

Adjusting Set Speeds

⚠ CAUTION: Avoid unexpected rapid acceleration. Check and adjust set speeds before putting tractor in motion.

Turn key switch to RUN position (for tractors with right-hand reverser, engine must be running to change set speeds).

Move lever (A) to Scroll position. Forward and reverse set speeds scroll on corner post display pausing at each speed for 2 seconds.

Adjust each speed when displayed by rotating set speed adjuster on speed control lever clockwise to increase set speed value or counterclockwise to decrease it.

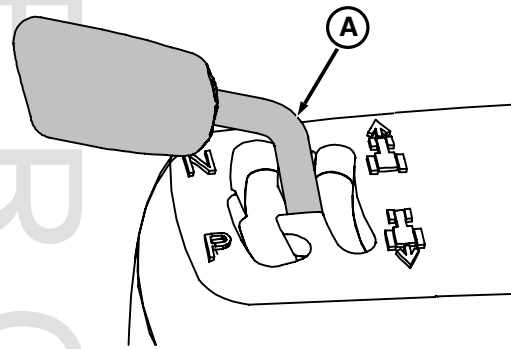
NOTE: Set speed adjustments may affect corresponding set speed of opposite direction (see Adjusting Reverse/Forward Set Speed Ratio in this section).

On corner post display, set speed of selected speed band displays in orange and ground speed of tractor displays in white letters. Set speed can be adjusted while tractor is moving by rotating set speed adjuster dial (C). Increasing set speed value increases ground speed. Decreasing set speed value decreases ground speed. New set speed shows on display (B).

Select set speed approximately 3.2 km/h (2 mph) higher than desired working speed to obtain maximum productivity where precise forward speed is **not** critical (such as plowing). Tractor reaches higher set speed value during no load or light load condition.

Maximum ground speed of selected speed band is attained at full throttle when speed control lever (D) is pushed fully forward to end of slot in respective speed band.

- A—Left-Hand Reverser
- B—Corner Post Display
- C—Set Speed Adjuster Dial
- D—Speed Control Lever



Left-Hand Reverser Shown



Corner Post Display



Speed Control Lever

TO84419,00000EA -19-22AUG13-1/1

RXA0066281 —UN—27AUG03

RXA0130020 —UN—22AUG13

RXA0127885 —UN—22AUG13

Set Speeds—Guidelines and Examples

Value of Set Speed 1 is always at least 10% less than value of Set Speed 2. This ensures smooth transition between speed bands and is illustrated in following examples.

NOTE: F1 refers to Forward mode for Set Speed in speed band 1. F2 refers to Forward mode for Set Speed in speed band 2.

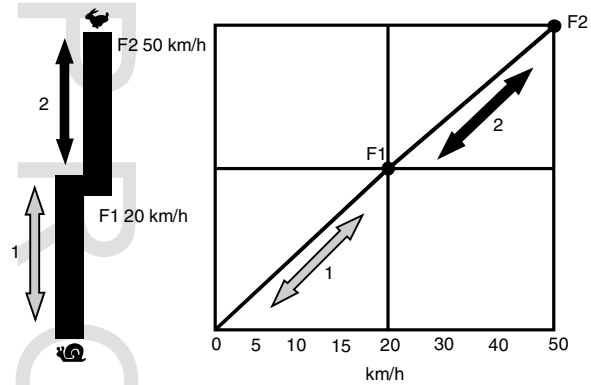
Example 1: Maximum Forward Set Speeds are selected for each speed band.

Example 2: Value of Set Speed 1 is reduced to 10 km/h (6 mph). Set Speed 2 value is not changed, but lower portion of speed band 2 has automatically decreased to meet top end of speed band 1.

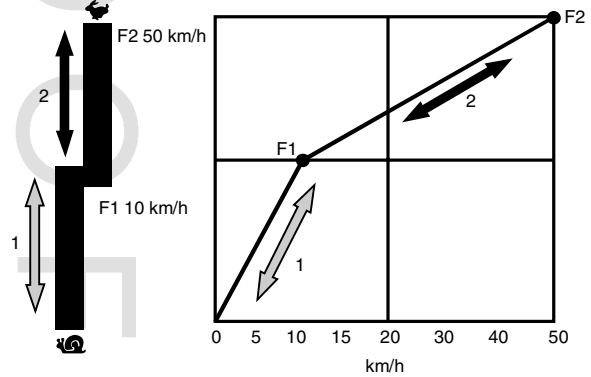
NOTE: Actual set speed increases or decreases at least 10% of adjusted speed band and ranges up to 12.5%. 10% is used in illustrations of Examples 3 and 4, and can differ by 2.5% of speeds shown.

Example 3: Set Speed 2 is reduced to 5 km/h (3 mph). Set Speed 1 automatically decreases to 4.5—4.3 km/h (2.8—2.7 mph), 10—12.5% below new value of Set Speed 2.

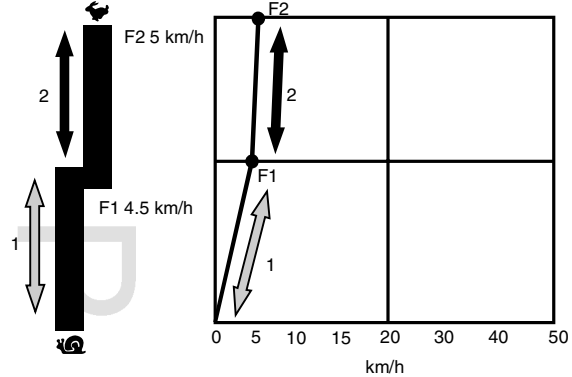
Example 4: Set Speed 1 is increased to 20 km/h (12.4 mph), which is higher than value of Set Speed 2. Set Speed 2 automatically increases to 22—22.5 km/h (13.7—14.0 mph), 10—12.5% above new value of Set Speed 1.



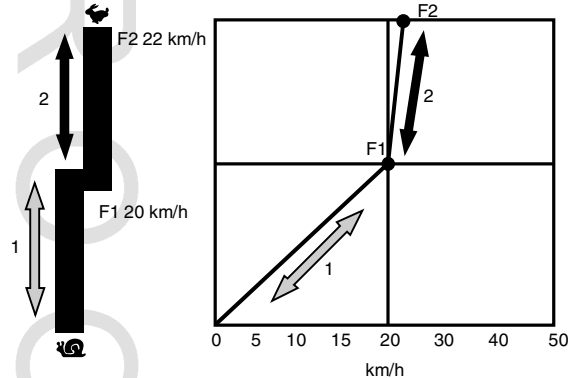
Example 1



Example 2



Example 3



Example 4

RXA0053043 —UN—26APR01

RXA0053045 —UN—26APR01

RXA0053049 —UN—26APR01

RXA0053047 —UN—26APR01

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RXA0133712 —UN—16JUL13

IVT™/AutoPowr™ Modes and Setting Maximum Speed

Press Transmission Shortcut Button on Navigation Bar or follow alternative path:

1. Select Menu .
2. Select Tractor Settings tab.
3. Select Transmission Icon.

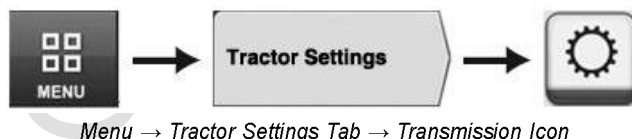
IVT™/AutoPowr™ offers three or four modes for fuel efficiency and load control from tractor:

- **Full Auto Mode (A)**
Automatically adjusts Minimum Engine Speed allowing tractor to use most fuel efficient engine speed under light load.
Automatically adjusts Auto Shift Engine Speed Droop allowing tractor to use peak power under full load.
- **Custom Mode (B)**
Operator can choose Performance, Minimum Engine Speed, Auto Shift Engine Speed Droop, and Load Anticipation reaction.
- **Pedal Mode (C) (If Equipped)**
Operator can control wheel speed independently of engine speed by using the accelerator pedal. Operator can only choose Pedal Mode when the tractor is stopped and park brake is applied.
- **Manual Mode (D)**
Tractor performs as if equipped with normal transmission and reacts to controls. No Fuel Economy or Load Control functions active.

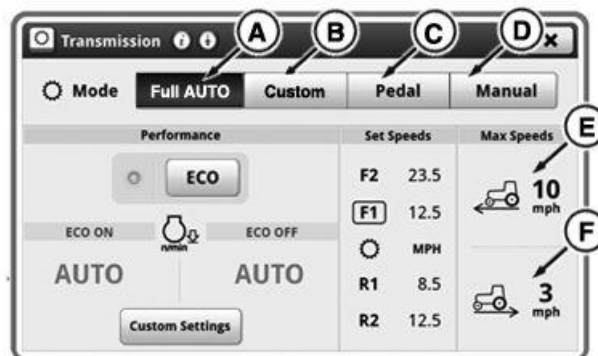


Transmission Shortcut Button on Navigation Bar

RXA0128094 —UN—14SEP12



Menu → Tractor Settings Tab → Transmission Icon



Transmission Home Page

- A— Full Auto Mode
- B— Custom Mode
- C— Pedal Mode
- D— Manual Mode
- E— Forward MAX Speed
- F— Reverse MAX Speed

RXA0130021 —UN—05JUN13

Full Auto Mode (A)	Custom Mode (B)	Pedal Mode (C)	Manual Mode (D)
<ul style="list-style-type: none"> • Auto Shift (or Load Control) ON. • Load Anticipation for Hitch ON. • Load Anticipation for SCVs ON. • Auto Shift Engine Speed Droop maintained at maximum tractor power. • Maximum engine speed limit adjusted according to PTO rated speed. 	<ul style="list-style-type: none"> • Auto Shift (or Load Control) ON. • Auto Shift Engine Speed Droop with PTO On is Adjustable. • Auto Shift Engine Speed Droop with PTO Off is Adjustable. • Performance and Minimum Engine Speed with ECO On is Adjustable. • Performance and Minimum Engine Speed with ECO Off is Adjustable. • Load Anticipation for Hitch is Adjustable. • Load Anticipation for SCVs is Adjustable. 	<p>When hand throttle control is pulled all the way to the rearward position:</p> <ul style="list-style-type: none"> • Auto Shift (or Load Control) ON. • Load Anticipation for Hitch ON. • Auto Shift Engine Speed Droop maintained at maximum tractor power. • Maximum engine speed limit adjusted according to PTO rated speed. <p>When hand throttle control is at any other position:</p> <ul style="list-style-type: none"> • Constant engine speed corresponding to the throttle position is commanded. • Auto Shift (or Load Control) ON. • Activating Engine Set Speed Button would engage constant engine speed functionality. 	<ul style="list-style-type: none"> • Auto Shift (or Load Control) OFF. • Use when application is causing undesired automatic shifting. • Use when operating on steep and/or slippery downhill slopes. ^a

^a(See Downhill Operation in Slippery Conditions in this section.)

Forward maximum speed (E) or reverse maximum speed (F) displays maximum reverse or forward speed limits. To change maximum speed, select module, use increase (+) or decrease (-) buttons to set value. Increasing speed

does not change dynamic behavior of tractor. If operator changes maximum forward or reverse speed below current set speed, set speed decreases to maximum speed and vehicle speed decreases.

TO84419,00000EC -19-23AUG13-1/1

Custom IVT™/AutoPowr™ Settings

NOTE: All settings pertaining to this page are only applicable when AutoPowr™ transmission is in Custom Mode.

Load Anticipation allows IVT™/AutoPowr™ transmission to predict loads with hitch or SCVs in use. By default, Load Anticipation is enabled in "Full AUTO" mode. In "Custom" mode, load anticipation for hitch is enabled when hitch toggle (G) is turned to ON. In "Custom" mode, load anticipation for SCVs is enabled when SCV toggle (H) is turned to ON. In "Custom" mode, load anticipation for PTO is enabled when PTO toggle (I) is turned to ON.

Fuel economy feature may raise minimum engine speed to 1500 rpm when load anticipation is enabled and either hitch/SCV/PTO is placing heavy load on engine or SCV is in continuous flow. If load on engine is still excessive, load anticipation feature may raise minimum engine speed to 1800 rpm.

Press **Transmission Shortcut** button on **Navigation Bar**.

Press **Custom mode toggle (A)**.

Set ECO Engine Speed RPM ON

- Select ECO ON Engine Speed module (B).
- Adjust percentage value using increase (+) or decrease (-) to set desired value. Operator can toggle between ECO On/Off to select between the ECO On and ECO Off Minimum Engine Speeds.

Set ECO Engine Speed RPM OFF

- Select ECO OFF Engine Speed module (C).
- Adjust percentage value using increase (+) or decrease (-) to set desired value. Operator can toggle between ECO On/Off to select between the ECO On and ECO Off Minimum Engine Speeds.

Set Auto Shift Engine Speed Droop PTO ON

NOTE: Auto Shift Engine Speed Droop PTO ON can be set from 2 % — 26 %.

- Select Auto Shift Engine Speed Droop module PTO ON (E).
- Adjust percentage value using increase (+) or decrease (-) to set desired value.

Set Auto Shift Engine Speed Droop PTO OFF

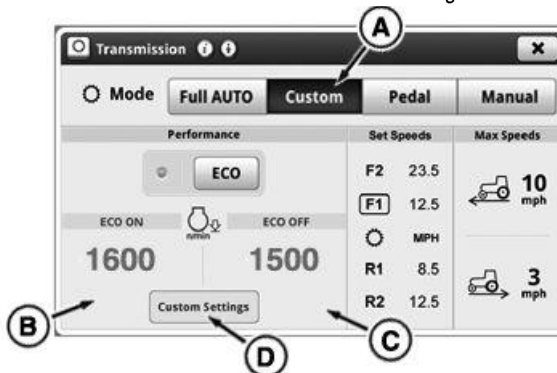
NOTE: PTO OFF can be set from 2% — 26 %.

- Select Auto Shift Engine Speed Droop module PTO OFF (F). PTO OFF box highlights.
- Adjust percentage value using increase (+) or decrease (-) to set desired value.

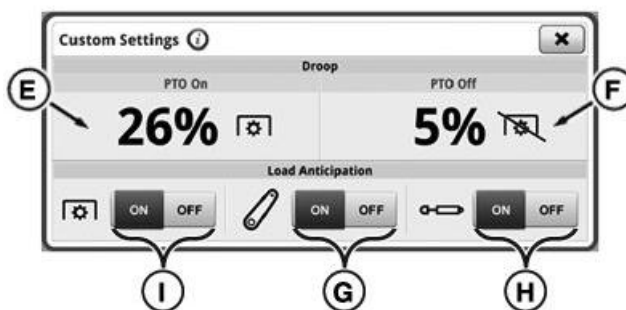
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Transmission Shortcut Button on Navigation Bar



Transmission Home Page



Transmission Custom Settings Page

- A— Custom Mode Toggle
- B— ECO Engine Speed ON
- C— ECO Engine Speed OFF
- D— Custom Settings button
- E— Auto Shift Engine Speed Droop PTO ON
- F— Auto Shift Engine Speed Droop PTO OFF
- G— Load Anticipation (Hitch) Toggle
- H— Load Anticipation (SCV) Toggle
- I— Load Anticipation (PTO) Toggle

Turn On Load Anticipation

- Press Hitch toggle (G), SCV toggle (H), or PTO toggle (I) to on. When SCV toggle is on, engine speed is boosted as needed, with each use of SCV. When Hitch toggle is on, engine speed is boosted as needed, each time hitch is raised or lowered.

RXA0130022 —UN—11JUN13

RXA0130023 —UN—10DEC12

Adjusting Reverse/Forward Set Speed Ratio

RXA0133712 —UN—16JUL13

Reverse/Forward Ratio can be set to operate independently of each other or from 0.3 to 1.3 times as fast (in 0.1 increments). Forward and Reverse Set Speeds are same at 1.0 setting (1 to 1 ratio).

Maximum reverse speed is up to 20 km/h (12 mph) regardless of ratio.

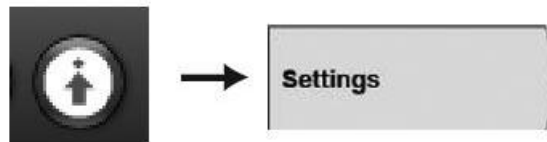
Press **Transmission Shortcut Button on Navigation Bar**.

1. Press **Advanced Settings icon**.
2. Press **Settings tab**.
3. Press **Reverse/Forward Ratio button (B)** to access list of reverse/forward ratio options.



