



USER INSTRUCTION GUIDE

AIRRAK01 RADON READY KIT

REVISED: JANUARY 2022

THANK YOU!

FROM ALL OF US AT AIRCAVATOR TOOLS, THANK YOU FOR YOUR PURCHASE OF THE AIRRAK01 RADON READY KIT!

WE HOPE OUR PRODUCTS BRING YOU YEARS OF RELIABLE SERVICE AND MAKE YOUR JOB FASTER, EASIER, AND SAFER!

OUR MISSION:

TO DELIVER VALUE TO OUR CUSTOMERS BY IMPROVING SAFETY, REDUCING TIME REQUIRED TO PERFORM A TASK, AND SUPPORTING OUR CUSTOMERS NEEDS THROUGH INNOVATION.

OUR STORY:

AIRCAVATOR TOOLS, INC. WAS CO-FOUNDED BY RALPH AND KELLY QUIN IN 2021.

RALPH IS A LICENSED RESIDENTIAL BUILDER AND CERTIFIED RADON MITIGATOR WITH OVER 30 YEARS OF EXPERIENCE IN THE INDUSTRY. OVER THE PAST 10 YEARS, RALPH HAS BEEN DEVELOPING AND SELF-TESTING TOOLS TO IMPROVE THE RADON MITIGATION PROCESS. HE UNDERSTANDS THE CHALLENGES FACED IN THE RADON MITIGATION PROCESS AND IS NOW PASSING LESSONS LEARNED IN THE TRADE ONTO YOU!

AIRCAVATOR TOOLS USES THE PATENT PENDING METHOD PROCESS, USING HIGH-POWERED AIR TO EXPAND AND DISMANTLE THE TINY AIR POCKETS THAT ALL COMPACT SOIL HAS. THIS REVOLUTIONARY PROCESS MAKES DIGGING A BREEZE!

AIRCAVATOR TOOLS ARE MANUFACTURED IN SIMPSONVILLE, SC.

CAUTIONARY STATEMENTS

- EVERY AIRCAVATOR KIT IS ENGINEERED WITH SAFETY AS OUR #1 PRIORITY.
- PRIOR TO USING ANY AIRCAVATOR PRODUCTS READ AND UNDERSTAND ALL INSTRUCTIONS FOR USE. FOR ANY QUESTIONS, REFER TO THE TECHNICAL SUPPORT SECTION OF THIS MANUAL
- PLEASE KNOW AND ABIDE BY ALL LOCAL, STATE, AND NATIONAL LAWS APPLICABLE TO EVERY JOB SITE PRIOR TO USE.
- USE ALL PERSONAL PROTECTIVE EQUIPMENT (PPE) THAT IS REQUIRED IN THIS MANUAL.
- RECOMMENDED PPE MAY NOT BE REQUIRED, BUT SHOULD BE CONSIDERED
- DURING USE, IF ELECTRICAL LINES ARE EXPOSED, BE MINDFUL OF PHYSICALLY CONTACTING THE LINES WITH THE PHYSICAL TOOL COMPONENTS. IF THE WIRING BECOMES DAMAGED, ELECTRICAL SHOCK MAY RESULT.
- USE OF THIS PRODUCT IN A MANNER THAT IT IS NOT INTENDED FOR WILL VOID ANY WARRANTIES, EXPRESSED OR IMPLIED.
- IMPROPER USE MAY RESULT IN PERSONAL INJURY OR THE INJURY OF OTHERS. THE END USER SHALL FOLLOW ALL WRITTEN INSTRUCTIONS FOR MAXIMUM SAFETY AND JOB SITE SUCCESS.
- ALL NOZZLES THAT ARE NOT IDENTIFIED IN THIS DOCUMENT AS A "SAFETY NOZZLE" ARE FOR BELOW-GRADE USE ONLY. DO NOT ATTEMPT TO USE ABOVE GRADE.

