

BORING

Portable Magnetic Base Drilling Machine

ATRA ACE manual feed

Model **ARA-100A** 

• Max. 100 mm dia. x 75 mm deep



The versatile drilling machine with top-class power in ATRA ACE series

- Accepts various cutters for diverse drilling
- Advanced electronic control for efficient drilling and operator safety

Specifications

Model	ARA-100A	
Power Source (Single Phase)	220 - 240 V AC, 50/60 Hz	
Electric Drill	Rated Power Consumption W	1800
	Rated Current A	8.2
	No-load Speed min ⁻¹ (rpm)	110 - 210 / 330 - 660
	Morse Taper No.	MT3
	Rated Duty min	30
Magnet Power Consumption	W	80
Hole Capacity	Cutter	Hole Diameter Plate Thickness
mm	One-touch Type JETBROACH 35L	17.5 to 40 13 to 35
	One-touch Type JETBROACH 50L	17.5 to 50 13 to 50
	One-touch Type JETBROACH 75L	17.5 to 50 13 to 75
	JETBROACH 75L	50 to 100 13 to 75
	One-touch Type HI-BROACH 25L	17.5 to 35 13 to 25
	One-touch Type HI-BROACH 50L	18 to 35 13 to 50
	Twist Drill	Max. 32 mm dia.
	Min. Plate Thickness for Magnet Adhesion mm	13
	Max. Stroke mm	296
	Magnet Holding Power N(kgf)	17000 (1733)
	Magnet Dimensions mm	110 (W) x 220 (L)
Cutter Position	Straight Front to Back mm	20
Adjustment	Swivel angle	30°
	Power Cord Length m	5
	Mass (Weight) kg	30

Accessories Included

- Pilot Pin 12075 Ass'y
- Side Handle
- 2.5 mm Hex Socket Screw Key
- 5 mm Hex Socket Screw Key
- 6 mm Hex Socket Screw Key
- 8 mm Hex Socket Screw Key
- Drill Drift
- 7 x 8 mm Spanner
- Safety Chain
- Guard
- Oil Tank
- Oil Tank Bracket
- 3 pieces of Rod Handle
- Holder MT03075 Side Lock

Optional Accessories

Ref. No.	PN	Description	Sales Unit
1	TB01507	Cutting Oil 2L	1 piece
2	TB04374	Supporting Magnet Ass'y	1 set
3	TB09727	Holder MT03075 One-touch	1 piece

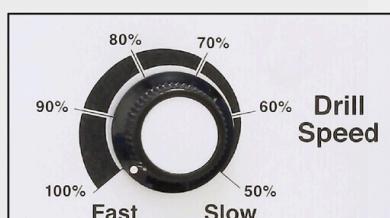
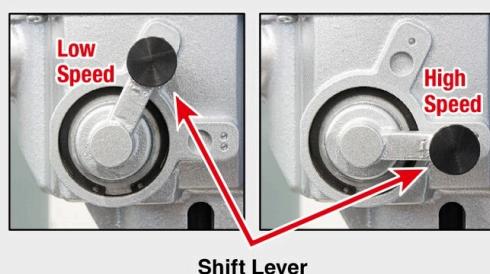
Slow Starting Function

Slow speed at the beginning of boring will securely set a hole cutting position.



Two speed electric drill with speed adjustment

Optimum drill speed adjustment can be made to bore a hole on difficult-to-cut materials or to securely set a hole cutting position at initial cutting stage.



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Load Indication and LED Condition

Load Indication

The load indicator (LED) indicates the condition of the load with different color of LED light.

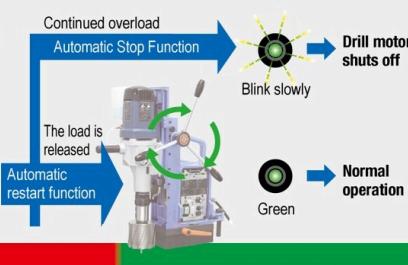
- The LED lights up in green. → The load on the drill motor is normal.
- The LED lights up in red. → The load on the drill motor is close to overload.
- The LED blinks in red. → The drill motor is overloaded.

Automatic Stop Function

As the drilling load increases, the load indicator will change in color from green to red. In addition, if excessive feeding force is applied, the load indicator will rapidly blink red and the rotation of the drill motor will slow down and stop. After the drill motor has come to a complete stop, the load indicator will slowly blink in green. To resume the rotation of the drill motor, release the load, turn off the switch of the drill motor, and then turn it back on.

