C80/C100
WOODCHIPPER

Operation, Safety & Maintenance Instructions

RED ROO™
COMMERCIAL POWER EQUIPMENT

RED ROO™
COMMERCIAL POWER EQUIPMENT

INTRODUCTION

Dear Valued Customer,

Congratulations! You have purchased one of the most superbly crafted woodchippers in the world. Properly maintained, it will give you years of reliable service. When the instructions in this manual are adhered to, operation is safe and simple.

Red Roo Woodchippers are built to withstand the most difficult conditions. Designed with simplicity and safety in mind, this woodchipper performs using precision engineered componentry and the force of gravity.

The Red Roo Woodchipper is designed to chip branches that are 80mm to 100mm in diameter. Its heavy duty construction and premium quality engine provide the durability required for this application.

Thank you for purchasing this Red Roo product and remember to operate it responsibly and safely.

For your future reference

Serial No. ..... **Date of purchase** .....

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ABOUT THIS MANUAL

The information contained in this manual has been prepared to assist you in the safe operation, the routine maintenance and general care of your Red Roo product. By following these guidelines, you may look forward to years of reliable service from your Red Roo. Information is categorised and denoted by the following symbols and phrases:

SAFETY FIRST Identifies general safety practices.

DANGER! An instruction which, if not followed, could result in serious or fatal injury.

WARNING! An instruction which, if not followed, could result in personal injury.

CAUTION! An instruction which, if not followed, could result in the possibility of personal injury or damage to machine components.

Before operating this Machine read and observe all Warnings, Cautions and Instructions on the Machine and in the Operators Manual. Although the reading of information contained in this manual does not eliminate the risk involved in operating this machine, your understanding of this information will promote the correct and safe use of your machine. Failure to follow Instructions and Safety Information could result in serious injury or death.

HAZARD WARNINGS

SAFETY FIRST

Read this section before use!

The C80/C100 Woodchipper is designed to chip wood and therefore is potentially dangerous. Careless or improper use may cause serious or even fatal injury.

It is important that you read and understand the contents of both this manual and the engine manual. Allow only mature, adult individuals to operate your woodchipper. **It is your responsibility to ensure that any individual who operates your woodchipper has read and understood these manuals.**

Never use the woodchipper for any other purpose than chipping organic yard debris. The machine is designed explicitly for this purpose and this purpose only. Any other use may result in serious or fatal injury and/or damage to the machine.

SAFETY PRECAUTIONS FOR C80/C100 USERS

Outdoor Power Equipment Institute Recommendations

WARNING TO PURCHASERS OF INTERNAL COMBUSTION ENGINE EQUIPPED MACHINERY OR DEVICES:

The equipment which you have purchased does not have a spark arrester muffler. If this equipment is to be used on any forest and brush covered and or grass covered unimproved land, the law may require that a spark arrester muffler be installed and be in effective working order. The spark arrester must be attached to the exhaust system and comply with local authorities by-laws.

USE COMMON SENSE AND PLENTY OF IT

1) **DO NOT** allow any person to operate the woodchipper without first reading and understanding the safety precautions and operating instructions. Also read and understand the engine manual. **KNOW THE CONTROLS AND HOW TO STOP THE WOODCHIPPER QUICKLY IN AN EMERGENCY.**

2) **NEVER** allow children to operate the woodchipper.

3) **ALWAYS** wear protective clothing when operating the woodchipper. This includes, but is not limited to: safety glasses, loose fitting gloves, steel capped boots and hearing protection. **NEVER** wear loose fitting clothing or jewellery when operating the woodchipper. Keep all clothing away from moving parts. Items could become caught in the machine, resulting in injury.

4) **ALWAYS** use woodchipper in a well lighted area.

5) **ALWAYS** operate woodchipper on level ground only. Keep your work area clear and free of debris. Never attempt to move a woodchipper over uneven or hilly ground without a tow vehicle or adequate help.

6) **NEVER** operate the chipper when fatigued. **ALWAYS BE ALERT!** If you get tired while operating the chipper, take a break. If you have any type of physical or mental condition that may be aggravated by strenuous work, check with your physician before you operate this equipment.
NEVER operate the chipper under the influence of medication, alcohol or drugs.

