



OPERATION OF BPW 'LL' SERIES SELF-STEERING AXLE



CONNECTIONS

1. Ensure that the electrical connections have been made correctly from the trailer to the tractor unit via the ISO7638, and/or 24N and 24S plugs.
2. Ensure that the air connections have been made correctly from the trailer to the tractor unit via the couplings and that the air suspension is at normal ride height.
3. Connection of the emergency feed line through the air suspension will activate the axle into steering mode. Steering mode is automatically activated until such time that:
 - a) Emergency line is disconnected.
 - b) Reverse gear has been selected.
 - c) Manual override has been engaged.
4. Ensure that the manual override valve is in the open position - [see Drawing SK-0003 A.](#)

Driving Mode (FORWARD)

BE AWARE

Whilst driving, observe the following:

- a) When entering a corner or junction, the trailer will follow more closely to the line taken by the tractor unit.
- b) Exaggeration of rear corner "swing out" will occur.
- c) Under normal conditions experience of operating this equipment will be gained in a relatively short time.



Driving Mode (REVERSING)

BE AWARE

Whilst reversing, observe the following:

- a) Under normal operating conditions, selection of reverse gear will automatically prime the locking mechanism.
 - i) Before selecting reverse gear attempt to achieve a situation where the tractor unit and trailer are in a straight ahead position (i.e. all trailer wheels in a straight line).
At this stage, selection of reverse gear will engage the locking mechanism.
 - ii) If it is not possible to align the tractor unit and trailer in a straight ahead position, select reverse gear, select opposite steering lock and reverse the vehicle **slowly** to engage the steering lock - see [Drawing SK-0002 A](#).
- b) Disengaging reverse gear automatically reverts the trailer to normal steer mode.