Automatic Restart Function

If the load is released while the load indicator is blinking red, the drill motor will resume its rotation.



Built-in Motion Sensor

If any lateral movement or excess vibration is detected during drilling a hole, the drill motor stop instantly and the LED blink red. To resume operation, turn the magnet switch off and on.



Fail-safe Restart

The magnetic field will become active, but the drill will not re-start even if power is re-supplied after accidental shutdown. The LED will blink green at this stage. Drilling can only be continued after turning on the drill switch.

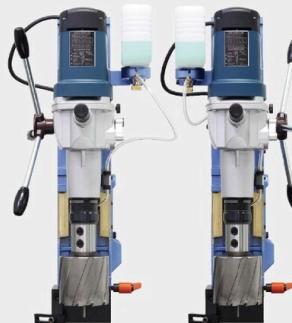
Magnet Open-circuit Sensor

The drill will not start until the magnetic field is active. If malfunction occurs on the magnet, the LED will blink red slowly and the drill motor will not revolve.



Features

Reversible Feed Handles



Feed handles can be positioned on the right or left hand side for ease of drilling.
When changing the feed handle position, oil tank is required to be positioned opposite to the feed handles.

Drilling Position Adjustment



When the clamp lever is loosened, the drill position can be adjusted back and forth by 20 mm and pivoted 15 degrees to the left or right. The clamp lever can be positioned for left hand or right hand operation.

One-Touch Cutter Replacement (Holder MT03075 One-Touch)

Mounting the cutter

Align the depression in the cutter shank with the white line on the sleeve, and then insert the cutter.



Removing the cutter

Turn the sleeve counterclockwise. The cutter will come off.



Available on the market

Twist Drill Bit



MT3 Morse taper shank drill bit can be directly installed.

Use Morse taper sleeve MT3 for other sizes than MT3

A drill chuck is required to install a straight drill bit.

*Available on the market

BORING

Annular Cutters

JETBROACH CUTTERS & HI-BROACH CUTTERS

BROACH CUTTERS are far better than twist drills

- No dead point
- Peripheral cutting
- Dramatically reduce cutting resistance
- Available diameter size: 12 - 100 mm

Test Drilling is very often the only way to determine the machinability of difficult materials.
Use a small size cutter wherever possible in order to minimize trial costs.



Specifications

		HI-BROACH One-touch Type/25L	HI-BROACH One-touch Type/50L	JETBROACH One-touch Type/25,35,50L	JETBROACH One-touch Type/50L(W)	JETBROACH One-touch Type/75L	JETBROACH Side lock Type/75L	
Hole Capacity mm	Hole Diameter	25L: 12 - 52 dia.	-	25L: 12 - 17 dia.	-	-	-	
		-	-	35L: 17.5 - 40 dia.	-	-	-	
		-	50L: 12 - 52 dia.	50L: 12 - 65 dia.	50L(W): 18, 22, 24 - 26.5, 28, 32, and 35 dia.	-	-	
	Plate Thickness	25L: 25	-	25L: 25	-	75L: 17.5 - 55 dia.	75L: 50 - 100 dia.	
		-	-	35L: 35	-	-	-	
		-	50L: 50	50L: 50	50L(W): 50	-	-	
Feed Speed mm/rev		0.02 - 0.1						
Circumferential Speed m/min		15 - 35 (mild steel)						
		35 - 50 (mild steel)						

HI-BROACH One-touch Type		
Depth	mm dia.	PN
12	TK00698	
13	TK00699	
14	TK00700	● ●
15	TK00701	● ● ● ● ●
16	TK00702	● ● ● ● ●
17	TK00703	● ● ● ● ●
17.5	TK01391	● ● ● ● ●
18	TK01392	● ● ● ● ●
19	TK01393	● ● ● ● ●
19.5	TK01394	● ● ● ● ●
20	TK01395	● ● ● ● ●
21	TK01396	● ● ● ● ●
21.5	TK01397	● ● ● ● ●
22	TK01398	● ● ● ● ●
22.5	TK01399	● ● ● ● ●
23	TK01400	● ● ● ● ●
23.5	TK01401	● ● ● ● ●
24	TK01402	● ● ● ● ●
24.5	TK01403	● ● ● ● ●
25	TK01404	● ● ● ● ●
26	TK01405	● ● ● ● ●
27	TK01407	● ● ● ● ●
28	TK01408	● ● ● ● ●
29	TK01409	● ● ● ● ●
30	TK01410	● ● ● ● ●
31	TK01411	● ● ● ● ●
32	TK01412	● ● ● ● ●
33	TK01413	● ● ● ● ●
34	TK01414	● ● ● ● ●
35	TK01415	● ● ● ● ●
36	TK01416	● ● ●
37	TK01417	● ● ●
38	TK01418	● ● ●
39	TK01419	● ● ●
40	TK01420	● ● ●
41	TK01421	● ● ●
42	TK01422	● ● ●
43	TK01423	● ● ●
44	TK01424	● ● ●
45	TK01425	● ● ●
46	TK01426	● ● ●
47	TK01427	● ● ●
48	TK01428	● ● ●
49	TK01429	● ● ●
50	TK01430	● ● ●
51	TK01431	● ● ●
52	TK01432	● ● ●

