

# **IMPORTANT**

#### PLEASE READ AND UNDERSTAND BEFORE OPERATING MACHINE

- 1. Pre-check all nuts, bolts, grub screws for tightness prior to operating machine.
- 2. Understand the operating procedures and the controls before operating.
- 3. Use the machine to roll 18-36 greens then check that all nuts, bolts etc. are tight.
- 4. Loose transmission and drive roller sprockets will cause damage to shafts & keyways. Ensure they are correctly tightened at all times.
- 5. As a guide to correct transmission oil use Mobil I 5W-50W Synthetic Oil or (Australia only Penrite Synthetic 5 SAE 5W-60)

# **CONTENTS**

Page:	
1.	MACHINE INFORMATION RECORD
2.	SAFETY INFORMATION
3.	WARRANTY
4.	INITIAL ASSEMBLY
5-7.	ASSEMBLY
8-9	OPERATION
10.	MAINTENANCE
11.	SERVICE OF DRIVE SYSTEM
12.	MAINTENANCE SCHEDULE
13.	FAULT FINDING
14-27.	MACHINE COMPONENTS
28-30.	PART NUMBERS
31.	OPTIONAL EXTRAS
	SEPARATE ENGINE OWNERS MANUAL INCLUDED

Congratulations on your investment in the GR11000 Golf Green Roller and your move to smoother, faster, more consistent putting Greens. The following operation and maintenance manual has been prepared for use with the GR11000 Golf Green Roller. It is intended as a guide and supplemental updates to the manual may take place at a future date.

This machine is engineered to be simple to operate and easy to maintain. If you have any questions or concerns that this manual does not address, please feel free to contact your distributor at:

NAME:	
ADDRESS:	
TELEPHONE:	
FACSIMILE:	

# MACHINE INFORMATION

# **GR11000 Golf Green Roller**

Serial #	
Engine #	
Transmission #	
Purchase Date # _	

September, 03

## SAFETY INFORMATION

Safety is of the utmost importance when operating turf equipment. To ensure safe operation of the GR11000 Golf Green Roller, please follow the following safety guidelines.

- \* Always make a pre-operation inspection before you start the engine. If this procedure is not carried out damage to property or personnel may occur.
- \* Keep children, pets and inexperienced personnel away from the machine. This machine should only be operated by trained and skilled personnel check with your supervisor if you are unsure.
- \* Know how to stop the engine when in motion. Read and understand engine manufacturers manual, as supplied.
- \* Never permit inexperienced operators to use the machine. This machine requires certain knowledge and expertise to operate it; you must be a trained person to use this machine. Unskilled persons can harm themselves and others if they operate this machine.
- \* Do not use in enclosed areas unless well ventilated. Carbon monoxide gases are dangerous if inhaled, it can cause death; use the machine outdoors.
- \* When transporting the roller, make sure the trailer lock down mechanism is secure to prevent premature release. If the trailer lock is not correctly engaged while towing and releases accidentally, the front of the roller can drop and dig into the ground, causing the machine to move dangerously in any direction causing bodily injury. This also applies during normal maintenance procedures make sure the latch is locked in place. When carrying out maintenance ensure the latch is engaged correctly; if it is not the trailer arm could fly up making contact with a person (s) causing serious injury.
- \* When engine is running, always keep hands and loose clothing away from rotating chains and sprockets in the transmission area. If hair, clothing or loose objects become entangled on a rotating shaft serious bodily injury could occur. Stop engine before opening safety cover fitted to the transmission area.

OPERATOR, REMEMBER IT IS YOUR RESPONSIBILITY TO BE AWARE OF YOUR SURROUNDINGS. TO AVOID ACCIDENTS, THINK SAFE AND OPERATE SAFE.

#### TRU-TURF EQUIPMENT

2/56 Export Drive Ernest, Queensland 4214 Australia

Telephone 61 7 5594 7199
Fax 61 7 5571 5493
Email sales@truturf.com
Web www.truturf.com



# ONE YEAR WARRANTY

**Universal Conditions:** Tru-Turf Equipment will either repair or replace any item or part of a Tru-Turf Equipment turf maintenance product that is defective in workmanship or material for a period of twelve (12) months from the date of delivery of the new product to the original end user. These items will be repaired or replaced free of charge and freight free.

**Products Protected By This Warranty:** This Warranty relates to the following products manufactured by Tru-Turf Equipment and parts used to make these products:- GR39 Golf Greens Roller; GR48 Golf Greens Roller; GR7000 Golf Greens Roller; GR11000 Golf Greens Roller; RS48 Roll 'N' Slice Golf Greens Roller; RS48-11 Roll 'N' Spike Golf Greens Roller; Triplex Roll 'N' Spike Mower Attachment Heads and Brackets; MT2000-S Single Tote for Walk Behind Mowers; MT2000-D Dual Tote for Walk Behind Mowers; Sports Ground Roll 'N' Spike Turf Roller.

**Parts Warranted By Suppliers To Tru-Turf:** Specific component parts supplied to Tru-Turf Equipment are covered by that supplier's Warranty. These parts include Eaton Transmission, Honda Engines and Kohler Engines.

**Normal Wear and Tear:** Tru-Turf Equipment will not repair or replace parts subject to normal maintenance routines as specified in the products Operator's Manual nor to parts subject to wear and tear during the correct operation of the product. These parts include, but are not limited to, oils, filters, tyres, shafts, bearings, blades, spikers, slicers, brakes, belts, hoses and spark plugs.

Other Items Not Covered By This Warranty: Tru-Turf Equipment will not repair or replace free-of-charge any item that has been damaged by accident, lack of reasonable care and protection or lack of suitable storage. We will not cover parts that have been altered or modified by anyone other than Tru-Turf Equipment nor will we cover used parts that are installed in place of failed parts. We will not cover parts that have not been installed correctly by the end user or its agents nor will we cover parts that have not been maintained as per the Operator's Manual. Service calls and overtime labour rates will not be covered. We will not cover freight costs related to the return of the faulty product to Tru-Turf Equipment or its agents. Tru-Turf Equipment will not be liable for any consequential loss or damage or costs caused by or incidental to the failure of any new part supplied with the original purchase or any new part supplied as a replacement for any failed part.

**Lodging Warranty Claims:** The final purchaser of the new Tru-Turf Equipment product must lodge a Warranty Claim with Tru-Turf Equipment or its agents. The final purchaser must provide written evidence detailing the product's delivery date to that purchaser and the reasons why the purchaser believes that the product or its part is defective in the categories of faulty material or workmanship. The purchaser is to deliver the faulty product or part to Tru-Turf Equipment or its agents at the purchaser's expense. Acceptance or rejection of the Warranty Claim is entirely at the discretion of Tru-Turf Equipment or their Suppliers who warrant their own part/s.

No person or organisation has the authority to modify the terms or conditions or limitations of this Warranty without the written consent of Tru-Turf Equipment

# **INITIAL ASSEMBLY**

When you receive the crate, the machine will be broken down into components ready for assembly. If you run into any problems during assembly, please feel free to call your local distributor or agent.

