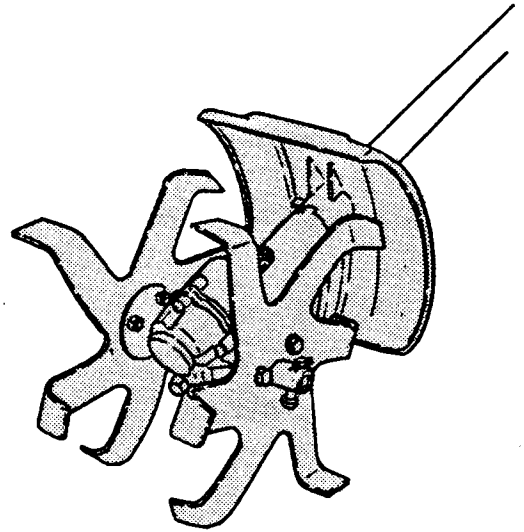


**ECHO**<sup>®</sup>



# **OPERATOR'S MANUAL**

**ECHO**

**CULTIVATOR ATTACHMENT**

**SRAC-200**

**SRAC-300**

**SRAC-2000**

**SRAC-2500**

**SRAC-400**

**RMAC-300**

**CAUTION**

Read Rules for Safe Operation  
and Instructions Carefully

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## INTRODUCTION

The ECHO cultivator attachments are designed to cultivate soft soil for weeding, cultivating, preparing garden seedbed, mulching crop residue, preparing for germination in small fields, etc..

These models have been designed for the optimum performance-to-size ratio, easy-to-handle and mountable on your ECHO Grass Trimmer/Brushcutter.

This manual provides the information necessary for assembly, safe operation, and maintenance of your unit.

Parts Catalogue is also provided in the last page.

