

D-01: Assemble Lifting Device

SAFETY FIRST

- Follow all Caterpillar facility safety standards when performing this task.
- Wear gloves if the chain is hot due to the welder cutting the chain.

EQUIPMENT

- parts identified on the drawing in the Bill of Materials area
- stamps
- hammer
- vise

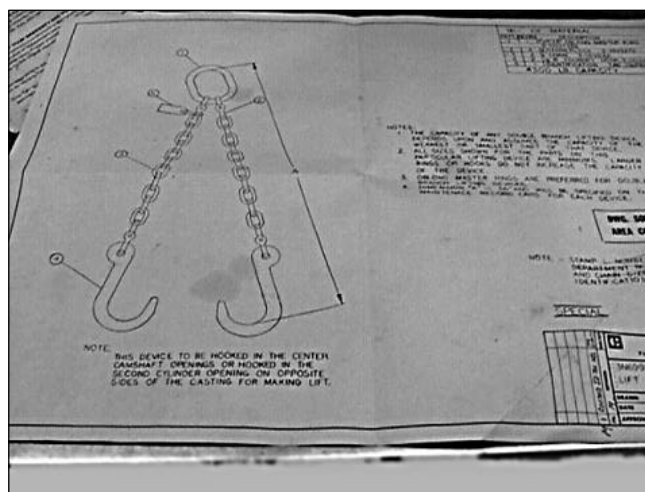
RESOURCES

- drawing for Plant Engineering

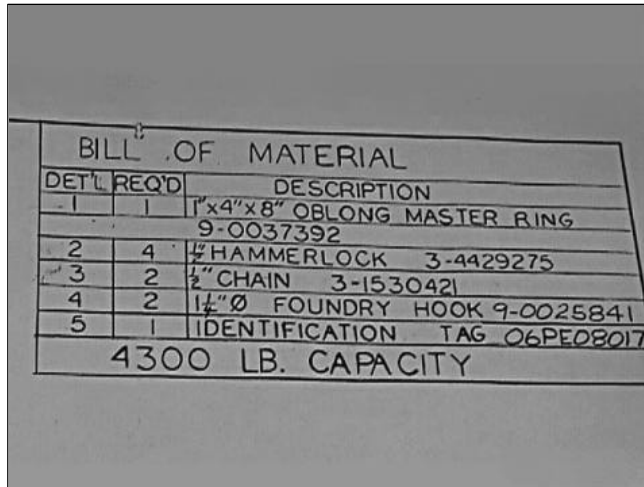

Assemble Lifting Device

Note: These steps apply to fabricating a 3N6997 V-16 Double Branch Lift Device.

1. Get the drawing (shown below) and work order from Plant Engineering.



2. Gather the materials listed in the Bill of Materials area on the drawing. See the figure below.



BILL OF MATERIAL	
DET'L REQ'D	DESCRIPTION
1	1x4"x8" OBLONG MASTER RING 9-0037392
2	4 1/2" HAMMERLOCK 3-4429275
3	2 1/2" CHAIN 3-1530421
4	2 1 1/4" Ø FOUNDRY HOOK 9-0025841
5	1 IDENTIFICATION TAG 06PE08017

4300 LB. CAPACITY

3. Ask the blacksmith/welder to cut the chain to the length specified on the drawing.
4. Install one half of the Hammerlok coupling link in the oblong master ring.
5. Install the other half of the coupling link in the first link of the chain. See the figure below.

Hammerlok® Coupling Link

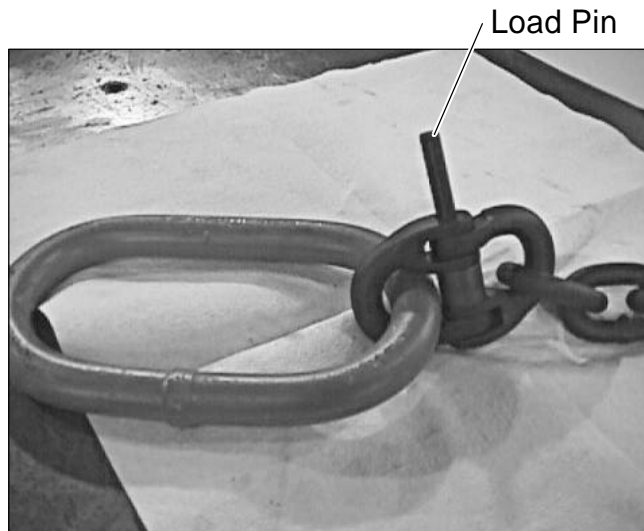


6. Push the two halves together.
7. Install the load pin retainer in the middle of the coupling assembly. See the figure below.



Load Pin Retainer

8. Insert the load pin into the coupling. See the figure below.



Load Pin

9. Drive the pin flush with the outside edge of the coupling, with a hammer. See the figure below.

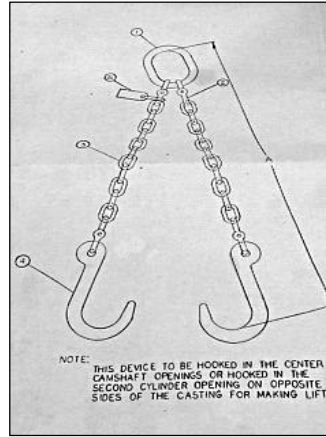


10. Repeat steps 4 through 8 for attaching the other chain to the oblong ring.
11. Ensure that both pieces of chain are straight.

Note: The chain must be straight to ensure that the hooks are pointing in the right direction. The figure below represents a lifting device that was assembled incorrectly. This device, shown below, is a safety hazard.

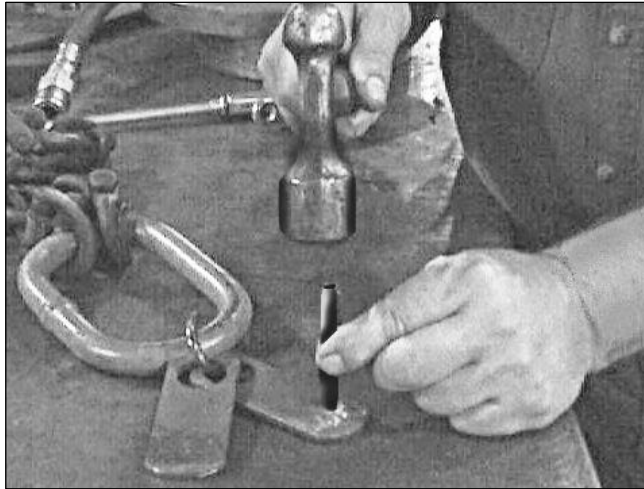


12. Position the hooks as specified in the drawing. See the figure below.



13. Install one half of the coupling link in the eyelet on the hook.
14. Install the other half of the coupling link in the last link of the chain.
15. Push the two halves together.
16. Install a load pin retainer in the middle of the coupling assembly.
17. Insert the load pin into the coupling, and drive the pin with a hammer until the pin is flush with the outside edge of the coupling.
18. Repeat steps 13 through 17 for attaching the other hook to the chain.

19. Stamp the specified information located on the drawing onto the Identification Tags. See the figure below.



Note: Stamp the L number, drawing number, department number, capacity, reach, chain size, and the date the fixture was made on the fixture identification tag 06PE08017.

20. Secure the identification tags to the lifting device.
- Attach the identification tag ring to the oblong ring.
 - Close the tag ring with a vise
 - Ask the welder to weld the tag ring closed. See the figure below.