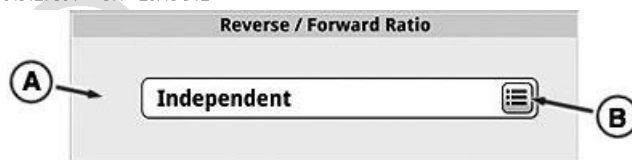
Transmission Shortcut Button on Navigation Bar

RXA0130326 —UN—11JAN13



Advanced Settings Icon → Settings Tab

RXA0127891 —UN—29AUG12



Reverse/Forward Ratio List

A— Reverse/Forward Module B— Reverse/Forward Ratio button

Forward Set Speed is 4 km/h (2.5 mph) and Ratio is:	Reverse Set Speed km/h (mph) is:
0.3	1.2 (0.4)
0.4	1.6 (0.8)
0.5	2.0 (1.2)
0.6	2.4 (1.5)
0.7	2.8 (1.75)
0.8	3.2 (2.0)
0.9	3.6 (2.2)
1.0	4.0 (2.5)
1.1	4.4 (2.7)
1.2	4.8 (3.0)
1.3	5.2 (3.2)
Independent	No ratio because reverse and forward set speeds function independent of each other. Reverse Set Speed is limited to be no more than 5 km/h (3 mph) faster than Forward Set Speed.

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RXA0133712 —UN—16JUL13

Adjusting AutoClutch Sensitivity

Press Transmission Shortcut Button on Navigation Bar.

1. Press **Advanced Settings** icon.
2. Press **Settings** tab.
3. Select appropriate AutoClutch setting.
 - Low (A) is for heavy trailer (load).
 - Medium (B) is for medium trailer (load).
 - High (Factory Default) (C) is for light or no trailer (load).

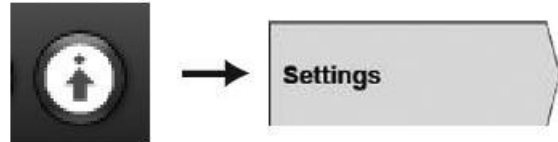
NOTE: To keep AutoClutch from disengaging before trailer brakes are applied, AutoClutch Sensitivity options allow operator to adjust AutoClutch settings to load requirements. Larger trailers take lower AutoClutch Sensitivity settings. **AutoClutch Sensitivity factory default setting is set to High, which will support most operations.**

- | | |
|--|--------------------------------------|
| A—Low AutoClutch Sensitivity Toggle | C—High AutoClutch Sensitivity Toggle |
| B—Medium AutoClutch Sensitivity Toggle | |

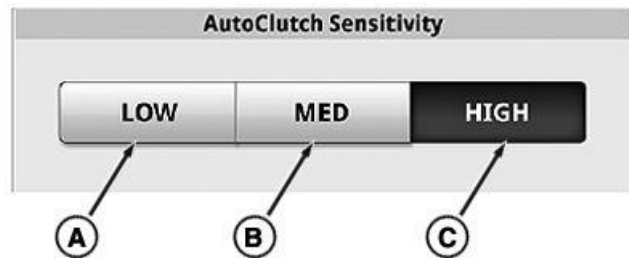


Transmission Shortcut Button on Navigation Bar

RXA0130326 —UN—11JAN13



Advanced Settings Icon → Settings Tab



Autoclutch Sensitivity and Acceleration Aggressiveness Module

RXA0127888 —UN—07FEB13

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P
R
O
O
F

Putting Tractor in Motion

CAUTION: Avoid possible injury due to sudden or unexpected acceleration. Be aware of set speeds and throttle position before putting tractor in motion.

NOTE: Tractor cannot be put in gear unless operator is seated. Information indicator lights and corresponding message appears on CommandCenter™ display when Forward, Reverse, or NEUTRAL positions are selected and operator is **not** in seat.

To initiate motion, move lever from PARK position to either Forward or Reverse position with operator seated.

NOTE: Cold conditions may affect IVT™/AutoPowr™ tractor performance:

- Engine speed will be limited to 1500 rpm if transmission oil temperature is less than -5°C (23 °F).
- Wheel speed is limited to 5 km/h (3 mph) if transmission oil temperature is less than -15°C (5 °F).

Using clutch to put tractor in motion is not necessary.

NOTE: In event of seat switch failure, tractor can still be put into motion by cycling (depress/release) clutch or brake pedals.

Move reverser lever into Forward or Reverse position.

Use throttle and speed control levers to obtain desired speed.

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Left-Hand Reverser

A—Speed Control Lever

B—Speed Band

RXA0130849 —UN—22AUG13

Cold Weather Starting

When temperature is -10 °C (14°F) or lower, it may take one minute to the release park brake with operator in the seat and shift transmission lever in gear. Several shifts between PARK and NEUTRAL may be required.

When temperature is -10 °C (14°F) or above, it may take 3 seconds to release park brake with operator in the seat.

When shift lever is moved to NEUTRAL, corner post display shows “N” for three seconds. If park brake does not release, “N” changes back to “P”. Move shift lever back to PARK then back to NEUTRAL until “N” displays more than three seconds.

Delayed shifting, slow hydraulic operation, hard steering, and limited engine rpm may also be noticeable until operating temperature is obtained.

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Using Creeper Mode

Creeper mode is entered automatically when a set speed of less than 2 km/h (1 mph) is selected in speed band 1.

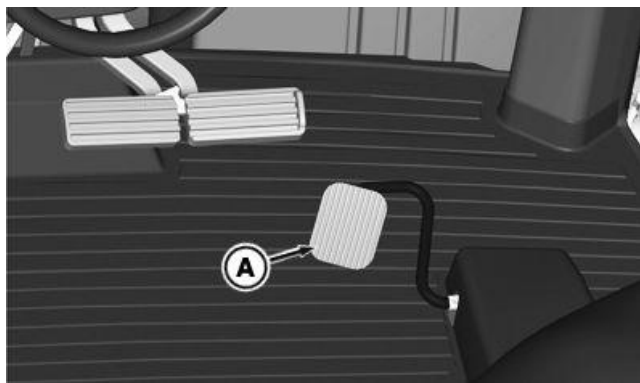
Default ratio between speed bands 1 and 2 is 2.5 in creeper mode. This is done to eliminate rapid acceleration when lever is moved into speed band 2. For example, if speed band 1 is set at 100 m/h (328.1 ft/h), corresponding maximum speed in band 2 is 250 m/h (820.2 ft/h). Default ratio may be temporarily overridden (such as when making headland turns) by increasing speed band 2 to a maximum of 10 km/h (6 mph). Moving lever back to band 1 restores previous working speeds.

Creeper mode is exited when Set Speed 1 is adjusted above 2 km/h (1 mph) or Set Speed 2 is adjusted above 10 km/h (6 mph).

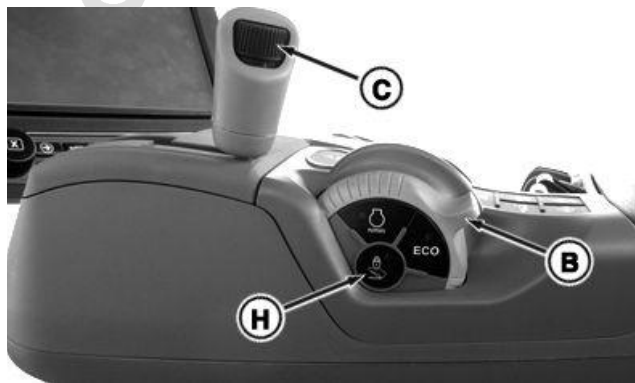
In creeper mode, reverse set speed can be set to less than forward set speed. Reverse set speed limit can be temporarily overridden by moving Right-Hand Reverser Lever into Reverse Speed Band and increasing reverse set speed. Moving Right-Hand Reverse Lever from Reverse Speed Band to Forward Speed Band 1 and not changing Forward Set Speed 1 resets Reverse Set Speed to less than Forward Set Speed.

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IVT™ AutoPowr™ — Accelerator Pedal Mode (If Equipped)



Accelerator Pedal



Hand Throttle Control

Accelerator pedal mode is a function that allows the operator to control wheel speed independently of engine speed by using the accelerator pedal (A) while using hand throttle (B) to keep the engine at a constant speed.

When the accelerator pedal is released, the vehicle decelerates to a minimum travel speed of 0.5 – 2 km/h. To come to a complete stop, brake pedal with auto clutch function must be used.

To cover transport applications with accelerator pedal (A) only, the operator can leave the hand throttle (B) in its lowest position; engine speed is increased or decreased from the drive strategy based on fuel economy settings. When hand throttle (B) is not at its lowest position, engine speed is controlled directly by hand throttle (B) while accelerator pedal (A) controls wheel speed only.

This means that the vehicle might not reach the wheel speed commanded by set speed adjuster dial (C), if the operator is holding the engine speed at low rpm via the hand throttle.

The accelerator pedal mode is intended for applications where it is important to keep the engine speed at a constant rpm independent from the wheel speed (mowing for example).

NOTE: If equipped, indicator light (D) is on with accelerator pedal mode activated. Indicator light (D) goes out when accelerator pedal mode is de-activated.



Pedal Mode Indicator Light



Pedal Mode

Activate the accelerator pedal mode

Accelerator pedal mode is activated via the AutoPowr™/IVT™ transmission settings screen on the CommandCenter™.

The drive lever or left-hand reverser needs to be in park position in order to activate the accelerator pedal mode.

Fuel economy settings and automatic mode functions become active when accelerator pedal mode is enabled. To do this, press the transmission button and activate pedal mode (E) on the page shown.

- A— Accelerator Pedal
- B— Hand Throttle Control
- C— Set Speed Adjuster Dial
- D— Indicator Light
- E— Pedal Mode button
- F— Max Forward Speed
- G— Max Reverse Speed
- H— Pedal Mode Lock/Unlock Button

To de-activate the accelerator pedal mode, move the drive lever or left-hand reverser to park position, press the transmission button and activate pedal mode (E) on the page shown.

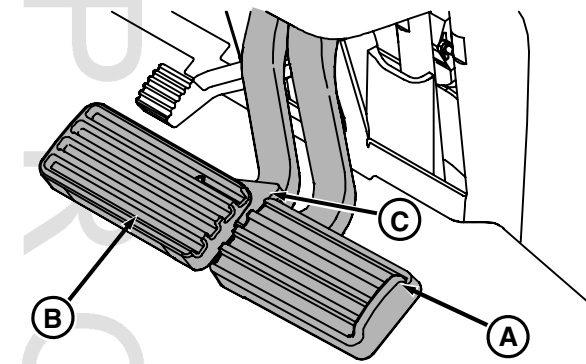
Using Individual Brake Pedals

Individual brake pedals (A) and (B) can assist with slow speed off-road turning, such as hooking up to implements. At low idle, AutoClutch feature stops tractor if operator depresses only one brake pedal. **IT IS NOT NECESSARY TO DEPRESS CLUTCH PEDAL.**

To assist in hooking up implement, depress either brake pedal while slowly increasing engine speed until desired turn is achieved. Returning engine speed to low idle while continuing to depress one brake pedal slows tractor to stop.

CAUTION: Avoid possible injury. Braking tractor while commanding high engine speed requires higher brake pedal force.

Avoid possible injury due to sudden or unexpected acceleration. When brake pedals are released, tractor automatically accelerates to speed currently commanded by throttle and speed control levers.



A—Right Brake Pedal
B—Left Brake Pedal

C—Pedal Lock Tab

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TO84419,00000F2 -19-14FEB13-1/1

Stopping and Parking Tractor

1. Reduce throttle to low engine rpm.
2. Depress both brake pedals. Brakes activate AutoClutch (automatic clutch function within transmission) to stop tractor. **It is not necessary to depress clutch**

CAUTION: Avoid possible injury due to losing control of tractor. Couple brake pedals (A) together when driving on roads.

3. Move speed control lever to slowest position.
4. Shift reverser to PARK position.

Using PARK Position

CAUTION: Always place reverser lever in PARK position before dismounting tractor.

Transmission PARK position holds tractor stationary.

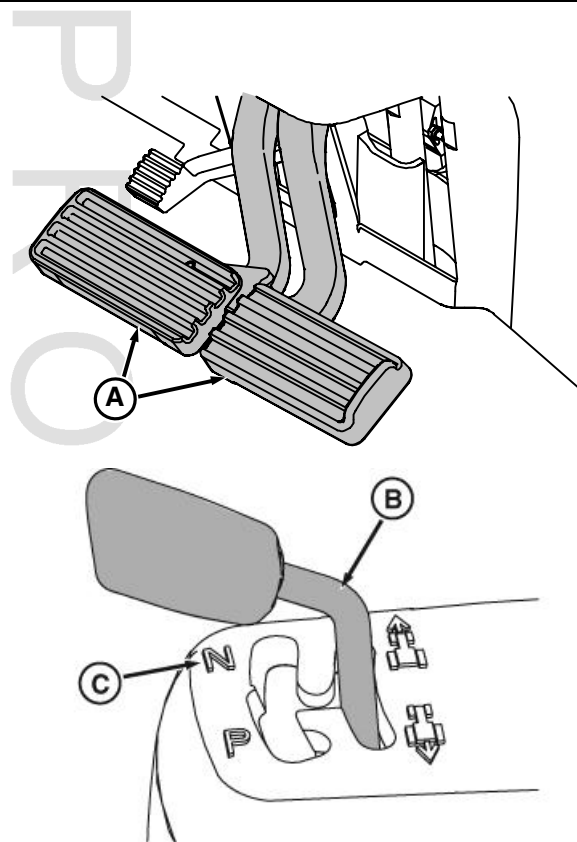
5. Lower implements and shut off PTO.
6. Shut engine off and remove key.

Stopping Tractor using AutoClutch

Depress both brake pedals. Brakes will activate AutoClutch. When brakes are released, tractor accelerates to currently commanded speed. **It is not necessary to depress clutch, reduce throttle, or move speed control lever.**

CAUTION: Avoid possible injury. Braking tractor while commanding a high engine speed will require higher brake pedal force.

Avoid possible injury due to sudden or unexpected acceleration. When brake pedals are released, tractor will automatically accelerate to speed currently commanded by throttle and speed control lever.



Left-Hand Reverser Shown In Power Zero™

A— Brake Pedals
B— Power Zero™ Position
C— NEUTRAL Position

Using Power Zero™ Position

Hold reverser lever in Power Zero™ position (B) to temporarily hold tractor stationary.

NOTE: Depending on speed and load, Power Zero™ may not bring tractor to stop if already in motion.

Using NEUTRAL Position

Transmission NEUTRAL position is obtained (with engine running) by shifting reverser to NEUTRAL position. Tractor will roll freely in NEUTRAL position.

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RXA0068273—UN—27AUG03

RXA0130864—UN—06FEB13

RXA0133712—UN—16JUL13

Downhill Operation in Slippery Conditions

Press Transmission Shortcut Button on Navigation Bar

When transmission page displays, select Manual toggle.

CAUTION: Avoid possible injury from losing control of tractor while operating on a downhill slope. Tractor wheels may lock and skid on slippery downhill slopes. Observe following precautions:

- Adjust set speed value to a safe downhill operating speed.
- Do not make major speed reductions with speed control lever.



Transmission Shortcut Button on Navigation Bar

- Turn MFWD on.

TO84419,0000F4 -19-28AUG13-1/1

PROOF

Intelligent Total Equipment Control (iTEC™)

CommandARM™ Control Functions

Intelligent Total Equipment Control, iTEC™, allows multiple reoccurring tasks to be performed with touch of one button, up to four sequences.

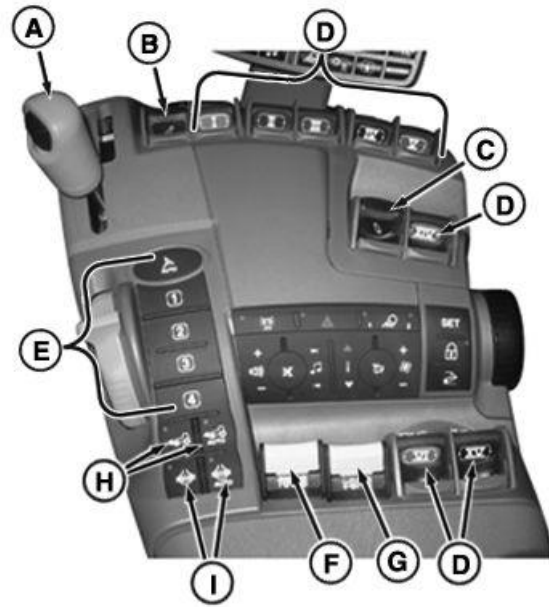
One sequence made up of series of functions, operations, and distances used at start of field. A second sequence used at water way in center of field. Sequences remain in memory until deleted or overwritten, even if electrical current is switched off.

Each sequence can include up to 20 functions.

A sequence is a course of events from start of first function to completion of last function that the operator can start by pressing one of the sequence buttons.

iTEC™ pages are accessed through Generation 4 CommandCenter™.

Chart below describes item and function from CommandARM™ image.



