



823 South 19<sup>th</sup> Ave. Marshalltown, Iowa 50158 877-752-4733

New Hampton CSD  
710 West Main St.  
New Hampton, IA

Christy Roethler,

Stock Unit: 2018 IC CE  
65 Passenger  
ISB 240hp  
Allison 2500  
Hydraulic Brake  
Electric Door  
**\$79,178.00** (Stock is subject to availability)

Order Out: 2018 IC CE  
71 Passenger  
ISB 250hp  
Allison 2500  
Manual Door  
**\$86,287.00**

Hoglund Bus has evolved as a leader in the transportation industry over the past 65 years. Our commitment to customer satisfaction and years of experience has helped us become the transportation specialists.

Our Mission is to deliver top quality mobility products at a favorable cost, to provide first class parts and service facilities and to maintain a mutually beneficial relationship with our suppliers, our company and our customers.

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STOCK UNIT - SUBJECT TO AVAILABILITY

2018 IC CE  
 65 PASS  
 ISB 240HP  
 HYDRAULIC BRAKE

Class Description	Component	Description
FRAMES	0001CAC	FRAME RAIL 50,000 PSI YIELD 480.1" OAL High Strength Low Alloy Steel (50,000 PSI Yield); 10.125" x 3.062" x 0.312" (257.2mm x 77.8mm x 8.0mm); 480.1" (12195mm) Maximum OAL
FRAMES	0001LLE	FRT BUMPER-FULL WIDTH-HD AERO-STL Full Width, Aerodynamic, Heavy Duty, Steel
FRAMES	0001LMW	CROSS GATE/FRT/ELECT/YELLOW BMP MOUNT Electric, Yellow Blade, Bumper Mounted
FRAMES	0001SAM	2-REAR AF CROSSMEMBER
FRAMES	0001WHU	WHEEL BASE RANGE 254" ONLY 254" (645cm) Only
FRAMES	0001WRP	TWO REAR TOW HOOKS ON LOWER RAIL FLANGE Mounted on Lower Rail Flange
FRAMES	1570	TWO FRONT TOW HOOKS Frame Mounted
FRONT AXLES	0002ASH	FR AXLE 10K MTOR MFS-10-122A I-Beam Type, 10,000-lb Capacity
FRONT SUSPENSIONS	0003ADB	10,000-LB FRT PARABOLIC TAPER LEAF SUSP Parabolic, Taper Leaf; 10,000-lb Capacity; with Shock Absorbers
BRAKES	0004GBJ	PARKING BRAKE BOSCH DSSA 12" X 3" DSSA Type, 12" x 3"; for Hydraulic Brake Chassis; Foot Operated in Cab; Differential Mounted
BRAKES	0004JNP	BRAKES FT HYD DISC 70MM DIA PISTON Quadraulic; Four 70mm Diameter Pistons
BRAKES	0004JNU	TRACTION CONTROL HYDRAULIC Automatic; Hydraulic Brake System
BRAKES	0004NNL	REAR HYD BRK DISC 70MM QUADRAULIC Quadraulic; Four 70mm Diameter Pistons
BRAKES	0004WGT	PARKING BRAKE INTERLOCK Parking Brake Cannot be Released until Ignition Switch is in the "ON" Position and the Service Brake Pedal is Applied, Use with Hydraulic Brake Chassis Only
BRAKES	0004WXP	GVWR LIMITATION FOR BUS 29,800 LB CONV with Hydraulic Brakes, Limited to 29,800-lbs Maximum to meet FMVSS 105 Requirements, for Conventional Bus
BRAKES	4100	HYD SPLIT BRAKE SYSTEM W/ABS Split System, with Automatic Adjustment And with Four Channel ABS
STEERING	0005CAL	STRG WHL BLK 2-SPK 2-Spoke, 18" Dia., Black
STEERING	0005PSA	1-PWR STRG GEAR SHEPPARD M100 Power
STEERING	5708	STRG COL, TILTING Tilting

EXHAUST SYSTEMS	0007BJV	EXH INLINE HORZ/HORZ TP RSM Inline, Horizontal Aftertreatment Device, Frame Mounted Right Side, Includes Long Horizontal Tail Pipe
EXHAUST SYSTEMS	0007WBK	TAIL PIPE LONG HORIZ EX RT THRU BUMPER Long Horizontal, Exits Right Side Through Bumper
ELECTRICAL SYSTEMS	0008GHV	200 AMP 12V ALT DELCO 28SI Brush Type, 12 Volt 200 Amp. Capacity, Pad Mount
ELECTRICAL SYSTEMS	0008MKL	3-12V 1950CCA BTRY SYS-INTERNATIONAL Maintenance-Free, (3) 12-Volt 1950CCA Total
ELECTRICAL SYSTEMS	0008TTK	BATT BOX STL LSM BFA 25.25"W SLDG Steel, with Sliding Tray, 25.25" Wide, for Standard Batteries, Mounted Left Side Behind Front Axle Perpendicular to Frame Rail
ELECTRICAL SYSTEMS	0008TTN	BATTERY BOX COVER-PLASTIC Plastic, Front Cover for Frame Mounted Battery Box Compartment
ELECTRICAL SYSTEMS	0008WPB	2-HEADLIGHTS HALOGEN COMPOSITE AERO Halogen; Composite Aero Design for Two Light System; Includes Daytime Running Lights
ELECTRICAL SYSTEMS	0008WTK	START MOTOR (DELCO 38MT TYPE 300) 12 Volt; less Thermal Over-Crank Protection
ELECTRICAL SYSTEMS	0008WWJ	INDICATOR LOW COOLANT WITH ALARM with Audible Alarm
ELECTRICAL SYSTEMS	0008WXB	HEADLIGHT WARNING BUZZER Sounds When Head Light Switch is on and Ignition Switch is in "Off" Position
ELECTRICAL SYSTEMS	0008WXC	WARNING LITE & ALARM PARK BRK Light and Audible Alarm; Parking Brake/Motion Warning System for Engaged Parking Brake
ELECTRICAL SYSTEMS	0008XAH	MANUAL-RESET CIRC BREAKERS (MAIN PANEL) Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses
ELECTRICAL SYSTEMS	0008XDX	BK WARN IND PARK BK NOT SET , Visual and Audible Alarm; Active Upon Ignition Off and Parking Brake Not Set, Reminder to Set Parking Brake
ELECTRICAL SYSTEMS	8000	ELEC SYS (12 VOLT) 12-Volt, Standard Equipment
ELECTRICAL SYSTEMS	8541	2-ELECTRIC HORNS DISC STYLE Disc Style
FRONT END	0009WAB	HOOD TILT ASSIST (MECHANICAL) Mechanical
FRONT END	0009WAY	FIBERGLASS TILT FE 3 PIECE Tilting, Fiberglass, with Three Piece Construction
SPEEDOMETER, TOOLS, MISC	0010XAK	PROMOTIONAL PKG 7 Year Unlimited Miles/km Warranty, Limited Time Program for Allison 2000 Series Transmission on School and Commercial Buses (Supplied directly through Allison)
SPEEDOMETER, TOOLS, MISC	10020	CHASSIS PAINT FULL FOR BUS Full Chassis
SPEEDOMETER, TOOLS, MISC	10060	SINGLE COLOR 100 PT SCHEMATIC Single Color, Design 100
SPEEDOMETER, TOOLS, MISC	10788	PAINT URETHANE (1-2 COLORS) Urethane, One or Two Colors, Other than Imron or International.
CLUTCH	11001	OMIT CLUTCH & CONTROLS Omit Item (Clutch & Control)

ENGINE	0012EEL	CUM ISB-240, 240 HP/2600 RPM GOV SPD EPA 2010, 240 HP @ 2400 RPM, 560 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 240 Peak HP (Max) School Bus Only
ENGINE	0012TSY	FAN DRIVE VISCOUS BORG WARNER SA-85 Viscous Type, Screw On
ENGINE	0012UGN	THROTTLE CONTROL ELECTRONIC Electronic
ENGINE	0012UPB	2016 FEDERAL EMISSIONS CUMMINS ISB ENG EPA, OBD and GHG Certified for Calendar Year 2016
ENGINE	0012UYE	RAD 717" CAC 313" W/TRANS COOLER Aluminum; 2-Row, Cross Flow, Over Under System, 717 SqIn Louvered, with 313 SqIn Charge Air Cooler. with In-Tank Transmission Cooler
ENGINE	0012VBR	AIR CLEANER W/SERVICE PROTECTION ELEMENT with Service Protection Element
ENGINE	0012VVN	ELECTRONIC CRUISE CONTROL Electronic
ENGINE	0012VWH	ELECTRONIC ROAD SPEED GOVERNOR Electronic Road Speed Type; for Electronic Engines and Bus Models; with 55 MPH Default
ENGINE	0012WSY	ENG BLOCK HTR 120V/750W FOR ISB/B6.7 ENG 120 Volt/750 Watt; for Cummins ISB/B6.7 Engines
ENGINE	0012WZE	EMISSION COMPLIANT FEDERAL NOT CA Federal, Does Not Comply with California Clean Air Idle Regulations
ENGINE	12703	ANTI FREEZE RED EXTENDED LIFE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection
TRANSMISSION	0013ART	ALLISON XMSN 2500_PTS 5-SP L/PTO L/RETR 5th Generation Controls; Wide Ratio, 5-Speed, with Overdrive; Less PTO Provision, Less Retarder, with 33,000-lb GVW & GCW Max. School Bus
TRANSMISSION	0013WLN	TRANS OIL--SYNTHETIC 20 THRU 28 PINTS Synthetic; 20 thru 28 Pints
TRANSMISSION	0013WYV	SHIFT CONT PARAMETERS ALLISON 1000/2000 Allison 1000 or 2000 Series Transmissions, 5th Generation Controls, with EcoCal and Dynamic Shift Sensing (FuelSense Basic)
REAR AXLES, SUSPENSIONS	0014AGM	SGL RA 19.8K 190 WE DANA 19060S Single Reduction, 19,800-lb Capacity, 190 Wheel Ends
REAR AXLES, SUSPENSIONS	0014SBK	RR SPGS 19,800# 2STG V-RATE Two Stage, Vari-Rate; 19,800-lb Capacity
REAR AXLES, SUSPENSIONS	0014WAP	REAR SHOCK ABSORBERS
FUEL TANKS	0015SBZ	1-FL TK BTR BRA STL 65G CAGE RECT Top Draw; Rectangular, Steel; 65 U.S. Gal., 246 L Capacity, Includes Protective Cage and with Fuel Filler Assembly and Vent Hosing, Mounted Between Frame Sidemembers and Behind Rear Axle
FUEL TANKS	0015WDK	DEF TANK 12 GAL FRAME MTD RT/SIDE 12 U.S. Gal. 45.4L Capacity, Frame Mounted Outside Right Rail
CABS, COWLS, BODIES	0016HBA	ENGLISH GA CLUSTER W/ENGLISH SPEEDO English with English Electronic Speedometer

