

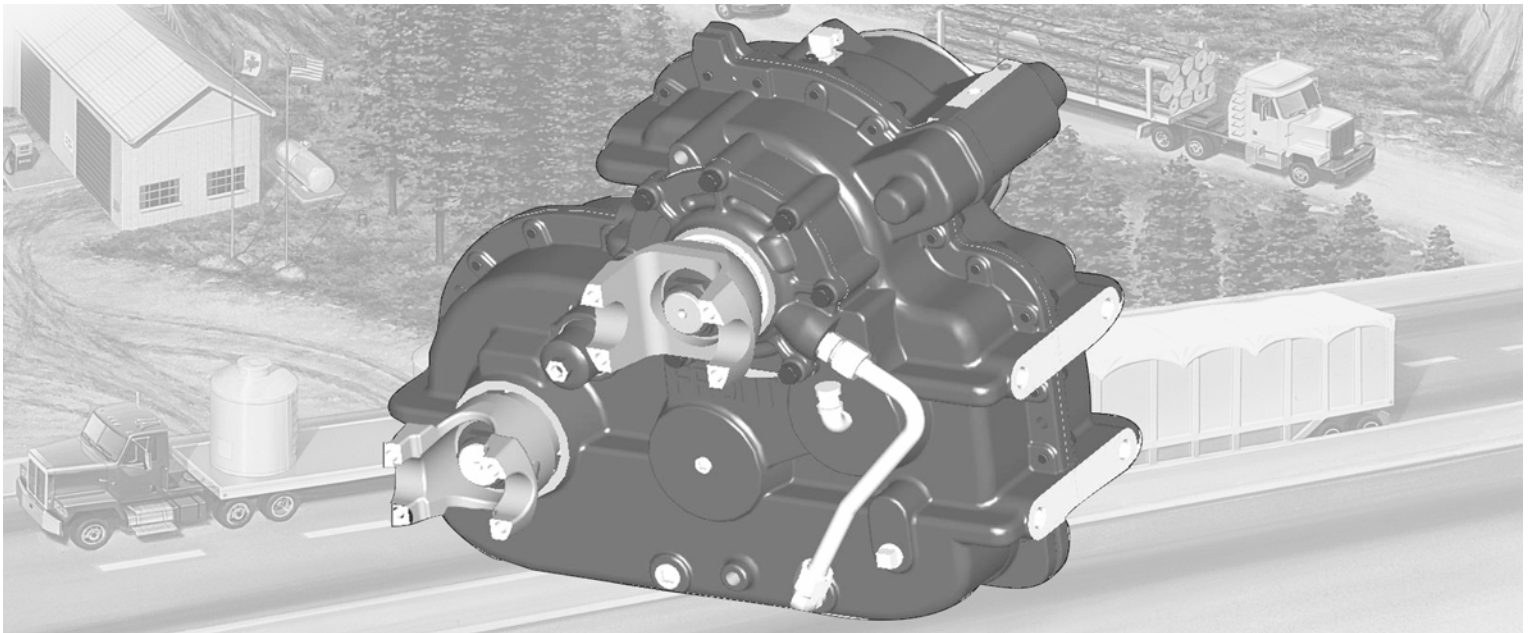
**MERITOR**

an *ArvinMeritor* brand

Revised 7/2008

# MTC-4208 Transfer Case

Catalog PB-0227



Strength • Power • Speed • Agility

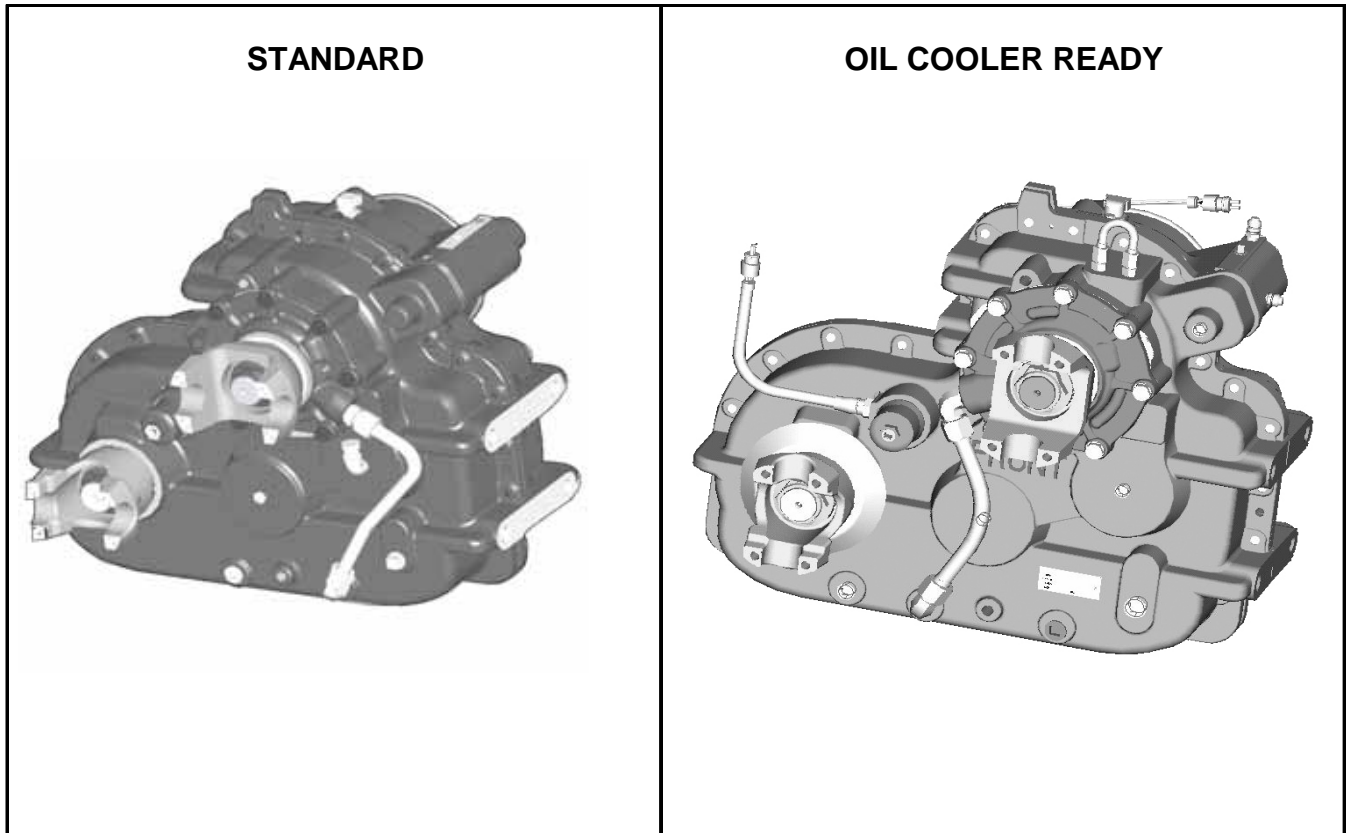
MERITOR PARTS. RIGHT FROM THE START.

