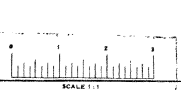
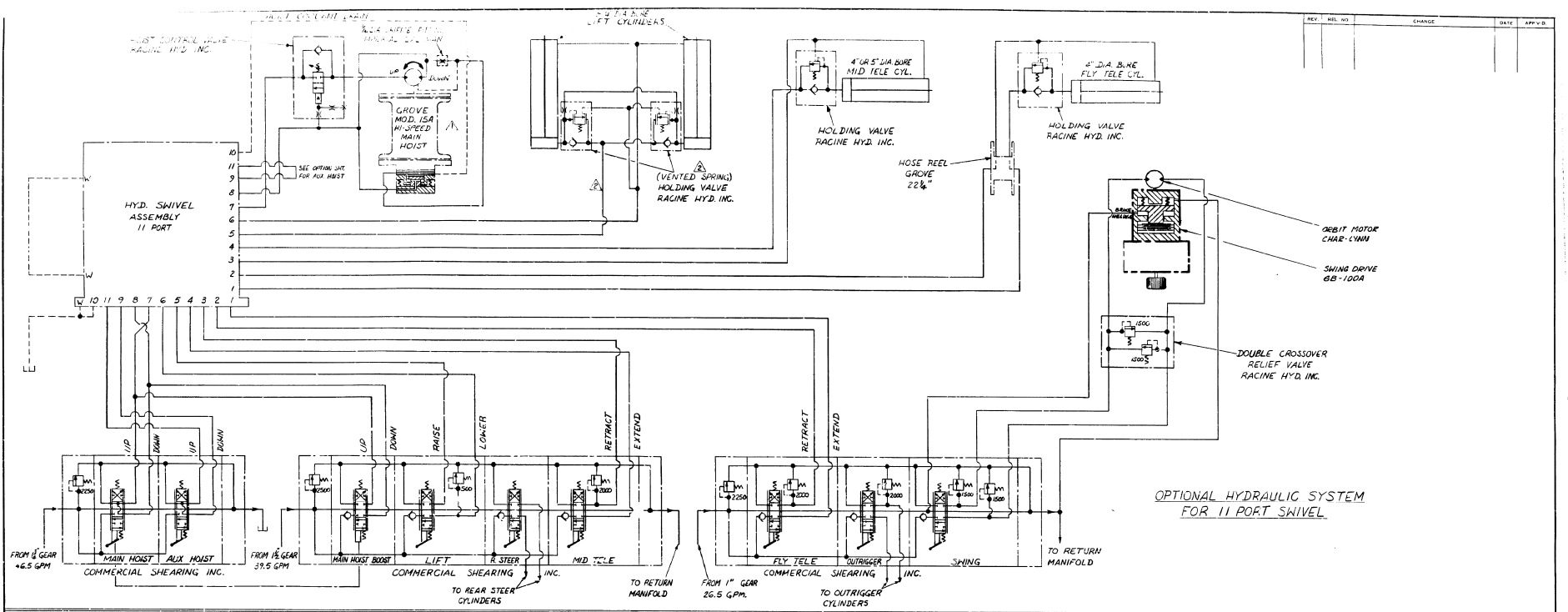