	List of Com	pponents
'	<ul><li>□ (1) Operation, Maintenance &amp; Parts Manual</li><li>□ (2) Machine Frame/Body</li></ul>	Wheel Components  ☐ (2) Tyres mounted on Wheel Rim
	(2) Machine Franciscody	☐ (2) 1" x 1 3/4" Flat Washers
	Seat Mounting Components	☐ (2) 25mm External Circlips
	□ (1) Drivers Seat	
	☐ (1) Seat Pin	Trailer Arm Components
	☐ (2) 12mm External Circlip	☐ (1) Left-side Trailer Arm
	,	☐ (1) Right-side Trailer Arm
	Steering Arm Components	☐ (2) 25mm External Circlips
	□ (1) Steering Joystick	
	□ (1) Woodruff Key	Tow/Latch Components
		☐ (1) Drawbar Coupling Assembly
	Dampener Strut (1)	☐ (2) 2" x 3/8" UNF Hex Hd Bolts
/		☐ (2) 3/8" UNF Nyloc Nuts
•	<b>\</b>	

#### Step 1: MOUNTING THE SEAT TO THE SEAT FRAME

- \* Remove the circlip and 12mm diameter pin from the seat frame.
- \* Place the seat down with the seat back oriented toward the rear of the machine ( the front of the machine is the side where the pedals are located ).

Replace 12mm diameter seat locating pin through seat frame guides and through the seat through the seat guide, replace external clip on the end of 12mm diameter rod to prevent the seat pin sliding out.

#### Step 2: MOUNT THE STEERING ARM TO THE MACHINE

- Select the steering joystick
- \* Place the keyed end of the steering joystick into the hole on top of the steering support cylinder (the cylinder is located directly behind the foot pedals and is approximately 12" high. There is a sealed bearing laying flat in the top and bottom of the cylinder). Slide the steering joystick into the hole until it rests against the shoulder. If the steering joystick stops before reaching the shoulder, use emery cloth to polish the shaft. You may also use a light oil on the bearing and shaft to allow the shaft to slide in freely. Lift up the smoothing roller side of the machine so that you can get to the underside of the Machine. On the opposite side of the machine from the smoothing rollers, there is a trailer pivot pin (25mm in diameter) welded on the top of the body which will prevent the machine from rolling on its side.

<u>VERY IMPORTANT</u>: Brace the machine so that it will not fall over. Secure the machine with a rope or blocks to prevent the machine from falling.

Locate the joystick shaft on the underside of the machine ( Again, this is toward the front of the machine ).

Locate the Woodruff Key. The Woodruff Key is a 3/4" x 3/16" thick piece of steel in the shape of a half circle.

- \* Place the round-side of the Woodruff Key into the rectangular key slot on the
- \* Joystick shaft. Hammer or squeeze with pliers into place. When complete, the flat side of the Woodruff Key should be parallel to the steering rod.
- Place the steering linkage assembly onto the steering shaft. The "shiny" arm or rod end should be on the ground-side or lower side of the steering arm assembly.

September, 03 5.

#### MOUNT THE STEERING ARM TO THE MACHINE continued

\* Line up the "square groove" on the steering arm assembly with the Woodruff Key with your hand, slide the assembly onto the joystick toward the bearing as far as it will go and tighten the 5/16 Grub screw up against the Joystick shaft. Make sure that the steering linkage remains aligned with the Woodruff Key and the Woodruff Key remains parallel to the rod when sliding the steering linkage on the rod.

IMPORTANT - Do not reduce the thickness of the Woodruff Key. It is designed to be a no tolerance fit.

#### Step 3: ATTACHING THE RH TRAILER ARM TO MACHINE BODY

Locate the trailer arm support axle (1" in diameter) which extends out on the side of the machine, remove the circlip from the axle. Slide right side trailer arm, onto the axle, replace the circlip, ensuring it is located in the groove correctly.

Grease both trailer arm support axles.

#### Step 4: ATTACHING DAMPENER STRUT & LH TRAILER ARM

Locate the trailer arm support axle (1" in diameter) which extends out on the side of the machine, remove the circlip from the axle. Hold the trailer arm in the vertical position and slide it part way onto the axle, ensuring the trailer arm will rotate past the trailer arm stop. Locate dampener strut. remove packing from the unattached end.

Apply Threadlocker "Loctite" to the M10 bolt attached to the dampener strut. Screw M10 bolt into the strut support on the trailer arm.

Rotate the trailer arm forward until it clears the trailer arm stop, use a soft headed hammer and tap the trailer arm on the axle until the circlip groove is revealed, replace the circlip, ensuring it is located in the groove correctly.

#### Step 5: ATTACHING DRAWBAR TO TRAILER ARMS

- \* Locate the drawbar assembly
- \* Gather the ends of the right and left trailer arms.
- \* Place the drawbar assembly between the trailer arms and align the holes.
- \* Place one 2-1/4" x 3/8" bolt through each hole, fit 3/8" Nyloc nut to each bolt & tighten securely
- \* Test to ensure the trailer latch is correctly locking the trailer arms in the down position. This is important when trailing the machine.

September, 03 6.

#### Step 6: ATTACHING WHEELS TO TRAILER ARMS

- \* Locate the two wheels for the left and right side trailer arms
- \* Check tyres for the correct air pressure, approximately 18psi. Do not exceed this pressure.

Remove circlips & washers from both axles, slide wheels onto axles with air valves facing outwards. Fit the 25mm flat washer & circlip on the end of the axle, ensure the circlip is fitted correctly in the axle groove.

#### Step 7: CORRECT DAMPENER STRUT OPERATION

- \* When the roller is in the raised position & the trailer locking catch is released if the dampener strut is operating correctly it should allow the roller to lower to the ground gently, when the roller is resting on the ground push the trailer backwards gently, (do not use excessive force) until the trailer arm rests against the stop. The dampener strut will hold the wheels off the ground whilst rolling.
- \* Drawbar assembly should raise slowly. This prevents the operator from being injured.

#### Step 8: REPLACE ENGINE OIL

\* A tag is placed on the engine's On/Off switch indicating you must fill the machine with oil prior to operation. The fluid placed in the machine is designed to keep the inside of the engine from rusting until it is replaced with engine oil.

Replace engine oil as per manufacturers specifications.

#### Step 9: TRANSMISSION OIL TANK BREATHER

\* Unscrew plastic plug from top of tank and replace with anti-splash breather supplied.

the circlip is fitted correctly in the axle groove.

#### Step 10: LUBRICATE SMOOTHING HEAD PIVOT BEARING

\* There is a grease fitting covered with a plastic cap located on the smoothing head centre ball joint swivels. Apply grease to lubricate fitting.

September, 03 7.

