

# **Shelbourne Reynolds**

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ENGINEERING

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SECTION 1

I N T R O D U C T I O N

1.1

FORWORD

This manual will assist the operator in setting the stripper header and combine combination to give optimum throughputs and loss levels in particular crops and field conditions when used in conjunction with the combine manufacturers operators manual.

The Shelbourne Reynolds stripping header has been successfully tested in a wide range of crops and crop conditions in terms of throughput and crop recovery with a grain stripper and combine combination, when compared against a conventional cutterbar and combine combination of similar size in the same crop and conditions.



### PATENTS

The Shelbourne Reynolds stripper header is protected by worldwide Patents:

PCT/GB/85/00442 and others.

## 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.

### 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 stripping header are located on the top right hand corner of the header.

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

1.5

SHELBOURNE REYNOLDS ENGINEERING LTD -WARRANTY TERMS AND CONDITIONS TO THE PURCHASER

### GENERAL

1. This warranty will become available to you when you have paid for the equipment and returned, duly completed, the delivery and warranty registration forms. It will expire on the anniversary of purchase from the dealer. After that date Shelbourne Reynolds will have no further liability under this warranty to you except in respect of claims already notified. This warranty is not transferable and is available only to the original purchaser from our dealer. In the case of purchasers having leasing or similar arrangements the first user shall be deemed the original purchaser and you shall be deemed to have paid for the equipment.

### USE AND MAINTENANCE

2. To maintain the benefit of the warranty throughout the twelve month period you must have the machine serviced in accordance with our recommendations and use the machine properly. If on inspection the machine appears to have been either misused, overloaded, improperly operated, neglected, not properly maintained, altered or repaired without our consent this will invalidate the warranty. We shall have no further liability under it to you at all. (If you require any guidance as to use you should contact the dealer.)

3. Our liability under this warranty is dependent upon your making the equipment and facilities available, for inspection and testing.

4. In this warranty the expression, "defective product" means any part of the equipment you have purchased which shows evidence of a defect in the materials, design (due regard being given for the state of the art at the time we designed it) or Shelbourne Reynolds' workmanship. Wearing parts, such as belting, are excluded. Parts not manufactured by Shelbourne Reynolds, for example tyres and alternators, are also excluded.

OUR OBLIGATIONS

5. If you discover a defective product you should contact the dealer from whom your machine was purchased. The dealer will notity us of your claim. Our obligation will then be to either replace, or if we consider it appropriate, repair the defective product. Alternatively, we may arrange for our dealer to carry out this work. YOU MUST NOTIFY THE DEALER OF THE DEFECT WITHIN SEVEN DAYS OF THE DAY ON WHICH IT IS DISCOVERED AND YOU MUST NOT USE THE EQUIPMENT AFTER DISCOVERY. FAILURE TO OBSERVE EITHER OF THESE OBLIGATIONS WILL INVALIDATE THE WARRANTY AS IS APPLIES TO THAT DEFECT. Any defective products replaced must be returned to SRE for inspection.

NO ADMISSION

6. On occasions we may, to preserve goodwill, replace parts even though they are not in our opinion defective. Accordingly, our agreeing to repair or replace a part cannot in any circumstance be deemed an admission that it was defective.

### LIMITATIONS

7. This warranty shall not apply to products made up in accordance with customer originated designs.

8. No warranty, condition or other term implied by statute or common law as to the merchantability or fitness for a particular purpose, is intended or given by this warranty. All such warranties which may apply between Shelbourne Reynolds and yourself are excluded to the fullest extent permitted by law.

9. In any case, except in respect of death or personal injury caused by our negligence, we shall not be liable to you by reason of any representation or implied warranty, condition or other term, or any duty at, law or under the express terms of any contract, for the consequential loss or damage (whether for loss or profit or otherwise and including delay in harvesting, loss of crops, expense incurred for labour, additional or substitute material, rental whatsoever and whether caused by our negligence, the negligence or our employees or agents or otherwise) which arises out of or in connection with the use of the goods by you.

10. Time of repair is not of the essence.

11. No person or persons are authorised to alter, modify or enlarge this warranty on behalf of Shelbourne Reynolds.

Shelbourne Reynolds shall not be liable for any failure to comply with any part of the warranty where such failure is due to circumstances beyond their reasonable control, including difficulty in obtaining materials or replacement parts.

### CALL OUT CHARGES

13. Shelbourne Reynolds and all dealers reserve the right to make a reasonable charge for call outs made at your request which do not turn out to relate to defective products.

YOUR STATUTORY RIGHTS ARE UNAFFECTED.

## SECTION 2 SAFETY PROCEDURES

#### . ... ... ... ... ...

ACCIDENT PREVENTION

Accident programmes can only prevent accidents with the cooperation 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 manufacturers operators manual safety precautions should be adhered to along with the following additional safety precautions listed when using a stripping header.

CAUTION

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

PRECAUTIONS:

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2.2

BEFORE STARTING THE MACHINE

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

2.3

THE MACHINE IN THE FIELD

- 5. Do not brake abruptly to avoid tipping the combine.
- Do not permit anyone other than the operator to ride on the 6. combine.
- 7. Always stop the engine and apply handbrake before removing or opening any guards or clearing a blockage.
- Do not go under the combine header unless it is securely 8. blocked or the header safety latch is lowered onto the lifting cylinder.
- 9. NEVER go in front of the machine whilst the rotor is rotating.
- 10. Always use locktight, (or self locking bolts) for rotor stripping element attachment.
- 11. Always replace all guards after making any adjustments or lubricating the machine. Replace or repair any damaged or missing guards immediately.
- 12. Do not work around the machine in loose clothing that might get caught in moving parts.
- 13. Keep hands away from moving parts.
- 14. Keep children away from and off the machine at all times.

LEAVING THE MACHINE

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

2.5

SERVICING THE STRIPPER HEADER

- 19. 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.
- 20. Stop engine and apply handbrake before performing any adjustments or lubrication and before opening or removing any guard.
- re-install all safety guards on completion of 21. Always servicing.

2.6

HEADER ATTACHMENT AND TRANSPORTATION

- 22. Follow the procedure described in the combine operators manual for header attachment and detachment.
- 23. When using the Shelbourne Reynolds Engineering header trailer ensure header is situated correctly in its seats and that all securing hooks are locked in position.

SECTION 3 SPECIFICATION AND DESCRIPTION

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 stripping header to other popular combine types.

Rotor speed - Variable in six steps from between 400 to 1000 rpm

Auger - Fixed speed, diameter 504mm over flights with adjustable retractable fingers, slip clutch, and stripping plates.

