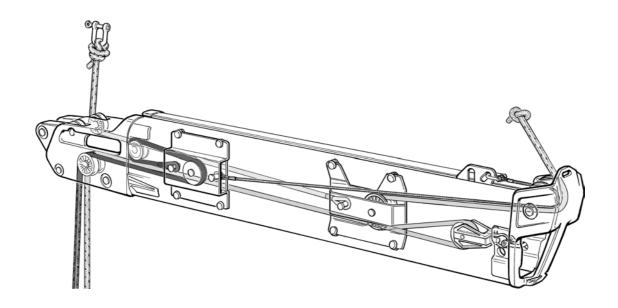
Outhaul block replacement kit

Instructions for fitting the following outhaul blocks

Boom	Block
120/62	538-860-01
143/76	538-861-01
171/94	538-862-01



This kit contains

- Block
- Sikaflex
- Messenger lines
- Instructions

Tools required

- Screwdriver (Phillips/Torx).
- Adjustable wrench or shackle key.
- Needle and thread (for joining messenger lines).
- Knife
- Pliers/Polygrip pliers (for undoing knot in the sail reefing line)

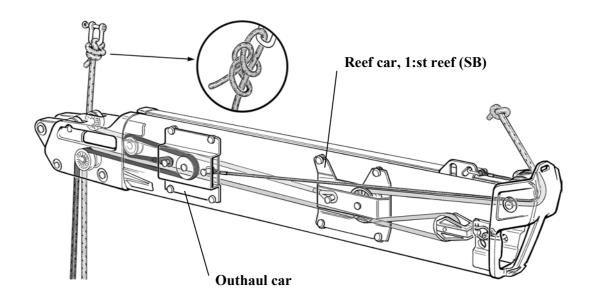


Procedure

Boom 120/62

- 1. Place the aft part of the boom on a level work surface, to avoid loosing small parts. The sail foot groove should be facing upwards.
- 2. Attach a messenger line to the outhaul line.
- 3. Undo the knot for the first reef shackle (starboard side) in the luff of the sail and attach a messenger line. The knot will be tight and tools may be required.
- 4. Remove the aft end of the boom. Screws will be Phillips or Torx, depending on year of manufacture.
- 5. Pull the first reef car backwards with the aid of its aft upper line, and slide it out of the boom. Take care not to loose the wheels from the car as you do this.
- 6. Pull the outhaul block out using the outhaul wire.
- 7. Tension the outhaul line in the boom using the free end of the messenger line, and rotate the block to remove any twists in the line. Place the block on the work surface with it's starboard side downwards.
- 8. With the information stamped on it facing upwards and the arrow pointing aft, place the new block (car) next to the old block.
- 9. Hold the old block in position on the work surface and pull the outhaul line out through the block until the messenger line runs through it.
- 10. Remove the eye of the outhaul line from the old block and attach in the corresponding position on the new car.
- 11. Cut the messenger line where it runs round the old block's sheave, and transfer to the corresponding point on the new car, knotting the loose ends together using a reef knot.
- 12. Undo the shackle of the old block and transfer the outhaul wire, minus shackle, to the new block.
- 13. Seal the ring clip in the new block with Sikaflex to prevent it from snagging the lines.
- 14. Using the free end of the messenger line at the forward edge of the boom, pull the new outhaul car in towards the boom end.
- 15. Insert the outhaul car in the starboard side of the boom with the text upright, fitting the wheels at the same time. The lines for the first reef must lie outside (starboard) of the outhaul block under the shafts of the pulleys. It is important that these lines are not twisted in the boom.
- 16. Finally, re-fit the first reef's car, replacing the wheels in sequence. Keep tension on the messenger line when doing this.
- 17. Apply fresh grease to the screws, and re-fit the boom end.
- 18. Tension the lines and remove the messenger lines.
- 19. Tie stopper knots in all free rope ends.
- 20. Re-attach the forward line of the first reef to its shackle using the special knot, as shown in the diagram.
- 21. Check the movement of the block carriages in the boom.





