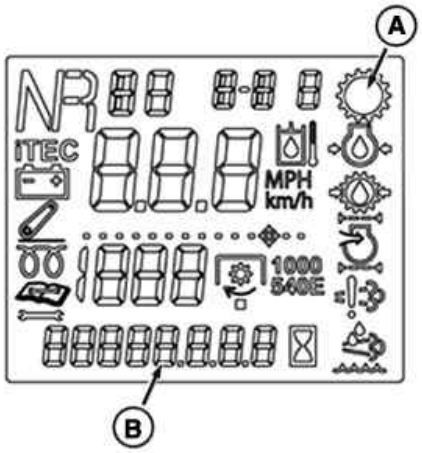
Electrohydraulic Transmission System Indicator



RXA0158295—UN—03MAY17

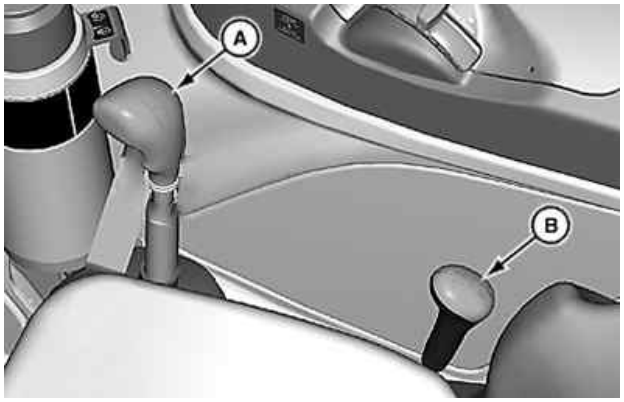
A—Transmission Indicator
B—Information Display

IMPORTANT: Under certain circumstances, cycling reverser lever to neutral and back into a direction restores transmission operation. Some fault conditions allow operator to drive the machine long enough to get it to a location for service or to load it on a carrier. Machine performance is reduced to help prevent additional damage.

Transmission indicator (A) warns of a malfunction in the electrohydraulic transmission control system. A diagnostic trouble code (DTC) is displayed on the information display (B). See John Deere dealer for any assistance.

HK75640,0000FF0-19-14SEP20

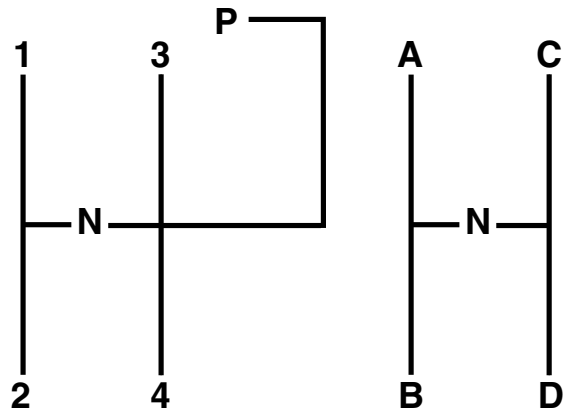
16/16 Transmission



APY36922—UN—08JUN20

PULV004928—UN—18JUN09

APY36923—UN—08JUN20



LV14577—UN—05AUG11

Gear and Range Shift Pattern

A—Gearshift Lever
B—Range Shift Lever
C—Left-Hand Reverser Lever
D—Declutch Button

CAUTION: Avoid any unintended machine movement. Put gearshift lever (A) in Park, left-hand reverser (C) in Neutral, and shut off machine before dismounting.

IMPORTANT: To prevent unnecessary clutch wear, never "ride" the clutch by resting a foot on the clutch pedal.

PowrReverser™ gearshift lever (A) provides four forward and reverse travel speeds (1, 2, 3, and 4). Range shift lever (B) provides four forward and reverse speed ranges (A, B, C, and D).

Left-hand reverser (C) provides travel direction (forward or reverse). When using range and gearshift levers in different combinations, 16 forward and reverse speeds are available.

1. When starting machine, put reverser lever in neutral and depress clutch pedal.

NOTE: If any of the following conditions are present, starting is not possible:

- *Gearshift lever (A) is in a position other than Neutral or Park*
- *Range shift lever (B) is not in Neutral*
- *Reverser lever (C) is not in Neutral*

2. Depress clutch pedal or declutch button (D) when shifting range. Some gears are synchronized allowing on-the-go shifting into those ranges.

