

School Bus Starters & Alternators





SCHOOL BUSES PRESENT A UNIQUE SET OF CHALLENGES.

A school bus performs the majority of its workday at slow speeds. At the same time, lighting and equipment associated with safety and passenger mobility add electrical loads that must be met at these same slow speeds.

TECHNOLOGY SOLUTIONS THAT ADDRESS THE CHALLENGES

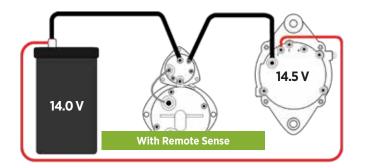
Delco Remy high output alternators are specially designed to contend with the demanding electrical loads of school bus operating routines. Add to that the fuel savings opportunity, high temperature ratings and proven technologies like Remote Sense and you've got alternators in a class by themselves.

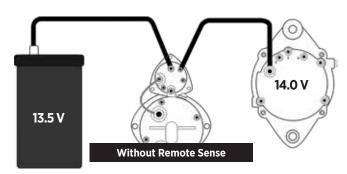
Remote Sense Can Reduce Battery Charge Time by 50% The Delco Remy high output alternators are equipped with Remote Sense which utilizes a second wire that reads the actual voltage at the battery. This signals the alternator to boost its output to compensate for the voltage drop, ensuring 14 volts at the battery. The proper voltage at the battery forces more current into the battery bringing the battery up to a full state of charge during the school bus runs between stops.

Designed for Extreme Temperatures & Long Life No other school bus alternator on the market today can perform like the Delco Remy high output alternators. Both the 28SI and 40SI models withstand extreme underhood temperature demands of up to 257°F – that's over 25°F above the competition – and still keep running.

High-Efficiency Alternators Equals 20% Fuel Savings An efficient alternator on a school bus can more than pay for itself in less than one year. Over the life of the vehicle, these savings can reach in the thousands of dollars.

As the alternator becomes more efficient in the process of converting mechanical power into electrical power, less fuel is consumed. And even though the power demands of the alternator are generally small in comparison to the overall vehicle, the impact on fuel cost is remarkable.





Operating data was collected on school bus applications in order to identify what was actually occurring over the course of the school week and the impact it had on the electrical system. Delco Remy high output alternators were installed and compared to other standard industry models. The results were amazing:

Fuel cost with base efficiency alternator = \$7533* Fuel cost savings with high efficiency alternator = \$1507*

Increasing alternator efficiency can, and will, measurably reduce fuel costs.

ALTERNATOR APPLICATIONS

School Bus Application	Amps	Part Number	Model	Style	Mount Type	Leece-Neville
Base bus without		8600308			J180 - Long	2800LC
AC prior to 2000	160	8600312	28SI	Brush	J180 - Short	
·		8600315			Pad	
Base bus without		8600311		Brush	J180 - Long	4836LGH, 4833LGH
AC after 2000	180	8600223	28SI		J180 - Short	
		8600316			Pad	4939PGH, 4943PGH
Bus with	200	8600307			J180 - Long	
factory AC or an electromagnetic brake retarder prior to 2002		8600313	28SI	Brush	J180 - Short	
		8600314			Pad	
Bus with factory AC or an	240	8600390		Brushless	J180 - Long	4887JB, 4885JB
electromagnetic		8600339	40SI		J180 - Short	
brake retarder after 2002		8600338			Pad	4959PA, 4958PA
	275	8600280			J180 - Long	4867JB
Bus with factory AC and additional add		8600279		Brushless	J180 - Short	
on AC OR bus with factory AC and an		8600094	40SI		Pad	4949PA
electromagnetic brake retarder	320	8600634			J180 - Long	
Diane letaluel		8600628			Pad	4962PA

Note: When replacing some competitive alternators on a Navistar/IC Bus, a different pulley may be required. Please use Navistar pulley part number 3611883C1 for DT and MaxxForce 9 & 10 engines, 3615037C1 for MaxxForce 7 engines and 3716856C1 for ISB engines.

