

# ***Wheel Balancer Accessories***



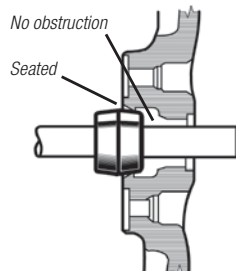
# Wheel mounting kits & accessories

## Why use collets?

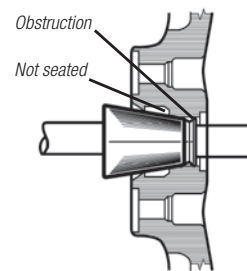
Precise wheel balancing relies on two critical conditions: accurate center mounting and distortion-free clamping while providing wheel protection. The center of the wheel must be properly located on the balancer shaft. Hub-centric and lug-centric wheels all use the hub bore as the center locating position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

### ✓ Direct-Fit dual-taper collet



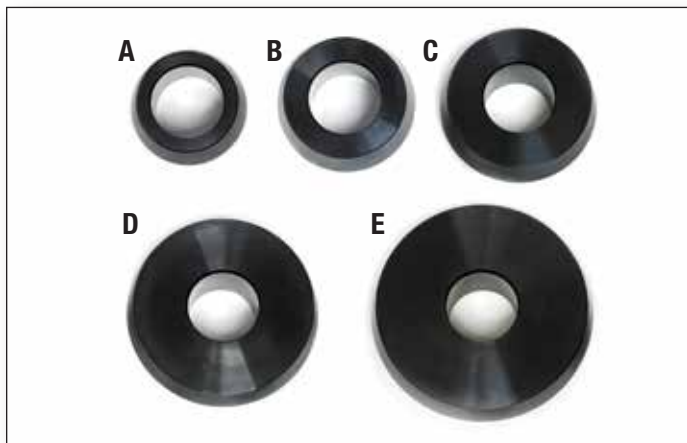
### ✗ Traditional high-taper cone



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:

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



### Basic collet kit with accessories - 20-2989-1

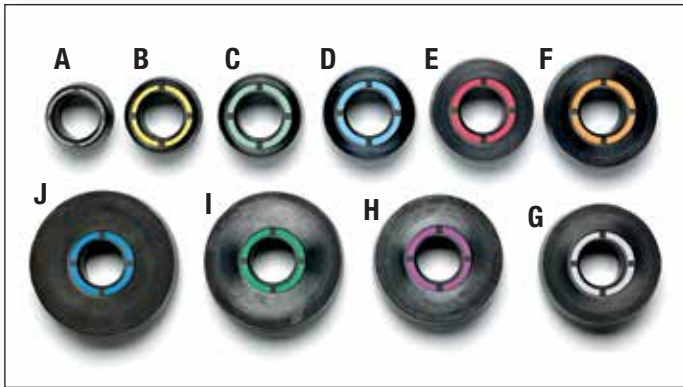
Kit includes:

<b>A</b>	<b>20-3062-1</b>	Basic collet kit
<b>B</b>	<b>46-653-2</b>	1.5 in. offset wheel spacer
<b>C</b>	<b>175-392-1</b>	6 in. clamping cup with retainer
<b>D</b>	<b>106-157-2</b>	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. Features optional 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:

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

### Collet storage kit 20-2739-1

**Touch series only**

This kit expands the BullsEye® front collet storage tray to hold 20 direct-fit collets. Conveniently attaches to right of standard BullsEye® storage tray.



### BullsEye® collet & storage kit – 20-2765-1

**SmartWeight Touch-series**

Kit includes:

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

### BullsEye® Pro collet & storage kit – BullsEyePro

**SmartWeight Touch-series**

Same as 20-2765-1 BullsEye® kit but includes adjustable flange plate and stud kit (20-1839-1). (Not shown, see page 5)

### BullsEye® collet & storage kit – 20-2747-1

**SmartWeight® Pro and LCD series only**

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

### BullsEye® front balancer cone carrier – 20-2750-1

**SmartWeight® Pro and LCD series only**

BullsEye® front collet storage tray only (C and D from above).



