CASE CONSTRUCTION

REPAIR MANUAL

ARTICULATED TRUCKS

327B
330B
TIER 3

SIMPLEMUX

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CAPACITIES

Part to be filled		Capacity		Specifications
		l (US Gal)	kg (lb)	
Engine oil sump (1)				
- URANIA LD7		30.5 (8)	--------	SAE 15W40 ACEA E3-E5 MIL L 21 04E lev. API CF4
Engine coolant radiator				
Protective anti-freeze mixture/water		50 (13.2)	--------	ASTM 0336
Fuel tank				
Diesel		320 (84,6)	--------	ASTM D - 975
Automatic transmission				
- URANIA LD7		35.5 (9.4)	--------	SAE 15W40 ACEA E3-E5 MIL L 21 04E lev. API CF4
Front differential				
- AMBRA MULTI G		14.0 (3.7)	--------	SAE 10W30 ISO 32/46 NH 410B API GL4 level
Axles				
- TUTELA W140/M DA - AKCELA GEAR 135H EP	Front hub	3.0 (0.8) x 2	--------	SAE 85W140 MIL L 2105D API GL5
	Intermediate axle	35.0 (9.3)	--------	
	Rear axle	33.0 (8.7)	--------	
Suspension				
- TUTELA GI/A - AKCELA A.T.F.		1.55 (0.41) x 2	--------	ATF DEXRON II
Hydraulic circuit (disc brake version) (2)				
- IDRAULICAR HVI 46 - AKCELA HYDRAULIC Excavator Fluid		210.0 (55.5)	--------	ISO VG 46 DIN 51524 /51525
Hydraulic circuit (wet brake version)				
- AMBRA MULTI G		210.0 (55.5)	--------	SAE 10W30 ISO 32/46 NH 410B API GL4 level
Greasing				
- TUTELA MR2 - AKCELA PREMIUM GREASE AP2		--------	2.0 (4.4)	N.L.G.I. 2
Greasing device body heating				
- MOLYCOTE Cu7439 - LOCTITE 8152		Q.B.	--------	--------
Climate control system				
Refrigerant fluid R134a		--------	1.2 (2.65)	
Windshield washer				
Protective anti-freeze mixture/water		Q.B.	--------	CUNA NC 956-11

1. for ambient temperature < -20 °C use SAE 5W30
   for ambient temperature > 45 °C use SAE 20W50
2. for ambient temperature -40 °C < T < 20 °C use ISO VG 100
   for ambient temperature 0 °C < T < 60 °C use ISO VG 22