CABS, COWLS, BODIES	0016HGH	OIL TEMP GAUGE FOR AUTOMATIC TRANS , for Allison Transmission
CABS, COWLS, BODIES	0016HKT	IP CLUSTER DISPLAY DIAGNOSTICS On Board Diagnostics Display of Fault Codes in Gauge Cluster
CABS, COWLS, BODIES	0016HLJ	GAUGE, DEF FLUID LEVEL
CABS, COWLS, BODIES	0016VCD	DASH INSULATOR
CABS, COWLS, BODIES	16000	TRANS COVER, FLOOR MATS, SEALS Transmission Cover, Floor Mats and Seal DO NOT ORDER-FOR FACTORY USE ONLY
CABS, COWLS, BODIES	16010	FLAT BACK COWL Flat Back
WHEELS, TIRES - FRONT	0027DUG	DISC FR WHL 22.5X8.25 PC/STL DISC; 22.5x8.25 Rims, Powder Coat Steel, 2-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
WHEELS, TIRES - REAR	0028DUG	DUAL DISC RR WHL 22.5X8.25 PC/STL DUAL DISC; 22.5x8.25 Rims, Powder Coat Steel, 2-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
WHEELS MISC OPTIONS	29580	INTERNATIONAL WHEEL SEALS (FRONT) Oil-Lubricated Wheel Bearings
WARRANTY	40114	WARRANTY STD CTS-3304G Standard for CE, RE, BE School Bus Models, Effective with Vehicles Built January 2, 2015 or Later, CTS-3304G
BODY PLANS	0047AGC	BODY;CO 78"HR 31'2"BL +9F&R 66PASS 254WB Conventional; 78" Headroom, 31'2" Body Length, +9 Section Front and Rear, 66 Passenger, 254 WB
BODY FEATURES	0047AJB	CERTIFICATION LABEL MYLAR Mylar Label
BODY FEATURES	0047AJC	BODY TAG, METAL INCL TOTAL PASSENGERS Capacity to Include the Total Number of Passengers
BODY FEATURES	0047AJW	FRT STEP ENTRANCE DR 27.25" 14GA 27 1/4" Depth; 14ga Steel
BODY FEATURES	0047APR	HEADLINR BODY CO 25'11"-34'11" PERF W/IN Conventional; 25'11"-34'11" Body Length, Perforated Full Length with Sound Insulation Full Length
BODY FEATURES	0047APW	FASTNERS HEADLINER RIVETS Rivets
BODY FEATURES	0047ARH	ROOF BOWS 14 GA ONE PIECE 14 ga., One Piece Construction
BODY FEATURES	0047ARP	LIGHT BARS PLASTIC Plastic
BODY FEATURES	0047ATB	SKIRT BODY CONV 20" 16GA 31'2"-34'11"BL Conventional, 20", 16ga., 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length
BODY FEATURES	0047AUR	TIE DOWNS GRADE 8 BOLTS Grade 8 Bolts, Every Body Section
BODY FEATURES	0047AXT	RUB RAILS 4 STEEL CS 31'2"-34'11"BL Conventional; Steel, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length, Includes Snow Rail
BODY FEATURES	0047AYB	BODY,REAR; W/EMERG DOOR Includes Emergency Door
BODY FEATURES	0047AZE	SIDE SHT EXT SMOOTH 16GA 3102-3411BL Conventional, 16ga., Smooth, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length

BODY FEATURES	0047AZL	FLOOR WITH WHEEL WELLS with Wheel Wells
BODY FEATURES	0047AZY	RAILS WRAP AROUND FLOOR/RADII At Floor Level To Radii
BODY FEATURES	0047AZZ	RAILS WRAP AROUND JUST BELOW WINDOW LINE Just Below Window Line
BODY FEATURES	0047BAR	BOLT REAR BUMPER SUPPORT TO FRAME Bolted to Frame
BODY FEATURES	0047BAU	BUMPER,REAR; PAINTED 12" Painted; 12" High, 3/16" Thick, with 7" Hole for Exhaust
BODY FEATURES	0047BBH	LINING EMBSED STEEL CLR COATED LWR INT Embossed Steel, Clear Coated
BODY FEATURES	0047BBZ	SEALER EXTRA WALL TO FLOOR & WHEELPOCKET Extra; Sidewall to Floor, In Wheel Pocket Area, and Rear Wall to Floor
BODY FEATURES	0047DAE	LAG SCREWS REAR DOOR TO BODY Lag Screws, Rear Door To Body
BODY FEATURES	0047DAJ	COVER PARTIAL RR INSIDE DOOR HANDLE Partial Coverage
BODY FEATURES	0047DDE	HANDLE ASSIST OUTSIDE ENTRANCE DOOR Outside Entrance
BODY FEATURES	0047DDH	HOLD BACK, STATIONARY, RR EMRG DOOR Stationary, No Cables, with Plastic Cover
BODY FEATURES	0047DDU	LATCH RR DOOR 1-POINT SLIDE BAR 1"STRKE One Point Slide Bar, Cam Operated, with One Inch Stroke
BODY FEATURES	0047DEK	VANDAL LK RR DR W/IGNITION START/INTERLK with Ignition Starter Interlock
BODY FEATURES	0047DEY	HANDLE EXTERIOR RR EMERG DOOR YELLOW Emergency Door; Yellow
BODY FEATURES	0047DNB	DOOR,FRT ENT; O/O ELEC W/SPLIT GLASS Electric, Outward Opening, with Split Pane Glass
BODY FEATURES	0047DNR	SWITCH LOCATION LEFT OF DRIVER Left of Driver; Includes Master Flasher, Amber Flasher, and 3 Position Door Control with Red Override
BODY FEATURES	0047EBM	BATTERY HOLDDOWN, 2 STANDARD SIZE BATT For (2) Standard Size Batteries
BODY FEATURES	0047KDC	MONITOR POST TRIP INSPEC W/ALARM DISABLE Accessory Controlled, with Push Button Alarm Disable at Rear of Bus Prompts Driver to Walk to Back of Bus and Push Button in Light Bar to Deactivate System
BODY FEATURES	0047LAB	INSULATION,DRIVER FLOOR; COMPLETE AREA Insulation Covering Complete Driver Floor Area
BODY FEATURES	0047LAT	ROOF BOW INSULATION CS 31'2-34'11" Conventional; Insulation, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Lengths
BODY FEATURES	0047LAU	INSULATION,ROOF & SIDES; 1.5" 1.50", All Models
BODY FEATURES	0047MAC	UNDERCOAT;FLOOR/STEPWELL SIDES for Engine Noise Reduction
BODY FEATURES	0047MBA	UNDERCOAT;BODY WATER BASED TT-C-730 SPEC Fire Resistant, Water Based, TT-C-730 Spec
BODY FEATURES	0047MBC	STEPWELL INSULATION
BODY FEATURES	0047MJR	DECAL,LTRS; EMERG DOOR, RR 2" BLK Decals; "EMERGENCY DOOR", 2" Black Letters Inside and Outside

BODY FEATURES	0047MNM	2" BATTERY" DECAL ON BATT COMPARTMENT (01) Decal; "Battery"; 2" Black letters, Centered on Standard Battery Box
BODY FEATURES	0047MNT	DECAL,ARROW; RR, INSIDE DOOR HANDLE RED Decal; Red, .75" Stroke, Indicating Handle Direction
BODY FEATURES	0047MPE	DECAL,LTRS; "SCHOOL BUS" 8" DIAMD REFL Decal; "SCHOOL BUS", with 8" Black Reflective Letters, Diamond Grade, On Front and Rear Cap
BODY FEATURES	0047MRU	2LT BLK DECAL E/E I/O Decal Sets, "EMERGENCY EXIT", Black Inside and Outside
BODY FEATURES	0047MTY	WIRING DIAGRAM Schematic, Electrical
BODY FEATURES	0047MVA	DECAL,LTRS; WATCH YOUR STEP 1" BLK Decal; "WATCH YOUR STEP", 1" Black, Above Windshield
BODY FEATURES	0047MVC	DECAL,LTRS; WATCH YOUR STEP BEHIND DR 1" Decal, "WATCH YOUR STEP", 2.5" Black, Behind Door on Step Riser
BODY FEATURES	0047MWZ	DECAL RR "UNLAWFUL TO PASS" REAR DOOR Decal, "UNLAWFUL TO PASS WHEN LIGHTS FLASH", Black Letters 27" x 2", Mounted Center of Rear Emergency Door
BODY FEATURES	0047NAB	PAINT COLOR RUB RAILS 0001 BLACK 0001 Canyon Black
BODY FEATURES	0047NGE	DECAL,LTRS; CAPACITY 2" BLK NBR IA 2" Black Decals, (2) Places, with Bus Number, for State of Iowa, Rated Cap
BODY FEATURES	0047NGW	SEAL TOP EDGE RUB RAILS Top Edge, All Rails
BODY FEATURES	0047NHB	INSTR PLATE 2LT MTD UNDER E/E WINDOWS Mounted Under Window
BODY FEATURES	0047NHL	2RT BLK DECAL E/E IN&OUT Decal Sets, "EMERGENCY EXIT", Black, Inside and Outside
BODY FEATURES	0047NHW	INSTR PLATE 2RT MTD UNDER E/E WINDOWS Mounted Under Window
BODY FEATURES	0047NJA	PAINT,BODY; SBNS YELLOW EXTERIOR 4421 Yellow, SBNS
BODY FEATURES	0047NJM	FLASHER BACKGROUND 0001 CANYON BLACK 0001 Canyon Black
BODY FEATURES	0047NJS	PAINT,BUMPER REAR; 0001 BLACK Rear; 0001 Canyon Black
BODY FEATURES	0047NKL	PAINT,RUB RAILS; FLANGE TO FLANGE Flange to Flange
BODY FEATURES	0047NKM	PAINT,BODY INTERIOR; 9384 SPRING WHITE 9384 Spring White
BODY FEATURES	0047NMG	DECAL,OP INSTRUCTIONS; INSIDE RR EMRG DR Decal, Inside Rear Emergency Door
BODY FEATURES	0047NTE	LOGO,ROOF LINE 1ST SEC ABOVE DRIVER & DR Decal; Wing and Shield, First Body Section, Above Driver Window and Entrance Door Over Driver Window and Entrance Door
BODY FEATURES	0047NTY	PAINT,HOOD FENDER; MATCH BODY EXTERIOR To Match Body Exterior
BODY FEATURES	0047NWH	STRIPING,REAR ROOF HATCH; 1" 3M FLUOR Decal, Perimeter, 1", Yellow, 3M Fluorescent Diamond Grade
BODY FEATURES	0047NWJ	STRIPING,SEATLINE; 2" YL FLUOR 2" Yellow, Fluorescent Diamond Grade
BODY FEATURES	0047NWR	1RR END STP'G 2" YL FLUOR 2" Yellow Fluorescent Diamond Grade

