



“Large Scale” Coupler Basics

Kadee® products are known worldwide for their quality and dependability. With the continuing growth and popularity of “Large Scale” trains Kadee® continues to offer a large selection of couplers with our “Delayed Magne-Matic Uncoupling®” system in both “G” and “#1” scale. We have been able to adapt our couplers to almost any large scale models. There are some coupler conversions that are as simple as “take theirs off and put ours on” operation but some may take extensive modifications, especially on certain locomotives. Some Brass models are easy to mount our couplers on and there are some that cannot, because brass cannot be modified as easy as plastic.

Most Large Scale manufacturers use their own proprietary knuckle couplers or hook and loop couplers. As many modelers have found out, some may or may not be compatible with each other both operationally and coupler mounting heights. Kadee® couplers, when installed correctly and using our Delayed Magne-Matic® Uncoupling system, are a complete “hands off” coupler system. As mentioned above, Kadee® couplers can be fitted to almost any model which eliminates any compatibility issues.

Our large scale couplers represents the common Type E coupler and come in two types and two scale sizes “G” scale 1:22.5 and #1 scale 1:32 scale ratio. Our original coupler style has an exposed knuckle spring with minimal details. Our newer style AAR Type E (New Generation) has a much more prototypically detailed coupler head and the knuckle spring is hidden inside the head and cannot be seen. Both styles are completely compatible with each other and use the same draft gear boxes, so the conversion information is the same for both. See the included cross reference chart and conversion list.

Kadee® coupler heights are based on the NMRA Standards S-1. For G scale the coupler height is 1 1/8” (1.125”) and #1 scale is 1 1/16” (1.0625” or 27 mm), measured from the top of the rails to the “center” of the coupler head. These heights are very close to the correct prototypical coupler height that is in line with the center beam of a freight car. On some models we have to use an off-set coupler to raise the coupler to the correct height especially on truck mounted coupler arms. Many large scale manufacturers use truck mounted couplers on their rolling stock for a number of reasons mostly to be able to negotiate tight curves and to mount their proprietary couplers low enough to use their in track uncoupling devices. This low mounting height means that to put a Kadee® coupler on the original truck mounting we have to use a large off-set coupler that “goose necks” up to the correct height. We offer large and medium off-set couplers, as well as center-set couplers to help achieve the correct coupler height. The medium off-set is .200” (thickness of the shank) higher than a center-set coupler. A large off-set coupler is .200” higher than a medium off-set or .400” higher than a center set coupler. We do not make off-set large scale couplers that lowers the coupler height as we do in HO and O scale. This is because most often in large scale modeling we have to raise the coupler rather than lower the height and lowering the height is a matter of putting a shim under a center set body mounted coupler. We do make large scale coupler height gauges to help in achieving the correct coupler heights. All your couplers should be mounted at the same height for top performance and dependable operation. Also important is that couplers do not compensate for bad track even with the larger G scale coupler’s pulling face. It just better to fix the track.

Since “Large Scale” covers several different actual “scale proportions” ranging through but not limited to 1:32, 1:29, 1:24, 1:22.5, and 1:20.3 scale ratios. The choice of what coupler size to use is left up to the modeler. Many like the smaller #1 scale (1:32 scale) couplers because of their more to scale appearance on 1:32 and 1:29 scale models. You usually have to use 1:32 scale couplers on #1 scale models regardless. But on other scale models you have a choice of either #1 or G scale couplers and we provide the option in our coupler conversion listings.

There are issues with understanding track gauge as all these different scales of models run on the same common 45 mm gauge track, which depicts “standard gauge” for #1 scale models, In the other scales it would be “narrow gauge” track especially with 1:20.3 scale models. The issue then is, are you modeling a narrow gauge operation or ignoring the track gauge and modeling a standard gauge operation?

“Welcome to large scale modeling.”