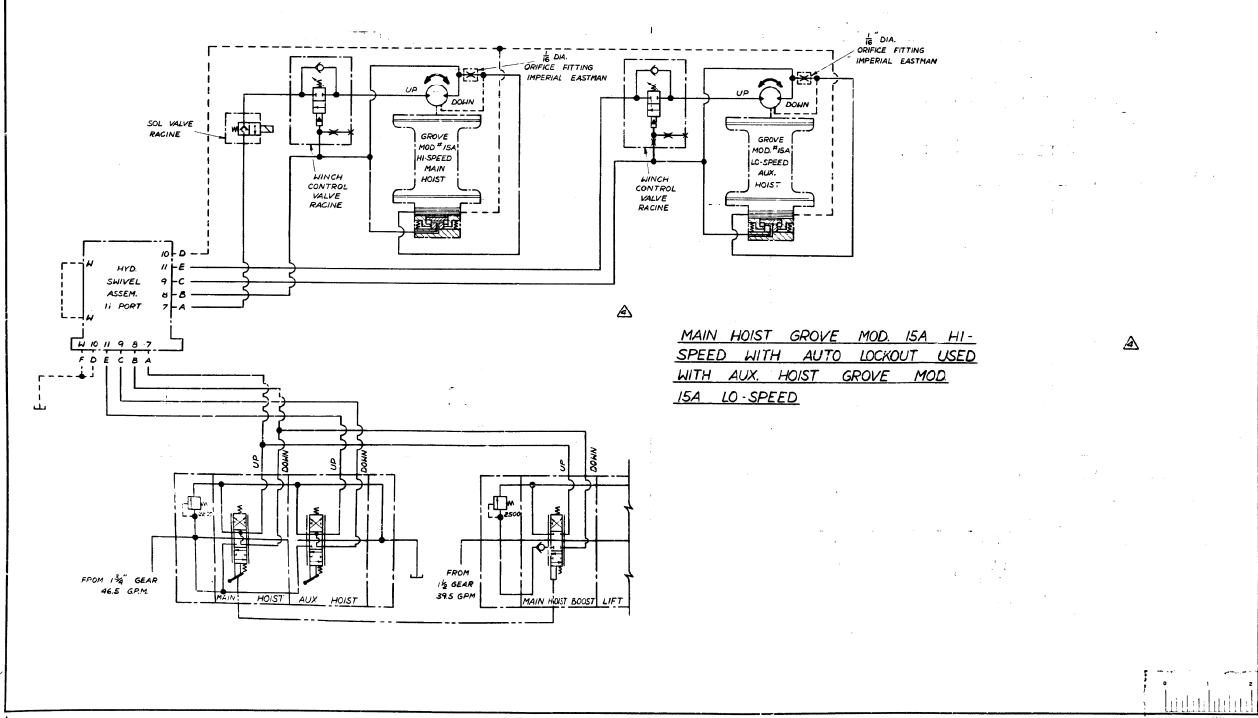
REV.	NO.	CHANGE	DATE	APP.
1	11751	REDUCED TOTAL NUMBER OF SHEETS FROM 3 TO 4; ON BOTS. 1 & 2 ADDED SCHEMATIC AND 22 MAIN HOIST WITH GROVE MOD. 154 SELECTED GEN. HYDRAULIC MOD. II P 23 HOIST OPTIMIZED; ADDED GROVE MOD. 154 HOIST OPTION ON SW. 21 ON SW. 4 ADDED MID BUCKET TO ACCESS 116' H. HOIST	10/27/78	BOB H-777
2	12088	REVISED THIRD HOLD VALVE & REPLACED BALANCED POPPET CARTRIDGE WITH VENTED SPRING CARTRIDGE ON LIFT CYLS.	2/26/79	BOB H-777
3	12842	ADDED MANUAL OVERRIDE OPTION ON SH. 41 COLLECTED HOSES & HYDRAULIC OPTION ON SW. 4; DELETED SH. 41 HOIST	4/19/79	BOB H-777
4	15688	CHANGED PICTURE OF AUTO L/D SOL. VALVE FROM NORMALLY OPEN TO NORMALLY CLOSED; ADDED WITH SHEET WITH HOIST OPTION; ADDED SPRINGS TO AXLE L/D VALVE; CHANGED SUPPLY LINE FROM RIGHT FRONT EXTENSION SOLENOID VALVE	11/2/78	BOB H-777
5	19405	REMOVED SWING CHECK VALVE; ADDED 250 PSI IN-LINE CHECK VALVE AND JUMPER LINE BETWEEN HOIST CIRCUIT AND DRAIN CIRCUIT; DRAIN LINE FROM OIL COOLER WAS CONNECTED AT CHECK VALVE.	1/2/79	BOB H-777