BODY FEATURES	0047NWT	STRIPING,FRT ROOF HATCH; 1" 3M FLUOR Decal, Perimeter, 1", Yellow Fluorescent Diamond Grade
BODY FEATURES	0047NWU	2RT 1"3M FLUOR YL PER STP'G E/E WINDO (02) Perimeter, 1" 3M Yellow Fluorescent Diamond Grade
BODY FEATURES	0047NXH	2LT 1"3M FLUOR YL PER E/E WINDO (02) Perimeter, 1" Yellow Fluorescent Diamond Grade
BODY FEATURES	0047NXN	1RR YEL 3M FLUDIA'D GRD PER STP'G E/E DR Emergency Door; 1" Wide, 3M Fluorescent Diamond Grade, Yellow
BODY FEATURES	0047PBZ	ASSIST HANDLE WS SIDE MTD L/R BODY COLOR Windshield Side Mounted, Left and Right, Body Color
BODY FEATURES	0047PLX	DECAL "DEF ONLY" 1"BLK ON DEF FILLER DR Decal; "DEF ONLY", 1" Black, on DEF Filler Door
BODY FEATURES	0047SBS	SUBFLR PLYWD 5PLY B-C GRD 31'2"-34'11"BL Conventional; B-C Exterior Grade, Less Sealed Edges, 5/8", 5 Ply, for 31'2",31'11",32'8",33'5", 34'2", 34'11", Body Length
BODY FEATURES	0048ABB	WINDOW, STORM, RT 1ST AFT ENT DR Position Aft Entrance Door
BODY FEATURES	0048ACN	SEATBELT,DRVR COLOR BLAZE ORANGE with Blaze Orange Seat Belt Webbing
BODY FEATURES	0048ANM	WINDOW ENTRANCE DOOR LAMINATED CLEAR Laminated, Clear
BODY FEATURES	0048ANW	WINDOW, DRIVER; STORM Storm
BODY FEATURES	0048APL	WINDOW STOP 12" ONLY W/78" HEADROOM 12" Opening, Only with 78" Headroom
BODY FEATURES	0048APW	WINDOW ENTRANCE DR STORM LAMINATED CLEAR Storm, Laminated, Clear
BODY FEATURES	0048ARK	WINDOW SASH, 14-27" SECTIONS 27" Sections, 9"x 23" Opening
BODY FEATURES	0048ASR	WINDOW SASH 3 +9 SECTION 9" x 32 1/4" Opening
BODY FEATURES	0048BAH	WINDOW, LT E/E; (2) VERT HNG Vertical Hinge
BODY FEATURES	0048BJA	STD AL/FINISH WIN/FRAME Passenger Window, Natural Aluminum Finish
BODY FEATURES	0048BKP	WINDOW, RT E/E; (2) VERT HNG Vertical Hinge
BODY FEATURES	0048BUB	WINDOW TINT,PASS; CONV 28% TEMPERED Conventional; 28% Light, Tempered Glass, 78" Headroom, with 34'11", 31'2", 31'11", 32'8", 33'5", 34'2" Body Lengths
BODY FEATURES	0048GHC	HEATER,DRVR; 90000BTU CONV W/DEFROSTER 90,000 BTU, with Defroster and without Rear Heat Duct
BODY FEATURES	0048PAV	WHEEL POCKET COVER PLASTIC ABS Plastic, ABS
BODY FEATURES	0048PAY	AISLE POSITION, CENTER FOR BALANCED SEAT Center, for balanced seating
BODY FEATURES	0048PAZ	WINDSHIELD; 3-PC FLAT 73% TINT 3 Flat Pieces, 73% Light
BODY FEATURES	0048PEW	GRAY#766 FLR COVERING Gray #766
BODY FEATURES	0048PHN	21-22 PASS SEAT UPH 42 OZ. PREVAILL Prevaill, 42 oz.; for (21-22) Seats
BODY FEATURES	0048PKP	DEFOG FANS MTG LEFT 2 SPD SWITCH 6.50" Diam. Chrome, Metal Case, Mounted Left of Center Post, 2 Speed Switch in Panel



BODY FEATURES	0048PKW	FAN,DEFOG RT; ABOVE W/S FWD DR, 2-SPD SW 6.50" Diam., Chrome Mounted Right Side Above Windshield, Forward Entrance Door, 2 Speed Switch in Panel
BODY FEATURES	0048PMC	HEATER,PASS; LT MDSHP (1) KYSOR 50000BTU 50,000 BTU
BODY FEATURES	0048PMJ	HEATER,PASS; LT REAR, KYSOR 84500BTU 84,500 BTU
BODY FEATURES	0048PMS	KYSOR 50000BTU STEPWELL HEATER 50,000 BTU
BODY FEATURES	0048PPC	FAN SWICH FOR REAR HEATER with 84,500 BTU Rear Heater Only
BODY FEATURES	0048PPM	HEATER CUT/OFF VALVE BUTTERFLY HDL Ball, with Butterfly Handle
BODY FEATURES	0048PPS	ROOF VENT, FRNT; STATIC Static
BODY FEATURES	0048PSH	SEAT,DRVR; MAGNUM 200 MECH Mechanical Suspension
BODY FEATURES	0048PUP	OMIT TRIM F/FLOOR COVERING Omit
BODY FEATURES	0048PUT	NUTS, STANDARD, DRIVER SEAT BELT MTG Standard Nuts For Seat Belt Mounting
BODY FEATURES	0048PVA	UPHOLSTERY,DRVR SEAT STYLE; PLAIN CL INS Plain, with Cloth Insert
BODY FEATURES	0048PVN	UPHOLSTERY DRVR SEAT,COLOR; GRAY Drivers Seat, Gray
BODY FEATURES	0048PWD	COLOR, GRAY ACT/PASS,BARRIER,BUMPRS Gray, for Seats, Barriers and Head Bumpers
BODY FEATURES	0048PWR	UPHOLSTERY,DRVR SEAT TYPE; PREVAIL 42 OZ Prevail, 42 oz.
BODY FEATURES	0048PXP	1-2 42 OZ PREVAILL UPHOLSTERY, BARRIER (1-2) Prevaill, 42 oz.
BODY FEATURES	0048PZP	ROOF HATCH FRT SPCLTY W/ALARM Emergency Exit with Alarm
BODY FEATURES	0048PZR	ROOF HATCH REAR WITH ALARM Emergency Exit with Alarm
BODY FEATURES	0048RAE	CB E/DR 39"1L 39", 1 Leg
BODY FEATURES	0048RAL	CB A/DRVR 39"1L 39", 1 Leg
BODY FEATURES	0048REP	PANEL,MODESTY; AFT OF DRIVER Mounted Under Barrier
BODY FEATURES	0048RET	PANEL, MODESTY; AFT OF ENTRANCE DOOR Mounted Under Barrier
BODY FEATURES	0048RGR	HAND RAIL AFT ENTR DOOR SST 4" A/STEP Stainless Steel, 4", Above Step
BODY FEATURES	0048RLX	SEAT CUSHION 15" DEPTH 15" Depth
BODY FEATURES	0048RRA	SINGLE STITCHING SEAT UPHOLSTERY Single
BODY FEATURES	0048RZJ	KOROSEAL STEP TREADS PEBBLE TOP W/NOSE Pebble Top with White Nosing, with Non-Metal Backing
BODY FEATURES	0048SAD	1LT26"2L PAS SEAT (01)
BODY FEATURES	0048SDT	10LT39"2L P/SEAT (10)
BODY FEATURES	0048SKM	11RT39"2L P/SEAT (11)
BODY FEATURES	0048USV	P/SEAT HIGH BACK High Back
BODY FEATURES	0048UWW	FLOOR COVER VINYL,1 PC ALL LTH DARK GRAY Koroseal, One Piece, Vinyl, All Body Lengths, Dark Gray
BODY FEATURES	0049AAZ	SWITCH INTERRUPT CROSSING GATE Single Cycle; with Auto Reset, Located In Driver Compartment
BODY FEATURES	0049ABB	LIGHT BKUP; 2-7" DIA CLEAR 7" Diameter, Clear

BODY FEATURES	0049ACB	TURN LITES FRT 7" AMBER ON COWL 7" Amber, on Front Cowl
BODY FEATURES	0049ACU	TURN LITE RR 7" AMBER LESS ARROW 7" Amber, without Arrow
BODY FEATURES	0049ADC	LIGHT WARN 4-FRT 4-RR 7" RED/AMBER Quartz Halogen Beams, 7", 2 Front, 2 Rear, Red and Amber Lights
BODY FEATURES	0049ADX	TAIL LIGHTS LICENSE PLATE 2 RED 4" 4" Red with Light Window
BODY FEATURES	0049AEG	LIGHT,MARKER; (4) FT/RR 1500HR 3CP SGL (4) Two Amber Front and Two Red Rear, Single 1500 Hour 3cp Bulb Each Light
BODY FEATURES	0049AEU	LIGHT,STOP; (2) W/TAIL, 7" DIA. and Tail, 7" dia., Red
BODY FEATURES	0049AJH	CONNECT LTS CLUS/CLR/SIDE MRKR TO TAIL Cluster, Clearance and Side Marker To Tail Lights
BODY FEATURES	0049AMD	DRIVERS SWITCH PANEL ROCKER Rocker
BODY FEATURES	0049AMT	MANUAL RESET BREAKERS ILO FUSES Breakers, Manual Reset in Lieu of Fuses
BODY FEATURES	0049AMV	BACK ALARM ECCO#850 112 DB 112 db
BODY FEATURES	0049AMY	SWITCH REAR DOOR BUZZER for Emergency Door
BODY FEATURES	0049ANG	LITE INDIC RED EMERG DR Wired To Buzzer and Mounted on Dash
BODY FEATURES	0049ANH	MAG SW MASTER DISCON ALL BODY CIRCUITS Master, Ignition Operated, All Body Circuits
BODY FEATURES	0049ANU	SOURCE, POWER, 12VDC MOUNTED IN DASH 12 Volt DC, Mounted On Dash
BODY FEATURES	0049APA	LIGHT DRIVER CEILING DELUX SEPARATE SW Deluxe, with Separate Switch, Mounted in Light Bar
BODY FEATURES	0049APZ	LIGHT,DOME; Conventional; Two Full Rows Rectangular Recessed Dome Lights, 31'2", 31'11", 32'8", 33' 5", 34'2", 34'11", Body Length
BODY FEATURES	0049ARM	SWITCH FOR REAR ROW DOME LIGHTS Separate, for Rear Row Dome Lights, Last Light on Each Side
BODY FEATURES	0049ARN	STEP LITE WIRED TO CLEARANCE LITES Wired to Clearance Lights
BODY FEATURES	0049ATV	LITE INDIC WARNING LITES RED/AMBER Red and Amber
BODY FEATURES	0049AUM	MASTER FLASHER SWITCH OMIT Omit Master Flasher Switch, 8-Lamp System
BODY FEATURES	0049AWU	6-SPEAKERS/WIRING FLUSH MTD IN LIGHT BAR Flush Mounted in Light Bar
BODY FEATURES	0049BCM	FLASHER 8-LAMP SEQU WITH DOOR OPEN Warning Lights, 8-Lamp System, Electronic Relay Flasher, Sequential Operation, Red Lights Activate after Ambers Lights with Door Open
BODY FEATURES	0049BCR	LIGHT, EXTERIOR CHECK Automatically Activates Lights for Pre Trip Inspection
BODY FEATURES	0049BRE	LIGHT,MARKER SIDE; INTERMEDIATE Intermediate, Single Bulb, Centered, 3cp, 1500 HR Bulb, Required for Units 30 Foot or Longer

