





SOD CUTTER Owner's Manual

SC180H

Beginning Serial #: 102215001

Original Instructions

IMPORTANT- READ CAREFULLY BEFORE USE AND KEEP FOR FUTURE REFERENCE

Part No 371508 1 Form No F102215A



ABOUT THIS MANUAL

THANK YOU for purchasing a BILLY GOAT[®] Sod Cutter. Your new machine has been carefully designed and manufactured to provide years of reliable and productive service. This manual provides complete operating and maintenance instructions that will help to maintain your machine in top running order. Read this manual carefully before assembling, operating, or servicing your equipment.

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Go to http://www.billygoat.com for French-Canadian translations of the product manuals.

Visitez http://www.billygoat.com pour la version canadienne-française des manuels de produits



SPECIFICATIONS

SC180H

	1
Engine: HP	5.5 HP (4.1 kw)
Engine: Model	GXV160UH2N1AH
Engine: Type	Honda
Engine: Fuel Capacity	1.6 qt. (1.5 L)
Engine: Oil Capacity	0.69 qt. (0.65 L)
Total Unit Weight:	348# (158 Kg)
Max. operating slope	20°
Overall length	54" (1371mm)
Overall width	26.5" (660mm)
Overall height	36.5" (927mm)
In accordance with 2000/14/EEC	104dBa
Sound at operators position	84dBa
Vibration at operator position	2.5g (24.8m/s ²)

SOUND



Lv/

SOUND LEVEL 84 dB(a) at Operator Position

104 dB(a)

Sound tests were conducted in accordance with 2000/14/EEC, and were performed on 7-11-13 under the conditions listed below.

Sound power level listed is the highest value for any model covered in this manual. Please refer to serial plate on the unit for the sound power level for your model.

General Conditions:

Temperature: Wind Speed: Wind Direction:

Humidity:

Barometric Pressure:

Sunny 84°F (28.9°C) 10 mph (16.1 kmh) East Southeast

37%

30.04 Hg (101.7 kpa)

VIBRATION DATA

VIBRATION LEVEL 2.5 g (24.8 m/s²)

Vibration levels at the operator's handles were measured in the vertical, lateral and longitudinal directions using calibrated vibration test equipment. Tests were performed on 7-11-13 under the conditions listed below.

General Conditions:

Temperature: Wind Speed: Wind Direction:

Humidity:

Barometric Pressure:

Sunny 84°F (28.9°C) 10 mph (16.1 kmh) East Southeast 37%

30.04 Hg (101.7 kpa)



INTENDED USE

INTENDED USE

This machine may only be utilized for the purpose for which it was designed, i.e. to cut 18in (45.7 cm) wide strips of turf. Make sure that all operators of this equipment are trained in general machine use and safety.

WARNING: During operation the lawn and turf are cut into strips. Should the cutter's wheels skid during use it is advisable to adjust the cutting depth. If this operation does not prevent this occurrence check the state of the terrain. If it is too dry it should be wetted so that the blade encounters a slight resistance, thus making cutting operations easier.

INSTRUCTION LABELS

The labels shown below were installed on your BILLY GOAT[®] Sod Cutter. If any labels are damaged or missing, replace them before operating this equipment. Item numbers from the Illustrated Parts List and part numbers are provided for convenience in ordering replacement labels. The correct position for each label may be determined by referring to the Figure and Item numbers shown.



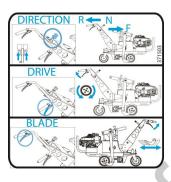
TIE DOWN BARS FOR STRANSPORT ONLY



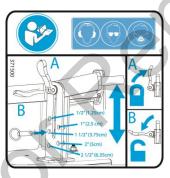
LABEL DANGËR KEEP HANDS AND FEET AWAY P/N 400424

LABEL TIE DOWN P/N 371505

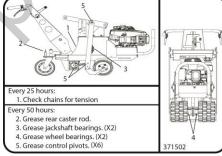
LABEL WARNING GUARDS P/N 900327



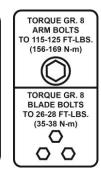
LABEL INSTRUCTION DRIVE P/N 371503



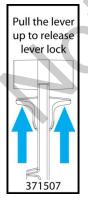
LABEL INSTRUCTION DEPTH P/N 371500



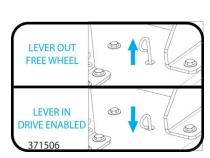
LABEL GREASE POINT P/N 371502



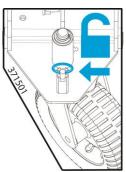
LABEL TORQUE P/N 371524



LABEL SHIFTER CONTROL P/N 371507



LABEL DRIVE RELEASE P/N 371506



LABELS CASTER LOCK P/N 371501 & 371504



PACKING CHECKLIST

Your Billy Goat Sod Cutter is shipped from the factory in one crate, completely assembled.



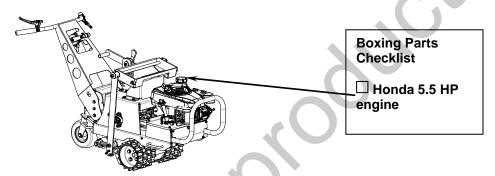


READ all safety instructions before assembling unit. **TAKE CAUTION** when removing the unit from the box.

PUT OIL IN ENGINE BEFORE STARTING
CHECK GREASE IN BEARING PER SERVICE LABEL ON UNIT. ADD GREASE AS REQUIRED. USE NLGI GRADE 2
MULTIPURPOSE LITHIUM BASE GREASE

PARTS BAG & LITERATURE ASSY

Warranty card P/N- 400972, Owner's Manual P/N-371500, Declaration of conformity P/N- 371509, General Safety and Warranty manual P/N- 100295



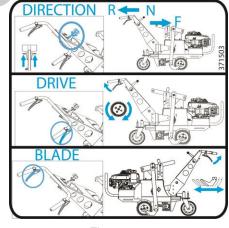
OPERATOR CONTROLS

<u>DRIVE CONTROL</u>: Located on the right hand side of the handle bars. When engaging the drive lever, pull it till it comes into contact with the handle bar. Do not halfway engage the drive as this will cause premature failure of the transmission. (See *Fig.* 1)

<u>BLADE ENGAGE LEVER</u>: Located on the left hand side of the handle bar. As with the drive lever, it must be fully engaged when in use.

