

# Cat® Brooms

Skid Steer Loaders Multi Terrain Loaders Compact Track Loaders Compact Wheel Loaders

Cat® Pickup, Angle and Utility Brooms are all available in two sweeping widths, and are used for cleaning and removing dirt, rock, snow and other debris from streets, parking lots, driveways, sidewalks and factory floors in a variety of construction, industrial and landscaping settings. They are also ideal for paving, specialty trades, recycling, demolition and airport maintenance applications.

#### **Pickup Brooms**

Pickup Brooms sweep and deposit material into an integrated hopper bucket for easy removal and dumping. Bi-directional capabilities of the bristles allow Pickup and Utility Brooms to sweep in forward or reverse machine travel. Optimum sweeping style is in forward travel, resulting in over-the-brush pickup. Certain conditions require a dust pan style of sweeping, done in reverse travel.

#### **Utility Brooms**

Utility Brooms sweep and collect light debris on smooth surfaces in forward or reverse travel. They can be adjusted for greater bristle down-force in tough applications such as sweeping course material out of a cold planer cut.

#### **Angle Brooms**

 Angle Brooms use a windrowing action to move loose debris ahead and to the side of the surface being swept.
 They can be oriented straight or angled up to 30° left or right of center in forward travel.

#### **Direct drive motors**

Direct drive motors provide maximum performance and durability. Pickup and Utility Brooms use a single variable speed, bi-directional gerotor style hydraulic motor, contained in a special housing that is adjustable to compensate for bristle wear. Angle brooms use a single variable speed unidirectional gerotor style hydraulic motor.

#### Polypropylene/wire convoluted brushes

Polypropylene/wire convoluted brushes provide optimum results for sweeping. Optional all-polypropylene and allsteel wire convoluted brushes are available for specialty applications. Convoluted brush sections are available in half-kits for easy maintenance and quick replacement.

#### Drop core design

 Drop core design allows for quick bristle replacement without removing hydraulic hoses.

#### Quick coupler

Quick coupler is rugged with an opposing edge design that holds the work tool securely and allows the operator to quickly change from one high performance Cat Work Tool to another.



# Cat® Brooms

Broom Application Matrix			
	Pickup Brooms BP115C, BP118C	Utility Brooms BU115, BU118	Angle Broom BA118C
Sweeping debris from a flat surface	✓	✓	✓
Collecting debris from a surface	✓	✓	
Side casting debris/material from a surface			✓
Sweeping coarse material from a cold planer cut		✓	
Optimum machine travel direction	Forward or Reverse	Forward or Reverse	Forward
Optimum brush/bristle rotation	Bi-directional	Bi-directional	Uni-directional Reverse rotation

Compa	Compatibility					
Model	Machines					
BP115C	216B3, 226B3, 247B3, 236D, 242D, 246D, 257D, 259D, 262D, 272D, 272D XHP, 277D, 279D, 287D, 289D, 297D, 297D XHP, 299D, 299D XHP					
BP118C	247B3, 236D, 246D, 257D, 259D, 262D, 272D, 272D XHP, 277D, 279D, 287D, 289D, 297D, 297D XHP, 299D, 299D XHP					
BA118C	216B3, 226B3, 247B3, 236D, 242D, 246D, 257D, 259D, 262D, 272D, 272D XHP, 277D, 279D, 287D, 289D, 297D, 297D XHP, 299D, 299D XHP, 906H2, 907H2, 908H2					
BU115	216B3, 226B3, 247B3, 236D, 242D, 246D, 257D, 259D, 262D, 272D, 272D XHP, 277D, 279D, 287D, 289D, 297D, 297D XHP, 299D, 299D XHP, 906H2, 907H2, 908H2					
BU118	236D, 242D, 246D, 257D, 259D, 262D, 272D, 272D XHP, 277D, 279D, 287D, 289D, 297D, 297D XHP, 299D, 299D XHP, 906H2, 907H2, 908H2					

Machine model availability and attachment vary by region. Please contact your local dealer for availability.