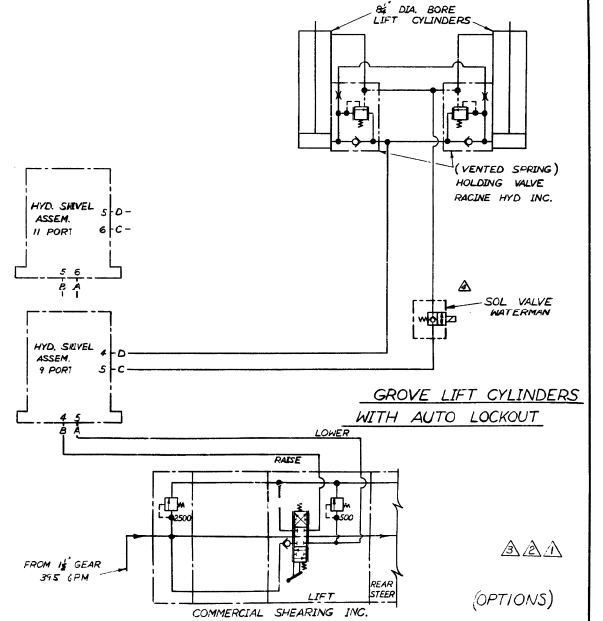
GROVE MANUFACTURING CO									
SHADY GROVE, PENNSYLVANIA									
DO NOT SCALE									
TOL. NOT SPECIFIED									
DECIMAL IN.	ANGULAR DEG.	FRACTIONAL IN.	SCALE	TITLE	APP'D	CHK'D	DESIGN	SEL. NO.	REV. NO.
0.015	1/2	1/16	NONE	HYD SYSTEM - RT60					
0.005	1/4	1/32	NONE						
0.002	1/8	1/64	NONE						
0.001	1/16	1/128	NONE						
0.0005	1/32	1/256	NONE						
0.0002	1/64	1/512	NONE						
0.0001	1/128	1/1024	NONE						
0.00005	1/256	1/2048	NONE						
0.00002	1/512	1/4096	NONE						
0.00001	1/1024	1/8192	NONE						



OPTIONAL HYDRAULIC SYSTEM FOR 11 PORT SWIVEL



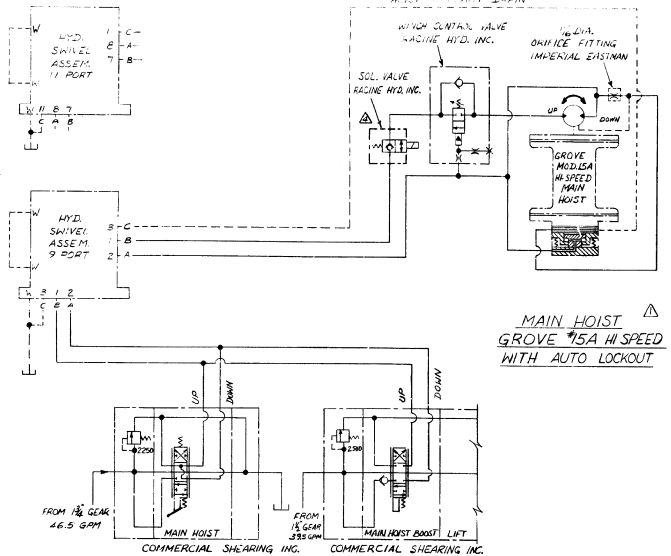
MAIN HOIST GROVE MOD. 15A HI-SPEED WITH AUTO LOCKOUT USED WITH AUX. HOIST GROVE MOD. 15A LO-SPEED



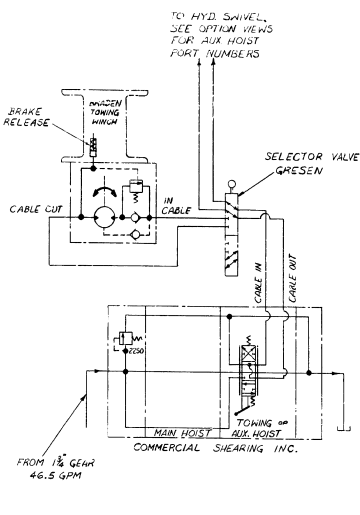
GROVE LIFT CYLINDERS WITH AUTO LOCKOUT

(OPTIONS)

