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.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

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

Removing the Adapter Cap



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.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 (yellow) bushings one at a time by overlapping the gap portion and placing them into the Guide



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



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



7. Install the top bushing (yellow) 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.

Construction for:



8. 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.30.HD / GRS.36.HD / GRS.45.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



4. Install the rod retainer key over the rod retainer



5. Install the rod retainer ring

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

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



Rod Retainer using a small retain for reassembly. screwdriver. Retain the ring for reassembly.



1. Remove the safety wire 2. Remove the three set screws ring from the outside of the using a 3 mm allen wrench and



3. Tap down the Rod Retainer 4. Remove the rod retainer wire 5. Using a utility knife, cut the 6. Remove the Rod Retainer rubber mallet.



on the Guide Rod using a soft ring using a small screwdriver dampener to remove it from the from the Guide Rod. If needed, or external snap ring spreaders. Guide Rod, and discard. If needed, a vise, with soft jaws, may be used to secure the Guide Rod. Retain the ring for reassembly.

Wire Ring





a vise with soft jaws may be used to secure the Guide Rod. Wash, clean and dry the Guide Rod thoroughly.



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.

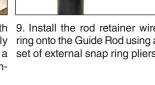
GRS.50.HD / GRS.50.HD.R **Construction for:** GRS.50.HD.R Only GRS.30.HD / GRS.36.HD / GRS.45.HD / GRS.65.HD Adapter Cap **Guide Rod Rod Collar** (Do not remove from Guide Rod) Guide Rod **Rod Collar** (Do not remove from Guide Rod) *Rod Wiper Guide Retainer -Flange Mount (FH) *Bushings *Bushings *Dampener *Dampener Dampener Backing Ring **Rod Retainer Rod Retainer Rod Retainer Rod Retainer Key** Wire Ring **Rod Retainer Ring Safety Wire Ring**



completely seated into the sized arbor press. retainer.



7. Install the new dampener 8. Push the Rod Retainer with 9. Install the rod retainer wire into the Rod Retainer. Using Dampener Assembly evenly ring onto the Guide Rod using a the dampener retaining lip is hydraulic press or a medium-The assembly will snap into



an arbor press. Make sure it 3 mm allen wrench. is seated on the rod retainer wire ring.



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

IV. Reassembly



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

GRS.50.HD.R only



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).

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

Repair Kits Includes bushings, rod wiper, dampener,

assembly grease and a maintenance manual. Repair Kit Model

*Rod Wiper

*Included in Repair Kit

| <u> </u> | - Itopani Itil |
|------------|----------------|
| GRS.30.HD1 | GRS.30.HD1.RK |
| GRS.30.HD2 | GRS.30.HD2.RK |
| GRS.30.HD4 | GRS.30.HD4.RK |
| GRS.30.HD5 | GRS.30.HD5.RK |
| GRS.36.HD | GRS.36.HD.RK |
| GRS.36.HD1 | GRS.36.HD1.RK |
| GRS.36.HD2 | GRS.36.HD2.RK |
| GRS.45.HD1 | GRS.45.HD1.RK |
| GRS.45.HD2 | GRS.45.HD2.RK |
| GRS.45.HD4 | GRS.45.HD4.RK |
| GRS.45.HD5 | GRS.45.HD5.RK |
| GRS.50.HD | GRS.50.HD.RK |
| GRS.65.HD | GRS.65.HD.RK |
| | |

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

Replacing the Bushings and Wipers



 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 he 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.



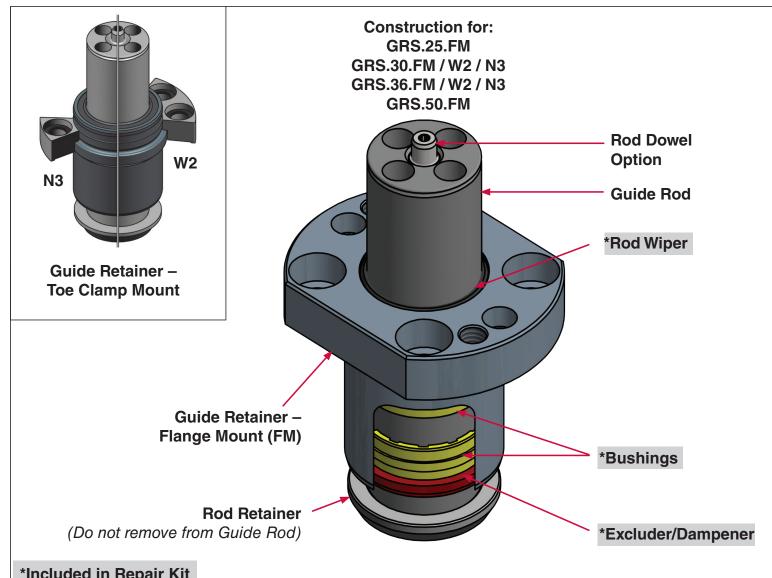
8. Install the new excluder/ dampener into the bottom of Guide Retainer. Check to see it is well seated.

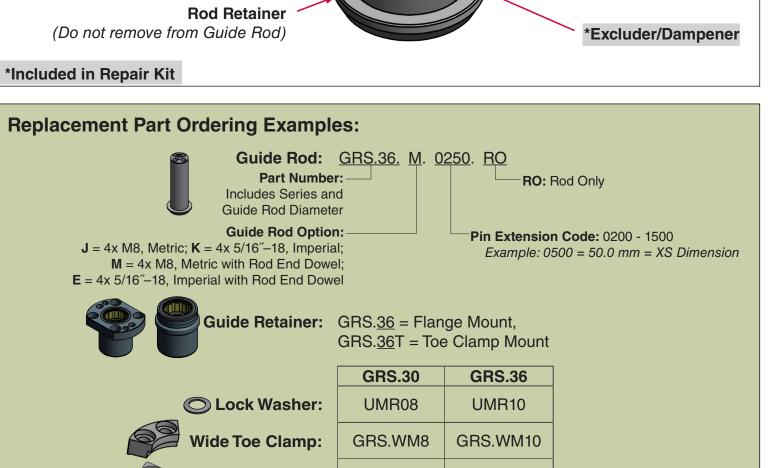


9. Install the third new bushing into the bottom of Guide Retainer. To insert, overlap the gap portion and push the bushing into place past the excluder/dampener. Once all the bushings are installed, use all the grease supplied in the kit to grease the bushings.



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





GRS.NM8

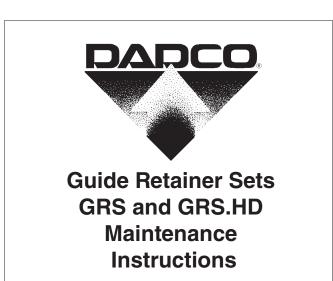
GRS.NM10

Narrow Toe Clamp:

Bulletin No. B17122A

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.



Repair Kits

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

| Model | Repair Kit |
|---------------|------------|
| GRS.25 | GRS.25.RK |
| GRS.30 | GRS.30.RK |
| GRS.36 | GRS.36.RK |
| GRS.50 | GRS.50.RK |
| | |







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