BODY FEATURES	0049BYD	RADIO AM/FM-MPLX ANT/CABLE PUB ADD SYS AM/FM-MPLX Stereo, Includes Antenna and Cable, with Public Address System
BODY FEATURES	0049DDC	LIGHT,CLUSTER; AMBR FT,RED RR LED LED; Amber Front and Red Rear
BODY FEATURES	0049EAX	TURN LT 4-LED ARMOR SND OFF AFT DR Rectangular LED Armored, 2 Each Side First Section Aft Entrance Door & Forward Rear Wheel Pocket
BODY FEATURES	0049EEX	STOP ARM,FRT; ELEC SPCLTY,HI-INT, FLH RD Electric, 18" Octagon, Double Sided, 1/2" White Border, Hi Intensity, Flashing Red Incandescent Lights
BODY FEATURES	0049EGC	MIRROR,INSIDE; 6" X 30" CLEAR SAFE/GLASS 6" x 30", Clear Safety Glass, Metal Back, Round Corners
BODY FEATURES	0049EGM	MIRROR,EXTRR CROSS-VIEW; BLK ROSCO HTD Heated, Black, Rosco
BODY FEATURES	0049ENK	SUN VISOR LT W/S 6" X 30" TRANSPARENT 6" x 30", Transparent, For Left Windshield
BODY FEATURES	0049ETJ	1-1ST AID KIT #918 24U IA No. 918, 24 UNIT, Iowa
BODY FEATURES	0049EVL	NOISE SUPP SWITCH FOR SOLENOID Actuator Legend States, "NOISE SUPP ", for Separate Solenoid, with Red Switch in Panel
BODY FEATURES	0049EWM	1-STROBE LT ECCO DBL FLASH 6550C ECCO 6550C, low profile, double flash, 4.9" high
BODY FEATURES	0049EXD	MIRROR,EXT RVIEW; ROSCO BLK MOTO HEAT Open View, Black, Heated, Motorized, Non-Detent
BODY FEATURES	0049GAR	BODY FLUID KIT NE Nebraska
BODY FEATURES	0049GBV	WINDSHIELD WIPERS; COWL MOUNTED Cowl Mounted
BODY FEATURES	0049GDB	LATCH BULKHEAD DOOR Lever Latch, for Bulkhead Mounted Safety Compartment or Destination Sign Access Doors
BODY FEATURES	0049GEE	COMP OVER WINDSHDL L/LK,BZR with Latch, No Lock, No Buzzer, Centered Over Windshield, with Single Piece Panel, (Requires Latch)
BODY FEATURES	0049GEM	SAFETY TRIANGLES MTD DRVR BARRIER 6"DWN Warning Reflectors, Mounted on Front of Drivers Barrier 6" Below Top of Modesty Shield
BODY FEATURES	0049GGE	FIRE EXT 5# 2A-40BC DRVR AREA 5 lb 2A-40BC Minimum with Flexible Hose and Metal Nozzle
BODY FEATURES	0049GHN	REFLECTOR,REAR; (2) RED 3" 3", Red, Adhesive Back
BODY FEATURES	0049GHR	REFLECTOR,SIDE REAR; (2) RED 3" 3", Red, Adhesive Back
BODY FEATURES	0049GHV	REFLECTOR,SIDE FRONT; (2) AMBER 3" 3", Amber; Adhesive Back, 1 Aft Drivers Window Left, 1 Aft Entrance Door Right
BODY FEATURES	0049GHX	REFLECTOR,INTERMED SIDE; (2) 3" 3" Amber, 1 Each Side, Below The Third Rub Rail From the Top, Adhesive Back
BODY FEATURES	0049GKZ	FUEL FILLER DOOR W/NON LOCKING LATCH with Non-Locking Latch
BODY FEATURES	0049GUC	KNIFE FOR LIFE/ SEAT BELT CUTTER for Cutting Seat Belts
BODY FEATURES	0049GUM	INSPECTION PL FL SEND UN 8X8 STL Fuel Sending Unit 8" x 8" Steel

BODY FEATURES	0049GUX	MUDFLAPS,FRT WHLS; (2) RUBBER Rubber
BODY FEATURES	0049GVC	2-MUD FLAPS R/WHLS RUBBER Rubber; Behind Rear Wheels
BODY FEATURES	0049GVN	WARRANTY, 5-YEAR LIMITED 5-Year, Limited
BODY FEATURES	0049GWW	WINDSHIELD WASHER,KIT; 6QT BOTTLE Kit; 6 Quart Capacity, Bottle
BODY FEATURES	0049GZX	F/FILL RT W/65G BTR TKS Neck Cap and Vent Hosing for Use with Right Side Fill 65 Gal. Between the Rails Fuel Tanks
BODY FEATURES	0049JAD	DEF FILLER DOOR W/LOCKING LATCH with Locking Latch
BODY FEATURES	0049MZT	INSULATION FUEL FILLER Rubber Isolator for Fuel Filler when Exhaust are on Same Side
BODY PLANS	0049TBV	BODY PLN CONV 31'2" +9F&R 65 PAS 254"WB Conventional; 31' 2" Body Length, +9 Section Front & Rear, 65 Passenger, 254" WB, DX0016A000
BODY FEATURES	0049UAT	IOWA STATE OF OPERATION Iowa

**Prepared For:**

New Hampton Community School District  
Bob Ayers  
710 West Main St.  
New Hampton, IA 50659-  
(641)394 - 2251  
Reference ID: 71 Pass

**Presented By:**

HOGLUND BUS CO INC  
Nicole V Crum  
P.O. BOX 249  
MONTICELLO MN 55362  
763-295-5119

**Model Profile**  
**2018 INTEGRATED CE S BUS (PB105)**

**APPLICATION:  
MISSION:**

School Transportation  
Requested GVWR: 31000. Calc. GVWR: 31000  
Calc. Start / Grade Ability: 22.40% / 2.48% @ 55 MPH  
Calc. Geared Speed: 79.2 MPH

**DIMENSION:  
ENGINE, DIESEL:**

Wheelbase: 276.00, CA: N/A, Axle to Frame: 148.00  
{Cummins B6.7 250} EPA 2017, 250 HP @ 2400 RPM, 660 lb-ft Torque @ 1600 RPM, 2600 RPM  
Governed Speed, 250 Peak HP (Max) School Bus Only

**TRANSMISSION, AUTOMATIC:**

{Allison 2500\_PTS} 5th Generation Controls; Wide Ratio, 5-Speed, with Overdrive; Less PTO  
Provision, Less Retarder, with 33,000-lb GVW & GCW Max. School Bus

**CLUTCH:**

Omit Item (Clutch & Control)

**AXLE, FRONT NON-DRIVING:**

{Meritor MFS-10-122A} I-Beam Type, 10,000-lb Capacity

**AXLE, REAR, SINGLE:**

{Meritor MS-21-13X-3DFL} Single Reduction, 21,000-lb Capacity, 190 Wheel Ends Gear Ratio:  
5.29

**TIRE, FRONT:**

(2) 11R22.5 Load Range G AH12 (HANKOOK), 503 rev/mile, 75 MPH, All-Position

**TIRE, REAR:**

(4) 11R22.5 Load Range G Z35A (HANKOOK), 503 rev/mile, 75 MPH, Drive

**SUSPENSION, REAR, AIR, SINGLE:**

{International} Ride Optimized Suspension (IROS); 21,000-lb Capacity, 9.25" Ride Height, with  
Shock Absorbers

**PAINT:**

Cab schematic 100NB  
Location 1: 4421, School Bus Yellow (Std)  
Chassis schematic N/A

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<u>Code</u>	<u>Description</u>
PB10500	Base Chassis, Model INTEGRATED CE S BUS with 276.00 Wheelbase, N/A CA, and 148.00 Axle to Frame.
1570	TOW HOOK, FRONT (2) Frame Mounted
1CAC	FRAME RAILS High Strength Low Alloy Steel (50,000 PSI Yield); 10.125" x 3.062" x 0.312" (257.2mm x 77.8mm x 8.0mm); 480.1" (12195mm) Maximum OAL  <u>Includes</u> : CHASSIS PAINT Chassis Painted Prior to Body Mounting : FRAME RAILS All holes Laser Aligned and Machine Punched, Powder Coated Prior to Full Assembly, Assembled in Fixture using "Grade 8" Bolts : FRAME REINFORCEMENT, SPECIAL 3.30" x 1.80" x 0.312" x 31.50" Inverted "L" in Front Shock Absorber Mounting Area
1LLE	BUMPER, FRONT Full Width, Aerodynamic, Heavy Duty, Steel  <u>Includes</u> : BUMPER, FRONT THICKNESS 1/4 Inch
1LNW	CROSSING GATE, FRONT Air, Yellow Blade, Bumper Mounted  <u>Includes</u> : CONTROL ASSEMBLY Located Rear of Front Bumper, Heater not Required : CONTROL ASSEMBLY Solid State, Located Rear of Front Bumper, Heater not Required : CROSSING GATE, FRONT Matches Contour of Bumper
1SAM	CROSSMEMBER, REAR, AF (2)
1WJE	WHEELBASE RANGE 276" (700cm) Only
1WRP	TOW HOOK, REAR (2) Mounted on Lower Rail Flange
2ASH	AXLE, FRONT NON-DRIVING {Meritor MFS-10-122A} I-Beam Type, 10,000-lb Capacity  <u>Includes</u> : AXLE, FRONT SQUARING to Plus or Minus .015 Inch, using a Special Fixture to Assure Parallelism of Springs  <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
3ADB	SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 10,000-lb Capacity; with Shock Absorbers  <u>Includes</u> : SPRING PINS Bolt and Nut Type : SPRING PINS Rubber Bushings, Maintenance-Free  <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
4091	BRAKE SYSTEM, AIR Dual System for Straight Truck Applications  <u>Includes</u> : BRAKE LINES Color and Size Coded Nylon : DRAIN VALVE Twist-Type : GAUGE, AIR PRESSURE (2) Air 1 and Air 2 Gauges; Located in Instrument Cluster : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel : PARKING BRAKE VALVE For Truck : QUICK RELEASE VALVE On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4 : SLACK ADJUSTERS, FRONT Automatic : SLACK ADJUSTERS, REAR Automatic : SPRING BRAKE MODULATOR VALVE R-7 for 4x2, SR-7 with relay valve for 6x4/8x6  <u>Notes</u>

