

Genie®

Service Manual

Refer to inside cover for additional serial number information

Part No. 119987
Rev A
June 2007

Z™-34/22IC

(from serial number 1187 to 3241)

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Hydraulic Specifications

Hydraulic fluid	Dexron equivalent
Drive pump	
Type:	bi-directional variable displacement piston pump
Displacement per revolution	1.71 cu in 28 cc
Flow rate @ 3000rpm	22 gpm 84 L/min
Function pump	
Type:	Fixed displacement gear pump
Displacement per revolution	0.24 cu in 4 cc
Flow rate @ 3000rpm	3 gpm 11.4 L/min
Drive manifold	
Hot oil shuttle relief pressure	250 psi 17.2 bar
Front drive motors, 4WD models	
Displacement per revolution	0.92 cu in 15 cc
Rear drive motors, all models	
Displacement per revolution	1.83 cu in 30 cc

Function manifold	
System relief valve pressure	3200 psi 220.7 bar
Primary boom down relief valve pressure (before serial number 2901)	1400 psi 96.5 bar
(after serial number 2900)	1600 psi 110 bar
Secondary boom down relief valve pressure	1600 psi 110 bar
Primary boom extend relief valve pressure (before serial number 2901)	1800 psi 124 bar
(from serial number 2901 to 3215)	2800 psi 193 bar
Auxiliary pump	
Type	Fixed displacement gear pump
Displacement	0.5 gpm 1.9 L/min
Auxiliary pump relief pressure	3400 psi 234.5 bar
Hydraulic filters	
Hydraulic tank return line filter	Beta 10 ≥ 200 with 25 psi / 1.7 bar bypass
Medium pressure filter	Beta 3 ≥ 200
Medium pressure filter bypass pressure	50 psi 3.45 bar

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Repair Procedures



Observe and Obey:

- ☑ Repair procedures shall be completed by a person trained and qualified on the repair of this machine.
- ☑ Immediately tag and remove from service a damaged or malfunctioning machine.
- ☑ Repair any machine damage or malfunction before operating the machine.

Before Repairs Start:

- ☑ Read, understand and obey the safety rules and operating instructions in the appropriate *Genie Z-34/22 IC Operator's Manual* on your machine.
- ☑ Be sure that all necessary tools and parts are available and ready for use.
- ☑ Use only Genie approved replacement parts.
- ☑ Read each procedure completely and adhere to the instructions. Attempting shortcuts may produce hazardous conditions.
- ☑ Unless otherwise specified, perform each repair procedure with the machine in the following configuration:
  - Machine parked on a firm, level surface
  - Boom in the stowed position
  - Turntable rotated with the boom between the non-steer wheels
  - Key switch in the off position with the key removed
  - Wheels chocked
  - All exernal AC power disconnected from the machine

About This Section

Most of the procedures in this section should only be performed by a trained service professional in a suitably equipped workshop. Select the appropriate repair procedure after troubleshooting the problem.

Perform disassembly procedures to the point where repairs can be completed. To re-assemble, perform the disassembly steps in reverse order.

Symbols Legend



Safety alert symbol—used to alert personnel to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠DANGER Used to indicate the presence of an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING Used to indicate the presence of a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠CAUTION With safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may cause minor or moderate injury.

CAUTION Without safety alert symbol—used to indicate the presence of a potentially hazardous situation which, if not avoided, may result in property damage.

NOTICE Used to indicate operation or maintenance information.