Rotor and auger speed - electronic performance monitor and alarm.

Feed conveyor - Fixed speed - Self tensioning when pre-set - Fitted with flights

Adjustable crop deflector - operated by combine hydraulics.(reel lift).

Torpedo dividers - adjustable with wing.

Adjustable skids.

Hinged side guards for ease of access.

3. OM WIDE STRIPPING HEADER

Stripping rotor: - 1 rotor 3.0m wide Nom: 8 rows of 5 elements.

Rotor drive line: - protected by an 800 N/M audible ratchet type torque limiter and an overunning clutch.

Conveyor belt: - 1 conveyor 3.0m wide Nom

3.6M WIDE STRIPPING HEADER Stripping rotors: - left hand 1.8m wide Nom; 8 rows of 3 elements. - right hand 1.8m wide Nom: 8 rows of 3 elements. drive line: - protected by an 800 N/M audible ratchet type Rotor torque limiter and an overunning clutch. Conveyor belts: - left hand 1.8m wide Nom right hand 1.8m wide Nom 4. 2M WIDE STRIPPING HEADER Stripping rotors: - left hand 2.4m wide Nom: 8 rows of 4 elements - right hand 1.8m wide Nom:8 rows of 3 elements Rotor drive line: - protected by a 1000 N/M shear bolt type torque limiter, and overunning clutch. Conveyor belts: - left hand 2.4m wide Nom right hand 1.8m wide Nom 4.8M WIDE STRIPPING HEADER Stripping rotors: - left hand 2.4m wide Nom: 8 rows of 4 elements - right hand 2.4m wide Nom: 8 rows of 4 elements Rotor drive line: - protected by a 1000 N/M shear bolt type torque limiter and overunning clutch Conveyor belts: - left hand 2.4m wide Nom right hand 2.4m wide Nom 5. 4M WIDE STRIPPING HEADER Stripping rotors: - left hand 3.0m wide Nom: 8 rows of 5 elements - right hand 2.4m wide Nom; 8 rows of 4 elements Rotor drive line: - protected by a 1200 N/M shear bolt type torque limiter and overunning clutch Conveyor belts: - left hand 3.0m wide Nom right hand 2.4m wide Nom 6. OM WIDE STRIPPING HEADER Stripping rotors: - left hand 3.0m wide Nom: 8 rows of 5 elements - right hand 3.0m wide Nom: 8 rows of 5 elements Rotor drive line: - protected by a 1200 N/M shear bolt type torque limiter and overunning clutch Conveyor belts: - left hand 3.0m wide Nom right hand 3.0m wide Nom

## RANGE OF SIZES

Sizes are as follows:-

				Contraction of the local division of the loc	
	'A'	' B '	'C'	'D'	WEIGHT *
SR3000	1200	2050	3000	3420	1100 kg appx
SR3600	1200	2050	3600	4020	1250 kg appx
SR4200	1200	2050	4200	4620	1400 kg appx
SR4800	1200	2050	4800	5220	1600 kg appx
SR5400	1200	2050	5400	5820	1750 kg appx
SR6000	1200	2050	6000	6420	1850 kg appx



For complete details of the correct sizes and fitting for the combine on which the Stripper Head is intended to be used, please contact your local SHELBOURNE REYNOLDS Dealer or the factory direct. SECTION 4

To prevent damage to the stripping header, the machine should be moved either by:

- Attatching to combine
- By slings through the lifting lugs provided 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 fork lift, unless the header is on an adequately supportive pallet.
- Remove header onto floor without placing secure blocks under the front corners of the machine.
- Never support machine fully on the skids, unless attached to the combine.
- Never support machines weight on the front beam under the machine.

4.1

## SHELBOURNE REYNOLDS TRANSPORT TRAILER

The Shelbourne Reynolds Engineering transport trailer is specially designed for the stripping header. It is engineered to reduce down time and to make it easy for the operator to attach, transport and detach the header safely and efficiently on his own.

FIG 1



## ATTACHMENT AND DETACHMENT PROCEDURE

DETACHMENT

- 1. Drive the combine and stripper header over the header trailer.
- 2. If the trailer is not on level ground, then ensure that the trailer tilts more towards the combine and header than away. ie. further wheel on higher ground.
- 3. Adjust the trailer screw jack so that the trailer beam is approximately parrallel to the angle of the header on the combine.
- 4. Disconnect the header drive and hydraulic pipe, then release the bottom securing clamps of the header to combine elevator attachment.
- 5. Gently lower the header, when positioned correctly, approximately 150mm of the support brackets of the trailer should be seen emerging from under the header. The front beam will sit on the front of the trailer support brackets first, allowing the bottom of the combine feeder housing to move away from the bottom of the header.

FIG 2



# CAUTION

If you are in doubt at any stage that the header is not aligning correctly on the brackets, then get out of the combine and check.

- Stop lowering the header when the combine feeder housing starts to move away from the header top beam, or top mounting lugs.
- 7. Lift the two hooks 'D' fig 2 on the front of the two end trailer mounting brackets over the front beam and lock into position with the locking pin.
- 8. Engage the two lower locking pins 'E' fig 2.

9. Lower the combine feeder housing and drive backwards until clear of the machine.

The header is now ready for transport.

ATTACHMENT

- 1. Drive combine to align with header.
- 2. If necessary, adjust trailer screw jack to make the top beam of the header parallel to the combine feeder housing.
- 3. Lift feeder housing to locate top mounting lugs.
- Remove the locking pins located on the trailer mounting brackets, and drop the hooks back from the front beam to release the header from the trailer.
- 5. Lift header clear of trailer.
- 6. Connect lower locking clamps of feeder housing to header and also connect drive and hydraulic connection.
- 7. Drive clear of trailer.

4.2

SETTING TRAILER TO SUIT COMBINE

When first using the Shelbourne Reynolds stripper trailer, it may be necessary to adjust the support clamps to suit the machine.

Procedure

 $\Delta$  The drive end of the machine must be nearest to the front of the trailer i.e. towing end. Machine and trailer must be on level ground for setting up.

When positioning the stripper header on the trailer, the end of the machine should be approximately level with the end of the main beam of the trailer.

The centre support bracket should then be positioned in the most suitable holes in the axle with the axle being as near to the centre of the machine as possible. The axle position on the main beam is also adjustable to achieve this.

The outer brackets are then located setting them to allow approximately 50mm each side for error when putting the machine on the trailer.

The front telescopic drawbar can then be put in a suitable postion, where when the trailer is attached to the combine, the combine does not hit the stripper header when turning a corner.

