SERVICE MANUAL

T7.290 AutoCommand™
T7.315 AutoCommand™
Stage IV
Tractor

PIN ZFEA01001 and above

Part number 48193165
English
December 2017

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Contents

INTRODUCTION

Engine 10

[10.001] Engine and crankcase 10.1

[10.216] Fuel tanks 10.2

[10.202] Air cleaners and lines 10.3

[10.254] Intake and exhaust manifolds and muffler 10.4

[10.500] Selective Catalytic Reduction (SCR) exhaust treatment 10.5

[10.400] Engine cooling system 10.6

[10.414] Fan and drive 10.7

[10.310] Aftercooler 10.8

Clutch 18

[18.112] Slip clutch or flywheel damper 18.1

Transmission 21

[21.504] Continuously Variable Transmission (CVT) 21.1

[21.505] Continuously Variable Transmission (CVT) external controls 21.2

[21.506] Continuously Variable Transmission (CVT) hydraulic components 21.3

[21.507] Continuously Variable Transmission (CVT) internal components 21.4

Four-Wheel Drive (4WD) system 23

[23.202] Electro-hydraulic control 23.1

[23.314] Drive shaft 23.2

Front axle system 25

[25.100] Powered front axle 25.1

[25.102] Front bevel gear set and differential 25.2

[25.108] Final drive hub, steering knuckles, and shafts 25.3

[25.122] Axle suspension control 25.4

Rear axle system 27

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[27.100] Powered rear axle 27.1
[27.106] Rear bevel gear set and differential 27.2
[27.120] Planetary and final drives 27.3
Power Take-Off (PTO) 31
[31.104] Rear electro-hydraulic control 31.1
[31.119] Four-speed rear Power Take-Off (PTO) 31.2
[31.142] Front Power Take-Off (PTO) control 31.3
[31.146] Front Power Take-Off (PTO) 31.4
Brakes and controls 33
[33.202] Hydraulic service brakes 33.1
[33.110] Parking brake or parking lock 33.2
[33.240] Emergency brake 33.3
[33.220] Trailer brake hydraulic control 33.4
[33.224] Trailer brake pneumatic control 33.5
[33.204] Front axle brake 33.6
[33.200] Brake cooling 33.7
[33.350] Anti-lock Brake System (ABS) 33.8
Hydraulic systems 35
[35.000] Hydraulic systems 35.1
[35.300] Reservoir, cooler, and filters 35.2
[35.106] Variable displacement pump 35.3
[35.230] Priority valves 35.4
[35.204] Remote control valves 35.5
[35.220] Auxiliary hydraulic pump 35.6
[35.114] Three-point hitch control valve 35.7
[35.116] Three-point hitch cylinder 35.8
[35.124] Three-point hitch hydraulic adjustment 35.9
[35.160] Front hitch controls and lines 35.10

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[35.162] Front hitch cylinders and lines 35.11

Hitches, drawbars, and implement couplings 37

[37.100] Drawbars and towing hitches 37.1

[37.106] Automatic pickup hitch 37.2

[37.162] Front hitch 37.3

Frames and ballasting 39

[39.100] Frame 39.1

[39.140] Ballasts and supports 39.2

Steering 41

[41.101] Steering control 41.1

[41.106] Tie rods 41.2

[41.200] Hydraulic control components 41.3

[41.216] Cylinders 41.4

[41.432] Autoguidance steering 41.5

Wheels 44

[44.511] Front wheels 44.1

[44.520] Rear wheels 44.2

Cab climate control 50

[50.100] Heating 50.1

[50.104] Ventilation 50.2

[50.200] Air conditioning 50.3

Electrical systems 55

[55.045] Front axle control system 55.1

[55.000] Electrical system 55.2

[55.100] Harnesses and connectors 55.3

[55.015] Engine control system 55.4

[55.301] Alternator 55.5

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Accumulator - Charging and Testing

⚠ WARNING

Explosion hazard!
Do not expose the accumulator to temperatures above 49 °C (120 °F). A charged accumulator contains nitrogen compressed to 1600 psi (110 bar). High heat will cause the safety plug to blow out of the accumulator and the escaping nitrogen will propel the accumulator at a dangerous rate of speed.
Failure to comply could result in death or serious injury.

