

System	Date of Issue	Bulletin Number	Bulletin Type
Odyne Systems	06/28/2019		<ul> <li>☑ Field Service Action</li> <li>□ Technical Service Bulletin</li> <li>□ Technical Service Advisory</li> </ul>

# Title: INSTALLATION OF DRIVESHAFT LOOP

# Issue: In case of u-joint or driveline failure, driveshaft loop limits movement of PTO driveshaft.

## **Applies To:**

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3FRYX7FE6CV353240	1HTMMAAN8EH068239	3ALACYDT6EDFV2462	1HTMMAAN09H130576
3FRYX7FE6CV353237	1HTMMAAN4EH068240	1FVACXDTXHHJH3093	1HTMMAAN09H130577
3FRYF7FEXCV353244	1HTMMAAN6EH068241	1FVACXFCXJHJM8931	2NP3KJ8X8JM491025
3FRYX7FL2DV026110	1HTMMAAN8EH068242	1FVACXFC1JHJM8932	2NP2HJ8X4KM617604
3FRYX7FE8CV353241	1HTMMAAN9EH068234	1FVACXFC7JHJM9065	2NP2HJ8X6KM617605
3FRYX7FEXCV353242	1HTWGAAR7EH095922	1FVACYDT8FHGJ5833	2NP2HJ8X8KM617606
3FRYX7FEXCV353239	1HTWGAAR9EH095923	1FVACYDTXFHGJ5834	2NP2HJ8XXKM617607
3FRYX7FE8CV353238	1HTWGAAR5EH105251	1FVACYDT1FHGJ5835	1FVACYDT4BDAY7502
3FRYX7FE2CV353235	1HTWGAAR9EH105253	3HAMKAAR5FL111908	1FVACYDT6BDAY7503
3FRYX7FE0CV353234	1HTWGAAR9CJ547228	1FVACYDT7FHGD3350	1FVACYDT7FHGE2548
3FRYF7FE3CV353246	1HTWGAAR7EH105252	1FVACYDT9FHGD3351	1FVACYDT9FHGE2549
3FRYF7FE1CV353245	3HAWGSTT2HL672529	1FVACYDT0FHGD3352	2NKHHJ8X6JM196063
3FRYF7FE8CV353243	3HAWGSTT9HL672530	1FVACYDT2FHGF2906	2NKHHJ8X7GN491214
3FRYF7FL8DV026101	3HAWGSTT0HL672531	1FVACYDT4FHGF2907	2NKHHJ8X5HM147303
3FRYF7FLXDV026102	3HAWGSTT2HL672532	1FVACYDT0FHGD3349	2NKHHJ8X7HM147304
3FRYX7FL5DV026103	3HAWGSTT4HL672533	3HAMMMMNXFL522970	1FVACXDT3FHGT1383
3FRYX7FL7DV026104	3HAWGSTT2HL672692	3HAMMMMN3FL522969	1FVHG3DV6FHGE0054
3FRYX7FL9DV026105	3HAWGSTT1HL672537	1FVHG5CY9FHGE5871	1FVHG3DV4FHGE0053



3FRYX7FL0DV026106	3HAWGSTT3HL672538	1FVHG5CY0FHGE5872	1FVAC5FE4JHJH7973
3FRYX7FL2DV026107	3ALACYDTXEDFV2464	3FRYF7FL1DV061076	1FVAC5FE6JHJH7974
3FRYX7FL4DV026108	1FVACYDT7EHFV5672	3FRYF7FLXDV061075	1FVAC5FE8JHJH7975
3FRYX7FL6DV026109	1FVACXDT6HHJH3091	3FRYF7FL6DV061073	1FVAC5FEXJHJH7976
3ALACXDT6EDFX9591	1HTMMAAR4AH176726	3FRYF7FL4DV061072	1FVAC5FE1JHJH7977
3HAZZMMR2JL594877	1HTWGAZR3FH617144	2NKHHJ8X4EM418900	1FVAC5FE3JHJH7978
1HTMMMMRXKH554319	1HTZZAAR8CH549387	2NKHHJ8X1EM418899	1FVHG3DV8FHGE0055
3FRXF7FK6CV431150	1HTMMAARX9H133102	1HTJTSKR9EH052340	3HAMMAAR2DL233150
1FVACXDT8HHJE2649	3HAMMAAN7CL456652	3HAWCAAR8FL690012	1FVHG3FE1JHJW7915
1FVACXDT6HHJE2648	1HTZZAAR9CH549415	1FVACXDT4EHFZ4035	1FVHG3FE3JHJW7916
1HTMMAAR1AH271521	1HTMMAANXFH526106	1FVACYCY0EHFX1130	1FVHG3FE5JHJW7917
1HTMMAAN0CH081788	1HTMMAAR3FH526161	1FVACXDT0FHGJ3519	1FVHG3FE7JHJW7918
1HTMMAAN5EH073771	1HTMKSTN4HH732811	1FVACXDT7FHGJ3520	3HAWNAZT6FL560823
1HTMMAAN7EH073772	3HAMKSTN5JL578402	3FRXF7FG5FV671211	3HAWNAZT8FL560824
1HTMMAAN9EH073773	1HTEUMMN3KH717118	1FVACXDT0EHFU8251	1HTWDAAR19J125195
1HTMMAAN0EH073774	3HAMKAARXFL127540	1FVACXDT8EHFU8241	1HTWDAARX9J120867
1HTMMAAN2EH073775	3HAMKAAR3FL127542	1HTMKAZRXEH783343	1HTWXAHT58J652843
1HTMMAAN6EH029178	1FVACYCY8FHGE8002	3HAMMAAN5GL744336	1FUYDZYB3PH496580
1HTMMAAN0EH068235	3FRXF7FJ6FV679474	1FVHCYCY1FHGG7828	1FVACXDT9EHFT2453
1HTMMAAN2EH068236	1HTWGAZT0FH518065	1FVHCYCYXFHGG7827	3HAMKAZN5EL013882
1HTMMAAN4EH068237	1FVACXCY3FHGE4465	3BKJHM7X7HF581538	
1HTMMAAN6EH068238	3ALACYDT8EDFV2463	3BKJHM7X5HF581408	

# **Special Tools or Software Required:**

Where Available	Type of Tool	Equipment Description
	5/8 socket	10mm socket
	11/16 wrench	T10 torx
	External torx E6	15mm socket

### Action:

### Remove Driveline from Traction Motor. Install updated Driveline Loop



Before Starting Procedure: Disconnect hybrid Battery, remove key from ignition and store in a safe place.

## **Service Procedure:**

Reference: The diagram's below shows the relative positions of the Odyne PTO (Power Take Off), Driveline, Plates, Hub, and Motor. Parts vary based off model year and production release.



#### G2V1-G2V5





**G2V6** –Current Production



#### Driveline Removal / Driveline Loop & Driveline Shaft Install

- 1. Remove existing 8 cap screws from Remy motor face.
- 2.
- a. G2V1-G2V5

Install lock washers (30244) on cap screws OEM Cap screws (3) & 30253 (5). Add Blue Loctite to all fasteners and set them aside ready for install. Take your driveline loop (40712) have it ready.

b. G2V6-CURRENT PRODUCTION

Install lock washers (30244) on cap screws (30245 & 30252). Add Blue Loctite to all fasteners and set them aside ready for install. Take your stack plate assembly, stack ring (40703), and driveline loop (40712) have them ready. Place your spline on the hub to the spline of the motor on your bearing/hub assembly. Seat the ring, and plate to motor when the spline engages. Start your bottom three fasteners on the plate to hold the assembly in place, take note of the grease Zerk, point the Zerk where it is accessible. Start the cap screws (30245) and just tighten slightly, leaving clearance, and room to move it accordingly for the other fasteners.

- 3.
- a. G2V1-G2V5

Place your driveline loop bracket in front of the motor and finger tighten the fasteners (30253) until all of our fasteners are started around the drive loop. (Driveline Loop configuration changes per application) If you need to rotate the loop accordingly to accommodate for frame/routing demands it is permissible.





#### b. G2V6-CURRENT PRODUCTION

Place your driveline loop bracket in front of the bearing plate and finger tighten the fasteners (30252) until all fasteners are started. (Driveline Loop configuration changes per application) If you need to rotate the loop accordingly to accommodate for frame/routing demands it is permissible.





4. Torque the fasteners to 10 foot pounds in a cross torque pattern. (ALL VERSIONS)







- 5. Verify that the assembly spins freely. Once you have verified that your assembly moves freely, finish torque the fasteners in a cross pattern (referenced previously) to 22 ft. pounds. You are now ready to install your drive shaft.
- 6. Reinstall the driveline using bolts (30187) and washer (30189) and nut (30188) on the PTO flange. Apply red Loctite to the bolt threads and torque to 37ft-lbs.
- 7. Reinstall the driveline using bolts (30247) and washer (30189) on the Hub/back fasteners of the driveline. Apply red Loctite to the bolt threads and torque to 37ft-lbs.
- 8. Check driveline for movement/typical mechanical wear. Please reach out to your Odyne service representative for additional assistance or parts.

You have now completed your Driveline Loop install



#### Test Truck and Return Parts

1. Test the truck to make sure everything works properly in driving mode, and when stationary with ePTO running the hydraulic pump or air compressor.

The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. Warranty Policy documentation determines Warranty coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Odyne Systems, LLC reserves the right to supersede this information with updates. The most recent information is available through Odyne on-line technical resources.



# **Parts Required:**

Part Number	Description	Quantity
Shop Supply	Blue Loctite	1
40712	Driveline Loop	1
30244	WASHER, SPLIT LOCK M10, SS	5
30253	SCREW,CAP, M10-1.5X35, SS	5
90052	Driveline Loop Hardware	1

## Warranty Information:

Code	Description	Time
00029E	Installation of Driveshaft Loop	1.0

# **Odyne Service Support Resources:**

To request technical assistance, contact <u>ServiceSupport@Odyne.com</u>. To request parts, contact <u>Parts@Odyne.com</u>.