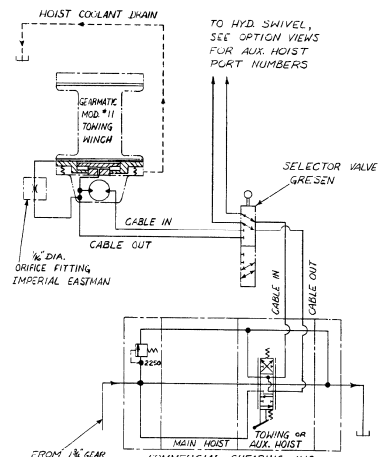
DO NOT SCALE				GROVE MANUFACTURING CO			
TOL. NOT SPECIFIED				SHADY GROVE, PENNSYLVANIA			
TITLE				HYD SYSTEM - RT. CO			
DESIGNED BY	DATE	BY	CHKD BY	DATE	REV. NO.	REV. DATE	REV. BY
APPROVED BY							
DRIVEN BY							
SCALE							



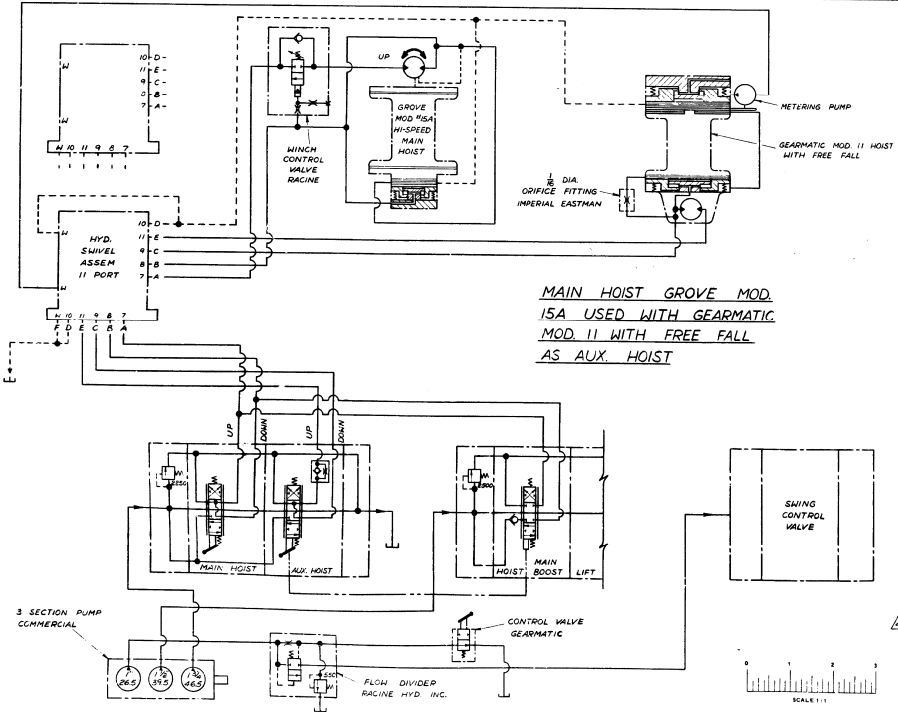
MAIN HOIST GROVE #15A HI-SPEED WITH AUTO LOCKOUT