Drive the header over the trailer brackets and lower until just clear of the brackets. The front beam behind the rotor, under the machine, should just touch the front of the support plates, when the rear location is approximately 30 to 40mm above their seating. This will enable the feeder housing to move away from the bottom of the header for detachment.

If this setting is not correct then the bolt 'A' & 'B' fig 2 should be slackened and bolt 'C' fig 2 should be removed. The angle of the bracket can now be changed, and bolt 'C' can be relocated in another hole. Each hole position changes the

bracket angle by approx 3 degrees. Re-tighten all bolts and ensure that all three brackets angle positions are set exactly the same.

Never adjust these brackets with the stripper header mounted on the trailer.

MACHINES FITTED WITH OUTER AND CENTRE SKID KITS

Top plates 'F' fig 2 will need to be removed, and replaced with different top plates when the stripper has outer and centre skids fitted. The plates are supplied with the skid kit. When fitted normal attachment and detachment procedure applies irrespective of skid position.

4.3

TRAILER ROUTINE MAINTENANCE

Daily: Check tyre pressures 94 PSI 6.5 BAR

Weekly: Check wheel nuts - Torque 110 Ib.ft 150 N.m Check all bolts SECTION 5 PREPARATION FOR USE

!\ Read this section carefully before use.

If in any doubt of adjusting the following, consult your dealer.

When using the Shelbourne Reynolds stripping header, the following features are required on your combine. (Some of these features may already be fitted as standard to your combine.)

5.1

1. HEADER DRIVE

Due to the extra power required to drive the stripping header compared to the conventional cutterbar, most makes and model of combine require a maize header drive kit which will increase the power available to drive the stripping header.

Shelbourne Reynolds dealers should be consulted to select the correct drive for your machine.

- 2. Combine grain loss monitors, mainly on the sieves.
- 3. De-awner or concave blanking plates.
- 4. Lights on top corners of cab for nightwork. The lights which are mounted at the bottom of the cab are designed to throw the light through the cutterbar reel, but as the stripper header has a solid cowl, the light cannot shine through it. The operator will require light at the front of the nose where the crop enters the header.
- 5. A straw chopper will be useful for dealing with straw intake in laid and lodged crops.

5.2

CONCAVE SETTING

As there is less straw intake in most crop conditions, it is necessary to adjust the concave to give a minimum clearance of 3-4mm on the first 5 bars.

This is achieved by putting the concave lever(s) into the top hole to give minimum clearance between the drum and concave.

Refer to the combine manufacturers manual to reduce this clearance, which is usually adjusted by threaded studs on each side of the combine supporting the concave. The clearance is normally measured by removing side covers at the end of the drum on each side of the machine, and using a piece of flat metal to the depth of 3-4mm to check the clearance between the concave bar and drum bars.

## CAUTION

After adjusting but before running, check that the concave cannot hit the drum when the concave hand adjusting lever is released from the top notch and pulled up as far as it will go, ie. until it his the stop. If when this is carried out the concave touches the drum rasp bars when the machine is rotated by hand, it is necessary to adjust the stop on the concave, adjusting lever to prevent it from going up so high. The stop is often a bolt in the top of the lever ratchet plate.

5.3

### HEADER LOWERING SPEED

/ Beware until set

The stripping header is heavier than most types of conventional cutterbar header, therefore the stripper header, when on the combine, will drop at a very fast speed until adjusted.

This is usually adjusted on the hydraulic feeder housing direction control valve which is usually mounted under the cab floor. When set correctly, the header will gently lower to the ground without banging on the skids. Header damage can be caused if the drop is to fast.

Refer to the combine operators manual for adjustment of the header lowering speed.

5.4

### COMBINE FRONT ELEVATOR DUST COVERS

Most of the stripper header adaptor plates for various combine models with the exception of New Holland and John Deere, have an elevator dust cover built into the stripper header adaptor plate itself. For this reason it is necessary to remove the dust cover from the combine elevator if fitted. If this cover is not removed, uneven feeding and blockage may occur.

It is not necessary to remove the cover on New Holland or John Deere combines, but often feeding will be improved if the centre section of the cover is removed, leaving the outer side deflectors of the cover in place.

5.5

### 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 operators manual, as adjustment method is the same as that for the conventional cutterbar.

5.6

ROTOR GROUND CLEARANCE See stripper header adjustments and maintenance section 7.1.

5.7

HEADER HEIGHT INDICATOR This should be set as described in the combine operators manual.

5.8

ALIGNING HEADER DRIVE See stripper header adjustments and maintenance section.

AXIAL FLOW COMBINES All crops except Rice.

When fitting the stripper header to an axial flow combine it will be necessary to adjust the concave hole sizes.

The axial flow concave will consist of front concaves, usually on 3 sections and a rear separating grate also usually in 3 sections.

The front concaves will adjust in relation to the rotor, the back separating grate is fixed.

For harvesting most crops of wheat and barley and other small seed crops, it will be necessary to put concave wires in all the holes of the first concave. Second and third concave should have the wires fitted in every other hole. The rear grate which is a welded construction should be of the small hole type. The rotor and concave clearance should be 1mm to 3mm.

If all the crop is not threshed, then it may be necessary to fill the second concave with wires in each hole, or bolt blanking plates on the first concave to block it completely.

However, if the crop is damp it may be necessary to remove wires from the concaves, and/or open the rotor to concave clearance to allow the damp crop to flow through. If the drum to concave clearance is opened above 3mm, short straw etc. may block the concaves due to centrifugal force, if this occurs the clearance should be reduced.

The rotor speed and cleaning shoe settings will be set the same as for a conventional cutterbar.

Axial flow combines have a narrow feeder housing, it will be necessary to raise the front roller to the top position and lock the float of the roller to allow even feed.

### RICE

When harvesting rice with axial flow combines it will also be neccessary to raise the front roller of the feeder housing to the top position, and lock the float of the roller to enable an even feed.

On IHC1680, 1480 combines it will be necessary to have 4 ears onthe front of the rotor to keep the feed even. The front 3 concaves should be of the rice type. The rear grates should be changed to the SRE modified type KIT-00903, and best results are achieved with the speciality rotor fitted with spiked raspbars in the area of the rear grates.

Best results are usually achieved with an axial rotor speed of 660 rpm.

On smaller IHC combines ie. 1660 it will also be necessary to fit the SRE modified grates, consult your dealer for details.

This section of the manual contains tables and other references to the basic settings of certain components of the stripping header and combine in various crops.

As the stripper header does not feed much straw into the combine the settings may vary to those you would normally set with a conventional cutterbar.

It is impractical to give the settings for every crop variety and conditions in the various soil types and weather conditions, so the settings given in the tables are initial settings to be used as a starting point.

