



KIRA DRILLING MACHINES

Model KHD-6
Model KND-8
Model NSD-13R
Model NSD-340

Model KID-420
Model KID-420L
Model KBR-600T



KIRA IRON WORKS CO., LTD. JAPAN

KIRA KHD-6 DRILLING MACHINE

FEATURES

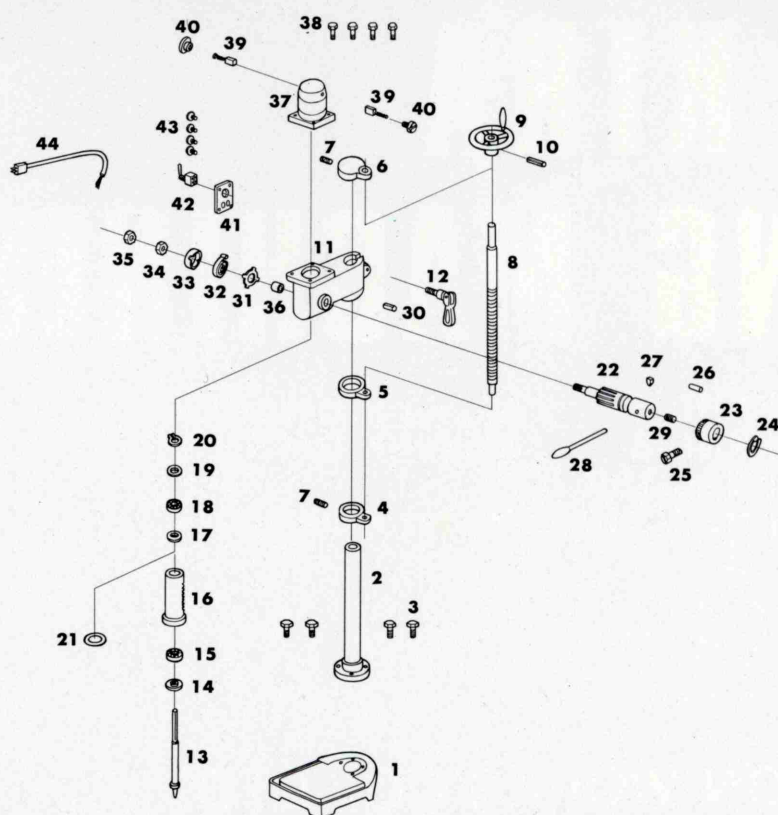
- * KHD-6 is recommended with full confidence for comparatively small size parts for Electric appliance, Precision machine and Optical insteument.
- * Single phase series commutator motor is directly mounted the spindle, so 12000 rpm spindle speed can be available.
- * The dial sleeve on the spindle feed control assures fast and accurate depth cutting.
- * Adjustment for the up-and-down of head can be done very easy by the handle lever.



SPECIFICATIONS

KHD-6

Model		KHD-6	Model		KHD-6
Swing		165mm (6½")	No Load Spindle speed 60Hz & 50Hz		12000 rpm.
Drilling Capacity	Steel	0.4~2.5mm (1/64"~3/32")	Drive motor		80W Series motor
	Casting	0.4~3 mm (1/64"~1/8")	Overall height		520mm (20½")
Max. distance spindle to base		170mm (6 11/16")	Working Surface		168 x 158mm (6 5/8" x 6 1/4")
Max. Spindle travel		40mm (1 5/8")	Net weight (Approx.)		16kg (35 lbs.)
Taper of spindle nose		J.T. No. D	Spindle bearings		6000zz 1pc. 6001zz 1pc.
Dia. of column		40 (1 1/8")			



- | | |
|--------------------|------------------------|
| 1. Bed | 23. Feed Dial |
| 2. Column | 24. Snap Ring |
| 3. Bolt | 25. Bolt |
| 4. Ring | 26. Spring Pin |
| 5. Ring | 27. Clamp Piece |
| 6. Cap | 28. Handle |
| 7. Set Screw | 29. Set Screw |
| 8. Elevating Screw | 30. Spring Pin |
| 9. Hand Wheel | 31. Spring Case Holder |
| 10. Spring Pin | 32. Helical Spring |
| 11. Head | 33. Spring Case |
| 12. Clamp Bolt | 34. Nut |
| 13. Spindle | 35. Nut |
| 14. Collar | 36. Bush |
| 15. Ball Bearing | 37. Motor |
| 16. Sleeve | 38. Bolt |
| 17. Wave Washer | 39. Brush |
| 18. Ball Bearing | 40. Brush Cap |
| 19. Collar | 41. Switch Plate |
| 20. Snap Ring | 42. Snap Switch |
| 21. O-Ring | 43. Machine Screw |
| 22. Feed Shaft | 44. Cord |

KIRA KND-8 DRILLING MACHINE

FEATHER

- * KND-8 is best selection for drilling holes of up to 6.4 mm (1/4") diameters.
- * For comparatively smaller size work-pieces this is recommended with full confidence.
- * Not only for metals but for wider field of materials — even non-metallic stocks such as plastics KND-8 can be successfully used.
- * The speed range of spindle is provided with a belt drive and its drive is noiseless by supporting Ball bearings.

