

Skil SPT70V-11

SKIL 16-5/16 In. Magnesium Worm Drive Skilsaw Circular Saw - SPT70V-11 User Manual

Model: SPT70V-11

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1. INTRODUCTION

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of your SKIL 16-5/16 In. Magnesium Worm Drive Skilsaw Circular Saw, Model SPT70V-11. Please read this manual thoroughly before using the tool to ensure proper handling and to prevent injury or damage.

The SKIL SPT70V-11 is a powerful worm drive circular saw designed for heavy-duty cutting tasks, featuring a 6-1/4 inch cutting capacity for thick materials like 6x lumber. Its magnesium construction ensures durability and reduced weight, while the 15 AMP Dual-Field™ motor provides consistent power and cooler operation.

2. SAFETY INFORMATION

WARNING: Read all safety warnings, instructions, illustrations, and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

General Power Tool Safety Warnings

- **Work Area Safety:** Keep work area clean and well lit. Cluttered or dark areas invite accidents. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- **Electrical Safety:** Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Personal Safety:** Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication. Always wear eye protection. Use safety glasses, dust mask, non-skid safety shoes, hard hat, or hearing protection for appropriate

conditions.

- **Tool Use and Care:** Do not force the power tool. Use the correct power tool for your application. It will do the job better and safer at the rate for which it was designed. Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.
- **Service:** Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Circular Saw Specific Safety Warnings

- **Cutting Procedure:** Always hold the saw firmly with both hands. Do not reach underneath the workpiece. Ensure the blade is clear of the workpiece before starting the saw.
- **Kickback Prevention:** Maintain a firm grip on the saw with both hands. Avoid cutting wet or warped wood. Ensure the blade is sharp and clean.
- **Blade Guard:** Always ensure the lower guard is functioning correctly and retracts smoothly. Never jam or tie back the lower guard.
- **Dust Collection:** Connect a dust extraction device if available and ensure it is properly used to reduce dust-related hazards.

3. WHAT'S IN THE BOX

Upon unpacking, verify that all items listed below are present and undamaged. If any parts are missing or damaged, contact SKIL customer service immediately.

- SKIL 16-5/16 In. Worm Drive Saw (Model SPT70V-11)
- Auxiliary Handle
- Multi-Function Wrench
- 16-5/16" 32-Tooth SKIL Carbide Blade
- Saw Stand

