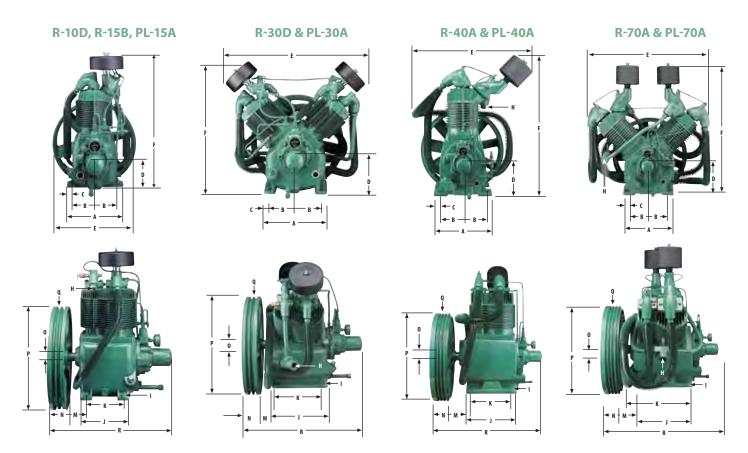
BARE-PUMP DIMENSIONS

	ltem	R-10D, R-15B, PL-15 Inch	R-30D & PL-30 Inch	R-40A & PL-40 Inch	R-70A & PL-70 Inch
А	Base – Width	10	11%	12%	12%
В	Boltdown – Width	43/8	413/16	511/16	5¹¼ ₆
С	Boltdown to Edge	5/8	3/4	3/4	3/4
D	Base to Crank CTR	5½	7	715/16	7%
Е	Overall Width	16%	26	30	331/2
F	Overall Height	231/4	23%16	32	33%6
Н	HP Exh. Opening Manifold	34" Tubing	¾ NPT	1" Tubing	1¼ NPT
1	Boltdown Hole Diameter	15/32	17/32	%16	%16
J	Base — Depth	7½	9¾	12	131⁄4
K	Boltdown — Depth	5¾	81/16	10	111⁄4
L	Boltdown to Edge	%	27/32	1	1
М	Bolt Hole to Wheel (Max.)	3	31⁄4	5¾	5¾
N	Flywheel — Width	21/2	2 ² 3/32	31/2	31/2
0	Crank Diameter	15/16	1¾	21/4	21/4
Р	Flywheel Diameter	161/2	18%	22	22¾6
Q	Flywheel Grooves	2VB*	2VB*	3VB*	3VB*
R	Overall Depth	20	22¾	271/2	28³¾4
Арр	roximate Shipping Weight (lbs.)	125	220	440	570

^{*} VB: V Belt



SPECIFICATIONS

	HOR	IZONTAL 1	TANK M	OUNTED UN	NITS — E	LECTRIC DRIVEN		125	PSI Rat	ing*	175	PSI Rat	ing*	250	PSI Rat	ing*
Motor HP	Tank Cap Gal.	R-Series CASRSA	Pump Comp Model	PL-Series CBSPLA	Pump Comp Model	L x W x H Dimensions Inches	Approx. Ship Wt. lbs.	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y
11/2	30	HR1-3	R-10D	NA	NA	41½ x 20¼ x 44½	300	575	11.2	6.0	542	10.5	5.3	NA	NA	NA
11/2	60	HR1-6	R-10D	NA	NA	51½ x 23¼ x 49	400	575	11.2	6.0	542	10.5	5.3	NA	NA	NA
11/2	80	HR1-8	R-10D	NA	NA	66½ x 23¼ x 49	425	575	11.2	6.0	542	10.5	5.3	NA	NA	NA
2	30	HR2-3	R-10D	NA	NA	41½ x 20¼ x 44½	320	765	14.9	8.3	725	14.1	7.5	NA	NA	NA
2	60	HR2-6	R-10D	NA	NA	51½ x 23¼ x 49	425	765	14.9	8.3	725	14.1	7.5	NA	NA	NA
2	80	HR2-8	R-10D	NA	NA	66½ x 23¼ x 49	455	765	14.9	8.3	725	14.1	7.5	NA	NA	NA
3	60	HR3-6	R-15B	HPL3-6	PL-15A	51½ x 23¼ x 49	425	485	14.1	10.9	440	12.8	9.7	380	11.0	8.0
3	80	HR3-8	R-15B	HPL3-8	PL-15A	66½ x 23¼ x 49	485	485	14.1	10.9	440	12.8	9.7	380	11.0	8.0
3	120	HR3-12	R-15B	HPL3-12	PL-15A	70½ x 25 x 52¾	725	485	14.1	10.9	440	12.8	9.7	380	11.0	8.0
5	60	HR5-6	R-15B	HPL5-6	PL-15A	51½ x 23¼ x 49	445	805	23.5	19.1	734	21.4	17.3	640	18.6	13.6
5	80	HR5-8	R-15B	HPL5-8	PL-15A	66½ x 23¼ x 49	535	805	23.5	19.1	734	21.4	17.3	640	18.6	13.6
5	120	HR5-12	R-15B	HPL5-12	PL-15A	70½ x 25 x 52¾	765	805	23.5	19.1	734	21.4	17.3	640	18.6	13.6
71/2	80	HR7F-8	R-15B	HPL7F-8	PL-15A	66½ x 23¼ x 49	570	990	28.7	23.9	990	28.7	23.1	870	25.5	18.2
71/2	120	HR7F-12	R-15B	HPL7F-12	PL-15A	70½ x 23¼ x 52¾	765	990	28.7	23.9	990	28.7	23.1	870	25.5	18.2
71/2	80	HR7-8	R-30D	HPL7-8	PL-30A	66½ x 23¼ x 52¾	665	670	39.6	30.0	575	33.5	25.8	520	30.2	21.3
71/2	120	HR7-12	R-30D	HPL7-12	PL-30A	70½ x 25 x 53¼	860	670	39.6	30.0	575	33.5	25.8	520	30.2	21.3
10	80	HR10-8	R-30D	HPL10-8	PL-30A	66½ x 23¼ x 49¼	675	810	47.3	37.3	740	43.1	34.8	640	37.1	27.5
10	120	HR10-12	R-30D	HPL10-12	PL-30A	70½ x 25 x 53¼	890	810	47.3	37.3	740	43.1	34.8	640	37.1	27.5
10	250	HR10-25	R-30D	HPL10-25	PL-30A	87½ x 30 x 60½	1295	810	47.3	37.3	740	43.1	34.8	640	37.1	27.5
15	80	HR15F-8	R-30D	HPL15F-8	NA	66½ x 23¼ x 49¼	675	1045	60.9	50.2	1045	60.9	49.0	900	52.5	42.6
15	120	HR15F-12	R-30D	HPL15F-12	PL-30A	70½ x 25 x 53¼	840	1045	60.9	50.2	1045	60.9	49.0	900	52.5	42.6
15	250	HR15F-25	R-30D	HPL15F-25	PL-30A	88½ x 30 x 60½	1275	1045	60.9	50.2	1045	60.9	49.0	900	52.5	42.6
15	120	HRA15-12	R-40A	HPL15-12	PL-40A	72 x 27½ x 62	1110	890	71.1	59.0	770	61.5	53.7	700	55.9	45.8
15	250	HRA15-25	R-40A	HPL15-25	PL-40A	89 x 30¼ x 64	1495	890	71.1	59.0	770	61.5	53.7	700	55.9	45.8
20	120	HRA20-12	R-70A	HPL20-12	PL-70A	72 x 27½ x 64½	1325	770	109.0	91.9	655	93.0	76.7	545	77.4	64.1
20	250	HRA20-25	R-70A	HPL20-25	PL-70A	89 x 30¼ x 71½	1790	770	109.0	91.9	655	93.0	76.7	545	77.4	64.1
25	120	HRA25-12	R-70A	HPL25-12	PL-70A	72 x 27½ x 64½	1365	890	127.8	102.1	770	109.4	90.1	660	93.7	76.8
25	250	HRA25-25	R-70A	HPL25-25	PL-70A	89 x 30¼ x 71½	1735	890	127.8	102.1	770	109.4	90.1	660	93.7	76.8
30	120	HRA30-12	R-70A	HPL30-12	PL-70A	72 x 27½ x 64½	1404	890	127.8	102.1	890	127.8	101.0	770	109.4	90.0
30	250	HRA30-25	R-70A	HPL30-25	PL-70A	89 x 30¼ x 71½	1774	890	127.8	102.1	890	127.8	101.0	770	109.4	90.0

	VE	RTICAL T	ANK MO	UNTED UNI	TS — ELE	CTRIC DRIVEN		125	PSI Rat	ing*	175	PSI Rat	ing*	250	PSI Rat	ing*
Motor HP	Tank Cap Gal.	R-Series CASRSA	Pump Comp Model	PL-Series CBSPLA	Pump Comp Model	L x W x H Dimensions Inches	Approx. Ship Wt. lbs.	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y
11/2	60	VR1-6	R-10D	NA	NA	30½ x 24 x 76	400	575	11.2	6.0	542	10.5	5.3	NA	NA	NA
11/2	80	VR1-8	R-10D	NA	NA	32½ x 24 x 75	425	575	11.2	6.0	542	10.5	5.3	NA	NA	NA
2	60	VR2-6	R-10D	NA	NA	30½ x 24 x 76	425	765	14.9	8.3	725	14.1	7.5	NA	NA	NA
2	80	VR2-8	R-10D	NA	NA	32½ x 24 x 75	455	765	14.9	8.3	725	14.1	7.5	NA	NA	NA
3	60	VR3-6	R-15B	VPL3-6	PL-15A	30½ x 24 x 76	425	485	14.1	10.9	440	12.8	9.7	380	11.0	8.0
3	80	VR3-8	R-15B	VPL3-8	PL-15A	32½ x 24 x 75	485	485	14.1	10.9	440	12.8	9.7	380	11.0	8.0
3	120	VR3-12	R-15B	VPL3-12	PL-15A	36 x 30 x 81	725	485	14.1	10.9	440	12.8	9.7	380	11.0	8.0
5	60	VR5-6	R-15B	VPL5-6	PL-15A	30½ x 24 x 76	445	805	23.5	19.1	734	21.4	17.3	640	18.6	13.6
5	80	VR5-8	R-15B	VPL5-8	PL-15A	32½ x 24 x 75	545	805	23.5	19.1	734	21.4	17.3	640	18.6	13.6
5	120	VR5-12	R-15B	VPL5-12	PL-15A	36 x 30 x 81	765	805	23.5	19.1	734	21.4	17.3	640	18.6	13.6
71/2	80	VR7F-8	R-15B	VPL7F-8	PL-15A	32½ x 24 x 75	635	990	28.7	23.9	990	28.7	23.1	870	25.5	18.2
71/2	120	VR7F-12	R-15B	VPL7F-12	PL-15A	36 x 30 x 81	765	990	28.7	23.9	990	28.7	23.1	870	25.5	18.2
71/2	80	VR7-8	R-30D	VPL7-8	PL-30A	42½ x 30 x 66¾	665	670	39.6	30.0	575	33.5	25.8	520	30.2	21.3
71/2	120	VR7-12	R-30D	VPL7-12	PL-30A	43½ x 30 x 81	800	670	39.6	30.0	575	33.5	25.8	520	30.2	21.3
10	80	VR10-8	R-30D	VPL10-8	PL-30A	42½ x 30 x 66¾	860	810	48.5	37.3	740	43.1	34.8	640	37.1	27.5
10	120	VR10-12	R-30D	VPL10-12	PL-30A	43½ x 30 x 81	890	810	48.5	37.3	740	43.1	34.8	640	37.1	27.5
15	120	VR15F-12	R-30D	NA	NA	43½ x 30 x 81	890	1045	63.5	50.2	1045	63.5	49.0	900	52.5	42.6

^{*}Pressure Lubricated units are capable of 250 PSIG operation; units tested in accordance with CAGI/PNEUROP Acceptance Test Code PN2CPTC2.

SPECIFICATIONS

					BASE MOUN	TED UNIT	rs								
Motor	R-Series	Pump	PL-Series	Pump	LxWxH	Approx.	125	PSI Rat	ing*	175	PSI Rat	ing*	250	PSI Rat	ing*
HP	CABRSA	Comp Model	CBBPLA	Comp Model	Dimensions inches	Ship Wt. lbs.	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y
11/2	BR-1	R-10D	NA	NA	34½ x 19¾ x 29½	205	575	11.2	6.0	542	10.5	5.3	NA	NA	NA
2	BR-2	R-10D	NA	NA	34½ x 19¾ x 29½	205	765	14.9	8.3	725	14.1	7.5	NA	NA	NA
3	BR-3	R-15B	BPL-3	PL-15A	34½ x 19¾ x 29½	230	485	14.1	10.9	440	12.8	9.7	380	11.0	8.0
5	BR-5	R-15B	BPL-5	PL-15A	34½ x 19¾ x 29½	280	805	23.5	19.1	734	21.4	17.3	640	18.6	13.6
71/2	BR-7F	R-15B	BPL-7F	PL-15A	34½ x 19¾ x 29½	310	990	28.7	23.9	990	28.7	23.1	870	25.5	18.2
71/2	BR-7	R-30D	BPL-7	PL-30A	41½ x 22¼ x 28¾	430	670	39.6	30.0	575	33.5	25.8	520	30.2	21.3
10	BR-10	R-30D	BPL-10	PL-30A	41½ x 22½ x 28¾	540	810	47.3	37.3	740	43.1	34.8	640	37.1	27.5
15	BR-15F	R-30D	BPL-15F	PL-30A	49½ x 26½ x 28¾	550	1045	60.9	50.2	1045	60.9	49.0	900	52.5	42.6
15	BRA-15	R-40A	BPL-15	PL-40A	49½ x 27½ x 38	730	890	71.1	59.0	770	61.5	53.7	700	55.9	45.8
20	BRA-20	R-70A	BPL-20	PL-70A	54½ x 28½ x 39½	1000	770	109.0	91.9	655	93.0	76.7	545	77.4	64.1
25	BRA-25	R-70A	BPL-25	PL-70A	54½ x 28½ x 39½	1020	890	127.8	102.1	770	109.4	90.1	660	93.7	76.8
30	BRA-30	R-70A	BPL-30	PL-70A	54½ x 28½ x 39½	1059	890	127.8	102.1	890	127.0	101.1	770	109.4	90.0

						TANK MOUNTED	DUPLEX	UNITS								
Matau	Tank	R-Series	Pump	PL-Series	Pump	LxWxH	Approx.	125	PSI Rat	ting*	175	PSI Rat	ing*	250	PSI Rat	ing*
Motor HP	Cap Gal.	CADRSA	Comp Model	CBDPLA	Comp Model	Dimensions Inches	Ship Wt. lbs.	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y
2 (2)	80	HR2D-8	R-10D	NA	NA	66¾ x 28 x 51¾	715	765	29.8	16.6	725	28.2	15.0	NA	NA	NA
2 (2)	120	HR2D-12	R-10D	NA	NA	70½ x 28 x 55¼	940	765	29.8	16.6	725	28.2	15.0	NA	NA	NA
3 (2)	80	HR3D-8	R-15B	HPL3D-8	PL-15A	66¾ x 28 x 51¾	725	485	28.2	21.8	440	25.6	19.4	380	22.0	16.0
3 (2)	120	HR3D-12	R-15B	HPL3D-12	PL-15A	70½ x 28 x 55¼	950	485	28.2	21.8	440	25.6	19.4	380	22.0	16.0
5 (2)	80	HR5D-8	R-15B	HPL5D-8	PL-15A	66¾ x 28 x 51¾	755	805	47.0	38.2	734	42.8	34.6	640	37.2	27.2
5 (2)	120	HR5D-12	R-15B	HPL5D-12	PL-15A	70½ x 28 x 55¼	980	805	47.0	38.2	734	42.8	34.6	640	37.2	27.2
7½ (2)	120	HR7DF-12	R-15B	HPL7DF-12	PL-15A	70½ x 28 x 55¼	1150	990	57.4	47.8	990	57.4	46.2	870	51.0	36.4
7½ (2)	250	HR7DF-25	R-15B	HPL7DF-25	PL-15A	87½ x 32¾ x 50¼	1485	990	57.4	47.8	990	57.4	46.2	870	51.0	36.4
7½ (2)	120	HR7D-12	R-30D	HPL7D-12	PL-30A	86½ x 28½ x 56½	1305	670	79.2	60.0	575	67.0	51.6	520	60.4	42.6
7½ (2)	250	HR7D-25	R-30D	HPL7D-25	PL-30A	87½ x 32¾ x 61¾	1675	670	79.2	60.0	575	67.0	51.6	520	60.4	42.6
10 (2)	250	HR10D-25	R-30D	HPL10D-25	PL-30A	87½ x 29 x 62	1725	810	94.6	74.6	740	86.2	69.6	640	74.2	55.0
10 (2)	120	HR10D-12	R-30D	HPL10D-12	PL-30A	86½ x 29 x 57	1725	810	94.6	74.6	740	86.2	69.6	640	74.2	550
15 (2)	120	HR15DF-12	R-30D	HPL15DF-12	PL-30A	91¾ x 26½ x 48¾	1860	1045	121.8	100.4	1045	127.0	98.0	900	105.0	85.2
15 (2)	250	HR15DF-25	R-30D	HPL15DF-25	PL-30A	86½ x 29 x 57	1860	1045	121.8	100.4	1045	127.0	98.0	900	105.0	85.2
15 (2)	250	HRA15D-25	R-40A	HPL15D-25	PL-40A	89 x 54¾ x 73½	2460	890	142.2	118.0	770	123.0	107.4	700	111.8	91.6
20 (2)	250	HRA20D-25	R-70A	HPL20D-25	PL-70A	89 x 60½ x 75¼	2845	770	218.0	183.8	655	186.0	153.4	545	154.8	128.2
25 (2)	250	HRA25D-25	R-70A	HPL25D-25	PL-70A	89 x 60½ x 75¼	2940	890	255.6	204.2	770	218.8	180.2	660	187.4	153.6
30 (2)	250	HRA30D-25	R-70A	HPL30D-25	PL-70A	89 x 60½ x 75¼	3018	890	255.6	204.2	890	255.6	202.0	770	218.8	180.0

 $[*]Pressure\ Lubricated\ units\ are\ capable\ of\ 250\ PSIG\ operation;\ Units\ tested\ in\ accordance\ with\ CAGI/PNEUROP\ Acceptance\ Test\ Code\ PN2CPTC2.$

		G	AS				CAERSB imensio		Approx.	175	S PSI Rati	ng*	250	PSI Rati	ng*
Motor HP	Tank Cap Gal.	R-Series CAERSB	Pump Model	PL-Series CBEPLB	Pump Model			н	Weight lbs.	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y
8	(2) 4	HGR3-LP	R15B	NA	NA	38	22.8	45	345	600	17.5	14.8	NA	NA	NA
8	30	HGR3-3	R15B	HGPL3-3	PL15A	38	22.8	45	345	600	17.5	14.8	NA	NA	NA
13	NA	BGR7-H	R15B	BGPL7-H	PL15A	41.2	20.5	29.3	304	1025	29.9	23.2	950	27.7	19.8
13	(2) 4	HGR7-LPH	R15B	HGPL7-LPH	PL15A	41.3	22.3	37.6	404	1025	29.9	23.2	950	27.7	19.8
13	30	HGR7-3H	R15B	HGPL7-3H	PL15A	41.6	20.5	45.5	434	1025	29.9	23.2	950	27.7	19.8
13	60	HGR7-6H	R15B	HGPL7-6H	PL15A	52.5	21.3	49.1	500	1025	29.9	23.2	950	27.7	19.8
13	80	HGR7-8H	R15B	HGPL7-8H	PL15A	67.5	21.3	49.1	539	1025	29.9	23.2	950	27.7	19.8
14	NA	BGR7K	R15B	BGPL7K	PL15A	41.2	20.5	29.3	304	1025	29.9	23.2	950	27.7	19.8
14	(2) 4	HGR7-LPK	R15B	HGPL7-LPK	PL15A	41.3	22.3	37.6	404	1025	29.9	23.2	950	27.7	19.8
14	30	HGR7-3K	R15B	HGPL7-3K	PL15A	41.6	20.5	45.5	434	1025	29.9	23.2	950	27.7	19.8
14	60	HGR7-6K	R15B	HGPL7-6K	PL15A	52.5	21.3	49.1	500	1025	29.9	23.2	950	27.7	19.8
14	80	HGR7-8K	R15B	HGPL7-8K	PL15A	67.5	21.3	49.1	539	1025	29.9	23.2	950	27.7	19.8
20	NA	BGR10K	R30D	BGPL10K	PL30A	34	23	29	715	765	44.6	36.2	680	39.6	31.2
20	80	HGR10-8K	R30D	HGPL10-8K	PL30A	66.5	21	49.8	715	765	44.6	36.2	680	39.6	31.2
23	5	BGR12K	R30D	BGPL12K	PL30A	46	28	35.8	645	940	55	44.2	810	47.2	38.4

H - Honda, B - Briggs and Stratton, K - Kohler.

NOTE: Only pressure lubricated units are capable of 250 PSIG operation. Units tested in accordance with CAGI/PNEUROP Acceptance Test Code PN2CPTC3.

Dimensions are for R-Series compressors. Add 1" to the width for PL units.

		DII	ESEL				CAERSB I		Approx.	175	PSI Rati	ng*	250	PSI Rati	ing*
Motor HP	Tank Cap Gal.	R-Series CAERSB	Pump Model	PL-Series CBEPLB	Pump Model		w	н	Weight Ibs.	RPM	CFM Displ.	CFM Del'y	RPM	CFM Displ.	CFM Del'y
10	NA	BDR5K	R15B	BDPL5K	PL15A	41.2	20.6	29.3	518	870	25.3	20.1	650	18.9	13.6
10	30	HDR5-3K	R15B	HDPL5-3K	PL15A	41.6	20.5	45.5	525	870	25.3	20.1	650	18.9	13.6
10	80	HDR5-8K	R15B	HDPL5-8K	PL15A	67.5	21.3	49.1	630	870	25.3	20.1	650	18.9	13.6
10	NA	BDR5Y	R15B	BDPL5Y	PL15A	41.2	20.6	29.3	518	940	27.4	21.7	810	23.6	18.7
10	30	HDR5-3Y	R15B	HDPL5-3Y	PL15A	42.7	20.5	45.5	525	940	27.4	21.7	810	23.6	18.7
10	80	HDR5-8Y	R15B	HDPL5-8Y	PL15A	67.5	21.3	49.1	630	940	27.4	21.7	810	23.6	18.7
25	(2) 4	BDRA15	R40A	BDPL15	PL40A	52	29	42	813	910	72.8	59	800	64	51.5

K - Kohler. Y-Yanmar.

NOTE: Only pressure lubricated units are capable of 250 PSIG operation. Units tested in accordance with CAGI/PNEUROP Acceptance Test Code PN2CPTC3. Dimensions are for R-Series compressors. Add 1" to the width for PL units.

						В	ARE PU	MPS						
N4 - 4	D.C.	DI Carias	D:1 /D	125 PS	Rating	175 PS	Rating	250 PS	Rating	D			Oil	Approx.
Motor HP	R-Series CAPRSA	PL-Series CBPPLA	Displ./Rev Cubic Feet	RPM	CFM Del'y	RPM	CFM Del'y	RPM	CFM Del'y	Bore Inches Dia.	Stroke Inches	Number Cylinders	Capacity Quarts	Ship Weight Ibs.
11/2	R-10D	NA	.01942	575	6.0	542	5.3	NA	NA	45/8 & 21/2	2	2	2	125
2	R-10D	NA	.01942	765	8.3	725	7.5	NA	NA	45/8 & 21/2	2	2	2	125
5	RP15B	NA	.02916	805	19.1	734	17.3	NA	NA	4% & 21/2	3	2	2	125
3	R-15B	PL-15A	.02916	485	10.9	440	9.7	380	8.0	45/8 & 21/2	3	2	2	125
5	R-15B	PL-15A	.02916	805	19.1	734	17.3	640	13.6	45/8 & 21/2	3	2	2	125
71/2	R-15B	PL-15A	.02916	990	23.9	990	23.1	870	18.2	45/8 & 21/2	3	2	2	125
71/2	R-30D	PL-30A	.05828	670	30.0	575	25.8	520	21.3	4% & 21/2	3	4	4	220
10	R-30D	PL-30A	.05828	810	37.3	740	34.8	640	27.5	4% & 21/2	3	4	4	220
15	R-30D	PL-30A	.05828	1045	50.2	1045	49.0	900	42.6	45/8 & 21/2	3	4	4	220
15	R-40A	PL-40A	.0800	890	59.0	770	53.7	700	45.8	61/4 & 31/4	41/2	2	4	440
20	R-70A	PL-70A	.1420	770	91.9	655	76.7	545	64.1	61/4 & 31/4	4	4	61/2	570
25	R-70A	PL-70A	.1420	890	102.1	770	90.1	660	76.8	61/4 & 31/4	4	4	61/2	570
30	R-70A	PL-70A	.1420	890	102.1	890	101.0	770	90.0	61/4 & 31/4	4	4	61/2	570

The Champion Assembled Unit Warranties

Compressor Pump Warranty

Each new Champion Assembled Unit has a five (5) year warranty on the compressor pump only, against defects in materials or workmanship under normal use and service, from the date of installation or sixty-six (66) months from the date of shipment by Champion or a Champion distributor, whichever may occur first.

The five-year extended warranty covers parts and labor and is prorated over the five years as follows:

Year One — 100% coverage Year Two — 90% coverage Year Three — 80% coverage Year Four — 70% coverage Year Five — 60% coverage

Head valves are warranted for Year One only. Warranty on components and/or accessories furnished to Champion by third parties, such as electric motors, gasoline engines and controls, are warranted only to the extent of the original manufacturer's warranty to Champion. Electric motors must be equipped with thermal overload protection to have warranty consideration.

The extended five-year warranty will apply to ASME air receivers if they are installed on rubber vibro isolator pads or approved equivalent.

Limited Warranty

Warranty shall not apply to any equipment which has been subjected to misuse, neglect or accident, nor shall it apply to any equipment that has been repaired or altered by any person(s) not authorized by Champion. Failure caused by lack of proper maintenance is not covered by warranty.

In no event shall Champion be liable for consequential damages or contingent liabilities arising out of failure of any compressor or part to operate properly. When a compressor pump or component is changed or replaced during the warranty period, the new/replaced item(s) is warranted for only the remainder of the original warranty period. Complete warranty details are included in compressor operating manual.

Package Warranty

Champion warrants each new air compressor package to be free from defects in material and workmanship under normal use and service for a period of one year (12 months) from the date of installation or 15 months from the date of shipment by Champion.



www.ChampionPneumatic.com

1301 North Euclid Avenue Princeton, Illinois 61356 USA www.ChampionPneumatic.com/ContactUs.aspx 866-276-4330



Please recycle after use.







OPTIONAL LIFT **ACCESSORIES**

Runway extensions add the versatility of a 24"wheelbase range adjustment.** ROTABY LIFT V KKX FIVE AVAILABLE RUNWAY LENGTHS

Model Shown: VREX64-48X / 64,000 lbs. capacity drive-on lift / surface mounted

LIFT COLORS

Legs and Console

working heights.

- C -- F

RAI 7040

Runways and Ramps

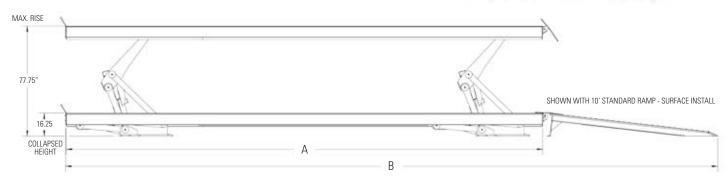
RAL5005 RAL3002 RAL9005

Ten locking positions at

convenient and ergonomic

SPECIFICATIONS V-REX44-V-REX64 V-REX80 Capacity* 44,000 lbs. 64,000 lbs. 80,000 lbs. Maximum Rise 77 3/4" Bottom of base to runway top 16 - 1/4" Collapsed Height 90 seconds Rise Time Runway Lengths** 28', 32', 36'*, 48' Overall Lengths 38', 42', 46', 58' With standard 10' approach ramps 32" Width of Runway 109" D. Overall Width 45" Distance Between Runways Motor 20 hp **Electrical Standard** 3ph, 208-230/460/575 Number of legs Minimum Floor Thickness

- * 44K, 64K and 80K capacities for all runway lengths. with the exception of the 36' runway length. It is available in 44K and 64K capacities only.
- ** 30' runway available with 2' extension on 28' runway



Superior by Design

Rotary maintains the industry's largest in-house mechanical, electrical and controls engineering staff using state of the art design, modeling and analysis software to ensure you get a well designed, reliable product.

Increase bay productivity with these drive-on lift accessories

Rolling Bridge Jacks allow the front, rear, or all wheels to be lifted off the runways for brake, tire, alignment and suspension work. Jacks are supported between the runways, not on the top.





Available in 22,000, 32,000 and 36,000 lbs. capacities





Runway wheel kit legs retract for easy rolling jack removal



MW-500 Tire Lift reduces risk of technician injury with this 500 lbs. capacity tire lift. Air operated (100 psi) with no batteries. Includes pressure regulator to prevent overloading.

Wash Bay Kits can be installed into wash bays for easy vehicle cleaning with a certified remote stainless steel control



North / South America Contact Information

p 800.640.5438

Latin America / Caribbean: 1.812.273.1622

Tech. Support: p 800.445.5438

Global Contact Information

USA: 1.812.273.1622

Canada: 1.905.812.9920

Brazil: +55.11.4534.1995

e userlink@rotarylift.com

e techlink@rotarylift.com

LED Runway Lighting Kit

Attach the light wands to runways for effective, efficient lighting where you need it.

• 120V AC input voltage • 60hz Lighting unit includes 60W power supply unit,

Rotary Lift

2700 Lanier Drive

Madison, IN 47250, USA



Pendant Controls

The pendant allows for remote operation away from the lift console

ADDITIONAL OPTIONS:

- Internal Air Kit connections for Rolling Jacks
- 12' Ramp Kits
- Bolt on Wheel Curbs
- Electronic Height Limiter
- Heavy Duty Turntables for Alignment Service
- Tapeswitches for Inside and Outside of Runways
- Audible Descent Alarm Kit



For additional world wide contact information and a complete guide to our product offering, visit us on the web at rotarylift.com.

Lit# Rotary V-REX HD Lift Brochure 2016.04

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V-REX Vertical Rise Drive-On Lifts

HEAVY DUTY PRODUCTIVITY FOR YOUR MAINTENANCE FACILITY 44,000, 64,000 and 80,000 lbs. CAPACITIES

V-REX vertical rise lift services the largest vehicles in a new space-saving design.

Powerful V-REX platform lifts offer superior and solid solutions for all of your mechanical and service repairs.





the patent-pending V-REX lift system provides rsatile heavy duty vertical lifting.





The new V-REX™ services your largest vehicles while setting (22) new strength and reliability standard in vertical rise lifts.

Innovative Vertical Rise Design INDUSTRY'S LOWEST DEFLECTION RATES

Four bar engineered rotational linkage transfers lower forces to the foundation, optimizing lift efficiency and decreasing installation costs. This positive force leg design has less maintenance than comparable designs and the superior structural steel tubing and fixed plate runway design has minimized the deflection seen in similar vertical rise lifts. Rotary's innovative leg design incorporates heavy-duty bearings to ensure a long lift

EXCLUSIVE LEG DESIGN

Rotational Hinged Positive Force Links LIFTING THE LARGEST VEHICLES WITH EASE

The V-REX's leg design features rotational hinge links with composite and UHMW bearings. They rotate and pivot rather than slide to increase efficiency and reduce wear. The 2" solid steel leg construction peforms better than plate / tube combinations which can flex and create stress points.





and 3" pins provide ncreased surface area to reduce loading on the

Patented Pending Direct Cylinder Stroke Measuring System

Incorporated within the cylinder, this controlled equalization technology directly measures cylinder stroke keeping the platforms level during lift operation. Keeping sensors within the cylinder prevents damage and expensive recalibration visits.

Each lifting leg assembly features a robust 7" lifting cylinder system that "breathes" at the control panel improving cycle life and reducing downtime seen in other designs. These maximum force, short stroke hydraulic cylinders utilize a leg design that lifts vehicles with little movement. Cylinders are protected by our proven negative rake high strength steel locking system and scissor legs





Communication cables are protected in an industrial energy chain.



Control Unit

Built with robust, simple buttons and switches for long life, the lift can be programmed with multiple height presets.

The microprocessorcontrolled unit monitors all mechanical and electrical synchronization systems at over 125 times per second.





Superior Mechanical Locks

Rotary's proven negative rake mechanical locks on each lifting mechanism are position monitored for increased reliability and operation. They are made of high strength, wear resistant steel with exclusive negative rake radius teeth with the ten position locks.



PRODUCTIVITY and **PERFORMANCE FEATURES**

- 3 heavy duty lifting capacities with 5 runway lengths
- Ten locking positions at convenient and ergonomic working heights
- 3 installation configurations: Surface / Recessed Pit / Flush
- Platforms are extra wide for easier drive on and off
- Lift is removable and re-locatable with only 16 anchors
- Manual lowering in the case of a power outage
- Durable zinc primer and epoxy lift paint for long life in any environment
- ALI third-party Gold Certified

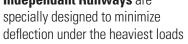


77" Vertical Rise Technicians now have the height to get repair work done on any heavy-duty machinery.

Independant Runways are

Model Shown: VRX44-48X 44,000 lbs. capacity drive-on lift urface mounted with 10' approach Surface mounted with 10' approach

ramps and optional rolling jacks





Large Torque Box Runway Design with engineered tubular steel decreases deflection seen regularly in competitor's lifts.



Rear Automatic

Wheel Chocks

lift is raised and

elease when

10' Extended,

are standard on

surface models

Low-Profile Ramps

engage when the

Wide Platform Top Plates create a greater drive on area with a nonskid platform surface for traction.



Model Shown: VRX44-28X / 44,000 lbs. capacity drive-on lift

urface mounted with 10' approach ramps and optional rolling jacks

All VR lifts are bio fluid compatible and 99% recyclable, protecting the environment.







180 PRO3DAUTO



EQUIPPED WITH AUTOMATIC WHEEL DIMENSION SONAR AND LASER RIM PROFILE SCANNER

3D TECHNOLOGY

ELECTRONIC WHEEL BALANCERS WITH MICROPROCESSOR

AUTOMATIC BALANCING MODE

Perfect balancing with maximum speed and precision!

AUTOMODE

After lowering the hood the sonar automatically detects wheel dimension.

- The laser scans rim profile
- Balancing program is auto selected
- Adhesive weights are positioned and memorized
- Wheel spoke quantities are checked and position for proper location of hidden weights is located
- Easily switch readout from ounces to grams

LASER WHEEL SCANNER



The laser pointer indicates the exact positioning for weights



AUTOMATIC LOCK IN POSITION



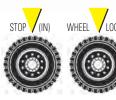
Automatic start when the cover is lowered.



Automatic stop in the external unbalanced position.



Automatic rotation to the internal side.



Automatic stop in the internal unbalanced position.

TECHNICAL DATA Rim diameter 10"- 3 automatic

Rim width

1.5" • 2"

Max. tire diameter

44"

Maximum assembly weight

Read out accuracy

1 g

Cycle time

6 seconds

Rotation speed (rpm)

<100

Power supply

110v / 60 Hz / 1Ø

WWW.ROTARYWHEELSERVICE.COM

GUIDED BALANCING PROCEDURE





MONITOR KEYPAD



vary according to use and are identified by icons on the display for easier understanding.

SPOKE



Hidden weight program

ALU-3







3 automatic ALU S programs

STANDARD ACCESSORIES



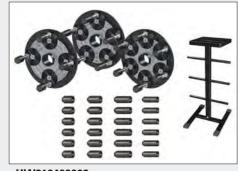
SPLIT PROGRAM



OPTIONAL BALANCER ACCESORIES



GAR113 4.65" - 6.8" (118-174mm) Vans and light trucks



HW210400002 Series IV Quick Plate Kit 40mm



HW150400110 Nine-piece Pro Collet Kit 40mm

- Clad Wheel Problem Solver
- Static Imbalance Solution
- Lower Taper For Better Mounting Surface
- No Wheel Hub Interference
- Includes collets #1 thru #9

Complete Range from 52.5mm -122mm or 2.07" - 4.76"



ELECTRONIC WHEEL BALANCER WITH MICROPROCESSOR

ALL THE FEATURES FOR THE MOST DEMANDING PROFESSIONALS!

Easy operation - interactive aputs guide tech during all the phases of the balancing process.







Automatic programs.



INTERNAL DATA ARM





Quick selection and rim run-out measurement with internal data gauge.





AUTOMATIC LOCK IN POSITION FAST PROCESS

Automatic start when the cover is lowered and automatic stop of the wheel in the external unbalanced position.



Automatic stop in the external unbalanced position.



Rotate to the internal side.



Stop in the internal unbalanced position.

TECHNICAL DATA	R155
Rim diameter	10"- 30
Rim width	1.5" - 22"
Max. tire diameter	44"
Maximum assembly weight	154 lbs. (70kg)
Read out accuracy	1 g
Cycle time	6 seconds
Rotation speed (rpm)	<100
Power supply	110v / 60 Hz / 1Ø





3.75" - 5" (95-124mm) Light truck cone



R155

PRODUCT VIDEO

COLOR MONITOR with

LINKED KEYBOARD



OPTIONAL ACCESORIES

SEE PAGE 3



Quick lock





Laser blade

Double LED

WWW.ROTARYWHEELSERVICE.COM

HEAVY DUTY

SHAFT

LARGE OFFSET 10.5"



QW ROTATION SPEED BALANCER

Computerized wheel balancer at a great value.

Smaller not print balancer with all the features designed for the most demanding technicians.

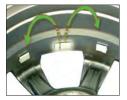
AUTO STOP ON TOP



AUTOMATIC START when cover is lowered.



AUTOMATIC PROGRAM Automatic measurement of distance and diameter thru ALU programs



HIDDEN WEIGHT program



CALIPER for automatic distance and diameter measurement



STANDARD **ACCESSORIES**



GAR112 3.75" - 5" (95-12 Light truck cone



OPTIONAL ACCESORIES

TECHNICAL DATA	R138
Rim diameter	10"- 26
Rim width	1.5" - 22"
Max. tire diameter	35.4"
Maximum assembly weight	143 lbs. (65kg)
Read out accuracy	1 g
Cycle time	6 seconds
Rotation speed (rpm)	<100
Power supply	110v / 50 /1ph



GAR 111 1.73"- 4.4"

(44-112 mm)

HANDSPIN Precision balancing of car, motorcycle and light commercial vehicle wheels.

R138

HAND SPIN BALANCER WITH PERFORMANCE FEATURES

OF EXPENSIVE MACHINES

SMALL FOOT PRINT, LOW ROTATION **SPEED BALANCER**

Single launch measurement at low rotation speed, using a hand crank or gently spinning the wheel by hand. Equipped with pedal brake to stop rotation and to position the weights.



Backlit 5"x 1.5" LCD display

INTERACTIVE **DISPLAY**

Multifunction and interactive keys assists technician



VERSATILE TRUCK WHEEL BALANCER

DESIGNED FOR FAST AND ACCURATE BALANCING OF COMMERCIAL TRUCK WHEELS



SCAN CODE FOR PRODUCT VIDEO

Microprocessor controlled with self-calibration and self-diagnostics. Specific balancing programs for static, dynamic and ALU wheels.

One single spin with low rotation speed provides all the values.

Readout of out of balance values and the related position on the wheel.



R544 Shown with optional GAR266T width sensor arm Model comes with pneumatic locking of the wheel.

AIR LIFT 441lbs. capacity

in the unbalance position.

GAR 351

Standard air lock nut

AIR BRAKE An electro-pneumatic brake keeps the wheel

2D AUTOMATIC DATA INPUT

Digital calliper with optical sensor, with alloy shaft sliding on bushes. Automatic storage of distance and diameter up to 26".





AIR LOCK IN POSITION > PRECISION WHEEL LIFT > SPEED





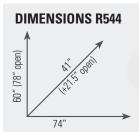




Linked directly to a standard monitor, this durable touchpad allows for a "gloved" input with the convenience of a touch screen monitor.

AUTO STOP ON TOP





R544

FULL COLOR MONITOR TFT SVGA 19" SCREEN

AUTOMATIC LOCK IN POSITION



Automatic start when the cover is lowered.



Automatic stop in the external unbalanced position.



Rotate to the internal side.



Stop in the internal unbalanced position.

STANDARD ACCESSORIES





GAR 122 GAR 114 (202-221-281) Cones (2) for HD trucks (7.9" - 8.7" - 11") Truck spacer

TECHNICAL DATA	R544
Rim diameter	10"- 30
Rim width	1.5" - 22"
Max. tire diameter	51"
Maximum assembly weight	441 lbs. (200kg)
Read out accuracy	10 g 1 g
Rotation speed (rpm)	100
Power supply	110v / 60 Hz / 1Ø

R544 OPTIONAL ACCESSORIES

CAMION / TRUCK / LKW



GAR 171 (3X170, 186, 205, 222, 245) **GAR 172** (4X275, 285) 202-221-281

SHOWN: GAR 173 (5X225, 286, 335) Five finger adapter



GAR 111 1.73" - 1.5" (44-112 mm) adapter Autos



GAR 112 3.7"-5" (95-132 mm) Light truck cone



GAR113 4.65" - 6.8" (118-174mm) Vans and light trucks



HW700E400020

Truck centering disc for finger adapters Fits 8.65" (219.9mm) and 8.69" (220.8mm)

Required for use with GAR173 and/or GAR172



GAR 124 Spacer for all balancers



WHEEL TIRE SENSOR

GAR 266T WIDTH SENSOR Calliper for automatic measurement of rim width.

The name you've come to trust for lifting vehicles worldwide now offers the best wheel service equipment for your shop.

Rotary didn't levent the wheel, but we sure know how to service it. Our line of wheel service equipment offers cutting-edge technology, productivity and safety features that every shop is looking for.

Providing the best service is about more than just know-how. It's about having the light equipment for the job. The go-to choice for shops of all sizes, Rotary's line of premium equipment is manufactured to the highest standards of quality and durability to help you perform the job right the first time, every time.

Offer your customers top quality tire and wheel service by putting Rotary to work for you.

Rotary

2700 Lanier Drive Madison, IN 47250, USA

For additional world wide contact information and a complete guide to our product offering, visit us on the web at **rotarylift.com**.









