



# Victory Tractor Implements by Centex Group Inc.

## USER MANUAL for HEAVY DUTY FLAIL MOWER



Model: EFGC135, EFGC155, EFGC175, EFGC195



**CAUTION: Read Manual Thoroughly  
Operation**



**Before**

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# PRODUCT SPECIFICATIONS

## Product Models

### EFGC SERIES FLAIL MOWER MODELS

Model	EFGC-135	EFGC-155	EFGC-175	EFGC-195
PTO power required	25-35hp	30-40hp	40-55hp	45-60hp
Three Point hitch category	Cat. 1	Cat. 1	Cat. 1	Cat. 1
Overall width (mm) / (in.)	1470 / 57.9	1670 / 66.8	1870 / 73.6	2070 / 81.5
Weight (kg) / (lb.)	275 / 606	280 / 617	300 / 661	345 / 760
Cutting width (mm) / (in.)	1350 / 53	1550 / 61	1750 / 69	1950 / 77
Number of blades	20	24	28	32
Number of drive belts	2	3	3	3

All mowers are 790 mm (31.1 inches) front to back, 850 mm (33.5 inches) tall and operate at a PTO speed of 540 rpm.

# SAFETY INSTRUCTIONS



Before operating the Flail mower read the following safety instructions. Failure to comply with these warnings may result in serious **injury** or **death**.

**READ AND FOLLOW ESPECIALLY IN THE SAFETY SECTION.**

**FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY OR DEATH.**

**SIGNAL WORDS:** The signal words **DANGER**, **WARNING** and **CAUTION** are used with the safety messages in this manual and with each safety sign. They are defined as follows:

**DANGER:** Indicates an immediate hazardous situation that, if not avoided, could result in serious injury or death. This signal word is to be limited to the most extreme situations typically for machine components that, for functional purposes, cannot be guarded.

**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practice.

## EQUIPMENT SAFETY GUIDELINES

- Safety of the operator and bystanders is one of the main concerns in designing and developing a mower. However, every year accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions and insist those working with you, or for you, follow them.
- In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.

# SAFETY INSTRUCTIONS

- Replace any safety sign that is not readable or missing. Location of such safety signs are indicated in this manual.
- Never use alcoholic beverages or drugs that can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- **Under no circumstances should children under the age of 18 be allowed to work with this equipment. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and how it works.** Review the safety instructions with all users annually.
- This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible, properly trained and physically able person familiar with farm machinery and trained in this equipment's operations. Recognize and accommodate any physical limitations of any helpers.
- Use a tractor equipped with a Roll Over Protective System (ROPS) and seat belts.
- Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**
- Do not modify the equipment in any way. Unauthorized modification could result in serious injury or death and may impair the function and life of the equipment.
- In addition to the design and the configuration of this implement, including safety signs and safety equipment; hazard control and accident prevention are dependent upon the awareness, concern, prudence, and proper training of personnel involved in the operation, transport, maintenance, and storage of the machine. Refer also to safety messages and operation instruction in each of the appropriate sections of the tractor and mower manuals. Pay close attention to the safety signs affixed to the tractor and the mower.

# SAFETY TRAINING

- Safety is a primary concern in the design and manufacturing of our product. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator or bystander.
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of this equipment.
- It has been said, “The best safety device is an informed, careful operator.” We ask you to be that kind of operator. It is the operator’s responsibility to read and understand all safety and operating instructions in the manual and to follow them. Accidents can be avoided.
- Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. If this machine is used by any person other than you, or is loaned or rented, it is the Flail mower owner’s responsibility to make certain that the owner's manual be available to the operator prior to operating and that the operator:
  - 1 - Reads and understands the operator’s manuals.
  - 2 - Is instructed in safe and proper use.
- Know your controls and how to stop the tractor, engine, and mower quickly in an emergency.
- Train all new personnel and review instructions frequently with existing workers. Be certain only a properly trained and physically able person will operate the machinery. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death. Recognize and accommodate any physical limitations of any helpers.

# SAFETY TRAINING

## PREPARATION

- Never operate the tractor and mower until you have read and completely understand this manual, the Tractor operator's manual, and each of the safety messages found on the safety signs on the tractor and mower.
- Personal protection equipment including hardhat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintenance, repairing, removal, or moving the implement. Do not allow long hair, loose fitting clothing, or jewelry to be around equipment.
- **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!** Tractors with or without mowers attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the operator's position exceeds 80 db. Noise over 80 db on a long-term basis can cause severe hearing loss. Noise over 90 dB on a long-term basis may cause permanent, total hearing loss. **NOTE:** Hearing loss from loud noise (from tractors, chain saws, radios, and other such sources) is cumulative over a lifetime without hope of natural recovery.
- Operate the mower only with a tractor equipped with an approved Roll-Over-Protective System (ROPS). Always wear your seat belt. Serious injury or even death could result from falling off the tractor — particularly during a turnover when the operator could be pinned under the ROPS or the tractor.
- Clear area to be mowed of stones, branches or other debris that might be thrown or entangled in the mower, causing injury or damage.
- Operate only in daylight or good artificial light.
- Ensure mower is properly mounted, adjusted and in good operating condition.
- Ensure that all safety shielding and safety signs are properly installed and in good condition. Remove or safely stow the parking support foot prior to transport or operation

