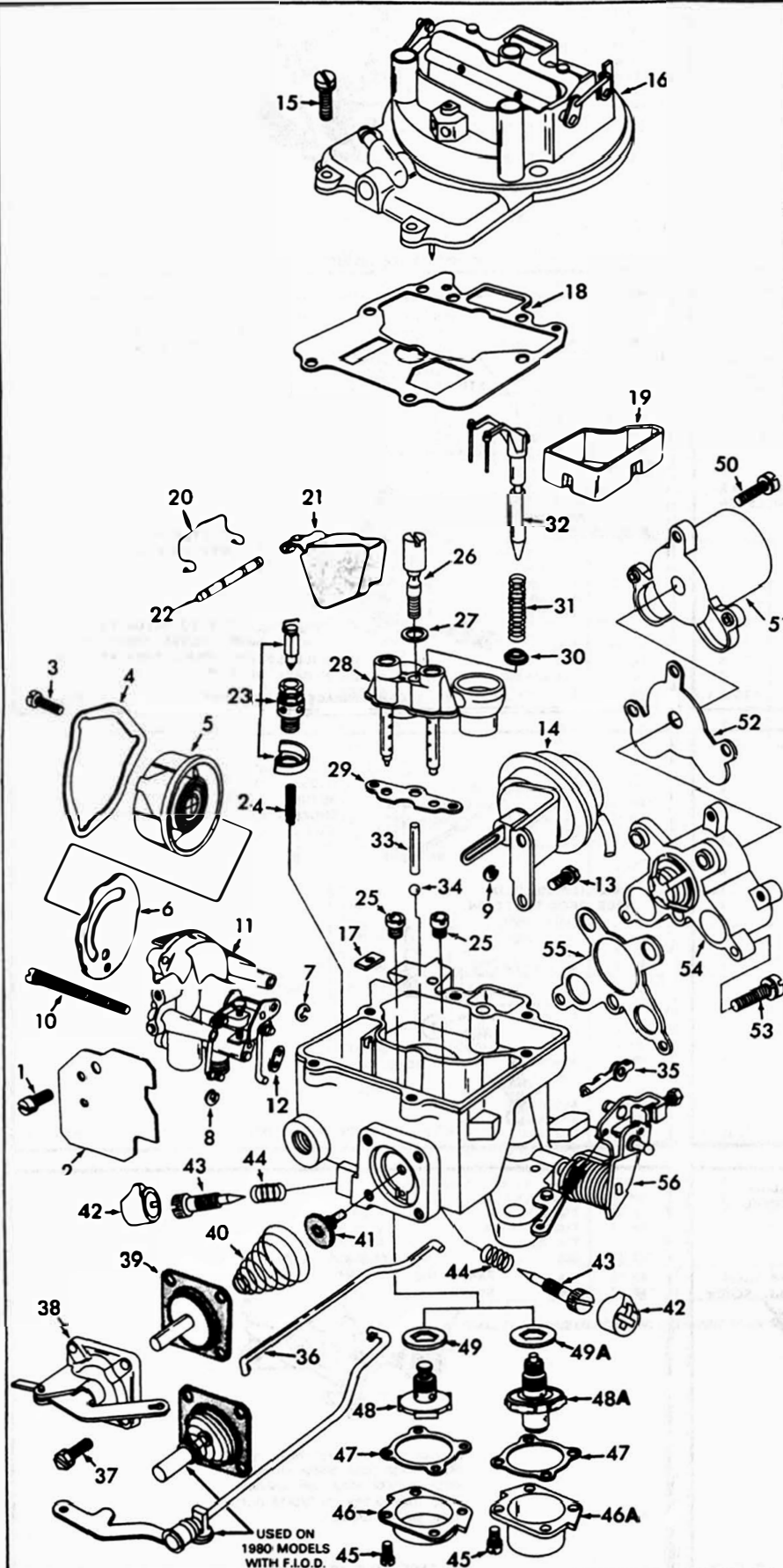
### MOTORCRAFT MODEL 2150

50-547-2

(ANEROID ASSY. USED ON SOME MODELS)

