

## **OFF-HIGHWAY FEATURES**

- Off-Highway supports listed Off-Highway vehicles.
- Supports SAE J1939 messages.
- Ability to save and playback log files for Off-Highway specific connections.
  - a NOTE: Playing backlog files from Off-Highway connections is not supported in JPRO® versions prior to 2023 v1.
  - NOTE: Appropriate off-highway cables are required to connect to vehicles in JPRO®. Refer to the <u>Cable Connection Guide</u> for assistance with cable selection and finding connector locations.

## **ENGINE SUPPORT**

# **Heavy-Duty Support for Bobcat**

- Supports reading proprietary diagnostic fault codes, event codes, and data for the following equipment types, models, and engines:
  - Mini-Excavators
    - a **E45**, **E50**, and **E55** with DL02 engine
  - Track Loaders
    - $\,^{\square}$   $\,$  T450, T550, T590, and T650 with DL02 engine
    - a **T630, T740, T770, and T870** with DL03 engine
  - Skid Steer Loaders
    - a **\$530, \$630, and \$650** with DL02 engine
    - $\,^{\mbox{\tiny DL03}}$  and S770 with DL03 engine
    - a **NOTE:** Bobcat 6-pin Off-Highway cable is required
- Bi-Directional support for Bobcat engines:
  - Wiggle Test/Performance Issue Monitoring
    - a DL02 and DL03 engines on applicable equipment

# **Heavy-Duty Support for Caterpillar**

- NEW! Supports reading SAE faults and sensor data on 2010 and newer models.
  - NEW! Backhoe Loaders
    - NEW! 415F2 (C3.4B), 415F2 IL (C3.4B), 427F2 (C3.4B)
  - NEW! Compact Track Loaders
    - NEW! 239D3 (C2.2), 249D3 (C2.2)
  - NEW! Excavators
    - NEW! 311F LRR (C3.4B), 312F GC (C3.4B), 313F GC (C3.4B), 320 (C4.4), M323F (C4.4)
  - NEW! Genset
    - NEW! CX31-P600C13BI (C13B), XQ35 (C2.2)
  - NEW! Hydraulic Shovel
    - new! 6030 (C27)
  - NEW! Industrial Engine
    - □ NEW! C13 (C13), C13B (C13B), C15 (C15), C18 (C18), C18 (C18), C27 (C27), C3.4B (C3.4B), C4.4 (C4.4), C7 (C7), C9 (C9), C9.3 (C9.3)
  - NEW! Material Handler
    - NEW! MH3037 (C7)
  - NEW! Padfoot Compactor
    - □ **NEW!** CP34 (C3.4B), CP44B (C3.4B), CP5 (C3.4B), CP56B (C4.4), CP68B (C4.4), CP74B (C4.4)
  - NEW! Petroleum Power Train (Transmission)
    - □ **NEW!** C7 (C7), CX31-C13I (C13), CX31-C18I (C18), CX31-P600-C13I (C13), CX31-P600-C9I (C9), CX35-P800-C18I (C18), CX35-P800-C27I (C27), TH35-C13I (C13), TH48-E70-C27I (C27)
  - NEW! Pneumatic Compactor
    - a NEW! CW14 (C3.4B), CW16 (C3.4B)

#### • NEW! Power Module

D NEW! XQ35 (C2.2))

#### NEW! Skid Steer (Both)

□ **NEW!** 216B2 (C2.2), 216B3 (C2.2), 226B2 (C2.2), 226B3 (C2.2), 226D3 (C2.2), 232B2 (C2.2), 232D3 (C2.2), 232D3 (C2.2), 236D3 (C2.2), 239D (C2.2), 247B2 (C2.2), 247B3 (C2.2), 247B3 (C2.2), 257B2 (C2.2)

#### • NEW! Smooth Drum Compactor

□ **NEW!** CB44B (C3.4B), CB46B (C3.4B), CB54B (C3.4B), CB7 (C3.4B), CB8 (C3.4B), CD10 (C3.4B), CD44B (C3.4B), CD4B (C3.4B), CD54B (C3.4B), CD54B (C3.4B), CS34 (C3.4B), CS44B (C3.4B), CS56B (C4.4), CS66B (C4.4), CS66B (C4.4), CS74B (C4.4), CS76B (C4.4), CS78B (C4.4)

#### NEW! Telehandler

□ **NEW!** TH336C (C3.4B), TH337C (C3.4B), TH3510D (C3.4B), TH357D (C3.4B), TH406C (C3.4B), TH407C (C3.4B), TH408D (C3.4B), TH414C (C3.4B), TH514C (C3.4B), TH514D (C3.4B), TL642C (C3.4B), TL642D (C3.4B), TL943D (C3.4B), TL943D (C3.4B)

### NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Caterpillar Off-Highway 2010 and newer models:

#### NEW! Asphalt Paver

NEW! AP1000 (C7.1), AP1000 F (C7.1), AP1000E (C7.1), AP1055 (C7.1), AP1055 F (C7.1), AP1055E (C7.1), AP105E (C7.1), AP

#### NEW! Backhoe Loader

□ **NEW!** 415 (C3.6), 416 (C3.6), 416 F (C4.4), 416F (C4.4B), 416F2 (C4.4B), 420 (C3.6), 420 XE (C3.6), 420 XE (C3.6), 420 F (C4.4), 420 F (C4.4B), 420 F 2 IT (C4.4B), 420 F (C4.4B), 420 F 2 IT (C4.4B), 424 (C3.6), 428 (C3.6), 428 F (C4.4), 428 F (C4.4B), 430 F (C3.6), 430 F (C4.4), 430 F (C4.4B), 430 F (C4.4B), 430 F 2 IT (C4.4B), 430 F 2 IT (C4.4B), 432 F (C4.4B), 432 F (C4.4B), 432 F (C4.4B), 432 F (C4.4B), 434 F (C4.4B

#### • NEW! Cold Planer

• NEW! PM310 (C9.3), PM310 (C9.3B), PM312 (C9.3), PM312 (C9.3B), PM313 (C9.3), PM313 (C9.3B)

#### NEW! Compact Wheel Loader

NEW! 910 (C3.6), 910M (C4.4B), 914 (C3.6), 914G2 (C4.4), 914M (C4.4B), 918M (C4.4B), 920 (C3.6)

#### NEW! Crawler Dozer

• NEW! D1 (C3.6), D1 LGP (C3.6), D2 (C3.6), D2 LGP (C3.6), D3 LGP (C3.6), D3 LGP (C3.6), D3 LGP (C4.4), D3K LGP (C4.4), D3K LGP (C4.4), D3K2 LGP (C4.4), D3K2 XL (C4.4), D4K2 XL (C4.4), D5K2 XL (C4.4), D5K2 XL (C4.4), D5K2 LGP (C4.4), D5K2 LGP (C4.4), D5K2 XL (C4.4), D5K2 XL (C4.4), D5K2 XL (C4.4), D5K2 LGP (C4.4), D5K2 LGP (C4.4), D5K2 XL (C4.4)

#### • NEW! Excavator

■ NEW! 312E (C4.4), 312E (C4.4B), 312E L (C4.4B), 312E L (C4.4B), 312F (C4.4B), 313 (C3.6), 313 GC (C3.6), 313F (C4.4B), 313F L (C4.4B), 314E CR (C4.4B), 314E CR (C4.4B), 314E LCR (C4.4B), 314F (C4.4B), 315 GC (C3.6), 315 GC (C3.6), 315F L (C4.4B), 316E L (C4.4A), 316E L (C4.4B), 316F L (C4.4B), 316F L (C4.4B), 317 GC (C3.6), 317 GC (C3.6), 318E L (C4.4B), 318F L (C4.4B), 318F L (C4.4B), 320 GC (C4.4B), 320E (C6.6), 320E LN (C6.6), 323E LN (C6.6), 320E LN (C6.

