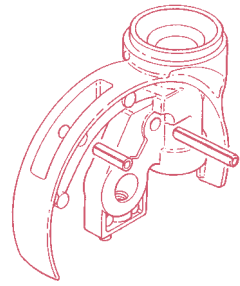


## TwinTech Solus Specifications



### Body and Wheel Centers

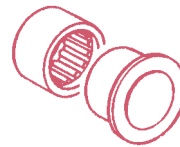
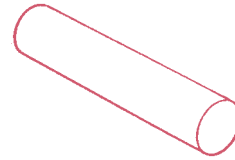
- Pressure-diecast aluminum for light weight, high load capacity, resistance to abuse, and electrical safety.
- Standard finish: epoxy coating in White RAL 9003.

### Brake

- Brake mechanism enabled through diecast teeth around each wheel hub and swivel pin.

### Tires

- Tire profiles to suit hard and soft floor surfaces.
- Gray rubber, or gray polyurethane, with extremely hard wearing properties for temperatures up to 176°F (80°C). Low rolling resistance and very high load capacity.
- Gray, non-marking rubber for softer ride and temperatures up to 149°F (65°C).



### Axle

- Precision hardened and ground steel shaft, manufactured to exacting tolerances; provides extended service life.

### Bearings

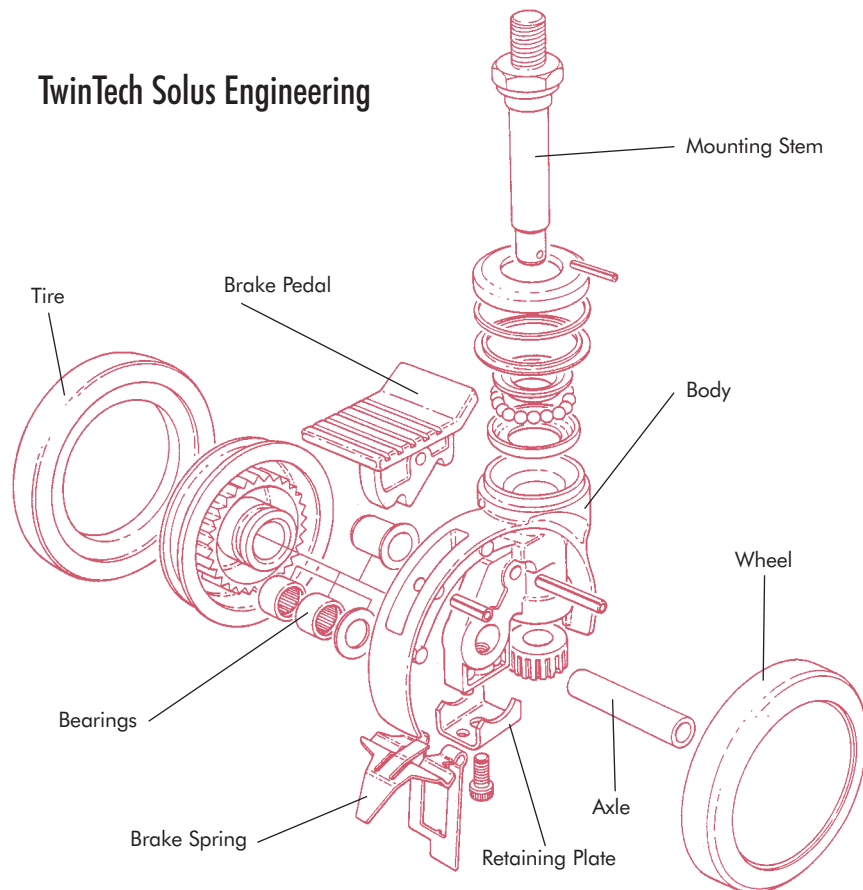
- Headwork thrust race with hardened cup and cone ensures minimal wear and swivel resistance.
- Precision needle roller bearings fitted as standard for low rolling resistance.

