2120
2130
2140
2150

2100 Series Tractors

SERVICE MANUAL

7-32621

CASE IH AGRICULTURE

MidWestTech | Case 2120, 2130, 2140, 2150 Tractor Service Manual | Publication 7-32621

Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

GENERAL SPECIFICATIONS
Capacities 3
Fuel Specifications 3
Electrical Specifications 3
Steering Specifications 4
Transmission Specifications 5
Hydraulic Specifications 6
Air Conditioning Specifications 7

ENGINE SPECIFICATIONS
Pistons 8
Piston Pins 8
Piston Rings 8
Connecting Rods 8
Crankshaft 9
Camshaft 10
Oil Pump 10
Rockers and Shaft 10
Intake Valves 11
Exhaust Valves 11
Valve Springs 11

SPECIAL TORQUES 12

Don 7-35100 Issued 11-90 Printed in U.S.A.

MidWestTech | Case 2120, 2130, 2140, 2150 Tractor Service Manual | Publication 7-32621 Order the manual at mid-west-tech.com >

GENERAL SPECIFICATIONS

Capacities

Engine Oil Capacity (with Filter Change):	
2120 and 2130 Series Tractors	6.7 litres
2140 and 2150 Series Tractors	9.2 litres
Air Conditioning:	
Compressor Oil Capacity	170 ml
Refrigerant System Capacity	1.8 kg
Receiver - Drier Oil Capacity	28.4 ml
Condenser Oil Capacity	56.8 ml
Evaporator Oil Capacity	56.8 ml
Hoses (Total) Oil Capacity	28.4 ml
Transmission/Hydraulic System:	
2 Wheel Drive Tractors	36 litres
MFD Tractors	38 litres
MFD Axle - Differential	4 litres
MFD Axle - Planetaries (Each)	0.8 litres
Fuel Tank	60 litres

Fuel System Specifications

Fuel Filter	
Type	Replacement paper cartridge, 1.55 to 2.0 micron
Replacement Period	300 hours
Fuel Pump	
Type	Diaphragm, driven from the engine camshaft
Fuel Injection Pump	
Type	Single cylinder immersed pump
Manufacturer	Bosch
Code	PFR IK 90 A 503
Injection Order:	
3 Cylinder Engine	1 - 3 - 2
4 Cylinder Engine	1 - 3 - 4 - 2
Injection Pressure	70 Bar 1015 PSI
Fuel Injectors	
Manufacturer	Bosch
Nozzle Code	DLLA 150 S 925
Holder Code	KBEL 100 S 31
Opening Pressure	180 to 188 Bar 2610 to 2725 PSI

Electrical Specifications

Type of System	12 Volts, negative ground
Battery	
Number of Batteries Required	1
Voltage of the Battery	12 Volts
Reverse Capacity	100 Minutes
Cold Cranking Capacity (SAE) at – 18°C	440 Amperes

MidWestTech | Case 2120, 2130, 2140, 2150 Tractor Service Manual | Publication 7-32621 Order the manual at mid-west-tech.com >

Starter Motor
- Manufacturer ..... Bosch
- Reference 3 Cylinder Engine ..... JF 12V 2.4KW
- 4 Cylinder Engine ..... JF 12V 3.0KW

No-Load Test at 27°C (80°F)
- Volts 12
- Current Draw ..... 170 amperes maximum
- Armature Speed ..... 8000 rpm minimum

Brush Length ..... 8.5 mm minimum

Armature Runout ..... 0.03 mm maximum

Commutator Diameter ..... 42.5 mm minimum

Armature End Play ..... 0.1 to 0.3 mm

Overrunning Clutch Rolling Resistance ..... 1.8 to 2.3 kg

Alternator
- Manufacturer ..... Bosch
- Type K1-14V 23/55A
- Output at 1200 RPM ..... 14 volts 10 Amperes
- 2000 RPM ..... 14 volts 36 Amperes
- 2350 RPM ..... 14 volts 40 Amperes
- 6000 RPM ..... 14 volts 55 Amperes
- Resistance of Rotor Winding ..... 4.0 Ohms ± 0.2 Ohms
- Stator Winding ..... 0.1 Ohms

