March 2017

ARCTIC CAT®

CATT II

Cat Advanced Tech Tool

0644-591

INSTALLATION GUIDE & USER MANUAL

Foreword

This manual was written to help you understand all of the functions and capabilities of the Cat Advanced Technical Tool Version 2 (CATT II) in order for you to receive the maximum benefits from the diagnostic tool.

Introduction

The CATT II diagnostic tool was designed as an aid to diagnose and test Engine Control Systems and related components.

This online- or off-line-capable tool provides a tremendous amount of information and features including:

- Diagnostic Trouble Codes (DTC)
- Engine Sensor Data
- Fuel Injection System Control Data
- Engine Controller Identification Information
- Output Driver Tests for fans, pumps, injectors, etc.
- Ability to perform live EPS, instrument cluster, and ECM updates
- Live System Updates

The CATT II is a robust diagnostic tool designed to provide diagnostic capabilities on Arctic Cat snowmobiles, ATV's, and ROV's with on-board diagnostic ports.

Additional vehicles and functions will be added with future updates to the software. Always refer to Cat Tracker Online for the latest software updates. If you have any questions, please contact the CATT II dealer support or your Arctic Cat service technician.

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Vehicles Supported by CATT II

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2002	Snowmobile	4-Stroke Touring	X		
		4-Stroke Trail	X		
2003	Snowmobile	4-Stroke Touring	X		
		4-Stroke Trail	X		
		Bearcat Wide Track	X		
2004	Snowmobile	T660 Touring	X		
		T660 Touring Turbo	X		
		T660 Trail Turbo	X		
		Bearcat Wide Track	X		
2005	Snowmobile	T660 Touring	X		
		T660 Turbo	X		
		T660 Turbo ST	X		
		T660 Turbo Touring	X		
		Bearcat Wide Track	X		
2006	Snowmobile	Panther 660 Touring	X		
		Panther 660 Trail	X		
		T660 Touring	X		
		T660 Turbo ST	X		
		T660 Turbo Touring	X		
		T660 Turbo Trail	X		
		Bearcat Wide Track	X		
		Bearcat Wide Track Turbo	X		
2007	Snowmobile	Panther 660 Touring	X		
		Panther 660 Trail	X		
		T660 Touring	X		
		T660 Turbo Touring	X		
		T660 Turbo Trail	X		
		Bearcat Wide Track	X		
		Bearcat Wide Track Turbo	X		
		Jaguar Z1	X		
		Crossfire 1000 EFI	X		
		Crossfire 800 EFI	X		
		F1000 EFI LXR	X		
		F1000 EFI Sno Pro	X		
		F8 EFI LXR	X		
		F8 EFI Sno Pro	X		
		M1000 EFI	X		
		M8 EFI	X		
2008	Snowmobile	Panther 660 Touring	X		
		T660 Touring	X		
		TZ1 Touring	X		
		Jaguar Z1	X		
		Bearcat Wide Track	X		
		Bearcat Wide Track Turbo	X		
		Crossfire 1000 EFI	X		
		Crossfire 800 EFI	X		
		F1000 EFI	X		
		F1000 EFI LXR	X		
		F1000 EFI Sno Pro	X		
		F8 EFI	X		
		F8 EFI LXR	X		
		F8 EFI Sno Pro	X		
		M1000 EFI	X		
		M8 EFI	X		
2009	Snowmobile	TZ1 Park	X		
		TZ1 Touring	X		
		TZ1 Turbo LXR	X		
		Z1	X		
		Z1 Turbo	X		
		Z1 Turbo Sno Pro	X		
		Bearcat Z1 XT	X		

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2009	Snowmobile	Crossfire 1000 EFI	X		
		Crossfire 1000 EFI Sno Pro	X		
		Crossfire 800 EFI	X		
		Crossfire R 1000 EFI	X		
		Crossfire R 800 EFI	X		
		F1000 EFI Sno Pro	X		
		F8 EFI	X		
		F8 EFI LXR	X		
		F8 EFI LXR LE	X		
		F8 EFI Sno Pro	X		
		M1000 EFI	X		
		M8 EFI	X		
		M8 HCR	X		
2010	ATV	450 H1 EFI	X	X	
		550 H1 EFI PS			X
		550 H1 EFI Limited PS			X
		TRV 550 H1 EFI GT PS			X
		700 H1 EFI PS			X
		700 H1 EFI Limited PS			X
		TRV 700 H1 EFI GT PS			X
		1000 H2 EFI Mud Pro	X	X	
		TRV 1000 H2 EFI Cruiser	X	X	
	Snowmobile	TZ1	X		
		TZ1 Turbo LXR	X		
		Z1	X		
		Z1 Turbo	X		
		Z1 Turbo EXT	X		
		Z1 Turbo Sno Pro	X		
		Bearcat Z1 XT	X		
		Crossfire 800	X		
		CFR 1000	X		
		CFR 800	X		
		F8	X		
		F8 Sno Pro	X		
		M1000 Sno Pro	X		
		M8	X		
		M8 HCR	X		
2011	ATV	425	X	X	
		425 CR EFT	X	X	
		XC 450	X	X	
		XC 450 I EFT	X	X	
		450 EFI	X	X	
		450 EFI LTD	X	X	
		TRV 450 EFI	X	X	
		550 EFI S PS			X
		550 PS EFT			X
		550 EFI LTD PS			X
		TRV 550 EFI GT PS			X
		TRV 550 EFI Cruiser PS			X
		550 TRV PS EFT			X
		700 EFI S PS			X
		700 PS EFT			X
		700 EFI LTD PS			X
		TBX 700 EFI LTD PS			X
		TRV 700 EFI GT PS			X
		TRV 700 EFI Cruiser PS			X
		700 TRV PS EFT			X
		1000 EFI LTD PS			X
		1000 EFI Mud Pro	X	X	X
		TRV 1000 EFI Cruiser PS	X	X	X
		1000 PS EFT			X
		1000 TRV PS EFT			X
	Prowler	Prowler 700 EFI XTX PS			X
		Prowler 700 EFI HDX PS			X
		Prowler 1000 EFI XTZ PS			X

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2011	Snowmobile	TZ1	X		
		TZ1 LXR LTD	X		
		TZ1 Turbo LXR LTD	X		
		Z1 LXR	X		
		Z1 Sno Pro	X		
		Z1 Turbo LXR	X		
		Z1 Turbo EXT	X		
		Z1 Turbo Sno Pro	X		
		Bearcat Z1 XT	X		
		Bearcat Z1 XT LTD	X		
		Crossfire 800	X		
		CFR 1000	X		
		CFR 800	X		
		F8 EXT	X		
		F8 LXR	X		
		F8 Sno Pro	X		
		M1000 Sno Pro	X		
		M8	X		
		M8 HCR	X		
2012	ATV	425 i	X	X	
		425 i SE	X	X	
		425 CR EFT	X	X	
		XC 450 i	X	X	
		XC 450 EFT	X	X	
		450 i	X	X	
		450 i GT	X	X	X
		TRV 450 i	X	X	
		TRV 450 i GT	X	X	X
		550 i GT			X
		550 GT EFT			X
		550 i LTD			X
		TRV 550 i GT			X
		550 TRV GT EFT			X
		TRV 550 i Cruiser			X
		700 i GT			X
		700 GT EFT			X
		700 i LTD			X
		700 i Mud Pro			X
		700 i Mud Pro LTD			X
		TBX 700 i GT			X
		700 TBX GT EFT			X
		TRV 700 i GT			X
		700 TRV GT EFT			X
		TRV 700 i Cruiser			X
		1000 i GT			x
		1000 i Mud Pro LTD	X	X	X
		TRV 1000 i GT	X	X	X
		TRV 1000 i Cruiser	X	X	X
	Prowler	Prowler 700 i XTX			X
		Prowler 700 i HDX			X
		Prowler 1000 i XTZ			X
	Wildcat	Wildcat 1000 i GT	X	X	X
	Snowmobile	Bearcat Z1 XT	X		
		Bearcat Z1 XT GS	X		
		Bearcat Z1 XT LTD	X		
		F 1100 LXR	X		
		F 1100 Sno Pro/Anniv. Ed.	X		
		F 1100 Sno Pro LTD	X		
		F 1100 Turbo LXR	X		
		F 1100 Turbo Sno Pro/Anniv. Ed.	X		
		F 1100 Turbo Sno Pro LTD	X		
		F 800 LXR	X		
		F 800 Sno Pro/Anniv. Ed.	X		
		F 800 Sno Pro LTD	X		
		M 1100	X		

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2012	Snowmobile	M 1100 Sno Pro/Anniv. Ed.	X		
		M 1100 Sno Pro LTD	X		
		M 1100 Turbo	X		
		M 1100 Turbo Sno Pro/Anniv. Ed.	X		
		M 1100 Sno Pro HCR	X		
		M 1100 Sno Pro LTD	X		
		M 800	X		
		M 800 HCR	X		
		M 800 Sno Pro/Anniv. Ed.	X		
		M 800 Sno Pro LTD	X		
		TZ1	X		
		TZ1 LXR	X		
		TZ1 Turbo LXR LTD	X		
		XF 1100 LXR	X		
		XF 1100 Sno Pro/Anniv. Ed.	X		
		XF 1100 Sno Pro LTD	X		
		XF 1100 Turbo LXR	X		
		XF 1100 Turbo Sno Pro/Anniv. Ed.	X		
		XF 1100 Turbo Sno Pro HC	X		
		XF 1100 Turbo Sno Pro LTD	X		
		XF 800 LXR	X		
		XF 800 Sno Pro/Anniv. Ed.	X		
		XF 800 Turbo Sno Pro HC	X		
		XF 800 Sno Pro LTD	X		
2013	ATV	450	X	X	
		450 CR EFT	X	X	
		XC 450	X	X	
		XC 450 EFT	X	X	
		500	X	X	
		500 XT	X	X	
		TRV 500	X	X	
		550 XT EPS			X
		550 XT EFT			X
		550 Limited EPS			X
		TRV 550 XT EPS			X
		TRV 550 Limited EPS			X
		550 TRV GT EFT			X
		700	X	X	
		700 XT EPS	X	X	X
		700 XT EFT			X
		700 Limited EPS	X	X	X
		Mud Pro 700 Limited EPS	X	X	X
		TBX 700 EPS	X	X	X
		700 TBX GT T3S			X
		TRV 700 XT EPS	X	X	X
		TRV 700 Limited EPS	X	X	X
		700 TRV XT EFT			X
		1000 XT			X
		1000 XT EFT			X
		Mud Pro 1000 Limited EPS	X	X	X
		TRV 1000 Limited EPS	X	X	X
		1000 TRV XT EFT			X
		Mud Pro 1000 Limited EPS	X	X	X
		TRV 1000 Limited EPS	X	X	X
		1000 TRV XT EFT			X
	Prowler	Prowler 700 XTX EPS	X	X	X
		Prowler 700 HDX EPS	X	X	X
		Prowler 1000 XTZ EPS			X
	Wildcat	Wildcat	X	X	X
		Wildcat Limited	X	X	X
		Wildcat 4	X	X	X
		Wildcat 1000 X	X	X	X

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2013	Snowmobile	Bearcat Z1 XT	X		
		Bearcat Z1 XT GS	X		
		Bearcat Z1 XT LTD	X		
		F 1100 LXR	X		
		F 1100 Sno Pro	X		
		F 1100 Sno Pro LTD	X		
		F 1100 Turbo LXR	X		
		F 1100 Turbo Sno Pro	X		
		F 1100 Turbo Sno Pro RR	X		
		F 1100 Turbo Sno Pro LTD	X		
		F 800 LXR	X		
		F 800 Sno Pro	X		
		F 800 Sno Pro RR	X		
		F 800 Sno Pro LTD	X		
		F 800 Tucker Hibbert Sig. Ed.	X		
		M 1100	X		
		M 1100 Turbo	X		
		M 1100 Turbo Sno Pro	X		
		M 1100 Sno Pro HCR	X		
		M 1100 Sno Pro LTD	X		
		M 800	X		
		M 800 HCR	X		
		M 800 Sno Pro	X		
		M 800 Sno Pro LTD	X		
		TZ1	X		
		TZ1 LXR	X		
		TZ1 Turbo LXR	X		
		XF 1100 LXR	X		
		XF 1100 Sno Pro	X		
		XF 1100 CT	X		
		XF 1100 Sno Pro LTD	X		
		XF 1100 Turbo LXR	X		
		XF 1100 Turbo Sno Pro	X		
		XF 1100 Turbo CT	X		
		XF 1100 Turbo Sno Pro HC	X		
		XF 1100 Turbo Sno Pro HC LTD	X		
		XF 1100 Turbo Sno Pro LTD	X		
		XF 800 LXR	X		
		XF 800 Sno Pro	X		
		XF 800 Sno Pro CT	X		
		XF 800 Turbo Sno Pro HC	X		
		XF 800 Turbo Sno Pro HC LTD	X		
		XF 800 Sno Pro LTD	X		
2014	ATV	450	X	X	
		450 EFT	X	X	
		XC 450	X	X	
		XC 450 EFT	X	X	
		500	X	X	
		500 XT	X	X	
		TRV 500	X	X	
		550	X	X	
		550 XT EPS	X	X	X
		550 XT EFT			X
		550 Limited EPS	X	X	X
		TRV 550 XT EPS	X	X	X
		TRV 550 Limited EPS	X	X	X
		550 TRV XT EFT			X
		700			X
		700 XT EPS	X	X	X
		700 XT EFT			X
		700 Limited EPS	X	X	X
		Mud Pro 700 LTD EPS	X	X	X
		TBX 700	X	X	
		700 TBX T3S			X
		TRV 700 XT EPS	X	X	X

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2014	ATV	TRV 700 Limited EPS	X	X	X
		700 TRV XT EFT			X
		1000 XT EPS			X
		1000 XT EFT			X
		Mud Pro 1000 LTD EPS	X	X	X
		TRV 1000 Limited EPS	X	X	X
		1000 TRV XT EFT			X
	Prowler	Prowler 500 HDX	X	X	
		Prowler 500 HDX XT	X	X	
		Prowler 500 HDX Limited EPS	X	X	X
		Prowler 700 XTX EPS	X	X	X
		Prowler 700 HDX Limited EPS	X	X	X
		Prowler 1000 XTZ EPS			X
	Wildcat	Wildcat Trail	X	X	
		Wildcat Trail XT	X	X	
		Wildcat	X	X	X
		Wildcat Limited	X	X	X
		Wildcat X	X	X	X
		Wildcat X Limited	X	X	X
		Wildcat 4	X	X	X
		Wildcat 4 Limited	X	X	X
		Wildcat 4 X	X	X	X
		Wildcat 4 X Limited	X	X	X
	Snowmobile	Bearcat Z1 XT	X		
		Bearcat Z1 XT GS	X		
		Bearcat Z1 XT LTD	X		
		TZ1	X		
		TZ1 LXR	X		
		XF 7000 CC Sno Pro	X	X	
		XF 7000 Crosstour	X	X	
		XF 7000 LXR	X	X	
		XF 7000 Sno Pro	X	X	
		XF 7000 Sno Pro LTD	X	X	
		XF 8000 Crosstour	X		
		XF 8000 HC Sno Pro	X		
		XF 8000 HC Sno Pro LTD	X		
		XF 8000 LXR	X		
		XF 8000 Sno Pro	X		
		XF 8000 CC Sno Pro	X		
		XF 8000 Sno Pro LTD	X		
		XF 9000 Crosstour	X		
		XF 9000 HC Sno Pro	X		
		XF 9000 HC Sno Pro LTD	X		
		XF 9000 LXR	X		
		XF 9000 Sno Pro	X		
		XF 9000 CC Sno Pro	X		
		XF 9000 Sno Pro LTD	X		
		M 6000 Sno Pro	X	X	
		M 8000	X		
		M 8000 HCR	X		
		M 8000 Sno Pro	X		
		M 8000 Sno Pro LTD	X		
		M 8000 Sno Pro LTD ES	X		
		M 9000	X		
		M 9000 HCR	X		
		M 9000 Sno Pro	X		
		M 9000 Sno Pro LTD	X		
		ZR 5000 LXR	X		
		ZR El Tigre 6000 ES	X	X	
		ZR El Tigre 6000	X	X	
		ZR 6000 RR	X	X	
		ZR 7000 LXR	X	X	
		ZR 7000 Sno Pro	X	X	
		ZR 7000 Sno Pro LTD	X	X	
		ZR 8000 LXR	X		
		ZR 8000 Sno Pro	X		

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2014	Snowmobile	ZR 8000 Sno Pro LTD	X		
		ZR 8000 Sno Pro RR	X		
		ZR 9000 LXR	X		
		ZR 9000 Sno Pro	X		
		ZR 9000 Sno Pro LTD	X		
		ZR 9000 Sno Pro RR	X		
2015	ATV	450	X	X	
		XC 450	X	X	
		450	X	X	
		XC 450	X	X	
		500	X	X	
		XR 500	X	X	
		XR 550	X	X	
		XR 550 XT EPS	X	X	X
		XR 550 Limited EPS	X	X	X
		XR 700	X	X	
		XR 700 XT EPS	X	X	X
		XR 700 Limited EPS	X	X	X
		1000 XT EPS	X	X	X
		Mud Pro 700 Limited EPS	X	X	X
		Mud Pro 1000 Limited EPS	X	X	X
		TBX 700 EPS	X	X	X
		TRV 500	X	X	
		TRV 550 XT EPS	X	X	X
		TRV 550 Limited EPS	X	X	X
		TRV 700 XT EPS	X	X	X
		TRV 700 Limited EPS	X	X	X
		TRV 1000 XT EPS	X	X	X
		TRV 1000 Limited EPS	X	X	X
		XC 450 EFT	X	X	
		450 EFT	X	X	
		550 XT EPS EFT			X
		XR 550 XT EPS EFT	X	X	X
		XR 700 EFT	X	X	
		700 XT EPS EFT			X
		XR 700 XT EPS EFT	X	X	X
		1000 XT EPS EFT			X
		TBX 700 XT T3S EPS			X
		TRV 550 XT EPS EFT			X
		TRV 700 XT EPS EFT			X
		TRV 1000 XT EPS EFT			X
	Prowler	Prowler 500 HDX	X	X	
		Prowler 550 XT	X	X	
		Prowler 700 XT EPS	X	X	X
		Prowler 700 HDX XT EPS	X	X	X
		Prowler 1000 XT EPS	X	X	X
	Wildcat	Wildcat Trail	X	X	
		Wildcat Trail XT	X	X	
		Wildcat Trail Limited	X	X	X
		Wildcat Trail XT L7e	X	X	
		Wildcat Sport	X	X	
		Wildcat Sport XT	X	X	
		Wildcat Sport Limited	X	X	X
		Wildcat	X	X	X
		Wildcat X	X	X	X
		Wildcat X Limited	X	X	X
		Wildcat 4 X	X	X	X
		Wildcat 4 X Limited	X	X	X
	Snowmobile	Bearcat 5000 XT	X		
		Bearcat 5000 XT LTD	X		
		Bearcat 5000 XT GS	X		
		Pantera 7000	X	X	
		Pantera 7000 LTD	X	X	
		XF 6000 LXR	X	X	
		XF 6000 Sno Pro	X	X	

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2015	Snowmobile	XF 6000 Sno Pro LTD	X	X	
		XF 6000 CT	X	X	
		XF 6000 CC Sno Pro	X	X	
		XF 6000 HC Sno Pro	X	X	
		XF 7000 CC Sno Pro	X	X	
		XF 7000 Crosstour	X	X	
		XF 7000 LXR	X	X	
		XF 7000 Sno Pro	X	X	
		XF 7000 Sno Pro LTD	X	X	
		XF 7000 HC Sno Pro	X	X	
		XF 8000 Crosstour	X		
		XF 8000 HC Sno Pro	X		
		XF 8000 HC Sno Pro LTD	X		
		XF 8000 LXR	X		
		XF 8000 Sno Pro	X		
		XF 8000 CC Sno Pro	X		
		XF 8000 CC Sno Pro LTD	X		
		XF 8000 Sno Pro LTD	X		
		XF 9000 Crosstour	X		
		XF 9000 HC Sno Pro LTD	X		
		XF 9000 LXR	X		
		XF 9000 Sno Pro	X		
		XF 9000 CC Sno Pro LTD	X		
		XF 9000 Sno Pro LTD	X		
		M 6000	X	X	
		M 6000 Sno Pro	X	X	
		M 7000 Sno Pro	X	X	
		M 8000	X		
		M 8000 HCR	X		
		M 8000 Sno Pro	X		
		M 8000 Sno Pro LTD	X		
		M 8000 Sno Pro LTD ES	X		
		M 9000 HCR	X		
		M 9000 Sno Pro LTD	X		
		ZR 5000 LXR	X		
		ZR 6000 LXR	X	X	
		ZR 6000 Sno Pro	X	X	
		ZR 6000 Sno Pro LTD	X	X	
		ZR 6000 Sno Pro El Tigre	X	X	
		ZR 6000 RR	X	X	
		ZR 6000 Tucker Hibbert RR	X	X	
		ZR 6000 R XC	X	X	
		ZR 7000 LXR	X	X	
		ZR 7000 Sno Pro	X	X	
		ZR 7000 Sno Pro LTD	X	X	
		ZR 7000 Sno Pro El Tigre	X	X	
		ZR 7000 RR	X	X	
		ZR 8000 LXR	X		
		ZR 8000 Sno Pro	X		
		ZR 8000 Sno Pro LTD	X		
		ZR Sno Pro El Tigre	X		
		ZR 8000 Sno Pro RR	X		
		ZR 9000 LXR	X		
		ZR 9000 Sno Pro	X		
		ZR 9000 Sno Pro LTD	X		
		ZR 9000 Sno Pro El Tigre	X		
		ZR 9000 Sno Pro RR	X		
	ATV	500	X	X	
		550 TRV XT L7E			X
		700 Mud Pro Limited	X	X	X
		700 TBX	X	X	X
		700 TBX T3S			X
		700 TRV SE	X	X	X
		700 TRV SE L7E			X
		700 TRV T3S			
		1000 Mud Pro SE	X	X	X

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2016	ATV	1000 TRV XT L7E			X
		1000 XT	X	X	X
		1000 XT L7E			X
		Alterra 450	X	X	
		Alterra 450 L7E	X	X	
		Alterra 500 XT	X	X	X
		Alterra 550	X	X	
		Alterra 550 XT	X	X	X
		Alterra 550 XT L7E	X	X	X
		Alterra 550 XT T3S	X	X	X
		Alterra 700	X	X	
		Alterra700 L7E	X	X	
		Alterra 700 T3S	X	X	
		Alterra 700 XT	X	X	X
		Alterra 700 XT L7E	X	X	X
		Alterra 700 XT T3S	X	X	X
		XC 450	X	X	
		XC 450 L7E	X	X	
	Prowler	Prowler 500 HDX XT	X	X	
		Prowler 700 XT	X	X	X
		Prowler 700 HDX XT	X	X	X
		Prowler 700 HDX SE	X	X	X
		Prowler 1000 XT	X	X	X
	Wildcat	Wildcat Trail	X	X	
		Wildcat Trail XT	X	X	X
		Wildcat Trail XT L7E	X	X	
		Wildcat Trail XT T3S	X	X	
		Wildcat Trail SE	X	X	X
		Wildcat Trail LE	X	X	X
		Wildcat Sport	X	X	
		Wildcat Sport XT	X	X	X
		Wildcat Sport Limited	X	X	X
		Wildcat X	X	X	X
		Wildcat X Limited	X	X	X
		Wildcat X SE	X	X	X
		Wildcat 4 X	X	X	X
	Snowmobile	Bearcat 3000 LT	X	X	
		Pantera 3000	X	X	
		ZR 5000 LXR	X		
		M 6000 141 SE	X	X	
		M 6000 141 Sno Pro	X	X	
		M 6000 153 SE	X	X	
		M 6000 153 Sno Pro	X	X	
		M 6000 153 LTD	X	X	
		XF 6000 CrossTrek	X	X	
		XF 6000 High Country	X	X	
		ZR 6000 LXR	X	X	
		ZR 6000 Sno Pro	X	X	
		ZR 6000 LTD	X	X	
		ZR 6000 El Tigre	X	X	
		ZR 6000 RR	X	X	
		Bearcat 7000 XT	X	X	
		Bearcat 7000 XT GS	X	X	
		Pantera 7000	X	X	
		Pantera 7000 LTD	X	X	
		Pantera 7000 XT LTD	X	X	

