

CROWN



INTEGRITY  
**Parts**  
SYSTEM®





# PROTECT YOUR INVESTMENT.



**Bill Esra**  
Project Manager  
Advance Auto Parts

**“WITH CROWN INTEGRITY PARTS,  
OUR EQUIPMENT  
RUNS LONGER  
AND REPAIRS ARE FASTER, WHICH MEANS  
MORE UPTIME & LESS MAINTENANCE COST.”**

**“Advance Auto Parts is one of the largest automotive parts and supply distributors with over 3,600 stores nationwide.** As the project manager for over 30 locations, I work closely with our maintenance managers to maintain each facility.

To keep a DC running, I need good people and good partnerships with my vendors so I can move product in and out. At Advance Auto Parts, we move thousands of automotive parts and supplies through our distribution network daily and we rely on dependable equipment, service and parts to achieve our productivity requirements. That's why we choose to work with Crown. I've been a Crown customer since 1999 and I won't buy parts from any other vendor. I depend on them to provide the service, parts and supplies I need and when I need them—and they deliver every time.

We run Crown lift trucks, and when I need a part, I want Crown parts. Crown Integrity Parts keep my trucks up and running. I can't have operators standing by waiting for a truck to be repaired. In the past I used look-alike forklift parts, and often these parts didn't fit properly or didn't last as long as Crown parts. Most were inferior. Look-alike parts may seem less expensive at first, but when you replace the part twice as often, include extra labor cost and additional equipment downtime, then you've just increased your overall repair cost.

Crown Integrity Parts is one of our best business decisions for maintaining our material handling assets. To me, Crown is all about integrity. They are honest, reliable and dependable. On a personal level, Crown's parts program means 'peace of mind'. With Crown, our equipment runs longer and repairs are faster, which equates to higher operating time and less maintenance cost.”

**Your System of Savings Begins with Crown Integrity Parts®.**

- ▶ **Uncover the Difference**
- ▶ **System of Performance**
- ▶ **Extensive Parts Testing**



# UNCOVER THE DIFFERENCE.

Your lift truck is down.  
Now, what do you do?  
Settle for a cheap, look-alike part?  
Or buy an OEM part?

## Look alike? Look again.

A look-alike part may seem like an easy fix to get your truck moving again at a low cost. However, this quick decision increases your risk of future downtime, costly repairs and unsafe operation. As a manufacturer that guarantees total truck performance, Crown knows the consequences of using look-alike parts that were not designed for your Crown trucks.



Crown Solenoid



Look-alike Solenoid



### Crown Roller



### Look-alike Roller



**3X** LONGER LIFE

◀ Crown has proven through detailed, documented evaluation and testing that our parts last and perform longer. After 208,000 cycles, the OEM roller shows minor bushing wear, while the aftermarket roller failed after only 63,000 cycles.

## Consider the design.

Crown's roller includes a softer one-piece plastic bushing design that offers better bushing to roller retention and a quieter, more durable and smoother operation. Crown's roller design also features a steel spacer and one-piece steel bearing sleeve that provides positive orientation and bearing alignment.

Now compare Crown's one-piece design to a two-piece aftermarket roller design. This two-piece design results in reduced bushing to roller retention, resulting in premature failure. The aftermarket's harder composition also results in more vibration and roller race wear. With a plastic spacer built into the bushing, the aftermarket design also features individual steel sleeves that do not provide positive bearing alignment, reducing bearing life.

## Compare and calculate.

Crown Integrity Parts® may cost more than look-alike parts initially, but they typically last two to three times longer—providing substantial savings over time. *This means you would need two or three look-alike parts to equal the service life of one Crown part.*

Downtime and labor associated with more frequent part replacement can drive your costs even higher. With Crown Integrity Parts, you'll save money and quickly discover that no other parts on the market can perform better or longer.



**Craig Bruns**  
Director of Aftermarket Support

“An initial low labor rate and low part cost doesn't mean lowest cost of ownership over time—it's the parts frequency of consumption and the support behind the Integrity Parts System® that truly counts.”

### FREQUENCY OF CONSUMPTION COMPARISON

PE Drive Unit Roller	Crown Roller	Look-alike Roller
Price*	\$131.88	\$51.75
Repair Labor	\$35.00	\$35.00
Operator (downtime)	\$20.00	\$20.00
Cost	\$186.88	\$106.75
x Life Cycle	x 1	x 3
Total Cost	\$186.88	\$320.25+

\*Quantity of 4 required per repair.

