

Revolution™ Tire Changer

WalkAway™ Operation Adds Capacity



**MORE AUTONOMOUS
FEATURES**



MADE IN USA
USING THE FINEST US & GLOBAL MATERIALS



Key features at a glance



PATENT PENDING

WalkAway™ Operation

- ✓ 80-second unattended bead breaking and demounting process
- ✓ When paired with wheel balancing, 25%+ time savings is possible
- ✓ 57% less time spent changing a tire using WalkAway™

PATENT PENDING

Automatic Adds Simplicity

- ✓ Same procedure for all tires and wheels
- ✓ Operator experience no longer a factor



PATENTED

Leverless Tool Head

- ✓ Demounts without levers
- ✓ Prevents damage to tire and rim



PATENT PENDING

“Go” Pedal Controls Operation

- ✓ Press “Go” to make selection
- ✓ Hold “Go” to advance procedure





PATENTED

Space Saving Wheel Lift

- ✓ Spindle lifts tire directly into position
- ✓ Built-in wheel lift reduces overall footprint



PATENTED

Powered Press Arms

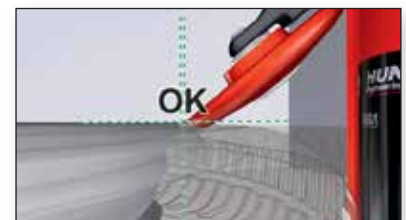
- ✓ Mount virtually any tire
- ✓ Powered for maximum control



EXCLUSIVE

Animations & Videos

- ✓ Animations train operator "on the job"
- ✓ Video training for new users
- ✓ Video library of special procedures



PATENT PENDING

Automatic and autonomous operation saves time,



Mount and Clamp

0:10



Bead Breaking ...



WalkAway™ Mode

The TCR1X allows the operator to “walk away” during bead breaking and demounting process.

- ✓ Available for tires 2 through 4 in a set
- ✓ Status indicator lamp signals when the machine is in operation, stopped, or needs operator



Steady Green
—
machine operating



Flashing Green
—
tasks completed



Steady Red
—
operator required

effort, and mistakes



... and Demounting

1:20

Mounting

0:40

The Operator's Responsibilities When Using WalkAway™ bead breaking and demount.



✓ Load and unload the assembly



✓ Orient TPMS and enable WalkAway™



✓ Offload old tire

Fully automatic adds safety



Position Safety

- ✓ Operator stands back and lets machine do the work



Inflation Safety

- ✓ Inflation station algorithm fills to set pressure automatically — not necessary to stand on foot pedal to inflate
- ✓ Inflation controls keep operator away from assembly



Leverless Safety

- ✓ No levers to hit operator
- ✓ Automatic press arms replace using levers for mounting



Power and Clamping Safety

- ✓ Operator's hands stay away from the assembly
- ✓ No pinch points
- ✓ No risk of rim slipping



Wheel Lift Safety

- ✓ Protects operator's back
- ✓ No need to lift heavy assemblies



TPMS Safety

- ✓ Monitors TPMS location constantly
- ✓ Won't allow tire to be mounted or demounted in unsafe TPMS location



Tire and Wheel Safety

- ✓ Automatic procedure protects rim and tire
- ✓ All rim contact, or near rim contact, is plastic

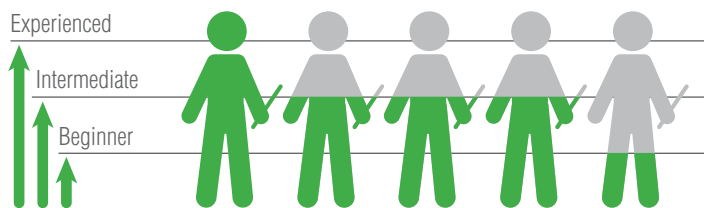


Fully automatic eliminates experience gap

The Revolution™ can elevate your tire-changing team with differing experience levels to a team of experts.

Conventional Tire Changer

*Equipment is the tool
and the technician is the tire changer.*

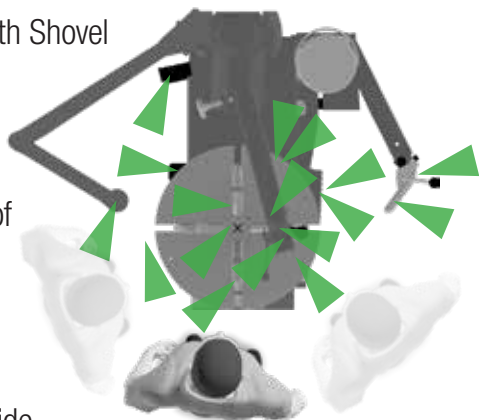


Experience makes the difference.

