



RENEGADE™

TORQUE SERIES PUMP



SUPERIOR TECHNOLOGY FOR BOLT TORQUING APPLICATIONS

The Renegade Torque Series Pump was born out of necessity. For decades, other companies have served the bolting market with traditional hydraulic pumps that were originally designed for non-bolting applications. At Graco, we set out to create a better solution. The Renegade Pump looks different, runs different, even sounds different because it is different than any other bolting pack on the market today.

Graco Inc. was established in 1926 and today is a world leader in fluid handling solutions. Investing heavily in Research and Development, often at several times the rate of its peers, Graco develops cutting edge technologies that serve today's markets while preparing for the needs of tomorrow.

The Renegade Torque Series Pump is designed, machined, manufactured, and assembled in our Rogers, Minnesota facility.



PATENT PENDING

DEFYING CONVENTIONS

The new Renegade pump has been designed specifically for bolting applications —this is not a lifting and jacking pump that has been re-purposed for bolting.



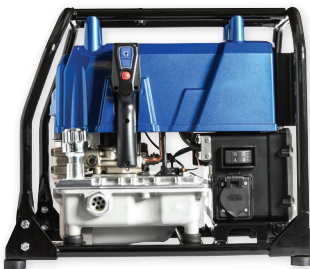
FASTER

- Larger, twin-piston pump design delivers more oil per stroke—in fact, each stroke delivers 15X more oil than typical pumps
- Renegade uses a variable speed brushless DC motor —it automatically changes speed to maximize oil flow at any pressure



STRONGER

- Oversized piston pumps run slower and cooler resulting in less wear and longer life
- High capacity oil cooler with powered fan prevents heat build up extending pump, motor, and valve life
- Case-cooled brushless DC motor runs cooler even when using longer extension cords



SMARTER

- Wireless pendant operation —no more cords to manage as you work the tools
- Plug your extension cord directly into the pump—there is no separate power cord to manage
- Digital display uses LED light technology making it easy to read—even in low light conditions



GET THE JOB DONE FASTER

Fast pumps make you more money—period. Whether your need is for faster throughput on your production line or a faster connection on the wellhead, Renegade delivers the speed advantage.



PUMP SIZE MATTERS

- 15X more oil displacement per pump stroke than typical packs
- Designed to deliver maximum oil flow across the entire bolting application
- Larger pumps run slower, lasting longer
- Double acting pump design delivers oil flow on both the up and down stroke, increasing efficiency and speed

Other Pump Bodies and Pistons



All comparative pump images scaled at 40% actual size.

Renegade Pump Body and Pistons



WHAT'S INSIDE MATTERS

- Unlike traditional metal-on-metal pump designs, Renegade uses energized U-cup packing seals to eliminate oil blow-by
- Carbon fiber filled PTFE seals maintain performance even in hot operating conditions
- Oversized flow passages allow for maximum oil flow and fast cold weather start ups

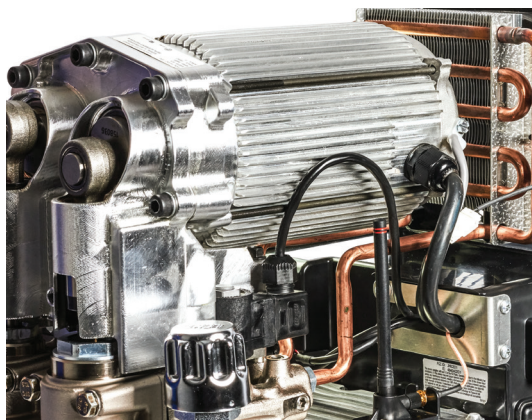
Typical Pistons Without Seals



All comparative pump images scaled at 40% actual size.

Renegade Pistons Seals





MAXIMUM CONTROL DELIVERS MAXIMUM FLOW

SmartControl™ Microprocessor

- Controls both motor speed and the oil flow from the high flow and high pressure pumps
- Automatically switches between single pump and dual pump flow to the tool

Variable Speed Brushless Motor

- Automatically changes speed to maximize oil flow
- Most tool cycles occur during run down and return strokes, these are completed at maximum motor speed

ProGuard™ Protection System

- Prevents damage associated with connecting to incorrect power
- Provides an error message indicating that high or low voltage was detected



RENEGADE DELIVERS THE HIGHEST PERFORMANCE IN ITS CLASS!



STRONGER, TO PERFORM ON THE JOB LONGER

The Renegade pump has been field-tested and proven reliable in all types of operating conditions. Sub-zero temperatures, triple-digit high temperatures, rain, snow, mud and muck have been thrown its way—and the work continues on.

