



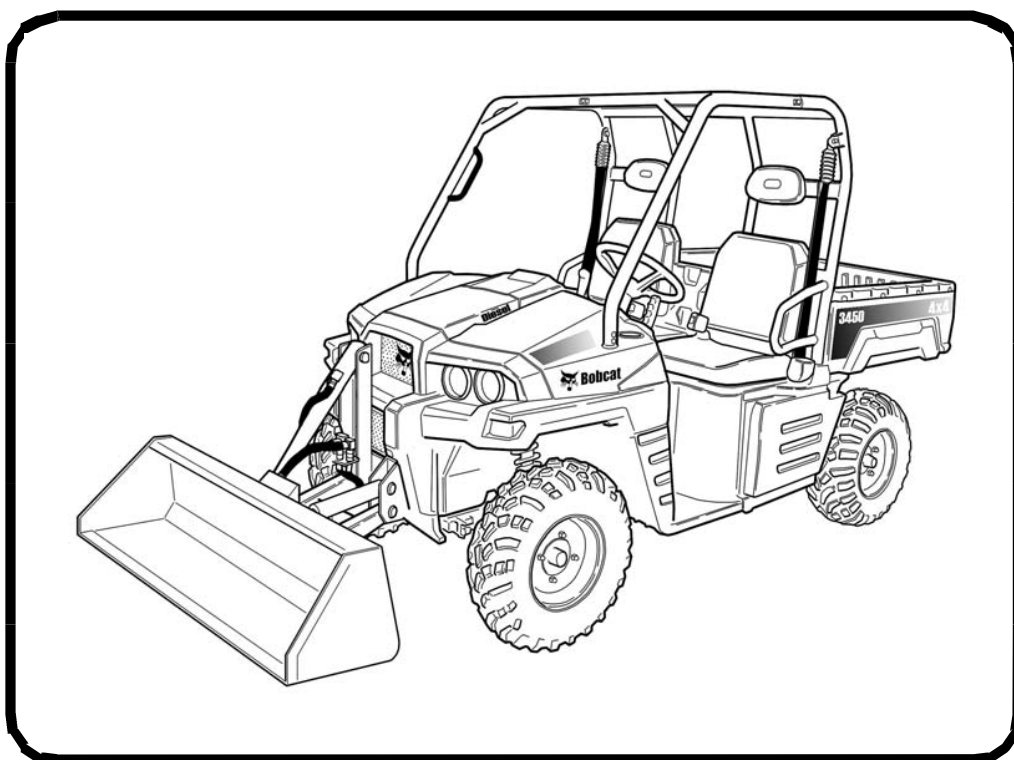
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# Service Manual

## 3450 Utility Vehicle

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S/N AJNY11001 & Above



Dealer Copy -- Not for Resale





# MAINTENANCE SAFETY



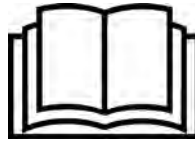
## WARNING

Instructions are necessary before operating or servicing utility vehicle. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on the utility vehicle. 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.



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

### CORRECT



P-90216



Never service the utility vehicle without instructions.

### CORRECT

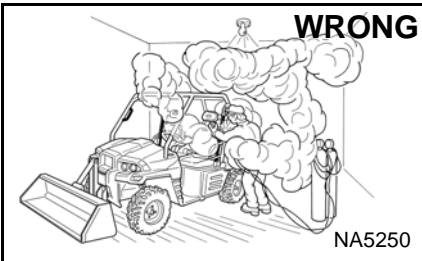


NA5252



Cleaning and maintenance are required daily.

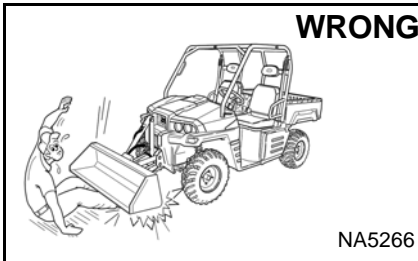
### WRONG



NA5250

- ⚠ Have good ventilation when welding or grinding painted parts.
- ⚠ Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.
- ⚠ Avoid exhaust fume leaks which can kill without warning. Exhaust system must be tightly sealed.

