

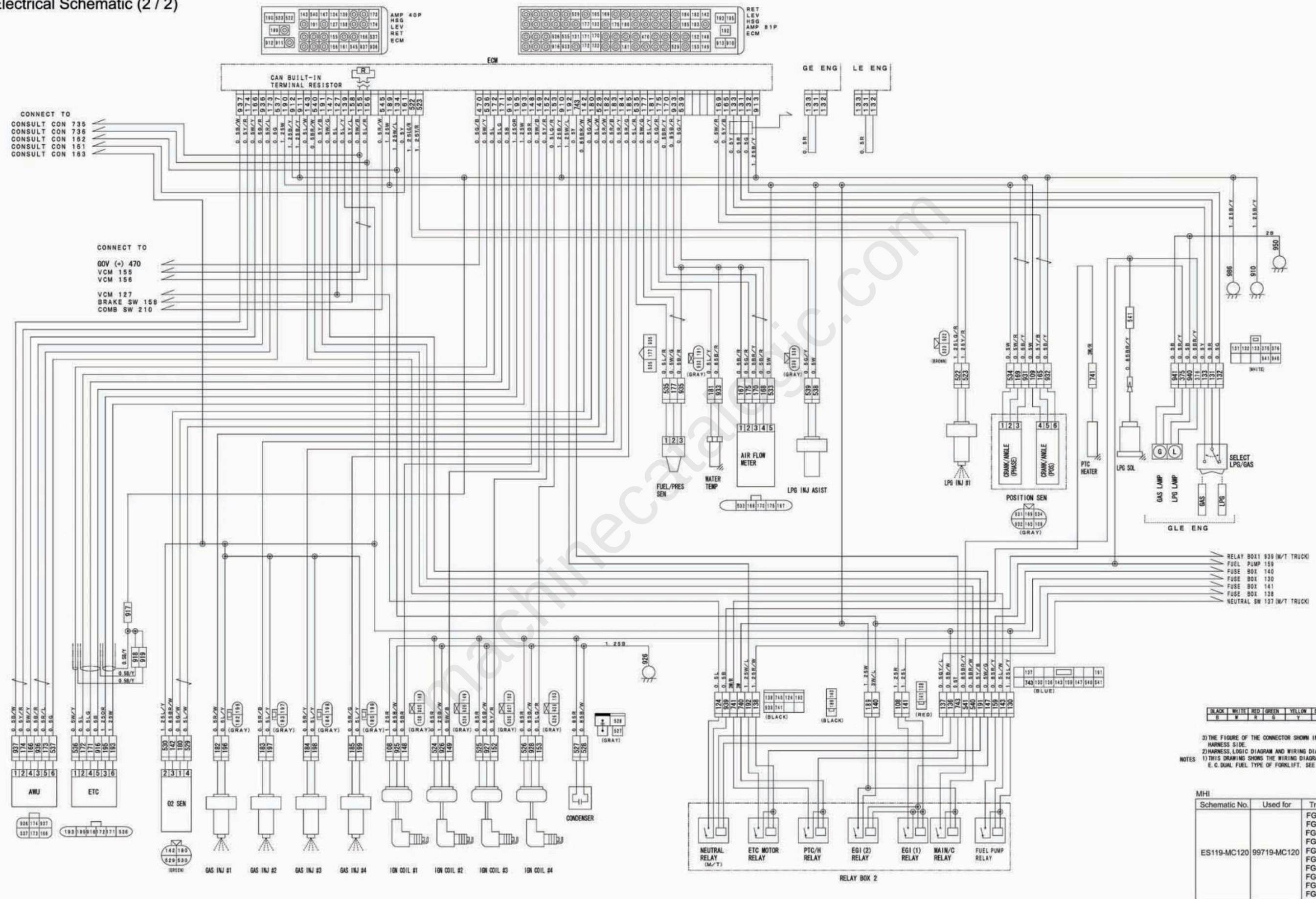


Service Manual

Chassis, Mast & Options

FGC15N	AF81F-10121-up
FGC18N	AF81F-10121-up
FGC20CN	AF81F-60121-up
FGC20N	AF82F-10121-up
FGC20N HO	AF90-10121-20120
FGC25N	AF82F-10121-up
FGC25N HO	AF90-10121-20120
FGC28N	AF83F-10121-20120
FGC30N	AF83F-10121-up
FGC33N	AF83F-60121-up

Electrical Schematic (2 / 2)



