

AGP[®]

DIAMOND CORE DRILL STAND

QS600

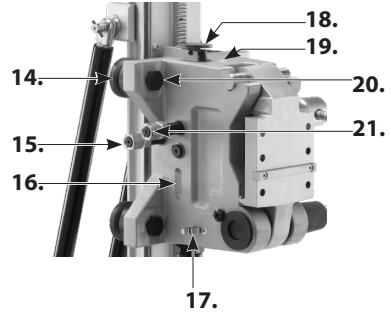
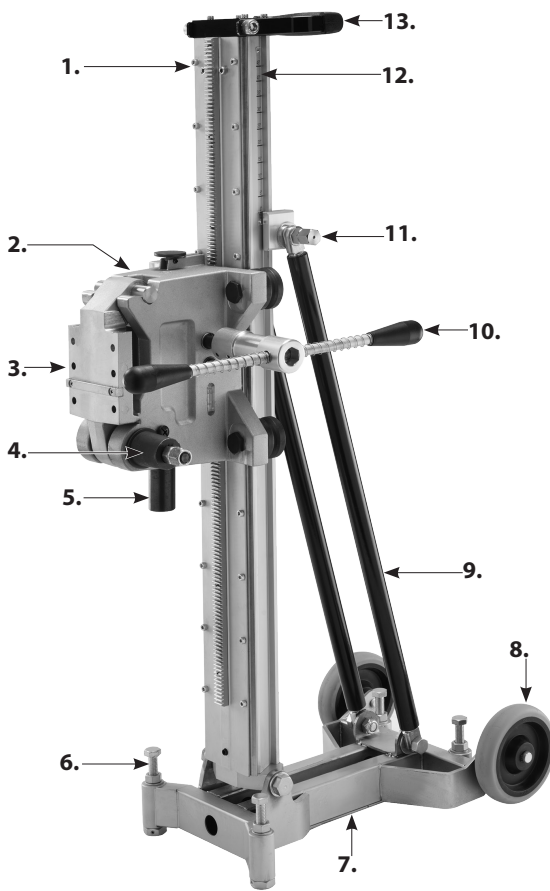


Instruction Manual



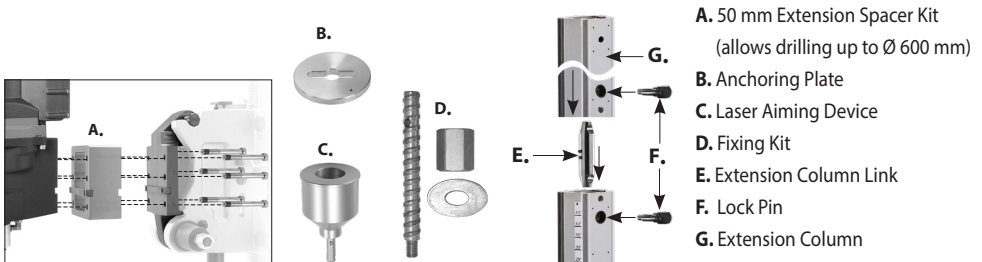
SPECIFICATIONS

Model	QS600
Capacity (without spacers)	500 mm (20")
Max. Capacity (with spacer)	600 mm (24")
Effective Stroke	670 mm (26.4")
Dimensions (LxWxH) 6"	582 x 313 x 1032 mm (22.9" x 12.3" x 40.6")
Weight	26.8 kg (59 lb)



1. Column
2. Carriage
3. Motor Mount (quick-release)
4. Cradle Lock (eccentric)
5. Wrench Stop Lug
6. Leveling Screws
7. Steel Base
8. Wheels
9. Buttress Bars
10. Crank Handle (M19)
11. Tilt Lock
12. Tilt Scale
13. Handle
14. Guide Roller
15. 1:1 Crank Spindle
16. Horizontal Spirit Level
17. Cable Clip
18. Carriage
19. Vertical Spirit Level
20. Guide Roller Adjuster
21. 4:1 Reduction Crank Spindle

Optional:



INTRODUCTION

This drill stand is designed to mount diamond core drilling motors by using a suitable motor mounting plate. A standard 4 bolt (+2) motor mounting plate is included with this stand. The drill stand guides the motor and diamond core bit so that it is possible to drill perfectly straight cuts in a safe and controlled manner. The stand is also able to slant so that holes may be cored at an angle as required. This stand must be securely fastened to the workpiece using a concrete anchor and fixing kit.

