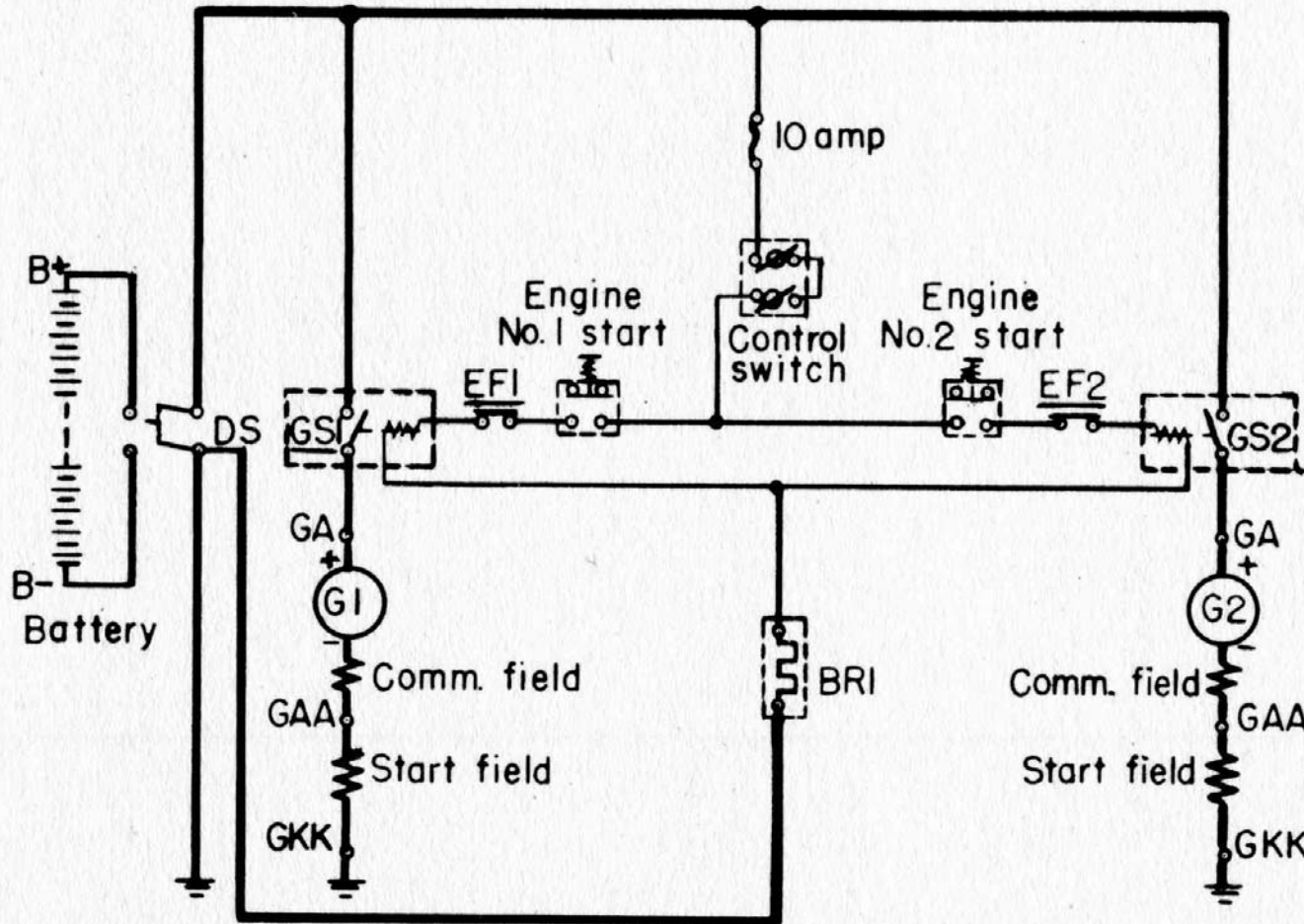


**ALCO-GE 44 TON
LOCOMOTIVE
SAMPLE PHYSICAL
SCHEMATIC AND AIR BRAKE
DIAGRAMS**

