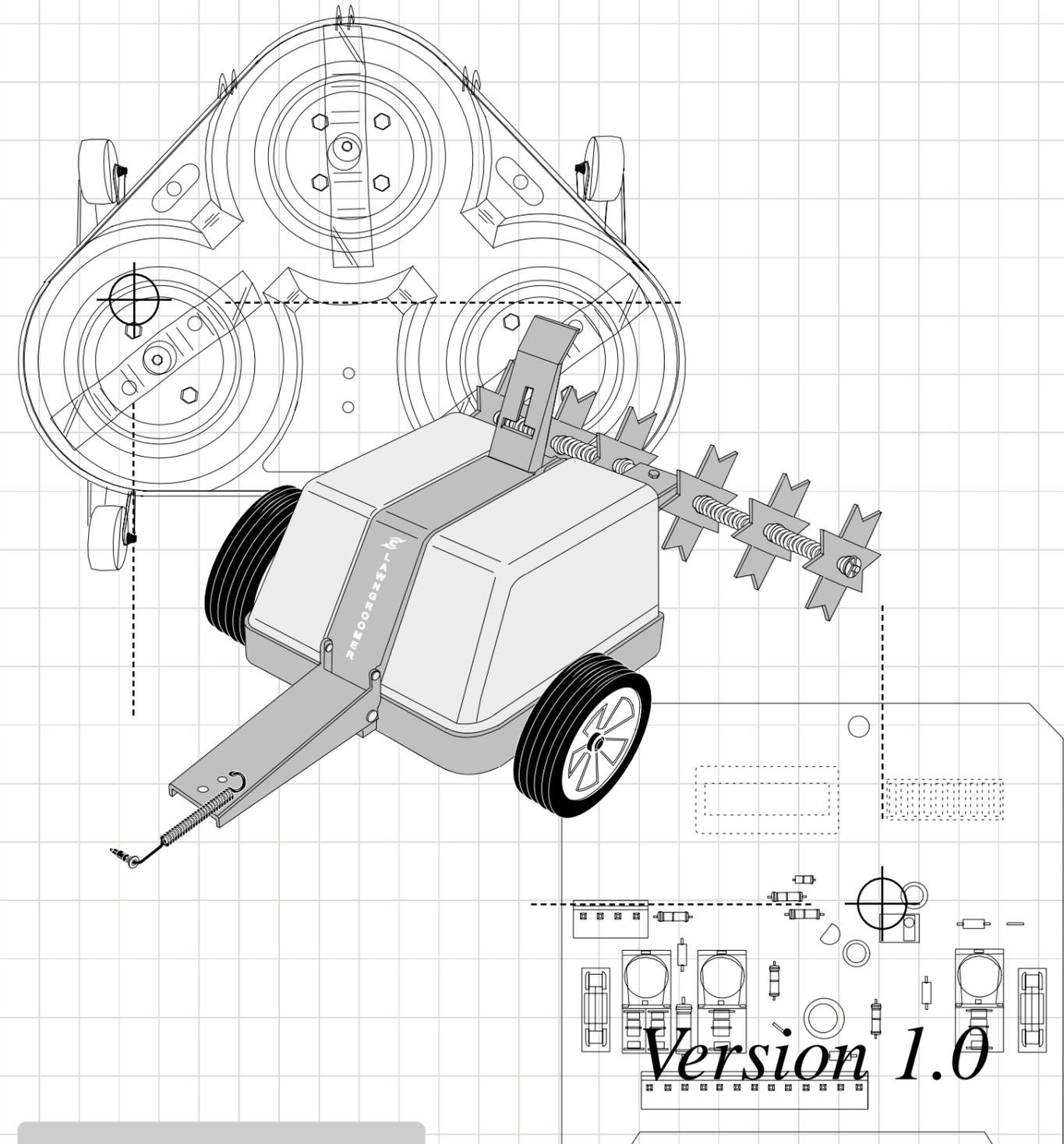


# COUNTAX™

Manufacturers of Britain's No.1 Range of Garden Tractors and Ride-On Mowers



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# COUNTAX™

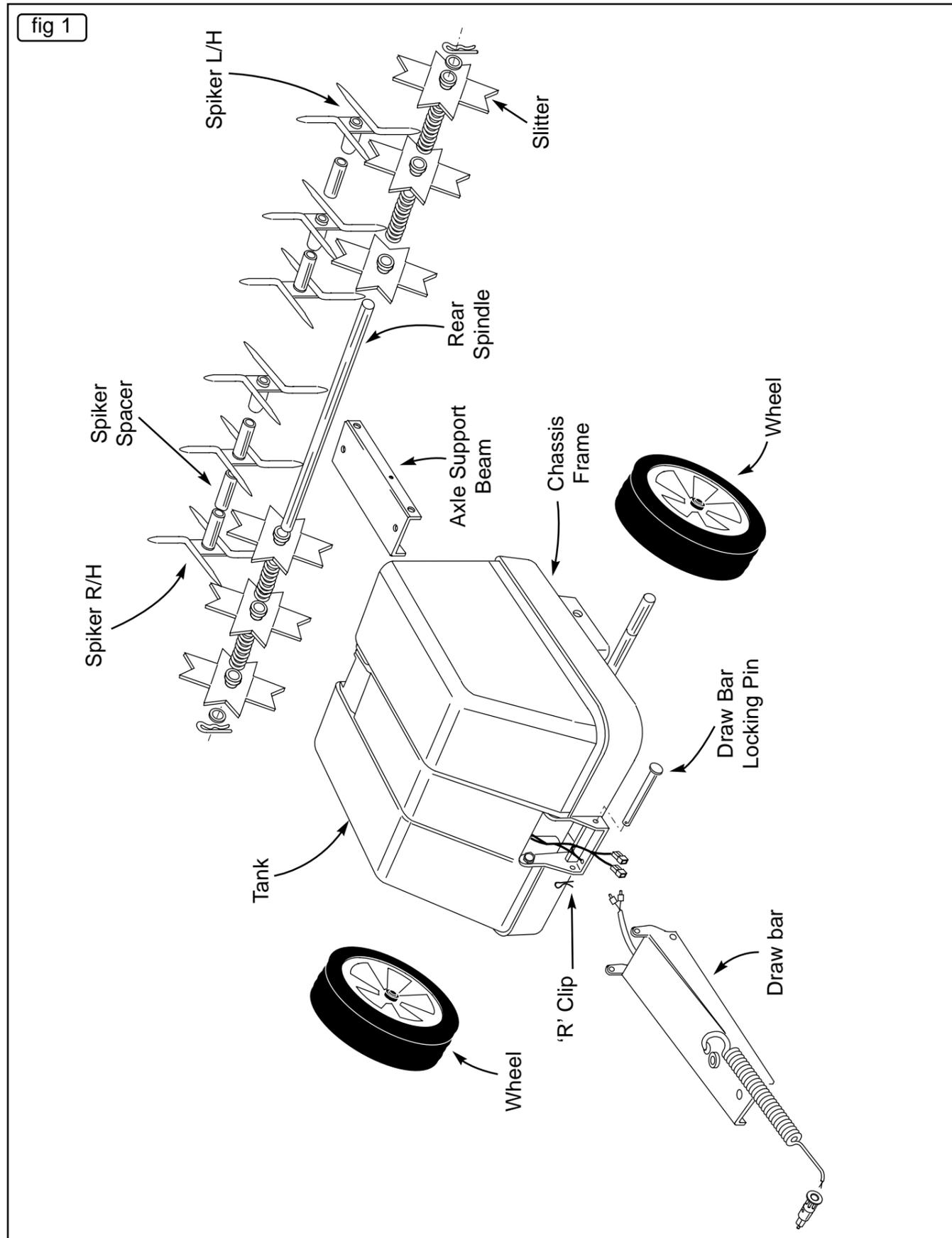
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Powered  
*Lawngroomer*

**OPERATORS MANUAL**

# Main Componentenets

# Operation



# Connection

Avoid getting your fingers trapped underneath.