GENERAL INFORMATION

- AIRCAVATOR TOOLS INC. PATENT PENDING SYSTEMS AND METHODS PROVIDES A REVOLUTIONARY, FASTER WAY TO EXCAVATE A VARIETY OF SOIL TYPES WITH LOWER INJURY RISK, MINIMAL PHYSICAL EFFORT, LESS FATIGUE, AND LOWER CHANCE OF DAMAGE TO UNDERGROUND UTILITIES/SYSTEMS.
- AIRRAK01 IS AN AIR POWERED TOOL SPECIALLY DESIGNED FOR EXCAVATION OF RADON SUCTION PITS THROUGH AN ACCESS HOLE. AIRRAK01 CONSIST OF A STORAGE CASE, CONTROL HANDLE, 4 SPECIALTY NOZZLES, 2 RUBBER DISKS AND A VACUUM PLATE.
- THIS UNIT WAS SPECIALLY BUILT FOR THE ENVIRONMENT IT WILL OPERATE IN, WHICH IS HIGHLY ABRASIVE. THE PROPRIETARY NOZZLES DELIVER A FOCUSED HIGH ENERGY AIR STREAM WHICH IS EFFECTIVE AT LOOSENING AGGREGATE FOR EASY REMOVAL.
- THE PROPRIETARY NOZZLES ARE CONSTRUCTED FROM ROBUST STAINLESS STEEL, PROVIDING A THOUGHTFUL BALANCE OF WEAR RESISTANCE, DURABILITY, AND RUST PREVENTION.
- TYPICALLY, THE AIRCAVATOR IS POWERED BY A PORTABLE AIR COMPRESSOR IN CONJUNCTION WITH A SHOP-TYPE VACUUM TO REMOVE THE LOOSE SOIL. FOR OPTIMAL PERFORMANCE AND EXTENDED OPERATION, THE AIRCAVATOR CAN BE USED WITH HIGH CFM GAS POWERED TYPE OR TOW BEHIND AIR COMPRESSOR UNITS AS WELL.
- THE AIRCAVATOR'S PATENT PENDING SYSTEM COMBINES DIRECTING AIR FLOW TO A PROPRIETARY NOZZLE TIP WHICH CREATES A FOCUSED HIGH ENERGY AIR STREAM. THIS FOCUSED HIGH ENERGY AIR STREAM PRESSURIZES THE VOID IN SOIL CAUSING THE SOIL TO BREAK APART. TRADITIONAL METHODS FOR EXCAVATING RADON SUCTION PITS UTILIZE TOOLS LIKE AUGERS, SCRAPERS, PRY BARS, AND OTHER CONVENTIONAL TOOLS THAT HAVE HARD EDGES THAT WILL DAMAGE UNDERGROUND UTILITIES. THE AIRCAVATOR'S FOCUSED HIGH ENERGY AIR STREAM IS HARMLESS TO NON-POROUS MATERIALS LIKE UNDERGROUND ELECTRICAL WIRING, PLUMBING PIPES, HVAC LINES AND OTHER UTILITIES.

AIRCAVATOR AIRRAK01 KIT CONTENTS

Item Description	Quantity per Kit	Aircavator Part Number
Customized Carrying Case	1	AIRTC01
Safety Glasses	1	AIRSG01
Safety Rubber Disk Set	1	AIRSD01
Protective Vacuum Base	1	AIRPVB01
Control Handle Assembly	1	AIRARH01
Safety Nozzle Assembly	1	AIRSN01
0° Nozzle Assembly	1	AIRZDN01
70° S Nozzle Assembly	1	AIR70SN01
90° S Nozzle Assembly	1	AIR90SN01

AIRRAK01 KIT CONTENTS



AIRTC01 Custom Carrying Case

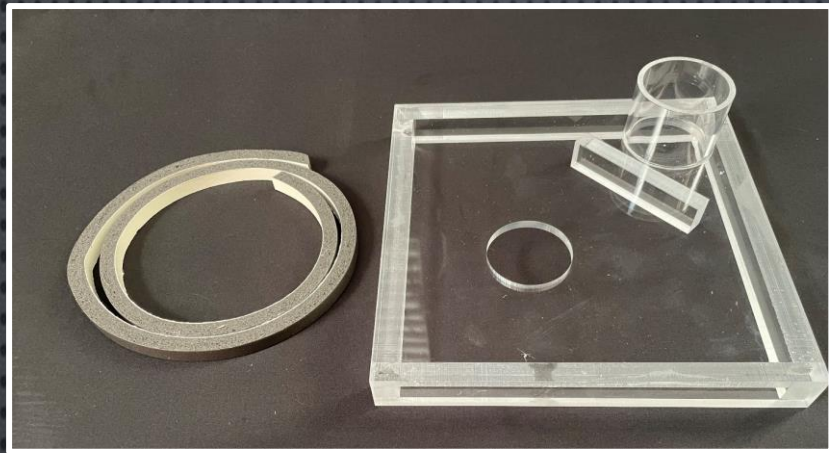


AIRSG01 Safety Glasses



AIRSD01 Safety Rubber Disk Set

AIRRAK01 KIT CONTENTS (CONTINUED)



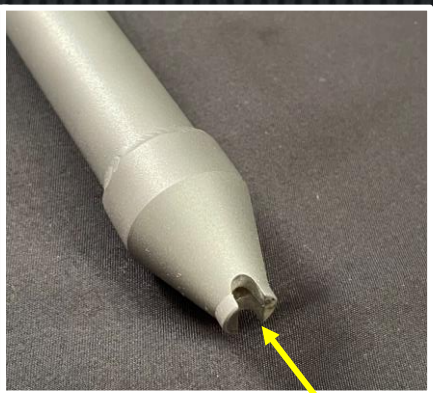
AIRPVB01 Protective Vacuum Base



Inlet Side
(from Compressor)