<u>SPEED AND DIRECTON SHIFTER</u>: Lift the levers located on either side of the shifter control then move the shifter control forward or backward to select the desired direction and speed then release the levers. DO NOT push the shifter control without releasing the levers as this will cause damage to the shifter control. (See *Fig.* 2)

FREE WHEEL LEVER: Located on top of machine next to the height adjust. Pull the lever out to free wheel and push it in to allow the drive to be engaged. (See Fig. 3)



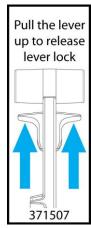


Fig. 1

Fig. 2



Fig. 3



OPERATION

Note: Item numbers in () will be referenced in the Parts Illustration and Parts List on pages 11-20

△Like all mechanical tools, reasonable care must be used when operating machine.

Inspect machine work area and machine before operating. Make sure that all operators of this equipment are trained in general machine use and safety.

PUT OIL IN ENGINE BEFORE STARTING

STARTING ENGINES

See engine manufacturer's instructions for type and amount of oil and gasoline used. Engine must be level when checking and filling oil and gasoline.

ENGINE SPEED: Engine speed is fixed.

FUEL VALVE: Move fuel valve to "ON" position.

CHOKE: Found on engine above fuel on switch.

PULL: Pull the starting rope to start engine.

FORWARD CONTROL AND BLADE MOVEMENT LEVERS: See page 8 Operator's Controls.

Do not operate if excessive vibration occurs. If excessive vibration occurs, shut engine off immediately and check for damaged or worn blade, loose blade bolts, loose engine or lodged foreign objects.

HANDLING & TRANSPORTING

Use loading ramps to move unit into truck or trailer for transport. \triangle DO NOT operate the blade when loading. \triangle Never load this machine by hand.

CUTTING OPERATION

The unit performs best when the ground is wet. If possible sprinkle the work area several hours before starting.

CAUTION: Shut off the blades when crossing gravel drives, walks or roads and under all conditions where thrown objects might be a hazard.

CLEARING DEBRIS FROM UNDERSIDE OF MACHINE: Turn engine off and wait for blade to stop completely. Disconnect spark plug wire and place the unit in gear to prevent the unit from rolling.

Wearing durable gloves, remove debris. Danger, the debris may contain sharp materials. Reconnect spark plug wire.

CAUTION: Use extreme care when operating the blade. Inspect the work area for foreign objects that could cause damage to the unit or injure the operator if struck by the blade. Never operate the blade with bystanders in the work area.

GENERAL OPERATION

Position the turf cutter outdoors on sufficiently firm, flat soil. Read the instructions provided by the engine manufacturer in the relative manual and follow them carefully to prevent situations arising which may endanger either persons or the machine.

WARNING: When using the machine for the first time it is advisable to get the feel of it by executing maneuvers on flat ground free of foreign objects.

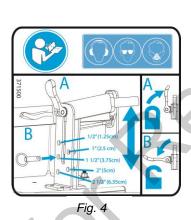
After switching on the engine following the instructions given in the previous paragraph:

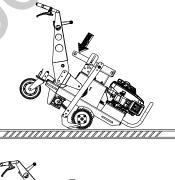
WARNING: DO NOT adjust cutting depth while machine is in motion. Choose a cutting depth suitable for the type of terrain the machine is to be used on. Cutting height is set using the removable pin and placing it into the desired slot for depth. Then loosening the locking lever to allow the arm to be raised or lowered. The arm should be resting against the pin for the desired cutting height. Make sure to engage the locking lever before blade operation.

Operation continued next page.



- 1. Choose a depth of cut. See instruction label on the unit (see *fig 4*). *Note*: Sod should be cut leaving a minimum amount of dirt (1/4"-3/8") attached to the roots. This minimizes its weight for removal and encourages faster growth when reused.
- 2. Holding both handles, fully engage the blade clutch lever on the operator's left hand side. Rocking back on the handles, allow the blade to cut into the sod to your chosen depth. Keep the blade clutch lever fully engaged at all times when cutting (see *fig 5*).
- 3. Using the ground speed and direction adjustment lever in the middle of the handle, set forward ground speed to a slow forward speed to begin.
- 4. Fully engage the ground drive clutch lever on the operator's right hand side. The unit will begin to move forward and cut a strip of sod.
- 5. As ground conditions allow, increase the ground speed using the speed control lever, in small increments until you attain the maximum speed of cut for your application. If the engine RPM drops significantly lower the forward speed until the engine comes back up to speed.
- 6. When you reach the end of the strip you are cutting, release both clutch levers and the unit will come to a stop. Using the blade depth adjustment handle raise the blade to the maximum height possible and lock it in place.
- 7. Fully engage both blade drive and ground drive clutch levers and the unit will drive forward and complete the cut of the strip.
- 8. Release the blade clutch lever and continue to drive the unit forward into position for the next cut, repeat the process above as required.





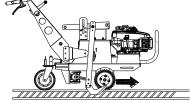


Fig. 5

*****TIPS****

Before commencing cutting operations, read the safety instructions given in the previous sections.

At first the setting of a relatively shallow cutting depth is recommended and then lowering it gradually according to working conditions.

Engage the blade clutch only after having carried out the machine switch on and gear engagement operations.



MAINTENANCE

Note: Item numbers in () will be referenced in the Parts Illustration and Parts List on pages 11-20.

PERIODIC MAINTENANCE

Periodic maintenance should be performed at the following intervals (disconnect spark plug during maintenance):

Maintenance Operation	Every Use (daily)	Every 5 hrs or (daily)	Every 25 Hrs	Every 50 Hrs (Yearly)	Every 150 Hrs
Inspect for loose, worn or damaged parts	•				
Check for excessive vibration		•		*	
Inspect belt for wear					
Engine (See Engine Manual)					
Grease pivot points *Use NLGI grade 2 multipurpose lithium based grease					
Sharpen Blade					
Replace blade and traction belts					•

Note: Blade, and drive belts and chains are normal wear items. See Fig. 4 for Chain configuration. These should be inspected on a regular basis and replaced if worn. Also see your Billy Goat Dealer for servicing your machine.