ALTERNATOR COMPETITIVE COMPARISON

	Delco Remy 28SI	Delco Remy 40SI	Leece-Neville	Bosch	
Remote Sense	Yes	Yes	No	No	
Peak Efficiency	68%	72%	60%	68%	
Output at Temperature Ratings	Full Output 125°C (257°F)	Full Output 240 & 275 Amp: 125°C (257°F) 300 & 320 Amp: 115°C (239°F)	Full Output 110° C (230° F)	No Output 125°C (257°F)*	
All Three Industry Mounting Styles	Yes	Yes	No	No**	

^{*} Bosch regulator will shut down before 125°C, resulting in no alternator output

ALTERNATOR SPECIFICATIONS

	28SI	40SI							
Performance Output	160, 180, 200	240, 275, 300, 320							
Rotation	Clockwise	Clockwise							
Temperature Ratings	Low: -40°C (-40°F) High: 125°C (257°F)	Low: -25°C (-13°F) High: 240 & 275 Amp: 125°C (257°F) High: 300 & 320 Amp: 115°C (239°F)							
Mounting	J180 Short Hinge Mount J180 Long Hinge Mount Pad Mount	J180 Short Hinge Mount* J180 Long Hinge Mount Pad Mount							
Weight	18.7 lbs (8.5 kg)	31 lbs (14.1 kg)							
School Bus Aftermarket Warranty**	2 Years/Unlimited Miles	3 Years/Unlimited Miles							

^{*320} Amp not available in short hinge mount **Applicable to U.S. and Canada only

NEW BUS SPECIFICATION CODES

ALTERNATORS

Blue Bird Bus

40SI 275 Amps 4013203 40SI 300 Amps 4013204

Freightliner/Thomas Built

C2

28SI 160 Amps FL-124-1D6* 28SI 200 Amps FL-124-1E0 40SI 275 Amps FL-124-1E7

HDX

28SI 200 Amps C1370-00-000

EFX

40SI 275 Amps C1371-00-000

Navistar/IC Bus BE/CE/RE

28SI 200 Amps 08GHV*

STARTERS

Navistar/IC Bus

BE & CE 29MT 08WYD

38MT 08WTK*

39MT 08WTU

39MT OCP 08WTL

RE

38MT 08WTK* 39MT 08WTU 39MT OCP 08WTL

*Standard Position





^{**} Requires additional purchase of installation kit in order to accommodate the long hinge mount style

