

Fault Code List

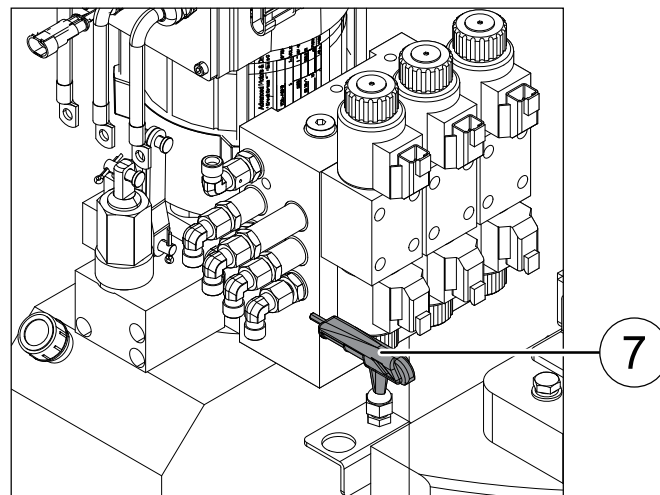
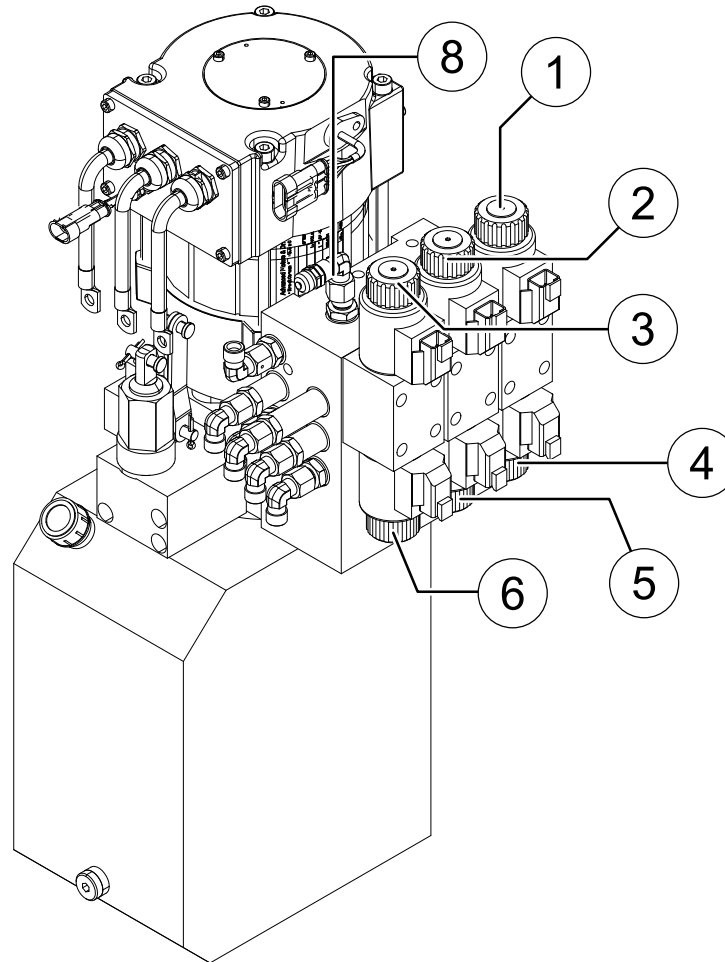
| Fault Code | Description | Explanation |
|-------------------|------------------------------------|---|
| A1 | PCU 186 Timeout | Platform Control Unit (PCU) not communicating. |
| A2 | PCU 187 Timeout | Platform Control Unit (PCU) not communicating. |
| A3 | Reserve | Not used. |
| A4 | Level Ang Timeout | Level Sensor failed or open circuit. |
| A5 | PCU_Y_ Fault | Check Platform Control Unit (PCU) connections. Replace Platform Control Unit (PCU) board. |
| A6 | System Alarm | General fault - see other fault codes. |
| A7 | Jib Angl Fault | Jib Position Sensor open or shorted. |
| A8 | Jib Pres Fault | Jib Pressure Sensor open or shorted. |
| A9 | Mast Rot Ev Open Load | Mast Rotate Coil open circuit or wire off. |
| A10 | Mast Rot Ev Sht Load | Mast Rotate Coil shorted - drawing excessive amperage. |
| A11 | Mast UD_Ev Opn Load | Mast Lift Coil open circuit or wire off. |
| A12 | Mast UD_Ev Sht Load | Mast Lift Coil shorted - drawing excessive amperage. |
| A13 | Steer Ev Open Load | Steer Coil open circuit or wire off. |
| A14 | Steer Ev Short Load | Steer Coil shorted - drawing excessive amperage. |
| A15 | Pump Can TimeOut | Pump Motor Controller not communicating. |
| A16 | Travel Can TimeOut | Traction Motor Controller not communicating. |
| A17 | PCU Can TimeOut | Platform Control Unit (PCU) not communicating. |
| A18 | mA_Pres_A_Fault | Pressure Sensor A output fault. Check pressure sensor and wiring. |
| A19 | mA_Pres_B_Fault | Pressure Sensor B output fault. Check pressure sensor and wiring. |
