

Stanhay
Robin 870

IMPORTANT NOTICE TO OPERATORS

YOU are the person responsible for the **SAFE** and **SUCCESSFUL** operation of this machine.
You **MUST**:

- **READ** this users guide carefully
- **UNDERSTAND** the guide **BEFORE** using the machine
- **FOLLOW** the instructions in the guide about:
PREPARATION
OPERATION
SAFETY
MAINTENANCE
REPAIR
- **USE YOUR COMMON SENSE** if this machine does not conform to descriptions in the guide.
- **CHECK** periodically that **THE PERFORMANCE YOU EXPECT IS BEING ACHIEVED**. In adverse conditions you should check performance more frequently.
- **IF EXPECTED PERFORMANCE IS NOT BEING ACHIEVED**, it is your responsibility to **STOP THE MACHINE**. The suppliers of this machine cannot be held responsible.
- **SEEK HELP** on mechanical problems from your Stanhay Webb dealer.

SAFETY

1. **When transporting the machine on public roads, it is the responsibility of the operator to ensure prevailing Road Traffic Regulations are strictly adhered to.**
2. The machine is designed for one-man operation, and to comply with Safety Regulations, it is understood that the operator is in the tractor cab when the machine is in motion.

RECORD DETAILS OF YOUR MACHINE IN THE SPACE PROVIDED BELOW

Model: STANHAY ROBIN 870

Serial Number:

Supplier:

Date Purchased:

ALL ENQUIRIES

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STANHAY 870

INSTRUCTION MANUAL

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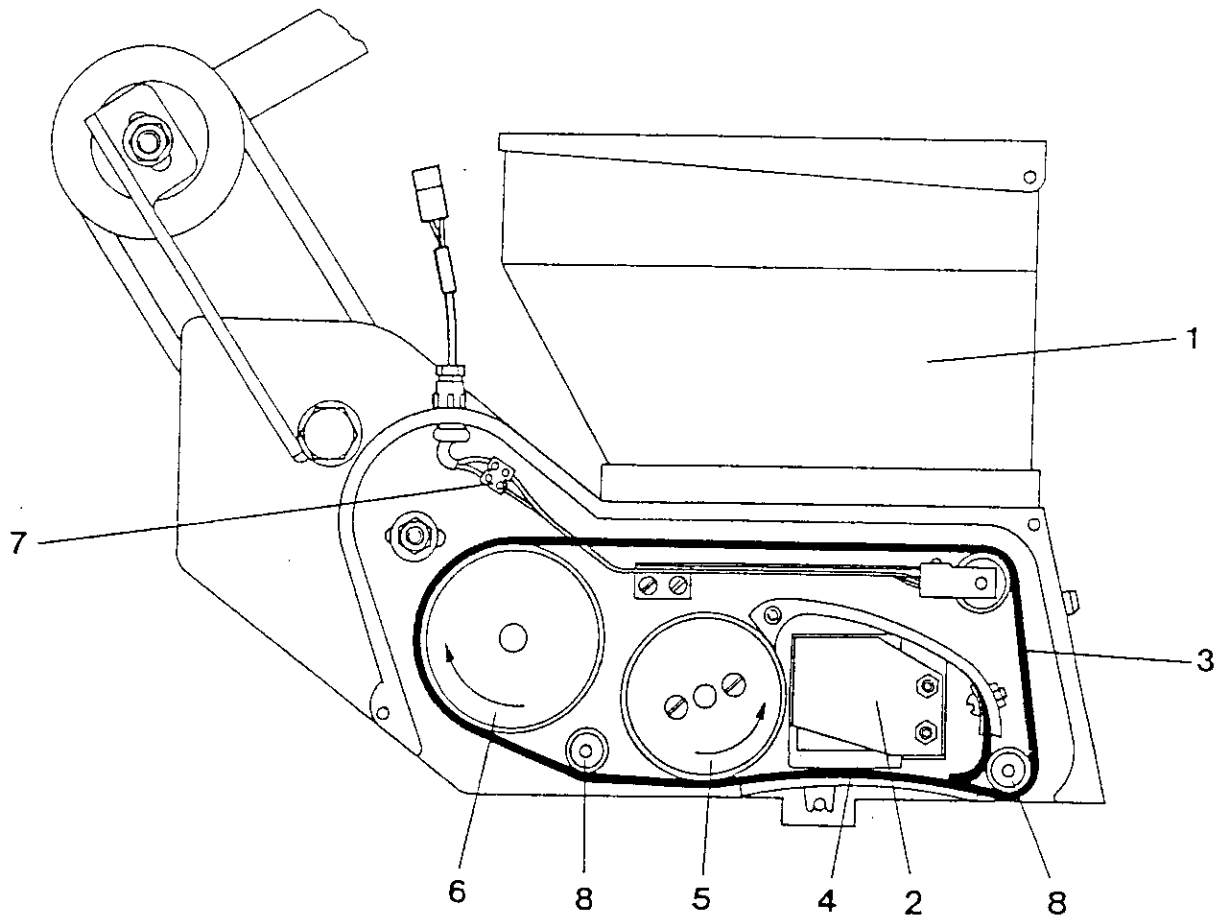
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SECTION 1

GENERAL DESCRIPTION

SEED METERING UNIT

FIG. 1



HOPPER (Ref. 1)

The hopper has a capacity of 4 litres (7 pints). One hopper on a drill outfit is monitored electrically to give a visual indication to the tractor driver that the seed level is low. A hopper extension is available, which will increase the capacity to 9 litres (15¾ pints).

CHOKE (Ref. 2)

The choke is designed to control the flow of seed from the hopper to the seed chamber. Various sizes are available and it is essential to fit the correct size to suit the particular seed to be planted. In certain cases a choke is not required, e.g. for beans.

SEED BELT (Ref. 3)

Four types of seed belt are available:

- a) A plain rubber/canvas laminated belt, suitable for small seeds such as brassicae, turnips etc.
- b) A ribbed rubber/canvas laminated belt, suitable for larger seeds such as sugar beet, peas etc.
- c) Triple ribbed rubber/canvas laminated belt, for use when multi-line planting from one metering unit.
- d) A plain thin belt, suitable for very small seeds such as carrot, lettuce, etc.

All belts are available with a range of hole sizes to suit the particular seed to be planted and the holes can be spaced to give the required number of seed stations per metre (foot).

SPRING BASE (Ref. 4)

Various types are available in a range of sizes to suit particular seeds. It is essential that the correct spring base be fitted to suit the type of seed to be planted.

REPELLER WHEEL (Ref. 5)

This wheel is contra-rotating and is designed to brush excess seed from the holes in the seed belt, and, at the same time, circulate the seed in the seed chamber.

BELT WHEEL (Ref. 6)

The belt wheel provides the drive for the seed belt.

SEED BELT MONITOR (when fitted) (Ref. 7)

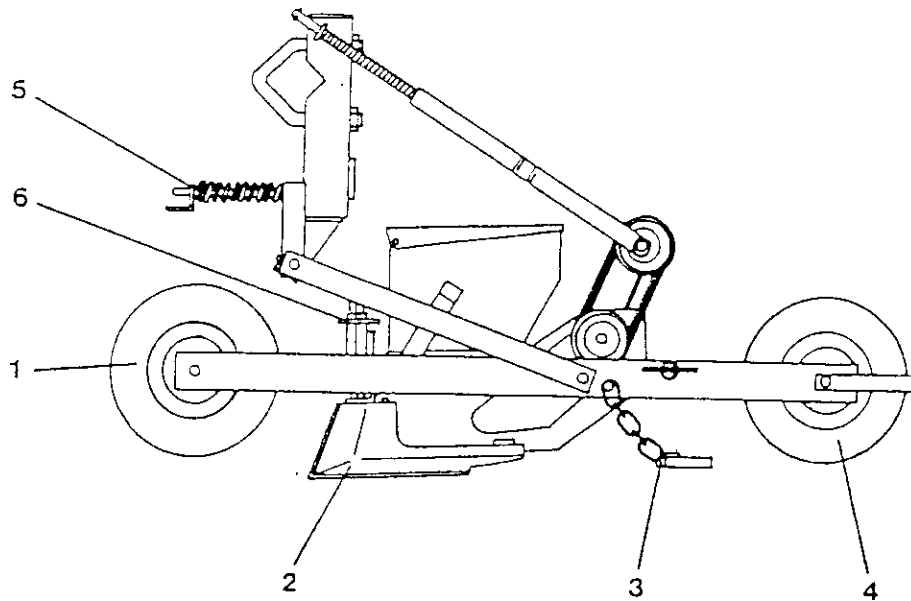
Each metering unit is fitted with an electrical monitoring device which gives a visual indication to the tractor driver that the seed belt is being driven.

IDLER ROLLERS (Ref. 8)

Easily removed for cleaning etc.

CHASSIS

FIG.2



FRONT WHEEL (Ref. 1)

The standard 228mm (9") diameter wheel has a flat steel non-stick tyre, and is cleaned by an adjustable, flexible scraper.

COULTER (Ref. 2)

A range of coulters is available for soil types and seed application. The general purpose coulters is a furrow forming type leading in by the point to assist entry. Available as all steel or with a replaceable ceramic tip to give much longer life while maintaining correct profile.

DRAG COVERER (Ref. 3)

This consists of two chains with a crossbar, designed to move the correct amount of soil in most conditions.

REAR PRESS WHEEL (Ref. 4) - MASTER LAND WHEEL DRIVE ONLY

As front wheel.

REAR PRESS WHEEL/DRIVE WHEEL - UNIT DRIVE

A rubber covered press wheel with a vee belt drive to the metering unit with one forward speed only.

PRESSURE SPRING (Ref. 5)

Adjustment is provided to allow coulter and rear wheel pressure to be varied.

DEPTH ADJUSTMENT (Ref. 6)

Carried out by releasing a spring clip which locates into grooves on the stem of the coulter.

DRILL OUTFIT

TRACTOR HITCH

A-frame with pins for category I or II linkage.

CARRIER BAR

Various lengths are available to suit the number of row units.

MASTER LANDWHEEL DRIVE

A 4 speed ratio, 'V' belt drive from two landwheels to a main drive shaft - from which each metering unit is driven via a 'knee-joint' arrangement. The drive shaft is available in various lengths to suit the number of row units required and the carrier bar to be used.

HIGH/LOW SEED RATE PULLEYS

Twin pulleys on the hexagon main drive shaft and triple pulleys on the 'knee-joint' provide a 7 speed ratio to the drive. (See Section 3 for more detail).

UNIT WHEEL DRIVE

A fixed speed, direct 'V' belt drive from the rear press wheel to the metering unit.

MARKERS

A beam and trailing arm system is used. The trailing arm is fitted with a reversible tine. On yoke bar outfits, the beam is raised by a hydraulic ram.

MONITORING UNIT (when fitted)

Mounted in the tractor cab, this unit gives a warning to the operator when the seed level in the hoppers is low, or that a metering unit seed belt is not functioning correctly.

PARKING STAND

The stand is adjustable and facilitates coupling and uncoupling from the tractor. Two stands are supplied with yoke bar outfits.

ALTERNATIVE EQUIPMENT

COULTERS

A range of coulters is available to suit specific requirements:

- General purpose - single line - all steel
- General purpose - single line c/w replaceable ceramic tip
- Double line - 2 @ 50mm (2") centres
- Double line - 2 @ 75mm (3") centres
- Triple line - 3 @ 25mm (1") centres
- Triple line - 3 @ 38mm (1½") centres
- Deep drilling - for depths from 25mm (1") to 75mm (3")
- Keeled (export only) - for depths from 10mm (¾") to 60mm (2¾")
- Prow shaped (export only) - for trashy conditions where material would hang around the nose of the standard coulters. Also for very stony conditions.

REAR PRESS WHEEL

- Concave - concave, cast iron
- Cage - expanded metal tyre 120mm (4¾") wide
- Split - two flat wheels with 25mm (1") centre space
- Skeleton - central disc with round V bar welded to it

ADJUSTABLE HEIGHT MASTER LANDWHEELS

Designed to compensate for ground compaction by the tractor rear wheels, and for use when planting on raised beds or ridges.

EXTENDED MASTER LANDWHEEL DRIVE

To enable drive wheels to be used between rows down to 330mm (13") as opposed to standard and adjustable master landwheels, which can only be used between rows down to 457mm (18") and 540mm (21¼") respectively.

BOW WAVE ELIMINATORS

Used with tandem drill double and triple line coulters to give an even depth between front and rear rows.

BLADE COVERERS

Two arm coverers which are staggered to allow small stones and clods to escape. Used on seedbeds which tend to be 'cloddy'. CANNOT be used with double or triple line coulters.

YOKE BAR (RIGID)

Designed to allow drill outfits to be coupled together in a side by side arrangement, and permitting combinations of 9,10 and 12 rows. The carrier bars are mounted on the yoke bar pivots allowing movement of the carrier bars on undulating ground so that each outfit follows its own ground contours. The pivot limiter/guide controls the movement of the carrier bars, and is adjustable to vary up and down movements. The forward and rear thrust of the carrier bar is also controlled by this guide.

TANDEM ATTACHMENT

Used to couple two drill outfits together in a tandem arrangement, enabling row widths down to 25mm (1") to be achieved.

CLOD PUSHER

The clod pusher is spring mounted and the working height can be adjusted; it is removable when not required. Clod pushers should not be used when Granyl Applicators with fish tail assemblies are being utilized, or on tandem outfits operating at close row spacings.

ELECTRONIC MONITOR

This is a standard monitoring unit but with the control box modified to incorporate additional features.

GRANYL GRANULAR APPLICATORS

This equipment is designed to dispense granular insecticides, nematicides, etc., and is fitted to its own carrier bar which mounts onto the drill carrier bar. The drive is taken from the hexagon drive shaft through a speed reducer to the granyl drive shaft. Each hopper delivers the granules to two rows through a funnel or fish tail, depending on the application.

SECTION 2

ASSEMBLY INSTRUCTIONS (Master Landwheel Drive)

- i) Carrier Bar - Mark the carrier bar centre. Working from this point, mark-off for the row units at the required centres.
- ii) Chassis Units - Clamp the units to the carrier bar and check, at the coultter points, that the row widths are as required.
- iii) Master Landwheels - Fit the drive belts to the wheel pulleys and clamp the wheel assemblies to the carrier bar, positioned such that both wheels will be running on the outside of the tractor wheelings.

NOTE: The minimum row width for positioning the master landwheel between the units is 457mm (18") using standard wheels, 540mm (21½") using adjustable height wheels and 330mm (13") using extended wheels.

- iv) Bearing Brackets - Fit a bracket at each end of the carrier bar, and one in the centre if required, i.e. 6 row on 50cm (20") rows for example. Ensure the bearing bracket is fitted with the two bearing holes pointing upwards so the bearing is being cupped by the bracket.
- v) Fit the two self-aligning bearings to the two master landwheels with the bearing locking collar pointing away from the drive side of the assembly.
- vi) Drive Shaft -
 - a) First check that all unit pulleys and master landwheel pulleys slide on the hexagon shaft freely.
 - b) Slide the hexagon shaft through the first end bearing bracket, then slide the first unit pulley on, ensuring that the pulley is to the L.H. side of the chassis stem. When fitting twin drive pulleys, these must be fitted with the large pulley toward the chassis stem. DO NOT FORGET to put the unit drive belt on the pulley.
 - c) Now pass the hexagon shaft through the bearing on the master landwheel assembly.
 - d) Slip the master landwheel drive belt over the hexagon shaft. Slide the 4 speed pulley onto the hexagon shaft, ensuring it is fitted the opposite way round to the 4 speed pulley on the wheel hub. Ensure that all the unit pulleys, and master landwheel pulley locking screw, are all on the same flat on the hexagon shaft.
 - e) Continue fitting the unit drive pulleys and the other master landwheel onto the hexagon shaft as described in (d).
 - f) When all the pulleys are fitted, lock up the grub screws on the self-aligning bearings, line up the 4 speed pulleys on the master landwheel and lock.

- vii) A-Frame - Fit the A-frame to the carrier bar equally spaced about the bar centre. The brackets are reversible, and can be fitted to the inside of outside of the A-frame, allowing the clamps to be positioned clear of any drill unit mountings.
- viii) Marker (Standard) -
 - a) First fit the marker rest as near as possible to the end of the toolbar, pointing forward.
 - b) Fit the marker beam and hinge bracket with the hinge assembly pointing forward.
 - c) Fit the connecting chain between the two marker beams.
- ix) Parking Stand (if supplied) - Finally position the stand so that the stand foot is between the units.
- x) Seed Metering Unit - A seed metering unit has three components which are specific to a particular seed type and it is essential that the correct components are fitted to suit the seed to be planted.
 1. The seed belt governs the spacing of the seed.
 2. The spring base, in conjunction with the appropriate seed belt, controls the singulation of seed from the seed chamber.
 3. The choke controls the volume of seed in the seed chamber.

REFER TO Seed Belt, Spring Base and Choke Selection Charts
Section 5

When fitting the choke, make sure that it is seated correctly in the recess provided - it must not protrude into the seed chamber.

Ribbed and plain seed belts must be fitted with the canvas surface on the inside.

Thin seed belts must be fitted with the trailed edge of the spliced joint (if present), on the inside.

Spring bases must be fitted with the short arm towards the repeller wheel and be free to oscillate on the pivot pin - free movement is essential.

Before fitting the seeder body cover plate, check all working parts for free movement. Rotate the mechanism by hand and check the seed belt for correct running - adjust the spring tensioner as necessary. Locate the cover plate on the two pins and tighten the wing nut firmly. Check again for free rotation of the units.

Fit the units to their chassis. Fully locate the dowel in the corresponding hole in the coulter stem, and, with the boss on the unit casting resting on the coulter, tighten the clamp.

Align the unit drive pulleys and clamp to the shaft.

- xi) Spring Rods - Locate the fork ends in the grooves in the knee joint pulley shafts, thus tensioning the unit drive belts.
- xii) Electrical Monitoring System (Standard) NEGATIVE EARTH ONLY. The standard fault detection system includes a light box to suit the sizes of drill. Each orange light corresponding to a row unit flashes on and off continuously when the drill is in work. Each light is operated by a reed switch on the spring tensioner arm in the corresponding metering unit, the switches being activated by a magnet in the spring tensioner roller. Should a punched belt stop rotating, the appropriate light will cease flashing, warning the operator to check that particular unit.

The other lights are green, which indicates power on, and orange, which is the hopper monitor light. This will remain lit until the level of seed in the hopper falls below the switch operation arc, when it will go out, warning that the hoppers require refilling.

Mount the control box in a position convenient for the driver, and wire the control box to the ignition switch, or to a point where the power can be turned off and protected by a fuse.

Should it be necessary to remove the control box, the cable can be split at the socket point.

NOTE: Brown lead is positive +
 Blue lead is negative -

The drill loom is supplied in 4, 6 and 8 row forms as required, and is plugged into the multi-head socket on the rear of the control box. This socket is fitted with a master spline. Each lead in the loom is numbered, and should be connected to the appropriate metering unit, with brown lead connected to brown on the metering unit, and blue to blue. In addition to the numbered leads, there is one without a number. This is for connection to the hopper monitor, which should be located in one of the centre units.

The cluster of leads should be positioned on the toolbar either vertically or flat, NOT hanging down, so that water cannot enter the protective sheath. On hydraulic folding toolbars, the cable between the clusters and control box should be looped to allow for the bar folding.

Observe the Electrical Monitor Panel as much as possible. Remember that at 3 m.p.h. (5 km/hr) the drill moves forward 1½ yards (more than one metre) in one second. If any of the lights remain on or off, or blink irregularly, it indicates that the seed belt is not turning correctly. STOP AND CHECK THE UNIT CONCERNED.

- xiii) Master Landwheel Drive - To determine the speed ratio required for the master landwheel drive belts, refer to Fig.8, Section 3. Also refer to the same chart to determine which unit pulley drive is to be used.

ASSEMBLY INSTRUCTIONS - (UNIT WHEEL DRIVE)

CARRIER BAR

As detailed for Master Landwheel Drive.

CHASSIS UNITS

As detailed for Master Landwheel Drive.

TRIPOD

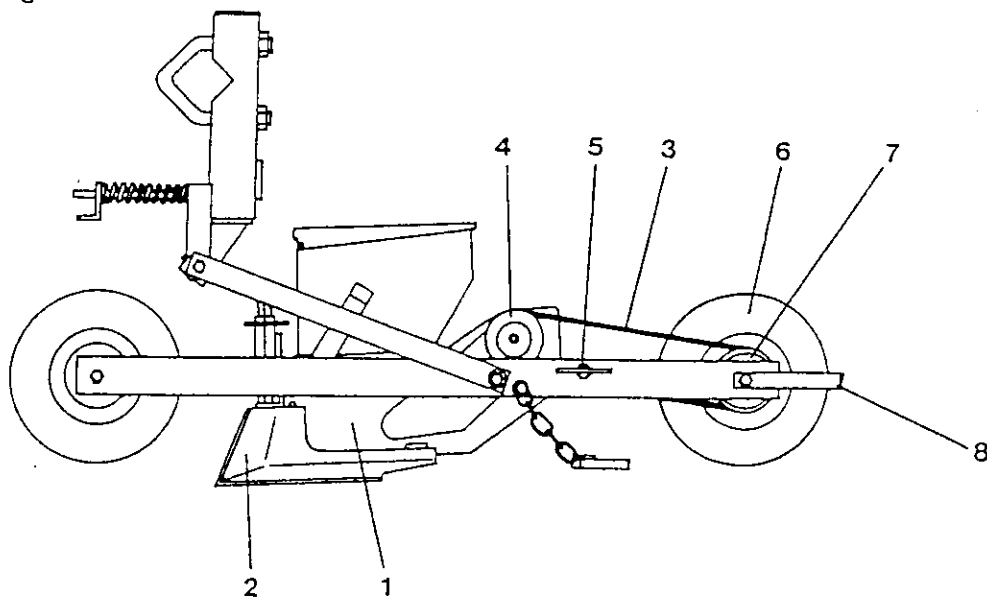
As detailed for Master Landwheel Drive.

MARKERS

As detailed for Master Landwheel Drive.

DRIVE

FIG. 3



- a) Insert the front of the unit (Ref.1) into the couler (Ref.2) and fit the drive belt (Ref.3) to the unit pulley (Ref.4) only.
- b) Insert the unit locating dowel into the corresponding hole in the couler stem and tighten the rear clamp (Ref.5).
- c) Release the rear wheel nuts and move the wheel (Ref.6) forward as far as possible.
- d) Fit the drive belt to the wheel pulley (Ref.7), rotating the wheel forward.

- e) Position the rear wheel to give the correct belt tension and tighten the wheel nuts.
- f) Adjust the wheel scraper (Ref.8) so that the scraper blade is just tight against rubber tyre.

NOTE: When coultter depth is adjusted, drive belt should be re-tensioned.
UNIT WHEEL DRIVE DRILLS HAVE A FIXED DRIVE RATIO EQUIVALENT TO
SETTING AH WITH A MAXIMUM FORWARD SPEED OF 3.2 KM/HR (2 M.P.H.).

SEED METERING UNIT

A seed metering unit has three components which are specific to a particular seed type and it is essential that the correct components are fitted to suit the seed to be planted.

1. The seed belt governs the spacing of the seed.
2. The spring base, in conjunction with the appropriate seed belt, controls the singulation of the seed from the seed chamber.
3. The choke controls the volume of seed in the seed chamber.

REFER TO Seed Belt, Spring Base and Choke Selection Charts - Section 5.

When fitting the choke, make sure that it is seated correctly in the recess provided - it must not protrude into the seed chamber.

Ribbed and plain seed belts must be fitted with the canvas surface on the inside.

Thin seed belts must be fitted with the trailed edge of the spliced joint (if present) on the inside.

Spring bases must be fitted with the short arm towards the repeller wheel and be free to oscillate on the pivot pin - free movement is essential.

Before fitting the seeder body cover plate, check all working parts for free movement. Rotate the mechanism by hand and check the seed belt for correct running - adjust the spring tensioner as necessary. Locate the cover plate on the two pins and tighten the wing nut firmly. Check again for free rotation of the units.

Fit the units to their chassis. Fully locate the dowel in the corresponding hole in the coultter stem, and with the boss on the unit casting resting on the coulter, tighten the stem.

Refit drive belt and check tension.

ELECTRICAL MONITORING SYSTEM

As detailed for Master Landwheel Drive.

ASSEMBLY INSTRUCTIONS - ALTERNATIVE EQUIPMENT

ELECTRONIC MONITORING SYSTEM

The electronic fault detection system includes a light box to suit the size of drill. **NEGATIVE EARTH ONLY.**

The orange drill lights are operated by a reed switch on the spring tensioner arm in the corresponding metering units, and in work are normally off.

If a seed belt stops rotating the corresponding drill light will illuminate and an audible warning sounds. When the outfit is out of work all the drill lights will illuminate and the audible warning sounds for a short time.

The orange refill light is operated by a float monitor in one of the unit hoppers and will illuminate when the seed level reaches the bottom of the hopper, and an audible warning sounds.

Mount the control box in a position convenient for the driver, and wire the control box to the ignition switch, or to a point where the power can be turned off and protected by a fuse.

Should it be necessary to remove the control box, the cable can be split at the socket point.

NOTE: **Brown lead is positive** +
 Blue lead is negative -

The drill loom is supplied in 4, 6 and 8 row forms as required, and is plugged into the multi-head socket on the rear of the control box. This socket is fitted with a master spline. Each lead in the loom is numbered, and should be connected to the appropriate metering unit, with brown lead connected to brown on the metering unit, and blue to blue. In addition to the numbered leads, there is one without a number. This is for connection to the hopper monitor, which should be located in one of the centre units.

The cluster of leads should be positioned on the toolbar either vertically or flat, NOT hanging down, so that water cannot enter the protective sheath. On hydraulic folding toolbars, the cable between the clusters and control box should be looped to allow for the bar folding.

YOKE BAR (RIGID) WITH PIVOT AND PIVOT LIMITER

Arrange the outfits side by side allowing a gap of 50mm (2") between the two carrier bars - adjusting the row centre to allow for this.

