





Wheel Balancer



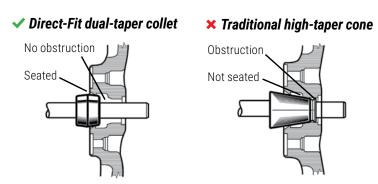


WHEEL MOUNTING KITS AND ACCESSORIES

Why use collets?

Precise wheel balancing relies on two critical conditions: accurate center mounting and distortion-free clamping while providing wheel protection. The center of the wheel must be properly located on the balancer shaft. Hub-centric <u>and</u> lug-centric wheels all use the hub bore as the center locating position of the wheel. The hub bore centerline is virtually the same as the lug holes.

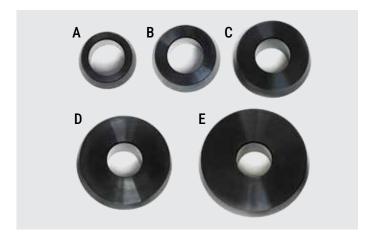
Traditional high-taper cones often fail to fit properly within the bore of the wheel. The actual bore of the wheel (not the bore chamfer) is where centering takes place when the wheel is mounted on a vehicle. Many modern aluminum wheel designs cannot be properly mounted with traditional cones.



The low-taper of a direct-fit, dual-taper collet (versus the high-taper cone) offers better hub bore contact and prevents bottoming on the outer hubcap.

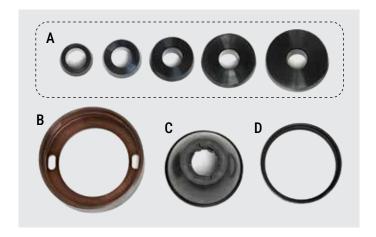
Economy collet kits

Hunter's new economy collet kits provide a superior centering performance when compared to traditional cones. Dual-sided design reduces the possibility of damage to challenging assemblies such as plastic clad wheels.



Basic collet kit – 20-3062-1 Kit includes:

A 192-237-2 2.01 in. to 2.56 in. (51 mm to 65 mm)
B 192-238-2 2.47 in. to 3.05 in. (63 mm to 77 mm)
C 192-239-2 2.99 in. to 3.58 in. (76 mm to 91 mm)
D 192-240-2 3.58 in. to 4.31 in. (91 mm to 109 mm)
E 192-241-2 4.27 in. to 4.98 in. (108 mm to 126 mm)



Basic collet kit with accessories - 20-2989-1 Kit includes:

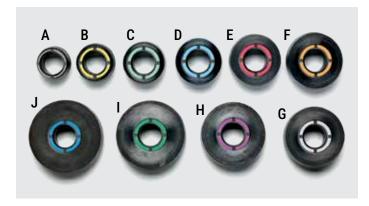
Α	20-3062-1	Basic collet kit
В	46-653-2	1.5 in. offset wheel spacer
С	175-392-1	6 in. clamping cup with retainer
D	106-157-2	6 in. clamping protector sleeve

Premium BullsEye® collet kits

Hunter's BullsEye® kits provide comprehensive coverage for passenger-car and light-truck wheels, including 1-ton capacity. Provides improved centering and wheel protection over basic cone and collet sets.

BullsEye® collets and storage are standard on Road Force® Elite balancers.





BullsEye® collet set - 20-2683-1

Kit includes:

192-249-1	Cone: 2.10 in. to 2.43 in. (53 mm-62 mm)
192-250-1	Cone: 2.44 in. to 2.79 in. (62 mm-71 mm)
192-251-1	Cone: 2.71 in. to 3.11 in. (69 mm-79 mm)
192-252-1	Cone: 3.05 in. to 3.42 in. (77 mm-87 mm)
192-253-1	Cone: 3.37 in. to 3.74 in. (86 mm-95 mm)
192-254-1	Cone: 3.65 in. to 4.06 in. (93 mm-103 mm)
192-255-1	Cone: 4.05 in. to 4.36 in. (103 mm-111 mm)
192-256-1	Cone: 4.32 in. to 4.70 in. (110 mm-119 mm)
192-257-1	Cone: 4.64 in. to 5.01 in. (118 mm-127 mm)
192-258-1	Cone: 4.96 in. to 5.33 in. (126 mm-135 mm)
	192-250-1 192-251-1 192-252-1 192-253-1 192-254-1 192-255-1 192-256-1 192-257-1

BullsEye® cone carrier for SmartWeight® Pro – 20-2750-1

Collet carrier and mounting hardware only.





