IQAN and VMMS parameters

Table of Contents

[1 2100I plus II 4](#_Toc116550495)

[1.1 Variables 4](#_Toc116550496)

[1.1.1 System 5](#_Toc116550497)

[1.1.2 Configure 5](#_Toc116550498)

[1.1.3 Options 7](#_Toc116550499)

[1.1.4 Water Level 11](#_Toc116550500)

[2 2100I plus III 11](#_Toc116550501)

[2.1 Variables 11](#_Toc116550502)

[2.1.1 System 13](#_Toc116550503)

[2.1.2 Configure 13](#_Toc116550504)

[2.1.3 Options 15](#_Toc116550505)

[2.1.4 Water Level 18](#_Toc116550506)

[3 Impact 18](#_Toc116550507)

[3.1 Variables 18](#_Toc116550508)

[3.1.1 System 19](#_Toc116550509)

[3.1.2 Configure 19](#_Toc116550510)

[3.1.3 Options 20](#_Toc116550511)

[4 Ramjet II 22](#_Toc116550512)

[4.1 Variables 22](#_Toc116550513)

[4.1.1 22](#_Toc116550514)

[4.1.2 System 22](#_Toc116550515)

[4.1.3 Configure 23](#_Toc116550516)

[4.1.4 Options 23](#_Toc116550517)

[5 Paradigm 25](#_Toc116550518)

[5.1 Variables 25](#_Toc116550519)

[5.1.1 System 25](#_Toc116550520)

[5.1.2 Truck Setup Engineering 25](#_Toc116550521)

[6 HXX 27](#_Toc116550522)

[6.1 Variables 27](#_Toc116550523)

[6.1.1 System 27](#_Toc116550524)

[6.1.2 PTO Compressor 28](#_Toc116550525)

[6.2 VMMS 28](#_Toc116550526)

[7 QX 28](#_Toc116550527)

[7.1 Variables 28](#_Toc116550528)

[7.1.1 System 29](#_Toc116550529)

[7.1.2 Truck Setup Engineering 29](#_Toc116550530)

[7.2 Pin Codes 32](#_Toc116550531)

[8 FLXX 32](#_Toc116550532)

[8.1 Variables 32](#_Toc116550533)

[8.1.1 System 33](#_Toc116550534)

[8.1.2 Configure 33](#_Toc116550535)

[8.1.3 Options 34](#_Toc116550536)

[9 APXX 36](#_Toc116550537)

[9.1 Variables 36](#_Toc116550538)

[9.1.1 System 36](#_Toc116550539)

[9.1.2 Configure 36](#_Toc116550540)

[9.1.3 Options 36](#_Toc116550541)

[10 TRXX 36](#_Toc116550542)

[10.1 Variables 36](#_Toc116550543)

[10.1.1 System 36](#_Toc116550544)

[10.1.2 Configure 36](#_Toc116550545)

[10.1.3 Options 36](#_Toc116550546)

[11 Guzzler 37](#_Toc116550547)

[11.1 Variables 37](#_Toc116550548)

[11.1.1 System 37](#_Toc116550549)

[11.1.2 Truck Config 37](#_Toc116550550)

[11.1.3 Options 38](#_Toc116550551)

[11.2 VMMS 38](#_Toc116550552)