This section then follows on to indicate further adjustments which can be made to suit specific conditions.

Read and carry out the procedures in section 5 before attempting to operate the machine.

Field adjustment details are only given for the Shelbourne Reynolds Engineering stripping header. For specific combine adjustment details use the combine manufacturers operators manual.

6.1

FIELD ADJUSTMENTS

Crop dividers

Both the right and left hand adjustable crop dividers are quick release attachment and detachment at point A as shown in FIG 3 and also described in section 7.12.

FIG 3



The inner wing should be set to guide the crop away from the edge of the rotor and side plate, to acheive this the wing is adjustable in and out from the divider. The height of the dividers are adjustable with plate C.

Header height

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

When working in laid crops the header should be allowed to float over the ground contours using the header skids and combine header float system. Do not exert too much of the header weight onto the skids as this will cause the skids to dig into the ground.

Adjustable deflector

This is adjusted hydraulically by the operator from the combine cab using the conventional header reel lift lever.

When correctly set the heads of the crop should be approximately 100mm below the top of the nose.

This is an adjustment which the operator will have to continually adjust to suit the crop height as the machine travels across the field.

6.2

Stripping rotor speed

The rotation speed of the stripping rotor is adjusted by a variable speed gearbox using change wheels to select the required speed.

FIG 4



The procedure for changing the gears in the gearbox to alter the rotor speed is as follows:

- Lower the header to the ground.
  Do not remove the cover unless this is carried out, or oil will spill out of the gearbox.
- 2. Remove the 3 thumb screws in the back of the gearbox and pull the cover off.
- 3. Refer to the chart of rotor speeds and select the correct gears for the required speed, slide the gears off the shafts and replace with the selected gears.
- 4. Check oil level see section 8.
- 5. A spare set of gears must be replaced onto the back of the gearbox cover to keep the driving gears in position.
- 6. Replace the gearbox cover ensuring the cork gasket is correctly set, replace and tighten the screws. (Hand tight only)

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Speed Ratios
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Driven (LH	) Driver (RH)	Rotor Speed (RPM) (APPROX)
18	28	1020
20	26	850
22	24	710
24	22	600
26	20	500
28	18	420

6.3

Tacho performance monitor

The tacho performance monitor will monitor the shaft speed of the feed auger and the stripping rotor shaft. For operation and setting proceedure see stripper header monitor operating instruction manual.

The tacho is fitted with an audible alarm. As the speed of the rotor and or auger reduce due to overload or blockage, the alarm will warn the driver to slow down or to stop. The arrow on the tacho display panel will automatically indicate which shaft has reduced speed during operation.

Auger - This is monitored only to alert the driver that the auger is blocked. The alarm speed should be set at 100rpm.

Rotor speed - Monitoring the rotor speed enables the driver to monitor the effort required by the rotor to strip the crop. By correctly setting the audible alarm speed, the torque limiter shearbolt can be prevented from shearing or if rattle clutch type, prevented from slipping.

i.e. If rotor speed with no load is 600rpm, and the shearbolt shears in operation when the tacho monitors the rotor speed at 550rpm, by setting the alarm speed to 560rpm the driver can prevent the bolt from shearing by slowing down the forward speed when he hears the alarm, to reduce the load on the rotor. Use the graph to initially set the alarm speed. The graph is only a guide, as engine power, and combine drive design to the stripper header will affect the value the alarm needs to be set. The values on the graph are conservative, and the operator may wish to reduce the alarm speed in increments of 1 or 2 rows rpm, until a shearbolt shears, at which point he should note the alarm speed and then raise it by 4 or 5 rpm so as to give advanced warning, to prevent the bolt from shearing again.

#### Example: -

The NO LOAD speed is when the machine is running empty. If the NO LOAD speed of the tacho is 650rpm follow the graph horizontally across until you meet the appropriate line for your torque limiter rating (in this case 1200N/M), if you are not sure see section 3. Then go vertically down and read the TACHO WARNING SETTING from the bottom scale.



BASI	C MAC	HINE SE	TTING	TABLE	
TYPE OF CROP	DIVIDER	S STRIPPING ROTOR SPEE RPM (APPRC		DRUM SPEED RPM	CONCAVE CLEARANCE
WHEAT DURAM TRI TI CALI RYE	SOMETIM: E	ES 500/600	APPROX 5/10MM	900-1000	3 - 6 MM
BARLEY & WINTER BARLEY	NO	500/600	5 ТО 10ММ	900-1000	3-6MM
OATS	YES	500/600	5 TO 10MM	600-700	7-15MM
GRASS	NO	APPROX 500/700	10 TO 12MM	800-900	6-15MM
RICE	YES	400/500	5 TO 10MM	CAN USE R DRUM AND C	ICE OR STD CONCAVE
LINSEED	YES	700	5 TO 10MM	FULL	3 – 4 MM
CLOVER	NO	400	5 ТО 10ММ	FULL	ЗММ
PEAS	NO	400/500	5 TO 10MM	500-600	15-20mm
GRASS FESCUE	YES	600	5 TO	800/900	5-8MM

NOTE: When harvesting peas best results are achieved with a soil kit fitted to combine.

CONCAVE BLANKING PLATES	STRAW WALKERS	FAN POSITION	SIEVES
YES BOTH SETS	WHEN DRY, INSTALL COVER PLATES	FULL	TOP: FULLY OPN BTM: 1/3 OR MORE OPN
YES BOTH SETS	VCP WHEN DRY	JUST BELOW FULL	TOP: FULLY OPN BTM: 1/3 OR MORE OPN
YES 1 SET	VCP WHEN DRY	APPROX 3/4 OPEN	TOP: FULLY OPN BTM: 1/3 TO 1/2 OPN
NONE OR 1 SET	-	1/2 TO 2/3	TOP: 1/4 TO 1/2 OPN BTM: 1/4 OPN
NONE	_	3/4 TO FULL	TOP: FULL OPEN BTM: 1/2 TO FULL
YES BOTH SETS	-	3/4 TO FULL	TOP: 3/4 OPN BTM: 1/4 OPN
YES BOTH SETS		LOW TO 1/4	TOP: 1/4 OPN BTM: ALMOST FULLY CLOSED
NONE	-	3/4 TO FULL	TOP: FULLY OPN BTM: 1/2 TO 3/4 OPN
1 SET OR BOTH	-	1/2	TOP 1/4 TO 1/3 BTM: 1/4OR LESS

6.5 OPERATING THE STRIPPER HEADER

Read this manual carefully before operating the stripper header.

To get optimum performance from your Shelbourne Reynolds stripping header the operator should follow the following procedures of operation.