17 critical decisions for conventional tire changers

Bead Breaking with Shovel

1. Avoid TPMS sensor
2. Set angle and position of shovel
3. Avoid rim



Clamp

4. Inside or outside
5. Use jaw protectors or not
6. Position jaws as needed

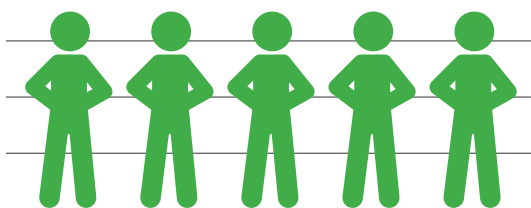
Mount

7. Set mount head
8. TPMS sensor position
9. Use lever protector or not
10. Reloosen bottom bead

11. Position mount head
12. Over/under head
13. TPMS sensor position
14. Use press arms as needed
15. Keep tire turning with rim Inflation
16. Inflate, then check pressure
17. Repeat as needed

Revolution™ Tire Changer

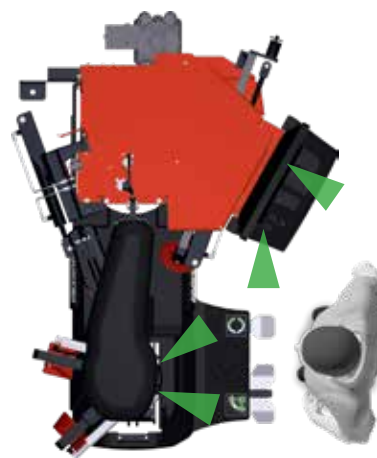
*The Revolution is the tire changer
and the technician is an equipment operator.*



All experts in no time.

4 critical decisions for the Revolution

vs.



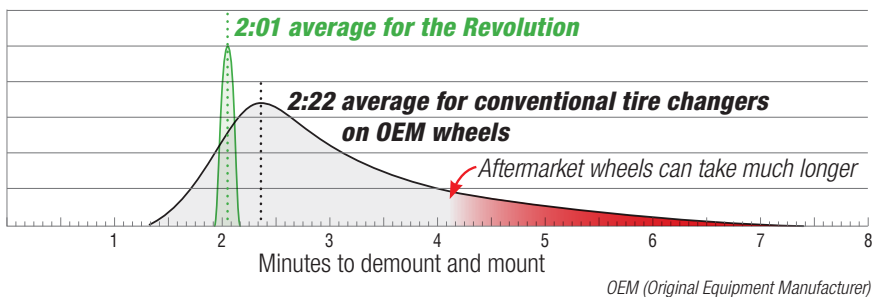
1. Select clamp size
2. Set TPMS sensor and rim diameter
3. Use press arms as needed
4. Set inflation pressure

Fully automatic saves time

Tire Changing is an all day task, not a race for single tires. Assembly after assembly, the Revolution™ outpaces conventional equipment.

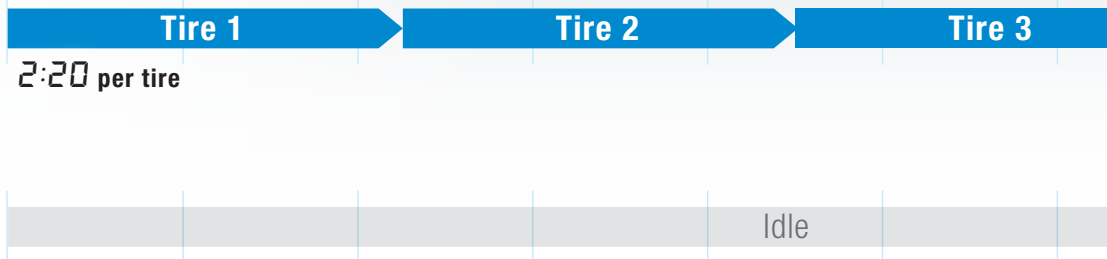
Eliminate Cycle Time Variation

The Revolution™ handles virtually all tires in the same time.