# Standard accessories

## Touch/LCD-series balancers

### Basic Touch/LCD accessory kit

Kit includes:

<b>A</b>	<b>106-82-2</b>	Sleeve, scratch guard for small cup
<b>B</b>	<b>175-353-1</b>	Polymer cup (4.5 in. O.D.)
<b>C</b>	<b>76-433-3</b>	High-torque steel wing nut* †
<b>D</b>	<b>221-658-2</b>	Hammer heads (4)
<b>E</b>	<b>46-320-2</b>	Spacer
<b>F</b>	<b>221-589-2</b>	Weight hammer/pliers
<b>G</b>	<b>223-68-1</b>	Pressure ring
<b>H</b>	<b>20-1650-1</b>	Rim tags (GSP9700/RFE only) †
<b>I</b>	<b>221-659-2</b>	Adhesive weight scraper
<b>J</b>	<b>65-72-2</b>	Balance calibration weight
<b>K</b>	<b>233-44-2</b>	Post-cone hook plastic (not shown)



## SWP-series balancers

### Basic SWP accessory kit

Kit includes:

<b>A</b>	<b>221-563-1</b>	Caliper, rim width/internal diameter <sup>(A)</sup>
<b>B</b>	<b>106-82-2</b>	Sleeve, scratch guard for 4.5 in. cup
<b>C</b>	<b>175-353-1</b>	Polymer cup (4.5 in. O.D.)
<b>D</b>	<b>76-432-1</b>	Steel wing nut
<b>E</b>	<b>221-658-2</b>	Hammer heads (4)
<b>F</b>	<b>46-320-2</b>	Spacer
<b>G</b>	<b>221-589-2</b>	Weight hammer/pliers
<b>H</b>	<b>221-659-2</b>	Adhesive weight scraper
<b>I</b>	<b>223-68-1</b>	Pressure ring
<b>J</b>	<b>65-72-2</b>	Balance calibration weight



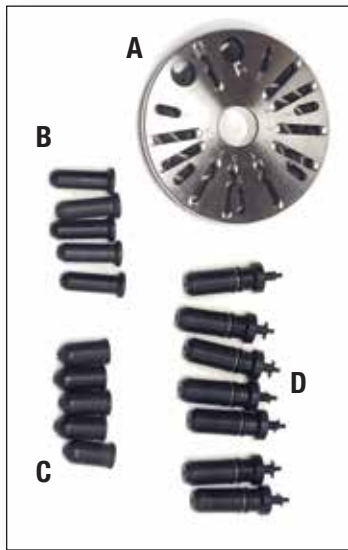
(A) Note: Caliper is only included with SWP versions that do not come with an outer laser/camera.

# Flange plates & stud kits

## Adjustable Flange Plate & Stud Kit - 20-1839-1

The preferred recommendation when choosing a flange plate kit for maximum application coverage. Single-plate sliding bolt circle design with interchangeable pins provides quick setup and universal fitment. The kit adapts to 3-, 4-, 5-, 6-, 7- and 8-lug bolt circles with infinite adjustability. Fits future vehicle bolt circles that have yet to be released.

The maximum bolt circle diameter is 6.70 in. (170 mm) and minimum diameter is 3.85 in. (98 mm). The kit contains much fewer pieces and is more economical than multiple flange plate kits. All pins use compressible studs allowing more accurate centering when clamping on uneven wheel lug seat surfaces. This mounting method is the most accurate of all choices.



Kit includes:

<b>A</b>	<b>175-355-1</b>	Adjustable flange plate with locking knob
<b>B</b>	<b>106-145-2</b>	Conical end pin sleeve (5), 3/4 in. diameter, 2.50 in. long
<b>C</b>	<b>106-144-2</b>	Spherical end pin sleeve (5), 7/8 in. diameter, 2.00 in. long
<b>D</b>	<b>106-143-2</b>	Conical end pin sleeve (7), 1 in. diameter, 2.00 in. long Shown with (135-378-1) pin assemblies (7), 1.00 in. long
<b>E</b>	<b>20-1881-1</b>	Pin storage rack (Not shown)

Optional pin end kits (not shown)

<b>20-2110-1</b>	Pin end kit – Long 3/4 in. O.D., set of five pins (106-150-2) used with adjustable flange plate (not included in 20-1839-1). Depending on wheel offset and width, these pins may only be compatible when used with the GSP/DSP9200 series wheel balancers. 3.25 in. long.
<b>20-2111-1</b>	Pin end kit – spherical end, set of five pins (106-149-2) used with adjustable flange plate (not included in 20-1839-1). Depending on wheel offset and width, these pins may only be compatible when used with the GSP/DSP9200 series wheel balancers. 3.25 in. long.