### • NEW! Feller Buncher

□ NEW! 2570C (C7.1), 2570D (C7.1), 2670C (C7.1), 2670D (C7.1), 521 (C9.3B), 522 (C9.3B), 563C (C7.1), 573C (C7.1)

#### • NEW! General Forestry

a NEW! 548 (C7.1), 558 (C7.1), 568 (C9.3), 568 (C9.3B), FM538 (C7.1), FM568 (C9.3B)

#### NEW! Knuckleboom Loader

□ NEW! 2384C (C6.6), 2384D (C4.4B), 2484C (C6.6), 2484D (C4.4B), 559C (C6.6), 559D (C4.4B), 579C (C6.6), 579D (C4.4B)

#### NEW! Landfill Compactor

NEW! 826K (C15)

#### NEW! Load Haul Dump

NEW! R2900 (C15)

#### • NEW! Log Loader

NEW! 538 (C7.1), 548 (C7.1), 558 (C7.1), 568 (C9.3), 568 LL (C9.3B), 938K (C6.6), 938M (C7.1), FM538 (C7.1), FM568 (C9.3B)

### • NEW! Material Handler

NEW! MH3022 (C7.1), MH3024 (C7.1), MH3026 (C7.1), MH3032 (C7.1), MH3040 (C7.1), MH3050 (C9.3B), MH3250 (C9.3B)

#### NEW! Motor Grader

□ **NEW!** 120 (C7.1), 120M (C7.1), 120M || (C7.1), 120M (C9.3), 14 (C13), 140 (C9.3), 140 GC (C7.1), 140M (C9.3), 14M (C13), 14M ||| (C13), 150 (C9.3), 16 (C13), 160 (C9.3), 160M (C9.3), 16M (C13), 16M ||| (C13), 18M ||| (C13), 18M ||| (C13)

#### • NEW! Off-Highway Truck

• **NEW!** 725 (C9.3), 725C (C9.3), 725C2 (C9.3), 730 (C13), 730C (C13), 730C2 (C13), 735 (C13), 735B (C15), 735C (C15), 740B (C15), 740B (C15), 770G (C15)

#### • NEW! Padfoot Compactor

□ **NEW!** 815 (C7.1), 815K (C7.1), 816 (C7.1), 816K (C7.1), 824K (C15), 824K (C15), 825K (C15), 825K (C15), 826K (C15), CP11 (C4.4B), CP11 GC (C3.6), CP12 (C4.4B), CP12 GC (C3.6), CP13 GC (C3.6), CP14 (C4.4B), CP16 (C4.4B), CP44 (C4.4), CP54 XT (C4.4), CP54B (C4.4), CP54B (C4.4B), CP56B (C4.4), CP56B (C4.4B), CP74B (C4.4B), CP74B (C4.4B)

#### NEW! Petroleum Power Train (Transmission)

NEW! CX31-P600-C9.3I (C9.3), C31-P600-C15I (C15), CX31-P600-C18I (C18), CX35-P800\_C18I (C18), CX38-P892-C18I (C18), TH35-C13I (C13), TH35-C15I (C15), TH35-C15I (C15), TH48-E70-C27I (C27)

- NEW! Pipelayer
  - NEW! PL61 (C4.4B), PL72 (C9.3), PL83 (C15), PL87 (C15)
- NEW! Pneumatic Compactor
  - NEW! CW34 (C4.4), CW34 (C4.4B)
- NEW! Road Reclaimer
  - p NEW! RM500 (C15)
- NEW! Site Prep Tractor
  - NEW! 2864C (C9.3), 586C (C9.3)
- NEW! Smooth Drum Compactor
  - NEW! CB10 (C3.6), CB10 (C4.4B), CB13 (C4.4B), CB15 (C4.4B), CB16 (C4.4B), CB34 (C4.4), CB44B (C4.4), CB44B (C4.4B), CB54 (C4.4), CB54B (C4.4), CB54B (C4.4B), CB64 (C4.4B), CB64B (C4.4B), CB66B (C4.4B), CB7 (C3.6), CB7 (C3.6), CCS7 (C4.4B), CS10 GC (C3.6), CS11 (C4.4B), CS11 GC (C3.6), CS12 (C4.4B), CS12 GC (C3.6), CS13 GC (C3.6), CS14 (C4.4B), CS16 (C4.4B), CS19 (C4.4B), CS44 (C4.4), CS54 (C4.4), CS54 XT (C4.4), CS54B (C4.4), CS54B (C4.4B), CS56B (C4.4B), CS76B (C4.4B)
- NEW! Soil Stabilizer/Recycler
  - DEW! RM400 (C9.3B), RM500B (C15),
- NEW! Telehandler
  - NEW! TH3510 (C3.6), TH3510D (C4.4), TH357 (C3.6), TH357D (C4.4), TH408 (C3.6), TH408D (C4.4), TL1055 (C3.6), TL1055D (C4.4), TL1255 (C3.6), TL1255D (C4.4), TL642 (C3.6), TL943 (C3.6)
- NEW! Track Loader
  - NEW! 953 (C7.1), 953K (C7.1), 963 (C7.1), 963K (C7.1), 973K (C9.3)
- NEW! Track Processor/Harvester
  - a NEW! 568 (C9.3)
- NEW! Transmission Power Train
  - NEW! CX31-P600-C9.3I (C9.3)
- NEW! Wheel Dozer
  - NEW! 814 (C7.1), 814K (C7.1)
- NEW! Wheel Feller Buncher
  - NEW! 563D (C7.1), 573D (C7.1)
- NEW! Wheel Loader
  - NEW! 924K (C6.6), 926 (C7.1), 926M (C7.1), 930 (C7.1), 930K (C6.6), 930M (C7.1), 938 (C7.1), 938M (C7.1), 950 (C7.1), 950 GC (C7.1), 950GC (C7.1), 950K (C7.1), 950M (C7.1), 950M (C7.1), 950M Z (C7.1), 962 (C7.1), 962M (C7.1), 962M Z (C7.1), 966 (C7.1), 966 (C7.1), 966 GC (C9.3B), 966 XE (C9.3B), 966M XE (C9.3), 972 (C7.1), 972 (C9.3B), 972 XE (C9.3B), 972K (C9.3), 972M XE (C9.3), 972M XE (C9.3), 980K (C13), 980M (C13), 982M (C13), 986 (C15), 986 (C15), 988 GC (C15), R1700 (C13)
- NEW! Wheel Scraper
  - NEW! 621 (C13), 621H (C13), 621K (C13), 623K (C13), 623H (C13), 623K (C13), 627 (C9.3), 627 (C9.3), 627H (C13), 627H (C9.3), 627K (C9.3
- NEW! Wheel Skidder
  - NEW! 525D (C7.1), 535D (C7.1), 545D (C7.1), 555D (C7.1)
- D NOTE: CAT 9 or 14 pin Off-Highway cables are required.
- Bi-Directional support for Caterpillar engines:
  - Cylinder Cut-Out
    - a C4.4, C6.6, C7.1, C9.3, C9.3B, and C13 engines
  - Wiggle Test/Performance Issue Monitoring
    - a C4.4, C6.6, C7.1, C9.3, C9.3B, and C13 ACERT T4i & T4 engines on applicable equipment

## **NEW!** Heavy-Duty Support for Cummins

### **NEW!** Ammann

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Ammann Off-Highway 2013 and newer
  models:
  - NEW! Soil Compactor
    - D NEW! ASC 110 D (QSB4.5)
- NEW! Ammann Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSB4.5
  - NEW! DPF Service Regen
    - D NEW! QSB4.5
  - NEW! SCR Performance and System Test
    - D NEW! QSB4.5
  - NEW! Wiggle Test/Performance Issue Monitoring
    - D NEW! QSB4.5
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW! ASV**

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following ASV Off-Highway 2013 and newer models:
  - NEW! Compact Track Loader
    - NEW! RT 75(QSF2.8), RT 120(QSF3.8)
- NEW! ASV Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - □ NEW! QSF3.8
  - NEW! DPF Service Regen
    - D NEW! QSF3.8
  - NEW! SCR Performance and System Test
    - n NEW! OSF3.8
  - NEW! Wiggle Test/Performance Issue Monitoring
    - D NEW! QSF3.8
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Bergman

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Bergman Off-Highway 2020 and newer models:
  - NEW! Wheeled Dump Truck
    - a NEW! C815S (QSB4.5), C828S (QSB6.7)
- NEW! Bergman Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DEW! QSB4.5, QSB6.7
  - NEW! DPF Service Regen
    - D NEW! QSB4.5
  - NEW! Fuel Leakage Test
    - D NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - D NEW! QSB4.5, QSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - DEW! QSB4.5, QSB6.7
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Bomag

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Bomag Off-Highway 2010 and newer models:
  - NEW! Mobile Feeder
    - a **NEW!** BMF 2500 Series (QSB5.9)
  - NEW! Drum Roller
    - NEW! BW 200 Series (QSB5.9)
  - a **NOTE:** Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Ditch Witch

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Ditch Witch Off-Highway 2010 and newer models:
  - NEW! Trencher
    - NEW! HT 275 (QSC8.3), HT 275 (QSL9)
  - NEW! Directional Drill
    - NEW! JT100 ALL TERRAIN (QSB6.7), JT100 (QSB6.7), JT24(F3.8), JT25 (QSB4.5), JT30 ALL TERRAIN (QSB4.5), JT30 (QSB4.5), JT40 (QSB4.5), JT40 (QSB4.5), JT60 ALL TERRAIN (QSB6.7), JT60 ALL TERRAIN (QSB6.7), JT60 ALL TERRAIN (QSB6.7)
- NEW! Ditch Witch Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DEW! QSB4.5, QSB6.7
  - NEW! DPF Service Regen
    - a NEW! QSB4.5
  - NEW! Fuel Leakage Test
    - □ NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - DEW! QSB4.5, QSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB4.5, QSB6.7
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Dynapac

