# carbatec



OWNERS MANUAL 345MM (14") HEAVY DUTY BANDSAW BS-345C

## WARNING

- 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 operator and parts manual which was shipped with your machine.

#### When setting up machine:

- Always avoid using machine is damp or poorly lighted work areas.
- Always be sure machine is securely anchored to the floor.
- Always keep machine guards in place.
- Always put start switch in "OFF" position before plugging in machine.

When using machine:

- Never operate with machine guards missing.
- Always wear safety glasses with side shields.
- Never wear loose clothing or jewelry.
- Never overreach you may slip and fall into the machine.

- Never leave machine running while you are away from it.
- Always shut off the machine when not in use.

#### When servicing machine:

- Always unplug machine from electrical power while servicing.
- Always follow instructions in operators and parts manual when changing accessory tools or parts.

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. Use properly, this machine 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. Should read and understand the Operators and Parts Manual as well as all labels affixed to the machine. Failure in following of these warnings can cause serious injuries

#### MAHINERY GENERA L SAFETY WARNINGS

- 1. Always wear protective eye wear when operating machinery. Eye wear shall beimpact resistant, protective safety glasses with side shields. Not using eye wear which could result in severe injury from breakage of eye protection.
- 2. Wear proper apparel. No loose clothing or jewelry which can get caught in moving parts. Rubber soled footwear is recommended 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.
- 4. Keep guards in place and in proper working order. Do not operate the machine with guards removed.
- 5. Avoid dangerous working environments. Do not use stationary machine tools in wet or damp locations. Keep work areas clean and well lit. Special electrics should be used when working on flammable materials.
- 6. 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.
- 8. 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.
- 13. Keep work area clean. Cluttered area 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 it was not designed for.
- 16. 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 hazard.

#### **GENERAL ELECTRICAL CAUTIONS**

This saw 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.

**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.

#### 3. SAFETY INSTRUCTION FOR MACHINERY

- 1. Always wear leather gloves when handling saw blade. The operator shall not wear gloves when operating the machine.
- 2. All doors shall be closed, all panels replaced, and other safety guards in place prior to the machine being started or operated.
- 3. Be sure that the blades are not contact with the workpiece when the motor is started. The motor shall be started and you should allow the saw to come up to full speed before bringing the saw blade into contact with the workpiece.
- 4. Keep hands away from the blade area. See Figure A.
- 5. Remove any cut off piece carefully while keeping your hands free of the blade area.
- 6. Saw must be stopped and electrical supply must be cut off before any blade replacement or adjustment of blade support mechanism is done, or before any attempt is made to change the drive belts or before any periodic service or maintenance is performed on the saw.
- 7. Remove loose performed on the unnecessary workpieces from area before staring machine.
- 8. Bring adjustable saw guides and guards as close as possible to the workpiece.

- 9. Always wear protective eye wear when operating, servicing, or adjusting machinery. Eyewear shall be impact resistant, protective safety glasses with side shields. Not using eye wear which could result in severe injury from breakage of eye protection. See Figure B.
- 10. Nonslip footwear and safety shoes are recommended. See Figure C.
- 11. Wear ear protectors (plugs or muffs) during extended periods of operation. See Figure D.
- 12. Wear mask to operate machine. See Figure E.
- 13. Do not smoke during operating machine. See Figure F.
- 14. The workpiece, or part being sawed, must be securely clamped before the saw blade enters the workpiece.
- 15. Remove cut off pieces carefully, keeping hands away from saw blade.
- 16. Saw must be stopped and electrical supply cut off or machine unplugged before reaching into cutting area.
- 17. Avoid contact with coolant, especially guarding your eyes.



Α



С



D





#### ASSEMBLY

· When you receive your new bandsaw, the stand will not be assembled. Use the carriage bolts and nuts (M8 x 16), Flat washes (M6 x 13) and hex head bolts (M6 x  $\frac{1}{2}$ 16). Make sure after assembly the stand is sitting square and flat on the floor.

will need the help of a second person.

• Fix into place with remaining nuts and bolts.

• To mount table, you will need to remove the table pin and the insert. Slide the blade through the blade slot and turn the table around so the mitre slot is posi- to remove hex head bolt. Fig 4. A tioned to the outside of the machine.

 Fit the trunnions onto the support bracket and screw the lock knobs onto the 2 two Hex head bolts that run through the bracket. Fig.3 A and B.



