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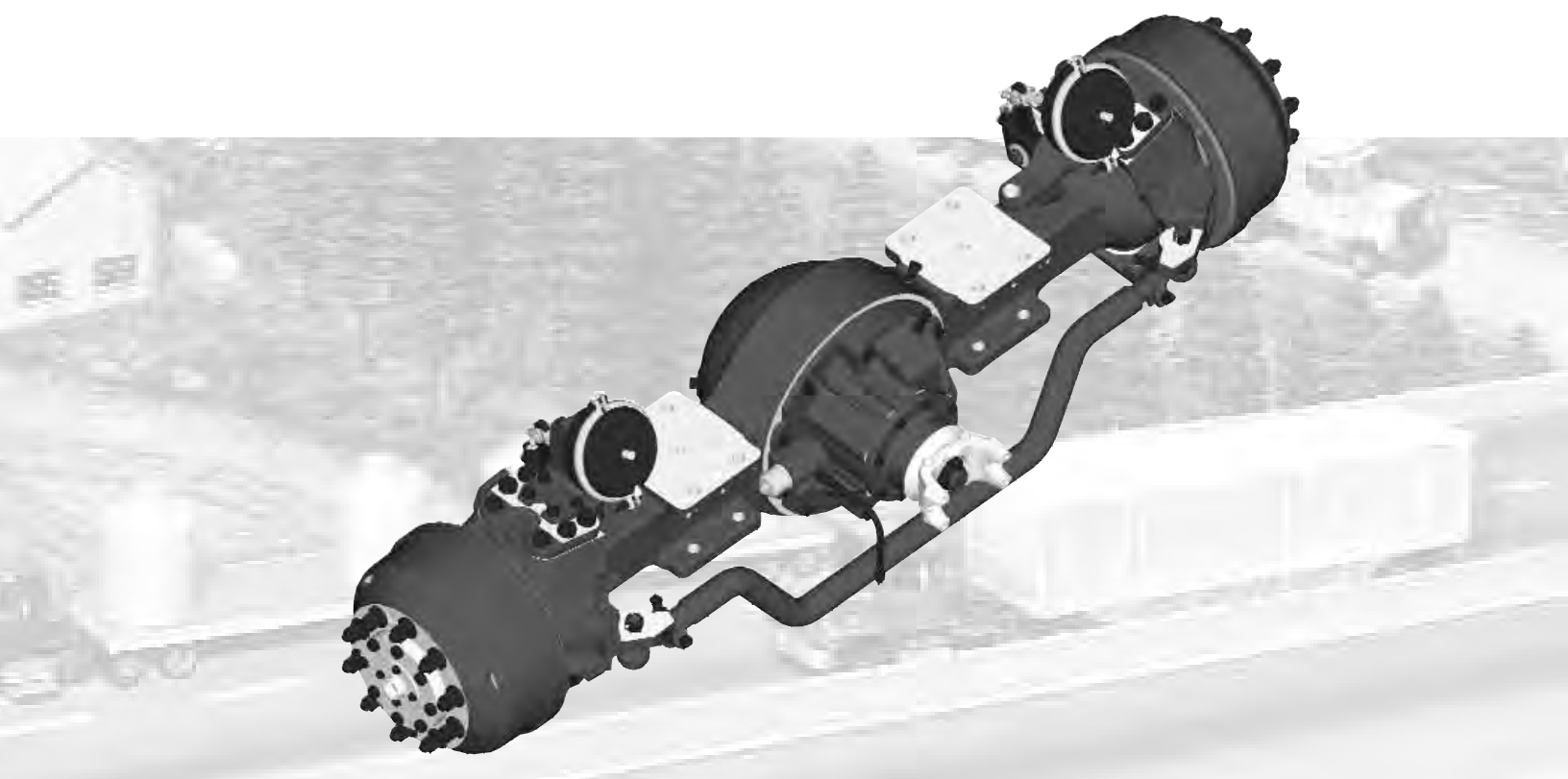
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Revised 11/2009

Heavy Duty Front-Drive Steer Axles MX-140 and MX-160 Series

Catalog PB-0349



Strength • Power • Speed • Agility

MERITOR PARTS. RIGHT FROM THE START.