## SLITTING

This operation is carried out in the Spring. It prunes grass roots and so promotes healthy growth throughout the season.

The slitter plates are not handed and do not have to be put on any particular way round. They work equally well in either direction. Make sure that the operating lever is in the down position, i.e. lying flat along the plastic tank with the switch arm over it. Fit the 6 slitters (as illustrated in figure 1), 3 on either side of the rear axle with spacing springs in between. Secure to the rear axle with 3/4" washers and R clips (fig 8). To operate use as with the spikers described. Take care to protect against the torque of the spring-loaded operating lever especially when replacing it in the up position.

## SPRAYING

The Countax Lawngroomer's spraying facility comprises a 10 gallon (imperial) calibrated plastic tank housing a 1/2" submersible impeller pump with a 12v motor which is driven from the tractor battery. The pump is connected by flexible hose to a delavan nozzle which is mounted in an aperture at the front of the plastic tank.

The electric cable to the pump runs from a plug on the draw bar via a switch on the end of the switch on the end of the switch arm through a rubber bung in the bottom of the plastic tank then through a nylon conduit to the pump. The draw bar plug connects to a socket on the tractor. For tractors not equipped with a socket, a conversion kit is supplied.

The spray nozzle is equipped with an anti-drip cut-off valve. There is also a filter immediately behind the jet. The standard jet is the D7.5, which passes one gallon in one minute 20 seconds. A priming jet is situated in the side of the nylon tailpiece which holds the nozzle to the plastic tank. This is a constant flow jet with the double function of ensuring positive priming of the nozzle and providing internal agitation to spray mixtures as yet not fully dissolved. If at any time the nozzle fails to work, this priming jet should be checked for blockages.

## JET AND FILTER REMOVAL

Hold the body of the nozzle to prevent it from turning, then turn the winged cap-ring at the front of the nozzle clockwise. This releases the cap-ring with the jet and the filter which lies in the nozzle body immediately inside can easily be prised out carefully for cleaning. Assemble in reverse order. The nozzle body can be removed from the wall of the plastic tank in a similar fashion using the spanner illustrated to hold the tank adapter. However when replacing always make sure that the end of the nozzle jet is lying horizontal before you start spraying. This will ensure even spraying to left and right.

## SPRAYING OPERATION

The filler cap is underneath the switch arm and the operating lever. Both of these have to be lifted to get at the filler cap. Raise the operating lever with caution. Load the plastic tank with the pre-

mixed spray mixture, replace the filler cap and switch am and operating lever.

The spray is turned ON and OFF by the switch at the end of the switch arm. The nozzle sprays to a width of approximately 33". Do not run the pump dry. Switch it off as soon as the plastic tank is empty. When you have finished spraying, clean the system by placing one or two gallons of clean water in the tank and spraying it out.

## CALIBRATING

To make sure you get an accurate application of the spray it is important to control the speed of the tractor. Since the pump is not controlled by the tractor's speed it will run at a constant rate. We therefore recommend that when spraying you travel at a speed of around 3mph. At a constant pumping speed of one gallon in 1 minute will thus be sprayed over 170 square yards (90 square meters). From this you can see there is a formula to calculate how much of the raw material recommended by the manufacturers to cover this area must be put into each gallon mixture e.g. for 25ml per 28sq yds per gallon

$$107 \times 25 \div 28 = 95.5 \text{ml}$$

There is not a speedometer on your Countax tractor. At a constant speed of 3mph the tractor will cover 50 yards in 34 seconds. Great care is needed to keep this speed constant — it is just as important to avoid applying spray too sparsely as it is to over-spray.