   The following applies when shifting ranges:

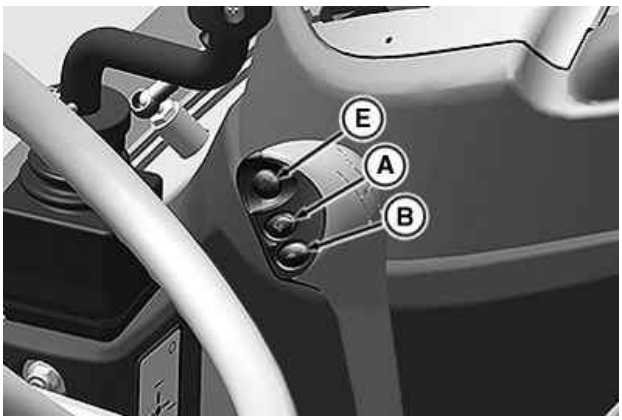
   - From B, operator must stop to shift to C
   - From C, operator shift on-the-go to D
   - From D, operator shift on-the-go to C
   - From A, operator shift on-the-go to B
   - From C, operator must stop to shift to B
   - From B, operator shift on-the-go to A

3. Depress clutch pedal or declutch button (D) when shifting gears. Make gearshifts (1, 2, 3, and 4) on-the-go without stopping. Release clutch pedal or declutch button (D) gradually to take up load smoothly.
4. Use left-hand reverser lever (C) to select forward or reverse travel direction. Travel direction change does not require depressing clutch pedal or declutch button (D).

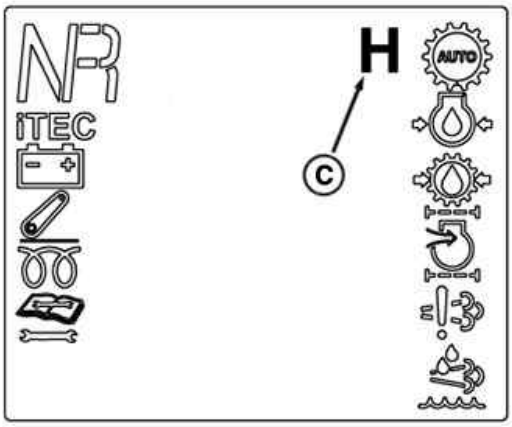
NOTE: Slow speed gearing (creeper) is available on separate lever. Range shift lever must be in neutral position to shift into creeper.

HK75640,0000FF1-19-14SEP20

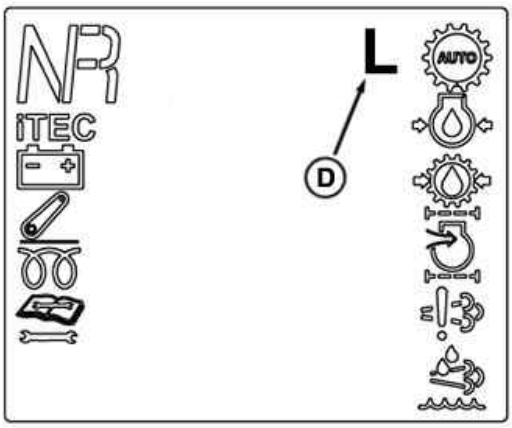
32/16 Transmission



APY36921—UN—08JUN20



RXA0158296—UN—05APR17



RXA0158297—UN—05APR17

A—High Speed
B—Low Speed
C—High-Speed Indicator
D—Low Speed Indicator
E—Declutch Button

CAUTION: Avoid unintended machine movement. Put gearshift lever in Park, left-hand reverser in Neutral and shut off machine before dismounting.

IMPORTANT: To prevent unnecessary clutch wear, never "ride" the clutch by resting a foot on the clutch pedal.

NOTE: 32/16 transmission shift pattern and operation are similar to the 16/16 transmission with an added option of high/low speed switches on the range shift lever.

PowrReverser Plus™ transmission is available with declutch button (E) and push-button high speed (A) and low speed (B) split-shift feature. Each range and gear combination is split for more exact speed control.

High speed and low speed split-shift feature doubles forward speeds only to 32 forward and 16 reverse.

Use the high speed and low speed switches to up-shift and downshift within the selected range and gear. "H" high-speed indicator (C) appears when high speed is selected and "L" low-speed indicator (D) appears when low speed is selected.

NOTE: Slow speed gearing (creeper) is available on separate lever. Range shift lever must be in neutral position to shift into creeper.

