

Instructions for all GRS Heavy Duty Models

CAUTION: Always wear safety goggles when performing any maintenance work.

NOTE: Before starting the reassembly process, be sure the repair area is clean. It is imperative that the GRS be free of all contaminants upon reassembly. If this precaution is not taken it may lead to contamination and premature failure.

GRS.50.HD / GRS.50.HD.R Models

Removing the Adapter Cap

GRS.50.HD.R Only



1. Remove the guide rod adapter cap located at the top of the GRS.50.HD.R Guide Rod, using a 5 mm allen wrench to unthread the cap screw.



2. Remove the cap screw, lock washer and the adapter cap and retain for reassembly.

I. Removing the Guide Rod



1. Remove the Guide Rod from the Guide Retainer using a soft rubber mallet. A vise, with soft jaws, may be used to secure the Guide Retainer if needed.

GRS.36.HD / GRS.65.HD Models

I. Removing the Dampener and Guide Rod



1. Remove the rod retainer ring located at the bottom of the guide rod using a screwdriver. Retain ring for reassembly



2. Remove the guide rod retaining key by sliding it off the Guide Rod. Retain the key for reassembly.



3. Remove the two halves of the rod retainer from the Guide Rod and retain for reassembly.



4. Remove the dampener backing ring and then the dampener from the Guide Rod. Retain the ring for reassembly and dispose of the dampener.



5. Pull the Guide Retainer off the Guide Rod. You may need to use a soft rubber mallet. A vise, with soft jaws, may be used to secure the Guide Rod if needed.

GRS.36.HD / GRS.50.HD / GRS.50.HD.R / GRS.65.HD Models

II. Replacing the Bushings and Wipers



1. Remove the bottom bushing from the guide retainer using a small screwdriver. Then remove the bottom wiper (if present). Discard used bushing.



2. Remove the top bushing from the top of the guide retainer then remove the wiper using a small screwdriver and discard.



3. Remove the two middle bushings from the guide retainer. Discard used bushings. Inspect the Guide Retainer for any damage. Wash and dry the inside thoroughly.



4. Install the two new middle bushings one at a time by overlapping the gap portion and placing them into the Guide Retainer.



4. Install the bottom wiper (if it was present in step 1), then install the bottom bushings by overlapping the gap portion and placing it into the Guide Retainer.



5. Install a new wiper into the top of Guide Retainer. Check to see it is well seated.



6. Install the top bushing by overlapping the gap portion and placing it below the wiper into the Guide Retainer. The bushings may not seat properly if the wiper is not seated properly. Note: All the bushings should 'click' into place and have a gap when installed properly.



7. Using the grease provided in the kit, grease the installed bushings. Verify for the GRS.65.HD that the bushings are installed so that the two yellow bushings are in the middle and the black bushings are at the top and bottom.

GRS.50.HD / GRS.50.HD.R Models

III. Replacing the Dampener (GRS.50.HD / GRS.50.HD.R)



1. Remove the safety wire ring from the outside of the Rod Retainer using a small screwdriver. Retain the ring for reassembly.



2. Remove the three set screws using a 3 mm allen wrench and retain for reassembly.



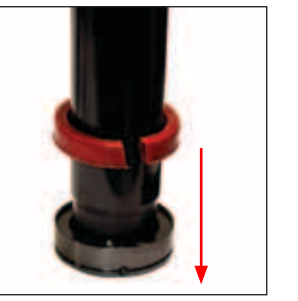
3. Tap down the Rod Retainer on the Guide Rod using a soft rubber mallet.



4. Remove the rod retainer wire ring using a small screwdriver or external snap ring spreaders. If needed, a vise, with soft jaws, may be used to secure the Guide Rod. Retain the ring for reassembly.



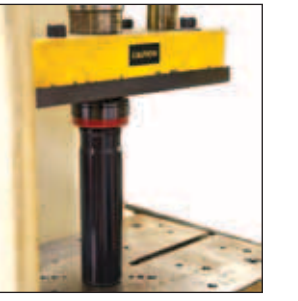
5. Using a utility knife, cut the dampener to remove it from the Guide Rod, and discard.



6. Remove the Rod Retainer from the Guide Rod. If needed, a vise with soft jaws may be used to secure the Guide Rod. Wash, clean and dry the Guide Rod thoroughly.