Minimum Brush Length (Extending from Holder) ..... 5 mm

Maximum Out of Roundness:
- Rotor ..... 0.05 mm
- Slip Rings ..... 0.03 mm

Drive Belt Tension ..... Deflection of 20 to 25 mm under a 10 to 12 kg load

Steering Specifications

Front Wheels Toe-In ..... 0 to 5 mm

Wheel Tilt Angle ..... 1.5 degrees

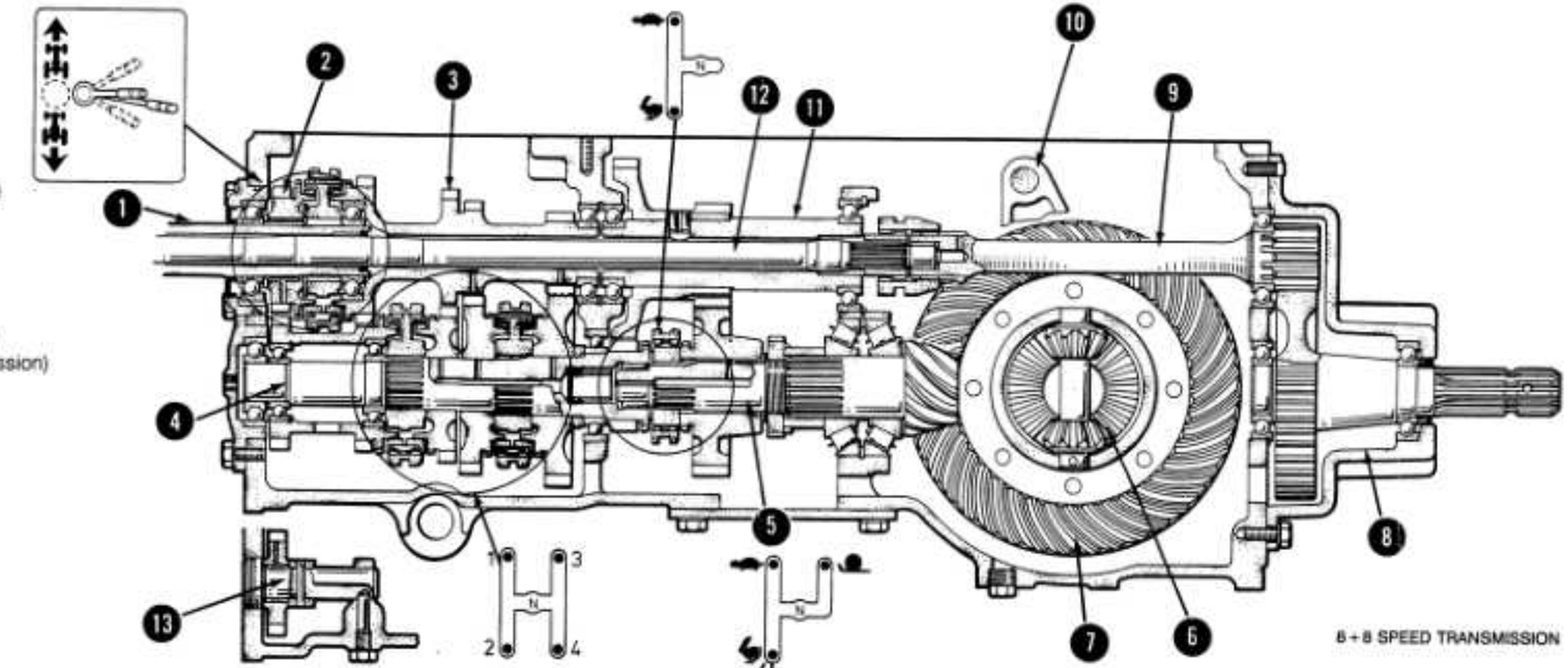
Axle Tilt Angle
- Vineyard ..... 6 degrees
- Narrow ..... 12 degrees

Distance Between Wheels Mounting Flange (Planetary Gear Carriers)
- Vineyard ..... 905 mm
- Narrow ..... 1150 mm

MidWestTech | Case 2120, 2130, 2140, 2150 Tractor Service Manual | Publication 7-32621 Order the manual at mid-west-tech.com >

