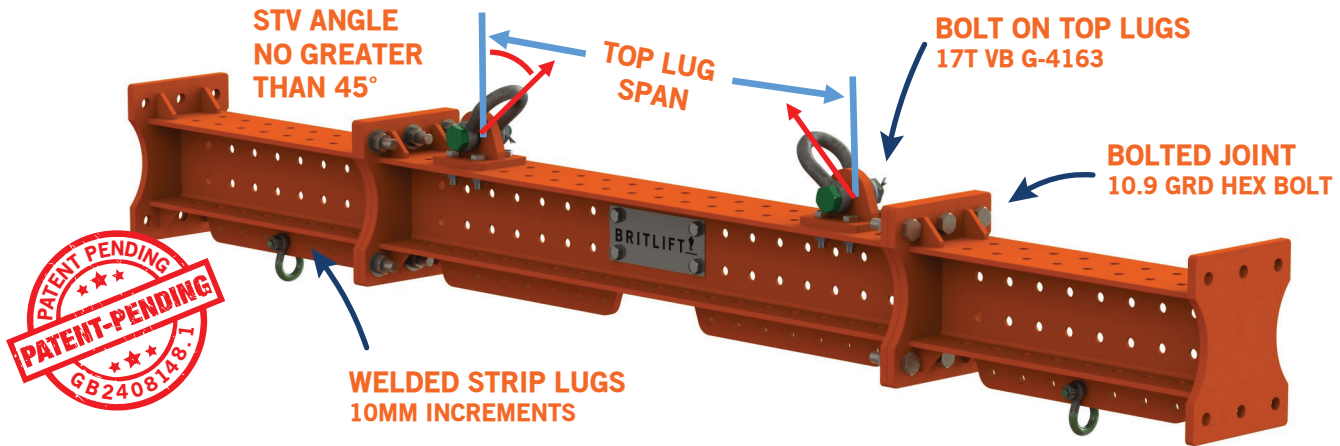


THIS SET OF USER INSTRUCTIONS IS FOR THE BRITLIFT ML180 MULTILIFTER. WHEN USED AS A DUAL TOP POINT SEMI SPREADER, THIS MULTILIFTER IS RATED TO A MAXIMUM VERTICAL LOAD OF 23 TONNES (23000KG) AND HAS A MAXIMUM SPAN (OR LENGTH) OF 10 METERS (10000MM). THIS BEAM SHOULD BE LOADED VIA 2 TOP CONNECTION POINTS WHICH ARE DESIGNED TO SUIT 17T SHACKLES. CONNECTION TO THE LOAD SHOULD BE MADE AT THE BOTTOM STRIP LUG LIFTING POINTS USING EITHER 6.5T STANDARD BOW SHACKLES OR 9.5T SUPER SHACKLES.

THE LENGTH AND NUMBER OF BOTTOM POINTS CONNECTED TO AFFECT THE SWL OF THE SYSTEM, PLEASE REFER TO THE CHARTS BELOW FOR MORE DETAIL.

THE MULTILIFTER MAY BE COMPRISED OF MULTIPLE SECTIONS AND AS THE SPAN INCREASES, THE CAPACITY DECREASES, PLEASE SEE CHARTS 3, 4 AND 5 BELOW.



## WLL/SWL INFORMATION

CHART 1: COMPONENTS

DESCRIPTION	SELF WEIGHT
1m Beam Section	180kg
2m Beam Section	250kg
4m Beam Section	425kg

CHART 2: SHACKLE INFORMATION

LOCATION	SHACKLE SPEC
Top Shackle $\varnothing$ 45mm	17T Standard Bow - Dims based upon VB Green Pin G-4163
Bottom Shackle $\varnothing$ 27mm	9.5T Super Bow - Dims based upon VB Green Pin G-4163
Bottom Shackle $\varnothing$ 27mm	6.5T Standard Bow - Dims based upon VB Green Pin G-4163