WARNING: Do not attempt to use this drill stand if the mounting system does not fit perfectly to the drilling motor. Loose mounting will cause a hazardous situation.

PACKAGE CONTENTS

- Drill Stand
- Crank Handle
- Motor Mount Plate
- Wheels

MOUNTING THE DRILL STAND TO THE WORK SURFACE

Once the desired position of the stand is determined, use a concrete anchor to secure it.

Drill a suitable sized hole for the anchor with a hammer drill.

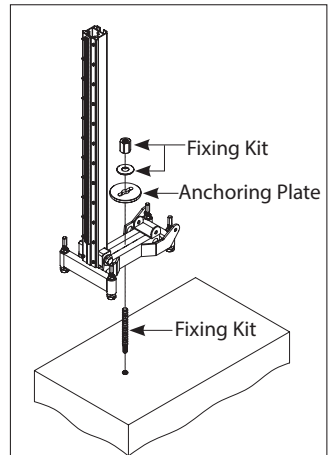
Drive in the anchor.

Thread the rod from the fixing kit into the anchor, add the anchoring plate, the washer, and speed nut in the fixing kit.

Before fully tightening the nut, use the spirit levels to check if the stand is level. If needed, loosen the locknuts, and adjust the four leveling screws to achieve levelness. Then retighten the locknuts.

Now fully tighten the speed nut which affixes the base to the work surface.

WARNING: When anchoring to a brick surface, a special masonry anchor and brick fixing kit must be used. Using a concrete type drop-in anchor in brick could lead to the brick cracking and the anchor loosening!

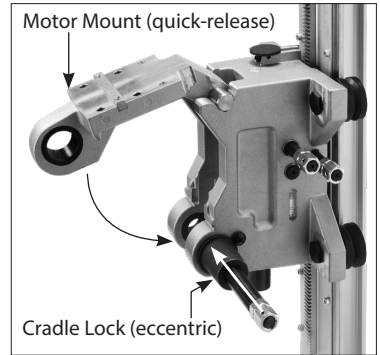


MOUNTING THE MOTOR TO THE DRILL STAND

The drill stand's motor mounting plate must be bolted to the drill motor. The mounting tenon must fit securely in the slot in the back of the drill motor, then evenly tighten the four (or 6) bolts. (If the last two holes do not correspond to holes in the drill motor, the 4 bolts are fully sufficient to hold the motor.)

This motor mounting plate now acts as a secure and accurate coupling between the motor and the drill stand.

To install the motor head unit to the drill stand, pull the cradle lock shaft out until it stops. The pins of the motor mounting plate fit in the hooks in the stand's cradle and the plate is rotated into the slot in the cradle. Secure by pushing the cradle lock shaft all the way in, then, using the crank handle as a wrench, turn the cradle lock shaft clockwise to lock. Removal is the opposite of installation.



ADJUSTING THE DRILLING ANGLE

The drilling angle can be tilted from 0 to 45 degrees. To adjust the angle, use the crank handle as a wrench and loosen the angle clamp bolt. Refer to the scale on the column indicating the angle. Adjust to the desired angle and tighten the clamp.

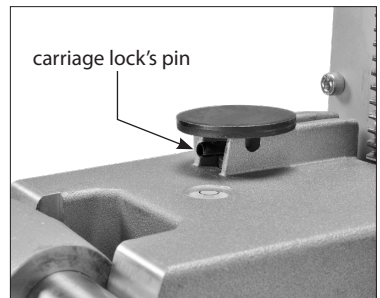
CAUTION: Do not overtighten the clamp. Only tighten the necessary amount to make the clamp secure. Extreme overtightening could distort the column.



CARRIAGE LOCK

Pull up on the carriage lock and turn 90° so that the carriage lock's pin drops down to its lower position to lock. To release, pull up on the carriage lock and turn 90° so that the carriage lock's pin is held in its higher position in the notch on the carriage.