STARTER APPLICATIONS

Cummins ISS, 5-71 S20004599 Internal Control of C	JIAN	ARTER APPLICATIONS			BEST REPLACEMENT OPTION							
Cummins ISB, 5.9 L 0002459 000	OEM	ENGINE		28MT								DENSO PART #
Cummins ISB, 6.7L E200077 E200078 E200		Cummins ISB, 5.9L		10465151 10479615 10479638 RH MOUNT: 1113276 10465043	19011402 10461771 RH MOUNT: 19011400 19011409	N/A	61005264 RH MOUNT:	N/A	N/A	N/A	N/A	228000-1953 228000-7301 428000-8400
No. Ground Stad No. Profile Turbo; Section Secti		Cummins ISB, 6.7L	8200077	N/A	8300064	8200371 8200834	61006211	8200077		M105610		428000-7090
Doors Process Proces		No Ground Stud				N/A	61006209	N/A		N/A	N/A	N/A
Car C7, 721			10461171 3921012		N/A	8200958	N/A	8200005	8200433		M009T72679 PC1379 PC2679	
With 2000 Allisen 10479207 1046172 1046172 1046174 10479645 104		Cat C7, 7.2L,	19026027 10461768 8300021					8200076		M105611		228000-5851
MBE 900, 72L MBE 904, 83L 8 8200573 10479648 10479648 10479648 10479648 10479648 10479647 10467964 1046797 10467964 1046797 10467964 10						N/A		8201002		M105612		N/A
Max Force 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		MBE 900, 7.2L MBE 904, 4.3L &	10461772 19011403 8200570 8200565 61231341	10479648 10479645 10479637	8200103		61006208	N/A	N/A	N/A		428000-8470 428000-1881
VT365, 6.0L 1901H07 1046176 132958 10461850		MBE 926, 7.2L		N/A	N/A	8200394	N/A	8200075		N/A		N/A
Cummins ISB, 6.7L 8200079 8200571 8200057 82000571 820			8200271 19011407 10461764 3591688C91		8200972	N/A	61005266	N/A		N/A	N/A	428000-0071
T444E, 7.3L		Cummins ISB, 6.7L	8200077 8201039	N/A	8300064	8200371 8200834	61006210	8200077 N/A	M105610			
MaxxForce DT, 7.6L 2000251 2000252 200	IC Bus	T444E, 7.3L	10461170 1688615C91 2508912C91		N/A	N/A	N/A	8200007		M105617	N/A	228000-7371
Cummins ISB, 5.9L 1045151 1045151 1045171 1045171 1045171 1045171 1045171 115276 1045171 115276 10451771 115276 1045171 115276 1045171 115276 1045171 19011400 10461770 115276 1045170 1046171 1046170 1046171 1046170 1046171 1046170 1046171 1046170 1046170 1046171 1046170 1046171 1046170 1046171 1046170 1046171 1046170 1046171 1046170 1046171 1046170 1046170 1046171 1046170		MaxxForce DT, 7.6L	10478999 10461171 8200251 8200252 8300005					8200005	8200433	M110606 M105302	IN3179 MITIN1378 IN1378 MITIN2178	
Cummins ISB, 6.7L 8200077 90032414 8200371 8200834 8200375 61006211 8200077 M105610 M009T71779 428000-7090 438000-3110 8200375 M105610 M009T71779 428000-7090 438000-3110 M105610 M009T71779 428000-7090 438000-3110 M105610 M009T71779 428000-7090 438000-3110 M105610 M009T71779 428000-7090 438000-3110 M105610 M10		Cummins ISB, 5.9L	90024059 90022947	10465151 10479615 RH MOUNT: 1113276 10465043	19011402 10461771 RH MOUNT: 19011400 19011409	N/A	61005264 RH MOUNT:	N/A	N/A	N/A	N/A	228000-1953 228000-7301 428000-8400
Bus Cummins ISC 8.3L 10478999 10461171 8200958 8200836 8200958 8200055 N/A Cat 3126 7.2L 1993994 19026027 10461768 8300021 With 3000 Allison With 3000 Allison With 3000 Allison Cat C7, 7.2L, 8200055 Cat C7, 7.2L, 8200055 Salar Residue Re		Cummins ISB, 6.7L			8300064	8200371 8200834	61006211	8200077		M105610		428000-7090
Cat 3126 7.2L 1993994 19026027 N/A N/A 10461768 8300021 1454651 N/A			10461171		82(82) N/A	8200836 8200958	N/A	8200005	8200433		M009T72679 PC1379 PC2679	228000-5311 428000-7870
Cat C7, 7.2L, 8200055		Cat C7, 7.2L,	19026027 10461768 8300021 1454651			N/A		8200076	N/A	M105611		228000-5851
							8201002		M105612		N/A	

STARTER SPECIFICATIONS

	29MT	31MT	38MT	39MT			
Engine Size	12V up to 6.6L	12V up to 8L	12V up to 10L	12V up to 15L			
Performance	3.3 kW	4.1 kW	4.6 kW	7.2 kW			
Weight	17.6 lbs (8 kg)	18.5 lbs (8.4 kg)	27.6 lbs (12.5 kg)	30.21 lbs (13.7 kg)			
Mounting	SAE #1	SAE #1	SAE #1, SAE #3	SAE #1, SAE #3			
Pinions	9-tooth/Module 3 10-tooth/8-10 pitch 10-tooth/10-12 pitch 11-tooth/Module 3	10-tooth/10-12 pitch 10-tooth/8-10 pitch 9 -tooth/Module 3	10-tooth/8-10 pitch 12-tooth/8-10 pitch 11-tooth/Module 3	11-tooth/6-8 pitch 12-tooth/8-10 pitch 12-tooth/Module 3			
Supports Wet & Dry Clutch Applications	✓						
School Bus Aftermarket Warranty	Minimum 2 Years/Unlimited Miles (Applicable to U.S. and Canada only)						



