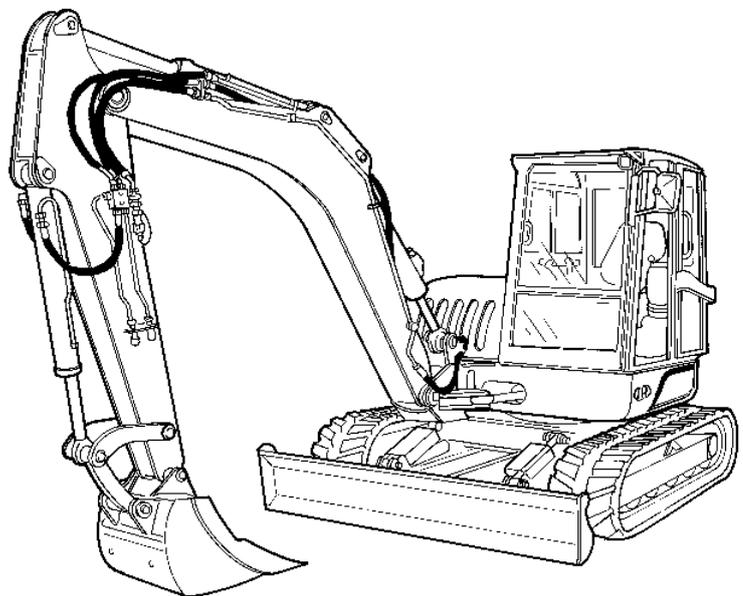


ZX 75

IR *Ingersoll Rand*
Utility Equipment

Service Manual



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CONTENTS

FOREWORD.....	III
SAFETY INSTRUCTIONS	V
DELIVERY REPORT.....	X
SERIAL NUMBER LOCATIONS	IX
INGERSOLL RAND EXCAVATOR IDENTIFICATION	XI
SAFETY AND MAINTENANCE.....	10-01
HYDRAULIC SYSTEM	20-01
UNDERCARRIAGE.....	30-01
UPPERSTRUCTURE & SWING SECTION	40-01
ELECTRICAL SYSTEM AND ANALYSIS	50-01
ENGINE SERVICE	60-01
HEATING, VENTILATION, AIR CONDITIONING	70-01
SPECIFICATIONS.....	SPEC-01

**SAFETY &
MAINTENANCE**

**HYDRAULIC
SYSTEM**

**UNDER-
CARRIAGE**

**UPPER-
STRUCTURE &
SWING SECTION**

**ELECTRICAL
SYSTEM AND
ANALYSIS**

**ENGINE
SERVICE**

HVAC

SPECIFICATIONS

**Thanks very much for your reading,
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**



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FOREWORD

This manual is for the Ingersoll Rand Hydraulic Excavator mechanic. It provides necessary servicing and adjustment procedures for the hydraulic excavator 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 hydraulic excavator has had service or repair:

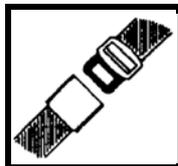
1. Check that the R OPS/TOPS/FOPS is in good condition and is NOT modified.



2. Check that R OPS mounting hardware is tightened and is Ingersoll Rand approved.



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



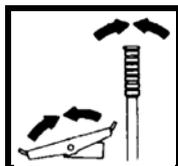
4. Inspect for loose or broken parts or connections.



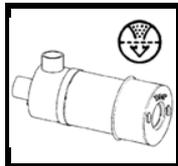
5. Machine signs must be legible and in the correct location.



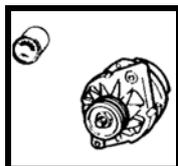
6. Steering levers, control levers and foot pedals must return to neutral. Check that foot pedals lock and control lever locks are in working order.



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



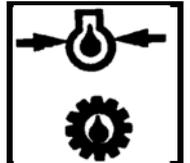
8. Check the electrical charging system.



9. Safety treads must be in good condition.



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



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



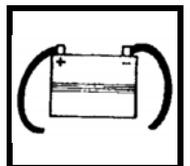
12. Inspect for fuel, oil or hydraulic fluid leaks.



13. Lubricate the excavator.



14. Check the condition of the battery and cables.



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



**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

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

 **WARNING**

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's 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.

