Please carefully read and save these instructions before attempting to assemble, maintain, install, or operate this product. Observe all safety information to protect yourself and others. Failure to observe the instructions may result in property damage and/or personal injury. Please keep instructions for future reference.

Important Operating Instructions

7” VARIABLE SPEED POLISHER

Models: 45134

CALIFORNIA PROPOSITION 65

WARNING: You can create dust when you cut, sand, drill or grind materials such as wood, paint, metal, concrete, cement, or other masonry. This dust often contains chemicals known to cause cancer, birth defects, or other reproductive harm. Wear protective gear.

WARNING: This product or its power cord may contain chemicals, including lead, known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

Important!
When using equipment, a few safety precautions must be observed to avoid injuries and damage. Please read the complete operating manual with due care. Keep this manual in a safe place, so that the information is available at all times. If you give the equipment to any other person, give them these operating instructions as well. We accept no liability for damage or accidents which arise due to non-observance of these instructions and the safety information herein.

SPECIFICATIONS
Motor: 120V ~ 60Hz, 9.2 Amp
No-Load Speed: 200 - 3,350 RPM
Buffing Diameter: 7”

Keep this manual and receipt in a safe and dry place for future reference.

GENERAL SAFETY RULES

WORK AREA

• KEEP THE WORK AREA CLEAN AND WELL LIT. Cluttered benches and dark areas increases the risk of injury.

• DO NOT OPERATE THE TOOL IN EXPLOSIVE ATMOSPHERES, such as in the presence of flammable liquids, gases, or dust. The tool may create a spark that could ignite flammable liquids, gases, or dust.

• KEEP VISITORS AWAY. Do not let visitors handle the tool. All visitors should be kept safely away from the work area.

• NEVER ENGAGE IN HORSEPLAY WITH THE TOOL. Respect the tool as a working implement.

PERSONAL SAFETY

• OPERATORS AND OTHERS IN WORK AREA MUST WEAR SAFETY GLASSES WITH SIDE SHIELDS. Safety glasses must conform to ANSI Z87.1 specifications.

For warranty purchases, please keep your dated proof of purchase. File or attach to the manual for safe keeping.

- ALWAYS WEAR EAR AND HEAD PROTECTION. Wear ear protection to protect your ears from loud noises. Wear head protection to protect your head from flying objects.
- USE SAFETY EQUIPMENT. A dust mask, non-skid safety shoes, and a hard hat must be used for the applicable conditions. Wear a full face shield if you are producing metal filings or wood chips.
- DRESS PROPERLY. Do not wear loose clothing or jewelry. Contain long hair. Keep hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts and increase the risk of injury.
- STAY ALERT, WATCH WHAT YOU ARE DOING AND USE COMMON SENSE WHEN OPERATING A POWER TOOL. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may cause serious injury.
- AVOID UNINTENTIONAL STARTING. Keep fingers away from trigger when not in use.
- DO NOT OVERREACH. Keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.
- REMOVE ANY ADJUSTING KEY OR WRENCH BEFORE TURNING THE POWER TOOL ON. A wrench or key left attached to a rotating part of the power tool may result in personal injury.

ELECTRICAL SAFETY

- POWER TOOL PLUGS MUST MATCH THE OUTLET. Do not use any adapter plugs with grounded power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.
- VOID BODY CONTACT WITH GROUNDED SURFACES SUCH AS PIPES, RADIATORS, RANGES, AND REFRIGERATORS. There is an increase in electric shock if your body is grounded.
- DO NOT EXPOSE POWER TOOLS TO RAIN OR WET CONDITIONS. Water entering a power tool will increase the chance for electric shock.
- DO NOT ABUSE THE CORD. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges, or moving parts. Damaged or entangled cords increase the risk of electric shock.
- WHEN OPERATING A POWER TOOL OUTDOORS, Using a cord suitable for outdoor use reduces the risk of electric shock.
- IF OPERATING A POWER TOOL IN A DAMP LOCATION IS UNAVOIDABLE, use a Ground Fault Circuit Interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