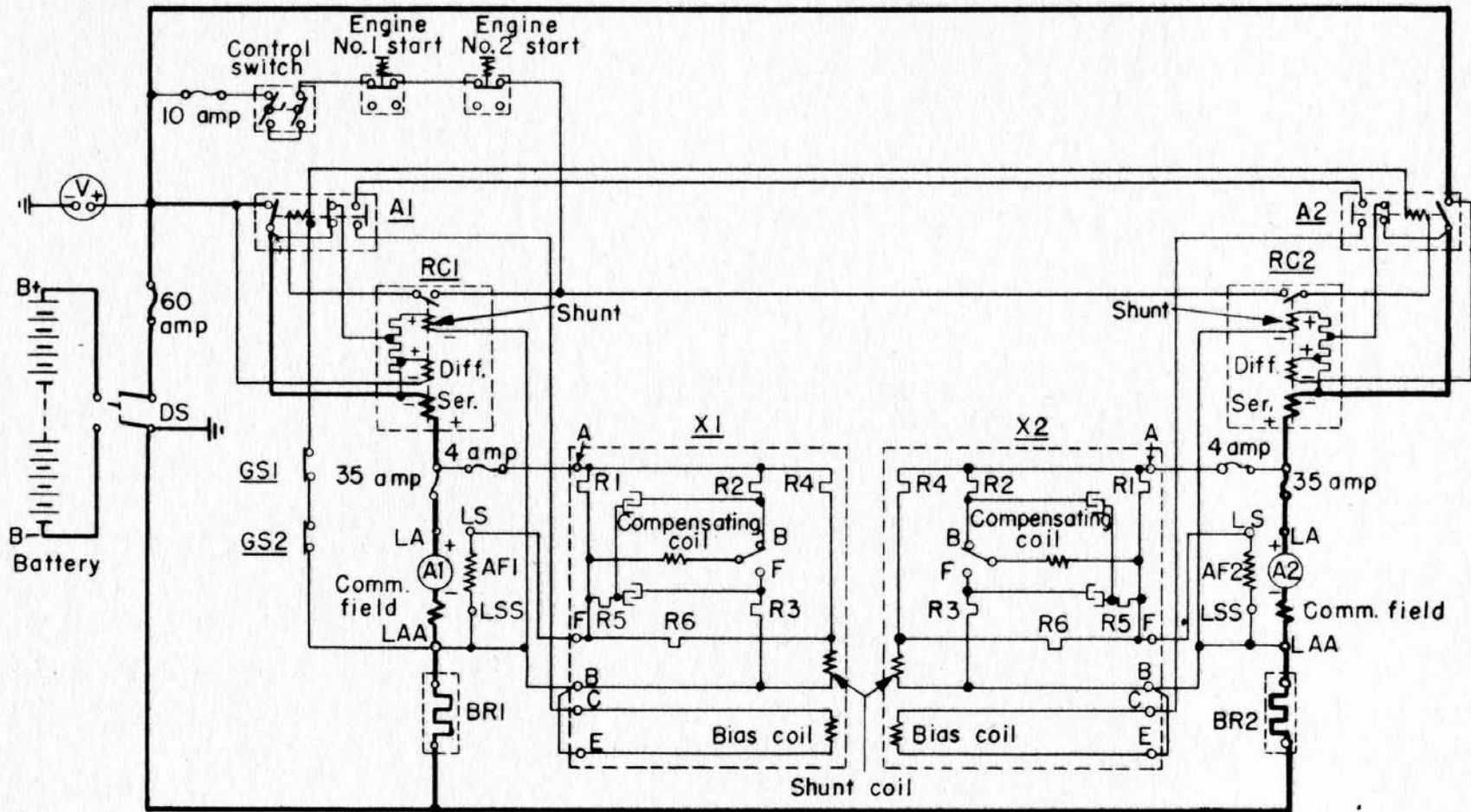
COMPILED BY PRESTON COOK
FOR THE RAILROAD MUSEUM OF NEW ENGLAND
FROM ALCO-GE SERVICE MANUALS
AND PUBLICATIONS