HK75640,0000FF2-19-14SEP20

Reverser Modulation

LV14552—UN—03AUG11

A—Reverser Modulation Knob

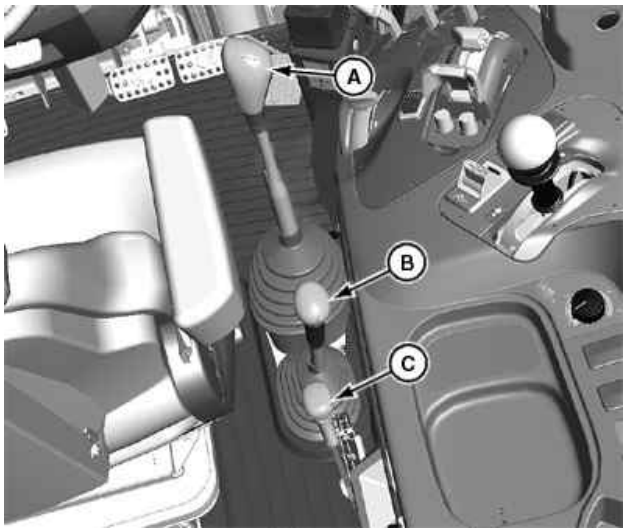
IMPORTANT: Premature tire wear occurs when operating in full right (clockwise) position on concrete or paved surfaces.

Reverser modulation knob (A) adjusts load take-up and acceleration when making directional changes with the left-hand reverser lever during repetitive cycle work such as loader operation.

- In full left (counterclockwise) position, load take-up, and acceleration ramp-up are slow to respond.
- When operating with high load and ballast, turn control knob (clockwise) to increase acceleration ramp-up and load take-up response.

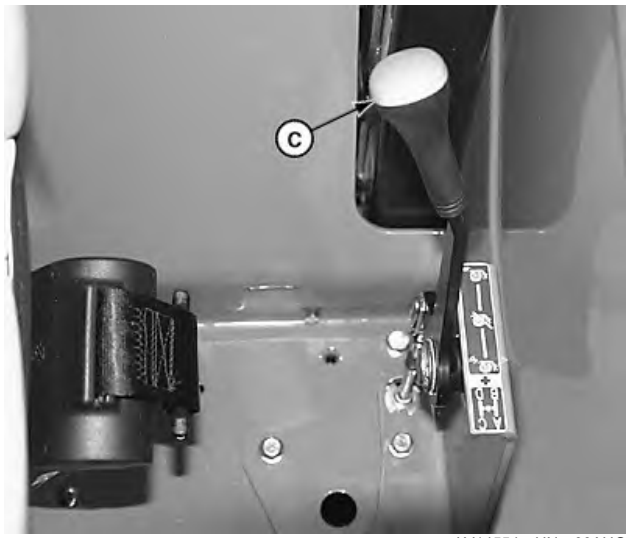
LGCKF7U,0000BCC-19-10MAY21

Creeper Gear Operation



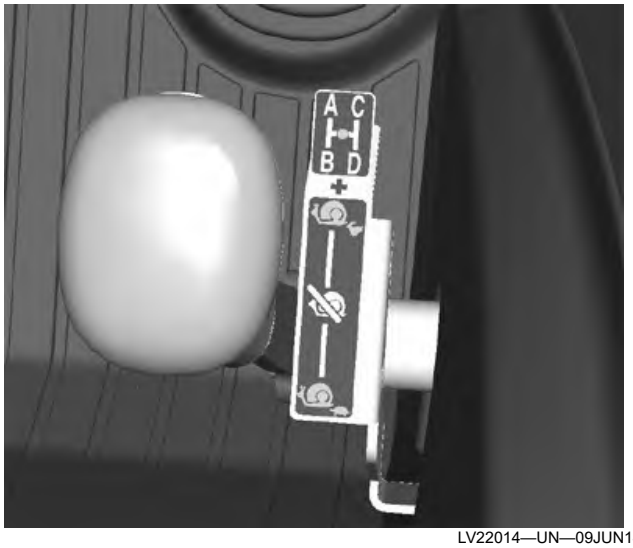
APY36924—UN—08JUN20

Cab



LV14554—UN—03AUG11

OOS



LV22014—UN—09JUN14

Creeper Shift Pattern

A—Speed Shift Lever
B—Range Shift Lever
C—Creeper Lever

IMPORTANT: While applying creeper, left-hand reverser must be placed in direction (forward or reverse) after creeper lever and speed shift lever.

A two-speed creeper gear is available and provides slower speeds.

Place the range shift lever (B) in neutral to operate the creeper. Change creeper lever (C) speed selection when at a complete stop.