 **WARNING**

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

IMPORTANT

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

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

- ï The Delivery Report is used to assure that complete instructions have been given to the new owner and that the machine is in safe operating condition.
- ï The Operation & Maintenance Manual delivered with the machine or attachment contains 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.
- ï 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.
- ï An Operator's Handbook fastened to the operator cab. Its 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.
- ï The AEM Safety Manual delivered with the machine gives general safety information.
- ï The Service Manual and Parts Manual are available from your dealer for use by mechanics to do shop-type service and repair work.

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SAFETY INSTRUCTIONS (CONT'D)

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.)

SAFETY INSTRUCTIONS (CONT'D)

Fire Prevention

The machine and attachments have components that are at high temperature 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.

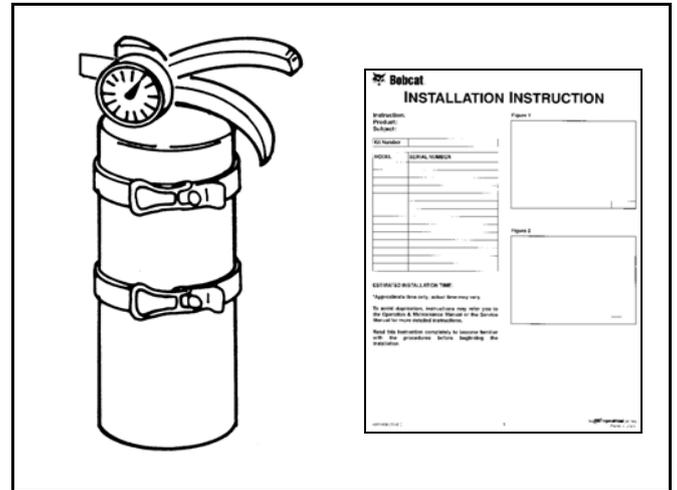
Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it will increase fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential hazard.

The spark arrestor muffler is designed to control the emission of hot particles from the engine and exhaust system, but the muffler and the exhaust gases are still hot.

- i Do not use the machine where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases.
- i The operator cab, engine compartment, and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazard and overheating.
- i Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part.
- i 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.
- i Do not use ether or starting fluids on any engine which has glow plugs. These starting aids can cause explosion and injure you or bystanders.
- i Always clean the machine, disconnect the battery, and disconnect the wiring from the controllers 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 a dust mask when grinding painted parts. Toxic dust or gas can be produced.
- i Stop the engine and let it cool before adding fuel. **NO SMOKING!**

- i Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting.
- i Use the procedure in the Operation & Maintenance Manual for cleaning the spark arrestor muffler (if equipped).

Figure 1



- i 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].

