Model 3000 Corn Header Workshop Service Manual

MASSEY FERGUSON® Model 3000 Corn Header 79023082 A Rev. CONTENTS

GENERAL INFORMATION	1-1
ADJUSTMENTS	2-1
SERVICE GENERAL	3-1
SERVICE - FRAME GROUP	4-1
SERVICE - ROW UNIT	5-1

Contents

GENERAL INFORMATION	
Safety Alert Symbol	1-3
Signal Words	1-3
Safety Precautions	1-4
Road and Highway Operation	1-6
Safety Decals, Lights, and Reflectors	1-7
Right and Left Hand 1	-12
Header Lift Cylinder Stop 1	
SHIELDS	-14
Attaching Corn Head to Combine 1	-21
Leveling Header 1	-26
Specifications 1	-27
Lubrication and Service 1	
SETTING UP INSTRUCTIONS 1	-39
General 1	-39
Shipping Angles	-40
Shipping Stands 1	-41
Preparation1	-42
Inner Gathering Sheets	-43
Inner Divider Points 1	-45
Outer Fenders	-47
Extremity Lights 1	-50
Corn Head Hopper Bottom Deflector Plate 1	
Setup to Fit Transverse Corn Head on Conventional or Axial Combine	
Setup to Fit Conventional or Axial Corn Head on Transverse Combine	

Safety Alert Symbol

FIG. 1: This is the safety alert symbol. It means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! Look for it, both in this manual and on safety signs on the machine. It will direct your attention to information that involves your safety and the safety of others.

Hazard control and accident prevention are dependent upon the awareness, concern, and prudence of personnel involved in the operation, transport, maintenance, use, and storage of equipment.



CAUTION: Shields have been removed in some photos for clarification. DO NOT OPERATE HEADER UNLESS ALL SHIELDS ARE IN PLACE.

Saf

FIG. 1

Signal Words

FIG. 2: The words **DANGER**, **WARNING**, or **CAUTION** are used with safety alert symbol. Learn to recognize these safety alerts, and follow the recommended precautions and safe practices.



DANGER: Indicates an imminently hazardous situation that, if not avoided, will cause DEATH OR VERY SERIOUS INJURY.



WARNING: Indicates a potentially hazardous situation that, if not avoided, could cause DEATH OR SERIOUS INJURY.



CAUTION: Indicates a potentially hazardous situation that, if not avoided, may cause a MINOR INJURY.

Replace any **DANGER**, **WARNING**, **CAUTION** or instructional decal that is not readable or is missing. The location and part number of these decals is identified later in this section of the manual.

IMPORTANT: The word IMPORTANT is used to identify special instructions or procedures which, if not strictly observed could result in damage to, or destruction of the machine, process or its surroundings.

NOTE: The word NOTE is used to indicate points of particular interest for more efficient and convenient repair or operation.



FIG. 2

Safety Precautions

FIG. 3: Read and understand this section of your service manual, the operator's manuals for the combine, and for all the attachments before operating the combine.

Learn how to operate the combine and header and how to use the controls properly.

Do not allow anyone to operate the combine without proper instruction and training.

The Right Hand and Left Hand side is determined by facing in the direction of forward travel.

IT IS TOO LATE TO REMEMBER WHAT SHOULD HAVE BEEN DONE AFTER THE ACCIDENT HAS HAPPENED.

For you safety and the safety of others, follow all the safety precautions and instructions in the manuals and on the decals affixed to the combine and its attachments. Personal injury or death may result if these precautions are not followed.

- READ the Operator's Manuals carefully to acquaint yourself with the Corn Head and combine. Operating unfamiliar equipment can cause accidents.
- ALWAYS shift transmission to neutral, stop engine, set brake and remove start key before leaving the operator's station, or before permitting anyone to inspect, clean, lubricate, adjust or repair any part of the combine or its attachments, unless otherwise specifically recommended in the Operator's Manual.
- NEVER permit anyone to work under the Corn Head or feeder housing or between the Corn Head and combine UNLESS the header lift cylinder stop is fully engaged on the lift ram, the engine is stopped, the brake is set, the key is removed from the start switch, and the Corn Head is latched securely to the feeder housing.
- NEVER permit the operator or another person to engage or disengage the header lift cylinder stop UNLESS the combine engine is stopped, the brake is set, and the key is removed from the start switch while that person is between the Corn Head and the combine or under the feeder housing to move the header lift cylinder stop.
- BE SURE that everyone is clear of the combine before starting the engine and mechanism or it's attachments.
- ALWAYS be sure that all shields, guards and access doors are in place when Corn Head is in operation.
- DO NOT try to clean, adjust, or service the Corn Head while the Corn Head or combine is operating.
- KEEP all belts and chains in alignment and at the proper tension.
- NEVER turn the Corn Head conveyor or drives unless ALL parts of the body and articles of clothing are well clear of the chains, gears, and other moving parts.

