



FIELD SERVICE CAMPAIGN – 24110R1

26 July 2024

SUBJECT:

Street Sweeper Driveline Replacement

MODELS INVOLVED:

International® MV™ Series trucks

REASON FOR REVISION:

Update to parts information: 29535213 (Allison P/N) Transmission Retaining Plate O-Ring updated to reflect 29502439 (Allison P/N) Transmission Retaining Plate O-Ring.

DEFECT DESCRIPTION:

Certain International® MV™ Series trucks may have an incorrect driveshaft installed in the vehicle that can cause a vibration that may be felt by the driver.

ELIGIBILITY:

This procedure applies ONLY to vehicles marked in the International® Service PortalSM with FSC 24110. Also complete any other open campaigns listed on the Service Portal at this time.

TOOLS REQUIRED:

Description	Tool Number
Bar Puller	Obtain Locally
4:1 Multiplier	Obtain Locally

Table 1 Tools Information

PARTS REQUIRED:

Part Number	Description	Quantity
DS170DS55004C1260M	Drive Shaft	1 (Critical Direct Shipment Order)
2500674C91	KIT U-JT BOLT & RET SPL-170	2
2502780C91	Rear Differential yoke, FLANGE TRUNNION BRG SPL170	1
2599730C1	Transmission Yoke	1
DS128049	Rear Differential Yoke Nut	1
N/A	Rust Preventative Black Spray Paint	1 (Obtain Locally)
29535219 (Allison P/N)	Transmission Yoke Retaining Bolt	1 (Obtain Locally)
29502439 (Allison P/N)	Transmission Retaining Plate O-Ring	1 (Obtain Locally)
29512875 (Allison P/N)	Transmission Yoke Retaining Bolt O-Ring	1 (Obtain Locally)

Table 2 Parts Information

WORK INSTRUCTIONS

GOVERNMENT REGULATION: Engine fluid (oil, fuel, and coolant) may be a hazard to human health and the environment. Handle all fluid and other contaminated materials (such as filters and rags) in accordance with applicable regulations. Recycle or dispose of engine fluids, filters, and other contaminated materials according to applicable regulations.

WARNING! To prevent personal injury and / or death, or damage to property, park vehicle on hard flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in both directions.

WARNING! To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING! To prevent personal injury and / or death, or damage to property, keep flames or sparks away from vehicle and do not smoke while servicing the vehicle's batteries. Batteries expel explosive gases.

WARNING! To prevent personal injury and / or death, or damage to property, confirm driveshafts secured / supported properly during removal.

WARNING! To prevent personal injury and / or death, or damage to property, secure driveshaft to lifting device with ratchet straps and utilize the lifting device to lower old driveshaft to ground.

WARNING! To prevent personal injury and / or death, or damage to property, destroy removed driveshaft to avoid any possible future reuse. It is recommended to cut removed driveshaft in half.

CAUTION! To prevent damage to property, be aware that control arm may shift when bolt is removed.

1. Park vehicle on a dry and level surface.
2. Put drive mode selector in Neutral and set parking brake.
3. Turn ignition to Key OFF position.
4. Install wheel chocks.
5. Obtain access to driveline.

NOTE: Ensure that bell housing bolts are tightened to 38–43 lb-ft (51–58 N·m).

NOTE: If there is a crack in the transmission housing and / or bell housing, open a technical service case to resolve the issue.

6. Inspect transmission housing for cracks, especially around bell housing.

NOTE: When removing or installing the universal joint (U-joint), it is possible for the U-joint caps to slide off. Any type of tape wrapped around the top of each U-joint cap will keep the caps in place until the U-joint is removed or installed.