#### 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: NOT ALL MODELS WILL BE EQUIPPED WITH A FUEL BOWL SPACER OR WITH THE ALTITUDE SYSTEM. MODELS WILL ALSO DIFFER FROM A SINGLE STAGE TO A 2 STAGE ENRICHMENT VALVE. 1980 PUMP DIAPHRAGM LEVER AND ROD ASSY. (USED ON F.I.O.D. MODELS) SHOULD NOT BE TAKEN APART. (FACTORY ADJUSTED AND SEALED.)

#### NOMENCLATURE

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

#### 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), (14), (21), (51), AND (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 (48) - USE CARE WHEN TIGHTENING TO PREVENT DISTORTION OF GASKET - (49).

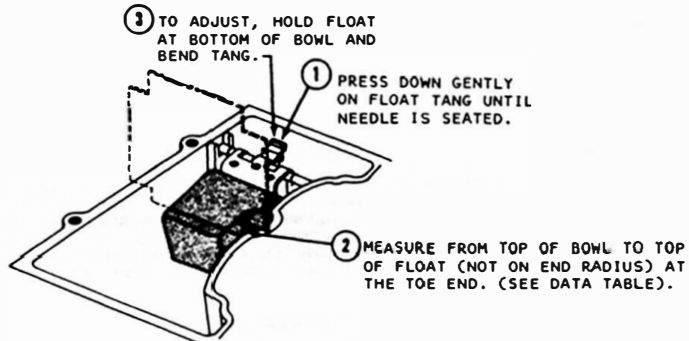
IDLE ADJUSTING NEEDLES (43) - TURN IN UNTIL LIGHTLY SEATED, THEN BACK OUT 1 1/2 - 2 TURNS. (DO NOT INSTALL LIMITER CAPS AT THIS TIME).

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

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

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

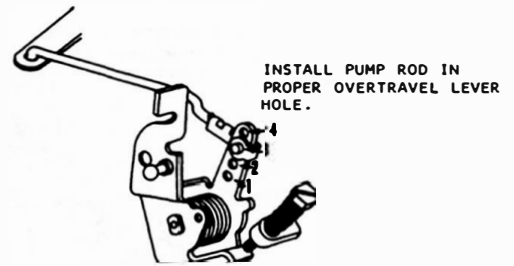
# ADJUSTMENTS



CAUTION: DO NOT EXERT PRESSURE ON RESILIENT NEEDLE VALVE.

