snorkel

S3215L
S3215E
S3219E
S3220E
S3226E
S4726E
S4732E
S4740E



SERVICE & MAINTENANCE MANUAL

Part Number 1503854-000
March 2024

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SETTING PRESSURES

Steer Pressure

1. Remove cap and install a 0-5000 psi pressure gauge to G Test Port (item 1 page101).
2. Steer one direction until stop both directions pressure should be 1100-1150 psi (75-79 bar).
3. Remove cap (item 4 page 101), for adjustment.
4. Turn relief clockwise to increase pressure and counterclockwise to decrease pressure.
5. Remove pressure gauge and replace cap.

Lift Pressure

1. Install a 0-5000 psi gauge to G Test Port (item 1 page 101).
2. Load capacity in platform.
3. When adjusting lift pressure relief (item 3 page 101, on manifold) platform should just be able to lift capacity (add 50 lbs to make sure machine will not lift past capacity).
4. Remove pressure gauge.

Hydraulic Pump Pressure

Note: Hydraulic pump pressure is preset by pump manufacturer, to check the pump pressure follow steps below.

1. Remove pressure hose from pump and install a hose long enough to go into a clean five gallon container.
2. Install a tee and ball valve at the end of hose going into the bucket.
3. Install a fitting for 500 psi pressure gauge. **⚠Warning** Make sure ball valve is not closed completely.
4. Steer machine, pump will come on, slowly close ball valve until pressure equalizes. **⚠Warning** Do not close ball valve completely as pump damage will occur. Pressure should be 3300 psi (227 bar).
5. To adjust pump pressure turn relief (item 2 page 32). Clockwise increases pressure and counterclockwise decreases pressure. **⚠Warning** Do not close ball valve completely.
6. Remove ball valve and hose, reinstall pressure hose, refill hydraulic oil and check for leaks.

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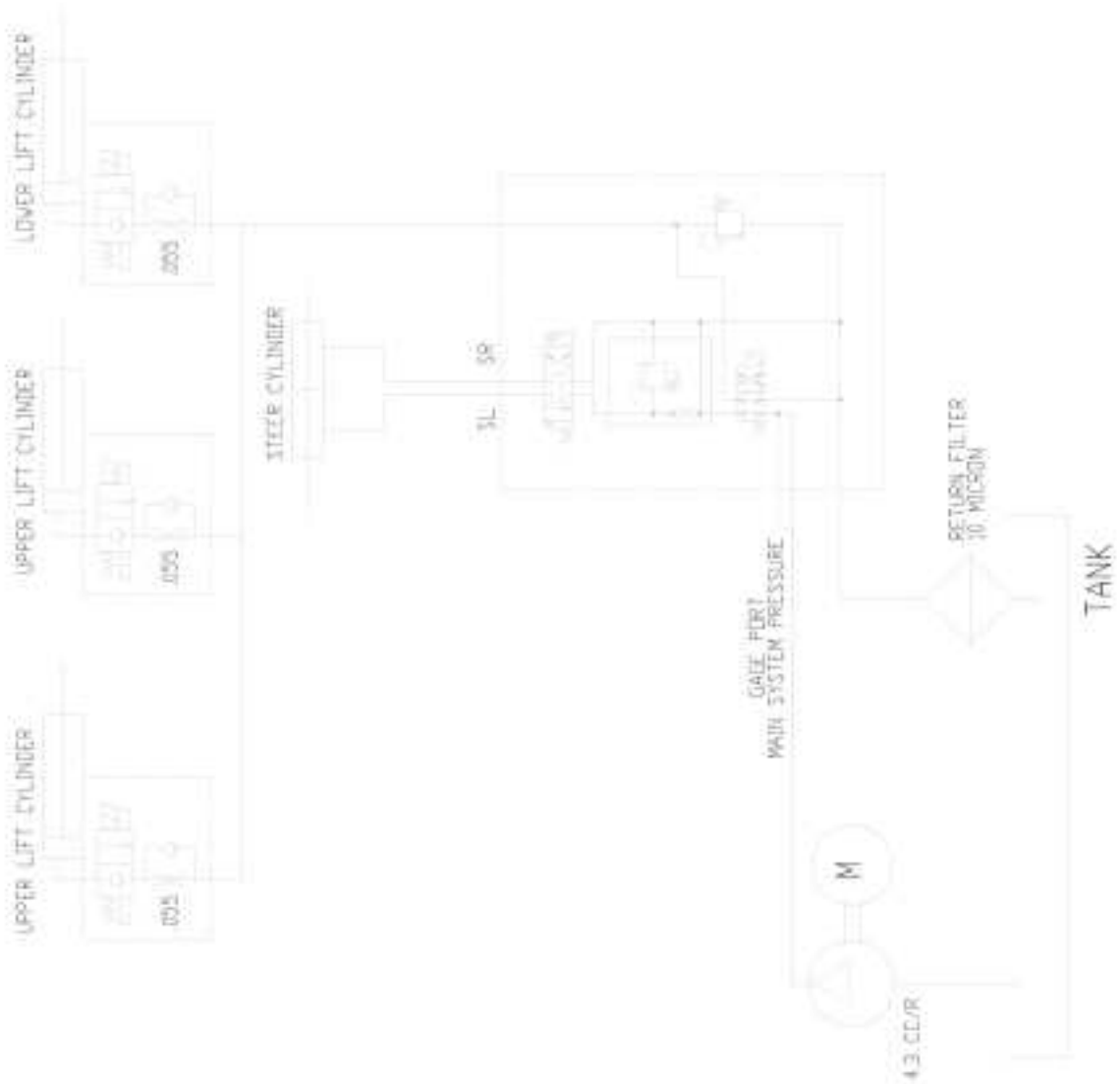
Frequent Inspection and Maintenance – Every 90 Days or 150 Hours

