Revolution™ Tire Changer
WalkAway™ Operation Adds Capacity

MORE AUTONOMOUS FEATURES

WHEEL DIMENSIONS
WEIGHT
MODE
SPOKE LOCATION
RIM PROFILE
SMARTWEIGHT
OPTIMIZED
RIM RUNOUT

REPORT CARD
ROAD FORCE
TIRE PULL
ERROR PROOF
FORCEMATCH
PREDICTION
AUTOMATIC
CENTERING
CHECK

POSITIONS
SAFETY
LEVERLESS
SAFETY
POWER & CLAMPING
SAFETY
WHEEL LIFT
SAFETY

SIMPLIFIES TRAINING

TPMS SAFETY
WALKAWAY
TIRE & WHEEL
SAFETY

ADDS SAFETY
ELIMINATES
EXPERIENCE
GAP
SAVES TIME

25%+ FASTER

NEW
Key features at a glance

**PATENT PENDING**

**WalkAway™** Operation  **NEW**
- 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
Automatic and autonomous operation saves time,

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

WalkAway™ Mode

NEW

Steady Green — machine operating
Flashing Green — tasks completed
Steady Red — operator required

Mount and Clamp

Bead Breaking ...
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

- **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

- **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

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

**Conventional Tire Changer**

<table>
<thead>
<tr>
<th>Experienced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
</tr>
<tr>
<td>Intermediate</td>
</tr>
</tbody>
</table>

*Experience makes the difference.*

**17 critical decisions for conventional tire changers**

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

**Demount**

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

**Mount**

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**

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.

**WalkAway™ mode adds capacity**

2:01 average for the Revolution

2:22 average for conventional tire changers on OEM

Eliminate Cycle Time Variation
The Revolution™ handles virtually all tires in the same time.

- NEW

- Old Way
  - Manual & Sequential
  - Tire 1
  - Tire 2
  - Tire 3
  - 2:20 per tire
  - Idle

- Revolution™ WALKAWAY™
  - Automatic & Concurrent
  - Tire 1
  - Tire 2
  - Tire 3
  - 2:20 per tire
  - Unattended Operation
  - Wheel 1
  - Wheel 2
  - 1:15 per tire

57% less time spent changing a tire using WalkAway!
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.

**OEM Fitments**

<table>
<thead>
<tr>
<th>Modern</th>
<th>Low profile (under 50 series)</th>
<th>Traditional</th>
<th>Heavy assembly (over 30” assembly)</th>
<th>Run flat</th>
<th>Large diameter (over 20” wheel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of Fitments</td>
<td>51%</td>
<td>22%</td>
<td>14%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Old Equipment (skilled operator)</td>
<td>2:08</td>
<td>1:20</td>
<td>3:14</td>
<td>4:06</td>
<td>3:59</td>
</tr>
<tr>
<td>Revolution™ (any operator)</td>
<td>2:00</td>
<td>1:56</td>
<td>2:00</td>
<td>2:07</td>
<td>2:10</td>
</tr>
</tbody>
</table>

**Tire 3**

Yields 25% or greater reduction in overall mount and balance cycle time
**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
**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.

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**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

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- 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.

Flange plate kit 20-3158-1
Ideal for plastic clad wheels or reverse wheels where maximum protection is needed. Maximum diameter 240 mm.

Other Accessories:

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.

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**

**Power Requirements**
208-230V, 1 phase, 60Hz, 24A, NEMA 30 amp plug, L6-30P, 5,520 watts

**Air Supply Requirements**
125 ± 25 psi (8.6 ± 1.7 bar)

**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**
12 in. – 30 in. (305 mm – 762 mm)

**Maximum Tire Diameter**
50 in. (1,270 mm)

**Maximum Wheel Width**
15 in. (381 mm)

**Drive**
Variable up to 15 rpm CW / CCW
Torque: 875 ft-lbs (1186 Nm)

**Shipping Weight**
1,856 lbs (842 kg)

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**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.

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**TCR1X Revolution™**

<table>
<thead>
<tr>
<th>Width (W)</th>
<th>Height (H1)</th>
<th>Height (H2)</th>
<th>Depth (D)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 in</td>
<td>78.5 in</td>
<td>86.0 in</td>
<td>78 in</td>
<td>1,856 lbs</td>
</tr>
<tr>
<td>1,272 mm</td>
<td>1,994 mm</td>
<td>2,185 mm</td>
<td>1,981 mm</td>
<td>842 kg</td>
</tr>
</tbody>
</table>

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

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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!

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