



SINCE 1903

**SERIES 03 & SERIES 35
LEVELLING HARROW
PRODUCT MANUAL FOR
SECTIONS & SETS**

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LEVELLING HARROW SECTIONS & SETS SERIES 03 & SERIES 35

PRODUCT MANUAL

This Product Manual must be given to the Owner of the Harrow and the Operator(s) of the Harrow and any person(s) who carry out any service work / repairs to the Harrow.

This Product Manual contains important information about the Harrow and its Intended Use, Safety, Set Up & Assembly Instructions and Operating Instructions.

Please read this Product Manual. Thank you.

Additional copies of this publication are readily available direct from Murray Agricultural Equipment.

SERIES 03 & SERIES 35 LEVELLING HARROWS

Thank-you for selecting an item of equipment or service part manufactured or supplied by Murray Agricultural Equipment – building quality & value priced harrows for Australia & export markets. This product manual covers harrow sections, complete harrow sets and service parts.

Please study the information contained in this product manual. Please retain this product manual for reference and re-read it from time to time to refresh your memory. Please ensure all future operators and owners of this product study this manual or the latest edition of this manual. Additional copies of this publication or the most recent edition are readily available direct from Murray Agricultural Equipment.

Correctly assembled, operated & maintained, and used for the purpose for which it was designed, this product should provide productive service. Your attention is drawn to information contained in this manual. Following the appropriate guidelines and instructions will contribute to reliable, effective performance and maintain the manufacturer's product warranty cover.

SAFETY

“A Special note – Please read it”

- Work safely and promote safety at all times.
- Familiarize yourself, employees & contractors and other people with all and any safety warnings, marks or instructions issued, marked or affixed to this product. Work in accordance with these instructions at all times when around this product.
- This product is intended to be pulled (towed) by a tractor correctly fitted with an approved rollover protection structure. This product is NOT intended for use with an “ATV” or “Ride on Lawn Mower” or similar machine.
- This equipment is not intended to be used or operated, serviced or repaired by children under the age of 18 years or persons who are not medically fit.
- Children, especially young children, should be supervised to ensure that they do not play with or near this equipment. Encourage children to keep away from farm machinery including this product.
- Do Not climb on Agricultural Equipment including this product.
- You and other people must be especially aware of the dangers from moving, sharp, falling or mobile components or equipment including tractors and engines, and of the danger from mechanisms or assemblies that can be activated remotely by other people.
- Wear and use the appropriate safety clothing and equipment.

- This equipment is not intended to be used on or travel on roads or freeways.
- When transporting this product in conjunction with (connected to) a tractor or another vehicle, transport only when safe to do so and **transport speed** (not work speed) should not exceed 20 kph.
- Electrical Safety; “Look Up And Live” When near powerlines, always Look Up And Live & Look Around And Live. Contact with powerlines and other electrical wires can end in tragedy.
- Replace any safety or warning labels on this product if they become damaged, unclear or unreadable. Labels are available as a service part.

SERIES 03 & SERIES 35 LEVELLING HARROW SECTIONS & SETS: USAGE INFORMATION

The Murray Series 03 & Series 35 Levelling Harrows are designed to be used as a “Levelling Style” Harrow pulled (towed) by a **tractor correctly fitted with an approved rollover protection structure**. In general they are suitable for prepared ground. Maximum operating speed is 10 km / hour.

NOT INTENDED FOR USE WITH AN “ATV” OR “RIDE ON LAWN MOWER”

MURRAY SERIES 03 & SERIES 35 LEVELLING HARROW SECTIONS & SETS (OR ANY OTHER MURRAY HARROW) ARE NOT TO BE ATTACHED TO / USED IN CONJUNCTION WITH OR PULLED BY AN “ATV” OR “RIDE ON LAWN MOWER” OR SIMILAR MOTIVE POWER MACHINE.

Murray Agricultural Equipment expressly prohibit the attachment to / use with or pulling by an “ATV” or “Ride On Lawn Mower” or similar form of machine regarding Series 03 & Series 35 Levelling Harrow Sections & Sets or any other Murray Harrow.

If, for whatever reason, attachment / or use in conjunction with or pulling by an “ATV” or “Ride On Mower” or similar form of machine was being considered **STOP NOW!**

DO NOT PROCEED WITH ASSEMBLY OR ATTACHMENT!

