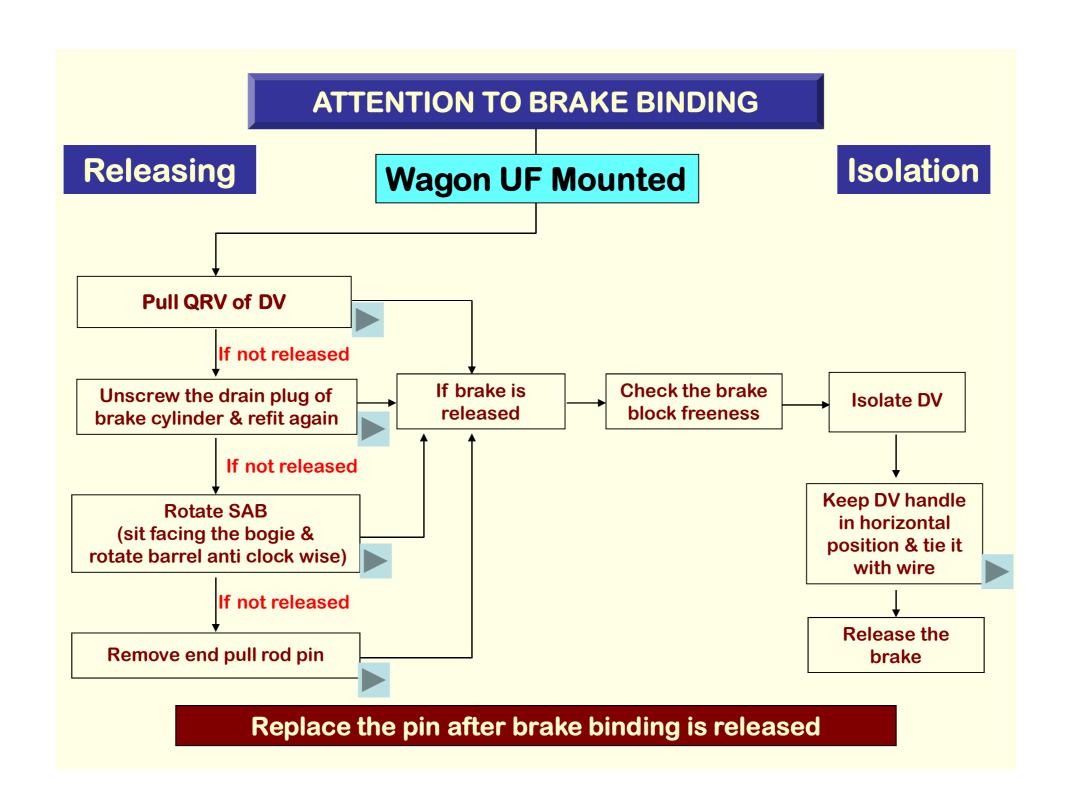
#### **BRAKE BINDING**

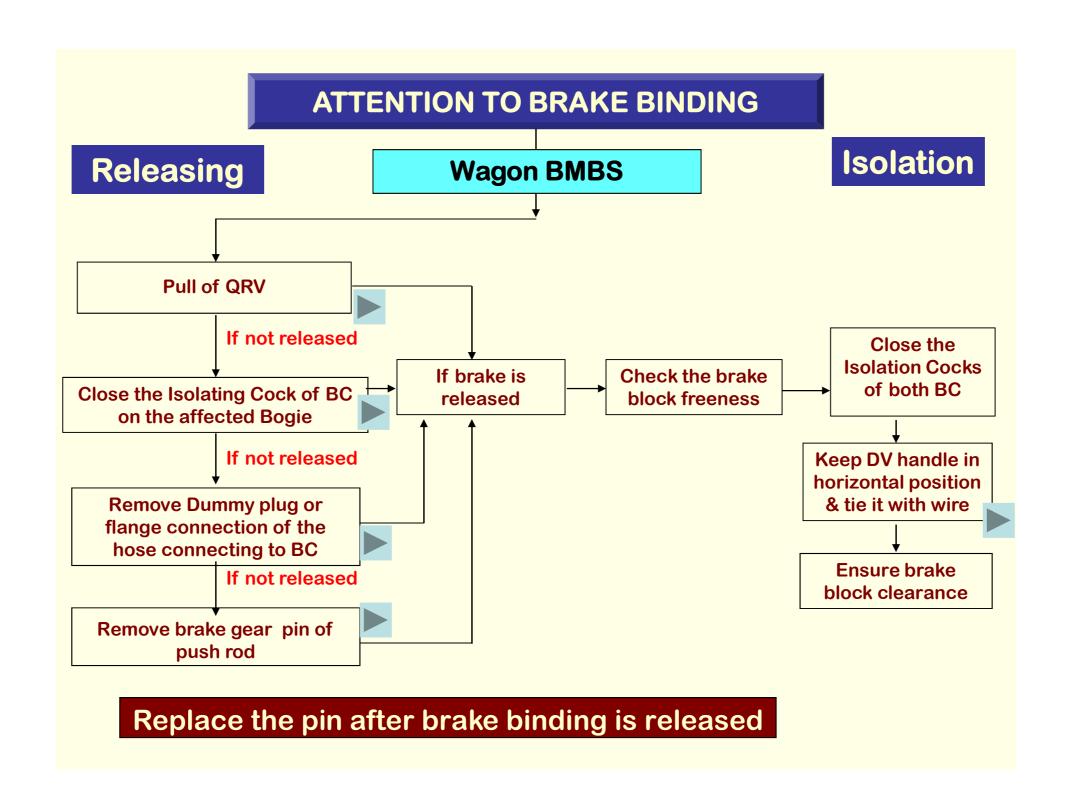
- During releasing, due to various reasons, the brakes will not release and the wheels will not rotate freely. This is called BRAKE BINDING.
- It can be ensured, by checking the freeness of brake block, apart from the indications like smoke, heat (brake block & wheel) etc.

