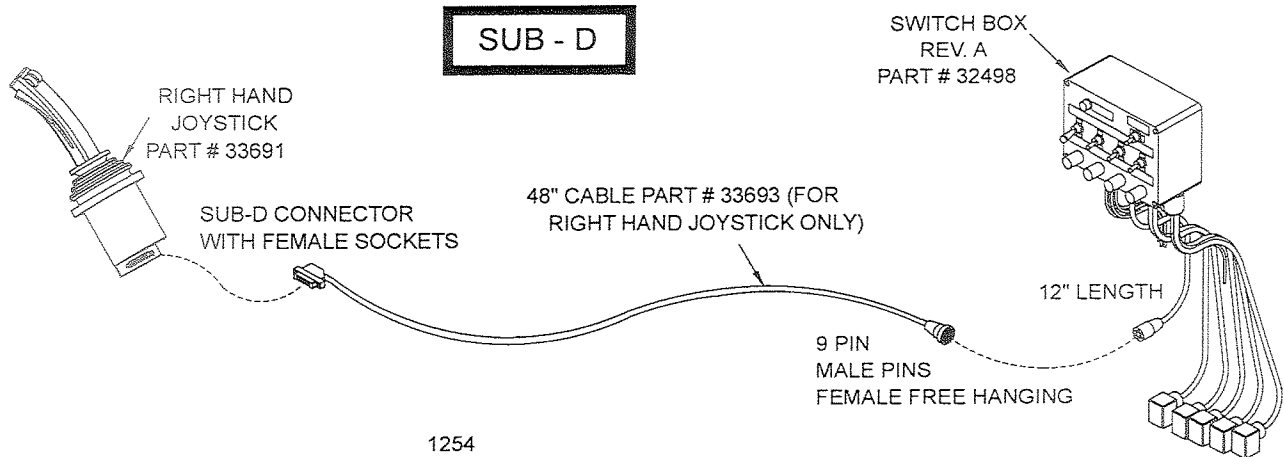


ASSEMBLY

BOOM JOYSTICK CONTROL CALIBRATION



CAUTION!



The joystick control is equipped with signal adaption potentiometers. These provide the capability to individually adjust the oil flow to each boom function. It is important that the boom functions do not travel too fast. Excessive boom speed can reduce the stability of the unit and decrease operator control.

Note: These potentiometers have 270° total adjustment. Use a phillips screw driver and be sure to adjust the screws carefully! DO NOT turn the potentiometers beyond their stopping point, potentiometers are very delicate! Turning the potentiometers clockwise increases the oil flow to increase the boom function speed, and turning them counterclockwise decreases the oil flow to decrease the boom function speed. See the graphic on page 2-14 for help in adjusting.

Run tractor in normal operating RPM to adjust the settings as follows.

Set the dead band compensation potentiometer first.

(continued)

ASSEMBLY

SUB-D

Setting Signal Adaptation Potentiometers:

A full counter clockwise setting of the dead band potentiometer provides the maximum amount of dead band. Turn full clockwise and then back 150° counter-clockwise to set.

MAIN BOOM: "A" Port Potentiometer: 100° Counter-clockwise (i.e.: turn screw full clockwise, then turn it 100° counter-clockwise)

"B" Port Potentiometer: Set to full Counter-clockwise

SECONDARY

BOOM: "A" Port Potentiometer: 90° Counter-clockwise

"B" Port Potentiometer: 110° Counter-clockwise

DECK ROLL: "A" Port Potentiometer: 225° Counter-clockwise

"B" Port Potentiometer: 180° Counter-clockwise

Note: The deck roll spool has a "float" position. This initial adjustment should prevent the spool from traveling to the "float" position when actuating the thumb roller on the joy stick. After making this first adjustment if the spool still goes into float, adjust the "B" port screw additionally counterclockwise.

BOOM

SWIVEL: "A" Port Potentiometer: 135° Counter-clockwise

"B" Port Potentiometer: 40° Counter-clockwise

(continued)

7-30-02

ASSEMBLY

SUB-D

After making the initial adjustments, time each boom function, and refine the adjustments to meet the following cycle times:

MAIN BOOM: "A" Port, Boom UP: 7-9 Seconds

(Note: Extend secondary boom completely, roll deck to be level with ground, and lower main boom until deck is on ground. Now index main boom "up" function and determine the time required for main boom to raise completely.)

"B" Port, Boom Down: 6-8 Seconds

(Note: Extend secondary boom completely, roll deck to be level with ground, and raise the main boom to "full up". Then index the main boom "down" function to determine the amount of time required for the deck to contact the ground. CAUTION: Stop the boom just as the deck contacts the ground.)

