



# TRANSMISSION RATINGS — 4000 PRODUCT FAMILY —

## ALLISON ON-HIGHWAY TRANSMISSIONS

	MODEL	TABLE NUMBER		MODEL	TABLE NUMBER
General Information		1.0	RDS Models	4000 RDS	8.1
BUS Model	B500	2.1		4500 RDS	8.2
EVS Models	4000 EVS	3.1		4700 RDS	8.3
	4500 EVS	3.2		4900 RDS	8.4
	4700 EVS	3.3		4970 RDS	8.5
	4800 EVS	3.4	SPS Models	4000 SP	9.1
	4850 EVS	3.5		4430 SP	9.2
	4900 EVS	3.6		4500 SP	9.3
4970 EVS	3.7	4700 SP		9.4	
		4800 SP		9.5	
HS Models	4000 HS	4.1		4900 SP	9.6
	4500 HS	4.2		4970 SP	9.7
MHS Model	4000 MH	5.1	T-Models	T425	10.1
OFS Model	4430 OFS	6.1		T450	10.2
	4500 OFS	6.2		T525	10.3
	4700 OFS	6.3	TRV Model	4000 TRV	11.1
	4750 OFS	6.4	WBD Model	4340 WBD	12.1
	4800 OFS	6.5		4600 WBD	12.2
	4870 OFS	6.6		4800 WBD	12.3
ORS Models	4000 ORS	7.1	4000 International Models	4000	13.1
	4200 ORS	7.2		4430	13.2
	4430 ORS	7.3		4440	13.3
	4500 ORS	7.4		4500	13.4
	4600 ORS	7.5		4700	13.5
	4700 ORS	7.6		4800	13.6
	4800 ORS	7.7		4900	13.7
			4970	13.8	
			List of Referenced Documents		
			Revision History		

## 1.0 MODELS AND RATINGS

### 1.1 TRANSMISSION MODEL NAMES

The 4000 Product Family is comprised of several individual transmission models. The names of most transmission models consist of two elements, the base model number and the vocational model name or series. For a description, refer to [Transmission Families and Models](#).

### 1.2 NOTES REGARDING INFORMATION IN THIS DOCUMENT

The following common items are applicable to all tables in this document.

1. Values in U.S. units shown in parenthesis ( ) are for reference only. Conversions between metric and U.S. units are not necessarily exactly equivalent.
2. Gross power rating as defined by ISO 1585 or SAE J1995.
3. Turbine Torque limit based on [iSCAAN](#) standard deductions.
4. Refer to [Technical Document \(TD\) 180-2. Vocational Compatibility for Allison On-Highway Transmissions](#), to determine which rating applies to your vocation.
  - For example, a 4000 RDS model used in a front-loader landfill refuse truck uses the refuse ratings. That same transmission model used in a dump truck will use the On/Off Highway ratings.

## 2.0 BUS MODELS

### 2.1 B500

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Transit Bus</b>	313 (420)	1763 (1300)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Intercity Coach</b>	410 (550)	2305 (1700)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 3.0 EVS (Emergency Vehicle Series)

#### 3.1 4000 EVS

Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Emergency Vehicle</b>	451 (605)	2508 (1850)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting (ARFF) Vehicles</b>	451 (605)	2271 (1675)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

#### 3.2 4500 EVS

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Emergency Vehicles, ARFF Vehicles</b> Without Torque Limiting	451 (605)	All Gear Ranges 2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Emergency Vehicles, ARFF Vehicles</b> With Torque Limiting	451 (605)	1st Gear 2400 (1770)	Gears 2-6 2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 3.3 4700 EVS

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Aircraft Rescue and Fire-Fighting (ARFF) Vehicles</b>	451 (605)	2508 (1850)	3795 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbft) in Deep Reverse

### 3.4 4800 EVS

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Aircraft Rescue and Fire-Fighting (ARFF) Vehicles</b>	522 (700)	2644 (1950)	3795 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbft) in Deep Reverse

