MAXXUM 110 EP / MAXXUM 110 Multicontroller EP / MAXXUM CVT 110 /
MAXXUM 115 EP / MAXXUM 115 Multicontroller EP /
MAXXUM 120 EP / MAXXUM 120 Multicontroller EP / MAXXUM CVT 120 /
MAXXUM 125 EP / MAXXUM 125 Multicontroller EP /
MAXXUM 130 EP / MAXXUM 130 Multicontroller EP / MAXXUM CVT 130 /
MAXXUM 140 EP / MAXXUM 140 Multicontroller EP

Tier 4A

Tractor

# SERVICE MANUAL

**Part number 47665854**

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CASE IH AGRICULTURE

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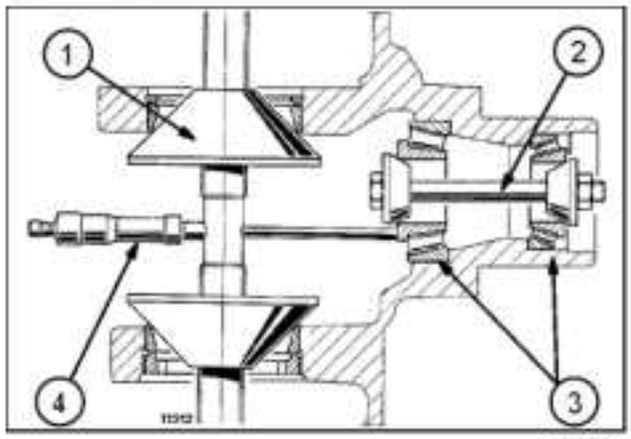
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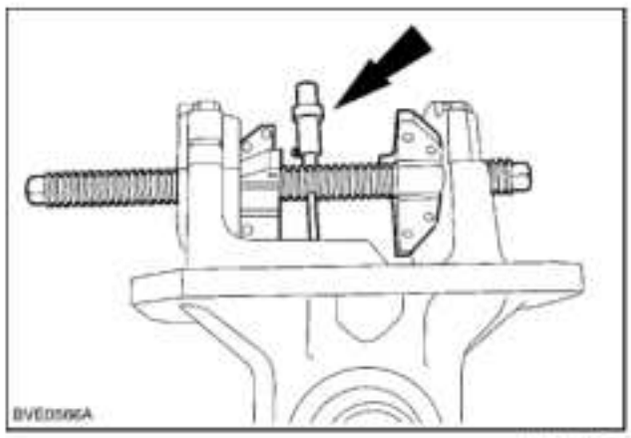
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## Pinion Shimming using Pinion Adjustment Tool 380000249.

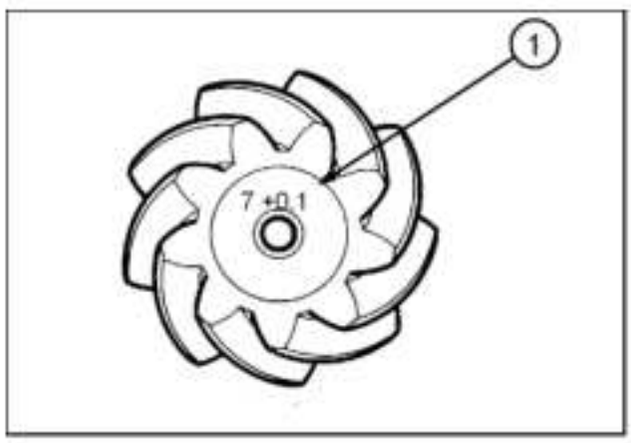
8. Install pinion bearings in differential support housing and clamp in position using special tool **380000248**/ **380000463** as used when determining thickness of shims for bearing preload.
   1. Pinion Measuring Gauge special tool **380000249**
   2. Pinion Bearing Clamp. Use special tool **380000248**/ **380000463**
   3. Pinion Bearings
   4. Micrometer (Part of special tool **380000249** )




9. Install the Pinion Setting special tool **380000249** complete with bearing cup and adjusting rings. Tighten the bearing caps retaining bolts to the specified torque value of **113 Nm** ( **83 lbf**).
   Adjust the cones of the special tool so that the depth micrometer tip touches the inner race of the bearing and measure the dimension (H4).