7) **DO NOT** allow other persons near the woodchipper. It is the responsibility of the operator to keep bystanders and animals a minimum of 6 metres (20 ft) away from the machine while in operation.

8) **ALWAYS KEEP YOUR HANDS, FEET AND BODY AWAY FROM THE INTAKE HOPPER AND DISCHARGE CHUTE WHEN THE MACHINE IS IN OPERATION OR THE CHIPPER DISC IS TURNING.**

9) **NEVER** operate the unit without the safety guards in place and in working order. Keep the unit well maintained and in good working order

10) **DO NOT** leave the machine unattended while the engine is running.

11) **DO NOT** overspeed the engine or alter the governor settings. Excessive speed is dangerous and will shorten engine life.

12) **NEVER** operate the woodchipper in an enclosed area. Engine exhaust contains carbon monoxide, an odourless and tasteless poison.

13) **STOP** the engine and disconnect the spark plug lead(s) and allow engine to cool before inspecting or performing maintenance on the woodchipper.

14) **REFUELLING**

* Shut off engine. **DO NOT REFUEL AN ENGINE THAT IS OPERATING!**
* Allow engine to cool. Minimum 5 minutes.
* **USE UNLEADED FUEL ONLY. Use clean, fresh unleaded fuel.**
* **Do not mix oil with unleaded fuel.**
* Do not over-fill fuel tank. Allow space for fuel expansion.
* Do not smoke near the unit.
* Allow no naked flame or hot material in refuelling area.
* Use only approved fuel containers and funnels. Remember, fuel is a potential hazard.
* Refer to engine owners manual for full details.

OPERATING INSTRUCTIONS

TRANSPORT

1) **WARNING:** Do not exceed 80 kms per hour when towing.

2) **WARNING:** Make sure discharge chute is tightened and secure before towing. (See Figure 1)

BEFORE USE

1) **WARNING:** Before starting engine, inspect the intake hopper and remove any foreign debris or branches, stones, cans, nails, sweepings, wire, etc.

2) Perform a thorough visual inspection of the woodchipper and the chipper disc drive system.

3) Rotate and set deflection guards to desired direction and angle. (See Figure 1)

OPERATION

1) Familiarize yourself with the woodchipper and its controls.

2) Wear safety glasses or helmet and visor combination, loose fitting gloves, and hearing protection.

3) No foreign objects such as stones, steel, cans, glass, sweepings, wire, rope or nails should be fed into the chipper chute, as damage will occur.

4) Position the machine level and stable – to avoid unnecessary vibrations do not operate it on concrete or bitumen.

5) Open fuel shut-off valve, if engine is equipped. Move choke control to CHOKE or START position. Note: Choke must be fully closed. Move throttle control to RUN or FAST position.

Typical Throttle & Choke Controls — Stop Switch

If engine is equipped with rocker style stop switch, push RUN or I (I = Ignition) before starting. Rewind Starter: Grasp rope handle and pull slowly until resistance is felt to prevent kickback. Then pull cord rapidly to overcome compression and start engine. Repeat if necessary with choke off and throttle control in FAST position. Operate engine in FAST position.
Disengage Belt Drive. Start engine. Slowly increase engine revs to full speed. Hold engine engagement handle firmly and gradually lift the lever up and around as far as it will go, to engage the drive. This has to be done slowly to allow the cutting disc to pick up speed. Otherwise the engine will stall because there is a high inertia in the cutting disc.

6) Allow engine to reach full R.P.M. and operating temperature. Begin chipping at top speed-full throttle and continue to chip at top speed full throttle.

7) When feeding branches into chipper, make sure to feed the large end of the branch first. Place the branches into the chipper chute from the operator zone. Branches should not be forced into the chipper chute. If branches are extremely long it is recommended that they be cut into shorter lengths to achieve best results. Note: Side branches should be lopped off to avoid clogging the chipper chute. Brush should not be forced into the chipping unit. Chipper should feed itself. If unit does not feed itself, the knives may be dull or the blade to anvil setting may be incorrect.