RUNS COOL UNDER PRESSURE

High-Capacity Oil Cooler

- Over 240 square inches of cooling fins efficiently transfer heat away from the critical system components to ensure long life

High Flow Cooling Fan

- Delivers constant air flow across all critical system components, thereby extending your run times

Case-Cooled Brushless DC Motor

- Optimized for heat transfer with current carrying windings on the outer motor case
- Heat dissipating cooling fins carry heat away to keep the motor running cool

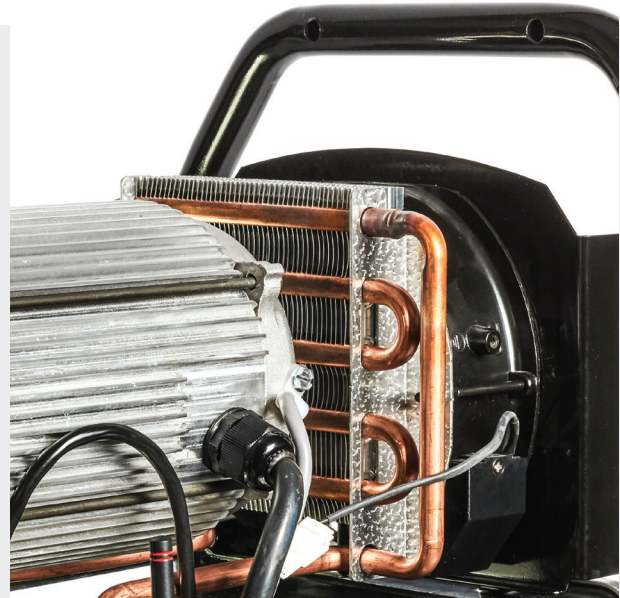
Extension Cord Friendly

- Highly efficient DC motor runs cool even with long extension cords

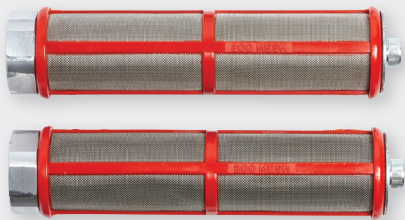
LESS MAINTENANCE

Brushless Motor

- No brushes to wear or replace—ever



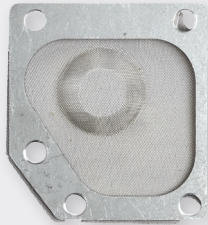
Renegade Dual Pump Filters



Other Pump Filters



Brand A

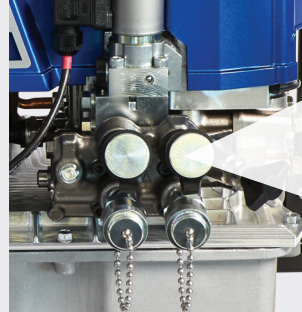


Brand B

All comparative filter images scaled at 40% actual size.

REAL WORLD PROTECTION

- We know that real jobs eventually result in dirty oil—that's why we use oversized pump filters, the largest filtration system in the industry
- Dual-layer filter design with 60 mesh outer screen and ultra fine 200 mesh internal screen
- Incoming oil filters are also at the connection point to help decrease the chance of contaminating the oil each time a hose or tool is connected



Renegade Triple-Layer Incoming Oil Filters



ALL-WEATHER OPERATION

- We know your job does not get rain delayed or time off for snow days, so we built Renegade to withstand all weather conditions



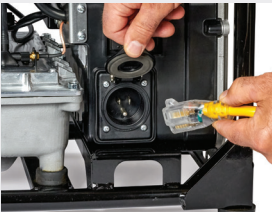
SMARTER BECAUSE WE LISTENED TO YOU



CUTTING CORD PROBLEMS

Cordless Pendant Operation

- No cord to manage, control, repair or wrap up at the end of the day
- Long range antenna, for operating up to 100 ft away



Direct Connect Power Port

- Grab your extension cord and plug it right into the pack (up to 100 ft) — easily get a replacement anywhere
- No hard-wired cord to fail or repair



USER-FRIENDLY PENDANT DESIGN

- **EZ-Press™ Thumb Control** — lightest press force is less fatiguing than any other pendant



- **EZ-Pull™ Trigger** — easily switch to convenient trigger pull operation



Wireless pendant even includes a magnet on its tether strap



Conveniently located pump stop switch is easy to reach



HIGH VISIBILITY LED DISPLAY SCREEN

Readable in all light conditions, long distances and at wide angles

DISPLAY CAPABILITIES

Pressure Read Out

- Displays real time pressure

Set Hours

- Re-settable hour meter is perfect for tracking oil changes

Life Hours

- Tracks the total lifetime operation hours

Pendant Selection

- Choose the device the pack responds to (wireless pendant, corded pendant, or manual switch)