Item		Procedure	Information		P/F/R
	Overload system test CE machines only	Check the lift function at 120% maximum load capacity. Start the test with the platform fully lowered. Verify that the lift function cuts out automatically, the alarm sounds and the red light on the control panel flashes before the platform reaches an elevation of approximately 1.8 m (6').	120% Maximum Load S3215L S3215E S3219E S3220E S3226E S4726E S4732E S4740E	 366 kg (805 lb) 327 kg (720 lb) 300 kg (660 lb) 490 kg (1080 lb) 272 kg (600 lb) 544 kg (1200 lb) 381 kg (840 lb) Standard Capacity 300 kg (660 lb) High Capacity 420 kg (924 lb)	
	Battery disconnect switch	Shuts off all controls			
Upper Controls					
	Operating controls	Check for smooth operation and proper speed			
	Parking brakes	Proper operation			
	Emergency stop	Shuts off power to upper controls			
	Lowering alarm–if equipped	Verify that alarm sounds while the platform is lowering			
	Drive motion alarm –if equipped	Verify that alarm sounds while chassis is in motion			
	Electrical power outlet	Check for proper operation of outlet and GFCI			
	Travel speed	Verify proper travel speed			
		High Drive Platform Lower than 6 ft (1.8 m) 0 to 2 mph (0 to 3.2 km/h)	 2.0 mph = 50 ft in 17 secs (3.2 km/h = 15.2 m in 17 secs)		
		Low Drive Platform Higher than 6 ft (1.8 m) 0 to 0.4 mph (0 to 0.6 km/h)	 0.4 mph = 50 ft in 85 secs (0.6 km/h = 15.2 m in 85 secs)		
	Horn	Check for wear and damage			
	Battery condition indicator	Check for proper operation			
Options					
	Flashing light	Check for proper operation			