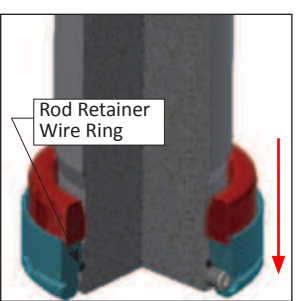
7. Install the new dampener into the Rod Retainer. Using a soft rubber mallet make sure the dampener retaining lip is completely seated into the retainer.



8. Push the Rod Retainer with Dampener Assembly evenly onto the Guide Rod using a hydraulic press or a medium-sized arbor press. The assembly will snap into place.



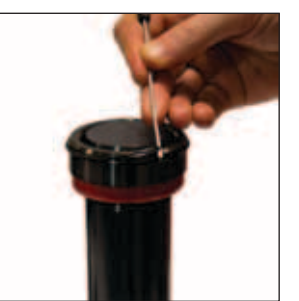
9. Install the rod retainer wire ring onto the Guide Rod using a set of external snap ring pliers.



10. Push the Rod Retainer with Dampener Assembly into place using a soft rubber mallet or an arbor press. Make sure it is seated on the rod retainer wire ring.



11. Install the three set screws into the Rod Retainer with Dampener Assembly using a 3 mm allen wrench.



12. Install the safety wire ring onto the Rod Retainer by hand using a small screw driver to make sure it properly seats into the groove.

GRS.50.HD / GRS.50.HD.R Models

IV. Reassembly

GRS.50.HD.R only



1. Install the Guide Rod into the Guide Retainer using a soft rubber mallet.



2. Install the guide rod adapter cap with the washer and cap screw. Thru holes must be aligned with the M16 rod end tapped holes. Tighten the cap screw using a 5 mm allen wrench and tighten to 100 lb.in (11 N.m).

GRS.36.HD / GRS.65.HD Models

III. Reassembly and Installing the New Dampener



1. Using a soft rubber mallet install the Guide Retainer onto the Guide Rod.



2. Install the dampener and then the dampener backing ring on to the Guide Rod.



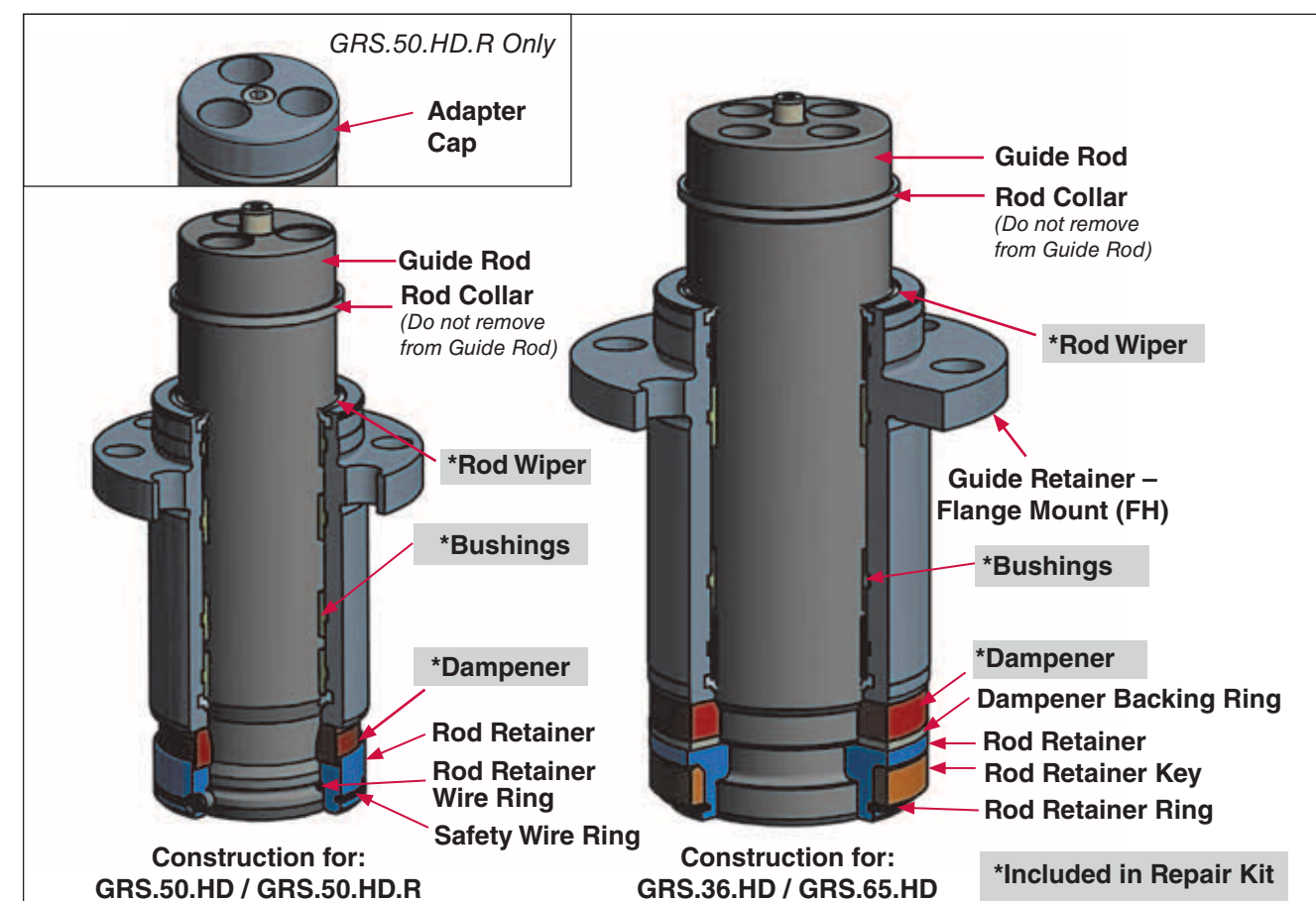
3. Install the two halves of the rod retainer.



