HYDRAULIC PICK UP HEADER

Shelbourne REYNOLDS

3.6m, 4.2m & 4.8m OPERATORS & HEADER PARTS MANUAL

(2000 & ON)
ORIGINAL INSTRUCTIONS



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Issue 16/10/2020









EC Declaration of conformity for machinery

(Machinery Directive 2006/42/EC, Annex II., sub. A)

Shelbourne Reynolds Engineering Ltd.

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Address:

| | Bury St Edn Suffolk. England. IP31 2AR | nunds, | |
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| | | n (established in the cal file (to the autho | European Community/EEA) rities on request): |
| Name : | Mr. Neil Sm | ith | |
| Address : | As stated at | oove. | |
| Herewith we decla | re that : | DESIGNATION: | PICK-UP HEADER |
| | | MODEL: | |
| | | TYPE: MACHINE No.: | |
| | | SERIAL No.: | |
| • is in conform | nity with the re | elevant provisions o | f the Machinery Directive (2006/42/EC) |
| Neil Smith Director Place : Stan | ton, England | . Date | ; : |

OPERATORS MANUAL

CONTENTS

| Section 1 | INTRODUCTION |
|------------|--|
| 1.1 | Foreword |
| 1.2 | Improvements and changes |
| 1.3 | Service Parts |
| 1.4 | Machine Identification |
| 1.5 | Standard warranty policy |
| Section 2 | SAFETY PROCEDURES |
| 2.1 | Accident prevention |
| 2.2 | Before starting the machine |
| 2.3 | The machine in the field |
| 2.4 | Leaving the machine |
| 2.5 | Servicing the pick up header |
| 2.6 | Header attachment and detachment |
| Section 3 | SPECIFICATION AND DESCRIPTION |
| Section 4 | TRANSPORTATION |
| Section 5 | PREPARATION FOR USE |
| 5.1 | Mounting the pick up header |
| 5.2 | Levelling the header |
| 5.3 | Angle of pick up header |
| 5.4 | Aligning header drive |
| 5.5 | Electro-hydraulic control box installation |
| 5.6 | Draper position settings |
| 5.7 5.8 | Draper skid settings (optional equipment) Draper wheels and float springs settings (optional equipment) |
| 5.9 | Setting the draper to the optimum angle |
| 5.10 | Stripper plate settings |
| 5.11 | Header skids |
| 5.12 | Header height indicator |
| 5.13 | Auger flight and flight extensions |
| 5.14 | Crop slides (optional equipment) |
| Section 6 | FIELD OPERATION |
| 6.1 | Direction of travel |
| 6.2 | Header / draper height settings |
| 6.3 | Forward speed |
| 6.4 | Draper speed |
| 6.5 | Auger / finger position |
| 6.6 | Auger blockage / reversing |
| 6.7 | Picking up the swath |
| 6.8 | Adjustment / troubleshooting charts |

| Section 7 | ADJUSTMENTS AND MAINTENANCE |
|------------|--|
| 7.1 | Angle of pick up header |
| 7.2 | Aligning header drive |
| 7.3 | Draper position |
| 7.4 | Draper skid settings (optional equipment) |
| 7.5 | Draper wheels settings (optional equipment) |
| 7.6 | Setting draper to optimum angle (optional skids fitted) |
| 7.7 | Setting draper springs and angular movement (optional wheels and springs fitted) |
| 7.8 | Draper belt tensioning |
| 7.9 | Draper belt tracking |
| 7.10 | Changing draper belt |
| 7.11 | Changing draper plastic pick up tines |
| 7.12 | Stripper plate settings |
| 7.13 | Header skids |
| 7.14 | Auger position / float settings |
| 7.15 | Auger fingers |
| 7.16 | Auger stripper plates |
| 7.17 | Auger flight extensions |
| 7.18 | Hydraulic oil reservoir |
| 7.19 | Hydraulic filter |
| 7.20 | Hydraulic relief valves |
| 7.21 | Draper metal tines and slats (optional equipment) |
| 7.22 | Crop slides (optional equipment) |
| Section 8 | LUBRICATION |
| Section 9 | MACHINE STORAGE |
| Section 10 | PARTS LISTING |

SECTION 1

INTRODUCTION

1.1 FOREWORD

This manual will assist the operator in setting the pick up header and combine combination to give optimum throughputs and loss levels in particular crops. It should be read carefully before putting the machine to work.



1.2 IMPROVEMENTS AND CHANGES

Shelbourne Reynolds Engineering are continually improving their products to meet the farmers needs and therefore reserve the right to make improvements and changes when practical to do so, without incurring any obligation to make changes and additions to equipment which has been sold previously.

1.3 SERVICE PARTS

Use guaranteed and genuine Shelbourne Reynolds Engineering service parts on Shelbourne Reynolds machinery to ensure maximum life and best performance. These are available through your Shelbourne Reynolds Engineering dealer.

When ordering service parts always quote the model, serial number and machine number.

1.4 MACHINE IDENTIFICATION

The serial and machine numbers of the pick up header are printed on a plate located on the right hand side sheet of the mainframe.

The machine number of the adaptor plate is printed on a plate located on the top right hand corner of the adaptor plate.



1.5 STANDARD WARRANTY POLICY

1.5.1 MACHINE REGISTRATION

To qualify for the full benefit of the warranty set out in clause 1.5.2 of this warranty policy (the "Warranty"), it is the buyer's responsibility to ensure that the selling dealer has completed the warranty registration details and that they are submitted to Shelbourne Reynolds Engineering Ltd. within 30 days from the date of delivery. Using the machine implies the knowledge and acceptance of these warranty terms.

1.5.2 NEW MACHINE WARRANTY

All new machines supplied by **Shelbourne Reynolds Engineering Ltd.** ("Shelbourne"), are warranted to the original purchaser, under normal use and service, to be free from defects in material and workmanship for a period of 12 months from the date of delivery to the original purchaser (the **Warranty Period**), subject to the terms set out in this warranty policy.

No other warranty is given by Shelbourne regarding the machine, and no person has any authority to give any such warranty for or on behalf of Shelbourne, other than where given in writing signed by a director of Shelbourne.

1.5.3 WARRANTY CLAIMS

All claims must be submitted by a Shelbourne authorised dealer providing that the original purchaser has;

- 1) given notice in writing with full information regarding the failure, to Shelbourne (or the Shelbourne authorised dealer) during the Warranty Period, and within 15 days of the failure:
- 2) given Shelbourne (or the Shelbourne authorised dealer) a reasonable opportunity of examining the machine or the damaged or defective parts;
- 3) if requested by Shelbourne, returned the damaged or defective parts (via the original Shelbourne authorised dealer) within 30 days of notification of a defect;

then Shelbourne shall, at its opinion, repair or replace the defective parts, or refund the price of the defective parts.

1.5.4 REPAIR COSTS

The original purchaser or Shelbourne authorised dealer shall not repair, or arrange for a repair, of the machine without the prior written authority of Shelbourne. Such authority may only be given by Shelbourne service personnel. **Shelbourne will not be liable for the cost of any repairs carried out without its prior written consent to the work being done.**

If Shelbourne authorises a repair of the machine, all claims for repair costs must be submitted to Shelbourne by a Shelbourne authorised dealer within 15 days of the date of repair on a Shelbourne Warranty Claim Form.

Repairs should be completed by a Shelbourne authorised dealer (or another repairer with the prior written consent of Shelbourne).

The submission of a claim is not a guarantee of payment. Shelbourne will only reimburse the reasonable costs and expenses incurred in connection with any repair. The decision reached by Shelbourne is final.

1.5.5 EXCLUSIONS

Shelbourne will not be liable for the machine's failure to comply with the Warranty in any of the following circumstances:

- 1) damage due to improper use or abusive operation
- 2) damage or depreciation caused by normal wear and tear;
- 3) the machine has been subjected to alteration, modification or fitment of non-genuine Shelbourne parts without the prior consent of Shelbourne;
- 4) accidental damage, including (but not limited to) damage caused by foreign objects (e.g. stones, metals and any materials other than those suitable for the machines intended use);

- 5) the machine has been neglected and not maintained and serviced fully in accordance with the details and maintenance schedule set out in the Operators Manual, and only using Shelbourne genuine parts. Proof of service work may be requested prior to approval of any claim under the Warranty;
- 6) failure due to use of incorrect oil or lubricants, contamination of the oil, or oil which has served its useful life or failure to carry out proper maintenance as recommended in the Shelbourne Operators Manual;
- 7) where the original purchaser has continued to use the machine after they became (or should reasonably have become) aware of the defect with the machine.