## Introduction

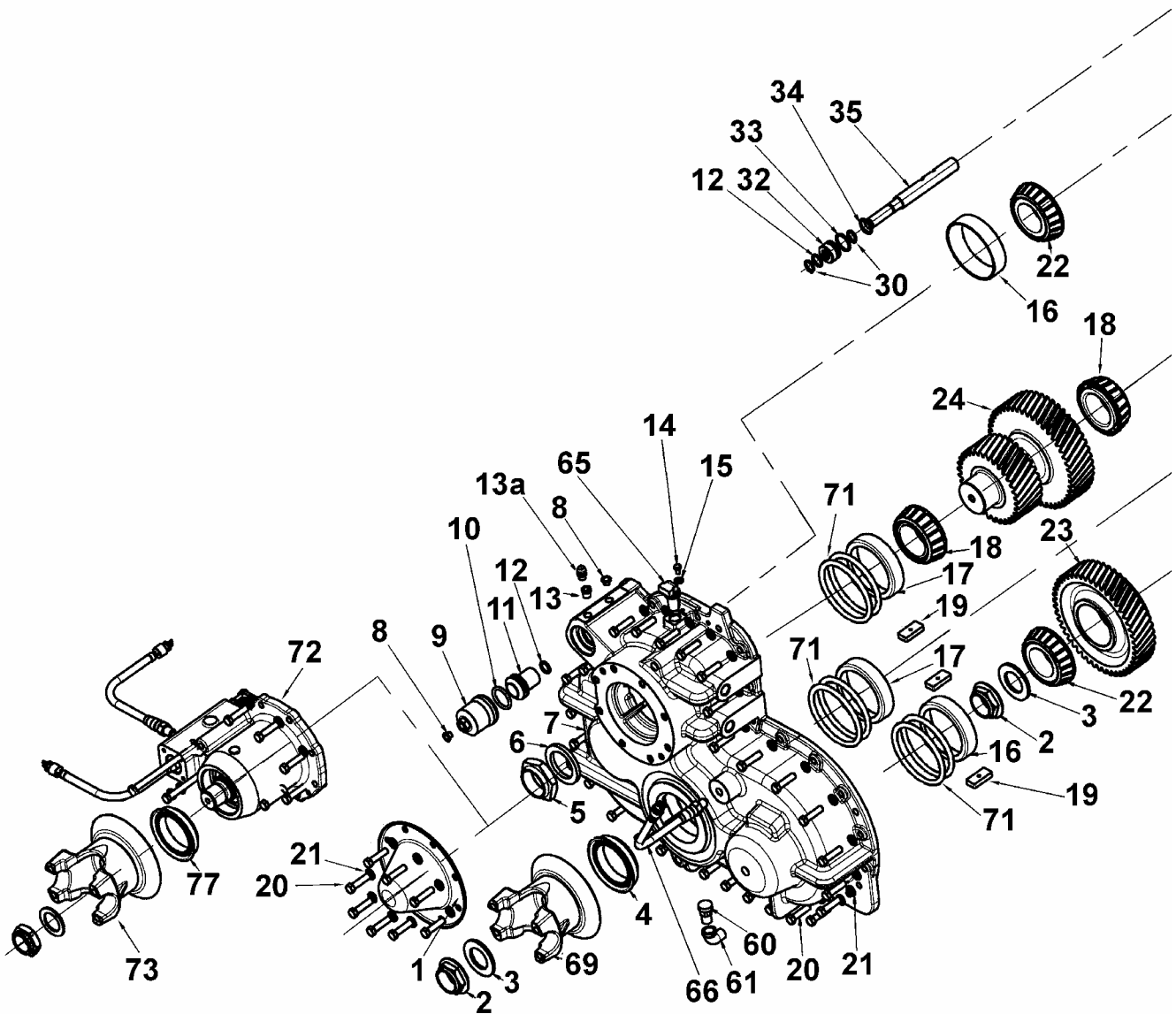
- To find the part you need to order, match the item number on the exploded view with the item number in the parts list.
- For service parts, contact ArvinMeritor Commercial Vehicle Aftermarket, 888-725-9355. In Canada, 800-668-3508/option 7.
- All Meritor gears and shafts are marked with the check letter and final digits of the part number; for example , F-5024 or X-2442.
- When you service gears, Meritor recommends that you replace all mating gears.
- Service kits include parts to service different models covered by this publication. Kits may include extra parts you do not need. In addition to kits, individual parts are also available. Kits and parts can be ordered through Meritor's Florence, KY or Brampton, Ontario distribution centers.
- You must use the correct tools and maintenance procedures. For MTC-4208 thru 4213 transfer cases, use general service instructions from Meritor Maintenance Manual MM0146, *Transfer Cases*. To order these publications, call Meritor's Customer Service Center at 800-535-5560.

