

## Meritor MTC4208XL-EVO Transfer Case Parts Manual

Pro Gear Meritor MTC4208XL-EVO Transfer Case Parts Manual to assist in identifying your Meritor unit. If you need any assistance identifying the correct transfer case unit for your truck and equipment, contact your Meritor replacement part specialists at Pro Gear and Transmission.

Pro Gear Transmission has same day shipping and 1000's of products in stock and ready to ship internationally for your next project.

For parts or service contact the Meritor specialists at Pro Gear & Transmission, Inc.

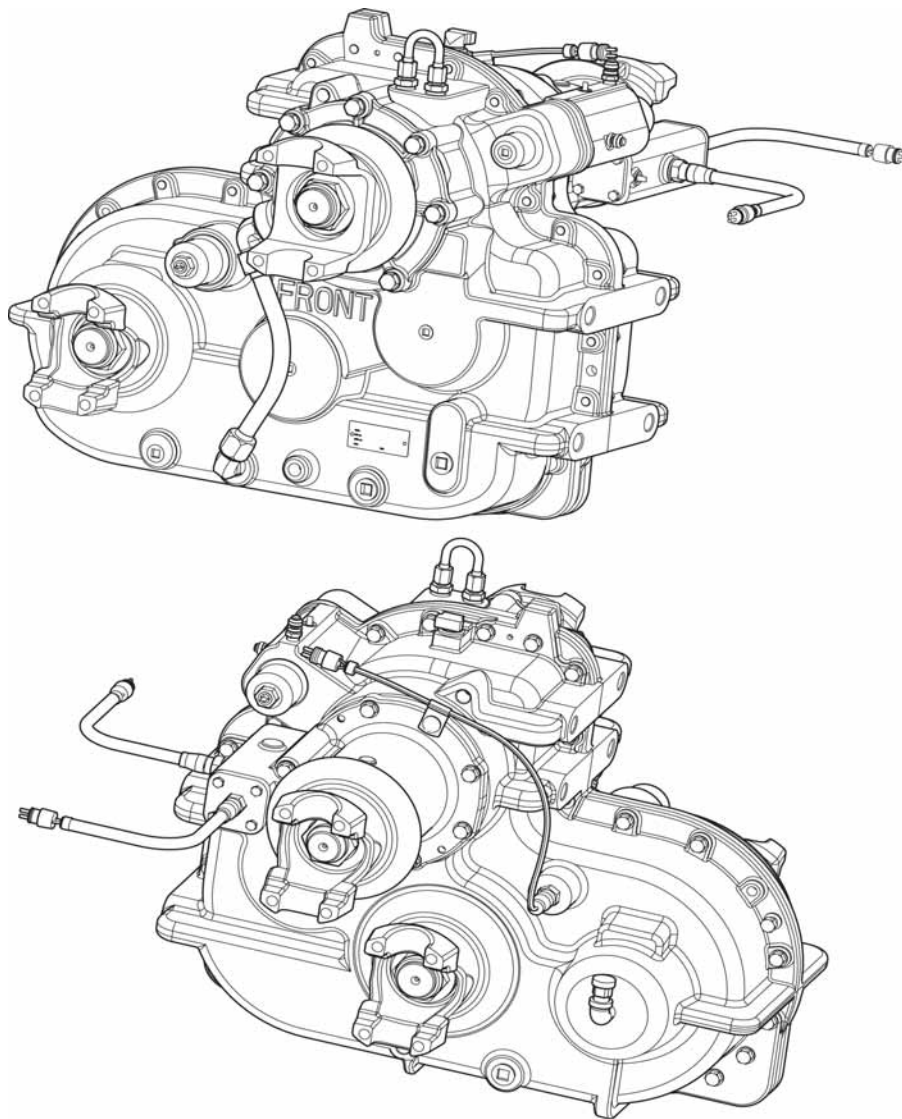
1 (877) 776-4600

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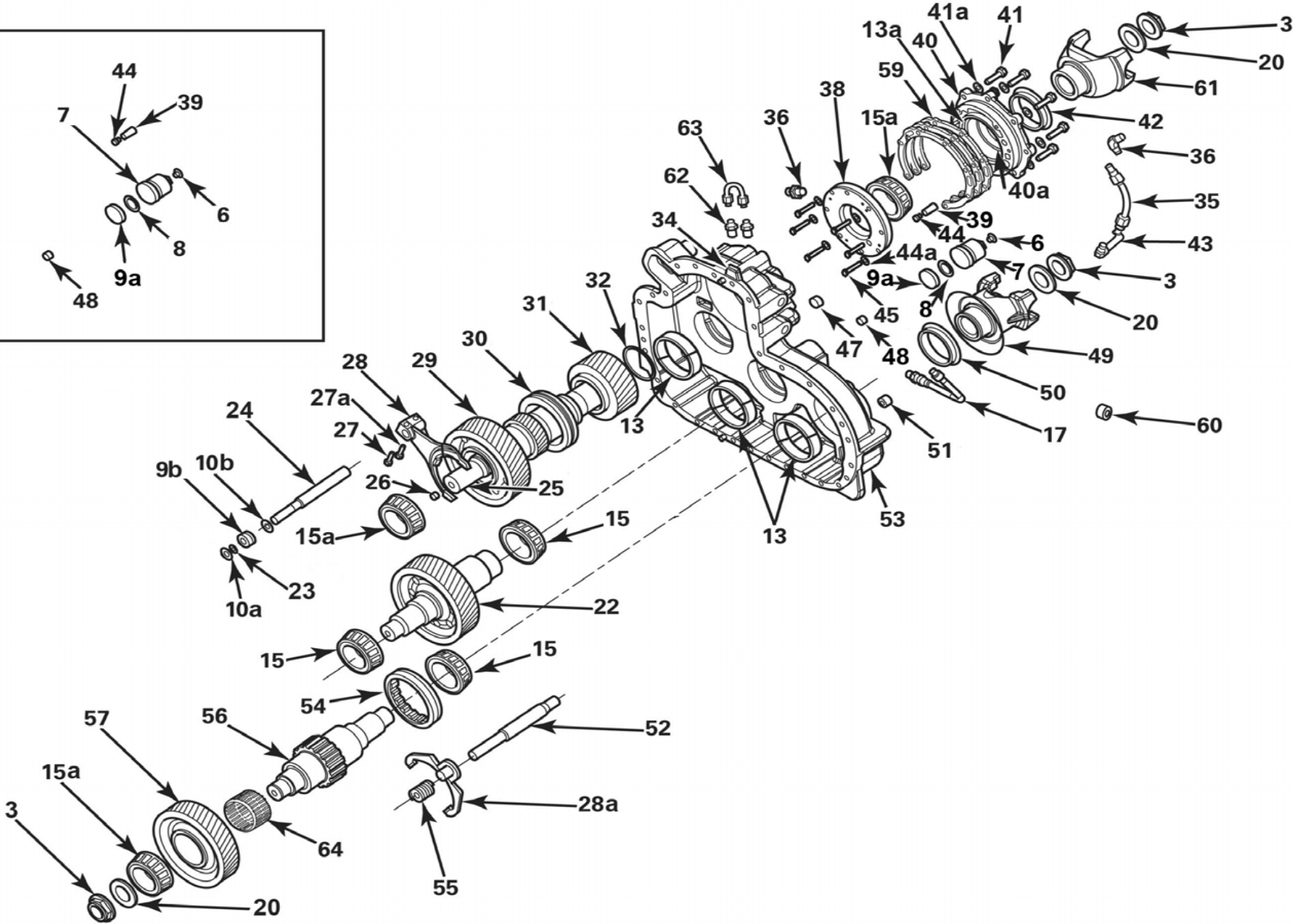
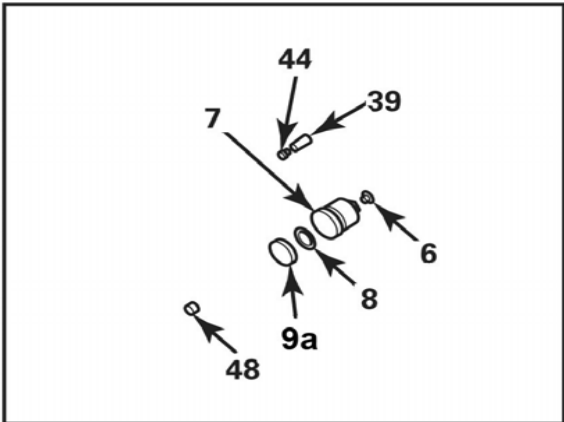
# MTC4208X / XP