## **OPERATION**

#### PRE-OPERATION CHECKS

- Check engine as per Honda / Kohler manual
- Ensure steering joystick has no looseness
- Check that foot pedal depresses under normal foot pressure.
- Ensure that the trailer bar locking catch mechanism is securely locked to the main frame bolt when in the trailing position.
- Check and tighten grub screws fitted to joystick steering arm, and end bearing lock rings on the rubber coated drive roller and spiker shaft.
- Grease lightly Bearings fitted to Drive Roller, Spiker shaft, Smoothing Head Carrier and the grease nipples fitted to the trailer arms. Replace plastic cap.
- Oil rod ends sparingly
- Check tyre pressure for proper operating pressure (18psi)
- Check for oil leaks rectify before using machine.

#### STANDARD OPERATION PROCEDURES

- Inspect and check that the roller is serviceable prior to departing from workshop.
- Use a suitable towing vehicle to move roller from green to green.
- Maximum recommended towing speed would be equal to a motorised golf buggy. Approximately 4mph/7kph.

#### Towing at excess speed or across rough terrain may cause damage to the machine.

- When approaching the green do not tow roller onto the green to set up; put the roller on the fringe of the green. Put trailer in the up position, start up the roller and drive it onto the green.
- Greens can be rolled in any direction; take care to ensure there are no crease lines produced on the surface.
- It is recommended that you place the smoothing head rollers on the high side of the green when rolling. This puts more weight on the rubber drive roller and helps give more traction, thus less slipping or spinning of the drive roller will occur on the green.

#### STANDARD OPERATION PROCEDURES CONTINUED

Whilst becoming familiar with the roller, set the throttle at about 1/2 speed. Press the left or right foot pedal down gently but not suddenly. **Be smooth with your action**, hold in this position until nearing the edge of the green, then take your foot gently off the pedal, the roller will stop. Rest your other foot on the opposite pedal and gently apply the pressure on the pedal. It then starts to move the roller into the opposite direction. Once again be gentle with the pedal, but not sudden. By using the left and right pedal in this manner, will ensure there is no damage to the green, less wear and tear on the equipment and operator.

- The correct procedure for rolling the green is:
  - (a) Select the correct direction to roll the green
  - (b) Start on one side of the green and work your way across the green in a zigzag fashion, slightly overlapping each lap you roll: this makes sure you miss no part of the green and all of the green is rolled. Avoid coming back across the green to roll missed areas if possible. You should be able to complete the rolling of 18 greens in the same time or quicker than mowing using a triplex mower.
- When the rolling of the green is completed, move the roller onto the fringe, stop the engine, lock the trailer
  into the trailing position, connect it to the towing vehicle then move off to the next green to be rolled. Do
  not put the trailer down into the towing position on the green; damage may occur to the green from the
  roller tyres and body.

#### POINTS TO REMEMBER

- Make sure the roller is serviceable before rolling.
- Start rolling from the fringe of the green.
- Smooth operation on the foot pedals.
- Pick a point on the other side of the green to roll to.
- Do not look at the green close to the roller; it makes it difficult to steer the roller; look well ahead.
- Use 1/2 throttle until you are proficient at operating the roller.
- Move the steering joystick a little at a time to change direction; excessive movement of the joystick makes
  it difficult to maintain a straight line.
- Roll in straight lines.
- Do not leave the engine running with the roller parked on the green; the engine vibration will cause roller depressions on the green.
- Move off the green when rolling is complete before putting the trailer in the down position.
- When rolling steep greens and the engine stops, check engine oil level. The engine is fitted with a safety switch; when the engine oil level is low the engine will stop.

# **MAINTENANCE**

- Stop engine before performing any maintenance
- Service the Honda or Kohler engine according to the manufacturers maintenance schedule.
- Check transmission oil level on oil tank sight glass. Oil level should remain at a minimum of 25 mm (1") & a maximum of 40mm (1 ½") from the top of the tank.
- As a guide to correct transmission oil use Mobil 1 or equivalent.

#### TRANSMISSION (PUMP, EATON 11)

- Change oil every 500 hours or annually, whichever occurs first
- Change hydraulic oil filter every 500 hours or annually, whichever occurs first.
- Only use the manufacturer's recommended replacement oil filter
- When fitting the filter, follow the instructions supplied with the filter. This will ensure that the filter remains tight and no leaks occur
- Check hard line oil pipes for leaks and tightness on a regular basis
- Check transmission oil level on oil tank sight glass. Oil level should remain at a minimum of 25mm (1") and at a maximum of 40mm (1.5") from the top of the tank
- As a guide to correct transmission oil, use Mobil 1 5W 50 or (Australia only Penrite Synthetic 5 SAE 5W-60).

#### **STORING**

• It is important to store this roller in the towing position. This ensures the trailer strut is in the closed position, protecting the shaft from corrosion, then failure.

#### SERVICE OF DRIVE SYSTEM

- **REPLACEMENT** Use only the chain and sprockets recommended.
- *TENSIONING THE DRIVE CHAIN* No adjustment is required; the chain tension is automatically adjusted.

#### **LUBRICATION**

• Lubricate Drive Chain with WD40 or equivalent (CRC; Penetrene etc.) prior to rolling the Greens

### **SERVICE OF BEARINGS**

• Whilst the Roller is suspended by the Trailer, check operational smoothness of the bearings fitted to the Roller by rotating the Rollers by hand. If bearing roughness is detected, replace faulty bearings

#### **CHANGE OIL**

Change oil and service as per Servicing Schedule enclosed in the Manual

APPLIES TO RS48-11;	RS48; GR48 & G	R11000 RC	LLERS	
fitted with the Eaton 11 Tran	nsmission & Stainless S	Steel Oil Tank		
AAAINITENIANIOE O				
MAINTENANCE S	CHEDULE - ONGO	<u>JING</u>		
	<u> Pre -</u>	Pre-operating		
	Delivery	Procedure		
Check Engine Oil	X	Х		
Check Transmission Oil Level	X	X		
- Beware of contaminants entering the tra	= =			
Lubricate drive chain with WD40	X	Χ		
Check Tyres	X	X		
Check Gas	X	X		
Check Smoothing Roller Bearings	X	X		
Check Drive Roller Bearings	X	X		
Grease Trailer Arm Pivot Bushes	X			
Check for loose Nuts & Bolts	X	Х		
Check for loose facts & Boils	, <u>, , , , , , , , , , , , , , , , , , </u>	Λ		
<u>LUBRICANTS &amp; RE</u>	PLACEMENT SCHE	DULE		
	<u>Monthly</u>	3 Monthly	6 Monthly	12 Monthly
Renew Engine Oil	As per Manufacture	ers Handbool	K	
Renew Transmission Oil	Every 500 hours	or		Х
Renew Transmission Oil Filter				Х
Grease Trailer Arm Pivot Bushes	Χ			
Renew Smoothing Roller Bearings	When defective or		Х	
Renew Drive Roller Bearings	When defective or			Х
Renew Chain Tensioner Sprocket Bearings	As required or			X
Renew Drive Chain	As required or			X
Replace Foot Pedal Struts	When defective			
Replace Trailer Strut	When defective			
				10
September 2003				12

