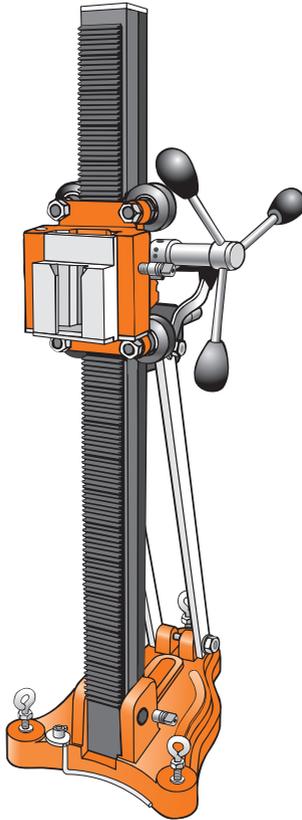




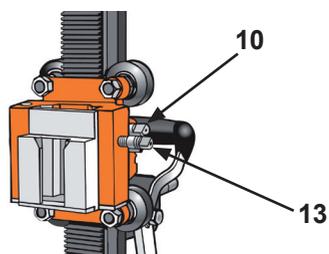
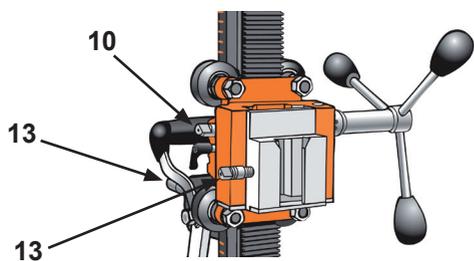
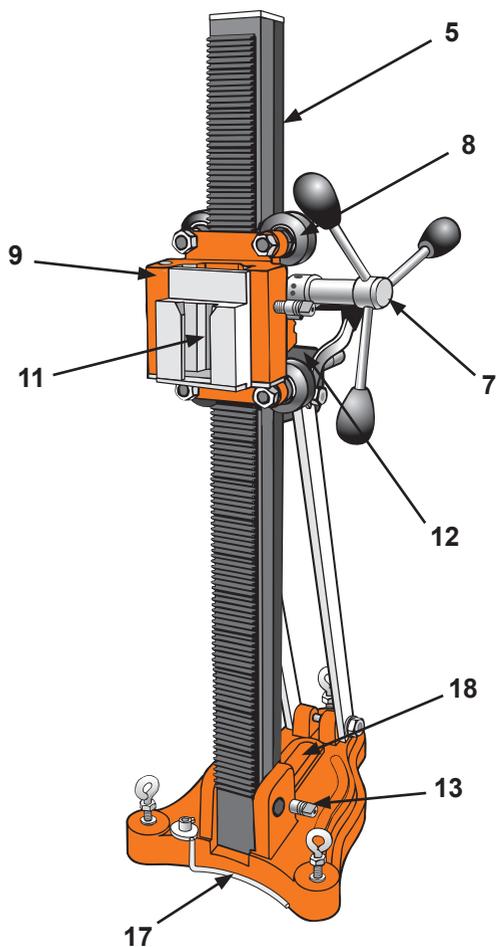
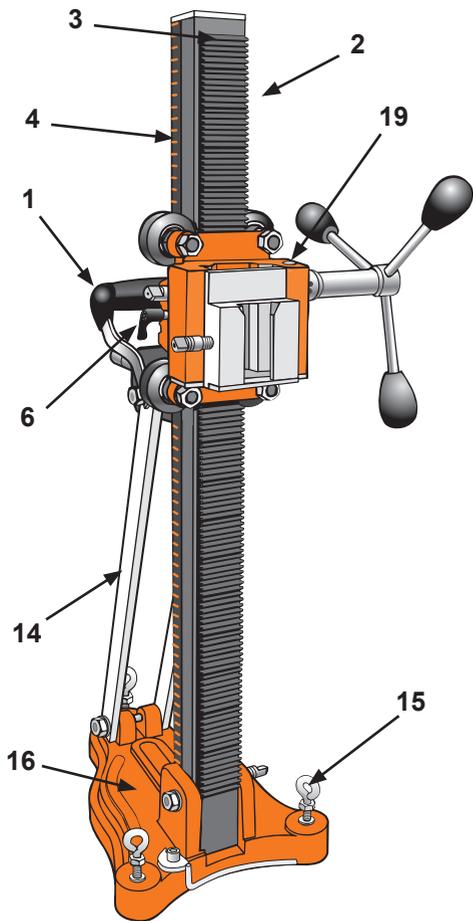
# Ramset™