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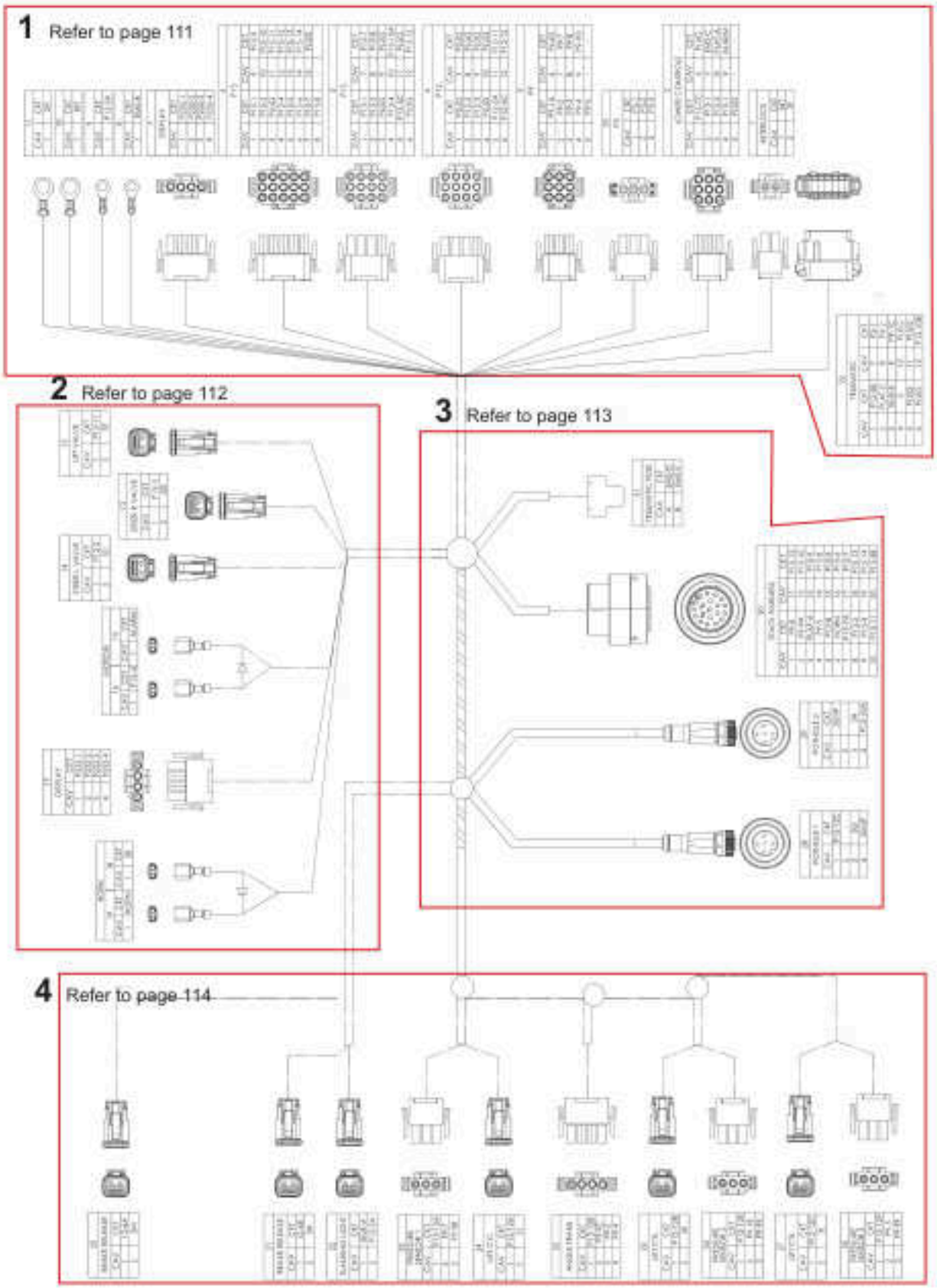
HYDRAULIC SCHEMATIC