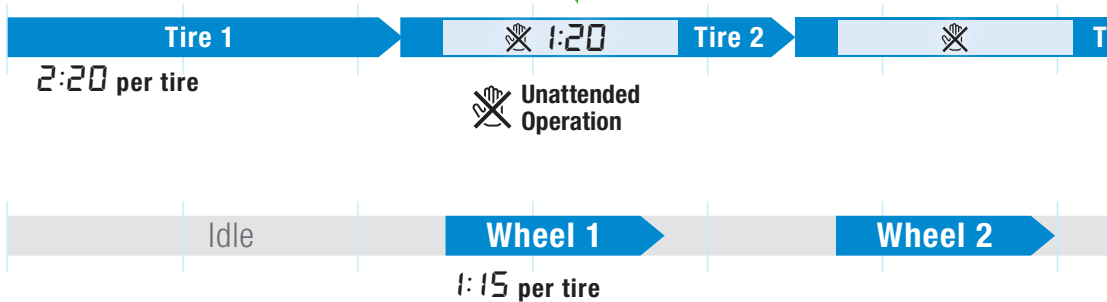







WalkAway™ mode adds capacity NEW


OLD WAY
Manual & Sequential



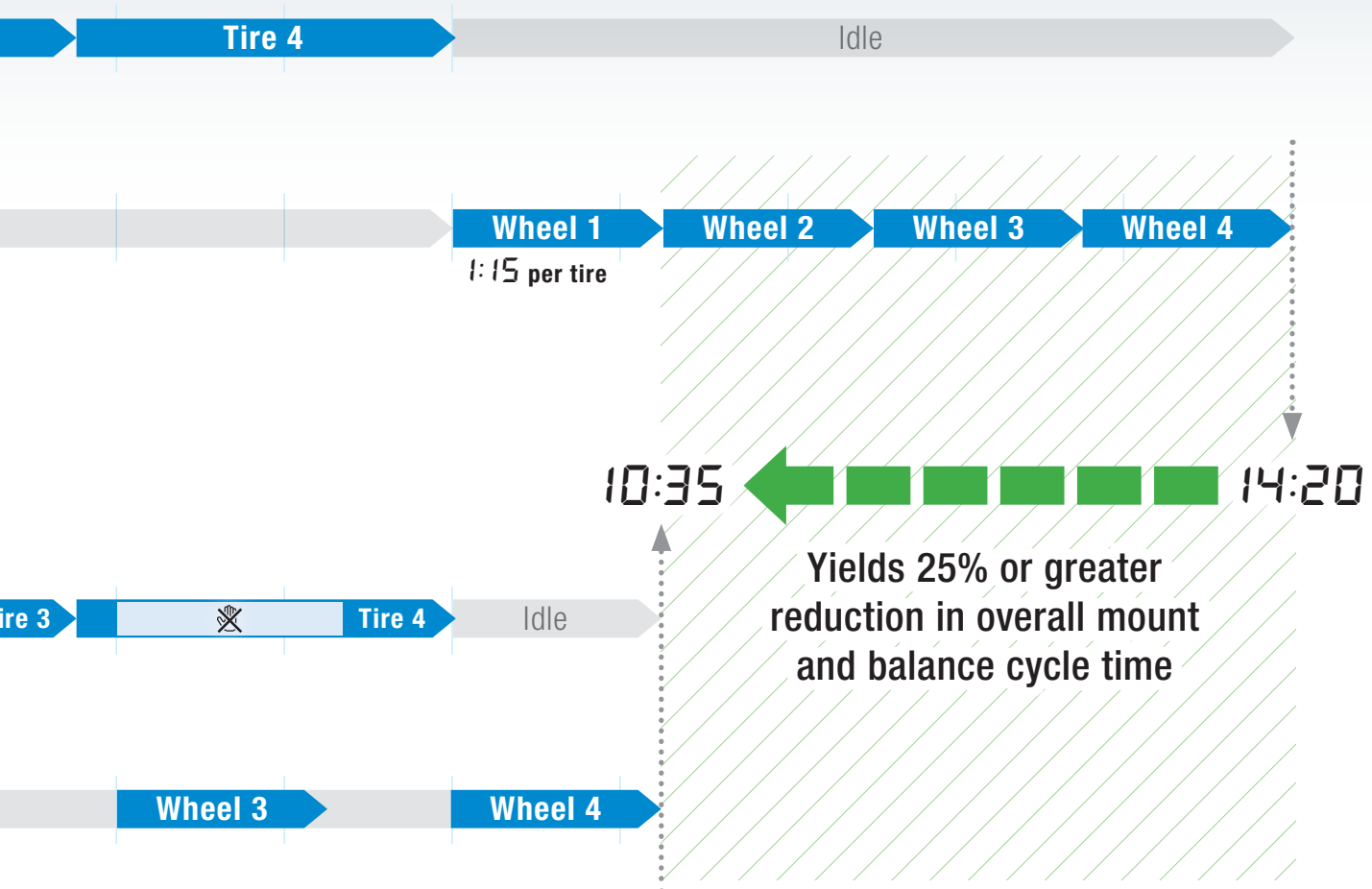
REVOLUTION™ WALKAWAY™
Automatic & Concurrent