BullsEye® collet and storage kit – 20-2765-1 For Elite Series Balancers

Kit includes:

Α	175-392-1	6 in. clamping cup
В	46-653-2	Performance wheel and light truck spacer
С	14-1470-005	Cone carrier bracket support
D	56-70-2	Front balancer cone carrier*
E	20-2683-1	Passenger to 3/4 ton dual-taper collet kit
F	106-157-2	Protector sleeve

^{*} Carrier not compatible with SmartWeight Pro

BullsEye® Pro collet and storage kit – 20-3777-1 For Elite Series Balancers

Same as 20-2765-1 BullsEye® kit but includes adjustable flange plate and stud kit (20-3698-1). (Not shown, see page 5)

BullsEye® collet and storage kit – 20-2747-1 For SmartWeight® Pro

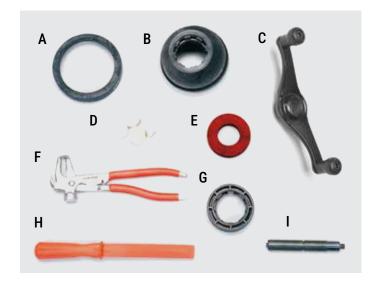
Same as 20-2765-1 BullsEye® kit, except D is substituted with 56-78-2 that fits LCD series balancers (Not shown).

STANDARD ACCESSORIES

Touch series balancers

Basic Touch accessory kit *Kit includes:*

Α	106-82-2	Sleeve, scratch guard for small cup
В	175-353-1	Polymer cup (4.5 in. O.D.)
С	76-433-3	Premium steel wing nut* †
D	221-658-2	Hammer covers (4)
Ε	46-320-2	Spacer
F	221-589-2	Weight hammer/pliers
G	223-68-1	Pressure ring
Н	221-659-2	Adhesive weight scraper
1	65-72-2	Balance calibration weight
J	233-44-2	Post-cone hook plastic (not shown)



SWP balancers

Basic SWP accessory kit

Α	221-563-1	Caliper, rim width/internal diameter (A)
_		•
В	106-82-2	Sleeve, scratch guard for 4.5 in. cup
С	175-353-1	Polymer cup (4.5 in. O.D.)
D	76-432-1	Steel wing nut (B)
Ε	221-658-2	Hammer covers (4)
F	46-320-2	Spacer
G	221-589-2	Weight hammer/pliers
Н	221-659-2	Adhesive weight scraper
I	223-68-1	Pressure ring
J	65-72-2	Balance calibration weight

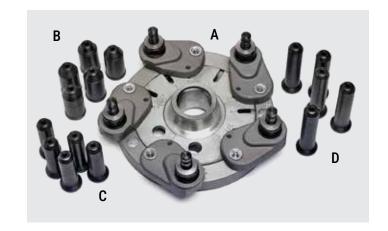


- (A) Note: Caliper is only included with SWP versions that do not come with an outer laser/camera.
- (B) Wingnut not standard with export balancers.

FLANGE PLATES AND STUD KITS

Adjustable Flange Plate and Stud Kit - 20-3698-1

Adjustable design with interchangeable pins protects wheel faces while providing quick setup and universal fitment. The kit covers 3 lug through 10 lug vehicles* with bolt circles from 3.86 in. (98 mm) to 8.26 in. (210 mm). Pins have radiused edges to prevent damage to wheels with spherical lug holes.