NOTE: On some units, such as odd rows on 50cm (20") rows, it may be necessary to offset the carrier bars by half a row to get the centre drill unit in the centre of the tractor.

- i) Clamp a yoke bar pivot to each carrier bar, with flat plate upward, offsetting one row to the outside of the centre to allow for the weight of the markers. Remove U-bolts.
- ii) Fit yoke bar to tractor three point linkage. Reverse tractor up to the two outfits so that the headstock is central to the drilling pattern. Lower yoke bar onto the pivots and re-fit U-bolts.
- iii) The pivot limiter should be fitted between yoke bar and carrier bar as far from the pivot as possible. Remove U-bolt and guide bar and pass limiter bracket between yoke bar and carrier bar. Re-fit U-bolt and guide bar. Grease the two faces against which the carrier bar rubs. Adjust the two stop bolts to give a small amount to movement to the carrier bar.
- iv) Check to ensure that the row centres are correct.
- v) Clamp the two parking stands to the yoke bar.

ADJUSTABLE MASTER LANDWHEEL

FIG. 4

The landwheels should be positioned on the carrier bar in line with the tractor rear wheels.

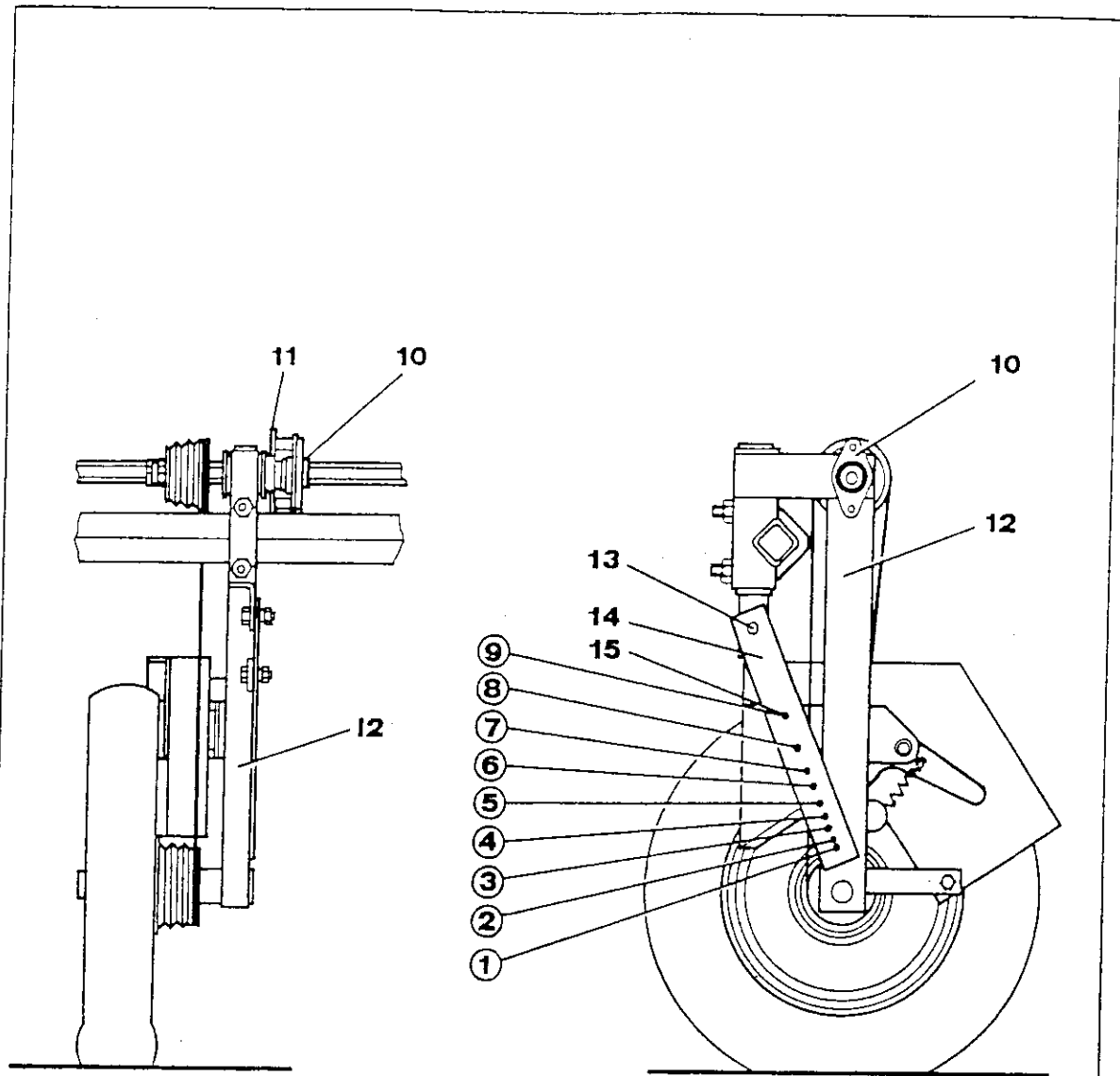
NOTE: A bearing bracket assembly MUST be fitted as close as possible to the 4-speed shaft pulley.

To assemble see Fig. 5. To adjust the operating height of the outfit:

- i) Raise the outfit so that the landwheels are off the ground.
- ii) Slacken the two grub screws (Ref.10), in the wheel arm pivot nut bearing, and slacken the wheel arm pivot nut (Ref.11).
- iii) Slacken the stay top bolt and nut (Ref.13).
- iv) Remove the stay locating bolt (Ref.14), and move the wheel arm (Ref.12) to the required position. (See chart Fig.5). Re-fit the stay locating bolt and nut.
- v) Tighten the stay bolts and wheel arm pivot nut. Realign the bearing and tighten the two bearing grub screws.

NOTE: The illustration shows the landwheel at its maximum depth setting. IN THE FIELD ensure that the carrier bar is at the correct operating height of 510mm (20").

The minimum row distance at which the adjustable master landwheels can operate between rows is 540mm (21¼") for L.H. and R.H. units, and 483mm (19") for two R.H. units.



POSITION OF STAY	LANDWHEEL DEPTH
1	STANDARD
2	25mm(1in) BELOW STD
3	50mm(2in) BELOW STD
4	75mm(3in) BELOW STD
5	100mm(4in) BELOW STD
6	125mm(5in) BELOW STD
7	150mm(6in) BELOW STD
8	175mm(7in) BELOW STD
9	190mm(7.5in) BELOW STD

FIG. 4

TANDEM DRILLS - FIG. 6

UP TO 8 ROW UNITS

- i) Assemble the front and rear drill outfits as detailed in the General Assembly Instructions, positioning the row units to give the required drilling pattern. DO NOT FIT ANY DRIVE WHEELS TO REAR BAR.
- ii) Fit the joining members (Ref. 1) to the underside of the carrier bar with the lugs for the support chains (Ref. 2) at the rear and facing inwards towards the A-frame
- iii) Fit the tandem drive sprockets and chain to the left hand ends of the drive shafts.
- iv) The chain tensioners are fitted to the rear half of each guard: locate the tensioners and clamp the guard to the carrier bar. Fit the guards' front sections.
- v) Position a drive shaft bearing adjacent to each sprocket.
- vi) Adjust the drive chain tension.
- vii) Fit the support chain to the hook at the top of the A-frame, using the 'D' shackles, and fit the other ends through the lugs at the rear of the joining members.

The chains should be adjusted so that they are just slack when the drill is standing on the ground.

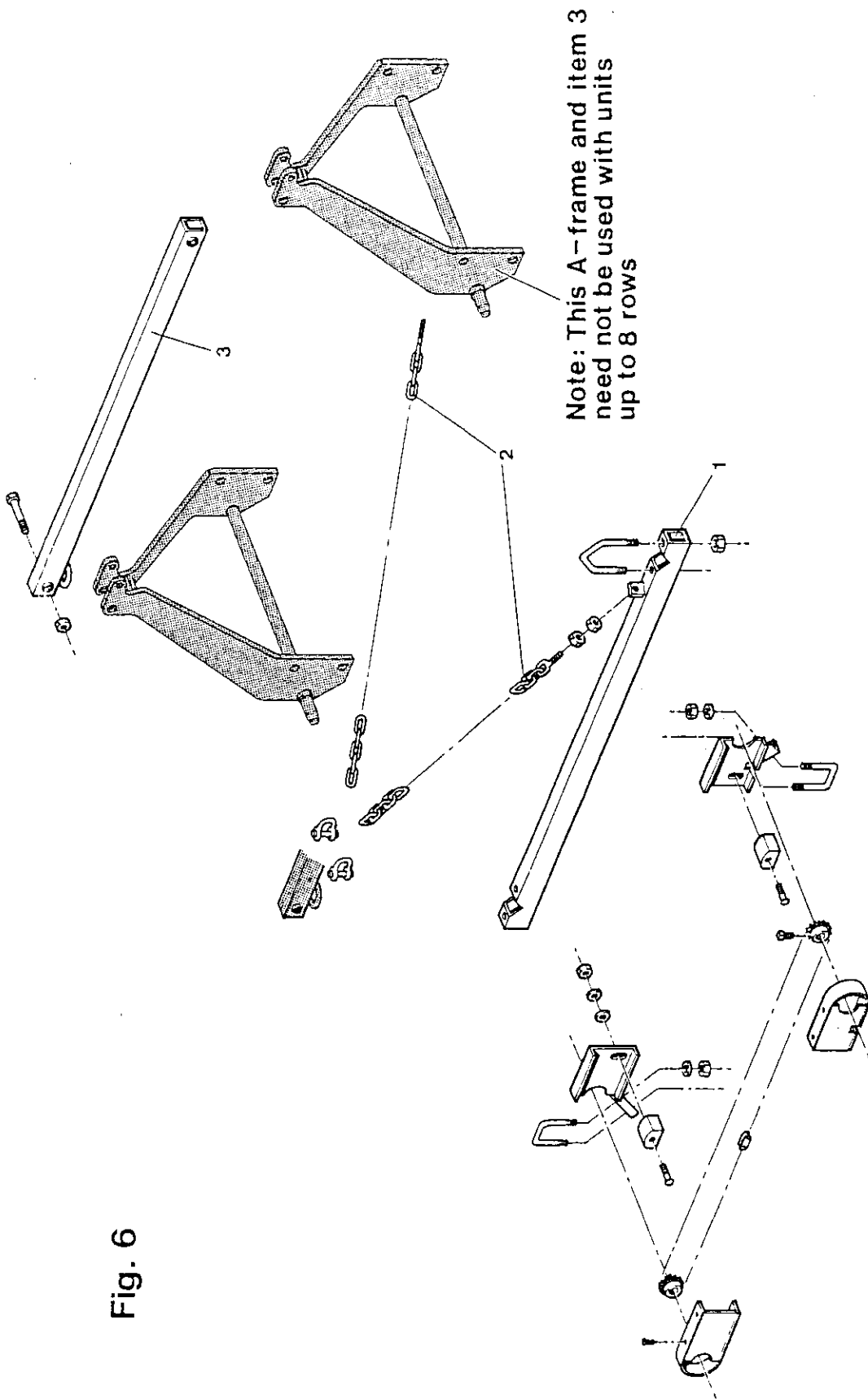
NOTE: This type of mounting and drive must not be used above 8 rows.

OVER 8 ROW UNITS

- i) Assemble the front and rear drill outfits as detailed in the General Assembly Instructions, positioning the row units to give the required drilling pattern.
- ii) Fit the joining members (Ref.1) to the underside of the carrier bars at convenient points between the row units. It is recommended that a joining member be fitted as close as possible to each A-frame bracket.
- iii) Fit the joining member (Ref.3) between the front and rear A-frame.

NOTE: When attaching a tandem outfit to a tractor, make certain that the A-frame is vertical to ensure that the rear drills are not lifted off the ground when in work. Always use bow wave eliminators to give an even sowing depth between front and rear units.

It is advisable to use a chain type top link which will allow the unit to follow the ground contours.



Note: This A-frame and item 3
 need not be used with units
 up to 8 rows

Fig. 6

SECTION 3

ATTACHMENT TO TRACTOR

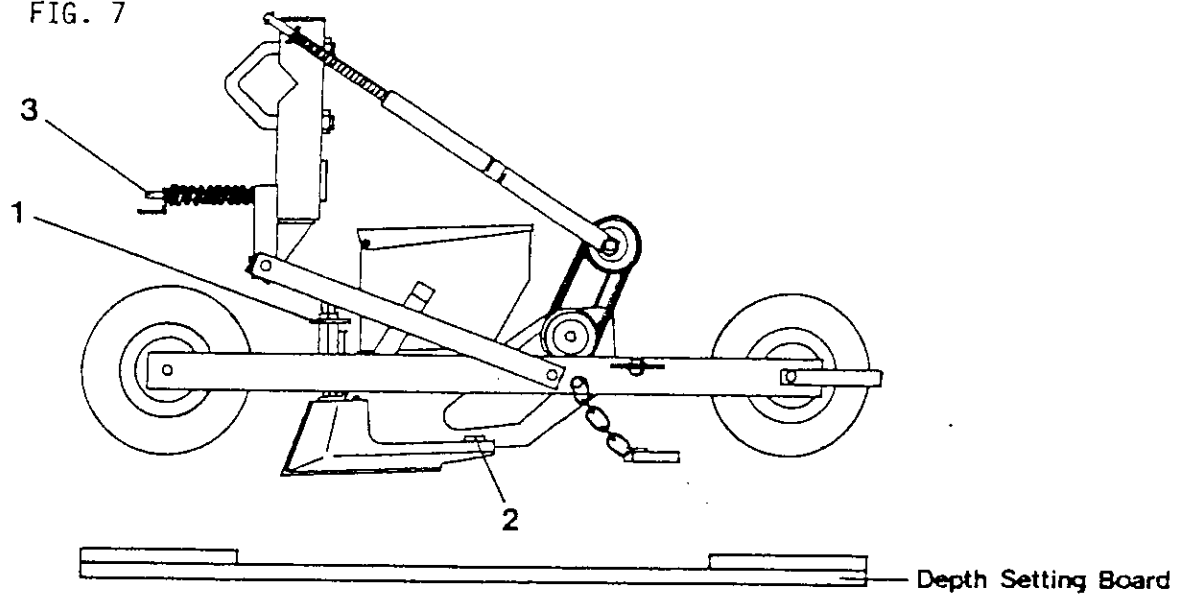
Check that tractor wheels at the front and rear are at the correct width for the rows.

The tractor linkage should be fitted with stabilizers, or check chains, adjusted to be taut when the outfit is at work.

The tractor three point linkage should be adjusted so that the carrier bar is horizontal. The top link should be adjusted so that, when in the working position, the A-frame is vertical.

SETTING UP FOR WORK

FIG. 7



These settings can be made on a flat concrete stand, however, final settings to suit soil type and conditions MUST be carried out in the field.

DEPTH ADJUSTMENT

It is advisable to use a depth setting board to ensure that all coulters are kept to the same depth. Initial depth adjustment is best made before fitting the seed metering units to their chassis.

- i) Place the depth setting board under the wheels and coulters.
- ii) Release the coulters retaining clip (Ref.1) and raise or lower the coulters till the tip or base of the coulters is touching the board.
- iii) Replace the units, ensuring that the peg on the metering unit has entered the coulters, and that the side block (Ref.2) is touching the coulters heel.

COULTER AND REAR WHEEL PRESSURE ADJUSTMENT

Pressure can be varied by adjustment to the pressure spring (Ref.3).

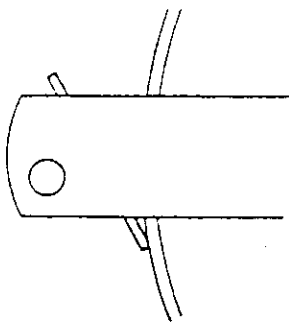
To increase pressure, compress the spring, to decrease pressure, decompress the spring.

On Master Landwheel Drive Drills, care should be taken not to over-adjust the spring; over-adjustment could result in a loss of traction at the drive wheels.

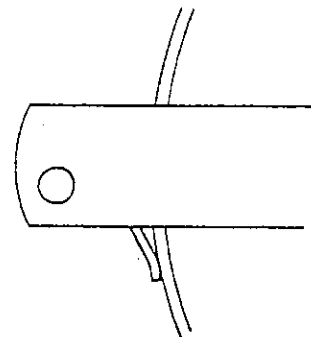
To achieve equal pressure settings on all row units, measure the protruding length of the adjusting screws, 25-30mm (1" - 1½") is an average setting.

WHEEL SCRAPERS (FIXED)

The scrapers should be set as shown in the diagram. Over setting will result in the scrapers acting as a brake on the wheel.



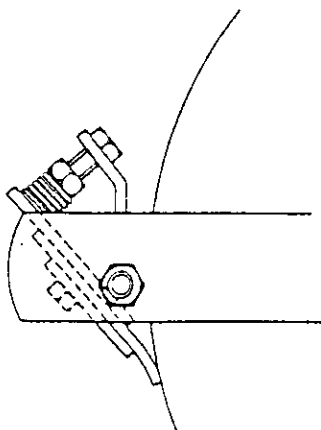
CORRECT



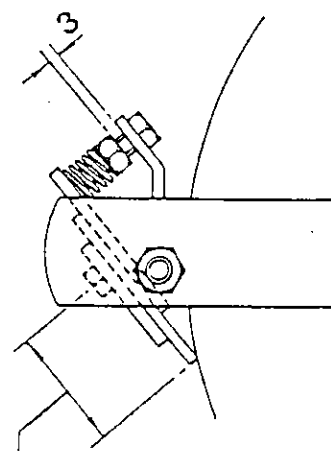
INCORRECT

WHEEL SCRAPER (SPRING LOADED)

It is important not to overtension the spring adjustment, as this will result in the blade acting as a brake on the wheel, as will over-adjustment of the blade. For best results the spring should be adjusted so there is 3mm clearance between the plate and the adjustment nut. The blade should be adjusted so it is set 35mm between the edge of the blade and the centre of the blade retaining bolts on 120mm Flat Wheels.



INCORRECT



35mm for 120mm Wheel

CORRECT

MASTER LANDWHEEL TYRES

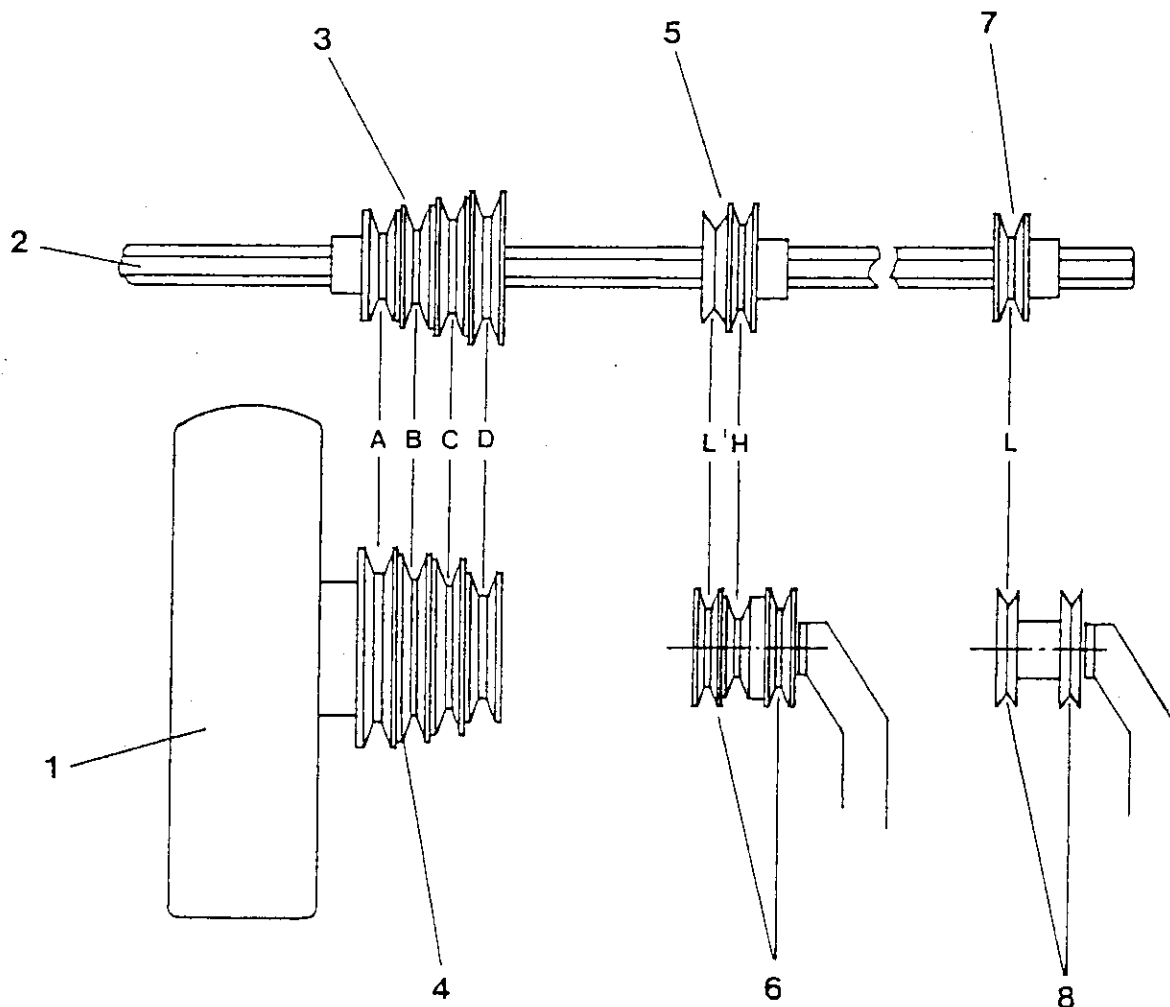
Check that tyres have the correct pressure - 1.5 bar (22 p.s.i.)

METERING UNITS

Check that the correct belts, base, and chokes are fitted for the seed type and spacing required. (See seed belt, spring base and choke selection chart - Section 5). Ensure they are all fitted correctly as per the instructions on Metering Unit - Section 2.

DRIVE SETTING

MASTER LANDWHEEL DRIVE



The master landwheel (Ref.1) and the drive shaft (Ref.2) are fitted with multi-pulleys (Refs. 3 & 4), which give four speed ratios, i.e. A.B.C. and 0.

To change the drive setting on the master landwheel, raise the tensioning lever. Position the belt on the selected pulleys and relocate the tensioner.

The drive to each metering unit can be either high/low range or low range only.

The high/low range drive comprises a double pulley (Ref.5) on the drive shaft, and a triple pulley (Ref.6) on the 'knee-joint', giving speed ratios AH, AL, BL, CH, CL, DH AND DL.

NOTE: BH has been omitted as it is identical to AL.

To change the drive ratios, the belt can be run from pulley to pulley without disconnecting the spring rod.

For the high range ratio, the belt should be fitted to the large pulley on the drive shaft and the small centre pulley on the 'knee-joint'.

The low range drive comprises a single pulley (Ref.7) on the drive shaft and a twin pulley (Ref.8) on the 'knee-joint' giving speed ratios AL, BL, CL and DL.

For the low range ratio, the belt should be fitted to the small pulley on the drive shaft, and the large outer pulley on the 'knee-joint'.

Check to ensure that:

- a) both master landwheel drive settings are the same, and that the belt is not crossed on the pulleys;
- b) all the belts are fitted to the correct pulley on the unit drive shaft and the 'knee-joint' pulley, and are not crossed.

UNIT WHEEL DRIVE S870 AND ROBIN

These drills have a fixed drive ratio equivalent to setting AH with a maximum forward speed of 3.2 km/hr (2 m.p.h.).

OPERATING SPEEDS

Tractor speed is dependent on:-

- a) The recommended seed belt speed, i.e. SLOW, MEDIUM, or FAST, as indicated by the relevant Seed Belt, Spring Base & Choke Selection Chart Section 5
- b) The unit drive ratio, i.e. AH, BL, etc., selected from Drive Selection Chart

TRACTOR SPEEDS									
Unit Drive Ratio	Seed Belt Speed								
	SLOW			MEDIUM			FAST		
	Tractor mph km/hr	Unit Shaft rpm rpm		Tractor mph km/hr	Unit Shaft rpm rpm		Tractor mph km/hr	Unit Shaft rpm rpm	
AH	— —	— —		1.6 2.4	60 48		2.0 3.2	75 60	
AL	1.5 2.4	50 50		2.0 3.2	60 60		2.5 4.0	75 75	
CH	2.0 3.2	50 40		2.4 4.0	60 48		3.0 4.8	75 60	
BL	2.1 3.2	50 50		2.5 4.0	60 60		3.1 5.0	75 75	
CL	2.5 4.0	50 50		3.0 4.8	60 60		3.75 6.0	75 75	
DH	2.6 4.0	50 40		3.2 5.2	60 48		4.0 6.4	75 60	
DL	3.3 5.2	50 50		4.0 6.4	60 60		— —	— —	

NOTE: Drive ratios AH, AL, CH and BL are preferable to ratios CL, DH and DL; seed belt speed relative to ground speed is better, reducing the possibility of seed bounce or roll.

DRIVE SELECTION

MASTER LAND WHEEL DRILLS

1. Determine seed spacing required — see Chart to convert seed stations per metre to seed spacing in mms.
2. Determine seed belt required & no. of holes in belt.

