

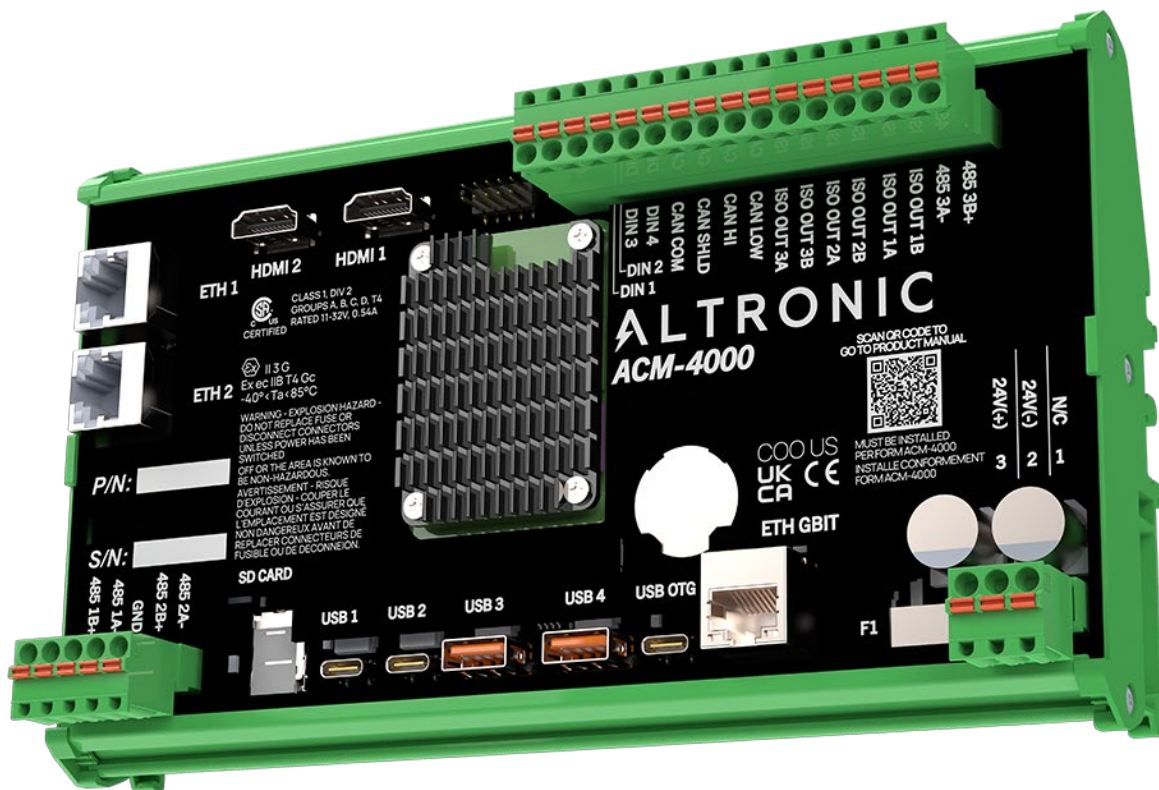
ACM-4000

Altronic Compute Module

CAT CDL COMS Connections Application Manual

ALTRONIC

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CERTIFIED
CLASS I, DIVISION 2,
GROUPS C and D

Ex II 3 G
Ex ec IIB T4 Gc
-40° < Ta < 85°C

1.0 Overview

The ACM-4000 can directly acquire Caterpillar® engine data through the CDL COMS interface, providing access to key operating parameters such as engine speed, pressures, temperatures, timing, throttle/actuator position, and combustion metrics. Integrating this data into the ACM-4000 centralizes engine information on a single display, streamlining monitoring, diagnostics, and troubleshooting. For Caterpillar G3500 and G3600 engine families, the CDL COMS connection delivers full data visibility without additional hardware or system complexity.

2.0 CAT CDL Connections

Connect the CAT CDL to your ACM-4000 as follows (see also *Figure 1* and *Figure 2*):

Connections at ACM-4000	Connections at CAT CDL
485 3A-	Purple
485 3B+	Pink
CDL+	Pink
CDL-	Purple

Table 1

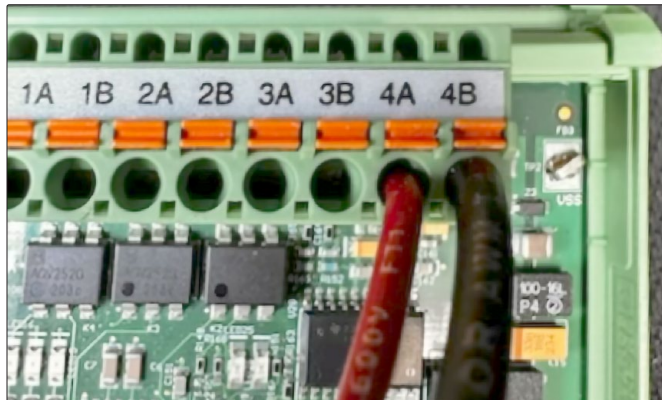


Figure 1

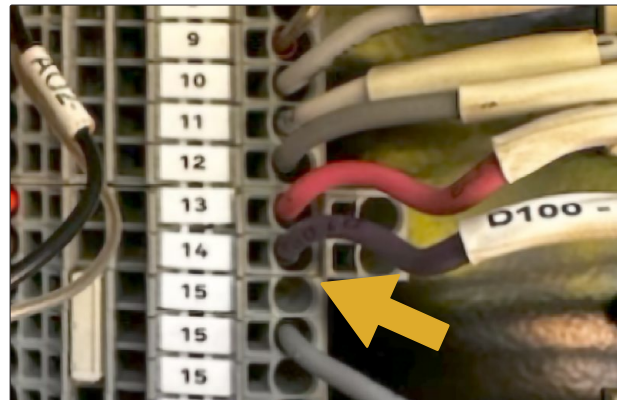


Figure 2

3.0 Adding the CAT CDL to the ACM-4000 MDI

3.1 Step 1: Create Your AWI

1. Build your AWI.

NOTE: There are [pre-built CAT CDL COMS AWIs](#) available for download in the Altronic GitHub. You can also download the latest [AWI Application](#) release from GitHub, if needed. For comprehensive instructions on designing and configuring an AWI, refer to the [AWI Connection and Interface Manual](#).

2. Once your AWI is complete, click the **Application** button in the left sidebar. See *Figure 3*.
3. Name the file, enter a version number, and add any notes desired. **NOTE:** Do NOT select any of the checkboxes at the bottom. See the example in *Figure 3*.
4. Click the **Download** button to save the AWI file.

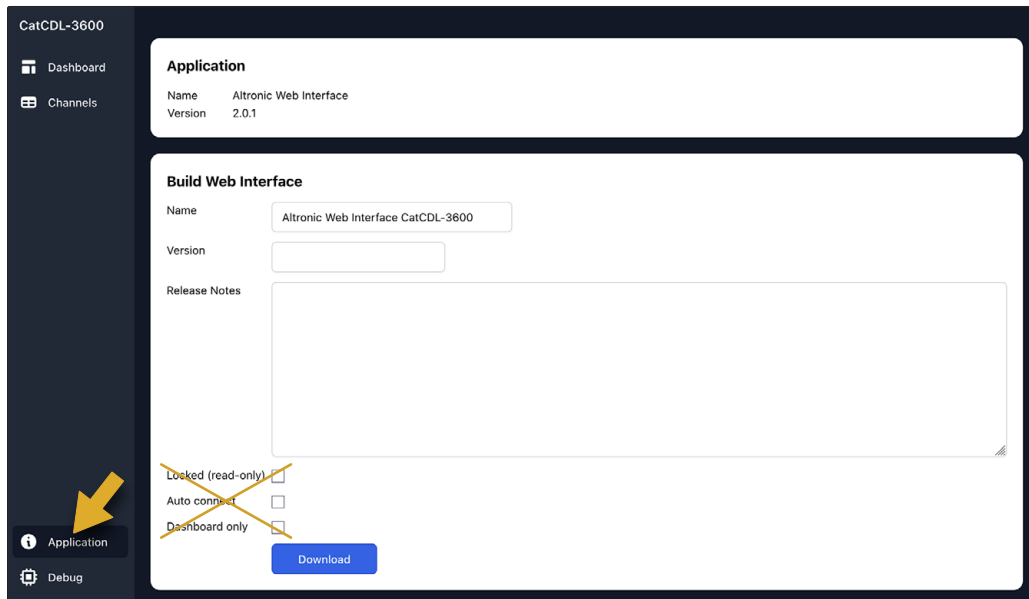



Figure 3

3.2 Add the CAT CDL Device to the MDI

1. Open the ACM-4000 configuration IP address in your web browser: **98.102.65.175:3000/awi**
2. Click the **MDI Configuration Menu**  button in the bottom-right corner to open the MDI Configuration interface.
3. On the Devices screen, click the **Add New Device** button, and select the CAT CDL AWI device file. See *Figure 4*.