# **FAULT FINDING**

#### ROLLER LOOSES POWER OR SLOWS DOWN WHEN OPERATING

**Check:** \* Correct oil is used in transmission (Mobil 1 or equivalent)

\* Smoothing Rollers & Drive roller bearings are not seized

Drive chain seizedEngine problems

\* Faulty transmission

#### ROLLER WILL NOT MOVE ONE OR EITHER WAY

Check: \* Chain is okay

\* Foot control not operating - check all arms are secure

\* For Sheared Pulley Key

\* Ensure Transmission neutral lever is in the upright position

#### **ROLLER WILL NOT STEER**

**Check:** \* Joystick locating grub screw is tight

\* Woodruff Key is in place

Rod ends are connected to smoothing roller head and the steering arm

\* Centre swivel bearing on top centre of smoothing rollers has not seized

#### ROLLER HAS EXCESSIVE VIBRATION

**Check:** \* Disconnect engine-to-transmission and isolate the drive chain to determine

whether the problem is in the engine or into the transmission

\* If engine is at fault contact your nearest Honda agent for rectification

\* If the transmission is at fault, repair or replace as necessary

#### SMOOTHING ROLLERS SEIZED

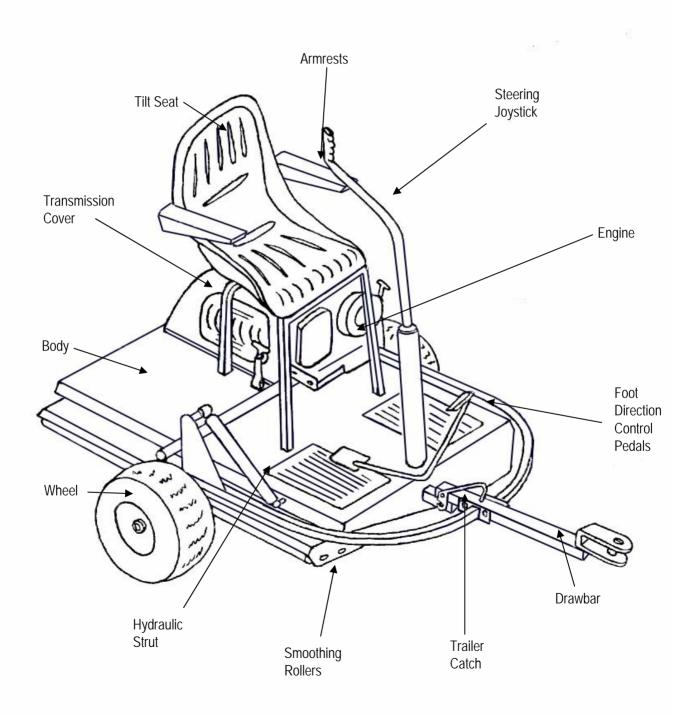
Check: \* Bearing has not seized

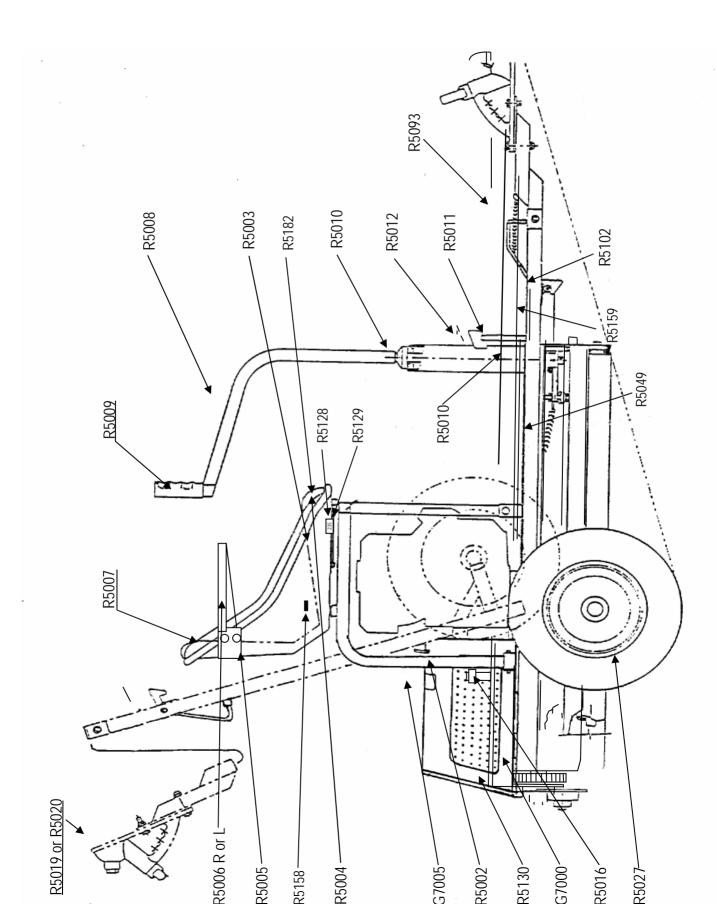
#### RUBBER DRIVE ROLLER WILL NOT ROTATE

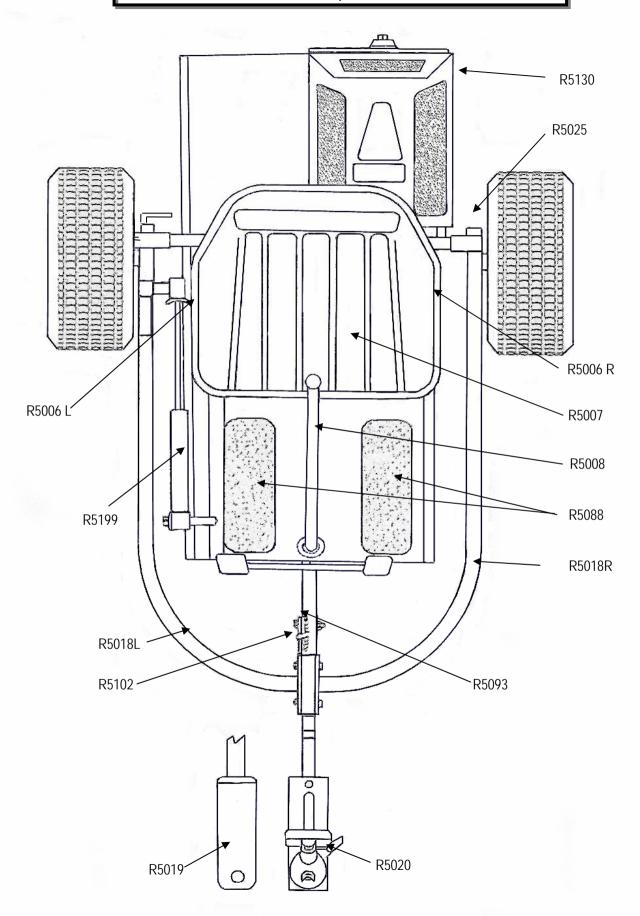
**Check:** \* Roller shaft end bearings have not seized