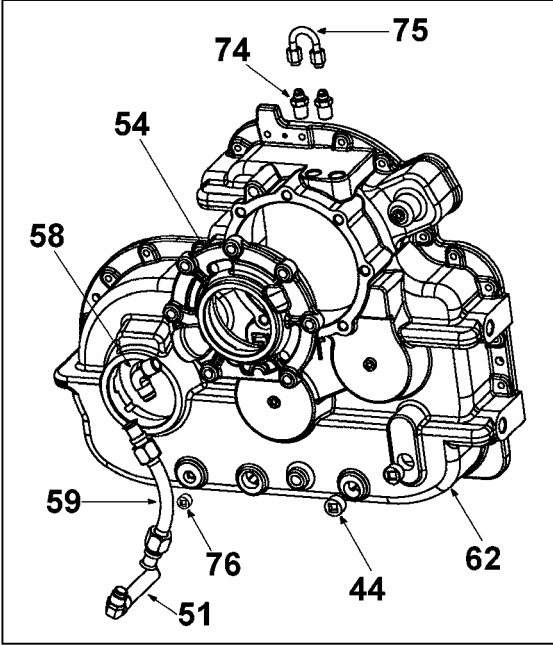
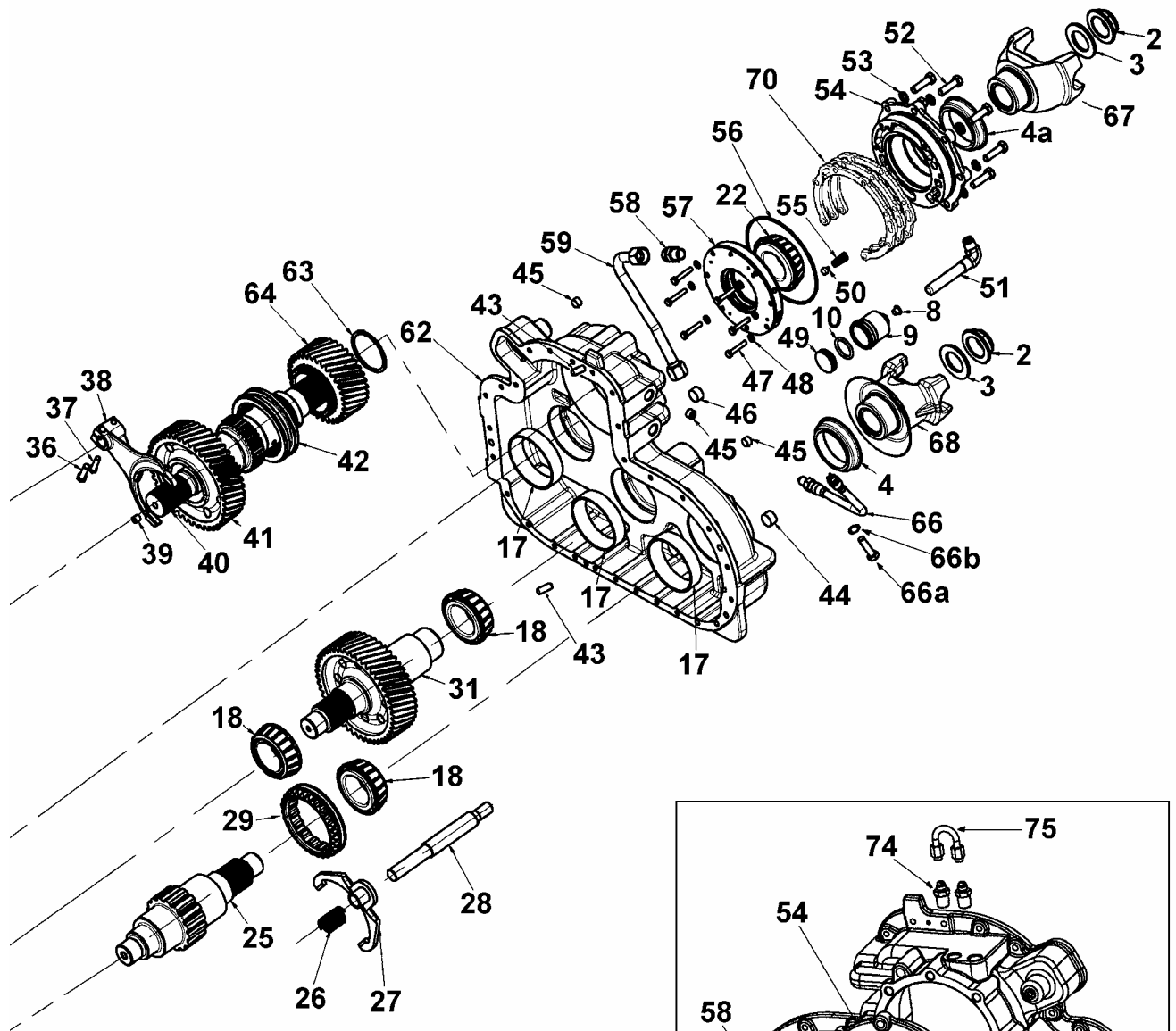