BELT REPLACEMENT

Note: See Fig. 3 for belt configuration

Switch off the engine and disconnect the spark plug wire before carrying out any maintenance or repair work on the machine.

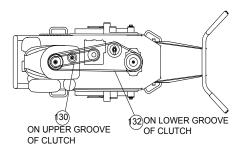
If a belt is worn or breaks it should be replaced as follows:

Remove all of the metal guards (items 15, 16, 21 and 17) to allow easier access to the pulleys and belts.

Note: see pages 11, 13, 15, 17 and 19 for part illustrations

BLADE BELT

- 1. Disconnect the spark plug, and then remove the guards.
- 2. Remove the master link on the drive chain (Item 133) to allow the belt (item 132) to be slipped past.
- Loosen the tension on the pulley (item 35) by loosening the nut and bolt holding it to the base. Do not completely remove the nut and bolt, as loosening it will allow the pulley to shift.
- 4. Walk the old belt off of the clutch (item 18) if necessary.
- Replace with the new belt and reapply tension to it on the pulley loosened in step 3 then tighten it. Do not put too much tension on the belt as this will lead to premature wear.
- 6. Reinstall the chain onto the wheel drive by reinserting the master link.
- 7. Reinstall the guards.
- 8. Check for proper operation.



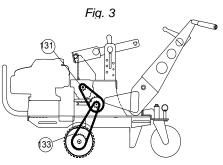


Fig. 4

See page 19 for parts illustration



DRIVE BELT

- 1. Follow steps 1-4 in the blade belt removal section. The blade belt will need to be removed in order to remove the drive belt.
- 2. Loosen the belt finger (119) on the idler arm (20) and remove the belt from the idler arm by lifting it over the idler pulley (39) and arm.
- 3. The belt will be loose enough now to walk it off of the transmission pulley (32). Remove the belt from the transmission pulley.
- 4. Disconnect the clutch cable (110) and then remove the bolt (114) holding the clutch (18) to the engine shaft.
- 5. Lower the clutch (18) enough and slide the belt off of the clutch groove and replace the old worn belt with a new one. Make sure it is sitting in the groove that the old one was removed from.
- 6. Reconnect the clutch back to the engine shaft. Make sure the anti-rotation bolt is in the small tube before reattaching. See page 15 for proper torque for the clutch bolt.
- 7. Reinstall all removed parts in the reverse order that they were removed.
- 8. Check for proper operation.

CHECKING AND REPLACING THE BLADE

- Always check the state of the blade (item 44) before commencing work. Do not forget to switch the engine off!
- Remove the sparkplug wire.
- During work operations if the blade strikes stones or stumps stop straightaway and make sure that it has not become bent or broken. A damaged blade must be replaced.
- If the blade is very worn, cracked or bent, it may snap and project objects outwards, risking serious accident.
- Use heavy-duty work gloves to check or replace the blade to avoid risk of injury to hands.
- The blade fixing screws (item 81) and relative nuts (item 75) are also subject to wear. Always replace them at the same time as the blade, using bolts and screws of the same strength and type. Torque the bolts to 30 ft. lbs. (40.6 N.m)
- The blade wears more quickly on dry, sandy ground. In these conditions it should be replaced more frequently.

To remove the blade, proceed as follows:

- 1. Switch off the engine and disconnect the spark plug wire
- 2. Adjust the cutting height to maximum
- 3. Check the state of the blade. Check that the blade is not cracked, bent, excessively worn or broken
- 4. When repair or check of blade is completed reattach spark plug

CHECKS

- Adjust the belt and cable control tension after the first few working hours to account for initial break-in.
- Briefly operate all the machine's components to detect any abnormal noises or overheating.
- During the initial running in period avoid heavy-duty usage to encourage proper settling of the mechanical parts.
- Never neglect maintenance operations after work and carry out all pre-scribed checks regularly.

CABLE CONTROL ADJUSTMENT

To adjust the cables place the machine on flat ground, switch off the engine and disconnect the wire from the spark plug.

BLADE AND DRIVE CONTROL CABLES

Adjustments to the tension on the cables are made by adjusting the barrel length located on the handle. By extending the barrel more tension will be put on the cable. Make sure that you do not apply too much tension as this will cause premature failure or cause the lever to engage when it is not wanted.

Note: Apply lithium grease to the slots on the drive levers where the cable sits to help extend cable life.

SHIFTER CONTROL CABLE

Position on the Shifter control cable (item 22) can be made by removing the rear cover and adjusting the barrel in or out depending on the desired Position.







TROUBLESHOOTING

Problem	Possible Cause	Solution
Engine will not start	Choke not on. Out of gasoline, bad or old gas. Spark plug wire disconnected. Dirty air cleaner. Blade clutch is engaged	Check Gasoline. Check for spark with an approved tester. Clean or replace air cleaner. Disengage the Blade clutch lever.
Engine runs poorly	Spark plug wire loose. Carburetor out of adjustment. Water or dirt in fuel system. Spark plug fouled, faulty or wrong gap	Sharpen or replace blade. Adjust carburetor (refer to engine manual). Reset gap or replace spark plug (refer to engine manual).
Beltslips	Belt tension inadequate. Too deep of a working depth. Belt worn.	Replace belt. Replace blade
Abnormal vibration	· Loose or out of balance blade. Bent blade. Loose engine bolts	Stop work immediately. Check blade mount and balance. Replace damaged or bent blade if required. Check engine mount.
Will not cut or has poor cutting performance	Dull or bent Blade. Debris locked against blade. Engine running at too low RPM. Sod is too dry.	Sharpen or replace blade. Remove debris. Check engine RPM (refer to engine manual). Apply more water to cutting area to loosen sod
Drive will not engage	Shifter in neutral. Out of adjustment drive cable. Broken drive cable. Worn or broken belt.	Shift lever to desired direction and speed. Adjust drive cable. Replace with new cable. Replace belt.
Drive will not release	Drive cable out of adjustment. Damaged drive lever.	Adjust drive cable. Replace drive cable.
Engine is locked, will not pull over	Debris locked against blade. Damaged engine.	Remove debris. Refer to engine owner's manual. Replace control cable.

