John Deere AM142008

John Deere AM142008 Gear Box Instruction Manual

For 44-inch Snow Blower Attachments

Introduction

This manual provides essential information for the safe and effective use, installation, and maintenance of your John Deere AM142008 Gear Box. This component is designed as an original equipment replacement part for specific John Deere 44-inch snow blower attachments. Please read this manual thoroughly before installation or operation to ensure proper function and safety.

Important Safety Information

Warning: Keep hands and clothing away from moving parts. Wear protective gloves and eye protection. Store in a dry, secure place. Do not operate if any parts are damaged or missing. Always ensure the tractor is turned off and the spark plug wire is disconnected before performing any maintenance or installation.

Product Overview

The John Deere AM142008 Gear Box is a critical component for 44-inch snow blower attachments. It is responsible for transmitting power from the tractor's drive system to the snow blower's auger and impeller, enabling the efficient clearing of snow. This gear box is an OEM (Original Equipment Manufacturer) part, ensuring compatibility and performance with your John Deere equipment.



Image: The John Deere AM142008 Gear Box, shown in black, features a robust casing secured by multiple bolts. A metal shaft extends from one side, indicating its role in power transmission. This image displays the primary component of the gear box.

Compatible Models

This gear box is compatible with John Deere 44-inch snow blower attachments used on various tractor models. Please verify your specific model number against the list below:

- **D100 Series:** D100, D105, D110, D120, D125, D130, D140, D150, D155, D160, D170
- **E100 Series:** E100, E110, E120, E130, E140, E150, E160, E170, E180
- **X300 Series:** X300, X300R, X304, X305R, X310, X320, X324, X330, X340, X350, X350R, X354, X360, X370, X380, X384, X390, X394
- **X500 Series:** X500, X520, X570
- **Other Compatible Models:** 102, 105, 107H, 107S, 115, 125, 135, 145, 155C, 190C, L100, L105, L107, L108, L110, L111, L118, L120, L130, LA100, LA105, LA110, LA115, LA120, LA125, LA130, LA135, LA140, LA145, LA150, LA155, LA165, LA175, S100, S110, S120, S130, S140, S160, S170, S180, S220, S240, X110, X120, X125, X135R, X140, X145, X155R, X165.

Installation Instructions

The following are general guidelines for installing the AM142008 Gear Box. Always refer to your specific John Deere snow blower attachment and tractor service manuals for detailed, model-specific instructions and safety procedures.

1. **Prepare for Installation:** Ensure the tractor is completely turned off, the engine is cool, and the spark plug wire is disconnected to prevent accidental starting. Engage the parking brake.
2. **Disconnect Snow Blower:** Safely disconnect the snow blower attachment from the tractor according to your snow blower's specific manual. Place the attachment on a stable, level surface.
3. **Remove Old Gear Box:** Carefully identify and remove all fasteners securing the existing gear box to the snow blower housing. Note the orientation of the gear box and any associated components like shims or spacers. Disconnect any drive shafts, belts, or linkages attached to the gear box.
4. **Inspect Surrounding Components:** Before installing the new gear box, inspect adjacent components such as drive belts, pulleys, bearings, and mounting hardware for wear or damage. Replace any worn parts as necessary to ensure

optimal performance and longevity of the new gear box.

5. **Install New Gear Box:** Position the new John Deere AM142008 Gear Box in the correct orientation. Secure it with the appropriate fasteners, ensuring they are tightened to the manufacturer's specified torque. Reconnect any drive shafts, belts, or linkages that were removed.
6. **Lubrication:** Refer to your snow blower's service manual for specific lubrication requirements for the gear box. Ensure proper grease or oil levels are maintained before operation.
7. **Reattach Snow Blower:** Reattach the snow blower attachment to the tractor, following the specific instructions in your snow blower's manual.
8. **Test Operation:** Before full operation, perform a low-speed test in a clear, safe area to ensure all components are functioning correctly and there are no unusual noises or vibrations.

Note: Professional installation is recommended if you are unfamiliar with mechanical repairs.

Operating Principles

The AM142008 Gear Box functions as a power transfer unit within your snow blower's drive system. It converts the rotational energy from the tractor's engine or PTO into the necessary motion to drive the auger and impeller, which collect and discharge snow. Proper engagement and disengagement of the snow blower attachment, as outlined in your tractor's operating manual, are crucial for the gear box's longevity.
Avoid operating the snow blower in conditions that could cause excessive strain on the gear box, such as attempting to clear frozen solid snow or encountering large foreign objects. Such actions can lead to premature wear or damage to the internal gears and bearings.

Maintenance

Regular maintenance is essential to ensure the long-term performance and reliability of your gear box.

- **Lubrication:** Periodically check and maintain the lubricant level within the gear box. Always use the type and grade of grease or oil recommended in your snow blower's service manual. Inadequate lubrication is a primary cause of gear box failure.
- **Visual Inspection:** Regularly inspect the gear box casing for any signs of leaks, cracks, or physical damage. Ensure all mounting bolts are tight and secure.
- **Shaft and Bearing Check:** Inspect the input and output shafts for excessive play or wobble, which could indicate worn bearings. Listen for unusual grinding or whining noises during operation, as these may signal internal wear.
- **Cleaning:** Keep the exterior of the gear box clean from dirt, debris, and snow buildup. A clean surface helps prevent corrosion and allows for proper heat dissipation.

Troubleshooting

This section addresses common issues you might encounter with your gear box.

Problem	Possible Cause	Solution
Snow blower auger/impeller not turning	Broken shear pins, loose or broken drive belt, internal gear box failure.	Check and replace shear pins. Inspect and adjust or replace the drive belt. If these are intact, the gear box may require professional inspection or replacement.

Problem	Possible Cause	Solution
Unusual noise (grinding, whining) from gear box	Low lubricant level, worn gears or bearings, foreign object inside.	Check lubricant level and refill if necessary. Inspect for any foreign objects. If noise persists, internal inspection by a qualified technician is recommended.
Oil or grease leak from gear box	Damaged seal, loose casing bolts, cracked housing.	Inspect seals and replace if damaged. Tighten casing bolts to specification. If the housing is cracked, the gear box will likely need replacement.
Excessive vibration during operation	Loose mounting, worn bearings, unbalanced components.	Check all mounting bolts for tightness. Inspect shafts and bearings for wear. Ensure all rotating components are free of debris and balanced.

Specifications

Part Number: AM142008

Brand: John Deere

Manufacturer: JOHN DEERE

Color: Black

Clearing Width Compatibility: 44 Inches (for snow blower attachments)

Engine Type Compatibility: 4 Cycle (for associated tractors)

Warranty and Support

This John Deere Original Equipment part is covered by John Deere's standard warranty. For specific warranty details, claims, or technical support, please contact your authorized John Deere dealer or visit the official John Deere website. Always use genuine John Deere replacement parts to ensure compatibility and maintain warranty coverage.
For further assistance, you may visit the John Deere Store on Amazon or consult your local John Deere service center.

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