FAULT FINDING

1. If the steering lock fails to engage check the following points:

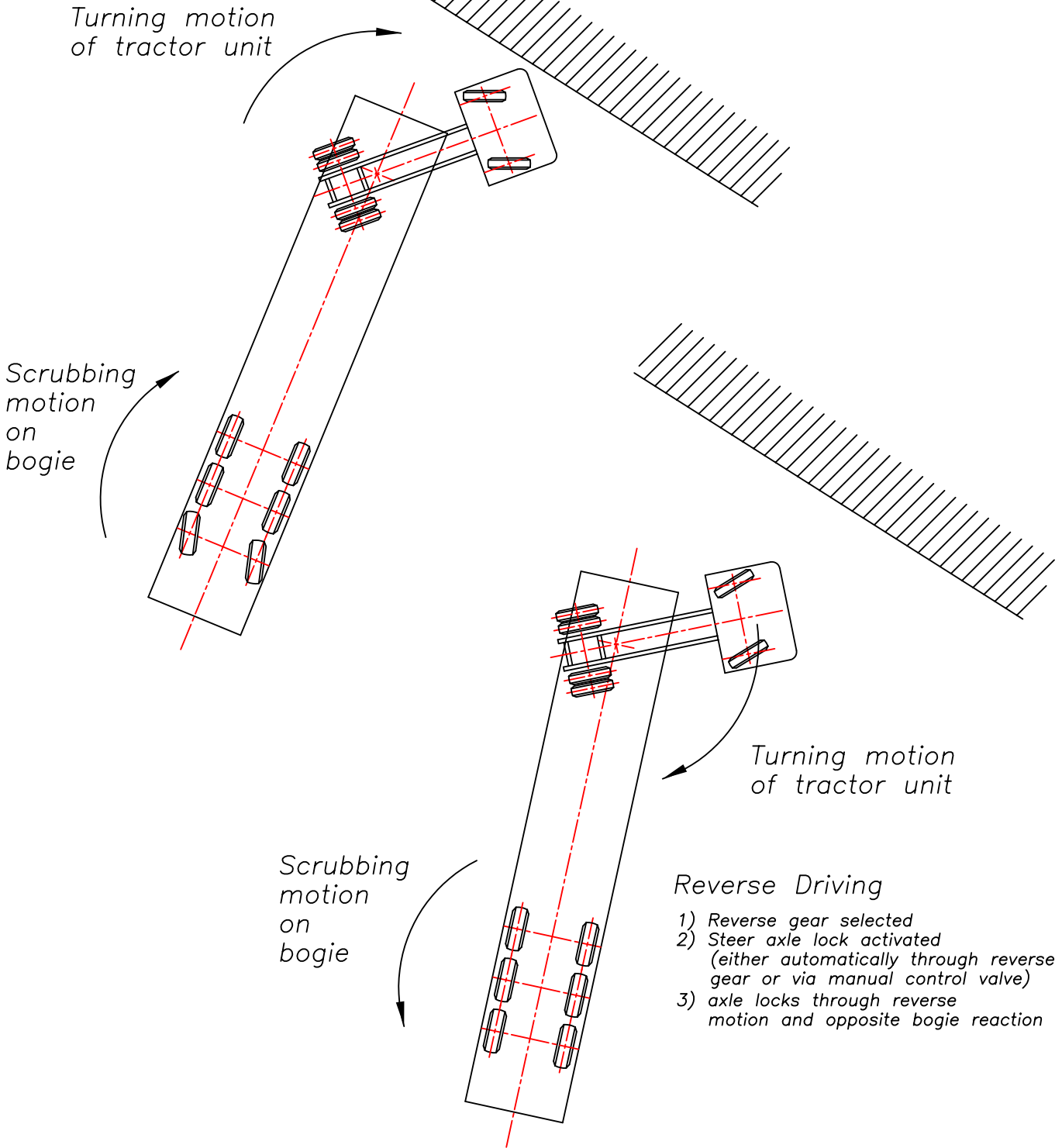
- a) Are the tractor and trailer misaligned? If so, carry out procedure as in a. ii) above.
- b) If the steering lock has gone past the engaged position, (i.e. rear trailer wheels have gone to opposite lock whilst reversing) pull forward and repeat procedures as in a. ii) above remembering to reverse the vehicle **slowly**.
- c) If the tractor and trailer are in a straight ahead position with reverse gear selected and lock fails to engage, operate the manual override valve as in **3** and check to see if the lock operates.

If these fault finding procedures do not rectify the situation, consult your vehicle Maintenance Department.



Driving Forward

- 1) Steer axle unlocked
- 2) Steering response through normal bogie action



Reverse Driving

- 1) Reverse gear selected
- 2) Steer axle lock activated (either automatically through reverse gear or via manual control valve)
- 3) axle locks through reverse motion and opposite bogie reaction