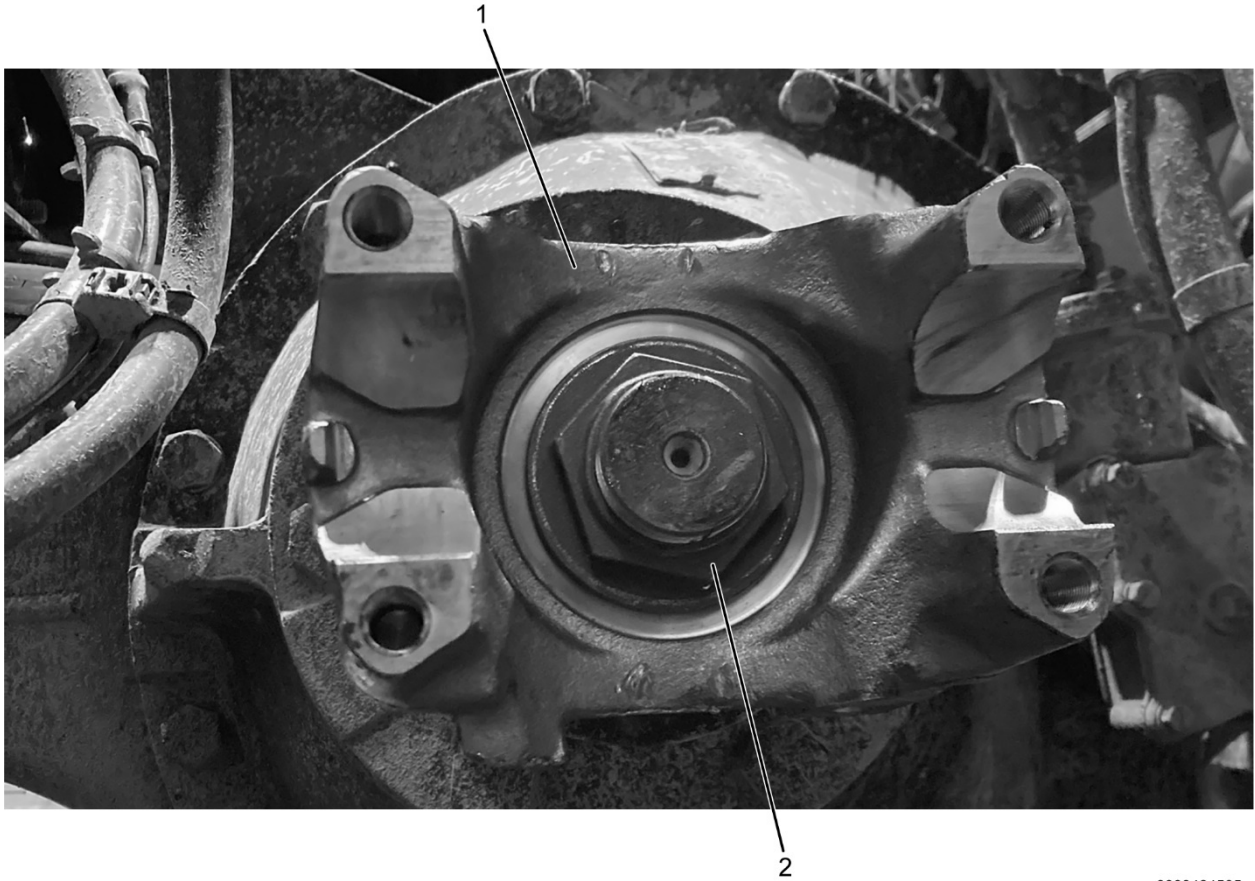
WARNING! To prevent personal injury and / or death, or damage to property, use a suitable lifting device when servicing driveline.

7. Using a suitable lifting device to secure driveline, remove and discard four U-joint strap bolts and two U-joint straps from transmission yoke and differential yoke.

NOTE: A pry bar may be used if the U-joint will not come out of the yoke. Gently pry the U-joint out of its seat to aid in removal.

NOTE: If the yoke on either the differential or the transmission will not come off, a bar puller may be needed. Using a universal bar puller with the old straps from the yoke reinstalled will easily remove the yoke.

8. Remove U-joint from differential yoke and carefully remove driveline from vehicle.
9. Lower driveshaft from vehicle and make it available for easy access.

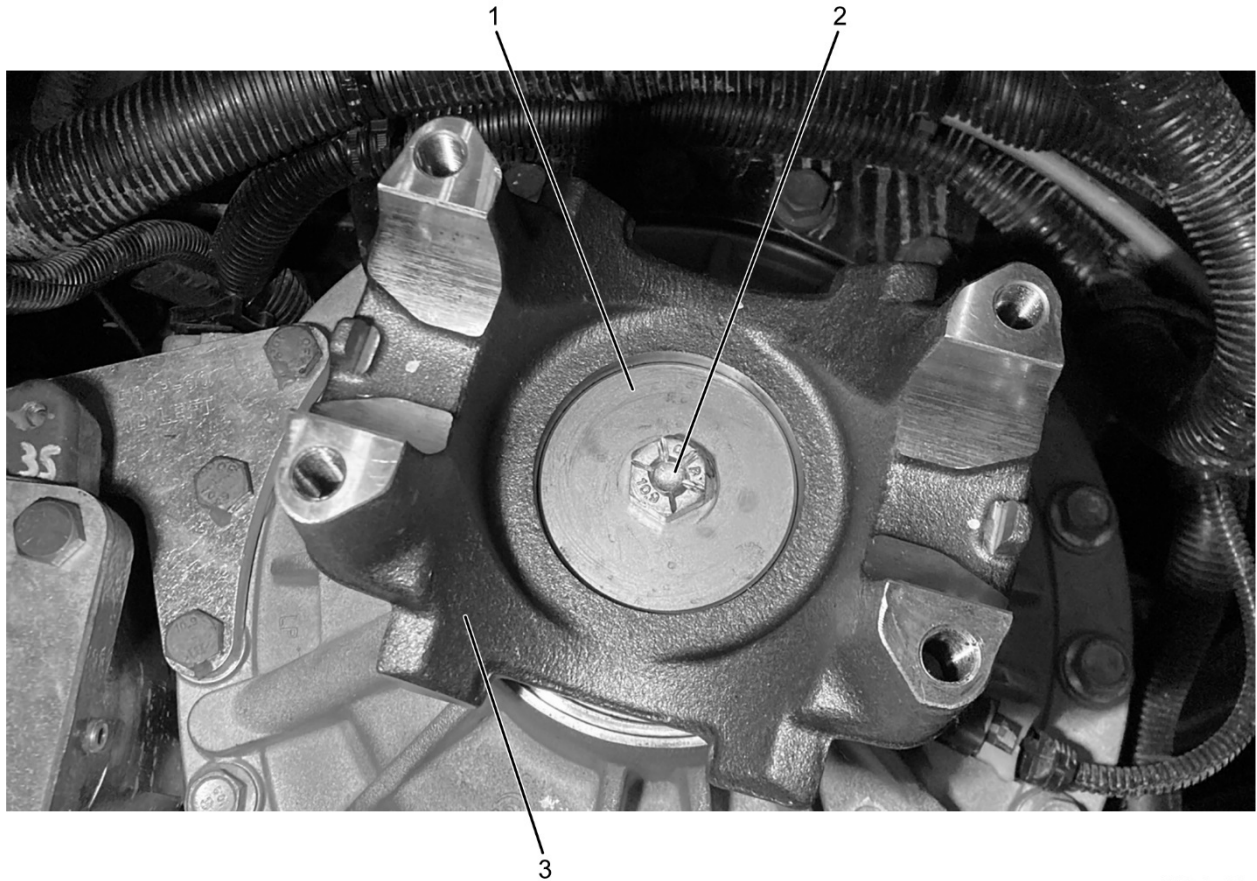


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Figure 1. Differential Yoke

- 1. Yoke
- 2. Yoke nut

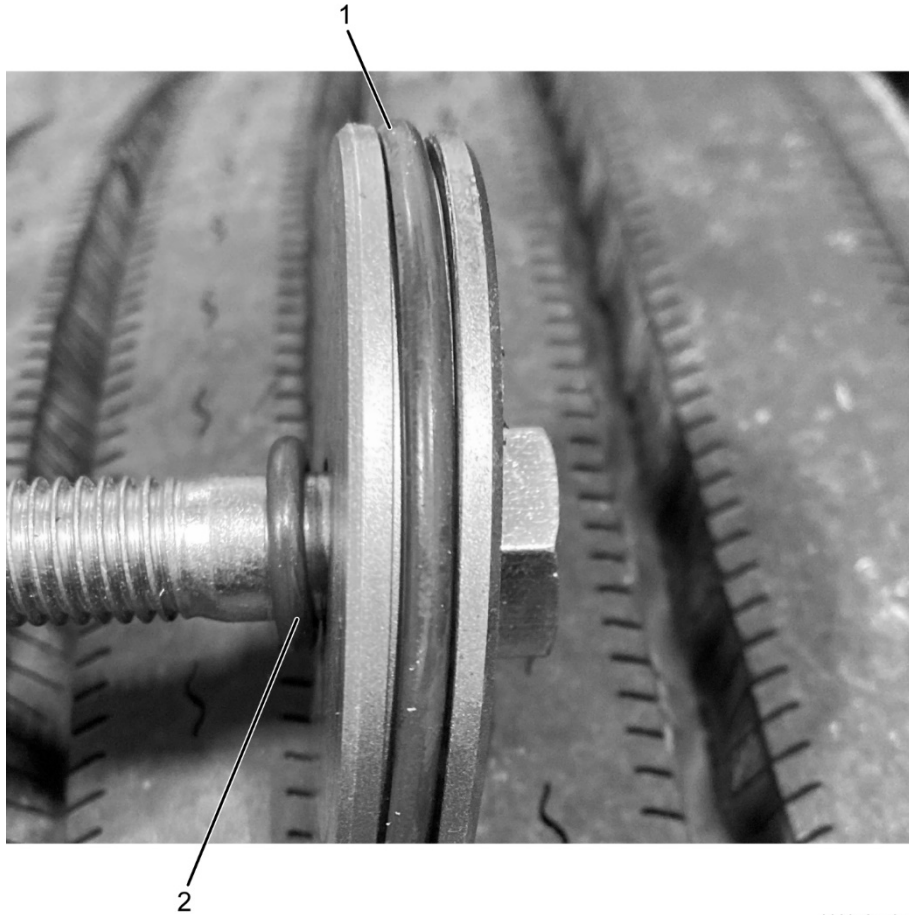
10. Remove rear differential yoke nut (Figure 1, Item 2) from yoke (Figure 1, Item 1) and discard both.



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Figure 2. Transmission Yoke

1. Transmission yoke
 2. Retaining bolt
 3. Retaining bolt plate
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11. Remove retaining bolt (Figure 2, Item 2) and retaining bolt plate (Figure 2, Item 3). Set aside retaining bolt plate for later use.
 12. Carefully remove transmission yoke (Figure 2, Item 1). Discard transmission yoke, retaining bolt, and O-rings.



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Figure 3. Transmission Yoke Plate and Bolt Assembly

1. Yoke plate with O-ring
2. Yoke plate bolt with O-ring

NOTE: Lubricate new O-ring with lightweight oil before installation.

13. Install new O-ring onto outer edge of yoke plate (Figure 3, Item 1). Insert yoke plate bolt through yoke plate. Place the smaller O-ring (Figure 3, Item 2) over threaded end of bolt, ensuring that O-ring presses against plate. Using torque wrench, tighten yoke plate bolt to 52–63 lb-ft (70–85 N·m).



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Figure 4. Torque Multiplier

NOTE: A 4:1 torque wrench multiplier (Figure 4) may be needed to tighten the differential yoke nut.

14. Install differential yoke and nut. Using torque wrench, tighten nut to 786–966 lb-ft (1066–1310 N·m).
15. Using a suitable lifting device, install driveshaft into place with slip yoke facing transmission.
16. Install U-joint straps into place. Using a torque wrench, tighten bolts to 45 lb-ft (61 N·m) on both transmission yoke and differential yoke.

