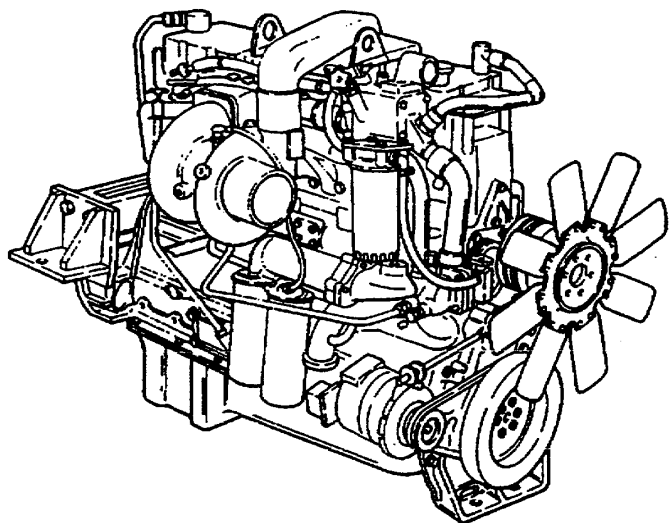


Supersedes TM 9-2815-225-34&P-1, TM 9-2815-225-34&P-2,
TM 9-2815-222-34&P and all changes.

DIRECT SUPPORT AND GENERAL SUPPORT (DS/GS)
MAINTENANCE MANUAL INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)
FOR

ENGINE, DIESEL: 6 CYLINDER
IN-LINE, TURBOCHARGED,
CUMMINS MODEL NTC-400
M915-M920 AND
M915A4*/BIG CAM I
(NSN 2815-01-082-8125)
M915A1 AND M915A4*/BIG CAM III
(NSN 2815-01-142-2745)



BIG CAM II SHOWN

* M915A4 TRUCKS WILL BE EQUIPPED WITH
EITHER BIG CAM I OR BIG CAM III ENGINES

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HEADQUARTERS, DEPARTMENT OF THE ARMY
AUGUST 2001

WARNING**CARBON MONOXIDE (EXHAUST GAS) CAN KILL YOU**

Carbon monoxide is without color or smell, but can kill you. Breathing air with carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, a sleepy feeling, and coma. Brain damage or death can result from heavy exposure. Carbon monoxide occurs in the exhaust fumes of fuel-burning heaters and internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of no air movement. Precautions must be followed to ensure crew safety when the personnel heater or engine of any vehicle is operated for any purpose.

1. **DO NOT** operate personnel heater or engine of vehicle in a closed place unless the place has a lot of moving air.
2. **DO NOT** idle engine for long periods without ventilator blower operating.
3. **DO NOT** drive any vehicle with inspection plates, cover plates, or engine compartment doors removed unless necessary for maintenance purposes.
4. **BE ALERT** at all times during vehicle operation for exhaust odors and exposure symptoms. If either is present, **IMMEDIATELY VENTILATE** personnel compartments. If symptoms persist, remove affected crew to fresh air; keep warm; **DO NOT PERMIT PHYSICAL EXERCISE**. If necessary, give artificial respiration. **FOR ARTIFICIAL RESPIRATION, REFER TO FM 21-11.**
5. **BE AWARE:** the field protective mask for Chemical-Biological-Radiological (CBR) protection will not protect you from carbon monoxide poisoning.

THE BEST DEFENSE AGAINST CARBON MONOXIDE POISONING IS GOOD VENTILATION.

WARNING SUMMARY

- Compressed air used for cleaning purposes will not exceed 30 psi. Use only with effective chip guarding and protective equipment such as goggles or shield, gloves, etc. Failure to comply may result in injury to personnel.
- Wear heat-resistant gloves when handling heated crankshaft gear. Failure to comply may result in injury to personnel.
- Perform operation out of doors or in a well-ventilated room. Failure to comply may result in injury to personnel.
- Remove pressure regulator assembly slowly to prevent spring tension from shooting assembly from oil pump body. Wear eye protection. Failure to comply may result in damage to equipment or injury to personnel.
- Eye protection must be worn when using wire brush for cleaning. Failure to comply may result in injury to personnel.
- The machined edges on turbine wheel are very sharp. Wear protective gloves. Failure to comply may result in injury to personnel.
- Wear rubber gloves when removing piston pin to prevent burns from boiling water or hot piston. Failure to comply may result in injury to personnel.
- Control valve cover is under pressure from control valve outer spring. Wear suitable eye protection and hold cover down when removing screw and cover. Failure to comply may result in injury to personnel.