Stations per metre	Spacing mms	Holes in Belt	Seed Spacing (mms)						
3	333	144	13	16	19	20	24	25	32
6	166	120	15	19	23	24	29	31	38
10	100	112	17	20	25	25	31	33	41
12	83	96	19	24	29	30	36	38	47
15	67	90	20	25	31	32	38	41	51
18	56	72	25	32	38	40	48	51	64
20	50	60	30	38	47	48	57	61	76
25	40	56	33	41	49	51	61	66	82
28	36	48	38	48	57	60	71	76	95
30	33	45	40	51	61	64	76	81	102
33	30	40	46	57	69	71	86	91	114
36	28	36	51	64	76	79	95	102	127
40	25	32	57	71	86	89	107	114	143
44	23	30	61	76	91	95	114	122	152
46	22	28	66	81	98	102	123	130	163
48	21	24	76	95	114	119	143	152	191
50	20	20	91	114	137	143	171	183	229
54	19	18	101	127	152	159	191	203	254
56	18	16	114	142	171	178	214	229	286
60	17	15	121	152	183	191	229	244	305
		14	130	163	196	203	245	262	327
		12	152	191	229	238	286	305	381
		10	183	229	274	286	343	366	457
		9	203	254	305	318	381	406	508
		8	228	285	343	357	429	457	571
		6	305	381	457	476	571	610	762
		5	366	457	549	571	686	732	914
		4	457	569	686	711	857	914	1143
		1 Rev.	1829	2286	2743	2857	3429	3658	4572
			AH	AL	CH	BL	CL	DH	DL
			DRIVE						

DRIVE SELECTION

MASTER LAND WHEEL DRILLS

1. Determine seed spacing required — see Chart to convert seed stations per foot to seed spacing in inches.
2. Determine seed belt required & no. of holes in belt.

Stations per foot	Spacing inches	Holes in Belt	Seed Spacing (inches)						
			AH	AL	CH	BL	CL	DH	DL
1	12.00	144	0.5	0.63	0.75	0.78	0.94	1.0	1.25
2	6.00	120	0.59	0.75	0.9	0.94	1.1	1.2	1.5
3	4.00	112	0.66	0.8	0.97	1.0	1.2	1.3	1.6
4	3.00	96	0.75	0.94	1.1	1.2	1.4	1.5	1.9
5	2.40	90	0.80	1.0	1.2	1.25	1.5	1.6	2.0
6	2.00	72	1.0	1.25	1.5	1.6	1.9	2.0	2.5
7	1.71	60	1.2	1.5	1.8	1.9	2.25	2.4	3.0
8	1.50	56	1.3	1.6	1.9	2.0	2.4	2.6	3.2
9	1.33	48	1.5	1.9	2.25	2.3	2.8	3.0	3.75
10	1.20	45	1.6	2.0	2.4	2.5	3.0	3.2	4.0
11	1.09	40	1.8	2.25	2.7	2.8	3.4	3.6	4.5
12	1.00	36	2.0	2.5	3.0	3.1	3.75	4.0	5.0
13	0.92	32	2.25	2.8	3.4	3.5	4.2	4.5	5.6
14	0.85	30	2.4	3.0	3.6	3.75	4.5	4.8	6.0
15	0.80	28	2.6	3.2	3.9	4.0	4.8	5.1	6.4
16	0.75	24	3.0	3.75	4.5	4.7	5.6	6.0	7.5
17	0.71	20	3.6	4.5	5.4	5.6	6.75	7.2	9.0
18	0.66	18	4.0	5.0	6.0	6.25	7.5	8.0	10.0
19	0.63	16	4.5	5.6	6.75	7.0	8.4	9.0	11.3
20	0.60	15	4.8	6.0	7.2	7.5	9.0	9.6	12.0
		14	5.1	6.4	7.7	8.0	9.6	10.3	12.9
		12	6.0	7.5	9.0	9.4	11.3	12.0	15.0
		10	7.2	9.0	10.8	11.3	13.5	14.4	18.0
		9	8.0	10.0	12.0	12.5	15.0	16.0	20.0
		8	9.0	11.2	13.5	14.0	16.8	18.0	22.5
		6	12.0	15.0	18.0	18.8	22.5	24.0	30.0
		5	14.4	18.0	21.6	22.5	27.0	28.8	36.0
		4	18.0	22.4	27.0	28.0	33.8	36.0	45.0
		1 Rev.	72	90	108	112.5	135	144	180
			AH	AL	CH	BL	CL	DH	DL
			DRIVE						

MINIMUM SPACING

This is controlled by the maximum number of holes that can be punched in the seed belt according to hole size. Details as under.

To achieve the minimum spacing the drive must be via Pulleys AH.

Hole Size	Max. No. of Holes	Hole Size	Max. No. of Holes
6.5 & 7	144	21 to 24	48
8, 8.5 & 9	120	25 to 30	40
9.5 & 10	112	32	36
11	96	36	32
12 & 13	90	40	30
14 to 17	72	44	28
18 to 20	60	49	24

FIELD CHECKS AND FIELD OPERATION

Checks before filling the hoppers:

- CHECK - pressure spring adjustment on all units - all settings should be identical.
- all wheel scraper settings and, at the same time, ensure that all wheels turn freely.
 - 'V' belt tensions and make sure that all drive settings are the same.
 - 'Knee joint' spring rods for free movement.
 - drilling speed - set the tractor throttle, select the correct gear and test:
 - 3.2 kph = 0.9 metres per second approx. or 53 metres per minute.
 - 4.8 kph = 2.7 metres per 2 seconds approx. or 80 metres per minute.
 - 2 mph = 1 yard per second approx. or 58 yards per minute
 - 3 mph = 3 yards per 2 seconds approx. or 88 yards per minute
 - marker settings in the field to ensure they are set correctly.
 - to ensure that carrier bar is horizontal
 - that A-frame is vertical
 - that the carrier bar is at correct working height of 510mm (20") to the centre of the bar
 - setting of clod pusher, if fitted. The clod pusher should be set clear of the top surface of the ground. It is not for planing the soil and if put too deep could cause the chassis to nose-dive thereby 'cartwheeling' the chassis.

FILLING THE HOPPERS

Make sure that the seed is clean and dry and remove any rubbish such as string, labels, etc.; close all hopper lids after filling.

- CHECK - to ensure that all units are seeding correctly - raise the outfit and turn the main drive shaft manually, by means of the master landwheel.

CHECKS IN WORK

CHECK - that spacing is correct.

- that coverers are working correctly and not moving too much soil.
- that all hoppers are emptying at the same rate.
- that the seed is being placed at the correct depth.

The above checks should be carried out on each new field, and at least every 5 acres.

FIELD OPERATION

- i) Always keep the hopper lids closed.
- ii) The outfit should always be lowered into work and raised on the move to prevent coulter blockage.
- iii) If stopped in the middle of the field, the unit should be raised and the coulters checked for blockage, and then lowered whilst on the move.
- iv) Always raise the outfit when turning at headlands.
- v) When the outfit is lowered into work, the tractor linkage control lever should be moved to the 'fully down' position to prevent the drill being carried on the linkage.
- vi) DAILY, or more frequently if conditions demand, remove metering units and clean out any accumulated dust and seeds from units and coulters.
- vii) DO NOT drive long distances between fields with seed in the hopper as this may cause bridging in the seed chamber.
- viii) DO NOT drill in very sticky conditions - for efficient performance soil engaging components must remain clean.

SECTION 4

MAINTENANCE

Daily, clean and examine the metering units.

- i) Remove the metering units from the chassis and empty the hoppers.
- ii) Remove the seeder body cover plate. Extract any remaining seed and clean all parts thoroughly.
- iii) Examine the repeller wheel tyre - certain seed types are very abrasive and will tend to wear a groove in the tyre, particularly in the centre. For efficient sowing, it is essential that the tyre is free from any defects. It should be replaced at the first sign of any wear.
- iv) Ensure that all rollers rotate freely - remove and clean if necessary.
- v) Check to see that the seed belt is running true by turning the mechanism by hand - the belt should just touch the body casting. Adjust if necessary, by slightly bending the spring tensioner bracket. Bend up to move the belt away from the casting. Bend down to move the belt toward the casting. With belt removed, the distance between tensioner and idler roller centres should be 80mm (3 $\frac{1}{8}$ "). Adjust at tensioner bracket screws.
- vi) Check the rubber flap for wear or distortion. Replace if necessary. After the cover plate has been refitted, ensure that the rubber flap can move freely. Dimension from end of flap to end of clamp plate is 27mm (1-1/16")

NOTE: When replacing ceramic tip, the retaining nut should be torqued up 4.4 Kg/fm or 43.5 NM (32 lbs./ft.).

FAULT FINDING

SEED DAMAGE can be caused by:

- i) Incorrect fitting of the choke
- ii) A scored repeller tyre. If the tyre is scored, or worn anywhere other than at the centre, examine the seeder body casing for damage.

EXCESS SEED in the coulter can be caused by:

- i) Incorrect, or worn seed belt.
- ii) A worn repeller wheel.
- iii) A badly fitted, or worn rubber flap. Dimension from end of flap to end of clamp plate is 27mm (1-1/16").
- iv) Incorrect fitting of the spring base.
- v) Excess soil in the coulter pressing against the spring base - check the coulter for excessive wear or damage.

NOTES ON DRILLING

Cage wheels are available for use when drilling with double or triple line coulters.

DRILLING IN SOIL CONDITIONS LIABLE TO CAP

There are some silt soils which are inclined to run together after rain and form a hard crust, or cap, on the surface, which is detrimental to plant emergence. For these conditions, we recommend that minimum pressure should be applied over the rear wheels, and also the use of one of these three types of alternative rear wheel:

1. **CONCAVE WHEEL:** Designed to compact the soil on each side of the seed row whilst leaving the soil above the seed loose, thus assisting plant emergence.
2. **ANTI-CAPPING (SPLIT):** These are twin flat wheels, with a 25mm (1") gap between, which runs on each side of the seed row so that the soil is not compressed directly over the seed.
3. **CAGE WHEEL:** These wheels have an expanded metal tyre instead of the standard solid tyre. They do not press heavily over the soil although they control depth and give some slight compaction. They should be used to prevent capping when drilling double or triple lines from one seed metering unit.

DRILLING ON THE RIDGE

The ridge should be flattened slightly in front of the seed drill. This can be achieved by rolling first. Adjustable height master landwheels must be used. See Section 2.

DRILLING ON RAISED SEED BEDS

When working on raised beds with the tractor wheels spanning the beds, it is necessary to have adjustable master landwheels which will run in the troughs. These enable the wheels to be set behind the tractor wheels, whilst still keeping the carrier bar at the correct height for the drill units in relation to the seedbeds. For method of assembly and adjustment see Fig. 4 - Section 2.

PRE-STORAGE

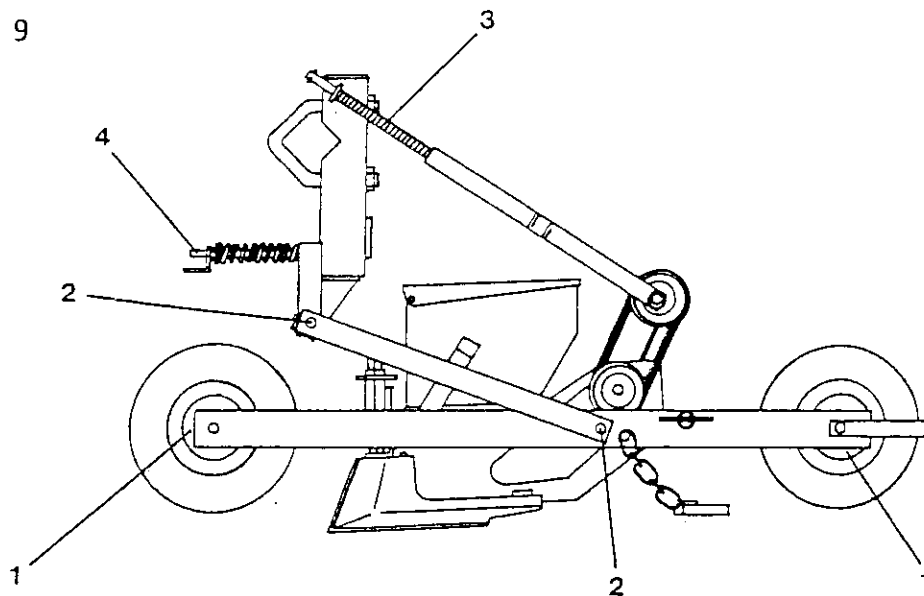
Prior to storing the drill:

- i) Remove the seed metering units from their chassis.
- ii) Remove seed belts and spring bases and clean thoroughly. Label and store safely.
- iii) Clean the units, making sure that all traces of seed dressing are removed - it can be corrosive.
- iv) Examine working parts and replace as necessary.
- v) Check the drive chain and adjust tension as necessary.
- vi) Check the seed belt spring tensioner setting. The correct position (with the seed belt removed) is 80mm (3 $\frac{1}{8}$ ") from centre of tensioner roller to centre of idler roller. Adjust by repositioning the tensioner bracket.

- vii) Store units in a dry place.
- viii) Raise the jockey rollers to release the tension on the main drive belts.
- ix) Check the coulters for excessive wear - replace if necessary.
- x) Check the chassis wheels for excessive play - replace bushes if necessary.
- xi) Clean the outfit thoroughly, lubricate all bearings and grease bright parts.
- xii) Clean the machined faces of the landwheels and grease to prevent rusting.

LUBRICATION

FIG. 9



WEEKLY

Chassis Landwheels	(Ref.1)	1 grease nipple per wheel
Chassis Arms	(Ref.2)	4 grease nipples per chassis
Spring Rod	(Ref.3)	Grease spring shaft
Pressure Spring	(Ref.4)	Oil screw thread

PRE-STORAGE

Lubricate the above working parts and grease bright parts.
Metering unit drive chains - oil sparingly.

RECOMMENDED LUBRICANTS

- B.P. Energrease L2
- Castrolase LM
- Esso Multi-Purpose Grease H
- Shell Retinax A
- Rocol (chains)

SEED BELT BASE AND CHOKE SELECTION CHART

Code	Seed Size Code-see Overleaf	Belt	Base	Choke	Belt Speed
Sugar Beet - Pelleted	Q-U	Ribbed Hole Size 17	C	A	Fast
Sugar Beet - Pelleted	Q-U	Ribbed Hole Size 16.5	C	A	Medium
Fodder Beet - Pelleted	P-U	Ribbed Hole Size 16.5	C	A	Medium
Beetroot/Red Beet	M-P	Ribbed Hole Size 14	S	A	Fast
	N-R	Ribbed Hole Size 14.5	B	X	Fast
	Q-S	Ribbed Hole Size 15	C	X	Fast
* Carrot	E	Plastic Hole Size 8	A	C or T	Fast
	F	Plastic Hole Size 8.5	A	C or T	Fast
	G	Plastic Hole Size 9	A	C or T	Fast
	H	Plastic Hole Size 10	A	C or T	Fast
Celery Mini-Pellet	G-J	Plain Hole Size 9.5	A	T	
Brassicae	G	Plain Hole Size 7	A	T	Medium
	H	Plain Hole Size 8	A	T	Medium
	J	Plain Hole Size 8.5	A	T	Medium
	K	Plain Hole Size 9	A	T	Medium
Leek	H	Plain Hole Size 8	A	T	Medium
	J	Plain Hole Size 8.5	A	T	Medium
Lettuce	Natural	Plastic Hole Size 10	A	C or T	Fast
** Onion	K	Plain Hole Size 10	A	T	Medium
Parsnip	Q-R	Plain Hole Size 18	A	A	Medium
	S-U	Plain Hole Size 18	A	A	Medium
	V-X	Plain Hole Size 20	A	A	Medium
Radish	K	Plain Hole Size 11	A	T	Medium
	L	Plain Hole Size 11	Z	T	Medium
	M	Plain Hole Size 12	Z	T	Medium
Swede	H	Plain Hole Size 8	A	T	Medium
Turnip	G	Plain Hole Size 7	A	T	Fast

* Hole size for carrot seed based on average of 2 seeds per hole due to varying seed size and seed counts.

** Various coated seed will need different hole size, refer to Seed Merchant contact us.

STANHAY WEBB SEED TEST SERVICE

If the information you require is not in this book, please discuss with us your specific application. If necessary we will ask for a sample of seed for testing to determine the optimum drill settings for your crop. (Overseas customers please consult your local importer).

GRADED SEED SIZES CODES

This table is based on the CODE LETTER system used by the Seed Trade and Drill Manufacturers.

Code Letter	mm	Code Letter	mm	Code Letter	mm
A	0- $\frac{1}{4}$	J	2-2 $\frac{1}{4}$	S	4-4 $\frac{1}{4}$
B	$\frac{1}{4}$ - $\frac{3}{8}$	K	2 $\frac{1}{4}$ -2 $\frac{1}{2}$	T	4 $\frac{1}{4}$ -4 $\frac{1}{2}$
C	$\frac{3}{8}$ - $\frac{1}{2}$	L	2 $\frac{1}{2}$ -2 $\frac{3}{4}$	U	4 $\frac{1}{2}$ -4 $\frac{3}{4}$
D	$\frac{1}{2}$ -1	M	2 $\frac{3}{4}$ -3	V	4 $\frac{3}{4}$ -5
E	1-1 $\frac{1}{4}$	N	3-3 $\frac{1}{4}$	W	5-5 $\frac{1}{4}$
F	1 $\frac{1}{4}$ -1 $\frac{1}{2}$	P	3 $\frac{1}{4}$ -3 $\frac{1}{2}$	X	5 $\frac{1}{4}$ -5 $\frac{1}{2}$
G	1 $\frac{1}{2}$ -1 $\frac{3}{4}$	Q	3 $\frac{1}{2}$ -3 $\frac{3}{4}$	Y	5 $\frac{1}{2}$ -5 $\frac{3}{4}$
H	1 $\frac{3}{4}$ -2	R	3 $\frac{3}{4}$ -4	Z	5 $\frac{3}{4}$ -6

GENERAL COMMENTS

SEED SPACING is determined by the number of holes in each seed belt.

SEED BELT SPEED is influenced by the tractor operating speed and pulley drive ratio - see pages 23 - 24.

NATURAL UNGRADED SEED may be used: the hole size in the seed belt must be large enough to select the biggest seed, therefore the smaller seeds in the sample will pass through the hole as doubles or triples.

PELLETED SEED is available for many crops: the pelleting material increases the size of the seed for ease of handling and single seed drilling: pellet size range must be established before Stanhay hole size is advised.

SEED DRESSING is often provided, but if seeds do not have a powder dressing then the addition of French Chalk, one part to every sixteen parts of seed by weight, will assist circulation of seed. THIS IS RECOMMENDED WITH NATURAL CARROT SEED.

ALTERNATIVE CROPS - most known seeds can be drilled using your Stanhay drill.

PEAS - precision drilling can increase yields and single seed selection is possible. For general seed rate details refer to charts in this section.

OIL SEED RAPE - a highly profitable crop, easily handled with your Stanhay drill. For general seed rate details refer to charts in this section.

CEREALS - cover crops are easily handled by your Stanhay drill, please consult us for details.

FLOWERS AND TREE SEEDS - a number of varieties can be drilled, and a separate chart is available giving details of equipment.

CHICORY - no special equipment required - mostly grown in Europe. Normally 8.5 hole size plastic belt, A base, C choke.

SEED POPULATION per ACRE/HECTARE (THOUSANDS)

SEED SPACING		ROW SPACING																			
		45 cms	19"	47.5 cms	20"	50 cms	21"	52.5 cms	22"	55 cms	24"	60 cms	26"	65 cms	28"	70 cms	30"	75 cms			
Spacing	No Stations per yard																				
ins	mm																				
¾	20	48	50	465	1111	440	1052	418	1000	398	952	380	909	348	833	322	769	299	714	279	666
1	25	36	40	348	888	329	842	314	800	299	761	285	727	261	666	241	615	224	571	209	533
1¼	30	29	33	281	740	266	702	253	666	241	635	230	606	211	555	194	513	180	476	168	444
1½	35	24	28	232	635	220	601	209	571	199	544	190	519	174	476	161	439	149	408	139	381
1¾	40	21	25	203	555	193	526	183	500	174	476	166	455	152	417	141	385	131	357	122	333
2	50	18	20	174	444	165	421	157	400	149	381	143	364	131	333	121	308	112	286	105	267
3	75	12	13	116	296	110	281	105	266	100	254	95	242	87	222	80	205	75	190	70	178

DRILLING LENGTH

Yards per Acre	9680	9171	8712	8297	7920	7260	6702	6223	5808
Metres per Hectare	22222	21052	20000	19047	18181	16666	15384	14285	13333

Total No. of Seed Stations per Acre/Hectare = Drilling Length (yards/metres) x Seed Stations per yard/metre.

Weight of Seed per Acre/Hectare (lbs/kgs.) = Seed Stations per Acre/Hectare x Seeds per Station + Seeds per lb./kg.

SEED RATE GUIDE METRIC SUGAR BEET

SEED COUNTS	PELLETED	Grade 3.5-4.75 mm	15400 seeds per kg
	MULTIGERM POLYPLOID	Grade 3.5-4.75 mm	48400 seeds per kg
	MULTIGERM Rubbed & Graded	Grade 3.25-4.0 mm	72600 seeds per kg
	MONOGERM Rubbed & Graded	Grade 3.25-4.0 mm	92400 seeds per kg

Seed Spacing (mm)	WEIGHT OF SEED (Kgs. per Hectare)											
	450 mm Rows		475 mm Rows		500 mm Rows		525 mm Rows		550 mm Rows		600 mm Rows	
	seeds/kg. x 100											
38	154	484	726	924	154	484	726	924	154	484	726	924
51	37.5	11.75	8	6.25	35.5	11.25	6.25	5.5	33.5	10.5	7.25	5.5
76	28	9	6	4.75	26.5	8.5	5.5	4.5	25	8	5.25	4.25
102	18.75	6	4	3	17.5	5.5	3.5	2.75	17	5.25	3.5	2.75
127	14	4.5	2.75	2.25	13	4.25	2.75	2.25	12.5	4	2.75	2.25
152	11.25	3.5	2.25	2	10.75	3.5	2.25	1.75	10	3	2.25	1.75
	9.5	3	2	1.75	9	2.75	2	1.5	8.5	2.75	2	1.5
									32	10	6.75	5.5
									24	7.5	5	4
									16	5	3.5	2.75
									12	4	2.5	2
									9.5	3	2	1.75
									8	2.5	1.75	1.5
									31	9.5	6.5	5
									23	7.5	4.75	4
									15.25	4.75	3	2.5
									11.5	3.5	2.25	2
									9.25	2.75	2	1.75
									8	2.5	1.75	1.5
									28	9	6	4.5
									21	6.75	4.5	3.5
									14	4.5	3	2.25
									10.5	3.5	2.25	1.75
									8.25	2.5	1.75	1.5
									7.5	2.25	1.5	1.25

To calculate weight of seed

$$\text{No. Kgs per Hectare} = 10^{10} \div \text{Row Spacing (mms)} \div \text{Seed Spacing (mms)} \div \text{no. seeds per kg.}$$

SEED RATE GUIDE

OIL SEED RAPE

Guide based on 100,000 seeds per lb.

IMPERIAL

Hole Size	Seed Belt		WEIGHT of SEED (lbs per acre)				
	Hole Spacing		8" Rows	16" Rows	18" Rows	20" Rows	22" Rows
8.5	1 1/4"		6.3	3.1	2.8	2.5	2.3
8.5	3/4"		10.4	5.2	4.6	4.2	3.8
8.5	5/8"		12.5	6.3	5.6	5.0	4.5
9	5/8"		15.0	7.5	6.7	6.0	5.4
9.5	3/4"		19.2	9.6	8.5	7.7	7.0
9.5	5/8"		23.0	11.5	10.2	9.2	8.4

Guide based on 220,000 seeds per Kg.

METRIC

Hole Size	Seed Belt		WEIGHT of SEED (Kgs per Hectare)				
	Hole Spacing		200 mm Rows	400 mm Rows	450 mm Rows	500 mm Rows	550 mm Rows
8.5	32 mm		7.1	3.5	3.1	2.8	2.6
8.5	20 mm		11.4	5.7	5.0	4.5	4.1
8.5	17 mm		13.4	6.7	5.9	5.4	4.8
9	17 mm		16.0	8.0	7.1	6.4	5.8
9.5	20 mm		20.9	10.5	9.3	8.4	7.6
9.5	17 mm		24.6	12.3	10.9	9.8	8.9

SEED RATE GUIDE

PEAS

Guide based on 1360 seeds per lb. — medium size

IMPERIAL

Seed Belt	Spring Base	WEIGHT OF SEED (lbs. per acre)			
		14" Rows	16" Rows	18" Rows	20" Rows
24 or 32	P	110—115	100—105	90—95	80—85
32 (1" lg. holes)	P	145—150	130—135	120—125	105—110
49	K	220—225	200—205	180—185	160—165
49	L	275—280	250—255	225—230	200—205

Guide based on 3000 seeds per Kg. — medium size

METRIC

Seed Belt	Spring Base	WEIGHT OF SEED (Kgs. per Hectare)			
		350 mm Rows	400 mm Rows	450 mm Rows	500 mm Rows
24 or 32	P	127—135	111—118	99—105	89—94
32 (25 mm lg. holes)	P	169—179	148—156	132—139	118—125
49	K	254—263	222—230	198—205	178—184
49	L	314—323	275—283	224—251	220—226

Note: The above rates are based on the high range drive pulleys 'AH' (see Fig. 6) being used, on Master Land Wheel Drive Drills.
T, U and N bases, may, in some instances, give better results.

SEED BELT & SPRING BASE GUIDE

ONIONS Natural Seed

Before using the chart is it necessary to:

(a) decide upon required row width, no. of drilling lines per row and weight of seed per acre (Hectare).

(b) calculate drilling length i.e.

yards per pound = $174240 \times \text{no. lines per row} \div \text{row width (inches)} \div \text{no. pounds per acre}$.

metres per Kilogram = $10^7 \times \text{no. lines per row} \div \text{row width (mms)} \div \text{no. kgs per Hectare}$.

