US Sander LLC
Operator's Manual



ZEMN
Micro 2" Needle Edger

4131 Highway Route 20
Esperance, NY 12066
(518)-875-6124
sales@ussander.com

US Sander LLC U. S. LIMITED WARRANTY

This US Sander LLC Industrial/Commercial Product is warranted to be free from defects in materials and workmanship under normal use and service for a period of one year from the date of purchase, when operated and maintained in accordance with US Sander LLC Maintenance and Operations Instructions. This warranty is extended only to the original purchaser when purchased from US Sander LLC or an authorized distributor for use of the product. It does not cover normal wear parts such as electrical cable, belt, brushes, wheels, pads or other consumable parts.

If difficulty develops with the product, you should:

(a). Return the complete tool with proof of purchase, freight prepaid, to US Sander, 4131 Highway Route 20, Esperance, NY, 12066 or an authorized repair center. Only repair center locations are authorized to make repairs to the product under this warranty.

(b). If inspection shows the trouble is caused by defective workmanship or material, US Sander will repair the product and or replace any defective parts without charge once within a reasonable time after receipt of the product. All parts replaced become property of US Sander LLC.

This warranty does not apply where: repairs have been made or attempted by others, repairs are required because of normal wear and tear or accidents, the tool has been abused, misused, damaged, overloaded, improperly maintained, alterations have been made to the tool or minor adjustments need made not connected with the replacement of warranty parts.

US Sander's liability under this warranty is limited to repair of the product and/or replacement of parts and is given to original purchaser in lieu of all other remedies, including INCIDENTAL AND CONSEQUENTIAL DAMAGES. THIS INCLUDES, BUT NOT LIMITED TO LOSS OF USER TIME, LIMITED OR INDIRECT, SPECIAL OR CONSIQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE FURNISHING, PERFORMANCE, USE OF OR INABILITY TO USE THE MACHINE. SUCH AS, BUT NOT LIMITED TO PHYSICAL INJURY OR PROPERTY DAMAGE, LOSS OF USE, INCONVENIENCE, RENTAL OR ACCOMMODATIONS. THERE ARE NO EXPRESS WARRANTIES OTHER THAN THOSE SPECIFIED HEREIN. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE SHALL BE IMPLIED. ANY STATUTORY IMPLIED WARRANTIES IMPOSED BY LAW DESPITE THE EXPRESS LIMITATION OR WARRANTIES ABOVE, ARE EXPRESSLY LIMITED TO THE DURATION OF THE WRITTEN WARRANTY. BUYER UNDERSTANDS, ACKNOWLEDGES AND AGREES THAT THE REMEDIES PROVIDED UNDER THIS LIMITED WARRANTY ARE THE SOLE AND EXCLUSIVE REMEDIES AVAILABLE TO THE BUYER AND MAY NOT BE MODIFIED.

US Sander LLC reserves the right to change our warranty policy without notice.

READ THIS BOOK

This book has important information for the use and safe operation of this machine. Failure to read this book prior to operating or attempting any service or maintenance procedure to your US Sander machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. If you cannot read English, have this manual explained fully before attempting to operate this machine.

All directions given in this book are as seen from the operator's position at the rear of the machine.

For new books write to: US Sander, P. O. Box 335, Esperance, NY 12066

OPERATOR SAFETY INSTRUCTIONS

WARNING AVERTISSEMENT ADVERTENCIA

DANGER means:

Severe bodily injury or death can occur to you or other personnel if the **DANGER** statements found on this machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **DANGER** statements found in this Owner's Manual and on your machine.

WARNING means:

Injury can occur to you or to other personnel if the **WARNING** statements found on your machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **WARNING** statements found in this Owner's Manual and on your machine.

CAUTION means:

Damage can occur to the machine or to other property if the **CAUTION** statements found on your machine or in this Owner's Manual are ignored or are not adhered to. Read and observe all **CAUTION** statements found in this Owner's Manual and on your machine.

DANGER: Failure to read the Owner's Manual prior to operating or attempting any service or maintenance procedure to your US Sander machine could result in injury to you or to other personnel; damage to the machine or to other property could occur as well. You must have training in the operation of this machine before using it. **If you or your operator cannot read English, have this manual explained fully before attempting to operate this machine.**

DANGER: Sanding/finishing wood floors can create an environment that can be explosive or combustible. The following safety procedures must be adhered to:

DANGER: Risk of explosion. Cigarette lighters, pilot lights and any other source of ignition can create an explosion when active during a sanding session. All sources of ignition should be extinguished or removed if possible from the work area. Floor sanding can result in an explosive mixture of fine dust and air.