\* Broken chain

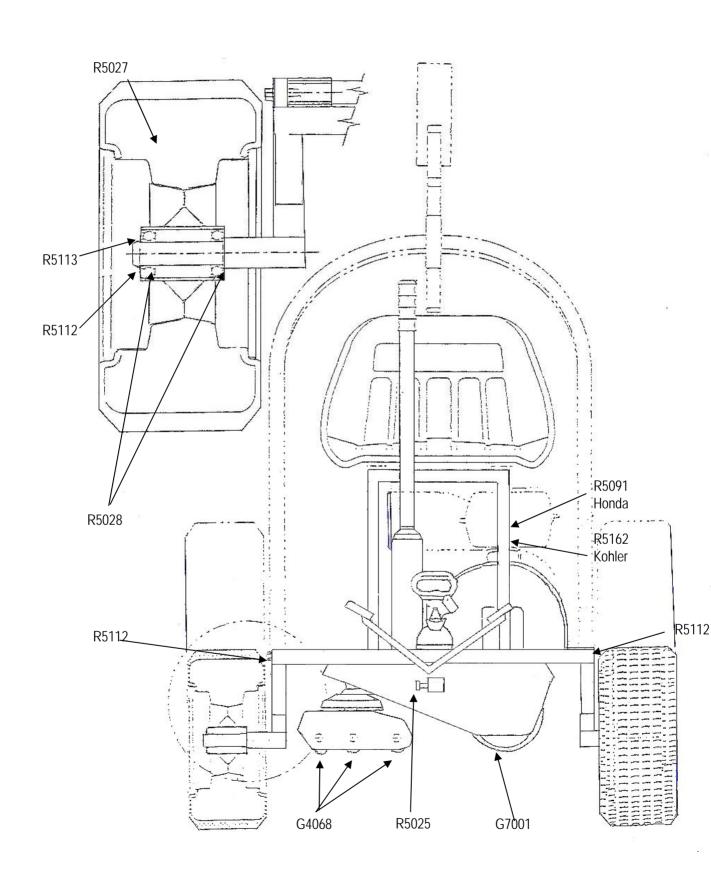
## **Machine Components**

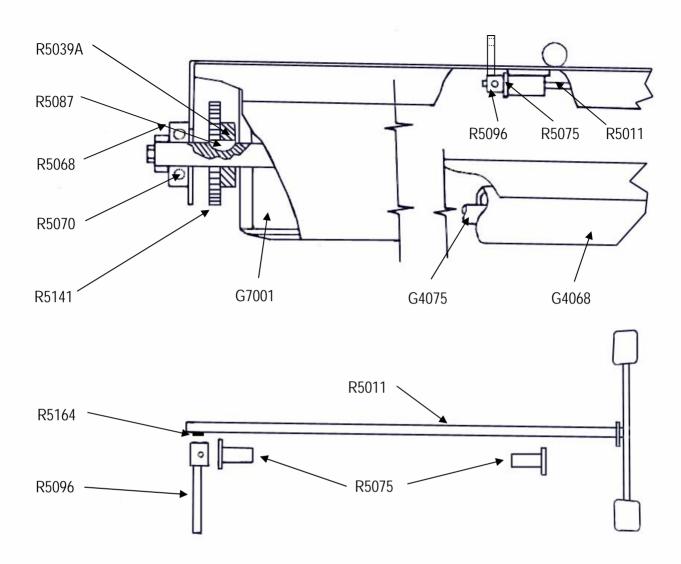


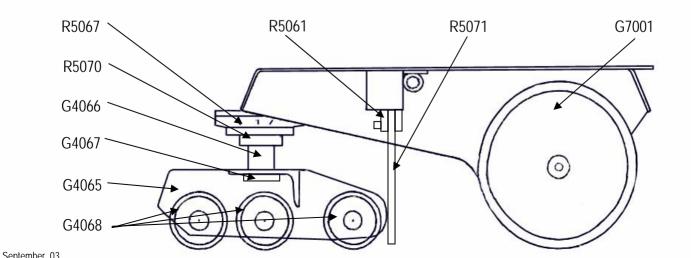




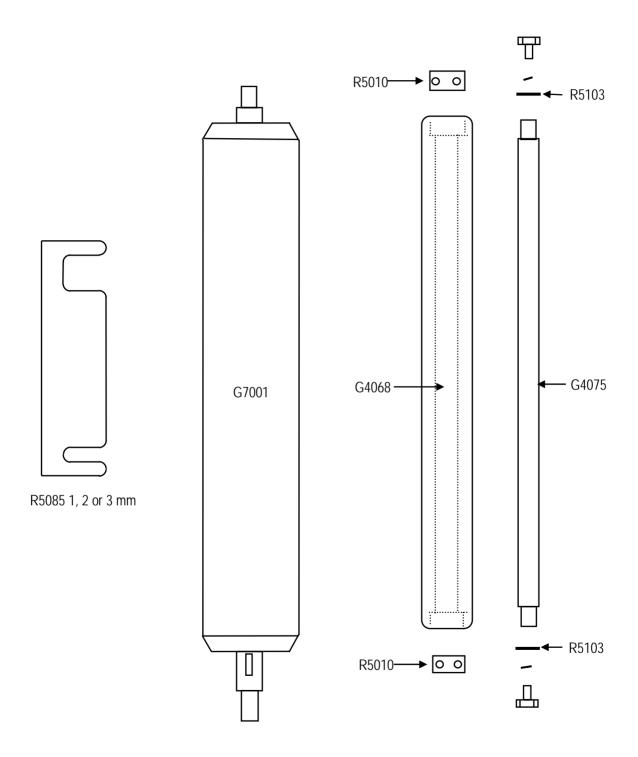
Sentember 03

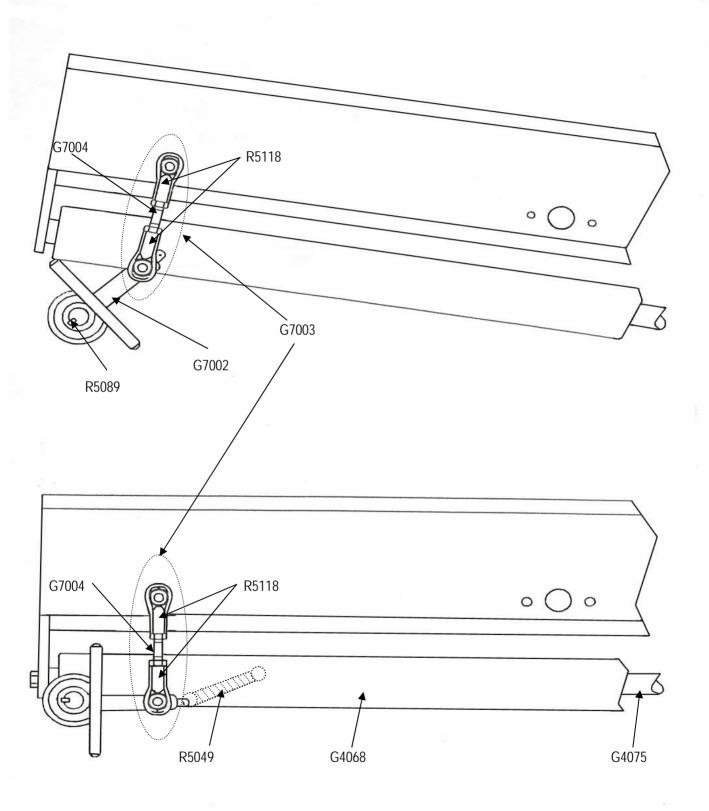


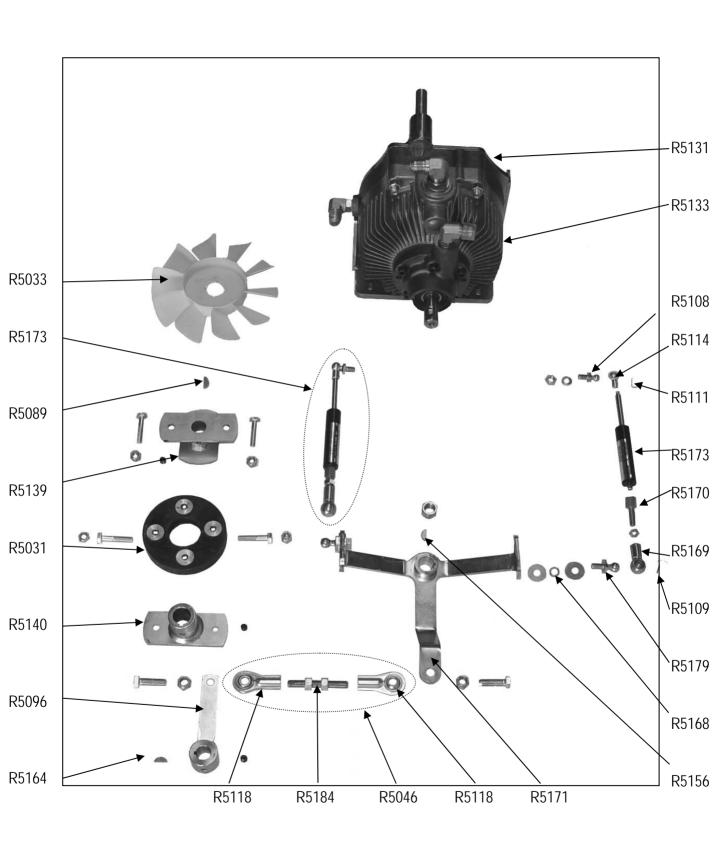


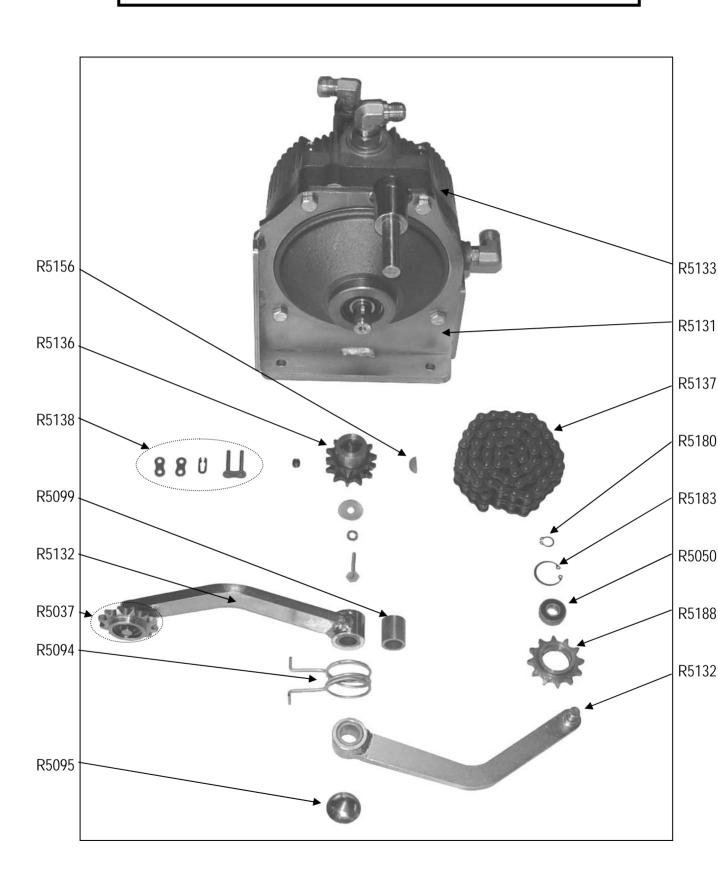


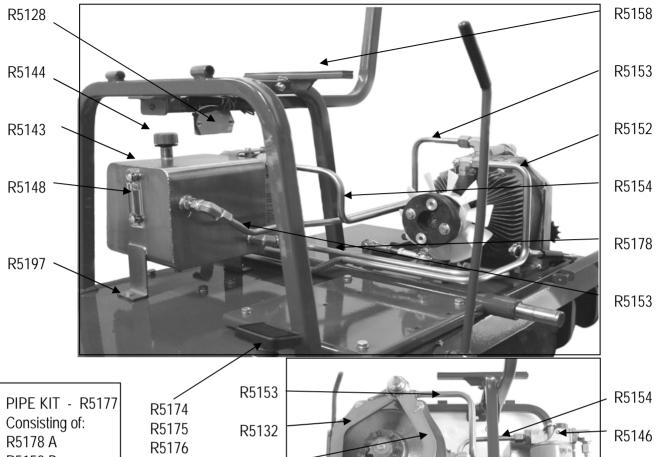
18



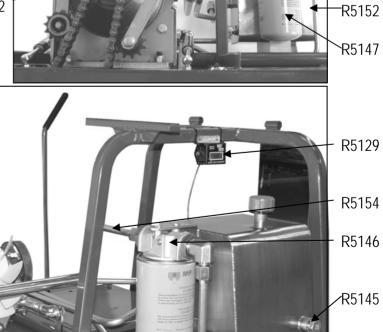




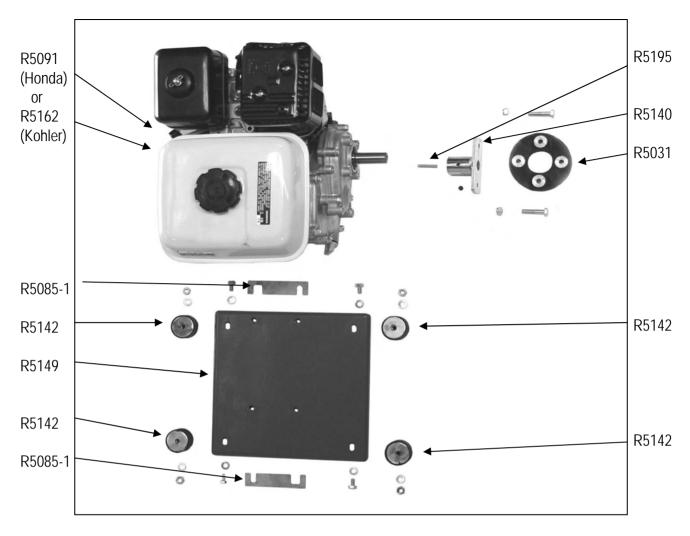


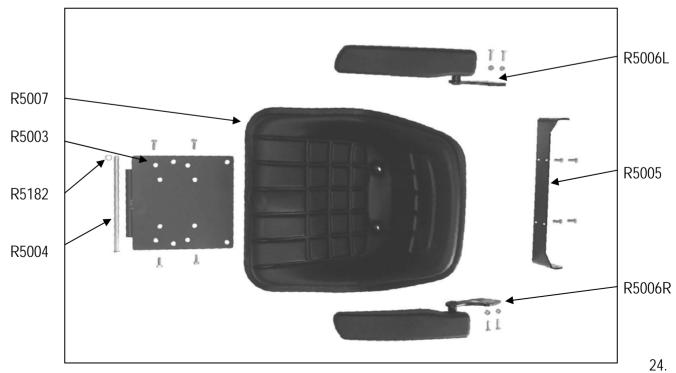


R5152 B R5153 C R5154 D R5132



Sentember 03





Part No. G4015

Name & Model attached to rear of Transmission Cover



TRU - PUTT ROLLER

Model GR 39

MADE ON THE GOLD COAST - THE GOLFING CAPITAL OF AUSTRALIA

World patent applied for



# DANGER DO NOT OPERATE MACHINE WITHOUT COVER IN PLACE.

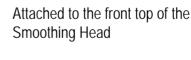
Attached to the Body beside the Transmission Cover

PRESS & HOLD PEDAL TO MOVE LEFT

Attached to the Body under the Foot Pedals

# PRESS & HOLD PEDAL TO MOVE RIGHT

WHEN ROLLING SLOPING GREENS PLACE THESE ROLLERS ON THE HIGH SIDE.



# CAUTION

ENSURE FRONT OF ROLLER IS TOUCHING THE GROUND BEFORE RELEASING THE TRAILER LOCK Attached to the front of both trailer arms at the Release Catch position

TRU-TURF EQUIPMENT International Agencies + 61 7 5594 7199

> Email: truturf@ausinfo.com.au Website:www.truturf.com

SERIAL NUMBER.

GR1056

Attached to side of body.

Sentember 03

## **PARTS LIST**

PART PART