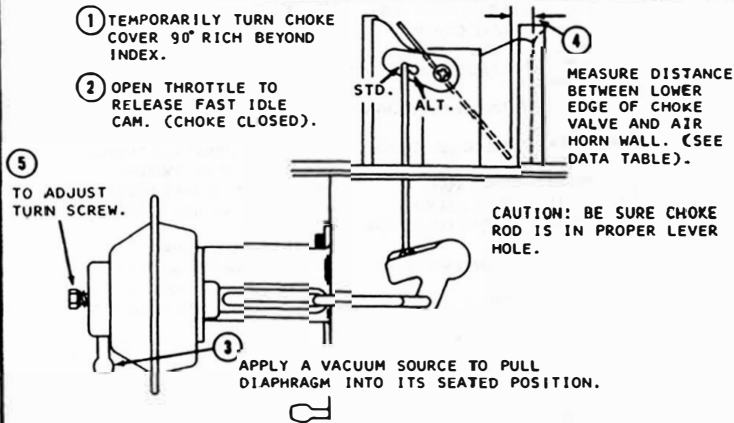
DRY FLOAT LEVEL ADJUSTMENT

FIG. 1



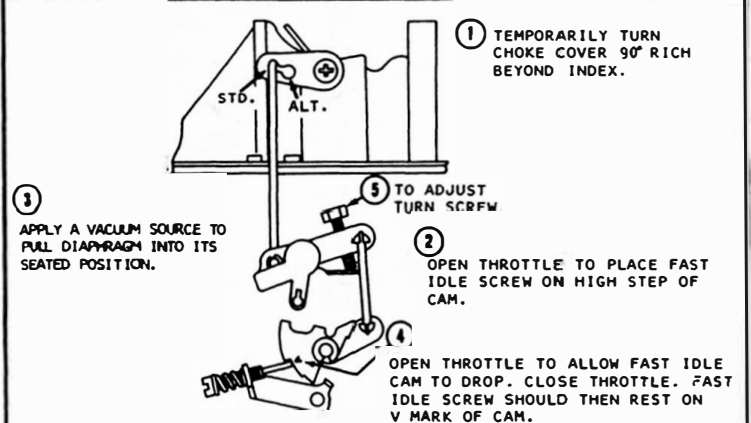
PUMP STROKE ADJUSTMENT

FIG. 2



CHOKE VALVE PULLDOWN ADJUSTMENT

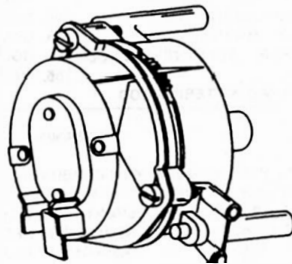
FIG. 3



FAST IDLE CAM LINKAGE ADJUSTMENT

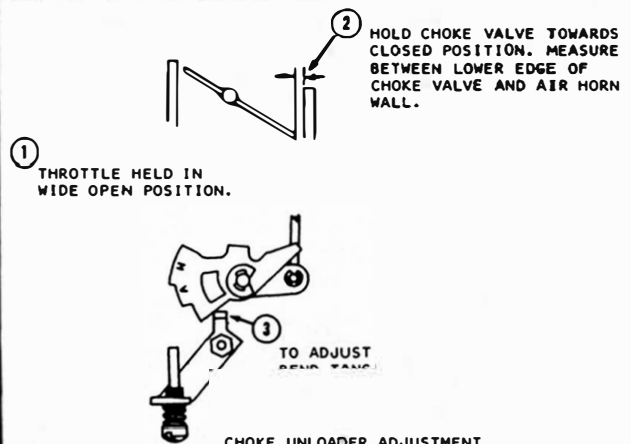
FIG. 4

ROTATE CHOKE COVER AGAINST SPRING TENSION. SET MARK ON COVER TO SPECIFIED POINT ON CHOKE HOUSING. (SEE ENGINE DECAL).



AUTOMATIC CHOKE SETTING

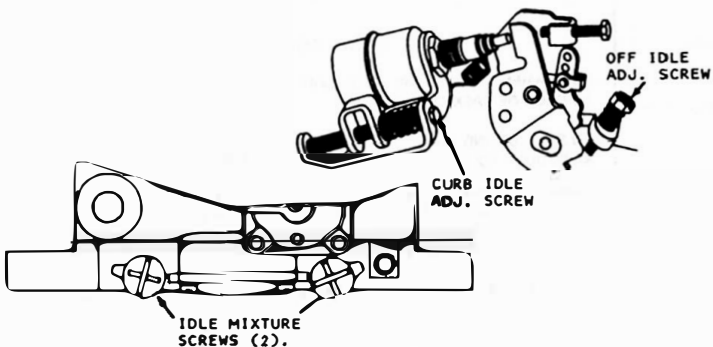
FIG. 5



CHOKE UNLOADER ADJUSTMENT

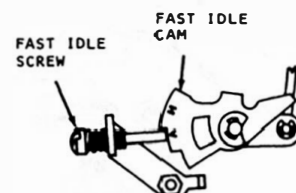
FIG. 6

USE FACTORY CAR MANUAL PROCEDURE FOR SETTING SLOW (CURB IDLE.) (SPECIFICATIONS LISTED ON ENGINE DECAL.)