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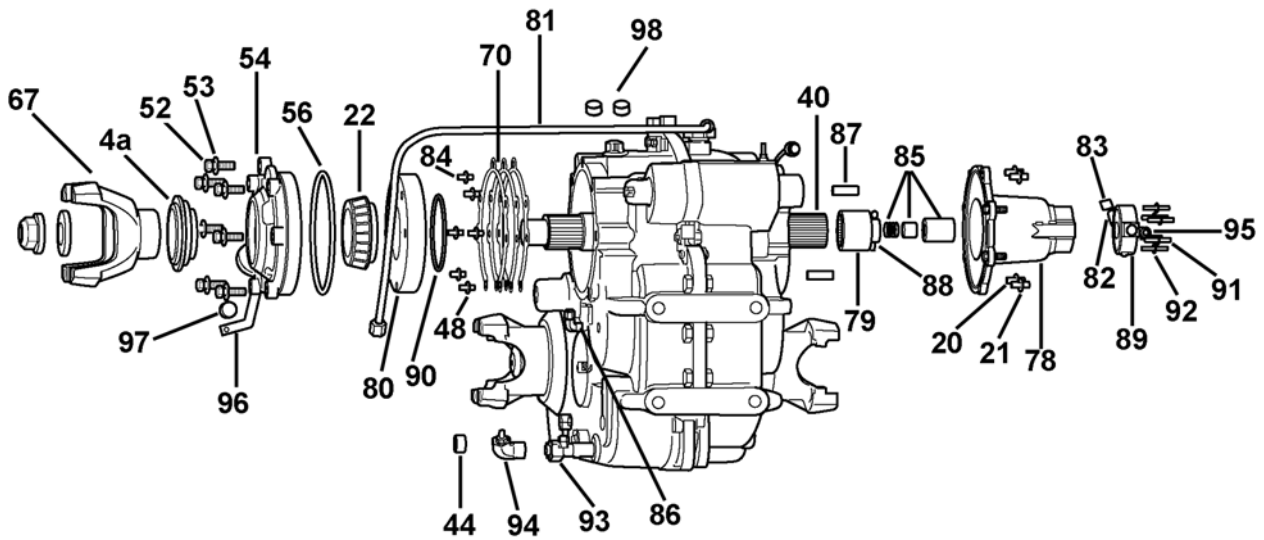
# MTC-4208 SERIES TRANSFER CASE