### WRONG

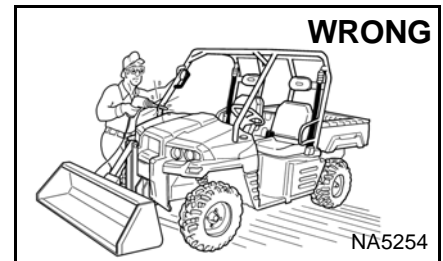


NA5266



Disconnecting or loosening any hydraulic tubeline, hose, fitting, component or a part failure can cause attachment arm to drop.

### WRONG

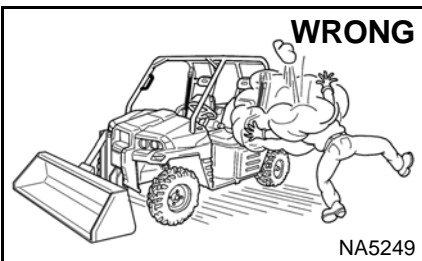


NA5254



Never modify equipment or add attachments and accessories not approved by Bobcat Company.

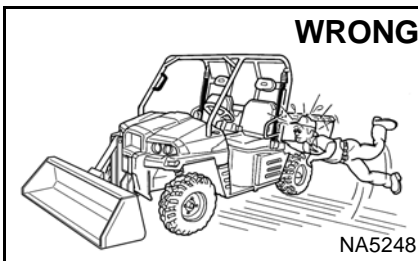
### WRONG



NA5249

- ⚠ Stop, cool and clean engine of flammable materials before checking fluids.
- ⚠ Never service or adjust utility vehicle 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

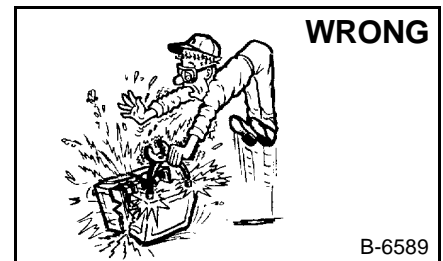


NA5248



- ⚠ 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 access doors closed except for service.

### 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 BOBCAT SERVICE PERSONNEL**. Always use **genuine Bobcat replacement parts**.

MSW42-0610



**Bobcat®**

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## FOREWORD

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**Bobcat®**



# FOREWORD

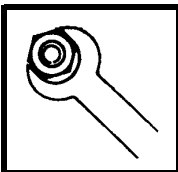
This manual is for the Utility Vehicle mechanic. It provides necessary servicing and adjustment procedures for the Utility Vehicle and its component parts and systems. Refer to the for operating instructions, starting procedure, daily checks, etc.

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

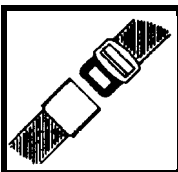
1. Check that the ROPS is in good condition and is not modified.



2. Check that ROPS mounting hardware is tightened and is Bobcat approved.



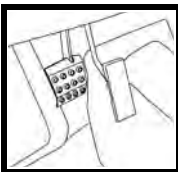
3. The operator and passenger seat belts must be correctly installed, functional and in good condition.



4. Safety signs (decals) must be legible and in the correct location.



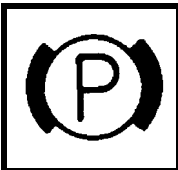
5. Foot pedals must return to neutral.



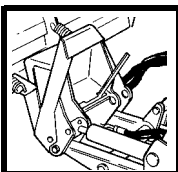
6. Check for correct function of the head lights and tail lights.



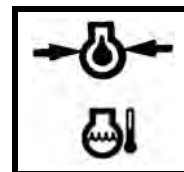
7. The parking brake must function correctly.