## DRIVING TECHNIQUES

To be certain of the correct rate of application, you must take care not to drive accurately and turn off the spray when turning or stopping. You should avoid an overlap of anything greater than a few inches.

Spray only on still days when rain is not expected; also take care especially when using weedkiller, that the spray mixture does not carry over on to surrounding vegetation.

## SAFETY PRECAUTIONS

**IT IS ESSENTIAL WHEN USING ANY CHEMICAL SPRAY PRODUCTS SUCH AS WEEDKILLERS AND FERTILIZERS, TO OBSERVE ALL THE MANUFACTURER'S INSTRUCTIONS FULLY. WE FURTHER RECOMMEND THE USE OF GLOVES AND PROTECTIVE GOGGLES WHEN MIXING SUCH PRODUCTS AND ALSO WHEN FILLING THE CONTAINER ON YOUR LAWNGROOMER.**

# Assembly Instructions

The Countax Electric Lawngroomer has been designed for use with all models of Countax garden tractors, as well as all other popular models of tractor and ride-on mower, which have a 12v electric Charging System and electrical Power Take Off plug.

The electric Lawngroomer is straightforward to assemble.

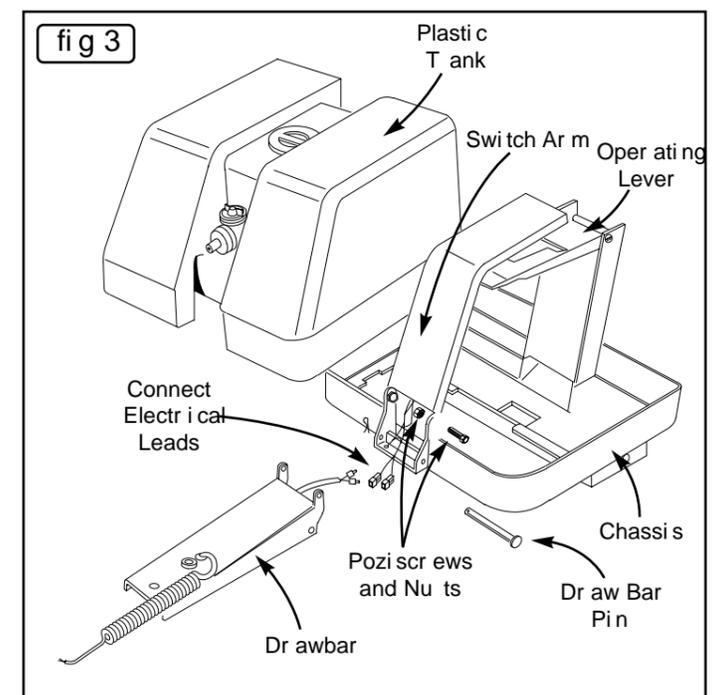
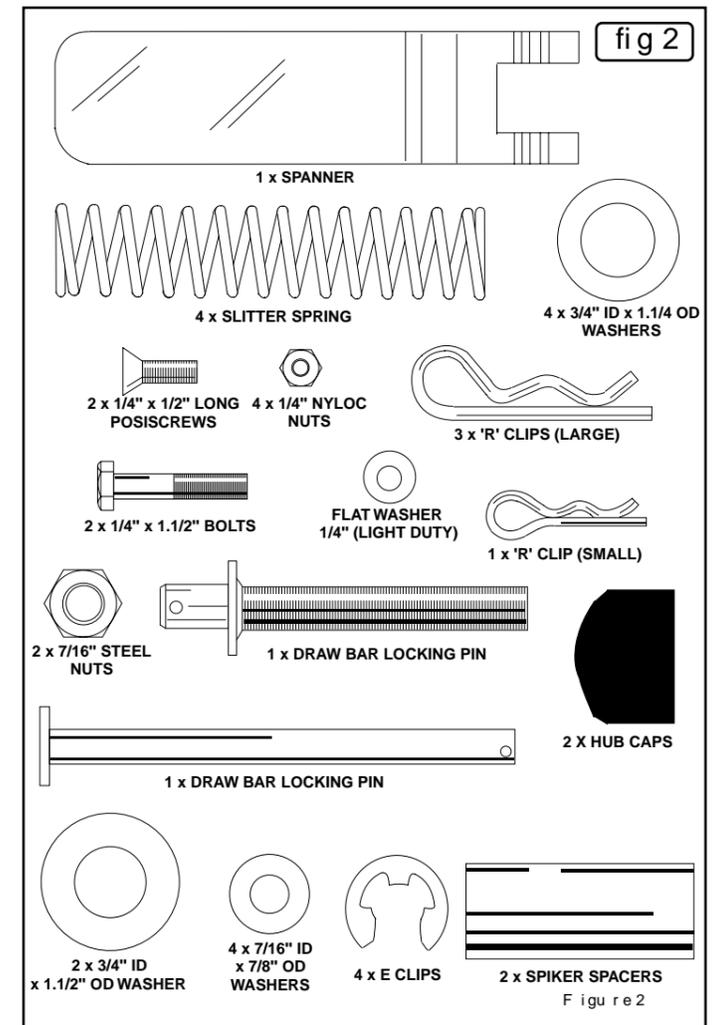
The Lawngroomer comes in one package which should be emptied and all the contents checked against the parts list (fig 2).