Continued use of the machine after a defect is discovered could cause further failures for which Shelbourne cannot be held liable and may also have safety implications.

- 8) the Shelbourne serial number plate on the machine has been removed or altered;
- 9) failure by the customer to release the machine for repair will not be accepted as a reason for delay in repair or submitting warranty claims.

The Warranty shall not apply in respect of any:

- wearing items which includes flails, skids, blades or any other items which are considered to be a normal wearing or consumable items such as chains, bearings and belts;
- 2) hoses that have suffered external damage, unless the damage is a direct result of poor routing during assembly. Complete hoses must be returned for warranty within this period. Any which have been cut or repaired will be rejected;
- 3) repeat or additional repairs resulting from incorrect diagnostics, unless advised by Shelbourne.
- 4) poor-quality previous repair work.

1.5.6 LIMITATIONS OF LIABILITY

Shelbourne and the Shelbourne authorised dealer shall not be liable to the original purchaser under any circumstance for injuries, death, property damage or damages of any kind whatsoever directly, consequential or contingent to any person or property caused by the use of the machine.

Shelbourne shall not be liable for any consequential loss such as the following costs or types of loss (whether direct or indirect):

- 1) Loss of profit;
- 2) Loss of or damage to goodwill;
- 3) Loss of sales or business;
- 4) Loss of agreements or contracts or business opportunity;
- 5) The cost of lost consumables (such as oil);

- 6) Any loss or costs arising from the inability to use the machine due to any defect with the machine, and during the time taken to repair or replace the machine;
- 7) The cost of hire or purchase of any replacement machine;
- 8) Recovery of broken-down machine;
- 9) Damage to or loss of crops or vegetation;
- 10) Damage to the carrying tractor, loader or combine;
- 11) Damage caused by exceeding the tractor, loader or combine OEM (original equipment manufacturers) specification for implement mounting and hitch capability;
- 12) Any other indirect or consequential loss;

In view of the Warranty given by Shelbourne, the terms implied by sections 13 to 15 of the Sale of Goods Act 1979, and all other implied warranties or conditions regarding the quality or suitability of the machine, are, to the fullest extent permitted by law, excluded from this warranty policy and any contract or agreement between Shelbourne and either the original purchaser or the Shelbourne authorised dealer.

Nothing in this warranty policy limits any liability which cannot legally be limited, including liability for:

- 1) death or personal injury caused by negligence;
- 2) fraud or fraudulent misrepresentation;
- 3) breach of the terms implied by section 12 of the Sale of Goods Act 1979 (title and quiet possession); and
- 4) breach of section 2 of the Consumer Protection Act 1987.

1.5.7 WARRANTY ON SPARE PARTS

Shelbourne warrants that any spare part or component supplied by Shelbourne in accordance with this limited warranty are free from defects in material or workmanship from the date of sale to the original purchaser for 6 months, subject to the conditions and limitations in clauses 1.5.4 to 1.5.6 of this warranty policy. Shelbourne will at its option, either repair or replace the defective part free of charge providing that any warranty claim is supported with a copy of the invoice to the end user for the failed part. Original Purchaser shall be responsible for labour and all freight charges to and from the place where the warranty work is performed.

Shelbourne Reynolds Engineering Ltd. cannot be held responsible for any failures or safety implications arising from the use of non-genuine parts. Use of non-genuine parts may seriously affect the machine's performance and safety.

1.5.8 TRANSFER OF WARRANTY

Shelbourne may at its sole discretion allow this warranty to be transferred to a subsequent owner of the machinery for the balance of the Warranty Period, subject to all the warranty conditions being met and only with Shelbourne giving prior written consent.

1.5.9 EXPORT CUSTOMERS

If you are based outside of the UK, warranty terms and conditions outlined above may differ depending on your market. Please contact Shelbourne Reynolds Engineering Ltd. for further information.

SECTION 2 <u>SAFETY PROCEDURES</u>

2.1 ACCIDENT PREVENTION

The following safety instructions are applicable for all chapters of this manual.

Careful heed must be paid not only to the safety instructions contained in this operating manual but also to the accident prevention regulations governing the operation of agricultural machinery.

Accident programmes can only prevent accidents with the co-operation of the persons responsible for the operation of the equipment.

For safety of yourself and others, operate equipment with care and do not take unnecessary risks which could cause an accident.

The combine manufacturer's operators manual safety precautions should be adhered to along with the following additional safety precautions listed when using a pick up header

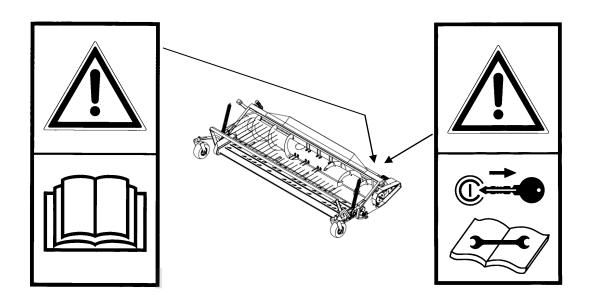
CAUTION



In addition to the following list, this symbol will appear throughout this manual whenever your safety is involved.

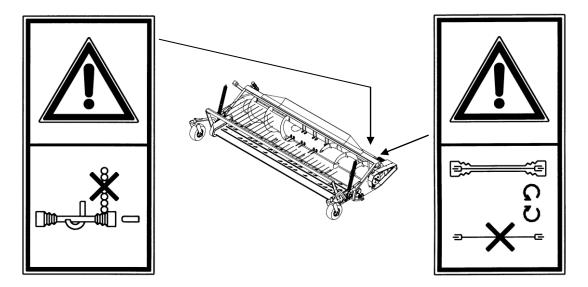
DANGER SYMBOLS

On the machine - the following symbols appear on the machine and are for your safety and the safety of other people. Ensure that you identify each symbol and understand it's warning.



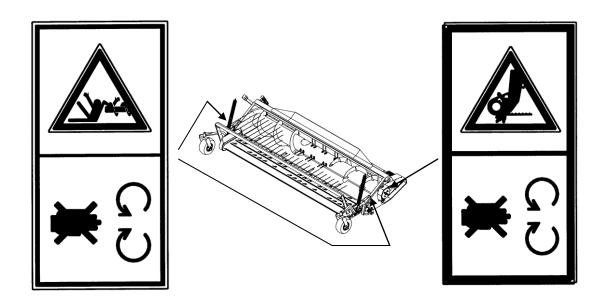
Carefully read the operating manual before handling the machine.

Stop the engine and remove the key from the tractor before carrying-out any work on the machine.

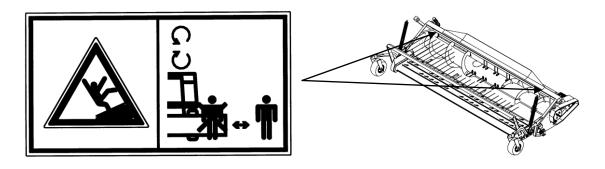


When the PTO drive shaft is disconnected it must be supported on it's correct support. It must not be hung on it's chain.

All PTO guards must be securely in-place before the engine is started. Do not Remove any guard whilst the engine is running. Severe injury may result from moving and rotating parts.



Beware of rotating auger and draper belt. Severe injury may result from falling onto the auger or the draper belt. All guards must be securely in-place before the engine is started. Do not remove any guard whilst the engine is running. Severe injury may result from moving and rotating parts.



Do not stand in front of header. Stand clear of header. Disengage header drive, shut off engine and remove key before servicing or unclogging header.

GENERAL SAFETY

Please read all safety instructions contained in this operating manual with the utmost care and also observe all warning signs attached to the Pick up header. These warning signs must be kept in a legible condition and must be replaced if missing or damaged. This is especially the case when whole sections are replaced when making repairs. Warning signs are available from your dealer or importer.

Follow these instructions to prevent accidents. These instructions must also be made available to all other users. You are advised to refrain from any working methods which may be hazardous.

PROPER USE

Shelbourne Reynolds Pick-up Headers are based on state-of-the-art technology and are manufactured in accordance with recognised safety requirements. Nevertheless the use of the header does not preclude the risk of injury to the user or third parties and / or the risk of damage to the header itself or to other materials or items of equipment.

Always make sure that the **Shelbourne Reynolds Pick-up Header** is in a technically perfect condition and that it is used properly and for it's intended purpose and entirely in accordance with the instructions given in this manual. Any malfunctions or defects which might affect the safe operation or the header must be immediately eliminated.

The **Shelbourne Reynolds Pick-up Header** must be used, maintained and repaired only by persons who are familiar with it's working and have been made fully conversant with the risks involved.