The more frequently you replace a part, the more expensive it becomes. The total cost of buying aftermarket rollers cost two times as much as the OEM rollers. Frequency of consumption is a very real factor in your total cost of ownership.

## Find proven value beyond the surface.

Through rigorous testing, Crown proves that even though an inexpensive, aftermarket brake rotor may look similar to a Crown rotor on the outside, multiple problems lurk below the surface. As illustrated below, Crown tested the consistent hardness of the Crown rotor and an aftermarket rotor side by side to determine each rotor's average hardness.

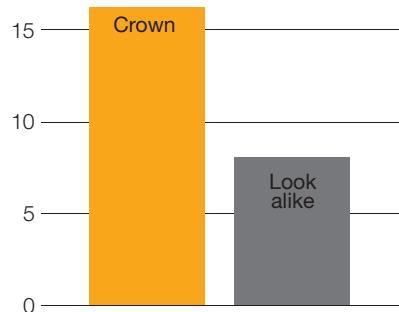


Crown Rotor



Look-alike Rotor

### ROTOR AVERAGE HARDNESS (ROCKWELL SCALE)



\*Test results based on 18 parts from each vendor tested.

**56%** HARDNESS ADVANTAGE

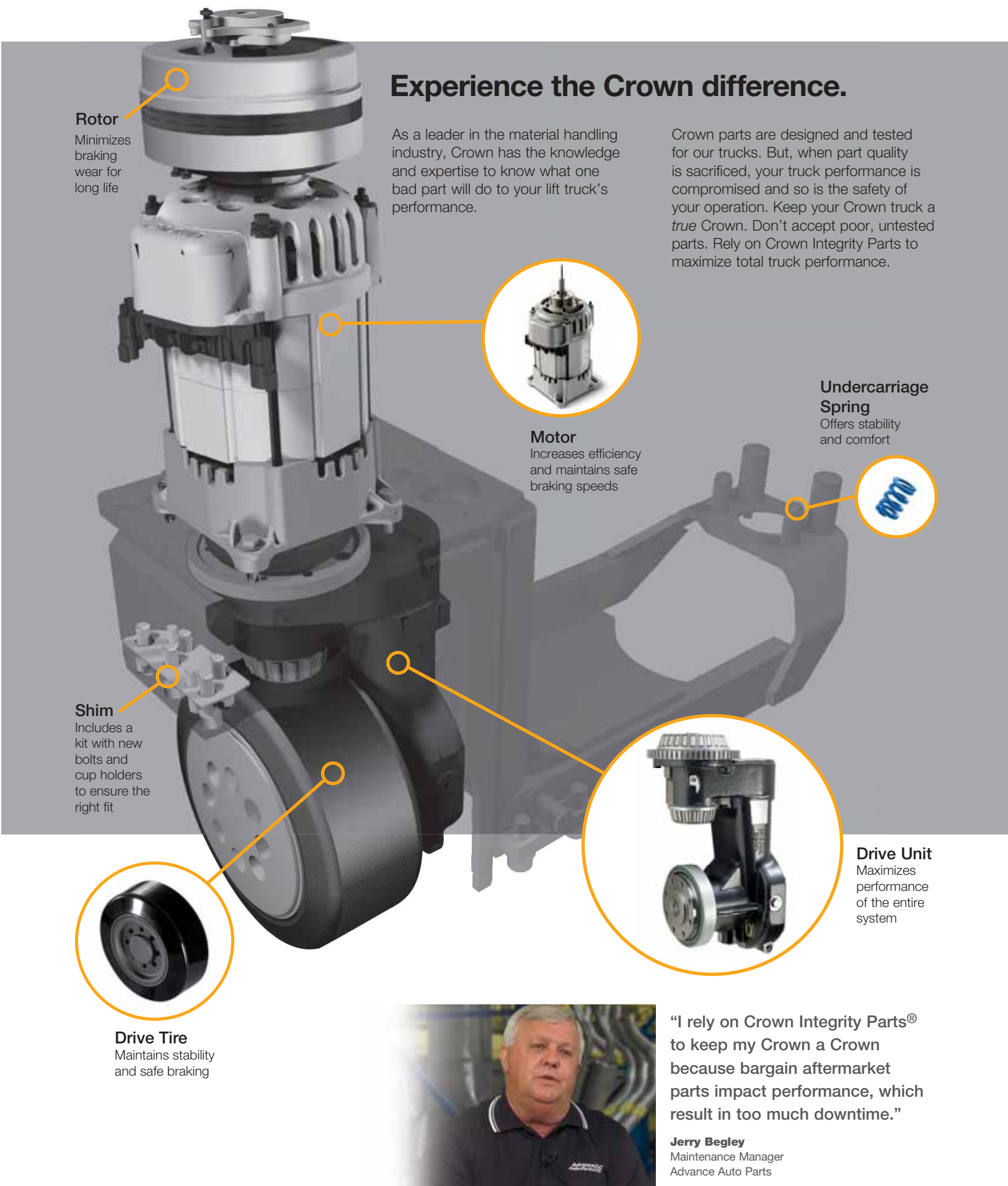
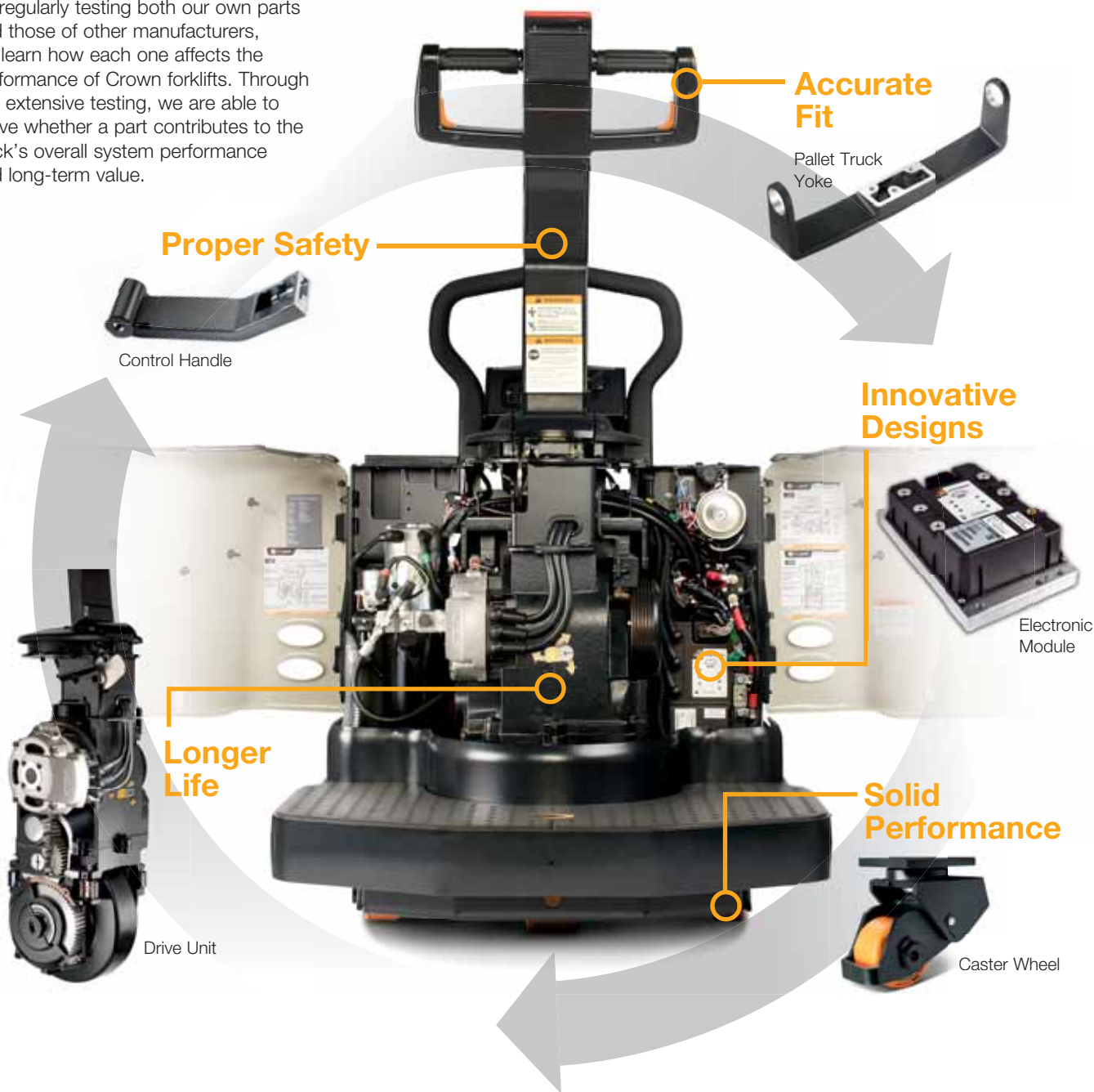
◀ Test results prove that the Crown rotor has a higher hardness average (16 RC) compared to a look-alike rotor (9 RC). Crown's minimum rotor hardness tested at 15 RC and the competitor part tested as low as 5 RC. This indicates that Crown's rotors are up to three times harder than look-alike parts which equals increased life.