## Transfer Case

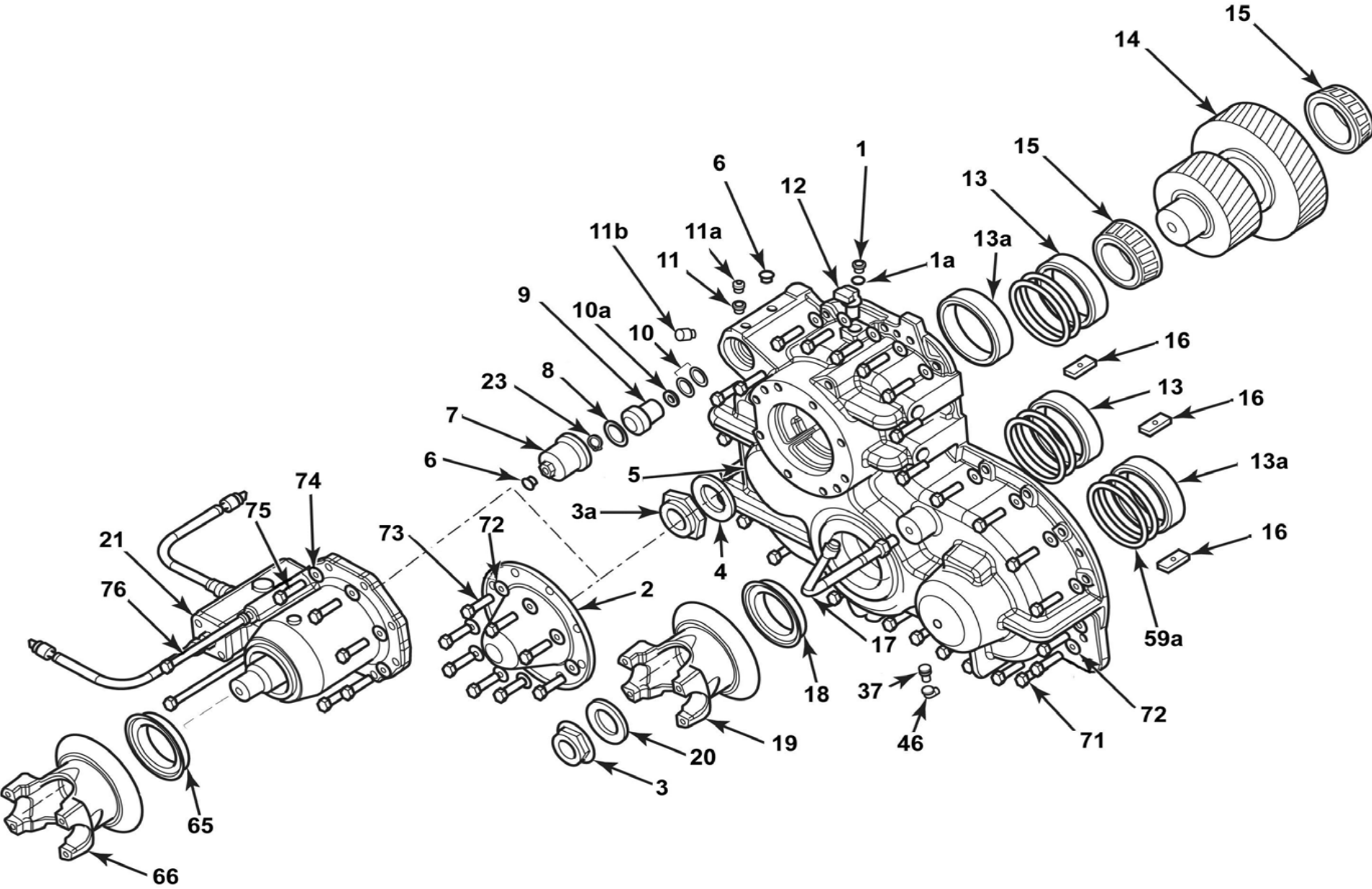


**NOTE:** The MTC-4208X/XP transfer case models are backward-compatible with MTC-4208 transfer case specifications. There are no changes to the oil cooler interface points with these models. However, the exterior geometry of the housing has changed, which potentially impacts clearances to surrounding components. In addition, the previous models cannot be used in place of the new models in applications with “engage-on-the fly” systems or mid-ship pumps. Refer to Maintenance Manual MM-0146, Transfer Cases, for more information.