WARNING SUMMARY (Contd)

- Improper cleaning methods and use of unauthorized cleaning solvents will not be used. Refer to TM 9-247 for proper cleaning methods and solvents. Failure to comply may result in damage to equipment or injury to personnel.
- The stamped steel oil pan on M915A1/Big Cam III or on M915/Big Cam I engines must not be used to support weight of engine; the pan will permanently deform and may collapse, allowing engine to fall over. Failure to comply may result in damage to equipment and injury to personnel.
- All personnel must stand clear during lifting operations. A snapped chain or swinging or shifting load may result in injury to personnel.
- Use extreme caution during disassembly or assembly; engine components are heavy. Failure to comply may result in damage to equipment or injury to personnel.
- Operation of a deadlined vehicle without preliminary inspection will cause further damage to a malfunctioning component and possible injury to personnel.
- Approved solvents may be flammable and will not be used near open flame. Use only in well-ventilated area. Failure to comply may result in injury to personnel.
- Do not perform fuel system procedures while smoking or within 50 ft (15.2 m) of sparks or open flame. Diesel fuel is flammable and may explode. Failure to comply may result in injury to personnel.
- Allow adequate ventilation for engine exhaust gases. Failure to comply may result in brain damage or death to personnel.

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DIRECT SUPPORT AND GENERAL SUPPORT (DS/GS)
MAINTENANCE MANUAL INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)
FOR
ENGINE, DIESEL: 6 CYLINDER IN-LINE,
TURBOCHARGED, CUMMINS MODEL NTC-400
M915-M920/BIG CAM I (NSN 2815-01-082-8125)
M915A1/BIG CAM III (NSN 2815-01-142-2745)

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* This manual supersedes TM 9-2815-225-34&P-1, TM 9-2815-225-34&P-2, dated Dec 1983 and TM 9-2815-222-34&P dated Dec 1980 and all changes.

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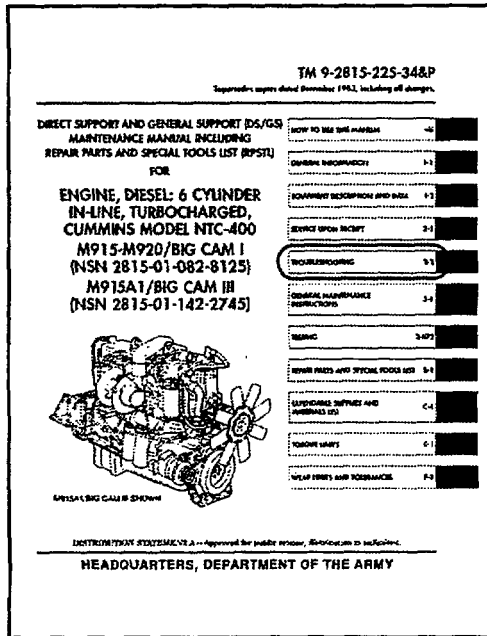
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HOW TO USE THIS MANUAL

ABOUT YOUR MANUAL

Maintenance tasks in this manual are written in sequence for the complete disassembly of the engine. They can also be used in conjunction with troubleshooting to repair a specific engine component or part without performing a complete engine overhaul. In either event, always refer to the maintenance record (or attached instructions if the engine arrives for repair in a container). This will prevent any unnecessary work on your part. Follow the steps listed below under "Using Your Manual" to become familiar with how to use this book.

