CASE

PROFESSIONAL PARTNER

REPAIR MANUAL

COMPACT WHEEL LOADER

21E
121E
221E
321E

87630260 NA

Replaces 87618251 NA

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TECHNICAL SPECIFICATIONS

		21E	121E	221E	321E
System		Pump with adjustment depending on engine speed			
Type		AV4VG40DA1D2 / 32R	A4VG56DA1D2 / 32R	A4VG56DA1D2 / 32R	A4VG71DA1D2 / 32R
Volumetric delivery	cm^3/rev (in^3/rev)	40 (2.44)	56.0 (3.41)	56.0 (3.41)	71.0 (4.33)
Power (useful)	kW (hp)	34.4 (46.1)	38.0 (51)	38.5 (51.6)	49.0 (65.7)
Transmission through		diesel engine direct drive i = 1.0			
Service revolutions (= engine rated speed)	1/min	2300	2400	2500	2300
Maximum oil delivery	bar (psi)	88.9 (1289)	131.3 (1904)	136.9 (1986)	159.3 (2310)
Supply pressure (rotation speed at full load)	bar (psi)	25 (362)	27 (391)	27 (391)	27 (391)
Adjustment start	bar (psi)	50 (725) (at 1100 rpm)	50 (725) (at 1100 rpm)	50 (725) (at 1100 rpm)	50 (725) (at 1150 rpm)
Adjustment end	bar (psi)	400 (5801) (at 1900 rpm)	400 (5801) (at 2100 rpm)	400 (5801) (at 2100 rpm)	400 (5801) (at 1800 rpm)
Pressure cut-off	bar (psi)	430 (6234)			
High pressure relief valves - opening -	bar (psi)	465 (6744)	467 (6773)	467 (6773)	467 (6773)
Hydraulic motor adjustment start	bar (psi)	255 (3698) (at 2100 rpm)	200 (2900) (at 2300 rpm)	200 (2900) (at 2300 rpm)	210 (3045) (at 2000 rpm)
Voltage	V	12			

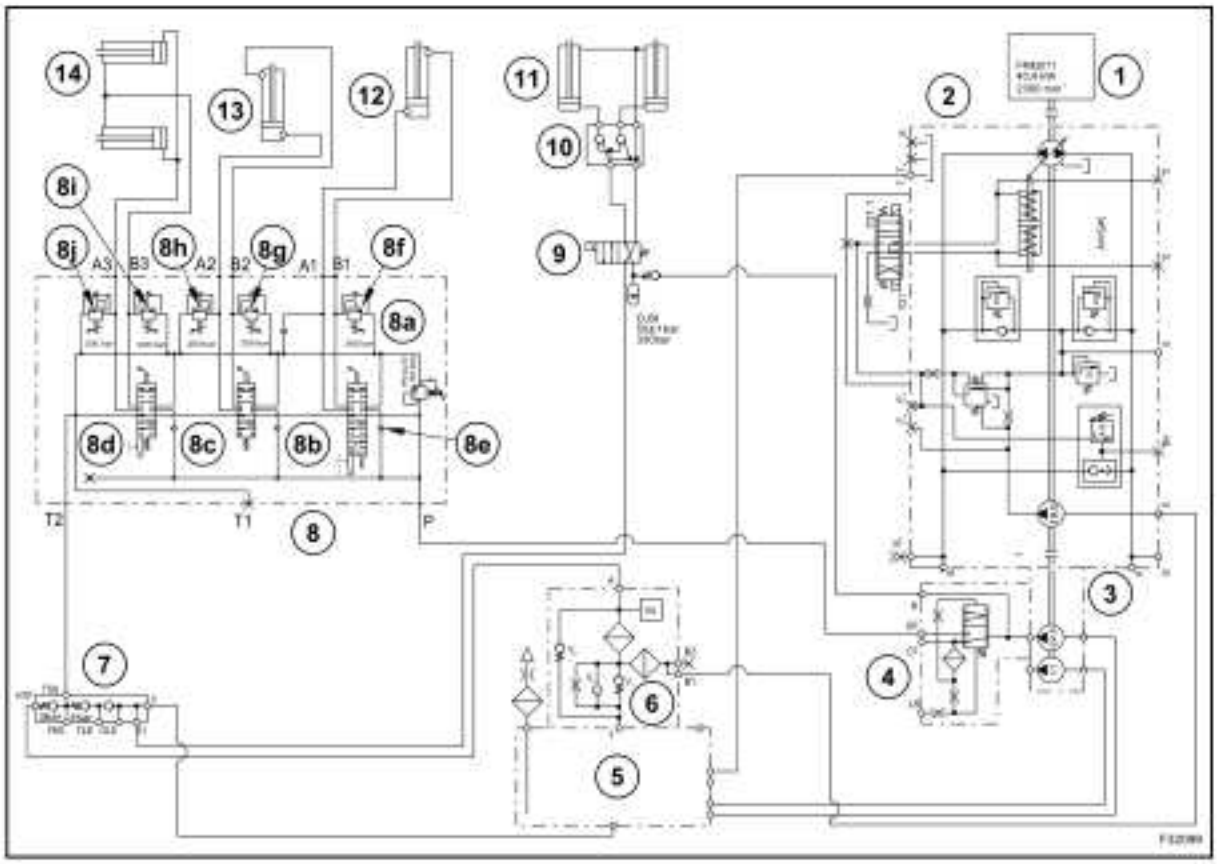
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9. TROUBLESHOOTING

