G-29: Remove and Replace Transfer Bar

SAFETY FIRST

- ☐ Follow all Caterpillar facility safety standards when performing this task.
- ☐ Lockout / tagout the main disconnect before disconnecting the drive mechanism.
- ☐ Mobile and bridge cranes may be used to move the transfer bar sections. Observe all crane operation safety procedures.
- ☐ An overhead hazard exists when moving the transfer bar sections with a crane.

EQUIPMENT

- ☐ mobile and bridge cranes
- ☐ Maintenance Mechanic hand tools
- ☐ lifting straps
- ☐ wood cribbing

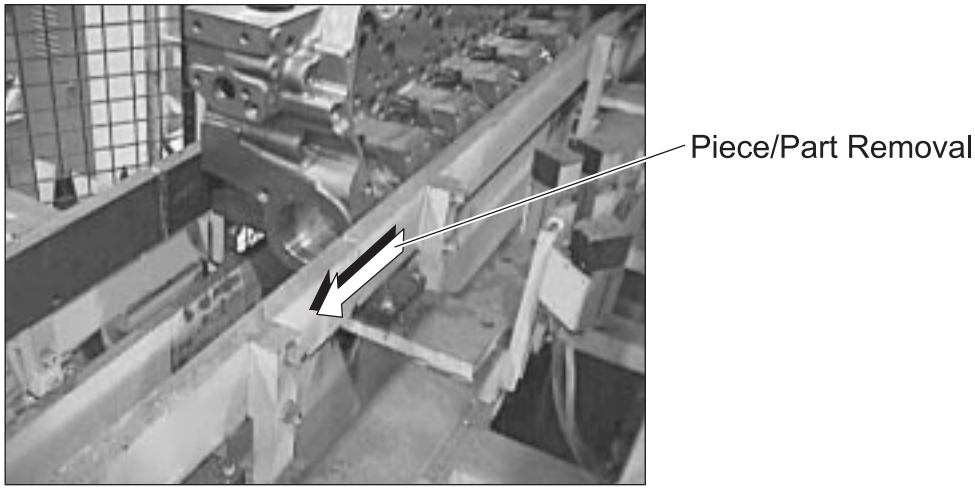
RESOURCES

- ☐ print, if available
- ☐ manufacturer's assembly specifications

Remove and Replace Transfer Bar

1. Ask the Machine Operator to "run" all of the piece / parts from the section line.

- ☐ Remove all parts from the transfer section.



2. Ask the Machine Operator to place the transfer bar in the lower (disengaged) position.

3. Disengage the drive mechanism from the section of transfer bar.

Drive Mechanism

- ☐ Use the print to locate the drive yoke, if necessary.
- ☐ Remove any guards, as necessary, to access the drive yoke.
- ☐ Remove the mounting bolts from the drive yoke and retain the hardware.

4. Determine transfer bar removal needs.

- ☐ Determine the number of personnel required to remove the transfer bar. You will need at least one Crane Operator and two or three Maintenance Mechanics, depending upon the length of the section and type of transfer bar.
- ☐ Determine what types of lifting straps are needed and how many.
- ☐ Use wood cribbing as supports for the transfer bar after removal. If removing the section from the middle, you will have to re-hook the hoist to get around fixtures or other obstacles.
- ☐ Use a mobile crane, to remove the bar from the middle of the line; use the bridge crane to remove the transfer bar.

5. Remove all obstructions that interfere with removing the transfer bar.

- ☐ Remove fixtures or components of fixtures that block removing the transfer bar.

Warning: The following steps require using a bridge crane or mobile crane. Designate one person as the Crane Signaler so there is no confusion about the message to the Crane Operator(s).