DANGER: Work areas that are poorly ventilated can create an explosive environment when certain combustible materials are in the atmosphere, i.e., solvents, thinners, alcohol, fuels, certain finishes, wood dust and other combustible materials. Floor sanding machines can cause flammable material and vapors to burn. Read the manufacturer's label on all chemicals used to determine combustibility. Keep the work area well ventilated.

DANGER: Spontaneous combustion or an explosion can occur when working with sanding dust. The sanding dust can ignite and cause injury or damage. Sanding dust should be disposed of properly. Promptly dispose the sanding dust into a metal container that is located away from combustibles and outside of any building(s). Do not dispose in a fire.

DANGER: Hitting a nail while sanding can cause sparks and create an explosion or fire. Always use a hammer and punch to countersink all nails before sanding floors.

DANGER: Operating a machine that is not completely or fully assembled could result in injury or property damage. Do not operate this machine until it is completely assembled. Keep all fasteners tight. Keep adjustments according to machine specifications

DANGER: **Do not operate with belt guard removed. Serious injury may occur.**

DANGER: Electrocution could occur if the machine is used on a power circuit that repeatedly trips or is undersized. Have a licensed electrician check the fuse, circuit breaker or power supply

DANGER: Electrocution could occur if maintenance and repairs are performed on a unit that is not properly disconnected from the power source. Disconnect the power supply or battery before attempting any maintenance or service.

DANGER: This tool has not been waterproofed; so do not use water on work piece surface or operate in water.

DANGER: Use of this machine with a damaged power cord could result in an electrical shock. Do not use the machine if the power cord is damaged. Do not use the electrical cord to move the machine. Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.

DANGER: Electrocution or injury could occur if the power cord is run over or damaged by the sander. Keep the cord free from under the machine to avoid contact with the sandpaper. Always lift the power cord over the machine.

DANGER: Moving parts of this machine can cause serious injury and/or damage. Keep hands, feet, and loose clothing away from all moving parts of the sander. Disconnect machine from the power source or remove batery before changing the abrasive or performing any maintenance. **Do not operate unless all covers and guards are in place**. Never leave machine unattended while motor is running, connected to power source or battery attached.

WARNING: Failure to read and observe all safety statements found on your machine or in this Owner's Manual can result in serious injury or damage. Read and observe all safety statements. Make sure that all labels, decals, warnings, cautions, and instructions are fastened to the machine. Get new labels from your authorized US Sander distributor.

WARNING: Injury to the eyes and/or body can occur if protective clothing and/or equipment is not worn while sanding. Always wear safety goggles, protective clothing, and a dust mask while performing any sanding operation and other safety gear as required.

WARNING: Sanding dust can be airborne and can be breathed in while operating a sander. Always wear a dust mask while operating sanding equipment. Some dust created by power sanding and other construction activities produces hazardous dust which can contain chemicals known (to the state of California) to cause cancer, birth defects, other reproductive harm, serious injury or death. Some examples of these chemicals are:

Lead from lead based paints, Crystalline silica from bricks and cement and other masonry products, and Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals do not sand these materials with this tool. If you deem a material safe to sand; work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

WARNING: Do not use damaged accessories. Inspect for damage before each use, such as cracked or worn abrasives or holder.

WARNING: Operating a tool that is not fully assembled could result in injury or property damage.

WARNING: Maintain a firm grip on the power tool and position your body and arms to allow you to resist kickback forces. Always use handles for maximum control over kickback and torque forces.

WARNING: Bodily injury could occur if power is applied or battery attached to the machine with the power switch already in the "ON' position. Always check to assure that the power switch is in the "OFF" position and adjusting wrenches are removed before applying power to the power cable or attaching the battery.

WARNING: Any alterations or modifications of this machine could result in damage to the machine or injury to the operator or other bystanders. Alterations or modifications not authorized by the manufacturer voids any and all warranties and liabilities.

WARNING: Never place your hand or loose clothing near a rotating accessory.

WARNING: Accessories must be rated at least 30% more than the speed recommended on the tool warning label. Wheels and other accessories running over the rated speed can fly apart and cause injury

WARNING: Check the backing pad carefully for cracks, damage, or deformity before operation. Replace cracked damaged or deformed pad immediately. Damaged rotating parts can fly off and cause injury to you or other persons.

WARNING: Servicing of this unit must always be referred to an authorized US Sander distributor.

WARNING: Pay attention that the wheel continues to rotate after the tool is switched off.

