Magnum 1-800-330-0857

TSB100616

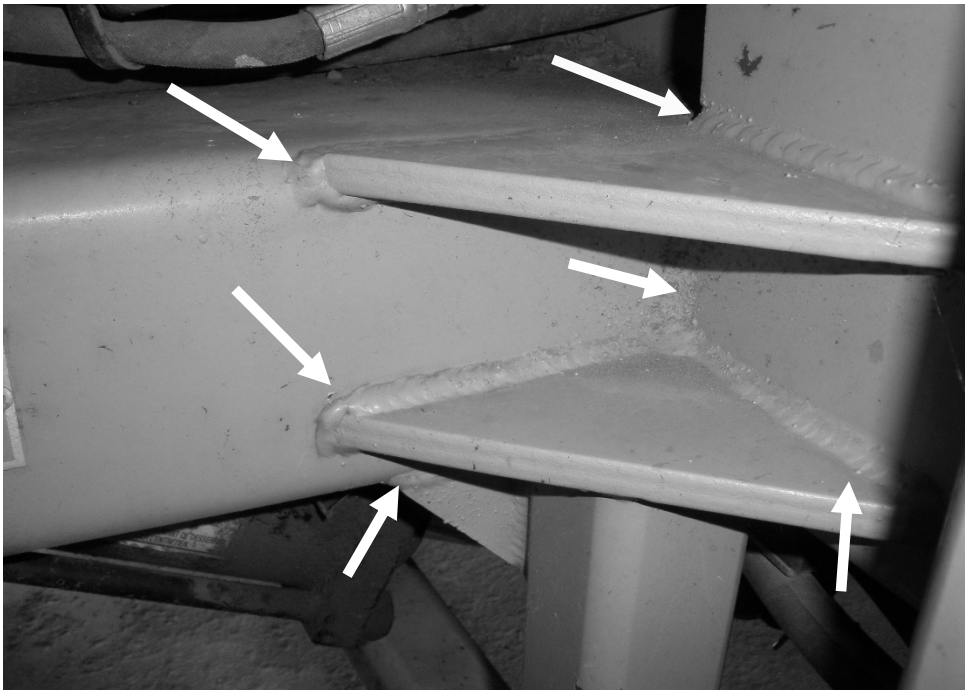
TECHNICAL SERVICE BULLETIN

SUBJECT: Cracking/Breaking Roll Lift and Main Frame

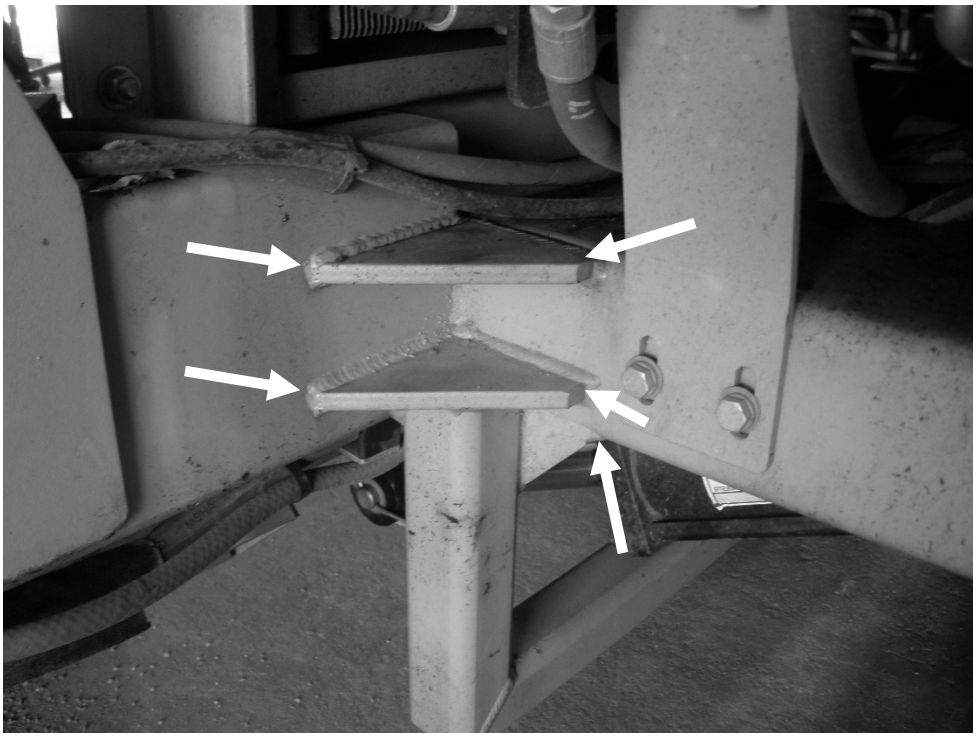
Models: All M-Series Installers

Bucyrus Equipment Company Inc. (BECI) has received reports from the field of cracks and breakage of the mainframe or roll lift on certain M-series big roll installers. Therefore, BECI recommends daily inspection of the main frame and roll lift for evidence of cracking or breakage in the areas shown in the following photos. If cracks or breakage is noted, BECI strongly recommends discontinuing the use of the machine until suitable repairs are performed. Continued use of a unit that has a cracked or broken mainframe or roll lift will result in additional damage and possible complete failure of the mainframe or roll lift.