SECONDARY

BOOM: "A" Port, Boom Out: 8-10 Seconds

(Position main boom full up, roll deck out until deck cylinder is fully retracted, and bring secondary boom in completely. Then index the secondary boom "out" function and determine the time required for boom to extend out completely.)

"B" Port, Boom In: 8-10 Seconds

(Position the main boom full up, roll deck out until deck cylinder is fully retracted, and extend secondary boom completely. Then index the secondary boom "in" function and determine the time required for boom to come in.)

DECK ROLL: "A" Port, Deck Out: 7-9 Seconds

(Raise main boom to vertical, extend secondary boom out slightly so that deck can be articulated without contacting the main boom, and roll deck in until deck cylinder is completely extended. Then index the deck roll "out" function and determine the time required for the deck to roll out.)

"B" Port, Deck In: 7-9 Seconds

(Raise main boom to vertical, extend secondary boom out slightly so that deck can be articulated without contacting the main boom, and roll deck out until deck cylinder is completely retracted. Then index the deck roll "in" function and determine the time required for the deck to roll in.)

BOOM

SWIVEL: "A" Port, Boom Aft: 6-8 Seconds

(Extend booms completely, rotate head to be level with ground, lower main boom until deck is just above ground, and swivel boom full forward. Then index the boom swivel "aft" function and determine the time required for the boom to swivel full aft.)

"B" Port, Boom Forward: 6-8 Seconds

(Extend booms completely, rotate head to be level with ground, lower main boom until deck is just above ground, and swivel boom full aft. Then index the boom swivel "forward" function and determine the time required for the boom to swivel full forward.)

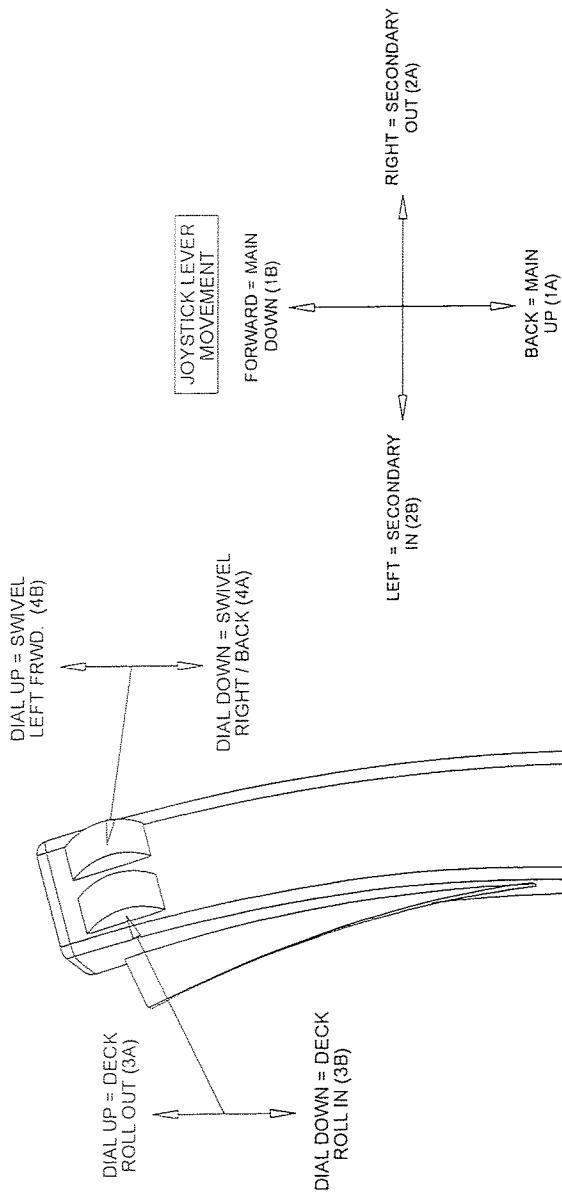
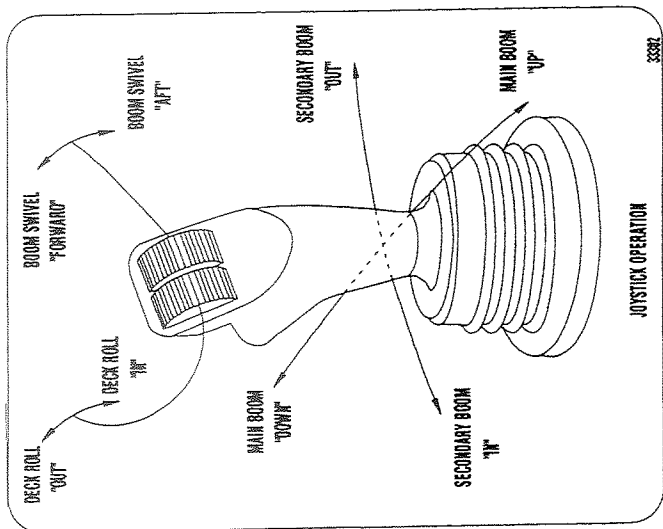
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ASSEMBLY

