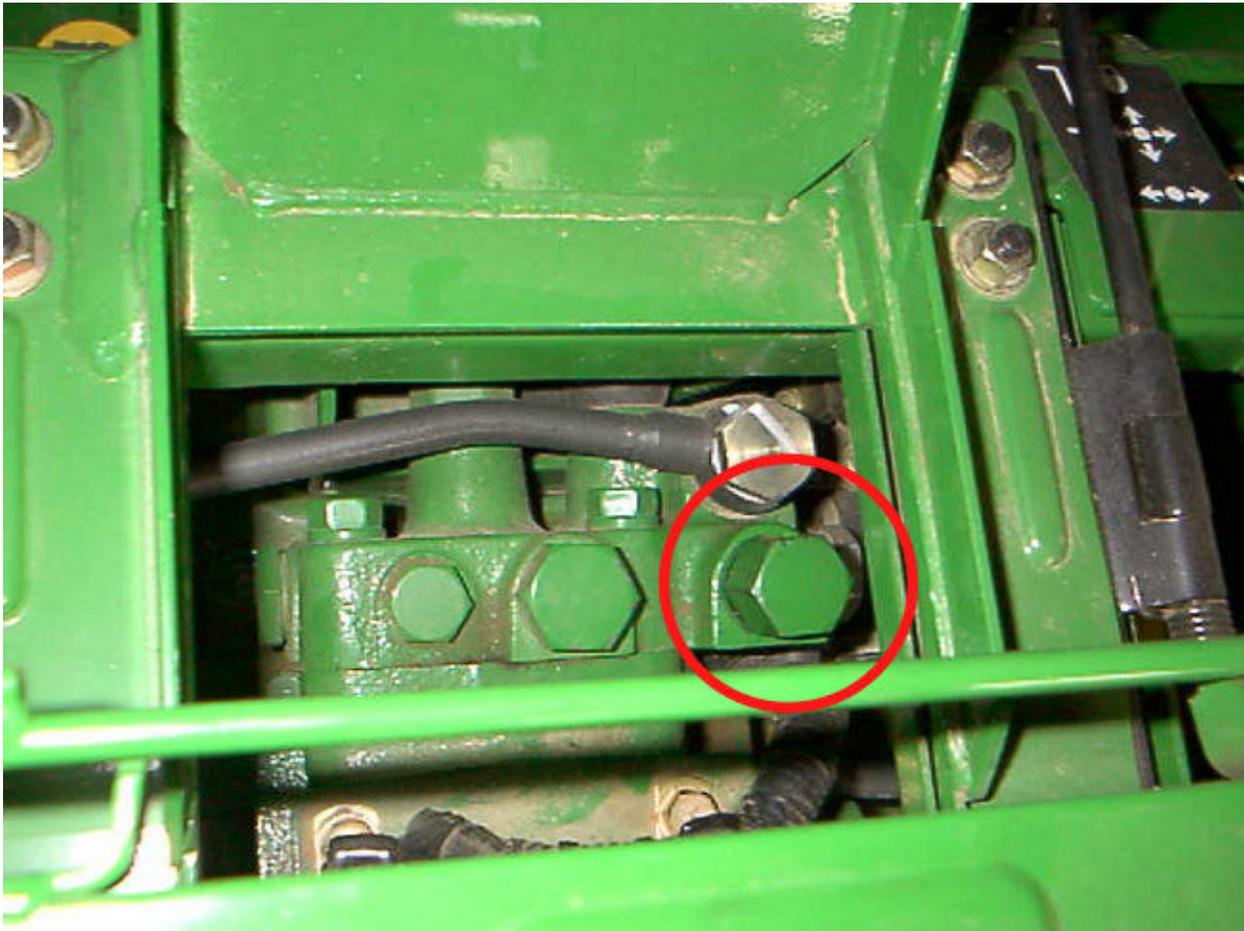


Boosting the 790's hydraulic pressure.