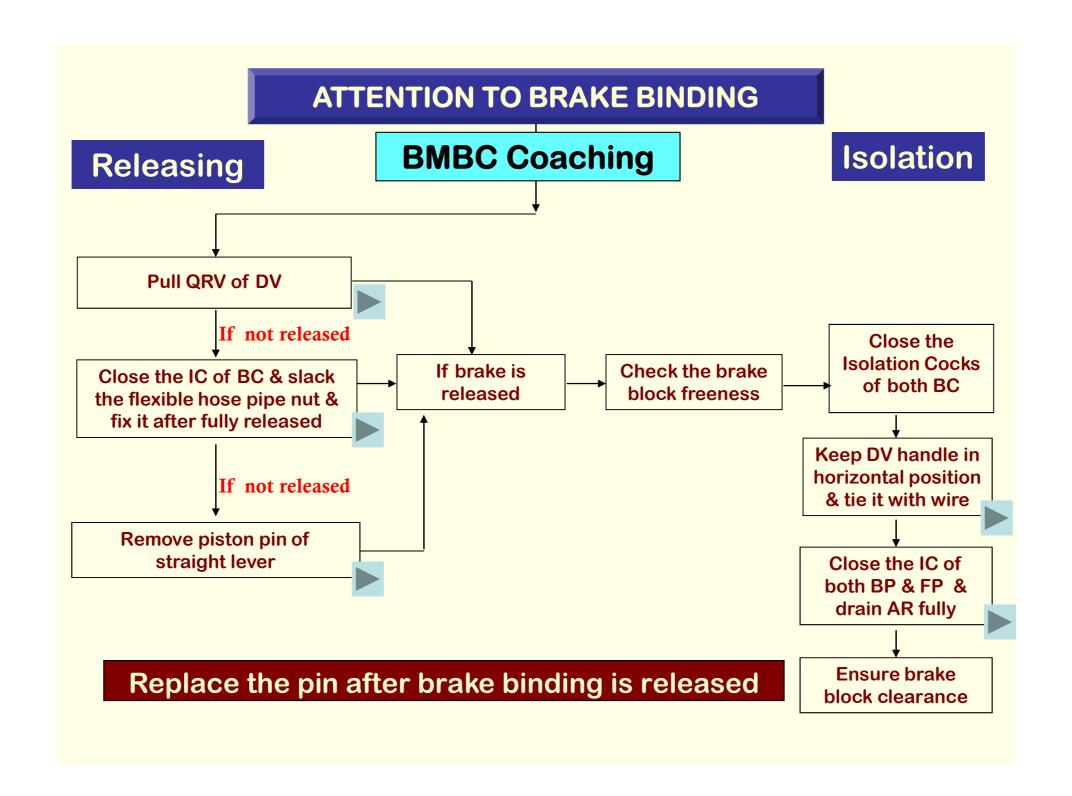
# **Tools required**

When it is required to attend brake binding in Air braked coaches/wagon take the following tools before getting down from the loco:

- Spanner DE 19 22 (Dirt Collector)
- Spanner DE 13 16 (Brake cylinder plug screw, Air pipe flange joint, Bolt & nut and flexible hose of BMBC)
- Spanner DE 27 and 46 for LHB Brake cylinder
- Hammer ball peen
- Pin punch with 10mm dia tip







- Reset the alarm chain apparatus
- If leakage still continues, close the isolating cock of the alarm apparatus and work the train.



**Handle Position** 

Open : Along pipeline.
Close : Across pipe line.