### 3.5 4850 EVS

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Aircraft Rescue and Fire-Fighting (ARFF) Vehicles</b>	574 (770)	2644 (1950)	3795 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbft) in Deep Reverse

### 3.6 4900 EVS

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Emergency Vehicles, ARFF Vehicles</b> Without Torque Limiting	597 (800)	All Gear Ranges 3200 (2360)	3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Emergency Vehicles, ARFF Vehicles</b> With Torque Limiting	597 (800)	All Gear Ranges 3200 (2360)	4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3796 Nm (2800 lbf) in Normal Reverse and 1268 Nm (935 lbf) in Deep Reverse

### 3.7 4970 EVS

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Emergency Vehicles, ARFF Vehicles</b> Without Torque Limiting	597 (800)	All Gear Ranges 3200 (2360)	3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Emergency Vehicles, ARFF Vehicles</b> With Torque Limiting	597 (800)	All Gear Ranges 3200 (2360)	4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Fast Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3457 Nm (2550 lbf) in Normal Reverse and 3796 Nm (2800 lbf) in Fast Reverse

## 4.0 HS (Highway Series)

### 4.1 4000 HS

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Highway</b> Without Torque Limiting	433 (580)	All Gear Ranges 2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Highway</b> With Torque Limiting	433 (580)	Gears 1-2 2400 (1770)	Gears 3-6 2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 4.2 4500 HS

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)			Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
								min rpm	max rpm	min rpm	max rpm
<b>Highway</b> Without Torque Limiting	433 (580)	All Gear Ranges 2237 (1650)			3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Highway</b> With Torque Limiting	433 (580)	1st Gear 2237 (1650)	2nd Gear 2400 (1770)	Gears 3-6 2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**5.0 MH (Motor Home Series)**

**5.1 4000 MH**

Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Motor Home</b>	485 (650)	2644 (1950)	3795 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously



## 6.0 OFS (Oil Field Series)

### 6.1 4430 OFS

Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
Oil Field Service	317 (425)	1650 (1217)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 6.2 4500 OFS

Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
Oil Field Service and Yard Logger	433 (580)	2237 (1650)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 6.3 4700 OFS

Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
Oil Field Service	451 (605)	2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbft) in Deep Reverse

### 6.4 4750 OFS

Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
Oil Field Service	496 (665)	2644 (1950)	4067 (3000)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbft) in Deep Reverse

### 6.5 4800 OFS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Oil Field Service (Dual Mode)</b>	503 (675)	All Gear Ranges 3000 (2213)		3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Oil Field Service (Pumping - Only)</b>	503 (675)	All Gear Ranges 3000 (2213)		4067 (3000)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
<b>Oil Field Service (Dual Mode &amp; Pumping - Only)</b>	503 (675)	Gears 1-3 3000 (2213)	Gears 4-7 3050 (2250)	4067 (3000)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3796 Nm (2800 lbft) in Normal Reverse and 1268 Nm (935 lbft) in Deep Reverse

### 6.6 4870 OFS

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Oil Field Service</b> Without Torque Limiting	503 (675)	All Gear Ranges 3000 (2213)		3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Oil Field Service</b> With Torque Limiting	503 (675)	Gears 1-3 3000 (2213)	Gears 4-7 3050 (2250)	3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Fast Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3457 Nm (2550 lbft) in Normal Reverse and 3796 Nm (2800 lbft) in Fast Reverse

## 7.0 ORS (Off-Road Series)

### 7.1 4000 ORS

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	358 (480)	2203 (1625)	3322 (2450)	68,500 (151,017)	n/a n/a	1700	2300	500 *	800
<b>Rigid Rear Dump</b>	358 (480)	2102 (1550)	3322 (2450)	57,000 (125,663)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 7.2 4200 ORS

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	358 (480)	2305 (1700)	3322 (2450)	81,000 (178,574)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 7.3 4430 ORS