Engaging the drive

In order to prevent the rotor drive torque limiter from operating when engaging the header drive the following procedure should be followed:

- 1. Run combine engine at idle speed.
- 2. If manual engagement, engage the drum of the combine and then gently operate the lever to engage the stripping head, avoiding snatch in the drive.
- 3. If your combine is fitted with electric or hydro-electric clutch engagement, the header drive should be engaged before the drum, therefore the complete workings of the combine and header will engage at the same time, thus reducing the snatch in the header drive line. Alternatively, hydro-electric clutches maybe fitted with a restrictor.
- 4. Increase combine engine speed to the working rpm.

Stripping rotor speed setting

The minimum speed should be set to ensure that all grains/seed is stripped from the ear of the crop. It is unnecessary to run the rotor faster than that required to strip all the crop as this only causes the machine to intake more straw and also will reduce the life of the stripping elements.

Header height setting

Standing Crops

When operating in standing crops the rotor will be carried between 150-300mm from the ground.

The aim is to carry the rotor as high as possible to reduce the amount of straw intake, but it must be low enough to lift and remove heads which maybe attached to stems low down in the crop, eg. bent over stems.

Laid Crops

When operating in laid crops it will be necessary to operate with the rotor as close to the ground as possible but without digging up dirt. This is achieved by floating the header on the skids. When set correctly, the skids will prevent the rotor touching the ground.

To keep header losses to a minimum, laid crops should be approached by harvesting either across or towards the way of lay, losses will increase if harvesting with the way of lay as the rotor is unable to lift the heads of the crop clear of the ground. However, if harvesting standing crop and small patches are laid, eg at headlands, these patches can be harvested with the way of lay providing that the header and front cowl are lowered enough. Also see front cowl setting.

When operating in laid crops, forward speed will be limited to being able to keep the header settings correct.

Standing and lodged or laid crop

-

There will be occasions where standing and laid crop will need to be harvested in the same pass. In these situations the header should be lowered down to lift and recover the laid crop.

Front cowl setting

The front cowl setting is important to ensure optimum performance of your stripping header. When correctly set in standing crop the front nose of the cowl

should deflect crop below it, the top of the crop being about 100mm below the top of the nose.

When correctly set in laid crops, the front nose of the cowl should ride over the top of the crop, the aim being not to push the crop down any further but to close the gap at the front to prevent grain losses.

When harvesting laid and standing crop in the same pass, lower the nose to recover the laid crop, therefore pushing over the standing crop, so it becomes laid.

Forward speed

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The Shelbourne Reynolds stripper header is capable of very fast forward speeds due to its rotary action, unlike a conventional cutterbar.

The forward speed will depend on the following:

- 1. Crop ripeness
- 2. Moisture level
- 3. Standing or laid
- 4. Levelness of the field
- 5. Power available to drive the rotor
- 6. Combine capacity
- 7. Crop yield

Normal operating speeds in standing crops are expected to be between 4 - 12 km/hour. In laid crops the speed may be slower.

Set performance monitor

Set the performance monitor rpm warning value to that indicated by the graph. Section 6.3.

### HARVESTING THE CROP

Follow in order the following procedures and checks to set the stripping header and combine to give optimum performance:

- 1. Ensure that all the necessary procedures of preparation for use described in this manual have been carried out.
- 2. Set the combine and header to the basic setting chart for the particular crop to be harvested.
- 3. Harvest approximately 50 metres of crop.
- 4. Stop the machine and look at the stripped crop for the following:
  - Check that all grain is stripped from the heads.
  - Check that there are no heads which have been missed low down in the crop. Note: The stripper header will not recover pre-harvest losses.
  - Check combine sieve and straw walker losses.

Note: Do not do this from behind the combine where you have just stopped. The check should be carried out in an area where there has been continous crop flow through the machine, whilst it has been on the move.

- Check header losses: This should again not be carried out where the machine has just stopped. An easy check is to back the combine away from the crop. Look in the area 2 - 3 metres back from where the header stopped, but before you get to the area where the sieves of the combine has blown out unwanted material. Another way to check header losses is to put a narrow tray between the rows of the crop, taking care not to disturb the crop near the tray, drive the header over the tray and then count the grains which are caught by the tray. From the losses can be calculated. Great care should be this, taken when carrying out such a test to ensure that grains from areas other than the header are not caught in the Also check the grain sample for cleanliness tray. and cracked grains.

- 5. Use adjustment charts to correct the results.
- 6. Go back to step 3 and repeat until satisfactorily set.

During Operation

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When operating the machine in the field it is important to keep the stripping header front cowl and height to the correct settings to suit the crop as it varies across the field. This means the operator will have to raise and lower the header and front cowl continually to suit the crop. If the crop is very even then very little adjustment will be necessary. If the crop is very uneven then the operator will have to adjust the header to suit the conditions much more frequently.

Use the combine grain loss monitors to determine the forward speed, unless the field is too rough or if the stripping rotor

power requirment is high. This can occur in unripe or damp crops and will be indicated by an audible torque limiter on the rotor drive line.

## PERFORMANCE MONITOR AUDIBLE ALARM SPEED ADJUSTMENT

When operating the machine it will be noted that the power required to drive the rotor depends mainly on forward speed and the height of the rotor from the ground.

i.e. - The closer the rotor to the ground, the more the power requirement and hence the rotor speed will reduce. - The faster the forward speed, the more the power requirement and hence the rotor speed will reduce.

If the rpm warning has been selected from the graph, yet the shearbolt breaks before the audible warning is heard, then the rpm warning value should be raised. See stripper header monitor operating instructions manual section B3.

This is carried out by operating the machine in work, and gradually increasing the forward speed, watching closely the rotor rpm, until the shearbolt shears. Set the rotor rpm warning value about 3 to 6 rpm above the value the shearbolt sheared.

The same procedure will apply if you feel that the rpm warning value is set to high.

If a fault occurs with the monitor, reset the tacho as described in the stripper header monitor operating instruction manual. If this fails consult your RDS dealer see appendixes.