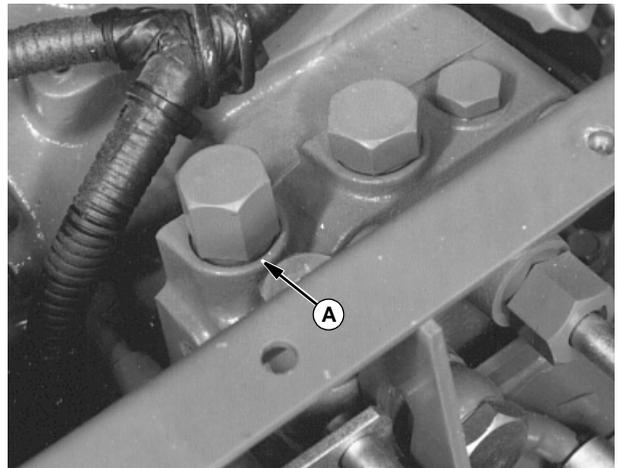
Flip up the seat on your tractor and this is what you will see. You will notice there are three caps. The one on the right is where you will add the shims. Be careful when removing the cap because there is a couple of parts from inside the cap that can fall down and get lost. The shims get added to the inside of the cap, so as to push all of the other parts down slightly more. I originally said to add two full packages, but don't do this. I put mine on a gauge and the PSI was way too high. Get a gauge, start with one full package, and then work up from there. Keep in mind that the factory setting is 2050 PSI. I have mine at 2500 now with a modest increase in power. (3500 works really good, but don't ask how I know). When putting the cap back on, if it seems difficult, then reach in the hole and pull out the rubber o-ring and slip it over the threads on the cap. It will thread right in then.

If you go with a modest modification (I would say under 3000 PSI) you should have no problems. As stated, before I checked mine with a gauge, I was operating at a little over 3500 PSI. It worked great, but at that pressure there was a chance of damaging the pump. Keep in mind the setting from the factory is 2050 PSI. You probably have the 70 loader on yours...mine has the newer 419 loader. If you went to 2500 PSI, in my eyes you will have absolutely nothing to lose, only some lift power to gain. I believe that the reason they are "turned down" so much from the factory is for liability reasons. The relief is for the whole system. It's exactly what the tractor needs. Shim kit Part # AM875169



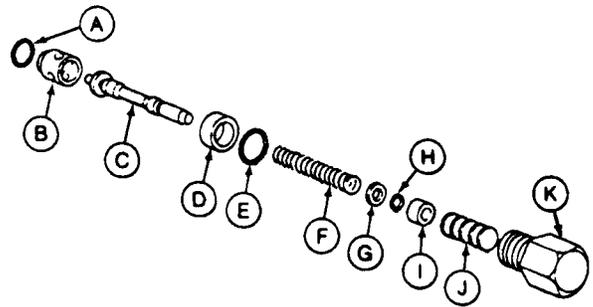
REMOVE, INSPECT AND INSTALL SYSTEM RELIEF VALVE

1. Lower rockshaft arms.
2. Remove seat and support. (See Section 80, Group 25.)
3. Remove relief valve assembly (A).



M53205

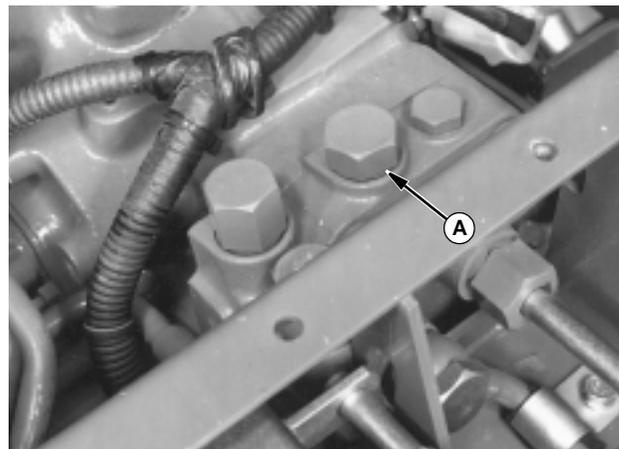
4. Inspect all parts for wear or damage. Replace as necessary.
5. Apply clean transmission/hydraulic oil to all parts.
6. Install relief valve assembly with new O-rings (A, E and H).



- | | |
|--------------|----------------------|
| A—O-Ring | G—Washer |
| B—Valve Seat | H—O-Ring |
| C—Poppet | I—Bushing |
| D—Bushing | J—Shim (As Required) |
| E—O-Ring | K—Plug |
| F—Spring | |

