



Installation Instructions

MacDon FD1 Series FM100 Adapter



Turbodrum Installation Manual MacDon FD1 Series

FM100 Adapter

Removing the feed drum:

Step 1: Remove LH side drive cover components



Step 2: loosen and remove idler chain sprocket

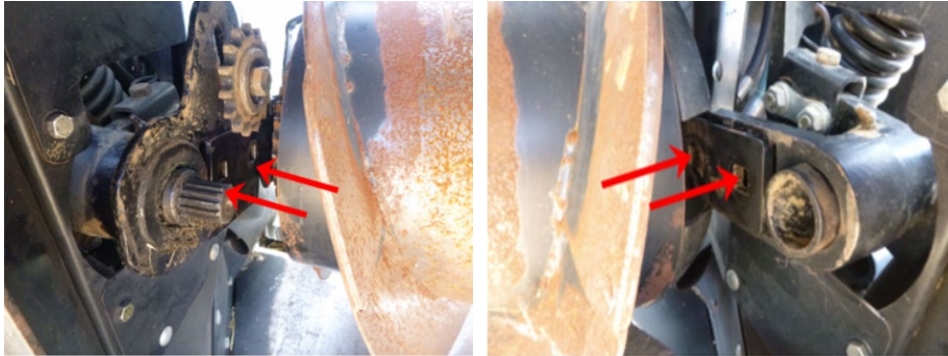


Step 3: Remove endless drive chain

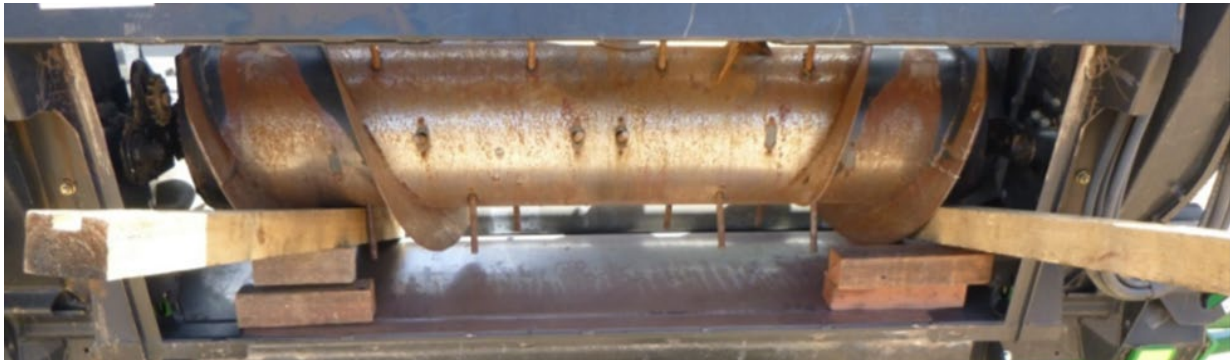


Step 4: Remove RH round plastic cover

Step 5: Remove LH/RH arm bracket bolts



Step 6: by following above steps this will allow the feed drum to be removed



Step 7: You will need to use the following OEM parts for the conversion of the Turbodrum (Steps 8-13)

- LH side mounting bracket
- RH side mounting is provided within the kit (Y shaped bracket)
- You will as well have to use 2 short bolts/nuts for the timing cover off the OEM. There are 3 holes to put together the cover disc and Y mounting bracket. Make sure to just use the 2 back holes as if the front bolt was to be put in the timing bracket will hit the nut.
- 3 mounting bolts/nuts (there is 1 provided bolt and nut in kit for timing plate for the RH side)
- LH side plastic cover along with cover hardware
- Remove the spider hub with 6 bolts (this will allow for the entire drive system to be removed from the feed drum)
- You will then have to separate all components (press or wooden blocks will be required)
- Once separated you will need the auger drive shaft, washer, and LH arm
- You will not need the 2 half-moon keys
- Then press on aftermarket drive sprocket provided in the Turbodrum kit to the drive shaft

- Once pressed down install the lock nut back on the top of the threaded auger shaft (you will have to tighten manually with ratchet wrench or else you may wreck threads)

The end result should look like this:



Step 8: Remove LH end out of Drum by removing the 6 Bolts from around the outside:

Step 9: Remove Nut off Center Shaft:

