

TWO ROW STRIPPER HARVESTER



OPERATOR'S MANUAL

November 19, 2014



TO OUR CUSTOMER:

Thank you for purchasing your Two Row Stripper Harvester. At Granville Equipment we are dedicated to manufacturing equipment for the efficient farmer. With rising costs in labor, we strive to build equipment that will help farmers conserve labor, increase speed, and generate more profit.

Your dealer has performed the pre-delivery service on your new Harvester. He will discuss with you the operating and maintenance instructions given in this manual, and instruct you in the proper and varied applications of this machine.

This machine is covered by a written warranty which can be found in this manual.

Any questions on replacement parts or servicing for the Two Row Stripper Harvester should be directed to the local dealer from whom you purchased the equipment or by contacting us here at Granville Equipment. Our contact information is listed below.

We sincerely thank you for purchasing your new Two Row Stripper Harvester from Granville Equipment.

Sincerely,

GRANVILLE EQUIPMENT

GRANVILLE EQUIPMENT 4602-A Watkins Road Oxford, North Carolina 27565 Phone: 919-693-7268 website: www.granvilleequipment.com

TABLE OF CONTENTS

Introduction
Emission Warranty5
Harvester Identification
Safety Precautions
Safety Signs
Instruments & Harvester Controls
Initial Machine Setup
Harvester Operations
Trouble Shooting
Murphy Reference
Maintenance Chart
Cutter Bar Identification
Filter Reference
Hydraulic Parts Reference
Hydraulic Valve Reference (2011) 33
Hydraulic Valve Reference (2012-2014)
Parts Reference

INTRODUCTION

Thank you for choosing the Granville Two Row Stripper Harvester for your tobacco harvesting needs. The purpose of this manual is to provide you with information regarding safety, initial startup, maintenance and general information about your machine. Also included are diagrams for reference in regards to hydraulic components, electrical controls and safety decals.

For 2011/2012 models, please consult the Deutz Operation Manual and Spare Parts Catalogue for details regarding the Deutz engine. On the 2013 to present models, please consult the John Deere 4045 Operation Manual and Spare Parts Catalogue for details regarding the John Deere engine.

This book also contains instructions for adjustments and maintenance of your harvester. Please follow these instructions carefully and keep a record of your maintenance. We have included a log sheet for your maintenance records.

Granville Equipment strives to continually improve our equipment and make good products even better and reserve the right to make such improvements without incurring any obligation to make changes to equipment previously sold.

An important note for your new Two Row Stripper Harvester regarding its capabilities is as follows:

The Granville Two Row Stripper Harvester is built to only strip the upper two thirds of the tobacco stalk. It is not built to strip the entire stalk during one pulling.

If you have any questions after reading this manual, please contact your local dealer or sales representative.

GRANVILLE EQUIPMENT *Limited Warranty*

Granville Equipment, Inc. warrants its agricultural equipment to be free of any defects in materials or workmanship utilized in the manufacturing process of its agricultural equipment. This LIMITED WARRANTY covers any defects that are incurred during the manufacturing process or any defects that arise from the operation of the equipment under normal use and operation for one harvesting season.

Granville Equipment's obligations to its customers include repairing or replacing any parts that they deem to be faulty due to the manufacturing process only. The purchaser is responsible for the payment of all other repairs or replacement parts. Granville Equipment is not responsible for belt damage caused by improper adjustment.

Under this LIMITED WARRANTY Granville Equipment is not liable for any damages caused by the mistreatment or neglect of its agricultural equipment by the purchaser. The agricultural equipment should only be operated in a manner that is recommended by Granville Equipment.

Only work that is completed by a Granville Equipment employee or dealer is warranted. Any outside work done to the equipment does not fall under this warranty and Granville Equipment is not liable for any damages that result from outside work on the agricultural equipment.

Granville Equipment certifies that its agricultural equipment meets all federal and state regulations that exist during the time that the equipment is manufactured.

The forgoing warranty shall be the sole and exclusive liability of Granville Equipment, and is in lieu of all other warranties expressed, implied, or statutory, including but not limited to, any implied warranty of merchantability or fitness of purpose or use.

EMISSION WARRANTY

The following statement applies to engines used in the Two Row Stripper Harvester and standards set forth by the United States Environmental Protection Agency.

PRODUCTS WARRANTED

This emission warranty applies to new engines fitted in the harvester and used in the United States as off-road applications. The warranties issued by different Granville Equipment engine suppliers cover the initial owner and subsequent owners of a certified off-road diesel engine, and ensure that it is:

- 1. At the time of the sale, conform with all applicable regulations adopted by the United States Environmental Protection Agency.
- 2. Free from defects in workmanship or material which could cause it not to meet these regulations.

Granville Equipment and its engine suppliers are not responsible for damage to emission related parts resulting from:

- Improper application or installation of the used product
- Equipment, accessory items or parts not sold or approved by them
- Improper engine maintenance, repair or abuse
- Use of improper fuel or by water dirt or other fuel contamination

Your machine has labels from the engine supplier as well as Granville Equipment showing it meets EPA Emission Standards.

EMISSION CONTROL INFORMATION CRANVILLE EQUIPMENT Control Cont			
THIS TWO ROW HAR' ENGINE THAT MEETS U STANDARDS UNDER	J.S. EPA EMISSION		
Contact name: Stephanie W. Keith Email/website: www.granvilleequipment.com	DOM: 2/2013 Telephone number: (919) 693-7268		

Fig. 1

HARVESTER IDENTIFICATION / SERIAL NUMBER

Each Harvester is identified by a serial number and an engine serial number. To ensure prompt response to ordering parts and repair work from your dealer, always record the serial number since it will tell the dealer when the machine was built.