OEM replacement parts and accessories from Shelbourne Reynolds have been specially designed for use with the **Shelbourne Reynolds Pick-up Header**. Any replacement parts and accessories not supplied by Shelbourne Reynolds have not been tested and approved by us. The installation and/or the use of non-Shelbourne Reynolds products may under certain circumstances have a negative influence on the given design features of your header and may therefore adversely affect it's safe and reliable operation and your safety. Shelbourne Reynolds cannot therefore be held liable for damage or injury caused by the use of non-OEM replacement parts or accessories.

The **Shelbourne Reynolds Pick-up Header** is intended for use on typical farms and to be employed in picking up suitable swathed crops. Any uses other than those for which the header is intended, such as transportation, will automatically exempt Shelbourne Reynolds or the supplier from it's/his liability in respect of ensuing damage. Such cases of improper use will therefore be entirely at the user's own risk.

All relevant accident prevention regulations, as well as other generally acknowledged health and safety regulations and road traffic regulations must be strictly observed.

Improper use also comprises failure to observe the instructions given in this operating manual and the manufacturer's maintenance and servicing requirements.

OPERATIONAL SAFETY

The **Shelbourne Reynolds Pick-up Header** must not be put into operation until the user has been given proper initial instructions either by the dealer or by one of Shelbourne Reynolds' representatives or employees.

The **Shelbourne Reynolds Pick-up Header** may be used only if all safety devices, e.g. detachable guards, are fitted and in proper working order.

Nuts and bolts should be checked at regular intervals and tightened if necessary.

Tyre pressures must also be checked regularly.

In the event of a malfunction, immediately cease operation and secure the **Shelbourne Reynolds Pick-up Header** in it's stationary position. Malfunctions must be eliminated immediately.

No liability for consequential damage

Even though your **Shelbourne Reynolds Pick-up Header** has been manufactured with the utmost care and you are using it properly, fluctuations in performance may still occur.

It is the duty of the operator / user to ensure that foreign objects, e.g. stones, metal objects etc. are not allowed to enter the header. Failure to observe this may result in damage to the header and / or injury to the operator / user and / or damage to the combine.

Any claims for damages not directly incurred by the **Shelbourne Reynolds Pick-up Header** cannot be accepted. By the same token, Shelbourne Reynolds cannot be held liable for any consequential damage resulting from incorrect use of the header.

ROAD SAFETY

Road traffic regulations must be observed when taking the **Shelbourne Reynolds Pick-up Header** on roads, paths and other public places. The header must be in a road-worthy condition.

Observe the maximum permissible width for road transport and fit all necessary warning signs and guards.

Fully secure guards and covers so that they cannot cause injury or damage to other users of the public place.

Use only the approved Shelbourne Reynolds trailer for transporting the **Shelbourne Reynolds Pick-up-Header** header and attach it securely to the tow hitch on the towing vehicle.

Ensure that all braking systems and lighting systems on the combine or towing vehicle (if using a trailer) are in full working order and that they can be fully and correctly operated.

Disconnect all hydraulic connections and / or the PTO drive shaft from the header so that it cannot be inadvertently operated if transported on combine.

No person other than the operator may be allowed to ride on the combine.

When coupling the Shelbourne Reynolds Pick-up Header to the combine.

The coupling and uncoupling of the header is the same as for the combine's cutterbar. Follow the procedure outlined in the manufacturer's operators book also.

When using the PTO shaft

Use only the universal joint shaft which is supplied with the **Shelbourne Reynolds Pick-up Header** and is intended for use with it. Ensure that it is fitted with the prescribed protective equipment (protective tube and funnel-shaped PTO shaft guard must be fitted). Make sure that the combine engine and the PTO shaft are switched off before proceeding to fit the universal joint shaft.

Do not modify the length of the supplied PTO shaft, guard cones and tubes. Ensure the guards are secured in such a way that they cannot rotate with the shaft.

Be absolutely sure that there is nobody standing in dangerous proximity to the header or combine when you switch on the PTO shaft.

When using the hydraulic system

Do not connect the hydraulic hoses to the combine's hydraulic system until you have made sure that the system is at zero pressure on both the combine and the header. The hydraulic system generates extremely high pressures. All piping, hoses and connections must therefore be checked regularly for leakage and visible external damage. Use proper and thorough means of searching for leakage and repair all damage immediately. Spurting hydraulic oil can cause injuries and fires. Call a doctor immediately in the event of injury.

2.2 BEFORE STARTING THE MACHINE

- 1. Read the manual thoroughly.
- Check that all guards are properly secured.
- 3. Ensure that no person is working on or inside the machine.
- 4. Check that all observers are clear of the machine. Warn bystanders by sounding the horn several times.

2.3 THE MACHINE IN THE FIELD

- 5. Do not permit anyone other than the operator to ride on the combine.
- 6. Always stop the engine and apply handbrake before removing or opening any guards or clearing a blockage.
- 7. Do not go under the pick up header unless it is securely blocked or the header safety latch is lowered onto the lifting cylinder
- 8. NEVER go in front of the machine whilst the header is running.
- 9. Always replace all guards after making any adjustments or lubricating the machine. Replace or repair any damaged or missing guards immediately.
- Do not work around the machine in loose clothing that might get caught in moving parts.
- 11. Keep hands away from moving parts.
- 12. Keep children away from and off the machine at all times.

2.4 LEAVING THE MACHINE

- 13. Park the machine on reasonably level ground.
- 14. Apply the parking brake.
- 15. Lower the header to the ground.
- 16. Stop the engine and remove ignition key.

2.5 SERVICING THE PICK UP HEADER

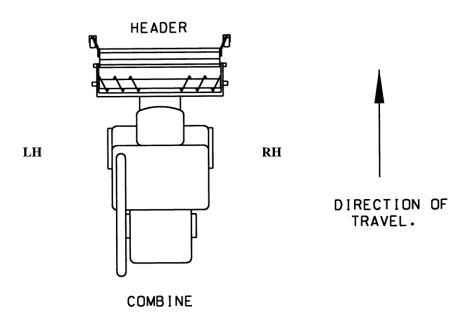
- 17. Ensure that the header is on the ground or if in the raised position, that it is securely blocked or the header safety latch is lowered onto the lifting cylinder.
- 18. Stop engine and apply handbrake before performing any adjustments or lubrication and before opening or removing any guard.
- 19. Always re-install all safety guards on completion of servicing.

2.6 HEADER ATTACHMENT AND DETACHMENT

20. Follow the procedure described in the combine operators manual for header attachment and detachment.

SECTION 3 <u>SPECIFICATION & DESCRIPTION</u>

RIGHT AND LEFT HAND OF THE MACHINE AS TERMED IN THE MANUAL IS AS VIEWED WHEN IN THE DRIVERS SEAT.



ALL MACHINES

Multi-plate - Interchangeable adaptor plates and drive kits for mounting pick up

header to other popular combine types.

Auger - Direct hydraulic drive with a fixed speed of approximately 150rpm

Diameter 610mm over flights with adjustable retractable fingers and

stripping plates.

Outside retractable fingers and two stage bolt on flight extensions

to allow for width variations in combine feed elevators

Auger can have float facility to accommodate lumps in swath.

Draper - Direct hydraulic drive with a variable speed conveyor range

between 0 to 390 rpm. (approx)

One piece draper belt constructed out of a low maintenance PVC,

fitted with flights and plastic tines.

Belt tensioning and tracking from sides of draper.

Canvas edged stripper plate fitted.

Hydraulic - Header electronic control box positioned in cab of combine to give

operator control of auger reverse facility and draper speed. The pick up header's unique hydraulic auger reverser can be activated without

shutting down the combine drives.

Adjustable - skids

Mounted under header mainframe to control ground height.

Optional equipment

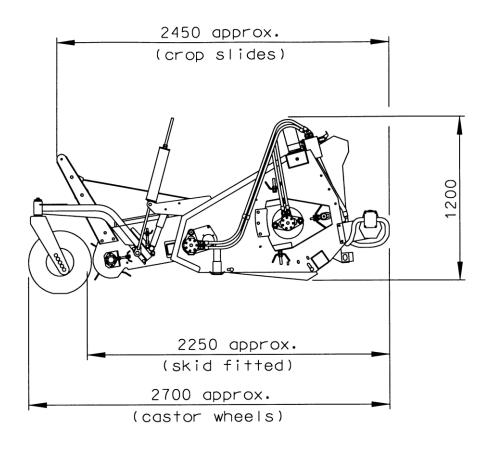
Draper skids and support chains. Draper wheels and float springs.

Crop slides.

Metal tines and slats.