### Twin Wheels

- Independent rotation allows minimal swivel effort.
- Totally enclosed bearings, swivel and brake mechanisms in minimal height housing.

**Minimal wheel lubrication may be needed in extreme conditions.**

## TwinTech Solus Engineering



## Ordering Options

- Body and wheel hubs can be powder coated in virtually any color to match existing equipment. (*Consult factory for pricing and set-up charges.*)
- Tires available in polyurethane, rubber, and nylon in a selection of color, shape, hardness, or electrical characteristics.
- Optional hard tread tire in black nylon for high maneuverability on suitable floors.
- Mounting stem can be customized to user's requirements.
- Special "Gold Seal" version provides 72-hour salt spray protection through special plating quality and additional seals for regular autoclaving or steam cleaning. (*Consult factory for pricing and set-up charges.*)
- Available with the following brake options:
  1. Wheel lock
  2. Directional lock
  3. Total lock
- Caster construction for non-magnetic characteristics.
- Anti-static rubber, nylon, or polyurethane tires.
- Delrin® bearing wheels.

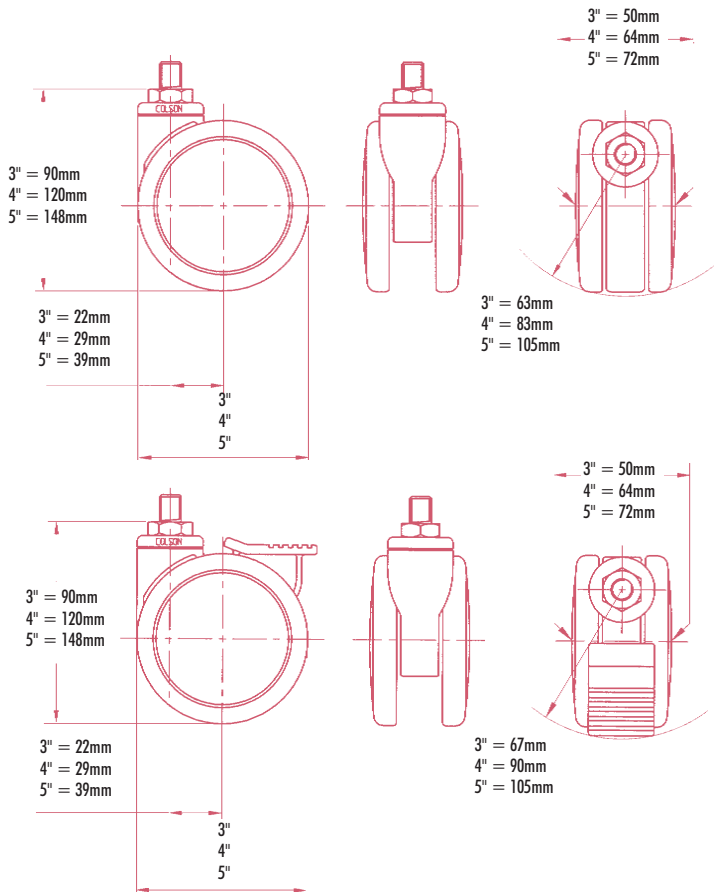
## TwinTech – Solus Swivel Casters

Simple, clean lines combined with the ability to swivel freely in all directions make the TwinTech Solus Swivel Caster ideal for high-technology equipment. It features a lower overall height than traditional casters to maximize stacking capacity, or to stabilize legs which need to slide under equipment.

The Total Lock models feature a brake mechanism that is fully enclosed between the twin wheels to avoid wear on tires often associated with external brakes. The brake is activated by light pressure on a smooth-contoured pedal, manufactured from tough, reinforced thermoplastic for a low operating load and long service life. Both the wheel and the swivel are locked simultaneously by the positive engagement of two sets of metal teeth.