#### RIP **FENCE** (Fig.5)

• Bolt the fixed rail of the fence (The one with the scale), to the front of the cast table using 2 hex head bolts (M6 x 20) and 2 M6 spring washers.



• The square tube that the end of the fence runs on is bolted to the back of the cast iron table.

• Set the fence assembly onto the fixed rail, slide on its guides to ensure smooth movement.

• To lock in position push down locking handle.

#### **TILTING THE TABLE** MAKE SURE THE MACHINE IS NOT CONNECTED TO Its POWER SOURCE.

• Lift the saw body onto the base, as it is heavy, you Table will tilt up to 45 degrees to the right and 10 degrees to the left.

> Loosen the 2 lock knobs Fig. 3 A and B tilt table to desired angle and retighten knobs.

> • Please note that to tilt table to the left you will need



#### **ADJUSTING THE TABLE STOP TO 90 DEGREES**

· Loosen the 2 lock knobs Fig 3 A and B. Tilt table until it hits the table stop bolt. Fig. 4. Hold a square against the blade to check if it is square to the table Fig. 1, if it isn't, loosen the lock knobs and raise or lower the stop bolt until the table is square to the blade. Don't forget to retighten the lock knobs.

 You may need to reset the pointer to zero. Fig.2

#### CHANGING THE BLADES

 Disconnect machine from power source.

 Remove the table pin and insert.







• Open the wheel covers top and bottom, by turning side knobs Fig.6 A.



• Loosen the lever on the rear of bandsaw by pushing it up. Fig 7. A This will release the blade tension.

• Remove blade from wheels and direct it through the side slot in the table. Remember a blade is still a sharp object and can be dangerous when handling.

• Feed new blade through table slot and put into position into upper and lower ball bearing system and over the wheels. Teeth should be facing front and angling down.

- Re-tension the blade by pushing lever Fig 7 A down.
- Replace the table pin and insert.

#### **BLADE TENSION**

• If the blade tension is not correct you will need to adjust the blade tension hand wheel. Fig.8 A. There is an indicator that gives you the correct tension for the width of the blade. Fig. 7B.



#### **UPPER BLADE GUIDE SETTING**

• The bearings for the upper and lower guide assembly should be .5mm from the sides of the blade. There is also a micro adjustment at the rear of the guides to move them forward or back. Fig. 9 A. Make sure the guide bearings are set back from the blade teeth.



• Do not have the blade traveling on the rear roller it needs to sit forward and only touch it when the bandsaw is in use. If the blade is in constant contact with the roller it may overheat. Adjustment is made via micro adjusting knob. Fig. 9B.

#### **DUST COLLECTION**

This bandsaw is equipped with a 4" dust port Fig.10 Carba-Tec strongly recommends this machine should be used with an appropriate dust extractor.





#### **BLADE GUIDE HEIGHT**

The upper blade guide should have as little clearance as possible from the material. It is adjusted by loosening the locking knob Fig.11A and raising or lowering the guide via the rack and pinion knob Fig. 11B to the correct height. Don't forget to re-tighten the locking knob when you have your setting.