The engine serial number should be recorded in order to get faster service when contacting the engine supplier or engine dealer for service.

Your harvester will have a serial number as seen in the figures to the left. Depending on year, it is located under the dash or the mounting side of the driver's seat. If you are missing a serial number please contact Granville Equipment and we will replace it at no charge.



Fig. 2



HARV0113-39

[Harvester] [Year - 2013] [26th shipped]



HARV160114-08

[Harvester][Conveyor Width] [Year] [26th built]

SAFETY PRECAUTIONS

INTRODUCTION

This safety section of your Operator's manual is intended to point out some of the basic situations which may be encountered during the normal operation and maintenance of your Two Row This section is NOT a Stripper Harvester. replacement for other safety practices featured in other sections of this manual or for normal workplace safety. Additional precautions may be necessary depending on conditions in the field or The manufacturer has no direct work site. control over the harvester application, operation, lubrication, maintenance. inspection, or Therefore it is YOUR responsibility to use good safety practices in these areas.



WARNING: In some of the illustrations used in this Operator's Manual, panels or shields may have been removed for clarity. Never operate the harvester without these components in appropriate position. If the removal of panels or shields is necessary in order to carryout repair, they MUST be replaced before operating machine.

HARVESTER SAFETY

The harvester is a source of power – mechanical and hydraulic. On its own, the harvester is of little practical value. Only when used in conjunction with a Live Bottom Dump Box does the harvester become a working unit. This operator manual is compiled to cover recommended working practices that are associated with general harvester operation. It is YOUR responsibility to read and understand the safety section in this manual before operating your Two Row Stripper Harvester. Remember YOU are the key to safety. Good safety practices not only protect you, but also the people around you. Study the features in this manual and make them a working part of your safety program. Keep in mind that this safety section is written only for this type of machine. Practice all other usual and customary safe working precautions, and above all REMEMBER – SAFETY IS YOUR RESPONSIBILITY. YOU CAN PREVENT SERIOUS INJURY OR DEATH.

SAFETY ALERT SYMBOL

This is the safety alert symbol. It means ATTENTION! BECOME ALERT! SAFETY IS INVOLVED! Look for it, both in this manual and also along with other safety signs on the harvester. These symbols and signs will direct your attention to information that involves your safety and the safety of others.

SIGNAL WORDS

The words DANGER, WARNING OR CAUTION are used with any safety alert symbol. Learn to recognize these safety alerts and follow the recommended precautions and safe practices.



WARNING: Indicates a potentially hazardous situation that, if not avoided. Could result in DEATH OR SERIOUS INJURY.

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

INFORMATIONAL MESSAGES

The words IMPORTANT and NOTE are not related to personal safety, but are used to give additional information and tips for operating or servicing the equipment.

IMPORTANT: Identifies special instructions or procedures that, if not strictly observed, could result in damage to, or destruction of the harvester, attachments or the environment.

NOTE: Identifies points of particular interst for more efficient and convenient operation or repair.



Fig. 4



Fig. 5

SAFETY AND INSTRUCTION SIGNS



WARNING: DO NOT remove or obscure Danger, Warning, Caution, Attention or Instruction signs/decals. Replace any Danger, Warning, Caution, Attention or Instruction signs/decals that are not readable or are missing. Replacement signs/decals are available from your local dealer or Granville Equipment in the event of loss or damage. The actual location of these Safety signs/decals is shown at the end of this section.

Safety signs on this harvester use pictorials and short messages to convey hazardous situations and hazard avoidance information. The intent of the pictorial information is given in the safety sign pages at the end of this section. Review this information to be sure you understand the specific pictorials used.

The "See Operator's Manual" pictorial is used at times in conjunction with other symbols to remind you to consult the Operator's Manual if you do not fully understand the pictorials or if all the information needed in a particular situation is not given by the pictorials. If a used harvester has been purchased, refer to the illustrations at the end of this section to ensure that all the safety signs/decals are in the correct position and are readable.

FOLLOW A SAFETY PROGRAM

For proper operation of the harvester, you must be a qualifed and authorized operator. To be qualified you must understand the written instructions supplied in this Operator's Manual, have training, and know the safety rules and regulations for the job. Some regulations specify that no one under the age of 16 years, for example, may operate power machinery. This includes harvesters. It is your reponsibility to know what these regulations are, and obey them. These will include, but are not limited to, the following instructions for safe harvester operation.



WARNING: An operator should not use alcohol or drugs which can affect their alertness or coordination. An operator on prescription or "over the counter" drugs needs medical advice on whether or not he or she can safely operate machines.



Observe the Following

- DO NOT allow children or unqualified persons to operate your harvester. Keep others away from your area of work.
- Securely fasten your seat belt.
- Where possible, avoid operating the harvester near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and on rough, slippery, or muddy surfaces.
- Stay off slopes too steep for safe operation.
- Watch where you are going, especially at row ends, on roads, and around trees.
- DO NOT permit others to ride on the harvester or in the dumpbox.
- Operate the havester smoothly no jerky turns, starts or stops.
- DO NOT modify or remove any part of the harvester including safety shields or guides.
- DO NOT perform any maintenance while the machine is running and use extra caution near the cutter bar blades.

PROTECTIVE STRUCTURE

The harvester has been fitted with a protective frame/top and a seat belt. This combination is effective in reducing potential injuries during overturns if the seat belt is worn properly.

Do not operate the harvester with the top removed or the seat belt not fastened.

Before using the harvester ensure that the top is not damaged, that it is securely fastened to the harvester.

Do not attach chains, ropes, or cables to the frame/top for pulling purposes – this may cause the harvester to tip backwards or damage the frame/top.