When servicing engine refer to specific manufacturer's engine owner's manual. All engine warranty is covered by the specific engine manufacturer. If your engine requires warranty or other repair work contact your local servicing engine dealer. When contacting a dealer for service it is a good idea to have your engine model number available for reference (See table page 15). If you cannot locate a servicing dealer in your area you can contact the manufacturer's national service organization:

American Honda- 800-426-7701

WARRANTY CLAIM PROCEDURE

Should a BILLY GOAT[®] machine fail due to a defect in material and/or workmanship, the owner should make a warranty claim as follows:

- The machine must be taken to the dealer from whom it was purchased or to an authorized Servicing BILLY GOAT Dealer.
- The owner must present the remaining half of the Warranty Registration Card, or, if this is not available, the invoice or receipt.
- The Warranty Claim will be completed by the authorized BILLY GOAT Dealer and submitted to their respective BILLY GOAT Distributor for their territory Attention: Service Manager. Any parts replaced under warranty must be tagged and retained for 90 days. The model number and serial number of the unit must be stated in the Warranty Claim.
- The distributor service manager will sign off on the claim and submit it to BILLY GOAT for consideration.
- The Technical Service Department at BILLY GOAT will study the claim and may request parts to be returned for examination. BILLY GOAT will notify their conclusions to the distributor service manager from whom the claim was received.
- The decision by the Technical Service Department at BILLY GOAT to approve or reject a Warranty Claim is final and binding.