NUMBER DESCRIPTION G7000 Main Body

G7001 Drive Roller, rubber coated

G7002 Steering Arm

G7003 Steering Connecting Rod, complete

G7004 Rod connecting steering arm – smoothing head

G7005 Sticker Safety pack
G4065 Smoothing Head
G4066

G4066 Smoothing Head Spacer G4067 Smoothing Head Bearing Carrier

G4068 Smoothing Rollers

G4075 Roller Shaft Stepped
R5002 Seat Frame
R5003 Seat Base
R5004 Seat Base Pin
R5005 Arm Rest Support
R5006R Arm Rest RH
R50006L Arm Rest LH

R5007 Seat R5008 **Joystick** R5009 Hand Grip R5010 Bearing R5011 Foot Pedal R5012 Foot Pedal Pad R5016 **Rubber Cover Catch** R5018R Trailer Arm RH R5018L Trailer Arm LH Drawbar (pin type) R5019

R5020 Drawbar (50mm Ball Coupling)

R5020A Drawbar to suit R5020 R5025 Plug Kit; Plastic; Trailer R5027 Tyre & Wheel Complete R5028 Bearing; 6205; To suit R5027

R5031 Coupling; Rubber

R5033 Fan

R5037 Sprocket Kit; Simplex R5039A Bush; Taper Lock

R5046 Rod Unit; Connecting Arm; Foot Pedal to Yoke; Transmission

R5049 Spring; Steering Return

R5050 Bearing; 6000 R5061 Strap; Mud Flap

R5067 Housing; F205; 4 hole; for R5070 Bearing R5068 Housing; LFL5J; 2 hole for R5070 Bearing

R5070 Bearing; B5 R5071 Mud Flap

# **GR11000 PARTS LIST CONTINUED**

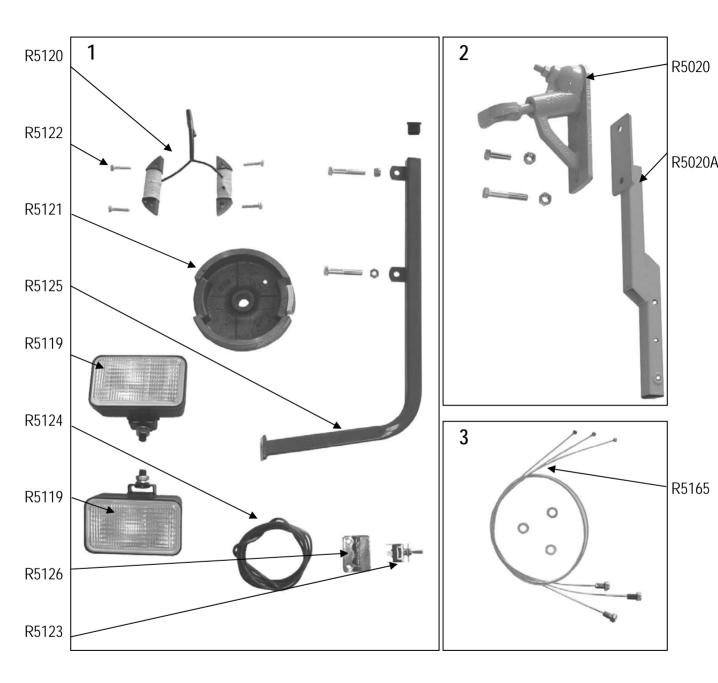
PART NUMBER	PART DESCRIPTION