ALWAYS WEAR THE SEAT BELT – ADJUSTED SNUGLY. Regularly check the seat belt for damage. A damaged seat belt must be replaced.

If the frame/top has been damaged during a rollover or by striking an overhead object, it must be replaced.

Do not attempt to straighten a damaged frame/top.

Do not weld or drill the frame/top for any reason as this may lead to failure and reduce the protection intended.



Fig. 7



Fig. 8

Protect Yourself

Wear all the protective clothing and personal safety devices issued to you or called for by field or shop conditions. Do not take chances.

You may need:

- $\circ \quad \text{A hard hat} \quad$
- o Safety glasses, goggles, or face shield
- Hearing protection
- Inclement weather clothing
- Reflective clothing
- Heavy gloves
- Safety boots
- o Other specialized safety gear

Do not wear loose clothing, jewlery or other items, and tie up long hair which could entangle in controls or other parts of the harvester.

Note where fire extinguishers and first-aid or emergency equipment is kept and get to know where to find help in a hurry. Make sure you know how to use this equipment.

PREPARE FOR SAFE OPERATION

Know your equipment. Know how to operate your harvester and know the purpose of all the controls, gauges and dials. Know the rated load capacity, speed range, braking and steering characteristics, turning radius, and operating clearances.

Keep in mind that rain, loose gravel, soft ground, etc. can change the way your harvester operates. Under poor conditions, slow down and be extra careful. Study the DANGER, WARNING, or CAUTION safety signs on your harvester and the information signs also.

READ THIS OPERATOR INSTRUCTION BOOK BEFORE STARTING THE ENGINE.

STUDY THE OPERATOR INSTRUCTION BOOK BEFORE YOU START WORK

IF THERE IS SOMETHING IN THE MANUAL YOU DO NOT UNDERSTAND, ASK SOMEONE (such as your equipment dealer) TO EXPLAIN IT TO YOU.

IMPORTANT: This manual covers recommended practices for your Two Row Stripper Harvester. It should be kept with the harvester. Additional copies of this manual are available from your local dealer.



Fig. 9



Use All Available Protective and Safety Devices

Keep all protective devices in place and securely fastened. Make certain all guards, shields and safety signs/decals are properly installed, as specified, and are in good condition.

To help keep you and others around you safe, your tractor must be equipped with:

- Frame/Top
- o Seat Belt
- \circ SMV emblem
- Safety Bar and Reset Button
- Rear Red Lights on Live Bottom Box
- o Side Amber Lights on Conveyors

Make sure all equipment appropriate to your operation is in place and in good working condition. DO NOT remove or disconnect any safety device.

Check the Equipment

Before you begin your working day, take time to check your harvester and ensure that all systems are in good working condition.

- DO NOT smoke while refueling the harvester. Keep any type of open flame away.
- Stop the engine and wait for it to cool before refuelling.
- Check for loose, broken, missing, or damaged parts.
- Have everything put into good repair. Make certain all safety devices are in place.
- Check seat belt for damage. A damaged seat belt must be replaced.
- Make sure the machine is off before making any repairs to the cutter bars or conveyor belts.
- Check the harvester's hydraulic system. Have any leaks or damaged parts repaired or replaced.



WARNING: Diesel fuel or hydraulic fluid under pressure can penetrate the skin or eyes and cause serious personal injury, blindness or death. Fluid leaks, under pressure, may not be visible. Use a piece of cardboard or wood to find leaks. DO NOT use your bare hand. Wear safety googles for eye protection. If any fluid is injected in the skin, it must be surgically removed within a few hours by a doctor familiar with this type of injury.



Fig. 11

- Before applying pressure to the fuel or hydraulic system, be sure all connections are tight and that lines, pipes, and hoses are not damaged. Before disconnecting fuel or hydraulic lines, be sure to relieve all pressure.
- Make sure that all hydraulic lines are correctly installed and not crossed.
- Check the tires for cuts, bulges, and correct pressure.
- Perform all maintenance procedures outlined in the maintenance and adjustment sections of this manual.
- Check the engine cooling system and add coolant as required.



WARNING: Liquid cooling systems build

up pressure as the engine gets hot. Before removing the radiator cap, stop the engine and let the system cool.

 Check engine oil level and add oil if needed

Servicing the Harvester

- DO NOT service the harvester while the engine is running or hot, or if the harvester is in motion.
- Before making adjustments to, or servicing the electrical system, disconnect the battery negative (-) cable first.
- To prevent fires or explosions keep open flames away from the battery or cold weather starting aids. To prevent sparks which could cause explosions use jumper cables according to instructions.
- When making repairs or adjustments it is recommended that you consult your dealer and have the work carried out by trained personnel.
- Check all nuts and bolts periodically for tightness, especially wheel hub and rim nuts. Tighten to the prescribed torque values.
- Check the brakes regularly, top up the reservoir and/or adjust where necessary.

STARTING

Warn Personnel Before Starting

Before starting the harvester, walk completely around the machine. Make sure that no one is under it, on it, or close to it, especially the wheels and cutter bars. Let other workers and bystanders know you are starting up and do not start until everyone is clear of the harvester.

Ensure that all bystanders, particularly children, are a suitable distance away before starting the engine.

Mount and Dismount Safely

Always use "three point contact" with the machine, and face the machine when you mount and dismount it. (Three point contact means both hands and one foot or one hand and both feet are in contact with the machine at all times during mounting and dismounting). Use handrails, grab handles, ladders or steps (as provided) when mounting or dismounting.

DO NOT use control levers or the safety bar as a hand hold.

DO NOT attempt to mount or dismount when harvester is in motion.

DO NOT jump off harvester except in the case of an emergency.