TOOL USE AND CARE

- DO NOT FORCE THE POWER TOOL. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- DO NOT USE THE POWER TOOL IF THE SWITCH DOES NOT TURN IT ON AND OFF. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- NEVER MODIFY OR ALTER THE TOOL. Doing so may cause the tool to malfunction and personal injuries may result.
- KNOW THIS TOOL. Read manual carefully; learn its applications and limitations, as well as the specific potential hazards related to this tool.
- CHECK FOR MISALIGNMENT OR BINDING OF MOVING PARTS, BREAKAGE OF PARTS, OR ANY OTHER CONDITION THAT MAY AFFECT THE TOOL'S OPERATION. If damaged, have the tool serviced by an authorized technician before using. Many accidents are caused by poorly maintained tools.
- MAINTAIN TOOLS WITH CARE. Keep the tool clean for better and safer performance.
- NEVER CARRY THE TOOL BY THE POWER CORD.
- STORE TOOLS OUT OF THE REACH OF CHILDREN AND UNTRAINED PEOPLE. Tools are dangerous in the hands of untrained users.

• DISCONNECT THE PLUG FROM THE POWER SOURCE BEFORE MAKING ANY ADJUSTMENTS, CHANGING ACCESSORIES, OR STORING THE POWER TOOL. This will reduce the risk of accidental starting.

• USE THE POWER TOOL THE WAY IT WAS INTENDED. Use of the power tool for operations different could result in a hazardous situation.

WARNING: The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

KICKBACK

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory's rotation at the point of binding.

1. Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.

2. Never place your hand near the rotating accessory.

3. Do not position your body in the area where the power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.

4. Use special care when working corners, sharp edges, etc. Avoid bouncing and snagging the accessory. Corners, sharp edges, or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

5. Do not allow any loose portion of the polishing bonnet or its attachment strings to spin freely. Tuck away or trim any loose attachment strings. Loose and spinning attachment strings can entangle your fingers or snag on the workpiece.

VIBRATION SAFETY

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms, and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.

2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.

3. Wear suitable gloves to reduce the vibration effects on the user.

4. Use tools with the lowest vibration when there is a choice between different processes.

5. Include vibration-free periods each day of work.

6. Grip tool as lightly as possible (while still keeping safe control of it). Let the tool do the work.

7. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

TOOL SERVICE

• USE ONLY ACCESSORIES THAT ARE IDENTIFIED BY THE MANUFACTURER FOR THE SPECIFIC TOOL MODEL.

• USE OF UNAUTHORIZED PARTS OR FAILURE TO FOLLOW MAINTENANCE INSTRUCTIONS MAY CREATE A RISK OF INJURY.

• TOOL SERVICE MUST ONLY BE PERFORMED BY A QUALIFIED REPAIR PERSONNEL.

SETUP

Installing the Auxiliary Handles

WARNING: To prevent serious injury: Do not operate this tool without the auxiliary handle properly installed.

The D-Handle (included) may be installed for either right-hand or left-hand use.

OPTION 1: Using the D-Handle

Attach the D-Handle to the sides of the front cover, using the hex key and two hex head bolts.

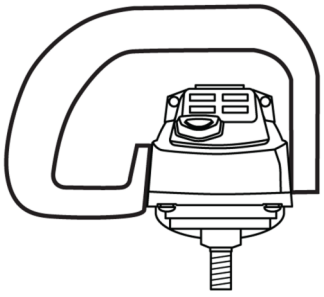


Figure A

NOTE: Slide the hex key through the hole in the handle to access the bolt on the long side of the handle

Figure B: D-Handle Installed

OPTION 2: Using with a side handle (side handle not included)

This tool can be used with many standard angle grinder side handles which can be installed on either side.

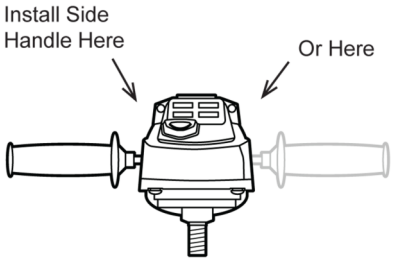


Figure C

Installing the Backing Pad/Foam Pad

1. The accessory MUST be:

· Rated to at least 3377 RPM

· No larger than 7” in diameter

· Fitted with a threaded opening of 5/8” x 11 TPI

· Undamaged

· A backing pad

2. Press in and hold the Spindle Lock Button to prevent the Spindle from turning.

3. Thread the backing pad onto the spindle until firmly secured in place.

Workpiece and Work area set up

1. Designate a work area that is clean and well-lit. The work area must be accessible by children or pets to prevent distraction and injury.

2. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage. The power cord must reach the work area with enough extra length to allow free movement while working.

3. Secure loose workpieces using a vise or clamps (not included) to prevent movement while working.

4. There must not be hazardous objects, such as utility lines or foreign objects nearby that will present a hazard while working.

OPERATION

Polishing

1. Make sure the surface to polish has been thoroughly washed, and is free of dust, dirt, oil, grease, etc.

2. Place a clean foam pad (sold separately) securely onto the backing pad.

3. Apply 2 tablespoons of wax (not included) evenly on the foam pad.

Caution: Do not apply the wax directly to the surface of the vehicle. The amount of wax needed will vary according to the size of the vehicle being waxed.

4. Rotate the speed dial to select the desired speed between 1 & 4.

Caution: Only use the slower speeds (1 through 4) for polishing. Otherwise, damage may occur to the paint being polished. NATI is not responsible for damage to the vehicle's finish due to improper use of this Polisher.

5. Plug the power cord into an electrical extension cord (not included). Then, plug the extension cord into a grounded, GFCI-protected, 120 Volt electrical outlet.

WARNING: To prevent electrical shock, keep cord connection off the ground.

Note: Always start and stop the polisher while it is held firmly against the surface of the vehicle. Failure to do so may result in the foam pad or polishing bonnet being thrown from the polishing pad.

6. To start, position the unit on the area to be polished, grip the polisher firmly with both hands and press the trigger. Release the trigger to stop. To use the lock on button, while holding in the trigger, press the lock on button, then release the trigger. The polisher will stay on. Press and release the trigger to stop.

7. Keep pressure off of the polisher when operating. The foam pad should LIGHTLY contact the polishing surface.

Caution: To prevent damage to the foam pad, polishing bonnet, and vehicle finish: Only apply the pad/bonnet flat against the surface, see Figure F.

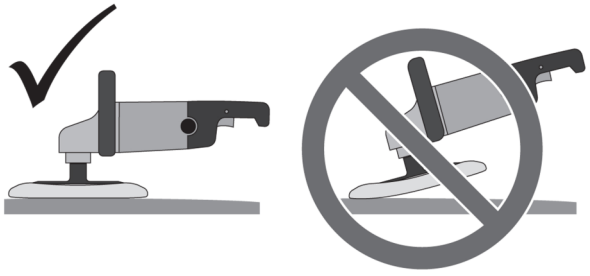


Figure F: Polishing Angle

8. Begin using the polisher to apply wax to the vehicle. Apply the wax to all the flat surfaces with broad, sweeping strokes in a crisscross pattern. Apply the wax evenly over the surface of the vehicle.

9. Add additional wax to the polishing pad as needed. To add additional wax:

a. Stop the tool and allow the polisher to come to a complete stop.

b. Add a small amount of wax evenly over the pad surface.

c. Avoid using too much wax. For additional applications of wax to the foam pad, reduce the amount of wax. The foam pad will not absorb as much wax in subsequent applications.

d. Resume operation.

Note: The most common error when waxing/polishing a vehicle is applying too mush wax. If the foam pad becomes saturated with wax, applying wax will be more difficult and will take longer. Applying too much wax may also reduce the life of the foam pad. If the foam pad continually comes off the backing pad during use, too much wax may have been applied.

10. After the wax has been applied to the vehicle's surface, turn off the polisher. Unplug the power cord from the electrical source.

11. Remove the foam pad from the backing pad and with your hand and the foam pad, apply wax to any hard to reach areas of the vehicles such as around lights, door handles, under bumpers, etc.

12. Allow sufficient time for the wax to dry.

13. Place a clean polishing bonnet (sold separately) securely onto the backing pad.

Note: Tightly pull the string to secure the polishing bonnet. Secure the string and keep it out of the way by tying several knots.