NOTES

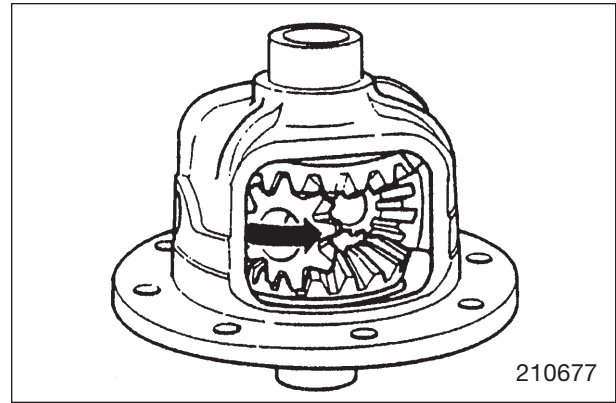
- 1) THIS DRAWING SHOWS THE WIRING DIAGRAM OF ELECTRIC CONTROL, GASOLINE, E.C.LPG AND E.C.DUAL FUEL TYPE OF FORKLIFT. SEE (1/2) FOR BODY SIDE.
- 2) HARNESS, LOGIC DIAGRAM AND WIRING DIAGRAM ARE SHOWN IN THE FOLLOWING TABLE.
- 3) THE FIGURE OF THE CONNECTOR SHOWN IN THIS DRAWING MEANS ONE OF THE MAIN HARNESS SIDE.

MHI			
Schematic No.	Used for	Truck Model	Serial No.
ES119-MC120	99719-MC120	FGC15 N	AF81F - 10121 - up
		FGC18 N	AF81F - 10121 - up
		FGC20C N	AF81F - 60121 - up
		FGC20 N	AF82F - 10121 - up
		FGC20 N HO	AF90 - 10121 - 20120
		FGC25 N	AF82F - 10121 - up
		FGC25 N HO	AF90 - 10121 - 20120
		FGC28 N	AF83F - 10121 - 20120
		FGC30 N	AF83F - 10121 - up
		FGC33 N	AF83F - 60121 - up

REDUCTION DIFFERENTIAL

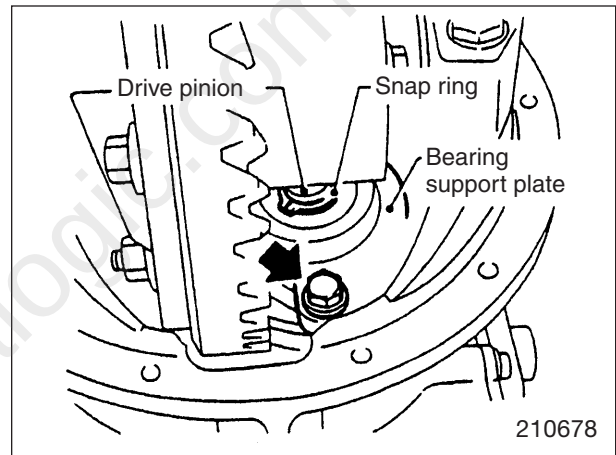
- (9) Draw out pinion mate shaft and remove pinion mate gears, side gears and thrust washers (1 ton class).

Put marks on gear and thrust washer so that they can be reinstalled in their original positions from which they were removed.