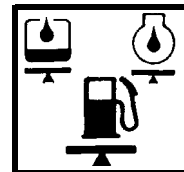
8. RapidLink™ must function correctly and be in good condition (3450 only).



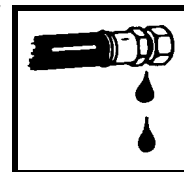
9. Check for correct function of indicator lamps.



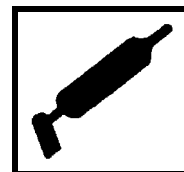
10. Check hydraulic fluid level, engine oil level and fuel supply (3450 only).



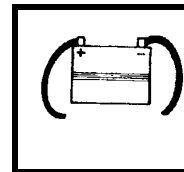
11. Inspect for fluid, oil or hydraulic fluid leaks (3450 only).



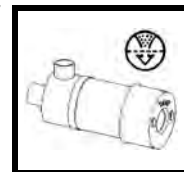
12. Lubricate the machine.



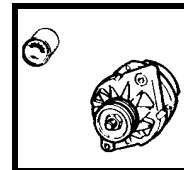
13. Check the condition of the battery and cables.



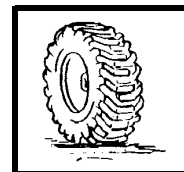
14. Inspect the air cleaner for damage or leaks. Check the condition of the element.



15. Check the electrical charging system.



16. Check tires for wear and pressure. Use only approved tires.



FW UV-0510 SM

17. Inspect for loose or broken parts or connections.



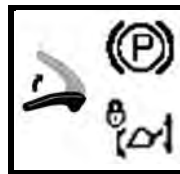
18. Check for any field modification not completed.



19. Operate the vehicle and check all functions.



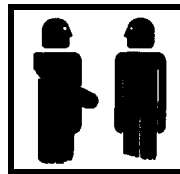
20. Check for correct function of the Start Interlock System before the machine is returned to the customer.



21. Check function or condition of all equipped options and accessories.



22. 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.

## 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

Operator must have instructions before operating the utility vehicle. Untrained operators can cause injury or death.

W-2855-0510

## IMPORTANT

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

I-2317-0510



## DANGER

The signal word DANGER on the utility vehicle and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

D-1022-0510



## WARNING

The signal word WARNING on the utility vehicle and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

W-2856-0510

The following publications provide information on the safe use and maintenance of the Bobcat utility vehicle and attachments:

- The Delivery Report is used to assure that complete instructions have been given to the new owner and that the vehicle is in safe operating condition.
- The Operation & Maintenance Manual delivered with the vehicle or attachment contains operating information as well as routine maintenance and service procedures. It is a part of the vehicle and can be stored in a container provided on the vehicle. Replacement Operation & Maintenance Manuals can be ordered from your Bobcat dealer.
- Safety signs (decals) instruct on the safe operation and care of your Bobcat utility vehicle or attachment. The signs and their locations are shown in the Operation & Maintenance Manual. Replacement signs are available from your Bobcat dealer.
- An Operator's Handbook fastened to the operator cab. 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 Bobcat dealer for more information on translated versions.
- The Service Manual and Parts Manual are available from your dealer for use by mechanics to do shop-type service and repair work.
- The Utility Vehicle Operator Training Course is available through your local dealer or at [www.training.bobcat.com](http://www.training.bobcat.com) or [www.bobcat.com](http://www.bobcat.com). This course is intended to provide rules and practices of correct operation of the Utility Vehicle. The course is available in English and Spanish versions.
- The Utility Vehicle Safety Video is available from your Bobcat dealer or at [www.training.bobcat.com](http://www.training.bobcat.com) or [www.bobcat.com](http://www.bobcat.com).

## 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 utility vehicle for a different application(s) he or she must ask the dealer for recommendations on the new use.



Cutting or drilling concrete containing sand or rock containing quartz may result in exposure to silica dust. Do not exceed Permissible Exposure Limits (PEL) to silica dust as determined by OSHA or other job site Rules and Regulations. Use a respirator, water spray or other means to control dust. Silica dust can cause lung disease and is known to the state of California to cause cancer.

