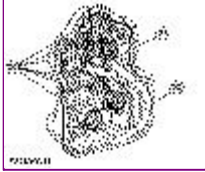


## TM10849 - 310SJ Backhoe Loader (S.N. 159760— ) Clutch Packs Install

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### Clutch Packs Install



1. TX1020118-UN: Torque Converter Side Bearing Outer Rings and Suction Tube Installation

#### LEGEND:

- 20 - Bearing Cup (7 used)
- 21 - Cap Screw (2 used)
- 22 - Oil Suction Tube

Apply petroleum jelly to bearing cups (20).

2. Install bearing cups (20).
  3. Install oil suction tube (22).
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4. TX1023851-UN: O-ring and Bearing Outer Races

#### LEGEND:

- 19 - Bearing Cup (5 used)
- 23 - O-Ring (2 used)

Apply petroleum jelly to bearing cups (19).

5. Install bearing cups (19)
6. **NOTE:**

*Use petroleum jelly to hold O-rings in place during assembly.*

Install O-rings (23).

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- 7.

## TX1021630-UN: 2nd, 3rd, and MFWD Installation

LEGEND:

- 9 - Second Speed Clutch Pack
- 10 - Mechanical Front Wheel Drive (MFWD) Clutch Pack
- 11 - Third Speed Clutch Pack
- 12 - Eyebolt (2 used)
- 13 - Screen Sheet
- 24 - Snap Ring (2 used)
- 25 - Snap Ring
- 26 - Pilot Hole (2 used)
- 27 - Bolt (2 used)

Apply petroleum jelly to snap O-rings (24 and 25).

8. Install bolts (27) through screen sheet (13).
9. 

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**CAUTION:**

*Prevent possible crushing injury from heavy component. Use appropriate lifting device.*

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Align bolts (27) with pilot holes (26) to install clutch packs (9—11) together with screen sheet (13).

Item	Measurement	Specification
Second, Third, and MFWD Clutch Pack	Weight (approximate)	27 kg 60 lb

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10. TX1021690-UN: First Speed Clutch Install

LEGEND:

- 8 - First Speed Clutch
- 28 - Snap Ring (2 used)

Apply petroleum jelly to snap rings (28) and install clutch (8).

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11. TX1021688-UN: Reverse and Low Range Clutch Install

LEGEND:

- 5 - Low Range Clutch

- 7 - Reverse Clutch
- 29 - Snap Ring (2 used)
- 30 - Snap Ring (3 used)

Apply petroleum jelly to snap rings (29 and 30) and install clutches (5 and 7) together.

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12. TX1021693-UN: High Range Forward Clutch Install

LEGEND:

- 6 - High Range Forward Clutch
- 31 - Snap Ring (2 used)

Apply petroleum jelly to snap rings (31) and install clutch (6).

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13. **NOTE:**

*Bolts (27) must be installed properly before the transmission halves are installed.*



- TX1021714-UN: Transmission Case Installation

LEGEND:

- 3 - Eyebolts
- 27 - Bolts

Install lifting eyebolts (3) and attach hoist.

14. Clean mating surfaces of transmission case halves with PM37509 Cure Primer.
15. Apply PM38657 High Flex Form-In-Gasket to mating surfaces of transmission halves.
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- 16.
- 



**CAUTION:**

***Prevent possible crushing injury from heavy component. Use appropriate lifting device.***

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**NOTE:**

*Bolts (27) must be installed properly before the transmission halves are installed.*



## TX1021714-UN: Transmission Case Installation

**LEGEND:**

- 3 - Eyebolt (2 used)
- 27 - Bolt

Install lifting eyebolts (3) and attach hoist.

Item	Measurement	Specification
Transmission Case Half	Weight (approximate)	42 kg 93 lb



17. TX1021717-UN: Transmission Case Cap Screws and Pins

**LEGEND:**

- 1 - Dowel Pins (2 used)
- 2 - Cap Screw (24 used)
- 32 - Bracket

Install bracket (32).

18. Align the dowel holes.
19. Install dowel pin (1) until flush.
20. Tighten cap screws (2) with an initial run up torque of 20 N·m (177 lb-in).

Item	Measurement	Specification
Transmission Case Mounting Cap Screws	Run Up Torque	20 N·m 177 lb-in

21. Tighten cap screws (2).

Item	Measurement	Specification
Transmission Case Mounting Cap Screw	Torque	65 N·m 48 lb-ft