TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT AND DEPOT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS INFORMATION AND SUPPLEMENTAL MAINTENANCE INSTRUCTIONS) FOR TRUCK, DUMP, 20 TON, 6X4, ON-OFF HIGHWAY 71,000 GVW, IHC MODEL F-5070 (CCE)

(NSN 3805-00-192-7249)

HEADQUARTERS, DEPARTMENT OF THE ARMY

AUGUST 1980

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HEADQUARTERS
DEPARTMENT OF THE ARMY
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OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, GENERAL SUPPORT AND DEPOT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS INFORMATION AND SUPPLEMENTAL MAINTENANCE INSTRUCTIONS) FOR TRUCK, DUMP, 20 TON, 6X4, ON-OFF HIGHWAY 71,000 GVW, IHC MODEL F-5070 (CCE) (NSN 3805-00-192-7249)

REPORTING OF ERRORS

You can Improve this manual by recommending improvements using DA Form 2028 (Recommended Changes to Publications and Blank Forms) or DA Form 2028-2 located In the back of this manual. Mall the form direct to Commander, US Army Tank-Automotive Materiel Readiness Command, ATTN: DRSTA-MBS, Warren, MI 48090. A reply will be furnished direct to you.

PART ONE. DUMP TRUCK OPERATOR'S MANUAL
TWO. SUPPLEMENTAL OPERATING, MAINTENANCE AND REPAIR PARTS INSTRUCTIONS
THREE. SPECIAL PARTS CATALOG

NOTE
Refer to TM 5-3805-254-14&P-2 for Special Service Manual.

Credit Is hereby given to International Harvester Company for permission to reproduce the following manuals procured under Contract No. DSA-700-72-C9235:

Operator's Manual No. 1086872-R1
Special Parts Catalog No. 1086677-R1

This technical manual Is an authentication of the manufacturer's commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available Information that Is essential to the operation and maintenance of the equipment.

PART ONE

OPERATOR'S MANUAL

INTERNATIONAL HARVESTER COMPANY

OPERATOR'S MANUAL

NO. 1086872-R 2

FOR

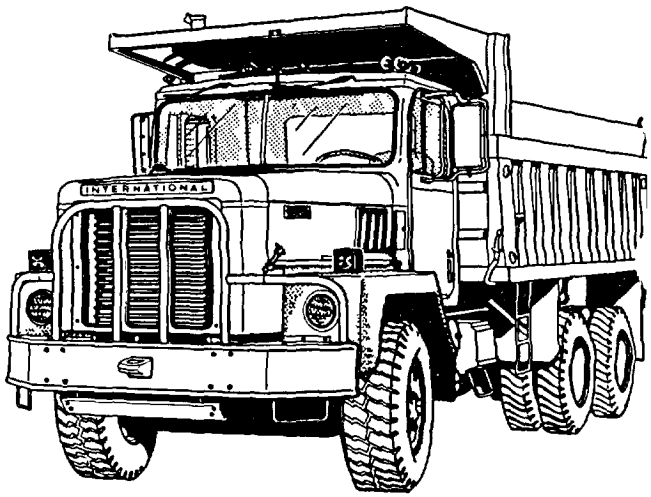
TRUCK, DUMP, 20 TON, ON/OFF HIGHWAY

(184 INCH WHEELBASE, MODEL F-5070)

PRODUCED FOR U.S. ARMY

ON CONTRACT NO. DSA-700-72-C-9235

INTERNATIONAL®
OPERATOR'S
MANUAL
1086872-R2 (REV. 1/76)



