

# ZOOM



**GENUINE HYDRAULIC  
PUMPS & MOTORS**  
CONVERT ENERGY INTO PERFORMANCE



CASE IH MAKES THE DIFFERENCE.  
LET'S SEE HOW.

**GENUINEPARTS**  
HIGH PERFORMANCE

**CASE IH**

# The key role of hydraulic pumps and motors.

A **hydraulic pump** is a mechanical device that converts mechanical energy into **hydraulic energy** (flow and pressure). Hydraulic pumps use hydraulic fluid dynamics (oil can't be compressed, whereas air can) to perform a variety of functions such as:

- **Lifting & lowering parts** (cutterbars, buckets, forks).
- Operating steering and braking systems.
- Operating hydraulic transmissions (with hydraulic motors).

A **hydraulic motor** converts hydraulic energy into mechanical energy. The hydraulic pressure and flow generate forces and **move the tractor**. As a key part of hydraulic transmission, the motor is able to deliver:

- **High torque** at low speed.
- Force and torque at a constant level.
- Variable speed: (CVT or Powershift).
- Near-instantaneous shift to reverse motion.



- 1 The mechanical energy drives** the hydraulic pump to draw the oil from the tank.
- 2 The flow of oil is transferred** to all hydraulic receivers, such as cylinders and motors, using the distributor switching function.
- 3 The waste oil collected is filtered** and can be reinjected into the hydraulic circuit.





## Why choose Genuine CASE IH hydraulic pumps and motors?




- 1 HIGH RELIABILITY OF PARTS**
- 2 DRIVING COMFORT**
- 3 INCREASED PRODUCTIVITY**
- 4 PERFECT FIT FOR THE MACHINE**
- 5 OPTIMISED HYDRAULIC SYSTEM**
- 6 TIME SAVING ON THE IMPLEMENTATION**

### Did you know?

Get the best performance from your hydraulic system with CASE IH Genuine replacement Parts: Hydraulic valves, distributors, cylinders, quick couplers, filters and lubricants.

# Recommendations for use.

HOW TO KEEP YOUR HYDRAULIC PUMPS AND MOTORS IN A GOOD CONDITION.

RECOMMENDATIONS		RISK
 FLUIDS	<ul style="list-style-type: none"><li>• <b>Change oil regularly</b> in accordance with the recommended maintenance intervals.</li><li>• Use a hydraulic oil with a <b>min/max viscosity which corresponds with the instructions provided by CASE IH</b> and the conditions of use: temperature, risk of pollution, fire hazard.</li></ul>	<b>Failure of major components, higher fuel consumption, lower performance.</b>
 FILTRATION	<ul style="list-style-type: none"><li>• <b>Change your filters</b> regularly using <b>Genuine replacement parts</b>. A finer filtration reduces contamination and offers <b>better protection</b>.</li><li>• Using a Genuine filter allows a minimal pressure drop for <b>better performance</b>.</li></ul>	<b>Pump piston and valve damaged, clogged cylinders, or high pressure drop.</b>
 BREAKDOWN	<ul style="list-style-type: none"><li>• Sources of <b>pollution</b> (dust, air bubbles and particles) can damage your hydraulic circuit.</li><li>• Ensure you consult a hydraulics expert during repair operations.</li></ul>	<b>Breakdown of components due to cavitation, overpressure or excessive temperatures.</b>



At any time, easily and safely  
from the CASE IH web shop



caseih.com

www.mycnhstore.com

CASE IH a brand of CNH © 2024