





FIRE & EMERGENCY Body Integration

When spec'ing out a new truck for a customer, it is important to consider the body that will get mounted to the chassis. International has invested in specific features on our chassis such as the Diamond Logic electrical system to help the body installer mount their equipment with high quality in an efficient manner.

The following pages include feature codes specifically designed for ease of body integration.

#### FEATURE CODES/ DESCRIPTIONS:

Body Li	Body Lighting	
AAH80	BODY BUILDER WIRING To Rear of Frame, With Stop, Tail, Turn, and Marker Lights Circuits, Ignition Controlled Auxiliary Feed and Ground, Less Trailer Socket	
08HAB	BODY BUILDER WIRING Back of Cab at Frame, Includes Sealed Connectors for Tail/Amber Turn/ Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn	
08HAE	BODY BUILDER WIRING Rear of Frame; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn	
UAH80	BODY BUILDER WIRING INSIDE CAB; Includes Sealed Connectors for Tail/Amber, Turn/Marker/Backup/Accessory, Power/Ground, and Stop/Turn	
08НВХ	BODY BUILDER WIRING Back of Day Cab at Left Frame or Under Extended or Crew Cab at Left Frame with Pigtail; Includes Sealed Connectors for Tail/Amber Turn/Marker/ Backup/Accessory Power/Ground and Sealed Connector for Stop/Turn	

Other body builder connections are available. Refer to the PDB-71000 sales book

## **Body Wiring**

TAH80	WIRING, SPECIAL Includes Wires Installed Through the Dash Panel and End in Engine
	Compartment, In Cab Wire Ends Will Have ESC Input Terminals, Engine Compartment Wire
	Ends will have Sealed Connectors

#### **Exhaust Regeneration Inhibit**

07WZX	Exhaust regeneration	inhibit switch, mo	omentary, resets	s when key off
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## **High Amperage Switch**

08XBK	Control one auxiliary load up to 40 Amps with a factory-installed switch for a high amperage load such as a light bar. Power available in "IGNITION" or "ACCESSORY" key states.
	(HV/HX/MV)

#### **Passenger Control of Air Horn**

08XKM	Instrument panel mounted switch to enable the passenger to engage the air horn
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### **Air Accessory Controls**

08WGA/ 08WGB/ 08WGC/ 08WGD Provides 1/2/3/4 normally closed air solenoids to be used as a pilot air source. Includes latched switch in cab; air is available only with key in 'IGNITION" or "ACCESSORY" positions

### **Collision Mitigation Features**

**08TPU** 

Bendix Wingman Fusion; Adaptive cruise control and collision mitigation, includes front radar and camera, driver display; Lane departure warning switch and speakers, stationary object alert, safety direct capability

Headlight Features		
08WRB	Headlights will automatically turn on if windshield wipers are turned on	
08WXB	Headlight warning buzzer; Warning sounds when Head Light Switch is on and Ignition Switch is in "Off" Position	
60AKL	Wig Wag Hi-Beam with park brake interlock. Park brake disables hi-beam wig wag, enables low-beam wig wag. (HV/HX/MV)	
60AKK	Wig Wag Hi-Beam with park brake interlock. Park brake disables wig wag (HV/HX/MV)	

## **Pre-Trip Exterior Light Inspection**

08WPZ

Pre-trip inspection will cycle exterior lamps, except back-up lights

#### **Windshield Wiper Speed Control**

08WGL

Force wipers to slowest intermittent speed when park brake set and wipers left on for a predetermined time

#### **Power Windows and Locks**

16WJU

(2) Power windows and locks, with express down feature

### Park Brake Alarm

08WXD

Electric horn sounds in repetitive manner when vehicle park brake is "NOT" set, with ignition "OFF" and any door opened

#### **Jump Start Stud**

08WBW

Provides remote jump start stud on the outside of the battery box that eliminates the need to remove the battery box cover when jump starting is required

### **Back-Up Alarm**

08THB	Provides a 102 dBA audible alarm when a vehicle is operated in reverse gear
Battery	Disconnect Switch
08MJV	For Cab Power Disconnect Switch; Cab Mounted, Lever Operated, Disconnects Power to PDC, Does Not Disconnect Charging Circuits. (HV)
08WZP	Green "Battery On" indicator light on left side of dash.
VHX80	Cab Power Disconnect Switch, Cab Mounted, Disconnects power to PDC and body builder through solenoid, does not disconnect charging circuits, locks with padloc

Two-Way Radio Wiring Effects	
08REA*	10' wiring coil under the instrument panel for optimal radio placement. (HV/HX/MV)
08RGA*	Wiring in the center of the header console in the cab. (HV/HX/MV)

<sup>\*</sup> Both 08REA and 08RGA provide radio power and ground directly from the battery to minimize electrical noise on the line

