

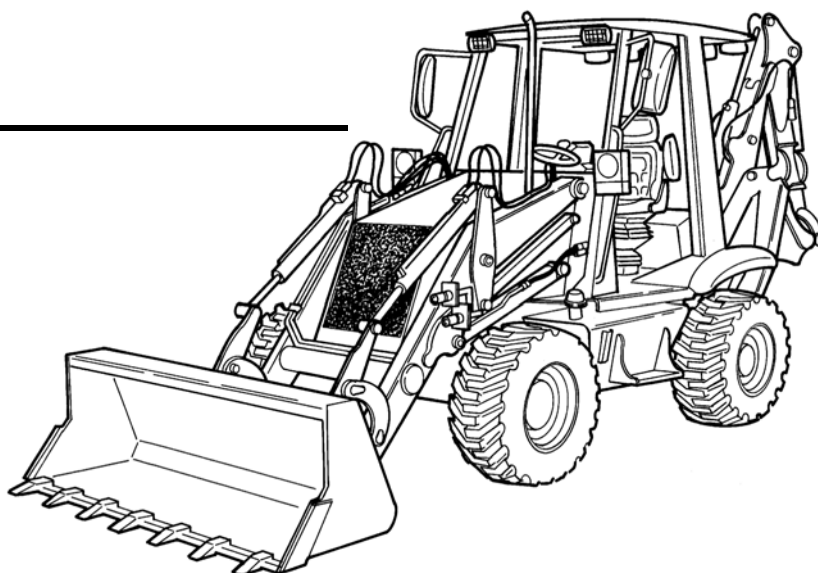
BL-370

B Series



Service Manual

S/N 573211001 & Above



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ALPHABETICAL INDEX

AIR CLEANER	70-01	HYDRAULIC FILTER	20-01
AIR CLEANER SERVICE	10-01	HYDRAULIC FILTER HOUSING	20-01
ALTERNATOR	60-01	HYDRAULIC FLUID RESERVOIR	20-01
ALTERNATOR BELT	10-01	HYDRAULIC SYSTEM INFORMATION	20-01
APPROVED LIFT ARM SUPPORT DEVICE	10-01	HYDRAULIC/HYDROSTATIC FLUID SPECIFICATIONS	SPEC-01
ARM CYLINDER	20-01	HYDRAULIC/HYDROSTATIC SYSTEM	10-01
ARM	50-01	HYDROSTATIC DRIVE MOTOR	30-01
AXLES (FRONT AND REAR)	10-01	HYDROSTATIC PUMP	30-01
AXLE TOE-IN	10-01	HYDROSTATIC SYSTEM INFORMATION	30-01
BACKHOE CONTROL VALVE	20-01	HYDROSTATIC PUMP TESTING	30-01
BACKHOE LOADER TORQUE	SPEC-01	INSTRUMENT PANEL	60-01
BATTERY	60-01	LIFT ARMS	50-01
BOB-TACH	50-01	LIFT ARM STABILIZER	50-01
BOB-TACH HAND LEVER	10-01	LIFT CYLINDER	20-01
BOOM	50-01	LIFTING AND BLOCKING THE BACKHOE LOADER	10-01
BOOM CYLINDER	20-01	LOADER CONTROL VALVE	20-01
BOOM LOCK PIN	10-01	LOADER SPECIFICATIONS	SPEC-01
BRAKE PEDAL ASSEMBLY	40-01	LUBRICATING THE BACKHOE LOADER	10-01
BUCKET	50-01	MAIN RELIEF VALVE	20-01
BUCKET CYLINDER	20-01	MASTER CYLINDER	20-01
CAB LIGHTS	60-01	MUFFLER	70-01
CENTER FLOOR PANEL	50-01	OPERATOR CANOPY	50-01
CONVERSIONS	SPEC-01	OPERATOR SEAT	50-01
DRIVE COUPLER	70-01	PARKING BRAKE HOUSING	40-01
DRIVESHAFT	40-01	PORT RELIEF VALVE (BACKHOE CONTROL VALVE)	20-01
DROP BOX	40-01	PORT RELIEF VALVE (LOADER CONTROL VALVE)	20-01
ELECTRICAL SYSTEM INFORMATION	60-01	OIL COOLER/RADIATOR	30-01, 70-01
ENCLOSED CAB	50-01	REAR AXLE	40-01
ENGINE	70-01	RECONDITIONING THE ENGINE	70-01
ENGINE COMPONENTS AND TESTING	70-01	SERVICE BRAKE	40-01
ENGINE COOLING SYSTEM	10-01	SERVICE SCHEDULE	10-01
ENGINE COVER	10-01, 50-01	STABILIZER	50-01
ENGINE LUBRICATION SYSTEM	10-01	STABILIZER CYLINDER	20-01
ENGINE SIDE COVERS	50-01	STEERING CYLINDER (FRONT & REAR)	20-01
ENGINE SPECIFICATIONS	SPEC-01	STEERING PUMP	20-01
ENGINE SPEED CONTROL	70-01	STEERING VALVE	20-01
FENDER	50-01	STARTER	60-01
FLOOR PANELS	50-01	SWING CYLINDER	20-01
FLYWHEEL	70-01	SWING FRAME	50-01
FLYWHEEL HOUSING	70-01		
FRONT AXLE	40-01		
FRONT LIGHTS	60-01		
FUEL LEVEL SENDER	60-01		
FUEL SYSTEM	10-01		
FUEL TANK	50-01		
GEAR PUMP	20-01		
GRILL	50-01		
GRILL FRAME	50-01		