Header marker lights.(USA only)

TECHNICAL SPECIFICATIONS:



| Mode I | Effective pick up width | Overall width (Castor wheels) | Overall width (Skids fitted) | Weight |
|-------------|----------------------------|-------------------------------|------------------------------|---------|
| 3.6M+ (11') | 3316mm (10'10") | 4330mm (14'2") | 3980mm (13′) | 1000 kg |
| 4.2Mt (13') | 3916mm (12'10") | 4930mm (16'2") | 4580mm (15′) | 1160 kg |
| 4.8M+ (15') | 4516mm (14'10") | 5530mm (18'2") | 5180mm (17′) | 1320 kg |

SECTION 4 TRANSPORTATION

To prevent damage to the pick up header, the machine should be moved only by one of the following methods:

- Attaching to combine

- By slinging the mainframe using the two designated sling points for overhead lifting.

- On a trailer which gives suitable support in the correct positions of the header and provides adequate stability.



DO NOT

- Attempt to lift under the header with a forklift, unless the header is on an adequately supportive pallet.
- Remove header onto floor without lowering parking stands positioned at the front corners

of the machine.

SECTION 5 PREPARATION FOR USE



Read this section carefully and carry out settings listed before field use. If in any doubt of adjusting the following, consult your dealer.

5.1 MOUNTING THE PICK UP HEADER.

The header mounts onto the combine in the same manner as the normal cutting platform. Refer to combine operator's books for fitting details.

5.2 LEVELLING THE HEADER

The header should be parallel with the front axle of the combine, if it is not, then it should be adjusted according to the combine operator's manual, as adjustment method is the same as that for the conventional cutterbar.

5.3 ANGLE OF PICK UP HEADER

The angle of the pick up header is adjustable. This allows the header to be tipped forwards or backwards on the adaptor plate. This enables the front, flat area of the auger pan to be set level or slightly slopping down to the auger trough, when the header is in the harvesting height position.

See pick up header adjustments and maintenance section.

5.4 ALIGNING HEADER DRIVE

See pick up header adjustments and maintenance section.

5.5 ELECTRO-HYDRAULIC CONTROL BOX INSTALLATION.

The electro-hydraulic control box needs to be situated inside the cab and the feed cable connected to a 12V supply either by wiring into the ignition or an auxiliary outlet. (IMPORTANT - Do not connect the feed cable to a 24V circuit unless a voltage reducer is used) The header cables with connector should be routed down the L.H. side of the feed elevator and secured in suitable places.

This lead can then be connected to the lead coming from the valve control block by use of the 6-way male/female coupling.

(For certain combine models with electronically activated header reverser systems, an additional wire can be connected from the header control box. This would allow the header to reverse automatically along with the combine elevator. Consult Shelbourne Reynolds if required).

5.5 DRAPER POSITION SETTINGS.

The draper can be set in two different positions within the mainframe depending upon the crop type being harvested. For crops, which are bulky (i.e. winter and spring oil seed rape), use the front position. The rear position would therefore be used for crops of less bulk (i.e. clover, grass etc.)

See pick up header adjustment and maintenance section.

5.7 DRAPER SKID SETTINGS (OPTIONAL EQUIPMENT)

On both the front corners of the draper frame adjustable skids can be fitted. These are to restrict the fingers from touching the ground when harvesting. They should initially be set so that when the skids touch, the fingers are approximately 50mm (2") above the ground. See pick up header adjustment and maintenance section.

5.8 DRAPER WHEELS AND FLOAT SPRINGS SETTINGS (OPTIONAL EQUIPMENT)

On both the front corners of the draper frame height adjustable wheels and variable float springs can be fitted. These are to control the height of the draper fingers in relation to the ground when harvesting. The wheels should initially be set in the middle adjustment hole. The float springs should be set so that they carry 95% of the draper weight. By this the draper can be raised using hand force only and when released it should return to its lowest position on the stop. The amount of float movement can also be adjusted See pick up header adjustment and maintenance section.

5.9 SETTING THE DRAPER TO THE OPTIMUM ANGLE

The draper assembly pivots around the drive roller within the pick up header mainframe. This therefore allows the draper to have a variable angle to the ground. For the least swath disturbance this angle needs to be as acute as possible.

This angle needs initial setting if draper skids are fitted.

See pick up header adjustment and maintenance section.

If draper wheels are installed then the angle does not need setting, as it is variable in use.

5.10 STRIPPER PLATE SETTING

The stripper plate can be set in two positions of which generally it will be used in the most forward. This also has an adjustable canvas and steel edging strip. Its purpose is to wipe the pick up fingers clean of crop and at the same time retain any loose seed. To adjust see pick up header adjustment and maintenance section.

5.11 HEADER SKIDS

Underneath the header mainframe two adjustable skids are fitted. In operation the header will normally be carried, but it could on occasion touch the ground. The skids will protect the bottom of the mainframe and assist the operator. Initially the skids can be set in there fully raised position.

See pick up header adjustment and maintenance section.

5.12 HEADER HEIGHT INDICATOR

This should be set as described in the combine operator's manual.

5.13 AUGER FINGERS AND FLIGHT EXTENSIONS

Different combine's have different width feed elevators.

To accommodate this the pick up header has removable retractable fingers, and flight extensions so feed adjustment can be made.

To prevent auger plugging and uneven feed, it is important to ensure that the outer retractable fingers are not feeding in a position wider than the feed elevator of the combine. The outer fingers should be removed until the outermost finger is inboard of the feed chain by at least 100mm (4"), otherwise wrap in the ends of the elevator roller may occur. The auger flights should pass the end of the combine feeder chain by at least 75mm. See pick up header adjustment and maintenance section.

5.14 CROP SLIDES (OPTIONAL EQUIPMENT)

The crop slides functions are to hold light fluffy crop down onto the draper as well as help the swath's presentation under the auger.

The kit consists of a tube, supported off the draper side plates, running across the width of the header positioned above and in front of the front draper roller. From this tube spring steel wires are fixed. These point backwards towards the auger over the draper assembly. The tube can be fitted in three height settings and the angle of the wires is also adjustable to suit all crop conditions.

Final setting should be done in field to suit conditions. See pick up header adjustment and maintenance section.

SECTION 6

FIELD OPERATION

OPERATING THE PICK UP HEADER.

Read this manual carefully before operating the pick up header in the field.

To get optimum performance from your Shelbourne Reynolds pick up header the operator should keep to the following procedures of operation. The main objective is to lift the swath off the stubble and feed it to the combine with the least disturbance possible, several factors can affect this.

6.1 DIRECTION OF TRAVEL.

The direction of travel is important when picking up the swath. To obtain the best crop movement on to the draper the combine should travel in the same direction as the swather. Travelling the opposite direction has a tendency of excessive crop disturbance, which will effect the efficiency of the machine.

6.2 HEADER / DRAPER HEIGHT SETTINGS.

The height of the header is adjusted from the combine cab by the operator using the header height hydraulic adjusting lever or switch.

Generally the header height needs to be as low as possible to the crop, but not too low so that the skids are grounding constantly. This will therefore allow the draper to be set to a shallow angle.

Draper skids (optional equipment)

Once the draper optimum angle has been set then the header height will also control that of the draper.

Obviously draper height needs to be just low enough to recover the crop. When in operation the draper skids should to be clear of the ground most of the time allowing the support chains to be taught

Draper wheels and float springs (optional equipment)

The wheels setting in the castor yoke set the draper's front roller height to the ground.

The draper's height needs to be just low enough to recover the crop

During harvesting the operator would simply lower the header, firstly allowing the draper's wheels to contact the ground, then to lower further to allow the draper to be in a mid travel float position to the header.

(Note with the draper frame being torsional strong, along with the float springs, it can allow only one wheel touching the ground at times when on changeable ground.)

This height setting can be repeated by noting the header height off the combine's header height indicator.

With the draper in a mid float position, as the ground contour changes then the draper can pivot in the mainframe still keeping a constant tine height to the ground.

6.3 FORWARD SPEED.

This is dependent upon size and capacity of the combine being used. The maximum speed will be governed either by the amount of acceptable combine loss levels or a facility, which is overloaded. To maximise efficiency the fastest forward speed possible should be used.

6.4 DRAPER SPEED.

This needs to be directly related to the ground speed. In operation the swath being lifted and transported by the draper needs the least disturbance possible.

By this the draper linear belt speed needs to be equal or very slightly faster than ground speed. The speed is adjusted from the control box within the cab and will need adjusting every time the forward speed is varied.

6.5 AUGER / FINGER POSITION SETTINGS.

The auger is mounted into the mainframe by the use of bolt on side plates.