Keyless Features	
08630	Keyless ignition switch
16WKZ	Remote keyless entry: key fob to control remote keyless entry, with panic & auxiliary buttons

Spare Input/ Output For Automatic Transmissions	
13WDH	WIRING, TRANS, BODY BUILDER Transmission Installed Wiring for Transmission/PTO Controls, for Allison 1000, 2000, 2100, 2200, 2400, 2500 Series
13WUZ	EVS;198 includes J1939 Based Auto Neutral; Fire/Pumper, Tank, Aerial/Ladder

Transmi	Transmission Control Module (TCM) Location	
13WYH	Transmission control module located inside cab	

Data Re	Data Recorders and Seatbelt Warning Prewire	
08ТРА	DATA RECORDER, Weldon, NFPA 1901 compliant, Includes seat belt display mounted in overhead console	
08TPB	DATA RECORDER, Weldon, NFPA 1901 complaint, Less seat belt display (HV)	
16HCK	SEATBELT WARNING PREWIRE, includes seat belt switches and seat sensors for all belted positions in the cab and a harness routed to the center of the dash for the aftermarket installation of the data recorder and seatbelt indicator systems, for 1 to 3 seat belts	
16HCL	SEATBELT WARNING PREWIRE, includes seat belt switches and seat sensors for all belted positions in the cab and a harness routed to the center of the dash for the aftermarket installation of the data recorder and seatbelt indicator systems, for 4 to 6 seat belts	

Trailer E	Trailer Electric Brake Accommodation Features	
08HAG	ELECTRIC TRAILER BRAKE/LIGHTS Accommodation Package to Rear of Frame; for Separate Trailer Stop, Tail, Turn, Marker Light Circuits; Includes Electric Trailer Brake Accommodation Package with Cab Connections for Mounting Customer Installed Electric Brake Unit, Less Trailer Socket	
08НАН	ELECTRIC TRAILER BRAKE/LIGHTS Accommodation Package to Rear of Frame; for Combined Trailer Stop, Tail, Turn, Marker Light Circuits; Includes Electric Trailer Brake Accommodation Package with Cab Connections for Mounting Customer-Installed Electric Brake Unit, Less Trailer Socket	
08TKK	Trailer Aux Feed Circuit for Electric Trailer Brake Accommodation / Air Trailer ABS; with 30 Amp ABS wiring to make 08HAG or 08HAH interchangeable between electric and air trailer brakes	

Trailer Connections	
08TME	TRAILER CONNECTION SOCKET 7-Way; Mounted at Rear of Frame, Wired for Turn Signals Independent of Stop, Compatible With Trailers That Have Amber or Side Lamps. (HV/HX/MV)
08TMG	TRAILER CONNECTION SOCKET 7-Way; Mounted at Rear of Frame, Wired for Turn Signals; Combined With Stop, Compatible With Trailers That Use Combined Stop, Tail, and Turn Lamps. (HV/HX/MV)

Remote Engine Speed Control	
12VGA	Remote mounted body builder interface wiring for engine speed control with International A26 engines. (HV/HX)
12VXT	Stationary variable auxiliary / PTO engine speed control through steering wheel cruise switches
12VXU	Stationary preset (2 speeds) auxiliary / PTO engine speed control through steering wheel cruise switches
12XBM	Remote mounted body builder interface wiring for engine speed control with Cummins B6.7 and L9 engines

# **PTO Controls**

You must determine the type of PTO that will be added to know which PTO accommodation is appropriate:

- Transmission mounted
- Engine mounted
- Transfer case mounted

All International PTO accommodation packages are appropriate for transmission mounted PTOs, as well as transfer case mounted PTOs. To add an engine mounted PTO, order feature code 60ABE.

In addition, you must determine the type of PTO engagement that will be added. International has released features to accommodate the five most popular PTO engagement types:

• Electric engagement

Air (clutched/non-clutched) engagement

Hydraulic engagement

Cable/Lever engagement

Constant engagement

Power Take Off Engagement Type	Chelsea® Models	Muncie® Models	International® Feature
Air (non-clutched)	442/489 Series (A)	TG, SH or 82 Series	60ABK
Air (clutched)	230/236 Series (A)	CS Series (CS8/6 Air Only)	60ABL
Hydraulic	270/271/277/278/85	CS Series (CS10/20/6 Hyd Only)	60ABE

#### **Remote Power Modules and Associated Features**

Remote power modules are the gateway to body integration. Each remote power module includes 6 power outputs and 6 switch inputs. Customers should inform their International dealer or body builder company if they intend to utilize this form of body integration on their vehicle.