MT 16403

IMPORTANT

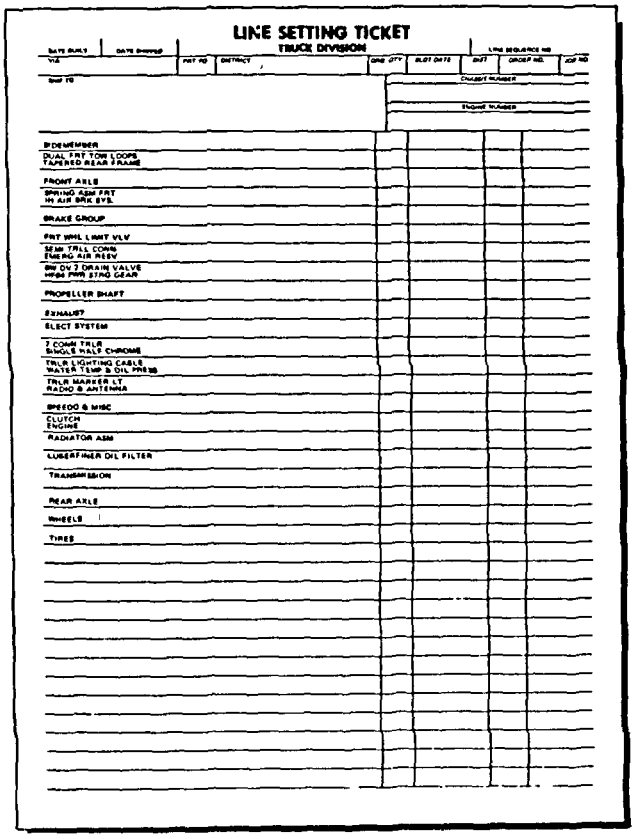
You were presented with an "Owners Service Policy" by the dealership from whom you purchased your new International vehicle.

Should the occasion arise where warranty service is required it will be necessary that you present to the servicing dealer this "Owners Service Policy" to verify warranty qualification.

For this reason it is important that this policy be kept with the vehicle at all times.

F - 5070 PAYSTAR
SERIES
Cont. DSA-700-72-C-9235

OPERATION - PREVENTATIVE MAINTENANCE AND LUBRICATION



The code numbers on the line setting ticket positively identify units used in building your vehicle. You can be sure of getting the correct replacement parts if you take the line setting ticket in the glove compartment with you.

<u>DO NOT REMOVE THE LINE SETTING TICKET ATTACHED TO THE VEHICLE</u>.

MT-16757

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A WORD TO OWNER AND OPERATOR

Every effort has been made to assure that your new vehicle has been engineered and manufactured to provide continued trouble-free service. Materials selected to manufacture the many parts which make up the vehicle exhaustive test and research to make certain that acceptable, safe service life is realized.

There is, however, an area in which the vehicle owner plays an important part and which determines in a large measure the extent of continued, safe trouble-free service to be realized from the owner's investment in the vehicle. This has to do with the responsibility which rests with the owner in seeing that the vehicle receives proper care through following the periodic lubricating procedures and arranging for regular inspection intervals to assure that parts that normally deteriorate are replaced or repaired. In addition, it would be good practice to ask your IH dealer or Service Center to make an inspection of the running gear of your vehicle at least once a year. The lubrication intervals present a good opportunity to inspect the vehicle, and we suggest that the following points be checked at these intervals.

AXLES, BODY AND CHASSIS COMPONENTS: Check to assure that axle mounting U-bolt nuts, body mounting brackets and chassis components (attaching or mounting bolts and nuts) are securely tightened.

ENGINE EXHAUST SYSTEM: Mufflers, exhaust pipes etc. All joints tight. No leaks in the system.

ELECTRICAL: Loose, weathered, cracked or broken wires replaced to safeguard against breakdown on the road or possible shorts.

PIPES, HOSES: Leakage, air, water or hydraulic lines. Check pipes and hose routing. They should not be pushed over against hot exhaust pipes or near the exhaust. Replace cracked, weathered or deteriorated hoses.

LINKAGES: Transmission and brake rods, clevis pins and lock pins should be in good repair and secure. Control linkages properly adjusted.

BRAKES AND BRAKE LININGS: Brake linkages, controls and the condition of brake linings should be part of the periodic inspections.

Have your vehicle's brake system inspected at least once each year. Where vehicles are used in severe service or in considerable stop and go service, more frequent inspections should be scheduled.

RUBBER PARTS: Rubber is subject to deterioration wherever it is used. Brake cylinder parts, both air and hydraulic, should be considered for periodic replacement based upon the severity and length of service. Usually careful inspection by experienced mechanics will disclose the need for attention. Some parts, such as air brake chamber diaphragm, should be inspected once a year or every 50,000 miles and replaced if considered unserviceable for further use.