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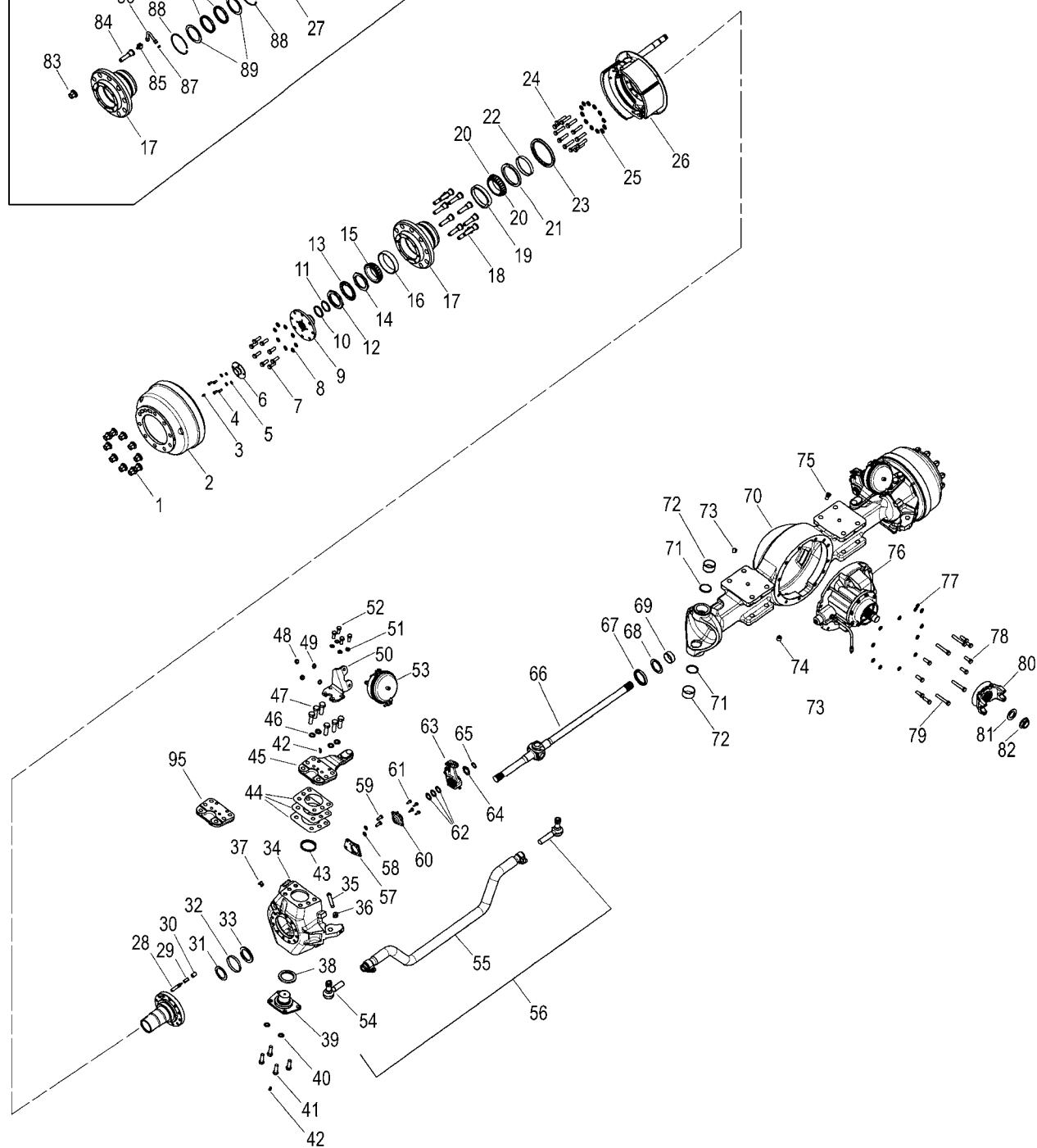
MX-17/19/21-140 and MX-21/23-160