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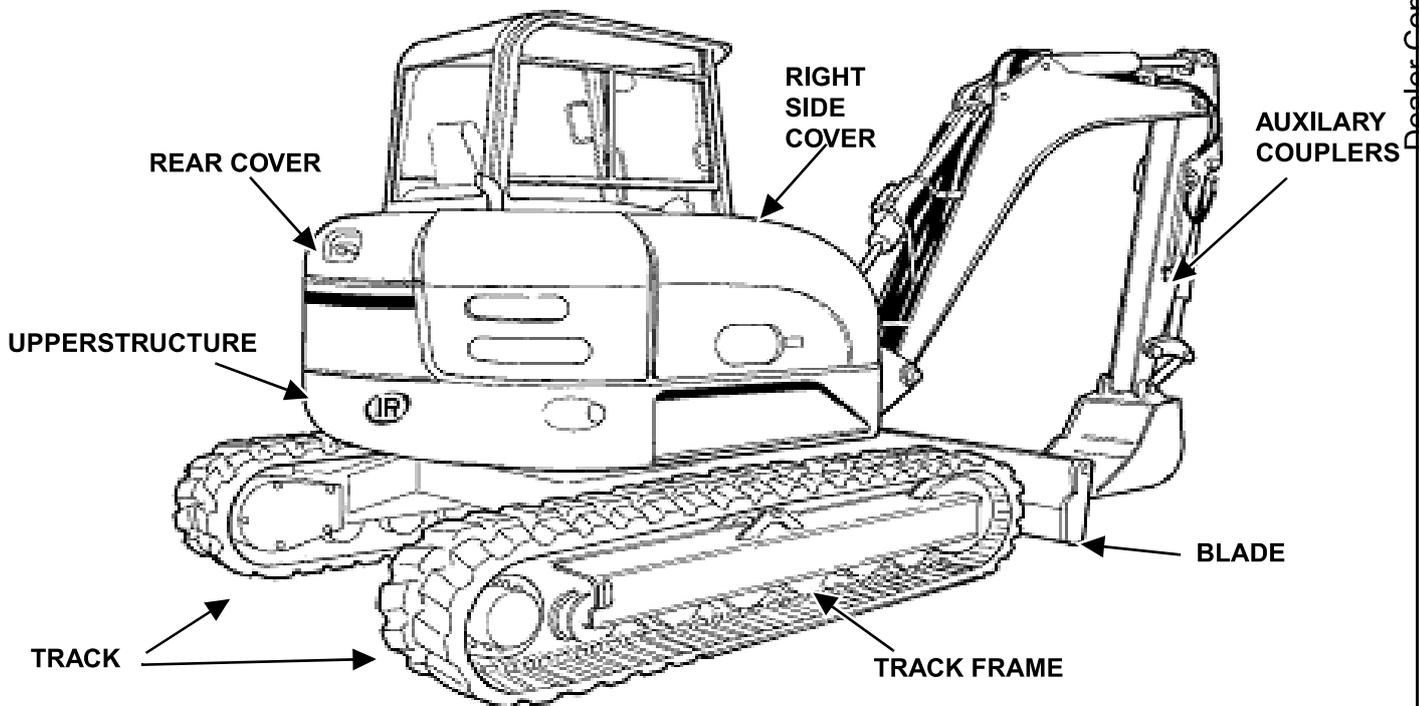
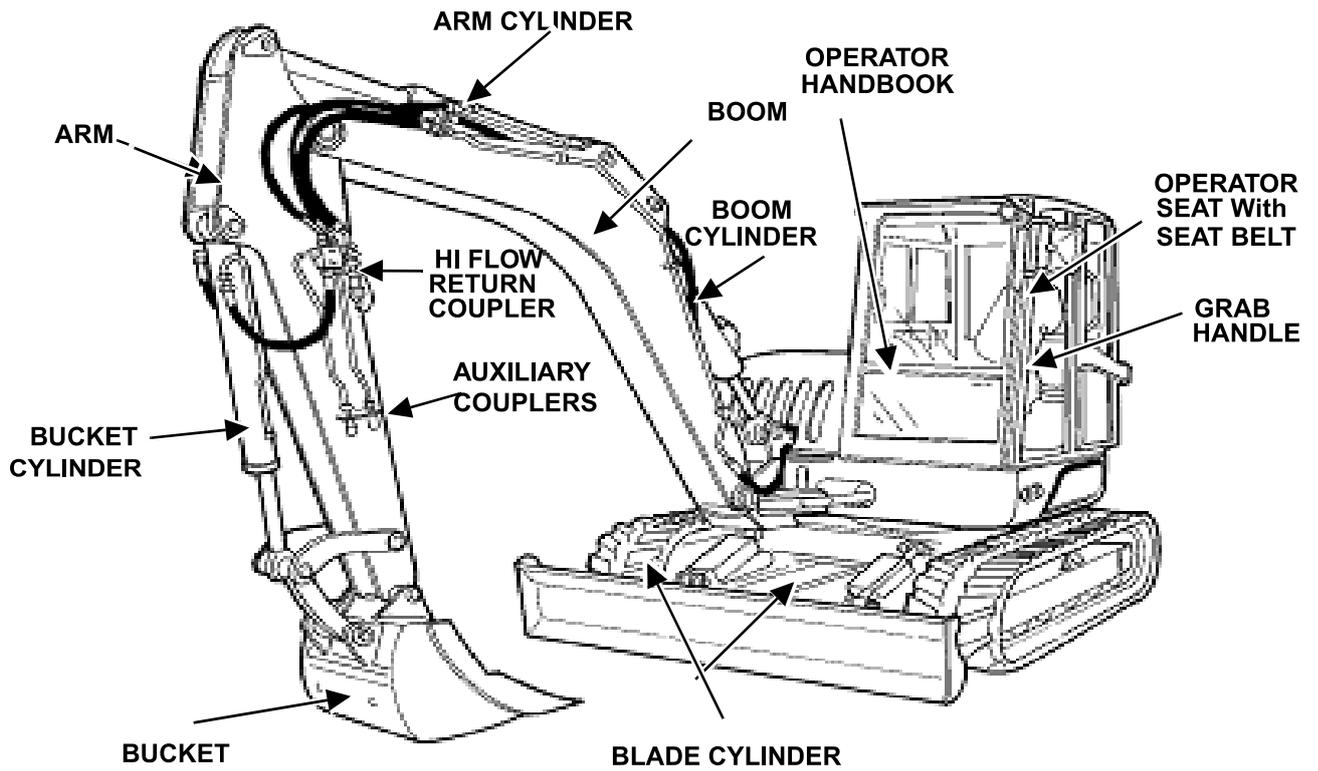
DELIVERY REPORT

