

ANNEXURE II

TEST FACILITY FOR E70 BRAKE SYSTEM

1.0 SCOPE

The test equipment offered are essential units required for performance testing of different type of brake valves of E-70 Brake System of SAB WABCO DAVIES & Metcalfe, UK design.

2.0 DESCRIPTION

The test facilities being to offer are used to test the following valves of E70 brake system of M/s SAB WABCO Davies & Metcalfe, UK design as per the latter's test specifications.

S#	D&M Pt#	FTIL PT#	Name of the Valve
1	AB224-T6	002 0076 00	Compressor Check Valve
2	AB224-T3	002 0077 00	Compressor Check Valve
3	AB799-T2	003 0405 00	Latched Isolating Cock-Vented
4	AB799-T1	003 0400 00	Latched Isolating Cock-1.1/4"
5	650-1330		Auxiliary Compressor Delivery Hose
6	650-1330	028 0041 00	Compressor Delivery Hose
7	650-1331	028 0046 00	Compressor Delivery Hose
8	650-716S	032 0025 00	Brake Supply Reservoir
9	650-712S	032 0030 00	Brake Supply Reservoir
10			All Types of Flexible Hose
11	AB81-T5	022 0075 00	Double Check Valve 3/4"
12	Z1350	029 0090 00	Air Line Sieve
13	V23-T4	002 0080 00	Unloader Exhaust Valve 1"
14	V23-T14	002 0079 00	Emergency Exhaust Valve 1.1/4"
15	AB140-T10	010 0010 00	Auto Drain Valve
16	AB 153-T14	009 0205 00	Drip Cup with Auto Drain Valve
17	AB751-T3	607 0015 00 607 0016 00	End-Cock 1.1/4" BP & FP
18	AB121-T35	007 0030 00	End Cock 1" RH
19	AB121-T36	007 0031 00	End Cock 1" LH
20	AB441-T2	014 0010 00	Two Way Horn Valve
21	EF4946&FF 4947	024 0010 00	Safety Valves
22	AB900-W37	003 0415 00	Emergency Exhaust Valve-Panel Mounted
23			All types of isolating Cock W/W/o Vent

24	AB62-T11	033 0010 00	Pressure Control Valve
25	AB759-W415	006 1150 00	SPB Equipment Manifold Assy.
26	AB759-W17	006 1160 00	Direct brake manifold Assy
27	AB759-W404	006 1170 00	Sanding Equipment Manifold Assy.
28	AB759-W414	006 1140 00	Pantograph Equipment Assy.
29	AB759-W429	006 1200 00	Auxiliary Flange Lubrication Assy.
30	AB519-T25	016 0010 00*	E70 Control Unit
31	AB759-W398	006 1120 00	Distributor Equipment manifold Assy.
32	AB578-W398	006 1130 00	EBC/5 Blending Unit
33	FF5684/E	013 1100 00	Latched Solenoid Valve
34	AB901-W8	002 0075 00	Double Check Valve
35	AB519-W25	016 0020 00	Pressure Regulator Valve
36	AB42-W1	018 0020 00	D2 Relay Valve
37	AB900-W41	018 1010 00	Direct Brake Pilot Valve
38	AB903-W1	012 0010 00	Flow Meter Relay Valve
39	AB907-T4	017 0090 00	Pressure Regulator
40	AB759-W390	009 0020 00	Check Valve with Strainer 1/2"
41	AB3-T1	004 0010 00	Direct brake Valve FD1
42	AB489-T10	034 0010 00	Driver's brake Controller
43	AB58-T5	011 0010 00	Anti-Slip Valve
44	AB154-T10	009 0010 00	Centrifugal Air Strainer
45	AB776-T7	019 0010 00	Break Away Two protection Valve
46	AB914-W47	013 0050 00	Brake Cut Out Valve
47	AB725-W14	017 0010 00	Limiting Valve
48	AB725-W14	017 0040 00	Limiting Valve
49	AB901-W12	017 0020 00	Control Reservoir Retaining Valve
50	AB85-T4	002 0078 00	Duplex Check Valve
51	AB903-T4	002 0085 00	Venturi Check Valve

3.0 TEST FACILITY DETAILS

- 3.1 RBTR-0106 is used to test individual valves/items outside the panel manifold assembly. Refer S.No:1 to 23 of section 2.0 for D&M Part No/FTRTIL Part No of the valves which can be tested in this test rig.
- 3.2 RBTR-0102 is used to test all sub-assembly manifolds of the brake frame. Refer SI.No:24 to 31 of Section 2.0 for D&M part No/FTRTIL Part Number of the valves which can be tested in this test rig.
- 3.3 RBTR-0103 is used to test all individual valves mounted on the panel manifold assembly. Refer SI.No: 32 to 51 of Section 2.0 for D&M Part No/FTRTIL part No of the valves which can be tested in this test rig.

4 Requirements for the test facility

The General layout for location of all the four test facilities are given in the overall view of Test Rigs is as per Annexure enclosed. As desired in the tender we have quoted 3 Test Rig to FTIL Part Nos. RBTR-0106, RBTR-0102 & RBTR-0103.

- 4.2 The pipe size suggested upto the entry of each test rig shall be 32NB (min). The material of the pipe shall be any corrosion resistant one like PU & Nylon Tubes.
- 4.3 The flow rate of the compressor with inter-after cooler shall be 2000 Litres per min. However, a minimum pressure of 11 bar is to be ensured in each of the pressure gauge of the respective test facility before starting the test on that test facility.
- 4.4 A compressor check valve to prevent reverse flow and a safety valve to ensure safety of the system is required.
- 4.5 A drip-cup with auto drain valves and an auto drain valve at the main reservoir 1 is required to ensure clean and avoid moisture entering the air dryer.
- 4.6 Main Reservoir 1 is required to ensure hot air not entering the air dryer system.
- 4.7 Main reservoir 2 is required to maintain the required volume in the test facility
- 4.8 The Air Dryer is included in the system to ensure dry unsaturated air reaches the test facility.
- 4.9 The size of each test facility and space to be provided between each test facility shall be taken as approximate.
- 4.10 The water getting accumulated in the reservoir shall be drained off atleast once in a week by opening the manual drain cock.
- 4.11 All the auxiliary equipments shall be chosen or treated accordingly to resist any corrosion.

