



FOR CONTROL P.C. BOARDS L6959-2 OR HIGHER USE L8943 SCHEMATIC FOR COMPONENT VALUES AND CIRCUIT CONNECTIONS.			FOR LOGIC P.C. BOARDS L5927-2 OR HIGHER USE L9015 SCHEMATIC FOR COMPONENT VALUES AND CIRCUIT CONNECTIONS.			FOR VARIABLE VOLTAGE P.C. BOARDS L5394-2 OR HIGHER USE M16966 SCHEMATIC FOR COMPONENT VALUES AND CIRCUIT CONNECTIONS.			TRAVEL CIRCUIT			COMPONENTS NOT ON P.C. BOARD		
CONTROL CIRCUIT			LOGIC CIRCUIT			VARIABLE VOLTAGE CIRCUIT								
C101 .47 MFD	R101 80Ω, 12W	R133 27K Ω	C201 .02 MFD	QU201 UJT	R232 47.5 Ω	C301 2 MFD	R316 33K Ω	C401 2 MFD	D401 1 A	R1 2 Ω, 50W				
C102 50 MFD	R102 68K Ω		C202 2 MFD		R233 100 Ω	C302 1 MFD	R317 10K Ω	C402 10 MFD	D402 1 A, 1000V	R2 10K Ω, 2W POWER SOURCE OUTPUT CONTROL				
C103 .047 MFD	R104 10K Ω, 2W	Q101 2N5655	C203 .02 MFD	R201 1.5K Ω	R234 475 Ω	C303 .01 MFD	R318 560K Ω	C403 .005 μ F	D403 1 A, 1000V	R3 5K Ω, 2W WIRE FEED SPEED CONTROL				
C104 .047 MFD	R105 39K Ω	Q102 MJ3029	C204 10 MFD	R202 4.75K Ω	R235 475 Ω	C304 .02 MFD	R319 2.7M Ω	C404 10 MFD	D404 16 A	R4 25K Ω, 25W				
C105 .047 MFD	R106 4.7K Ω	Q103 2N4123	C205 10 MFD	R203 19K Ω	R236 4.75 Ω	C305 .01 MFD	R320 100 Ω	C405 .1 MFD	D405 16 A	R5 2 Ω, 25W				
C107 .1 MFD	R107 12K Ω	Q104 2N4123	C206 .02 MFD	R204 47.5K Ω	R237 332 Ω	C306 2 MFD		C406 .01 MFD	D406 16 A	R6 5K Ω, 2W TRAVEL SPEED CONTROL				
C108 1 MFD	R108 22K Ω	Q105 2N4123	C207 50 MFD	R205 10K Ω		C307 .47 MFD	LED 3A	C407 .047 MFD	D407 1 A					
C110 1 MFD	R109 10K Ω	Q106 2N5816	C208 2 MFD	R206 50K Ω TRIMMER	X201 QUAD 2 INPUT NANDGATE	C308 .22 MFD	LED 3B	C408 .047 MFD	D408 1 A	S1 DPST CONTROL POWER SWITCH				
C113 .15 MFD	R110 1.5K Ω	Q107 2N5816	C209 4.7 MFD	R207 1.5K Ω	X202 QUAD 2 INPUT NANDGATE	C309 .02 MFD	EMITTING DIODE	C409 .02 MFD	D409 1 A	S2 SPST TRAVEL CONTROL SWITCH				
C114 .15 MFD	R111 5K Ω TRIMMER	Q108 2N4123	C210 THRU	R208 1K Ω	X203 HEX INVERTER	C310 .01 MFD		C411 .02 MFD	D411 1 A	S3 SPST INCH UP SWITCH				
C116 .047 MFD	R112 4.7K Ω		C211 THRU	R209 10K Ω	X204 QUAD 2 INPUT NANDGATE		OC301 OPTO-ISOLATOR	C412 1 MFD	D412 1 A	S4 SPST INCH DOWN SWITCH				
C117 .02 MFD	R113 22K Ω	QU101 2N5027	C212 THRU	R210 5K Ω TRIMMER	X205 QUAD 2 INPUT NANDGATE	D301 THRU	OC302 OPTO-ISOLATOR			S5 SPST START SWITCH				
C118 .02 MFD	R114 10K Ω	QU103 UJT	C215 THRU	R211 1K Ω		D302 THRU				S6 SPST STOP SWITCH				
C119 .02 MFD	R115 100 Ω		D201 THRU	R212 2.67K Ω	L201 5.6mH	D303 THRU				S7 DPDT (REV.) TRAVEL DIRECTION SWITCH				
C120 .02 MFD	R117 47 Ω	LED 1A RED	D213 THRU	R213 47.5K Ω		D304 THRU								
C121 1 MFD	R118 6.8K Ω	LED 1B LIGHT	D216 THRU	R214 4.75K Ω	D2201 16 V.	D305 THRU								
C122 .02 MFD	R119 6.8K Ω	LED 1C EMITTING	D217 THRU	R215 4.75K Ω	D2202 THRU	D312 THRU								
	R120 680 Ω	LED 1D DIODE	D218 THRU	R216 4.75K Ω	D2205 THRU									
D101 16 A	R121 2.7K Ω	LED 1E DIODE	D219 THRU	R217 4.75K Ω		R301 47 K Ω	TP301 TRANSIENT PROTECTOR	R401 10 K Ω	TP401 TRANSIENT PROTECTOR					
D102 16 A	R122 47K Ω		D220 THRU	R218 1.5K Ω		R302 3.3K Ω, 2W	TP302 TRANSIENT PROTECTOR	R402 22K Ω	TP402 TRANSIENT PROTECTOR					
D103 16 A	R123 100 Ω	SCR101 8A, 600 V.	D221 THRU	R219 2.67K Ω		R303 6.8K Ω		R403 2.7K Ω	PT401 1:1:1 PULSE TRANSFORMER					
D104 THRU	R124 100 Ω	SCR102 8A, 600 V.	D222 THRU	R220 4.75K Ω		R304 68K Ω	PT301 PULSE TRANSFORMER	R404 162 Ω						
D114 1 A	R125 10K Ω	SCR103 12A, 400 V.	D223 THRU	R221 1.5K Ω		R305 100K Ω		R405 1.5K Ω, 15W						
D116 1 A	R126 680 Ω	SCR104 12A, 400 V.	D224 THRU	R222 1K Ω		R306 4.7K Ω, 2W	S301 SPDT TOGGLE SWITCH	R406 15K Ω	DZ401 20 V					
D117 1 A	R127 4.7K Ω		D225 THRU	R223 10K Ω		R307 100 Ω		R407 4.7K Ω						
	R128 47K Ω		D226 THRU	R224 2.67K Ω		R308 10K Ω TRIMMER	T301 24V. TRANSFORMER	R408 4.7K Ω, 4W	SCR401 12A 400V SCR					
DZ101 25 V	R129 47K Ω		D227 THRU	R225 1.5K Ω		R309 15 Ω		R409 4.7K Ω	SCR402 12A 400V SCR					
DZ102 3 V	R131 10K Ω, 2W		D228 THRU	R226 6.81K Ω		R310 75 Ω	DZ301 5.1V							
	R132 10K Ω		D229 THRU	R227 1.5K Ω		R311 68 Ω	DZ302 10V							
TP101 TRANSIENT PROTECTOR	PT101 PULSE TRANSFORMER		D230 THRU	R228 4.75K Ω		R312 5.6K Ω, 2W	DZ303 25V							
PT104 TRANSIENT PROTECTOR	PT104 PULSE TRANSFORMER		D231 THRU	R229 100 Ω		R313 6.8K Ω	DZ304 15V							
F101 1/2A SLOW BLOW FUSE	PT105 PULSE TRANSFORMER		D232 THRU	R230 100 Ω		R314 10K Ω	DZ305 3V							
F102 2/10 A FUSE			D233 THRU	R231 100 Ω		R315 1K Ω, 12W	DZ306 3V							