16/16 Transmission: Speed shift lever (A) provides eight forward travel speeds and eight reverse travel speeds in the creeper range.

32/16 Transmission: Speed shift lever (A) provides 16 forward travel speeds and 8 reverse travel speeds in the creeper range.

HK75640,0000FF4-19-14SEP20

Downhill Operation in Slippery Conditions

CAUTION: Avoid injury from losing control of the tractor while operating on a downhill slope. Wheels can lock and skid on slippery downhill slopes. Follow the following precautions:

- **Reduce machine speed.**
- **Select an appropriate gear and range to reduce skidding.**
- **Set MFWD to Manual.**

HK75640,0000FF5-19-14SEP20

16/16 Transmission Ground Speed Chart

Speeds are calculated using 480/70R28 Mitas rear tires at 2200 rpm engine speed. To calculate ground speeds for machines equipped with rear tires other than 480/70R28 Mitas tires, see Correction Factors for Other Tire Sizes in this section.

	FORWARD		REVERSE	
Range-Gear	**km/h**	**mph**	**km/h**	**mph**
A-1	1.77	1.09	1.96	1.21
A-2	2.27	1.41	2.50	1.55
A-3	2.75	1.70	3.03	1.88
A-4	3.28	2.03	3.62	2.24
B-1	4.28	2.65	4.72	2.93
B-2	5.47	3.39	6.03	3.74
B-3	6.63	4.11	7.30	4.50
B-4	7.92	4.92	8.73	5.42
C-1	10.49	6.51	11.56	7.18
C-2	13.40	8.32	14.76	9.17
C-3	16.24	10.09	17.89	11.11
C-4	19.41	12.06	21.39	13.29
D-1	16.22	10.07	17.87	11.10
D-2	20.71	12.86	22.82	14.17
D-3	25.10	15.59	27.66	17.18
D-4	30.00	18.64	33.06	20.54

Ground Speed Estimates—16/16 (30K)

	FORWARD		REVERSE	
Range-Gear	km/h	mph	km/h	mph
A-1	1.75	1.08	1.92	1.19
A-2	2.39	1.48	2.64	1.64
A-3	2.94	1.82	3.24	2.01
A-4	3.76	2.33	4.15	2.57
B-1	4.21	2.61	4.64	2.88
B-2	5.77	3.58	6.36	3.95
B-3	7.10	4.41	7.83	4.86
B-4	9.09	5.64	10.01	6.21
C-1	9.67	6.00	10.65	6.61
C-2	13.24	8.22	14.59	9.06
C-3	16.29	10.12	17.96	11.15
C-4	20.85	12.96	22.97	14.27
D-1	16.22	10.07	17.87	11.10
D-2	22.21	13.80	24.48	15.21
D-3	27.33	16.98	30.12	18.71
D-4	34.97	21.72	38.54	23.94

Ground Speed Estimates—16/16 (40K)

LGCKF7U,0000B9C-19-28APR21

32/16 Transmission Ground Speed Chart

Speeds are calculated using 480/70R28 Mitas rear tires at 2200 rpm engine speed. To calculate ground speeds for machines equipped with rear tires other than 480/70R28 Mitas tires, see Correction Factors for Other Tire Sizes in this section.

	FORWARD (Low)		FORWARD (High)		REVERSE	
Range-Gear	km/h	mph	km/h	mph	km/h	mph
A-1	1.77	1.09	2.13	1.32	1.96	1.21
A-2	2.27	1.41	2.72	1.69	2.50	1.55
A-3	2.75	1.70	3.30	2.05	3.03	1.88
A-4	3.28	2.03	3.94	2.44	3.62	2.24
B-1	4.28	2.65	5.14	3.19	4.72	2.93
B-2	5.47	3.39	6.57	4.08	6.03	3.74
B-3	6.63	4.11	7.96	4.94	7.30	4.53
B-4	7.92	4.92	9.52	5.91	8.73	5.42
C-1	10.49	6.51	12.61	7.83	11.56	7.18
C-2	13.40	8.32	16.10	10.00	14.76	9.17
C-3	16.24	10.09	19.51	12.12	17.89	11.11
C-4	19.41	12.06	23.32	14.49	21.39	13.29
D-1	16.22	10.07	19.48	12.10	17.87	11.10
D-2	20.71	12.86	24.88	15.45	22.82	14.17
D-3	25.10	15.59	30.15	18.73	27.66	17.18
D-4	30.00	18.64	36.05	22.40	33.06	20.54

LGCKF7U,0000B9D-19-29APR21

16/16 Creeper Ground Speed Chart

Speeds are calculated using 480/70R28 Mitas rear tires at 2200 rpm engine speed. To calculate ground speeds for machines equipped with rear tires other than 480/70R28 Mitas tires, see Correction Factors for Other Tire Sizes in this section.