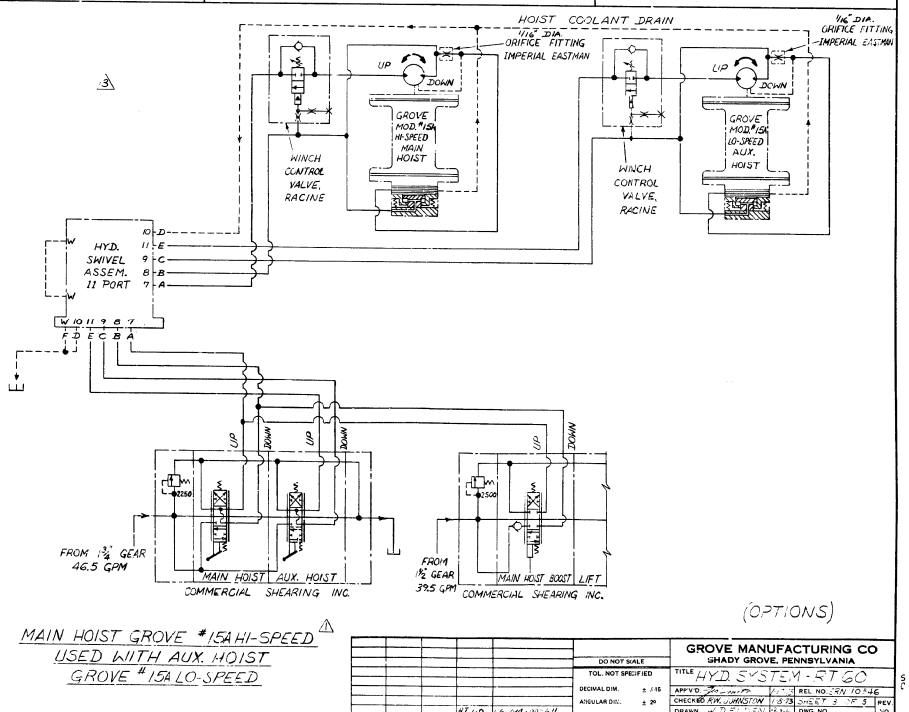
TONING WINCH - BRADEN



TONING WINCH - GEARMATIC MOD #11



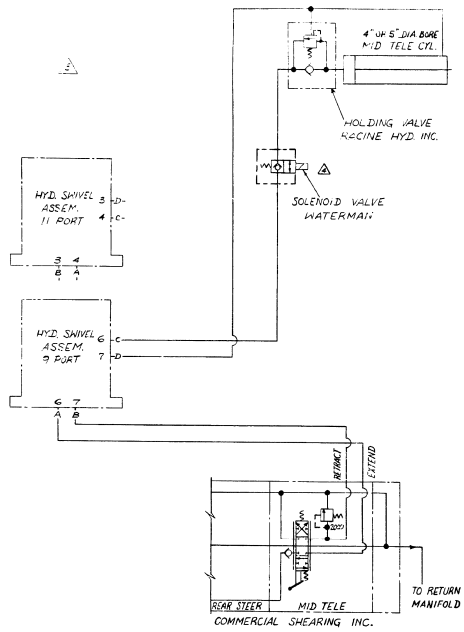
MAIN HOIST GROVE MOD. 15A USED WITH GEARMATIC MOD. 11 WITH FREE FALL AS AUX. HOIST



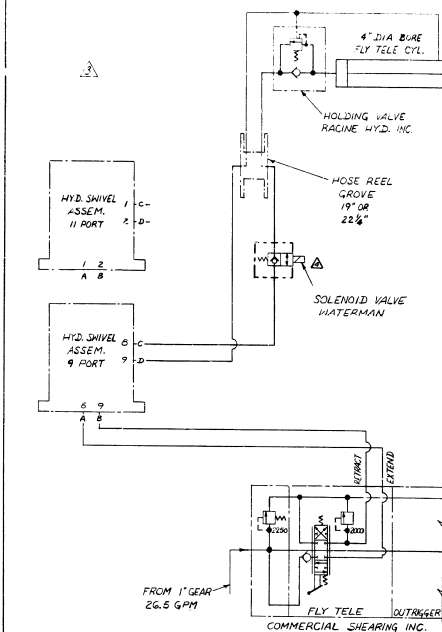
MAIN HOIST GROVE #15A HI-SPEED USED WITH AUX HOIST GROVE #15A LO-SPEED

(OPTIONS)