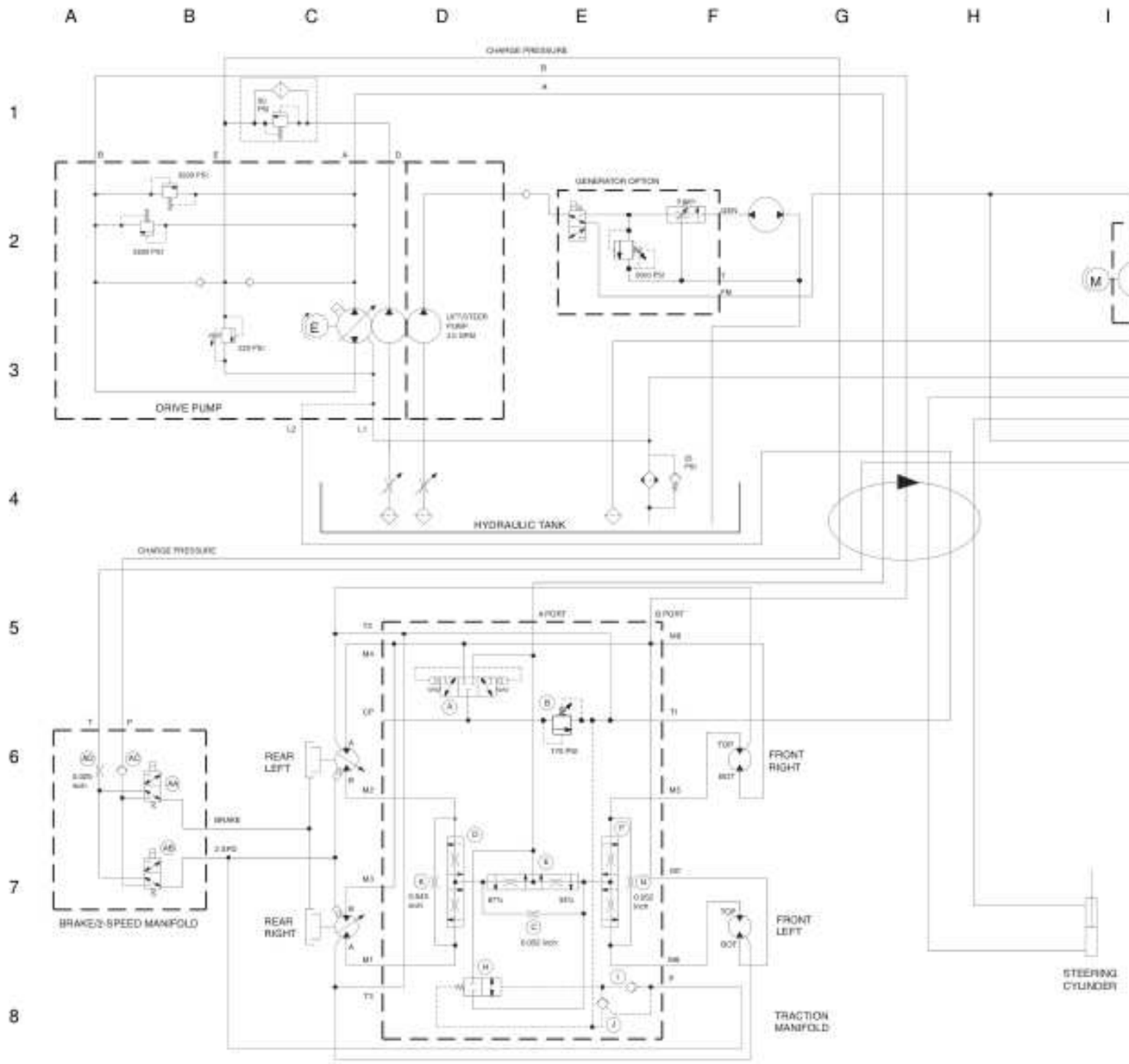
⊙ Indicates that a specific result is expected after performing a series of steps.

☒ Indicates that an incorrect result has occurred after performing a series of steps.

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Hydraulic Schematic, 4WD Models (from serial number 1547 to 2900)