**Oil Cooler Ready  
Components View**

# MTC-4208 SERIES REAR MOUNT OIL PUMP



## MTC-4208 SERIES TRANSFER CASE

Item	Part Name	Qty.	Part Number	Description
1	Cover - PTO	1	3266-N-1444	
2	Lock Nut	4	40-X-1233	M45 x 1.5 thd.
3	Washer	4	1229-N-1730	1.79" ID x 3.00" OD x .19" wide
4	Unitized Seal - Forward & Rear Output	2	R945007	3.25" ID x 4.25" OD x .86" long
4a	Multiple-Lip Seal - Input Shaft	1	A1-1205-X-2728	3.25" ID x 4.25" OD x .58" long
5	Lock Nut	1	40-X-1341	2.25"-12 thd.
6	Washer	1	1229-E-4113	2.28" ID x 3.25" OD x .32" wide
7	Cover - Transfer	1	3289-J-1076	Replaced by 3289-D-1096
		1	3289-D-1096	Thicker wall
8	Plug (Shipping)	3	1779-F-344	
9	Shift Cylinder	1	3261-A-1067	
10	O-Ring	2	5-X-1326	1.459" ID x .208" thick
11	Piston (Outer)	1	2230-Q-1369	
12	O-Ring (Inner)	2	5-X-1290	.734" ID x .139" thick
13	Reducer Bushing	1	2206-Q-1447	Not for use in vehicles equipped
13a	Neutral Breather	1	A-1199-C-1043	with neutral airline.
13b	Blow-by Breather	1	A-1199-C-1043	Use with 3289-D-1096 cover only
14	Capscrew (Speed Sensor Retainer)	1	S244-2	
15	Washer (Speed Sensor Retainer)	1	1229-X-5094	
16	Bearing Cup	2	HM813810	5.00" OD cup
17	Bearing Cup	5	HM212011	4.8125" OD cup
18	Bearing Cone	5	HM212049	2.625" ID cone
19	Magnet	3	2297-K-6771	
20	Capscrew	34	S2714A-2	7/16"-14 thd x 1.75"
21	Washer - Hardened	34	1229-E-1513	.47" ID x .81" OD x .09" wide
22	Bearing Cone	3	HM813843	2.4375" ID cone
23	Gear - Front Output	1	3892-Z-5668	
24	Gear - Idler	1	3892-V-5664	
25	Shaft - Front Output	1	3297-N-1444	
26	Spring	1	2258-U-411	
27	Shift Fork	1	3296-Z-1326	Replaces A-3296-A-1093
28	Push Rod	1	2244-S-1189	
29	Collar - Clutch	1	3107-J-1284	Replaces 3107-M-1183
30	Snap Ring	2	1229-U-4857	.689" ID
31	Gear - Rear Output	1	3892-H-5676	
32	Piston (Inner)	1	2230-T-1346	
33	O-Ring	1	5-X-1292	1.17" ID x .139" thick
34	O-Ring (Housing)	2	5-X-1291	.984" ID x .139" thick
35	Shaft - Shift	1	2244-T-1190	
36	Bolt/Capscrew	1	S1712A-2	
37	Bolt/Capscrew	1	S1612A-2	
38	Shift Fork	1	3296-Q-1317	
39	Plug - Oil Restriction	1	1250-M-1313	.090" orifice
40	Shaft - Input	1	3297-L-1442	Replaced by 3297-H-1542
		1	3297-H-1542	Service with KIT 2590
41	Gear - Input (High)	1	3892-R-5660	
42	Collar - Clutch	1	3107-K-1181	
43	Dowel	2	1246-T-1190	.375" dia x 1.00" long
44	Drain Plug - Magnetic	1	1250-E-473	3/4"-14 NPT square socket
45	Plug	4	P-26	3/8"-18 NPT square socket
