



Jib Support Replacement (Effer — Campaign ID: CL202217)

Units Affected: Certain EC505 Effer cranes built between May 2018 and August 2021. Verify your unit is affected by reviewing the attached list or accessing Altec Connect.

Background: Altec is committed to providing our customers reliable products from initial delivery throughout the useful life of the machine.

Effer has decided a defect which relates to motor vehicle safety exists in your unit with the serial number shown in the attached list. Refer to the included communication from Effer for more information.

Customer Action: Contact Altec to perform the installation of the Jib Support Kit, part number 991544720, and inspect the boom for cracks. The kit must be installed and inspection completed no later than 60 days from the receipt of this notice. Any weld repairs, if indicated by the inspection, must be completed within 120 days of this notice. Subsequent damage due to failure to perform the required action(s) in the time period allowed will not be covered by warranty.

Requirements: Every unit requires the Jib Support Kit be installed for completion, and some units may require additional repairs based on inspection. Altec is able to install the kit and inspect the unit for cracks. If cracks are found, Altec is not able to perform the repair. Crack repairs must be completed by Hiab USA. Contact information for Hiab USA is included in the inspection instruction in the Jib Support Kit.

Installation of the Jib Support Kit and inspection of the boom is estimated to take two hours and one person to complete. If required, a crack repair is estimated to take 16 hours to complete and must be completed by Hiab USA.

Completion and Warranty: The initial inspection and repair are covered under the Altec Warranty Policy and can be performed by Altec. Altec will perform the work for free at an Altec facility. Customers are responsible for the travel costs of an Altec Mobile Service technician if the technician performs the work at the owner’s location.

Weld repair, if required, must be completed by Hiab USA.

Altec Contact Info:

Altec Connect: connect.altec.com/login



Phone: 1-877-GO ALTEC (1-877-462-5832) | Options: 1 - Parts; 2 - Shop Service; 3 - Mobile Service; 4 - Technical Support; 5 - Global Rental Service Request; 6 - Chassis Repair

Altec Use Only	
Inspection labor	2.5 hr (Service) - includes kit installation
Repair labor	16 hrs (weld repair - Hiab only)
Account #	010.0222.43151.000.9248.00
Travel	Not included
NHTSA code	90
Prime fail P/N	NA
Doc ref	074900847

Altec Use Only			
Description	Part No.	Qty	Warranty
Jib Support Kit	991544720	1	Yes



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JIB support replacement

Reason		Products			
Safety		505			

Safety Risk	Warranty claim procedure	Priority	Repair time allowed	Date	Reference
Essential	Campaign	High	2+16 hours/crane	25/11/2022	Andrea Loggioia, Marco Zannoni

BACKGROUND

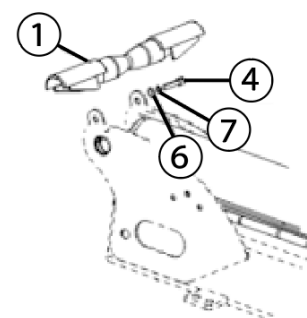
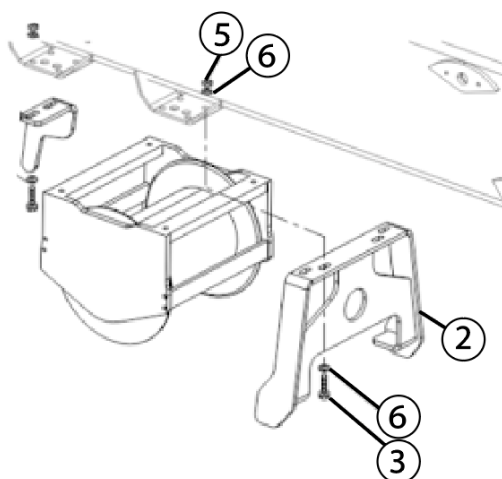
Based on information from the market, we found a problem with the JIB support in crane model EFFER 505. During the transport of the crane, we could see some bouncing movements of the JIB against its support. Thus, Effer R&D decided that in these cases it is necessary to replace the JIB support.

Important! Please remind the operator that regardless of this change, the crane must be folded correctly, following the Operator's Manual instructions.

ACTION

First, replace the JIB support.