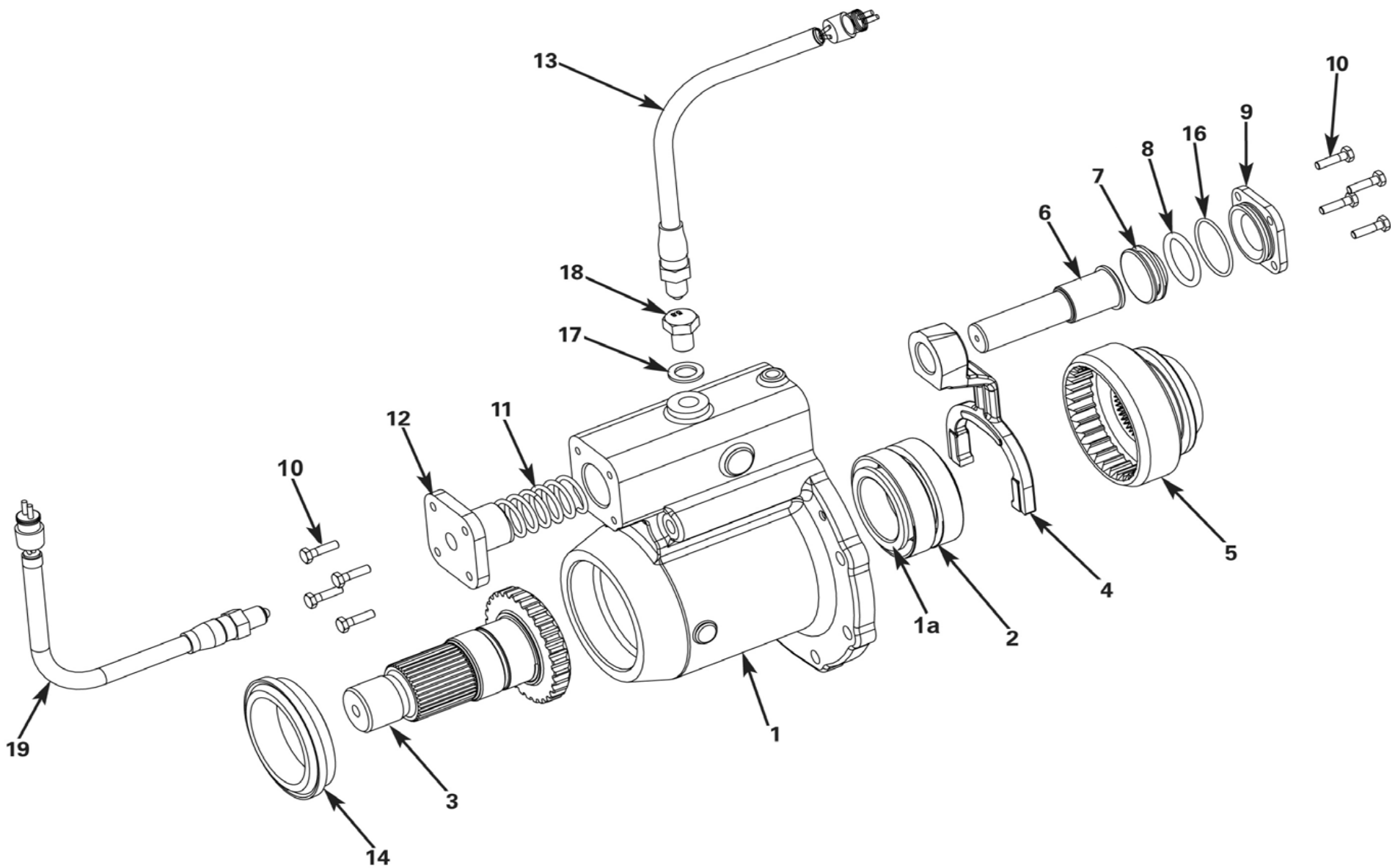
MTC4208 X / XP - Front



MTC4208 X / XP - Rear



MTC4208 X / XP - PTO





## MTC-4208X / XP TRANSFER CASE

Item	Description	Qty	Part No.	Comments
1	Capscrew - Sensor Retainer	1	S-244-2	
1a	Washer - Sensor Retainer	1	WA-34	
2	Cover - PTO	1	3266-N-1444	
3	Locknut	4	40-X-1233	M45 x 1.5 thd
3a	Locknut - Rear Input Shaft	1	40-X-1341	2.25"-12 thd
4	Washer - Hardened	1	1229-E-4113	2.28" ID x 3.25" OD x .32" wide
5	Cover - Transfer Case Rear	1	3289-F-1098	
6	Shipping Protector - Plug	15	1779-F-344	
7	Shift Cylinder	2	3261-A-1067	
8	O-Ring - Shift Piston	2	5-X-1326	1.459" ID x .208" thick
9	Piston - Shift (Outer)	1	2230-Q-1369	
9a	Piston - Shift	1	2230-T-1190	
9b	Piston - Shift (Inner)	1	2230-T-1346	
10	O-Ring	2	5-X-1291	.984" ID x .139" thick
10a	O-Ring	2	5-X-1290	.734" ID x .139" thick
10b	O-Ring	1	5-X-1292	1.17" ID x .139" thick
11	Bushing - Reducing	1	2206-Q-1447	Not for use with vehicles equipped with Neutral Airline
11a	Neutral Breather	1	A-1199-C-1043	
11b	Blow-By Breather	1	A-1199-R-4048	
12	Speed Sensor	1	A-3280-U-9849	Optional
13	Bearing Cup	5	HM212049	2.625" ID cone
13a	Bearing Cup	3	HM813843	2.4375" ID one
14	Gear - Idler	1	3892-V-5664	
15	Bearing Cone	5	HM212011	4.8125" OD cup
15a	Bearing Cone	3	HM813810	5.00" OD cup
16	Magnet - Ceramic	3	2297-K-6771	
17	Engagement Sensor	1	3237-W-1167	Optional. Do not use with special screw (41-X-1022) and washer (1229-U-1503).