## Fixed Flange Plate & 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 plug-in studs. No storage provided.



Kit includes:

<b>A</b>	<b>175-385-2*</b>	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
<b>B</b>	<b>175-386-2*</b>	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.
<b>C</b>	<b>175-387-2*</b>	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.
<b>D</b>	<b>175-388-2*</b>	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
<b>E</b>	<b>175-389-2</b>	Stud II plug-in – 80 mm with tapered head
<b>F</b>	<b>175-390-2</b>	Stud III plug-in – 90 mm with round head
<b>G</b>	<b>175-391-2</b>	Stud V plug-in – 100 mm with tapered head

### (Optional) Trolley for flange plate storage – 20-2124-2

Flange plates and studs shown are not included with trolley



# Cups, pressure rings & 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.



## 175-316-1 – Cup

4.5 in. clamping cup with dual notched design fits recessed wheel bores on aluminum wheels and aluminum wing nuts (76-390-1, 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.



## 175-217-1 – Cup

4.75 in. clamping cup fits Quick Clamp pro-grip kits and early cast iron GSP9700 wing nut (76-348-3).



## 175-159-1 – Cup

4.5 in. clamping cup fits early DSP wing nut (76-255).



## 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.



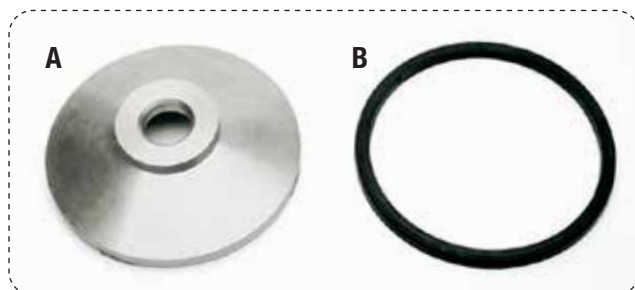
## 175-392-1 – Cup

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.



## 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).



## 175-324-1 Cup with sleeve

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

*Includes:*

<b>A</b>	<b>175-296-2</b>	Clamp cup
<b>B</b>	<b>106-127-2</b>	ALU protective sleeve



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

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

Allows proper offset mounting of wide performance wheels. Achieves balance repeatability on many domestic 3/4- and 1-ton truck rims, including “duallies.”

*Required for Dodge Viper rear wheels.*

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



**46-320-2 – Spacer**

Polymer washer increases back cone centering pressure when back cone mounting wheel bore and extreme large end of the cone is used.



**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.



**223-53-2 – Pressure ring**

Fits early GSP and Quick Clamp pro-grip wing nuts. Protects metal-to-metal contact, significantly increasing clamping force (height: 0.69 in.).



**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.).



**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.*

***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.

**192-147-2 – 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.

192-152-2



# Wing nuts



## **AutoClamp hub – 184-86-1**

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



**NEW**

## **Ergonomic QuickNut steel wing nut – 76-574-2**

Collapsing jaws allow fast clamping to standard threaded 40 mm shafts on most DSP and LCD series wheel balancers.

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



## **High-torque steel wing nut – 76-433-3**

Forged steel wing nut with handles and bearing kit. Standard for RFT, SWT, RF, SW and FM balancers.



## **Steel wing nut – 76-432-1**

Forged steel wing nut with no handles. Standard for DSP7705 balancers.



# Additional accessories



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

## 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 Touch/LCD balancers in group configurations or as a line item add-on:

**20-2166-1** For any LCD-series balancer

**20-2892-1** For any Touch-series balancer

**FACTORY OR FIELD INSTALLED**



## 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.



## Printer kit with storage shelf\* 20-2143-1

Ink jet color printer and side storage support kit

**FACTORY OR FIELD INSTALLED**



## Calibration tool – 221-672-1

For load roller and Dataset® arms.

# Medium-duty balancer accessories

## **NEW** 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:*

<b>A</b>	<b>46-748-2</b>	Back plate
<b>B</b>	<b>51-2912-2</b>	Centering adaptor
<b>C</b>	<b>192-245-2</b>	Hub pilot disc – 5.59 in. (142 mm); 6.26 in. (159 mm) <u>and</u> 6.34 in. (161 mm); 6.45 in. (164 mm); 6.69 in. (170 mm)
<b>D</b>	<b>192-246-2</b>	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)
<b>E</b>	<b>192-244-2</b>	Hub pilot disc – 4.88 in. (124 mm); 5.25 in. (133 mm); 5.46 in. (139 mm); 6.06 in. (154 mm)
<b>F</b>	<b>76-464-2</b>	Knurled nut
<b>G</b>	<b>135-581-2</b>	Plug-in, conical stud (66 mm length)
<b>H</b>	<b>135-601-2</b>	Plug-in, conical stud (90 mm length)
<b>I</b>	<b>135-582-2</b>	Fixed, conical stud (35 mm)