HI-BROACH One-touch Type		
Depth	mm dia.	PN
12	TK00721	●
13	TK00722	● ●
14	TK00723	● ● ●
15	TK00724	● ● ● ●
16	TK00725	● ● ● ●
17	TK00726	● ● ●
18	TK00727	● ● ●
19	TK00728	● ● ●
20	TK00729	● ● ●
21	TK00730	● ● ●
22	TK00731	● ● ●
23	TK00732	● ● ●
24	TK00733	● ● ●
25	TK00734	● ● ●
26	TK00735	● ● ●
27	TK00736	● ● ●
28	TK00737	● ● ●
29	TK00738	● ● ●
30	TK00739	● ● ●
31	TK00740	● ● ●
32	TK00741	● ● ●
33	TK00742	● ● ●
34	TK00743	● ● ●
35	TK00744	● ● ●
36	TK00745	● ● ●
37	TK00746	● ● ●
38	TK00747	● ● ●
39	TK00748	● ● ●
40	TK00749	● ● ●
41	TK00750	● ● ●
42	TK00751	● ● ●
43	TK00752	● ● ●
44	TK00753	● ● ●
45	TK00754	● ● ●
46	TK00755	● ● ●
47	TK00756	● ● ●
48	TK00757	● ● ●
49	TK00758	● ● ●
50	TK00759	● ● ●
51	TK00760	● ● ●
52	TK00761	● ● ●

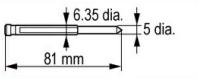
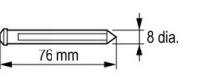
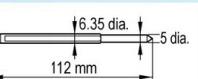
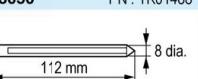
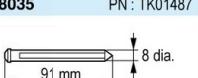
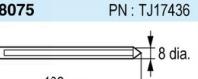
JETBROACH One-touch Type		
Depth	mm dia.	PN
12	TK01148	●
13	TK01149	● ●
14	TK01150	● ●
15	TK01151	● ●
16	TK01152	● ●
17	TK01153	● ●
17.5	TK01249	● ● ●
18	TK01250	● ● ●
18.5	TK01251	● ● ●
19	TK01252	● ● ●
19.5	TK01253	● ● ●
20	TK01254	● ● ●
20.5	TK01255	● ● ●
21	TK01256	● ● ●
21.5	TK01257	● ● ●
22	TK01258	● ● ●
22.5	TK01259	● ● ●
23	TK01260	● ● ●
23.5	TK01261	● ● ●
24	TK01262	● ● ●
24.5	TK01263	● ● ●
25	TK01264	● ● ●
25.5	TK01265	● ● ●
26	TK01266	● ● ●
26.5	TK01267	● ● ●
27	TK01268	● ● ●
28	TK01269	● ● ●
29	TK01270	● ● ●
30	TK01271	● ● ●
31	TK01272	● ● ●
32	TK01273	● ● ●
33	TK01274	● ● ●
34	TK01275	● ● ●
35	TK01276	● ● ●
36	TK01277	● ● ●
37	TK01278	● ● ●
38	TK01279	● ● ●
39	TK01280	● ● ●
40	TK01281	● ● ●