N. in the picture	p/n
1	2K86121
2	5R86002
3	8229700GE
4	8263500GE
5	84080147
6	8521100GE
7	8526300GE



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Then, check if there is any crack in the 2nd boom as shown in the following picture. If you find a crack, see the instruction below. If there is no crack, no preventive action is required.



Note! If the crane is already in service, ask the customer to bring the crane to the workshop for inspection.

SCOPE

Cranes list attached to this Circular Letter.

INSTRUCTION

If during the inspection, the 2nd boom is cracked, please contact H&SH Technical Support. In the following 4 cranes, we know that the 2nd boom is already cracked:

- 100026641
- 100028378
- 100028672
- 100028676

Proceed as follows to repair the crack(s):

1. Remove the boom from the crane.
2. Remove the extensions and all the parts that can hinder the repair of the boom.
3. Clean, remove the paint from the affected area(s) and degrease the boom before proceeding with the next steps. Clean accurately the surface inside the tubular of the 2nd boom.

Note! All dimensions given in the drawings below are in MILLIMETERS.

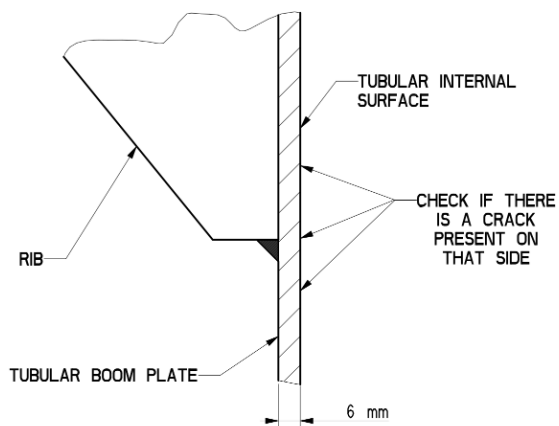
Where the rib is welded to the tubular of the boom, the crack is probably on all the thickness of the tubular plate. If the crack is not visible to the unaided eye, perform an LPI (Liquid Penetrant Inspection) or similar test on the internal surface (Step 1 in the drawing below). If the crack is passing through the plate (so it is also in the internal surface), start to repair it by grinding from inside the boom (Steps 2, 3, 4, and 5 in the drawings below). If the crack is not inside, you can repair it only from the external side (Steps 4 and 5 in the drawings below).



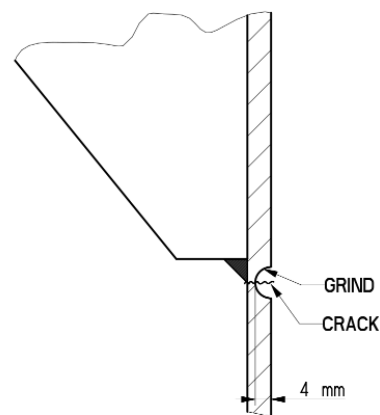
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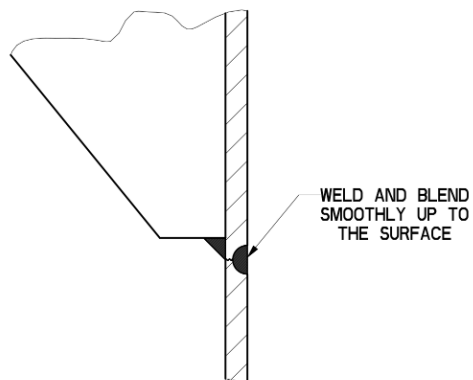
STEP 1