CHART 3: WLL LOAD EVENLY SPLIT OVER 2 BOTTOM POINTS

SWL (TOP LUG SPAN MUST BE SET AT HALF OF TOTAL SPAN)	TOTAL SPAN (M)
19 tonnes	4
17 tonnes	5
14 tonnes	6
11 tonnes	7
9 tonnes	8
7 tonnes	9
5 tonnes	10

CHART 4: WLL LOAD EVENLY SPLIT OVER 3 BOTTOM POINTS EVENLY DISTRIBUTED OVER FULL SPAN

SWL (TOP LUG SPAN MUST BE SET AT HALF OF TOTAL SPAN)	TOTAL SPAN (M)
23 tonnes	4
23 tonnes	5
20 tonnes	6
16 tonnes	7
13 tonnes	8
10 tonnes	9
7 tonnes	10

CHART 5: WLL LOAD EVENLY SPLIT OVER 4 BOTTOM POINTS EVENLY DISTRIBUTED OVER FULL SPAN

SWL (TOP LUG SPAN MUST BE SET AT HALF OF TOTAL SPAN)	TOTAL SPAN (M)
23 tonnes	4
23 tonnes	5
23 tonnes	6
22 tonnes	7
18 tonnes	8
14 tonnes	9
10 tonnes	10

AS HIGHLIGHTED IN CHARTS 3, 4 AND 5, THE USE OF SUPER SHACKLES (G-5263) MAXIMISES THE CAPACITY OF THE SYSTEM. YOU CAN USE 6.5T STANDARD SHACKLES (G-4163) IF YOU WISH BUT THE CAPACITY WILL REDUCE DOWN TO 13 TONNES UNLESS OTHERWISE STATED. YOU MUST NOT USE 6.5T STANDARD SHACKLES (G-4163) AND LIFT MORE THAN THE CAPACITY OF THE SHACKLES! PLEASE NOTE: THE SHACKLE HOLES ARE NOT SIZED TO RECEIVE 9.5T STANDARD SHACKLES (G-4163).

## SAFETY REQUIREMENTS

- DUE TO THE FLEXIBILITY OF THE MULTILIFTER SYSTEM, ANY LIFTS USING THE SYSTEM MUST HAVE BEEN PLANNED BY A COMPETENT AP AND HAVE A LIFT SPECIFIC METHOD STATEMENT. DO NOT USE THE SYSTEM WITH A BASIC GENERIC LIFT PLAN.
- CONSIDER THE COG (CENTRE OF GRAVITY) OF THE LIFT, AND BE SURE THAT NO INDIVIDUAL COMPONENTS ARE OVERLOADED DUE TO OFFSET LOADING.
- CONSIDER THE COG OF THE ASSEMBLED SYSTEM, IF YOU HAVE ASSEMBLED THE SYSTEM TO SUIT AN OFFSET COG LIFT OR YOU HAVE AN UNSYMMETRICAL ASSEMBLY THEN THE SYSTEM MAY TILT SIGNIFICANTLY WHEN UNLOADED.
- USE A TAPE TO CONFIRM LOCATIONS OF LIFTING POINTS ARE IN ACCORDANCE WITH THE LIFT PLAN.

**TERMINOLOGY: "LIFTING CENTRES" REFERS TO THE DISTANCE BETWEEN THE LUGS TAKEN FROM THEIR CENTRE POINTS (4M CENTRES = 2M FROM EACH SIDE OF THE CENTRE OF THE BEAM).**