#### 14" BAND SAW BODY PARTS LIST

	14	BAND SAW BODY PARIS LISI	
REF.NO	#DWG.	DESCRIPTION	Q'TY
1	1001	BODY	1
2	1002	GUIDE BAR UP/DOWN LABEL	1
3	1003	MODEL NO. LABEL	1
4	1004	SAW BLADE TENSION LABEL	1
5	1005	KNOB	2
6	GB70	M6X20 HEX SOC CAP SCR	2
7	GB889	M6 NYLON NUT	2
8		M8 PULL NUT	1
9	1006	GUIDE BAR LOCK KNOB	1
10	1007	UPPER DOOR	1
11	GB70	M6X10 HEX SOC CAP SCR	1
11	1008	WARNING LABEL A	1
12	1008	ANTI-DUST LABEL	1
13	1010	NAMEPLATE	1
14	1010	DOWN DOOR	1
15	GB70		1
		M6X10 HEX SOC CAP SCR	
17	1012		
18	1013	WARNING LABEL C	1
19	1014		1
20	GB70	M5X12 HEX SOC CAP SCR	1
21	1015	BIAS SHAFT	1
22	1016	BIAS SHAFT CLAMP SEAT	1
23	GB70	M6X12 HEX SOC CAP SCR	4
24	GB859	6MM SPRING WASHER	4
25	1017	ADJUST SHOES	1
26	GB819	M8X20 HEX SOC COUNTERSUNK SCR	1
27	1018	ADJUST HANDLE	1
28	GB6170	M8 HEX NUT	1
29	1019	UPPER SUPPORT BRACKET	1
30	GB	M8X20 HEX SOC PAN HD SCR	4
31	GB859	8MM SPRING WASHER	4
32	1020	ADJUST PIECE	1
33	GB80	M6X6 HEX SOC SET SCR	2
34	1021	SPRING PIECE	1
35	GB819	M4X8 CROSS HD COUNTERSUNK SCR	2
36	1022	ADJUST GEAR	1
37	1023	BUSHING	1
38	1024	GEAR FIXED PLATE	1
39	GB70	M6X12 HEX SOC CAP SCR	2
40	GB859	6MM SPRING WASHER	2
41	1025	GUIDE SHAFT COVER PLATE	2
42	GB819	M4X8 CROSS HD COUNTERSUNK SCR	4
43	1026	GUIDE SHAFT	1
44	1020	GUIDE SHAFT CONNECT ROD	1
45	GB70	M6X30 HEX SOC CAP SCR	1
46	GB/0 GB6170	M6 HEX NUT	1
	1028	GEAR ROW	1
<u> </u>	1040		
47	GR810	MAX8 CROSS HD COLINITEDSI INIK SOD	1 2
47 48 49	GB819 1029	M4X8 CROSS HD COUNTERSUNK SCR ADJUST KNOB	$\frac{3}{2}$

REF.NO	#DWG.	DESCRIPTION	Q'TY	
51	1030	UPPER SUPPORT BRACKET POST	1	
52	GB5783	M6X20 HEX BOLT		
53	1031	SPACER SLEEVE		
54	80100	DOUBLE END SEALED BALL BEARING	2	
55	GB9074.1	M6X8 CROSS PAN HD SCR W/FT WASHER	1	
56	1032	THUMB SCR	4	
57	1032	ADJUST NUT	4	
58	GB80	M8X40 HEX SOC SET SCREW	4	
59	1034	SUPPORT BRACKET	2	
60	GB70	M5X40 HEX SOC CAP SCR	2	
61	GB859		2	
H		5MM SPRING WASHER	4	
62	1035	BIAS SHAFT	4	
63	80018 CD70	DOUBLE END SEALED BALL BEARING		
64	GB70	M5X10 HEX SOC CAP SCR	2	
65	GB96		2	
67	1036	SAW BLADE COVER	1	
68		M6X8 CROSS PAN HD SCR W/FT WASHER	2	
70	1037	GUIDE SHAFT SCALE	1	
71	1038	FREE BOARD	1	
72	1039	PLASTIC FLAT WASHER	1	
73	1040	STEP SCR	1	
74	1041	POINTER FIXED PLATE	1	
75		M5X6 CROSS PAN HD SCR W/FT WASHER	3	
76	1042	POINTER	1	
77	1043	LEFT COVER	1	
78	1044	RIGHT COVER	1	
79	GB9074.1	M5X8 CROSS PAN HD SCR W/FT WASHER	4	
80	1045	FIXED PLATE	1	
81	GB5783	M8X20 HEX BOLT	3	
82	GB859	8MM SPRING WASHER	3	
83	GB97.2	8MM FLAT WASHER	3	
84	1046	PIN	2	
85	GB80	M8X20 HEX SOC SET SCR	3	
86	1047	LOW SUPPORT BRACKET POST	1	
87	GB5783	M6X16 HEX FLANGE SCR	2	
88	GB96	6MM FLAT WASHER	2	
89	GB70	M5X40 HEX SOC CAP SCR	2	
90	GB6170	M5 HEX NUT	2	
91	GB96	5MM FLAT WASHER	2	
92	1048	TUNNION SUPPORT BRACKET	1	
93	GB5783	M8X30 HEX BOLT	3	
94	GB859	8MM SPRING WASHER	3	
95	GB5783	M8X80 HEX BOLT	1	
96	GB6170	M8 HEX NUT	1	
97	1049	SCALE POINTER	1	
98	GB9074.1	M5X8 CROSS PAN HD SCR W/FT WASHER	1	
99	1050	FIXED RING	1	
100	GB80	M5X5 HEX SOC SET SCR	1	
101	1051	ADJUST SHAFT	1	
			1	
102	1052	SHAFT SEAT		