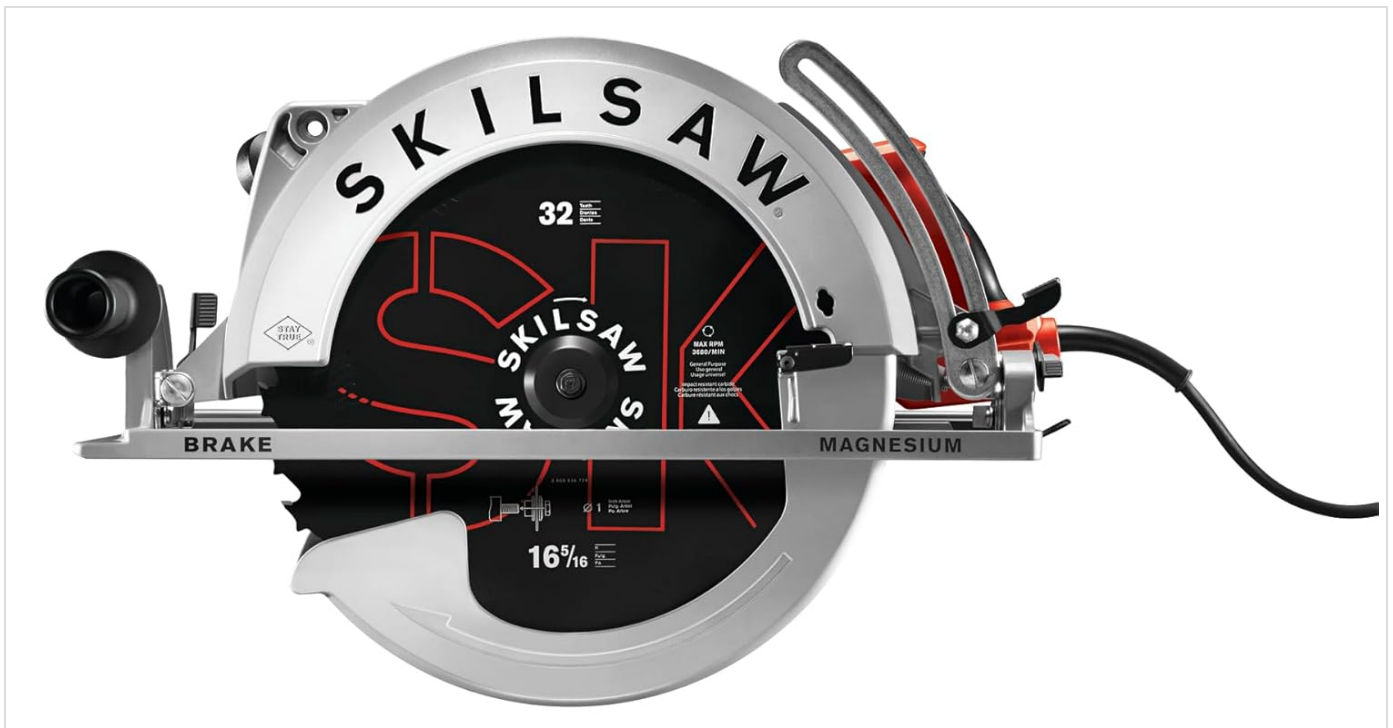


Figure 3.1: The SKIL 16-5/16 In. Magnesium Worm Drive Skilsaw Circular Saw (SPT70V-11) with its blade and magnesium footplate visible.

4. SETUP

4.1 Attaching the Auxiliary Handle

The auxiliary handle provides additional control and stability during operation. Securely attach it to the designated mounting point on the saw body. Ensure it is tightened firmly before use.

4.2 Blade Installation and Removal

WARNING: Always disconnect the saw from the power source before installing or removing the blade.

1. Place the saw on a stable surface.
2. Using the multi-function wrench, loosen the arbor nut that secures the blade.
3. Retract the lower blade guard and carefully remove the old blade, if present.
4. Clean the arbor and blade flanges.
5. Place the new 16-5/16" 32-tooth carbide blade onto the arbor, ensuring the teeth are pointing in the direction of rotation indicated by the arrow on the saw and blade.
6. Replace the outer flange and tighten the arbor nut firmly with the wrench. Do not overtighten.
7. Check that the blade rotates freely and the lower guard operates correctly.



CLEAN CUTS THROUGH 6X

Figure 4.1: Close-up view of the SKILSAW blade and guard, illustrating the area for blade installation.

4.3 Adjusting Cutting Depth

To adjust the cutting depth, loosen the depth adjustment lever, move the shoe up or down to the desired depth, and then firmly tighten the lever. For optimal performance and safety, set the blade depth so that the blade extends approximately 1/8 inch (3 mm) below the workpiece.

4.4 Adjusting Bevel Angle

To make bevel cuts, loosen the bevel adjustment lever, tilt the saw shoe to the desired angle (up to 45 degrees), and then securely tighten the lever. Always test the angle on a scrap piece of material before making the final cut.

5. OPERATION

5.1 General Cutting Guidelines

- Ensure the workpiece is securely clamped or supported to prevent movement during cutting.

- Always wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, and a dust mask.
- Keep hands clear of the blade path.
- Allow the saw to reach full speed before beginning a cut.
- Maintain a steady, consistent feed rate. Do not force the saw.
- After completing a cut, release the trigger and allow the blade to stop completely before lifting the saw from the workpiece.



Figure 5.1: The SKILSAW making a clean cut through a thick piece of lumber, demonstrating its 6x cutting capacity.

5.2 Making Straight Cuts

For straight cuts, align the saw's cutting line indicator with your marked line on the workpiece. Use a straight edge or guide for longer cuts to ensure accuracy. Apply even pressure and guide the saw smoothly through the material.