## **Pickup Brooms**





#### Bolt-on cutting edges and sight gauge on hopper hood

Cat bolt-on cutting edges on hopper bucket increases wear life.

#### Interior deflectors, rear bucket seal, and side brush

Interior deflectors, rear bucket seal, and side brush stripping direct dirt and dust into the bucket and reduce spillage and air-borne contaminants.

#### Large hopper capacity and wide bucket opening

 Large hopper capacity allows greater productivity with longer sweeping cycles before emptying the hopper. Wide bucket opening permits fast, efficient dumping.

#### **Dual chain and loader arm bracket system**

 Dual chain and loader arm bracket system holds brush housing horizontally when emptying the hopper.

#### Heavy-duty low profile pneumatic guide wheel

Heavy-duty low profile pneumatic guide wheel supports the hood during sweeping.

#### Optional all-steel wire gutter brush and optional water kit

- Optional all-steel wire gutter brush mounted on left or right side of broom assists in removing material from gutters and pavement edges. Poly bristle brush also available.
- Optional water sprinkler kit is available for dust suppression.

#### Adjustable volumizer

 Adjustable volumizer feature allows for more material retention in hopper, giving operator more sweeps before stopping to empty material.

#### Bristle height adjustment

 Bristle height adjustments have been simplified with the use of a handle and tool-less locking feature.

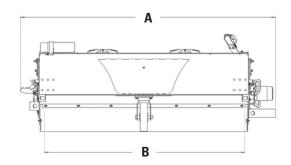
#### Motor serviceability

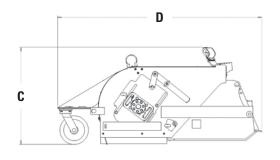
■ Motor serviceability is enhanced with a handle shaped motor bracket, core connection is close to broom wall and single retention pins allow for quick brush change and less downtime.



# Cat® Brooms

# Pickup Brooms – Specifications





			BP115C		BP118C	
A Overall width	mm	(in)	1990	(78)	2295	(90)
<b>B</b> Sweeping width	mm	(in)	1524	(60)	1829	(72)
<b>C</b> Height	mm	(in)	872	(34)	872	(34)
<b>D</b> Length w/o gutter brush	mm	(in)	1837	(72)	1837	(72)
Unit weight*	kg	(lb)	526	(1,160)	570	(1,258)
Motor displacement	cm³/rev	(in³/rev)	405	(25)	405	(25)
Required hydraulic flow range	L/min	(gpm)	42-86	(11-23)	42-86	(11-23)
Optimal hydraulic pressure range	bar	(psi)	145-235	(2,100-3,400)	145-235	(2,100-3,400)
Brush speed (shaft) @ max flow**	rpm		199		199	
Hopper capacity (struck)***	m³	(yd³)	0.41	(0.54)	0.49	(0.64)
	$m^3$	$(ft^3)$	0.41	(14.6)	0.49	(17.4)
Brush diameter	mm	(in)	660	(26)	660	(26)
Gutter brush weight	kg	(lb)	41	(90)	41	(90)

<sup>\*</sup> Weight without gutter brush option.

<sup>\*\*</sup> Gutter brush receives 5 gpm maximum flow when installed.

<sup>\*\*\*</sup> Rated struck capacity shown as per ISO 7546:1983 and SAE J742 FEB85.

## **Utility Brooms**





 Reinforced high-strength steel and curved hood design increases durability and protection from front hood impacts. Front-mounted torque tube adds stiffness.

#### Bi-directional bristle rotation and adjustable locking nut

Bi-directional bristle rotation allows for dust pan or over-the-brush sweeping of debris.
 Adjustable locking nut allows brush core to float, reducing bristle wear, or provides positive brush down-force for aggressive sweeping.