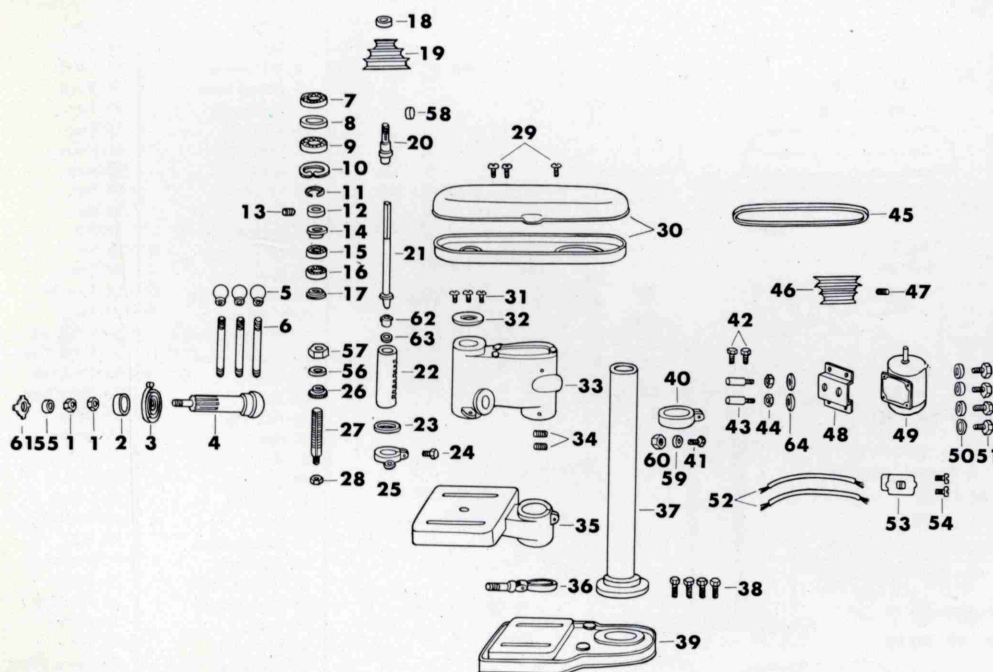


KND-8

SPECIFICATIONS

Model		KND-8	Model		KND-8
Swing		254mm (10")	Spindle speed		60Hz 1000, 2100, 4100 rpm 50Hz 850, 1750, 3400 rpm
Drilling Capacity	Steel	2~5 mm ($\frac{5}{64}$ "~ $\frac{13}{64}$ ")	Drive motor		200W (1/4HP) 4P
	Casting	2~6.5mm ($\frac{5}{64}$ "~ $\frac{1}{4}$ ")	Size of V-belt		M-32.5
Max. distance spindle to table		289mm (11 $\frac{3}{8}$ ")	Overall height		687mm (27")
Max. distance spindle to base		383mm (15")	Dimension of base		362 x 210mm (14 $\frac{1}{4}$ " x 8 $\frac{1}{4}$ ")
Max. Spindle travel		60mm (2 $\frac{3}{8}$ ")	Net weight (Approx.)		33kg (70 lbs.)
Taper of spindle nose		J.T. No. 1	Spindle bearings		6201 LLB 2pcs. 6204 LLB 2pcs.
Dia. of column		60φ (2 $\frac{3}{8}$ ")			
Dimension of table		196□ (7 $\frac{3}{4}$ " squ.)			
Vertical travel of table		289mm (11 $\frac{3}{8}$ ")			

PARTS LIST (Part No./Name)



- | | |
|--------------------|-------------------|
| 1. Nut 1" Nut | 33. Body |
| 2. Spring Case | 34. Set Screw |
| 3. Helical Spring | 35. Table |
| 4. Feed Shaft | 36. Clamp Bolt |
| 5. Gripe | 37. Column |
| 6. Handle | 38. Bolt |
| 7. Ball Bearing | 39. Bed |
| 8. Bearing Space | 40. Ring |
| 9. Ball Bearing | 41. Bolt |
| 10. Snap Ring | 42. Bolt |
| 11. Snap Ring | 43. Slide Bar |
| 12. Collar | 44. Nut |
| 13. Set Screw | 45. V-Belt |
| 14. Collar | 46. Motor Pulley |
| 15. Ball Bearing | 47. Set Screw |
| 16. Ball Bearing | 48. Motor Base |
| 17. Collar | 49. Motor |
| 18. Pulley Nut | 50. Washer |
| 19. Spindle Pulley | 51. Bolt |
| 20. Spindle Sleeve | 52. Cord |
| 21. Spindle | 53. Switch |
| 22. Sleeve | 54. Machine Screw |
| 23. Felt Ring | 55. Bush |
| 24. Bolt | 56. Washer |
| 25. Ring | 57. Nut |
| 26. Scale Nut | 58. Key |
| 27. Scale Bar | 59. Washer |
| 28. Nut | 60. Nut |
| 29. Machine Screw | 61. Spring Holder |
| 30. Belt Cover | 62. Spline Piece |
| 31. Machine Screw | 63. Ring |
| 32. Bearing Cover | 64. Washer |

KIRA NSD-13R AND NRD-13R DRILLING MACHINE

FEATURES

- * NSD-13R is best suited for drilling up to 12.7 mm (1/2") capacity and is unequalled in rugged extra sturdy construction.
- * The large and rigid main spindle of machine provide unequal accuracy and long life.
- * Adjustments of drilling depth can be done by clamping the nut of graduation bar.
- * NSD-13R type machine is available to choice either Square or Round table.