# 2100I plus II

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| WO# | Integer | 20000000 |
| Vacuum Truck Type | State | Not Selected |
| Transfer Case Type | State | Not Selected |
| Transmission Type | State | Not Selected |
| Park Brake Type | State | Not Selected |
| Throttle Max RPM (water only) | Function | 1000,0 |
| Throttle Max RPM (Vacuum) | Function | 1000 |
| Throttle Type | State | Not Selected |
| Vacuum CNG Truck | Digital | FALSE |
| Vac Relief Load Management | Digital | FALSE |
| No Front Hose Reel | Digital | FALSE |
| Throttle VOG SA Swap (Detroit's) | Digital | TRUE |
| Recycler Filter Motor PVEA | Digital | TRUE |
| Rodder Pump Water Pressure Closed Loop | Digital | FALSE |
| Water Pump Type | State | Rodder Pump |
| Ignore Allision PTO Consent | Digital | FALSE |
| Boom Control Type | State | Standard |
| Body Keypad is 2x4 | Digital | FALSE |
| Blower Type | State | Default |
| Pump Off | State | None |
| Reciculator | Digital | FALSE |
| Boom Type | State | Standard |
| Front Blower Controls | Digital | TRUE |
| Wireless Remotes | State | None |
| Boom Work Light | Digital | FALSE |
| Rear Work Light | Digital | FALSE |
| Side Work Light | Digital | FALSE |
| Hose Reel Work Light | Digital | FALSE |
| Strobes | State | None |
| Arrows | State | None |
| Cameras | State | Rear |
| Water Level Type | State | Float |
| Debris Body Level Type | State | None |
| Coolant Valve | Digital | FALSE |
| Blower Temp Sensor | Digital | FALSE |
| Boom OOP | Digital | FALSE |
| Body OOP | Digital | FALSE |
| Cont. Fill | Digital | FALSE |
| Tool package | State | None |
| Pipe Rack | Digital | FALSE |
| Vibrator | State | None |
| Pinch Roller | Digital | TRUE |
| Boiler | Digital | FALSE |
| VOG | Digital | FALSE |
| Recycler | Digital | FALSE |
| Out Of Position Alarm Silence | Digital | FALSE |
| Digital Scale System | Digital | FALSE |
| Vac Enhance/Anti-Splash | State | None |
| Cab Dump Controls | Digital | FALSE |
| Recycler Gray Water Sensor Type | State | All Switch's |
| Flusher | Digital | FALSE |
| TD1140 Type | State | Standard |
| DPF regen | Digital | FALSE |
| Boom OOP Disable Shift Selector | Digital | FALSE |
| Body OOP Disable Shift Selector | Digital | FALSE |
| Water Tank Diameter | State | 28" |
| Center Water Tank Volume | Integer | 224 |
| Lower Water Tank Volume | Integer | 245 |
| Upper Water Tank Volume | Integer | 1028 |
| Sensor Height from Bottom of Tank | Integer | 0 |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Configure

WO#: work order number of truck

Vacuum Truck Type:

1. Not Selected
2. DD-PD
3. HYD SEF-SS
4. HYD SEF-DS
5. HYP-PD

Transfer Case Type:

1. Not Selected
2. 35 Teeth 1:1.457
3. 40 Teeth 1:1.1
4. 40 Teeth 1:1.275
5. 47 Teeth 1:1
6. 38 Teeth 1:468
7. 40 Teeth, 1:1.468

Transmission Type

1. Not Selected
2. Allison 3000 Dual PTO
3. Allision 4000
4. Manual
5. Allison 3000 single PTO

Look at work order to see PTO A and B if only A transmission is Allision 4000 if A and B is Allision 3000 Dual PTO.

Park Brake Type

1. Not Selected
2. J1939
3. Hardwired

All 2100I hardwired

Throttle Max RPM (water only)

From -1E7 to 1E7

Look at work order; typically, 1550

Throttle Max RPM (Vacuum)

From -1E7 to 1E7

Look at work order; typically, blower 1765 and fan 1650.

Throttle Type

1. Not Selected
2. Hardwired
3. TSC1-SA7
4. TSC1-SA39
5. TSC1-SA231
6. PTO-SA7
7. TSC1-SA7(Paccar MX)
8. PWM

Cummins engines use TSC1-SA7. Mx13 uses hardwire throttle on 2100I. A26 and Mack hardwired. Note with hardwire throttle RPM is limited on engine side not IQAN.

Vacuum CNG Truck

False/True

Vac Relief Load Management

False/True

No Front Hose Reel

False/True

Throttle VOG SA Swap (Detroit’s)