NOTE: Rust preventative paint helps to prevent oxidation.

NOTE: Once painted surface is dry to the touch, apply grease to U-joint zerk fittings.

17. Apply black rust preventative paint to driveshaft and yokes.

NOTE: If air suspension ride height is 10.0–10.6 in, no adjustment is necessary.

NOTE: Drive vehicle a short distance (around parking lot) before adjusting air suspension drive height.

18. Check air suspension ride height. Set ride height to 10.0–10.6 in.

19. Ensure components are installed and tightened properly.

20. Remove wheel chocks.

LABOR INFORMATION

Operation number must appear on all claims.

Operation Number	Description	Time
A40-24110-1	Replace with correct driveline	4.5 hrs

Table 3 Labor Information

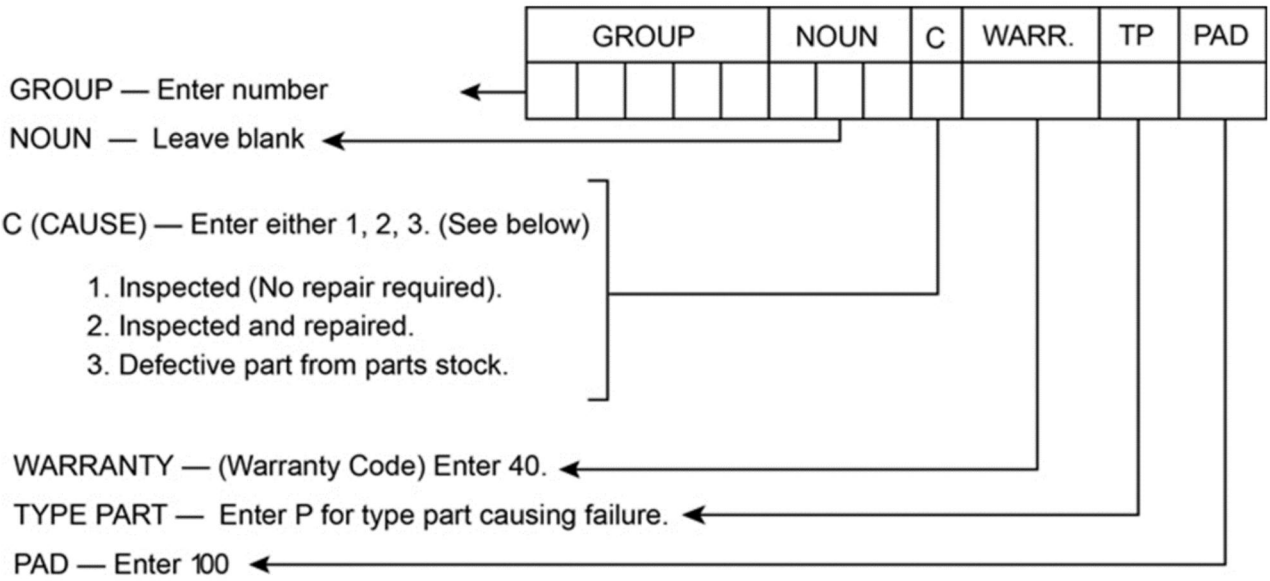
WARRANTY CLAIMS

Warranty claim expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Field Service Campaign 24110.

Section 7 of the Warranty Policy and Procedures Manual contains further information related to the submission and processing of AFC / Recall claims.

As with all claim submissions, items acquired locally must be submitted in the “Other Charges” tab. The cost of any bulk items (such as a bag of cable tie straps, roll of wire, barrel of oil, or tube of silicone) should be prorated for the cost of the individual pieces / amount used during each repair.

To make sure this important improvement is made in a timely manner, all claims for 24110 activity must be submitted by 17 June 2025 or within the normal warranty period for the component repaired, if after 17 June 2025.



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