4. Install the rod retainer key over the rod retainer.



5. Install the rod retainer ring.



GRS.HD Ordering Example:

GRS. 50. HD. J. 0550. FH

- Series:** Guide Retainer Set
- Guide Rod Diameter:** ø36, ø50, ø65
- Guide Rod Type:** HD = Heavy Duty, HD.R = Heavy Duty, Retrofit (ø50 only)
- Guide Rod Option:** M = Metric or E = Imperial, J = Metric without Rod End Dowel, K = Imperial without Rod End Dowel
- Guide Retainer Mount Option:** FH = Flange Mount
- Pin Extension Length:** Use order code listed in catalog. Example: 0550 = 55.0 mm

For optional plate adapter add AC, or order separately.

Replacement Part Ordering Examples:

Guide Rod: GRS.50HD.J.0550.RO
GRS.50HD.M.0550.RO

Guide Retainer: GRS.50HD

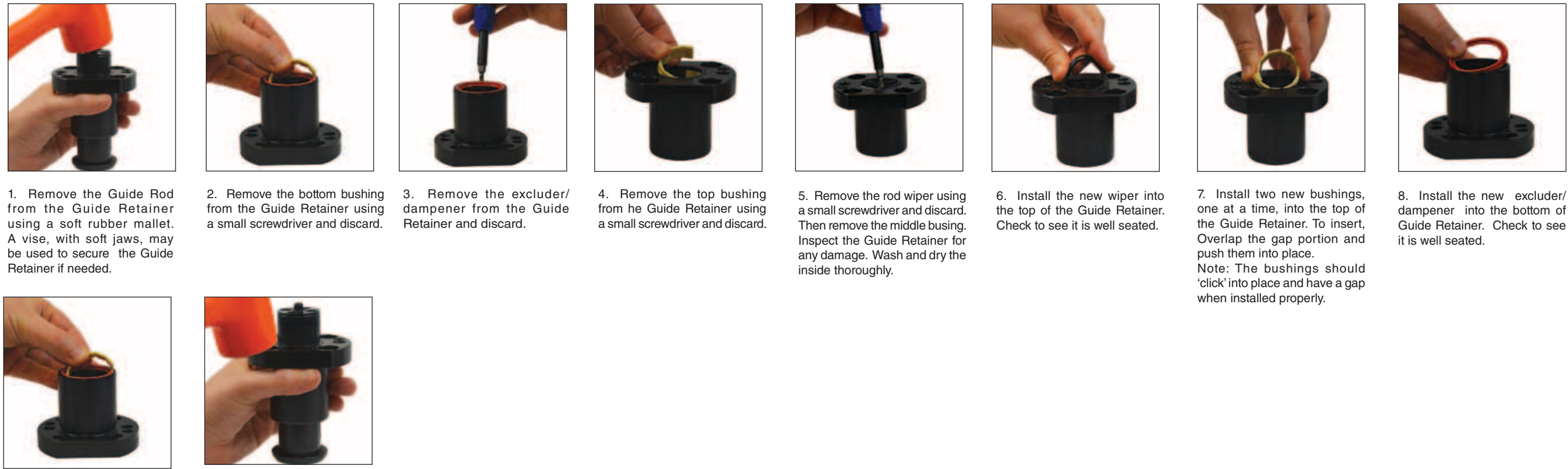
Plate Adapter: GRS.50.AC
GRS.65.AC

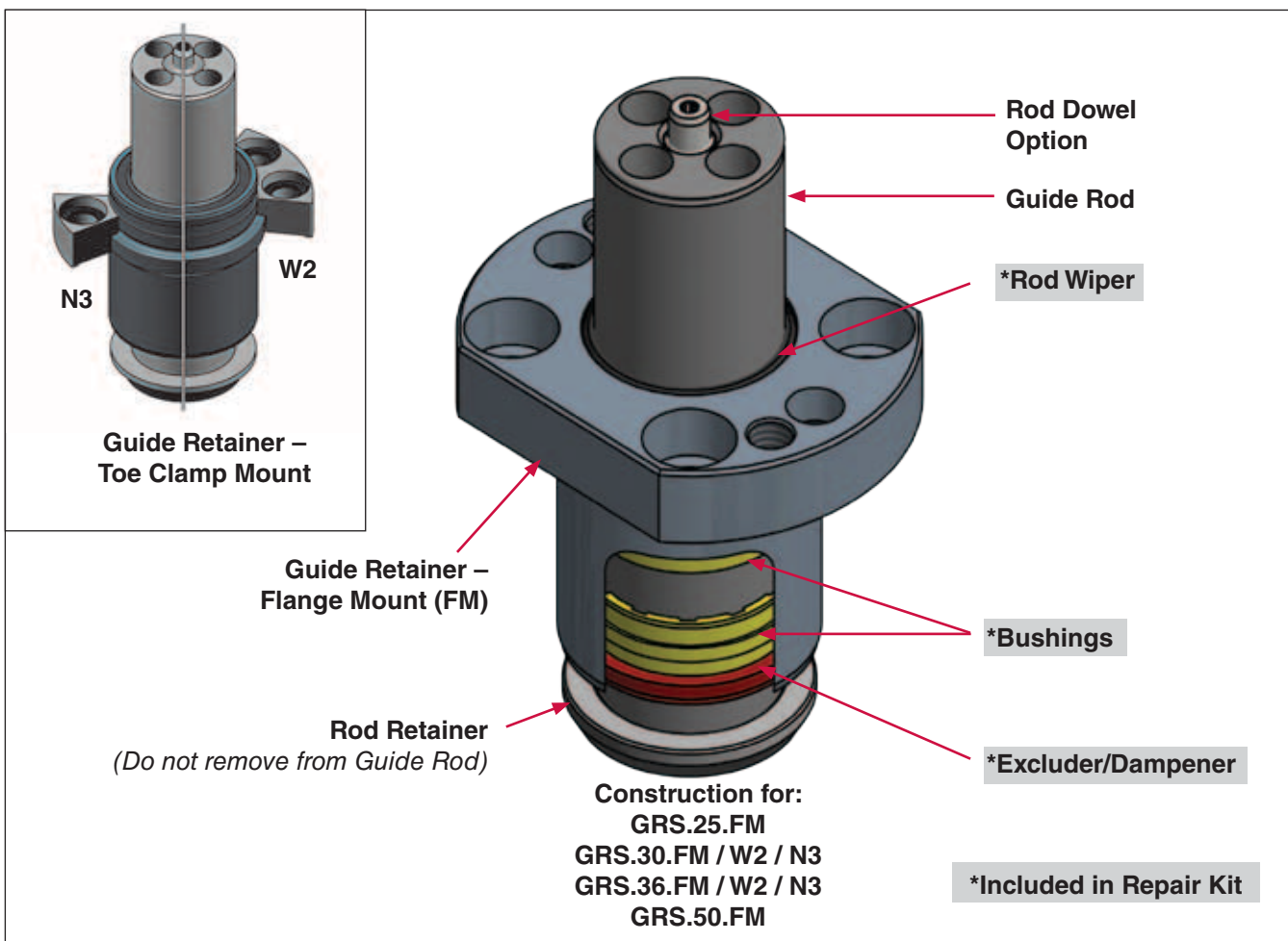
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GRS.25 / GRS.30 / GRS.36 / GRS.50 Models - All Guide Retainer Mount Options (FM, W2, N3)