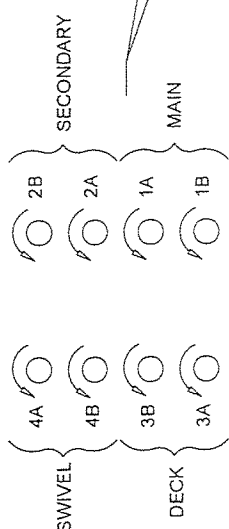
SUB-D

RH SUB-D SABER/BOOM

1138



SIGNAL ADAPTION POTENTIOMETERS

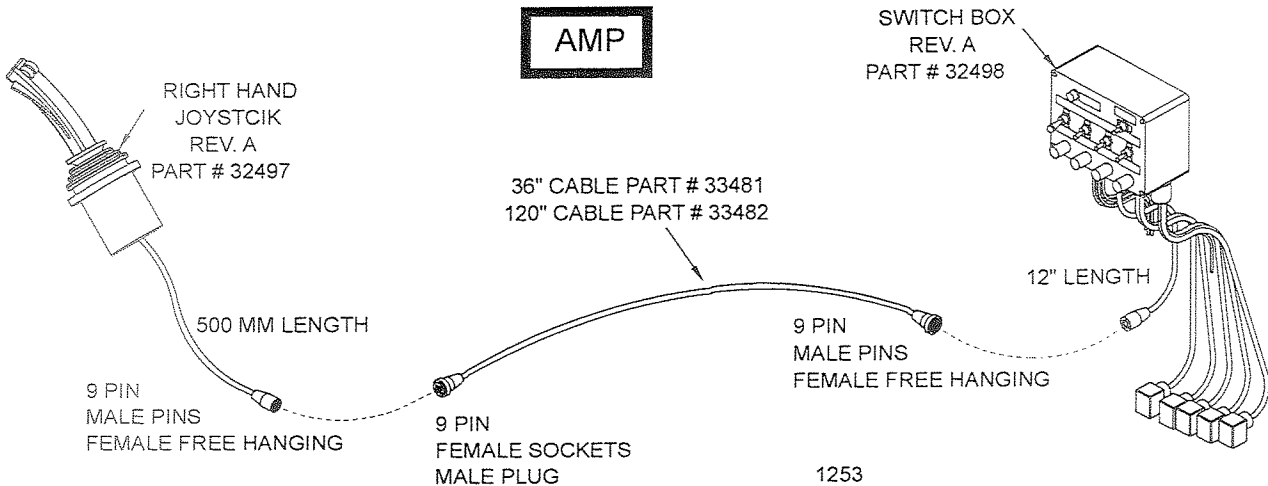


NOTE: FULL C-CLOCKWISE RESULTS IN MAXIMUM "DEAD BAND"

ARROW DIRECTION () DENOTES DIRECTION TO DECREASE OIL FLOW (SLOW BOOM FUNCTIONS)

ASSEMBLY

BOOM JOYSTICK CONTROL CALIBRATION



The joystick control is equipped with signal adaption potentiometers. These provide the capability to individually adjust the oil flow to each boom function. It is important that the boom functions do not travel too fast. Excessive boom speed can reduce the stability of the unit and decrease operator control.

Note: These potentiometers have 270° total adjustment. Use a phillips screw driver and be sure to adjust the screws carefully! DO NOT turn the potentiometers beyond their stopping point, potentiometers are very delicate! Turning the potentiometers clockwise increases the oil flow to increase the boom function speed, and turning them counterclockwise decreases the oil flow to decrease the boom function speed. See the graphic on page 2-14 for help in adjusting.

Run tractor in normal operating RPM to adjust the settings as follows.

Set the dead band compensation potentiometer first.

(continued)

ASSEMBLY

AMP

Setting Signal Adaptation Potentiometers:

A full counter clockwise setting of the dead band potentiometer provides the maximum amount of dead band. Turn full clockwise and then back 150° counter-clockwise to set.