10. Determine the thickness of shims to be installed beneath the pinion gear as follows:
    Shim thickness S2 = H4- H3
    Where:-
    H4 = Dimension measured using pinion micrometer tool
    H3 = **115 Nm** ±C
    **115 Nm** is the nominal manufacturing dimension from rear face of pinion gear to conical point of pinion.
    C = Manufacturing correction factor stamped on face of pinion.
    Example
    H4= 118.27
    C = **+0.1 mm**
    H3 = 115 + 0.1 = **115.1 mm**
    S2 = H4 - H3 = 118.27 - 115.1
    Shim Thickness S2 = **3.17 mm**.




11. Refer to **Bevel gear set and differential carrier - Exploded view (25.102)**.



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**Wire harnesses - Electrical schematic sheet 12 (55.100.DP-C.20.E.12)**
**Wire harnesses - Electrical schematic sheet 13 (55.100.DP-C.20.E.13)**



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# 12012-Electrical Motor Disconnected

| | |
|---|---|
| MAXXUM CVT 110 | NA |
| MAXXUM CVT 120 | NA |
| MAXXUM CVT 130 | NA |

## Control Module : EPL

***NOTE:*** *When the cause of the error code has been rectified, clear the error code and test the system for normal operation.*

***NOTE:*** *To electronically release and disable the Electronic Park Lock (EPL) when carrying out maintenance on the system, use the H1 calibrations menu in the XA module. Select* ***(SC)*** *and perform the accelerometer stroke calibration procedure but stop the process when* ***(M)*** *is displayed and turn the ignition key switch OFF. For further information, refer to* ***Electronic park lock actuator/controller - H1 - Calibration procedures (55.031)****.*

*If electronic release is not possible, remove the EPL cover and use the special tool supplied in the cab to manually disengage the EPL.*

***NOTE:*** *When clearing the stored memory in H8 in the XA module or installing a new EPL, make sure the correct EPL orientation is selected in H3 in the XA module, channel 3. Refer to* ***Electronic park lock actuator/controller - H3 - Configurations and options (55.031)****.*

**Cause:**
The fault triggering condition is 'outside of actuation'.

**Possible failure modes:**

1. Faulty Electronic Park Lock (EPL) assembly

**Solution:**

1. Make sure the machine is parked on a level surface and chock the front wheels using suitable wheel stops.

   A. Continue to step **2**

2. Before proceeding clear the error code using either the on board HH menu or approved diagnostic equipment. Turn the ignition key switch OFF, wait for 5 seconds and then turn the ignition key switch ON. Operate the system and check for the error code.

