

Volume

1.3

OPERATIONAL MANUAL

**MODEL: Z1T/S CORE DRILL STAND - W/TILTING
STAND / ROLLING BASE / VACUUM BASE**



by BLUEROCK® Tools



UNPACKING THE ITEM

CAUTION: This machine is packed together with items that may be sharp, oily and overly heavy objects. Remove the machine from the packaging in a safe manner. Check to ensure all accessories are included with the item while unpacking. If any parts are found to be missing, contact the retailer as soon as possible. Do not throw away the packaging until the item is out of the guarantee period. Dispose of the packaging in an environmentally responsible manner. Recycle if possible. Keep all plastic bags away from children due to risk of suffocation.

SLURRY DISPOSAL

NOTE: It is recommended to dispose of the drilling slurry (the muddy/dusty water material) in an environmentally responsible manner. The disposal of slurry directly into sewage systems, sewers, lakes, rivers, or direct earth without treatment can be environmentally harmful and possibly illegal. Ask your local public authorities about current regulations in your area.

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Z1T/S CORE DRILL STAND

NO	NAME	NO	NAME	NO	NAME
1	Inner hexagonal round head bolt M8*55	25	Wheel	49	Stellated bolt
2	Sqare pipe	26	Adjustable loop	50	wool washer
3	Track strip	27	Adjustable bolt of wheel	51	Ball of steel 11
4	Gear bar	28	Nut with washer M12	52	Function plug
5	Pin	29	Bolt of wheel	53	Washer for the function plug
6	Inner hexagonal bolt M5*10	30	Inner hexagonal round head bolt M8*20	54	Sealing bar
7	Inner hexagonal round bolt M5*10	31	Function pin	55	Hexagonal nut
8	Ruler(U.K. standard)	32	Spanner	56	Steel steelv
9	Ruler(metric)	33	Washer	57	Eye bolt M12*90
10	Plug	34	washer 13	58	Inner hexagonal bolt head bolt M5*40
11	Screw	35	Pression block	59	Handle
12	Eye bolt	36	Slide block	60	Key A8*18
13	Hand ball	37	Flat washer	61	Bolt
14	Operation stick	38	Spring washer	62	Base
15	Fastener	39	Inner hexagonal round head bolt M8*30	63	Inner hexagonal bolt head bolt M8*25
16	Lengthen sleeve	40	Function washer	64	Key 8*10*100
17	Shield ring for shaft Φ 35	41	Bolt M8*110		
18	Ball bearing	42	Pole		
19	Key	43	Washer 10		
20	Block of steel	44	Nut M10		
21	Elevating body	45	Flat washer 10		
22	Operation gear spindle	46	wheel 4"		
23	Flat washer	47	Pin 3.2*18		
24	Ball bearing 6001	48	Shaft of the wheel		

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BREAKDOWN VIEW

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Safety

DO NOT USE THIS MACHINE UNLESS YOU HAVE READ THE OPERATING INSTRUCTIONS!



Safety glasses must be worn at all times in work areas.



Long and loose hair must be contained.



Appropriate footwear must be worn.



Close fitting/protective clothing must be worn.



Safety gloves should be worn at all times and jewelry must not be worn.



Hearing protection should be worn when using this machine.



Hard-hat must be worn while using machine.



Dust mask must be worn while using this machine.



Read operational manual prior to use.

PRE-OPERATIONAL SAFETY CHECKS IN CORE DRILLING

- Examine the power cord and plug for damage. This tool is supplied with a ground plug and must always be used with a properly grounded circuit.
- Examine the body of the machine and inspect for damage or defects.

OPERATIONAL SAFETY CHECKS IN CORE DRILLING

- ONLY to be operated by qualified personal who have read instructions.
 - NOTE: Failure to read and follow instructions could result in electrical shock, fire, property damage and/or serious injury!
- DO ensure all non-essential people are clear of the immediate work area.
- DO be attentive at all times. Keep your eye on the work piece. Always be in a sensible state of mind and do not use the machine if you cannot fully concentrate.
- DO keep body parts, clothing & power cords clear of turning/cutting pieces. Stay alert and use common sense when using this tool.