ALCO-GE 44 TON LOCOMOTIVE



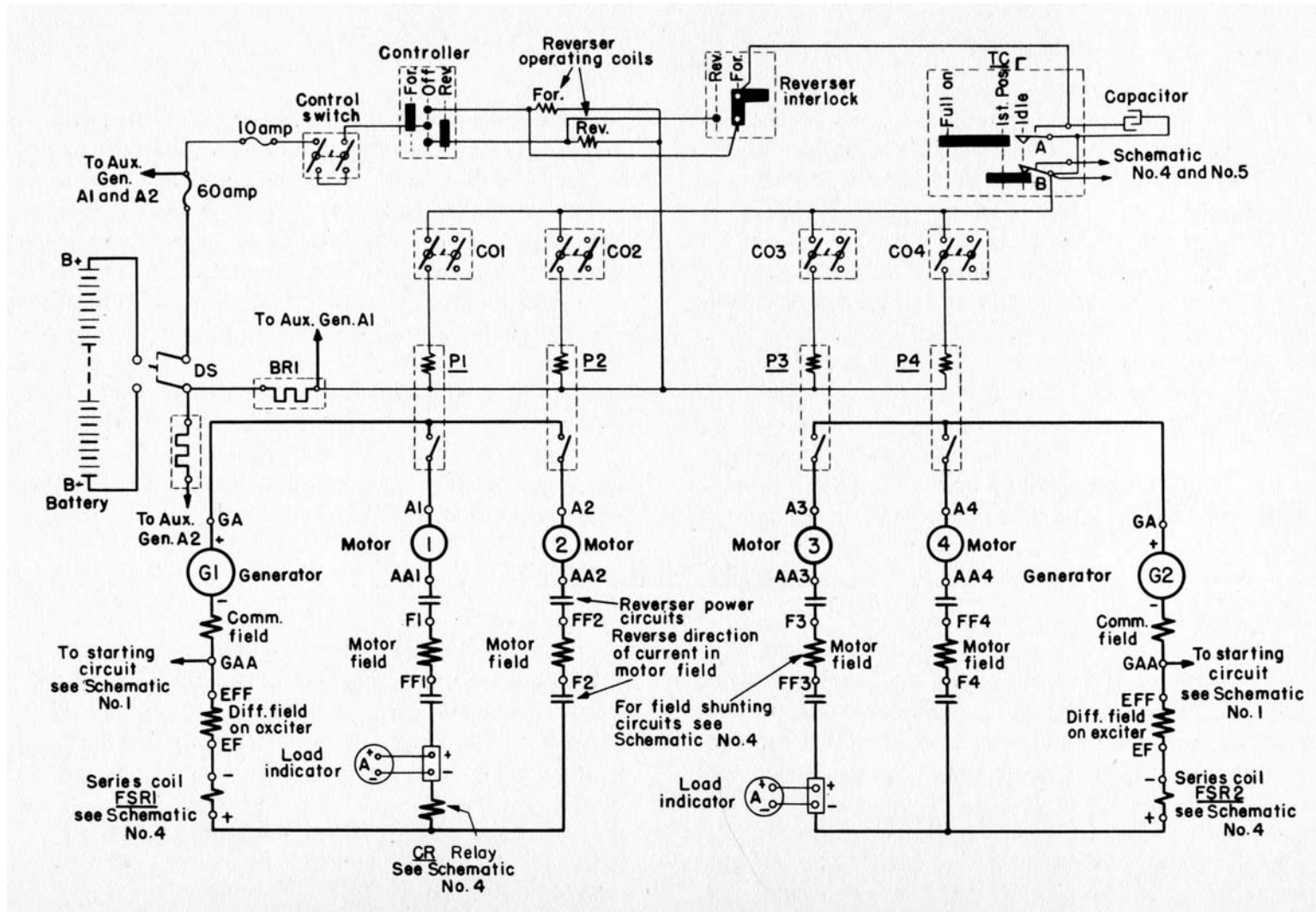
TYPICAL STARTING CIRCUIT

ALCO-GE 44 TON LOCOMOTIVE



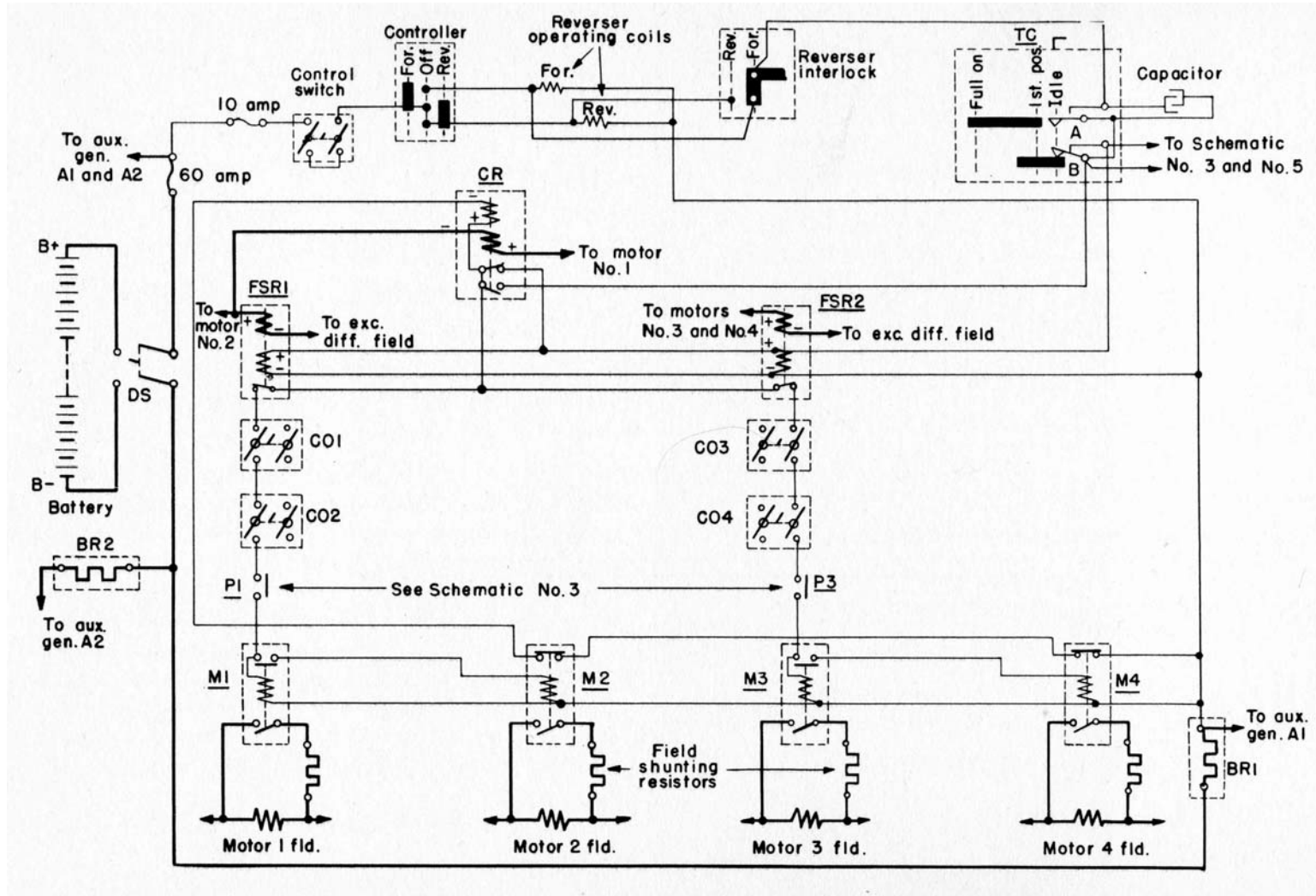
TYPICAL BATTERY CHARGING CIRCUIT

ALCO-GE 44 TON LOCOMOTIVE



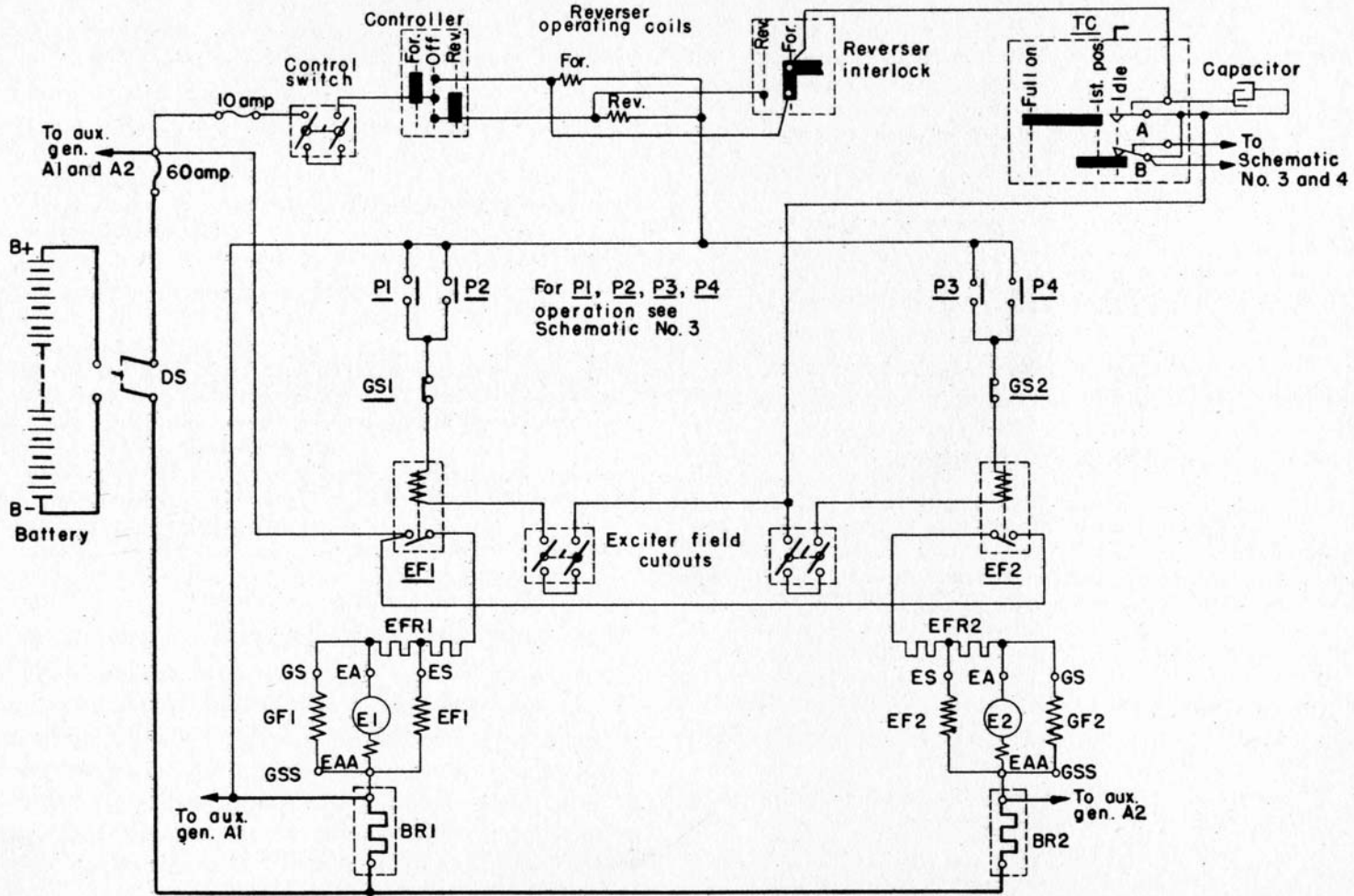
TYPICAL MOTOR POWER CIRCUIT

ALCO-GE 44 TON LOCOMOTIVE