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

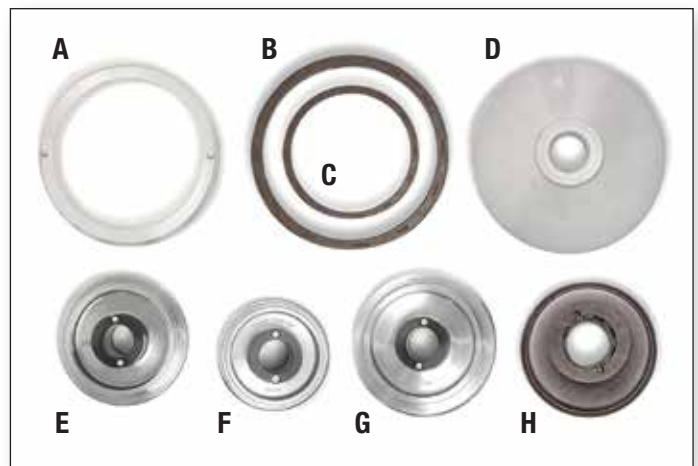


## **NEW** Medium-Duty Economy Kit - 20-3358-1

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

<b>A</b>	<b>46-748-2</b>	Back plate
<b>B</b>	<b>106-127-2</b>	ALU protective sleeve
<b>C</b>	<b>106-157-2</b>	Protector sleeve
<b>D</b>	<b>175-296-2</b>	Clamp cup
<b>E</b>	<b>192-245-2</b>	Hub pilot disc – 5.59 in. (142 mm); 6.26 in. (159 mm) <u>and</u> 6.34 in. (161 mm); 6.45 in. (164 mm); 6.69 in. (170 mm)
<b>F</b>	<b>192-244-2</b>	Hub pilot disc – 4.88 in. (124 mm); 5.25 in. (133 mm); 5.46 in. (139 mm); 6.06 in. (154 mm)
<b>G</b>	<b>192-246-2</b>	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)
<b>H</b>	<b>175-392-1</b>	Cup

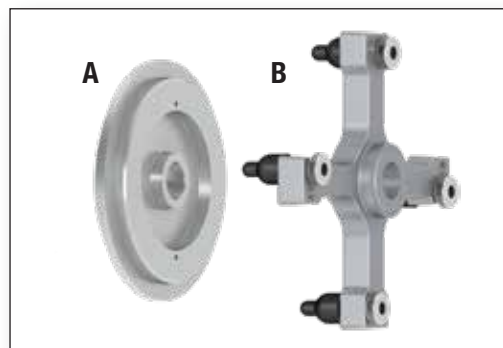
*Large bore, 8-lug, 19.5 in. wheels are handled by kit 20-2977-2.*



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

Perfect fit for medium-duty trucks with an 8.7 inch bore. *Kit includes:*

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



# Heavy-duty balancer accessories

## **NEW** Heavy-Duty “Super Set” Kit – 20-3155-1

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

Kit includes:

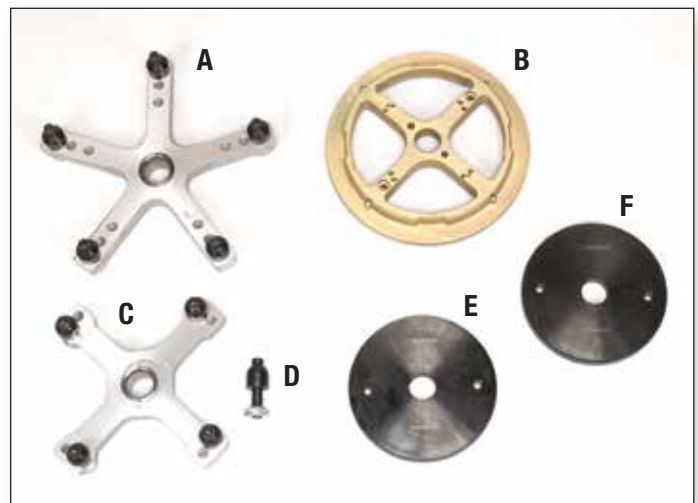
<b>A</b>	<b>20-2274-2</b>	Heavy-duty truck & bus kit
<b>B</b>	<b>20-2765-1</b>	BullsEye® light-duty kit
<b>C</b>	<b>20-3116-1</b>	Medium-duty centering kit
<b>D</b>		4 in. and 9 in. cups and sleeves