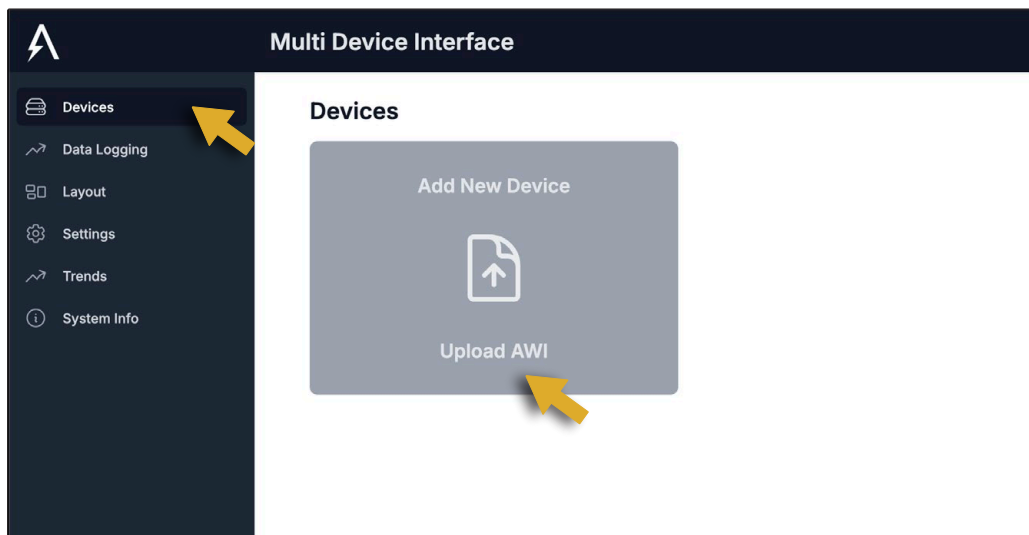


Figure 4

4. Click the device summary card, and edit the device settings to those shown in *Figure 5*.

Device Settings

Name	<input type="text" value="CatCDL-3600"/>	Device Type	<input type="text" value="CatCDL-3600"/>
Protocol	<input type="text" value="CAT CDL"/>	Unique Id	<input type="text" value="rfd245"/>
Proxy Node Id	<input type="text" value="1"/>	<input type="button" value="Download Dashboard json"/>	
Poll Count	<input type="text" value="30"/>	<input type="button" value="Download AWI"/>	
Poll Delay	<input type="text" value="50"/> ms	<input type="button" value="Upload AWI"/>	
Poll Frequency	<input type="text" value="1000"/> ms	<input type="button" value="Delete Device"/>	
<input type="button" value="Cancel"/> <input type="button" value="Save Changes"/>		<input type="button" value="View Errors"/>	

Figure 5

4.0 Modbus Registers

Register	Label	ReadOnly / ReadWrite	Type
135	Low Idle Speed	ReadOnly	FLOAT32
137	Engine Oil Temperature	ReadOnly	FLOAT32
139	Crank Terminate RPM	ReadOnly	FLOAT32
141	NumberOfEngineRatingMapsAvailable	ReadOnly	FLOAT32
143	EnineRatingMapInUse	ReadOnly	FLOAT32
145	Detonation Level	ReadOnly	FLOAT32
147	Number of Detonation Sensors	ReadOnly	FLOAT32
149	EngineConfiguration	ReadOnly	FLOAT32
151	OxygenSensorStatus	ReadOnly	FLOAT32
153	RemoteFaultReset	ReadOnly	FLOAT32
155	Ignition Timing Calibration	ReadOnly	FLOAT32
157	Inlet Manifold Temperature	ReadOnly	FLOAT32
159	Cooldown Duration	ReadOnly	FLOAT32
161	Cold Mode Status	ReadOnly	FLOAT32
163	Engine Prelube Status 1	ReadOnly	FLOAT32
165	Remote Start Status	ReadOnly	FLOAT32
167	Engine Coolant Level Status	ReadOnly	FLOAT32
169	Engine Control Switch Position	ReadOnly	FLOAT32
171	Shutdown Notify Relay Status	ReadOnly	FLOAT32
173	Overspeed Test Switch Position	ReadOnly	FLOAT32
175	Remote Emergency Stop Switch Position	ReadOnly	FLOAT32
177	Startup Mode Status	ReadOnly	FLOAT32
179	Air Shutoff Status	ReadOnly	FLOAT32
181	Maximum Number of Crank Cycles	ReadOnly	FLOAT32

183	Cooldown Override Control	ReadOnly	FLOAT32
185	Engine Prelube Status 2	ReadOnly	FLOAT32
187	Engine Low Fuel Level Status	ReadOnly	FLOAT32
189	Acceleration Delay Time	ReadOnly	FLOAT32
191	Remote Throttle Override	ReadOnly	FLOAT32
193	ECM in Control Marine	ReadOnly	FLOAT32
195	LowIdleSwitchPosition	ReadOnly	FLOAT32
197	SpeedGovernorAuxiliary1ProportionAdjustment	ReadOnly	FLOAT32
199	SpeedGovernorAuxiliary1IntegralAdjustment	ReadOnly	FLOAT32
201	SpeedGovernorAuxiliary1DerivativeAdjustment	ReadOnly	FLOAT32
203	SpeedGovernorPriProportionalAdjustment	ReadOnly	FLOAT32
205	SpeedGovernorPriIntegralAdjustment	ReadOnly	FLOAT32
207	SpeedGovernorPriDerivativeAdjustment	ReadOnly	FLOAT32
209	PercentFuelPosition	ReadOnly	FLOAT32
211	EngineStatus3600	ReadOnly	FLOAT32
213	EngineOperation	ReadOnly	FLOAT32
215	GasFuelCorrectionFactor	ReadOnly	FLOAT32
217	WastegatePositionCommand	ReadOnly	FLOAT32
219	ChokePositionCommand	ReadOnly	FLOAT32
221	PercentEngineLoadFactor	ReadOnly	FLOAT32
223	AuxiliaryStatus	ReadOnly	FLOAT32
225	AFRControlProportionalAdjustment	ReadOnly	FLOAT32
227	AFRControlIntegralAdjustment	ReadOnly	FLOAT32
229	EISMode	ReadOnly	FLOAT32
231	NumberLoadSensorTimingMaps	ReadOnly	FLOAT32
233	LoadSensitiveTimingMapInUse	ReadOnly	FLOAT32
235	EISSpecialTestStatus	ReadOnly	FLOAT32
237	AFRControlStatus	ReadOnly	FLOAT32
239	SpeedGovernorAuxiliary1GainStatus	ReadOnly	FLOAT32
241	BackupECMStatusMarine	ReadOnly	FLOAT32
243	DiagnosticStatusSummary	ReadOnly	FLOAT32
245	FuelCorrectionFactor	ReadOnly	FLOAT32
247	GasFuelQuality3500	ReadOnly	FLOAT32
249	RemoteStartStop	ReadOnly	FLOAT32
251	ShutdownEmergencyOverrideSwitchStatus	ReadOnly	FLOAT32
253	GeneralAlarmOutStatusOverride	ReadOnly	FLOAT32
255	GovernorGlobalGainAdjustment	ReadOnly	FLOAT32
257	EngineRpm	ReadOnly	FLOAT32
259	EngineCoolantTemperature	ReadOnly	FLOAT32
261	DesiredEngineTiming	ReadOnly	FLOAT32
263	TransmissionOilTemperatureMarine	ReadOnly	FLOAT32

