Factory Campaign Announcement

KOMATSU

Komatsu America Corp

January 11, 2008

CAMPAIGN NUMBER: 7C064 1

TO: **ALL DISTRIBUTORS**

MODELS: PC400LC-7 L

ATTN: **SERVICE MANAGERS**

SUBJECT:	PC400LC-7L REPAIR OF ARM CYLINDER BRACKET ON BOOM. ***NOTE: EXTENDED COMPL ETION DATE 6/27/2008 KF***
PURPOSE:	REPAIR THE BOOM AT THE ARM CYLINDER MOUNTING BRACKET.
TYPE:	Mandatory. Do modification as soon as possible.
SAFETY RELATED (N-No, Y-Yes):	N
MAXIMUM METER READING:	999999
APPLICABLE MACHINES:	
PARTS REQUIRED:	
PARTS PROCUREMENT:	NONE
REIMBURSEMENT:	
LABOR	4.00 Hours
MILEAGE	One Round Trip
PARTS	No Parts are required for this FC
SHIPPING	N/A
TRAVEL_TIME	One Round Trip
EXPIRATION DATE:	Distributors must submit all claims by August 31, 2008.
CLAIM INSTRUCTIONS:	Complete modification as soon as possible. Normal submission through SAP with a failure code of H170 HA
ATTACHMENTS:	See Attachments at end of this announcement
COMMENTS:	PLEASE FOLLOW THE ATTACHED INSTRUCTIONS.REPAIRS MUST BE PERFORMED TO BOTH SIDES, EVEN IF NO CRACK IS PRESENT. WHEN POSSIBLE PLEASE TARGET MACHINES IN A MORE AGGRESSIVE APPLICATION FIRST.IF YOU FIND THE DAMAGE IS BEYOND REPAIR CAPABILITY CONTACT YOUR REGIONAL CSM & KAC SHQ. DB MUST INCLUDE PICTURES OF THE FAILURE BEFORE AND AFTER REPAIR, ALSO

ATTACH PHOTO'S TO CLAIM WHEN SUBMITTING. REVISED VERBAGE 2/21/2008.

It is the distributors responsibility to complete all machines in this campaign as soon as possible.

Problem Description

There have been field failures on PC400LC-7L due to the arm cylinder bracket to bracket strip weld set-up.
The drawing calls for a 10mm gap to be maintained at this weld joint to achieve penetration
However some units may have been manufactured with a gap below 10mm.
With high stress and improper weld penetration at these points, cracks may develop in this area and in some cases propagate across the top plate.

Following instruction are :

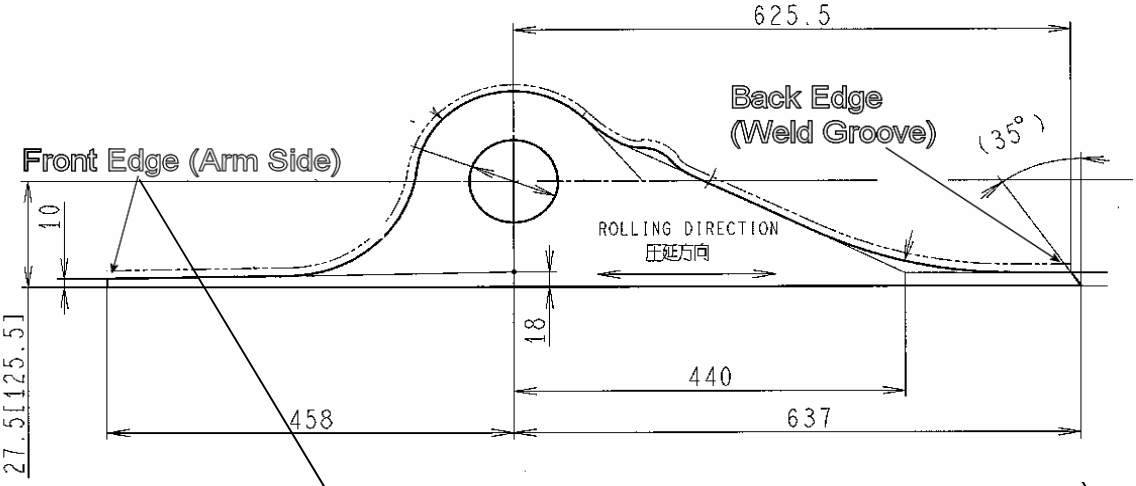
1. Place the machine on level ground and lower boom to lowest possible position. See Photo 1