   Avoid feeding short, stubby pieces of wood into the machine, as they tend to bounce and spin in the inlet chute.

   While operating the machine, keep a wooden stick handy, approximately 30mm diameter and 1 metre long. This will be useful for feeding in short, brushy and very leafy material and to keep the inlet chute clear.

   The chipper can clog up with soft wet or fibrous materials. However, if you feed soft materials intermittently with branches, there should be no problem, as the woodchips tend to clean out the machine.

   Should it happen that the chipper stalls through overloading or clogging, stop the engine. Ensure that the cutting disc is completely stopped and disengage the belt drive. Unbolt the housing cover. Clear and remove all material from inside the housing. Replace the housing cover making sure to tighten the bolts. Restart the machine.

8) **CAUTION:** If chipper discharge clogs with material or the cutting disc jams, **STOP THE ENGINE IMMEDIATELY.**

9) When unit is in operation, approach chipper from the operator zone side (See Figure 1). **KEEP CLEAR OF DISCHARGE AREA.**

10) The chipping disc will take several seconds to stop after the engine has been turned of **WARNING: Do not go near the chipping disc for any reason during this period.**

11) **Stop Engine:** Do not move choke control to CHOKE position to stop engine. Backfire or engine damage may occur. Move throttle control to SLOW position, then push rocker switch to 0 (STOP) or turn key to OFF, if equipped. Do not disengage the beltdrive with the machine running, as this will cause unnecessary friction and vibration on the beltdrive.

Typical Stop Switches

AFTER USE

1) Turn fuel tap to "OFF" position.
2) Allow machine to cool down.
3) Clean with warm soapy water. Ensure no water enters the carburettor.

Figure 1

SERVICE INFORMATION

GENERAL MAINTENANCE

BEFORE PERFORMING ANY TYPE OF MAINTENANCE ON THIS MACHINE, ALWAYS FOLLOW THE SAFETY GUIDELINES DISCUSSED IN EACH SECTION. ALWAYS PERFORM THE FOLLOWING THREE OPERATIONS:

1. **TURN MACHINE OFF AND REMOVE IGNITION KEY (IF EQUIPPED).**
2. **ALLOW ENGINE TO COOL.**
3. **REMOVE SPARK PLUG LEADS WHEN SERVICING OR ADJUSTING ENGINE OR EQUIPMENT.**

- Your engine manual contains important information concerning its care and operation. Read it carefully. Make sure engine has sufficient lubrication before operation. Service the air element(s) frequently.

LUBRICATION

- Lubricate the rotor bearings every 10 hours of operation with multi-purpose bearing lubricant. **DO NOT OVER GREASE.** Check the bearing collar lock screws at this time to ensure that they are tight.
- **DO NOT OVER GREASE ROTOR BEARINGS.** Over greased bearings will run hot. A medium weight grease should be used on rotor bearings. Check wheel hub bearings and repack if required.

BELT TENSION, ADJUSTMENT AND ALIGNMENT

- Proper tension on the drive belts is 4-5 mm deflection at the center of the span between the pulleys with 3kgs of pressure applied.

NOTE: When installing a new set of belts, a break-in period of two (2) hours with subsequent re-tensioning is recommended.

- Remove spark plug leads, engage belts.
- See Illustration 6 –Adjustment Screw (Item 10)
- Release lock nut on adjustment screw.
- Screw down to tighten belts.
- Screw up to loosen belts or when replacing belts.

HINT: To familiarize yourself with the required pressure, have kitchen scales nearby. Put a pencil through the access slot on angled side of belt guard, onto either of the belts and mark a line flush with the top of guard onto pencil. Then mark another line 4mm above. Press the centre of the scales with the pencil to 3kg, then on the belt with the same feel. The top mark lines up with the belt guard when belt tension is correct.

CAUTION: Excessive belt tension will result in power loss, premature wear and excessive stress on crankshaft bearings.

CAUTION: Check tension of new belts after the first two hours of operation and several times during the first 50 hours of operation.

CAUTION: REPLACE BELTS WITH A FULL, MATCHED SET. Belt tensions will vary with a subsequent loss in power. Non-matched belts can be thrown from the pulley. Use only GENUINE RED ROO PARTS

KNIFE REPLACEMENT

WARNING: Disc will turn for several seconds after engine stops.