Outlet Side
(to Nozzles)

AIRRARH01 Aircavator Control Handle Assembly



AIRSN01 Safety Nozzle Assembly

Safety Nozzle Tip
(approved for
above-grade use)

AIRRAK01 KIT CONTENTS (CONTINUED)



AIRZDN01 0° Nozzle Assembly



AIR70SN01 70° S Nozzle Assembly



AIR90SN01 90° S Nozzle Assembly

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE REQUIRED FOR OPERATION:

- SAFETY GLASSES, MEETING ANSI-Z87.1 IMPACT TEST REQUIREMENT (INCLUDED WITH THE KIT)
- CLOTHING APPROPRIATE FOR THE JOB, AS NEEDED TO PREVENT INJURY FROM FLYING DEBRIS PARTICLES
 - CLOSED TOE SHOES
 - STEEL TOED SHOES
 - FULL-LENGTH PANTS
 - LONG-SLEEVED SHIRTS

PPE RECOMMENDED FOR OPERATION:

- APPROPRIATE RESPIRATORY PROTECTION
- HEARING PROTECTION (IF NOISE MAY EXCEED 85 DBA DURING USE)
- GLOVES

GUIDELINES FOR SAFE OPERATION

1. BE SURE ALL PROPER PPE IS IN PLACE AND BEING USED.
2. PRIOR TO USING TOOLS, KNOW AND UNDERSTAND ALL SECTIONS OF THIS MANUAL
3. VACUUM UNIT SHALL DISCHARGE TO THE EXTERIOR OF THE STRUCTURE OR A WELL-VENTILATED SPACE.
4. THE WORK AREA SHALL BE DEFINED AND ISOLATED TO PREVENT DEBRIS FROM ENTERING UNWANTED AREAS AND SURROUNDING SURFACES SHOULD BE COVERED OR PROTECTED FROM POSSIBLE DAMAGE.
5. EXAMINE ALL AIR HOSES, AIR HOSE FITTING CONNECTIONS, AND AIR COUPLERS DAILY, PRIOR TO OPERATION.
 1. CHECK AIR HOSES FOR KINKS, CUTS, AND OTHER DAMAGE. ANY SIGN OF DAMAGE REQUIRES REPLACEMENT.
 2. CHECK THE FITTING CONNECTIONS ON THE HOSE FOR DAMAGE OR MISSING COMPONENTS.
 3. RECOMMENDED TIP: AIR HOSES SHOULD BE REPLACED ANNUALLY.
 4. AIR COUPLING ENDS SHALL BE FREE FROM DENTS OR DEFORMATION. REPLACE LEAKING COUPLINGS.
6. EXAMINE AIRCAVATOR COMPONENTS FOR DAMAGE PRIOR TO AND DURING USE FOR THE FOLLOWING CONDITIONS:
 1. DAMAGED NOZZLE ENDS CAN PROVIDE REDUCED PERFORMANCE. DO NOT MODIFY NOZZLE ENDS, RATHER REPLACE ANY WITH DAMAGE. CONTACT AIRCAVATOR FOR REPLACEMENT PART(S).
 2. IF A FITTING IS DAMAGED OR LEAKING, CONTACT AIRCAVATOR TECHNICAL SUPPORT.
 3. IF THE AIRCAVATOR HANDLE IS DAMAGED, IT MUST BE REPLACED. CONTACT AIRCAVATOR FOR REPLACEMENT PART(S).
7. USE AN AIR COMPRESSOR THAT MEETS OR EXCEEDS MINIMUM REQUIREMENTS SET FORTH IN THE TECHNICAL SPECIFICATION SECTION OF THIS MANUAL. OPERATE AND MAINTAIN THE COMPRESSOR PER AIR COMPRESSOR MANUFACTURER'S REQUIREMENTS. BE MINDFUL OF THE RATED DUTY CYCLE AND BE SURE TO DRAIN WATER FROM THE COMPRESSOR DAILY.

