

# *DE Engineers*

## *Field bin*

### *Operation Manual*



#### **Field bin Operation:**

Congratulations on your purchase of a quality field bin for better grain handling and storage. Please take time to read this manual.

Main points:

1. When using a 15" auger for the first time, keep the manual choke plate in place to reduce power requirements until the flighting is polished.
2. Set PTO clutch before use, then annually by backing off clutch bolts until clutch slips under load then tension bolts evenly until slipping stops. Note/ do not over tighten clutch as this will prevent clutch from working properly.
3. Do not use a PTO driveline without a rotating shield that is in good working order and be certain that safety shields are in place and secure on tractor and field bin.
4. Field bins should always be placed on level, even ground and always try to avoid a mixture of hard and soft soil so the bin can sink evenly into the ground ie/- do not straddle field bins across a roadway.
5. Always ease tractor PTO Into gear slowly then increase auger speed.

DE Engineers subscribes to the general standards specified by W.A.O.H.&S. For this reason, we strongly recommend that all personnel associated with this equipment be trained in the correct operational and safety procedures required for this silo. DE Engineers also recommends that periodic reviews be standard practice. For your convenience, we include the sign-off sheet so you can record your periodic reviews.



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#### 1. Your health

Entering a field bin is unnecessary; cleaning must only be done through the access hatch in the bottom. The small amount remaining can be easily cleaned out with a brush through the bottom clean out door.

#### 2. Safety

This field bin is fitted with safety features designed to prevent accidents. These have been fitted in compliance with a 'Code of Practice' or Safety aspects in the design' for field bin construction in States where these codes have been adopted. Removal of these devices may be illegal under legislation in some Australian States.

#### Precautions

As a field bin owner you have a duty of care to your workers or any other person living at or visiting your property. Warn your family, employees and visitors of the dangers of grain. Tell them to stay out of grain bins silos and trucks. Also tell them not to ride on loads of grain and to keep clear of steep walls of grain. Persons who will operate this field bin must be fully trained in safe working procedures.

#### External ladder

The Field bin is fitted with a drop ladder on the external. The purpose of this device is to prevent children being able to climb the silo. The barrier must be in the locked in the up position when the silo is not being used.

#### Base Manhole

DE Engineers field bins are fitted with a lockable base entry manhole. This must remain locked to prevent entry while field bin is connected to tractor or power source, to prevent injury or death from exposure to the auger inside. Before entering the field bin, you must disconnect the PTO drive shaft from the tractor (power plant).

#### Warning signs

This field bin is fitted with appropriate warning signs. If these fade or fall off, please order replacements.

#### Easy Hitch and Wheel lift operation:

Remove "R" clips and slide both locking pins from " Easy Hitch" (Patented), lift top sections and replace locking pins so pins now rest on lower pipe sections in a "broken" position. The Easy hitch



will now lower the field bin front to the ground when filling and The “Easy hitch” can be left in this position while travelling (make sure the bolts are not too tight as this will restrict movement).

Warning if the easy hitch arms are still in this position after filling has commenced, lever the arms upwards while standing clear as they can move upwards violently.

#### Raising Field bins:

Always make sure the wheels are raised when filling a hydraulic lift field bin. When transporting a hydraulic lift field bin always pin the wheels in the lowered transport position if the hydraulic hoses are disconnected from the tractor.



#### Twin tow gearboxes:

Always stop tractor or driveshaft from spinning before placing twin tow gear-box into gear. Check all grub screws (in gearbox) after the first hour of run-ning and keep shafts and chain well lubricated.

When storing granulated fertiliser, attach PTO drive shaft to bottom shaft at front of gearbox which is the direct drive to auger. Nb/- shifting fertiliser through the dog clutch drive can place excessive loads on shafts.



#### Opening Field Bin Doors:

Pull the square tube above the spring downwards to release the handles and always open the top panel first, then secure lifting again to prevent wind damage.



#### 5.0 HITCHING TO TRACTOR

Raise field bin hitch to tractor tow hitch by using jacking stand, connect field bin hitch FX 08 9274 6618 to tractor with a 1” towing pin then rotate jack stand to horizontal position to prevent damage while moving. NB/ if a larger pin is to be used, the hole size in field bin tongue can be increased.

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FX 08 9274 6618 PH 08 9274 2632

4.1 Open field bin lids by releasing over centre fasteners on roof top.



4.2 Pull the square tube above the spring downwards to release the handles and always open the top panel first, then secure lifting again to prevent wind damage.

### 5.0 HITCHING TO TRACTOR

Raise field bin hitch to tractor tow hitch by using jacking stand, connect field bin hitch to tractor with a 1" towing pin then rotate jack stand to horizontal position to prevent damage while moving. NB/ if a larger pin is to be used, the hole size in field bin tongue can be increased.

### 6.0 AUGER DRIVE

1. Set PTO clutch before use, then annually by backing off clutch bolts until clutch slips under load then tension bolts evenly until slipping stops. Note/ do not over tighten clutch as this will prevent clutch from working properly.
2. Ensure that the PTO driveline is securely attached to the fighting drive shaft and to the tractor.
3. Do not use a PTO driveline without a rotating shield that is in good working order.
4. Be certain that safety shields are in place and secure on tractor and field bin.
5. Always ease tractor PTO into gear slowly then increase auger speed.
6. When using a 15" auger for the first time leave the manual choke plate in place to restrict the amount of flow until the flighting is polished, the the choke plate can be removed.



### 7.0 LUBRICATION

Grease all points including wheel assembly square tube annually.

## **8.0 STORING FERTILISER IN FIELD BINS**

If granulated fertilizer is used, use a rubber hammer on the base cone and sides to make sure there are no hold ups in the field bin which could cause the side walls to crumple. The field bin should sit on level ground.