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Dynapac Off-Highway 2010 and newer models:
  - NEW! Tandem Roller
    - NEW! CC 2200 C (QSB3.3), CC2300 (QSB3.3), CC3200 (QSB3.3)
  - NEW! Compactor
    - D NEW! CP 1200 (QSF2.8), CP 274 (QSB4.5), CT3000 (QSB6.7), F1000T (QSB6.7)
  - NEW! Wheeled Finisher
    - NEW! FC1400C II (QSF2.8), F 2500 CS(QSB6.7), F 2500W (QSB6.7), F 3030C (QSB6.7), F 2500 C, (QSB6.7), F 2500 CS, (QSB6.7), MF2500CL (QSB6.7), MF2500CM (QSB6.7), MF2500CS (QSB6.7), F1000W (QSB6.7), F800T (QSB6.7), F800W (QSB6.7)
  - NEW! Vibratory Roller
    - □ NEW! 150 A (QSB3.3), 150 AD (QSB3.3), CA 150 P (QSB3.3), CA 150 (QSB3.3), CA 1300 PD (QSB4.5), CA 250 D-II (QSB4.5), CA 250 PD (QSB4.5), CA 2500 D (QSB4.5), CA 3500 PD (QSB4.5), CA 3500 PD (QSB4.5), CA 3500 PD (QSB4.5), CA 3500 PD (QSB4.5), CA 362 D(QSB6.7), CA 362 PD (QSB6.7), CA 4000 D (B4.5), CA 4000 D (QSB4.5), CA 4000 PD (B4.5), CA 4000 PD (B4.5), CA 4000 PD (B4.5), CA 4000 PD (B4.5), CA 4000 PD (QSB4.5), CA 4000 PD (QSB4.5),
- NEW! Dynapac Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! QSB4.5, QSB6.7, QSF3.8
  - NEW! DPF Service Regen
    - DEW! B4.5, QSB4.5, QSF3.8
  - NEW! Fuel Leakage Test
  - D NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - DEW! QSB4.5, QSB6.7, QSF3.8
  - NEW! Wiggle Test/Performance Issue Monitoring
    - DEW! QSB4.5, QSB6.7, QSF3.8
  - D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Gradall

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Gradall Off-Highway 2010 and newer models:
  - NEW! Wheel Excavator
    - NEW! D 152(ISB6.7), D 154(ISB6.7)
  - NEW! Hydraulic Excavator
    - NEW! D 172(ISB6.7), D 174(ISB6.7)
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Hitachi

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Hitachi Off-Highway 2010 and newer models:
  - NEW! Wheeled Loader
    - NEW! ZW310-5A (QSM11), ZW330 (QSM11), ZW370 (QSX15), ZW140ZW15 0(QSB4.5), ZW140-6 (QSB4.5), ZW180 (QSB6.7), ZW180-5 (QSB6.7), ZW200-5 (QSB6.7), ZW200-5A (QSB6.7), ZW200-6 (QSB6.7), ZW310-6 (QSL9)
- NEW! Hitachi Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! QSB4.5, QSB6.7, QSL9
  - NEW! DPF Service Regen
    - D NEW! QSB4.5, QSL9
  - NEW! Fuel Leakage Test
    - D NEW! QSB6.7, QSL9
  - NEW! SCR Performance and System Test
    - NEW! QSB4.5, QSB6.7, QSL9
  - NEW! Wiggle Test/Performance Issue Monitoring
    - DEW! QSB4.5, QSB6.7, QSL9
  - a **NOTE:** Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Hydrema

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Hydrema Off-Highway 2013 and newer models:
  - NEW! Loader Backhoe
    - NEW! 906 E (QSB4.5), 908 E (QSB4.5)
  - NEW! Off Highway Truck
    - □ **NEW!** 912 F (QSB4.5), 922 C (QSB5.9), 922 C (QSB6.7), H 926 EESD (QSB4.5), H 928 E-ESD (QSB4.5)
  - NEW! Wheel Excavator
    - NEW! MX 14 (QSB4.5), MX 16 (QSB4.5), MX 18 (QSB4.5)

- NEW! Hydrema Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! QSB4.5, QSB6.7
  - NEW! DPF Service Regen
    - NEW! QSB4.5
  - NEW! Fuel Leakage Test
    - □ NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - DEW! QSB4.5, QSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB4.5, QSB6.7
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Hyundai CE

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Hyundai CE Off-Highway 2010 and newer models:
  - NEW! Excavator
    - NEW! R850LC-9 (QSX15), 480LC-9 MH, (QSM11), 480LC-9A (QSX11.9), 520LC-9A (QSX11.9), HX480A L (X12), HX520A L (X12), R480LC-9 (QSM11), R800LC-7A, (QSX15), R800LC-9A, (QSX15), R800LC-9A, (QSX15), R850LC-9A (QSB6.7), 220LC-9A (QSB6.7), 235LCR-9A (QSB6.7), 260LC-9A (QSB6.7), 300LC-9A (QSB6.7), 330LC-9A (QSL9), 380LC-9A (QSL9), HX140A L (QSF3.8), HX140LC (QSF3.8), HX220AL (QSB6.7), HX220L (QSB6.7), HX220LR (QSB6.7), HX300L (QSB6.7)
  - NEW! Wheel Loader
    - NEW! HL 935, (QSB6.7), HL 940, (QSB6.7), HL 955(QSB6.7), HL760-9 (QSB6.7), HL770-9 (QSL9), HL980A XT (X12), HL980A (X12)
  - NEW! Compactor
    - D NEW! HR110 C(QSF3.8), HR120C (QSF3.8), HR140C (QSF3.8)
  - NEW! Wheel Excavator
    - NEW! HW140A (QSB4.5), HW160A, (QSB4.5), HW170A CR (QSB4.5), HW210 (QSB6.7), HW210 (QSB6.7), HW210A (QSB6.7), HW250A MH (QSB6.7)
  - NEW! Compact Loader
    - NEW! R110C, (QSF3.8), R140C (QSF3.8), R140W-9A (QSB6.7)
- NEW! Hyundai CE Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! QSB4.5, QSB6.7, QSF3.8, QSL9, QSX15
  - NEW! DPF Service Regen
    - NEW! QSB4.5, QSF3.8, QSL9, QSX15
  - NEW! Fuel Leakage Test
    - DEW! QSB6.7, QSL9, QSX15
  - NEW! SCR Performance and System Test
    - DEW! QSB4.5, QSB6.7, QSF3.8, QSL9
  - NEW! Wheel Speed Chart Test or Wheel Speed Window Test
    - □ NEW! QSX15
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB4.5, QSB6.7, QSF3.8, QSL9, QSX15
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

#### **NEW! JCB**

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following JCB Off-Highway 2013 and newer models:
  - NEW! Wheel Loader
    - NEW! 467ZX (QSM11), 427 (QSB6.7), 435S (QSB6.7), 437 (QSB6.7), 437HT (QSB6.7), 457HT (QSB6.7), 457S (QSB6.7), 457ZX (QSB6.7)
  - NEW! Articulated Dump Truck
    - a NEW! 700 (QSB6.7)
  - NEW! Backhoe Loader
    - D NEW! HMEE (QSB6.7)
- NEW! JCB Bi-Directional support for Cummins engines:
- NEW! Cylinder Cut-Out Test
  - D NEW! QSB6.7
- NEW! DPF Service Regen
  - DEW! QSB6.7
- NEW! SCR Performance and System Test
  - DEW! QSB6.7
- NEW! Wiggle Test/Performance Issue Monitoring
  - p NEW! QSB6.7
- **NOTE:** Cummins 3pin or 9-pin off-highway cables are required.
- NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Kalmar

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Kalmar Off-Highway 2013 and newer models:
  - Off-Highway Truck
    - □ **NEW!** T2 (B6.7), TT618i (B6.7)
- NEW! Kalmar Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! B6.7
  - NEW! DPF Service Regen
    - p NEW! B6.7
  - NEW! Fuel Leakage Test
    - a **NEW!** B6.7
  - NEW! SCR Performance and System Test
    - n NEWI BA 7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - a **NEW!** B6.7
  - **NOTE:** Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Kawasaki KCM

- **NEW!** Supports reading proprietary diagnostic fault codes, event codes, and data for the following Kawasaki KCM Off-Highway 2013 and newer models:
  - NEW! Wheel Loader
    - DEW! 90ZV-2 (QSM11)
  - NEW! Wheeled Loader
    - NEW! 60ZV-2 SERIES (QSB4.5), 70TM7 SERIES (QSB6.7), 70TMV-2 (QSB6.7), 70Z7 SERIES (QSB6.7), 70ZV SERIES (QSB6.7), 70ZV-2 SERIES (QSB6.7), 80ZV-2 (
- NEW! Kawasaki KCM Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DEW! QSB4.5, QSB6.7, QSL9
  - NEW! DPF Service Regen
    - a NEW! QSB4.5, QSL9
  - NEW! Fuel Leakage Test
    - DEW! QSB6.7, QSL9
  - NEW! SCR Performance and System Test
    - new! QSB4.5, QSB6.7, QSL9
  - NEW! Wiggle Test/Performance Issue Monitoring
    - DEW! QSB4.5, QSB6.7, QSL9
  - D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Leeboy

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Leeboy Off-Highway 2013 and newer models:
  - NEW! Road Widener
    - DEW! RW-85 (QSF2.8), 4130B (QSF3.8)
  - NEW! Force Feed Loader
    - DEW! 3000C (QSF3.8)
  - NEW! Motor Grader
    - NEW! 685D (QSF3.8), 695B (QSF3.8), G700B (QSF3.8)
  - NEW! Asphalt Pavers
    - D NEW! 8816 (QSF3.8)
  - NEW! Chip Spreader
    - □ **NEW!** CSM (QSB4.5), CSV (QSB4.5)
- NEW! Leeboy Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DEW! QSB4.5, QSF3.8
  - NEW! DPF Service Regen
    - n NEW! QSB4.5. QSF3.8
  - NEW! SCR Performance and System Test
    - NEW! QSB4.5, QSF3.8
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB4.5, QSF3.8
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Liebherr