46	Fill Plug	1	P-212	3/4"-14 NPT square socket
47	Capscrew	6	MS208045-1	M8 x 1.25
48	Washer - Flat	6	1229-E-1669	.34" ID x .62" OD x .06" wide

## MTC-4208 SERIES TRANSFER CASE

Item	Part Name	Qty.	Part Number	Description
49	Piston	1	2230-T-1190	
50	Valve - Pressure Relief	1	2297-U-5273	
51	Fitting Assy (Screen / Elbow)	1	A-2206-U-1347	3/4"-14 NPT
52	Capscrew	7	S2814A-2	1/2"-13 thd x 1.75"
53	Washer - Hardened	7	1229-C-1511	.53" ID x .88" OD x .09" wide
54	Cage - Input Bearing	1	A-3226-Z-1482	Non-Oil Cooler version
		1	A-3226-W-1479	Oil Cooler ready
55	Spring - Relief Valve	1	2258-Z-1118	
56	O-Ring	1	5-X-1327	7.483" x .139" thick
57	Pump Assy.	1	A-3303-G-1047	Replaces A-3303-P-1030. Must use A-3226-Z-1482 Input Cage.
58	Male Connector	1	2206-V-1348	Non-Oil Cooler version
		1	2206-C-1485	Oil Cooler ready
59	Tube Assy	1	A-2206-R-1344	Non-Oil Cooler version
		1	A-2206-A-1483	Oil Cooler ready
60	Breather Assy	1	A-1199-P-1394	3/8"-18 NPT
61	Elbow	1	2206-F-1254	3/8"-18 NPT / 3/8"-18 NPT
62	Case - Transfer	1	3290-X-1142	Non-Oil Cooler version
		1	3290-D-1200	Oil Cooler ready
63	Snap Ring	1	1229-J-4950	Use with shaft 3297-L-1442 only.
		1	1229-P-4800	Use with shaft 3297-H-1542 only.
64	Gear - Input (Low)	1	3892-T-5662	
65	Speed Sensor	1	A-3280-U-9849	Optional
66	Engagement Sensor	2	3237-W-1167	Optional. Do not use with Special Screw (41-X-1022) and Washer (1229-U-1503)
66a	Screw - Special (Sensor Plug)	2	41-X-1022	Optional M16 x 1-6g. Special Screw and Washer used in vehicles not equipped with Engagement Sensor (3237-W-1167)
66b	Washer	2	1229-U-1503	
67	Yoke - Input	1	RAP or RCE spline code***	2-3/8"-46T spline (No Slinger)
68	Yoke - Front Output	1		2-3/8"-46T spline (Slinger opt.)
69	Yoke - Rear Output	1		2-3/8"-46T spline (Slinger opt.)
70	Shim - .003"	Use	2203-K-9241	Input bearing cage
	Shim - .005"	As	2203-L-9242	
	Shim - .010"	Reqd.	2203-M-9243	
71	Shim - .010"	Use	2803-P-3110	Housing bearing cups
	Shim - .005"	As	2803-Q-3111	
	Shim - .003"	Reqd.	2803-R-3112	
72	Power-Take-Off Assembly (PTO)	1	MDP-10-AF-100	Optional (Kit 2540)
73	PTO Yoke	1	RAI spline code***	Purchase separate from Kit 2540
74	Male Connector	2	2206-E-1513	1/2" NPT x 9/16" 37° Flare Oil Cooler ready
75	Loop Tube	1	A-2296-Q-1161	Oil Cooler ready - for use when cooler not connected
76	Plug	1	P-28	
77	PTO Seal	1	R945008	3" ID x 3.75" OD x .79" long