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SECTION 4 - HYDRAULIC SYSTEM
CHAPTER 1 - HYDRAULIC DIAGRAMS

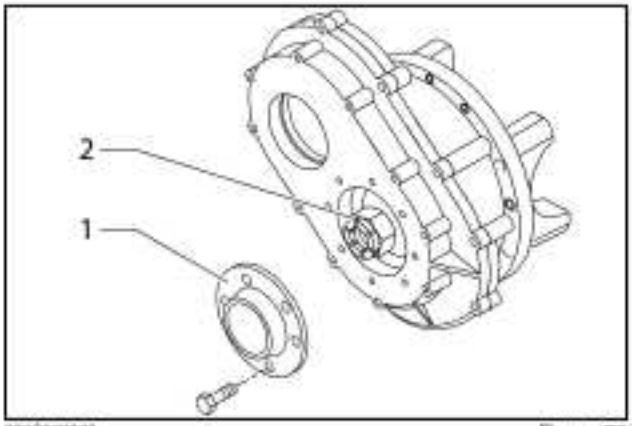
Component key

PGR	DESCRIPTION
200	12V socket
201	12V cigar lighter
202	24/12V voltage reducer
203	12V radio
204	Left speaker
205	Right speaker
206	CB radio (set–up)
207	Climate control pressure switch (N.O.)
208	Climate control joint
209	Tipping bonnet switch (ADT 25 - 30 - 35 - 40) (opt.)
210	Optional fuse block
211	Rear-view mirrors heating switch (optional)
212	Motor tipping bonnet
213	Tipping bonnet switch ADT 30 (opt.)
214	– –
215	– –
216	Grease dispensing device
217	– –
218	– –
219	Electrical–pneumatic seat joint
220	Working light switch
221	Working lights
222	Windscreen wiper/washer (stalk)
223	Wiper motor
224	Washer motor
225	Side wiper switch (1 fixed position)
226	Left side wiper motor
227	Right side wiper motor
228	Side wiper switch (1 toggle position)
229	Side washer motor
230	Horn switch (stalk)
231	Horn
232	Reversing 12V motor
233	– –
234	Left rear-view mirror heater (optional)
235	Right rear-view mirror heater (optional)
236	Left wide-angle mirror heater (optional)
237	Right wide-angle mirror heater (optional)
238	Left rear-view mirror adjustment (optional)
239	Right rear-view mirror adjustment (optional)
240	Left wide - angle mirror adjustment (optional)
241	Right wide - angle mirror adjustment (optional)
242	– –
243	Left mirror adjustment joystick (optional)
244	Right mirror adjustment joystick (optional)

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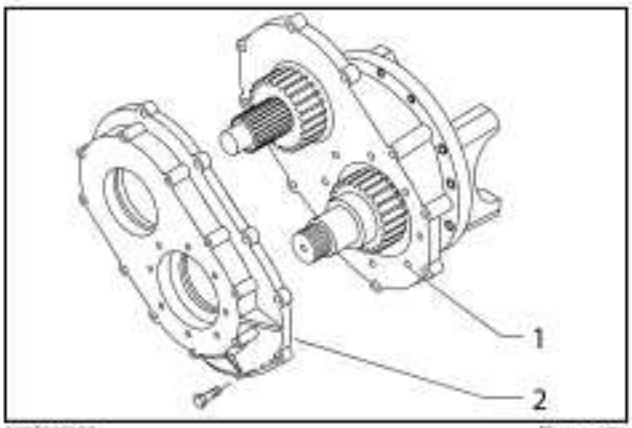
Idle gear and pinion disassembly

Proceed as follows:



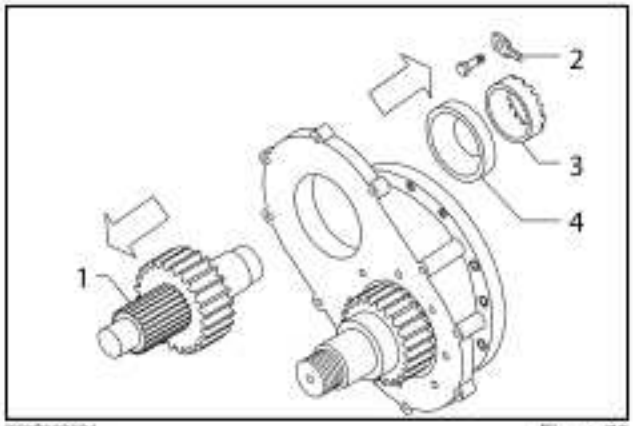
276C062082 Figure 70

- position the assembly horizontally;
- remove the cover (1);
- straighten the dent and remove the pinion stop nut (2).



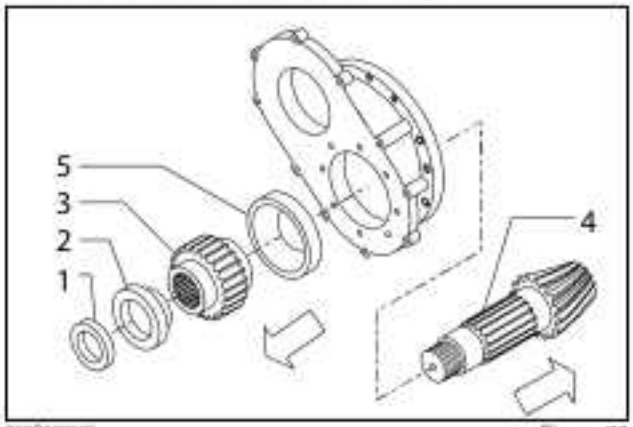
276C062083 Figure 71

- remove the retaining screws and separate the pinion box (1) from the external box (2);
- recover the inner races of bearing (B) and bearing (F) from the external box.



