



TIM'S TECH TIPS



GXT Cylinder Removal

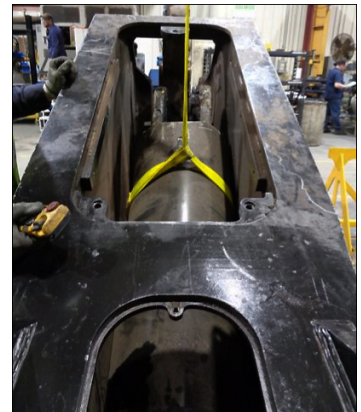
The hydraulic cylinder is the heart of any shear, and because it cycles back and forth, end to end, all day long, it's important to perform scheduled and proper maintenance to prevent significant damage.

Cylinders can weigh anywhere from 1,500 to 12,000 pounds, so when it's time to remove a GXT shear cylinder for maintenance, be sure to follow the steps below to remove it safely and correctly.

Remove the top cover plate and extend the cylinder barrel all the way out (upper jaw closed).

Wrap a strap, basket style, around the cylinder. It may be easiest to feed a piece of wire around the cylinder and use the wire to pull the strap through because the clearance between the cylinder and inner wall of the shear is narrow. Put light tension on the strap to support the cylinder.

Remove the rod-end cylinder pin keeper and then the front cylinder pin. Use caution as the upper jaw will drop (close) slightly as the front pin is removed.



Retract the barrel slowly to avoid damaging the auto guide assembly with the cylinder clevis.

Relieve Hydraulic System Pressure

For rotating shears - at the swivel manifold, carefully remove the split flanges from the hoses connecting the regeneration, regen, valve to the swivel manifold.

For non-rotating shears - at the port blocks, carefully remove the split flanges from the hoses connecting the regen to the port blocks.

Remove the cylinder hose split flanges using caution as there

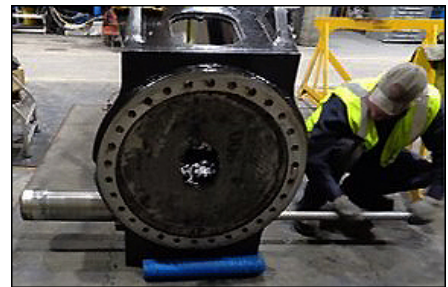
may still be some hydraulic pressure in the lines. Cap the port with steel port plugs and split flanges.

Remove the regen-to-swivel hose split flanges at the swivel. Attach a strap to the regen and tray assembly and suspend from a suitable lifting device. Remove the regen tray mounting bolts and pull the regen out of the shear stick. Be careful not to damage the hoses. Wrap the hose ends in clean rags and place the regen and hoses on a clean surface.



Change the cylinder strap from basket style to choke style, making sure your strap can be chocked to the amount required to lift the cylinder.

Remove the pin keeper from the rear cylinder pin and collar, and remove the rear cylinder pin. Note, the cylinder will shift as it is no longer attached to the shear.



Push the cylinder to the back of the shear. Lift the cylinder, barrel end clevis first.



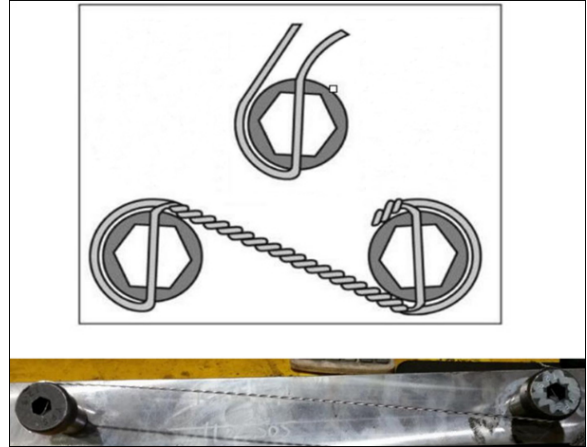
When you reinstall the cylinder following maintenance, be sure to use new O-rings coated with clean grease. Torque and Loctite 262 application specifications can be found in the **GXT Safety and Operator's Manual** and the **parts manual** for your shear model.

Reinstall the regen and tray assembly, lockwiring the shoulder bolts per the instructions below.

Slide the 0.032-inch diameter wire through two of the holes that are 180 degrees apart. Twist the wire as shown using safety wire pliers.

Slide one wire through two of the holes that are 180 degrees apart and wrap the other wire around the bolt.

Twist the wires together to form a pigtail.



Tim, 218-349-5755, talseth@genesisattachments.com, and Loren, 715-919-8316, llagesse@genesisattachments.com, are here to answer any questions you have about removing and/or reinstalling a GXT shear cylinder.

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