WARNING: Be sure engine and disc/knives have come to a **FULL STOP** before opening access cover to change knives. Disconnect engine spark plug leads prior to performing any maintenance procedures.

WARNING: Always block disc from rotating when working on knives or performing other maintenance that could allow the disc/knives to rotate, causing serious injury. Use disc lock pin (supplied) to pin rotor disc which will prevent disc from turning. **Always remove disc lock pin before restarting chipper.**

When the steel chipping knives (Part No. 0206-0002) needs turning, sharpening or replacing, proceed as follows. When changing knives, make sure that all knives are perfectly clean and knife pockets are thoroughly cleaned of any rust or foreign objects before reinstalling knives. Make sure that counter sunk screws and nuts in knife are carefully and equally tightened for proper holding. Double check to assure safety.

Knife Bolt Remover
Part No. 1401-0056

1. Ensure the engine is cool and remove spark plug leads.
2. Unbolt access covers.
3. Position disc lock pin through both front and back plate.
4. Clean hexagonal socket in counter sunk knife screws (Part No. 1901-0010) item C with a pressure washer or sharp pointed object.
5. Remove the counter sunk screws (1901-0010) item C and locking nuts (1401-0052) item B on each Knife (See View 1).
   KNIFE BOLT REMOVER TO USE: Remove Lock Nut at the rear of Blade. Screw on special Blind Nut (1401-0056) until counter sunk screw releases. Unscrew and remove with 5/16" hex bit with 1/2" drive (2004-0003).
6. When Knives are sharpened or exchanged, always use sharp edge away from disc when installing Knives. (See View 1, Item E). Be sure that Knives and Receiving Seat in Disc are perfectly clean and free of burr and debris before installing knives. **NOTE:** The blade life is determined by the point where the bevel face (after subsequent sharpening) meets the slot in the chipper disc. (i.e. Dim X not to become less than zero.) (See View 1.) **WARNING:** Do not exceed this point as the blade may fail.
7. If resharpened knives are to be installed, anvil must be adjusted to compensate for the amount of material removed from the knives during sharpening. (View 2). See anvil adjustment and replacement.
8. Replace the chipper knives using metal base grease (i.e. anti seize) on threads and under head of counter sunk knife screws. DO NOT allow the grease to get between the knife and disc.
9. Finger tighten all knife screws first. Tighten in the following sequence. Starting at the outside circumference bolt, then middle bolt, and then inside bolt.
10. Replace spring washer and jam nut to the exposed thread and tighten securely.
11. Check each countersunk knife screw and make sure both the screw and the jam nut are tight before closing and securing the access covers.

Letter and Part Number Key

A – 2301-0008 Washer, Lock	F – 0104-0005 Anvil
B – 1401-0052 Nut, Jam	G – Mount, Anvil
C – 1901-0010 Screw, Cap Flat	H – 0209-0320 Bolt
D – 0403-0009 Disc	I – 2301-0006 Washer, Lock
E – 0206-0002 Knife	J – 1913-0031 Spacer

ANVIL ADJUSTMENT AND REPLACEMENT

1. The chipper utilizes a single anvil with 3 hold-down bolts. The anvil (View 1, Item F) is located below the intake hopper. To remove anvil, ensure the disc has come to a full stop and remove the bolts.

   WARNING: Disc may contain latent residual energy and suddenly turn or rotate further to cause serious injury to fingers.

   WARNING: Disengage belts and remove spark plug leads.

   CAUTION: If the anvil has been removed, all dirt and debris under anvil must be removed to achieve proper anvil setting and tightness.