# EXPERIENCE A TOTAL SYSTEM OF PERFORMANCE.

Crown selects materials and designs parts based on the way each component interacts with other parts and the truck as a whole. We build a total system that maximizes performance and productivity.

## Take a closer look.

By regularly testing both our own parts and those of other manufacturers, we learn how each one affects the performance of Crown forklifts. Through this extensive testing, we are able to prove whether a part contributes to the truck's overall system performance and long-term value.





# EXTENSIVE TESTING

## ENSURES SYSTEM PERFORMANCE.

Crown takes the time to ensure that each part works with the entire system to deliver maximum performance, so you can keep your product moving.



▲ Our multi-task control handles are put through rigorous testing for proven reliability.



▲ Structural tests verify the frame's durability.



▲ Electrical components on our lift trucks are tested at -40° to 85°C to verify longevity in extreme temperatures.



▲ An electrodynamic shaker qualification test applies 8,000 pounds of force to the product to ensure it withstands repeated impacts and vibration.

### Crown's testing delivers reliability and elevates uptime.

First, Crown designs each part to exact engineering specifications that only we know. We then manufacture components to high precision and narrow tolerance levels. Through extensive evaluation and testing, we reject parts that could be unreliable, unsafe or faulty in any way.

Crown's ongoing testing of look-alike parts consistently reveals major flaws—including poor fit and obsolete designs—that can lead to system damage and serious performance and safety issues.



# START UP YOUR SYSTEM OF SAVINGS.



## A full-service parts and service system provider.

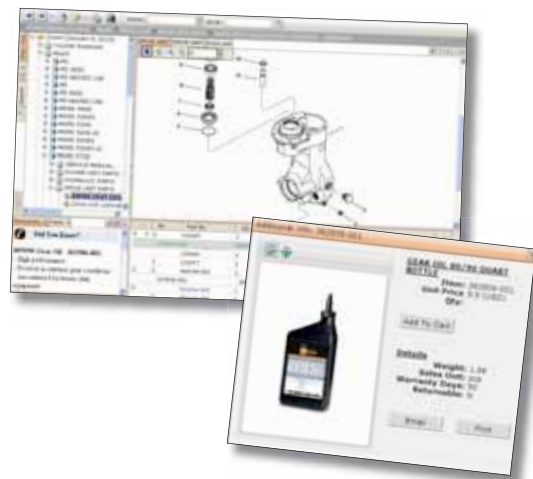
Crown is more than just selling parts. We sell the *right* part. Through research, observation and collaboration, Crown works hard to understand your specific application so we can deliver the right part that meets your needs.

Combine all this with Crown's forklift quality, replacement part accessibility, part commonality, proven technical service and an operator-friendly, ergonomic design, and you'll experience uptime like no other.

With Crown and our retail network, you'll benefit from:

- ▶ A well-managed dealer parts inventory
- ▶ Quick delivery
- ▶ Online parts ordering
- ▶ Exceptional customer service

These benefits add up to less downtime, easier and faster parts replacement and dramatically longer truck life.



◀ Our online Parts and Service Resource Tool (PSRT) system allows customers to find exactly what they need.

## CROWN INTEGRITY PARTS® QUALITY, SUPPORT & VALUE.

### Learn more about our parts:

- ▶ Drive Units
- ▶ Motors
- ▶ Electronic Modules
- ▶ Wheels & Tires

Compare our OEM parts to look-alike parts and experience the Crown difference.



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