<i>OEM Fitments Modern</i>	 Low profile (under 50 series)	 Traditional	 Heavy assembly (over 30" assembly)	 Run flat	 Large diameter (over 20" wheel)	
<i>Percent of Fitments</i>	37%	27%	14%	15%	7%	100%
<i>Old Equipment (skilled operator)</i>	2:08	1:20	3:14	4:06	3:59	2:22 AVERAGE
<i>Revolution™ (any operator)</i>	2:00	1:56	2:00	2:07	2:10	2:01 AVERAGE


15%
IMPROVEMENT

Most technicians mount and balance sequentially. First demounting and mounting all four tires, then balancing all four assemblies. The Revolution™ tire changer's new walk-away mode, frees the operator to balance assemblies while the Revolution™ demounts another tire — unattended — saving time and adding capacity.



Fully automatic simplifies training

Technique is no longer a requirement for tire changing — learn on one tire and apply same skills to all tires.

The old push here, pull there technique learned through making mistakes and busted knuckles no longer applies. On the Revolution™, the same process learned for one tire assembly applies to all tire assemblies.

Three Ways to Train:

The “Walk Me Through It” Mode

- ✓ Animation details each step
- ✓ 13 unique animations
- ✓ Can be bypassed by experienced operator



18 On-board videos

Including:

- ✓ Basic operation
- ✓ Detailed operations
- ✓ Special procedures
- ✓ Accessories



STANDARD

Camera Monitors Operations

- ✓ Identify incorrect operation
- ✓ Verify proper work
- ✓ Protect your investment



PATENTED

Powered press arms assist on demand

- ✓ Utilize press arms only when necessary or set up to always use them
- ✓ Press arms adjust automatically when you set the diameter
- ✓ Press arms power clockwise to prevent tire slippage
- ✓ Mount correctly the first revolution and protect TPMS sensors!



PATENTED

Leverless tool head advantages

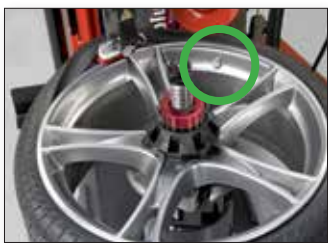
- ✓ Demounting hook automatically deploys to catch and lift bead
- ✓ No risk of lever damage to operator or rim
- ✓ Demount hook always avoids TPMS sensor — no risk of damage
- ✓ Mount head designed to work with clad, raised spoke and all unique wheel designs



PATENTED

TPMS protection is automatic

Once the operator sets the diameter and positions valve stem/TPMS, the Revolution™ tracks the sensor during mounting and demounting, avoiding costly damage.