	FORWARD		REVERSE	
Range-Gear	km/h	mph	km/h	mph
CrLo-1	0.27	0.16	0.30	0.18
CrLo-2	0.35	0.21	0.39	0.24
CrLo-3	0.42	0.26	0.47	0.29
CrLo-4	0.51	0.31	0.56	0.34
CrHi-1	0.68	0.42	0.75	0.46
CrHi-2	0.87	0.54	0.96	0.59
CrHi-3	1.06	0.65	1.17	0.72
CrHi-4	1.26	0.78	1.39	0.86

Ground Speed Estimates—16/16 (30K)

	FORWARD		REVERSE	
Range-Gear	km/h	mph	km/h	mph
CrLo-1	0.27	0.16	0.30	0.18
CrLo-2	0.37	0.22	0.41	0.25
CrLo-3	0.45	0.27	0.50	0.31
CrLo-4	0.58	0.36	0.64	0.39
CrHi-1	0.67	0.41	0.74	0.45
CrHi-2	0.92	0.57	1.02	0.63
CrHi-3	1.13	0.70	1.25	0.77
CrHi-4	1.45	0.90	1.60	0.99

Ground Speed Estimates—16/16 (40K)

LGCKF7U,0000B9E-19-29APR21

32/16 Creeper Ground Speed Chart

Speeds are calculated using 480/70R28 Mitas rear tires at 2200 rpm engine speed. To calculate ground speeds for machines equipped with rear tires other than 480/70R28 Mitas tires, see Correction Factors for Other Tire Sizes in this section.

	FORWARD (Low)		FORWARD (High)		REVERSE	
High/Low-Range-Gear	km/h	mph	km/h	mph	km/h	mph
CrLo-1	0.27	0.16	0.33	0.20	0.30	0.18
CrLo-2	0.35	0.21	0.42	0.26	0.39	0.24
CrLo-3	0.42	0.26	0.51	0.31	0.47	0.29
CrLo-4	0.51	0.31	0.61	0.37	0.56	0.34
CrHi-1	0.68	0.42	0.82	0.50	0.75	0.46
CrHi-2	0.87	0.54	1.05	0.65	0.96	0.59
CrHi-3	1.06	0.65	1.27	0.78	1.17	0.72
CrHi-4	1.26	0.78	1.52	0.94	1.39	0.86

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Correction Factors for Other Tire Sizes

NOTE: Actual speed varies due to a number of factors but not limited to, rolling circumference, load, tire pressure, make of tire, and wheel slip. If the precise speed is required for specific applications, then measurement is necessary.

The following table is used to calculate ground speeds for machines equipped with rear tires other than 480/70R28 Mitas tires. Multiply speeds shown in Ground Speed Charts in this section by the correction factor for the appropriate tire size found in the table.

Be sure to use correct ground speed estimate for your transmission type (16/16, or 32/16 Transmission). Use creeper transmission ground speed estimates as required.

Example: Forward Low B-3 (32/16 Transmission) at 2200 engine rpm with 480/70R28 mitas tires.

6.63 km/h (4.11 mph) x 1.18 = 7.8 km/h (4.8 mph)

Tire Size	Correction Factor
480/70R28	1.00
420/85R30 (16.9R30)	1.06
460/85R30	1.09
460/85R34	1.17
340/85R38	1.09
15.5R38	1.13
540/65R38	1.20
230-95R48	1.22
23.1-26	1.06
420-85R34 RT 855 142A8-B SPL. TL	1.13
420/85R34/TL/R1W/142A8/B	1.13
420/85R34/TL/R1W/142A8/B	1.14
480/70R34/TL/R1W/143A8	1.12
480/70R34/TL/R1W/149D	1.14
480/70R34	1.13
540/65R34/TL/R1W/145D	1.14
540/65R34/TL/R1W/152D	1.11
540/65R34	1.13
600/65R34/R1W/157D	1.17
600/65R34/TL/R1W/157D/160A8	1.19
600/65R34	1.18
320/85R36	1.04
420/85R38/TL/R1W/144A8/B	1.19
420/85R38	1.21
230-95R48 RT 955, 136D-139A8, TL	1.22

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