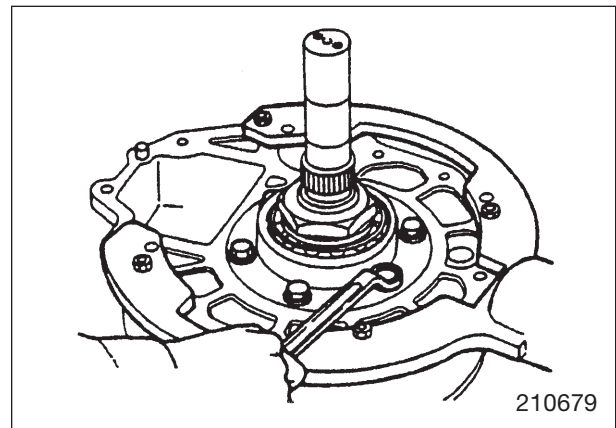


Drive pinion

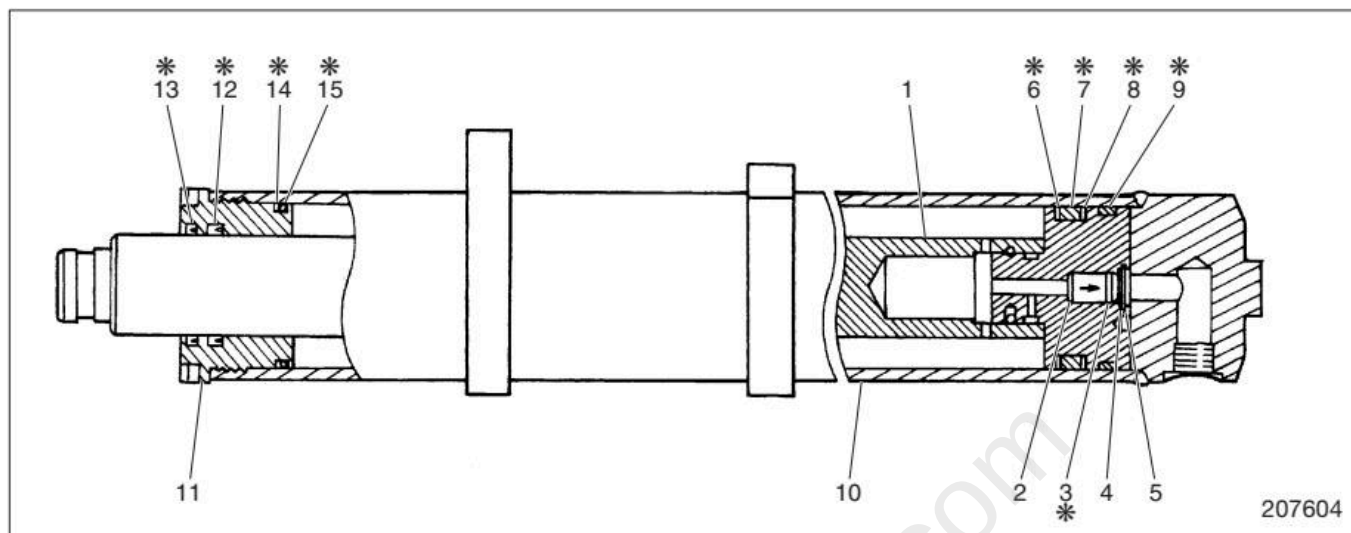
- (1) Remove snap ring on drive pinion front end (3 ton class).



- (2) Remove drive pinion sleeve from differential carrier.



Reassembly



Sequence

- | | | |
|--------------------------------------|------------------|---|
| 1 Piston rod, Piston | 6 Nylon ring | Install parts 12 through 15 to part 11. |
| Install parts 2 through 9 to part 1. | 7 Piston seal | |
| 2 Check valve | 8 Nylon ring | |
| 3 O-ring | 9 Wear ring | |
| 4 Washer | 10 Cylinder tube | |
| 5 Circlip | 11 Retainer | 12 Rod seal |
| | | 13 Wiper |
| | | 14 Backup ring |
| | | 15 O-ring |

NOTE

Replacement parts marked with an asterisk (*) are included in the seal kit.

Suggestions for Reassembly

- (1) Use all parts in the seal kit to replace removed parts.
- (2) After installing seal kit parts, apply hydraulic oil before installing to the cylinder tube or piston rod.
- (3) Fill the space between the cylinder tube and piston rod with the specified amount of hydraulic oil before installing the retainer.

Unit: cc (cu in.)

Truck Model	1 ton class	2 ton class	3 ton class
Item			
Amount of hydraulic oil	20 to 25 (1.2 to 1.5)	30 to 35 (1.8 to 2.1)	

- (4) Tighten the retainer to the specified torque.

Unit: N·m (kgf·m) [lbf·ft]

Truck Model	1 ton class	2 ton class	3 ton class
Item			
Retainer tightening torque	353 to 380 (36 to 39) [260 to 280]	380 to 407 (39 to 42) [280 to 300]	434 to 461 (44 to 47) [320 to 340]

4. Friction plates and mating plates

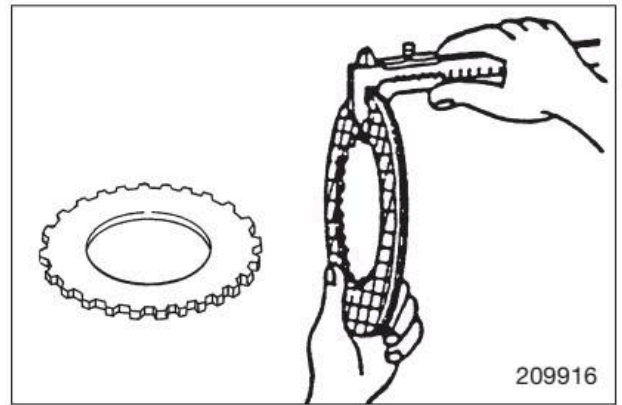
- (1) Check for burns, trace of uneven contact, deformation and wear.
- (2) Check splines for wear or other damage.

5. Piston ring

Check piston ring for wear or damage.

A: Standard value B: Repair or service limit

Thickness of friction plate	A	2.5 to 2.65 mm (0.098 to 0.104 in.)
	B	2.2 mm (0.087 in.)
Thickness of mating plate	A	1.53 to 1.67 mm (0.060 to 0.066 in.)
	B	1.4 mm (0.055 in.)



Full Version Available

Mitsubishi FGC20CN Forklift Service Manual (99719-MC120)

Mitsubishi FGC20CN forklift service manual PDF, covers LPG engine, hydraulics, drive train, and wiring for shop repairs. Instant PDF download.

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