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## NOMENCLATURE

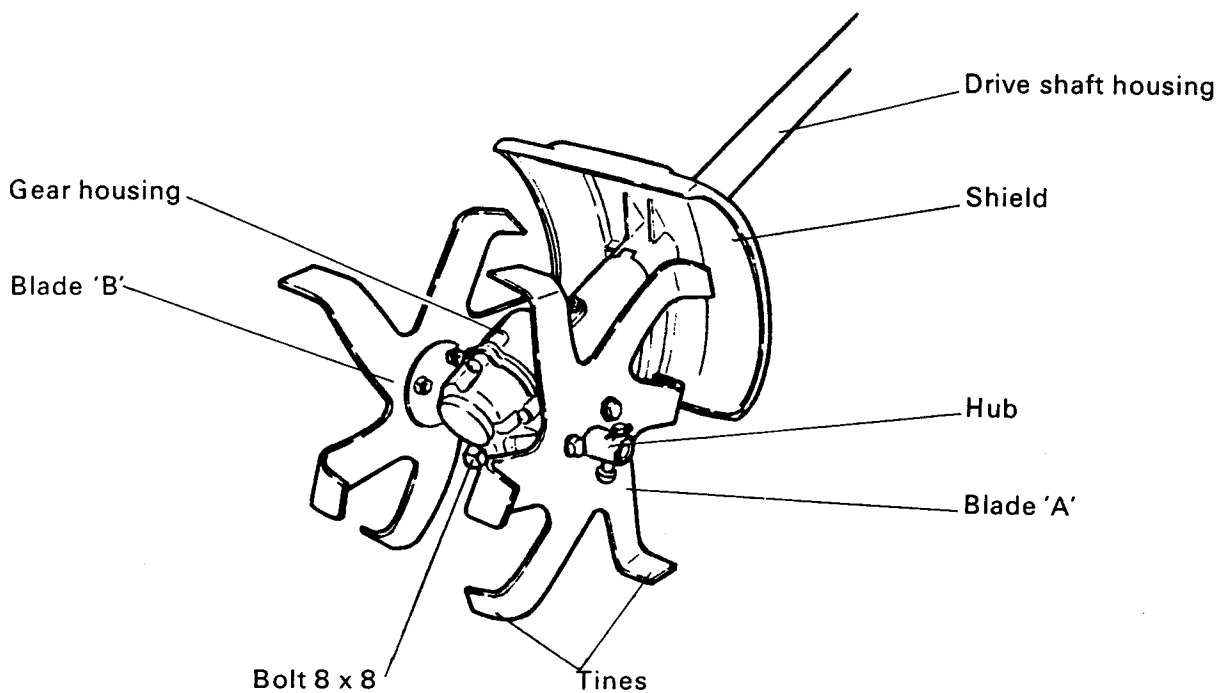


Figure 1

## TECHNICAL DATA

Model		SRAC-200	SRAC-2000	SRAC-2500	SRAC-300	SRAC-400	RMAC-300
L x W x H	mm (in)	235 x 160 x 220 (9.25 x 6.30 x 8.66)					
Blade diameter	mm (in)	220 (8.66)					
Cultivating width	mm (in)	160 (6.30)					
Weight	kg (lb)	1.8 (4.0)					
Mounting bore	mm (in)	25.0 (0.98)			28.0 (1.10)		
Coupling hole	mm (in)	5.4 x 5.4 (0.21 x 0.21)	Involute 6.0	Involute 7.0	6.5 x 6.5 (0.26 x 0.26)	Involute serrations 8.0	
Gear reduction ratio		1 : 46					
Lubrication		Lithium base grease (Shell Delpena or equivalents)					

## INSTALLING CULTIVATOR ATTACHMENT

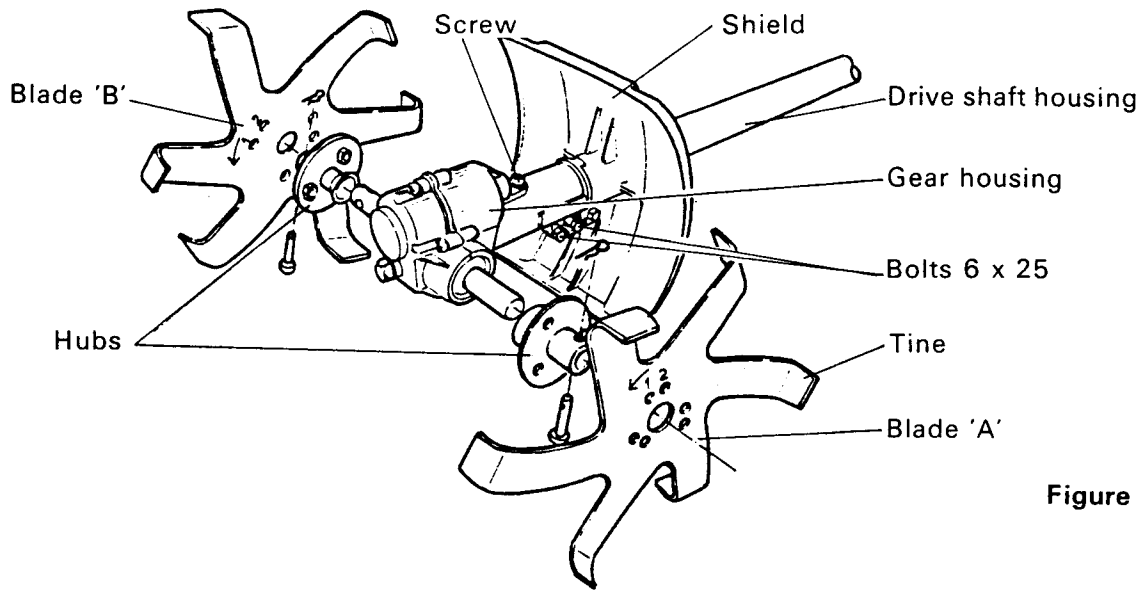


Figure 2

1. Remove gear housing, and shield from your grass trimmer/brushcutter.
2. Install shield of cultivator through hole to drive shaft housing about 15 cm (6 in) from the end, but do not secure it now.
3. Install gear housing to drive shaft housing and secure it with screw and bolts 6 x 25.
4. Joint the recessed part of the shield to the protruding part of gear housing as shown in figure 3. Then fasten bolt 6 x 20 to secure shield to drive shaft housing.

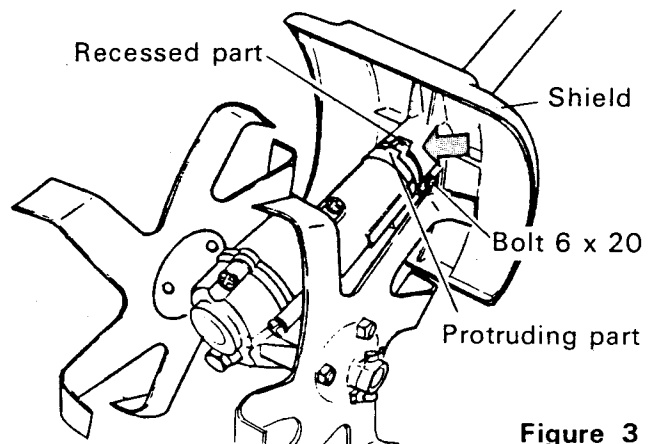


Figure 3

## ASSEMBLING BLADES FOR DEEP CULTIVATING

The both blades 'A' and 'B' have been mounted at factory before delivery for regular cultivation as shown in left of figure 4. For deeper cultivation, just reposition blade 'A' as follows.