NSD-13R



NRD-13R

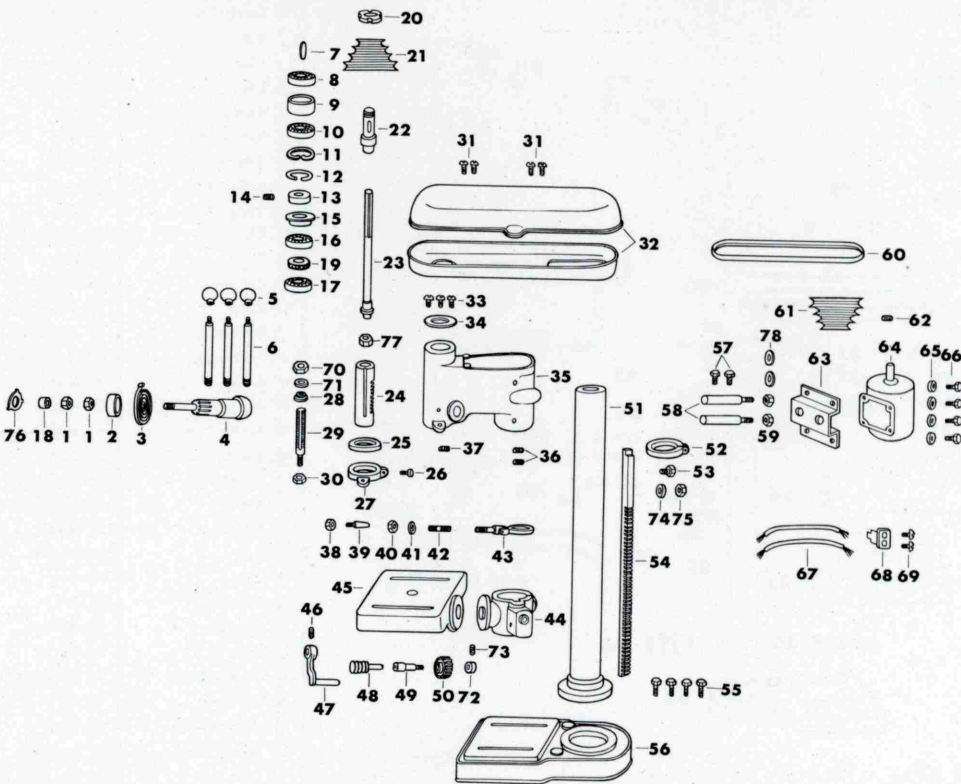
SPECIFICATIONS

mm (inch)

Model		NSD-13R	NRD-13R
Swing		330mm (13")	
Drilling Capacity	Steel	3~10mm ($\frac{1}{8}$ "~ $\frac{13}{32}$ ")	
	Casting	3~13mm ($\frac{1}{8}$ "~ $\frac{1}{2}$ ")	
Max. distance spindle to table		460mm (18")	430mm (16 $\frac{7}{8}$ ")
Max. distance spindle to base		590mm (23")	
Max. Spindle travel		80mm (3 $\frac{1}{8}$ ")	
Taper of spindle nose		J.T. No. 6 (Chuck #2 $\frac{1}{2}$)	
Dia. of column		80 ϕ (3 $\frac{1}{8}$ ")	
Dimension of table		234□ (9 $\frac{3}{16}$ "squ.)	285 ϕ (11 $\frac{1}{32}$ ")
Vertical travel of table		410mm (16")	

Model		NSD-13R	NRD-13R
Spindle speed	60Hz	500, 900, 1600, 2800 rpm	
	50Hz	415, 750, 1330, 2300 rpm	
Driving motor		200W ($\frac{1}{4}$ "HP) 4P	
Size of V-belt		A-40	
Overall height		990mm (39")	
Dimension of base		268 x 464mm (10 $\frac{9}{16}$ " x 18 $\frac{5}{16}$ ")	
Net weight (Approx.)		67kg (145 lbs.)	
Spindle bearings		6003z 1pc.	51103 1pc.
		6202z 1pc.	6205 2pcs.

PARTS LIST (Part No./Name)



1. Nut 1" Nut

2. Spring Case

3. Helical Spring

4. Feed Shaft

5. Gripe

6. Handle

7. Key

8. Ball Bearing

9. Bearing Space

10. Ball Bearing

11. Snap Ring

12. Snap Ring

13. Collar

14. Set Screw

15. Collar

16. Ball Bearing

17. Ball Bearing

18. Bush

19. Thrust Bearing

20. Pulley Nut

21. Spindle Pulley

22. Spindle Sleeve

23. Spindle

24. Sleeve

25. Felt Ring

26. Bolt

27. Ring

28. Scale Nut

29. Scale Bar

30. Nut

31. Machine Screw

32. Belt Cover

33. Machine Screw

34. Bearing Cover

35. Body

36. Set Screw

37. Key Screw

38. Nut

39. Taper Pin
40. Nut

41. Washer

42. Stud Bolt

43. Clamp Bolt

44. Table Bracket

45. Table

46. Set Screw

47. Handle

48. Worm

49. Pin

50. Gear

51. Column

52. Ring

53. Bolt

54. Rack

55. Bolt

56. Bed

57. Bolt

58. Slide Bar

59. Nut

60. V-Belt

61. Motor Pulley

62. Set Screw

63. Motor Base

64. Motor

65. Washer

66. Bolt

67. Cord

68. Switch

69. Machine Screw

70. Nut

71. Washer

72. Bush

73. Set Screw

74. Washer

75. Nut

76. Spring Holder

77. Nut

78. Washer

KIRA NSD-340 AND NRD-340 DRILLING MACHINE

FEATHER

- * Powerful drilling is possible on the machine, equipped with 250W 4P Main motor.
- * NSD-340 is designed for very rigidly, large spindle, powerful motor and 52mm (2-1/16") rack sleeve.
- * The dial sleeve on the spindle feed control assures fast and accurate depth settings. Micropositioning of the dial its smooth setting hold breakage to a minimum.
- * Both machine with Square table (NSD-340) and Round table (NRD-340) available.
- * The machine with the spindle taper of M.T. No. 2 is available.