6	•	6

## ADJUSTMENT CHARTS

PROBLEM	CAUSE	REMEDY
Grain left in stripped heads.	Rotor rotation speed too slow.	Speed up the rotor. (see section 6. 2)
	Stripping elements worn or broken.	Check elements, replace if necessary (see section 7. 11)
	Rotor too high when harvesting crop.	Lower rotor.
	Front cowl too low, pushing the crop away from the stripping rotor.	Lift the front cowl.
	Rotor torque limiter slipping causing loss of rotor speed.	Reduce forward speed lift the header.
Heads unstripped at division plate between the two rotors.	Rotor clearances and element clearance to the division plate incorrect.	Adjust the stripping element as close as possible to the division plate.
	Stripping fingers broken off at division plate.	Replace the element
	Fingers at division plate worn.	Cut the stripping finger to restore its stripping ability. (see section 7. 11)
Excessive shedding of seeds at side of machine.	Crop not separating properly	Fit dividers (see section 6. 1)
	Header side crop deflectors dislodged, missing or badly bent.	Replace or repair
Crop wrapping around rotor.	Rotor rotation too slow.	Speed up the rotor (see section 6. 2)

PROBLEM	CAUSE	REMEDY
Material not feeding to the header	Conveyor belt slipping.	Tension the belt. (See section 7.8)
auger	Conveyor belt flights missing	Replace conveyor belt
Auger torque limiter slipping	Auger blocked by foreign object.	Clear blockage
	Auger to low to auger trough	Adjust the auger clearance. (See section 7.4)
	Auger torque limiter spring tension incorrectly set	Re-adjust springs, (see section 7.5)
Irregular feeding into feed elevator	Elevator feed chain too high at entrance.	Lower chain. (See combine manufacturers manual.
	Elevator feed chain too far away from auger	Move auger back or move elevator chain forward. (see section 7.4)
	Crop building up on feed elevator dust cover	Remove the centre section of the elevator dust cover.
Excessive shelling of seeds at header.	Rotor too high in relation to the ground.	Lower rotor.
	Front adjustable cowl too high.	Lower cowl.
	Front adjustable cowl too low.	Lift front cowl.
	Crop is laid and leaning away from direction of travel.	Approach crop from different angle.
	Conveyor belt behind rotor not working.	Check for slippage or broken drive.
	Forward speed too slow.	Increase forward speed.

cleaned.

Grain sample

not properly

CAUSE

REMEDY

No concav	е
blanking	plates
fitted.	-

Concave to drum clearance not close enough.

Bottom sieve open too wide.

Drive speed too slow.

Excessive cracked grain in grain sample. Drum speed too fast Concave set too close to drum.

Concave blanking

plates fitted.

Grain loss over the sieves. Sieves blocked

Top sieve blocked air blast full.

Too much air blast from the cleaning fan.

Excessive short straw on the sieves. Fit concave blanking plates. (See C. M. O. M. )

Adjust clearnace (See C. M. O. M.)

Close the sieve slightly. (See C. M. O. M.)

Increase drive speed (See C. M. O. M.)

Reduce drum speed. (See C. M. O. M.)

Increase drum to concave clearance. (See C. M. O. M. )

Remove plates one set at a time. (See C. M. O. M.)

Increase air blast. (See C. M. O. M.

Close top sieve slightly, (See C. M. O. M.)

Reduce air blast or increase forward speed if possible to load more material onto the sieves. (See C. M. O. M.)

Reduce drum speed
 Open concave

3. Remove concave blanking plates. (See C. M. O. M.)

For other causes see C. M. O. M.

PROBLEM	CAUSE	REMEDY				
Stripping rotor torque limiter	Rotor hitting the ground.	Lift rotor.				
operating excessively.	Forward speed too fast.	Slow down.				
	Crop too unripe.	Allow crop to ripen.				
	Rotor rotating too slow.	Increase rotor speed. (See section 6.2)				
Stripping rotor torque limiter operating	Audible warning device rpm valve set too slow.	Check value setting from graph. (See section 6.3)				
before tacho audible warning		Check audible device is switched on.				
heard.		If the above is correct then recheck the value as in section operating the stripper header. (see section 6.5 performance monitor audible alarm speed adjustment)				
Crop wrapping in rotor ends	Anti-wrap plates out of adjustment	Adjust (see section 7.10)				
and centre.	Conditions very severe anti-wrap plates will not stay adjusted.	Fit Kit-00902 available from your dealer				

SECTION	7	S	Т	R	Ι	Ρ	Ρ	Ε	R	Η	Ε	A	D	Ε	R		A	D	J	U	S	Т	М	Ε	Ν	Т	S
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												-															

ANGLE OF STRIPPER

The angle of the stripper header is adjustable. The bolt in adaptor plate attaching the stripper to your combine has two fixing studs at the top, (A) Fig 5 located just under the top beam near the centre opening. These fixing studs are adjustable and will therefore adjust the angle of the stripper head, and hence the rotor height from the ground.

FIG 5



To correctly set: -

- If your machine is fitted with a bearing box drive input, which is fitted to the stripper main frame and not the adaptor plate i.e. JD then DISCONNECT the drive coupling.

- Set the stripper head skids in the uppermost position.

- On the level concrete lower the stripper head to the ground, i.e. so the skids touch the concrete.

- The rotor fingers should have ground interferance of approx 10mm.

- 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.

- Adjust the studs (A) Fig 5 of the adaptor plate equal amounts until the setting is approximately correct.

- Lock the adjusting stud nuts.
- Re-set the auger stripper plates to give approx 5mm clearance from the auger flights.
- For machines fitted with the bearing box on the stripper main frame, realign the header drive.
- Lower the skids to a position where the stripping fingers clear the ground by approx 20mm.

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

If your stripping header is fitted with a bearing box assembly supporting the header drive shaft, on initial header attachment, this will need aligning with the combine drive shaft as described below.

- 1. Attach the stripper header to the combine. DO NOT attempt to connect the drive shaft at this stage.
- 2. The header should be levelled as described in section 5, preparation for use. If your machine is fitted with a bearing box assembly which is bolted to the back of the header securing the drive shaft, then follow the following procedure to align the drive. If your machine is fitted with a standard PTO shaft eg. Claas, then simply press in the button of the coupling and push the coupling onto the shaft. Ensure that the coupling seast correctly ie. when the pin pops out again.
- 3. Remove guard and slacken the 4 bolts which hold the bearing box as shown in Fig 6 (A).
- 4. 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.
- 5. Tighten the 4 bolts which hold the bearing box to lock the shaft in the set position.
- 6. Replace the guard.

### JD American combines.

9600 and 8800 When aligning the drive on these combines, the female drive sleeve on the header is required. The grub screw on the male hub should be removed to allow the whole assembly to slide so that the header can be taken off and put on without the drives interfering. When fitting to other JD American combines the female sleeve should be removed, and the male hub locked with the grub screw so it does not slide.



AUGER SLIP CLUTCH SETTING

The auger slip clutch is pre-set at the factory. When correctly set, the spring length from the plate to under the washer should be approximately 55mm. When adjusting, it is necessary to hold the bolt behind the auger drive sprocket with a spanner to prevent it from turning whilst turning the locknut to compress the spring. See FIG 7.