We suggest that if the packing box is to be kept, the sharp copper staples that sealed it are removed completely for safety's sake.

The Lawngroomer comes partly assembled from the Countax factory. It is recommended that you read these instructions right through, identifying the various components used in each step before actually starting to assemble.

## ASSEMBLY INSTRUCTIONS

1. Identify the Switch Arm, the components which has "Lawngroomer" written on it. Identify also the spring-loaded operating lever with a T cut in it. Both Levers come already in place. Raise each Lever, taking care with the torque on the spring loaded operating lever, and take out the plastic tank, placing it to the left of the machine as you look at it from the front. Be careful, when moving the plastic tank, not to disconnect the wires. Return operating lever to down position (see fig 3).
2. Identify the draw bar. Now take off the pozdrive screws and nuts that secure the switch arm to the front of the chassis and slide the draw bar into the front of the chassis. Next connect the electrical lead from the draw bar to the terminals at the front of the chassis. Ensure that blue wire from the plug connects to the white from the switch (see fig 3).
3. Refit the Pozdrive screws and nuts to the switch arm and the front of the chassis. Tighten them sufficiently to hold the pieces firmly, but do not so tightly that the switch arm cannot swivel properly (see fig 3). Now the draw bar is in place, slide the draw bar pin through the holes in the front of the chassis and the draw bar itself and secure with a small R clip. Take care however, when inserting the pin, not to catch the wiring running through the draw bar (fig 3).
4. Identify the Axle Support Beam. Apart from the 2 large holes in each end of its sides the Axle Support Beam has 2 smaller holes towards one end, this is the front. Now with the operating lever the down position, insert this front end of the axle support beam through the aperture in the rear of the chassis. Fit the wheel axle, passing it through both sides of the chassis and through the holes in the front end of the axle support beam. Identify and slip in a 1/4"x1/2" hex head bolt through the axle beam and axle and add a washer and Nyloc nut. Do up loosley (see fig 4).



# Assembly

- Bring the operating lever into the up position. This action will lower the link plate down towards the axle support beam. Pull the link plate away from the unit whilst raising the operating lever up to the lock position (see fig 5).
- Then raise the axle support beam from the rear and this will enable you to slip the 2 flanges on the link plate into place on the axle support beam. It may be necessary to tap the link into its final position and align the two sets of holes (see fig 6).
1. IMPORTANT: Take great care during this operation, since there is considerable torque on the operating lever and on the link plate.