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2016	Snowmobile	M 7000 153 Sno Pro	X	X	
		M 7000 153 LTD	X	X	
		M 7000 162 Sno Pro	X	X	
		M 7000 162 LTD	X	X	
		XF 7000 CrossTour	X	X	
		XF 7000 CrossTrek	X	X	
		XF 7000 High Country	X	X	
		ZR 7000 LXR	X	X	
		ZR 7000 Sno Pro	X	X	
		ZR 7000 LTD	X	X	
		ZR 7000 El Tigre	X	X	
		ZR 7000 RR	X	X	
		M 8000 141 SE	X		
		M 8000 141 Sno Pro	X		
		M 8000 153 SE	X		
		M 8000 153 Sno Pro	X		
		M 8000 153 LTD	X		
		M 8000 153 HCR	X		
		M 8000 162 Sno Pro	X		
		M 8000 162 LTD	X		
		XF 8000 CrossTrek	X		
		XF 8000 High Country	X		
		XF 8000 High Country LTD	X		
		ZR 8000 LXR	X		
		ZR 8000 Sno Pro	X		
		ZR 8000 LTD	X		
		ZR 8000 El Tigre	X		
		ZR 8000 RR	X		
		M 9000 162 Sno Pro	X		
		M 9000 162 LTD	X		
		XF 9000 CrossTrek	X		
		XF 9000 High Country LTD	X		
		ZR 9000 LXR	X		
		ZR 9000 Sno Pro	X		
		ZR 9000 LTD	X		
		ZR 9000 El Tigre	X		
		ZR 9000 RR	X		
2017	ATV	Alterra 450 T3	X	X	?
		Alterra 450 L7E	X	X	?
		XC 450	X	X	
		Alterra 500	X	X	
		500	X	X	
		Alterra TRV 500	X	X	
		Alterra TRV 500 T3	X	X	
		Alterra 550 T3	X	X	
		Alterra 550 L7E	X	X	
		Alterra TRV 550 T3	X	X	
		Alterra TRV 550 L7E	X	X	
		Alterra TRV 550 XT	X	X	X
		Alterra TRV 550 XT T3	X	X	X
		Alterra 700	X	X	
		Alterra 700 T3	X	X	
		Alterra 700 L7E	X	X	
		Alterra 700 XT	X	X	X
		Alterra 700 XT T3	X	X	X
		Alterra 700 XT L7E	X	X	X
		Alterra TRV 700 T3	X	X	

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2017	ATV	Alterra TRV 700 L7E	X	X	
		Alterra TRV 700 XT	X	X	X
		Alterra TRV 700 XT T3	X	X	X
		Alterra TRV 700 XT L7E	X	X	X
		Mud Pro 700 LTD	X	X	X
		TBX 700	X	X	X
		TBX 700 T3S	X	X	X
		VLX 700	X	X	
		1000 XT	X	X	X
		Alterra TRV 1000 XT	X	X	X
		Alterra TRV 1000 XT T3	X	X	X
		Mud Pro 1000 LTD	X	X	X
	Prowler	Prowler 500	X	X	
		Prowler 500 HDX XT	X	X	X
		Prowler 700 XT	X	X	X
		Prowler 700 HDX SE	X	X	X
		Prowler 700 HDX XT	X	X	X
		Prowler 700 HDX Crew XT	X	X	X
		Prowler 1000 XT	X	X	X
	Wildcat	Wildcat Trail	X	X	
		Wildcat Trail XT	X	X	X
		Wildcat Trail XT LTD	X	X	X
		Wildcat Trail SE	X	X	X
		Wildcat Sport XT	X	X	X
		Wildcat Sport SE	X	X	X
		Wildcat Sport Limited	X	X	X
	Snowmobile	Bearcat 3000 LT	X	X	
		Pantera 3000	X	X	
		ZR 3000 LXR	X	X	
		ZR 5000 LXR	X		
		M 6000 141 SE	X	X	
		M 6000 153 SE	X	X	
		M 6000 153 Sno Pro	X	X	
		XF 6000 CrossTrek	X	X	
		XF 6000 Cross Country	X	X	
		XF 6000 High Country	X	X	
		XF 6000 High Country LTD	X	X	
		ZR 6000 LXR	X	X	
		ZR 6000 Sno Pro	X	X	
		ZR 6000 LTD	X	X	
		ZR 6000 El Tigre	X	X	
		ZR 6000 RR	X	X	
		ZR 6000 SX R	X	X	
		ZR 6000 R XC	X	X	
		Bearcat 7000 XT	X	X	
		Bearcat 7000 XT GS	X	X	
		Pantera 7000 LTD	X	X	
		Pantera 7000 XT LTD	X	X	
		XF 7000 CrossTour	X	X	
		XF 7000 CrossTrek	X	X	
		ZR 7000 LXR	X	X	
		ZR 7000 Sno Pro	X	X	
		ZR 7000 LTD	X	X	
		ZR 7000 El Tigre	X	X	
		M 8000 141 Sno Pro	X		
		M 8000 153 SE	X		
		M 8000 153 Sno Pro	X		
		M 8000 153 LTD	X		
		M 8000 Mountain Cat 153	X		

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2017	Snowmobile	M 8000 162 SE	X		
		M 8000 162 Sno Pro	X		
		M 8000 162 LTD	X		
		M 8000 Mountain Cat 162	X		
		XF 8000 CrossTrek	X		
		XF 8000 Cross Country Limited	X		
		XF 8000 High Country	X		
		XF 8000 High Country LTD	X		
		ZR 8000 LXR	X		
		ZR 8000 Sno Pro	X		
		ZR 8000 LTD	X		
		ZR 8000 El Tigre	X		
		ZR 8000 RR	X		
		XF 9000 CrossTrek	X	X	
		M 9000 King Cat SE	X	X	
		XF 9000 High Country LTD	X	X	
		XF 9000 Cross Country LTD	X	X	
		ZR 9000 LXR	X	X	
		ZR 9000 Sno Pro	X	X	
		ZR 9000 LTD	X	X	
		ZR 9000 Thundercat	X	X	
		ZR 9000 RR	X	X	
2018	Snowmobile	Norseman 3000	X	X	
		Pantera 3000	X	X	
		ZR 3000	X	X	
		M 6000 141 SE	X	X	
		M 6000 153 SE	X	X	
		Norseman 6000	X	X	
		Pantera 6000	X	X	
		XF 6000 CrossTrek	X	X	
		XF 6000 CrossTour	X	X	
		XF 6000 Cross Country	X	X	
		XF 6000 High Country	X	X	
		ZR 6000	X	X	
		ZR 6000 Sno Pro	X	X	
		ZR 6000 LTD	X	X	
		ZR 6000 El Tigre	X	X	
		ZR 6000 RR	X	X	
		Bearcat 7000 XT	X	X	
		Bearcat 7000 XT GS	X	X	
		Pantera 7000	X	X	
		Pantera 7000 LTD	X	X	
		Pantera 7000 XT LTD	X	X	
		XF 7000 CrossTour	X	X	
		XF 7000 CrossTrek	X	X	
		ZR 7000	X	X	
		ZR 7000 Sno Pro	X	X	
		ZR 7000 LTD	X	X	
		M 8000 153 SE	X	X	
		M 8000 153 Sno Pro	X	X	
		M 8000 Mountain Cat 153	X	X	
		M 8000 162 SE	X	X	
		M 8000 162 Sno Pro	X	X	
		M 8000 Mountain Cat 162	X	X	
		XF 8000 CrossTrek	X	X	
		XF 8000 Cross Country Limited	X	X	
		XF 8000 High Country	X	X	
		XF 8000 High Country LTD	X	X	
		ZR 8000	X	X	

Year	Product Line	Model	ECM Diagnostics	ECM Update Programing Capable	EPS Diagnostics and Update Programming Capable
2018	Snowmobile	ZR 8000 Sno Pro	X	X	
		ZR 8000 LTD	X	X	
		ZR 8000 El Tigre	X	X	
		ZR 8000 RR	X	X	
		M 9000 Sno Pro	X	X	
		M 9000 Limited	X	X	
		M 9000 King Cat SE	X	X	
		XF 9000 CrossTrek	X	X	
		XF 9000 High Country LTD	X	X	
		XF 9000 Cross Country LTD	X	X	
		ZR 9000 Sno Pro	X	X	
		ZR 9000 LTD	X	X	
		ZR 9000 Thundercat	X	X	
		ZR 9000 RR	X	X	

Safety Guidelines

This safety section contains information that must be followed to avoid damage to the CATT II diagnostic tool or serious injury or death to the user. Please acknowledge this section – read it carefully.

- Thoroughly read and understand this manual before using the tool.
- Always make sure the diagnostic connections are clean, dry, and in good condition before connecting to a vehicle.
- Verify the vehicle battery or external 12-volt battery is fully charged and in good condition before attempting to use the diagnostic tool. Low battery voltage WILL cause communication issues as well as produce invalid test results.

⚠ WARNING

Always make sure an approved exhaust ventilation system is in place and being used. Ensure the work area being used is well ventilated whenever running an engine. Carbon monoxide gas is extremely poisonous and can lead to serious injury or death.

⚠ WARNING

Always stay clear of moving parts and remove all loose clothing that can be caught in moving parts on the vehicle.

⚠ WARNING

Always wear approved safety glasses or goggles as necessary.

⚠ WARNING

Use extreme caution when working around batteries. Batteries can produce a highly explosive hydrogen gas that can cause the battery to explode without warning.

CAUTION

Always make sure diagnostic cables are free and clear of any belts, pulleys, or other moving parts on the vehicle being tested.

CAUTION

Be sure diagnostic cables DO NOT come in contact with hot engine components such as exhaust manifold or engine block.

CAUTION

Never allow diagnostic cables to lay near or on any ignition system components such as coils, spark plug wires, or solenoids as electrical interference may occur and may cause damage to the diagnostic tool and/or computer.

CAUTION

Never allow cables to lay on the floor near or in puddles of water. Water may leak into the diagnostic connectors and cause serious damage.

Kit Contents

Included with your kit you will find the following parts. If replacement parts are needed, order using the following part numbers.

- 0544-029 – Complete Kit
- N/A – Diagnostics Tool (CATT II) – Hardware Interface to connect Laptop or PC to vehicle (must order complete kit to replace Hardware Interface**)**
- 0486-515 – Diagnostics Cable (2.0 USB) – Connects the Laptop or PC to the tool
- 0486-476 – Diagnostics Harness (10 Pin) – For use on ATVs and ROV's with a 10-pin diagnostic connector
- 0486-497 – Diagnostics Adapter Harness (10 Pin to 6 Pin) – For use on ATVs and ROV's with a 6-pin diagnostic connector to view diagnostic information
- 0486-513 – Diagnostics Filter Harness – Suppresses starter motor power feedback during starting when using the tool. To be used if tool stops functioning during vehicle starting cycles

■NOTE: The starter motor power feedback is not harmful to the tool.

- 1686-734 – Diagnostics Harness (10-Pin 2-Stroke) – For use on both 2-stroke and 4-stroke snowmobiles with a 10-pin diagnostic connector
- 1686-750 – Power Supply Diagnostics Harness – For use on 2-stroke snowmobiles to view sensor data, trouble codes, and run the appropriate output driver tests when the engine is not running

■NOTE: Disconnect this harness when the engine is running to avoid engine starting issues.

- 1686-744 – Diagnostic Harness - 10 Pin to 6 Pin Snow – For use on snowmobiles with a 6-pin diagnostic connector.
- 0644-598 – Diagnostic Harness - 800/1000 – For use on 800/1000 cc 2-stroke snowmobiles to supply power to the ECM.
- 2260-121 – Quick Start Manual/CATT II Guide
- 2253-071 – Software Instruction Reference Sheet
- 6639-456 – Diagnostic Tool Bag

Installing the Software

Computer Requirements

Before installing the software, ensure your computer meets the following requirements:

- Computer – Laptop computer (recommended) or PC in service/shop area.
- A minimum screen resolution of 1280 x 800 is recommended
- Operating System – Windows XP (SP3), Windows 7, Windows 8, Windows 10; 4 GB RAM (min), dual core processor (recommended).

■NOTE: Windows Vista and Windows 8 RT will not be supported.

- Internet Connection - required for installation and certain features.

Installation Instructions

Log in to Cat Tracker.

Locate and click on the CATT II link on Cat Tracker to install the software.

When the installation process has started, the Setup Wizard window will appear. Select the "**Next >**" button to begin.

■NOTE: If you have previously installed software for the temporary EPS tool, the software will automatically be removed during CATT II software installation.

CATTII-001

The next screen will ask for which users to install. Select one of the options; then select the "**Next >**" button to continue.

CATTII-002

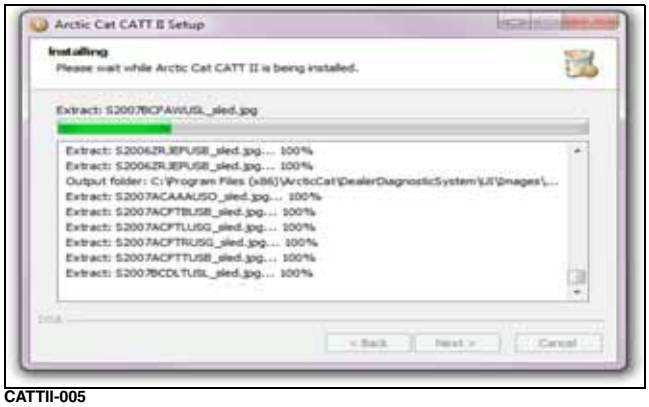
Choose a location to install. The default, recommended location will be displayed within the "**Destination Folder**" text box. Either accept this option or select the "**Browse…**" button and select a different destination folder. Select the "**Next >**" button to continue.

CATTII-003

Choose a Start Menu folder for the Arctic Cat CATT II shortcuts. The window will default to creating a new folder called "**Arctic Cat CATT II**" as shown in the text box. Either accept this option and create a new folder, change the text and create a new folder with a different name, select a different folder from the list box, or click the "**Do not create shortcuts**" check box. Select the "**Install**" button to continue.

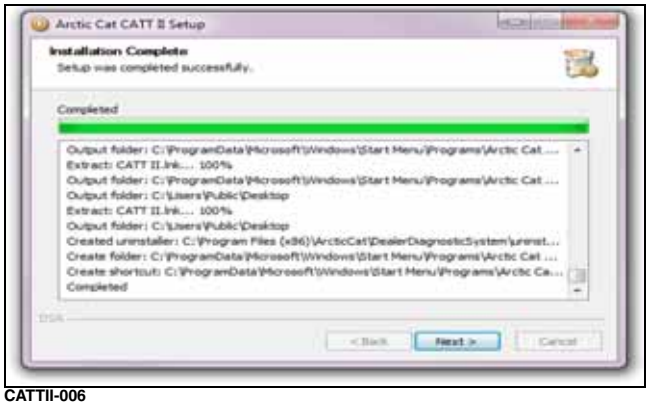
CATTII-004

The next screen shows the installation progress. Wait while Arctic Cat CATT II installs.



CATTII-005

Once the process is complete, the following screen will be shown. Select the "**Next >**" button to continue.



CATTII-006

Finally, the Setup Wizard screen will be shown confirming that Arctic Cat CATT II has been installed. Select the "**Finish**" button to close the Setup Wizard. The Arctic Cat CATT II application will launch automatically.

CATTII-007

Logging In

Once the CATT II application is run or has finished initializing, the following window will appear.

Enter your dealership's Cat Tracker user name and password and select the "**CONTINUE**" button.

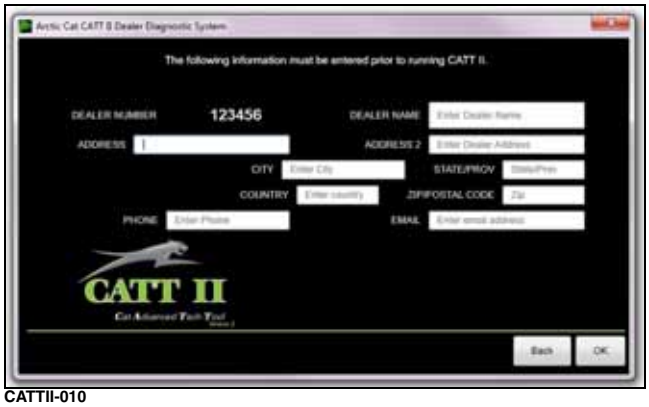
CATTII-008

Next, enter your dealer number and select the "**Next**" button to continue.

CATTII-009

Finally, enter the information as prompted in the corresponding text boxes. Select the "**OK**" button to finish the log-in process.

If your dealership has previously registered, the following information will be automatically populated. If the information populated is incorrect, the wrong dealer number may have been used. Click the "**Back**" button to go back and enter the correct dealer number. Otherwise make changes and click the "**OK**" button.



CATTII-010

Using the CATT II Software

Connecting the CATT II to the Vehicle

Select and assemble the appropriate harness/harnesses for the vehicle being serviced.

- Use p/n 0486-476 when servicing ATV's/ROV's.

■NOTE: Certain ATV's/ROV's require p/n 0486-497 to convert the 10-pin connector to a 6-pin connector.

- Use p/n 1686-734 when servicing 2-stroke and 4-stroke snowmobiles with a 10-pin connector.

■NOTE: 2-stroke models require the use of p/n 1686-750 to supply power from an external 12-volt battery to view sensor data, trouble codes, and process certain output test features when the engine is not running.

CAUTION

Do not use a battery charger or power supply in place of the battery. Damage to the tool may occur.

■NOTE: Certain snowmobiles require p/n 1686-744 to convert the 10-pin connector to a 6-pin connector.

■NOTE: Certain 2-stroke models require p/n 0644-598 to supply power through the use of the "Electrical System" connector to view sensor data and trouble codes when the engine is not running.

■NOTE: On 2-stroke models, the "Electrical System" connector is used to power the electrical system of the vehicle outside of the ECM when the p/n 1686-750 wire harness is connected to an external 12-volt battery. This will power the gauge, headlights, and allow for oil pump prime function. If this connector is left plugged in for an extended period of time, the battery may drain to a low voltage causing invalid results.

First, connect the receiver end of the diagnostic cable into the corresponding plug end of the CATT II Tool; then plug the other end of the diagnostic cable into the appropriate diagnostic connector of the vehicle.

CATTII-011

Next, plug the type B USB 2.0 connector into the CATT II and the type A USB 2.0 connector into the computer.

CATTII-012

The complete setup should look like the following picture.

CATTII-013

If previously logged in, the following initial window will appear. Select "**OPEN LAST CASE**" to load the last vehicle selected; otherwise select "**OPEN NEW CASE**".

CATTII-014

If not previously logged in, refer to "Logging In".

Icons

■NOTE: The icons are at the bottom of the application window.

/	Show / Hide left-side tool bar
	Internet Not Connected / Icon Disappears when Internet connection is present
/	USB not connected / USB connected
/	No vehicle connected / Vehicle connected
/	Engine ECM not connected / Engine ECM connected
/	EPS not connected / EPS connected
/	Instrument cluster not connected / Instrument cluster connected

The vehicle model and VIN may be displayed at the bottom of the window.

CATTII-015

Screens

■NOTE: The screens tool bar is on the left side of the application window.

IDENTIFY	The IDENTIFY screen is used to connect to the vehicle and view ECU ID information.
TROUBLE CODES	The TROUBLE CODES screen is used to view and reset active/inactive codes.
SENSOR DATA	The SENSOR DATA screen is used to view values of vehicle sensors.
TESTS	The TESTS screen is used to activate/deactivate specific vehicle functions.
PROCEDURES	The PROCEDURES screen is used to complete vehicle registration PIN.
ECU UPDATE	The ECU UPDATE screen is used if a calibration upgrade/update is available.
SERVICE INFO	The SERVICE INFO screen is used to view available Guided Diagnostic procedures for the selected vehicle.
SYSTEM SETUP	The SYSTEM SETUP screen is used to change user settings/preferences.
REPORT	The REPORT screen is used to create or view vehicle diagnostic reports.

CATTII-067

■NOTE: Some screens/functions may not be applicable to all models.

IDENTIFY Screen

When the CATT II software is opened, the default screen is the IDENTIFY screen. There are two tabs within this screen. The default tab is "**VEHICLE SELECTION**"; there are several options to identify a vehicle.

■NOTE: Make sure the vehicle key is turned to the ON position, CATT II is connected to the vehicle and Laptop or PC with the proper harness, and the vehicle's battery or the external battery (2-stroke snowmobiles) is fully charged prior to making a selection.

Option 1

Click the "**AUTO IDENTIFICATION**" button. This will automatically select the appropriate vehicle and populate the text box with the VIN of the vehicle.

■NOTE: Some vehicles do not support this feature.

Option 2

Enter the complete VIN (17 characters) of the vehicle in the text box and click the "**CONTINUE WITH VIN**" button.

Option 3

Select a product from the "**PRODUCT LINE**" drop down list, select a year from the "**MODEL YEAR**" drop down list, and select a vehicle from the "**VEHICLE**" drop down list.

■NOTE: Before manually identifying a vehicle using the drop downs, clear any VIN from a prior vehicle.

CATTII-018

If you click on the "**ECUID**" tab you can view ECU information retrieved from the vehicle. To select which ECU information is displayed, make a selection from the drop down list.

Types of ECUs

Engine Control Module (ECM)

Electronic Power Steering (EPS)

Instrument Cluster

CATTII-019

Under the "**BULLETINS**" tab you can view any applicable bulletin documents if the VIN number was supplied in the Identify process. The "Expire Date" will be displayed above the document, along with "Repair Date" and "Claim Number" if the bulletin has been completed with a warranty claim filed.

CATTII-075

If there is more than one bulletin applicable for the VIN Identified, "Click" the drop-down box to see the list of available bulletins. Then "click" the appropriate bulletin you would like to view.

■NOTE: This feature can be accessed with or without being connected to the vehicle, if not connected to the vehicle Identify the vehicle by manually entering the 17 character VIN and navigate to the appropriate screen.

CATTII-076

If you receive the following error message when trying to open a bulletin, Click Here for instructions on configuring your Internet browser to allow PDF's to be opened within a browser.

CATTII-077

Under the "VEHICLE INFO" tab, you can view vehicle information for the VIN Identified. Included information is listed below. Note, some information may be blank due to variances in compatibility.

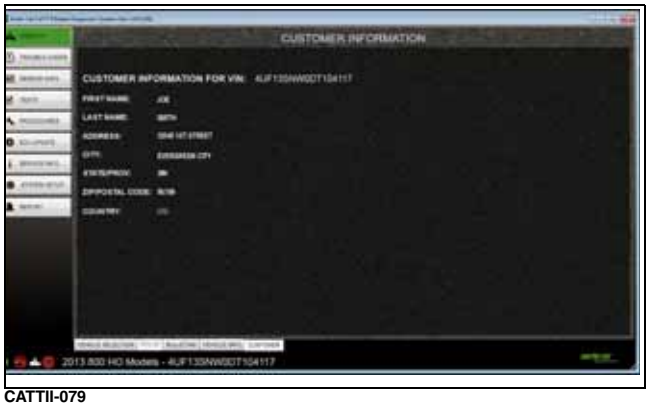
- Engine Serial Number
- Model Number
- Model Description
- Sales Date:
- Selling Dealer Name
- Factory Warranty Expiration Date
- Extended Service Contract End Date
- Extended Service Provider
- Point of Sale Registration PIN
- Keycode

■NOTE: This feature can be accessed with or without being connected to the vehicle, if not connected to the vehicle Identify the vehicle by manually entering the 17 character VIN and navigate to the appropriate screen.