\*\*\* See yokes, page 10.



## MTC-4208 SERIES TRANSFER CASE

**NOTE: The following parts are used only on models with rear mount oil pump.**

Item	Part Name	Qty.	Part Number	Description
78	Pump housing	1	3266-D-1538	
79	Pump drive adapter	1	2297-J-8642	
80	Oil diverter	1	1250-N-1366	
81	Inlet tube	1	A-2296-T-1164	
82	Tee	1	2206-G-1541	1/4"-18 NPT x 9/16"-18 JIC
83	Cap	1	2206-H-1542	9/16"-18 JIC
84	M8 bolts	6	MS-208030-MA2	M8 x 1.25
85	Pump	1	A-3303-N-1054	Includes spring & transfer bushing
86	Elbow at idler	1	A-2206-K-1545	With 0.125" integral restrictor
87	Dowel	2	1246-T-1190	3/8" diameter x 1.00"
88	Pump drive pin	2	1246-S-1163	
89	Pump cover	1	3266-T-1398	
90	Seal ring	1	5-X-1321	
91	Pump cover bolts	6	S-2414-2	1/4"-20 x 1.75"
92	Pump cover washers	6	1229-X-5094	1/4"
93	Screen fitting - sump	1	A-2206-U-1425	3/4"-14 NPT
94	Elbow	1	2206-A-1431	3/4"-14 NPT x 3/4"-16 JIC
95	Fitting	1	2206-D-1434	3/8"-18 NPT x 3/4"-16 JIC
96	Tie down	1	3155-Q-1499	
97	Plug	1	P-212	3/4"-14 NPT
98	1/2" plug for cooler	2	P-18	1/2"-14 NPT

## MTC-4208 SERVICE KITS

Part Name	Part Number	Quantity	Description
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### KIT 2540

### PTO Kit

PTO Assy.	MDP10AF100	1	
Washer - Flat	1229-E-1513	8	
Capscrew	S2748-2	2	
Capscrew	S2710-2	6	
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	5-X-1326	2	1.459" ID x .208" thick
O-Ring (Inner)	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	5-X-1327	1	7.483" x .139" thick

### KIT 2563

### 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	

### KIT 2564

### 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	40-X-1341	1	2.25"-12 thd.
Washer	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	34	7/16"-14 thd x 1.75"
Washer - Hardened	1229-E-1513	34	
Bolt/Capscrew	S1712A-2	1	
Bolt/Capscrew	S1612A-2	1	
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	6	M8 x 1.25
Washer - Flat	1229-E-1669	6	.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	

### KIT 2590

### Input Shaft Kit

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

## MTC-4208 SERVICE KITS (cont)

Part Name	Part Number	Quantity	Description
<b>KIT 2592</b>			<b>Oil-Cooler Retrofit Kit</b>
Case - Fin.	3290-D-1200	1	
Input Bearing Cage Assy.	A-3226-W-1479	1	
Tube Assy.	A-2296-Q-1161	1	
Tube Assy.	A-2206-A-1483	1	
Male Connector	2206-C-1485	1	3/4"-14 NPT / 1 1/16"-12 Flare
Fitting	2206-E-1513	2	1/2" NPT x 9/16" 37° Flare
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	5-X-1326	1	1.459" ID x .208" thick
O-Ring	5-X-1327	2	7.483" x .139" thick
O-Ring (Inner)	5-X-1290	1	.734" ID x .139" thick
O-Ring (Housing)	5-X-1291	2	.984" ID x .139" thick
O-Ring	5-X-1292	1	1.71" ID x .139" thick
Plug	P-28	1	