Kit includes:

A 175-524-1 Adjustable flange plate		Adjustable flange plate
В	106-224-2	1 in. diameter pin (5), 2.0 in. long
С	106-225-2	3/4 in. diameter pin (5), 2.5 in. long
D	106-226-2	3/4 in. diameter pin (5), 3.25 in. long
Ε	20-1881-1	Pin storage rack (Not shown)

Optional spherical end pin kits (not shown)

20-3779-1	Spherical end short pin kit – Includes five 106-144-2 spherical end pins 2.0 in. long with a 7/8 in. diameter. Not included in 20-3698-1 kit.
20-2111-1	Spherical end long pin kit – Includes five spherical end pins 3.25 in. long with a 3/4 in. diameter. Not included with 20-3698-1 kit.

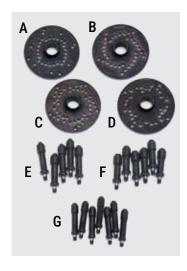
Fixed Flange Plate and Stud Kit - 20-2123-2

Wheel bolt circles are defined in a fixed flange plate kit. Kit consists of 4 flange plates in 4-, 5-, 6-, 7- and 8-lug bolt circles with three sets of added plugin studs. No storage provided.

(Optional) Trolly for flange plate storage - 20-2124-2

Flange plates and studs shown are not included with trolley





	W. Moradeo.		
Α	175-385-2*	Bolt patterns include 4 x 3.75 in.; 4 x 98 mm; 4 x 100 mm; 4 x 4.00 in.; 4 x 108 mm; 4 x 4.50 in.; 7 x 150 mm; and 8 (4) x 170 mm	
В	175-386-2*	Bolt patterns include 5 x 98 mm; 5 x 102 mm; 5 x 108 mm; 5 x 110 mm; 5 x 115 mm; 5 x 4.75 in,; 5 x 135 mm; and 6 (3) x 6.10 in.	
С	175-387-2*	Bolt patterns include 5 x 100 mm; 5 x 112 mm; 5 x 4.50 in.; 5 x 120 mm; 5 x 5.00 in.; 5 x 127 mm; 5 x 130 mm; 5 x 5.50 in.; 5 x 150 mm; and 5 x 6.50 in.	
D	175-388-2*	Bolt patterns include 6 (3) x 98 mm; 6 (3) x 112 mm; 6 (3) x 4.50 in.; 6 (3) x 115 mm; 6 (3) x 5.00 in.; 6 (3) x 127 mm; 6 (3) x 135 mm; 6 (3) x 5.50 in.; 8 (4) x 6.50 in.; 6 (3) x 120 mm; 6 (3) x 130 mm; and 6 (3) 132 mm	
Ε	175-389-2	Stud II plug-in – 80 mm with tapered head	
F	175-390-2	Stud III plug-in – 90 mm with round head	
G	175-391-2	Stud V plug-in – 100 mm with tapered head	

^{*} Does not cover Ford 7 lug trucks

CUPS, PRESSURE RINGS, AND SPACERS



175-353-1 - Cup

4.5 in. clamping cup with notchless design. Fits aluminum wing nuts (76-371-3 and 76-373-3); forged steel wing nuts (76-432-1 and 76-433-3); QuickNut (76-438-2); and AutoClamp feature.



175-392-1 - Cup

6 in. clamping cup. Fits aluminum wing nut (76-390-1), forged steel wing nuts (76-432-1 and 76-433-3), QuickNut (76-438-2), and AutoClamp feature.



106-82-2 - Protector sleeve

Fits all 4.5 in. cups to protect finished wheel surfaces when using a cup to clamp.



106-157-2 - Protector sleeve

Fits all 6 in. cups to protect finished wheel surfaces when using a cup to clamp.



46-653-2 - Performance wheel & light-truck spacer

(7.89 in. O.D. x 5.25 in. I.D. x 1.5 in.)

Provides 1.5 inche of offset for wide performance wheels.

Not compatible with the extra large truck cone (192-92-2).



46-309-2 Extra large truck cone wheel spacer

(8.00 in. O.D. x 6.30 in. I.D. x 1.53 in.)

For use when front-cone mounting Extra Large Truck Cone (192-92-2).



46-320-2 - Spacer

Polymer washer increases centering force when back coning.



46-511-2 - Small wheel spacer

Designed to use with wheels with small hubs such as a Mini Cooper. Reduces hub face inside diameter to 3.58 in.



