

Description of Revisions: *This bulletin replaces the version dated September 2006. Additional information is included about ICU3 configurations.*

General Information

To minimize vehicle downtime and assist field service technicians in quickly replacing ICU3 driver instrument clusters (Instrumentation Control Unit, Level I), PDCs now stock a selection of ICU3 service clusters.

IMPORTANT: Since the ICU3 is designed on a vehicle-specific basis, the clusters in stock for immediate shipment may not exactly match the original, but should be better than or equal to the original cluster.

NOTE: An exact ICU3 replacement cluster can be ordered according to the original vehicle specifications.

This bulletin explains how to choose the correct replacement service cluster, describes service cluster configurations, explains how to replace the ICU3 cluster and its components, and summarizes the process. Read the entire document before beginning work.

Choosing the Correct Service Cluster

Choose the correct service cluster based on three criteria:

1. Engine Type — Choose either:
 - M-B Engine or
 - Non M-B Engine
2. Transmission temperature gauge — Choose either:
 - With the transmission temperature gauge (required on some vehicles with automatic transmissions) or
 - Without the transmission temperature gauge
3. Gauge face configuration — Choose one of these three:
 - U.S./Metric for the U.S. market
 - Metric/U.S. for Canada or Mexico
 - Metric-only for export

For the correct ICU3 service cluster part number, based on the choices above, see **Table 1**.

Service Cluster Configurations

Service clusters are configured as follows:

- **TACHOMETER** — All service clusters include a functional tachometer gauge even if it wasn't originally specified on the vehicle.
- **RESET BUTTON** — All service clusters include the trip mileage reset button. The button will function on the service cluster even if the original cluster did not include this option.
- **AIR PRESSURE GAUGES** — The only replaceable gauges on the ICU3 are the air pressure gauges. If any other gauge in the cluster fails, the cluster must be replaced.
- **TELLTALES** — Each of the nine optional warning lights located in the top row at the center of the ICU3 consists of a lamp and a small plastic bezel with the warning message printed on it. The plastic bezel covering the lamp is referred to as a "telltale" lens.

Though service clusters come with lamps in all warning light locations, only the warning lights wired for the original cluster will illuminate when the ICU3 service cluster is plugged in to the main cab harness. Bulbs for warning lights that are not used do not need to be removed from the cluster.

The service cluster **does not** include the top row telltales; **these must be removed from the old cluster and placed in the same positions in the service cluster.** This can be done without disassembling the ICU3. Using a pair of needlenose pliers or a similar tool, grab the exposed tab at the top of the telltale slot (from the back) and carefully pull the telltale out from the top of the ICU.

Choosing the Correct Service Cluster

All service ICU3 clusters are standard with speedometer, tachometer, hourmeter, and a tripmeter with a reset button. Choose the correct service cluster based on the following three criteria.

Service Cluster Configuration

All L-Line and A-Line service clusters come with air pressure gauges, which are standard original equipment. Acterra service clusters do not come with air pressure gauges, which are optional. When installing a service cluster in an Acterra vehicle, remove the air gauges from the old cluster or order new air gauges, then install them in the replacement cluster.

See **Table 1** and **Table 2**.

Cluster Description and Service Cluster Part Numbers				
Vehicle	Options	U.S./Metric	Metric/U.S.	Metric Only
Acterra, L-Line/ A-Line	With Transmission Temperature Gauge	VDO A2C53102223	VDO A2C53102225	VDO A2C53102224
	Without Transmission Temperature Gauge	VDO A2C53102220	VDO A2C53102222	VDO A2C53102221
	M-B Engine With Transmission Temperature Gauge	VDO 1 911 222 321S	VDO 1 911 222 345S	VDO 1 911 222 338S
	M-B Engine Without Transmission Temperature Gauge	VDO 1 911 222 297S	VDO 1 911 222 314S	VDO 1 911 222 307S