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<u>Code</u>	<u>Description</u>
	: Rear Axle is Limited to 19,000-LB GAWR with Code 04091 BRAKE SYSTEM, AIR and Code 04NDC BRAKES, REAR, AIR CAM Regardless of Axle/Suspension Ordered : Rear Axle is Limited to 20,000-LB GAWR with Code 04092 BRAKE SYSTEM, AIR and Code 04NCW BRAKES, REAR, AIR CAM Regardless of Axle/Suspension Ordered
4732	DRAIN VALVE {Berg} with Pull Chain, for Air Tank  <u>Includes</u> : DRAIN VALVE Mounted in Wet Tank
4AZA	AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)
4EBS	AIR DRYER {Bendix AD-9} with Heater
4EXP	BRAKE CHAMBERS, FRONT AXLE {Bendix} 20 SqIn
4EXU	BRAKE CHAMBERS, REAR AXLE {Bendix EverSure} 30/30 Spring Brake
4JCG	BRAKES, FRONT, AIR CAM S-Cam; 15.0" x 4.0"; Includes 20 Sq. In. Long Stroke Brake Chambers  <u>Notes</u> : Front Axle with 14,000-lb GAWR is Limited to 13,200-lb GAWR when used in Conjunction with 15" BRAKES, FRONT, AIR CAM.
4NDB	BRAKES, REAR, AIR CAM S-Cam; 16.5" x 7.0"; Includes 30/30 Sq.In. Long Stroke Brake Chamber and Spring Actuated Parking Brake  <u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
4SPA	AIR COMPRESSOR {Cummins} 18.7 CFM Capacity
4WBX	DUST SHIELDS, FRONT BRAKE for Air Brakes
4WDM	DUST SHIELDS, REAR BRAKE for Air Brakes
4WZT	GVWR LIMITATION FOR BUS with Air Brakes, Limited to 33,000-lbs Maximum to meet FMVSS 105 Requirements, for Conventional Bus
5710	STEERING COLUMN Tilting and Telescoping
5CAL	STEERING WHEEL 2-Spoke, 18" Dia., Black
5PRR	STEERING GEAR {TRW (Ross) TAS66} Power
7BLA	EXHAUST SYSTEM Single, Horizontal Aftertreatment Device, Frame Mounted Under Right Rail, for Long Horizontal Tail Pipe  <u>Includes</u> : NOTE: The Horizontal Tailpipe Includes a Temperature Control Device
7WBM	TAIL PIPE Long Horizontal, Exits Left Side Ahead of Rear Wheels
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment  <u>Includes</u> : FUSES, ELECTRICAL SAE Blade-Type : HAZARD SWITCH Push On/Push Off, Located on Top of Steering Column Cover : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever : MISCELLANEOUS FEATURES Modular, Loom Protected, Grommets in all Applicable Body Openings, Assembled in Computer Assisted Fixture which Verifies Continuity and Correct Assembly Prior to Installation : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : TURN SIGNAL FLASHER : TURN SIGNAL SWITCH Self-Cancelling with Lane Change Feature

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<u>Code</u>	<u>Description</u>
	: TURN SIGNALS, FRONT Includes Reflectors; Flush Mounted : WINDSHIELD WIPER SWITCH 2-Speed with Wash and Intermittent Feature (5 Pre-Set Delays), Integral with Turn Signal Lever : WIRING, CHASSIS Color Coded and Continuously Numbered
8GGR	ALTERNATOR {Bosch LH200} Brush Type, 12 Volt 200 Amp. Capacity, Pad Mount
8MKL	BATTERY SYSTEM {International} Maintenance-Free, (3) 12-Volt 1950CCA Total
8TTK	BATTERY BOX Steel, with Sliding Tray, 25.25" Wide, for Standard Batteries, Mounted Left Side Behind Front Axle Perpendicular to Frame Rail
8TTN	BATTERY BOX COVER Plastic, Front Cover for Frame Mounted Battery Box Compartment
8VAZ	HORN, ELECTRIC (2) Trumpet Style, Mounted on Top of Mega-Bracket
8WPB	HEADLIGHTS Halogen; Composite Aero Design for Two Light System; Includes Daytime Running Lights
8WTK	STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; less Thermal Over-Crank Protection
8WWJ	INDICATOR, LOW COOLANT LEVEL with Audible Alarm
8WXB	HEADLIGHT WARNING BUZZER Sounds When Head Light Switch is on and Ignition Switch is in "Off" Position
8XAH	CIRCUIT BREAKERS Manual-Reset (Main Panel) SAE Type III with Trip Indicators, Replaces All Fuses
9WAB	HOOD TILT ASSIST {EASY TILT} Mechanical
9WAY	FRONT END Tilting, Fiberglass, with Three Piece Construction
	<u>Includes</u> : AIR INTAKE SYSTEM Integrated Pre-Cleaning System to Enhance Air Filter Life : GRILLE Removable; Fiberglass Painted Hood Color : SPLASH SHIELD Integral with Front End Assembly
10020	CHASSIS PAINT Full Chassis
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100
	<u>Includes</u> : PAINT SCHEMATIC ID LETTERS "NB"
10788	PAINT TYPE Urethane, One or Two Colors, Other than Imron or International.
10AA Y	OVER THE AIR PROGRAMMING for Cummins Engines
10XAK	PROMOTIONAL PACKAGE 7 Year Unlimited Miles/km Warranty, Limited Time Program for Allison 2000 Series Transmission on School and Commercial Buses (Supplied directly through Allison)
11001	CLUTCH Omit Item (Clutch & Control)
12703	ANTI-FREEZE Red, Extended Life Coolant; To -40 Degrees F/ -40 Degrees C, Freeze Protection
12EJT	ENGINE, DIESEL {Cummins B6.7 250} EPA 2017, 250 HP @ 2400 RPM, 660 lb-ft Torque @ 1600 RPM, 2600 RPM Governed Speed, 250 Peak HP (Max) School Bus Only
	<u>Includes</u> : FUEL FILTER Included with Cummins B6.7 Engines Engine Mounted : FUEL/WATER SEPARATOR Fuel/Water Separator; Heated; with Water-in-Fuel Sensor. Engine Mounted
12TJA	FAN DRIVE {Warner Electric FC-550} Electronically Activated and Controlled
12UGN	THROTTLE, HAND CONTROL Electronic
	<u>Notes</u> : Cruise Control Switches Mounted on Steering Wheel are Non-Illuminated.



**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<b><u>Code</u></b>	<b><u>Description</u></b>
12UYE	RADIATOR Aluminum; 2-Row, Cross Flow, Over Under System, 717 SqIn Louvered, with 313 SqIn Charge Air Cooler. with In-Tank Transmission Cooler  <u>Includes</u> : DEAERATION SYSTEM with Surge Tank : HOSE CLAMPS, RADIATOR HOSES Gates Shrink Band Type; Thermoplastic Coolant Hose Clamps : RADIATOR HOSES Premium, Rubber
12VBR	AIR CLEANER with Service Protection Element  <u>Includes</u> : GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted
12VVN	CRUISE CONTROL Electronic  <u>Notes</u> : Cruise Control Switches Mounted on Steering Wheel are Non-Illuminated.
12VWH	GOVERNOR Electronic Road Speed Type; for Electronic Engines and Bus Models; with 55 MPH Default
12WSY	BLOCK HEATER, ENGINE {Phillips} 120 Volt/750 Watt; for Cummins ISB/B6.7 Engines
12WZE	EMISSION COMPLIANCE Federal, Does Not Comply with California Clean Air Idle Regulations
12XZE	FEDERAL EMISSIONS {Cummins B6.7} EPA, OBD and GHG Certified for Calendar Year 2017
13ART	TRANSMISSION, AUTOMATIC {Allison 2500_PTS} 5th Generation Controls; Wide Ratio, 5-Speed, with Overdrive; Less PTO Provision, Less Retarder, with 33,000-lb GVW & GCW Max. School Bus  <u>Includes</u> : OIL FILTER, TRANSMISSION Mounted on Transmission : TRANSMISSION OIL PAN Magnet in Oil Pan
13WLN	TRANSMISSION OIL Synthetic; 20 thru 28 Pints
13WYY	SHIFT CONTROL PARAMETERS Allison 1000 or 2000 Series Transmissions, 5th Generation Controls, Performance Programming
14AKJ	AXLE, REAR, SINGLE {Meritor MS-21-13X-3DFL} Single Reduction, 21,000-lb Capacity, 190 Wheel Ends . Gear Ratio: 5.29
14TBS	SUSPENSION, REAR, AIR, SINGLE {International} Ride Optimized Suspension (IROS); 21,000-lb Capacity, 9.25" Ride Height, with Shock Absorbers  <u>Notes</u> : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.
15SHU	FUEL TANK Top Draw; Rectangular, Steel; 100 U.S. Gal., 397 L Capacity, Mounted Between Frame Sidemembers and Behind Rear Axle, Includes Protective Cage and with Fuel Filler Assembly and Vent Hosing  <u>Notes</u> : Requires 254" WB Minimum
15WDT	DEF TANK 12 U.S. Gal. 45.4L Capacity, Frame Mounted Outside Right Rail, Behind 0 Bow
16010	COWL Flat Back
16HBA	GAUGE CLUSTER English with English Electronic Speedometer  <u>Includes</u> : GAUGE CLUSTER (5) Engine Oil Pressure (Electronic), Water Temperature (Electronic), Fuel (Electronic), Tachometer (Electronic), Voltmeter : ODOMETER DISPLAY, Miles, Trip Miles, Engine Hours, Trip Hours, Fault Code Readout : WARNING SYSTEM Low Fuel, Low Oil Pressure, High Engine Coolant Temp, and Low Battery Voltage (Visual and Audible)

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

**June 19, 2017**

<b><u>Code</u></b>	<b><u>Description</u></b>
16HKT	IP CLUSTER DISPLAY On Board Diagnostics Display of Fault Codes in Gauge Cluster
16HLJ	GAUGE, DEF FLUID LEVEL
27DUW	WHEELS, FRONT {Accuride 51408} DISC; 22.5x8.25 Rims, Powder Coat Steel, 2-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
28DUW	WHEELS, REAR {Accuride 51408} DUAL DISC; 22.5x8.25 Rims, Powder Coat Steel, 2-Hand Hole, 10-Stud, 285.75mm BC, Hub-Piloted, Flanged Nut, with Steel Hubs
29580	WHEEL SEALS, FRONT {International} Oil-Lubricated Wheel Bearings
47AGJ	BODY, BUS Conventional; 78" Headroom, 33'5" Body Length, +9 Section Front and Rear, 72 Passenger, 276 WB
47AJB	BODY CERTIFICATION TAG Mylar Label
47AJC	BODY TAG, METAL Capacity to Include the Total Number of Passengers
47AJW	STEP, FRONT ENTRANCE DOOR 27 1/4" Depth; 14ga Steel <u>Includes</u> : STEP, FRONT ENTRANCE DOOR OPENING, 35 Inch Width; Continuous Bottom to Top
47APR	HEADLINER, BODY Conventional; 25'11"-34'11" Body Length, Perforated Full Length with Sound Insulation Full Length
47APW	FASTENERS, HEADLINER Rivets
47ARH	BOWS, ROOF 14 ga., One Piece Construction <u>Includes</u> : BOWS, ROOF Positioned Floor Line to Floor Line, Threaded Through Roof Strainers and Drip Rail
47ARP	LIGHT BARS Plastic
47ATB	SKIRT, BODY Conventional, 20", 16ga., 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length <u>Includes</u> : SKIRT, BODY Extra Smooth Steel Supported by Floor Gussets
47AUR	TIE DOWNS, BODY Grade 8 Bolts, Every Body Section <u>Includes</u> : TIE DOWNS, BODY with Formed Tab that Fits into Floor Structure to Prevent Turning
47AXT	RUB RAILS, BODY (4) Conventional; Steel, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length, Includes Snow Rail <u>Includes</u> : RUB RAILS Full Length, Primer Coated (Both Sides), Attached to Body without Cuts or Splices
47AYB	BODY, REAR Includes Emergency Door <u>Includes</u> : DOOR, REAR EMERGENCY with Concealed Hinges : HEADER BUMPER Padded, Mounted Over Rear Door; Upholstered to Match Passenger Seat Color
47AZE	SIDE SHEET, BODY, EXTERIOR Conventional, 16ga., Smooth, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length
47AZL	FLOOR, BODY with Wheel Wells
47AZY	RAILS, WRAP-AROUND, FLOOR At Floor Level To Radii
47AZZ	RAILS, WRAP-AROUND Just Below Window Line