76-379-2 - Threaded shaft ring

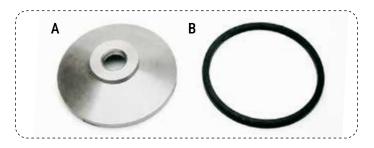
Prevents cone or collet from sliding off the balancer shaft when removing assembly from the balancer.

Not recommended unless same cone is used repeatedly.



223-68-1 - Pressure ring

Fits both aluminum DSP and GSP wing nuts. Prevents metal-to-metal contact, significantly increasing clamping force (height: 0.97 in.).



175-324-1 Cup with sleeve

9.0 in. alloy wheel clamping cup with replaceable protector sleeve.

Includes:

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Α	175-296-2	Clamp cup	
В	106-127-2	ALU protective sleeve	

OE-specific applications



192-131-2 - Cone (Honda)

3.90 in. - 4.02 in. (99 mm-102 mm)

192-248-2 – Cone (Mercedes-Benz)

Supports 65, 66 and 84 mm bore sizes.

192-152-2

192-147-2 - Cone (Porsche)

2.69 in. - 2.94 in. (69 mm-74 mm)

192-148-2 - Cone (Mazda)

2.57 in. - 2.94 in. (65 mm-74 mm)

192-152-2 – Cone (Range Rover)

2.73 in. - 2.94 in. (69 mm-74 mm)



192-165-2 - Cone (BMW)

Low-taper two-step design

2.783 in. - 2.913 in. (71 mm-74 mm)

2.200 in. - 2.279 in. (56 mm-58 mm)



175-379-2 - Spacer bushing (Porsche)

Porsche Cayenne alloy wheel mounting protector replaces the need to use a flange plate for front wheel protection while back cone mounting.

MOTORCYCLE ACCESSORIES

Hunter ProBike Kit - 20-3602-2

This kit makes balancing motorcycle wheels simple with the appropriate Hunter wheel balancer. It covers nearly all motorcycles including Italian, Japanese, and Harley Davidson. The kit includes two storage boards for the adaptor and accessories.

Note: The max assembly diameter that can be handled with this kit is 27.5". This kit requires a removable balancer shaft and will therefore only work with the DS05, SWP, or balancers with the SpeedClamp option.

Includes:

- A | Wallmount storage brackets and hardware
- **B** ProBike adaptor
- C | 14mm and 19mm shafts and QuickFix clamps
- **D** | Centering cones/collets
- E | Tools and hardware

Motorcycle adaptors require a Hunter balancer with a two piece shaft.



WING NUTS AND COLLARS



SpeedClamp collar - 184-86-1

For use with any Touch series or LCD balancer that is equipped with the SpeedClamp feature.



Ergonomic QuickNut steel wing nut - 76-574-2

Collapsing jaws allow fast clamping to standard threaded 40mm shafts on all Hunter balancers.

Not recommended for HD applications.

- Improved durability
- ✓ Locking threads and ergonomic handles reduce slippage



Premium steel wing nut - 76-433-3

12-inch forged steel wing nut with handles and thrust bearing. *Included with SWT, RFE, and HDE balancers*.



Long Arm Steel Wing Nut - 76-597-3

14-inch forged steel long arm wingnut with handles and thrust bearing. Provides higher clamp force than the premium steel wing nut. Useful when balancing large assemblies.



Steel wing nut - 76-432-1

Forged steel 12-inch wing nut with no handles. *Included with SWP balancer.*

ADDITIONAL ACCESSORIES



RFE13 shown equipped with HammerHead® top-dead-center laser system and printer



Printer kit with storage shelf* 20-2143-1

Ink jet color printer and side storage support kit

HammerHead® Top-Dead-Center (TDC) clip-weight placement laser system

The HammerHead® laser projects laser lines on the rim flange for precise clip-weight application. HammerHead® also includes an overhead light to illuminate the work area.

HammerHead® can be ordered with balancer groups or as a separate line item.

20-3765-1 used for all Hunter balancers including the HDE



Hunter wheel lift system - 20-3101-1

Wheel lift system helps technicians safely service today's oversized, light-truck and medium-duty wheels. Compliant platform permits easy alignment and improves centering.



Calibration tool - 221-672-1

For load roller and Dataset® arms.

