



2200 BALE HIKER TRAINING

General Service Training

PDI FORM

WHOLEGOOD ASSEMBLY CHECKLIST - BALE HIKER-2200 SERIES

THIS CHECKLIST IS TO BE COMPLETED FOR EACH MACHINE ASSEMBLED. THE PERSON RESPONSIBLE FOR EACH STEP ON THE CHECKLIST MUST CHECK OFF THE STEP AT THE TIME OF INSPECTION.

RETURN THE COMPLETED CHECKLIST TO: CUSTOMER SERVICE DEPT.
MORRIS INDUSTRIES LTD.
PO BOX 5008
YORKTON SK S3N 3Z4

Delivery Date: _____

GENERAL:

- Verified unit has been washed to remove all road debris (road salt/tar)
- Inspected paint, decals and general appearance of the unit and found to be satisfactory
- Verified tire location and correct load range as per assembly manual
- Verified proper tire air psi as per assembly manual
- Inspected all wheel bolts and ensured they are torqued to specifications
- Inspected bearings on drive jack shafts and ensured they are shimmed properly (1400 only)
- Lubricated all components as per assembly manual
- Tested operation of lighting kit (if equipped)
- Verified all hardware is installed and correctly torqued
- Inspected safety chain and ensured it is secured to unit
- Inspected hitch jack and ensured it is secure and operating properly
- Verified all transport locks and safety pins are secure and in proper location
- Verified unit operates properly

HYDRAULICS:

- Verified all hydraulic fittings are secure with no oil leaks
- Inspected all cylinder shafts for the presence of rust or pits
- Inspected push bar hydraulic system and ensured air has been bled out of system (1400 only)
- Verified selector valve is adjusted properly
- Verified push bar moves freely from the front of the bed to the back
- Verified safety valve (cantilever) is adjusted to specifications

(1400 only)

- Verified line lock valves are working properly (1400 only)
- Verified hoses have enough slack by raising bed slowly and making adjustments as necessary

DELIVERY:

- Verified operator's manual is being sent with unit

COMMENTS

SAFETY

General

- Be aware of Danger, Warning and Caution notes.
- DO NOT RIDE!! Do not allow riders on the implement while in motion.
- Do not allow extra riders in the tractor unless an instructor seat and seat belt are available.
- Check behind when backing up.
- Reduce Speed when working in hilly terrain.
- Never allow anyone within the immediate area when operating machinery.
- Keep all shields in place, replace them if removed for service work.
- Always lock bale fork in raised position.
- Be aware of the correct tractor operating procedures, when working with implements.
- Review tractor operator's manual.
- Secure hitch pin with a retainer and lock draw bar in center position.
- Turn **OFF** the power source/tractor whenever working on the hiker.

SAFETY

Hydraulics

- Do not search for high pressure hydraulic leaks without hand and face protection. A tiny, almost invisible leak can penetrate skin, thereby requiring immediate medical attention.
- Use cardboard or wood to detect leaks – never your hands.
- Double check that all is clear before operating all hydraulics.
- Never remove hydraulic hoses or ends with machine elevated. Relieve hydraulic pressure before disconnecting hydraulic hose or ends.
- Maintain proper hydraulic fluid levels.
- Keep all connectors clean for positive connection.
- Ensure all fittings and hoses are in good condition.
- Do not stand under wings.

SAFETY

Maintenance

- Shut tractor engine off before making any adjustments or lubricating machine.
- Block machine securely to prevent any movement during servicing.
- Wear close fitting clothing and appropriate personal protective equipment for the job.
- Do not search for high pressure hydraulic leaks without hand and face protection. A tiny, almost invisible leak can penetrate skin, thereby requiring immediate medical attention.
- To prevent personal injury, do not walk within radius of raised bale fork or bed. Always ensure bale fork is locked in place.
- Do not modify the machine