WARNING: Do not leave tool running. Operate the tool only when hand-held

CAUTION: Use of this machine to climb on could result in injury or damage. Do not use this machine as a step or furniture.

CAUTION: Keep work area clean and well lit.

CAUTION: Keep children and bystanders away while operating sander. Anyone entering work area must wear proper safety equipment.

CAUTION: Do not operate the sander while tired or under the influence of drugs, alcohol or medication.

CAUTION: Do not rest machine on sanding disc. To do so may cause a flat spot and reduce the quality of performance. Tip machine back or rest on side when not in use.

CAUTION: Do not sand metal surfaces. Watch out for flying sparks. Hold the tool so any sparks or debris will fly away from you and other persons or flammable materials.

CAUTION: Damage could occur to the machine if not properly kept in a dry building for storage. Store the machine in a dry building.

CAUTION: **Keep hands away from rotating parts. Use the grips provided. Hold the tool firmly.**

SANDING CUTS AND SANDPAPER

Aggressive Sanding



Initial cuts made with the quick change roloc type discs will be more aggressive and last longer. If the finish or wood is melting or burning the speed of the pad should be slowed down to avoid this. If having trouble changing paper use allen wrench in top of nose to stop pad from spinning.

Fine Sanding



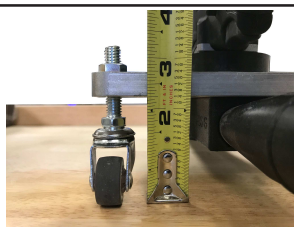
Finish sanding done with the hook and loop pad will sand more smoothly and blend better than the quick change roloc discs. The hook and loop will work for initial cuts as well, however at a reduced cutting rate. Always center the hook and loop disc before using.

Changing Pads



First remove the dust shroud around the pad. Then using the provided allen wrench on the top of the nose spin the pad off counter clockwise. When changing pads the wheel height may need to be adjusted for less nose heavy cutting with the hook and loop pad. If having trouble changing paper use allen wrench in top of nose to stop pad from spinning.

Wheel Adjustment



If pad is cutting nose heavy and leaving lines at the nose turn caster bolts counter clockwise to lower the back of the sander. If pad is hopping or creating back scratches turn caster bolts clockwise to raise the back of the sander. We do not recommend a cut side and sander should be adjusted to sand at the front of the pad.

Hook and loop pad start adjustment height from floor to bottom of wheel bracket at 2-1/4" and fine tune from there.
Quick change pad start adjustment height from floor to bottom of wheel bracket at 2-1/2" and fine tune from there.

Machine Setup

1. Familiarize yourself with the machine. Read all danger, warning, and caution statements and the Owner's Manual before operating this machine. If you or your operator cannot read English, have this manual explained fully before attempting to operate this machine.
2. Center abrasive on backing pad and secure with quick attach or hook and loop.
3. This machine is designed to be operated with 1-1/2" vacuum dust collection. (start vacuum system before sander operation)
4. Make sure you have the correct frequency and voltage as shown on the nameplate before connecting the power cord to an outlet
5. Use only an approved extension cord with three conductors, with a minimum wire size of 16AWG. Do not use an extension cord longer than 25 feet and do not join two extension cords.
6. Do not modify or use adapters with the plug provided on the sander, if it will not fit the outlet, have a proper outlet installed by a qualified electrician.
7. Have worn, cut, or damaged cords replaced by an authorized service person.
8. To prevent possible electric shock, protect the sander from rain. Keep the sander in a dry building. Do not use in damp environments.

OPERATING INSTRUCTIONS

WARNING Bodily injury could occur if power is applied to the machine with the power switch already in the "ON" position. Always check to assure that the power switch is in the "OFF" position before applying power to the power cable or by battery. Do not use if switch is broken.

1. Move machine to the location of your work. Set any exposed nails with hammer and punch to avoid encounter with abrasive.
2. Make sure the control switch is in the "Off' position then connect the supply cable to an appropriately grounded fused circuit.
3. With the machine in the reclined position firmly grasp both handles and pull the control switch to the "ON" position.
4. Gradually lower pad to surface intended for sanding. Make sure the machine is in motion while the pad is engaged with the surface to be sanded. You may use broad circular motion as you sand along the length of the surface or your may use a combination of forward and sideward motions. In time you will develop your own technique to optimize coverage. It is advisable to not add effort to the pad as this may lead to "nosing in" or "tipping" which produces grooves or lines on the surface.
5. When replacing abrasive or sanding operation is completed, return machine to reclined position, release the control switch to "Off" then disconnect the motor power cord from the supply cable or remove the battery.