18	Oil Seal - Rear Output	1	R945007	3.25" ID x 4.25" OD x .86" wide
19	Yoke - Rear Output	1	Rap or RCE Spline Code***	2-3/8" - 46 spline (slinger optional)
20	Washer - Flat	4	1229-N-1730	1.79" ID x 3.00" OD x .19" wide
21	PTO Assembly - Optional	1	A1-3226-A-1379	Optional (KIT 2540)
22	Driven Gear and Rear Output Shaft	1	3892-H-5676	
23	Ring - Snap	2	1229-U-4857	.689" ID
24	Shaft - Shift	1	2244-T-1190	
25	Shaft - Input	1	3297-H-1542	Service with KIT 2590
26	Plug - Special Orifice	1	1250-M-1313	.090" orifice
27	Capscrew - Shift Fork	1	S-1712A-2	7/16" x 1.5"
27a	Capscrew - Shift Fork	1	S-1612A-2	3/8" x 1.5"
28	Shift Fork	1	3296-Q-1317	Input shaft
28a	Shift Fork	1	3296-T-1346	Front output
29	Gear - Helical Drive, High Range	1	3892-R-5660	
30	Clutch Collar - High and Low	1	3107-K-1181	
31	Gear - Helical Drive, Low Range	1	3892-T-5662	
32	Ring - Snap	1	1229-P-4800	Use with shaft 3297-H-1542
34	Pin - Locating Dowel	2	1246-T-1190	.375 dia. x 1.00" long
35	Tube Assembly - Inlet Oil	1	A-2206-A-1483	Oil cooler ready
36	Elbow - Male	1	2206-C-1485	3/4"-14NPTF / 1-1/16"-12UNC-2A
37	Breather Assembly	1	A-1199-R-4048	3/8"-18 NPT
38	Oil Pump Assembly	11	A-3303-G-1047	Use A-3226-Z-1482 input cage
39	Spring - Pressure Relief	1	2258-Z-1118	
40	Cage - Input Bearing	1	A-3226-W-1479	Oil cooler ready
40a	O-Ring - Input Bearing Cage	1	5-X-1327	7.483" x .139" thick