Type	Wheel Dia.	Load Capacity	Bearing	Wheel Type	Stem Size	Weight	Part Number
Swivel	3"	198 lbs.	Roller	Gray Polyurethane	M10 x 15	0.8 lbs.	2-3504-409-064-0001-0805
Swivel	4"	275 lbs.	Roller	Gray Polyurethane	M12 x 20	1.6 lbs.	2-4504-409-007-0001-0805
Swivel	5"	297 lbs.	Roller	Gray Polyurethane	M16 x 20	2.9 lbs.	2-5504-409-017-0001-0805
Swivel	4"	198 lbs.	Roller	Gray Rubber	M12 x 20	1.6 lbs.	2-4504-409-007-0001-0105
Swivel	5"	220 lbs.	Roller	Gray Rubber	M16 x 20	2.9 lbs.	2-5504-409-007-0001-0105
Total Lock	3"	198 lbs.	Roller	Gray Polyurethane	M10 x 15	0.9 lbs.	2-3502-409-064-2001-0805
Total Lock	4"	275 lbs.	Roller	Gray Polyurethane	M12 x 20	1.9 lbs.	2-4502-409-007-2001-0805
Total Lock	5"	297 lbs.	Roller	Gray Polyurethane	M16 x 20	3.0 lbs.	2-5502-409-017-2001-0805
Total Lock	4"	198 lbs.	Roller	Gray Rubber	M12 x 20	1.9 lbs.	2-4502-409-007-2001-0105
Total Lock	5"	220 lbs.	Roller	Gray Rubber	M16 x 20	3.0 lbs.	2-5502-409-017-2001-0105

Standard Finish: Body - White RAL 9003.



### Options

(Consult Factory)

- "Gold Seal" washable casters
- Colored finishes
- Electrically conductive tires
- Alternative stem and thread sizes
- Top plate fixing
- Black nylon tires
- Directional lock for Total Lock models

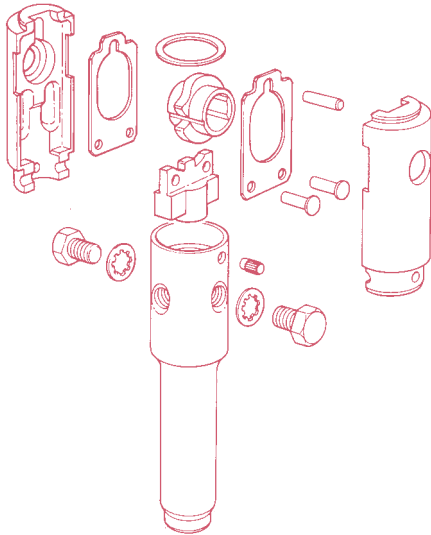
Consult factory for English/Imperial ordering dimensions and quantities.

## TwinTech Combi Specifications

### Cam Capsule

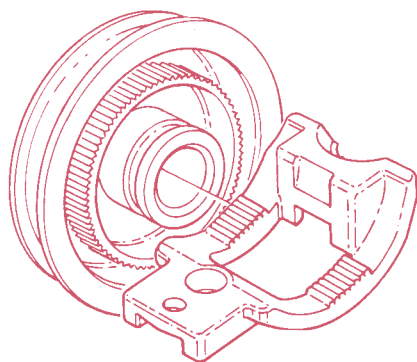
The locking mechanism is totally enclosed within the capsule. It is activated by an 11mm hexagonal drive bar, which can be set for three modes of operation:

1. Wheel and caster swivel;
2. Wheel swivel, but caster positioned in directional lock;
3. Wheel and caster total locked.



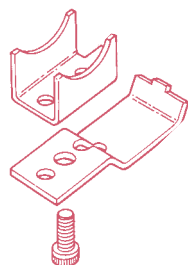
### Brake

- Mechanical system with pressure-diecast teeth engaging with integral teeth cast into a wheel hub. This is a positive-locking parking brake which completely immobilizes the equipment.