   A. If the error code is not indicated, check that the system is operating correctly.

   B. If the error code is indicated, continue to step **3**

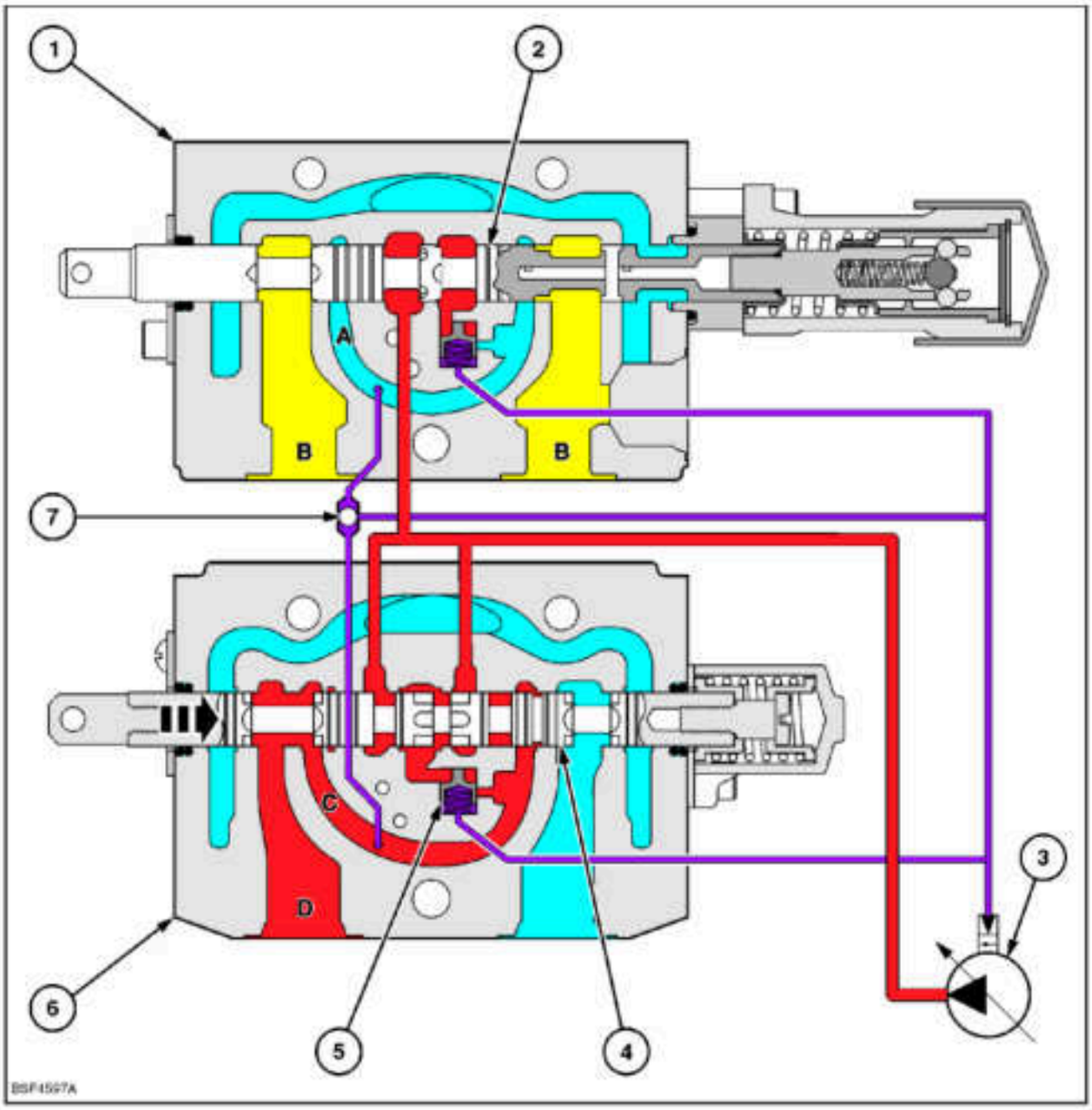
3. Using H8 in the XA module, clear the EPL memory, refer to **Electronic park lock actuator/controller - H8 - Clear stored calibration information (EEPROM) (55.031)**. Using H3 in the XA module, re-enable the EPL, refer to **Electronic park lock actuator/controller - H3 - Configurations and options (55.031)**. Re-calibrate the EPL, refer to **Electronic park lock actuator/controller - H1 - Calibration procedures (55.031)**. Operate the system and check for the error code.

   A. If the error code is not indicated, check that the system is operating correctly.

   B. If the error code is indicated or it was not possible to calibrate the EPL, remove and replace the EPL assembly. Refer to **Electronic park lock actuator/controller - Remove (55.031)** and **Electronic park lock actuator/controller - Install (55.031)**. Calibrate the EPL, refer to **Electronic park lock actuator/controller - H1 - Calibration procedures (55.031)**.