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Want to get more information,
Please click here, Then get the complete
manual**

JustClickHere 

NOTE:

**If there is no response to click on the link above,
please download the PDF document first, and then
click on it.**

**Have any questions please write to me:
admin@servicemanualperfect.com**

ALPHABETICAL INDEX (CONT'D)

TILT CYLINDER	20-01
TIRE MAINTENANCE	10-01
TORQUE SPECIFICATIONS FOR BOLTS.....	SPEC-01
TOWING THE LOADER BACKHOE	10-01
TRANSPORTING THE LOADER BACKHOE.....	10-01
TRAVEL PEDAL	70-01
TROUBLESHOOTING.....	40-01, 70-01
TURBO	70-01
TURN INDICATOR LIGHTS (FRONT).....	60-01
TURN INDICATOR LIGHTS (REAR).....	60-01
X-CHANGE™	50-01

MAINTENANCE SAFETY



WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0199

! Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



CORRECT

B-10731a

! Never service the Ingersoll-Rand Loader Backhoe without instructions.



CORRECT

B-16842

! Always use an approved lift arm support device when servicing the loader backhoe with the lift arm raised. Replace the lift arm support device if damaged or missing.
! Disconnecting or loosening any hydraulic tubeline, hoe, fitting component, or part failure can cause lift arms or backhoe boom to drop.



CORRECT

B-16865

! Cleaning and maintenance are required daily.
! NEVER modify equipment or add attachments not approved by Ingersoll-Rand



WRONG

B-16815

! Have good ventilation when welding or grinding painted parts.
! Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.



WRONG

B-16881

! Vent exhaust to outside when engine must be run for service.
! Exhaust system must be tightly sealed. Exhaust fumes can kill without warning.



WRONG

B-16826

! Never work on loader backhoe with lift arms raised unless supported by an approved lift arm support device.
! Always lower the backhoe bucket to the ground before doing any maintenance.



WRONG

B-16885

! Stop, cool and clean engine of flammable materials before checking fluids.
! Never service or adjust machine with the engine running unless instructed to do so in the manual.
! Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate the skin or eyes.
! Never fill fuel tank with engine running, while smoking or when near open flame.