R5075 R5085 R5087 R5088 R5089 R5091 R5093 R5094 R5095 R5096 R5099 R5102 R5103 R5108 R5109 R5111 R5112 R5113 R5114 R5118 R5119 R5128 R5129 R5130 R5131 R5132 R5133 R5136 R5137 R5138 R5136 R5137 R5138 R5139 R5140 R5141 R5142 R5143 R5144	Bush; Nylon; Black Shim 1,2 or 3mm Thick; Honda/Kohler Engine Key, Woodruff Mat; Foot Key; Woodruff; for Joystick Engine; 5.5 hp; Honda Spring; Coil; Drawbar Spring; Arm; Chain Tensioner Washer; Capped Arm; Foot Pedal; for Eaton 11 Transmission Bush; Bronze; for Chain Tensioner Arms Catch; Front Trailer; No Spring Tab; use Spring R5093 Washer; Fits Smoothing Rollers Shafts R5106 & G4075 Ball Fitting; Strut; Foot Pedal Retainer; Clip; for R5115 Strut Cup End Retainer; Clip; for R5114 Strut Cup End Circlip; External; 25mm Washer; Flat Cup End; Strut; Foot Pedal Rod End Light; 50 Watt Bracket; Hour/Tach Meter Meter; Hour/Tach Meter Meter; Hour/Tach Meter Meter; Transmission; Eaton 11 Bracket; Transmission; Eaton 11 Sprocket; 11 Tooth; Duplex Chain, Duplex; Eaton 11 Transmission Joiner; Chain; Duplex Eaton 11 Transmission Coupling; Transmission; Eaton 11 Transmission Coupling; Transmission; Eaton 11 Transmission Coupling; Engine; Honda 5.5hp or Kohler 6hp – Eaton 11 Sprocket; 27tooth; Duplex; Drive Roller; Eaton 11 transmission Cushion; Rubber; for Engine Base Plate Tank; Stainless Steel; Transmission Oil Breather; Tank; Transmission Oil
R5144 R5145 R5146 R5147 R5148 R5149 R5152	Breather; Tank; Transmission Oil Plug; Drain; Tank; Transmission Oil Housing; Filter; Tank; Transmission Oil Cartridge; Filter; Tank; Transmission Oil Gauge; Sight; Tank; Transmission Oil Plate; Mounting; Engine Pipe; Oil; B
R5152 R5153	Pipe; Oil; C