W9977D

⚠ WARNING

Pressurized system!
The accumulator contains highly pressurized nitrogen gas. If the accumulator system does not function correctly, replace the accumulator. DO NOT attempt to repair the accumulator.
Failure to comply could result in death or serious injury.

W8266A

⚠ WARNING

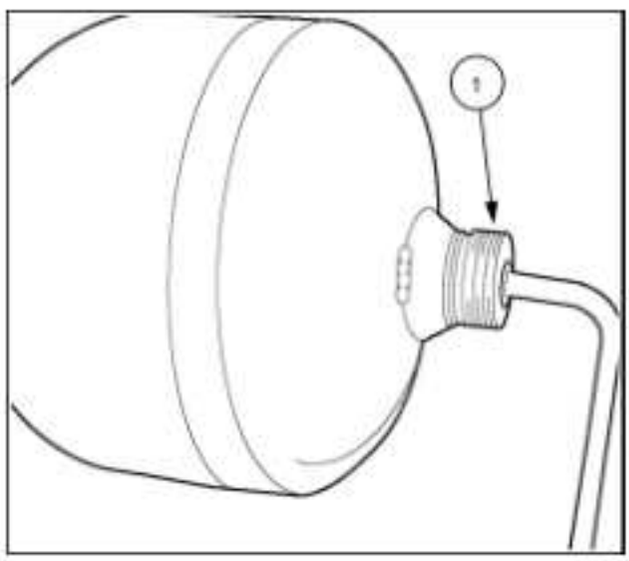
Avoid injury!
Use Personal Protective Equipment (PPE), including protective goggles, gloves, and safety footwear.
Failure to comply could result in death or serious injury.

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NOTE: *It is recommended to remove the accumulator from the unit to carry out the precharge pressure test and to charge the accumulator.*

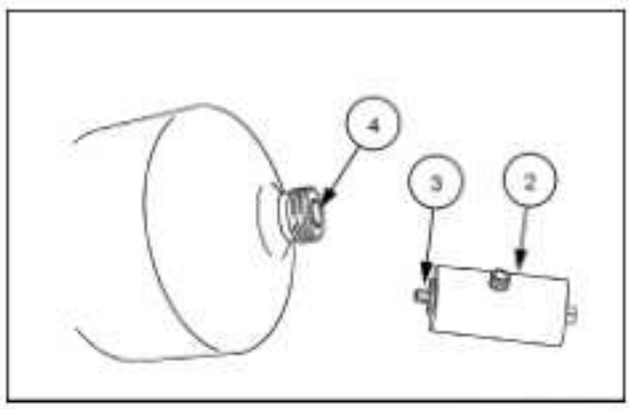
1. Remove the protective cap (not shown) from the service valve **(1)**.
2. To facilitate the use of the charge adapter **(2)**, loosen the service valve **(1)** slightly to make sure that no gass escapes. Use an appropriate wrench.

NOTICE: *Do not use the charge adapter **380001168 (2)** (see Figure **2**) to unseat the charge valve. Damage to the adapter may occur if excessive force is applied to the service valve **(1)**.*



RCPH18CCH068AAB 1

3. Align the hex fitting **(3)** with the valve hex pattern **(4)**.
4. Install and tighten the charge adapter **(2)**.



RCILI18CCH062AAB 2

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Wiring harnesses - Electrical schematic sheet 10 SH010 - POWER DISTRIBUTION - MF4 (2/3)

T7.290 AutoCommand™ Sidewinder II [ZGEA04529 -]
T7.315 AutoCommand™ Sidewinder II [ZGEA04529 -]