#### Positive brush down-force

 Positive brush down-force allows aggressive sweeping in cuts by rapidly dragging broom backwards and sweeping millings under the brush core and into the bucket.

#### Large hopper capacity and wide bucket opening

 Large hopper capacity allows greater productivity with longer sweeping cycles before emptying the hopper. Wide bucket opening permits fast, efficient dumping.

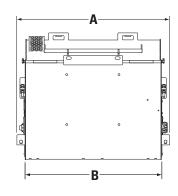
#### Optional bolt-on cutting edge and optional water sprinkler kit

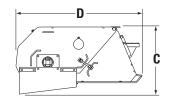
- Optional bolt-on cutting edge extends the life of the hopper in severe applications.
- Optional water sprinkler kit is available for dust suppression.

#### **Rubber boot on front and sides**

Rubber boot on front and sides aids in containing debris and airborne contaminants during sweeping.

## **Utility Brooms – Specifications**





			BU115		BU118	
A Overall width	mm	(in)	1810	(71)	2115	(83)
<b>B</b> Sweeping width	mm	(in)	1510	(59)	1865	(73)
<b>C</b> Height	mm	(in)	793	(31)	793	(31)
<b>D</b> Length	mm	(in)	1490	(59)	1490	(59)
Unit weight	kg	(lb)	422	(930)	481	(1,060)
Motor displacement	cm³/rev	(in³/rev)	393	(24)	393	(24)
Required hydraulic flow range	L/min	(gpm)	30-86	(8-23)	30-86	(8-23)
Optimal hydraulic pressure range	bar	(psi)	145-235	(2,100-3,400)	145-235	(2,100-3,400)
Brush speed (shaft) @ max flow	rpm		220		220	
Hopper capacity	m³	(yd³)	0.42	(0.55)	0.49	(0.64)
	$m^3$	$(ft^3)$	0.42	(14.9)	0.49	(17.4)
Brush diameter	mm	(in)	660	(26)	660	(26)

## **Angle Brooms**



#### Manual or hydraulic angling

 Manual or hydraulic angling up to 30° right or left of center. Hydraulic angling option allows operator to control broom angle from the operator compartment. Manual angling brooms can be easily converted to hydraulic angling.

#### **Heavy-duty storage stands**

- Heavy-duty storage stands allow the broom to be transported and stored without damaging the bristles.
- Pivot design quickly transitions angle broom from storage to sweep mode.

#### Optional water sprinkler and optional bolt-on hood extension and rubber flap

 Optional water sprinkler kit is available for dust suppression. Optional bolt-on hood extension and rubber flap are available when conditions or regulations require.

#### **Motor serviceability**

Motor serviceability is enhanced with a handle shaped motor bracket, core connection is close to broom wall and single retention pins allow for quick brush change and less downtime.

#### **Brush adjustment chain**

■ Brush adjustment chain allows for quick broom height adjustment.

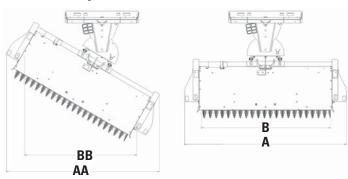
#### Manifold block design

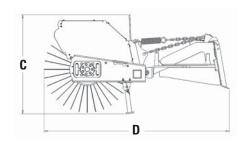
■ Manifold block design has 70% less pressure drop, providing more sweeping power.

#### Angle cylinder

■ Angle cylinder improves durability with a large diameter rod and higher pressure rating.