(CURB) SLOW IDLE ADJUSTMENT

FIG. 7



ADJUST CURB AND OFF IDLE. THEN PLACE FAST IDLE SCREW ON PROPER STEP OF FAST IDLE CAM. ADJUST FAST IDLE SCREW TO PROPER R.P.M. (SEE ENGINE DECAL).

FAST IDLE ADJUSTMENT

FIG. 8

# ADJUSTMENT DATA TABLE

| YEAR | APPLICATION                       | FLOAT<br>LEVEL<br>(DRY) | PUMP<br>OVERTRAVEL<br>LEVER | CHOKE<br>VALVE<br>PULLDOWN | AUTO<br>CHOKE<br>SETTING | UNLOADER |
|------|-----------------------------------|-------------------------|-----------------------------|----------------------------|--------------------------|----------|
| 1978 | 302" GRANADA/MONARCH M/T          | 7/16"                   | 3                           | .157                       | INDEX                    | .250     |
|      | 302" MUSTANG M/T                  | 7/16"                   | 4                           | .155                       | 2-RICH                   | .250     |
|      | 302" GRANADA/MONARCH 49S A/T      | 7/16"                   | 2                           | .110                       | 3-RICH                   | .250     |
|      | 302" FAIRMONT/ZEPHYR 49S A/T      | 7/16"                   | 2                           | .135                       | 3-RICH                   | .250     |
|      | 302" FORD 49S A/T                 | 7/16"                   | 2                           | .136                       | INDEX                    | .250     |
|      | 302" MONARCH/ZEPHYR HI/ALT. A/T   | 7/16"                   | 2                           | .136                       | INDEX                    | .250     |
|      | 351" M 49S A/T                    | 3/8"                    | 3                           | .187                       | 3-RICH                   | .250     |
|      | 351" M HI/ALT. A/T                | 7/16"                   | 3                           | .150                       | 2-RICH                   | .250     |
|      | 351" M CALIF. A/T                 | 3/8"                    | 3                           | .147                       | 3-RICH                   | .250     |
|      | 351" W A/T                        | 7/16"                   | 4                           | .140                       | 1-RICH                   | .250     |
|      | 400" 49S A/T                      | 7/16"                   | 3                           | .180                       | 2-RICH                   | .250     |
|      | 400" HI/ALT. A/T                  | 7/16"                   | 3                           | .150                       | 2-RICH                   | .250     |
|      | 400" CALIF. A/T                   | 7/16"                   | 3                           | .147                       | 3-RICH                   | .250     |
| 1978 | TRUCK                             |                         |                             |                            |                          |          |
|      | 302" 49S & CAN. M/T               | 31/64"                  | 3                           | .130                       | 3-RICH                   | .250     |
|      | A/T                               | 31/64"                  | 2                           | .130                       | 3-RICH                   | .250     |
|      | 302" HI/ALT. M/T                  | 31/64"                  | 2                           | .130                       | 1-RICH                   | .250     |
|      | A/T                               | 31/64"                  | 2                           | .130                       | 3-RICH                   | .250     |
|      | 302" CALIF. M/T                   | 31/64"                  | 3                           | .120                       | 3-RICH                   | .250     |
|      | A/T                               | 31/64"                  | 2                           | .130                       | 3-RICH                   | .250     |
|      | 330" CALIF. M/D M/T               | 31/64"                  | 4                           | .180                       | MAN.                     | ....     |
|      | 351" M F-100 49S M/T              | 31/64"                  | 3                           | .145                       | INDEX                    | .250     |
|      | 351" M F-100 HI/ALT. A/T          | 31/64"                  | 3                           | .145                       | 1-RICH                   | .250     |
|      | 351" M F-150/250 CALIF. M/T       | 31/64"                  | 4                           | .130                       | INDEX                    | .250     |
|      | 351" M F-150/250 CALIF. A/T       | 31/64"                  | 3                           | .130                       | INDEX                    | .250     |
|      | 351" M F-350 CALIF. M/T           | 31/64"                  | 4                           | .180                       | 2-RICH                   | .250     |
|      | 351" M F-350 0-8500# A/T          | 31/64"                  | 3                           | .180                       | 3-RICH                   | .250     |