For online product registration go to www.billygoat.com

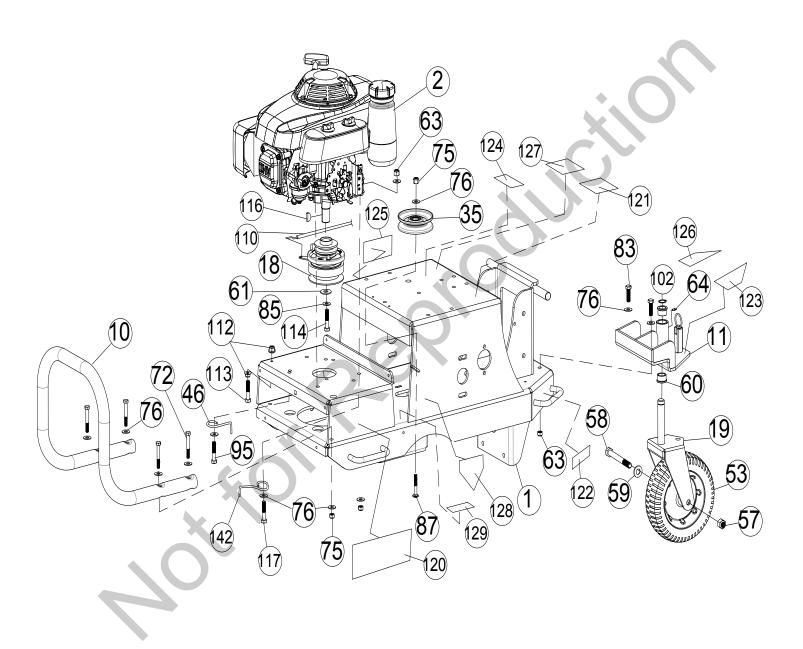


MAINTENANCE RECORD

Date	Service Performed
	*



SC18 ENGINE ASSEMBLY PARTS DRAWING



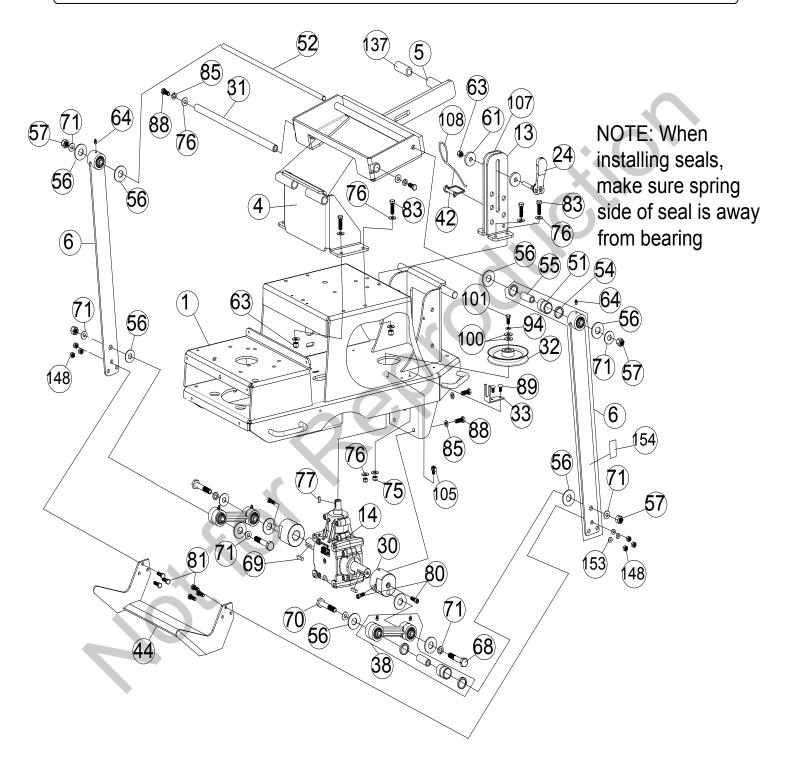


SC18 ENGINE ASSEMBLY PARTS LIST

Item no.	Part no.	Description	Qty
1	371100	FRAME WA SC	1
2	900615	ENGINE GXV 160	1
10	371400	TUBE BUMPER SC	1
11	371101	CASTER MOUNT WA	1
18	371264	CLUTCH SC	1
19	371102	CASTER RIG WA	1
35	520061	PULLEY IDLER 5L INSIDE 4"	1
46	371267	BELT FINGER	1
53	371207	WHEEL 8" X 3" HEAVY DUTY	1
57	8160005	NUT LOCK 1/2"-13 HEX	1
58	8041108	SCREWCAP 1/2"-13 X 4 3/4" HCS ZP	1
59	8172011	WASHER 1/2" SAE	1
60	520184	BUSHING FLANGE 1" OD X 3/4" ID	2
61	440153	WASHER 1.5" OD X .453 ID X .25 THK	1
63	8160003	NUT LOCK 3/8"-16	6
64	610363	GREASE ZERK	1
72	8041033	SCREWCAP 5/16"-18 X 2 1/4 GR 5 HCS ZP	4
75	8160002	NUT LOCK 5/16"-18	5
76		WASHER 5/16" FLAT	22
83	8171003 8041051	SCREWCAP 3/8"-16 X 1 1/4" HC ZP	22
85			1
87	8177012	LOCK WASHER 3/8" S/T MED	
	8024062	CARRIAGE BOLT 3/8"-16 X 2" ZP	1
95	8041031	SCREWCAP 5/16"-18 X 1 3/4" GR. 5 HCS ZP SNAP RING	1
102	520176		1
110	371232-S	CABLE SPEED CONTROL LEFT SERVICE	
112	900455	NUT WHIZ 1/4-20 WASH FACE	2
113	8041008	SCREWCAP 1/4"-20 X 1 1/2" HCS ZP	1
114	900344	SCREWCAP 3/8"-24 X 1 1/2" GR. 8 40-45 FT-LBS (54-61 N.m)	1
116	900162	KEY HI PRO 5/32 X 5/8"	1
117	400164	SCREWCAP 5/16"-24 X 1 " GR. 8 ZP W/PATCH	3
120	371510	LABEL BADGING SC	2
121	371503	LABEL INSTRUCTION DRIVE	1
122	371505	LABEL TIE DOWN	4
123	371501	LABEL CASTER LOCK LEFT	1
124	371506	LABEL DRIVE RELEASE SC	1
125	371502	LABEL GREASE POINTS SC	1
126	371504	LABEL CASTER LOCK RIGHT	1
127	371500	LABEL INSTRUCTION DEPTH	1
128	400424	LABEL DANGER	2
129	900327	LABEL WARNING GUARDS	4
142	371281	BELT FINGER TIGHT SIDE	1



SC18 BLADE ASSEMBLY PARTS DRAWING