False/True

Recycler Filter Motor PVEA

Locked for EngTech

Rodder Pump Water Pressure Closed Loop

False/True

Water Pump Type

1. Rodder Pump
2. CAT pump w/o Charge Pump
3. CAT pump With Charge Pump

Ignore Allision PTO Consent

False/True

Boom Control Type

1. Standard
2. Proportional

Body Keypad is 2x4

False/True

Blower Type

1. None
2. Hibon VTB XL

Affects the blower Temperature shutdown/Warning

### Options

Pump Off

1. None
2. External
3. Internal
4. Guzzler

Reciculator

False/True

Boom Type

1. Standard
2. 5x5
3. 10x15

Front Blower Controls

False/True

Wireless Remotes

1. None
2. TD31140
3. TD3100
4. TD1140/T3100

Boom Work Light

False/True

Rear Work Light

False/True

Side Work Light

False/True

Hose Reel Work Light

False/True

Strobes

1. None
2. Standard
3. Mirror
4. Standard, Mirror

Arrows

1. None
2. Arrow Board
3. Arrow Bar
4. FS Arrow board

Cameras

1. Rear
2. Front, Rear
3. Sides, Rear
4. Front, Sides, Rear
5. None

Water Level Type

1. Float
2. Sensor

Debris Body Level Type

1. None
2. Float
3. Sensor

Coolant Valve

False/True

Blower Temp Sensor

False/True

Boom OOP

False/True

Body OOP

False/True

Cont. Fill

False/True

Tool package

1. None
2. Standard
3. 20 GPM

Pipe Rack

False/True

Vibrator

1. None
2. Hydraulic
3. Electric

Pinch Roller

False/True

Boiler

False/True

VOG

False/True

Recycler

False/True

Out Of Position Alarm Silence

False/True

Digital Scale System

False/True

Vac Enhance/Anti-Splash

1. None
2. 2-Pos
3. Variable

Cab Dump Controls

False/True

Recycler Gray Water Sensor Type

1. All Switches
2. LVL switch with overflow Switch
3. LVL switch with High/Low Switch

Locked until Recycler is turned on. Typically set to option 1; LVL switch with overflow switch, for recycler.

Flusher

False/True

TD1140 Type

1. Standard
2. Dump Controls

DPF regen

False/True

Boom OOP Disable Shift Selector

False/True

Body OOP Disable Shift Selector

False/True

### Water Level

Water Tank Diameter

1. 28”
2. 30”

Center Water Tank Volume

Integer value

Lower Water Tank Volume

Integer value check for left and right side

Upper Water Tank Volume

Integer value check for left and right side

Sensor Height from Bottom of Tank

Integer value installed 3 inches from the bottom

# 2100I plus III

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| WO# | Integer | 20000000 |
| Vacuum Truck Type | State | Not Selected |
| Transfer Case Type | State | Not Selected |
| Transmission Type | State | Not Selected |
| Park Brake Type | State | Not Selected |
| Throttle Max RPM (water only) | Function | 1000,0 |
| Throttle Max RPM (Vacuum) | Function | 1000 |
| Throttle Type | State | Not Selected |
| Vacuum CNG Truck | Digital | FALSE |
| Vac Relief Load Management | Digital | FALSE |
| No Front Hose Reel | Digital | FALSE |
| Throttle VOG SA Swap (Detroits) | Digital | TRUE |
| Recycler Filter Motor PVEA | Digital | TRUE |
| Rodder Pump Water Pressure Closed Loop | Digital | FALSE |
| Water Pump Type | State | Rodder Pump |
| Ignore Allision PTO Consent | Digital | FALSE |
| Particle GPS | Digital | FALSE |
| Body Keypad is 2x4 | Digital | FALSE |
| Pump Off | State | None |
| Reciculator | Digital | FALSE |
| Boom Type | State | Standard |
| Front Blower Controls | Digital | TRUE |
| Wireless Remotes | State | None |
| Boom Work Light | Digital | FALSE |
| Rear Work Light | Digital | FALSE |
| Side Work Light | Digital | FALSE |
| Hose Reel Work Light | Digital | FALSE |
| Strobes | State | None |
| Arrows | State | None |
| Cameras | State | Rear |
| Water Level Type | State | Float |
| Debris Body Level Type | State | None |
| Coolant Valve | Digital | FALSE |
| Blower Temp Sensor | Digital | FALSE |
| Boom OOP | Digital | FALSE |
| Body OOP | Digital | FALSE |
| Cont. Fill | Digital | FALSE |
| Tool package | State | None |
| Pipe Rack | Digital | FALSE |
| Vibrator | State | None |
| Pinch Roller | Digital | TRUE |
| Boiler | Digital | FALSE |
| VOG | Digital | FALSE |
| Recycler | Digital | FALSE |
| Digital Scale System | Digital | FALSE |
| Vac Enhance/Anti-Splash | State | None |
| Cab Dump Controls | Digital | FALSE |
| Recycler Gray Water Sensor Type | State | Lvl Sense with Overflow Switch |
| Flusher | Digital | FALSE |
| TD1140 Type | State | Standard |
| DPF regen | Digital | FALSE |
| Boom OOP Disable Shift Selector | Digital | FALSE |
| Body OOP Disable Shift Selector | Digital | FALSE |
| Accumulator | Digital | TRUE |
| Freewheel | Digital | TRUE |
| WindGuide | Digital | TRUE |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Configure

WO#: work order number of truck

Vacuum Truck Type:

1. Not Selected
2. DD-PD
3. HYD SEF-SS
4. HYD SEF-DS
5. HYP-PD

Transfer Case Type:

1. Not Selected
2. 35 Teeth 1:1.457
3. 40 Teeth 1:1.275
4. 47 Teeth 1:1
5. 38 Teeth 1:468

Transmission Type

1. Not Selected
2. Allison 3000 Dual PTO
3. Allision 4000
4. Manual
5. Allison 3000 single PTO

Park Brake Type

1. Not Selected
2. J1939
3. Hardwired

Throttle Max RPM (water only)

From -1E7 to 1E7

Look at work order; typically, 1550

Throttle Max RPM (Vacuum)

From -1E7 to 1E7

Look at work order; typically, blower 1765 and fan 1650.