# GR11000 PART LIST CONTINUED

R5154 Pipe; Oil; D R5156 Key; Woodruff; to suit R5133 Eaton 11 Transmissio R5158 Rubber Strip; Frame; Seat R5159 Rubber Strip; Rest; Trailer R5162 Engine; Kohler; 6 hp	
R5164 R5167 R5168 R5168 Spacer; Stainless Steel; Strut End; Transmission R5169 Cup End; Long for R5173 Transmission Strut R5170 R5171 R5171 R5173 R5174 R5174 R5175 R5175 R5176 R5176 R5177 R5177 R5178 R5178 R5178 R5179 R5180 R5180 R5180 R5180 R5182 R5183 R5184 Rod; Connects Foot Pedal Arm to Transmission Young R5185 R6186 R5187 R6186 R6186 R6187 R6187 R6188 R6188 R6188 R6188 R6188 R6188 R5196 R5180 R	Yoke
R5197 Rubber Strip; Oil Tank Base R5199 Strut Trailer	

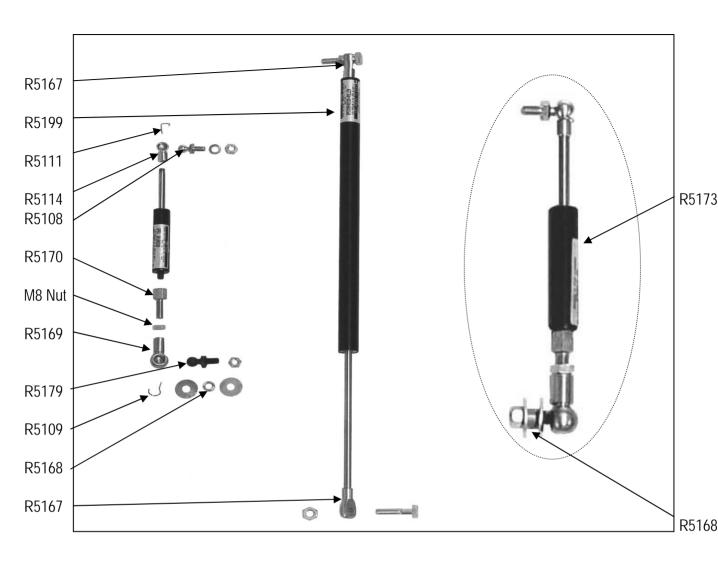
# **OPTIONS AVAILABLE**

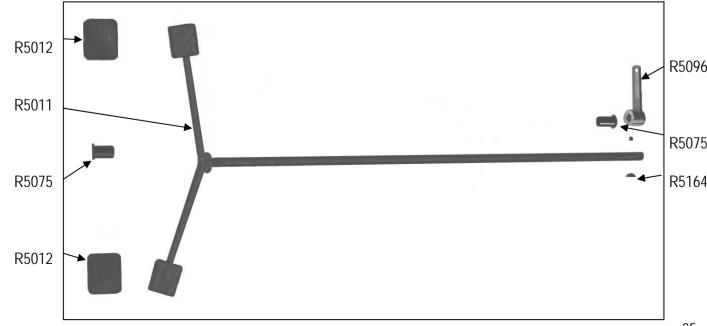
R5127	Light Kit
R5119	Light 2 Off (50W)
R5120	Coil; Lighting; for Honda 4.0 hp & 5.5hp
R5121	Flywheel, Honda 5.5hp
R5122	Bolt; Flange
R5123	Switch; Light
R5124	Harness; Wire
R5125	Bracket; Lights; for Light Kit
R5126	Bracket; Switch; for Light Kit
R5165	Scraper; Wire; for Smoothing Roller



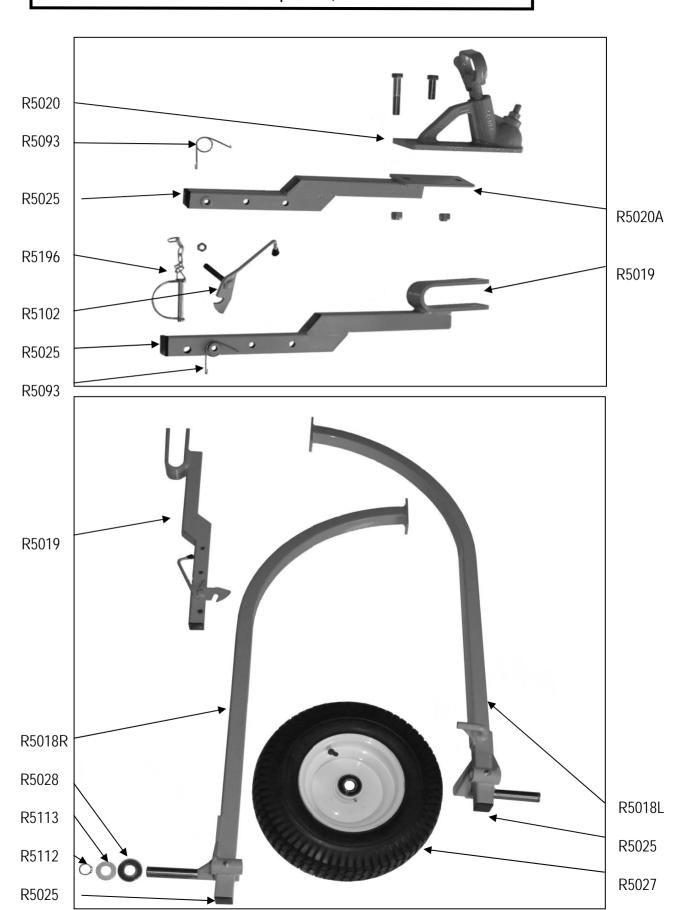
- 1. R5127 Lighting Kit, suits Honda 5.5 HP
- 2. R5020 50mm (2") Ball coupling R5020A Drawbar
- 3. R5165- Smoothing roller, wire scrapers

Sentember 03





25.



September, 03