CATTII-078

Under the "CUSTOMER" tab you can view information about the customer the vehicle has been registered to. If the vehicle has not been registered, this tab will not be viewable.

■NOTE: This feature can be accessed with or without being connected to the vehicle, if not connected to the vehicle Identify the vehicle by manually entering the 17 character VIN and navigate to the appropriate screen.



CATTII-079

TROUBLE CODES Screen

When the TROUBLE CODES screen is opened, the default tab opened is "**TROUBLE CODES**". This tab will display Active and Inactive trouble codes on compatible models; you can also clear Inactive trouble codes.

The icon displayed next to the code indicates which ECU is producing the trouble code. The status of the trouble code will also be displayed on the right side of the screen.

(ECM) Engine Control Module Code

(EPS) Electronic Power Steering Code

Instrument Cluster Code

Guided Diagnostic Procedure Available

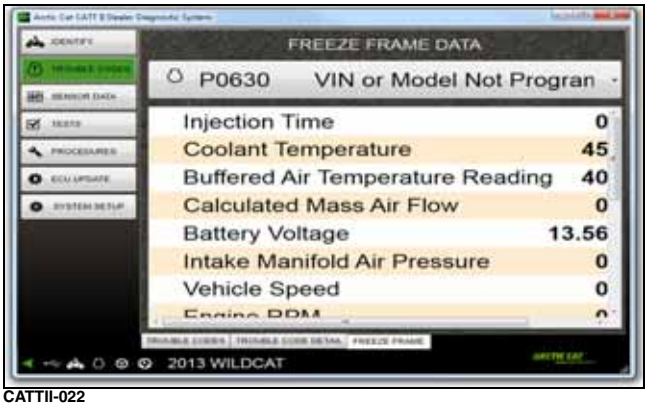
Click the "**CLEAR TROUBLE CODES**" button to remove all inactive troubles codes from the tool display and from the vehicle.

CATTII-020

To view the details of a Trouble Code, click on the code or click the "**TROUBLE CODE DETAIL**" tab. Under this tab, you can view a description of the fault, a possible cause of the fault, and how to clear the code.

CATTII-021

Under the "**FREEZE FRAME**" tab, you can view sensor data values of when the trouble code was activated. This displays data for all sensors applicable for the vehicle being serviced. Scroll through the list of sensors using the scrolling bars on the side and bottom of the screen.



CATTII-022

■**NOTE: If a code has been activated multiple times, the information displayed will be from the most current code activation.**

Possible Trouble Codes

■NOTE: When clearing a code by restarting the engine, the code will only be cleared from the instrument cluster display if the code is now inactive. To clear the code from the ECM history, click the "CLEAR TROUBLE CODES" button from the TROUBLE CODE tab in the CATT II Tool.

3000/C-TEC2/7000/2017 9000/ATV/ROV ECM

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ROV
C0063	Tilt Sensor Circuit High	The ECM has detected a high voltage condition on the tilt sensor circuit input. It is possible the tilt sensor or its interconnect harness is shorted to battery power. To clear the fault code correct the tilt sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
C0064	Tilt Sensor Circuit Low/SG/Open	The ECM has detected a low voltage condition on the tilt sensor circuit input. It is possible the tilt sensor or its interconnect harness is shorted to chassis ground or it has an open circuit. To clear the fault code correct the tilt sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
C1263	Backup/ Reverse Light Circuit Open	The ECM has detected a low voltage condition on the tilt sensor circuit input. It is possible the tilt sensor or its interconnect harness is shorted to chassis ground or it has an open circuit. To clear the fault code correct the tilt sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
C1264	Backup/ Reverse Light Circuit High	A high voltage condition has been detected on the backup/reverse-light circuit output. It is possible the backup/reverse-light or it's interconnect harness is shorted to battery power. To clear the fault code correct the backup/reverse light circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
C1265	Backup/ Reverse Light Circuit Low/SG	A low voltage condition has been detected on the backup/reverse-light circuit output. It is possible the backup/reverse-light or it's interconnect harness is shorted to chassis ground. To clear the fault code correct the backup/reverse light circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0016	Crankshaft Position - Camshaft Position Correlation	The ECM has detected an error in the camshaft position signal timing based on the synchronization of the crankshaft position sensor. It is possible the engine is timed incorrectly or there is an issue with either the camshaft position sensor crankshaft position sensor. To clear the fault code correct the crankshaft position -camshaft position correlation condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0030	02 Heater Control Circuit	An intermittent or open circuit condition has been detected on the 02 heater output. It is possible the 02 heater or its interconnect harness is open or is producing an intermittent voltage. To clear the fault code correct the 02 heater circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0030	O2 Heater Intermittent/ Open	The ECM has detected an intermittent or open circuit condition on the O2 heater output. It is possible the O2 heater or interconnect harness is open or is producing an intermittent voltage. To clear the fault code correct the O2 heater circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0031	O2 Heater Low/SG	The ECM has detected a low voltage condition on the O2 heater output. It is possible the O2 heater or interconnect harness is shorted to chassis ground. To clear the fault code correct the O2 heater circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0031	O2 Heater Control Circuit Low	A low voltage condition has been detected on the O2 heater control output. It is possible that the O2 heater or it interconnect harness is shorted to chassis ground. To clear the fault code correct the O2 Heater Control circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0032	O2 Heater High/SP	The ECM has detected a high voltage condition on the O2 heater output. It is possible the O2 heater or interconnect harness is shorted to battery power. To clear the fault code correct the O2 heater circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0032	O2 Heater Control Circuit High	A high voltage condition has been detected on the O2 heater control output. It is possible that the O2 heater or it interconnect harness is shorted to battery power. To clear the fault code correct the O2 Heater Control circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0034	Turbocharger Bypass Valve Control Circuit Low	A low voltage condition has been detected on the Turbocharger Bypass Valve Control input. It is possible the Turbo Charger Bypass Valve Relay or its interconnect harness is open or shorted to ground. Correct the Turbocharger Bypass Valve Control Circuit Low malfunction and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0035	Turbocharger Bypass Valve Control Circuit High	A high voltage condition has been detected on the Turbocharger Bypass Valve Control input. It is possible the Turbo Charger Bypass Valve Relay or its interconnect harness is shorted to power. Correct the Turbocharger Bypass Valve Control Circuit High malfunction and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0107	Manifold Absolute Pressure Circuit Low	A low voltage condition has been detected on the manifold absolute pressure sensor input. It is possible the MAP sensor or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the MAP sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0107	Manifold Absolute Pressure Circuit Low	A low voltage condition has been detected on the manifold absolute pressure sensor input. It is possible the MAP sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the MAP sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P0107	MAP Circuit Low/SG/ Open	A low voltage condition has been detected on the manifold absolute pressure sensor input. It is possible the MAP sensor or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the MAP sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0108	Manifold Absolute Pressure Circuit High	A high voltage condition has been detected on the manifold absolute pressure sensor input. It is possible the MAP sensor or its interconnect harness is shorted to battery power. To clear the fault code correct the MAP sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0108	Manifold Absolute Pressure Circuit High	A high voltage condition has been detected on the manifold absolute pressure sensor input. It is possible the MAP sensor or its interconnect harness is open or shorted to battery power. To clear the fault code correct the MAP sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0108	MAP Circuit High/SP	A high voltage condition has been detected on the manifold absolute pressure sensor input. It is possible the MAP sensor or its interconnect harness is shorted to battery power. To clear the fault code correct the MAP sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0112	Intake Air Temperature Sensor Circuit Low	A low voltage condition has been detected on the intake air temperature sensor input. It is possible the intake air temperature sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the intake air temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.	X	X	X	X	
P0112	IAT Sensor Circuit Low/ SG	A low voltage condition has been detected on the intake air temperature sensor input. It is possible the intake air temperature sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the intake air temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0113	Intake Air Temperature Sensor Circuit High	A high voltage condition has been detected on the intake air temperature sensor input. It is possible the intake air temperature sensor or its interconnect harness is open or shorted to battery power/regulated voltage. To clear the fault code correct the intake air temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.	X	X	X	X	
P0113	IAT Sensor Circuit High/ Open	A high voltage condition has been detected on the intake air temperature sensor input. It is possible the intake air temperature sensor or its interconnect harness is open or shorted to battery power. To clear the fault code correct the intake air temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0114	Intake Air Temperature Sensor Circuit Intermittent	The ECM has detected an intermittent voltage condition on the IAT sensor input. It is possible the IAT sensor or interconnect harness is damaged causing an intermittent voltage. To clear the fault code correct the IAT sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0115	Engine Coolant Temperature Sensor 1 Circuit	A constant voltage condition has been detected on the engine coolant temperature sensor input. It is possible the engine coolant temperature sensor is faulty or the thermostat may be stuck. To clear the fault code correct the engine coolant temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0116	Engine Coolant Temperature Sensor Circuit Range/ Performance	The ECM has detected the engine coolant temperature sensor input is out of range. It is possible the engine coolant temperature sensor or interconnect harness is causing the signal to be out of the normal operating range of the sensor. To clear the fault code correct the engine coolant temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0117	Engine Coolant Temperature Sensor 1 Circuit Low	A low voltage condition has been detected on the engine coolant temperature sensor input. It is possible the engine coolant temperature sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the engine coolant temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.	X	X	X	X	
P0117	ECT Sensor Circuit Low/ SG	A low voltage condition has been detected on the engine coolant temperature sensor input. It is possible the engine coolant temperature sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the engine coolant temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0118	Engine Coolant Temperature Sensor 1 Circuit High	A high voltage condition has been detected on the engine coolant temperature sensor input. It is possible the engine coolant temperature sensor or its interconnect harness is open or shorted to battery power/regulated voltage. To clear the fault code correct the engine coolant temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.	X	X	X	X	
P0118	ECT Sensor Circuit High/ Open/SP	A high voltage condition has been detected on the engine coolant temperature sensor input. It is possible the engine coolant temperature sensor or its interconnect harness is open or shorted to battery power. To clear the fault code correct the engine coolant temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0119	Engine Coolant Temperature Sensor Circuit Intermittent	The ECM has detected an intermittent voltage condition on the engine coolant temperature sensor input. It is possible the engine coolant temperature sensor or interconnect harness is damaged causing an intermittent signal. To clear the fault code correct the engine coolant temperature sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P0120	Throttle Position Sensor Circuit	This code will be set any time an error has occurred in the TPS circuit. The TPS or its interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct the TPS circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0121	Throttle Position Sensor Circuit Range/ Performance	The ECM has detected the TPS input is out of range. It is possible the TPS or its interconnect harness is causing the signal to be out of the normal operating range of the sensor. To clear the fault code correct the TPS circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0122	Throttle Position Sensor Circuit Low	A low voltage condition has been detected on the throttle position sensor input. It is possible the throttle position sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the throttle position sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0122	Throttle Position Sensor Circuit Low	A low voltage condition has been detected on the throttle position sensor input. It is possible the throttle position sensor or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the throttle position sensor circuit condition and then restart the engine.	X	X		X	
P0122	TPS Circuit Low/SG	A low voltage condition has been detected on the throttle position sensor input. It is possible the throttle position sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the throttle position sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0123	Throttle Position Sensor Circuit High	A high voltage condition has been detected on the throttle position sensor input. It is possible the throttle position sensor or its interconnect harness is open or shorted to battery power. To clear the fault code correct the throttle position sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0123	Throttle Position Sensor Circuit High	A high voltage condition has been detected on the throttle position sensor input. It is possible the throttle position sensor or its interconnect harness is shorted to regulated voltage. To clear the fault code correct the throttle position sensor circuit condition and then restart the engine.	X	X		X	
P0123	TPS Circuit High	A high voltage condition has been detected on the throttle position sensor input. It is possible the throttle position sensor or its interconnect harness is open or shorted to battery power. To clear the fault code correct the throttle position sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0130	O2 Sensor Circuit	An intermittent open or open circuit condition has been detected on the O2 sensor input. It is possible that the O2 sensor or its interconnect harness have an intermittent open or an open circuit. To clear the fault code correct the O2 sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		X
P0131	O2 Sensor Circuit Low	A low voltage condition has been detected on the O2 sensor input. It is possible the O2 sensor or its interconnect harness is shorted to chassis ground or an air leak may exist in the exhaust. To clear the fault code correct the O2 sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		X
P0132	O2 Sensor Circuit High	A high voltage condition has been detected on the O2 sensor input. It is possible the O2 sensor or its interconnect harness is shorted to battery power. To clear the fault code correct the O2 sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		X
P0171	System Too Lean	The ECM internal O2 feedback is lower than expected. It is possible that this symptom is caused by low fuel pressure, dirty fuel filter or dirty injectors. To clear the fault code correct the lean condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		X
P0172	System Too Rich	The ECM internal O2 feedback is higher than expected. It is possible that this symptom is caused by excessive fuel pressure, faulty MAP sensor or faulty temp sensors. To clear the fault code correct the rich condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		X
P0201	Injector Circuit/Open Cylinder 1	An intermittent open or open circuit condition has been detected on the fuel injector circuit, PTO side cylinder. It is possible that the injector or its interconnect harness have an intermittent open or an open circuit. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0201	Injector Circuit/Open Cylinder 1	The ECM has detected a lack of current when activating the PTO injector circuit. It is possible the injector or it's interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0202	Injector Circuit/Open Cylinder 2	An intermittent open or open circuit condition has been detected on the fuel injector circuit, center cylinder on 7000, MAG cylinder on 3000. It is possible that the injector or its interconnect harness have an intermittent open or an open circuit. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0202	Injector Circuit/Open Cylinder 2	The ECM has detected a lack of current when activating the center cylinder injector circuit. It is possible the injector or it's interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0203	Injector Circuit/Open Cylinder 3	An intermittent open or open circuit condition has been detected on the fuel injector circuit, MAG side cylinder. It is possible that the injector or its interconnect harness have an intermittent open or an open circuit. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0203	Injector Circuit/Open Cylinder 3	The ECM has detected a lack of current when activating the MAG injector circuit. It is possible the injector or it's interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P0217	Engine Coolant Over Temperature Condition	The engine coolant temperature is too high for engine operation. Possible causes for this code are poor snow conditions, engine coolant level is low or the water pump may not be circulating coolant properly. To clear the fault code correct the engine coolant over temperature condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0219	Engine Over-Speed Condition	The ECM has detected the engine RPM has exceeded the ECM's engine RPM limit set point. It is possible the engine RPM is too high due to improper clutching. To clear the fault code correct the engine over speed condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0231	Fuel Pump Relay Circuit Low/SG/ Open	The ECM has detected a low voltage condition on the fuel pump relay output. It is possible the fuel pump relay has been removed or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the fuel pump relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0231	Fuel Pump Relay Circuit Low	A low voltage condition has been detected on the coil side of the fuel pump relay. It is possible that the fuel pump relay in the PDM or its interconnect harness is shorted to chassis ground. To clear the fault code correct the fuel pump relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P0232	Fuel Pump Relay Circuit High	The ECM has detected a high voltage condition on the fuel pump relay output. It is possible the fuel pump relay or its interconnect harness is shorted to battery power. To clear the fault code correct the fuel pump relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0232	Fuel Pump Relay Circuit High	A high voltage condition has been detected on the coil side of the fuel pump relay. It is possible that the fuel pump relay in the PDM or its interconnect harness is shorted to battery power. To clear the fault code correct the fuel pump relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P0233	Fuel Pump Relay Circuit	The ECM has detected an intermittent voltage condition on the fuel pump relay output. It is possible the fuel pump relay or its interconnect harness is damaged causing an intermittent voltage signal. To clear the fault code correct the fuel pump relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0233	Fuel Pump Relay Circuit Open	An open circuit condition has been detected on the coil side of the fuel pump relay. It is possible that the fuel pump relay in the PDM or its interconnect harness is open or not making a good connection. To clear the fault code correct the fuel pump relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P0237	Turbocharger Boost Sensor Circuit Low	A low voltage condition has been detected on the Turbocharger Boost Sensor input. The Turbo Charger Boost sensor or it's interconnect harness is open or shorted to ground. To clear the fault code correct Turbo Charger Boost Sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0238	Turbocharger Boost Sensor Circuit High	A high voltage condition has been detected on the Turbocharger Boost Sensor input. The Turbo Charger Boost sensor or it's interconnect harness is open or shorted to battery power. To clear the fault code correct Turbo Charger Boost Sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0243	Turbocharger Wastegate Solenoid	The ECM has detected a lack of current when activating the Turbocharger Wastegate circuit. It is possible the Turbocharger Wastegate or its interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct Turbo Charger Wastegate Solenoid circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position				X	
P0261	Cylinder 1 Injector Circuit Low	The ECM has detected a low voltage condition has been detected on the injector circuit output, for the PTO side cylinder. It is possible the injector or its interconnect harness is shorted to chassis ground. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0261	Cylinder 1 Injector Circuit Low	The ECM has detected a low current draw condition on the injector circuit output, for the PTO side cylinder. It is possible the injector or its interconnect harness is shorted to chassis ground. To clear the fault code correct the injector circuit condition and then restart the engine.		X			
P0261	Cylinder 1 Injector Circuit Low	The ECM has detected a low voltage condition on the cylinder #1 fuel injector output. It is possible the cylinder #1 fuel injector or its interconnect harness is shorted to chassis ground. To clear the fault code correct the cylinder #1 fuel injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0262	Cylinder #1 Fuel Injector Circuit High	The ECM has detected a high voltage condition on the cylinder #1 fuel injector output. It is possible the cylinder #1 fuel injector or its interconnect harness is shorted to battery power. To clear the fault code correct the cylinder #1 fuel injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0263	Cylinder #1 Fuel Injector Circuit Balance/ Open	The ECM has detected an intermittent voltage condition on the cylinder #1 fuel injector output. It is possible the cylinder #1 fuel injector or its interconnect harness is open. To clear the fault code correct the cylinder #1 fuel injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0264	Cylinder 2 Injector Circuit Low	The ECM has detected a low voltage condition has been detected on the injector circuit output, for the center cylinder on 7000, MAG cylinder on 3000. It is possible the injector or its interconnect harness is shorted to chassis ground. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0264	Cylinder 2 Injector Circuit Low	The ECM has detected a low current draw condition on the injector circuit output, for the MAG side cylinder. It is possible the injector or its interconnect harness is shorted to chassis ground. To clear the fault code correct the injector circuit condition and then restart the engine.		X			
P0264	Cylinder #2 Injector Circuit Low/ SG	The ECM has detected a low voltage condition on the cylinder #2 fuel injector output. It is possible the cylinder #1 fuel injector or its interconnect harness is shorted to chassis ground. To clear the fault code correct the cylinder #2 fuel injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P0265	Cylinder #2 Fuel Injector Circuit High	The ECM has detected a high voltage condition on the cylinder #2 fuel injector output. It is possible the cylinder #2 fuel injector or its interconnect harness is shorted to battery power. To clear the fault code correct the cylinder #2 fuel injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0266	Cylinder #2 Fuel Injector Circuit Balance/ Open	The ECM has detected an intermittent voltage condition on the cylinder #2 fuel injector output. It is possible the cylinder #2 fuel injector or its interconnect harness is open. To clear the fault code correct the cylinder #2 fuel injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0267	Cylinder 3 Injector Circuit Low	A low voltage condition has been detected on the injector circuit output, for the MAG side cylinder. It is possible the injector or its interconnect harness is shorted to chassis ground. To clear the fault code correct the injector circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0324	Knock Control System Activated	Detonation has been detected by the knock sensor, ignition timing has been reduced but detonation still exists. If the system cannot eliminate the knock by reducing timing within the set parameters, it goes into a knock control system error in which case fuel is added and the code P0324 will flash on the gauge. Fuel is added to try and eliminate the knock, but power will be reduced and the operating RPM will be Limited to 7700 RPM's to try and protect the engine from damage. Poor fuel quality, elevated intake air and engine coolant temperatures, low fuel pressure, intake air leaks or any after-market components may cause this code, the knock sensor is working as designed. To clear the fault code correct the condition and then restart the engine.		X			
P0327	Knock Sensor 1 Circuit Low	A low voltage condition has been detected on the knock sensor circuit input. It is possible the knock sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the knock sensor circuit condition and then restart the engine.		X			
P0327	Knock Sensor 1 Circuit Low	A low voltage condition has been detected on the knock sensor circuit input. It is possible the knock sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the knock sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0328	Knock Sensor 1 Circuit High	A high voltage condition has been detected on the knock sensor circuit input. It is possible the knock sensor or its interconnect harness is shorted to regulated voltage. To clear the fault code correct the knock sensor circuit condition and then restart the engine.		X			
P0328	Knock Sensor 1 Circuit High	A high voltage condition has been detected on the knock sensor circuit input. It is possible the knock sensor or its interconnect harness is shorted to regulated voltage. To clear the fault code correct the knock sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0336	Crankshaft Angle Sensor Synchronization	The ECM was unable to synchronize the engine due to and intermittent signal from the crankshaft angle sensor. It is possible the crankshaft angle sensor or its interconnect harness are faulty causing the intermittent signal. This could also be caused by poor cranking speeds when trying to start the engine which may be caused my valves out of adjustment, weak battery, ~~ect~~etc. To clear the fault code correct the crankshaft angle sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0337	Crankshaft Angle Sensor Circuit SG	The ECM has detected a low voltage condition on the crankshaft angle sensor circuit input. It is possible the crankshaft angle sensor or its interconnect harness are shorted to chassis ground. To clear the fault code correct the crankshaft angle sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0339	Crankshaft Angle Sensor Circuit Intermittent	The ECM has detected an intermittent voltage condition on the crankshaft angle sensor circuit input. It is possible the crankshaft angle sensor or its interconnect harness are faulty causing the intermittent voltage signal. To clear the fault code correct the crankshaft angle sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0340	Camshaft Angle Sensor Synchronization	The ECM was unable to synchronize the engine due to and intermittent signal from the camshaft angle sensor. It is possible the camshaft angle sensor or its interconnect harness are faulty causing the intermittent signal. This could also be caused by poor cranking speeds when trying to start the engine, which may be caused by valves out of adjustment, weak battery, etc. To clear the fault code correct the camshaft angle sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0341	Camshaft Angle Sensor Circuit SG	The ECM has detected a low voltage condition on the camshaft angle sensor circuit input. It is possible the camshaft angle sensor or its interconnect harness are shorted to chassis ground. To clear the fault code correct the camshaft angle sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0342	Camshaft Angle Sensor Circuit Intermittent	The ECM has detected an intermittent voltage condition on the camshaft angle sensor circuit input. It is possible the camshaft angle sensor or its interconnect harness are faulty causing the intermittent voltage signal. To clear the fault code correct the camshaft angle sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0351	Ignition Coil "A" Primary/ Secondary Circuit	An open circuit condition has been detected on the MAG side cylinder ignition coil. It is possible the ignition coil or interconnect harness has an open circuit. To clear the fault code correct the ignition coil circuit condition and then restart the engine.		X			
P0351	Ignition Coil "A" Primary/ Secondary Circuit	The ECM has detected a lack of current when activating the PTO ignition coil. It is possible the ignition coil or its interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct ignition coil "A" primary control circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0352	Ignition Coil "B" Primary/ Secondary Circuit	An open circuit condition has been detected on the PTO side cylinder ignition coil. It is possible the ignition coil or interconnect harness has an open circuit. To clear the fault code correct the ignition coil circuit condition and then restart the engine.		X			