CAUTION: Hold the crank lever or motor head whenever releasing the carriage lock. It could slam down causing possible injury or damage.

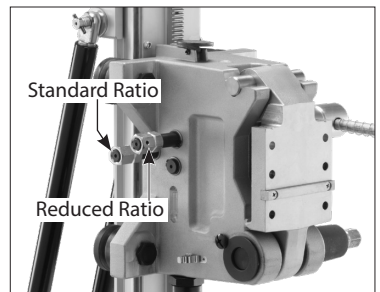


REDUCTION GEARING

There are two crank spindles:

The rearward spindle is for standard fast cranking and the forward spindle is for reduced gear ratio cranking. The reduced gear ratio allows the operator to drill with greatly reduced effort when using large diameter core bits.

To switch from standard to reduced gear ratio cranking, simply remove the crank handle from the main spindle and connect to the forward spindle.



WRENCH-STOP LUG

The lug is provided for safely loosening tight bits. The wrench on the spindle rests against the lug when tapping on the other wrench on the bit.



CABLE CLIP

A clip is provided for the power supply cable to help keep it away from the bit.

OPTIONAL EXTENSION SPACER

To achieve 600 mm drilling diameter, the extension spacer kit must be used. Place the extension spacer between the motor mounting plate and the motor and use the long screws in the kit to fasten them together.

OPTIONAL LASER AIMING DEVICE

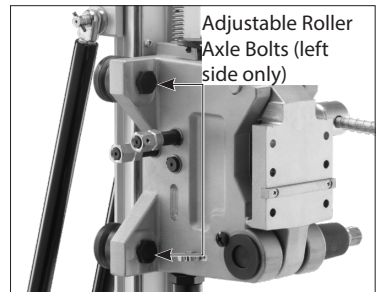
The laser aiming device allows accurate alignment of two or more holes such as for pipe runs through multiple walls, etc. Leave the stand fixed in position, unscrew the bit, and thread on the laser aiming device. It will point at the center of the next hole.

MAINTENANCE

Keep the drill stand clean and routinely inspect for damage and loose fasteners.

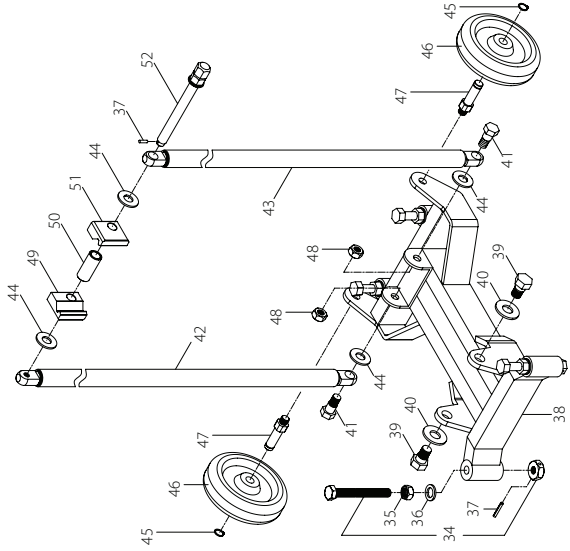
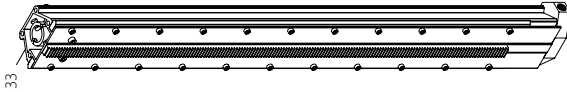
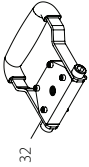
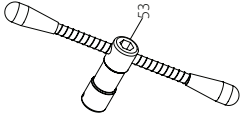
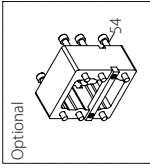
ADJUSTING THE DRILL STAND GUIDANCE

Loose guidance will cause the bit to run out-of-true and result in poor performance and possible damage to the bit. If the rollers can be turned by hand with the carriage locked, they are too loose. To adjust the guidance, the two guide rollers on the left side are on eccentric shafts. Turn the eccentric roller axle bolt until the clearance is taken up on each roller in turn. Turn just enough so that the roller cannot be turned by hand. Now test the tightness of the carriage by cranking it up and down. There should be no backlash, yet no binding throughout its travel.