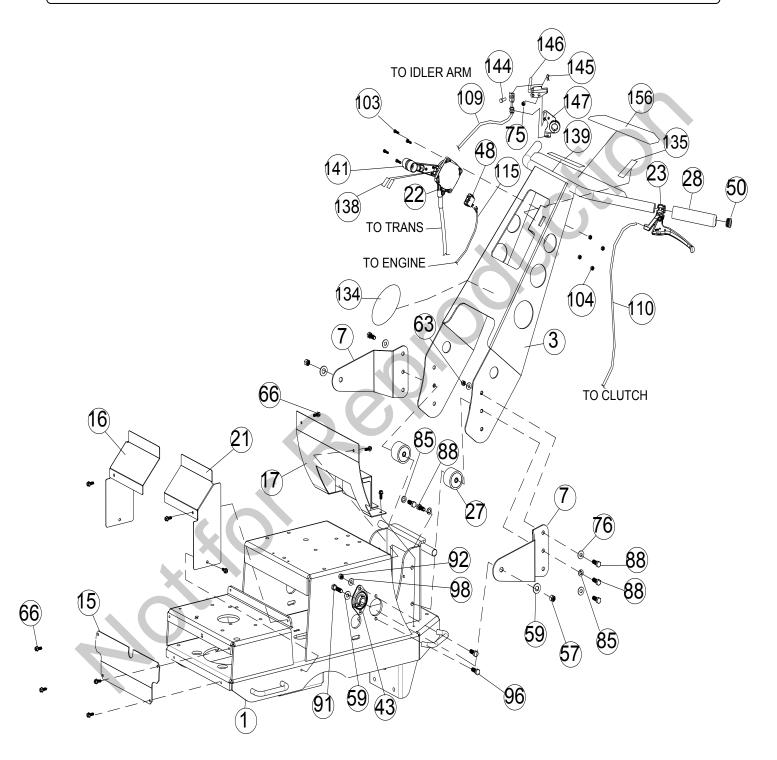


SC18 BLADE ASSEMBLY PARTS LIST

Item no.	Part no.	Description	Qty
1	371100	FRAME WA	1
4	371107	PIVOT DEPTH WA	1
5	371106	BLADE DEPTH WA	1
6	371108-S	BLADE ARM	2
13	371289	HEIGHT DEPTH BRACKET LH	1
14	371205	GEAR BOX "T" 2:1 REDUCTION	1
24	371219	LEVER CAM LOCK	1
30	371202-S	ECCENTRIC BLADE DRIVE SERVICE W/ITEM 80	2
31	371259	SHAFT PIVOT DEPTH	1
32	371215	PULLEY 5" X 3/4" BORE	1
33	371208	TAB MOUNT SHIFT CABLE	1
38	371216-S	ARM BLADE DRIVE SERVICE	2
42	371284	PIN WIRE LOCK DIA. 1/2" X 3" LG ZP	1
44	371203-S	KIT SC REPLACEMENT BLADE	1
51	371247	BEARING SC	6
52	371260	ROD BEARING	1
54	371252	SEAL GREASE	12
55	371257	BUSHING BEARING SC	6
56	371237	WASHER PLASTIC	14
57	8160005	NUT LOCK 1/2"-13 HEX	4
61	440153	WASHER 1.5 OD X .453 ID X .25	2
63	8160003	NUT LOCK 3/8"-16	9
64	610363	GREASE ZERK	8
68	8041110	SCREWCAP 1/2"-13 X 2 3/4" GR 8 ZP W/RED PATCH	2
		(TORQUE TO 115 FT. LBS.)	
69	9201113	KEY 1/4" SQ X 1"	2
70	8041111	SCREWCAP 1/2"-13 X 3" GR 8 ZP (TORQUE TO 115 FT. LBS)	2
71	8171006	WASHER 1/2" USS	8
75	8160002	NUT LOCK 5/16"-18	2
76	8171003	WASHER 5/16" FLAT	32
77	9201072	KEY 3/16" SQ X 5/8"	1
80	362289	SHCS 5/16"-18 X 1.25 BLK OX W/RED PATCH	4
81	8041043	SCREWCAP 5/16"-18 X 1" GR. 8 ZP	6
83	8041051	SCREWCAP 3/8"-16 X 1 1/4" HC ZP	8
85	8177012	LOCK WASHER 3/8" S/T MED	6
88	8041050	SCREWCAP 3/8"-16 X 1" HCS ZP W/PATCH	6
89	8024040	CARRIAGE BOLT 5/16"-18 X 1" GR. 5 HCS ZP	2
94	8177011	LOCK WASHER 5/16" S/T MED	1
100	8171004	WASHER 3/8" FC	2
101	8041026	SCREWCAP 5/16"-18 X 3/4" GR 5 HCS ZP	1
105	371222	CABLE CLAMP	4
107	371288	HEIGHT DEPTH BRACKET RH	1
108	371283	LANYARD 12" COATED STEEL	1
137	790179	GRIP 1" X 4"	1
148	371286	NUT LOCK 5/16"-18 HEX GR 8 (TORQUE 28 FT. LBS.)	6
153	8172008	WASHER 5/16" SAE	6
154	371524	LABEL TORQUE SC	2



