

TRAINING MANUAL

ELECTRICS

DESCRIPTION OF ELECTRICAL CIRCUIT COMPONENTS 4.2.01 to 4.3.01

LOCATION OF COMPONENTS

- Switches - Pressure switches..... 4.4.00
- Proximity switches - Senders - Pressure switches 4.5.00
- External lights 4.5.00
- Fuse panel..... 4.6.00
- Control panel..... 4.6.00

DESCRIPTION OF ELECTRICAL CIRCUIT BY FUNCTION 4.7.00

ELECTRICAL CIRCUIT DIAGRAM 4.8.00 to 4.25.00

- Power and starting system 4.9.00
- 621B - 721B - 821B parking brake and transmission circuits..... 4.11.00
- "Z" or "XT" attachment circuits..... 4.13.00
- Instrument panel circuits 4.15.00
- Lights 4.17.00 to 4.19.00
- Air conditioning and windshield washer..... 4.20.00
- Cab interior light - horn - emergency steering - radio circuits 4.22.00
- Speedometer - attachment quick hitch - cigar lighter circuits 4.24.01
- Parking brake and gearbox control, specific to 921B 4.26.01
- Lighting circuits 921 B 4.28.00 to 4.30.00

CONNECTORS - N° OF PASSAGES AND WIRES COLOURS 4.32.00 to 4.33.00

TRAINING MANUEL

DESCRIPTION OF ELECTRICAL COMPONENTS

Solenoids

B1	Engine STOP	4.09.00
B2	Engine STOP (not on 621B - 621BXT)	4.09.00
B3	Control lever (float position)	4.13.00
B4	Control lever (return to dig)	4.13.00
B5	Control lever (height control)	4.13.00
B6	Air conditioning compressor clutch	4.21.00
B7	Ether start	4.09.00
B8	Quick coupling (621B XT and 721B XT)	4.25.00
B9	Parking brake solenoid (921B)	4.27.00
B10	Ride Control system electro-valve	4.25.00

Diodes

D1	Diode	4.19.00
D2	Diode	4.19.00

Lighting

E1	Indicator	Rear - Left	4.17.00
E2	Stop	Rear - Left	4.17.00
E3	Tail	Rear - Left	4.17.00
E4	Fog	Rear - Left	4.17.00
E5	Indicator	Rear - Right	4.17.00
E6	Stop	Rear - Right	4.17.00
E7	Tail	Rear - Right	4.17.00
E8	Fog	Rear - Right	4.17.00
E9	Indicator	Front - Left	4.17.00
E10	Side	Front - Left	4.17.00
E11	High beam	Front - Left	4.17.00
E12	Low beam	Front - Left	4.17.00
E13	Indicator	Front - Right	4.17.00
E14	Side	Front - Right	4.17.00
E15	High beam	Front - Right	4.17.00
E16	Low beam	Front - Right	4.17.00
E17	Working	Rear - Left	4.19.00
E18	Working	Front - Left	4.19.00
E19	Working	Rear - Right	4.19.00
E20	Working	Front - Right	4.19.00
E21	Marker	Rear - Left	4.17.00
E22	Marker	Front - Left	4.17.00
E23	Marker	Rear - Right	4.17.00
E24	Marker	Front - Right	4.17.00
E25	N° Plate	Rear	4.17.00
E27	Engine compartment		4.23.00

Generators

G1	Batteries	4.09.00
G2	Alternator	4.09.00

Warning - indicators lamps

H1	Transmission oil temperature	4.15.00
H2	Brake pressure	4.15.00
H3	Emergency steering	4.15.00
H4	Parking brake	4.15.00
H5	Hydraulic filter	4.15.00
H6	Lights	4.15.00
H7	Air filter	4.15.00
H8	Hydraulic oil temperature	4.15.00
H9	Engine oil pressure	4.15.00
H10	Alternator charging	4.15.00
H11	System normal (GREEN)	4.15.00
H12	Master warning lamp (RED)	4.15.00
H13	Indicator	4.17.00
H14	Air conditioning warning lamp	4.21.00
H15	High beam	4.19.00
H17	Fog lights	4.19.00
H18	Low level of coolant (621B and 621B XT only)	4.15.00
H19	Horn	4.23.00
H20	Reversing alarm	4.11.00
H21	Ride Control system activated indicator lamp	4.25.00

Relays

K1	Power relay	4.09.00
K2	Starter	4.09.00
K3	Neutral start	4.09.00
K4	Transmission disconnect	4.11.00
K6	Flasher unit	4.17.00
K7	High beam / Low beam	4.19.00
K8	Condensor fan (1)	4.21.00
K9	Condensor fan (2)	4.21.00
K10	Compressor clutch	4.21.00
K11	Cold start	4.09.00
K12	Low level of coolant (621B and 621B XT only)	4.15.00
K13	Horn	4.23.00
K14	Emergency steering (1)	4.23.00
K15	Emergency steering (2)	4.23.00
K16	Emergency steering pump	4.23.00
K17	Engine STOP (not fit on 621B)	4.09.00
K18	Parking brake memorisation relay (921B)	4.27.00
K19	Parking brake relay (921B)	4.27.00
K20	Ride Control system activator relay	4.25.00

