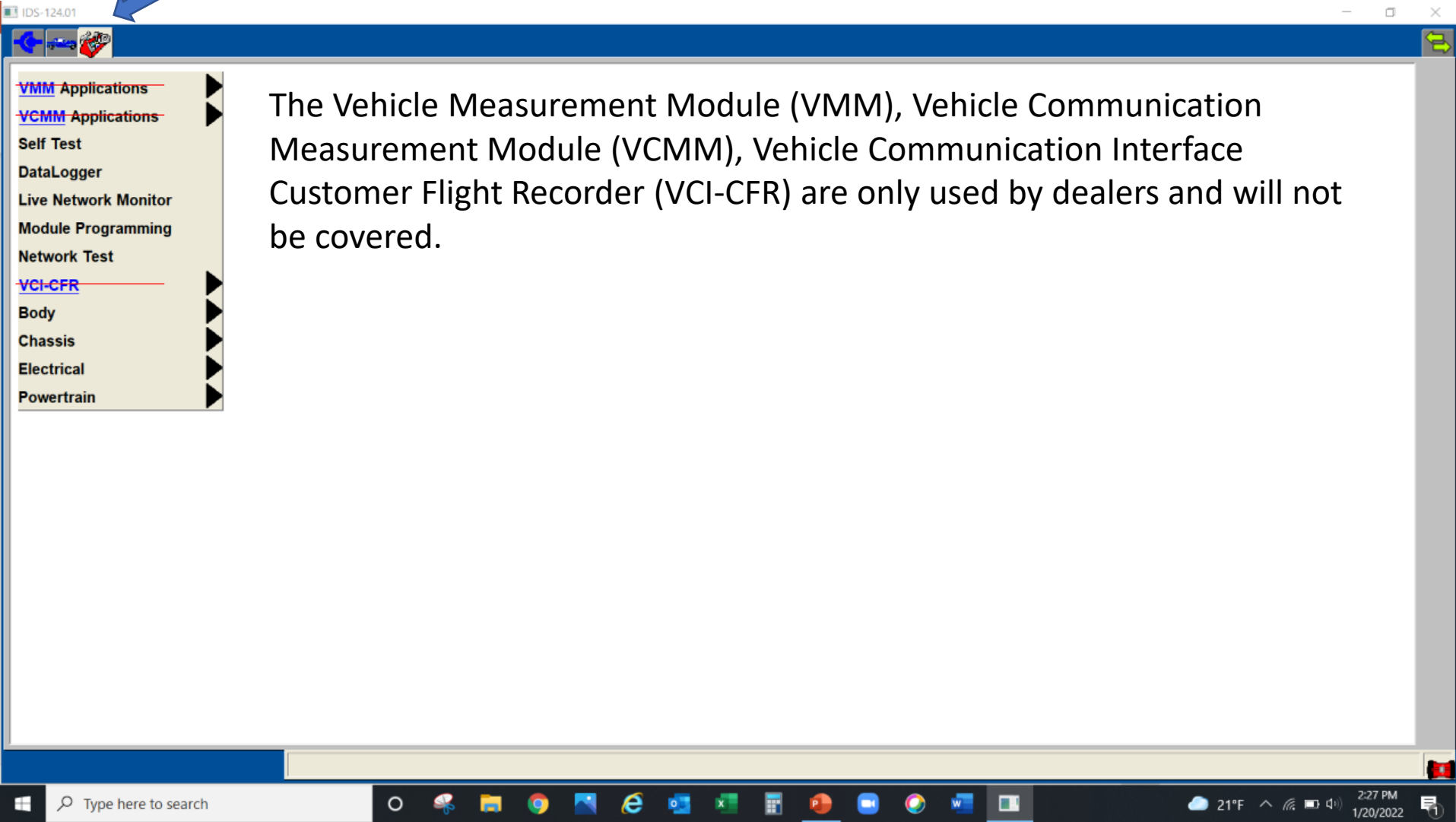


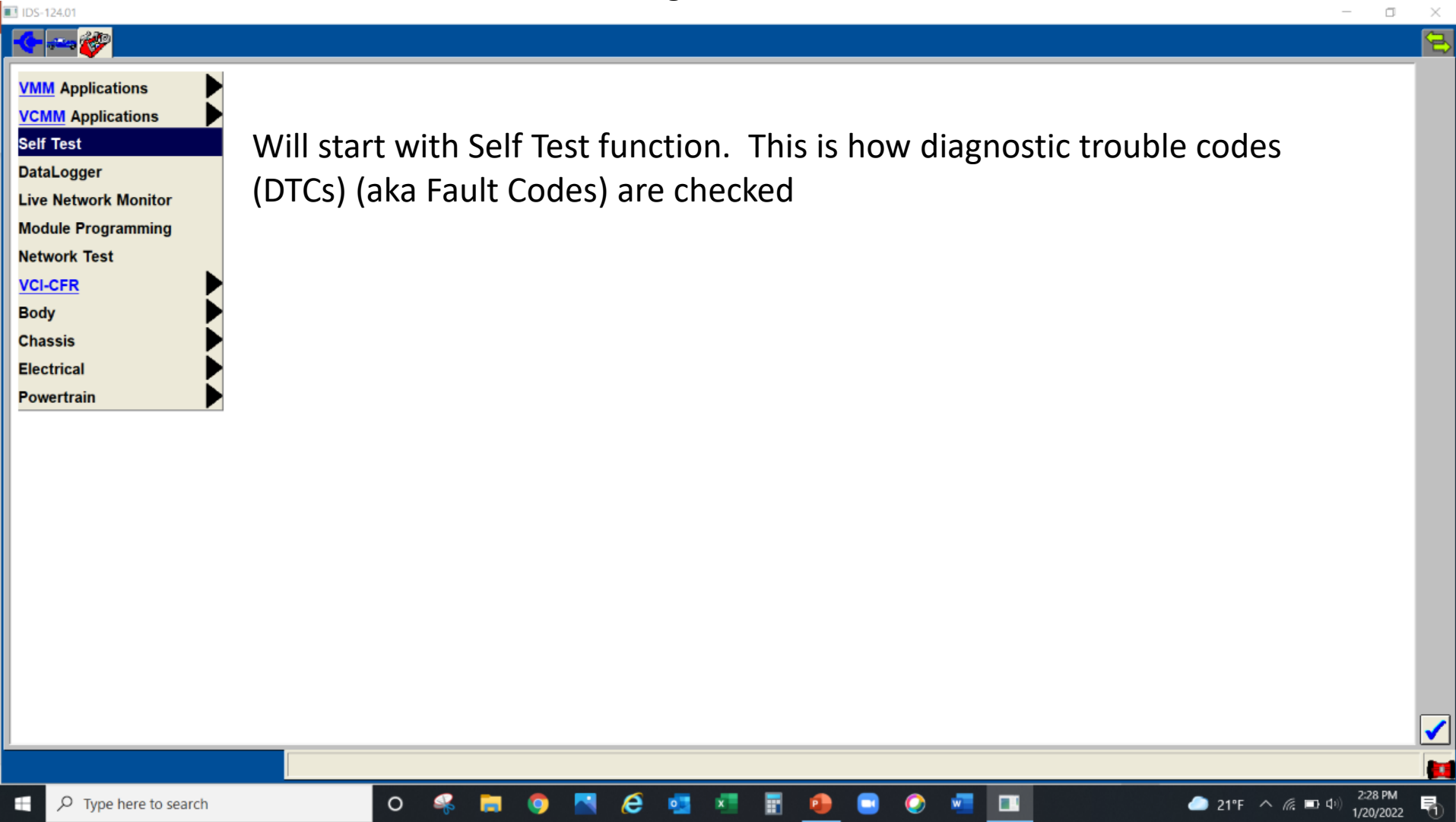
# Ford F59 & F650 IDS Toolbox Screen Shots for Training

Model Year 2022 F59 & F650 screen shots shown.  
Some content not available for earlier model years.