SC18 HANDLE ASSEMBLY PARTS DRAWING



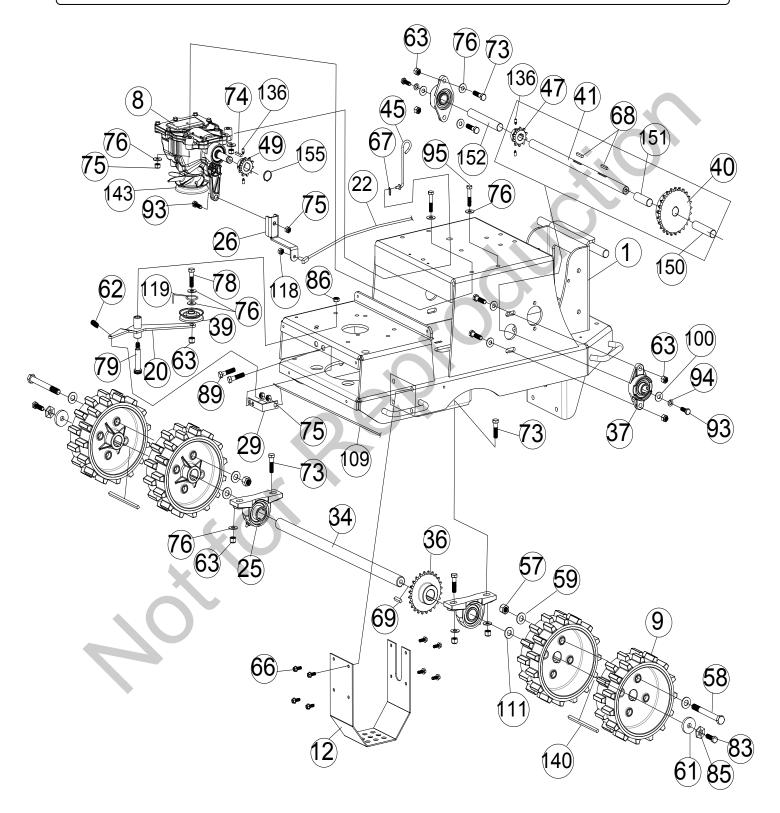


SC18 HANDLE ASSEMBLY PARTS LIST

Item no. Part no. Description Qty	U IIANULL A	33EMDLT PANTS	LIVI	
3 371613 HANDLE SC WA W/LABELS 1 7 371209 HANDLE BRACKET MOUNT 2 15 371207 GUARD FRONT 1 16 371242 GUARD MID RIGHT 1 17 371103 GUARD MID RIGHT 1 17 371103 GUARD MID RIGHT 1 21 371233 GUARD MID RIGHT 1 22 371204 SPEED CONTROL SC 1 23 351209 CONTROL LEVER DRIVE 2 23 351209 CONTROL LEVER DRIVE 2 24 3891025 J/2" PRESSED STEEL HOUSING 2 24 3891025 J/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276	Item no.	Part no.	Description	Qty
7 371209 HANDLE BRACKET MOUNT 2 15 371207 GUARD FRONT 1 16 371242 GUARD MID RIGHT 1 17 371103 GUARD REAR WA 1 21 371233 GUARD MID LEFT 1 22 371204 SPEED CONTROL SC 1 23 351209 CONTROL LEVER DRIVE 2 27 371210 RUBBER HANDLE MOUNT 2 28 500267 GRIP 1" X 5.5" 2 43 891025 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 5/8"-16 4 66 312276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 85 <td>1</td> <td>371100</td> <td>FRAME WA</td> <td>1</td>	1	371100	FRAME WA	1
15 371207 GUARD FRONT 1 1 1 1 1 1 1 1 1	3	371613	HANDLE SC WA W/LABELS	1
16 371242 GUARD MID RIGHT 1 17 371103 GUARD REAR WA 1 21 371233 GUARD MID LEFT 1 22 371204 SPEED CONTROL SC 1 23 351209 CONTROL LEVER DRIVE 2 27 371210 RUBBER HANDLE MOUNT 2 28 500267 GRIP 1" X 5.5" 2 43 891025 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/46"-18 X 1 3/4" HCS ZP 1 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8	7	371209	HANDLE BRACKET MOUNT	2
17 371103 GUARD REAR WA 1 21 371233 GUARD MID LEFT 1 22 371204 SPEED CONTROL SC 1 23 351209 CONTROL LEVER DRIVE 2 27 371210 RUBBER HANDLE MOUNT 2 28 500267 GRIP 1" X 5.5" 2 43 891025 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 4/36"-18 X 1 3/4" HCS 2P 1 76 8171003 WASHER 5/16" FLAT 8 85 817012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 1/8"-13 X 1 3/4 HCS 2P 2 91 8041097 SCREWCAP 1/4"-20 X 1" HCS 2P 8	15	371207	GUARD FRONT	1
21 371233 GUARD MID LEFT 1 22 371204 SPEED CONTROL SC 1 23 351209 CONTROL LEVER DRIVE 2 2 2 2 371210 RUBBER HANDLE MOUNT 2 2 2 371210 RUBBER HANDLE MOUNT 2 2 3 351209 CONTROL LEVER DRIVE 2 2 371210 RUBBER HANDLE MOUNT 2 2 3 891025 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 1 2 5 5 6 5 6 5 6 5 6 6	16	371242	GUARD MID RIGHT	1
22 371204 SPEED CONTROL SC 1 23 351209 CONTROL LEVER DRIVE 2 2 2 2 2 3 351209 CONTROL LEVER DRIVE 2 2 2 2 2 3 351209 CONTROL LEVER DRIVE 2 2 2 2 3 351209 CONTROL LEVER DRIVE 2 2 3 351209 CONTROL LEVER DRIVE 2 2 3 351205 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 1 50 890132 PLUG TUBE 1" 2 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 2 59 8172011 WASHER 1/2" SAE 2 2 63 8160003 NUT LOCK 3/8"-16 4 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 4 85 8177012 LOCK WASHER 3/8" S/T MED 4 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 8 8 8 8 8 8 8 8	17	371103	GUARD REAR WA	1
23 351209 CONTROL LEVER DRIVE 2 27 371210 RUBBER HANDLE MOUNT 2 2 2 2 371210 RUBBER HANDLE MOUNT 2 2 2 371210 RUBBER HANDLE MOUNT 2 2 2 371210 RUBBER HANDLE MOUNT 2 2 3 381025 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 1 1 2 2 5 5 5 5 5 5 5 5	21	371233	GUARD MID LEFT	1
27 371210 RUBBER HANDLE MOUNT 2 28 500267 GRIP 1" X 5.5" 2 2 43 891025 1/2" PRESSED STEEL HOUSING 2 2 48 500281 SWITCH TOGGLE 1 1 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 2 63 8160003 NUT LOCK 3/8"-16 4 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 4 8 8 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 8 8 8 8 8 8 8 8	22	371204	SPEED CONTROL SC	1
28 500267 GRIP 1" X 5.5" 2 43 891025 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 3/8"-16 X 1" HCS ZP 8 92 8160001 NUT LOCK 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK	23	351209	CONTROL LEVER DRIVE	2
43 891025 1/2" PRESSED STEEL HOUSING 2 48 500281 SWITCH TOGGLE 1 50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTRO	27	371210	RUBBER HANDLE MOUNT	2
48 500281 SWITCH TOGGLE 1 50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED	28	500267	GRIP 1" X 5.5"	2
50 890132 PLUG TUBE 1" 2 57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-5	43	891025	1/2" PRESSED STEEL HOUSING	2
57 8160005 NUT LOCK 1/2"-13 HEX 2 59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303	48	500281	SWITCH TOGGLE	1
59 8172011 WASHER 1/2" SAE 2 63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 3/8"-16 X 1" HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507	50	890132	PLUG TUBE 1"	2
63 8160003 NUT LOCK 3/8"-16 4 66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 37	57	8160005	NUT LOCK 1/2"-13 HEX	2
66 371276 SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23 12 75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL SHIFTER CONTROL 1 138 371513 LABEL SHIFTER CONTROL 1 139	59	8172011	WASHER 1/2" SAE	2
75 8160002 NUT LOCK 5/16"-18 X 1 3/4" HCS ZP 1 76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL SHIFTER CONTROL 1 138 371513 LABEL SHIFTER CONTROL 1 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 <td>63</td> <td>8160003</td> <td>NUT LOCK 3/8"-16</td> <td>4</td>	63	8160003	NUT LOCK 3/8"-16	4
76 8171003 WASHER 5/16" FLAT 8 85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279	66	371276	SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23	12
85 8177012 LOCK WASHER 3/8" S/T MED 4 88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193	75	8160002	NUT LOCK 5/16"-18 X 1 3/4" HCS ZP	1
88 8041050 SCREWCAP 3/8"-16 X 1" HCS ZP 8 91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277	76	8171003	WASHER 5/16" FLAT	8
91 8041097 SCREWCAP 1/2"-13 X 1 3/4 HCS ZP 2 92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL	85	8177012	LOCK WASHER 3/8" S/T MED	4
92 8160001 NUT LOCK 1/4"-20 4 96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	88	8041050	SCREWCAP 3/8"-16 X 1" HCS ZP	8
96 8041006 SCREWCAP 1/4"-20 X 1" HCS ZP 4 98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	91	8041097	SCREWCAP 1/2"-13 X 1 3/4 HCS ZP	2
98 8171002 WASHER 1/4" FLAT 4 103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	92	8160001	NUT LOCK 1/4"-20	4
103 8059136 SCREW MACH #10-24 X 3/4 WF ZP 4 104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	96	8041006	SCREWCAP 1/4"-20 X 1" HCS ZP	4
104 8155007 NUT LOCK #10-24 HEX 4 109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	98	8171002	WASHER 1/4" FLAT	4
109 831227 CABLE CONTROL DRIVE QV 1 110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	103	8059136	SCREW MACH #10-24 X 3/4 WF ZP	4
110 371232-S CABLE SPEED CONTROL LEFT SERVICE 1 115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	104	8155007	NUT LOCK #10-24 HEX	4
115 360316 WIRE HARNESS 1 134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	109	831227	CABLE CONTROL DRIVE QV	1
134 430303 LABEL PRODUCT LOGO CIRCLE LG 1 135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	110	371232-S	CABLE SPEED CONTROL LEFT SERVICE	1
135 371507 LABEL SHIFTER CONTROL 1 138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	115	360316	WIRE HARNESS	1
138 371513 LABEL NEUTRAL SC18 2 139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	134	430303	LABEL PRODUCT LOGO CIRCLE LG	1
139 371514 LABEL HANDLE DRIVE SC18 1 141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	135	371507	LABEL SHIFTER CONTROL	1
141 371279 HANDLE SPEED CONTROL SC18 1 144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	138	371513	LABEL NEUTRAL SC18	2
144 440124 PIN CLEVIS 0.25 X 0.50 1 145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	139	371514	LABEL HANDLE DRIVE SC18	1
145 440193 PIN CLIP HITCH 0.51 X 3/4" 1 146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	141	371279	HANDLE SPEED CONTROL SC18	1
146 440277 ARM CONTROL WA 1 147 831115 CONTROL MOUNT HANDLE WA 1	144	440124	PIN CLEVIS 0.25 X 0.50	1
147 831115 CONTROL MOUNT HANDLE WA 1	145	440193	PIN CLIP HITCH 0.51 X 3/4"	1
	146	440277	ARM CONTROL WA	1
156 271292 LAREL CONSOLE SC 1	147	831115	CONTROL MOUNT HANDLE WA	1
130 S71262 LABLE CONSOLL SC 1	156	371282	LABEL CONSOLE SC	1