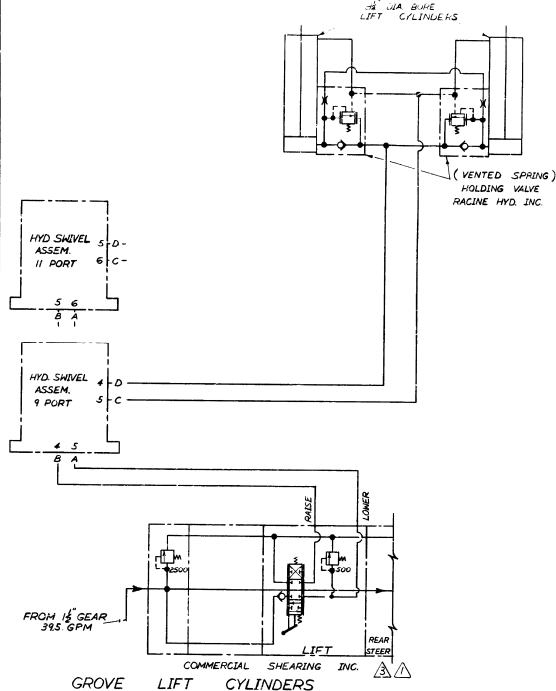
DO NOT SCALE		GROVE MANUFACTURING CO SHADY GROVE, PENNSYLVANIA	
TOL. NOT SPECIFIED		TITLE HYD SYSTEM - RT 60	
DESIGNER: 5 / 15	APPROVED: 5 / 15	REL. NO. 257 70746	REV. 1
ANALYST: 5 / 15	CHECKED: 5 / 15	SCALE 1:1	REV. 2
MODEL: 5 / 15	FRACTORAL: 5 / 15	SCALE 1:1	REV. 3
MODEL: 5 / 15	FRACTORAL: 5 / 15	SCALE 1:1	REV. 4



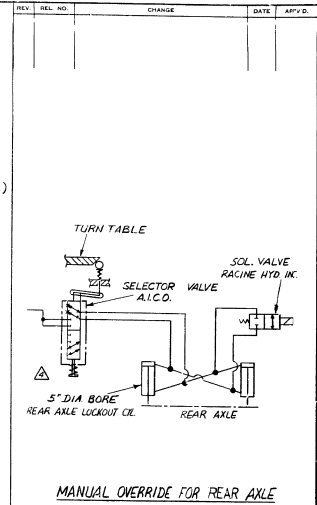
MID TELE CYL. WITH AUTO LOCKOUT.