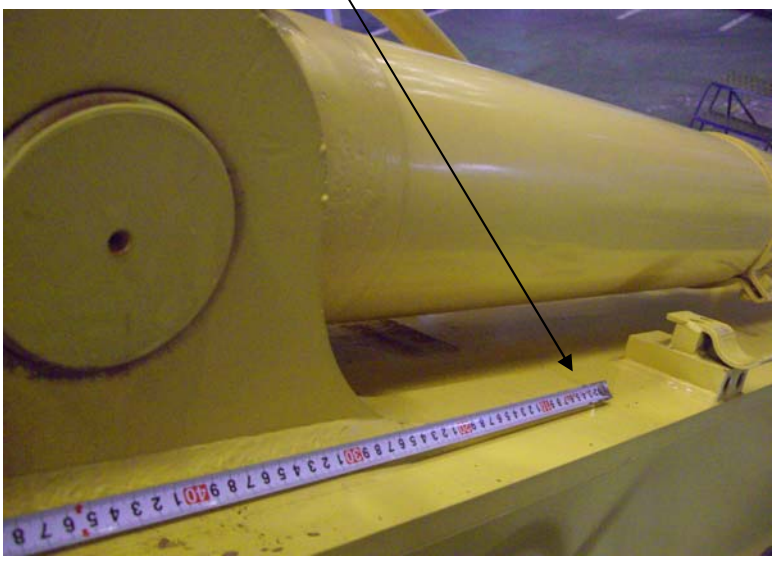
2. Remove all hydraulic tube clamp brackets on top side of boom.

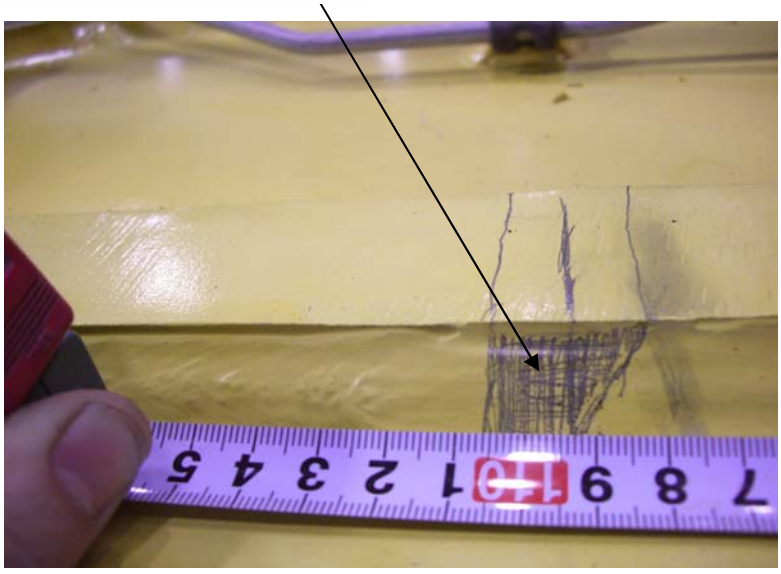
3. Without breaking any hydraulic connections, pull tubes off to side of boom and band tie together to make access for weld repair. See Photo 2.

4. Layout and mark area to be ground out.
If there is no visible crack, weld root is 1095 mm from front edge of bracket.

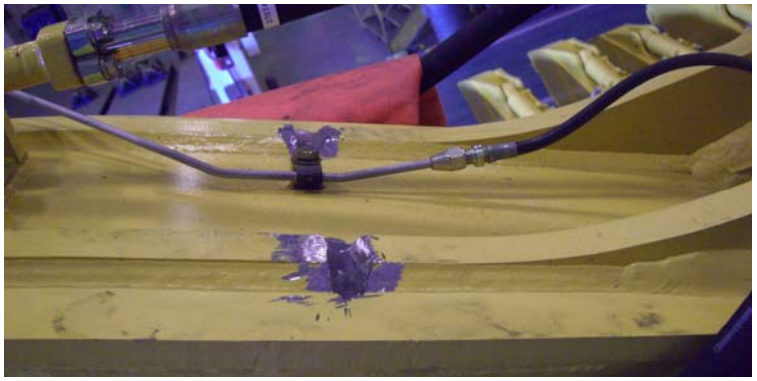
Note: Protect work lamp, hoses, cab etc. from grinding/gouging sparks with fire proof blankets.