If you purchased these Harrows **brand new** contact the Murray Dealer that sold these Harrows to you or Murray Agricultural Equipment **NOW to arrange a return of these Harrows.**

SET UP INSTRUCTIONS

DANGER; Use extreme caution to prevent injury when handling or working with the tine sections (points) as the tines are very sharp. A Tine or Tines should never be assembled in any other position that the way they were designed or intended to be positioned, ie; Tines should never be assembled so some or all of the tines are positioned the other way or positioned so they are pointing upwards etc.

When assembling equipment for delivery or in preparation for field work please follow these general instructions.

Always refer to the appropriate assembly drawings and / or instructions during assembly.

“Left” and “Right” are relative to a position behind the implement looking forward to the hitch point.

Assemble the implement on a solid, level surface wherever possible.

SERIES 03 & SERIES 35 LEVELLING HARROW SECTIONS & SETS: NORMAL PACKAGING

The following items should be included;

HARROW SECTIONS; Tine Harrow sections, if section(s) only have been specified.

“DRAG” TYPE SET;

Quantity	Description
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1	Series 03 / Series 35 “Front” Harrow Drawbar (a “Front” drawbar has two or three pull chains depending on the width of the set.)
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1	Bundle (or stack) of the required number of Tine Harrow Sections.
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SERIES 03 & SERIES 35 LEVELLING HARROW SECTIONS & SETS: ASSEMBLY INSTRUCTIONS

SAFETY TIP: Safety Glasses should be correctly worn by the person(s) removing tie-wires.

STEP 1: Remove all items of packaging, including strapping, tie-wires and shipping tags etc; from components.

STEP 2: **ASSEMBLY TIP; *We suggest you use the front harrow drawbar as an assembly guide, therefore;*** Lay out front harrow drawbar, with labels facing up, on solid level ground large enough for the harrow set. (Naturally, leave enough space for the remainder of the set.)

STEP 3: Carefully, place the individual tine harrow sections with their tines downwards so that they line up with the front harrow drawbar and the tine harrow “front coupling” correspond with their respective drawbar anchors.

STEP 4: Assemble each “front coupling” with its respective drawbar anchor.

STEP 5: To assist in transportation, the tine harrow sections are supplied *rigid* with the 2 locking nuts firmly “pulled” up on their respective long bolts. *The harrows should **never** be used in this state.* The result may be that the nuts become loose due to the severe vibration caused from working and components separate from the tine harrow section. On each of the long bolt assemblies (with the exception of the bolt assembly in the last rank [rear] of each tine harrow section) back off the outside nuts and loosen the inside nuts so that the ranks of tines are able to move freely around their respective pivot points.

Assembly Tip: Please allow for freeing up of the “pivoting harrow” action after the early stages of the implement’s use. (Refer to section: Operating Instructions for further details). Carefully retighten the outside nuts in order to firmly lock the 2 locking nuts together to avoid the assemblies from becoming loose in operation.

SPECIAL NOTES:

If the harrow set is **not** required to be “taken apart” we generally recommend that all or some of the couplings, links, harrow hooks etc, be closed up. Safety Glasses should be correctly worn by the person(s) hammering the couplings, links, harrow hooks etc closed. For a permanent situation welding of these closed up components may be considered. Please ensure the person who is carrying out any welding work is qualified as a welder if this step is undertaken. Ensure all safety procedures are adhered to during welding.

Please dispose of any packaging and shipping items thoughtfully. Thank you.

SERIES 03 & SERIES 35 LEVELLING HARROW SECTIONS & SETS: OPERATING INSTRUCTIONS

Recommended maximum working speed is **10 kph**. For better results, and to safeguard the implement, do not operate the harrow above this speed. Operation at a speed greater than 10 kph will result in premature wear and damage to the harrow and may void manufacturer’s product warranty.

Tine harrow section locking nuts: it is recommended the tightness of the 2 nuts on each of the tine harrow section’s “long” bolts be checked several times during the first few hours of work and there-after when required to assist in keeping the 2 nuts firmly locked together. Failure to carry out this procedure may result in the nut(s) becoming loose with the result that nuts, tines, spacers and bolts may

separate from the harrow sections and become lost in the field.

The “**pivoting harrow action**” of the tine harrow sections may become freer when any paint and/or metal burs around the pivot points are worn off during the early stages of the implement’s use.