WRONG

B-16814

! Keep body, jewelry and clothing away from moving parts, electrical contact, hot parts and exhaust.
! Wear eye protection to guard from battery acid, compressed springs, fluids under pressure and flying debris when engines are running or tools are used. Use eye protection approved for type of welding.
! Keep engine cover closed except for service. Close and latch engine cover before operating the loader backhoe



WRONG

B-6589

! Lead-acid batteries produce flammable and explosive gases.
! Keep arcs, sparks, flames and lighted tobacco away from batteries.
! Batteries contain acid which burns eyes or skin on contact. Wear protective clothing. If acid contacts body, flush well with water. For eye contact flush well and get immediate medical attention.

Maintenance procedures which are given in the Operation & Maintenance Manual can be performed by the owner/operator without any specific technical training. Maintenance procedures which are **not** in the Operation & Maintenance Manual must be performed **ONLY BY QUALIFIED Ingersoll-Rand SERVICE PERSONNEL**. Always use genuine Ingersoll-Rand replacement parts.

MSW18-0602

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CONTENTS

FOREWORD	II
SAFETY INSTRUCTIONS	V
SERIAL NUMBER LOCATION	VIII
DELIVERY REPORT	VIII
BACKHOE LOADER IDENTIFICATION	IX
SAFETY AND MAINTENANCE	10-01
HYDRAULIC SYSTEM	20-01
HYDROSTATIC SYSTEM	30-01
DRIVE SYSTEM	40-01
MAIN FRAME	50-01
ELECTRICAL SYSTEM AND ANALYSIS	60-01
ENGINE SERVICE	70-01
SPECIFICATIONS	SPEC-01

**SAFETY &
MAINTENANCE**

**HYDRAULIC
SYSTEM**

**HYDROSTATIC
SYSTEM**

**DRIVE
SYSTEM**

MAIN FRAME

**ELECTRICAL
SYSTEM &
ANALYSIS**

**ENGINE
SERVICE**

SPECIFICATIONS

FOREWORD

This manual is for the Ingersoll-Rand loader mechanic. It provides necessary servicing and adjustment procedures for the Ingersoll-Rand loader and its component parts and systems. Refer to the Operation & Maintenance Manual for operating instructions, Starting procedure, daily checks, etc.

A general inspection of the following items must be made after the loader has had service or repair:

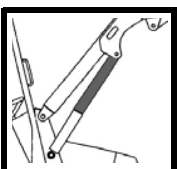
1. Check that ROPS mounting hardware is tightened and is Ingersoll-Rand approved.



2. The seat belt must be correctly installed, functional and in good condition.



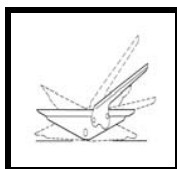
3. Check lift arm support device, replace if damaged.



4. Machine signs must be legible and in the correct location.



5. Foot pedal must return to neutral.



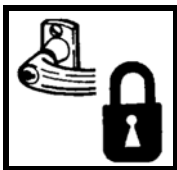
6. Check for correct function of the work lights



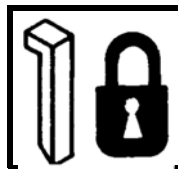
7. The parking brake must function correctly.



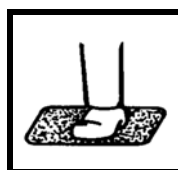
8. Enclosure door latches must open and close freely.



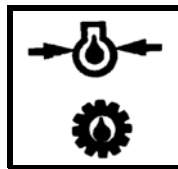
9. Bob-Tach wedges and linkages must function correctly and be in good condition.



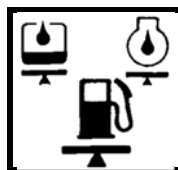
10. Safety treads must be in good condition.



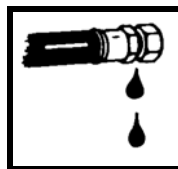
11. Check for correct function of indicator lamps (Optional on some models.



