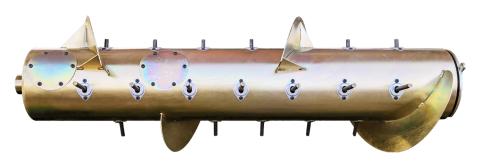




# **Fitting Instructions**

MACDON D60 (CA20) - D65 (CA25) D/FD1 (FM100)



### **Operation and adjustment:** iPaddock Typhoon Feed Drum

(Right and left refer to as looking forward on the machine)

### **Retractable Finger Timing**

Marking a significant improvement over other feed drums, Typhoon allows you to easily and repeatably adjust the retractable finger timing through a broad range of 150 degrees.

To set the timing, loosen the nut on the quick-set adjusting arm, adjust it to the desired position, then tighten the nut again. If the lever becomes tight over time, a 1/2" square hole is provided to allow more leverage with a socket drive bar. Read the arm position against the top edge of the arm, as indicated by the arrow shaped hole in the arm.

The recommended initial quick-set position for the retractable fingers is at position 7. In this setting the fingers reach maximum extension at about 45 degrees after (forward from) top dead centre, allowing them to be fully retracted by the time they are coming up the back side of the rotation. which minimizes the chance of catching crop and creating repeats over the drum.

If you experience repeating you should advance the finger timing. This is done by setting the timing lever to a lower position number. Most feeding issues are a result of excessively slow finger timing.

#### **Coarse Timing Adjustment**

In extreme situations you may wish to try adjusting the Typhoon fingers beyond the normal 150" range. To achieve full adjustment anywhere within 360° rotation, remove the bolt through the centre of the timing lever and fit it in an alternate hole in the shaft. The standard position for the bolt is to align hole "A" on the lever with the "A" position marked on the end of the shaft.

### **Light and Droughted Crops**

In very short and light crops it may be an advantage to slow the finger timing (le. Increase the setting number) to maximize the length of the fingers at the bottom of the stroke.

If light crop material is perching on the deck in front of the Typhoon, adding sections of corflute (or similar plastic or rubber batts) to the reel fingers with self tapping screws may help move the material further towards the back of the mats, while creating a fan effect in the center, both of which help to minimize this issue.



### Fitting Instructions: iPaddock Typhoon Feed Drum

(Right and left refer to as looking forward on the machine)

#### To Remove the Original Feed Drum:

It is not necessary to remove the adaptor for this job. However it will be necessary to remove the from the feeder house of the header (combine) to allow access from both sides of the drum. Attach a lifting strap to carry the centre of the drum from the top main beam of the draper front.

Remove the plastic covers from both ends of the feed drum.

D60: Remove and discard the original half circle plastic lip which sat to the rear side of the drum on the drive end.

D60: Open the inspection cover on the left (drive) end of the original drum, remove the left end bearing nut locking tab and remove the bearing nut. (Place a clean rag under the stub shaft to catch the bearing In the next step)

D65/D1: Remove the bolts attaching the cast "spider" to the drum at the left (drive) end. Loosen (but don't remove) the 2 large cuphead bolts attaching the feed drum to the drive end swingarm. Open the inspection cover on the left (drive) end.

Undo the fasteners holding the right end of the drum to the support swingarm, then move the swingarm outwards, away from the drum.

Move the drum to the right and forward at the right hand end, to slide the drum off the stub shaft at the drive end. Take care not to damage the draper mats.

D60: The inner bearing will fall off the stub shaft into the drum. It is important to keep this clean if you intend to reuse this bearing. If it is worn or damaged you should replace it with a new bearing.

Leave the rear bearing on the stub shaft to be used with the Typhoon.

You can now maneuver the drum out through the rear opening of the adaptor.

D65/D1: After removing the feed drum, remove the bearing retaining nut, the pitman arm and the key from the drive end stub shaft. Leave the spacer washer on the stub shaft, to be used with the Typhoon bearing hub. Remove the torx head sprocket retainer from the drive sprocket.

**NOTE:** The key will not be required with the Typhoon feed drum.

The drive sprocket will slide off the splined drive shaft together with the driven sprocket and chain. Note the offset orientation of the drive sprocket.

#### To Fit the New iPaddock Typhoon:

Fitting the IPaddock Typhoon is the reverse of the removal steps, with note of the following points:

D60: Fit the sprocket and bearing hub from the original feed drum to the Typhoon. Use loctite on the threads and no washer.

D65/D1: Fit the original sprocket with the new supplied bearing hub to the Typhoon. Use loctite on Paddock.

Maneuver the Typhoon into the opening from the rear. Support the Typhoon in the center with a lifting strap.



Move the Typhoon forward at the right-hand end. Align the drive end bearing hub over the stub axle, then move the Typhoon left onto the stub.

D60: Put the internal tapered bearing, washer and nut onto the stub and do the nut up loosely to still allow some fore/aft swing of drum while completing the installation.

D65/D1: Fit the bearing retaining nut loosely to the stub shaft before fully sliding the hub onto the stub shaft.

Secure the timing lever and timing end plate to the shaft using the stepped bolt provided, aligning the countersunk hole in the crankshaft with the larger hole on the handle.

IMPORTANT: The correct orientation of the quick set retractable finger timing mechanism is critical for correct performance of your Typhoon feed drum. When positioned correctly, in the recommended position 7 the retractable fingers should be fully extended 45 degrees forwards from top dead center. This must be checked once the Typhoon has been installed.

D60: Inspect the original right end support for hairline cracks. It is recommended to weld reinforcing plates onto this support, which is known to crack where the small triangular section is welded to the larger plate. For extra support for the original Macdon bracket, drill a hole in the original right-hand support and add an extra bolt through the hole provided on the new Typhoon quick-set timing plate.

Attach the quick-set timing end plate to the original right hand swing arm support. The original plastic covers are not required for the Typhoon.

D60: Tighten the drive end bearing retaining nut enough to remove end float, taking care not to over tension the bearing. Lock the nut using the original locking tab, with a 1/2" nut as a spacer under the cotter bolt that secures the locking tab to the original stub shaft.

D65/D1: The replacement bearing hub uses two bearings with a spacer which prevents excess bearing preload. Tighten the self-locking bearing retaining nut fully against the inner bearing.

Install and tighten all fasteners at both ends.

### IMPORTANT: RISK OF FIRE OR DAMAGE

Check for a clear gap at both ends of the drum to ensure that no brackets, fasteners or covers rub on the drum when rotating.

Check that the retractable finger timing is fully extended 45 degrees forward to top dead center with the timing lever set at position 7.



## THUNDERSTRUCK Warranty Disclaimer

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The i-Paddock Typhoon comes with a 12-month manufacturer's warranty. This warranty typically covers defects in materials and workmanship under normal use.