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BSF4597A 1

High Pressure Circuit Oil

Load Sensing Pressure Oil

Return To Reservoir Oil

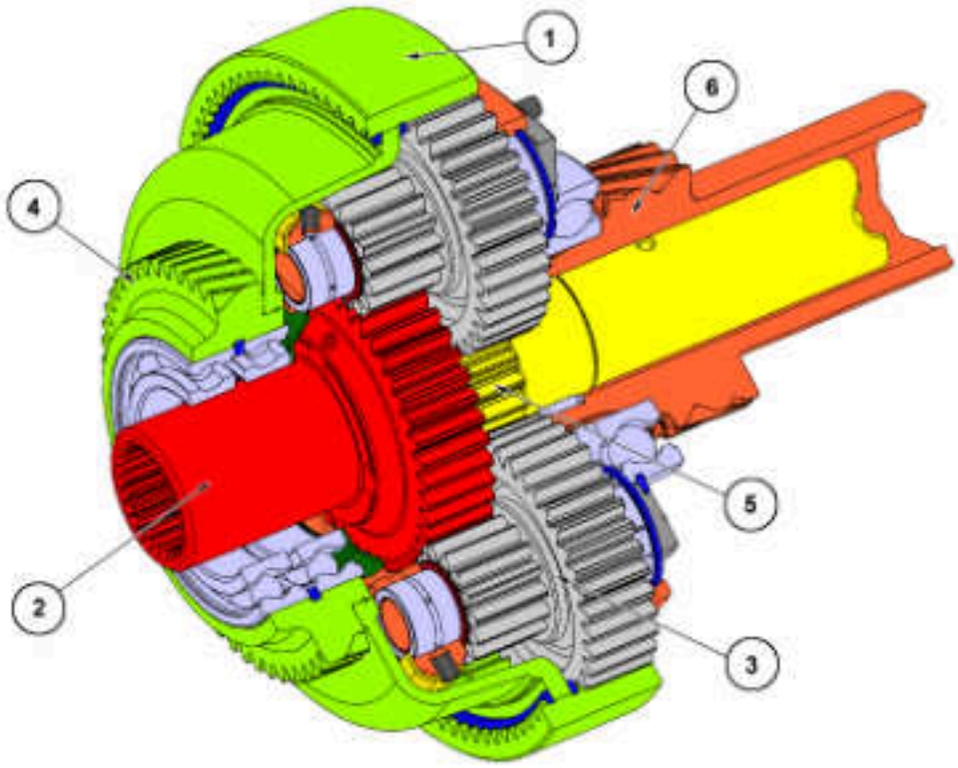
Trapped Oil

1 Control Valve with Detent (Boom)
2 Boom Spool
3 Pump
4 Bucket Spool
5 Compensator
6 Control Valve less detent (Bucket) Valve
7 Load Sense Shuttle Valve



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## Summation planetary gears




The summation planetary gears have two input shafts and two output shafts.