North / South America Contact Information

Sales: p 800.640.5438

e userlink@rotarylift.com

Tech. Support: p 800.445.5438

e techlink@rotarylift.com

Global Contact Information

USA: 1.812.273.1622 Canada: 1.905.812.9920

Latin America / Caribbean: 1.812.273.1622

Brazil: +55.11.4534.1995

Assistance for Government Purchasing

Rotary Lift offers assistance to help ou make informed decisions when it comes to pyrchasing equipment.

For additional information and the statutes that pertain to your area, contact our **Government Sales Leader** at 800.445.5438 X5655 or visit us on the web at **rotarylift.com/Government-Purchasing-Assistance/.**







Lit# Rotary Wheel Service Changers Brochure.2018.02

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Home | Products & Services | Parts Cleaning Technologies | Solvent Parts Washer | Recycling | Model 250/260

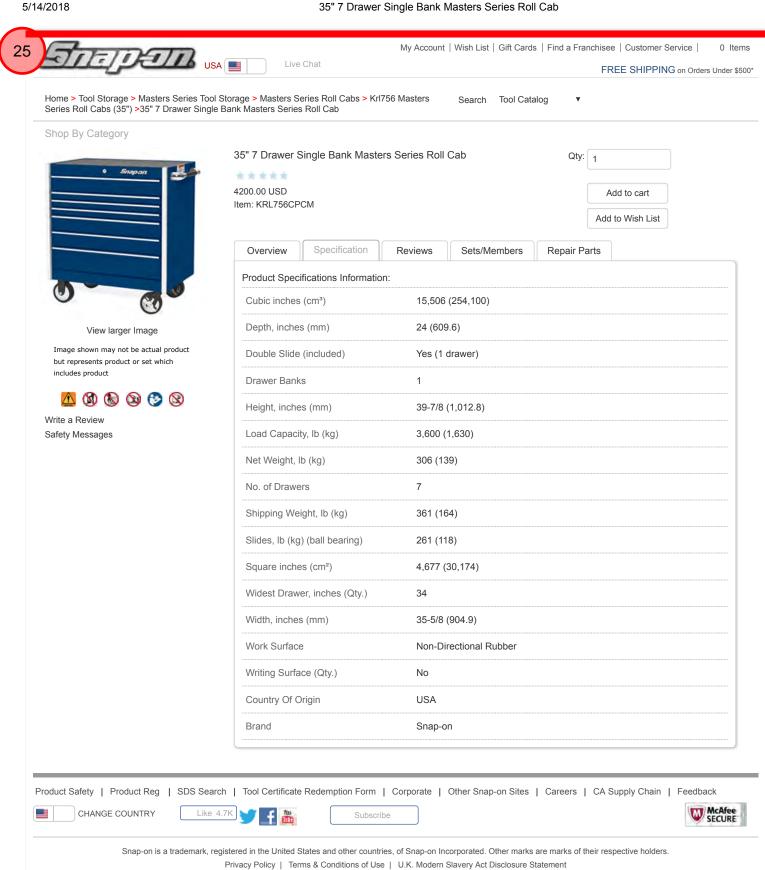
Model 250/260

The Model 250/260 parts washer is specifically designed to help reduce waste generation by providing clean, recycled solvent through Safety-Kleen's exclusive distillation process. Pressing the recycle button automatically pumps clean solvent back into the basin for optimal cleaning and less waste.



CHEMISTRY	SPECIFICATIONS	
Premium Solvent QSDL® PRF 680 Type II	Operation Type Depth Height at Sink Height w/ Lid Open	Manual/Recycler 27" (68.6cm) 33" (83.8cm) 61.5" (156.2cm)
*Certified reconditioned equipment.	Width Sink Depth Electric Power Standard Fill Operating Temp Material Machine Color Max Workload Reservoir Capacity Sink Capacity Listing	32" (81.3cm) 7" (17.8cm) 115 VAC, 60 Hz, 13 A 20 gal. (75.71 L) Ambient Steel Red 500 lbs. (226.8 kg) 20 gal (75.71L) 4.5 gal (17.03L) cETL

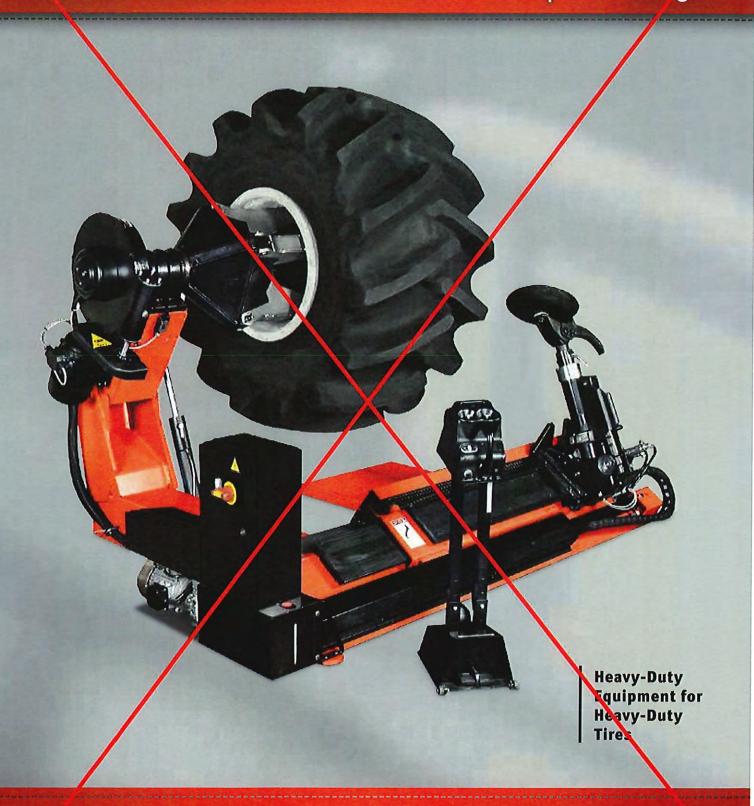
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HEAVY-DUTY TIRE CHANGERS

Heavy-Duty Truck Tire Changers



John Bean.



T8058 Series

EEWHT8058B

The John Bean T8058 heavy-duty truck tire changer series makes wheel service for trucks, tractors, off-road and skidder wheels a faster, easier and more profitable part of your business. They feature a hydraulically-operated self centering four jaw chuck that can be lowered as much as 13.78" from the carriage – great for handling wheels without tires. Rotation and positioning of the mounting tool are controlled independently, saving the technician time and increasing productivity. The mounting tool can be positioned hydraulically.



T8056

EEWHT8056

These heavy-duty tire changers feature a hydraulically operated, self-centering four jaw chuck with clamping jaws, one operating capability allowing a single technician to safely monitor all tire changing operations and bead breaker disc mount/demount heads that are combined into one assembly for ease of use.

- Four jaw clamping chuck
- One man operation
- Versatility

T8058 SERIES SPECIFICATIONS

- Max. Wheel Width: 59"
- Max. Wheel Assembly Diameter: 95"
- Max. Wheel Weight: 4,409 lbs
- Wheel Clamping Range: 14" 58"
- Bead Breaking Force: 8,543 lbs
- Two-Speed Chuck: 4/8 RPM
- Chuck Motor: 3 HP
- Hydraulic Motor: 2/1P
- Dimensions (D x W x H): 116.5" x 82.7" x 75.74"
- Shipping Weight: 3,087 lbs
- Power Requirements: 230V 3Ph 60Hz

T8056 SRECIFICATIONS

- Max. Wheel Width: 43"
- Max. Wheel Assembly Diameter: 90.5"
- Wheel Clamping Range: 14" 44"
- Rotational Torque: 2,268 ft lbs
- Chuck Spindle Diameter: 5"
- Chuck Motor: 3 HP
- Hydraulic Motor: 2 HP
- Dimensions (D x W x H): 117" x 81" x 63"
- Shipping Weight: 2,085 lbs
- Power Requirements: 230V 3Ph 6012



T8026

EEWHT8026

The John Bean T8026 is a heavy-duty tire changer designed for tubeless and tube-type wheels. This tire changer can mount/demount a wide variety of truck, bus, tractor and off-road tires.

- Four jaw clamping chuck
- One man operation
- Patented mount/demount head assembly



T8010TR

EEWHT8010TR

The John Bean T8010TR is specifically designed to change on-road, RV and bus tires. It is ideal for businesses that maintain a fleet of vehicles, freight forwarders and bus garages. The 18010TR is designed for a single technician and to take up a minimum amount of shop floor space.

- Four jaw clamping chuck
- ne man operation
- Minimum space requirement
- Affordable priced for fleets

T8026 SPECIFICATIONS

- Max. Wheel Width: 31"
- Max. Wheel Assembly Diameter: 60"
- Wheel Clamping Range: 14" 26"
- Chuck Motor: 3 HP
- Hydraulic Motor: 2 HP
- Lifting Capacity: 1,4000 lbs
- Dimensions (D x W x H): 64" x 87" x 48"
- Shipping Weight: 1,200 lbs
- Power Requirements: 230V 3Ph 60Hz

T8010TR SPECIFICATIONS

- Max. Wheel Width: 20"
- Max. Wheel Assembly Diameter: 47"
- Max. Wheel Weight: 450 lbs
- Wheel Clamping Range: 16" 24.5"
- Dimensions (D x W x H): 54" x 52" x 31"
- Shipping Weight: 880 lbs
- Power Requirements: 230V 1Ph 60Hz

John Bean...

PRODUCT FEATURES & SPECIFICATIONS

OPTIONAL ACCESSORIES



ST4007611

Useful when breaking the bead from the rim on multi-piece wheels (OTR)



ST4022287

Tubeless Roller - facilitates mounting and dismounting tubeless tires up to 13" wide



ST402185

To hold the bead when mounting tires on light alloy rims



EAA0347G43A

Guards For Alloy Rims - suitable for rims with flange thickness 19 - 28mm

John Bean is committed to product innovation and improvement. Therefore, specifications listed in this brochure may change without notice. © 2015 Snap-on incorporated. John Bean is a trademark of Snap-on in orporated. All rights reserved. All other marks of their respective holders.

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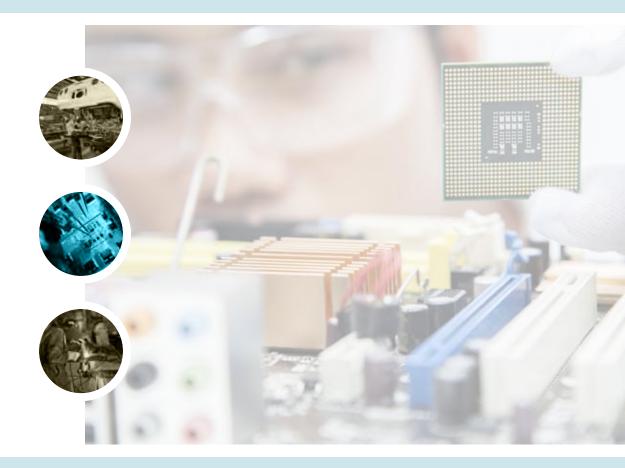
For more information regarding
Heavy-Duty Truck Tire Changers
Call 800.362.4618 (US) or 800.362.4608 (Canada)



CRN Series

REFRIGERATED COMPRESSED AIR DRYERS 10–3000 SCFM

- ► ISO Qulaity Class Performance
- ► Integral Filtration
- ► Stainless Steel
 Brazed Plate
 Heat Exchangers







Durability Delivered

CRN SERIES REFRIGERATED AIR DRYERS



CRN Series refrigerated air dryers are engineered to benefit you today and tomorrow from the tradition of durability that is Champion. Quality components and engineering excellence meld to ensure you of a stable ISO Qulaity Class 4-5 pressure dew point. These exclusive compressed air preparation packages combine reliability, cutting-edge design, and innovative packaging into a single space saving unit. The air quality delivered from an CRN Series dryer may define the difference between moderate and superior results from your plant's processes or systems.

packages to allow you to customize the CRN Series dryers to meet your specific requirements.
This lets you choose which I-Controller package

This lets you choose which I-Controller package represents your best value.

Select Heat Exchanger arrangements to ensure you get the right combination of value and

Three levels of Intelligence Controller (I-Controller)

efficiency in every size. This secures your investment today and tomorrow with energy efficiency and the best warranties in the industry.

Combination Separator/Filter that incorporates

Combination Separator/Filter that incorporates our 99% efficient 3 micron Grade B elements.

This ensures you of consistent water removal (especially under low flow conditions).

AIR TREATMENT SYSTEMS

The flexibility engineered into every CRN Series dryer allows you to satisfy your air quality requirements with a single package. Enlist us to deliver the dew point stability, air quality, energy efficiency, and product reliability that you expect from Champion.

ISO 8573.1 AIR QUALITY CLASSES

CRN Series dryers benefit you with:

1992 earmarked the year the International Organization for Standardization (ISO) established ISO 8573.1 as the global benchmark for evaluating the quality of compressed air. Thus, providing engineers with a universally accepted unit of measure for quantifying compressed air stream contaminants. Namely Solid Particulates, Moisture, and Oil.

STANDARDS PER ISO 8573.1

Quality Classes	Solid Contaminants (maximum particle size in microns)	Max. Pressure Dew Points °F (°C)	Maximum Oil Content (droplets, aerosols, & vapor ppm w/w (MG/M³)
0	as specified	as specified	as specified
1	0.1	-94 (-70)	0.008 (0,01)
2	1	-40 (-40)	0.08 (0,1)
3	5	-4 (-20)	0.8 (1)
4	15	38 (3)	4 (5)
5	40	45 (7)	21 (25)
6	-	50 (10)	-

CRN Series packages deliver:

ISO 8573.1 QUALITY CLASS RATINGS

CRN Seriesw	Solids	Moisture	Oil
As Standard	3	4–5	5
with Cold Coalescer Option	1	4–5	1
with an optional external Grade G CFF Filter (shown attached)	1	4–5	0*

^{*}Quality Class 0 reflects "as specified" level of cleanliness. The addition of an optional external Grade G Filter achieves 0.003 ppm w/w for technically Oil-Free air.



Built to Perform

* * * Previous WARRANTY 2 Years Complete Dryer 5 Years On Heat Exchanger*

Extended Warranty available: contact your local distributor for more details.

PACKAGE DESIGN

At first glance, the ruggedness and ease of serviceability engineered into CRN Series becomes apparent. Fabricated from solid steel, the corrosion resistant epoxy powder paint and the fit and finish of the cabinet, foretell of the quality to be found within. At the touch of a button, quick fasteners release each lift out door panel. Easy interior access and user-friendly serviceability translate to reduced maintenance costs.

PROVEN PERFORMANCE

All models use reliable refrigeration compressors and environmentally friendly refrigerants. Models through CRN500 use proven reciprocating refrigeration compressors. CRN600 through CRN3000 incorporate rugged scroll compressors. You benefit from long component life, and exceptional around-the-clock performance.

CRN 10-15

The patented static condenser technology eliminates the need for a cooling fan. Models include an on/off power switch, 8 foot power cord and no air loss float drain. Outlet air is reheated to eliminate pipe line sweat.

HEAT TRANSFER

CRN models 10–15 benefit from our smooth handcrafted all copper heat exchangers. Multiple tube-on-tube designs achieve the low pressure drop, high heat transfer.

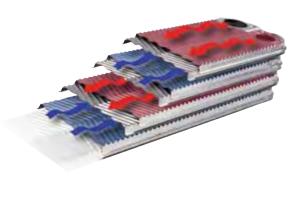
CRN Series models 25–300 incorporate heat exchangers crafted from multiple offset layers of press formed AISI 316 stainless steel. Press forming creates peaks and valleys that form media channels that are rich in fluid turbulence. This prevents fouling and maximizes energy efficiency.

MAXIMUM EXTRACTION SEPARATOR/FILTER

Effective moisture removal at all flow rates is the key to preserve dew point stability. CRN25 and larger includes Grade B two-stage cold filtration to ensure maximum water extraction even under low flow conditions. Stage one mechanically entraps solids >10 microns with dual stainless steel orifice tubes. Stage two utilizes in-depth fiber media to coalesce water droplets and retain solid particles 3 microns and larger.

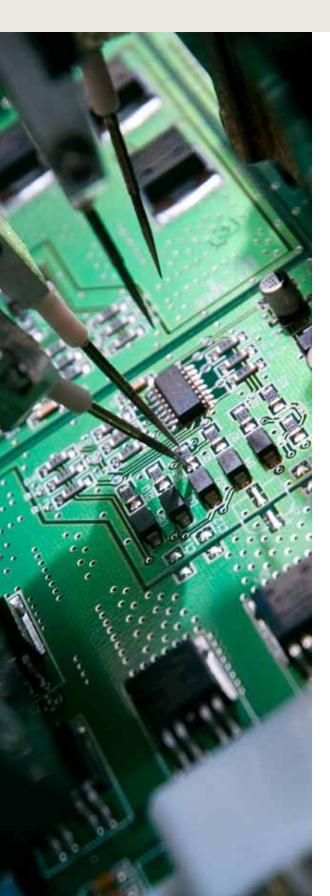
GET CONNECTED

The extended inlet/outlet connections on CRN dryers (CRN25–CRN750) were engineered with foresight to readily accept all CFF Series Filters without the need for cumbersome adaptors and fittings. CRN1000 - 3000 inlet/outlet connections on top of unit for ease of installation. You gain the installation flexibility you need today that may help you be prepared to meet the changes of tomorrow.





Take Control



CRN Series dryers are equipped with control schemes that are designed to provide you with the most value delivered within each flow range. Engineered with industry leading features, each I-Controller package provides just the right level of benefits to appeal to the most demanding applications and discriminating customers.

INSTRUMENTATION

Power-on LED and 6 foot grounded power cord are standard on all single-phase 115-volt units. Easy view angular instrumentation panels prominently display all I-Controllers instrumentation packages



I-CONTROLLER LEVEL 1

On/Off rocker switch, green power on light, temperature indicator and pneumatic, pilot-operated drain trap. Easy to monitor display panel.



I-CONTROLLER LEVEL 2

Standard equipment* on models CRN125 through CRN750 includes: "Power-on" LED, "Compressor-on" LED, On/Off rocker switch, dew point bar graph LED display. Timed solenoid drain trap with push-to-test button and secondary manual drains complete with by-pass valves and drain lines are standard equipment. This helps keep the surrounding area clean and dry and helps you avoid having to shutdown the dryer during drain valve maintenance.

Compare these Features— Unmatched in the Industry!

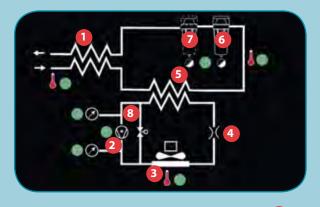


I-CONTROLLER LEVEL 4

Standard equipment on models CRN1000 through CRN3000 includes: manual mode, schedule mode to synchronize operation to your workday, auto restart, text display window that displays current time, operating mode, total operating hours, hours to service, dew point bar graph LED display, initializes alarm relay, display, compressor-on light, power-on light, temperature indicator, alarm/service light, reset button, set/run button, programming buttons, on/off button, drain push-to-test button, English, Spanish, German, French and Italian language selectable, RS-232 communication capable, fault condition diagnostics with text display, dry contacts for high dew point remote alarm at 55° F.

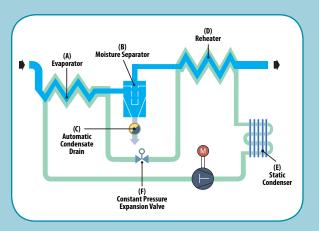


Refrigeration Circuit



- Precooler/Reheater
- **Refrigeration Compressor**
 - Condenser
- Thermal Expansion Valve

 - Evaporator
- Moisture Separator/3 micron Filter
- Optional Cold Coalescing Oil Removal Filter
 - Suction-side



- Evaporator
- **Moisture Separator**
- Automatic Drain
 - Reheater
- Static Condenser
- **Constant Pressure Expansion Valve**



CRN 25-3000

Series dryers enlist proven components and modern materials to deliver the durability you expect from Champion. Hot, moist incoming compressed air enters the Precooler/Reheater (1) where it is precooled by the cold dehydrated airstream. Environmentally friendly low-pressure refrigerant gas is pressurized in the refrigeration compressor (2) Once compressed into a highpressure gas, it then flows through the condenser (3) and changes to a cold 35° F liquid. The thermal expansion valve (4) precisely meters the cold liquid refrigerant into the evaporator (5) where the work is done. Hot, saturated compressed air enters the evaporator at the end opposite the incoming liquid refrigerant. The compressed air is chilled as they cross paths. Water is condensed out of the cold exiting air and is efficiently removed in the Separator/3 micron Filter (6). The cold air stream then flows through (7) the Cold Coalescing Oil Removal Filter (optional on models CRN25-CRN3000) where oil droplets and aerosols to 0.008 ppm w/w are captured and removed. The exiting cold, dry compressed air then reenters the Precooler/Reheater (1) where it is reheated by the hot incoming air to prevent pipe sweating in your plant. Finally, the warm refrigerant is now a low-pressure gas and returns to the suction-side (8) of the refrigeration compressor to continue the process.

CRN 10-15

Warm saturated air enters the Evaporator (A), where it is cooled by an air-to-refrigerant process. Water vapor condenses into a liquid for removal at the moisture separator (B) by an Automatic Drain (C). The cold, dry air is reheated as it passes through the Reheater (D) while the patented Static Condenser (E) radiates waste heat to ambient. This eliminates the need for a cooling fan and prevents pipeline sweating at the air outlet.

A Constant Pressure (F) Expansion Valve (CPEV) modulates the flow of liquid refrigeration to the Evaporator (A). This eliminates freeze-ups and assures continuous, automatic dew point control. The CPEV responds to pressure changes as the refrigerant leaves the Evaporator. This maintains the proper cooling rate under all load conditions. The CPEV is adjusted at the factory to deliver automatic operation.

System Options

INSTRUMENTATION

Power-on LED and 6 foot grounded power cord are standard on all single-phase 115-volt units. Easy view angular instrumentation panels prominently display all I-Controllers instrumentation packages.

OPTION FEATURE OVERVIEW

	L	ED Indicator lig	hts		Drain Valves	System Upgrades		
Control Version	Power-on	Compressor- on	Dew Point Temperature Indicator	Pneumatic Pilot- Operated	Timed Drain w/ Push-to- test*	Demand Drain w/ Push-to- test*	Cold Coalescing Oil Removal Filter	Vacuum Flourescent Text Display
I-Controller Level 1	S	S	S	S	-	-	0	-
I-Controller Level 2	S	S	S	-	S	-	0	
I-Controller Level 4	S	S	S	-	-	S	0	S

OIL REMOVAL... this option integrates our factory installed Grade E Cold Coalescing Oil Removal Filter. Oil droplets and aerosols are extracted from the air stream in cleaning it down to 0.008 ppm w/w and solids are retained down to 0.01 micron. CRN Series dryers that include the Cold Coalescing Oil Removal Filter option are also equipped with a dedicated drain trap. Drain trap is consistent with the type provided with your chosen I-Controller. Available on models CRN25–CRN3000.

GAUGES... four panel mounted guages: air inlet temperature, air outlet pressure, refrigerant suction pressure and refrigerant head pressure.

DRY CONTACTS... remote bulb temperature switch with "C"-form contacts; mounted inside cabinet.

AIR-BYPASS PIPING... Three valve block and bypass; mounts to inlet/outlet connections; shipped loose. MWP 200 psig

- S = Standard Feature
- O = Optional Feature
 - Secondary manual drains complete with by-pass valves are standard equipment and only available on packages with Level 2, and Level 4 I-Controllers. This helps keep the area clean and dry and helps you avoid dryer shutdown during drain valve maintenance.



CRN SERIES REFRIGERATED DRYER-FILTER SPECIFICATIONS

Model CRN	Rated Flow (1)	Standard Controller (2)	Connection [inches] (3)	н	Dimensi [inche W		Weight [lbs]	w/Oil Remo R [lbs]	Voltages [v/ph/Hz]	kW	Dryer Model Number	Kits for Dryers Mfg. Before June 15, 2006	Kits for Dryers Mfg. After June 15, 2006	
10 15	10 15	On/Off Switch	3/8 OD 3/8 OD	15 15	12.6 12.6	12.6 12.6	64 69		115/1/60	1/7 1/7	CRN 25, 35 CRN 25, 35 w/ OPTION F CRN 50	CRNMK2 CRNMK12 CRNMK3	CRNMK2 CRNMK12 CRNMK3	
25 35 50 75 100	25 35 50 75 100	I-Controller Level 1	1/2 NPT 1/2 NPT 1/2 NPT 1/2 NPT 3/4 NPT 1 NPT	26 26 26 26 38	20.5 20.5 20.5 20.5 20.5	18 18 18 18 20	86 90 95 106 251	147 151 157 216 258	115/1/60 208-230/1/60 220-240/1/50	.21 .25 .41 .59	CRN 50 w/ OPTION F CRN 75, 100 CRN 75, 100 w/ OPTION F CRN 100 CRN 100 w/ OPTION F CRN 125, 150 CRN 125, 150 w/ OPTION F	CRNMK13 CRNMK4 CRNMK14 N/A N/A CRNMK5 CRNMK15	CRNMK13 SEE BELOW SEE BELOW CRNMK22S CRNMK42S CRNMK23S CRNMK43S	
125	125		1 NPT	38	29	20	273	281		1.28	CRN 200, 250	CRNMK6	CRNMK24S	
150 200 250 300 400	150 200 250 300 400	I-Controller Level 2	1 NPT 1-1/2 NPT 1-1/2 NPT 1-1/2 NPT 2 NPT	38 39 39 46 46	29 34 34 35 35	20 32 32 32 32 32	279 425 463 527 571	287 438 476 540 603	1.3 1.2 1.9 2.0 2.0 2.6 3.0 4.3 208-230/3/60 460/3/60 575/3/60 380-420/3/50 380-420/3/50 6.3 7.2 9.4 11. 11.		1.30 1.26 1.96 2.00 2.03	CRN 200 , 250 w/ OPTION F CRN 300 UNITS MFG BEFORE 12/19/02 CRN 300 w/ OPTION F UNITS MFG BEFORE 12/19/02	CRNMK16 CRNMK7 CRNMK17	CRNMK44S SEE BELOW SEE BELOW
500 600 750	500 600 750		2-1/2 NPT 2-1/2 NPT 2-1/2 NPT	58 58 58	32 32 32 32	42 42 42 42	684 646 734	716 691 804		2.68 3.06 4.32	CRN 300 CRN 300 w/ OPTION F CRN 400, 500 CRN 400, 500 w/ OPTION F	CRNMK8 CRNMK18 CRNMK8 CRNMK18	CRNMK25S CRNMK45S CRNMK26S CRNMK46S	
1000 1250 1500 1750 2000	1000 1250 1500 1750 2000	l-Controller Level 4	3" ANSI Flg. 4" ANSI Flg. 4" ANSI Flg. 6" ANSI Flg. 6" ANSI Flg.	85 85 85 85	49 49 49 55 55	41 51 51 60 60	1146 1521 1547 1940 1986	1173 1548 1574 1994 2040		460/3/60 575/3/60 575/3/60	6.3 7.29 9.47 11.3	CRN 600 CRN 600 w/ OPTION F CRN 750 CRN 750 w/ OPTION F CRN 1000, 1250, 1500 CRN 1000, 1250, 1500 w/ OPTION F CRN 1000, 1250,1500 MFG 1/15/02 – 6/14/06	N/A N/A CRNMK9 CRNMK19 CRNMK10 CRNMK20	CRNMK27S CRNMK47S CRNMK28S CRNMK48S CRNMK29S CRNMK49S
2500 2500 3000	2500 3000		6" ANSI FIG. 6" ANSI FIG.	85 85 85	55 55 55	60 60	2315 2646	2369 2700		15.0 19.7	CRN 1000, 1250, 1500 w/ OPTION F CRN 1750, 2000, 2500, 3000 CRN 1750, 2000, 2500, 3000 w/ OPTION F CRN 1750, 2000, 2500, 3000 MFG 1/15/02 – 6/14/06	CRNMK20 CRNMK11 CRNMK21 CRNMK11-5	CRNMK49S CRNMK30S CRNMK50S CRNMK30S	

TABLE 1 - Correction Factors (Multipliers) for Inlet Air Temperature and Pressure

INLET	INLET TEMPERATURE								
PRESSURE	80° F	90° F	100° F	110° F	130° F				
(PSIG)	(27° C)	(32° C)	(38° C)	(43° C)	(54° C)				
50	1.35	1.05	0.84	0.69	0.44				
80	1.50	1.17	0.95	0.79	0.52				
100	1.55	1.23	1.00	0.82	0.56				
125	1.63	1.31	1.07	0.91	0.61				
150	1.70	1.37	1.13	0.95	0.64				
175	1.75	1.42	1.18	0.99	0.66				
200	1.80	1.47	1.22	1.03	0.68				

To adjust dryer capacity for conditions other than rated, use Correction Factors (multipliers) from Tables 1, 2 and 3.

Example: What is the capacity of a model CRN100 when the compressed air at the inlet to the dryer is at 150 psig and 100° F, the ambient temperature is 90° F

Answer: 100 scfm (rated flow from Specifications Table) x 1.13 (correction factor for inlet temperature and pressure from Table 1) x 1.06 (correction factor for ambient temperature from Table 2) = 147 scfm

TABLE 2 - Correction Factors for Ambient Temperature

AMBIENT	80° F	90° F	100° F	110° F
TEMPERATURE	(27° C)	(32° C)	(38° C)	(43° C)
Multiplier	1.12	1.06	1.00	0.94

* Consult your local Distributor for information on complete maintenance kits Refrigerant: CRN10-CRN750 use R-134a, models CRN1000-CRN3000 use R-404a Maximum operating pressure: 232 PSIG

Maximum operating temperature: 130° F

- Rated Flow Capacity Conditions for rating dryers are in accordance with CAGI (Compressed Air and Gas Institute) Standard ADF100: Refrigerated Compressed Air Dryers - Methods for Testing and Rating. Conditions for rating above dryers are: compressed air at dryer inlet: 100 psig and 100° F saturated; ambient temperature: 100° F; operating on 60 Hz power supply. For dew point performance ratings,
- models RNC200-RNC1000, request a CAGI data sheet from your local distributor. I-Controller Level 4 is standard on CRN1000-CRN3000 I-Controller Level 2 is standard on CRN125-CRN750
- I-Controller Level 1 is standard on CRN25-CRN100 OD connection is tubing: NPT connections are male
- Add 2 inches for Inlet/Outlet connections (does not apply to CRN10-CRN15 or CRN1000-CRN3000)

NOTES

- CSA and CE certified
- NEMA 1 standard
- a. An additional drain valve, consistent with type supplied with package I-Controller, is supplied when Cold Coalescing Oil Removal Filter option is specified.
 b. Units are air-cooled as standard. Contact your local Distributor if water-cooled
- versions are required.



www.ChampionPneumatic.com

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Please recycle after use.











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Multi-color, multi-material or versatility? Choose all three for your office.

Unleash your creativity with the most advanced office 3D printer: The Objet260 Connex3™. The Connex3 empowers you to 3D print brilliantly colored prototypes to fit your application needs. The Objet260 Connex3 boasts the widest range of material properties for its class, from rigid to flexible, transparent to opaque, neutral to vibrant, standard to bio-compatible and durable to high temperature. With Connex3, incorporate dozens of colors into one prototype, from vivid opaque to stained glasslike translucent, with hundreds of blended hues in between. Objet Studio™ software makes it simple to build high-quality, accurate 3D models.



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Proven PolyJet 3D Printing is famous for smooth surfaces, fine precision and diverse material properties. It works a bit like inkjet document printing, but instead of jetting drops of ink onto paper, the print head jets microscopic layers of liquid photopolymer onto a build tray and instantly cures them with UV light. The fine layers build up to create a prototype or production part.

Along with the selected model material, the 3D printer features two support material options: SUP705, removed with a WaterJet; and SUP706, which is easily removed and soluble for automated post-processing and increased geometric freedom to print complex and delicate features and small cavities.

With its astonishingly realistic aesthetics and ability to deliver special properties such as transparency, flexibility and even bio-compatibility, PolyJet 3D Printing offers a competitive edge in consumer products prototyping, precision tooling and specialized production parts.

3D Printer Specifica	tions
Model Materials	Rigid Opaque: VeroPureWhite™, VeroWhitePlus™, VeroBlackPlus™, VeroGray™, VeroBlue™, VeroCyan™, VeroMagenta™, VeroYellow™ Rubber-like: Agilus30™, TangoPlus™, TangoBlackPlus™, TangoBlack™, TangoGray™ Transparent: VeroClear™ and RGD720 Simulated Polypropylene: Rigur™ and Durus™ High Temperature Bio-compatible
Digital Materials	Vibrant blended colors in Rigid Opaque Translucent colored tints Rubber-like materials in a variety of Shore A values Digital ABS Plus™ for durability, including blends with rubber Simulated polypropylene materials with improved heat resistance
Material Options	Over 1,000
Maximum Materials per Part	82
Support Material	SUP705 (WaterJet removable)
	SUP706 (soluble)
Maximum Build Size (XYZ)	255 x 252 x 200 mm (10.0 x 9.9 x 7.9 in.)
System Size and Weight	87 x 120 x 73.5 cm (34.2 x 47.2 x 29 in.); 264 kg (581 lbs.) Material Cabinet: 33 x 117 x 64 cm (13 x 46.1 x 25.2 in.); 76 kg (168 lbs.)
Resolution	X-axis: 600 dpi; Y-axis: 600 dpi; Z-axis: 1600 dpi
Accuracy	Up to 200 microns for full model size (for rigid materials only, depending on geometry, build parameters and model orientation)
Minimum Layer Thickness	Horizontal build layers as fine as 16 microns (.0006 in.)
Build Modes	Digital Material: 30-micron (.001 in.) resolution High Quality: 16-micron (.0006 in.) resolution High Speed: 30-micron (.001 in.) resolution
Software	Objet Studio intuitive 3D printing software
Workstation Compatibility	Windows 7 or Windows 8
Network Connectivity	LAN - TCP/IP
Operating Conditions	Temperature 18-25°C (64-77°F); relative humidity 30-70% (non-condensing)
Power Requirements	110-240 VAC 50/60Hz; 1.5 kW single phase
Regulatory Compliance	CE, FCC



STRATASYS.COM ISO 9001:2008 Certified

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The Stratasys F123 Series

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Smarter prototyping for your entire office.

Now there's a more capable, more affordable professional rapid prototyping solution for your entire office — from the leader in 3D printing. The Stratasys F123 series combines powerful FDM technology with design-to-print GrabCAD software for the most versatile and intelligent solution available. Produce fast, effective prototypes for concept development, as well as highly accurate and robust parts for design validation and functional performance. Share projects between multiple users. Get your new product designs to market faster. And do it all without the need for dedicated expert staffing. It's just one more way we shape what's next.

STRATASYS F123 SERIES







The Stratasys F123 Series

User-Friendly, Office-Friendly

The new Stratasys F123 series is easy to operate and maintain for all levels of experience. And, it's adept at every prototyping stage, from concept verification to design validation to functional performance.

A variety of the most commonly used CAD file formats can be imported directly into the software. The three printers in the platform, the Stratasys F170TM, F270TM and Stratasys F370TM, support a broad range of capabilities and budgets for every stage of prototyping.

Minimal setup means you can simply plug and play to give your entire office access to professional 3D printing.

Auto-calibration ensures you spend less time troubleshooting and more time prototyping.

Fast and easy material swaps to help maximize your design team's productivity.

Smarter Software

GrabCAD Print™ software simplifies the entire 3D printing process with an intuitive CAD-like application anyone on your team can use. And with features like detailed reporting and remote monitoring, you can easily manage your print jobs from outside the office. Combined with the ability to seamlessly share projects between users, it all adds up to a more streamlined, efficient workflow.

Versatility and Performance

The Stratasys F123 series lets you print everything from fast, low-cost concept models to durable assemblies. And the Stratasys F123 series gives the option of up to four different materials, along with our easy-to-remove soluble support material.* Create complex parts and assemblies with no compromise on accuracy, detail and repeatability. Even for your earliest design iterations, you can expect Stratasys quality and dependability.

*The Stratasys F170 and F270 models support PLA, ABS-M30 and ASA materials; the Stratasys F370 supports PLA, ABS-M30, ASA and PC-ABS materials. PLA uses breakaway support only.



More Efficiency

The Stratasys F123 series also features **the all-new fast-draft mode** to produce initial design concepts quickly and economically. Now you can print twice as fast as standard build mode while consuming just a third of the material on average. For even more efficiency and savings, choose PLA. A thermoplastic made from renewable resources, PLA gives you the speed of fast-draft mode while keeping material expenses down. Spend less, create more. That's smarter 3D printing.



The all-in-one power of the Stratasys F123 series gives you value all around — with expanded capabilities and unprecedented accessibility. New and improved features save time and material. Incredible ease of use with both the hardware and the software means you don't need special 3D printing expertise. Super quiet and office friendly. Reliable, consistent printing ensures less waste. Designed for the way you work, it's a smart business move.



PRODUCT SPECIFICATIONS								
System Size and Weight	1626 x 864 x 71	1626 x 864 x 711 mm (64 x 34 x 28 in.) 227 kg (500 lbs) with consumables						
Noise Specification	46 dB maximun	n during build, 35	dB when idle					V
			Strata	asys F170	Strat	asys F270		Stratasys F370
Model Capabilities	Maximum Buil	d Size (XYZ)		54 x 254 mm 10 x 10 in.)		54 x 305 mm 10 x 12 in.)		5 x 254 x 355 mm (14 x 10 x 14 in.)
	Model Materia	Is		S-M30™, ASA, oport material		3S-M30, ASA, oport material		A*, ABS-M30, ASA, S, QSR support material
		0.013 in. (0.	.330 mm)	0.010 in. (0.2	254 mm)	0.007 in. (0.	178 mm)	0.005 in. (0.127 mm)
Layer Thickness	PLA ABS ASA PC-ABS	X X		X X X		X X X		X X X
Accuracy		X ced within an acc			or +/002 m	m/mm (.002 in/in),	whichever is g	
Material Delivery Options	1					a drawer on the fro		unit
Network Connectivity	·				·	I, RJ45 connector		
Software		(download): Strat		270 and F370				
System Requirements	Windows 7, 8, 8.1 and 10 (64bit only) with a minimum of 4GB RAM (8GB or more recommended)							
Operating Environment	Operating: Temperature: 59-86°F (15-30°C), Humidity: 30-70% RH Storage: Temperature: 32-95°F (0-35°C), Humidity: 20-90% RH							
Power Requirements	100–132V/15A or 200–240V/7A. 50/60 Hz							
Regulatory Compliance	CE, FCC, EAC,	CE, FCC, EAC, EMC (low-voltage directive), TUV, FCC, RC, RCM, RoHs, WEEE, Reach						

The Stratasys F123 Series

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The Stratasys F123 series is the ultimate, all-in-one rapid prototyping solution. Our platform is backed by 25 years of experience with over 20,000 loyal Stratasys customers worldwide. As the world's leader in 3D printing, Stratasys provides unrivalled levels of support, application knowledge, and industry collaboration. Which puts you at the **forefront of what's next.**

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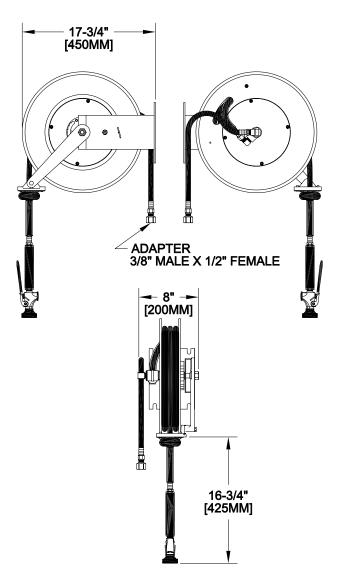
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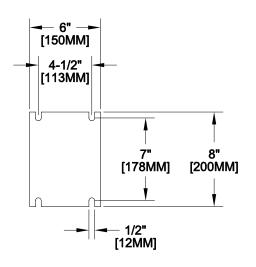
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APPLICATION:

QUANTITY: ITEM NO.



ROUGH-IN: SEE MOUNTING PLATE BELOW



ANSI/A112.18.1M

OPTIONS OR MODIFICATIONS:

□ BRUSH

□ OTHER

2980

FEATURES

REEL

* SELF-LOCKING

* EXPOSED HOSE

* 35' LENGTH REEL HOSE

* 19" LENGTH INLET HOSE

* 3 PLY FIBER REINFORCED RUBBER HOSE

* ADJUSTABLE BALL STOP

PRO SPRAY VALVE

* NOZZLE THREADED INTO VALVE

* 2.65 GPM AT 80 PSI

* SHOWER SPRAY PATTERN

SYSTEM LIMITS

* TEMP: 40°F MIN. TO 140°F MAX.

* PRESSURE: 200 PSI MAX. STATIC

SHIPPING WEIGHT

* 34.0 LBS







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Print large, durable 3D models right in your office.

See your designs come to life with the Dimension SST 1200es[™] and BST 1200es 3D Printers. They turn 3D CAD files into functional, durable 3D models that you can not only discuss but test.

The large build capacity of Dimension 1200es 3D Printers gives you the room to print models at the size you need. And they're simple to operate: Just click "print" to prep the CAD file and print the model, then remove the support material to reveal your design in three dimensions.

Bundle & Save

Order the Dimension 3D Print Pack and you'll get everything you need to start printing 3D models affordably – as soon as you unbox it.

You get a:

- Dimension 1200es SST 3D Printer
- SCA-1200 support removal system
- Startup supply of materials



LEARN MORE ABOUT DIMENSION 1200ES AT STRATASYS.COM





THINK IN 3D AND GIVE YOUR IDEAS NEW DIMENSION

PRODUCT SPECIFICATIONS

Model material:

ABSplus in ivory, white, black, red, olive green, nectarine, fluorescent yellow, blue or gray

Support material:

Soluble Support Technology (SST) or Breakaway Support Technology (BST)

Build size:

254 x 254 x 305 mm (10 x 10 x 12 in)

Layer thickness

.254 mm (.010 in) or .330 mm (.013 in) of precisely deposited ABSplus model and support material

Workstation compatibility:

Windows 10

Windows 8.1

Windows 8

Windows 7

Windows Vista

Network connectivity:

Ethernet TCP/IP 10/100Base-T

Size and weight:

838 x 737 x 1143 mm (33 x 29 x 45 in) 148 kg (326 lbs)

Power requirements:

110-120 VAC, 60 Hz, minimum 15A dedicated circuit; or 220-240 VAC 50/60 Hz, minimum 7A dedicated circuit

Regulatory compliance:

CE/ETL

Special facility requirements:

None

stratasys

E info@stratasys.com / STRATASYS.COM ISO 9001:2008 Certified

PRINT 3D MODELS THAT ARE BIG. TOUGH AND FUNCTIONAL.