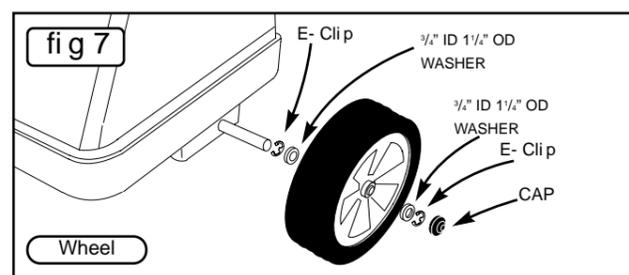
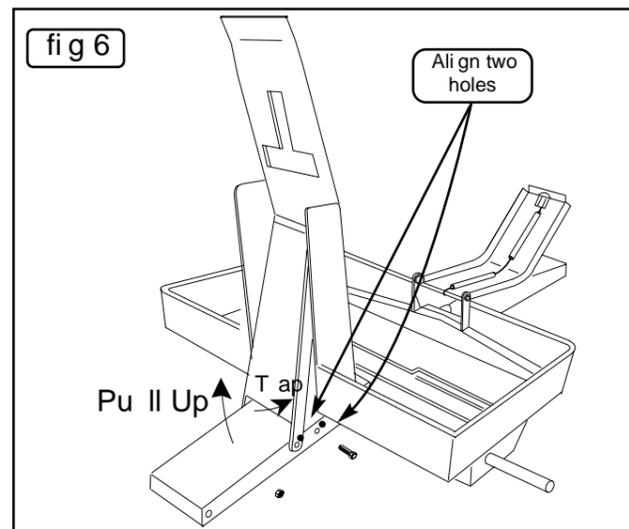
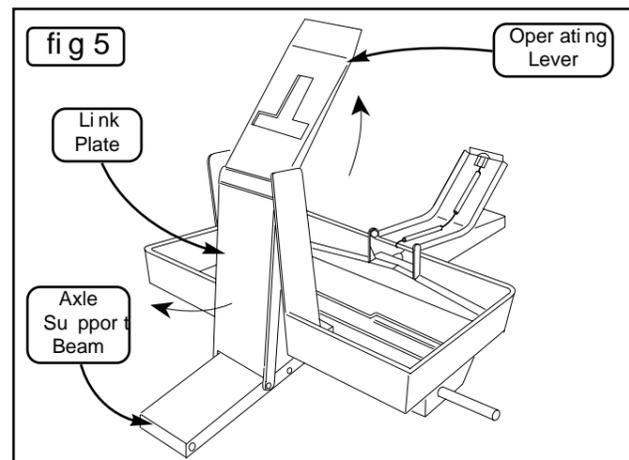
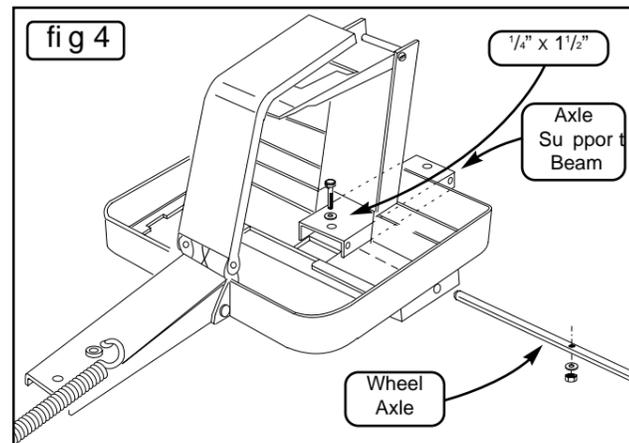
**ON NO ACCOUNT ATTEMPT TO REMOVE THE SPRING SPECIAL TOOLS ARE REQUIRED FOR ITS REMOVAL AND REPLACEMENT**

- When the link is in its proper position, the 2 flanged screw holes will be over the corresponding holes in the axle beam. Secure it with the two 1/4"x1/2" long Poziscrew head bolts, and Nyloc nuts.
- Now tighten the nut on the bolt connecting the axle beam to the axle.
- Next replace the plastic tank into its original position, taking care not to trap the wiring.
- The operating lever is now pulled forward and down onto the plastic tank and the switch arm on top of it.

