

# Instructions for Installation Front P.T.O. for JD6030 Series

# JD6230-6430 No.20200010/20200020 JD6530-6830 No.20200030/20200040





## <u>6 CylZyl. 6030</u>

Mount the basic plate with the rubber couplings "A" and mounting disc "B" completely. **M12x50** <u>147N</u> The recess at the basic plate has to point in the direction of the v-belt pulley.



## <u>6 Cyl. 6030</u>

Mount plate completely with rubber star at the v-belt pulley with the help of 4 socket head screws. **M14x30** <u>138Nm</u>



- A = bolts and washers for p.t.o. protection
- B = bolts and washers for front p.t.o.
- C = socket head screws for propeller shaft, 6 units



## 4 Cyl. 6030 with Common Rail engine

Remove the original v-belt pulley and the washer Clean the v-belt pulley included in delivery at the inner taper and remount it with the new washer and the original bolt at the crankshaft.

The flange surface between washer and v-belt pulley also has to be free of colour and fat!



During the installation please see to it that the taper of v-belt pulley and crankshaft are free of grease. Mount the taper connection by means of loctite **"660"** (taper connection).

To do so apply a 2-3 mm wide rim ( "C") with the glue loctite around the taper of the crankshaft.

The tightening torque of the greased bolt is 500 Nm.



Mount the hub of the propeller shaft into the rubber star.

Mount the pre-assembled rubber star with 4 bolts at the v-belt pulley.

<u>4 Cyl. 6030</u> Mount the rubber star at the crank shaft with the bolts. Please observe correct tightening torque.



## 6 Cylinder 6030

Mount rubber coupling "A" with the bolts "B" and the rubber coupling "C" against the installation plate ( clamping bush ) "D".

Tighten the bolts at their respective tightening torque.

Install the installation disc at the v-belt pulley.



<u>6 Cyl. 6030</u>



<u>6 Cyl. 6030</u> Mount the rubber coupling at the installation disc.







Mount the homo-kinetic coupling with propeller shaft.

Fix the 6 socket head bolts at <u>tightening torque</u>.



Put the complete front p.t.o. with the propeller shaft at the front side of the tractor and, when doing so, insert propeller shaft in the hub (clamping bush).



With the two bolts of the hub (clamping bush ) the propeller shaft is locked tightly.

## Attention! Please make sure that the propeller shaft is pushed in up to the marking ( unvarnished shaft).





Tighten the front p.t.o with 4 bolts M20x70 respectively 110mm at tightening torque.

Mount distance units 60mm between gearbox and front axle carrier. Only for 20200010 & 20200030 (125mm shaft offset)



Fasten the front p.t.o. protection by means of self-cutting bolts.

#### <u>Tightening torque bolts,</u> greased

	Tightening torque Nm		
	8,8	10,9	12,9
M 10	34	51	59
M 12	59	87	100
M 14	95	140	165
M 16	145	215	250
M 18	210	300	350
M 20	295	420	490
M 22	400	570	670
M 24	510	720	840

	Nm
	8,2
1/4"	10
3/8"	36
1/2"	90
5/8"	175



#### For all tractors

Connect the starting knob at the cable harness below the panelling ( John Deere plug X127, cable no.:A-973/orange, B-901/brown, C-904/yellow)



## **Only for tractors with Command ARM**

Install the switch for p.t.o. in the arm rest. To do so disassemble the arm rest( by removing three bolts at the bottom.) Connect switch to the cable harness. Reassemble the arm rest.



Connect the cable harness for the front p.t.o. at the cable harness of the tractor ( left side in driving direction, in front of the cooler)



Tighten the starting delay module on the left side of engine at the covering sheet by means of two bolts and nuts.



In the middle of the starting delay relay the starting phase can be adjusted via a rotary potentiomenter ( ,, -,, or ,, +<sup>"</sup>).





First change of oil after 50 hours and then every 6 months. **Please use only the make Shell Donax TX oil.** 

> oil quantity: 1,9 Ltr. (without oil cooler) oil quantity: 2,2 Ltr. (with oil cooler)

Please clean the sieve during each change of oil. Remove circlip ring and take of the cover.

(For approved oil makes please refer to our service page on <u>www.Landtechnik-Degenhart.de</u>)

# Installation of oil cooler



## 6 Cyl.- Tractors

Fix the oil cooler with the two holders at the frame of the tractor. To do so drill two holes of 7 mm diameter.



Possibly the two holders have to be bent slightly to achieve perfect fit.





Fix the oil cooler with the two holders to the frame For this purpose the fuel holder has to be shortened by 4 - 5 cm.

of the tractor. To do so drill two holes with 7 mm diameter. If there is a cooler for fuel and air condition this may result in lack of available space in the front area behind the battery. Therefore the fuel cooler has to be displaced to the top to provide space for the oil cooler below. (see photographs)













Drill two holes of 26 cm and install the protection rubber. Install the hydraulic hoses across the floor section to the gearbox.