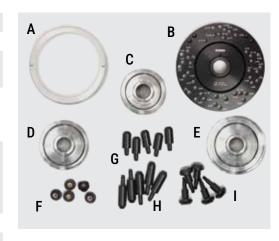
MEDIUM-DUTY ACCESSORIES

Medium-Duty Centering Kit - 20-3116-1

Provides unmatched centering and outer wheel surface protection with flange plate. Handles vehicles from an F-250 up to a vehicle with 19.5 in. wheels.

Kit includes:

Α	46-748-2	Back plate	
В	51-2912-2	Centering adaptor	
С	192-246-2	#17: Hub pilot disc – 4.56 in. (116 mm); 4.60 in. (117 mm); 4.77 in. (121 mm); 4.88 in. (124 mm) <u>and</u> 4.93 in. (125 mm)	
D	192-264-2	#18: Ford/Dodge RAM/GM medium-duty collet – 5.24 in. (133 mm); 5.26 in. (133 mm); 5.47 in. (139 mm); 5.44 in. (138 mm); 5.52 in. (140 mm); 5.64 in. (143 mm)	
E	192-265-2	#19: Ford/Dodge RAM/Freightliner medium-duty collet – 6.06 in. (153 mm); 6.09 in. (154 mm); 6.22 in. (158 mm); 6.36 in. (161 mm); 6.43 in. (163 mm); 6.63 in. (169 mm); 6.74 in. (171 mm); 6.53 in. (165 mm)	
F	76-464-2	Knurled nut	
G	135-581-2	Plug-in, conical stud (66 mm length)	
Н	135-601-2	Plug-in, conical stud (90 mm length)	
ı	135-582-2	Fixed, conical stud (35 mm)	



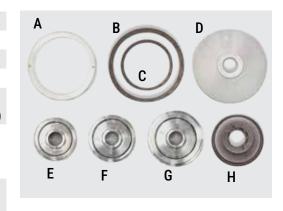
Large bore, 8-lug, 19.5 in. wheels are handled by kit 20-2977-2.

Medium-Duty Economy Kit - 20-3358-1

Provides unmatched centering. Handles vehicles from an F-250 up to a vehicle with 19.5 in. wheels.

Kit includes:

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Α	46-748-2	Back plate	
В	106-127-2	ALU protective sleeve	
С	106-157-2	Protector sleeve	
D	175-296-2	Clamp cup	
Ε	192-246-2	#17: Hub pilot disc - 4.56 in. (116 mm); 4.60 in. (117 mm); 4.77 in. (121 mm); 4.88 in. (124 mm) <u>and</u> 4.93 in. (125 mm)	
F	192-264-2	#18: Ford/Dodge RAM/GM medium-duty collet – 5.24 in. (133 mm); 5.26 in. (133 mm); 5.47 in. (139 mm); 5.44 in. (138 mm); 5.52 in. (140 mm); 5.64 in. (143 mm)	
G	192-265-2	#19: Ford/Dodge RAM/Freightliner medium-duty collet – 6.06 in. (153 mm); 6.09 in. (154 mm); 6.22 in. (158 mm); 6.36 in. (161 mm); 6.43 in. (163 mm); 6.63 in. (169 mm); 6.74 in. (171 mm); 6.53 in. (165 mm)	
Н	175-392-1	Cup	

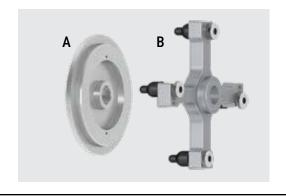


Large bore, 8-lug, 19.5 in. wheels are handled by kit 20-2977-2.

Large bore, 8-lug 19.5 stud kit - 20-2977-2

Perfect fit for medium-duty trucks with an 8.7 inch bore.

Α	192-242-2	Centering ring, 220/221 mm
В	175-397-2	Adaptor – 4 arm clamp star MD
	175-420-2	Pin HD steel (4)
	76-463-2	Nut – knurled HD M16 (4)



HEAVY-DUTY ACCESSORIES

Heavy-Duty "Super Set" Kit - 20-3990-1

This kit provides ultimate balancer centering for the smallest passenger cars up to the largest HD trucks; coverage from KIA to Kenworth.