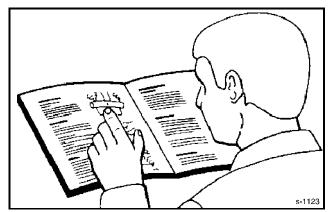


FIG. 3

1-4 79023082 A Rev.

- FOR YOUR SAFETY and the safety of others, SAFETY AND OPERATIONAL DECALS that become damaged, faded, or come off should be replaced immediately.
- REMEMBER that safe operation is no accident.
- ALWAYS lower the Corn Head to the ground, or block, or lock it up securely before disconnecting or servicing any part of the system.
- ALWAYS keep the drives, moving parts, and shields clean of chaff and build-up to reduce the possibility of fire

Road and Highway Operation

FIG. 4: COMPLY with your state and local LAWS and REGULATIONS governing highway safety when moving machinery on a highway.

- ALWAYS travel at a reasonable speed for road or field conditions. Whenever possible, avoid traveling near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and or rough, slick or muddy surfaces.
- ALWAYS empty grain tank before transporting on public roads.
- ALWAYS reduce speed GRADUALLY to maintain adequate weight for stability on the rear (steering) wheels whenever:
- a. Slowing ENGINE speed.
- b. Slowing HYDRO-TRACTION drive.
- c. Applying BRAKES.
- NEVER apply turning assist individual wheel brakes during road or highway operation. Brakes must be locked together during road travel.
- TOWING of combine is NOT recommended!

ROTATE the Corn Head extremely lights so that the lights are to the outside position of Corn Head when traveling on a highway. **USE SMV** (slow moving vehicles) emblem on the combine and flashing warning lights when operating the combine and Corn Head on a highway, unless prohibited by law.

CHECK clearance **CAREFULLY** before driving the combine and Corn Head under electric lines, over bridges, or other obstructions along the highway.

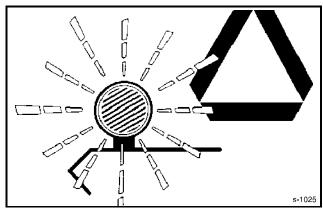


FIG. 4

1-6 79023082 A Rev.

Safety Decals, Lights, and Reflectors



CAUTION: The following warning signs, lights, and reflectors are placed at strategic positions on the Corn Head and or combine to provide the operator with a continual reminder of correct operating practices. If they become damaged or lost, replace them immediately. They may be obtained from your local AGCO dealer. The part number and location on the combine or Corn Head are listed under each safety sign.

Item	Part Number	Description	Quantity
1	71350770	Decal, Danger Ram Stop	1
2	71350365	Decal, Danger Snapping Rolls	2
3	71192887	Decal, Warning Drive Shieldp	1
4	70596071	Decal, Warning Shipping	1
5	71389339	Decal, Warning Lift Hook	2
6	70591362	Decal, Warning Speed (8, 10, 12 row units only)	1
7	71359170	Decal, Danger Drive Line	2
8	71359119	Decal, Danger Drive Line (under shield)	2
9	700722000b	Decal, Informational Lubrication	1
10	528934	Reflector Strip, Yellow	2
11	528933	Reflector Strip, Red	2 (4 on 12-Row units)
12	528938	Reflector Strip, Orange	2 (4 on 12-Row units)

FIG. 5: Safety sign, 1.

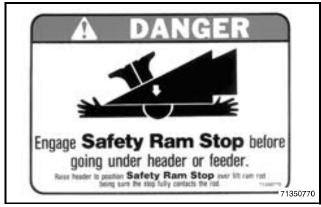


FIG. 5

FIG. 6: Safety sign, 2.



FIG. 6



FIG. 7

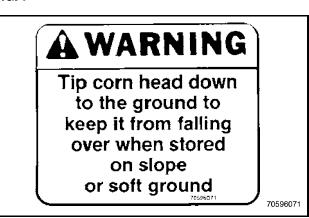


FIG. 8



FIG. 9

FIG. 7: Safety sign, 3.