## Call Before You Dig

**Dial 811 (USA Only)**

**1-888-258-0808 (USA & Canada)**

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

## FIRE PREVENTION



### Maintenance

The utility vehicle and some attachments and accessories 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.

The operator's area, engine compartment and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.

All fuels, most lubricants and some coolants mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

### Operation

Do not use the utility vehicle where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases. Do not park this vehicle near open flames or pilot lights.

### Electrical



Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.

Battery gas can explode and cause serious injury. Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting. Do not jump start or charge a frozen or damaged battery. Keep any open flames or sparks away from batteries. Do not smoke in battery charging area.

## Fueling



Stop the engine and let it cool before adding fuel. No smoking! Do not refuel a utility vehicle near open flames or sparks. Fill the fuel tank outdoors.

### Starting

Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting.

### Spark Arrestor Exhaust System

The spark arrestor exhaust system 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.

Check the spark arrestor exhaust system regularly to make sure it is maintained and working properly. Use the procedure in the Operation & Maintenance Manual for cleaning the spark arrestor muffler

### Welding And Grinding

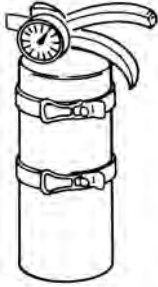
Always clean the utility vehicle attachments and accessories, disconnect the battery, and disconnect the wiring from the Bobcat controllers before welding. Cover fuel tank, rubber hoses, battery and all other flammable parts. Keep a fire extinguisher near the utility vehicle when welding.

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

Dust generated from repairing nonmetallic parts such as hoods, fenders or covers can be flammable or explosive. Repair such components in a well ventilated area away from open flames or sparks.

## **FIRE PREVENTION (CONT'D)**

### **Fire Extinguishers**



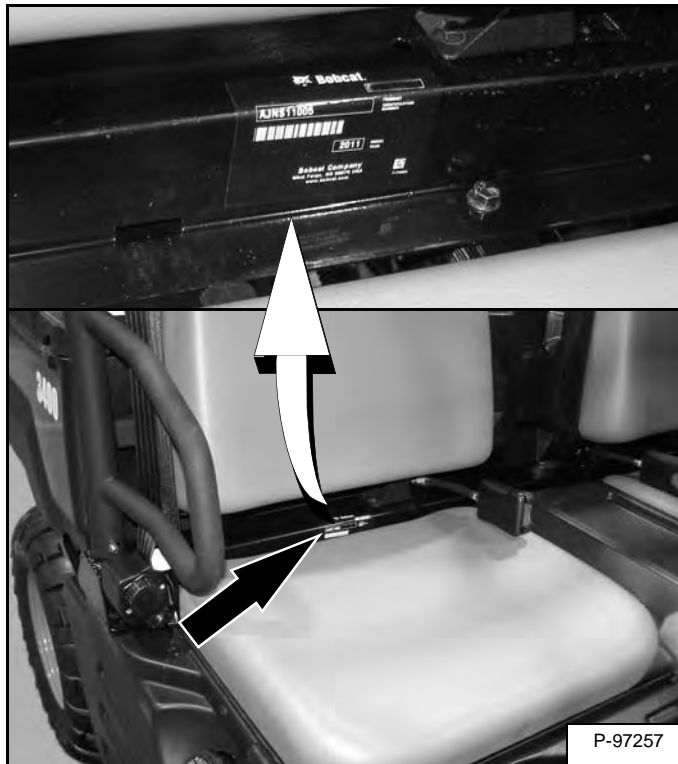
Know where fire extinguishers and first aid kits are located and how to use them. Inspect the fire extinguisher and service the fire extinguisher regularly. Obey the recommendations on the instructions plate.

## SERIAL NUMBER LOCATIONS

Always use the serial number of the utility vehicle 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.