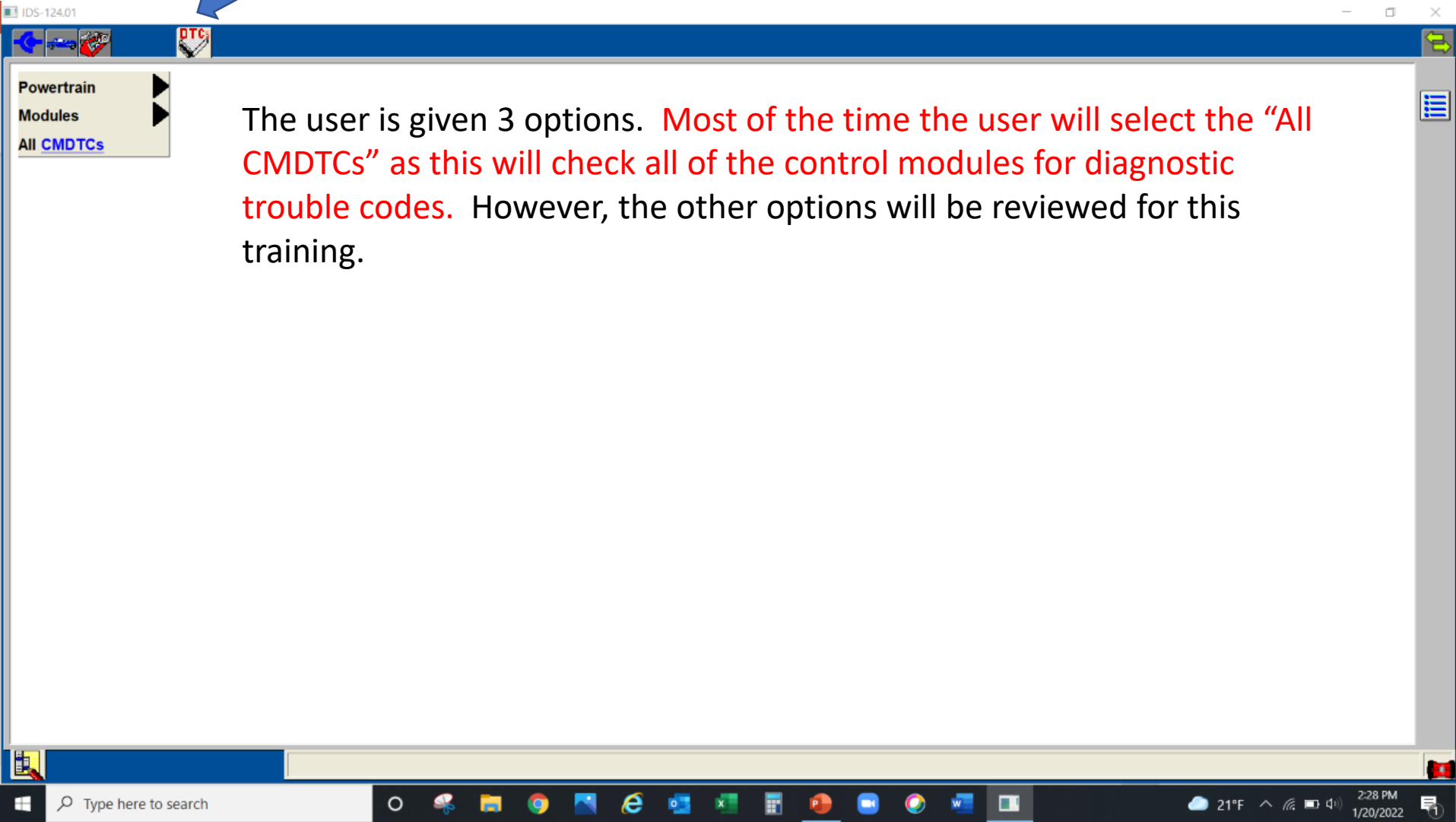
Toolbox tab



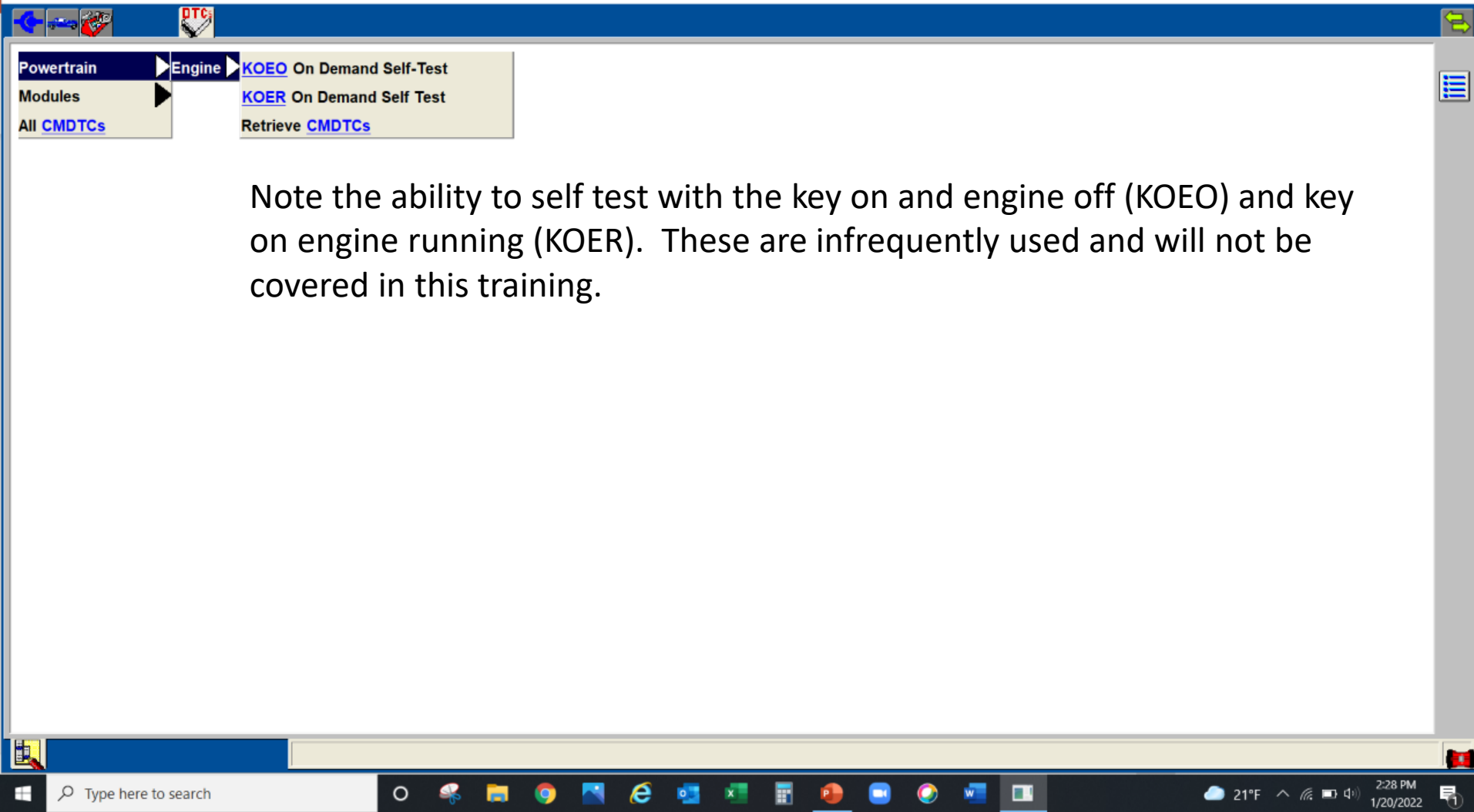
## Checking Fault Codes



Note "DTC" tab opens



The user is given 3 options. Most of the time the user will select the "All CMDTCs" as this will check all of the control modules for diagnostic trouble codes. However, the other options will be reviewed for this training.



IDS-124.01

Powertrain

Modules

All CMDTCs

F59

F650

ABS

ACM

BCM

C-CM

GWM

IPC

IPM-A

PCM

SCCM

TCU

ABS

ACM

BCM

C-CM

GFM-2

GFM

GWM

HVAC

IPC

IPM-A

PCM

RCM

RHVAC

RTM

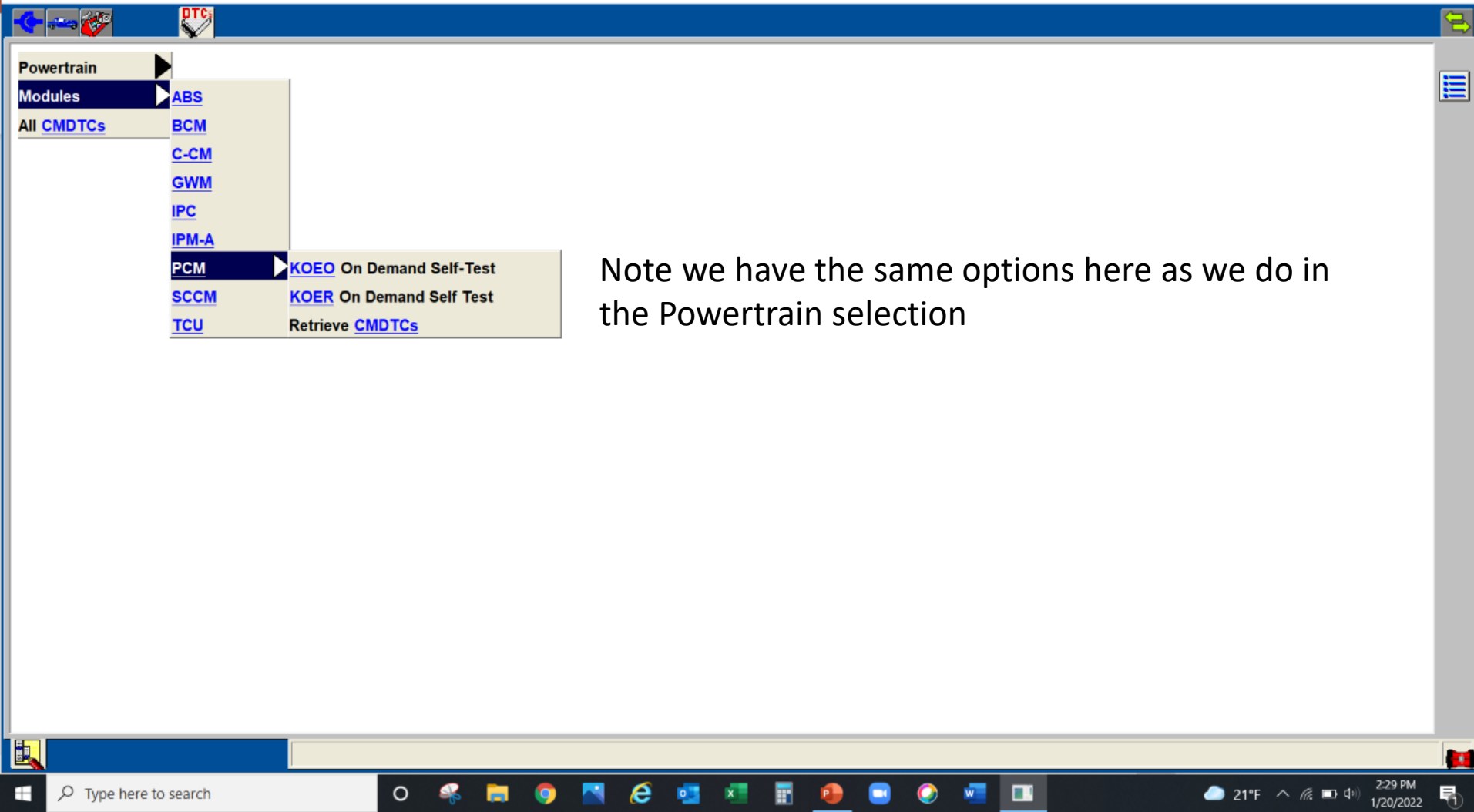
SCCM

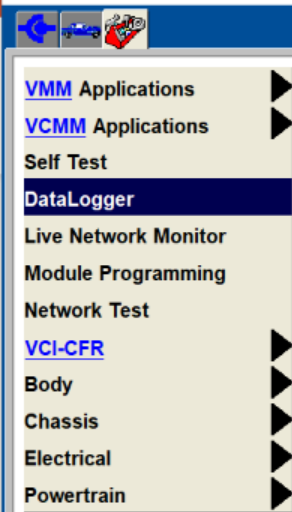
If the user wants they can limit checking fault codes to a specific module

Type here to search

21°F

2:29 PM 1/20/2022





Refer to separate Datalogger video training for more details. Only screen shots of options will be shown.

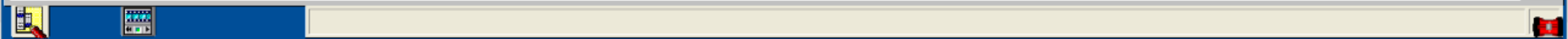


Electrical ▶ Air conditioning clutch

Powertrain ▶

Modules ▶

Not applicable on UPS units





Electrical ▶

Powertrain ▶

Modules ▶

Adaptive Fuel

Electronic Throttle Control

Engine

Starter Motor Blocked / Aborted

Transmission

EEC/Engine Basic

Selections provide pre-set parameters to datalog



Type here to search

21°F ^ [Wi-Fi icon] [Battery icon] [Volume icon] 2:30 PM  
1/20/2022

The screenshot displays the IDS-124.01 software interface. On the left, a sidebar contains a tree view with 'Electrical', 'Powertrain', and 'Modules'. The 'Modules' section is expanded, showing a list of modules for two selected units, F59 and F650. The F59 unit has a list of modules: ABS, BCM, C-CM, GWM, IPC, IPM-A, PCM, SCCM, and TCU. The F650 unit has a list of modules: ABS, ACM, BCM, C-CM, GFM-2, GFM, GWM, HVAC, IPC, IPM-A, PCM, RCM, RHVAC, RTM, and SCCM. The main area of the window contains the text: 'Can pick specific module to datalog. Sample parameters for some of the modules are shown in the following slides'. The Windows taskbar at the bottom shows the search bar, several application icons, and system status information including 21°F and the date 1/20/2022.