60AAA	One Remote Power Module, back of cab, for bodybuilder to integrate additional lights (up to
	six 20 Amp loads, 80 Amp max)
60AAB	Two Remote Power Modules, back of cab, for up to 12 outputs and inputs (20 Amps each, 80 Amp max per module).
60AAD	REMOTE POWER MODULE (2) Mounted Under Cab or On Battery Box; Max. 20 amp. per Channel, Max. 80 amp. Total per Power Module; Includes 1 Module With Switch Pack Containing 6 Latched Switches and 1 Module With Hardware Only
60AAG	BDY INTG, REMOTE POWER MODULE (1) Mounted Inside Cab behind Driver Seat on DuraStar and WorkStar Series Up to 6 Outputs & 6 Inputs, Max. 20 Amps. per Channel, Max. 80 Amps. Total (Includes 1 Switch pack with 6 Latched Switches)
60AAH	REMOTE POWER MODULE (2) Mounted inside Cab behind Driver Seat; Up to 6 Outputs & 6 Inputs each, Max. 20 amps. Per Channel, Max. 80 amp Total (Includes 2 Six Switch Packs with Latched Switches)
60AAJ	REMOTE POWER MODULE (3) Mounted Inside Cab behind Driver Seat; Up to 6 Outputs & 6 Inputs each, Max. 20 amps. Per Channel, Max. 80 amp Total (Includes 3 Six Switch Packs with Latched Switches)
60AAM	POWER MODULE AUX (1) Mounted on the Driver's Side Frame Rail at Rear of Frame; Up to 6 Outputs & 6 Inputs, Max. 20 Amp. Per Channel, Max. 80 Amp. Total
08WSK/ 08WTJ	One Remote Power Module, end of frame, for up to 6 outputs and inputs (20 Amps each, 80 Amp max per module)

Enhancements for additional functionality, using Remote Power Module features:

60ACE	Dual Output Switch, control one auxiliary load up to 40 Amps with a factory-installed switch connected to two Remote Power Module outputs for a high Amperage load such as a light bar. Power available in "IGNITION" or "ACCESSORY" key states. (requires 2 Remote Power Module outputs)
60ACG 60ACH	Switches Interlocked to Vehicle Speed, 1 or 2 switches that will disengage a body feature if the vehicle exceeds a certain MPH or other parameter

60ACS / 60ACT / 60ACU	Replaces 1 / 2 / 3 latched switches with momentary switch(s) that provide control of body equipment from the cab and a location on the body for features such as cabinet lights and other body lights. (HV/HX/MV)
60ACW	I/O EXPANSION HARNESS (for Diamond Logic Builder) In-Cab Wire Harness (DLB) Program Only, Includes a Harness with five blunt cut Wires routed on lower left of Instrument Panel. Two ground active inputs and two (.5Amp) Relay Driver outputs are provided

Additional Indicator Lights	
60AKY	BDY INTG, DASH IND LT TRICOLOR (1) for Optional Usage Customer to Program.
60AKZ	BDY INTG, DASH IND LT TRICOLOR (2) for Optional Usage Customer to Program.
60ALA	BDY INTG, DASH IND LT TRICOLOR (3) for Optional Usage Customer to Program.
60ALB	BDY INTG, DASH IND LT TRICOLOR (4) for Optional Usage Customer to Program.
60ALC	BDY INTG, DASH IND LT TRICOLOR (5) for Optional Usage Customer to Program.
60ALD	BDY INTG, DASH IND LT TRICOLOR (6) for Optional Usage Customer to Program.
60ALE	BDY INTG, DASH IND LT TRICOLOR (7) for Optional Usage Customer to Program.
60ALG	BDY INTG, DASH IND LT TRICOLOR (8) for Optional Usage Customer to Program.
60ALH	BDY INTG, DASH IND LT TRICOLOR (9) for Optional Usage Customer to Program.
60ALJ	BDY INTG, DASH IND LT TRICOLOR (10) for Optional Usage Customer to Program.
60ALK	BDY INTG, DASH IND LT TRICOLOR (11) for Optional Usage Customer to Program.
60ALL	BDY INTG, DASH IND LT TRICOLOR (12) for Optional Usage Customer to Program.

# **Diamond Logic Builder Custom Software Programming Features**

- Load sequencing
- Load management
- Low voltage indicator & alarm
- Parking brake signal
- Neutral signal
- Split shaft pump controls
- Transmission mounted PTO pump controls
- Door Open warning light/alarm
- Siren module control from steering wheel
- Auto ramp of engine speed with low voltage/ A/C on
- · Control auto chains
- Unlock power door locks w/ parking brake
- Lighting features:
  - Master switch
  - Upper/lower flashing warning lights
  - o Rear, right and left flood lights
  - Front grill lights
  - Compartment lights
  - o Step lights
  - Cabinet lights
  - Cab light bars
  - o 110V AC floodlights
  - o Set up body lights to work with pre-trip light inspection