Yards per lb.	DRILLING LENGTH		SEED BELT		SPRING BASE	SEED STATION SPACING	
	Metres per Kg.	Type (rubber)	Hole Size	Inches		mms	
5300	10700	Plain	10	A	2	50	
4000	8080				1½	38	
3350	6770				1¼	32	
3000	6060				1.1/8	28	
2650	5350				1	25	
2475	5000				15/16	24	
2300	4650				7/8	22	
2150	4350				13/16	20	
2000	4040				¾	19	
1750	3535	Plain	10	G	1.1/8	28	
1550	3130				1	25	
1450	2930				15/16	24	
1350	2730				7/8	22	
1250	2525				13/16	20	
1225	2475	Plain	11	G	1	25	
1150	2325				15/16	24	
1050	2120	Plain	12	G	1	25	
1000	2020	Plain	13	G	1¼	32	

SEED BELT & SPRING BASE GUIDE

ONIONS (contd.)

Yards per lb.	DRILLING LENGTH		SEED BELT		SPRING BASE	SEED STATION SPACING	
	Metres per kg.	Type (rubber)	Hole Size	Inches		mms	
900	1820	Plain	13	1 1/8	G	28	
800	1620			1		25	
700	1410	Ribbed	13	1 1/8	S	28	
650	1310	Plain	14	1	G	25	
600	1210	Ribbed	13	1	S	25	
550	1110	Ribbed	14	1	S	25	
500	1010			1 1/8	B	28	
450	960	Ribbed	14	1		25	

Note: It may be necessary to use the high range drive pulleys 'AH' (see Fig. 5) to achieve the required seed rate.

SEED RATE GUIDE

CARROTS Natural Seed

Type & Market	Drilling System	Lines per Row	Seed Stations per foot per line	WEIGHT of SEED (lbs. per acre) Average 2 seeds per station																									
				15" Rows						18" Rows						20" Rows						28" Rows							
				seeds/oz x 1000	15	20	25	30	35	15	20	25	30	35	15	20	25	30	35	15	20	25	30	35					
Large Processing	S1/D2	Single	6	1.75	1.31	1.05	0.88	0.75	1.45	1.09	0.87	0.73	0.62	3.87	2.9	2.32	1.93	1.66	3.49	2.61	2.09	1.74	1.49	14.0	10.5	8.4	7.0	6.0	
				1.75	1.31	1.05	0.88	0.75	1.45	1.09	0.87	0.73	0.62	3.87	2.9	2.32	1.93	1.66	3.49	2.61	2.09	1.74	1.49	16.8	12.6	10.1	8.4	7.2	
Ware	T1/D1	2 @ 4" centres	8																										
Small Pre-Pack	T3/D15	9 on 10" band	10 12																										
Canning Whole	S3/D12	3 @ 1" centres	10 12																										
Medium Pre-Pack	S2/D8	2 @ 2" centres	12																										

Note: If seed is not powder dressed, we recommend the addition of French Chalk, one (1) part to every sixteen (16) parts of seed by weight, to assist circulation of seed.

SEED RATE GUIDE

CARROTS Natural Seed

Type & Market	Drilling System	Lines per Row	Seed Stations per metre per line	WEIGHT of SEED (kgs. per Hectare)																			
				Average 2 seeds per station						Average 2 seeds per station													
				375 mm Rows			450 mm Rows			500 mm Rows			700 mm Rows										
seeds/Kg. x 100,000			seeds/Kg. x 100,000			seeds/Kg. x 100,000			seeds/Kg. x 100,000			seeds/Kg. x 100,000											
			6	7	9	11	12	6	7	9	11	12	6	7	9	11	12	6	7	9	11	12	
Large Processing	S1/D2	Single	20	1.78	1.53	1.19	0.97	0.89	1.48	1.27	0.91	0.88	0.74										
Ware	T1/D1	2 @ 100mm centres	28						4.23	3.63	2.82	2.31	2.12	3.81	3.26	2.54	2.08	1.92					
Small Pre-Pack	T3/D15	9 on 250mm band	33 40																14.3	12.3	9.5	7.8	7.1
Canning Whole	S3/D12	3 @ 25 mm centres	33 40											6.7	5.7	4.5	3.7	3.4	17.1	14.7	11.4	9.1	8.6
Medium Pre-Pack	S2/D8	2 @ 50 mm centres	40						5.92	5.07	3.95	3.23	2.96	5.33	4.57	3.55	2.46	2.66					

SEED RATE GUIDE

IMPERIAL

BRASSICAE

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Kales, Savoy, Spring Greens, Swedes, Turnips.

Guide based on 150,000 seeds per lb.

Seed Spacing (inches)	WEIGHT of SEED (lbs per acre)									
	18" Rows	19" Rows	20" Rows	21" Rows	22" Rows	24" Rows	26" Rows	28" Rows	30" Rows	
¾	3.1	2.93	2.79	2.65	2.53	2.32	2.15	1.99	1.86	
1	2.32	2.19	2.09	1.99	1.9	1.74	1.61	1.49	1.39	
1¼	1.87	1.77	1.69	1.61	1.53	1.41	1.29	1.2	1.12	
1½	1.55	1.47	1.39	1.33	1.27	1.16	1.07	0.99	0.93	
1¾	1.35	1.29	1.22	1.16	1.11	1.01	0.94	0.87	0.81	
2	1.16	1.1	1.05	1.0	0.95	0.87	0.81	0.75	0.7	
3	0.77	0.73	0.7	0.67	0.63	0.58	0.53	0.5	0.47	

Guide based on 33,000 seeds per Kg.

METRIC

Seed Spacing (mms)	WEIGHT of SEED (Kgs per Hectare)									
	450 Rows	475 Rows	500 Rows	525 Rows	550 Rows	600 Rows	650 Rows	700 Rows	750 Rows	
20	3.37	3.19	3.03	2.89	2.75	2.53	2.33	2.16	2.02	
25	2.69	2.55	2.43	2.31	2.2	2.02	1.87	1.73	1.62	
30	2.24	2.13	2.02	1.93	1.84	1.68	1.55	1.44	1.35	
35	1.93	1.82	1.7	1.65	1.57	1.45	1.33	1.24	1.16	
40	1.68	1.6	1.52	1.44	1.38	1.23	1.17	1.08	1.01	
50	1.35	1.28	1.21	1.16	1.1	1.01	0.94	0.87	0.81	
75	0.9	0.85	0.81	0.76	0.73	0.67	0.62	0.58	0.54	

DRILLING LENGTHS for NOMINAL ROW WIDTHS

Row Width (ins)	Yards per Acre
8	21,780
9	19,360
10	17,424
11	15,840
12	14,520
13	13,404
14	12,446
15	11,616
16	10,890
17	10,249
18	9,680
19	9,171
20	8,712
21	8,297
22	7,920
23	7,567
24	7,260
30	5,808
36	4,840

Row Width (mms)	Metres per Hectare
200	50,000
250	40,000
300	33,333
350	28,571
400	25,000
450	22,222
500	20,000
550	18,181
600	16,666
650	15,384
700	14,285
750	13,333
800	12,500
850	11,764
900	11,111
950	10,526
1000	10,000

Drilling Yards per Acre = $4840 \times 36 \div \text{row width (ins.)}$

Drilling Metres per Hectare = $10,000 \times 1000 \div \text{row width (mms.)}$

Area	1 square mile	=	2,589,952 square metres
		=	259 hectares
	1 acre	=	4047 square metres
		=	0.405 hectares
	1 square yard	=	0.836 square metres
	1 square foot	=	0.093 square metres
	1 square inch	=	6.45 square centimetres
	1 square kilometre	=	247 acres
	1 hectare	=	2.47 acres
	1 square metre	=	1.20 square yards
	1 square centimetre	=	0.16 square inches

Land in small areas is measured in ares

An are	=	100 square metres
One acre	=	40.47 ares
2.47 acres	=	10,000 square metres = 1 hectare
89 lb. per acre	=	100 kilogrammes per hectare
One quintal	=	100 kilogrammes
1 cwt. per acre	=	1.26 quintals per hectare

Weight	1 ton	=	1016 kg.
	1 cwt.	=	50.80 kg.
	1 qtr.	=	12.70 kg.
	1 lb.	=	0.45 kg.
	1 kg.	=	2.20 lb.
	1 grm.	=	0.035 oz.

Ounces to grammes	x	28.35
Pounds to kilogrammes	x	0.4536
Hundredweights (cwt.) to kilogrammes	x	50.8
Tons to kilogrammes	x	1016.0
Tons to tonnes (metric) or 1,000 kilogrammes	x	1.016

Pounds to kilogrammes: 1 lb. = 0.453592 kg										
lb.	0	1	2	3	4	5	6	7	8	9
	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
0	—	0.5	0.9	1.4	1.8	2.3	2.7	3.2	3.6	4.1
10	4.5	5.0	5.4	5.9	6.3	6.8	7.3	7.7	8.2	8.6
20	9.1	9.5	10.0	10.4	10.9	11.3	11.8	12.2	12.7	13.1
30	13.6	14.1	14.5	15.0	15.4	15.9	16.3	16.8	17.2	17.7
40	18.1	18.6	19.0	19.5	20.0	20.4	20.9	21.3	21.8	22.2
50	22.7	23.1	23.6	24.0	24.5	24.9	25.4	25.8	26.3	26.8
60	27.2	27.7	28.1	28.6	29.0	29.5	29.9	30.4	30.8	31.3
70	31.7	32.2	32.7	33.1	33.6	34.0	34.5	34.9	35.4	35.8
80	36.3	36.7	37.2	37.6	38.1	38.5	39.0	39.5	39.9	40.4
90	40.8	41.3	41.7	42.2	42.6	43.1	43.5	44.0	44.4	44.9

Supplier:

Date Purchased:

ALL ENQUIRIES

Stanhay Webb Ltd
Houghton Road
Grantham
Lincolnshire
NG31 6JE
England

Tel: +44 (0) 1476 515406
Fax: +44 (0) 1476 515407
Email: sales@stanhay.com

Part No: 6417103 Issue 09/02

WHEN ORDERING PARTS PLEASE QUOTE THE FOLLOWING INFORMATION:

1. Model - STANHAY ROBIN 870
2. Order number.
3. Part number and description.

PLEASE NOTE:

The parts listed are not necessarily supplied as unit items, they may be part of an assembly or be packed in quantities.

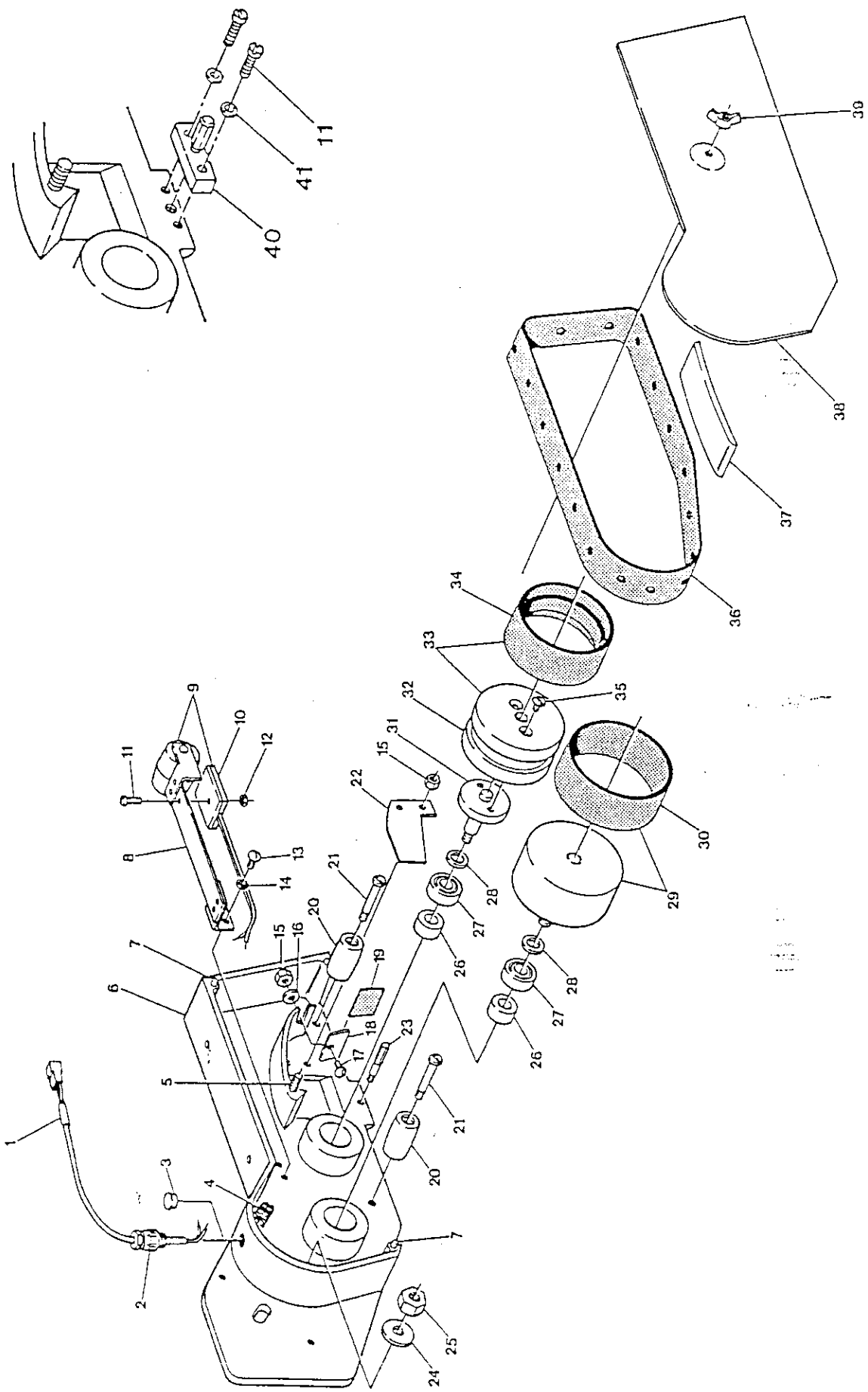
Some of the parts shown are optional extras and are not fitted as standard to new machines.

STANHAY ROBIN 870

PARTS MANUAL

Contents

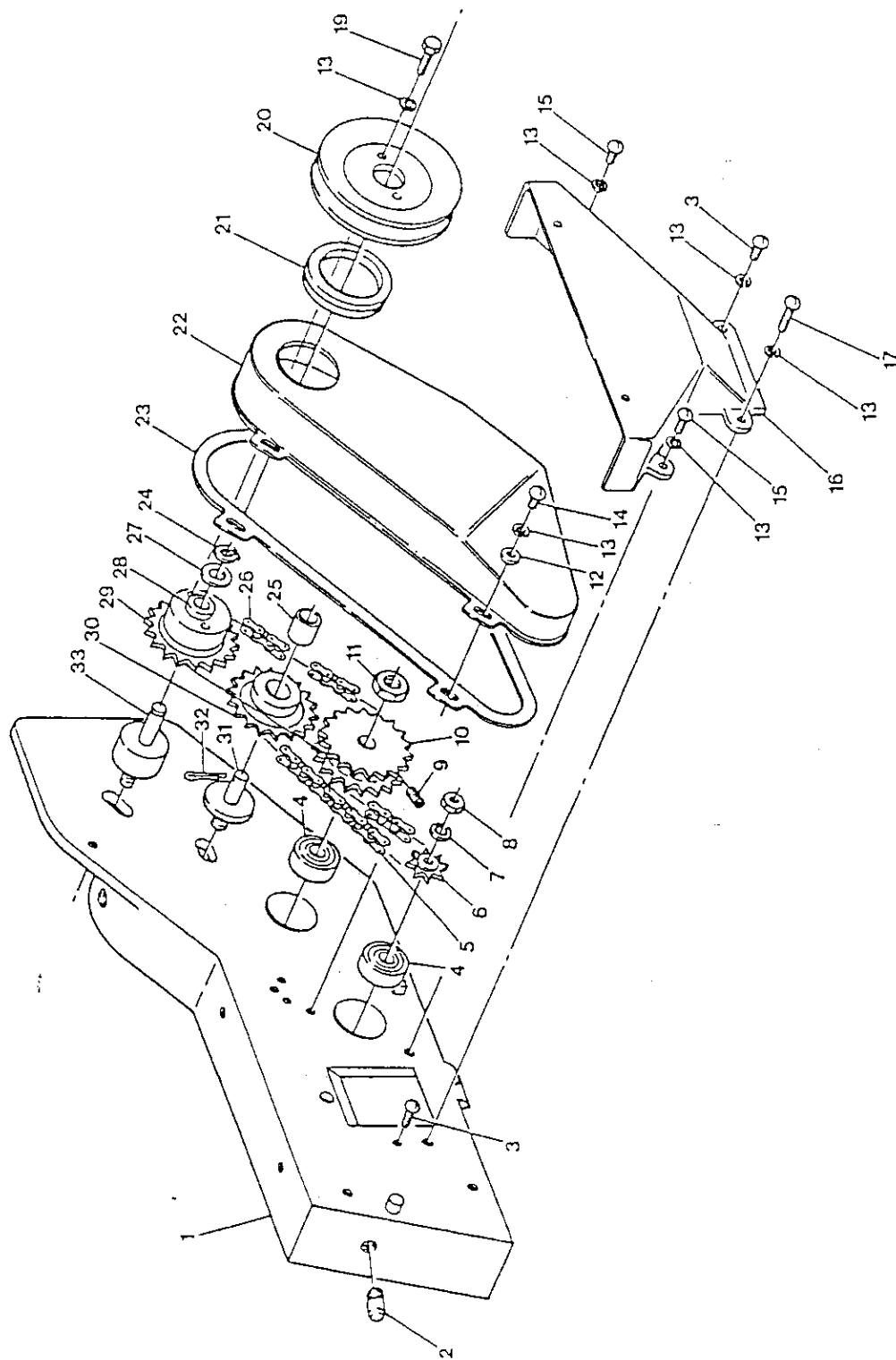
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STANHAY ROBIN 870
METERING UNIT - SEED BELT SIDE

Item No:	Part No:	Description:
1	5201040	Indicator Lead
2	5205004	Indicator Lead Gland
3	6402001	Protection Plug - above seed chamber flange
	6402031	Protection Plug - rear body flange - non electric drills only
4	5209051	Two way Connector
5	7000002	Seeder Body Stud
6	7702404	Seeder Body
7	7000003	Seeder Body Dowel
8	7702475	Belt Tensioner
9	7702476	Belt Tensioner & Reed Switch Assembly
10	5208050	Reed Switch c/w items 11 & 12
11	2335046	M3 x 12 Slotted Pan Head Screw
12	2303003	M3 Hexagon Nut
13	2318329	3/16 BSW x 3/8 Slotted Round Head Screw
14	2311213	M6 Spring Washer
15	2301015	3/16 BSW Hexagon Nut
16	2311132	M5 Flat Washer - large diameter
17	2318331	3/16 BSW x 1/2 Slotted Round Head Screw
18	6902110	Rubber Flap Clamp
19	6900011	Rubber Flap
20	*2810180	Fixed Roller - 8 Bore
21	*6902222	Fixed Roller Pin - 8 diameter
22	6900040	A-Choke
	6900041	B-Choke
	6900042	C-Choke
	6900043	P-Choke
	6900044	T-Choke
	6900045	X-Choke
23	6902238	Spring Base Pin (Hexagon)
24	2311090	M10 Flat Washer
25	2301018	3/8 BSW Hexagon Nut
26	6900016	Bearing Spacer
27	1901045	Ball Bearing
28	3220002	Spacing Shim - 0.13mm
	3220003	Spacing Shim - 0.25mm
29	7700006	Belt Wheel and Tyre - item 30
30	2820001	Belt Wheel Tyre
31	6902067	Repeller Spindle
32	2810174	Plastic Repeller Wheel
33	7702102	Standard (Black) Repeller Assembly
	7702453	Polymer (Brown) Repeller Assembly
	7703139	Black (Solid Centre) Repeller Assembly
34	2820002	Standard (Black) Tyre
	2830033	Polymer (Brown) Tyre
	2820042	Black Solid Centre Tyre
35	2333102	M5 x 8 Countersunk Head Screw
36		Seed Belt - state type required
37		Spring Base - state type required
38	7400002	Body Cover Plate
39	2301437	1/4 BSW Wing Nut
40	7703070	Spring Base Pin & Block Assembly
41	2311085	M3 Flat Washer

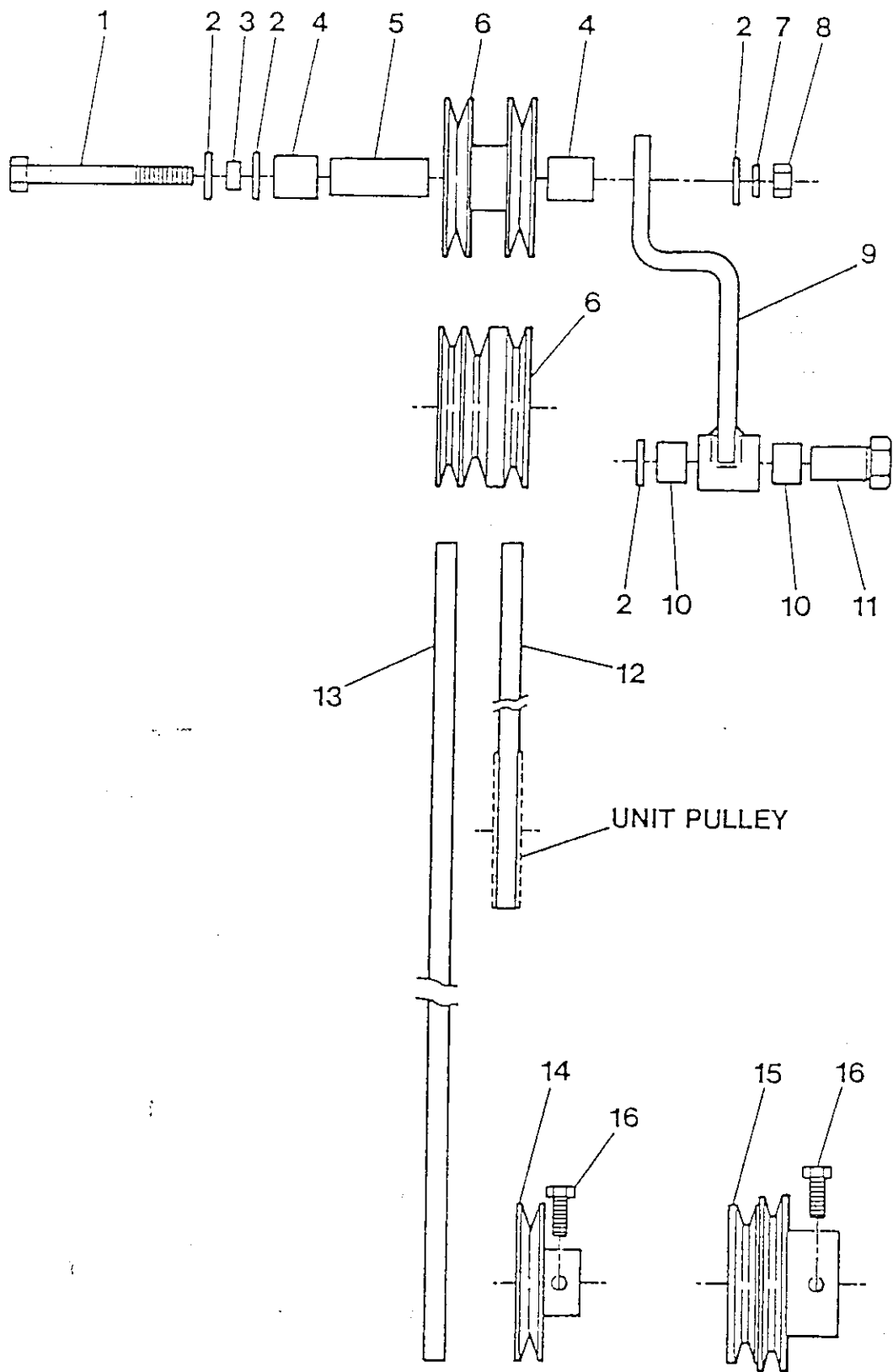
* We recommend that items 20 and 21 are purchased as sets.