FIG. 8: Safety sign, 4.

FIG. 9: Safety sign, 5.

1-8 79023082 A Rev.

FIG. 10: Safety sign, 6.

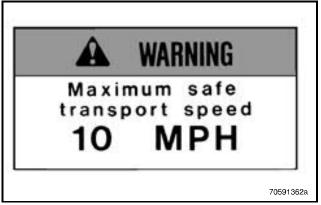


FIG. 10



FIG. 11



FIG. 12

FIG. 11: Safety sign, 7.

FIG. 12: Safety sign, 8.

79023082 A Rev.

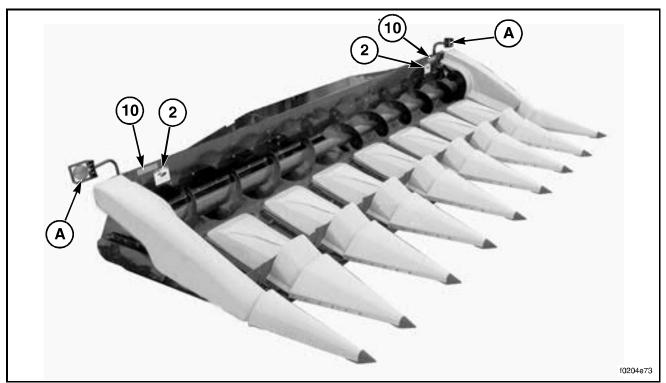


FIG. 13

FIG. 13: Safety sign locations. Corn Head Lights (A). Front & Rear Lens, Amber.

FIG. 14: Reflector & Safety sign locations.

FIG. 15: Reflector locations.

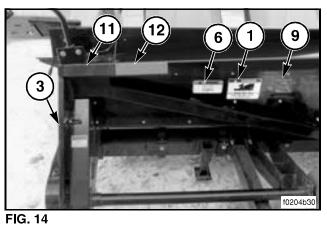


FIG.

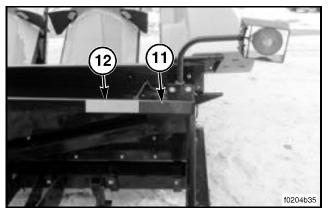


FIG. 15

1-10 79023082 A Rev.

FIG. 16: Safety sign & reflector locations. 12-Row models only.

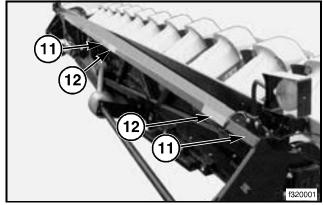


FIG. 16

FIG. 17: Safety sign locations.

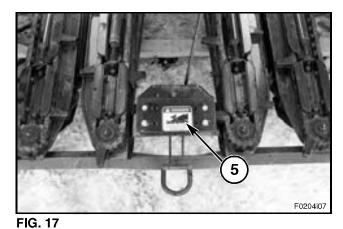


FIG. 18: Safety sign locations.

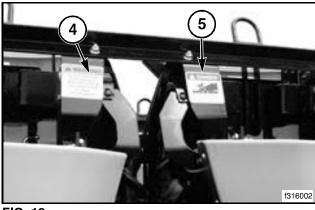


FIG. 18

FIG. 19: Safety sign locations.



WARNING: DO NOT operate the combine or Corn Head unless all shields are in place.



WARNING: Shields have been removed in some photos for clarification. DO NOT OPERATE Corn Head UNLESS ALL SHIELDS ARE IN PLACE.

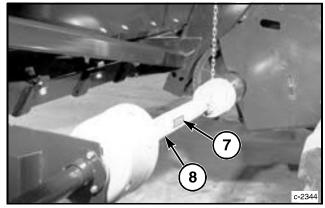


FIG. 19

Right and Left Hand

FIG. 20: Throughout this manual when reference is made to Left Hand and Right Hand, it is determined by standing behind the machine and facing the direction of forward travel.



FIG. 20

Header Lift Cylinder Stop

FIGS. 21–22: Disengaged Lift Ram Stop: A header lift cylinder stop (1) is located on the Left Hand feeder housing lift cylinder on the combine.