## *TRIX 160*



Operator's manual and  
maintenance instructions





- |                                  |                            |
|----------------------------------|----------------------------|
| 1. Carrying handle               | 11. Quick release coupling |
| 2. Column                        | 12. Sliding clamp          |
| 3. Upper stop                    | 13. Fixing bolts           |
| 4. Depth adjustment scale        | 14. Rear brace             |
| 5. Angle adjustment scale        | 15. Levelling screws       |
| 6. Carriage break handle         | 16. Vacuum base plate      |
| 7. Capstan wheel                 | 17. Centre gauge           |
| 8. Rollers                       | 18. Fastening slot         |
| 9. Carriage                      | 19. Spirit level           |
| 10. Capstan wheel mount carriage |                            |

Dimensions	340 x 250 x 880
Weight	12 kg
Maximum drilling stroke	850 mm
Maximum drill bit diameter	160 mm
Recommended drilling diameter	130 mm
Usable inclination	0° to 45°
Transport inclination	fully collapsed
Carriage guide	4 rollers
Carriage brake	yes
Capstan wheel with three arms	left and right mounting
Motor attachment	quick release coupling
Levelling	4 adjustment screws

**CE Declaration of conformity**

We hereby declare, under our sole responsibility, that this article conforms to the European standards for column-type drilling machines.



Paul van Beek  
General Manager



Ruben Bernaert  
Product Manager

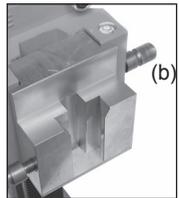
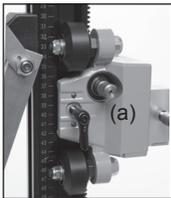
**Intended use**

The TRIX 160 drilling rig is designed to be used with the SPIT SD 160 and SD 200E diamond drilling motors. Our equipment will fully and effectively meet all of your requirements if you read and observe the instructions in the operations and maintenance manual provided with the equipment.

SPIT refuses to accept any form of liability for injury or damage resulting from incorrect or improper use of the equipment.

ITW HEGER  
Industriepark  
Cardijnlaan 3  
BE-8600 Diksmuide  
BELGIUM

In order to ensure safe use of the equipment, all screws and nuts, clamping handles, and other items used for clamping and locking must be securely tightened or fitted after each adjustment.



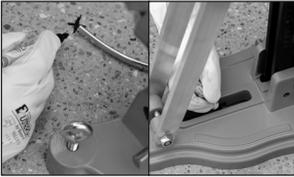
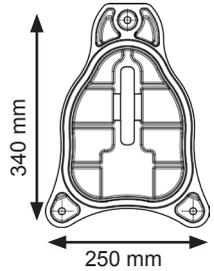
The capstan wheel can be fitted on the right (a) or left (b) side of the carriage, according to the circumstances.

Check to ensure that the capstan wheel is securely attached.

## SETTING-UP: FASTENING THE BASE PLATE

### Fastening using an anchor plug in concrete

- 1) Mark the centre point for fastening the base plate at a distance of 275 mm from the centre point of the bore, or use the centre gauge.
- 2) Drill a hole of  $\varnothing$  15 mm for the Spit Grip M12 anchor plug. Insert and expand the plug.



1



2

- 3) Fit the quick-fastening screw, then place the base plate over the screw and align the stand assembly using the fastening slot.
- 4) Fit the washer and the quick fastening nut and tighten the nut using a 32 mm spanner.
- 5) Before and after tightening the nut, carefully level the stand using the three levelling screws and firmly tighten the 3 levelling screws.