Throttle Type

1. Not Selected
2. Hardwired
3. TSC1-SA7
4. TSC1-SA39
5. TSC1-SA231
6. PTO-SA7
7. TSC1-SA7(Paccar MX)
8. PWM

Vacuum CNG Truck

False/True

Vac Relief Load Management

False/True

No Front Hose Reel

False/True

Throttle VOG SA Swap (Detroit’s)

False/True

Recycler Filter Motor PVEA

Locked for EngTech

Rodder Pump Water Pressure Closed Loop

False/True

Water Pump Type

1. Rodder Pump
2. CAT pump w/o Charge Pump
3. CAT pump With Charge Pump

Ignore Allision PTO Consent

False/True

Particle GPS

False/True

Body Keypad is 2x4

False/True

### Options

Pump Off

1. None
2. External
3. Internal
4. Guzzler

Reciculator

False/True

Boom Type

1. Standard
2. 5x5
3. 10x15

Front Blower Controls

False/True

Wireless Remotes

1. None
2. TD31140
3. TD3100
4. TD1140/T3100

Boom Work Light

False/True

Rear Work Light

False/True

Side Work Light

False/True

Hose Reel Work Light

False/True

Strobes

1. None
2. Standard
3. Mirror
4. Standard, Mirror

Arrows

1. None
2. Arrow Board
3. Arrow Bar
4. FS Arrow board

Cameras

1. Rear
2. Front, Rear
3. Sides, Rear
4. Front, Sides, Rear
5. None

Water Level Type

1. Float
2. Sensor

Debris Body Level Type

1. None
2. Float
3. Sensor

Coolant Valve

False/True

Blower Temp Sensor

False/True

Boom OOP

False/True

Body OOP

False/True

Cont. Fill

False/True

Tool package

1. None
2. Standard
3. 20 GPM

Pipe Rack

False/True

Vibrator

1. None
2. Hydraulic
3. Electric

Pinch Roller

False/True

Boiler

False/True

VOG

False/True

Recycler

False/True

Digital Scale System

False/True

Vac Enhance/Anti-Splash

1. None
2. 2-Pos
3. Variable

Cab Dump Controls

False/True

Recycler Gray Water Sensor Type

Locked for EngTech

Flusher

False/True

TD1140 Type

1. Standard
2. Dump Controls

DPF regen

False/True

Boom OOP Disable Shift Selector

False/True

Body OOP Disable Shift Selector

False/True

Accumulator

False/True

Freewheel

False/True

wind guide

False/True

### Water Level

Water Tank Diameter

1. 28”
2. 30”