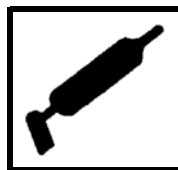
12. Check hydraulic fluid level, engine oil level and fuel supply.



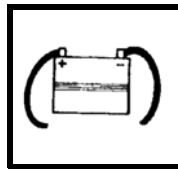
13. Inspect for fuel, oil or hydraulic fluid leaks.



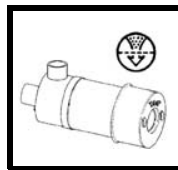
14. Lubricate the backhoe loader.



15. Check the condition of the battery and cables.

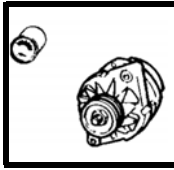


16. Inspect the air cleaner for damage or leaks. Check the condition of the element.



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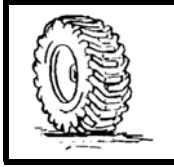
17. Check the electrical charging system.



20. Operate the loader and check all functions.



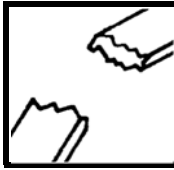
18. Check tires for wear and pressure.



21. Check for any field modification not completed.



19. Inspect for loosen or broken parts or connections.



22. Recommend to the owner that all necessary corrections be made before the machine is returned to service.



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**CALIFORNIA
PROPOSITION 65 WARNING**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.



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SAFETY INSTRUCTIONS

Before Operation

Carefully follow the operating and maintenance instructions in this manual.

The Ingersoll-Rand Backhoe Loader is highly maneuverable and compact. It is rugged and useful under a variety of conditions. This presents an operator with hazards associated with off highway, rough terrain applications, common with Backhoe Loader usage.

The Ingersoll-Rand Backhoe Loader has an internal combustion engine with resultant heat and exhaust. All exhaust gasses can kill or cause illness so use the Backhoe Loader with adequate ventilation.

The dealer explains the capabilities and restrictions of the Ingersoll-Rand Backhoe Loader and attachments for each application. The dealer demonstrates the safe operation according to Ingersoll-Rand instructional materials, which are also available to operators. The dealer can also identify unsafe modifications or use of unapproved attachments. The attachments and buckets are designed for a Rated Operating Capacity (some have restricted lift heights) or Rated Lift Capacity. They are designed for secure fastening to the Ingersoll-Rand Backhoe Loader. The user must check with the dealer, or Ingersoll-Rand literature, to determine safe loads of materials of specified densities for the machine - attachment combination.

The following publications and training materials provide information on the safe use and maintenance of the Ingersoll-Rand machine and attachments:

- The Delivery Report is used to assure that complete instructions have been given to the new owner and that the machine and attachment is in safe operating condition.
- The Operation & Maintenance Manual delivered with the machine or attachment gives operating information as well as routine maintenance and service procedures. It is a part of the machine and can be stored in a container provided on the machine. Replacement Operation & Maintenance Manuals can be ordered from your Ingersoll-Rand dealer.
- Machine signs (decals) instruct on the safe operation and care of your Ingersoll-Rand machine or attachment. The signs and their locations are shown in the Operation & Maintenance Manual. Replacement signs are available from your Ingersoll-Rand dealer.

- An Operator's Handbook is fastened to the operator cab of the Backhoe Loader. It's brief instructions are convenient to the operator. The Handbook is available from your dealer in an English edition or one of many other languages. See your Ingersoll-Rand dealer for more information on translated versions.
- The AEM Backhoe Loader Safety Manual delivered with the machine gives general safety information.
- The Loader Backhoe Operating Training Course is available through your Ingersoll-Rand dealer. This course is intended to provide rules and practices of correct operation of the Ingersoll-Rand Loader Backhoe. The course is available in English and Spanish versions.
- See the ADDITIONAL PUBLICATIONS Page in this manual or your Ingersoll-Rand dealer for Service and Parts Manuals, printed materials, videos, or training courses available.