Note: Start and stop the polisher only while it is held firmly against the surface of the vehicle. Failure to do so may result in the bonnet being thrown from the backing pad.

14. Start the polisher and begin buffing off the dried wax.

15. When you have removed as much wax as you can with the polisher, turn off and unplug the polisher.

16. Remove the polishing bonnet from the backing pad. Using the polishing bonnet, remove the wax from all the hard to reach areas of the vehicle.

CLEANING, MAINTENANCE, & LUBRICATION

1. Before each use, inspect the general condition of the tool. Check for:

· Loose hardware

· Misalignment or binding of moving parts

· Cracked or broken parts

· Damaged electrical wiring

· Any other condition that may affect its safe operation

2. After use, wipe external surfaces of the tool with a clean cloth.

3. Periodically blow dust and grit out of the motor vents using dry compressed air. Wear ANSI-approved safety goggles and NIOSH-approved breathing protection while doing this.

4. Periodically recheck all nuts, bolts, and screws for tightness.

5. Remove foam pad from backing pad when polisher is not in use. This will allow backing pad to dry and retain its original shape. Wash with mild soap and water before storing.

6. The polishing bonnet may be machine washed in cold water with mild detergent. **Do not put in the dryer.**

7. Use only a clean cloth and mild detergent to clean the body of the polisher. Do not use solvents. Do not immerse any part of the tool in liquid.

8. Carbon Brush Maintenance. The carbon brush may require maintenance when the motor performance of the tool decreases or stops working completely. To maintain the brushes:

a. Remove the carbon brush cover on each side of the motor housing.

b. Remove the carbon brushes from the housing. Keep track of which orientation the old carbon brushes were in to prevent needless wear if they will be reinstalled.

c. If either carbon brush is worn down by more than 1/2, replace them both.

d. To clean old carbon brushes before reusing them, rub the contact areas with a pencil eraser.

e. Reinsert the old carbon brushes in the same orientation to reduce wear.

f. When installing, make sure the carbon portions of the brushes contact the motor armature, and that the springs face away from the motor. Also, make sure the springs operate freely.

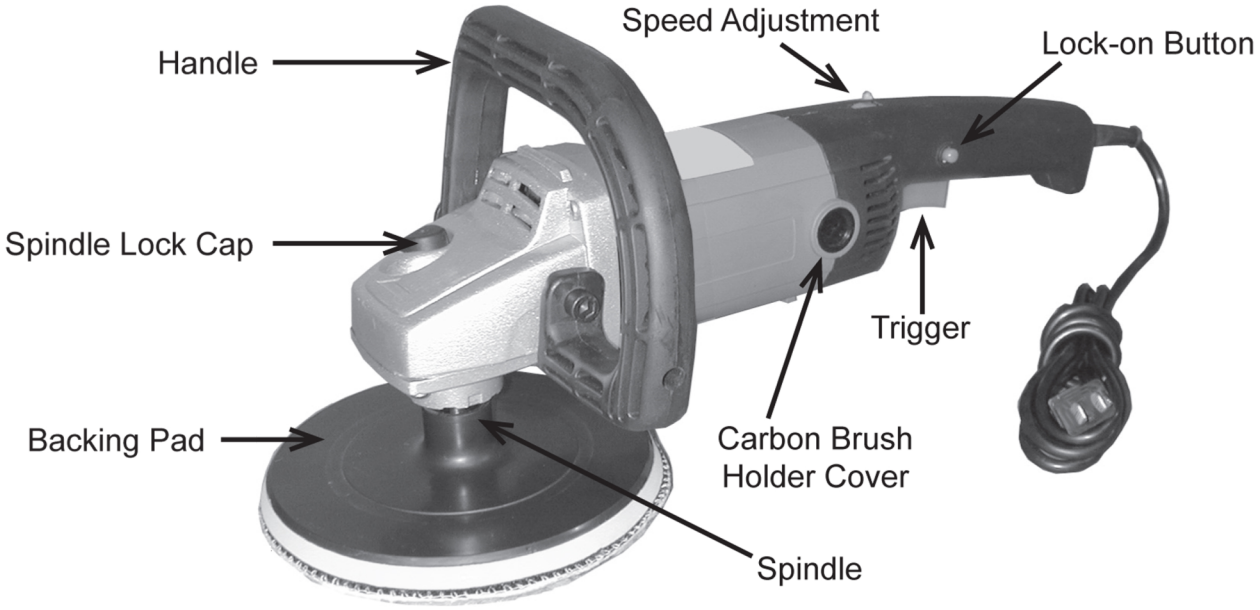
g. Replace the carbon brush covers. Do not over-tighten.