## CRITICAL INFORMATION

1. THIS IS A SEMI SPREADER LIFTING BEAM WHICH MUST BE USED WITH 2 TOP LIFTING POINTS AS DETAILED WITHIN FURTHER INFORMATION (ABOVE), PAGE ONE: CHARTS 1, 2, 3, 4 & 5.
2. ENSURE EACH COMPONENT YOU ARE USING IS FROM THE CORRECT ML SERIES AND CHECK THAT ALL RELEVANT CERTIFICATION IS PRESENT.
3. ENSURE THAT THE MATING FACES OF THE COMPONENTS ARE FREE FROM DEBRIS.
4. BOLT THE SYSTEM TOGETHER USING THE FASTENERS AND TIGHTENING TORQUE SPECIFIED.
5. BOLT THE ATTACHMENTS USING THE FASTENERS AND TIGHTENING TORQUE SPECIFIED.
6. CHECK AND ENSURE THAT THERE IS A BOLT IN EVERY HOLE REGARDING THE FLANGES AND CONNECTION POINTS IN USE.
7. CHECK AND ENSURE THAT THE BOLTS CONNECTING THE FLANGES ARE 10.9 GRADE SPECIFICALLY.
8. ALL CHARTS ON PAGE ONE MUST BE REFERRED TO.
9. YOU MUST NOT EXCEED ANY WLL WITHIN CHARTS 3, 4 & 5.
10. IF YOU DO NOT USE 9.5T SUPER SHACKLES THEN THE SYSTEM WILL BE DERATED TO THE STANDARD SHACKLES SIZE (6.5T).
11. THE WLL OF ANY COMPONENT MUST NOT BE EXCEEDED.
12. SHACKLE HOLE DIAMETERS ARE PROVIDED WITHIN SHACKLE CHARTS.
13. ANY PERSONNEL USING THIS PRODUCT MUST BE A TRAINED AND COMPETENT RIGGER OR SLINGER/ SIGNALLER.
14. THE ONGOING USE OF THIS PRODUCT MUST BE IN ACCORDANCE WITH THE REQUIREMENTS IN LOLER (LIFTING OPERATIONS AND LIFTING EQUIPMENT REGULATIONS 1998).
15. CHECK THAT NO RIGGING EQUIPMENT CLASHES WITH THE BEAM. THE BEAM MUST ONLY BE LOADED THROUGH THE SHACKLE PIN HOLES AT EACH END.

## KEY CONSIDERATIONS FOR USE

- ALWAYS FOLLOW THE LIFT PLAN CREATED BY THE APPOINTED PERSON WHEN USING THIS EQUIPMENT.
- DO NOT RIG THE LOWER SLINGS MORE THAN 6 DEGREES FROM VERTICAL.
- ENSURE THE CORRECT SHACKLES AND BOLTS ARE BEING USED, AS DETAILED WITHIN THIS DATASHEET.
- CONSULT WITH YOUR AP, SUPPLIER, OR BRITLIFT DIRECTLY IF YOU ARE UNSURE.