265	GeneratorSetHourmeter	ReadOnly	FLOAT32
267	EngineStatus	ReadOnly	FLOAT32
269	EngineFrontAftercoolantTemperature	ReadOnly	FLOAT32
271	RightExhaustTemperature	ReadOnly	FLOAT32
273	LeftExhaustTemperature	ReadOnly	FLOAT32
275	SpeedRampRate	ReadOnly	FLOAT32
277	GeneratorAlarmStatus	ReadOnly	FLOAT32
279	GeneratorShutdownStatus	ReadOnly	FLOAT32
281	CooldownTimeRemain	ReadOnly	FLOAT32
283	EtherUsage	ReadOnly	FLOAT32
285	ExhaustTemperature	ReadOnly	FLOAT32
287	CooldownEngineSpeed	ReadOnly	FLOAT32
289	CycleCrankTimeSetpont	ReadOnly	FLOAT32
291	CrankTerminateRpm	ReadOnly	FLOAT32
293	FuelRateOld	ReadOnly	FLOAT32
295	FuelQualityValueInput	ReadOnly	FLOAT32
297	IntakeManifoldAirFlow	ReadOnly	FLOAT32
299	UserDefinedSwitchStatus	ReadOnly	FLOAT32
301	ExhaustPortTemperature01	ReadOnly	FLOAT32
303	ExhaustPortTemperature02	ReadOnly	FLOAT32
305	ExhaustPortTemperature03	ReadOnly	FLOAT32
307	ExhaustPortTemperature04	ReadOnly	FLOAT32
309	ExhaustPortTemperature05	ReadOnly	FLOAT32
311	ExhaustPortTemperature06	ReadOnly	FLOAT32
313	ExhaustPortTemperature07	ReadOnly	FLOAT32
315	ExhaustPortTemperature08	ReadOnly	FLOAT32
317	ExhaustPortTemperature09	ReadOnly	FLOAT32
319	ExhaustPortTemperature10	ReadOnly	FLOAT32
321	ExhaustPortTemperature11	ReadOnly	FLOAT32
323	ExhaustPortTemperature12	ReadOnly	FLOAT32
325	ExhaustPortTemperature13	ReadOnly	FLOAT32
327	ExhaustPortTemperature14	ReadOnly	FLOAT32
329	ExhaustPortTemperature15	ReadOnly	FLOAT32
331	ExhaustPortTemperature16	ReadOnly	FLOAT32
333	ExhaustPortTemperature17	ReadOnly	FLOAT32
335	ExhaustPortTemperature18	ReadOnly	FLOAT32
337	ExhaustPortTemperature19	ReadOnly	FLOAT32
339	ExhaustPortTemperature20	ReadOnly	FLOAT32
341	RightOddBankTurbineInletTemperature	ReadOnly	FLOAT32
343	RightOddBankTurbineOutTemperature	ReadOnly	FLOAT32
345	LeftEvenBankTurbineInletTemperature	ReadOnly	FLOAT32

347	LeftEvenBankTurbineOutTemperature	ReadOnly	FLOAT32
349	LeftBankExhaustPort	ReadOnly	FLOAT32
351	RightBankExhaustPort	ReadOnly	FLOAT32
353	EngineCoolantPumpPressureStatus	ReadOnly	FLOAT32
355	JacketWaterToEngineOilDifferentialTemperature	ReadOnly	FLOAT32
357	EngineCoolantPressureAbsolute	ReadOnly	FLOAT32
359	EngineOvercrankTimeOld	ReadOnly	FLOAT32
361	EnginePurgeCycleTime	ReadOnly	FLOAT32
363	GasFuelFlowNew	ReadOnly	FLOAT32
365	DetonationLevel01	ReadOnly	FLOAT32
367	DetonationLevel02	ReadOnly	FLOAT32
369	DetonationLevel03	ReadOnly	FLOAT32
371	DetonationLevel04	ReadOnly	FLOAT32
373	DetonationLevel05	ReadOnly	FLOAT32
375	DetonationLevel06	ReadOnly	FLOAT32
377	DetonationLevel07	ReadOnly	FLOAT32
379	DetonationLevel08	ReadOnly	FLOAT32
381	DetonationLevel09	ReadOnly	FLOAT32
383	DetonationLevel10	ReadOnly	FLOAT32
385	DetonationLevel11	ReadOnly	FLOAT32
387	DetonationLevel12	ReadOnly	FLOAT32
389	DetonationLevel13	ReadOnly	FLOAT32
391	DetonationLevel14	ReadOnly	FLOAT32
393	DetonationLevel15	ReadOnly	FLOAT32
395	DetonationLevel16	ReadOnly	FLOAT32
397	DetonationLevel17	ReadOnly	FLOAT32
399	DetonationLevel18	ReadOnly	FLOAT32
401	DetonationLevel19	ReadOnly	FLOAT32
403	DetonationLevel20	ReadOnly	FLOAT32
405	TransformerSecondaryOutV01	ReadOnly	FLOAT32
407	TransformerSecondaryOutV02	ReadOnly	FLOAT32
409	TransformerSecondaryOutV03	ReadOnly	FLOAT32
411	TransformerSecondaryOutV04	ReadOnly	FLOAT32
413	TransformerSecondaryOutV05	ReadOnly	FLOAT32
415	TransformerSecondaryOutV06	ReadOnly	FLOAT32
417	TransformerSecondaryOutV07	ReadOnly	FLOAT32
419	TransformerSecondaryOutV08	ReadOnly	FLOAT32
421	TransformerSecondaryOutV09	ReadOnly	FLOAT32
423	TransformerSecondaryOutV10	ReadOnly	FLOAT32
425	TransformerSecondaryOutV11	ReadOnly	FLOAT32
427	TransformerSecondaryOutV12	ReadOnly	FLOAT32

429	TransformerSecondaryOutV13	ReadOnly	FLOAT32
431	TransformerSecondaryOutV14	ReadOnly	FLOAT32
433	TransformerSecondaryOutV15	ReadOnly	FLOAT32
435	TransformerSecondaryOutV16	ReadOnly	FLOAT32
437	TransformerSecondaryOutV17	ReadOnly	FLOAT32
439	TransformerSecondaryOutV18	ReadOnly	FLOAT32
441	TransformerSecondaryOutV19	ReadOnly	FLOAT32
443	TransformerSecondaryOutV20	ReadOnly	FLOAT32
445	TransformerSecondaryOutV21	ReadOnly	FLOAT32
447	MaximumEngineHighIdleSpeed	ReadOnly	FLOAT32
449	MinimumHighEngineldleSpeed	ReadOnly	FLOAT32
451	HighInletAirTemperatureEngineLoadSetpt	ReadOnly	FLOAT32
453	HydraxOilPressureSwitchStatus	ReadOnly	FLOAT32
455	NormalStopInputStatus	ReadOnly	FLOAT32
457	EmmissionsFeedbackMode	ReadOnly	FLOAT32
459	FuelValvePosition	ReadOnly	FLOAT32
461	MaximumFuelFlowSetting	ReadOnly	FLOAT32
463	EngineOiltoEngineCoolantDifferentialTemperature	ReadOnly	FLOAT32
465	O2FeedbackFeaturEnableStatus	ReadOnly	FLOAT32
467	O2SensorStatus	ReadOnly	FLOAT32
469	AutoPowerBalanceModeTandem	ReadOnly	FLOAT32
471	O2FeedbackEnabledStatus	ReadOnly	FLOAT32
473	RequestEngineExhaustPortTemperature	ReadOnly	FLOAT32
475	RightTurboTurbineSpeed	ReadOnly	FLOAT32
477	LeftTurboTurbineSpeed	ReadOnly	FLOAT32
479	DesiredSpeedInputConfig	ReadOnly	FLOAT32
481	EngineWarningStatus	ReadOnly	FLOAT32
483	EngineShutdownStatus	ReadOnly	FLOAT32
485	EngineDerateStatus	ReadOnly	FLOAT32
487	GeneratorTotalRealPower	ReadOnly	FLOAT32
489	EngineWarningStatus2	ReadOnly	FLOAT32
491	EngineShutdownStatus2	ReadOnly	FLOAT32
493	ThrottlePositionOld	ReadOnly	FLOAT32
495	SystemBatteryVoltage	ReadOnly	FLOAT32
497	EngineCompressionRatio	ReadOnly	FLOAT32
499	EnginePowerDeratePercentage	ReadOnly	FLOAT32
501	ActualEngineTiming	ReadOnly	FLOAT32
503	DesiredEngineSpeed	ReadOnly	FLOAT32
505	RatedEngineSpeed	ReadOnly	FLOAT32
507	TransmissionOilPressureAbsolute	ReadOnly	FLOAT32
509	AtmosphericPressure	ReadOnly	FLOAT32