Type	Component	Connector / Link	Description
Fuse	**F-031n**		SEATHEAT/ ARMREST ADJUST
Fuse	**F-032n**		FRONT W/SCREEN WIPER
Fuse	**F-033n**		REAR WIPER SWITCH
Fuse	**F-034n**		TRACTOR BRAKE SW
Fuse	**F-035n**		HYD TRAILER BRAKE
Fuse	**F-036n**		PTO REAR & FRONT
Fuse	**F-037n**		NOT USED
Fuse	**F-038n**		AUTOGUIDANCE
Fuse	**F-039n**		EHR
Fuse	**F-040n**		TRANSMISSION
Connector	X-020A	**X-020A**	TRANSMISSION 2
Connector	X-020B	**X-020B**	(T2) EXTENSION HARNESS CONNECTOR
Connector	X-022A	**X-022A**	TRANSMISSION 1
Connector	X-022B	**X-022B**	(T1) EXTENSION HARNESS CONNECTOR
Connector	X-072	**X-072**	F21 TO F40
Connector	X-088A	**X-088A**	ARMREST 2
Connector	X-088B	**X-088B**	ARMREST
Connector	X-106A	**X-106A**	ROOF HARNESS
Connector	X-106B	**X-106B**	MAIN HARNESS
Connector	X-110A	**X-110A**	RH FENDER CONN 2 HPL RAISE/LOWER SWITCH
Connector	X-110B/X-127B	**X-110B/X-127B**	RH FENDER CONNECTOR 2 HPL RAISE/LOWER SWITCH
Connector	X-254A	**X-254A**	REAR BRAKES
Connector	X-254B	**X-254B**	REAR BRAKES(TR)
Connector	X-400A	**X-400A**	DIVERTER SWITCH
Connector	X-400B	**X-400B**	
Connector	X-623A	**X-623A**	OSPED
Connector	X-623B	**X-623B**	FAST STEER
Connector	X-787A	**X-787A**	ELECTRIC ADJUST MOTOR
Connector	X-787B	**X-787B**	GARU IN-LINE

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2027 - Engine speed - no signal

Control Module: UCM

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

Cause:
The measured Engine RPM (ERPM) average is **0 RPM**.

Possible failure modes:

1. Faulty connector.
2. Faulty wiring harness.
3. Faulty flywheel speed sensor **B-035**.
4. Mechanical fault.

Solution:

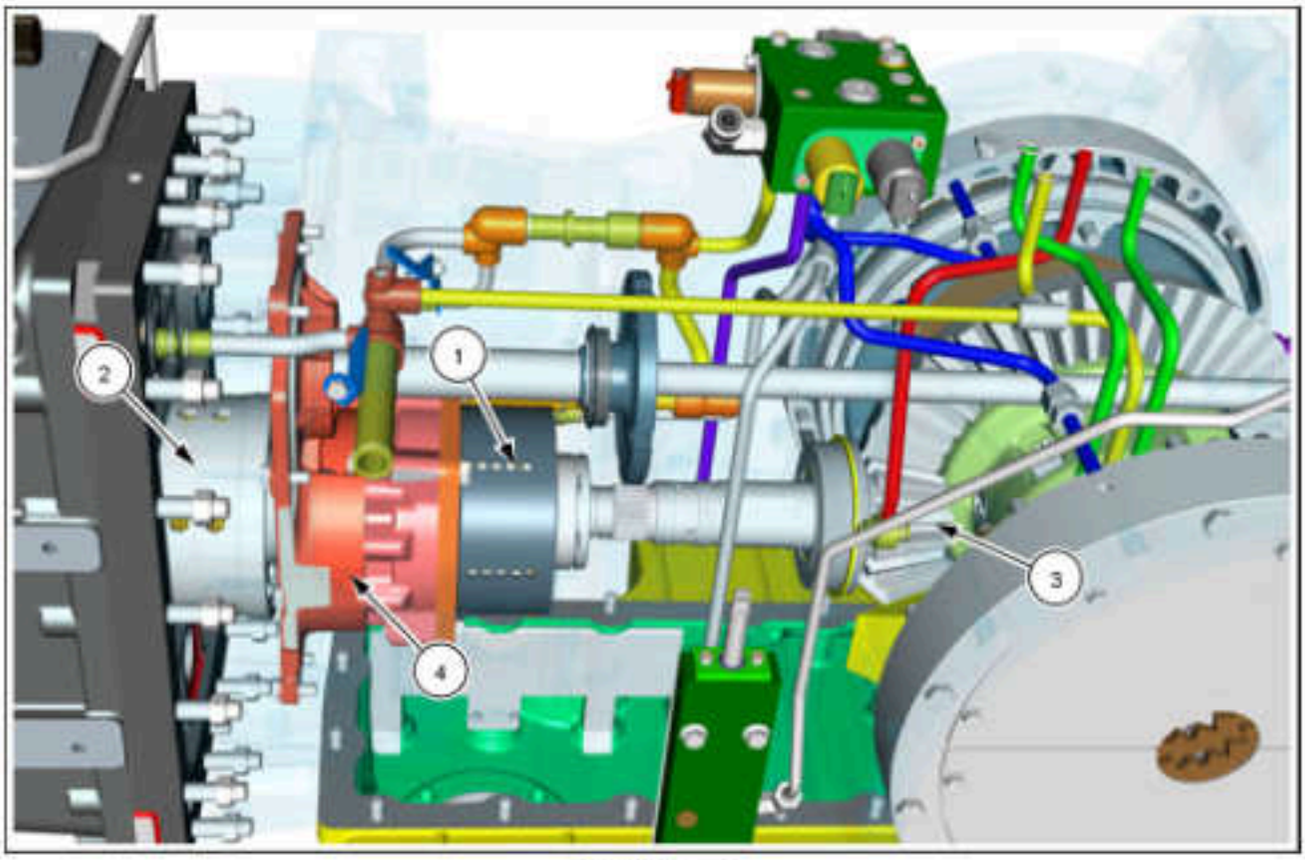
1. Verify fault is present and active.
   A. If the fault is present and active, continue to Step **2**.
   B. If the fault is no longer present or in an inactive state, the fault may be intermittent and not currently active. Continue to Step **6**.
2. Check for other fault codes being displayed.
   A. If any other fault code is being displayed, see these tests.
   B. If no other fault code is displayed, continue to Step **3**.
3. Check the **B-035** connector **X-289**.
   Make sure the connector is connected, not damaged, the pins are in the correct position and that the fit is tight.
   A. If a fault is indicated, repair or replace as required.
   B. If the connector is okay, continue to Step **4**.
4. Check the **B-035**.
   Make sure the **B-035** is installed correctly and not damaged.
   A. If a fault is indicated, repair or replace as required.
   B. If the **B-035** is installed correctly, continue to Step **5**.
5. Replace the **B-035**.
   Test the system for normal operation.
   A. If the fault is still present, there is fault with the **B-035** inductive ring.
6. Visually inspect the relevant harnesses and connectors for damage, bent or dislocated pins, corroded terminals, or broken wires. Verify that the connectors are fully installed. Flex the harnesses involved to reveal intermittent breaks or shorts in the wiring concerned. Operate the machine while monitoring the display.
   A. If damage is detected or the display indicates abnormal display readings, then repair the damage discovered during the inspection or locate and repair the abnormal display condition and verify that the fault has been resolved.
   B. If no damage is detected and the display indicates only normal readings, erase the fault code and continue operation.

Wiring harnesses - Electrical schematic sheet 24 (55.100)

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Parking brake clutch - Static description