Print models in production-grade thermoplastic.

Dimension 1200es 3D Printers use ABSplus™ modeling material, a productiongrade thermoplastic that is durable enough to perform virtually the same as production parts. Models printed with Dimension 3D Printers have customerproven toughness - from commercial sprayers tested at pressures up to 60 psi, to final parts on M1 tanks normally machined in aircraft-grade aluminum

At the core of every model: FDM® Technology.

Stratasys FDM (Fused Deposition Modeling) technology is the foundation for all Dimension 3D Printers. Models are printed from the bottom up with precisely deposited layers of modeling and support material. There's no waiting for models to "cure" — they're ready for support removal right from the printer. The SST 1200es uses Soluble Support Technology which dissolves the supports in a waterbased solution. The BST 1200es uses Breakaway Support Technology in which the supports are simply snapped off to reveal the final model. Then, models can be drilled, tapped, sanded and painted.

A tool for today's fast-track product development.

You'll dramatically improve your product development process with Dimension 1200es 3D Printers. They print models that help you check form, fit and function, and correct errors, before your product goes into production. And they're versatile enough to produce functional models, molds, patterns, customized tools and fixtures. To shorten product development cycles and accelerate time-to-market, start with Dimension 1200es 3D Printers — and bring your ideas to life.

HEADQUARTERS

7665 Commerce Way, Eden Prairie, MN 55344

- +1 888 480-3548 (US Toll Free)
- +1 952 937-3000 (Intl)
- +1 952 937-0070 (Fax)

2 Holtzman St., Science Park, PO Box 2496 Rehovot 76124, Israel +972 74 745-4000

+972 74 745-5000 (Fax)



DESCRIPTION

Fab-Lab Workbench PRODUCT

Flexibility is the key component of this workbench. The bench is perfect for Makerspaces and Fab-Labs. It can be adjusted in height from 24"H to 34"H. Add the optional 5" locking casters and you'll add another 6" in height. The legs are 12 gauge steel and have 14 gauge stringers for strength and stability. The steel base is finished with a gray baked enamel finish. The static weight capacity is 2000 lbs. and the dynamic load is 500 lbs, proving just what a work horse this bench is! Need storage? Add the 14 gauge 12"D shelf. Choose from a 1-3/4 thick maple work surface or the 1-1/2" thick ShopTop®. The bench is 30"D and available in three lengths: 60"W, 72"W or 96"W.

ITEM #	PRODUCT	SIZE	ТОР
AMT-6030S	Fab-Lab Workbench	60"W	ShopTop®
→ AMT-6030M	Fab-Lab Workbench	60"W	Maple
AMT-7230S	Fab-Lab Workbench	72"W	ShopTop®
AMT-7230M	Fab-Lab Workbench	72"W	Maple
AMT-9630S	Fab-Lab Workbench	96"W	ShopTop®
AMT-9630M	Fab-Lab Workbench	96"W	Maple
252208	Casters, Set of 4	N/A	N/A
252205	60"W Shelf for Workbench	N/A	N/A
252206	72"W Shelf for Workbench	N/A	N/A
252207	96"W Shelf for Workbench	N/A	N/A

















Home) Shelving & Rack) 8000 Series Shelving) 8000 Series with Wire Shelves) 8000 Series Open Wire Shelving) 8000 Series Open Shelving 6 Wire Shelves Starter 48"w x 24"d x 84"h





8000 Series Open Shelving 6 Wire Shelves Starter 48"w x 24"d x 84"h

Model # DD8348SWS

SHIPS IN 5-7 DAYS

Lyon offers a variety of adjustable wire shelving. The 8000 Series 8348SWS Wire Shelving Starter features 6 Wire Shelves. This open wire shelving unit is ideal for storing packaged stock and other material where high visibility is a concern. The wire shelf maximizes air circulation as well as deters dust and dirt build-up.

Each 8348SWS Wire Shelving Starter includes two T-Post upright assemblies made of tough, durable hot-rolled steel. Lyon uses all-welded construction on their wire shelves from heavy gauge steel wire with heavy gauge channels. The included shelf clips also quickly lock into place on either side of the uprights without tools. You can easily adjust your shelves on 1-1/2" centers.

The 8000 series shelving is ideal for use as commercial grade wire shelving as well as industrial wire shelving. Create the storage capacity you need anywhere heavy duty wire shelving is required with these adjustable wire shelving units. You can expand your storage shelving units even more with additional shelves. 8000 Series Shelving is available in Dove Gray. Use these free standing metal shelves alone, or you can also include Add-on units to create a long run of shelving.

8348SWS Wire Shelving Starter Features

- 6 Wire Shelves with Clips
- 2 T-Post Upright Assembly with Side Braces

Quantity
1

\$624.38

ADD TO CART

- 1 Back Brace
- Made in the USA

View even more Wire Shelving from Lyon

Tags: 24 Inch Deep Shelving Units, Shelving Units with 6 Shelves

DETAILS

Overall Dimensions	48"w x 24"d x 84"h
Number Of Levels	6
Capacity Per Level	350 lbs
Starter Or Add On	Starter

DOWNLOADS

Available Color Options

Assembly Instructions

T-Post Specifications

Shelf Weight Capacities

















Home) Shelving & Rack) 8000 Series Stocked Shelving) 8000 Series Stocked Open Shelving) 8000 Series Open Shelving 5 Medium Duty Shelves Starter 36"w x 24"d x 84"h







8000 Series Open Shelving 5 Medium Duty Shelves Starter 36"w x 24"d x 84"h

Model # DD8007SM

SHIPS IN 24-48 HOURS

Lyon offers a variety of steel shelving with adjustable shelves. The 8000 Series 8007SM Shelving Starter features 5 medium-duty shelves. This open metal shelving unit is ideal for storing packaged stock and other material where high visibility is a concern.

Each 8007SM Shelving Starter includes two T-Post upright assemblies made of tough, durable hotrolled steel. Lyon's patented Box "W" design provides added support to the front and rear of the shelf. The lapped and welded shelf corners also provide added strength and durability. The included shelf clips quickly lock into place on either side of the uprights without tools. You can easily adjust your shelves on 1-1/2" centers.

Lyon's 8000 series shelving is ideal for use as industrial shelving as well as garage storage shelves. Anywhere heavy duty storage shelves are needed, these open shelving units provide the storage capacity you need. Expand your storage shelving units even more with additional shelves. 8000 Series Shelving is available in Dove Gray. These free standing metal shelves can be used alone, or you can include Add-on units to create a long run of shelving.

8007SM Shelving Starter Features

- 5 Medium-Duty Shelves with Clips
- 2 T-Post Upright Assembly with Side Braces

(Quantity							
	1							

\$265.46

ADD TO CART

- 1 Back Brace
- Made in the USA
- GREENGUARD Certified

View even more 8000 Series with Box W Shelves from Lyon

Tags: 24 Inch Deep Shelving Units, Shelving Units with 5 Shelves

DETAILS

Overall Dimensions	36"w x 24"d x 84"h
Number Of Levels	5
Capacity Per Level	600 lbs
Shelf Gauge	22
Starter Or Add On	Starter

DOWNLOADS

Available Color Options

Assembly Instructions

T-Post Specifications

Shelf Weight Capacities









MACH SERIES MOBILE COLUMN LIFTS

Keep your bays productive, your revenue streaming and your trucks back on the road.

Productivity is the key for any shop and reliable Rotary lifts are packed with features that help your technicians get vehicles up on the lift and back on the road faster and easier than anyone else. Rotary's **NEW MACH FLEX** lifts powered by **Red Fire** are the industry's ultimate mobile column lifting system. Versatile, wireless **MACH FLEX** lifts are an easy to operate **remote-controlled system** with an increased lifting capacity. The hand-held remote shortens our already fast set up time giving you the mobility to make repairs anywhere in your shop while moving around the vehicle during operation.

MACH SERIES features:

- Wireless columns communicate without cables increasing technician set up times.
 (MCHFLEX19 / MCHFLEX14 / MCHW18 models)
- Exclusive column control console allows the lift to be fully controlled from any column. (MCHW18 / MCH18 / MCH13 models)
- DC battery power creates the fastest lift cycle times while requiring no power cords creating an open work area free of interference.
- Direct hydraulic cylinder lifting. The cylinder and chrome piston rod is protected inside the carriage from debris and damage. No required monthly maintenance.
- The exclusive automatic steering and braking system requires no manual operation saving time on every set up.
- Lifts and components are cycle tested for at least 20,000 cycles at rated load, giving you a robust, proven and quality tested lift that won't let you down.
- The MACH system remembers its location and channel reading no need to reconfigure columns.

Environmentally-friendly:

- Surface mounted and portable no excavation or site prep
- Battery operated with an onboard 110v charger
- Optional high efficiency LED lighting saves electricity
- Compatible with all bio fluid hydraulic oils
- More than 98% recyclable

Trusted MACH Series lifts are gold certified and meet the ANSI/ALI ALCTV 2011 standard, including the required third party validation.



Rotary DESIGN ADVANTAGE

PRODUCTIVITY & PERFORMANCE

Faster set-up times and lifting speed beats the competitor hands down!

Easier with fewer steps required by the technician to put the lift in service!

Safer with adjustable forks for different wheel sizes - lift with confidence!

Two, four, six or eight column sets with a capacity range of 13,000 lbs to over 150,000 lbs!



Government agencies, municipalities, truck repair centers and commercial fleets all find what they need in Rotary mobile lifts.

"We wanted a product that was worth the cost and easy to use and supported our core value of safety. What we found with the Rotary lift system is that it helped reduce the number of knee injuries, back injuries and hand injuries. We did a time study on the drive line repairs and compared that to other shops that were not using the Rotary Lift system and we found a 10 to 15% difference in cycle times."

- **James Enright,** Regional Maintenance Director Schneider National

"Clovis Unified School District purchased the MACH Wireless Lift System and have used these lifts continuously on our bus fleet.

The combination of ease of setup, maneuverability, and speed have greatly increased the production in our shop. We own other wireless lifts and they do not compare. These lifts are much more user-friendly and combined with the corded feature, we are always assured that we will not be left up in the air. Utilizing these in a bay that was not originally equipped with an in-ground lift system has made what was once dead space, efficient space."

- Lee A. Peterson, Manager, Vehicle Maintenance Clovis Unified School District



"After extensive testing of multiple mobile column lifts, I chose the Rotary MACH4 as having the most advanced design, most options and ease of relocating being the best choice for the city. After receiving the lifts, Rotary's customer service and local distributor experience was exceptional. Not only did they answer my questions, but they went above & beyond in addressing any issues I had with the lifts. Between the product and the company, you can't go wrong."

- **Daniel S. Corbin,** Fleet Operations Manager Town of Summerville, South Carolina

ROTARY MOBILE COLUMN LIFTS INCREASE TECH PRODUCTIVITY SAVING YOUR FACILITY TIME AND INCREASING YOUR BOTTOM LINE.

EX: ANNUAL LABOR SAVINGS CALCULATION

- 1 Cost Per Labor Hour: \$75.00
- 2 Required Hours For Typical RO: 5
 Time Savings with a MACH Lift: 15%
 Labor Savings Per RO: \$112.50
- 3 Monthly ROs Per Bay Per Month: 20
 Hours Saved / Month: 15
 Monthly Labor Cost Savings / Lift: \$1,125

4 How Many Bays? 8

Time Savings Per RO: .**75 Hours**

Hours Saved

PerYear: 180 Hours

Annual Labor Cost Savings Per Lift: \$13,500.00

ANNUAL POTENTIAL \$108,000
LABOR SAVINGS OF



SCAN THIS CODE TO CALCULATE YOUR TOTAL POTENTIAL LABOR SAVINGS!

www.rotarylift.com/LIFTS/Mobile-Columns/



MACHFLEX WIRELESS MOBILE COLUMN LIFT WITH INCREASED COLUMN CAPACITY

FASTER, EASIER, MORE POWERFUL

MACH FLEX™powered by Red Fire gives you unmatched lifting versatility, mobility and flexibility!

REMOTE CONTROL TECHNOLOGY with exclusive software means FASTER SETUP and EASY OPERATION.

75.200 lbs. CAPACITY

Remote-controlled system gives you the mobility to make service repairs anywhere in your shop while technicians follow control commands. Not waiting at each column to sync before moving to the next column saves critical set up time on



New industrial grade controller shows each lift column with yellow indicator light while pairing, and green light once columns are ready to go.

Controller includes:

- On /off power button
- Info screen
- 2-speed joystick control for up /down movement
- Single lower-to-lock button
- E-stop control
- Remote battery indicator
- Convenient auto resume
- Press Protect™ eliminates accidental button presses and preserves battery life
- Audible warning when operator is getting out of operational range







The NEW MACH FLEX includes these standard features:

Column capacities at 18,800 lbs. and 14,000 lbs.

Ergonomic wireless hand-held remote control

99 system IDs to eliminate communication interference

Software upgrades can be made wirelessly

 Height and weight digital display gauge displays

BATTERY OPERATED WITH **ON-BOARD CHARGER**

During lift use, there are no power cords to clutter up the service bay.

Batteries purchased separately for international use

PROTECTED HYDRAULIC CYLINDER ROD The hydraulic cylinder is inverted inside the carriage and the chrome piston rod is protected from debris and damage. This extends the life of the column and reduces maintenance frequency and cost.

EASY TO MOVE ADJUSTABLE FORKS Improves set up time without the need to install reducer sleeves - adjustment range: 9.25" to 22"

SPRING LOADED STEERING AND BRAKING SYSTEM

No need to manually operate the jacks to raise and move columns saving set up time. Prevents movement on sloped floors.

5 FORKLIFT POCKETS Provides a fast and convenient way to relocate columns within your shop.

6 TOUGH RUBBER-COATED STEEL WHEELS Easily roll over dirt and debris that can jolt other lifts to a stop - wheels automatically retract under load

7 LOCK LIGHT™LOCK INDICATOR



Rotary's exclusive LockLight indicates when a column is on it's mechanical safety locks.

UPDATED SINGLE COLUMN CONTROLS

Easy to use control panels on the columns include a large information screen.





Industrial control buttons for the toughest shop environments.



MCHFLEX / 18,800 lb. 14,000 lb. COLUMN CAPACITIES

MOBILE LIFT	MCHF419	MCHF619	MCHF414	MCHF614
Column configuration*	4	6	4	6
Capacity per set	75,200 lbs.	112,800 lbs.	56,000 lbs.	84,000 lbs.
Rise	70" (17	78 mm)	69" (17)	60 mm)
Column width	45.5" (1	156 mm)	43" (1092 mm)	
Wheel Rim Size	9"to 24" (228 to 610 mm)			
Clearance from fork to column	10" (254 mm)			
Speed of rise	78 sec	onds		
Charging voltage	110v charger** (2.5 amps max.)			

^{*} Two, four, six and eight column configurations are available. See accessories page for 2-column lifting kits, ** Call factory for alternate voltage

MCHW18 WIRELESS MOBILE COLUMN LIFT 18,000 LBS. COLUMN CAPACITY

Rotary's versatile MCHW18 Wireless mobile column lift gives you the power and mobility to make your repairs anywhere in your shop.

EXCLUSIVEWIRELESS OPERATION BENEFITS:

Wireless column communication *eliminates communication cables creating a faster setup reducing technicians' setup time by 75%.*

Position memory - no need to configure columns for each lifting cycle...set it and forget it.

Automatically re-establishes communication between columns if signal is dropped - no need to reset communication errors.

On-board diagnostics with easy-to-read LEDs.

WIRED MODELS FEATURE

RETRACTABLE CORD REELS

With quick lock connections providing easy onehanded connectivity between columns, don't waste time handling cables every time you use the lift.

STANDARD ON WIRED UNITS

INNOVATIVE HORSESHOE WIRING

While other mobile column lifts are connected by four cables, the wired MACH columns use just three (forming a horseshoe), so the front or back of the lift is always open. Vehicles can be driven in and out of the bay without having to disconnect and reconnect cables.

AC POWERED LIFT OPTION

Operate your mobile lifting system without the use of batteries. *Consult factory representative for details.*





108,000 lbs. CAPACITY

MCHW18 FEATURES

Two, four, six or eight column configurations can accomodate heavy duty trucks up to 144,000 pounds!

1 BATTERY OPERATED WITH ON-BOARD CHARGER

During lift use, there are no power cords to clutter up the service bay. Batteries purchased separately for international use

2 PROTECTED HYDRAULIC CYLINDER ROD

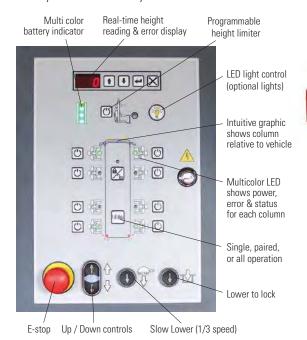
The hydraulic cylinder is inverted inside the carriage and the chrome piston rod is protected from debris and damage. This extends the life of the column and reduces maintenance frequency and cost

- **3** WIRELESS COLUMN COMMUNICATION
- 4 EASY TO MOVE ADJUSTABLE FORKS
 Improves set up time without the need for reducer sleeves adjustment range: 9.25" to 22"
- SPRING LOADED STEERING AND BRAKING SYSTEM

 No need to manually operate a pallet jack to move the columns

 saves precious time every time you move
- 6 FORKLIFT POCKETS Provides a fast and convenient way to relocate columns.
- 7 TOUGH RUBBER-COATED STEEL WHEELS
 Easily roll over dirt and debris that can jolt other lifts
 to a stop wheels automatically retract under load
- **(3)** INTUITIVE CONTROL CONSOLE

Rotary's exclusive control console allows the lift to be fully controlled from any column





MCHW18 / 18,000 lb. COLUMN CAPACITY

MOBILE LIFT	MCHW418	MCHW618	MCHW818		
Column configuration*	4	6	8		
Capacity per set	72,000 lbs.	108,000 lbs.	144,000 lbs.		
Rise		70" (1778 mm)			
Column width	45.5" (1156 mm)				
Wheel Rim Size	9"to 24" (228 to 610 mm)				
Clearance from fork to column	10" (254 mm)				
Speed of rise	78 seconds				
Charging voltage	110v charger* (2.5 amps max.)				

^{*} Two, four, six and eight column configurations are available. See accessories page for 2-column lifting kits.

^{**}Call factory for alternate charging voltage / Contact factory for wired model specifications

ROTARY

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MCH13 WIRED MOBILE COLUMN LIFT 13,000 LBS. COLUMN CAPACITY

Two, four, six or eight column configurations can accomodate heavy duty trucks up to 104,000 pounds!

MACH13 mobile column lifts give you the option of not being tied to a bay. Easy to use design gives techs the option to control lift from any column.

Boasting most of the same great features as the MCH18, this wired mobile lift is the perfect combination of capacity, features and value. Lift trucks and light duty vehicles with speed and ease.



1 BATTERY OPERATED WITH INTERNAL CHARGER AND LIGHTED STATUS DISPLAY

During use, there are no power cords improving portability.

2 PROTECTED HYDRAULIC CYLINDER ROD

The hydraulic cylinder is inverted inside the carriage and the chrome piston rod is protected from debris and damage. This extends the life of the column and reduce maintenance frequency and cost

SPRING-LOADED STEERING / BRAKING SYSTEM

No need to manually operate a pallet jack up to move the columns in and out saving time on every set up. Rubber-coated steering wheels easily roll over dirt and debris.

4 EASY TO MOVE ADJUSTABLE FORKS

Improves set up time without the need for reducer sleeves. Adjustment range is 6.3" to 23.6" to accommodate approximate wheel rim sizes of 9" to 24".

5 FORKLIFT POCKETS

Provides a fast and convenient way to relocate columns within your shop.

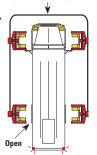
6 QUICK CONNECT CABLES / HORESHOE WIRING

Included with the lift, these lightweight and easy to connect cables are 33 feet long. While other mobile column lifts are connected by four cables, the wired MACH Series columns use just three (forming a horseshoe), so the front or back of the lift is always open. Vehicles can be driven in and out of the bay without wasting time to disconnect and reconnect cables.

INTUITIVE CONTROL CONSOLE

Rotary's exclusive control console allows
the lift to be fully controlled from any column.

Exclusive featured equipment for both MCH18 and MCH13 series lifts.



Communication Cable



Shown: MCH413U1A00

52,000 lbs. CAPACITY

MOBILE LIFT	MCH413	MCH613	MCH813		
Column configuration*	4	6	8		
Capacity per set	52,000 lbs.	78,000 lbs.	104,000 lbs.		
Rise	69" (1760 mm)				
Column width	43" (1092 mm)				
Wheel Rim Size	9"to 24" (228 to 610 mm)				
Clearance from fork to column	10" (254 mm)				
Speed of rise	68 seconds				
Charging voltage	110v - 240v / 50/60Hz charger				

^{*} Two, four, six and eight column configurations are available. See accessories page for 2-column lifting kits.

MACH4 PLUS RUNWAY LIFTING SYSTEMS 36,000 / 50,000 / 60,000 lbs. CAPACITIES



OPTIONAL ROLLING BRIDGE JACKS

Air operated rolling bridge jacks can be attached to the runways creating additional lifting options to make these lifts even more versatile.

FOR 36,000 lbs. CAPACITY LIFTS

#RJ140LBK - 14,000 lbs. capacity jack #RJ22001LBK - 22,000 lbs. capacity jack

FOR 50,000 lbs. / 60,000 lbs. CAPACITY LIFTS

#RJ25001L - 25,000 lbs. capacity jack #RJ30001L - 30,000 lbs. capacity jack

MACH4 PLUS HEAVY-DUTY DRIVE-ON RUNWAYS						
Lifting Capacity	35,900 lbs. (16,283kg) †	50,000 lbs. (22679kg) ††	60,000 lbs. (27215kg) ††			
Maximum Wheelbase	25' (300"/ 7,620mm)* 30' (360"/ 9,144mm)*	28' (336"/ 8534mm) **	33' (396"/ 10058mm)**			
Max. Rise / Floor to top of runway	79" (2,007mm)	78" (1981mm)	78" (1981mm)			
Length Overall	33' 11-3/4" (10,358mm) 38' 11-3/4" (11,882mm)	35' 7-1/2" (10858mm)	40' 7-1/2" (12382mm)			
Width Overall - outside controls	16' 3-3/8" (4963mm)	15′ 11″ (4851mm)	15′ 11″ (4851mm)			
Height of Columns when raised	89" (2260mm)	144 - 3/4" (3677mm)	144 - 3/4" (3677mm)			
Width of Runways	28" (711mm)	28" (711mm)	28" (711mm)			
Drive Thru Between Columns	12'-4" (3607mm)	11'-10" (3607mm)	11'-10" (3607mm)			
Runway Spacing	45" (1143mm)	45" (1143mm)	45" (1143mm)			
Rise Time	68 seconds	78 seconds	78 seconds			
Ramp Angle	7 degrees	10 degrees	10 degrees			
Power Usage	Battery powered Charges on 110V	Battery powered Charges on 110V	Battery powered Charges on 110V			

- TWITH MCH13 SERIES LIFTS THWITH MCH18 SERIES LIFTS
- *BOTH 25' AND 30' RUNWAY LENGTH MODELS ARE AVAILABLE AS 35,900 LBS. CAPACITY LIFTS.
- **BOTH 28' AND 33' RUNWAY LENGTH MODELS ARE AVAILABLE AS 50,000 AND 60,000 LBS. CAPACITY LIFTS

PORTABLE CROSS BEAM KITS

21,000 lbs. to 32,000 lbs. CAPACITIES

M140070

LOW PROFILE CROSS BEAM KIT 30,000 / 21,000 lbs. CAPACITIES

SUPPLIED WITH TWO (2) SUPPORT BLOCKS PER BEAM



30,000 lbs. at 49" adapter spread / 15,000 LBS. per adapter 21,000 lbs. at 25" adapter spread / 10,500 LBS. per adapter

ALI THIRD-PARTY GOLD CERTIFIED

FRAME ENGAGING CROSS BEAM KITS

Pick up buses, RVs and more with wheels-free, frame-engaging cross beam kits. Beam vehicle spotting allows technicians to service wheels and tires with ease.

FOR USE WITH MODELS THAT HAVE A COLUMN CAPACITY OF 18,000 LBS. OR GREATER.

ML41

SADDLE CROSS BEAM KIT 32,000 / 24,000 lbs. CAPACITIES

Shown: MCH418U100

Raise crossbeam and adjust sliding adapters to contact the frame at proper lifting point. Adapters are for frame engagement only.

32,000 LBS.

79 SPREAD*
32,000 LBS.
24,000 LBS.

 $32,\!000$ lbs. at 79" adapter spread / 16,000 LBS. per adapter 24,000 lbs. at 49" adapter spread / 12,000 LBS. per adapter

ALI THIRD-PARTY GOLD CERTIFIED



Shown: M140070 low profile cross beam with optional jack stands

ALSO AVAILABLE

FD2353KIT

RAMP STYLE CROSS BEAM KIT FOR RV SERVICE

FOR USE WITH MODELS THAT HAVE A COLUMN CAPACITY OF 18,000 LBS. OR GREATER.

22,000 lbs. CAPACITY

FRAME ENGAGING LIFTING KITS

Fore and aft, frame-engaging end lift enables lifting by the front and rear of the vehicle using stacking adapters.
For use with two MCH18 or MCH13 series columns.





SERVICE TWO VEHICLES AT ONCE USING A SINGLE SET OF 4 COLUMNS!

#M140005 / **15,000 lbs. capacity**MCH18 FRAME-ENGAGING LIFTING KIT

For use with two MCH18 series columns only.

#M140079 / 12,000 lbs. capacity
MCH13 FRAME-ENGAGING LIFTING KIT

For use with two MCH13 series columns only.

STORAGE CART FOR LIFTING KITS

#M110108BK Cart for fore and aft lifting kits. For storing and moving kits.



JACK STANDS

Always use jack stands when installing or removing heavy components.

Spring loaded caster wheels for easy positioning and portability. Height adjustment in 1" increments with 4" fine-tuning. All jack stands meet the required ASME PASE-2014 requirements for portable service equipment.

18,000 lbs. and 36,000 lbs. CAPACITIES

MW-500 TIRE LIFT

500 lbs. capacity air operated tire and wheel lift. Provides maneuverability and adjustable lifting and lowering speeds. Reduces risk of shoulder and back injuries while limiting potential worker's comp claims.

- Quick transfers to tire balancers
- Air operated no batteries
- Easy positioning of the tire / wheel
- · Air hose and auxiliary air tool connection
- Includes pressure regulator

MW-200

200 lbs. capacity model available

MCH18 FORK LIFT KIT

Make servicing fork lifts easy using two MCH18 columns. Kit readily attaches to the base of the column giving the clearance needed to raise Class II fork lifts with a capacity of 18,000 lbs. Drive-on / back-off operation.

Column lifts shown with M14012YRD Forklift Ramp Kit 18,000 lbs. capacity

EXTENDED FORK KITS

Longer forks and support legs available to support inboard tires on dual-wheeled axles. Also for use with M140004 forklift ramp kit and M140005 truck frame kit. For use on the MCH18 Series only.

22" Forks and 8" Legs: #M140001RD 20" Forks and 6" Legs: #M140041RD



LED LIGHTING

High-efficiency service lamps with single touch operation provide convenient handsfree lighting from the lift's control panel. Operates on the column's battery power.





- Shown: M140148BK

OPTIONAL WEIGHT GAUGE

Know what you are lifting instantly with this column gauge. These gauges approximate the weight being lifted by one column - converting pressure into a weight.

#M140019RD / Analog gauge for MCH18 #M140041RD / Analog gauge for MCH13



Shown: M140019RD

LARGE WHEEL KIT

Larger tires are raised on ramps to allow for proper fork placement. MCH18 and MCH13 approved.



LOCK LIGHT™

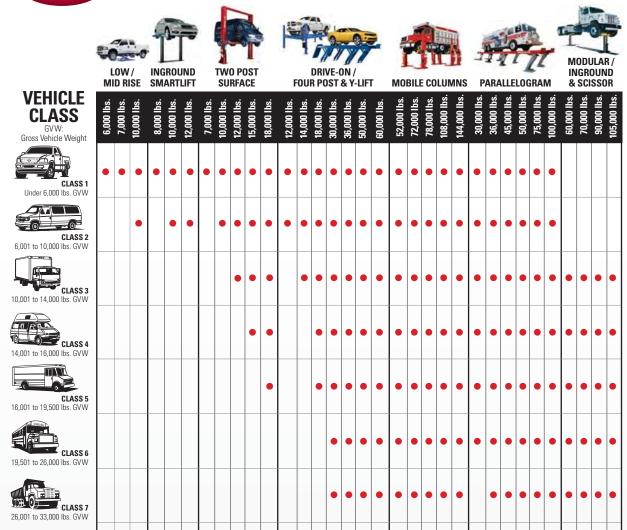
Featured on each column, light indicates when lift is set on its locks. (PATENT PENDING)

#M140112 / DC versions for MCH18/ MCH13

#M140115 / For AC mobile columns and MCH columns with installed pressure gauges



Retary LIFT APPLICATION GUIDE



NOTE: This reference guide indicates that the noted lift is applicable to the vehicle based on typical vehicle weights, lengths and wheelbases. All information should be verified before purchasing a lift.



Rotary Lift 2700 Lanier Drive Madison, IN 47250, USA









CLASS 8

North / South America Contact Information

Sales: p 800.640.5438

e userlink@rotarylift.com

Tech. Support: p 800.445.5438

e techlink@rotarylift.com

Global Contact Information

USA: 1.812.273.1622 Canada: 1.905.812.9920

Latin America / Caribbean: 1.812.273.1622

Brazil: +55.11.4534.1995

For additional world wide contact information and a complete guide to our product offering, visit us on the web at **rotarylift.com**.

Assistance for Government Purchasing

Government Sales: 800.445.5438 X5655

















Lit# MACH SERIES_HD Brochure_2017.07 (SUPERSEDES Lit# MACH SERIES_HD Brochure_2016.02)

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Canon ImageRunner Advance C5535i II Color Copier









• 35



SPECS

Model No.:0605C039AA

Condition:New

Availability: In Stock

Shipping: Ask About Free Shipping!



The Canon ImageRunner Advance C5535i II Copier will print, copy, scan and has a fax option. The Canon C5535i features 35 ppm print speed, 1200 dpi resolution, various finishing options, mobile printing and a 10.1" intuitive touchscreen. With My ADVANCE, the ImageRunner C5535i will give you a unique experience tailored to your individual preferences.

Quantity: 1

\$5490.00

Add To Cart

*** All options and supplies in stock, please call 888.298.3095 to speak to a customer representative.

\$151 / mo

Product Details

Specifications

Accessories

Reviews

Product Details

Specifications

MAIN UNIT

TYPE

CORE FUNCTIONS

PROCESSOR CONTROL PANEL

MEMORY

HARD DISK DRIVE

Color Laser Multifunctional

Standard: Print, Copy, Scan, Send, Store

Optional: Fax

Canon Dual Custom Processor (Shared) 10.1" TFT LCD WSVGA Color Flat-panel

4.0 GB RAM Standard: 250 GB Maximum: 1 TB MIRRORING HARD DISK DRIVE Optional: (250 GB, 1 TB)

Method: Raid1

Network: 1000Base-T/100Base-TX/10Base-T, Wireless LAN (IEEE

802.11 b/g/n

INTERFACE CONNECTION Others

PAPER SOURCES (LTR, 20LB BOND)

FINISHING CAPABILITIES

SUPPORTED MEDIA TYPES

SUPPORTED MEDIA SIZES

SUPPORTED MEDIA WEIGHTS

Standard: USB 2.0 x2 (Host), USB 3.0 x1 (Host), USB 2.0 x1 (Device)

Optional: Serial Interface, Copy Control Interface

PAPER CAPACITY (LTR, 20LB BOND) Standard: 1,200 Sheets Maximum: 6,350 Sheets

Standard: Dual 550-sheet Paper Cassettes, 100-sheet Stack Bypass Optional: Dual 550-sheet Paper Cassettes (CASSETTE FEEDING UNIT-AM1), 2,450-sheet High-Capacity Paper Cassette (HIGH

CAPACITY CASSETTE FEEDING UNIT-A1), 2,700-sheet Paper Deck

(PAPER DECK UNIT-F1)

PAPER OUTPUT CAPACITY (LTR, 20LB BOND)
Standard: 250 Sheets
Maximum: 3,450 Sheets (with External Finisher and Copy Tray)

Standard: Collate, Group

With Inner Finisher: Collate, Group, Offset, Staple, Hole Punch, Staple-

Free Staple, Staple On Demand

With External Finishers: Collate, Group, Offset, Staple, Booklet, Hole

Punch, Staple-Free Staple, Staple On Demand

Paper Cassettes (1/2): Thin, Plain, Recycled, Color, Heavy, Pre-punched,

Letterhead, Bond, Transparency, Tab, Envelope

Stack Bypass: Thin, Plain, Recycled, Color, Heavy, Pre-punched, Labels, Letterhead, Bond, Coated, Transparency, Tab, Tracing, 1 Envelope CASSETTE FEEDING UNIT-AM1: Thin, Plain, Recycled, Color,

Heavy, Pre-punched, Letterhead, Bond, Transparency

HIGH CAPACITY CASSETTE FEEDING UNIT-A1: Thin, Plain, Recycled, Color, Heavy, Pre-punched, Letterhead, Bond PAPER DECK UNIT-F1: Thin, Plain, Recycled, Color, Heavy, Pre-punched, Letterhead, Bond

Bond

Paper Cassette 1: Letter, Executive, Statement-R, Envelope [No.10 (COM10), DL, ISO-C5], Custom Size (3-7/8" x 5-7/8" to 11-3/4" x 8-

1/2")

Paper Cassette 2: 12" x 18", 11" x 17", Legal, Letter, Letter-R,

Executive, Statement-R, Envelope [No.10 (COM10), Monarch, DL, ISO-

C5], Custom Size (3-7/8" x 7-1/8" to 12" x 18")

Stack Bypass: 12" x 18", 11" x 17", Legal, Letter, Letter-R, Executive, Statement, Statement-R, Envelope [No.10 (COM10), Monarch, DL, ISO-C5], Envelope Custom Size (3-7/8" x 3-7/8" to 12-5/8" x 18"), Custom Size (3-7/8" x 5-1/2" to 12-5/8" x 18"), Free Size (3-7/8" x 5-1/2" to 12-5/8" x 18")

5/8" x 18")

CASSETTE FEEDING UNIT-AM1: 12" x 18", 11" x 17", Legal, Letter, Letter-R, Executive, Statement-R, Custom Size (3-7/8" x 7-1/8" to 12" x

18")

HIGH CAPACITY CASSETTE FEEDING UNIT-A1: Letter

PAPER DECK UNIT-F1: Letter

Cassettes: 14 lb. Bond to 140 lb. Index (52 to 256 g/m2) Stack Bypass: 14 lb. Bond to 110 lb. Cover (52 to 300 g/m2) Duplexing: 14 lb. Bond to 80 lb. Cover (52 to 220 g/m2)

From Power On: 30 Seconds From Sleep Mode: 10 Seconds Quick Startup Mode: 4 Seconds2

24-3/8" x 29-1/4" x 37-3/8"(620 mm x 742 mm x 950 mm)3

Basic: Stack Bypass + Cassette drawers open: 37-1/8" x 46-3/8" (943

mm x 1,176 mm)3

Approx. 313.1 lb. (142 kg)4

PRINT SPECIFICATIONS

DIMENSIONS (W X D X H)

INSTALLATION SPACE (WXD)

WARM-UP TIME

WEIGHT

Up to 35 ppm (Letter)
Up to 23 ppm (Letter-R)
Up to 21 ppm (Letgal)
Up to 21 ppm (Legal)
Up to 18 ppm (11" x 17")

PRINT RESOLUTION 1200 dpi x 1200 dpi, 600 dpi x 600 dpi STANDARD PAGE DESCRIPTION LANGUAGES UFR II, PCL®6, Adobe® PS® 3

DIRECT PRINT Available from USB, Advanced Box, Remote UI, and Web Access5

SUPPORTED FILE TYPES

PRINTING FROM MOBILE AND CLOUD

FONTS

OPERATING SYSTEM9

PRINT FEATURES

COPY SPECIFICATIONS

COPY SPEED (BW and Color)

FIRST-COPY-OUT-TIME

COPY RESOLUTION

MULTIPLE COPIES COPY EXPOSURE **MAGNIFICATION**

PRESET REDUCTIONS PRESET ENLARGEMENTS

BASIC COPY FEATURES

SPECIAL COPY FEATURES

SCAN SPECIFICATIONS

DOCUMENT FEEDER PAPER CAPACITY

DOCUMENT FEEDER SUPPORTED MEDIA SIZES

DOCUMENT FEEDER SUPPORTED MEDIA WEIGHT

PLATEN ACCEPTABLE ORIGINALS

PULL SCAN

TYPE

SCAN RESOLUTION

SCAN TO MOBILE DEVICES AND CLOUD-BASED SERVICES

SCAN SPEED (LETTER)

PDF, TIFF, JPEG, EPS,6 XPS

A range of software and MEAP-based solutions are available to provide printing from mobile devices or Internet-connected devices and cloud-

based services depending on your requirements.

PCL fonts: 93 Roman, 10 Bitmap fonts, 2 OCR fonts, Andalé Mono WT

J/K/S/T (Japanese, Korean, Simplified and Traditional

Chinese).7 Barcode Fonts8 PS fonts: 136 Roman

UFRII: Server 2003/Server 2003 R2/Windows Vista®/Server 2008/Windows® 7/Server 2008 R2/Windows 8/Server 2012/Windows 8.1/Server 2012 R2/Windows 10, MAC OS X (10.6.8 or later)

PCL: Server 2003/Server 2003 R2/Windows Vista/Server 2008/Windows 7/Server 2008 R2/Windows 8/Server 2012/Windows 8.1/Server 2012

R2/Windows 10

PS: Server 2003/Server 2003 R2/Windows Vista/Server 2008/Windows 7/Server 2008 R2/Windows 8/Server 2012/Windows 8.1/Server 2012

R2/Windows 10, MAC OS X (10.6.8 or later)

Suspend Job Timeout, Subset Finishing (PS only), Profile Settings, Secured Print, Forced Hold Printing, Watermark, Page Border, Header/Footer, Page Layout, Two-sided Printing, Collating, Booklet Printing, Grouping, Mixed Paper Sizes/Orientations, Offsetting, Printing on Transparencies, Front/Back Covers, Toner Reduction, Poster Printing

Up to 35 ppm (Letter) Up to 23 ppm (Letter-R) Up to 21 ppm (Legal) Up to 18 ppm (11" x 17")

As fast as 4.9 seconds (BW)/ 7.4 seconds (Color)

Reading: 600 dpi x 600 dpi Printing: 1200 dpi x 1200 dpi

Up to 9,999 copies 25%-400% (1% Increments) 25%, 50%, 64%, 73%, 78% 121%, 129%, 200%, 400%

Up to 9,999 copies

Preset Reduction/Enlargement Ratios by Area, Paper Setting, Previous Settings, Favorite Settings, Finishing, Two-Sided, Density Adjustment, Original Type Selection, Interrupt Mode, Setting Confirmation/Cancel Book to Two Pages, Two-sided Original, Finishing, Booklet, Job Build, N on 1, Add Cover, Insert Sheets, Different Size Originals, Density Adjustment, Original Type Selection, Transparency Cover Sheets, Page Numbering, Copy Set Numbering, Sharpness, Erase Frame, Secure Watermark, Print Date, Shift, Gutter, Print & Check, Negative/Positive, Repeat Images, Merge Job Blocks, Job Done Notice, Mirror Image, Print on Tab, Store in Mail Box, Superimpose Image, Copy ID Card, Detect Feeder Multi Sheet Feed, Free Size Original, Color Balance, Adjust One-

Touch Color, Area Designation

Color Platen and Single-pass Duplexing Automatic Document Feeder 150 Sheets (20 lb. Bond)

11" x 17", Legal, Letter, Letter-R, Statement, Statement-R BW Original: 13 lb. Bond to 58 lb. Cover (50 to 157 g/m2) CL Original: 17 lb. Bond to 58 lb. Cover (64 to 157 g/m2) Sheet, Book, 3-Dimensional Objects [Up to 4.4 lb. (2 kg)]

Color Network ScanGear2 for both Twain and WIA Supported OS: Windows Vista/7/8/8.1/10 Windows Server 2003/Server 2003 R2/ Server

2008/Server 2008 R2/Server 2012/Server 2012 R2

600 x 600 dpi, 400 x 400 dpi, 300 x 300 dpi, 200 x 400 dpi, 200 x 200 dpi, 200 x 100 dpi, 150 x 150 dpi, 100 x 100dpi

A range of solutions is available to provide scanning to mobile devices and cloud-based services depending on your requirements.

Single-sided Scanning (BW): 80 ipm (300 dpi)/80 ipm (600 dpi) Single-sided Scanning (Color): 80 ipm (300 dpi)/60 ipm (600 dpi)

Double-sided Scanning (BW): 160 ipm (300 dpi)/150 ipm (600 dpi) Double-sided Scanning (Color): 160 ipm (300 dpi)/80 ipm (600 dpi)

SEND SPECIFICATIONS

E-mail/Internet Fax (SMTP), SMB, FTP, WebDAV, Mail Box, Super G3 DESTINATION

Fax (Optional), IP Fax (Optional)

Automatic-Color Select (Full Color/Grayscale), Automatic-Color Select **COLOR MODE**

(Full Color/Black-and-White), Full color, Grayscale, and Black-and-

ADDRESS BOOK LDAP (2,000)/Local (1,600)/Speed dial (200)

600 x 600 dpi, 400 x 400 dpi, 300 x 300 dpi, 200 x 400 dpi, 200 x 200 SEND RESOLUTION

dpi, 200 x 100 dpi, 150 x 150 dpi, 100 x 100dpi

File: FTP, SMB, WebDAV COMMUICATION PROTOCOL

E-mail/I-Fax: SMTP, POP3, I-Fax (Simple, Full)

Standard: TIFF, JPEG, PDF(Compact, Searchable, Apply policy, Optimize for Web, PDF A/1-b), XPS (Compact, Searchable), Office

Open XML (PowerPoint®, Word)

Optional: PDF (Trace & Smooth, Encrypted), PDF/XPS (Digital

Signature)

Original Type Selection, Two-sided Original, Book to Two Pages, Different-size Originals, Density Adjustment, Sharpness, Copy Ratio, Erase Frame, Job Build, Direct Send, Delayed Send, Preview, Finished Stamp, Job Done Notice, File Name, Subject/Message, Reply-to, E-mail Priority, TX Report, Original Content Orientation, Skip Blank Originals.

