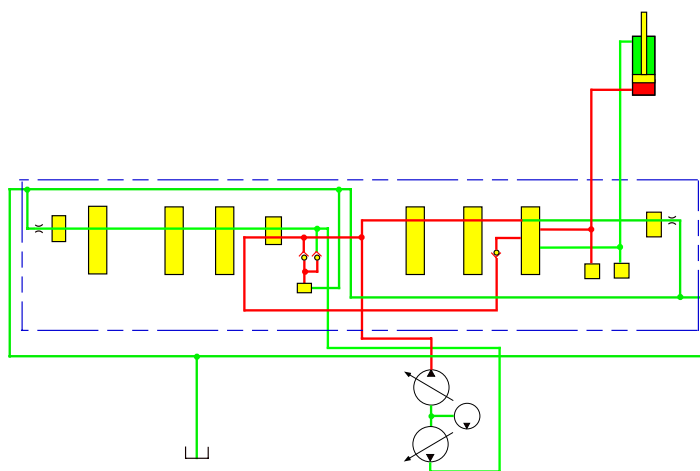


# CATERPILLAR®

## Service Training MALAGA

### *320B/330B Hydraulic Excavators*

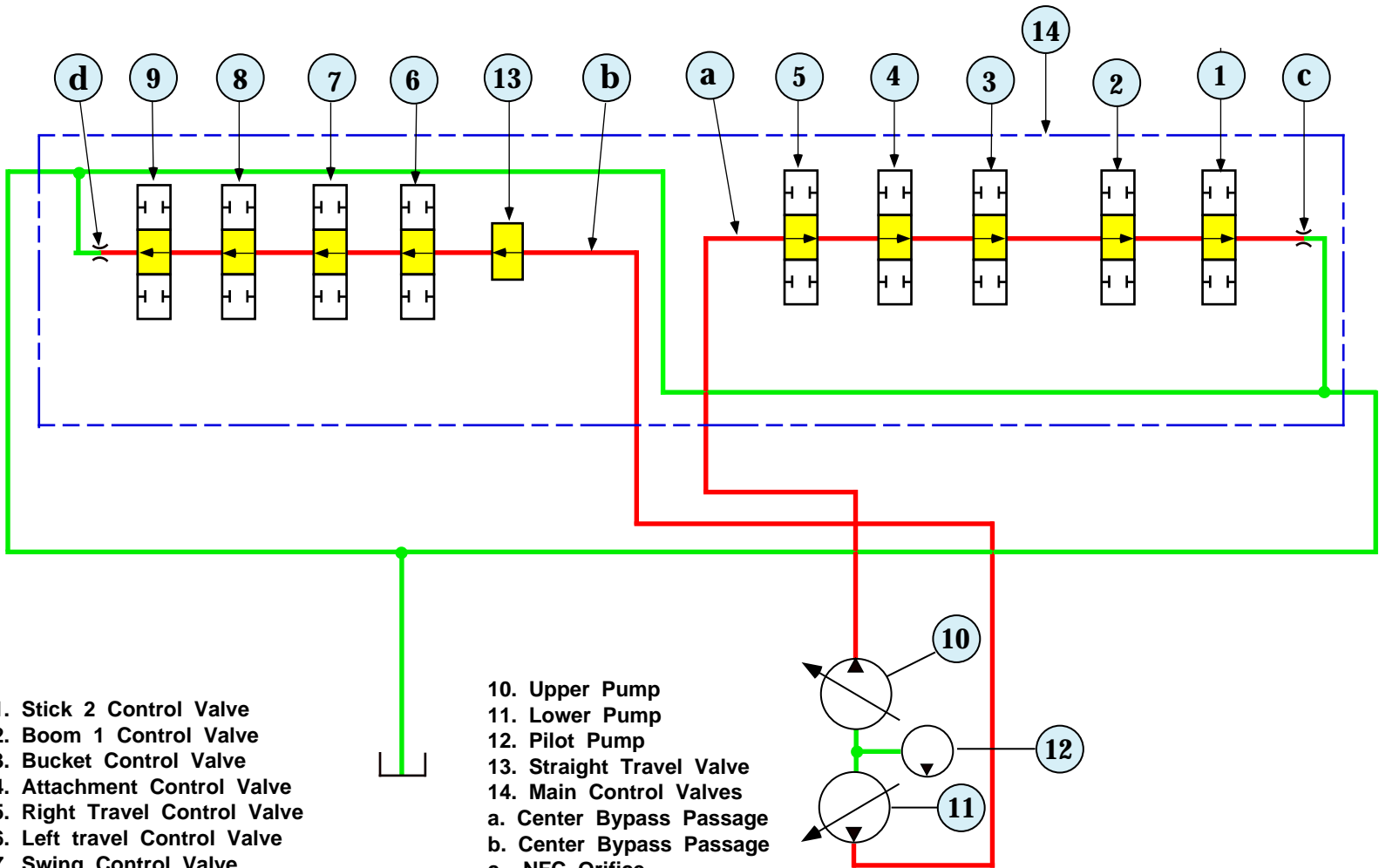
#### IV. IMPLEMENT & TRAVEL SYSTEM



The hydraulic system main control valve is similar to the 300A control valve arrangement that includes the attachment control valve as standard equipment. The control valve group has two negative flow control valves, a straight travel valve, a parallel tandem logic valve and a selector valve.

Francis  
June 97

# MAIN CONTROL VALVE FLOW ILLUSTRATION (IN NEUTRAL)



- 1. Stick 2 Control Valve
- 2. Boom 1 Control Valve
- 3. Bucket Control Valve
- 4. Attachment Control Valve
- 5. Right Travel Control Valve
- 6. Left travel Control Valve
- 7. Swing Control Valve
- 8. Stick 1 Control Valve
- 9. Boom 2 Control Valve

- 10. Upper Pump
- 11. Lower Pump
- 12. Pilot Pump
- 13. Straight Travel Valve
- 14. Main Control Valves
- a. Center Bypass Passage
- b. Center Bypass Passage
- c. NFC Orifice
- d. NFC Orifice
- e. Return Passage