Spring Applied Hydraulic Release (SAHR) system

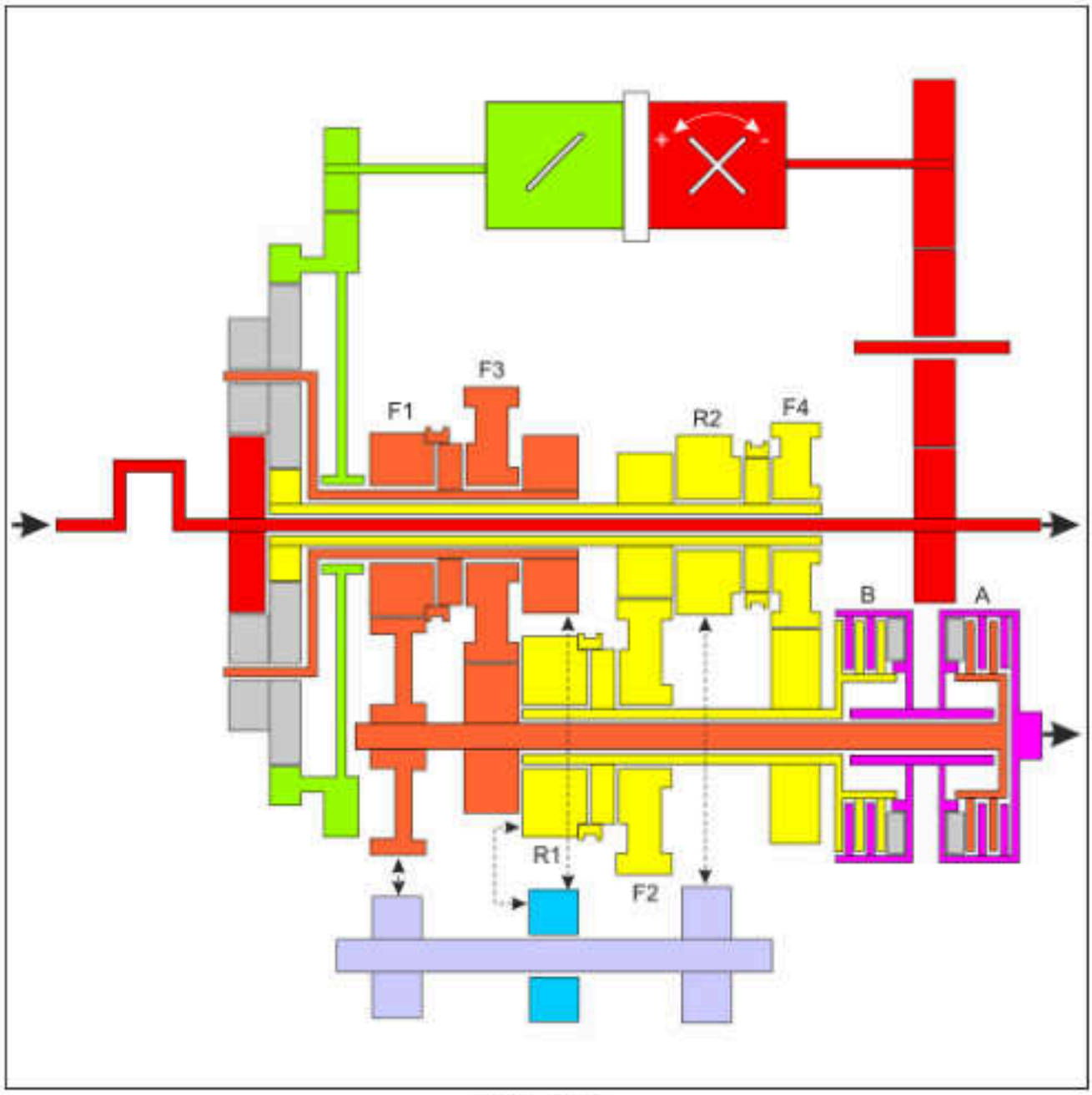


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The Spring Applied Hydraulic Release (SAHR) system **(1)** is installed behind the transmission clutch A **(2)** in line with the differential bevel pinion **(3)**.

The bevel pinion is a single shaft. The toothing on the shaft stays in contact with the friction discs. The steel plates are in standstill and fixed to the Spring Applied Hydraulic Release (SAHR) system. The housing is fixed with six bolts on the support cover **(4)**.

