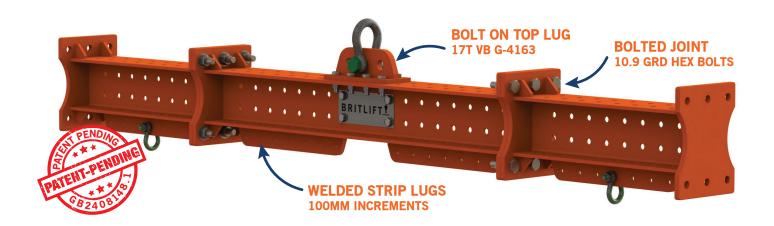


# MULTILIFTER (ML180) LIFTING REAM INSTRUCTIONS FOR USE PEUR

THIS SET OF USER INSTRUCTIONS IS FOR THE BRITLIFT ML180 MULTILIFTER. WHEN USED AS A CENTRAL TOP POINT LIFTING BEAM, THIS ML180 IS RATED TO A MAXIMUM VERTICAL LOAD OF 16 TONNES (16000KG) AND HAS A MAXIMUM SPAN (OR LENGTH) OF 10 METERS (10000MM). THIS BEAM SHOULD BE LOADED VIA THE TOP CENTRAL CONNECTION POINT WHICH IS DESIGNED TO SUIT A 17T SHACKLE. 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.

(PLEASE NOTE THAT SHACKLES AND SLINGS ARE NOT SUPPLIED WITH THE MULTILIFTER UNLESS PURCHASED).

THE MULTILIFTER MAY BE COMPRISED OF MULTIPLE SECTIONS AND AS THE SPAN INCREASES, THE CAPACITY DECREASES, PLEASE SEE CHART 2 BELOW.



# **WLL INFORMATION**

#### **CHART 1: LOAD INFORMATION 1-3 ONLY**

TOTAL SPAN (M)	SWL TOP CENTRAL LIFTING POINT BOTTOM SHACKLES 9.5T SUPER
1-3 meters	16 tonnes

#### **CHART 2: LOAD INFORMATION 4m +**

TOTAL SPAN (M)	SWL TOP CENTRAL LIFTING POINT BOTTOM SHACKLES 6.5T STANDARD
4 meters	13 tonnes
5 meters	10 tonnes
6 meters	7 tonnes
7 meters	6 tonnes
8 meters	4 tonnes
9 meters	3 tonnes
10 meters	2 tonnes

#### **CHART 3: COMPONENT INFORMATION**

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

#### **CHART 4: SHACKLE INFORMATION**

LOCATION	SHACKLE SPEC
Top Shackle Ø 45mm hole	17T Standard Bow Dims based upon VB Green Pin G-4163
Bottom Shackle	9.5T Super Bow
(Chart 1)	Dims based upon VB Green
Ø27mm hole	Pin G-5263
Bottom Shackle	6.5T Standard Bow
(Chart 2)	Dims based upon VB Green
Ø 27mm hole	Pin G-4163

AT SPANS BETWEEN 1M - 3M 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 AND YOU MUST FOLLOW CHART 2. 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).



# **MULTILIFTER (ML180)**

# **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 CENTRAL POINT LIFTING BEAM WHICH MUST BE USED WITH THE ATTACHMENTS PROVIDED, AND **DETAILED WITHIN FURTHER INFORMATION (ABOVE),** PAGE ONE: CHARTS 1, 2 AND 3.
- 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 BEAM SECTIONS TOGETHER USING THE FASTENERS AND TIGHTENING TORQUE SPECIFIED.
- 5. BOLT THE ATTACHMENTS USING THE FASTENERS AND TIGHTENING TORQUE SPECIFIED.
- 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.

- ALL CHARTS ON PAGE ONE MUST BE REFERRED TO.
- 9. YOU MUST NOT EXCEED ANY WLL WITHIN CHARTS 1 & 2.
- 10, IF YOU DO NOT USE 9.5T SUPER SHACKLES THEN THE SYSTEM WILL BE DERATED TO THE STANDARD SHACKLE 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**

- 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.
- CHECK AND ENSURE THAT THERE IS A BOLT IN EVERY HOLE REGARDING THE FLANGES AND CONNECTION POINTS IN USE.
- 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.

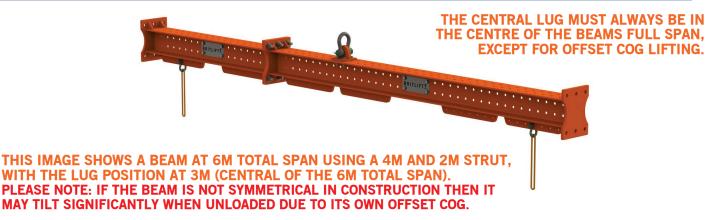


# **MULTILIFTER (ML180)**

### **FURTHER INFORMATION**

- THE TOP LUGS ON THIS SYSTEM ARE BOLT ON. WHEN THE MULTILIFTER IS USED AS A LIFTING BEAM THEY MUST BE BOLTED ON CENTRALLY UNLESS BEING OFFSET TO ACCOMMODATE AN OFFSET COG. THE LUGS SUIT A GRADE 10.9 M24x70 BOLT AND MUST BE TORQUED TO A MINIMUM OF 400NM.
- ullet 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 A 9.5T SUPER OR 6.5T STANDARD BOW SHACKLE. 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.

# **EXAMPLE:** HOW THE CENTRAL LUG MAY BE PLACED WHEN USING DIFFERENT STRUTS



### USING THE BOTTOM CENTRAL BOLT HOLE ON THE OUTER FLANGES: STRICTLY 90 SLINGS <



#### **TANDEM LIFTING BEAM**

