

PRODUCT INFORMATION LETTER # 11-001

Date: September 2011

Subject: Axle model designations and required features for Australia
and New Zealand

Models: All Tandem and Single Rear Drive Axles

Dear Customer,

Based on customer feedback and field experience, Meritor axle application approval and ratings guidelines are periodically reviewed, and where necessary, updated.

This letter is an update to the previously released PIL #325 (December 1999) and PIL 09-001 (June 2009), to accommodate the new MT-14X series of rear drive axles, along with updates and additions to the axle ratings.

The following information summarizes the contents of the attachments to this PIL:

- Generally speaking, the “G” suffix on the axle models will denote a product required for use in Australia and New Zealand. This requirement stays the same.
- The “P” suffix on the axle model denotes a tandem axle, which features an oil-pump in the forward rear axle differential carrier.
- Sheet 3 of this PIL list specific features of the axle products.

It should be noted that Meritor’s warranty is subject to vehicles being operated within the specific axle application approval limitations and only when covered by an approved Application Approval form. Application Approvals are valid for a period of 5 years.

Product Information Letters have been published in the past to act as guidelines to the application approval process and do not, themselves, constitute actual approval.

This Product Information Letter is being distributed to clarify previous issues that have arisen, and supersedes all previous ratings guidelines and Product Information Letters.

The attached ratings guidelines are released to cover on-highway, line-haul applications at road legal axle ground loads. For the purposes of these ratings guidelines, major unsealed highways are considered to be on-highway and on-highway is considered to be a maximum of 13% grade. Any vocation outside of these guidelines, are subject to separate application approval review. Logging applications are no longer covered by these ratings guidelines.

PRODUCT INFORMATION LETTER # 11-001

For mining and logging applications, in addition to the standard application approval form to be submitted, a detailed route profile will be required.

All tri-drive applications are subject to application review.

It should be further noted that the use of single wide-base tyres mounted on outset wheels is not covered by these guidelines. Please refer to Product Information Letter # 515 for application guidelines on single wide-base tyres.

One of two oil temperature control methods may be employed for RT160P forward tandem axles. (1) The installation of an axle kit by the selling dealer, which has been developed and is now available from Meritor Sunshine, under Part No. LSG-392. (2) The installation of an OE supplied axle lube cooler that is remote mounted and suitably protected from possible damage due to road debris.

Oil cooler installation is not mandatory. It is recommended, subject to application. Meritor Australia recommends oil cooler installation for vehicles carrying high GCW and operating long-distance on-highway, or where axle input speeds exceed 2,500 rpm.

For RT185 and RT380 forward tandem axles, an OE supplied remote mounted axle lube oil cooler is required for all applications using engines with torque ratings in excess of 1870 lb-ft or where the axle lube temperatures exceed the guidelines, as shown in Maintenance Manual No. 1.

If you have any questions, please contact a Meritor Australia representative on +613-93005200.

**Issued by Product Engineering
Meritor HVS Australia**



PRODUCT INFORMATION LETTER # 11-001

Meritor Australia - Drive Axle Product Features											
Axle Model	GAW - Pounds (Tonnes)	Wall Thickness (in/mm)	Bowl Cover Thickness (in/mm)	Axle shaft body dia (in/mm)	Long axle shaft spline	Axle shaft, Flange style,	Hub and Axle shaft length	Carrier Lube Pump	# Holes - Brake Flange Pattern	Main Diff Lock (DCDL)	Features / Notes
RS23-161	23000 (11.0)	1/2 , (12.7)	0.39 , (10)	2.25 / 57.2	Double	8 Stud - 5/8" Taper	Long	NA	16 Holes	Customer's Option 1. Std 2. DCDL	
RS25-160	25000 (11.5)	5/8 , (16)	0.39 , (10)	2.25 / 57.2	Double	8 Stud - 5/8" Taper	Long	NA	16 Holes	Customer's Option 1. Std 2. DCDL	
RC23-160	23000 (11.0)	1/2 , (12.7)	0.39 , (10)	2.25 / 57.2	Double	8 Stud - 5/8" Taper	Long	NA	16 Holes	Customer's Option 1. Std 2. DCDL	
RT40-140GA (Linehaul)	40000 (18.1)	7/16 , (11)	5/16 , (8)	2.00 / 50.8	Double	8 Stud - 5/8" Taper	Long	NA	16 Holes	NA	Alum inium Carrier, no pump
RT40-140G (Linehaul)	40000 (18.1)	7/16 , (11.0)	3/8 , (9.5)	2.00 / 50.8	Double	8 Stud - 5/8" Taper	Long	Customer's Option; 1. Std-Fwd 2. Pumpless	16 Holes	Customer's Option 1. Std 2. DCDL	
RT40-145GP : Severe duty (including refuse collection)	40000 (18.1)	1/2 , (12.7)	3/8 , (9.5)	2.00 / 50.8	Double	8 Stud - 5/8" Taper	Long	Std - Fwd	16 Holes	Customer's Option 1. Std 2. DCDL	With pump
MT40-14X (Linehaul)	40000 (18.1)	7/16 , (11)	5/16 , (8)	2.00 / 50.8	Double	8 Stud - 5/8" Taper	Long	NA	16 Holes	Customer's Option 1. Std 2. DCDL	Pump Optional
MT44-14X : Severe duty (including refuse collection)	44000 (20)	1/2 , (12.7)	3/8 , (9.5)	2.00 / 50.8	Double	8 Stud - 5/8" Taper	Long	Std - Fwd	16 Holes	Customer's Option 1. Std 2. DCDL	Pump Optional
RT46-160GP	46000 (20.9)	1/2 , (12.7)	0.39 , (10)	2.25 / 57.2	Double	8 Stud - 5/8" Taper	Long	Std - Fwd	16 Holes	Customer's Option 1. Std 2. DCDL	1. Tapered dowel mounting (6 places only) on fwd carrier 2. Oil bypass kit on fwd carrier 3. All stud mounting for fwd carrier-housing
RT50-160GP	50000 (22.7)	5/8 , (16)	0.39 , (10)	2.25 / 57.2	Double	8 Stud - 5/8" Taper	Long	Std - Fwd	16 Holes	Customer's Option 1. Std 2. DCDL	1. Tapered dowel mounting (6 places only) on fwd carrier 2. Oil bypass kit on fwd carrier 3. All stud mounting for fwd & rear carrier-housing
RT52-185G	52000 (23.6)	9/16 , (14.3)	3/8 , (9.5)	2.25 / 57.2	Single - Fwd Double - Rear	8 Stud - 5/8" Taper	Long	Std - Fwd	16 Holes	Customer's Option 1. Std 2. No Spin - Fwd 3. DCDL - Rear	1. Reinforcement plates on top of the bowl (under suspension bracket) and internally
RT52-380G	52000 (23.6)	9/16 , (14.3)	3/8 , (9.5)	2.25 / 57.2	Single	8 Stud - 5/8" Taper	Long	Std - Fwd & Rear	16 Holes	Customer's Option 1. Std 2. No spin - Rear	1. Reinforcement plates on top of the bowl (under suspension bracket) and internally