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Liebherr Off-Highway 2013 and newer models:
  - NEW! Material Handler
    - NEW! LH 24 (QSB4.5), LH 26 (QSB4.5)
  - NEW! Rough Terrain Crane
    - NEW! LRT 1090-2.1(QSB6.7)
  - NEW! Crane
    - NEW! LRT 1100-2.1 (QSB6.7)
  - NEW! Excavator
    - NEW! R 922 (QSB6.7), R 924 (QSB6.7)
- NEW! Liebherr Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DEW! QSB4.5, QSB6.7
  - NEW! DPF Service Regen
    - D NEW! QSB4.5
  - NEW! Fuel Leakage Test
    - p NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - DEW! QSB4.5, QSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - DEW! QSB4.5, QSB6.7
  - D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Link-Belt

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Link-Belt Off-Highway 2013 and newer models:
  - NEW! Rough Terrain Crane
    - □ NEW! 100 RT (QSB6.7), 120 RT (QSB6.7), 75 RT (QSL9), RTC 80160 SII(QSL9), RTC 8050 SII (QSB4.5), RTC 8065 SII (QSB6.7), RTC 8090 (QSL9)
  - NEW! All Terrain Crane
    - NEW! 175 AT (QSX15), ATC 3200 (QSB6.7)
  - NEW! Crane
    - NEW! 138 HSL (QSB6.7), 228 HSL (QSB6.7), 238 HSL (QSB6.7), HTC 8660 SL (QSM11), HTC 8675 Series II (QSX15), HTC 8690 LB (ISX12), HTC 8690 LB (QSX15), HTC 8690 LB (Q
  - NEW! Telescopic Crane
    - □ NEW! HTT 86100 (QSX15), HTT 86100 (X12), HTT 86110(QSX15), HTT 86110 (X12), HTT 8675 (QSX15), HTT 8675 (X12)
- NEW! Link-Belt Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DIEW! QSB4.5, QSB6.7, QSL9, QSX15
  - NEW! DPF Service Regen
    - NEW! QSB4.5, QSL9, QSX15
  - NEW! Fuel Leakage Test
    - NEW! QSB6.7, QSL9, QSX15
  - NEW! SCR Performance and System Test
    - NEW! QSB4.5, QSB6.7, QSL9
  - NEW! Wheel Speed Chart Test or Wheel Speed Window Test
    - D NEW! QSX15
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB4.5, QSB6.7, QSL9, QSX15
  - **NOTE:** Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Liugong

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Liugong Off-Highway 2013 and newer models:
  - NEW! Cold Planer
    - DEW! 5100-2 (QSB5.9)
  - NEW! Wheel Loader
    - NEW! 886H (QSM11), 890H (QSM11), 890H (X12)
  - NEW! Excavator
    - NEW! 945E (QSM11), 950E (QSG12), 950E (X12), 950F (X12), 970E (QSX15)
  - NEW! Mining Truck
    - NEW! DR50C (QSX15), DW90A (QSM11)
  - NEW! Directional Drill
    - NEW! RD45A-CS (QSC8.3), SD36A (QSM11), SH32(QSM11), SH36C(QSM11), SH39 (QSM11), SH46A (QSX15)

- NEW! Diaphragm Wall Grab
  - NEW! SG50A (QSM11), SG70 (QSM11)
- NEW! Trencher
  - NEW! SX40A (QSM11), SX50 (QSX15)
- NEW! Dozer
  - NEW! 230C (B6.7)
- NEW! Paver
  - NEW! 509A (QSB6.7)
- NEW! Vibratory Roller
  - NEW! 6212E (QSB4.5), 6213E (QSB4.5), 6214E (QSB4.5), 6520E (QSB4.5), 6612E (QSB4.5)
- NEW! Wheel Loader
  - NEW! CLG856H (QSB6.7), 848H (QSB6.7), 856H (B6.7), 856H(QSL9), 862H (QSL9), 877H (L9)
- NEW! Excavator
  - D NEW! 913E (QSF3.8), 915E (QSB4.5), W915E (QSB4.5), 936E (QSL), 939E (L9)
- NEW! Liugong Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! B6.7, QSB4.5, QSB6.7, QSF3.8, QSL9, QSX15
  - NEW! DPF Service Regen
    - NEW! B6.7, L9, QSB4.5, QSF3.8, QSL9, QSX15
  - NEW! Fuel Leakage Test
    - new! B6.7, QSB6.7, QSL9, QSX15
  - NEW! SCR Performance and System Test
    - NEW! B6.7, L9, QSB4.5, QSB6.7, QSF3.8, QSL9
  - NEW! Wheel Speed Chart Test or Wheel Speed Window Test
    - NEW! QSX15
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! B6.7, QSB4.5, QSB6.7, QSF3.8, QSL9, QSX15
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Manitowoc

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Manitowoc Off-Highway 2013 and newer models:
  - NEW! Crane
    - NEW! 1015 (QSX15), 15000 (QSM11), 16000 (QSX15),18000(QSX15), 2250 (QSX15), 31000 (QSX15), 777 (QSC8.3), 888 (QSM11), 999 (QSM11), MLC300 (QSG12), MLC650 (QSX15), 14000(QSL9)
  - NEW! Wheel Loader
    - a NEW! 555 (QSL9)
  - NEW! Crane
    - NEW! MLC100 (QSB6.7), MLC100A (QSB6.7), MLC150(QSB6.7), MLC165(QSB6.7), MLC80A (QSB6.7), MLC90A (QSB6.7)
- NEW! Manitowoc Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSB6.7, QSL9, QSX15
  - NEW! DPF Service Regen
    - NEW! QSL9, QSX15
  - NEW! Fuel Leakage Test
    - NEW! QSB6.7, QSL9, QSX15
  - NEW! SCR Performance and System Test
    - D NEW! QSB6.7, QSL9
  - NEW! Wheel Speed Chart Test or Wheel Speed Window Test
    - D NEW! QSX15
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB6.7, QSL9, QSX15
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** New Holland CE

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following New Holland CE Off-Highway 2010 and newer models:
  - Dozer
  - D350 (QSM11)
  - D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Pettibone

NEW! Bi-Directional support for Cummins engines, reading proprietary diagnostic fault codes, event codes, and data for the following Pettibone
Off-Highway 2010 and newer models:

- NEW! Telehandler
  - □ NEW! 1056x (QSF3.8), 1246x (QSF3.8), 1256x (QSF3.8), 1544x (QSF3.8), 7944x (QSF3.8), 71056X (QSF3.8), 71246X (QSF3.8), 71256X (QSF3.8), 445F2 (QSF3.8)
- NEW! Pettibone Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - □ NEW! 1056x (QSF3.8), 1246x (QSF3.8), 1256x (QSF3.8), 1544x (QSF3.8), 7944x (QSF3.8), 71056X (QSF3.8), 71246X (QSF3.8), 71256X (QSF3.8), 445F2 (QSF3.8)
  - NEW! DPF Service Regen
    - □ NEW! 1056x (QSF3.8), 1246x (QSF3.8), 1256x (QSF3.8), 1544x (QSF3.8), 7944x (QSF3.8), 71056X (QSF3.8), 71246X (QSF3.8), 71256X (QSF3.8), 445F2 (QSF3.8)
  - NEW! SCR Performance and System Test
    - NEW! 1056x (QSF3.8), 1246x (QSF3.8), 1256x (QSF3.8), 1544x (QSF3.8), 7944x (QSF3.8), 71056X (QSF3.8), 71246X (QSF3.8), 71256X (QSF3.8), 445F2 (QSF3.8)
  - NEW! Wiggle Test/Performance Issue Monitoring
    - □ NEW! 1056x (QSF3.8), 1246x (QSF3.8), 1256x (QSF3.8), 1544x (QSF3.8), 7944x (QSF3.8), 71056X (QSF3.8), 71246X (QSF3.8), 71256X (QSF3.8), 445F2 (QSF3.8)
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Sakai

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Sakai Off-Highway 2010 and newer models:
  - NEW! Vibratory Roller
    - NEW! SV414D (QSF2.8), SV414T (QSF2.8), SV544D (QSF3.8), SV544T (QSB4.5)
  - NEW! Tandem Roller
    - D NEW! SW994 (QSF3.8)
- NEW! Sakai Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSB4.5, QSF3.8
  - NEW! DPF Service Regen
    - DEW! QSB4.5, QSF3.8
  - NEW! SCR Performance and System Test
    - DEW! QSB4.5, QSF3.8
  - NEW! Wiggle Test/Performance Issue Monitoring
    - DEW! QSB4.5, QSF3.8
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW! Sany**