! Replace the guards.

FIG 7



### AUGER POSITION SETTING

The auger position is set at the factory. 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 up or down FIG 8 (B), and fore or aft. See FIG 8 (A).

### FIG 8



NOTE: If adjusting forwards or down, first slacken the auger drive chain, and all stripper plate securing bolts.

- 1. To move up or down, slacken off the auger support plate locking bolt and adjust stud 'A' as indicated. Adjust both ends of the auger to equal amounts.
- For fore and aft movement, slacken off the auger support plate locking bolt and adjust stud 'B' as indicated. Again adjust both sides of the auger equal amounts.
- 3. Tighten bolts and locknuts when adjustment is complete.
- 4. Reset auger stripper plates.

### IMPORTANT

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

- 5. Re-adjust the auger drive chain to correct tension.
- 6. Replace the guards.
## AUGER FINGERS The position of the auger finger retraction is pre-set at the factory. It is adjusted by removing the guard on the right hand side, slacken off the bolt on the handle as shown in FIG 8 (C) and move the handle to the required position.

## 7.6

## AUGER STRIPPER PLATES

The stripper plates are behind the auger across the width of the machine, Fig 9 (B) except for the centre opening. These should be set approximately 5mm from the auger flight. They are adjusted by slackening all the bolts Fig 9 (A) on the stripper plate and moving it on the slots before re-tightening. The stripper plate or the adaptor plate is adjusted independantly to the same clearance.

FIG 9



## 7.7

CHAIN TENSIONING

The conveyor and auger drive chains are all fitted with jockey sprockets and idler adjusters, so that the chains can be correctly tensioned. The position of the adjusting idlers is as shown in FIG 10 (A).

## 7.5



STRIPPING ROTOR SAFETY CLUTCH

The rotor safety clutch is positioned as seen in Fig 10 (C). If the clutch is the shearbolt type, if the clutch operates, bolt (B) Fig 10 must be replaced.

/!  $\setminus$  Always stop the combine engine before replacing the shearbolt.

CONVEYOR BELTS

The conveyor belts are a low maintenance design. Once they are pre-set, they should not need much attention as they are also fitted with a self tensioning system.

The stripping header is fitted with two conveyor belts which are independantly tensioned and tracked. All adjustment is carried out at the ends of the machine, there are no adjusters inboard of the conveyor ends.

7.8

SETTING CONVEYOR BELT PRE-LOAD

The conveyor belt pre-load is set by adjusting the threaded rod as shown in FIG 11 (A) to increase or decrease the spring tension, which in turn pre-loads the conveyor belt. The left hand adjuster will pre-load the left hand conveyor belt and the right hand adjuster will pre-load the right hand conveyor belt. The spring length, hook centre to centre, to give the correct conveyor belt tension should be as follows:

1.8m belts - 130mm 2.4m belts - 135mm 3.0m belts - 140mm



#### 7.9

## TRACKING CONVEYOR BELTS

The drive and idle conveyor rollers should be set parellel to each other. This is adjusted by rod FIG 11 (B) on the left hand side of the machine which adjusts the left hand conveyor belt, and the adjuster on the right hand side of the machine adjusts the right hand conveyor belt. To set parallel, the distance over the rollers should be measured at either end of the conveyor belt.

## 7.10

# ROTOR

(!) CAUTION - Block or fit header safety latch before carrying out adjustments on the rotor.

## ANTI-WRAP PLATES

The ends of the rotor are fitted with anti-wrap plates around the rotor circumferance - FIG 12 (A) to prevent the crop entering and wrapping in the rotor ends.

The plates are pre-set at the factory but if they need adjusting, follow the procedure below:

- 1. Loosen the two screws securing the plate as shown. FIG 12 (A)
- 2. Push the anti-wrap plate to the machine side plate or division plate until the tip just touches.
- 3. Move the anti-wrap plate in a further 2mm, to apply slight spring pressure.
- 4. Tighten the two securing screws.
- 5. Repeat for the other plates.





Although not usually required, in severe conditions an extra anti-wrap kit (KIT-00902) may be necessary. This can be purchased from your dealer.

### STRIPPING FINGERS

The stripping fingers or crop engaging elements are sectioned into 600mm lengths to allow replacement of individual sections.

# ANTI-WEAR PLATE (PORTCULLIS)

The rotor is fitted with metal anti-wear plates which bolt in front of the plastic fingers, Fig. 12 (B) these are replaceable, in sections. Note, the ends are different to the centres and are handed left or right. The bolts securing the steel wear plates should be set to a torque of 171b/ft.

7.11

# STRIPPING ELEMENT WEAR ASSESSMENT

During the first hours of use, it will be noticed that the corners of the stripping elements will round off, this is normal. When the stripping element holes become distorted or enlarged, it is time to replace some of the elements. Two new rows of elements should replace the old ones, the selected rows being opposite each other to keep the rotor in balance (180 degrees). This, along with the partially worn ones, will give effective stripping.

When these new stripping elements begin to distort or enlarge, then two different rows should be selected for renewal and so on alternatively around the rotor.

If a single finger breaks off a section of a stripping element, the other fingers on the other rows around the rotor will compensate for it and stripping will still be just as efficient. If a few fingers break off in the same area around or along the rotor, then these stripping element sections should be replaced. As the stripping elements at the division plate between the two rotors wear, stripping efficiency may reduce, and some unstripped heads maybe noticed at this position. This can be cured by slackening the bolts of two opposing rows (i.e. at 180 degrees) of elements on each rotor of the element nearest the division plate, and push them upto the division plate until they just touch, re-tighten the bolts. Then cut the inner stripping finger, the one closest to the division plate as shown below, to restore its stripping ability, care must be taken not to overcut in the corner or the finger will break off in use.



Each element can only be cut once, when these wear, another two opposing rows must be cut.

## REPLACING STRIPPING ELEMENTS

To replace the stripping elements, follow the procedure below:

- 2. Lift the front cowl with the combine hydraulics and secure, ie. with a rope or block.
- Each individual stripping element is secured to the rotor by six bolts. Each element section can be clearly seen by the joints.
- 4. Remove the six bolts securing the element and pull the element out of the rotor.

NOTE: Sometimes it may be necessary to slacken the first two or three bolts of the neighbouring elements to release the one you want to remove.

- 5. Place the new element in position. If it is difficult to push into the rotor, it may be tapped into place with a small bar in the bottom of the stripping holes.
- 6. Replace the six bolts including the spring washer. Nut Lock (loctite) or a locking bolt must be used on the bolts.