INSTRUCTIONS ARE CONTINUED ON THE NEXT PAGE

GUIDELINES FOR SAFE OPERATION (CONTINUED)

8. NEVER POINT AN AIRCAVATOR HANDLE OR NOZZLE AT ANY PERSON. KEEP ALL BODY PARTS AWAY FROM AIRCAVATOR NOZZLE TIPS DURING OPERATION. NEVER PLACE AN AIRCAVATOR NOZZLE AGAINST EXPOSED SKIN.
9. DO NOT USE AIRCAVATOR NOZZLES FOR ANY OTHER PURPOSE OTHER THAN WHAT IT IS DESIGNED AND SPECIFIED TO PERFORM WITHIN THIS DOCUMENT.
10. DO NOT MODIFY AIRCAVATOR COMPONENTS.
11. DO NOT BYPASS THE DEAD MAN OPERATION OF THE AIRCAVATOR CONTROL HANDLE IN ANY WAY. THIS IS A SAFETY COMPONENT OF THE SYSTEM. THE AIRCAVATOR CONTROL HANDLE WILL AUTOMATICALLY SHUT AIR OFF WHEN THE HANDLE LEVER IS RELEASED. NEVER MODIFY THE AIRCAVATOR CONTROL HANDLE.
12. THE AIRCAVATOR SAFETY NOZZLE IS SPECIALLY DESIGNED TO BE USED ABOVE GROUND FOR POST CLEANING THE WORK AREA, TOOLS, AND EQUIPMENT. KEEP BODY PARTS AWAY FROM THE AIRCAVATOR NOZZLE TIP.

ASSEMBLY INSTRUCTIONS

ALL NOZZLES

CHECK TO MAKE SURE ALL NOZZLE COUPLERS AND CONTROL HANDLE COUPLER PLUGS ARE FREE OF DEBRIS.

PULL NOZZLE COUPLER LOCK AND PLACE TWO DROPS OF AIR TOOL IN THE COUPLER LOCK MECHANISM (ONCE DAILY). REPEAT ON ALL NOZZLES.

RELEASE THE COUPLER LOCK MECHANISM AND MAKE SURE IT ROTATES FREELY. IF THE TUBE DOES NOT ROTATE, GO BACK TO STEP 2 AND RECHECK. REPEAT ON EACH NOZZLE.

SAFETY NOZZLE ONLY

INSERT SAFETY NOZZLE TIP THROUGH CENTER HOLE OF SAFETY NOZZLE 6" RUBBER DEBRIS DEFLECTOR DISK PROTRUDING THROUGH ABOUT 4". THE SAFETY NOZZLE 6" RUBBER DEBRIS DEFLECTOR DISK CAN BE ADJUSTED AS NEEDED TO REDUCE DEBRIS KICK BACK TOWARD THE OPERATOR.

CONTROL HANDLE

PLACE 2 DROPS OF AIR TOOL OIL INTO THE CONTROL HANDLE INLET COUPLER PLUG.

CONNECT AIR LINE COUPLER TO CONTROL HANDLE INLET COUPLER PLUG.

POINT CONTROL HANDLES OUTLET COUPLERS INTO A RAG IN A SAFE DIRECTION. TEST CONTROL HANDLE OPERATION AND VERIFY CONTROL HANDLE CUTS OFF AIR FLOW WHEN LEVER IS RELEASED. IF THE HANDLE DOES NOT CUT OFF AIR FLOW, DO NOT USE IT UNTIL THE CONTROL HANDLE IS REPAIRED.

VACUUM BASE

VACUUM BASE PLATE CAN BE USED WITH OR WITHOUT SEAL. WE RECOMMEND USING A SELF-STICKING FOAM OR RUBBER SEAL TAPE. THIS IS A WEAR ITEM THAT WILL NEED TO BE REPLACED REGULARLY.

CLEAN THE VACUUM PLATE SEAL LEDGE. CUT THE FOAM SEAL TAPE TO FIT ON THE FOUR OUTSIDE SEAL LEDGES OF THE VACUUM PLATE. REMOVE SELF STICKING FOAM SEAL TAPE BACKING AND INSTALL ON THE FOUR LEDGES OF THE VACUUM BASE PLATE.

CONNECT THE VACUUM HOSE TO THE VACUUM BASE PLATE AND SET OVER THE OPENING IN THE SLAB.