Z1T/S CORE DRILL STAND

➤ DO allow machine to reach operating speed before starting a hole.
➤ DO unplug machine while changing or adjusting cutting bits so as not to accidentally turn machine on.
➤ DO remove adjusting wrenches prior to turning the machine on.
➤ DO guard against electric shock by only operating this tool on a properly functioning GFCI (Ground Fault Circuit Interrupt) circuit.
➤ DO be mindful that power tools can expose an operator to vibrations transmitted through contact with the machine. Prolonged exposure can lead to medical issues which should be discussed with a medical professional.
➤ DO tie in a drip loop in the power cord to prevent water from running into the power receptacle.
➤ DO use a dust extraction system for cutting materials that create dust. The operator should also wear a protective respiratory device.
➤ DO NOT make adjustments to machine while the machine is running.
➤ DO NOT switch off the machine when it is under load, except in an emergency.
➤ DO NOT remove or modify grounding plug. Only to be used on a properly grounded GFCI circuit.
➤ DO NOT leave the machine running when not in use.
➤ DO NOT hold the work piece by hand or using body. Always mechanically clamp or secure work piece.
➤ DO NOT allow operator to make contact with grounded surfaces such as metal objects.
➤ DO NOT allow liquids to enter the machine's ventilation system.
➤ DO NOT operate machine outside of machine specifications.
➤ DO NOT touch moving parts while the machine is running as death or dismemberment could occur.
➤ DO NOT operate machine overhead (Inverted) when drilling "wet" type cores.
➤ DO NOT remove machines electrical components while connected to a power source. Only to be removed for service by qualified personal and put back on the machine after service is complete.
➤ DO NOT allow children or untrained personal to operate machine.
➤ DO NOT use this machine in the rain or a wet environment.
➤ DO NOT operate in the presence of explosive materials as power tools create sparks which may ignite dust or fumes.
➤ DO NOT drill into an area that may contain a live electrical wire/circuit.
➤ DO NOT use this machine without safely securing to the work piece being drilled.
➤ DO NOT use full water pressure when drilling with "wet" type bits! You only need minimal water to drill with these machines. Extreme water pressure can cause water to enter the gearbox!

HEALTH WARNINGS IN CORE DRILLING

- Certain dust created by drilling contains chemicals known to cause cancer, birth defects or other reproductive harm. The examples of these chemicals are below:

- Lead from lead based paint.
- Crystalline silica from bricks, cement and assorted masonry products.

- TO REDUCE RISK OF EXPOSURE TO THESE CHEMICALS, WORK IN A WELL-VENTILATED AREA WITH VACUUM SYSTEMS, RESPIRATORS AND WITH ALL SUITABLE SAFETY EQUIPMENT.

Specifications

MECHANICAL DATA	
Compatible with the following BLUEROCK Tools Core drills	4"Z1 & 4"Z1 W/S 8"Z1 10"Z1 & 10"Z1 RB 12"Z1T/S and 12"Z1 LRBTs
Tilting Base	Yes
Vacuum Base Compatible	Yes (Center vacuum cap can be removed for traditional bolt anchoring).
Rolling Base	Yes
Leveling Bubble for Vertical Drilling	Yes
Travel	15"
Stand Height	39"

SHIPPING DATA	
Shipping Weight	48 Lbs
Shipping Carton	42" x 14" x 8"

Included Accessories

DESCRIPTION	QTY
Instruction Manual	1
Feed Handle	1
Top Bolt for Binding in Ceilings	1
Vacuum Base Accessories	1
Spacer Adapter (only used if using an 8"Z1 Motor)	1
Spacer Adapter (only used if using a 10"Z1 or 12"Z1 Motor)	1
Spacer Adapter Thick Keyway	1
Spacer Adapter Thin Keyway	2
Spacer Adapter 25mm Bolts (with flat washers)	4
Spacer Adapter 30mm Bolts	4
Spacer Adapter 45mm Bolts (with flat washers)	4
4"Z1 Mounting Collar (only used if mounting a 4"Z1 Core Drill to this stand)	1

Note

UPON RECEIPT, CHECK CAREFULLY TO ENSURE THAT THE ITEM IS IN GOOD CONDITION AND HAS ALL ACCESSORIES LISTED ABOVE.

Additional Available Accessories

Additional accessories for this item can be found in BLUEROCK® Tools online shop at www.bluerocktools.com or from your local retailer.