The dealer and owner/operator review the recommended uses of the product when delivered. If the owner/operator will be using the machine for a different application(s) he or she must ask the dealer for recommendations on the new use.



Call Before You Dig
1-888-258-0808

When you call, you will be directed to a location in your state/city for information about buried lines (telephone, cable TV, water, sewer, gas, etc.)

SI IRBL-T2-0604

BL-370 Backhoe Loader
Service Manual

SAFETY INSTRUCTIONS (CONT'D)

Safe Operation Is The Operator's Responsibility



Operator must have instructions before running the machine. Untrained operators can cause injury or death.

W-2001-1285



This notice identifies procedures which must be followed to avoid damage to the machine.

I-2019-0284



Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause injury or death.

W-2044-1285

The Ingersoll-Rand Backhoe Loader and attachment must be in good operating condition before use.

Check all of the items on the Service Schedule Decal under the 8-10 hour column or as shown in the Operation & Maintenance Manual.

Safe Operation Needs A Qualified Operator

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine.

A Qualified Operator Must Do The Following:

Understand the Written Instructions, Rules and Regulations

- The written instructions from Ingersoll-Rand include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, Safety Manual and machine signs (decals).
- Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

Have Training with Actual Operation

- Operator training must consist of a demonstration and verbal instruction. This training is given by your Ingersoll-Rand dealer before the product is delivered.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.
- Operator Training Courses are available from your Ingersoll-Rand dealer in English and Spanish. They provide information for safe and efficient equipment operation. Safety videos are also available.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the Rated Operating Capacity (R.O.C.) of the loader or the Rated Lift Capacity of the backhoe. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of load if handling dense material.
- The operator must know any prohibited uses or work areas, for example, he or she needs to know about excessive slopes.
- Know the location of any underground lines. Call local utilities or the TOLL FREE phone number found in the **Before Operation** Section of this manual.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses or hearing protection are required for some work. See your Ingersoll-Rand dealer about available Safety Equipment.

SI IRBL-T2-0604

**BL-370 Backhoe Loader
Service Manual**

SAFETY INSTRUCTIONS (CONT'D)

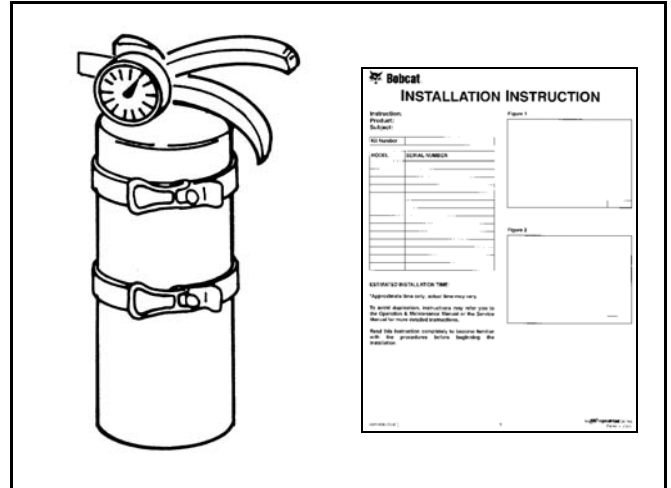
Fire Prevention

The machines and some attachments have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.

Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential fire hazard.

- Do not use the machine where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases.
- The operator cab, engine compartment and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.
- Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part.
- Check fuel and hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Tighten or replace any parts that show leakage. Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.
- Do not use ether or starting fluids on any engine that has glow plugs. These starting aids can cause explosion and injure you or bystanders.
- Always clean the machine and disconnect the battery before welding. Cover rubber hoses, battery and all other flammable parts. Keep a fire extinguisher near the machine when welding. Have good ventilation when grinding or welding painted parts. Wear dust mask when grinding painted parts. Toxic dust or gas can be produced.
- Stop the engine and let it cool before adding fuel. No smoking!
- Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting.