Center Water Tank Volume

Integer value

Lower Water Tank Volume

Integer value check for left and right side

Upper Water Tank Volume

Integer value check for left and right side

Sensor Height from Bottom of Tank

Integer value installed 3 inches from the bottom

# Impact

## Variables

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Type | Default |  |  |  |
| Machine ID | Text | NULL |  |  |  |
| Date And Time | Integer | -6 |  |  |  |
| WO# | Integer | 20000000 |  |  |  |
| Park Break Type | State | Not Selected |  |  |  |
| Trans Type | State | Allison |  |  |  |
| Throttle Type | State | Not Selected |  |  |  |
| Throttle Max RPM | Function | 1000 |  |  |  |
| No front Hose Reel | Digital | FALSE |  |  |  |
| Ignore Allision PTO Consent | Digital | FALSE |  |  |  |
| Recirc Multiflow | Integer | 6 |  |  |  |
| PTO Ratio | Function | 1.28 |  |  |  |
| Enable 500K Chassis | Digital | FALSE |  |  |  |
| Allison SA | Integer | 49 |  |  |  |
| Blower Temp Sensor | Digital | FALSE |  |  |  |
| Boom Type | State | Standard |  |  |  |
| Boom Work Lights | Digital | FALSE |  |  |  |
| Continuous fill | Digital | FALSE |  |  |  |
| Debris Body Level Type | State | None |  |  |  |
| Hose Reel Work Lights | Digital | FALSE |  |  |  |
| Pinch Roller | Digital | TRUE |  |  |  |
| Rear Work Lights | Digital | FALSE |  |  |  |
| Water Level Type | State | Float |  |  |  |
| Side Work Lights | Digital | FALSE |  |  |  |
| Recirc | Digital | FALSE |  |  |  |
| Wireless | Digital | FALSE |  |  |  |
| Sludge Pump | Digital | FALSE |  |  |  |
| Water Heater | Digital | FALSE |  |  |  |
| Body Dump Keypad | Digital | FALSE |  |  |  |
| Hose Reel Lock | Digital | FALSE |  |  |  |
| Hose Reel Ext/Ret | Digital | FALSE |  |  |  |
| Hyd Tool Package | Digital | FALSE |  |  |  |
| Strobes | Digital | FALSE |  |  |  |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Configure

WO#

work order number from -200000000 to 200000000

Park Break Type

1. Not Selected
2. Hardwire
3. J1939

All hardwired

Trans Type

1. Allison
2. Manual

Throttle Type

1. Not Selected
2. Hardwire
3. TSC1-SA7
4. TSC1-SA7(Paccar MX)

Throttle Max RPM

-10000000 to 10000000

No front Hose Reel

False/True

Ignore Allision PTO Consent

False/True

Recirc Multiflow

-10000000 to 10000000

PTO Ratio

-10000000 to 10000000

Enable 500K Chassis

False/True

Allision SA

Allison Source Address

### Options

Blower Temp Sensor

False/True

Boom Type

1. Standard
2. 5x5
3. 10x15

Boom Work Lights

False/True

Continuous fill

False/True

Debris Body Level Type

1. None
2. Float
3. Sensor

Hose Reel Work Lights

False/True

Pinch Roller

False/True

Rear Work Lights

False/True

Water Level Type

1. Float
2. Sensor

Side Work Lights

False/True

Recirc

False/True

Wireless

False/True

Sludge Pump

False/True

Water Heater

False/True

Body Dump Keypad

False/True

Hose Reel Lock

False/True

Hose Reel Ext/Ret

False/True

Hyd Tool Package

False/True

Strobes

# Ramjet II

## Variables

### 

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| WO# | Integer | 20000000 |
| Park Break Type | State | Not Selected |
| Throttle Type | State | Not Selected |
| Throttle Max RPM | Function | 1000 |
| Front/Rear Hose Reel | State | Rear Hose Reel |
| Single PTO | Digital | FALSE |
| Enable HXX Mode Icon | Digital | FALSE |
| 250K Chassis Baud Rate | Integer | 250 |
| Hardwire PTO | Digital | FALSE |
| Continuous Fill | Digital | FALSE |
| Hose Reel Work Lights | Digital | FALSE |
| Pinch Roller | Digital | TRUE |
| Rear Work Lights | Digital | FALSE |
| Water Level Type | State | Float |
| Side Work Lights | Digital | FALSE |
| Recirc | Digital | FALSE |
| Wireless | Digital | FALSE |
| Keypad Actuated Accumulator | Digital | FALSE |
| Hyd Wind Guide | Digital | FALSE |
| Hose Reel Extend/Retract | Digital | FALSE, TRUE |
| Cabinet Heaters | Digital | FALSE |
| Water Heater Option | Digital | FALSE |
| Strobes | Digital | FALSE |
| Freewheel | Digital | FALSE |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