S4740E Electric Drive



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CHASSIS HARNESS

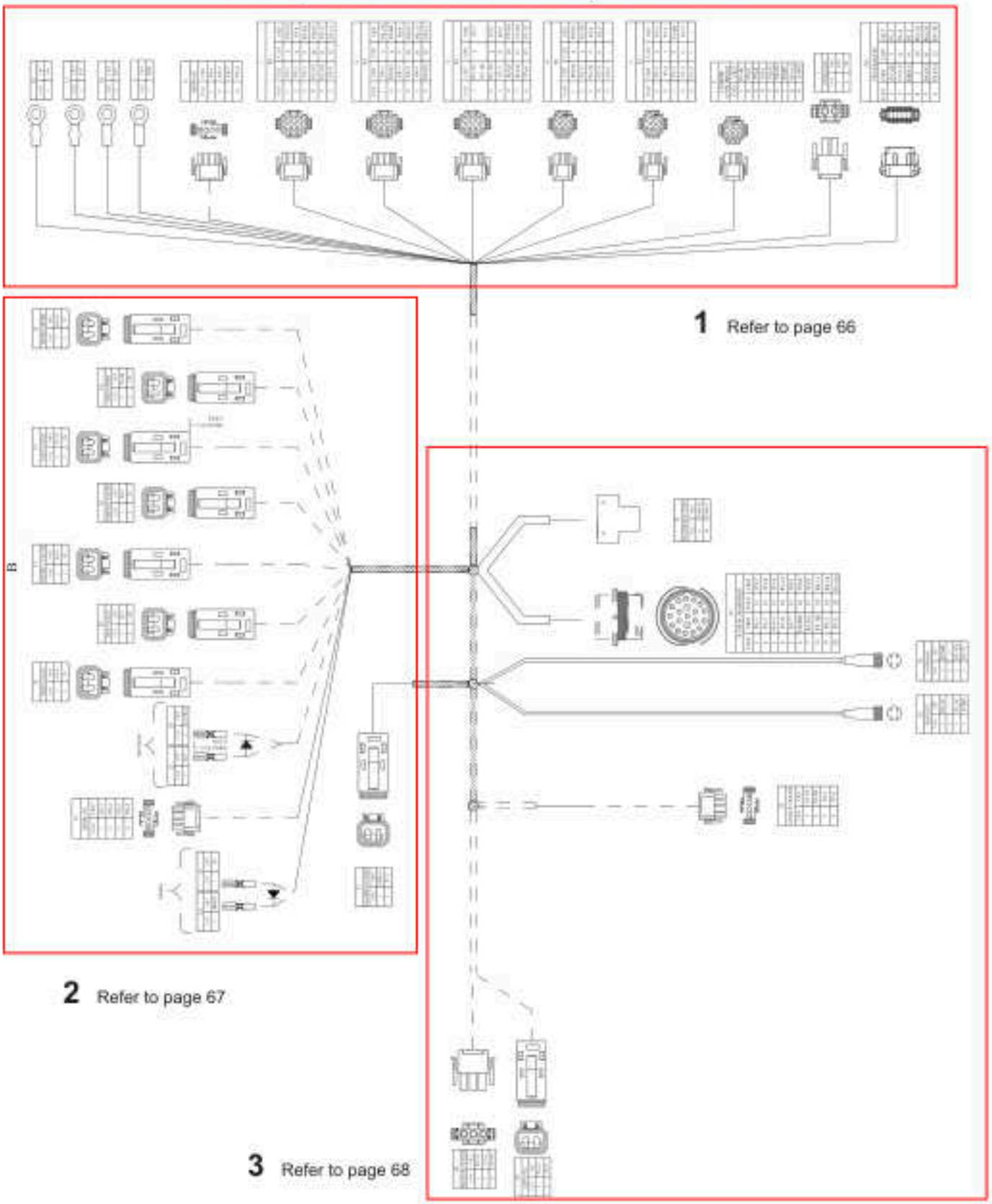


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HARNESSES

Chassis Harness

S3215E, S3215L and S3219E – January 2019 and After



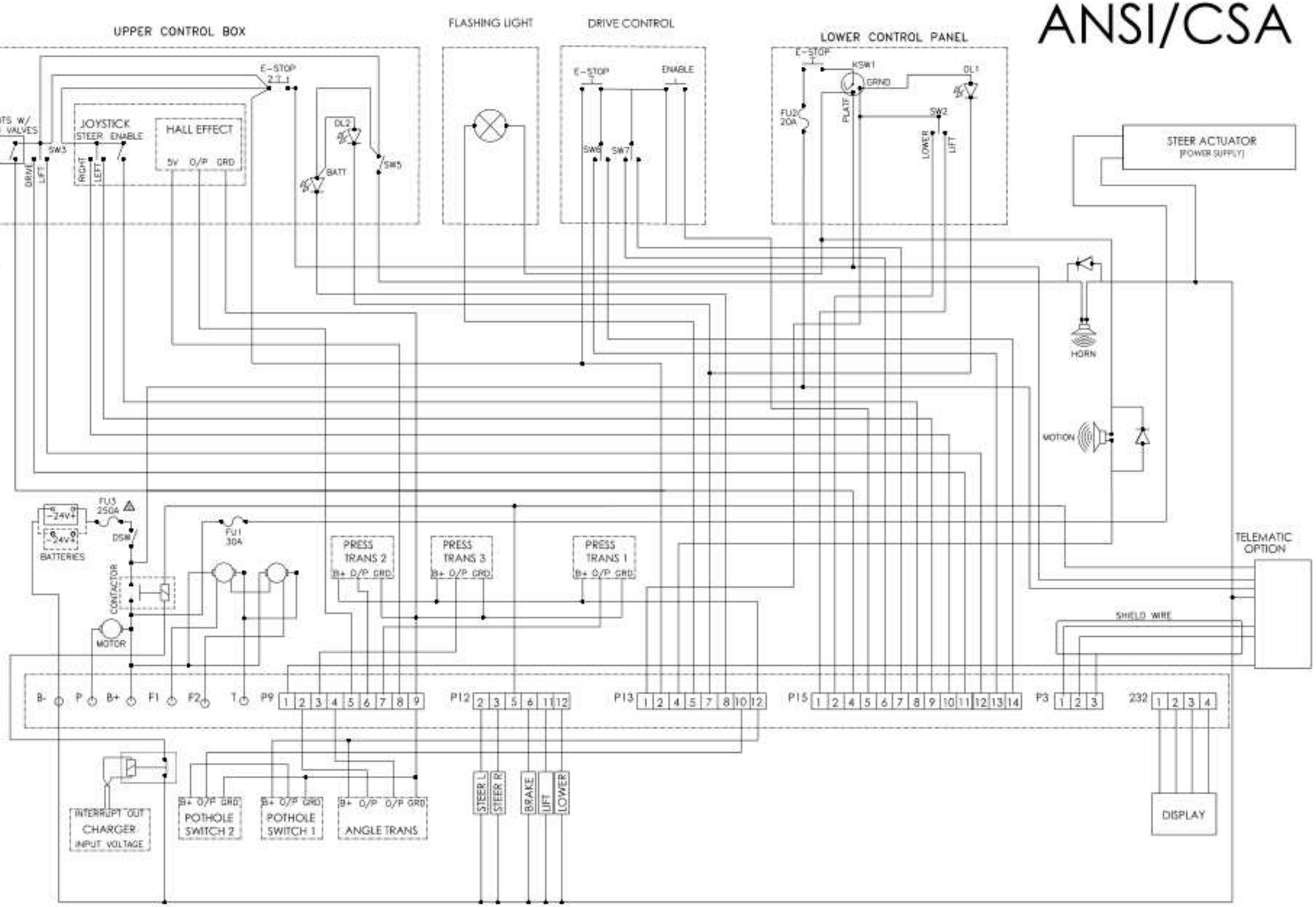
1 Refer to page 66

2 Refer to page 67

3 Refer to page 68

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ANSI/CSA



CONNECTIONS	
P3-1	CAN HIGH
P3-2	CAN LOW
P3-3	CAN SHIELD
P9-1	TELEMATIC INTERLOCK (B- =ACTIVE)
P9-2	ANGLE SENSOR #1 INPUT
P9-3	PRESSURE SENSOR #3 INPUT
P9-4	ANGLE SENSOR #2 INPUT
P9-5	JOYSTICK ANALOG INPUT
P9-6	PRESSURE SENSOR #2 INPUT
P9-7	PRESSURE SENSOR #1 INPUT
P9-8	5V TO JOYSTICK (LOW CURRENT)
P9-9	0V TO SENSORS (LOW CURRENT)
P12-2	STEER LEFT (B+ = ACTIVE)
P12-3	STEER RIGHT (B+ = ACTIVE)