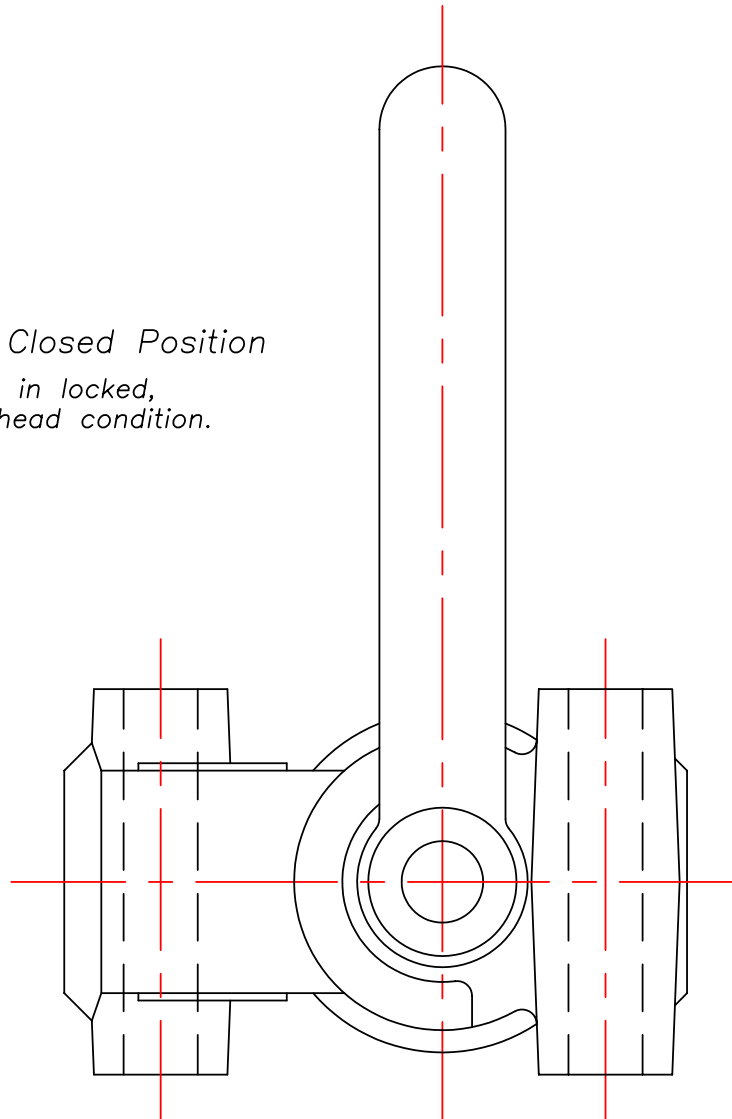
Above notes assume normal connection of air and electrical suzies.

Drawn R Thorpe
 Date 21:11:95
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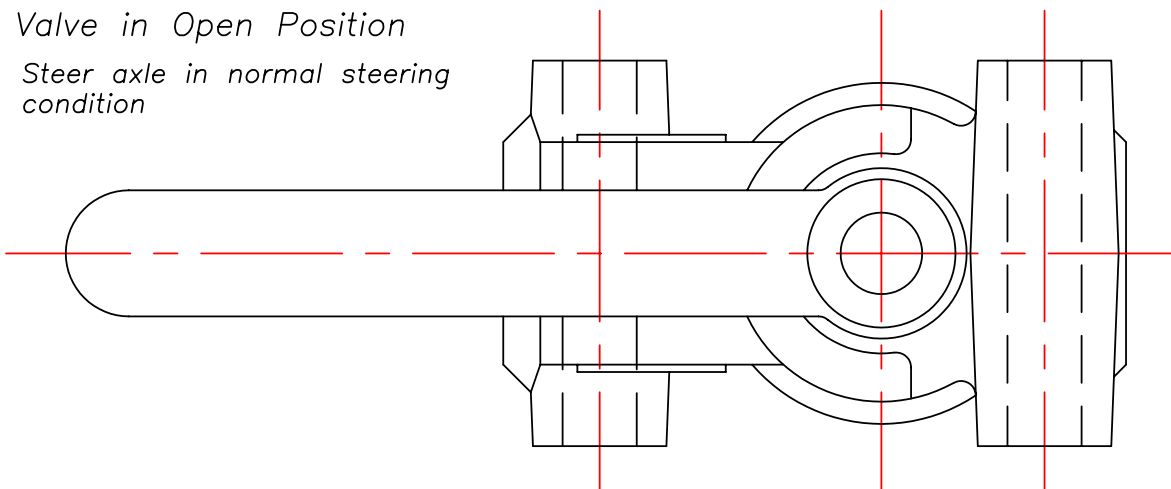
SELF-STEERING AXLE OPERATION DURING REVERSING MANOEUVRES

Drawing No. Rev.
 SK-0002 A

*Valve in Closed Position
Steer axle in locked,
straight ahead condition.*



*Valve in Open Position
Steer axle in normal steering
condition*



Drawn R Thorpe
Date 21:11:95
Scale 1:1
Chkd.

*SELF-STEERING AXLE
MANUAL CONTROL
VALVE POSITIONS*

Drawing No. Rev.
SK-0003 A