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<b><u>Code</u></b>	<b><u>Description</u></b>
47BAK	BUMPER, REAR Painted; 12" High, 0.188" Thick
47BAR	SUPPORTS, REAR BUMPER Bolted to Frame
47BBH	LINING, SIDE INTERIOR, LOWER Embossed Steel, Clear Coated
47BBZ	SEALER Extra; Sidewall to Floor, In Wheel Pocket Area, and Rear Wall to Floor
47BCV	CONTROL, CHASSIS AIR DRAIN Clip and Cable for Remote Operation of Chassis Air Tank Drain Valve, with 1 Berg Pull Chain
47DAC	CONTROL, ENTRANCE DOOR Manual Pull Type, Black
47DAE	FASTENERS, REAR DOOR Lag Screws, Rear Door To Body
47DAJ	COVER, REAR DOOR INSIDE HANDLE Partial Coverage
47DBL	DOOR, ENTRANCE, FRONT Manual, Outward Opening, with Split Pane Glass  <u>Includes</u> : DOOR, ENTRANCE, FRONT Aluminum Frame with Pin Style Hinges, Ball Bearing Assisted, Interchangeable Top and Bottom Glass
47DBZ	GLASS GUARD Inside Back-up, In Lower Section of Rear Door
47DDE	HANDLE, ASSIST, ENTRANCE DOOR Outside Entrance
47DDH	HOLD BACK, REAR DOOR Stationary, No Cables, with Plastic Cover
47DDU	LATCH, REAR DOOR One Point Slide Bar, Cam Operated, with One Inch Stroke
47DEJ	LOCK, VANDAL, ENTRANCE DOOR for Manual, Electric Control, with Key Switch
47DEK	LOCK, VANDAL, REAR DOOR with Ignition Starter Interlock
47DEY	HANDLE, EXTERIOR, REAR Emergency Door; Yellow
47DRR	SWITCH, LOCATION Left of Driver; Includes Master Flasher, Amber Flasher, with Manual Door Control
47EBM	HOLD DOWN, BATTERY For (2) Standard Size Batteries
47KDC	MONITOR, POST TRIP INSPECTION {Leave No Student Behind} Accessory Controlled, with Push Button Alarm Disable at Rear of Bus Prompts Driver to Walk to Back of Bus and Push Button in Light Bar to Deactivate System
47LAB	NOISE REDUCTION, DRIVER FLOOR Insulation Covering Complete Driver Floor Area
47LAT	NOISE REDUCTION, ROOF BOW Conventional; Insulation, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Lengths
47LAU	INSULATION, ROOF AND SIDES 1.50", All Models
47MAC	UNDERCOAT, FLOOR/STEPWLL/SIDES for Engine Noise Reduction
47MBA	UNDERCOAT, BODY Fire Resistant, Water Based, TT-C-730 Spec  <u>Includes</u> : UNDERCOATING Performed Before and After Mounting on Chassis
47MBC	INSULATION, STEPWELL
47MJR	LETTERS, DOOR, REAR Decals; "EMERGENCY DOOR", 2" Black Letters Inside and Outside
47MNM	LETTERS, BATTERY COMPARTMENT (01) Decal; "Battery"; 2" Black letters, Centered on Standard Battery Box
47MNT	ARROW, RR DOOR, INSIDE Decal; Red, .75" Stroke, Indicating Handle Direction

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

**June 19, 2017**

<b>Code</b>	<b>Description</b>
47MPE	LETTERS, SCHOOL BUS FRONT/REAR Decal; "SCHOOL BUS", with 8" Black Reflective Letters, Diamond Grade, On Front and Rear Cap
47MRU	LETTERS, E/E WINDOW, LEFT (2) Decal Sets, "EMERGENCY EXIT", Black Inside and Outside
47MTY	WIRING DIAGRAM Schematic, Electrical
	<u>Includes</u> : ACCESS PANEL for Wiring Diagram Schematic Located on Body Exterior; Below Driver Window
47MVA	LETTERS, HEADER Decal; "WATCH YOUR STEP", 1" Black, Above Windshield
47MVC	LETTERS, STEPWELL Decal, "WATCH YOUR STEP", 2.5" Black, Behind Door on Step Riser
47MWZ	LETTERS, SIGN, REAR Decal, "UNLAWFUL TO PASS WHEN LIGHTS FLASH", Black Letters 27" x 2", Mounted Center of Rear Emergency Door
47NAB	PAINT COLOR, RUB RAILS 0001 Canyon Black
47NGE	LETTERS, CAPACITY 2" Black Decals, (2) Places, with Bus Number, for State of Iowa, Rated Cap
47NGW	SEAL, RUB RAILS Top Edge, All Rails
47NHB	PLATE INSTR, LT. E/E WINDOW (2) Mounted Under Window
47NHL	LETTERS, E/E WINDOW, RIGHT (2) Decal Sets, "EMERGENCY EXIT", Black, Inside and Outside
47NHW	PLATE INSTR, RT. E/E WINDOW (2) Mounted Under Window
47NJA	PAINT COLOR, BODY EXTERIOR 4421 Yellow, SBNS
47NJM	PAINT FLASHER BACKGRD 0001 Canyon Black
47NJS	PAINT COLOR, BUMPER Rear; 0001 Canyon Black
47NKE	PAINT COLOR, ROOF 9219 Winter White, (Does Not Include Lift Door) Beginning 5" Above Drip Rail, Rounded Corners
47NKL	PAINT, RUB RAIL Flange to Flange
47NKM	PAINT COLOR, BODY INTERIOR 9384 Spring White
47NMG	OPERATING INSTR, REAR Decal, Inside Rear Emergency Door
47NTE	LOGO, ROOF LINE Decal; Wing and Shield, First Body Section, Above Driver Window and Entrance Door Over Driver Window and Entrance Door
47NTY	PAINT HOOD AND FENDER To Match Body Exterior
47NWH	STRIPING, ROOF HATCH, REAR Decal, Perimeter, 1", Yellow, 3M Fluorescent Diamond Grade
47NWI	STRIPING, SEATLINE {3M} 2" Yellow, Fluorescent Diamond Grade
47NWR	STRIPING, REAR END {3M} 2" Yellow Fluorescent Diamond Grade
47NWT	STRIPING, ROOF HATCH, FRONT {3M} Decal, Perimeter, 1", Yellow Fluorescent Diamond Grade
47NWU	STRIPING, E/E WINDOW, RIGHT (02) Perimeter, 1" 3M Yellow Fluorescent Diamond Grade
47NXH	STRIPING, E/E WINDOW, LEFT {3M} (02) Perimeter, 1" Yellow Fluorescent Diamond Grade
47NXN	STRIPING, PERIMETER, REAR Emergency Door; 1" Wide, 3M Fluorescent Diamond Grade, Yellow
47PBZ	HANDLE, ASSIST Windshield Side Mounted, Left and Right, Body Color
47PLX	LETTERS, DEF, I.D. Decal; "DEF ONLY", 1" Black, on DEF Filler Door
47SBS	SUB FLOOR, PLYWOOD Conventional; B-C Exterior Grade, Less Sealed Edges, 5/8", 5 Ply, for 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<b><u>Code</u></b>	<b><u>Description</u></b>
48ABB	WINDOW, STORM RT 1ST Position Aft Entrance Door
48ACN	SEAT BELT, DRIVER, COLOR with Blaze Orange Seat Belt Webbing
48AHD	WINDOW, REAR DOOR, BOTTOM Laminated Clear
48ANW	WINDOW, DRIVER Storm
48APL	WINDOW, STOPS 12" Opening, Only with 78" Headroom
48APX	WINDOW, ENTRANCE DOOR, TOP Storm, Clear, Tempered
48APY	WINDOW, ENTRANCE DOOR, BOTTOM Storm, Clear, Tempered
48ARK	WINDOW, SASH (14) 27" Sections, 9"x 23" Opening
48ASR	WINDOW, SASH +9 SECTIONS (3) 9" x 32 1/4" Opening
48BAH	WINDOW, E/E, LEFT (2) Vertical Hinge
48BJA	COLOR, WINDOW FRAME, PASS Passenger Window, Natural Aluminum Finish
48BKP	WINDOW, E/E, RIGHT (2) Vertical Hinge
48BUB	WINDOW, PASSENGER, TINT Conventional; 28% Light, Tempered Glass, 78" Headroom, with 34'11", 31'2", 31'11", 32'8", 33'5", 34'2" Body Lengths
48GHC	HEATER, DRIVER 90,000 BTU, with Defroster and without Rear Heat Duct
	<u>Includes</u> : AIR FILTER : HEATER HOSES Premium : HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps
48NAM	UPHOLSTERY, PASS SEATS, TYPE Prevaill, 52 oz.; for (21-22) Seats
48NAT	FITTINGS, AIR SEAT for Driver Seat
48PAV	WHEEL POCKET COVER Plastic, ABS
48PAY	AISLE POSITION Center, for balanced seating
48PAZ	WINDSHIELD 3 Flat Pieces, 73% Light
48PEW	FLOOR COVERING, COLOR Gray #766
48PJR	FLOOR COVERING, TRIM Aluminum
48PJZ	FLOOR COVERING, TYPE {Koroseal} All Body Lengths
48PKA	AIR FOIL Mounted Top, Rear
48PKC	HOSE CLAMPS, HEATER HOSE Constant Torque for Heater System
48PKN	FAN, DEFOG FAR RIGHT (01) Black, Mounted Right Above Windshield, Forward Entrance Door, 2-Speed Switch in Panel
48PKR	FAN, DEFOG LEFT CENTER 6.50" Diam., Black, Mounted Left of Center Post, 2-Speed Switch in Panel
48PMC	HEATER, PASS, LT MIDSHIP 1ST 50,000 BTU
	<u>Includes</u> : AIR FILTER
48PMJ	HEATER, PASS, LT REAR 84,500 BTU
	<u>Includes</u> : AIR FILTER

