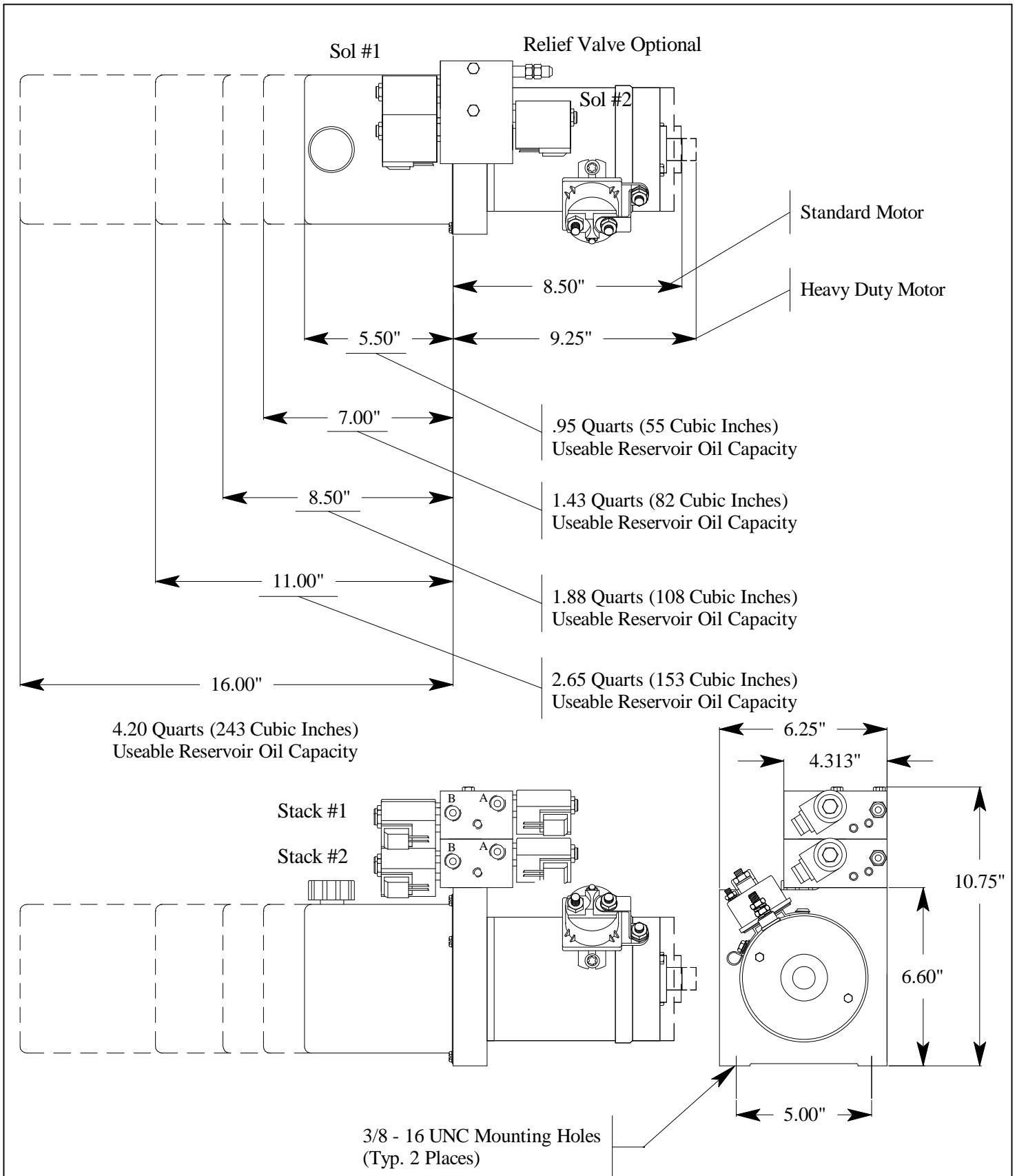


# #12/12 Stacked Valve – DC Unit Layout

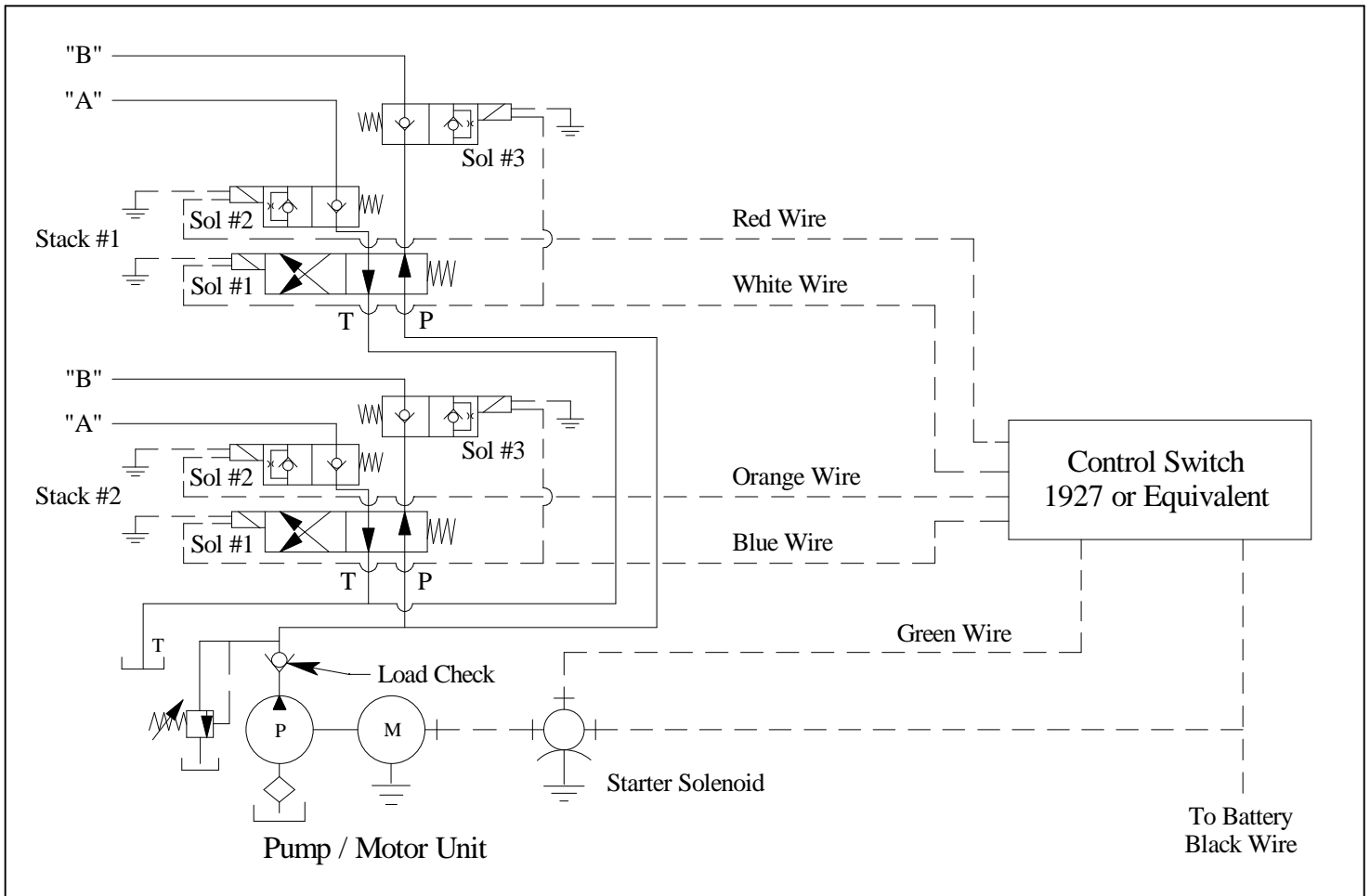


**Description :**

12 Volt DC Piston/Gear Pump Unit with two-stack #12 Valves.

One 4-Way, 2-Position Solenoid Valve and two Solenoid Operated N/C Check Valve in each Stack

# #12/12 Stacked Valve – Schematic



## System Function (Each Valve Stack)

Energizing Power unit, Sol # 1, and Sol # 3, oil is directed to Port "A" and oil from Port "B" is directed back to tank ("T" Port).

Energizing Power unit and Sol # 2, oil is directed to Port "B" and oil from Port "A" is directed back to tank ("T" Port).

## Application (Each Valve Stack)

1. Power up / Power Down
2. Power extend / Power retract

## Note :

When either one of the #12 valves are actuated, both hoses of the other valve will pressurize. This is normal in this design.