## 35 mm for 4 cylinder 90 mm for 6 cylinder



## Attention! Please check oil level of the front p.t.o. after installation of the front p.t.o. <u>Use Shell Donax TX oil only.</u>

(Approval of respective oil makes: see service page <u>www.Landtechnik-Degenhart.de</u>)

## Please note:

On tractors with HMS II – function the front hitch (only tractors with supplementary electrical control units) and the front power take-off can be included in programming as well.

## <u>Operation and General Information for Diagnostic operation and Access to Programme</u> process with the Command Center (DTI)

## Address **BCU023**

## Action:

Enter for John Deere Front P.T.O. = 040

Enter for Degenhart Front P.T.O. = 008

**Result:** 

OKAY: Confirm entry.

NOT OKAY: Correct entry.

## Address **BCU027**

## Action:

Modulation "ON" entry for John Deere front p.t.o = 1

Modulation "ON" entry for Degenhart front p.t.o. = 1

## **Result:**

**OKAY:** Confirm entry

NOT OKAY: Correct entry.

## Address **BCU030**

Action:

#### Sensor for front p.t.o. speed

For tractors with front p.t.o. tachometer: Entry = 1XXX

For tractors without front p.t.o. tachometer: Entry = 0XXX

Please note:

X stands for an indicated figure.

**Result:** 

**OKAY:** Confirm entry

NOT OKAY: Correct entry.

## Address **BCU041**

#### Action:

Soft starting phase in seconds: Entry = 400 (Factory setting)

Possible values to be entered are soft starting phases of the front p.t.o. in the range of 000 - 600 (1,50 - 6,00 seconds in steps of 0,25 seconds ).

Please note:

In Address BCU027 modulation of the front p.t.o. has to be switched on.

**Result::** 

**OKAY:** Confirm entry

NOT OKAY: Correct entry.

## Address DTI127

### Action:

Front p.t.o. existant: Enter = 1

Front p.t.o. not existant: Enter = 0

## **Result:**

**OKAY:** Confirm entry.

NOT OKAY: Correct entry.

# **Operating and general information regarding diagnostic operation and access to course of the programme via the CommandCenter (DTI)**



LX1036831-UN: Entry unit (control unit DSM)



LX1036833-UN: Information page



LX1036834-UN: Diagnostic codes and diagnostic addresses

KEY:

- A Selection knob
- B Button for operation
- C Button for Cancelling
- D Button for main menu

- $E-Info\ page$
- F Diagnostic addresses
- G Diagnostic codes

## Entry unit ( control unit DSM)

- Selection knob (A) to ,,scroll" over the different monitor screen arrays
- Button (B) "Confirmation" to select or close an entry.
- Button (C) "Cancellation" to cancel an entry or a process
- Button (D) "Main menu" to call up the main menu

## **Display unit (Command Center DTI)**

- Array (E) "Info page" to get access to diagnostics.
- Array (F) "Diagnostic addresses" to display diagnostic addresses.
- Array (G) "Diagnostic codes" to display diagnostic codes.

## Calling up diagnostic codes

Access to the programme process	Select the array "info page" by means of the selection knob and press the button "confirmation"
Calling up diagnostic codes	Select the array "diagnostic codes" by means of the selection knob and press the button "confirmation".
Selection of control unit	Select the requested control units by means of the section knob and press the button "confirmation".

#### Calling up addresses

Access to the	Select the array "info page" by means of the selection knob and press the button
programme process	commation
Calling up address	Select the array "diagnostic addresses" via the selection knob and press the button
mode	"confirmation".
Calling up control units	Select the array "instrument" and press the button "confirmation".
Select control unit	Select the requested control units via the selection knob and press the button "confirmation".
Enter address	Select the requested address, marked with "INP" by means of the selection knob and press the button "confirmation".
Enter value	Select the respective entry array and and confirm, select the requested value by means of the selection knob and press the button "confirmation"
Quit address	Select the symbol "back" by means of selection knob and press the button "confirmation".

## Access to the programme process by means of CommandCenter (DTI)

Please note:

Please observe the safety instructions mentioned in paragraph 210, group 05.

#### **1** Select entry level

#### Action:

There are different levels for the entry to diagnostics.

Customer level:

Here diagnostic codes and customer relevant addresses are displayed.

Dealer respectively service level:

Here diagnostic codes and all addresses are displayed.

### **Result:**

**OKAY:** PROCEED WITH: <u>dealer respectively Service level</u>

## **Dealer respectively Service Level**

## 1 Entry by means of Command Center (DTI)

#### Action:

- 1. Select the array "info page" by means of the selection knob and press button "confirmation".
- 2. Select the array "diagnostic addresses" and press the button "confirmation":
- 3. After the hour glass has disappeared within 5 seconds press the button "confirmation" and keep it pressed for 4 seconds.
- 4. Release the button "confirmation" and press it again within 2 seconds. Keep it pressed for another 4 seconds.

## **Result:**

OKAY: In the upper area of the monitor the letter "T" appears.

**NOT OKAY:** If there is no "T" displayed on the monitor the ignition has to be switched off and restarted before repeating the attempt.

#### Pin-Configuration of the 3-pole compact plug in the cabin for front p.t.o. switch:

Pin configuration	Cable no.	Cable colour
,,А"	0472 AC	red
"В"	6151 A	brown
"С"	6174 A	yellow

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