REQUIREMENTS

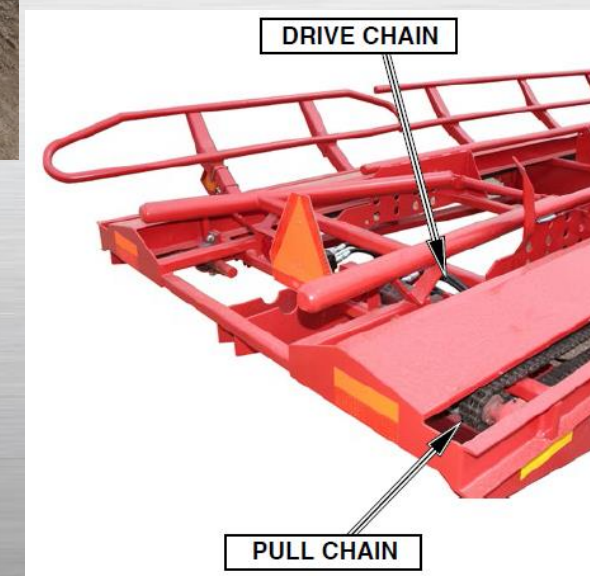
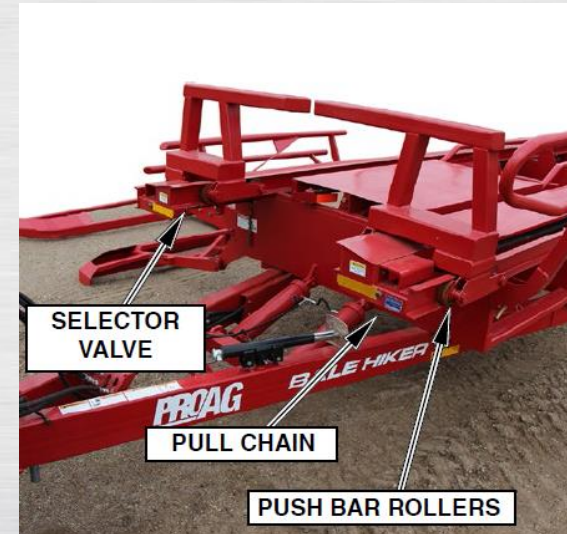
180 Horsepower Recommended

DAILY MAINTENANCE

Daily Maintenance

To maintain dependable operation and to maximize the life of the 2200 Bale Hiker the following should be done on a daily basis.

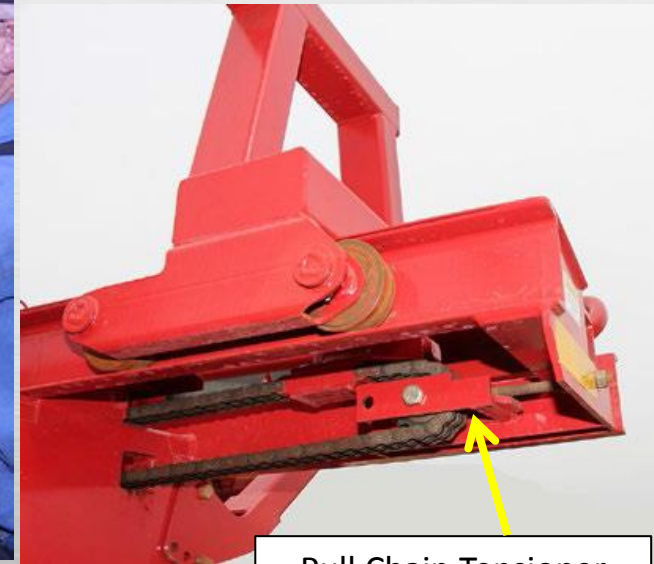
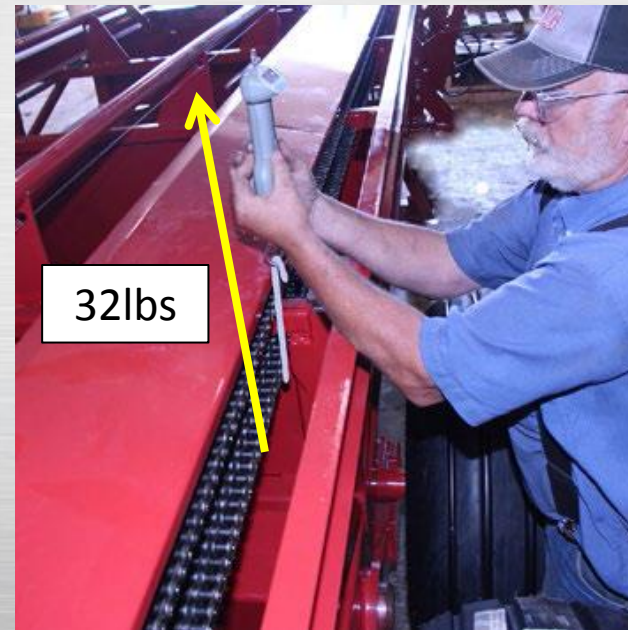
- Keep Selector Valve Spools clean of any debris and ensure it moves freely. Lubricate Spool with Silicone Lubricant or WD-40 or Penetrating Oil to prevent rusting.
- Ensure Drive Sprockets are clean of any debris, if the area between the sprocket and pillow block bearing gets wrapped with trash the chain could jump a tooth causing the push bars to go out of time.
- Grease Fork daily to assure maximum life of bushings.
- Ensure Drive Chains are clean of any debris and ensure it moves freely. Lubricate chains every 50 hours with a dry chain lube.
- Check the push bar daily to ensure it is tracking correctly.