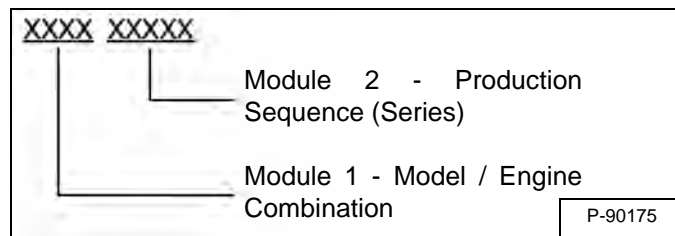
### Utility Vehicle Serial Number

Figure 1



The utility vehicle serial number plate is located on the seat frame just behind the passenger(s) seat [Figure 1].

Figure 2

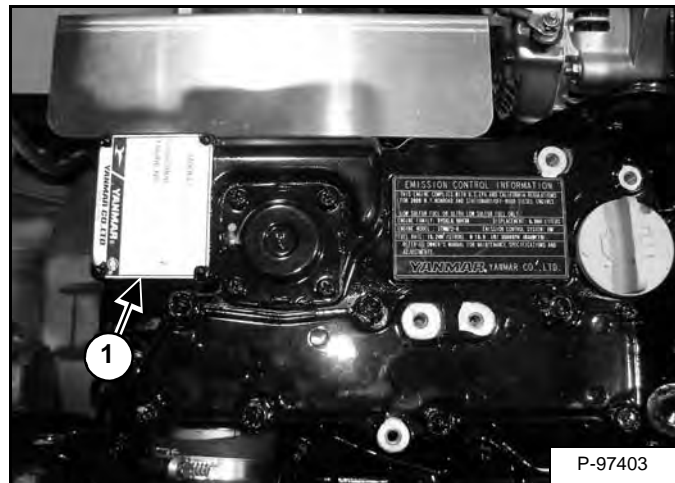


Explanation of utility vehicle Serial Number [Figure 2]:

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 utility vehicle is produced.

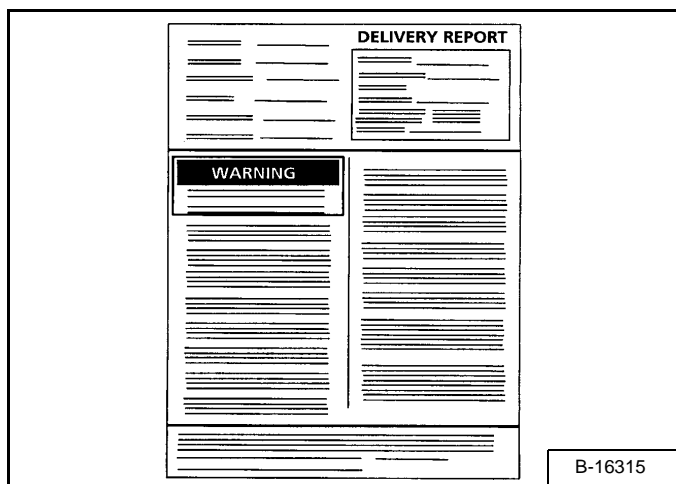
### Engine Serial Number

Figure 3



The engine serial number is located on the top of the engine (Item 1) [Figure 3].