STEERING: Check tie-rod and drag-link and clamp bolts. They must be tight. Ask your service mechanic to examine the steering mechanism.

Minor adjustments could head off future problems.

WHEELS, RIMS, TIRES: Check condition of and tighten wheel and rim mounting bolts and nuts. Examine condition of tires. Cut or broken tire casings should be replaced. Keep tires inflated properly.

A good general vehicle check by an experienced serviceman will give you assurance that your vehicle is still in a safe condition, ready to work for you.

VEHICLE CERTIFICATION LABEL

A Vehicle Certification Label is affixed to all vehicles in addition to the serial or warranty plate. This label certifies that the vehicle conforms to all applicable Federal Motor Vehicle Safety Standards in effect at the date of manufacture. Do not remove or deface this label. The label contains the Certified Gross Vehicle Weight Rating (GVWR) and Gross Axle Weight Rating (GAWR). The GVWR means the maximum design weight of the vehicle including the vehicle itself and everything that is loaded into or onto the single vehicle. The GAWR is the maximum weight that any one axle can carry. Note that the sum of the axle GAWR's may be greater than the GVWR, so that it is not necessarily proper to load both axles at the same time to the maximum capacity shown for each. The maximum GVWR should never be exceeded.

The GAWR is the maximum weight measured at the ground permissible on that axle system. These ratings are developed on the basis of the minimum component capability, be it axles, springs or tires.

For assistance in understanding your vehicle weight carrying capability, consult your local International Harvester dealer or branch.

SPECIFICATIONS

ENGINE	NTC-290
Cylinders	6
Bore & Stroke	5-1/2 x 6 Inches
Piston Displacement (Cu. In.)	855
Horsepower	290 @ 2100 RPM
Firing Order	1-5-3-6-2-4
ELECTRICAL	
Electrical System, 12 Volt	Negative Ground

TO THE OPERATOR

The purpose of this manual is to familiarize you with the controls of your vehicle and to provide sufficient information to enable you to perform minor routine services necessary for continued efficient operation. To protect your equipment, study this manual before you start to operate the vehicle.

When you need parts, always give the unit code number, vehicle model and chassis serial number, and the serial number of the unit for which the parts are required. We suggest that you write these serial numbers in the spaces provided so that you have them at hand when parts are required. Request the salesman to assist you in obtaining these serial numbers when the vehicle is delivered to you.

If you need major information not given in this manual, or if you require services of a trained serviceman, we urge you to use the extensive facilities offered by IH dealers and branches in your locality. IH dealers and branches keep abreast of the best methods of servicing IH equipment, and have up-to-date facilities for providing prompt, first-class service. They carry ample stocks of essential International service parts.

NOTE: For Cummins Engines refer to their Engine Operator's Manual for detailed Diesel Engine information.

VEHICLE MODEL

(Stamped on plate cab door inner panel, left side.)

CHASSIS SERIAL NUMBER

(Stamped on frame left side rail, front)

ENGINE SERIAL NUMBER

(Cummins engines stamped on plate, left side of gear case, front of engine.)

TRANSMISSION NUMBER

(From specification cards.)

FRONT AXLE NUMBER

(From specification card)

REAR AXLE NUMBER

(From specification card.)