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<b><u>Code</u></b>	<b><u>Description</u></b>
48PMS	HEATER, STEPWELL 50,000 BTU  <u>Includes</u> : AIR FILTER
48PNW	HEATER, WATER PUMP {2MPU 12} Self Priming, with Plastic Housing
48PPC	SWITCH, HTR FAN, REAR, LT with 84,500 BTU Rear Heater Only
48PPM	HEATER CUT OFF, VALVE Ball, with Butterfly Handle
48PPP	HEATER CUT OFF, VALVE INSIDE Brass Ball, Inside Forward of Driver Heater
48PPS	ROOF VENT, FRONT Static
48PTT	ARM REST, DRIVER, RIGHT {National}
48PUT	NUTS, BELT MOUNTING Standard Nuts For Seat Belt Mounting
48PVA	UPHOLSTERY, DRIVER SEAT, STYLE Plain, with Cloth Insert
48PVN	UPHOLSTERY, DRIVER SEAT, COLOR Drivers Seat, Gray
48PWD	UPHOLSTERY, PASS SEATS, COLOR Gray, for Seats, Barriers and Head Bumpers
48PWR	UPHOLSTERY, DRIVER SEAT, TYPE Prevail, 42 oz.
48PXW	UPHOLSTERY, BARRIER, TYPE (1-2) Prevaill, 52 oz.
48RAE	BARRIER, CRASH, AFT ENTRY DOOR 39", 1 Leg
48RAL	BARRIER, CRASH, AFT DRIVER 39", 1 Leg
48RET	PANEL, MODESTY, AFT ENTRNCE DR Mounted Under Barrier
48RGR	HAND RAIL, ENTRANCE DOOR, AFT Stainless Steel, 4", Above Step
48RLX	CUSHION, SEAT 15" Depth  <u>Includes</u> : WARRANTY Four Years
48RRA	UPHOLSTERY, SEAT, STITCHING Single  <u>Includes</u> : WARRANTY Two Years
48RYW	SEAT, DRIVER {National 2000} Air Suspension, High Back with Integral Headrest, Isolated, with 2 Position Front Cushion Adjustment, 6 to 17 Degree Seat Back Adjustment, Mechanical Lumbar Support, Includes Additional Back Padding For School Bus Use  <u>Includes</u> : SEAT BELT, DRIVER Adjustable D-Loop Seat Belt, Single Locking Retractor
48RZJ	STEP TREADS {Koroseal} Pebble Top with White Nosing, with Non-Metal Backing
48SAD	SEAT,PASS,LT,26",2 LEG (01)
48SDU	SEAT,PASS,LT,39",2 LEG (11)
48SKN	SEAT,PASS,RT,39",2 LEG (12)  <u>Notes</u> : BTI Seating System Base Seat. Retrofittable, Contact IC Bus Application Engineering for more information.  <u>Notes</u> : BTI Seating System Base Seat. Retrofittable, Contact IC Bus Application Engineering for more information.

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<b><u>Code</u></b>	<b><u>Description</u></b>
48UCP	ROOF HATCH, FRONT {Transpec 1975-028-121-03} with Outside Release, with English Decals
48UCR	ROOF HATCH, REAR {Transpec 1975-028-121-03} with Outside Release, with English Decals
48USV	SEAT BACK, PASSENGER High Back
49040	BODY PLAN, APPROVED VARIATION Number 040
49AAZ	SWITCH, INTERRUPT CROSS GATE Single Cycle; with Auto Reset, Located In Driver Compartment
49AHV	LIGHT, STROBE, STOP SIGN, FRT In Lieu Of Flashing Lights Furnished with Stop Sign, Speciality
49AJH	CONNECTION, LIGHTS Cluster, Clearance and Side Marker To Tail Lights
49AMB	WIRE, FEED 4 Gauge, Chassis To Body
	<b><u>Notes</u></b> : Terminals have heat shrink protection.
49AMD	SWITCH, DRIVER PANEL, TYPE Rocker
49AMT	CIRCUIT, PROTECTION Breakers, Manual Reset in Lieu of Fuses
	<b><u>Includes</u></b> : ACCESS PANEL for Body and Chassis Fuses/Circuit Breakers Located on Body Exterior; Below Driver Window
49AMV	ALARM, BACKING {Ecco #850} 112 db
49AMY	SWITCH, REAR DOOR BUZZER for Emergency Door
49ANG	LIGHT, INDIC EMRG DR RED Wired To Buzzer and Mounted on Dash
49ANH	SWITCH, MAGNETIC, DISCONNECT Master, Ignition Operated, All Body Circuits
49ANU	SOURCE, POWER 12 Volt DC, Mounted On Dash
49APA	LIGHT, DRIVER, CEILING Deluxe, with Separate Switch, Mounted in Light Bar
49APZ	LIGHTS, DOME Conventional; Two Full Rows Rectangular Recessed Dome Lights, 31'2", 31'11", 32'8", 33'5", 34'2", 34'11", Body Length
	<b><u>Includes</u></b> : WIRING HARNESS Main Body Wiring Harness Accessed by Removing Dome Light
49ARA	LIGHT, RED, EMERG EXIT, REAR 3" Inside, Over Rear Door, Connected to Clearance Lights
49ARM	SWITCH, DOME LIGHT, REAR Separate, for Rear Row Dome Lights, Last Light on Each Side
49ARN	LIGHT, STEP Wired to Clearance Lights
49ATV	LIGHT, INDIC, WARNING LIGHTS Red and Amber
	<b><u>Includes</u></b> : LIGHTS, WARNING Indicator Located in Instrument Cluster
49AUM	SWITCH, MASTER FLASHER Omit Master Flasher Switch, 8-Lamp System
49AWT	SPEAKERS AND WIRING (4) Flush Mounted in Light Bar
49BCM	FLASHER SYSTEM (8) Warning Lights, 8-Lamp System, Electronic Relay Flasher, Sequential Operation, Red Lights Activate after Ambers Lights with Door Open
49BCR	LIGHT, EXTERIOR, CHECK Automatically Activates Lights for Pre Trip Inspection
49BMA	STOP ARM, FRONT {Specialty 2980} Air, Hi Intensity, LED Strobe Lights

**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<b><u>Code</u></b>	<b><u>Description</u></b>
49BYG	RADIO, ENTERTAINMENT {Panasonic} AM/FM-MPLX Stereo, Includes Antenna and Cable, with Public Address System, Mounted Overhead in Driver Area
49BYT	LIGHTS, STOP (2) {Sound Off} and Tail; 7" Round LED, Red
49BYV	LIGHTS, MARKER, FRONT, REAR {Sound Off} Rectangular LED, Armored, (8) Four Amber Front and Four Red Rear
49BYY	LIGHTS, DIRECTIONAL, FRONT {Sound Off} with Park, 7" Round Amber LED, on Front Cowl
49BYZ	LIGHTS, DIRECTIONAL, REAR (2) {Sound Off} LED, 7" Round Amber LED
49BZG	LIGHTS, BACK UP (2) {Sound Off} LED, 7" Round Clear
49DBR	HOOD, WARNING LAMP (4) Black, 8-Lamp System, One Hood Above Two Lights
49DDC	LIGHTS, CLUSTER {Truck Lite 07045A & 07045R} LED; Amber Front and Red Rear
49EAW	LIGHTS, MARKER, SIDE {Sound Off} Rectangular LED, Armored Type, Intermediate, Centered; Required for Units 30 Foot or Longer
49EAX	LIGHTS, DIRECTIONAL, SIDE (4) {Sound Off} Rectangular LED Armored, 2 Each Side First Section Aft Entrance Door & Forward Rear Wheel Pocket
49EGB	MIRROR, INSIDE 10" x 30", Clear
49EGM	MIRROR, CROSS VIEW, EXTERIOR Heated, Black, Rosco
	<u>Includes</u> : MIRROR MOUNT Attached to Body with Metal Backing Plates
49ENK	VISOR, INTERIOR, LEFT FRONT 6" x 30", Transparent, For Left Windshield
49ETJ	KIT, FIRST AID No. 918, 24 UNIT, Iowa
49EVL	SWITCH, NOISE SUPPRESSION Actuator Legend States, "NOISE SUPP ", for Separate Solenoid, with Red Switch in Panel
49EWT	LIGHT, STROBE Specialty Man. Co. 515-400, Low Profile, Double Flash, 4.25" High
49EXD	MIRROR, REAR VIEW, EXTERIOR {Rosco} Open View, Black, Heated, Motorized, Non-Detent
49GAR	KIT, BODY FLUID Nebraska
49GBV	WINDSHIELD WIPERS (2) Cowl Mounted
	<u>Includes</u> : WINDSHIELD WIPERS CONTROL Single Motor, Overlapping Wipe Pattern
49GDB	LATCH, DOOR BULKHEAD Lever Latch, for Bulkhead Mounted Safety Compartment or Destination Sign Access Doors
49GDD	DOOR, REAR BULKHEAD For Access to Rear Bulkhead
49GEE	COMPARTMENT, OVER WINDSHIELD with Latch, No Lock, No Buzzer, Centered Over Windshield, with Single Piece Panel, (Requires Latch)
49GEH	SAFETY TRIANGLES Warning Reflectors, Mounted on Drivers Barrier Level with Top of a Modesty Shield
49GGE	FIRE EXTINGUISHER, DRIVER AREA 5 lb 2A-40BC Minimum with Flexible Hose and Metal Nozzle
49GHN	REFLECTORS, REAR (2) 3", Red, Adhesive Back
49GHR	REFLECTORS, SIDE, REAR (2) 3", Red, Adhesive Back
49GHV	REFLECTORS, SIDE, FRONT (2) 3", Amber; Adhesive Back, 1 Aft Drivers Window Left, 1 Aft Entrance Door Right



**Vehicle Specifications**  
**2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

<b>Code</b>	<b>Description</b>
49GHX	REFLECTORS, SIDE, INTERMEDIATE (2) 3" Amber, 1 Each Side, Below The Third Rub Rail From the Top, Adhesive Back
49GKZ	FUEL FILLER DOOR with Non-Locking Latch
49GUC	CUTTER, SEAT BELT {Knife for Life} for Cutting Seat Belts
49GUK	FENDERS, RUBBER, REAR (2)
49GUM	INSPECTION PLATE Fuel Sending Unit 8" x 8" Steel
49GUX	MUD FLAPS, FRONT WHEELS (2) Rubber
49GVC	MUD FLAPS, REAR WHEELS (2) Rubber; Behind Rear Wheels
49GWW	WINDSHIELD WASHER Kit; 6 Quart Capacity, Bottle
	<u>Includes</u> : WINDSHIELD WASHER ELECTRICAL CONNECTIONS Sealed and Locking Type
49GZT	FUEL FILLER PIPE Neck Cap and Vent Hosing for Use with Right Side Fill 100 Gal. Between the Rails Fuel Tanks
49JAC	DEF FILLER DOOR with Non-Locking Latch
49JBU	LIGHT, ENTRY DOOR {Sound Off} LED; 4" Oval; Light Mounted in Skirt Behind Entrance Door, Wired To Step Light
49JBV	LIGHT, LICENSE PLATE {Sound Off} LED, with Mounting Gasket
49NGJ	LIGHTS, WARNING (8) {Sound Off} (4) 7" Round Red Strobing LED and (4) 7" Round Amber Strobing LED, 2 Front, 2 Rear Each Color
49UAT	STATE OF OPERATION Iowa
49ZNG	LIGHTS, STOP & TAIL ADDITIONAL (2) {Sound Off} 4" Round LED, Red, with Flange
7372135801	(2) TIRE, FRONT 11R22.5 Load Range G AH12 (HANKOOK), 503 rev/mile, 75 MPH, All-Position
7372135805	(4) TIRE, REAR 11R22.5 Load Range G Z35A (HANKOOK), 503 rev/mile, 75 MPH, Drive
OBD001	BODY PLAN, NON-SPECIAL NEEDS Pending Factory Approved Floorplan
	<b>Services Section:</b>
40126	WARRANTY Standard for CE, RE, BE School Bus Models, Effective with Vehicles Built March 1, 2017 or Later, CTS-3304H
49GVN	WARRANTY 5-Year, Limited

**Electronic Parameters Summary  
2018 INTEGRATED CE S BUS (PB105)**

June 19, 2017

(0012EJT)