DANGER: Failure to disconnect the supply cable from machine whenever servicing, or replacing abrasive could result in electrocution or severe injury. Never leave machine unattended while the supply cable is connected.

DANGER: Never Leave a dust bag or vacuum unattended with sanding dust in it. Sanding dust can spontaneously ignite and cause a fire or explosion. Empty the dust bag into a metal container, clear of any combustibles. Do not empty dust bag contents into a fire. Do not overfill.

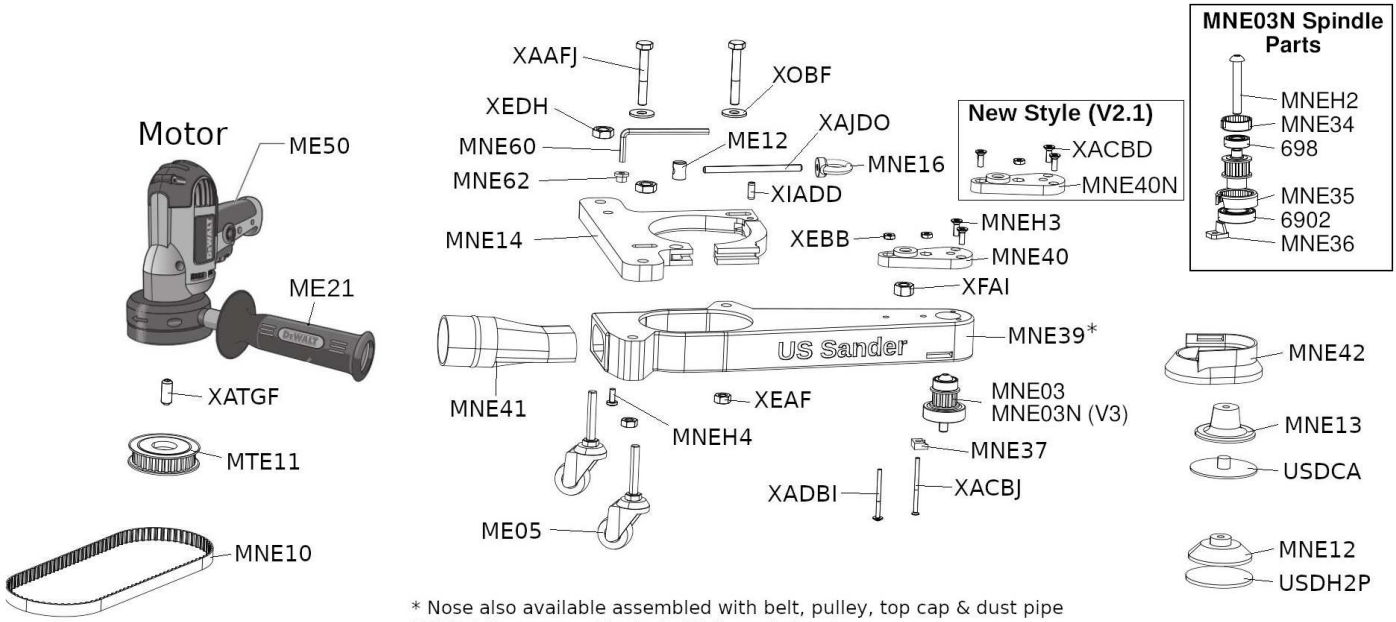
ROUTINE MAINTENANCE

CAUTION Failure to perform maintenance at recommended intervals may void the warranty. When inspecting and making repairs make sure sander is unplugged or battery removed. Repairs performed by unauthorized personnel could result in damage or injury, as well as void the warranty.



Belt Tension - Inspect for play by rotating pad left and right and tighten if needed after first use and every 100 hours
Belt - Inspect every 250 hours or 6 months and replace if there are cracks or wear.
Bearings - Inspect the armature bearings every 750 hours
Nose Bearing/Pulley Assembly - Replace every 250 hours
Carbon Brushes - Have the carbon brushes inspected every 6 months or 250 hours and replaced at least every 500 hours and more frequently under heavy use.
Motor Vents - Clean regularly
Motor Rotating - If motor rotates tighten eye nut, eye nut can be released and tightened to turn motor for smaller spaces

Parts List



* Nose also available assembled with belt, pulley, top cap & dust pipe
MNE07 Nose assembly for DeWalt corded motor
MNE08 Nose assembly for Makita cordless motor