5. Grind out and prepare weld groove as described on page 4.

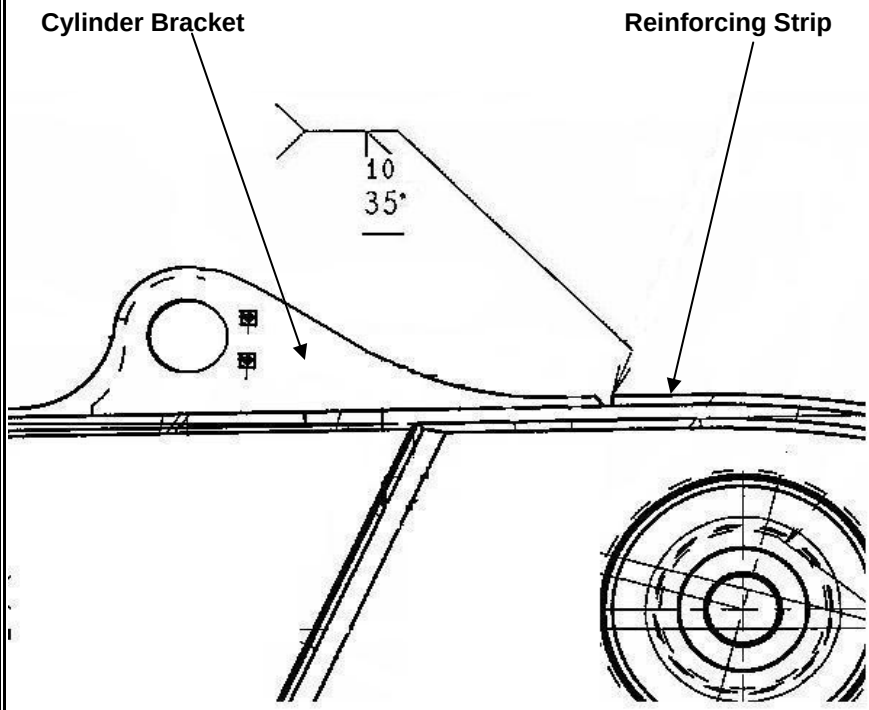


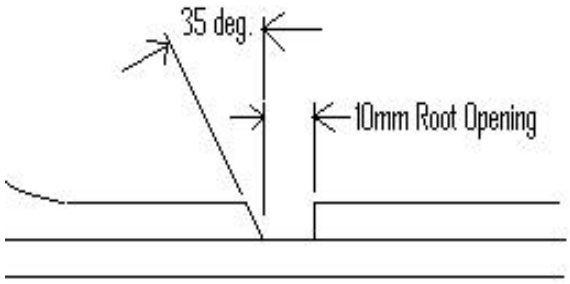
6. Liquid penetrant (PT) inspect weld groove to ensure top plate is not cracked. *Note: Dye will bleed out between cyl. bracket and top plate and between reinforcing strip and top plate as shown; Check is to ensure there is no crack in fillet welds at side of bracket or in the boom top plate.*
If cracking has occurred in top plate; See page 4/5 for additional instructions.
Proceed with step 7 if top plate is not cracked.

7. Clean weld groove and weld per page 6 procedure.

8. Grind and paint as shown, reassemble tubes to boom.

WELD JOINT





PROCEDURE AND SEQUENCE

1. Air arc or grind out entire crack 16mm deep including 5mm on each side into sound base metal. Include 35 deg. Bevel.
2. Liquid penetrant (PT) or Magna Flux (MT) inspect weld root area to ensure crack has not progressed into boom top plate.
3. Weld per procedure on page 6.
4. Grind weld cap pass flush with bracket and blend ends of weld with existing fillet weld.
5. Recommended (but not mandatory) UT inspection of finished weld to ensure there is no lack of fusion.
6. Paint.

If visual or PT/MT inspection reveals cracking in top plate, use grinder or air arc to completely remove.

If crack has propagated through the thickness of the top plate; open up enough of a groove to allow for inserting a backing plate made of A36 material. This is recommended to ensure complete joint strength.

Do not bridge groove without backing: cracking may reappear as shown in pictures below of a previously repaired machine.

Use liquid penetrant insp. to ensure entire crack has been completely removed prior to weld repair.

If cracking is excessive and has propagated from top plate into sideplates, please contact service representative prior to performing any work.

JOINT:

JOINT DESIGN:	"V" Groove
ROOT GAP:	10mm
BUTTERING:	N/A
BACK GOUGING:	N/A
GAS PURGE:	N/A
BACKING MATERIAL:	Boom Top Plate (A36)

PREHEAT:

PREHEAT TEMP.MIN.:	50 deg. F Ambient
METHOD:	
INTERPASS TEMP: MIN:	
INTERPASS TEMP: MAX:	
MAINTENANCE:	

BASE METALS:

BASE METAL:	THICKNESS:
Top Plate	22mm
Cylinder Bracket	16mm at weld joint
Bracket extension strip	16mm

POST WELD HEAT TREATMENT: None

HEATING RATE:	
HOLD TEMP:	
HOLD TIME:	
COOLING RATE:	

FILLER METALS & GAS:

PROCESS:	SMAW
ELECTRODE:	E 7018
SIZE:	1/8 - 3/32
PROCESS:	GMAW
WIRE:	ER 70S-6
SIZE:	0.045"
GAS:COMPOSITION:	Ar 75%, CO2 25%
FLOW RATE:	30-45 CFH
ORFICE OR GAS CUP SIZE:	
CONTACT TUBE TO WORK DISTANCE:	

TECHNIQUE:

STRING OR WEAVE BEAD:	Root Pass is 2 stringers, remaining can be weaved.
RESTRICTION OF WEAVE:	SMAW: 2X Elec. Dia., GMAW: 25mm
INITIAL & INTERPASS CLEANING:	Remove all paint/grease min. 1" from weld
BACK GOUGING METHOD:	N/A
OTHER NOTES:	

POSITION:

WELDING POSITION:	Flat
WELDING PROGRESSION:	Up (If Vertical)
OTHER:	

INSPECTION:

METHOD:	PT on Top Plate After Grind, Prior to Weld
	UT if available Final Weld to Ensure There is no Lack of Fusion.
HOLD POINTS:	After cleaning, prep.
	After completion of weld, prior to paint.