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CTI EQUIPPED
AXLES ONLY

MX-17/19/21-140 MX-21/23-160 FIGURE 1



MX-17/19/21-140
MX-21/23-160
FIGURE 1

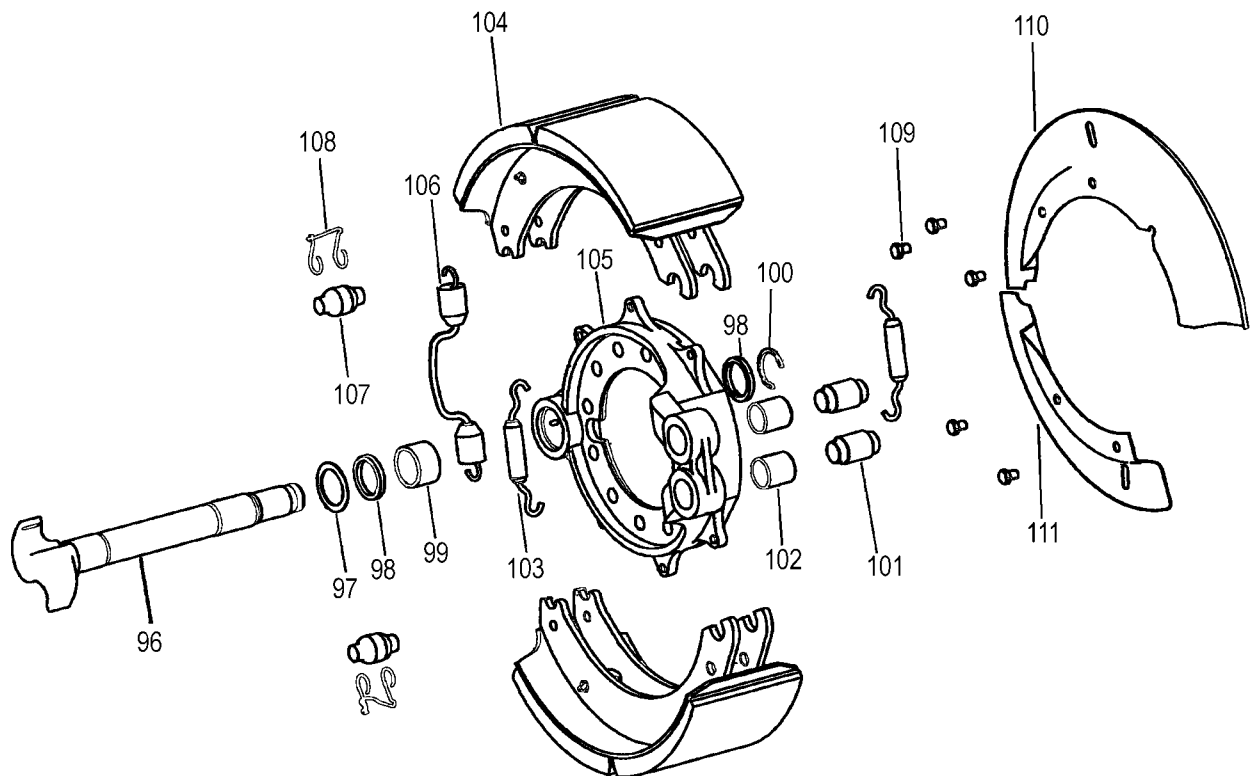


FIGURE 1
MX-17/19/21-140 and MX-21/23-160

Item	Description	Quantity	Part Number	Comments
1	Wheel Nut	10* (LH)	See Page 9	*9 + 1 CTI Wheel Nut (83) For CTI Equipped Axles
		10* (RH)		
2	Brake Drum	2	3219-P-5034	Stud Pilot, 13.19" Bolt Circle
		2	3219-R-5036	Stud Pilot, 11.25" Bolt Circle
		2	3219-N-5786	Hub Pilot, 335 mm Bolt Circle
		2	3219-A-5799	Hub Pilot, 285.75 mm Bolt Circle
3	Grease Fitting	2	1199-N-1860	
4	Capscrews - Cover Plate	8	S-266P-2	
5	Washers - Cover Plate	8	1229-K-1597P	
6	Cover Plate	2	3262-L-1052	
7	Capscrews - Drive Flange	16	10-X-1594	
8	Washers - Drive Flange	16	1229-U-1503	
9	Drive Flange	2	A-3270-V-1036	
10	Felt - Drive Flange	2	5-X-1050	
11	Retainer - Drive Flange	2	1205-N-2146	
12	Outer Adjusting Nut	2	1227-K-1025	
13	Lock Washer	2	1229-L-2560	
14	Inner Adjusting Nut	2	1227-D-1018	
15	Outer Bearing Cone	2	52393	CTI Equipped Axles
		2	594A	
16	Outer Bearing Cup	2	52618	CTI Equipped Axles
		2	592A	
17	Hub Assembly	2	See Page 10	Contains 15, 19 and 23 (ABS Equipped)
18	Wheel Studs	10* (LH)	See Page 9	*9 + 1 CTI Wheel Stud (84) For CTI Equipped Axles
		10* (RH)		
19	Inner Bearing Cup	2	52618	
20	Inner Bearing Cone	2	52400	
21	Grease Seal	2	A-1205-P-2434	Non CTI Equipped Axles
		2	A-1205-T-2490	CTI Equipped Axles
22	Oil Seal Sleeve - Outer	2	1199-T-3166	DO NOT USE With CTI Equipped Axles
23	ABS Tone Ring	2	3237-V-1062	ABS Equipped Axles Only
24	Capscrews - Brake Assembly	24	S-21022A-2	
25	Washers - Brake Assembly	24	1229-W-1557	
26	Brake Assembly	1 (LH)	QP6-1656-5	See Figure 2 for individual components.
		1 (RH)	QP6-1656-6	
27	Spindle Assembly	1 (LH)	See Page 10	ABS Equipped Axles Contains 22, 30, 31, 32. CTI Equipped Axles Contains 30, 31, 32, 91.
		1 (RH)		
28	ABS Sensor Assembly	2	A-2237-B-1328	ABS Equipped Axles Only