STANHAY ROBIN 870

METERING UNIT - DRIVE SIDE

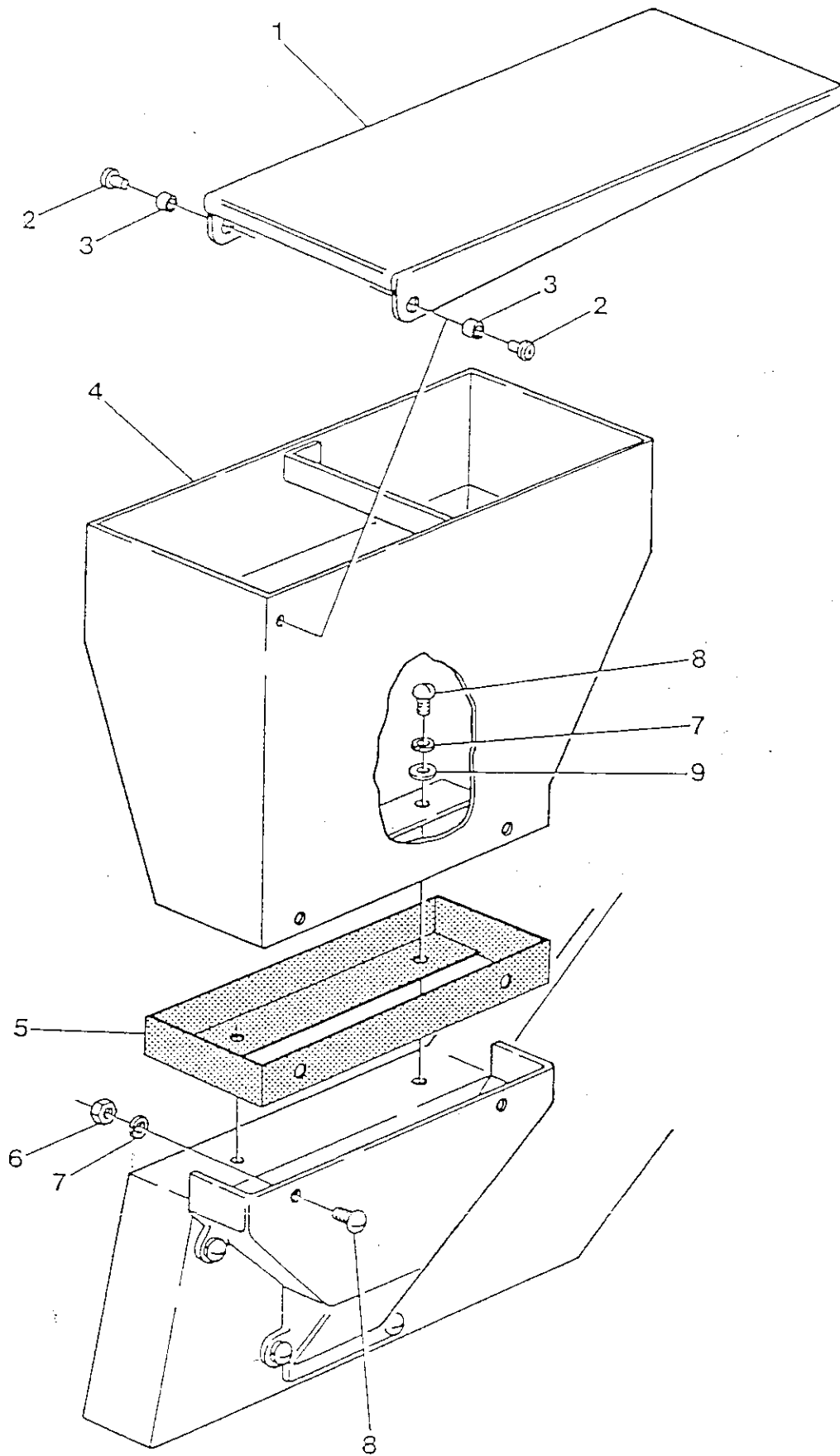
Item No:	Part No:	Description:
1	7702404	Seeder Body
2	7000004	Coulter Peg
3	2318331	3/16 BSW x 1/2 Slotted Round Head Screw
4	1901023	Ball Bearing
5	1801002	Chain - 48 pitches
6	1701014	Repeller Sprocket
7	2310506	1/4 Shakeproof Washer
8	2301161	1/4 BSF Hexagon Locknut
9	2260135	3/16 BSW x 5/16 in. Socket Set Screw
10	7700004	Belt Wheel Sprocket c/w item 9
11	2301163	3/8 BSF Hexagon Locknut
12	2310111	2BA Flat Washer
13	2311213	M5 Spring Washer
14	2318329	3/16 BSW x 3/8 Slotted Round Head Screw
15	2318330	3/16 BSW x 7/16 Slotted Round Head Screw
16	3000027	Seeder Chute
17	2318334	3/16 BSW x 3/4 Slotted Round Head Screw
18	2317003	V-belt
19	6902366	3/16 BSW x 3/4 Hexagon Head Screw
20	7400001	Driving Sprocket Pulley
21	4001001	V-ring Seal
22	3210008	Chaincase
23	3900001	Chaincase Gasket
24	2216046	Circlip
25	2001005	Oilite Bearing
26	1801001	Chain - 46 pitches
27	3220001	Spindle Shim
28	2001009	Oilite Bearing
29	7702101	Driving Sprocket c/w item 28
30	7702100	Idler Sprocket c/w item 25
31	6900006	Idler Sprocket Spindle
32	2214057	3/32 x 3/4 Split Pin
33	6900013	Driving Sprocket Spindle



STANHAY ROBIN 870

METERING UNIT - KNEE JOINT & DRIVE

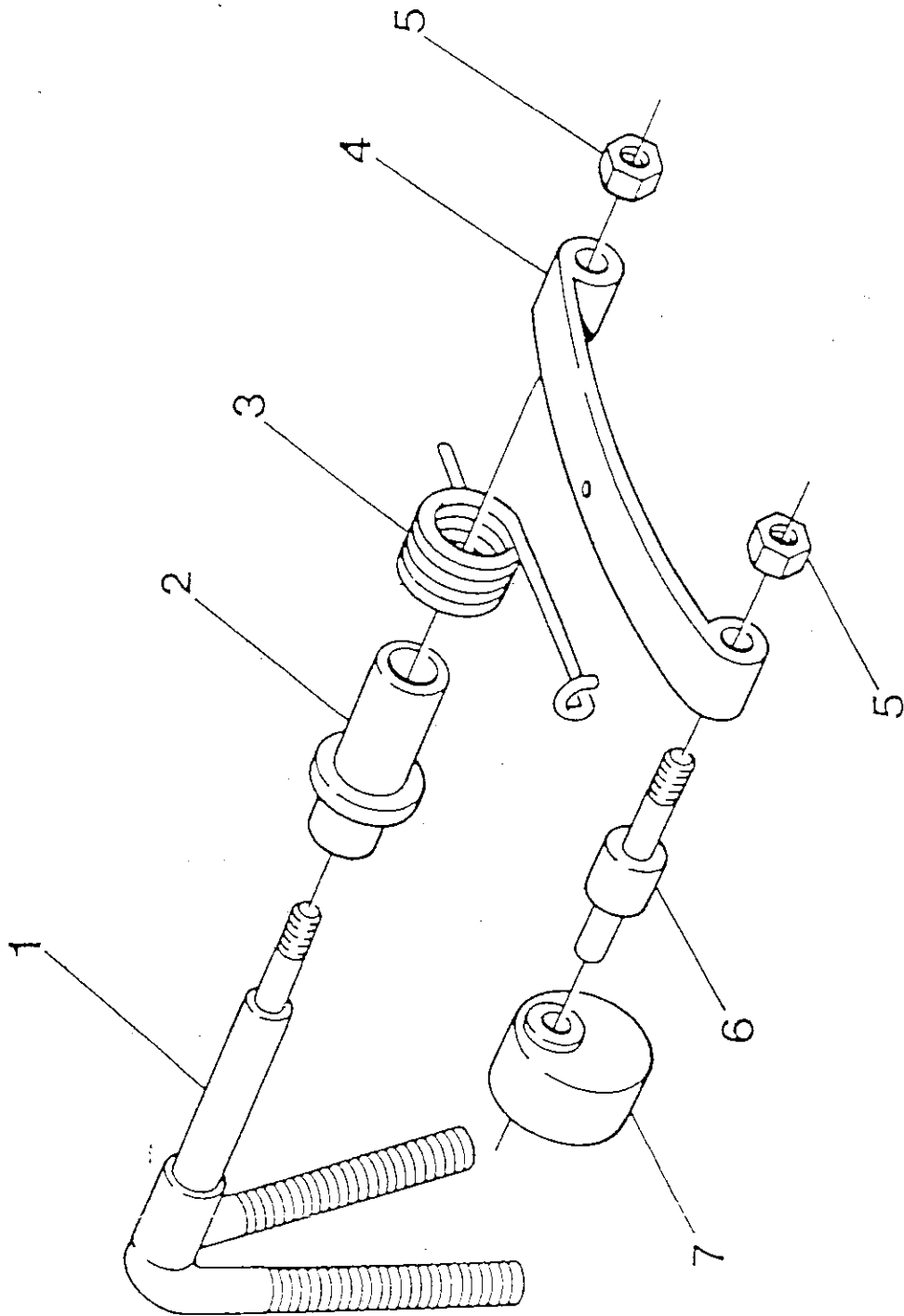
Item No:	Part No:	Description:
1	2306074	M10 x 80 Hexagon Head Bolt
2	2310090	M10 Flat Washer
3	7000022	Seeder Clamp Spacer
4	2001002	Oilite Bearing
5	6900021	Pulley Hub Spacer
6	7700010	Twin Pulley c/w item 4
	7700584	Triple Pulley c/w item 4
7	2311216	M10 Spring Washer
8	2303008	M10 Hexagon Nut
9	7000009	Knee Joint Arm c/w item 10
10	2001011	Oilite Bearing
11	6900020	Knee Joint Spindle
12	1308010	V-belt
13	1308055	V-belt
14	7700011	Single Shaft Pulley c/w item 16
15	7700845	Double Shaft Pulley c/w item 16
16	2308341	1/4 UNC x 3/4 Hexagon Head Screw



STANHAY ROBIN 870

SEED HOPPER

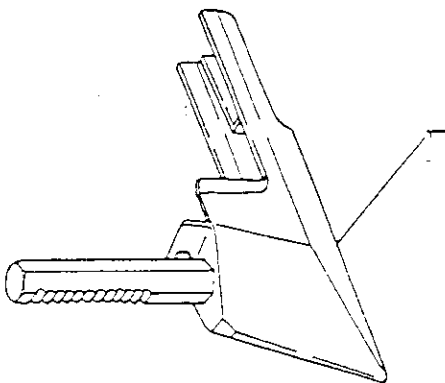
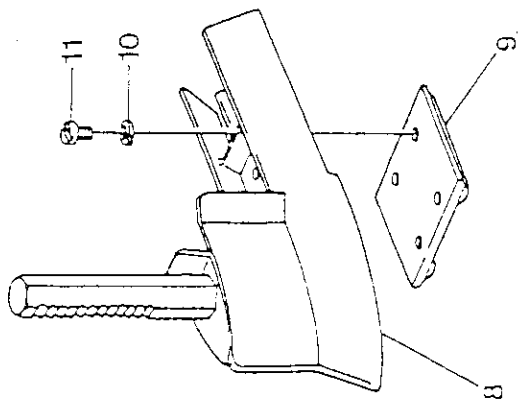
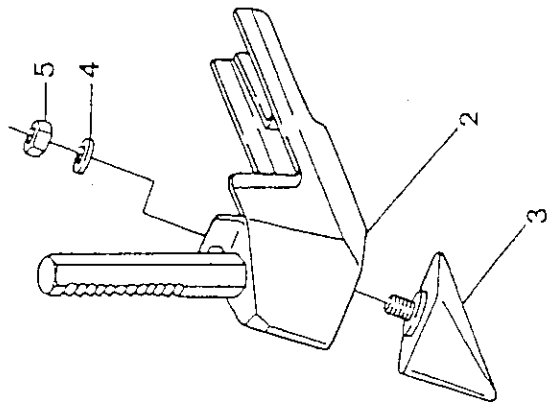
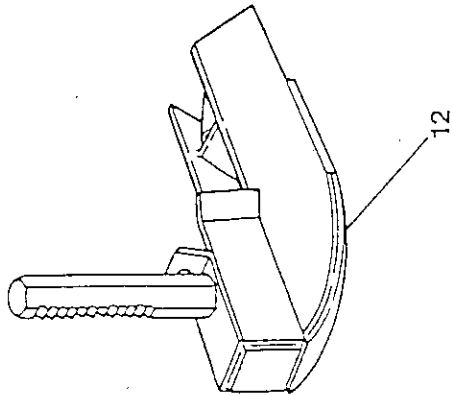
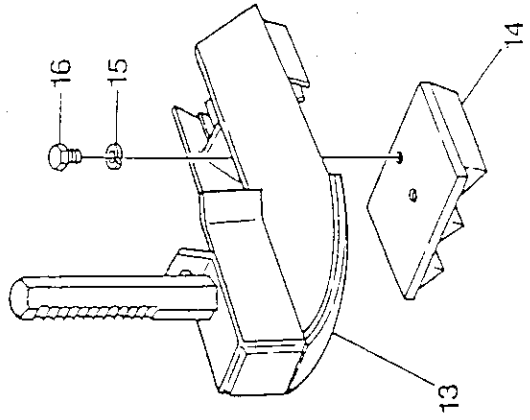
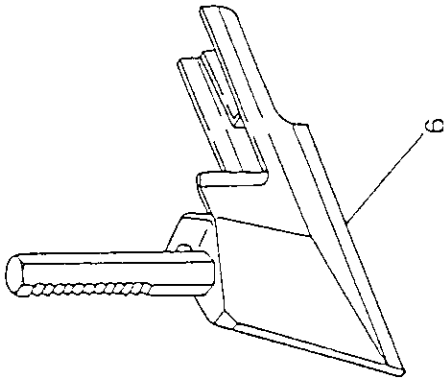
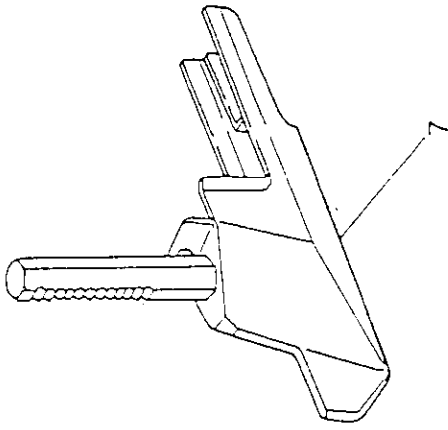
Item No:	Part No:	Description:
1	8002644	Hopper Lid Kit c/w items 2,3
2	2212563	POP Rivet
3	6900018	Hinge Spacer
4	7400003	Hopper - without monitor fixing
	7400015	Hopper - with monitor fixing
5	2820003	Chute Seal
6	2301015	3/16 BSW Hexagon Nut
7	2311213	M5 Spring Washer
8	2318331	3/16 BSW x 1/2 Slotted Round Head Screw
9	2311132	M5 Flat Washer - large diameter



STANHAY ROBIN 870

AGITATOR

Item No:	Part No:	Description
1	7701097	Agitator
2	6900023	Agitator Bush
3	2703001	Agitator Torsion Spring
4	6900025	Agitator Arm
5	2301014	1/8 BSW Hexagon Nut
6	6900024	Agitator Eccentric Spindle
7	2810010	Agitator Eccentric
	KIT	
	8000007	Agitator Kit



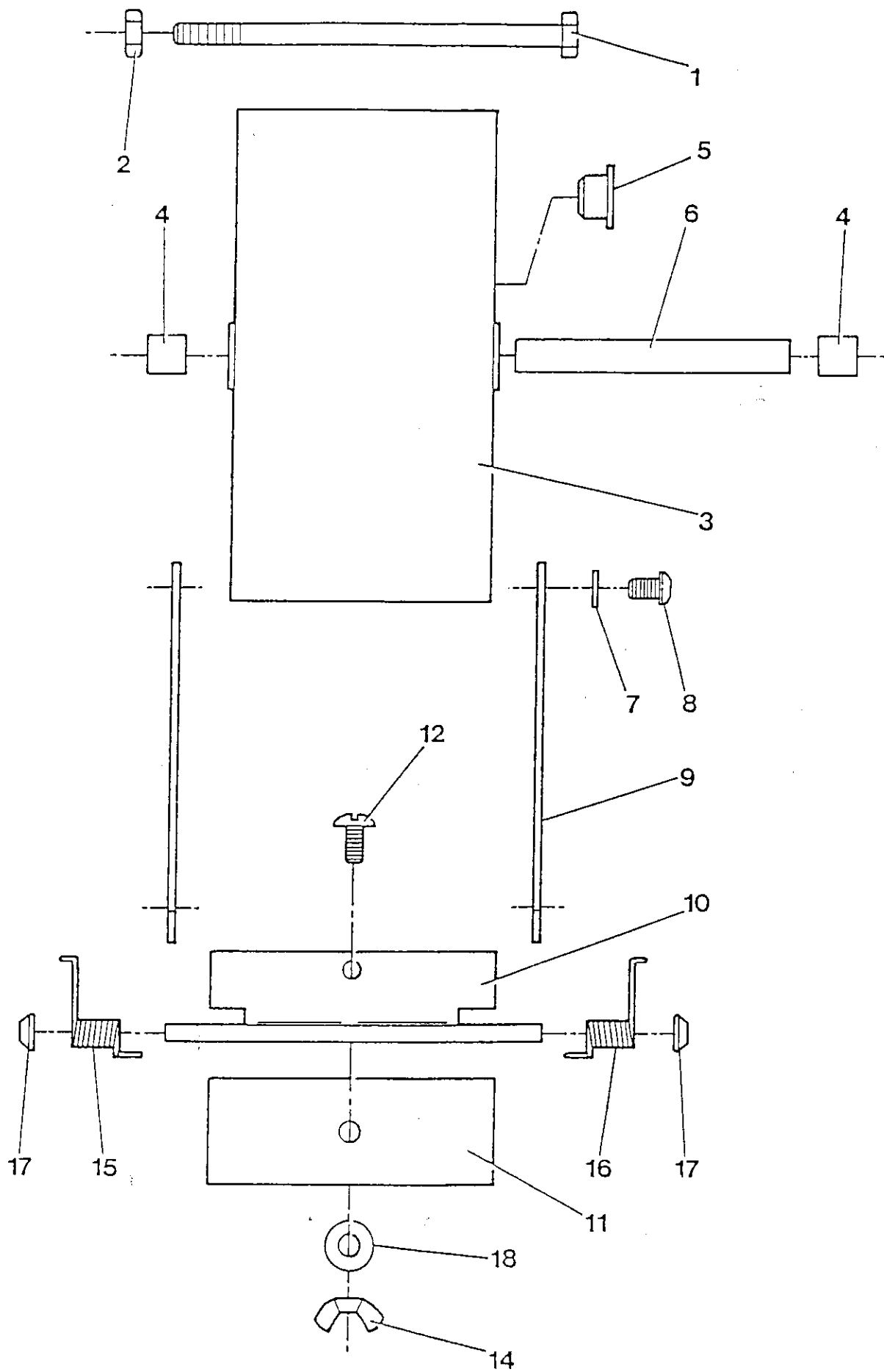
STANHAY ROBIN 870

COULTERS

Item No:	Part No:	Description:
1	7400034	General Purpose Coultter - Steel
2	7702270	General Purpose Coultter - Ceramic
	7402318	Coultter - Ceramic - Body Only
3	8002157	Ceramic Tip c/w items 4, 5
4	2311090	M10 Flat Washer
5	2303008	M10 Hexagon Nut
6	7401059	Keeled Coultter - EXPORT
7	7402628	Curved Nose Coultter (no rear fin)
8	7700042	25mm x 3 rib Coultter Assembly
	7700044	50mm x 2 rib Coultter Assembly
	7700046	38mm x 3 rib Coultter Assembly
	7700048	76mm x 2 rib Coultter Assembly
9	8010040	25mm x 3 rib Coultter Base c/w items 10,11
	8010038	50mm x 2 rib Coultter Base c/w items 10,11
	8010041	38mm x 3 rib Coultter Base c/w items 10,11
	8010039	76mm x 2 rib Coultter Base c/w items 10,11
10	2310401	1/4 Spring Washer
11	2319360	1/4 BSW x 1/2 Slotted Cheese Head Screw
12	7402878	100mm Band Coultter
13	7702787	100mm x 3 rib Coultter Assembly
14	8010037	100mm x 3 rib Coultter Base c/w items 15,16
15	2311215	M8 Spring Washer
16	2309045	M8 x 12 Hexagon Head Screw

KITS:

8002159	Ceramic Coultter (Box of 2)
8002158	Ceramic Coultter Tips (Box of 4)



STANHAY ROBIN 870

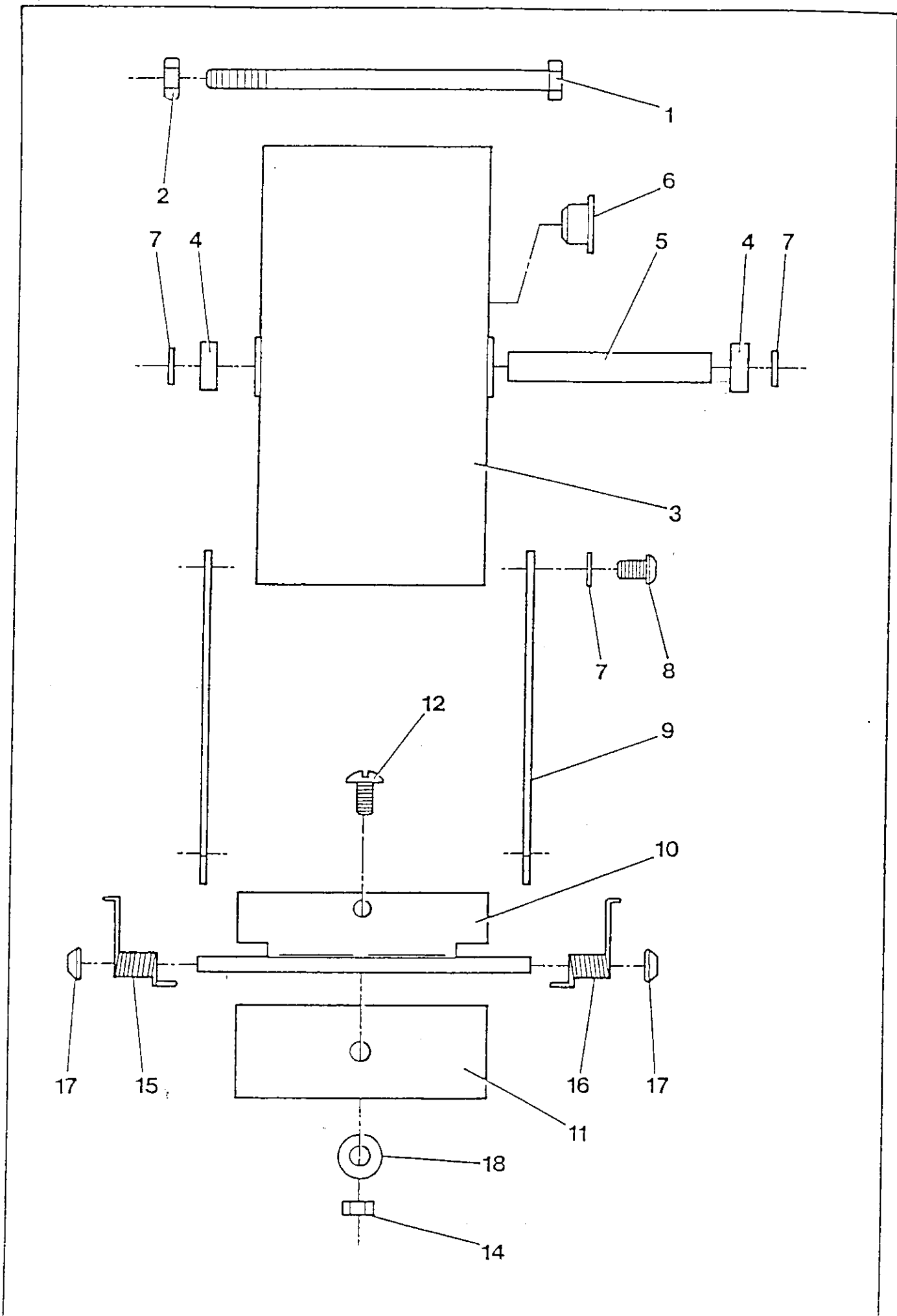
120mm WIDE MILD STEEL WHEEL

(Will fit front or rear)

Item No:	Part No:	Description:
1	2306082	M10 x 160 Hexagon Head Bolt
2	2303008	M10 Hexagon Nut
3	7700027	120 M/S Wheel c/w items 4,5
4	2001002	Oilite Bearing
5	2830001	Rubber Bung
6	6902016	Landwheel Spacer
7	2311090	M10 Flat Washer
8	2377104	M10 x 16 Socket Button Head Screw
9	6902741	Scraper Frame Side
10	7403011	120 Scraper Plate
11	6902659	120 Scraper Blade
12	2390052	M8 x 16 Roofing Bolt
14	2303007	M8 Hexagon Nut
15	2703012	Scraper Spring L/H
16	2703013	Scraper Spring R/H
17	2311365	M8 Starlock Washer - Capped
18	2311089	M8 Flat Washer

KITS

8002229	120 M/S Wheel Kit (items 1,2,3,6)
8002778	120 Wheel Scraper Kit (items 7-18)
8002779	120 M/S Wheel & Scraper Kit (items 1,2,3,6-18)



STANHAY ROBIN 870

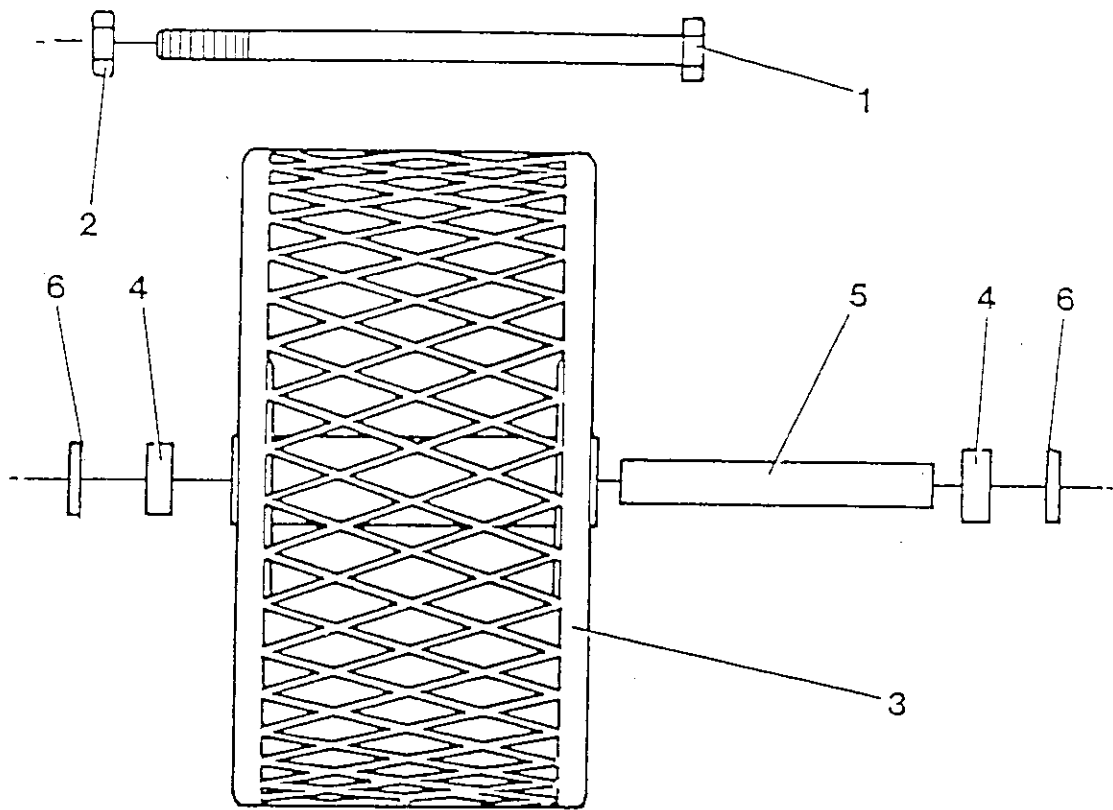
120mm WIDE STAINLESS STEEL WHEEL

(Will fit front or rear)