Electrical  
Powertrain  
Modules

F59

F650

ABS  
BCM  
C-CM  
GWM  
IPC  
IPM-A  
PCM  
SCCM  
TCU

ABS  
ACM  
BCM  
C-CM  
GFM-2  
GFM  
GWM  
HVAC  
IPC  
IPM-A  
PCM  
RCM  
RHVAC  
RTM  
SCCM

Can pick specific module to datalog. Sample parameters for some of the modules are shown in the following slides

# F59 ABS Example

IDS-124.01

ABS (MODE)	ABSLF_I (MODE)	ABSRF_O (MODE)	ABSTCVFLD (MODE)	ABSTCVFLIV (MODE)	ABSTCVFRD (MODE)	ABSTCVFRIV (MODE)	ABSTCVPMMS (MODE)	ABSTCVRLD (MODE)	ABSTCVRLIV (MODE)	ABSTCVRRD (MODE)	ABSTCVRRIV (MODE)	ABSTCVVS (MODE)	ABS_DIAGSTATE (FAULT)	ABS_MODE (MODE)
ABS_WARNLMP (MODE)	AYC_MODE (MODE)	BFLHP (PRESS)	BRAKE_SW (MODE)	BRAKE_SW (MODE)	BRK_FLUID (MODE)	BRK_WARNLMP (MODE)	DSTC_STATUS (MODE)	DSTC_SWLMP (MODE)	DSTC_SWSTAT (MODE)	DSTC_WRNLMP (MODE)	DYNOMODE (MODE)	EBD_MODE (MODE)	ECUPSVO (VOLT)	EFPS (MODE)
EngDragCntrl (MODE)	HLA_MODE (MODE)	HLA_STATUS (MODE)	LA (ACC)	LFWSSI (METER)	LNGACC (ACC)	LONGACC_ABS (ACC)	LRWSSI (METER)	PBA_STATUS (MODE)	PRK_BRAKE (MODE)	RFWSSI (METER)	RRWSSI (METER)	R_GEAR_SW (MODE)	SELTESTDTC (NUM)	STEER_ANGL (ANGL)
TSCntrl (MODE)	VSS_ABS (SPD)	YAWR (ANGV)												

ABS

# F59 BCM Example

IDS-124.01

ACC_DELAY # (MODE)	AMB_LT_LVL (MODE)	AMB_WHT_LHT (MODE)	BAT_TEMP (TEMP)	BAT_VOLTAGE (VOLT)	BCM_STATE (FAULT)	BOO_2 (MODE)	BRK_SHIFT # (MODE)	CCNT_BCM (NUM)	COURTESY_LTS # (MODE)	CRASH # (MODE)	DOOR_SW_DRVRR (MODE)
DOOR_SW_LR (MODE)	DOOR_SW_PSGR (MODE)	DOOR_SW_RR (MODE)	ENG_IMB_CKEY (MODE)	ENG_IMB_MLE (MODE)	ENG_IMB_STAT (MODE)	HAZARD_LP_SW (MODE)	HI_BEAM_LT # (MODE)	HI_BEAM_RT # (MODE)	HOOD_SW (MODE)	IGN_ACC/RUN # (MODE)	IGN_R/A_INPT (MODE)
IGN_R/S_INPT (MODE)	IGN_RUN/STRT # (MODE)	IGN_ST_INPT (MODE)	IGN_SW_STATE (MODE)	KEYS_PROGMD (NUM)	KEY_IN_INFRD (MODE)	KEY_IN_INPT (MODE)	KEY_IN_SW (FAULT)	KEY_LRN_MODE (MODE)	LOAD_SHED_OC # (MODE)	LOW_BEAM_LT # (MODE)	LOW_BEAM_LT # (MODE)
LOW_BEAM_RT # (MODE)	LOW_BEAM_RT # (MODE)	MIN_KEYS_RQD (NUM)	ODDTC_BCM (NUM)	PARK_BRK_SW (MODE)	PCM_WKUP_CTRL # (MODE)	RVRSLMPs # (MODE)	START_STOP_1 (MODE)	START_STOP_2 (MODE)	TRN_LMP_LF # (MODE)	TRN_LMP_LR # (MODE)	TRN_LMP_RF # (MODE)
TRN_LMP_RR # (MODE)	UNL_KEY_MODE (MODE)	VEHICLE_MODE (MODE)									

Delayed Accessory Power

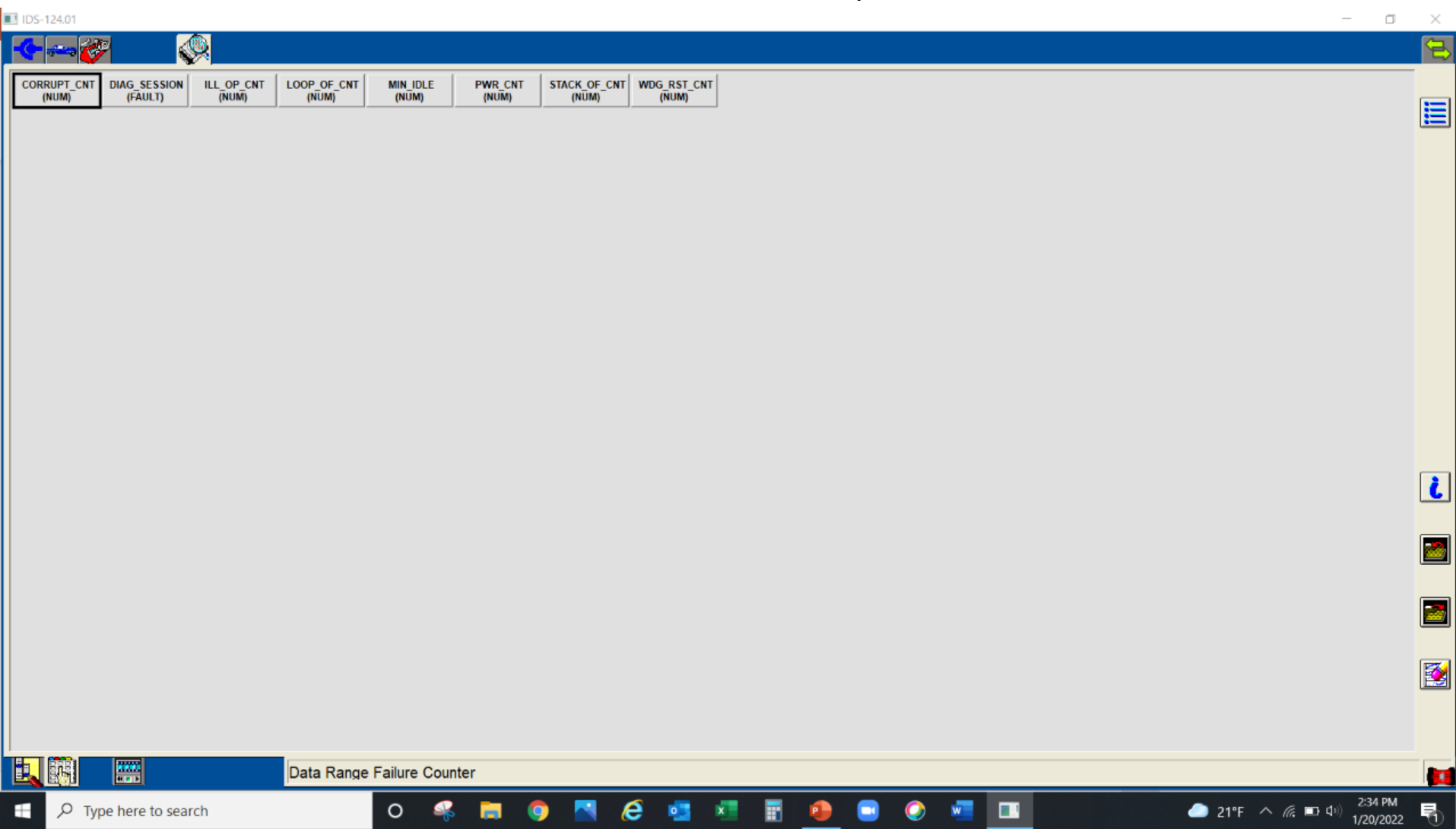
# F59 C-CM Example

IDS-124.01

ALGN_CONV (MODE)	ALGN_OFF (ANGL)	ALGN_STATE (MODE)	ALGN_STATUS (MODE)	C-CM_CALIB (MODE)	CCM_DIAGSTATE (FAULT)	DIST_TOT_VEH (DIST)	ExtTemp (TEMP)	FLC_HTR_DRV (MODE)	FLR_HTR_RLY (MODE)	FWD_ALRT_LED (MODE)	FWD_ALRT_SW (MODE)	HIGH_TONE (MODE)	HUD_LED1 (MODE)
HUD_LED2 (MODE)	HUD_LED3 (MODE)	LOW_TONE (MODE)	MOD_SUP_V (VOLT)	NUM_SRV_REQ (NUM)	PRI_TGT_ANG (ANGL)	PRI_TGT_PWR (NUM)	PRI_TGT_RANGE (DIST)	SERV_ALGN_UD (NUM)	TGT_MNT_OFF (DIST)	VERTICAL_ALIGN (ANGL)	VSS (SPD)	YAWRATE (ANGV)	YAW_SRC_OVR (MODE)

Service Alignment Convergence State

# F59 GWM Example



# F59 IPC Example

IDS-124.01

ABS_LAMP # (MODE)	ACTV_HOOD (MODE)	ACTV_HREST (MODE)	ADAP_CRU (MODE)	ADAP_HLAMP (MODE)	ADAP_SPOIL (MODE)	AIRBAG_LAMP # (MODE)	AIRBAG_LMP # (MODE)	AIR_BAG (MODE)	ALL_LAMP # (MODE)	ALTRN_TAIL (MODE)	ANTI_LOCK (MODE)
AUTO_HEAD (MODE)	AUTO_HIBEAM (MODE)	AUTO_LIGHT (MODE)	AUTO_SPEED (MODE)	AVID_COLLI (MODE)	BATT_ELEC (MODE)	BRAKE_WIRE (MODE)	BRK_LAMP # (MODE)	CHARGE_LMP # (MODE)	CONTI_CON (MODE)	COOLANT_LMP # (MODE)	CORE_NUM (NUM)
CORRUPT_CNT (NUM)	DEF_CONTAM_WARN (MODE)	DEF_LVL_LOW (MODE)	DIAG_VER (MODE)	DIES_PREHEATR (MODE)	DYNA_BEND (MODE)	ECU_NUM (NUM)	ELEC_PARK (MODE)	ELEC_POW (MODE)	ELEC_STAB (MODE)	EMER_BRAK (MODE)	ENGIDL_TIME_TOT (TIME)
ENG_TIME_TOT (TIME)	EPB_LAMP # (MODE)	FOWRD_COLLI (MODE)	FROST_LAMP # (MODE)	FUELLVL1 (NUM)	FUELLVL2 (NUM)	FUEL_CELL (MODE)	GEAR_LAMP # (MODE)	HDC_FAULT # (MODE)	HIGH_BEAM # (MODE)	HILL_DESCNT (MODE)	HILL_DESNT_SW (MODE)
HILL_START (MODE)	HYB_POW_ST (MODE)	IC_STATE (FAULT)	IGN_FINAL (MODE)	LANE_BRAKE (MODE)	LANE_DEPAT (MODE)	LANE_STEER (MODE)	LH_TURN_L # (MODE)	LOFUELL # (MODE)	MIL # (MODE)	MIN_IDLE (NUM)	MODULE_VOLT (VOLT)
ODDTC_IC (NUM)	ODOMETER (DIST)	OIL_P_LOW # (MODE)	OVERDRV # (MODE)	PBA_LMP # (MODE)	POWER_CNT (NUM)	PRET_SION (MODE)	PTOTIME_TOT (TIME)	RH_TURN_L # (MODE)	RIDE_HGHT (MODE)	ROLL_OVER (MODE)	SBLT_LAMP # (MODE)
SEMI_AUTO (MODE)	SERIAL_NUM (NUM)	SHIFT_LAMP # (MODE)	SIDELIGHT_LMP # (MODE)	SOFTVER_NO (NUM)	SOUNDER_OUT # (MODE)	SPDOMETER # (MODE)	SPDOMETER # (PER)	STAB_CTRL_SW (MODE)	STAB_TC_LMP # (MODE)	STAT_BEND (MODE)	SUPER_STEER (MODE)
TACH_IND # (MODE)	TACH_IND # (PER)	TC/IVD/RSLMP # (MODE)	TPM_SYS (MODE)	TRAC_CONT (MODE)	TRAILER_LMP # (MODE)	TRANSA_LMP # (MODE)	WATER_FUEL (MODE)	WHEEL_STEER (MODE)	WLS1DO (MODE)	WLS1FF (MODE)	WLS1RF (MODE)
W_BLIND_SPOT (MODE)	W_BULB_FAIL (MODE)	W_CITY_SAFETY (MODE)	W_HILLDESC_IC (MODE)	W_HILL_STRT (MODE)	W_LANE_DEPART (MODE)	W_SERV_STEER (MODE)	W_STPSTRT_IC (MODE)	W_THFT (MODE)			

ABS Warning Lamp

# F59 IPM-A Example

IDS-124.01

CORE_NUM (NUM)	CORRUPT_CNT (NUM)	ECU_NUM (NUM)	ILL_OP_CNT (NUM)	IPMA_SED_D100_B (FAULT)	LKS_SW_ST (MODE)	LOOP_OF_CNT (NUM)	MIN_IDLE (NUM)	PITCH_A (ANGL)	POWER_CNT (NUM)	ROLL_A (ANGL)	SPCPC (PER)	STACK_OF_CNT (NUM)
SW_NUM (NUM)	WDG_RST_CNT (NUM)	W_HTR_ST (MODE)	YAW_A (ANGL)									