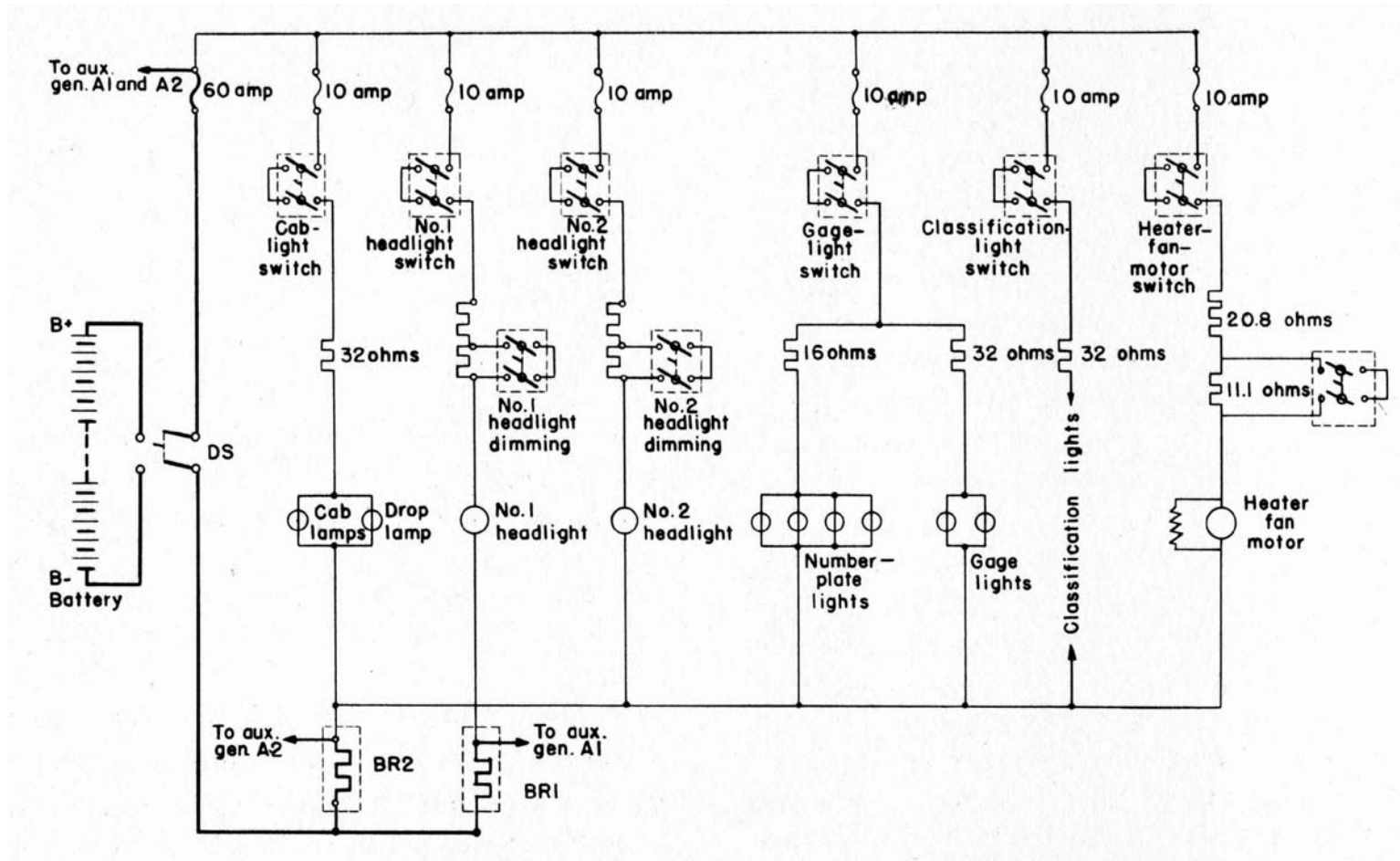
TYPICAL MOTOR SHUNTING CIRCUIT

ALCO-GE 44 TON LOCOMOTIVE



TYPICAL GENERATOR FIELD CIRCUIT

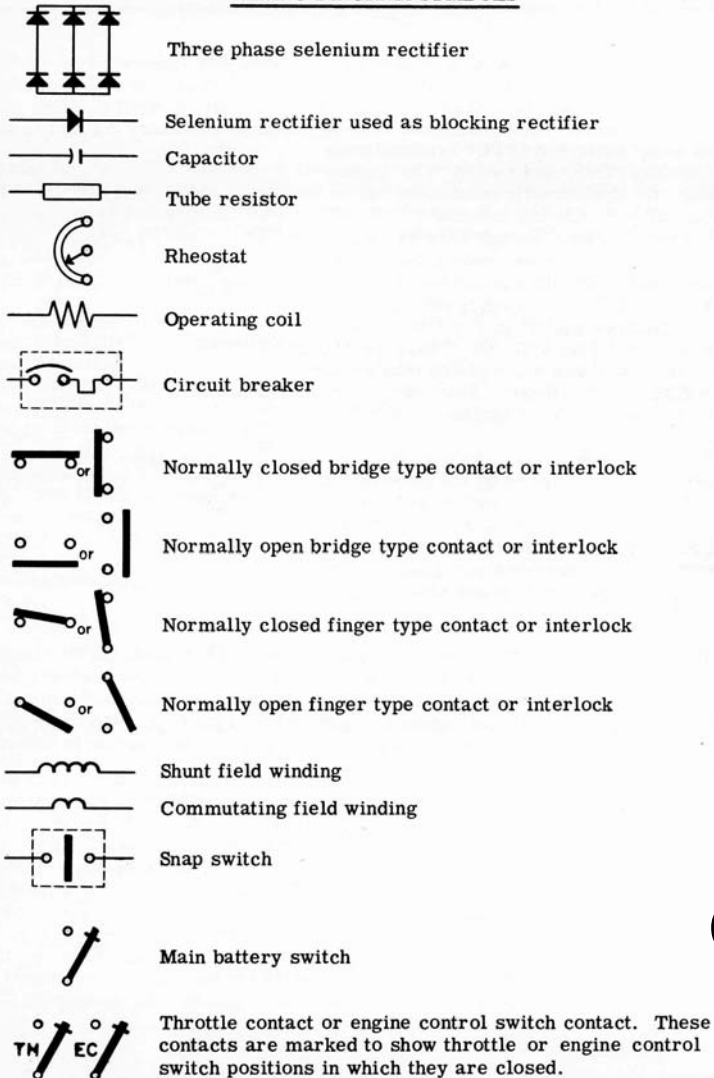
ALCO-GE 44 TON LOCOMOTIVE



TYPICAL LIGHTING AND AUXILIARY CIRCUIT

ALCO-GE 44 TON LOCOMOTIVE

WIRING DIAGRAM SYMBOLS

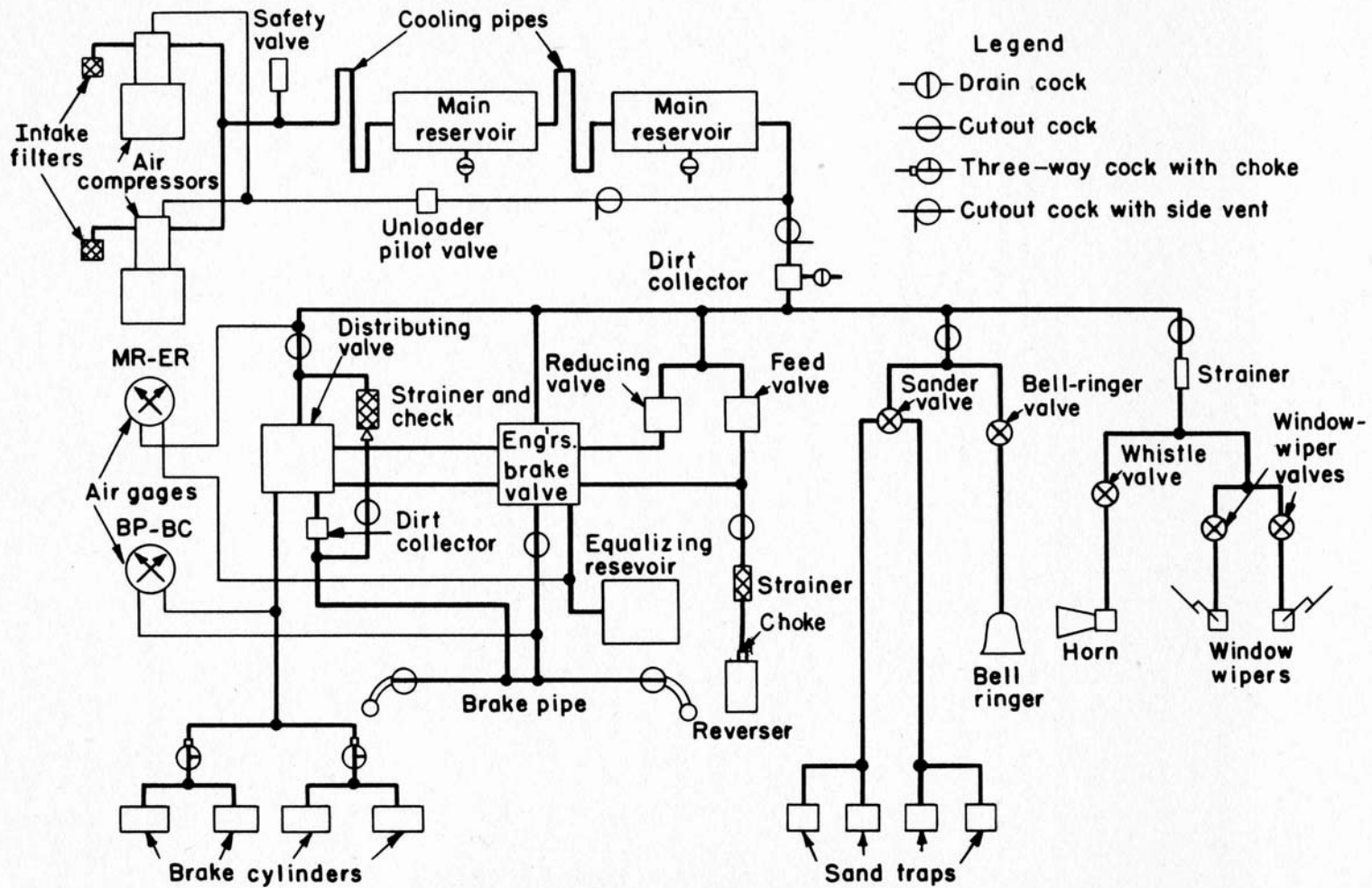