Item No:	Part No:	Description:
1	2306082	M10 x 160 Hexagon Head Bolt
2	2303008	M10 Hexagon Nut
3	7702614	120 S/S Wheel c/w items 4,5,6
4	1901045	Ball Bearing
5	6902390	Bearing Spacer
6	2830001	Rubber Bung
7	2311090	M10 Flat Washer
8	2377104	M10 x 16 Socket Button Head Screw
9	6902741	Scraper Frame Side
10	7403011	120 Scraper Plate
11	6902659	120 Scraper Blade
12	2390052	M8 x 16 Roofing Bolt
14	2303007	M8 Hexagon Nut
15	2703012	Scraper Spring L/H
16	2703013	Scraper Spring R/H
17	2211365	M8 Starlock Washer - Capped
18	2311089	M8 Flat Washer

KITS

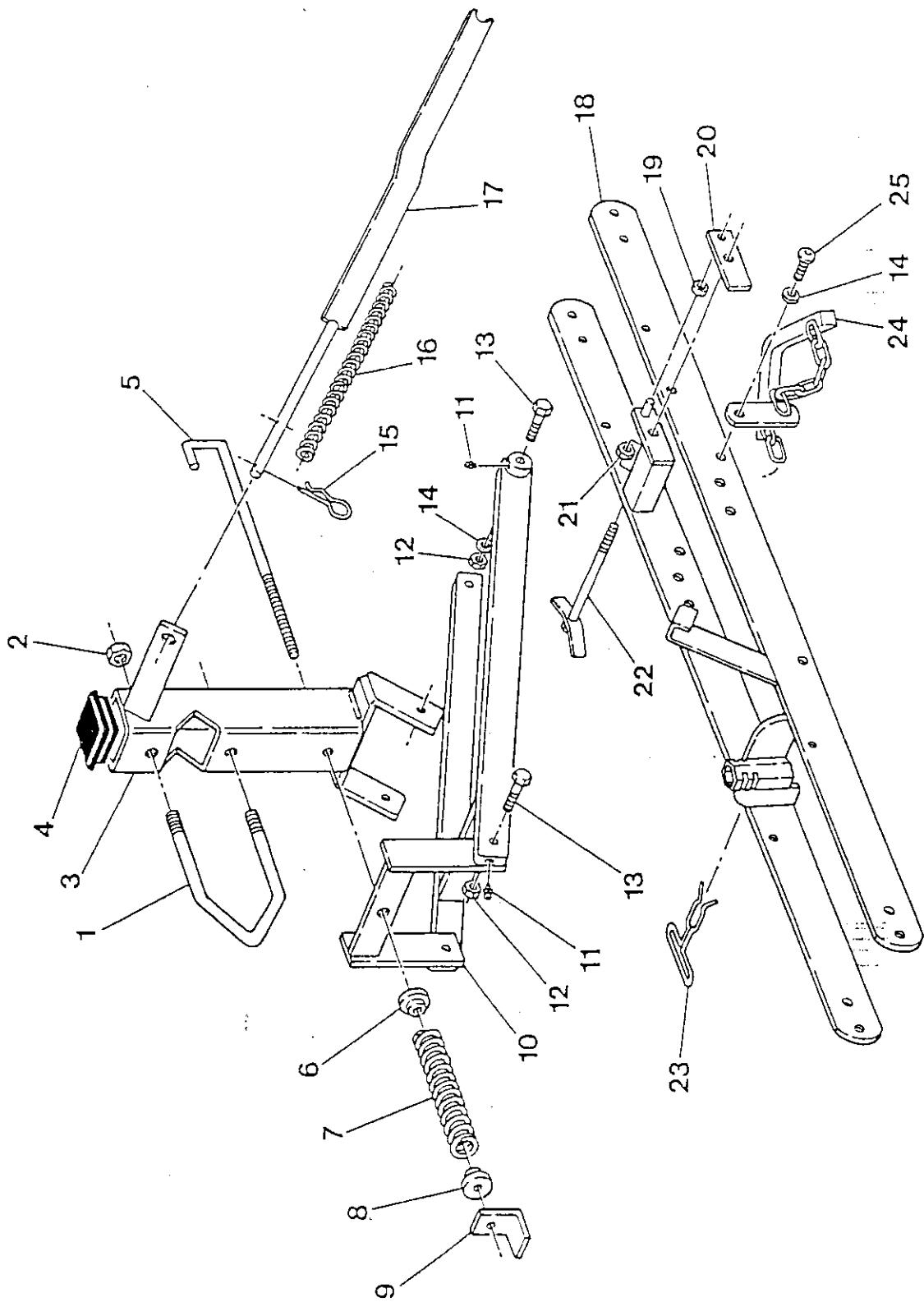
8002438	120 S/S Wheel Kit (items 1,2,3,7)
8002778	120 Wheel Scraper Kit (items 7-18)
8002780	120 S/S Wheel & Scraper Kit (items 1,2,3, 7-18)



STANHAY ROBIN 870

120mm WIDE CAGE WHEEL

Item No:	Part No:	Description:
1	2306082	M10 x 160 Hexagon Head Bolt
2	2303008	M10 Hexagon Nut
3	7702723	120 Cage Wheel c/w items 4, 5
4	1901045	Ball Bearing
5	6902390	Bearing Spacer
6	2311090	M10 Flat Washer
	KIT	
	8002524	120 Cage Wheel (items 1,2,3,6)



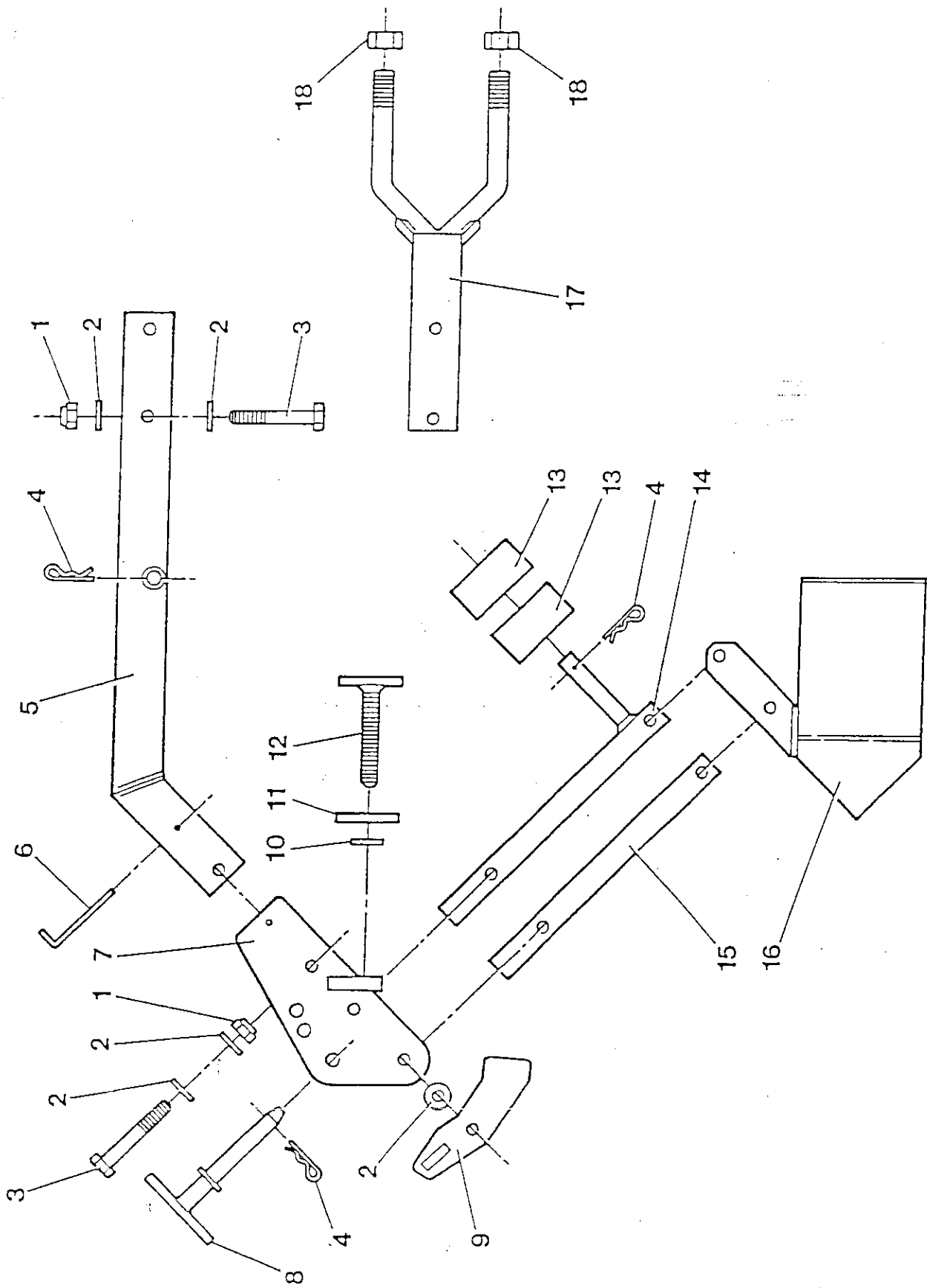
STANHAY ROBIN 870

CHASSIS

Item No:	Part No:	Description:
1	8002125	7001093 U-bolt c/w item 2
2	2303010	M16 Hexagon Nut
3	7400121	Attachment Stem
4	6402015	Plastic Plug
5	7000086	Chassis Spring Rod
6	2810067	Spring Guide Collar
7	2701006	Chassis Arm Spring
8	2810068	Spring End Collar
9	7000087	Spring Tensioner
10	7700145	Chassis Arms c/w item 11
11	6401004	1/4 Straight Greaser - Drive Fit
12	2301163	3/8 BSF Hexagon Locknut
13	2304642	3/8 BSF x 1.3/8 Hexagon Head Bolt
14	2311090	M10 Flat Washer
15	2316033	R-clip
16	2701001	Knee Joint Spring
17	7400007	Spring Rod
18	7403129	Chassis
19	7000022	Seeder Clamp Spacer
20	6902365	Unit Clamp
21	2303008	M10 Hexagon Nut
22	7402639	Clamp Handle
23	2705001	Coulter Clip
24	7400119	Drag Coverer
25	2377104	M10 x 16 Socket Button Head Screw
26	7701106	L/H Arm Coverer c/w item 28
27	7701105	R/H Arm Coverer c/w item 28
28	2215296	6 x 20 Tension Pin
29	2303007	M8 Hexagon Nut
30	2311089	M8 Flat Washer
31	6900089	Arm Spacer
32	2309048	M8 x 25 Hexagon Head Screw

KITS

8002900	Drag Coverer Kit (items 14,24,25)
8000053	Arm Coverer Kit (items 26,27,29-32)



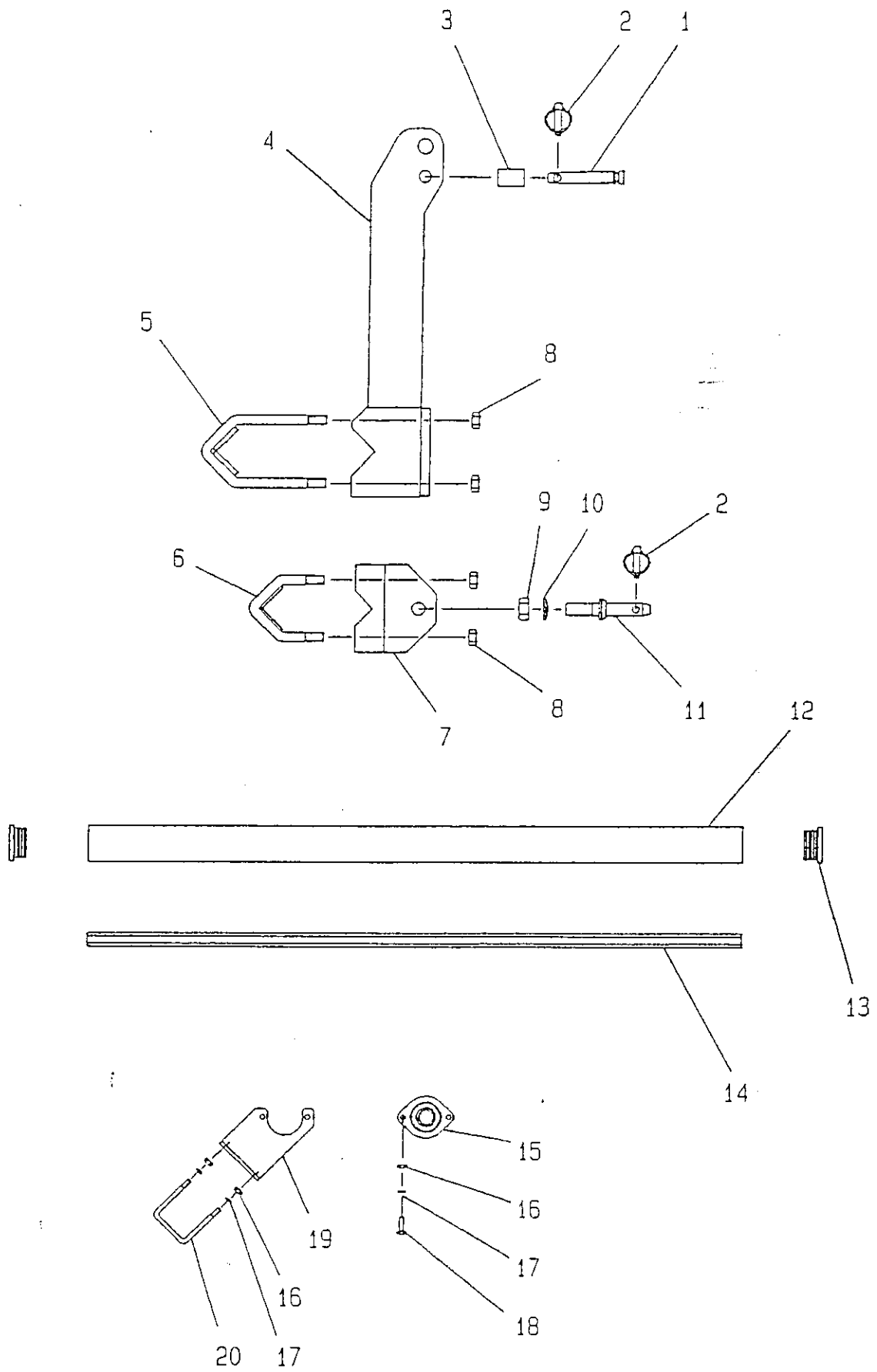
STANHAY ROBIN 870

CLOD DEFLECTOR

Item No:	Part No:	Description:
1	2303109	M10 Nyloc Hexagon Nut - thin
2	2311112	M10 Flat Washer - thin
3	2306072	M10 x 70 Hexagon Head Bolt
4	2316033	R-clip
5	7403004	Deflector Stem
6	6902240	Shear Pin
7	7402479	Link Bracket
8	7402238	Support Pin
9	7403001	Adjuster Arm
10	2311091	M12 Flat Washer
11	6902654	Locking Plate
12	7403002	Adjuster Screw
13	3000445	Ballast Weight
14	7402856	Upper Link
15	6902212	Lower Link
16	7402480	Deflector Blade
17	7402992	Deflector Bracket
18	2303010	M16 Hexagon Nut

ASSEMBLY

7702912 Clod Deflector (items 1-18)



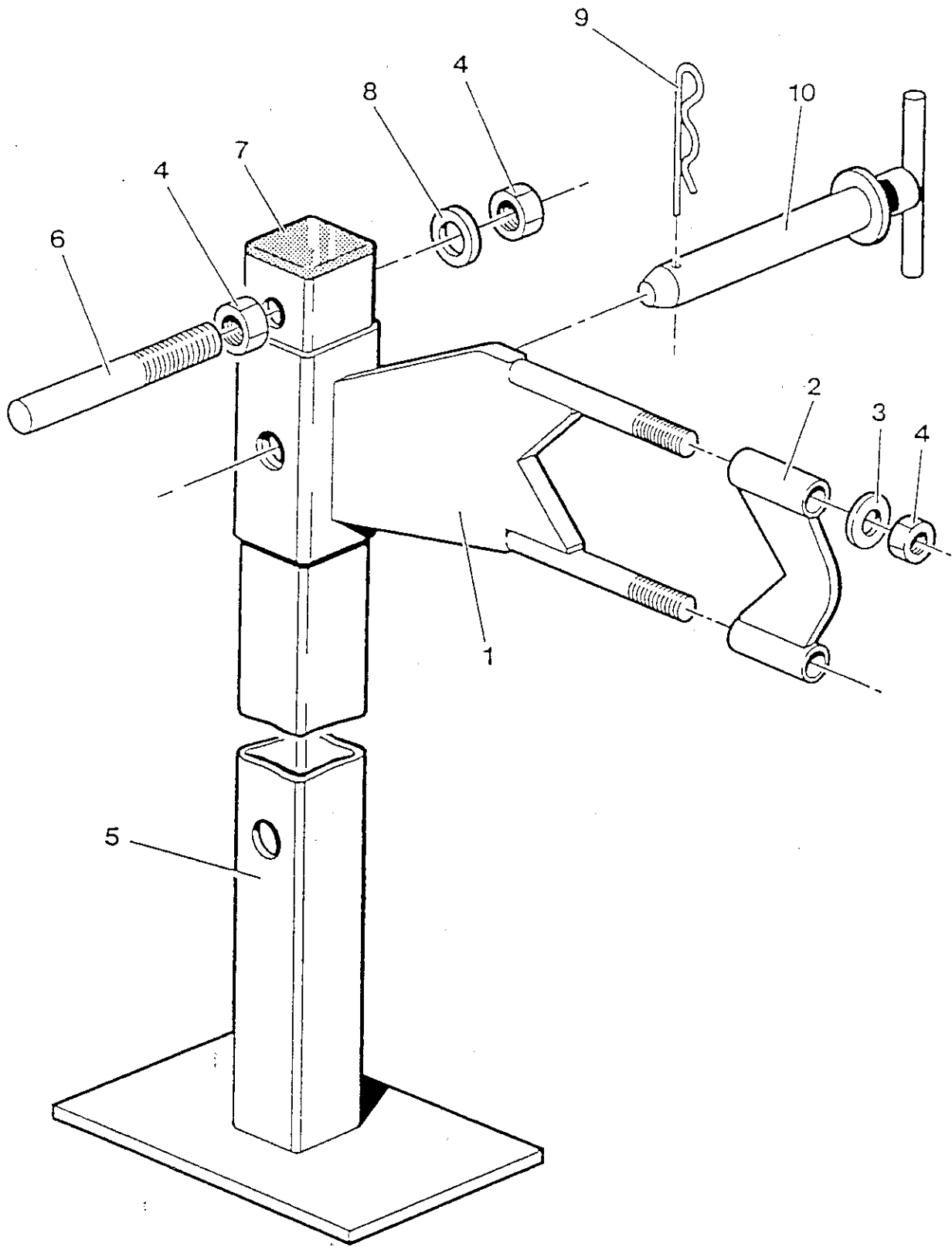
STANHAY ROBIN 870

TRACTOR HITCH, TOOLBARS, SHAFTS, ETC.

Item No:	Part No:	Description:
1	2314807	Cat.1 Top Link Pin
2	2314754	Linch Pin
3	2314805	Cat.2 Conversion Sleeve
4	7403101	Upper Hitch
5	8002136	Upper Hitch U-bolt c/w item 8
6	8002135	Lower Hitch U-bolt c/w item 8
7	7403100	Lower Hitch
8	2303010	M16 Hexagon Nut
9	2302036	7/8 UNF Hexagon Nut
10	2310409	7/8 Spring Washer
11	2314806	Cat.1 Bottom Link Pin c/w items 9,10
12	7702352	1.10M Toolbar
	7702192	1.50M Toolbar
	7702668	2.00M Toolbar
	7701112	2.30M Toolbar
	7701113	2.90M Toolbar
13	6402015	Plastic Plug
14	6902174	1.10M Shaft
	6902105	1.50M Shaft
	6902469	2.00M Shaft
	7000067	2.30M Shaft
	7000068	2.90M Shaft
15	8010027	1905025 Ball Bearing c/w items 16-18
16	2303007	M8 Hexagon Nut
17	2311215	M8 Spring Washer
18	2309048	M8 x 25 Hexagon Head Screw
19	7400070	Bearing Bracket
20	8002126	7001098 U-bolt c/w items 16,17

KITS

8002751	Tractor Hitch Kit (items 1-11)
7700996	Bearing Bracket (items 15-20)



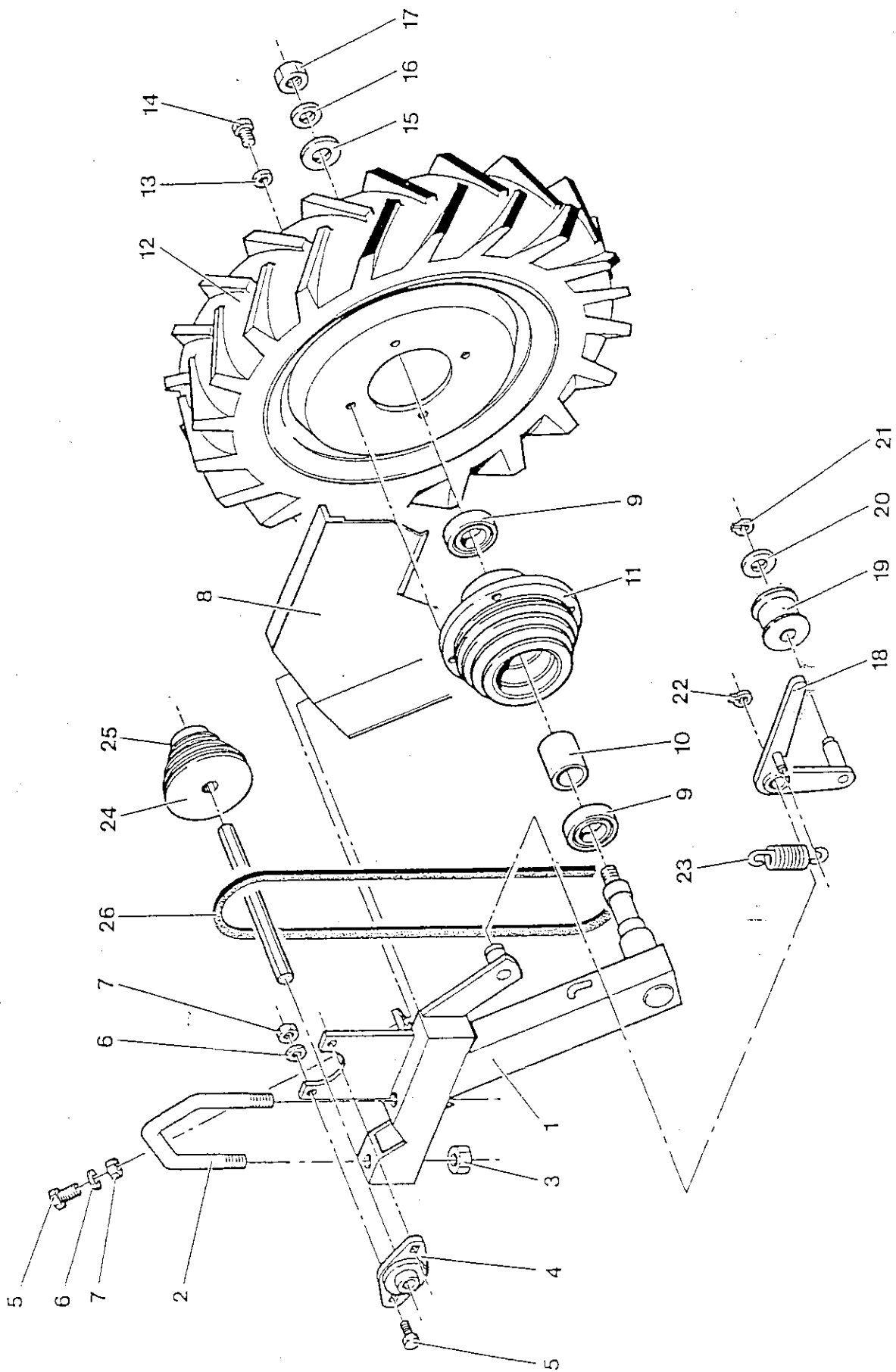
STANHAY ROBIN 870

PARKING STAND

Item No:	Part No:	Description:
1	7402247	Parking Stand Bracket - Toolbar
2	7400709	Half Clamp
3	2311091	M12 Flat Washer
4	2303009	M12 Hexagon Nut
5	7402141	Parking Stand
6	6902100	Stand Handle
7	6402018	Plastic Plug
8	2311217	M12 Spring Washer
9	2316033	R-Clip
10	7402238	Support Pin