### Retaining Plate

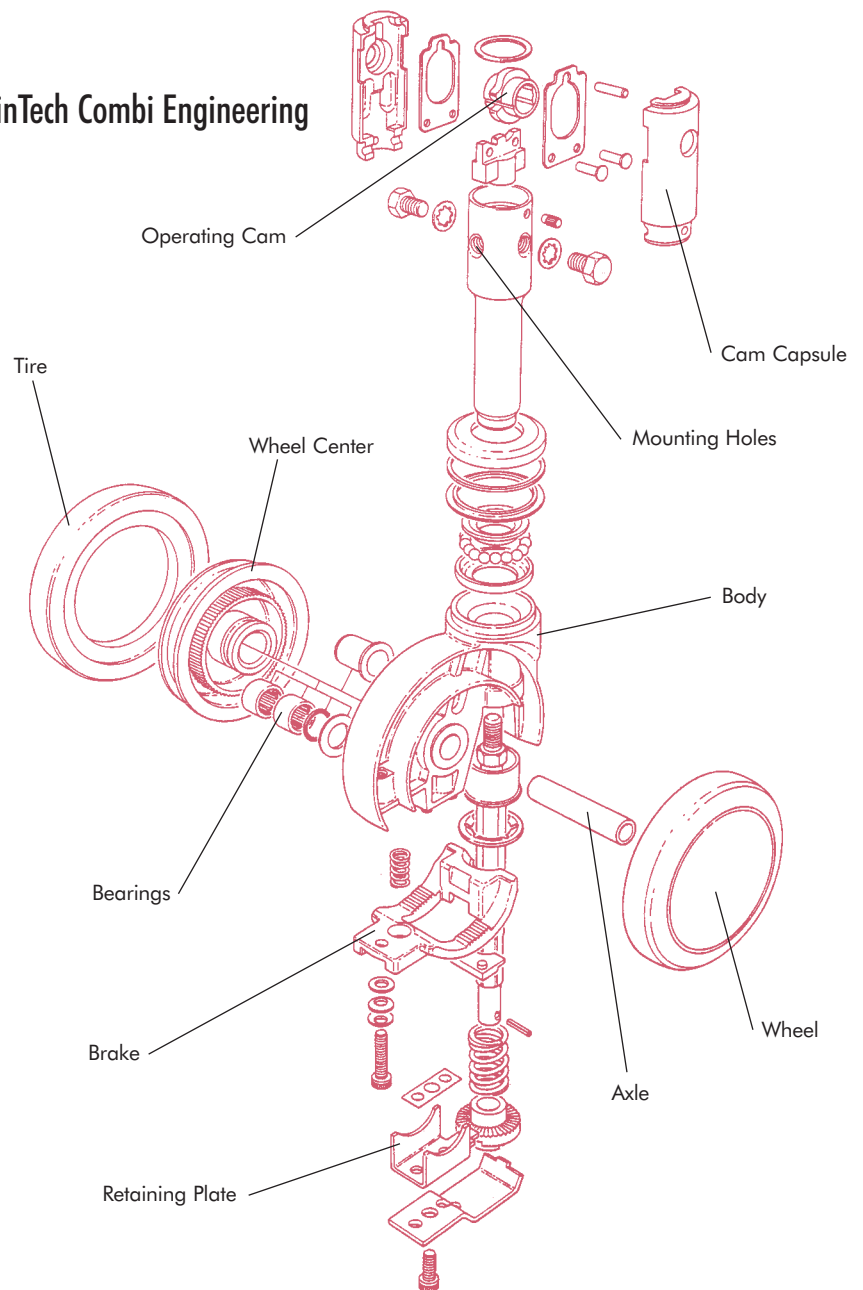
- Designed to allow quick removal and reassembly of the wheels for easy servicing.