276C062084 Figure 72

- remove the idle gear (1) from the pinion box;
- remove the stop plate (2), adjustment ring nut (3) and the outer race (4) of bearing (E);

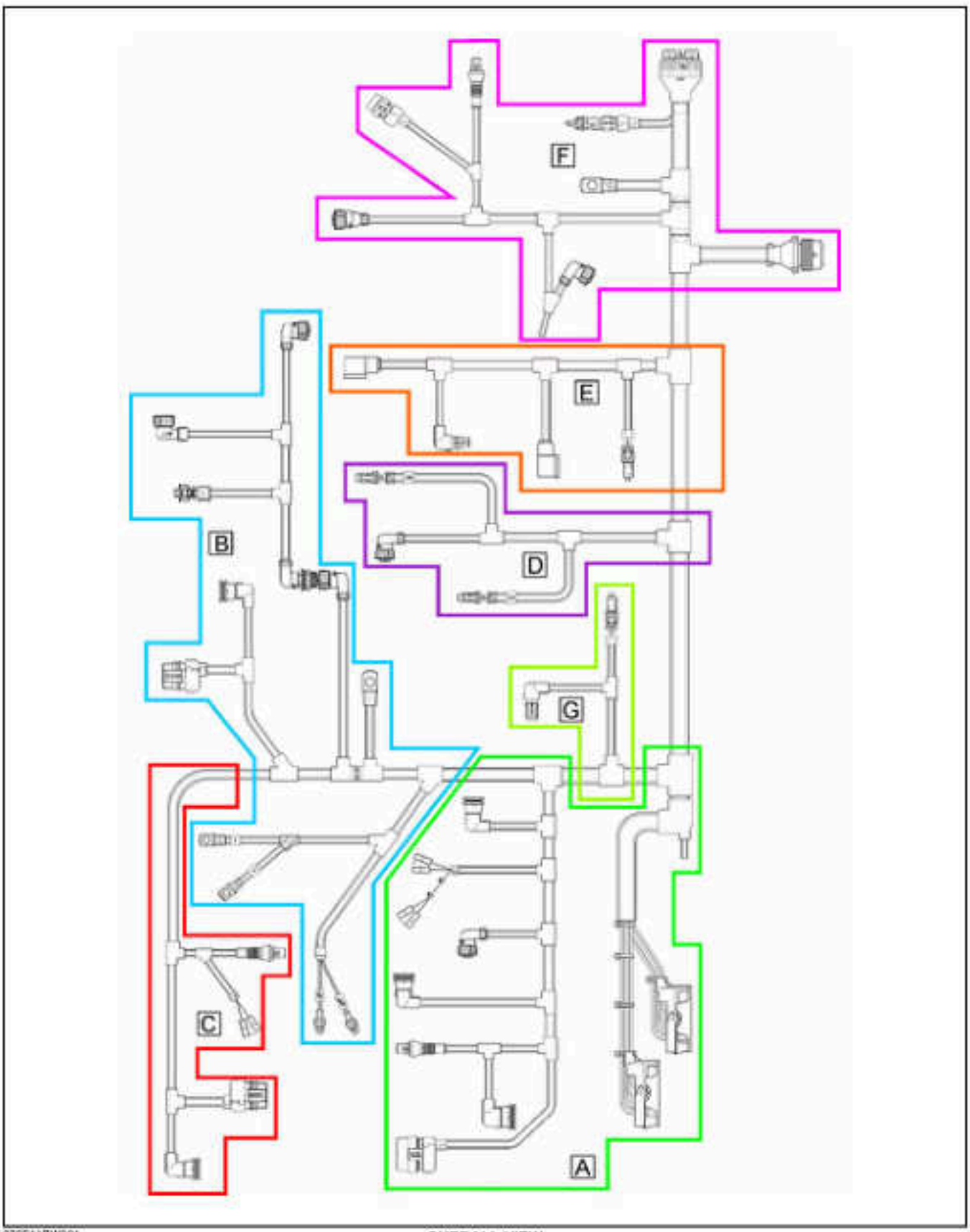


276C062085 Figure 73

- remove the bearing preload spacer S2 (1), spacer (2) and coaxial gear (3) from the pinion;
- remove the pinion (4);
- use a suitable extractor to remove the outer race of bearing (B) from the pinion box.