NSD-340

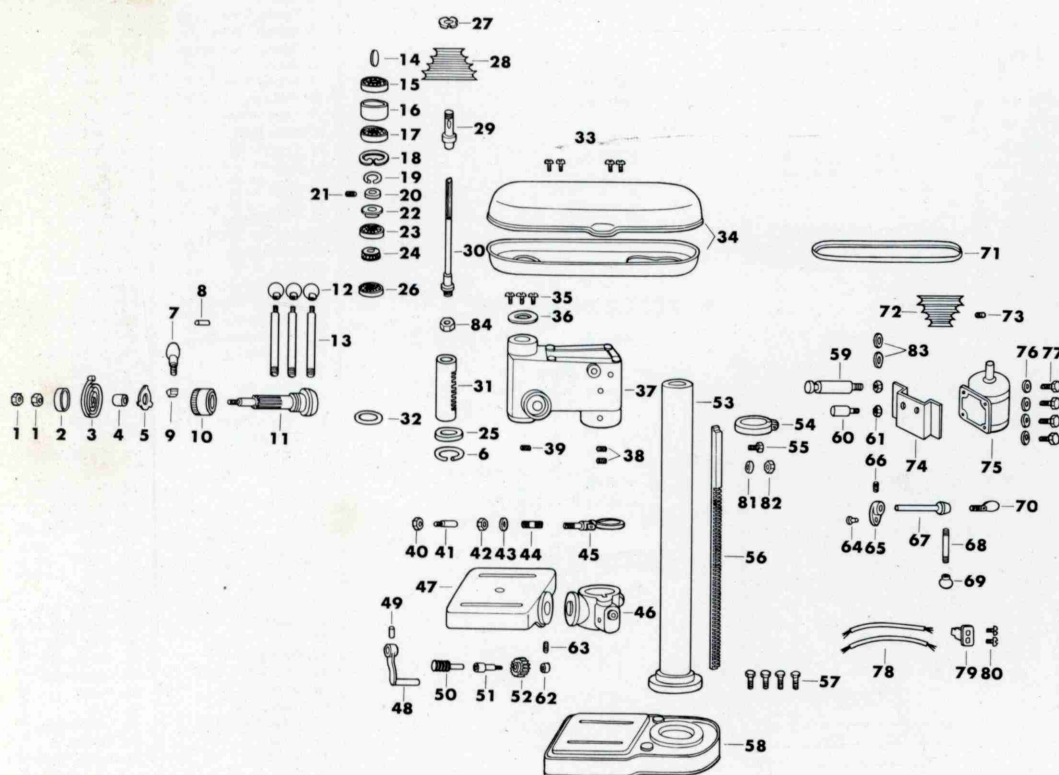


NRD-340

SPECIFICATIONS

				mm (inch)							
Model		NSD-340		NRD-340		Model		NSD-340		NRD-340	
Swing		330mm (13")				Spindle speed		60Hz	500, 900, 1600, 2800 rpm		
Drilling Capacity	Steel	3~ 11mm ($\frac{1}{8}" \sim \frac{7}{16}"$)						50Hz	415, 750, 1330, 2300 rpm		
	Casting	3~ 13mm ($\frac{1}{8}" \sim \frac{1}{2}"$)				Drive motor		250W ($\frac{1}{3}$ HP) 4P			
Max. distance spindle to table		498mm (19 $\frac{3}{4}"$)		468mm (18 $\frac{3}{8}"$)		Size of V-belt		A-40			
Max. distance spindle to base		628mm (24 $\frac{3}{4}"$)				Overall height		1030mm (40 $\frac{5}{8}"$)			
Max. Spindle travel		80mm (3 $\frac{1}{8}"$)				Dimension of base		268 x 464mm (10 $\frac{5}{8}"$ x 18 $\frac{5}{8}"$)			
Taper of spindle nose		J.T. No. 6 (Chuck #2 $\frac{1}{2}$)				Net weight (Approx.)		72kg (160 lbs.)			
Dia. of column		80 ϕ (3 $\frac{1}{8}"$)				Spindle bearings		6203z 1pc. 51103 1pc.			
Dimension of table		234 $\square$ (9 $\frac{3}{8}$ squ.)		285 ϕ (11 $\frac{3}{32}"$)				6202z 1pc. 6205z 2pcs.			
Vertical travel of table		410mm (16")									

PARTS LIST (Part No./Name)