Start Safely



WARNING: Before starting the engine make sure there is plenty of ventilation. DO NOT operate the engine in a closed building. The exhaust fumes may cause asphyxiation.

Start the engine from the operator's seat only, with the transmission levers in neutral. After starting engine make sure the saftey bar is down and then press the safety reset (green push button) to begin operating harvester.

Adjust the seat, fasten the seat belt, and put all controls in neutral before starting the engine. Start with the key. Never attemp to start the engine by shorting across the starter terminals.

Follow Recommended Starting Procedures in the operation section of this manual.

Starting Fluid (2012 Models ONLY)

WARNING: DO NOT use aerosol cans of starting aid with the intake manifold preheater connected to the electrical system. Ether combined with intake manifold preheater can cause an explosion with damage to engine, personal injury, or both.

Your 2012 harvester with a Duetz Engine has been fitted with an intake manifold preheater cold starting device. If aerosol cans of starting fluid, or ether start-aid, are to be used the preheater system must be disconnected. Remove the wire from the preheater system unit which will be found on the intake manifold. Tape the end of the wire to prevent an electrical short circuit.

Follow Safe Operating Practices

- Operate the controls smoothly do not jerk the steering wheel or other controls.
- DO NOT get on or off a moving harvester. Keep a firm grip on the steering wheel at all times, with the thumbs clear of the spokes when driving the harvester.
- Make sure you have adequate clearance in all directions for the harvester and the top.
- DO NOT play games with a harvester. Use only for intended purpose.
- DO NOT attempt to work controls except from the operator's seat.
- Before dismounting, lower the conveyor belts to the lowest position, place the transmission controls in neutral, turn the engine off and remove the key.
- Do not carry passengers.
- Stay alert. Should something break, come loose, or fail to operate correctly, stop work, shut off engine, inspect machine and have repairs or adjustments made before resuming operation.

Watch Out For Others

 Be aware of what is going on. DO NOT allow an untrained or unqualified person to operate your harvester. They could injure themselves or someone else.



WARNING: Your harvester is a one-

person machine. DO NOT permit others to ride on the harvester. DO NOT allow anyone to ride in the Live Bottom Box. DO NOT allow children on the harvester.

Risk of Overturning

In the event of an overturn, hold the steering wheel firmly and keep your seatbelt fastened. DO NOT attempt to leave the seat until the harvester has come to rest.

To Avoid Side Overturns

- Reduce speed to match operating conditions.
- Make wide slow turns at reduced speed. Do not let it bounce.
- Do not overfill your Live Bottom Box.
- Do not brake suddenly. Apply breaks smoothly and gradually.
- When going down a slope, use the throttle to slow the tractor engine and use the same gear range you would use to go up the slope.
- It is less likely that the harvester will overturn if you travel straight up or down a steep slope rather than across it.
- When operating near ditches or banks, always keep your harvester at least as far away from the edge as the height of the bank.
- If it is necessary to cross a slope, avoid turning uphill, slow down and make a wide turn. If you get stuck in a ditch, BACK OUT, if possible. If you must go forward, do it slowly and carefully.

Road Transport

BEFORE operating your harvester on a public road, a number of precautions must be taken.

- Familiarize yourself with and obey all laws appropriate to your harvester
- Make sure Live Bottom Box door is closed
- Make sure Conveyors are at the highest level.
- Make sure any required clearance flags or warning lights are in place and in working order.
- Clean off all reflectors and road lights, on back of Live Bottom Box and on sides of Conveyors.
- Make sure the harvester is equipped with Slow Moving Vehicle (SMV) signs.

Rules of the Road

WHEN operating your harvester on public roads a number of precautions must be taken.



WARNING: DO NOT allow any passengers on the harvester.

- Know the route your are going to travel.
- Use flashing warning lights when traveling on roads, day or night, unless prohibited by law.
- Observe all local or national regulations regarding the road speed of your harvester.
- Wait for traffic to clear before entering a public road.
- Beware of blind intersections. Slow down until you have a clear view.
- DO NOT attempt to pass at any time.
- Slow down for turns and curves.
- Make wide, gentle turns.

- Signal your intent to slow, stop or turn.
- To maintain control, reduce tractor speed before going up or down hills.
- Stay out of the path of oncoming traffic.
- Drive in your correct lane keeping to the curb as near as possible.
- Drive defensively. Anticipate what other drivers might do.

When stopping at any time, bring the harvester to a complete halt, lower conveyors, stop the engine and remove the key BEFORE leaving the seat.



Fig. 12

SAFETY SIGNS

LOCATION ON HARVESTER AND SAFETY DESCRIPTION



Fig. 13

SAFETY SIGNS

LOCATION ON HARVESTER AND SAFETY DESCRIPTION

Cutter Bar Caution – Danger Sharp Rotating Blades Below. Please keep hands clear from rotating blades.





Fan Caution – Danger Rotating Fan. Do not put hands into fan while the machine is running.



Fan Caution – Danger Rotating Fan. Do not put hands into fan while the machine is running.



Instruments and Harvester Controls



- 1. Oil pressure gauge
- 2. Water Temperature
- 3. Warning Decal Fasten Seat Belt
- 4. Warning Decal Must be in operator's seat while machine is running
- 5. Hydrostat Control Lever



LO/HI - (Two Position Mntd) LO Speed Position, counter clockwise, used while traveling 0 to 7 mph, usually when in the field. HI Speed Position, clockwise, used when traveling over 7 mph on roadways.

Stalk Cutters – (Three Position Spring/Mntd) 12:00 position is a maintained position for road travel or transporting, 9:00 position is for lifting stalk cutters up and 3:00 position is for floating position during harvesting.