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TOPOGRAPHIC DIAGRAM OF FRONT MAIN FRAME SERVICES CABLE WIRING - (WET BRAKES)

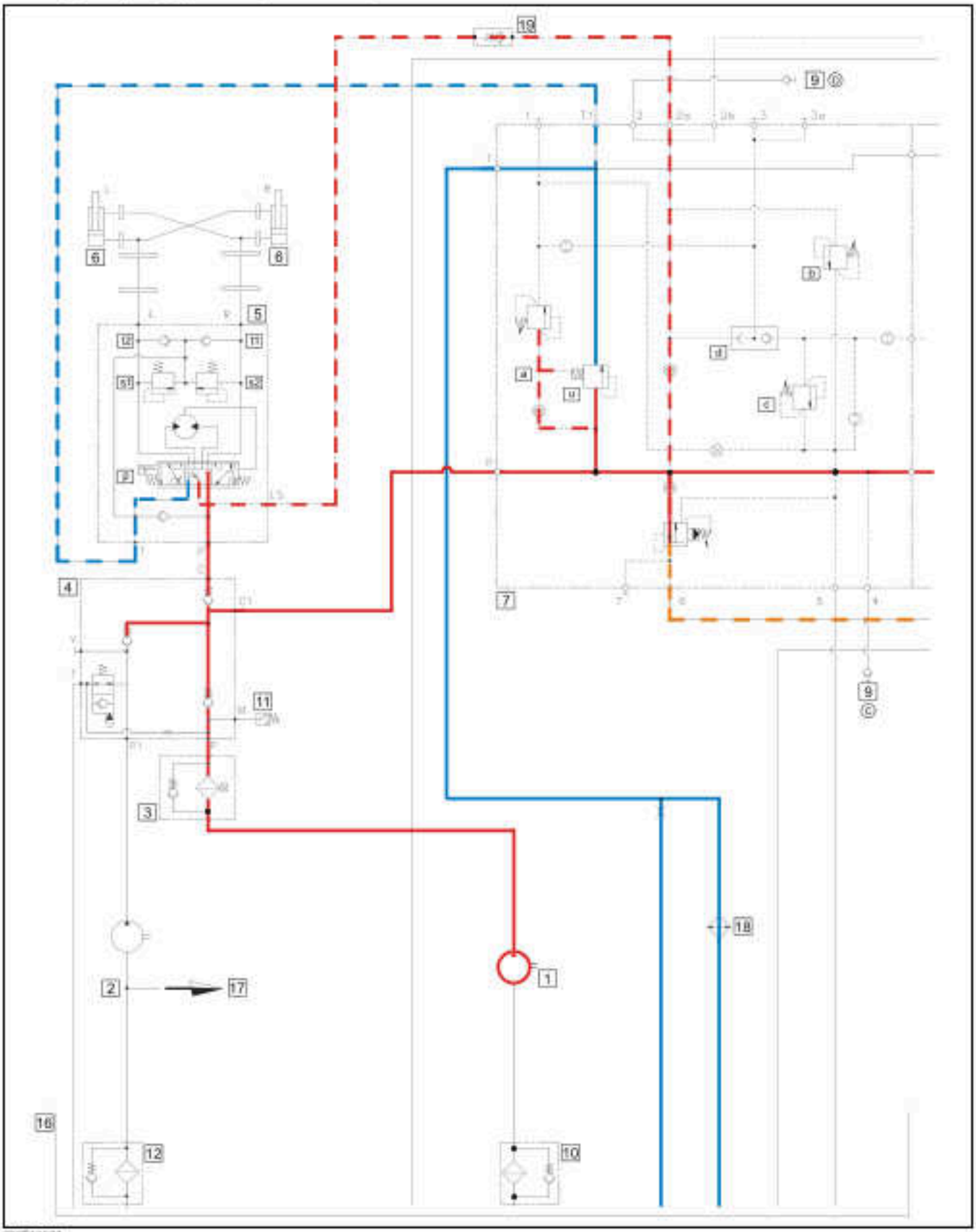


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OVERALL VIEW

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Steering-dumping system hydraulic diagram