- Nut 1" Nut
- Spring Case
- Helical Spring
- Bush
- Spring Holder
- Snap Ring
- Clamp Bolt
- Roll Pin
- Clamp Piece
- Feed Dial
- Feed Shaft
- Gripe
- Handle
- Key
- Ball Bearing
- Bearing Space
- Ball Bearing
- Snap Ring
- Snap Ring
- Collar
- Set Screw
- Collar
- Ball Bearing
- Thrust Bearing
- Collar
- Ball Bearing
- Pulley Nut
- Spindle Pulley
- Spline Sleeve
- Spindle
- Sleeve
- Cushion Ring
- Machine Screw
- Belt Cover
- Machine Screw
- Bearing Cover
- Body
- Set Screw
- Key Screw
- Nut
- Taper Pin
- Nut
- Washer
- Stud Bolt
- Clamp Bolt
- Table Bracket
- Table
- Handle
- Set Screw
- Worm
- Pin
- Gear
- Column
- Ring
- Bolt
- Rack
- Bolt
- Bed
- Slide Bar
- Bar
- Nut
- Bush
- Set Screw
- Shifter Piece
- Shifter
- Set Screw
- Shifter Bar
- Handle
- Gripe
- Clamp Bolt
- V-Belt
- Motor Pulley
- Set Screw
- Motor Base
- Motor
- Washer
- Bolt
- Cord
- Switch
- Machine Screw
- Washer
- Nut
- Washer
- Nut

KIRA KID-420 AND 420L DRILLING MACHINE

FEATURES

- * KID-420 is equipped with the same features as KSD-340 series making its 19 mm (3/4") drilling capacity ideal for all heavy duty machine shop requirements.
- * The machine is constructed rigidly and accurately for absorbing vibration from heavy drilling.
- * No use the middle pulley, the range of spindle speeds have 8 steps by engaging directly with the spindle and the main motor.

	50Hz	60Hz	V-belt
1	700	840	A-45
2	950	1150	A-50
3	970	1170	A-52

- * For standing works, KID-420L has longer column than KID-420 model. Unnecessary use to place on the table as the bench type.