Figure 3

The image shows a schematic of a 'DELIVERY REPORT' form. The form is enclosed in a rectangular border. At the top right, the words 'DELIVERY REPORT' are printed in a bold, sans-serif font. Below this title, there are several horizontal lines representing text input fields. A prominent section on the left side is labeled 'WARNING' in a bold, black box. The rest of the form is filled with numerous horizontal lines, indicating a large area for detailed notes or data entry.

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

INGERSOLL RAND EXCAVATOR IDENTIFICATION



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MAINTENANCE SAFETY



WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's 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-2003-0903



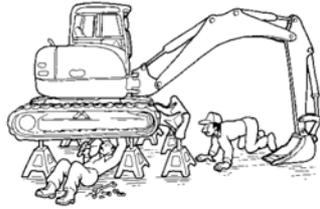
Safety Alert Symbol: This symbol with a warning statement, means: i Warning, be alert! Your safety is involved!i Carefully read the message that follows.

CORRECT



! Never service the Ingersoll Rand Hydraulic Excavator without instructions.

CORRECT



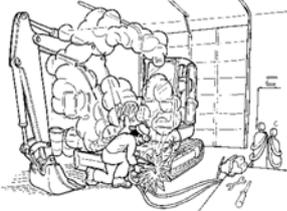
! Use the correct procedure to lift and support the excavator.
! Always lift the blade fully before installing jackstands.

CORRECT



! Cleaning and maintenance are required daily.

WRONG



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

WRONG



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

WRONG



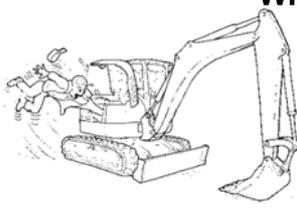
! Always lower the bucket and blade to the ground before doing any maintenance.
! Never modify equipment or add attachments not approved by Ingersoll Rand.

WRONG



! 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



! 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 tailgate closed except for service, Close and latch tailgate before operating the excavator.

WRONG



! 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.

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SPECIFICATIONS

CONVERSIONS	SPEC-80-1
Decimal And Millimeter Equivalents	SPEC-80-1
U.S. To Metric Conversion	SPEC-80-2
EXCAVATOR BOLT TORQUE	SPEC-40-1
Specifications	SPEC-40-1
FUEL, COOLANT AND LUBRICANTS (CONT'D)	SPEC-70-1
Chart	SPEC-70-1
HYDRAULIC EXCAVATOR SPECIFICATIONS	SPEC-10-1
Brakes	SPEC-10-5
Capacities	SPEC-10-6
Controls	SPEC-10-2
Digging Force	SPEC-10-6
Drive System	SPEC-10-5
Electrical	SPEC-10-3
Engine	SPEC-10-3
Hydraulic Cylinders	SPEC-10-4
Hydraulic Cycle Times	SPEC-10-4
Hydraulic System	SPEC-10-3
Machine Dimensions	SPEC-10-1
Performance	SPEC-10-2
Track	SPEC-10-5
Swing System	SPEC-10-4
Undercarriage	SPEC-10-5
HYDRAULIC FLUID SPECIFICATIONS	SPEC-60-1
Specifications	SPEC-60-1
TORQUE SPECIFICATIONS FOR BOLTS	SPEC-50-1
Torque For General Metric Bolts	SPEC-50-1
Torque For General SAE Bolts	SPEC-50-1

SPECIFICATIONS

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