Figure 1



- Know where fire extinguishers and first aid kits are located and how to use them. Fire extinguishers are available from your Ingersoll-Rand dealer [Figure 1].

NOTE: The engine in this machine is factory equipped with a spark arrestor exhaust system. It is a violation of California Public Resource Code Section 4442 to use or operate this engine on or near any forest-covered, brush-covered or grass-covered land unless the exhaust system is equipped with a spark arrestor meeting any applicable spark arrestor standards. All spark arrestors must be properly maintained.

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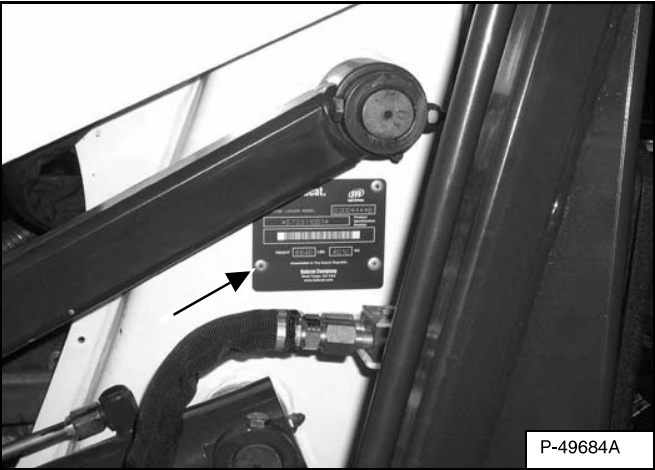
BL-370 Backhoe Loader
Service Manual

SERIAL NUMBER LOCATION

Always use the serial number of the backhoe loader when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation.

Backhoe Loader Serial Number

Figure 1



The backhoe loader serial number plate is located under the loader lift arm on the left side [Figure 1].

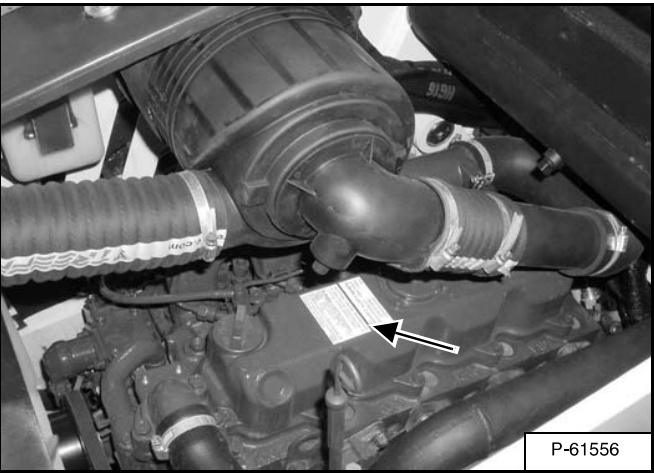
Explanation of loader Serial Number:

XXXX	XXXXX
Model 1.-Model/ Engine Combination	Model 2.-Production Sequence (Series)

- 1. The four digit Model/Engine Combination Module number identifies the model number and engine combination.
- 2. The five digit Production Sequence Number identifies the order which the loader is produced.

Engine Serial Number

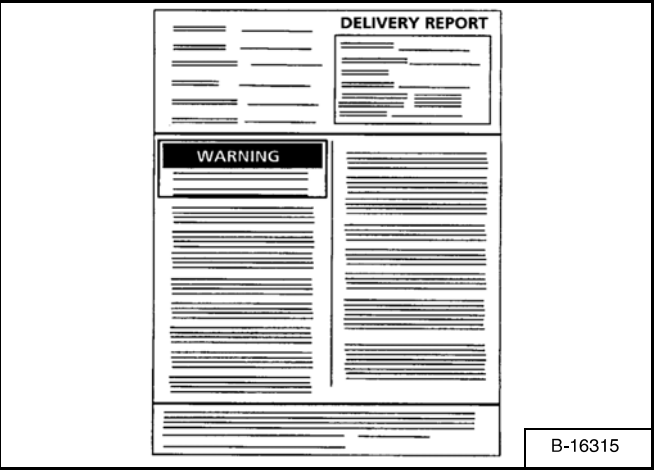
Figure 2



The engine serial number is located on the valve cover at the front of the engine [Figure 2].