ASSEMBLY

7702095	Parking Stand - Toolbar (items 1-10)
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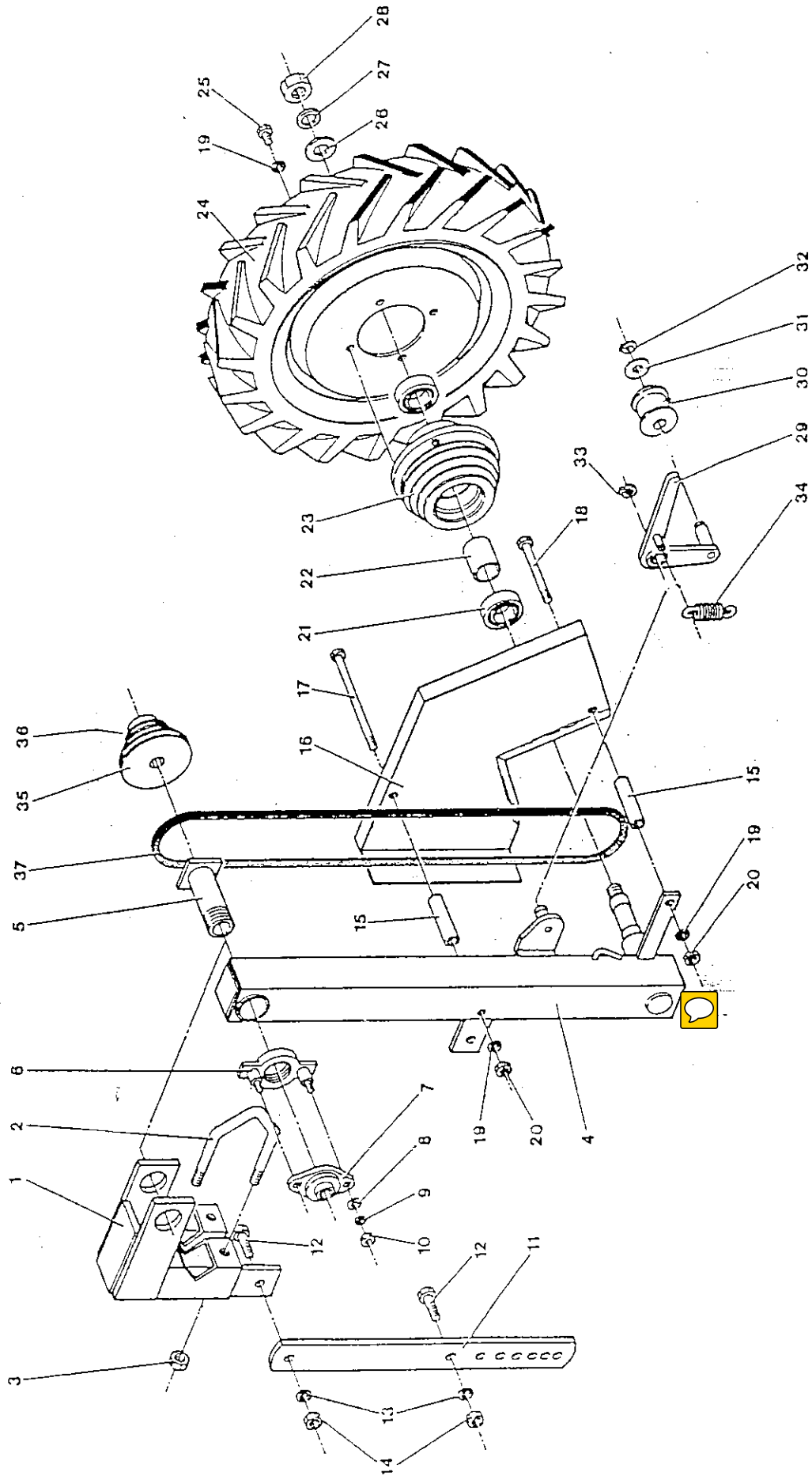
STANHAY ROBIN 870

MASTER LANDWHEEL (R/H ILLUSTRATED)

Item No:	Part No:	Description:
1	7402286	Wheel Arm R/H
	7402287	Wheel Arm L/H
2	8002125	7001093 U-bolt c/w item 3
3	2303010	M16 Hexagon Nut
4	8010027	1905025 Ball Bearing c/w items 5-7
5	2309048	M8 x 25 Hexagon Head Screw
6	2311215	M8 Spring Washer
7	2303007	M8 Hexagon Nut
8	7401080	Landwheel Guard R/H
	7401081	Landwheel Guard L/H
9	1901106	Ball Bearing
10	6900053	Bearing Spacer
11	3000197	Landwheel Hub
12	5700004	Landwheel R/H (c/w tyre & tube)
	5700005	Landwheel L/H (c/w tyre & tube)
	5700001	Landwheel only
	5700002	Tyre
	5700003	Tube
13	2311216	M10 Spring Washer
14	2309061	M10 x 20 Hexagon Head Screw
15	2311093	M20 Flat Washer
16	2311219	M20 Spring Washer
17	2303011	M20 Hexagon Nut
18	7401078	Jockey Lever R/H
	7401079	Jockey Lever L/H
19	6902359	Jockey Roller - flanged
20	2311114	M16 Flat Washer - thin
21	2217012	Circlip
22	2217003	Circlip
23	2702001	Jockey Lever Spring
24	7700063	Shaft Pulley c/w item 25
25	2308341	1/4 UNC x 3/4 Hexagon Head Screw
26	1310047	V-belt

ASSEMBLIES & KITS

7700961	R/H Jockey Lever Assembly (items 18-22)
7700962	L/H Jockey Lever Assembly (items 18-22)
7700965	Landwheel Hub (items 10,11,12)
8002111	Pair of Master Landwheels complete
8002161	R/H Master Landwheel complete
8002162	L/H Master Landwheel complete



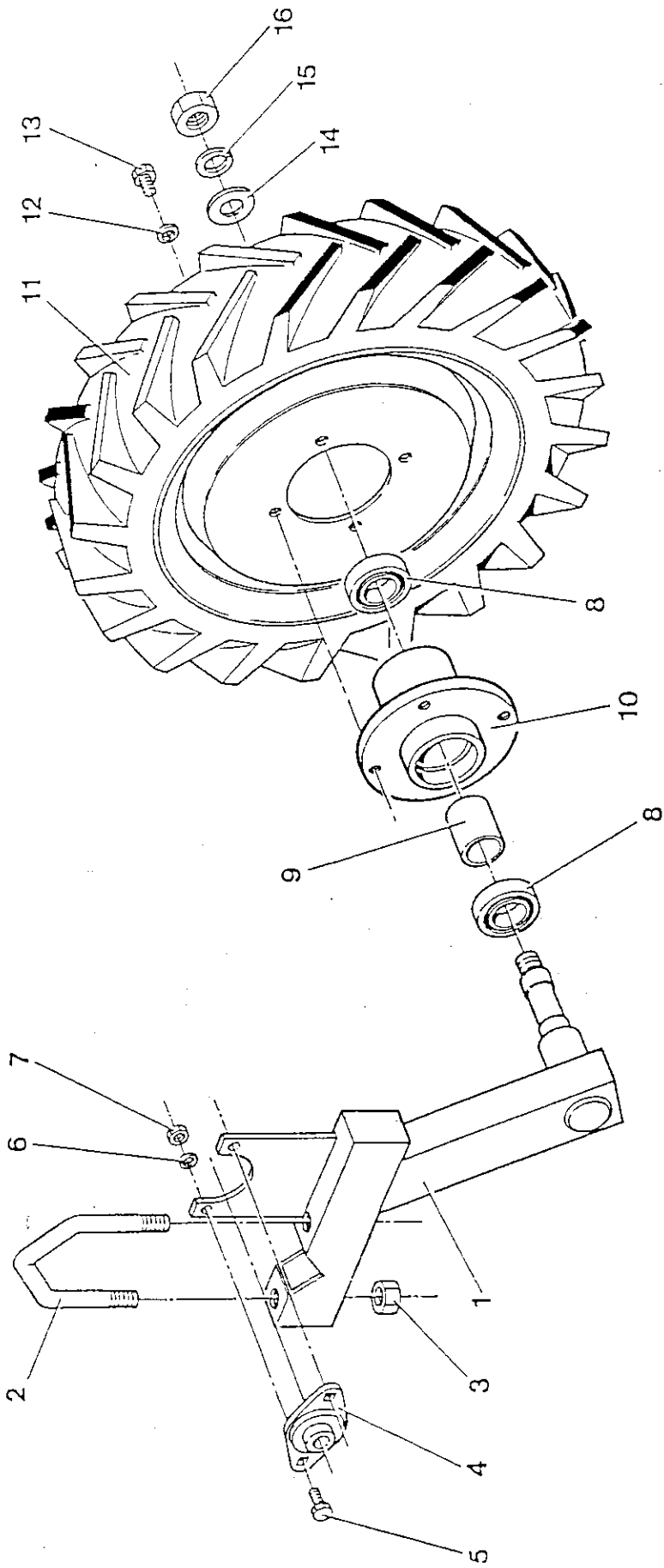
STANHAY ROBIN 870
ADJUSTABLE MASTER LANDWHEEL (R/H ILLUSTRATED)
 (To 19cm below standard)

Item No:	Part No:	Description:
1	7401087	Wheel Arm R/H
	7401088	Wheel Arm L/H
2	8002125	7001093 U-bolt c/w item 3
3	2303010	M16 Hexagon Nut
4	7402422	Wheel Stem R/H
	7402423	Wheel Stem L/H
5	7400064	Pivot Bolt
6	7401086	Pivot Bolt Nut
7	8010027	1905025 Ball Bearing c/w items 8-10
8	2311089	M8 Flat Washer
9	2311215	M8 Spring Washer
10	2303007	M8 Hexagon Nut
11	6902217	Wheel Stem Stay
12	2309080	M12 x 40 Hexagon Head Screw
13	2311217	M12 Spring Washer
14	2303009	M12 Hexagon Nut
15	6900057	Guard Spacer
16	7400068	Landwheel Guard R/H
	7400069	Landwheel Guard L/H
17	2306082	M10 x 160 Hexagon Head Bolt
18	2306077	M10 x 110 Hexagon Head Bolt
19	2311216	M10 Spring Washer
20	2303008	M10 Hexagon Nut
21	1901106	Ball Bearing
22	6900053	Bearing Spacer
23	3000197	Landwheel Hub
24	5700004	Landwheel R/H c/w tyre & tube
	5700005	Landwheel L/H c/w tyre & tube
	5700001	Landwheel only
	5700002	Tyre
	5700003	Tube
25	2309061	M10 x 20 Hexagon Head Screw
26	2311093	M20 Flat Washer
27	2311219	M20 Spring Washer
28	2303011	M20 Hexagon Nut
29	7401078	Jockey Lever R/H
	7401079	Jockey Lever L/H
30	6902359	Jockey Roller - flanged
31	2311114	M16 Flat Washer - thin
32	2217012	Circlip
33	2217003	Circlip
34	2702001	Jockey Lever Spring
35	7700063	Shaft Pulley c/w item 36
36	2308341	1/4 UNC x 3/4 Hexagon Head Screw
37	1310063	V-Belt

ASSEMBLIES & KITS

7700961	R/H Jockey Lever Assembly (items 29-33)
7700962	L/H Jockey Lever Assembly (items 29-33)
7700965	Landwheel Hub (items 21,22,23)
*8002281	Pair of Adj. Master Landwheels complete
*8002282	R/H Adj. Master Landwheel complete
*8002283	L/H Adj. Master Landwheel complete

* Includes Bearing Bracket 7700996, which should be mount as close as possible to the 4-speed shaft pulley.



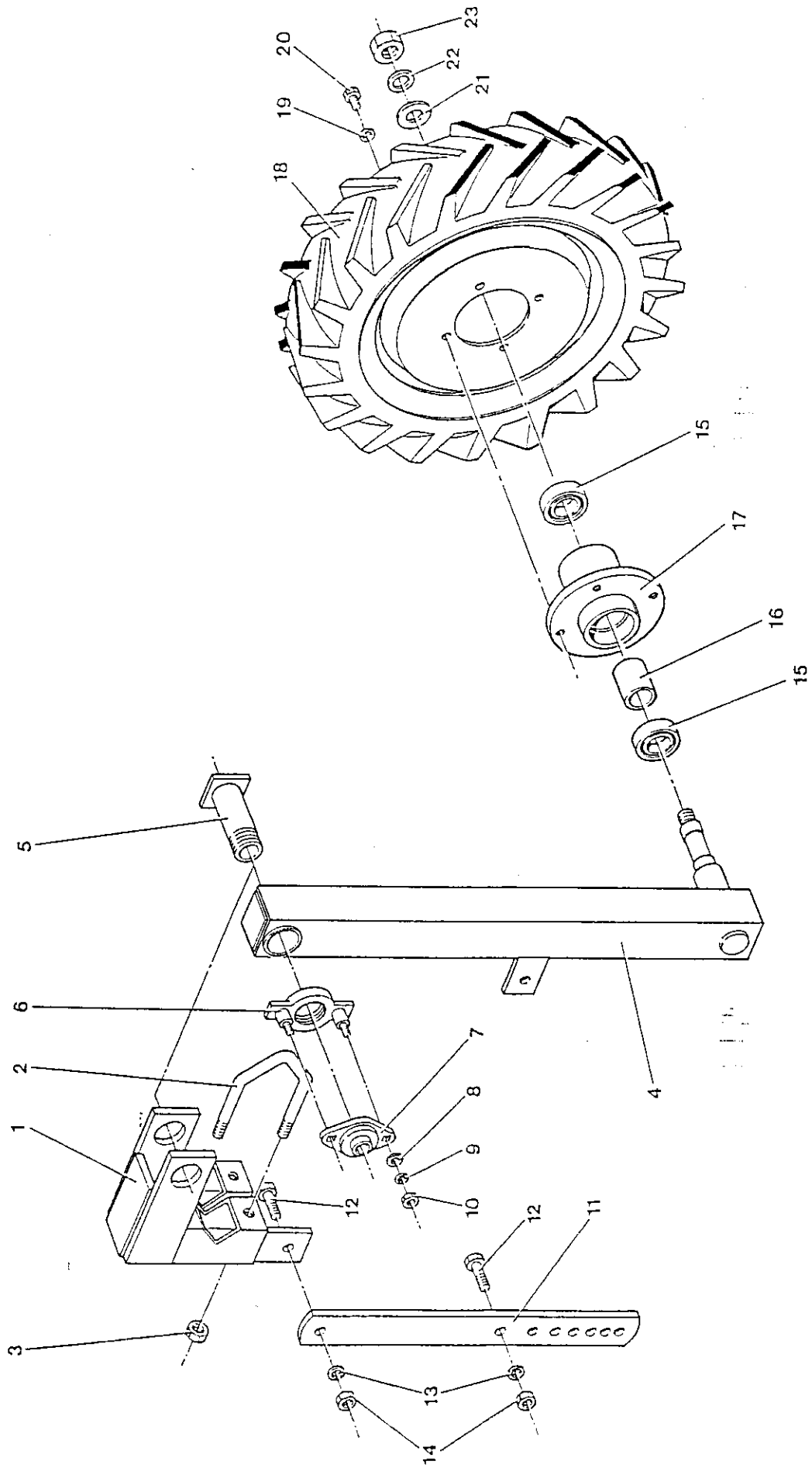
STANHAY ROBIN 870

SUPPORT WHEEL - MLD (R/H ILLUSTRATED)

Item No:	Part No:	Description:
1	7402367	R/H Support Wheel Arm
	7403054	L/H Support Wheel Arm
2	8002125	7001093 U-bolt c/w item 3
3	2303010	M16 Hexagon Nut
4	8010027	1905025 Ball Bearing c/w items 5-7
5	2309048	M8 x 25 Hexagon Head Screw
6	2311215	M8 Spring Washer
7	2303007	M8 Hexagon Nut
8	1901106	Ball Bearing
9	6900053	Bearing Spacer
10	7402369	Support Wheel Hub
11	5700004	Landwheel R/H (c/w tyre & tube)
	5700005	Landwheel L/H (c/w tyre & tube)
	5700001	Landwheel only
	5700002	Tyre
	5700003	Tube
12	2311216	M10 Spring Washer
13	2309061	M10 x 20 Hexagon Head Screw
14	2311093	M20 Flat Washer
15	2311219	M20 Spring Washer
16	2303011	M20 Hexagon Nut

KITS

7702355	Support Wheel Hub (items 8-10)
8002247	R/H Support Wheel - MLD - complete
8002718	L/H Support Wheel - MLD - complete



STANHAY ROBIN 870

SUPPORT WHEEL - ALD (R/H ILLUSTRATED)

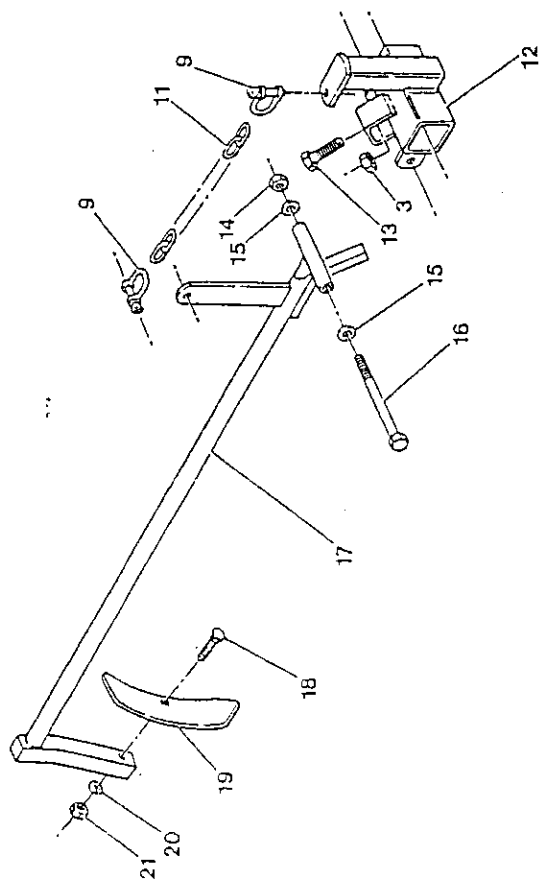
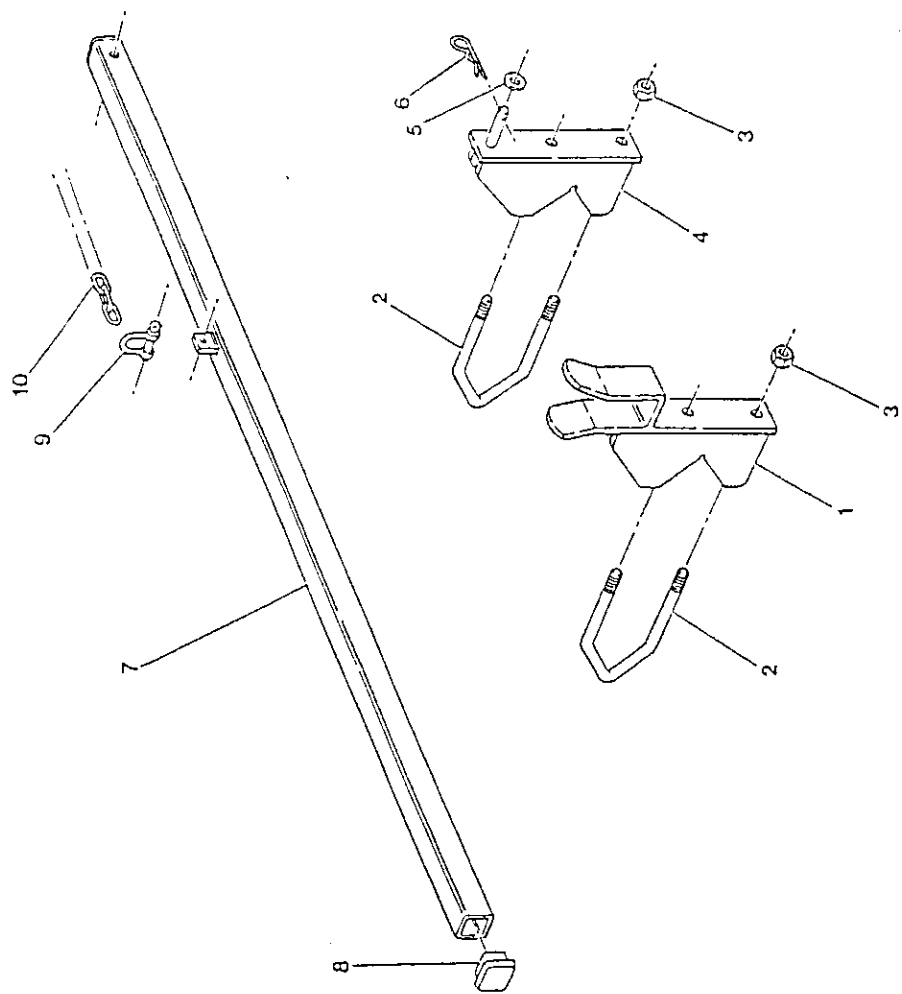
(To 19cm below standard)

Item No:	Part No:	Description:
1	7401087	R/H Wheel Arm
	7401088	L/H Wheel Arm
2	8002125	7001093 U/bolt c/w item 3
3	2303010	M16 Hexagon Nut
4	7402424	R/H Support Wheel Stem
	7403053	L/H Support Wheel Stem
5	7400064	Pivot Bolt
6	7401086	Pivot Bolt Nut
7	8010027	1905025 Ball Bearing c/w items 8-10
8	2311089	M8 Flat Washer
9	2311215	M8 Spring Washer
10	2303007	M8 Hexagon Nut
11	6902217	Wheel Stem Stay
12	2309080	M12 x 40 Hexagon Head Screw
13	2311217	M12 Spring Washer
14	2303009	M12 Hexagon Nut
15	1901106	Ball Bearing
16	6900053	Bearing Spacer
17	7402369	Support Wheel Hub
18	5700004	Landwheel R/H c/w tyre & tube
	5700005	Landwheel L/H c/w tyre & tube
	5700001	Landwheel only
	5700002	Tyre
	5700003	Tube
19	2311216	M10 Spring Washer
20	2309061	M10 x 20 Hexagon Head Screw
21	2311093	M20 Flat Washer
22	2311219	M20 Spring Washer
23	2303011	M20 Hexagon Nut

KITS

7702355	Support Wheel Hub (items 15-17)
*8002284	R/H Support Wheel - ALD - complete
*8002717	L/H Support Wheel - ALD - complete

*Includes Bearing Bracket 7700996, which should be mounted as close as possible to 4-speed shaft pulley.



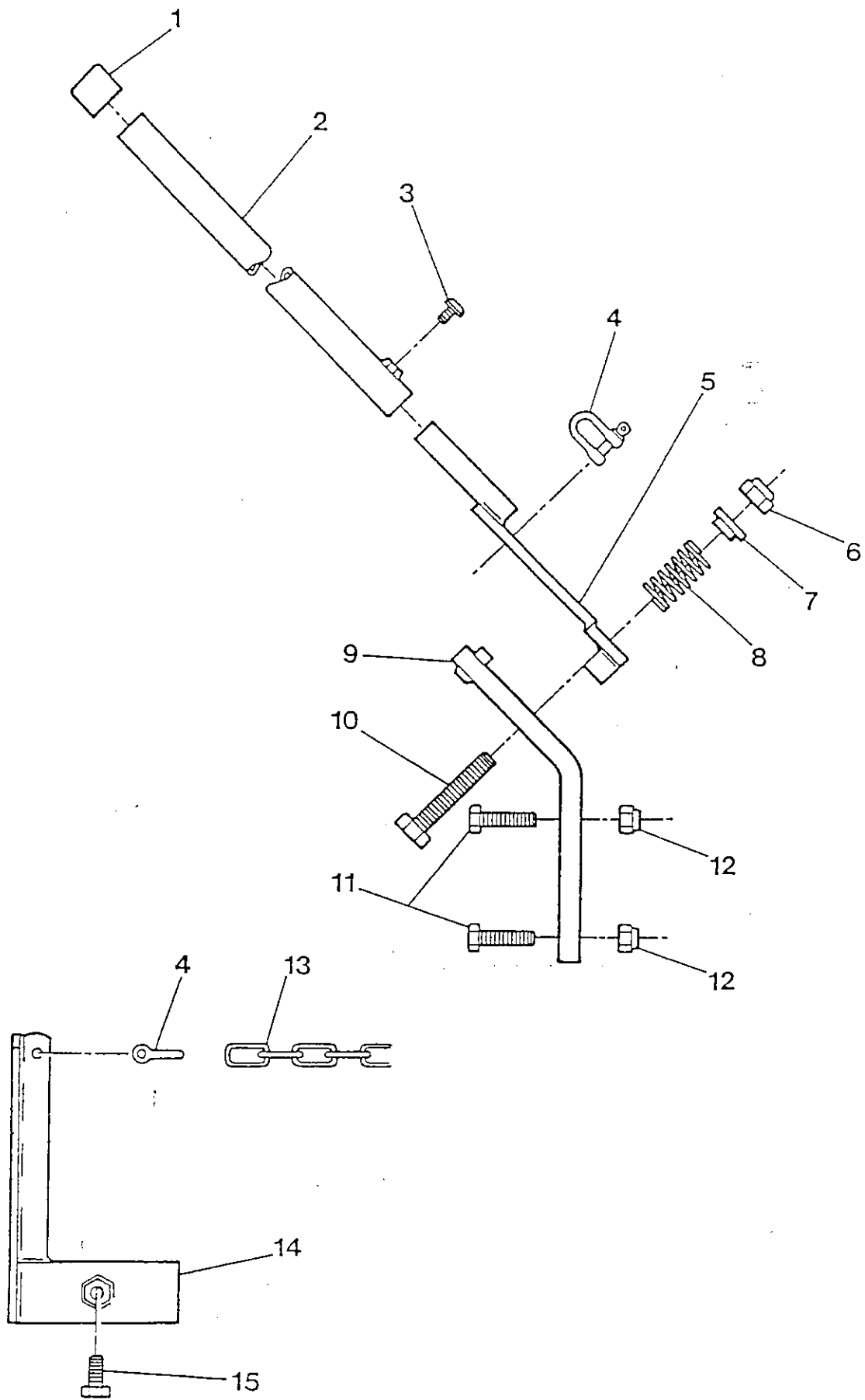
STANHAY ROBIN 870

MANUAL MARKERS

Item No:	Part No:	Description:
1	7402293	Marker Beam Guide
2	8002127	7002005 U-Bolt c/w item 3
3	2303010	M16 Hexagon Nut
4	7402292	Marker Beam Hinge
5	2311092	M16 Flat Washer
6	2316033	R-clip
7	7400825	1.37M Marker Beam
8	6402018	Plastic Plug
9	6408002	1/4 D-shackle
10	6900985	Connecting Chain
11	6902599	Marker Arm Chain - 8 links
12	7402521	Marker Arm Bracket
13	2306128	M16 x 50 Hexagon Head Bolt
14	2303094	M12 Nyloc Hexagon Nut
15	2311091	M12 Flat Washer
16	2306109	M12 x 130 Hexagon Head Bolt
17	7402522	Marker Arm
18	2306489	M10 x 40 Coach Bolt
19	6000002	Tine
20	2311216	M10 Spring Washer
21	2303008	M10 Hexagon Nut