KID-420

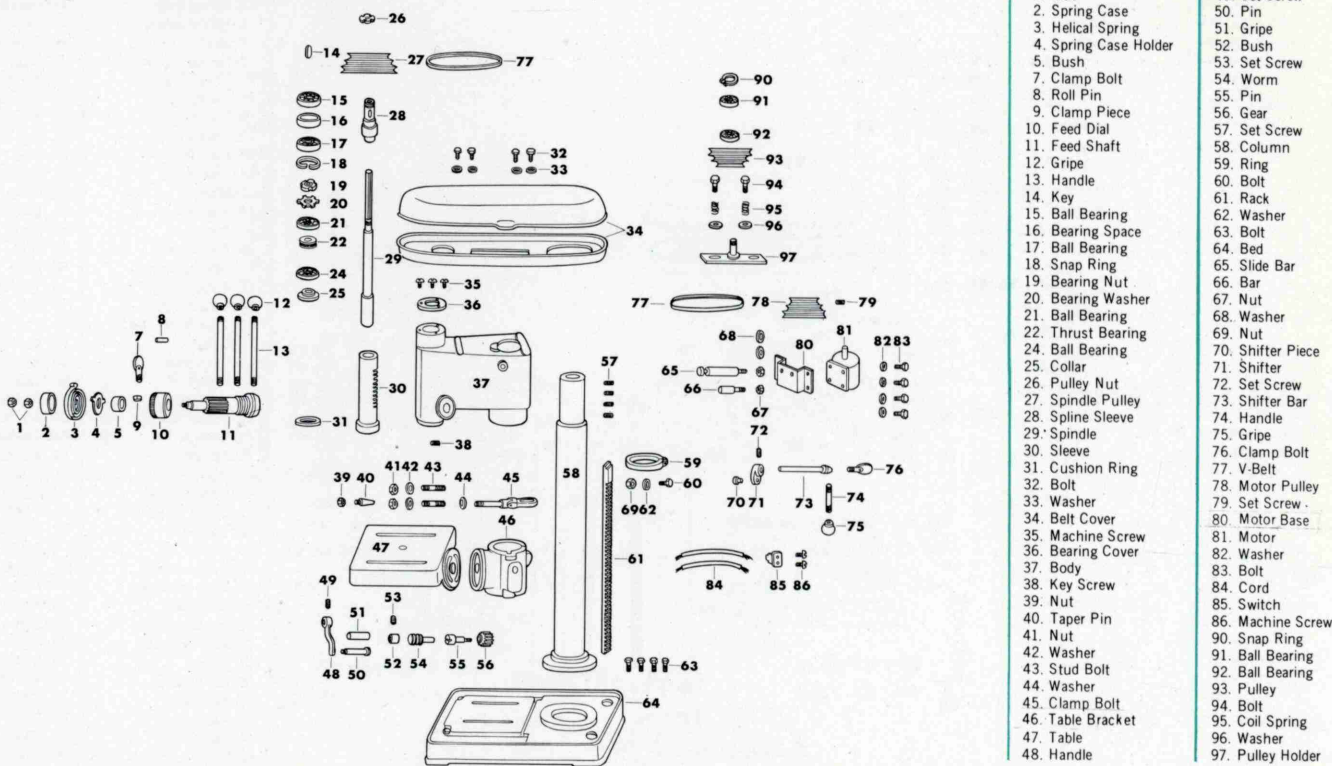
KID-420L
FLOOR TYPE

SPECIFICATIONS

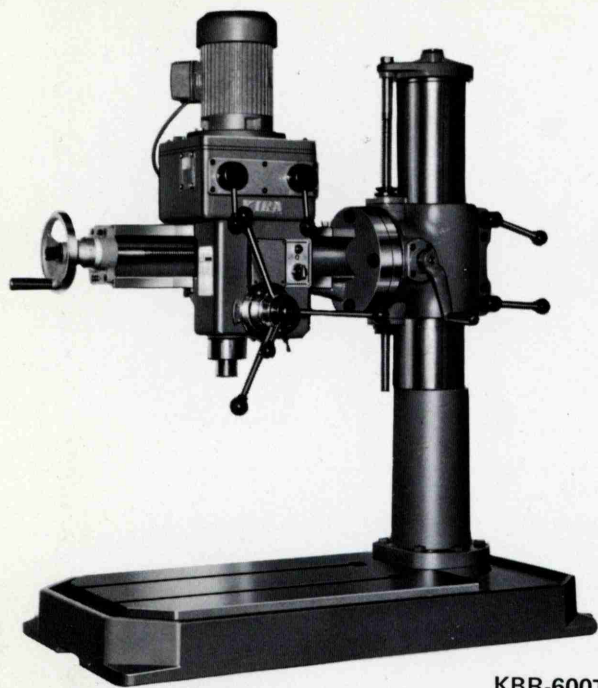
Model			K1D-420	K1D-420L
Swing			420mm (16½")	
Drilling	400W (½HP) motor	Steel 4~16mm (⅝~⅝")	Casting 4~20 mm (⅝~⅝")	
Capacity	750W (1HP) motor	Steel 4~19 mm (⅝~¾")	Casting 4~23 mm (⅝~⅝")	
Max. distance spindle to table		Square 470mm (18½")	Square 1010mm (39¾")	
		Round 425mm (16¾")	Round 965 mm (38")	
Max. distance spindle to base		660mm (26")	1168 mm (46")	
Max. Spindle travel		130mm (5⅛")		
Taper of spindle nose		M.T. No. 2		
Dia. of column		100φ (3⅞")		
Dimension of table		300□ (11⅜") 370φ (14½")		
Vertical travel of table		425mm (16¾")	889mm (35")	

Model		K1D-420		K1D-420L	
Spindle speed	60 Hz	4P	300, 450, 750, 1700, 2000, 3000 rpm		
		6P	200, 300, 500, 1150, 1400, 2100 rpm		
	50 Hz	4P	250, 370, 620, 1400, 1650, 2500 rpm		
		6P	170, 250, 420, 950, 1150, 1750 rpm		
Drive motor		0.4KW (½HP) 4P			
Size of V-belt		A-34, A-26			
Overall height		1275mm (50⅞")		1778mm (70")	
Dimension of base		340 x 600mm (13⅝" x 23⅝")			
Net weight (Approx.)		130kg (290 lbs.)		190kg (420 lbs.)	
Spindle bearings		6006 ZZ 1pc. 6005 ZZ 1pc.			
		51106 1pc. 6207 ZZ 2pcs.			

PARTS LIST (Part No./Name)



KIRA KBR-600T BENCH RADIAL DRILLING & TAPPING MACHINE



KBR-600T

FEATURES

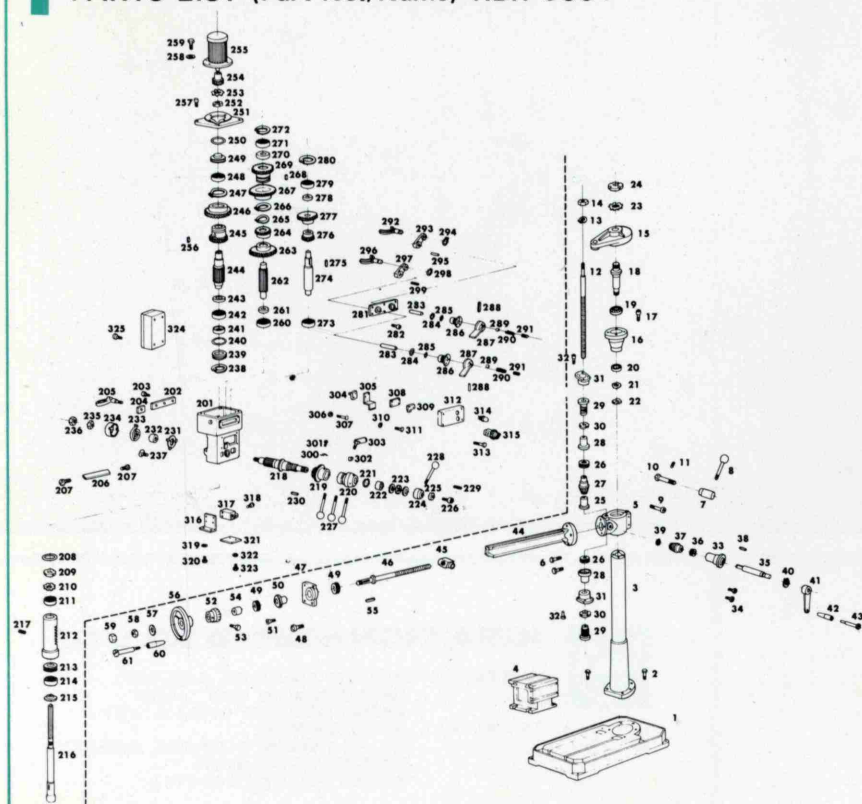
Model **KBR-600T** – Tapping Mechanism

- * KBR-600T machine is designed to be capable of obtaining as many tapping works.
- * With 0.75kw (1HP) 4p main drive motor and Morse Taper No. 3 of spindle, heavy duty drilling and tapping available.
- * All gears in this machine are carburized and hardened carefully, guarantees high precision. And the number of spindle speed changes is 4 steps.
- * A base-table of the machine is available as a special accessory.

