



Briggs Irrigation  
Boyle Road  
Corby  
Northants  
NN17 5XU  
Tel: 01536 260338  
Fax: 01536 263972  
E-mail: enquiries@briggsirrigation.co.uk

## Boom Service List

Type ..... Serial Number.....

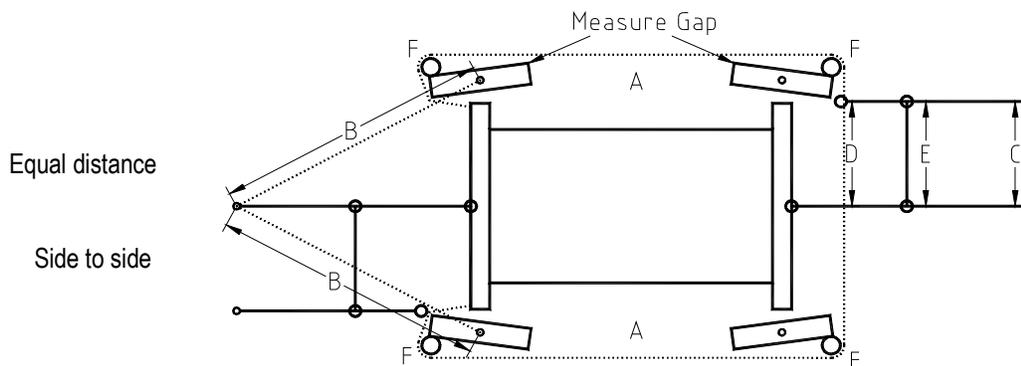
- 1: Check the following components for straightness:
  - Boom Sections
  - Track Rods
  - 4 Wheel Steering Arm
  - Drawbars
  - Straighten if possible or replace.
- 2: Ensure check chains are correctly adjusted to take equal tension on both drawbars.
- 3: Grease all steering joints, Track Rods, Steering Arm, Offset Cross-link, Universal Joints and Kingpins.
- 4: Check the amount of wear on the water feed skid and replace if necessary using 30 x 5 flat steel.
- 5: Dismantle hubs and check wheel bearings. Replace bearings and seals as necessary and repack with grease. Assemble hubs and tension wheel nuts.
- 6: Grease turntable.
- 7: Check boom 'O' rings and replace as necessary. Use Loctite 480 to glue in place.
- 8: Check offset water feed 'O' rings and replace as necessary. Use Loctite 480 to glue in place.
- 9: Offset water feed check that the water feed locking cams are tight. On Pre '97 booms, check 'Bauer' fittings and replace ball and clamp if necessary.
- 10: With the boom folded, adjust the support brackets so they do not carry the weight of the boom.
- 11: Unfold the boom and check all locking catches have the correct tension. Adjust by rotating the mating cam. Grease all locking catch hooks.
- 12: Check condition of hoses and clamps and replace as necessary.
- 13: If the central spinning joint seal was leaking replace it.
- 14: Check the end section wires and adjust as necessary (making sure that they are equally tensioned)

continued

**Boom Service List Continued...**

- 15: Manually check smooth operation of ball valves, rotator jets and sprinklers and ensure valves are open.
- 16: If it has been necessary to straighten or replace steering components, the boom will require the wheel alignment to be checked and reset as follows:-
- Ensure the boom is on a flat surface.
  - Disconnect centre 4 wheel steering arm.
  - Slacken the drawbar chains and rest drawbars on stands approximately 500mm from the ground.
  - Measure from centre of the drawbar to the centre of the kingpin, (Line B) to centralise. Set both drawbars. Take care not to knock these while carrying out other checks.
  - Tension a string around the outside of 4 wheels at the centre line of the hub height, (Line A) and tie off to stub axle. Install a 25mm spacer between string and the widest point on each tyre sidewall leading edge. Ensure these are in the same position on each tyre, (F).
  - Measure the gap between the string and tyre wall on the trailing edge of the tyre. This dimension must be 22-23mm giving 2-3mm of tow-in. Adjust the track rod if necessary. Repeat on all wheels and double check.
  - Re-connect central steering arm. Adjust to suit drawbars if necessary.
  - Measure the centre-line between the drawbar and water feed pipe at point D & C. Hold the water feed pipe up to get an accurate measurement at point C. There must be 25-35mm tow-in between point D & C, i.e. point C must be 25mm shorter than D. Adjust this through the link E.
  - Note: on side slopes it may be necessary to adjust water feed pipe tow-in.
  - Check all bolts, nuts and clamps are tight.

**Wheel Alignment - Diagram:**



- 17: On hydraulic raising booms grease the rollers and the roller shafts and store with the ram in the closed position. On the electro-hydraulic pack check oil level and remove battery (disconnect the negative terminal first).

For any other service/maintenance enquiries please contact Briggs Irrigation on:

Tel: 01536 260338

E-mail [enquiries@briggsirrigation.co.uk](mailto:enquiries@briggsirrigation.co.uk)

**Service completed date: ...../...../..... by engineer name: .....**