Detect Feeder Multi Sheet Feed

FAX SPECIFICATIONS

UNIVERSAL SEND FEATURES

FILE FORMAT

MAXIMUM NUMBER OF LINES

Super G3: 33.6 kbps MODEM SPEED G3: 14.4 kbps

COMPRESSION METHOD MH, MR, MMR, JBIG

400 x 400 dpi, 200 x 400 dpi, 200 x 200 dpi, 200 x 100 dpi RESOLUTION

SENDING / RECORDING SIZE Statement-R to 11" x 17" FAX MEMORY Up to 30,000 pages

SPEED DIALS Max. 200 **GROUP DIALS / DESTINATIONS** Max. 199 dials

SEQUENTIAL BROADCAST Max. 256 addresses

MEMORY BACKUP

Different-size Originals, Density for Scanning, Sharpness, Copy Ratio, Erase Frame, Job Build, Specifying the Sender's Name (when sending FAX FEATURES fax), Sender's Name (TTI), Select Line, Selecting the Telephone Line (when sending fax), Direct Send, Delayed Send, Preview, Finished Stamp, Job Done Notice, TX Report, Detect Feeder Multi Sheet Feed

STORE SPECIFICATIONS

100 User In-boxes, 1 Memory RX In-box, 50 Confidential Fax In-boxes, MAIL BOX (NUMBER SUPPORTED)

30,000 Maximum Pages Stored

Communication Protocol: SMB or WebDAV

Supported Client PC: Windows (Windows Vista/7/8/8.1/10)

Original Type Selection, Two-sided Original, Book to Two Pages,

ADVANCED BOX Concurrent Connections (Max.)

SMB: 64

WebDAV: 3 (Active Sessions)

Approx. 16 GB (Standard HDD) ADVANCED BOX AVAILABLE DISC SPACE Approx. 480 GB (1 TB HDD)

> Disabling Advanced Box, Storage Filtering, Authentication for Advanced Box Log-in, Search Function, Sort Function, Printing a PDF

File with a Password, imageWARE Secure Audit Manager Support

Standard: USB

SECURITY SPECIFICATIONS

ADVANCED BOX FEATURES

MEMORY MEDIA

AUTHENTICATION Standard: Universal Login Manager, User Authentication, Department ID Authentication, Access Management System, Device and Function **DATA**

DOCUMENT

Level Log-in Optional: uniFLOW

Standard: Trusted Platform Module (TPM), Hard Disk Password Lock, Hard Disk Drive Erase, Mail Box Password Protection, Hard Disk Drive

Encryption(FIPS140-2 Validated)

Optional: Hard Disk Drive Mirroring, Hard Disk Drive removal, IEEE 2600.2 Common Criteria Certification, Data Loss Prevention (Requires

uniFLOW)

Standard: IP/Mac Address Filtering, IPsec, TLS Encrypted Communication, SNMP V3.0, IEEE 802.1X, IPv6, SMTP **NETWORK**

Authentication, POP Authentication before SMTP

Standard: Secure Print, Adobe LiveCycle® Rights Management ES2.5

Integration

Optional: Encrypted PDF, Encrypted Secure Print, User and Device

signatures, Secure Watermarks, Document Scan locking

ENVIRONMENTAL SPECIFICATIONS

Temperature: 50 to 86 °F OPERATING ENVIRONMENT

Humidity: 20 to 80 % RH (no condensation)

POWER REQUIREMENTS 120-127V AC,60 Hz,10 A

PLUG (MAIN UNIT) **NEMA 5-15P**

Maximum: Approx. 1.8 kWh Standby: Approx. 66.2 W POWER CONSUMPTION Sleep Mode: Approx. 0.8 W10

Typical Electricity Consumption (TEC) Rating: 1.6 kWh

ENERGY STAR® Certified Rated EPEAT® Gold11 **STANDARDS RoHS Compliant**

CONSUMABLES

TONER GPR-55 Toner12 Black: 69,000 Images

TONER YIELD (ESTIMATED @ 5% COVERAGE) Color (C,M,Y):12 60,000 Images

FOOTNOTES

- 1 Some types of tracing paper cannot be used.
- 2 Time from device power-on to when copy jobs can be programmed.
- 3 Includes main unit and either Cassette Feeding Unit-AM1, High Capacity Cassette Feeding Unit-A1, or Cabinet Type-N.
- 4 Includes main unit, consumables, and Cassette Feeding Unit-AM1.
- 5 PDF print from Web sites is supported.
- 6 EPS can be printed directly only from the Remote User Interface.
- 7 Requires the optional PCL International Font Set-A1.
- 8 Requires the optional Barcode Printer Kit-D1.
- 9 Other operating systems and environments including AS/400, UNIX, Linux and Citrix may be supported. Some of these solutions are chargeable.
- SAP Device Types are available via the SAP Market Place. For more information, contact your sales representative.
- 10 0.8 W sleep mode not available in all circumstances due to certain settings.
- 11 For current EPEAT rating (Gold/Silver/Bronze), please visit www.epeat.net.
- 12 GPR-55L Toner also available for Color (C, M, Y). Yield (estimated @ 5% coverage) is 26,000 images.



Download Manufacturer Specifications

Accessories

Reviews



Canon ImageRunner Advance C5535i Color Copier

\$6,490.00



FLAMMABLE SAFETY CABINETS

Flammable Safety Cabinets provide protection for your employees and property with proper storage of flammable liquids. Available with Manual or Self-Closing doors.

SPECIFICATIONS:

- All steel parts are manufactured from cold rolled steel
- Flush-mounted paddle handle design allows easy fingertip operation and features a double key set and can be padlocked (padlock not included)
- All cabinets meet NFPA Code 30 and OSHA standards



- Fully welded construction with 18-gauge double wall construction with 1.5" insulating airspace
- The fail-safe closing mechanism utilizes a three-point stainless steel bullet latching system





Self-Closing Doors

Latch holds door open when in use and will release to close door automatically when temperatures reach 165°F





FLAMMABLE SAFETY CABINETS



37







add prefix 74 for color yellow

	SIIX 74 IOI COIOI YCIIOW							
Capacity	WxDxH	No. of Shelves	Cat. No. Manual- Closing	Cat. No. Self- Closing	Cat. No. Extra Shelf	Cat. No. Mounting Brackets	Cat. No. Optional Shelf Tray	Cat. No. Optional Bottom Tray
Standard								
30 gal.	43" x 18" x 44"	1	R5440N	R5441N	5449	N/A	5550	5550
45 gal.	43" x 18" x 65"	2	R5444N	R5445N	5449	N/A	5550	5550
60 gal.	32" x 32" x 65"	2	R5460	R5461	N5450	N/A	n/a	N/A
Compact								
4 gal.	17" x 17" x 22"	1	R5470	N/A	N5478	5480	N/A	N/A
12 gal.	23-1/4" x 18" x 35"	1	R5473	N/A	N5476	N/A	N/A	N/A
12 gal.	43" x 18" x 18"	_	R5471	N/A	N/A	5479	N/A	N/A
15 gal.	23-1/4" x 18" x 44"	1	R5474	N/A	N5476	N/A	N/A	N/A
17 gal.	43" x 18" x 24"	1	R5472	N/A	N5449N	5479	N/A	N/A
17 gal.	43" x 18" x 24"	1	R5465*	N/A	N5449N	included	N/A	N/A
20 gal.	43" x 12" x 44"	2	R5466*	N/A	N5477	included	N/A	N/A
20 gal.	43" x 12" x 44"	2	R5469	N/A	N5477	5479	5552	5552
Under-Co	unter							
22 gal.	35" x 22" x 35"	1	R5467	N/A	N5468	N/A	5568	5568

Note: not recommended for Phenol, Sulfuric or Nitric Acids.

*Includes brackets for wall-mounting.



Heavy-duty ribbed galvanized steel shelves have a 350 lb. shelf capacity and are adjustable on 3" centers





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Add to watch list

People who viewed this item also viewed



14" x 40" Precision



G0824 14" x 40" Gunsmith \$6,250.00 + \$375.00



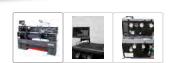
New Birmingham \$6,400.00 + Shipping





GRAZIANO SAG 14" x 40" \$4,599.99





Have one to sell?

Sell now

CLARK 1440 14" x 40" Precision Gap-Bed Lathe with DRO - NEW!

1 viewed per hour Be the first to write a review. Condition: Last one / 5 sold Quantity: US \$6,690.00 Price: **Buy It Now** \$322 for 24 months Add to cart Add to watch list Last item available

> Shipping: Freight - Read the item description or contact the seller for details | See details Item location: Chatsworth, California, United States

Ships to: United States

Delivery: Varies

Payments:

PayPal CREDIT

*\$322 for 24 months. Minimum purchase required. Apply Now |

Returns: 30 day returns. Buyer pays for return shipping | See details

Shop with confidence

eBay Money Back Guarantee Get the item you ordered or get your money back. Learn more

Seller information

machinery_exchange (3526)

100% Positive feedback

Save this Seller

Contact seller

Visit store See other items

Description

Shipping and payments

Report item

eBay item number: 172061278912

Seller assumes all responsibility for this listing.

Last updated on Mar 06, 2018 14:33:00 PST View all revisions

Item specifics

Condition: New: A brand-new, unused, unopened, undamaged item in its

original packaging (where packaging is ... Read more

Model: 1440

CLARK Brand:



BUY - SELL - TRADE machineryexchange@gmail



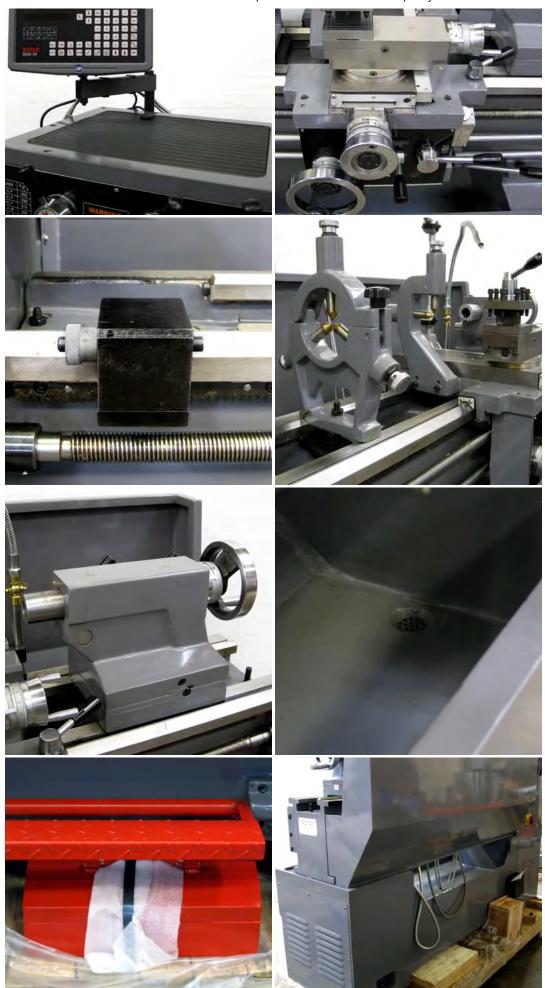


NEW! 1440 Gap-bed Lathe (14" x 40")



Clark bench lathes are especially suitable for machining, tool rooms and repairing workshops to machine shafts, spindle, sleeves, and disc workpiece of middle or small types. They can also be used to cut imperial, diametral, and module thread, and with compact construction and reasonable composition, they can cut very well. They are easy and reliable to operate, convenient to repair, high in efficiency, and low noise.







FEATURES

- 2-Axis DRO
- D1-4 Camlock spindle is supported by precision tapered roller bearings
- Headstock gears are made from high tensile steel, hardened and ground
- Bedways are induction hardened and ground to a Rockwell 65 C-Scale
- · Headstock gears run on splined shafts
- Machine built to imperial and metric system

SPECIFICATIO	N MODEL: CLARK - 1440	INCH	METRIC
	SWING OVER BED	14"	355mm
CAPACITY	SWING OVER CROSS SLIDE	8-1/2"	216mm
&	SWING THROUGH GAP	20"	508mm
DIMENSIONS	LENGTH OF GAP	9-3/8"	238mm
	DISTANCE BETWEEN CENTERS	40"	1016mm 38mm -4 IT-5 IT-3 ER BEARING 2 200 RPM -0.0294" -0.0100" 0 2 T.P.I. 2
	HOLE THROUGH SPINDLE	1-1/2"	38mm
	SPINDLE NOSE	DI	-4
	TAPER IN SPINDLE NOSE	MT	-5
HEADSTOCK	SPINDLE TAPER ADAPTER	MT	-3
10.000	SPINDLE BEARING TAPER	TAPER ROLLE	R BEARING
	NUMBER OF SPINDLE SPEEDS	1:	2
	RANGER OF SPINDLE SPEEDS	40-180	O RPM
	RANGER OF LONGITUDINAL FEEDS (Inch/Rev.)	0.0012"-0.0294"	
	RANGER OF CROSS FEEDS (Inch/Rev.)	0.0003"-0.0100"	
- 1	NUMBER OF INCH THREADS	40	
GEARBOX	RANGER OF INCH THREADS	4-112	T.P.I.
GEARBOX	NUMBER OF METRIC THREADS	2:	2
	RANGER OF METRIC THREADS	0.45-7	.5mm
	LEADSCREW	7/8" x 49-1/2"	22 x 1257mm
	FEED ROD DIAMETER	3/4"	19mm
COLUDOLINIC	MAXIMUM TOOL SIZE	5/8" x 5/8"	16 x 16mm
COMPOUND	MAXIMUM COMPOUND SLIDE TRAVEL	3-1/2"	90mm
CARRIAGE	MAXIMUM CROSS SLIDE TRAVEL	6-3/8"	162mm
CARRIAGE	MAXIMUM CARRIAGE TRAVEL	37-1/2"	953mm
	TAILSTOCK SPINDLE TRAVEL	4-3/4"	121mm
TAILSTOCK	DIAMETER OF TAILSTOCK SPINDLE	1-25/32" 45r	
	TAPE IN TAILSTOCK SPINDLE	MT	-
all a but the set	OVERALL DIMENSIONS	75-3/4"L x 29-1/	2"W x 47-1/4H
AISCELLANEOUS	MAIN MOTOR	3HP, 3Ph, 230V/46	
	SHIPPING WEIGHT (approx.)	2,491	lbs.

STANDARD ACCESSORIES:		OPTIONAL ACCESSORIES:		
3-jaw chuck. 4-jaw chuck. 4-way tool post. Steady rest. Follow rest.	Work light. Coolant system. Foot brake. Center sleeve and cente Tool box.	11. DRO system. 12. Manual.	Face plate. Quick change tool post. SC Collet closing attachment. Toper attachment. Adjustable machine mounts.	

This machine is BRAND NEW from the manufacturer. Every new Clark machine is thoroughly tested by the manufacturer before its ships. These machines have proven to be solid performers for our local customers. We are confident in the Clark brand and are proud to offer them nationally with a 30-day satisfaction guarantee. Clark backs their machines with a one year warranty. See the "Terms" section below for detailed warranty information.

$\underline{Shipping}$

Shipping is the responsibility of the buyer; however, Machinery Exchange has a large network of freight carriers to help you find the best price. If you would like a freight quote for this item please click "Contact Seller" or "Ask Question" at the bottom of the listing and provide us with your city, state and zip code. Or contact us via telephone at [phone removed by eBay].

Machines are covered in protective cosmoline coating for shipment. A forklift will be required to remove the machine from the truck. The cosmoline can be removed using a light kerosene/water mixture.

Tooling:

Below are directions on how you can calculate shipping for items under 150lbs. That does not qualify for USPS Flat Rate.

Pick up/Will Call:

All our items are available for pick up Monday thru Friday from 9am to 4:30. Arrangements can be made for Saturday pick up. We do not charge loading fees for loading machines or tooling unless we have to bring in special equipment or call a mover.

Note: Most of our listings are marked Freight shipping. We ship via FEDEX and USPS for item(s) 150lbs or lighter. The cost of shipping will be sent via invoice. We encourage all customers to log into the FedEx website to calculate shipping. Listed on every item are the directions and information needed to do so.

OPEN-BED FREIGHT-

- Items over 1000 lbs. less than 3000 lbs. will be sent via open-bed freight. Open-bed freight trucks allow the item to secured to the truck bed. For an open-bed freight quote please email us with: item #, name, zip code, and destination type [commercial or residential]. We forward your emails to a freight broker who networks with all the major freight companies to find you the best rate.
- We can act on your behalf for shipping quotation but shipping arrangement and charges are your responsibility. We will send you the freight broker's contact info to schedule pick up.
- We will not palletize, skid or crate an item over 1000 lbs. These items are prepared for transit by wrapping the item's electrical components with stretch wrap and spraying down any exposed metal surfaces with protective oil.
- These items are with-in our forklifts capacity and we will load them on to an open-bed freight truck at no charge. We may charge a rigging fee if we do not feel comfortable loading the item and contract machinery movers to load for us. This is usually the case with top-heavy items, such as grinding machines.
 - MACHINE DIMENSIONS: 80" x 30" x 50"H (inches) approximate.
 - o MACHINE WEIGHT: 2,491 lbs. approximate.
 - o RIGGING: NO CHARGE

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*RETURN PRIVILEGE DOES NOT APPLY TO CONSIGNMENT OR DISCOUNTED ITEMS.

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NEW HERMES Gravograph IS6000 XP Engraver with Cylindrical Attachments, Software & New Diamond **Cutting Tools**



GUDEL ELECTRONIC ENGRAVING, **DUPLICATING, COPY MEDALLIONS MILLING** SYSTEM W/ PRECISE SPINDLE - New 1993



Sharp Mill with Proto 2 Axis TrakCNC DRO, Yr 2004 Contact Us

- Depth 79 Inches
- Width 104 Inches
- Table: 9"x49"
- Longitudinal Travel: 36"
- Cross Travel: 12"
- Vertical Knee Travel: 16"
- Ram Travel: 12"
- T-Slot Number, Size: 3, 5/8"
- Main Motor: 3 HP Spindle Speed: 60-2400

Equipped With:

- · Draw bar
- Slideway Cover
- One Shot Lubrication System
- **Operation Manual**
- Tools and Tool Box
- Digital Readout System
- Power Feed Unit

Optional Accessories:

- Air Draw Bar Equipment
- Electrical Control Box or Panel
- Splash Guard
- 6" Precision Swivel Milling Vise: \$425.00
- 58pc Clamping Kits Set: \$180.00
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- Work Lamp
- Riser Block 4 or 6 inches
- Horizontal Milling Attachment
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1 of 2

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Business & Product Lines

Industrial Grinders



Cast aluminum wheel guards can be exhausted or left closed. 8-foot power cord. Base mounted on/off switch. Rubber feet minimize vibration.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1/3	3600	6"x3/4"x1/2"	600E	247	G1	30	115	Grinder	UL	a,c
1/3	3600	6"x3/4"x1/2"	602E	247	G1	27	115	Grinder/Buffer	UL	b,c

Cast aluminum non-exhaust type wheel guards. 8-foot power cord. Base mounted on/off switch. Rubber feet to minimize vibration.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1/3	3600	6"x3/4"x1/2"	612	280	G1	30	115	Grinder	UL, CSA	a,c
1/3	3600	6"x3/4"x1/2"	662	280	G1	29	115	Grinder/Buffer	UL, CSA	b,c

Cast iron exhaust type wheel guards. 8-foot power cord. Base mounted on/off switch. Rubber feet to minimize vibration.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1/4	1800	6"x3/4"x1/2"	632E	392	G1	47	115	Grinder		a,d
1/3	3600	6"x3/4"x1/2"	612E	347	G1	44	115	Grinder	UL, CSA	a,c
1/3	3600	6"x3/4"x1/2"	623E	392	G1	47	115	Grinder	UL	a,d
1/3	3600	6"x3/4"x1/2"	623ED	530	G1	61	115	Grinder		a,d,e
1/3	3600	6"x3/4"x1/2"	662E	347	G1	43	115	Grinder/Buffer	UL, CSA	a,c
1/3	3600	6"x3/4"x1/2"	673E	392	G1	45	115	Grinder/Buffer	UL	a,d

Cast iron exhaust type wheel guards. 8-foot power cord. Base mounted on/off switch. Rubber feet to minimize vibration.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1/2	3600	7"x1"x5/8"	712	414	G1	45	115	Grinder	UL, CSA	a,c,f
1/2	3600	7"x1"x5/8"	762	414	G1	42	115	Grinder/Buffer	UL, CSA	b,c,f
1/2	3600	7"x1"x5/8"	712E	488	G1	69	115	Grinder	UL, CSA	a,c
1/2	3600	7"x1"x5/8"	762E	488	G1	66	115	Grinder/Buffer	UL, CSA	b,c
1/2	1800	7"x1"x5/8"	7306	534	G1	71	115/230	Grinder	UL	a,d,g
1/2	3600	7"x1"x5/8"	7307	534	G1	70	115/230	Grinder	UL, CSA	a,d,g
1/2	3600	7"x1"x5/8"	7351	534	G1	68	115/230	Grinder/Buffer	UL, CSA	b,d,g
1/2	1800	7"x1"x5/8"	7308	534	G1	71	208-230-4600	Grinder	UL, CSA	a,d,h
1/2	3600	7"x1"x5/8"	7309	534	G1	70	208-230-4600	Grinder	UL, CSA	a,d,h
1/2	1800	7"x1"x5/8"	7306D	688	G1	84	115/230	Grinder	UL	a,d,e,g
1/2	3600	7"x1"x5/8"	7307D	688	G1	84	115/230	Grinder	UL	a,d,e,g
1/2	3600	7"x1"x5/8"	7309D	688	G1	87	208-230/460	Grinder	UL, CSA	a,d,e,h
1/2/ 1/3	1800/ 3600	7"x1"x5/8"	7312D	864	G1	90	115	Grinder	UL	a,d,e



623E



7306



7306D

NOTES.

- (a) Supplied with 36 & 60 grit wheels.
- (b) Supplied with 36 grit and 0.014 wire wheel.
- (c) Stamp steel tool rests.
- (d) Cast iron tool rests.
- (e) Deluxe model includes water pot, tool tray and lighted eyeshields.
- (f) Non-exhaust type wheel guards.
- (g) Factory connected for 115 volts, power cord supplied.
- (h) Factory connected for 208-230 volts, no power cord.



Industrial Grinders



8100W



8100WD

All models have cast iron tool rests and exhaust type wheel guards. 8-foot power cord. Base mounted on/off switch. Rubber feet to minimize vibration.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
3/4	4 1800	8"x1"x3/4"	8100W	860	G1	99	115/230	Grinder	UL	a,g
3/4	4 1800	8"x1"x3/4"	8100WD	982	G1	110	115/230	Grinder	UL	a,e,g
3/4	4 3600	8"x1"x3/4"	8107W	860	G1	99	115/230	Grinder	UL	a,g
3/4	4 3600	8"x1"x3/4"	8107WD	982	G1	111	115/230	Grinder	UL	a,e,g
3/4	4 3600	8"x1"x3/4"	8250W	860	G1	97	115/230	Grinder/Buffer	UL	b,g
3/4	1800	8"x1"x3/4"	8102W	833	G1	98	208-230/460	Grinder	UL,CSA	a,h
3/4	1800	8"x1"x3/4"	8102WD	967	G1	111	208-230/460	Grinder	UL,CSA	a,e,h
3/4	4 3600	8"x1"x3/4"	8123W	833	G1	99	208-230/460	Grinder	UL,CSA	a,h
3/4	4 3600	8"x1"x3/4"	8123WD	967	G1	112	208-230/460	Grinder	UL,CSA	a,e,h
3/4	4 3600	8"x1"x3/4"	8252W	833	G1	95	208-230/460	Grinder/Buffer	UL	b,h
3/4	4 3600	8"x1"x3/4"	8125W	833	G1	99	575	Grinder	UL	a,i



1022W



1022WD

All models have cast iron tool rests and exhaust type wheel guards. Base mounted on/off switch. Rubber feet to minimize vibration.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1	1800	10"X1"X7/8"	1022W	1,098	G1	133	115/230	Grinder	UL	a,J
1	1800	10"X1"X7/8"	1022WD	1,257	G1	145	115/230	Grinder	UL	a,e,J
1-1/2	1800	10"X1"X7/8"	1021W	1,082	G1	134	208-230/460	Grinder	UL,CSA	a,h
1-1/2	1800	10"X1"X7/8"	1021WD	1,239	G1	146	208-230/460	Grinder	UL,CSA	a,e,h
1-1/2	1800	10"X1"X7/8"	105W	1,082	G1	133	575	Grinder	UL,CSA	a,i

- (a) Supplied with 36 & 60 grit wheels.
- (b) Supplied with 36 grit and 0.014 wire wheel.
- (e) Deluxe model includes water pot, tool tray and lighted eyeshields.
- (g) Factory connected for 115 volts, power cord supplied.
- (h) Factory connected for 208-230 volts, no power cord.
- (i) 575 volt, 50//60 Hz.
- (J) Factory connected for 115 volts, no power cord.

BALDOR

Industrial Grinders 12 Inch



BALDOR Catalog #1215W with #GA20 Pedestal

14 Inch



BALDOR Catalog #1407W with #GA20 Pedestal

Cast iron tool rests & exhaust type wheel guards. Manual starter with overload protection. Also includes lighted eyeshield (bulb not included). All three-phase units are suitable for 50/60 Hz, 1500/1800 RPM operation. Wheels sold separately. See chart below.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
2	1800	12"X2"X1-1/4"	1215W	2,469	G1	253	208-230/460	Grinder	UR	k
3	1800	12"X2"X1-1/4"	1216W	2,557	G1	254	208-230/460	Grinder	UR	k
2	1800	12"X2"X1-1/4"	1217W	2,615	G1	259	115/230	Grinder	UR	J
3	1800	12"X2"X1-1/4"	129W	2,557	G1	256	575	Grinder	UR	i

Cast iron tool rests & exhaust type wheel guards. Magnetic starter with overload protection. Also includes lighted eyeshields (bulbs not included). Suitable for 50/60 Hz operation. Wheels sold separately. See chart below.

Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
5	1800	14"X3"X1-1/4"	1406W	3,168	G1	359	230	Grinder	UR	m
5	1800	14"X3"X1-1/4"	1410W	3,168	G1	362	460	Grinder	UR	m
5	1800	14"X3"X1-1/4"	1408W	3,168	G1	358	575	Grinder	UR	m
7-1/2	1800	14"X3"X1-1/4"	1407W	3,456	G1	372	230	Grinder	UR	m
7-1/2	1800	14"X3"X1-1/4"	1411W	3,456	G1	381	460	Grinder	UR	m
7-1/2	1800	14"X3"X1-1/4"	1409W	3,456	G1	374	575	Grinder	UR	m

Wheels for 12-Inch and 14-Inch Grinders

High quality aluminum oxide and silicon abrasive in a premium vitrified system

Catalog Number	List Price	Mult. Sym.	Diameter	Face	Bore	Grit	Shpg. Wgt.
B125	188	A8	12"	2"	1-1/4"	30	22
B126	190	A8	12"	2"	1-1/4"	46	22
B147	356	A8	14"	3"	1-1/4"	30	42
B148	356	A8	14"	3"	1-1/4"	46	41

NOTE: When installing new wheels, check wheels for possible damage. Do not use a damaged wheel.

With new wheel installed, all safety guards in place and operator standing away from front of grinder, run grinder for one minute before apply work. (Wear safety glasses). Exercise caution.

Designed to comply with OSHA standards under normal usage.

- (i) 575 volt, 50//60 Hz.
- (J) Factory connected for 115 volts, no power cord.
- (k) Factory connected for 230, manual starter, specify voltage when ordering.
- (m) Factory connected for 230, magnetic starter must be changed for other voltages

BALDOR

Industrial Tool Grinders

Diamond Wheel Grinder



Catalog #522

Baldor Diamond Wheel Tool Grinders feature all cast iron construction.

Precision built, they have locked double row bearings and a maximum runout of .002 for precise tool and die work. Accommodates cup wheels with 1-1/4" center hole. Large tool tables with protractor type tool support. Light and water pot with spout and faucet that can be moved to either side are standard equipment. Diamond wheels sold separately. See chart below.

Нр	RPM	Cup Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1/2	3600	6"x1"x1-1/4	522	1,381	G1	108	115	Tool Grinder	UL	g
1/2	3600	6"x1"x1-1/4	532	1,381	G1	109	208-230/460	Tool Grinder	UL	h

NOTE: Rough service bulb is suggested.

- EQUIP. #41

Carbide Tool Grinder



Catalog #500

Baldor Carbide Tool Grinders feature all cast iron construction.

Accommodates cup wheels with 1-1/4" center hole. Large tool tables with protractor type tool support. Light and water pot with spout and faucet that can be moved to either side are standard equipment. Wheels sold separately. See chart below.

3	Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
2	1/2	3600	6"x1"x1-1/4	500	1,228	G1	109	115	Tool Grinder	UL	g
Ž	1/2	3600	6"x1"x1-1/4	510	1,228	G1	109	208-230/460	Tool Grinder	UL	h

NOTE: Rough service bulb is suggested



Catalog #D501



Catalog #C61



Wheels and Accessories

Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Face	Grit	Description
D501	789	A8	5	3/4"	120	General Purpose Diamond Wheel
D502	789	A8	2	3/4"	220	Fine Finish Diamond Wheel
C61	121	A8	5	1"	60	Silicone Carbide
C121	121	A8	3	1"	120	Silicone Carbide
S46	112	A8	3	1"	46	Aluminum Oxide
S61	112	A8	3	1"	60	Aluminum Oxide
GA8	133	A8	1		Whee	el Dresser with Diamond NIB
GA7	80	A8	1		Diamond NIE	3 for GA8 (7/16 diameter x 1" long)

NOTE: When installing new wheels, check wheel for possible damage. Do not use a damaged wheel. With new wheel installed and all safety guards in place, and operator is standing away from front of grinder, run grinder for one minute before applying work. **(Wear safety glasses). Exercise caution.**

- (g) Factory connected for 115 volts, power cord supplied.
- (h) Factory connected for 208-230 volts, no power cord.

Cross Reference and Index

BALDOR

Industrial Abrasive Belt Sanders

Baldor offers several options when it comes to industrial belt sanders, fixed and tiltable belts, grinder/sanders and even an adjustable speed sander for increased flexibility. All units come with a base mounted on/off switch and your choice of 2"x36" 100 grit belt or 2"x48" 80 grit belt.









Catalog #602E-MT

Catalog #248-151D

Catalog #248-181TD

Catalog #248-151TD

Catalog #248-151AS

Нр	RPM	Tiltable belt	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1/3	3600	Multi-Position	602E-MT	656	G1	24	115	Grinder/Belt Sander	UL	g, n
1-1/2	3600	Fixed	2048-151D	1,322	G1	88	115/230	Belt Sander	UL	g
1-1/2	3600	Fixed	2048-153D	1,279	G1	76	208-230/460	Belt Sander	UL	h
1-1/2	3600	Three positions	248-151TD	1,448	G1	95	115/230	Belt Sander	UL	g
1-1/2	3600	Three positions	248-153TD	1,405	G1	84	208-230/460	Belt Sander	UL	h
1-1/2	3600	Three positions	248-181TD	1,702	G1	138	115/230	Grinder/Belt Sander	UR	J,l
1-1/2	3600	Three positions	248-183TD	1,654	G1	128	208-230/460	Grinder/Belt Sander	UL	h,l
1-1/2	0-3600	Three positions	248-151AS	1,560	G1	105	115	Adjustable Speed	UR	g,J,l

Industrial Buffers



Catalog #333B



Catalog #1458 with #GA20 Pedestal

Buffers are designed for use with soft cloth wheels **ONLY**. Specific buffing applications may require the addition of operator safety devices. Consult with a safety engineer before installation. Price includes flanges and nuts but **does not** include wheels.

Нр	RPM	Max. Wheel Size	Shaft Diameter	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Agency Approval	Notes
1/4	1800	6"	1/2"	114	312	G1	24	115	UR	g
1/3	3600	6"	1/2"	111	312	G1	25	115	UR	g
3/4	1800	8"	3/4"	332B	614	G1	55	115/230	UR	g
3/4	3600	8"	3/4"	333B	614	G1	56	115/230	UR	g
3/4	1800	8"	3/4"	334B	600	G1	54	208-230/460	UR,CSA	h
3/4	3600	8"	3/4"	330B	600	G1	56	208-230/460	UR,CSA	h
1	1800	10"	7/8"	407B	815	G1	60	115/230	UR	j
1-1/2	3600	10"	7/8"	410B	801	G1	61	115/230	UR	j
1-1/2	1800	10"	7/8"	409B	782	G1	59	208-230/460	UR,CSA	h
1-1/2	3600	10"	7/8"	412B	782	G1	62	208-230/460	UR,CSA	h
2	1800	12"	1-1/4"	1250	1,889	G1	164	115/230	UR	k
2	3600	12"	1-1/4"	1251	1,834	G1	160	115/230	UR	k
3	1800	12"	1-1/4"	1252	1,734	G1	156	208-230/460	UR,CSA	k
3	3600	12"	1-1/4"	1253	1,685	G1	156	208-230/460	UR,CSA	k
5	1200	14"	1-1/4"	1457	2,532	G1	228	230	UR,CSA	m
5	1800	14"	1-1/4"	1458	2,155	G1	218	230	UR,CSA	m
7-1/2	1800	14"	1-1/4"	1454	2,408	G1	229	230	UR,CSA	m
7-1/2	3600	14"	1-1/4"	1453	2,278	G1	223	230	UR,CSA	m

- (g) Factory connected for 115 volts, power cord supplied.
- (h) Factory connected for 208-230 volts, no power cord.
- (J) Factory connected for 115 volts, no power cord.
- (k) Factory connected for 230, manual starter, specify voltage when ordering.
- (I) Supplied with 8"x1"x3/4" 36 grit wheel and 80 grit belt.
- (m) Factory connected for 230, magnetic starter must be changed for other voltages
- (n) Supplied with 0.014 wire wheel and 36" x 2" 100 grit belt

45 BALDOR

Big Red Grinders



600RE



Big Red Grinders are available with 6", 7" or 8" wheels, equipped with base mounted on/off switch and 8 foot cord with plug. Rubber mounting feet help minimize vibration. Models ending in "E" have exhaust type wheel guards.

<u> </u>											
Ź٠	Нр	RPM	Wheel Size	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
₹	/3	3600	6"x3/4"x1/2"	600RE	247	G1	29	115	Grinder	UL	a,c
∫ 1	/3	3600	6"x3/4"x1/2"	602RE	247	G1	27	115	Grinder/Buffer	UL	b,c
2	/3	3600	6"x3/4"x1/2"	612R	280	G1	30	115	Grinder	UL,CSA	a,c,f
$\sqrt{}$	/3	3600	6"x3/4"x1/2"	662R	280	G1	29	115	Grinder/Buffer	UL,CSA	b,c,f
∫ 1	/2	3600	7"x1"x5/8"	712R	414	G1	44	115/230	Grinder	UL,CSA	a,c,f
1	1/2	3600	7"x1"x5/8"	762R	414	G1	43	115/230	Grinder/Buffer	UL,CSA	b,c,f
1	1/2	3600	7"x1"x5/8"	712RE	488	G1	68	115/230	Grinder	UL,CSA	a,c
1	1/2	3600	7"x1"x5/8"	762RE	488	G1	67	115/230	Grinder/Buffer	UL,CSA	b,c
3	3/4	3600	8"x1"3/4"	812RE	813	G1	99	115/230	Grinder	UL	a,c,g
3	3/4	3600	8"x1"3/4"	862RE	813	G1	95	115/230	Grinder/Buffer	UL	a,c,g

812RE

Big Red Accessories

Pedestals



GA16R

GA14R

Lighted Eyeshields



GA9R GA9SR

Catalog Number	Description	List Price	Mult. Sym.	Shpg. Wgt.
GA16R	Cast iron pedestal can be used on all Big Red Grinders Height is 32-7/8"	387	A8	62
GA16RE	Light industrial version, all steel construction for use on 6" & 7" only, height is 34"	252	A8	36
GA20RE	Light industrial version, all steel construction for use on 8" only, height is 34"	292	A8	54
GA14R	Fabricated steel pedestal with storage shelves can be used on all Big Red Grinders, height is 34-1/2"	292	A8	64
GA9R	2) Lighted eyeshield, 5-1/2" x 3-3/4" viewing area, 8-ft cord with plug, mounts to any Big Red Grinder	163	A8	5
GA9SR	2) Lighted eyeshield with on/off switch, 5-1/2" x 3-3/4" viewing area, 8-ft cord with plug, mounts to any Big Red Grinder	181	A8	5

- (a) Supplied with 36 & 60 grit wheels.
- (b) Supplied with 36 grit and 0.014 wire wheel.
- (c) Stamp steel tool rests.
- (d) Cast iron tool rests.
- (f) Non-exhaust type wheel guards.
- (g) Factory connected for 115 volts, power cord supplied.

BALDOR

Accessories Dust Control Units for Baldor Grinders



Catalog #1022W with DC10 and GA16

115 Volt, Single Phase, 60 Hz.

	Dust			nding	Cul	bic Ft/Min		
Catalog Number	Control Mult Unit Sym		Wheel Maximum		Total	Required Per Wheel	Air Control	Shpg. Wgt.
	Price		Dia.	Width	Cap.	By OSHA (0)	Valves	3
DC7	1,162	A8	7"	1"	440	220	Yes	60
DC8	1,162	A8	8"	1"	440	220	Yes	62
DC10	1,162	A8	10"	1"	440	390	Yes (p)	60
DC12	1,263	A8	12"	2"	440	390	Yes (p)	62
DC12-3	1,263	A8	12"	2"	440	390	Yes (p)	57
DC14-3 (n)	2,062	A8	14"	3"	700	590	Yes (p)	73

- (n) DC14-3 powered with 1Hp TEFC 208-230/460 volt, three phase motor, less cord, switch, and lug.
- (o) From ventilation section 1910.94 table G-4 Federal register vol. 37 #202, 10-18-72.
- (p) Air control valve required to direct total CFM of collector to only the wheel being used to meet OSHA CFM requirements on 10" and larger grinders.

Replacement Filter Bags

Catalog Number	List Price	Mult. Sym.	Dust Control Unit	Shpg. Wgt.
ARB-1	80	A8	DC7, 8, 10, 12, 12-3	1
ARB-2	112	A8	DC14-3	2

NOTE: Do not collect potentially reactive materials without consulting (NFPA) National Fire Protection Association Standards.

Powered by a 1/2 Hp TEFC single phase Baldor motor with cord, switch, and plug.

230 volt single phase units are available and supplied less switch, cord, and plug. Specify for 230 volt single phase operation.

Collectors with three phase motor less cord, switch, and plug are available. For 208-230/460 volt three phase, add suffix -3 to catalog number. Add \$30.00 to list price. Mount dust control units with Grinder and GA16 or GA20 pedestal.

Accessories Grinder and Buffer



ltem Number	Catalog Number	Description	List Price	Mult. Sym.	Shpg. Wgt.
۸	GA16	Pedestal "Cast Iron"	387	A8	62
А	GA16E	"Steel"	252	A8	36
В	GA14	Pedestal "Steel"	292	A8	64
0	GA20	Pedestal "Cast Iron"	637	A8	125
С	GA20E	"Steel"	292	A8	54
D	GA24	Water Pot	42	A8	1
Е	GA3	Water Pot	65	A8	9
F	GA25	Tool Tray	42	A8	7
G	GA4	Tool Tray	66	A8	6
Н	GA11	Eyeshield	53 pr	A8	2
I	GA10	Eyeshield	48 pr	A8	1
J	GA9	Lighted Eyeshield (less on/off switch)	163 pr	A8	5
J-1	GA9-1	same as GA9 except packed 1 unit per carton	89 ea	A8	3
K	GA9S	Lighted Eyeshield (with on/off switch)	181 pr	A8	6
L	GA13	Eyeshield for 6" Grinders	41 pr	A8	2
M	AB248	Abrasive Belt 2" x 48" – 80 Grit	24	A8	1

- A) GA16 Pedestal for 6", 7", 8" and 10" grinders, carbide and diamond wheel grinders, 1/4 Hp through 1-1/2 Hp buffers and belt grinders. Height 32 7/8".
 - GA16RE for 6" & 7" grinders "all steel construction". Height 34".
- (B) GA14 Pedestal fabricated steel, for 6", 7", 8" and 10" grinders, 1/4 Hp through 1 1/2 Hp buffers. Height 34 1/2".
- GA20 Pedestal for 8", 10", 12" and 14" grinders and 3/4 through 7-1/2 Hp buffers. Height 30".
 - GA20RE for 8" & 10" grinders "all steel construction". Height 34".
- (D) GA24 Water Pot for 623E, 673E, 612E, 662E, and 7" (except #712, #712R, #762, & #762R), 8" and 10" grinders. Supplied with mounting bracket and swivel arm. Capacity 1-1/2 pints.
- (E) GA3 Water Pot for GA20 pedestal. Capacity 3 pints.
 - GA25 Tool Tray for 623E, 632E, 673E, 612E, 662E and 7" (except #712, #712R, #762, & #762R),
- 8" and 10" grinders. Supplied with mounting bracket and swivel arm. Diameter 8". Area 48 square inches.
- G) GA4 Tool Tray for GA20 pedestal. Dimensions 12" x 6".
- (H) GA11 Eyeshield 6" x 4" shatter resistant Plexiglas®. Fits Baldor grinders 7" through 14".
- (I) GA10 Eyeshield 5" x 4" shatter resistant Plexiglas®. Fits Baldor 6" grinders and #712, #712R, #762 and #762R.
 - GA9 Lighted Eyeshield 5 1/2" x 3 3/4" viewing area made of shatter resistant Plexiglas[®]. Supplied with 8 foot 3 conductor cord with plug. Accommodates standard 115 volt 60 watt bulb. Supplied less bulb and on/off switch. Mounts to Baldor grinders except tool and belt grinders. Adjusts horizontally and vertically. U.L. listed/CSA certified.
- (J-1) GA9-1 Same as GA9 except packed 1 per carton. 115 volt only.
- () GA9S Lighted Eyeshield with On/Off Switch 115 volt only.
- (L) GA13 Eyeshield for 600 Series 6" Grinders
- (M) AB248 Abrasive Belt 2" x 48" 80 Grit.