CHAIN TENSION

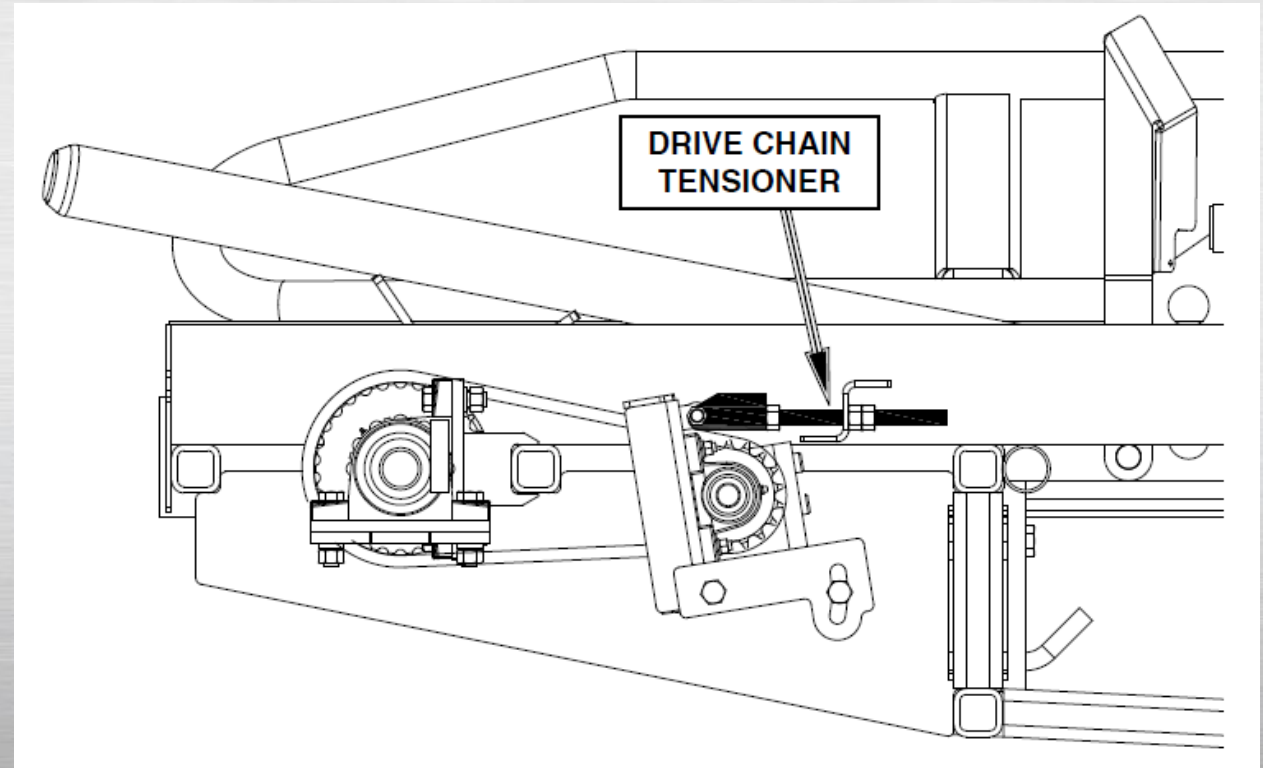
Ensure proper chain tension for both the double #80 push bar chain and the #60 drive chain.