FAULT	POSSIBLE CAUSE	ACTION
Hydraulic system does not operate regularly.	Oil level low.	Top up system.
	Hydraulic filter clogged.	Replace hydraulic filter.
	Hydraulic system faulty.	Consult your Dealer.
Hydraulic oil overheated.	Oil level high or low.	Top up oil level.
	Oil filter element clogged.	Replace filter.
	Delivery control wrongly adjusted.	Adjust delivery control for lower delivery.
Hydraulics of steering and working system does not react.	Transmission coupling faulty.	Replace.
Machine does not move.	Hydraulic oil level too low.	Refill.
Engine does not come under load.	Operation faults in the pressure control circuit of travel pump.	Consult your Dealer.
	Travel motor not connected with rear axle.	Recheck installation of travel motor.
	Parking brake still applied.	Release parking brake.
	Parking brake switch still stuck in opening position.	Replace.
	Travel direction lever faulty.	Replace.
Engine under load.	Rear axle locked.	Check axle.
	Brake locked.	Release brake.
Machine does not move either forward or back.	Travel direction valve faulty.	Replace.
	Travel direction lever faulty.	Replace.
On a flat surface the machine starts only with high engine speed.	Supply filter contaminated.	Clean or replace.

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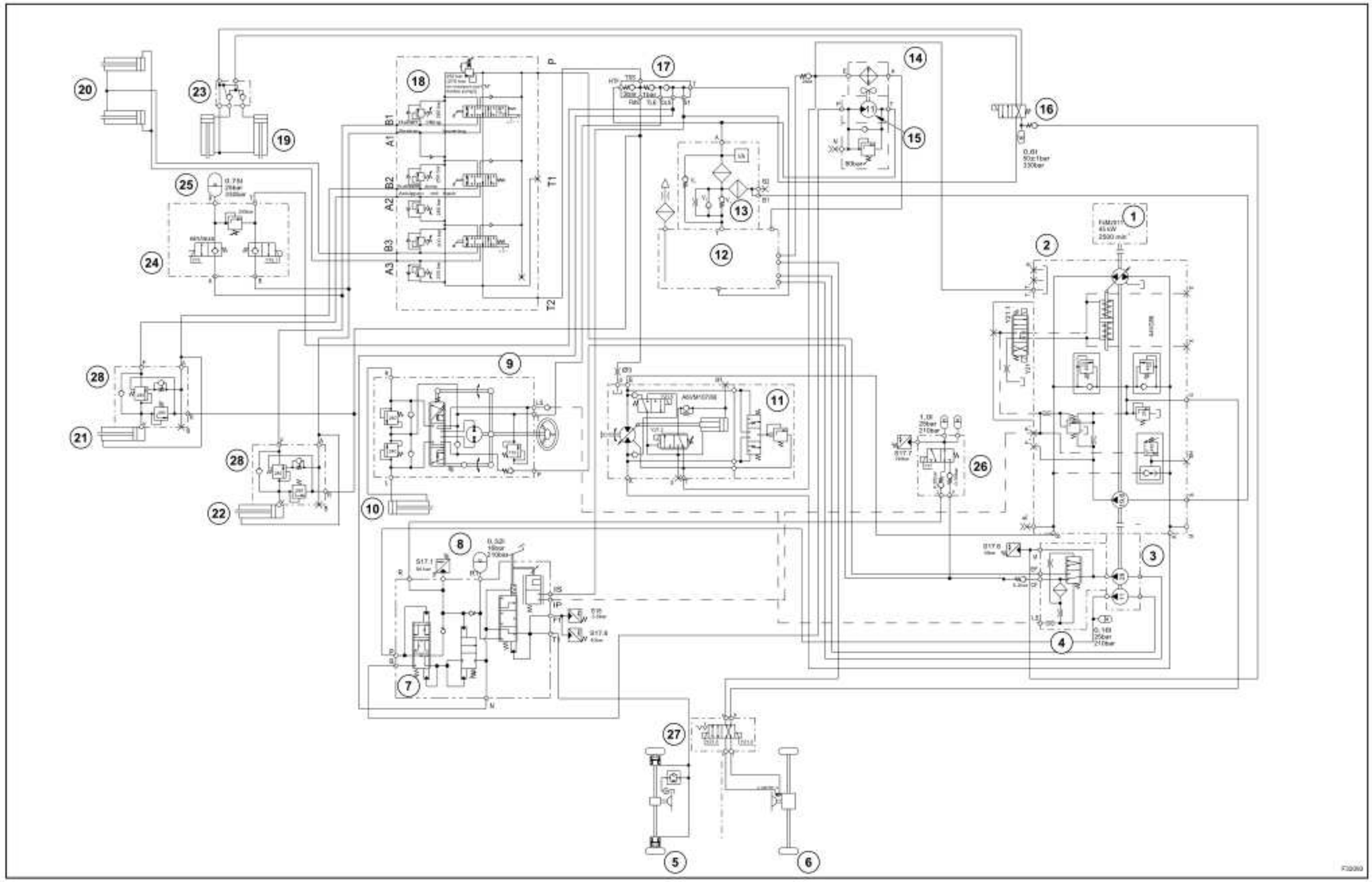
1. HYDRAULIC DIAGRAM



1. Diesel engine
2. Pump at variable displacement
3. Double gear pump
4. Priority valve
5. Hydraulic oil tank
6. Oil return filter
7. One-way distributor valve
8. Working equipment control valve
   - a. Primary valve
   - b. Lifting spool
   - c. Dumping spool
   - d. 3rd function spool
   - e. Valve
   - f. Secondary valve
   - g. Secondary valve
   - h. Secondary valve
   - i. Secondary valve
   - j. Secondary valve
9. Load holding valve
10. Quick tool coupler cylinders valve
11. Quick tool coupler cylinders
12. 3rd function rod
13. Dumping cylinder
14. Lifting cylinder

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1.6 221E HYDRAULIC DIAGRAM WITH OPTIONAL OUTFITS



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