Note: New carbon brushes tend to spark when first used until they wear and conform to the motor's armature.

WARNING: If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.

FUNCTIONAL DESCRIPTION AND SPECIFICATIONS

WARNING: Disconnect the tool from the power source before making any adjustments, changing accessories or storing the tool. Such precautionary safety measures reduce the risk of unintentional tool operation.



Troubleshooting Guide

Symptom	Possible Cause(s)	Corrective Action
Tool will not start	Cord not connected	Check that the cord is plugged in
	No power at outlet	Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure the circuit is right capacity for tool and circuit has no other loads.
	Internal Damage or wear	Replace carbon brushes and/or have technician service tool
Tool operates slowly	Excess pressure applied to workpiece.	Decrease pressure, allow tool to do the work.
	Power being reduced by long or small diameter extension cord.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load.
Performance decreases over time	Carbon brushes worn or damaged	Replace brushes
Excessive noise or rattling	Internal damage or wear	Have technician service tool
Overheating	Forcing tool to work too fast.	Allow tool to work at its own rate
	Blocked motor housing vents.	Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air.
	Motor being strained by long or small diameter extension cord.	Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load.
Tool does not sand or polish effectively	Disc or accessory may be loose on spindle	Be sure disc accessory arbor is correct and outer flange/arbor nut is tight.
	Disc accessory may be damaged, worn, or wrong type for the material	Check condition and type of disc accessory. Use only proper type of disc accessory in good condition.
	Wax sprays off polishing pad	Reduce RPM to minimum setting

North American Tool Industries (NATI) makes every effort to ensure that this product meets high quality and durability standards. NATI warrants to the original retail consumer a 1-year limited warranty from the date the product was purchased at retail and each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, or accidents, repairs or alterations, or a lack of maintenance. NATI shall in no event be liable for death, injuries to persons or property, or for incidental, special, or consequential damages arising from the use of our products. To receive service under warranty, the original manufacturer part must be returned for examination by an authorized service center. Shipping and handling charges may apply. If a defect is found, NATI will either repair or replace the product at its discretion.