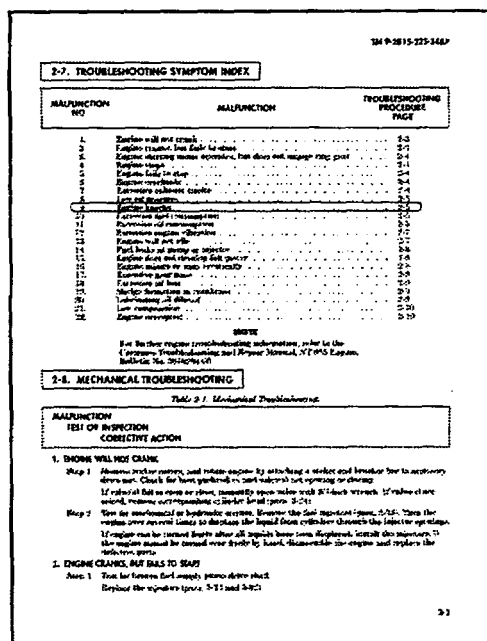
USING YOUR MANUAL



Task: The operator of an M915 series vehicle has complained the engine knocks under a load, and the vehicle has been assigned to you for repair.

TROUBLESHOOTING STEPS:

1. Look at the cover of this manual. You'll see chapter/section titles listed from top to bottom on the right-hand side.
2. Look at the right edge of the manual. On some of the pages you'll see black bars (edge indicators) that are aligned with the chapter/section bars on the cover. These are the locations of the chapters/section in the text.
3. Look for "TROUBLESHOOTING" in the chapter/section list on the cover.
4. Turn to those pages with the edge indicator matching the black bar for TROUBLESHOOTING. Page numbers are also listed next to chapter/section titles.
5. One of the first pages having the mechanical systems troubleshooting edge indicators is the "TROUBLESHOOTING SYMPTOM INDEX."
6. Look down the list until you find "ENGINE KNOCKS."
7. Turn to the page indicated: 2-5.



8. On page 2-5, steps/tests relating to resolving the problem of "Engine Knocks" are listed:

Step 1. You check for a possible damaged piston.

Step 2. During your inspection you discover that a piston is damaged. The part must be replaced. Chapter 3, paras. 29 and 69, are referenced.

9. Before turning to paras. 3-29 and 3-69, turn to chapter 3, section I, "GENERAL MAINTENANCE INSTRUCTIONS," and review the guidelines to be followed during maintenance of engine (paras. 3-2 through 3-10).

10. Because replacement of a piston is extensive, refer to chapter 3, section II, "DISASSEMBLY." Find "Piston, Connecting Rod, and Bearings Removal" in the task summary (para. 3-12.)

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Table 2-5. Malfunction Troubleshooting (cont.)

MAJORITY TEST OR INSPECTION	CORRECTIVE ACTION
Step 1	Check for loose or worn piston rings Refer to piston rings (para. 3-65)
Step 2	Check for incorrect mixture timing Then, adjust mixture (para. 3-75)
B. LOW OIL PRESSURE	
Step 1	Check oil level in sump If low, see pressure regulator or regulator of pressure (3-15 and 3-14)
Step 2	Check for worn or faulty bearings Regulate bearing clearance (para. 3-31)
Step 3	Inspect oil pump pickup Regulate pick-up (para. 3-14)
Step 4	Check for worn camshaft Regulate clearance (para. 3-40)
Step 5	Check for worn crankshaft Regulate clearance and install new bearings (para. 3-31)
Step 6	Inspect main bearings Regulate main bearings (para. 3-29)
Step 7	Inspect connecting rod bearings Regulate connecting rod bearings (para. 3-31)
Step 8	Inspect oil pump pump Regulate oil pump (para. 3-14 and 3-15)
Step 9	Check for high oil temperature Inspect and clean oil cooler (para. 3-42)
Step 10	Check for worn bearings, connecting rod bearings, and crankshaft Install new bearings and check clearance (para. 3-31 and 3-29)
9. ENGINE NOISES	
Step 1	Check for broken piston Regulate piston (para. 3-29 and 3-69)
Step 2	Check for broken injection pump Regulate injection pump (para. 3-42)
Step 3	Check for incorrect valve adjustment Adjust valves (para. 3-30)
Step 4	Check for incorrect injection adjustment Adjust injection (para. 3-42)
Step 5	Check for loose connecting rod cap screws a. Torque connecting rod injection (para. 3-40) b. Check bearing (para. 3-31)
Step 6	Check for worn connecting rod bearings Regulate connecting rod bearings (para. 3-31, 3-30, and 3-31)