MAGNE-MATIC®












#1-SCALE - AAR TYPE “E” COUPLERS

#1905 Centerset Couplers & #779 Gear Box 1 Pair Sill Mount  #1- Scale Patent number 7,810,660 B1	#1906 Centerset Couplers & #910 Gear Box (Black) 1 Pair Body Mount  #1- Scale Patent number 7,810,660 B1	#1906R Centerset Couplers & #910 Gear Box (Rust) 1 Pair Body Mount  #1- Scale Patent number 7,810,660 B1	#1907 Centerset Couplers & #911 Gear Box 1 Pair Truck or Body Mount  #1- Scale Patent number 7,810,660 B1
#1908 Medium Offset Couplers & #911 Gear Box 1 Pair Truck or Body Mount  #1- Scale Patent number 7,810,660 B1	#1909 Large Offset Couplers & #911 Gear Box 1 Pair Truck Mount  #1- Scale Patent number 7,810,660 B1	#1917 Centerset Short Couplers Small Short Gear Box (Black) 1 Pair Body Mount  #1- Scale Patent number 7,810,660 B1	#11221 Remote Coupler Actuated Body Mount Coupler with Gearbox - Assembled 1 Pair Body Mount #1- Scale  Patent number 7,810,660 & 8,950,606

#1-SCALE - ORIGINAL STYLE COUPLERS

#1779 Centerset Couplers & #779 Gear Box 1 Pair Sill Mount  #1- Scale	#820 Centerset Couplers & #910 Gear Box (Black) 1 Pair Body Mount  #1- Scale	#920 Centerset Couplers & #910 Gear Box (Rust) 1 Pair Body Mount  #1- Scale	#1789 Centerset Couplers & #911 Gear Box 1 Pair Truck or Body Mount  #1- Scale
#1787 Medium Offset Couplers & #911 Gear Box 1 Pair Truck or Body Mount  #1- Scale	#1831 Large Offset Couplers & #911 Gear Box 1 Pair Truck Mount  #1- Scale	#821 Centerset Short Couplers Small Short Gear Box (Black) 1 Pair Body Mount  #1- Scale 	#921 Centerset Short Couplers Small Short Gear Box (Rust) 1 Pair Body Mount  #1- Scale 
#1832 Large Offset Couplers & #913 Extra Swing Gear Box 1 Pair Pedestal Mount  #1- Scale 	#1835 Centerset Couplers & #912 Short Narrow Gear Box 1 Pair Body Mount  #1- Scale 	#1836 Medium Offset Couplers & #912 Short Narrow Gear Box 1 Pair Body Mount  #1- Scale 	#1837 Large Offset Couplers & #912 Short Narrow Gear Box 1 Pair Body Mount  #1- Scale 

G-SCALE - AAR TYPE "E" COUPLERS ONLY

<p>#900 Coupler Only (Black)</p>  <p>Includes #878 Springs 1 Pair</p> <p>G-Scale</p>	<p>#900R Coupler Only (Rust)</p>  <p>Includes #878 Springs 1 Pair</p> <p>G-Scale</p>	<p>#901 Coupler Only Centerset Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>	<p>#902 Coupler Only Medium Offset Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>
<p>#903 Coupler Only Large Offset Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>	<p>#904 Coupler Only Straight Shank Coupler</p>  <p>1 Pair</p> <p>G-Scale</p> <p>Stationary Mounting</p> 	<p>#916 Coupler Only Bachmann Centerset Shank Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>	<p>#917 Coupler Only Bachmann Medium Offset Shank Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>









G-SCALE - AAR TYPE "SE" TOP & BOTTOM SHELF COUPLERS ONLY

<p>#933 Coupler Only</p>  <p>Includes #878 Springs 1 Pair G-Scale</p>	<p>#934 Coupler Only Centerset Coupler</p>  <p>1 Pair G-Scale</p>	<p>#935 Coupler Only Medium Offset Coupler</p>  <p>1 Pair G-Scale</p>	<p>#936 Coupler Only Large Offset Coupler</p>  <p>1 Pair G-Scale</p>
--	--	---	---


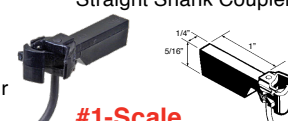






G-SCALE - AAR TYPE “SBE” BOTTOM SHELF COUPLERS ONLY

<p>#943 Coupler Only</p>  <p>Includes #878 Springs 1 Pair</p> <p>G-Scale</p>	<p>#944 Coupler Only Centerset Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>	<p>#945 Coupler Only Medium Offset Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>	<p>#946 Coupler Only Large Offset Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>
---	---	--	--