511	EngineOilPressureGauge	ReadOnly	FLOAT32
513	BoostPressureGauge	ReadOnly	FLOAT32
515	AirFilterRestriction	ReadOnly	FLOAT32
517	FilteredEngineOilPressure	ReadOnly	FLOAT32
519	TurboOutletPressureAbs	ReadOnly	FLOAT32
521	LeftTurboInletPressure	ReadOnly	FLOAT32
523	RightTurboInletPressure	ReadOnly	FLOAT32
525	IntakeManifoldPressure	ReadOnly	FLOAT32
527	EngineOilFilterDifferentialPressure	ReadOnly	FLOAT32
529	EffectiveRack	ReadOnly	FLOAT32
531	EffectiveRackLimit	ReadOnly	FLOAT32
533	EffectiveSmokeRackLimit	ReadOnly	FLOAT32
535	PeakAirFilterRestriction	ReadOnly	FLOAT32
537	UnfilteredEngineOilPressureAbsolute	ReadOnly	FLOAT32
539	FuelFilterDifferentialPressure	ReadOnly	FLOAT32
541	UnfilteredEngineFuelPressureAsbsolute	ReadOnly	FLOAT32
543	ActualExhaustOxygenPercent	ReadOnly	FLOAT32
545	DesiredExhaustOxygenPercent	ReadOnly	FLOAT32
547	CrankcaseAirPressureAbsolute	ReadOnly	FLOAT32
549	CrankcaseAirPressureGauge	ReadOnly	FLOAT32
551	FilteredEngineFuelPressureAbsolute	ReadOnly	FLOAT32
553	FilteredEngineFuelPressureGauge	ReadOnly	FLOAT32
555	IntakeManifoldAirTemperture	ReadOnly	FLOAT32
557	ActualAirToFuelRation	ReadOnly	FLOAT32
559	PercentDroop	ReadOnly	FLOAT32
561	DesiredCombustionTime	ReadOnly	FLOAT32
563	AirToFuelDifferentialPressure	ReadOnly	FLOAT32
565	ActualAirPressure	ReadOnly	FLOAT32
567	DesiredIntakeManifoldAirPressure	ReadOnly	FLOAT32
569	FuelTemperature	ReadOnly	FLOAT32
571	RightAirRestriction	ReadOnly	FLOAT32
573	LeftAirRestriction	ReadOnly	FLOAT32
575	DesiredFullLoadExhaustOxygen	ReadOnly	FLOAT32
577	FuelConsumptionRate	ReadOnly	FLOAT32
579	TotalFuelConsumed	ReadOnly	FLOAT32
581	HighCrankcasePressureShutdownLevel	ReadOnly	FLOAT32
583	UnfilteredEngineOilPressureGauge	ReadOnly	FLOAT32
585	DesiredAirToFuelRatio3600	ReadOnly	FLOAT32
587	SecondDesiredTiming	ReadOnly	FLOAT32
589	DrivenEquipmentDelayTime	ReadOnly	FLOAT32
591	GasSpecificGravity	ReadOnly	FLOAT32

593	InletManifoldAirPressureAsbolute	ReadOnly	FLOAT32
595	ExtEnginePowerDeratePercent	ReadOnly	FLOAT32
597	TotalOperatingHours	ReadOnly	FLOAT32
599	IgnitionTiming01	ReadOnly	FLOAT32
601	IgnitionTiming02	ReadOnly	FLOAT32
603	IgnitionTiming03	ReadOnly	FLOAT32
605	IgnitionTiming04	ReadOnly	FLOAT32
607	IgnitionTiming05	ReadOnly	FLOAT32
609	IgnitionTiming06	ReadOnly	FLOAT32
611	IgnitionTiming07	ReadOnly	FLOAT32
613	IgnitionTiming08	ReadOnly	FLOAT32
615	IgnitionTiming09	ReadOnly	FLOAT32
617	IgnitionTiming10	ReadOnly	FLOAT32
619	IgnitionTiming11	ReadOnly	FLOAT32
621	IgnitionTiming12	ReadOnly	FLOAT32
623	IgnitionTiming13	ReadOnly	FLOAT32
625	IgnitionTiming14	ReadOnly	FLOAT32
627	IgnitionTiming15	ReadOnly	FLOAT32
629	IgnitionTiming16	ReadOnly	FLOAT32
631	IgnitionTiming17	ReadOnly	FLOAT32
633	IgnitionTiming18	ReadOnly	FLOAT32
635	IgnitionTiming19	ReadOnly	FLOAT32
637	IgnitionTiming20	ReadOnly	FLOAT32
639	EngineSpeedDropTime	ReadOnly	FLOAT32
641	EnginePrelubeTimeOutPeriod	ReadOnly	FLOAT32
643	EngineStartChokePosition	ReadOnly	FLOAT32
645	MaximumChokePosition3600	ReadOnly	FLOAT32
647	FuelValveDifferentialPressure	ReadOnly	FLOAT32
649	FuelSpecificHeatRatio3500	ReadOnly	FLOAT32
651	ThrottleActuatorPositionCommand	ReadOnly	FLOAT32
653	Engine2ThrottleActuatorTrim	ReadOnly	FLOAT32
655	DesiredInletManifoldAirPressureOffset	ReadOnly	FLOAT32
657	MasterEngineDesiredExhaustO2	ReadOnly	FLOAT32
659	ChokeProportionalGainPercent	ReadOnly	FLOAT32
661	ChokeIntegralStabilityPercent	ReadOnly	FLOAT32
663	ChokeDerivativeCompensationPercent	ReadOnly	FLOAT32
665	GovernorProportionalGainPercent	ReadOnly	FLOAT32
667	GovernorIntegralStabilityPercent	ReadOnly	FLOAT32
669	GovernorAuxiliary1ProportionalGainPercent	ReadOnly	FLOAT32
671	GovernorAuxiliary1IntegralStabilityPercent	ReadOnly	FLOAT32
673	GovernorAuxiliary1IntegralStabilityPercent	ReadOnly	FLOAT32

675	WastegateProportionalGainPercent	ReadOnly	FLOAT32
677	WastegateIntegralStabilityPercent	ReadOnly	FLOAT32
679	WastegateDerivativeCompensationPercent	ReadOnly	FLOAT32
681	ActualCombustionTime3600	ReadOnly	FLOAT32
683	EngineOutputPower16CM34	ReadOnly	FLOAT32
685	FuelBasedEngineLoadFactor	ReadOnly	FLOAT32
687	FuelQualityMeasured	ReadOnly	FLOAT32
689	DesiredEmissionsGainAdjustmentPercent	ReadOnly	FLOAT32
691	DeliveredFuelVolume	ReadOnly	FLOAT32
693	SmokeLimitFuelVolume	ReadOnly	FLOAT32
695	TorqueLimitFuelVolume	ReadOnly	FLOAT32
697	Turbo1CompressorInletPressureAbsolute	ReadOnly	FLOAT32
699	Turbo2CompressorInletPressureAbsolute	ReadOnly	FLOAT32
701	Turbo3CompressorInletPressureAbsolute	ReadOnly	FLOAT32
703	Turbo4CompressorInletPressureAbsolute	ReadOnly	FLOAT32
705	TurboInletTemperature	ReadOnly	FLOAT32
707	AverageFuelRateBasedLoad	ReadOnly	FLOAT32
709	ExhaustGasMassFlowRate	ReadOnly	FLOAT32
711	AirFilterRestriction1	ReadOnly	FLOAT32
713	AirFilterRestriction2	ReadOnly	FLOAT32
715	AirFilterRestriction3	ReadOnly	FLOAT32
717	AirFilterRestriction4	ReadOnly	FLOAT32
719	ActualEngineNOxLevel	ReadOnly	FLOAT32
721	DesiredEngineNOxLevel	ReadOnly	FLOAT32
723	InletManifoldPressureGauge	ReadOnly	FLOAT32
725	EngineVibrationVelocity	ReadOnly	FLOAT32
727	FuelActuatorPositionCommand	ReadOnly	FLOAT32
729	AfterCoolerPumpOutletPressureAbsolute	ReadOnly	FLOAT32
731	EngineCoolantPumpOutletPressureAbsolute	ReadOnly	FLOAT32
733	EngineBlockCoolantOutletPressure	ReadOnly	FLOAT32
735	FuelRailPressure	ReadOnly	FLOAT32
737	FuelRailTemperature	ReadOnly	FLOAT32
739	RearAfterCoolerTemperature	ReadOnly	FLOAT32
741	FuelFilterStatus	ReadOnly	FLOAT32
743	TallTankFuelLevel	ReadOnly	FLOAT32
745	EngineOilLevelStatus	ReadOnly	FLOAT32
747	EngineCoolantFlowStatus	ReadOnly	FLOAT32
749	AftercoolerCoolantLevelStatus	ReadOnly	FLOAT32
751	MachineSystemVoltage	ReadOnly	FLOAT32
753	TorqueConverterInOilFilterStatus	ReadOnly	FLOAT32
755	TorqueConverterOutOilFilterStatus	ReadOnly	FLOAT32

