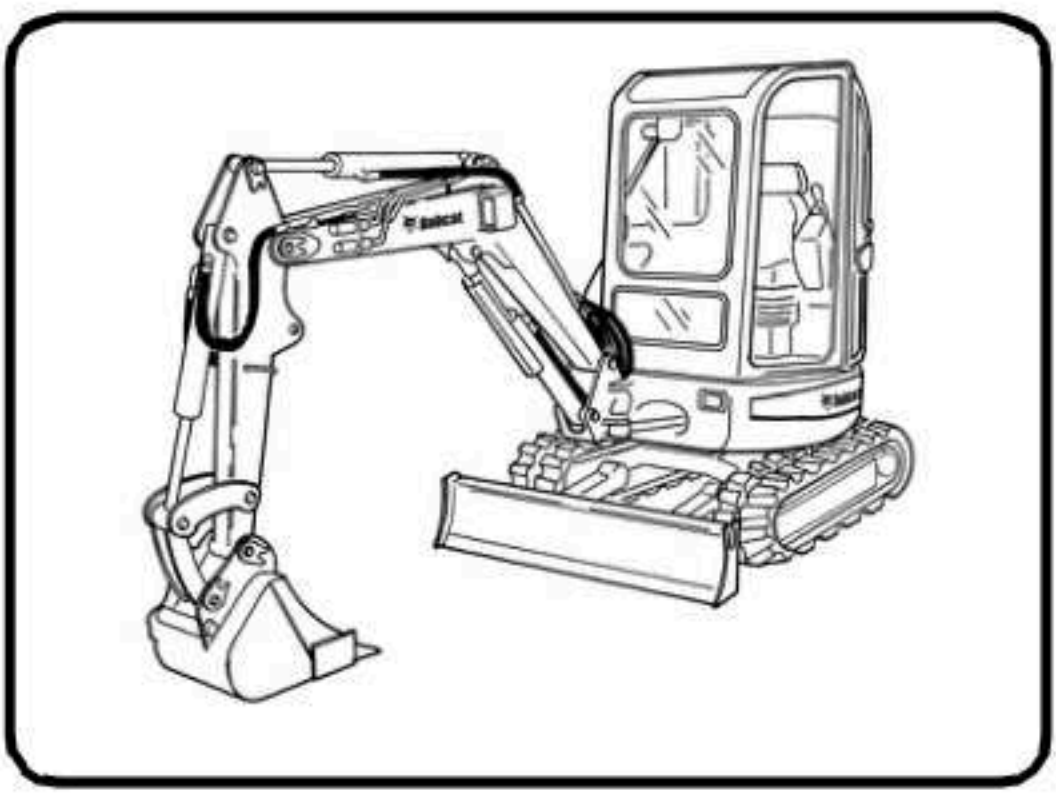
Bobcat®

Service Manual

425, 428 Compact Excavator

425 S/N AACJ11001 & Above
425 S/N A9K311001 & Above
428 S/N A9K411001 & Above



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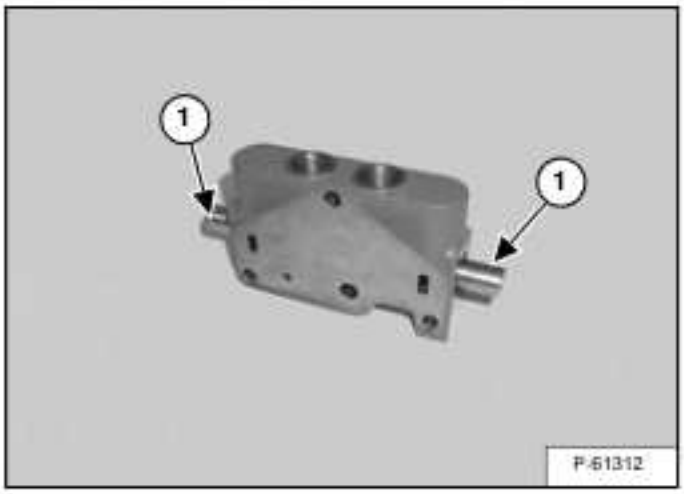
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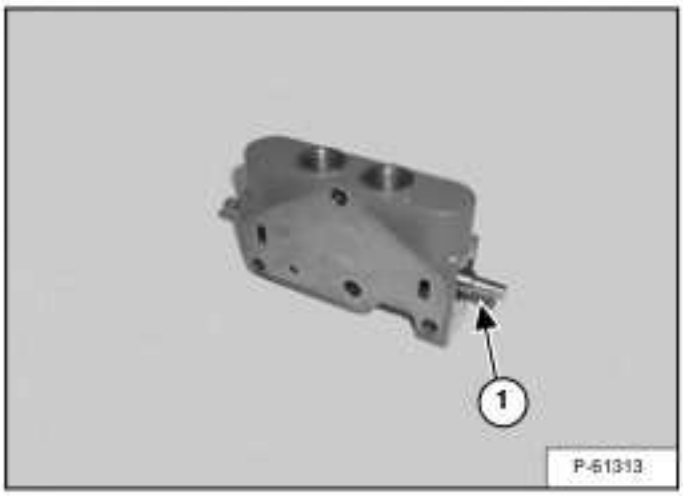
Slew Valve Section Disassembly And Assembly (Cont'd)