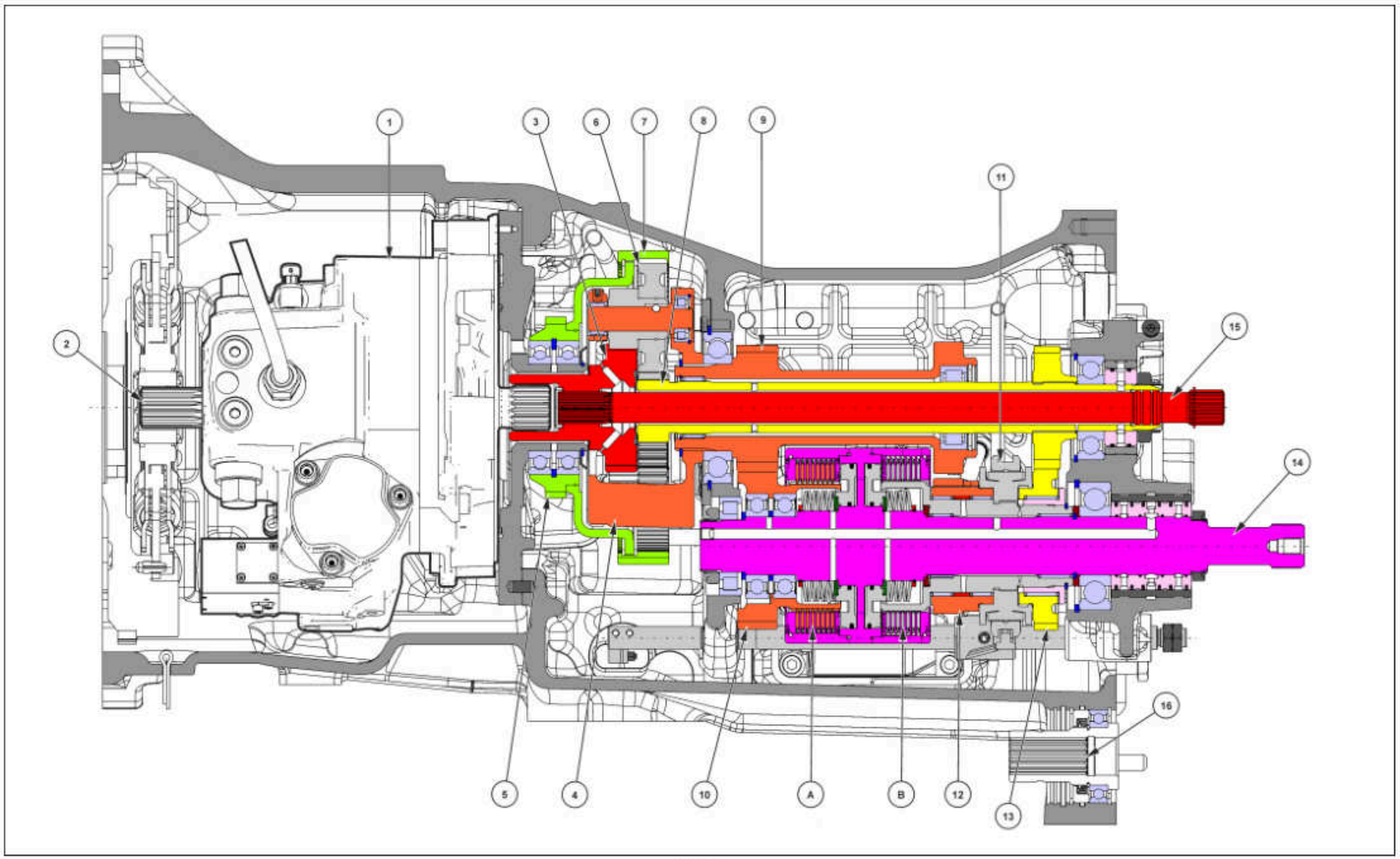
In a figurative sense, the sun gear **(2)** and the ring gear **(1)** are the two input shafts. The planetary gear carrier **(6)** and the sun gear **(5)** each have a secure connection to an output shaft.

The spur gear **(4)** drives the ring gear **(1)** directly from the hydro motor. The combustion engine drives the sun gear **(2)** directly. From the three double planetary gears **(3)**, the drive power transfers either via the planetary gear carrier **(6)** or via the sun gear **(5)** to the corresponding output shaft.

With the aid of the two output shafts, two continuously variable forward gears and one continuously variable reverse gear are possible in conjunction with the synchronizer and the clutches **(A)** and **(B)**. This enables the operator to implement all requirements (large tractive effort, high top speed, the necessary gear spread and excellent efficiency).



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