# SAFETY TRAINING

## STARTING AND STOPPING SAFETY

- Check the tractor master shield over the PTO stub shaft. Make sure it is in good condition and fastened securely to the tractor. Purchase a new shield if old shield is damaged or missing.
- All tractors that are not equipped with a “live” power takeoff (PTO) need to be equipped with an over-running PTO clutch. These are available through most farm equipment stores. NOTE: The addition of an over-running PTO clutch may change the length of the PTO driveline required. Pay extra attention to the instructions on the PTO driveline installation. Be sure that the driveline system guarding is adequate.
- Mower operating power is supplied from the tractor PTO. Refer to your tractor manual for PTO engagement and disengagement instructions. Know how to stop the tractor and mower quickly in case of an emergency.
- When engaging PTO, the engine RPM should always be at idle speed. Once engaged and ready to mow raise PTO speed to 540 RPM and maintain during mowing.

## OPERATIONAL SAFETY

- The use of this equipment is subject to certain hazards that cannot be protected against by the mechanical means or product design. All operators of this equipment must read and understand this entire manual, paying particular attention to safety and operating instructions, prior to using. If there is something in this manual you do not understand, ask your supervisor, or your dealer, to explain it to you.
- Most accidents occur because of neglect or carelessness. Keep all helpers and bystanders at least several hundred feet from an operating Flail mower. Only properly trained people should operate this machine.
- When machine is operated in populated areas where thrown objects could injure persons or property, **operation must be stopped when anyone comes within several hundred feet.**



## SAFETY TRAINING

- The majority of the accidents involve entanglement on the driveline, injury of bystanders by the objects thrown by the rotating blades, and operators being knocked off the tractor by low hanging limbs and then being run over by the mower. Accidents are most likely to occur with machines that are loaned or rented to someone who has not read the owner's manual and is not familiar with a Flail mower.
- The Flail mower is designed for use only on tractors with the power take-off (PTO) turning at **540 RPM**.
- Install and secure all guards and shields before starting or operating. The mower blades, driveline guards and tractor shields should be used and maintained in good working condition. They should be inspected carefully, at least daily, for missing or broken chain links, shields, or guards. (Worn items must be replaced at once to reduce possibility of injury.)
- Disengage power takeoff (PTO) and place transmission in neutral before attempting to start engine.
- Many objects, such as wire, cable, rope, or chains, can become entangled in the operating parts of the mower. These items could then swing outside the housing at greater velocities than the blades. Such a situation is extremely hazardous. Inspect the cutting area for such objects and remove from the site before working. Never allow the working blades to contact such items. Never assume an area is clear. **Always Check!**
- Always stop the tractor, disengage the PTO, set brake, shut off the tractor engine, remove the ignition key, lower implement to the ground and allow rotating pieces to come to a complete stop before dismounting tractor. Never leave equipment unattended with the tractor running.
- Never place hands or feet under mower with tractor engine running or before you are sure all motion has stopped. Stay clear of all moving parts.
- Do not reach or place any part of your body under equipment until it is blocked securely.

## SAFETY TRAINING

- Do not allow riders on the Flail mower or tractor at any time. There is no safe place for any riders.
- Do not operate unless all personnel, livestock, and pets are several hundred feet away to prevent injury by thrown objects.
- Never operate tractor and Flail mower under trees with low hanging limbs. Operators can be knocked off the tractor and then run over by the rotating blades.
- The rotating parts of this machine have been designed and tested for rugged use. However, they could fail upon impact with heavy, solid objects such as steel guardrails and concrete abutments. Such impact could cause the broken objects to be thrown outward at very high velocities. To reduce the possibility of property damage, serious injury, or even death, never allow the working blades to contact such obstacles.
- Stop Flail mower and tractor immediately upon striking an obstruction. Turn engine off, remove key, inspect and repair any damage before resuming operation.
- Stay alert for uneven terrain, holes, rocks, and roots and other hidden hazards. Keep away from drop-offs and hazards that could cause roll over. Use extreme care and maintain minimum ground speed when transporting or operating on hillsides, over rough ground and when operating close to ditches or fences. Be careful and slow down when turning sharp corners and changing direction on slopes. Do not start or stop suddenly on slopes. Avoid operation on steep slopes. In extremely uneven terrain, rear wheel weights, front tractor weights, and/or tire ballast should be used to improve stability.
- Pass Flail mower diagonally through sharp dips and avoid sharp drops to prevent “hanging up” tractor and Flail mower. Practice will improve your skills in maneuvering on rough terrain. Always cut down slopes, never across the face. Always check tractor manual for proper use on slopes.

## SAFETY TRAINING

- When using a unit, a minimum 20% of tractor and equipment weight must be on tractor front wheels. Without this weight, tractor could tip over, causing personal injury or death. The weight may be attained with a front-end loader, front wheel weights, ballast in the tires or front tractor weights. When attaining a minimum 20% of tractor and equipment weight on the front wheels, you must not exceed the ROPS weight certification. Weigh the tractor and equipment. **Do not guess or estimate!**

## TRANSPORT SAFETY

- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all lighting and marking requirements.
- At all times, when driving the tractor and equipment on the road or highway under 20 mph (32kph) use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem. Do not exceed 20 mph (32 km/h). Reduce speed on rough roads and surfaces.
- Plan your route to avoid heavy traffic.
- Secure the parking support foot before moving.
- Do not drink and drive.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.