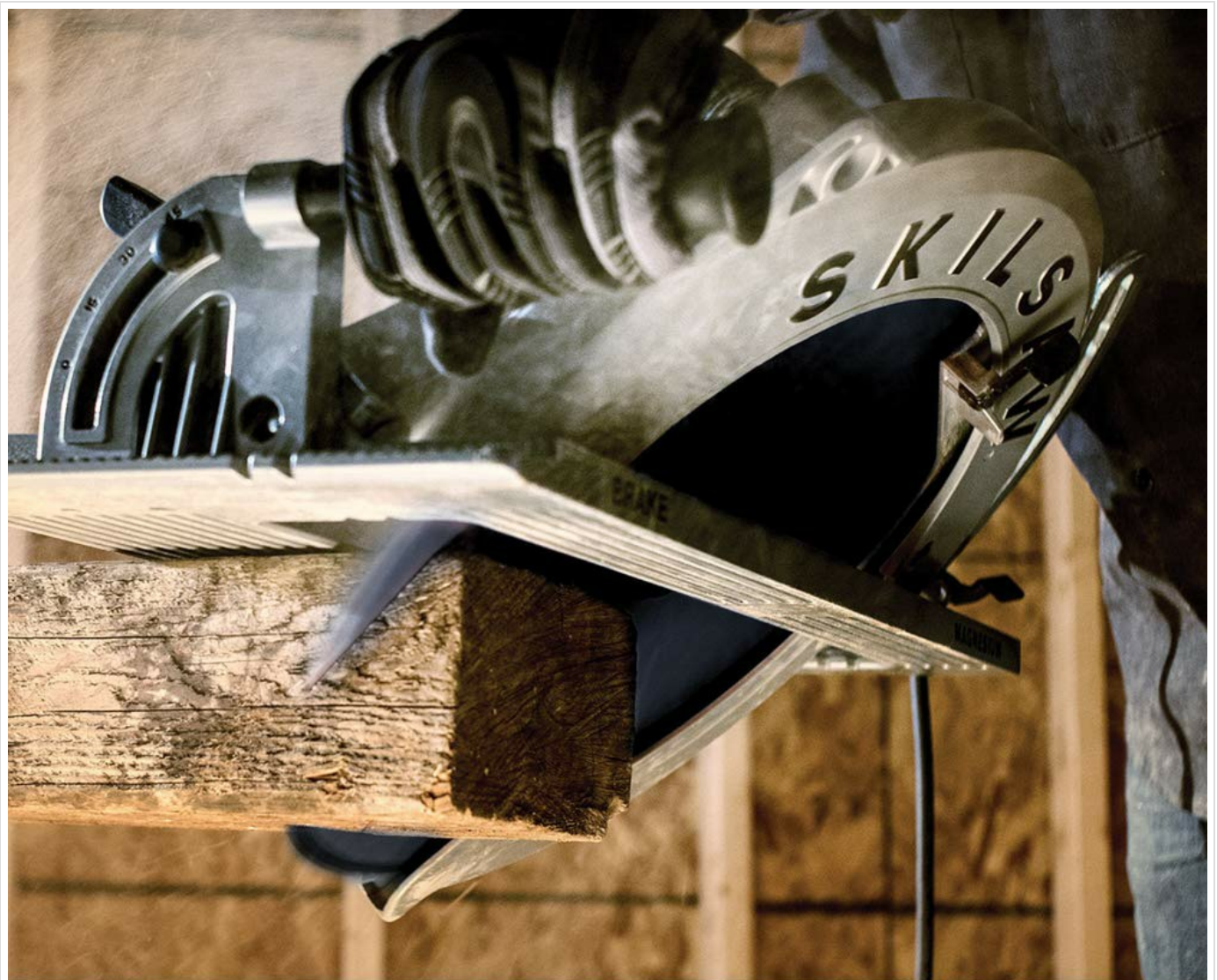
5.3 Making Bevel Cuts

After setting the desired bevel angle (refer to Section 4.4), position the saw so the blade enters the material at the correct

angle. Be aware that the cutting line indicator may shift slightly when making bevel cuts, so adjust your alignment accordingly.

