Wheel Chocks Guidelines
Application & Proper Use

- What Wheel Chock for What Application?
- Choosing the RIGHT Wheel Chocks
- Proper Chocking Procedures
- Chocking Guide
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OSHA/MSHA SAFETY SPECIFICATIONS:
ESCO Wheel Chocks meet and exceed requirements of OSHA and MSHA as specified below:

OSHA SPECIFICATIONS:

- **1910.178(k) - (1)**
  The brakes of highway trucks shall be set and wheel chocks placed under the rear wheels to prevent the trucks from rolling while they are boarded with powered industrial trucks.

- **1910.178(m)- (7)**
  Brakes shall be set and wheel blocks shall be in place to prevent movement of trucks, trailer, or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semitrailer during loading or unloading when the trailer is not coupled to a tractor.

- **1910.111(f) - (9)**
  Chock blocks. At least two chock blocks shall be provided. These blocks shall be placed to prevent rolling of the vehicle whenever it is parked during loading and unloading operations.

MSHA SPECIFICATIONS:

- **Standard for Surface Operations** - 30 CFR § 56.14207
  Parking procedures for unattended equipment. Mobile equipment shall not be left unattended unless the controls are placed in the park position and the parking brake, if provided, is set. When parked on a grade, the wheels or tracks of mobile equipment shall be either chocked or turned into a bank.

- **Standard for Underground Mines** - 30 CFR § 57.14207
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- **Procedures During Repairs or Maintenance** - 30 CFR § 56.1410
  Repairs or maintenance of machinery or equipment shall be performed only after the power is off, and the machinery or equipment blocked against hazardous motion. Machinery or equipment motion or activation is permitted to the extent that adjustments or testing cannot be performed without motion or activation, provided that persons are effectively protected from hazardous motion.

WARNING:

- Always consider vehicle, tire, and wheel type and application before considering any wheel chock.
- GVW (gross vehicle weight) is based on recommendation. Check with vehicle manufacturer for specifics on your vehicle make and models **Gross Vehicle Weight & Tire Dimensions**.
- All specifications regarding wheels must be properly researched before using any wheel chock.
- DO NOT use damaged wheel chocks on vehicles. If wheel chock is damaged, discard and replace.
- Always test and review wheel chocks before applying in real life application.
- ESCO is NOT liable for the misuse or improper application of wheel chocks.

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ABOUT WHEEL CHOCKS

- Designed to support the vehicle/load when in the parked position.
- Can be used for a wide range of vehicle sizes and applications; whether choking the wheels of a standard automobile or a large mining “haul” truck, there is a wheel chock for each application.
- Assist in complying with both OSHA and MSHA safety regulations. (see regulations for more details)
- Characterized as being both “Lightweight” and “Heavy Duty” in construction due to the urethane material and “Compact” design.
- Heavy Duty urethane material makes these wheel chocks weather resistant and capable of withstanding some of the harshest elements (water, heat, cold, oil, lubricants, etc.) that some “parked” vehicles may encounter.
- Unlike wood, rubber, or steel chocks, ESCO Wheel Chocks are maintenance free and have a much longer usable lifespan.
- Will not crack, chip or dry rot due to weather and abrasives.
- Made out of Non-Conductive Material - Safe for Underground Mining Applications.
- Safety “Yellow” product color makes wheel chocks “easy to spot” in the field and in “accidental” situations, where the chocks have been forgotten before leaving location.

WHAT WHEEL CHOCK IS RIGHT FOR THE JOB?

TIRE DIAMETER:
Picking the appropriate wheel chock that fits the tires “diameter” is one of the most important specification details when selecting the appropriate wheel chock(s). If the wheel chock is not WIDE enough, it will not maintain the tire and weight of the vehicle.

GROSS VEHICLE WEIGHT (GVW):
The overall “GVW” is important when selecting wheel chocks because each chock is rated to specific weight capacities. Consult vehicle user manual or contact vehicle manufacturer for exact details on gross vehicle weight.

SURFACE/TERRAIN:
The surface/terrain and environment that wheel chocks are being used in are important when selecting the right wheel chock. Know the surface application to better ensure proper use of wheel chocks (ESCO wheel chocks can work in ALL surface applications).
**PROPER USE, RECOMMENDATIONS, & PROCEDURES FOR USING WHEEL CHOCKS**

- **ALWAYS** chock wheels at the center point of the wheel. NEVER chock wheel at off-center or at an angle.
- Improper chocking can lead to the chock not working correctly and/or could lead to damage of the vehicle or even possible injury/death.
- **ALWAYS** position wheel chock against the wheel so that it is making contact.
- If chocking on an incline or decline, chock the wheels accordingly based on type of vehicle, weight, tire diameter/size etc. Consult full wheel chocking recommendations in this guide.
- **ALWAYS** consider the surface/terrain and environment around the vehicle. Soft “Soil”, wet, or slippery terrain can affect the usability of wheel chocks and/or cause a potential for failure.
- **TIRE SIZES/GVW** - Always consider the tire size and type of tire/wheel configuration. Radial vs. Biased Tires may require a different sized chock.
- **Always consider the vehicles “Gross Vehicle Weight”** (for “hauler” type vehicles, always consider “loaded weight”).
- **ALWAYS** use a minimum of (2) wheel chocks.