29	ABS Clip	2	2237-Q-1005	ABS Equipped Axles Only
30	ABS Bushing	2	1225-S-1189	ABS Equipped Axles Only

FIGURE 1 (Cont.)
MX-17/19/21-140 and MX-21/23-160

Item	Description	Quantity	Part Number	Comments
31	Thrust Washer	2	1229-U-4623	
32	Oil Seal Sleeve - Inner	2	3280-S-6649	
33	Grease Seal - Axle Shaft	2	A-1205-Z-1534	
34	Steering Knuckle	1 (LH)	3111-U-3323	
		1 (RH)	3111-V-3324	
		1 (LH)	3111-P-3318	With Power Assist
		1 (RH)	3111-Q-3319	With Power Assist
		1 (RH)	3111-R-3320	With Power Assist – Ball Down
35	Steering Stop Adjusting Screw	2	26-X-243	
36	Steering Stop Adjusting Nut	2	N-312-1	
37	ABS Bushing - Rubber	2	2237-A-1223	ABS Equipped Axles Only
38	Thrust Bearing	2	A-1228-X-1220	
39	Lower Knuckle Cap	2	3262-G-1255	
40	Washers - Lower Knuckle Cap	4	1229-V-1556	
41	Capscrews - Lower Knuckle Cap	8	S-21218A-2	
42	Grease Fitting	4	1199-B-3226	
43	Grease Seal - Upper Cap/Steering Arm	2	1205-A-1743	
44	Shim	*	2803-G-2789	0.003" Thickness
		*	2803-H-2790	0.005" Thickness
		*	2803-J-2792	0.010" Thickness
45	Steering Arm	2	See Page 11	
46	Washers - Steering Arm	8	1229-M-1625	
47	Capscrews - Steering ARM	12	S-21422A-2	
48	Nut - Air Brake Chamber	4	NL-210-1	
49	Washers - Air Brake Chamber	4	1229-U-1503	
50	Chamber Bracket	1 (LH)	3299-Y-6681	CTI Equipped Axles
		1 (RH)	3299-Z-6682	
		1 (LH)	3299-J-6978	
		1 (RH)	3299-K-6979	
51	Washers - Chamber Bracket	8	1229-U-1503	
52	Capscrews - Chamber Bracket	8	S-21012A-2	
53	Air Brake Chamber (See original axle spec for chamber needed)	2	V86-3276-D-30	Type 30 Chamber
		2	V99-3276-X-24	Type 24 Chamber
54	Tie Rod End	1 (LH)	A-3144-X-1090	Standard Track / Wide Track
		1 (RH)	A-3144-Y-1091	
55	Cross Tube w/Clamps	1	A-3102-D-4424	Standard Track
		1	A-3102-S-4439	Wide Track
56	Tie Rod Assembly	1	A1-3102-D-4424	Standard Track
		1	A1-3102-S-4439	Wide Track
57	Camshaft Bracket	2	3299-E-6713	
58	Washers - Camshaft Bracket	4	1229-W-1505	
59	Capscrews - Camshaft Bracket	4	S-2810-2	