JOB SITE SETUP INSTRUCTIONS

1. IDENTIFY AND ISOLATE THE WORK AREA. PROTECT IMPORTANT SURROUNDING AREAS AND FURNISHINGS FROM DAMAGE. KEEP ALL PEOPLE AND PETS AWAY FROM THE WORK AREA TO PREVENT INJURY. INDIVIDUALS WITHIN THE WORK AREA MUST FOLLOW PPE REQUIREMENTS AND SAFETY MEASURES TO REMAIN PROTECTED FROM INJURY.
2. MAKE AN ACCESS OPENING THROUGH THE FLOOR SYSTEM. AFTER THE ACCESS IS OPENED, CLEAN THE AREA, MAKING SURE THERE IS A MINIMUM OF 4" OF CLEAN SURFACE AROUND THE SUCTION PIT OPENING.
3. OPEN THE AIRCAVATOR KIT, INSPECT COMPONENTS, AND REMOVE THE FOLLOWING ITEMS:
 1. CLEAR VACUUM BASE
 2. 3" RUBBER NOZZLE SLIDE DISK
 3. 3/8" FOAM SEAL TAPE
4. APPLY THE FOAM TAPE TO THE LEDGE ON THE VACUUM BASE. PLACE THE VACUUM BASE OVER THE OPENING WITH SEALING LEDGE IN FULL CONTACT WITH THE FLOOR. CENTER THE NOZZLE ACCESS HOLE OVER THE OPENING IN THE FLOOR SYSTEM. SET VACUUM BASE 3" RUBBER NOZZLE SLIDE DISK ON CLEAR VACUUM PLATE OVER NOZZLE OPENING.
5. SET UP VACUUM ASSEMBLY EXTENDING EXHAUST DISCHARGE TO A WELL-VENTILATED AREA, PREFERABLY TO THE EXTERIOR OF STRUCTURE. VERIFY VACUUM FILTER ASSEMBLY IS CLEAN. CONNECT SUCTION HOSE FROM VACUUM TO AIRCAVATOR VACUUM BASE PLATE. TURN THE VACUUM ON.
6. SET UP THE AIR COMPRESSOR (PREFERABLY REMOTE TO THE WORK AREA TO REDUCE EXCESSIVE NOISE). START-UP THE AIR COMPRESSOR FOLLOWING THE MANUFACTURER'S INSTRUCTIONS/REQUIREMENTS. VERIFY THE COMPRESSOR'S AIR PRESSURE REGULATOR IS SET BETWEEN AT 90 TO 150 PSI. CONNECT THE AIR HOSE TO THE COMPRESSOR AND EXTEND THE AIR HOSE INTO THE WORK AREA LEAVING AT LEAST 5 EXTRA FEET OF AIR HOSE AT SUCTION PIT ACCESS OPENING.
7. REMOVE THE CONTROL HANDLE ASSEMBLY FROM THE AIRCAVATOR KIT AND CONNECT TO THE AIR HOSE. HOLDING CONTROL HANDLE POINT INTO RANGE IN SAFE DIRECTION BRIEFLY TEST OPERATE HANDLE TO VERIFY HANDLE PROPERLY TURNS THE AIRFLOW ON AND OFF WHEN THE CONTROL LEVER IS RELEASED.
8. REMOVE ONE NOZZLE ASSEMBLY FROM THE AIRCAVATOR KIT. TO CONNECT, PULL BACK THE LOCK MECHANISM ON THE NOZZLE COUPLER AND PUSH IN THE CONTROL HANDLE OUTLET COUPLER PLUG THEN RELEASE THE LOCK MECHANISM ON THE NOZZLE COUPLER. TO REMOVE THE NOZZLE, PUSH IN THE LOCK MECHANISM AND PULL OUT THE CONTROL HANDLE OUTLET COUPLER PLUG. THIS PROCESS WORKS FOR ALL NOZZLES IN THIS KIT.