A. To adjust the tension on the double #80 the tensioner bolts are located at the front of the machine. First loosen the jam nut (this is the outer most nut) then you can tighten or loosen the chain by turning the second nut. Periodically check the chain tension by lifting up on the chain between the wheels (this is important as it is the middle of the chain assembly). Once Proper tension is achieved (32 lbs) use the jam nut to lock it into position.



CHAIN TENSION

B. To adjust the tension on the #60 drive chain the tensioner bolts are located near the rear of the machine just forward and above the motor mounts. First loosen the jam nut (this is the outer most nut) then you can tighten or loosen the chain by turning the second nut. Periodically check the chain tension at the rear of the machine. Once Proper tension is achieved use the jam nut to lock it into position. Note: proper tension is achieved when there is only 1/8" deflection in the chain.



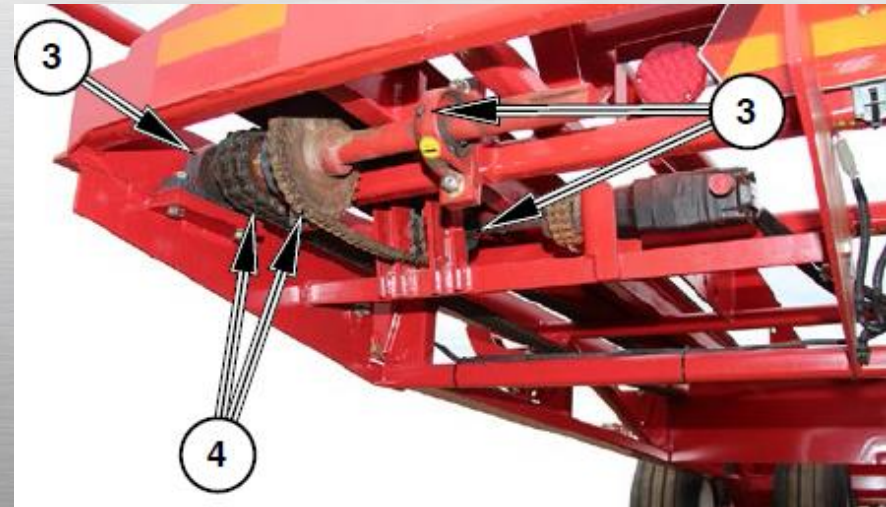
CHAIN TIMING/CONNECTING LINKS

- A. When checking the timing of the push bar chains (double #80) it is important to check the connecting link for proper spacing. First the push bars need to be at the forward most position (at the front of the machine), then check that there is proper spacing on both sprockets. Note you must ensure that both sprockets have the same gap and the link can be rocked forward and back by hand when the push bars are in the forward position.
- B. If a chain is replaced, it is recommended to replace both so that they are the same length.



LUBRICATION

- A. Grease, ensure the following areas are properly greased: Fork assembly (bale fork pins **(2)** every 250 bales), rear drive shaft bearings **(3)** (every 50 hours), and wheel hubs **(1)** (every 500 hours). Note: use a good grade lithium based grease.
- B. Chain lube, ensure the drive chain and the push bar chain **(4)** are properly oiled (every 50 hours with dry chain lube), this will help with smooth operation and prevent corrosion/rust.
- C. Inspect wheel hubs for free play weekly, repack them annually.



TIRE PRESSURE & WHEEL TORQUE

Tire Pressure and wheel torque

- A. Ensure tire pressure is set to 60 psi.
- B. Ensure that wheel lugs are torqued to 150 lb. ft.
- C. Check wheel studs daily until torque is maintained.

TRANSPORTATION/STORAGE

Transport

When transporting place side rails in the transport position, this is where the rails are in the uppermost position using the bottom most pin hole. After that make sure safety chain is latched to the fork before transporting.