Replacing the Bushings and Wipers

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1. Remove the Guide Rod from the Guide Retainer using a soft rubber mallet. A vise, with soft jaws, may be used to secure the Guide Retainer if needed.
 2. Remove the bottom bushing from the Guide Retainer using a small screwdriver and discard.
 3. Remove the excluder/dampener from the Guide Retainer and discard.
 4. Remove the top bushing from the Guide Retainer using a small screwdriver and discard.
 5. Remove the rod wiper using a small screwdriver and discard. Then remove the middle bushing. Inspect the Guide Retainer for any damage. Wash and dry the inside thoroughly.
 6. Install the new wiper into the top of the Guide Retainer. Check to see it is well seated.
 7. Install two new bushings, one at a time, into the top of the Guide Retainer. To insert, Overlap the gap portion and push them into place. Note: The bushings should 'click' into place and have a gap when installed properly.
 8. Install the new excluder/dampener into the bottom of Guide Retainer. Check to see it is well seated.
 9. Install the third new bushing into the bottom of Guide Retainer. To insert, Overlap the gap portion and push the bushing into place past the excluder/dampener. Once all the bushings are installed, use all the grease supplied in the kit to grease the bushings.
 10. Install the Guide Rod into the Guide Retainer using a soft rubber mallet.



GRS Ordering Example:

GRS. 36. M. 0250. FM

Series: Guide Retainer Set

Guide Rod Diameter: ø25, ø30, ø36 or ø50

Guide Rod Option: M = Metric or E = Imperial, J = Metric without Rod End Dowel, K = Imperial without Rod End Dowel

Guide Retainer Mount Option: FM = Flange Mount

W2 = Wide Toe Clamps (Qty. 2) or N3 = Narrow Toe Clamps (Qty.3); GRS.30 and GRS.36 only

Stroke Length: Use order code listed in catalog. Example: 0250 = 25.0 mm

Replacement Part Ordering Examples:

Guide Rod: GRS.36.M.0250.RO

Guide Retainer: GRS.36 = Flange Mount, GRS.36T = Toe Clamp Mount

	GRS.30	GRS.36
Lock Washer:	UMR08	UMR10
Wide Toe Clamp:	GRS.WM8	GRS.WM10
Narrow Toe Clamp:	GRS.NM8	GRS.NM10

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Comprehensive Guide

This service manual is a simple step-by-step maintenance guide for DADCO's Guide Retainer Sets (GRS and GRS.HD Series). Proper repair requires careful examination of all component parts and replacement of any that are worn or damaged. All DADCO replacement parts are available from factory stock. Typically, a GRS can be rebuilt in less than ten minutes by replacing the bushings, wiper and dampener which are included in a repair kit. After reviewing this maintenance guide, if you require any additional training or have any questions please contact DADCO for assistance.

Guide Retainer Sets

Designed for use in dies as a replacement for common pins, bushings and spools the Guide Retainer Set (GRS) Series features high quality guided components to ensure exceptionally long service life.

DADCO offers GRS in five models, designated by Guide Rod diameter, to accommodate different load capacities: GRS.25, GRS.30, GRS.36, GRS.50 and GRS.65.


Model	Guide Rod Diameter	FM	W2	N3	HD
GRS.25	25 mm .984"	✓			
GRS.30	30 mm 1.181"	✓	✓	✓	
GRS.36	36 mm 1.417"	✓	✓	✓	✓
GRS.50	50 mm 1.968"	✓			✓
GRS.65	65 mm 2.559"				✓

FM = Flange Mount, W2 = Wide (Qty. 2) Toe Clamps, N3 = Narrow (Qty. 3) Toe Clamps, HD = Heavy Duty Flange Mount

Repair Kits

Includes bushings, rod wiper, dampener, assembly grease and a maintenance manual.

Model	Kit Number
GRS.25	GRS.25.RK
GRS.30	GRS.30.RK
GRS.36	GRS.36.RK
GRS.50	GRS.50.RK
GRS.36.HD	GRS.36HD.RK
GRS.50.HD	GRS.50HD.RK
GRS.65.HD	GRS.65HD.RK



**Guide Retainer Sets
Maintenance
Instructions
GRS and GRS.HD**



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