The design of these allows the auger to have a vertical float facility to accommodate gaps and lumps within the swath. The float is totally adjustable and can also be locked off.

The auger will be factory set with float giving a 20mm min, and 40mm may auger.

The auger will be factory set with float giving a 20mm min. and 40mm max. auger clearance.

The augers horizontal position is also adjustable.

In field operation, the auger could possible require adjusting to suit a condition. The position of the auger finger retraction is also adjustable. This is factory set to a standard position.

See pick up header adjustment and maintenance section.

6.6 AUGER BLOCKAGE / REVERSING.

If at any time the auger gets blocked and stalls during operation, the hydraulic control system has a reversing feature built into it. If this occurs firstly stop all forward movement of the combine immediately, then simply press and hold the auger reverser button mounted on the electro-hydraulic control box in the cab.

With this the draper will stop moving and the auger will run in the reverse direction. Hold the button down for a few seconds or until the blockage is freed. At this stage release the reverser button. With this the auger will automatically change direction to run in the normal manner where as the draper will delay for approximately 2-3 seconds before re-starting. This will allow the auger to clear itself before any more crop is fed from the draper. If the auger blocks again repeat reversing procedure again.

If for some other reason it still blocks, totally shut down the combine, lower the header to the ground and investigate blockage.

6.7 PICKING UP THE SWATH.

Follow in order the following procedure and checks to set the pick up header -

- 1. Ensure that all previous preparations have been carried out.
- Begin to pick up the swath keeping a close watch on crop movement in the header. Set speeds to keep crop flow smooth and undisturbed.
- 3. When at a convenient stage stop machine and inspect area where swath had laid.
- 4. Any alterations to settings should be made with reference to adjustment charts on the following pages.
- 5. Continue harvesting but once again check for improvement.

6.8 **ADJUSTMENT CHARTS PROBLEM CAUSE REMEDY** CROP LOSS AT FRONT OF DRAPER Heads shattering Draper speed too Decrease draper or breaking off fast for ground speed. speed see section 6.4 Draper speed too Increase draper slow for ground speed. speed. see section 6.4 Draper and / or Lower draper and / or header height too header height. see section 6.2 high. Direction of travel Change direction of travel. incorrect. see section 6.1 Draper angle Lessen draper angle. too great see section 7.6 / 7.7 Replace draper belt. Seeds rolling off Damaged conveyor see section 7.10 front of draper. flights. CROP LOSS AT REAR OF DRAPER Crop being pulled Stripper plate not set Re-set stripper forwards under correctly. plate draper see section 7.12 Auger not clearing crop Set auger fingers. satisfactorily see section 7.15 Set auger position. see section 7.14 Loose seed falling Stripper plate not set Set stripper plate in front of forward. forward. stripper plate see section 7.12 Stripper plate spring Set or replace. retainers broken or see section 7.12 set incorrectly. Header frame angle not Set angle.

see section 7.1

set in correct position.

| I KOBELINI | CAUSE | KLWLDI | | | |
|--|---|---|--|--|--|
| IRREGULAR FEEDING THROUGH HEADER. | | | | | |
| Crop not moving smoothly on draper | Pick up tines broken or damaged. | Replace see section 7.11 | | | |
| | Draper speed to ground speed incorrectly set. | Adjust speed from control box. | | | |
| | Crop slides not set Correctly | Adjust crop slides see section 7.22 | | | |
| Draper loosing | Draper jammed | Clear object | | | |
| speed | Draper belt slipping | Tension draper belt see section 7.8 | | | |
| | Draper belt to low in tall stubble | Set skids or wheels height see section 7.4 or 7.5 | | | |
| | Hydraulic relief valve set incorrectly | Check draper relief valve pressure setting. see section 7.20 | | | |
| | Auger speed reducing. | Check main relief valve pressure setting see section 7.20 | | | |
| | | Check auger clearance and auger float is on see section 7.14 | | | |
| | Hydraulic component failure. | Contact SRE dealer. | | | |
| | Electrical control box failure. | Check fuse and power supply. see section 5.5 Contact SRE dealer | | | |
| Irregular crop flow between draper and auger | Draper position in main frame incorrect. | Set position for crop type. see section 5.6 / 7.3 | | | |
| | Auger set too low | Adjust auger height. see section 7.14 | | | |
| | Draper angle too great | Lessen draper angle. see section 7.6 / 7.7 | | | |
| Auger speed | Auger overloaded. | Reduce forward speed | | | |
| reducing | Auger set too low. and float locked off | Adjust auger. see section 7.14 | | | |

CAUSE

REMEDY

PROBLEM

| PROBLEM | CAUSE | REMEDY | | |
|---|---|--|--|--|
| | Main relief valve set incorrectly. | Check main relief valve pressure setting. see section 7.20 | | |
| | Hydraulic component failure. | Contact SRE dealer | | |
| MECHANICAL PROBLEM | MS | | | |
| Draper always runs to one side. | Contamination inside draper. | Clear contamination. | | |
| | Belt tension incorrect | Set tension. see section 7.8 | | |
| | Rollers not parallel. | Adjust accordingly. see section 7.8 / 7.9 | | |
| | Draper tracking needs adjusting. | Adjust to track the belt. see section 7.9 | | |
| HYDRAULIC/ELECTRICAL PROBLEMS | | | | |
| Main relief valve recommended setting cannot be achieved. | Combine drive slippage. | Adjust according to combine manual. | | |
| carriot be acrieved. | Hydraulic oil level low. | Check oil level. see section 7.18 | | |
| | Hydraulic pump failure. | Test hydraulic circuit. Contact SRE dealer. | | |
| Header will not reverse when red button is pushed. | No power to electric control box. | Check power supply and fuse. see section 5.5 | | |
| | Plug to header from control box not connected, or faulty. | Connect / check the plug. | | |
| | Electrical control box or connection failure. | Contact SRE dealer. | | |
| | Hydraulic valve failure | Contact SRE dealer. | | |
| Draper will not restart after reversing auger, | Delay feature set incorrectly. | Check delay time of 2 to 3 seconds. For adjustment contact SRE dealer. | | |
| | Electrical control failure. | Contact SRE dealer. | | |

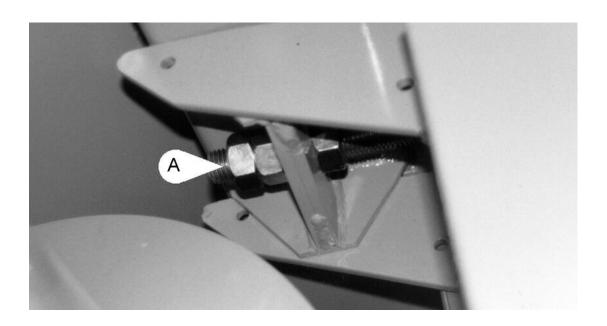
| PROBLEM | CAUSE | REMEDY |
|-----------------------------------|---------------------------------------|--|
| | Hydraulic valve or component failure. | Contact SRE dealer. |
| Hydraulic services lacking power. | Oil over heating | Check oil level. see section 7.18 |
| | Filter blocked. | Change oil filter. see section 7.19 |

SECTION 7 PICK UP HEADER ADJUSTMENTS AND MAINTENANCE

7.1 ANGLE OF PICK UP HEADER.

The angle of the pick up header is adjustable. The bolt in adaptor plate attaching the pick up header to your combine has two fixing studs (A) Fig.1 located just under the top beam near the centre opening. These fixing studs are adjustable and will therefore adjust the angle of the pick up header.

FIG 1.



To correctly set :-

- 1. Set the pick up header skids in the fully raised position.
- 2. On level concrete lower the pick up header, so that the rear corner of the skid is approx.. 100-150mm (4-6") above the ground.
- 3. At this stage the flat front section of the auger pan should be horizontal or slightly sloping back to the auger trough.
- 4. If adjustment is required, before adjusting the studs, the bolts securing the auger stripper plates on the adaptor plate only should be loosened to prevent jamming.
- 5. Adjust the studs (A) Fig.1. of the adaptor plate equal amounts until the setting is approximately correct.
- 6. Lock the adjusting stud nuts.
- 7. Re-set the auger stripper plates to give approx. 5mm clearance from the auger flights.

NOTE:- When making this adjustment the auger to feed elevator clearance will also change. Before operating the machine, check that the auger and feed elevator do not hit each other, re-adjust the auger, or elevator if necessary.

7.2 ALIGNING HEADER DRIVE

There are two types of header drive systems used on the pick up header;

(1) Most modern combine's use a standard PTO shaft from the combine's elevator to the header.

With this system no shaft adjustment is required for alignment.