## SAFETY TRAINING

- Turn curves or go up or down hills only at a low speed and at a gradual steering angle. Make certain that a least 20% of the tractor's weight is on the front wheels to maintain safe steering. Slow down on rough or uneven surfaces. Always check tractor manual for proper use on slopes.
- Use extreme care and maintain minimum ground and when operating close to ditches or fences. Be careful when turning sharp corners.
- Never allow riders on either tractor or mower.

## MAINTENANCE SAFETY

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
  - Follow good shop practices.
  - Keep service area clean and dry
  - Be sure electrical outlets and tools are properly grounded
  - Use adequate light for the job at hand.
  -
- Make sure there is plenty ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
- Before working on this machine, disengage the PTO, shut off the engine, set the brakes, and remove the ignition keys.
- Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- Never work under equipment unless it is blocked securely.
- Always use personal protection devices such as eye, hand and hearing protectors, when performing any service or maintenance.
- Frequently check mower blades. They should be sharp, free of nicks and cracks and securely fastened.

## SAFETY TRAINING

- Periodically tighten all bolts, nuts, and screws and check that all cotter pins are properly installed to ensure unit is in safe condition.
- When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.
- After servicing, be sure all tools, parts and service equipment are removed from mower.
- Do not allow debris, grease or oil to build up on any deck or platform.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications.
- The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
- A fire extinguisher and the first aid kit should be kept readily accessible while performing maintenance on this equipment.

## STORAGE SAFETY

- Following operation, or when unhooking the mower, stop the tractor, set the brakes, disengage the PTO, shut off the engine and remove the ignition keys.
- Attach the parking support foot before unhitching the Flail mower. Store the unit in an area away from human activity.
- Do not park equipment where it can be exposed to direct contact to livestock for long periods of time. Damage and livestock injury could result.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.

# ASSEMBLY INSTRUCTIONS

1. Upon receipt, it is best to store the Flail mower inside, but if stored outside, be sure to have a well-secured, waterproof tarp. When ready to assemble, cut any securing wires, remove soft packing, if provided, and remove from shipping frame. The shipping frame may need to be disassembled in order to remove the mower body.
2. Assemble the top hitch assembly arm as shown in the photo below.



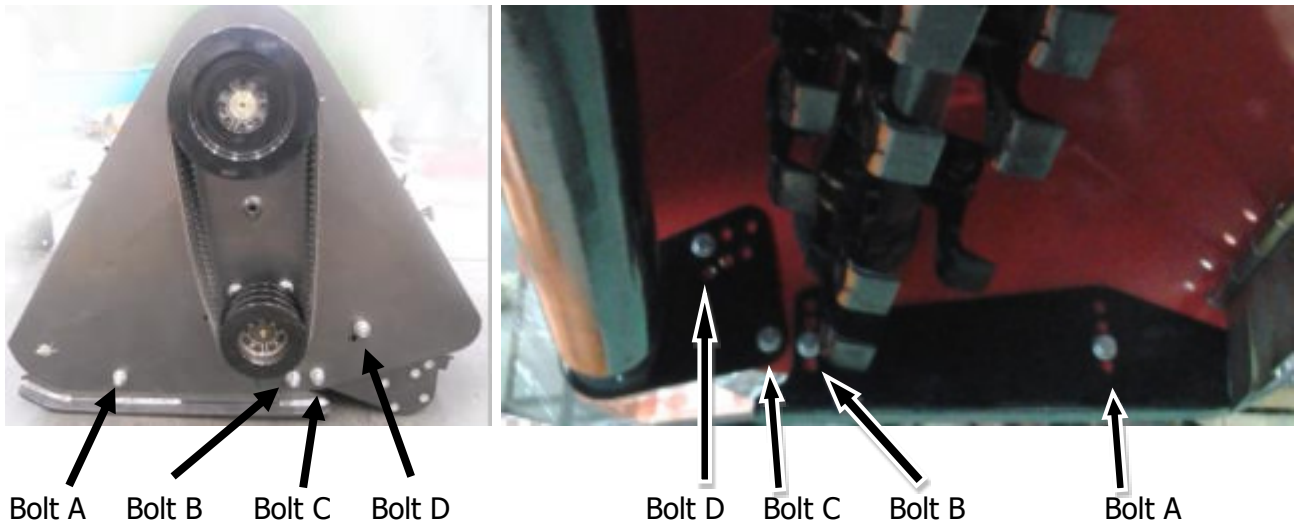
3. Mount the top hitch assembly to the mower body. There are two possible positions as shown below which result in more or less offset.



4. Connect the mower to the tractor three-point hitch. Note that the lower hitch arms are mounted between the two vertical flanges on the lower hitch bracket as shown in the right photo below.