- 6. Throttle Control Lever
- 7. RPM Meter
- 8. 20 AMP Fuse Primary
- 9. Voltmeter
- 10. Ignition Switch
- 11. Instrument Control Panel (See below)
- 12. 20 AMP Fuse Secondary

Belts – (Two Position Mntd) Counter clockwise is OFF/ Clockwise is ON

Cutter Heads - (Two Position Mntd) Counter clockwise is OFF/Clockwise is ON

Safety Reset – After starting engine, make sure lever is down then press green button to operate machine.

Lights – (Two Position Mntd) Counter clockwise is OFF/Clockwise is ON

Lift – (Three Position Spring) Counter clockwise raises the Conveyors and Heads, clockwise lowers the Conveyors and Heads

Dumpbox- (Three Position Spring) Clockwise lowers the door, continue holding for belts to run. Counter clockwise raises the door into closed position and reverses the belts for a moment while the door is closing.

Instruments and Harvester Controls SAFETY LEVER & SAFETY RESET

The harvester is equipped with a safety mechanism to ensure the operator is sitting in the seat before any hydraulics on the machine will begin to run.

After sitting in the operators seat and fastening your seat belt, pull the lever to the left of the control console into a down position as pictured to the right. Then start the engine.

After the engine has been ingnited, press the green push button labeled "SAFETY RESET". This will engage all hydraulics on the machine to begin operating.



Fig. 17



Fig. 18

Control Switch Reference



INITIAL MACHINE SETUP

Cutter Bar Adjustments

The cutter bars are setup for an average to medium size stalk at the factory. If your tobacco stalk is larger than average you may need to adjust the cutter bar width.

To adjust the cutter bar width to accommodate the stalk size follow these steps:

BOTTOM WIDTH

- Remove the stalk guide shields by unscrewing the two 3/8" bolts that hold the shields in place.
- After removing the shields, loosen the two 1" bolts going through the mounting plates and flange bearing bolted to the base of the cutter bars. Move the bearings inward or outward based on the stalk size.
- Retighten bolts and reinstall the stalk guide shields.

NOTE: Normally the distance between the blades at the base will be one to two times the size of the average stalk. It is not necessary to adjust the distance of the cutter bars at the top unless the tobacco stalk is unusually small or unusually large.

TOP WIDTH (Normally NOT necessary)

 To adjust width at the top of the cutter bars you must loosen the 3/8" bolts on both sides that connect the gearbox to the mounting plate. You must also loosen the shaft coupler and Allen screws/ hex screws so that the couplers can be repositioned after desired distance has been set. DO NOT ADJUST BLADES SO CLOSE THAT THEY TOUCH WHEN CUTTER BARS ARE AT FULL RPM. THIS WILL DAMAGE THE BLADES. IF YOU HEAR A CLANKING NOISE, THE BLADES ARE TOO CLOSE AND MUST BE ADJUSTED TO PREVENT DAMAGE. NOTE: It is more important that the fans are lowered to the proper position to blow leaves downward so they will be cut off clean from the stalk.



Fig. 19 3/8" Bolts





INITIAL MACHINE SETUP Conveyor Belt Adjustments



WARNING: DO NOT OVERTIGTEN BELTS.

INCLINE CONVEYOR BELT

 Adjust the belt so that there is two to four inches slack from the bottom chaise of the conveyor. If belt slippage occurs it is normally trash between the belt and rollers.

BOTTOM CONVEYOR BELT

 The bottom conveyor belt that picks up the tobacco leaves can be adjusted minimally by moving the rollers on the bottom conveyor in or out as needed. They are run with a minimum amount of tension. The bearing bolts are slotted for adjustment.

BOTTOM CONVEYOR CHAIN ADJUSTMENT

- The bearings at the rear of the bottom conveyor belt have slotted bolt holes for chain adjustment.
- The chain used is Renold Synergy Chain. This specific chain is built to withstand the dirt and debris accumulated from running so close to the ground.
- If it needs replacing contact Granville Equipment or your local chain supplier for #40 Renold Synergy Chain (Part #119047)

NOTE: The chain and the v-guides of the rollers should be checked daily to ensure there is no buildup of debris.







Slide in or out to adjust chain

INITIAL MACHINE SETUP Setting Timing for Cutter Bar Hub & **Bearing Assembly**

The cutter bar hub assembly timing is achieved by loosening the trantorque bushing. This is the bushing that attaches the hub assembly to the gear box shaft. It has a 1-3/8 hex nut on the back side of the hub. When timed properly the four 5/8" bored holes in the hubs will be aligned vertically and you will have a distance between cross blades of approximately 1 inch. When rotated the blades will come up evenly together. To loosen the trantorque bushing turn to left and it will release the bushing. Position the trantorque bushing and hub until all three are even on the end of the gearbox shaft and retighten. For more detailed instructions please see diagram below:



TRANTOROUE BUSHINGS

SETTING CUTTER BAR TIMING



Fig. 26

Trantoroue **Keyless Bushings**

WARNING: DO NOT USE AN IMPACT WRENCH OR LUBRICANTS DURING THIS INSTALLATION.

- 1. The shaft diameter must be within +/-0.003" (0.08mm) of the Trantorque bore, "d" and the mounted component bore must be within +/-0.003" (0.08mm) of the Trantorque outside diameter, "D" (Figure 1). See Fenner Drives website or catalog for "d" and "D" values
- 2. Both the shaft and mounted component bore must have a surface finish of 32-125 Ra. Both must be completely free of paint, grease, oil and debris of any kind. Return surfaces to bare metal; clean using a non-petroleum based solvent (isopropyl alcohol)
- 3. Insert the Trantorque OE unit into the mounted component's bore. To achieve peak performance, it is best practice to completely cover the hub gripping area (Trantorque outside diameter between scribe line and tail end of the unit)
- Insert the assembly onto the shaft and position to achieve the desired location of the hub.

