

MODEL IDENTIFICATION

| Model | Series Symbol |
|-------------------------------------|---------------|
| F4-134 4 x 2 & 4 x 4 Jeep Utility | 54 |
| L6-226 4 x 2 & 4 x 4 Jeep Utility | 54 |
| F4-134 4 x 2 Jeep Utility Sta. Wgn. | 58 |
| L6-226 4 x 2 Jeep Utility Sta. Wgn. | 58 |
| F4-134 & L6-226 4WD Truck | 55 |
| DJ-3A Dispatcher | 56 |
| FJ-3 Fleetvan (Post Office) | 62 |
| FJ-3A Fleetvan (Other) | 62 |
| CJ-3B, CJ-5, CJ-6 Universal Jeep | 57 |
| FC-150 Forward Control | 65 |
| FC-170 Forward Control | 61 |

SERIAL NUMBER attached in various locations:
 NOTE - Number (example below) includes identification data.
 ① ② ③ ④ ⑤ ⑥
 54 5 4 8 13 10001

- ① - See "Series Symbol" in Model Table above.
- ② - See "Body Style" in Body Style Table below.
- ③ - Engine Type 3 - 4 Cyl. 134 cu. in. "L" Head. 4 Cyl. 134 cu. in. "F" Head. 6 - 6 Cyl. 226 cu. in. "L" Head. 7 - Tornado Overhead Cam Engine.
- ④ - 2 Wheel Drive - 1 or 7 (LHD), 5 (RHD). 4 Wheel Drive - 2 or 8 (LHD), 6 (RHD).
- ⑤ - Indicates H.D. FC-170 with Dual Rear Wheels Number not used on other models.
- ⑥ - Factory Unit Production Number.

| Body Style | Series | 54 | 55 | 56 | 57 | 58 | 61 | 65 |
|------------------------|--------|----|----|----|----|----|----|----|
| Wagon | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Delivery | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Flat Faced Cowl | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Cowl Windshield | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Stripped Chassis | 6 | 6 | 4 | 3 | 1 | 1 | 1 | 1 |
| Cab Chassis | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pick-Up | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Stake | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Open Body & Canvas Top | ① | ① | ① | ① | ① | ① | ① | ① |
| Platform | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

- ① - 3 (CJ-3B), 5 (CJ-5), 7 (CJ-6).
- ② - Open Body, Canvas Top, Soft Top, Hard Top, or Surrex
- ③ - 4 (CJ-3B), 6 (CJ-5), 8 (CJ-6).

ENGINE NUMBER: Located as follows:
 4 Cyl. Engines - Stamped on top of water pump boss at front of engine.
 6 Cyl. Engines (Exc. Overhead Cam) - Stamped on boss on left front corner of engine block above generator.
 6 Cyl. Engine (Overhead Cam) - Stamped on lower right front of cylinder block just behind ignition coil.
ENGINE NUMBER SUFFIX NOTE: Letters A, B, AB, or P following engine number designates special sizes of some engine parts. For details, refer to ENGINE NUMBER NOTE under Engine below.

TUNE-UP

COMPRESSION PRESSURE: 4 Cyl. "L" Head 90-110 lbs. 4 Cyl. "F" Head 115-145 lbs. (6.9-1 Ratio), 120-130 lbs. (7.4 or 7.8-1 Ratio). 6 Cyl. "L" Head 120-130 lbs. (6.86-1 ratio), 125-140 lbs. (7.3-1 ratio).
 NOTE - All cylinders must be equal within 10 lbs.

6 Cyl. Overhead Cam Engine - 145-155 lbs. Cylinders equal to within 15 lbs.
VACUUM READING: 18-21" (Exc. Overhead Cam Eng.), 16-18" (Overhead Cam Eng.) at idle speed.

TAPPET CLEARANCE:

| | Intake | Exhaust |
|-----------------|--------|---------|
| 4 Cyl. "L" Head | .016" | .016" |
| 4 Cyl. "F" Head | .018" | .016" |
| 6 Cyl. "L" Head | .014" | .014" |

NOTE - Set clearance with engine COLD not running.
TAPPET ADJUSTMENT (FORWARD CONTROL MODELS): Access panel provided in right front wheel housing.
MANIFOLD HEAT CONTROL: Used as follows:

- 4 Cyl. "L" Head - Thermostatic coil on manifold.
- 4 Cyl. "F" Head - Water jacketed intake manifold.
- 6 Cyl. Exhaust heat control valve with spring tension of 180° wind-up on manifold.

CRANKCASE VENTILATION VALVE: Service at regular intervals and check operation before performing a "Tune-Up" for ignition and carburetion troubles. See "Closed Crankcase Ventilation Systems" in Carburetion Section.

IGNITION

FIRING ORDER: 1-3-4-2 (4 Cyl.), 1-5-3-6-2-4 (6 Cyl.).
SPARK PLUG GAP: .030".

SPARK PLUG & SECONDARY COIL CABLE NOTE: Resistor type cables used. DO NOT puncture cable. NOTE - When removing cable, grasp boot or terminal ONLY.