Generators



Accessories Wheels for Grinders

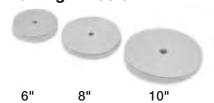


14"

Extremely durable aluminum oxide abrasive grain. Excellent for steels and alloy steels. Ideal for numerous general purpose applications.

Catalog Number	List Price	Mult. Sym.	Diameter	Face	Bore	Grit	Shpg. Wgt.
B66	33	A8	6"	3/4"	1/2"	36	2
B67	33	A8	6"	3/4"	1/2"	60	2
B73	46	A8	7"	1"	5/8"	36	4
B74	46	A8	7"	1"	5/8"	60	3
B80	55	A8	8"	1"	3/4"	36	5
B81	55	A8	8"	1"	3/4"	60	4
B102	83	A8	10"	1"	7/8"	36	8
B103	83	A8	10"	1"	7/8"	60	6
B125	188	A8	12"	2"	1-1/4"	30	22
B126	190	A8	12"	2"	1-1/4"	46	22
B147	356	A8	14"	3"	1-1/4"	30	42
B148	356	A8	14"	3"	1 1/4"	46	41

Sewed Cotton Buffing Wheels



Features: Wheels are muslin cloth, spiral sewn. These bore sizes will fit shafts 1/8" greater diameter than bore.

Catalog Number	List Price	Mult. Sym.	Diameter	Face	Bore	Shpg. Wgt.
A65	18	A8	6"	1/4"	1/2"	1
A82	29	A8	8"	1/4"	3/4"	1
A103	35	A8	10"	1/4"	7/8"	1

NOTE: Cotton wheels are supplied in sections 1/4" wide. Two (or more) sections may be put together to make up wheel of desired width.

Wire Brush Wheels



Features: Wheels are crimped, carbon steel wire.

Catalog Number	List Price	Mult. Sym.	Diameter	Face	Bore	Diameter of Wire	Shpg. Wgt.
W64	41	A8	6"	5/8"	1/2"	0.014	1
W70	48	A8	7"	5/8"	5/8"	0.014	1
W82	54	A8	8"	3/4"	3/4"	0.014	1

NOTE: Baldor 6", 7" & 8" grinders equipped with grinding wheels can be converted to have wire brush wheels. To properly fit the wire brush wheels, flat washers or spacer must be placed on both sides of the wheel flanges. This will accommodate the width differences between the wire brush wheel and the original grinding wheel. Order washers/spacers as follows: 6" (3) HW1000A50, 7" (2) HA2047A01, 8"(4) HW1000A75

NOTE: When installing new wheels, check wheel for possible damage. Do not use a damaged wheel. With new wheel installed and all safety guards in place, and operator standing away from front of grinder, run grinder for one minute before applying work. (Wear safety glasses).

Exercise Caution.

Single Phase Electronic Motor Brake



Applications: Efficient alternative to mechanical brakes, suitable for woodworking machinery, machine tools, bench grinders and buffers. Ideal for OEM equipment or for retrofitting into an existing application.

Features: Automatic braking for single-phase motors. User adjustable torque and brake time. Prevents restarts after power has been removed for 7 seconds. Accommodates frequent start/stop applications. Available in panel mount for system integration or with line cord, plug and receptacle in a NEMA 1 enclosure for easy installation.

Catalog Number	Horsepower	Amps	Voltage (60 Hz only)	List Price	Mult. Sym.							
	Panel Mount											
BQ1-015-CP	BQ1-015-CP 1 15 110-125 VAC 660 E7											
BQ2-015-CP	2	15	208-230 VAC	660	E7							
		N	EMA 1		'							
BQ1-015-CC	1	15	110-125 VAC	852	E7							
BQ2-015-CC	2	15	208-230 VAC	852	E7							

SUFFIX: CP = 6"x5"x3" module without cord, receptacle, switch or enclosure. CC = 8"x8"x4.5" NEMA 1 enclosure with 9ft. cord, receptacle and switch. Generators

406

and Index

Polishing Lathes, Chucks









380WCT

LPL50

Baldor polishing lathes have features preferred by Dentists, dental lab technicians, jewelers, lapidary and other for precision, trouble-free polishing. All lathes are supplied with 8-foot cord with plug, rubber feet and heavy construction to minimize vibration, provisions for mounting to a laboratory bench are provided as well.

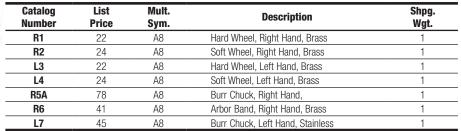
Нр	RPM	Shaft Diameter/Taper	Catalog Number	List Price	Mult. Sym.	Shpg. Wgt.	Voltage	Style	Agency Approval	Notes
1/4	3600/1800	0.375 / 0.250	340	383	G1	32	115	Dual Speed	UR, CSA	q
1/4	3000/1500	0.375 / 0.250	342	383	G1	31	220-240	Dual Speed	UR, CSA	r
1/4	3600/1800	0.375 / 0.250	353T	420	G1	35	115	Dual Speed	UL,CSA	q
1/2	3600	0.375 / 0.250	359T	421	G1	36	115	Single speed	UL,CSA	q
1/3	3600/1800	0.375 / 0.250	380T	468	G1	42	115	Dual Speed	UL,CSA	q
1/3	3600/1800	0.375 / 0.250	380WCT	1,077	G1	47	115	Dual Speed	UL,CSA	q,s
1/2	3600	0.625 / straight	LPL50	409	G1	43	115	Single speed	UR	q,t
3/4	3600	0.625 / straight	LPL75	499	G1	48	115/230	Single speed	UR	q,t

NOTES:

- (q) Factory connected for 115 volts, power cord supplied.
- (r) Factory connected for 220-240 volts, power cord without plug.
- (s) Right side equipped with Wells Dental "Super Quick" chuck, 2 mandrels, 2 stone, 1 arbor band, 1 soft wheel chuck.
- (t) Single shaft, right side.

Baldor True-Running Chucks

Made to close-tolerance specifications, keeps vibration to an absolute minimum. All chuck guaranteed to match Baldor lathes and other make with standard tapered shaft. Mounting hole 0.370" tapered 0.250 per foot.



NOTE: R1 & L3 hard wheel chucks accommodate up to 1/4" wide wheel with 1/4" arbor hole. R6 arbor band chuck accommodates 1/2" wide x 3/4" diameter arbor band.



R₁ R₆ L7 R2 L3 L4 R5A

Dust Collector Bags

Catalog Number	List Price	Mult. Sym.	Description	Shpg. Wgt.
DA1	45	A8	Dust Collector Bag (1 per carton).	1
DAI	40	40 Ao	For Baldor D60 and D61 Dust Collectors	ļ

FULL THREE YEAR WARRANTY

Baldor polishing lathes are warranted against burnouts, defective materials, and workmanship for three full years. Warranty covers all parts except those subject to normal wear. "Wells Quick Chuck" warranted one year by manufacturer.

BALDOR · RELIANCE II

Product Information Packet

600E

20S 2P GRNDR

BALDOR • RELIANCE Product Information Packet: 600E - 20S 2P GRNDR

Part Detail							
Revision:	х	Status:	INA/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	G6WG0050	CD Diagram:	CD0185A03	Mfg Plant:	
Mech. Spec:		Layout:	G6-0443-0050	Poles:	02	Created Date:	08-09-2007
Base:		Eff. Date:	12-12-2018	Leads:	2#18		

Specs				
Nameplate Output:	.33			
Product Style:	GRINDER			

BALDOR • RELIANCE Product Information Packet: 600E - 20S 2P GRNDR

Nameplate NP0523L						
CAT.NO.	600E	HP .33	HZ 60			
VOLTS	115	AMPS 3.1				
SPEC.	G6-0443-0050	·				
RPM	3600	SER.				

Parts List				
Part Number	Description	Quantity		
SA161399	SA G6-0443-0050	1.000 EA		
RA149954	RA G6-0443-0050	1.000 EA		
RE1020SP	C.S.RELAY 3CR-738-169(TI)	1.000 EA		
G6BA3000BG	G6-264 BASE, W/ BATTLE SHIP GRAY POWDER	1.000 EA		
60XM2520A12	SCREW,PAN TORX 1/4-20X.750 THREAD FORMIN	2.000 EA		
HW1000A25	1/4 SAE FLAT WASHER (FS)	2.000 EA		
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	1.000 EA		
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	1.000 EA		
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	2.000 EA		
LD0090B120	LD,01 6.5" BLK W/INSU FLAG TERM	1.000 EA		
51XN0832A08	08-32 #10 & SMALLER HEX WASHER HEAD, SL	1.000 EA		
LD0158A02	CORD & PLUG ASSY 18-3 SJT 8' LONG	1.000 EA		
WD4102A01	SR-6L-1 HEYCO STRN RELIEF OR 23MPO6L10 M	1.000 EA		
SP9017SP	SWITCH 7580K8 (C-H)	1.000 EA		
HA3205A50	U550-N SWITCH NUT/CARLING	1.000 EA		
HW1003A50	LOCKWASHER,1/2",EXT.TOOTHZINC PLATED	1.000 EA		
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA		
G6CB4501L	BASE COVER PLATE 6" GRINDER BLACK	1.000 EA		
RM1012	6" GRINDER FOOT	4.000 EA		
11XT1032A06	10-32 X 3/8 HX WSHR HD SLTD TYPE 23	2.000 EA		
G6EP3900A01BG	EP,G6AC DE CL 6203 W/BATTLE SHIP GRAY	1.000 EA		
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA		
HA3107A03	10-32 X 5.375 THRUBOLT OHIO	2.000 EA		
G6EP3900A01BG	EP,G6AC DE CL 6203 W/BATTLE SHIP GRAY	1.000 EA		

Parts List (continued)				
Part Number	Description	Quantity		
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA		
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	2.000 EA		
G6FH3804A01BG	GRINDER GUARD COVER BATTLE SHIP GRAY	1.000 EA		
51XF1032A08	10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED	4.000 EA		
G6FH3804A01BG	GRINDER GUARD COVER BATTLE SHIP GRAY	1.000 EA		
51XF1032A08	10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED	4.000 EA		
HA6113SP	GRINDER FLANGE, STAMPED ZINC PLATED	2.000 EA		
G6AP3000A02	A60N6V10 6X3/4X1/2 60GRITB67	1.000 EA		
XY5020A12SP	1/2-20 NUT R.H. HEX (NF)	1.000 EA		
HA6113SP	GRINDER FLANGE, STAMPED ZINC PLATED	2.000 EA		
B66	A36N5V10 6X3/4X1/2 36GRITB66	1.000 EA		
XY5020A62SP	1/2-20 NUT L.H. HEX (NF)X	1.000 EA		
G6FH3804BG	GRINDER GUARD COVER BATTLE SHIP GRAY	1.000 EA		
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA		
G6AP1012A02ZP	GRINDER TOOL REST,PU END/RH, ZINC PLATED	1.000 EA		
83XN2520A40	1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA		
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA		
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA		
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA		
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA		
HW1000A25	1/4 SAE FLAT WASHER (FS)	1.000 EA		
83XN2520A40	1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA		
HW1000A25	1/4 SAE FLAT WASHER (FS)	1.000 EA		
XY2520A03	NUT, WING 1/4-20	1.000 EA		

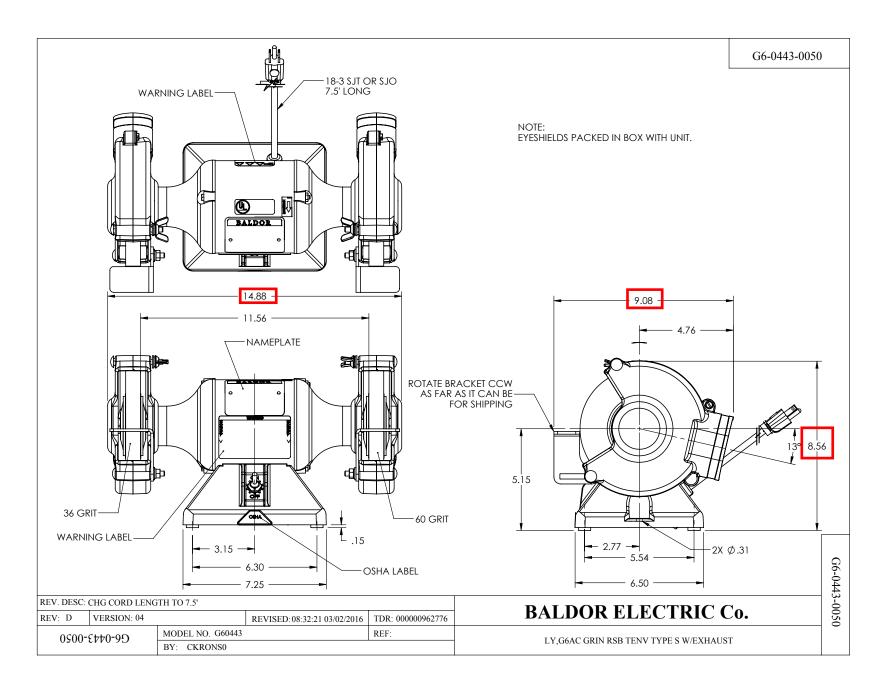
Product Information Packet: 600E - 20S 2P GRNDR

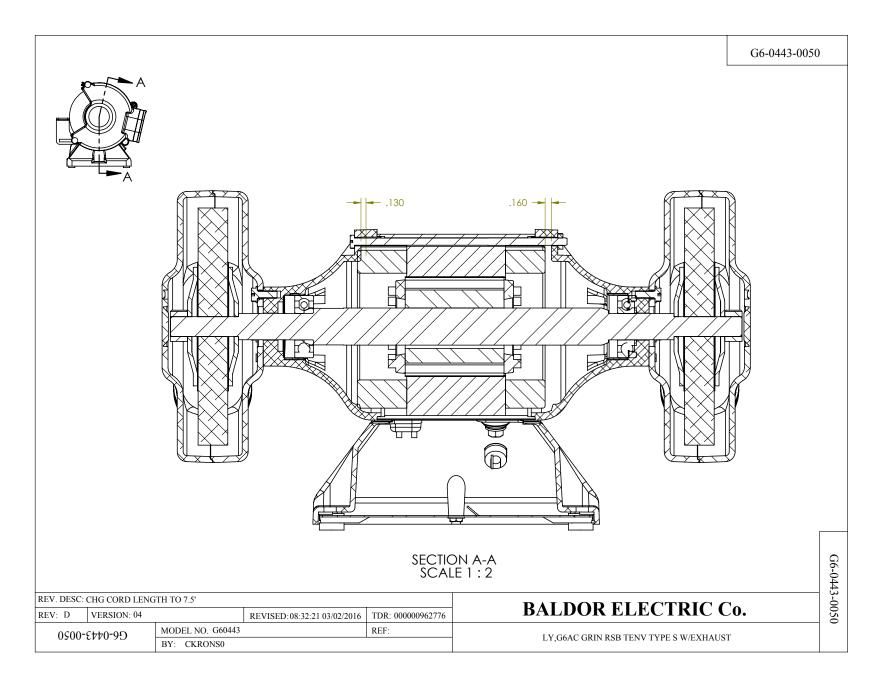
G6FH3804BG	GRINDER GUARD COVER BATTLE SHIP GRAY	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
G6AP1012A01ZP	GRINDER TOOL REST,FR END/LH, ZINC PLATED	1.000 EA
83XN2520A40	1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA
HW1000A25	1/4 SAE FLAT WASHER (FS)	1.000 EA
83XN2520A40	1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA
HW1000A25	1/4 SAE FLAT WASHER (FS)	1.000 EA
XY2520A03	NUT, WING 1/4-20	1.000 EA
G6AP1013	GRINDER GUARD EXHAUST PLATE	2.000 EA
NP0523L	ALUM NO LOGO'S 6" GRINDER - BUFFER	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
G6AP5002A02	EYE SHIELD GLASS ASSEMBLY FOR 6" GRINDER	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LB1307	LABEL, WARNING	1.000 EA
LB1030	LABEL, OSHA (ON ROLLS)	1.000 EA
LB1009N	LABEL, ROTATION DIRECTION (ON ROLLS)	1.000 EA
LB1008	LABEL, UL	1.000 EA
MN903	INSTR MANUAL FOR GRINDERS 9/03	1.000 EA
27PA1001	PKG GRP, PRINT PK1027A06	1.000 EA

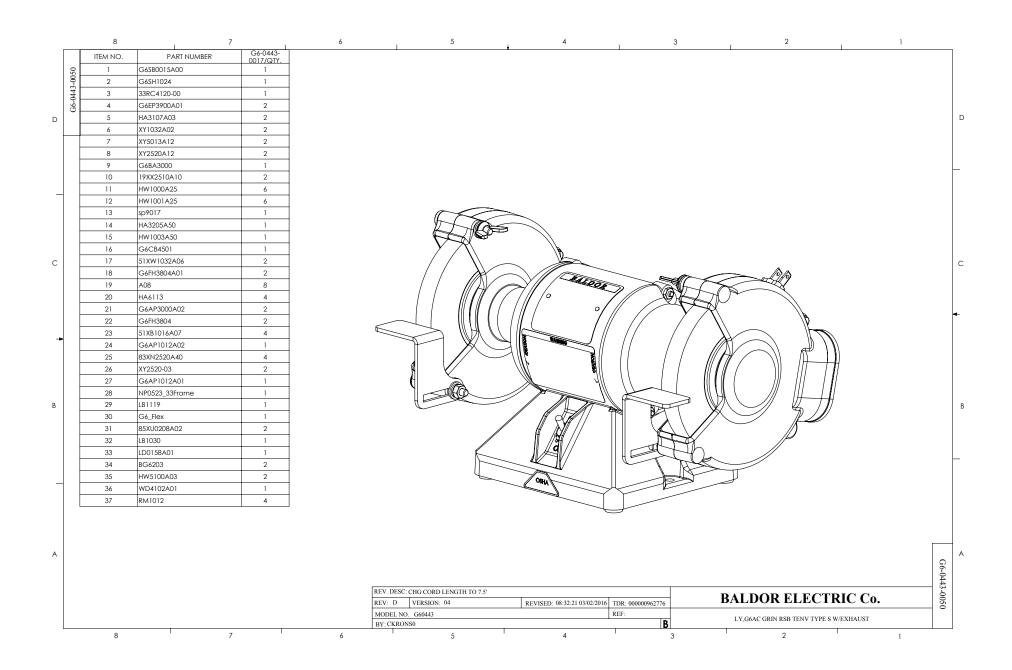
BALDOR • RELIANCE Product Information Packet: 600E - 20S 2P GRNDR

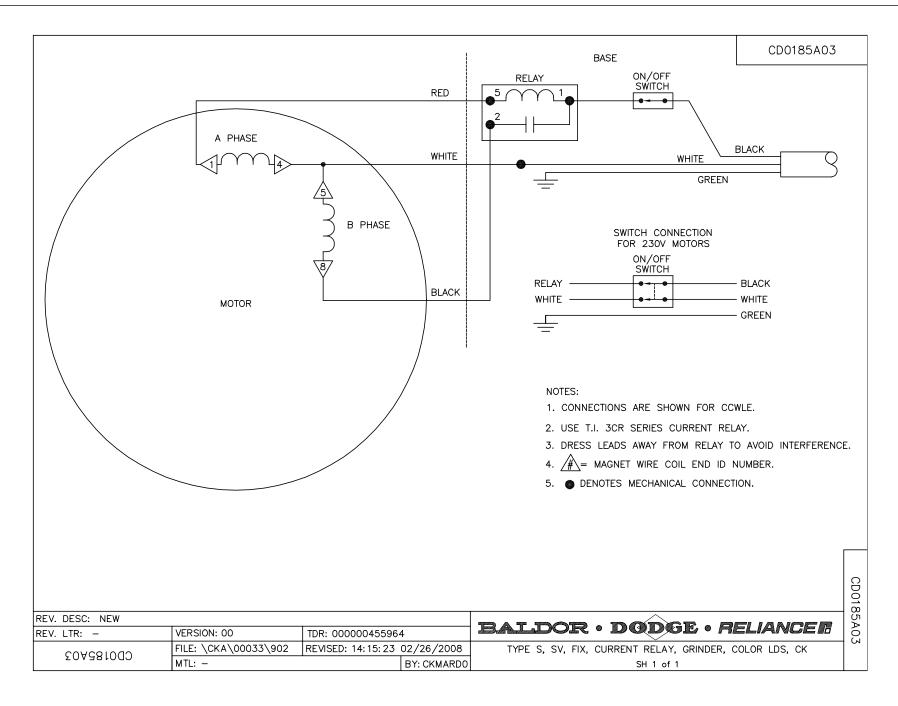
Accessories				
Part Number	Description	Multiplier		
GA16E	PEDESTAL LIGHT INDUSTRIAL,STEEL	A8		
GA16	PEDESTAL INDUSTRIAL, CAST IRON 6" - 10"	A8		
B66	6" 36 GRIT GRINDING WHEEL	A8		
B67	6" 60 GRIT GRINDING WHEEL	A8		
GA14	PEDESTAL FABRICATED STEEL W/SHELVES	A8		
GA13	EYE SHIELD GLASS ASSEMBLY FOR 6" GRINDER	A8		
BQ1-015-CC	1PH Brake, NEMA 1,110-125 VAC, 50/60Hz	P1		
BQ1-015-CP	1PH Brake, Panel 110-125 VAC, 50/60 Hz	P1		

No performance data has been assigned to this product.











Product Information Packet

500

.5HP,3600RPM,1PH,60HZ,3524C,3524C,TENV

BALDOR • RELIANCE Product Information Packet: 500 - .5HP,3600RPM,1PH,60HZ,3524C,3524C,TENV

Part Detail							
Revision:	ВН	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	G9WG0343	CD Diagram:	CD0285	Mfg Plant:	
Mech. Spec:	A-559	Layout:	ALY0559	Poles:	02	Created Date:	08-08-2007
Base:	RG	Eff. Date:	12-18-2018	Leads:	3#18		

Specs				
Nameplate Output:	.5			
Product Style:	GRINDER			

BALDOR • RELIANCE Product Information Packet: 500 - .5HP,3600RPM,1PH,60HZ,3524C,3524C,TENV

Nameplate NP3118			
CAT.NO.	500		
HP	.5	VOLTS 115	
PHASE	1	AMPS 5	
HZ	60	RPM 3600	
SER.NO			
SPEC.	A-559-343		

Parts List				
Part Number	Description	Quantity		
SA037565	SA A-559-343	1.000 EA		
RA033590	RA A-559-343	1.000 EA		
OC3012F12SP	CYL OIL CAP 12MFD/370V	1.000 EA		
G8BA3000A02	BASE, MACH	1.000 EA		
19XX2510A14	1/4-10 X 7/8 HEX HD PLASTITE SCREW	4.000 EA		
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA		
HA6053A01ZP	CLAMP, CAPACITOR 2" DIA, WHITE ZINC PLAT	1.000 EA		
51XN1032A04	10-32 X 0.25 HX WS SL SR	3.000 EA		
XY1032A01	10/32 SQUARE NUT	3.000 EA		
HW1001A10	WASHER, #10 SPLT LK, ZN X	3.000 EA		
WD4102A04	SR 7P-2 HEYCO STRN RELIEF OR 22MP07P20 M	1.000 EA		
LD5001A01	CORD & PLUG SET 18/3 SJTOW 105C 300V 8'	1.000 EA		
WD4006A01	WIRE JOINT,T&B RB-4 OR RB-44	2.000 EA		
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA		
HW1001A10	WASHER, #10 SPLT LK, ZN X	1.000 EA		
SP9019SP	SWITCH 7563K6 (EATON)	1.000 EA		
HW1003A50	LOCKWASHER,1/2",EXT.TOOTHZINC PLATED	1.000 EA		
WD1000A02	41202 AMP RECP.(11M/REEL)NON-CANCELABLE/	4.000 EA		
G8CB4500A02	G8-272 BASE COVER,STPD X PLATED	1.000 EA		
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA		
G9EP1900A02	ENDPLATE, MACH	1.000 EA		
HW5100A04	WAVY WASHER, 204 BRG	1.000 EA		
G9EP1900A03	ENDPLATE, MACH	1.000 EA		
51XN1032A18	10-32 X 1 1/8 HX WS SL SR (ESKAY)	4.000 EA		

Parts List (continued) Part Number Description Quantity HA3100A45 THRUBOLT 10-32 X 8.875 4.000 EA XY1032A02 10-32 HEX NUT DIRECTIONAL SERRATION 4.000 EA G9FH1800A01 GRINDER GUARD, MACH 1.000 EA HA3212A01 DR-1895D TABLE GUIDE PLMS(AUTO.MACH) 4.000 EA 10XN2520A14 1/4 20X7/8 HX HD CAP 4.000 EA HW1001A25 LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I 4.000 EA G9FH1800A01 GRINDER GUARD, MACH 1.000 EA HA3212A01 DR-1895D TABLE GUIDE PLMS(AUTO.MACH) 4.000 EA 10XN2520A14 1/4 20X7/8 HX HD CAP 4.000 EA HW1001A25 LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I 4.000 EA G9AP1003A01 TABLE CLAMP, MACH AMB 4.000 EA HA5001A01 HA5001A01 TABLE CL.SCREW WELKER 4.000 EA HW1000A38 WASHER, 3/8" FLAT, SAE Z/P 4.000 EA HW1001A38 LOCKWASHER 3/8, ZINC PLT .688 OD. .382 I 4.000 EA G9AP1000A01 TABLE, TOOL GR. MACH 2.000 EA G9AP1001A01 WATER TRAY, 153 CARBIDE TOOL GRINDER 2.000 EA HA3405A01 4.000 EA DR-798A STUD(AUTO.MACH) G9AP1005A02 DR799B LH ANGLE INDICATOR ZINC PLATED 2.000 EA 51XN1032A06 10-32 X .38 HEX SLOTTED SERRATED WASHER 4.000 EA HA3407A01 DR-780 TABLE STUD(AUTO) 2.000 EA XY3118A12 5/16-18 HEX NUT DIRECTIONAL SERRATION 2.000 EA G9AP1005A01 DR799A RH ANGLE INDICATOR PLATED 2.000 EA 51XN1032A06 10-32 X .38 HEX SLOTTED SERRATED WASHER 4.000 EA HA3407A01 DR-780 TABLE STUD(AUTO) 2.000 EA

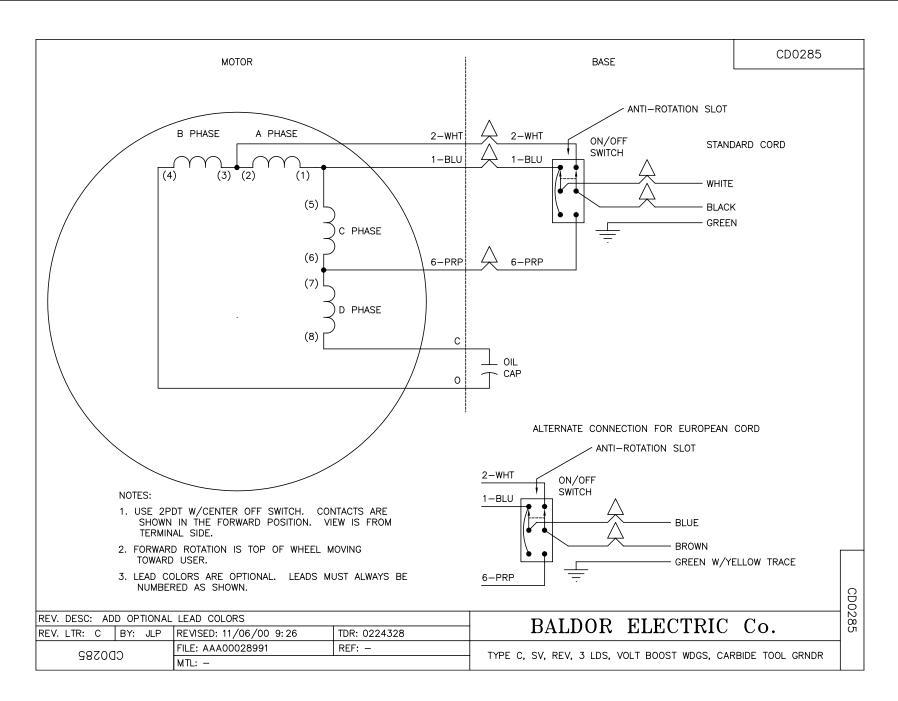
Product Information Packet: 500 - .5HP,3600RPM,1PH,60HZ,3524C,3524C,TENV

5/16-18 HEX NUT DIRECTIONAL SERRATION	2.000 EA
	2.000 EA
TOOL REST ASSEMBLY	1.000 EA
WHEEL FLANGE, MACH	2.000 EA
DR8218 SCREW (WELKER) AISI-1018	8.000 EA
3/4-16HEX JAM NUT(RH)MACH	2.000 EA
HUB PROTECTOR FOR GRINDER 3.88"OD	2.000 EA
HUB PROTECTOR FOR GRINDER 4.425"OD	2.000 EA
VNYL CAP 1.125-14 701-89 BLACK S/R Q=	2.000 EA
WATER POT ASSEMBLY	1.000 EA
DR-798B STUD (AUTO)	2.000 EA
GRINDER LIGHT VIMCO	1.000 EA
10-16X 1/2HXWSSLD SERTYB	2.000 EA
SLINGER, OD 1.750, ID .938, 205 BRG	2.000 EA
LABEL, UL	1.000 EA
LABEL, UL APP CARBIDE GDR	1.000 EA
LABEL, "ON" AND "OFF" X	1.000 EA
#4-7 X 1/4 DRIVE PIN	2.000 EA
GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
MUNSELL 5.93PB 3.81/ 2.71	0.017 GA
3-520140-4 AMP TRM=3.4M/R	6.000 EA
ALUM GRINDERS-BUFFERS NO LOGO'S	1.000 EA
WARNING LABEL	1.000 EA
PKG GRP, PRINT PK1156A06	1.000 EA
MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL	0.001 EA
CARTON(OPF)GRINDER PARTS,13-1/4X8-1/4X2	2.000 EA
Inst. Manual for Tool Grinders 9/03	1.000 EA
	WHEEL FLANGE, MACH DR8218 SCREW (WELKER) AISI-1018 3/4-16HEX JAM NUT(RH)MACH HUB PROTECTOR FOR GRINDER 3.88"OD HUB PROTECTOR FOR GRINDER 4.425"OD VNYL CAP 1.125-14 701-89 BLACK S/R Q= WATER POT ASSEMBLY DR-798B STUD (AUTO) GRINDER LIGHT VIMCO 10-16X 1/2HXWSSLD SERTYB SLINGER, OD 1.750, ID .938, 205 BRG LABEL, UL LABEL, UL APP CARBIDE GDR LABEL, "ON" AND "OFF" X #4-7 X 1/4 DRIVE PIN GREASE, POLYREX EM EXXON (USe 4824-15A) MUNSELL 5.93PB 3.81/2.71 3-520140-4 AMP TRM=3.4M/R ALUM GRINDERS-BUFFERS NO LOGO'S WARNING LABEL PKG GRP, PRINT PK1156A06 MICROFOAM, 8"X"8 PERF. SHEETS 5,400/RL CARTON(OPF)GRINDER PARTS, 13-1/4X8-1/4X2

BALDOR • RELIANCE Product Information Packet: 500 - .5HP,3600RPM,1PH,60HZ,3524C,3524C,TENV

Accessories						
Part Number	Description	Multiplier				
GA16	PEDESTAL INDUSTRIAL, CAST IRON 6" - 10"	A8				
GA14	PEDESTAL FABRICATED STEEL W/SHELVES	A8				
GA20	PEDESTAL INDUSTRIAL, CAST IRON 8"-14"	A8				
GA20E	PEDESTAL LIGHT INDUSTRIAL,STEEL	A8				
GA7	DIAMOND NIB FOR GA8	A8				
GA8	WHEEL DRESSER	A8				
C61	60 GRIT CARBIDE GRINDING WHEEL	A8				
C121	120 GRIT CARBIDE GRINDING WHEEL	A8				
S46	46 GRIT GRINDING WHEEL/ALUM OXIDE	A8				
S61	60 GRIT GRINDING WHEEL/ ALUM. OXIDE	A8				
BQ1-015-CC	1PH Brake, NEMA 1,110-125 VAC, 50/60Hz	P1				
BQ1-015-CP	1PH Brake, Panel 110-125 VAC, 50/60 Hz	P1				

No performance data has been assigned to this product.





BLACK GRANITE SURFACE PLATES

ASME B89.3.7-2013 Fed Spec GGG-P-463c
Plates smaller than 12" x 18" made to Manufacturer's Spec

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or equivalent natl or intl organization

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4-LEDGE

0-LEDGE 2-LEDGE

SURFACE PLATES AA GRADE (LABORATORY)

SIZE INCHES	0-LI	EDGE	2-1	2-LEDGE 4-LEDGE		LEDGE	OVERALL	REPEAT	SHIP
WxLxT	\$	Item#	\$	Item#	\$	Item#	ACCURACY	READING	WT LB
8 x 12 x 2	132.00	8x12x2-AA0	N/A		N/A		.000050"	.000035"	28
9 x 12 x 3	155.00	9x12x3-AA0	N/A		N/A		.000050"	.000035"	40
12 x 12 x 3	177.00	12x12x3-AA0	N/A		N/A		.000050"	.000035"	54
12 x 18 x 3	219.00	12x18x3-AA0	256.00	12x18x3-AA2	292.00	12x18x3-AA4	.000050"	.000035"	81
18 x 18 x 4	376.00	18x18x4-AA0	434.00	18x18x4-AA2	488.00	18x18x4-AA4	.000050"	.000035"	156
18 x 24 x 4	462.00	18x24x4-AA0	508.00	18x24x4-AA2	582.00	18x24x4-AA4	.000075"	.000035"	208
24 x 24 x 4	630.00	24x24x4-AA0	678.00	24x24x4-AA2	728.00	24x24x4-AA4	.000075"	.000045"	278
24 x 36 x 6	944.00	24x36x6-AA0	1,017.00	24x36x6-AA2	1,114.00	24x36x6-AA4	.0001"	.000045"	601
24 x 48 x 6	1,305.00	24x48x6-AA0	1,389.00	24x48x6-AA2	1,584.00	24x48x6-AA4	.000150"	.000045"	802
30 x 48 x 6	1,654.00	30x48x6-AA0	1,775.00	30x48x6-AA2	1,874.00	30x48x6-AA4	.000175"	.000045"	1,002
36 x 36 x 6	1,379.00	36x36x6-AA0	1,516.00	36x36x6-AA2	1,662.00	36x36x6-AA4	.000150"	.000045"	902
36 x 48 x 6	1,930.00	36x48x6-AA0	2,052.00	36x48x6-AA2	2,316.00	36x48x6-AA4	.0002"	.000045"	1,203
36 x 60 x 8	2,414.00	36x60x8-AA0	2,607.00	36x60x8-AA2	2,894.00	36x60x8-AA4	.000250"	.000060"	1,966
36 x 72 x 10	2,966.00	36x72x10-AA0	3,255.00	36x72x10-AA2	3,618.00	36x72x10-AA4	.0003"	.000060"	2,914
48 x 48 x 8	2,757.00	48x48x8-AA0	2,888.00	48x48x8-AA2	3,101.00	48x48x8-AA4	.0002"	.000060"	2,097
48 x 60 x 8	3,136.00	48x60x8-AA0	3,495.00	48x60x8-AA2	3,738.00	48x60x8-AA4	.0003"	.000060"	2,621
48 x 72 x 10	3,712.00	48x72x10-AA0	3,931.00	48x72x10-AA2	4,219.00	48x72x10-AA4	.000350"	.000060"	3,885
48 x 96 x 12	6,210.00	48x96x12-AA0	6,357.00	48x96x12-AA2	6,658.00	48x96x12-AA4	.0005"	.000075"	5,920

SURFACE PLATES A GRADE (INSPECTION)

SIZE INCHES	0-LE	DGE	2-LEDGE		4-LEDGE		OVERALL	REPEAT	SHIP
WxLxT	\$	Item#	\$	Item#	\$	Item#	ACCURACY	READING	WT LB
8 x 12 x 2	105.00	8x12x2-A0	N/A		N/A		.0001"	.000060"	28
9 x 12 x 3	126.00	9x12x3-A0	N/A		N/A		.0001"	.000060"	40
12 x 12 x 3	146.00	12x12x3-A0	N/A		N/A		.0001"	.000060"	54
12 x 18 x 3	185.00	12x18x3-A0	219.00	12x18x3-A2	256.00	12x18x3-A4	.0001"	.000060"	81
18 x 18 x 3	295.00	18x18x3-A0	333.00	18x18x3-A2	414.00	18x18x3-A4	.0001"	.000060"	121
18 x 24 x 3	351.00	18x24x3-A0	389.00	18x24x3-A2	424.00	18x24x3-A4	.000150"	.000060"	162
24 x 24 x 3	486.00	24x24x3-A0	552.00	24x24x3-A2	630.00	24x24x3-A4	.000150"	.000070"	216
24 x 36 x 4	668.00	24x36x4-A0	745.00	24x36x4-A2	843.00	24x36x4-A4	.0002"	.000070"	416
24 x 48 x 6	1,064.00	24x48x6-A0	1,146.00	24x48x6-A2	1,282.00	24x48x6-A4	.0003"	.000070"	802
30 x 48 x 6	1,339.00	30x48x6-A0	1,456.00	30x48x6-A2	1,558.00	30x48x6-A4	.000350"	.000070"	1,002
36 x 36 x 6	1,138.00	36x36x6-A0	1,275.00	36x36x6-A2	1,353.00	36x36x6-A4	.0003"	.000070"	902
36 x 48 x 6	1,545.00	36x48x6-A0	1,653.00	36x48x6-A2	1,798.00	36x48x6-A4	.0004"	.000070"	1,203
36 x 60 x 6	2,004.00	36x60x6-A0	2,124.00	36x60x6-A2	2,341.00	36x60x6-A4	.0005"	.000080"	1,503
36 x 72 x 8	2,607.00	36x72x8-A0	2,799.00	36x72x8-A2	3,136.00	36x72x8-A4	.0006"	.000080"	2,359
48 x 48 x 6	2,105.00	48x48x6-A0	2,235.00	48x48x6-A2	2,448.00	48x48x6-A4	.0004"	.000080"	1,603
48 x 60 x 6	2,773.00	48x60x6-A0	3,014.00	48x60x6-A2	3,270.00	48x60x6-A4	.0006"	.000080"	2,004
48 x 72 x 8	3,088.00	48x72x8-A0	3,304.00	48x72x8-A2	3,618.00	48x72x8-A4	.0007"	.000080"	3,145
48 x 96 x 10	5,404.00	48x96x10-A0	5,544.00	48x96x10-A2	5,822.00	48x96x10-A4	.001"	.0001"	4,933

Custom and Larger Sizes, Inserts, and Holes Quoted on Request

STEEL STANDS







The ASME B89.3.7-2013 and Fed. Spec. GGG-P-463c recommends three fixed points to support the surface plate and minimize sag and warp. PRECISION GRANITE® plates are marked on the bottom of the plate to coincide with the supports on the top of the stand. When aligned with each other they uphold the accuracy of the plate.

PRECISION GRANITE® standard stands are manufactured to support the weight of the surface plate plus 50 pounds per square foot load. Stands are made for each plate to meet a 36" working height unless specified otherwise.



36 YEARS

Grizzly | SKU: G3155 | Model # G3155

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Grizzly G3155 - 8" x 20" Surface Grinder





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Grizzly | SKU: G3155 | **Model # G3155**

8" x 20" Surface Grinder



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\$23⁹⁵

Product Resources > In the Catalog > Documents

Overview

This is the big brother to the G3104 surface grinder for those who need more capacity. Heavy castings, smooth operation, and dependable precision are built into this well-made unit. Check out the specs below and you will see this is an incredible value for a machine of this quality.

Features:

- Flood coolant system
- Column dial
- Cross feed dial
- Cast iron cabinet
- One-shot lubrication
- Power indicator lights
- Work light
- 7-7/8" x 15-3/4" magnetic chuck
- Grinding wheel balancing kit
- Dressing diamond with mount
- Cast iron construction
- Includes 24-grit grinding wheel



Close

Specifications:

211 2201/3 hase, 6.8A



.3/4"

^{-1/8} Grizzly | SKU: G3155 | **Model # G3155**

8" x 20" Surface Grinder

ible to wheel: 13-7/8"

d, 7/8" head

Grinding wheel: 1-1/4" B x 3/4" W x 8" D

Maximum grinding area: 10" x 21-1/2"

\$4,95000 In Stock

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Overall dimensions: 66" W x 43" D x 64" H

Column size: 9-1/4" x 12-3/4"

Spindle diameter: 1-1/4"

Spindle speed: 3450 RPM

Approximate shipping weight: 1898 lbs.

Comparisons

Reviews

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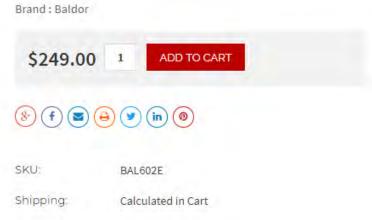
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Baldor 602E 6" Grinder/Buffer, 3,600 RPM - Stamp Steel Tool Rest, Exhaust Type





PRODUCT DESCRIPTION

PRODUCT REVIEWS

Baldor 6" Industrial Grinder Cast

Cast aluminum wheel guards can be exhausted or left closed. 8-foot power cord. Base mounted on/off switch. Rubber feet minimize vibration.

Features:

• Supplied with one 6" X 3/4" X 1/2" 36 grit wheel and one wire brush wheel



For More Baldor Options

- Exhaust type wheels guards
 - can be connected to a standard 3.00" shop vacuum hose.
- Furnished with GA13 eyeshields. U.L. Listed, Designed to comply with OSHA standards under normal usage.
- Built for heavy-duty grinding, powered by 1/3 HP Baldor split-phase motor. Slim design provides extra clearance
- for grinding odd shaped pieces. Gate exhaust-type guards accommodate a standard
- Adjustable stamp-steel tool rest, spark breaks and eyeshields. Wheels are 6" diamet

Offline. Leave a Message.