Isolating cock



- In case of brake binding, the brake indicator of the affected bogie will show red colour.
- Pull the release lever of DV

**Faively** 



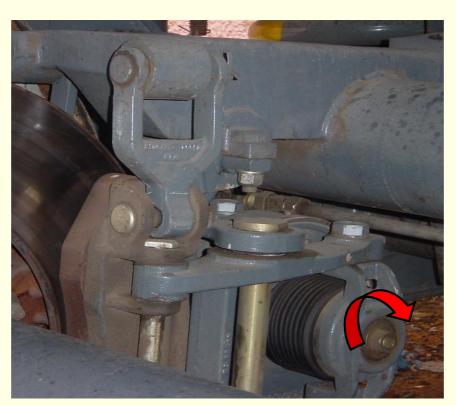
**Knorr Bremse** 



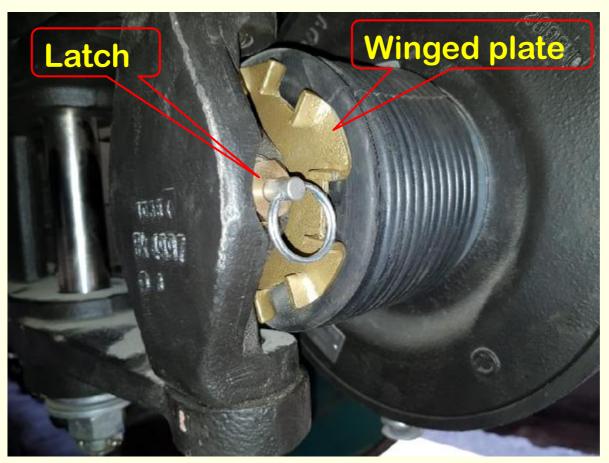
Rotate the isolation cock of the affected bogie provided on the brake panel in anti-clockwise direction by 90 degree to release and isolate the brake cylinders of the affected bogie



• If brakes are released, brake indicator of the affected bogie will change colour from red to green as shown. Check that the brakes are released by shaking the brake calipers. If brakes are released, work the train



Even after isolating the Bogies if the brake binding prevails, loosen the hexagonal nut of the brake cylinder by spanner 27 no for all coaches and 46 no for WLRRM. Ensure the brakes are released by shaking the calipers and work the train.

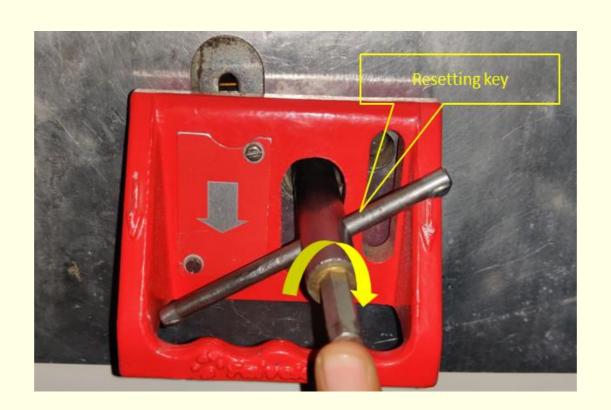


For Escort design the latch has to be pulled by ring and rotate the winged plate clock wise. Ensure the brakes are released by shaking the calipers and work the train.

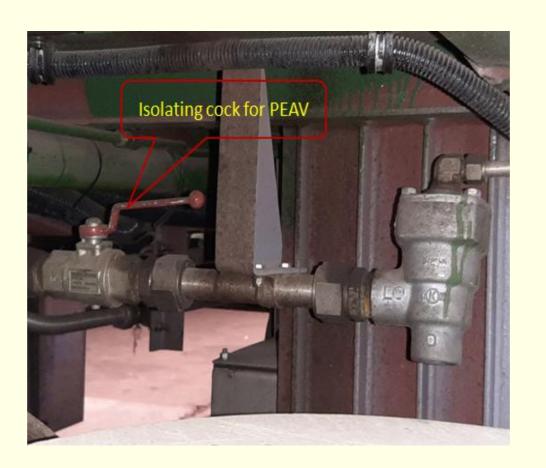




 In the case of ICC the visual indicator out side the coach will glow and the pull box lever will be in pulled down condition and red LED on the pull box will be glowing



Re-setting is done by rotating the re-setting key in the PEASD box inside the cabin in clockwise direction, the lever will go up and the LED will switch off



If the air leakage does not stop even after resetting, then isolate the PEAV isolation cock provided under the coach

#### **INSTRUCTIONS**

- Ensure that the Airflow indicator reading is stable and reached the same level as it was before starting of the train from the originating point.
- Wait for 1.5 minutes in case of twin type system and 3 minutes in case of single pipe system after emergency brake application. This is necessary to allow the release of brake on full formation.

- While Loco Changing, to over come difference of BP pressure maintained by two different locos, ensure entire coach/ wagon of the train are released manually and then only create air pressure in BP pipeline with the loco attached.
- Never forget to ensure continuity of air with guard, at rear of the formation.
- Ensure MR in loco is drained whenever train halts.

- Never forget to apply formation brakes when train is detained in gradient sections
- Ensure that the gauges are provided in the brake van & required air pressure level is maintained.
- In originating trains, ensure that the hand brakes are released before starting.
- Ensure that the load empty lever is placed in appropriate position.

• When the train is detained in a gradient section ensure that the Hand brakes are applied in brake van and are released before starting.