Park brake all hardwire

### Configure

WO#

work order number from -200000000 to 200000000

Park Break Type

1. Not Selected
2. Hardwire
3. J1939

Throttle Type

1. Not Selected
2. TSC1 -SA7
3. TSC1 -SA7 (Paccar MX)

Throttle Max RPM

From -1E7 to 1E7

Front/Rear Hose Reel

1. Rear Hose Reel
2. Front Hose Reel

Single PTO

False/True

Enable HXX Mode Icon

False/True

250K Chassis Baud Rate

250K or 500K

Hardwire PTO

False/True

### Options

Continuous Fill

False/True

Hose Reel Work Lights

False/True

Pinch Roller

True/False

Rear Work Lights

False/True

Water Level Type

1. Float
2. Sensor

Side Work Lights

False/True

Recirc

False/True

Wireless

False/True

Keypad Actuated Accumulator

False/True

Hyd Wind Guide

False/True

Hose Reel Extend/Retract

False/True

Cabinet Heaters

False/True

Elec cargo are cabinet heaters

Water Heater Option

False/True

Strobes

False/True

Freewheel

False/True

# Paradigm

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | Null |
| Date And Time | Integer | -6 |
| WO# | Integer | 0 |
| Throttle Type | State | Not Selected |
| Water Pump Type | State | Not Selected |
| Water Level Sensor Type | State | Not Selected |
| Park Brake Type | State | Not Selected |
| Compressor Type | State | Not Selected |
| Blower Tooth Count | Integer | 30 |
| Water Pump Tooth Count | Integer | 40 |
| Option 1 - Recirc | Digital | FALSE |
| Option 2 - Water Heater | Digital | FALSE |
| Option 3 - Hopper Vibrator | Digital | FALSE |
| Option 4 - DigRight | Digital | FALSE |
| Option 5 - Load Limit | Digital | FALSE |
| Option 6 | Digital | FALSE |
| Option 7 | Digital | FALSE |
| Option 8 | Digital | FALSE |
| Option 9 | Digital | FALSE |
| Option 10 | Digital | FALSE |
| Option 11 | Digital | FALSE |
| Option 12 | Digital | FALSE |
| Baud Rate | Integer | 250 |
| Allison PTO Consent Request SA | Integer | 49 |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Truck Setup Engineering

WO#

work order number from -200000000 to 200000000

Throttle Type

1. Not Selected
2. TSC1
3. PTO Set/Acc
4. PTO Set/Coast

Water Pump Type

1. Not Selected
2. No Water Pump
3. Washdown (4 GPM)
4. Full Size ( 8GPM )

Water Level Sensor Type

1. Not Selected
2. Float Switch
3. Continuous Level

Typically float switch

Park Brake Type

1. Not Selected
2. J1939
3. Hardwire

Set to J1939

Compressor Type

1. Not Selected
2. No Compressor
3. Boss (Small Air)
4. Vanair (Big Air)
5. Vanair (Small Air)

Blower Tooth Count

Typically, 30

Water Pump Tooth Count

Typically, 40

Option 1 – Recirc

False/True

Option 2 - Water Heater

False/True

Option 3 - Hopper Vibrator

False/True

Option 4 – DigRight

False/True

Option 5 - Load Limit

False/True

Option 6

False/True

Option 7

False/True

Option 8

False/True

Option 9

False/True

Option 10

False/True

Option 11

False/True

Option 12

False/True

Baud Rate

Typically 250, can be 500

Allison PTO Consent Request SA

Source address of Allison typically 49 which is 0x31

# HXX

Set on display and not with IQAN

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| PTO Compressor Type | Digital | False |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### PTO Compressor

False/True

False; Vactor

True; VanAir

## VMMS

# QX

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| WO# | Integer | 1000001 |
| Throttle Type | State | Not Selected |
| Trans\_Type | State | Not Selected |
| Vacuum Type | State | Not Selected |
| Transfer Case Type | State | Not Selected |
| Park Brake Type | State | Not Selected |
| Fan Tooth Count | Integer | 30 |
| Recirc Comp Value % | Integer | 10 |
| GT Cell Module | Digital | FALSE |
| Option 2 - Recirc | Digital | TRUE |
| Option 3 - Spare | Digital | FALSE |
| Option 4 - Air Compressor | Digital | FALSE |
| Option 5 - Water Heater | Digital | TRUE |
| Option 6 - Knife Gate | Digital | FALSE |
| Option 7 - Sludge Pump | Digital | FALSE |
| Option 8 - Tool Package | Digital | FALSE |
| Option 9 - Vacuum Enhancer | Digital | FALSE |
| Option 10 - Driver Work Lts | Digital | TRUE |
| Option 11 - Pass Work Lts | Digital | FALSE |
| Option 13 - Boom Work Lts | Digital | TRUE |
| Option 12 - Rear Work Lts | Digital | FALSE |
| Option 14 - Beacon Lts | Digital | TRUE |
| Option 15 - Mirror Strobe | Digital | FALSE |
| Option 16 - Spare | State | Not Enabled |
| Option 17 - Cabinet Heaters | Digital | TRUE |
| Option 18 - Heat Cord | Digital | FALSE |
| Option 19 - Scale System | Digital | FALSE |
| Option 20 - Body Level Sensor | Digital | FALSE |
| Option 21 - Hydraulic Oil type | State | None |
| Option 22 Hose Reel | Digital | FALSE |
| Option 23 Load limit switch | Digital | FALSE |
| Option 24 Side hydraulic enabled | Digital | FALSE |
| MC43 Cabinet Lights | Digital | FALSE |
| Option 25 DOT Strobes | Digital | TRUE |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Truck Setup Engineering