To fit the shaft simply press in the button of the coupling and push onto shaft. Ensure that the coupling seats correctly i.e. when the pin pops out again

On the rear LH corner of the pick up header a hydraulic pump and gearbox is mounted. The pump and gearbox can be mounted in three height positions. Refer to MAN-04100 (Hydraulic pick up header drive / adaptor manual) for the position of specific makes and models of combine.

Note - using the correct mounting position should give a PTO angle of no greater than 20 degrees.

The PTO shafts length is factory cut to suit the combine make and model, to ensure at least minimum engagements are obtained. If a fitted PTO shaft seems to have minimal tube engagements or you need to modify the length contact Shelbourne Reynolds.



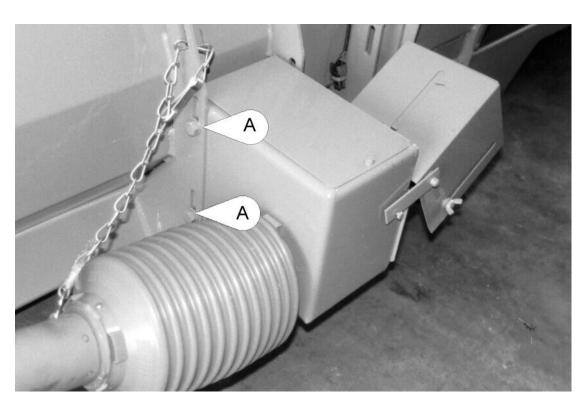
Keep all PTO guards in place when operating.

Do not hang the shaft from the guard chain, use the support hook provided

(2) Some older / non lateral float combine's used various other drive coupling systems. They mostly used coupling mounted on a solid shaft that need correct alignment to the mating coupling mounted on the side of the elevator.

With this system on initial header attachment the drive could need moving or levelling. To align drive;

FIG 2



- 1. Remove guards and slacken the 4 bolts which hold the bearing box as shown in Fig 2 (A).
- 2. Move the bearing box to align the shaft in the correct position and engage the coupling connector to the drive shaft on the feed elevator.

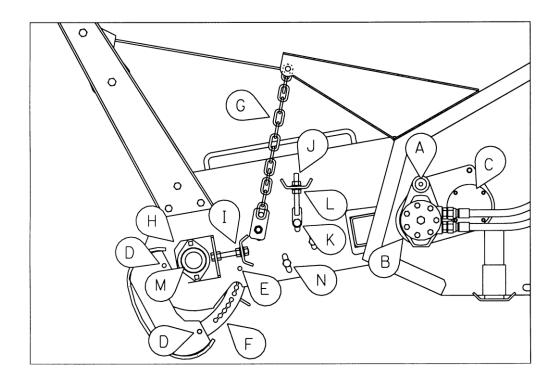
- 3. Tighten the 4 bolts which hold the bearing box to lock the shaft in the set position.
- 4. Replace the guard.

DRAPER

7.3 DRAPER POSITION.

As previously mentioned the draper can be set in two different positions. The following procedure should be used to change position; (See Fig 3 and 4)

FIG 3



- 1. Remove draper drive motor, by simply removing mounting plate fixing bolt (fig 3 A) and then withdrawing motor and plate assembly from drive roller.
- 2. Remove stripper plate assembly from rear of draper (see section 7.12).
- 3. Support draper assembly with blocks or similar
- 4. If draper springs and wheels are fitted loosen and remove shock absorber and strap's top fastener (fig 4 A) from support bracket. Keep springs still attached and carrying most of the weight. If chains fitted leave chain still attached also.
- 5. Loosen and remove the fasteners (fig 3 B) that hold the draper bearing supports on to both ends of the mainframe side sheets. Withdraw the bearing supports from the mainframe allowing the draper to be released.
- 6. Remove the cover plates fitted to the second position (fig 3 C).
- 7. Align the draper drive roller with this different position and insert bearing supports. Secure with fasteners.
- 8. Fit shock absorber and strap's top fastener into support bracket's second

position.(fig 4 B)

- 9. Re fit stripper plate assembly, fitting spring hold down clips in second position
- 10. Fit draper drive motor in new position.
- 11. Replace cover plates to position now not used.
- 12. Adjust draper optimum angle if required if support chains fitted.

7.4 DRAPER SKID SETTINGS (OPTIONAL EQUIPMENT).

The draper skids fitted to the front corners of the draper frame can easily be adjusted to various heights.

They should be set to give a minimum distance of 50mm (2") from pick up tine tip to the ground when the skid is on the ground.

To adjust (see fig 3) -

- 1. With the machine on level concrete lower the header fully so that the skids touch the ground and the support chains are slack.
- Check distance of pick up tine tip to ground level.



Support draper with something at this stage.

- 3. Loosen the two fasteners (D) slightly and remove fastener (E) on both ends of draper.
- 4. Using a different hole in the skid adjuster bar (F), move the skid to the height required.
- 5. Tighten fasteners.(D) and (E)

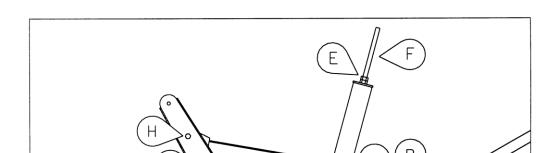
7.5 DRAPER WHEELS SETTINGS (OPTIONAL EQUIPMENT)

The draper wheels controlling the height of the tine to the ground can easily be adjusted. There are 5 height positions for the wheel but initially it should be in the mid position which should give approximately 50mm (2").

To adjust (see fig.4)

- 1. Lift header fully and engage header lift cylinder stops. Failing this lift until wheels come clear of the ground and then block header for safety reasons.
- 2. Loosen and remove fastener (C) and spacer tubes (D). At this stage the wheel will need supporting.
- 3. Move wheel assembly to new position.
- 4. Secure wheel with fasteners and spacer tubes. Tighten fasteners.

FIG 4



7.6 SETTING DRAPER TO OPTIMUM ANGLE (OPTIONAL SKIDS FITTED).

The draper angle can be adjusted by increasing or decreasing the length of the support chains.

To set angle (see fig 3):-

- 1. Ensure that the header skids are in their fully raised position and the header is level fore and aft. (as discribed in section 7.1)
- 2. On level concrete lower the header so that the header skids are approx.. 100-150mm (4-6") above the ground.
- Now adjust the support chain assemblies (G) so that both the draper skids just touch the ground.

IMPORTANT - Adjusting the angle of the draper could also adjust the tracking of the belt if both support chains are not adjusted exactly the same amount. See draper belt tracking (section 7.9).

7.7 SETTING DRAPER SPRINGS AND ANGULAR MOVEMENT (OPTIONAL WHEELS AND SPRINGS FITTED).

(See fig 4)

As previously explained the purpose of the springs is to carry 95% the weight of the draper assembly. The belts tracking is very sensitive to twisting of the two rollers within the draper frame. To allow the strong frame to remain as rigid as possible the springs relieve the weight. As it only takes hand force to lift the draper, shock absorbers are also fitted to dampen any bouncing effect.

The downward movement of the draper is limited by the strap fitted along side the shock absorber.

The upwards movement of the draper is adjustable.

Setting procedure -

- 1. Ensure that the draper assembly is fully down in the mainframe so that the strap alongside both the shock absorbers are taking the weight.
- Set the amount of spring force by winding down the nuts (E) at the top of the stud adjuster (F)

The amount of spring force required varies on the width of the header and also if crop slides and steel tines are fitted or not.

Basically the springs need to take as much weight as possible but when raised and released the draper assembly needs to return to the fully down position Below is a guide for a header with crop slides and plastic tines fitted. Final adjustments might need making.

| Header width | Spring compressed length (draper fully down position) |
|--------------|---|
| 4.8Mt. (15') | 355mm (14") |
| 4.2Mt. (13') | 390mm (15.25") |
| 3.6Mt. (11') | 430mm (17") |

Note – Ensure both springs are adjusted to the same length.

A mechanical stop is built in to eliminate over compressing spring further than 340mm

- 3. After adjusting lock up nuts (E)
- 4. The amount of upwards travel is governed by the position of the sleeve assembly (G). This can simply be adjusted by un locking the lower nut and then turning the sleeve assembly up or down the stud adjuster.
 Generally set the sleeve so that from the draper fully down position the sleeve allows 100mm of upwards spring movement. This will allow the draper to rise to a horizontial position.



If ever stripping down the spring assembly **never** remove the top locknuts (E) without firstly relieving the spring tension by moving the sleeve assembly (G) as far down the stud adjuster as possible (F) Strip down spring assembly off the header.