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P0352	Ignition Coil "B" Primary/ Secondary Circuit	The ECM has detected a lack of current when activating the center cylinder ignition coil. It is possible the ignition coil or its interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct ignition coil "B" primary control circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0353	Ignition Coil "C" Primary/ Secondary Circuit	The ECM has detected a lack of current when activating the MAG ignition coil. It is possible the ignition coil or its interconnect harness is open, shorted to ground or shorted to battery power. To clear the fault code correct ignition coil "C" primary control circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0480	Fan-Primary/ Right Relay Control Circuit	The ECM has detected an intermittent voltage condition on the primary fan relay output. It is possible the primary fan relay or its interconnect harness are faulty causing the intermittent voltage signal. To clear the fault code correct the primary fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0480	Cooling Fan Relay Circuit Open	An open circuit has been detected on the coil side of the cooling fan relay. It is possible that the cooling fan relay is open or not making a good connection. To clear the fault code correct the cooling fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P0481	Fan-Secondary/ Left Relay Control Circuit High	The ECM has detected a high voltage condition on the secondary fan relay output. It is possible the secondary fan relay or its interconnect harness are shorted to battery power. To clear the fault code correct the secondary fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0482	Fan-Secondary/ Left Relay Control Circuit Low/ SG/Open	The ECM has detected a low voltage condition on the secondary fan relay output. It is possible the secondary fan fuse is faulty, the relay has been removed or its interconnect harness is shorted to chassis ground. To clear the fault code correct the secondary fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0483	Fan-Secondary/ Left Relay Control Circuit	The ECM has detected an intermittent voltage condition on the secondary fan relay output. It is possible the primary fan relay or its interconnect harness are faulty causing the intermittent voltage signal. To clear the fault code correct the secondary fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0484	Fan-Primary/ Right Relay Control Circuit High	The ECM has detected a high voltage condition on the primary fan relay output. It is possible the primary fan relay or its interconnect harness are shorted to battery power. To clear the fault code correct the primary fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0484	Cooling Fan Relay Circuit High	A high voltage condition has been detected on the coil side of the cooling fan relay. It is possible that the cooling fan relay shorted to battery power. To clear the fault code correct the cooling fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P0485	Fan-Primary/ Right Relay Control Circuit Low/ SG/Open	The ECM has detected a low voltage condition on the primary fan relay output. It is possible the primary fan fuse is faulty, the relay has been removed or its interconnect harness is shorted to chassis ground. To clear the fault code correct the primary fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0485	Cooling Fan Relay Circuit Low	A low voltage condition has been detected on the coil side of the cooling fan relay. It is possible that the cooling fan relay shorted to chassis ground. To clear the fault code correct the cooling fan relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P0500	Vehicle Speed Sensor	The ECM has detected an intermittent voltage condition on the vehicle speed sensor input. It is possible the vehicle speed sensor or its interconnect harness is faulty causing the intermittent voltage signal. To clear the fault code correct the vehicle speed circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0505	Idle control system F/B malfunction	The ECM has detected the engine RPM at idle is outside the allowable range. Check the intake system for leaks which could cause the engine RPM to be outside the allowable idle RPM range. To clear the fault code correct the idle control system F/B circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0508	Idle Air Control System Circuit Low	A low voltage condition has been detected on the ISC control circuit. It is possible the ISC or its interconnect harness is shorted to chassis ground. To clear the fault code correct the ISC circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P0508	Idle Air Control System Circuit Low/ SG	A low voltage condition has been detected on the ISC control circuit. It is possible the ISC or its interconnect harness is shorted to chassis ground. To clear the fault code correct the ISC circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0509	Idle Air Control System Circuit High	A high voltage condition has been detected on the ISC control circuit. It is possible the ISC or its interconnect harness is open or shorted to battery power. To clear the fault code correct the ISC circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		X
P0511	Idle Air Control System Circuit	An open circuit condition has been detected on the ISC control circuit. It is possible the ISC or its interconnect harness is open. To clear the fault code correct the ISC circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0522	Engine Oil Pressure Sensor Circuit Low	A low voltage condition has been detected on the engine oil pressure sensor input circuit. It is possible the engine oil pressure sensor or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the engine oil pressure sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P0523	Engine Oil Pressure Sensor Circuit High	A high voltage condition has been detected on the engine oil pressure sensor input circuit. It is possible the engine oil pressure sensor or its interconnect harness is shorted to battery power. To clear the fault code correct the engine oil pressure sensor circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P0524	Engine Oil Pressure Low	A low oil pressure condition has been detected. The engine oil pressure is lower than expected, check the oil level and for proper pressure. To clear the fault code correct the Engine Oil Pressure Low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P0545	Exhaust Gas Temperature Sensor Circuit Low	A low voltage condition has been detected on the exhaust gas temperature sensor circuit input. It is possible the exhaust gas temperature sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the exhaust gas temperature sensor circuit condition and then restart the engine.		X			
P0546	Exhaust Gas Temperature Sensor Circuit High	A high voltage condition has been detected on the exhaust gas temperature sensor circuit input. It is possible the exhaust gas temperature sensor or its interconnect harness is shorted to regulated voltage. To clear the fault code correct the exhaust gas temperature sensor circuit condition and then restart the engine.		X			
P0562	System Voltage Low	A low voltage condition has been detected on the system power circuit. It is possible the regulator/rectifier output or the battery charge condition is low. To clear the fault code correct the battery charging circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X	X	X
P0563	System Voltage High	A high voltage condition has been detected on the system power circuit. It is possible the regulator/rectifier output is high or the battery cable connections may be loose. To clear the fault code correct the battery charging circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X	X	X
P0601	ECM CAN Communication Shutdown	The ECM has detected an intermittent or unstable CAN communication condition. It is possible the CAN communication wires are faulty causing the ECM to temporarily shut down the CAN communication. To clear the fault code correct the ECM CAN communication condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	X
P062F	Internal Control Module EEPROM Error	The ECM has detected an error with the information stored in the EEPROM. Check wires and connectors for damage, corrosion or potential shorts which could cause ECM damage. To clear the fault code the ECM must be replaced.				X	
P0615	Starter Relay Circuit	The ECM has detected an intermittent voltage condition on the starter relay circuit. It is possible the starter switch/ button, starter relay, gear switch or its interconnect harness are faulty causing the intermittent starter relay signal. To clear the fault code correct the starter relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0616	Starter Relay Circuit Low	The ECM has detected a low voltage condition on the starter relay circuit. It is possible the starter switch/ button, starter relay or its interconnect harness are shorted to chassis ground. To clear the fault code correct the starter relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0617	Starter Relay Circuit High	The ECM has detected a high voltage condition on the starter relay circuit. It is possible the starter switch/ button, starter relay or its interconnect harness are shorted to battery power. To clear the fault code correct the starter relay circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0630	VIN Not Programmed or Incompatible	The ECM has detected a VIN compatibility condition. It is possible the LCD gauge or ECM on the vehicle is not correct, verify the part numbers of these parts for the vehicle being worked on. To clear the fault code correct the VIN not programmed condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P0642	Sensor Power Circuit Low	The ECM has detected a low voltage condition on the sensor power circuit. It is possible one or more of the sensors is defective or shorted to chassis ground. To clear the fault code correct the sensor power circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0643	Sensor Power Circuit High	The ECM has detected a high voltage condition on the sensor power circuit. It is possible one or more of the sensors is defective or shorted to battery power. To clear the fault code correct the sensor power circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P0780	Shift Error	A gear change was not detected when the command was given to change gears. It is possible the reverse actuator, forward relay, reverse relay or gear position switch may be faulty or not connected. To clear the fault code verify that the relays are activating the reverse actuator and gear position switch when an attempt is made, then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X	X	
P0919	Shift Switch Stuck	The ECM has received a request to shift for more than 30 seconds. It is possible the shift switch on the handlebar is stuck or the switch or interconnect harness is shorted to ground causing the constant signal sent to the ECM. To clear the fault code correct the shift switch stuck condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P1000	Oil Pump Flow Not Programmed	The ECM does not have oil pump flow data stored in its memory. It is possible that the ECM has never been initialized with oil pump flow data. Using the oil pump replacement procedure enter the data as it appears on the oil pump ID tag. To clear the fault code correct the oil pump flow not programmed condition then restart the engine.		X			
P1001	Injector 1 Offset Not Programmed	The ECM does not have injector flow data for the MAG side cylinder stored in its memory. It is possible that the ECM has never been initialized with injector flow data for the MAG side cylinder. Using the injector replacement procedure enter the data as it appears on the injector ID tag. To clear the fault code correct the injector flow not programmed condition then restart the engine.		X			

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P1002	Injector 2 Offset Not Programmed	The ECM does not have injector flow data for the PTO side cylinder stored in its memory. It is possible that the ECM has never been initialized with injector flow data for the PTO side cylinder. Using the injector replacement procedure enter the data as it appears on the injector ID tag. To clear the fault code correct the injector flow not programmed condition then restart the engine.		X			
P1003	Oil Pump Outlier	The oil pump drive voltage is detected as out of range. It is possible the oil pump or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the oil pump outlier condition then restart the engine.		X			
P1004	ISC Outlier	The ISC drive voltage is detected as out of range. It is possible the ISC or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the ISC outlier condition then restart the engine.		X			
P1005	Regulator Voltage Circuit Low	A low voltage condition has been detected on the voltage regulator output. It is possible the voltage regulator is not producing enough voltage due to a faulty regulator or stator. It could also be caused by an excessive current draw causing the low voltage condition. To clear the fault code correct the regulator voltage circuit condition then restart the engine.		X			
P1006	Regulator Voltage Circuit High	A high voltage condition has been detected on the voltage regulator output. It is possible the voltage regulator is producing too high of a voltage due to a faulty regulator. To clear the fault code correct the regulator voltage circuit condition then restart the engine.		X			
P1007	Fuel Pump Circuit Low	A low voltage condition has been detected on the fuel pump circuit. It is possible the fuel pump or its interconnect harness is shorted to chassis ground. To clear the fault code correct the fuel pump circuit condition and then restart the engine.		X			
P1008	Fuel Pump Circuit High	A high voltage condition has been detected on the fuel pump circuit. It is possible the fuel pump or its interconnect harness is shorted to regulated voltage. To clear the fault code correct the fuel pump circuit condition and then restart the engine.		X			
P1009	Speed Sensor Malfunction	The ECM has detected an error with the speed sensor circuit due to inputs from the speed sensor, engine RPM and TPS. It is possible the speed sensor or its interconnect harness is open or shorted to a steady voltage. To clear the fault code correct the speed sensor malfunction condition then restart the engine.		X		X	
P100A	Run-A-Way Prevention System Activated	The Run-A-Way Prevention System has been activated and the engine shut down. The TPS voltage has exceed its threshold with no input from the RPS switch. The RPS switch or interconnect harness may be open. To clear the fault code correct the Run-A-Way Prevention System condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1106	MAP Sensor Hose Disconnect	The ECM has detected the hose from the MAP sensor is disconnected from the sensor or the intake manifold. Check the hose for proper connections and ensure there are no leaks which could cause erratic readings. To clear the fault code correct the MAP Sensor Hose Disconnect condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1236	Turbocharger Boost Sensor Hose Disconnect	The ECM has detected the hose from the Turbo Charger Boost sensor is disconnected from the sensor or the intake system. Check the hose for proper connections and ensure there are no leaks which could cause erratic readings. To clear the fault code correct the Turbocharger Boost Sensor Hose Disconnect condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1261	Injector Circuit/Open - Cylinder 1b	A low current draw condition has been detected on the MAG side cylinder sub-injector output. It is possible the injector or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the injector circuit/open condition then restart the engine.		X			
P1264	Injector Circuit/Open - Cylinder 2b	A low current draw condition has been detected on the PTO side cylinder sub-injector output. It is possible the injector or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the injector circuit/open condition then restart the engine.		X			
P1315	Crankshaft Position Out of Sync	The ECM was unable to determine the crankshaft position from the signal given by the crankshaft position sensor. It is possible that the crankshaft position sensor is faulty or the CPS may have debris on it causing a poor signal. Before replacing the CPS verify that the battery is in good health, connections from the battery to the starter are tight, and that the engine is turning over properly. To clear the fault code correct the crankshaft position out of sync condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P1324	Knock Control System Activated	Detonation has been detected by the knock sensor, ignition timing has been reduced but detonation still exists. If the system cannot eliminate the knock by reducing timing within the set parameters, it goes into a knock control system error in which case fuel is added and the code P0324 will flash on the gauge. Fuel is added to try and eliminate the knock, but power will be reduced and the operating RPM will be Limited to 7700 RPM's to try and protect the engine from damage. Poor fuel quality, elevated intake air and engine coolant temperatures, low fuel pressure, intake air leaks or any after-market components may cause this code, the knock sensor is working as designed. To clear the fault code correct the injector circuit condition and then restart the engine.		X			
P1329	Knock Sensor Loose Detection	The ECM has detected the knock sensor may not be mounted tightly by interpreting the signal sent from the knock sensor. The knock sensor may not be properly torqued causing this fault code. To clear the fault code correct the knock sensor loose condition then restart the engine.		X			
P1335	Crank not detected while starting	The ECM has detected the Start Switch has been engaged with no RPM signal detected. The Crankshaft Position Sensor or its interconnect harness may be open or shorted to ground. If the engine does not turn over, the starter solenoid circuit may be malfunctioning. To clear the fault code correct the crank not detected while starting condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1338	Crankshaft Spike Detected	The ECM has detected an abnormal spike in the signal from the CPS. It is possible that the signal from the CPS to the ECM is intermittent or the signal is out of the defined parameters due to inconsistent cranking speed, improper combustion or a faulty CPS sensor. To clear the fault code correct the crankshaft spike detected condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P1339	Crankshaft Tooth Not Detected	The ECM has detected an incorrect number of teeth in the signal sent from the CPS. It is possible that the air gap from the CPS to the timing gear on the output shaft assembly is out of specification, the CPS is reading an incorrect number of teeth due to debris on the CPS or CPS is faulty. To clear the fault code correct the crankshaft tooth not detected condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P1520	Engine Oil Pressure Switch Circuit	The ECM has detected an error on the Oil Pressure switch circuit. The Engine Oil Pressure Switch circuit or its interconnect harness may be open. To clear the fault code correct the Engine Oil Pressure Switch Circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1522	Engine Oil Pressure Sensor Circuit Low	A low voltage condition has been detected on the Oil Pressure Sensor input. The Engine Oil Pressure sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the Engine Oil Pressure Sensor Circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1523	Engine Oil Pressure Sensor Circuit High	A high voltage condition has been detected on the Oil Pressure Sensor input. The Engine Oil Pressure sensor or its interconnect harness is open or shorted to battery power. To clear the fault code correct the Engine Oil Pressure Sensor Circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1636	Crank Angle Sensor Circuit	The ECM has detected a problem with the crank angle sensor circuit due to the signal sent from the crank angle sensor. It is possible the crank angle sensor or its interconnect harness is open or shorted to a constant voltage not allowing the ECM to properly read the 11-tooth signal on the magneto. To clear the fault code correct the crank angle sensor circuit condition then restart the engine.		X			
P1639	Exhaust Valve Position Sensor Circuit Low	A low voltage condition has been detected on the exhaust valve position sensor circuit input. It is possible the exhaust valve position sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the exhaust valve position sensor circuit condition and then restart the engine.		X			
P1640	Exhaust Valve Position Sensor Circuit High	A high voltage condition has been detected on the exhaust valve position sensor circuit input. It is possible the exhaust valve position sensor or its interconnect harness is shorted to regulated voltage. To clear the fault code correct the exhaust valve position sensor circuit condition and then restart the engine.		X			
P1645	Exhaust Valve System Malfunction	The exhaust valve system is not operating as expected. It is possible the exhaust valve is out of the specified range or it is physically stuck and unable to move as requested by the ECM. Proper exhaust valve cable length should always be checked when there is an error within the exhaust valve system. When checking the free length also verify that the valves move freely and return to the closed position when released. To clear the fault code correct the exhaust valve system malfunction condition and then restart the engine.		X			
P1646	Exhaust Valve Actuator Self-Cleaning Open Error	An open circuit condition was detected while the ECM was self-calibrating the exhaust valve range by attempting a full sweep of the actuator. It is possible the exhaust valve actuator or its interconnect harness has an open circuit. To clear the fault code correct the exhaust valve actuator self-cleaning open error condition and then restart the engine.		X			
P1647	Exhaust Valve Actuator Short Error	A short circuit condition was detected while the ECM was self-calibrating the exhaust valve range by attempting a full sweep of the actuator. It is possible the exhaust valve actuator or its interconnect harness is shorted to chassis ground. To clear the fault code correct the exhaust valve actuator short error condition and then restart the engine.		X			
P1685	Main Relay Open Circuit	An open circuit has been detected on the coil side of the ISC relay. It is possible that the ISC relay in the PDM is not making connection or the wiring to the ISC relay is open due to a broken wire. To clear the fault code correct the main relay open circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P1686	Main Relay Circuit Low	A low voltage condition has been detected on the coil side of the ISC relay. It is possible that the ISC relay in the PDM or its interconnect harness is shorted to chassis ground. To clear the fault code correct the main relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P1687	Main Relay Circuit High	A high voltage condition has been detected on the coil side of the ISC relay. It is possible that the ISC relay or its interconnect harness is shorted to battery power. To clear the fault code correct the main relay circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P1688	Reverse Relay Open Circuit	An open circuit has been detected on the coil side of the reverse relay. It is possible that the reverse relay in the PDM is not making connection or the wiring to the reverse relay is open due to a broken wire. To clear the fault code correct the reverse relay open circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P1689	Reverse Relay Circuit Low	A low voltage condition has been detected on the coil side of the reverse relay. It is possible that the reverse relay in the PDM or its interconnect harness is shorted to chassis ground. To clear the fault code correct the reverse relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P1689	Reverse Relay Circuit Low	A low voltage condition has been detected on the coil side of the reverse relay. It is possible that the reverse relay in the PDM or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the reverse relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1690	Reverse Relay Circuit High	A high voltage condition has been detected on the coil side of the reverse relay. It is possible that the reverse relay in the PDM or its interconnect harness is shorted to battery power. To clear the fault code correct the reverse relay circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X			X	
P1691	Forward Relay Open Circuit	An open circuit has been detected on the coil side of the forward relay. It is possible that the forward relay in the PDM is not making connection or the wiring to the forward relay is open due to a broken wire. To clear the fault code correct the forward relay open circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P1692	Forward Relay Circuit Low	A low voltage condition has been detected on the coil side of the forward relay. It is possible that the forward relay in the PDM or its interconnect harness is shorted to chassis ground. To clear the fault code correct the forward relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P1692	Forward Relay Circuit Low	A low voltage condition has been detected on the coil side of the forward relay. It is possible that the forward relay in the PDM or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the forward relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1693	Forward Relay Circuit High	A high voltage condition has been detected on the coil side of the forward relay. It is possible that the forward relay in the PDM or its interconnect harness is shorted to battery power. To clear the fault code correct the forward relay circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X			X	
P1694	Headlight Relay Open Circuit	An open circuit has been detected on the coil side of the headlight relay. It is possible that the headlight relay in the PDM is not making connection or the wiring to the headlight relay is open due to a broken wire. To clear the fault code correct the headlight relay open circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P1695	Headlight Relay Circuit Low	A low voltage condition has been detected on the coil side of the headlight relay. It is possible that the headlight relay in the PDM or its interconnect harness is shorted to chassis ground. To clear the fault code correct the headlight relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P1695	Headlight Relay Circuit Low	A low voltage condition has been detected on the coil side of the headlight relay. It is possible that the headlight relay in the PDM or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the headlight relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1696	Headlight Relay Circuit High	A high voltage condition has been detected on the coil side of the headlight relay. It is possible that the headlight relay in the PDM or its interconnect harness is shorted to battery power. To clear the fault code correct the headlight relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1704	Fuel Pump Relay Circuit Low	A low voltage condition has been detected on the coil side of the fuel pump relay. It is possible that the fuel pump relay in the PDM or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the fuel pump relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1705	Fuel Pump Relay Circuit High	A high voltage condition has been detected on the coil side of the fuel pump relay. It is possible that the fuel pump relay in the PDM or its interconnect harness is shorted to battery power. To clear the fault code correct the fuel pump relay circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.				X	
P1755	Engine RPM Sensor Circuit Malfunction	The ECM has detected a problem with the engine RPM sensor circuit due to the signal sent from the engine RPM sensor. It is possible the engine RPM sensor or its interconnect harness is open or shorted to a constant voltage not allowing the ECM to properly read the 2-tooth signal on the magneto. To clear the fault code correct the engine RPM sensor circuit condition then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.		X			
P2228	Barometric Pressure Sensor "A" Circuit Low	A low voltage condition has been detected on the barometric pressure sensor input. It is possible the barometric pressure sensor or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct the barometric pressure sensor circuit condition then restart the engine.		X	X		
P2228	Barometric Pressure Sensor "A" Circuit Low	A low voltage condition has been detected on the barometric pressure sensor input. It is possible the barometric pressure sensor or its interconnect harness is shorted to chassis ground. To clear the fault code correct the barometric pressure sensor circuit condition then restart the engine.				X	
P2229	Barometric Pressure Sensor "A" Circuit High	A high voltage condition has been detected on the barometric pressure sensor input. It is possible the barometric pressure sensor or its interconnect harness is shorted to battery power/ regulated voltage. To clear the fault code correct the barometric pressure sensor circuit condition then restart the engine.		X	X		
P2229	Barometric Pressure Sensor "A" Circuit High	A high voltage condition has been detected on the barometric pressure sensor input. It is possible the barometric pressure sensor or its interconnect harness is open or shorted to battery power/regulated voltage. To clear the fault code correct the barometric pressure sensor circuit condition then restart the engine.				X	
P2282	Air Leak Between Throttle Body and Intake Valves	The ECM has detected that the calculated Mass Air Flow value is implausible. It is possible that the throttle body has come loose causing an air leak between the throttle body and the intake valves. To clear the fault code correct air leak between the throttle body and intake valve condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P2300	Ignition Coil "A" Primary Control Circuit Low	A low voltage condition has been detected on the PTO side cylinder ignition coil. It is possible the ignition coil or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct ignition coil "A" primary control circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P2300	Ignition Coil #1 Primary Circuit Low/ SG/Open	A low voltage condition has been detected on the #1 cylinder ignition coil. It is possible the ignition coil or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct ignition coil #1 primary control circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P2301	Ignition Coil "A" Primary Control Circuit High	A high voltage condition has been detected on the MAG side cylinder ignition coil. It is possible the ignition coil or its interconnect harness is shorted to battery power. To clear the fault code correct ignition coil "A" primary control circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P2301	Ignition Coil #1 Primary Circuit High	A low voltage condition has been detected on the #1 cylinder ignition coil. It is possible the ignition coil or its interconnect harness is shorted to battery power To clear the fault code correct ignition coil #1 primary control circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X