* As Required

FIGURE 1 (Cont.)
MX-17/19/21-140 and MX-21/23-160

Item	Description	Quantity	Part Number	Comments
60	Retainer Assembly	2	A-3105-V-282	
61	Screws - Self Tapping	8	10-X-1423	
62	Spacing Washer (Outer)	*	1229-B-1848	
63	Automatic Slack Adjuster	2	A2-3275-A-1249S	
64	Retainer	2	1229-J-868	
65	Camshaft Snap Ring	2	1229-X-1116	
66	Axle Shaft Assembly	2	See Page 12	
67	Oil Seal - Axle Shaft	2	A-1205-T-2750	Replaces A-1205-A-1535
68	Thrust Washer - Axle	2	1229-U-4623	
69	Inner Axle Shaft Bushing	2	1825-X-310	
70	Housing Assembly	1	See Bill of Materials	
71	Socket Plug	4	1250-V-1218	
72	King Pin Bushing	4	1225-U-1191	
73	Lube Fill Plug	1	1250-E-473	
74	Lube Drain Plug	1	1250-E-473	
75	Breather Assembly	1	A-1199-P-1394	
76	Carrier Assembly	1	See Bill of Materials	
77	Washers - Carrier Housing	12	1229-U-1503	
78	Capscrews (Short) - Carrier Housing	8	10-X-1594	
78	Capscrews (Long) - 160 Carrier Housing	4	10-X-1600	
78	Capscrews (Long) - 140 Carrier Housing	4	10-x-1605	
80	Yoke	1	See Bill of Materials	
81	Washer - Yoke	1	1229-N-1730	
82	Nut - Yoke	1	40-X-1233	
83	CTI Wheel Nut	1 (LH)	See Page 9	CTI Equipped Axles Only
		1 (RH)		
84	CTI Wheel Stud	1 (LH)	See Page 9	CTI Equipped Axles Only
		1 (RH)		
85	Elbow	2	2206-D-1018	CTI Equipped Axles Only
86	Tube Assembly	2	A-3196-F-1072	CTI Equipped Axles Only
87	Tube Seat	2	2297-P-3838	CTI Equipped Axles Only
88	Snap Ring - CTI	4	1229-S-4569	CTI Equipped Axles Only
89	Guide	4	2297-K-6901	CTI Equipped Axles Only
90	CTI Air Seal	4	A-1205-F-2476	CTI Equipped Axles Only
91	Ball Plug	2	2297-M-5655	CTI Equipped Axles Only
92	Connector Fitting	4	2206-Y-1247	CTI Equipped Axles Only
93	Tube Assembly	1 (LH)	A-3196-L-1078	CTI Equipped Axles Only
		1 (RH)	A-3196-K-1077	
94	Bulkhead Fitting	2	2206-Z-1248	CTI Equipped Axles Only
95	Upper Knuckle Cap	1	3266-J-1284	For Axles With One Steering Arm ONLY

* As Required

FIGURE 2
MX-17/19/21-140 and MX-21/23-160

Item	Description	Quantity	Part Number	Comments
96	Camshaft	1	2210-R-8208	LH
		1	2210-Q-8207	RH
97	Washer	2	1229-X-3118	
98	Camshaft Seal	2	1205-Q-2123	
99	Camshaft Bushing	1	1225-B-834	
100	Snap Ring	1	1229-T-4102	
101	Brake Shoe Anchor Pin	2	1259-N-274	
102	Anchor Pin Bushing	2	1225-B-496	
103	Brake Shoe Retaining Spring	2	2258-H-1230	
104	Brake Shoe and Lining Assembly	2	A8-3222-P-2200	Contains 107, 108
105	Brake Spider Assembly	1	A-3211-M-5733	Contains 98, 99, 102
106	Brake Shoe Return Spring	1	2258-Y-1273	
107	Brake Shoe Roller	2	2297-T-7222	
108	Brake Shoe Roller Retainer	2	3105-B-210	
109	Dust Shield Capscrew	6	S-264B	
110	Dust Shield	1	3264-P-1290	
111	Dust Shield	1	3264-Q-1291	

WHEEL NUTS AND WHEEL STUDS

NOTE: Wheel nut part numbers listed may be installed for axle shipping purposes only. Please contact the vehicle OEM to confirm part numbers used for final assembly.