## **Angle Brooms – Specifications**





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A Overall width	mm	(in)	2637	(104)
<b>B</b> Sweeping width	mm	(in)	2119	(83)
<b>AA</b> Overall width angled (±30°)	mm	(in)	2508	(99)
<b>BB</b> Sweeping width angled (±30°)	mm	(in)	1849	(73)
C Height	mm	(in)	918	(36)
<b>D</b> Length	mm	(in)	1741	(69)
Unit weight	kg	(lb)	401	(885)
Motor displacement	cm³/rev	(in³/rev)	405	(25)
Required hydraulic flow range	L/min	(gpm)	42-86	(11-23)
Optimal hydraulic pressure range	bar	(psi)	145-235	(2,100-3,400)
Brush speed (shaft) @ max flow	rpm		199	
Brush diameter	mm	(in)	815	(32)
Hood extension weight	kg	(lb)	18	(40)

## **Cat Replacement Brushes**



A clean work site offers more than just aesthetic value. Removing debris results in both improved productivity and a safer working environment. Caterpillar offers a full line of replacement brushes, including polypropylene brushes and solid steel wire brushes for the most versatility in a broad range of applications to meet your specific needs.

#### Convoluted Poly and Wire Brush Design for BP115C, BP118C and BA118C

■ Convoluted wire and poly brush hubs have three high points and three low points on their hubs. As one brush high point meets the adjoining brush high point, the brushes space themselves out. This design creates a side-to-side sweeping path, forming open pockets between brushes to pick up large debris.

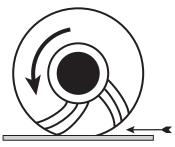


#### **Brush Materials**

- All polypropylene bristle brushes offer excellent wear resistance, provide more lift action and are for use on natural and artificial turf, including snow.
- All steel wire bristle brushes are for use on compacted materials, ensure an aggressive sweeping and cutting action and lose sweeping efficiency with excessive down pressure.



# **Operating Tips**

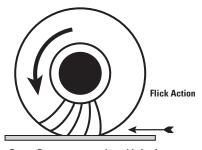


Too Much Pressure – causes mop action Incorrect

#### **Proper Down Pressure for Pickup and Angle Brooms**

Effective sweeping uses the tip of the bristles to flick debris off the surface. Proper down pressure will result in brush wear at the tip. If the brush bristle is pushed down too far, it drags across the surface on its side and wears more quickly on a long angle. Excessive downward pressure can decrease brush life by up to 95% and limit sweeping effectiveness.

To check for proper down pressure, rotate the broom at normal operating speed on the ground while the machine is stationary. After lifting the broom off the ground, measure the brush pattern on the ground. It should be between 55-110 mm (2-4 in) wide. If it is wider than 110 mm (4 in), you are exerting too much down pressure.



Proper Pressure – sweeping with the tips

Correct

## **Operating Tips for Angle Brooms**

- For dirt and gravel If possible, keep the wind at your back so it follows the angle of the broom. Low broom speed and moderate ground speed are the best choices when sweeping hard surfaces. High broom speeds create excessive dust.
- For heavy debris If debris is larger than 55 mm (2 in) in diameter, use a high broom speed. Ground speed should not exceed 8 km/h (5 mph).
- For snow Set the engine speed at three-fourths of high idle. Use the speed direction control to move the machine at a slow ground speed. For wet or deep snow, increase engine speed to high idle so snow does not build up in the broom frame.
- For thatch Bristle tips should barely touch the grass to avoid pulling the broom into the ground. If the broom begins to pull into the ground or stall, raise the broom instead of increasing engine speed. Low broom and ground speeds generally work best for thatching jobs.

## **Brush Wear Life**

In general, sweeping effectiveness decreases as the brush diameter is reduced.

- Pickup Brooms and Utility Brooms The brush diameter can wear down until there is no further downward adjustment of the broom. That will result in approximately 110 mm (4 in) of bristle length remaining. From a practical perspective, the brush begins to lose its effectiveness as soon as the diameter is decreased. Shorter bristle length means there is less ability to flick debris into the collection hopper.
- Angle Brooms There is no caster to limit downward broom travel of the brush as it wears. At the end of the adjustment range, the tilt function of the arms can be rotated to allow further bristle wear. As with Cat pickup brooms and utility brooms, shorter bristles are less effective in flicking debris.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.