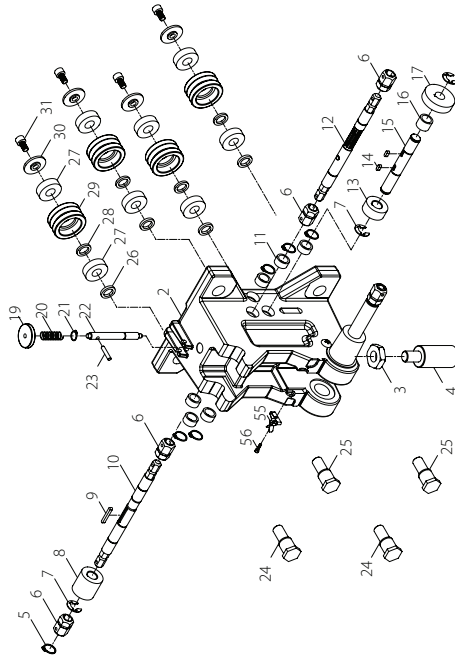
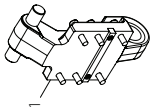


(Right side Roller Axle Bolts are not adjustable)

Exploded View



NO.01~56 Version 2023.07.18 D.888



Parts List

NO.	Parts Name	Q'ty	NO.	Parts Name	Q'ty
1	MOTOR MOUNT	1	29	GUIDE ROLLER	4
2	CARRIAGE	1	30	AXLE SPACER A	4
3	HEX NUT (M16)	1	31	SOCKET CAP SCREW (M8-1.25 x 16)	4
4	WRENCH STOP	1	32	AUXILIARY HANDLE SET	1
5	EXTERNAL CIRCLIP (S-15)	6	33	COLUMN (900MM)	1
6	HEX ADAPTOR	5	34	LEVELING SCREW	4
7	E-CLIP (E-12)	3	35	HEX NUT (M12-1.75)	4
8	CRANK GEAR (M1.5x20T)	1	36	FLAT WASHER (Ø12.2xØ23x2)	4
9	PARALLEL KEY (4x4x30)	1	37	ROLL PIN (Ø4x25)	5
10	CRANK SPINDLE	1	38	BASE	1
11	BUSHING (Ø15xØ20x10)	6	39	SHOULDER BOLT	2
12	REDUCTION CRANK PINION	1	40	FLAT WASHER (5/8"xØ30x3)	2
13	SPINDLE GEAR (M1.5x20T)	1	41	SHOULDER BOLT	2
14	PARALLEL KEY (4x4x10)	2	42	BUTTRESS BAR (L-650MM)	1
15	INTERMEDIATE SHAFT	1	43	BUTTRESS BAR (R-650MM)	1
16	SHAFT RACE (Ø15xØ22x15)	1	44	FLAT WASHER (Ø14.3xØ32x2.5)	4
17	SPINDLE GEAR (M1.0x46T)	1	45	EXTERNAL CIRCLIP (S-13)	2
18	N/A	-	46	WHEEL	2
19	HAND KNOB	1	47	ROLLER AXLE	2
20	SPRING (Ø1.0xØ10.5Ø12.5x8Tx35L)	1	48	NYLOCK NUT (M12xP1.75)	2
21	EXTERNAL CIRCLIP (S10)	1	49	CLAMP CLAW-RIGHT	1
22	PIVOT PIN (Ø10x96)	1	50	SPACER	1
23	ROLL PIN (Ø5x25)	1	51	CLAMP CLAW-LEFT	1
24	ECCENTRIC SHAFT	2	52	ANGLE LOCK	1
25	AXLE SHAFT	2	53	CRANK BOSS	1
26	AXLE SPACER C	4	54	EXTENSION SPACER SET	1
27	BALL BEARING (6202)	8	55	CABLE CLIP	1
28	AXLE SPACER B	4	56	PANHEAD MACHINE SCREW (M3-0.5 x 10)	1