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	283 (380)	1675 (1235)	3322 (2450)	68,500 (151,017)	n/a n/a	1700	2300	500 *	800
<b>Rigid Rear Dump</b>	283 (380)	1675 (1235)	3322 (2450)	68,500 (151,017)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 7.4 4500 ORS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	358 (480)	All Gear Ranges 2102 (1550)		3322 (2450)	68,500 (151,017)	n/a n/a	1700	2300	500 *	800
<b>Rigid Rear Dump</b>	358 (480)	2102 (1550)		3322 (2450)	68,500 (151,017)	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	358 (480)	Gears 1-2 2102 (1550)	Gears 3-6 2203 (1625)	3322 (2450)	68,500 (151,017)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 7.5 4600 ORS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	358 (480)	All Gear Ranges 2102 (1550)		3322 (2450)	81,000 (178,574)	n/a n/a	1700	2300	500 *	800
<b>Rigid Rear Dump</b>	358 (480)	2102 (1550)		3322 (2450)	81,000 (178,574)	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	358 (480)	Gears 1-2 2102 (1550)	Gears 3-6 2305 (1700)	3322 (2450)	81,000 (178,574)	n/a n/a	1700	2300	500 *	800
<b>Rigid Rear Dump</b>	358 (480)	2102 (1550)	2305 (1700)	3322 (2450)	81,000 (178,574)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 7.6 4700 ORS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	373 (500)	All Gear Ranges 2305 (1700)		3322 (2450)	81,000 (178,574)	n/a n/a	1700	2300	500 *	800
<b>Mining/Off-Highway (Hauling rock, ore, gravel, dirt, etc.)</b>	433 (580)	All Gear Ranges 2400 (1770)		3525 (2600)	62,596 (138,000)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

### 7.7 4800 ORS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Articulated Dump</b>	451 (605)	All Gear Ranges 2508 (1850)		3525 (2600)	96,000 (211,644)	n/a n/a	1700	2300	500 *	800
<b>Rigid Rear Dump</b>	451 (605)	2508 (1850)		3525 (2600)	96,000 (211,644)	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
<b>Mining/Off-Highway (Hauling rock, ore, gravel, dirt, etc.)</b>	451 (605)	Gears 1-3 2400 (1770)	Gears 4-7 2508 (1850)	3525 (2600)	62,596 (138,000)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

## 8.0 RDS (Rugged Duty Series)

### 8.1 4000 RDS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	433 (580)	All Gear Ranges 2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse</b>	373 (500)	2102 (1550)		3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Specialty PTO</b>	433 (580)	2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	451 (605)	2508 (1850)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
<b>On/Off-Highway</b>	433 (580)	Gears 1-2 2400 (1770)	Gears 3-6 2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

## 8.2 4500 RDS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)			Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
								min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	433 (580)	All Gear Ranges 2237 (1650)			3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse</b>	373 (500)	2102 (1550)			3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Specialty PTO</b>	433 (580)	2237 (1650)			3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	451 (605)	2237 (1650)			3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)			Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
								min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	433 (580)	1st Gear 2237 (1650)	2nd Gear 2400 (1770)	Gears 3-6 2508 (1850)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse</b>	Not Applicable										
<b>Specialty PTO</b>	433 (580)	2237 (1650)	2400 (1770)	2400 (1770)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	451 (605)	2237 (1650)	2508 (1850)	2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
* 600 rpm if dual PTOs are used simultaneously											

### 8.3 4700 RDS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	433 (580)	All Gear Ranges 2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse</b>	373 (500)	2102 (1550)		3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	451 (605)	2508 (1850)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	433 (580)	Gears 1-3 2400 (1770)	Gears 4-7 2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

### 8.4 4900 RDS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	485 (650)	All Gear Ranges 3000 (2213)		3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	485 (650)	Gears 1-3 3000 (2213)	Gears 4-7 3051 (2250)	3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3796 Nm (2800 lbf) in Normal Reverse and 1268 Nm (935 lbf) in Deep Reverse