The tine harrow sections should **never** be used in a rigid state with the “long” bolts and 2 locking nuts “pulled” up. For further details please refer to step 5 of the set up instructions in this manual.

Special operating note: flexibility is essential for effective working of a Murray Levelling harrow. Wear is a natural consequence of flexibility. Operation below the recommended maximum working speed will assist to optimise the implement’s working life.

Replace any safety or warning labels on this product if they become damaged, unclear or unreadable. Labels are available as a service part.

Inspect this product prior to use. Ensure that all couplings, rings, hooks etc are correctly assembled / attached. Replace any parts (couplings, rings, tines etc) on this product if they become worn or unserviceable.

Safety Glasses should be correctly worn by the person(s) hammering couplings, links, harrow hooks etc.

Murray Agricultural Equipment does **not** recommend the adding of extra weight to their harrow sets, harrow sections or harrow drawbars.

NEVER GET UNDERNEATH A HARROW; Safe work practice directs that operators and other persons never get underneath a Harrow Section or Harrow Set or components of a Harrow at any time while attempting to clear or clean the Harrow of grass / weed matter or any other material or blockage and when carrying out maintenance or at any other time whether the Harrow Section or Set or components of a Harrow are attached to a 3 point Linkage Lift frame or a drag type set. Failure to do so will / may result in death or serious injury.

NO RIDING ON A HARROW; Owners and Operators must ensure that no person(s) or animals ride or are carried etc on Murray Harrows. Failure to do so will / may result in death or serious injury.

STAND CLEAR OF “PINCH POINTS”; Owners and Operators must ensure no person(s) or animal(s) are permitted to stand within or be allowed to be nearby a “Pinch Point”. A Pinch Point maybe an area between the front of a Harrow Front Drawbar and the rear of a tractor when the Drawbar is connected to a tractor.

A Pinch Point maybe an area between a Harrow Set and the rear of a tractor when the Harrow Set is NOT connected to a tractor and the tractor is being reversed so as to enable the Harrow Set to be attached to the tractor. A Pinch Point maybe an area between the tractor’s rear tyres and a drag

type Harrow Front Drawbar when the tractor and attached Harrow Set is turning a corner.

Operating Instructions for Towing Vehicles;

This equipment is not intended to be used on or travel on roads or freeways. When transporting this product in conjunction with (connected to) a tractor or another vehicle, transport only when safe to do so and **transport speed** (not work speed) should not exceed 20 kph.

When towing equipment combinations, the maximum equipment combination ground speed shall be limited to the lowest specified ground speed of any of the towed machines.

The maximum travel speed is that specified in the operator's manual(s), Speed Identification Symbol (S I S), or information sign of towed equipment, or the limit of the road conditions, **whichever is the lesser**.

GENERAL

Additional copies of this publication are readily available. Please contact Murray Agricultural Equipment.

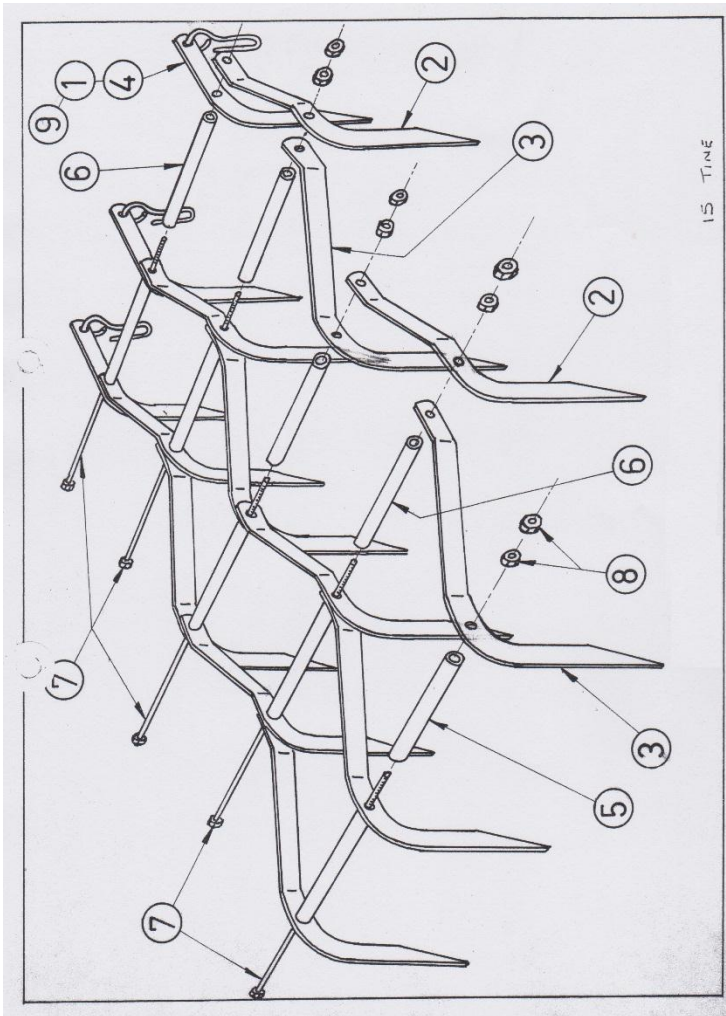
We do not recommend the adding of any extra weight to this harrow.