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Sany Off-Highway 2010 and newer models:
  - NEW! Crane
    - NEW! SCC3500A (QSM11)
  - NEW! Cold Planer
    - a NEW! SCM600-3 (QSX15)
  - NEW! Grader
    - DEM! SMG200C-6 (QSC8.3), SAG200C-6 (QSB6.7)
  - NEW! Combination Roller
    - DEW! SPR260C-6 (QSB5.9), SPR300C-6 (QSB5.9)
  - NEW! Asphalt Pavers
    - NEW! SAP60C-7 (QSB4.5)
  - NEW! Crane
    - NEW! SCC1350A (QSL9), SCC2600A (QSL9)
  - NEW! Grader
    - DEM! SMG180C-6 (QSB6.7), SMG200C-6 (QSB6.7)
  - NEW! Vibratory Roller
    - NEW! SSR100C-6 (QSB4.5), SSR120C-6 (QSB4.5)
  - NEW! Excavator
    - NEW! SY215C (QSB6.7), SY215CLC (QSB6.7), SY225C (QSB6.7), SY235CLC (QSB6.7), SY265C (QSB6.7), SY305C LC(QSL9), SY335C LC (QSL9), SY365C (QSL9), SY390H (QSL9), SY500H (QSG12)
- NEW! Sany Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DEW! QSB4.5, QSB6.7, QSL9
  - NEW! DPF Service Regen
    - D NEW! QSB4.5, QSL9
  - NEW! Fuel Leakage Test
    - D NEW! QSB6.7, QSL9
  - NEW! SCR Performance and System Test
    - NEW! QSB4.5, QSB6.7, QSL9
  - NEW! Wiggle Test/Performance Issue Monitoring
    - D NEW! QSB4.5, QSB6.7, QSL9
  - NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Sennebogen

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Sennebogen Off-Highway 2010 and newer models:
  - NEW! Crane
    - NEW! 6100E (QSX15), 690 HD(QSM11), 690 HD (QSX15), 1100 (QSB6.7), 1100E (QSB6.7)
  - NEW! Cycle Crane
    - □ NEW! 640 (B6.7), 624 (B6.7), 730 (QSB6.7), 738 M (QSB6.7), 818 M(QSB4.5), 821R E (B4.5), 824 G (B4.5), 825 M (QSB6.7)
  - NEW! Material Handler
    - □ NEW! 8100 (QSB4.5), 8130 EQ (QSB4.5), 8160 EQ (QSB6.7)
- NEW! Sennebogen Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! B6.7, QSB4.5, QSB6.7
  - NEW! DPF Service Regen
    - DEW! B4.5, B6.7, QSB4.5
  - NEW! Fuel Leakage Test
    - D NEW! B6.7, QSB6.7
  - NEW! SCR Performance and System Test
    - DEW! B6.7, QSB4.5, QSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! B6.7, QSB4.5, QSB6.7
  - D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality

#### **NEW!** Tadano Faun

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Tadano Faun Off-Highway 2010 and newer models:
  - NEW! Crane
    - D NEW! GTC-350 (QSB4.5), GTC-600 (QSB6.7), GTC-800 (QSB6.7)
- NEW! Tadano Faun Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSB4.5, QSB6.7
  - NEW! DPF Service Regen
    - D NEW! QSB4.5
  - NEW! Fuel Leakage Test
    - D NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - DEW! QSB4.5, QSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB4.5, QSB6.7
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

#### **NEW!** Terex

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Terex Off-Highway 2010 and newer models:
  - NEW! All Terrain Crane
    - NEW! MAC 50 (QSC)
  - NEW! Skid Steer
    - NEW! R265T (QSF2.8)
  - NEW! Articulated Dump Truck
    - NEW! TA 251 (QSM11), TA 27-7 (QSM11), TA 300 (QSM11), TA 30-7 (QSM11), TA 25-7 (QSC8.3), TA25-7 (QSM11), TA 27-7 (QSL9)
  - NEW! Wheel Loader
    - NEW! TL 420 (QSM11), TL 450 (QSM11)
  - NEW! Rock Truck
    - D NEW! TR 35 (QSM11)
  - NEW! Crane
    - □ NEW! T340-1 (QSC8.3), 1065 (QSB6.7), 1075 (QSB6.7), 1100 (QSB6.7), RT 130 (QSB9.7), RT 230 (QSB4.5), RT 555 (QSB6.7), RT 670 (QSB6.7), T 340-1 XL (L9)
  - NEW! Rough Terrain Crane
    - □ **NEW!** RT 780 (QSB6.7)
  - NEW! Hydraulic Excavator
    - NEW! TC 210 LC (QSB6.7), TC 210 (QSB6.7), TC 240 LC (QSB6.7), TC 240 (QSB6.7), TC 260 LC (QSB6.7), TC 260 (QSB6.7)
  - NEW! Wheel Loader
    - NEW! TL 210 (QSB6.7), TL 260 (QSB6.7), TL 310 (QSB6.7)
  - NEW! Excavator
    - NEW! TW 190 (QSB6.7), TW 240 (QSB6.7)
- NEW! Terex Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! QSB4.5, QSB6.7, QSL9

- NEW! DPF Service Regen
  - D NEW! L9, QSB4.5, QSL9
- NEW! Fuel Leakage Test
  - D NEW! QSB6.7, QSL9
- NEW! SCR Performance and System Test
  - NEW! L9, QSB4.5, QSB6.7, QSL9
- NEW! Wiggle Test/Performance Issue Monitoring
  - NEW! QSB4.5, QSB6.7, QSL9
- D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
- a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Tiger Cat

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Tiger Cat Off-Highway 2010 and newer models:
- NEW! Loader
  - NEW! 234 (QSB6.7), 845 (QSB6.7)
  - NEW! Material Handler
    - NEW! 600D (QSB6.7)
- NEW! Mulcher
  - D NEW! M700 SERIES (QSB6.7)
- NEW! Tiger Cat Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSB6.7
  - NEW! Fuel Leakage Test
    - a NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - D NEW! OSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - D NEW! QSB6.7
  - **NOTE:** Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** Vermeer

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Vermeer Off-Highway 2010 and newer models:
  - NEW! Chipper
    - new! BC1200X L(QSB3.3), BC2100XL (QSB6.7)
  - NEW! Tractor
    - NEW! FT100 (QSF3.8), FT300 (QSL9)
- NEW! Vermeer Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - NEW! QSB6.7, QSF3.8, QSL9
  - NEW! DPF Service Regen
    - D NEW! QSF3.8, QSL9
  - NEW! Fuel Leakage Test
    - DEW! QSB6.7, QSL9
  - NEW! SCR Performance and System Test
    - DEW! QSB6.7, QSF3.8, QSL9
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## NEW! Wirtgen

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Wirtgen Off-Highway 2010 and newer models:
  - NEW! Cold Planer
    - NEW! W 100 XFI (QSL9), W 120 XFI (QSL9), W 120 XTI (QSL9), W 130 XFI (QSL9), W 150 CFI (QSL9), W 250I (QSL9), W 200 FI (QSX15), W 200 HI (QSX15), W 207 FI (QSX15), W 250I (QSX15)
- NEW! Wirtgen Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSL9, QSX15
  - NEW! DPF Service Regen
    - D NEW! QSL9, QSX15
  - NEW! Fuel Leakage Test
    - D NEW! QSL9, QSX15
  - NEW! SCR Performance and System Test
    - D NEW! QSL9
  - NEW! Wheel Speed Chart Test or Wheel Speed Window Test
    - D NEW! QSX15

- NEW! Wiggle Test/Performance Issue Monitoring
  - NEW! QSL9, QSX15
- D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
- NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

## **NEW!** Wollard

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following Wollard Off-Highway 2013 and newer models:
  - NEW! Passenger Stair
    - NEW! CMPS 170 (B3.3), CMPS 228 (B3.3), TML 704 (B3.3)
  - NEW! Tug
    - D NEW! M 100 (QSB3.3)
  - NEW! Conventional Pushback Tractor
    - new! M 60 (QSF2.8)
  - NEW! Loader
    - □ NEW! TC 1000 (B3.3)
  - NEW! Tug
    - D NEW! M 100 (QSB4.5)
  - NEW! Conventional Pushback Tractor
    - NEW! M 140 (QSB4.5), M 200 (QSB4.5), M 400 (QSB6.7), MB 2 (QSB6.7), MB 4 (QSB4.5), MB 4 (QSB6.7)
- NEW! Wollard Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSB4.5, QSB6.7
  - NEW! DPF Service Regen
    - NEW! QSB4.5
  - NEW! Fuel Leakage Test
    - p NEW! QSB6.7
  - NEW! SCR Performance and System Test
    - p NEW! QSB4.5. QSB6.7
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB4.5, QSB6.7
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