CONDITION	THROTTLE SWITCH		CONTACTORS												RELAYS*			
	TC		P1	P2	P3	P4	M1	M2	M3	M4	GS1	GS2	EF1	EF2	A1	A2	FSR1	FSR2
	A	B																
NO.1 ENGINE START		●																
NO.2 ENGINE START		●										●						
IDLING		●																
FULL FIELD RUNNING	LOW SPEED	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	HIGH SPEED	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
REDUCED FIELD	MOMENTARY	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	RUNNING	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
MAX. SPEED CONNECTION WITH NO.1 ENGINE SHUT DOWN & WITH CO1, CO2, & NO.1 EXCITER FIELD SWITCHES OPEN		●			●	●								●		●		
MAX. SPEED CONNECTION WITH NO.2 ENGINE SHUT DOWN & WITH CO3, CO4, & NO.2 EXCITER FIELD SWITCHES OPEN		●		●	●			●	●				●		●			
MAX. SPEED CONNECTION WITH A MOTOR CUT OUT	NO.1 CO	●		●	●	●							●	●	●	●		
	NO.2 CO	●		●	●	●				●	●		●	●	●	●		
	NO.3 CO	●		●	●	●			●	●			●	●	●	●		
	NO.4 CO	●		●	●	●			●	●			●	●	●	●		

* THIS TABLE INDICATES THE POSITION OF THE ARMATURE OF FIELD-SHUNTING RELAYS