ECU Core Assembly Number

# F59 PCM Example (Screen 1 of 2)

AAT_UR (FAULT)	ACCLT_ALW (MODE)	ACC_CMD # (MODE)	ACC_F (FAULT)	ACP_PRESS (PRESS)	ACP_V (VOLT)	AC_DISABLE_TRQ (MODE)	AC_INHIBIT_00 (MODE)	AC_INHIBIT_01 (MODE)	AC_INHIBIT_02 (MODE)	AC_INHIBIT_03 (MODE)	AC_INHIBIT_04 (MODE)
AC_INHIBIT_05 (MODE)	AC_INHIBIT_06 (MODE)	AC_INHIBIT_07 (MODE)	AC_INHIBIT_08 (MODE)	AC_INHIBIT_09 (MODE)	AC_INHIBIT_10 (MODE)	AC_INHIBIT_11 (MODE)	AC_INHIBIT_12 (MODE)	AC_INHIBIT_13 (MODE)	AC_INHIBIT_14 (MODE)	AC_INHIBIT_15 (MODE)	AC_INHIBIT_16 (MODE)
AC_INHIBIT_17 (MODE)	AC_INHIBIT_18 (MODE)	AC_INHIBIT_19 (MODE)	AC_INHIBIT_20 (MODE)	AC_INHIBIT_21 (MODE)	AC_INHIBIT_22 (MODE)	AC_INHIBIT_23 (MODE)	AC_INHIBIT_24 (MODE)	AC_INHIBIT_25 (MODE)	AC_INHIBIT_26 (MODE)	AC_INHIBIT_27 (MODE)	AC_MSG_F (FAULT)
AC_REQ (MODE)	ADPT1_F (FAULT)	ADPT2_F (FAULT)	AEIS_ACTION (NUM)	AEIS_POSS (NUM)	APP (PER)	APP1 (VOLT)	APP1 [APP_D] (PER)	APP2 (VOLT)	APP2 [APP_E] (PER)	APP_FLT (FAULT)	APP_MAXDIFF (ANGL)
B+ (VOLT)	BARO (FREQ)	BARO (PRESS)	BARO (VACU)	BARO_CORR (PRESS)	BARO_UR (FAULT)	BARO_V (VOLT)	BATT_V_INF (VOLT)	BOO1 (MODE)	BOO2 (MODE)	BRKVRD_POSS (NUM)	BRKVR_ACTION (NUM)
CAM_SYNC (MODE)	CANVENT_F (FAULT)	CCM_EVAL (MODE)	CHT (TEMP)	CHT (VOLT)	CHTIL (MODE)	CHT_F (FAULT)	CLRDIST (DIST)	CLRWRMUP (NUM)	CLR_TIME (TIME)	CMP2_F (FAULT)	CMP_F (FAULT)
CYL_1_ACCL (NUM)	CYL_2_ACCL (NUM)	CYL_3_ACCL (NUM)	CYL_4_ACCL (NUM)	CYL_5_ACCL (NUM)	CYL_6_ACCL (NUM)	CYL_7_ACCL (NUM)	CYL_8_ACCL (NUM)	DECHOKE (MODE)	DIST_AEIS (DIST)	DIST_BRKVRD (DIST)	DIST_TOT_VEH (DIST)
DTCCNT (NUM)	EGR_EVAL (MODE)	ENGOFF_TIMER (TIME)	ENG_CRANK (MODE)	ENG_CRNK (MODE)	ENG_EXH_F_RATE (NUM)	ENG_FEL_RATE (FLOW)	ENG_IDLE_SD (MODE)	ENG_REF_TRQ (TORQUE)	EOPC_CIRC_F (FAULT)	EOPC_FUNC_F (FAULT)	EOPDC_CMD (PER)
EOP_UR (FAULT)	EOP_V (VOLT)	EQRAT11_DSD # (RATIO)	EQRAT21_DSD # (RATIO)	EQ_RAT11 (RATIO)	EQ_RAT11 (RATIO)	EQ_RAT21 (RATIO)	EQ_RAT21 (RATIO)	ETC [TAC_PCT] (PER)	ETC_ACT (ANGL)	ETC_CIR_FLT (FAULT)	ETC_DOWN (MODE)
ETC_DSD (ANGL)	ETC_EX_PWR (FAULT)	ETC_FROZEN (FAULT)	ETC_HOT_STR (FAULT)	ETC_MISWIRE (FAULT)	ETC_OPR_ST (MODE)	ETC_PWR_UP (FAULT)	ETC_SERV_RS (MODE)	ETC_SERV_SH (FAULT)	ETC_STK_HI (FAULT)	ETC_STK_LOW (FAULT)	ETC_STUCK_M (FAULT)
ETC_TP1_HI (FAULT)	ETC_TP1_LOW (FAULT)	ETC_TP1_OF5 (FAULT)	ETC_TP2_LOW (FAULT)	ETC_TP2_OF5 (FAULT)	ETC_TPS_HI (FAULT)	ETC_TP_FAIL (FAULT)	ETC_TP_NP_F (FAULT)	ETC_TRIM (ANGL)	ETC_TRIM_LRN (MODE)	EVAP020C (MODE)	EVAPCP # (PER)
EVAPCV (PER)	EVAPCV # (MODE)	EVAPCV_F (FAULT)	EVAPCT (PER)	EVAPSOAK (MODE)	EVAPSTA (MODE)	EVAPVM_F (FAULT)	EVAP_EVAL (MODE)	EVAP_GAUGE (PRESS)	FANDC (PER)	FANSPD_MOD (FAULT)	FANSS (RPM)
FAN_DSD # (PER)	FAN_F (FAULT)	FLI (PER)	FP (PER)	FP # (MODE)	FPM (PER)	FP_F (FAULT)	FP_RELAY (MODE)	FTBRAKE (MODE)	FTP (PRESS)	FTP (VOLT)	FTP_F (FAULT)
FTP_H20 (NUM)	FUELMON_CMP (MODE)	FUELMON_RDY (MODE)	FUELSYS (FAULT)	GEAR (MODE)	GEAR_OSC # (MODE)	GEAR_RAT (RATIO)	GENCMD (PER)	GENCMD_LF (FAULT)	GENCMD_LS (FAULT)	GENFIL (MODE)	GENMON (PER)
GENMON_FS (FAULT)	GENMON_HZ (FREQ)	GENMON_LS (FAULT)	GENVDSO # (VOLT)	GENVDSO2 (VOLT)	GEN_FAULT (FAULT)	HRSH_SHIFT # (MODE)	HTR11 (MODE)	HTR11F (FAULT)	HTR12 (MODE)	HTR12F (FAULT)	HTR21 (MODE)
HTR22 (MODE)	HTRCM11 (CUR)	HTRCM12 (CUR)	HTRCM21 (CUR)	HTRX1 # (MODE)	HTRX2 # (MODE)	IACKAM0_TRQ (TORQUE)	IACKAM1_TRQ (TORQUE)	IACKAM2_TRQ (TORQUE)	IACKAM3_TRQ (TORQUE)	IACRIM_TRQ (TORQUE)	IAC_MODE (MODE)
IAT (TEMP)	IAT (VOLT)	IAT1_UR (FAULT)	IAT_F (FAULT)	IMRC # (MODE)	IMRC_F (FAULT)	INJ1_F (FAULT)	INJ1_OFF # (MODE)	INJ2_F (FAULT)	INJ2_OFF # (MODE)	INJ3_F (FAULT)	INJ3_OFF # (MODE)
INJ4_F (FAULT)	INJ4_OFF # (MODE)	INJ5_F (FAULT)	INJ5_OFF # (MODE)	INJ6_F (FAULT)	INJ6_OFF # (MODE)	INJ7_F (FAULT)	INJ7_OFF # (MODE)	INJ8_F (FAULT)	INJ8_OFF # (MODE)	INJPWR_M (VOLT)	INJ_F (FAULT)
IN_GEAR (MODE)	KAPWR_OK (FAULT)	KEYST (MODE)	KNOCK_1 (NUM)	KNOCK_2 (NUM)	KNOCK_3 (NUM)	KNOCK_4 (NUM)	KNOCK_SPRK (ANGL)	LINEDSD # (PRESS)	LOAD (PER)	LOAD_ABSL (PER)	LONGFT1 (PER)
LONGFT2	100	100	100	MAE	MAE	MAE_H7	MEE_INCFAD	MEE_LOAD	MEE_DDM	MEE_DDM	MEE_SOAK