#### **NEW! XCMG**

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following XCMG Off-Highway 2013 and newer models:
  - NEW! Wheel Loader
    - □ NEW! LW1100KN (QSX15), LW1200KN (QSX15), LW600K (QSC8.3), LW700KV (QSM11), LW800K (QSM11), LW800KN (QSM11), LW820G (QSM11), LW900KN (QSM11)
  - NEW! Grader
    - □ NEW! GR135C (QSB4.5), GR180C (QSB6.7), GR300 (QSL9)
  - NEW! Rough Terrain Crane
    - NEW! RT100 (QSL9), RT120E (QSL9), RT200E (QSL9), RT25 (QSB6.7), RT35 (QSB6.7), RT40E (QSB6.7), RT50 (QSB6.7), RT50A (QSB6.7), RT50A (QSB6.7), RT55E (QSB6.7), RT55U (QSB6.7), RT60 (QSB6.7), RT60A (QSB6.7), RT70E (QSB6.7), RT70U (QSB6.7), RT80 (QSL9), RT90E (QSL9), RT90U (QSL9)
  - NEW! Backhoe Loader
    - NEW! XC870HK (QSB4.5), XC870K (QSB4.5)
  - NEW! Vibratory Roller
    - DIEW! XD121 (QSF3.8), XS142 (B5.9), XS162 (B5.9), XS182 (B5.9), XS202 (B5.9), XS222 (B5.9)
  - NEW! Excavator
    - NEW! XE210C (QSB6.7), XE250C (QSB6.7), XE300U (QSB6.7)
  - NEW! Crane
    - NEW! QUY80 (QSC8.3), XG500 (QSM11), XGC100 (QSC8.3), XGC300 (QSM11), XGC400 (QSM11), XGC650 (QSX15), QUY150 (QSL9), QUY250 (QSL9), QUY260 (QSL9), QUY280 (QSL9), QUY70 (QSB6.7), XG360 (QSL9), XGC130 (QSL9), XGC260 (QSL9), XGC55 (QSB6.7), XE470C (QSM11), XE470CK (QSM11), XE470CK (QSM11), XE470CK (X12), XE490CK (X12), XE490CK (X12), XE500C (QSM11), XE500CA (QSM11), XE500D (QSM11), XE700D (QSX15), XE700D (QSX15), XE900C (QSX15), XE900D (QSX15)
  - NEW! Directional Drill
    - NEW! XMZ130 (QSB6.7), XMZ160 (QSB6.7), XR180D (QSB6.7), XR180D-II (QSB6.7), XR220 (QSL9), XR220A (QSL9), XR220D (QSL9), XR220D-II (QSL9), XR22D-II (QSL9), XR220D-II (QSL9), XR22D-II (QSL9), XR22D-II (QSL9), XR22D-II (QSL9), XR22D-II
- NEW! XCMG Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - DEW! QSB4.5, QSB6.7, QSF3.8, QSL9, QSX15
  - NEW! DPF Service Regen
    - DEW! QSB4.5, QSF3.8, QSL9, QSX15
  - NEW! Fuel Leakage Test
    - DI NEW! QSB6.7, QSL9, QSX15
  - NEW! SCR Performance and System Test
    - D NEW! QSB4.5, QSB6.7, QSF3.8, QSL9
  - NEW! Wheel Speed Chart Test or Wheel Speed Window Test
    - p NEW! QSX15

- NEW! Wiggle Test/Performance Issue Monitoring
  - NEW! QSB4.5, QSB6.7, QSF3.8, QSL9, QSX15
- D NOTE: Cummins 3pin or 9-pin off-highway cables are required.
- NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

### **NEW!** ZoomLion

- NEW! Supports reading proprietary diagnostic fault codes, event codes, and data for the following ZoomLion Off-Highway 2013 and newer models:
  - NEW! Diaphragm Wall Grab
    - DEW! ZDG650 (QSM11)
  - NEW! Excavator
    - NEW! ZE135E (QSF3.8), ZE135E-10F (QSF3.8), ZE155E-10 (QSF3.8), ZE480E (QSM11), ZE700E (QSX15), ZR220A (QSL9)
  - NEW! Directional Drill
    - NEW! ZR280C (QSM11), ZR360C (QSM11), ZR360L (QSM11)
  - NEW! Rough Terrain Crane
    - NEW! RT25 (QSB6.7), RT35 (QSB6.7), RT60 (QSB6.7), RT61 (QSB6.7), RT65 (QSB6.7), RT75 (QSB6.7), RT100 (QSC8.3), RT110 (QSC8.3)
  - NEW! Trencher
    - NEW! RT80 (QSB6.7)
  - NEW! Crane
    - NEW! QUY180 (QSL9), ZCC1300 (QSL9), ZCC2600 (QSL9)
- NEW! ZoomLion Bi-Directional support for Cummins engines:
  - NEW! Cylinder Cut-Out Test
    - D NEW! QSB6.7, QSF3.8, QSL9
  - NEW! DPF Service Regen
    - D NEW! QSF3.8, QSL9
  - NEW! Fuel Leakage Test
    - D NEW! QSB6.7, QSL9
  - NEW! SCR Performance and System Test
    - D NEW! QSB6.7, QSF3.8, QSL9
  - NEW! Wiggle Test/Performance Issue Monitoring
    - NEW! QSB6.7, QSF3.8, QSL9
  - a NOTE: Cummins 3pin or 9-pin off-highway cables are required.
  - a NOTE: The models listed above are verified to work in JPRO. Users may be able to connect to additional models and attain partial or complete coverage functionality.

# **Heavy-Duty Support for John Deere**

- Supports SAE Faults and sensor data for the listed equipment types and models:
  - Backhoes
    - a 310L, 310SL, 310SL HL, and 410L with John Deere 6068 engine
    - a 310L EP with Yanmar 4TNV engine
  - Dozers
    - a 450K, 450K LGP, 650K, and 650K LGP with John Deere 4045 engine
    - a 700L XLT, 700L LGP, 750L, 750L XLT, and 750L LGP with John Deere 6068 engine
    - $\tt m$   $\,$  850L, 850L WLT, and 850L LGP with John Deere 6090 engine
  - Compact Loaders
    - a 317G, 325G, 331G, and 333G with Yanmar 4TNV engine
  - Excavators
    - $\ensuremath{\text{a}}$  35G and 30G with Yanmar 3TNV engine
    - a 50G, 60G, 75G, and 85G with Yanmar 4TNV engine
    - a 130G, 160G LC, and 200G with John Deere 4.5L engine
    - a 210G LC with John Deere 6.8L 6068HT106 engine
    - a 250G LC with John Deere 6.8 Lengine
    - a 350 P-Tier with John Deere 9.0 Lengine
    - a 470 P-Tier with John Deere 6135 engine
  - Skid Steer Loaders
    - a 317G, 318G, 320G, and 330G with Yanmar 4TNV engine
  - Wheel Loaders
    - a 524P, 544 P-Tier, 624 P-Tier, and 644P with John Deere 6068 engine
    - a 844 P-Tier with John Deere 6135 engine
- Bi-Directional support for John Deere engines:
  - Wiggle Test/Performance Issue Monitoring
    - a 3TNV, 4045, 4TNV, 6068, 6090, 6135 engines on applicable equipment

## **Heavy-Duty Support for Komatsu**

- Supports reading proprietary diagnostic fault codes, event codes, and data for the following equipment types, models, and engines:
  - Excavators
    - p PC138USLC-11 and PC210LC-10 with SAA4D95LE-7 engine
    - p PC-200-LC-8 with SAA6D107E-1 engine
    - a PC210LC-11 and PC290LC-11 with SAA6D107E-3 engine
    - a PC360LC-10 with SAA6D114E-5 engine
    - PC360LC-11 with SAA6D114E-6 engine
    - p PC490LC-11 with SAA6D125E-7 engine
    - a PC88MR-10 and PC88MR-11 with SAA4D95LE-6 engine
  - Wheel Loaders
    - a WA270-7, WA320-7, and WA380-7 with SAA6D107E-2 engine
    - WA270-8, WA320-8, and WA380-8 with SAA6D107E-3 engine
    - D NOTE: Komatsu 12-pin Off-Highway cable is required
- Bi-Directional support for Komatsu equipment:
  - Aftertreatment Injector Flow Test
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - Aftertreatment Injector Leak Test
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - Aftertreatment Injector Shutoff Valve Test
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - Cylinder Cut Out
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - DEF Doser Pump Override Test
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - DPF Service Regen
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - Fuel Injector Performance Test
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - Fuel Leakage Test
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - SCR Performance and System Test
    - $\,$  a  $\,$  SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines  $\,$
  - Wiggle Test/Performance Issue Monitoring
    - $\,$  a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines
  - VGT Hysteresis Test
    - a SAA6D107E-3, SAA6D114E-6, SAA6D125E-7, and SAA4D95LE-7s engines

# **Heavy-Duty Support for Kubota**

- Supports proprietary Faults and sensor data for the listed equipment types, models, and engines:
  - Kubota Compact Track Loader
    - a **SVL75-2** with V3307-CR-TE4 engine
    - a **SVL95-2s** with V3800-TIEF4 engine
    - a SVL97-2 with V3800-TIEF4 engine
  - Kubota Skid Steer Loader
    - a SSV75 with V3307-CR-TE4 engine
  - Kubota Power Utility Excavator
    - **EXXOSO-4** with V3307-CR-TE4 engine
  - Sunward America Tracked Skid Steep Loader
    - a SWTL4538 with V3307-CR-TE4 engine
  - Takeuchi Compact Track Loader
    - TL8R2 with V3307-CR-TE4 engine
    - a TL12V2 with V3800-TIEF4 engine
- Supports V3307-CR-TE4 and V3800-TIEF4 engines found on third party equipment.
- Bi-Directional support for Kubota engines:
  - Cylinder Cut Off Test
    - a V3307-CR-TE4, and V3800-TIEF4 engines on applicable equipment
  - DPF Regen
    - a V3307-CR-TE4, and V3800-TIEF4 engines on applicable equipment
  - Wiggle Test/Performance Issue Monitoring
    - a V3307-CR-TE4, and V3800-TIEF4 engines on applicable equipment

## GENERAL FEATURES

- Diagnoses all vehicle components in a single application.
- Automatically connects to all supported and available data buses on the vehicle.
- Enhanced VIN decoding for North American VINs.
  - a Vehicle Series provided when available.
- Displays fault codes for all components on the supported data bus protocols.
- Displays manufacturer flash codes and descriptions for faults when available.
- Access to historical fault data from previous JPRO® connections which can be used to identify intermittent vehicle issues.
  - NOTE: Requires internet access.
- Provides key data points in graphical displays for vehicle and components.
- Automatically displays all component parameters of interest in the Data Monitor.
  - a Search, sort, or filter capabilities to easily identify parameters of interest.
  - a Graph parameter changes over time.
  - a Export up to the last 5 minutes of graphed data to local file.
- Data can be displayed in Metric or English units of measurement.
- Vehicle Readiness List displays information about each identified component.
- ECUs displayed on the Vehicle Tree with active faults are marked with a red exclamation point.
- Demo mode in Vehicle History enables users to explore JPRO features quickly and easily without needing access to vehicles.
- Access to 'What's New' document showing all supported features from the Connection Selection and Help menu.