FSR1 AND FSR2; THE RELAY CONTACTS ARE NORMALLY CLOSED WITH THE OPERATING COILS DE-ENERGIZED AND THE ARMATURE OPEN.

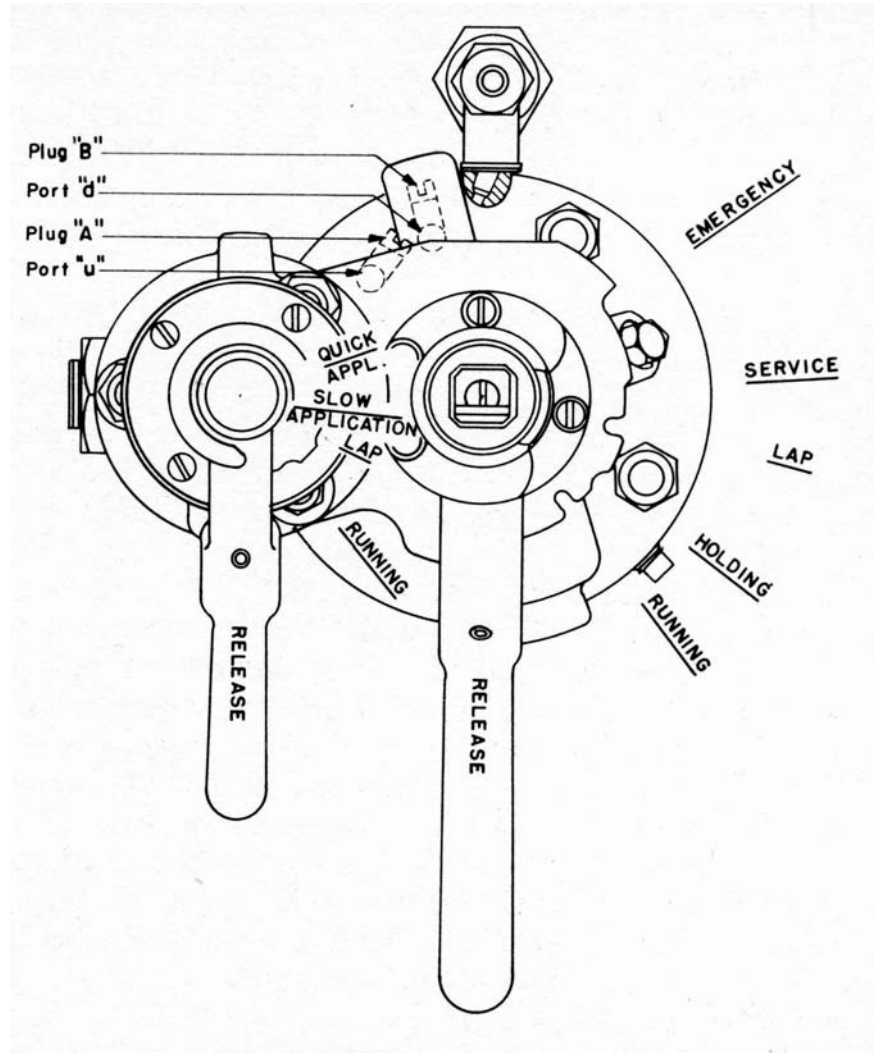
WIRING DIAGRAM SYMBOLS AND CONTROL SEQUENCE CHART

ALCO-GE 44 TON LOCOMOTIVE



AIR SYSTEM SCHEMATIC DIAGRAM

ALCO-GE 44 TON LOCOMOTIVE



INDEPENDENT AND AUTOMATIC AIR BRAKE HANDLES