WARNING: THE SHAFT MUST FULLY ENGAGE THE SHAFT GRIPPING AREA (DEFINED BY THE STEPPED BORE) OF THE TRANTORQUE OE.

5. Using a torque wrench, tighten the nut to the specified

installation torque. See Table 1 WARNING: OVER-TIGHTENING THE NUT COULD RESULT IN DAMAGE TO THE TRANTORQUE OF UNIT AND/OR THE MOUNTED COMPONENT.





Fig. 26

5. Utilizando una llave de torsión, ajuste la tuerca al torque de ADVERTENCIA: AJUSTAR EXCESIVAMENTE LA TUERCA PODRÍA DAÑAR LA UNIDAD OE DE TRANTORQUE Y/O EL COMPONENTE MONTADO. 17 to 19 110 20 to 22 150

Table I			
1-5/16 to 1-1/2	196	· -	_
1-3/16 to 1-1/4	177	32 to 35	265
1-1/16 to 1-1/8	155	28 to 30	240
15/16 to 1	137	24 to 25	185
13/16 to 7/8	111	20 to 22	150

T-PR-034 03/01/11

Este producto está cubierto por las patentes estadounidenses número 5,695,297 y 6,361,243 y la patente EP número 0925455E

ADVERTENCIA: NO UTILIZAR LLAVES DE IMPACTO NI LUBRICANTES

1 El diámetro del eje debe estar dentro de los +/-0.003" (0.08mm)

del orificio del Trantorque, "d" y el orificio del componente montado debe estar dentro de los +/-0.003" (0.08mm) del diámetro externo

2. Tanto el eje como el orificio del componente montado deben tener un acabado de superficie de 32-125 Ra. Ninguno debe tener restos de pintura, grasa, aceite o residuos de ningún tipo. Restaure las

áreas a metal base; limpie utilizando un solvente sin base de petróleo

3. Inserte la unidad Trantorque OE en el orificio del componente montado. Para alcanzar el máximo rendimiento, se recomienda cubrir

el área de agarre de la maza (hub) (el diámetro externo del Trantorque entre la línea de desplazamiento hasta la sección final de la unidad).

4. Inserte el montaje en el eje y ajústelo hasta lograr la ubicación

ADVERTENCIA: EL EJE DEBE CUBRIR LA SUPERFICIE DE AGARRE DEL EJE (DEFINIDA POR EL ORIFICIO ESCALONADO) COMPLETAMENTE DEL TRANTORQUE OE.

82

del Trantorque, "D" (Figura 1), Favor de referirse al sitio web de enner Drives o al catálogo para verificar los valores "d" y "D"

DURANTE LA INSTALACIÓN

(alcohol isopropílico).

deseada de la maza

instalación especificado. Ver Tabla 1.

11/16 to 3/4

Table I

INITIAL MACHINE SETUP Stalk Cutter Set up

The stalk chopper switch has three positions. Turn to 3:00 clockwise and the blades will be in the down position with adjustable hydraulic down pressure. This is the normal operating position. In this position if you hit an obstacle in the field the stalk cutters will automatically rise and roll over top of object. This is similar to having a spring loaded stalk chopper with the exception that it is operated by a hydraulic system. The down pressure is adjustable from zero to 500 lbs by means of a valve located on the rear of the aluminum block which is located above the rear wheels on the top of the chassis. The valve has a round grooved thumb wheel with a locking nut as well. Usually it is run at three turns out. If you turn the valve clockwise it will increase the pressure on the stalk chopper. Turn the valve counter clockwise to decrease your pressure.

For traveling or transporting the machine turn the stalk cutter switch to the 12:00 position. Do not use this position in the field while operating. Rotating the switch into the 9:00 position will raise the stalk cutters and the switch will then spring back to the 12:00 position. This is only used to raise the stalk cutters when not in use. NOTE: When stalk choppers are in maintained position (12:00), they will not raise or lower if an object is hit.



Fig. 28

HARVESTER OPERATIONS (FIELD)

To begin harvesting tobacco, first start the engine.

The operator must be seated with seat belt fastened before beginning operation. The safety handle must be in the down position and safety reset button must be pushed before hydraulics will activate.

Cutter bar head height should be adjusted to run under the bottom leaves so that the stem on the leaves pass over the nose cones with two inches of clearance. Add or remove ram stops on the lift cylinder to adjust the header height.

After the header height is adjusted you will then need to lower your fan chutes until you are approximately three inches above the tallest plants. This can be adjusted during operation as you encounter taller or shorter tobacco stalks. The fans must be adjusted at the right heights at the correct position for the cleanest leaf removal.

It is imperative that you begin with the machine straight in the row of tobacco.

You can engage throttle and hydrostat evenly and it will synchronize the ground speed and the cutter bar speed. Optimal speed is 4.5 to 5 mph at 2300rpm.



CAUTION: THIS HARVESTER IS BUILT TO ONLY STRIP THE UPPER TWO THIRDS OF THE TOBACCO STALK. IT IS NOT BUILT TO STRIP THE ENTIRE STALK DURING ONE PULLING.

HARVESTER OPERATIONS (Highway)

Turn HI/LO switch clockwise to HI position when traveling on the highway.

Always have hydrostat control lever in neutral position when going from Low to High or High to Low. Advance Hydrostat lever forward in a slow and steady motion.

When reducing speed bring hydrostat lever to netural speed slowly. Fast stoping and starting will damage the machine.



Ram stops can be positioned on both cylinders on the lift of the machine.