ATTACHMENTS: 0012VWH 0012TJA

<u>Parameter</u>	<u>Value</u>	<u>UOM</u>
Max Accelerator Vehicle Speed	75	MPH
Road Speed Governor Upper Droop	0	MPH
Road Speed Governor Lower Droop	0	MPH
Max Engine Speed No Veh Speed Sensr	1772	RPM
Idle Speed Adjustment Enable	Y, ENABLE FEATURE OR FUNCTION	N/A
Low Idle Speed	750	RPM
Idle Shutdown Enable	N, DISABLE FEATURE OR FUNCTION	N/A
ISD Time Before Shutdown	60.0	MIN
ISD Percent Engine Loading	100	%
ISD With PTO	N, DISABLE FEATURE OR FUNCTION	N/A
ISD Manual Override	N, DISABLE FEATURE OR FUNCTION	N/A
ISD With Parking Brake Set	N, DISABLE FEATURE OR FUNCTION	N/A
ISD Ambient Temperature Override	N, DISABLE FEATURE OR FUNCTION	N/A
ISD Cold Ambient Air Temperature	30	F
ISD Intermediate Ambient Air Temp	40	F
ISD Hot Ambient Air Temperature	81	F
ISD Manual Override Inhibit Zone En	N, DISABLE FEATURE OR FUNCTION	N/A
ISD Hot Ambient Automatic Override	N, DISABLE FEATURE OR FUNCTION	N/A
ISD Engine Coolant Temp Threshold	30	F
Cruise Control Enable	Y, ENABLE FEATURE OR FUNCTION	N/A
CC Maximum Vehicle Speed	75	MPH
CC Save Set Speed	N, DISABLE FEATURE OR FUNCTION	N/A
CC Upper Droop	0.0	MPH
CC Lower Droop	0.0	MPH
CC Auto Resume	N, DISABLE FEATURE OR FUNCTION	N/A
PTO Max Engine Speed	2600	RPM
PTO Max Vehicle Speed	5	MPH
PTO Service Brake Override	Y, ENABLE FEATURE OR FUNCTION	N/A
PTO Resume Switch Speed	950	RPM
PTO Set Switch Speed	950	RPM
PTO Ramp Rate	250	RPM/SEC
Engine Protection Shutdown	N, DISABLE FEATURE OR FUNCTION	N/A
Engine Protection Restart Inhibit	Y, ENABLE FEATURE OR FUNCTION	N/A
Trip Information Vehicle Ovrsped1	0	MPH
Trip Information Vehicle Ovrsped2	0	MPH
Maintenance Monitor Enable	N, DISABLE FEATURE OR FUNCTION	N/A
Maintenance Monitor Operating Mode	0, MAINTENANCE MONITOR AUTOMATIC MODE OF OPERATION	N/A
Maintenance Monitor Alert Percent	90	%
Maintenance Monitor Distance	15000	MILES
Maintenance Monitor Fuel	2000	GALLONS
Maintenance Monitor Time	500	HOURS
Maintenance Monitor Interval Factor	1.00	N/A
Master Password	000000	N/A
Adjustment Password	000000	N/A
Reset Password	000000	N/A

These Electronic Parameters have been successfully finalized

# Cummins Warranty

## All Engines

### United States and Canada

### School Bus

## Coverage

### Products Warranted

This Warranty applies to new diesel, LPG, compressed or liquid natural gas fueled Engines sold by Cummins Inc. or Cummins Westport and delivered to the first user on or after September 15, 1996, that are used in school bus\*applications in the United States\*\* or Canada.

### Base Engine Warranty

The Base Engine Warranty covers any failures of the Engine which result, under normal use and service, from a defect in material or factory workmanship (Warrantable Failure). This Coverage begins with the sale of the Engine by Cummins and continues for **five years or 100,000 miles** (160,935 kilometers), whichever occurs first, from the date of delivery of the Engine to the first user. Engine after treatment components included in the Cummins Critical Parts List (CPL) and marked with a Cummins part number are covered under Base Engine Warranty.

### Extended Major Components Warranty

The Extended Major Components Warranty applies to all except B and ISB Series Engines and covers Warrantable Failures of the Engine cylinder block, camshaft, crankshaft and connecting rods (Covered Parts).

Bushing and bearing failures are not covered.

This Coverage begins with the expiration of the Base Engine Warranty and ends three years or 300,000 miles(482,805 kilometers), whichever occurs first, from the date of delivery of the Engine to the first user.

### Emission Warranty

Additional Coverage is outlined under the Emission Warranty.

THESE WARRANTIES ARE MADE TO ALL OWNERS IN THE CHAIN OF DISTRIBUTION AND COVERAGE CONTINUES TO ALL SUBSEQUENT OWNERS UNTIL THE END OF THE PERIODS OF COVERAGE.

## Cummins Responsibilities

### During The Base Engine Warranty

Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Warrantable Failure. Cummins will pay for the lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items that are not reusable due to the Warrantable Failure. Cummins will pay for reasonable labor costs for Engine removal and reinstallation when necessary to repair a Warrantable Failure. Cummins will pay reasonable costs for towing a vehicle disabled by a Warrantable Failure to the nearest authorized repair location when necessary to make the repair for the first 2 years from the date of delivery of the Engine to the first user. In lieu of towing expenses, Cummins will pay reasonable costs for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging, when the repair is performed at the site of the failure.

## **During The Extended Major Components Warranty**

Cummins will pay for the repair or, at its option, replacement of the defective Covered Part and any Covered Part damaged by a Warrantable Failure of the defective Covered Part.

## **Owner Responsibilities**

### **During The Base Engine Warranty**

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items provided during Warranty repairs unless such items are not reusable due to the Warrantable Failure.

### **During The Extended Major Components Warranty**

Owner is responsible for the cost of all labor needed to repair the Engine, including the labor to remove and reinstall the Engine. When Cummins elects to repair part instead of replacing it, Owner is not responsible for the labor needed to repair the part. Owner is responsible for the cost of all parts required for the repair except for the defective Covered Part and any Covered Part damaged by a Warrantable Failure of the defective Covered Part. Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items replaced during the repair.

### **During The Base Engine and Extended Major Components Warranties**

Owner is responsible for the operation and maintenance of the Engine as specified in the applicable Cummins Operation and Maintenance Manual. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of the applicable Warranty, Owner must notify a Cummins distributor; authorized dealer or other repair location approved by Cummins of any Warrantable Failure and make the Engine available for repair by such facility. Except for Engines disabled by a Warrantable Failure during the first two years from the date of delivery of the Engine to the first user, Owner must also deliver the Engine to the repair facility.

Service locations are listed on the Cummins Worldwide Service Locator at [cummins.com](http://cummins.com).

Owner is responsible for communication expenses, meals, lodging and similar costs incurred as a result of a Warrantable Failure.

Owner is responsible for non-Engine repairs and for "downtime" expenses, passenger delays, fines, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

## **Limitations**

Engines with an emissions certification listed below must be operated using only diesel fuel having no more than the corresponding maximum sulfur content. Failure to use the specified fuel as listed in the Cummins Fuel Bulletin#3379001 Table 1 (Cummins Inc. Required Diesel Fuel Specifications) can damage the Engine and after treatment system within a short period of time. This damage could cause the Engine to become inoperable and failures attributable to the use of incorrect fuels will be denied Warranty Coverage. Fuel specifications also need to comply with local fuel regulations (EN590 for Europe and ASTM D975 for North America) for Warranty eligibility.

Maximum sulfur levels by emissions certification level as listed on the Engine's data plate are:

EPA 2007/2010/2013	max. 15 parts per million
EPA Tier 4 Interim / Final	max. 15 parts per million
EU Stage IIIB 2011	max. 15 parts per million
Euro 4/5	max. 50 parts per million
Euro 6	max. 10 parts per million

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling;

overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the after treatment system could negatively affect emissions certification and void the Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

This Warranty does not apply to accessories which bear the name of another company. This category includes, but is not limited to: alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, vacuum pumps, power steering pumps and air compressors. Cummins branded alternators and starters are covered for the first two years from the date of delivery of the Engine to the first user, or the expiration of the Base Engine Warranty, whichever occurs first.

Excessive oil consumption for B Series Engines is covered for the duration of the Coverage. Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

Failures of belts and hoses supplied by Cummins are not covered beyond the first year from the date of delivery of the Engine to the first user or the expiration of the applicable Base Engine Warranty, whichever occurs first.

Parts used to repair a Warrantable Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Warrantable Failure assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

**CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.**

**CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

**THESE WARRANTIES AND THE EMISSION WARRANTY SET FORTH HEREIN AFTER ARE THE SOLE WARRANTIES MADE BY CUMMINS IN REGARD TO THESE ENGINES. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## **Emission Warranty**

### **Products Warranted**

This Emission Warranty applies to new Engines marketed by Cummins that are used in the United States\*\* or Canada in vehicles designed for transporting persons or property on a street or highway. This Warranty applies to Engines delivered to the ultimate purchaser on or after January 1, 1996.

### **Coverage**

Cummins warrants to the ultimate purchaser and each subsequent purchaser that the Engine is designed, built and equipped so as to conform at the time of sale by Cummins with all U.S. federal emission regulations applicable at the time of manufacture and that it is free from defects in material or factory workmanship which would cause it not to meet these regulations within the longer of the following periods: (A) Five years or

100,000miles (160,935 kilometers) of operation, whichever occurs first, as measured from the date of delivery of the Engine to the ultimate purchaser, or (B) The Base Engine Warranty.

If the vehicle in which the Engine is installed is registered in the state of California, a separate California Emission Warranty also applies.

### **Limitations**

Engines with an emissions certification listed below must be operated using only diesel fuel having no more than the corresponding maximum sulfur content. Failure to use the specified fuel as listed in the Cummins Fuel Bulletin#3379001 Table 1 (Cummins Inc. Required Diesel Fuel Specifications) can damage the engine and after treatment system within a short period of time. This damage could cause the engine to become inoperable and failures attributable to the use of incorrect fuels will be denied Warranty Coverage. Fuel specifications also need to comply with local fuel regulations (EN590 for Europe and ASTM D975 for North America) for Warranty eligibility.

Maximum sulfur levels by emissions certification level as listed on the Engine's dataplate are:

EPA 2007/2010/2013	max. 15 parts per million
EPA Tier 4 Interim / Final	max. 15 parts per million
EU Stage IIIB 2011	max. 15 parts per million
Euro 4/5	max. 50 parts per million
Euro 6	max. 10 parts per million

Failures, other than those resulting from defects in material or factory workmanship, are not covered by this Warranty.

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the after treatment system could negatively affect emissions certification and void the Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Cummins is not responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs or other losses resulting from a Warrantable Failure.

**CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

\* A vehicle used to transport students to and from school. Vehicle must be painted yellow, should have warning lights and the words 'SCHOOL BUS' written on the front and rear roof caps. The requirements pertaining to paint color, warning lights and 'SCHOOL BUS' inscription would not apply if the vehicle is exclusively used to transport students for school related activities and it is owned by a school district.

\*\* United States includes American Samoa, the Commonwealth of Northern Mariana Islands, Guam, Puerto Rico and the U.S. Virgin Islands.

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Bulletin 3381329  
U.S.A.  
Printed in U.S.A. Rev. 3/13  
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