Code	Fault	Description	Applicable Models				
			3000	C-TEC 2	7000	2017 9000	ATV/ ROV
P2302	Cylinder #1 Ignition Coil Circuit High	The ECM has detected a high voltage condition on the cylinder #1 ignition coil circuit. It is possible the cylinder #1 ignition coil or its interconnect harness is shorted to battery power. To clear the fault code correct the cylinder #1 ignition coil circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P2303	Ignition Coil "B" Primary Control Circuit Low	A low voltage condition has been detected on the center cylinder ignition coil. It is possible the ignition coil or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct ignition coil "B" primary control circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X		X		
P2303	Ignition Coil #2 Primary Circuit Low/ SG/Open	A low voltage condition has been detected on the #2 cylinder ignition coil. It is possible the ignition coil or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct ignition coil #2 primary control circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P2304	Ignition Coil "B" Primary Control Circuit High	A high voltage condition has been detected on the center cylinder ignition coil. It is possible the ignition coil or its interconnect harness is shorted to battery power. To clear the fault code correct ignition coil "B" primary control circuit high condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				
P2304	Cylinder #2 Ignition Coil Circuit High	A low voltage condition has been detected on the #2 cylinder ignition coil. It is possible the ignition coil or its interconnect harness is shorted to battery power To clear the fault code correct ignition coil #2 primary control circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X
P2306	Ignition Coil "C" Primary Control Circuit Low	A low voltage condition has been detected on the MAG side cylinder ignition coil. It is possible the ignition coil or its interconnect harness is open or shorted to chassis ground. To clear the fault code correct ignition coil "C" primary control circuit low condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.			X		
P2531	Ignition Switch Circuit Low	The ECM has detected a low voltage condition on the ignition switch power. It is possible the battery charge or regulator/rectifier output is low causing the condition. To clear the fault code correct the ignition switch circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P2532	Ignition Switch Circuit High	The ECM has detected a high voltage condition on the ignition switch power. It is possible the battery connections are loose or regulator/rectifier output is high causing the condition. To clear the fault code correct the ignition switch circuit condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.	X				X
P3001	Control Module Improper Shutdown (Runaway Det.)	The runaway prevention system has been activated and the engine has been shut down due to an unexpected throttle position based on the current state of the runaway prevention switch. To clear the fault code correct control module improper shutdown condition and then restart the engine.		X			
U0155	Lost Communicati on With the Gauge	The CAN communication between the gauge and the ECM is intermittent or has failed. It is possible that the CAN communication wires from the gauge or to the ECM are open or shorted to each other. To clear the fault code correct the lost communication with gauge condition then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.	X	X	X	X	X
U1000	Vehicle Not Registered or Invalid Pin Entered	The vehicle has not been registered or had the correct PIN entered. The vehicle must be warranty registered before the correct PIN will be supplied. To clear the fault code correct the vehicle not registered or invalid pin entered condition then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.		X	X	X	X
U1001	Vehicle Not Registered and Vehicle Limits Enabled	The vehicle has not been registered or had the correct PIN entered and the engine hours have exceeded the allowable time. The vehicle must be warranty registered before the correct PIN will be supplied. To clear the fault code correct the vehicle not registered vehicle limits enabled condition then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position or restart the engine.		X	X	X	X
FUEL OFF	Tilt Sensor Activation Code	The ECM has deactivated the fuel system due to the tilt sensor signal. To clear the fault code correct the tilt sensor condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.					X

660/660T/1100/1100T/800/1000

Code	Fault	Description	Applicable Models					
			660	660T	1100	1100T	800	1000
P0105-L	Manifold Absolute Pressure Circuit Malfunction	A low voltage condition has been detected on the MAP sensor circuit. It is possible the MAP sensor or its interconnect harness may be shorted to ground or lack the necessary sensor power supply. To clear the fault code correct the MAP circuit condition and then restart the engine.	X	X	X	X		
P0105-H	Manifold Absolute Pressure Circuit Malfunction	A high voltage condition has been detected on the MAP sensor circuit. It is possible the MAP sensor or its interconnect harness may be open or short circuited to battery power on the ground or signal circuit. To clear the fault code correct the MAP circuit condition and then restart the engine.	X	X	X	X		
P0110-L	Intake Air Temperatur e Circuit Malfunction	A low voltage condition has been detected on the IAT sensor circuit. It is possible the IAT sensor or its interconnect harness may be shorted to ground. To clear the fault code correct the IAT circuit condition and then restart the engine.	X	X	X	X	X	X
P0110-H	Intake Air Temperatur e Circuit Malfunction	A high voltage condition has been detected on the IAT sensor circuit. It is possible the IAT sensor or its interconnect harness may be open or short circuited to battery power. To clear the fault code correct the IAT circuit condition and then restart the engine.	X	X	X	X	X	X

Code	Fault	Description	Applicable Models					
			660	660T	1100	1100T	800	1000
P0115-L	Engine Coolant Temperature Circuit Malfunction	A low voltage condition has been detected on the ECT sensor circuit. It is possible the ECT sensor or its interconnect harness may be shorted to ground. To clear the fault code correct the ECT circuit condition and then restart the engine.	X	X	X	X	X	X
P0115-H	Engine Coolant Temperature Circuit Malfunction	A high voltage condition has been detected on the ECT sensor circuit. It is possible the ECT sensor or its interconnect harness may be open or short circuited to battery power. To clear the fault code correct the ECT circuit condition and then restart the engine.	X	X	X	X	X	X
P0120-L	Throttle Position Sensor "A" Circuit Malfunction	A low voltage condition has been detected on the TPS circuit. It is possible the TPS or its interconnect harness may be open or shorted to ground on the signal circuit. It is also possible the sensor supply voltage may be inadequate. To clear the fault code correct the TPS circuit condition and then restart the engine.	X	X	X	X	X	X
P0120-H	Throttle Position Sensor "A" Circuit Malfunction	A high voltage condition has been detected on the TPS circuit. It is possible the TPS or its interconnect harness may be short circuited to battery power or open on the sensor ground circuit. To clear the fault code correct the TPS circuit condition and then restart the engine.	X	X	X	X	X	X
P0130	02 Sensor Circuit Malfunction (Bank 1 Sensor 1)	A disconnect or intermittent circuit condition has been detected on the 02 sensor circuit. It is possible the 02 sensor or its interconnect harness may be open or shorted to chassis ground. To clear the fault code correct the 02 circuit condition and then restart the engine.	X	X	X	X		
P0201	Injector Circuit (Cylinder 1) Malfunction	A disconnect or intermittent circuit condition has been detected on the injector circuit. It is possible the injector or its interconnect harness may be open or shorted to chassis ground. To clear the fault code correct the injector circuit condition and then restart the engine.			X	X		
P0202	Injector Circuit (Cylinder 2) Malfunction	A disconnect or intermittent circuit condition has been detected on the injector circuit. It is possible the injector or its interconnect harness may be open or shorted to chassis ground. To clear the fault code correct the injector circuit condition and then restart the engine.			X	X		
P0203	Injector Circuit (Cylinder 12) Malfunction	A disconnect or intermittent circuit condition has been detected on the injector circuit. It is possible the injector or its interconnect harness may be open or shorted to chassis ground. To clear the fault code correct the injector circuit condition and then restart the engine.				X		
P0204	Injector Circuit (Cylinder 22) Malfunction	A disconnect or intermittent circuit condition has been detected on the injector circuit. It is possible the injector or its interconnect harness may be open or shorted to chassis ground. To clear the fault code correct the injector circuit condition and then restart the engine.				X		
P0230-L	Fuel Pump Circuit Malfunction	A low voltage condition has been detected on the fuel pump circuit. It is possible the fuel pump or its interconnect harness may be open or shorted to ground. To clear the fault code correct the fuel pump circuit condition and then restart the engine.			X	X		
P0230-H	Fuel Pump Circuit Malfunction	A high voltage condition has been detected on the fuel pump circuit. It is possible the fuel pump or its interconnect harness may be short circuited to battery power. To clear the fault code correct the fuel pump circuit condition and then restart the engine.			X	X		
P0236	Turbo Charger Boost Sensor Performance Malfunction	The ECM has detected an incorrect reading of the intake system pressure sensors. It is possible the barometric pressure sensor or the MAP sensor may be faulty. With the key turned to the ON position and the engine OFF, compare the value of these two sensors, they should be very close. To clear the fault code correct the turbo charger boost sensor performance malfunction condition and then restart the engine.				X		
P0324	Knock Control System Error	Detonation has been detected and cannot be corrected by the knock control system. Fuel will be added, ignition timing will be reduced and the engine RPMs will be Limited. It is possible this is being caused by poor fuel quality, elevated intake and coolant temperatures, low fuel pressure, intake air leaks or after-market engine/exhaust components. To clear the fault code correct the knock control system malfunction condition and then restart the engine.					X	
P0325	Knock Sensor Circuit Malfunction	An out of range voltage condition has been detected on the knock sensor circuit. It is possible the knock sensor or its interconnect harness may be open, shorted to regulated voltage or shorted to ground. To clear the fault code correct the knock sensor circuit condition and then restart the engine.				X	X	
P0325-L	Knock Sensor 1 Circuit Malfunction	A low voltage condition has been detected on the knock sensor circuit. It is possible the knock sensor or its interconnect harness may be shorted to chassis ground. To clear the fault code correct the knock sensor circuit condition and then restart the engine.	X	X		X		
P0325-H	Knock Sensor 1 Circuit Malfunction	A high voltage condition has been detected on the knock sensor circuit. It is possible the knock sensor or its interconnect harness may be shorted to battery voltage. To clear the fault code correct the knock sensor circuit condition and then restart the engine.	X	X		X		
P0326	DTCC Control for Regular Fuel Judge	The ECM has detected low octane fuel, boost pressure will be decreased to try and protect the engine from damage. It is possible the gasoline being used has an inadequate octane level causing the ECM to reduce engine performance. To clear the fault code correct the DTCC control for regular fuel judge condition and then restart the engine.				X		
P0335	Crankshaft Position Sensor "A" Circuit Malfunction	A disconnect or intermittent circuit condition has been detected on the CPS circuit. It is possible the CPS or its interconnect harness may be open or shorted to a constant voltage. To clear the fault code correct the CPS circuit condition and then restart the engine.	X		X	X		

Code	Fault	Description	Applicable Models					
			660	660T	1100	1100T	800	1000
P0340	Camshaft Position Sensor "A" Circuit Malfunction	A disconnect or intermittent circuit condition has been detected on the camshaft position sensor circuit. It is possible the camshaft position sensor or its interconnect harness may be open or shorted to a constant voltage. To clear the fault code correct the camshaft position sensor circuit condition and then restart the engine.	X	X	X	X		
P0350	Ignition Coil Primary/ Secondary Circuit Malfunction	A disconnect or intermittent circuit condition has been detected on the ignition coil circuit. It is possible the ignition coil or its interconnect harness may be open or shorted to chassis ground. To clear the fault code correct the ignition coil circuit condition and then restart the engine.	X	X			X	X
P0351	Ignition Coil "A" Circuit Malfunction	An open circuit condition has been detected on the MAG side cylinder ignition coil circuit. It is possible the ignition coil or its interconnect harness may have an open circuit. To clear the fault code correct the ignition coil circuit condition and then restart the engine.			X	X		
P0352	Ignition Coil "B" Circuit Malfunction	An open circuit condition has been detected on the PTO side cylinder ignition coil circuit. It is possible the ignition coil or its interconnect harness may have an open circuit. To clear the fault code correct the ignition coil circuit condition and then restart the engine.			X	X		
P0500	Vehicle Speed Sensor Circuit Malfunction	A disconnect or intermittent circuit condition has been detected on the speed sensor circuit. It is possible the speed sensor or its interconnect harness may be open or shorted to a constant voltage. To clear the fault code correct the speed sensor circuit condition and then restart the engine.	X	X	X	X		
P0505-L	Idle Air Control Circuit Malfunction	A low voltage condition has been detected on the IAC circuit. It is possible the IAC or its interconnect harness may be open or shorted to ground. To clear the fault code correct the IAC circuit condition and then restart the engine.			X	X		
P0505-H	Idle Air Control Circuit Malfunction	A high voltage condition has been detected on the IAC circuit. It is possible the IAC or its interconnect harness may be short circuited to battery voltage. To clear the fault code correct the IAC circuit condition and then restart the engine.			X	X		
P0506	Idle Control System F/B Malfunction	The ECM has detected that the idle RPM does not match the target idle RPM and the IAC has reached its maximum or minimum feedback position. It is possible the IAC is not moving to the targeted position causing an incorrect air flow or there may be an obstruction/air leak causing the improper idle RPM. To clear the fault code correct the idle control system F/B condition and then restart the engine.				X		
P0780	Gear Position Error	The ECM has not detected a gear change when expected. It is possible the gear position sensor is open or shorted to ground, the reverse actuator, forward relay or reverse relay are faulty or the related interconnect harness may be open or shorted to ground. To clear the fault code correct the gear position sensor error condition and then restart the engine.			X	X		
P0826	Shift Control Switch Malfunction	The ECM received a request to shift for more than 30 seconds. It is possible the switch on the handle bar is stuck or the switch or related interconnect harness is shorted to ground causing the constant signal to be sent to the ECM. To clear the fault code correct the shift control switch malfunction condition and then restart the engine.			X	X		
P1200	Injector Circuit Malfunction	A disconnect or intermittent circuit condition has been detected on the injector circuit. It is possible the injector or its interconnect harness may be open or shorted to chassis ground. To clear the fault code correct the injector circuit condition and then restart the engine.					X	X
P1450-L	Barometric Pressure Sensor Circuit Malfunction	A low voltage condition has been detected on the barometric pressure sensor circuit. It is possible the barometric pressure sensor or its interconnect harness may be shorted to ground or lack the necessary sensor voltage supply. To clear the fault code correct the barometric pressure sensor circuit condition and then restart the engine.	X	X	X	X	X	X
P1450-H	Barometric Pressure Sensor Malfunction	A high voltage condition has been detected on the barometric pressure sensor circuit. It is possible the barometric pressure sensor or its interconnect harness may be open or short circuited to battery voltage on the ground or signal circuit. To clear the fault code correct the barometric pressure sensor circuit condition and then restart the engine.	X	X	X	X	X	X
P1636	Crankshaft Angle Sensor Circuit Malfunction	A disconnect or intermittent circuit condition has been detected on the crankshaft angle sensor circuit. It is possible the crankshaft angle sensor or its interconnect harness may be open or shorted to a constant voltage. To clear the fault code correct the crankshaft angle sensor circuit condition and then restart the engine.					X	X
P1638	Exhaust Valve Position Sensor Circuit Malfunction	An incorrect voltage condition has been detected on the exhaust valve position sensor circuit. It is possible the exhaust valve position sensor or its interconnect harness may be open, shorted to regulated voltage or shorted to chassis ground. To clear the fault code correct the exhaust valve position sensor circuit condition and then restart the engine.					X	X
P1645	Exhaust Valve System Malfunction	The exhaust valve control valve is not working as expected. It is possible the exhaust valve is out of range or it may be physically stuck and unable to move under the control of the ECM. To clear the fault code correct the exhaust valve system malfunction condition and then restart the engine.					X	X
P1649-L	Exhaust Temperatur e Sensor Circuit Malfunction	A low voltage condition has been detected on the exhaust temperature sensor circuit. It is possible the exhaust temperature sensor or its interconnect harness may be shorted to ground. To clear the fault code correct the exhaust temperature sensor circuit condition and then restart the engine.					X	X
P1755	Engine RPM Sensor Circuit Malfunction	A disconnect or intermittent circuit condition has been detected on the engine RPM sensor circuit. It is possible the engine RPM sensor or its interconnect harness may be open or shorted to a constant voltage. To clear the fault code correct the engine RPM sensor circuit condition and then restart the engine.					X	X

Code	Fault	Description	Applicable Models					
			660	660T	1100	1100T	800	1000
P1935	O2 Sensor Circuit Malfunction (Bank 1 Sensor 1)	An incorrect voltage condition has been detected on the 02 sensor circuit. It is possible the 02 sensor or its interconnect harness may be open, shorted to battery voltage or shorted to chassis ground. To clear the fault code correct the 02 circuit condition and then restart the engine.	X					
P2502	Low Battery Voltage	A low battery voltage condition has been detected by the ECM. It is possible the battery may not be able to retain an adequate charge or the charging system is not producing enough current to maintain the battery charge level. To clear the fault code correct the low battery voltage condition and then restart the engine.			X	X		
P3001	Control Module Improper Shutdown (Runaway Det.)	The runaway prevention system has been activated and the engine has been shut down due to an unexpected throttle position based on the current state of the runaway prevention switch. To clear the fault code correct control module improper shutdown condition and then restart the engine.					X	x

ATV/ROV EPS

Code	Fault	Description
C1301	Over Current	The EPS has detected that the internal current is above the allowed set point. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the over current condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1302	Excessive Current Error	The EPS has detected that there is an internal current measurement error. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the excessive current condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1303	Torque Sensor Range Fault	The EPS has detected that there is an internal torque sensor range condition. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the torque sensor range condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1304	Torque Sensor Linearity Fault	The EPS has detected that there is an internal torque sensor linearity condition. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the torque sensor linearity condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1305	Rotor Position Encoder	The EPS has detected that there is an internal rotor position encoder condition. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the rotor position encoder condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1306	System Voltage Low	The EPS has detected a low battery voltage condition due to the voltage being supplied to the EPS being below 11 DC volts. It is possible that this has been caused by a faulty wire harness to the EPS, faulty voltage regulator, inadequate battery voltage or loose battery cable connections. The fault code will be cleared when the battery voltage returns to its specified range.
C1307	System Voltage High	The EPS has detected a high battery voltage condition due to the voltage being supplied to the EPS being above 16 DC volts. It is possible that this has been caused by a faulty wire harness to the EPS, faulty voltage regulator or loose battery cable connections. The fault code will be cleared when the battery voltage returns to its specified range.
C1308	Temperature Above 110°C	The EPS has detected its internal temperature is above 110°C. It is possible that this has been caused by dirt and contaminates preventing the cooling fins from properly cooling the EPS unit. It is recommended to clean the exterior of the EPS unit to allow for proper air flow to cool the EPS unit. The fault code will be cleared when the internal temperature of the EPS drops below 105°C.
C1309	Temperature Above 120°C	The EPS has detected its internal temperature is above 120°C. It is possible that this has been caused by dirt and contaminates preventing the cooling fins from properly cooling the EPS unit. It is recommended to clean the exterior of the EPS unit to allow for proper air flow to cool the EPS unit. The fault code will be cleared when the internal temperature of the EPS drops below 115°C.
C1310	Vehicle Speed High	The EPS has detected the vehicle speed signal received exceeds the maximum speed specification. It is possible that this has been caused by a faulty speed sensor or intermittent signals due to faulty speed sensor wires or main harness wires. The fault code will be cleared when the vehicle speed signal drops below its maximum speed specification.
C1311	Vehicle Speed Low	The EPS has detected the vehicle speed signal received is zero or missing. It is possible that this has been caused by a faulty speed sensor or intermittent signals due to faulty speed sensor wires or main harness wires. The fault code will be cleared when the vehicle speed signal is received by the EPS unit.
C1312	Vehicle Speed Faulty	The EPS has detected the vehicle speed CAN signal received is incorrect or missing. It is possible that this has been caused by a faulty speed sensor or intermittent signals due to faulty speed sensor wires or main harness wires. The fault code will be cleared when the correct vehicle speed signal is received by the EPS unit.
C1313	Engine Speed High	The EPS has detected the RPM signal received exceeds the maximum RPM specification. The fault code will be cleared when the RPM signal drops below its maximum specification.
C1314	Engine Speed Low	The EPS has detected the RPM signal received suddenly dropped below 500 RPM. The fault code will be cleared when the RPM signal received by the EPS unit goes above 500 RPM.
C1315	Engine Speed Faulty	The EPS has detected the RPM CAN signal received is incorrect or missing. It is possible that this has been caused by faulty main harness wires or a faulty ECM. The fault code will be cleared when the correct vehicle speed signal is received by the EPS unit.
C1316	EEPROM Error	The EPS has detected an error in its internal memory. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the EEPROM error condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1317	CAN Bus Error	The EPS has detected a loss of CAN communication between the ECM and the EPS. It is possible that this has been caused by faulty CAN wires or an improper connection at the ECM. To clear the fault code correct the CAN bus error condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1318	Internal CRC Error	The EPS has detected an internal CRC calculation condition. It is possible that this has been caused by a failed reflash due to loss of battery power during reflash programming. To clear the fault code the EPS must be properly programmed.
C1319	Boot Counter Exceeded	The EPS has detected an internal application code condition. It is possible that this has been caused due to an unsuccessful application launch due to intermittent power supplied to the EPS. To clear the fault code correct the boot counter exceeded condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.

Code	Fault	Description
C1320	Incorrect Vehicle Speed to RPM Ratio	The EPS has detected the vehicle speed is greater than 10 MPH and the engine RPM signal is less than 500 RPM. To clear the fault code correct the incorrect vehicle speed to RPM ratio condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1321	Vehicle Speed Erratic	The EPS has detected that the vehicle speed signal is changing at unrealistic rates. It is possible that this has been caused due to a faulty speed sensor, dirty speed sensor or trigger wheel, or an intermittent connection in the main harness. To clear the fault code correct the vehicle speed erratic condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1322	Engine RPM Lost	The EPS has detected that engine RPM signal is above 500 RPM and then drops to zero or goes missing causing an erratic signal. The fault code will be cleared when the correct engine RPM signal is received by the EPS unit.
C1323	"EPS OFF" Gauge Display	The EPS has detected there is no RPM signal but battery power has been applied for 5 minutes. It is possible that this has been caused due to a customer leaving the key in the ON position. The fault code will be cleared when the correct engine RPM signal is received by the EPS unit or by the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1324	Loss of CAN Communication with EPS Unit	The gauge has detected there is no CAN communication with the EPS unit. It is possible that this has been caused due to faulty CAN wire in the main harness or a faulty connection at the EPS. The fault code will be cleared when the correct CAN communication signal is received by the gauge.
C1325	Dual Loss	The EPS unit has detected there is no vehicle speed or engine RPM signal being sent to the EPS unit. It is possible that this has been caused due to the handlebar switch in the OFF position, the engine has stalled with the key in the ON position, a faulty wire harness or the loss of the CAN data signal. The fault code will be cleared when either the vehicle speed or engine RPM signal is received by the EPS unit.
C1326	Rotor Position Encoder	The EPS has detected an internal rotor position encoder variance. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the rotor position encoder condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1327	Voltage Converter Error (Low)	The EPS has detected a low voltage condition on the internal voltage converter. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the voltage converter error condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1328	Voltage Converter Error (High)	The EPS has detected a high voltage condition on the internal voltage converter. It is possible that this has been caused by an internal EPS condition. To clear the fault code correct the voltage converter error condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1329	Internal Data Error	The EPS has detected an internal preloaded data condition. It is possible that this has been caused by an internal EPS condition. To clear the fault code the EPS unit will have to be reprogrammed.

