

Construction Equipment

Service Information

Document Title:	Function Group:	Information Type:	Date:
Control Terminology	600	Service Information	2014/3/17
Profile: SSL, MC60 [GB]			

Control Terminology

To understand the safety, operation and maintenance information presented in this section, it is necessary for the operator/ mechanic to be familiar with the name and location of the machine controls. The following illustration identifies the components that are referred to throughout this section.



Figure 1

- 1. Standard hand/foot controls
- 2. Optional hands only controls
- 3. Seat bar
- 4. Right travel/ Steering and auxiliary hydraulic control lever
- 5. Engine throttle
- 6. Attachment tilt foot pedal
- 7. Loader arm raise/lower foot pedal
- 8. Left travel/Steering lever
- 9. Attachment tilt hand control
- 10. Right travel/Steering control lever
- 11. Engine throttle
- 12. Auxiliary hydraulic foot pedal
- 13. Left foot pedal (not used)
- 14. Left travel/Steering control lever
- 15. Loader arm raise/Lower hand control



Construction Equipment

Service Information

Document Title: Travel/Steering description	Levers,	Function Group: 600	Information Type: Service Information	Date: 2014/3/17
Profile: SSL, MC60 [GB]				

Travel/Steering Levers, description

Travel/Steering Lever Operation

Two travel/steering levers control speed, steering and stopping. The right lever controls the wheels on the right side of the machine and the auxiliary hydraulic control (side to side movement). The left lever controls the wheels on the left side of the machine.



Figure 1 Travel Controls

- 1. Forward
- 2. Reverse
- 3. Left
- 4. Right

To travel forward (1), both levers must move forward. To travel in reverse (2), both levers must move backward. To turn left (3), the left lever goes back while the right lever goes forward. To turn right (4), the right lever goes back while the left lever goes forward. To stop travel, return both levers to the center (NEUTRAL) position. Refer to the Owners/Operators Manual for more detailed operational instructions.

Without attachment, the machine is rear heavy. Therefore, when no attachment is fitted to the machine, move the machine by using smooth controls and the engine at low idle.



Construction Equipment

Document Title: Neutral centring and control lever adjustment	Function Group: 643	Information Type: Service Information	Date: 2014/3/17
Profile: SSL, MC60 [GB]			

Neutral centring and control lever adjustment

Op nbr 643-083

- 1. Put the machine in service position 1, see <u>191 Service position 1</u>.
- 2. Raise and block the machine, see <u>191 Safety when handling accumulators</u>. **NOTE!**

Without an implement or bucket attached to the loader arm attachment bracket, the machine is rear end heavy. When raising the machine, raise the rear first and place support blocks under the rear of drive chain cases, not under the slanted part of the fuel and hydraulic oil reservoirs.

3. With the machine supported and all tires off the ground, start the engine and set the throttle at "low idle." Allow the machine hydraulic oil to warm up to normal operating temperature [43°C (110°F)], and shut the engine OFF. **NOTE!**

The centering spring assemblies return the travel/steering levers to the NEUTRAL (center) position when it is released during operation. Perform the following procedure for each lever:

4. Loosen the damping cylinder from the transmission lever.



Figure 1

- 1. Damping cylinder
- 5. There cannot be any end-play in the centering spring assembly. Check for end-play by lightly pushing and pulling on the linkage rod. If end-play is detected, loosen the hex jam nut, and adjust nut to position the front and rear spring guides against the front and rear retaining rings with minimal force. Once end-play has been eliminated, retighten the hex jam nut.





- 1. Centering spring assemblies
- 2. Linkage rod
- 3. Hex jam nut
- 4. Adjust nut

Travel/Steering Lever Position

6. If either (left and right) travel/steering lever is not in a vertical (straight up) position, proceed to the next step. If both levers are in a vertical position, skip to Step 14.



Figure 3 Travel/steering lever position

1. Travel/steering lever in vertical (straight up) position

Travel/steering lever vertical adjustment right side shown

7. Loosen the hex jam nut on the front linkage rod ball joint.



Figure 4

- 1. Hex jam nut
- 2. Link rod ball joint
- 3. Lever pivot
- 4. Locknut
- 5. Capscrew
- 8. Disconnect right side link rod ball joint from the right travel/steering lever pivot by removing the locknut from capscrew.
- 9. With the travel/steering lever held in a vertical position, turn the linkage rod ball joint as required to align the ball joint with its mounting hole in the travel/steering lever.
- 10. Tighten the ball joint hex jam nut against the ball joint once the travel/steering lever(s) has been adjusted to the vertical (straight up) position.
- 11. Repeat Steps 4 through 8 to center the opposite travel/steering lever if required.
- 12. Start the engine, and set the throttle at "low" idle.
 - If the tires on either side of the machine DO NOT turn (creep), see <u>643 Neutral centring test</u>.
 - If the tires on either side of the machine DO turn (creep), the neutral position for the appropriate control requires adjustment. Shut the engine OFF and proceed to the next step.
- 13. Loosen the jam nut fully on the transmission linkage ball joint that requires adjustment.



Figure 5 Travel/steering lever adjustment

- 1. Jam nut
- 2. Ball joint
- 14. Remove the capscrew, linkage rod with hex lock nut and ball joint, flat washer , rebound washer , and hex locknut . DO NOT remove the rubber isolator from the transmission lever.



Figure 6 Travel/steering lever adjustment (left side shown)

- 1. Capscrew
- 2. Linkage rod
- 3. Hex lock nut
- 4. Ball joint
- 5. Flat washer
- 6. Rebound washer
- 7. Hex locknut
- 8. Rubber isolater
- 9. Lever
- 15. If the tires turn rearward in Step 10, the ball joint should be rotated counterclockwise (farther off the rod) to make the rod overall length longer. If the tires turn forward in Step 10, the ball joint should be rotated clockwise (farther onto the rod) to make the rod overall length shorter.
- 16. Reassemble the linkage rod with hex locknut and ball joint to the transmission lever with capscrew, flat washer, rebound washer and hex locknut. DO NOT tighten at this time.

Thank you so much for reading. Please click the "Buy Now!" button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email:

ebooklibonline@outlook.com