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3-12. TASK SUMMARY (Contd)

TASK	PROCEDURES	TASK PARA.	ENCLOSURE/FORM (SEE NO. PARA.)
10	Disassemble Bearings and Crankshaft Assembly	3-30	3-4
11	Remove, Check and Reinstall Piston to Engine	3-29	3-4
12	Install New Bearings	3-31	3-4
13	Remove Crankshaft and Main Bearing Assembly	3-31	3-4

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3-29. PISTON, CONNECTING ROD, AND BEARINGS REMOVAL

THIS TASK COVERS:
Removal

INITIAL SETUP:

APPLICABLE MODELS: All	REFERENCES (TM): None
SPECIAL TOOLS: Torque wrench (SAE) 1/2" x 1/4" (15.24 N·m) Piston ring expander (16036-95-20)	TROUBLESHOOTING REFERENCES: Para. 3-29
TEST EQUIPMENT: None	EQUIPMENT CONDITION: Compliant and case documents (manual - para. 3-29)
MATERIALS/PARTS (P/N): Lubricant - Appendix C, Level 4	SPECIAL ENVIRONMENTAL CONDITIONS: Work area clean and away from blowing dirt and dust.
PERSONNEL REQUIRED: One Automotive Technician (A15-031)	GENERAL SAFETY INSTRUCTIONS: 1) Jamboree must be made if not making a new break for clearance.

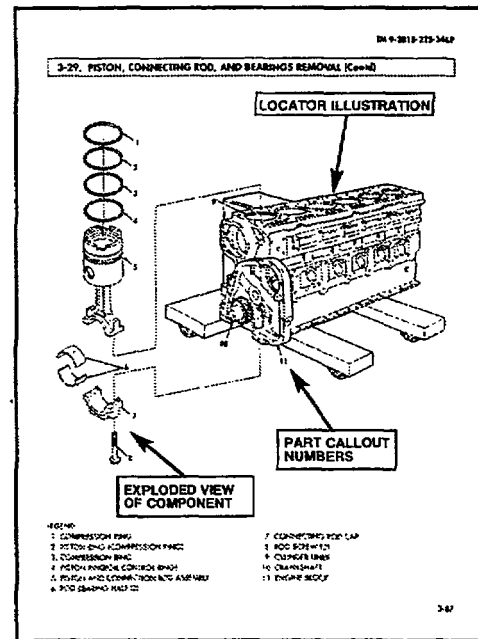
LOCATION/TBM	ACTION	EDWARDS
Removal		

WARNING:
Eye protection must be worn when using tools to break the cleaning fixture to do an easy removal in the event.

NOTE:
The task covers removal of the piston, connecting rod, and bearing assembly. Removal of the connecting rod, depending on the model. Parts are not interchangeable and should be identified with each assembly as it is removed.

- Engine back (1):
 - Place in vertical position with rear of block down.
 - Using a torque wrench set at 15.24 N·m (11.15 ft·lb) torque the head of the piston (1) and the head of the rod (2) to the wall of the cylinder bore (3).
- Remove the rod (2) in assembly.
- Remove the head of the piston (1) and the head of the rod (2) in assembly.
- Remove the head of the piston (1) and the head of the rod (2) in assembly.
- Remove the head of the piston (1) and the head of the rod (2) in assembly.

1-8



11. Turn to para. 3-29 on page 3-89. Here you find the detailed procedure for removing the piston, connecting rod, and bearings.