ATV/ROV Instrument Cluster

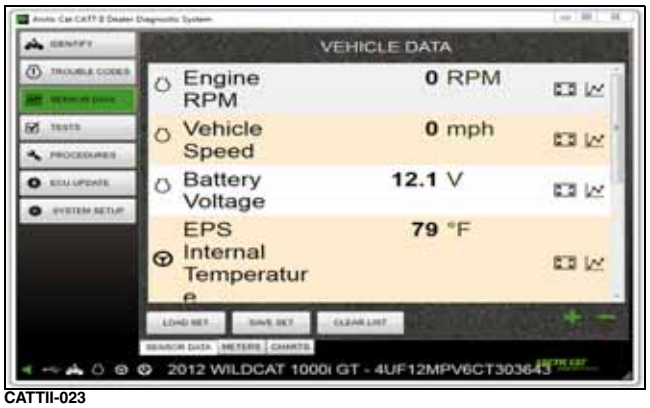
Code	Fault	Description
C1400	Fuel Sender Open	The gauge has detected an open circuit condition in the fuel sender circuit. It is possible that this has been caused due to an open circuit or disconnect in the fuel sender or its interconnect harness. To clear the fault code correct the fuel sender condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1401	Fuel Sender High	The gauge has detected a high voltage condition in the fuel sender circuit. It is possible that this has been caused due to the fuel sender or its interconnect harness shorted to battery power. To clear the fault code correct the fuel sender condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1402	Fuel Sender Low	The gauge has detected a low voltage condition in the fuel sender circuit. It is possible that this has been caused due to the fuel sender or its interconnect harness shorted to chassis ground. To clear the fault code correct the fuel sender condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1403	Input #1 Open	The gauge has detected an open circuit condition in the input #1 circuit. It is possible that this has been caused due to an open circuit or disconnect in the input #1 or its interconnect harness. To clear the fault code correct the input #1 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1404	Input #1 High	The gauge has detected a high voltage condition in the Input #1 circuit. It is possible that this has been caused due to the Input #1 or its interconnect harness shorted to battery power. To clear the fault code correct the Input #1 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1405	Input #1 Low	The gauge has detected a low voltage condition in the Input #1 circuit. It is possible that this has been caused due to the Input #1 or its interconnect harness shorted to chassis ground. To clear the fault code correct the Input #1 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1406	Input #2 Open	The gauge has detected an open circuit condition in the input #2 circuit. It is possible that this has been caused due to an open circuit or disconnect in the input #2 or its interconnect harness. To clear the fault code correct the input #2 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1407	Input #2 High	The gauge has detected a high voltage condition in the Input #2 circuit. It is possible that this has been caused due to the Input #2 or its interconnect harness shorted to battery power. To clear the fault code correct the Input #2 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1408	Input #2 Low	The gauge has detected a low voltage condition in the Input #2 circuit. It is possible that this has been caused due to the Input #2 or its interconnect harness shorted to chassis ground. To clear the fault code correct the Input #2 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1409	Input #3 Open	The gauge has detected an open circuit condition in the input #3 circuit. It is possible that this has been caused due to an open circuit or disconnect in the input #3 or its interconnect harness. To clear the fault code correct the input #3 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1410	Input #3 High	The gauge has detected a high voltage condition in the Input #3 circuit. It is possible that this has been caused due to the Input #3 or its interconnect harness shorted to battery power. To clear the fault code correct the Input #3 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1411	Input #3 Low	The gauge has detected a low voltage condition in the Input #3 circuit. It is possible that this has been caused due to the Input #3 or its interconnect harness shorted to chassis ground. To clear the fault code correct the Input #3 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1412	Input #4 Open	The gauge has detected an open circuit condition in the input #4 circuit. It is possible that this has been caused due to an open circuit or disconnect in the input #4 or its interconnect harness. To clear the fault code correct the input #4 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1413	Input #4 High	The gauge has detected a high voltage condition in the Input #4 circuit. It is possible that this has been caused due to the Input #4 or its interconnect harness shorted to battery power. To clear the fault code correct the Input #4 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1414	Input #4 Low	The gauge has detected a low voltage condition in the Input #4 circuit. It is possible that this has been caused due to the Input #4 or its interconnect harness shorted to chassis ground. To clear the fault code correct the Input #4 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.

Code	Fault	Description
C1415	App Reflash Error	The gauge has detected an unstable application code during or after a reflash. It is possible that this has been caused due to intermittent power or unstable communication during the reflash which has prevented a successful app reflash. To clear the fault code, correct the gauge power or communication condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position., the gauge may need to be reflashed at this time.
C1416	Cal Reflash Error	The gauge has detected an unstable calibration code during or after a reflash. It is possible that this has been caused due to intermittent power or unstable communication during the reflash which has prevented a successful app reflash. To clear the fault code, correct the gauge power or communication condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position, the gauge may need to be reflashed at this time.
C1417	Internal Hardware Fault	The gauge has detected an internal hardware condition. It is possible that this has been caused due to one or more the internal components or systems not responding due to a poor connection between the gauge and the main harness. To clear the fault code correct the internal hardware fault condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1418	Memory Power Fault	The gauge has detected a low voltage condition on the clock memory circuit. It is possible that this has been caused due to a faulty ACC, MEM or memory fuse in the PDM. To clear the fault code correct the memory power fault condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1419	Output #1 Open	The gauge has detected an open circuit condition in the output #1 circuit. It is possible that this has been caused due to an open circuit or disconnect in the output #1 or its interconnect harness. To clear the fault code correct the output #1 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1420	Output #1 High	The gauge has detected a high voltage condition in the output #1 circuit. It is possible that this has been caused due to the output #1 or its interconnect harness shorted to battery power. To clear the fault code correct the output #1 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1421	Output #1 Low	The gauge has detected a low voltage condition in the output #1 circuit. It is possible that this has been caused due to the output #1 or its interconnect harness shorted to chassis ground. To clear the fault code correct the output #1 condition and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1422	Incorrect App Code	The gauge has detected non production application code in the internal app memory space. To clear the fault code reflash the gauge with the appropriate software and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.
C1423	Incorrect Cal Code	The gauge has detected non production calibration code in the internal cal memory space. To clear the fault code reflash the gauge with the appropriate software and then turn the key to the OFF position (for a minimum of 10 seconds) then turn the key to the ON position.

SENSOR DATA Screen

When the SENSOR DATA Screen is opened, the default tab is "**SENSOR DATA**". Under this tab, you can view voltage or physical values for various sensors on the vehicle being serviced.

When this tab is opened, a default list of sensors is displayed. You can add or remove sensors by using the "+" or "-" buttons in the lower-right corner of the screen. Once you have the desired sensors displayed, you can save this list for future use by clicking the "**SAVE SET**" button. You will be prompted to enter a name for the set. To open previously saved sets, click the "**LOAD SET**" button and choose the desired set from the list. Click the "**CLEAR LIST**" button to remove all items from the display.



CATTII-023

A sensor value can be viewed in full-screen mode by clicking the **expand icon** ( ) located at the far right position of a sensor's row. This opens the full screen in a new window. To exit full-screen mode, click the "**X**" in the upper-right corner of the screen.

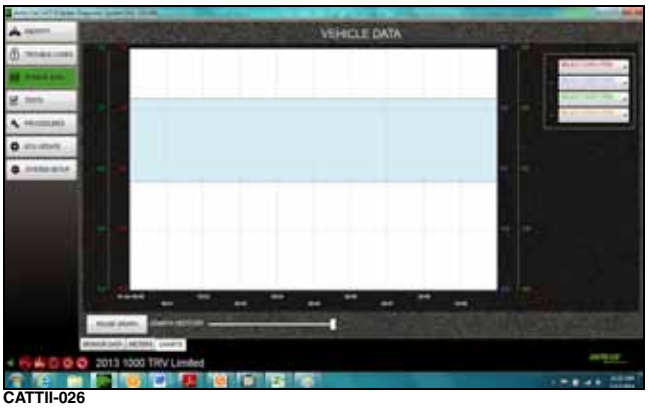
CATTII-024

A sensor can be viewed graphically by clicking the **graph icon** ( ) located at the far-right position of a sensor's row. This will open the "**CHARTS**" tab and allow for up to four sensors to be shown graphically by selecting them from the drop down lists located on the right side of the screen.

With the "**CHARTS**" tab selected, the graph will begin displaying values for the sensors selected. Click the "**PAUSE GRAPH**" to stop displaying values of the sensors. With the graph paused, you can scroll through the data by using the sliding icon in "**GRAPH HISTORY**". Click the "**RESUME GRAPH**" to continue displaying data.

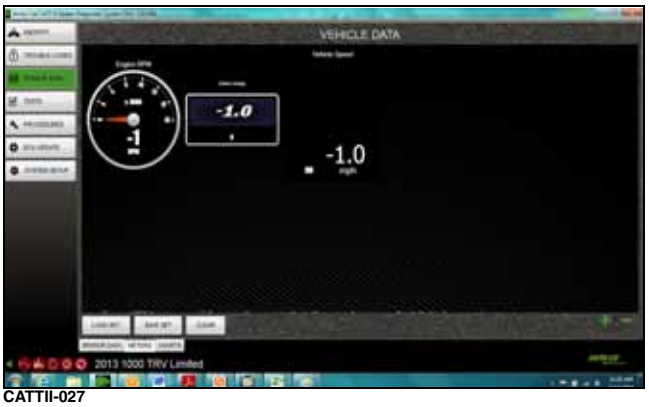
CATTII-025

Each sensor is displayed on a separate axis on the right or left side of the graph. By default, the lower and upper values are set to the minimum and maximum allowable value for the sensor on that axis. To zoom within the default range, highlight the area by clicking and holding the left mouse button on the axis you wish to zoom. Once you have the desired range of values highlighted, release the left mouse button and it will zoom to the selected values. To return to the default range of values, double click within the axis.



CATTII-026

Sensor data can also be displayed with gauges by clicking the "**METERS**" tab. When the "**METERS**" tab is opened, a default list of meters are displayed. This can be changed by clicking the "+" or "-" buttons in the lower right side of the screen. Once you have the desired meters displayed, you can save this list for future use by clicking the "**SAVE SET**" button. Type a name for the set you are saving. To open previously saved sets, click the "**LOAD SET**" button and choose the desired set from the list. Click the "**CLEAR**" button to remove all items from the display.



CATTII-027

■**NOTE: The type of gauge displayed can be changed by double clicking the sensor's gauge.**

Available Sensors

3000/6000/7000

Sensor Name	Sensor Description	Sensor Output Value	Applicable Models		
			3000	C-TEC 2	7000
Engine Run Time	Overall Engine Operating in Hours	Displays the time on the engine in hours.	X	X	X
Vehicle Speed	Miles/Kilometers Per Hour	Displays the track speed in MPH or KMH depending on units selected in user preferences.	X	X	X
Degrees of TPS Open	Angle of Throttle Plate	Displays the amount of throttle valve opening in degrees.	X	X	X
Air Temperature Sensor	Value of Intake Air Temperature	Displays the value of the Intake Air Temperature sensor in °F or °C depending on units selected in user preferences.	X	X	X
Regulated Voltage	Total Voltage Output From Regulator	Displays the output from the regulator to the ECM, this is displayed in volts.		X	
Coolant Temperature Sensor	Value of Coolant Temperature	Displays the value of the coolant temperature sensor in °F or °C depending on units selected in user preferences.	X	X	X
Engine RPM	Revolutions Per Minute	Displays the current engine RPM determined by the signal sent to the ECM from the Crankshaft Position Sensor.	X	X	X
Exhaust Valve Position Voltage	Volts	Displays the exhaust valve position based on servo motor voltage.		X	
ISC	Idle Speed Control (ISC)	Displays the current target position of the ISC determined by the ECM, this value will be displayed in the number of steps of targeted ISC position.	X	X	X
Throttle Position Sensor	Volts	Displays the voltage of the throttle position sensor.		X	
Exhaust Temperature Sensor	Temperature in Degrees	Displays the temperature of the exhaust temperature sensor in °F or °C depending on units selected in user preferences.		X	
Atmospheric/ Ambient Air Pressure	Atmospheric/Ambient Air Pressure	Displays the value of the atmospheric pressure in in.-HG or mb depending on units selected in user preferences.	X	X	X
RPS Position	Runaway Prevention Switch	Displays the position of the RPS switch on the throttle control housing. “On” should be displayed when the throttle is depressed. “Off” should be shown when the throttle is released.		X	
RPS Engine Control	Runaway Prevention Switch	Displays the current status of the RPS Engine Control strategy. If all systems are operating correctly “INACTIVE” will be displayed. If the system determines the engine needs to be shutdown “ACTIVE” will be displayed.	X		X
Reverse Switch Position	On/Off	Displays the position of the reverse switch position located on the throttle control housing. “On” should be displayed when the button is depressed fully. “Off” should be displayed when the switch is not depressed.		X	
Engine Direction	Forward/Reverse	Displays the direction the engine is spinning, “Forward” will be displayed to indicate forward direction of travel.		X	
Gear Position	Forward/Reverse	Displays the current direction of travel dependent on the gear position switch.	X		X
Reverse Denied	ECU denied request or was unsuccessful to switch into reverse	Displays the status of the reverse shift command. “Good” will be displayed if the request was successful. “Denied” will be displayed if the request was unsuccessful, if the request was denied one or more conditions of the request were outside the parameters of the function, engine or vehicle speed may have been outside its parameters.		X	
Coolant Temp Attention	Engine getting warm	Displays the status of the coolant temp attention message. “Good” will be displayed if the engine coolant temperature is within its operating range. “Warm” will be displayed if the engine is running above the normal operating range.		X	
Coolant Temp Warning	Engine hot	Displays the status of the coolant temp warning message. “Good” will be displayed if the engine coolant temperature is within its operating range. “Hot” will be displayed if the engine is running above the warning coolant temperature range.		X	
Engine Overheat	Engine Hot	Displays the current state of the engine coolant temperature. “Good” will be displayed if the engine coolant temperature is below 221°F or 105°C. “Hot” will be displayed if the engine coolant temperature is above 221°F or 105°C.			X
RPMs Limited	Reached the RPM Limit	Displays the status of the RPM limiter. “Good” will be displayed if the RPM limiter is not activated. “Limited” will be displayed if the RPM limiter is active.		X	
Knock Detection PTO Cylinder	Knock Detected on PTO-side Cylinder	Displays the knock detection system for the PTO cylinder. “Good” will be displayed if no knock is detected. “Detected” will be displayed if knock has been detected on the PTO cylinder.		X	
Knock Detection MAG Cylinder	Knock Detected on MAG-side Cylinder	Displays the knock detection system for the MAG cylinder. “Good” will be displayed if no knock is detected. “Detected” will be displayed if knock has been detected on the MAG cylinder.		X	
Registration Status	Yes/No	Displays the PIN registration status. “Not Registered” will be displayed if the PIN has not been entered. “Registered” will be displayed if the PIN has been successfully entered.	X	X	X
Warranty Registration	After 5 hours of operation, engine RPM Limited	Displays the status of the Warranty Registration Limitation. “Limited” will be displayed if the correct PIN has not been entered and the engine hours exceed 5 hours. “Good” will be displayed if the correct PIN has been entered or the engine hours are less than 5 hours.	X	X	X

Sensor Name	Sensor Description	Sensor Output Value	Applicable Models		
			3000	C-TEC 2	7000
Engine Break-In State	1st Level/2nd Level/ Complete	Displays the engine break in status. “1st Level” will be displayed during the initial break in period. “2nd Level” will be displayed during the secondary break in period. “Good” will be displayed once both break in periods have been completed.		X	
ISC Target Idle	RPM	Displays the target idle RPM specified by the ECM.		X	
Relay Battery Voltage	Voltage to ECM	Displays the voltage supplied to the ECM from the main relay. If this voltage is not very close to the Battery Voltage - Key On it may indicate an issue with the circuit.			X
Idle RPM	Target RPM at operating temperature.	Displays the target idle speed determined by the ECM. This value is dependent on engine coolant temperature and will change as the engine reaches operating temperature.	X		X
Low Oil Pressure	Reading from oil pressure switch or an analog sensor at specific RPMs	Displays the current state of oil pressure by inputs to the ECM from the oil pressure switch or the oil pressure sensor. “Good will be displayed if the ECM detects adequate oil pressure and “Low” will be displayed if the ECM detects a low oil pressure condition exists.	X		X
RPM Limit	Rev Limiter Set point	Displays the current RPM Limit set point determined by inputs to the ECM.	X		X
Battery Voltage - Key On	Current Voltage of the Battery	Displays the voltage supplied to the ECM from the key switch. If this voltage is not very close to the Relay Battery Voltage it may indicate an issue with the circuit.	X		X
Air Temperature Sensor Voltage		Displays the voltage sent to the ECM of the Air Temperature Sensor.			X
Manifold Air Pressure Sensor Voltage		Displays the voltage sent to the ECM of the Manifold Air Pressure Sensor.			X
State of Oil Pressure Switch	Reading from oil pressure switch at specific RPM	Displays the position of the oil pressure switch. “Off” will be displayed when there is adequate pressure at the switch which creates an open circuit, there may still be a low oil pressure alarm if the oil pressure sensor detects a low oil pressure reading for current RPM. “On” will be displayed if there is inadequate oil pressure at the switch, which closes the circuit.			X
Intake Manifold Air Pressure	Intake Manifold Air Pressure	Displays the value of the intake air pressure in in.-HG or mb depending on units selected in user preferences.	X		X
Engine State	Engine Stop/Started/ Idle Speed/Part Load/ Throttle Trailing/ Trailing Throttle Fuel cutoff	Displays the current engine state determined by the ECM dependent on inputs to the ECM.	X		X
CPS Synchronization	Crank Position Sensor	Displays the current state of the CPS synchronization strategy determined by the ECM. This is used to determine engine position and timing of spark and injection. “True” will be displayed if the ECM is able to determine the position of the engine. “False” will be displayed if the ECM is not able to determine the position of the engine.	X		X
Maximum Manifold Air Pressure	Maximum pressure reached over life of vehicle	Displays the maximum Manifold Air Pressure measured over the vehicles total run time. Units displayed will be in.-HG or mb depending on units selected in user preferences.	X		X
Maximum RPM	Maximum RPM reached over life of vehicle	Displays the maximum RPM measured over the vehicles total run time.	X		X
Maximum Engine Coolant Temperature	Maximum temperature reached over life of vehicle	Displays the maximum Engine Coolant Temperature measured over the vehicles total run time. Units displayed will be °F or °C depending on units selected in user preferences.	X		X
Maximum Intake Air Temperature	Maximum temperature reached over life of vehicle	Displays the maximum Intake Air Temperature measured over the vehicles total run time. Units displayed will be °F or °C depending on units selected in user preferences.	X		X
TPS %	% of Throttle Opening	Displays the amount of throttle plate opening as a percentage.	X		
Ignition Timing		Displays the current ignition timing value in °CRK.	X		
Run/Stop Switch Position	On/Off	Displays the position of the Run/Stop switch determined by the signal sent to the ECM.	X		
Maximum RPM Hours	Engine run time when maximum RPM was reached	Displays the number or engine hours on the vehicle when the maximum RPM occurred.	X		
Maximum Engine Coolant Temperature Hours	Engine run time when maximum engine coolant temperature was reached	Displays the number or engine hours on the vehicle when the maximum engine coolant temperature was reached.	X		
Maximum Intake Air Temperature Hours	Engine run time when maximum intake air temperature was reached	Displays the number or engine hours on the vehicle when the maximum intake air temperature was reached.	X		
Maximum RPM at Coolant Range 0	Between engine coolant temperatures -30°C and below	Displays the Maximum RPM reached for the engine coolant temperature range shown.	X		
Maximum RPM at Coolant Range 1	Between engine coolant temperatures -30°C and 0°C	Displays the Maximum RPM reached for the engine coolant temperature range shown.	X		
Maximum RPM at Coolant Range 2	Between engine coolant temperatures 0°C and 20°C	Displays the Maximum RPM reached for the engine coolant temperature range shown.	X		
Maximum RPM at Coolant Range 3	Between engine coolant temperatures 20°C and 60°C	Displays the Maximum RPM reached for the engine coolant temperature range shown.	X		

Sensor Name	Sensor Description	Sensor Output Value	Applicable Models		
			3000	C-TEC 2	7000
Maximum RPM at Coolant Range 4	Between engine coolant temperatures 60°C and 120°C	Displays the Maximum RPM reached for the engine coolant temperature range shown.	X		
Maximum RPM at Coolant Range 5	Between engine coolant temperatures 120°C and Above	Displays the Maximum RPM reached for the engine coolant temperature range shown.	X		
Maximum RPM at Coolant Range 0 Hours	Between engine coolant temperatures -30°C and below	Displays the number or engine hours on the vehicle when the maximum RPM for the corresponding engine coolant temperature range occurred.	X		
Maximum RPM at Coolant Range 1 Hours	Between engine coolant temperatures -30°C and 0°C	Displays the number or engine hours on the vehicle when the maximum RPM for the corresponding engine coolant temperature range occurred.	X		
Maximum RPM at Coolant Range 2 Hours	Between engine coolant temperatures 0°C and 20°C	Displays the number or engine hours on the vehicle when the maximum RPM for the corresponding engine coolant temperature range occurred.	X		
Maximum RPM at Coolant Range 3 Hours	Between engine coolant temperatures 20°C and 60°C	Displays the number or engine hours on the vehicle when the maximum RPM for the corresponding engine coolant temperature range occurred.	X		
Maximum RPM at Coolant Range 4 Hours	Between engine coolant temperatures 60°C and 120°C	Displays the number or engine hours on the vehicle when the maximum RPM for the corresponding engine coolant temperature range occurred.	X		
Maximum RPM at Coolant Range 5 Hours	Between engine coolant temperatures 120°C and Above	Displays the number or engine hours on the vehicle when the maximum RPM for the corresponding engine coolant temperature range occurred.	X		
Number or Low Pressure Alarms		Displays the number of times the ECM has detected that the oil pressure was lower than expected.	X		
Engine Temperature Warning	Engine Hot	Displays the current state of the engine coolant temperature. “Good” will be displayed if the engine coolant temperature is below 221°F or 105°C. “Hot” will be displayed if the engine coolant temperature is above 221°F or 105°C.	X		

660/660T/1100/1100T

Sensor Name	Sensor Description	Sensor Output Value	Applicable Models			
			660	660T	1100	1100T
Degrees of TPS Open	Throttle Position Sensor (TPS)	Displays the amount of throttle valve opening in degrees.			X	X
Engine Coolant Temperature	Value of coolant temperature	Displays the value of the coolant temperature sensor in °F or °C depending on units selected in user preferences.	X	X	X	X
MAP Sensor	Manifold Absolute Pressure	Displays the value of the intake air pressure in in.-HG or mb depending on units selected in user preferences.	X	X	X	X
Engine RPM	Revolutions Per Minute	Displays the current engine RPM determined by the signal sent to the ECM from the Crankshaft Position Sensor	X	X	X	X
Vehicle Speed	Miles/Kilometers Per Hour	Displays the track speed in MPH or KMH depending on units selected in user preferences.	X	X	X	X
IAT Sensor	Intake Air Temperature	Displays the value of the Intake Air Temperature sensor in °F or °C depending on units selected in user preferences.	X	X	X	X
TPS %	Throttle Position Sensor (TPS)%	Displays the amount of throttle valve opening in percent open.	X	X		
Idle RPM	Target RPM at operating temperature	Displays the target idle speed determined by the ECM. This value is dependent on engine coolant temperature and will change as the engine reaches operating temperature.	X	X	X	X
Throttle Position Sensor Voltage	Volts	Displays the voltage of the throttle position sensor.	X	X		
Barometric pressure	Value of Barometric Pressure	Displays the value of the barometric pressure in in.-HG or mb depending on units selected in user preferences.	X	X		X
IAC	Idle Air Controller (IAC)	Displays the position of the IAC based on the percentage open.	X	X		
IAC	Idle Air Controller (IAC)	Displays the position of the IAC based on the number of steps.			X	X
Battery Voltage	Current voltage of the battery	Displays the voltage supplied to the ECM from the key switch.	X	X	X	X
Oil Pressure Switch	Position of the Oil Pressure Switch	Displays the position of the oil pressure switch. “Good” will be displayed when there is adequate pressure and “Low” will be displayed if there is inadequate oil pressure.	X	X	X	X
RPS Position	Runaway Prevention Switch	Displays the position of the RPS switch on the throttle control housing. “Throttle Open” should be displayed when the throttle is depressed. “Throttle Closed” should be shown when the throttle is released.	X	X	X	X
Fuel Pump	Current State of the Fuel Pump	Displays the current state of the fuel pump, as it is being controlled by the ECM.	X	X	X	X
Ignition timing advance for #1 cylinder	°CRK	Displays the current ignition timing value in °CRK.	X	X	X	X
Ignition timing advance for #2 cylinder	°CRK	Displays the current ignition timing value in °CRK.			X	X