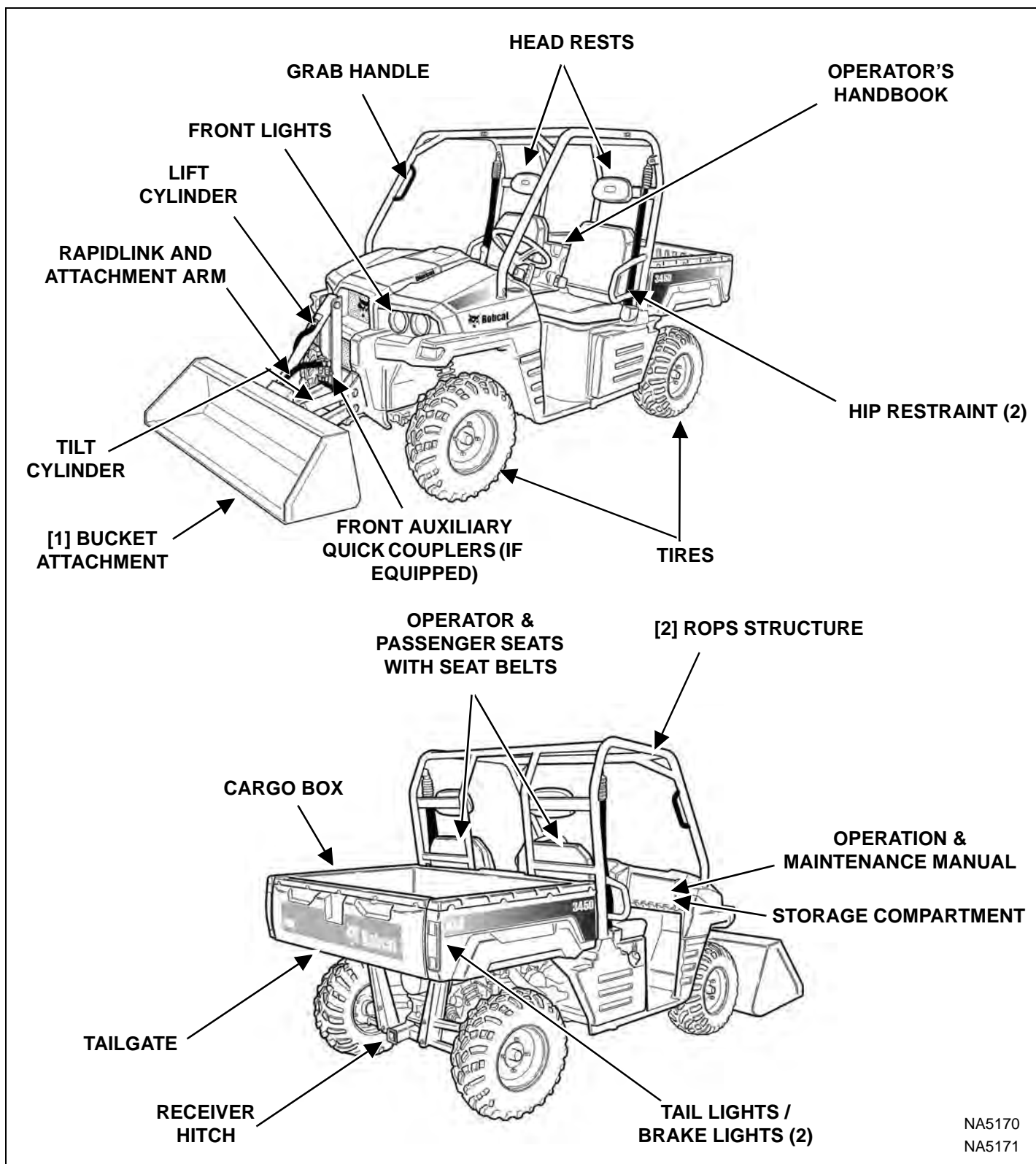
### Figure 4



The delivery report **[Figure 4]** must be completed by the dealer and signed by the owner or operator when the Bobcat utility vehicle is delivered. An explanation of the form must be given to the owner.



## UTILITY VEHICLE IDENTIFICATION



NA5170  
NA5171

**[1] BUCKET** - Buckets and other attachments are available for the 3450 utility vehicle.

**[2] ROPS** - Rollover Protective Structure, per OSHA 1928.53: 2006, ISO 5700: 2006 and SAE J2194: 2009.

**Dear**

**Thanks very much for your visiting and  
patience.**

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**The Download Link will also be sent to your e-mail.**

**You will get the complete manual**

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**[admin@servicemanualperfect.com](mailto:admin@servicemanualperfect.com)**