CAUTION - Nut Lock or locking bolts must be used on the element securing bolts.

DO NOT overtighten the bolts, when correctly tightened they should just nip up the stripping elements.

7.12

#### DIVIDERS

Torpedo type dividers are supplied with the stripping header. To fit the dividers, open the side guards, put the divider through the slot in the side frame, and hook into the catch. Place the clip in the catch to prevent the divider falling out. The height of the divider can be adjusted by slackening the bolt and moving the adjusting bracket to set the divider to the correct height.

The wings of the divider are also adjustable and should be set on the inside to suit the crop conditions.

7.13

#### SKIDS

The skids under the stripping header are adjustable. They can be moved by slackening off the 4 bolts and moving the skid in the slots.

The function of the skids is to prevent the rotor from hitting the ground and to keep the rotor at a constant height above the ground when working at low levels eg. laid crops. (Extra skid kits are available).

In some cases due to feeder housing length and wheel sizes etc. it may be necessary to fit a skid extension kit to increase adjustment to prevent the rotor hitting the ground.

7.14

DROP BOX TYPE ROTOR DRIVE (196519 --- only) Uprated Rice machines 196518 -- are fitted with a different type of drive.

The complete six speed gearbox and drop box assembly can be moved up or down in 6 different hole positions (position 1 being the top and 6 being the bottom) Fig 14 (A) with micro adjusting studs (B). The drop box (C) will pivot fore and aft in an arc by adjusting the tie rod (D) after loosening all bolts (E). This is to allow exact drive shaft alignment to combine specifically on the narrow stripper headers. On the wider headers ie 5.4m and 6.0m, the gearbox assembly should be positioned so that the side PTO (F) and rear PTO (G) are of approx. equal angles, when standard PTO joints are used. The angle of either shaft should not exceed 20 degrees. In some cases, a wide angle PTO shaft is used, at the back, in which case the side PTO should be set at no more than 12 degrees, allowing the wide angle shaft to work at a much increased angle. Recommended shaft positions are given in the combine model drive kit section, and is determined by the gaurd kit used.

<u>Combine type</u> - There are 2 select gears inside the drop box which determine the output speed for the combine type. These gears can be changed for different combine models. Your dealer should be consulted if you require to change these as the gearbox cover has to be removed.



### SECTION 8

Your Shelbourne Reynolds Stripper 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.

#### CHAINS

All chains as indicated, should be lubricated daily, and after work so that the oil will adhere to the chain to provide good lubrication.

Use an aerosol chain lubricant of SAE 90 gear oil.

NOTE: If your combine was fitted with a maize drive kit, with a chain to drive the header, this too should be lubricated daily.

### PIVOT POINTS

It is recommended that all pivot points which may become stiff from corrosion should be occasionally oiled.

SIX SPEED GEARBOX (machine number 196515 -- and 196516 -- only) To check the level on the six speed gearbox, lower the header onto the skids on level ground.

Remove the three thumb screws on the rear of the gearbox securing the back cover, and remove the back cover. Remove the oil level plug on the side of the gearbox. Replenish the gearbox with SAE 90 gear oil to the level of the plug.

Replace the back cover.

BEVEL GEARBOX (machine number 196515 -- and 196516 -- only) To check the level the gearbox should be set level. Remove the dipstick in the top of the gearbox, and check the level with the marks on the stick. Replenish with SAE 90 gear oil.

SIX SPEED GEARBOX (machine number 196518 -- only) Check the level as above. Use oil type (synthetic) MOBILUBE S.H.C. or equivalent.

The gearbox capacity 1.25 litre (2.2 pints)

BEVEL GEARBOX (machine number 196518 -- only)

To check the oil level the machine should be level ie. in the lowered position so the gearbox is at 30 degrees. Remove the dipstick in the top of the gearbox, and check the level with the marks on the stick. Use oil type (synthetic) MOBILUBE S. H. C. or equivalent.

The gearbox capacity 1.5 litre (2.64 pints)

The input housing has a seperate reservoir, oil can be drained and replenished by removing the plugs top and bottom.

The reservoir capacity is 0.13 litre (0.23 pints)

LONG AND SHORT DROP BOXES (machine number 196519 -- only) To check the oil level the gearbox should be set vertically to the ground. This can usually be achieved by raising the header on the combine. The level plug is on the side of the gearbox.

Use oil type (synthetic) MOBILUBE S.H.C. or equivalent.

The gearbox capacity is 1.25 litre (2.2 pints).

NOTE - ALL GEARBOXES After the first 20 hours of use the oil should be drained from all gearboxes and replaced with the recommended type.

Oil should then be changed annually.

Only the recommended lubricant oils should be used.

Grease the following points at 10 hour intervals;

- 1. Overunning clutch.
- 2. Universal joints.

Grease the following at 50 hour intervals;

- 1. Torque limiter.
- 2. Rotor end bearings.
- 3. Adjustable deflector pivot arm bushes.

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

SECTION 9

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

- 1. Remove the stripping header from the combine feeder housing, either onto the 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. Dismantle the conveyor assembly, and remove conveyor belts to prevent them taking a permenant set.
- 4. Clean and lubricate all chains with oil.
- 5. Dismantle the auger slip clutch, check and lubricate before reassembly. When assembling leave the springs slack for storage.
- 6. Lubricate the machine thoroughly as described in the lubrication section of this manual.
- 7. 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 STRIPPING FINGERS AS IT MAY DAMAGE THEM

- 8. Retract the hydraulic rams of the front deflector.
- 9. Store the header in a dry place protected from the weather and rodents.
- 10. Support the header on the trailer or on blocks of equal height at the ends and under the header division plate during storage, to prevent header damage. Do not support header weight on skids during storage.
- 11. Use the combine operators manual for storage procedure of your combine.

SECTION 10

### APPENDIXES

Barr Specialist Services Newmarket Nailsworth Glostershire GL6 ORL Tel. 045 383 3337 Car phone 0836 237913

RDS UK DISTRIBUTORS

East Coast Electrical Services Chigborough Road Maldon Essex CM9 7RE Tel. 0621 52113 Car phone 0836 737028

R & L Services 31 Highfield Road Ormskirk Lancs L39 1NP Tel. 0695 72397 Car phone 0836 620049

RDS (NE) Ltd 8-12 Albany Road Woodhall Spa Lincs LN10 6TS Tel. 0526 53677 Car phone 0836 711697 0836 711696

Wallace Agricultural Services Unit 12 Camps Industrial Estate Kirknewton Midlothian EH27 8DF Tel. 0506 882903 Car phone 0860 359912

RDS OVERSEAS DISTRIBUTORS

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