EXCAVATION INSTRUCTIONS

1. INSTALL 0° NOZZLE ON CONTROL HANDLE.
2. INSERT NOZZLE THROUGH 3" RUBBER NOZZLE SLIDE DISK ON VACUUM PLATE DOWN UNTIL IT CONTACTS SOIL. APPLY LIGHT PRESSURE DOWN ON THE NOZZLE TIP THEN OPERATE THE CONTROL HANDLE LEVER APPLYING FULL AIR PRESSURE TO THE NOZZLE TIP. AT 2 SECONDS PULL UP CONTROL HANDLE NOZZLE ASSEMBLY ABOUT ¼ " WHILE CONTINUING TO HOLD THE HANDLE LEVEL IN FULL ON POSITION MOVING SLOWLY IN A 1-3" ROTATING PATTERN FOR AN ADDITIONAL 15 SECONDS THEN RELEASE. REPEAT APPROXIMATELY 3-5 MORE TIMES.
3. REMOVE CONTROL HANDLE NOZZLE ASSEMBLY AND SET ASIDE. REMOVE VACUUM HOSE AND SLIDE CLEAR VACUUM BASE OUT FROM OVER THE ACCESS HOLE. INSERT VACUUM HOSE INTO THE ACCESS HOLE AND REMOVE LOOSE SOIL. REPEAT # 2 UNTIL THE CAVITY IS ABOUT 2-4" WIDE AND 8-14" DEEP INTO SOIL.
4. CHANGE THE NOZZLE TO THE 70° S NOZZLE.
5. INSERT NOZZLE THROUGH RUBBER DISK AND VACUUM PLATE DOWN UNTIL NOZZLE TIP MAKES CONTACT WITH THE SOIL WALL AT BOTTOM OF EXCAVATED CAVITY. APPLY LIGHT PRESSURE TO THE NOZZLE TIP AGAINST THE BOTTOM OF THE SOIL CAVITY WALL THEN OPERATE THE CONTROL HANDLE LEVER APPLYING FULL AIR PRESSURE TO THE NOZZLE TIP. AT 2 SECONDS WHILE STILL HOLDING AIR PRESSURE ON AND NOZZLE TIP AGAINST THE CAVITY WALL START PULLING UP VERY SLOWLY TO TOP OF THE CAVITY WALL THEN RELEASE CONTROL HANDLE LEVER. DO NOT COMPRESS LOOSE SOIL IN THE CAVITY. REMOVE LOOSE SOIL OFTEN. REPEAT 3-5 MORE TIMES ALL AROUND THE CAVITY.
6. REMOVE CONTROL HANDLE NOZZLE ASSEMBLY AND SET ASIDE. REMOVE VACUUM HOSE AND SLIDE CLEAR VACUUM BASE OUT FROM OVER THE ACCESS HOLE. INSERT VACUUM HOSE INTO THE ACCESS HOLE AND REMOVE LOOSE SOIL. REPEAT # 5 UNTIL THE CAVITY IS ABOUT 8-12" WIDE.
7. CHANGE NOZZLE TO 90° S NOZZLE.
8. INSERT NOZZLE THROUGH RUBBER DISK AND VACUUM PLATE DOWN UNTIL NOZZLE TIP CONTACTS THE SOIL WALL AT BOTTOM OF EXCAVATED CAVITY. APPLY LIGHT PRESSURE TO THE NOZZLE TIP AGAINST THE BOTTOM OF THE SOIL CAVITY WALL THEN OPERATE THE CONTROL HANDLE LEVER APPLYING FULL AIR PRESSURE TO THE NOZZLE TIP. AT 2 SECONDS WHILE STILL HOLDING AIR PRESSURE ON AND NOZZLE TIP AGAINST THE CAVITY WALL START PULLING UP VERY SLOWLY TO TOP OF THE CAVITY WALL THEN RELEASE CONTROL HANDLE LEVER. DO NOT COMPRESS LOOSE SOIL IN THE CAVITY. REMOVE LOOSE SOIL OFTEN. REPEAT 3-5 MORE TIMES ALL AROUND THE CAVITY.
9. REMOVE CONTROL HANDLE NOZZLE ASSEMBLY AND SET ASIDE. REMOVE VACUUM HOSE AND SLIDE CLEAR VACUUM BASE OUT FROM OVER THE ACCESS HOLE. INSERT VACUUM HOSE INTO THE ACCESS HOLE AND REMOVE LOOSE SOIL. REPEAT # 5 UNTIL THE CAVITY IS ABOUT 16-24" WIDE.

CONTACT AIRCAVATOR WITH ANY ADDITIONAL EXCAVATION METHOD QUESTIONS

SAFETY NOZZLE INSTRUCTIONS

NOTE: THE 0° SAFETY NOZZLE IS THE ONLY NOZZLE IN THIS KIT INTENDED FOR BOTH ABOVE AND BELOW GROUND USE. ALL OTHER NOZZLES ARE BELOW GROUND EXCAVATION USE ONLY.

- WHEN USING THE 0° DEGREE SAFETY NOZZLE FOR CLEANING, KNOW YOUR SURROUNDINGS AND BE PREPARED FOR EXCESSIVE DEBRIS FLYBACK AND DEFLECTION.
- SAFETY GLASSES ARE REQUIRED, GLOVES ARE HIGHLY RECOMMENDED. ALWAYS WEAR PROPER PPE TO PREVENT INJURY.
- THIS CONFIGURATION CAN BE USED ABOVE GROUND FOR CLEANING TOOLS AND EQUIPMENT WITH THE SAME PROPRIETARY FOCUSED HIGH ENERGY AIR STREAM NOZZLE MODIFIED WITH A PRESSURE RELIEF CONE. INSTALL 6" RUBBER DEBRIS DEFLECTOR DISK ON 0 DEGREE STANDARD SAFETY NOZZLE. CONNECT 0 DEGREE STANDARD SAFETY NOZZLE TO THE CONTROL HANDLE.

CONTACT AIRCAVATOR WITH ANY ADDITIONAL EXCAVATION METHOD QUESTIONS

MAINTAINING YOUR KIT

CONTROL HANDLE ASSEMBLY:

EVERY USE: CHECK

CHECK INLET AND OUTLET INDUSTRIAL COUPLER PLUGS FOR DAMAGE. INSERTING A DAMAGE COUPLER PLUG INTO A COUPLER MAY CAUSE DAMAGE TO SEALS OR THE LOCK MECHANISM. IF HANDLE COUPLER PLUGS ARE DAMAGED, HAVE THE HANDLE SERVICED OR REPLACED. DAMAGED COUPLER PLUGS ARE RECOGNIZED AS NORMAL WEAR AND TEAR ITEMS. CLEAN AFTER USE.