- Remove three bolts securing the blade 'A' to hub (the side of which marked numbers 1 and 2 can be seen). Refer to figure 2.
- Align hole '2' to that in hub and reinstall three bolts to secure them together.

**NOTE:** Position blade 'A' so that tines of both blades face together or are mutually back-to-back. (Right of figure 4)

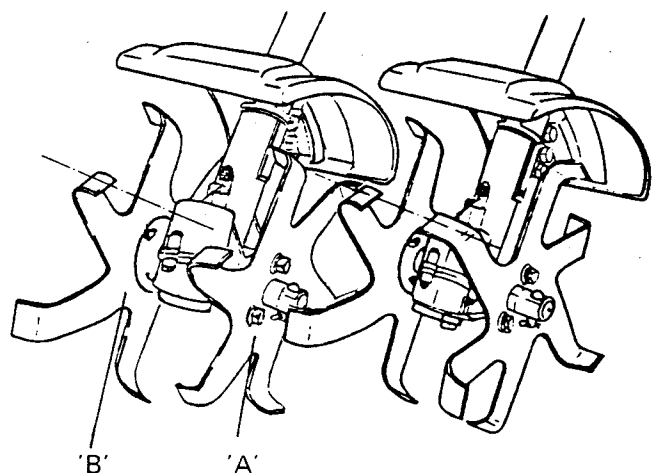


Figure 4

## PRECAUTIONS FOR OPERATION

1. Read carefully and follow precautions described on your grass trimmer/brushcutter Operator's Manual, your local regulations, and this manual.
2. Use safety footwear, snug-fitting clothing, protective gloves and eye protection devices.
3. Use this cultivator attachment only with ECHO grass trimmer/brushcutter.
4. Do not allow other persons to be in the work area when operating. Keep bystanders and animals out of the work area.
5. Be careful, the blades should move right after engine starts. Do not let any part of your body coming into contact with the blades when starting engine or operating. It may cause dangerous bodily injury.
6. Do not attempt to remove cut materials sticking on tines while blades are moving. If such a case should happen, stop engine before removing cut materials from tines.
7. Always hold handle with both hands during operation. Using cultivator with one hand may cause you to lose control of the machine resulting in bodily injury.
8. Do not work with the machine above ground level (Figure 5) or near your feet (Figure 6).
9. To avoid dangerous kickback which may lead to loose control of the machine, do not let the tip of tines contact a log, branch, or any other obstruction. (Figure 7)
10. Do not operate the cultivator in water. (Figure 8)
11. The gear housing is designed for use with ECHO genuine blades. It should not be used for other purposes and with other blades.

