INTEGRATION EDUCATION

TANKER
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 Lighting	
08HAA	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

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

Work Light Accommodation	
08WMA	SWITCH, TOGGLE, FOR WORK LIGHT Lighted; on Instrument Panel and Wiring Effects for Customer Furnished Back of Cab Light

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.

Air Accessory Controls	
08WKM	Provides 6 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.
08WGR	Provides 6 normally open air solenoids to be used as a pilot air source for sprayer hoses. Includes switch in cab; air is exhausted with key in "IGNITION" or "ACCESSORY" positions; and air will be supplied with key in "Off" position

Convenience Features	
08RPB	Steering wheel switches for control of radio and Bluetooth calling
08WPZ	Pre-trip inspection will cycle exterior lamps, except back-up lights
08WBW	Jump start stud; remote mounted

Safety and Equipment Protection 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
08WXD	Park brake alarm; Electric horn sounds in repetitive manner when vehicle park brake is "NOT" set, with ignition "OFF" and any door opened.
08WGL	Force wipers to slowest intermittent speed when park brake set and wipers left on for a predetermined time.
08WWJ	Indicator and alarm for low coolant level
08THB	Back up alarm; Provides a 102 dBA audible alarm when a vehicle is operated in reverse gear.
60ACX	Theft Deterrent; Limits vehicle mobility by requiring a pre-selected code to be entered to drive vehicle
16HCH	Seat belt indicator and alarm will alert driver if park brake is released and seat belt is not fastened
08THN	Hazard Flasher Override; Turn signal switch with hazard flasher that overrides brake lights

Battery Disconnect Switch

08WAD	Shuts down the entire battery fed electrical system with a lever located on the battery box
08WCS	Shuts down the entire battery-fed electrical system with a lever located on the floor to the left of the driver's seat
08RMH	Disconnects charging circuits, locks with padlock, battery box mounted
08WZP	Green "Battery On" indicator light on left side of dash

Other battery disconnect switches available, see dealer for complete list

Two-Way Radio Wiring Effects

08REA*	10' wiring coil under the instrument panel for optimal radio placement
08RGA*	Wiring in the center of the header console in the cab
08RNC	CB radio accommodation package, header mounted, includes power source and two antenna bases with wiring

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

Spare Input/ Output For Automatic Transmissions

13WUB/ 13WUC	Remote body builder interface wiring and software programming for Allison automatic transmissions
13WDH	Wiring for transmission PTO controls for Allison 1000/2000 series transmissions, includes range inhibit and torque converter lock up functions

Remote Engine Speed Control	
12VXT	Stationary variable auxiliary / PTO engine speed control through steering wheel cruise switches
12VXV	Mobile variable (2-20MPH) auxiliary / PTO engine speed control through steering wheel cruise switches
12XAT	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
- Hydraulic engagement
- Constant engagement
- Air (clutched/non-clutched) engagement
- Cable/Lever 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

PTO Controls and Hourmeter	
13XAA	PTO CONTROL, DASH MOUNTED For Customer Provided PTO; Includes Switch, Electric/Air Solenoid, Piping and Wiring. **Recommended for manual transmissions ONLY**
16WLM	HOURMETER, PTO for Customer Provided PTO; Indicator Light and Hour meter in Gauge Cluster Includes Return Wire for PTO Feedback Switch. **Included with the PTO feature codes below** (HV/HX/MV)
60AKG	Body Integration, PTO Accommodation for (3) Latched rocker switches, one for PTO switch and two generic switches to control (3) 30amp relays, with programmable parameters. Recommended for use with automatic transmissions
60ABE	BDY INTG, PTO ACCOMMODATION for Electric over Hydraulic PTO, Does Not Include Solenoids, With Switch Mounted on Dash, Includes Audible Alarm and Indicator Light in Gauge Cluster, (Requires 1 Remote Power Module input & 1 output) (HV/HX/MV)

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	BDY INTG, REMOTE POWER MODULE (1); Up to 6 Outputs & 6 Inputs, Max. 20 Amps. Per Channel, Max. 80 Amps. Total (Includes 1 Switch Pack With Latched Switches), Mounted Back of Battery Box on MV Series and Under Cab, Left Rear on HV Series. (HV/MV)
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)

Enhance 60AAG with additional functionality, using Remote Power Module features:
PTO Accommodations, for body builder to add PTO. Includes PTO switch, hourmeter and PTO feedback light in gauge cluster. Programmable parameters are available, and can be changed for a charge through an International dealership, to ensure PTO is operating only in the desired conditions.

PTO 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
Cable or lever (includes warning lights/alarms only)	442/489 Series (Y & W)	TG, SG Series (Cable package)	60ABA

Enhancements for additional functionality, using Remote Power Module features:

60AJE	BDY INTG, REMOTE THROTTLE - When ground is applied to the Remote Power Module input, the engine ramps to the first preset speed and maintains that speed as long as the input is held at ground. Removing ground from the Remote Power Module input returns the engine to idle.
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)
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
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 (HV/HX/MV)
60ABM	RPM I/O harness includes pigtails with blunt cut wires for six inputs and six outputs for use with one RPM; Simplifies RPM integration by allowing upfitter to use butt splice connections

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

- Floodlights
- Step lights
- "Door Open" warning light/alarm
- Cabinet lights
- Cab strobe lights