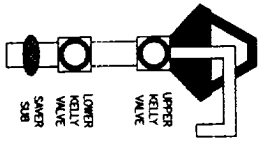
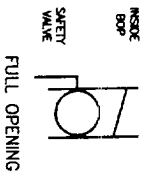


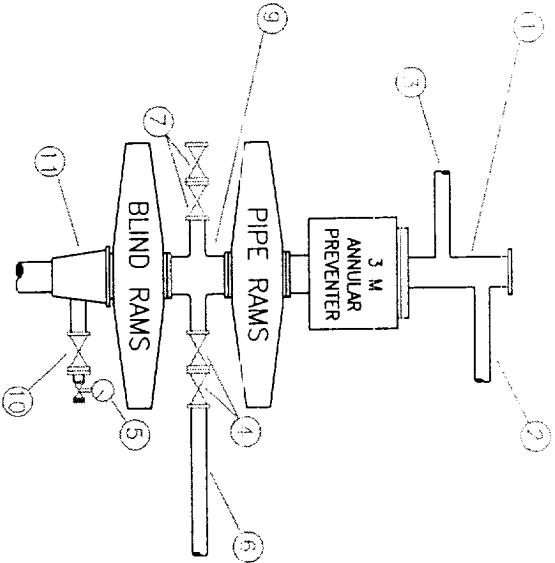
DRILLSTRING CONTROL DEVICES



ON DRILL FLOOR



BOP STACK



- 1 BELL NIPPLE
- 2 FLOW LINE
- 3 FILL-UP LINE
- 4 3" FE PRESSURE-OPERATED CHOKE LINE VALVE
- 5 PRESSURE GAUGE
- 6 3" CHOKE LINE TO CHOKE MANIFOLD
- 7 3" FE GATE OR PLUG VALVES
- 8 2" KILL LINE
- 9 DRILLING SPOOL
- 10 2" SE OR FE GATE VALVE WITH NEEDLE VALVE
- 11 CASING HEAD HOUSING

CHOKE MANIFOLD

DISCHARGE MANIFOLD OPTIONAL FOR LAND RIGS

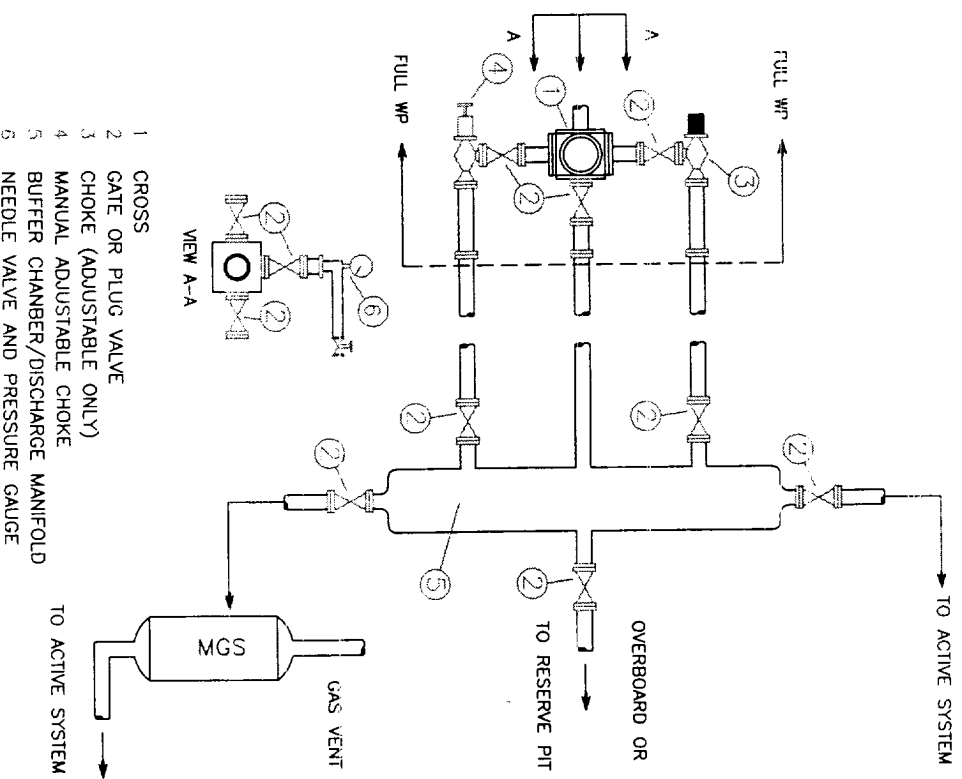


Fig. 2.4. Class 2 BOP and Choke Manifold