DETAILED MAINTENANCE PROCEDURES:

12. Detailed procedures: Include everything you must do to accomplish a basic maintenance task.
- Before beginning the maintenance task, look through the procedure. You must familiarize yourself with the entire maintenance procedure before beginning the maintenance task. The entire procedure of para. 3-29, "Piston, Connecting Rod, and Bearings Removal," include the task REMOVAL under the heading "THIS TASK COVERS."
 - The ten basic headings listed under "INITIAL SETUP" outline the task conditions, materials, manpower requirements, and special conditions or tools. They are:
 - Applicable Models:** Any models that require that particular maintenance task.
 - Special Tools:** Those special tools required to finish a maintenance task. The use of common tools is not explained.
 - Test Equipment:** Test equipment required to complete a task.
 - Materials/Parts:** All materials or parts required to complete a task.
 - Personnel Required:** The number and type of personnel needed to accomplish a task.
NOTE: If you think an assistant will be necessary to correctly or safely complete a task (perhaps as the result of unusual conditions, etc.), alert your supervisor and ask for help.
 - References (TM):** Those manuals required to complete the task.
 - Troubleshooting References:** Specific troubleshooting symptom or those manuals required to complete the task.
 - Equipment Condition:** Notes the conditions that must exist prior to starting the task.
 - Special Environmental Conditions:** Outlines specific environmental conditions necessary to perform a task. For example: Work area clean and away from blowing dirt and dust.
 - General Safety Instructions:** Summarizes all safety warnings for the maintenance task.

- c. A step-by-step maintenance procedure follows the INITIAL SETUP. Three columns "Location/Item," "Action," and "Remarks" give detailed instructions for the procedure. They are:
- Location/Item: Indicates the general location and specific part(s) you are working on in a step. For example, the location/item of step 2 is the "crankshaft (10)." The number(s) in parentheses correspond to that part(s) callout number(s) in the accompanying illustration.
 - Action: Specifies the action to be taken with the part(s) listed in the Location/Item column. In our example, you are directed to "Rotate [the crankshaft (10)] until rod cap (7) is accessible."
 - Remarks: Provide additional information. Our example notes: "Use lint-free paper to remove loose debris from cylinder liner (9)."
- d. At the end of a procedure, "FOLLOW-ON TASK(S)" will list additional task(s) that must be performed to complete the procedure. The Follow-On Tasks for our example procedure is: "For repair or installation of piston, connecting rod, and bearings, refer to para. 3-69 or 3-39."
13. Refer to the example pages for para. 3-29, "Piston, Connecting Rod, and Bearings Removal," as we review the following points:
- a. **Modular Text**: Both pages of text and illustrations are to be used together. This manual was designed so the two pages would be visible at once, making part identification and procedure sequence easy to follow.
 - b. **Legend**: Use the legend found at bottom of each illustration page to find part name and callout number in relation to text and illustration.
 - c. **Illustrations**: A locator illustration of the cylinder block is provided. An exploded view of the component, removed from the cylinder block, shows specific part locations, attachments, and spatial relationships.
14. You can also use the Table of Contents (page ii) to find more information about the engine. For example: Appendix E, Torque Values.
15. Refer to Appendix B, Direct Support and General Support Maintenance Repair Parts and Special Tools List (RPSTL) when requisitioning parts, special tools, and equipment for organizational maintenance.
16. Your manual is easier to use once you understand its design and we hope this will encourage you to use it more often.

**CHAPTER 1
INTRODUCTION**

Section I. GENERAL INFORMATION

Section I. General Information (page 1-1)
Section II. Equipment Description and Data (page 1-2)

PARA. NO.	TITLE	PAGE NO.
1-1.	Overview	1-1
1-2.	Scope	1-1
1-3.	Maintenance Forms, Records, and Reports	1-1
1-4.	Destruction of Army Materiel to Prevent Enemy Use	1-1
1-5.	Preparation for Storage and Shipment	1-2
1-6.	Reporting Equipment Improvement Recommendations (EIRs)	1-2
1-7.	Warranty Information	1-2
1-8.	Equipment Characteristics, Capabilities, and Features	1-2
1-9.	Location and Description of Major Components	1-3
1-10.	Equipment Data	1-5

1-1. OVERVIEW

NOTE
All information contained in this manual applies to both M915 and M915A4/Big Cam I and M915A1 and M915A4/Big Cam III engines except where differences are specifically noted.