Ambient Air Temperature Sensor Input Unreliable

## F59 PCM Example (Screen 2 of 2)

IDS-124.01

FTP_H20 (NUM)	FUELMON_CMP (MODE)	FUELMON_RDY (MODE)	FUELSYS (FAULT)	GEAR (MODE)	GEAR_OSC # (MODE)	GEAR_RAT (RATIO)	GENCMD (PER)	GENCMD_LF (FAULT)	GENCMD_LS (FAULT)	GENFIL (MODE)	GENMON (PER)
GENMON_FS (FAULT)	GENMON_HZ (FREQ)	GENMON_LS (FAULT)	GENVDS # (VOLT)	GENVDS2 (VOLT)	GEN_FAULT (MODE)	HRSH_SHIFT # (MODE)	HTR11 (MODE)	HTR11F (FAULT)	HTR12 (MODE)	HTR12F (FAULT)	HTR21 (MODE)
HTR22 (MODE)	HTRCM11 (CUR)	HTRCM12 (CUR)	HTRCM21 (CUR)	HTRX1 # (MODE)	HTRX2 # (MODE)	IACKAM0_TRQ (TORQUE)	IACKAM1_TRQ (TORQUE)	IACKAM2_TRQ (TORQUE)	IACKAM3_TRQ (TORQUE)	IACRIM_TRQ (TORQUE)	IAC_MODE (MODE)
IAT (TEMP)	IAT (VOLT)	IAT1_UR (FAULT)	IAT_F (FAULT)	IMRC # (MODE)	IMRC_F (FAULT)	INJ1_F (FAULT)	INJ1_OFF # (MODE)	INJ2_F (FAULT)	INJ2_OFF # (MODE)	INJ3_F (FAULT)	INJ3_OFF # (MODE)
INJ4_F (FAULT)	INJ4_OFF # (MODE)	INJ5_F (FAULT)	INJ5_OFF # (MODE)	INJ6_F (FAULT)	INJ6_OFF # (MODE)	INJ7_F (FAULT)	INJ7_OFF # (MODE)	INJ8_F (FAULT)	INJ8_OFF # (MODE)	INJPWR_M (VOLT)	INJ_F (FAULT)
IN_GEAR (MODE)	KAPWR_OK (FAULT)	KEYST (MODE)	KNOCK_1 (NUM)	KNOCK_2 (NUM)	KNOCK_3 (NUM)	KNOCK_4 (NUM)	KNOCK_SPRK (ANGL)	LINEDSD # (PRESS)	LOAD (PER)	LOAD_ABSL (PER)	LONGFT1 (PER)
LONGFT2 (PER)	LPC (PRESS)	LPC_AMP # (CUR)	LPC_F (FAULT)	MAF (FLOW)	MAF_F (FAULT)	MAF_HZ (FREQ)	MFF_INGEAR (MODE)	MFF_LOAD (PER)	MFF_RPM (RPM)	MFF_RUN (TIME)	MFF_SOAK (TIME)
MFF_TCC_LOCK (MODE)	MFF_THR_ANG (PER)	MFF_TRIP (NUM)	MFF_VSS (SPD)	MIL (MODE)	MIL_DIS (DIST)	MISFIRE (MODE)	MISFIRE_MON (MODE)	MISMON (MODE)	MP_LRN (MODE)	NUM_MISFIRE (NUM)	O2S11_CUR (CUR)
O2S11_HTR (PER)	O2S11_IMP (VOLT)	O2S11_READY (MODE)	O2S11_STAT (MODE)	O2S12 (VOLT)	O2S21_CUR (CUR)	O2S21_HTR (PER)	O2S21_IMP (VOLT)	O2S21_READY (MODE)	O2S21_STAT (FAULT)	O2SHTR_EVAL (MODE)	O2S_EVAL (MODE)
O2_DS1_ERR (VOLT)	O2_DS2_ERR (VOLT)	O2_DS_DISBL (MODE)	OCTADJ_R_LRND (PER)	OIL_REMAINING (PER)	OSS_F (FAULT)	OSS_SRC (RPM)	P2610_ECUCLOCK (FAULT)	P2610_INFRTIMER (FAULT)	P2610_LOSSCOM (FAULT)	PATSENABL (MODE)	PRS_TRQ_ACT (PER)
PSP (MODE)	PTOIL (MODE)	PTOIL_F (FAULT)	PTOIR_V (VOLT)	PTO_ACTV_MODE (MODE)	PTO_BCPIL_CMD (MODE)	PTO_OP_STATE (MODE)	PTO_REQ_STATUS (MODE)	PTO_REQ_SW1 (MODE)	PTO_REQ_SW2 (MODE)	PTO_RPM_DSD (RPM)	PTO_STATUS (MODE)
PVT (PRESS)	PVT (VACU)	PWRTRN_DRVMODE (MODE)	PWRT_FUNCMON_A (NUM)	PWRT_FUNCMON_B (NUM)	REALTIME (TIME)	RO2FT1 (PER)	RO2FT2 (PER)	RPM # (RPM)	RPMDS (RPM)	RPM_VSS_RATIO (RATIO)	RUNTM (TIME)
SHIFT_DROP (RPM)	SHIFT_FLRE (RPM)	SHIFT_ID (MODE)	SHIFT_LAG (TIME)	SHIFT_TIME (TIME)	SHIFT_TYP (MODE)	SHRTFT1 (PER)	SHRTFT2 (PER)	SMR_ONCE (MODE)	SNOWPLW_CFG (MODE)	SPARKADV # (ANGL)	SSA_AMP # (CUR)
SSB_AMP # (CUR)	SSC_AMP # (CUR)	SSD_AMP # (CUR)	SSE_AMP # (CUR)	SSPCA (PRESS)	SSPCA_F (FAULT)	SSPCB (PRESS)	SSPCB_F (FAULT)	SSPCC (PRESS)	SSPCC_F (FAULT)	SSPCD (PRESS)	SSPCD_F (FAULT)
SSPCE_F (FAULT)	STARTER_PROT (MODE)	STARTREQ_CAN (MODE)	START_KEY (MODE)	STRT_RLY (MODE)	SYNC (MODE)	TCC (PRESS)	TCC_AMP # (CUR)	TCC_F (FAULT)	TCC_OSC # (MODE)	TCC_RAT (RATIO)	TCS_DEPRES (MODE)
TCS_STATE (MODE)	TC_SLIPACT (RPM)	TC_SLIPDS (RPM)	TFT (TEMP)	TFTV (VOLT)	TFT_F (FAULT)	THL_ANG_COR (PER)	TP1 (PER)	TP1_LRN_TRIM (ANGL)	TP_A_2NDRCNT_F (FAULT)	TP_A_FAULT_CNTR (NUM)	TP_A_MSG_CNTR (NUM)
TP_A_RCNT_F (FAULT)	TP_F (FAULT)	TQ_CNTRL (MODE)	TQ_FRICTION (PER)	TR (MODE)	TRANS_CLT_STAT (MODE)	TRANS_VOLT_A (MODE)	TRAN_RAT (RATIO)	TRO_N_F (MODE)	TRO_P_F (MODE)	TR_CRANK (MODE)	TR_DC (PER)
TR_F (FAULT)	TR_FREQ (FREQ)	TSS_F (RPM)	TSS_SRC (RPM)	VCT1_F (FAULT)	VCT2_F (FAULT)	VCTSYS (MODE)	VCT_EXH_ACT1 (ANGL)	VCT_EXH_ACT2 (ANGL)	VCT_EXH_DC1 (PER)	VCT_EXH_DC2 (PER)	VCT_EXH_DIF1 (ANGL)
VCT_EXH_DIF2 (ANGL)	VCT_EXH_DSD # (ANGL)	VEHMODE (MODE)	VEH_FEL_RATE (FLOW)	VEH_ODO (METER)	VPWR (VOLT)	VREF (VOLT)	VSOUT_F (FAULT)	VSS (SPD)	VSS (SPD)		

Ambient Air Temperature Sensor Input Unreliable

21°F 2:36 PM 1/20/2022

# F59 SCCM Example

IDS-124.01

DIAG_SESSION (FAULT)	FLASH to PASS (MODE)	F_WASH_SW (MODE)	F_WIPE_FAST_SW (MODE)	F_WIP_INT_D1 (MODE)	F_WIP_INT_D2 (MODE)	F_WIP_INT_D3 (MODE)	F_WIP_INT_D4 (MODE)	F_WIP_INT_D5 (MODE)	F_WIP_INT_D6 (MODE)	F_WIP_SLO_SW (MODE)	HIGH_BEAM_SW (MODE)	IGN_INPUT (MODE)
LANE_ASSIST_SW (MODE)	L_CURS_DWN (MODE)	L_CURS_LFT (MODE)	L_CURS_OK (MODE)	L_CURS_RGT (MODE)	L_CURS_UP (MODE)	RAIN_SENS (MODE)	R_CURS_DWN (MODE)	R_CURS_LFT (MODE)	R_CURS_OK (MODE)	R_CURS_RGT (MODE)	R_CURS_UP (MODE)	R_WASH_SW (MODE)
R_WIPE_DEL1 (MODE)	R_WIPE_DEL2 (MODE)	R_WIPE_INT_SW (MODE)	R_WIPE_OFF_SW (MODE)	R_WIPE_SW (MODE)	R_WIPE_WASH_SW (MODE)	SCCS (MODE)	SC_CANCEL (MODE)	SC_CNCL_RESM (MODE)	SC_CRUISE_F (FAULT)	SC_GAPMINUS (MODE)	SC_GAPPLUS (MODE)	SC_GAP_SW # (MODE)
SC_OFF (MODE)	SC_ON (MODE)	SC_ONOFF (MODE)	SC_ONOFF_CL # (MODE)	SC_RESUME (MODE)	SC_SET+ (MODE)	SC_SET- (MODE)	SC_SPD_LMTER # (MODE)	STRCOL_ADJ (MODE)	SW_END (MODE)	SW_MEDIA (MODE)	SW_MENUMINUS (MODE)	SW_MENUPLUS (MODE)
SW_MODE (MODE)	SW_MUTE (MODE)	SW_OK (MODE)	SW_PHONE (MODE)	SW_SEEKMINUS (MODE)	SW_SEEKPLUS (MODE)	SW_SEND (MODE)	SW_VOICE (MODE)	SW_VOLDOWN (MODE)	SW_VOLUP (MODE)	TRN_SIG_LC_L (MODE)	TRN_SIG_LC_R (MODE)	TRN_SIG_SW_L (MODE)
TRN_SIG_SW_R (MODE)	VBAT_SCCM (VOLT)	WIPE_SINGLE (MODE)										

Active Diagnostic Session

[VMM Applications](#)[VCMM Applications](#)

Self Test

DataLogger

**Live Network Monitor**

Module Programming

Network Test

[VCI-CFR](#)

Body

Chassis

Electrical

Powertrain

Helps diagnose vehicle network communication issues

### Live Network Monitor

During this test the tool will continuously send a message to each module on the vehicle network and monitor that a response was received within the specified time period.

A green module box indicates the tool received a positive response from the module.

For any instance where the tool did not receive a message from one or more modules.

- The missed message counter box will turn Red to indicate that message had been missed and will continue to increment for every missed message.
- The module label will turn Red for each missed message and will turn Green when a message is received.

Optional modules that do not respond during the initial network test are disabled by default and are colored gray.

- Additional modules can be disabled from testing by checking the box in the lower left of the module box. The tool will not ping any modules that are disabled and the missed message counter will not increment.

An entire network can be disabled by checking the "Disable All" box next to that network to help further isolate the concern.

An audible "beep" can also be enabled to provide feedback while wiggling the harness and related connectors when the display is not within view.

#### NOTE:

- While this test can be helpful in diagnosing vehicle network communication issues, it is not intended to replace technical training, Workshop Manual (WSM) or Wiring Diagram information or procedures and should not be used to fault a module.
- If a module is suspected to be the cause of the concern, follow the appropriate pinpoint or diagnostic procedure to determine if module replacement is necessary.

Click the information button on the right of the next screen for further instructions and tips for using the Live Network Monitor tool.

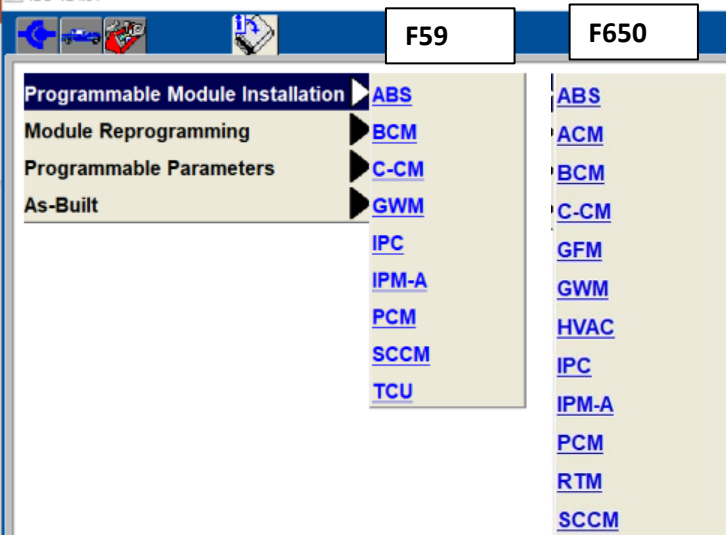
Select the Tick to continue.





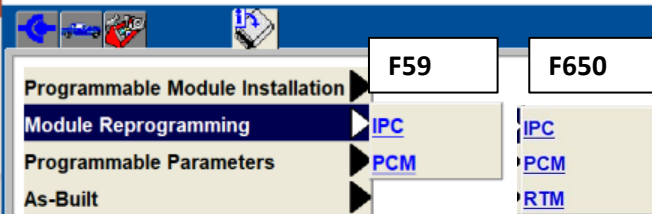
- VMM Applications
- VCMM Applications
- Self Test
- DataLogger
- Live Network Monitor
- Module Programming**
- Network Test
- VCI-CFR
- Body
- Chassis
- Electrical
- Powertrain

Refer to separate Module Programming video training for more details. Only screen shots of options will be shown.



Program Module Installation (PMI) is used when replacing or reprogramming a module. This stores the configuration settings to a buffer and rewrites them. If the module is not available or IDS won't communicate with the module, use As-Built. As-Built is not available on MY19 and older F59s. In those cases, install a new module and program as necessary using Programmable Parameters.