- Includes 8 ft. 3 conductor power cord. Base mounted on/off switch and rubber feet to minimize vibration
- Shipping Weight: 27 lbs, UL Agency Approval, Supplied with 36 grit and 0.014 wire wheel, Stamp Steel Tool Rests

Applications:

General purpose grinding. Used for shaping objects by removing material. Sharpen small tools.

Manufacturer's Warranty Only

Most Baldor grinders in stock and usually ship in 24 hours.

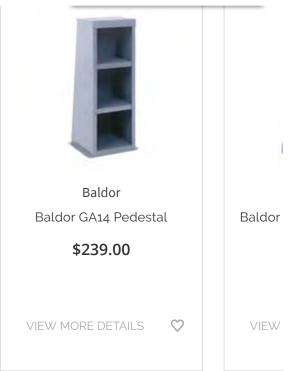
Specifications:

Catalog Number:	602E
Specification Number:	G6-0444-0017
Horsepower:	1/3
Voltage:	115
Hertz:	60
Phase:	1
Amps:	3.1
RPM:	3600
Insulation:	
Baldor Type:	3320S
Max Wheel Size:	6 inches
Bearings:	6203
Mechanical Specification Number:	G6LY0444
Electrical Specification Number:	G6WG0017
UL Listed:	Yes
CSA Certified:	No









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Aluminum vs. Steel BVA CylindersAluminum cylinders provide a great alternative to the traditional st

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MI-T-M | New Manufacturer

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BALDOR · RELIANCE II

Product Information Packet

600RE

20S 2P GRNDR (RED PAINT)

BALDOR • RELIANCE Product Information Packet: 600RE - 20S 2P GRNDR (RED PAINT)

Part Detail							
Revision:	Q	Status:	INA/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	G6WG0050	CD Diagram:	CD0185A03	Mfg Plant:	
Mech. Spec:		Layout:	G6-0443-0050	Poles:	02	Created Date:	10-10-2008
Base:		Eff. Date:	12-12-2018	Leads:	2#18		

Specs		
Nameplate Output:	.33	
Product Style:	GRINDER	

BALDOR • RELIANCE Product Information Packet: 600RE - 20S 2P GRNDR (RED PAINT)

Nameplate NP0523L					
CAT.NO. VOLTS		HP .33 AMPS 3.1			HZ 60
SPEC.	G6-0443-0050G1 3600	SER.			

Parts List			
Part Number	Description	Quantity	
SA176377	SA G6-0443-0050G1	1.000 EA	
RA164454	RA G6-0443-0050G1	1.000 EA	
RE1020SP	C.S.RELAY 3CR-738-169(TI)	1.000 EA	
G6BA3000BR	G6-264 BASE, CAST RED POWDER COAT	1.000 EA	
60XM2520A12	SCREW,PAN TORX 1/4-20X.750 THREAD FORMIN	2.000 EA	
HW1000A25	1/4 SAE FLAT WASHER (FS)	2.000 EA	
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	1.000 EA	
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	1.000 EA	
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	2.000 EA	
LD0090B120	LD,01 6.5" BLK W/INSU FLAG TERM	1.000 EA	
51XN0832A08	08-32 #10 & SMALLER HEX WASHER HEAD, SL	1.000 EA	
LD0158A02	CORD & PLUG ASSY 18-3 SJT 8' LONG	1.000 EA	
WD4102A01	SR-6L-1 HEYCO STRN RELIEF OR 23MPO6L10 M	1.000 EA	
SP9017SP	SWITCH 758OK8 (C-H)	1.000 EA	
HA3205A50	U550-N SWITCH NUT/CARLING	1.000 EA	
HW1003A50	LOCKWASHER,1/2",EXT.TOOTHZINC PLATED	1.000 EA	
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA	
G6CB4501L	BASE COVER PLATE 6" GRINDER BLACK	1.000 EA	
RM1012	6" GRINDER FOOT	4.000 EA	
11XT1032A06	10-32 X 3/8 HX WSHR HD SLTD TYPE 23	2.000 EA	
G6EP3900A01BR	EP,G6AC DE CL 6203 BIG RED POWDER COATIN	1.000 EA	
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA	
HA3107A03	10-32 X 5.375 THRUBOLT OHIO	2.000 EA	
G6EP3900A01BR	EP,G6AC DE CL 6203 BIG RED POWDER COATIN	1.000 EA	

Parts List (continued)			
Part Number	Description	Quantity	
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA	
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	2.000 EA	
G6FH3804A01BR	GRINDER GUARD COVER, BIG RED POWDER COAT	1.000 EA	
51XF1032A08	10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED	4.000 EA	
G6FH3804A01BR	GRINDER GUARD COVER, BIG RED POWDER COAT	1.000 EA	
51XF1032A08	10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED	4.000 EA	
HA6113SP	GRINDER FLANGE, STAMPED ZINC PLATED	2.000 EA	
G6AP3000A02	A60N6V10 6X3/4X1/2 60GRITB67	1.000 EA	
XY5020A12SP	1/2-20 NUT R.H. HEX (NF)	1.000 EA	
HA6113SP	GRINDER FLANGE, STAMPED ZINC PLATED	2.000 EA	
B66	A36N5V10 6X3/4X1/2 36GRITB66	1.000 EA	
XY5020A62SP	1/2-20 NUT L.H. HEX (NF)X	1.000 EA	
G6FH3804BR	GRINDER GUARD COVER, BIG RED POWDER COAT	1.000 EA	
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA	
G6AP1012A02ZP	GRINDER TOOL REST,PU END/RH, ZINC PLATED	1.000 EA	
83XN2520A40	1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA	
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA	
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA	
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA	
HW1023A25	WASHER, 1/4 INT/EX TH LK, ZN X	1.000 EA	
HW1000A25	1/4 SAE FLAT WASHER (FS)	1.000 EA	
83XN2520A40	1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA	
HW1000A25	1/4 SAE FLAT WASHER (FS)	1.000 EA	
XY2520A03	NUT, WING 1/4-20	1.000 EA	

Product Information Packet: 600RE - 20S 2P GRNDR (RED PAINT)

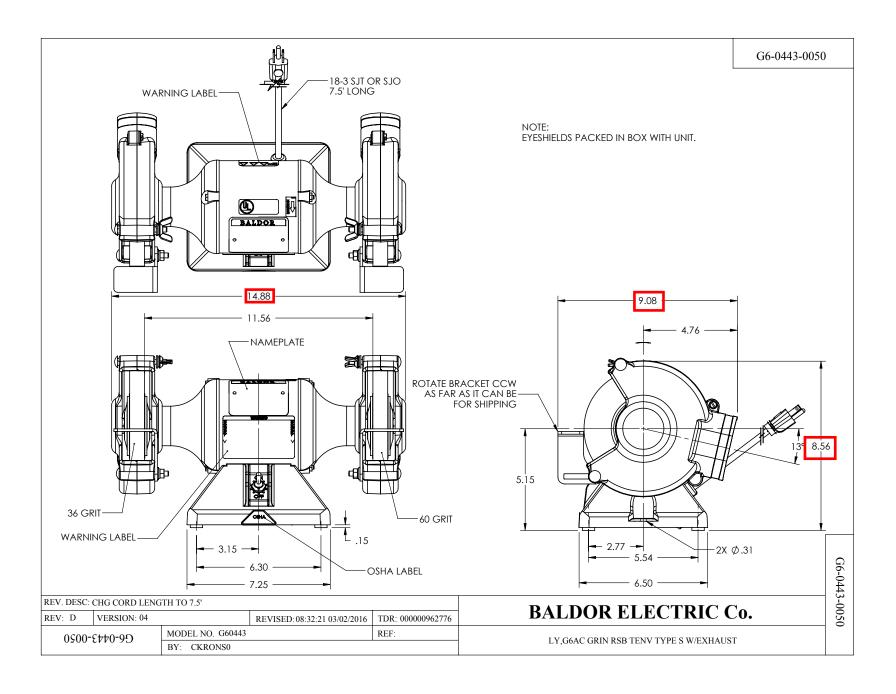
CDINIDED CHARD COVED DIG DED DOWNER COAT	4 000 54
GRINDER GUARD COVER, BIG RED POWDER COAT	1.000 EA
10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
GRINDER TOOL REST,FR END/LH, ZINC PLATED	1.000 EA
1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA
1/4 SAE FLAT WASHER (FS)	1.000 EA
1/4-20 X 2 1/2" LONG CARRIAGE BOLT	1.000 EA
1/4 SAE FLAT WASHER (FS)	1.000 EA
NUT, WING 1/4-20	1.000 EA
GRINDER GUARD EXHAUST PLATE	2.000 EA
ALUM NO LOGO'S 6" GRINDER - BUFFER	1.000 EA
4X1/4 U DRIVE PIN STAINLESS	2.000 EA
EYE SHIELD GLASS ASSEMBLY FOR 6" GRINDER	1.000 EA
WARNING LABEL	1.000 EA
LABEL, WARNING	1.000 EA
LABEL, OSHA (ON ROLLS)	1.000 EA
LABEL,ROTATION DIRECTION (ON ROLLS)	1.000 EA
LABEL, UL	1.000 EA
INSTR MANUAL FOR GRINDERS 9/03	1.000 EA
PKG GRP, PRINT PK1027A06	1.000 EA
	GRINDER TOOL REST,FR END/LH, ZINC PLATED 1/4-20 X 2 1/2" LONG CARRIAGE BOLT 1/4 SAE FLAT WASHER (FS) 1/4-20 X 2 1/2" LONG CARRIAGE BOLT 1/4 SAE FLAT WASHER (FS) NUT, WING 1/4-20 GRINDER GUARD EXHAUST PLATE ALUM NO LOGO'S 6" GRINDER - BUFFER 4X1/4 U DRIVE PIN STAINLESS EYE SHIELD GLASS ASSEMBLY FOR 6" GRINDER WARNING LABEL LABEL, WARNING LABEL, OSHA (ON ROLLS) LABEL, OSHA (ON ROLLS) LABEL, UL INSTR MANUAL FOR GRINDERS 9/03

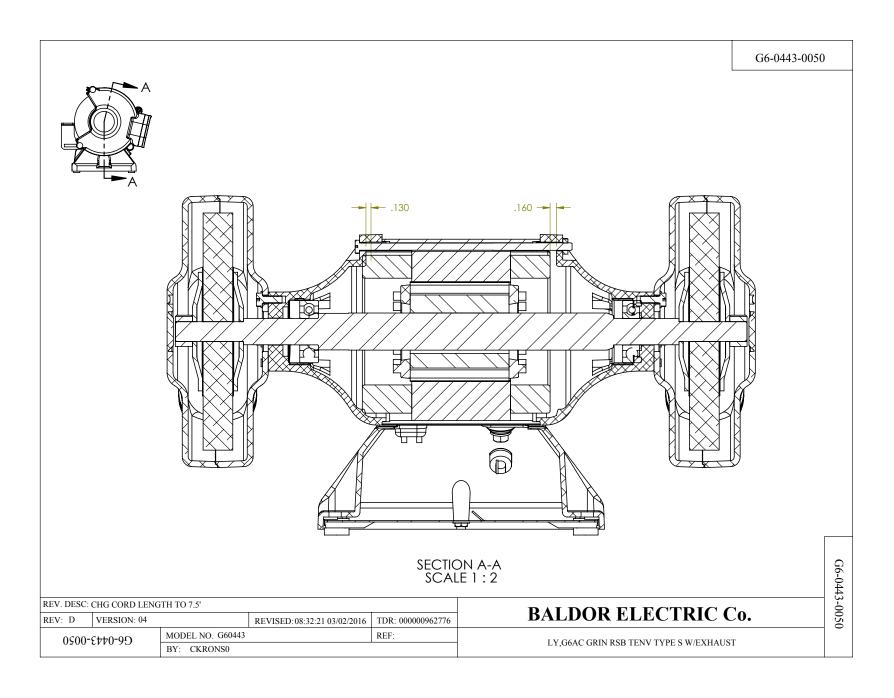
BALDOR • RELIANCE Product Information Packet: 600RE - 20S 2P GRNDR (RED PAINT)

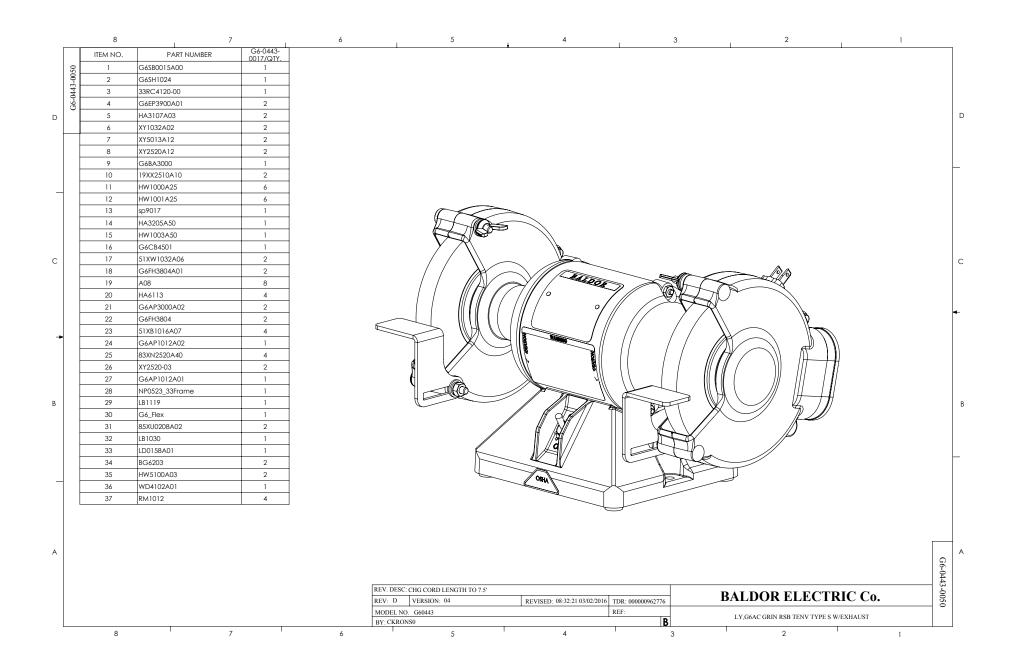
Accessories			
Part Number	Description	Multiplier	
GA16RE	PEDESTAL LIGHT INDUSTRIAL,STEEL-RED	A8	
GA14R	PEDESTAL FABRICATED STEEL W/SHELVES-RED	A8	
GA16R	PEDESTAL IND., CAST IRON 6" - 10" RED	A8	
GA13	EYE SHIELD GLASS ASSEMBLY FOR 6" GRINDER	A8	
B66	6" 36 GRIT GRINDING WHEEL	A8	
B67	6" 60 GRIT GRINDING WHEEL	A8	
BQ1-015-CC	1PH Brake, NEMA 1,110-125 VAC, 50/60Hz	P1	
BQ1-015-CP	1PH Brake, Panel 110-125 VAC, 50/60 Hz	P1	

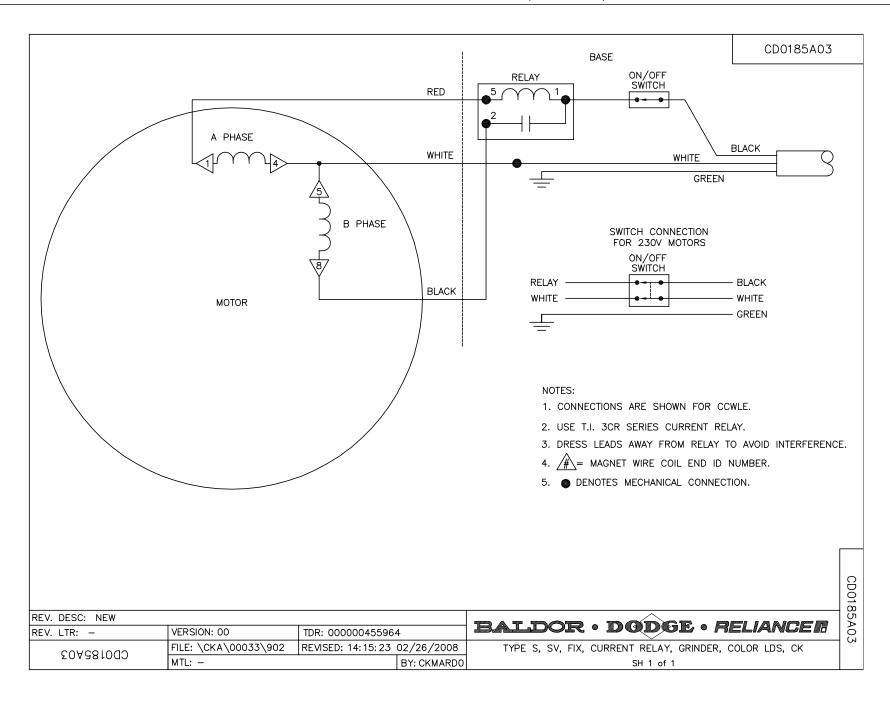
BALDOR · RELIANCE

No performance data has been assigned to this product.











VBS-2012, 20" VERTICAL **BANDSAW**

414482

The line of JET Vertical Bandsaws offers machine and fabrication professionals all the power and precision in a package that meets their individual specifications. An exclusive gear box design permits variety of cutting applications. Features you've come to expect, backed by the industry-leading JET Two Year Warranty



FEATURES

- Heavy-duty bandsaw, can handle large production pieces on its extra-large table
- Multi-tilting worktable
- · Easy to read blade tension indicator
- Variable speeds provide proper adjustments for high efficiency cutting
- Bi-Metal blade welder, grinder and cutter
- Work lamp
- · Chip blower
- Blade and tire cleaning brush
- Set of tools
- 1/4" x 14/18VT Bi-Metal blade



JET RED ASSURANCE 2-YEAR WARRANTY

JET warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these JPW Industries Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.



VBS-2012, 20" VERTICAL BANDSAW

414482



SPECIFICATIONS

Blade Speeds (SFPM)	65 - 3,280
Height Capacity (Max.) (In.)	12
Throat Capacity (In.)	20
Table Size (L x W) (In.)	24 x 22-1/2
Table Tilt (Deg.)	8 F & B, 15 R & 12 L
Blade Length (In.)	156-1/2
Blade Width (MinMax.) (In.)	1/8 - 1
Table Height (In.)	39-1/2
Motor (HP)	2 HP, 230/460V, 3Ph
Overall Dimensions (L x W x H) (In.)	42 x 30 x 79
Weight (Lbs.)	1,244



J-2221VS, 20" VARIABLE SPEED DRILL PRESS 115/230V 1PH

354221

All the precision operation and control on a heavy-duty cast iron base. Variable speed spindles, front mounted positive control depth stop and other features that enhance overall operation make these JET 20" Variable Speed Drill Presses a machinist's first choice.



FEATURES

- · Heavy-duty steel column for increased precision and rigidity
- Variable spindle speeds from 300 to 2,000 RPM
- Easy-to-read internal depth gauge
- Large production table and T-slotted dish in base
- Table can be raised from front or side
- Table rotates 360° around column
- MT-3 Spindle taper





J-2221VS, 20" VARIABLE SPEED DRILL PRESS 115/230V 1PH

354221

SPECIFICATIONS

Style (Type)	Variable
Drills to Center of Circle (in)	20
Drilling Capacity Cast Iron (In.)	1-1/4
Drilling Capacity Mild Steel (In.)	1
Distance Column to Spindle (In.)	10-7/16
Number of Spindle Speeds	Variable
Range of Spindle Speeds (RPM)	300 - 2,000
Column Diameter (In.)	4-1/2
Spindle Taper (In. x TPI)	MT-3
Spindle Travel (In.)	6
Spindle Distance to Base (In.)	43-5/16
Spindle Distance to Table (Max.) (In.)	30-1/4
Table Travel (In.)	18
T-Slots Number and Size (In.)	2 and 5/8
T-Slot Centers (In.)	7-7/16
Table Size (L x W) (In.)	18-1/8 x 14-3/4
Work Table Weight Capacity (Lbs.)	176



STAND BEHIND YOUR WORK™





Operating Instructions and Parts Manual **20-inch Variable Speed Drill Presses**

Models: J-2221VS, J-2223VS, J-2232AC, J-2234AC



JET 427 New Sanford Road LaVergne, Tennessee 37086 Ph.: 800-274-6848 www.jettools.com

Part No. M-354221 Revision E1 06/2017 Copyright © 2017 JET

Warranty and Service

JET warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries, Inc.

Product Listing with Warranty Period

90 Days - Parts; Consumable items

1 Year - Motors; Machine Accessories

2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes

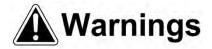
5 Year – Woodworking Machinery

Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools; Air Tools

NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.

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- Misuse of this machine can cause serious injury.
- For safety, machine must be set up, used and serviced properly.
- Read, understand and follow instructions in the Operating Instructions and Parts Manual which was shipped with your machine.

When setting up machine:

- Always avoid using machine in damp or poorly lighted work areas.
- Always be sure the machine support is securely anchored to the floor or the work bench.

When using machine:

- Always wear safety glasses with side shields (See ANSI Z87.1)
- Never wear loose clothing or jewelry.

- Never overreach—you may slip and fall. **When servicing machine:**

- Always disconnect the machine from its electrical supply while servicing.
- Always follow instructions in Operating Instructions and Parts Manual when changing accessory tools or parts.
- Never modify the machine without consulting JET.

You—the stationary power tool user—hold the key to safety.

Read and follow these simple rules for best results and full benefits from your machine. Used properly, JET machinery is among the best in design and safety. However, any machine used improperly can be rendered inefficient and unsafe. It is absolutely mandatory that those who use our products be properly trained in how to use them correctly. They should read and understand the Operating Instructions and Parts Manual as well as all labels affixed to the machine. Failure in following all of these warnings can cause serious injuries.

Machinery General Safety Warnings

- Always wear protective eye wear when operating machinery. Eye wear shall be impact resistant, protective safety glasses with side shields which comply with ANSI Z87.1 specifications. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from breakage of eye protection.
- Wear proper apparel. No loose clothing or jewelry which can get caught in moving parts. Rubber soled footwear is recom-mended for best footing.
- 3. Do not overreach. Failure to maintain proper working position can cause you to fall into the machine or cause your clothing to get caught, pulling you into the machine.
- Keep guards in place and in proper working order. Do not operate the machine with guards removed.
- Avoid dangerous working environments. Do not use stationary machine tools in wet or damp locations. Keep work areas clean and well lit.
- Avoid accidental starts by being sure the start switch is "OFF" before plugging in the machine.

- 7. Never leave the machine running while unattended. Machine shall be shut off whenever it is not in operation.
- Disconnect electrical power before servicing.
 Whenever changing accessories or general
 maintenance is done on the machine,
 electrical power to the machine must be
 disconnected before work is done.
- 9. Maintain all machine tools with care. Follow all maintenance instructions for lubricating and the changing of accessories. No attempt shall be made to modify or have makeshift repairs done to the machine. This not only voids the warranty but also renders the machine unsafe.
- 10. Machinery must be anchored to the floor.
- 11. Secure work. Use clamps or a vise to hold work, when practical. It is safer than using your hands and it frees both hands to operate the machine.
- 12. Never brush away chips while the machine is in operation.
- Keep work area clean. Cluttered areas invite accidents.
- 14. Remove adjusting keys and wrenches before turning machine on.

- 15. Use the right tool. Don't force a tool or attachment to do a job for which it was not designed.
- Use only recommended accessories and follow manufacturer's instructions pertaining to them.
- 17. Keep hands in sight and clear of all moving parts and cutting surfaces.
- 18. All visitors should be kept at a safe distance from the work area. Make workshop completely safe by using padlocks, master switches, or by removing starter keys.
- 19. Know the tool you are using its application, limitations, and potential hazards.

Familiarize yourself with the following safety notices used in this manual:

This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

This means that if precautions are not heeded, it may result in serious or even fatal injury.

General Electrical Cautions

This drill press should be grounded in accordance with the National Electrical Code and local codes and ordinances. This work should be done by a qualified electrician. The saw should be grounded to protect the user from electrical shock.

Wire sizes

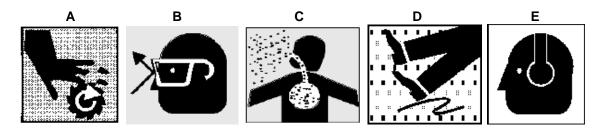
Caution: For circuits which are far away from the electrical service box, the wire size must be increased in order to deliver ample voltage to the motor. To minimize power losses and to prevent motor overheating and burnout, the use of wire sizes for branch circuits or electrical extension cords according to the following table is recommended.

	AWG (American Wire Gauge) number		
Conductor Length	240 Volt lines	120 Volt lines	
0-50 feet	No. 14	No. 14	
50-100 feet	No. 14	No. 12	
Over 100 feet	No. 12	No. 8	

Safety Instructions for Drill Presses

- All work shall be secured using either clamps or a vise to the drill press table. It is unsafe to use your hands to hold any workpiece being drilled.
- Drill press head and table shall be securely locked to the column before operating the drill press. This must always be checked prior to starting the machine.
- 3. Always use the correct tooling. Tooling shall always be maintained and properly sharpened. All tooling must be run at the proper speeds and feeds as they apply to the job. Use only recommended accessories and follow those manufacturer's instructions pertaining to them. Tooling shall not be forced in to any work piece but fed according to the proper specifications. Failure to follow these instructions will not only ruin the tooling as well as the machine, but can cause serious injury.
- 4. Never brush away any chips while the machine is in operation. All clean up should be done when the machine is stopped.

- Keep hands in sight. Do not put hands or fingers around, on, or below any rotating cutting tools. Leather safety gloves should be used when handling any sharp objects or cutting tools. See Figure A.
- 6. Always wear protective eye wear when operating, servicing or adjusting machinery. Eyewear shall be impact resistant, protective safety glasses with side shields complying with ANSI Z87.1 specifications. Use of eye wear which does not comply with ANSI Z87.1 specifications could result in severe injury from breakage of eye protection. Figure B.
- When drilling in material which causes dust, a dust mask shall be worn. See Figure C.
- 8. Avoid contact with coolant, especially guarding the eyes.
- 9. Non-slip footwear and safety shoes are recommended. See Figure D.
- 10. Wear ear protectors (plugs or muffs) during extended periods of operation. See Figure E.



Introduction

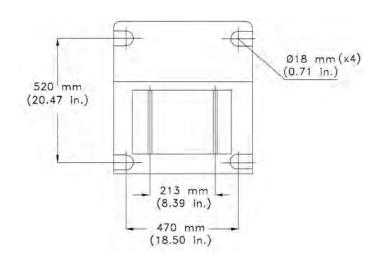
This manual is provided by JET covering the safe operation and maintenance procedures for a JET 20-inch Variable Speed Drill Press. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide years of trouble free operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

General Specifications

The JET 20-inch Variable Speed Drill presses Models J-2221VS, J-2223VS, J-2232AC and J-2234AC are available in manual speed control or inverter speed control configuration. Electrical power options are single-phase, 115 and 220 volts; or 3-phase, 440 volts.

	Manual Spe	Manual Speed Control Models		Inverter Speed Control Models	
Model	J-2221VS	J-2223VS	J-2232AC	J-2234AC	
Stock Number	354221	354223	354214 .	354216	
Drilling Capacity:					
Cast Iron (in.)	1-1/4	1-1/4	1-1/2 .	1-1/2	
Steel (in.)			1-3/8 .	1-3/8	
Spindle to Table Max. (in.)	30-1/4	30-1/4	30-1/4 .	30-1/4	
Spindle to Base Max. (in.)	44-1/2	44-1/2	44-1/2 .	44-1/2	
Spindle to Column Max. (in.)	10-7/16	10-7/16	10-7/16 .	10-7/16	
Motor:					
Rating	2HP, 1-Phase	2HP, 3-Phase	2HP, 3-Phase.	2HP, 3-Phase	
Voltage					
Pre-wired Voltage	115V	220V	220V .	440V	
T-Slots (Table/Base):					
Number					
Size (in.)					
Column Diameter (in.)	4-1/2	4-1/2	4-1/2 .	4-1/2	
Spindle:					
Travel (in.)	6	6	6 .	6	
Taper	MT-3	MT-3	MT-3 .	MT-3	
RPM (variable)	300-2000	300-2000	65-2000 .	65-2000	
Quill:					
Diameter (in.)					
Travel (in.)	6	6	6 .	6	
Table:					
Overall Size (in.)	22 x 18-3/4	22 x 18-3/4	22 x 18-3/4 .	22 x 18-3/4	
Working Surface (in.)					
Travel (in.)	18	18		18	
Base:					
Overall Size (in.)					
Working Surface (in.)	15-1/4 x 12-1/16	15-1/4 x 12-1/16	15-1/4 x 12-1/16 .	15-1/4 x 12-1/16	
Overall Dimensions:					
Length (in.)	34-1/4		36-5/8 .	36-5/8	
Width (in.)	27	27	27 .	27	
Height (in.)					
Net Weight	715 lbs.(325 kgs.)	715 lbs.(325 kgs.)	792 lbs.(325 kgs.).	792 lbs.(325 kgs.)	

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.



Hole centers in Base (all models)

The JET Model J-2221VS and J-2223VS drill presses feature manual speed control. Models J-2232AC and J-2234AC have inverter speed control. This manual contains procedures for both speed control versions. The manual provides separate instructions when differences in operation and maintenance exist.

Refer to Figures 1 and 2 for key features of the drill press.

Electrical Control Enclosure Panel (hidden, far Drill Head Head Speed Clamping Adjustment Nuts (2) Handwheel Switch Drive Motor Depth Indicator Spindle Spindle Handle Column Work Table Base Mounting Slots (4)

Figure 1 Drill Press Features (Manual Speed Control Model)

Operation and Set-Up

Securing the Base

The base of the drill press has four mounting slots; two slots on both sides of the base. The drill press should be level and rest solidly on the floor. Place shims under the four mounting slots in the base as needed to level the drill press.

When securing the base to the floor, apply even torque to the fasteners to prevent distortion of the base.

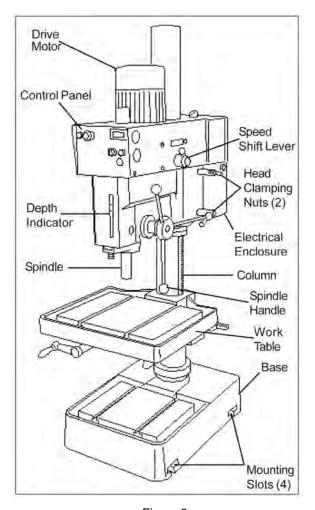


Figure 2
Drill Press Features
(Inverter Speed Control Model)

Raising the Drill Head and Table

The drill press is shipped with the table and drill head supported by wooden blocks near the bottom of the column.

The head is raised to the operating position using a strap and hoist, then secured to the column by tightening the hex cap screw. The table is raised to the desired position using the crank handle. See *Adjustments* section for more information.

Electrical Connection

be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

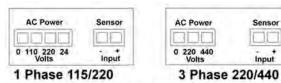
Refer to the Wiring Diagram section for wiring information.

The Drill Press is not supplied with a power cord. To connect power, you may either install a power cord with a UL/CSA listed plug, or hard wire the machine directly to a service panel.

If the drill press is to be hard-wired to a panel, make sure a disconnect is available for the operator. (During hard-wiring of the machine, make sure the fuses have been removed or the breakers have been tripped in the circuit to which the drill press will be connected.)

Manual control models: Model J-2221VS (1-Phase) is pre-wired for 110 volts. Model J-2223VS (3-Phase) is pre-wired for 220 volts.

NOTE: If rewiring the J-2221VS or J-2223VS for alternate voltage, you must reconnect the wire on the LED display accordingly (Figure 3), in addition to changing the motor leads.



LED Display Connection

Figure 3

Inverter control models: Model J-2232AC (3-Phase) is pre-wired for *220 volt only*. The machine can also be run on 1-Phase power by hooking up the ground, L1 and L2 wires, as explained below.

Model J-2234AC (3-Phase) is pre-wired for *440* volt only.

To wire the drill press with inverter control:

If using a power cord, strip back the cord until about 3 to 4 inches of the lead wires are exposed.

Slide a grommet onto the cord to be installed later in the control box hole, to prevent stress to the power cord.

- Bring the lead wires through the hole in the side of the control box and connect as follows (refer to Figure 3a):
- 2. If your incoming power is **single phase**, connect the two leads to L1 and L2, and the green ground wire to the grounding screw.

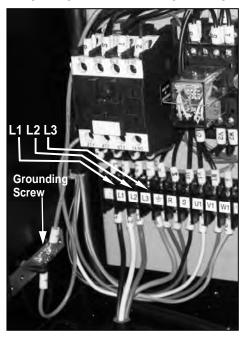


Figure 3a

3. If your incoming power is **three phase**, connect the three leads to L1, L2 and L3, and the green ground wire to the grounding screw.

This drill press must be properly grounded. Make sure the green ground wire is secured to the grounding screw as described.

Make sure the power available matches the power requirement of the drill. When the drill is connected properly, the spindle turns clockwise in a conventional drilling rotation. If the spindle does not turn clockwise, disconnect the drill from the power supply and reverse two of the three power leads (except ground wire *green*).

Operating Controls

Manual Speed Control (Models J-2221VS and J-2223VS)

Refer to Figure 4.

Spindle Selector Switch

A three-position selector switch is provided at the left side of the drill head. It is used to select spindle rotation: reverse (REV), off (OFF), and forward (FWD).

Speed Control Hand Wheel

ACAUTION To avoid damage to the speed adjustment mechanism, the drive motor must be operating before attempting to adjust the speed setting.

A speed control hand wheel is provided on the left front of the head (Figure 4). The handle is turned clockwise to increase spindle speed and counterclockwise to reduce speed. To set the speed, the speed control handle is turned until the pointer on the front panel is at the desired speed.

Speed Indicator

An LED spindle speed indicator is provided on the front panel. The LED indicates speeds from 300 to 2000 rpm.

A selector switch is provided at the left side of the drill head. The two-position switch is used to start and stop the drive motor.

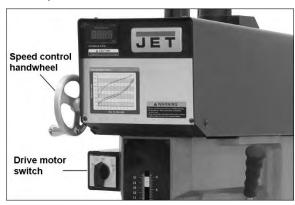


Figure 4
Control Panel (Manual Speed Control)

Inverter Speed Control (Models J-2232AC and J-2234AC)

Speed Shift Lever

To avoid damage to the speed adjustment mechanism, the drive motor must be operating before attempting to adjust the speed setting.

A speed shift lever is on the right side of the head (refer to Figure 2 for location). The handle is turned clockwise to increase spindle speed and counterclockwise to reduce speed.

Front Panel

The front panel (Figure 5) is mounted on the front of the drill head. The panel contains all the controls required to operate the drill press. There are additional controls on the inverter mounted on the left side of the drill head. The inverter is preprogrammed at the factory and <u>the settings are not</u> to be changed!

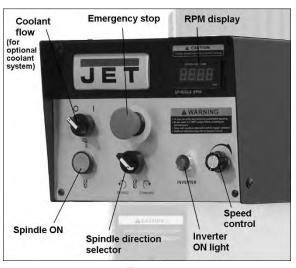


Figure 5
Control Panel (Inverter Control)

Inverter On Indicator

The INVERTER ON light indicates that the inverter is powered up.

Spindle On Pushbutton Switch

The SPINDLE ON pushbutton is used to start the drive motor. To stop the motor, the pushbutton is pressed (the switch toggles on and off).

Emergency Stop Pushbutton Switch

The mushroom shaped EMG. STOP pushbutton switch provides a quick means of stopping the drive motor. To reset the pushbutton switch, the knob is turned clockwise (as shown on the face of the knob).

RPM Display

The spindle speed display shows the spindle RPM selected by the speed control knob.

Spindle Speed Knob

The SPINDLE SPEED knob is used to set the desired spindle speed (clockwise increases).

Spindle Selector

The SPINDLE selector switch is used to set the desired direction of spindle rotation. The REV. (reverse) setting will provide counterclockwise rotation. The FOR. setting will provide clockwise rotation.

Drilling Speed Chart

A DRILLING SPEED CHART is provided on the front panel. The chart can be used to select the speed required for various drill sizes (0.196 inch to 1.000 inch — 5 mm to 25 mm) and materials (steel, cast iron, aluminum, and copper). The chart defines spindle speeds from 300 to 2000 RPM.

Depth Indicator — All Models

Refer to Figure 6.

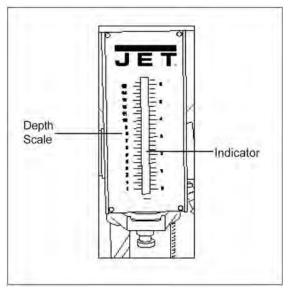


Figure 6

A drilling depth indicator is provided on the front of the drill head. The indicator can be set for depths up to 6.5 inches (16.5 mm). A knurled knob is provided at the front, underside of the head. Before starting the motor, set the end of the drill against the surface into which the hole is to be drilled. The indicator is zeroed out using the knurled knob. The motor is started and the hole drilled until the indicator pointer reaches the desired depth.

Maintenance

Replacement of Drive Belt

electrical power to the drill press to avoid the possibility of inadvertent operation and exposure to potentially lethal voltage levels.

Manual Speed Control (Models J-2221VS and J-2223VS)

- Start drill press. Set speed control to highest speed. Stop drill press.
- Disconnect electrical power by setting drill press circuit breaker to OFF.
- 3. Remove head cover.
- 4. Remove belt. (With speed control setting at the highest speed, the belt should be loose enough to remove.)
- Install the replacement belt. Install the head cover.
- 6. Set the drill press circuit breaker ON.
- 7. Operate the drill press to verify correct operation.

Inverter Speed Control (Models J-2232AC and J-2234AC)

- Disconnect electrical power by setting drill press circuit breaker to OFF.
- Remove pan screws from small cover (around column). Remove pan screws and eight bolts from head cover.
- 3. Loosen set screw and remove shift lever.
- 4. Remove plastic spindle cup.
- Remove head cover. Leave small cover in place.
- 6. Disconnect electrical wiring from motor junction box. Remove motor from mounting plate.
- 7. Remove motor mounting plate.
- Remove three screws from pulley covers (discs). Remove used belt. Install the replacement belt.
- 9. Install pulley covers and secure with three screws in each pulley cover.
- 10. Install motor mounting plate. Install motor and connect electrical wiring (refer to *Wiring Diagram* section for wiring details).
- 11. Install the head cover and secure with pan screws and eight bolts.
- Secure small head cover to head cover using pan screws.
- 13. Set the drill press circuit breaker ON.
- 14. Operate the drill press to verify correct operation.

Replacement of Motor

electrical power to the drill press to avoid the possibility of inadvertent operation and exposure to potentially lethal voltage levels.

Manual Speed Control (Models J-2221VS and J-2223VS)

- Remove drive belt (refer to Replacement Of Drive Belt).
- Disconnect electrical wiring from motor junction box.
- Remove nuts from mounting studs securing motor to drill head. Remove motor.
- 4. Remove upper and lower pulleys and related components from motor shaft.
- 5. Install upper and lower pulleys and related components on replacement motor shaft.
- 6. Install motor on mounting studs and secure with nuts.
- 7. Connect electrical wiring (refer to *Wiring Diagram* section for wiring details).
- 8. Install drive belt (refer to Replacement Of Drive Belt).
- 9. Operate drill press to verify proper operation.

Inverter Speed Control (Models J-2232AC and J-2234AC)

Refer to Replacement Of Drive Belt for instructions on removal of the drive motor.

Lubrication

Following are lubrication recommendations for drill press components.

Manual Speed Control (Models J-2221VS and J-2223VS)

- 1. Spindle pulley drive: Lubricate spindle splines occasionally with light grease.
- 2. Quill and column: Lubricate with light film of oil.
- Lift rack: Lubricate regularly with SAE 20 oil (clean rack with kerosene before applying oil).
- 4. Variable drive:
 - Speed control fork: service oil hole with SAE 20 oil once a week.
 - b. Countershaft spindle and push rod: Lubricate with SAE 20 oil occasionally.
 - c. Speed control handle cam: Clean and grease with medium cup grease annually.

Inverter Speed Control (Models J-2232AC and J-2234AC)

- Spindle pulley drive: Lubricate spindle splines occasionally with light grease.
- 2. Quill and column: Lubricate with light film of oil.
- 3. Lift rack: Lubricate regularly with SAE 20 oil (clean rack with kerosene before applying oil).
- 4. Variable speed drive:
 - a. Periodically check oil level in sight gauge on (left side of head) (refer to Figure 7).
 - b. If level is below centerline of sight gauge, add oil.
 - c. To add oil, remove oil fill tube cover plate. Pull fill tube out of hole in head cover.
 - d. Add SAE 20 oil to bring oil level up to the centerline of the sight gauge.
 - e. Put end of fill tube back through hole in head cover. Install fill tube cover and secure with two screws.

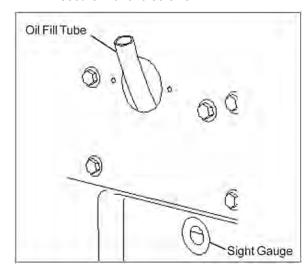


Figure 7

Adjustments

Table Adjustment

Refer to Figure 8.

The table can be raised or lowered to accommodate the height of the workpiece. To raise or lower the table, loosen the table lock using the hand crank. Then use the hand crank to move the table to the desired height. Then lock the table in position.

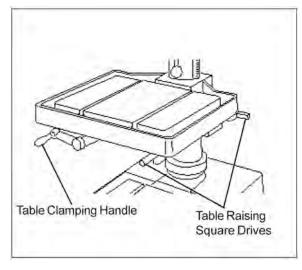


Figure 8

Radial Head Adjustment (All Models)

AWARNING Change the radial position of the drill head only if the drill press base is secured to the floor. Swinging the drill head without the base being secured to the floor will cause the drill press to become unstable and tip over resulting in injury and/or damage to the machine.

The radial position of the drill head can be changed to accommodate the drilling of a hole that may be offset from the center of the table. Reposition the drill head as follows:

- 1. Loosen the two clamping hex nuts using the hex socket wrench provided with the machine.
- The swing the drill head to the desired position.
- 3. Tighten the two clamping nuts.

Speed Pickup Adjustment (All Models)

- Loosen screws securing speed pickup (ref. 68A, page 23) to plate (ref. 69A, page 23).
- 2. Adjust the speed pickup gap to approximately 1/8-inch. Re-tighten screws.