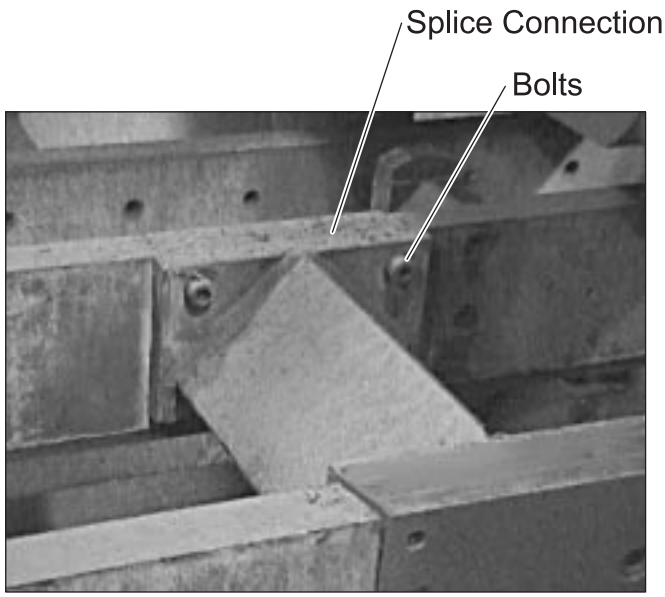
6. Attach the lifting strap to the bar so the bridge crane can slide the bar out of the end (or into the access point if in the middle).

7. Slide the transfer bar until the first section of bar is accessible from the end of the conveyor or from the middle access point.

- ☐ When working on a middle section, use the mobile crane to lift the transfer bar while the bridge crane pulls it out.
- ☐ Use wooden cribbing, as necessary, to hold the weight of the transfer bar while resetting the crane straps.
- ☐ Feed the transfer bar out slowly until the first section is accessible.

8. Disconnect the section of transfer bar at the transfer bar splice connection, as it becomes accessible from the end of the conveyor.

☐ Remove the bolts and dowels from the splice connection.



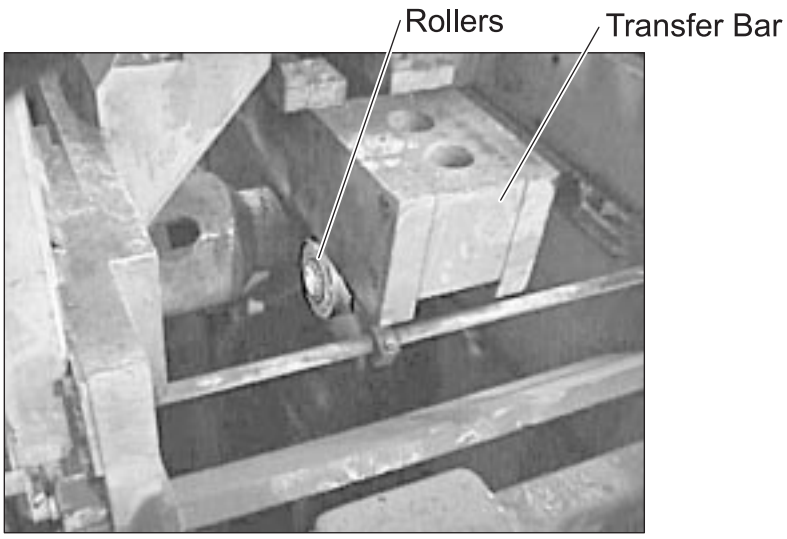
Splice Connection

9. Move the detached section with the mobile crane.

☐ Set the detached transfer bar section in a designated area.

10. Repeat steps 6-9 until the entire section is removed.

11. Inspect the lift mechanism rollers and pins after removing the transfer bar.



Lift Mechanism and Rollers

- ☐ Look for unusual wear or deterioration.

12. Replace the rollers, bearings in the rollers, and pins.

13. Assemble the new transfer bar according to the manufacturer's specifications.

14. Replace the transfer bar.

- ☐ Attach each section at the splice connection; replace the pins and tighten the bolts according to the manufacturer's specifications.
- ☐ Feed the pieces down the line with the bridge crane until the entire transfer bar has been replaced.

15. Reconnect the drive mechanism to the transfer bar.

16. Replace all fixtures, guards, and fixture parts as specified on the print.