<b>KIT 2596</b>			<b>Shift Fork/Collar Kit</b>
Collar - Clutch	3107-J-1284	1	
Shift Fork	3296-Z-1326	1	

<b>KIT 2598</b>			<b>Shift Cylinder Kit</b>
Shift Cylinder	3261-A-1067	1	
O-Ring	5-X-1326	1	
O-Ring (Inner)	5-X-1290	1	
Piston (Outer)	2230-Q-1369	1	

<b>KIT 2832</b>			<b>Oil Pump Kit</b>
Pump housing	3266-D-1538	1	
Pump drive adapter	2297-J-8642	1	
Oil diverter	1250-N-1366	1	
Inlet tube	A-2296-T-1164	1	
Tee	2206-G-1541	1	1/4"-18 NPT x 9/16"-18 JIC
Cap	2206-H-1542	1	9/16"-18 JIC
M8 bolts	MS-208030-MA2	6	M8 x 1.25
Pump	A-3303-N-1054	1	Includes spring & transfer bushing
Elbow at idler	A-2206-K-1545	1	With 0.125" integral restrictor
Dowel	1246-T-1190	2	3/8" diameter x 1.00"
Pump drive pin	1246-S-1163	2	
Pump cover	3266-T-1398	1	
Seal ring	5-X-1321	1	
Pump cover bolts	S-2414-2	6	1/4"-20 x 1.75"
Pump cover washers	WA-34	6	1/4"
Screen fitting - sump	A-2206-U-1425	1	3/4"-14 NPT
Elbow	2206-A-1431	1	3/4"-14 NPT x 3/4"-16 JIC
Fitting	2206-D-1434	1	3/8"-18 NPT x 3/4"-16 JIC
Tie down	3155-Q-1499	1	
Plug	P-212	1	3/4"-14 NPT
1/2" plug for cooler	P-18	2	1/2"-14 NPT
Oil seal assembly	A1-1205-X-2728	1	
Oil seal assembly	R945007	2	
Hardware kit	R980001	8	
Strap and capscrew kit	KI17SB	2	

# 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	R945007	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

## MTC-4208 YOKES

Yoke Location	ArvinMeritor Part Number	Yoke Description	Spline Size
Front Input	<b>3260-S-1813</b>	Easy Service	2-3/8"-46T
	see note (1)	Other styles	2-3/8"-46T
Front Output	<b>140TYS38A</b>	SPL140	2-3/8"-46T
	see note (1)	Other styles	2-3/8"-46T
Rear Output	<b>140TYS38A</b>	SPL140	2-3/8"-46T
	<b>170TYS38-4A</b>	SPL170	2-3/8"-46T
	see note (1)	Other styles	2-3/8"-46T

(1) Note: Other yokes under RAP and RCE spline code will fit. However, the yoke must be compatible with unitized seals. Please look up other yoke part numbers at: [www.arvinmeritor.com/products/truckandtrailer/drivelines.asp](http://www.arvinmeritor.com/products/truckandtrailer/drivelines.asp)

Yoke Location	ArvinMeritor Part Number	Yoke Description	Spline Size
PTO Output	<b>17NYS32-100A1</b>	Full Round	2"-39T
	<b>17TYS32-68A1</b>	Easy Service	2"-39T
	see note (2)	Other styles	2"-39T

(2) Note: Other yokes under RAI spline code will fit. However, the yoke must be compatible with unitized seals. Please look up other yoke part numbers at: [www.arvinmeritor.com/products/truckandtrailer/drivelines.asp](http://www.arvinmeritor.com/products/truckandtrailer/drivelines.asp)

## **ARVINMERITOR 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 ArvinMeritor replacement parts are covered by this aftermarket parts warranty.

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**ArvinMeritor**<sup>™</sup>

*Commercial Vehicle Aftermarket*

**Meritor Heavy Vehicle Systems, LLC**

7975 Dixie Highway  
Florence, KY 41042 USA  
888-725-9355

www.arvinmeritor.com

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