REF.NO	#DWG.	DESCRIPTION	Q'TY	
104	1054	BLADE TENSION POINTER	1	
105	1055	FREE SQURE PLATE		
106	1056	BLADE ADJUST KNOB		
107	1057	HANDLE LOCK KNOB		
108	1058	UPPER WHEEL ADJUST FRAME	1	
109		M8 PULL NUT	1	
110	1059	SQURE SHAFT	1	
111	1060	REVOLVING SPINDLE	1	
112	GB70	M8X20 HEX SOC CAP SCR	4	
113	GB859	8MM SPRING WASHER	4	
114		FLAT WASHER	4	
115	1061	UPPER WHEEL JUMP SEAT	1	
115	GB879	5X35 SPRING PIN	3	
117	1062	UPPER WHEEL SHAFT	1	
117	GB7246	15 WAVE WASHER	2	
113	1063	UPPER WHEEL	1	
119	6202Z	DOUBLE END SEALED BALL BEARING	4	
120	GB893.1	35MM RETAINING RING	4	
121	GB5783	M8X16 HEX HD BOLT	2	
122	GB859		$\frac{2}{2}$	
	00039	8MM SPRING WASHER	$\frac{2}{2}$	
124	1064		$\frac{2}{2}$	
125	1064		_	
126	1065	SAW BLADE	1	
127	1066	LOWER WHEEL	1	
128	GB	V BELT	1	
129	GB6171	M18X1.5 HEX NUT	1	
130	GB856	18MM SPRING WASHER		
131	1067	LOWER WHEEL SHAFT	1	
132	GB80	M8X20 HEX SOC SET SCR	4	
133	GB6170	M8 HEX NUT	4	
134	1068	LOWER WHEEL SHAFT COVER	1	
135	GB9074.1	M5X8 CROSS PAN HD SCR W/FT WASHER	1	
136	1069	BRUSH	1	
137	GB9074.1	M5X8 CROSS PAN HD SCR W/FT WASHER	1	
138	1070	MOTOR W/SWITCH	1	
139	GB1096	5X30 KEY		
140	GB70	M8X20 HEX SOC CAP SCR	2	
141		FLAT WASHER	2	
142	GB859	8MM SPRING WASHER	2	
143	1071	MOTOR PULLEY	1	
144	GB80	M6X8 HEX SOC SET SCR	1	
145	1072	DUST OUTLET	1	
146	GB9074.1	M6X8 CROSS PAN HD SCR W/FT WASHER	4	
147	GB9074.1	M5X8 CROSS PAN HD SCR W/FT WASHER	4	
148		SWITCH ASS'Y	1	
149		STRAIN RELIEF 6N-4	2	
150	GB9074.1	M5X8 CROSS PAN HD SCR W/FT WASHER	2	



#### 14" BAND SAW TABLE PARTS LIST

REF.NO	#DWG.	DESCRIPTION	Q'TY	
201	2001	TABLE	1	
202	2002	TABLE PIN		
202	2003	TABLE INSERT		
203A	GB879	3X10 SPRING PIN	1	
204	2004	TRUNNION	2	
205	GB70	M6X16 HEX SOC CAP SCR	6	
205A		FLAT WASHER	6	
205B	GB859	6MM SPRING WASHER	6	
206	2005	SCALE	1	
207	2006	TRUNNION CLAMP SHOES	2	
208	GB5783	M10X50 HEX HD BOLT	2	
209	2007	TABLE FIXED KNOB	2	
210	2008	CLAMP FRAME	1	
211	GB5783	M6X20 HEX HD BOLT	2	
212	GB859	6MM SPRING WASHER	2	
213		FLAT WASHER	2	
214	2009	STRAIGHT RULER	1	
215	2010	END COVER	2	
216	GB845	ST3.5X8 CROSS PAN HD SELF TAPING SCR	2	
217	2011	ADJUST BASE	1	
218	2012	CONVEX	1	
219	GB9074.1	M4X6 CROSS PAN HD SCR W/FLAT	2	
220	2013	FIXED SHAFT	2	
221	2014	FIXED SPINDLE	1	
222	2015	FIXED LUMP	1	
223	GB9074.1	M4X10 CROSS PAN HD SCR W/FLAT	1	
224	2016	LOCK CAM	1	
225	2017	LOCK HANDLE	1	
226	GB6170	M8 HEX NUT	1	
227	2018	LINER PLATE	1	
228	2019	SUPPORT TUBE	1	
229	2020	SPACER BUSHING	4	
230	GB70	M6X60 HEX SOC CAP SCR	4	
231	2021	SUPPORT TUBE END COVER	2	
232	GB845	ST3.5X8 CROSS PAN HD SELF TAPING SCR	2	
233	2022	ADJUST SCR	1	
234	GB6170	M6 HEX NUT	1	
235	2023	SQUARE TUBE	1	
236	GB70	M6X16 HEX SOC CAP SCR	2	
237	2024	SQUARE TUBE END COVER	2	
238		MITER GAUGE	1	
238A	2025	MITERGAUGE BODY	1	
238B	2026	MITER GAUGE GUIDE BAR	1	
238C	2027	MITER GAUGE FIXED HANDLE	1	
238D	2028	HANDLE WASHER	1	
238E	2029	POINTER	1	
238F	GB818	M5X6 CROSS PAN HD SCR	1	