Figure 20-40-87



Remove the spring guides (Item 1) **[Figure 20-40-87]** from both ends of the valve spool.

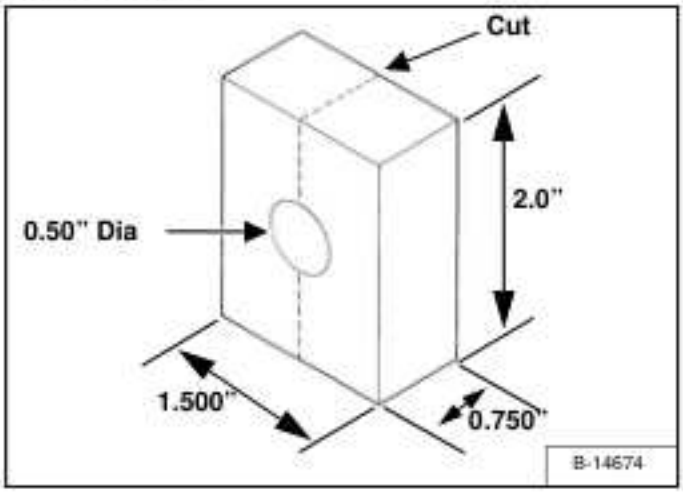
Figure 20-40-88



Record the orientation of the spool (Item 1) **[Figure 20-40-88]**. Remove the spool from the valve section.

NOTE: The spool is not symmetrical. Incorrect spool installation will cause poor hydraulic valve performance.

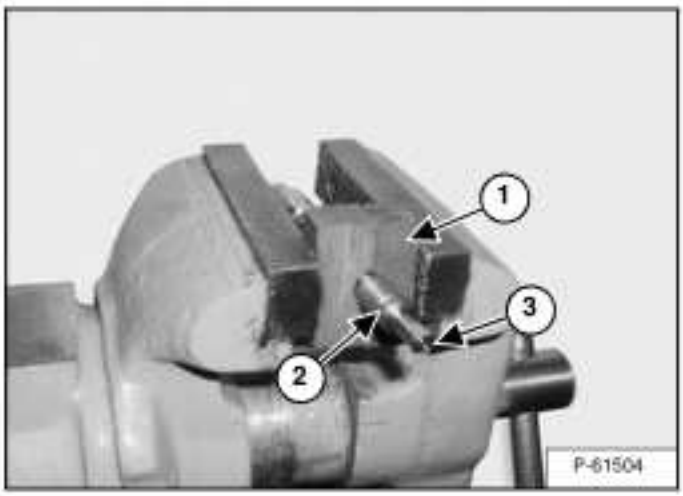
Figure 20-40-89



To remove the plugs from the spool, a holding fixture will have to be made from a 0.750 in. thick x 1.500 in. wide x 2.0 in. long (19 mm thick x 38 mm wide x 50 mm long) piece of hardwood. Drill a 0.50 in. (13 mm) hole in the center of the hardwood block. Cut the block lengthwise **[Figure 20-40-89]**.

NOTE: Do not use anything other than hardwood blocks to grip the spool, or the spool will be damaged.

Figure 20-40-90



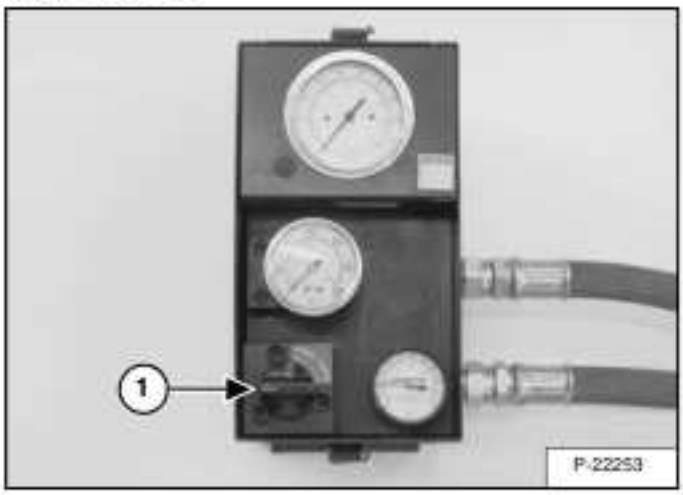
Using the wood blocks (Item 1) clamp the spool assembly (Item 2) in a vise and loosen the plugs (Item 3) **[Figure 20-40-90]** (both ends.)