NOTE: TCU not used on F59 & F650

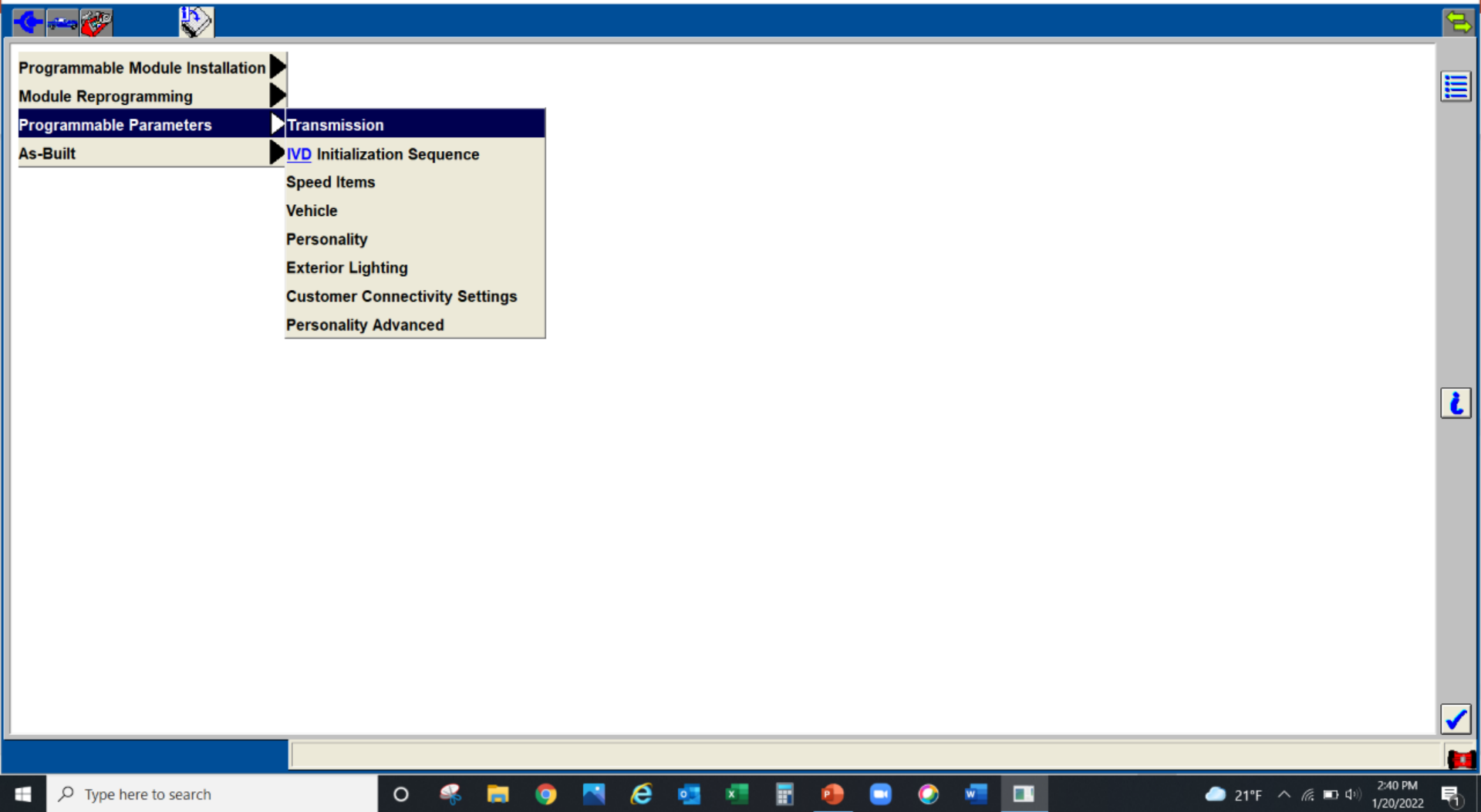


Module reprogramming (also referred to as "flashing") is a scan tool process which updates the strategy/calibration in a module. Reprogramming a module with the same level of software will not improve module operation or repair a hardware failure.

Module reprogramming is automatically carried out during PMI when a later strategy/calibration is available

The screenshot displays the IDS-124.01 software interface. On the left, a vertical menu lists four options: "Programmable Module Installation", "Module Reprogramming", "Programmable Parameters" (which is highlighted in blue), and "As-Built". To the right of this menu, two columns of parameters are shown, labeled "F59" and "F650" at the top. The "F59" column lists: "Transmission", "IVD Initialization Sequence", "Speed Items", "Vehicle", "Personality", "Exterior Lighting", "Customer Connectivity Settings", and "Personality Advanced". The "F650" column lists: "Transmission", "IVD Initialization Sequence", "Vehicle", "Personality", "Exterior Lighting", "Driveline", "Tire Size / Axle Ratio", "Fuel", "Powertrain", "Tire Size", and "Speed Items". Blue lines connect corresponding parameters between the two columns: "Transmission" to "Transmission", "IVD Initialization Sequence" to "IVD Initialization Sequence", "Speed Items" to "Speed Items", "Vehicle" to "Vehicle", "Personality" to "Personality", "Exterior Lighting" to "Exterior Lighting", and "Personality Advanced" to "Personality". The bottom of the screen shows a Windows taskbar with various application icons and a system tray displaying the date and time as 1/20/2022, 2:40 PM.

	F59	F650
Programmable Module Installation		
Module Reprogramming		
Programmable Parameters	Transmission	Transmission
As-Built	IVD Initialization Sequence	IVD Initialization Sequence
	Speed Items	Vehicle
	Vehicle	Personality
	Personality	Exterior Lighting
	Exterior Lighting	Driveline
	Customer Connectivity Settings	Tire Size / Axle Ratio
	Personality Advanced	Fuel
		Powertrain
		Tire Size
		Speed Items





## Main Menu



This procedure will read the transmission strategy and [IDN](#) from the module, provide solenoid data, and provide functionality to replace the transmission strategy.

This function is used on [HEV](#) applications to update the [ISC](#) motor and generator offsets.

This function should be performed as recommended in the service manual procedures.

Do you wish to continue?

NO

YES



Programmable Module Installation ▶

Module Reprogramming ▶

Programmable Parameters ▶

As-Built ▶

Transmission

**IVD Initialization Sequence**

Speed Items

Vehicle

Personality

Exterior Lighting

Customer Connectivity Settings

Personality Advanced



## IVD Initialization Sequence



**Note:**

- Before performing this procedure, please make sure the following operations are completed.
- Don't shake or bounce the vehicle
- Ensure that you are not pressing the brake pedal.
- Park the vehicle on level ground.
- Do not depress the accelerator pedal during this test.
- Bring the steering wheel to the straight ahead position.
- Do not move Steering Wheel during the routine

Do you wish to continue?

NO

YES

Interactive Vehicle Dynamics



The screenshot displays the IDS-124.01 software interface. The main window has a blue header bar with several icons on the left and a list of menu items. The menu items are:

- Programmable Module Installation
- Module Reprogramming
- Programmable Parameters
- As-Built

The 'Programmable Parameters' menu is expanded, showing a list of sub-items:

- Transmission
- IVD Initialization Sequence
- Speed Items
- Vehicle
- Personality
- Exterior Lighting
- Customer Connectivity Settings
- Personality Advanced

The 'Speed Items' sub-item is currently selected, highlighted in blue. The interface also includes a search bar at the bottom left and a taskbar at the bottom with various application icons.



Vehicle Speed Limit - (PCM) = ?