OPERATION

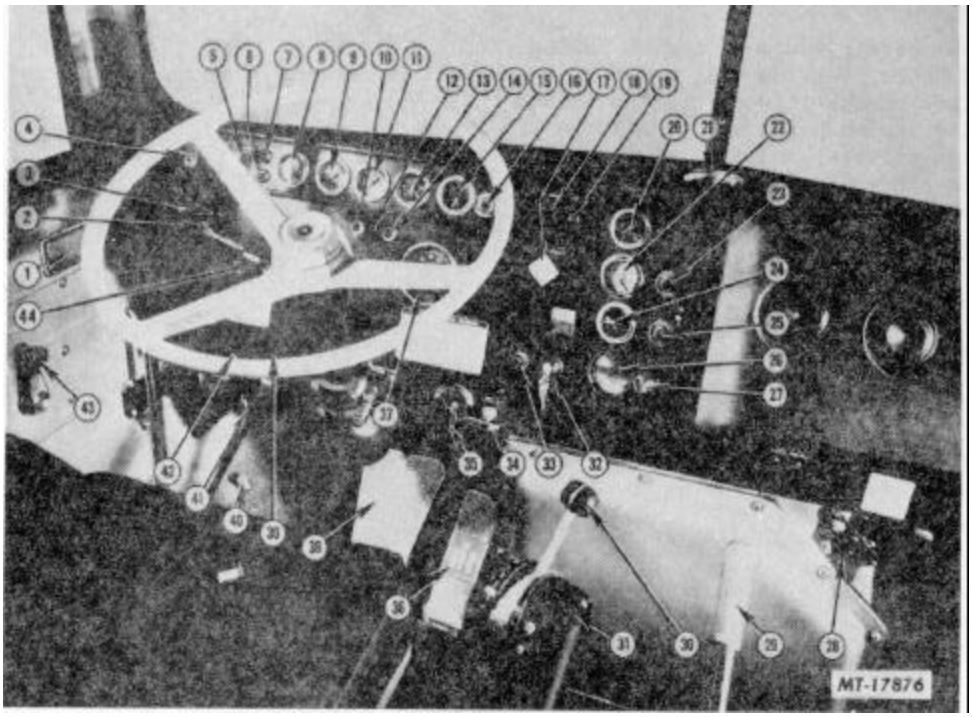
BREAK-IN DIESEL ENGINE (Except IH Diesel Engines)

The way you operate your new engine during the first 100 hours' service will have an important effect on the life of the engine and its parts. Its moving parts are closely fitted for long service, and even though all diesel engines are run on a dynamometer for several hours before they leave the factory, an additional period may be required before uniform oil films are established between all mating parts.

During the first 100 hours' service:

1. Operate most of the time at one-half to three-quarters throttle. Do not operate at maximum horsepower for more than five minutes at a time.
2. Do not idle the engine for long periods.
3. Keep a close watch on your instruments. Back off on throttle if water temperature exceeds 190 degree F.
4. Drive in a gear low enough so that you can accelerate under any condition to prevent lugging your engine. DO NOT LUG THE ENGINE AT ANY TIME.

"During this break-in period, avoid full throttle starts and, if possible, abrupt stops. Gentle braking during the first hundred miles of operation will result in longer brake life and better future performance. Avoid hard stops especially during the first 250 miles of operation, since brake misuse during this period could sharply reduce future brake efficiency."



1. Door Control
2. Turn Indicator Control
3. Power Divider Lock Control
4. Exhaust Brake Switch
5. Glow Plug Switch
6. Oil-Water Temperature Indicator Light
7. Glow Plug Indicator Light
8. Battery-Generating System Indicator Gauge
9. Water Temperature Gauge
10. Left Turn Indicator Light
11. Oil Pressure Gauge, Engine
12. Headlight High Beam Indicator Light
13. Air Pressure Gauge
14. Right Turn Indicator Light
15. Fuel Level Gauge
16. Low Air Pressure Light
17. Parking Brake Control
18. Dome and Panel Lights
19. Headlights
20. Fuel Pressure Gauge
21. Ash Receptacle
22. Transmission Oil Pressure Gauge
23. Transmission Oil Pressure Indicator Light
24. Transmission Oil Temperature Gauge
25. Transmission Oil Temperature Indicator Light
26. Air Cleaner Restriction Gauge
27. Cigarette Lighter
28. Circuit Breaker Switch-Start-Run
29. Dump Body Control
30. Automatic Transmission Control
31. Auxiliary Transmission Control
32. Starting Switch Key
33. Starting Button
34. Throttle Control
35. Emergency Brake Release
36. Accelerator Pedal
37. Speedometer and Odometer
38. Brake Pedal
39. Front Wheel Brake Limiting Valve
40. Headlight Beam Selector
41. Power Take Off Control
42. Fuel Primer Pump
43. Window Regulator
44. Tachometer (Behind Turn Signal Control)