ELECTRICAL SYMBOLS PER E1537

NOTES:

N.A. TO OPERATE UNIT WITHOUT VARIABLE VOLTAGE BOARD JUMPER 637 TO 539 AND 635 TO 636.

N.B. X201 THRU X205 - PIN 7 CONNECTED TO 639

S4 SPST INCH DOWN SWITCH - PIN 14 CONNECTED TO 515

N.C. WHEN CONTROLS ARE USED WITH R35 POWER SOURCES OF THE TYPE WHICH USES TAPS CONNECTED WITH TRIANGLE PLATE FOR MAJOR VOLTAGE ADJUSTMENTS, JUMPER TO BE CONNECTED TO PIN "L". FOR ALL OTHER POWER SOURCES JUMPER TO BE CONNECTED TO PIN "H".

NOTE: SINCE COMPONENTS OR CIRCUITRY ON A PRINTED CIRCUIT BOARD MAY CHANGE WITHOUT AFFECTING THE INTERCHANGEABILITY OF A COMPLETE BOARD, THIS DIAGRAM MAY NOT SHOW THE EXACT COMPONENTS OR CIRCUITRY OF CONTROLS HAVING A COMMON CODE NUMBER.

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MANUFACTURING TOLERANCE PER ASME UNLESS OTHERWISE SPECIFIED TOLERANCES ON PLACES DECIMALS TO 4 DIGITS (0.0001) ON ALL ANGLES 15 & 30 DEGREES MATERIAL TOLERANCE TYP TO AGREE WITH PURCHASER'S DRAWING	CONTROL CLEVELAND	SCALE: NONE IF PRINTED @ A1 SIZE	EQUIPMENT TYPE: LT-7 TRACTOR	PAGE 1 OF 1
DO NOT SCALE THIS DRAWING	APPROVED: [Signature]	DATE: 2-15-2008	PROJECT NUMBER: CRM37981	DOCUMENT NUMBER: G1790
				REVISION: B