CommandARM™ Controls

iTEC™ Functionality		
	Component	Function(s)
A	IVT™ /AutoPowr™ Set Speed Forward (IVT™/AutoPowr™ Only)	Change Set Speed
	CommandQuad™ Transmission	Upshift or Downshift in Forward Gear and Change Ranges with Push Buttons A, B, C
B	Rear Hitch (If Equipped)	Raise Detent and Lower Detent
C	Front Hitch (If equipped)	Raise and Lower
D	SCVs (CommandARM™)	Extend, Retract, Float, and Cancel
E	iTEC™ Buttons	1/2/3/4
F	Front PTO (If Equipped)	On/Off
G	Rear PTO	On/Off
H	MFWD	On/Off/Auto
I	Differential Lock	On/Off/Auto

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 iTEC is a trademark of Deere & Company
 CommandCenter is a trademark of Deere & Company
 IVT is a trademark of Deere & Company
 AutoPowr is a trademark of Deere & Company
 CommandQuad is a trademark of Deere & Company

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CommandCenter™ Pages Descriptions And Functions

iTEC™ Main Page

RXA0133714 —UN—16JUL13

Use shortcut buttons or follow alternative path:

1. Select **Menu**.
2. Select **Tractor Settings** tab.
3. Select **iTEC™ Icon**.

- **A — iTEC™ Master Toggle:** Toggle iTEC™ ON/OFF.
- **B — Active Assignment Set Button:** Select or create an assignment set.
- **C — Assignments List:** List of sequences assigned to iTEC™ buttons.
- **D — Manage Sequences Button:** Edit sequence and assign buttons.
- **E — Scroll Bar:** Scroll up or down.
- **F — Status List:** Shows status of each iTEC™ sequence step as sequence progresses.
- **G — Title Bar:** Pressing on Title Bar to access application title, help button, and advanced settings (if applicable).

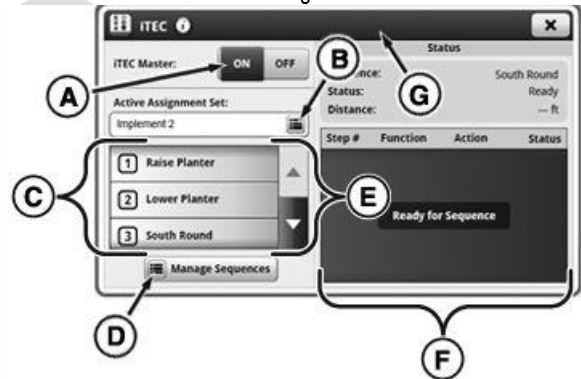


Generation 4 Shortcut Buttons

RXA0131089 —UN—26FEB13



Menu → Tractor Settings Tab → iTEC™ Icon



iTEC™ Main Page

RXA0131985 —UN—23APR13

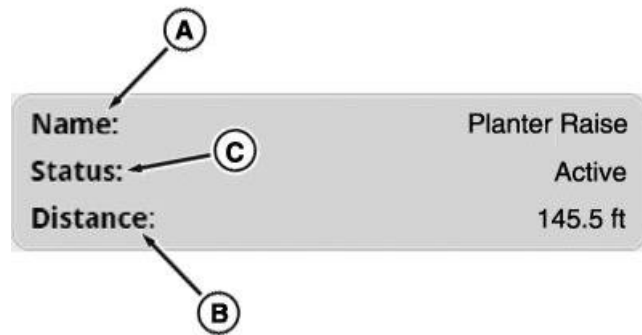
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SV81855,000002E -19-05SEP13-1/1

Status Area

iTEC™ Status Area

- **A—Name:** Name of sequence that is currently running.
- **B—Distance:** Displays accumulated distance while iTEC™ sequence is running.
- **C—Status:** Indicator of current iTEC™ status.
 - **Off** - No sequence execution possible.
 - **Ready** - Waiting for iTEC™ button to which a sequence is assigned to be pressed.
 - **Active** - iTEC™ sequence execution active.
 - ***RPM Limit** - Engine speed is out of range.
 - ***Park** - Transmission indicates that park lock is engaged.
 - ***Operator Presence** - No operator presence, no iTEC™ execution allowed. Operator returns to seat.
 - **Wheel Speed Low** - Wheel speed < 0.5 km/h (0.3 MPH), execution is paused.
 - **Complete** - Sequence successfully completed.
 - **Aborted** - Sequence execution aborted by operator or active abort condition.



Status Area on Main Page

- **Error** - One or more sequence steps did not execute.
- *Sequences pauses or cannot start if this condition exists. Correct condition to resume sequence.

RXA0131243 —UN—08MAR13

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SV81855,0000030 -19-05SEP13-1/2

iTEC™ Manage Sequence Page

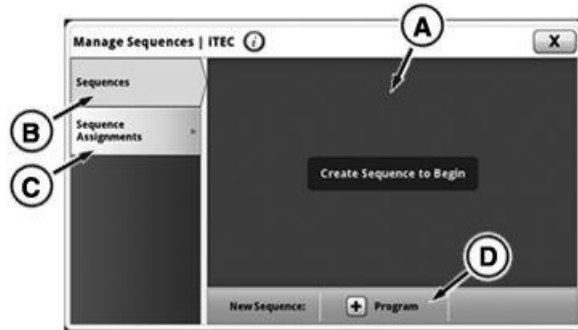
RXA0129723 —UN—06MAR13

1. Select **Manage Sequences** button on iTEC™ main page.

- **A — iTEC™ Content Section:** Available sequences or sequence assignments are displayed.
- **B — Sequences Tab:** View available, delete saved, edit saved, or add new sequences.
- **C — Sequence Assignments Tab:** View assigned sequences or give sequence assignment.
- **D — Program Button:** Manually program sequence.



Manage Sequences Button



iTEC™ Manage Sequences Page

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RXA0131143 —UN—26FEB13

Sequence Step Status

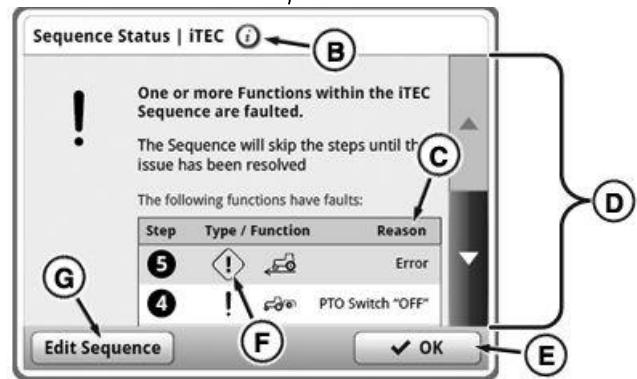
RXA0131170 —UN—05MAR13

Whenever execution of a sequence step is not possible or is interrupted, iTEC™ system informs operator about new issue by displaying Information Alert (A) or Fault Alert (F) next to sequence or sequence step. Press **Alert Symbol** next to a sequence (in assignment area or sequence assignment tab) to access the sequence status page to read the steps with errors. Use scroll bars (D) to scroll up and down list. Select edit sequence button (G) if you want to edit this certain sequence. Press **Alert Symbol** next to a sequence step (while in EDIT) for information about the issue just for that step. Both views will show a short reason (C) for issue.

NOTE: Press Information Button (B) on any iTEC™ page to access a general status page. General status page will list at least all functions that are part of the sequences of current selected implement (assignment set).



Sequence Bar



Sequence Status Page

- A— Information Alert
- B— Information Button
- C— Text Description
- D— Scroll Bar
- E— OK Button
- F— Fault Alert
- G— Edit Sequence Button

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TO84419,00000F7 -19-05SEP13-1/5

RXA0131609 —UN—25JUL13

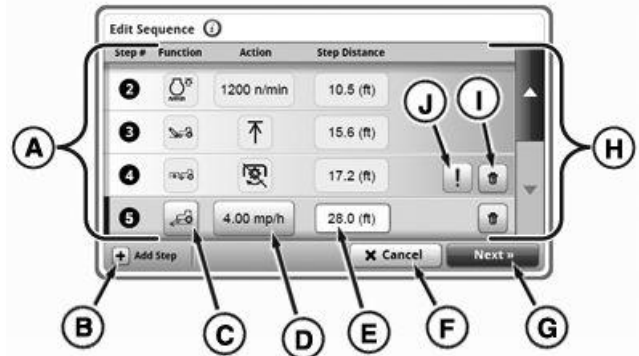
iTEC™ Edit Page:

From iTEC™ main page, follow guidelines listed below:

1. Select **Manage Sequences** button.
2. Select **Sequences** tab.
3. Select desired sequence.
4. Select **Edit** button.



Manage Sequences Button → Sequence Tab → Edit Button

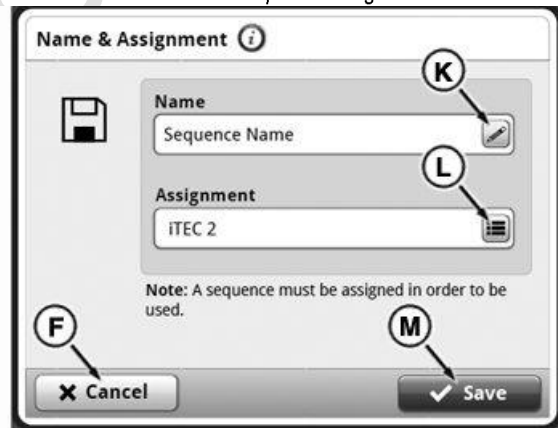


Edit Sequence Page

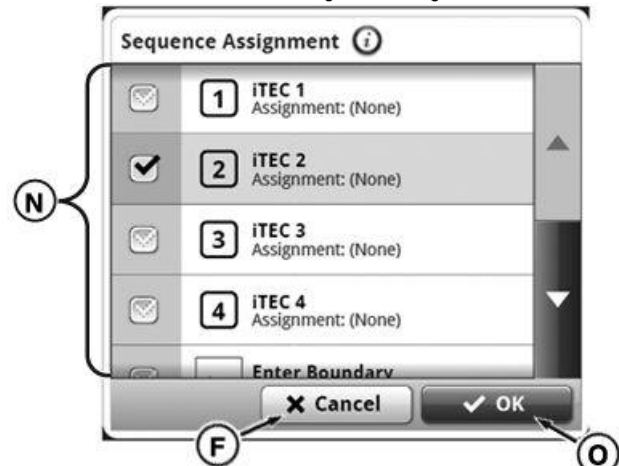
- **A — Sequence Step List:** List of steps in selected sequence.
- **B— Add Step Button:** Add new step to sequence.

NOTE: Insert can be realized by selecting step before. 'Add Step' will insert a step after selected one with distance field auto-filled with distance from previous step. If distance is changed, step is sorted accordingly.

- **C— Step Function Input Box:** Change selected sequence step function.
- **D— Step Action Input Box:** Change selected sequence step action.
- **E— Step Distance Input Box:** Access number pad to adjust selected sequence step distance.
- **F— Cancel Button:** Exit without saving changes.
- **G— Next Button:** Access next page.
- **H — Scroll Bar:** Scroll up or down.
- **I— Delete Step Button:** Delete step.
- **J— Notification Button:** View issue for a particular step.
- **K — Sequence Name Input Box:** Access keypad to rename sequence.
- **L— Assignment Button:** Assign sequence to an iTEC™ button.
- **M— Save Button:** Save changes.
- **N — Sequence Assignment List:** Select button to which assign sequence.
- **O — OK Button:** Accept changes.



Name & Assignment Page



Sequence Assignment Page

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TO84419,00000F7 -19-05SEP13-2/5

RXA0131144 —UN—25JUL13

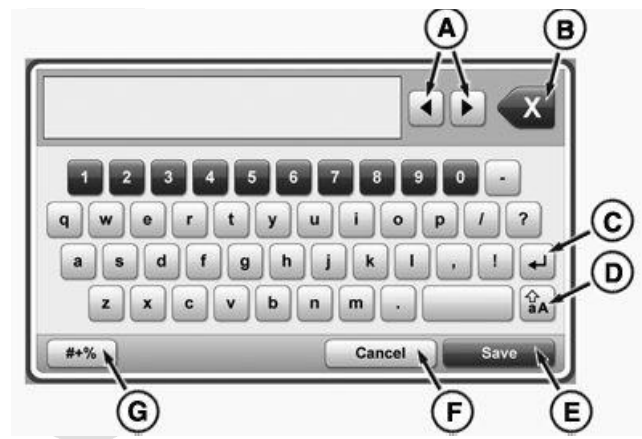
RXA0131281 —UN—25JUL13

RXA0131280 —UN—25JUL13

Keyboard

Select Sequence Name Input button on Name & Assignment page will display a keyboard for name input.

- **A — Left and Right Arrow Buttons:** Move cursor right or left in input box.
- **B — Backspace Button:** Delete individual characters left of cursor in input box.
- **C — Return Button:** Move cursor to next line.
- **D — Caps Lock Button:** Toggle between capital and lower case letters.
- **E — Save Button:** Save changes.
- **F — Cancel Button:** Discard changes without saving.
- **G — Symbol Button:** Choose symbols.



Keyboard

RXA0131300—UN—14MAR13

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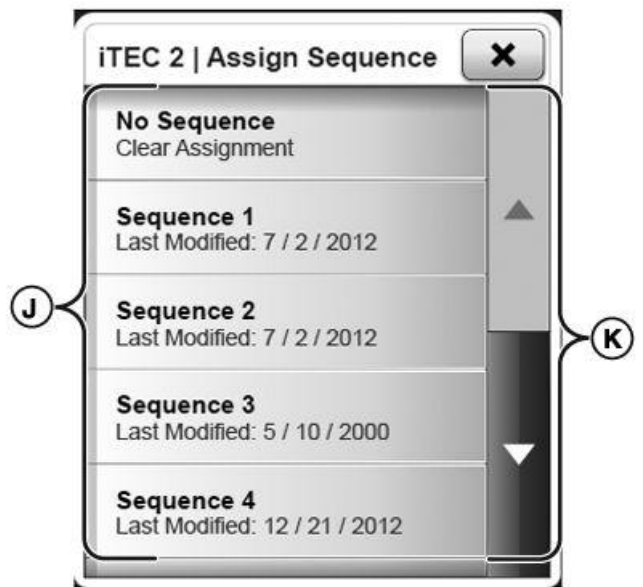
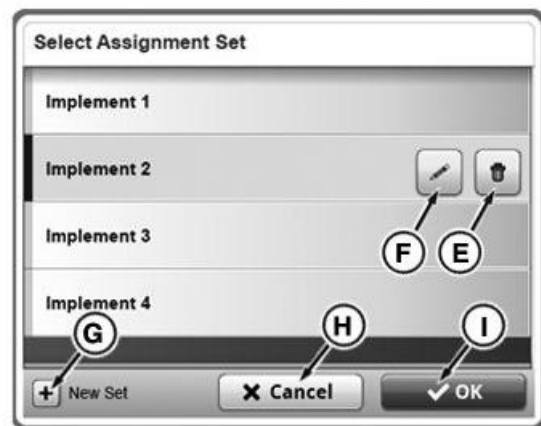
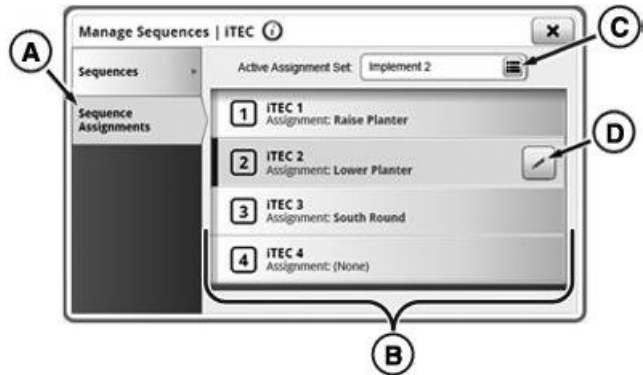
iTEC™ Sequence Assignments Page:

1. Select **Menu**.
2. Select **Tractor Settings** tab.
3. Select **iTEC™ Icon**.
4. Select **Manage Sequences** button.
5. Select **Sequence Assignments** tab (A).



- **A — Sequence Assignment Tab:** View or change sequences assigned to buttons.
- **B — Sequence Assignment List:** List of assignments or openings for potential assignments to buttons.
- **C — Active Assignment Set Button:** Change selected assignment set from list.
- **D — Edit Button:** Change selected button assignment and assignment set.
- **E — Delete Assignment Set Button:** Delete assignment set.
- **F — Edit Assignment Button:** Change and set assignment name.
- **G — New Assignment Set Button:** Add a new assignment set.
- **H — Cancel Button:** Exit without saving changes.
- **I — OK Button:** Select a previously highlighted assignment set.
- **J — Available Sequence List:** Available sequences to assign.
- **K — Scroll Bar:** Scroll list up or down.

NOTE: Assignment Set: A set of button-assigned sequences for one implement. With assignment sets relating to different implements (e.g. planter and plow) it is easy to switch from one set (implement) to another.



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RXA0131607 —UN—27MAR13

RXA0131283 —UN—07MAR13












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TO84419,00000F7 -19-05SEP13-4/5

Available iTEC™ Options:

List and diagram name and illustrate icons for all available iTEC™ function, operation and distance options.