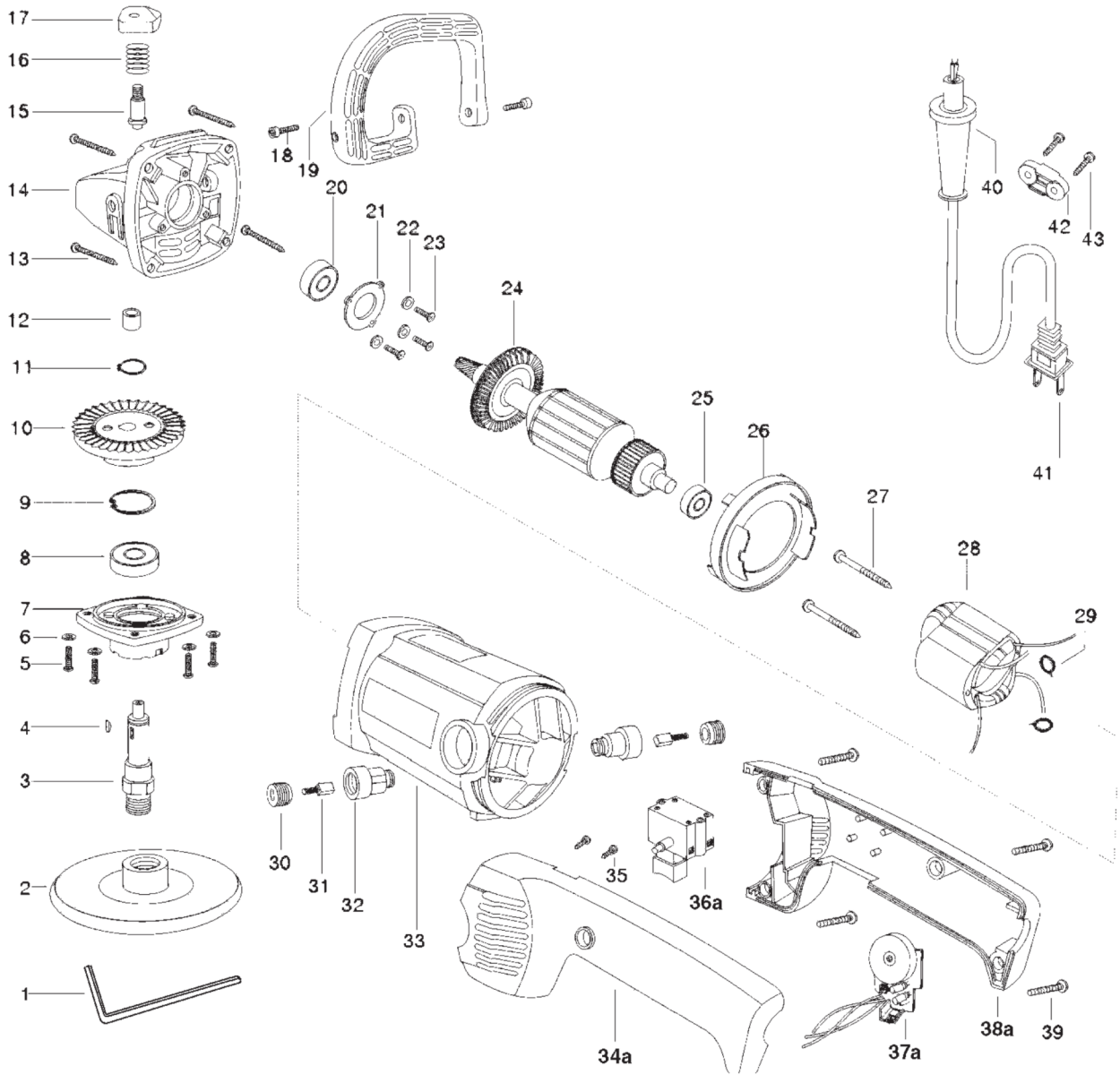
DO NOT RETURN TO STORE

For Customer Service:
Email: feedback@natitools.com or Call 1-800-348-5004

7” VARIABLE SPEED CAR POLISHER

Model: 45134

Parts List



Call 1-800-348-5004 for assistance or replacement parts

Please provide the following information:

- *Model number*
- *Part description and number as shown in parts list*
- *Serial number (if any)*

Address any correspondence to:

North American Tool Industries
84 Commercial Rd
Huntington, IN 46750

#	Description	QTY.	#	Description	QTY.
1	Hex Key	1	23	Screw (4x10)	3
2	Backing Pad	1	24	Armature	1
3	Spindle	1	25	Bearing (#18)	1
4	Half Circle Key (4x13)	1	26	Wind Shield Ring	1
5	Screw (5x16)	4	27	Tap Screw (5x55)	2
6	Spring Washer	4	28	Stator	1
7	Front Cover	1	29	Spring (#110)	2
8	Bearing (#201)	1	30	Brush Holder Cover	2
9	Fender Ring (32)	1	31	Carbon Brush (#4100)	2
10	Large Gear	1	32	Brush Holder (#4100)	2
11	Fender Ring (12)	1	33	Motor Housing	1
12	Steel Sleeve (115B, 12x8x10)	1	34	Upper Back Cover	1
13	Tap Screw (5x30)	4	35	Tap Screw (3x10)	2
14	Front Cover	1	36	Trigger	1
15	Lock Pin	1	37	Speed Adjustment	1
16	Lock Spring	1	38	Lower Black Cover	1
17	Spindle Lock Cap	1	39	Screw (4x20)	4
18	Hex Head Screw (8x16)	2	40	Sheath (#125)	1
19	Handle	1	41	Power Cord	1
20	Bearing (#101)	1	42	Press Cable Board	1
21	Triangle Press Cover	1	43	Tap Screw (4x14)	2
22	Spring Washer (4)	3			