Sensor Name	Sensor Description	Sensor Output Value	Applicable Models			
			660	660T	1100	1100T
O2 Sensor output voltage	Voltage of Sensor	Displays the voltage of the O2 sensor which is interpreted by the ECM to determine the air to fuel ratio of the exhaust within specified ranges.	X	X	X	X
Fuel injection pulse width for #1 cylinder	MAG-Side Cylinder Primary Injector	Displays the current injector pulse width value in milliseconds.	X	X	X	X
Fuel injection pulse width for #2 cylinder	PTO-Side Cylinder Primary Injector	Displays the current injector pulse width value in milliseconds.			X	X
Calculated IAC flow	Air flow through IAC Circuit	Displays the calculated air flow allowed through the IAC Circuit of the throttle body.	X	X		
Headlight Relay	Headlight Relay Signal	Displays the current state of the headlight relay, as it is being controlled by the ECM.	X	X	X	X
Heater Relay	Handwarmer Heater Relay	Displays the current state of the handwarmer relay, as it is being controlled by the ECM.	X	X		
Fuel Cut	Fuel Delivery Status	Displays whether or not fuel is allowed to be injected. “Cut” will be displayed if fuel injection is not available due to a sensor input to the ECM, “Stop” will be displayed if all systems are working properly and fuel is allowed to be injected.	X	X	X	X
Idle Switch	Position of the Idle Switch	Displays the position of the Idle switch on the throttle control housing. “On” should be displayed when the throttle is depressed. “Off” should be shown when the throttle is released.	X	X		
Main O2 sensor activate signal	State of O2 Sensor	Displays the current state of the O2 sensor activate signal. “Activate” should be displayed when O2 control is being used and “Deactivate” should be shown when the O2 control is not being used.	X	X	X	X
Maximum Manifold Air Pressure	Stored in ECM Memory	Displays the Maximum Measured Manifold Air Pressure value in In.-Hg or mb depending on units selected in user preferences.		X		
Maximum RPM	Maximum Engine RPM	Displays the maximum Engine RPM recorded by the ECM.		X	X	X
Waste gate valve VSV	Position of the valve	Displays the position of the waste gate valve. “On” will be displayed with the valve is open and “Off” will be displayed when the valve is closed.		X		X
ABV VSV relay	Air bypass valve vacuum switching valve	Displays the position of the air bypass valve. “On” will be displayed with the valve is open and “Off” will be displayed when the valve is closed.		X		X
Start Switch Position	Position of the switch	Displays the position of the Start Switch. “On” will be displayed with the switch in the start position and “Off” will be displayed with the key in any other position.			X	X
Engine Run Time	Overall Engine Operating in Hours	Displays the time on the engine in hours.				X
Knock Feedback Control (AKCS)	Amount of ignition timing removed due to engine knock detected.	Displays the amount of ignition timing removed in °CRK due to knock detected by the knock sensor.				X
Fuel injection pulse width for #11 cylinder	MAG-Side Cylinder Secondary Injector	Displays the current injector pulse width value in milliseconds.				X
Fuel injection pulse width for #22 cylinder	PTO-Side Cylinder Secondary Injector	Displays the current injector pulse width value in milliseconds.				X
Regular Judge		Displays the status of the fuel judgment, “On” is displayed if low octane fuel is detected, performance will be reduced, “Off” is displayed if adequate octane fuel is detected.				X

800/1000

Sensor Name	Sensor Description	Sensor Output Value	Applicable Models	
			800	1000
Engine Coolant Temperature	Value of coolant temperature	Displays the value of the coolant temperature sensor in °F or °C depending on units selected in user preferences.	X	X
Engine RPM	Revolutions Per Minute	Displays the current engine RPM determined by the signal sent to the ECM from the Crankshaft Position Sensor.	X	X
IAT Sensor	Intake Air Temperature	Displays the value of the Intake Air Temperature sensor in °F or °C depending on units selected in user preferences.	X	X
Degrees of TPS Open	Throttle Position Sensor (TPS)	Displays the amount of throttle valve opening in degrees.	X	X
Barometric pressure	Value of Barometric Pressure	Displays the value of the barometric pressure in in.-HG or mb depending on units selected in user preferences.	X	X
EGT Sensor	Temperature in Degrees	Displays the temperature of the exhaust temperature sensor in °F or °C depending on units selected in user preferences.	X	X
Exhaust Valve Position Voltage	Volts	Displays the exhaust valve position based on servo motor voltage.	X	X
RPS Position	Runaway Prevention Switch	Displays the position of the RPS switch on the throttle control housing. “On” should be displayed when the throttle is depressed. “Off” should be shown when the throttle is released.	X	X
Engine Run Time	Overall Engine Operating in Hours	Displays the time on the engine in hours.	X	X
Run/Stop Switch Position	Position of the Switch	Displays the position the run/stop switch located on the handlebar. “On” will be displayed when the switch is in the run position and off will be displayed when in the stop position.	X	X

Sensor Name	Sensor Description	Sensor Output Value	Applicable Models	
			800	1000
Ignition timing advance for #1 cylinder	°CRK	Displays the current ignition timing value in °CRK.	X	X
Ignition timing advance for #2 cylinder	°CRK	Displays the current ignition timing value in °CRK.	X	X
Fuel injection pulse width for #1 cylinder	MAG-Side Cylinder Primary Injector	Displays the current injector pulse width value in milliseconds.	X	X
Fuel injection pulse width for #2 cylinder	PTO-Side Cylinder Primary Injector	Displays the current injector pulse width value in milliseconds.	X	X
Knock Control fuel injection pulse width correct for #1	MAG-Side Cylinder Injector Correct	Displays the percent change in injector pulse to correct for knock conditions.	X	
Knock Control fuel injection pulse width correct for #2	PTO-Side Cylinder Injector Correct	Displays the percent change in injector pulse to correct for knock conditions.	X	
Knock Control ignition timing correct for #1	MAG-Side Cylinder Ignition Timing Correct	Displays the reduction in timing to correct for knock conditions.	X	
Knock Control ignition timing correct for #2	PTO-Side Cylinder Ignition Timing Correct	Displays the reduction in timing to correct for knock conditions.	X	
Fuel State	High, Mid and Low	Displays the current fuel state dependent on conditions measured by the ECM.	X	
Maximum RPM	Maximum Engine RPM	Displays the maximum Engine RPM recorded by the ECM.	X	X

ATV/ROV Power Steering

Sensor Name	Sensor Description	Sensor Output Value
EPS Internal Temperature	Internal temperature of the EPS	Displays the internal temperature of the EPS in °F or °C depending on units selected in user preferences.
EPS Internal Current	Current command of the EPS	Displays the amount of current being applied to the EPS motor in AMPs.
EPS Output Torque	Calculated amount of torque to be applied	Displays the amount of torque being applied to the steering system by the EPS motor in ft-lb or N-m depending on the units selected in the user preferences.
EPS Input Torque	Force of input shaft of the EPS unit	Displays the amount of torque being applied to the EPS motor by the user in ft-lb or N-m depending on the units selected in the user preferences.
EPS Calculated Vehicle Speed	EPS Estimated Vehicle Speed	Displays the calculated vehicle speed determined by the EPS in mph or kph depending on the units selected in the user preferences. This value should be close to the vehicle speed displayed on the gauge, if it is not there may be a communication issue between the gauge and the EPS motor.
EPS Calculated Engine Speed	EPS Estimated Engine RPM	Displays the calculated engine speed determined by the EPS in RPM. This value should be close to the RPM displayed on the gauge, if it is not there may be a communication issue between the gauge and the EPS motor.

ATV/ROV ECM

■**NOTE: Sensor availability varies depending on model.**

Sensor Name	Sensor Description	Sensor Output Value
Engine RPM	Revolutions Per Minute	Displays the current engine RPM determined by the signal sent to the ECM from the Crankshaft Position Sensor.
Vehicle Speed	Miles/Kilometers Per Hour	Displays the vehicle speed in MPH or KMH depending on units selected in user preferences.
Battery Voltage	Current voltage of the battery	Displays the current charge of the battery in volts.
Ambient Air Pressure	Value of Sensor	Displays the value of the atmospheric pressure in in.-HG or mb depending on units selected in user preferences. This value is measured by the TMAP sensor in the throttle body.
ISC	Idle Speed Control (ISC)	Displays the current target position of the ISC determined by the ECM. This value will be displayed in the number of steps of the targeted ISC position.
TPS %	Throttle Position Sensor (TPS)%	Displays the amount of throttle plate opening as a percentage.
RPM Limit	Rev Limiter Set point	Displays the current RPM Limit set point determined by inputs to the ECM.
Ignition Timing		Displays the current ignition timing value in °CRK.
Idle RPM	Target RPM at operating temperature	Displays the target idle RPM specified by the ECM. Engine coolant temperature will affect the target idle RPM, if the engine coolant temperature is below the operating temperature the target idle RPM will be higher.
O2 Sensor Voltage Bank #1	Voltage of sensor	Displays the voltage of the O2 sensor which is interpreted by the ECM to determine the air to fuel ratio of the exhaust within specified ranges.
Engine State	Engine Stop/Started/Idle Speed/Part Load/ Throttle Trailing/Trailing Throttle Fuel cutoff	Displays the current engine state determined by the ECM dependent on inputs to the ECM.
Gear Position	P, R, N, H, L	Displays the current location of the transmission dependent on the signal sent to the ECM from the gear position switch.
Run/Stop Switch Position	On/Off	Displays the position of the Run/Stop switch determined by the signal sent to the ECM. Not applicable to ROV vehicles.
CPS Synchronization	Crank Position Sensor	Displays the current state of the CPS synchronization strategy determined by the ECM. This is used to determine engine position and timing of spark and injection. “True” will be displayed if the ECM is able to determine the position of the engine. “False” will be displayed if the ECM is not able to determine the position of the engine.
Degrees of TPS Open	Angle of throttle plate	Displays the position of the TPS in degrees.

Sensor Name	Sensor Description	Sensor Output Value
Engine Run Time	Revolutions Per Minute	Displays the current engine RPM determined by the signal sent to the ECM from the Crankshaft Position Sensor.
4WD Position	Engaged/Disengaged	Displays the current position of the 4WD switch. When “4WD” is displayed the vehicle should be in 4WD, if “2WD” is displayed the vehicle should be in 2WD.
Brake Switch Position	On/Off	Displays the position of the Brake Switch, “On” indicates the switch is depressed and “Off” indicates the switch is not depressed.
Reverse Override Switch	On/Off	Displays the position of the Reverse Override Switch, “On” indicates the switch is depressed and “Off” indicates the switch is not depressed.
Air Temperature Sensor	Value of intake air temperature	Displays the value of the intake air temperature in °F or °C depending on units selected in user preferences.
Coolant Temperature Sensor	Value of coolant temperature	Displays the value of the coolant temperature in °F or °C depending on units selected in user preferences.
Throttle Position Sensor	Volts	Displays the voltage of the throttle position sensor.
Warranty Registration Status	After 5 hours of operation, engine RPM Limited	Displays the status of the Warranty Registration Limitation. “Limited” will be displayed if the correct PIN has not been entered and the engine hours exceed 5 hours. “Good” will be displayed if the correct PIN has been entered or the engine hours are less than 5 hours.
Registration Status	Yes/No	Displays the PIN registration status. “Not Registered” will be displayed if the PIN has not been entered. “Registered” will be displayed if the PIN has been successfully entered.

TESTS Screen

This screen allows the technician to activate or deactivate certain sensors; functions will vary depending on product line and model.

When the TESTS screen is opened for the first time of a session, there will be a warning message displayed. Read and understand the warning; then check "I have read and acknowledge the above WARNING statement and have complied with it" and click the "**OK**" button to continue. Otherwise click the "CANCEL" button which will exit you from the "TESTS" screen.

CATTII-028

When the "**TESTS**" screen is opened, the default tab is "**OUTPUT DRIVER**". This tab shows which output driver tests are available for the vehicle being serviced.

■NOTE: Output driver testing is not available on some models.

Select a test and click the "**ACTIVATE**" button to perform the test. Click the "**RESET ACTIVATE**" button to reset it. Click the "**DEACTIVATE**" button to deactivate the test. Click the "**RESET DEACTIVATE**" button to reset it.

CATTII-029

■NOTE: "DEACTIVATE" and "RESET DEACTIVATE" may not be applicable to the vehicle being serviced.

Select the "**RESET**" tab to view the reset options. Reset an item by clicking its corresponding button.

CATTII-030

■NOTE: The reset function is not available on some models.

Output Drivers Tab

C-TEC 2

Test Name	Test Description	Test Instructions
Fuel Injector - Cylinder 1 (MAG-Side Cylinder)	Deactivates the MAG-side injector with the engine running. If an engine is running on one cylinder this can aid in determining which cylinder is not running.	With the engine running, click the "**DEACTIVATE"** button. This will deactivate the cylinder until the **"RESET"** button is clicked or until the engine is shut off and the CATT II Tool is disconnected.
Fuel Injector - Cylinder 2 (PTO-Side Cylinder)	Deactivates the PTO-side injector with the engine running. If an engine is running on one cylinder this can aid in determining which cylinder is not running.	With the engine running, click the "**DEACTIVATE"** button. This will deactivate the cylinder until the **"RESET"** button is clicked or until the engine is shut off and the CATT II Tool is disconnected.
Oil Pump	Cycles the oil pump 5 times. The oil pump is a plunger style oil pump that will repeatedly activate/deactivate. Listen for an audible sound each time the pump is activated. **NOTE: The 2-pin external power connector needs to be plugged in to supply power to the oil pump.**	With the engine off and the 2-pin external power connector plugged in, click the "**ACTIVATE**" button and listen to hear the pump. Once the test has been completed click the "**RESET**" button.
Exhaust Servo	Verifies the position of the exhaust servo motor. Before controlling the position of the servo motor the ECM must learn the working range of the valve. This can be done by clicking "Cycle Servo Full Valve Range". **NOTE: The 2-pin external power connector needs to be plugged in to supply power to the exhaust servo motor.**	With the engine off and the 2-pin external power connector plugged in, click the **"Cycle Servo Full Valve Range"** button to learn the range of the servo motor. Next click the "**Set Valve to Fully Open"** button; this will open the exhaust valves. Next click the **"Set Valve to Full Closed"** button, this will allow the valves to return to the closed position. Once the test has been completed click the **"RESET"** button. **NOTE: Before testing is started, verify the free length of the servo cables.**
Idle Speed Controller (ISC)	Verifies the functionality of the ISC stepper motor.	With the engine off and the 2-pin external power connector plugged in, click the "**Cycle ISC Full Range"** button to learn the range of the ISC. Next click the **"Open Valve"** button; this will open the ISC. Next click the "**Close Valve"** button, this will close the ISC. Once the test has been completed click the **"RESET"** button. When the ISC is moving listen for an audible noise to detect the movement. To view the target position of the ISC select the ISC on the gauge display.

7000

Test Name	Test Description	Test Instructions
Ignition Coil - Cylinder #3 (MAG-Side Cylinder)	Repeatedly activates the MAG-side ignition coil for the specified test interval. Once the test has completed, click the **"RESET"** button before proceeding with the next test. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, using an appropriate spark tester, click the **"ACTIVATE"** button. There will be multiple triggers of the ignition coil, this will happen very rapidly. Once the test has been completed click the **"RESET"** button.
Ignition Coil - Cylinder #2 (Center Cylinder)	Repeatedly activates the center cylinder ignition coil for the specified test interval. Once the test has completed, click the **"RESET"** button before proceeding with the next test. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, using an appropriate spark tester, click the **"ACTIVATE"** button. There will be multiple triggers of the ignition coil, this will happen very rapidly. Once the test has been completed click the **"RESET"** button.
Ignition Coil - Cylinder #1 (PTO-Side Cylinder)	Repeatedly activates the PTO-side ignition coil for the specified test interval. Once the test has completed, click the **"RESET"** button before proceeding with the next test. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, using an appropriate spark tester, click the **"ACTIVATE"** button. There will be multiple triggers of the ignition coil, this will happen very rapidly. Once the test has been completed click the **"RESET"** button.
Fuel Pump	Activates the fuel pump for the specified test interval. Listen for the fuel pump building pressure. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the **"ACTIVATE"** button, the fuel pump will cycle on and off during the specified test interval. Fuel pressure should build to the specified pressure. Once the test has been completed click the **"RESET"** button.
Cooling Fan	Activates the cooling fan from the ECM for a specified test interval. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the **"ACTIVATE"** button, the cooling fan will cycle on and off during the specified test interval. Listen to hear the fan, there will be an audible noise heard. Once the test has been completed click the **"RESET"** button.
Vehicle Speed Test	Displays the selected speed on the gauge. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the one of the three available speeds to be displayed, the units displayed will be determined by the units the gauge is set to. Once the test has completed click the **"RESET"** button. This test verifies the gauge is receiving the correct signal to display speed.
Engine RPM Test	Displays the selected RPM on the gauge. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the one of the two available RPM's to be displayed. Once the test has completed click the **"RESET"** button. This test verifies the gauge is receiving the correct signal to display engine RPM.
Headlight Relay	Repeatedly activates the headlight relay. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the **"ACTIVATE"** button, the headlights will turn of and off for the specified test interval. Once the test has completed click the **"RESET"** button. This verifies the signal from the ECM is activating the relay located in the PDM, the wiring from the PDM to the headlight bulbs and the headlight bulbs.

Test Name	Test Description	Test Instructions
Forward Shift Relay	Activates the forward shift relay. **NOTE: The gear shift actuator will also activate if connected to the vehicle harness. NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the **"ACTIVATE"** button, if not already in forward gear it will shift into forward gear. Once the test has completed click the **"RESET"** button. This verifies the signal from the ECM is activating the relay located in the PDM, the wiring from the PDM to the gear shift actuator and the gear shift actuator.
Reverse Shift Relay	Activates the reverse shift relay. **NOTE: The gear shift actuator will also activate if connected to the vehicle harness. NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the **"ACTIVATE"** button, if not already in reverse gear it will shift into reverse gear. Once the test has completed click the **"RESET"** button. This verifies the signal from the ECM is activating the relay located in the PDM, the wiring from the PDM to the gear shift actuator and the gear shift actuator.
Idle Speed Controller (ISC)	Repeatedly cycles the ISC stepper motor for the specified test interval. Listen for the ISC valve to rotate from fully open to fully closed. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the key in the ON position and the engine off, click the **"ACTIVATE"** button, listen to hear the ISC stepper motor moving. Once the test has been completed click the **"RESET"** button. This test verifies the operation and function of the ISC stepper motor. To view the target position of the ISC select the ISC on the gauge display.

1100 Turbo Models

Test Name	Test Description	Test Instructions
SLRN Reset	Resets the learned position adjustment of the IAC.	Click the "**ACTIVATE**" button and wait for the test to complete.

ATV/ROV

■NOTE: Sensor availability varies depending on model.

■NOTE: Output Driver Tests are only available on vehicles with ECM diagnostic capability.

Test Name	Test Description	Test Instructions
Fuel Pump	Activates the fuel pump for the specified test interval. Listen for the fuel pump building pressure. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off click the "**ACTIVATE**" button, the fuel pump will cycle on and off during the specified test interval. Fuel pressure should build to the specified pressure. Once the test has been completed click the "**RESET**" button.
Cylinder #1 Fuel Injector	Activates the Cylinder #1 fuel injector for the specified test interval. Once the test has completed, click the "**RESET**" button before proceeding with the next test. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	**Warning: Whenever any maintenance or inspection is performed on the fuel system during which there may be fuel leakage, there should be no welding, smoking, open flames, etc., in the area.**
Cylinder #2 Fuel Injector	Activates the Cylinder #2 fuel injector for the specified test interval. Once the test has completed, click the "**RESET**" button before proceeding with the next test. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	**Warning: Whenever any maintenance or inspection is performed on the fuel system during which there may be fuel leakage, there should be no welding, smoking, open flames, etc., in the area.**
Cylinder #1 Ignition Coil	Repeatedly activates the Cylinder #1 ignition coil for the specified test interval. Once the test has completed, click the "**RESET**" button before proceeding with the next test. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off using an appropriate in line spark tester, click the "**ACTIVATE**" button. There will be multiple triggers of the ignition coil, this will happen very rapidly. Once the test has been completed click the "**RESET**" button.
Cylinder #2 Ignition Coil	Repeatedly activates the Cylinder #2 ignition coil for the specified test interval. Once the test has completed, click the "**RESET**" button before proceeding with the next test. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off using an appropriate in line spark tester, click the "**ACTIVATE**" button. There will be multiple triggers of the ignition coil, this will happen very rapidly. Once the test has been completed click the "**RESET**" button.
Cooling Fan #1 (Left Side) Primary	Activates the cooling fan from the ECM for a specified test interval. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off click the "**ACTIVATE**" button, the cooling fan will cycle on and off during the specified test interval. Listen to hear the fan, there will be an audible noise heard. Once the test has been completed click the "**RESET**" button.
Cooling Fan #2 (Right Side) Secondary	Activates the cooling fan from the ECM for a specified test interval. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off click the "**ACTIVATE**" button, the cooling fan will cycle on and off during the specified test interval. Listen to hear the fan, there will be an audible noise heard. Once the test has been completed click the "**RESET**" button.
ISC	Repeatedly cycles the ISC stepper motor for the specified test interval. Listen for the ISC valve to rotate from fully open to fully closed. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off click the "**ACTIVATE**" button, listen to hear the ISC stepper motor moving. Once the test has been completed click the "**RESET**" button. This test verifies the operation and function of the ISC stepper motor. To view the target position of the ISC select the ISC on the gauge display.
Vehicle Speed Test	Displays the selected speed on the gauge. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off click the one of the three available speeds to be displayed, the units displayed will be determined by the units the gauge is set to. Once the test has completed click the "**RESET**" button. This test verifies the gauge is receiving the correct signal to display speed.
Engine RPM Test	Displays the selected RPM on the gauge. **NOTE: To start the vehicle after activating this test, turn the key off until it has disconnected from the tool prior to starting.**	With the engine off click the one of the two available RPMs to be displayed. Once the test has completed click the "**RESET**" button. This test verifies the gauge is receiving the correct signal to display engine RPM.

ATV/ROV Reset Tab

Tab	Function	Description
Reset TPS	Resets the Degrees of TPS Open to Zero. This reset should be used when the TPS has been adjusted or replaced and then set according to the idle voltage specification.	Once the TPS has been adjusted to the specified voltage, with the key in the ON position, click the "**Reset TPS**" button, then turn the key off when prompted. Wait for power latch before turning the key back on to allow the process to complete.
Reset ISA	Resets the ISC's allowable area of travel. This reset should be used when the ISC is replaced or when an improper idle condition exists.	With the key in the ON position click the "**Reset ISA**" button, then turn the key off when prompted. Wait for power latch before turning the key back on to allow the process to complete.

PROCEDURES Screen

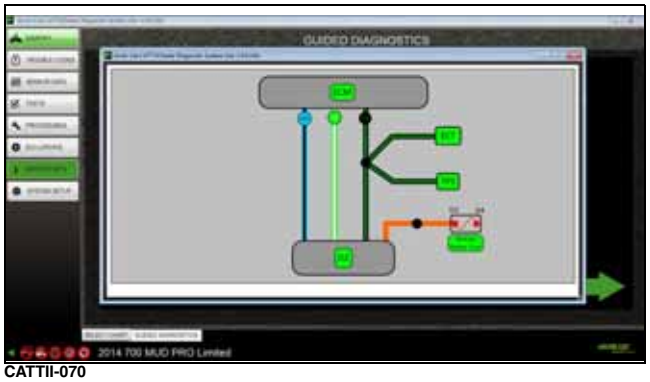
When you open the PROCEDURES screen, the default tab is "**SELECT CHART**". From this tab you can view the available procedures for the vehicle selected. To start the procedure click on the code.