   WARNING: Do this operation with extreme caution as knives are razor sharp.
2. The anvil has four (4) usable edges. When edge is worn, rotate anvil until all four (4) edges are worn. Replace anvil after fourth rotation.
3. When checking clearance between knife edge and anvil, as shown in View 1, page 8; use knife gauge for adjustment between E & F (View 1). For best chipping action, have between 3mm clearance on the outer edge and 1mm clearance on the inner edge. (refer to View 2)
4. When proper clearance is obtained, tighten all bolts securely. Tighten the middle bolt FIRST. Tighten remaining bolts. This will ensure even pressure on all anvil bolts.
5. Before starting machine, always manually rotate disc for several revolutions and check for proper setting, clearance and adjustment.
6. If the gap between anvil and knife is excessive, you will have vibration when chipping. The blade will seem to be dull and metal fatigue may occur. If the gap is to small, the blade may strike the anvil.
7. Always maintain knives in a perfect set, both in dimension and weight.

   CAUTION: ALWAYS TEST-RUN CHIPPER FOR A FEW MINUTES AFTER KNIVES HAVE BEEN CHANGED. THEN RECHECK FOR KNIFE TIGHTNESS BEFORE RESUMING CHIPPER OPERATION. ALWAYS CHECK TIGHTNESS OF BOLTS BEFORE STARTING UNIT.

MAINTENANCE MINDER

WARNING: Turn engine off. Disconnect spark plug wire from spark plug. De-energize the starting system on engines equipped with Touch-N-Mow® starters.

WIRE ROUTING: Route the wire with existing equipment wire harness or wrap around and tape to metal supports. After connections are made, wrap up any excess wire and tape.

CAUTION: Keep all wires clear of extremely hot engine parts, such as exhaust area, and keep clear of any rotating parts. Cuts or burns to the wires can cause a short and the Maintenance Minder will stop working.

RED WIRE INSTALLATION: Wrap around an insulated section of spark plug wire 3-4 times, as shown. **DO NOT** wrap the wire too close to where the spark plug and wire connect, vibration may cause it to come in contact with the metal portion of the spark plug.

WHITE WIRE INSTALLATION: Attach using a bolt from the engine frame or blower. Loosen the bolt and slip the solder lug between engine and bolt. Tighten bolt.

MAINTENANCE MINDER INSTALLATION: Maintenance Minder should be installed in a location which is easily viewable and is free of dirt, grease and oil.

OPERATION: The display holds 5 digits, and is initially set to zero, 0000.0. Once the engine is started, the meter will record running time in tenths of an hour. Example: If the engine ran for 6 minutes (1/10 hour) the Maintenance Minder will display 0.1.

After 25 hours, or increments of 25 hours, (eg. 25, 50, 75, etc.) of running time the display will flash on and off. Press the reset button with a pointed object, to stop the display from flashing. When the display reaches a count of 9999.9, it will reset back to 0000.0 and start over.

CARING FOR YOUR POWDERCOATED FINISH

The effects of ultra violet light, pollution, dirt, grime, and salt deposits accumulate on the powder coated surface of your machine over time. To extend the effective life of the powder coated surface, a regular maintenance program should be implemented for the removal of any debris or residues.

As a general rule the machine should be cleaned after every use.

1) Remove any loose deposits with a wet sponge
2) Use a soft brush (non abrasive) or cloth, and a mild household detergent solution to remove any dirt, or grime
3) Pressure wash or rinse when finished

Detergents that recommend the use of gloves when handling should be avoided. The detergent may be too harsh and therefore unsuitable for cleaning your powder coating. Although some strong solvents are recommended for removing grease, or other stubborn residues these may be harmful to the extended life of the powder coated surface. If paint splashes or other residue needs to be removed then use methylated spirits, turpentine, or white spirits.

STORAGE

- When unit is not in use, store out of the reach of children. Ensure that petrol fumes are not present in the storage area. For extensive storage periods, the fuel tank should be drained or a fuel stabiliser added. Draining the tank is strongly recommended. Engine should be stored with the intake and exhaust valves closed (compression stroke). See Engine Manual.