| A20 | mA_Pres Rdn Fault | Pressure Sensor A & B output not equal fault. Check pressure sensor and wiring. |
| A21 | Jib Am Up Ev Opn Load | Jib Coil open circuit or wire off. |
| A22 | Jib Am Up Ev Sht Load | Jib Coil shorted - drawing excessive amperage. |
| A31 | Left Motor Mcu Over Current | Left Traction Motor Control Unit excessive output amperage. |
| A32 | Left Motor Curr Sens Fault | Left Traction Motor amperage sensor fault. |
| A33 | Left Motor Encode Fault | Left Traction Motor Encoder fault - possible wire off or faulty encoder. |
| A34 | Left Motor Open Circuit | Left Traction Motor U, V, W wire open circuit. Check wire connections at motor. |
| A35 | Left Motor Short Circuit | Left Traction Motor drawing excessive amperage. Possible motor lock up or internal short. |
| A36 | A36: Left Motor Mcu Temp Too High | Left Traction Motor Control Unit excessive temperature. |
| A37 | Left Motor Temp Over | Left Traction Motor Temperature Sensor indicating excessive temperature. If motor is cool, check temp sensor. |
| A38 | Left Motor Cut Off Temp Over | Left Traction Motor Temperature Sensor indicating excessive temperature. If motor is cool, check temp sensor. |
| A39 | Left Motor Temp Sens Fault | Left Traction Motor Temperature Sensor not communicating with MCU. |
| A40 | Left Motor Block | Left Traction Motor unable to turn. |
| A41 | Left Motor Over Spd Fault | Left Traction Motor Temperature excessive RPMs. |
| A42 | Left Motor Brake Coil Open Circuit | Left Traction Motor Brake failed or broken wire. |