	Pilot	Stud Size	Wheel Type	Wheel Stud (18)	Wheel Nut (1)	CTI Wheel Stud (84)	CTI Wheel Nut (83)
No CTI	Stud	1.31"-12	Steel	20-X-1423 (LH)	1199-Y-1351 (LH)		
				20-X-1422 (RH)	1199-X-1350 (RH)		
			Aluminum	20-X-2271 (LH)	1199-Y-1351 (LH)		
				20-X-2270 (RH)	1199-X-1350 (RH)		
		1.12"-16	Steel	20-X-2353 (LH)	1199-M-117 (LH)		
				20-X-2354 (RH)	1199-N-118 (RH)		
			Aluminum				
	Hub	M22 x 1.5	Steel	20-X-2392	13-X-1005 (335 B.C.)		
					13-X-1006 (285.75 B.C.)		
			Aluminum	20-X-2390	13-X-1006		
CTI	Stud	1.31"-12	Steel	20-X-1423 (LH)	1199-Y-1351 (LH)	20-X-2351 (LH)	1199-Y-1351 (LH)
				20-X-1422 (RH)	1199-X-1350 (RH)	20-X-2352 (RH)	1199-X-1350 (RH)
			Aluminum	20-X-2271 (LH)	1199-Y-1351 (LH)	20-X-2361 (LH)	
				20-X-2270 (RH)	1199-X-1350 (RH)	20-X-2362 (RH)	
		1.12"-16	Steel	20-X-2353 (LH)	1199-M-117 (LH)	20-X-2355 (LH)	1199-Y-1351 (LH)
				20-X-2354 (RH)	1199-N-118 (RH)	20-X-2356 (RH)	1199-X-1350 (RH)
			Aluminum				
	Hub	M22 x 1.5	Steel	20-X-2392	13-X-1005 (335 B.C.)	20-X-2394	13-X-1005 (335 B.C.)
					13-X-1006 (285.75 B.C.)		1227-Z-1378 (285.75 B.C.)
			Aluminum	20-X-2390	13-X-1006	20-X-2396	13-X-1005

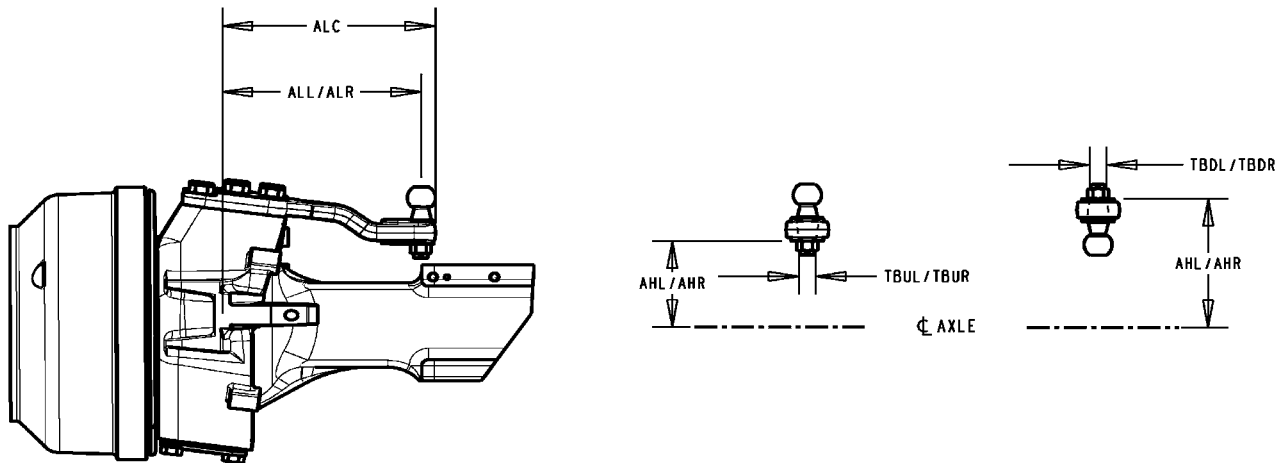
HUB ASSEMBLIES

Pilot	Bolt Circle	ABS	CTI	Hub Assembly (17)
Stud Pilot	13.19 in.	Yes	Yes	A1-333-D-4190
			No	A1-333-F-4140
		No	Yes	A-333-D-4190
			No	A-333-F-4140
	11.25 in.	Yes	Yes	A1-333-C-4189
			No	A1-333-G-4141
		No	Yes	A-333-C-4189
			No	A-333-G-4141
Hub Pilot	335 mm	Yes	Yes	A1-333-Q-4229
			No	A1-333-P-4228
		No	Yes	A-333-Q-4229
			No	A-333-P-4228
	285.75 mm	Yes	Yes	A1-333-S-4231
			No	A1-333-R-4230
		No	Yes	A-333-S-4231
			No	A-333-R-4230