|      | 351" W E-100 49S M/T              | 31/64"                  | 3                           | .185                       | 3-RICH                   | .250     |
|      | 351" W E-150/250 CALIF. M/T       | 7/16"                   | 3                           | .185                       | INDEX                    | .250     |
|      | 351" W E-100 0-6000# 49S A/T      | 7/16"                   | 2                           | .205                       | 1-RICH                   | .250     |
|      | 351" W E-100 HI/ALT. A/T          | 31/64"                  | 4                           | .145                       | INDEX                    | .250     |
|      | 351" W E-100 CALIF. A/T           | 31/64"                  | 2                           | .215                       | INDEX                    | .250     |
|      | 351" W E-150/250 CALIF. A/T       | 31/64"                  | 2                           | .215                       | INDEX                    | .250     |
|      | 351" W E-350 0-8500# CALIF. A/T   | 31/64"                  | 3                           | .180                       | 3-RICH                   | .250     |
|      | 400" F-150/250 CALIF. A/T         | 31/64"                  | 3                           | .140                       | INDEX                    | .250     |
|      | 400" F-350 CALIF. A/T             | 31/64"                  | 2                           | .155                       | 3-RICH                   | .250     |
| 1979 | PASSENGER CARS                    |                         |                             |                            |                          |          |
|      | 302" ENG. 49S M/T                 | 7/16"                   | 3                           | .153                       | 2-RICH                   | .250     |
|      | A/T                               | 7/16"                   | 2                           | .125                       | 3-RICH                   | .250     |
|      | 351" M ENG. 49S/CAN. A/T          | 7/16"                   | 3                           | .132                       | 3-RICH                   | .250     |
|      | 351" M ENG. CALIF. A/T            | 7/16"                   | 3                           | .147                       | 3-RICH                   | .250     |
|      | 351" W ENG. 49S A/T               | 7/16"                   | 3                           | .132                       | 2-RICH                   | .250     |
| 1979 | 400" ENG. 49S A/T                 | 3/8"                    | 3                           | .145                       | 3-RICH                   | .250     |
|      | 400" ENG. CALIF. A/T              | 7/16"                   | 3                           | .150                       | 3-RICH                   | .250     |
|      | TRUCK                             |                         |                             |                            |                          |          |
|      | 302" ENG. M/T                     | 31/64"                  | 3                           | .140                       | 3-RICH                   | .250     |
|      | 302" ENG. A/T                     | 31/64"                  | 2                           | .145                       | 3-RICH                   | .250     |
|      | 302" ENG. F-150 CANADA A/T        | 31/64"                  | 3                           | .130                       | 3-RICH                   | .250     |
|      | 302" ENG. CALIF. A/T              | 31/64"                  | 2                           | .136                       | 1-RICH                   | .250     |
|      | 351" M ENG. M/T                   | 31/64"                  | 2                           | .145                       | INDEX                    | .250     |
|      | 351" M ENG. A/T                   | 31/64"                  | 3                           | .145                       | INDEX                    | .250     |
|      | 351" M ENG. CALIF. A/T            | 31/64"                  | 3                           | .150                       | 3-RICH                   | .250     |
|      | 351" W ENG. M/T                   | 7/16"                   | 2                           | .190                       | INDEX                    | .250     |
|      | 351" W ENG. CANADA M/T            | 31/64"                  | 4                           | .175                       | 1-RICH                   | .250     |
| 1980 | 351" W ENG. E-100/250 0-6000# A/T | 7/16"                   | 2                           | .200                       | INDEX                    | .250     |
|      | 351" W ENG. E-150/350 CANADA A/T  | 31/64"                  | 3                           | .200                       | 2-RICH                   | .250     |
|      | 351" W ENG. E-350 0-8500# A/T     | 31/64"                  | 3                           | .180                       | 3-RICH                   | .250     |