SC18 TRANSMISSION ASSEMBLY PARTS DRAWING



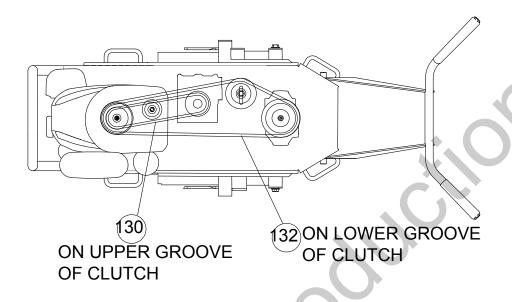


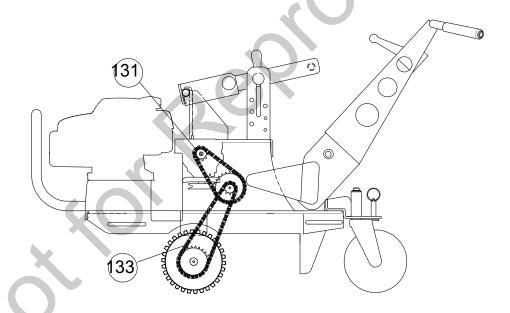
SC18 TRANSMISSION ASSEMBLY PARTS LIST

Item no.	Part no.	Description	Otv
1	371100	FRAME WA SC	Qty 1
8	371201	TRANSMISSION RT310	1
9	371201	WHEEL DRIVE SOD CUTTER	4
12	371211	GUARD AXLE	1
20	371105	IDLER ARM WA	1
22	371204	SPEED CONTROL SC	1
25	810700	PILLOW BLOCK 1"	2
26	371213	SHIFT ARM EXTENSION	1
29			1
34	371234 371277	TAB MOUNT WHEEL CLUTCH CABLE AXLE LONG SC	1
36	371277	SPROCKET 40C25 1" BORE	1
37	350209	BEARING 3/4" CAST FLANGE W/ZERK	2
39	510137	IDLER PULLEY	1
		SPROCKET 40B25 1" BORE	1
40	371292		
41	371290	JACKSHAFT 1.00 X 17.06 LG 4140HT PLATED	1
45	371245	ROD TRANSMISSION BYPASS	1
47	371291	SPROCKET 40B10 1" BORE	1
49	371212	SPROCKET 40B10 5/8" BORE	1
57	8160005	NUT LOCK 1/2"-13 HEX	8
58	8041108	SCREWCAP 1/2"-13 X 4 3/4" HCS ZP	8
59	8172011	WASHER 1/2" SAE	16
61	440153	WASHER 1.5 OD X .453 ID X .25	2
62	800242	SPRING EXTENSION	1
63	8160003	NUT LOCK 3/8"-16	9
66	371276	SCREW SELF TAP 1/4"-20 X 3/4" TYPE 23	8
67	371275	PIN 1/4" RUE RING	1
69	9201113	KEY 1/4" SQ X 1"	3
73	8041052	SCREWCAP 3/8"-16 X 1 1/2" HC ZP	4
74	9201078	KEY 3/16" SQ X 1"	1
75	8160002	NUT LOCK 5/16"-18	5
76	8171003	WASHER 5/16" FLAT	14
78	8041054	SCREWCAP 3/8"-16 X 2" HCS ZP	1
79	520031	SHOULDER BOLT 1/2" X 2"	1
83	371278	SCREWCAP 3/8" - 16 X 1 1/4" GR 5 ZP W/RED PATCH	2
84	850233	SNAP RING TRUARC 5/8"	1
85	400502	WASHER LOCK 3/8" TWISTED TOOTH	2
86	8161042	NUT LOCK 3/8"-16 LT WT TH ZP	1
89	8041004	SCREWCAP 1/4"-20 X 3/4" HCS ZP	2
93	8041028	SCREWCAP 5/16"-18 X 1" GR 5 HCS ZP	3
94	8177011	LOCK WASHER 5/16" S/T MED	2
95	8041032	SCREWCAP 5/16"-18 X 2" GR 5 HCS ZP	2
98	8171002	WASHER 1/4" FLAT	4
100	8171004	WASHER 3/8"FC	2
109	831227	CABLE CONTROL DRIVE QV	1
111	8172017	WASHER 1" SAE	2
118	8149001	NUT 1/4" - 28 HEX ZP	1
119	371269	BELT FINGER DRIVE IDLER PULLEY	1
136	8083122	SCREWSET 1/4"-20 X .375 CUP PT W/NYLOK	4
140	9201131	KEY 1/4" X 4.00"	2
143	371602	PULLEY AND FAN KIT RT310	1
150	371293	SPACER 1.25 X .109 WALL 3.35 LG	1
151	371294	SPACER 1.25 X .109 WALL X 2.787 LG	1
152	371295	SPACER 1.25 X .109 WALL X 6.578 LG	1
155	430226	RETAINING RING 5/8"	1



SC18 BELT AND CHAIN ASSEMBLY PARTS DRAWING





SC18 BELT AND CHAIN ASSEMBLY PARTS LIST

Item no.	Part no.	Description	Qty
130	371270	BELT GATES 6732	1
131	371296	CHAIN #40 X 44 PITCHES	1
132	371246	BELT GATES 6958	1
133	371297	CHAIN #40 X 61 PITCHES	1