Mainframe Inspection



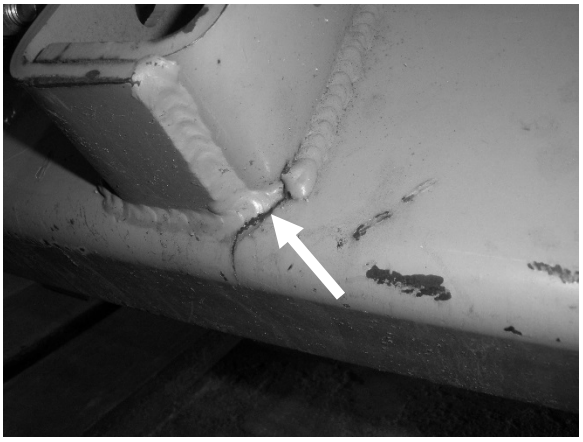
Inspect the mainframe for cracks in the areas shown.



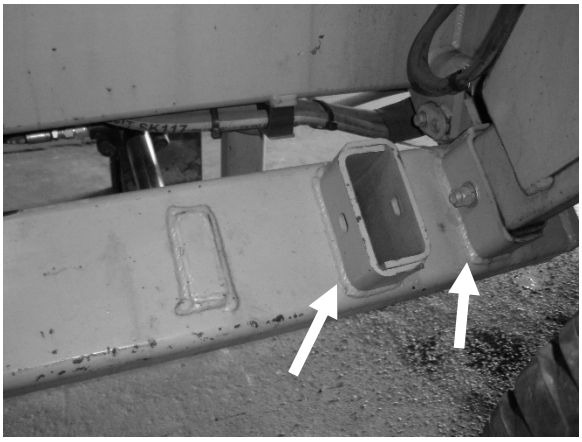
Inspect the mainframe for cracks in the areas shown.

If any cracks are noted in mainframe, discontinue use and perform the appropriate repair. Consider consulting with a local welding or fabricating shop with experience with this type of repair. Also, contact BECI (800-330-0857). BECI can provide frame stiffeners (part No. IN-MF900) at no charge, along with instructions for frame repair. Prior to returning the unit to service, test the lift cylinders for internal leakage as described in this bulletin.

Roll Lift Inspection



Inspect the roll lift for cracks in the areas shown.



Inspect the roll lift for cracks in the areas shown.

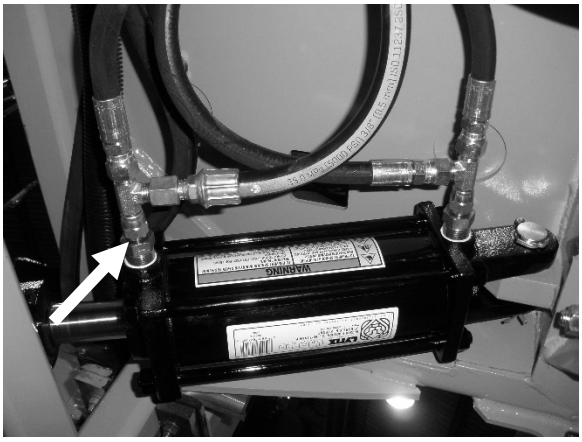
Inspect the roll lift for cracks in the areas shown. If cracks are noted, the roll lift must be repaired or replaced prior to returning the machine to service. Severe damage will occur to the roll lift and mainframe if the machine is operated with cracked or broken components. Consider consulting with a local welding or fabrication shop with experience in this type of repair. Contact BECI (800-330-0857) for a replacement roll lift.

Lift Cylinder Inspection and Testing

If any cracks or breakage occurs on the installer mainframe or roll lift, test the roll lift cylinders for leakage prior to resuming operation. Internal cylinder leakage will cause uneven lifting performance and result in repeated breakage. Both lift cylinders must carry an equal amount of the total load or damage will result.

1. To test the lift cylinders, start the installer engine and raise the lift arms to the fully up position. The lift arms must be empty without any load. Shut off the engine.

View showing left lift cylinder



View showing right lift cylinder

WARNING: Hydraulic oil escaping under pressure can penetrate skin causing serious personal injury. Wear suitable gloves and eye protection when working with pressurized hydraulic oil. Be sure the machine is not running and relieve all pressure from the hydraulic lines before disconnecting any hydraulic lines. Securely tighten all connections before applying pressure. Search for leaks using a piece of cardboard. Protect hands and body from high pressure fluids. If hydraulic oil penetrates the skin, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours of gangrene may result. Doctors unfamiliar with the type of injury should reference a knowledgeable medical source.

2. Starting with the left cylinder, disconnect the hydraulic hose from the rod end of the cylinder. See the photos above.

3. Install and securely tighten a No. 6 JIC cap onto the fitting on the cylinder. Next, disconnect the rod end hose from the right cylinder.

4. Start the engine and apply hydraulic pressure to the cylinder using the lift valve. Note the disconnected fitting on the cylinder while holding the lift valve toward the UP position.

5. If oil flow is noted at the disconnected fitting, the cylinder is leaking internally and must be replaced or repaired. Contact BECI (800-330-0857) for replacement cylinders or cylinder repair kits.

6. If no oil flow is noted at the fitting, remove the cap from the left cylinder. Install and tighten the cap onto the right cylinder fitting. Repeat Step 4 while observing the disconnected fitting for oil flow. If no oil flow is present, the cylinders are in acceptable condition. Remove the cap and reconnect both hoses to the fittings on the cylinders.