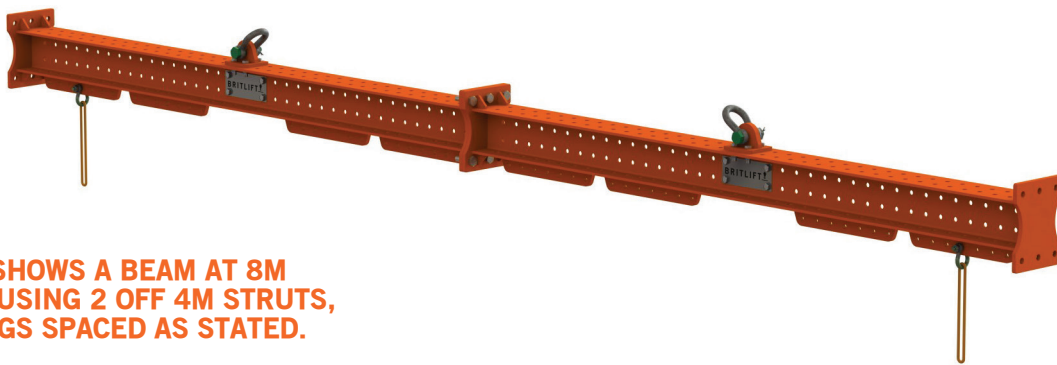
## ASSEMBLY GUIDE

1. CONSULT THE LIFT PLAN AND ENSURE THAT YOU ARE USING THE CORRECT BEAM FOR YOUR LIFT REQUIREMENTS.
2. ENSURE EACH COMPONENT YOU ARE USING IS FROM THE CORRECT SERIES AND CHECK THAT ALL RELEVANT CERTIFICATION IS PRESENT.
3. ENSURE THAT THE MATING FACES OF THE COMPONENTS ARE FREE FROM DEBRIS.
4. BOLT THE SYSTEM TOGETHER USING THE FASTENERS AND TIGHTENING TORQUE SPECIFIED.
5. CHECK AND ENSURE THAT THERE IS A BOLT IN EVERY HOLE.
6. CHECK AND ENSURE THAT THE BOLTS CONNECTING THE FLANGES ARE 10.9 GRADE SPECIFICALLY.
7. PLACE YOUR TOP SLING WITHIN THE TOP SHACKLE AND THEN LOWER THE SHACKLE INTO PLACE OVER THE LUGS. ONCE ALL THE HOLES ARE ALIGNED, PIN IN PLACE USING THE TOP SHACKLE PIN.
8. ATTACH THE OTHER END OF THE TOP SLINGS TO THE CRANE HOOK.
9. THE LOWER SLINGS AND SHACKLES CAN NOW BE CONNECTED TO THE STRIP LUGS. ENSURE THE CORRECT SHACKLES ARE BEING USED, IN LINE WITH THIS DATASHEET.
10. BEFORE MOVING THE BEAM OUT OF REACH, THE ASSEMBLY MUST BE THOROUGHLY INSPECTED BY A COMPETENT PERSON.
11. RAISE THE BEAM ABOVE THE LOAD AND CONNECT THE BOTTOM SLINGS TO THE LOAD AND CHECK TO ENSURE THAT THE RIGGING ARRANGEMENT IS IN ACCORDANCE WITH THE LIFT PLAN.

## FURTHER INFORMATION

- THE TOP LUGS ON THIS SYSTEM ARE BOLT ON. WHEN THE MULTILIFTER IS USED AS A SEMI SPREADER BEAM, THEY MUST BE BOLTED AT LEAST HALF THE LENGTH OF THE BEAM APART FROM EACH OTHER WITH OFFSET COG'S TAKEN INTO CONSIDERATION. THE LUGS SUIT A GRADE 10.9 M24x70 BOLT AND MUST BE TORQUED TO A MINIMUM OF 400NM.
- IF USING MULTIPLE SECTIONS, THE BEAMS MAY BE CONNECTED TOGETHER USING THE BOLTED FLANGES. EACH FLANGE CONNECTION IS DESIGNED TO USE 6 OFF GRADE 10.9 M30x90 BOLTS AS SUPPLIED BY BRITLIFT. THESE BOLTS MUST BE TORQUED TO A MINIMUM OF 500NM.
- THE BOTTOM LUGS ON THIS SYSTEM ARE STRIP LUGS TO SUIT 9.5T SUPER OR 6.5T STANDARD BOW SHACKLES. THE HOLES ARE LOCATED AT 100MM INCREMENTS.
- THIS SYSTEM HAS MULTIPLE ATTACHMENTS WHICH ENABLE THE BEAMS TO BE USED FOR MANY DIFFERENT SITUATIONS AND LIFTING SCENARIOS. SEE BELOW FOR AN EXAMPLE OF THE DIFFERENT USES OF THE SYSTEM.

## SEMI SPREADER LIFTING BEAM AT 8.0M SPAN CHART 3 EXAMPLE - 2 DROP SLINGS



THIS IMAGE SHOWS A BEAM AT 8M TOTAL SPAN USING 2 OFF 4M STRUTS, WITH TOP LUGS SPACED AS STATED.

## SEMI SPREADER LIFTING BEAM AT 8.0M SPAN CHART 4 EXAMPLE - 3 DROP SLINGS



ALL DROP SLINGS MUST BE EQUALLY LOADED AND NO LUGS ARE TO BE OVERLOADED. DUE TO STATIC INDETERMINABILITY, BRITLIFT DO NOT TAKE RESPONSIBILITY FOR UNEVENLY LOADED SLINGS.

## SEMI SPREADER LIFTING BEAM AT 8.0M SPAN CHART 5 EXAMPLE - 4+ DROP SLINGS



THE OVERALL COG OF THE LOAD MUST BE DIRECTLY BELOW THE CRANE HOOK PRIOR TO LIFTING.