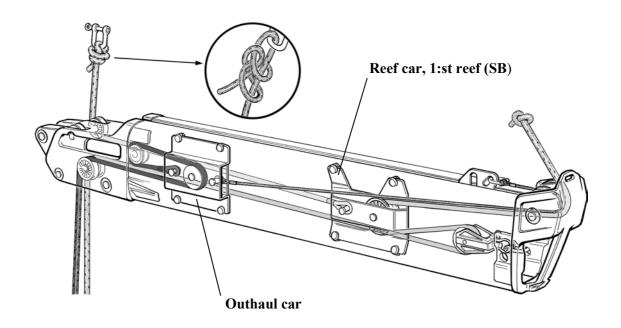
Boom 120/62



Boom 143/76

- 1. Place the aft part of the boom on a level work surface, to avoid loosing small parts. The sail foot groove should be facing upwards.
- 2. Attach a messenger line to the outhaul line.
- 3. Undo the knot for the first reef shackle (starboard side) in the luff of the sail and attach a messenger line. The knot will be tight and tools may be required.
- 4. Remove the aft end of the boom. Screws will be Phillips or Torx, depending on year of manufacture.
- 5. Pull the first reef car backwards with the aid of its aft upper line, and slide it out of the boom. Take care not to loose the wheels from the car as you do this.
- 6. Pull the outhaul block out using the outhaul wire.
- 7. Tension the outhaul line in the boom using the free end of the messenger line, and rotate the block to remove any twists in the line. Place the block on the work surface with the starboard side downwards.
- 8. With the information stamped on it facing upwards and the arrow pointing aft, place the new block(car) next to the old block.
- 9. Hold the old block in position on the work surface and pull the outhaul line out through the block until the messenger line runs through it.
- 10. Remove the eye of the outhaul line from the old block and attach in the corresponding position on the new car. Ensure that the pin is fitted in the block in the same direction as before.
- 11. Cut the messenger line where it runs round the old block's sheave, and transfer to the corresponding point on the new car, knotting the loose ends together using a reef knot.
- 12. Undo the shackle of the old block and transfer the outhaul wire, minus shackle, to the new car. Ensure that the pin is fitted in the block in the same direction.
- 13. Seal the sharp ends of the split pins with Sikaflex to prevent them from snagging the lines.
- 14. Using the free end of the messenger line at the forward edge of the boom, pull the new outhaul car in towards the boom end.
- 15. Insert the outhaul car in the starboard side of the boom with the text upright, fitting the wheels in sequence at the same time. The lines for the first reef must lie outside (starboard) of the outhaul block under the shafts of the pulleys. It is important that these lines are not twisted in the boom.
- 16. Finally, re-fit the first reef's car, replacing the wheels in sequence. Keep tension on the messenger line when doing this.
- 17. Apply fresh grease to the screws, and re-fit the boom end.
- 18. Tension the lines and remove the messenger lines.
- 19. Tie stopper knots in all free rope ends.
- 20. Re-attach the forward line of the first reef to its shackle using the special knot, as shown in the diagram.
- 21. Check the movement of the cars in the boom.





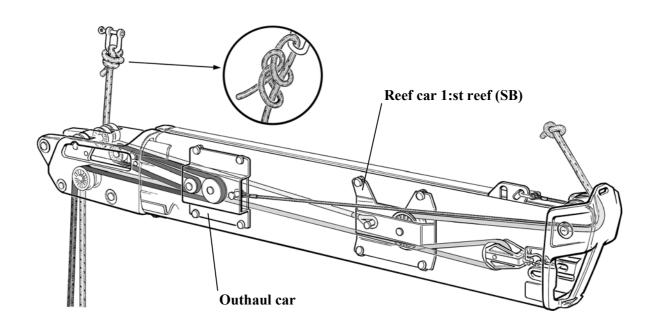
Boom 143/76



Boom 171/94

- 1. Place the aft part of the boom on a level work surface, to avoid losing snmall parts. The sail foot groove should be facing upwards.
- 2. Attach a messenger line to the outhaul line.
- 3. Attach a messenger line to the hauling end of the first reefing line.
- 4. Undo the knot for the first reef shackle (starboard side) in the luff of the sail and attach a messenger line. The knot will be tight and tools may be required.
- 5. Remove the aft end of the boom. The screws will be Phillips or Torx, depending on year of manufacture.
- 6. Pull the first reef car backwards with the aid of its aft upper line, and slide it out of the boom. Take care not to loose the wheels from the car as you do this.
- 7. Pull the outhaul block out using the outhaul wire.
- 8. Tension the outhaul line in the boom using the free end of the messenger line, and rotate the block to remove any twists in the line. Place the block on the work surface with it's starboard side downwards.
- 9. With the information stamped on it facing upwards and the arrow pointing aft, place the new block(car) next to the old block.
- 10. Hold the old block in position on the work surface and pull the outhaul line out through the block until the messenger line runs through it.
- 11. Cut the messenger line where it runs round the old block's sheave, and transfer to the corresponding point on the new car, knotting the loose ends together using a reef knot.
- 12. Undo the shackle of the old block and transfer the outhaul wire, minus shackle, to the new car. Ensure that the pin is fitted in the block in the same direction.
- 13. Seal the sharp ends of the split pins with Sikaflex to prevent them from snagging the lines.
- 14. Using the free end of the messenger line at the forward edge of the boom, pull the new outhaul car in towards the boom end.
- 15. Insert the outhaul car in the starboard side of the boom with the text upright, fitting the wheels in sequence at the same time. The lines for the first reef must lie outside (starboard) of the outhaul block under the shafts of the pulleys. It is important that these lines are not twisted in the boom.
- 16. Finally, re-fit the car for the first reef, replacing the wheels in sequence. Keep tension in the messenger line when doing this.
- 17. Apply fresh grease to the screws, and re-fit the boom end.
- 18. Tension the lines and remove the messenger lines.
- 19. Tie stopper knots in all free rope ends.
- 20. Re-attach the forward line of the first reef to its shackle using the special knot, as shown in the diagram.
- 21. Check the movement of the cars in the boom.





Boom 171/94