Top bead demount



Bottom bead demount



Bottom bead mount

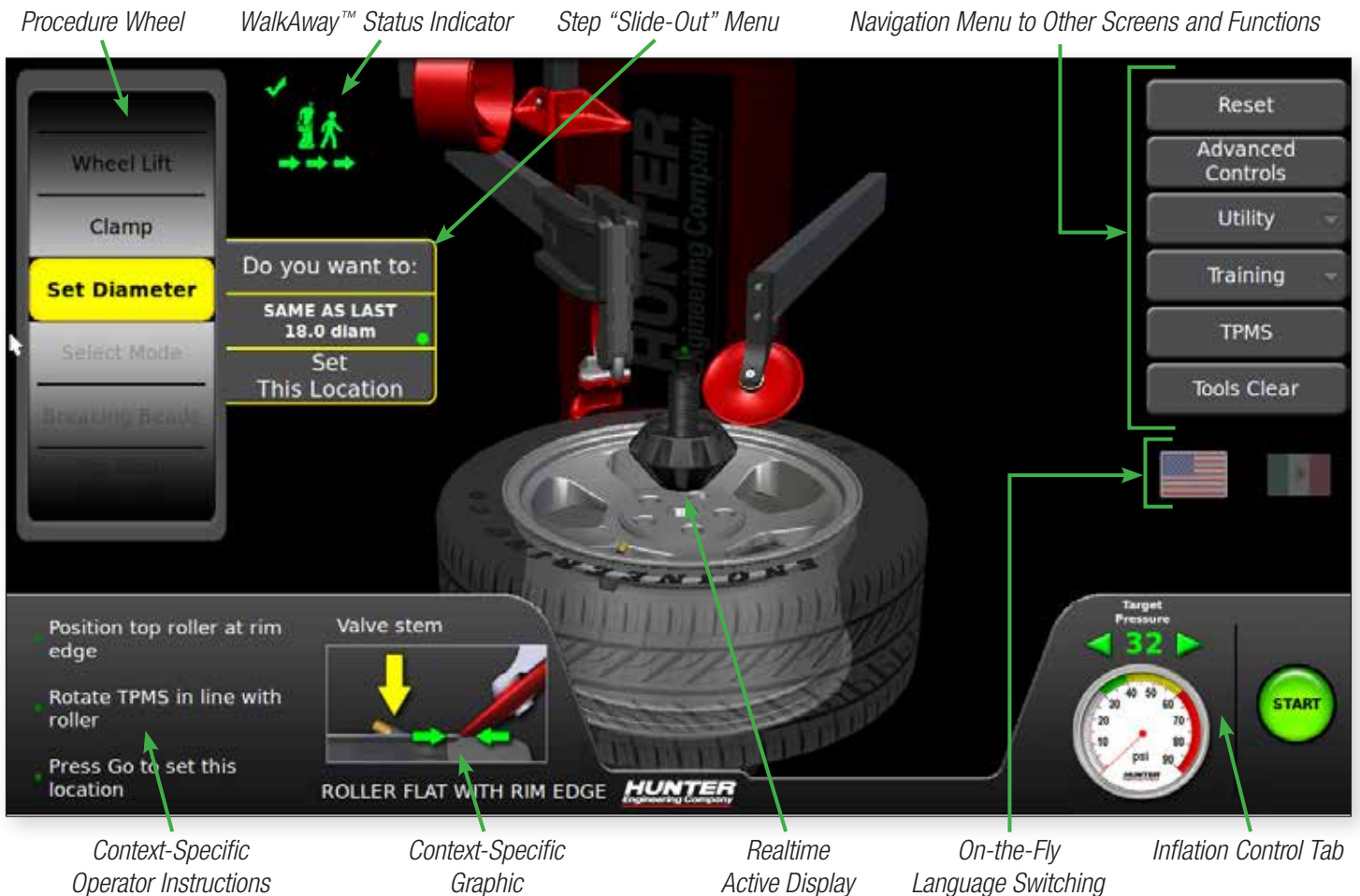


Top bead mount

PATENT PENDING

Touchscreen interface is simple to use

The display shows the operator's current step and monitors progress. Interactions with screen are generally not required. When needed, slide out menus guide the operator through procedure.



PATENT PENDING

Fast inflation saves time

Inflation station automatically fills tire to desired pressure.

- ✓ Operator stands back or can WalkAway™ from inflation
- ✓ 33% faster than traditional foot pedal inflation systems



Blast inflation directs large blast of air for tough bead seating.



Clamping versatility

- ✓ Powerful pneumatic clamp holds wheel secure
- ✓ Center clamp design avoids clamping damage
- ✓ Three position cone handles wide variety of wheels



PATENTED

Bead loosening rollers are damage free

- ✓ Bead loosening rollers work best for widest variety of tires
- ✓ Procedure loosens even the most stuck on soft sidewall tires
- ✓ No risk of TPMS damage
- ✓ No risk of rim damage



Hydraulic operation is powerful and precise

- ✓ Hydraulic operation with filter means long durable life, much like industrial equipment
- ✓ Hydraulic operation means power and control
- ✓ Each tool can be moved quickly or slowly into position and held as needed



Reduce comebacks and do it right the first time

PATENTED

Match-mounting

When used with Hunter's Road Force® Elite, the Revolution™ quickly and easily helps eliminate vibration problems balancers alone can't fix.