WO#

work order number from -200000000 to 200000000

Throttle Type

1. Not Selected
2. Hardwire
3. TSC1-SA7
4. TSC1-SA39
5. TSC1-231
6. PTO-SA7
7. TSC1-SA7-Paccar

Trans Type

1. Not Selected
2. Manual
3. Allision 250K
4. Allison 500K
5. Ultrashift 11
6. Ultrashift 13
7. Ultrashift 18

Vacuum Type

1. Not Selected
2. Roots 824
3. Robuschi 145
4. Fan

Transfer Case Type

1. Not Selected
2. 1:1.100
3. 1:1.275
4. 1:1.470

Park Brake Type

1. Not Selected
2. J1939
3. Hardwire

Fan Tooth Count

Typically set to 30

Recirc Comp Value %

Typically set to 10

GT Cell Module

False/True

Option 2 – Recirc

True/False

Option 3 – Spare

Second Operator Station

False/True

Option 4 - Air Compressor

False/True

Option 5 - Water Heater

True/False

Option 6 - Knife Gate

False/True

Option 7 - Sludge Pump

False/True

Option 8 - Tool Package

False/True

Option 9 - Vacuum Enhancer

False/True

Option 10 - Driver Work Lts

True/False

Option 11 - Pass Work Lts

False/True

Option 13 - Boom Work Lts

True/False

Option 12 - Rear Work Lts

False/True

Option 14 - Beacon Lts

True/False

Option 15 - Mirror Strobe

False/True

Option 16 – Spare

Arrow Board

Option 17 - Cabinet Heaters

True/False

Option 18 - Heat Cord

False/True

Option 19 - Scale System

False/True

Option 20 - Body Level Sensor

False/True

Option 21 - Hydraulic Oil type

1. None
2. IS0-22
3. ISO-32
4. ISO-46

Option 22 Hose Reel

False/True

Option 23 Load limit switch

False/True

Option 24 Side hydraulic enabled

False/True

MC43 Cabinet Lights

False/True

Option 25 DOT Strobes

True/False

## Pin Codes

|  |  |  |
| --- | --- | --- |
| To program truck password: Ben$Bacha1 | | |
| Truck Engineering | | 2000 |
| Compensator | | 2001 |
| Truck Setup |  | 2002 |
| Boom Setup | | 2003 |
| Hyd Overrides | | 2004 |
| Fan Overrides | | 2005 |
| Blocking valve recir | | 2006 |
| Keypad Addressing | | 2000 |
| Cat Pump setting | | 2000 |

# FLXX

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| WO# | Integer parameter | 20000000 |
| Body Locks | Digital parameter | FALSE |
| Hyd Oil Type | State parameter | ISO-32 |
| Throttle Max RPM | Function parameter | 2150 |
| Throttle Type | State parameter | Not Selected |
| Transmission Type | State parameter | Not Selected |
| Aux Pump Has Torque Limiter | Digital parameter | TRUE |
| Allison Consent Source Address | State parameter | SA 49 |
| Boom Work Lights | Digital parameter | TRUE |
| Cabinet Heaters | Digital parameter | TRUE |
| Debris Body Level Type | State parameter | None |
| Driver Side Work Lights | Digital parameter | FALSE |
| Passenger Side Work Lights | Digital parameter | TRUE |
| Rear Work Lights | Digital parameter | TRUE |
| Recirc | Digital parameter | TRUE |
| Vac Enhance | Digital parameter | TRUE |
| Vibrator | Digital parameter | TRUE |
| Water Heater | Digital parameter | TRUE |
| Water Level Type | State parameter | Float |
| Air Compressor Type | State parameter | None |
| Tool Package | Digital parameter | TRUE |
| Sludge Pump | Digital parameter | FALSE |
| Strobes | Digital parameter | TRUE |
| DigFAST | Digital parameter | TRUE |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Configure