DELIVERY REPORT

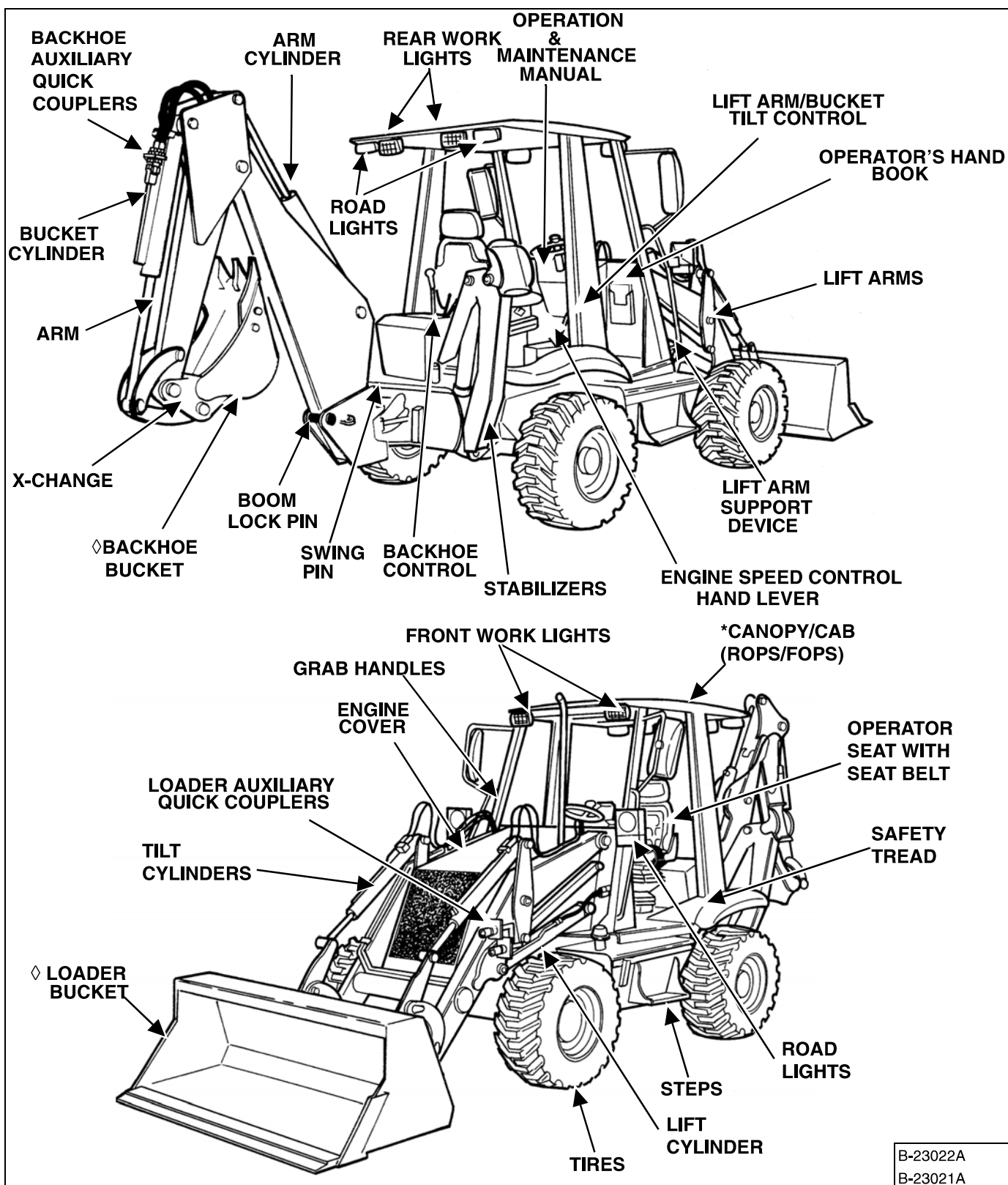
Figure 3



The Delivery Report must be filled out by the dealer and signed by the owner or operator when the Ingersoll-Rand backhoe loader is delivered. An explanation of the form must be given to the owner. Make sure it is filled out completely [Figure 3].

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BACKHOE LOADER IDENTIFICATION



◇ BUCKET - Several different buckets and other attachments are available for the Ingersoll-Rand backhoe loader.

* Roll Over Protective Structure (ROPS) per ISO 3471 and Falling Object Protective Structure (FOPS) per ISO 3449, Level I and Level II.

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SAFETY AND MAINTENANCE

AIR CLEANER SERVICE 10-80-1

 Replacing The Filter..... 10-80-1

ALTERNATOR BELT 10-160-1

 Adjusting The Alternator Belt..... 10-160-1

APPROVED LIFT ARM SUPPORT DEVICE 10-20-1

 Installing The Approved Lift Arm Support Device 10-20-1

 Removing The Approved Lift Arm Support Device 10-20-2

AXLES (FRONT AND REAR) 10-130-1

 Checking Oil Level (Front Axle)..... 10-130-2

 Checking Oil Level (Planetary Carrier) 10-130-1

 Checking Oil Level (Rear Axle) 10-130-2

 Draining Oil (Front Axle) 10-130-2

 Draining Oil (Planetary Carrier) 10-130-1