#### 14" BAND SAW STAND PARTS LIST

REF.NO.	#DWG.	DESCRIPTION	Q'TY
301	3001	STAND	2
302	3002	SIDE PANEL	2
303		STAND CARRIAGE BOLT	8
304	□190	FLAT WASHER	8
305		NUT	8
306	GB5783	M6X16 HEX HD BOLT	8
307	GB97.2	6MM FLAT WASHER	8
308	GB6177	M6 HEX FLANAGE NUT	8



## WARRANTY

#### 1. WARRANTY

- (a) We warrant that this **Carbatec**. product will be free from defects caused by faulty workmanship or faulty materials for a period 3 years from the invoice date (less specifically noted invoice exclusions).
- (b) This warranty is in addition to other rights and remedies you may have under a law in relation to the goods.
- (c) This warranty does not apply in any of the following cases:
  - (i) defects arising from:
    - (1) fair wear and tear;
    - (2) corrosive atmosphere;

(3) damage or injury caused by deliberate act, lack of care or failure to comply with the recommended care and maintenance for the goods;

- (4) improper use of the goods;
- (5) alterations or repairs (not made by us) to the goods;
- (ii) defects arising from an event outside of our control such as fire, flood, earthquake or other natural calamity, motor vehicle or other accident, strike, civil unrest, terrorism or war;
- (iii) to accessory items such as after-market jigs, accessories or other items which are not sold or serviced by us and which are not sold with or were not included with the main unit purchased; or
- (iv) to wearable parts such as drive belts/shafts, bearings, bandsaw tyres, motor brushes, blades or abrasive belts/discs or other cutting or machining implements.
- (v) damage caused to any electrical component, where connected to a power supply outside the country for which it was designed (namely Australia or New Zealand).
- (d) If this warranty applies and you have complied with the procedure below for making a claim, we will, at our election, either repair the goods (or those parts of the goods recognised as defective) or will provide a replacement within a reasonable time at our expense.
- (e) If this warranty applies, the procedure for making a claim is:
  - (i) you must contact us by email;
  - (ii) you must include in the email the following information:
    - (1) a copy of the order or receipt for the goods;
    - (2) the serial or batch number printed on the machinery manufacturing plate; and
    - (3) a detailed description of the fault and how and when it arose; and
  - (iii) if the fault is a type covered by this warranty, we will then make arrangements with you for the return of the goods to us (for repair or replacement) at our cost using our transport providers or we may decide to attend at your premises to repair or replace the goods.
- (f) Our liability (and that of our resellers) under this warranty is wholly limited to repair or replacement of the goods (or those parts of the goods recognised as defective) in accordance with the procedure above and you have no right to other compensation, costs or damages under this warranty. But this does not mean that you may not have other rights under a law in relation to the goods.
- (g) If following our inspection of goods returned by you under this warranty it is found that this warranty does not apply and you are not otherwise entitled to repair or replacement by us, you must, if requested by us, reimburse our costs including parts, labour and freight.
- (h) This warranty is not transferable and only the person who purchased the goods may make a claim.
- (i) Where the goods have been exported outside Australia or New Zealand, the Company may not require the Purchaser to return any allegedly faulty or defective Product for evaluation. However, the Company has the right to request the return for evaluation at purchasers cost.

#### 2. STATUTORY NOTICE

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

#### 3. CONTACT DETAILS

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