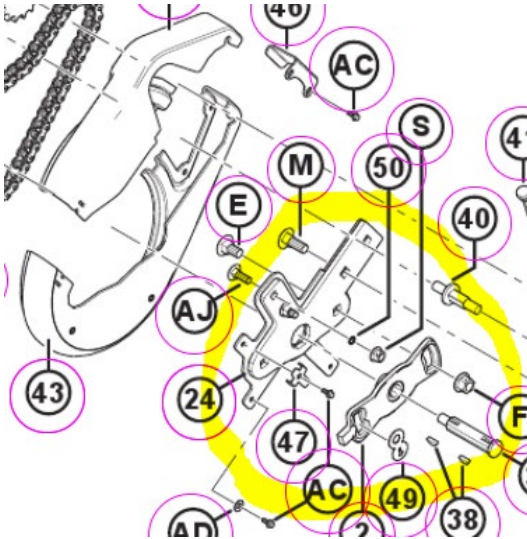


Step 10: Remove the pinion Arm off Mount Arm Shaft:



Step 11: Remove LH Mount Arm off Sprocket Hub:

It is also important to note that your LH drive bracket is put in the correct position. If you have the mounting bracket flipped the wrong way when installing your drive sprocket on the bracket your drive covers (top and bottom) will not fit correctly. Image below is how mounting bracket should be positioned:



Step 12: Attach Turbodrum Sprocket to LH mounting arm:



Step 13: Fit Mount Arm Assembly to Turbodrum with 6 Bolts from OEM sprocket:

Step 14: Take the RH plastic cover along with the steel metal plate and plastic plate provided within the Turbodrum kit

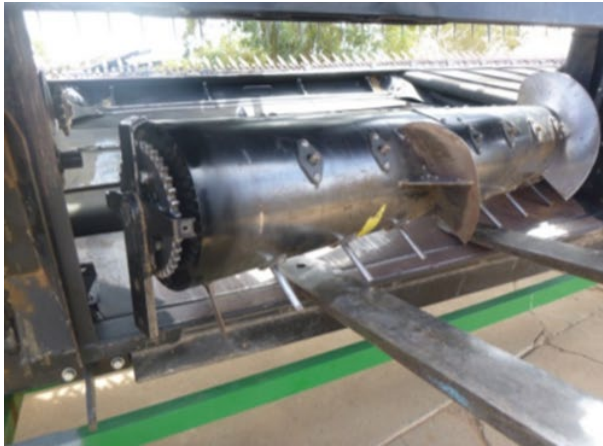
Step 15: Use OEM hardware and put all plates together (on the inside)

Step 16: Use the OEM cover for the RH side along with a Y shaped mounting bracket that is provided with the Turbodrum kit



Installation of the Turbodrums:

Slide the TurboDrum off the forks into the front with the RHS going in first:



(Endless chains will need to be fitted to the Drum Sprocket and Drive Shaft Sprocket on Drive Shaft before fitting bolts to Mount Arm on LHS)

Before sliding in the RH side make sure to put your plastic over and LH arm over the crank shaft. The supplied bolt will need to be in place before RH side of drum is in place. Once that is done you will have drum in the right position to place the other 3 mounting bolts/nuts. Before placing all 4 mounting bolts of the LH/RH sides you will be able to place your splined sprocket back on the drive side. You can then apply your idler sprocket back into place on the spline.

Then you will be able to place your timing slot over your bolt. There is also a lock nut with some washers that act as spacers (if needed). You will also insert your bearing over the crankshaft and into the timing slot. You will want to make sure you have enough bite on the crankshaft for proper fitting.

The end result should look like this:

It is also important to note that the timing slot should be set to the middle so if needed you can adjust your crankshaft left or right by loosening nut.

Setting Finger Timing:

Turn Turbodrum to have one row of retractable fingers at 2/2:30 on a 12 hour clock spectrum and hold to stop drum from turning. (Fingers point slightly above center when kneeling down and looking at finger position at the front of the header)

Once fingers are fully extended in the right position place a vice grip at the base of any finger at the top of the drum:



Then tighten the 8 allen key screws in a circular pattern until all are tight. For more access room you can as well remove the plastic shield by the orbit motor.

IF you haven't done so beforehand fit drive chain, idler sprocket and set chain tension. If you are having trouble installing endless OEM chain, I recommend measuring links and installing roller chain with a connector link. This drive chain is 60 heavy.

Reinstall drive system LH OEM covers and hardware

The OEM round plastic cover on the RH side will now fit over top of the diameter of the Turbodrum. There will be about 1" gap. I recommend blowing this out with an air gun once a year or when needed. I haven't seen significant buildup of material before.

Turn Turbodrum to see the auger flighting to feed pan deck clearance. Sometimes there need to be an adjustment. To raise or lower drum there is a bracket, threaded rod, and 2 nuts on the LH and RH side. When loosen or tightening this will lower or raise the drum. When drum is set I recommend about $\frac{1}{2}$ " to $\frac{3}{4}$ " clearance between the largest part of the flighting.