LIVE BOTTOM BOX OPERATION

The dumpbox is designed with one switch to lower the door and sequentially rotate the belt to dump the tobacco. This can be done on the go or in a stopped position.



CAUTION do not overfill dumpbox, the cleats on the belts will pull tobacco down the back side of the conveyor and damage belts.

TROUBLE SHOOTING

ENGINE TURNS OVER BUT DOESN'T START

- Check Fuel
- Check Murphy Safety Switches Check 10 amp fuse on left side of dash beside voltmeter first.
- If the safety switches are suspected to be at fault you can do a field bypass by removing the wire on B terminal and connecting it on NC terminal of the Red Box located behind the dash on the gauge panel. Refer to Murphy Wiring Diagram for terminal location.



WARNING: This procedure is only used if it is determined that the problem is in the gauges and not the engine. YOU WILL NOT HAVE ENGINE WARRANTY IF SAFETY GAUGES ARE DISCONNECTED. CONTACT YOUR LOCAL DEALER FOR MORE INFORMATION.

ENGINE WILL NOT TURN OVER

- Check fuse on dash beside voltmeter
- Check neutral switch and relay (Refer to Control Switch Reference for wiring diagram of dash)
- Check starter

LOW ENGINE POWER

- Check Fuel Filters
- Check Air Filter

LOW HYDROSTAT AND CUTTER BAR SPEED

- Check Fluid Level
- Check Fluid Temperature
- Check Hydraulic Cooler for debris

NO HYDRAULICS

- Check three fuses in dash
- Check for lose wires in dash and on solenoid valves on rear of chassis and on mainframe



[\] Fig. 30
10 AMP FUSE



Fig. 31

Magnetic Switch

MURPHY REFERENCE 1



MURPHY REFERENCE 2



MAINTENANCE CHART

SERVICE HOURS	ITEM	C H E C K	C L E A N	L U B E	C H A G E	A D J U S T	T O P U P
	FUEL LEVEL	X					
	ENGINE OIL LEVEL	Х					Х
DAILY OR	ENGINE OIL FILTER	Х					
10 HOURS	AIR FILTER / AIR CLEANER ELEMENT	Х					
	HYDRAULIC OIL & TRANSMISSION OIL LEVEL	Х					Х
	GEARBOXES	X	Х				
	CONVEYOR BELT DEBRIS BUILD UP	Х	Х				
	ROLLER DEBRIS BUILD UP (ESPECIALLY BOTTOM)	Х	X				
	CHECK FOR BAD OR CRACKED CUTTER BAR BEARINGS	Х			Х		
	TIRE PRESSURE	X				Х	
EVERY	FRONT & REAR WHEEL BOLT/NUT TORQUE	Х				Х	
100 HOURS	TAKE UP AND FOUR BOLT BEARINGS (GREASE LIGHTLY)	Х		Х			
HOOKS	WHEEL HUB OIL LEVEL & GEAR BOX OIL LEVEL	Х					Х
	HYDRAULIC RETURN OIL FILTER				Х		
EVERY	HYDROSTAT FILTER				Х		
200	HYDROSTAT OIL	Х			Х		
HOURS	PRIMARY & SECONDARY FUEL FILTER	Х			Х		
	REPLACE CUTTER BAR BEARINGS	Х			Х		

CUTTER BAR BLADE MAINTENANCE

The cutter bar blades are made of stainless steel and generally do not require sharping. If you decide to sharpen them, do not use a grinder. A hand file or dremel tool is required. Remove only a small amount of metal. If a stainless steel blade itself becomes bent, they normally can be straightened by tapping on them lightly with a hammer. If the bar itself cracks, the entire blade must be replaced.



Fig. 32

CUTTER BAR IDENTIFICATION



GRANVILLE STRIPPER 2011/2012 MODEL Filter Reference

Engine Oil Filter – Part # NAPA 7085 or WIX 57085 Fuel Filter Primary – Part # NAPA 4006 or WIX 24006 Fuel Filter Secondary – Part # NAPA 3361 or WIX 33361 Air Filter – Part # NAPA 6671 or WIX 46671 Secondary Air Filter – Part # NAPA 6672 or WIX

HYDRAULIC RETURN OIL FILTER – DO NOT SUBSTITUTE – PART # GRANVILLE 615–001 (DOUBLE GLASS ELEMENT)

BREVINI HYDRASTAT FILTER - DO NOT SUBSTITUTE - PART # GRANVILLE 615-002

GRANVILLE STRIPPER 2013/2014 MODEL Filter Reference

Engine Oil Filter – Part # John Deere RE504836 Fuel Filter Primary – Part # NAPA 4006 or WIX 24006 Fuel Filter Secondary – Part # John Deere RE522868 Air Filter – Part # Enginaire 3.75–E1 or Donaldson P772580 Secondary Air Filter – Part # Enginaire 3.75–E2 or Donaldson P775302

HYDRAULIC RETURN OIL FILTER – DO NOT SUBSTITUTE – PART # GRANVILLE 615–001 (DOUBLE GLASS ELEMENT)

BREVINI HYDRASTAT FILTER – DO NOT SUBSTITUTE – PART # GRANVILLE 615–002

ENGINE OIL – 15W-40 ROTELLA HYDRAULIC OIL – STANDARD JOHN DEERE/CASE IH

GRANVILLE STRIPPER Hydraulic Parts Reference



Hydraulic Valve Reference 2011 MODEL



GRANVILLE STRIPPER Hydraulic Valve Reference



Hydrostat Pump - Part #610-013 Rear Wheel Motor 2 Speed Danfoss - Part #600-300 Front Wheel Motor Danfoss - Part #600-310