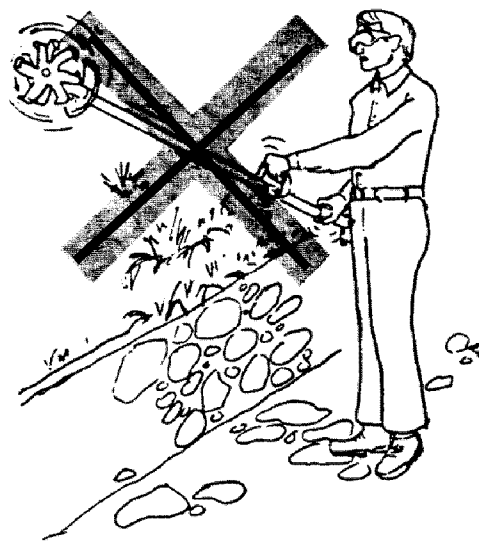


Figure 5

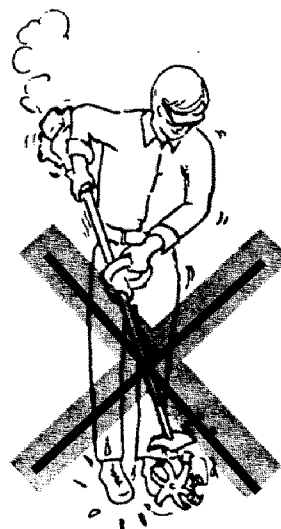


Figure 6

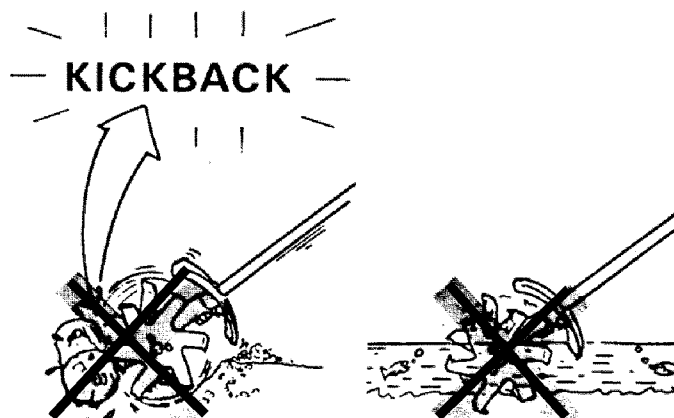


Figure 7

Figure 8

## OPERATING METHODS

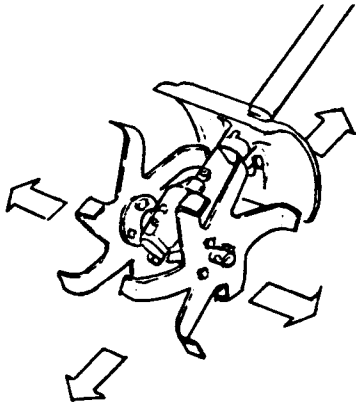


Figure 9

1. The cultivator attachment of each model can cultivate crops and be moved to any direction. (Figure 9)

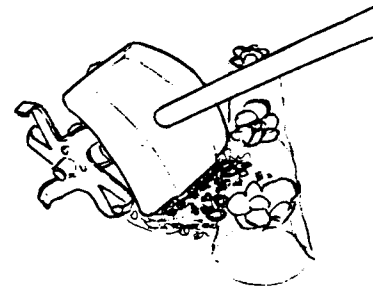


Figure 11

3. Tilt the blades to raise soil as shown in figure 11.

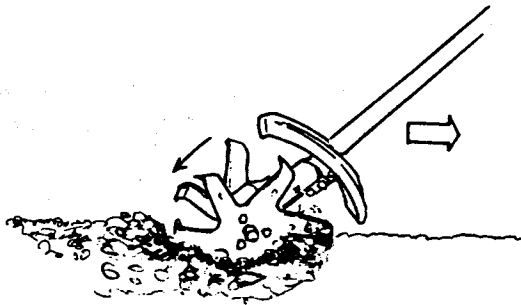


Figure 10

2. For deep cultivation of soil, apply pulling motion to the machine and blades will automatically go deep into soil. (Figure 10)

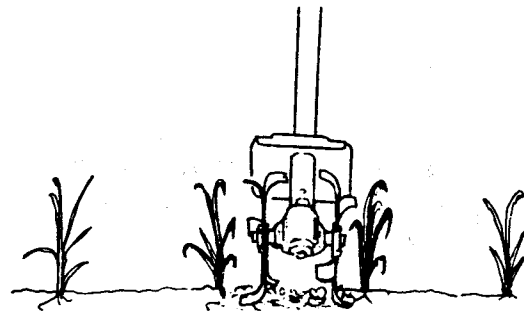


Figure 12

4. These models can work even in narrow distance between two plants as shown in figure 12.

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## MAINTENANCE

Apply grease to gear housing every 30 hours of use. Proceed to apply grease as follows.

- Unscrew bolts securing gear housing to drive shaft and remove gear housing.
- Remove bolt 8 x 8 from gear housing and apply grease through hole with a grease gun until grease can be seen (about 50 g or 0.11 lb) through ball bearings located at drive-shaft-mount bore.

2. Clean outside of gear housing every day after use. Particularly clean drive-shaft-mount area to prevent foreign materials or dust entering gear housing.

3. Remove cut materials or dust from blades and hubs after daily work. This will prevent them from being prematurely rusted.

## STORAGE AFTER USE

Inspect and adjust every part of the unit.

- Completely clean every part, and repair, if necessary.

- Apply thin coating of oil to metal parts to prevent rust.

- Remove the cutter head, apply sufficient oil coating and wrap up in plastic film.

- Store in a dry area and out of reach of children.

**NOTE: For cleaning, do not immerse or wash this attachment in water because water penetrates into gear housing and will damage it.**