If you require assistance in any way with a Murray Series 03 & Series 35 Levelling Harrow Section or Set please contact your dealer, area distributor (where applicable) or Murray Agricultural Equipment.

Information contained herein is from data available at time of publishing. Due to a policy of continual product research and evaluation, Hugh Murray & Son Pty Ltd trading as Murray Agricultural Equipment reserves the right to change specifications without notice and without obligation.
E. & O. E. Copyright March 2016

NOTES

**SERIES 03 & SERIES 35 LEVELLING HARROW SECTION:
PARTS BREAKDOWN**



For illustrative purposes only, harrow section may vary in width (3 or 4 tines wide) and depth (ranks, front to back).

**SERIES 03 LIGHT LEVELLING HARROW PARTS LIST
(25 X 6 mm MATERIAL)**

Ref No.	Part No.	Description
1	103001	1st Rank Tine c/w Coupling
2	103002	2nd & 4th Rank Tine Only
3	103003	3rd & 5th Rank Tine Only
4	103007	1st Rank Tine Only
5	103005	Last Rank Spacer
6	103004	1st – 4th Rank Spacer
7	190250	3/8" x 20" Bolt c/w 2 Nuts
	190251	3/8" x 29 1/4" Bolt c/w 2 Nuts
8	190266	3/8" Nut (incl with ref # 7)
9	103006	1st Rank Coupling

Please see your local dealer for any spare part requirements.

**SERIES 03 HEAVY LEVELLING HARROW PARTS LIST
(32 X 6 mm MATERIAL)**

Ref No.	Part No.	Description
1	103008	1st Rank Tine c/w Coupling
2	103009	2nd & 4th Rank Tine Only
3	103010	3rd & 5th Rank Tine Only
4	103014	1st Rank Tine Only
5	103012	Last Rank Spacer
6	103011	1st – 4th Rank Spacer
7	190252	1/2" x 20 1/4" Bolt c/w 2 Nuts
	190253	1/2" x 29 1/2" Bolt c/w 2 Nuts
8	190268	1/2" Nut (incl with ref # 7)
9	103013	1st Rank Coupling

Please see your local dealer for any spare part requirements.

**SERIES 35 FORGED TINE LEVELLING HARROW PARTS LIST
(25 X 10 mm MATERIAL)**

Ref No.	Part No.	Description
1	135001	1st Rank Tine c/w Coupling
2	135002	2nd & 4th Rank Tine Only
3	135003	3rd & 5th Rank Tine Only
4	135007	1st Rank Tine Only
5	135005	Last Rank Spacer
6	135004	1st – 4th Rank Spacer
7	190252	1/2" x 20 1/2" Bolt c/w 2 Nuts
	190310	1/2" x 29 3/4" Bolt c/w 2 Nuts
8	190311	1/2" Nut (incl with ref # 7)
9	103013	1st Rank Coupling

Please see your local dealer for any spare part requirements.

**MURRAY AGRICULTURAL EQUIPMENT CONTACT
INFORMATION:**

Hugh Murray & Son Pty Ltd ABN 74 004 169 135 Trading As
Murray Agricultural Equipment.
One Pickett Street
Dandenong VIC 3175
Australia

Phone (03) 9791-7033
Fax (03) 9791-1894
Email sales@murrayag.com.au
Web www.murrayag.com.au

CUSTOMER PURCHASE INFORMATION:

Date of Purchase:

Dealer Purchased From:

Model No.:

The above information will help us to service any warranty
claims.