- A—SCV's (I through XV)
 - A-1 Extend
 - A-2 Float
 - A-3 Retract
 - A-4 Cancel
- B—Rear Hitch (If Equipped)
 - B-1 Raise to height limit
 - B-2 Lower to set point
 - B-3 Fast Lower
- C—Front Hitch (If Equipped)
 - C-1 Raise
 - C-2 Lower
 - C-3 Float
 - C-4 Cancel
- D—Transmission
 - D-1 Gear-Preselect gear
- E—AUTO Transmission¹
- E-1 Automatic gear-shift up to highest selected gear; with maximum gear or just resume based on transmission capabilities.
- F—FieldCruise™ On/Off
 - F-1 set engine to maximum rpm
- G—IVT™ /AutoPowr™ Set Speed
 - G-1 Speed-Set to maximum ground speed
- H—Rear PTO On/Off (If Equipped)
- I—Front PTO On/Off (If Equipped)
- J—Differential Lock On/Off/Auto
- K—MFWD On/Off/Auto

	(A1)	→
	(A2)	~
	(A3)	←
	(A4)	///
	(B1)	↑
	(B2)	↓
	(B3)	⇓
	(C1)	↑
	(C2)	↓
	(C3)	~
	(C4)	///
	(D1)	4
	(E1)	4
	(F1)	1200 rpm
	(G1)	1.8 mph
		PTO ON PTO OFF
		PTO ON PTO OFF
		ON OFF AUTO
		ON OFF AUTO

First Column: Function, Second Column: Action, Third Column: Distance

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 FieldCruise is a trademark of Deere & Company
 IVT is a trademark of Deere & Company
 AutoPowr is a trademark of Deere & Company

¹If CommandQuad™ Transmission is in AUTO mode, this function can change gears within a range but cannot change ranges.

RXA0134396 —UN—06AUG13

Set Up A Sequence

NOTE: For complete list of functions available, see Description and Display in this section of this Operators Manual.



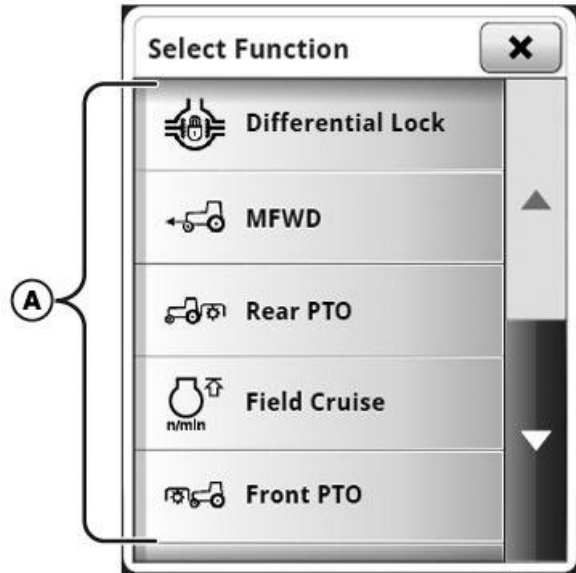
Manage Sequences → Sequences Tab → Program Sequence Button → Add Step Button

From iTEC™ main page, follow guidelines listed below:

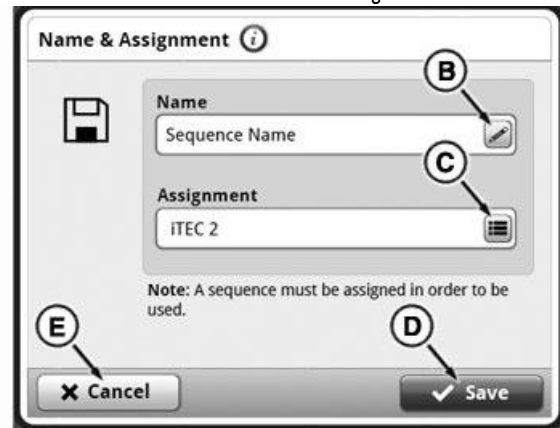
1. Select **Manage Sequences** button.
2. Select **Sequences** tab.
3. Select **Program Sequence** button.
4. Select **Add Step** button.

NOTE: Operator may select Cancel button (E) to exit editing process without saving changes.

5. Select Function page appears allowing the operator to select from list of functions (A). Select a function.
6. Select Action page appears after function has been selected. Select an appropriate action.
7. Step Distance page appears after action has been selected. Use keypad to input distance from step to take place.
8. Select **OK** button to complete and access next page.
9. Repeat steps 7-11 until entire sequence is set up.
10. Press next button to access next page.
11. Name Sequence page appears.
12. Select **Edit Sequence Name** button (B). Keyboard appears to type name of sequence. Select **Save** button when complete.
13. Select **Edit Assignment** button (C). List of available assignments appears. Select assignment and press **Save** button on sequence assignment page.
14. Select **Save** button (D) to complete process.



Select Function Page



Name & Assignments Page

- | | |
|------------------------------------|------------------|
| A— Function List | D— Save Button |
| B— Edit Sequence Name Button | E— Cancel Button |
| C— Edit Sequence Assignment Button | |

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Execute Sequence

iTEC™ sequence execution requires certain tractor controls be operated in a particular way. Sequence will NOT execute with tractor in PARK position. Drive lever must be in forward position when executing set speeds, gears, or Automatic Gear Shift. Tractor ground speed must be at least 0.5 km/h (0.31 mph).

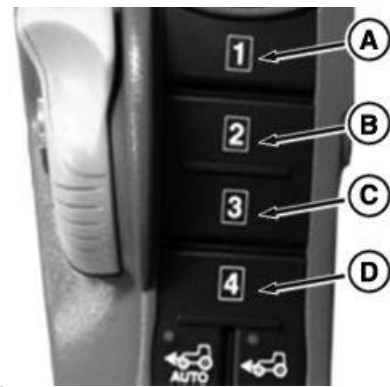
If a PTO function is included in sequence, PTO must be engaged manually, using PTO switch, for initial engagement. Before performing sequence using SCV functions, relevant SCV levers must be in neutral position.

Abort current sequence at any time by again pressing same iTEC™ Sequence button (A-D) used for starting sequence. Currently active commanded functions will be canceled (for example, hitch motion or SCV flow will stop if previously initiated as part of sequence).

During sequence execution, a function can be actuated manually at any time without execution of sequence being interrupted. Functions that are actuated manually are ignored by iTEC™ for the rest of sequence. Relevant alert icon for this function appears in Status Area (H).

1. Turn iTEC™ Master Toggle (F) to ON position.
2. Select iTEC™ Sequence button (A-D) on CommandARM™ for desired sequence.
3. Sequence steps appear in Status Area (H) and shows progression of steps.

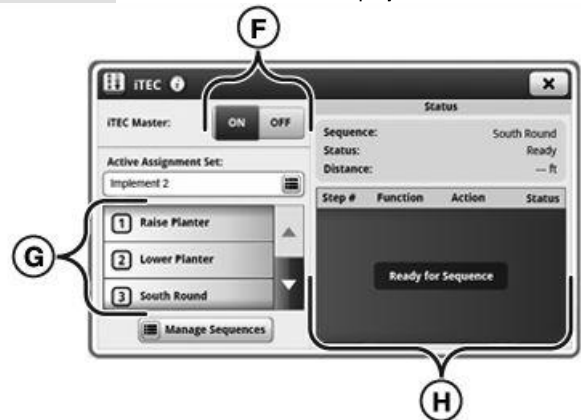
- | | |
|----------------------|--------------------|
| A— Sequence Button 1 | E— iTEC |
| B— Sequence Button 2 | F— Master Toggle |
| C— Sequence Button 3 | G— Assignment List |
| D— Sequence Button 4 | H— Status Area |



CommandARM™ Sequence Switches



Corner Post Display



iTEC™ Main Page

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CommandARM is a trademark of Deere & Company

RXA0130323 —UN—29JAN13

RXA0131148 —UN—26FEB13

RXA0131608 —UN—26MAR13

TO84419,00000FC -19-05SEP13-1/1

Delete iTEC™ Sequence

If no longer necessary, sequences can be completely deleted. When a sequence is deleted, all button assignments clear and sequence is no longer available for use.

From iTEC™ main page, follow guidelines listed below:

1. Select **Manage Sequences button**.
2. Select **Sequences tab (B)**.
3. Select sequence to be deleted.
4. Select **Delete button (E)**.
5. Delete Sequence page appears asking operators to confirm deleting sequence. Select delete to remove sequence.

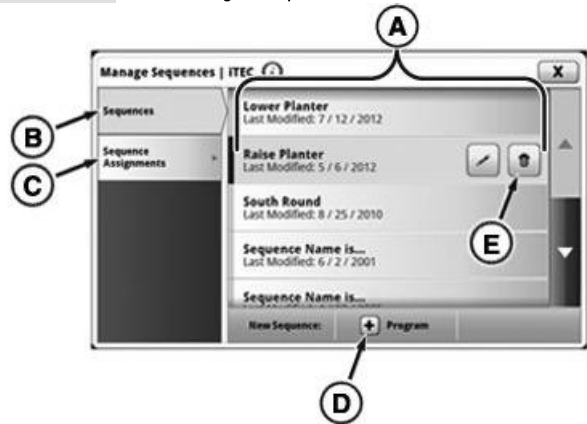
- | | |
|----------------------------|------------------|
| A—iTEC™ Content Section | D—Program Button |
| B—Sequences Tab | E—Delete Button |
| C—Sequence Assignments Tab | |

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Manage Sequences Button



Manage Sequences Page

RXA0133539 —UN—15JUL13

TO84419,00000FD -19-15AUG13-1/1

iTEC Functions—IVT™/AutoPowr™ Transmission

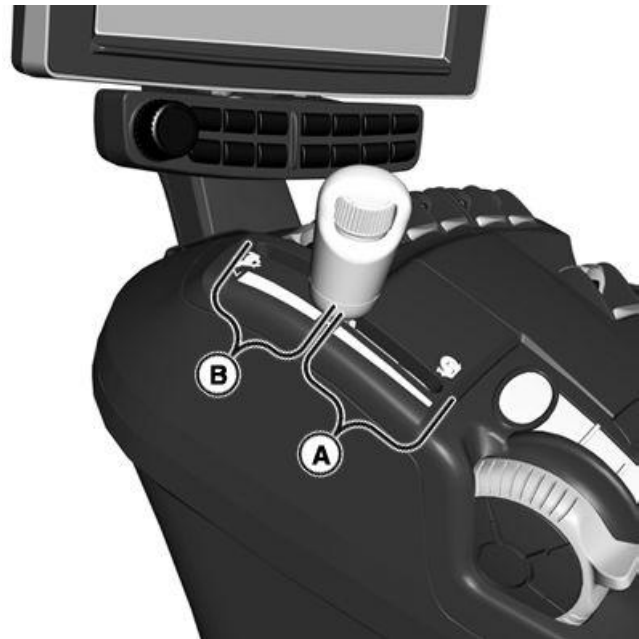
iTEC™ allows set speeds for IVT™/AutoPowr™ transmission to be preset. Minimum set speed can be saved is 0.8 km/h (0.5 mph).

Changing set speed or moving lever during execution of sequence will not cause iTEC™ to abort, but set speed changes will not be commanded for remainder of sequence.

If iTEC™ sequence commanded set speed exceeds maximum allowable speed in range selected, set speeds change, but are restricted to highest or lowest allowable set speed in current range. For example, tractor reaches maximum allowable set speed if transmission is in speed range F1 and operator executes 50 km/h (31 mph) command. When set speed is changed by iTEC™, control unit reacts as if operator changed set speed, pushing other set speeds up or down as result.

- | | |
|-----------------|-----------------|
| A— Speed Band 1 | B— Speed Band 2 |
|-----------------|-----------------|

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TO84419,00000FE -19-07AUG13-1/1

Tractor-Implement Automation™ (TIA™)

Tractor-Implement Automation™ (TIA™)

⚠ CAUTION: Although phrases "transfer control" and "withdraw control" are terms commonly used with TIA™ equipment, at NO time is implement in total control of an operation. Operator ALWAYS has ability to override TIA™ implement. It is operator's responsibility to make sure implement operation does not damage equipment, or pose danger of injury or death to operator or others close by.

*TIA is a trademark of Deere & Company
Tractor Implement Automation a trademark of Deere & Company
John Deere is a trademark of Deere & Company*

Tractor Implement Automation™ must not be put in operation when driving on public roads or when other persons are close by.

For ISO-compliant tractors, TIA™-compatible implements have ability to control certain individual tractor functions. See your implement Operator's Manual or contact your John Deere™ dealer with any questions regarding TIA™ - compatible implements.

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PROOF

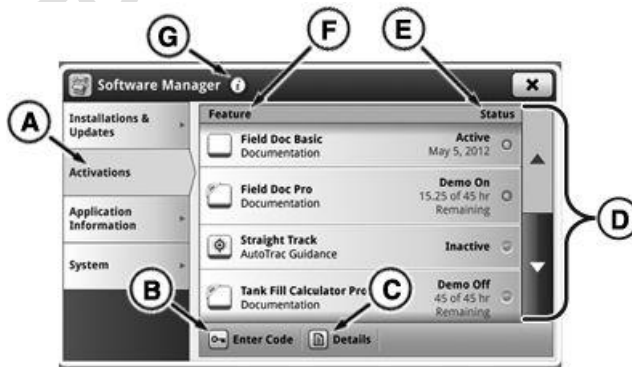
Activating Tractor-Implement Automation™ Equipment

RXA0131994 —UN—22APR13



Menu → Systems Tab → Tractor implement Automation Icon → Activations Tab

- A—Activations Tab
- B—Enter Code Button
- C—Details Button
- D—Scroll Bar
- E—Status List
- F—Feature List
- G—Information Button



Activations Page

RXA0131990 —UN—22APR13

Response Codes, Text Descriptions, And Corrective Actions		
Common Response Codes	Text Displayed	Corrective Action
0	Code Accepted	None Required
4	Implement Not Available to Deactivate	Implement already deactivated
5	Implement Already Activated	None Required, implement should work as expected
6 and 11	Space Unavailable for Activation	Contact your dealer for assistance
17	Demonstration Activation Replaced With Permanent Activation	None Required

NOTE: To obtain tractor serial number, see Record Product Identification Number in Identification Numbers section of this Operator's Manual.

An activation code is required to allow TIA™ to function. Contact your John Deere™ dealer with tractor serial number and implement make, model and serial number. Dealer will obtain activation code through John Deere™ StellarSupport™.

1. Select **Menu**
2. Select **System Tab**
3. Select **Application Manager Icon**
4. Select **Activations Tab (A)**
5. When Activations page displays, press Enter Code button (B). Keyboard will appear.

NOTE: Some Tractor Automation Activation page keyboard characters are grayed out and are not used in activation codes. If received activation code includes any characters that are grayed out on Tractor Automation Activation page keyboard, request dealer reconfirm activation code.

6. Using keyboard, enter activation code, then select Save/Enter button.
7. If activation code is entered correctly, confirmation code appears in the enter activation overlay and message is displayed. Code accepted indicates activation is complete.
8. If message other than Code Accepted appears, see table describing most common possible alternative messages and corrective actions. If message not listed appears, check and reenter code. If problem persists, contact your John Deere™ dealer.

Up to twenty implement names can be viewed on Tractor Automation Activation page at any given time. If additional pages are required, use Scroll Bar (D) displayed in Tractor Automation Activation page right region to scroll to a new page. When a new entry shows up in Feature List (F), that entry will be labeled "Unknown Implement". The text 'Unknown Implement' should change to a real name after first time connecting the implement.

TIA is a trademark of Deere & Company
 John Deere is a trademark of Deere & Company
 StellarSupport is a trademark of Deere & Company

T084419.0000100 -19-08AUG13-1/1

Operating Tractor-Implement Automation™

IMPORTANT: Various requirements must be met by tractor and implements to allow TIA™ to function correctly. See information in this section of this Operator's Manual and implement Operator's Manual.

1. Connect TIA™ equipment to tractor using ISO connection.
2. Select AutoTrac™ Resume Button (A) on CommandARM™ .
3. Follow implement Operator's Manual instructions to operate implement.

A—AutoTrac™ Resume Button



AutoTrac™ Switch

RXA0130324 —UN—11JAN13

*TIA is a trademark of Deere & Company
CommandARM is a trademark of Deere & Company
AutoTrac is a trademark of Deere & Company*

TO84419,0000107 -19-08AUG13-1/1

PTO Requirements

Before transferring control to implement, prepare implement as indicated in implement Operator's Manual. Transfer control using AutoTrac™ resume switch as described in implement Operator's Manual.

Following guidelines must be met before transferring control to implement:

- Operator in seat.
- Functional PTO system.
- PTO remote control off.
- PTO engaged (PTO switch On).

AutoTrac is a trademark of Deere & Company

While operating and depending on PTO system capabilities, implement has ability to engage/disengage PTO, change PTO gear or adjust PTO speed.

To disengage control, turn PTO switch off.

NOTE: *Unless implement is authorized to engage PTO when tractor is stopped, tractor will prevent engagement of PTO when stopped. Implement is however, allowed to disengage PTO.*

TO84419,0000101 -19-05AUG13-1/1

SCV Requirements

Before transferring control to implement, prepare implement as indicated in implement Operator's Manual. Transfer control using AutoTrac™ resume switch as described in implement Operator's Manual.

Following guidelines must be met before transferring control to implement:

- Operator in seat.
- SCVs are functional.
- SCV control levers in neutral position.
- SCV levers are not locked.