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C80/C100 Illustration 1

PARTS LIST FOR C80/C100 ILLUSTRATION 1

Item No.	Part No.	Description	Quantity
1	1901-0010	Screw, Blade	6
2	0206-0002	Blade, Chipping Knife	2
3	0403-0009	Disc, Chipping	1
4	2301-0008	Washer, Lock	10
5	1401-0052	Nut	10
6	0215-0034	Bushing, Taper Lock	1
7	1913-0079	Spacer, Disc to Shaft	1
8	1904-0022	Shaft, Rotor	1
9	1913-0014	Spacer, Rotor Shaft	As Required
10	1605-0030	Plate, Volute Pulley Side	1
11	0314-0026	Cover, Access Blade Nuts	1
12	2301-0004	Washer	19
13	0209-0106	Bolt	4
14	1608-0031	Pulley, Driven Rotor	1
15	0215-0033	Bushing, Driven Rotor	1
16	1102-0016	Key, Pulley Rotor	1
17	1901-0042	Screw	2
18	0704-0043	Guard, Belt	1
19	0209-0108	Bolt	13
20	2301-0021	Washer	15
21	0704-0046	Guard, Belt Inspection	1
22	0209-0141	Bolt	2
23	0806-0014	Housing, Bearing	1
24	0204-0015	Bearing	2
25	0705-0009	Guide, Upper Belt	2
26	0705-0010	Guide, Lower Belt	1
27	0704-0047	Guard, Belt Back Panel	1
28	0401-0058	Nut	1

safety

IS EVERYBODY'S BUSINESS

...now

You alone know the operational demands and special conditions affecting the equipment in your situation and therefore assume the responsibility for developing, carrying out, and enforcing the safety concepts which apply to your own operation to effect the greatest safety for yourself and the people around you.

C80/C100 Illustration 2

C80/C100 Illustration 2a

C80/C100 Illustration 3

PARTS LIST FOR C80/C100 ILLUSTRATION 2

Item No.	Part No.	Description	Quantity
1	0209-0318	Bolt	4
2	2301-0006	Washer	5
3	2301-0004	Washer	6
4	0209-0106	Bolt	6
5	0314-0024	Cover, Access Hole	1
6	1605-0029	Plate, Volute Anvil Side	1
7	1908-0005	Scroll, Volute	1
8	1401-0033	Nut	13
9	2301-0024	Washer	23
10	0209-0368	Bolt	11
11	1604-0018	Pin, R	1
12	1604-0046	Pin, Locking Assembly	1
13	2301-0022	Washer	2
14	0209-0320	Bolt	3
15	1913-0031	Spacer	5
16	0209-0621	Bolt	3
17	0314-0018	Cap	1
18	1901-0012	Screw	1
19	0303-0022	Cap	1
20	1401-0052	Nut	4
21	2301-0008	Washer	4
22	0806-0025	Housing, Bearing	1
23	0204-0015	Bearing	1
24	1913-0054	Spacer, Flange, Seal Ring	1
25	0104-0005	Anvil	1

PARTS LIST FOR C100 ILLUSTRATION 2a

Item No.	Part No.	Description	Quantity
1	BS805256	Gasket	2
2	0101-0008	Block, Spacer	1
3	2301-0003	Washer	3
4	0209-0003	Bolt	1
5	1901-0023	Screw, Cap	2
6	0209-0032	Bolt	2

PARTS LIST FOR C80/C100 ILLUSTRATION 3

Item No.	Part No.	Description	Quantity
1	1913-0080	Spacer, Motor Pulley (C80 13.0 Honda)	1
	1913-0082	Spacer, Motor Pulley (C100 16.0 B&S)	1
2	1102-0012	Key, Pulley, Motor	1
3	0205-0010	Belt	3
4	1608-0030	Pulley, Motor	1
5	0215-0032	Bushing, Taper	1
6	1901-0043	Screw	2
7	0209-0322	Bolt	4
8	2301-0022	Washer	2
9	2301-0024	Washer	6
10	1401-0023	Nut	4
11	0503-0025	Engine	1