### Ordering Options

- Overall height of caster can be extended to match conventional single-wheel casters for greater ground clearance and under-trolley access.
- Alternative "D" section drive bar actuating mechanism can be specified.
- Body and wheel hubs can be powder coated in virtually any color to match existing equipment. *(Consult factory for pricing and set-up charges.)*
- Tires available in polyurethane, rubber, and nylon in a selection of color, shape, hardness, or electrical characteristics.
- Special "Gold Seal" version provides 72-hour salt spray protection through special plating quality, and additional seals for regular autoclaving or steam cleaning. *(Consult factory for pricing and set-up charges.)*

### TwinTech Combi Engineering



## TwinTech – Combi Total Lock Swivel Casters

TwinTech Combi Casters offer all of the design features and benefits of the TwinTech Solus models plus sophisticated braking options.

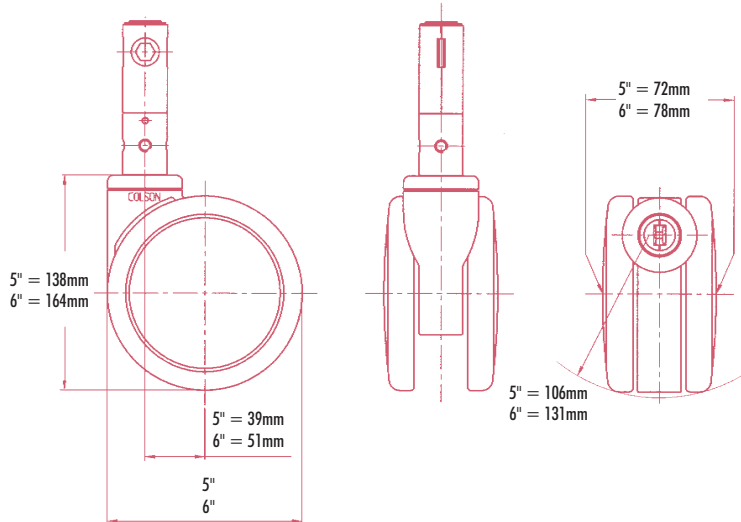
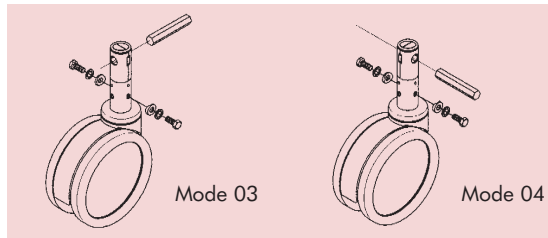
The Total Lock models feature a mechanical brake that allows the wheels to swivel and rotate freely when in the “off” position, and will prevent both swiveling and rotation when in the “on” position. The brake system uses metal teeth that engage simultaneously with complementary teeth on the wheel hub and swivel pin to immobilize the caster. This central locking system does not cause the wear on brake pads and tire surfaces common to conventional friction brakes.

The Total & Directional Lock models are ideal for the most complex applications, including hospital beds and stretchers where its twin-wheel design ensures perfect tracking down long corridors. The central locking mechanism can be locked in three distinct positions, providing free swiveling, swivel locked with wheel free, and total locking of both wheels and swivel.

Type	Wheel Dia.	Load Capacity	Bearing	Wheel Type	Weight	Part Number	Locking Position
Total Lock	5"	297 lbs.	Roller	Gray Polyurethane	3.7 lbs.	2-5512-409-002-0001-0805	
Total Lock	6"	330 lbs.	Roller	Gray Polyurethane	4.9 lbs.	2-6512-409-002-0001-0805	
Total Lock	5"	198 lbs.	Roller	Gray Rubber	3.7 lbs.	2-5512-409-002-0001-0105	
Total Lock	6"	220 lbs.	Roller	Gray Rubber	4.9 lbs.	2-6512-409-002-0001-0105	
Total & Directional Lock	5"	297 lbs.	Roller	Gray Polyurethane	3.7 lbs.	2-5513-409-003-0001-0805	Mode 03
Total & Directional Lock	6"	330 lbs.	Roller	Gray Polyurethane	4.9 lbs.	2-6513-409-003-0001-0805	Mode 03
Total & Directional Lock	5"	198 lbs.	Roller	Gray Rubber	3.7 lbs.	2-5513-409-003-0001-0105	Mode 03
Total & Directional Lock	6"	220 lbs.	Roller	Gray Rubber	4.9 lbs.	2-6513-409-003-0001-0105	Mode 03
Total & Directional Lock	5"	297 lbs.	Roller	Gray Polyurethane	3.7 lbs.	2-5513-409-004-0001-0805	Mode 04
Total & Directional Lock	6"	330 lbs.	Roller	Gray Polyurethane	4.9 lbs.	2-6513-409-004-0001-0805	Mode 04
Total & Directional Lock	5"	198 lbs.	Roller	Gray Rubber	3.7 lbs.	2-5513-409-004-0001-0105	Mode 04
Total & Directional Lock	6"	220 lbs.	Roller	Gray Rubber	4.9 lbs.	2-6513-409-004-0001-0105	Mode 04