Table 1, Cluster Description and Service Cluster Part Numbers

Sterling Acterra ICU3 Cluster Service Parts	
Description	Part Number
Panel Surround, Taupe, w/ switch cutout	A22-48832-000
Panel Surround, Taupe, without switch	A22-48832-001
Panel Surround, WDGRN, w/switch cutout	A22-48832-003
Panel Surround, WDGRN, without switch	A22-48832-004
Mask/Lens Assy., w/o Reset Button	VDO/2 332 920 081S
Mask/Lens Assy., with Reset Button	VDO/2 332 920 098S
Reset Button	VDO/3 732 010 035S
Quick Connect Air Fitting, 90 Deg. 5/32 TBG.	VDO/3 959 000 011S
Quick Connection, 90 Deg., 1/4 Tubing	LEG/3009 00 05 00 (early production)
Socket LED-Amber	VDO/4 990 100 007S
Socket LED-Red	VDO/4 990 100 014S

Sterling Acterra ICU3 Cluster Service Parts	
Description	Part Number
Primary Air Pressure Gauge-U.S.	VDO/2 311 610 004S
Primary Air Pressure Gauge-Metric	VDO/2 311 610 028S
Secondary Air Pressure Gauge-U.S.	VDO/2 311 610 011S
Secondary Air Pressure Gauge-Metric	VDO/2 311 610 035S
Lamp Backlighting, Tan (5 Pack)	VDO/4 923 090 025S
Lamp Indicator, Black (5 Pack)	VDO/2 013 001 814S
Lens, Transfer Case Shift OK	24-00909-000
Lens, Transfer Case High Range	24-00909-001
Lens, Mirror Heat	24-00909-002
Lens, Suspension Air	24-00909-003
Lens, Utility Light	24-00909-004
Lens, Road Light	24-00909-005
Lens, Fog Light	24-00909-006
Lens, Spot Light	24-00909-007
Lens, Engine Fan	24-00909-008
Lens, Case Neutral	24-00909-009
Lens, Do Not Shift	24-00909-010
Lens, ISO Symbol for Water in Fuel	24-00909-011
Lens, Washer Fluid	24-00909-012
Lens, Message	24-00909-013
Lens, Optimized Idle	24-00909-014
Lens, SRS Warning	24-00909-015
Lens, Wheel Spin	24-00909-016
Lens, Trailer Auxiliary	24-00909-017
Lens, ECAS Transfer	24-00909-018
Lens, EBS Warning	24-00909-019
Lens, Differential Lock	24-00909-020
Lens, Axle Lock	24-00909-021
Lens, Forward Differential Locked	24-00909-022
Lens, Rear Differential Locked	24-00909-023
Lens, Interaxle Differential Locked	24-00909-024
Lens, Retarder Overheating	24-00909-025
Lens, Roof Light	24-00909-026
Lens, Strobe Light	24-00909-027
Lens, Work Light	24-00909-028
Lens, Auxiliary Air	24-00909-029

Sterling Acterra ICU3 Cluster Service Parts	
Description	Part Number
Lens, PTO Engaged	24-00909-030
Lens, Transfer Case in Low Range	24-00909-031
Lens, Stop Engine	24-00909-032
Lens, ECAS Fail	24-00909-033
Lens, No Step	24-00909-034
Lens, Intake Heater	24-00909-035
Lens, Check Trans	24-00909-036
Lens, Shift Inhibit	24-00909-037
Lens, Low Fuel	24-00909-038
Lens, Reduce Speed	24-00909-039
Lens, HI Idle	24-00909-040
Lens, Pump Roll	24-00909-041
Lens, Low Water	24-00909-042
Lens, Wheel Lock	24-00909-043
Lens, Range Inhibit	24-00909-044
Lens, Lane Searching	24-00909-045
Lens, Stop Request	24-00909-046
Lens, Brake	24-00909-047
Lens, Side Door	24-00909-048
Lens, Service Transmission	24-00909-049
Lens, Check AC	24-00909-050
Lens, ABS	24-00909-051
Lens, Low Brake Fluid	24-00909-052
Lens, Wait to Start	24-00909-053
Lens, CTIS Overspeed	24-00909-054
Lens, Battery On	24-00909-055

Table 2, Sterling Acterra ICU3 Cluster Service Parts