No additional speed limit

65 MPH/105KPH

68 MPH/110KPH





Programmable Module Installation ▶

Module Reprogramming ▶

Programmable Parameters ▶

As-Built ▶

Transmission

IVD Initialization Sequence

Speed Items

**Vehicle**

Personality

Exterior Lighting

Customer Connectivity Settings

Personality Advanced

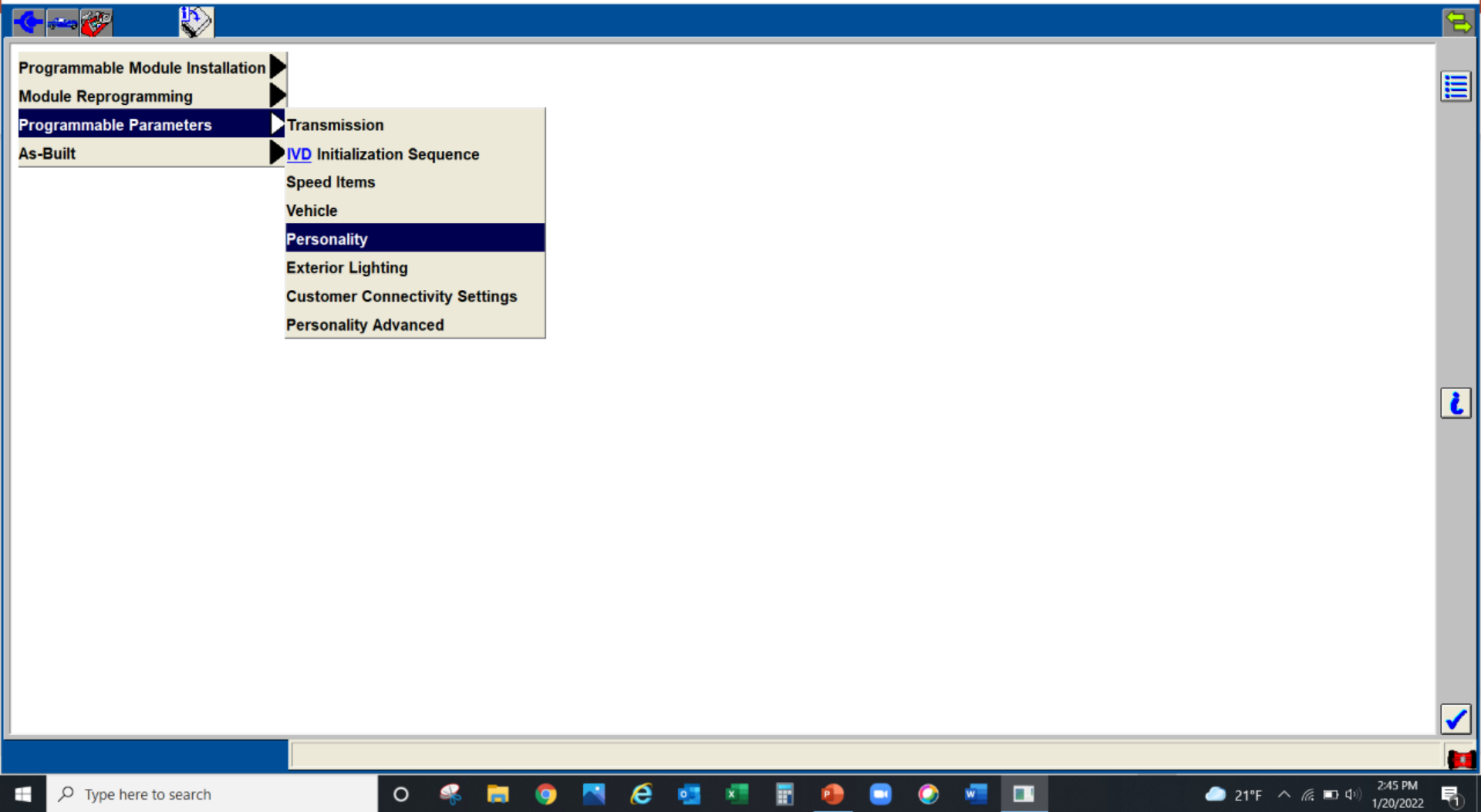


**LROS Country - (IPMA) = ?**

**LROS Speed Limit Units - (IPMA) = ?**

Canada





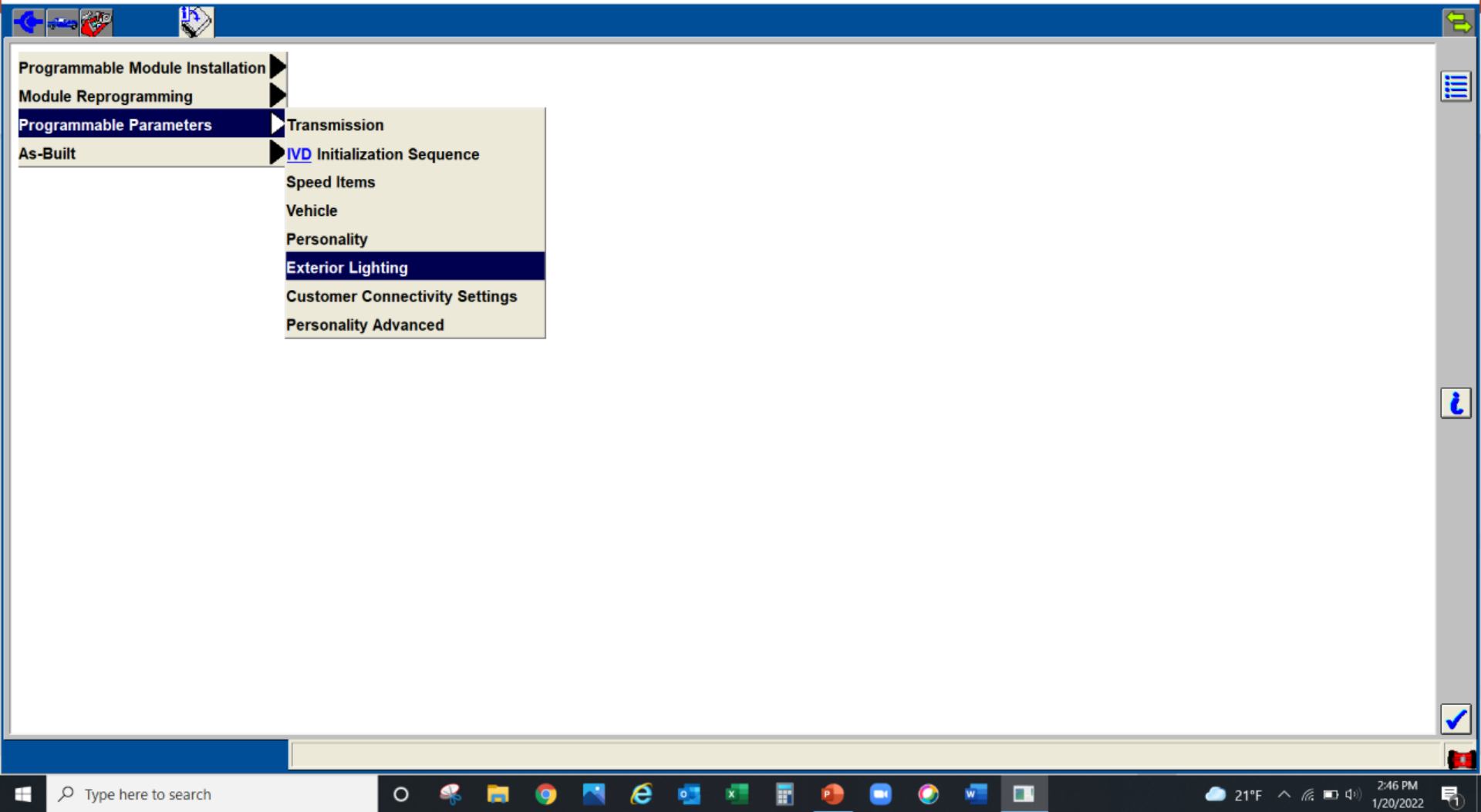


Display Unit Selection Function - (IC) = ?

Powerpoint - (BdyCM) = ?

Metric





**Daytime Running Lamps Control Function - (IC) = ?**

DRL Include Park Lamps - (BdyCM) = ?

DRL LF Low Beam Circuit Usage - (BdyCM) = ?

DRL RF Low Beam Circuit Usage - (BdyCM) = ?

DRL Vehicle - (BdyCM) = ?

Disabled





Programmable Module Installation ▶

Module Reprogramming ▶

Programmable Parameters ▶

As-Built ▶

Transmission

IVD Initialization Sequence

Speed Items

Vehicle

Personality

Exterior Lighting

**Customer Connectivity Settings**

Personality Advanced

<b>Customer Connectivity Settings - (TCU) = ?</b>	
Customer Connectivity Settings - (IC) = ?	Disabled
RF Section - (TCU) = ?	Enabled
TCU Available - (BdyCM) = ?	
Wi-Fi Hotspot Feature - (TCU) = ?	



Programmable Module Installation ▶

Module Reprogramming ▶

Programmable Parameters ▶

As-Built ▶

Transmission

**IVD** Initialization Sequence

Speed Items

Vehicle

Personality

Exterior Lighting

Customer Connectivity Settings

**Personality Advanced**



**Silent Mode Vehicle - (BdyCM) = ?**

**Welcome Goodbye - (IC) = ?**

**Disabled**

**Enabled**



IDS-118.01

Programmable Module Installation  
Module Reprogramming  
Programmable Parameters  
**As-Built**

F59

F650

ABS  
BCM  
C-CM  
GWM  
IPC  
IPM-A  
PCM  
SCCM

ABS  
ACM  
BCM  
C-CM  
GFM  
GWM  
HVAC  
IPC  
IPM-A  
PCM  
RTM  
SCCM

As-Built can be helpful to reprogram a module to its original as-built configuration or if the original module is not available. The As-built file can also be downloaded from the OASIS website under the Diagnostics tab.

Type here to search

3:12 PM  
7/8/2020



[VMM Applications](#) ▶▶

[VCMM Applications](#) ▶▶

Self Test

DataLogger

Live Network Monitor

Module Programming

**Network Test**

[VCI-CFR](#) ▶▶

Body ▶▶▶

Chassis ▶▶▶

Electrical ▶▶▶

Powertrain ▶▶▶



Fail - [TCU](#)

Pass - [ABS](#)

Pass - [C-CM](#)

Pass - [IPM-A](#)

Pass - [SCCM](#)

Pass - [BCM](#)

Pass - [GWM](#)

Pass - [IPC](#)

Pass - [PCM](#)

Select item for more information.



[VMM Applications](#)

[VCMM Applications](#)

Self Test

DataLogger

Live Network Monitor

Module Programming

Network Test

[VCI-CFR](#)

**Body** ▶ Security ▶

Chassis ▶ Service Functions ▶

Electrical ▶ [BMS](#) Reset

Powertrain ▶ [IPMA](#) Camera Alignment

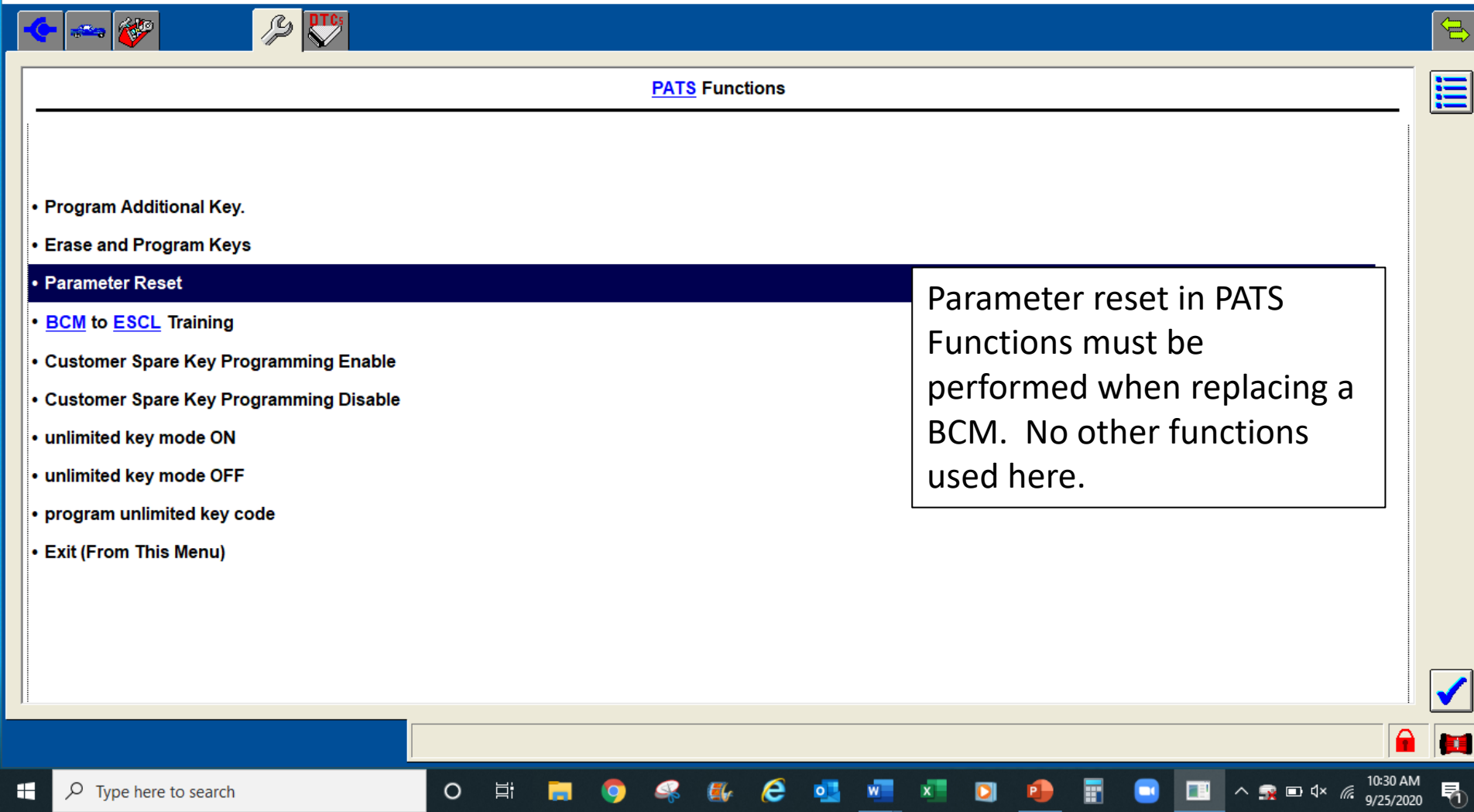


VMM Applications  
VCMM Applications  
Self Test  
DataLogger  
Live Network Monitor  
Module Programming  
Network Test  
VCI-CFR  
Body  
Chassis  
Electrical  
Powertrain

Security  
Service Functions  
BMS Reset  
IPMA Camera Alignment

PATS Functions  
~~Factory Keyless Entry Code~~  
~~Remote Keyless Entry~~  
~~Connectivity Device RKE Programming~~

Parameter reset in PATS Functions must be performed when replacing a BCM. No other functions used here.



The screenshot shows a software window titled "IDS-119.02" with a blue header bar. Below the header, there are several icons: a blue gear, a blue car, a red car with a white checkmark, a wrench, and a document with "DTCs" written on it. The main area of the window is titled "PATS Functions" in blue text. A list of functions is displayed on the left, with "Parameter Reset" highlighted in a dark blue bar. A text box on the right explains that parameter reset must be performed when replacing a BCM. The Windows taskbar is visible at the bottom, showing the search bar and various application icons.

**PATS Functions**

- Program Additional Key.
- Erase and Program Keys
- **Parameter Reset**
- [BCM](#) to [ESCL](#) Training
- Customer Spare Key Programming Enable
- Customer Spare Key Programming Disable
- unlimited key mode ON
- unlimited key mode OFF
- program unlimited key code
- Exit (From This Menu)

Parameter reset in PATS Functions must be performed when replacing a BCM. No other functions used here.