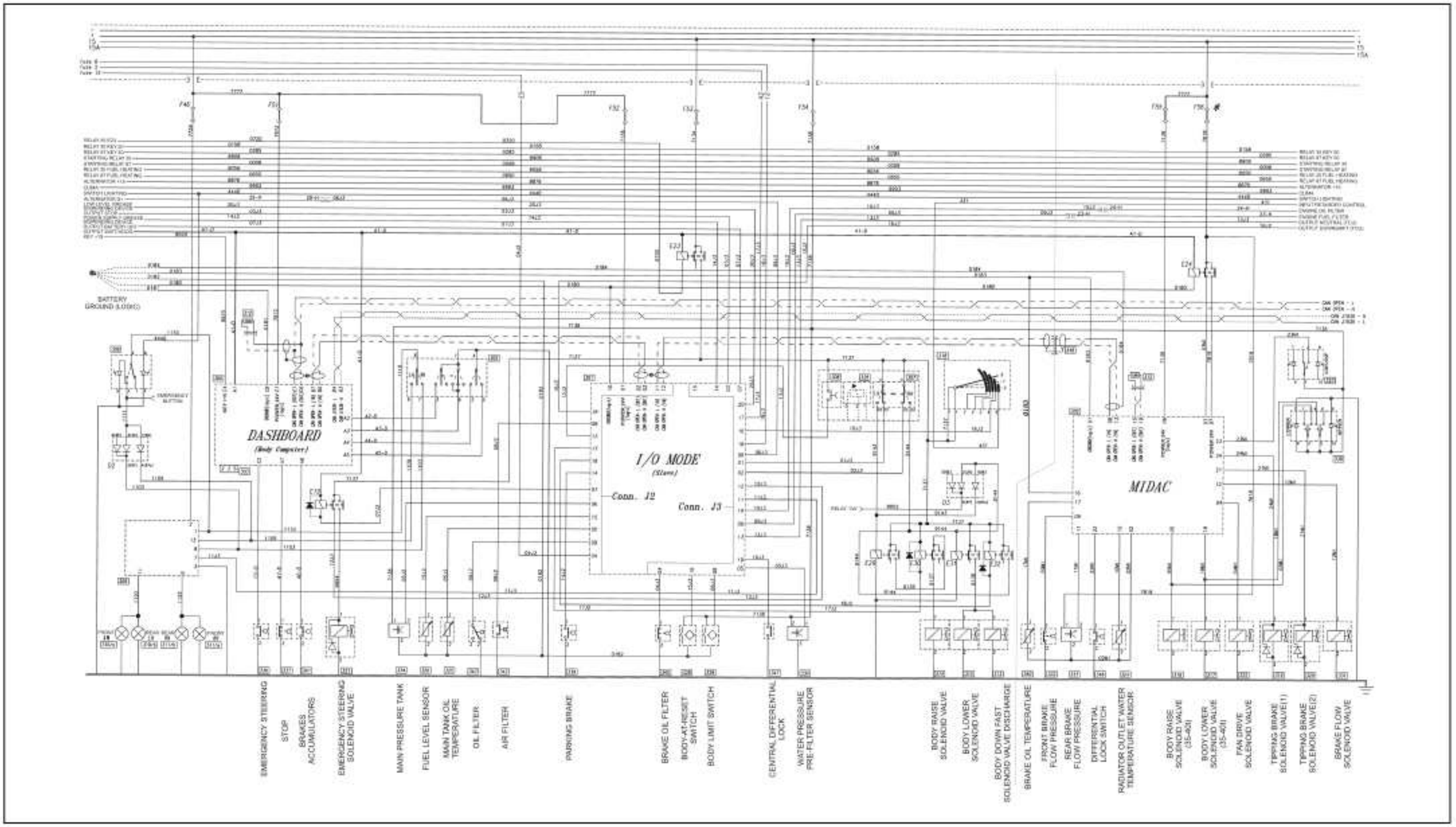


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Layout electrical system (3/5)



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