NOTE: Set maximum SCV flow limit which cannot be exceeded by implement.

AutoTrac is a trademark of Deere & Company

While operating, implement has ability to:

- Control SCVs during operations.
- Change SCV flow rate up to set limit.

To disengage control:

- Actuate specific SCV lever.
- Lock SCV lever.
- Actuate remote control switch on fender.

NOTE: Unless implement is authorized to adjust SCV flow when tractor is stopped, tractor will prevent SCV flow adjustments when at a stopped. Implement is however allowed to stop oil flow.

T084419,0000102 -19-08AUG13-1/1

IVT™/AutoPowr™ Requirements

Before transferring control to implement, prepare implement as indicated in implement Operator's Manual. Transfer control using AutoTrac™ resume switch as presented in implement Operator's Manual.

NOTE: Limit is determined by maximum speed setting and position of speed control lever. This set limit cannot be exceeded by implement.

Following guidelines must be met before transferring control to implement:

- Operator in seat.
- No malfunctions present at IVT™ /AutoPowr™ transmission.
- Reverser lever must be in Scroll (E), Power Zero™ (D), or forward position (F or G) for left hand, right hand reverser, forward position (H) for left hand reverser.

While operating, implement has ability to:

- Adjust speed up to operator set limit.
- Stop tractor.
- Drive tractor again after stopping; with operator's confirmation.

Operator's approval to start or restart motion:

- Cycle reverser lever. Move lever from forward to scroll to forward position again.
Cycle reverser lever when a round baler stops tractor to eject full bale.
- Depress clutch pedal or brake pedal while tractor rolls to stop. Hold pedal down while tractor is stopped. Tractor starts moving when pedal is released, if implement requests speed.

To withdraw control using reverser lever:

- When driving: Move lever out of forward position.
- When stopped: Move lever to Reverse, Neutral or Park.

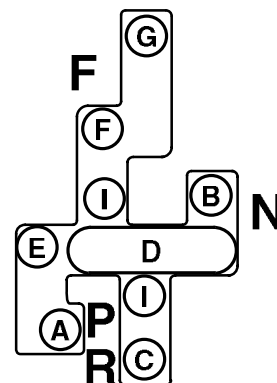
To withdraw control using speed control lever or speed wheel:

NOTE: Speed may always be reduced.

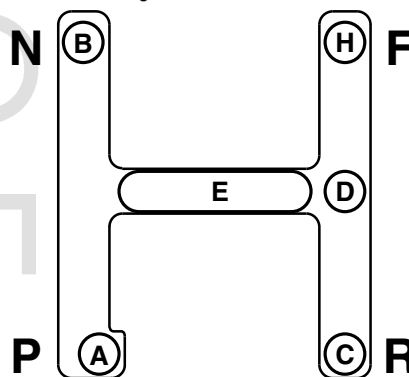
Set speed limit may be increased within 2 seconds after engaging travel speed Auto Mode. Current travel speed can be limited by other processes (e.g. iTEC™). This limit will be observed. However, the limit will not be considered as an intervention by operator.

- If implement commands stopping tractor and speed is increased, travel speed Auto Mode will be ended.
- Increasing speed can end Auto Mode. Implement has all information to inform operator that this interaction will

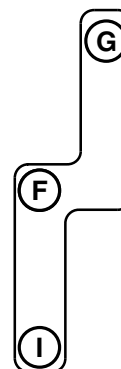
*AutoTrac is a trademark of Deere & Company
IVT is a trademark of Deere & Company
AutoPowr is a trademark of Deere & Company
Power Zero is a trademark of Deere & Company
iTEC is a trademark of Deere & Company*



Right-Hand Reverser



Left-Hand Reverser



Left-Hand Reverser Speed Lever

- | | |
|-------------------|------------------------|
| A—Park | F—Forward Speed Band 1 |
| B—Neutral | G—Forward Speed Band 2 |
| C—Reverse | H—Forward |
| D—Power Zero | I— Minimum Speed |
| E—Scroll Position | |

end travel speed Auto Mode (see implement Operator's Manual).

RXA0133408 —UN—13AUG13

RXA0100319 —UN—26JAN09

RXA007571 —UN—10JUN05

AutoTrac™ Guidance Requirements

Before transferring control to implement, prepare implement as indicated in implement Operator's Manual. Transfer control using AutoTrac™ resume switch as presented in implement Operator's Manual.

Following guidelines must be met before transferring control to implement.

- Operator in seat.
- Steering system functional.

AutoTrac is a trademark of Deere & Company

- AutoTrac™ is **OFF**.
- Steering wheel stationary.
- Vehicle speed below maximum automated speed.
- Transmission not in Park.

While operating, implement has ability to automatically steer tractor.

To disengage control:

- Turn steering wheel.
- Place tractor in Park.

TO84419,0000104 -19-08AUG13-1/1

Rear Hitch Requirements

Before transferring control to implement, prepare implement as indicated in implement Operator's Manual. Transfer control using AutoTrac™ resume switch as presented in implement Operator's Manual.

Implement can automatically control hitch depth.

NOTE: Set raise limit using CommandCenter™. Implement cannot exceed limit.

Following guidelines must be met before transferring control to implement:

- Operator in seat.

*AutoTrac is a trademark of Deere & Company
CommandCenter is a trademark of Deere & Company*

- Functional hitch system.
- Hitch control lever in neutral position.
- Hitch unlocked.

While operating, implement has ability to control hitch depth.

To disengage control:

- Move hitch control lever.
- Lock hitch (transport lock).
- Activate fender mounted hitch switch (if equipped).

NOTE: Unless implement is authorized to adjust hitch depth when tractor is at a standstill, tractor will prevent hitch depth adjustments when at a standstill.

TO84419,0000105 -19-08AUG13-1/1

Drive Strategy Requirements

While operating, implement has ability to change drive strategy mode. See IVT™/AutoPowr™ Custom Settings in Operating IVT™/AutoPowr™ Transmission section of this Operator's Manual.

Before transferring control to implement, prepare implement as indicated in implement Operator's Manual. Transfer control using AutoTrac™ resume switch as presented in implement Operator's Manual.

*IVT is a trademark of Deere & Company
AutoPowr is a trademark of Deere & Company
AutoTrac is a trademark of Deere & Company*

Following guidelines must be met before transferring control to implement:

- Operator in seat.
- Functional transmission.
- Transmission not in Park.

To disengage control:

- Manually select a drive strategy.
- Place transmission in Park.

TO84419,0000106 -19-08AUG13-1/1

TouchSet™ Depth Control

Attaching Implement and Control System

CAUTION: Escaping fluid under pressure can penetrate skin causing serious injury. Avoid hazard by relieving pressure before disconnecting hydraulic or other lines.

If an accident occurs, see a doctor immediately. Any fluid injected into skin must be surgically removed within a few hours or gangrene may result.

IMPORTANT: Hydraulic hoses can fail due to physical damage, kinks, age, and exposure. Check hoses regularly.

Any dirt, dust, or other foreign material can damage hydraulic system. Thoroughly clean hydraulic hoses and SCVs before connecting implement to tractor.

IMPORTANT: Steam cleaning or using a high pressure washer in the area around the SCV connections and electronics may damage equipment. Any pressure washer exceeding 6895 kPa (69 bar) (1000 psi) should be kept a minimum of 200 mm (8 in.) away from connections.

NOTE: Hose identification kits are available from your John Deere™ dealer.

1. Identify extend hose (B) and retract hose (C).
2. Back tractor into position and attach implement to drawbar. Be sure that hitch pin is locked into position.

CAUTION: Prevent possible personal injury. Shut off engine, move SCV lever to neutral position and lock out SCV controls before attaching implements to prevent implement movement.

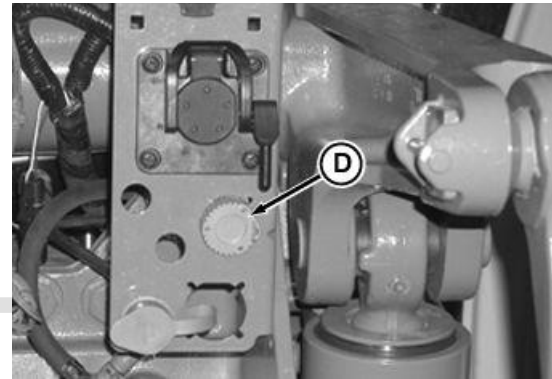
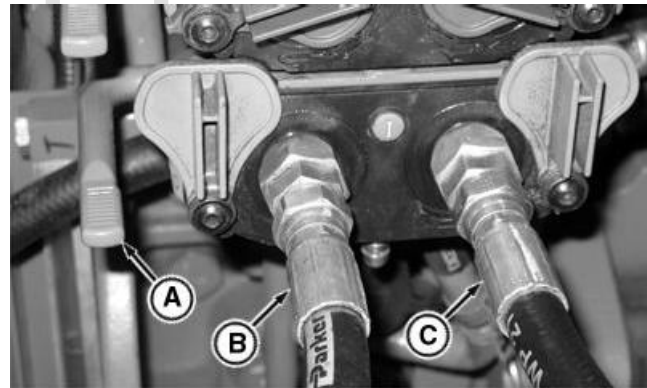
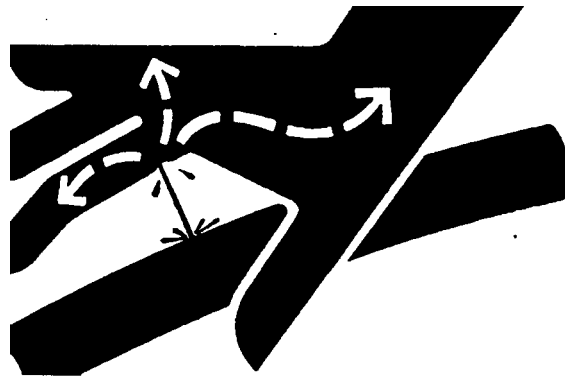
IMPORTANT: Always shut engine off before connecting/disconnecting implement position sensor. Connect/disconnect with engine running will cause system faults. Shut engine off restart to restore correct function.

3. Shut off tractor engine.

IMPORTANT: Be sure to correctly connect remote hydraulic hoses to couplers. If hose connections are reversed, machine will not respond to system controls as expected. Mid-mount SCV ports are arranged opposite of front hitch and rear SCV stack ports.

Rear SCV or Front Hitch	Mid-Mount SCV
Extend=Left Port	Extend=Right Port
Retract=Right Port	Retract=Left Port

John Deere is a trademark of Deere & Company



- A— SCV handle
- B— Extend Hose
- C— Retract Hose
- D— Wiring Harness Connector

NOTE: SCV Handle (A) is only pushed down when couplers are disconnected.

4. Connect implement hydraulic hoses. For reference see Remote Hydraulic Connections Selective Control Valves in Section 63 in this Operator's Manual.
5. Install implement position sensor to tractor wiring harness connector (D).

X9811 —UN—23AUG88

RXA0110340 —UN—13SEP10

RXA0097019 —UN—15JAN08

RD47322.00001DC -19-17APR13-1/1

Using TouchSet™ Depth Controls

CAUTION: Avoid personal injury or death. Do not attempt to install depth control sensors on implements not intended for this system. See implement operator's manual.

Moving implement control unit, sensor, connectors, or linkages, when engine is running, may cause unexpected movement. Stay clear of implement when starting engine.

Tractor selective control valve (SCV I) is used to electronically control raising, lowering, and setting of implement depth, without leaving cab.

1. Connect implement to tractor.
2. Select **Menu**.
3. Select **SCV Icon**.

NOTE: When using TouchSet™, SCV must be set for feature mode. See *Hydraulics and Selective Control Valves Section 60*.

Height setting is upper setpoint implement range (B). Lower limit (depth setting) is bottom portion of implement range. Actual implement position is depicted by indicator (C).

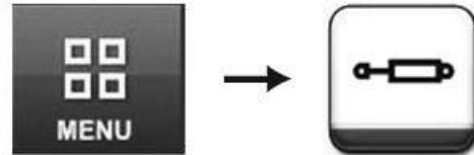
Moving SCV 1 lever (A) into extend or retract detent position with TouchSet™ in AUTO (G) will command implements's position to established set point.

Rapidly moving SCV I lever into extend or retract region and returning to center position with TouchSet™ in AUTO will adjust implement's position up or down by a fixed amount. Repeated lever "flick" movements will be summed.

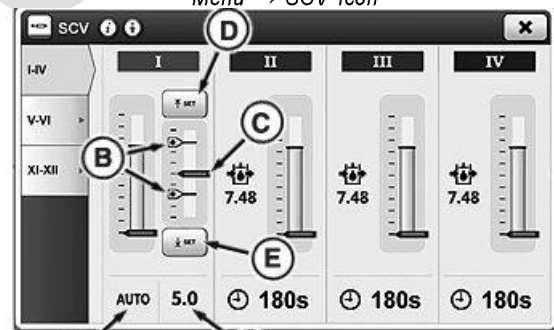
4. Using SCV I lever, lower implement to desired depth while watching implement and CommandCenter™ Implement Position (F).
5. When implement is at desired depth, press button (E).
6. Using SCV I lever, raise implement to desired height while watching implement and CommandCenter™ Implement Range (B).



RXA0127933 —UN—04SEP12



Menu → SCV Icon



SCV Page

- A— SCV I Control Lever
- B— Implement Range
- C— Implement Position Indicator
- D— Upper Setpoint Button
- E— Lower Setpoint Button
- F— Implement Position
- G— Automation Mode Status

7. When implement is at desired height, press button (D).

Continued on next page

RD47322,00001DD -19-17APR13-1/2

RXA0130050 —UN—26AUG13

RXA0131879 —UN—10APR13

TouchSet™ Continued - Setting Flow

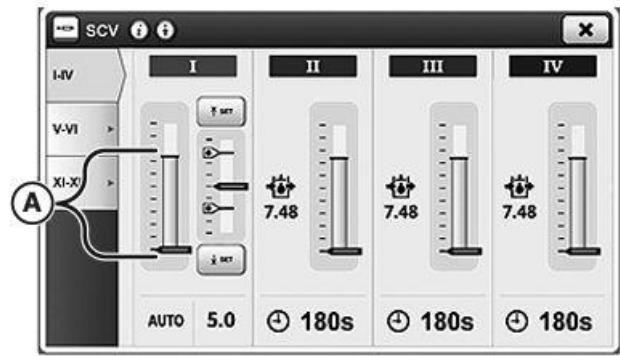
1. Touch bar graph (A) on main SCV Screen to bring up flow tab overlay. Increase flow by pushing button (B) or to decrease flow push buttons (C) to set desired flow.

NOTE: Bar graph (A) depicts detent flow and amount of detent flow will be shown in box (D). Detent time drop down box (E) cannot be adjusted when Automation Mode (F) is enabled. See Configuring Selective Control Valves - Standard Mode in Hydraulics and Selective Control Valves Section 60.

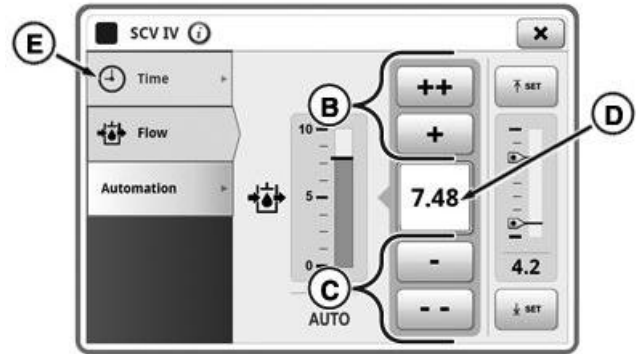
NOTE: Flow is displayed in increments of 0.04 beginning at 0.04 through 10 located in input box (D). Pushing (+) will increase flow by 0.04, pushing (++) increases flow by 1.00, and by pushing (-) and (- -) will decrease flow setting by same increments.

2. Press Automation tab (F) then ON or OFF toggle button (G), to activate the Automation feature.

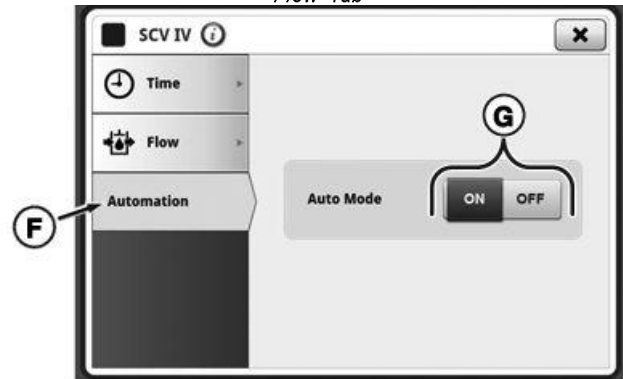
- | | |
|--------------------------|-------------------------|
| A— Detent Flow Bar Graph | E— Detent Time Drop |
| B— Increase Flow Buttons | F— Automation Tab |
| C— Decrease Flow Buttons | G— ON/OFF Toggle Button |
| D— Input Box | |



SCV Page



Flow Tab



Automation

RD47322.00001DD -19-17APR13-2/2

RXA0131898 —UN—10APR13

RXA0131880 —UN—26AUG13

RXA0131882 —UN—26AUG13

ROOF

Hydraulics and Selective Control Valves

Configuring Selective Control Valves - Access to Settings

RXA0133709 —UN—16JUL13

CAUTION: Do not operate front loaders in conjunction with Intelligent Total Equipment Control (iTEC™) to avoid sudden movements and possible accidents.

