

## **PowerSmart 303160355P**

# **PowerSmart Shear Pin Replacement Kit User Manual**

**MODELS: 303160355P, DB7019A, PSSAM24, DB7109B, PSS2260LED**

## **1. INTRODUCTION**

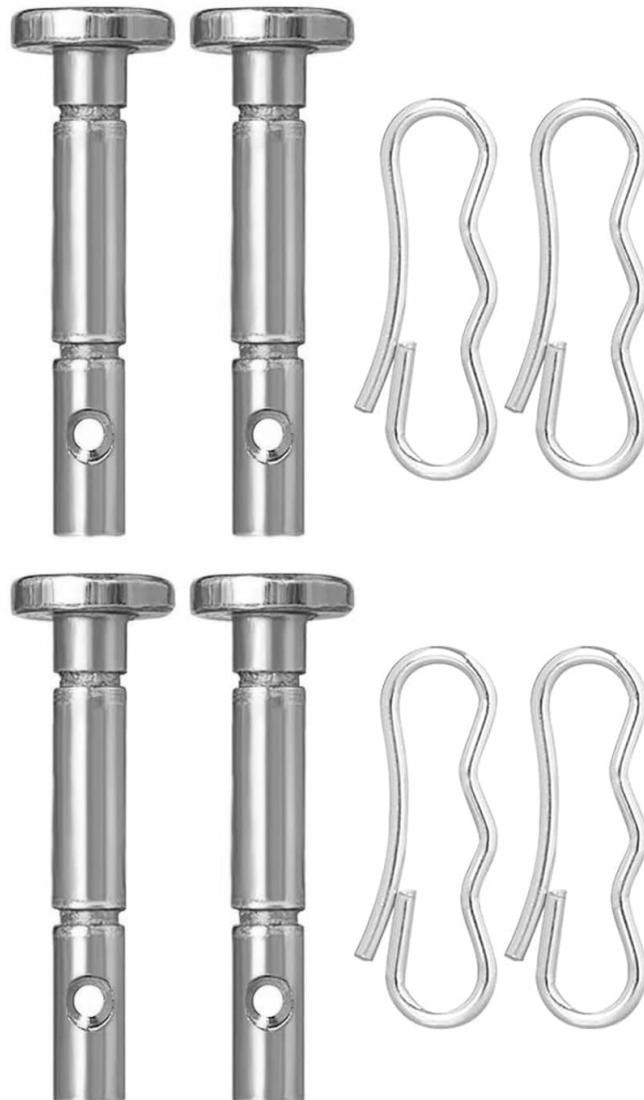
This manual provides essential information for the installation, maintenance, and understanding of your PowerSmart Shear Pin Replacement Kit. PowerSmart shear pins are critical safety components designed to protect your snow blower's auger and gearbox from damage.

Shear pins (also known as shear bolts) connect the auger to the auger shaft. They are engineered with specific grooves that allow them to break or "shear" when the auger encounters an obstruction, such as a rock, ice, or a foreign object. This intentional breakage prevents more costly damage to the snow blower's internal components.

## **2. PACKAGE CONTENTS**

Each PowerSmart Shear Pin Replacement Kit (Model 303160355P) contains the following components:

- 4 x Shear Pins
- 4 x Cotter Pins



This image displays the four shear pins and four cotter pins included in the PowerSmart replacement kit. The shear pins are cylindrical metal bolts with a flat head and a hole near one end for the cotter pin. The cotter pins are wavy metal wires designed to secure the shear pins in place.

### 3. COMPATIBILITY

This shear pin replacement kit is specifically designed for and compatible with the following PowerSmart snow blower models:

- DB7019A
- PSSAM24
- DB7109B
- PSS2260LED

It is also suitable for most 2-stage and some 3-stage snow blower models that utilize similar shear pin designs. If you are unsure about compatibility with your specific snow blower model, please contact PowerSmart customer support for assistance.

### 4. INSTALLATION (SETUP)

Replacing broken shear pins is a straightforward process, but always prioritize safety. Ensure your snow blower is completely powered off and secured before beginning any maintenance or installation procedures.

## Tools Required:

- Pliers
- Work Gloves (recommended for safety)

## Installation Steps:

1. **Ensure Safety:** Turn off the snow blower engine and remove the spark plug wire (for gas models) or unplug the power cord (for electric models) to prevent accidental starting.
2. **Locate Shear Pins:** Identify the auger shaft and the location of the shear pins, typically found where the auger connects to the shaft.
3. **Remove Broken Pin:** If a shear pin is broken, carefully remove any remaining pieces of the pin and cotter pin from the auger shaft and auger using pliers.
4. **Align Holes:** Rotate the auger until the hole in the auger aligns perfectly with the corresponding hole in the auger shaft.
5. **Insert New Pin:** Insert a new PowerSmart shear pin through both the auger and auger shaft holes.
6. **Secure with Cotter Pin:** Slide a new cotter pin through the small hole at the end of the shear pin. Bend the ends of the cotter pin outwards to securely lock the shear pin in place.
7. **Verify:** After installation, gently try to rotate the auger by hand to ensure it is properly secured and moves as expected.

## 5. OPERATING CONSIDERATIONS

Shear pins are designed to be a sacrificial component. If your snow blower's auger stops rotating but the engine is still running, it is a clear indication that one or more shear pins have broken. This is a normal safety feature to prevent damage to the more expensive components of your snow blower.

Always replace broken shear pins with genuine PowerSmart replacement parts to ensure proper function, maintain the integrity of the safety system, and prolong the life of your snow blower.

## 6. MAINTENANCE

To ensure optimal performance and safety of your snow blower, regular inspection and maintenance of the shear pins are recommended:

- **Regular Inspection:** Before each use, or at least seasonally, inspect your snow blower's shear pins for any signs of wear, bending, corrosion, or damage.
- **Immediate Replacement:** If any shear pin appears damaged or compromised, replace it immediately, even if it has not yet broken.
- **Keep Spares:** It is highly recommended to keep a supply of PowerSmart replacement shear pins readily available, especially during the snow season, to minimize downtime.
- **Proper Storage:** Store spare shear pins in a dry environment to prevent rust and corrosion.

## 7. TROUBLESHOOTING

- **Auger Not Turning, Engine Running:**

**Cause:** One or more shear pins have broken.

**Solution:** Turn off the snow blower, remove the spark plug wire/unplug, and replace all broken shear pins following the installation steps in Section 4.

- **Difficulty Inserting New Shear Pin:**

**Cause:** The auger and auger shaft holes are not perfectly aligned, or there is debris in the holes.

**Solution:** Ensure the auger is rotated precisely to align the holes. Use a small tool to clear any debris from the holes if necessary.

## 8. SPECIFICATIONS

Attribute	Value
Material	Metal
Pin Type	Cotter
Number of Pieces	4 Shear Pins, 4 Cotter Pins
Product Dimensions (approx. per pin)	0.5 x 1 x 1.5 inches
Manufacturer	Amerisun Inc.

## 9. WARRANTY AND SUPPORT

For specific warranty information regarding your PowerSmart Shear Pin Replacement Kit or for technical support, please refer to the main user manual of your PowerSmart snow blower or visit the official PowerSmart website. You may also contact PowerSmart customer service directly for assistance.

For more information about PowerSmart products, visit the [PowerSmart Store on Amazon](#).