Spark Plugs (Exc. Overhead Cam Eng.) - Prestolite (Autolite) A7 or Champion J8, 14 mm. Torque to 28-30 ft. lbs.

Spark Plugs (Overhead Cam Eng.) - Prestolite (Autolite) AE 42 or Champion L-7, 14 mm. Torque to 28-30 ft. lbs.

COIL: Prestolite (Autolite) No. 200564.
 Ignition Current - 2.8-2.9 amps. at 12.5 volts idling or stopped.

DISTRIBUTOR: Prestolite (Autolite) used as follows:

| Model | Distr. No. |
|---------------------------------|------------|
| 4 Cyl. Jeeps & Fleetvans | IAY-4401 |
| 4 Cyl. Others | IAT-4405 |
| 6 Cyl. (Exc. Overhead Cam Eng.) | IAT-4404A |
| 6 Cyl. (Overhead Cam Eng.) | IAT-4411 |

Distributor Removal & Installation (6 Cyl. Overhead Cam Eng.): Distributor driven from crankshaft by oil pump drive gear. See "Electrical Notes" in Willys Special Data.

Condenser - Prestolite (Autolite) 2-32.
Capacity - .21-.25 mfd. (Exc. Overhead Cam Eng.), .25-.28 mfd. (Overhead Cam Eng.).
Contact Point Set - Prestolite (Autolite) 1-45 (IAY Distr.), 1-47 (IAT Distr.).

Breaker Gap - .020".
Cam Angl - 37-42° (4 Cyl.), 36-42° (6 Cyl.).
Breaker Arm Spring Tension - 17-22 ozs.
Rotation - Counterclockwise at commutator end.

Automatic Advance - IAY-4401, IAT-4405

| Degrees Start | Distr. | RPM | Degrees Eng. | RPM |
|---------------|--------|------|--------------|------|
| 0 | | 300 | 0 | 600 |
| 2 | | 425 | 2 | 850 |
| 12 | | 1050 | 12 | 2100 |
| 20 | | 1575 | 20 | 3150 |
| 22 | | 1700 | 22 | 3400 |

Automatic Advance - IAT-4404A & 4411

| Degrees Start | Distr. | RPM | Degrees Eng. | RPM |
|---------------|--------|------|--------------|------|
| 0 | | 300 | 0 | 600 |
| 2 | | 375 | 2 | 750 |
| 8 | | 600 | 8 | 1200 |
| 12 | | 1175 | 12 | 2350 |
| 15 | | 1700 | 15 | 3400 |

Vacuum Spark Control: Autolite (integral type). Not used on IAY-4401 Distributor.

Vacuum Advance - IAT-4405

| Distr. Degrees | Eng. Degrees | Vacuum (" of Hg) |
|----------------|--------------|------------------|
| Start | 0 | 5 1/8 |
| 1 | 2 | 6 5/8 |
| 3 | 6 | 9 5/8 |
| 5 | 10 | 12 1/2 |
| 6 | 12 | 14 |

Vacuum Advance - IAT-4404A & 4411

| Distr. Degrees | Eng. Degrees | Vacuum (" of Hg) |
|----------------|--------------|------------------|
| Start | 0 | 10 |
| 1 | 2 | 11 |
| 3 | 6 | 13 |
| 4 | 8 | 14 |
| 5 | 10 | 15 |

IGNITION TIMING

Setting - 5° BTDC (All Models).
Timing Mark (4 Cyl. "F" Head) - Notch on rim of pulley to align with 5° mark on indicator on timing gear cover. Two marks on indicator - 5° and T (TDC).
Timing Mark (4 Cyl. "L" Head) - 5° mark on flywheel in center of timing hole in flywheel housing. Flywheel marked T.C. (TDC), and 5° (5° BTDC).
Timing Mark (6 Cyl.) - Align correct graduation on damper with pointer on timing gear cover. Damper marked "0" at TDC with 1° graduations before and after this point.

CARBURETOR

CARBURETOR APPLICATION: Carter YF Carburetors used on all models except 6 Cylinder Overhead Cam Engine, which uses a Holley 2-Bbl. Downdraft Carburetor.

CARTER YF

| Model | Carb. N. |
|--|-----------|
| 4 Cyl. "L" Hd. Jeep Dispatcher (Early) | YF 2392S |
| 4 Cyl. "L" Hd. Jeep Dispatcher (Late) | YF 2392SA |
| 4 Cyl. "F" Hd. Universal Jeep | YF 938SD |
| 4 Cyl. "F" Hd. 4 x 2, 4 x 4, 4 WD | YF 951SA |
| 4 Cyl. "F" Hd. Fleetvan (Post Office) | YF 3200S |
| 4 Cyl. "F" Hd. Fleetvan (Others) | YF 938SD |
| 4 Cyl. "F" Hd. Forward Control | YF 938SD |
| 6 Cyl. "L" Hd. All Models | YF 2467S |

Idle Setting - Initial setting 3/4 to 1 1/4 turns open (938SD), 3200S, & 951SA), 1/2 to 2 turns open (2392S), 1 to 2 1/2

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See INDEXES on Pgs. 4 to 9 for complete CARBURETION, ELECTRICAL, MECHANICAL data.