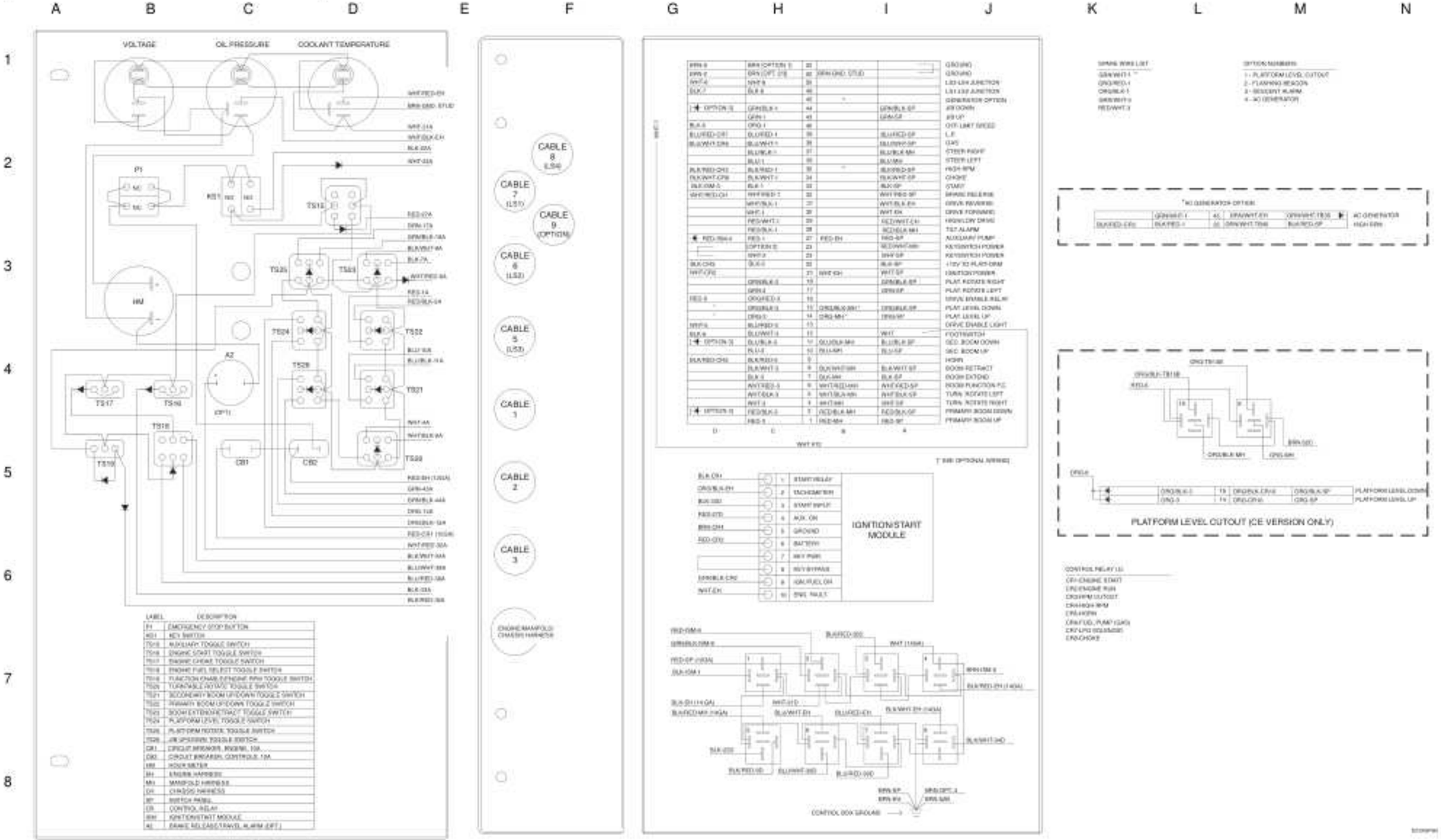
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Ground Control Box Wiring Diagram - Gasoline/LPG Models (from serial number 1547 to 1985)

REV A



LABEL	DESCRIPTION
P1	EMERGENCY STOP BUTTON
KS1	KEY SWITCH
TS16	AUXILIARY TOGGLE SWITCH
TS18	ENGINE START TOGGLE SWITCH
TS17	ENGINE CHOKE TOGGLE SWITCH
TS19	ENGINE FUEL SELECT TOGGLE SWITCH
TS16	FUNCTION ENABLE/ENGINE RPM TOGGLE SWITCH
TS20	TURNTABLE ROTATE TOGGLE SWITCH
TS21	SECONDARY BOOM UP/DOWN TOGGLE SWITCH
TS22	PRIMARY BOOM UP/DOWN TOGGLE SWITCH
TS23	BOOM EXTEND/RETRACT TOGGLE SWITCH
TS24	PLATFORM LEVEL TOGGLE SWITCH
TS25	PLATFORM ROTATE TOGGLE SWITCH
TS26	JIB UP/DOWN TOGGLE SWITCH
CB1	CIRCUIT BREAKER, 80(ENG), 10A
CB2	CIRCUIT BREAKER, CONTROLS, 10A
HR	HOUR METER
H1	ENGINE HARNESS
M1	MANIFOLD HARNESS
CH	CHASSIS HARNESS
BT	BATTERY PACK
CR	CONTROL RELAY
IGN	IGNITION/START MODULE
A1	BRAKE RELEASE/TRAVEL ALARM (OPT.)

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