PRODUCT INFORMATION LETTER # 11-001

MERITOR AXLES AND SUSPENSIONS — NOMINAL ON-HIGHWAY G.C.W. RATINGS [TONNES] FOR AUSTRALIA AND NEW ZEALAND

Axle Model Identification		Engine Limit ¹	Ground Rating Tonne	Highway Operation Gradients 8% Typical 13% Maximum	B Doubles (& Triples) Operation Gradients 5% Typical 8% Maximum	Road Train ^{2/3} Operation Gradients 3% Typical 5% Maximum
Australia	North America					
RQ4670		LAZY AXLE (N/A)	10	N/A	N/A	N/A
RS-23-161G (MS-11-165)	RS-23-161G	1850 FT-LBS	11	36	N.R.	N.R.
RS-26-186G (MS-12-186)	RS-26-186G	1850 FT-LBS	11.8	50	N.R.	N.R.
RT-40-140G (MT-18-144G)	RT-40-140G	1650 FT-LBS	18.1	50	N.R.	N.R.
RT-40-145GA (MT-18-144GA)	RT-40-145GA	1650 FT-LBS	18.1	50	N.R.	N.R.
RT-40-145GP (MT-18-144GP)	RT-40-145GP	1650 FT-LBS	18.1	50	N.R.	N.R.
MT-40-14XGP ⁵	MT-40-14XGP	1650 FT-LBS	18.1	50	N.R.	N.R.
MT-44-14XGP ⁵	MT-44-14XGP	1650 FT-LBS	20	50	N.R.	N.R.
RT-46-160GP (MT-21-165GP)	RT-46-160GP	2050 FT-LBS	20.9	80	90	110
RT-50-160GP (MT-23-168GP)	RT-50-160GP	2050 FT-LBS	22.7	90	100	131
RT-52-185G (MT-24-186G)	RT-52-185G	2050 FT-LBS	23.6	100	110	140
RT-52-380G (MT-24-386G)	RT-52-380G	2050 FT-LBS	23.6	120	120	155

PRODUCT INFORMATION LETTER # 11-001

MERITOR AXLES AND SUSPENSIONS — NOMINAL ON-HIGHWAY G.C.W. RATINGS [TONNES] FOR AUSTRALIA AND NEW ZEALAND

Suspension Identification	Ground Rating	All Highway Operation Including B Doubles and Road Train
AC6P	18.1	68
AC6S	20.9	110
AC6S-SS	20.9	118
AC6T	23.6	155

Permalube™ Driveline	Application	On-Highway GCM Rating	Replaces
RPL25SD	MAIN DRIVELINE	140	18N
RPL20	MAIN DRIVELINE	140	17N
RPL20	INTER-AXLE DRIVELINE	140	17N

SPECIAL NOTES

1. NOMINAL ON-HIGHWAY RATING. FOR HIGHER ENGINE TORQUES, REFER TO MERITOR ENGINEERING FOR POSSIBLE APPROVAL
2. FOR LOW LOADER APPLICATIONS USE ROAD TRAIN GCM AT B DOUBLE GRADIENTS
3. THE GCW RATINGS APPLY AT LEGAL GROUND LOADS (UP TO 18.1 TONNE) NOT AT GROUND RATING
4. AC6S-SS IS SEVERE SERVICE VERSION OF AC6S WITH 51MM DIAMETER LOWER TORQUE RODS USED WITH MT-23-168GP and RT-50-160GP
5. 1850 LB-FT (2508 NM) ENGINE MAY BE APPROVED WITH STRAIGHT TORQUE ENGINES UP TO 48 TONNE GCW