Installation: Apply thread lock adhesive (Loctite™ 262) or equivalent to the threads. Tighten the plugs to 44 in.-lb. (5 N•m) torque.

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Testing Auxiliary Hydraulic Flow (Cont'd)

Figure 20-50-10



NOTE: Open the flow control knob (Item 1) [Figure 20-50-10] fully.

Start the engine, and run at low RPM. Engage the auxiliary hydraulic circuit.

NOTE: When engaging the auxiliary hydraulic circuit, make sure the female coupler is pressure and the male coupler is return.

Make sure the tester is connected correctly. If no flow is indicated at the tester, the hoses are connected wrong.

Increase the engine speed to full RPM. Warm the hydraulic fluid to 150° F (66° C) by turning the restrictor valve until the gauge reads about 1000 PSI (69 bar). Do not exceed system pressure.

After the temperature is correct, open the restrictor valve fully.

Record the auxiliary hydraulic free flow GPM (L/min.).

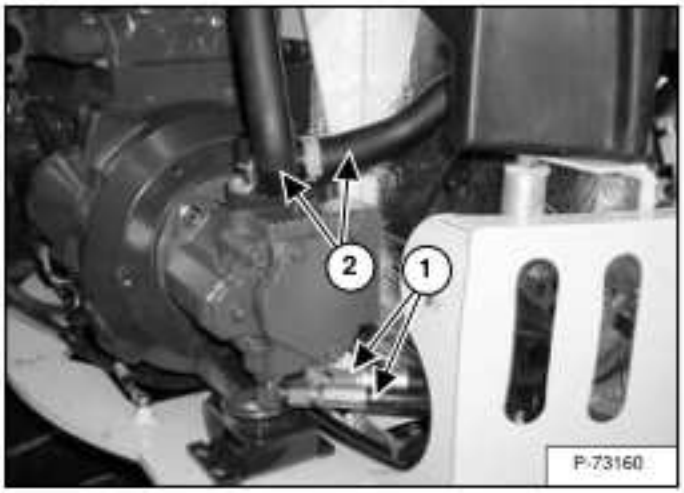
Removal

Drain the hydraulic reservoir. (See Removing And Replacing The Hydraulic Fluid on Page 10-100-3.)

Remove the counterweight. (See COUNTERWEIGHT on Page 40-210-1.)

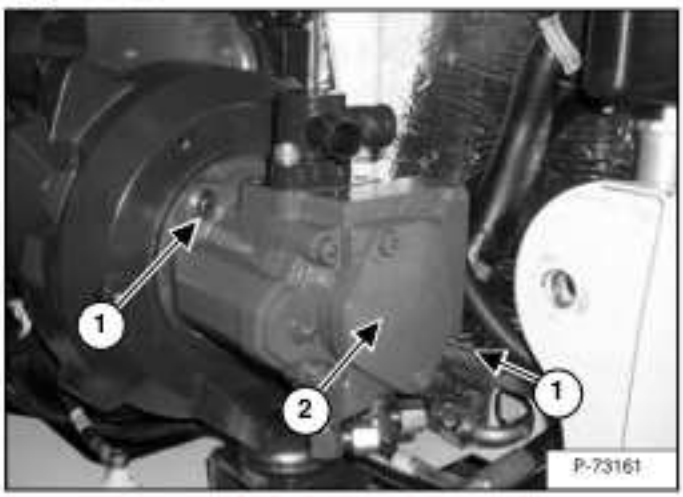
Remove the spark arrestor muffler. (See SPARK ARRESTOR MUFFLER on Page 60-30-1.)

Figure 20-50-11



Mark and remove the hoses (Item 1 & 2) **[Figure 20-50-11]**.

Figure 20-50-12



Remove the two bolts (Item 1) and the pump (Item 2) **[Figure 20-50-12]**.