### 8.5 4970 RDS

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	485 (650)	All Gear Ranges 3000 (2213)		3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>On/Off-Highway</b>	485 (650)	Gears 1-3 3000 (2213)	Gears 4-7 3051 (2250)	3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Fast Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3457 Nm (2550 lbft) in Normal Reverse and 3796 Nm (2800 lbft) in Fast Reverse

## 9.0 SP (Specialty Series)

### 9.1 4000 SP

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Specialty / Military</b>	485 (650)	2644 (1950)	3795 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 9.2 4430 SP

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Specialty / Military</b>	283 (380)	1600 (1180)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 9.3 4500 SP

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
		1st Gear	Gears 2-6				min rpm	max rpm	min rpm	max rpm
<b>Specialty / Military</b> Without Torque Limiting	451 (605)	All Gear Ranges 2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Specialty / Military</b> With Torque Limiting	451 (605)	1st Gear 2400 (1770)	Gears 2-6 2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 9.4 4700 SP

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
Specialty / Military	451 (605)	2508 (1850)	4067 (3000)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

### 9.5 4800 SP

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
Specialty / Military	597 (800)	2644 (1950)	4067 (3000)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

### 9.6 4900 SP

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
Specialty / Military	597 (800)	3200 (2360)	4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

**9.7 4970 SP**

Rating	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Specialty / Military</b> Without Torque Limiting	597 (800)	All Gear Ranges 3200 (2360)	3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Specialty / Military</b> With Torque Limiting	597 (800)	All Gear Ranges 3200 (2360)	4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Fast Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3457 Nm (2550 lbft) in Normal Reverse and 3796 Nm (2800 lbft) in Fast Reverse

## 10.0 T (Torqmatic Series)

### 10.1 T425

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Transit Bus</b>	283 (380)	1650 (1217)	3322 (2450)	29,000 (63,935)	n/a n/a	1700	2300	500 *	800
<b>Intercity Coach</b>	283 (380)	1750 (1291)	3322 (2450)	27,000 (59,525)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 10.2 T450

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Transit Bus</b>	298 (400)	1750 (1291)	3322 (2450)	29,000 (63,935)	n/a n/a	1700	2300	500 *	800
<b>Intercity Coach</b>	373 (500)	2100 (1549)	3322 (2450)	27,000 (59,525)	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 10.3 T525

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Intercity Coach</b>	410 (550)	2600 (1918)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

## 11.0 TRV (Truck-Based Recreational Vehicle Series)

### 11.1 4000 TRV

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Truck-Based Recreational Vehicle</b>	451 (605)	2508 (1850)	3795 (2800)	23,587 (52,000)	32,659 (72,000)	1700	2300	500 *	800
<small>* 600 rpm if dual PTOs are used simultaneously</small>									

## 12.0 WBD (Wide Body Dump Series)

### 12.1 4430 WBD

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>Wide Body Dump</b>	283 (380)	1675 (1235)	3322 (2450)	68,500 (151,017)	n/a n/a	1700	2300	500 *	800
						<small>* 600 rpm if dual PTOs are used simultaneously</small>			

<b>12.2 4600 WBD</b>										
Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Wide Body Dump</b>	390 (523)	All Gear Ranges 2102 (1550)		3322 (2450)	90,000 (198,416)	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
		Gears 1-2	Gears 3-6				min rpm	max rpm	min rpm	max rpm
<b>Wide Body Dump</b>	390 (523)	2102 (1550)	2305 (1700)	3322 (2450)	90,000 (198,416)	n/a n/a	1700	2300	500 *	800
* 600 rpm if dual PTOs are used simultaneously										