MAIN BOOM: "A" Port Potentiometer: 100° Clockwise (i.e.: turn screw full counter-clockwise, then turn it 100° clockwise)

"B" Port Potentiometer: Set to full Counter-clockwise

SECONDARY

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DECK ROLL: "A" Port Potentiometer: 225° Counter-clockwise

"B" Port Potentiometer: 180° Clockwise

Note: The deck roll spool has a "float" position. This initial adjustment should prevent the spool from traveling to the "float" position when actuating the thumb roller on the joy stick. After making this first adjustment if the spool still goes into float, adjust the "B" port screw additionally counterclockwise.

BOOM

SWIVEL: "A" Port Potentiometer: 135° Clockwise

"B" Port Potentiometer: 40° Counter-clockwise

(continued)

ASSEMBLY

AMP

After making the initial adjustments, time each boom function, and refine the adjustments to meet the following cycle times:

MAIN BOOM: "A" Port, Boom UP: 7-9 Seconds

(Note: Extend secondary boom completely, roll deck to be level with ground, and lower main boom until deck is on ground. Now index main boom "up" function and determine the time required for main boom to raise completely.)

"B" Port, Boom Down: 6-8 Seconds

(Note: Extend secondary boom completely, roll deck to be level with ground, and raise the main boom to "full up". Then index the main boom "down" function to determine the amount of time required for the deck to contact the ground. CAUTION: Stop the boom just as the deck contacts the ground.)

SECONDARY

BOOM: "A" Port, Boom Out: 8-10 Seconds

(Position main boom full up, roll deck out until deck cylinder is fully retracted, and bring secondary boom in completely. Then index the secondary boom "out" function and determine the time required for boom to extend out completely.)

"B" Port, Boom In: 8-10 Seconds

(Position the main boom full up, roll deck out until deck cylinder is fully retracted, and extend secondary boom completely. Then index the secondary boom "in" function and determine the time required for boom to come in.)

DECK ROLL: "A" Port, Deck Out: 7-9 Seconds

(Raise main boom to vertical, extend secondary boom out slightly so that deck can be articulated without contacting the main boom, and roll deck in until deck cylinder is completely extended. Then index the deck roll "out" function and determine the time required for the deck to roll out.)

"B" Port, Deck In: 7-9 Seconds

(Raise main boom to vertical, extend secondary boom out slightly so that deck can be articulated without contacting the main boom, and roll deck out until deck cylinder is completely retracted. Then index the deck roll "in" function and determine the time required for the deck to roll in.)

BOOM

SWIVEL: "A" Port, Boom Aft: 8-10 Seconds

(Extend booms completely, rotate head to be level with ground, lower main boom until deck is just above ground, and swivel boom full forward. Then index the boom swivel "aft" function and determine the time required for the boom to swivel full aft.)

"B" Port, Boom Forward: 8-10 Seconds

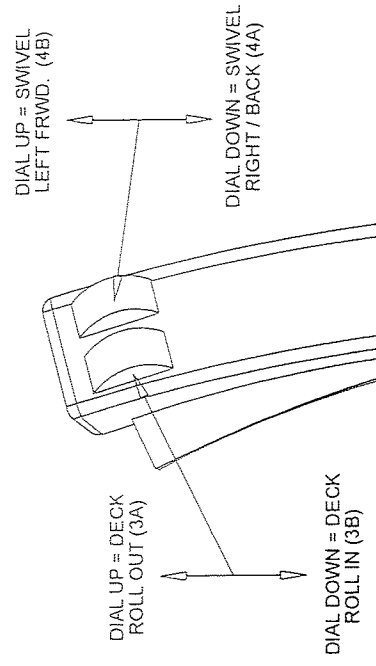
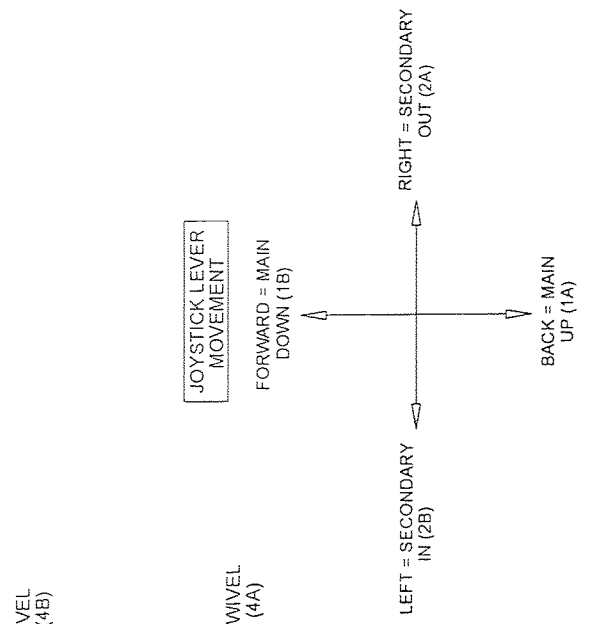
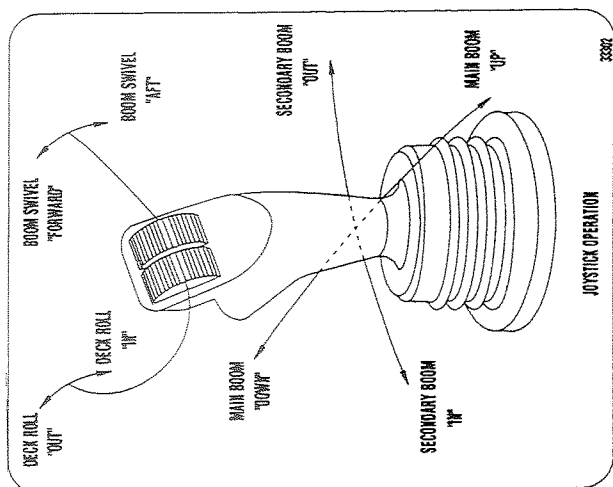
(Extend booms completely, rotate head to be level with ground, lower main boom until deck is just above ground, and swivel boom full aft. Then index the boom swivel "forward" function and determine the time required for the boom to swivel full forward.)