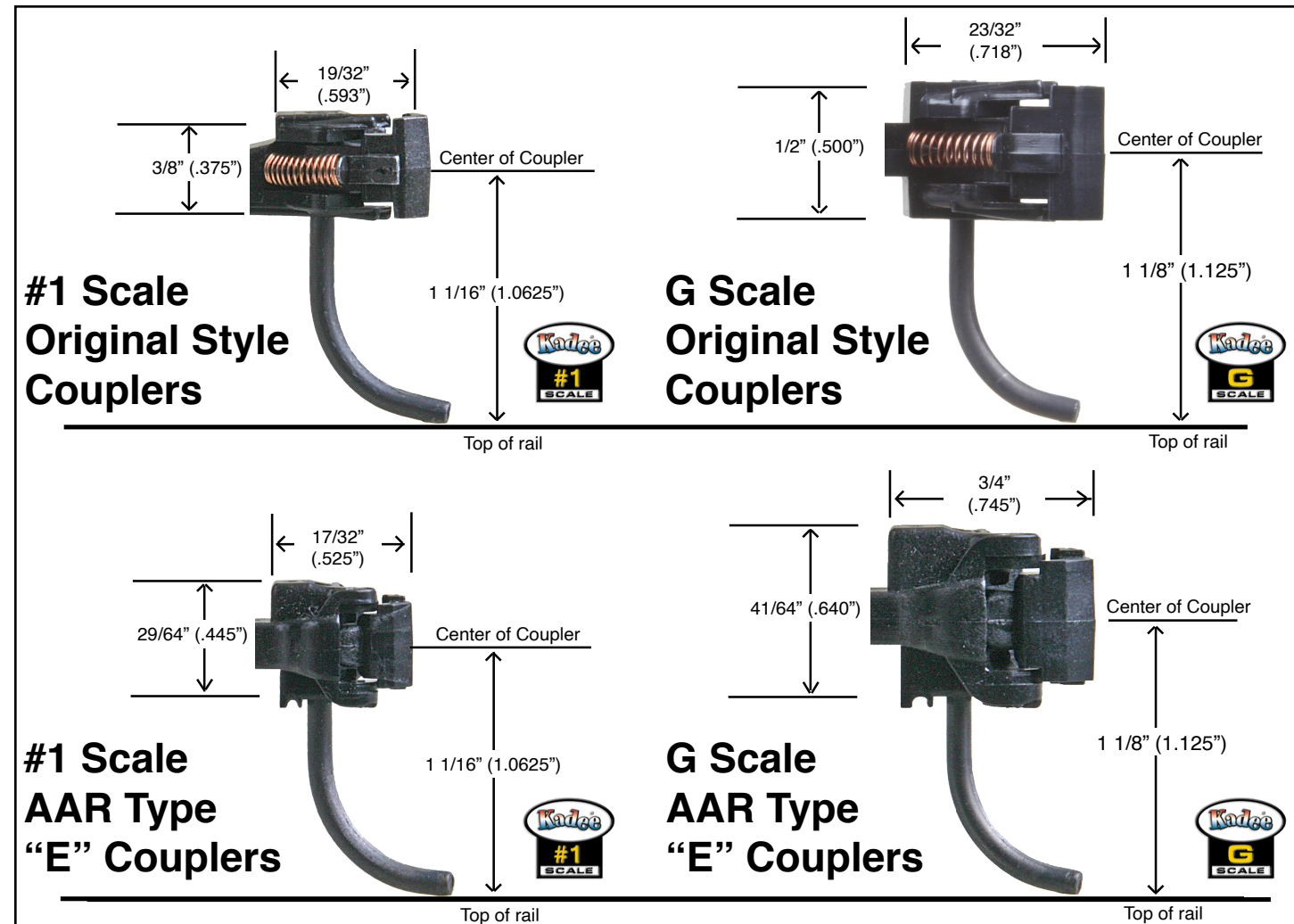
#1-SCALE - AAR TYPE "E" COUPLERS ONLY

<p>#1900 Coupler Only (Black)</p>  <p>Includes #878 Springs 1 Pair</p> <p>#1-Scale</p>	<p>#1900R Coupler Only (Rust)</p>  <p>Includes #878 Springs 1 Pair</p> <p>#1-Scale</p>	<p>#1901 Coupler Only Centerset Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	<p>#1902 Coupler Only Medium Offset Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>
<p>#1903 Coupler Only Large Offset Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	<p>#1904 Coupler Only Straight Shank Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	<p>#1916 Coupler Only Bachmann Centerset Shank Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	