5. Set the mower down on some heavy wood blocks. Insure that the mower cylinder is resting on the blocks because you will be moving the skids and the roller mounting plates located on both ends of the mower. Do not rely on the three-point hitch to maintain the mower at a given height, as it can fall on its own accord, pinning your arm or more under the mower. Note the position of the adjusting bolts in the two photos below. The left photo has the pulley and belt cover removed for clarity. Adjust the skid height using Bolts A and B. The bolts should be in the same relative hole so that bottom flange is level. Note that increasing the skid height with Bolts A and B may result in increased ground clearance for the blade flaps resulting in more material being ejected out the front of the mower. The roller height can be adjusted by loosening Bolt C and inserting Bolt D in an appropriate hole on the roller support plate. Adjusting mower height using the roller may tend to move the blade guard flaps closer to the ground, which can be compensated using the top three-point hitch adjustment. Note that during operation, debris can build up on the roller, thereby increasing the mowing height.



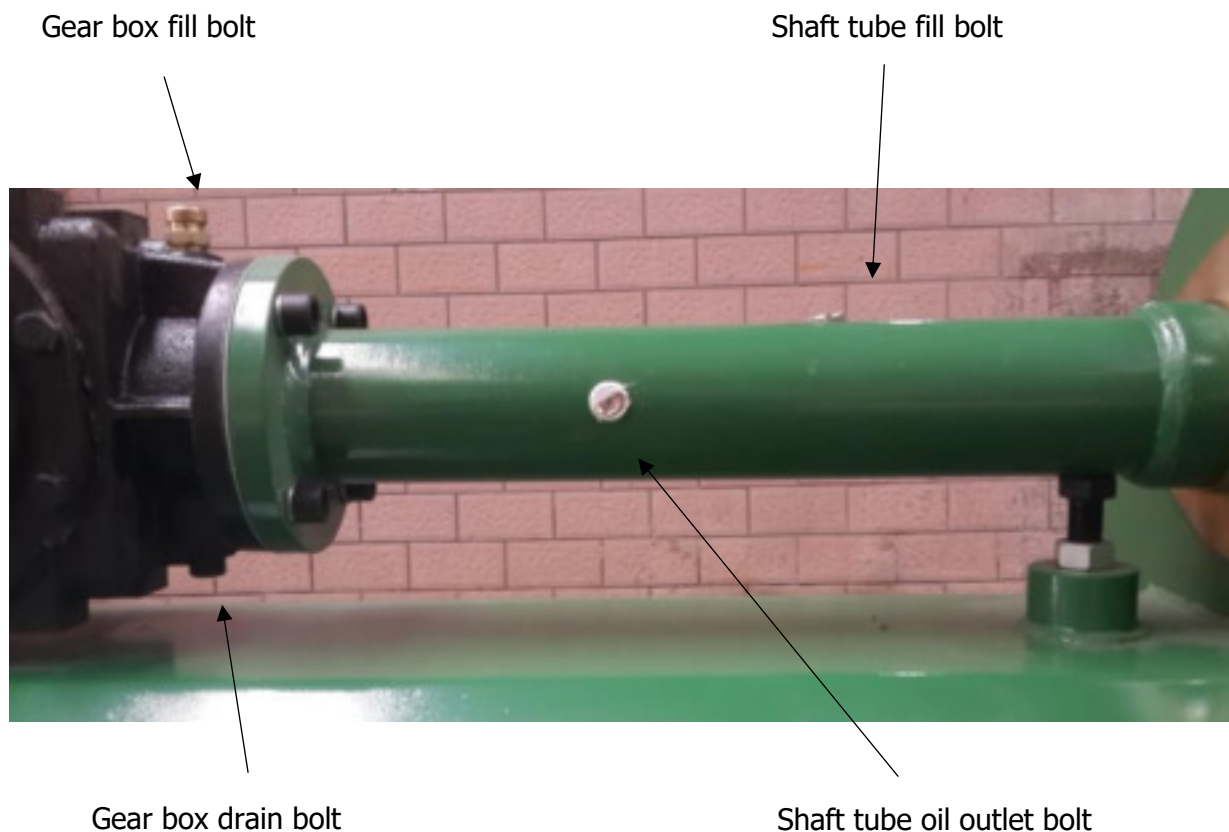
Again, be very careful to support the mower cylinder on heavy blocks while adjusting the skids or roller.

6. Using a stick, check the level of the gear oil in the transmission. Factory fill is 1 liter of SAE 85W/90 gear oil. Total gear box capacity is 2 liters. Do not fill the gear box to capacity – slightly above the minimum is adequate.



## ASSEMBLY INSTRUCTIONS

- Using a stick, check the level of the gear oil in the shaft tube. Factory fill is 0.75 liter of SAE 85W/90 gear oil. Proper oil level can be checked with the shaft tube fill bolt top center, then place a container under the shaft tube outlet bolt and remove it. If oil drips out of the outlet hole, let the level equalize and then replace both fill bolt and outlet bolt. If no oil drips out of the outlet hole, then add oil through the fill hole until the oil level is even with the outlet hole.