KITS

7702230	Marker Beam Guide (items 1,2)
7702229	Marker Beam Hinge (items 2,4,5,6)
7702834	Marker Arm & Bracket (items 3,9, 11-21)
8002112	Pair of 1.37M Manual Markers



STANHAY ROBIN 870

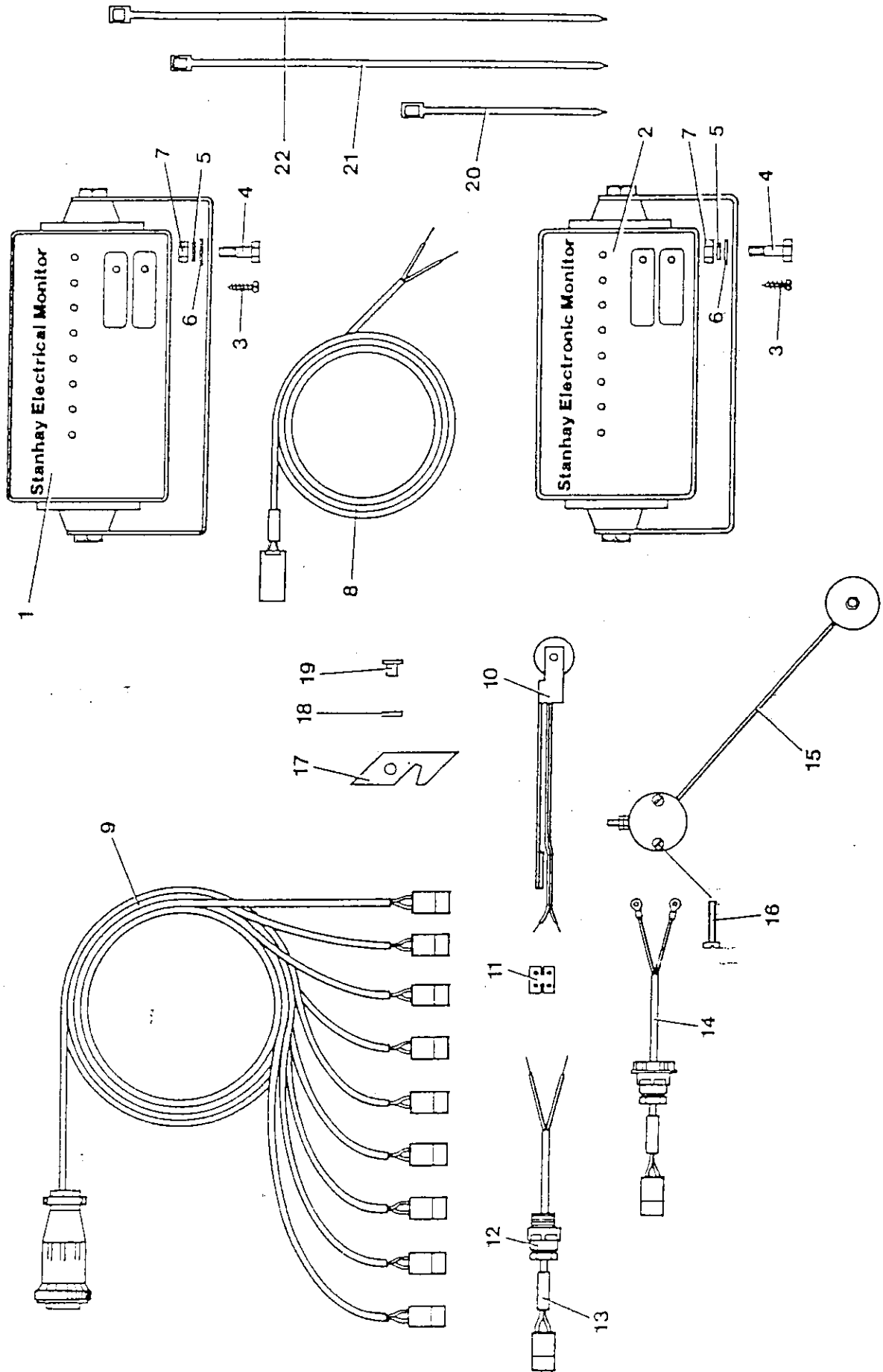
MANUAL MARKER

CHANGE-OVER KIT

Item No:	Part No:	Description
1	6403011	Plastic Ferrule
2	7403034	Marker Lever
3	2377079	M8 x 12 Socket Button Head Screw
4	6408002	1/4 D-shackle
5	7403034	Marker Handle
6	2303095	M16 Nyloc Hexagon Nut
7	2810209	Spring Cap
8	2701050	Compression Spring
9	7403033	Marker Handle Pivot Bracket
10	2306134	M16 x 80 Hexagon Head Bolt
11	2306097	M12 x 45 Hexagon Head Bolt
12	2303094	M12 Nyloc Hexagon Nut
13	6900985	Connecting Chain
14	7702864	Marker Beam Lifter c/w item 15
15	2309077	M12 x 25 Hexagon Head Screw

ASSEMBLIES & KITS

7702925	Marker Lever & Pivot (items 1-12)
8002686	Marker Change-Over Kit complete



STANHAY ROBIN 870

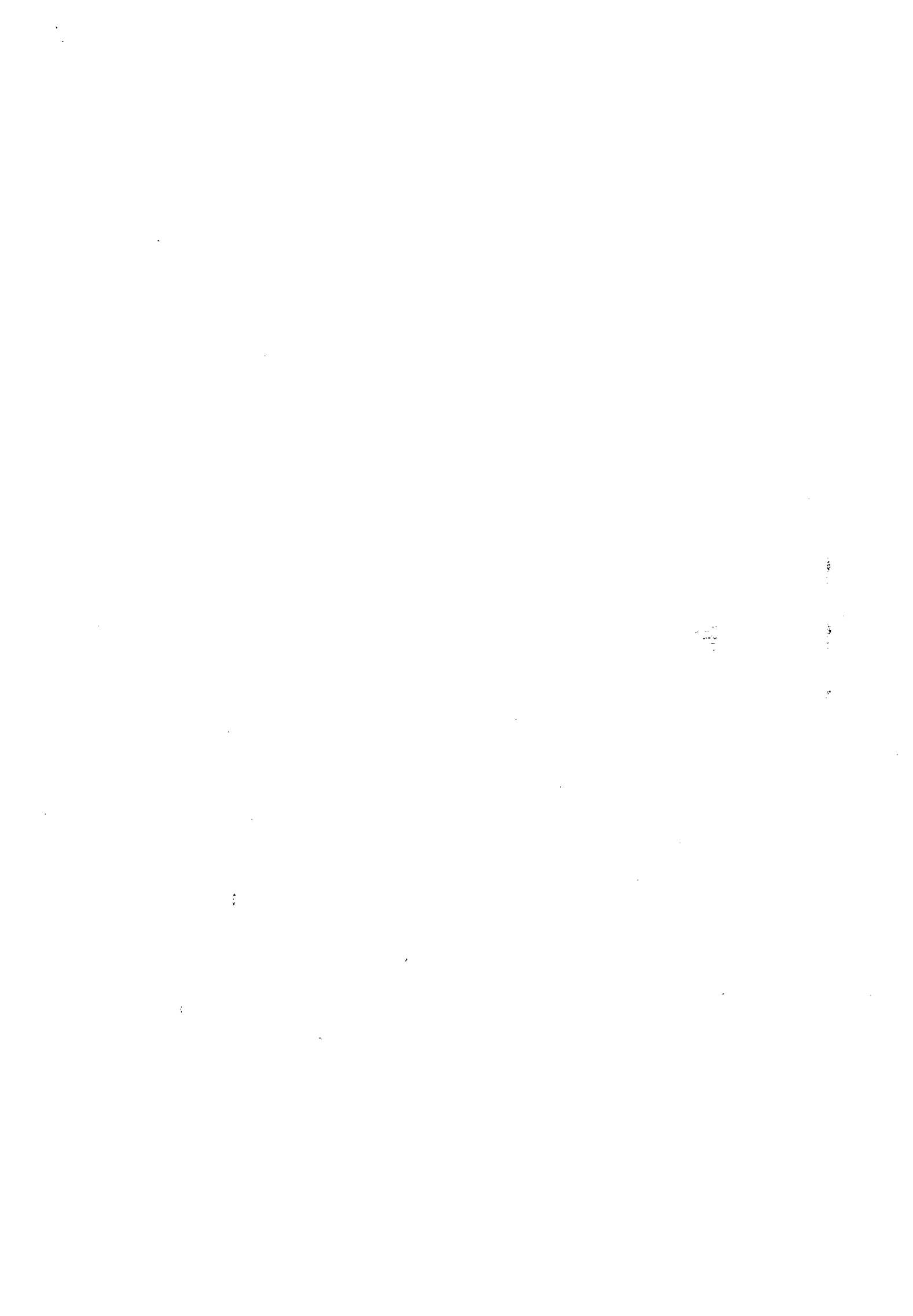
ELECTRICAL MONITORING SYSTEM

Item No:	Part No:	Description:
1	5301008	8 row Light Box c/w item 8
	5301010	16 row Light Box c/w item 8
2	5301023	4 row Electronic Box c/w item 8
	5301024	5 row Electronic Box c/w item 8
	5301025	6 row Electronic Box c/w item 8
	5301026	7 row Electronic Box c/w item 8
	5301027	8 row Electronic Box c/w item 8
	5301028	9 row Electronic Box c/w item 8
	5301029	10 row Electronic Box c/w item 8
	5301030	12 row Electronic Box c/w item 8
	5301031	15 row Electronic Box c/w item 8
3	2385052	No.8 x 8 Pan Head Self-Tapping Screw
4	2309034	M6 x 20 Hexagon Head Screw
5	2311214	M6 Spring Washer
6	2311088	M6 Flat Washer
7	2303006	M6 Hexagon Nut
8	5201039	Power Supply Lead
9	5201052	4 row Loom
	5201059	6 row Loom
	5201060	8 row Loom
10	7702476	Belt Tensioner & Reed Switch Assembly
	5208050	Reed Switch (bolt-on) c/w Screw & Nut
11	5209051	2-way Connector
12	5205004	Indicator Lead Gland
13	5201040	Indicator Lead
14	5201041	Hopper Monitor Lead
15	7700021	Hopper Monitor (straight arm)
16	2219288	5BA x 1 Slotted Cheese Head Screw - Brass
	2201706	5BA Hexagon Nut - Brass
17	7000038	Monitor Arm Catch
18	6900037	Arm Catch Spacer
19	2212559	Pop Rivet
20	5215044	Cable Tie
21	5215045	Cable Tie
22	5215046	Cable Tie

NOT SHOWN ON ILLUSTRATION

5201049	Power Supply Adaptor Lead (to power 2 boxes)
5201045	Extension Lead (Light Box to Loom)
5201046	Extension Lead (Loom to Metering Unit)
5201061	Unit/Loom Repair Kit (8 rows)
5203022	Loom Plug Kit (14 pin)
*5306004	1-8 row Electronic Conversion Kit
*5306005	9-16 row Electronic Conversion Kit
5306007	8 row Electrical Fascia Board
5306008	16 row Electrical Fascia Board
5306009	8 row Electronic Fascia Board
5306010	16 row Electronic Fascia Board

* State number of rows required.



Stanhay III

Stanhay Webb Limited

Houghton Road, Grantham, Lincs, NG31 6JE

Tel: 01476 515406 Fax: 01476 515407

TOP PARTS KITS

FOR STANHAY PRECISION SEED DRILLS AS SPECIFIED BELOW

KIT NO. WHEEL KITS

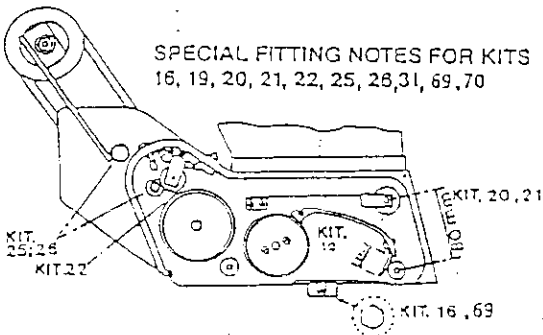
9	Wheel Bush Kit x 10	870,981
10	Rear Wheel Axle c/w bush x 3	981
11	Zero Pressure Front Axle c/w bush x 3	981
12	Front & Rear Axle c/w bush x 3	870
13	Scraper c/w plate x 3	WS,870,981

METERING UNIT AND CHASSIS KITS

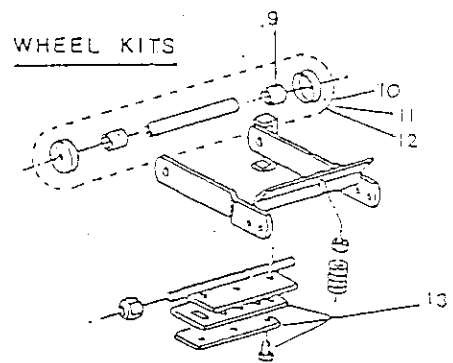
14	Unit Bearing x 4	870,981,985,840,830,820
15	Drive Tyre x 3	870,981,985,840,830,820
16	Update Kit x 1	870,981,840,830,820
17	Repeller Tyre HP Brown x 3	870,981,840,830,820
18	Repeller Tyre x 3	870,981,985,840,830,820
19	Rubber Flap Kit x 5	870,981,985
20	Belt Tensioner Electrical Type x 1	870,981,985,840,830,820
21	Belt Tensioner Non-electrical x 1	870,981,985,840,830,820
22	Indicator Assembly x 1	870
23	Hopper Seal Kit x 3	870,981,985,840,830,820
24	Chain Case Seal Kit x 3	870,981,985,840,830,820
25	Drive Sprocket Kit x 1	870,981,785,985,590,592,585
26	Chain & Sprocket Kit x 1	870,981,985,840,830,820
27	Drive Shaft Bearing Kit x 1	870,981,785,985,590,592,585
28	Chassis Bolt Kit x 12	870
31	Repeller Spindle Screw Type x 1	870,981,985,840,820
70	Repeller Wheel - Screw on x 1	870,981,985,840,820
66	Solid Rep. Tyre small seeds x 3	870,981,985,840,820
34	Seeder Chute Kit x 1	870,981,985,840,820
35	Spring Rod Kit x 1	870,840
36	Spring Rod Kit x 1	981
69	Adjustable Base Pin x 1	870,985,840,820

MULTI LINE BASE KITS (overall width)

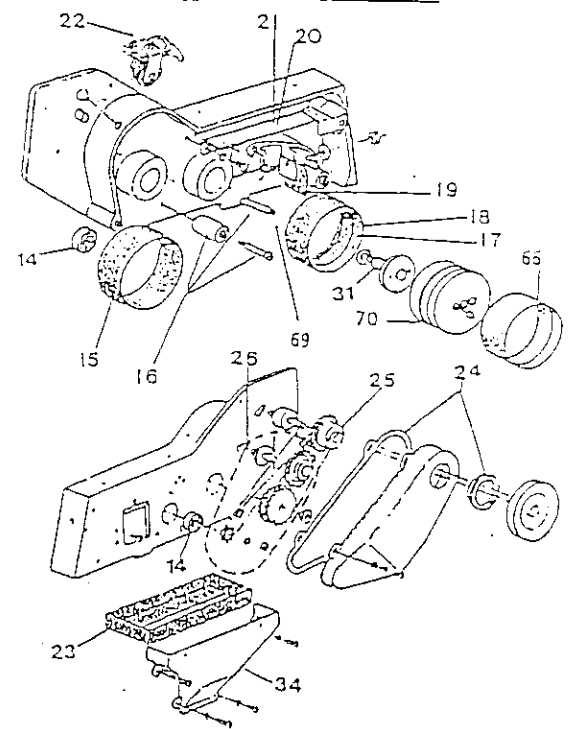
37	Coulter Base 100mm x 3 rib Kit x 1	870,981,985,840,820
38	Coulter Base 50mm x 2 rib Kit x 1	870,981,985,840,820
39	Coulter Base 75mm x 2 rib Kit x 1	870,981,985,840,820
40	Coulter Base 50mm x 3 rib Kit x 1	870,981,985,840,820
41	Coulter Base 75mm x 3 rib Kit x 1	870,981,985,840,820



SPECIAL FITTING NOTES FOR KITS
16, 19, 20, 21, 22, 25, 28, 31, 69, 70

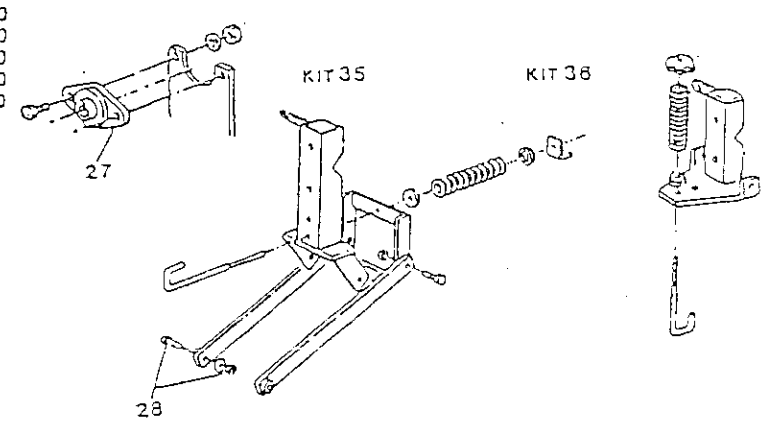


METERING UNIT KITS



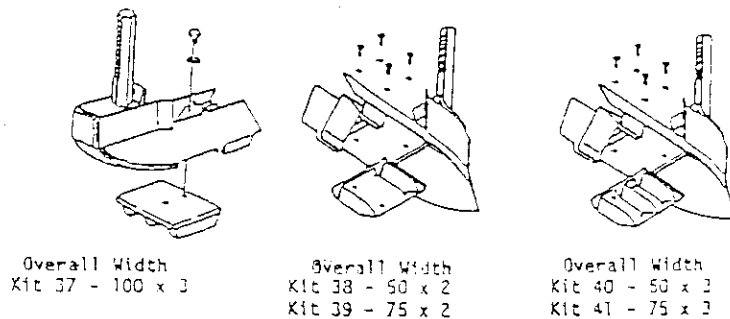
CHASSIS KITS

SPRING ROD KITS



- KIT 16 as per diagram
- KIT 19 as per diagram 27MM
- KIT 20-21 adjust to 80mm with seed belt removed
- KIT 22 adjust indicator wheel to .75mm clearance from drive wheel with seed belt removed
- KIT 25-26 chain adjuster nuts
- Kit 31, 70 shim out Spindle so that the repeller wheel fits centrally in the unit

MULTI LINE BASE KITS



Overall Width
Kit 37 - 100 x 3
Overall Width
Kit 38 - 50 x 2
Kit 39 - 75 x 2
Overall Width
Kit 40 - 50 x 3
Kit 41 - 75 x 2

STANHAY WEBB WARRANTY POLICY



LIMITATION OF LIABILITY

1. Stanhay Webb Ltd (the Company) does not give any Warranty in respect of its products except the limited Warranty contained in paragraphs 3-5 below which is expressly in lieu of all other warranties or conditions expressed or implied and of all other obligations or liabilities on its part. The company supplies its products on the express condition that the purchaser is solely responsible for determining the suitability of the product for his requirements and conditions of use. Stanhay Webb will in no event be liable for any incidental or consequential damages of any nature or source allegedly incurred through defects, incorrect operation, or loss of use of the product, whatsoever, nor for any sum in excess of the price received by the Company for the goods for which liability is claimed. The Company is not responsible for the performance of its products: it is the purchaser's sole responsibility to ensure that any Stanhay Webb product is performing to his satisfaction at all times, and this responsibility overrides absolutely any suggestions or assistance offered in good faith by the Company or its agents.
2. Stanhay Webb operates a policy of continuous improvement, and reserves the right to change specifications at any time without prior notice, and without incurring any obligations to make such changes to products previously purchased.

LIMITED WARRANTY

3. Stanhay Webb Ltd warrants to its authorised Distributor or Dealer all new products supplied of its manufacture, when correctly assembled, operated and serviced, to be free from defects in material and workmanship, for a period of nine (9) months (the warranty period) after the date of delivery by the Distributor or Dealer to the original retail purchaser. Its obligations under this Warranty are limited to making good on products for which payment to the Company is not overdue any part or parts (excluding normal wear) of its own manufacture which shall have been reported in writing to the Company within thirty (30) days from date of failure thereof, and which the Company's examination shall disclose to its satisfaction to have been defective. Stanhay Webb repair parts are warranted similarly to ninety (90) days from date of replacement or for the unexpired warranty period of the applicable Stanhay Webb machine, whichever is the longer.
4. Due to the particular nature of Stanhay Webb products, this Warranty is void absolutely if any part not supplied by the Company is used in assembly or repair, or if the product has been altered, assembled, repaired or used in any way, configuration or conditions differing from the written recommendations and instructions of the Company (whose decision is final).
5. In the event of components supplied by Stanhay Webb not of its own manufacture for which payment to the Company is not overdue being reported in writing as defective during the warranty period, Stanhay Webb will endeavour to claim against the manufacturer of such components and in the event of any claim being successful will pass the benefit on to the customer.

CONDITIONS OF SUPPLY

6. No warranties other than those expressly noted herein are given, and no one is authorized to alter, modify or enlarge this Warranty beyond the warranties expressed.
7. This product is supplied subject to the Terms of Trading of Stanhay Webb Ltd as reproduced on the inside covers of the Company's price list.

NOTE: WARRANTY REGISTRATION FORM MUST BE RETURNED TO STANHAY WEBB LIMITED. WARRANTY VOID IF MACHINE IS NOT REGISTERED.

PRECISION DRILL WARRANTY REGISTRATION FORM

Demonstration Installation Date

Conducted by (name)..... (dealer).....

for (grower's name)..... (address).....

(contact) (tel no.)

Conducted at (location)..... In barn/yard/field

Machine Model No:	Serial No:	No of rows:
Crop type:	Area drilled:	
Chosen disc:	selector wheel:	
seedbelt:	gear setting:	

ACKNOWLEDGEMENT BY PURCHASER

This acknowledgement is to be completed for every new drill to validate warranty.

1. The following checks and settings have been explained to me:

All drills

- Row spacing
- Setting charts
- Metering units
- Drive system
- Toolbar height
- Tractor top link
- Drilling depth
- Field checks
- Maintenance

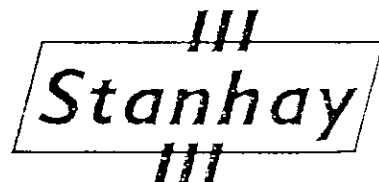
As appropriate

- Pivots and limiters
- Transport system
- Bout markers
- Clod deflectors
- Seedpress wheels
- Power take off
- Fan
- Gauges

2. I acknowledge that the Stanhay Webb Warranty Policy applies to this drill and in particular I acknowledge that I (not Stanhay or my dealer) am responsible for ensuring that it is performing to my satisfaction.

Signed:

Date:



Stanhay Webb Limited
Houghton Road, Grantham, Lincs, NG31 6JE
Tel: 01476 515406 Fax: 01476 515407

THANK YOU FOR YOUR CO-OPERATION

(After completion, this form to be retained by the selling dealer, and copied to Stanhay.)

EC DECLARATION OF CONFORMITY

Type of Machine: Precision Seed Planting Machine
Name of model : Stanhay S870
Serial Number : Number of rows:
Manufacturer : Stanhay Webb Limited
Houghton Road,
Grantham,
Lincs, NG31 6JE,
England.
Tel: +44(0) 1476 515406
Fax: +44(0) 1476 515407



Technical Manager

We, the manufacturers, hereby declare that this machine, when assembled to our design, conforms with the Essential Health and Safety Requirements of the European Union.

Wij, de fabrikanten, verklaren hierbij dat deze uitrusting, indien opgebouwd volgens ons ontwerp, voldoet aan de gezondheids- en veiligheidsvoorschriften van de Europese Unie.

Assemblé conformément à nos ordres, nous, les fabricants, déclarons que cette machine répond aux normes d'Hygiène et Sécurité au Travail de la CE.

Noi, I fabbricanti, dichiariamo che questo maccinario, quando montato secondo il nostro disegno, si conforma ai requisiti essenziali di salute e di sicurezza della Comunità Europea.

Wenn diese Maschine entsprechend unserer Konstruktion zusammengesetzt wird, erklären wir, daß sie den Arbeitsschutzvorschriften der Europäischen Gemeinschaft entspricht.

Nosotros los fabricantes declaramos que este equipo, realizando el montaje según nuestro diseño, se ajusta a las reglas esenciales de salud y seguridad de la Union Europea.

Vi, fabrikanten, erklærer hermed at denne maskine, når den er monteret ifølge vores konstruktion, er i overensstemmelse med de essentielle sundhed og sikkerhedskrav indefor EU.

Me valmistajana ilmoitamme täten, että ohjeittemme mukaisesti asennettuna tämä kone täyttää Euroopan Unionin olennaiset terveys- ja turvallisuusvaatimukset.

Nós os fabricantes declaramos que este equipamento, quando montado conforme nosso desenho, ajusta-se às regras essenciais de saúde e segurança da Comunidade Europeia.

Tillverkaren försäkrar härmed att denna maskin, efter sammansättning enligt vår konstruktion, uppfyller hälsooch säkerhetskrav inom EU.