# **Education and Troubleshooting Features**

- Virtual Truck feature enables exercising JPRO features including bi-directional tests for training and educational purposes without the need for an actual truck connection.
  - Freightliner truck illustrates a Cummins engine aftertreatment issue and a brake issue with Wabco brakes.
  - Volvo truck highlighting Bendix capabilities.
  - Komatsu equipment highlighting off-highway capabilities.
- Bendix Demo Truck demonstrates the tests and data available for various Bendix ECU versions and configurations.
  - NOTE: This is for demonstration purposes only. Tests and data may not function realistically
- Integrates with Noregon's NextStep™ Fault Guidance to provide troubleshooting guidance.
  - View troubleshooting information, wiring diagrams and step-by-step troubleshooting procedures for a fault with one click in JPRO® Commercial Vehicle Diagnostics.
  - Enhanced integration features from the troubleshooting repair view:
    - a View fault related data while simultaneously viewing repair procedures.
    - a Clear faults to verify the repair without leaving the Fault Guidance screen.
      - a NOTE: Access to this can be removed. Contact Noregon support for more information.
    - a Access Bi-Directional functionality directly from the troubleshooting repair view.
    - a Access to installed Maintenance or Service Data on the Fault Guidance screen.
  - Works on vehicle without requiring a VIN.
  - The following are currently supported
    - a Heavy Duty engines and aftertreatment systems
    - a All Bendix components
    - a Wabco components
    - a Eaton transmissions
    - a Ford and GM medium-duty engine and aftertreatment faults.
  - Regular content updates to add more fault and component coverage.
    - NOTE: NextStep™ Fault Guidance is only available when JPRO® Professional Diagnostic Software with NextStep™ is the purchased product.
- View NextStep™ Repair information and repair procedures in Fault Guidance when you connect your NextStep™ Repair license key to JPRO.
  - NOTE: NextStep™ Repair is a separate annual subscription to an interactive maintenance guide created and maintained by top ASE, OE, and JPRO-certified technicians. Click the NextStep Repair<sup>™</sup> main toolbar button to visit the website for details.
- Download Service Data Sheets for Wabco, Bendix, and Haldex brakes, as well as Eaton transmissions
  - NOTE: only available when JPRO® Professional Diagnostic Software with NextStep™ is the purchased product.
- Access to Maintenance or Service Data in the fault window by automatically linking to available service data sheets for the selected fault.

  a NOTE: NextStep™ Fault Guidance and Maintenance or Service Data Sheets for Wabco, Bendix, and Haldex brakes, as well as Eaton transmissions, are only available when JPRO® Professional
  - Diagnostic Software with NextStep™ is the purchased product.
- Repair Mentor, an enhanced vehicle health indicator and assisted diagnostics tool, prioritizes vehicle issues and provides guidance for diagnosis and repair for heavy-duty vehicle connections.
- Most Likely Repair, available from Repair Mentor and Fault Guidance, provides information on the most frequent repairs for a fault.
- Possible Unrepaired Recalls, available from Repair Mentor and Fault Guidance, provides detailed information on possible NHTSA recalls for the connected vehicle.
  - NOTE: Requires internet access.

- ECU Version Check will inform technicians when a firmware update is available for:
  - Cummins ECMs
  - Detroit Diesel CPC, MCM, and ACM ECUs
  - a NOTE: Visiting the dealership or having the correct OEM software is required to flash an ECU to the latest firmware.
- Overall vehicle health indicators including No J1939 Data, Cannot Detect Engine, Excessive CAN Error Frames, Active Faults Present, DPF Regen Inhibited, DPF Regen Needed, Consumable Fluid(s) Low, Battery Voltage Low, and Cannot Detect ABS.
- Fault Assistance providing technician-friendly descriptions for fault status values from both the Fault Display and the Data Monitor.
- FMI Assistance providing technician-friendly descriptions for fault code FMI values from both the Fault display and the Data Monitor.
- Industry Terms definitions available from the Fault Grid, Fault Guidance window, and the Data Monitor window.
- EPA Assistance available from the Data Monitor window provides a basic explanation of EPA standards, the systems and technologies involved as well as manufacturer examples.
- Lookup Code Assistant provides a reference for the equivalent term used in an ECU's Service Data Sheet.
- Power Diagram and Electrical Assistance available in Data Monitor to aid in the diagnosis of electrical problems for heavy-duty vehicle connections.
- Diagnostic connector pinout diagrams for Heavy-Duty and Medium-Duty cable connectors to aid in troubleshooting connection issues.
- Provides data bus utilization statistics on live heavy-duty and medium-duty vehicle connections.
- Displays CAN error frame data to aid in diagnosing communication issues.
- The Resource Portal enables quick access to the JPRO Certification program as well as other OEM training resources.
- Link to Noregon's library of training videos.
- Noregon Tech Tips educational and training videos will automatically play during vehicle connections while initial data is gathered to aid technicians in getting the most out of JPRO.
- Auto-launch of JPRO News & Insights information providing quick access to technician tips, white papers, and other information to aid technicians in getting the most out of JPRO.

## **Reporting Features**

- Prints reports containing faults and key data.
- Automatically captures a vehicle snapshot recording containing all available ECUs and parameters on every vehicle connection.
- Ability to manually record logs for up to 1 hour of vehicle data for later analysis. Log will contain all ECU and parameter data that is requested and reported during the recording.
  - a **NOTE:** Log recoding time may be limited by computer system resources.
- Ability to playback recorded logs and monitor parameters via Data Monitor.
- Ability to perform customized Preventative Maintenance Inspections. Inspection available in XML format as well as in PDF report format.
- Ability to perform customized Vehicle Inspections.
  - Checklists and Visual Inspection supports vehicle types: Tractor, Trailer, Box Truck, Bus and Truck.

  - Customize the inspection checklist for each vehicle type via Preferences.

    Take notes and draw on default images or uploaded pictures for visual inspection.
  - Vehicle Components, Vehicle Key Data Points, Vehicle Issues, and Faults information included when inspection created from a live-vehicle connection or log file playback.
  - Optional disclaimer setup via Preferences.
  - Supports saving customer signature as part of the Vehicle Inspection report.
  - View and print a complete Vehicle Inspection Report.

# **Integration Features**

- NEW! Launches OEM component diagnostic applications from the Software Connection Warnings dialog.
- Register and view your Technician as a Service (TaaS) license information in JPRO. An active, registered license is required for TaaS support.
  - NOTE: TaaS is a separate product purchase that provides live support from Noregon master technicians and is registered to a single computer. Click the TaaS Support main toolbar button for more information or to register your TaaS license.
- Automatically detects OEM applications and provides convenient methods to launch them.
- Ability to download or launch Truck Check Up from OEM Portal when it is released.
  - NOTE: Download link currently opens <u>Clean Truck Check</u> information website.
- Link to download ServiceMaxx diagnostic applications from OEM Application Portal.
- Launches OEM component diagnostic applications in Fault Code Information. Simply click on the OEM application icon to launch the application for more information about that component.
- Ability to integrate with third-party applications to collect vehicle data using JPRO's Data Collector API. Contact Noregon support for more information.
- Search mechanism to link to troubleshooting guides.