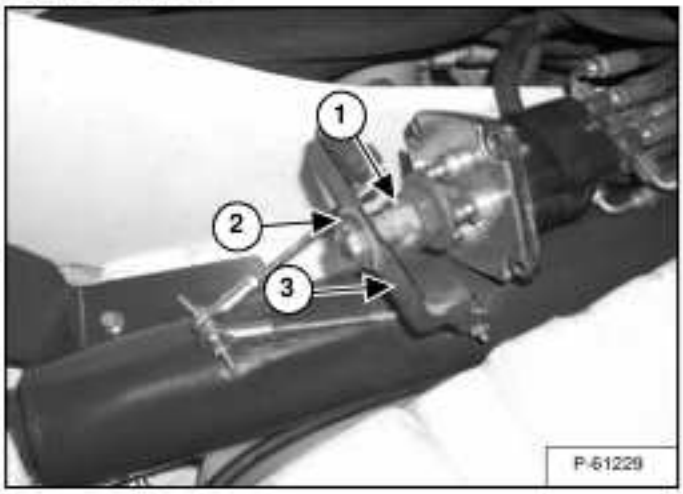
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Linkage Removal And Installation

Remove the floor mat and floor panel. (See Removal And Installation on Page 40-90-1.)

Remove travel levers/pedals. (See Removal And Installation on Page 40-110-1.)

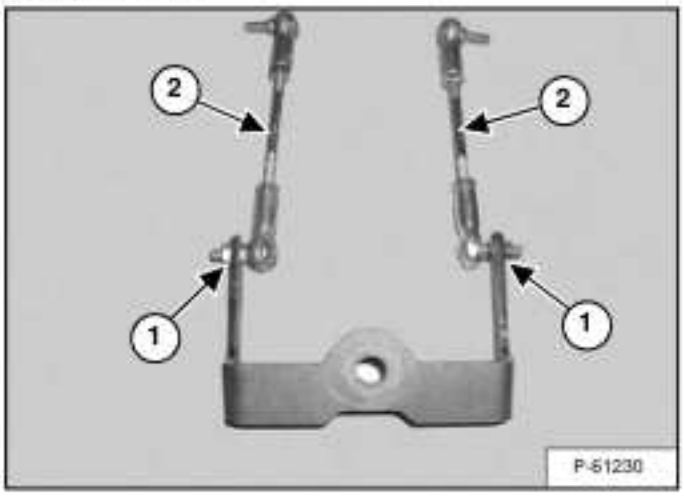
Figure 40-110-16



Hold the nut (Item 1). Remove the bolts and washer (Item 2) **[Figure 40-110-16]**.

Remove the control linkage (Item 3) **[Figure 40-110-16]** from the excavator.

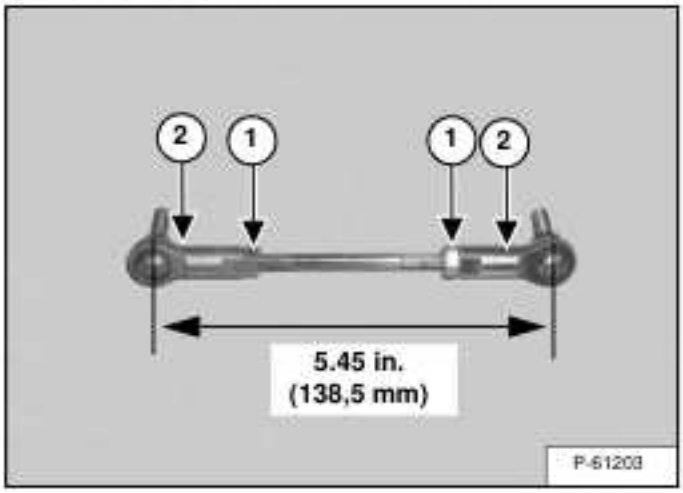
Figure 40-110-17



Remove the nuts (Item 1) and the linkage rods (Item 2) **[Figure 40-110-17]** from the mounting plate.

Inspect the ball joints, and replace as needed.

Figure 40-110-18



Loosen the nuts (Item 1). Remove the ball joints (Item 2) **[Figure 40-110-18]**.

Installation: The distance between the linkage ball joints is 5.45 in. (138.5 mm) **[Figure 40-110-18]**.

The travel controls must be adjusted for neutral, forward and reverse. (See Adjustment on Page 40-110-4.)

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WIRING SCHEMATIC
425 (S/N AACJ11001 AND ABOVE)
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CONTROL MODULE CONNECTORS J1-J5

RIGHT HAND CONSOLE HARNESS 7130798

LH CONSOLE HARNESS 7130797

CAB HARNESS 7102833 (IF EQUIPPED)

ENGINE HARNESS 7130796

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