NOTE: The SCV Page at right has the Flow Indicators (F) appearing for reference only, the Flow Indicator will only appear if the SCV is activated and hydraulic oil is flowing. Flow Display (G) will only appear in yellow when the SCV is activated and hydraulic oil is flowing.

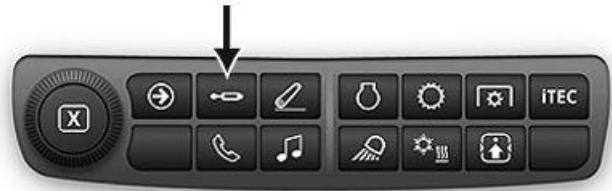
Feature Mode optional connector to be configured correctly.

Press **SCV shortcut button** on Navigation Bar or follow alternative path:

1. Select **Menu**.
2. Select **Tractor Settings** tab.
3. Select **SCV icon**.

Each SCV can be configured to three different modes: standard mode displayed in SCV I (A), independent mode displayed in SCV II (B), or feature mode displayed in SCV III (C).

Additionally when SCV is set to float as in SCV IV (D), float symbol (E) appears.

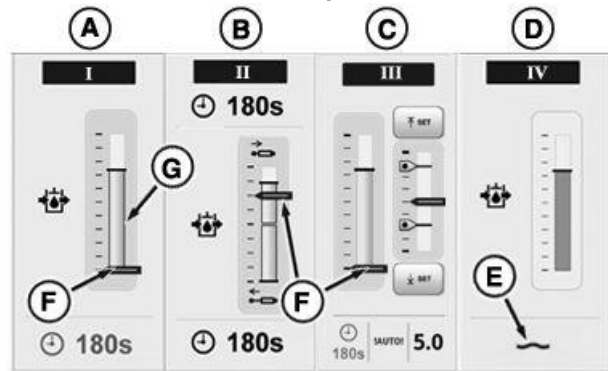


SCV Shortcut Button on Navigation Bar

RXA0128092 —UN—10SEP12



Menu → Tractor Settings Tab → SCV Icon



SCV Page

- | | |
|-------------------------|-------------------|
| A— SCV Standard Mode | E— Float Symbol |
| B— SCV Independent Mode | F— Flow Indicator |
| C— SCV Feature Mode | G— Flow Display |
| D— SCV Float Operation | |

RXA0131094 —UN—08AUG13

RD47322.0000236 -19-25AUG13-1/1

RXA0133709 —UN—16JUL13

Configuring Selective Control Valves - Standard Mode

SCVs in standard mode have one detent time and one detent flow settings which apply to both extend and retract.

Press **SCV shortcut button on Navigation Bar** or follow **alternative path**.

1. Select one of the individual SCV's (A) to access Standard Mode.
2. Select Time tab (B).

NOTE: Detent time displays amount of time in input box (E). Pressing (+) will increase time in 1 second increments up to 10, then in increments of 2 seconds up to 20, then increases every 5 seconds to 30, then by 30 seconds up to C for continuous. Pressing (-) will decrease time setting by the same increments.

3. To increase detent time press button (D) or to decrease detent press button (F). Also turning adjustment dial (G) can be used to increase or decrease detent time settings.

4. Select Flow tab (C).

NOTE: Flow is displayed in increments of 0.04 beginning at 0.04 through 10 located in input box (E). Pressing (+) will increase flow by 0.04, pressing (++) increases flow by 1.00, and by pressing (-) and (- -) will decrease flow setting by the same increments.

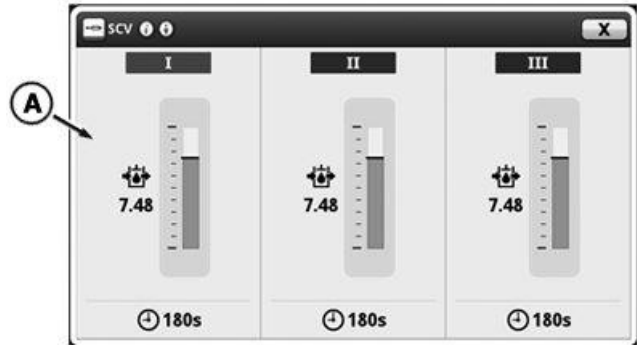
5. To increase flow press buttons (D) or to decrease press buttons (F). Also turning adjusting dial (G) can be used to increase or decrease flow settings.

A— SCV Main Page
 B— Detent Time Tab
 C— Detent Flow Tab
 D— Increase Time/Flow buttons

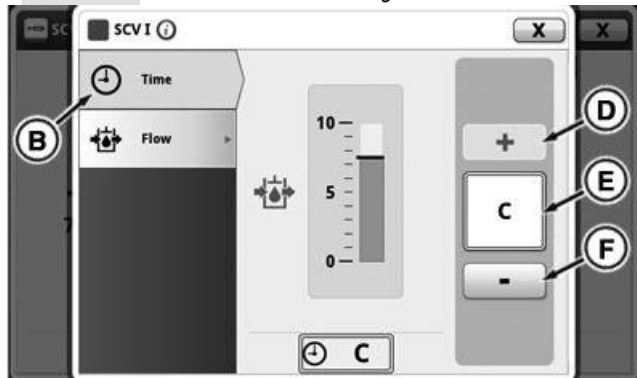
E— Input Box
 F— Decrease Time/Flow buttons
 G— Adjusting Dial



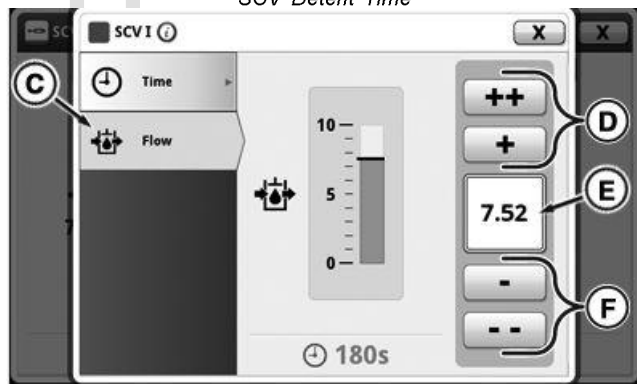
SCV Shortcut Button on Navigation Bar



SCV Main Page



SCV Detent Time



SCV Detent Flow

RXA0131231 —UN—09MAY13



Display Shortcut Bar

RXA0131602 —UN—19AUG13

RXA0131601 —UN—19AUG13

RXA0127867 —UN—19AUG13

RD47322,0000237 -19-03JUL13-1/1

Activating Independent Mode

RXA0133709 —UN—16JUL13

Press **SCV shortcut button** on **Navigation Bar**.

1. Press **Advanced Settings Icon**.
2. Press **Settings tab**.

Use toggles (A) to switch Independent Mode ON or OFF for each SCV.

NOTE: If Independent Mode is off, the SCV is in Standard Mode.

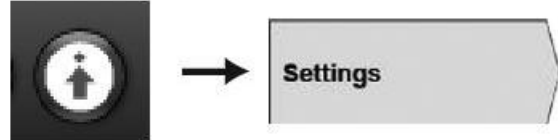
A— SCV ON/OFF Toggles

B— Scroll Bar

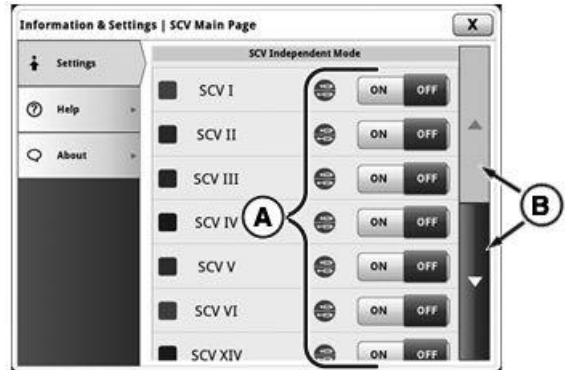


SCV Shortcut Button on Navigation Bar

RXA0130326 —UN—11JAN13



Advanced Settings Icon



Information and Settings Page

RXA0128422 —UN—22AUG13

RD47322,0000238 -19-03JUL13-1/1

P
R
O
O
F

RXA0133709 —UN—16JUL13

Configuring Selective Control Valves - Independent Mode

SCV's in Independent Mode have two detent flow and two detent time settings, one for extend and one for retract.

Press **SCV shortcut button on Navigation Bar**.

1. Select an SCV that is in Independent Mode.
2. Select Detent Time Retract tab (A) or Detent Time Extend tab (B).

NOTE: Detent time displays amount of time in input box (F). Pressing (+) will increase time in 1 second increments up to 10, then increments of every 2 seconds up to 20, then increases every 5 seconds to 30, then by 30 seconds up to C for continuous and by pressing (-) will decrease time setting by the same increments.

3. To increase detent time press buttons (E) or to decrease press buttons (G). Also adjusting dial (H) can be used to increase or decrease desired detent time setting.
4. Select Detent Flow Retract tab (C) or Detent Flow Extend tab (D).

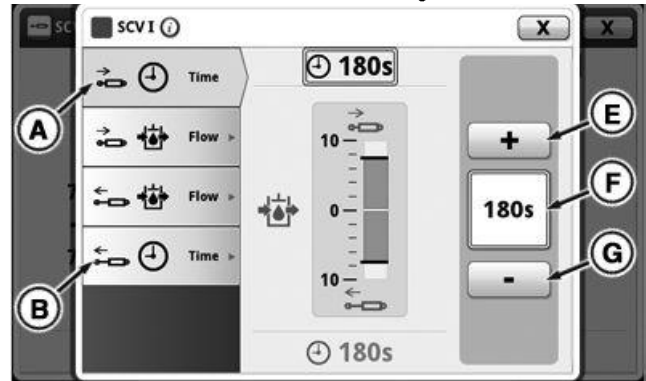
NOTE: Flow is displayed in increments of 0.04 beginning at 0.04 through 10 located in input box (F). Pressing (+) will increase flow by 0.04, pressing (++) increases flow by 1.00, and by pressing (-) and (- -) will decrease flow setting by the same increments.

5. To increase flow press buttons (E) or to decrease press buttons (G). Also adjusting dial (H) can be used to increase or decrease flow setting.

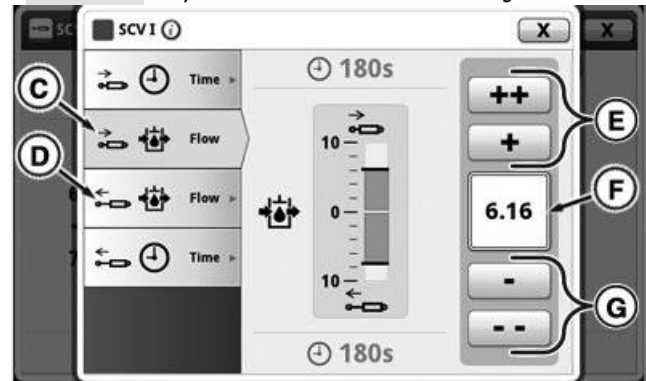
- | | |
|----------------------------|-------------------------------|
| A— Retract Detent Time Tab | E— Increase Time/Flow Buttons |
| B— Extend Detent Time Tab | F— Input Box |
| C— Retract Detent Flow Tab | G— Decrease Time/Flow Buttons |
| D— Extend Detent Flow Tab | H— Adjusting Dial |



SCV shortcut button on Navigation Bar



Independent SCV Detent Time Setting



Independent SCV Detent Flow Setting

RXA0131232 —UN—09MAY13



Display Shortcut Bar

RD47322,0000239 -19-20AUG13-1/1

RXA0131827 —UN—19AUG13

RXA0131877 —UN—19AUG13

Configuring Selective Control Valves - Feature Mode

NOTE: Feature mode requires an optional connector. To use feature mode, connect implement to tractor before the key switch has been turned on. When connected through ISO Bus or implement connector, SCV(s) automatically enter feature mode. SCV page with feature option is displayed for selected SCV(s). Tractor also has Class 3 capabilities.

Following are available feature modes:

- TouchSet™ depth control
- AccuDepth™ control
- ISOBUS control
- Laser Scraper
- Class 3 Capabilities

1. Connect tractor to implement.
2. Select **Menu** .
3. Select **Tractor Settings tab**.
4. Select **SCV Icon**.
5. Select Feature SCV Module.
6. Select Detent Flow tab (A).
7. To increase flow press (+ or ++) button (D) or to decrease press (- or --) button (F). Also turning adjusting dial (G) can be used to set desired flow setting.

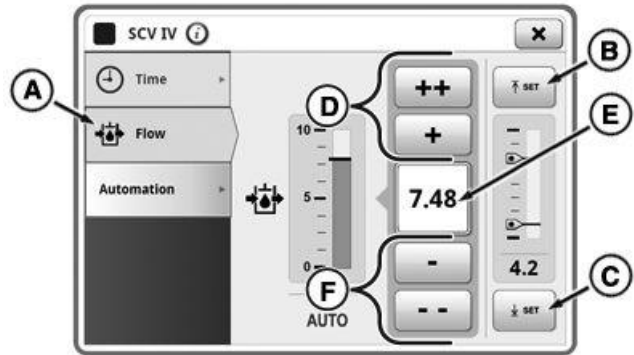
NOTE: Flow is displayed in increments of 0.04 beginning at 0.04 through 10 located in input box (E). Pressing (+) will increase flow by 0.04, pressing (++) increases flow by 1.00, and by pressing (-) and (--) will decrease flow setting by the same increments.

NOTE: Only TouchSet™ depth control uses upper and lower setpoint buttons (B) and (C).

8. Select Upper Setpoint button (B) to set upper setpoint to current position.
9. Select Lower Setpoint button (C) to set lower setpoint to current position.



SCV shortcut button on Navigation Bar



Feature SCV Settings Page



Display Shortcut Bar

- | | |
|--------------------------|-------------------|
| A— Detent Flow Tab | E— Input Box |
| B— Upper Setpoint button | F— Decrease Flow |
| C— Lower Setpoint button | G— Adjusting dial |
| D— Increase Flow | |

RXA0127959 —UN—21AUG13

RXA0131233 —UN—09MAY13

Laser Scraper—for Scrapers Equipped with Scraper Control Unit

RXA0133709 —UN—16JUL13

NOTE: Used primarily in areas requiring automated laser guidance system for scraper applications.

Press **SCV shortcut button** on Navigation Bar or follow **alternative path**:

1. Connect tractor to implement.
2. Select **Menu softkey**.
3. Select **Tractor Settings tab**.
4. Select **SCV softkey**.
5. Select Feature SCV Mode.
6. Select Detent Flow tab (A).
7. To increase flow press softkey (D) or to decrease press softkey (F). Also turning adjusting wheel (G) can be used to obtain desired flow setting.
8. Select Upper Setpoint softkey (B) to set upper setpoint to current position.
9. Select Lower Setpoint softkey (C) to set lower setpoint to current position.

- | | |
|---------------------------|-------------------|
| A— Detent Flow Tab | E— Input Box |
| B— Upper Setpoint Softkey | F— Decrease Flow |
| C— Lower Setpoint Softkey | G— Adjusting Dial |
| D— Increase Flow | |

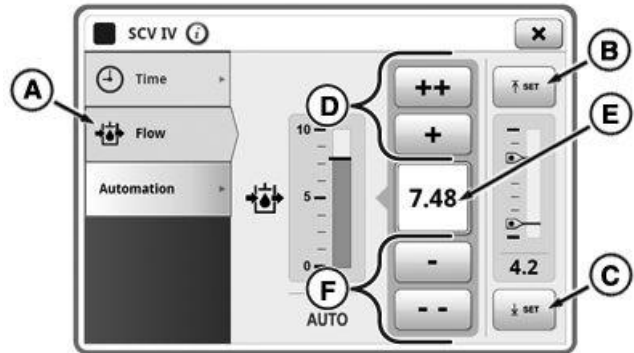


SCV Shortcut Button on Navigation Bar

RXA0128092 —UN—10SEP12



Menu Button → Tractor Settings Tab → SCV Softkey



Feature SCV Settings Page



Navigation Bar

Continued on next page

RD47322,000025F -19-09AUG13-1/2

RXA0127959 —UN—21AUG13

RXA0131233 —UN—08MAY13

⚠ CAUTION: Avoid personal injury or death. Moving scraper control unit, connectors, or linkages, when engine is running, may cause unexpected movement. Stay clear of implement when starting engine.

Tractor selective control valves (SCV I and/or SCV III) are used to electronically control raising, lowering, and setting of implement depth, without leaving the cab.

Control lever (A) is used to manually control SCV I and activate an automatic scraper control system.