This chapter familiarizes the technician with standard forms, record data, and the equipment to be maintained at the direct support and general support maintenance levels. This information is covered in the following sections:

- Section I. General Information
- Section II. Equipment Description and Data

1-2. SCOPE

- a. Type of Manual: Direct Support and General Support Army Maintenance.
- b. Model Number and Name: NTC-400, Cummins, six-cylinder, in-line, turbocharged diesel engine.
- c. Purpose of Equipment:
 - Engine for M915 through M920 and M915A4 Truck, Big Cam I.
 - Engine for M915A1 and M915A4 Truck, Big Cam III.

1-3. MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, The Army Maintenance Management System (TAMMS).

1-4. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Procedures for destruction of Army equipment to prevent enemy use can be found in TM 750-244-6.

1-5. PREPARATION FOR STORAGE AND SHIPMENT

Information concerning storage or shipment of equipment can be found in TM 740-90-1. Additional information concerning storage of Cummins NTC-400 engine can be found in Chapter 3, Maintenance.

1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs)

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. You may mail, fax or email your letter, DA Form 2028, or DA Form 2028-2 direct to: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CIP-WT, Rock Island, IL 61299-7630. The email address is TACOM-TECH-PUBS@ria.armv.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

1-7. WARRANTY INFORMATION

The Cummins diesel engine (model NTC-400) is warranted in accordance with TB 9-2300-295-15/21. The warranty starts on the date found in block 23, DA Form 2408-9, in logbook. Report all defects in material or workmanship to your supervisor, who will take appropriate action.

Section II. EQUIPMENT DESCRIPTION AND DATA**1-8. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES****NOTE**

"M9151Big Cam I" is intended and will be written hereafter to mean M915 through M920 series and M915A4 trucks with Big Cam I engines.

a. The Cummins NTC-400 diesel engine is used on all M915 through M920, M915A1, and M915A4 trucks. It is a turbocharged, liquid-cooled, overhead valve, four-cycle engine of in-line six-cylinder design. The NTC-400 engine has a compression ratio of 13.5: 1 (M915) and 14.0: 1 (M915A1), and develops 400 horsepower at 2100 rpm. Peak torque is 1150 lb-ft at 1500 rpm (M915) and 1300 lb-ft at 1300 rpm (M915A1).

b. The following engine characteristics and features apply to both M915/Big Cam I and M915A1/Big Cam III engines, except where differences are noted.

Camshaft: 2-1/2-inch diameter camshaft with gear drive controlling all valve and injector movement. Made of induction-hardened alloy steel. Camshaft followers are roller type.

Connecting Rods: Drop-forged, rifle-drilled for pressure lubrication.

Crankshaft: High-tensile steel forging. Bearing journals and fillets-induction hardened. Fully counterweighted.

Cylinder Block: Alloy cast iron with removable wet liners.

Cylinder Heads: Each head serves two cylinders. Drilled fuel supply and return lines. High temperature inserts on exhaust valve seats.

Turbocharger: Model T-50 (M915/Big Cam I); Model T-46-B, which has a redesigned compressor wheel, compressor housing, turbine wheel and shaft, bearing housing assembly, location of oil inlet line, and vee bands (M915A1/Big Cam III).

Exhaust Manifold: Conventional log-type (M915/Big Cam I). Pulse-type for less restriction (M915A1/Big Cam III).

Fuel System: Integral flywheel-type governor.

Injectors: Camshaft actuated top-stop type.

1-8. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES (Contd)

Intake Manifold: Conventional aftercooler (M915/Big Cam I). Triple-pass water aftercooler (M915A1/Big Cam III).

Lubrication Oil Cooler: Conventional oil cooler and filter with separately mounted bypass oil filter on engine firewall (M915/Big Cam I). Demand flow automatically regulates oil pressure, routes engine coolant through engine oil cooler twice. Engine and cooler core are made of cast aluminum and incorporates mounting adapters for spin-on type full-flow and bypass oil filters, and incorporates a bypass valve and pressure sending unit (M915A1/Big Cam III).

Oil Pan: Made of cast aluminum (M915/Big Cam I). Made of stamped steel (M915A1/Big Cam III).