<b>12.3 4800 WBD</b>										
Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Wide Body Dump</b>	451 (605)	All Gear Ranges 2508 (1850)		3525 (2600)	105,000 (231,485)	n/a n/a	1700	2300	500 *	800
* 600 rpm if dual PTOs are used simultaneously										
<b>NOTE:</b> Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbft) in Deep Reverse										



## 13.0 4000 International Series

### 13.1 4000 Model

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>General</b>	421 (565)	All Gear Ranges 2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Fire Truck, Emergency</b>	447 (600)	2508 (1850)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	447 (600)	2508 (1850)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	447 (600)	2508 (1850)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse Vehicle</b>	373 (500)	2102 (1550)		3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Ag Spreader, Sprayer, Blower, Feedlot Truck</b>	421 (565)	2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
		Gears 1-2	Gears 3-6				min rpm	max rpm	min rpm	max rpm
<b>General</b>	421 (565)	2400 (1770)	2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse Vehicle</b>	373 (500)	2300 (1696)	2300 (1696)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** If equipped with the ground-driven steering pump provision, the maximum N/v ratio is 28.57 rpm/kph (46.00 rpm/mph)

### 13.2 4430 Model

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>General</b>	283 (380)	1560 (1150)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Highway</b>	283 (380)	1560 (1150)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Fire Truck, Emergency</b>	283 (380)	1560 (1150)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	283 (380)	1560 (1150)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	283 (380)	1560 (1150)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse Vehicle</b>	283 (380)	1560 (1150)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Ag Spreader, Sprayer, Blower, Feedlot Truck</b>	283 (380)	1560 (1150)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 13.3 4440 Model

Rating <small>with/without Torque Limiting</small>	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)	Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
						min rpm	max rpm	min rpm	max rpm
<b>General</b>	317 (425)	1776 (1310)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Highway</b>	317 (425)	1776 (1310)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Fire Truck, Emergency</b>	317 (425)	1776 (1310)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	317 (425)	1776 (1310)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	317 (425)	1776 (1310)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse Vehicle</b>	317 (425)	1776 (1310)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Ag Spreader, Sprayer, Blower, Feedlot Truck</b>	317 (425)	1776 (1310)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

### 13.4 4500 Model

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)			Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
								min rpm	max rpm	min rpm	max rpm
<b>General</b>	421 (565)	All Gear Ranges			3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Highway</b>	421 (565)				3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Fire Truck, Emergency</b>	447 (600)				3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	447 (600)				3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	447 (600)				3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse Vehicle</b>	373 (500)				3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Ag Spreader, Sprayer, Blower, Feedlot Truck</b>	421 (565)				3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)			Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
<b>General</b>	421 (565)	1st Gear 2237 (1650)	2nd Gear 2400 (1770)	Gears 3-6 2508 (1850)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Highway</b>	421 (565)	2237 (1650)	2400 (1770)	2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Fire Truck, Emergency</b>	447 (600)	2400 (1770)	2508 (1850)	2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	447 (600)	2400 (1770)	2508 (1850)	2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	447 (600)	2237 (1650)	2508 (1850)	2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse Vehicle</b>	373 (500)	2102 (1550)	2102 (1550)	2300 (1696)	3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Ag Spreader, Sprayer, Blower, Feedlot Truck</b>	421 (565)	2237 (1650)	2400 (1770)	2400 (1770)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** If equipped with the ground-driven steering pump provision, the maximum N/v ratio is 28.57 rpm/kph (46.00 rpm/mph)

### 13.5 4700 Model

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>General</b>	421 (565)	All Gear Ranges 2400 (1770)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	447 (600)	2508 (1850)		3795 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	447 (600)	2508 (1850)		3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Refuse Vehicle</b>	373 (500)	2102 (1550)		3322 (2450)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
<b>General</b>	421 (565)	Gears 1-3 2400 (1770)	Gears 4-7 2508 (1850)	3525 (2600)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

### 13.6 4800 Model

Rating with/without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	522 (700)	2644 (1950)		3795 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 1268 Nm (935 lbf) in Deep Reverse