MONTHLY: MAINTENANCE

THERE ARE MULTIPLE O-RINGS IN HANDLE ASSEMBLY THAT ARE SUSCEPTIBLE TO DAMAGE FROM DIRT AND DEBRIS. REMOVE ANY VISIBLE DIRT. FLUSH OUT WITH WATER, DRY OUT WITH AIR AND APPLY 5 DROPS OF AIR TOOL OIL INTO THE CONTROL HANDLE INLET COUPLER PLUG AND ROTATE SWIVEL. THEN CONNECT TO THE AIR LINE AND TEST. HAVE THE HANDLE SERVICED IF NOT WORKING PROPERLY. WORN OR DAMAGED O-RINGS AND SWIVELS ARE RECOGNIZED AS NORMAL WEAR AND TEAR ITEMS. CLEAN AFTER USE.

NOZZLE ASSEMBLIES:

EVERY USE: MAINTENANCE

PULL NOZZLE COUPLER LOCK AND PLACE TWO DROPS OF AIR TOOL OIL IN THE COUPLER LOCK MECHANISM. REPEAT ON ALL NOZZLES. RELEASE THE COUPLER LOCK MECHANISM AND MAKE SURE IT ROTATES FREELY. HAVE NOZZLE SERVICED OR REPLACED IF NOT WORKING PROPERLY. CLEAN AFTER USE.

EVERY USE: CHECK

CHECK NOZZLE EXTENSION AND TIP FOR WORN OR DAMAGED AREAS. BECAUSE THE NOZZLE OPERATES IN A HIGHLY ABRASIVE ENVIRONMENT, NOZZLE WEAR IS EXPECTED. REPLACE WORN OR DAMAGED NOZZLES. CLEAN AFTER USE.

CLEAR VACUUM BASE:

EVERY USE: CHECK

CHECK HOUSING AND FOAM SEAL TAPE FOR DAMAGE. REPLACE CLEAR VACUUM BASE IF DAMAGED. FOAM SEAL TAPE IS RECOGNIZED AS NORMAL WEAR AND TEAR ITEMS. CLEAN AFTER USE.

3" & 6" RUBBER DISKS:

EVERY USE: CHECK

CHECK BOTH RUBBER DISKS FOR DAMAGE. REPLACE DAMAGED RUBBER DISK(S) AS NEEDED.

TRANSPORTATION AND STORAGE:

STORE ALL COMPONENTS IN THE AIRCAVATOR KIT CASE FOR TRANSPORTATION.

TECHNICAL SPECIFICATIONS

- SUPPLY AIR HOSE (FROM AIR COMPRESSOR TO AIRCAVATOR KIT):
REQUIRES ½" INSIDE DIAMETER AIR HOSE WITH ½" NPT CONNECTORS
- COUPLERS AND CONNECTORS:
REQUIRES ½" COUPLER WITH ½" NPT HOSE CONNECTIONS
- OPERATING PRESSURE:
90-150 PSI (RECOMMENDED FOR BEST PERFORMANCE)
- MINIMUM PRESSURE:
80 PSI (LOWEST PRESSURE FOR PROPER OPERATION)
- NOZZLE AIR CONSUMPTION:
APPROXIMATELY 22 SCFM @ 90 PSI
- AIR COMPRESSOR (MINIMUM REQUIREMENT):
5.1 SCFM @ 90 PSI AIR COMPRESSOR W/ 30 GALLON TANK (OFFERS APPROXIMATELY A 15 % DUTY CYCLE RATING)
- AIR COMPRESSOR (IMPROVED PERFORMANCE):
24 SCFM @ 90 PSI AIR COMPRESSOR WITH 30+ GALLON TANK (OFFERS APPROXIMATELY A 90 % DUTY CYCLE RATING)
- AIRCAVATOR NOZZLE MATERIAL:
304 STAINLESS STEEL
- VACUUM:
SHOP VACUUM RATED AT 5 HP OR MORE WITH MINIMUM 2" DIAMETER SUCTION HOSE
- VACUUM AIR FILTER:
RECOMMENDED HEPA CERTIFIED