Transmission solenoids

M1	Solenoid valve which pilots the control spool : Reverse gear	4.11.00
M2	Solenoid valve which pilots the control spool : 1st gear	4.11.00
M3	Solenoid valve which pilots the control spool : Forward gear - 1st - 2nd - 3rd	4.11.00
M4	Solenoid valve which pilots the control spool : 1st - 2nd gear	4.11.00
M5	Solenoid valve which pilots the control spool : 4th speed	4.11.00
M6	Modulation control electro-valve	4.11.00

TRAINING MANUAL

DESCRIPTION OF ELECTRICAL COMPONENTS

Engines

M1	Starter motor	4.09.00
M2	Rotating beacon light	4.17.00
M3	Front windscreen motor	4.21.00
M4	Rear windscreen wiper motor	4.21.00
M5	Windscreen washer	4.21.00
M6	Blower motor	4.21.00
M7	Air-conditioning motor	4.21.00
M8	Air-conditioning motor	4.21.00
M9	Emergency steering pump	4.23.00

Gauges

P1	Cooling system temperature gauge	4.15.00
P2	Fuel level gauge	4.15.00
P3	Hourmeter	4.15.00
P4	Engine tachometer	4.15.00
P5	Engine oil pressure gauge	4.15.00
P6	Transmission oil temperature gauge	4.15.00
P7	Battery charge (voltmeter)	4.15.00
P8	Speedometer	4.25.00

Resistors / Elements

R1	75 ohm element	4.09.00
R3	Cigar lighter element	4.25.00
R4	Heating element (2x3,8ohm)	4.21.00
R5	200 ohm resistance (621B and 721B)	4.15.00

Switches

SD1	Return to dig proximity	4.13.00
SD2	High control proximity	4.13.00
SD3	Return to travel proximity	4.13.00
SD4	Cold start	4.09.00
SD5	Transmission cut out (left brake pedal)	4.11.00
SD6	Parking brake	4.11.00
SD7	Minimum steering pressure	4.23.00
SD8	Stop (brake pedals)	4.17.00
SD9	Engine light compartment	4.23.00
SD10	Transmission output speed sensor	4.11.00
SD11	Transmission turbine input speed sensor	4.11.00
SD12	Proximity detector on accelerator pedal	4.11.00
SD13	Travel speed sensor	4.25.00

Main switches

SP1	Batteries	4.09.00
SP2	Key	4.09.00
SP3	Gear shift selector	4.11.00

Pressure switches and sensors

SS1	Hydraulic oil temperature	4.15.00
SS2	Hydraulic filter	4.15.00
SS3	Air filter	4.15.00
SS4	Transmission safety - Brake pressure	4.11.00
SS5	Minimum brake pressure	4.15.00
SS6	Engine coolant temperature	4.15.00
SS7	Fuel level	4.15.00
SS9	Engine oil pressure	4.15.00
SS10	Transmission oil temperature	4.15.00
SS11	Cold start	4.09.00
SS12	Transmission oil temperature	4.15.00
SS13	Engine oil pressure	4.15.00
SS15	Low level coolant (621B and 621B XT only)	4.15.00
SS17	Air conditioning low pressure	4.21.00
SS18	Air conditioning high pressure	4.21.00
SS19	Transmission oil temperature, located on control valve	4.11.00
SS20	Ride control enable switch	4.25.00
SS21	Ride control cut-out switch	4.25.00
SS22	Ride control cut-out switch (only on 621BXT and 721BXT)	4.25.00

Control switches

ST1	Detents	4.13.00
ST2	Float and return to travel selection	4.13.00
ST3	Quick coupling (621B XT and 721B XT only)	4.25.00
ST4	Transmission cut out	4.11.00
ST5	Rotating beacon	4.17.00
ST6	Rear wiper	4.21.00
ST7	Front wiper	4.21.00
ST8	Washer	4.21.00
ST9	Air conditioning	4.21.00
ST10	Blower	4.21.00
ST12	Lights	4.19.00
ST13	Cab light	4.23.00
ST14	Hazard warning	4.17.00
ST15	Road lights control	4.17.00
ST16	Fog light	4.19.00
ST17	"Quick Down" (transmission shift)	4.11.00
ST18	"Quick Down" (loader control)	4.11.00
ST19	Horn (steering wheel)	4.23.00
ST20	Parking brake switch (on 921B steering console)	4.27.00
ST21	Manual - Auto. transmission selector switch	4.11.00
ST22	Ride control enable switch	4.25.00

RADIO

BR1	12 A	4.17.00
BR2	10 A	4.21.00
BR3	10 A	4.21.00