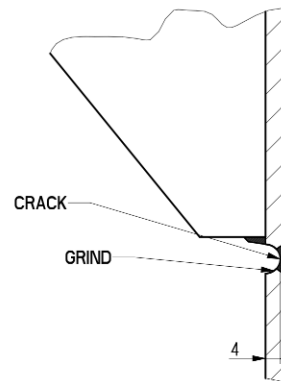
STEP 2



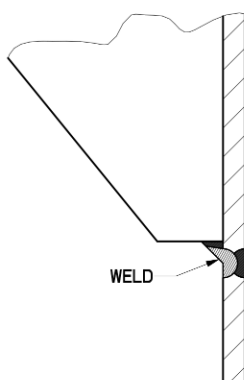
STEP 3



STEP 4



STEP 5



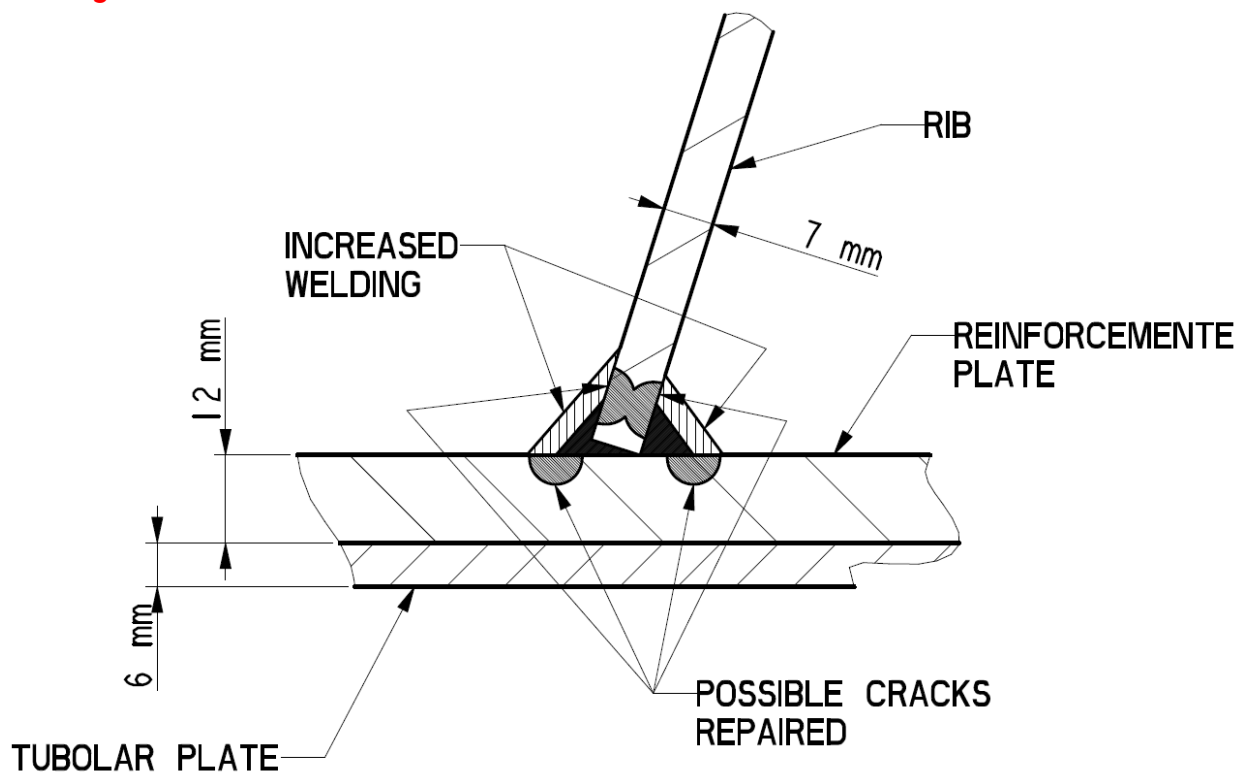


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- After the crack is repaired, add an external reinforcement (e.g. 5R40370, Drawing 2 and 3) to make the repaired zone stronger.
Important! Make the reinforcement from a plate of S690QL or S700Mc with a thickness of 8 mm. The shape of the reinforcement is shown in **Drawing 2** below and must cover the repaired zone. Smooth at 30° the internal profile to get a good chamfer to weld it.
- For the rib on the reinforcement, if there is a crack on the reinforcement of 12 mm thickness, remove it by grinding and heating (**Drawing 1**).
- If the crack is on the rib with 7 mm of thickness, remove it, by heating and grinding on both sides. (**Drawing 1**).
- Increase the weld of the rib, anyway, about 40 mm to reinforce the end of the rib (**Drawing 2**):