| Fault Code | Description | Explanation |
|-------------------|-------------------------------------|---|
| A43 | Left Motor Brake Shor Circuit | Left Traction Motor Brake failed or shorted wire. |
| A44 | Right Motor Mcu Over Current | Right Traction Motor Control Unit excessive output amperage. |
| A45 | Right Motor Curr Sens Fault | Right Traction Motor amperage sensor fault. |
| A46 | Right Motor Encode Fault | Right Traction Motor Encoder fault - possible wire off or faulty encoder. |
| A47 | Right Motor Open Circuit | Right Traction Motor U, V, W wire open circuit. Check wire connections at motor. |
| A48 | Right Motor Short Circuit | Right Traction Motor drawing excessive amperage. Possible motor lock up or internal short. |
| A49 | Right Motor Mcu Temp Too High | Right Traction Motor Control Unit excessive temperature. |
| A50 | Right Motor Temp Over | Right Traction Motor Temperature Sensor indicating excessive temperature. If motor is cool, check temp sensor. |
| A51 | Right Motor Cut Off Temp Over | Right Traction Motor Temperature Sensor indicating excessive temperature. If motor is cool, check temp sensor. |
| A52 | Right Motor Temp Sens Fault | Right Traction Motor Temperature Sensor not communicating with MCU. |
| A53 | Right Motor Block | Right Traction Motor unable to turn. |
| A54 | Right Motor Over Spd Fault | Right Traction Motor Temperature excessive RPMs. |
| A55 | Right Motor Brake Coil Open Circuit | Right Traction Motor Brake failed or broken wire. |
| A56 | Right Motor Brake Coil Shor Circuit | Right Traction Motor Brake failed or shorted wire. |
| A57 | Lf Rt Motor Mcu Volt Too Low | Traction Motor Control Units low battery voltage. |
| A58 | Lf Rt Motor Mcu Volt High | Traction Motor Control Units high battery voltage. |
| A59 | Lf Rt Motor Mcu Volt Too High | Traction Motor Control Unit high battery voltage. Check charger output. Check battery selection and connection. |
| A60 | Lf Rt Motor Mcu Main Cont Not Close | Main Contactor not closed - check main contactor. |
| A61 | Lf Rt Motor Pre Chg Faile | Capacitor Charge too low - check Contactor or other faults. |
| A62 | Lf Rt Motor Iner 15V Fault | Check connections. Replace motor controller. |
| A63 | Lf Rt Motor Directi Fault | Traction motors turning opposite directions. Check encoders and harnesses. |
| A64 | Lf Rt Motor Params Fault | Motor Control Unit configuration not correct. Possible MCU problem. |
| A65 | Lf Rt Motor Can Missing | Check traction motor and MCU harnesses. |
| A66 | Pump Motor Mcu Over Current | Pump Motor Control Unit excessive output amperage. |
| A67 | Pump Motor Current Sens Fault | Pump Motor amperage sensor fault. |
| A68 | Pump Motor Encode Fault | Pump Motor Encoder fault - possible wire off or faulty encoder. |
| A69 | Pump Motor Open Circuit | Pump Motor U, V, W wire open circuit. Check wire connections at motor. |
| A70 | Pump Motor Short Circuit | Pump Motor drawing excessive amperage. Possible motor lock up or internal short. |
| A71 | Pump Motor Mcu Temp Too High | Pump Motor Control Unit excessive temperature. |
| A72 | Pump Motor Tempera Over | Pump Motor Temperature Sensor indicating excessive temperature. If motor is cool, check temp sensor. |
| A73 | Pump Motor Cut Off Temp Over | Pump Motor Temperature Sensor indicating excessive temperature. If motor is cool, check temp sensor. |
| A74 | Pump Motor Temp Sens Fault | Pump Motor Temperature Sensor not communicating with MCU. |
| A75 | Pump Motor Block | Pump Motor unable to turn. |