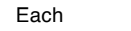


#1-SCALE & G-SCALE - ORIGINAL STYLE COUPLERS ONLY

<p>#822 Coupler Only Straight Shank Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	<p>#823 Coupler Only Straight Shank Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	<p>#1838 Coupler Only Medium Offset Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	<p>#1839 Coupler Only Large Offset Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>
<p>#1840 Coupler Only Centerset Coupler</p>  <p>1 Pair</p> <p>#1-Scale</p>	<p>#1850 Coupler Only Centerset Coupler</p>  <p>1 Pair</p> <p>G-Scale</p>		

©2024 Kadee® Quality Products Co. Tel: 541-826-3883 FAX: 541-826-4013 www.kadee.com e-mail: mail@kadee.com



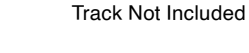

#1-SCALE & G-SCALE - COUPLER HEIGHT GAUGES

<p>#829 #1-Scale (Original Style) Each</p>  <p>#829</p>	<p>#1929 #1-Scale (AAR Type "E") Each</p>  <p>#1929</p>	<p>#880 G-Scale (Original Style) Each</p>  <p>#880</p>	<p>#980 G-Scale (AAR Type "E") Each</p>  <p>#980</p>
--	--	---	---

Kadee® Tools Measure Up!

- * Improves coupler performance.
- * Alleviates coupling and uncoupling problems.
- * Easy to assemble. Simple to use. Eliminates guesswork.
- * Provides instant visual reference of proper coupler centerline height above the rails.
- * Accurately measures correct mounting surface height.
- * Track and Wheel Width Gauge for troubleshooting.
- * Works as Uncoupler Gluing Jig.
- * A must-have for all railroads equipped with Kadee® Couplers.

DELAYED UNCOUPLERS

<p>#842 Unmounted</p> <p>Each Track Not Included</p> 	<p>#844 Portable</p> <p>Each Track Not Included</p> 
---	--

©2024 Kadee® Quality Products Co. Tel: 541-826-3883 FAX: 541-826-4013 www.kadee.com e-mail: mail@kadee.com



Kadee® G-Scale & #1-Scale Couplers



USE THE CHART BELOW TO HELP IDENTIFY THE CONTENT OF EACH #1 & G-SCALE COUPLER PACKAGE OR CONVERSION KIT.

NOTE: If AAR Type "E" Coupler is Kit is Not Available. You will need to use this chart to identify the Original Style Coupler Offset in the Coupler Conversion & then select the appropriate AAR Type "E" Coupler (Only) below to replace Original Coupler.