 Draining Oil (Rear Axle)..... 10-130-2

AXLE TOE-IN 10-60-1

 Procedure 10-60-1

BOB-TACH HAND LEVER 10-150-1

 Inspection And Maintenance 10-150-1

BOOM LOCK PIN 10-140-1

 Engaging And Disengaging The Pin 10-140-1

ENGINE COOLING SYSTEM..... 10-90-1

 Checking Coolant Level..... 10-90-1

 Cleaning The Cooling System 10-90-1

 Coolant Replacement 10-90-1

ENGINE COVER..... 10-30-1

ENGINE LUBRICATION SYSTEM 10-110-1

 Checking Engine Oil 10-110-1

 Oil Chart..... 10-110-1

 Replacing The Oil And Filter 10-110-2

FUEL SYSTEM 10-100-1

 Filling The Fuel Tank 10-100-1

 Fuel Filter..... 10-100-1

 Fuel Specifications..... 10-100-1

 Removing Air From The Fuel System 10-100-3

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SAFETY AND MAINTENANCE (CONT'D)

HYDRAULIC/HYDROSTATIC SYSTEM	10-120-1
Checking And Adding Fluid	10-120-1
Cleaning The Oil Cooler/Radiator	10-120-2
Replacing Hydraulic Fluid	10-120-3
Replacing Hydraulic/Hydrostatic Filter	10-120-2
LIFTING AND BLOCKING THE BACKHOE LOADER	10-10-1
Procedure	10-10-1
LUBRICATING THE BACKHOE LOADER	10-170-1
SERVICE SCHEDULE	10-70-1
Chart	10-70-1
TIRE MAINTENANCE	10-180-1
Mounting	10-180-1
Tire Pressure	10-180-1
Wheel Nuts	10-180-1
TOWING THE BACKHOE LOADER	10-50-1
Procedure	10-50-1
TRANSPORTING THE BACKHOE LOADER	10-40-1
Procedure	10-40-1