757	TorqueConverterScreenFilterStatus	ReadOnly	FLOAT32
759	TorqueConverterOilOutletTemperature	ReadOnly	FLOAT32
761	DifferentialOilTemperature	ReadOnly	FLOAT32
763	DesiredGear	ReadOnly	FLOAT32
765	ActualGear	ReadOnly	FLOAT32
767	TransmissionChargeFiltStatus	ReadOnly	FLOAT32
769	TransmissionOilFilterStatus	ReadOnly	FLOAT32
771	LowSteerOilPressureStatus	ReadOnly	FLOAT32
773	HighSteerOilPressureStatus	ReadOnly	FLOAT32
775	BrakeAirPressureGauge	ReadOnly	FLOAT32
777	ParkBrakeSwitchPosition	ReadOnly	FLOAT32
779	BrakeOilFilterStatus	ReadOnly	FLOAT32
781	MasterCylinderOverstrookStatus	ReadOnly	FLOAT32
783	LeftFrontBrakeTemperature	ReadOnly	FLOAT32
785	LeftRearBrakeTemperature	ReadOnly	FLOAT32
787	RightFrontBrakeTemperature	ReadOnly	FLOAT32
789	RightRearBrakeTemperature	ReadOnly	FLOAT32
791	HoistScreenFilterStatus	ReadOnly	FLOAT32
793	LeftFrontStrutCylinderPressure	ReadOnly	FLOAT32
795	LeftRearStrutCylinderPressure	ReadOnly	FLOAT32
797	RightFrontStrutCylinderPressure	ReadOnly	FLOAT32
799	RightRearStrutCylinderPressure	ReadOnly	FLOAT32
801	GroundSpeed	ReadOnly	FLOAT32
803	BodyPositionAngle	ReadOnly	FLOAT32
805	AmbientAirTemperature	ReadOnly	FLOAT32
807	TruckPayloadTons	ReadOnly	FLOAT32
809	FuelPressureSensorStatus	ReadOnly	FLOAT32
811	InletAirTemperatureSensorStatus	ReadOnly	FLOAT32
813	CoolantLevelSensorStatus	ReadOnly	FLOAT32
815	ExhaustTemperatureSensorStatus	ReadOnly	FLOAT32
817	EngineOilTemperatureSensorStatus	ReadOnly	FLOAT32
819	TransmissionOilTemperatureSensorStatus	ReadOnly	FLOAT32
821	TransmissionOilPressureSensorStatus	ReadOnly	FLOAT32
823	ThrottlePositionSensorStatus	ReadOnly	FLOAT32
825	EngineVibrationLevel	ReadOnly	FLOAT32
827	JacketWaterTemperature3600	ReadOnly	FLOAT32
829	JacketWaterPressure3600	ReadOnly	FLOAT32
831	ThrottlePosition	ReadOnly	FLOAT32
833	DesiredFuelRailPressure	ReadOnly	FLOAT32
835	HydraulicOilTemperature	ReadOnly	FLOAT32
837	TransmissionIntermediateSpeed1	ReadOnly	FLOAT32

839	TransmissionIntermediateSpeed2	ReadOnly	FLOAT32
841	TransmissionOutputSpeed1	ReadOnly	FLOAT32
843	TransmissionOutputSpeed2	ReadOnly	FLOAT32
845	TransmissionClutchCurrent01	ReadOnly	FLOAT32
847	TransmissionClutchCurrent02	ReadOnly	FLOAT32
849	TransmissionClutchCurrent03	ReadOnly	FLOAT32
851	TransmissionClutchCurrent04	ReadOnly	FLOAT32
853	TransmissionClutchCurrent05	ReadOnly	FLOAT32
855	TransmissionClutchCurrent06	ReadOnly	FLOAT32
857	TransmissionClutchCurrent07	ReadOnly	FLOAT32
859	TransmissionClutchCurrent08	ReadOnly	FLOAT32
861	TransmissionClutchCurrent09	ReadOnly	FLOAT32
863	TransmissionClutchCurrent10	ReadOnly	FLOAT32
865	FuelLevelGuagePosition	ReadOnly	FLOAT32
867	ActionLampStatus	ReadOnly	FLOAT32
869	ActionAlarmStatus	ReadOnly	FLOAT32
871	SystemWarningStatus	ReadOnly	FLOAT32
873	MonitoringSystemOperatorModeSelectSwitch	ReadOnly	FLOAT32
875	ServiceSwitchStatus	ReadOnly	FLOAT32
877	ClearSwitchStatus	ReadOnly	FLOAT32
879	ECMInputLineStatus0	ReadOnly	FLOAT32
881	ECMInputLineStatus1	ReadOnly	FLOAT32
883	ECMInputLineStatus2	ReadOnly	FLOAT32
885	ECMInputLineStatus3	ReadOnly	FLOAT32
887	ECMInputLineStatus4	ReadOnly	FLOAT32
889	ECMInputLineStatus5	ReadOnly	FLOAT32
891	TransmissionSwitchPosition	ReadOnly	FLOAT32
893	DirectionSwitchPosition	ReadOnly	FLOAT32
895	ShiftLeverPosition1	ReadOnly	FLOAT32
897	UpshiftSwitchPosition	ReadOnly	FLOAT32
899	DnShiftSwitchPosition	ReadOnly	FLOAT32
901	GearSelectorPosition	ReadOnly	FLOAT32
903	MachineControlModeStatus	ReadOnly	FLOAT32
905	ServiceBrakeSwitchPosition	ReadOnly	FLOAT32
907	ParkBrakeWarningIndicatorStatus	ReadOnly	FLOAT32
909	BrakeOilPressureSwitchStatus	ReadOnly	FLOAT32
911	RideControlSwitchPosition	ReadOnly	FLOAT32
913	RideControlConfig	ReadOnly	FLOAT32
915	NeutralSwitchPosition	ReadOnly	FLOAT32
917	RideContrlSolenoidStatus	ReadOnly	FLOAT32
919	StarterRelayStatus	ReadOnly	FLOAT32

