



PRODUCT STANDARD

HYDERABAD

Prod. Std. No. GT51140

REV. No. 06

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HYDRAULIC MANIFOLD ASSEMBLY

1.0 DESCRIPTION:

The hydraulic manifold is part of the high pressure hydraulic supply system and provides a convenient means of inter connecting a number of small components reqd in this subsystem. It is located in a compartment above the oil tank.

2.0 OPERATION:

The path of oil flow through the manifold is described as follows. (Refer Scheme -Fig. 1 in page 3)

Oil from the hydraulic pump enters the manifold and is ported directly to check valve inlet with branches to air bleed valve and to the relief valve. If the oil pressure is above the relief valve setting, the relief valve will open and relieve the oil directly to drain at a rate sufficient to just maintain the set pressure at the valve inlet. The air bleed valve allows any air that may be trapped in this portion of the supply system to escape during the pump startup cycle. The check valve prevents back flow from the system and also isolates the two relief valves in a dual pump installation.

3.0 SYSTEM COMPONENTS:

All the valves coming in Hydraulic manifold assembly should be of M/s Vickers make only. Other makes are not acceptable. M/s Vickers Model Nos are given below.

3.1 RELIEF VALVE:

Type	:	Adjustable pilot – operated valves.
Flow	:	80 LPM
Pr. Relief Range	:	35 to 140 Kg/cm ²
Model No.	:	CG-06-C- 50
Set pressure	:	94.89 ± 1.75 Kg/cm ² (g)

3.2 CHECK VALVE:

Max Flow	:	80 LPM
Max Pressure	:	210 Kg/cm ²
Free low Pr drop	:	0.5 to 2 Kg/cm ²
Model No.	:	C4G-815-S19

Revisions :

Refer to record of revisions

Prepared :

(Y. V. RAO)

Approved :

(B. I. B.)

Date :

4.4.91



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3.3 AIR BLEED VALVE :

Valve closing pressure: 9.5 Kg/cm²
 Model No. : ABS-03-10-IN80

All these components are to be assembled on a manifold with internal drilling for passages and with required inlet, outlet, vent & drain connections.

4.0 DOCUMENTATION :

- 4.1 Manufacturing drawings and Quality plan are to be submitted for BHEL approval prior to manufacture.
- 4.2 4 copies of Test Certificates to be enclosed with each consignment.
- 4.3 15 copies of O&M manuals with catalogues of components to be enclosed with each consignment.
- 4.4 4 copies of Guarantee Certificates to be sent for each consignment.

TABLE - I

BHEL VAR NO.	DESCRIPTION	BHEL Material Code	WT in (kg)	REMARKS
01	HYD MANIFOLD ASSLY. AS PER FIG - 1	GT9751140013	7.0	
02	RELIEF VALVE VICKERS MODEL:CG-06-C-50	GT9751140021	1.5	
03	AIR BLEED VALVE VICKERS MODEL:ABS-03-10-IN80	GT9751140030	1.0	
04	CHECK VALVE VICKERS MODEL:C4G-815-S19.	GT9751140048	1.0	

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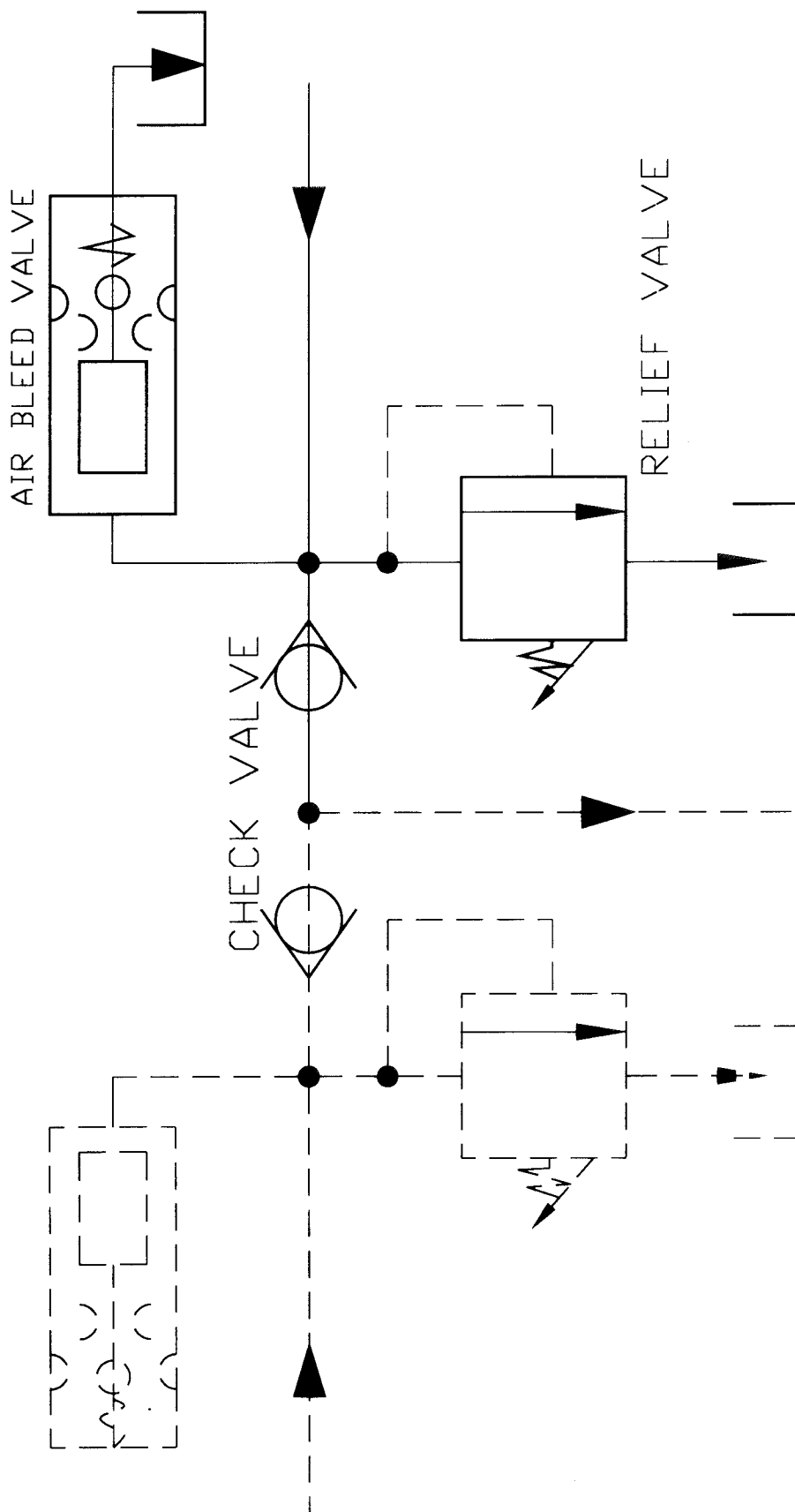


FIG-1

Form No.,



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