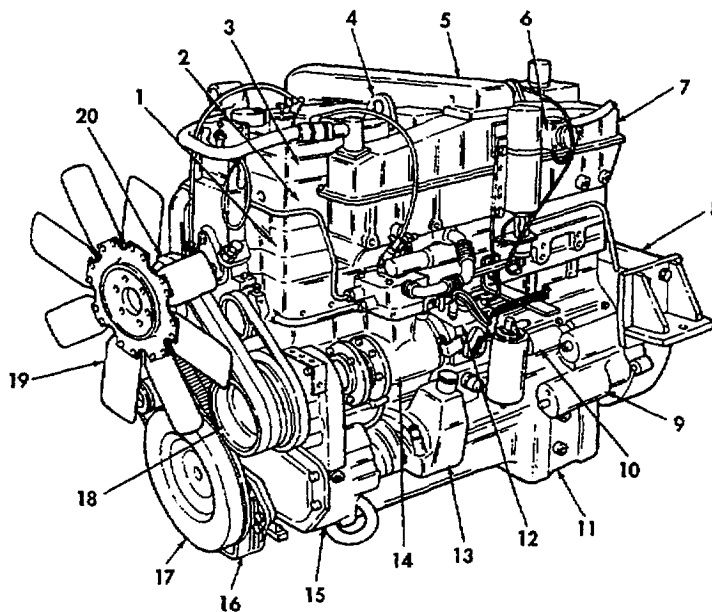
Water Transfer Tube: Made of cast iron (M915/Big Cam I). Made of stamped, welded steel (M915A1/Big Cam III).

1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

Right and left views of the NTC-400 engine and its components are shown below and on the following page. Identification can be made from the engine identification plate located on the gear case mounting flange of the engine block. Because of changes made during production, some engines may have minor differences not shown in the following views.

NOTE

Below is a 3/4-view of right side of engine as viewed from front.