MAGNE-MATIC®

Cross Reference Chart



AAR Type "SE" G	AAR Type "SBE" G	AAR Type "E" G	Original Style G	AAR Type "E" #1	Original Style #1	Coupler Conversions with Gearboxes
		905	779	1905	1779	NOTE: Packaging Descriptions below do not include miscellaneous shims, brackets, screws, etc. that may be included in each package.
			781		1781	Centerset Couplers with Sill Mount Pockets. (1 Pair)
			782		1782	Coupler Conversion - Center Set Coupler & Medium Offset Coupler with Pilot Pocket Gear Box & Truck Mount Type Gear box. (1 Pair)
			783		1783	Coupler Conversion - Cut Couplers with Mounting Brackets (1 Pair)
			784		1784	Coupler Conversion - Cut Coupler with Mounting Bracket & Large Offset Coupler with Truck Mount Type Gear box. (1 Pair)
			785		1785	Coupler Conversion - Large Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
			786		1786	Coupler Conversion - Large Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
		908	787	1908	1787	Coupler Conversion - Medium Offset Couplers with Swinging Type Gear boxes. (1 Pair)
			788		1788	Medium Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
		907	789	1907	1789	Coupler Conversion - Medium Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
			790		1790	Center Set Couplers with Truck Mount Type Gear boxes. (1 Pair)
			791		1791	Coupler Conversion - Large Offset Coupler & Modified Medium Offset Coupler with Truck Mount Type Gear boxes. (1 Pair)
			792		1792	Large Offset Coupler & Center Set Coupler with Pilot Pocket Gear Box & Truck Mount Type Gear box. (1 Pair)
			793		1793	Coupler Conversion - Large Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
			794		1794	Coupler Conversion - Large Offset Coupler & Medium Offset Coupler with Truck Mount Type Gear boxes. (1 Pair)
			795		1795	Large Offset Coupler & Medium Offset Coupler with Truck Mount Type Gear box & Swinging Type Gear box. (1 Pair)
			796		1796	Coupler Conversion - Large Offset Couplers with Swinging Type Gear boxes. (1 Pair)
			797		1797	Large Offset Couplers with Truck Mount Type Gear box & Swinging Type Gear box. (1 Pair)
			798		1798	Large Offset Couplers with Swinging Type Gear boxes. (1 Pair)
			799		1799	Coupler Conversion - Large Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
		906 / 906R	830 / 930	1906 / 1906R	820 / 920	Coupler Conversion - Large Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
				1917	821 / 921	Straight Center Set Shank Couplers with Standard Body Mount Gear boxes (820, 830, 906, 1906 - Black) (920, 930, 906R, 1906R - Rust) (1 Pair)
					824	Center Set Short Shank Couplers with Extra Short Gear boxes (821-Black) (921-Rust) (1 Pair)
					827	Coupler Conversion - Straight Center Set Shank Couplers with Standard Gear boxes (1 Pair)
		909	831	1909	1831	Coupler Conversion - Straight Thick Shank Type Coupler & Center Set Short Shank Coupler with Extra Short Gear box (1 Pair)
			832		1832	Large Offset Couplers with Truck Mount Type Gear boxes (1 Pair)
			833		1833	Large Offset Couplers with Swinging Type Gear boxes (1 Pair)
			834		1834	Coupler Conversion - Large Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
			835		1835	Coupler Conversion - Large Offset Couplers with Truck Mount Type Gear boxes. (1 Pair)
			836		1836	Center Set Couplers with Short Gear boxes. (1 Pair)
			837		1837	Medium Offset Couplers with Short Gear boxes. (1 Pair)
						Large Offset Couplers with Short Gear boxes. (1 Pair)
Kadee® RC Remote Couplers						
		11115				Remote Coupler - Body Mount Coupler Kit (1 Kit)