|      | 400" ENG. A/T                     | 31/64"                  | 3                           | .145                       | INDEX                    | .250     |
|      | PASSENGER CAR                     |                         |                             |                            |                          |          |
|      | 4.2L 49S                          | 7/16"                   | 3                           | .118                       | 4-RICH                   | .250     |
|      | 4.2L CALIF.                       | 7/16"                   | 2                           | .104                       | 3-RICH                   | .250     |
|      | 5.0L F.I.O.D.                     | 7/16"                   | 2                           | .137                       | 3-RICH                   | .250     |
|      | 5.0L NON/F.I.O.D.                 | 7/16"                   | 2                           | .104                       | 3-RICH                   | .250     |
|      | 5.8L/W NON/F.I.O.D.               | 7/16"                   | 3                           | .129                       | 2-RICH                   | .250     |
|      | 5.8L/W F.I.O.D.                   | 7/16"                   | 3                           | .159                       | 3-RICH                   | .250     |
|      | 5.8L/W NON F.I.O.D. CAN.          | 7/16"                   | 3                           | .129                       | 1-RICH                   | .250     |
| 1980 | LIGHT TRUCK                       |                         |                             |                            |                          |          |
|      | 5.0L 49S M/T                      | 31/64"                  | 3                           | .128                       | 3-RICH                   | .250     |
|      | 5.0L 49S A/T                      |                         |                             |                            |                          |          |
|      | CARB. NO.'S EOTE-8HA              | 7/16"                   | 2                           | .135                       | INDEX                    | .250     |
|      | EOTE-CYA, C2A, EOU-ABA            | 7/16"                   | 2                           | .140                       | 3-RICH                   | .250     |
|      | 5.0L CANADA                       | 31/64"                  | 3                           | .130                       | 3-RICH                   | .250     |
|      | 5.0L CALIF. A/T                   |                         |                             |                            |                          |          |
|      | CARB. NO.'S EOTE-8EA              | 7/16"                   | 2                           | .140                       | 3-RICH                   | .250     |
|      | EOTE-CVA                          | 31/64"                  | 2                           | .105                       | 1-RICH                   | .250     |
|      | EOTE-NA                           | 7/16"                   | 3                           | .105                       | 3-RICH                   | .250     |
|      | 5.0L CALIF. M/T                   | 7/16"                   | 2                           | .128                       | 3-RICH                   | .250     |
|      | 5.8L/W 49S PICK UP TRUCK          | 31/64"                  | 3                           | .148                       | 3-RICH                   | .250     |
|      | 5.8L/W 49S & CALIF. VAN           |                         |                             |                            |                          |          |
|      | CARB. NO.'S EOU-PA, RA, VA        | 7/16"                   | 4                           | .185                       | INDEX                    | .250     |
|      | EOU-SA, TA                        | 7/16"                   | 2                           | .185                       | INDEX                    | .250     |
|      | 5.8L/M 50S M/T                    | 31/64"                  | 2                           | .140                       | 3-RICH                   | .250     |
|      | 5.8L/M 49S & CAN. A/T             | 31/64"                  | 4                           | .155                       | 3-RICH                   | .250     |
|      | 5.8L/M CALIF. A/T                 |                         |                             |                            |                          |          |
|      | & CARB. NO. EOTE-CBA 49S          | 31/64"                  | 3                           | .159                       | INDEX                    | .250     |
| 1980 | 6.6L A/T                          | 31/64"                  | 4                           | .175                       | 3-RICH                   | .250     |
|      | 6.6L M/T                          | 31/64"                  | 4                           | .180                       | 2-RICH                   | .250     |

F.I.O.D. = FORD INTERNAL OVERDRIVE (AUTOMATIC OVERDRIVE TRANSMISSION)

LITER CU. IN.  
 4.2L - 255"  
 5.0L - 302"  
 5.8L - 351"  
 6.6L - 400"