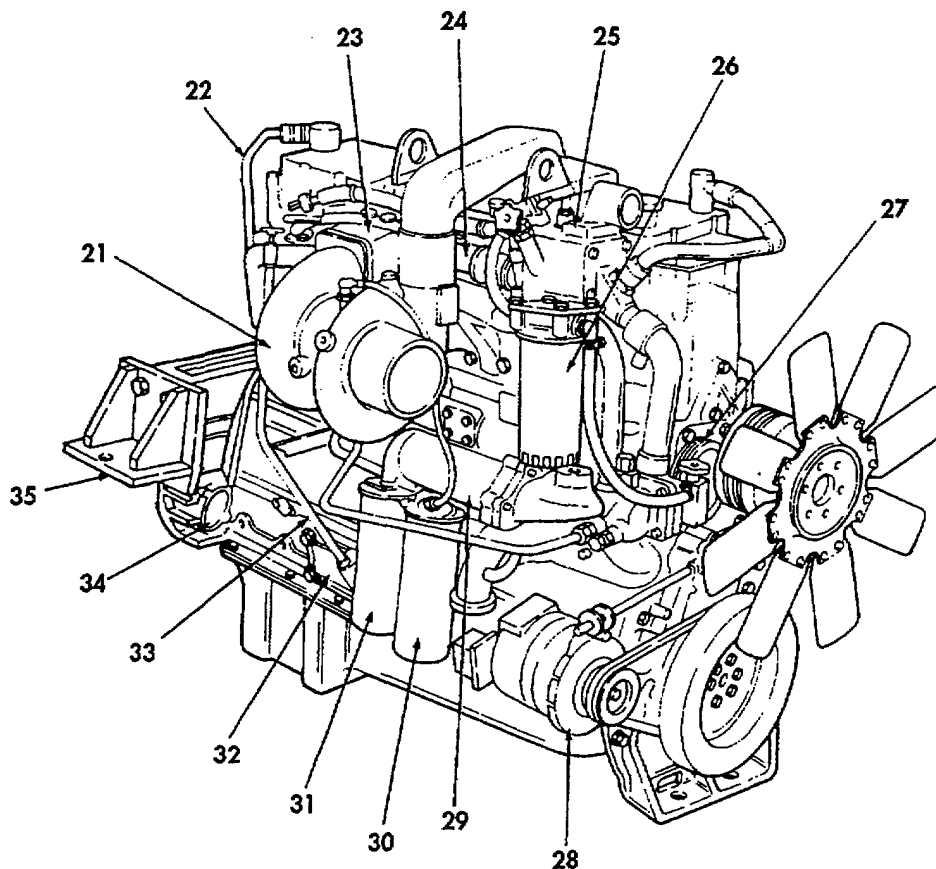
**LEGEND:**

- | | |
|--|--|
| 1. CYLINDER HEAD ASSEMBLY (3) | 11. OIL PAN |
| 2. ROCKER ARM ASSEMBLY (3) | 12. FUEL PUMP |
| 3. ENGINE RETARDER (3) | 13. POWER STEERING PUMP AND RESERVOIR |
| 4. ENGINE LIFTING BRACKET (2) | 14. AIR COMPRESSOR |
| 5. AIR CROSSOVER | 15. LUBRICATION OIL PUMP |
| 6. DIAGNOSTIC CONNECTOR ASSEMBLY BRACKET | 16. FRONT ENGINE MOUNT |
| 7. AIR AFTERCOOLER | 17. VIBRATION DAMPER AND CRANKSHAFT PULLEY |
| 8. FLYWHEEL HOUSING | 18. ACCESSORY DRIVE PULLEY |
| 9. STARTER | 19. FAN |
| 10. CAM FOLLOWER ASSEMBLY (3) | 20. FAN CLUTCH |

1-9. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (Contd)

NOTE

Below is a 3/4-view of left side of engine as viewed from front.



LEGEND:

21. TURBOCHARGER (AS SHOWN, MODEL T-50, M915/BIG CAM I); (MODEL T-46-B, M915A1/BIG CAM III)

22. CRANKCASE BREATHER TUBE

23. EXHAUST MANIFOLD

24. WATER MANIFOLD

25. THERMOSTAT HOUSING

26. WATER FILTER

27. WATER PUMP

28. ALTERNATOR

29. ENGINE OIL COOLER

30. FULL-FLOW OIL FILTER

31. BYPASS OIL FILTER (AS SHOWN, M915A1/BIG CAM III); (M915/BIG CAM I MAY BE MOUNTED ON FIREWALL)

32. HAND HOLE COVER

33. DIPSTICK AND TUBE

34. FLYWHEEL INDEX HOLE COVER

35. REAR ENGINE MOUNT

1-10. EQUIPMENT DATA

Manufacturer	Cummins Engine Company, Inc.
Model	NTC-400
Type	4-cycle, turbocharged diesel, compression ignition

DIMENSIONS

Length	58.88 in. (149.6 cm)
Width	33.63 in. (85.4 cm)
Height	50.91 in. (129.3 cm)
Net Weight, Dry	2,600 lbs (1,180.4 kg)

CYLINDERS

Number	6
Arrangement	In-line
Firing Order	1-5-3-6-2-4
Bore	5.5 in. (14 cm)
Stroke	6 in. (15.2 cm)
Displacement	855 cu-in. (14 L)
Compression Ratio	13.5:1 (M915/Big Cam I) 14.0:1 (M915A1/Big Cam III)

GOVERNED SPEED

Full Load	2100 rpm
No Load	2460 rpm
Idle Speed	600 rpm

LUBRICATION SYSTEM

Type	Force-fed
Operating Pressure (Normal)	35-45 psi (M915A1/Big Cam III) 50-70 psi (345-483 kPa) (M915/Big Cam I)
Operating Pressure (Minimum)	15 psi (100 kPa) @ idle
System Capacity Including Bypass Filter	44 qt (41.6 L) (M915A1) 46 qt (43.5 L) (M915)
Operating Temperature (Normal)	200-250°F (93-121°C)
Oil Pump	Gear-type

COOLING SYSTEM

Type	Liquid with fan and radiator
Operating Temperature (Normal)	175-195°F (79-91°C)
Thermostat	1

PERFORMANCE HEAD

Maximum Torque	1150 lb-ft @ 1500 rpm (M915/Big Cam I) 1300 lb-ft @ 1300 rpm (M915A1/Big Cam III)
Maximum Output	400 BHP
Piston Speed @ 2100 rpm.....	2100 ft/min