Calibration

- Connect a calibrated external gauge and easily re-calibrate in seconds

Auto Prime

- 90 second auto priming routine ensures complete system priming



BUILT-IN BACK UP PLANS



On-Board Manual Advance Switch

- Provides the ability to operate the pack even without a pendant
- Lose the pendant, drive over the pendant, no matter what happens you still get the job done



15 / 20 Amp Power Selector

- Keep the pack in 20A mode for fastest operation
- If you find yourself on a limited power source, switch to the 15A mode and complete the job without throwing a breaker



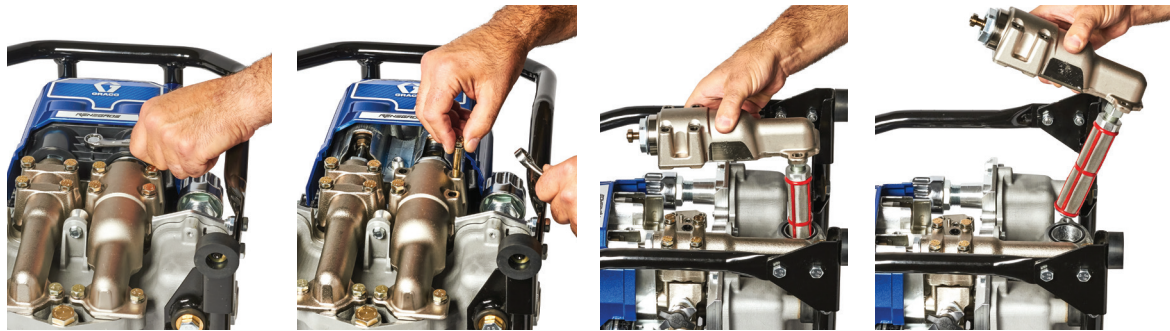
ON-THE-JOB MODULAR MAINTENANCE AND REPAIRS

Eventually, wear and tear will require that you perform maintenance on the Renegade pack. Rather than require you to ship it away for service, we designed the Renegade pack with modular repair solutions that you can perform virtually anywhere.

ONE-PART PUMP REPLACEMENT

ProConnect™ Pump Replacement System

- Simply replace the pump on the job using a single tool—without draining the reservoir
- Keep a spare and never be down for more than a few minutes
- Removed pump can be rebuilt and re-used later



REMOVE THE BOLTS, LIFT OUT THE PUMP—IT'S THAT SIMPLE

GET BACK TO WORK TODAY

Additional Modular Replacement Kits available, each replaceable with simple tools.



**4-Way
Directional
Valve**



**2-Way
Cross-Over
Valve**



**Pressure
Transducer**



**Pressure
Selector**



TECHNICAL SPECIFICATIONS

HYDRAULIC POWER PACK	
Maximum psi (bar, MPa)	10,000 (700, 68.9)
Maximum gpm (lpm)	1.7 (6.4)
Motor (brushless DC)	2 HP
120V, A, Hz	15A/20A, 50/60
Recommended Hydraulic Oil	ISO 10 to ISO 68
Environmental Temperature Range	-40°–120°F (-40°–49°C)
Oil Capacity	1 gal (3.8 L)
DIMENSIONS	
Weight (Dry)	78 lb (35.5 kg)
Height	17 in. (43 cm)
Length	17.75 in. (45 cm)
Width	14 in. (36 cm)

ORDERING INFO

MODEL	PART NUMBER
Renegade TSP, Corded Pendant, 120V	17U632
Renegade TSP, Wireless Pendant, 120V	17U633
Spare Corded Pendant, 30 ft (10 m)	17U758
Spare Wireless Pendant	17U762
Four Tool Distribution Manifold	17U670





Graco Inc. was established in 1926 and today is a world leader in fluid handling solutions.

The company's success is built on its unwavering commitment to technical excellence, world-class manufacturing, and unparalleled customer service.

Graco invests heavily in Research and Development, often at several times the rate of its peers, to develop cutting edge technologies that serve today's markets while preparing for the needs of tomorrow.

Graco's line of hydraulic bolting pumps is just one of the outcomes of this aggressive investment in technology.



AMERICAN BUILT QUALITY—Graco field-proven Renegade Torque Series Hydraulic Pumps are designed, manufactured, assembled and 100% factory-tested in the USA.

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Every Graco purchase comes with A+ Customer Service.

Questions?
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For more information visit graco.com/renegade