C80/C100 Illustration 4

C80/C100 Illustration 5

PARTS LIST FOR C80/C100 ILLUSTRATION 4

Item No.	Part No.	Description	Quantity
1	0209-0109	Bolt	4
2	2301-0021	Washer	4
3	2301-0004	Washer	2
4	1401-0504	Nut	10
5	0214-0098	Bracket, Mount (C80)	2
	0214-0102	Bracket, Mount (C100)	2
6	0606-0001	Fender, Mudguard (C80)	2
	0606-0002	Fender, Mudguard (C100)	2
7	0209-0624	Bolt, Assembly	10
8	1906-0001	Shield, Cap	2
9	1604-0026	Pin, Cotter	2
10	2301-0028	Washer	2
11	1401-0010	Nut, Castle	2
12	0204-0034	Bearing, Front	2
13	1401-0055	Nut, Wheel	8
14	0312-0008	Cone, Bearing	2
15	2305-0010	Wheel, Assembly (C80)	2
	2305-0011	Wheel, Assembly (C100)	2
16	0806-0013	Hub, Wheel (C80)	2
	0806-0016	Hub, Wheel (C100)	2
17	0103-0011	Axle, Assembly (C80)	1
	0103-0012	Axle, Assembly (C100)	1
18	0204-0014	Bearing, Rear	2
19	1902-0007	Seal	2
20	1401-0023	Nut	2
21	0209-0520	Bolt	4
22	2301-0040	Washer	4

PARTS LIST FOR C80/C100 ILLUSTRATION 5

Item No.	Part No.	Description	Quantity
1	1806-0002	Ring, Circlip	1
2	0314-0025	Cover, Cam Follower	2
3	0204-0023	Bearing	1
4	2301-0053	Washer, Spring Cover	1
5	1916-0021	Spring	1
6	1913-0067	Spacer, Spring Guide	1
7	1401-0033	Nut	1
8	2301-0024	Washer	4
9	0209-0365	Bolt	1
10	1401-0034	Nut	2
11	1913-0031	Spacer	2
12	1303-0017	Mount, Engine	1
13	0215-0031	Bushing, Engine Base	2
14	0209-0030	Bolt	2
15	0706-0008	Gauge, Maintenance	1

C80/C100 Illustration 6

C80/C100 Illustration 7

PARTS LIST FOR C80/C100 ILLUSTRATION 6

Item No.	Part No.	Description	Quantity
1	1201-0020	Lever, Belt Engage	1
2	1904-0021	Shaft, Belt Engage	1
3	0311-0013	Collar, Belt Engage	1
4	1901-0040	Screw	2
5	0214-0086	Bracket, Cam Rotate	1
6	2301-0024	Washer	2
7	1401-0033	Nut	3
8	0603-0004	Fitting, Zerk	1
9	0209-0368	Bolt	1
10	1901-0030	Screw	1
11	1913-0053	Spacer, Belt Engage	1
12	0309-0002	Cam, Belt Engage	1
13	1913-0031	Screw	2
14	2301-0006	Washer	2
15	0707-0001	Grommet	1
16	2301-0021	Washer	1
17	0209-0121	Bolt	1
18	1401-0023	Nut	1
19	0215-0023	Bushing	1
20	0214-0107	Bracket, Spare Tyre (C100)	1

PARTS LIST FOR C80/C100 ILLUSTRATION 7

Item No.	Part No.	Description	Quantity
1	1213-0001	Loom, 5 Core	1
2	1202-0002	Light	2
3	0209-0365	Bolt	1
4	2301-0024	Washer	11
5	0214-0083	Bracket, Clamp	1
6	2301-0040	Washer	1
7	1401-0055	Nut, Wheel	1
8	0214-0082	Bracket, Spare Wheel	1
9	2305-0006	Wheel, Jockey	1
10	0209-0515	Bolt	4
11	2301-0025	Washer	4
12	1401-0053	Nut	4
13	1606-0019	Plug	1
14	1401-0034	Nut	6
15	0316-0012	Coupling	1
16	0209-0318	Bolt	6
17	2301-0022	Washer	10
18	2305-0010	Wheel, Assembly (C80)	1
	2301-0011	Wheel, Assembly (C100)	1