Control lever (B) is used to manually control SCV III and activate a second automatic scraper control system.



SCV Control Levers

A— SCV I Control Lever

B— SCV III Control Lever

RD47322,000025F -19-09AUG13-2/2

RXA0135011 —UN—09AUG13

PROOF

Total Rear SCV Flow

1. Check flow setting for each function independently (see implement operator's manual Specifications section to determine correct motor flow settings).

Following may cause pump to operate at high pressure:

- Down pressure systems (drills, air seeders, disks) can be considered to be zero flow demand after completion of raise or lower cycle (see Implement Connection Example 1, Pressure Control Valve Applications (Grain Drills or Air Seeders with Constant Down-Pressure System) in Hydraulic Connections section).
 - Auxiliary flow control valves (vacuum flow control)
 - Open implement flow control valve and adjust tractor flow rate to desired setting (see Implement Connection Example 4, Planter with Vacuum Motor and Return Line to SCV Using Motor Return Tip in Hydraulic Connections section).
 - Cylinder functions where line or orifice restrictions control flow - Adjust tractor flow control to point where function speed begins to decrease.
 - Auxiliary control valves (implement stack valves, row guidance) adjust tractor flow control to lowest setting resulting in correct operation.
2. Determine total flow demand by adding flow requirements for each SCV using settings determined in Step 1. Include hitch and power beyond flow requirements, if applicable (refer to chart for correct settings).
 3. Determine if flow demand exceeds available pump flow (refer to chart for available pump flow):
 - Flow demand is less than available pump flow but has performance concern (see your John Deere™ dealer).
 - Flow demand exceeds pump flow:
 - Increase engine RPM if possible.
 - Decrease flow setting on noncritical functions.
 - Convert implement open center valves to closed center operation, if equipped.

NOTE: Flow measurements made without steering or hitch being used.

SCV FLOW (Approximate)			
Engine rpm	Pump Flow (48 cm ³ Pump) L/min (gpm)	Pump Flow (63 cm ³ Pump) L/min (gpm)	Pump Flow (85 cm ³ Pump) L/min (gpm)
800	42.4 (11.2)	52 (13.7)	75 (19.8)
1500	85.8 (22.6)	109 (28.8)	152 (40.2)
1700	98.3 (26)	125 (33.0)	174 (46.0)
1900	110.7 (29.2)	142 (37.5)	196 (51.8)
2100	123.1 (32.5)	158 (41.7)	218 (57.6)
2200	129.3 (34.1)	166 (43.9)	229 (60.5)

SCV FLOW OUTPUT (Approximate) ^a	
SCV Flow Settings	L/min (gpm)
0.1 ^b	—
1.0	1.9 (0.5) ^c
2.0	6.1 (1.6)
3.0	13.6 (3.6)
4.0	20.4 (5.4)
5.0	28.0 (7.4)
6.0	40.9 (10.8)
7.0	62.1 (16.4)
8.0	81.4 (21.5)
9.0	107.1 (28.3)
10.0	132 (35)

^aAt 2000 rpm and 454 kg (1000 lbs) of load at point of use.

^b0.1 = Minimum Flow Setting

^cObserved under no load.

Hitch Flow		
Hitch Cylinder	Flow	
Diameter (mm)	L/min	gpm
90/90	71	18.7
100/100	88	23.2
100/115	102	26.9

RD47322,000023B -19-03JUL13-1/1

Using Six Position SCV Control Levers

CAUTION: To avoid personal injury, ensure that hoses are not reversed. If hoses are reversed, cylinder extends when it should retract.

Prevent possible personal injury. Shut off engine, move SCV lever to neutral position and press SCV Control Lever Lock (J) before attaching implements to prevent unintentional implement movement.

NOTE: CommandARM™ configuration may vary depending on options.

Float can be used to allow hydraulic motors to coast when shutting down implement. Neutral and Float are positions SCV lever remains in without being held.

- **SCV Control Lever Lock (J):** Locks out control inputs (On SCV Levers (A) through (H) and Front Hitch Lever only).

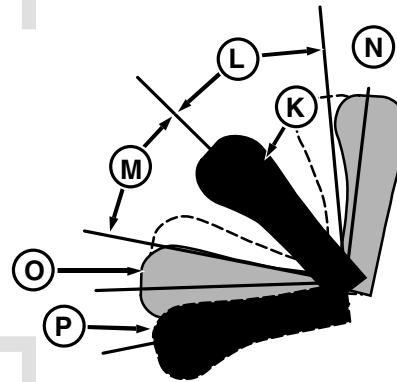
NOTE: External Switches for the SCV's (rear fender) and Front Hitch (front hitch casting) as well as the Rear Hitch Lever on the CommandARM™ can still be used to command flow.

- **Neutral (K):** Lever returns to center position when released, except in float position.
- **Extend (L):** (Rearward between Neutral and Extend Detent position) Variable flow to extend cylinder, proportional to lever movement and flow settings; flow stops when released.
- **Retract (M):** (Forward between Neutral and Retract Detent position) Variable flow to retract cylinder, proportional to lever movement and flow settings; flow stops when released.
- **Extend Detent Position (N):** (Rearward to "click" position) Timed flow to extend cylinder, based on detent time setting and at a rate set by flow rate control (see Adjusting Timed Detent and Adjusting SCV Flow Rate in this section). Returns to neutral when released.
- **Retract Detent Position (O):** (Forward to "click" position) Timed flow to retract cylinder, based on detent time setting and rate set by flow rate control (see Adjusting Timed Detent and Adjusting SCV Flow Rate in this section). Returns to neutral when released.
- **Float (P):** (Down into locked position) Valves open to sump to allow cylinder to extend or retract. Allows implement to follow ground contour. Pull up and out of locked position to disengage.

Push SCV lever cover (I) forward when SCV is not in use.



CommandARM™



Armrest Controls — Six Position SCV Levers

- | | |
|------------|---------------------------------|
| A— SCV I | I— SCV Cover Lever |
| B— SCV II | J— SCV Control Lever Lock |
| C— SCV III | K— SCV Lever (Neutral Position) |
| D— SCV IV | L— Extend Range |
| E— SCV V | M— Retract Range |
| F— SCV VI | N— Extend Detent Position |
| G— SCV XI | O— Retract Detent Position |
| H— SCV XII | P— Float |

NOTE: To relieve hydraulic pressure in implement, move SCV lever to float position (P), while engine is running.

RD47322,000023C -19-06AUG13-1/1

RXA0126580 —UN—05AUG13

RXA0134902 —UN—05AUG13

SCV Control Lever—Neutral Position

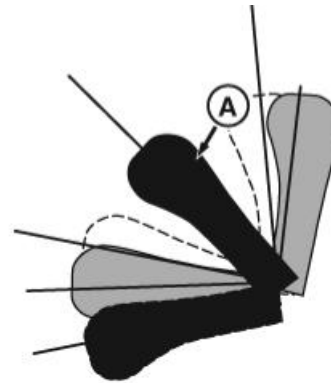
Neutral position (A) allows flow to continue until timed detent expires. If no timed detent is commanded, then flow is turned off.

NOTE: SCV control lever should be in neutral position at tractor startup.

Levers in extend or retract positions automatically return to neutral when released. Float position remains detented.

Any position other than neutral is ignored until lever is cycled to neutral after engine startup.

A— Neutral Position



SCV Control Lever - (Neutral)

RXA0135070 —UN—20AUG13

RD47322,000023D -19-25AUG13-1/1

SCV Control Lever—Extend and Extend Detent Position

Extend Position

Pull lever (A) rearward of neutral. This extends the cylinder at a rate that varies with how far rearward the lever is pulled.

Pull lever slightly rearward to extend the remote cylinder slowly.

Pull lever rearward against the first detent notch to extend the remote cylinder at maximum rate. (See Adjusting SCV Flow Rate in this section) Lever returns to neutral and flow stops when released.

NOTE: Time Setting is ignored in the retract position.

Extend Detent Position

Pull lever (A) rearward to “click” detent position and release. Lever will return to neutral position, but flow will continue at maximum rate. (See Adjusting SCV Flow Rate and Adjusting Timed Detent in this section.)

Flow timing begins when the lever returns to center after being in the detent position for 0.8 seconds. SCV flow time should be adjusted so cylinder will be fully extended when time has elapsed.



SCV Control Lever Extend and Extend Detent

A— Extend Position (Pull Rearward)

Detent can be canceled by moving SCV lever slightly forward or rearward from neutral after lever has returned to neutral or by holding lever in extend position for more than 0.8 seconds after lever has entered detent position.

NOTE: Detent positions are ignored at start up until lever is cycled to NEUTRAL.

RXA0129923 —UN—22JUL13

RD47322,000023E -19-25AUG13-1/1

SCV Control Lever—Retract and Retract Detent Position

Retract Position

Push lever (A) forward of neutral. This retracts cylinder at a rate that varies with how far forward the lever is pushed.

Push the lever slightly forward to retract the remote cylinder slowly.

Push the lever forward against the first detent notch to retract the remote cylinder at maximum rate. (See Adjusting SCV Flow Rate in this section) Lever returns to neutral and flow stops when released.

NOTE: Time setting is ignored in retract position.

Retract Detent Position

Push lever (A) forward to "click" detent position and release. Lever will return to neutral position, but flow will continue at maximum rate if detent time setting is non-zero. (See Adjusting SCV Flow Rate and Adjusting Timed Detent in this section.)

Flow timing begins when the lever returns to center after being in the detent position for 0.8 seconds. SCV flow time should be adjusted so cylinder will be fully retracted when time has elapsed.



SCV Control Lever Retract and Retract Detent

A— Retract Position (Push Forward)

Detent can be canceled by moving SCV lever slightly forward or rearward from neutral after lever has returned to neutral or by holding lever in retract position for more than 0.8 seconds after lever entered detent position.

NOTE: Detent positions are ignored at start up until lever is cycled to NEUTRAL.

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SCV Control Lever—Float Position

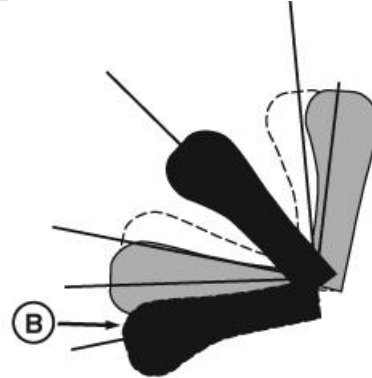
Push SCV control lever (A) all the way forward to lock the lever in float position. Lever and SCV will remain in float position until lever is manually returned to neutral. Cylinder is free to extend or retract, letting implement follow ground contour.

NOTE: Time setting is ignored in Float position.

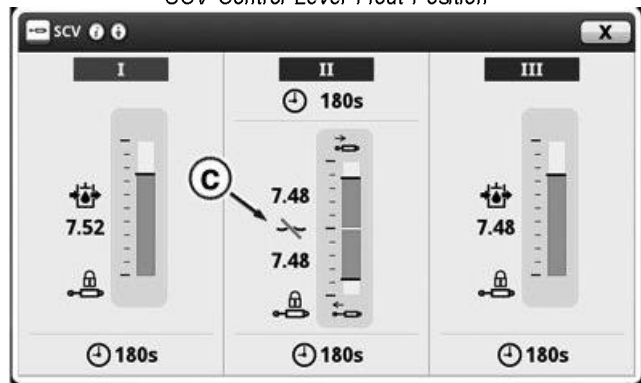
If lever is in float position at engine start up, float function will be disabled (B) until lever is cycled to neutral.

Cycle cylinder fully in both directions after being used in the float position to insure cylinder is filled with oil.

- A— Float position (Push Down)
- B— Float Position
- C— Disabled Float Function and SCV Lockout



SCV Control Lever Float Position



SCV Float and Lockout

RD47322,0000240 -19-03JUL13-1/1

RXA0129325 —UN—22JUL13

RXA0135073 —UN—20AUG13

RXA0131855 —UN—19AUG13

Operator Presence Sensor

An audible warning will sound if operator leaves the seat with transmission in PARK or NEUTRAL with SCV control in “Continuous” or “Timed Detent” modes. After 5 seconds, the audible warning stops.

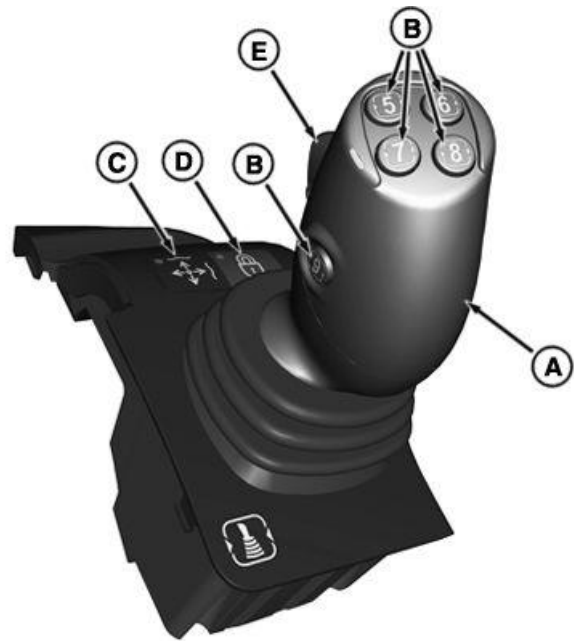
NOTE: SCV does not disengage when operator leaves seat.

RD47322,0000241 -19-03JUL13-1/1

CommandARM™ Joystick (If Equipped)

Operating SCVs With Joystick

- The Control Setup Icon appears around Controls that may be setup to control other functions. Review the Controls Setup page to verify the function of each control.
- The axes of the joystick (A) operates combinations of programmed front or rear SCV(s) functions.
- Tractors equipped with either CommandQuad™ or the e23™ transmissions can select gear upshift (button 5) (B) and downshift (button 7) (B) for their multi-functional control lever buttons located on top of the lever.
- Joystick activation indicator light (C) is ON when Joystick is active.
- Joystick lock (D) is used to lock out electro-hydraulic functions for SCV(s) assigned to Joystick.
- Rocker switch (E) operates combinations of programmed SCV(s) functions.



CommandARM™ Joystick

RXA0133735 —UN—17JUL13



Controls Setup Icon

A— Joystick (If Equipped)
 B— Joystick Buttons
 C— Joystick Activation
 Indicator Light

D— Joystick Lock
 E— Joystick Rocker Switch

RXA0133920 —UN—24JUL13

Continued on next page

RD47322,0000242 -19-04SEP13-1/3

PROOF

Joystick Controls Custom Setup

RXA0133715 —UN—16JUL13



Controls Setup Shortcut Button on Navigation Bar

RXA0131049 —UN—21FEB13

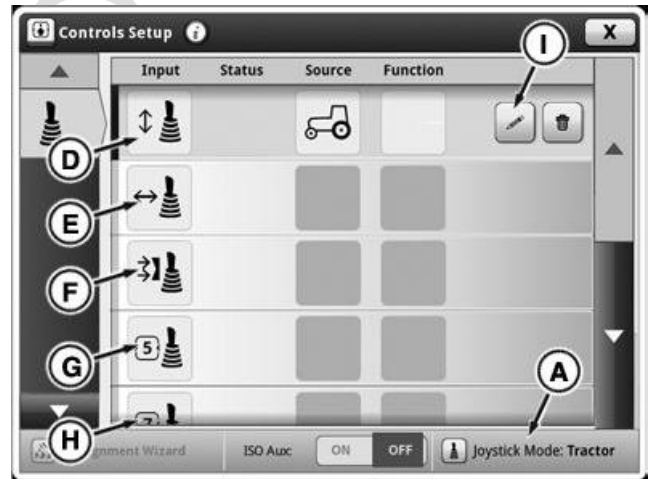


Menu → Applications Tab → Controls Setup Icon

Press **Controls Setup Shortcut Button** on Navigation Bar or follow alternative path:

1. Select **Menu**.
2. Select **Applications** tab.
3. Select **Controls Setup Icon**.
4. Select **Joystick Tractor Mode (A)**.
5. Select desired Custom Assignments buttons (B through D) to change programmed function.
6. Press edit function button (E).

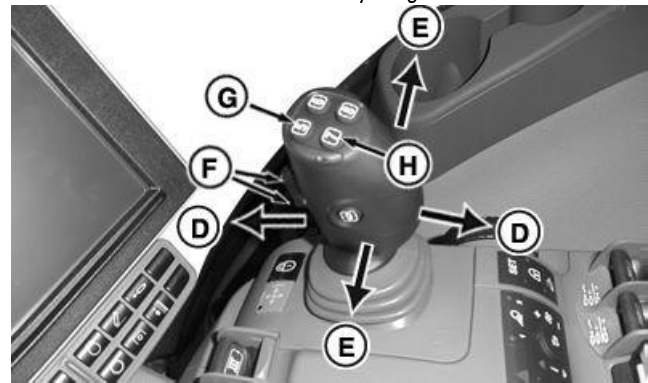
NOTE: Joystick buttons 5 (F) and 7 (G) are preassigned from the factory for up and downshifting respectively with the CommandQuad™ and the e23™ transmissions.