921	ReverseSteerSolenoidStatus	ReadOnly	FLOAT32
923	ServiceBrakeSwitch	ReadOnly	FLOAT32
925	PrimarySteerDisableOvrd	ReadOnly	FLOAT32
927	EngineShutdownLampStatus	ReadOnly	FLOAT32
929	OperatorBackupThrottleSwitch	ReadOnly	FLOAT32
931	SecondaryThrottlePosition	ReadOnly	FLOAT32
933	SecondaryThrottlePositionSensorDuty	ReadOnly	FLOAT32
935	RemoteControlPowerStatus	ReadOnly	FLOAT32
937	EngineOilPressureWarningIndicator	ReadOnly	FLOAT32
939	BrakeOilPressureWarningIndicator	ReadOnly	FLOAT32
941	ChargeStatusWarningIndicatorStatus	ReadOnly	FLOAT32
943	EngineMaintRequiredWarningIndicatorStatus	ReadOnly	FLOAT32
945	AFRestrWarningIndicatorStatus	ReadOnly	FLOAT32
947	EngineCoolantLevelWarningIndicatorStatus	ReadOnly	FLOAT32
949	ImpendingBrakeApplicationWarningIndicatorStatus	ReadOnly	FLOAT32
951	BrakeOilTemperatureWarningIndicatorStatus	ReadOnly	FLOAT32
953	FuelLevelPercent	ReadOnly	FLOAT32
955	TotalTattletale	ReadOnly	FLOAT32
957	NumberOfCylinders3600	ReadOnly	FLOAT32
959	HighIdleSpeed	ReadOnly	FLOAT32
961	FuelQualityInUse	ReadOnly	FLOAT32
963	BucketPayload	ReadOnly	FLOAT32
965	CatalystTemperature	ReadOnly	FLOAT32
967	UreaFlowRate	ReadOnly	FLOAT32
969	PowerTrainOilTemperature	ReadOnly	FLOAT32
971	ShortFuelTankLevel	ReadOnly	FLOAT32
973	BodyRaiseStatus	ReadOnly	FLOAT32
975	BodyUpStatus	ReadOnly	FLOAT32
977	HoistLeverPosition	ReadOnly	FLOAT32
979	ShiftLeverPosition2	ReadOnly	FLOAT32
981	EngineDerateStatus2	ReadOnly	FLOAT32
983	Engine1Throttle1Position	ReadOnly	FLOAT32
985	Engine1Throttle3Position	ReadOnly	FLOAT32
987	Engine2Throttle1Position	ReadOnly	FLOAT32
989	Engine2Throttle3Position	ReadOnly	FLOAT32
991	Throttle2Position	ReadOnly	FLOAT32
993	Engine1Throttle1DutyCycle	ReadOnly	FLOAT32
995	Engine1Throttle3DutyCycle	ReadOnly	FLOAT32
997	Engine2Throttle1DutyCycle	ReadOnly	FLOAT32
999	Engine2Throttle3DutyCycle	ReadOnly	FLOAT32
1001	Throttle2DutyCycle	ReadOnly	FLOAT32

1003	Engine1Throttle1DesiredSpeed	ReadOnly	FLOAT32
1005	Engine1Throttle3DesiredSpeed	ReadOnly	FLOAT32
1007	Engine2Throttle1DesiredSpeed	ReadOnly	FLOAT32
1009	Engine2Throttle3DesiredSpeed	ReadOnly	FLOAT32
1011	Throttle2DesiredSpeed	ReadOnly	FLOAT32
1013	Engine1CouplingFeedbackStatus	ReadOnly	FLOAT32
1015	Engine2CouplingFeedbackStatus	ReadOnly	FLOAT32
1017	EngineCouplingModeSelect	ReadOnly	FLOAT32
1019	Engine1DesiredThrottleInStatus	ReadOnly	FLOAT32
1021	Engine2DesiredThrottleInStatus	ReadOnly	FLOAT32
1023	Engine1ActualThrottleInStatus	ReadOnly	FLOAT32
1025	Engine2ActualThrottleInStatus	ReadOnly	FLOAT32
1027	SpeedControlMaximumSpeedDifferential	ReadOnly	FLOAT32
1029	EngineCoupMaximumSpeedDifferential	ReadOnly	FLOAT32
1031	EngineDeCoupMaximumSpeedDifferential	ReadOnly	FLOAT32
1033	PrimaryECMHBStatus	ReadOnly	FLOAT32
1035	InjectionDuration	ReadOnly	FLOAT32
1037	DesiredInjectionActuation	ReadOnly	FLOAT32
1039	InjectorActuationPressure	ReadOnly	FLOAT32
1041	InjectorActuationCurrent	ReadOnly	FLOAT32
1043	TotalEngineIdleTime	ReadOnly	FLOAT32
1045	TotalEngineIdleFuel	ReadOnly	FLOAT32
1047	FuelRailPressure2	ReadOnly	FLOAT32
1049	DriveShaftSpeed	ReadOnly	FLOAT32
1051	FrontDriveShaftSpeed	ReadOnly	FLOAT32
1053	LockupClutchPressure	ReadOnly	FLOAT32
1055	TransmissionOilLevelStatus	ReadOnly	FLOAT32
1057	InjectionDurationCylinder01	ReadOnly	FLOAT32
1059	InjectionDurationCylinder02	ReadOnly	FLOAT32
1061	InjectionDurationCylinder03	ReadOnly	FLOAT32
1063	InjectionDurationCylinder04	ReadOnly	FLOAT32
1065	InjectionDurationCylinder05	ReadOnly	FLOAT32
1067	InjectionDurationCylinder06	ReadOnly	FLOAT32
1069	InjectionDurationCylinder07	ReadOnly	FLOAT32
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1083	InjectionDurationCylinder14	ReadOnly	FLOAT32

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1089	InjectionDurationCylinder17	ReadOnly	FLOAT32
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1093	InjectionDurationCylinder19	ReadOnly	FLOAT32
1095	InjectionDurationCylinder20	ReadOnly	FLOAT32
1097	InjectionTimingCylinder01	ReadOnly	FLOAT32
1099	InjectionTimingCylinder02	ReadOnly	FLOAT32
1101	InjectionTimingCylinder03	ReadOnly	FLOAT32
1103	InjectionTimingCylinder04	ReadOnly	FLOAT32
1105	InjectionTimingCylinder05	ReadOnly	FLOAT32
1107	InjectionTimingCylinder06	ReadOnly	FLOAT32
1109	InjectionTimingCylinder07	ReadOnly	FLOAT32
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1115	InjectionTimingCylinder10	ReadOnly	FLOAT32
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1123	InjectionTimingCylinder14	ReadOnly	FLOAT32
1125	InjectionTimingCylinder15	ReadOnly	FLOAT32
1127	InjectionTimingCylinder16	ReadOnly	FLOAT32
1129	InjectionTimingCylinder17	ReadOnly	FLOAT32
1131	InjectionTimingCylinder18	ReadOnly	FLOAT32
1133	InjectionTimingCylinder19	ReadOnly	FLOAT32
1135	InjectionTimingCylinder20	ReadOnly	FLOAT32
1137	DesiredEngineNOxLevel	ReadOnly	FLOAT32
1139	IntakeMassAirFlowRate	ReadOnly	FLOAT32
1141	MassFuelFlowRate	ReadOnly	FLOAT32
1143	TurboBypassValvePosition	ReadOnly	FLOAT32
1145	PowerTakeOffMode	ReadOnly	FLOAT32
1147	NumberMisfiresCylinder1	ReadOnly	FLOAT32
1149	NumberMisfiresCylinder2	ReadOnly	FLOAT32
1151	NumberMisfiresCylinder3	ReadOnly	FLOAT32
1153	NumberMisfiresCylinder4	ReadOnly	FLOAT32
1155	NumberMisfiresCylinder5	ReadOnly	FLOAT32
1157	NumberMisfiresCylinder6	ReadOnly	FLOAT32
1159	NumberMisfiresCylinder7	ReadOnly	FLOAT32
1161	NumberMisfiresCylinder8	ReadOnly	FLOAT32
1163	NumberMisfiresCylinder9	ReadOnly	FLOAT32
1165	NumberMisfiresCylinder10	ReadOnly	FLOAT32

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1181	NumberMisfiresCylinder18	ReadOnly	FLOAT32
1183	NumberMisfiresCylinder19	ReadOnly	FLOAT32
1185	NumberMisfiresCylinder20	ReadOnly	FLOAT32
1187	ExhaustDifferentialTemperature	ReadOnly	FLOAT32
1189	DifferentialLubePressure	ReadOnly	FLOAT32
1191	BrakingCoolPumpSpeed	ReadOnly	FLOAT32
1193	LeftRearWheelSpeed	ReadOnly	FLOAT32
1195	RightRearWheelSpeed	ReadOnly	FLOAT32
1197	RightBrakeDifferentialTemperature	ReadOnly	FLOAT32
1199	LeftBrakeDifferentialTemperature	ReadOnly	FLOAT32
1201	SteeringOilTemperature	ReadOnly	FLOAT32
1203	FrontBrakeDifferentialTemperature	ReadOnly	FLOAT32
1205	RearBrakeDifferentialTemperature	ReadOnly	FLOAT32
1207	ElectDriveCoolSpeed	ReadOnly	FLOAT32
1209	FrontStrutDifferentialPressure	ReadOnly	FLOAT32
1211	RearStrutDifferentialPressure	ReadOnly	FLOAT32
1213	TotalDistanceTravelled	ReadOnly	FLOAT32
1215	MachinePitch	ReadOnly	FLOAT32
1217	DifferentialFiltSwitchBypass	ReadOnly	FLOAT32
1219	TransmissionLockoutStatus	ReadOnly	FLOAT32
1221	TransmissionGear	ReadOnly	FLOAT32
1223	TransmissionChargeFiltBypass	ReadOnly	FLOAT32
1225	MachineLockSwitch	ReadOnly	FLOAT32
1227	ParkBrakeDrag	ReadOnly	FLOAT32
1229	DifferentialOilLevelSwitchPosition	ReadOnly	FLOAT32
1231	BodyPositionDutyCycle	ReadOnly	FLOAT32
1233	BucketPayloadStatus	ReadOnly	FLOAT32
1235	AutoLubeWarningStatus	ReadOnly	FLOAT32
1237	AutoLubeSolStatus	ReadOnly	FLOAT32
1239	DesiredHoistStatus	ReadOnly	FLOAT32
1241	RetarderStatus	ReadOnly	FLOAT32
1243	EngineRetarderStatus	ReadOnly	FLOAT32
1245	RetarderMode	ReadOnly	FLOAT32
1247	LeftFrontStrutPressureExt	ReadOnly	FLOAT32