| Fault Code | Description | Explanation |
|-------------------|------------------------------------|--|
| A76 | Pump Motor Over Spd Fault | Pump Motor Temperature excessive RPMs. |
| A77 | Pump Motor Mcu Volt Too Low | Pump Motor Brake failed or broken wire. |
| A78 | Pump Motor Mcu Volt High | Pump Motor Brake failed or shorted wire. |
| A79 | Pump Motor Mcu Volt Too High | Pump Motor Brake failed or shorted wire. |
| A80 | Pump Motor Main Conc Adjoin | KM1 Contactor stuck closed. Check connections. Replace contactor. |
| A81 | Pump Motor Main Conc Not Close | KM1 Contactor not closing. Check connections. Replace contactor. |
| A82 | Pump Motor Main Coil Open Circuit | KM1 Contactor coil circuit open. Check connections at contactor and harness. Replace contactor. |
| A83 | Pump Motor Main Coil Short Circuit | KM1 Contactor coil circuit shorted. Check contactor coil resistance (~40 ohms) and harness. Replace contactor. |
| A84 | Pump Motor Pre Chg Faile | Capacitor Charge too low - check Contactor KM1 or other faults. |
| A85 | Pump Motor Iner 15V Fault | Check connections. Replace motor controller. |
| A86 | Pump Motor Direction Fault | Pump Motor turning opposite direction as signaled by encoder. Check encoder if hyd functions operate. |
| A87 | Pump Motor Params Fault | Pump Motor Control Unit configuration not correct. Possible MCU problem. |
| A88 | Pump Motor Can Missing | Check harness to Pump Motor Controller. |
| A89 | Pump Motor BDI_Too Low | BDI (Battery Discharge Indicator) indicates low battery voltage - charge batteries. |
| A200 | Cage Joy En Key Init Fault | Joystick Enable trigger closed at power up. Check joystick. |
| A201 | Cage Joy Lf Btn Init Fault | Joystick left steer switch closed at power up. Check joystick. |
| A202 | Cage Joy Rt Btn Init Fail | Joystick right steer switch closed at power up. Check joystick. |
| A203 | Cage Joy_X_Init Fault | Joystick not centered at power up. Check joystick. |
| A204 | Cage Joy_Y_Init Fault | Joystick not centered at power up. Check joystick. |
| A205 | Cage Pedal Init Fault | Not used - check Options settings. |
| A206 | Tr Mast Rot En Key Init Fault | Lower Panel Mast rotation switch closed at power up. |
| A207 | Tr Mast Up Dw En Key Init Fault | Lower Panel Mast up/down switch closed at power up. |
| A208 | Tr Jib Up Dw En Key Init Fault | Lower Panel Jib up/down switch closed at power up. |
| A209 | Truck Up Key Init Fault | Lower Panel Mast up switch closed at power up. |
| A210 | Truck Dw Key Init Fault | Lower Panel Mast Down switch closed at power up. |
| A211 | Ca Trav Stee Key Init Fault | Cage Drive Select Button closed at power up. |
| A212 | Ca Mast Up Dw Rot Key Init Fault | Cage Lift Select Button closed at power up. |
| A213 | Ca Jib Up Dw Key Init Fault | Cage Jib Select Button closed at power up. |
| A214 | Cage Horn Key Init Fault | Cage Horn Select Button closed at power up. |
| W4 | Battery BDI_Low | Battery discharged - charge batteries. |
| W5 | Disp 112 TimeOut | Display at Lower Panel not communicating with ECU. Check connections. |
| W6 | Steer Angl Sens Fault | Steering Angle Sensor no output to ECU. Check sensor and harness. |
| W7 | Ant Squeeze Warning | If PPSS Equipped, check for overhead obstructions. |
| W8 | GPS Limit Mast Up | Mast limited GPS interfaces with controls. |
| W9 | Mast Up Limit Outdoor | No Fault. Max elevated to Outdoor limit. |
| W20 | Enable Lift Travel Is Off | Not used, check option settings. |
| W21 | Pothole Switch On | Pothole bars are blocked when elevated. Check limit switch if not elevated. |