7.8 DRAPER BELT TENSIONING.

The conveyor belt is tensioned by adjusting the position of the idle roller within the draper frame. (See fig 3). Tension is applied by loosening all fasteners holding adjusting plate (H) to the draper frame and then adjusting the position of the nuts on the studding (I). When the belt is tensioned correctly it should experience 0.3 - 0.4 % elongation. By this if the belt in the relaxed untensioned state is marked in two places exactly 0.5 metre apart. Then when tensioned the marks should be 501 - 502mm apart.

Ensure that both ends of the belt are tensioned to the same amount.

7.9 DRAPER BELT TRACKING.

Belt tracking is controlled by three factors on the pick up header; (See fig 3)

- 1. Tensioning devices on both ends of idle roller (H & I).
 - Ensure that the idle roller when in correct tension is parallel to the drive roller.
- Crowned drive roller.
 This means that the belt is always influenced to track to the centre by using a crowned drive roller. The roller has tapered end sections leaving a parallel middle

portion.

This feature is not adjustable by the operator.

Tracking adjuster stud (J).

This adjuster has the effect of twisting the front roller in relation to the rear roller. If skids are fitted firstly ensure that the support chains (G) are identical in length. Run the header in a raised position so that the draper support chains are taught or the wheels (if fitted) are clear of the ground and draper is fully down on stops. If the belt moves to one side and is forced onto the roller disc, track the belt to the centre by slightly increasing the distance between the adjuster pivot (K)and the adjuster locknuts (L). This will have the effect of lifting the front roller on the adjusted side.

(Obviously the opposite adjustment on the other end side plate would have the same effect)

Allow the belt time to re-track and adjust again if necessary. Ensure that if the belt is moving away from one end roller disc, it is moving closer to the opposite end. I.E check that the complete belt is moving and not just compressing in width from one side. Finally run draper to max.. speed and check belt tension.

This principal will mean that when picking up a swath if only one draper skid happens to ground the belt will adjust its tracking. When that skid then clears the ground and the support chain goes taught the belt will re-track to the middle again. With the wheels fitted the tracking should not adjust.

7.10 CHANGING DRAPER BELT.

If at some time it is required to remove or replace the draper belt use the following procedure;

- 1. Remove the draper drive motor by removing the mounting plate fixing bolt (fig 3 A), then withdraw motor and plate assembly from the drive roller.
- 2. Support draper assembly with blocks or similar. If wheels are fitted ensure draper assembly is fully raised then blocked.
- 3. Remove the crop slides if fitted
- 4. Remove the support chains or the spring and shock absorber fixing to the draper.
- 5. Loosen and remove the fasteners that hold the draper bearing supports (fig 3. B) on to both ends of the mainframe side sheets. Withdraw the bearing supports, allowing the complete draper assembly to be separated from the mainframe.
- 6. Remove draper belt tension using opposite procedure as previously described in section 7.8
- 7. Remove the stripper plate as described in section 7.12.
- 8 From one end of the draper only, remove;
 - (a) the idle roller bearing locking ring (see fig 3. M)
 - (b) the fasteners (x5) holding the side plate to the draper frame (see fig 3. N)
- 9. This will allow the draper side sheet to be withdrawn from the draper frame and rollers. The belt can then be removed.
 - **IMPORTANT** Ensure that the pick up tines are previously fitted to the replacement belt prior to re-assembly.
- 10. Install new belt onto rollers and reassemble in reverse order of the above, ensuring correct orientation of tines.
- 11. Tension and track the belt as described in sections 7.8 & 7.9.

7.11 CHANGING DRAPER PLASTIC PICK UP TINES

If a plastic draper finger is damaged or needs replacing ensure that the removal is carried out when the tine is positioned on one of the rollers. The reason for this is that the finger is simply secured to the belt by means of a large flat headed bolt. If a finger is removed between rollers the bolt will fall into the draper and cannot easily be re-positioned. Ensure that when fitting fingers the square shank on the bolt engages into the square hole on the finger.

7.12 STRIPPER PLATE SETTINGS.



Fully raise header and engage safety latch.

The stripper plate is mounted to the rear of the draper side sheets. It is mounted on bushes to allow it to pivot. The back of the stripper plate is forced down onto the auger pan by five spring plates.

To move the position of the stripper plate;

- 1. Firstly remove the spring plates.
- 3. Remove the fasteners through the bush where the stripper fixes to the draper side plates.
- 3. Re-fit stripper into different position using reverse procedure.
- 4. Re-fit the spring plates.

NOTE - The spring plates have two sets of fixing holes. These would be used when the draper position is moved to the rear setting.

On to the stripper plate is bolted a canvas edging strip. This strip has slots punched into it so that it can be moved closer to the fingers when it gets worn.

7.13 HEADER SKIDS.

Both header skids are secured to the mainframe by fasteners through slotted holes. This will allow the skids to be adjustable in height.

Ensure both skids are set to the same setting.



When setting skids always have header in the fully raised position and engage lift cylinder safety latch's.

7.14 AUGER POSITION / FLOAT SETTING

The auger position is factory set with float giving 20mm min and 40mm max.auger clearance. This pre-set position should be suitable for most crops and conditions, however, if the position needs to be altered the auger can be adjusted. (see fig 5)

Note - Slacken all stripper plate securing bolts if auger is moved back.

- Adjuster (A) will move the augers fore and aft position. Simply adjust the locking nuts position.
 Adjust both ends of the auger to equal amounts.
- 2. The minimum auger clearance is set by the adjuster (B) and the maximum clearance

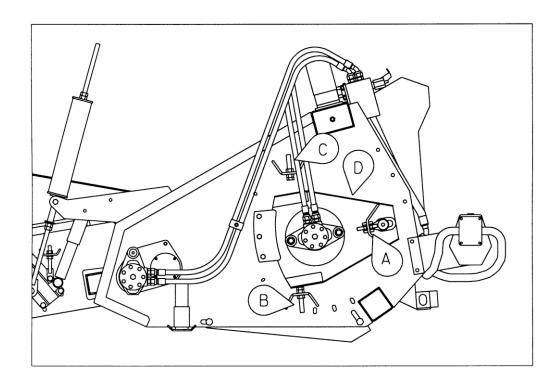
is set on adjuster (C). To move simply adjust the locking nuts equally both sides

- 3. To lock off the auger float simply set the minimum clearance and then adjust (C) to touch the top of the auger support plate (D).
- 4. Tighten locknuts when adjustment is complete.
- Check and reset auger stripper plates.

IMPORTANT.

After adjusting the auger, it should be rotated by hand to ensure that nothing on the auger fouls.

FIG 5.



7.15 AUGER FINGERS

The position of the auger finger retraction is pre-set at the factory. It is adjusted by moving the handle situated on the right hand side of the mainframe. To adjust it, slackening off the bolt on the handle and move the handle to the required position.

7.16 AUGER STRIPPER PLATES

The stripper plates (B) are behind the auger across the width of the machine, except for the centre opening (See fig 6). These should be set approximately 5mm from the auger flight. They are adjusted by slackening all the bolts (A) on the stripper plate and moving it on the slots before re-tightening. The stripper plate on the adaptor plate is adjusted independently to the same clearance.

FIG 6.



7.17 AUGER FINGERS AND FLIGHT EXTENSIONS

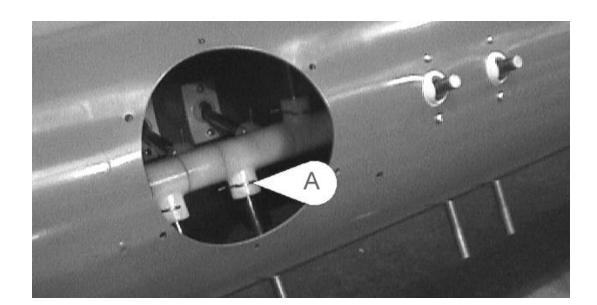
To remove the fingers; see fig 7.

- 1. Remove the cover plates near the auger centre.
- 2. Remove the `R' clip (A) securing the finger in the plastic holder, and pull the finger out of the holder.
- To prevent dust and particles filling the auger tube through the remaining hole, remove the ball guide from the auger tube and replace with a blanking plate.
 (Pt No. 190735 01)
- 4. When enough fingers have been removed, replace the auger cover plates.

The header is supplied with bolt on 90 degree flight extensions. For combine's with wide feed elevators they should be removed. The fasteners that fix the extensions to the auger tube should be replaced, once the flight extensions have been removed, to fill the fixing holes.

If the auger flights need extending in further than the 90 degree extension then a 180 degree extension is available to fit in its place. Theses are available through your SRE dealer and are part no's 200328 01 - LH flight extension. 200328 02 - RH flight extension.

