

HYTORC of Georgia

Below is a dealer-ready, application-focused list that ties HYTORC tools to Caterpillar Diesel Generator Sets and Gas Generator Sets—covering assembly, commissioning, maintenance, overhaul, and field service.

HYTORC Applications:

Caterpillar Diesel & Gas Generator Sets

(Applies to standby, prime, and continuous-duty gensets for data centers, utilities, hospitals, industrial plants, marine, and O&G.)

INDEX:

1) Engine–Generator Assembly & Rebuild (Shop)	Page 2
2) Generator End / Alternator Assembly	Page 2
3) Skid, Baseframe & Vibration Isolation	Page 3
4) Radiator, Cooling & Air Systems	Page 3
5) Exhaust, Turbo & Aftertreatment	Page 4
6) Fuel Systems (Diesel & Gas)	Page 4
7) Electrical Enclosures & Controls	Page 5
8) Acoustic Enclosures & Weather Housings	Page 5
9) Commissioning, Service & Field Repairs	Page 6
10) Data Center, Utility & Mission-Critical Sites	Page 6

1) Engine–Generator Assembly & Rebuild (Shop)

Typical Bolted Joints

- Cylinder head studs/nuts (diesel & gas)
- Main bearing cap bolts
- Connecting rod bolts
- Flywheel bolts
- Front/rear housing covers
- Timing gear housings
- Oil pan / structural sump bolts

HYTORC Tools

- **Hydraulic Bolt Tensioners** – preferred for head studs & critical preload joints
- **MXT+ / Avanti (Hydraulic)** – flywheels, main caps, structural housings
- **Stealth (Low-Clearance)** – tight access inside engine frames
- **HYTORC Nut / Washer** – eliminates backup wrenching; improves safety

Dealer Value

- Uniform clamp load, fewer gasket failures
 - Eliminates hot-torquing/slugging
 - Documentable torque/tension for rebuild QA
-

2) Generator End / Alternator Assembly

Typical Bolted Joints

- Alternator frame bolts
- End-bell bolts
- Stator/rotor retaining hardware
- Coupling bolts (engine-alternator)

HYTORC Tools

- **jGun Dual Speed (Air/Electric)** – fast, repeatable assembly
- **Lithium Series II** – portable work inside enclosures
- **MXT+** – higher torque coupling bolts

Dealer Value

- Faster build times and Consistent torque across multi-bolt patterns

3) Skid, Baseframe & Vibration Isolation

Typical Bolted Joints

- Engine-to-skid bolts
- Generator-to-skid bolts
- Vibration isolator mounts
- Lifting lug bolts

HYTORC Tools

- **MXT+ / Avanti** – structural bolts
- **HYTORC Washer/Nut** – hands-free tightening on awkward reactions
- **Hydraulic Tensioners** – critical anchors/lifting points (where specified)

Dealer Value

- Safer installation
 - Reduced rework from uneven preload
-

4) Radiator, Cooling & Air Systems

Typical Bolted Joints

- Radiator frame mounts
- Fan shroud supports
- Charge-air cooler mounts
- Coolant pump housings

HYTORC Tools

- **jGun Dual Speed** – high bolt counts
- **Stealth** – tight clearances near shrouds
- **Lithium Series II** – enclosure work

Dealer Value

- Speed without impacts
 - Reduced damage to adjacent components
-

5) Exhaust, Turbo & Aftertreatment

Typical Bolted Joints

- Exhaust manifold supports
- Turbo mounting bolts
- Expansion joints / supports
- SCR/aftertreatment structural mounts

HYTORC Tools

- **Stealth** – confined spaces
- **MXT+** – higher torque fasteners
- **HYTORC Washer** – improves safety near hot surfaces

Dealer Value

- Consistent preload reduces leaks & fatigue
 - Safer work in tight, hot areas
-

6) Fuel Systems (Diesel & Gas)

Typical Bolted Joints

- Fuel rail supports
- Gas mixer mounts
- Regulator brackets
- Fuel skid anchors

HYTORC Tools

- **jGun / Lithium Series II** – precision at moderate torque
- **Stealth** – limited access zones

Dealer Value

- Leak prevention
 - Controlled torque protects fittings
-

7) Electrical Enclosures & Controls

Typical Bolted Joints

- Control panel mounts
- Breaker cabinets
- Junction boxes
- Cable tray supports

HYTORC Tools

- **Lithium Series II** – hose-free, clean work
- **jGun** – repetitive hardware

Dealer Value

- Faster installs
 - Reduced technician fatigue
-

8) Acoustic Enclosures & Weather Housings

Typical Bolted Joints

- Panel bolts
- Roof supports
- Door frames
- Intake/exhaust louvers

HYTORC Tools

- **jGun Dual Speed** – speed for large bolt counts
- **Lithium Series II** – portability

Dealer Value

- Significant time savings during packaging/retrofits
-

9) Commissioning, Service & Field Repairs

Typical Tasks

- Re-torque after heat cycles
- Emergency repairs in the field
- Component replacement inside enclosures

HYTORC Tools

- **Lithium Series II** – ideal for remote sites
- **jGun** – quick breakdown/assembly
- **MXT+** – high-torque corrections

Dealer Value

- Shorter outages
 - Consistent service quality
-

10) Data Center, Utility & Mission-Critical Sites

Typical Bolted Joints

- Skid anchors to foundations
- Fuel system structural supports
- Cooling module frames

HYTORC Tools

- **Avanti / MXT+** – large anchors
- **Hydraulic Tensioners** – critical preload joints
- **Documented torque/tension packages**

Dealer Value

- Compliance, traceability
 - Reduced startup risk
-

Recommended CAT Dealer Tool Kits

Service Truck Kit

- jGun Dual Speed
- Lithium Series II
- HYTORC Washers
- Standard sockets (Imperial/Metric)

Rebuild Shop Kit

- MXT+ hydraulic wrench
- Stealth low-clearance kit
- Calibrated pump & gauge

Precision/High-Risk Kit

- Hydraulic tensioners
- HYTORC Nut systems
- QA documentation package

Why CAT Dealers Standardize on HYTORC for Gensets

- Eliminates unsafe practices (impacts, hot-torquing, slugging)
- Improves preload consistency → fewer leaks & failures
- Faster rebuilds and installs
- Supports dealer warranty, QA, and documentation needs