P12-5	CONTACTOR OUTPUT (B+ = ACTIVE)
P12-6	BRAKE RELEASE (B+ = ACTIVE)
P12-11	LIFT VALVE OUTPUT (B+ = ACTIVE)
P12-12	LOWER VALVE OUTPUT (B+ =ACTIVE)
P13-1	GROUND CONTROL INPUT
P13-2	PLATFORM CONTROL INPUT
P13-4	MOTION ALARM (B- = ACTIVE)
P13-5	FLASHING LIGHT (B- = ACTIVE)
P13-7	OVERLOAD LIGHT (B- = ACTIVE)
P13-8	LOW BATTERY LIGHT (B- = ACTIVE)
P13-10	POTHOLE SENSOR (B+ = ACTIVE)
P13-12	SENSOR SUPPLY (LOW CURRENT)
P15-1	GROUND CONTROL LIFT
P15-2	GROUND CONTROL LOWER
P15-4	HIGH SPEED
P15-5	LOADING CONTROL ENABLE
P15-6	LOADING - STEER LEFT
P15-7	LOADING - STEER RIGHT
P15-8	JOYSTICK ENABLE
P15-9	STEER LEFT
P15-10	STEER RIGHT
P15-11	DRIVE SWITCH
P15-12	LIFT SWITCH
P15-13	LOADING CONTROL FWD
P15-14	LOADING CONTROL REV
232-1	DISPLAY SUPPLY
232-2	DISPLAY RECEIVE
232-3	DISPLAY TRANSMIT
232-3	DISPLAY 0V RETURN

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