5.4 Electric Brake Function

The SKIL SPT70V-11 is equipped with an electric brake that rapidly stops the blade rotation upon release of the trigger. This feature enhances safety by reducing coasting time and allows for quicker transitions between cuts.



ELECTRIC BRAKE

Figure 5.2: A close-up of the SKILSAW showing the "BRAKE" label, indicating the electric brake feature.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your circular saw. Always disconnect the tool from the power source before performing any maintenance.

6.1 Cleaning

- After each use, clean the saw thoroughly. Remove sawdust and debris from the motor vents, blade guard, and

shoe.

- Use a soft brush or compressed air for cleaning. Do not use solvents or abrasive cleaners.
- Keep the blade clean and free of pitch and resin buildup, which can affect cutting performance and increase kickback risk.

6.2 Blade Care

- Inspect the blade regularly for sharpness, cracks, or missing teeth. Replace dull or damaged blades immediately.
- Store blades properly to prevent damage to the teeth.

6.3 Worm Drive Lubrication

The worm drive gearing requires periodic lubrication. Refer to the official SKIL user manual for specific lubrication intervals and recommended lubricants. Proper lubrication ensures smooth operation and extends the life of the gears.



Figure 6.1: The SKILSAW resting on its stand, highlighting the "Legendary Worm Drive Gearing" which requires proper maintenance.

6.4 Motor Maintenance

The 15 AMP Dual-Field™ motor is designed for durability. Keep the motor's ventilation openings clear to prevent overheating. Do not attempt to service internal motor components; refer to qualified service personnel for any motor issues.



Figure 6.2: Internal components of the SKILSAW's Powerful Dual-Field™ Motor, designed for efficient and cool operation.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your SKIL circular saw. For problems not listed here, or if solutions do not resolve the issue, contact SKIL customer service.

Problem	Possible Cause	Solution
Saw does not start	No power supply; Faulty switch; Tripped circuit breaker	Check power cord and outlet; Ensure switch is fully engaged; Reset circuit breaker; Consult qualified technician if problem persists.

Problem	Possible Cause	Solution
Blade binds or stalls during cut	Dull blade; Incorrect cutting depth; Workpiece not supported; Forcing the saw	Replace or sharpen blade; Adjust cutting depth; Secure workpiece; Reduce feed rate.
Excessive vibration or noise	Loose blade; Damaged blade; Worn bearings	Tighten blade arbor nut; Replace damaged blade; Contact service center for bearing issues.
Lower blade guard sticks	Sawdust buildup; Damaged spring	Clean guard mechanism thoroughly; If spring is damaged, seek professional repair.

8. SPECIFICATIONS

The following are the technical specifications for the SKIL 16-5/16 In. Magnesium Worm Drive Skilsaw Circular Saw, Model SPT70V-11:

- **Model Number:** SPT70V-11
- **Blade Diameter:** 16-5/16 inches
- **Motor:** 15 AMP Dual-Field™
- **Cutting Capacity (at 90°):** 6-1/4 inches
- **Construction Material:** Magnesium (footplate and housing)
- **Item Weight:** 27.3 Pounds
- **Product Dimensions:** 24.5 x 10 x 17.5 inches
- **Number of Teeth (Blade):** 32 (included blade)
- **Power Source:** Corded Electric
- **UPC:** 039725075109



Figure 8.1: Top-down view of the SKILSAW, showing its overall dimensions and design.

9. WARRANTY AND SUPPORT

For detailed warranty information, including terms, conditions, and registration, please refer to the official user manual provided with your product or visit the SKIL website. Keep your purchase receipt as proof of purchase for warranty claims. For technical support, replacement parts, or service inquiries, please contact SKIL customer service. You can find contact information on the SKIL website or in the official user manual.

Official User Manual (PDF): [Download Here](#)

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