## MTC-4208X / XP TRANSFER CASE

Item	Description	Qty	Part No.	Comments
41	Capscrew - Bearing Cage	7	S-2814A-2	1/2"-13 thd x 1.75"
41a	Washer - Flat	7	1229-C-1511	.53" ID x .88" OD x .09" wide
42	Oil Seal - Input	1	A1-1205-X-2728	3.25" ID x 4.25" OD x .86 long
43	Fitting Assy - Tube Adapter	1	A-2206-U-1347	3/4"-14 NPT
44	Valve - Relief	1	2297-U-5273	
44a	Washer - Oil Pump Capscrew	6	1229-E-1669P	.04" ID x .62" OD x .06" wide
45	Capscrew - Oil Pump	6	MS208045-1	M8 x 1.25
46	Elbow	1	2206-F-1254	3/8"-NPT / 3/8"-18 NPT
47	Plug - Oil Fill	1	P-212	3/4"-14 NPT square socket
48	Plug	4	P-26	3/8"-18 NPT square socket
49	Yoke - Front Output	1	Rap or RCE Spline Code ***	2-3/8"-46T spline (slinger opt.)
50	Seal - Front Output Oil	1	R945007	3.25" ID x 4.25" OD x .86" wide
51	Plug - Drain	2	1250-E-473	3/4"-14 NPT square socket
52	Push Rod	1	2244-S-1189	
53	Front T-Case Half	1	3290-D-1200	Oil cooler ready
54	Clutch Collar - Front Output	1	3107-U-1269	
55	Spring	1	2258-U-411	
56	Shaft - Front Output	1	3297-G-1567	
57	Gear - Helical Driven - Front Output	1	3892-L-5862	
59	Shim - .003"	As reqd	2203-K-9241	Input Bearing Cage
	Shim - .005"		2203-L-9242	Available in KIT 2889
	Shim - .010"		2203-M-9243	
	Shim - .0197"		2803-F-2866	
59a	Shim - .003"	As reqd	2803-P-3110	Housing Cup bearings
	Shim - .005"		2803-Q-3111	Available in KIT 2889
	Shim - .010"		2803-R-3112	
60	Plug	1	P-28	
61	Yoke - Input	1	Rap or RCE Spline Code ***	2-3/8"-46T spline (no slinger)
62	Male Connector - Oil Cooler	1	2206-E-1513	1/2" NPT x 9/16" 37° flare
63	Loop Tube	1	A-2296-Q-1161	
64	Needle Bearing	1	1228-P-1654	
65	Seal - PTO	1	R945008	3.00" x 3.75" OD x .79" long
66	Yoke - PTO	1	RAI Spline Code ***	Purchase separate from KIT 2540
71	Bolt/Capscrew	29	S-2714A-2	7/16"-14 thd x 1.75"
72	Washer - Flat	37	1229-E-1513	.47" ID x .81" OD x .09" wide
73	Bolt/Capscrew - T-case Housing	8	S-2710A-2	
74	Washer - Flat - T-case Housing	8	1229-E-1513	
75	Capscrew - PTO (short)	6	S-2710-2	7/16"-1.5"
76	Capscrew - PTO (long)	2	S-2748-2	7/16"-6.0"