The Revolution's bead roller discs allow spinning of tire on rim, helping match-mount stiffest point on tire to low spot on rim.



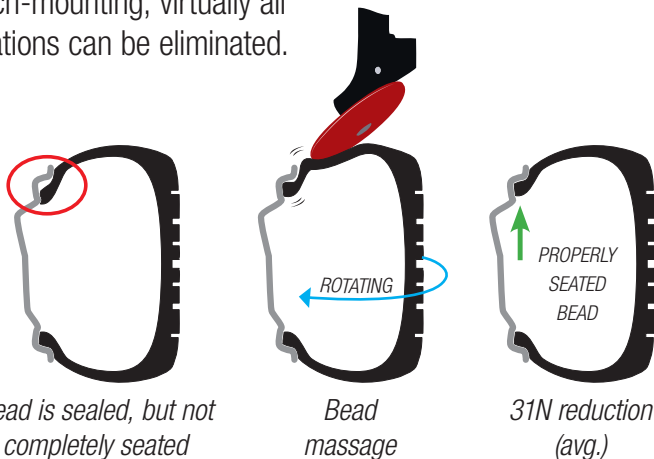
PATENT PENDING

Bead Massage

The Revolution tire changer introduces a WalkAway™ bead massage sequence.

During bead massage, rollers apply force to the tire walls, assisting proper bead seating and reducing vibration concerns.

When combined with Road Force® match-mounting, virtually all vibrations can be eliminated.



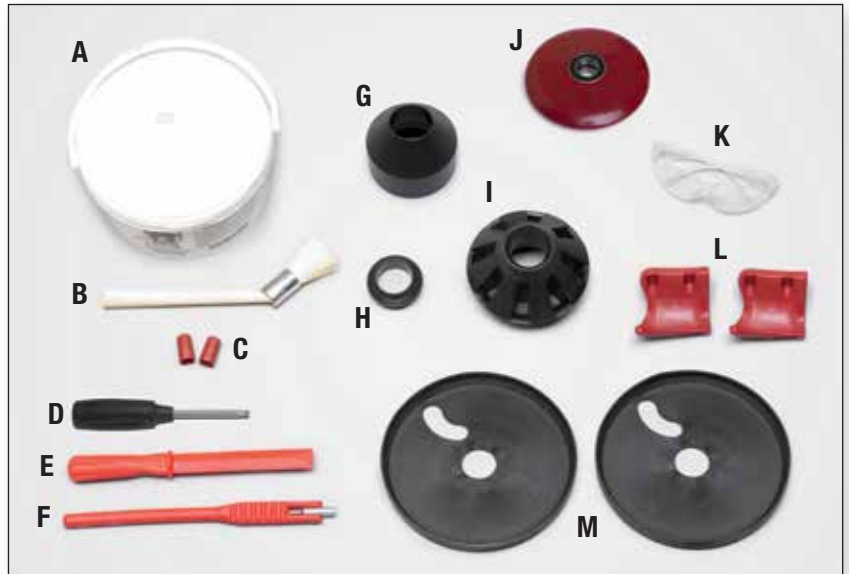
50% of tire sets are significantly improved using bead massage*

* (one or more tires has 7 lbs reduction)

Standard Accessories

The standard Revolution tire changer comes equipped to handle virtually all tire and wheel combinations.

A	RP6-3784	Paste
B	RP6-1506	Paste brush
C	69-1394-2	Pin protector (2)
D	221-759-2	Valve core remover
E	221-659-2	Bead starting tool
F	RP11-2020688	Valve puller
G	192-233-1	In-between cone (2)
H	192-225-1	Small polymer cone (2)
I	192-226-1	Double-sided polymer cone (2)
J	111-154-1	Spare roller
K	179-15-2	Glasses
L	221-713-2	Polymer mount head (2)
M	69-1392-2	Rubber platten cover (2)



Additional Accessories

The following options can be used to enhance serviceability of specialized applications.



