AERO-MOTIVE COMPANY



A Woodhead Industries, Inc. Subsidiary

IMPORTANT SAFETY INSTRUCTIONS

Please read this manual carefully and follow its instructions. Improper use or failure to follow these instructions could result in serious injury, death or property damage. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this manual for future reference.

The following safety precautions call attention to potentially dangerous conditions.

A	DANGER:	Immediate hazards which WILL result in severe personal injury or death.
A	WARNING:	Hazards or unsafe practices which COULD result in <i>severe</i> personal injury or death.
	CAUTION:	Hazards or unsafe practices which MAY result in <i>minor</i> personal injury or product or property damage.

NOTE: Instruct operators in the safe, proper use and maintenance. Keep this manual for future reference.

INSTALLATION

A	WARNING:	Failure to read, understand, and follow these instructions may result in hazards or unsafe practices COULD result in <i>severe</i> personal injury or death.
	CAUTION:	Operators need to be instructed on the safe, proper use and maintenance of this product. Keep this manual for future references. Hazards or unsafe practices MAY result in <i>minor</i> personal injury or product or property damage.

MOUNTING

Some reels come complete with hose and are set at proper tension, ready to install. The fixed base of the reel allows mounting in several different positions including base up, base down, or wall mounted. Here are general mounting requirements:

- Main-shaft must be horizontal.
- Centerline of the spool assembly must be in-line with the hose pull out.
- When mounted overhead in base up position, add a secondary chain, bracket or other safety device to prevent reel from falling in case the mounting bolts are removed or become loosened from vibration.

SECONDARY SUPPORT CHAIN

DANGER: A secondary safety cable or chain is to be attached to all reels mounted overhead to prevent reel from falling. Immediate hazards WILL result in severe personal injury or death.

All reels mounted over head should have a secondary support chain to protect personnel in case of structure or mounting component failure. Attach one end of secondary support chain or cable to reel. Attach other end of secondary support chain or cable to a support component other than that which supports the reel. The chain or cable should be as short as possible allowing reel to drop no more than 6 to 12 inches if the primary connection is released.

SUPPLY HOSE

Assemble supply hose to main-shaft. **Do not** use rigid pipe at input connection. Use Teflon tape or pipe sealant to reel hose fitting threads.

NOTE: To avoid damage to the swivel, use a wrench to support the swivel fitting while tightening the hose.

ADJUSTMENT

RATCHET LOCK

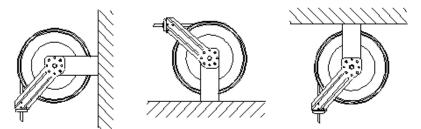


To avoid damage to the reel or personnel, always hold on to the hose while it is CAUTION: rewinding. Hazards or unsafe practices which MAY result in *minor* personal injury or product or property damage.

Ratchet lock works with reel mounted in any position and needs no adjustment. Check reel for correct operation by slowly pulling out the hose. A "clicking" noise will be heard every half revolution of the drum. To latch the reel, pull out the hose and allow it to retract after hearing the first second or third " click". To unlatch, slowly pull out the hose until the "clicking" noise stops, then let the hose retract until the hose stop rests against the hose guide. To disable, ratchet parts must be removed.

HOSE GUIDE ARM ADJUSTMENT

For maximum hose life, adjust guide arm so that the hose payout is in line with guide assembly (see illustration below). To adjust the guide arm, remove screws, and rotate guide arm 90 degrees to next group of mounting holes in stand assembly.



TENSION ADJUSTMENT

CAUTION: Failure to test for adequate spring revolutions can cause damage. Hazards or unsafe practices MAY result in *minor* personal injury or product or property damage.

NOTE: Pull hose out completely to insure enough spring revolutions remain for operating. Always leave at least 1-2 turns between full extension and when the spring is wound tight (bottomed out). If entire hose assembly cannot be pulled out, decrease spring tension until full extension is possible.

Reels shipped with hose installed are pre-tensioned at the factory. Reels shipped without hose require pre-tensioning after hose is installed and *before* making final hose connections. To pre-tension hose reel, pull hose out far enough to allow one full wrap of hose to be looped back over drum assembly. Hold, drum from turning and loop hose back on drum. Repeat steps above until desired tension is achieved. After tension is set, pull hose out completely to check spring travel. If full hose extension is not possible, remove pre-tension turns until full hose tension is possible. Failure to test in this manner may cause spring damage. Complete all hose connections.

<u>SERVICE</u>



Before performing any service, always disconnect and lock out compressed air or fluid, WARNING: and remove all spring tension before attempting any service. Hazards or unsafe practices COULD result in *severe* personal injury or death.

HOSE INSTALLATION AND REPLACEMENT

Remove all tension from reel (see Tension Adjustment). Remove ball-stop, unwind hose on reel, and unscrew hose from swivel. Feed new hose through roller guide and through slot in flange. Then connect hose to swivel (use Teflon tape or thread sealant), wind onto drum assembly, and re-tension reel.

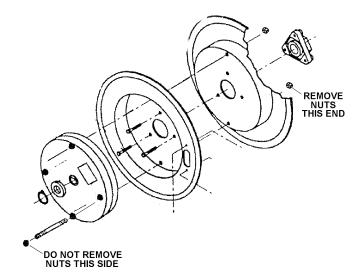
MAINSPRING ASSEMBLY REPLACEMENT

WARNING: Never, under any circumstances, remove spring from its container assembly. Replacement springs are assembled in a sealed assembly for safety and there is no need to remove them. Serious injury or death COULD result from removal of spring from its container assembly.

NOTE: Mainspring is completely self-contained and **safe** to handle. If spring is to be replaced when not broken make sure to remove all tension from reel before proceeding.

If reel will not develop tension or retract hose, the main-spring will need to be replaced. To replace main-spring:

- Remove supply hose to swivel
- Remove swivel by loosening its hex end
- Remove retaining ring and spacer washers from main-shaft.
- Do not attempt to remove screws from <u>swivel side of spring pocket.</u> Instead, <u>remove nuts from the stand side of the</u> <u>drum cavity.</u>
- Pull containerized spring pocket assembly off drum axle
- