

Endurant HD Series Automated Transmission TRPB0950EN-US

January 2025

EEO-14F112C
EEO-15F112C
EEO-16F112C
EEO-17F112C
EEO-18F112C
EHD-14112C-N
EE-17F111B



BACKED BY
Roadranger
SUPPORT

General Information

Warnings and Cautions1

How to Use This Manual2

Serial Tag Information and Model Nomenclature3

Service Parts and Kits

Service Kits and Parts Index4

OEM and Engine Specific Kits8

Clutch Housing Service Kits23

Main Housing Service Kits37

Rear Housing Service Kits and Parts54

Appendix

Change Log62

Warnings and Cautions

The alert symbols, signal words (**DANGER**, **WARNING** and **CAUTION**) and statements throughout this manual indicate the potential severity of a situation. Ensure to read, understand and follow each statement to avoid vehicle damage, component damage, personal injury, severe injury and/or death.



DANGER: Indicates an immediate hazard. Failure to follow the indicated procedures will cause major vehicle component damage, severe injury or death.



WARNING: Indicates an immediate hazard. Failure to follow the indicated procedures may result in major vehicle component damage, severe injury or death.



CAUTION: Indicates a potential hazard. Failure to follow the indicated procedures could result in minor or moderate component damage and/or personal injury.

The NOTICE and Note statements throughout this manual provide additional details required to avoid damaging a component or incorrectly completing a repair. Ensure to read, understand and follow each statement to properly complete a repair.

NOTICE: Indicates component or property damage could result if you do not follow the indicated procedure.

Note: Indicates additional detail that will aid in the repair of a component.

This manual is for transmission service parts and kits identification. Refer to Endurant HD Service Manual TRSM0950 for the appropriate service procedure.



CAUTION: Reference Endurant HD Service Manual TRSM0950 for the appropriate Service Procedure. Failure to follow the appropriate Service Procedure may result in component damage and/or personal injury.

NOTICE: Always reference the latest electronic version of this document to ensure accurate service information.

How to Use This Manual

This manual is divided into four sections: General Information, Transmission Identification, Service Parts and Kits, and Appendix.



CAUTION: Reference Endurant HD Service Manual TRSM0950 for the appropriate Service Procedure. Failure to follow the appropriate Service Procedure may result in component damage and/or personal injury.

NOTICE: Always reference the latest electronic version of this document to ensure accurate service information.

General Information

This section contains basic chapters such as Warnings and Cautions and How to Use This Manual

Transmission Identification

This section provides instruction on how to find and identify the transmission model and serial number.



CAUTION: Record transmission model and serial number prior to identifying the service part and/or kit. Failure to select the correct part based on transmission model number and/or serial number may result in improper repair, and possible transmission and/or engine component damage.

Service Parts and Kits

The Service Parts and Kits are divided in four sections; OEM and Engine Specific Kits (Clutch, Input Shaft and Service Units), Main Housing, Intermediate Housing and Rear Housing. A Component Identification diagram is included with each part or kit.

To find the information you need, simply identify the transmission model and the section of the transmission being worked on, refer to the Service Parts and Kits Index, turn to the page specified and identify the part or kit number.

Appendix

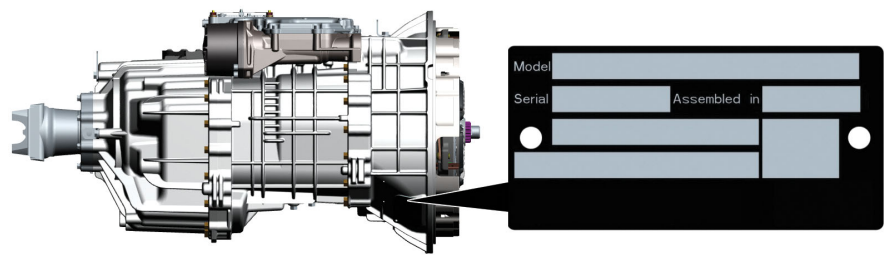
This section contains additional details that support the service of the transmission.

Serial Tag Information and Model Nomenclature

Transmission model designation and other transmission identification information are stamped on the serial tag. To identify the transmission model and serial number, locate the tag on the lower right side of the clutch housing.

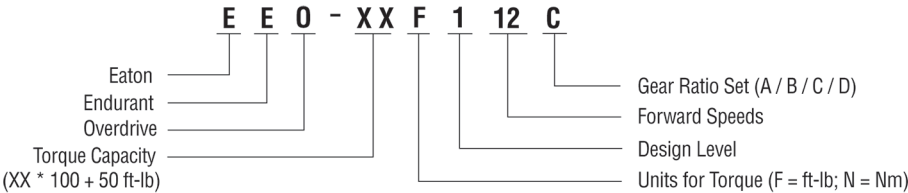
When calling for service assistance or parts, have the model and serial numbers handy.

NOTICE: Do not remove or destroy the transmission identification tag.



Model Number

The model number gives basic information about the transmission and is explained below. Use this number when calling for service assistance or replacement parts.



Serial Number

The serial number is the sequential identification number of the transmission. Before calling for service assistance, write the number down as it may be needed.

Service Kits and Parts Index

OEM and Engine Specific Transmission Kits

Description	Page
Clutch Service Kits	page 8
Input Shaft Kits	page 16
Input Shaft Repair Kit	page 13
Transmission Service Unit, Reman or Complete, Part Number Identification	page 21

Clutch Housing

Description	Part Number	Page
Breather	4304602	page 31
Clutch Housing Inspection Cover	10001202	page 31
Clutch Housing Kit	K-4358 K-4653	page 35 page 36
Clutch Housing Seal Kit	K-4382	page 24
Countershaft Bearing Kit	K-4484 K-4652	page 33
Front Snap Ring Kit	K-4359	page 31
Inertia Brake Air Line Assembly	S-3204	page 31
Inertia Brake Air Line Fitting	10001239 10001240	page 31
Inertia Brake Cover Cap Screw	10001813-MP6	page 30
Inertia Brake Housing	10004216 A-10004577	page 30
Inertia Brake Kit	K-4350	page 29
Input Shaft Bearing Kit	K-4483 K-4658	page 32
Input Shaft Cover Cap Screw	10001814-MP10	page 25
Input Shaft Cover Kit	K-4482 K-4657	page 25
Rail B Synchronizer Small Parts Kit	K-4388	page 33
Release Yoke Assembly Kit	K-4380 K-4553	page 23
Release Yoke Pivot Pin	10001949	page 24
Upper Countershaft Cover	10004215 A-10004580	page 26

Clutch Housing

Description	Part Number	Page
Upper Countershaft Cover Cap Screw	10001814-MP10	page 26

Main Housing

Description	Part Number	Page
8-Bolt PTO Cover Kit	K-4385	page 45
Anaerobic Sealant	5564561	page 38
Countershaft Bearing Kit	K-4484 K-4652	page 47
Drive Gear - Front Small Parts Kit	K-4367	page 50
Drive Gear - Rear Small Parts Kit	K-4369	page 50
Fluid Pressure Sensor Kit	K-4387	page 38
Linear Clutch Actuator (LCA)	K-4357R A-10004457 A-10004457R	page 43
Linear Clutch Actuator (LCA) Cap Screws	X-8-0874M-MP4	page 44
Lower Lube Tube Kit	K-4386	page 52
Main Housing Cap Screw	10002067-MP25	page 46
Main Housing Kit	K-4364 K-4646	page 45
Main Shaft Bearing	10000683	page 47
Main Shaft Kit	K-4366	page 48
Main Shaft Selective Washer Kit	K-4486	page 49
Mechatronic Transmission Module (MTM) Kit	See Table	page 39
MTM Air Pressure Sensor	10005053	page 41
MTM Cap Screw	10001179-MP20	page 44
MTM Cap Screw, Long	10001222-MP4	page 44
MTM Cap Screw, Special	10001815-MP4	page 44
MTM O-ring Kit	K-4637	page 41
MTM Top Cover Seal	10005055	page 42
MTM Top Cover Cap Screws	10005056-MP4	page 42
Plug, Fluid Pressure Sensor	4308231	page 38
Primary Drive Gear	S-3206	page 49

Main Housing

Description	Part Number	Page
Primary Driven Gear	10000898	page 49
Rail C and D Sliding Clutches	10000557	page 49
Reverse Gear	10000556	page 49
Reverse Idler Kit	K-4365	page 53
Secondary Driven Gear	10000899	page 49
Transmission Control Module (TCM) Kits	See Table	page 37
TCM Cover	4307675	page 38
TCM Mounting Stud	5577511-MP4	page 38
Upper and Lower Countershaft (Dual PTO) Kit	K-4371	page 51
Upper and Lower Countershaft (Single PTO) Kit	K-4370	page 51
Upper Lube Tube Kit	K-4384	page 52

Rear Housing

Description	Part Number	Page
Harness Bracket	10001082	page 55
Harness Bracket Cap Screw	X-8-0625M	page 55
Lube Tube (Dual PTO) Kit	K-4374	page 57
Oil Pump, Dual PTO	A-10002528 A-10004583	page 60
Oil Pump, Single PTO	A-10001057 A-10004577	page 60
Oil Pump/Range Spacer	10000907	page 61
Oil Pump/Range Spacer O-ring	10001065	page 61
Output Seal Kit	K-4399	page 54
Output Speed Sensor Bracket	10001097	page 55
Output Speed Sensor Harness Bracket Cap Screw	X-8-0625M	page 55
Output Speed Sensor Kit	K-4381	page 55
Output Yoke Retainer Bolt	10000949	page 54
Output Yoke Retainer Plate	10000950	page 55
Planetary Output Shaft Assembly Kit	K-4378	page 59
Pump Cap Screw	10001412-MP20	page 61
Rail E Detent Kit	K-4376	page 58

Rear Housing

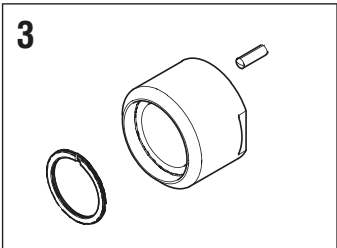
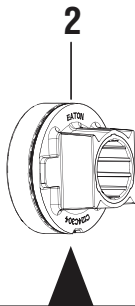
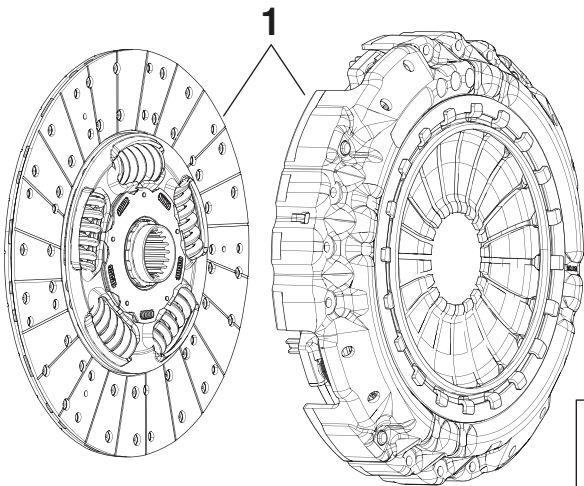
Description	Part Number	Page
Range Synchronizer Assembly Kit	K-4499R	page 59
Rear Bearing Cover Cap Screw	10001172-MP8	page 54
Rear Housing Cap Screw	10002067-MP25	page 58
Rear Housing (Dual PTO) Kit	K-4373	page 56
Rear Housing (Single PTO) Kit	K-4372	page 56
Rear Housing Threaded Cap Screw	10001102-MP3	page 58
Rear PTO Cover (Dual PTO) Kit	K-4375	page 57
Shift Rail E (and Yoke)	S-3216	page 59

Lubricant, PS-386 HD Synthetic Transmission




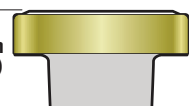
Description	Part Number	Page
1 Gallon Jug (4 -1 Gallon Jugs)	5564546-M4	page 61
5 Gallon Pail	5564543	page 61
55 Gallon Drum	5564544	page 61

OEM and Engine Specific Kits

Clutch Service Kits



- 1. Clutch Disc and Cover
- 2. Release Bearing
- 3. Input Shaft Repair Kit

Endurant HD and XD	A-10004340 (ISO) 53.55 mm (2.10 in) 	A-10004341 (SAE) 46.70 mm (1.83 in) 
	125969 (ISO) 94.60 mm (3.724 in) 	125968 (SAE) 87.75 mm (3.455 in) 

Note: 125969 (ISO) and 125968 (SAE) are replaced by A-10004340 (ISO) and A-10004341 (SAE) effective March 2023.

Transmission Model	OEM	Engine	Clutch Kit PN	Clutch Kit PN at PACCAR	Damper Size	Flywheel Bore	Release Bearing
EEO-xxF112C EE-xxF112B EHD-xxF112C-N PO-xxF112C	Freightliner Western Star	Detroit DD13 (thru 2020)	K-4496CL		254mm	290mm	SAE
		Detroit DD13 (2021+)			285mm		
		Detroit DD15					
		Cummins X15	K-4494CL (K-4573CLW*)		254mm	260mm	
		Cummins X12					
		Cummins ISX12N (CNG)	K-4512CL				
	International Motors	Cummins X15	K-4488CL (K-4573CLW*)		254mm	260mm	ISO
		International A26					
	Kenworth Peterbilt	PACCAR MX11 (thru 2020)	K-4488CL (K-4573CLW*)	K-4488CL-PAC	254mm	260mm	ISO
		PACCAR MX13 (thru 2020)					
		Cummins X15					
		Cummins ISX12N (CNG)	K-4512CL	K-4512CL-PAC			SAE
		PACCAR MX11 (2021+)	K-4514CL	K-4514CL-PAC	285mm	290mm	ISO
		PACCAR MX13 (2021+)					
	Volvo	Cummins X15	K-4494CL (K-4573CLW*)		254mm	260mm	SAE
		Cummins ISX12N (CNG)		K-4512CL			
EHD-xxF112C-V PHDP-xxF112C	International Motors	Cummins L9	K-4677CL		254mm	260mm	SAE
	Kenworth Peterbilt	PACCAR MX11	K-4676CL	K-4676CL-PAC	285mm	290mm	ISO
		PACCAR MX13					
		PACCAR PX9	K-4677CL	K-4677CL-PAC	254mm	260mm	SAE
		Cummins L9					

*Clutch kit K-4573CLW is supplied directly from Eaton Cummins and only to be used on clutch claims when directed by an Eaton Cummins representative. Kit does not include Release Bearing, Input Shaft Repair Kit or Pilot Bearing.

Note: Release bearing kits K-4692W (A-10004340 - ISO) and K-4693W (A-100046341 - SAE) are supplied directly from Eaton Cummins. Use one release bearing based on OEM and engine when installing clutch kit K-4573CW. Refer to Input Shaft Repair Kit and Pilot Bearing section, order appropriate kit/part (customer pay) when installing clutch kit K-4573CLW.

K-4379 (ISO / Standard Dampener with 260mm Flywheel Bore Engines)

- PACCAR - Cummins Engines
- International Motors A26 Engines
- International Motors - Cummins Engines
- PACCAR MX Engines

Note: K-4379 Obsoleted 01/16/2023. Use K-4488CL or K-4488CL-PAC.

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105511-1 (Standard Dampener)	1
2	Release Bearing Assembly	125969	1
3	Input Shaft Repair Kit	K-4362	1

K-4488CL / K-4488CL-PAC (ISO / Soft Rate Dampener with 260mm Flywheel Bore Engines)

Can be used to replace K-4379

- PACCAR - Cummins Engines
- International Motors A26 Engines
- International Motors - Cummins Engines
- PACCAR MX Engines

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105511-5 (Soft Rate Dampener)	1
2	Release Bearing Assembly	125969 A-10004340	1
3	Input Shaft Repair Kit	K-4569	1

K-4494CL (SAE / Soft Rate Dampener with 260mm Flywheel Bore Opening Engines)

- Freightliner - Cummins Engines
- Western Star - Cummins Engines
- Volvo - Cummins engine

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105511-5 (Soft Rate Dampener)	1
2	Release Bearing Assembly	125968 A-10004341	1
3	Input Shaft Repair Kit	K-4569	1

K-4496CL (SAE / Soft Rate Dampener with 290mm Flywheel Bore Opening Engines)

- Freightliner - Detroit Diesel Engines
- Western Star - Detroit Diesel Engines

Note: Covers all DD engines (DD13 / DD15 built October 1, 2019 to present).

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105519-5 (Soft Rate Dampener)	1
2	Release Bearing Assembly	125968 A-10004341	1
3	Input Shaft Repair Kit	K-4694	1

K-4513CL (SAE / Soft Rate Dampener with 290mm Flywheel Bore Opening Engines)

- Freightliner - Detroit Diesel Engines
- Western Star - Detroit Diesel Engines

Note: K-4513CL obsoleted 01/16/2023. Use K-4496CL.

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105521-20 (Soft Rate Dampener)	1
2	Release Bearing Assembly	125968	1
3	Input Shaft Repair Kit	K-4485	1

K-4514CL / K-4514CL-PAC (ISO / PACCAR Only / Soft Rate Dampener with 290mm Flywheel Bore Opening Engines)

- PACCAR MX 11 / MX 13 Engines with 290mm Flywheel Bore Opening
- Cummins X15N (Natural Gas)

Note: Only PACCAR MX 11 / MX 13 engines built after July 1, 2021 to present.

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105521-20 (Soft Rate Dampener)	1
2	Release Bearing Assembly	125969 A-10004340	1
3	Input Shaft Repair Kit	K-4569	1

K-4512CL / K-4512CL-PAC (SAE / Soft Rate Dampener with 260mm Flywheel Bore Opening Engines)

- Cummins ISX 12N (Natural Gas)

Note: K-4512CL-PAC obsoleted 01/16/2023. Use K-4512CL.

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105511-7 (Soft Rate Dampener)	1
2	Release Bearing Assembly	125968 A-10004341	1
3	Input Shaft Repair Kit	K-4569	1

K-4676CL / K-4676CL-PAC (ISO HD Vocational and TX-12 Pro) (ISO / Low Torque Extreme Duty Dampener with 290mm Flywheel Bore Opening Engines)

- PACCAR MX 11 / MX 13 Engines with 290mm Flywheel Bore Opening
- Endurant HD Vocational / TX12 Pro Only

Note: Endurant HD Vocational / TX12 Pro Series Only

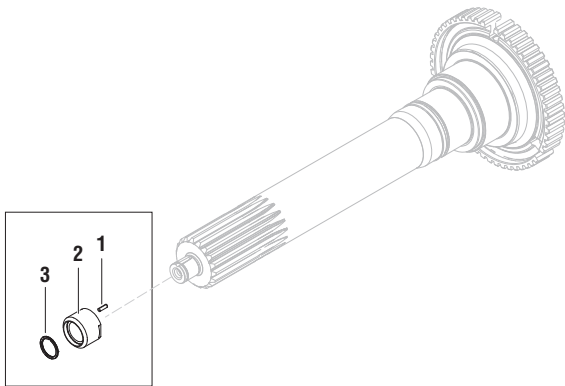
	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105561-CL-60 (Low Torque Extreme Duty)	1
2	Release Bearing Assembly	A-10004340	1
3	Input Shaft Repair Kit	K-4569	1

K-4677CL - K-4677CL-PAC (SAE HD Vocational and Non-Vocational) (SAE / Low Torque Extreme Duty Dampener with 260mm Flywheel Bore Opening Engines)

- PX-9 PACCAR / L-9 Cummins Engines

	Description	P/N	QTY
1	Driven Disc Assembly and Clutch Cover (NSS)	105551-CL-7 (Low Torque Extreme Duty)	1
2	Release Bearing Assembly	A-10004341	1
3	Input Shaft Repair Kit	K-4569	1

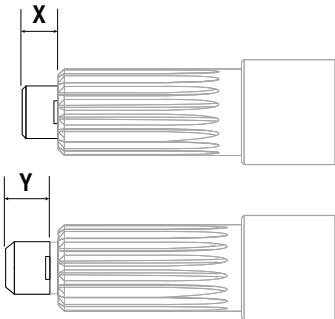
Input Shaft Repair Kit



Note: Kit includes items: 1, 2 and 3. Pilot Bearings were removed effective 03/18/2024 and are purchased separately.

Input Shaft Repair Kit Part Number Identification

Use the diagram below to identify wear sleeve installed on your Input Shaft or table based on your OEM and Engine to determine Input Shaft Repair Kit.



	Measurement	Kit Part Number
X	20.50 - 20.80 mm (0.807 - 0.819 in)	K-4569
Y	24.82 - 25.12 mm (0.977 - 0.989 in)	K-4694

OEM	Engine	Kit Part Number
Freightliner Western Star	Detriot Diesel	K-4694
	Cummins	K-4569
Kenworth Peterbilt	PACCAR MX	K-4569
	Cummins	
International Motors	International A26	K-4569
	Cummins	
Volvo	Cummins	K-4569

K-4569**Note:** Replaces K-4362 (obsoleted 03/18/2024).

- Freightliner - Cummins Engines
- Kenworth - Cummins Engines
- International Motors - A26 Engines
- International Motors - Cummins Engines
- Peterbilt - Cummins Engines
- Volvo - Cummins Engines
- Western Star - Cummins Engines
- PACCAR - MX Engines

	Description	Part Number	QTY
1	Wear Sleeve Alignment Pin (NSS)	10001190	1
2	Pilot Bearing Wear Sleeve (NSS)	10001335	1
3	Spiral Snap Ring (NSS)	10001444	1

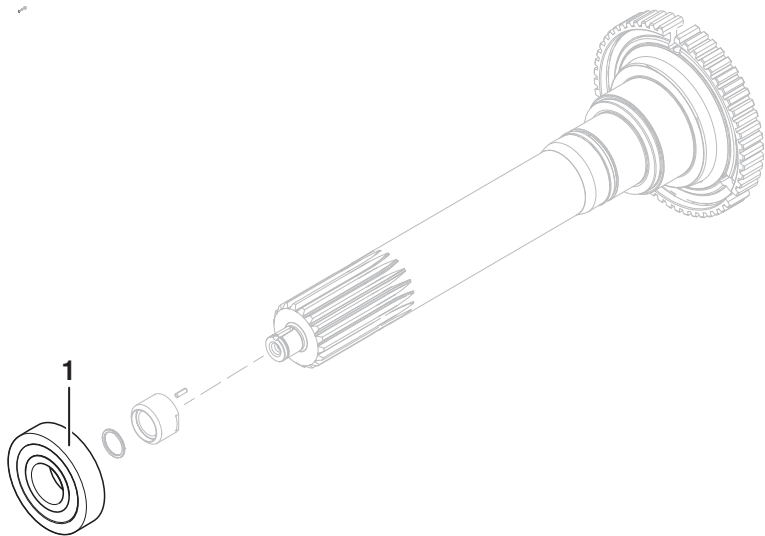
K-4694**Note:** Replaces K-4485 (obsoleted 03/18/2024).

- Freightliner - Detroit Diesel Engines
- Western Star - Detroit Diesel Engines

	Description	Part Number	QTY
1	Wear Sleeve Alignment Pin (NSS)	10001190	1
2	Pilot Bearing Wear Sleeve (NSS)	10003876	1
3	Spiral Snap Ring (NSS)	10001444	1

Pilot Bearings

Use the table below to identify the Pilot Bearing for your engine.



	Engine	Pilot Bearing Series	Part Number
1	PACCAR MX11	6206	5566516
	PACCAR MX13		
	Cummins ISX 12N / L-9 / PX-9	6306	5566517
	Cummins X12		
	Cummins X15		
	Detroit DD13		
	Detroit DD15		
	Detroit DD16		
	International Motors A26	5206	5566518

Input Shaft Kit Part Number Identification

Use the diagram below to identify the Input Shaft installed in your transmission. Verify Input Shaft and OEM - Engine to determine the correct input shaft service part number.

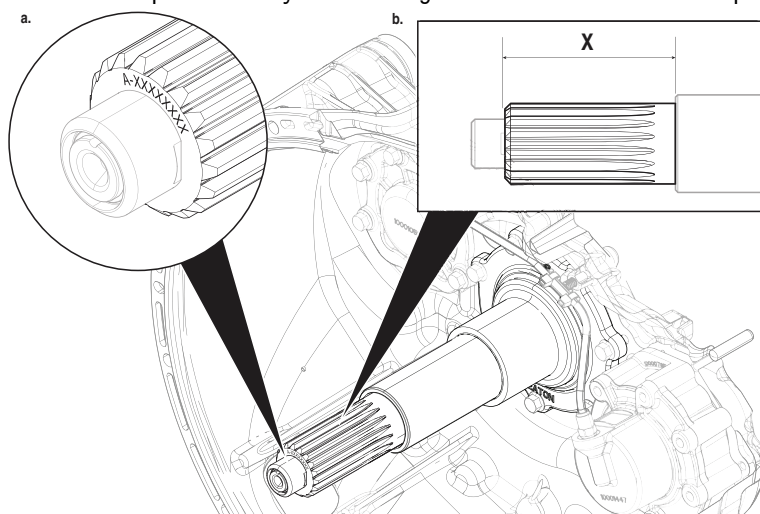
- Locate the part number on the end of the Input Shaft as shown in Diagram A. Compare input shaft part number to Kit Part Number in table below, primary identification.
- If part number is illegible - Measure input shaft as shown in Diagram B. Compare input shaft measurement (X) to Kit Part Number in table below, secondary identification.

NOTICE: For secondary identification, input shaft and cover must be fully assembled in Clutch Housing.

- OEM - Engine

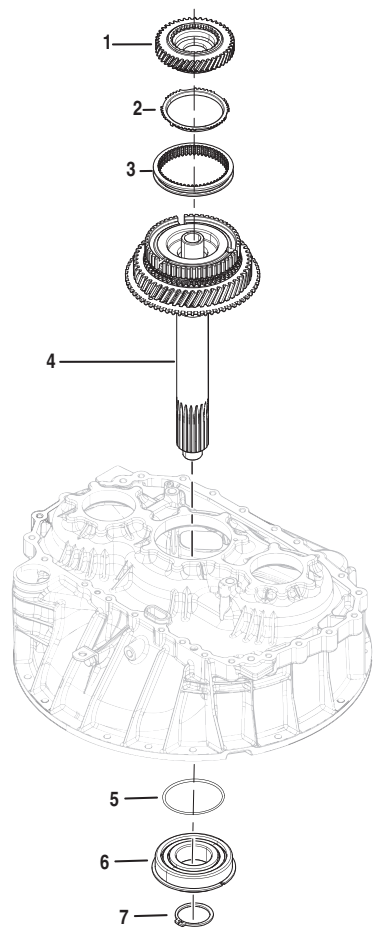


CAUTION: Ensure to install the correct input shaft based on the current input shaft installed in your transmission and OEM - Engine. Failure to install the correct input shaft may result in engine and/or transmission component damage.



a. Primary Identification Part Number	b. Secondary Identification Measurement (X)	c. OEM - Engine	Kit Part Number
A-10001529	90.50 - 92.50 mm (3.563 - 3.642 in)	Kenworth - Cummins Engines	K-4360 (ISO) K-4659 (ISO)
		International Motors - A26 Engines	
		International Motors - Cummins Engines	
		Peterbilt - Cummins Engines	
		PACCAR - MX engines	
A-10003441	79.50 - 81.50 mm (3.130 - 3.209 in)	Freightliner - Cummins Engines	K-4361 (SAE) K-4660 (SAE)
		Volvo - Cummins Engines	
		Western Star - Cummins Engines	
		All OEM's - Cummins 12N / CNG / L-9 / PX-9	
A-10003878	82.00 - 84.00 mm (3.228 - 3.307 in)	Freightliner - Detroit Diesel Engines	K-4363 K-4661 (Detroit Only)
		Western Star - Detroit Diesel Engines	

Input Shaft Kits



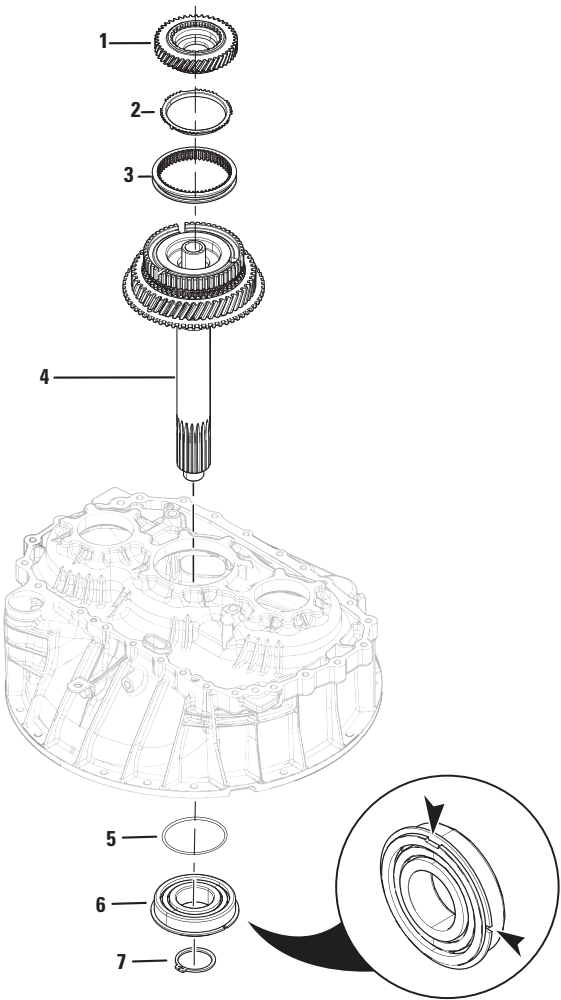
K-4360 (ISO)

- Kenworth - Cummins Engines
- International Motors - A26 Engines
- International Motors - Cummins Engines
- Peterbilt - Cummins Engines
- PACCAR - MX engines

	Description	Part Number	QTY
1	Primary Drive Gear	S-3206	1
2	Rail B Synchronizer Ring	10002550	1
3	Rail B Synchronizer Sliding Sleeve	10001942	1
4	Input Shaft Assembly (NSS)	S-3205	1
5	Input Shaft Bearing O-Ring	10003862	1
6	Input Shaft Bearing	10000552	1
7	Input Shaft Snap Ring	10000624	1
Kit	Rail B Synchronizer Small Parts Kit	K-4388	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: HD production changed to 10004584 Input Shaft Bearing early July 2023. K-4360 obsoleted in NAFTA 06/03/2023. Use K-4659.



K-4659 (ISO Hard Lock Bearing Design)

- Kenworth - Cummins Engines
- International Motors - A26 Engines
- International Motors - Cummins Engines
- Peterbilt - Cummins Engines
- PACCAR - MX engines

	Description	Part Number	QTY
1	Primary Drive Gear	S-3206	1
2	Rail B Synchronizer Ring	10002550	1
3	Rail B Synchronizer Sliding Sleeve	10001942	1
4	Input Shaft Assembly (NSS)	S-3205	1
5	Input Shaft Bearing O-Ring	10003862	1
6	Input Shaft Bearing	10004584	1
7	Input Shaft Snap Ring	10000624	1
Kit	Rail B Synchronizer Small Parts Kit	K-4388	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: Reference input shaft bearing installation procedure for bearing orientation when pressing in 10004584 input shaft bearing.

10004584 (Hard Lock Bearing Design) Input Shaft Bearing will require K-4657 (Hard Lock Bearing Design) Input Shaft Cover Kit.

K-4361 (SAE)

- Freightliner - Cummins Engines
- Volvo - Cummins Engines
- Western Star - Cummins Engines
- All OEM's - Cummins 12N / CNG / L-9 / PX-9

	Description	Part Number	QTY
1	Primary Drive Gear	S-3206	1
2	Rail B Synchronizer Ring	10002550	1
3	Rail B Synchronizer Sliding Sleeve	10001942	1
4	Input Shaft Assembly (NSS)	S-3207	1
5	Input Shaft Bearing O-Ring	10003862	1
6	Input Shaft Bearing	10000552	1
7	Input Shaft Snap Ring	10000624	1
Kit	Rail B Synchronizer Small Parts Kit	K-4388	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: HD production changed to 10004584 Input Shaft Bearing early July 2023. K-4361 obsoleted in NAFTA 06/03/2023. Use K-4660.

K-4660 (SAE Hard Lock Bearing Design)

- Freightliner - Cummins Engines
- Volvo - Cummins Engines
- Western Star - Cummins Engines
- All OEM's - Cummins 12N / CNG / L-9 / PX-9

	Description	Part Number	QTY
1	Primary Drive Gear	S-3206	1
2	Rail B Synchronizer Ring	10002550	1
3	Rail B Synchronizer Sliding Sleeve	10001942	1
4	Input Shaft Assembly (NSS)	S-3207	1
5	Input Shaft Bearing O-Ring	10003862	1
6	Input Shaft Bearing	10004581	1
7	Input Shaft Snap Ring	10000624	1
Kit	Rail B Synchronizer Small Parts Kit	K-4388	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: Reference input shaft bearing installation procedure for bearing orientation when pressing in 10004584 input shaft bearing.

10004584 (Hard Lock Bearing Design) Input Shaft Bearing will require K-4657 (Hard Lock Bearing Design) Input Shaft Cover Kit.

K-4363 (Detroit Only)

- Freightliner - Detroit Diesel Engines
- Western Star - Detroit Diesel Engines

	Description	Part Number	QTY
1	Primary Drive Gear	S-3206	1
2	Rail B Synchronizer Ring	10002550	1
3	Rail B Synchronizer Sliding Sleeve	10001942	1
4	Input Shaft Assembly (NSS)	S-3199	1
5	Input Shaft Bearing O-Ring	10003862	1
6	Input Shaft Bearing	10000552	1
7	Input Shaft Snap Ring	10000624	1
Kit	Rail B Synchronizer Small Parts Kit	K-4388	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: HD production changed to 10004584 Input Shaft Bearing early July 2023. K-4363 obsoleted in NAFTA 06/03/2023. Use K-4661.

K-4661 (Detroit Only Hard Lock Bearing Design)

- Freightliner - Detroit Diesel Engines
- Western Star - Detroit Diesel Engines

	Description	Part Number	QTY
1	Primary Drive Gear	S-3206	1
2	Rail B Synchronizer Ring	10002550	1
3	Rail B Synchronizer Sliding Sleeve	10001942	1
4	Input Shaft Assembly (NSS)	S-3199	1
5	Input Shaft Bearing O-Ring	10003862	1
6	Input Shaft Bearing	10004584	1
7	Input Shaft Snap Ring	10000624	1
Kit	Rail B Synchronizer Small Parts Kit	K-4388	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: Reference input shaft bearing installation procedure for bearing orientation when pressing in 10004584 input shaft bearing.

10004584 (Hard Lock Bearing Design) Input Shaft Bearing will require K-4657 (Hard Lock Bearing Design) Input Shaft Cover Kit.

Transmission Service Unit, Reman or Complete, Part Number Identification

Use the diagram below to identify the Input Shaft installed in your transmission. Verify Input Shaft and OEM - Engine to determine the correct transmission service unit part number.

- Locate the part number on the end of the Input Shaft as shown in Diagram A. Compare input shaft part number to Service Unit Part Number in table below, primary identification.

Note: The additional part number in the primary identification is the assembly part number used in the Bill of Material (BOM).

- If part number is illegible - Measure input shaft as shown in Diagram B. Compare input shaft measurement (X) to Service Unit Part Number in table below, secondary identification.

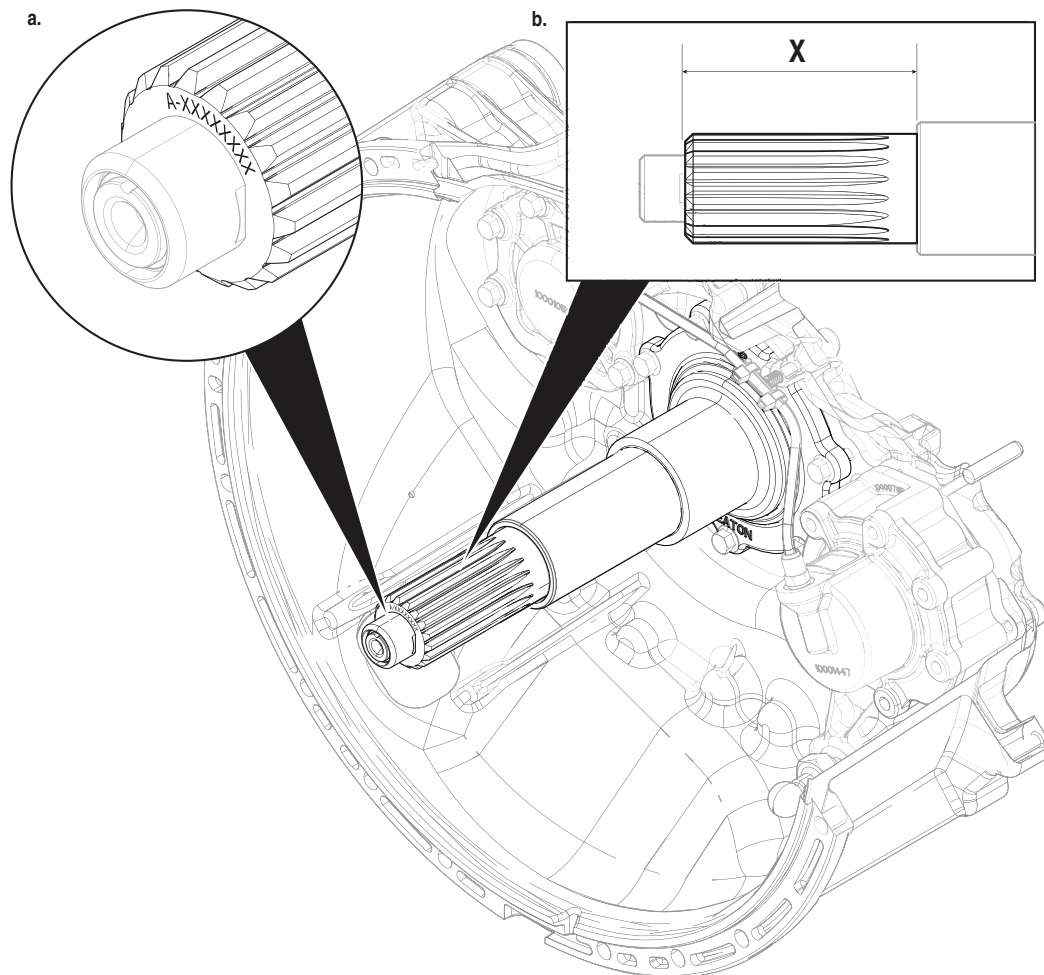
NOTICE: For secondary identification, input shaft and cover must be fully assembled in Clutch Housing.

- OEM - Engine



CAUTION: Ensure to install the correct service unit based on the current input shaft installed in your transmission and OEM - Engine. Failure to install the correct service unit may result in engine and/or transmission component damage.

Note: Service Unit part numbers support both 11-Speed and 12-Speed transmissions.



Single PTO

a. Primary Identification Part Number (Assembly Part Number)	b. Secondary Identification Measurement (X)	c. OEM - Engine	Reman Service Unit Part Number (Single PTO) w/o TCM, MTM	Complete Service Unit Part Number (Single PTO) w/o TCM
A-10001529 (10001336)	90.50 - 92.50 mm (3.563 - 3.642 in)	Kenworth - Cummins Engines	TN-H04-12R* (TN-H04-75RR)*	TA-H04-12X
		International Motors - A26 Engines		
		International Motors - Cummins Engines		
		Peterbilt - Cummins Engines		
		PACCAR - MX engines		
		All OEM's - Cummins X15N CNG		
A-10003441 (10003440)	79.50 - 81.50 mm (3.130 - 3.209 in)	Freightliner - Cummins Engines	TN-H04-31R	TA-H04-31X
		Volvo - Cummins Engines		
		Western Star - Cummins Engines		
		All OEM's - Cummins ISX12N CNG / L9 / PX-9		
A-10003878 (10003877)	82.00 - 84.00 mm (3.228 - 3.307 in)	Freightliner - Detroit Diesel Engines	TN-H04-34R	TA-H04-34X
		Western Star - Detroit Diesel Engines		



CAUTION: *Service units may be equipped with a Dual (4-Bolt) PTO Rear Housing. Do not install a 4-Bolt PTO. If a 4-Bolt PTO is installed, PTO and/or transmission component damage will occur. Reference TAIB-1010.

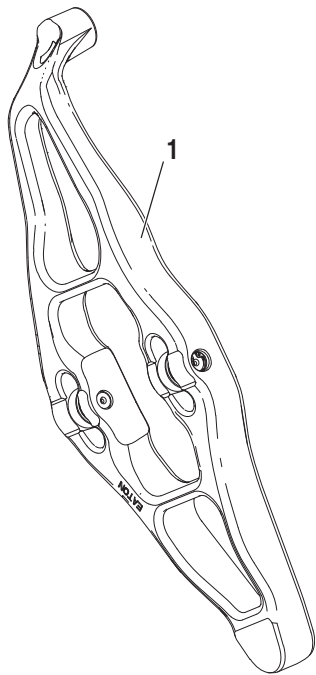
Dual PTO

Note: Endurant HD Vocational and TX-12 Pro Transmission replacement units are all Dual PTO units shown below.

a. Primary Identification Part Number (Assembly Part Number)	b. Secondary Identification Measurement (X)	c. OEM - Engine	Reman Service Unit Part Number (Dual PTO) w/o TCM, MTM	Complete Service Unit Part Number (Dual PTO) w/o TCM
A-10001529 (10001336)	90.50 - 92.50 mm (3.563 - 3.642 in)	Kenworth - Cummins Engines	TN-H04-26R	TA-H04-26X
		International Motors - A26 Engines		
		International Motors - Cummins Engines		
		Peterbilt - Cummins Engines		
		PACCAR - MX engines		
A-10003441 (10003440)	79.50 - 81.50 mm (3.130 - 3.209 in)	Freightliner - Cummins Engines	TN-H04-32R	TA-H04-32X
		Volvo - Cummins Engines		
		Western Star - Cummins Engines		
		All OEM's - Cummins 12N / CNG / L-9 / PX-9		
A-10003878 (10003877)	82.00 - 84.00 mm (3.228 - 3.307 in)	Freightliner - Detroit Diesel Engines	TN-H04-35R	TA-H04-35X
		Western Star - Detroit Diesel Engines		

Clutch Housing Service Kits

Release Yoke Assembly Kit



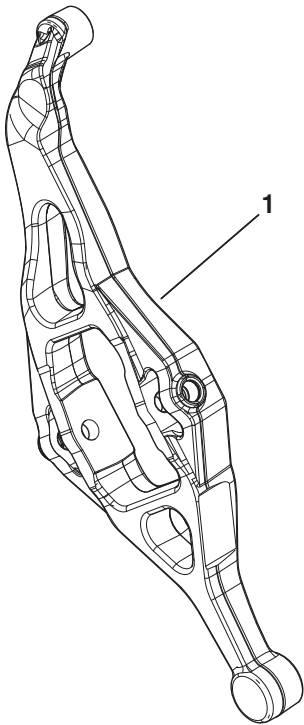
K-4380

	Description	Part Number	QTY
1	Release Yoke, Clutch	125891	1

Note: HD production changed to A-10004349 Release Yoke late August 2022. K-4380 obsoleted in NAFTA 02/15/2023. Use K-4553.

HD Release Yoke follows transmission warranty. Reference TAIB-0998 for clutch component inspection / reuse criteria.

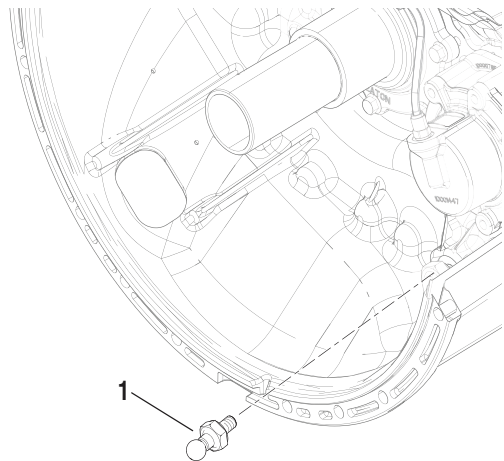
Release Yoke Assembly Kit



K-4553

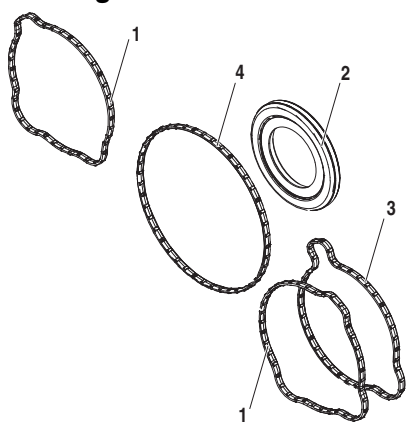
	Description	Part Number	QTY
1	Release Yoke, Clutch	A-10004349	1

Release Yoke Pivot Pin



	Description	Part Number	QTY
1	Release Yoke Pivot Pin	10001949	1

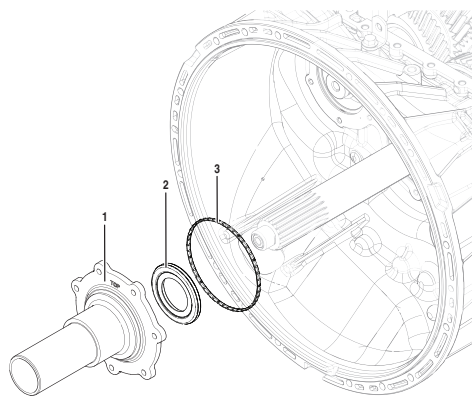
Clutch Housing Seal Kit



K-4382

	Description	Part Number	QTY
1	Upper Countershaft Cover/Inertia Brake Housing (Front) Seal (NSS)	10001048	2
2	Input Shaft Seal	4305625	1
3	Inertia Brake Housing (Rear) Seal (NSS)	10001049	1
4	Input Shaft Cover O-Ring (NSS)	10001578	1

Input Shaft Cover Kit

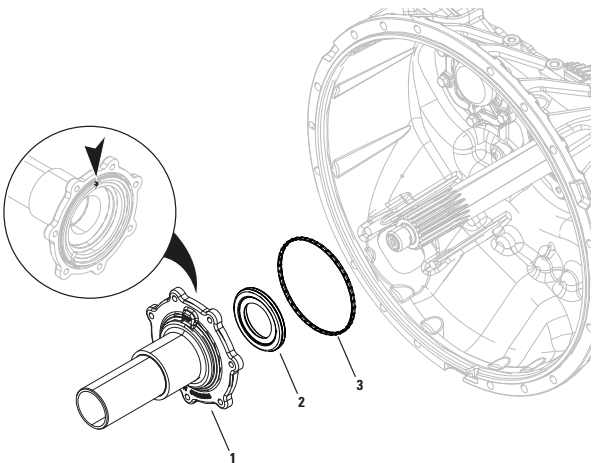


K-4482 (Non Hard Lock Bearing Design)

	Description	P/N	QTY
1	Input Shaft Cover	10001053	1
2	Input Shaft Seal	4305625	1
3	Input Shaft Cover Seal (NSS)	10001578	1

Note: HD production changed to A-10004581 Hard Lock Bearing Design Input Shaft Cover in June 2023. K-4482 is available with limited stock (~1900 kits as of 01/01/2024). Use K-4657 when stock is depleted.

Input Shaft Cover Kit

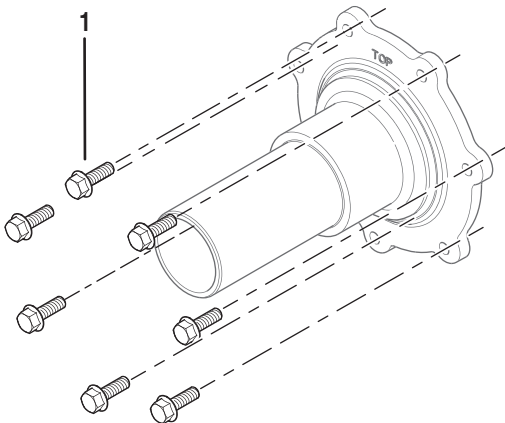


K-4657 (Hard Lock Bearing Design)

	Description	P/N	QTY
1	Input Shaft Cover	A-10004581	1
2	Input Shaft Seal	4305625	1
3	Input Shaft Cover Seal (NSS)	10001578	1

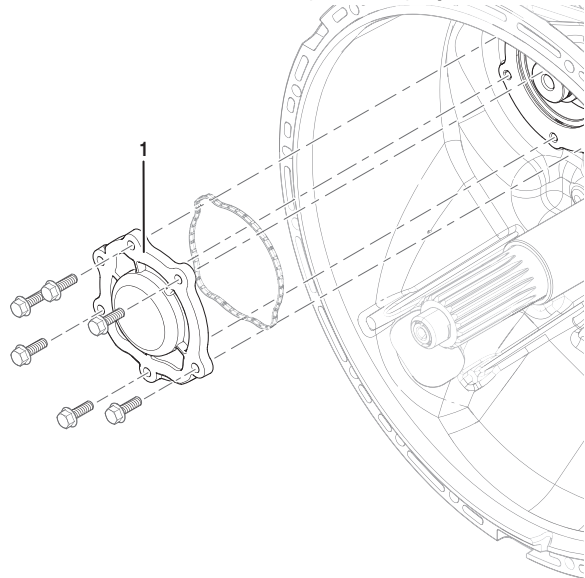
Note: A-10004581 Hard Lock Input Shaft Cover cannot be used with transmissions built prior to June 26, 2023 (Trans SN ~ Z0341993/ZR019930) without an input shaft bearing change to hard lock bearing design (10004584). 10004584 is also found in K-4658.

Input Shaft Cover Cap Screw



	Description	P/N	QTY
1	Input Shaft Cover Cap Screw (M8X1.25X25)	10001814-MP10	10

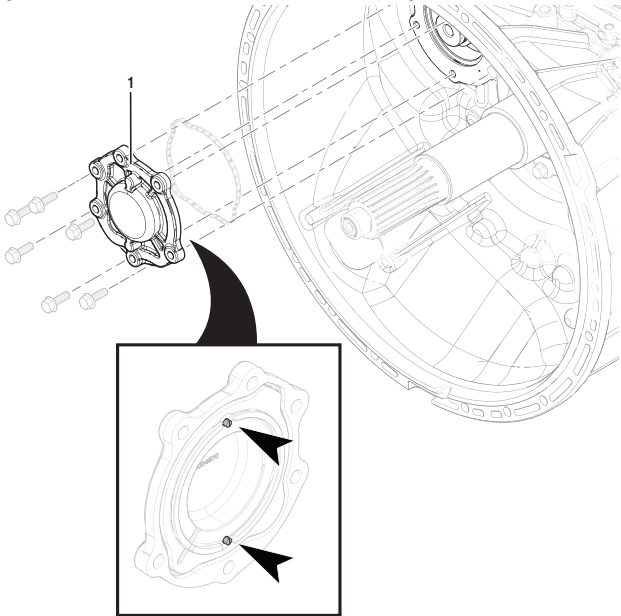
Upper Countershaft Cover
(Non Hard Lock Bearing Design)



	Description	P/N	QTY
1	Upper Countershaft Cover	10004215	1

Note: 10004215 is also available in K-4491 to support non hard lock countershaft bearing production transmissions built prior to November 18, 2022 (Trans SN ~ Z0278934).

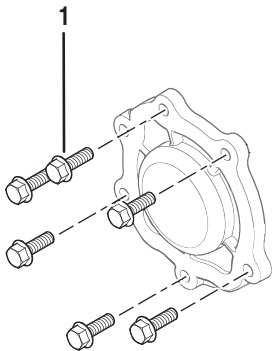
Upper Countershaft Cover
(Hard Lock Bearing Design)



	Description	P/N	QTY
1	Upper Countershaft Cover	A-10004580	1

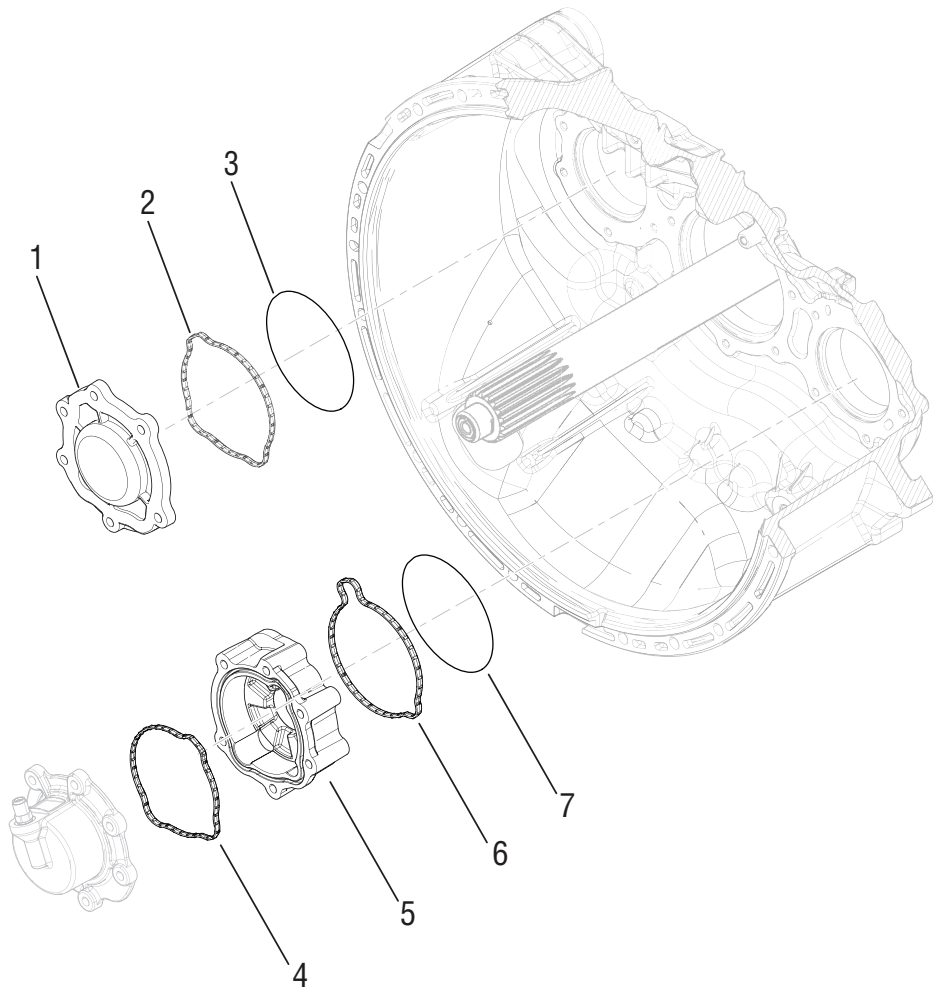
Note: A-10004580 Hard Lock Upper Countershaft Cover cannot be used with transmissions built prior to November 18, 2022 (Trans SN ~ Z0278934) without a countershaft bearing change to hard lock bearing design (K-4652). A-10004579 is also found in K-4654.

Upper Countershaft Cover Cap Screw



	Description	P/N	QTY
1	Upper Countershaft Cover Cap Screw (M8X1.25X25)	10001814-MP10	10

Clutch Housing Front Cover Kit

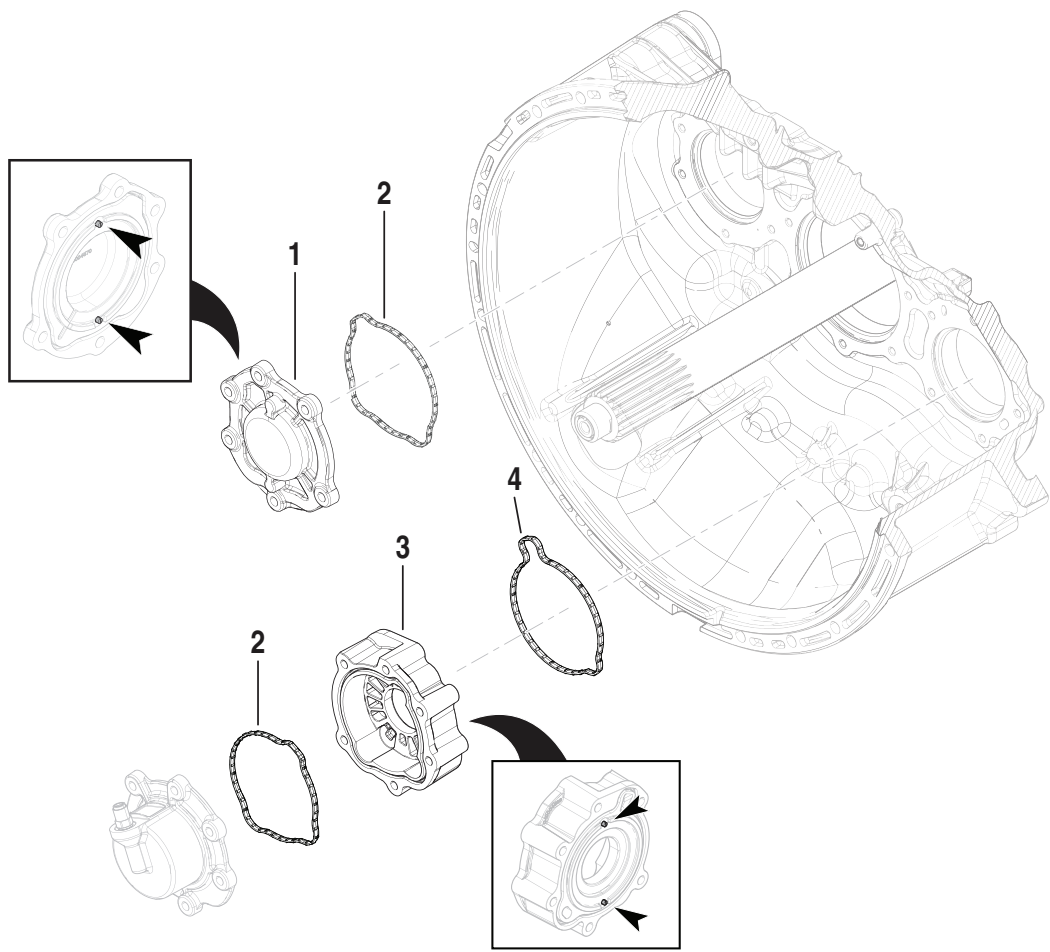


K-4491 (Non Hard Lock Bearing Design)

	Description	P/N	QTY
1	Upper Countershaft Cover	10004215	1
2, 4	Countershaft Cover / Inertia Brake Housing (Front) Seal (NSS)	10001048	2
3, 7	Countershaft Cover / Inertia Brake Housing Countershaft Bearing O-ring (NSS)	10004217	2
5	Inertia Brake Housing	10004216	1
6	Inertia Brake Housing (Rear) Seal (NSS)	10001049	1

Note: Reference RRMT0027 for use criteria.

Clutch Housing Front Cover Kit

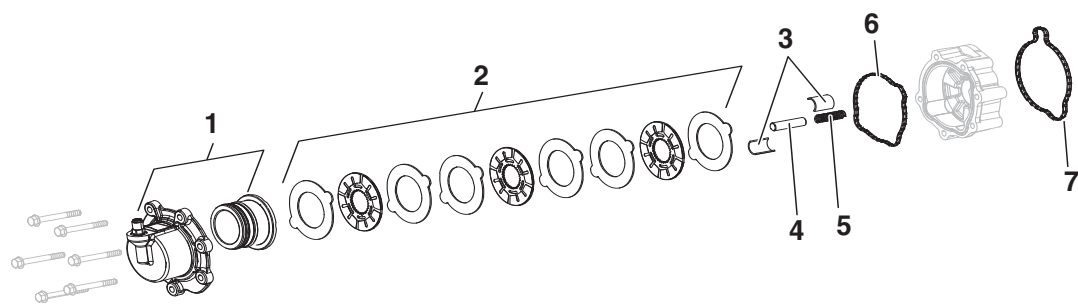


K-4654 (Hard Lock Bearing Design)

	Description	P/N	QTY
1	Upper Countershaft Cover (Hard Lock Bearing Design)	A-10004580	1
2	Countershaft Cover / Inertia Brake Housing (Front) Seal (NSS)	10001048	2
3	Inertia Brake Housing (Hard Lock Bearing Design)	A-10004579	1
4	Inertia Brake Housing (Rear) Seal (NSS)	10001049	1

Note: K-4654 cannot be used on transmissions built prior to November 18, 2022 (Trans SN ~ Z0278934) without a countershaft bearing change to hard lock bearing design (K-4652).

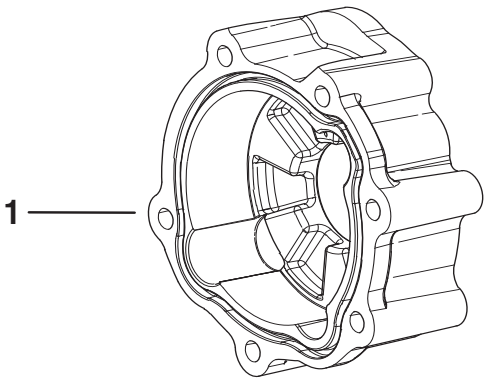
Inertia Brake Kit



K-4350

	Description	P/N	QTY			Description	P/N	QTY
1	Inertia Brake Cover and Piston (NSS)	S-3200	1		5	Inertia Brake Return Spring (NSS)	8874897	1
2	Inertia Brake Steel (6) and Friction Discs (3) (NSS)	S-3202	1		6	Inertia Brake Housing (Front) Seal (NSS)	10001048	1
3	Inertia Brake Wear Guides (NSS)	10000766	2		7	Inertia Brake Housing (Rear) Seal (NSS)	10001049	1
4	Inertia Brake Piston Pin (NSS)	10000778	1					

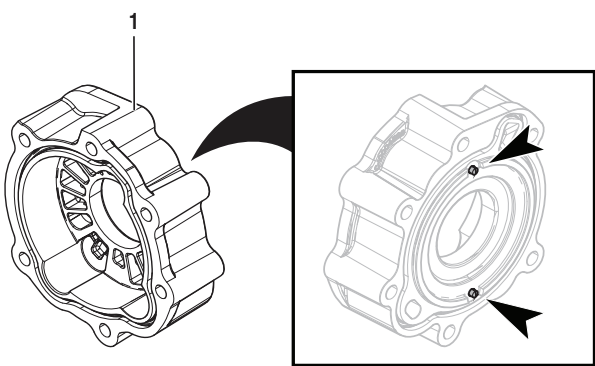
Inertia Brake Housing
(Non Hard Lock Bearing Design)



	Description	P/N	QTY
1	Inertia Brake Housing	10004216	1

Note: 10004216 Inertia Brake Housing is also available in K-4491 to support non hard lock countershaft bearing production transmissions built prior to November 18, 2022 (Trans SN ~ Z0278934).

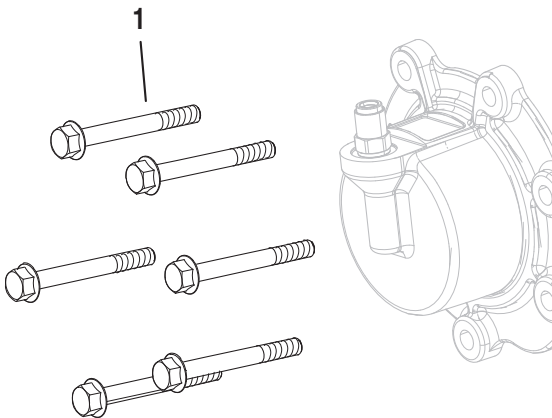
Inertia Brake Housing
(Hard Lock Bearing Design)



	Description	P/N	QTY
1	Inertia Brake Housing	A-10004579	1

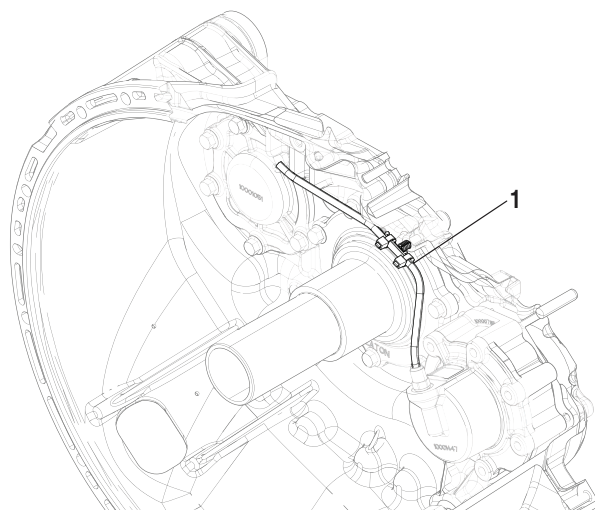
Note: A-10004579 Hard Lock Inertia Brake Housing cannot be used on transmissions built prior to November 18, 2022 (Trans SN ~ Z0278934) without a countershaft bearing change to hard lock bearing design (K-4652). A-10004579 is also found in K-4654.

Inertia Brake Cover Cap Screw



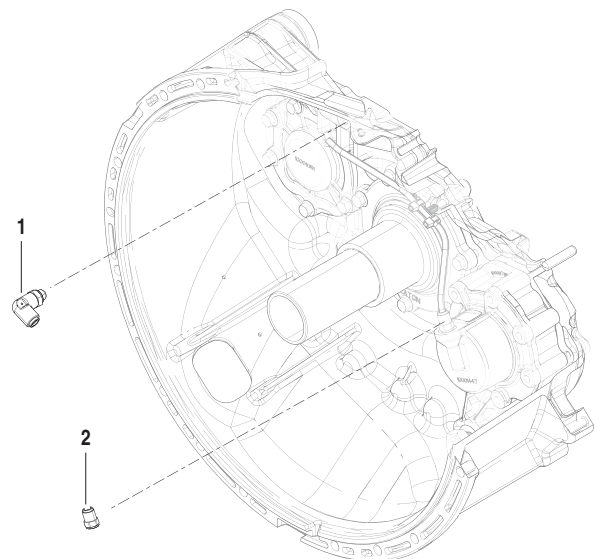
	Description	P/N	QTY
1	Inertia Brake Cover Cap Screw (M8X1.25X70)	10001813-MP6	6

Inertia Brake Air Line Assembly



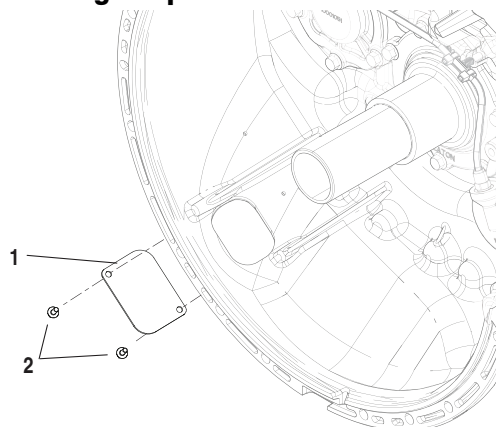
	Description	P/N	QTY
1	Inertia Brake Air Line Assembly	S-3204	1

Inertia Brake Air Line Fitting



	Description	P/N	QTY
1	Inertia Brake Air Line Swivel Fitting	10001240	1
2	Inertia Brake Air Line Straight Fitting	10001239	1

Clutch Housing Inspection Cover

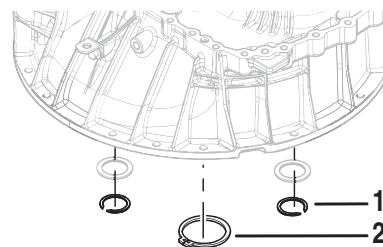


	Description	P/N	QTY
1	Clutch Housing Inspection Cover	10001202	1
2	Clutch Housing Inspection Cover Cap Screws (M6x1.0x16)	X-8-0625M	2

Breather

	Description	P/N	QTY
1	Breather	4304602	1

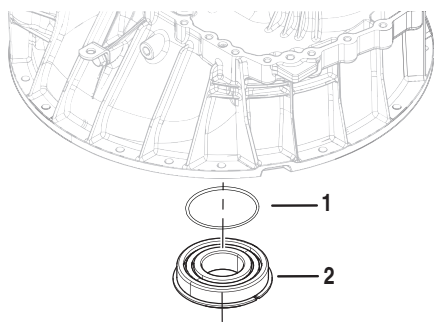
Front Snap Ring Kit



K-4359

	Description	P/N	QTY
1	Countershaft Snap Ring	4302082	2
2	Input Shaft Snap Ring	10000624	1

Input Shaft Bearing Kit



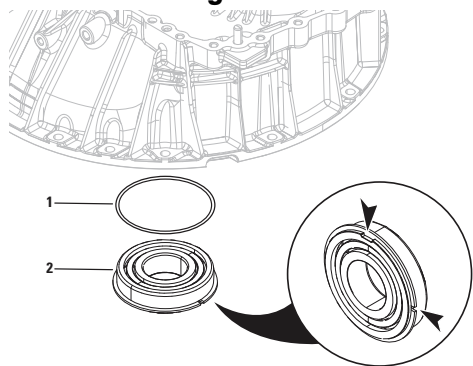
K-4483 (Non Hard Lock Bearing Design)

	Description	Part Number	QTY
1	Input Shaft Bearing O-Ring	10003862	1
2	Input Shaft Ball Bearing (NSS)	10000552	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft Bearing is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: HD production changed to 10004584 Hard Lock Bearing Design Input Shaft Bearing in June 2023. K-4483 obsoleted in NAFTA 07/03/2023. Use K-4658.

Input Shaft Bearing Kit



K-4658 (Hard Lock Bearing Design)

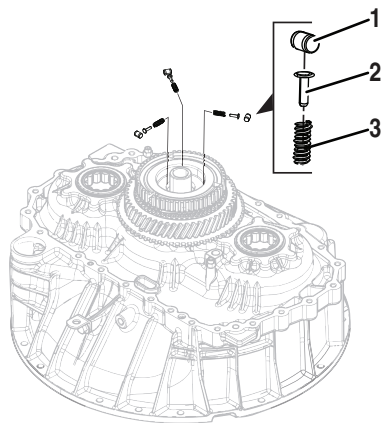
	Description	Part Number	QTY
1	Input Shaft Bearing O-Ring	10003862	1
2	Input Shaft Ball Bearing (NSS)	10004584	1

Note: The Main Shaft End-Play procedure is required if the Input Shaft Bearing is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: Reference Input Shaft Bearing Installation Procedure for bearing orientation when pressing in 10004584 (Hard Lock Bearing Design) bearing.

10004584 (Hard Lock Bearing Design) Input Shaft Bearing will require K-4657 (Hard Lock Bearing Design) Input Shaft Cover Kit.

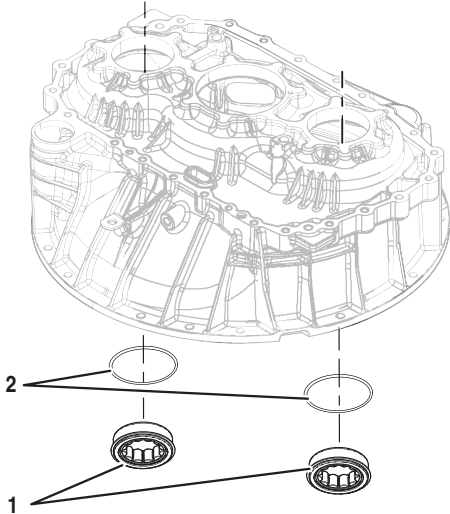
Rail B Synchronizer Small Parts Kit



K-4388

	Description	P/N	QTY
1	Rail B Synchronizer Roller (NSS)	10001959	3
2	Rail B Synchronizer Plunger (NSS)	10001711	3
3	Rail B Synchronizer Spring (NSS)	10001710	3

Countershaft Bearing Kit

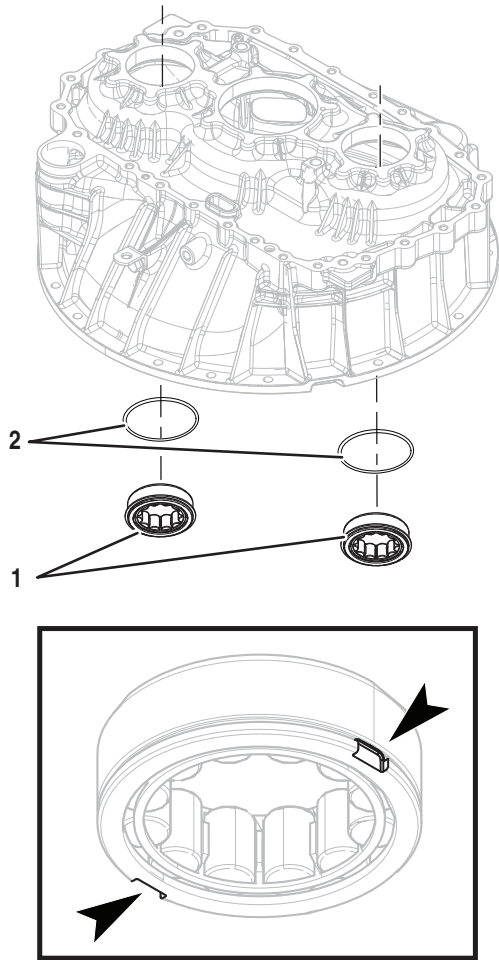


K-4484 (Non Hard Lock Bearing Design)

	Description	P/N	QTY
1	Counter Shaft Bearing	10000649	2
2	Counter Shaft Bearing O-Ring	5568511	2

Note: Clutch Housing and Main Housing use the same Countershaft Bearing part numbers. HD production went to Hard Lock Bearing Design November 18, 2022 (Trans SN ~ Z0278934). K-4484 was obsoleted in NAFTA 02/15/2023, use K-4652.

Countershaft Bearing Kit



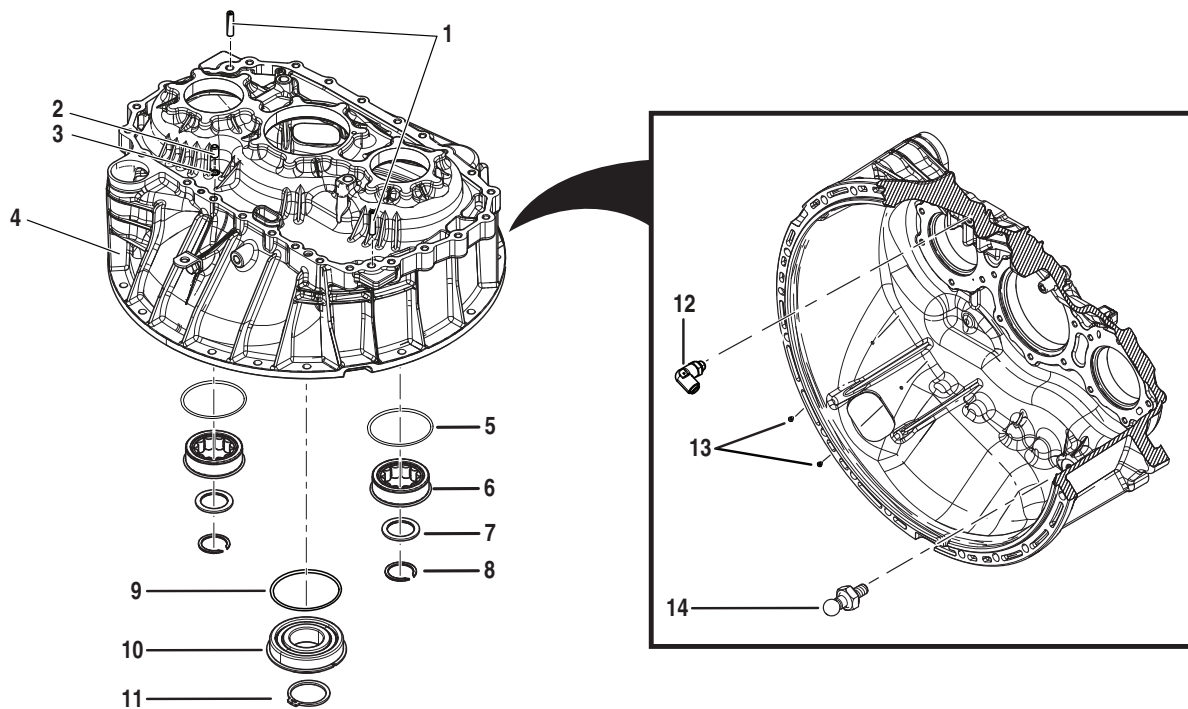
K-4652 (Hard Lock Bearing Design)

	Description	P/N	QTY
1	Counter Shaft Bearing	10004571	2
2	Counter Shaft Bearing O-Ring	5568511	2

Note: Clutch Housing and Main Housing use the same Countershaft Bearing part numbers. Reference countershaft bearing installation procedure for bearing orientation when pressing in new countershaft bearings.

Note: Use A-10004579 Inertia Brake Housing and A-10004580 Upper Countershaft Cover (also found in K-4654) when using K-4652 Hard Lock Bearing Design Kit in a clutch housing built prior to 02/15/2023.

Clutch Housing Kits



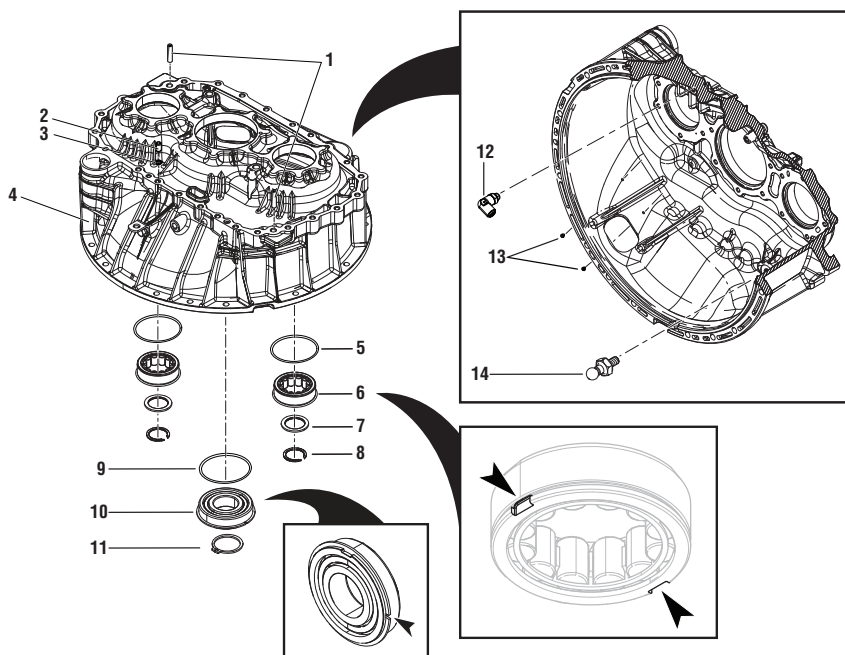
K-4358 (Non Hard Lock Bearing Design)

	Description	P/N	QTY			Description	Part Number	QTY
1	Main Housing to Clutch Housing Dowel Pins	5575522	2		8	Counter Shaft Snap Ring	4302082	2
2	I-Brake Main Housing to Clutch Housing Dowel	10001181	1		9	Input Shaft Bearing O-Ring*	10003862	1
3	I-Brake Main Housing to Clutch Housing O-ring	13834	1		10	Input Shaft Ball Bearing (NSS)*	10000552	1
4	Clutch Housing Assembly*	S-3203	1		11	Input Shaft Snap Ring	10000624	1
5	Countershaft Bearing O-Ring*	5568511	2		12	Inertia Brake Air Line Fitting*	10001240	1
6	Counter Shaft Bearing*	10000649	2		13	Serial Tag Rivets (NSS) (1/8x5/16)	X-13-229	2
7	Lower and Upper Counter-shaft Flat Washer	10001532	2		14	Release Yoke Pivot Pin	10001949	1

* Part of Clutch Housing Assembly, S-3203

Note: The Main Shaft End-Play procedure is required if the Clutch Housing is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: K-4358 was obsoleted in NAFTA 02/15/2023. Use K-4653 Hard Lock Bearing Design Clutch Housing.



K-4653 (Hard Lock Bearing Design)

	Description	P/N	QTY			Description	Part Number	QTY
1	Main Housing to Clutch Housing Dowel Pins	5575522	2		8	Counter Shaft Snap Ring	4302082	2
2	I-Brake Main Housing to Clutch Housing Dowel	10001181	1		9	Input Shaft Bearing O-Ring*	10003862	1
3	I-Brake Main Housing to Clutch Housing O-ring	13834	1		10	Input Shaft Ball Bearing (NSS)*	10004584	1
4	Clutch Housing Assembly*	S-3250	1		11	Input Shaft Snap Ring	10000624	1
5	Countershaft Bearing O-Ring*	5568511	2		12	Inertia Brake Air Line Fitting*	10001240	1
6	Counter Shaft Bearing*	10000649	2		13	Serial Tag Rivets (NSS) (1/8x5/16)	X-13-229	2
7	Lower and Upper Counter-shaft Flat Washer	10001532	2		14	Release Yoke Pivot Pin	10001949	1

* Part of Clutch Housing Assembly, S-3250

Note: The Main Shaft End-Play procedure is required if the Clutch Housing is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

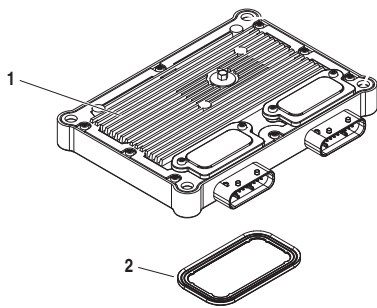
Note: K-4653's built before June 15th, 2023, were manufactured with non hard-lock Input Shaft Bearing (10000552).

Note: Use A-10004579 Inertia Brake Housing and A-10004580 Upper Countershaft Cover (also found in K-4654) when using K-4653.

Note: Use A-10004581 Input Shaft Cover (Also found in K-4657) when using K-4653.

Main Housing Service Kits

Transmission Control Module (TCM) Kits



	Description	PN	QTY
1	TCM (NSS)	Varies	1
2	TCM Seal	10001587	1

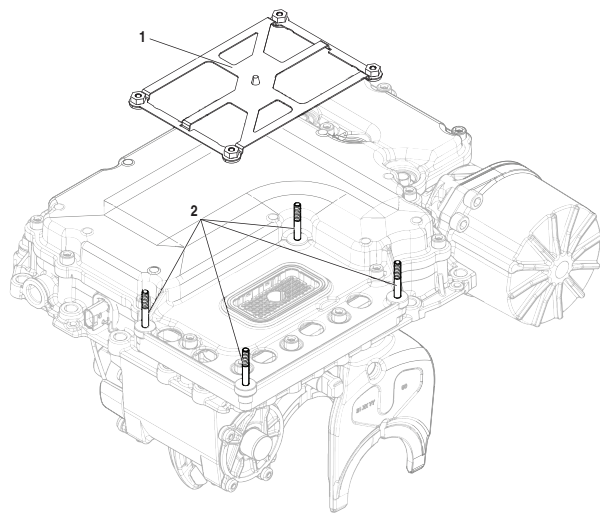
Transmission Control Module (TCM) Kit Part Number Identification

Record Transmission Model and compare in table to determine TCM Kit part number.

TCM Type	TCM Part Number	Transmission Model	TCM Kit PN	TCM Kit PN at PACCAR
A5	10003852	EEO-xxF112C	K-4616	K-4616-PAC
		EE-xxF111B	K-4617	K-4617-PAC
		EHD-xxF112C-N	K-4618	K-4618-PAC
		EHD-xxF112C-V	K-4664	K-4664-PAC
		PO-xxF112C		K-4619-PAC
		PHDP-xxF112C		K-4665-PAC

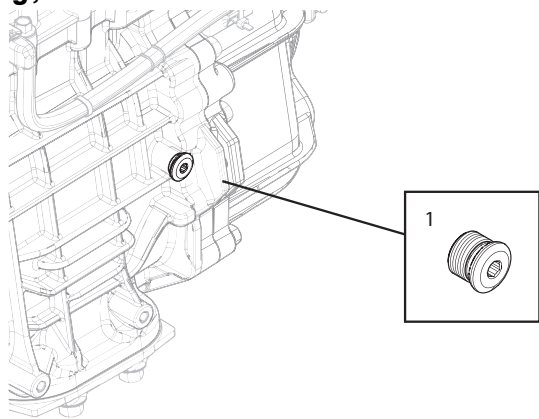
Note: Refer to **New Replacement Transmission Control Module (TCM) Service Procedure** in the Endurant HD Service Manual TRSM-0950 for original TCM removal and new replacement TCM installation.

TCM Cover and Mounting Stud



	Description	P/N	QTY
1	TCM Cover	4307675	1
2	TCM Mounting Stud (M6x50.0)	5577511-MP4	4

Plug, Fluid Pressure Sensor



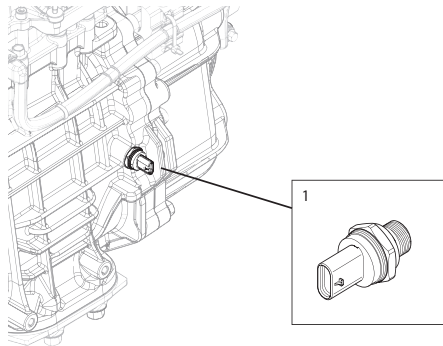
	Description	P/N	QTY
1	Plug, Fluid Press Sensor (M14X1.5)	4308231	1

Sealant



	Description	P/N	QTY
	Anaerobic Sealant (50 ML / 1.69 Oz.)	5564561	1

Fluid Pressure Sensor Kit

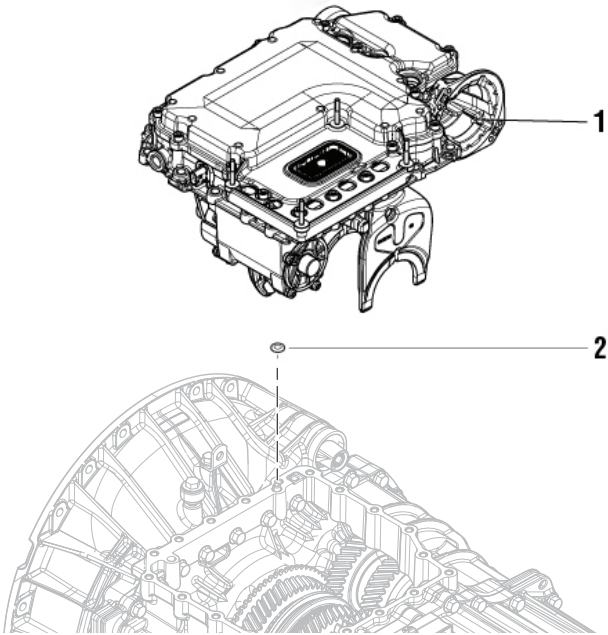


K-4387

	Description	P/N	QTY
1	Fluid Pressure Sensor	10004110	1

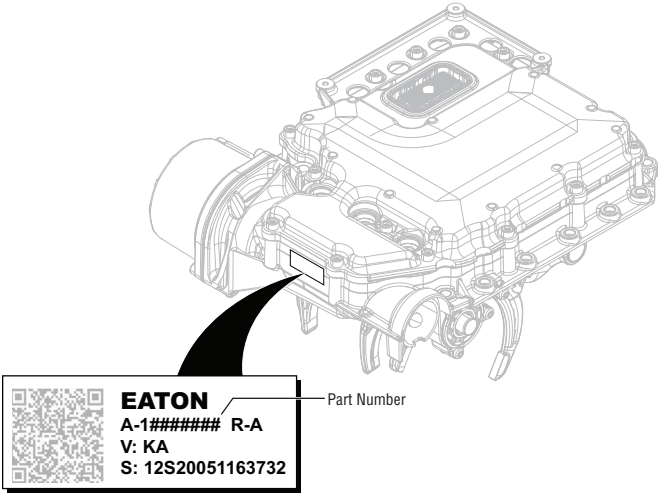
Mechatronic Transmission Module (MTM) Kits

PS-393



	Description	P/N	QTY
1	MTM (NSS)	Varies	1
2	I-Brake MTM to Main Housing O-Ring	13653	1

Mechatronic Transmission Module (MTM) Kit Part Number Identification





EATON

A-1##### R-A

V: KA

S: 12S20051163732

Part Number

MTM Kits

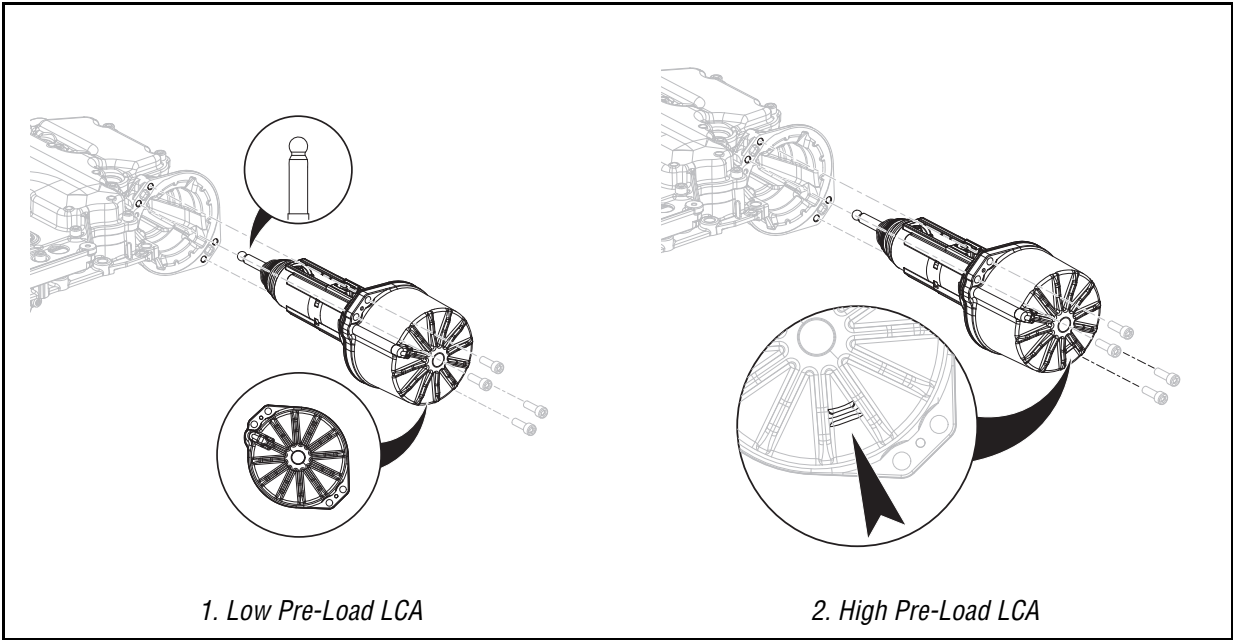
Record Transmission Model and compare in table to determine MTM Kit part number.

MTM Part Number	Transmission Model	MTM Kit PN	MTM Kit PN at PACCAR
A-10000715R A-10004231R	EEO-xxF112C	K-4355W*	K4355W-PAC*
	EE-xxF111B		
	EHD-xxF112C-N		
A-10004231	EHD-xxF112C-V	K-4497R	K-4497R-PAC
A-10002594R A-10004383R	PO-xxF112C		K-4356W-PAC*
A-10004383	PHDP-xxF112C		K4701R-PAC

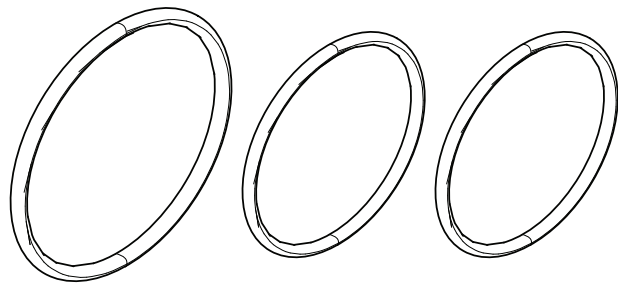
*MTM Kits do not include a Linear Clutch Actuator (LCA) - Remove and install original equipment LCA onto replacement MTM.

NOTICE: After MTM installation, go to Endurant HD Service Manual TRSM0950 and Configure MTM Type - PS-393.

Note: If original equipment LCA is a Low Pre-Load type, it is highly recommended to install a High Pre-Load type LCA (customer pay) - Identified by a raised casting at the 5 o'clock position: PN K-4357 (R).



MTM O-ring Kit (Rail B, C, D Cylinders)



K-4637

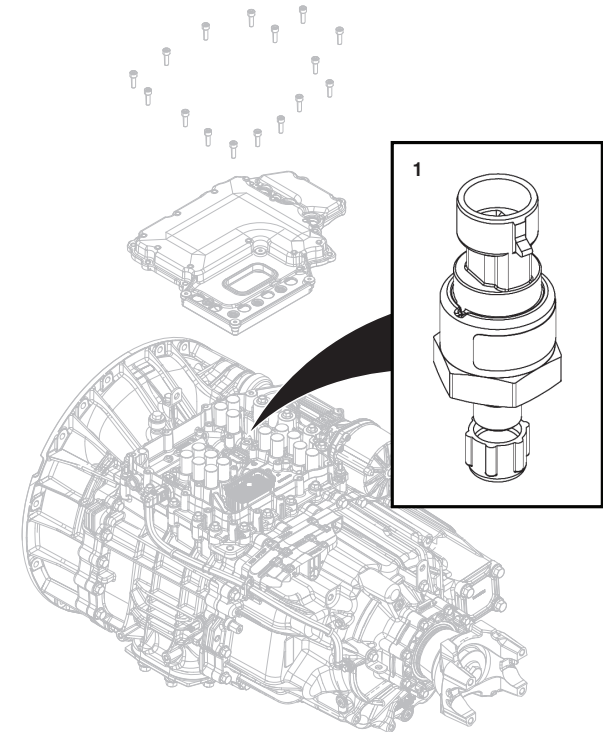
Note: Reference TAIB-0994 for warranty information and use criteria.

	Description	P/N	QTY
1	Thread Adhesive	71232	1
2	MTM O-rings (NSS)	K-4636	1

K-4636 (NSS)

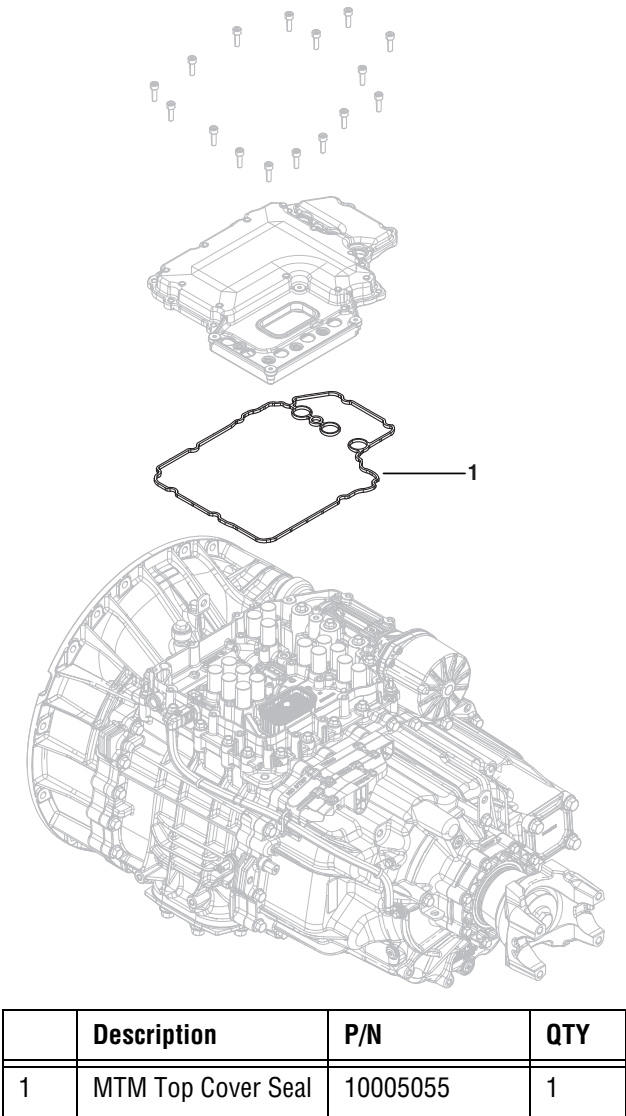
	Description	P/N	QTY
1	Rail B Cylinder O-ring 64mm (2.5 in)		1
1	Rail C/D Cylinder O-ring 47mm (1.85 in)		2

MTM Air Pressure Sensor

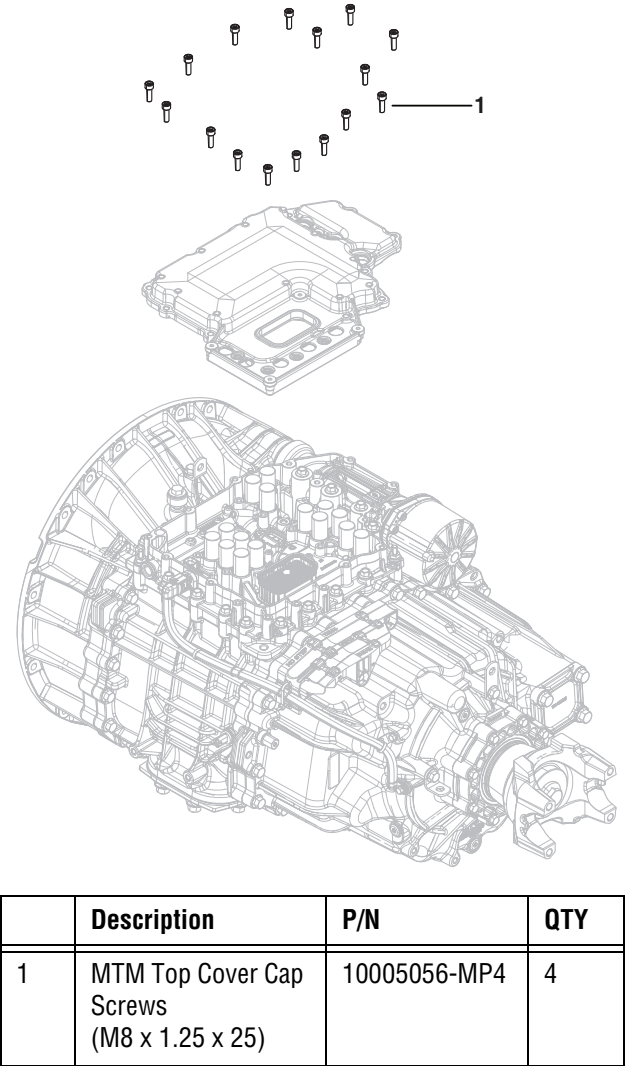


	Description	P/N	QTY
1	Air Pressure Sensor	10005053	1

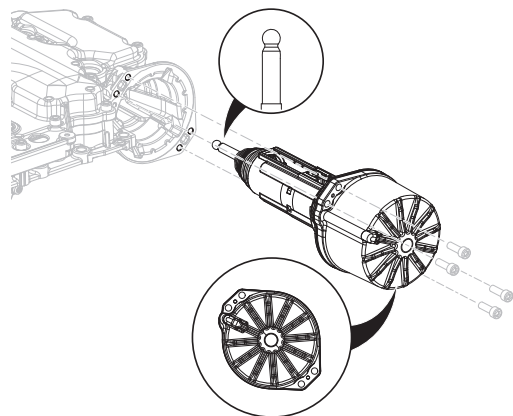
MTM Top Cover Seal



MTM Top Cover Cap Screws



Linear Clutch Actuator (LCA) Kit



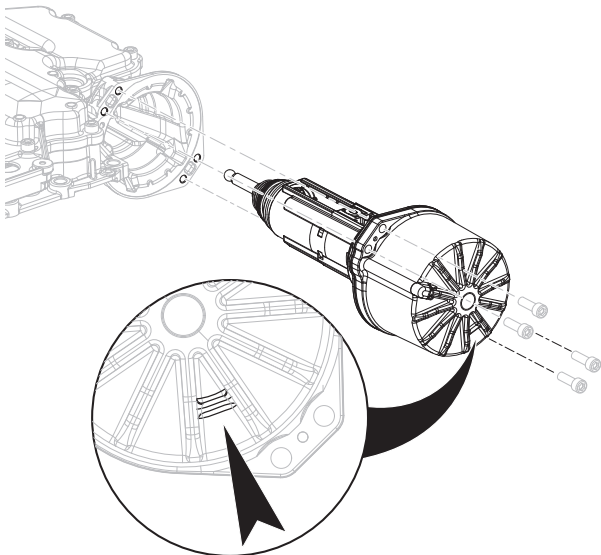
K-4357R

	Description	P/N	QTY
1	LCA	A-10004457 A-10004457R	1

Note: A-10004457 replaced A-10000714 and is required for transmission serial number Z0246939 and above.

Note: K-4357R replaces K-4357 (previously A-10000714 or A-10004457) effective as of 03/27/2024.

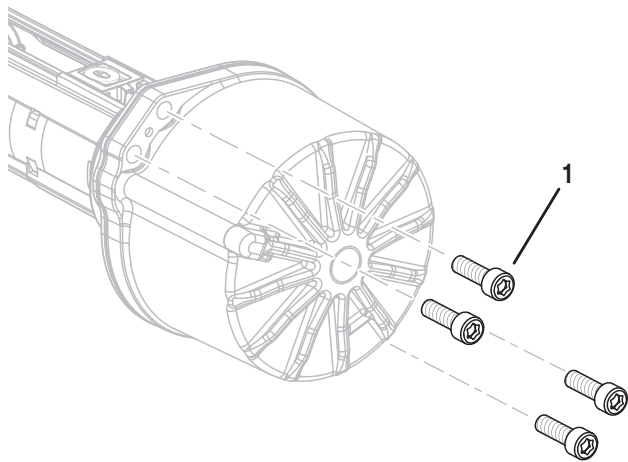
High Preload Linear Clutch Actuator (LCA)



	Description	P/N	QTY
1	LCA (NSS)	A-10004457	1

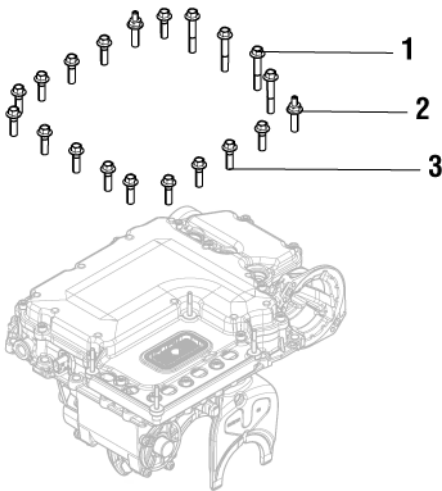
Note: A-10004457 is the High Preload LCA and is identified by the casting mark at the 5:00 position.

LCA Mounting Cap Screws



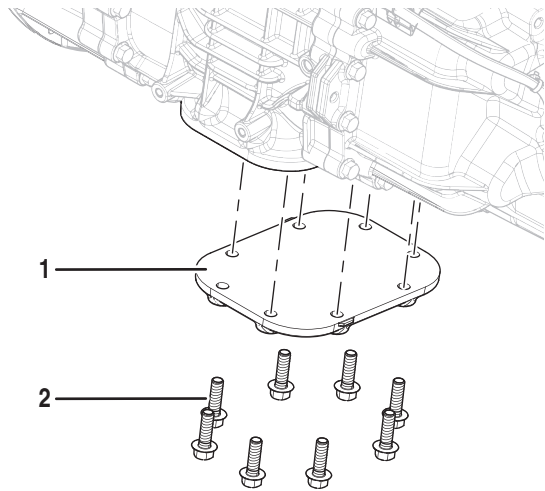
	Description	P/N	QTY
1	LCA Cap Screw (M8 X 1.25 X 30)	X-8-0847M-MP4	4

MTM Cap Screws



	Description	P/N	QTY
1	MTM Cap Screw, Long (M10X1.5X60)	10001222- MP4	4
2	MTM Cap Screw, Spe- cial (M10X1.5X38 & M8X1.25X13)	10001815- MP4	4
3	MTM Cap Screw (M10X1.5X35)	10001179- MP20	20

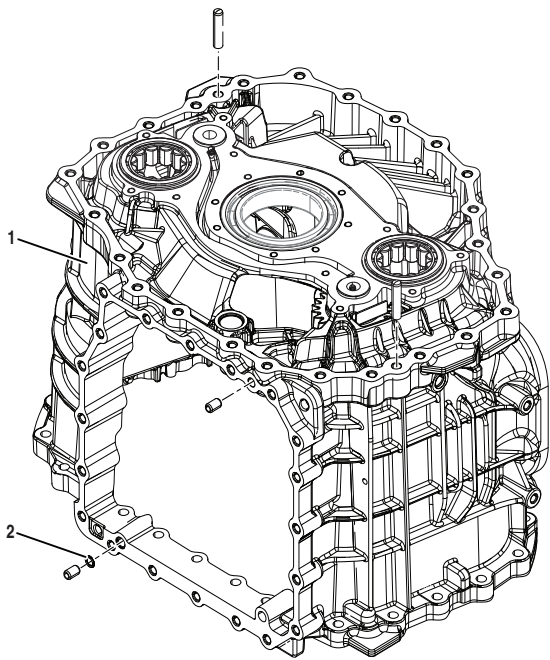
8-Bolt PTO Cover Kit



K-4385

	Description	P/N	QTY
1	8-Bolt PTO Cover	10001399	1
2	PTO Cover Cap Screws (M12x1.75x40)	10001483-MP8	8

Main Housing Kit



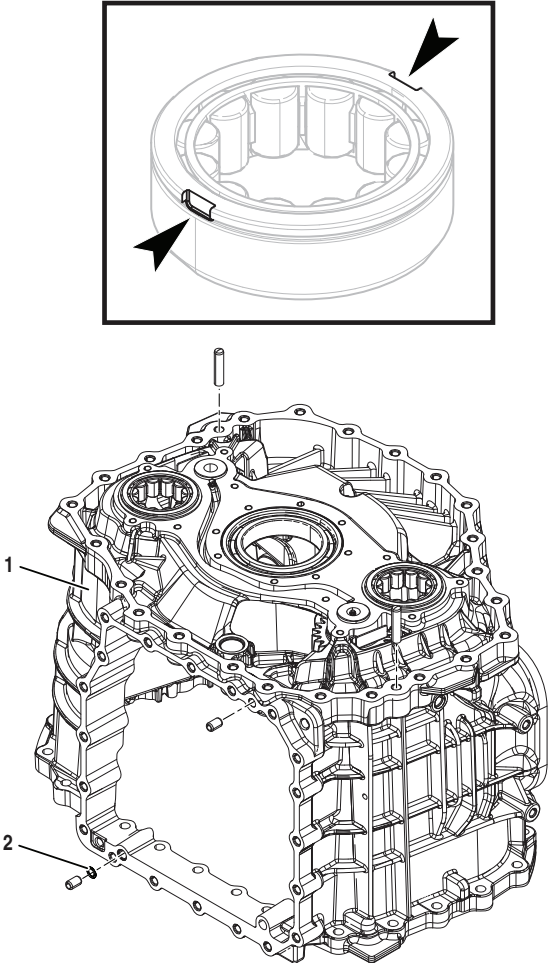
K-4364 (Non Hard Lock Bearing Design)

	Description	P/N	QTY
1	Main Housing (NSS)	S-3208	1
2	I-Brake MTM to Main Housing O-ring	13653	1

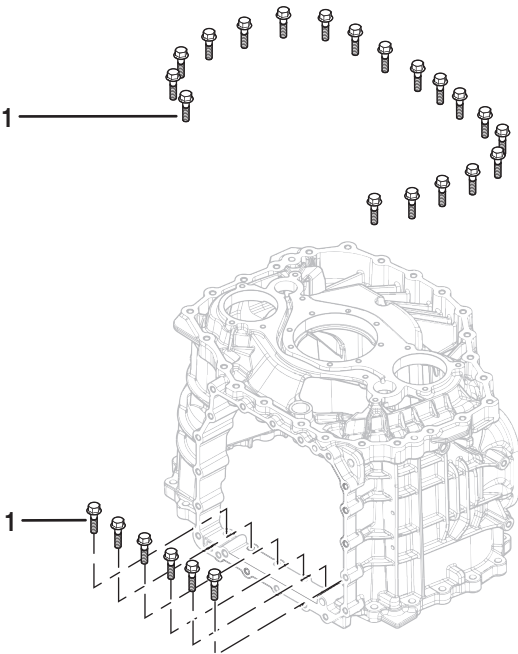
Note: The Main Shaft End-Play procedure is required if the Main Housing is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: K-4364 was obsoleted 02/15/2023 in NAFTA. Use K-4646.

Main Housing Kit



Main Housing Cap Screw



	Description	P/N	QTY
1	Main Housing Cap Screws (M10x1.5x40)	10002067-MP25	25

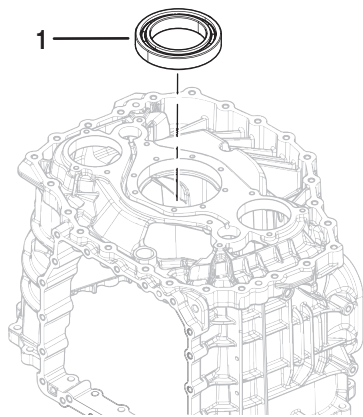
K-4646 (Hard Lock Bearing Design)

	Description	P/N	QTY
1	Main Housing (NSS)	S-3251	1
2	I-Brake MTM to Main Housing O-ring	13653	1

Note: The Main Shaft End-Play procedure is required if the Main Housing is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Note: Use Hard Lock bearing oil pump A-10004577 (Single PTO) or A-10004583 (Dual PTO) when using K-4646 Main Housing.

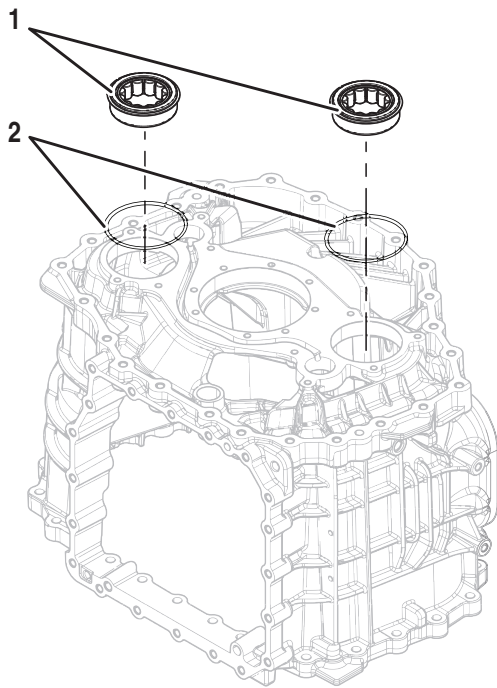
Main Shaft Bearing



	Description	P/N	QTY
1	Main Shaft Bearing	10000683	1

Note: The Main Shaft End-Play procedure is required if the Main Shaft Bearing is replaced. One of three Main Shaft Selective Washers are required to adjust end-play, Part Numbers: 10000555, 10001759, 10001760.

Countershaft Bearing Kit



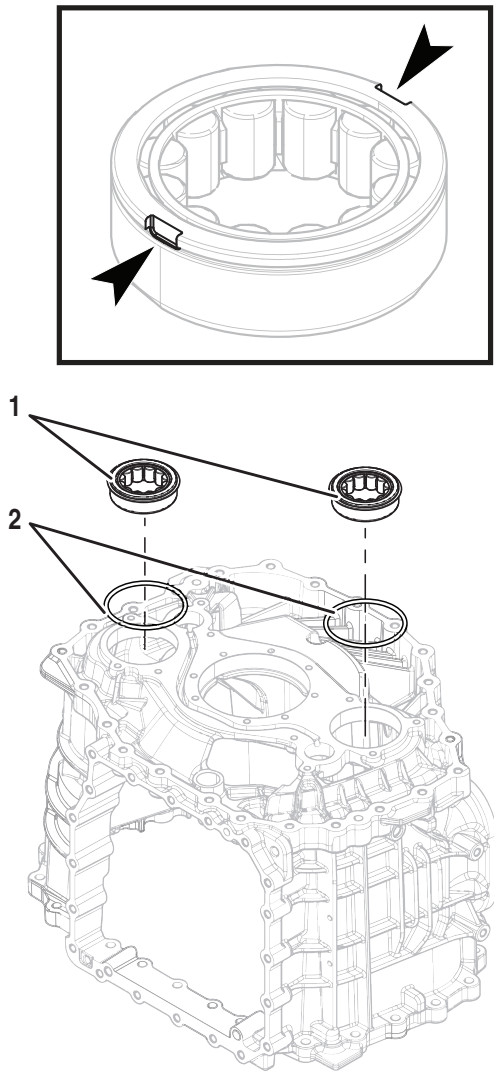
K-4484 (Non Hard Lock Bearing Design)

	Description	P/N	QTY
1	Counter Shaft Bearings	10000649	2
2	Counter Shaft Bearing O-Rings	5568511	2

Note: Main Housing and Clutch Housing use the same Countershaft Bearing part numbers.

Note: HD production went to Hard Lock Bearing Design November 18, 2022. K-4484 was obsoleted in NAFTA 02/15/2023. Use K-4652.

Countershaft Bearing Kit



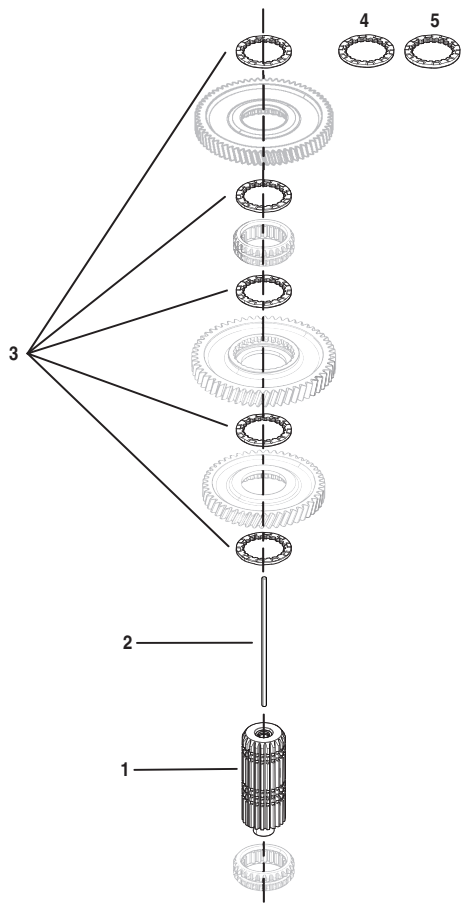
K-4652 (Hard Lock Bearing Design)

	Description	P/N	QTY
1	Counter Shaft Bearings	10004571	2
2	Counter Shaft Bearing O-Rings	5568511	2

Note: Main Housing and Clutch Housing use the same Countershaft Bearing part numbers. Reference countershaft bearing installation procedure for bearing orientation when pressing in new countershaft bearings.

Note: Use Hard Lock bearing oil pump A-10004577 (Single PTO) or A-10004583 (Dual PTO) when using K-4652 Hard Lock Bearing Design Kit in a main housing built prior to 02/15/2023.

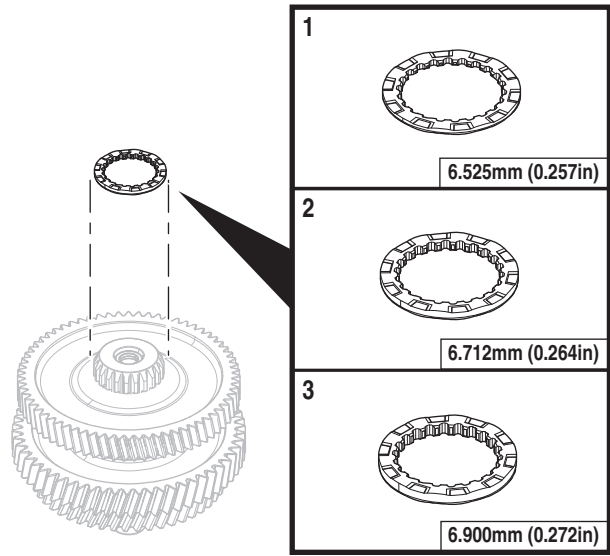
Main Shaft Kit



K-4366

	Description	P/N	QTY
1	Main Shaft (NSS)	S-3221	1
2	Main Shaft Key	10000560	1
3	Main Shaft Washer 6.525 mm (0.257 in)	10000555	5
4	Main Shaft Selective Washer 6.712 mm (0.264 in)	10001759	1
5	Main Shaft Selective Washer 6.900mm (0.272 in)	10001760	1

Main Shaft Selective Washer Kit



K-4486

	Description	P/N	QTY
1	Main Shaft Washer 6.525 mm (0.257 in)	10000555	1
2	Main Shaft Selective Washer 6.712 mm (0.264 in)	10001759	1
3	Main Shaft Selective Washer 6.900mm (0.272 in)	10001760	1

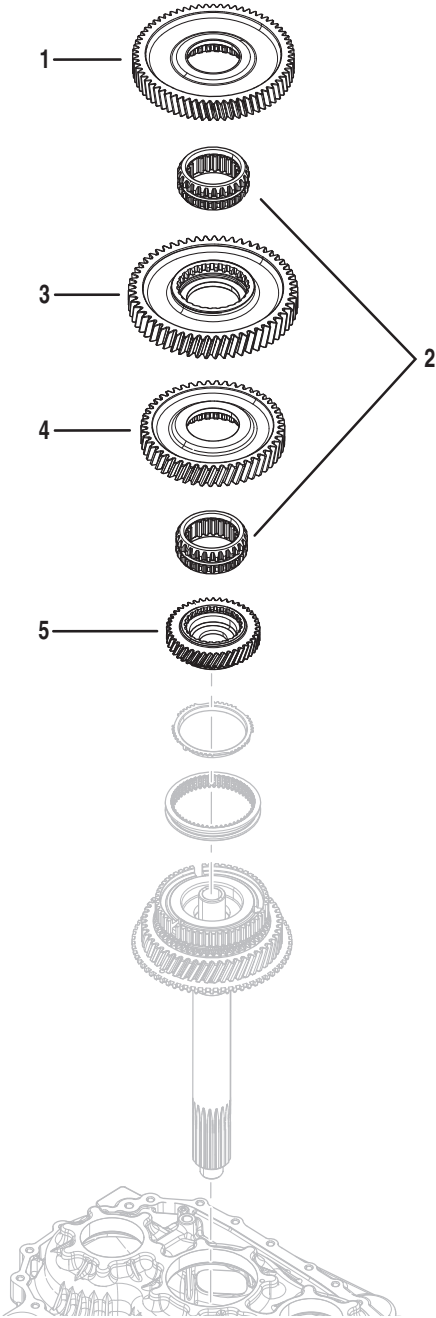
Note: The Main Shaft End-Play Service Procedure is required if one or more of the following components are replaced:

- Clutch Housing
- Main Housing
- Input Shaft
- Input Shaft Bearing
- Main Shaft Bearing



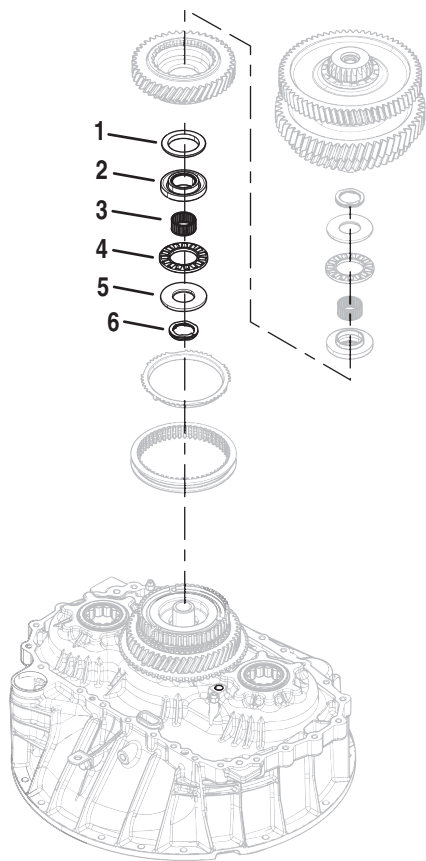
CAUTION: Failure to determine and install the ideal Main Shaft Selective Washer results in incorrect Main Shaft End-Play and transmission component damage.

Main Shaft Parts

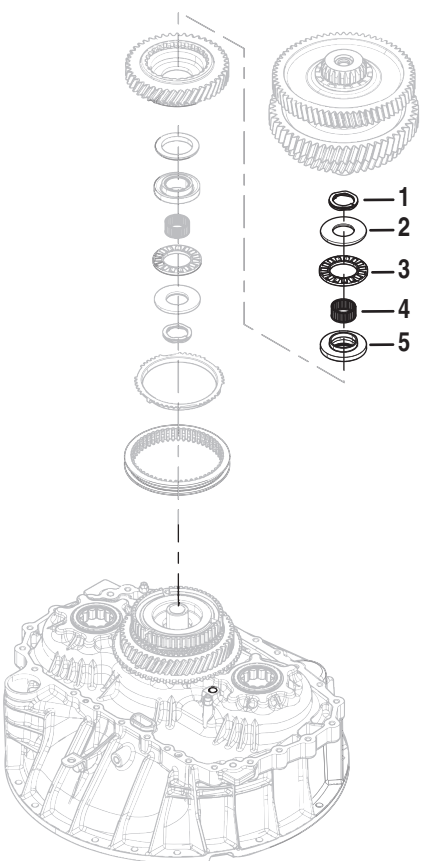


	Description	P/N	QTY
1	Reverse Gear	10000556	1
2	Rail C and D Sliding Clutches	10000557	2
3	Primary Driven Gear	10000898	1
4	Secondary Driven Gear	10000899	1
5	Primary Drive Gear	S-3206	1

Drive Gear - Front Small Parts Kit



Drive Gear - Rear Small Parts Kit




K-4367

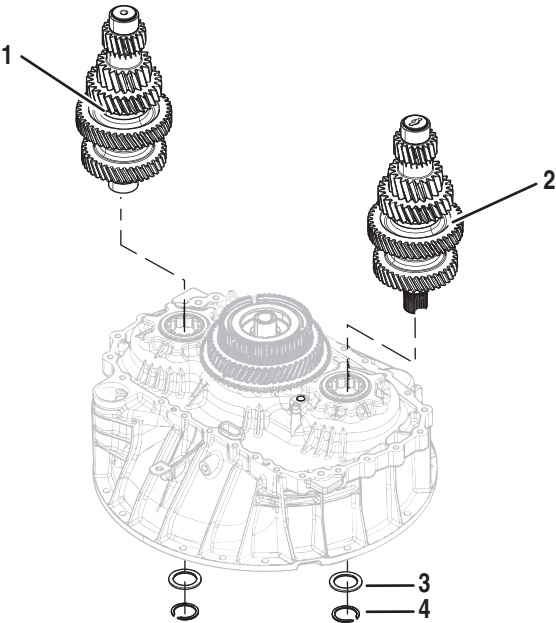
	Description	P/N	QTY
1	Spherical Washer - Front	10000545	1
2	Bearing Race - Front/Rear	S-3218	1
3	Needle Bearing - Front/Rear	10001006	1
4	Thrust Bearing - Front/Rear	10001392	1
5	Thrust Washer - Front/Rear	10001393	1
6	Wave Spring - Front	10001685	1

K-4369

	Description	P/N	QTY
1	Wave Spring - Rear	10000978	1
2	Thrust Washer - Front/Rear	10001393	1
3	Thrust Bearing - Front/Rear	10001392	1
4	Needle Bearing - Front/Rear	10001006	1
5	Bearing Race - Rear	S-3219	1

Upper & Lower Countershaft
(Single PTO) Kit


 **CAUTION:** Converting between a Single PTO transmission and a Dual PTO transmission voids transmission warranty and could result in transmission component damage.

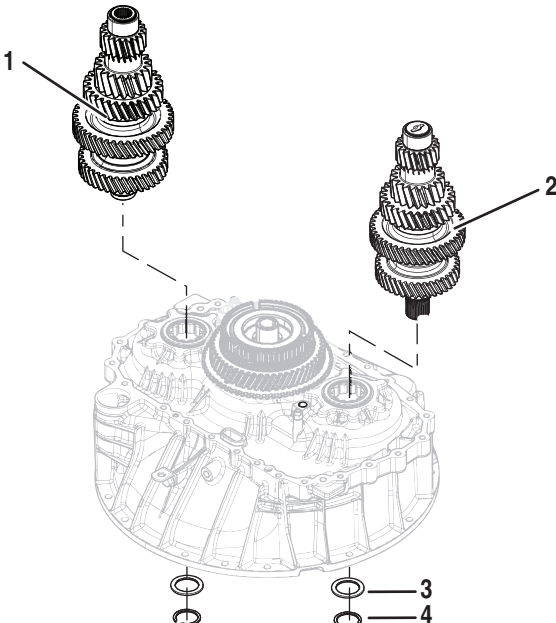


K-4370

	Description	P/N	QTY
1	Upper Countershaft	S-3211	1
2	Lower Countershaft	S-3210	1
3	Lower and Upper Countershaft Flat Washer	10001532	2
4	Lower and Upper Countershaft Snap Ring	4302082	2

Upper & Lower Countershaft
(Dual PTO) Kit

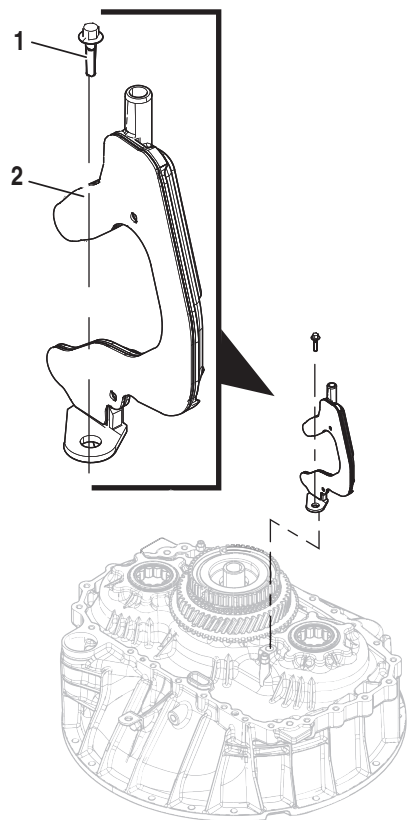
 **CAUTION:** Converting between a Single PTO transmission and a Dual PTO transmission voids transmission warranty and could result in transmission component damage.



K-4371

	Description	P/N	QTY
1	Upper Countershaft	S-3212	1
2	Lower Countershaft	S-3210	1
3	Lower and Upper Countershaft Flat Washer	10001532	2
4	Lower and Upper Countershaft Snap Ring	4302082	2

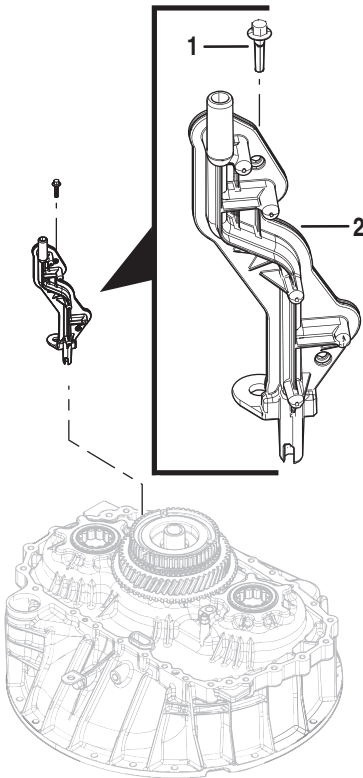
Upper Lube Tube Kit



K-4384

	Description	P/N	QTY
1	Lube Tube Cap Screw (NSS)	X-8-0629M	1
2	Upper Lube Tube (NSS)	A-10001512	1

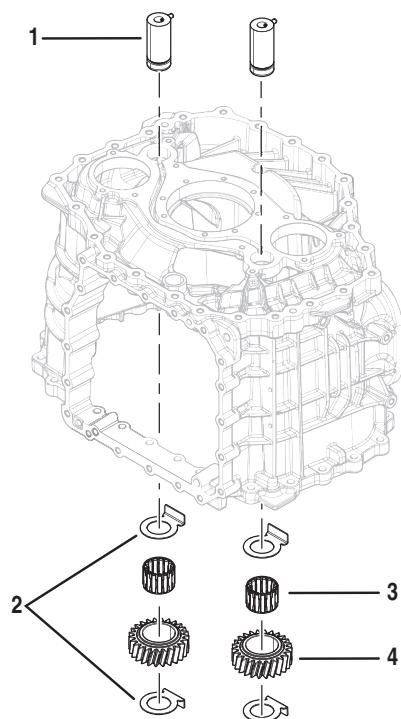
Lower Lube Tube Kit



K-4386

	Description	P/N	QTY
1	Lube Tube Cap Screw (NSS)	X-8-0629M	1
2	Lower Lube Tube (NSS)	A-10001513	1

Reverse Idler Kit

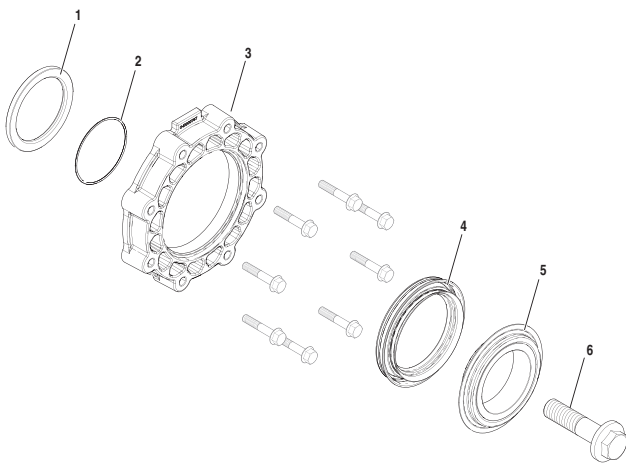


K-4365

	Description	P/N	QTY
1	Reverse Idler Shaft	S-3209	2
2	Reverse Idler Thrust Washer	10000665	4
3	Reverse Idler Gear Bearing	10001013	2
4	Reverse Idler Gear	10000664	2

Rear Housing Service Kits and Parts

Output Seal Kit

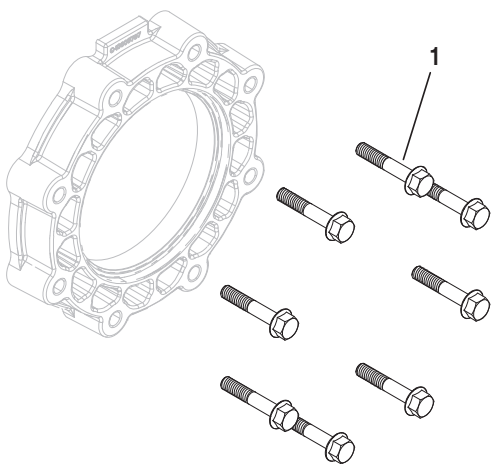


K-4399

	Description	P/N	QTY
1	Thrust Washer* (NSS)	10001089	1
2	O-ring* (NSS)	5568511	1
3	Rear Bearing Cover (NSS)	10000798	1
4	Output Shaft Seal* (NSS)	4302322	1
5	Wear Sleeve and Dust Cover* (NSS)	S-3201	1
6	Output Yoke Retainer Bolt* (M20x1.5x80)	10000949	1

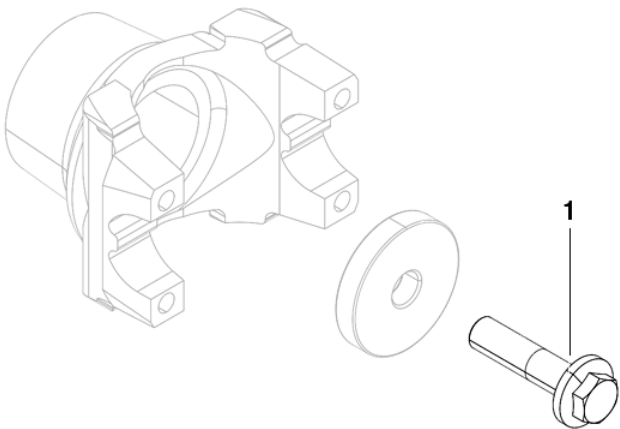
Note: *- included in K-4368, part of K-4399

Rear Bearing Cover Cap Screw



	Description	P/N	Qty
1	Rear Bearing Cover Cap Screw (M8X1.25X45)	10001172 -MP8	8

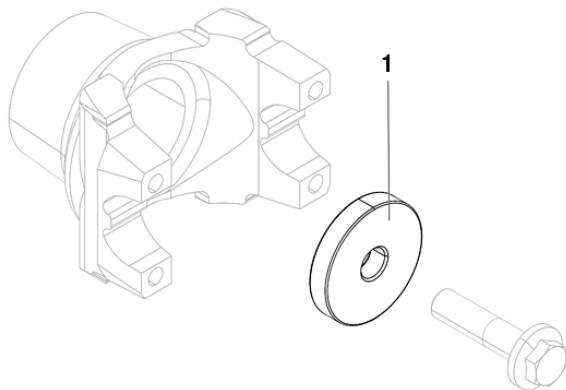
Output Yoke Retainer Bolt



WARNING: A new Retainer Bolt is required during Output Yoke installation. Failure to replace the Retainer Bolt may cause a re-used Retainer Bolt to loosen during operation and may result in major vehicle component damage, severe injury or death.

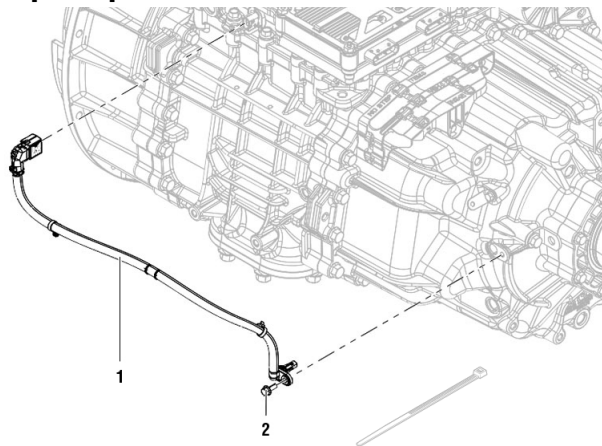
	Description	P/N	QTY
1	Output Yoke Retainer Bolt* (M20x1.5x80)	10000949	1

Output Yoke Retainer Plate



	Description	P/N	QTY
1	Retainer Plate	10000950	1

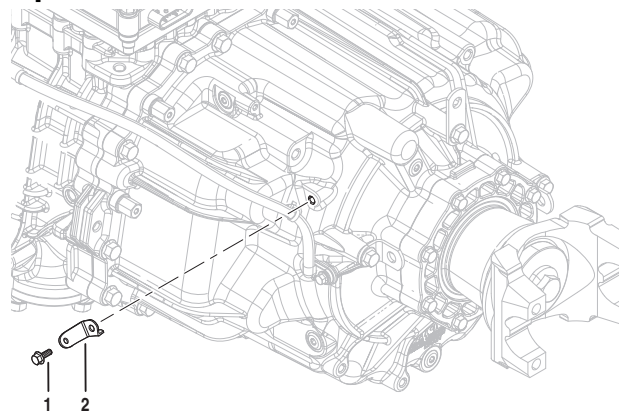
Output Speed Sensor Kit



K-4381

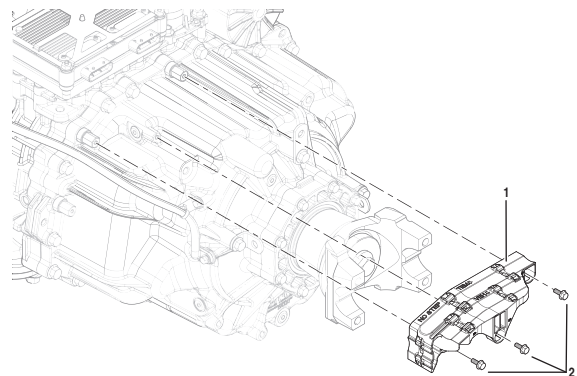
	Description	P/N	QTY
1	Output Speed Sensor Assembly (NSS)	10001792	1
2	Output Speed Sensor Cap Screw (M6x1.0x16)	X-8-0625M	1
3	Cable Tie	5559348	1

Output Speed Sensor Harness Bracket Cap Screw




	Description	P/N	QTY
1	Output Speed Sensor Harness Bracket Cap Screw (M6X1.0X16)	X-8-0625M	1
2	Output Speed Sensor Bracket	10001097	1

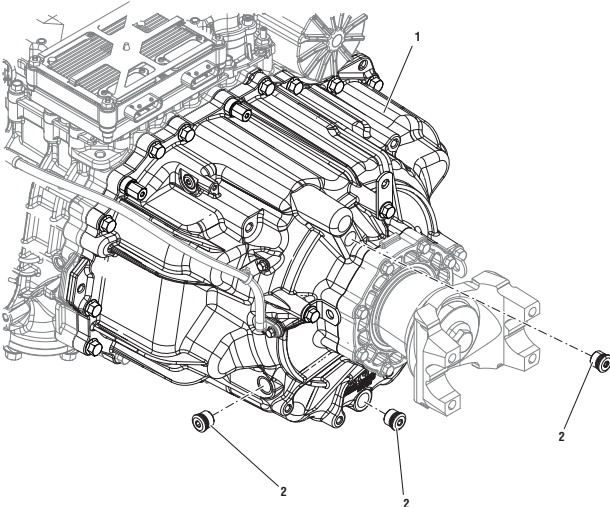
Harness Bracket Parts



	Description	P/N	QTY
1	Harness Bracket	10001082	1
2	Harness Bracket Cap Screw (M6X1.0X16)	X-8-0625M	3

Rear Housing (Single PTO) Kit


 **CAUTION:** Converting between a Single PTO transmission and a Dual PTO transmission voids transmission warranty and could result in transmission component damage.