Flange plate kit 20-3158-1

Ideal for plastic clad wheels or reverse wheels where maximum protection is needed. Maximum diameter 240 mm.



Flange plate accessory pin kit 20-3675-1

For wheels with extreme lug hole and lug depth variances.



Dual wheel adaptor 20-2964-1

Optional adaptor adds clamping capability for dual wheels, 19.5 in. wheels and other wheels with large center holes.

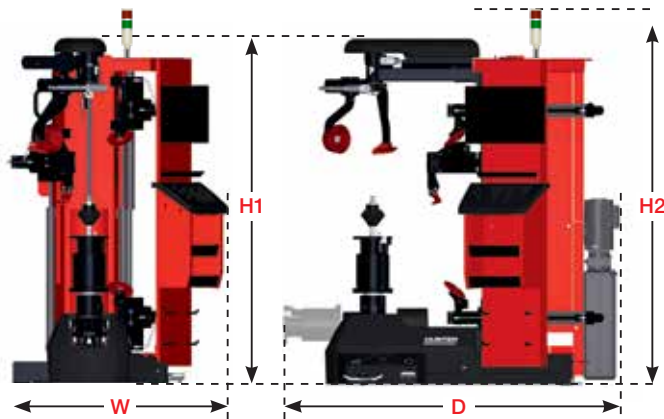


Thick bead kit 20-3160-1

Wider hook for thicker beads. Suitable for skid steer, load range G-H-J-tires. Plus, reverse wheel plate for 19.5- and 17.5-in. rims.

Specifications

MADE IN USA
USING THE FINEST US & GLOBAL MATERIALS



TCR1X Revolution™

Width (W)	Height (H1)	Height (H2)	Depth (D)	Weight
1,272 mm 50 in	1,994 mm 78.5 in	2,185 mm 86.0 in	1,981 mm 78 in	842 kg 1,856 lbs

Because of continuing technological advancements, specifications, models and options are subject to change without notice.

Model Choices

TCR1XE-216: 208-230V, 1Ph, 60Hz, 24A
TCR1XE-215: 208-230V, 1Ph, 50Hz, 24A
TCR1XE-435: 230/380V, 3Ph, 50Hz, 10/6A

Air Supply Requirements

8.6 ± 1.7 bar (125 ± 25 psi)

Mount / Demount Tool

Polymer Self Inserting Leverless

Clamping Type

Center w/Quick Clamp

Bead Loosening Type

Upper / Lower Roller

Match Mounting Capable

Yes

Rim Diameter Range

305 mm – 762 mm (12 in. – 30 in.)

Maximum Tire Diameter

1,270 mm (50 in.)

Maximum Wheel Width

381 mm (15 in.)

Drive

Variable up to 15 rpm Clockwise/Counter Clockwise
Torque: 1186 Nm (875 ft-lbs)

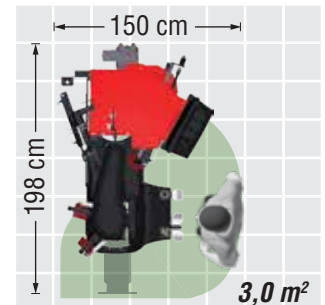
Shipping Weight

842 kg (1,857 lbs)

Footprint Comparison

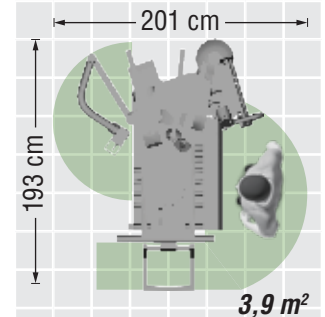
Revolution™

Revolution is space efficient for a premium changer.



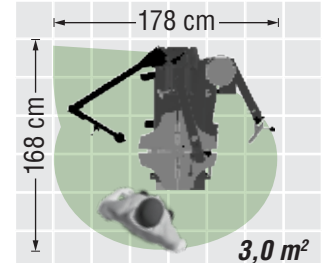
Premium Changer

Other popular premium tire changers are larger.



Typical Tabletop

Even simple conventional changers are larger than they appear when work area is factored.



This product is listed to UL201 Garage Equipment Standard by Intertek (ETL) Testing Laboratories.

Meets national electrical code requirements for electrically powered shop equipment — 1st for an electric tire changer!

HUNTER
Engineering Company

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