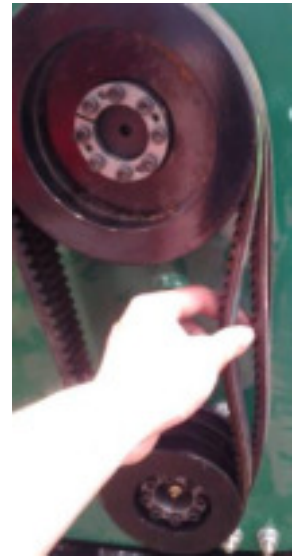
## ASSEMBLY INSTRUCTIONS

8. Check the PTO shaft for proper fit on your tractor. At least one-third of each shaft should overlap at the point where the shaft is most extended. There also needs to be some slack when the PTO shaft is most compressed. Raising and lowering the three-point hitch may change the spacing, so check the shaft length at several points. If the PTO shaft needs to be shortened, see the following section.

9. Remove the pulley and belt cover and check the belts for proper tightness. Deflection between



1 cm and 2 cm is acceptable. The left photo shows a 1 cm deflection and the right photo shows a deflection of more than 2 cm. If the deflection is not between 1 cm and 2 cm, then the distance between the pulleys needs to be adjusted. Follow the procedure below to adjust the belt tension.



Use a wrench to loosen the bolts on the gear box support as shown in the left photo below and also loosen the bolts on the shaft tube support as shown on the right photo below.



## ASSEMBLY INSTRUCTIONS

Underneath the shaft tube, you will find a threaded stud with two hex nuts on it. The bottom hex nut acts as a jam nut to lock the adjustment in place and the top hex nut is used to raise or lower the shaft tube which in turn, raises or lowers the top pulley to change the tension on the belts. First, loosen the bottom hex nut and then adjust the top hex nut so that the belts deflect between 1 and 2 cm.



Once you have adjusted the tension, then tighten the bottom hex nut and tighten the bolts on the shaft tube support. Check that the shaft tube is parallel with the top of the mower housing. If the shaft tube needs to be leveled, you may have to pry gently on the bottom of the gear box in order to lift it. When the shaft tube is parallel, then tighten the gear box support bolts

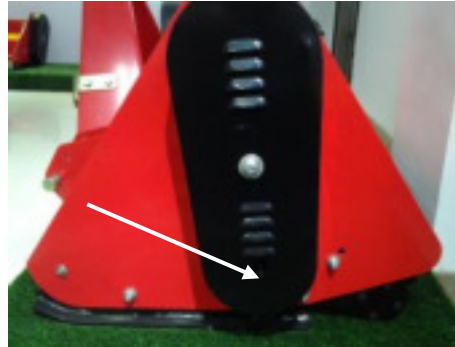
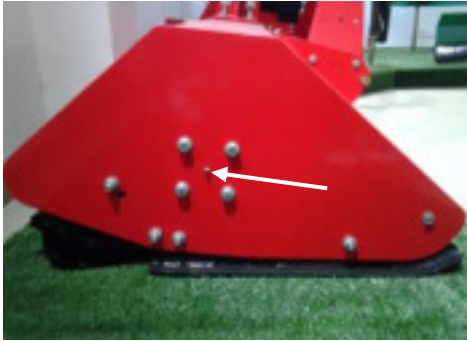
10. Check the pulley alignment by laying a straight edge between the pulleys. If there is a gap on either pulley more than 1 mm, then the pulley alignment needs to be adjusted. **Failure to do so may result in the belts flying off the pulleys with unwelcome results.**



Adjust these bolts to align the pulleys.

## ASSEMBLY INSTRUCTIONS

- Grease all grease fittings. There are four grease fittings on the mower, one on each end of the mower cylinder (note that one is covered by the pulley and belt cover). If the pulley and belt cover has a rubber grommet, this may be removed to grease the fitting, otherwise remove the pulley and belt cover.



There are two grease fittings on the roller bearings – note that the view below is from underneath the mower, however, the fittings are accessible from the rear of the mower when it is sitting on the ground.



There are also four fittings on the PTO shaft, two on the PTO universal joints and two on the PTO plastic shaft covers. Before operating the mower, be sure to grease all the fittings. Especially note that greasing the PTO shaft covers is essential. The covers naturally tend to rotate with the PTO shaft and are restrained by a light-weight chain. Not greasing the PTO shaft covers may result in the shaft cover rotation breaking the restraining chain. Operation without the restraining chain is unsafe.

# SIZING PTO SHAFT

Determine the desired PTO Shaft Length



**STEP 1** Cutting the PTO shaft to length.

**NOTE:** Be sure to cut equal lengths of each PTO shaft section. Clamp end of PTO shaft and cut off shield where marked.



**STEP 2** Using cut section of the shield as a guide cut shaft off the same amount.

**STEP 3** Repeat steps 1 and 2 for other PTO shaft section.



**STEP 4** Use a file to deburr PTO shafts. Clean up all chips, burrs and filings from both ends of the PTO shaft. Reassemble.

## OPERATING INSTRUCTIONS

**WARNING: IF MOWER IS RAISED UP SO THAT PTO SHAFT IS AT AN ANGLE SHARPER THAN 35 DEGREES PTO MUST BE STOPPED!**

The recommended mowing speed is 1.5 km/h (0.9 mph), according to the grass height, thickness and working conditions.