1249	LeftRearStrutPressureExt	ReadOnly	FLOAT32
1251	RightFrontStrutPressureExt	ReadOnly	FLOAT32
1253	RightRearStrutPressureExt	ReadOnly	FLOAT32
1255	TotalDistanceTravelledForward	ReadOnly	FLOAT32
1257	TotalDistanceTravelledReverse	ReadOnly	FLOAT32
1259	ParkBrakeStatus	ReadOnly	FLOAT32
1261	TruckPayloadState	ReadOnly	FLOAT32
1263	WeightSpeedAverageDuration	ReadOnly	FLOAT32
1265	FrontTireWeightSpeed	ReadOnly	FLOAT32
1267	RearTireWeightSpeed	ReadOnly	FLOAT32
1269	TurboBypassValvePositionCommand	ReadOnly	FLOAT32
1271	ThrottleValveDifferentialPressure	ReadOnly	FLOAT32
1273	DesiredThrottleValveDifferentialPressure	ReadOnly	FLOAT32
1275	ExhaustNOxLevelSensorCalibSlope	ReadOnly	FLOAT32
1277	ExhaustNOxLevelSensorPowerCommand	ReadOnly	FLOAT32
1279	ExhaustNOxLevelSensorPowerStatus	ReadOnly	FLOAT32
1281	ExhaustNOxLevelSensorHeaterCommand	ReadOnly	FLOAT32
1283	ExhaustNOxLevelSensorHeaterStatus	ReadOnly	FLOAT32
1285	EmmissionsFeedbackOverride	ReadOnly	FLOAT32
1287	ActualAfterTreatmentInOxygenSensorVoltage	ReadOnly	FLOAT32
1289	ActualAfterTreatmentOutOxygenSensorVoltage	ReadOnly	FLOAT32
1291	DesiredAfterTreatmentInOxygenSensorVoltage	ReadOnly	FLOAT32
1293	DesiredAfterTreatmentOutOxygenSensorVoltage	ReadOnly	FLOAT32
1295	AfterTreatmentOutOxygenSensorVoltageOffset	ReadOnly	FLOAT32
1297	AfterTreatmentInOxygenSensorFuelTrim	ReadOnly	FLOAT32
1299	AfterTreatmentOutOxygenSensorFuelTrim	ReadOnly	FLOAT32
1301	AfterTreatment1ConvEff	ReadOnly	FLOAT32
1303	AfterTreatment2ConvEff	ReadOnly	FLOAT32
1305	AfterTreatment1ReagConduct	ReadOnly	FLOAT32
1307	AfterTreatment2ReagConduct	ReadOnly	FLOAT32
1309	AfterTreatment1ExhaustGasDifferentialPressure	ReadOnly	FLOAT32
1311	AfterTreatment2ExhaustGasDifferentialPressure	ReadOnly	FLOAT32
1313	AfterTreatment1InGasTemperature	ReadOnly	FLOAT32
1315	AfterTreatment2InGasTemperature	ReadOnly	FLOAT32
1317	AfterTreatment1ReagConcent	ReadOnly	FLOAT32
1319	AfterTreatment2ReagConcent	ReadOnly	FLOAT32
1321	AfterTreatment1OutGasTemperature	ReadOnly	FLOAT32
1323	AfterTreatment2OutGasTemperature	ReadOnly	FLOAT32
1325	AfterTreatment1ReagPumpSpeed	ReadOnly	FLOAT32
1327	AfterTreatment2ReagPumpSpeed	ReadOnly	FLOAT32
1329	AfterTreatment1ReagValvePosition	ReadOnly	FLOAT32

1331	AfterTreatment2ReagValvePosition	ReadOnly	FLOAT32
1333	AfterTreatment1ReagHeaterValveCommandT1	ReadOnly	FLOAT32
1335	AfterTreatment2ReagHeaterValveCommandT1	ReadOnly	FLOAT32
1337	AfterTreatment1ReagHeaterValveCommandT2	ReadOnly	FLOAT32
1339	AfterTreatment2ReagHeaterValveCommandT2	ReadOnly	FLOAT32
1341	AfterTreatment1ReagLevelT1	ReadOnly	FLOAT32
1343	AfterTreatment2ReagLevelT1	ReadOnly	FLOAT32
1345	AfterTreatment1ReagLevelT2	ReadOnly	FLOAT32
1347	AfterTreatment2ReagLevelT2	ReadOnly	FLOAT32
1349	AfterTreatment1ReagTemperatureT1	ReadOnly	FLOAT32
1351	AfterTreatment2ReagTemperatureT1	ReadOnly	FLOAT32
1353	AfterTreatment1ReagTemperatureT2	ReadOnly	FLOAT32
1355	AfterTreatment2ReagTemperatureT2	ReadOnly	FLOAT32
1357	AfterTreatment1ReagPumpCommandPosition	ReadOnly	FLOAT32
1359	AfterTreatment2ReagPumpCommandPosition	ReadOnly	FLOAT32
1361	EngineOilPressure	ReadOnly	FLOAT32
1363	BoostPressure	ReadOnly	FLOAT32
1365	MarineThrottleSynchStatus	ReadOnly	FLOAT32
1367	CMSLampStatus	ReadOnly	FLOAT32
1369	AcceleratorPedalPosition	ReadOnly	FLOAT32
1371	LeftHydraulicCaseDrainTemperature	ReadOnly	FLOAT32
1373	CenterHydraulicCaseDrainTemperature	ReadOnly	FLOAT32
1375	RightHydraulicCaseDrainTemperature	ReadOnly	FLOAT32
1377	BrakeOilTemperature	ReadOnly	FLOAT32
1379	GearboxOilPressure	ReadOnly	FLOAT32
1381	GearboxOilTemperature	ReadOnly	FLOAT32
1383	VehicleIDCode	ReadOnly	FLOAT32
1385	SecondBrakeAirPressure	ReadOnly	FLOAT32
1387	TransmissionInputSpeed	ReadOnly	FLOAT32
1389	TransmissionOutputSpeed	ReadOnly	FLOAT32
1391	TotalMaxFuel	ReadOnly	FLOAT32
1393	NumOfEngStarts	ReadOnly	FLOAT32
1395	TransDesiredEngSpeed	ReadOnly	FLOAT32
1397	IntakeManifold2AirTemp	ReadOnly	FLOAT32
1399	FuelTransferPumpIntakePressAbs	ReadOnly	FLOAT32
1401	IntakeManifoldPress	ReadOnly	FLOAT32
1403	IntakeManifold2Press	ReadOnly	FLOAT32
1405	EngCoolantPumpOutletPress	ReadOnly	FLOAT32
1407	GroundSpeedDirection	ReadOnly	FLOAT32
1409	MachineSystemAirPress	ReadOnly	FLOAT32
1411	SteeringAccumulatorOilPress	ReadOnly	FLOAT32