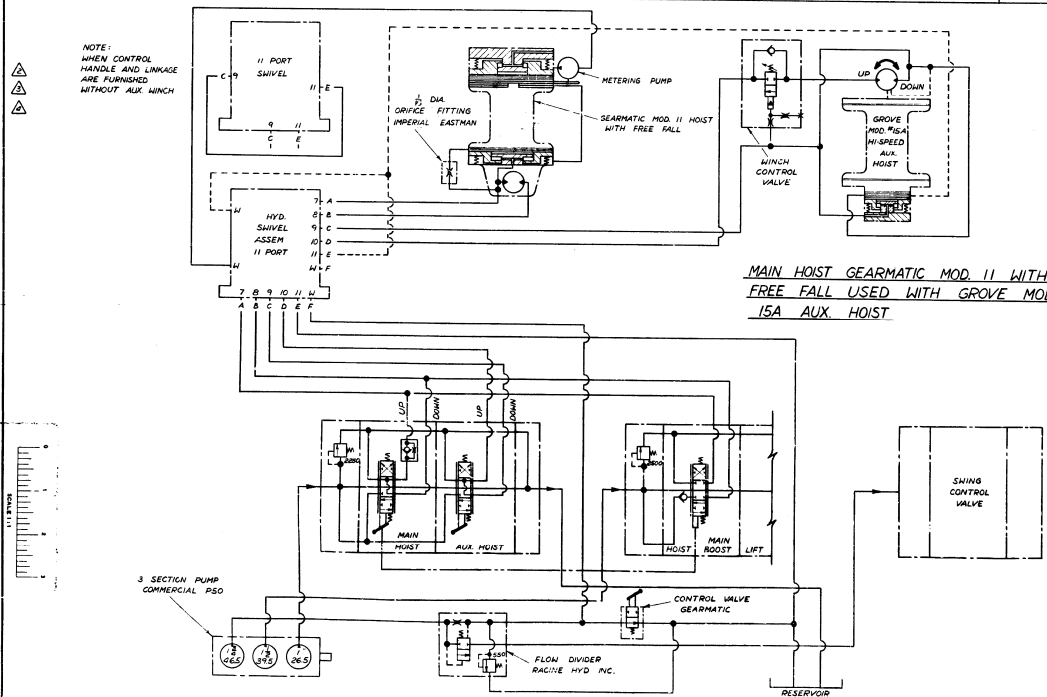
FLY TELE CYL. WITH AUTO LOCKOUT



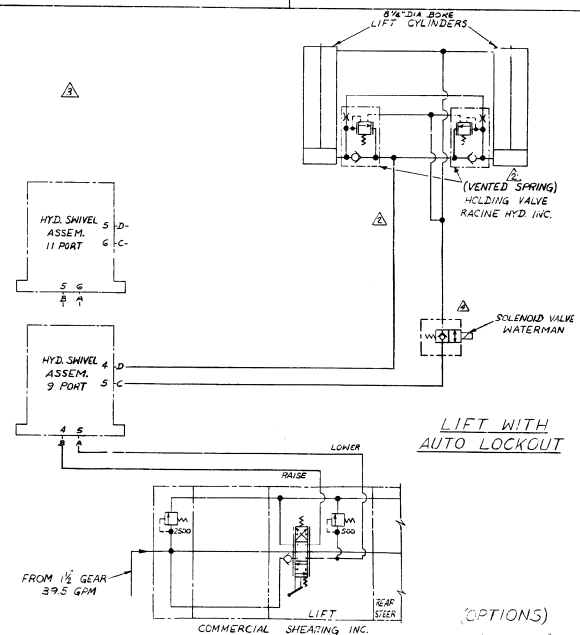
GROVE LIFT CYLINDERS



MANUAL OVERRIDE FOR REAR AXLE



MAIN HOIST GEARMATIC MOD. 11 WITH FREE FALL USED WITH GROVE MOD. 15A AUX. HOIST

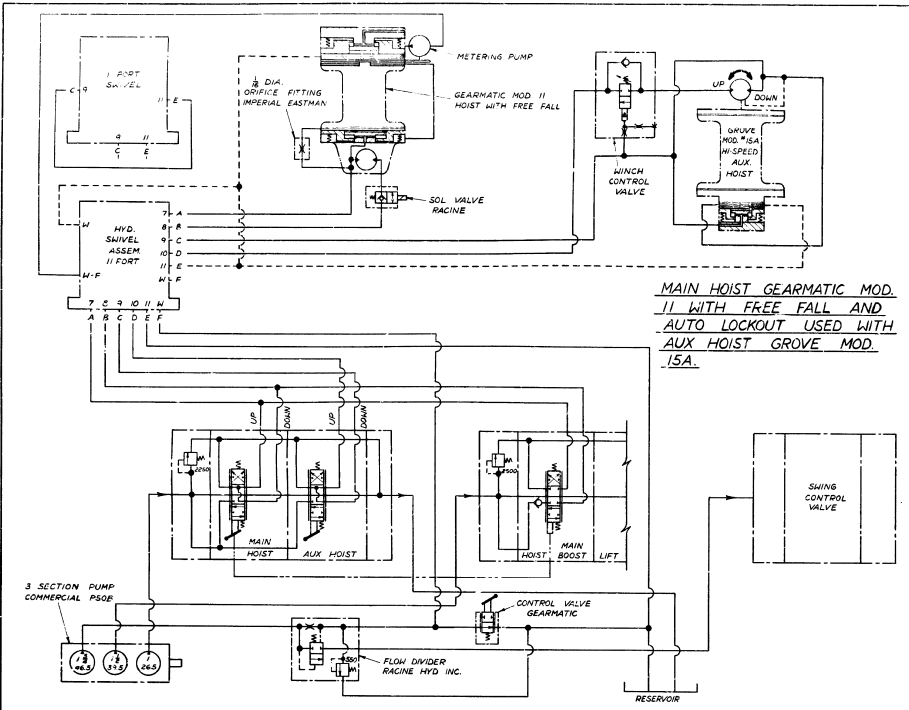


LIFT WITH AUTO LOCKOUT

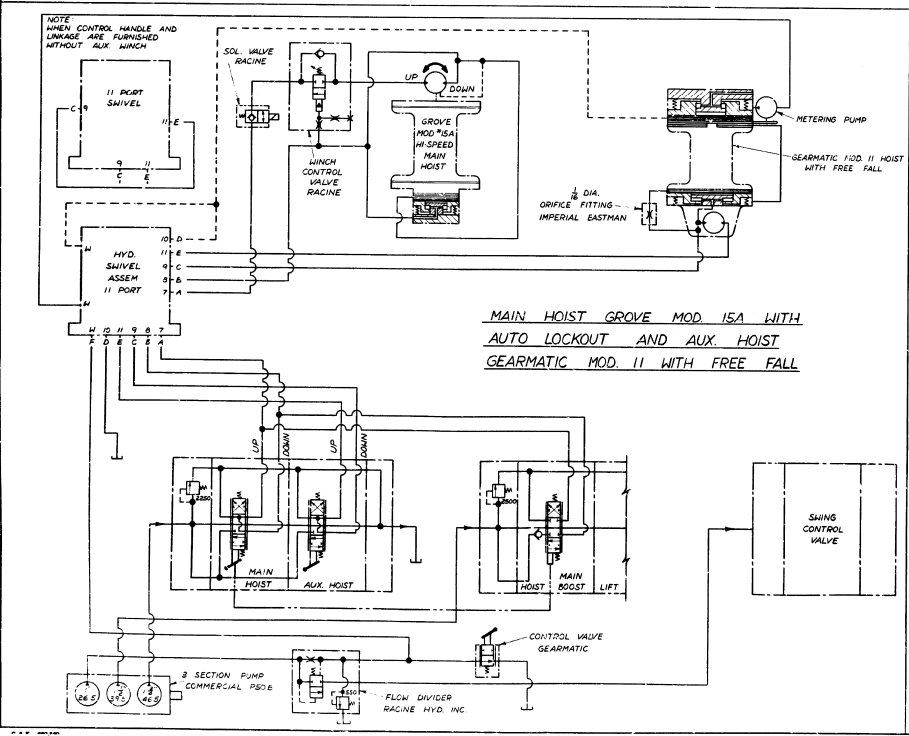
(OPTIONS)

DO NOT SCALE				GROVE MANUFACTURING CO	
TOL. NOT SPECIFIED				SHADY GROVE, PENNSYLVANIA	
TITLE: HYD SYSTEM - RT GO				REV. NO. 2025 2/27/16	
SEC. DIM. 1/8"				CHECKED BY: J. W. B. 1/27/16	
ANGULAR DIM. 30°				DRAWN BY: J. W. B. 1/27/16	
FRACTIONAL DIM. 1/16"				SCALE: AS SHOWN	
MODEL	MODEL	MODEL	MODEL	MODEL	MODEL

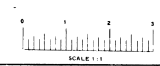
REV.	REL. NO.	CHANGED	BY	DATE	APP'D.



MAIN HOIST GEARMATIC MOD. 11 WITH FREE FALL AND AUTO LOCKOUT USED WITH AUX HOIST GROVE MOD. 15A



MAIN HOIST GROVE MOD 15A WITH AUTO LOCKOUT AND AUX HOIST GEARMATIC MOD. 11 WITH FREE FALL



MODEL	MODEL	MODEL	MODEL	MODEL	NEXT ASSEMBLY

DO NOT SCALE	GROVE MANUFACTURING CO SHADY GROVE, PENNSYLVANIA				
TOL. NOT SPECIFIED	TITLE: HYD SYSTEM - RT 60				
DESIGNED BY	R. J. H.	APP'D. BY	R. J. H.	REV. NO.	3-10
ANALYSIS BY		CHECKED BY	W. H. S. L.	REV. NO.	
		DRAWN BY	W. H. S. L.	REV. NO.	
FRACTIONAL DIM.	1/16"	SCALE	1/2" = 1"	REV. NO.	20 244 2-1-3

Δ (OPTIONS)