## Truck / Bus Adaptor Kit – 20-2274-2

Kit includes:

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

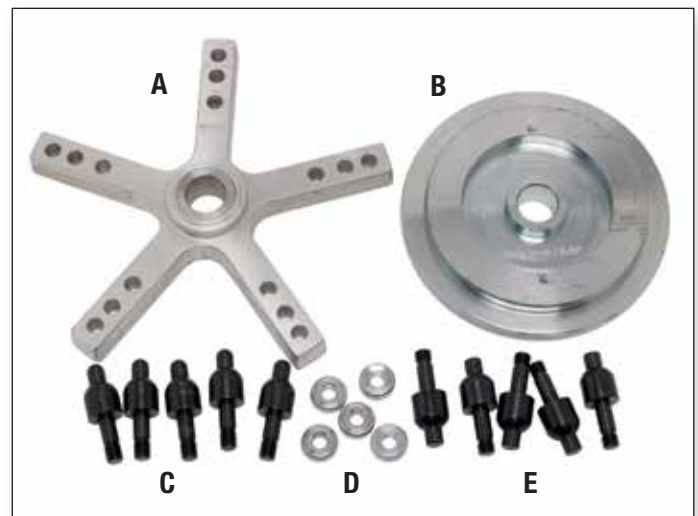


## Heavy-Duty “Economy” Kit\* – 20-2761-2

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).

Kit includes:

<b>A</b>	<b>175-396-2</b>	Adaptor – 5 arm clamp star
<b>B</b>	<b>192-242-2</b>	Centering ring, 220/221 mm
<b>C</b>	<b>175-394-2</b>	Pin HD steel (5)
<b>D</b>	<b>76-463-2</b>	Nut – knurled HD M16 (5)
<b>E</b>	<b>175-420-2</b>	Pin HD steel (5)



\* This kit cannot handle the 11.45 in. bore size found on some bus wheels and motor coaches.



# Heavy-duty balancer 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:

<b>A</b>	<b>175-286-2</b>	Three-jaw chuck adaptor <i>Shown with jaw kit (20-1603-2).</i>
<b>B</b>	<b>20-1854-2</b>	Heavy-duty extended jaw kit <i>For wheels with centering holes from 5.13 in. to 9.13 in.</i>
<b>C</b>	<b>175-296-2</b>	Clamp cup <i>9 in. clamp cup shown with ALU protective sleeve (106-127-2).</i>

\* See Form 4632-T for complete operation instructions and additional mounting information.



The TruckChuck balancing kit is used on the mounting pad side of medium-duty and light-truck wheels.

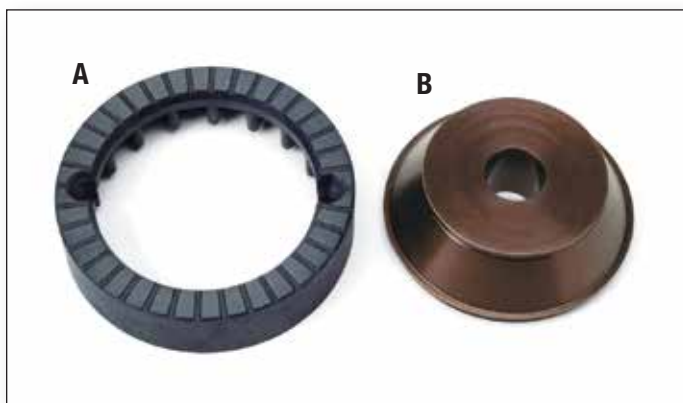


## Large truck cone & spacer kit – 20-1207-1

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

Kit includes:

<b>A</b>	<b>46-309-2</b>	Wheel spacer 8.00 in. O.D. x 6.30 in. I.D. x 1.53 in. (127 mm-168 mm) <i>See page 7 for details.</i>
<b>B</b>	<b>192-92-2</b>	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.



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

BullsEye, HammerHead, Dataset and Road Force are registered trademarks of Hunter Engineering Company.

**HUNTER**  
Engineering Company

[www.hunter.com](http://www.hunter.com)