\*\*\* See Yokes Page 9

## MTC-4208X / XP PTO

Item	Description	Qty	Part No.	Comments
1	Declutch Assembly	1	A1-3226-A-1379	
1a	Bearing Cone	2	1228-N-1548	
2	Bearing Cup	2	1228-M-1547	
3	PTO Shaft	1	3297-B-1432	
4	Shift Fork	1	3296-A-1301	
5	Clutch Collar	1	3107-D-1018	
6	Push Rod	1	2244-N-1184	
7	Shifter Piston	1	2230-T-1190	
8	O-Ring	1	5-X-1326	
9	Cover Plate	1	2205-N-1132	
10	Capscrew	8	S-248-2	
11	Shifter Spring	1	2258-N-1262	
12	Cap	1	2205-P-1134	
13	Connector Switch Assy - Disengage (Optional)	1	3237-W-1167	
14	Oil Seal Assembly	1	R945008	
15	Bearing Spacer .247	As reqd	1244-F-2554	Not Shown
	Bearing Spacer .25		1244-Q-2565	
	Bearing Spacer .253		1244-R-2566	
	Bearing Spacer .256		1244-S-2567	
	Bearing Spacer .259		1244-T-2568	
	Bearing Spacer .262		1244-U-2569	
	Bearing Spacer .265		1244-V-2570	
	Bearing Spacer .268		1244-K-2585	
	Bearing Spacer .271		1244-L-2586	
	Bearing Spacer .274		1244-M-2587	
	Bearing Spacer .277		1244-N-2588	
	Bearing Spacer .28"		1244-P-2590	
	Bearing Spacer .283"	1244-Q-2591		
16	O-Ring	1	5-X-1267	
17	Flat Washer	1	1229-U-1503	
18	Special Screw	1	41-X-1022	
19	Connector Switch Assy - Engage	1	3237-W-1167	
20	Plug	1	1250-N-222	
21	Washer	8	WA-34	



## MTC-4208X / XP SERVICE KITS

Part Name	Part Number	Quantity	Description
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### KIT 2894

### PTO Kit

PTO Assy.	A1-3226-A-1379	1	
Washer - Flat	1229-E-1513	8	
Capscrew - Long	S2748-2	2	7/16"-6.0"
Capscrew - Short	S2710-2	6	7/16"-1.5"
Dowel - Pin	1246-T-1190	2	

### KIT 2562

### Seal/Snap Ring Kit

Unitized Seal - Forward & Rear Output	R945007	2	3.25" ID x 4.25" OD x .86" long
Multiple-Lip Seal - Input Shaft	A1-1205-X-2728	1	3.25" ID x 4.25" OD x .58" long
O-Ring - Shift Piston	5-X-1326	2	1.459" ID x .208" thick
O-Ring (Outer)	5-X-1290	2	.734" ID x .139" thick
Snap Ring	1229-U-4857	2	.689" ID
O-Ring	5-X-1292	1	1.71" ID x .139" thick
O-Ring (Housing)	5-X-1291	2	.984" ID x .139" thick
O-Ring - Input Bearing Cage	5-X-1327	1	7.483" x .139" thick

### KIT 2889

### Shim Kit

Shim - .003"	2203-K-9241	5	Input bearing cage
Shim - .005"	2203-L-9242	5	
Shim - .010"	2203-M-9243	5	
Shim - .010"	2803-P-3110	5	Housing bearing cups
Shim - .005"	2803-Q-3111	5	
Shim - .003"	2803-R-3112	5	
Shim - .0197"	2803-F-2866	5	

### KIT 2890

### Fastener Kit

Lock Nut	40-X-1233	4	M45 x 1.5 thd.
Washer	1229-N-1730	4	1.79" ID x 3.00" OD x .19" wide
Lock Nut - Rear Input Shaft	40-X-1341	1	2.25"-12 thd.
Washer - Hardened	1229-E-4113	1	2.28" ID x 3.25" OD x .32" wide
Capscrew (Speed Sensor Retainer)	S244-2	1	
Washer (Speed Sensor Retainer)	1229-X-5094	1	
Capscrew	S2714A-2	29	7/16"-14 thd x 1.75"
Washer - Hardened	1229-E-1513	37	.47" ID x .81" OD x .09" Wide
Bolt/Capscrew	S1712A-2	1	7/16" x 1.5"
Bolt/Capscrew	S1612A-2	1	3/8" x 1.5"
Plug - Oil Restriction	1250-M-1313	1	.090" orifice
Dowel	1246-T-1190	2	.375" dia x 1.00" long
Drain Plug - Magnetic	1250-E-473	1	3/4"-14 NPT square socket
Plug	P-26	4	3/8"-18 NPT
Fill Plug	P-212	1	3/4"-14 NPT
Capscrew	MS208045-1	8	M8 x 1.25
Washer - Flat	1229-E-1669	8	.34" ID x .62" OD x .06" wide
Capscrew	S-2814A-2	7	1/2"-13 thd x 1.75"
Washer - Hardened	1229-C-1511	7	.53" ID x .88" OD x .09" wide
Male Connector	2206-C-1485	1	3/4"-14 NPT / 1 1/16"-12 Flare
Screw - Special (Sensor Plug)	41-X-1022	2	Optional M16 x 1-6g
Washer	1229-U-1503	2	
Capscrew	S2710A-2	8	.97" ID x .81" OD x .09" wide