Standard Finish: Body - White RAL 9003.

See page 3 for typical Combi configurations in Mode 03 and Mode 04



### Options

(Consult Factory)

- “Gold Seal” washable casters
- “D” cam mounting
- Longer mounting stems available
- Colored finishes
- Electrically conductive tires
- Non-magnetic casters
- Black nylon tires

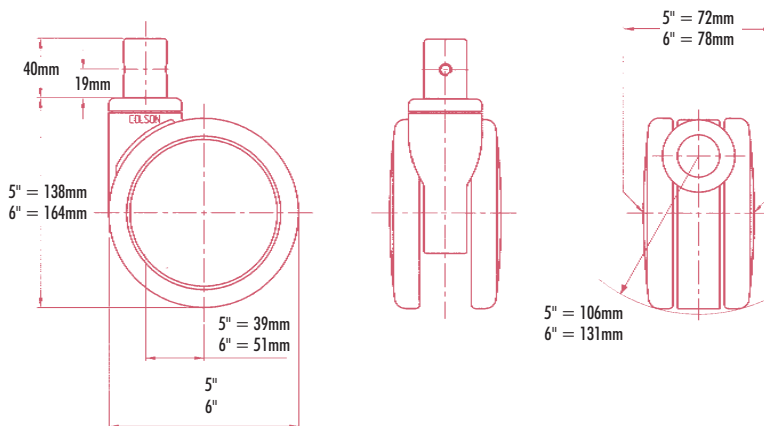
Consult factory for English/Imperial ordering dimensions and quantities.

## TwinTech – Combi Swivel Casters

TwinTech Combi Casters feature a head-bearing design that allows 360-degree swiveling with complete freedom. Since its overall dimensions are identical to others in the range, these Combi models can be used in combination with other types of Combi casters. This model also can be supplied in a non-swiveling, guiding caster version.

Type	Wheel Dia.	Load Capacity	Bearing	Wheel Type	Weight	Part Number
Swivel	5"	298 lbs.	Roller	Gray Polyurethane	2.9 lbs.	2-5514-409-001-0001-0805
Swivel	6"	330 lbs.	Roller	Gray Polyurethane	4.9 lbs.	2-6514-409-001-0001-0805
Swivel	5"	198 lbs.	Roller	Gray Rubber	2.9 lbs.	2-5514-409-001-0001-0105
Swivel	6"	220 lbs.	Roller	Gray Rubber	4.9 lbs.	2-6514-409-001-0001-0105

Standard Finish: Body - White RAL 9003.



### Options

(Consult Factory)

- "Gold Seal" washable casters
- Longer mounting stems available
- Colored finishes
- Electrically conductive tires
- Non-magnetic casters
- Black nylon tires

Consult factory for English/Imperial ordering dimensions and quantities.

## TwinTech – Combi Plunger Lock Casters

TwinTech Combi Plunger Lock Casters are designed to immobilize equipment quickly and easily. They offer the streamlined contours, exceptional maneuverability, and wide range of available materials and finishes standard with the TwinTech range. No adjustments or maintenance are required as the casters will provide a long life of positive operation and reliability. The plunger pad is made of soft, non-marking rubber for maximum friction resistance.