3



4



5

### **CHECK TO ENSURE THAT THE RIG IS PROPERLY SECURED!!**

For fastening to a material other than concrete, please contact us regarding the selection of a suitable anchor plug.

### Vacuum fastening (maximum $\varnothing$ 130 mm)

For this type of fastening, the material to be drilled must be smooth and flat, non-porous and free from cracks and reinforcements.

The maximum diameter to be drilled is 101 mm.

This type of fastening cannot be used if these conditions are not met.

For vacuum fastening, you must use a Spit vacuum pump and a Spit vacuum kit with manometer and seal (1).

Consult the manual of the vacuum pump regarding the use and maintenance.

- 2) Put the plate in the foreseen place on the back of the vacuum plate and fix the hexagonal nut.
- 3) Put the seal in the foreseen place.



1



2



3

- 4) Place the rig on the floor.  
Connect the vacuum hose to the manometer and start the vacuum pump.
- 5) Adjust the 3 levelling screw.



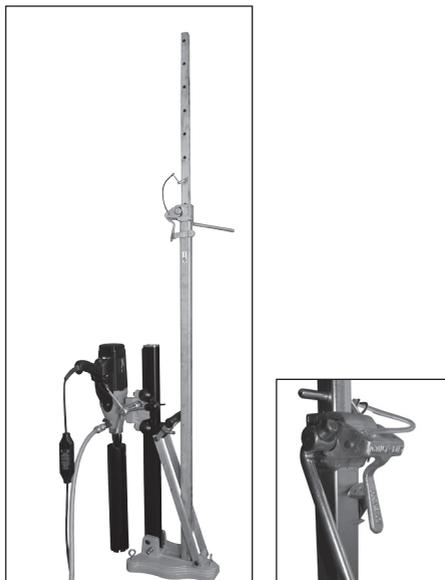
5

**ONLY START DRILLING WHEN THE VACUUM IS MINIMUM 0.8 BAR!**

**NEVER USE VACUUM FIXING AGAINST WALLS OR CEILINGS! ONLY USE IT ON THE FLOOR!**

### Fastening using a telescopic brace clamp

- 1) Fit the telescopic brace clamp in vertical position between the ceiling and footplate. Make sure that the brace is as close to the column as possible.
- 2) Secure the telescopic brace clamp by using the lever handle to apply sufficient force to firmly secure the rig. After fitting the brace clamp, carefully level the rig by tightening the 3 levelling screws.
- 3) Fit the safety pin at the lowest possible position.



1

3

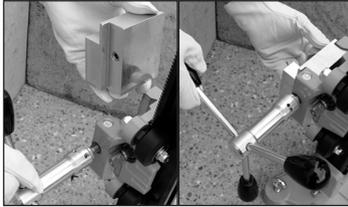
**IT IS OBLIGED TO USE A WATER COLLECTOR WHEN DRILLING UPSIDE DOWN!**

## SETTING UP: ATTACHING THE DRILL MOTOR

- 1) Move the carriage to the upper stop and secure it in place using the knob.
- 2) Slide the carriage block into the carriage and lock it in place by using the capstan wheel to tighten the locking screw.
- 3) Place the dovetail connection of the motor in the quick release coupling and fix the motor with the capstan wheel.



1



2



3

- 4) Select the correct machine speed.
- 5) While holding the capstan wheel in position, loosen the brake handle. Bring the crown of the drill bit in contact with the surface of the material to be drilled, then back it off by a few millimetres.
- 6) Open the water tap and adjust the water flow.
- 7) Switch the motor on. Consult the operation and maintenance manual for the SD 160 or SD 200E with regard to selecting the speed and other precautions. Start drilling. Drill slowly and cautiously for several millimetres after penetrating the surface, and then maintain a constant force on the capstan wheel for the remainder of the bore.

**ALWAYS SECURE THE CARRIAGE USING THE BRAKE HANDLE BEFORE RELEASING THE CAPSTAN WHEEL!!**



4



5



6

## SETTING UP: DRILLING AT AN ANGLE OF 0° TO 45°

- 1) Loosen the fixing bolts of the locking clamp with the capstan wheel.
- 2) Incline the column at the desired angle. Securely retighten the fixing bolt.