## MTC-4208X / XP SERVICE KITS

Part Name	Part Number	Quantity	Description
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### KIT 2590

### Input Shaft Kit

Shaft - Input	3297-H-1542	1	
Snap Ring	1229-P-4800	1	
Plug - Oil Restriction	1250-M-1313	1	

### KIT 2891

### Front Output Shift Fork/Collar Kit

Collar - Clutch	3107-U-1269	1	
Shift Fork	3296-T-1346	1	

### KIT 2895

### Shift Cylinder Kit

Shift Cylinder	3261-A-1067	1	
Piston - Shift	2230-T-1190	1	
Piston - Shift (Inner)	2230-T-1346	2	
O-Ring (Outer)	5-X-1290	2	.734" ID x .139" thick
O-Ring (Housing)	5-X-1291	2	.984" ID x .139" thick
O-Ring	5-X-1292	1	1.17" ID x .139" thick
O-Ring - Shift Piston	5-X-1326	2	
Piston (Outer)	2230-Q-1369	1	

## MTC-4208X / XP YOKES

Transfer Case Model Numbers	Part Numbers		
	Front Output	Front Input	Rear Output
MTC4208X 100 100 205	140TYS38A	17TYS38-76	140TYS38A
MTC4208X 101 100 205	140TYS38A	17TYS38-76	170TYS38-4A

**Note:** Other yokes under RAP and RCE spline code (2-3/8"-46T) will fit the main shafts. Yokes under RAI spline code (2"-39T) will fit the power take off unit. However, all yokes must be compatible with unitized seals.

For more information about yoke type, spline size, or compatibility see <http://xpresswayplus.arvinmeritor.com> , <http://www.meritorhvs.com/LODSearch.aspx>, or call 1-866-ONTRAC1

## SEAL REPLACEMENT

Meritor has released the Multiple-Lip Seal (MLS) for use in the INPUT POSITION ONLY on the MTC-4208, -4210 and -4213 transfer cases. The multiple-lip seal is compatible with the current input shaft seal and can be used in service.

Transfer Case Model	Seal Position	Seal Service Part Number	Previous Seal Part Number	Seal Driver	Sleeve Driver
MTC-4208, -4210 and -4213	Input Shaft	A1-1205X2728	A-1205R2592	2728T1	2728T2
MTC-4208 and -4210	Forward and Rear Output	R945007	A-1205R2592	KIT 4454	NA
MTC-4213	Forward Output	R945007	A-1205R2592	KIT 4454	NA
MTC-4213	Rear Output	R945010	A-1205Q2591	KIT 4454	NA
MTC-4208 and -4210	PTO Seal	R945008	A-1205P2590	KIT 4454	NA

## MERITOR AFTERMARKET PARTS WARRANTY

We warrant all new parts for one year from date of shipment to the buyer against defective material or workmanship (but not against damage caused by accident, abuse or improper installation, maintenance or repair) when such parts are used on vehicles the specifications of which have been approved by our Engineering Department.

As the exclusive remedy under this warranty, we will, at our option, repair or replace such parts free of charge, or take back the nonconforming parts and refund the monies paid by buyer for such parts, if found on examination by us to be nonconforming and if any necessary return charges are prepaid.

If it is necessary to return any parts under this warranty, buyer agrees not to make any deduction on account thereof from remittances on current accounts while claims are in the process of disposition. Any expense incurred without our consent for repairs or replacement will not be allowed.

**THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. IN NO EVENT SHALL SELLER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE.**

Only genuine Meritor replacement parts are covered by this aftermarket parts warranty.



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Issued 4/2009  
PB-0910  
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