**STEP 1** Before each use perform the maintenance described in maintenance section.

**STEP 2** Read, understand and follow the information on safety training, preparation, starting and stopping safety, operational safety, transport safety warning sections of this manual.

**STEP 3** With the Flail mower positioned on level ground, adjust the tractor lift arms so that when lifted, the rotor bar remains parallel to the ground.

**STEP 4** With the Flail mower attached to the tractor, raise and support the mower cylinder with suitable blocks. Adjust the skids, located on the sides of the mower. The adjustment bolts for both right and left sides should be positioned in the same adjustment hole. This allows the mower to mow the same depth on each side.

**Note: Never attempt to adjust the Flail mower while the tractor is running.**

**STEP 5** Raise the mower and remove the blocks. Lower the mower to the ground.

**STEP 6** With the tractor at idle RPM and the mower lifted off of the ground, engage PTO and slowly advance throttle to 540 PTO RPM. NOTE: Flail mower is designed to run at **540 PTO RPM only.**

**STEP 7** Select a low gear for the tractor and begin to move forward. Tractor ground speed is to be controlled by gear selection only and not engine speed. As the tractor moves forward, slowly lower the mower. For best results over varying terrain, the skids and mower roller should be in contact with the ground

**NOTE: Do not allow the tractor engine or Flail mower to bog down or stall. This causes undue wear and tear on the mower and tractor. If this continues to happen reduce ground speed and raise working depth of Flail mower. Never attempt to remove objects from the mower cylinder until the tractor has been shut down and the mower tines have completely stopped.**

## OPERATING INSTRUCTIONS

**Never travel at a fast ground speed while using the mower, this could damage it. Never attempt to turn the tractor or travel in reverse with the PTO engaged and the mower on the ground. Always raise the mower off of the ground when backing up or attempting to turn. Failure to do so may cause damage to the mower.**

**STEP 8** After each use clean all debris from the mower tines. Replace any missing or illegible safety decals. Inspect for any damaged or worn parts and replace before next use. Store Flail mower in a dry environment.

# SERVICE AND MAINTENANCE

## Service

### Fluids and Lubricants

- Grease: Use only a grade NGLI Type 2 tube grease.
- Gear Oil: Use SAE 85W/90 Gear Oil
- Storing Lubricants: Your machine can operate at top efficiency only if clean lubricants are used. Use clean containers to handle all lubricants. Store them in an area protected from dust, moisture and other contaminants.

### Greasing

- Use a hand-held grease gun for all greasing.
- Wipe grease nipple with a clean cloth before greasing, to avoid injecting dirt and grit.
- Replace and repair broken nipples immediately.
- If nipples will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace nipple if necessary.

## Maintenance

The recommended period is based on normal operating conditions. Severe or unusual conditions may require more frequent maintenance.

### Every 8 Hours or Daily Maintenance

- Check all nuts and bolts in connection parts, tighten if required.
- Pump 3 to 5 strokes of grease into each grease nipple including PTO universal joints.
- Clean the implement; take away all debris and residue.

### Weekly Maintenance

- Perform daily maintenance.
- Check the bearings of blade spindles for wear and tear. If worn, replace them.
- Check the drive belts and tighten as required.

# SERVICE AND MAINTENANCE

## Annual Maintenance

- Thoroughly clean the Flail mower of debris and residue.
- Drain the gearbox oil. Fill with a minimum of 1 liter of fresh gear oil.
- Check and clean blade axles.
- Check oil seals and replace if necessary.
- Check all blades, replace them if they are worn out or damaged.
- If the skids are damaged, repair or replace them.
- Replace damaged or broken protective devices.
- Remove the drive shaft from the tractor and mower. Pull the PTO shaft apart. Check and replace any components that are damaged or worn. Install the PTO shaft on the mower. The PTO shaft should telescope easily and the guard turn freely on the shaft, grease if necessary.

## PTO Shaft Maintenance

The PTO shaft is designed to telescope to allow for dimensional changes as the machine goes through its operating range. A tubular guard encloses the driving components and is designed to remain stationary on the turning shaft. The shaft should telescope easily and the guard turn freely on the shaft at all times. Annual disassembly, cleaning and lubrication is recommended to insure that all components function as intended. To maintain the shaft, follow this procedure:

- Remove the shaft from the machine and pull shaft apart.
- Use a screwdriver to pry the tabs out of the sleeves on each end. There are 3 tabs per guard.
- Pull the shaft out of the plastic tubular guard.
- Clean the male and female portions of the telescoping ends.
- Apply a light coat of grease to each end.
- Clean grooves on each end where the tabs are located. Clean each tab also.
- Apply a light coat of grease to each groove.
- Insert the shaft into its respective guard and align the slots with the groove.
- Insert the tabs through the slots and seat in the groove.



# SERVICE AND MAINTENANCE

- Check that each guard turns freely on the shaft.
- Assemble the shaft.
- Check that the shaft telescopes easily.
- Replace any components that are damaged or worn.
- Install the shaft on the machine.
- Reconnect the anti-spin chain.

## Gearbox Maintenance

- Check and replace belts if necessary.
- If the gearbox is not functioning correctly, repair or replace.
- Dirt, debris and salt must be removed from the drive train as soon as possible.