FIG 7.



7.18 HYDRAULIC OIL RESERVOIR.

The hydraulic oil reservoir is designed in such a manner that an external tank is connected to the header top and bottom beams. The oil capacity is made up by part of the tank and the total of the bottom beam. The top beam of the mainframe acts as a return line. The hydraulic oil tank is fitted with a level gauge which should only be read when the header is lowered to the ground.

The filler cap fitted also has the function of pressurising the reservoir circuit.

IMPORTANT - The filler cap should never be removed when the header is in operation. This could cause damage to the hydraulic components due to de pressurising.

In operation the top beam holds quite a large volume of oil before draining to the tank. Due to this the level will probably not be shown on the gauge. This will mean that the header should have standing time to allow oil to drain before topping up level.

A drain plug is situated on the LH end cap of the bottom beam to assist draining the oil reservoir.

For oil type and capacity see lubrication section.

7.19 HYDRAULIC FILTER.

A return line filter is fitted within the circuit and is mounted on the LH end, upper face of the top beam. The filter element should be changed when the indicator arrow points to the red section.

Always replace element with the correct item with the same micron rating.

7.20 HYDRAULIC RELIEF VALVES.

The amount of work each of the services, draper or auger, can achieve is regulated by pressure relief valves within the circuit. These relief valves are fitted into the hydraulic control block and are factory set. See fig. 8

The auger relief valve (A) should be set to 240 bar and the draper (B) setting is 90 bar.

These should be checked by dead heading the circuit at the ports labelled "A"(for the auger) and "C"(for the draper) and inserting a gauge at these point "G1"(auger) or "G2"(draper).

IMPORTANT - Do not adjust relief valves without consulting either Shelbourne Reynolds or your local dealer. Hydraulic test equipment will be required to set or check relief valves.

FIG 8



Note – On top of the auger drive motor there is bolted a cross line relief valve unit. This is to protect the auger motor from over pressurising when shuttling from forward to reverse rotation. It is pre-set and must not be adjusted.

7.21 DRAPER METAL TINES AND SLATS (OPTIONAL EQUIPMENT).

The pick up header has plastic draper tines fitted as standard. These are the preferred tine system. If a condition is experienced when the tines are not aggressive enough and do not recover all the swath then steel tines and slats can be fitted instead. Contact your SRE dealer if required. KIT-01604 3.6Mt (11')

KIT-01604 3.6Mt (11') KIT-01605 4.2Mt (13') KIT-01606 4.8Mt (15')

To change over remove a complete row of plastic tines (while positioned on the front roller) See section 7.11

Position on the metal slat over the existing bolts, ensuring the longer over 90 degrees folded flange is the leading face.

Note on 3.6Mt (11') headers the slats are the full width of the draper, where as the wider headers use a slat plus an extra piece to make up the headers width.

In this situation, the gap between slat and extra piece needs to alternate from one end of the header to the other on each row.

Fit metal tine, cup washer and existing nut and tighten.

7.22 CROP SLIDES (OPTIONAL EQUIPMENT)

Crop slides can be fitted to the draper side frame.

The spring steel wires are simply clamped to the cross tube assembly and have a swollen end to stop them from being pulled out

This cross tube can be positioned in three different height settings depending on how bulky the swath is.

The angle of the wires to the belt is also adjustable. (See fig 4)

- 1. To adjust angle loosen fastener (H) at both ends and remove (I).
- 4. Rotate crop slides to new position and replace fastener (I). Tighten all fasteners.



If moving height position adjust one end at a time. Loosen fastener at other end first.

SECTION 8

LUBRICATION

Your Shelbourne Reynolds Pick up Header is designed to reduce down time and therefore requires the minimum amount of lubrication.

Most of the bearings are of the sealed type, requiring no maintenance.



CAUTION - Stop engine before lubricating.

DROP GEARBOX

The oil level of this is displayed on a sight gauge and should only be read when the gearbox is vertical.

Use Synthetic gear oil, grade SAE 75W-90.

Brands of oil recommended are – Total SYN FE 75W90, BP Energear SHX SAE 75W-90 or Mobilube SHC SAE 75W-90.

The gearbox capacity is 0.25 litre (.0.5 pint)

NOTE:

After the first 100 hours of use the oil should be drained from the gearboxes and replaced with the recommended type.

Oil should then be checked regularly during use and changed annually.

HYDRAULIC OIL RESERVOIR.

The hydraulic oil tank is fitted with a level gauge which should only be read when the header is lowered to the ground and allowed to stand for a while to drain the top beam.

Use oil type TOTAL EQUIVIS 46, MOBILE DTE25 or equivalents

In very hot climates only i.e. Australia use MOBILE DTE16M

The total capacity is approx. – 75 –85 litres (17 – 19 gallons) pre 2004 models 95 - 110 litres (21 - 25 gallons) 2004 & on models

(variation due to different widths)

Only the recommended lubricant oils should be used.

HYDRAULIC FILTER.

The oil filter should be changed after the first 10 hours of operation. Ensure that the filter element used has a rating of 25 microns.

Elements should then be changed annually or when the indicator shows necessary.

Grease the following points at 10 hour intervals:

1. PTO universal joints.

Grease the following points at 50 hour intervals;

1. Draper wheels castor yoke pivot (optional equipment if fitted).

NOTE:- Grade of grease to be used - Mobilux EP3 or equivalent.

SECTION 9 STORAGE OF THE HEADER

The following procedure should be followed prior to off-season storage of your pick up header to preserve and protect your machine.

- 1. Remove the pick up header from the combine feeder housing, either onto a trailer or on adequately supportive blocks to prevent header damage.
- 2. Thoroughly clean the interior and exterior of the header, as any chaff, straw and dirt left on the machine will draw moisture and cause corrosion.
- 3. Remove conveyor belt tension to prevent it from taking a permanent set.
- 4. Lubricate the machine thoroughly as described in the lubrication section of this manual.
- 5. Coat all the bright parts with paint or anti-rust preservative to protect them.

IMPORTANT; DO NOT PUT ANY OIL, PAINT, PRESERVATIVE ETC ON THE PLASTIC BELTING OR FINGERS AS IT MAY DAMAGE THEM

- 6. Store the header in a dry place protected from the weather and rodents.
- 7. Use the combine operators manual for storage procedure of your combine.

SECTION 10

PARTS LISTING

PICK UP HEADER PARTS MANUAL

Your Shelbourne Reynolds pick up header is designed to fit many different types of combine.

For this reason the machine number index is broken down into sections for identification. Your machine numbers are listed below:

| HEADER SERIAL NO. | |
|--------------------|--|
| HEADER MACHINE NO. | |
| ADAPTOR PLATE NO. | |
| DRIVE KIT NO. | |
| OTHER KIT OPTIONS | |
| | |
| | |

This manual contains all parts common to the pick up header and is used in conjunction with the combine fittings manual, which contains the adaptor plate, and drive kit parts and fitting, and any other options available.

Machine Identification

The pick up header machine identification number is engraved on a plate located on the right hand side sheet of the mainframe.

The adaptor plate has a plate on the top right hand corner also with the adaptor plate assembly number engraved on it.

The drive kit can be identified by description, and use of the drive kit identification number marked above.

Ordering Spare Parts

To ensure that you order the correct part from your SRE dealer please use the following procedure.

ALWAYS QUOTE THE MACHINE AND SERIAL NUMBERS WHEN ORDERING.

Refer to the front pages of the parts lists, decide if the part you want is on the:

Pick up Header Adaptor Kit Drive Kit

If your part is on the Adaptor Kit, identify by matching the part number from the adaptor plate with that in the top left hand corner of the parts lists. You will find the appropriate drawing accompanying the parts list.

If the part you require is on the drive kit, ensure that you have the parts listing for the correct combine model. Then progress through to the next drawing following that list, for

indication of that part.

If the part you require is on the pick up header assembly, identify the appropriate assembly by matching the part number from the pick up header with the page with the same number marked on the top left hand side.

Use the following sub assembly numbers and descriptions to find the area of the machine that your part is required, i.e. you need a part which is fitted to the auger, your part will be in the auger assembly parts list.

Having decided which sub-assembly your part should be under, use the number beside that sub-assembly description which will begin with 2090-- -- to find the parts listing of the sub-assembly further on in the manual. The number will be printed in the top left hand corner, the sub-assemblies are in numerical order.

Having found the correct parts list, you will find the corresponding drawing by processing through the manual to the next drawing.

The drawings indicate the components by item numbers which you will find are repeated in the left hand side of your parts listing, and therefore referring to the correct part.