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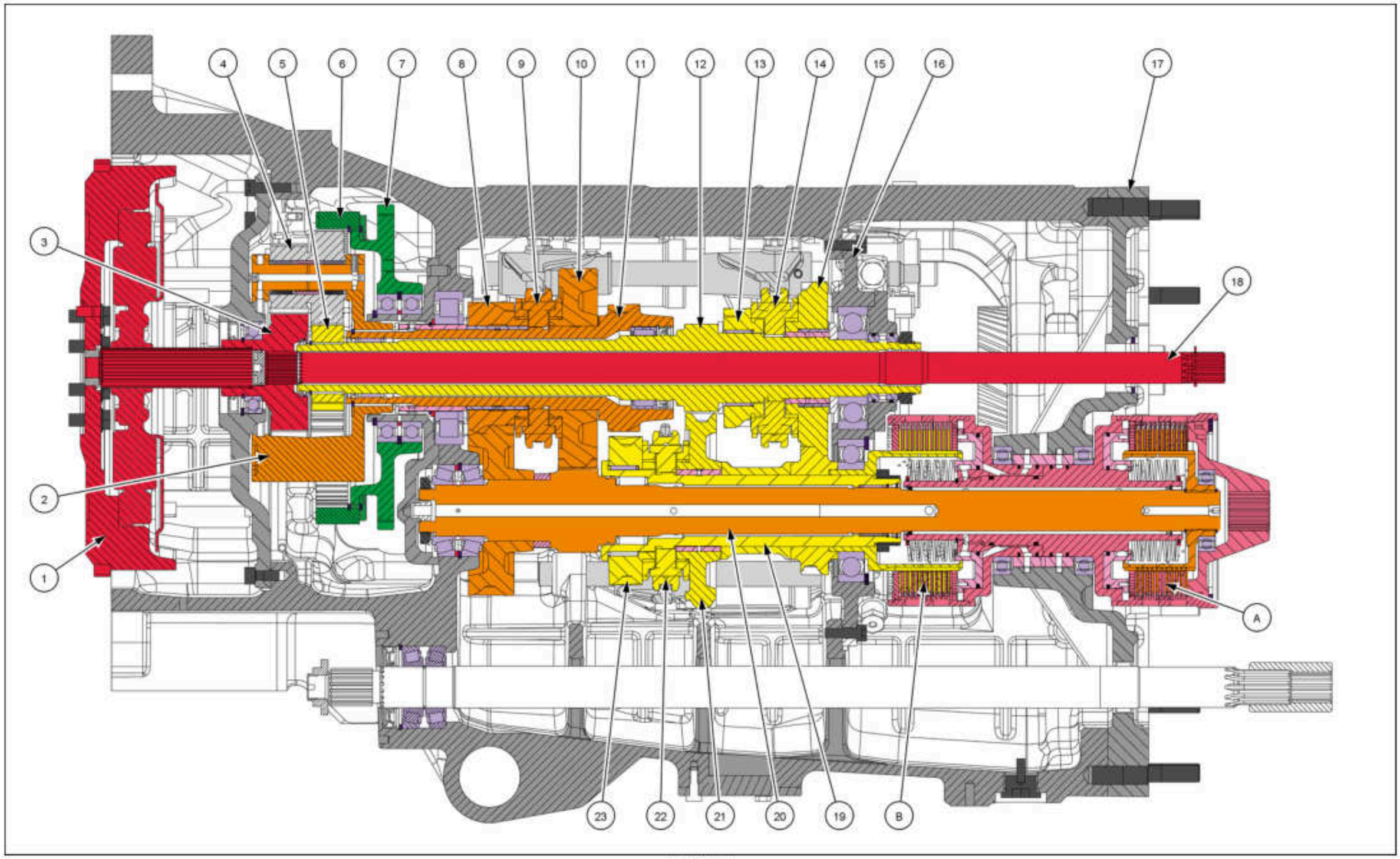


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Neutral position and park position

In the neutral position and park position, the transmission is not non-positive. Two mechanical gears, F1 and R1, are engaged. The clutch A and the clutch B are open. If the tractor rolls away in neutral position, the resultant differences in speed are compensated by the hydrostat. This ensures that the relevant clutch A or clutch B can be engaged again for synchronous speed when the neutral position is no longer active.

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