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**WARNING**

- **PLACE CHOCK TIGHTLY AGAINST TIRE TREAD.**
- **CHOCK SQUARED TO THE TIRE AND CENTER.**

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*Example of Model 12590 in Use on SUV Style Vehicle/Tire Combination.*
Wheel Chocks Guidelines
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Haul Truck with Payload Under 250 Tons - Proper Chocking Procedures

**Level Grade**
Chock tires in both front and rear position on each side of truck.

**Uphill Grade**
Chock rear outer tires on each side of truck.

**Downhill Grade**
Chock front tires on both sides of the truck.

Haul Truck with Payload Over 250 Tons - Proper Chocking Procedures

**Level Grade**
Chock tires in both front and rear position on each side of truck.

**Uphill Grade**
Chock the four rear tires (both duals) on both sides of truck.

**Downhill Grade**
Chock rear outer tires first then the front on both sides.

Articulated Trucks - Proper Chocking Procedures

**Level Grade**
Chock tires in both front and rear position on each side of truck.

**Uphill Grade**
Chock the rear tires on both sides of truck.

**Downhill Grade**
Chock on the center axle tires on both sides.

Vehicles with 2 or More Axles - Proper Chocking Procedures

**Level Grade**
Chock front tires in both front and rear position.

**Uphill Grade**
Chock outside rear tires on both sides of vehicle.

**Downhill Grade**
Chock front tires on both sides of vehicle.
## Wheel Chocks Specifications and Model Numbers

<table>
<thead>
<tr>
<th>Model # Description</th>
<th>12590 Wheel Chock</th>
<th>12591 Wheel Chock</th>
<th>12592 Wheel Chock</th>
<th>12593 Wheel Chock</th>
<th>12594 Wheel Chock</th>
<th>12595 Wheel Chock</th>
<th>12596 Wheel Chock</th>
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</thead>
<tbody>
<tr>
<td><strong>GVW (Gross Vehicle Weight) Capacity</strong></td>
<td>5 Ton (10,000 lbs.)</td>
<td>10 Ton (20,000 lbs.)</td>
<td>20 Ton (40,000 lbs.)</td>
<td>60 Ton (120,000 lbs.)</td>
<td>120 Ton (240,000 lbs.)</td>
<td>250 Ton (500,000 lbs.)</td>
<td>400 Ton (800,000 lbs.)</td>
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<tr>
<td><strong>Tire Sizes (Outer Diameter)</strong></td>
<td>Up to 27 in.</td>
<td>Up to 35 in.</td>
<td>Up to 45 in.</td>
<td>46 in. - 65 in.</td>
<td>Up to 65 in.</td>
<td>Up to 142 in.</td>
<td>Up to 165 in.</td>
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<tr>
<td><strong>Length</strong></td>
<td>8 in. 203mm</td>
<td>8.5 in. 216mm</td>
<td>11 in. 279mm</td>
<td>12.125 in. 308mm</td>
<td>16.25 in. 413mm</td>
<td>22 in. 559mm</td>
<td>24.5 in. 622mm</td>
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<tr>
<td><strong>Width</strong></td>
<td>7 in. 178mm</td>
<td>7 in. 178mm</td>
<td>8 in. 203mm</td>
<td>15.25 in. 387mm</td>
<td>14.5 in. 368mm</td>
<td>14.75 in. 375mm</td>
<td>14.25 in. 362mm</td>
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<td><strong>Height</strong></td>
<td>6 in. 152.5mm</td>
<td>6.25 in. 159mm</td>
<td>7 in. 178mm</td>
<td>10.75 in. 273mm</td>
<td>13.25 in. 337mm</td>
<td>10.5 in. 267mm</td>
<td>16 in. 406mm</td>
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<td><strong>Weight</strong></td>
<td>2 lbs. 0.9 kg</td>
<td>3 lbs. 1.3 kg</td>
<td>4 lbs. 1.8 kg</td>
<td>16 lbs. 7.25 kg</td>
<td>20 lbs. 9 kg</td>
<td>37 lbs. 16.75 kg</td>
<td>34 lbs. 15.5 kg</td>
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</table>
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RECOMMENDED VEHICLE APPLICATION*

**MODEL 12590**
- 5 Ton (10,000 lbs.)
- Up to 27 in.

**MODEL 12591**
- 10 Ton (20,000 lbs.)
- Up to 35 in.

**MODEL 12592**
- 20 Ton (40,000 lbs.)
- Up to 45 in.

**MODEL 12593**
- 60 Ton (120,000 lbs.)
- 46 in. to 65 in.

**MODEL 12594**
- 120 Ton (120,000 lbs.)
- Up to 65 in.

**MODEL 12595**
- 250 Ton (500,000 lbs.)
- Up to 142 in.

**MODEL 12596**
- 400 Ton (800,000 lbs.)
- Up to 165 in.

*NOTE: This is a “recommended guide” only. This chart does not include all possible tire, wheel, or vehicle combinations. Always consider vehicle, tire, and wheel type/application before considering any wheel chock. GVW (gross vehicle weight) is based on a recommendation. All specifications regarding wheels must be properly researched before using any ESCO wheel chock. DO NOT use damaged wheel chocks on vehicles. Always test and review wheel chocks before applying in real life application. ESCO is not liable for the misuse or improper application of wheel chocks. Contact an ESCO representative at 1-800-352-9852 or info@esco.net for more information about your wheel chock needs.*