CATTII-068

Once you have opened a procedure you will switch to the "**GUIDED DIAGNOSTICS**" tab and be taken through a number of tests to help determine the root cause of a diagnostic trouble code. These steps and test must be followed exactly to ensure accurate test results.

CATTII-069

If there are images or wire diagrams available you can click on the button in the lower portion of the screen.



CATTII-070

When the "**VEHICLE REGISTRATION**" tab is opened, you can register the Point of Sale Registration PIN. **This function is not available on all models.** If the vehicle PIN has not been programmed into the vehicle, click the "**CONTINUE**" button to proceed.

CATTII-031

Enter the PIN supplied by Arctic Cat for the vehicle; click the "**CONTINUE**" button or click the "**CANCEL**" button to stop the vehicle registration process at any time. The vehicle PIN will be supplied once the vehicle has been registered to the end customer.

CATTII-032

Before continuing, make sure the vehicle's battery is fully charged and the key is turned to the "**ON**" position. If the battery is not fully charged and/or the key is not turned on, the following screen will appear. Click the "**OK**" button and turn the key to the ON position.

CATTII-033

Turn the key to the "**OFF**" position and wait for the next prompt.

CATTII-034

If the key is not turned off shortly, the following screen will appear. Click the "**OK**" button to return to the vehicle registration page.

CATTII-035

Once the key is turned off, the following screen will appear. Turn the key to the "**ON**" position and wait for the next prompt.

CATTII-036

If the key is not turned on shortly, the following screen will appear. Click the "**OK**" button to return to the vehicle registration tab.

CATTII-037

If an incorrect PIN has been entered, the following screen will appear. Click the "**OK**" button to return to the vehicle registration tab.

CATTII-038

If the correct PIN has been entered, the following screen will appear. Click the "**OK**" button to finish the registration process and continue.

CATTII-039

Specific Procedures - 6000

Injector Replacement Tab

CAUTION

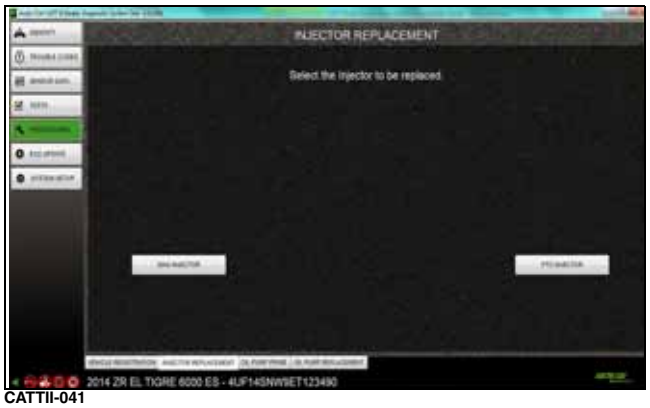
If an injector needs to be replaced, the following procedure must be completed using CATT II or engine damage may occur.

When the "**INJECTOR REPLACEMENT**" tab is opened, the following screen will be displayed. To continue with an injector replacement, click "**CONTINUE**". If you accessed this screen inadvertently, click on the correct page or tab to exit.

CATTII-040

Click "**MAG INJECTOR**" or "**PTO INJECTOR**" depending on which injector is being replaced.

■**NOTE: If both injectors are being replaced, this procedure must be completed separately for each injector.**



CATTII-041

Once the injector is selected, you will be prompted to enter the VIN of the vehicle being serviced and the injector tag descriptions for lines A and B as shown. Click "**CONTINUE**" to update the ECM's injector ID.

CATTII-042

Once the ECM injector ID update has been completed, the following screen will be displayed. To exit this procedure, click on another screen or tab.

CATTII-043

Oil Pump Prime Tab

CAUTION

The oil pump prime procedure is used to evacuate air from the oil lines after an engine or oil pump service. Failure to perform this procedure may cause engine damage.

CAUTION

The engine should be run to operating temperature to remove any excessive oil from the engine. Failure to do so may cause spark plug fouling.

When the "**OIL PUMP PRIME**" tab is opened, the following screen will be displayed. To continue with an oil pump prime, click "**CONTINUE**". If you accessed this screen inadvertently, click on the correct page or tab to exit.

CATTII-044

Once you click the "**CONTINUE**" button, the following screen will be displayed. The oil pump will activate to evacuate air from its lines. If air still exists in the lines after the oil prime function has been completed, it may be necessary to prime the oil pump again. Click the "**RETRY**" button to activate the oil pump prime function.

CATTII-045

Oil Pump Replacement Tab

CAUTION

If an oil pump needs to be replaced, the following procedure must be completed using CATT II or engine damage may occur.

When the "**OIL PUMP REPLACEMENT**" tab is opened the following screen will be displayed. To continue with an oil pump replacement, click "**CONTINUE**". If you accessed this screen inadvertently, click on the correct page or tab to exit.

CATTII-046

You will be prompted to enter the VIN of the vehicle being serviced and the oil pump tag descriptions for lines A and B as shown. Click "**CONTINUE**" to update the ECM's oil pump ID.

CATTII-047

Once the ECM oil pump ID update has been completed, the following screen will be displayed. To exit this procedure, click on another screen or tab.

CATTII-048

■**NOTE: Once the oil pump replacement procedure has been completed, refer to the Oil Pump Prime procedure.**

ECU UPDATE Screen

If there is an ECU update available, the following screen will appear automatically once the vehicle identification has been completed. Click the "**CONTINUE**" button to download the update to the ECU.

CATTII-049

A prompt to log in will appear. Enter your Cat Tracker user name and password; then click the "**CONTINUE**" button to log in and proceed with the download.

CATTII-050

Before the ECU update can begin, the entire file will be downloaded to your computer prior to uploading to the ECU. The following warning message will appear. Read and understand the warning message and perform any necessary tasks; then click the "**OK**" button to continue.

CATTII-051

When the progress bar reaches 100%, the following screen will appear. Turn the key off and wait for the next prompt.

CATTII-052

If the key is not turned off, the following screen will appear. Click the "**OK**" button to return to the "**IDENTIFY**" page.

CATTII-053

Once the key is turned off, the following screen will appear. Turn the key on to complete the procedure.

CATTII-054

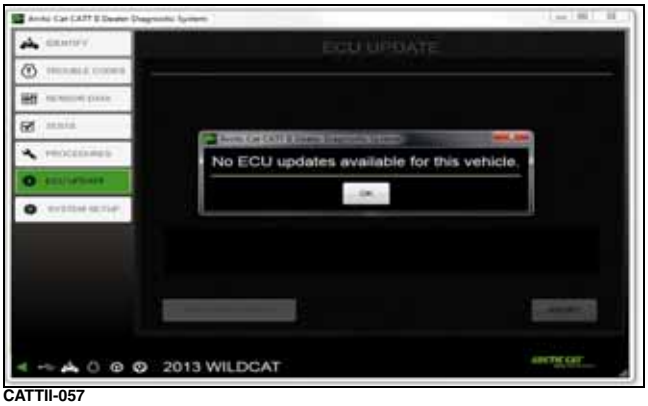
If the key is not turned on, the following screen will appear. Click the "**OK**" button to return to the "**IDENTIFY**" page.

CATTII-055

Once the key is turned on, the following screen will appear. Click the "**OK**" button to complete the update.

CATTII-056

If the "**ECU UPDATE**" screen is opened manually and there are no updates available, the following screen will be shown. Click the "**OK**" button to return to the "**IDENTIFY**" screen.

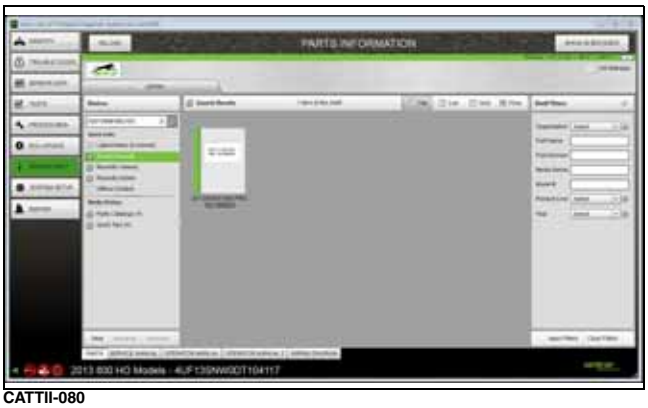


CATTII-057

■**NOTE: If an update is available, refer to the beginning of this section for instruction.**

SERVICE INFO Screen

When you open the SERVICE INFO screen the default tab is the "**PARTS**" tab, you can view the parts diagram for the vehicle you have identified if the VIN number was provided through the AUTO IDENTIFICATION or continue with VIN IDENTIFICATION process. You will be automatically signed in to Documoto, as a generic CATT II user. Your access will be limited to parts manuals with no pricing information or shopping cart abilities. If the vehicle was manually identified using the drop downs, you will be taken to the home page of Documoto.

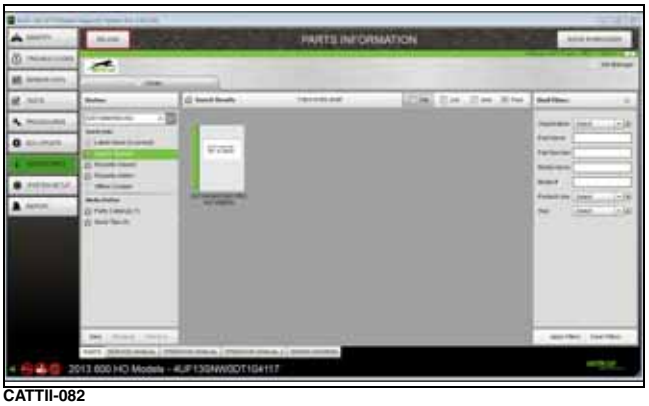


CATTII-080

Once Documoto has loaded, only the parts manual for the vehicle identified appears. This is due to a search query for the model number of the vehicle. To navigate to another parts manual, clear the search term in the upper left hand corner and all available manuals will be available.

CATTII-081

To return to the parts manual for the vehicle identified, click the "**RELOAD**" button in the upper left corner.



CATTII-082

Documoto requires a minimum screen resolution of 1280 x 800. If your screen does not show all information near the bottom of the screen, you have the option of showing the current vehicle parts manual in an Internet browser. Click the "**SHOW IN BROWSER**" button at the top right of the screen to open your Internet browser. It will automatically open to Documoto for the vehicle identified.

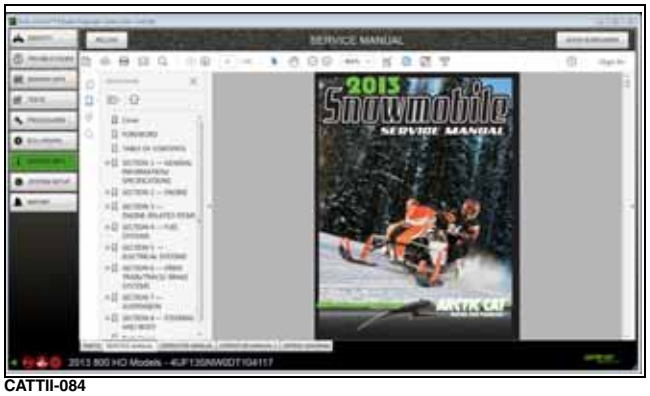
■**NOTE: This feature can be accessed with or without being connected to the vehicle, if not connected to the vehicle identify the vehicle by manually entering the 17 character VIN and navigate to the appropriate screen.**

CATTII-083

Under the "**SERVICE MANUAL**" tab, you can view the appropriate service manual for the vehicle that has been identified. Once the tab has been clicked on, the file will be downloaded and cached for future retrieval, this may take several minutes the first time the manual is downloaded.

■**NOTE: There may be more than one manual available for the vehicle identified.**

■**NOTE: This feature can be accessed with or without being connected to the vehicle, if not connected to the vehicle identify the vehicle by manually entering the 17 character VIN and navigate to the appropriate screen.**

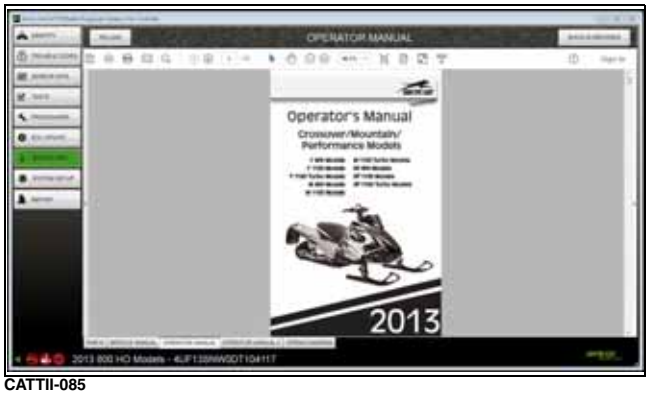


CATTII-084

Under the "**OPERATOR MANUAL**" tab, you can view the appropriate operator manual for the vehicle that has been identified. Once the tab has been clicked on, the file will be downloaded and cached for future retrieval, this may take several minutes the first time the manual is downloaded.

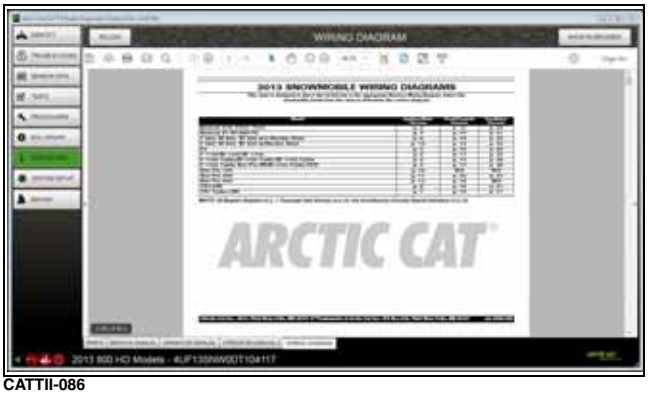
■**NOTE: There may be more than one manual available for the vehicle identified.**

■**NOTE: This feature can be accessed with or without being connected to the vehicle, if not connected to the vehicle identify the vehicle by manually entering the 17 character VIN and navigate to the appropriate screen.**



CATTII-085

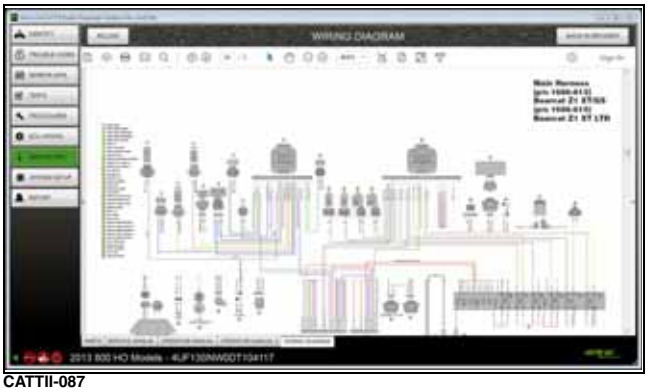
Under the "**WIRING DIAGRAM**" tab, you can view the appropriate wiring diagram for the year of the vehicle that has been identified. Once the tab has been clicked on, the file will be downloaded and cached for future retrieval, this may take several minutes the first time the manual is downloaded.



CATTII-086

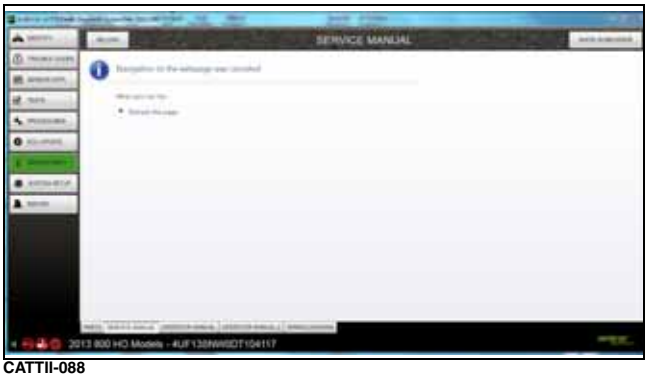
Next, you can click on the appropriate diagram page you would like to view.

■**NOTE: This feature can be accessed with or without being connected to the vehicle, if not connected to the vehicle identify the vehicle by manually entering the 17 character VIN and navigate to the appropriate screen.**



CATTII-087

If you receive the following error message when trying to open a service manual, operator manual or wiring diagram, Click Here for instructions on configuring your Internet browser to allow PDF's to be opened within a browser.



CATTII-088

■**NOTE: All manuals can be displayed in your Internet browser by clicking the "SHOW IN BROWSER" button located in the upper right corner.**

CATTII-089

CATTII-060

SYSTEM SETUP Screen

When you open the SYSTEM SETUP screen, the default tab is "**DEALER INFORMATION**". From this tab, you can view and edit your contact information. If there are changes made, click the "**SAVE**" button before exiting this tab.

CATTII-058

Under the "**SYSTEM CONFIGURATION**" tab, you can view your system configuration details. This information cannot be edited.

CATTII-059

Under the "**PREFERENCES**" tab, the language and unit preferences can be viewed or edited. To edit, select your preferences from the drop down lists and click the "**SAVE & RESTART**" button to save the changes. The CATT II will close and restart with your new preferences.

REPORTS Screen

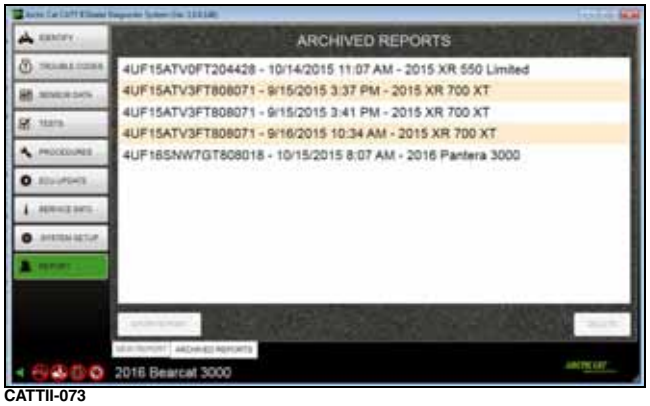
When you open the "**REPORTS**" screen and you are connected to a vehicle, the default tab is "**NEW REPORT**". The software will then collect all information available from the vehicle's ECUs in preparation of building the report. While the information is being collected you can enter the vehicle miles and any notes about the vehicle you would like attached to the report.

CATTII-071

Once the data has been collected you can choose to create a "**CUSTOMER REPORT**" or a "**DEALER REPORT**". The "**CUSTOMER REPORT**" will display the vehicle identification information, any notes made in the previous screen, any active or inactive trouble codes and the freeze frame information for those trouble codes. The "**DEALER REPORT**" will include all of the same information as the "**CUSTOMER REPORT**" along with current sensor data values for all sensors.

CATTII-072

Once the report has been created a copy can be saved locally within the software by clicking the "**ARCHIVE BUTTON**". These reports will be saved under the "**ARCHIVED REPORTS**" tab for viewing at a future time.



CATTII-073

The report can also be saved to the PC in a location of the user's choice in one of the following formats, PDF, Word or Excel by clicking the Export Button.

CATTII-074

Updating the Software

Each time you open the CATT II software, it will automatically check for updates. If an update is found, the following screen will be shown.

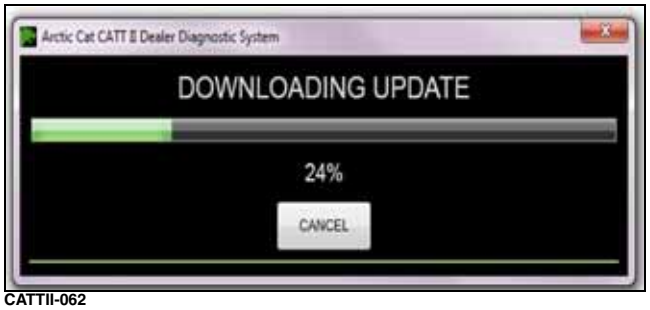
CATTII-061

■**NOTE: Arctic Cat recommends always updating to the latest version to allow access to the latest features and models.**

Select either "**YES**" or "**NO**" to continue.

If "**YES**" is selected, the update will begin. Wait for the update to download.

Once the update is downloaded, the installation process must be performed again. The setup wizard will start automatically once the update has finished downloading. Refer to the "Installing the Software" portion of this manual for instructions on how to reinstall.



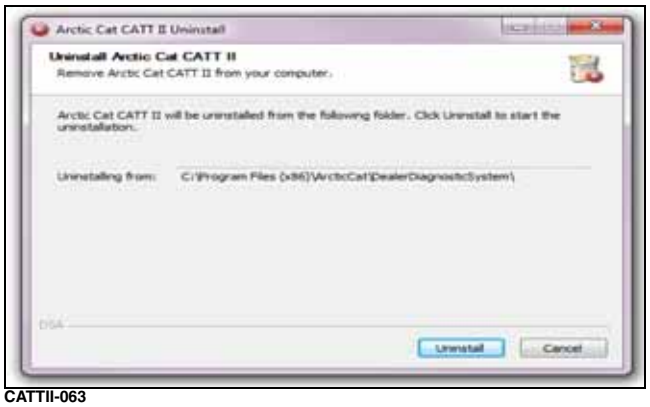
CATTII-062

If "**NO**" is selected, the update window will close and this update screen will appear upon opening the next software session.

Uninstalling the Software

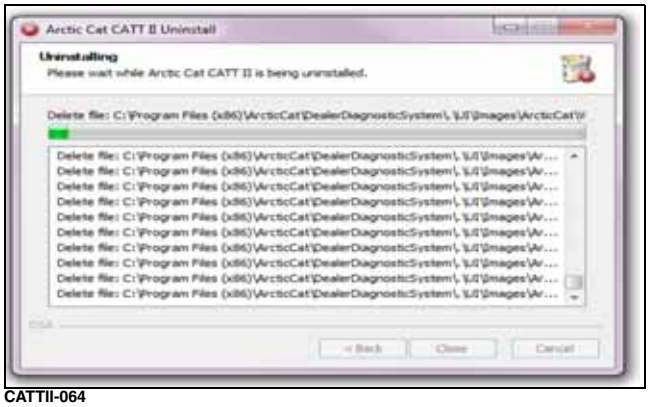
To begin the uninstall process, locate the "**ArcticCat**" folder using Windows Explorer or by opening "**My Computer**" and finding the file in the location you have saved it. Open the "**ArcticCat**" folder; then open the "**DealerDiagnosticSystem**" folder. Double click the "**UNINSTALL**" application to perform the uninstall process.

The uninstall application will open the following window. Click the "**UNINSTALL**" button to begin uninstalling Arctic Cat CATT II.

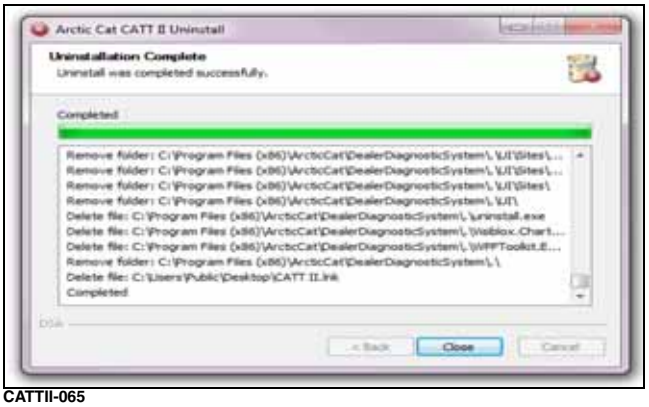


CATTII-063

The next screen will show the progress of the uninstall. Wait while Arctic Cat CATT II is uninstalled.



CATTII-064



CATTII-065

The following screen will be displayed when the uninstall process is complete. Click the "**CLOSE**" button to close the uninstall application.

NOTES