ADDITIONAL, HELPFUL INFORMATION

- AIRCAVATOR COUPLINGS ARE INTENDED TO SWIVEL, ALLOWING YOU TO DIG IN MULTIPLE DIRECTIONS WITH EASE.
- ON THE 70° AND 90° S NOZZLE ASSEMBLIES, YOU HAVE AN ALIGNMENT FLAG WELDED IN PLACE BELOW THE COUPLING.
 - THE FLAG ORIENTS TO THE TIP DIRECTION IN THE HOLE.
 - THIS WAS FOUND VERY IMPORTANT BECAUSE IT WAS DIFFICULT TO DETERMINE THE DIRECTION OF EXCAVATION WHILE YOU ARE WORKING IN A HOLE.
- THE AIRCAVATOR HANDLE ASSEMBLY IS A SAFETY SHUT OFF WITH AN AUTOMATIC RETURN TO AN “OFF” CONDITION IN THE EVENT OF A NOZZLE ISSUE. THIS CONTROLS THE AIR PRESSURE ENERGY OUTSIDE OF THE HOLE.
- AIRCAVATOR CAN DEVELOP SPECIAL NOZZLE DESIGNS IF YOU HAVE SPECIFIC DIGGING NEEDS.
- AIRCAVATOR IS CONSTANTLY DEVELOPING AND IMPROVING PRODUCTS. CUSTOMER FEEDBACK IS KEY TO OUR SUCCESS AND GROWTH.

VISIT OUR WEBSITE FOR PRODUCT UPDATES AND ADDITIONAL OFFERINGS.

CONTACT AIRCAVATOR TECHNICAL SUPPORT WITH ANY ADDITIONAL EXCAVATION NEEDS.

AIRCAVATOR SUPPORT

- EVERY AIRCAVATOR KIT IS MANUFACTURED AND ASSEMBLED FULLY IN THE USA, USING USA-MADE MATERIALS WHERE POSSIBLE AND LIMITED GLOBALLY SOURCED MATERIALS
- FOR SALES AND REPLACEMENT PARTS, VISIT WWW.AIRCAVATOR.COM TO LOCATE AN AUTHORIZED DISTRIBUTOR AND/OR EXPLORE SERVICE OPTIONS.
- FOR TECHNICAL SUPPORT:
 - EMAIL: SUPPORT@AIRCAVATOR.COM
 - PHONE: (864)-201-3021
 - WEBSITE: WWW.AIRCAVATOR.COM
 - ADDRESS: AIRCAVATOR TOOLS, INC.
PO Box 617
MAULDIN, SC 29662
- FIND US ON FACEBOOK @ WWW.FACEBOOK.COM/AIRCAVATORTOOLS

AIRCAVATOR LIMITED WARRANTY

LIMITED PRODUCT WARRANTY AIRCAVATOR TOOLS, INC. (AIRCAVATOR) LIMITED WARRANTY:

AIRCAVATOR WARRANTS TO THE ORIGINAL USER ITS AIR TOOLS ("TOOL") TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF PURCHASE FROM AN AUTHORIZED SELLER. AIRCAVATOR WILL, AT ITS OPTION, EITHER (1) REPAIR, WITHOUT COST, ANY TOOL FOUND TO BE DEFECTIVE, INCLUDING PARTS AND LABOR CHARGES, OR (2) REPLACE SUCH TOOL. REPAIRS OR REPLACEMENTS ARE WARRANTED FOR THE REMAINDER OF THE ORIGINAL WARRANTY.

IF ANY TOOL PROVES DEFECTIVE WITHIN ITS ORIGINAL ONE-YEAR LIMITED WARRANTY PERIOD IT SHOULD BE RETURNED TO ANY AUTHORIZED AIRCAVATOR TOOL DISTRIBUTOR, TRANSPORTATION PREPAID WITH PROOF OF PURCHASE. THIS WARRANTY DOES NOT APPLY TO TOOLS WHICH AIRCAVATOR HAS DETERMINED TO HAVE BEEN MISUSED OR ABUSED, IMPROPERLY MAINTAINED BY THE USER, OR WHERE THE MALFUNCTION OR DEFECT CAN BE ATTRIBUTED TO THE USE OF NON-GENUINE AIRCAVATOR REPAIR PARTS. THIS WARRANTY DOES NOT COVER TOOLS PURCHASED FROM UNAUTHORIZED AIRCAVATOR SELLERS.

AIRCAVATOR TOOLS, INC. MAKES NO OTHER WARRANTY, CONDITION OR REPRESENTATION OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, STATUTORY OR OTHERWISE. ANY IMPLIED WARRANTIES THAT MAY BE APPLICABLE TO TOOLS, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

AIRCAVATOR TOOLS, INC. MAXIMUM LIABILITY IS LIMITED TO THE PURCHASE PRICE OF THE TOOL AND IN NO EVENT SHALL BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT INCIDENTAL OR SPECIAL DAMAGES OF ANY NATURE ARISING FROM THE SALE OR USE OF THE TOOL WHETHER IN CONTRACT, TORT OR OTHERWISE.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH MAY VARY FROM STATE TO STATE.

AIRCAVATOR TOOLS, INC. PO Box 617 MAULDIN, SC 29662 REV 1/2022