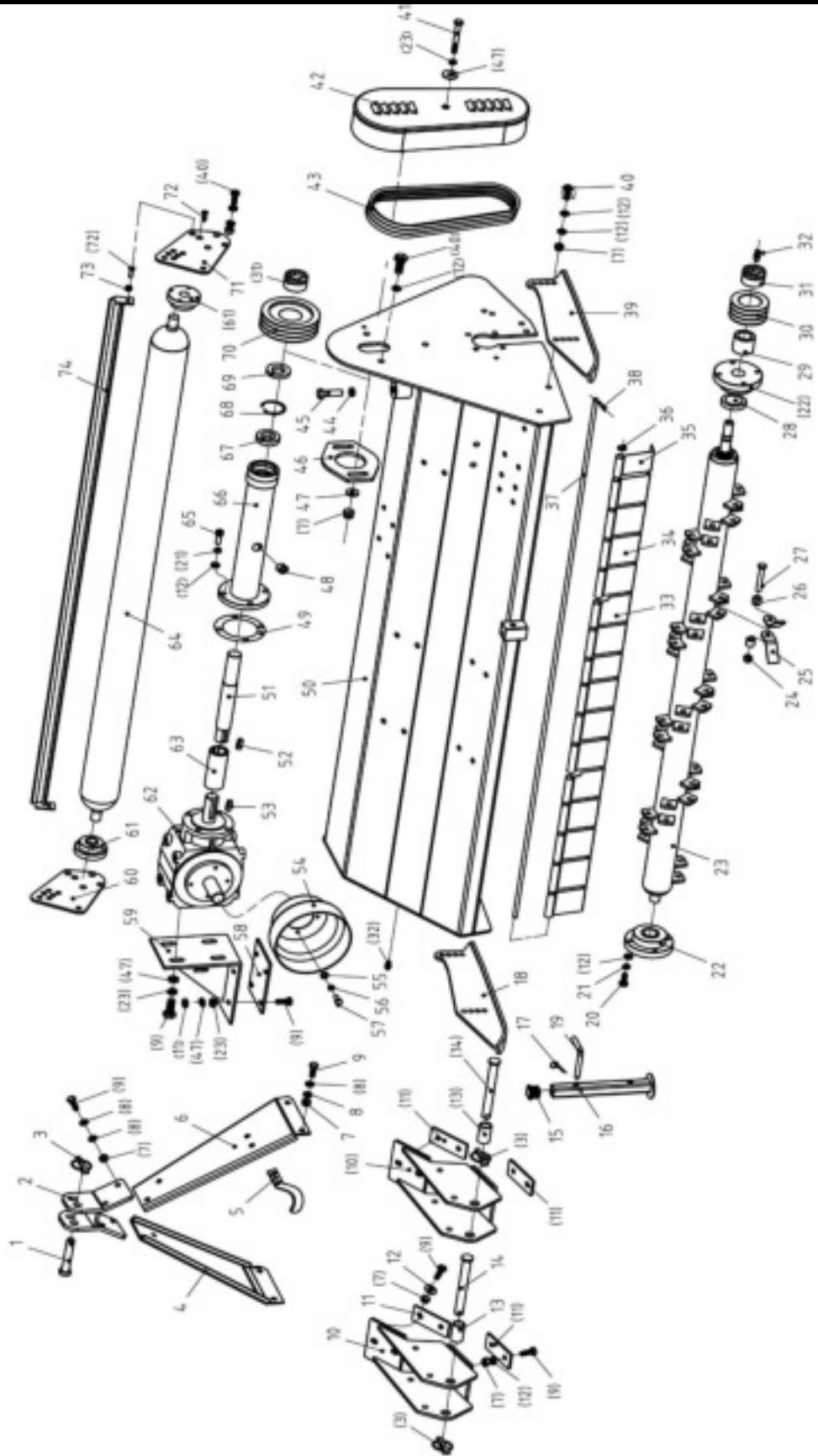
## STORAGE

After the season's use, the machine should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent any unnecessary down time at the start of next season. To insure a long, trouble free life, follow the procedure outlined below:

- Thoroughly wash the machine using a pressure washer to remove all dirt, mud, debris and residue. Avoid spraying directly onto bearings.
- Inspect the blades and rotor for damage or entangled material. Repair or replace damaged parts. Remove all entangled material.
- Lubricate all grease nipples. Make sure that all grease cavities have been filled with grease to remove any water residue from the inside.
- Touch up all paint nicks and scratches to prevent rusting.
- Move to storage area.
- Select an area that is dry, level and free of debris.
- Unhook from tractor.
- If the machine cannot be placed inside, cover with a waterproof tarpaulin and tie securely in place.
- Store the machine in an area away from human activity. Do not allow children to play on or around the stored machine.