■ SPECIFICATIONS

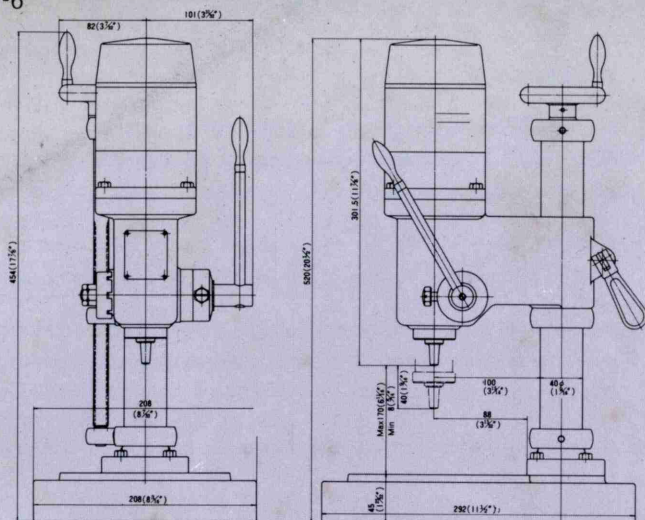
				mm (inch)
	KBR-600T		KBR-600T	
Drilling capacity	Steel 20mm ($\frac{3}{4}$ ") Casting 25mm (1")	Vertical travel of spindle	Drilling 120mm ($4\frac{3}{4}$ ") Tapping 115mm ($4\frac{1}{2}$ ")	
Tapping capacity	Steel 16mm ($\frac{5}{8}$ ") Casting 20mm ($\frac{3}{4}$ ")	Spindle speed	50 Hz 60 Hz	130, 260, 500, 930 rpm 160, 315, 600, 1120 rpm
Max. distance spindle to column	625mm ($24\frac{5}{8}$ ")			
Min. distance spindle to column	355mm (14")			
Max. distance spindle to flange of column	605mm ($23\frac{13}{16}$ ")	Diameter of column	150mm (5 $\frac{7}{8}$ ")	
Max. distance spindle nose to base	645mm ($25\frac{3}{8}$ ")	Overall height	1500mm (59")	
Min. distance spindle nose to base	261mm ($10\frac{1}{4}$ ")	Drive motor	0.75KW (1HP) 4P	
Taper of spindle nose	M.T. No. 3	Size of box table	250 x 250 x 250mm (10 x 10 x 10")	
		Net weight (Approx.)	420kg (930 lbs.)	