SPINDLE ASSEMBLIES

ABS	CTI	Spindle Assembly (27)	
		LH	RH
Yes	Yes	A-3213-V-1816	A-3213-W-1817
	No	A-3213-U-1815	A-3213-U-1815
No	Yes		
	No	A1-3213-U-1815	A1-3213-U-1815

STEERING ARMS



Steering Arm (44)	ALL (in)	ALR (in)	AHL/AHR (in)	TBDL/TBDR (in)	TBUL/TBUR (in)	ALC (in)
3133-R-7688	12.13	12.13	12.44	1.043	-	14.236
3133-Q-7687	11.50	11.50	11.11	1.043	-	13.587
3133-G-7391	11.50	11.50	9.62	1.043	-	13.193
3133-H-7392	12.00	12.00	9.62	1.043	-	13.193
3133-G-7677	12.44	12.44	9.61	1.043	-	13.193
3133-P-7686	12.25	12.25	9.55	-	1.043	13.583
3133-K-7395	11.50	11.50	8.07	-	1.043	13.193
3133-J-7680	12.00	12.00	8.07	-	1.043	13.193
3133-X-7642	11.50	11.50	6.53	-	1.043	13.587
3133-L-7682	12.49	12.49	6.53	-	1.043	13.587
3133-T-7690	12.12	12.12	6.53	-	1.043	13.587
3133-P-7400	11.50	11.50	5.44	-	1.043	13.228
3133-N-7684	12.13	12.13	5.43	-	1.043	13.228
3133-D-7778*	12.47	12.47	5.48	-	1.043	13.193
3133-H-8016*	11.50	11.50	5.44	-	1.043	13.193

* Special arms to be used with offset clevis slacks only (Wide Track)

AXLE SHAFT ASSEMBLIES

	Pinion Position	Standard Track		Wide Track	
		Left	Right	Left	Right
160 Series	Down Left	A1-3205-A-1119	A2-3205-A-1119	A4-3205-A-1119	A3-3205-A-1119
	Up Right	A2-3205-A-1119	A1-3205-A-1119	A3-3205-A-1119	A4-3205-A-1119
	Down Right	A2-3205-A-1119	A1-3205-A-1119	A3-3205-A-1119	A4-3205-A-1119
	Up Left	A1-3205-A-1119	A2-3205-A-1119	A4-3205-A-1119	A3-3205-A-1119
140 Series	Down Left	A7-3205-A-1119	A6-3205-A-1119	N/A	N/A
	Up Right	A6-3205-A-1119	A7-3205-A-1119	N/A	N/A

For Service Only - Universal Joint: A-3205-R-1136 (includes u-joint and snap rings)

CARRIERS

Axle Model	Pinion Position	Differential Style	Available Axle Ratios
MX-xx-160	Down Left / Up Right	Open	3.07, 3.21, 3.42, 3.58, 3.73, 3.91, 4.10, 4.30, 4.56, 4.89, 5.38, 5.63, 5.86, 6.14, 6.43, 6.83, 7.17
		DCDL	
MX-xx-160R	Down Right / Up Left	Open	
		DCDL	
MX-17-140	Down Left / Up Right	Open	3.58, 3.90, 4.11, 4.33, 4.62, 4.88, 5.29, 5.57, 5.86, 6.14, 6.43, 6.83
		DCDL	
MX-19-140	Down Left / Up Right	Open	2.73, 3.73, 4.11, 4.33, 4.63, 4.88, 5.57, 6.14, 6.83, 7.17
		DCDL	
MX-21-140	Down Left / Up Right	Open	5.57
		DCDL	

NOTE: Reference PB-9250 for 160 Series carrier components or PB-9147 for 140 Series carrier components.

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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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ArvinMeritorTM

Commercial Vehicle Aftermarket

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