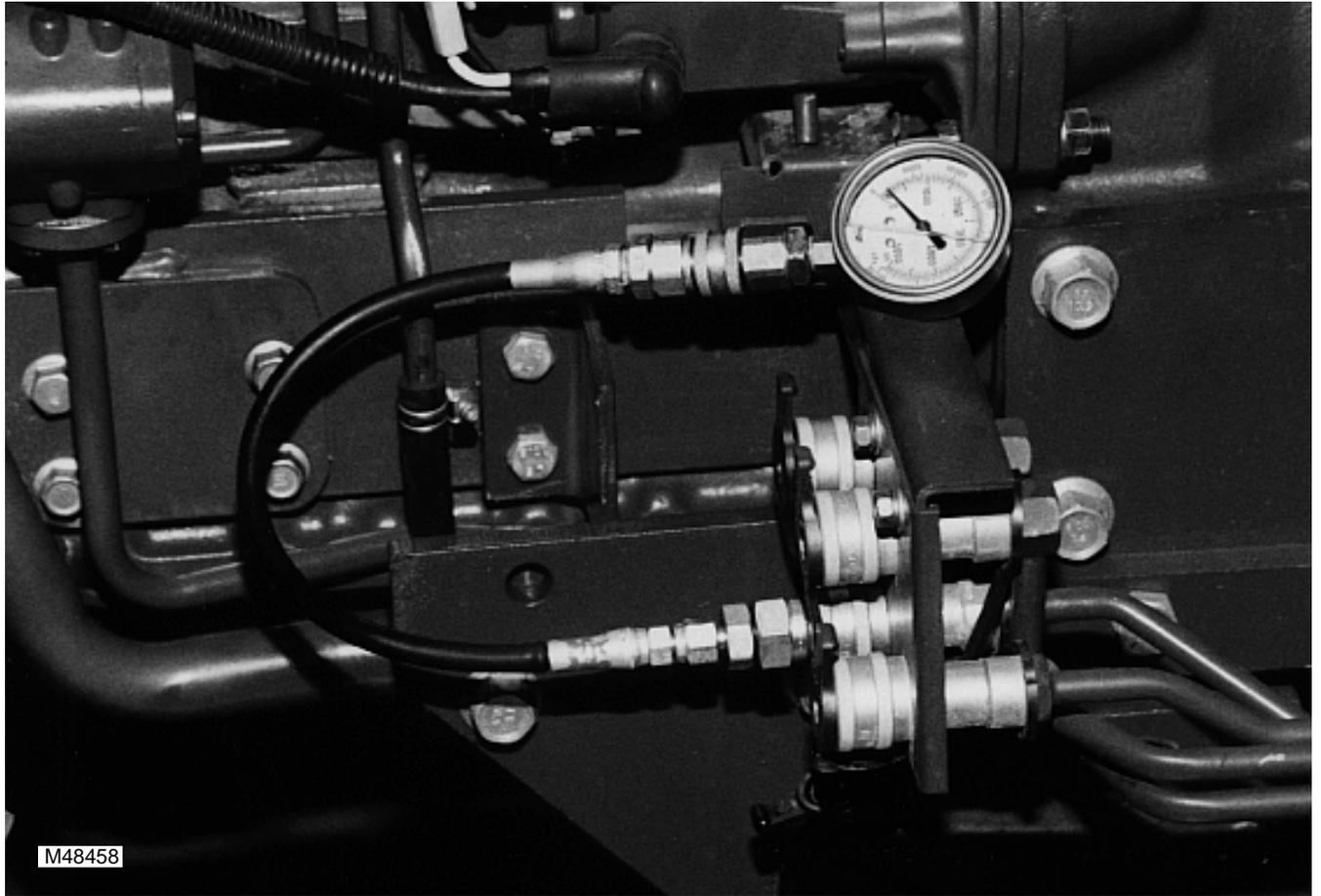
REMOVE, INSPECT AND INSTALL THERMO-RELIEF VALVE

1. Lower rockshaft arms.
2. Remove seat and support. (See Section 80, Group 25.)
3. Remove relief valve assembly (A).



M53209

SYSTEM RELIEF VALVE TEST (TRACTORS WITH SCV)



REASON FOR TEST:

To determine if the system relief valve is adjusted to the correct pressure. It will also indicate if leakage is occurring past the SCV plug.

TEST EQUIPMENT REQUIRED:

- A. JTO 3345—3000 psi Gauge
- B. JTO 3364—Hose with Coupler
- C. (670-770-790) JTO 5486—Adapter 1/4" M NPT x 7/16-20 M 37°
(870-970-1070) JTO 5494—Adapter 3/4-16 M ORB x 7/16-20 M 37°
- D. (670-770-790) Internal half of AM 102420 Coupler
(870-970-1070) Internal half of AM 105467 Coupler.

TEST PROCEDURE:

1. Connect test equipment into front outlet.
2. Run engine at fast idle.
3. Operate SCV lever to pressurize front outlet being used.
4. Check pressure reading on gauge.

TEST SPECIFICATIONS:

670-770-790—2000 to 2100 psi

870-970-1070—2200 to 2300 psi

TEST RESULTS:

Pressure too high—adjust system relief valve

Pressure too low—Relief valve is adjusted too low, leakage is occurring past relief valve or past SCV plug.