C80/C100 Illustration 8

PARTS LIST FOR C80/C100 ILLUSTRATION 8

Item No.	Part No.	Description	Quantity
1	0805-0007	Hopper, Chipping	1
2	0704-0044	Guard, Extension	1
3	0313-0001	Container, Manual	1
4	1401-0022	Nut	2
5	2301-0018	Washer	4
6	2301-0021	Washer	9
7	0214-0085	Bracket, Hinge	2
8	2301-0020	Washer	4
9	1401-0504	Nut	4
10	0209-0114	Bolt	2
11	0209-0624	Bolt, Assembly	4
12	0801-0009	Handle, Hood	1
13	0306-0011	Chute, Discharge	1
14	0704-0042	Guard, Discharge	1
15	1401-0033	Nut	1
16	2301-0024	Washer	2
17	0209-0372	Bolt	1
18	1401-0035	Nut, Wing	1
19	0601-0002	Flap, Hopper	1
20	1401-0023	Nut	5
21	0214-0062	Bracket, Hopper	1
22	0209-0121	Bolt	5
23	2002-0001	Tie, Cable	2

safety

IS EVERYBODY'S BUSINESS

...now

You alone know the operational demands and special conditions affecting the equipment in your situation and therefore assume the responsibility for developing, carrying out, and enforcing the safety concepts which apply to your own operation to effect the greatest safety for yourself and the people around you.

3 x 0401-0001

1 x medium 0401-0000 2 x small 0401-0000

1 x 0401-0096

1 x 0401-0097

3 x 0401-0062

1 x 0401-0065

1 x 0401-0094

2 x 0401-0077

1 x 0401-0095

1 x 0401-0053

1 x 0401-0049

1 x 0401-0050

2 x 0401-0070

1 x 0401-0038

2 x 0401-0055

1 x 0401-0092

C80/C100 – SERVICE HISTORY

DATE	PART No.	COMMENTS

Superseding Warranty

Red Roo Group of Companies

Warranty Policy

effective August 5, 2002

Replaces all undated previous Warranties and all Warranties dated prior to August 5, 2002.

"For a time period shown below from date of purchase, pending owner registration, Red Roo Sales & Service Company, P/L, herein referred to as "MANUFACTURER", will, at its option, repair or replace for the original purchasers of new Red Roo equipment, free of charge, any part, or parts of the unit (excluding Power Unit, warranty coverage provided by respective engine manufacturer), found upon inspection and testing by a Factory Authorised Agent, or by the Factory at Keysborough, Victoria, to be defective in material or workmanship or both under normal operating conditions; this is the exclusive remedy. All transportation charges on parts submitted to the MANUFACTURER for replacement under this Warranty are the responsibility of the purchaser.

This Warranty shall not apply to any product that has been altered, modified, or operated in a manner not approved or recommended by the MANUFACTURER. Warranty will be null and void in the following circumstances: (1) repairs or attempted repairs have been performed by persons other than agents authorised by the MANUFACTURER; (2) repairs are required because of normal wear; (3) the unit has been subject to abuse or involved in an accident; (4) misuse is evident, such as that caused by an application that unit is not intended to perform.

The MANUFACTURER reserves the right to modify, alter, or otherwise improve any product or part.

The purchaser is responsible for the performance of regular maintenance services as specified in the operator manual applicable to the unit. Untimely and/or improper care and replacement of normal maintenance items (eg.: filters, belts, drive chains, blades, knives, lubricants) may void Warranty. Use of non genuine Red Roo parts may void Warranty.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO 14 DAYS FROM PURCHASE, AND TO THE EXTENT PERMITTED BY LAW ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. LIABILITY FOR CONSEQUENTIAL DAMAGES UNDER ANY AND ALL WARRANTIES ARE EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. RED ROO GROUP OF COMPANIES DOES NOT AUTHORISE ANY PERSON OR ENTITY TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS OR SERVICES. Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion of limitation of incidental or consequential damages, so the above limitation exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state."

Red Roo Sales & Service Company, P/L
James A. Kerr III
Managing Director

Warranty Period

	Consumer Use*	Commercial Use*
All Equipment	365 Days	90 Days

* For the purposes of this warranty policy, "consumer use" shall mean personal residential household use by the original retail consumer. "Commercial use" shall mean all other uses, including use for commercial, income producing or hire purposes. Once a unit has experienced commercial use, it shall thereafter be considered as a commercial use unit for purposes of this warranty policy.

Proper registration of your Red Roo equipment is required to obtain warranty service. It is the responsibility of the original purchaser to register equipment within 10 days of purchase.