| Fault Code | Description | Explanation |
|-------------------|----------------------|--|
| W22 | Mast Up Max Limit | No Fault. Mast fully elevated. |
| W23 | Mast Dw Min Limit | No Fault. Mast fully lowered. |
| W24 | Jib Max Limit | Jib reached maximum elevation. Not a fault. |
| W25 | Anti Collision Warn | Not used. |
| W26 | Pedal Not Active | Not used. |
| W27 | Battery Voltage Low | Low battery voltage - charge batteries. |
| W28 | Manual Brake Release | Manual Brake Release activated. |
| W29 | Jib Up Max Limit | No Fault. Jib fully elevated. |
| W30 | Jib Dw Limit | No Fault. Jib fully lowered. |
| W101 | OverLoad 500 LBS | Overloaded - remove weight from platform. |
| W102 | Truck Tilt Warn | Machine out of level - lower mast and move to level surface. |

Function Manifold Valves



- 1) Steer Right Valve
- 2) Turntable Rotate Right Valve
- 3) Mast Function Valve
- 4) Steer Left Valve
- 5) Turntable Rotate Left Valve
- 6) Jib Boom Function Valve
- 7) Wrench
- 8) Test Port (M Port)

Hydraulic Schematic

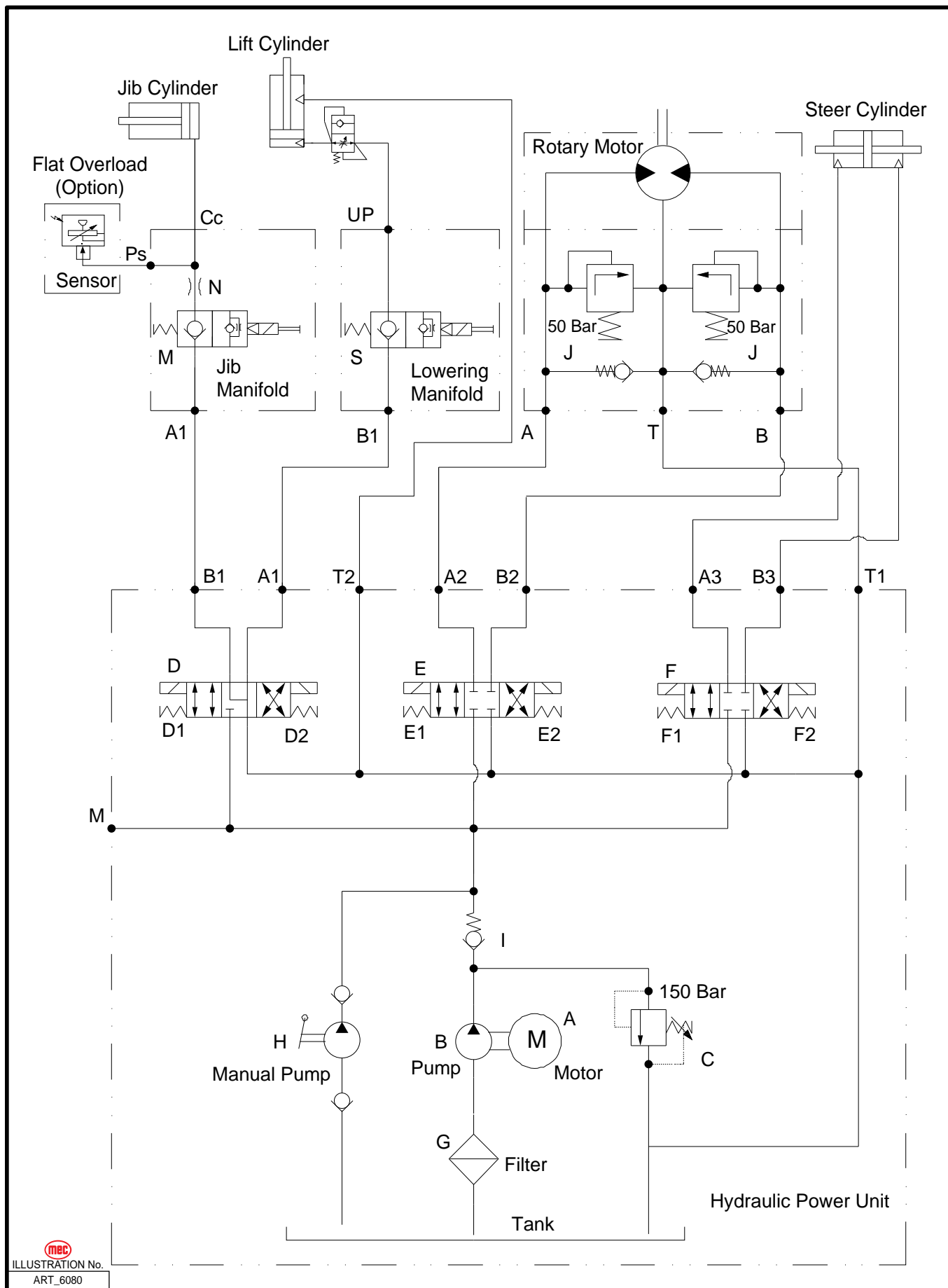


ILLUSTRATION No.
ART_6080

Electrical Schematic