<i>DESCRIPTION</i>
120V Vacuum Pump 1 L/S Displacement
1" Wet Coring Bit
1.25" Wet Coring Bit
1.5" Wet Coring Bit
1.75" Wet Coring Bit
2" Wet Coring Bit
2.5" Wet Coring Bit
3" Wet Coring Bit
3.5" Wet Coring Bit
4" Wet Coring Bit
4.5" Wet Coring Bit
5" Wet Coring Bit
6" Wet Coring Bit
7" Wet Coring Bit
8" Wet Coring Bit
9" Wet Coring Bit
10" Wet Coring Bit
11" Wet Coring Bit
12" Wet Coring Bit
1" Dry Coring Bit
1.25" Dry Coring Bit
1.5" Dry Coring Bit
1.75" Dry Coring Bit
2" Dry Coring Bit
2.5" Dry Coring Bit
2.75" Dry Coring Bit
3" Dry Coring Bit
3.5" Dry Coring Bit
4" Dry Coring Bit
5" Dry Coring Bit
1-1/4" 7 UNC to 5/8" 11 UNC Core Bit Adapter
10" Extension Rod
18" Extension Rod

Operations

Note

THOROUGHLY READ THROUGH THE ENTIRE MANUAL BEFORE OPERATING THIS ITEM!

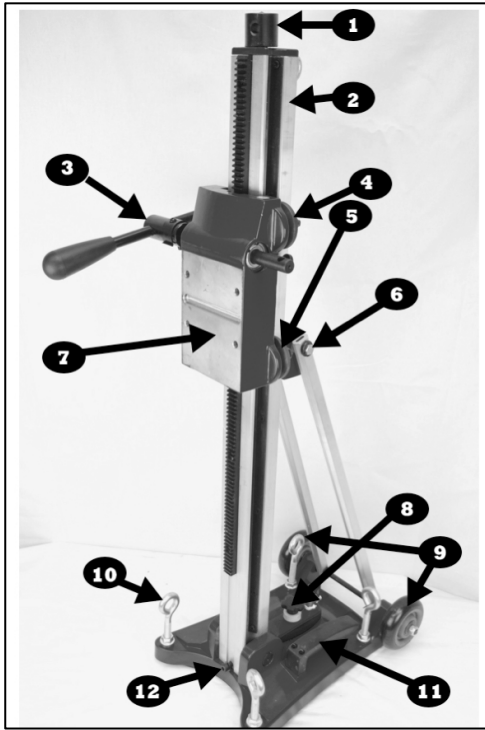
PURPOSE

- The purpose of the Z1T/S Core Drill Stand is to mount to the BLUEROCK 4”Z1, 8”Z1, 10”Z1, 10”Z1 RB, 12”Z1 T/S and 12”Z1 LRBTS core drill motors
- These stands are designed to be bolted or vacuumed to the drilling surface through their base.
 - NOTE: Make sure the base fits completely on the surface and the base is securely fastened using wedge anchors to bolt to the surface.
 - If using the vacuum base, you will need a vacuum pump (sold separately).
- These stands can be used vertically, horizontally or overhead (inverted) provided an acceptable work environment. NOTE: For safety, when drilling horizontally or overhead a safety chain/strap should always be used. Vacuum base is only to be used vertically on smooth surface.
 - CAUTION: If drilling overhead you are only permitted to use dry type core bits with a dust collection system. “Wet” type holes overhead would allow water into the motor and create an extremely dangerous situation.
- This machine has one primary adjusting point for the angle between the drill stand and the drill motor. The angle Adjusting bolt (6 below) can be loosened to adjust the angle and retightened when desired angle is achieved. NOTE: The drill carriage can also be locked in place by twisting until the locking bolt engages towards the carriage. To unlock the carriage pull out the bolt and turn.

TRANSPORTING THE MACHINE

- When transporting the machine, always lock the carriage bolt.
- When using the wheels, tilt the machine back towards the operator and once the wheels are engaged with the ground pull or push the machine on the ground.
 - Avoid dragging the vacuum rubber. You can take the rubber out if not using.
- If transporting inside a vehicle, it is recommended to transport it on its side so as to avoid the item falling over.