Drawing 1



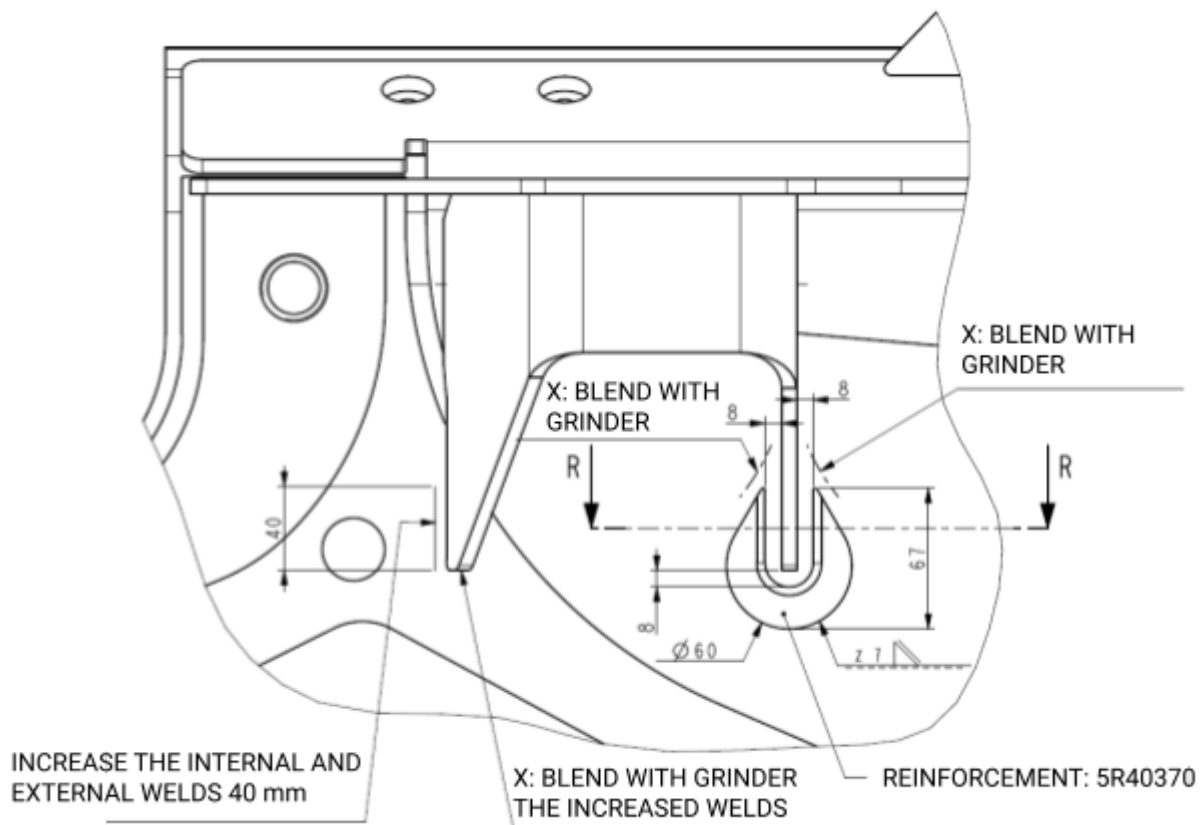
Important! Blend all the welds, in particular the point with "X" in the following picture:



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Drawing 2

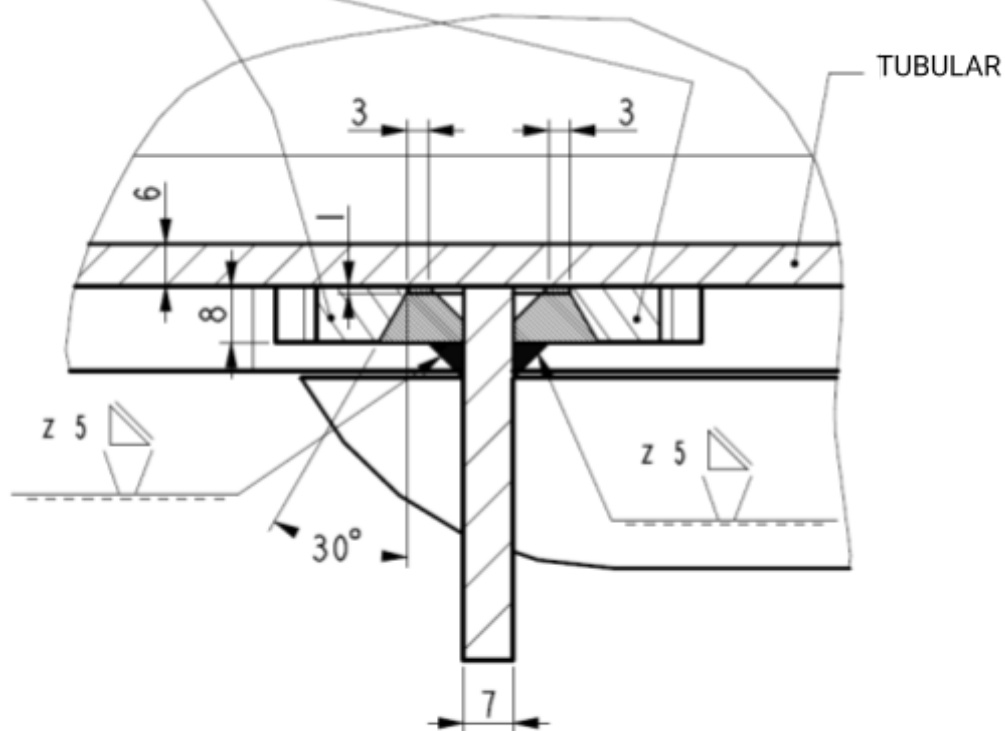


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Drawing 3

REINFORCEMENT:
5R40370



After the procedure:

1. Do a visual inspection according to EN ISO 17637.
2. Make sure that the welds are smooth and without sharp edges.
3. Carefully remove all spatter.
4. If you find arc strikes after the repair, remove them by grinding.
5. Do not use coarse grinding to smoothen the weld.

Welding quality

The quality of the repaired weld must fulfil, as a minimum, the requirements of acceptance level C according to EN ISO 5817.

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WELDING INSTRUCTIONS AND RECOMMENDATIONS

- Do the welding procedure as per the specification in the "INTERVENTION A - SERVICE MANUAL Rev.5 Part A".
- Use the multi-pass technique and do not work with temperatures that are more than 200°C.
- Maximum width of a single pass is 7x7 mm.
- Blend the welding by grinding.
- Repairs must be carried out by qualified personnel according to UNI EN ISO 9606-1 or AWS / B2.1 because of the characteristics and location of the repair.
- The workshop personnel must use all the "personal protective equipment" PPE necessary for this type of repair and obey the regulation enforced in the country in which the repair is being carried out..

Intervention A:

Electrode classification: EN 757/E69 4 ZB – AWS A.5 / E 11018 - M

Recommended electrodes diameters: 2.5 - 3.25 mm.

Note! It is compulsory to carry out the electrode drying process before the welding process, according to the manufacturer's instructions.

Rod classification (type full): EN 12534/G69 4 M Mn 3 Ni1Cr Mo
AWS A5.28 ER100S-1

Recommended rods diameters: 1 - 1.2 mm.

Gas classification: EN 439 TIPO m21

- Argon (85% - 75%) + co 2 (15% - 25%)

- Elio (85% - 75%) + co 2 (15% - 25%)

Quantity of gas adjusted to the exit from the gas cylinder:

12 lt/min in a closed environment

18 it/min in open air

Welding current:

160 - 180 A for the wire diameter 1 mm

190 - 230 A for the wire diameter 1.2 mm

Caution! Use lower currents only for welding in vertical position (100÷130A).



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WARRANTY

Normal warranty procedures apply to this matter.

Replacement of the JIB support will be compensated with 2 hours and the following parts can be claimed:

- 1x 2K86121 (page 1, No. 1)
- 1x 5R86002 (page 1, No. 2)
- 4x 8229700GE (page 1, No. 3)
- 2x 8263500GE (page 1, No. 4)
- 1x 84080147 (page 1, No. 5)
- 10x 8521100GE (page 1, No. 6)
- 2x 8526300GE (page 1, No. 7)

Repair time for the crack on the following serial numbers will be compensated with additional 16 hours:

- 100026641
- 100028378
- 100028672
- 100028676

For compensation, claims must be codified as follows:

Location Code:	11: Circular Letter	2278: CL_202217 JIB support replacement
Failure Code:	12: Campaign	

It is mandatory to send pictures of the area before and after the repair.

All warranty claims related to this campaign must be received by the Warranty Department **no later than 31/05/2023**.