A "U" shaped piece of heavy metal called a Header Lift Cylinder Stop (1) is pivoted on a pin near the outer end of the lift cylinder rod (2). When the lift rams are fully extended, the cylinder stop (1) can be pivoted upward.

The cylinder stop support hook (3) can be engaged into the slot in the feeder housing side where the stop (1) is carried while the combine is in operation.



DANGER: NEVER permit anyone to get under any part of header or feeder housing, or between raised header and combine to work, unless header lift cylinder stop is engaged, and fully contacts the cylinder rod, engine is stopped, brakes are set, and the start key is removed. Be sure the Corn Head is latched securely to the feeder housing.



DANGER: ALSO, to prevent any possible accidental lowering of header and possible injury, ALWAYS stop the engine, set brakes and remove the start key during the time operator or other person is between the back of the raised header and combine and reaches under the side of feeder housing to engage or disengage the header lift cylinder stop.

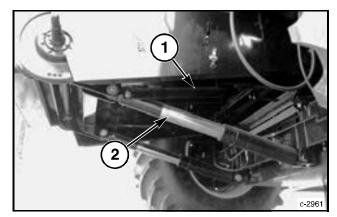


FIG. 21

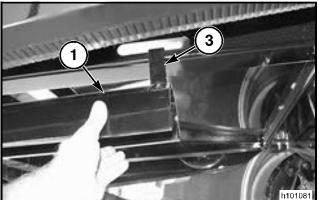


FIG. 22

1-12 79023082 A Rev.

FIG. 23: Engaged Lift Ram Stop: When the lift rams are fully extended the cylinder stop support hook can be released from the slot in the feeder housing side and pivoted downward until it fully contacts and surrounds three sides of the lift cylinder rod (2). In this position the rear end of the cylinder stop (1) is aligned with the front end of the lift cylinder barrel (3). When the feeder housing is lowered slightly, the end of the header lift cylinder stop contacts the outer end of the lift ram barrel and makes solid contact which holds the feeder housing and the header attached to it, properly in the raised position.

With header lift cylinder stop properly in place, the header cannot be lowered except by starting the engine and actuating lift ram to release the header lift cylinder stop.

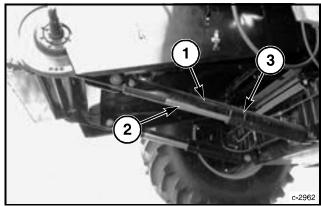


FIG. 23

SHIELDS

NOTE: Some pictures in this manual may show shields removed for visibility or access to parts of the header. Numerous shields must be opened and or removed to perform normal service and adjustment procedures.



WARNING: NEVER operate the combine or allow others to operate it unless ALL SHIELDS supplied with the combine and its attachments are PROPERLY IN PLACE.



WARNING: Do NOT leave the operator's platform UNLESS the brake is set, the engine is stopped, and the key is removed.



DANGER: NEVER permit anyone to examine, clean, lubricate, or adjust any part of the row units, the header automatic lift and tilt option, or the header itself UNLESS:

The header is lowered until the corn head is resting on the ground, the combine engine is stopped, the brake is set and the key is removed from the start switch.

OR

The corn head is raised, the ram stop is fully engaged on the header lift ram, the engine is stopped, the brake is set and the key is removed from the start switch.



DANGER: When operating with optional automatic header lift and tilt in muddy conditions or where trash may occur, the drag rod sensors may become jammed in the raised position and not permit the header to drop in automatic operation.

When this or any malfunction occurs, DO NOT ATTEMPT TO FREE OR MOVE THE DRAG RODS UNLESS THE HEADER LIFT CYLINDER STOP IS ENGAGED AS INSTRUCTED ON THE DANGER DECAL FOR THE LIFT CYLINDER STOP. TO DO SO CAN CAUSE THE HEADER TO DROP SUDDENLY AND CAUSE SERIOUS INJURY.

FIG. 24: Left Hand auger drive shield (1) shown in the open position on all models. And Right Hand auger drive shield is used on 12-Row 30 inch units only.

To open, unlatch (2) and swing shield downward. To close, reverse the process.

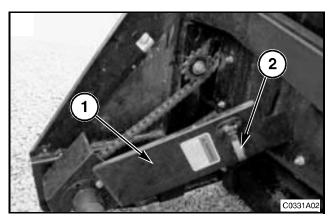


FIG. 24

1-14 79023082 A Rev.