## Valve Characteristics (Each Valve Stack)

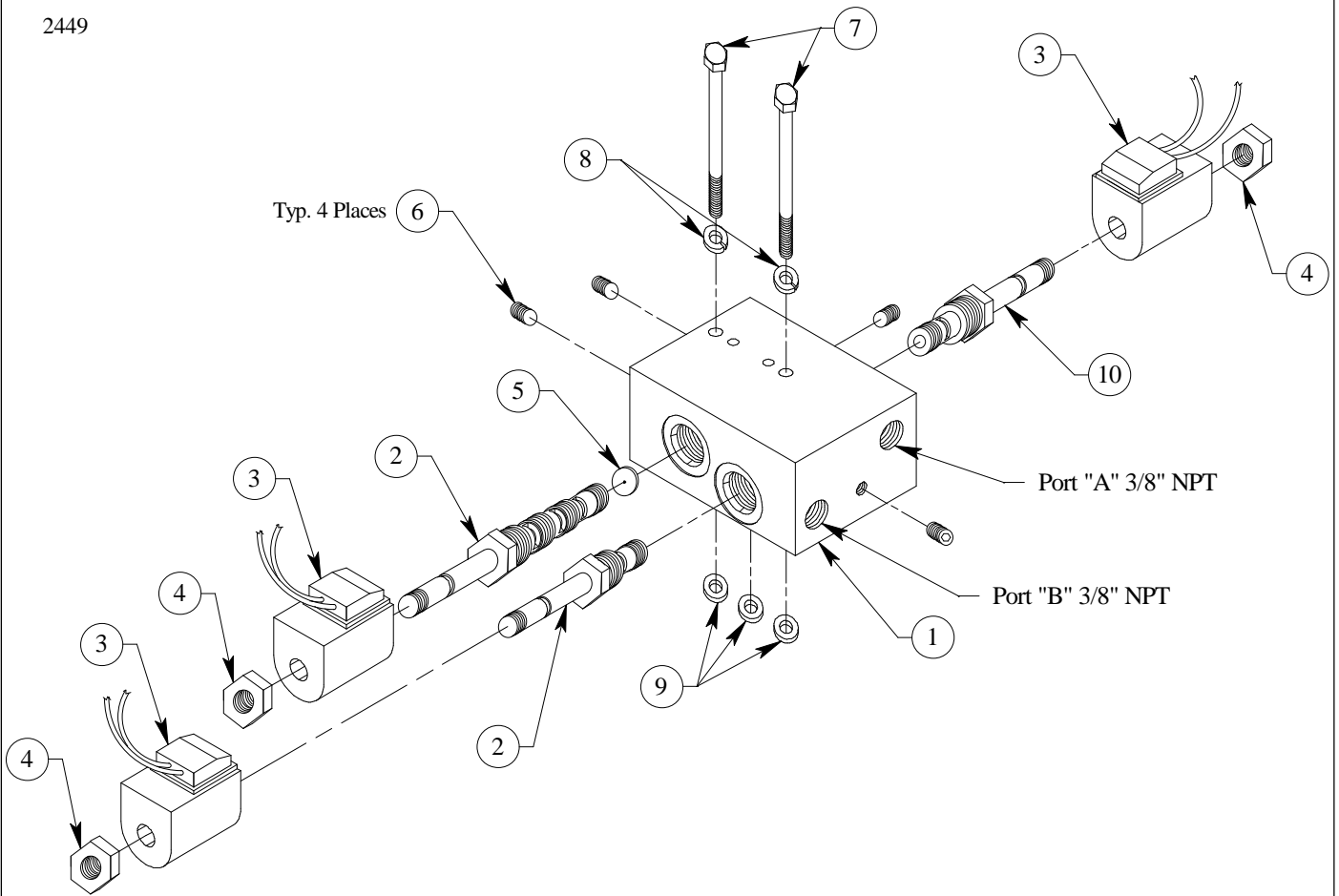
1. Uses one 4-way, 2-position spool type cartridge valve and two 2-way NC P.O. poppet type check valves, solenoid operated.
2. Aluminum manifold block machined for one 4-way, 2-position cartridge valve, two 2-way check valves and with two 3/8" NPT Ports.
3. On stack #1, "B" port relief is plugged. In applications where a low pressure relief is required, a #24 valve is recommended.

## Limitations (Each Valve Stack)

1. When lifting and/or holding a load, use port "A".
2. If valves are used in an application in which a cylinder is to be lowered with a load on it (overriding load), it should be noted that pressure surges can occur in the load holding hose on the valve that is being operated.
3. This valve is stackable from the factory up to three valves.
4. Horizontal Mounting.

# #12/12 Stacked Valve – Assembly

2449



Note: Torque Valve Bolts to 108 in./lbs.

Drawing No.	Part No.	Quantity Req'd	Part Description
1	2497S	1	Block, Solenoid Valve Stackable
2	2704	1	Cartridge Only, 4-Way, 2-Position, Valve
3A	2705	3	12 Volt Coil
3B	2706	3	24 Volt Coil
3C	2707	3	110 Volt Coil
3D	2708	3	220 Volt Coil
4		3	Nut Only, Cartridge Valve
5	2046	1	Orifice Disk, .050 Dia.
6	1579	4	Plug, 1/16" NPT w/Sealant
7A	1970	2	Cap Screw, 1/4"-20 x 4.5" GR 8 Pltd (2-Stack Valve)
7B	1980	2	Cap Screw, 1/4"-20 x 6.5" GR 8 Pltd (3-Stack Valve)
8	1290	2	Washer, Lock (1/4" I.D.)
9	1606	3	O - Ring, #2 - 010 Valve Seal
10	2703	2	Cartridge Only, 2-Way, 2-Position, N/C Check Valve