1413	SteeringPumpOilPress	ReadOnly	FLOAT32
1415	SteeringTankOilLvlStatus	ReadOnly	FLOAT32
1417	LeftRearWheelRpm	ReadOnly	FLOAT32
1419	RightRearWheelRpm	ReadOnly	FLOAT32
1421	CabAirTemp	ReadOnly	FLOAT32
1423	HoistOutputStatus	ReadOnly	FLOAT32
1425	MachineSpeedCorrectionFactor	ReadOnly	FLOAT32
1427	LifetimeTotalPayloadWeight	ReadOnly	FLOAT32
1429	TotalLoadCount	ReadOnly	FLOAT32
1431	CumulativeTravelTime	ReadOnly	FLOAT32
1433	MachineLoadedTravelHours	ReadOnly	FLOAT32
1435	MachineLoadedDistanceTraveled	ReadOnly	FLOAT32
1437	PercentAbovePayloadOverloadLimit	ReadOnly	FLOAT32
1439	AutoLubePress	ReadOnly	FLOAT32
1441	DesiredEngCoolingFanSpeed	ReadOnly	FLOAT32
1443	IntakeManifoldPressAbs	ReadOnly	FLOAT32
1445	AirInletTemp	ReadOnly	FLOAT32
1447	AutoLubeGreaseLvlPercent	ReadOnly	FLOAT32
1449	RearAxleOilTemp	ReadOnly	FLOAT32
1451	AutoLubePumpOutletPress	ReadOnly	FLOAT32
1453	FrontAxleOilTemp	ReadOnly	FLOAT32
1455	TotalNeutralGearOpHours	ReadOnly	FLOAT32
1457	LoaderBucketAngle	ReadOnly	FLOAT32
1459	BucketPayloadExtRes	ReadOnly	FLOAT32
1461	EngCoolingFanPumpPressAbs	ReadOnly	FLOAT32
1463	SteeringPilotOilPress	ReadOnly	FLOAT32
1465	LiftCylinderPositionPercentage	ReadOnly	FLOAT32
1467	LoaderBucketPayloadTargetWeightPct	ReadOnly	FLOAT32
1469	TruckPayloadTargetWeightExtRes	ReadOnly	FLOAT32
1471	LoadCount	ReadOnly	FLOAT32
1473	LoaderLiftLinkageAngle	ReadOnly	FLOAT32
1475	BrakeAccumulatorPressStatus	ReadOnly	FLOAT32
1477	LoaderTiltLinkageAngle	ReadOnly	FLOAT32
1479	EtherInjection	ReadOnly	FLOAT32
1481	LifetimeTotalEngRev	ReadOnly	FLOAT32
1483	BladePitch	ReadOnly	FLOAT32
1485	MainHydPumpOilPress	ReadOnly	FLOAT32
1487	TiltHydPumpOilPress	ReadOnly	FLOAT32
1489	MachinePitch	ReadOnly	FLOAT32
1491	MachinePitchRate	ReadOnly	FLOAT32
1493	TrackSlip	ReadOnly	FLOAT32

1495	TrackSpeedDirection	ReadOnly	FLOAT32
1497	TotalHoursCoastingInNeutral	ReadOnly	FLOAT32
1499	TotalForwardDistanceTraveled	ReadOnly	FLOAT32
1501	TotalReverseDistanceTraveled	ReadOnly	FLOAT32
1503	TotalPowertrainOilFilterBypassHours	ReadOnly	FLOAT32
1505	AccumulatedPayloadWeight	ReadOnly	FLOAT32
1507	TractionControlMode	ReadOnly	FLOAT32
1509	TurboInletPressAbsolute	ReadOnly	FLOAT32
1511	BoostPress2Gauge	ReadOnly	FLOAT32
1513	SteeringOilFilterStatus	ReadOnly	FLOAT32
1515	SteeringMotorSpeed1	ReadOnly	FLOAT32
1517	SteeringMotorSpeed2	ReadOnly	FLOAT32
1519	MachineAutoLubeControl	ReadOnly	FLOAT32
1521	ThrottleLockMode	ReadOnly	FLOAT32
1523	TransmissionMaximumForwardGear	ReadOnly	FLOAT32
1525	MachineBodyUpSpeedLimit	ReadOnly	FLOAT32
1527	UserDefinedShutdownStatus	ReadOnly	FLOAT32
1529	AccumulatorBleedRelayStatus	ReadOnly	FLOAT32
1531	ThrottleSensorDutyCycle	ReadOnly	FLOAT32
1533	EtherSolenoidConfiguration	ReadOnly	FLOAT32
1535	CompressionBrakeLowHighCommand	ReadOnly	FLOAT32
1537	CompressionBrakeMedHighCommand	ReadOnly	FLOAT32
1539	EngineCoolantFanSpeed	ReadOnly	FLOAT32
1541	LeftExhaust2Temperature	ReadOnly	FLOAT32
1543	RightExhaust2Temperature	ReadOnly	FLOAT32
1545	IntakeManifold2PressureAbsolute	ReadOnly	FLOAT32
1547	EngineChargeAirCooler1OutletTemperature	ReadOnly	FLOAT32
1549	AirConditionerCompressorStatus	ReadOnly	FLOAT32
1551	ServiceBrakePedalPosition	ReadOnly	FLOAT32
1553	AutoRetarderMode	ReadOnly	FLOAT32
1555	ARCControlSolenoidCurrentAmpPercentage	ReadOnly	FLOAT32
1557	ServiceBrakeAccumulatorPressure	ReadOnly	FLOAT32
1559	AirConditionerEvaporatorCoilTemperature	ReadOnly	FLOAT32
1561	SecondaryBrakeSolenoidCurrentAmpStatus	ReadOnly	FLOAT32
1563	Turbo2OutletPressAbs	ReadOnly	FLOAT32
1565	EngineCoolingFanDesiredPumpPress	ReadOnly	FLOAT32
1567	ThrottleSwitchPositionStatus	ReadOnly	FLOAT32
1569	SpreadSegmentDesiredBladePitch	ReadOnly	FLOAT32
1571	CarrySegmentDesiredBladePitch	ReadOnly	FLOAT32
1573	LoadSegmentDesiredBladePitch	ReadOnly	FLOAT32
1575	AutoReturnEnableStatus	ReadOnly	FLOAT32

1577	AutoSpreadEnableStatus	ReadOnly	FLOAT32
1579	BladeControlHandleThumbRockerPosition	ReadOnly	FLOAT32
1581	BladeControlHandleLiftPosition	ReadOnly	FLOAT32
1583	BladeControlHandleTiltPosition	ReadOnly	FLOAT32
1585	BladeCuttingEdgeHeight	ReadOnly	FLOAT32
1587	BladeLowerSolenoidCurrentAmpsPerc	ReadOnly	FLOAT32
1589	BladeRaiseSolenoidCurrentAmpsPerc	ReadOnly	FLOAT32
1591	TiltLeftSolenoidCurrentPerc	ReadOnly	FLOAT32
1593	BladeControlHandleLiftPositionSensorDutyCycle	ReadOnly	FLOAT32
1595	BladeControlHandleThumbRockerPositionSensorDutyCycle	ReadOnly	FLOAT32
1597	BladeControlHandleTiltPositionSensorDutyCycle	ReadOnly	FLOAT32
1599	DozerBladeCuttingEdgeHeight	ReadOnly	FLOAT32
1601	ImplementLockoutSolenoidStatus	ReadOnly	FLOAT32
1603	SingleTiltSolenoidStatus	ReadOnly	FLOAT32
1605	AutoSpreadPercSetting	ReadOnly	FLOAT32
1607	MainPumpHighPressScreenStatus	ReadOnly	FLOAT32
1609	TiltPumpHighPressScreenStatus	ReadOnly	FLOAT32
1611	FanPumpHighPressScreenStatus	ReadOnly	FLOAT32
1613	FanReturnFilterBypassStatus	ReadOnly	FLOAT32
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1617	EngineSerialNumber2	ReadOnly	FLOAT32
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1627	TotalCrankCycleTime	ReadOnly	FLOAT32
1629	GeneratorSetControlRelayStatus	ReadOnly	FLOAT32
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1633	RequestEngineExhaustPortTemperature	ReadOnly	FLOAT32
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1665	CombustionProbe16	ReadOnly	FLOAT32
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1669	LeftEvenAverageCombTime	ReadOnly	FLOAT32
1671	RightOddAverageCombTime	ReadOnly	FLOAT32
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1675	UnfilteredCombTime02	ReadOnly	FLOAT32
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1693	UnfilteredCombTime11	ReadOnly	FLOAT32
1695	UnfilteredCombTime12	ReadOnly	FLOAT32
1697	UnfilteredCombTime13	ReadOnly	FLOAT32
1699	UnfilteredCombTime14	ReadOnly	FLOAT32
1701	UnfilteredCombTime15	ReadOnly	FLOAT32
1703	UnfilteredCombTime16	ReadOnly	FLOAT32

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