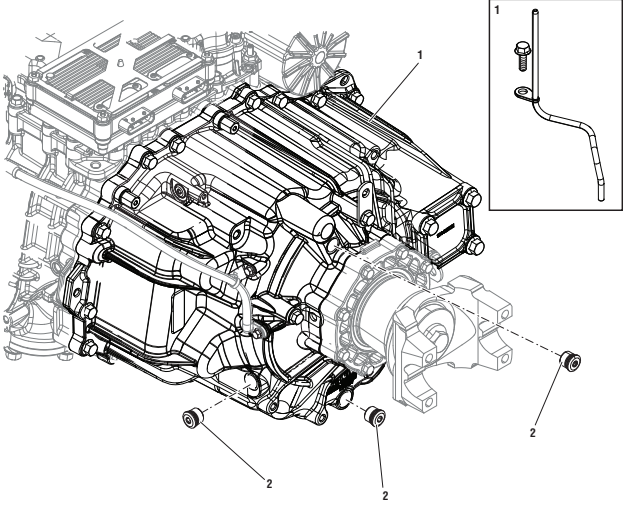


K-4372

	Description	P/N	QTY
1	Rear Housing Assembly (NSS)	S-3213	1
2	Oil Fill, Check, Drain Plug (M18x1.5)	4308230	3
Kit	Rear Bearing Cover/Output Seal Kit	K-4399	1

Rear Housing (Dual PTO) Kit

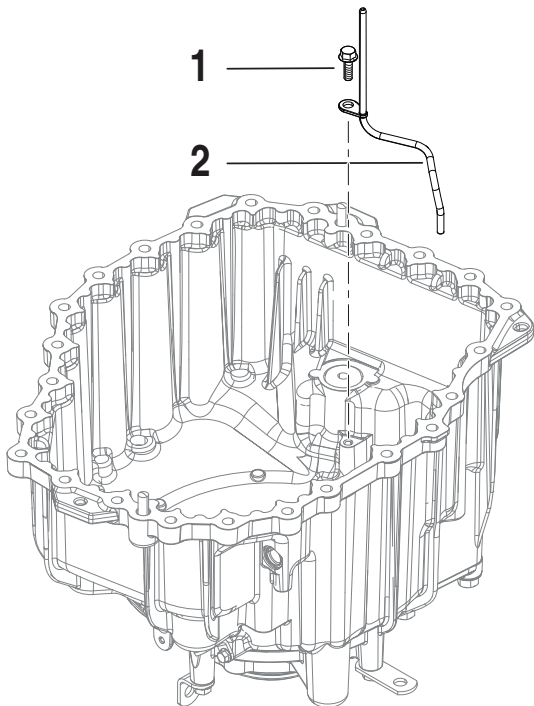
 **CAUTION:** Converting between a Single PTO transmission and a Dual PTO transmission voids transmission warranty and could result in transmission component damage.



K-4373

	Description	P/N	QTY
1	Rear Housing Assembly and Lube Tube	S-3214	1
2	Oil Fill, Check, Drain Plug (M18x1.5)	4308230	3
Kit	Rear Bearing Cover/Output Seal Kit	K-4399	1

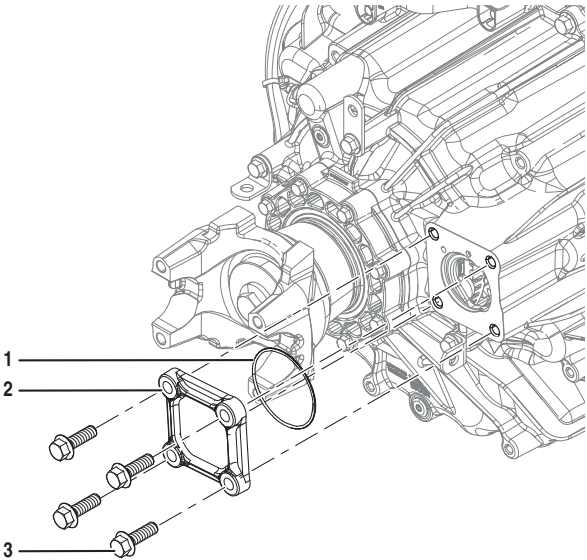
Lube Tube (Dual PTO) Kit



K-4374

	Description	P/N	QTY
1	Lube Tube (Dual PTO) Cap Screw (M8x1.25x25)	10001814	1
2	Lube Tube (Dual PTO) (NSS)	A-10002515	1

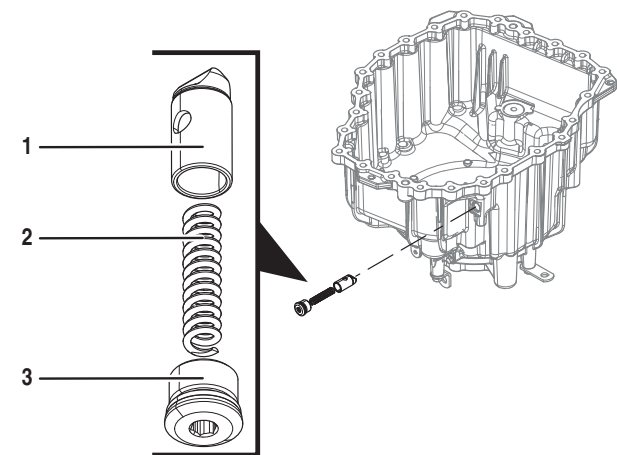
Rear PTO Cover (Dual PTO) Kit



K-4375

	Description	P/N	QTY
1	Rear PTO Cover O-ring	4307971	1
2	Rear PTO Cover (NSS)	A-10002922	1
3	Rear PTO Cover Cap Screw (M12x1.75x40)	10001483	4

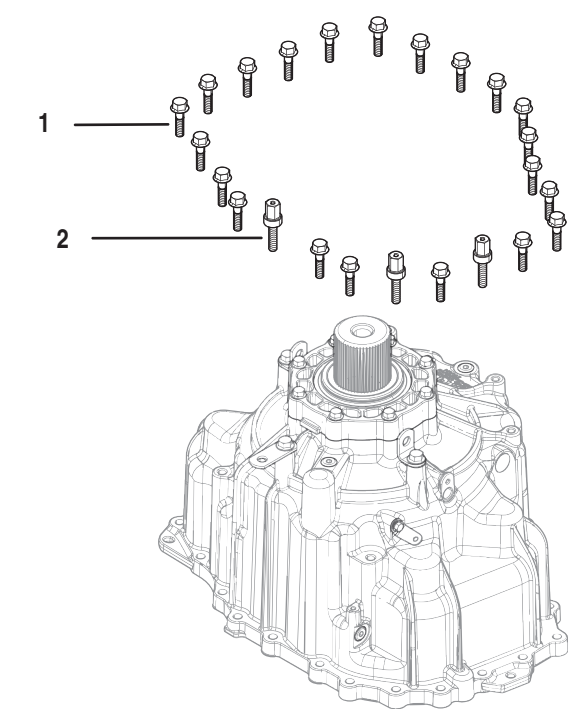
Rail E Detent Kit



K-4376

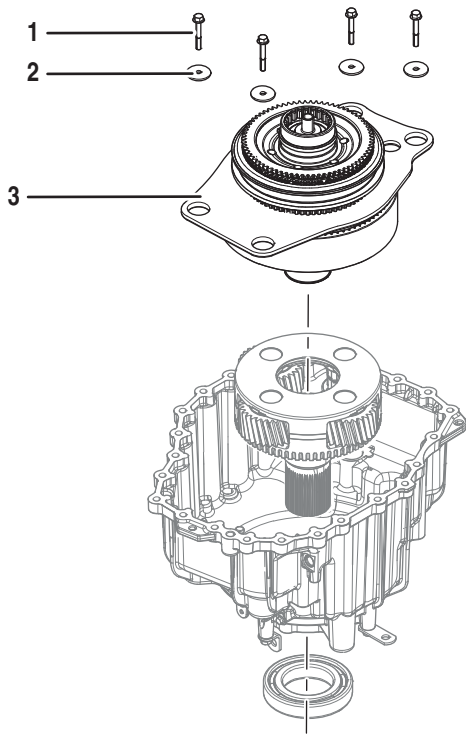
	Description	P/N	QTY
1	Rail E Detent (NSS)	4307820	1
2	Rail E Detent Spring (NSS)	10001120	1
3	Rail E Detent Plug (M18x1.5)	4308230	1

Rear Housing Cap Screws



	Description	P/N	QTY
1	Rear Housing Cap Screw (M10x1.5x40)	10002067-MP25	21
2	Rear Housing Threaded Cap Screw (M10)	10001102-MP3	3

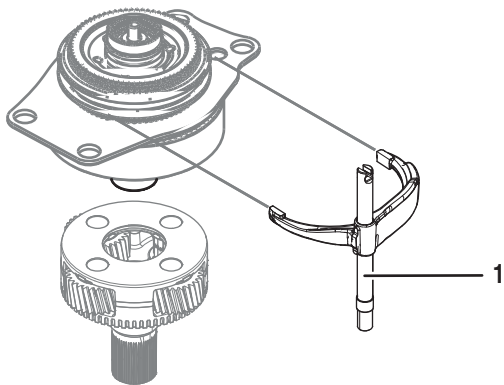
Range Synchronizer Assembly Kit



K-4499R

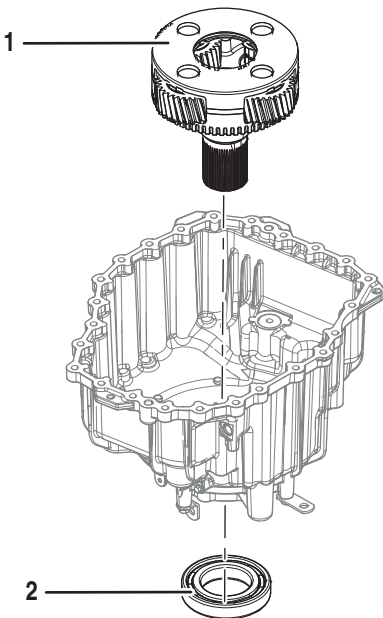
	Description	P/N	QTY
1	Range Synchronizer Cap Screw (M8x1.25x55)	10001167	4
2	Range Synchronizer Washer (M8)	10001168	4
3	Range Synchronizer Assembly (NSS)	S-3222	1

Shift Rail E (and Yoke)



	Description	P/N	QTY
1	Shift Rail E (and Yoke)	S-3216	1


Planetary Output Shaft Assembly Kit

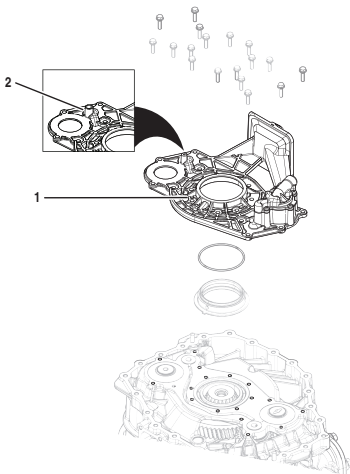


K-4378

	Description	P/N	QTY
1	Planetary Output Shaft Assembly (NSS)	S-3217	1
2	Output Bearing	10000592	1

Oil Pump Assembly
(Non Hard Lock Bearing Design)


 **CAUTION:** Converting between a Single PTO transmission and a Dual PTO transmission voids transmission warranty and could result in transmission component damage.

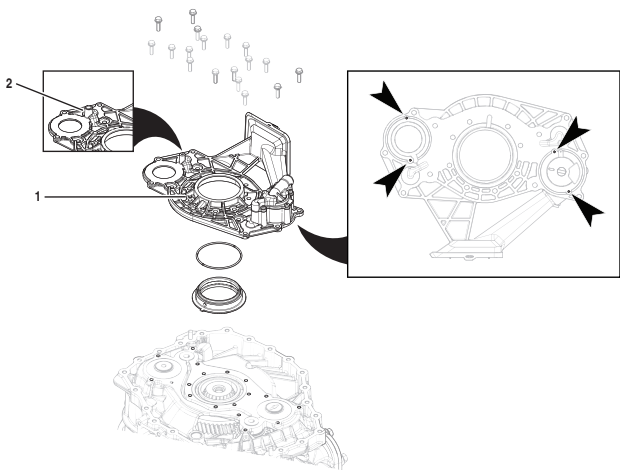


	Description	P/N	QTY
1	Single PTO	A-10001057	1
2	Dual PTO	A-10002528	1

Note: HD production went to Hard Lock Bearing Design mid November 2022. A-10001057 (Single PTO) and A-10002528 (Dual PTO) oil pumps were obsoleted in NAFTA 02/15/2023. Use A-10004577 (Single PTO) or A-10004583 (Dual PTO) oil pumps.

Oil Pump Assembly
(Hard Lock Bearing Design)

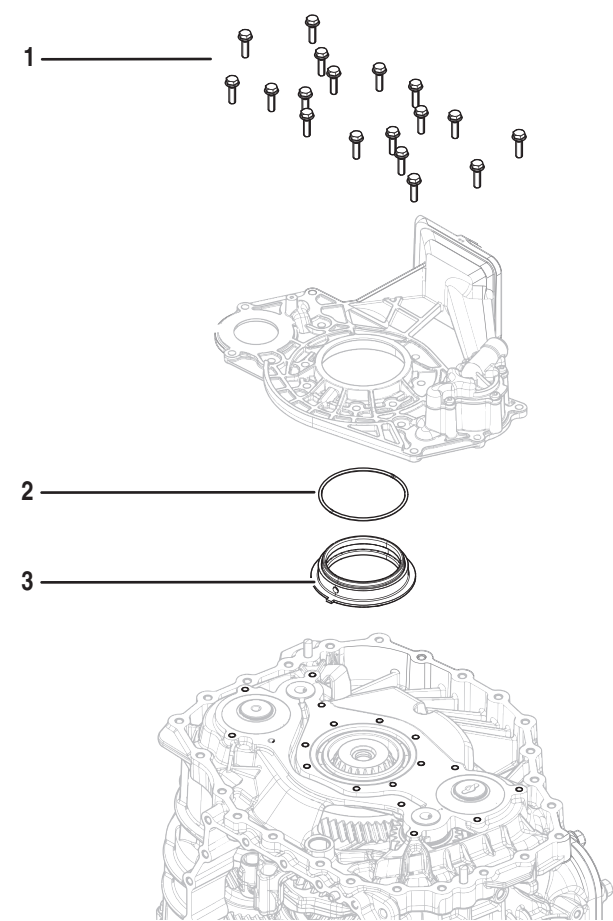
 **CAUTION:** Converting between a Single PTO transmission and a Dual PTO transmission voids transmission warranty and could result in transmission component damage.



	Description	P/N	QTY
1	Single PTO	A-10004577	1
2	Dual PTO	A-10004583	1

Note: A-10004577 and A-10004583 Hard Lock Oil Pumps cannot be used with main housings built in production prior to November 18, 2022 (Trans SN ~ Z0278934) without replacing the countershaft bearings K-4652. Reference countershaft bearing installation procedure for bearing orientation when pressing in new countershaft bearings. Main Case K-4646 (Hard Lock Design) supports Hard Lock Oil pumps.

Oil Pump/Range Spacer Parts



	Description	P/N	QTY
1	Pump Cap Screw (M8X1.25X30)	10001412-MP20	18
2	Oil Pump/Range Spacer O-ring	10001065	1
3	Oil Pump/Range Spacer	10000907	1

Lubricant

- PS-386 HD Synthetic Transmission Lubricant

	Description	P/N	QTY
	1 Gallon Jug	5564546-M4	4
	5 Gallon Pail	5564543	1
	55 Gallon Drum	5564544	1

Change Log

Date	Description
January 2025	Updated Single PTO Identification Table
December 2024	Updated Clutch Service Kits
November 2024	Changed references from “Navistar” to “International Motors”
October 2024	Updated TCM, MTM and Clutch Kit Tables
August 2024	Updated Clutch Service Kits
July 2024	Added 10005053 Air Pressure Sensor, 10005055 MTM Top Cover Seal, 10005056 MTM Top Cover Cap Screws. Updated Clutch service kits. Added Pilot Bearings table.
May 2024	Removed unnecessary note under LCA Kit K-4357R.
April 2024	Document reworked for online publication. Changes to MTM and TCM Kits. Updated Clutch Service Kits Table.
March 2023	Updated Service Kit and Parts Index Added Hard Lock Kits to Clutch, Main, and Rear Kits Sections
October 2022	Created manual Updated Service Kit and Parts Index

Copyright Eaton, 2025.

Eaton hereby grant their customers, vendors, or distributors permission to freely copy, reproduce and/or distribute this document in printed format. It may be copied only in its entirety without any changes or modifications. THIS INFORMATION IS NOT INTENDED FOR SALE OR RESALE, AND THIS NOTICE MUST REMAIN ON ALL COPIES.

Note: Features and specifications listed in this document are subject to change without notice and represent the maximum capabilities of the software and products with all options installed. Although every attempt has been made to ensure the accuracy of information contained within, Eaton makes no representation about the completeness, correctness or accuracy and assumes no responsibility for any errors or omissions. Features and functionality may vary depending on selected options.

For spec'ing or service assistance, call 1-800-826-HELP (4357) or visit www.eaton.com/roadranger. In Mexico, call 001-800-826-4357.

Roadranger: Eaton and trusted partners providing the best products and services in the industry, ensuring more time on the road.

Eaton
Vehicle Group
13100 E. Michigan Ave.
Galesburg, MI 49053 USA
800-826-HELP (4357)
www.eaton.com/roadranger

Printed in USA