Type	Wheel Dia.	Load Capacity	Bearing	Wheel Type	Weight	Part Number
Plunger Lock	5"	298 lbs.	Roller	Gray Polyurethane	3.2 lbs.	2-5545-409-001-0001-0805
Plunger Lock	6"	330 lbs.	Roller	Gray Polyurethane	4.0 lbs.	2-6545-409-001-0001-0805
Plunger Lock	5"	198 lbs.	Roller	Gray Rubber	3.2 lbs.	2-5545-409-001-0001-0105
Plunger Lock	6"	220 lbs.	Roller	Gray Rubber	4.0 lbs.	2-6545-409-001-0001-0105

Standard Finish: Body - White RAL 9003.

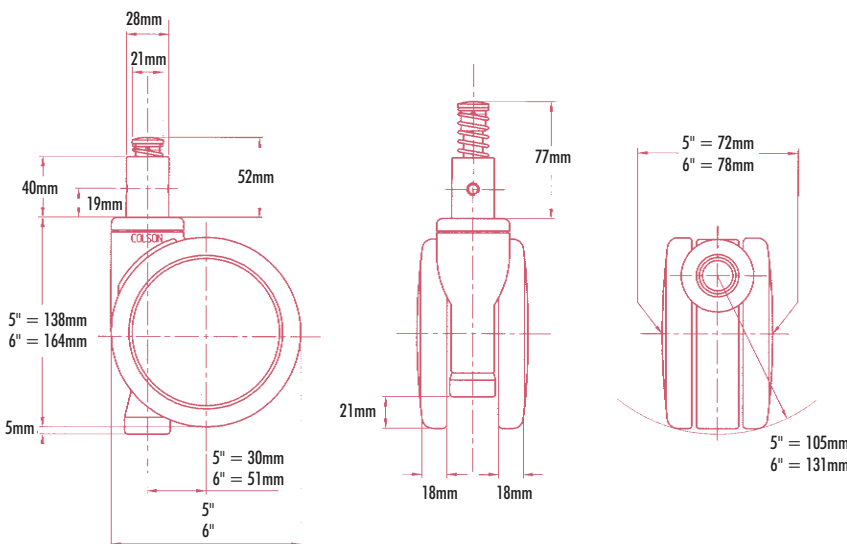


Figure 1

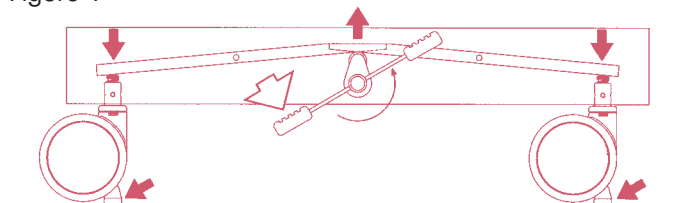
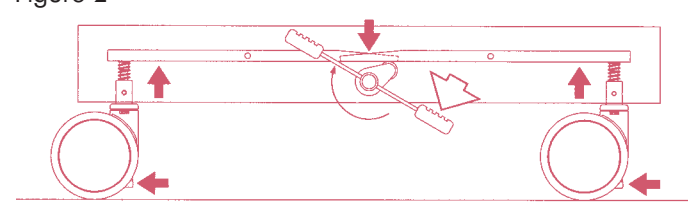


Figure 2



### Options

(Consult Factory)

- "Gold Seal" washable casters
- Colored finishes
- Electrically conductive tires
- Black nylon tires

Consult factory for English/Imperial ordering dimensions and quantities.



A single mechanism, housed within the equipment, drives the caster's integral plunger - lock down through the caster body, lifting the wheels clear of the floor. (Figure 1 above)



The mechanism also can be designed to immobilize the equipment while keeping the wheels in contact with the floor.



When the plunger lock is released, the equipment moves freely. (Figure 2 above)