Controls Setup Page

A— Joystick Tractor Mode
 B— Edit Function Button
 C— Front/Back Movement
 D— Left/Right Movement

E— Rocker Switch
 F— Joystick Button 5
 G— Joystick Button 7



Joystick

Continued on next page

RD47322,0000242 -19-04SEP13-2/3

RXA0133929 —UN—26JUL13

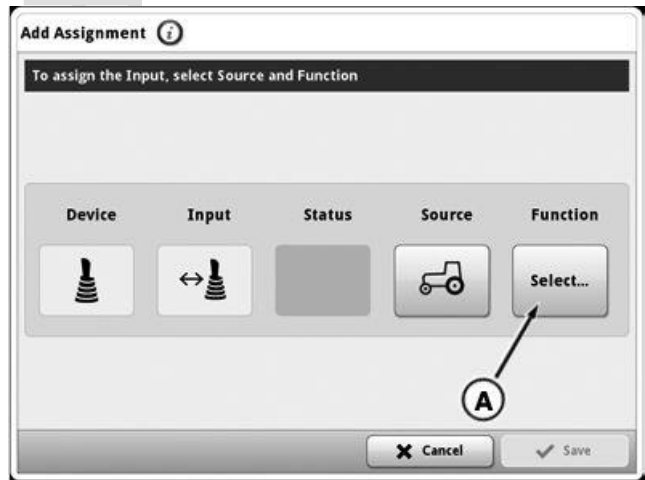
RXA0133467 —UN—26JUL13

1. Press select function button (A) on Add Assignment page.
2. Select from list of functions (B) tractor is equipped with and press desired function to assign.
3. Press close out button (C) to go back to Add Assignment page.
4. Press save button (D) to save assigned function.

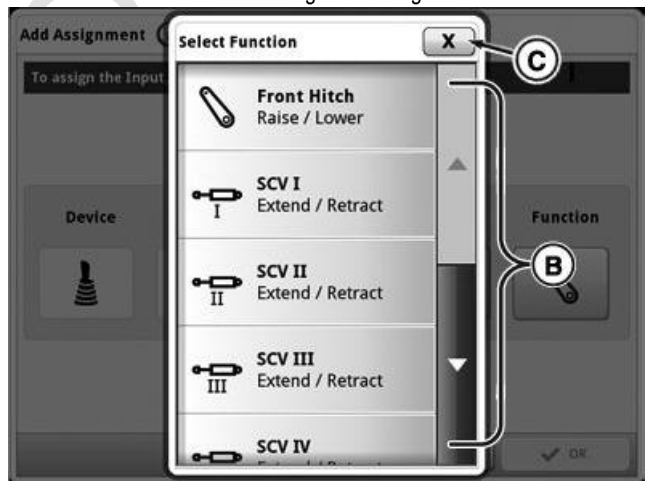
Operator can set any SCV on any axis or rocker switch of the joystick.

NOTE: Some functions shown may not be available depending upon what options the tractor is equipped with.

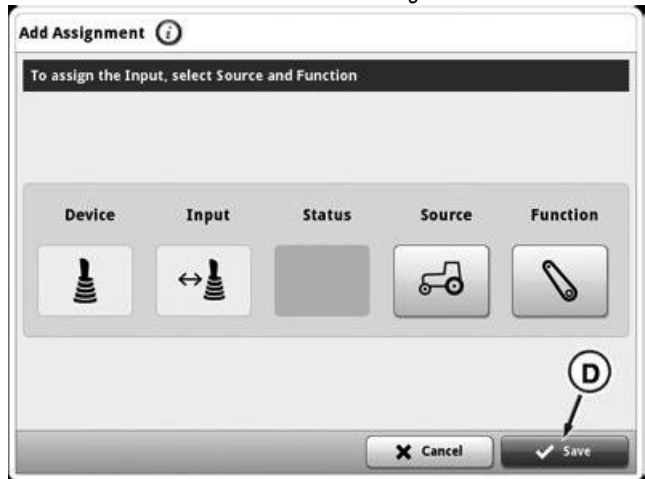
- A— Select Function Button C— Close Out Button
 B— Available Functions List D— Save Function Button



Add Assignment Page



Select Function Page



Save Function button

RXA0133548 —UN—30JUL13

RXA0133468 —UN—30JUL13

RXA0133549 —UN—30JUL13

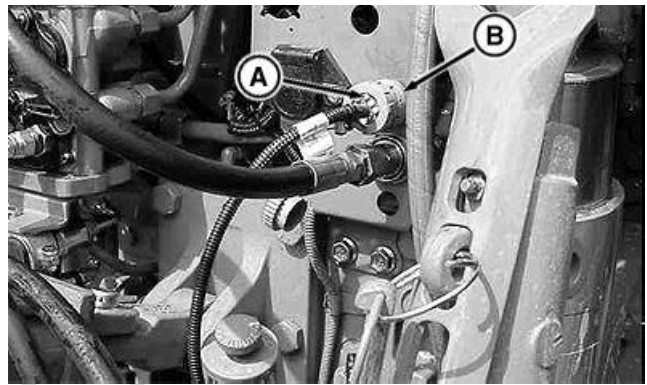
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Hydraulic Option Connector Harness Operation

If tractor is equipped with 9-pin connector (B), install hydraulic option connector harness (A).

This allows optional hydraulic functions (see table below).

Implement	Jumper Harness Part Number
SCV Controlled Hitch	AA39951
<i>NOTE: Jumper harness disables hitch valve and allows hitch valve to operate with SCV.</i>	
<i>NOTE: Additional hydraulic plumbing or parts may be required.</i>	



Optional Connector

RXA0126910 —UN—19JUN12

A— Hydraulic Option Connector Harness

B— 9-Pin Connector

RD47322,0000243 -19-25JUL13-1/1

PROOF

Laser Scraper

RXA0133709 —UN—16JUL13

Laser Scraper—for Scrapers Equipped with Scraper Control Unit

NOTE: Used primarily in areas requiring automated laser guidance system for scraper applications.

Press **SCV shortcut button** on Navigation Bar or follow **alternative path**:

1. Connect tractor to implement.
2. Select **Menu Button**.
3. Select **Tractor Settings tab**.
4. Select **SCV Button**.
5. Select Feature SCV Mode.
6. Select Detent Flow tab (A).
7. To increase flow press button (D) or to decrease press button (F). Also turning adjusting wheel (G) can be used to obtain desired flow setting.
8. Select Upper Setpoint button (B) to set upper setpoint to current position.
9. Select Lower Setpoint button (C) to set lower setpoint to current position.

Press Automation tab (H) then ON or OFF toggle button (I). To activate the Automation feature.

- | | |
|--------------------------|-------------------------|
| A— Detent Flow Tab | F— Decrease Flow |
| B— Upper Setpoint Button | G— Adjusting Dial |
| C— Lower Setpoint Button | H— Automation Tab |
| D— Increase Flow | I— ON/OFF Toggle Button |
| E— Input Box | |

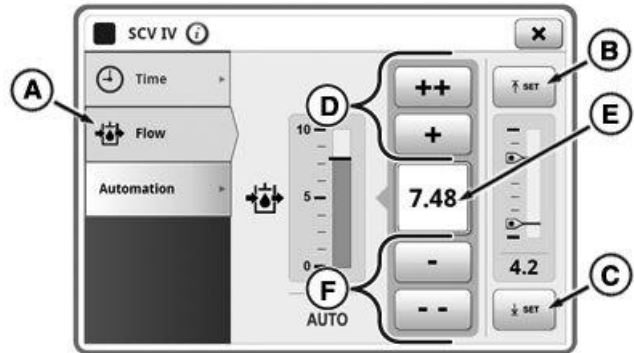


SCV Shortcut Button on Navigation Bar

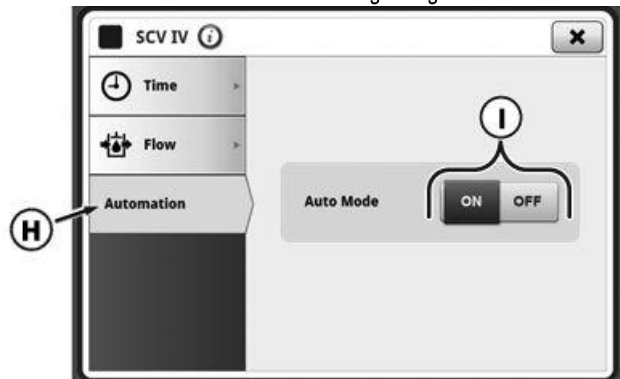
RXA0128092 —UN—10SEP12



Menu Button → Tractor Settings Tab → SCV Button



Feature SCV Settings Page



Automation Toggle



Navigation Bar

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RD47322,0000262 -19-25AUG13-1/2

RXA0127959 —UN—21AUG13

RXA0135247 —UN—22AUG13

RXA0131233 —UN—09MAY13

⚠ CAUTION: Avoid personal injury or death. Moving scraper control unit, connectors, or linkages, when engine is running, may cause unexpected movement. Stay clear of implement when starting engine.

Tractor selective control valves (SCV I and/or SCV III) are used to electronically control raising, lowering, and setting of implement depth, without leaving the cab.

Control lever (A) is used to manually control SCV I and activate an automatic scraper control system.

Control lever (B) is used to manually control SCV III and activate a second automatic scraper control system.



SCV Control Levers

A— SCV I Control Lever

B— SCV III Control Lever

RD47322,0000262 -19-25AUG13-2/2

RXA0135011 —UN—09AUG13

PROOF

Remote Hydraulic Connections

Connecting Hydraulic Hoses—Rear of Tractor

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result.

CAUTION: Engage Joystick Lock (A) (If Equipped) and SCV Control Lever Lock (B) before attaching or detaching hydraulic hoses to prevent unintentional implement movement and possible personal injury.

IMPORTANT: Hydraulic hoses can fail due to physical damage, kinks, age, and exposure. Check hoses regularly.

Any dirt, dust, or other foreign material can damage hydraulic system. Thoroughly clean hydraulic hoses and SCVs before connecting implement to tractor.

IMPORTANT: Steam cleaning or using a high pressure washer in the area around the SCV connections and electronics may damage equipment. Any pressure washer exceeding 6895 kPa (69 bar) (1000 psi) should be kept a minimum of 200 mm (8 in.) away from connections.

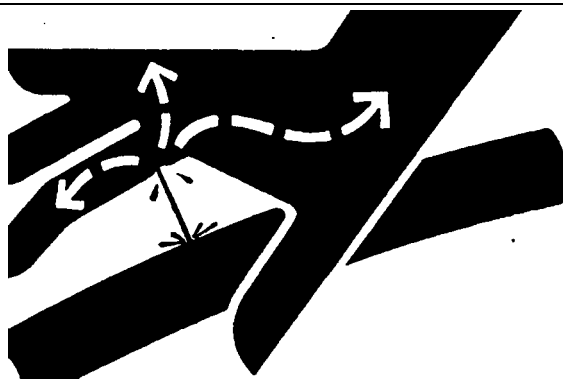
NOTE: See *Attaching Implement and Control System in TouchSet™ Depth Control Section of this Operator's Manual.*

- Lock out SCV controls:
 - Joystick—Press Joystick Lock (A).
 - CommandARM™—Press SCV Control lever Lock (B).
- Clean dust covers. Rotate dust covers up to expose couplers.

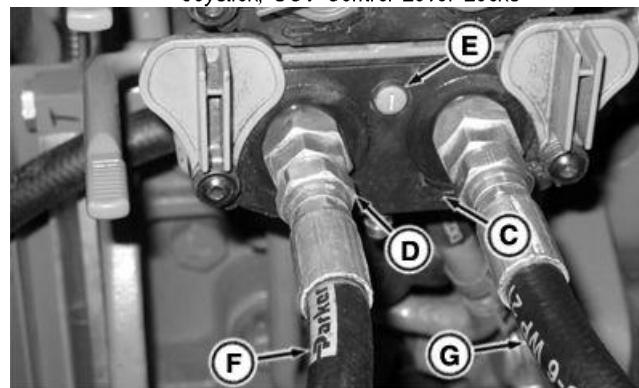
IMPORTANT: Be sure to correctly connect remote hydraulic hoses to couplers. If hose connections are reversed, machine will not respond to system controls as expected. Mid-mount SCV ports are arranged opposite of front hitch and rear SCV stack ports.

Rear SCV or Front Hitch	Mid-Mount SCV
Extend=Left Port	Extend=Right Port
Retract=Right Port	Retract=Left Port

NOTE: Remote cylinder couplers are designated I through IV (E) with I being the bottom receptacle.



Joystick, SCV Control Lever Locks



Couplers with High Pressure Relief Levers

- A— Joystick Lock
- B— SCV Control Lever Lock
- C— Retract Icon
- D— Extend Icon
- E— SCV Identifier Number
- F— Extend Hose
- G— Retract Hose

- Check if symbols on receptacle identification plate (C) or (D), indicating cylinder movement, match cylinder travel direction.
- When using SCV with single-acting cylinders, plug hose into extend side of receptacle (F). When connecting double-acting cylinders, extend side will be left side and retract is right side (G).
- Push hose(s) firmly into receptacle(s).

Continued on next page

RD47322,0000198 -19-12AUG13-1/2

X9811 —UN—23AUG88

RXA0126745 —UN—26AUG13

RXA0122134 —UN—09NOV11

NOTE: SCVs are color coded for easier identification. Hose identification kits are available from your John Deere™ dealer.

SCV Numbers And Corresponding Colors	
SCV Number	Color
SCV I	Green
SCV II	Blue
SCV III	Brown
SCV IV	Black
SCV V	Violet
SCV VI	Gray

TouchSet is a trademark of Deere & Company
John Deere is a trademark of Deere & Company

RD47322,0000198 -19-12AUG13-2/2

Disconnecting Hydraulic Hoses—Rear of Tractor

CAUTION: Prevent possible personal injury. Lock out SCV controls before detaching implements to prevent implement movement.

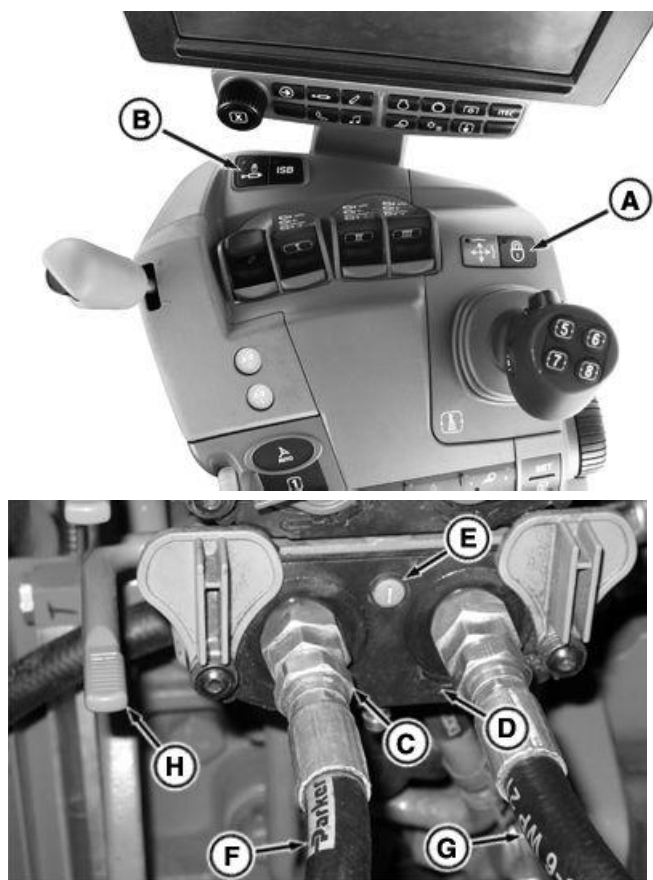
1. Lower implement to ground before disconnecting hydraulic hoses.

NOTE: To relieve hydraulic pressure in hoses, move SCV joystick to float position, while engine is running.

2. Move SCV joystick (If Equipped) to float position for a few seconds while engine is running.
3. Lock out SCV controls:
 - Joystick — Press Joystick lock (A).
 - CommandARM™ SCV — Press SCV control lever lock (B).
4. Push handle (H) down slightly to relieve any pressure buildup of trapped oil before removing hoses.

IMPORTANT: Forcing or jerking SCV hoses when disconnecting can damage hose ends and SCV couplers. If hoses cannot be removed easily, relieve pressure in hydraulic system by moving SCV lever to float position for a few seconds with engine running and using handle (H) to extract hoses.

5. Pull hoses **straight** out from couplers.
6. Clean coupler area before closing dust cover.
7. Rotate dust covers down to cover couplers.



Couplers with High Pressure Relief Levers

- | | |
|---|--------------------------|
| A— Joystick - Joystick lock | E— SCV Identifier Number |
| B— CommandARM™ - SCV control lever Lock | F— Extend Hose |
| C— Extend Icon | G— Retract Hose |
| D— Retract Icon | H— Handle |

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RXA0126745 —UN—26AUG13

RXA0131030 —UN—19FEB13