PARTS REFERENCE

Fig.	Part#	Description
1	600-065	#65 Brevini Exchange Motor (2013)
1	600-070	#70 or #65 Hydraulic Motor x5 (2011-2013)
1	600-080	#80HR Hydraulic Motor-Cutter Bar (2014+)
2	600-081	#80HS Hydraulic Motor-Conveyor (2014+)
3	165-004	#400 Hydraulic Motor (Dumpbox)
4	225-010	Fan Lift Cylinder
5	605-212	Steering Cylinder (x2)
6	225-010	Stalk Cutter Cylinder
7	605-312	Lift Cylinder (x2)
8	610-001	Fan Belt A36 for 2014 & Previous
9	610-002	Top Pulley on Fan 6" 2014 & Previous
10	610-003	Bottom Pulley on Fan 3" All Models
8	610-004	Fan Belt A38 for 2015
9	610-005	Top Pulley on Fan 7" for 2015 Models
11	615-001	Hydraulic Return Oil Filter
12	615-002	Hydrostatic Pump Filter – Brevini
13	615-008	LENZ Filter for Hydraulic Fuel Tank
14	620-001	Cutter Head Bolts with nuts (x32)
14	620-002	202RRE Radial Shoulder Bearing (x32)
14	620-003	6202RLD Radial Flat Bearing (x32)
15	620-004	Stainless Steel Cutter Bar Blade LOWER LEFT
16	620-006	Stainless Steel Cutter Bar Blade UPPER LEFT
17	620-007	Stainless Steel Cutter Bar Blade LOWER RIGHT
18	620-008	Stainless Steel Cutter Bar Blade UPPER RIGHT
19	620-005	205FB-16 Two Bolt Flange Bearing
20	620-009B	Bottom Cutter Bar Hub Assembly
21	620-009T	Top Cutter Bar Hub Assembly
22	620-010	Gearbox for Cutter Bar (Boston)
23	620-011	5/16-24 x ¹ / ₂ Bolts for Cutter Bar Hub

Fig.	Part#	Description
24	620-014	Trans torque Bushing (Top Hub)
25	620-019	Double Chain Coupling Set (Gearbox)
26	155-001	Love Joy L100 Coupling
27	155-005	Love Joy Spider (Orange)
28	625-001	40B12 Sprocket 3/4" 2011-2012
29	625-002	50B16 Sprocket 1-1/4
30	625-003	40B15 Sprocket 1-1/4
31	625-004	#40 Synergy Chain (10' Box)
28	625-005	40B12 Sprocket 1" 2013+
32	625-006	50B16 Sprocket 1" 2011-2013
31	625-007	#40 Master/Connecting Links
33	625-008	50B18 Sprocket 1-1/4" 2014+
34	630-001	Stalk Cutter Control Switch
35	630-002	Lift & Dumpbox Control Switches
36	255-001	Two Position Switch (Lo/Hi, Belts, Cutter Bars and Lights)
37	220-002	Green Safety Reset Push Button
38	630-005	Safety Control Bar Relay
39	635-001	4" Drive Roller 20" Wide Long (top middle) Conveyor (x1)
40	635-002	3" Drive Roller for 20" Wide Short Conveyor (x3)
41	635-003	Door Roller on Dumpbox – Drive (Bottom of Door)
42	635-004	Floor Roller on Dumpbox – Drive (Closest to Door)
43	635-005	Door Roller on Dumpbox – Idle (Top of Door)
44	635-006	Floor Roller on Dumpbox – Idle (Furthest from Door)
45	635-007	4" Idle Roller for 20" Wide Long Conveyor (x5)
46	635-008	3" Idle Roller for 20" Wide Short Conveyor (x3)
45	635-009	4" Idle Roller for 16" Wide Long Conveyor (x5)
40	635-010	3" Drive Roller for 16" Wide Short Conveyor (x3)
46	635-011	3" Idle Roller for 16" Wide Short Conveyor (x3)
39	635-012	4" Drive Roller 16" Wide Long (top middle) Conveyor (x1)
47	640-001	3/4" Four Bolt Flange Bearing (2011/2012)

Fig.	Part#	Description
48	640-002	1-1/4 Four Bolt Flange Bearing (x6)
49	640-003	1-1/4 Take up Bearing (x6)
47	640-004	1" Four Bolt Flange Bearing 2013 Model (x6)
51	640-005	3/4" Three Bolt Flange Bearing for Fan Mount (x6)
52	645-001	17" Stalk Chopper Blade
53	650-001	Dumpbox Door Belt
54	650-002	20" Wide Short Belt for Bottom Conveyor
55	650-003	20" Wide Belt for Long Conveyor
54	650-005	16" Wide Short Belt for Bottom Conveyor
55	650-006	16" Wide Belt for Long Conveyor
56	650-007	Dumpbox Floor Belt
57	655-001	Hydraulic Pump
58	655-002	Hydrostat Pump
59	655-007	Green Hose Clamp Assembly 28mm
60	115-001	Hose Clamp Assembly (Small)
61	655-008	D05 Valve 12V (5C)
62	655-009	D05 Valve 12V (2C)
63	660-001	Dumpbox Cover/Tarp
64	665-001	Steering Wheel
65	665-002	Steering Wheel Column
66	665-003	Steering Hydraulic Motor/Valve
67	680-001	Harvester Oil Cooler
68	690-001	Front Tire 24"
69	690-002	Rear Tire 28"
70	690-003F	Front Torque Hub
71	690-003R	Rear Torque Hub
72	690-006	Front Danfoss Wheel Motor
73	690-007	Left Rear Danfoss Wheel Motor
74	690-008	Right Rear Danfoss Wheel Motor



