3. Operate drill press to verify that speed readout is operating correctly.

Operating Precautions

The following operating and safety precautions must be observed in order to avoid harm to the operator or damage to the drill press.

- The head assembly must be locked to the column so the thrust produced by drilling will not force the head assembly up the column.
- 2. The work table must be locked to the column so it will not be forced down the column.
- Before drilling, release the quill lock nut to permit free travel of the quill.
- Be sure the belt is tightened to the proper tension.
- DO NOT start to drill the workpiece until making certain the workpiece is held down securely.
- MAKE SURE THE DRIVE MOTOR IS RUNNING <u>BEFORE</u> turning the speed control handwheel in either direction.
- 7. Point of operation protection is required for maximum safety. This remains the responsibility of the user/purchaser since conditions differ between jobs.
- Make sure the drill is secured in the spindle or chuck before attempting to use the drill press.
- Make sure the spindle taper is clean and free of burrs, scoring, and galling to assure maximum gripping.

Drilling Recommendations

Speeds for Drilling

The speed of a drill is usually measured in terms of the rate at which the outer periphery of the tool moves in relation to the work being drilled. The common term for this is Surface Feet per Minute (SFM). The relationship of SFM is expressed in the following formulas:

SFM = 0.26 X rpm X Drill Diameter (in inches)

In general, the higher the speed the shorter the drill life. Operating at the low end of the speed range for a particular material will result in longer life. The most efficient speed for operating a drill depends on many variables:

- Composition and hardness of material.
- 2. Depth of the hole.
- 3. Efficiency of the cutting fluid.
- 4. Type and condition of the drilling machine.
- 5. Desired quality of the hole.
- 6. Difficulty of set-up.

Feeds for Drilling

The feed of a drill is governed by the size of the tool and the material drilled. Because the feed rate partially determines the rate of production and also is a factor in tool life, it should be chosen carefully for each job. In general, the most effective feeds will be found in the following ranges:

Diameter of Drill	Feed per Revolution
(inches)	(inches)
Under 1/8	0.001 to 0.002
1/8 to 1/4	0.002 to 0.004
1/4 to 1/2	0.004 to 0.007
1/2 to 5/8	0.007 to 0.015

Indication of Extreme Speeds and Feeds

A drill that splits up the web is evidence of too much feed or insufficient tip clearance at the center as a result of improper grinding. The rapid wearing away of the extreme outer corners of the cutting edges indicates that the speed is too high. A drill chipping or braking out at the cutting edges indicates that either the feed is too heavy or the drill has been ground with too much tip clearance.

Speeds for High Speed Steel Drills

<u>Material</u>	Speed In SFPM
Alloy Steel — 300 to 400 Brinell	20 - 30
Stainless Steel	30 - 40
Automotive Steel Forgings	40 - 50
Tool Steel, 1.2C	50 - 60
Steel, .4C to .5C	70 - 80
Mild Machinery Steel, .2C to .3C	80 - 110
Hard Chilled Cast Iron	
Medium Hard Cast Iron	70 - 100
Soft Cast Iron	100 - 150
Malleable Iron	80 - 90
High Nickel Steel or Monel	40 - 50
High Tensile Bronze	70 -150
Ordinary Brass and Bronze	
Aluminum and its Alloys	
Magnesium and its Alloys	250 - 400
Slate, Marble, and Stone	15 -25
Plastics and similar material (Bakelite).	
Wood	
Titanium Alloys	10 - 25
Titanium Alloy Sheet	

In cases where carbon steel drills are applicable, the drill should be run at speeds of from 40 to 50 percent of those given above.

Optional Equipment

Coolant System Installation

- Remove the large reservoir cover plate from the machine base. Tap 1/4-20 threads in the 4 pilot holes.
- Install the cover plate back onto the machine base.
- 3. Insert the pump into the opening, utilize the screws from the small round cover plate to fasten the pump to the base.
- 4. Position the power switch and valve bracket on the spindle casting. Mark mounting hole locations and drill holes. (Refer to Figure 8)

Note: Mount components near the lower edge of the spindle casting. <u>Do not</u> mount components above the line shown in Figure 9.

5. Install the power switch and valve bracket with the provided fastener hardware.

Figure: 8 Suggested installation

- 6. Install the 3/8-inch hose coupling to the coolant pump. If needed, apply a light coat of pipe sealant or thread seal tape to the threads to prevent leakage.
- Mount the flow valve to the bracket, connect the supply hose to the pump and valve, use hose clamps at the ends.
- 8. Install the flexible nozzle to the flow valve.
- Install the 1/2-inch hose coupler to the worktable, and seal threads if needed. Connect the return hose.
- 10. Connect the power cord to a suitable source and ground (refer to *General Electrical Cautions*).
- 11. Fill the reservoir with appropriate machining coolant.

Do not mount components above this line.

Power switch - mounting plate flush with bottom edge of spindle casting.



Figure 9: Installation Detail

Flow valve mounting bracket.

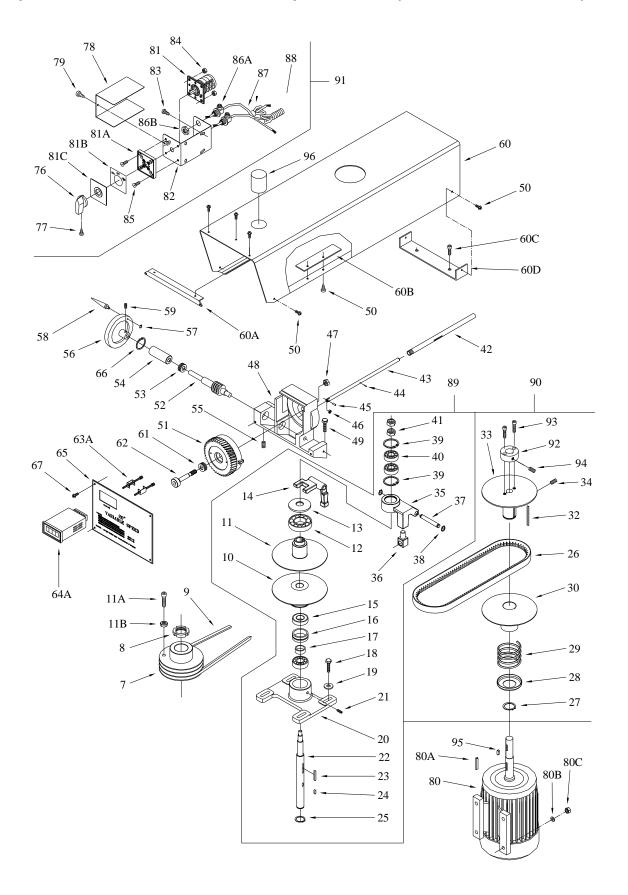
Troubleshooting

Trouble	Probable Cause	Remedy
Spindle does not turn.	Motor overload protector tripped.	Press motor overload reset button.
	Circuit breaker tripped.	Reset circuit breaker.
	Branch circuit breaker tripped or fuse blown.	Reset branch circuit breaker/replace fuse.
	Open wire in switch circuit.	Repair open circuit.
	Defective switch.	Replace switch.
	Broken drive belt.	Replace drive belt.
Caiadle asiau	Damaged spindle bearings.	Replace bearings.
Spindle noisy.	Worn spline.	Replace spline.
Drill stalls.	Worn drive belt.	Check condition of belt. Replace if glazed or slipping on pulleys.
	Excessive feed rate for size of drill and material being drilled. No cutting fluid or improper cutting fluid.	Reduce feed pressure or use cutting fluid. Use correct cutting fluid.
	Drill dull.	Sharpen drill.
Poorly drilled holes.	Lack of rigidity in hold-down method.	Check that all T-slot hold-downs are tight and that table-lock and drill head bolts are tight.
	Speed too fast for material and drill size.	Check spindle speed recommendations. Reduce speed if necessary.
	Feed too fast for material and drill size.	Reduce feed rate.
	No or improper cutting fluid or coolant being used.	Use cutting fluid, or change to proper fluid or coolant for material being drilled.
	Improperly ground drill bit.	Check for proper angles and reliefs. Regrind to proper geometry.
Motor overheating.	Electrical circuit fault.	Check current draw in circuit. Make sure current draw is the same as rating on motor plate.
	Oversize drill.	Reduce drill size.
	Excessive feed.	Reduce feed rate.
	No cutting fluid, or wrong fluid.	Use correct cutting fluid for the material and drill.
Table cannot be raised.	Lack of lubrication.	Lubricate.
No speed readout.	Speed pickup out of adjustment or failed.	Adjust gap between speed pickup and post spindle pulley. If there is no readout on the LED speed indicator after adjusting the gap, replace the speed pickup.

Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848, Monday through Friday (see our website for business hours, www.jettools.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Exploded View - Drill Head - Manual Speed Control (J-2221VS and J-2223VS)

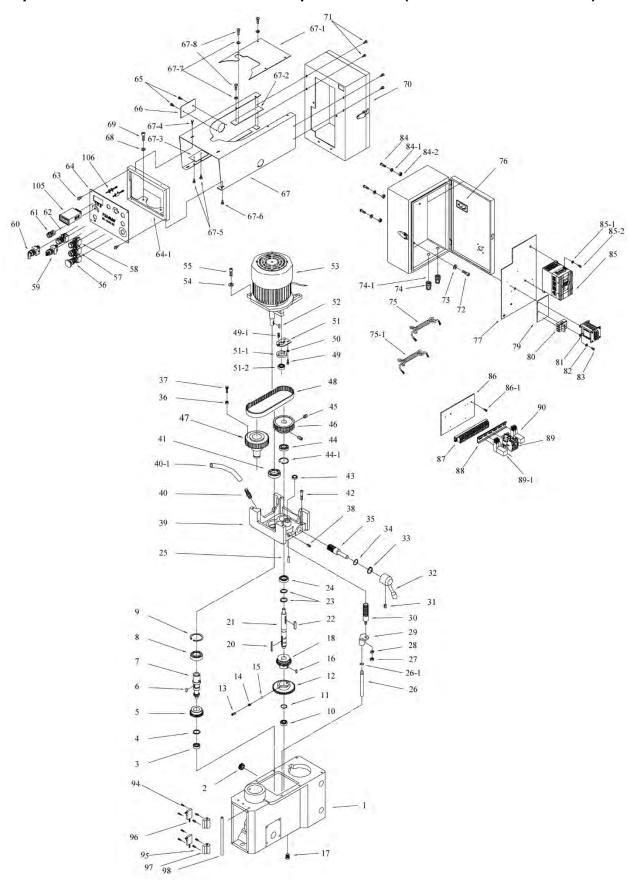


Parts List – Drill Head – Manual Speed Control (J-2221VS and J-2223VS)

Index No.		Description	Size	Qty
		. Spindle Step Pulley		
		. Spindle Nut		
		. V-Belt		
		VS Lower Spindle Pulley		
		VS Upper Spindle Pulley		
		. Cap Screw		
		. Hex Nut		
12	.5510082	Ball Bearing		1
		. Bearing Cover		
14	.5510084	. Speed Change Lever		1
15	.5510085	Ball Bearing		2
16	.5510086	. Bushing		1
		. Bushing		
		. Hex Bolt		
		. Washer		
		Bearing Housing		
		Set Screw		
		. Spindle Mid Shaft		
		Key		
		. Key		
		. C-Ring (Shaft)		
		. Variable Speed Belt		
		. C-Ring (Shaft)		
		. Spring Cover		
		. Spring		
		. VS Lower Motor Pulley		
		. Key		
		. VS Upper Motor Pulley		
34	.5510104	. Set Screw		1
35	.5510105	. Speed Change Bracket		1
		. Link		
		. Shaft		
		. C-Ring (Shaft)		
		. C-Ring (Hole)		
		. Ball Bearing		
		. Nut		
		. Control Rod Sleeve		
43	.5512115	. Control Rod		1
44	.5510114	. Pin Spring		1
		. Pin		
		. Roller		
47	.5510117	. Hex Nut		1
		. Housing		
		. Cap Screw		
		. Pan Head Screw		
		. Helix Gear		
		. Worm Gear		
		. Thrust Bearing		
54	.5510124	. Bushing		1
		Set Screw		
		. Hand Wheel (includes #58)		
		. Retaining Ring		
		. Hand Grip		
		Set Screw		
		Pulley Cover Assembly (incl 60A,60B,60C,60D)		
		Nameplate Bracket		
		. Cover Plate		
		. Cap Screw		
עטס	.J-35 I 3062	. Plate Bracket		1

Index No.	Part No.	Description	Size	Qty
61	. 5510131	. Thrust Bearing		1
		. Shaft		
63A	. 5513683	. Cap Screw		2
64A	5513519	. LED Display	115/230/24V	1
	.5513736	. LED Display	220/440	1
65	.5513690N	. Face Plate		1
66	.5513685	. C-Ring (Hole)		1
67	.5510137	. Round Head Screw		4
76	.5511848	. Knob		1
77	.5514634	. Set Screw	M3x8	1
78	.5511849	. Cover		1
		. Screw		
80	.J-5510344	. Motor	2HP 1PH 115/220V .	1
		. Motor		
80A	.5517320	. Square Key		1
		. Flat Washer		
80C	.5517322	. Hex Nut		4
81	.5517323	. Fwd/Rev Switch	1 Phase	1
	.5517331	. Fwd/Rev Switch	3 Phase	1
81A	.5517324	. Switch Plate		1
81B	.5517325	. Label		1
		. Label Cover		
82	.5513356	. Switch Box		1
83	.5513357	. Screw		2
84	.5513358	. Hex Nut		4
85	.5513359	. Screw		4
86A	.5517327	. Strain Relief		2
		. Hex Nut		
		. Connection Cord		
		. Power Cord		
		. VS Spindle Pulley Assembly		
90	.5513934	. VS Motor Pulley Assembly		1
		. Switch Assembly (includes items 76-79,81-85)		
	.5514716	. Switch Assembly (includes items 76-79,81-85)	3 Phase	1
		. Bushing		
		. Socket Head Cap Screw		
94	.TS-1524021	. Set Screw	M8 x 10	1
95	.2221VS-95	. Key	5 x 20 mm	1
		. Spindle Cap		

Exploded View - Drill Head - Inverter Speed Control (J-2232AC and J-2234AC)

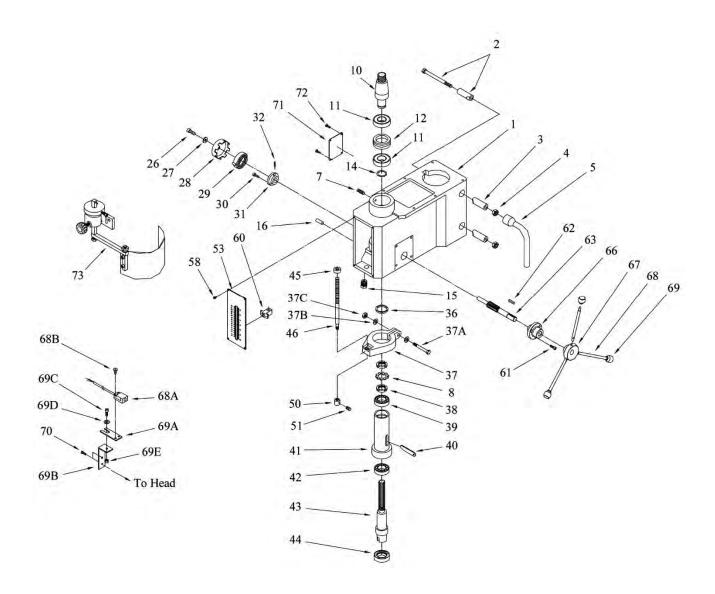


Parts List – Drill Head – Inverter Speed Control (J-2232AC and J-2234AC)

Index No.	Part No.	Description	Size	Qty
		Head Casting		
		Head Casting		
		Oil Window		
		Ball Bearing		
4	. 5510144	Retaining Ring		1
		Gear		
		Key		
		Drive Shaft		
		Ball Bearing		
		Retaining Ring		
		Ball Bearing		
		Retaining Ring		
		Gear		
		Set Screw		
		Spring		
		Steel Ball		
		Key		
		Drain Plug		
		Gear		
		Key		
		Mid Shaft		
		Key		
		Retaining Ring		
		Ball Bearing		
		Pin		
		Bar		
		Ring		
		Hex Nut		
		Spring Washer		
		Speed Change Block		
		Gear Bar		
		Set Screw		
		Speed Lever		
		Retaining Ring		
		Oil Seal		
		Gear Shaft		
		Hex Nut		
		Cap Screw		
		Set Screw		
		Gearbox Top Cover		
40	55 10 180 	Oil Fill Fitting	•••••	ا۱
	. 5510181 5510182	Oil Seal Bolt		
		Oil Seal		
		Oil Seal		
		Retaining Ring		
		Set Screw		
		Drive Pulley		
		Spindle Pulley with Driving Sleeve		
		Belt		
		Key		
53	.l-5517340	Motor	2HP 3PH 22N\/	1 1
		Motor		
		Washer		
		Screw		
		E-stop Switch		
		Speed Proximity Switch		
		Proximity Switch Bracket		
		Indicator Light		
		Pump Selector Switch		
60	5510200	Forward/Reverse Switch		1
••••••				

Index No.	Part No.	Description	Size	Qty
61	. 5510196	. Speed Control Potentiometer		1
		. Green Pushbutton Switch		
		. Screw		
		. Control Panel		
		. Plate Bracket		
		Pan Head Screw		
		Oil Filler Cover		
		Pulley Cover		
		Pan Head Screw		
		Screw		
		. Spring Washer		
		Screw		
		Enclosure (w/door & latch)		
		Screw		
		. Bolt		
		. Washer		
		. Cable Relief		
		. Cable Relief		
		Electric Cable		
		. Electric Cable		
		. Window Cover		
		. Component Mounting Panel		
		. Insulation Board		
		. Fuse Block		
81	. 5510229	. Transformer (for J-2232AC)	230V	1
		. Transformer (for J-2234AC)		
		. Washer		
		. Pan Head Screw		
		. Cap Screw		
		. Lock Washer		
		. Hex Nut		
		. Delta Inverter, M-type (serial no. 10110090 and highe		
	. 5512670	. Delta Inverter, M-type	440V, 3PH	1
85-1	. 5517371	. Flat Washer		4
85-2	. 5517372	. Screw		4
86	. 5517373	. Sub-Panel		1
86-1	. 5517374	. Screw		4
87	. 5510235	. Terminal Block		1
		. Mounting Rail		
		. Contactor		
		Relay		
		. Relay		
		. Screw		
		. Screw		
		. Microswitch		
		. Microswitch Bracket		
		. Microswitch Support Rod		
		Electrical Enclosure Complete		
		Electrical Enclosure Complete		
		LED Display		
		. Cap Screw		
		. Spindle Cap		
107	. 55 15205	. Opinule Cap		1

Exploded View – Spindle Components (All Models)

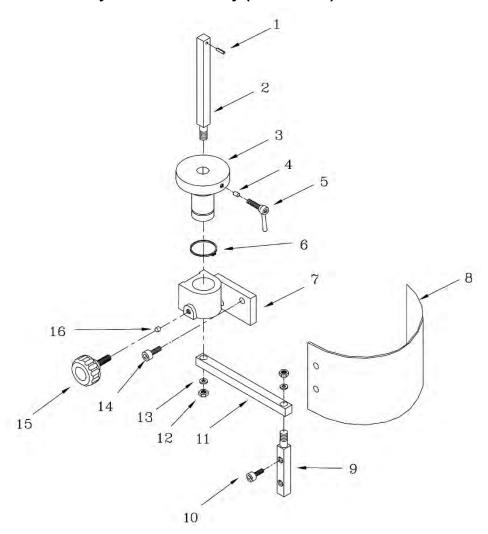


Parts List - Spindle Components (All Models)

Index No. Part No.	Description	Size	Qty
1J-5517332G	Head Casting	for 2221VS	1
J-5517332ACG	Head Casting	for 2232AC	1
	Hex Shoulder Bolt		
35517378	Cam Lock Rod		2
45510250	Hex Nut		2
55510251	Hex Head Wrench		1
75510252	Set Screw		1
85517379	External Tooth Washer		1
10 5510253	Driving Sleeve (for J-2221VS, J-2223VS only)		1
	Ball Bearing		
	Spacer		
	C-Ring		
	Set Screw		
165510259	Roll Pin		1
265510261	Socket Head Screw		1
	Washer		

28 .5510263 Container (includes #29) .1 29 .5510263 Return Spring .1 30 .5510265 Phillips Head Screw .3/16x3/4 in .3 31 .5510266 Spring Seat .1 32 .5510267 Spring Pin .1 36 .5513770 Rubber Washer .1 37 .J-5513771G Quill Band .1 37A .5517380 Hex Shoulder Bolt .1 37B .5517381 Flat Washer .2 37C .5517382 Hex Nut .1 38 .5513772 Lock Nut .2 39 .5513773 Ball Bearing .1 40 .5513774 Drift Pin .1 41 .5510269 Ball Bearing .1 42 .5510269 Ball Bearing .1 43 .5510271 Oil Seal .1 44 .5510272 Nut .1 45 .5510271 Oil Seal .1 46 .5510272 Nut .1<
29 5510263 Return Spring. 1 30 .5510265 Phillips Head Screw 3/16x3/4 in. 3 31 .5510266 Spring Seat 1 32 .5510267 Spring Pin 1 36 .5513770 Rubber Washer. 1 37 .J-5513771G Quill Band 1 37A .5517380 Hex Shoulder Bolt 1 37B .5517381 Flat Washer 2 37C .5517382 Hex Nut 1 38 .5513772 Lock Nut 2 39 .5513773 Ball Bearing 1 40 .5513774 Drift Pin 1 41 .5510268 Quill 1 42 .5510269 Ball Bearing 1 43 .5510270 Spindle 1 44 .5510271 Oil Seal 1 44 .5510272 Nut 1 46 .5510273 Depth Rod 1 50 .5510276 Retainer 1 51
30 5510265 Phillips Head Screw 3/16x3/4 in. 3 31 5510266 Spring Seat 1 32 5510267 Spring Pin 1 36 5513770 Rubber Washer 1 37 J-5513771G Quill Band 1 37A 5517380 Hex Shoulder Bolt 1 37B 5517381 Flat Washer 2 37C 5517382 Hex Nut 1 38 5513772 Lock Nut 2 39 5513773 Ball Bearing 1 40 5513774 Drift Pin 1 41 5510268 Quill 1 42 5510269 Ball Bearing 1 43 5510270 Spindle 1 44 5510271 Oil Seal 1 45 5510272 Nut 1 46 5510273 Depth Rod 1 50 5510276 Retainer 1 51 TS-1523011 Set Screw M6x6 1 58<
32 5510267 Spring Pin 1 36 5513770 Rubber Washer 1 37 J-5513771G Quill Band 1 37A 5517380 Hex Shoulder Bolt 1 37B 5517381 Flat Washer 2 37C 5517382 Hex Nut 1 38 5513772 Lock Nut 2 39 5513773 Ball Bearing 1 40 5513774 Drift Pin 1 41 5510268 Quill 1 42 5510269 Ball Bearing 1 43 5510270 Spindle 1 44 5510271 Oil Seal 1 45 5510272 Nut 1 46 5510273 Depth Rod 1 50 5510276 Retainer 1 51 TS-1523011 Set Screw M6x6 1 53 5510278 Depth Scale 1 58 5510279 Round Head Cap Screw 4 60 5510280
32 5510267 Spring Pin 1 36 5513770 Rubber Washer 1 37 J-5513771G Quill Band 1 37A 5517380 Hex Shoulder Bolt 1 37B 5517381 Flat Washer 2 37C 5517382 Hex Nut 1 38 5513772 Lock Nut 2 39 5513773 Ball Bearing 1 40 5513774 Drift Pin 1 41 5510268 Quill 1 42 5510269 Ball Bearing 1 43 5510270 Spindle 1 44 5510271 Oil Seal 1 45 5510272 Nut 1 46 5510273 Depth Rod 1 50 5510276 Retainer 1 51 TS-1523011 Set Screw M6x6 1 53 5510278 Depth Scale 1 58 5510279 Round Head Cap Screw 4 60 5510280
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43 5510270 Spindle 1 44 5510271 Oil Seal 1 45 5510272 Nut 1 46 5510273 Depth Rod 1 50 5510276 Retainer 1 51 TS-1523011 Set Screw M6x6 1 53 5510278 Depth Scale 1 58 5510279 Round Head Cap Screw 4 60 5510280 Key 1 61 5510281 Socket Head Screw 3 62 5510282 Key 1 63 5510283 Feed Shaft 1 66 5510284G Feed Shaft Seat 1 67 J-5510285G Hub 1
43 5510270 Spindle 1 44 5510271 Oil Seal 1 45 5510272 Nut 1 46 5510273 Depth Rod 1 50 5510276 Retainer 1 51 TS-1523011 Set Screw M6x6 1 53 5510278 Depth Scale 1 58 5510279 Round Head Cap Screw 4 60 5510280 Key 1 61 5510281 Socket Head Screw 3 62 5510282 Key 1 63 5510283 Feed Shaft 1 66 5510284G Feed Shaft Seat 1 67 J-5510285G Hub 1
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51 TS-1523011 Set Screw M6x6 1 53 .5510278 Depth Scale 1 58 .5510279 Round Head Cap Screw 4 60 .5510280 Key 1 61 .5510281 Socket Head Screw 3 62 .5510282 Key 1 63 .5510283 Feed Shaft 1 66 .5510284G Feed Shaft Seat 1 67 J-5510285G Hub 1
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58 .5510279 Round Head Cap Screw 4 60 .5510280 Key 1 61 .5510281 Socket Head Screw 3 62 .5510282 Key 1 63 .5510283 Feed Shaft 1 66 .5510284G Feed Shaft Seat 1 67 J-5510285G Hub 1
60 .5510280 Key 1 61 .5510281 Socket Head Screw 3 62 .5510282 Key 1 63 .5510283 Feed Shaft 1 66 .5510284G Feed Shaft Seat 1 67 J-5510285G Hub 1
61 .5510281 Socket Head Screw 3 62 .5510282 Key 1 63 .5510283 Feed Shaft 1 66 .5510284G Feed Shaft Seat 1 67 .J-5510285G Hub 1
62 .5510282 .5510283 .1 63 .5510283 .5510284G .1 66 .5510284G .5510284G .1 67 .5510285G .1 .1
63
665510284GFeed Shaft Seat
67J-5510285G Hub
VU
68A5513515Magnetic Pickup
68B5513687
69
5510286-RHA Rubber Handle Assembly (includes #68,69)
69A5517383Adjustable Plate
69B5517384 Mag. Pickup Bracket
69C5513689
69D5517385 Flat Washer
69E5517386
70
715511849
725513354
7332106A

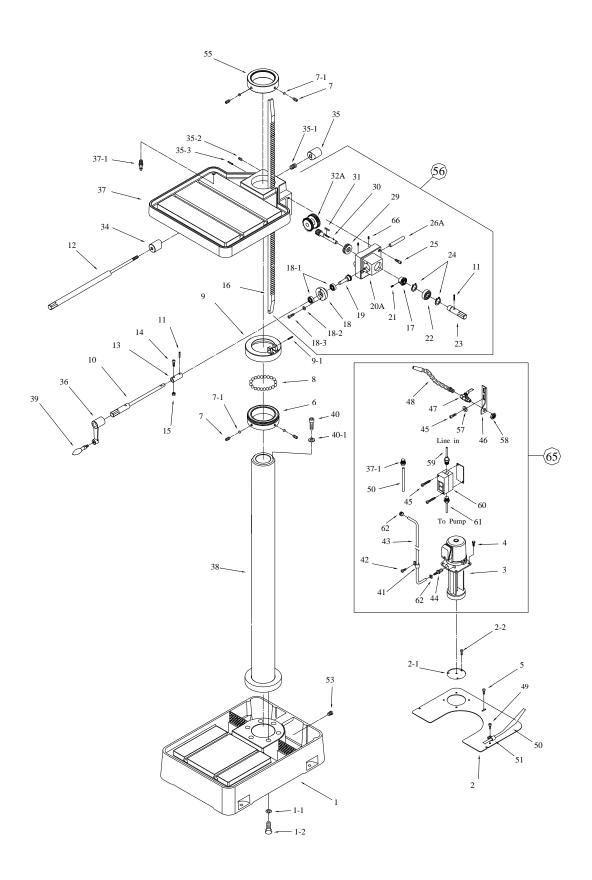
Exploded View - Safety Shield Assembly (All Models)



Parts List – Safety Shield Assembly (All Models)

Index No. Part No.	Description	Size	Qty
32106A	Safety Shield Assembly (#1 thru 16)		1
16293347	Spring Pin		
232106A-2	Support Bracket Bar		1
332106A-3	Bushing		1
432106A-4	Spacer		1
532106A-5	Lock Handle	M6x20	1
632106A-6	C-Clip	S30	1
732106A-7	Bracket		1
832106A-8	Safety Shield	530x210mm	1
932106A-9	Lower Bracket Bar		1
10TS-1504021	Hex Socket Head Cap Screw	M8x12	1
1132106A-11	Support Arm		1
12TS-0640091	Hex Nut	3/8"	1
13TS-0720091	Spring Washer	3/8"	1
14TS-1504041	Hex Socket Head Cap Screw	M8x20	1
1532106A-16	Lock Bolt with Knob	M8	1
1632106A-17	Spacer		1

Exploded View – Table and Base (All Models)

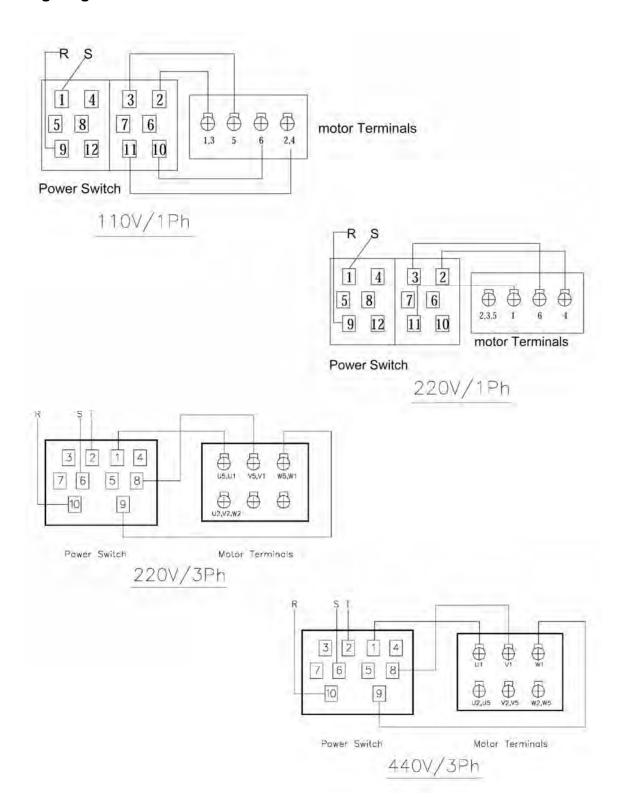


Parts List – Table and Base (All Models)

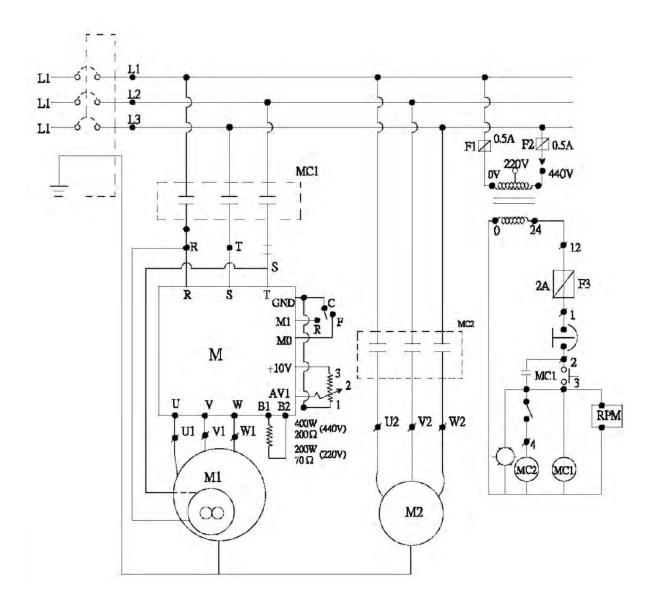
Index No.	Part No.	Description	Size	Qty
1	.J-5510288	. Base		1
	.J-5510288A	. Base (serial no. 7090589 and higher for 2221/2223)	/S	1
		(serial no. 7100425 and higher for 2232/2234AC	C)	
1-1	.TS-0720111	. Lock Washer	1/2"	6
1-2	.TS-0070031	. Hex Cap Screw	1/2" x 1-1/2"	6
2	.J-5510289	. Coolant Cover Plate		1
2-1	.20EVS-C2-1	. Small Cover		1
2-2	.20EVS-C4	. Screw w/Washer	1/4"	3
3	.5510456	. Coolant Pump	115V. 1P	1
		. Coolant Pump		
		. Hex Bolt		
		. Pan Head Screw		
		. Ball Seat		
		. Ball Seat (serial no. 7090589 and higher for 2221/2		
		(serial no. 7100425 and higher for 2232/223	4AC)	
7	.5510294	. Set Screw		4
		. Brass Block		
		Ball Bearing		
		Lock Ring		
		Lock Ring (serial no. 7090589 and higher for 2221/2		
		(serial no. 7100425 and higher for 2232/22		
9-1	.5517390	. Pin		1
		. Table Raiser Shaft		
-		. Spring Pin		
		. Table Clamp Shaft		
13	5516860	. Table Raiser Coupling		1
		Socket Head Screw		
		Nut		
		Rack		
		Large Bevel Gear		
		Bearing Housing		
		Ball Bearing		
		. Washer		
		Cap Screw		
		Small Bevel Gear		
		Bracket Cover		
		. Bracket Cover (serial no. 10120276 and higher for (serial no. 11010102 and higher for J-	2232AC/J-2234AC)	
		. C-Ring		
22	.5510307	. Ball Bearing		1
		. Shaft		
		. C-Ring		
		. Socket Head Screw		
		. Shaft		
26A	.5510311A	. Shaft (serial no. 10120276 and higher for J-2221/J-	2223VS)	1
		(serial no. 11010102 and higher for J-2232AC/J		
		. Bearing		
		. Table Raise Worm		
		. Key		
		. Worm Gear		
32A	.5510317A	. Worm Gear Assembly (serial no. 10120276 and higher (serial no. 11010102 and higher		
34	.5510319	Front Cam Lock		1
		. Rear Cam Lock		
		. Spring		
		Cap Screw		
		Pin		
30 0			5/120	

Index No	. Part No.	Description	Size	Qty
36	J-5510321	Table Raise Crank		2
37	J-5510322	Table		1
37-1	5517399	Hose Coupler (Return)	1/2"	1
		Column		
	5510323A	Column (serial no. 7090589 and higher for 2221/2	223VS	1
		(serial no. 7100425 and higher for 2232/22		
	5510323B	Column with Column Base Assembly		1
		(serial no. 14101393 and higher for 2221/2		
		(serial no. 14100286 and higher for 2232/2		
		Table Raise Handle		
		Hex Head Screw		
		Washer		
		Clamp		
		Pan Head Screw		
		Clear Vinyl Hose		
44	5510329	Hose Coupler (Supply)	3/8"	1
		Socket Head Cap Screw		
		Mounting Bracket		
		Valve		
		Flexible Nozzle		
		Pan Head Screw		
		Clear Vinyl Hose		
		Hose Clamp		
		Drain Plug		
		Rack Collar		
		Table Raiser Assembly		
57	9057451	Flat Washer	#10	2
		Hex Nut		
		Power Cord		
		Switch Assembly		
		Pump Cord		
		Pump Cord		
		Hose Clamp, Rad. Type		
		Coolant System Complete1/8 HP, 115		
		Coolant System Complete1/8 HP, 220		
		Socket Set Screw		
	J2221-SBCA	Support Bearing Collar Assembly (includes #6,7,	,7-1,8,9,9-1)	1

Wiring Diagram - Models J-2221VS and J-2223VS



Wiring Diagram – Models J-2232AC and J-2234AC



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427 New Sanford Road LaVergne, Tennessee 37086 Phone: 800-274-6848 www.jettools.com



HBS-916W, 9" X 16" HORIZONTAL BANDSAW

414468

Large handwheel, built-in gauge, blade guides, guick-positioning vise and removable chip tray are but a few of the features that make this JET Horizontal Bandsaw among the best when compared to the competition. Efficiency, precision and functionality combined to deliver superior results time after time



FEATURES

- · Large hand wheel and built-in gauge provides easy blade tensioning
- Quick-positioning vise with fully adjustable jaws, swivels to 45°
- · Easy access chip tray allows quick cleanup
- Blade is fully guarded, regardless of blade guide position
- · Carbide blade guides feature parallel double-row ball bearing support
- · Coolant is distributed through the blade guides
- Built-in, self propelled blade brush extends blade life
- Fully adjustable hydraulic downfeed with separate on/off control valve
- Automatic shut-off after cut
- Coolant system
- Adjustable material stop
- 1" Bi-Metal blade





JET RED ASSURANCE 2-YEAR WARRANTY

JET warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these JPW Industries Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.



HBS-916W, 9" X 16" **HORIZONTAL BANDSAW**

414468

SPECIFICATIONS

Cutting Capacity (W x D) (In.)	9 x 16
Round at 90 Degrees (In.)	9
Round at 45 Degrees (In.)	6-1/8
Rectangle at 90 Degrees (In.)	8-1/2 x 14 and 2 x 16
Rectangle at 45 Degrees (In.)	9 x 6-1/8
Vise Swivels (Deg.)	45°
Blade Speeds (SFPM)	82, 132, 170, 235
Blade Wheel Diameter (In.)	13
Blade Length (In.)	119-1/2
Blade Size (In.)	1 x .035 x 119-1/2
Bed Height (In.)	25
Motor (HP)	1-1/2 HP, 115/230V, 1Ph
Weight (Lbs.)	704
Overall Dimensions (L x W x H) (In.)	65 x 28 x 42
Drive	Belt Drive



*MACHINE TOOLS

ProtoTRAK CNCs

TRAK Knee Mills

Your Best Choice in Knee Mills Today!



TRAK Knee Mills

The best built, best supported knee-type milling machines you can buy



Outstanding Support at no Extra Cost

Only TRAK Knee Mills featuring ProtoTRAK CNCs are factory-integrated by us, the manufacturer of the control. That means an outstanding product and one source of parts and support. You will never be shuffled between machine and CNC supplier – the entire product is our responsibility.

Our track record proves you can rely on us to live up to our responsibility to you.

TRAK Knee Mill Models



ProtoTRAK EMX

Easy to use, yet full CNC functionality See page 6 for a complete description

TRAK-K3 EMX

- 2-axis CNC
- 3-axis DRO



ProtoTRAK KMX

The best CNC we've ever made for knee mill applications (and that is saying a lot).

See page 8 for a complete description

TRAK-K3 KMX

- 2-axis CNC
- 3-axis DRO

TRAK-K3 KMX-3

- 3-axis CNC
- 3-axis DRO



ProtoTRAK SMX

The most versatile CNC in our line with options you may add to configure for your application.

See page 12 for a complete description

TRAK-K3 SMX

TRAK-K3 SMX-3

- 2-axis CNC
 - 2-axis CNC 3-axis DRO
- 3-axis CNC
- 3-axis DRO



Three-Axis CNC

TRAK Knee Mills with the SMX and KMX CNC are available as three-axis CNCs, with a quill drive for Z-axis machining. The mill can be run manually, as a two-axis or three-axis CNC. Manual quill control is with our unique Electronic Handwheel.

Note: For most three-axis CNC applications, we highly recommend our TRAK Bed Mills.



Milling Machine Options



TRAKing™/Electronic Handwheels

- Converts the mechanical handwheels into electronic handwheels for operating the table and saddle
- Enables the powerful TRAKing[®] feature
- Useful DRO features
- Not available with the ProtoTRAK EMX CNC



Power Draw Bar

 A Torque-Rite R8 power draw bar factory installed with push button tool in/ out



Chip Pan



Remote Stop/ Go Switch

 A hand-held switch to stop and continue program run



Halogen Work Lamp

 Convenient light with bright, long-lasting halogen bulb



Knee Power Feed



Spray Coolant

 The non-fogging coolant sprayer directs a fine stream of coolant to the tool and workpiece



Tableguard

- Provides an enclosed workspace mounted on the table
- The sliding door is switched to prevent operation of CNC Run with door open



Vise

 Model DX6 6' Kurt vise and mounting hardware.



Glass Scales

- A glass scale mounted on the table and saddle
- Not available on ProtoTRAK EMX products

Machine Specifications

- Table Size 50" x 10"
- T-Slots -5/8" x 3 x 2 1/2"
- Table Travel 32"
- Saddle Travel 16"
- Knee Travel 16"
- Ram Travel 15"
- Maximum Quill Travel 5"
- Quill Diameter 3 3/8"
- Spindle Taper R8
- Spindle Speed 60-4200 RPM
- Head Tilt 45 deg. forward, 45 deg. back, 90 deg. left, 90 deg. right
- Spindle Motor Power 3HP continuous
- Power Requirements, machine 220/440V;3P; 8.5/4.25A
- Maximum Weight on Table 850lbs.
- Machine Weight 2816 lbs.
- Machine dims l, w, h 71" x 59" x 84"
- Maximum rapid feed 100IPM
- Way surface type Dovetail X, Z Square Y
- Precision 7207 CP4 spindle bearings
- Chrome hardened and ground guill
- Meehanite[®] castings
- Slide ways are Turcite[®] coated
- · Wide way surfaces are hardened and ground

Additional Options

Riser Block

• 4", 6" or 8"

Coolant Pump

- · Mounted inside the bed or machine column
- A manual switch is provided when not used with Auxiliary Functions

Limit Switches

- Switches and brackets to set maximum travel limits
- Tripping the switch will cause servo motors to shut down
- Not available with the ProtoTRAK EMX CNC

Automatic Lubrication Pump

- Provides lubrication to ways and ballscrews
- Programmable
- Alarms in case of problems

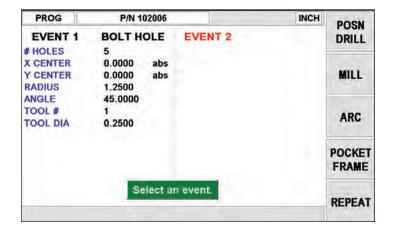


ProtoTRAK EMX



ProtoTRAK EMX

- · Easy to use yet full CNC functionality
- Easy to learn and remember all the features
- We recommend this control when most of the work for the machine is simple
- Great for shops where different people use the machine occassionally
- · Vo Techs love this CNC for teaching conventional milling and introduction to CNC on the same machine

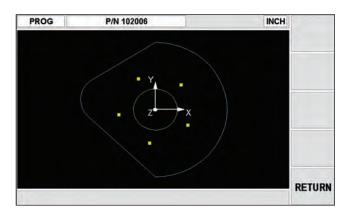


Programming

- Program easily with simple selections and prompts in plain English
- The ProtoTRAK EMX defines the tool path for you once you define the part geometry

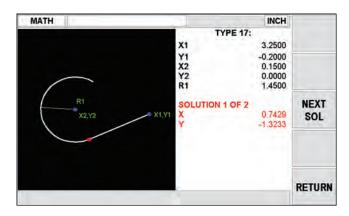
Canned Cycles

- Posn/ Drill
- Bolt Hole
- Mill
- Arc
- Pocket
- Frame
- Rotate
- Repeat



Part Graphics

 Press the LOOK key while programming to see programmed events with color graphics



Math Helps

Quickly calculate intersections, points of tangency, arc centers and more.