Thank you very much for your reading. Please Click Here. Then Get COMPLETE MANUAL. NO WAITING



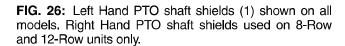
NOTE:

If there is no response to click on the link above, please download the PDF document first and then click on it.

FIG. 25: For 4-Row and 6-Row Corn Heads, Right Hand feeder house countershaft shield (1) shown in the open position.

To open, unlatch (2) and swing shield upward. To close, reverse the process.

Raise drive shield (1) at rear of head before driving combine in for hooking up. Lower shield after hooking up is complete.



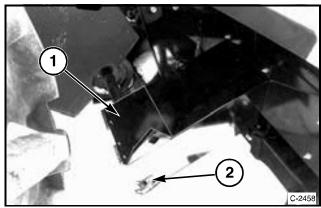


FIG. 25

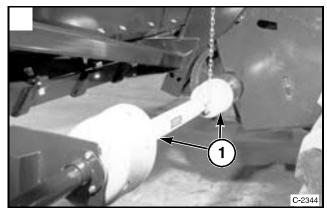


FIG. 26

FIGS. 27–30: Open Inner Gather Assembly: Raise Corn Head and set header lift cylinder stop. Reach under divider point, then pull pin (1) and lift gather assembly.

Remove prop rod (2) from the prop rod keeper (4) and then remove quick pin (3) from storage hole (A).

Use prop rod (2) to support gather assembly in latch plate (5) and install quick pin (3) in end of prop rod.

NOTE: Inner gather assemblies may be raised with or without divider point adjusting chain connected.



WARNING: ALWAYS install quick pin (3) in the prop rod (2) when fenders and inner gathers are raised into the service position.

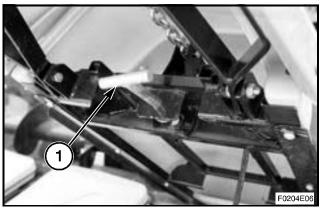


FIG. 27

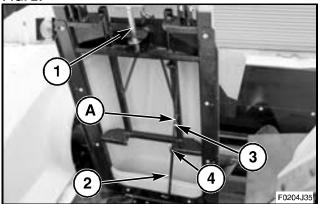


FIG. 28

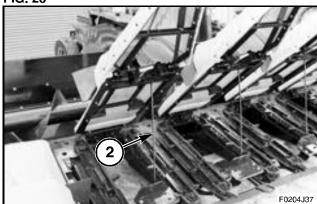


FIG. 29

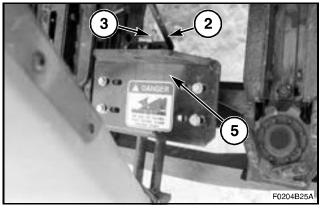


FIG. 30

1-16 79023082 A Rev.

FIGS. 31–33: Open Inner Gather Assembly 12-Row 20 and 22 inch: Raise Corn Head and set header lift cylinder stop. Reach under divider point, pull quick pin (1), and then remove retaining pin (2).

Raise divider and remove prop rod (3) from prop rod keeper (4).

Use prop rod (3) placed securely in row unit assembly.

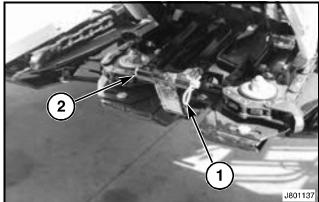


FIG. 31

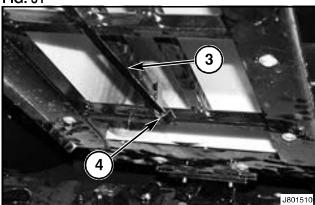


FIG. 32

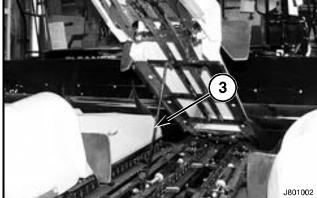


FIG. 33

FIG. 34: Close Inner Gather Assembly: Position pin (1) so that it is offset from the hole so that the pin is in the open position.

Store the prop rod in keeper and install quick pin in storage hole.

Lower gather assembly and then lock gather assembly in position by engaging pin (1).

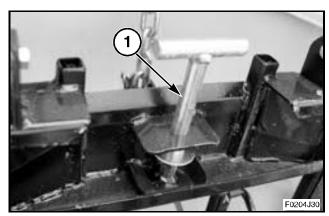


FIG. 34