- Support report submission to Bendix by emailing the Bendix DTC Report to TechTeam@Bendix.com.
- Support submissions by enabling you to upload vehicle details to:
  - + The ASIST platform, developed by Decisiv, for Volvo and Mack dealers.
  - + PACCAR Solutions, developed by Decisiv, for PACCAR dealers.
  - + ISUZU Connect, developed by Decisiv, for Isuzu dealers.
  - + HINO INSIGHT, developed by Decisiv, for Hino dealers
  - + Navistar's OnCommand™ service
  - + Ruan Transportation Management Systems
    - D NOTE: Access to this feature is disabled by default. Please contact Noregon support for more information.
  - + Trimble's TMT/TMW service
  - a Edit and correct mileage and VIN information upon warranty submission. See submission history information via Vehicle History.
- Optional automatic submission of vehicle data to Navistar's OnCommand™ service when disconnecting from a vehicle.
  - □ NOTE: Internet access is required for Decisiv (ASIST, PACCAR Solutions, ISUZU Connect, or HINO INSIGHT), and OnCommand™ Warranty submissions.
  - NOTE: Submitting Warranty to Decisiv (ASIST, PACCAR Solutions, ISUZU Connect, or HINO INSIGHT) requires personnel with Decisiv Admin level access to provide the Dealer ID or Decisiv App Username and Password. These items must be configured in Preferences.
  - NOTE: Submitting to Trimble's TMT/TMW service requires personnel with access to provide the Trimble URL, Username, and Password. These items must be configured in Preferences.

# **Configuration Features**

- Ability to configure the application to launch at computer startup.
- Ability to automatically switch between USB, Wi-Fi®, or Bluetooth® when connecting with a DLA+ 3.0 Wireless adapter.
- Ability to automatically switch between USB or Wi-Fi® when connecting with a DLA+ 2.0 Wireless, or DLA+ Wireless adapter.
- · Ability to automatically switch between USB or Wireless when connecting with a DLA+ Wireless or DLA+ 2.0 Wireless adapter.
- Ability to remove access to setting road and cruise speed limits. If interested in limiting these capabilities, contact Noregon support (support@noregon.com).

# **Product Support Features**

- Links to contact Noregon support or sales from within the application.
- Links to enable remote access for support.
- Support for automatic updates.
- Easy access to JPRO DLA+ Adapter Family test tools to aid in diagnosing connection problems.

## **HEAVY-DUTY FEATURES**

- Heavy Duty supports all standard Heavy-Duty vehicles. VIN is not required for vehicle connections.
- Supports the heavy-duty SAE J1587/J1708, J1939, ISO 15765 and KWP2000 messages.
- Supports trailer diagnostics using:
  - a PLC 7-way connector combined with a Noregon Trailer Diagnostic adapter or the Noregon DLA+ PLC.
  - a Universal J560 PLC Adapter combined with a Noregon DLA+ 3.0, DLA+ 2.0, DLA+, DLA+ 3.0 Wireless, DLA+ 2.0 Wireless, DLA+ Wireless, or DLA+ PLC adapter.
  - a 4-pin to 9-pin extended diagnostic cable adapter combined with a Noregon DLA+ 3.0, DLA+ 2.0, DLA+, DLA+ 3.0 Wireless, DLA+ 2.0 Wireless, or DLA+ Wireless adapter.

    Trailers equipped with 9-Pin SAE J1939 connector using a Noregon DLA+ 3.0, DLA+ 2.0, DLA+, DLA+ 3.0 Wireless, DLA+ 2.0 Wireless, DLA+ Wireless, or DLA+ PLC adapter.
- Supports reading and display of HD-OBD Emissions faults in standard fault display.
- Supports reading freeze frame data for 1939 faults that have that data available.
- Clear indication of overall vehicle health considering:
  - + No 1939 Data (on 2009 or newer vehicles)
  - + Cannot Detect Engine
  - + Excessive CAN Error Frames
  - + Active Faults Present
  - + DPF Regen Inhibited
  - + DPF Regen Needed
  - + Consumable Fluid(s) Low
  - Battery Voltage Low
  - Battery Voltage Low
     Cannot Detect ABS (on 2001 or newer vehicles)
- PRO® Road Worthiness assesses a vehicle's safety and compliance for over-the-road operation by checking:
  - + No ABS faults reported, or lamps illuminated
  - + Max Road Speed < 80 mph
  - + DPF Pressure is reported
- Display of data related to reported faults in Data Monitor.
- Graphically displays data using thermometers, gauges, etc. on the Data Monitor.

- Pre-defined Data Groups in Data Monitor enables troubleshooting electrical problems and common performance complaints.
- Ability to define custom groups of related data parameters to display in Data Monitor.
- Subsystems Diagnostics menu provides the ability to view the following subsystems with related data:
  - + Aftertreatment Diagnostics
  - + Coolant System
  - + Fuel System + Oil System
  - + ADAS
- Coolant System displays data from related components to assist in troubleshooting coolant system issues.
  - a NOTE: Coolant System display for CAT components not currently available.
- Fuel System displays data from related components to assist in troubleshooting fuel system issues.
  - **NOTE:** Fuel System display for Mack and Volvo components not currently available.
- Ability to launch Cylinder Cut Out directly from Fuel System screen.
- Oil System displays data from related components to assist in troubleshooting oil system issues.
- ADAS displays faults and data from related components to assist in troubleshooting Advanced Driver Assistance System issues.
- Aftertreatment Diagnostics displays data from aftertreatment related components, including Soot Level, current Regen Zone Information, and EGR data for rapid troubleshooting of the aftertreatment system.
  - a Ability to view the following subsystems with related data:
    - + DEF Tank and Pump
    - + DPF and DOC
    - + Engine, EGR, and Turbocharger
    - + SCR
  - a Clicking the Bi-Directional button on any of the Aftertreatment Diagnostics subsystem screens displays tests supporting the related subsystem components.
  - a Search the Data tab to quickly identify parameters of interest.
- Emissions Assistance from the Aftertreatment screen to aid in troubleshooting emissions problems.
- Regen Zone Information window helps technicians better understand DPF systems on today's diesel trucks. The Regen Zone window educates
  users on the meaning behind each Regen Zone.
  - $\,^{\rm a}\,$  Showing how each zone relates to DPF soot loading and engine derate.
  - When performing a parked regeneration is most beneficial or required.
- Ability to launch Maximum Road Speed, Cruise Speed, and Idle Shutdown parameter adjustments directly from the Vehicle Key Data Points display if available.
- Ability to launch PTO parameter adjustments directly from the Vehicle Key Data Points display if available.
- Consumable Fluid screen to monitor fluids used by vehicle and inform user of low levels.
- Displays the trailer lamp status on tractor brake key data point's window.
- Wheel Speed Window Test and Wheel Speed Chart Test used to verify and test wheel speed sensors on all tractor and trailer braking systems.
- The Wiggle Test / Performance Issue Monitor bi-directional test assists in diagnosing loose electrical connections, intermittent faults, and performance complaints by alerting users to changes in monitored data.

# HARDWARE / SOFTWARE CONFIGURATION

- The following operating systems are supported:
  - a Windows 10 (both 32 and 64-bit versions)
  - Windows 11
  - Note: Spanish operating systems are supported.

# **NOTES**

- 1. Registration is required before the JPRO® Commercial Vehicle Diagnostics application can be used. Valid license key(s) will be required in order to register the application. Please ensure you have license key information available before you install. Registration over the internet is required; offline registration is not supported. A confirmation code may be required to complete registration. If this is the case, the confirmation code will be sent to the email address used during registration and must be provided to complete registration
- 2. The appropriate vehicle adapter driver must be installed in order to connect to a vehicle adapter device. This installation is separate and independent of the JPRO® Commercial Vehicle Diagnostics installation. Only the Noregon DLA+ 3.0, DLA+ 3.0 Wireless, Noregon DLA+ 2.0, DLA+ 2.0 Wireless, Trailer Diagnostic Adapter, DLA+, DLA+ Wireless, and DLA+ PLC adapters are supported.
- 3. The Noregon DLA+ 3.0, DLA+ 3.0 Wireless, Noregon DLA+ 2.0, DLA+, DLA+ 2.0 Wireless or DLA+ Wireless adapters are required in order to connect to the Ford, GM, Isuzu or Sprinter Medium Duty vehicles. Please ensure you have the latest driver and firmware loaded.
  - To connect to Ford, use the OBDII Cable for Ford (red).
  - To connect to GM, use the OBDII Cable for GM (yellow).
  - To connect to Sprinter, use the OBD Cable for Sprinter (blue for DLA+ adapter family) or gray for DLA+ 3.0 and DLA+ 2.0 adapter family).
  - To connect to Hino or Isuzu, use the Generic OBD Cable (blue or gray)
- 4. JPRO® Off-Highway only supports the following Noregon adapters:
  - DLA+ 3.0 or DLA+ 3.0 Wireless adapter
  - DLA+ 2.0 or DLA+ 2.0 Wireless adapter

To purchase Off-Highway cables for the DLA+ 3.0, DLA+ 2.0, DLA+ 3.0 Wireless, or DLA+ 2.0 Wireless adapter, please visit https://jpronewsandinsights.kinsta.cloud/cableconnection-guide/, Email jprosolutions@noregon.com or call 855-889-JPRO (5776) toll-free.

- 5. Trailer diagnostic connections with the Universal J560 PLC Adapter must be combined with a Noregon DLA+ 3.0, DLA+ 3.0 Wireless, Noregon DLA+ 2.0, DLA+, DLA+ 2.0 Wireless, DLA+ Wireless, or DLA+ PLC adapter.
- 6. Trailer diagnostic connections with the 4-pin to 9-pin extended diagnostic cable adapter combined with a Noregon DLA+ 3.0, DLA+ 3.0 Wireless, Noregon DLA+ 2.0, DLA+, DLA+ 2.0 Wireless or DLA+ Wireless adapter