Z1T/S CORE DRILL STAND



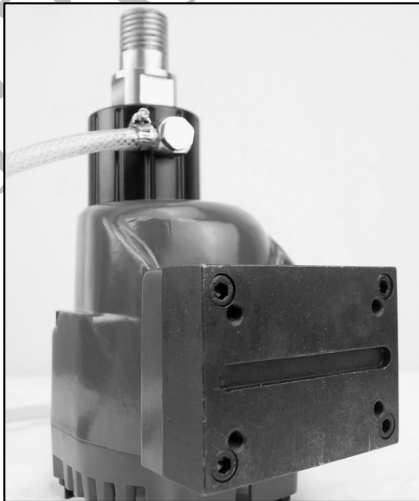
1) Top Bolt for Binding in Ceilings
2) Stand Mast
3) Feed Handle
4) Carriage Adjusting Bolt
5) Carriage Adjusting Bolt
6) Angle Adjusting Bolt
7) Drill Carriage
8) Vacuum Base Valve
9) Base Wheels
10) Base Leveling Bolts
11) Base Handle
12) 90 Degree Holding Bolt

MOUNTING THE DRILL MOTOR TO THE STAND

➤ Instruction for 10"Z1 and 12"Z1 Motors

○ 1) Mount Plate/Spacer to the Drill motor

- A) Use Thick keyway. Place keyway into the plate/spacer. Gently tap into place.
- B) Lightly tap the plate/spacer into drill motor.
- C) Line up holes. Use 30mm bolts (1-1/4" length) to tighten plate/spacer to drill motor gearbox

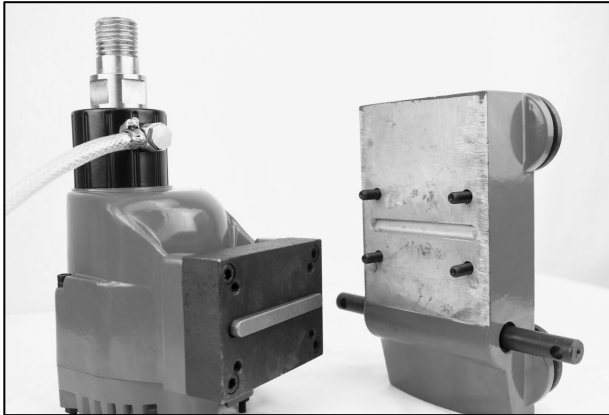


○ 2) Mount drill with plate/spacer to the stand carriage.

- A) Use Thin keyway. Place Keyway into the plate/spacer. Gently tap into place.

Z1T/S CORE DRILL STAND

- **B) Lightly tap the plate/spacer into the stand carriage.**



- **C) Line up holes. Use 25mm bolts (1" length) with flat washers to tighten plate/spacer to stand carriage. You will come from the backside of the carriage with these bolts. Tighten bolts. Final result pictured below:**



➤ **Instruction for 4"Z1 Motors**

- **1) Affix 4"Z1 mounting collar to stand carriage.**

- **A) Use Thin keyway. Place Keyway into the stand carriage. Gently tap into place.**

- **B) Lightly tap the mounting collar into the stand carriage. NOTE: The collar must be arranged in the same orientation as the picture below.**

- **C) Line up holes. Use 25mm bolts (1" length) with flat washers to tighten plate/spacer to stand carriage. You will come from the backside of the carriage with these bolts. Tighten bolts. Final result pictured below:**

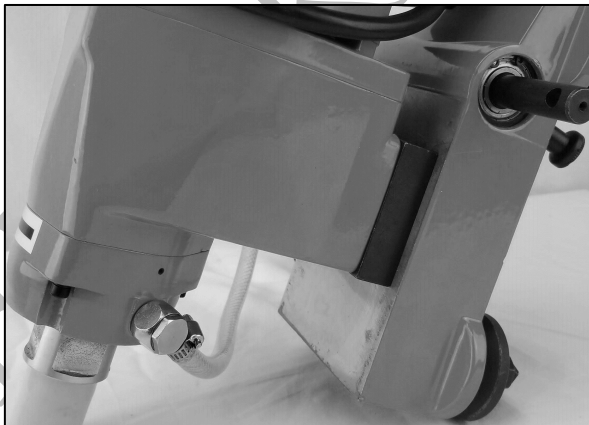
Z1T/S CORE DRILL STAND



➤ Instruction for 8"Z1 Motors

- 1) Affix 8"Z1 motor to stand carriage.