WO#

work order number from -200000000 to 200000000

Body Locks

False/True

Hyd Oil Type

1. ISO-32
2. ISO-22
3. ISO-43

Throttle Max RPM

See build ticket for RPM

Default at 2150

Throttle Type

1. Not Selected
2. Hardwire (needs Programming)
3. TSC1-SA7
4. TSC1-SA7 (Paccar MX)

Transmission Type

1. Not Selected
2. Manual
3. Allison

Aux Pump Has Torque Limiter

True/False

Allison Consent Source Address

1. SA 49
2. SA 49
3. SA3 3

Source Address in decimal

### Options

Boom Work Lights

True/False

Cabinet Heaters

True/False

Debris Body Level Type

1. None
2. Float
3. Sensor

Driver Side Work Lights

False/True

Passenger Side Work Lights

True/False

Rear Work Lights

True/False

Recirc

True/False

Vac Enhance

True/False

Vibrator

True/False

Water Heater

True/False

Water Level Type

1. Float
2. Sensor

Air Compressor Type

1. None
2. 185CFM /150PSI
3. 200CFM /200PSI
4. 300CFM / 250PSI
5. 300CFM /110PSI

CFM = cubic feet per minute

PSI = Pounds per Square Inch

Tool Package

True/False

Sludge Pump

False/True

Strobes

True/False

DigFAST

True/False

# APXX

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text parameter | NULL |
| Date And Time | Integer parameter | -6 |
| WO# | Integer parameter | 20000000 |
| Truck Type | State parameter | APXX Classic |
| Blower Type | State parameter | Roots 824 |
| Throttle Type | State parameter | TSC1 SA7 |
| Max Engine RPM | Integer parameter | 1850 |
| Trans Type | State parameter | Allison 3000 |
| Air Compressor Type | State parameter | None |
| Vibrator | Digital parameter | FALSE |
| Recirc | Digital parameter | FALSE |
| Vac Enhance | Digital parameter | FALSE |
| Water Heater | Digital parameter | FALSE |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Configure

WO#

work order number from -200000000 to 200000000

Truck Type

1. APXX Classic
2. APXX Simple
3. FLXX Classic
4. FLXX Simple

Simple: more electrical and software controls

Classic: more mechanical controls

Blower Type

1. Roots 824
2. Roots 624
3. Hibon 8702
4. Robuschi 145

Throttle Type

1. TSC1 SA7
2. Hardwire

Max Engine RPM

See work order for max RPM defaults to 1850

Trans Type

1. Allison 3000
2. Allison 400
3. Manual

### Options

Air Compressor Type

1. None
2. 185 CFM/150PSI
3. 200 CFM/200PSI
4. 300 CFM/250PSI
5. 300 CFM/110PSI

CFM = cubic feet per minute

PSI = Pounds per Square Inch

Vibrator

False/True

Recirc

False/True

Vac Enhance

False/True

Water Heater

False/True

# TRXX

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| WO# | Integer | 20000000 |
| Electric 4 Way Valve | Digital | TRUE |
| Wireless | State | CarTek |
| Strobes | Digital | TRUE |
| Arrowboard | Digital | FALSE |
| Tool Package | State | Default state |
| Water Heater | Digital | FALSE |
| Work Lights | Digital | TRUE |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Configure

WO#

work order number from -200000000 to 200000000

### Options

Electric 4 Way Valve

True/False

Wireless

1. CarTek
2. R260

Strobes

True/False

Arrow board

False/True

Tool Package

1. Default State
2. None
3. Hyd. Tool Package

Water Heater

False/True

Work Lights

True/False

# Guzzler

Program new box with A30. For 250K CAN plug in A31 and A29 if 500K CAN use A28 instead of A29

## Variables

|  |  |  |
| --- | --- | --- |
| Name | Type | Default |
| Machine ID | Text | NULL |
| Date And Time | Integer | -6 |
| Trans Type | State | None |
| Throttle Max RPM | Function | 1650 |
| Throttle Type | State | TSC1 SA7 |
| 250K Throttle Desired RPM message Selection | State | Auto |
| 500K Throttle Desired RPM message Selection | State | Auto |
| Allison Range ID | Digital | True |

### System

Machine ID: Based on the WO serial number

Date and time: set to -6 for central time

### Truck Config

Throttle Type

1. TSC1 SA7
2. TSC1 SA7 MX

Trans Type

1. None
2. Manual Trans
3. Auto Trans

Throttle Max RPM

Reference build ticket default is 1650

250K Throttle Desired RPM Message Selection

1. Auto
2. ECU
3. PTO

500K.Throttle Desired RPM Message Selection

1. Auto
2. ECU
3. PTO

Allison Range ID

True/False

Adjusts the range indicator for Alison or Eaton Ultrashift

### Options

## VMMS

Used on older boxes that do not need 500K