

# Press Release

## ***New generation electro proportional front loader control: Manip' Drive 2***

MANIP' improves the comfort of use on its front loader range with this new generation electro proportional front loader control: **Manip'Drive 2**. This new electric control adapts the speed of operation at the movement of the hand. This control includes **a new joystick located** in the tractor cab, a connecting wire between the joystick and **the hydraulic spool valve block actuated by electric stepper motors**. This new generation electro proportional front loader control **Manip'Drive 2** is on sale, as optional equipment, on the new front loader MPower range and as well as on the MPA range.



- **New hydraulic spool valves controlled by electric stepper motor:**

- **Simplicity**

There are no mechanical or hydraulic links between the joystick and the hydraulic spool valves, this ensures a smooth, accurate and progressive control of the front loader. This operating and fitting simplicity compared with electro hydraulic or low pressure controls, makes the system far less sensitive to external disturbances.



- **Reliability:**

A proof of its reliability, the stepper motor system has been used for several years in very demanding applications like robotic or pneumatic brakes on trucks. The components have been tested for many years and the complete system has been tested by MANIP' for 3 years for more than 1000 work hours per year. For one year, more than 50 units of this **Manip'Drive 2** are in operation, most of them in contractor firms but also in farms.

- **Compactness:**

The electric stepper motor system is more compact and also lighter than other systems. It can be easily integrated on tractors even with big front wheels or mudguards.

- **New Joystick: the comfort at one's fingertips**

The electro proportional control includes a new joystick which can be perfectly integrated into tractor cabs. Easy to operate and good ergonomics, the joystick **Manip'Drive 2** can operate all functions of the front loader:

- Lift/Lower/Floating position
- Tipping/digging
- 3<sup>rd</sup> and 4<sup>th</sup> functions
- Manip'Lock (*implement hydraulic locking device*)
- HPS (*automatic repositioning of the implement*)

This joystick is also equipped with a locking device (when the front loader is not used or on road transport), as well as a **rocker switch**, integrated into the front side of the joystick, which can control another function of the loader or the tractor (gear or shuttle shift...)

By removing all the mechanical or hydraulic links between the joystick and the hydraulic spool valves of the loader, this electric control generates neither additional noise nor vibrations inside the cab.