						Includes: 2 - #906 Individual Couplers & Body Mount Gearboxes, 2 - Trip Pin Linkage Collars, 2 - Short Linkage Rods, 1 - Long Linkage Rod, 2 - #841 Shims, 1 - Mounting Screws & Hardware, 1 - Standard Servo Kit #11120
		11220		11221		Remote Coupler - Actuated Body Mount Coupler with Gearbox
						Includes: 1 - Actuated Body Mount Coupler with Gearbox - Assembled
Couplers Only						
		904		1904	822	Straight Shank Couplers Stationary Mounting (1 Pair)
					823	Straight Thick Shank Couplers Stationary Mounting (1 Pair)
933	943	900 / 900R		1900 / 1900R		Straight Center Set Shank AAR Type "E" Couplers (AAR Type "SE" Couplers (1 Pair) (AAR Type "SBE" Couplers (1 Pair) (900-Black) (900R-Rust) (1900-Black) (1900R-Rust) (1 Pair)
934	944	901	1850	1901	1840	Center Set Couplers (AAR Type "SE" Couplers (1 Pair) (AAR Type "SBE" Couplers (1 Pair) (AAR Type "E" Couplers (1 Pair) ("Older Style" Couplers (2 Pair)
935	945	902		1902	1838	Medium Offset Couplers (AAR Type "SE" Couplers (1 Pair) (AAR Type "SBE" Couplers (1 Pair) (AAR Type "E" Couplers (1 Pair) ("Older Style" Couplers (2 Pair)
936	946	903		1903	1839	Large Offset Couplers (AAR Type "SE" Couplers (1 Pair) (AAR Type "SBE" Couplers (1 Pair) (AAR Type "E" Couplers (1 Pair) ("Older Style" Couplers (2 Pair)
		916		1916		Bachmann® Shank AAR Type "E" Center Set Couplers (1 Pair)
		917				Bachmann® Shank AAR Type "E" Medium Offset Couplers (1 Pair)
Gearboxes, Flex-brackets & Conversion Platforms						
					828	Long Flex-brackets & #820 Couplers (1 Pair)
					882	Flex-brackets for #1 Scale #820, #920 or #1906 Couplers (1 Pair)
		883				Flex-brackets for G Scale #830, #930 or #906 Couplers (1 Pair)
			881			Conversion Platforms for #1 & G Scale mounting #838, #882 or #883 Flex-brackets & Couplers on Aristo-Craft™ Heavyweight Passenger Car (1 Pair)
			884			Conversion Platforms for #1 & G Scale mounting #820, #830, #930, #906 or #1906 Couplers on Aristo-Craft™ GE U-25B (1 Pair)
		910 / 910R				#830 (type) Body Mount Gear Boxes for G-Scale Straight Center Set Shank Couplers. #900 AAR Type "E" Couplers (910-Black) (910R-Rust) (1 Pair)
		911				#831 (type) Truck Mount Gear Boxes for #1 & G Scale Center Set, Medium Offset, Large Offset Couplers. (1 Pair)
		912				#835 (type) Short Body Mount Gear Boxes for #1 & G Scale Center Set, Medium Offset, Large Offset Couplers. (1 Pair)
		913				#832 (type) Swinging Gear Boxes for #1 & G Scale Center Set, Medium Offset, Large Offset Couplers. (1 Pair)
		915				#791 Pilot Pocket & #911 #831 (type) Truck Mount Gear Boxes #1 & G Scale #791 for Center Set, Couplers. #831 for Center Set, Medium Offset, Large Offset Couplers. (1 Each)
					1920 / 1920R	#820 (type) Body Mount Gear Boxes for #1-Scale Straight Center Set Shank Couplers. #1900 AAR Type "E" Couplers (1920-Black) (1920R-Rust) (1 Pair)
Centering Springs						
			861			for #911, 912, 913, 915 Gear Boxes & #779, 905, 1779, 1905 Couplers
					876	for #1920 Gear Boxes. Only for #820 or 920 Couplers
					877	for #821 or #921 Couplers
		878				for #910 Gear Boxes. Used for #830, 930 & Type "E" #906 Couplers
					879	for #1920 Gear Boxes. Used for #820 or 920 & Type "E" #1906 Couplers
Knuckle Springs						
			876			Note: All Type "E" Couplers don't have replaceable Knuckle Springs.
					877	for all G-Scale Couplers. Except Type "E" Couplers
					878	for #1-Scale Couplers #819 through 828, 920 & 921
					879	for #1-Scale Couplers 1700 & 1800 Series
					879	for #1-Scale Couplers 1700 & 1800 Series