PARTS LIST (Part No./Name) KBR-600T

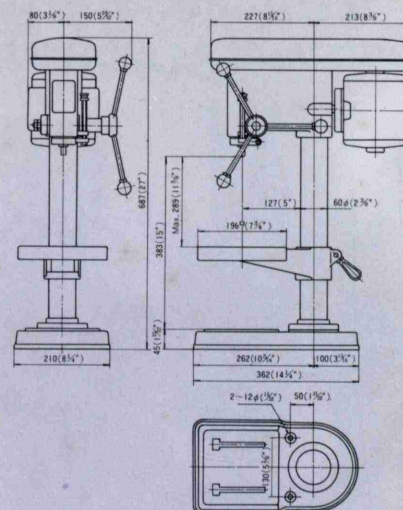


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|---------------------|---------------------|----------------------|------------------------|
| 1. Bed | 50. Flange | 238. Stop Ring | 287. Handle |
| 2. Bolt | 51. Socket Bolt | 239. Oil Seal Case | 288. Spring Pin |
| 3. Column | 52. Dial | 240. O-Ring | 289. Steel Ball |
| 4. Box Table | 53. Bolt | 241. Oil Seal | 290. Coil Spring |
| 5. Arm Bracket | 54. Collar | 242. Ball Bearing | 291. Set Screw |
| 6. Bolt | 55. Key | 243. Collar | 292. Shifter Fork |
| 7. Clamp Nut | 56. Handle Wheel | 244. Spindle Sleeve | 293. Shifter |
| 8. Handle | 57. Washer | 245. 32T Gear | 294. Stop Ring |
| 9. Socket Bolt | 58. Nut | 246. 52T Gear | 295. Spring Pin |
| 10. Bolt | 59. Nut | 247. Stop Ring | 296. Shifter Fork |
| 11. Set Screw | 60. Gripe | 248. Ball Bearing | 297. Shifter |
| 12. Elevating Screw | 61. Head | 249. Cover | 298. Stop Ring |
| 13. Spring Washer | 202. Supporter | 250. O-Ring | 299. Spring Pin |
| 14. Nut | 203. Socket Bolt | 251. Head Cover | 300. Switch Dog |
| 15. Bracket | 204. Clamp Piece | 252. Nut | 301. Machine Screw |
| 16. Bearing Case | 205. Clamp Bolt | 253. Washer | 302. Clamp Piece |
| 17. Socket Bolt | 206. Gib | 254. Motor Pinion | 303. Clamp Bolt |
| 18. Shaft | 207. Machine Screw | 255. Motor | 304. Micro Switch |
| 19. Ball Bearing | 208. Cushion Ring | 256. Key | 305. Micro Switch |
| 20. Ball Bearing | 209. Nut | 257. Socket Bolt | Base |
| 21. Washer | 210. Washer | 258. Washer | 306. Nut |
| 22. Nut | 211. Ball Bearing | 259. Bolt | 307. Machine Screw |
| 23. Washer | 212. Sleeve | 260. Ball Bearing | 308. Micro Switch |
| 24. Nut | 213. Thrust Bearing | 261. Collar | Base |
| 25. Space | 214. Ball Bearing | 262. Spine Shaft | 309. Micro Switch |
| 26. Thrust Bearing | 215. Collar | 263. 42T Gear | 310. Washer |
| 27. Bevel Gear | 216. Spindle | 264. 20T Gear | 311. Bolt |
| 28. Thrust Bearing | 217. Key Screw | 265. Stop Ring | 312. Switch Cover |
| Holder | 218. Feed Shaft | 266. Stop Ring | 313. Machine Screw |
| 29. Adjust Screw | 219. Feed Dial | 267. 47T Gear | 314. Pilot Lamp |
| 30. Nut | 220. Handle Body | 268. Key | 315. Select Switch |
| 31. Flange | 221. Cord | 269. 37T Gear | 316. Limit Switch Base |
| 32. Socket Bolt | 222. Bush | 270. Collar | 317. Limit Switch |
| 33. Flange | 223. Thrust Bearing | 271. Ball Bearing | 318. Machine Screw |
| 34. Socket Bolt | 224. Nut | 272. Stop Ring | 319. Washer. |
| 35. Shaft | 225. Collar | 273. Ball Bearing | 320. Bolt |
| 36. Thrust Bearing | 226. Socket Bolt | 274. Shaft | 321. Cover |
| 37. Bevel Gear | 227. Handle | 275. Key | 322. Washer |
| 38. Key | 228. Handle | 276. 20T Gear | 323. Bolt |
| 39. Stop Ring | 229. Spindle Pin | 277. 30T Gear | 324. Control Box |
| 40. Stop Ring | 230. Spindle Pin | 278. Collar | 325. Machine Screw |
| 41. Handle | 231. Spindle Case | 279. Ball Bearing | |
| 42. Gripe | Holder | 280. Stop Ring | |
| 43. Pin | 232. Bush | 281. Shifter Bracket | |
| 44. Arm | 233. Helical Spring | 282. Socket Bolt | |
| 45. Nut | 234. Spring Case | 283. Shifter Shaft | |
| 46. Screw | 235. Nut | 284. O-Ring | |
| 47. Bracket | 236. Nut | 285. O-Ring | |
| 48. Socket Bolt | 237. Machine Screw | 286. Flange | |
| 49. Thrust Bearing | | | |

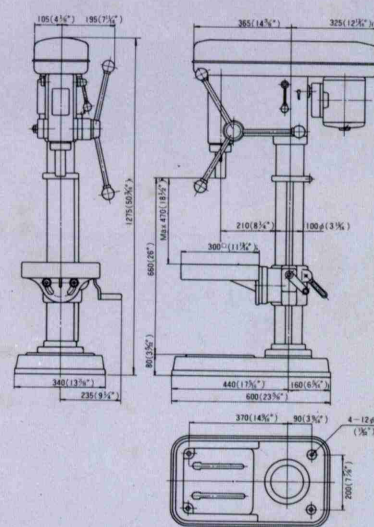
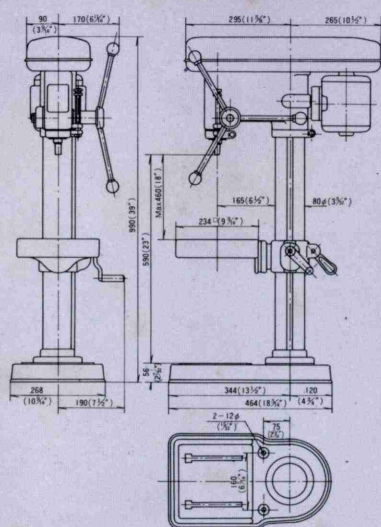
KHD-6



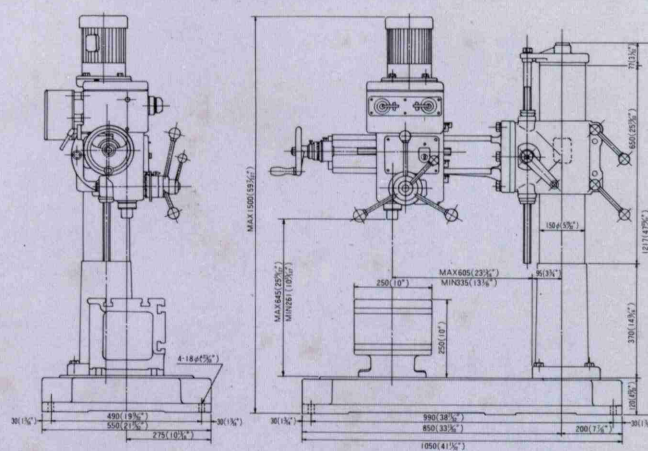
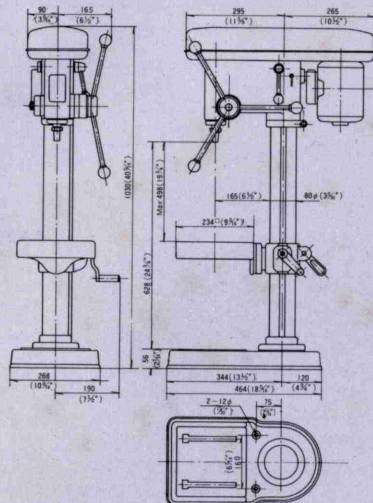
KND-8



KID-420



KBR-600T



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