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JETBROACH One-touch Type		
Depth	mm dia.	PN
12	TK01154	ARA-100A
13	TK01155	LO-3550
14	TK01156	WA-3500
15	TK01157	WA-5000
16	TK01158	WOJ-3200
17	TK01159	AO-5575A
17.5	TK01282	QA-6500
18	TK01283	Pilot Pin
19	TK01284	06050
19.5	TK01285	
20	TK01286	
20.5	TK01287	
21	TK01288	
21.5	TK01289	
22	TK01290	
22.5	TK01291	
23	TK01292	
23.5	TK01293	
24	TK01294	
24.5	TK01295	
25	TK01296	
25.5	TK01297	
26	TK01298	
26.5	TK01299	
27	TK01300	
28	TK01301	
29	TK01302	
30	TK01303	
31	TK01304	
32	TK01305	
33	TK01306	
34	TK01307	
35	TK01308	
36	TK01309	
37	TK01310	
38	TK01311	
39	TK01312	
40	TK01313	
41	TK01314	
42	TK01315	
43	TK01316	
44	TK01317	
45	TK01318	
46	TK01319	
47	TK01320	
48	TK01321	
49	TK01322	
50	TK01323	
51	TK01324	
52	TK01325	
53	TK01326	
54	TK01327	
55	TK01328	
56	TK01329	
57	TK01330	
58	TK01331	
59	TK01332	
60	TK01333	
61	TK01334	
62	TK01335	
63	TK01336	
64	TK01337	
65	TK01338	

JETBROACH One-touch Type		
Depth	mm dia.	PN
50 mm	18	TK01068
	22	TK00622
	24	TK00623
	24.5	TK00631
	25	TK00624
	26	TK00625
	26.5	TK00632
	28	TK00626
	32	TK00627
	35	TK00628
75 mm	17.5	TK01350
	18	TK01351
	19	TK01352
	20	TK01353
	21	TK01354
	22	TK01355
	23	TK01356
	24	TK01357
	24.5	TK01358
	25	TK01359
	26	TK01360
	26.5	TK01361
	27	TK01362
	28	TK01363
	29	TK01364
	30	TK01365
	31	TK01366
	32	TK01367
	33	TK01368
	34	TK01369
	35	TK01370
	36	TK01371
	37	TK01372
	38	TK01373
	39	TK01374
	40	TK01375
	41	TK01376
	42	TK01377
	43	TK01378
	44	TK01379
	45	TK01380
	46	TK01381
	47	TK01382
	48	TK01383
	49	TK01384
	50	TK01385
	51	TK01386
	52	TK01387
	53	TK01388
	54	TK01389
	55	TK01390

JETBROACH Side-lock Type		
Depth	mm dia.	PN
50 mm	50	TK01433
	51	TK01434
	52	TK01435
	53	TK01436
	54	TK01437
	55	TK01438
	56	TK01439
	57	TK01440
	58	TK01441
	59	TK01442
	60	TK01443
	61	TK01444
	62	TK01445
	63	TK01446
	64	TK01447
	65	TK01448
	66	TK01449
	67	TK01450
	68	TK01451
	69	TK01452
	70	TK01453
	71	TK01454
	72	TK01455
	73	TK01456
	74	TK01457
	75	TK01458
	76	TK01459
	77	TK01460
	78	TK01461
	79	TK01462
	80	TK01463
	81	TK01464
	82	TK01465
	83	TK01466
	84	TK01467
	85	TK01468
	86	TK01469
	87	TK01470
	88	TK01471
	89	TK01472
	90	TK01473
	91	TK01474
	92	TK01475
	93	TK01476
	94	TK01477
	95	TK01478
	96	TK01479
	97	TK01480
	98	TK01481
	99	TK01482
	100	TK01483

Pilot Pin		
06025	PN : TK01167	
08025	PN : TK01486	
06050	PN : TK01166	
08050	PN : TK01488	
12075	PN : TJ17436	
12075	PN : TA9A207	

Sales Unit: 1 Piece



BROACH HOLDERS



163 mm
BHM-02035



182 mm
BHM-03050



248 mm
BHM-13075



232 mm
BHM-14075

Specifications

Morse Taper No.	M.T.No.2		M.T.No.3						M.T.No.4	
Model	BHM-02035		BHM-03050						BHM-13075 BHM-14075	
PN	TB00390		TB00392						TB00352 TB00354	
Cutter	HBO-25L	JBO-35L	HBO-25L	HBO-50L	JBO-35L	JBO-50L	JBO-50L(W)	JBS-75L		
Cutter Diameter	12 - 17 dia.	17.5 - 35 dia.	17.5 - 40 dia.	12 - 17 dia.	17.5 - 52 dia.	12 - 18 dia.	19 - 52 dia.	17.5 - 40 dia.	17.5 - 65 dia.	18 - 35 dia.
Pilot Pin	06025	08025	08035	06025	08025	06050	08035	08050	08050	12075
	Optional		Optional						Optional	
	Included		Included						Included	

HBO: HI-BROACH One-touch Type

JBO: JETBROACH One-touch Type

JBS: JETBROACH Side-lock Type