# PARTS LIST

## EFGC Assembly



# PARTS LIST

No.	Part No.	Name & Specification	Qty
1	EF175-124	Top hitch pin	1
2	EF175-014	Top hitch pin bracket	1
3	SP11	Hitch pin lock assembly	3
4	EF175-021	Left upper hitch bracket	1
5	EF175-121	PTO support arm	1
6	EF175-022	Right upper hitch bracket	1
7	NN12	Hex nut 12	24
8	PW12	Plain washer 12	36
9	HB12A40	Hex bolt M12*40	20
10	EF175-017	Bottom hitch bracket	2
11	EF175-109	Bottom hitch bracket strap	4
12	PW12	Plain washer 12	8
13	EF175-120	Bottom hitch pin shroud	2
14	EF175-125	Bottom hitch pin	2
15	EF175-126	Support foot plug	1
16	EF175-019	Support foot	1
17	RP4	R pin	1
18	EF175-018	Left skid plate	1
19	EF175-122	Support foot pin	1
20	HB12A30	Hex bolt M12*30	14
21	SW12	Lock washer 12	17
22	UC207-Z	Mower cylinder bearing set UC207	2
23	EF175-013	Mower cylinder / blade holder	1
24	NN16	Blade hex nut M16	28
25	EF175-127	Blade halves	56
26	EF175-102	Blade separation sleeves	56
27	HB16A80	Blade hex bolt M12*80	28
28	OS55A80A8	Mower cylinder oil seal FB55*80*8	1
29	EF175-103	Mower cylinder spacer	1
30	EF175-130	Lower pulley	1
31	PL35A60	Lower pulley lock	2
32	GF8A1	Grease fitting M8*1	2
33	EF175-132	Guard flaps	3
34	EF175-133	Guard flaps	20
35	EF175-109	Guard flaps	1
36	PW10	Plain washer 10	32
37	EF175-106	Guard flap axle	1

# PARTS LIST

No.	Part No.	Name & Specification	Qty
38	SP4A35	Cotter pin 4*25	2
39	EF175-018	Right skid plate	1
40	GB5783-86	Hex bolt M12*35	8
41	GB5786-86	Hex bolt M12*10	1
42	EF175-022	Pulley and belt cover	1
43	VBB1016	Belt (quantity depends on model)	3
44	HN16A1.5	Hex nut M16*1.5	1
45	HB16A1.5A45	Hex bolt M16×1.5×45	1
46	EF175-101	Shaft tube support bracket	1
47	BPW12	Large washer 12	2
48	HSSTR3/8	Shaft tube hex socket head plug	2
49	EF175-134	Shaft tube flange gasket	1
50	EF175-011	Mower body assembly	1
51	EF175-104	Connecting shaft	1
52	KA10A40	Shaft key A10*40	1
53	KA10A70	Shaft key A10*70	1
54	EF175-131	PTO guard	1
55	BPW10	Large washer 10	2
56	SW10	Lock washer 10	2
57	HB10A12	Hex bolt M10*12	2
58	EF175-123	Gear box support plate	1
59	EF175-020	Gear box support bracket	1
60	EF175-108	Left roller adjusting plate	1
61	UC205-Z	Mower roller bearing	2
62	XH50.003Z.02W	Gear box	1
63	EF175-105	Gear box spindle collar	1
64	EF175-012	Roller	1
65	HSHS12A35	Hex socket head bolt M12*35	4
66	EF175-015	Shaft tube	1
67	B6007	Connecting shaft bearing	1
68	CFH62	Spring washer	1
69	EFH175.130	Connecting shaft oil seal 35*62*10	1
70	EF175-129	Top pulley	1
71	EF175-107	Right roller adjusting plate	1
72	HHSS8A20	Allen head screw M8*20	10
73	NN8	Roller scraper hex bolt M8	2
74	EF175-016	Roller scraper	1

# Victory Tractor Implements Warranty

## EFGC Series Flail Mower Warranty

This Product is warranted to be free of defects in materials and workmanship under normal use and service for a period of two years from the date of purchase, when operated and maintained in accordance with the operating and maintenance instructions supplied with this unit. This warranty does not cover misuse or negligence. Under no circumstances will the manufacturer be liable for any consequential damage or expenses of any kind, including loss of profit. The manufacturer is under no circumstances liable for tractor damage of any kind. The manufacturer is not liable for maintenance of the product.

This warranty is extended only to the original purchaser. Warranty is void if repairs are attempted by anyone other than an authorized Service Center.

If difficulties arise with the product, you should contact Victory Tractor Implements at the contact information below. Only this location is authorized to make repairs to the product or provide for the replacement of defective parts, which will be done at no charge within a reasonable time after the receipt of product. The complete unit or parts should be returned to Victory Tractor Implements. The customer may have to cover the return shipping expense and is responsible for avoiding damage from the transport. In-Transit Damage is not covered by warranty. Please include your purchase receipt with any claim and keep a copy for your own file.

The seller's liability under warranty is limited to the repair of the product and/or replacement of parts and is provided to the purchaser in lieu of all other remedies including incidental and consequential charges. There are no warranties, expressed or implied other than those specified herein.

For the nearest agent please contact:

Centex Group Inc. dba Victory Tractor Implements  
65 Pine Av., Suite 857  
Long Beach, CA 90802, USA

Website: [www.etractorimplements.com](http://www.etractorimplements.com)

Tel.: 1-562-235-5725 e-mail: [sales@etractorimplements.com](mailto:sales@etractorimplements.com)