### CAUTION:

**Take great care when pushing the operating lever into this position. It is spring loaded and there is strong torque. Avoid getting your fingers trapped underneath it. Hold firmly, preferably standing in a well balanced position.**

- Now fit the wheels. Locate the grooves on either side of the axle. In the innermost groove, place an E clip, then a 3/4"x1/4" washer, and then another E clip. Repeat process on other wheel. Finish off by pushing the plastic caps over the washers (see fig 7).
- Identify the rear spindle and slide it through the holes in the rear of the axle beam and secure it to the axle beam with a 1/4"x11/2" hex head bolt, washer and Nyloc nut. The rear spindle is now ready for you to attach the spikers or slitters.
- An electrical socket is supplied with this Lawngroomer, it is for use on tractors not fitted with a 12v power take off. On Countax tractors not already fitted with this PTO socket, fitting and wiring the electrical connector is very straightforward: at the rear of the tractor to the right hand side of the tow hitch bracket is a rubber blanking grommet; remove this to install the PTO socket. It is important to ensure a good earth between the socket and the chassis of the tractor and to achieve that it is necessary to remove paint from approx 1/4" around the rear of the hole which then must be smeared with Petroleum (not grease). Remove the nut and large starlock washer from the rear of the socket, insert the threaded part of the socket through the hole, then refit the starlock washer and the retaining nut. On the Countax tractor, connect the rear of the socket to the red/voilet wire which is adjacent to the socket.



# Assembly

## OPERATING INSTRUCTIONS

Your Countax Electric Lawngroomer is an extremely versatile machine. To produce and maintain excellent lawns, the Lawngroomer offers solid tine spiking for weed control and liquid fertilizer application.

The attachments for spiking and slitting are fitted as required to the rear spindle, and the spraying nozzle is fitted in an aperture at the front of the plastic tank, where it can be seen by the operator.

## SETTING THE DRAW BAR HEIGHT

Tractor models differ in tow height and it is important that the Lawngroomer operates at as near level stance as possible. The level of the machine is controlled from the towing pin which is adjustable in height. Simply move the 2 lock-nuts, above and below the draw bar (see fig 8).

- When hitching the Lawngroomer to your tractor for the first time (preferably on a flat piece of ground), insert the tow pin into the tractor's towing hitch bracket from underneath and secure with an R clip through the top of the tow pin.
- Now adjust the nuts on the tow pin, up or down as necessary until the Lawngroomer draw bar is 9" (23cms) above the ground at its front end. Then tighten the nuts to hold the draw bar at that height (Nyloc nuts are not used here, these are just plain nuts). You will not have to repeat this operation unless you use the Lawngroomer with another model of garden tractor.

## SPIKING

For this all season operation, first make sure that the operating lever is in the DOWN position; ie: lying flat along the plastic tank with the switch arm over it. Now fit the 3 left hand and 3 right hand spiker plates onto the rear axle as illustrated, with the loose spacers immediately inside each of the outer spiker plates. Make sure that the spiker plates are fitted so that the spike of each plate is pointing downwards, forward of the spindle in the direction of travel. The spikes will then work with the minimum of disturbance to the lawn. Secure onto the rear axle with 3/4" washers and an R clip (see fig 1 & 9).

To lower the spikes into the work position, raise the switch arm and raise the operating lever until it locks over the axle support beam. Put the switch arm back down along the plastic tank.

### CAUTION:

Perform this operation with great care because this lever is spring-loaded. It is best to grip the handle firmly, preferably when you are standing in a well balanced position. The same level of care should be exercised when raising the spikes by lowering the operating lever back into its down position.