- A) Use 2 thin keyways. Place 1 keyway into the stand carriage and gently tap into place. Place other keyway into drill motor and gently tap into place.
- B) Align 8"Z1 spacer between the carriage and drill motor.
- C) Lightly tap the 8" Motor onto the stand carriage. NOTE: The motor must be arranged in the same orientation as the picture below.
- D) Line up holes. Use 45mm bolts (1-3/4" length) with flat washers to tighten plate/spacer to stand carriage. You will come from the backside of the carriage with these bolts. Tighten bolts. Final result pictured below:



USING THE STAND

- Do all pre-operational and operational safety checks from Chapter 1.

- Consider your security and stability as well as the orientation of the machine in the work area.

- Consider the work surface material, condition, strength, density and rigidity. These factors directly affect the tools efficiency.

- Secure the machine base to the work surface by using a wedge anchor, vacuum system or other method to ensure the base does not move.

- Use the four leveling bolts on the corners of the base to level the machine if needed.

- If not using the vacuum base, you can either take out the vacuum foam or adjust the leveling bolts down 1/2" past the foam. It is generally recommended to take the foam out when not using as it can cause tears in the foam material transporting and moving the machine.

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- After placing the machine in work area, connect a safety chain or strap if necessary.
 - A safety chain should attach to the machine (preferably through the carrying handle or O bolt) as well as attached to the work area in such a manner that prevents the machine from detaching or falling from the work area.
- If necessary, adjust drilling angle.
 - NOTE: If adjusting from the 90 degree position you will need to take out the hex bolt on the front of the machine under the drill spindle that tightens into the drill base.
 - Loosen the lower side bottom bolt on the base if necessary, the side black handle and back adjusting hex bolt.
 - Adjust the angle and tighten the rear hex bolt. Tighten the side handle bolt. Tighten side bottom bolt in the base.
 - NOTE: If adjusting back to a 90 degree angle, also tighten the front hex bolt below the spindle that tightens the stand into the base.
- Ensure the feed handles are securely attached to the feed spindle.

BLUEROCK® TOOLS

General Maintenance

- Keep stand clean and free of debris.
- Check for misalignment, binding and breakage of all moving parts. If damaged, repair tool before use.

Occasional Maintenance

- Have the power tool serviced by a qualified service technician using identical replacement parts.
 - Adjusting Carriage:
 - 1) Periodically check and adjust slides as necessary.
 - 2) Tighten slides with motor in down position. Adjust left side square bolts on back of carriage rollers. Loosen lock nut and tighten square bolt. Tighten lock nut back up. These square bolts are curved type.
 - 3) Adjust the bolts evenly while moving the handle up and down so that there's no free play yet not binding anywhere through its range of travel.

Parts List

NO	NAME	NO	NAME	NO	NAME
1	Inner hexagonal round head bolt M8*55	25	Wheel	49	Stellated bolt
2	Sqare pipe	26	Adjustable loop	50	wool washer
3	Track strip	27	Adjustable bolt of wheel	51	Ball of steel 11
4	Gear bar	28	Nut with washer M12	52	Function plug
5	Pin	29	Bolt of wheel	53	Washer for the function plug
6	Inner hexagonal bolt M5*10	30	Inner hexagonal round head bolt M8*20	54	Sealing bar
7	Inner hexagonal round bolt M5*10	31	Function pin	55	Hexagonal nut
8	Ruler(U.K. standard)	32	Spanner	56	Steel steelv
9	Ruler(metric)	33	Washer	57	Eye bolt M12*90
10	Plug	34	washer 13	58	Inner hexagonal bolt head bolt M5*40
11	Screw	35	Pression block	59	Handle
12	Eye bolt	36	Slide block	60	Key A8*18
13	Hand ball	37	Flat washer	61	Bolt
14	Operation stick	38	Spring washer	62	Base
15	Fastener	39	Inner hexagonal round head bolt M8*30	63	Inner hexagonal bolt head bolt M8*25
16	Lengthen sleeve	40	Function washer	64	Key 8*10*100
17	Shield ring for shaft Φ 35	41	Bolt M8*110		
18	Ball bearing	42	Pole		
19	Key	43	Washer 10		
20	Block of steel	44	Nut M10		
21	Elevating body	45	Flat washer 10		
22	Operation gear spindle	46	wheel 4"		
23	Flat washer	47	Pin 3.2*18		
24	Ball bearing 6001	48	Shaft of the wheel		

Breakdown View