Kit includes:

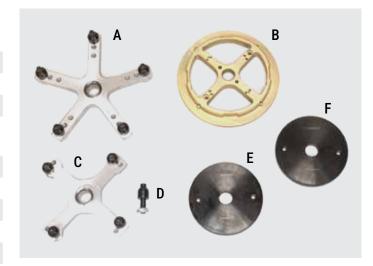
Α		Heavy-duty truck and bus kit
В	20-2765-1	BullsEye® light-duty kit
С	20-3116-1	Medium-duty centering kit
D		4.5 in. and 9 in. cups and sleeves



Truck / Bus Adaptor Kit - 20-2274-2

Kit includes:

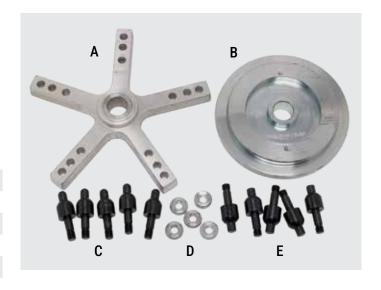
Α	175-396-2	Adaptor – 5 arm clamp star
	175-394-2	Pin HD steel (5)
	76-463-2	Nut – knurled HD M16 (5)
В	175-393-2	Adaptor – wheel support HD (also supports 281 mm bore size)
С	175-397-2	Adaptor – 4 arm clamp star MD
D	175-420-2	Pin HD steel (5)
Ε	192-182-2	Disc - HD 219.9 mm
F	192-181-2	Disc - HD 220.8 mm
	74-418-2	SHCS - 3/8 - 16 X 2.00 BO (2) (not shown)



Heavy-Duty "Economy" Kit* - 20-2761-2

The "economy kit" is now available for HD balancing applications. This kit is a lower cost alternative for those customers only balancing 22.5 in. and 24.5 in. tractor trailer wheels. The disc used in this kit is double-sided and handles both bore sizes seen on these wheels without needing the expensive offset spacer (wagon wheel).

Α	175-396-2	Adaptor – 5 arm clamp star
В	192-242-2	Centering ring, 220/221 mm
С	175-394-2	Pin HD steel (5)
D	76-463-2	Nut – knurled HD M16 (5)
Ε	175-420-2	Pin HD steel (5)



HEAVY-DUTY ACCESSORIES

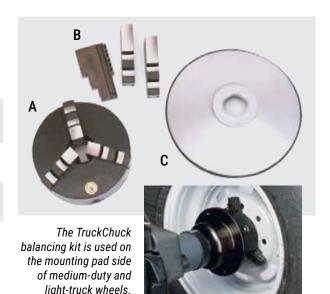
TruckChuck Wheel and Drum Balancing Kit* - 20-1602-1

Three-jaw chuck adaptor for factory steel and some aluminum wheels with centering holes from 3.13 in. to 7.13 in.

Kit includes:

Α	175-286-2	Three-jaw chuck adaptor. Shown with jaw kit (20-1603-2).
В	20-1854-2	Heavy-duty extended jaw kit. For wheels with centering holes from 5.13 in. to 9.13 in.
С	175-296-2	Clamp cup. 9 in. clamp cup shown with ALU protective sleeve (106-127-2).

^{*} See Form 4632-T for complete operation instructions and additional mounting information.

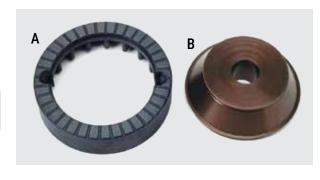


Large truck cone and spacer kit - 20-1207-1

Used when mounting single or dual truck wheels such as the Ford and GM 19.5 in. Accuride wheel.

Kit includes:

Α		Wheel spacer 8.00 in. O.D. x 6.30 in. I.D. x 1.53 in. (127 mm-168 mm)
В	192-92-2	Extra large truck cone 5 to 6.63 in. and 6.68 in. to 6.94 in. (170 mm-176 mm) used for extra large light trucks and motor homes.



Your local Hunter team is ready to help

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- (리 General information and questions



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