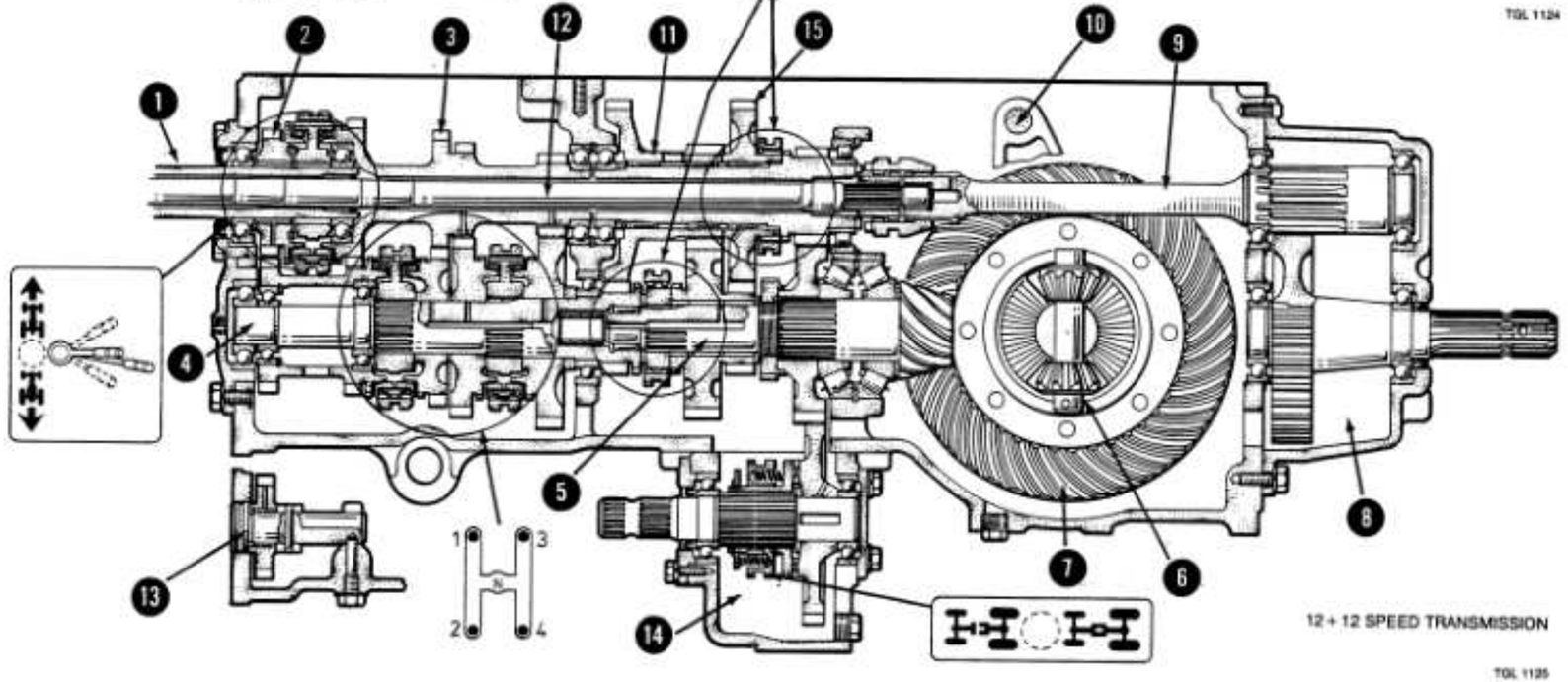
CROSS SECTIONAL DRAWING OF THE TRANSMISSION

1. Transmission Shaft
2. Forward/Reverse Gear
3. Primary Shaft
4. Secondary Shaft
5. Pinion Shaft
6. Differential
7. Bevel Gear
8. Single Speed PTO (See Section 6019)
9. PTO Drive Shaft
10. Differential Lock Shaft
11. Range Shaft
12. PTO Shaft
13. Reverse Idler Gear
14. Transfer Gearbox (See Section 6014)
15. Range Gear (12 + 12 Speed Transmission)



8 + 8 SPEED TRANSMISSION

TGL 1124



12 + 12 SPEED TRANSMISSION

TGL 1125

Don 7-35350

Issued 11-90 Printed in U.S.A.

MidWestTech | Case 2120, 2130, 2140, 2150 Tractor Service Manual | Publication 7-32621

Order the manual at mid-west-tech.com >