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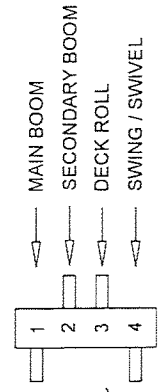
ASSEMBLY



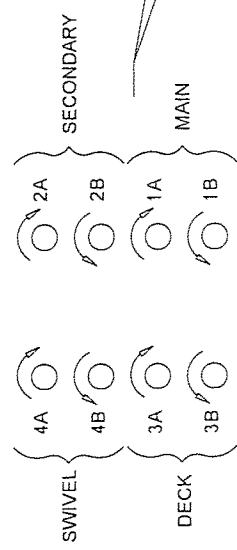
1255
RH AMP/CINCH SABER/BOOM



SIGNAL INVERSION SWITCHES



SIGNAL ADAPTION POTENTIOMETERS



DEAD BAND COMPENSATION
NOTE: FULL C-CLOCKWISE RESULTS IN MAXIMUM "DEAD BAND"

ARROW DIRECTION () DENOTES DIRECTION TO DECREASE OIL FLOW (SLOW BOOM FUNCTIONS)

ASSEMBLY

FINAL PREPARATION FOR OPERATION

Place operators safety information decal book and operation manual inside the truck cab where they are clearly visible to the operator. These manuals should be understood by each operator of the machine in conjunction with the safety and operation section of this book. The manuals are to be maintained in good condition as a reminder to the operator, and should be replaced if damaged.

Finally, all bosses, pins and pivot points will need to be greased as instructed in the maintenance section of this manual. The hydraulic reservoir can also be filled with the recommended fluid (see maintenance section) and the filter installed in the top of the tank. Double check all fittings and fasteners **BEFORE** starting the truck. Also secure any loose hoses together with zip ties and wrap with split hoses where friction may occur on the hoses.

WARNING!



BEFORE starting or operating the mower you must read and understand the safety and operation sections of this manual completely.

BE SURE THE BALL VALVES ARE OPEN! Start mower motor and allow instruments to stabilize. Using a piece of paper or cardboard as noted in the safety and maintenance sections, check all fittings and connections for hydraulic leaks.

If a leak is found, you must shut down the mower motor, set the cutter on the ground. Before attempting to fix the leak, you must actuate the lift valve handles several times to relieve any pressure in the lines.

Before operating the mower, the cutter head and boom should be slowly moved throughout the full range of motion. Watch for any condition that would cause pinching or excess stress on the hoses. Correct any condition that occurs in which the hoses maybe damaged. While checking motion limits, you should also check that the control circuits are connected correctly according to the operators manual and the motion of the boom.

MOWER TESTING

Take the truck to a place free of loose objects on the ground. Operate the cylinders through their full range of motion again, to clear the lines of air. Follow the instructions in the operation section to operate the mower. Vibration of the mower should be minimal at all times. After a 5 minute test run, the knife bolts should be retorqued and once again after the first few hours of operation.

If any parts of this assembly section, or any other section of this manual are not clearly understood you must contact your dealer or the address on the front of this manual for assistance!