1



2-3

The depth (or length) of the bore is restricted when drilling at an angle. It will be necessary to use a bit extension.

## MAINTENANCE

Always keep the rig clean, especially the column, the gear rack and the four rollers. Never oil or grease these three components.

For the best results, the rollers to move the carriage must travel perfectly along the column.

Adjust the rollers as follows:

- Using two flat 19 mm spanners, loosen each of the nuts on the side of the carriage marked "E".
- Retighten each of the nuts while ensuring that the hexagonal shafts are held in the previously determined positions.

Check the carriage for proper guidance and travel.

Oil the leveling screws of the base plate.



**Dispose of your appliance, accessories and packaging in an environment-friendly manner.**



# LOCATIONS

## RAMSET AUSTRALIA

### Victoria

Mooolbark  
296-298 Maroondah Highway  
VIC 3138  
Call 1300 780 063

### Richmond

96 Church Street  
VIC 3121  
Call 1300 780 063

### New South Wales

Silverwater  
71 Carnarvon Street  
NSW 2128  
Call 1300 780 063

### Mascot

563 Gardeners Road  
NSW 2020  
Call 1300 780 063

### Newcastle

Cardiff  
77 Munibung Road  
Cardiff 2285  
Call 1300 780 063

### Australian Capital Territory

Fyshwick  
5/19 Tennant Street  
ACT 2609  
Call 1300 780 063

### Queensland

West End  
281 Montague Road  
Qld 4101  
Call 1300 780 063

### Townsville

153 Ingham Rd  
QLD 4810  
Call 1300 780 063

### South Australia

Hilton  
115 Sir Donald Bradman Drive  
SA 5033  
Call 1300 780 063

### Western Australia

Welshpool  
1/12 Colin Jamieson Drive  
Welshpool WA 6106  
Call 1300 780 063

## RAMSET NEW ZEALAND

### Whangarei

2A Herekino St  
P.O. Box 133  
Whangarei  
Phone 09 438 2010

### North Shore

5J Miro Place, Albany  
P.O. Box 40-031  
Auckland 0747  
Phone 09 444 2354

### Auckland

35 Station Rd, Penrose  
P.O. Box 12-327, Auckland 1330  
Phone 09 579 3072

### Henderson

123 Central Park Drive  
P.O. Box 83-135, Auckland 1330  
Phone 09 838 9865

### East Tamaki

Unit 1, 333 East Tamaki Road  
P.O. Box 97823  
Sth Auckland Mail Centre  
Phone 09 272 4701

### Hamilton

15 Somerset St  
P.O. Box 1157  
Phone 07 847 9047

### Tauranga

Unit 1, 15 Portside Drive  
Mt Maunganui  
Phone 07 572 0520

### Rotorua

Waterford Park Estate  
50 Old Taupo Rd  
P.O. Box 855  
Phone 07 348 0190

### New Plymouth

25B Hurlstone Drive  
P.O. Box 4148  
Phone 06 759 8984

### Palmerston North

601 Tremaine Avenue  
P.O. Box 436  
Phone 06 357 6745

### Napier

124 Taradale Road  
P.O. Box 3374, Onekawa  
Phone 06 843 0067

### Lower Hutt

46 Victoria St  
Phone 04 569 7247

### Wellington

147 Taranaki St  
P.O. Box 3296  
Phone 04 384 4138

### Nelson

2 Parere St  
P.O. Box 1080  
Phone 03 548 2664

### Christchurch

7 O'Shannese Place  
Phone 03 341 8710

### Dunedin

5 Melbourne St  
P.O. Box 2227  
Phone 03 455 1134

### Queenstown

200 Glenda Drive,  
Frankton  
Queenstown  
P.O. Box 2469, Wakatipu  
Phone 03 442 8073

### Invercargill

121 Clyde St  
P.O. Box 673  
Phone 03 218 9241