G-SCALE - AAR TYPE "E" COUPLERS

#905

Centerset Couplers & #779 Gear Box

1 Pair

Sill Mount



G-Scale

Patent number 7,810,660 B1

#906

Centerset Couplers & #910 Gear Box (Black)

1 Pair

Body Mount



G-Scale

Patent number 7,810,660 B1

#906R

Centerset Couplers & #910 Gear Box (Rust)

1 Pair

Body Mount



G-Scale

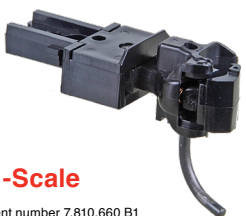
Patent number 7,810,660 B1

#907

Centerset Couplers & #911 Gear Box

1 Pair

Truck or Body Mount



G-Scale

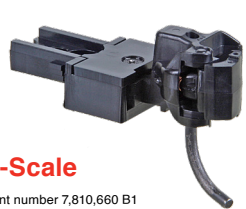
Patent number 7,810,660 B1

#908

Medium Offset Couplers & #911 Gear Box

1 Pair

Truck or Body Mount



G-Scale

Patent number 7,810,660 B1

#909

Large Offset Couplers & #911 Gear Box

1 Pair

Truck Mount



G-Scale

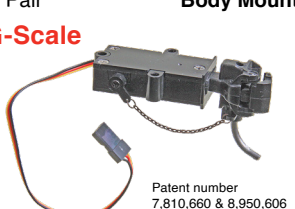
Patent number 7,810,660 B1

#11220

Remote Coupler Actuated Body Mount Coupler with Gearbox - Assembled

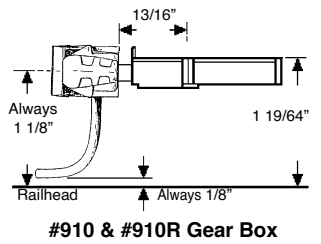
1 Pair

Body Mount



G-Scale

Patent number 7,810,660 & 8,950,606



G-SCALE - ORIGINAL STYLE COUPLERS

#779

Centerset Couplers & #779 Gear Box

1 Pair

Sill Mount



G-Scale

#830

Centerset Couplers & #1920 Gear Box (Black)

1 Pair

Body Mount



G-Scale

#930

Centerset Couplers & #1920R Gear Box (Rust)

1 Pair

Body Mount



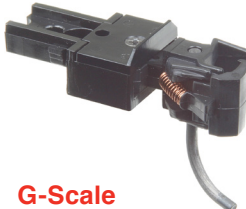
G-Scale

#789

Centerset Couplers & #911 Gear Box

1 Pair

Truck or Body Mount



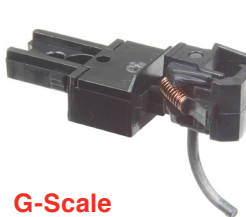
G-Scale

#787

Medium Offset Couplers & #911 Gear Box

1 Pair

Truck or Body Mount



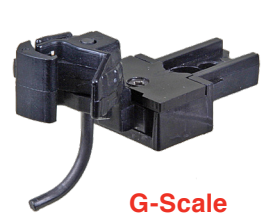
G-Scale

#831

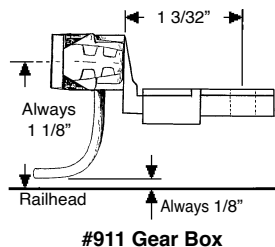
Large Offset Couplers & #911 Gear Box

1 Pair

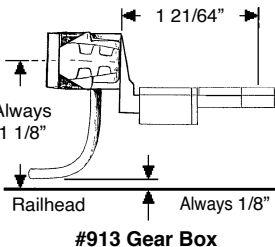
Truck Mount



G-Scale



#911 Gear Box



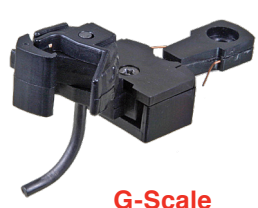
#913 Gear Box

#832

Large Offset Couplers & #913 Gear Box

1 Pair

Pedestal Mount



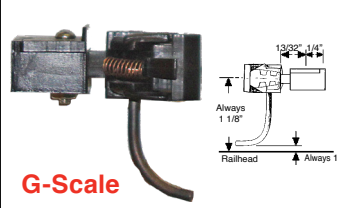
G-Scale

#835

Centerset Couplers & #912 Short Narrow Gear Box

1 Pair

Body Mount



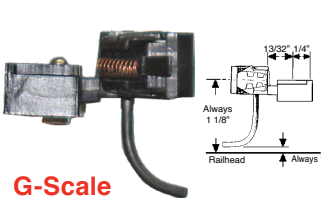
G-Scale

#836

Medium Offset Couplers & #912 Short Narrow Gear Box

1 Pair

Body Mount



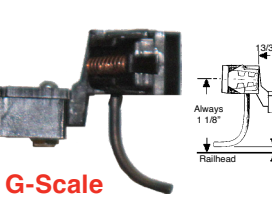
G-Scale

#837

Large Offset Couplers & #912 Short Narrow Gear Box

1 Pair

Body Mount



G-Scale