- Check that bale fork is fully raised and transport lock is secured.
- Be aware of the height, length and width of implement. Make turns carefully and be aware of obstacles and overhead electrical lines.
- Always travel at a safe speed. Do Not Exceed 20mph.
- REDUCE SPEED with a load. Do Not Exceed a speed of 10mph.
- The slow moving vehicle (SMV) emblem and reflectors must be secured and be visible on the machine for transport.
- Use flashing amber warning lights, turn signals and SMV emblems when on public roads.
- Do not transport in poor visibility.
- Avoid soft surfaces, the additional wing weight on the wheels could cause the machine to sink.

TRANSPORTATION/STORAGE

Storage

When storing ensure the following:

- Clean machine thoroughly
- Inspect all parts for wear or damage
- Lubricate grease fittings
- Lubricate chains
- Tighten all bolts to specs
- If able lower fork and release hydraulic pressure
- If fork must be stored in a raised position, ensure that the fork is properly secured with lock pins/ safety chain.
- Level bale hiker using hitch jack and block up.
- Relieve hydraulic pressure from hydraulic system.
- Raise main frame, block up and relieve weight from the tires.
- Cover tires with canvass to protect them from the elements when stored outside.
- Coat exposed cylinder shafts (Refer to “Cylinder shaft protection” in operators manual).
- Paint any surfaces that have become worn. On the bed use either paint or slip coat.
- Store implement away from areas of main activity.
- Do not allow children to play on or around stored implement.

TROUBLESHOOTING

Problem	Cause	Correction
Bale rolling in at an angle.	Bale Hiker not level.	Level Bale Hiker.
	Bales are slightly cone shaped.	Load larger end of bale onto fork first.
	Forks are spaced too wide.	Move forks closer together.
	Bent Fork.	Straighten or replace fork.
Poor Push Bar operation.	Dirt binding chain on drive sprockets	Keep dirt and other debris from building up around rear drive sprockets
	Chain timing out.	Adjust pull chains to pull evenly on push bar.
	Chain is too loose.	Keep chains evenly tightened.
	Rollers may be worn or binding.	Replace.
	Damaged links on pull chain.	Replace damaged links.
Poor fork operation	Push Bar.	Move push bar forward to switch selector valve.
	Selector valve not switching.	Adjust lever. Clean valve shaft. Damaged valve shaft, replace.
	Air in hydraulic system.	Raise fork fully holding hydraulic lever for several seconds.

TROUBLESHOOTING

Poor bed tilt operation.	Push Bar.	Move push bar back a few inches to switch selector valve.
	Selector Valve.	Move shaft to its outermost position.
	Selector valve.	Check position of lever when push bar is fully returned.
Bed rises when lowering fork.	Air in system.	Raise fork to full position and hold the hydraulic lever for several seconds to phase out air from system.
Oil accumulation	Normal.	Slight seepage from seal is normal.
	Damaged seal.	Replace seals.
	Loose fittings.	Tighten hose and pipe connections.
	Scored cylinder shaft will damage shaft seal.	Replace shaft and shaft seal.

SPECIFICATIONS



BALE HIKER Specifications and Options	
Model	2200
Length	42' (9.75 m)
Width Unloaded	Rails In - 9' 10" (3 m)
	Rails Out - 12' 8" (3.86 m)
Weight Unloaded	10,500 lbs. (4,763 kg)
Weight Loaded (GVWR)	44,100 lbs. (20,003 kg)
Load Capacity Weight	33,600 lbs. (15,240 kg)
Tires	(8) - 16L x 16.1FI - Load Range E 8 Bolt Hub
Transport Height	11' (3.353 m) minimum to 12' 4" (3.759 m) maximum
Number of Wheels	8
Automatic Bale Turner	Standard
Automatic Bale Unloading	Standard
Frame - Tubing	Engineered Truss Design
Bale Divider - Adjustable	Standard - 12 positions
Side Rail - Adjustable	Standard
Cylinders - Fork - Bed Lift	1 - 4 x 18 (10.16 cm x 45.72 cm)
	4 - 4 1/2 x 18 (11.43 cm x 45.72 cm)
Selector Valve	Standard
Safety Lights	Standard
Safety Chain	Standard
Ball Hitch	1 1/2 or 2 (3.81 cm or 5.08 cm)
Tractor Requirement	180 HP (133 kW) Minimum
Bale Diameters	48, 60, 72 (1.22 m, 1.52 m, 1.83 m)

PROAG
Morris



MORRIS

We hear you.