VMM Applications

VCM Applications

Self Test

DataLogger

Live Network Monitor

Module Programming

Network Test

VCI-CFR

Body

Chassis

Electrical

Powertrain

Security

Service Functions

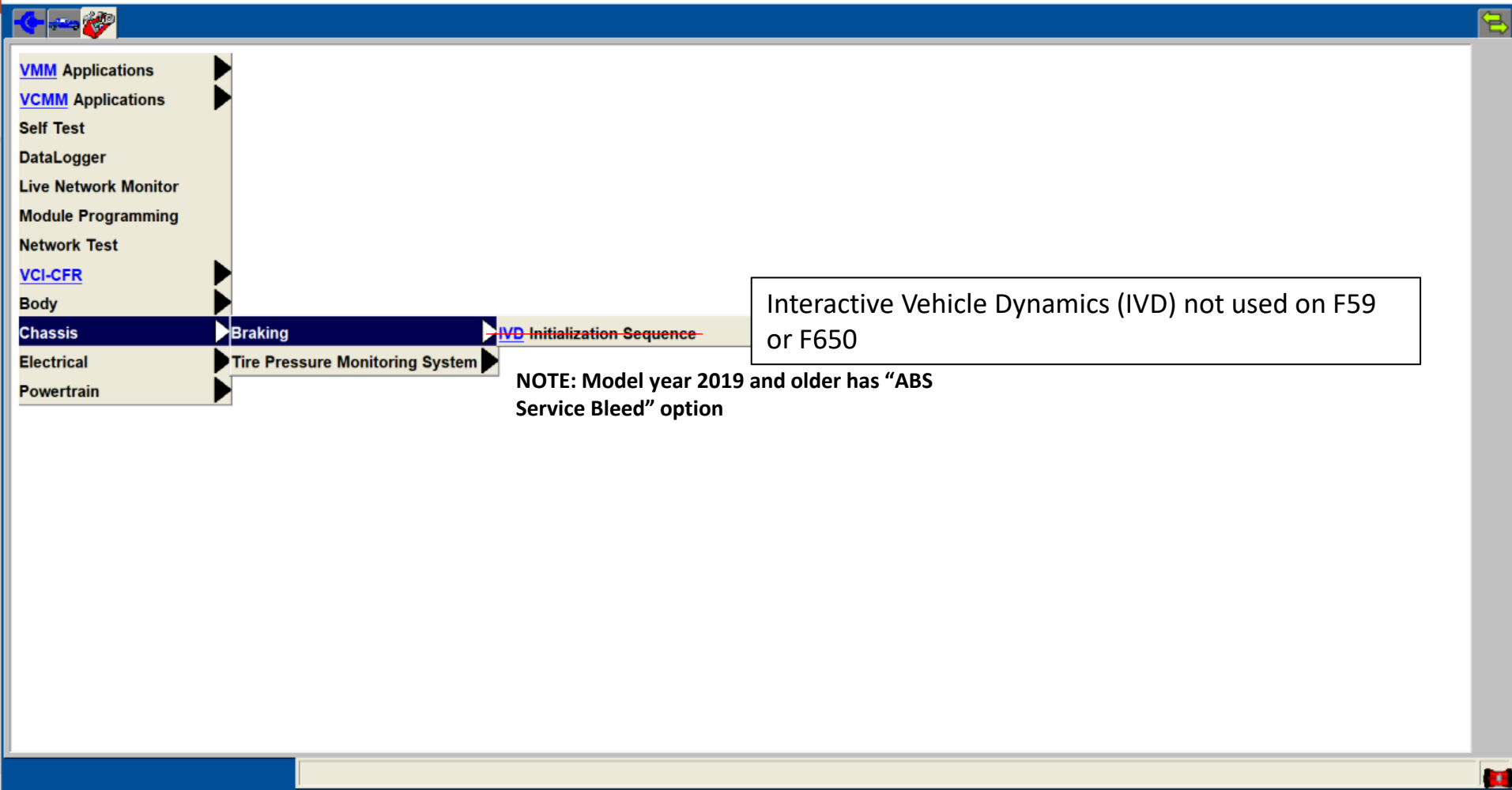
~~BMS Reset~~

IPMA Camera Alignment

~~CEI Lock Configuration~~

Configurable Engine Immobilizer (CEI) and Battery Monitoring System (BMS) not used on F59 or F650

Image Processing Module A (IPMA) Camera Alignment is for units equipped with camera and radar only. Used to calibrate the camera. Refer to separate camera alignment video training for more details.



Interactive Vehicle Dynamics (IVD) not used on F59 or F650

NOTE: Model year 2019 and older has "ABS Service Bleed" option

The screenshot displays the IDS-124.01 software interface. The main menu on the left includes the following items:

- VMM Applications
- VCMM Applications
- Self Test
- DataLogger
- Live Network Monitor
- Module Programming
- Network Test
- VCI-CFR
- Body
- Chassis**
- Electrical
- Powertrain

The 'Chassis' menu is expanded, showing the following sub-items:

- Braking
- Tire Pressure Monitoring System**

The 'Tire Pressure Monitoring System' menu is further expanded, showing the following sub-item:

- TPMS Sensor Training Mode**

A text box on the right side of the interface states: TPMS not used on F59 or F650

**VMM Applications**

**VCMM Applications**

Self Test

DataLogger

Live Network Monitor

Module Programming

Network Test

**VCI-CFR**

Body

Chassis

**Electrical**

**Powertrain**

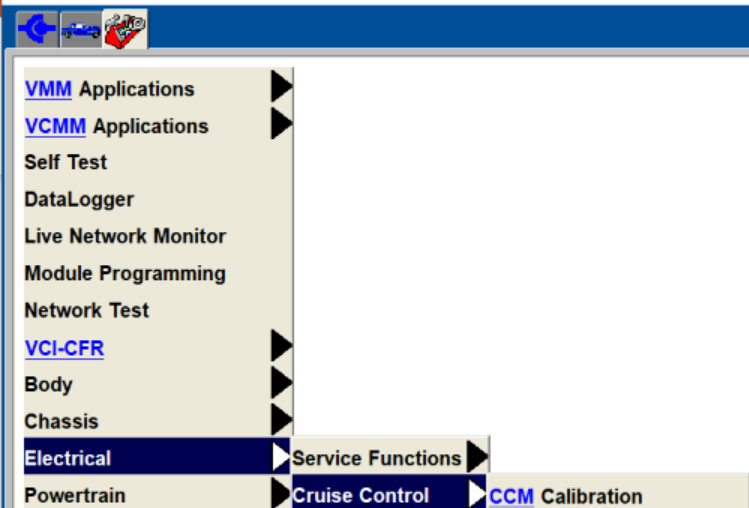
**Service Functions**

**Cruise Control**

**LIN New Module Initialization**

Not used on F59 or F650

**NOTE: Model year 2019 and older has "Charging System Test" option**



For units equipped with camera and radar only.  
Used to calibrate the Cruise Control Module (CCM)  
or radar. Refer to separate Radar Calibration video  
training for more details.

IDS-124.01

- VMM Applications
- VCMM Applications
- Self Test
- DataLogger
- Live Network Monitor
- Module Programming
- Network Test
- VCI-CFR
- Body
- Chassis
- Electrical
- Powertrain
  - Fuel
    - EVAP Test
    - Misfire Test
    - Power Balance
    - Relative Compression
    - OBD Test Modes
    - Reset KAM
    - Service Functions
    - Transmission
  - Fuel Economy Test
  - Fuel System Test

NOTES: Misfire test not available on F650. Model year 2019 and older has "Ignition Tools " option with "Ignition Test" that Analyzes the condition of the secondary ignition system by monitoring spark activity using capacitive pickups.

Type here to search

20°F 2:52 PM 1/20/2022



- |                                  |                               |
|----------------------------------|-------------------------------|
| Fuel                             |                               |
| Misfire Test                     |                               |
| Power Balance                    |                               |
| Relative Compression             |                               |
| <b><u>OBD</u> Test Modes</b>     | <b><u>OBD</u> Drive Cycle</b> |
| Reset <a href="#"><u>KAM</u></a> | Mode 1 Powertrain Data        |
| Service Functions                | Mode 6 On-Board Test Results  |
| Transmission                     | Mode 9 - Vehicle Information  |



- Fuel
- Misfire Test
- Power Balance
- Relative Compression
- OBD Test Modes**
- Reset KAM**
- Service Functions
- Transmission

1

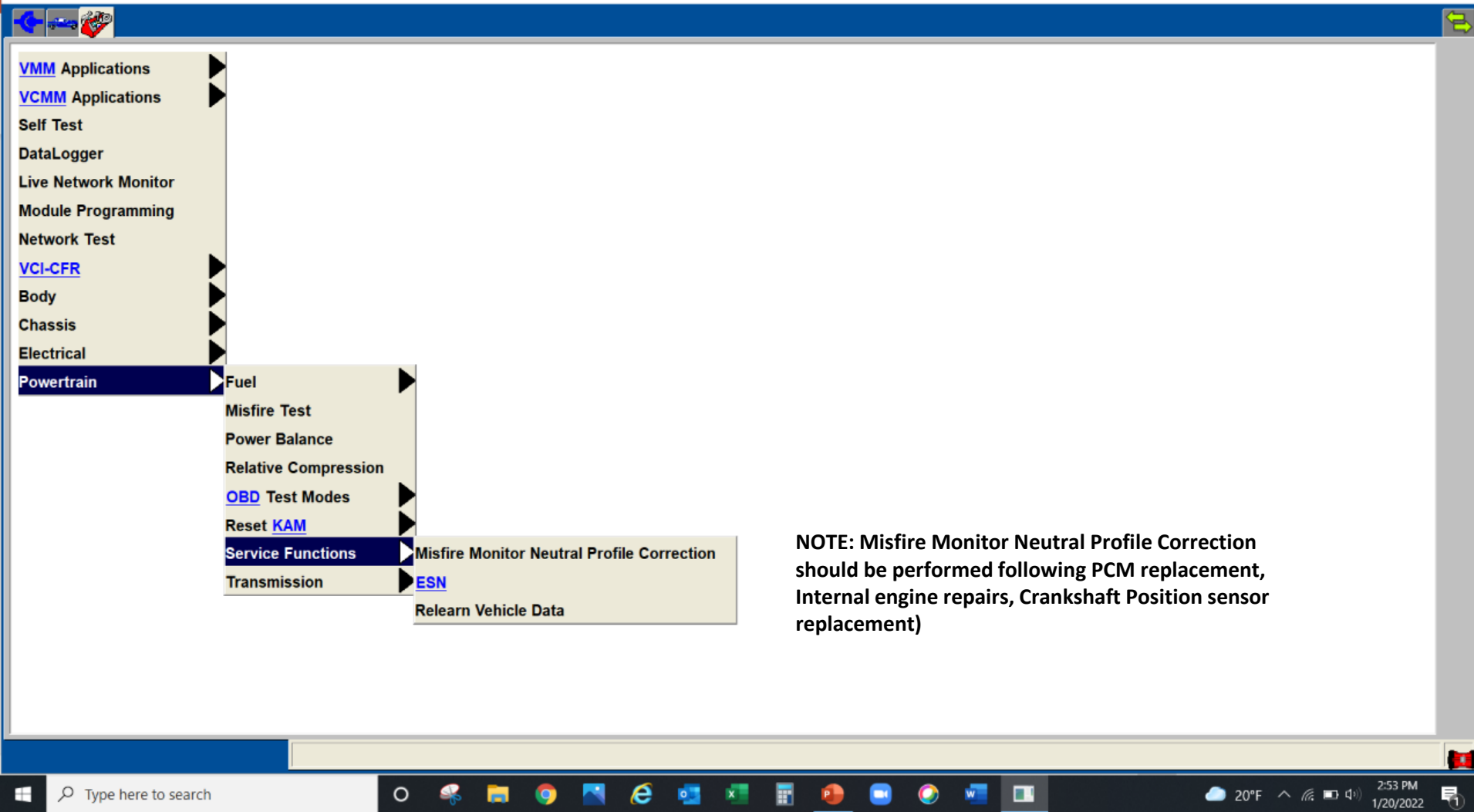
1



1

1





**NOTE: Misfire Monitor Neutral Profile Correction should be performed following PCM replacement, Internal engine repairs, Crankshaft Position sensor replacement)**



[VMM Applications](#)

[VCMM Applications](#)

Self Test

DataLogger

Live Network Monitor

Module Programming

Network Test

[VCI-CFR](#)

Body

Chassis

Electrical

**Powertrain**

Fuel

Misfire Test

Power Balance

Relative Compression

[OBD Test Modes](#)

Reset [KAM](#)

Service Functions

**Transmission**

Clear Transmission Adaptive Tables

Stop Use of Transmission Adaptive

Halt Transmission Adaptive Learning

Resume Transmission Adaptive Learning

Transmission Characterization/Solenoid [IDN](#)