### 13.7 4900 Model

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>General</b>	485 (650)	All Gear Ranges 3000 (2213)		3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	597 (800)	3200 (2360)		3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
<b>General</b>	485 (650)	Gears 1-3 3000 (2213)	Gears 4-7 3051 (2250)	3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	597 (800)	3200 (2360)		4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Deep Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3796 Nm (2800 lbft) in Normal Reverse and 1268 Nm (935 lbft) in Deep Reverse

### 13.8 4970 Model

Rating Without Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>General</b>	485 (650)	All Gear Ranges 3000 (2213)		3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	597 (800)	3200 (2360)		3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		3457 (2550)	n/a n/a	n/a n/a	1700	2300	500 *	800
Rating With Torque Limiting	Gross Input Power kW (hp)	Gross Input Torque Nm (lb-ft)		Net Turbine Torque Nm (lb-ft)	GVW kg (lbs)	GCW kg (lbs)	Full Load Engine Governed Speed		Engine Idle Speed in Drive	
							min rpm	max rpm	min rpm	max rpm
<b>General</b>	485 (650)	Gears 1-3 3000 (2213)	Gears 4-7 3051 (2250)	3796 (2800)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Aircraft Rescue and Fire-Fighting Vehicle</b>	597 (800)	3200 (2360)		4101 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800
<b>Heavy Equipment Transporter (HET)</b>	597 (800)	3200 (2360)		4100 (3025)	n/a n/a	n/a n/a	1700	2300	500 *	800

\* 600 rpm if dual PTOs are used simultaneously

**NOTE:** Fast Reverse Feature requires SEM/LRTP, or LRTP Only. Net Turbine Torque is 3457 Nm (2550 lbft) in Normal Reverse and 3796 Nm (2800 lbft) in Fast Reverse

## LIST OF REFERENCED DOCUMENTS

- [iSCAAN](#), Allison's vehicle performance calculation program
- [Transmission Families and Models](#)

### Technical Documents (TD's)

- [TD-180-2, Vocational Compatibility for Allison On-Highway Transmissions](#)
- [TD-188, Application and Installation Requirements for the 2nd Reverse Feature with 4th Gen Controls](#)
- [TD-191, Application and Installation Requirements for the 2nd Reverse Feature with 5th Gen Controls](#)



## REVISION HISTORY

### **March 5, 2024**

- In 13.3, correct 4800 Wide Body Dump GVW rating to 231,485 lb.

### **January 31, 2024**

- In 13.3, increase 4800 Wide Body Dump GVW rating to 105,000 kg (231,525 lb).

### **December 8, 2023**

- Added "with/without Torque Limiting" for added clarification for the ratings that can be used with or without Torque Limiting engines.

### **September 29, 2023**

- In 12.2 add new ratings for 4600 WBD raise Gross Input Power to 390 kW (523 hp) and GVW to 90,000 kg (198,416 lbs)
- Remove cancelled model, 4500 WBD, from Tech Data

### **July 25, 2023**

- In 9.6, add new ratings for 4900 SP removed with and without torque limiting ratings

### **June 16, 2023**

- In 6.5, add new ratings for 4800 OFS adding ratings for Dual Mode and Pumping Only

### **March 1, 2023**

- Update notes for SEM/LRPT requirement for Deep and Fast Reverse for the 7-Speed Models.

### **December 19, 2022**

- In 3.6, add ratings for the 4900 EVS
- In 3.7, add ratings for the 4970 EVS
- In 8.4, add ratings for the 4900 RDS
- In 8.5, add ratings for the 4970 RDS
- In 9.7, add ratings for the 4970 SP
- In 13.7, add ratings for the 4970 International
- In 13.8, add ratings for the 4970 International

### **November 30, 2022**

- In 9.6, add new ratings for 4900 SP

### **November 28, 2022**

- In 6.5, add new ratings for 4800 OFS
- In 6.6, add new ratings for 4870 OFS