DRO Routines

- · View the most useful DRO features in a clear, color display
- Press the Power Feed and Jog Buttons to let the servo motors do most of the work
- Ball screws provide smooth, positive control while hand cranking

Easy Program Storage and Handling

- · Save hundreds of typical programs on the internal flash drive
- Use the USB port to plug in a storage device or move programs between ProtoTRAKs and computers
- Use the optional USB flash drive that is configured to work with ProtoTRAK

ProtoTRAK EMX Specifications

Hardware

- Digital Servo Amplifiers custom designed for ProtoTRAK operation
- D.C. Servo Motors rated at 280 in-oz. continuous torque
- Precision Ball Screws
- Modular Design simplifies service and maximizes uptime
- 115V/60Hz
- 10 amps
- · Feedrate Override of programmed feedrate and rapid
- Polycarbonate Sealed Membrane Keypad to lock out contamination
- 7.0" Color LCD with adjustable contrast
- On board IDE flash memory storage for part programs
- 2 USB ports for interface with a storage device
- Rugged Industrial PC
- · Glass Scale on quill for Z-axis position readout
- Jog button in DRO

Options

- Remote Stop/Go (RSG) switch
- USB thumb drive for program storage and transfer

Software

- Diameter Cutter Compensation
- Circular interpolation
- Linear Interpolation
- Conrad provides automatic corner radius programming
- · Incremental and Absolute dimensioning
- Error Messages to identify programming mistakes
- · Fault Messages for system self-diagnostics
- Parts graphics display
- Look a single button press to view part graphics
- Machine Tool Error Compensation
- Backlash Compensation
- Selectable Inch/mm measurement readout
- Jog from 1 to 100 inches per minute
- Continue Mill/eliminate repetitive data inputs while programming
- · Context help information
- CAM to ProtoTRAK conversational language file conversion
- Teach
- Free offline programming available for download from our website

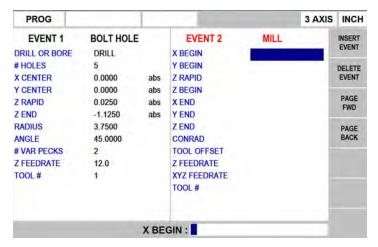


ProtoTRAK KMX CNC



ProtoTRAK KMX

- The best CNC we've ever made for knee mill applications (and that is saying a lot).
- Easy to learn and use with thoughtful features that make work easier
- Improved AGE® capability gives you the power of CAD for finding missing print data while you program!
- Outstanding graphics
- Powerful offline programming for using our Advanced Software Options
- We recommend this ProtoTRAK for most Knee Mill applications due to its amazing combination of price, features and ease of use
- Can handle anything from quick manual jobs to complex profiling



Powerful Canned Cycles

- Position
- Circle Pocket
- Subroutine Repeat

- Drill
- Rectangular Pocket
- Subroutine Rotate

- Bolt Hole
- Irregular Pocket
- Subroutine Mirror

- Mill
- Circular Pocket
- Copy Repeat

- Arc
- Rectangular Profile
- Copy Rotate

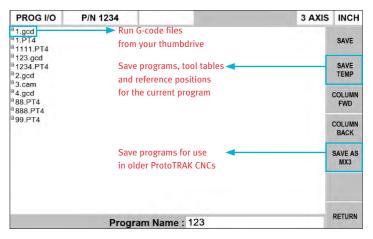
- Face Mill
- Irregular Profile
- Copy Mirror



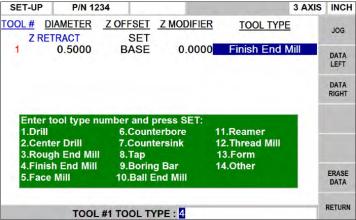
AGE™ the Auto Geometry Engine

Program complex profiles easily with the powerful AGE™ feature. Enter the information you have and the AGE™ will calculate missing points for you while you program.

Advanced File Management



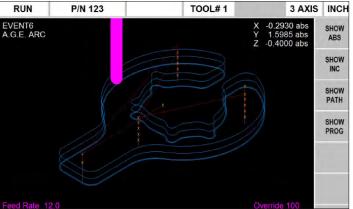
Convenient Tool Table



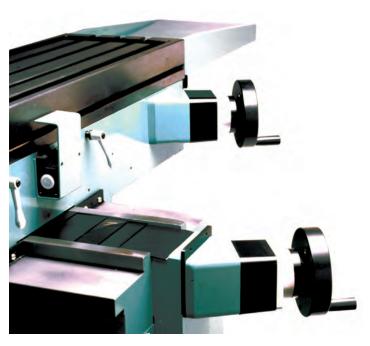
Check your program with convenient graphics



View your programmed toolpath during program run



Options for the ProtoTRAK KMX



TRAKing®/ Electronic Handwheel Option

- Electronic handwheels on X and Y (replaces the mechanical handwheels)
- TRAKing® of programs during program run
- GoTo Dimensions
- Selectable Fine/Course handwheel resolution

Once you use TRAKing®, you will never want to crank manual handles again!



KMX Offline Programming

- All features of the ProtoTRAK KMX organized to run on your PC
- Program and setup your jobs and then load into the ProtoTRAK KMX
- Windows[®] operating system

Converter Package for Offline

(requires purchase of KMX Offline Programming)

Verify

Solid model representation of parts and toolpaths

DXF File Converter

- · Import and convert CAD data
- DXF or DWG files
- Automatic Gap Closing with Chaining
- Layer Control
- Easy, prompted process

Parasolid File Converter

- Generate ProtoTRAK KMX programs from the data in the solid file
- 3D CAD format
- No specialized knowledge required

ProtoTRAK KMX Specifications

ProtoTRAK KMX Hardware

- Two- or three-axis CNC, 3-axis DRO
- 9.0" Color LCD
- · Rugged industrial PC
- 2 USB ports for interface with a storage device, keyboard and mouse
- RJ45 Port and Ethernet card for Networking
- 110V, 1P, 10A

Software Features – General Operation

- Clear, uncluttered screen display
- · Prompted data inputs
- English language no codes
- · Soft keys change with context
- Windows® operating system
- Selectable two or three-axis CNC (3-axis models)
- · Color graphics with adjustable views
- Inch/mm selectable
- Convenient modes of operation (see below)

DRO Mode Features

- Incremental and Absolute dimensions
- · Jog at rapid with override
- Powerfeed X, Y or Z (3-axis)
- · Teach-in of manual moves
- Servo motor return to 0 Absolute
- Tool offsets from library
- Go To Dimensions (Optional with TRAKing[®])
- Fine/Course handwheel resolution (Optional with TRAKing[®])

Program Mode Features

- Auto Geometry Engine
- Geometry-based programming
- · Tool Path programming
- Scaling of print data
- 3-axis Geometry conversational programming (3-axis models)
- Incremental and Absolute dimensions

- · Automatic diameter cutter comp
- Circular interpolation
- · Linear interpolation
- Look graphics with a single button push
- · Event editing within the program
- Conrad automatic corner radius
- Math Helps with graphical interface
- Tool step over adjustable for pocket routines
- Selectable ramp or plunge cutter entry
- Subroutine repeat of programmed events
- Nesting
- Subroutine Rotate about Z-axis for skewing data
- · Subroutine Mirror of programmed events
- · Copy repeat for editing of repeated events
- Copy rotate for editing of rotated events
- · Copy mirror for editing of mirrored events
- Run Island, Helix, Thread Mill and Engrave events when present in an imported ProtoTRAK program

Canned Cycles

- Position
- Drill
- Bolt Hole
- Mill
- Arc
- Circle pocket
- · Rectangular pocket
- Irregular pocket
- Face Mill
- Circular profile
- Rectangular profile
- Irregular profile

Set Up Mode Features

- Service Codes
 - Software
 - Machine Setup
 - Advanced Diagnostics and Service logs
 - Operator Defaults and options
- Set pocket and Face Mill step-over (in service codes)
- Tool names

- Tool library
- · Tool length offset with modifiers
- Tool path graphics with adjustable views
- Verify solid model representation of finished part (as programmed)

Run Mode Features

- TRAKing[®] (optional)
- 3D CAM file program run
- 3D G-code file run with tool comp
- · Real time run graphics with tool icon

Program In/Out Mode Features

- · Program Storage to USB Flash Drives
- CAM program converter
- Converter for prior-generation ProtoTRAK programs
- DXF / DWG file Converter (Offline version only)
- Preview Graphics for unopened files
- Networking
- Save Temp to save current program, tool offsets and home positions for running the next day with minimal setup

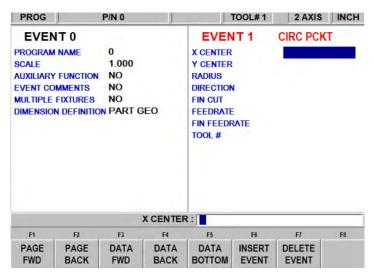


ProtoTRAK SMX CNC



- The most powerful CNC for Toolroom work in the world
- A powerful but easy to use basic operation with options you may add to configure your application
- Optional Parasolid and DXF Converters save you time by taking the dimensions directly from the drawing
- We recommend this ProtoTRAK model for more complex applications such as profiling and pockets

Easy and Powerful Programming The ProtoTRAK Way



Powerful Canned Cycles

(O indicates optional)

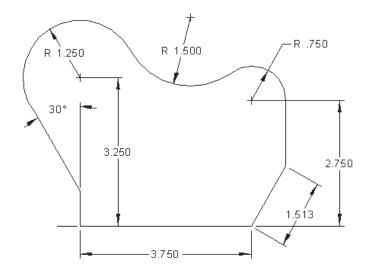
- Position
- Drill
- Bolt Hole
- Mill
- Arc
- Circle pocket
- Rectangular pocket
- Irregular pocket
- Face Mill
- Circular profile

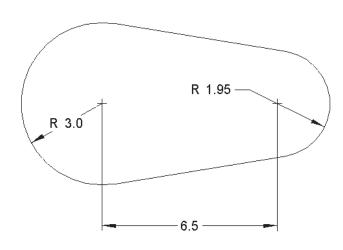
- · Rectangular profile
- Irregular profile (0)
- Circle Island (0)
- Rectangular Island (0)
- Irregular Island (0)
- Helix (O)
- Thread Milling (O)
- Engraving (0)
- Face Mill (O)

Auto Geometry Engine

The Auto Geometry Engine (A.G.E.) is powerful software that automatically fills in missing print dimensions as you program. It is CAD capability embedded into CNC programming.

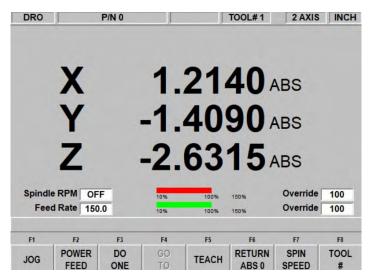
With A.G.E. you can make easy work out of programming incomplete prints or part sketches like the ones below. The A.G.E. doesn't take more time to use, it works automatically as you program.

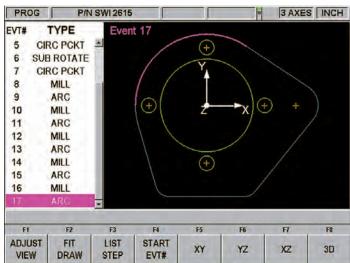




Powerful Capability

Only in the ProtoTRAK



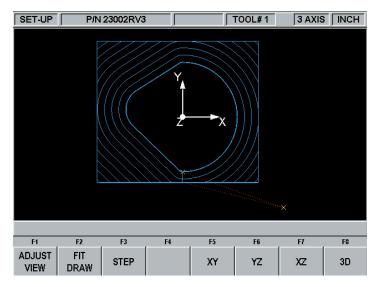


CNC Power, even when working manually

- Incremental and Absolute Referencing
- Large, easy-to-read dimensions display
- Convenient features such as Jog, Teach and Power Feed

List-Step Graphics

- See a full screen view of your programming progress with the push of a button
- Use the list step graphics to easily isolate program problems





Profiles and Pockets

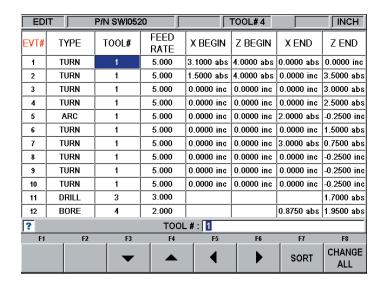
 Easily program pockets and profiles of all shapes with powerful canned cycles

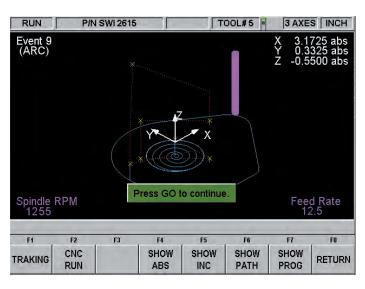
Electronic Brains in the Handles

 The feel of manual control of real handwheels, but our electronic handwheels bring the power of the CNC to your fingertips through features such as TRAKing and DO ONE.

Powerful Capability

Only in the ProtoTRAK



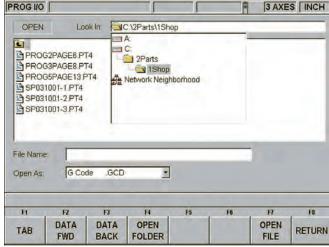


Spreadsheet Editing

- · View data for your whole program at once
- · Sort and make changes to a group of events with the press of a button

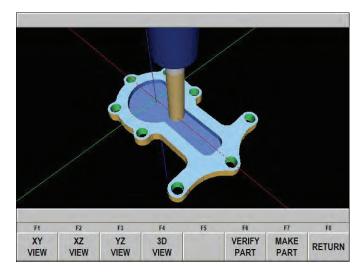
Tool Path Graphics

- See where the control plans to move the tool prior to machining
- · Easily catch mistakes with error messages, colors, and selectable views



Advanced File Management

- · Access different drives, copy and rename files and look at part graphics before opening a file
- · Back up programs easily with the automatic back up routine



Verify Machining Simulation

- Verifies ProtoTRAK or G-Code generated programs for errors
- Watch tools machine and display the finished part

Networking

- Network your ProtoTRAK with a server or another ProtoTRAK
- · File, share, or back-up programs from your machine
- · Collaborate easily centralized file management helps assure revision control

Run-Time Clock

• Easily see on the ProtoTRAK display how much time remains before the control is programmed to stop for a tool change



DXF Converter Option

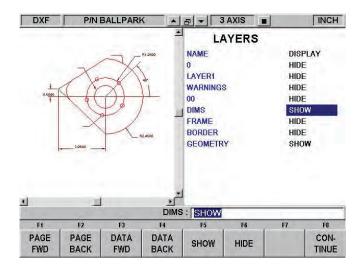
A Simple Process that your machinists control

Easily convert dimensions from a DXF or DWG file into a ProtoTRAK program.

- Works with ProtoTRAK SMX CNCs on the shop floor or with the ProtoTRAK Offline system
- Easy process that ProtoTRAK machinists can learn in minutes
- Milling and turning versions available

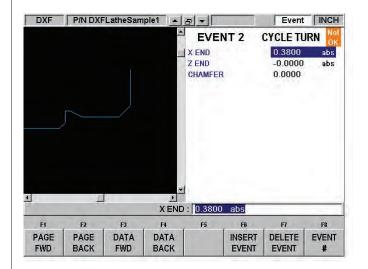
Layer Selection

 View the entire file and select the layers you want to machine



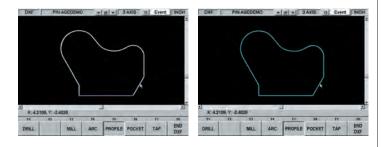
Interactive, Prompted Selection of Geometry

- · Program events in the order you choose
- Once the event type and dimensions are loaded it's easy to fill in the prompts



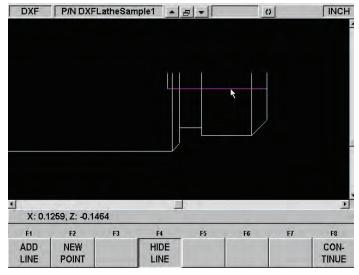
Chaining

- Program the entire geometry of Pocket or Profile peripheries with just two clicks tell ProtoTRAK where to start then tell it which direction to go. The rest of the connected events are loaded automatically
- The seven events below were programmed as easily as clicking two lines



Line Editing

 If lines drawn in a DXF file can't be machined as drawn, the DXF converter enables you to insert or hide lines to get past these problems. No need to go back to the CAD department.



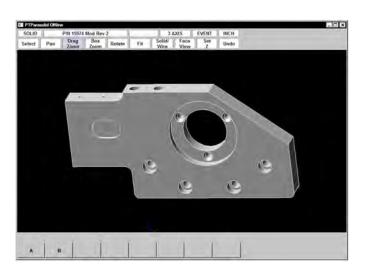
Parasolid Converter Option

Easily generate ProtoTRAK mill programs from Parasolid 3D CAD files.

- Save ProtoTRAK programming time easy to do on the shop floor with your ProtoTRAK SMX CNC
- Input .x_t format (Parasolid) 3D CAD files
- Easy process that ProtoTRAK machinists can learn in minutes

Intuitive 3D Model

- · Powerful viewing tools include Zoom, Pan, and Rotate
- · Enhances understanding and facilitates programming



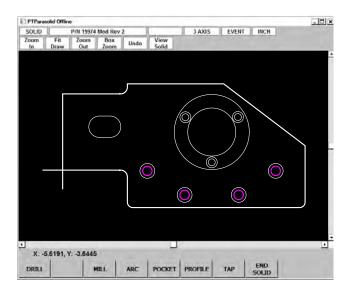
Interactive, Prompted Selection of Geometry

- Program events in the order you choose select event type and click on the geometry (excludes geometries with bottom contouring)
- X and Y dimensions loaded automatically
- · Point and click to load Z dimensions
- · Automatically compensates for drill point length



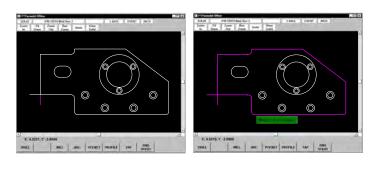
Event Groups

- Create event groups of items you want to machine the same way
- Click similar circular geometries, create an event, and the data from the first event will automatically fill in for the rest of the events



Chaining

- Program the entire geometry of Pocket or Profile peripheries with just two clicks tell ProtoTRAK where to start then tell it which direction to go in. The rest of the connected events are loaded automatically
- The 16 events for the below profile were loaded by simply clicking two lines





Specifications for the ProtoTRAK SMX for Mills

(O) – optional feature

Control Hardware

- Two or three-axis CNC, three-axis DRO
- Real handwheels for manual operation
- 10.4" color active-matrix screen
- · Industrial-grade Pentium® processor
- 1 GB Ram
- 4 USB connectors
- RJ45 port and Ethernet card (O)
- · Override of program feedrate
- Override of program spindle speed (O)
- · LED status lights built into display
- USB thumb drive flash memory
 512 MB or more
- Uncluttered front panel with few hard keys
- 110V, 1P, 12A

Software Features - General Operation

- Clear, uncluttered screen display
- · Prompted data inputs
- English language no codes
- · Soft keys change with context
- Windows® operating system
- · Selectable two or three-axis CNC
- · Color graphics with adjustable views
- Inch/mm selectable
- · Convenient modes of operation (see below)

DRO Mode Features for Manual Machining

- Incremental and absolute dimensions
- Jog at rapid with override
- Powerfeed X, Y or Z
- Do One CNC canned cycle
- Go To dimensions (O)
- Teach-in of manual moves
- · Servo motor return to 0 absolute
- Spindle speed setting with override (0)
- Tool offsets from library
- Fine/Course handwheel resolution (0)

Program Mode Features

- · Geometry-based programming
- Tool path programming (O)
- Scaling of print data (0)
- Multiple fixture offsets (O)

- Programmable Auxiliary functions (0)
- Event comments (0)
- Three-axis Geometry conversational programming (0)
- · Incremental and absolute dimensions
- · Automatic diameter cutter comp
- Circular interpolation
- · Linear interpolation
- Look graphics with a single button push
- List step graphics with programmed events displayed
- · Alphanumeric program names
- Canned cycles:
 - Position
 - Drill
 - Bolt Hole
 - Mill
 - Arc
 - · Circle pocket
 - Rectangular pocket
 - · Circular profile
 - · Rectangular profile
 - Irregular profile (0)
 - Irregular pocket (0)
 - Circle Island (0)
 - Rectangular Island (O)
 - Irregular Island (0)
 - Helix (O)
 - Thread milling (O)
 - Engraving (0)
 - Tapping (O)
 - Face Mill (O)
- Programmable Spindle Speeds (0)
- Program pause
- Conrad automatic corner radius
- Math Helps with graphical interface
- Auto load of math solutions
- Tool step over adjustable for pocket routines
- Pocket bottom finish pass
- Selectable ramp or plunge cutter entry
- · Subroutine repeat of programmed events
- Nesting
- · Rotate about Z axis for skewing data
- Mirror of programmed events (0)



- Copy Drill to Tap Event (O)
- Copy Rotate (O)
- Copy Mirror (O)
- Auto Geometry Engine™ (O)

Edit Mode Features

- Clipboard to copy events between programs (O)
- Spreadsheet editing (0)
- Global data change (0)
- G-Code editor (O)

Set Up Mode Features

- Program diagnostics
- Advanced tool library
- Tool names
- · Tool length offset with modifiers
- Advanced diagnostic routines
- Software travel limits
- Tool path graphics with adjustable views
- Program run time estimation clock (0)

Run Mode Features

- Trial run at rapid
- 3D G Code file run
- Real time run graphics with tool icon
- Countdown clock to next pause or tool change (O)
- TRAKing of programs during program run (O)

Program In/Out Mode Features

- CAM IN program converter
- CAM OUT converter to run ProtoTRAK programs on different controls (0)
- Converter for prior-generation ProtoTRAK programs
- DXF / DWG Converter (O)
- Selection of file storage locations
- · Automatic file back up routine
- · Preview Graphics for unopened files
- Networking via RJ45 port (0)Program Storage to USB Flash Drives



Options for the ProtoTRAK SMX

Advanced Features Option

- · Verify Machining Simulation
- Auto Geometry Engine™
- · Spreadsheet editing
- · Global data change
- · Scaling of print data
- Multiple fixture offsets
- Event comments
- 3-axis conversational programming
- G Code editor
- Program run time estimation clock
- Additional Canned Cycles:
 - Irregular Profile
 - Irregular Pocket
 - Circle Island
 - · Rectangular Island
 - Irregular Island
 - Helix
 - Thread Milling
 - Engraving
 - · Copy Drill to Tap
 - Face Mill
 - Mirror of programmed events
- Copy with or without offsets
- Copy Rotate
- Copy Mirror
- · Clipboard to copy events between programs

DXF File Converter

- Import and convert CAD data into ProtoTRAK programs
- DXF or DWG files
- Chaining
- Automatic Gap Closing
- Layer control
- Easy, prompted process you can do right at the machine

Networking Option

• Networking via RJ45 port

CAM OUT Converter

 Regenerate a CAM file with revisions from the shop floor

Auxiliary Functions Option

- Program control of coolant
- Spindle off
- Output to programmable indexer or rotary table



TRAKing/Electronic Handwheels (Our favorite option!)

- TRAKing of programs during program run
- Go To Dimensions
- Selectable Fine/Coarse handwheel resolution

Parasolid Converter Software

- · Generate programs from solid files
- · Process commonly used .x_t files
- · Dozens of time-saving features

Offline Programming

- The ProtoTRAK SMX user interface for Windows® PC
- Program and modify files from current and past ProtoTRAK models









We have transformed thousands of Bridgeport® and similar knee-type milling machines from outdated manual machines to highly productive ProtoTRAK CNCs. With experience earned over 30 years, we know how to give you the best possible outcome.



ProtoTRAK EMX

• 2-axis CNC retrofits



ProtoTRAK KMX

2 or 3-axis CNC retrofits



ProtoTRAK SMX CNC

• 2 or 3-axis CNC retrofits



The Retrofit Kit includes everything: motors, CNC, hardware, ballscrews, fasteners, and even cable ties.

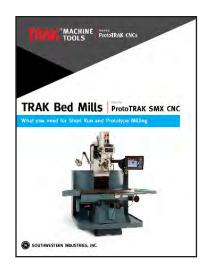


Custom and General Kits Are Available for the following brands of machines: * note, not all models may be retrofitted – contact your Southwestern Industries representative.

Acer	Birmingham	Enco	Kondia	Pasma	Supermax (YCI)
Acra Mill	Bridgeport	Euro-Mill	Lagun	Royal	Vectrax
Alliant	Chevalier	First	Marina	Santec	Victor
Astro	Classic	Hurco	Merlin	Seiki	Webb
Atlas	Clausing Atlas	Kalamazoo	Microcut	Sharp	Wells Index
Atrump	Comet	Kent	Millport	Siber-Hegner/Santec	Willis
Besmer	Do-All	Kingston	MSC	Southbend	Wilton

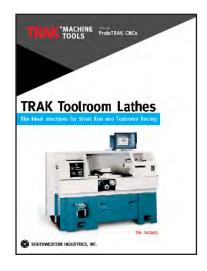


More TRAK Machines for Short Run/Protoype work



TRAK Bed Mills

- Highly recommended for 3-axis CNC Toolroom and prototyping applications.
- Solid ram moves long the column providing mass for heavy cuts
- 4 models starting at around \$32,000
- Travels up to 60" in X, 23" in Y and 20.5" in Z



TRAK TRL Lathes

- The world's best CNC lathes for short-run turning.
- Full CNC function but with features that make even manual work easier and more productive
- ProtoTRAK ELX or SLX CNC are always easy to program and run
- 5 models starting at on \$19,995



ProtoTRAK KMX Upgrades

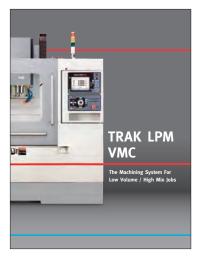
- Upgrade your older ProtoTRAK CNC with the all new ProtoTRAK KMX
- Upgrades for previous generations of retrofits, TRAK Knee Mills and TRAK Bed Mill starting from only \$4295
- Exciting new features will give you a great boost in productivity!

Also from TRAK Machine Tools: Unique Solutions for Low Volume/High Mix Production



TRAK 2op

- Productive: Get more from the people you already have!
- Versatile: Reduce your cost of production on a wide variety of jobs



TRAK LPM VMC

- A complete system that integrates the Control, Tool Setting and Workholding
- Reduce the labor spend in Setup
- Change from job to job in a few minutes



Want to see more? Check out our website or Call (800) 876 - 0601 for demo





2615 Homestead Place Rancho Dominguez, CA 90220 T | 310.608.4422 www.trakmachinetools.com



Mini Mill-EDU

Mini CNC Vertical Mill Exclusively for Education, with 16" x 12" x 10" travels

```
40 / 3 / 4k /
TAPER AXIS RPM
```



Haas Mini Mills are the industry standard for compact machining centers. They provide an economical solution for small parts machining in a compact package that is loaded with full-size features. The Mini Mill-EDU is a specially priced education-edition machine that is perfect for schools as a first step into CNC machining and training.

- ✔ Operates on single- or three-phase power
- ✓ Available exclusively for educational institutions
- ✓ Built with the same high-quality components as the standard Mini Mill
- ✓ Includes an education resource package
- ✓ Made in the USA

© 3D MODEL (ZIP)
INSTALLATION GUIDE
CLAYOUT DRAWING
OWNER'S MANUAL
OWNER'S MANUAL

Introduction to the Mini Mill

This super-popular, small-footprint machine has proved successful in small and large shops alike. Bob and Bryan talk about the improvements made to increase reliability and make the machine even easier to use.

STANDARD FEATURES

SPINDLES	4000-rpm Spindle
CHIP & COOLANT Management	Window Air Blast
THE HAAS Control	Media Display M-Code; M130 HaasConnect: Remote monitoring Early Power-Failure Detection Module Ethernet Interface Standard Program Memory, 1 GB
PRODUCT OPTIONS	Work Light
SHIPPING	Lifting Provision
WARRANTY	6-Month Standard Warranty

TRAVELS	S.A.E	METRIC
X Axis	16.0 in	406 mm
Y Axis	12.0 in	305 mm
Z Axis	10.0 in	254 mm
Spindle Nose to Table (~ max)	14.0 in	356 mm
Spindle Nose to Table (~ min)	4.0 in	102 mm

SPINDLE	S.A.E	METRIC
Max Rating	7.5 hp	5.6 kW
Max Speed	4000 rpm	4000 rpm
Max Torque	33 ft-lbf @ 1200 rpm	45 Nm @ 1200 rpm
Drive System	Direct Speed, Belt Drive	Direct Speed, Belt Drive
Taper	CT or BT 40	CT or BT 40

TABLE	S.A.E	METRIC
Length	36.0 in	914 mm
Length (Work Area)	28.75 in	730 mm
Width	12.0 in	305 mm
T-Slot Width	0.630 in	16 mm
T-Slot Center Distance	4.33 in	110 mm
Number of Std T-Slots	3	3
Max Weight on Table (evenly distributed)	500 lb	227 kg

FEEDRATES	S.A.E	METRIC	
Max Cutting	300 ipm	7.6 m/min	
Rapids on X	300 ipm	7.6 m/min	
Rapids on Y	300 ipm	7.6 m/min	
Rapids on Z	300 ipm	7.6 m/min	

AXIS MOTORS	S.A.E	METRIC
Max Thrust X	2000 lbf	8896 N
Max Thrust Y	2000 lbf	8896 N
Max Thrust Z	2000 lbf	8896 N

AIR REQUIREMENTS	S.A.E	METRIC
Air Required	4 scfm @ 100 psi	113 L/min @ 6.9 bar

ELECTRICAL SPECIFICATION	S.A.E	METRIC
Spindle Speed	4000 rpm	4000 rpm
Drive System	Direct Speed, Belt Drive	Direct Speed, Belt Drive
Spindle Power	7.5 hp	5.6 kW
Input AC Voltage (1 Phase)	220 VAC	220 VAC
Full Load Amps (1 Phase)	40 A	40 A
Input AC Voltage (3 Phase) - Low	220 VAC	220 VAC
Full Load Amps (3 Phase) - Low	25 A	25 A
Input AC Voltage (3 Phase) - High	440 VAC	440 VAC
Full Load Amps (3 Phase) - High	13 A	13 A



Mini Mill

Mini CNC Vertical Mill with 16" x 12" x 10" travels

40/3/6k/
FAPER AXIS RPM

TOOL APACITY



Mini Mill 2

Mini Vertical Mill with 20" x 16" x 14" travels

40 / 3 / 6k / TAPER AXIS RPM

20 TOOL CAPACITY



Super Mini Mill

Super-Speed Mini Vertical Mill with 16" x 12" x 10" travels

40 / 3 / 10k/ TAPER AXIS RPM

TOOL CAPACITY

All prices and specifi**Stiartingjat: \$29,995** without notice. Freight, rigging, stat**&tatting vat. \$36,995** tallation charges, and dealer installe**Startingjat:** \$29,995 included. Not responsible for misprints or typographical errors. All prices are in U.S. dollars. Machines shown with optional equipment. Actual product appearance may off \$28,495.25



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Automotive Storage Products

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Bumper Racks

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Tech Carts

Technician Workstations

Tire & Wheel Storage Racks

Transmission Teardown Benches

Wall Mounted Cabinets



Catalogs Case Studies





Value added services Outsourcing

STORAGE RACKS

Battery Racks

Borroughs gravity-fed Battery Racks offer four levels of battery storage on angled mesh decking, with no rollers to break or seize. A corrosion resistant coating ensures longevity.

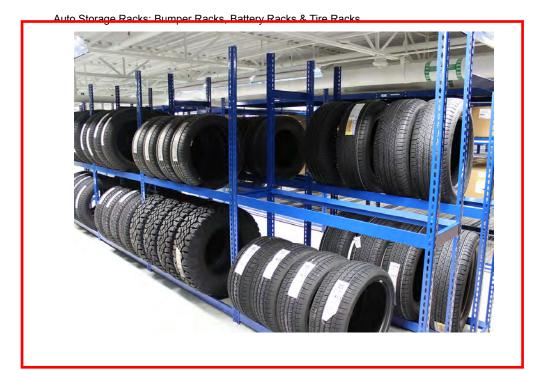


Four levels for storage • Corrosion resistant coating • Angled mesh deck • Gravity fed—no rollers to break or seize • Starter & adder units available

Tire Racks

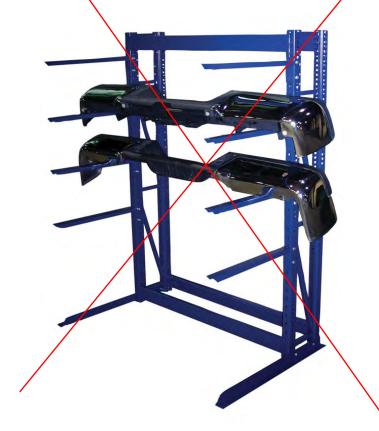
Borroughs Tire Racks are made of Rivet-Span construction, and require no nuts or bolts for assembly. Tires rest on angle beams, keeping them securely in place. Available in single or double-entry units.

51



Bumper Racks

Borroughs Bumper Racks save floor space by storing bumpers and bumper covers vertically. Elevated arms with 24" depth adjust in 1" vertical increments. Made from heavy-duty 16 gauge steel. Anti-tip angle iron base can be easily anchored to the floor for extra stability.



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Dealers & Distributors

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PLASTIC CROWD CONTROL

Direct folks at indoor or outdoor events. Economical, lightweight and portable.

- · Weatherproof, durable and UV resistant.
- Fill bases with sand or gravel for added stability.
- Flat Base Standard-duty stanchion. Fill weight: 6.4 lbs.
- Dome Base Heavy-duty stanchion. Fill weight: 12 lbs.
- Plastic Chain Easily cut to size.
- S-Hooks Connect chains together.

PLASTIC CROWD CONTROL POSTS					Wnite, Black, Yellow, Lime, Orange or Rea				
MODEL	DESCRIPTION	HEIGHT	POST	BASE	WT.	PRICE	EACH	ADD TO	
NO.	DESCRIPTION	пеіопі	DIAM.	DIAM.	(LBS.)	1-2	5+	CART	
H-3361	Post with Flat Base	40"	2 1/2"	14"	3	\$37	\$34	Specify Color	ORANGE
H-3362	Post with Dome Base	41"	3"	16"	4	40	37	Specify Color	

PLASTIC CROWD CONTROL CHAINS AND S-HOOKS				ck, Yellow, L	ime, Orange or Red
MODEL	DESCRIPTION		PRICE	EACH	ADD TO
NO.	DESCRIPTION	(LBS.)	1-2	5+	CART
H-3363	8' Bag of Chain - 2" Links (min. 2 bags)	1	\$10	\$8	Specify Color
<u>H-3364</u>	100' Box of Chain – 2" Links	7	80	75	Specify Color
<u>H-5108</u>	500' Box of Chain – 2" Links	33	375	350	Specify Color
<u>S-17974</u>	S-Hooks 12/pk. (min. 2 pks.)	1	6	5	Specify Color

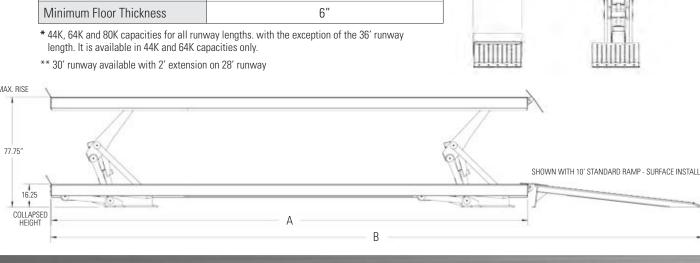
ORANGE

OPTIONAL LIFT **ACCESSORIES**

Runway extensions add the versatility of a 24"wheelbase range adjustment.** ROTARY LIFT V KKX FIVE AVAILABLE RUNWAY LENGTHS

Model Shown: VREX64-48X / 64,000 lbs, capacity drive-on lift / surface mounted

	SPECIFICATIONS	V-REX44	V-REX64	V-REX80		
	Capacity*	44,000 lbs.	64,000 lbs.	80,000 lbs.		
	Maximum Rise Bottom of base to runway top	77 3/4"				
	Collapsed Height	16 - 1/4"				
	Rise Time		90 seconds			
Α.	Runway Lengths**		28', 32', 36'*, 4	8′		
В.	Overall Lengths With standard 10' approach ramps	38', 42', 46', 58'				
C.	Width of Runway		32"			
D.	Overall Width		109"			
E.	Distance Between Runways		45"			
	Motor	20 hp				
	Electrical Standard	3ph, 208-230/460/575				
	Number of legs		4			
	Minimum Floor Thickness		6"			





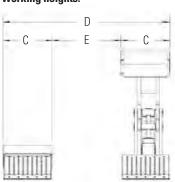




Legs and Console

RAI 7040

Ten locking positions at convenient and ergonomic working heights.



LED Runway Lighting Kit

Rolling Bridge Jacks allow the front, rear, or all wheels to be

lifted off the runways for brake,

tire, alignment and suspension

Rolling Bridge Jack Retractable Wheel Kit

the runways, not on the top.

Attach the light wands to runways for effective, efficient lighting where you need it.

• 120V AC input voltage • 60hz Lighting unit includes 60W power supply unit,

Rotary Lift

2700 Lanier Drive

Madison, IN 47250, USA



Pendant Controls

The pendant allows for remote operation away from the lift console

Increase bay productivity with these drive-on lift accessories

work. Jacks are supported between

Available in 22,000, 32,000 and 36,000 lbs. capacities

Runway wheel kit legs retract

for easy rolling jack removal

MW-500 Tire Lift

reduces risk of technician injury with this 500 lbs. capacity tire lift. Air operated (100 psi) with no batteries. Includes pressure regulator to prevent overloading.

Wash Bay Kits can be installed into wash bays for easy vehicle cleaning with a certified remote stainless steel control



ADDITIONAL OPTIONS:

- Internal Air Kit connections for Rolling Jacks
- 12' Ramp Kits
- Bolt on Wheel Curbs
- Electronic Height Limiter
- Heavy Duty Turntables for Alignment Service
- Tapeswitches for Inside and Outside of Runways
- Audible Descent Alarm Kit

North / South America Contact Information

p 800.640.5438

Latin America / Caribbean: 1.812.273.1622

Tech. Support: p 800.445.5438

Global Contact Information

USA: 1.812.273.1622

Canada: 1.905.812.9920

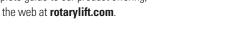
Brazil: +55.11.4534.1995

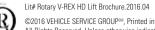
e userlink@rotarylift.com

e techlink@rotarylift.com

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For additional world wide contact information and a complete guide to our product offering, visit us on the web at rotarylift.com.





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V-REX Vertical Rise Drive-On Lifts HEAVY DUTY PRODUCTIVITY FOR YOUR MAINTENANCE FACILITY

44,000, 64,000 and 80,000 lbs. CAPACITIES

V-REX vertical rise lift services the largest vehicles in a new space-saving design.

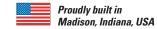
Powerful V-REX platform lifts offer superior and solid solutions for all of your mechanical and service repairs.





SAVE BAY SPACE AND MONEY

Designed for facilities with limited bay space, the patent-pending V-REX lift system provides ersatile heavy duty vertical lifting.

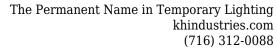






Rotary maintains the industry's largest in-house mechanical, electrical and controls engineering staff using state of the art design, modeling and analysis software to ensure you get a well designed, reliable product.

KH Industries











Retractable Cord Reel, RTA Series

Model #: RTAN3LW-WDD520-J12F

ATTRIBUTES:

Cord Length: 25'

Gauge: 12 AWG

Conductor: 3

Max Amps:20 AmpStandard:NEMA 2Cord Type:SJOW-BlackVolts:125 VACFeeder End:5-20P

Payout End: Blk O/B 20A Duplex/Duplex

Reel Color: White

FEATURES:

- NEMA 2 rated for indoor use
- 125 Volt slip ring
- Heavy duty formed steel mounting base for ceiling, wall or bench mount
- 4 position adjustable arm with 4 roller guides
- cULus listed
- Adjustable ball stop included
- 6' feeder cord included
- White, corrosion resistant powder-coat finish
- Made in USA







The Permanent Name in Temporary Lighting khindustries.com (716) 312-0088





Retractable Cord Reel, RTB Series

Model #: RTBB3L-WDD520-J12K

ATTRIBUTES:

Cord Length: 50'

Gauge: 12 AWG

Conductor: 3

Max Amps:20 AmpStandard:NEMA 2Cord Type:SJOW-BlackVolts:125 VACFeeder End:5-20P

Payout End: Yellow O/B 20A Duplex/Duplex

Reel Color: Yellow

FEATURES:

- NEMA 2 rated for indoor use
- Prewired rubber yellow outlet box with (4) N5-20R
- All steel construction, including mounting base
- 12 position adjustable guide arm
- Adjustable ratchet can be engaged (positive lock) or disengaged (constant tension) as needed
- Adjustable ball stop included
- 6' feeder cord included with molded 5-20P for easy plug and play operation
 Yellow powder-coat finish
- renow powder-coat milsi
- · Made in USA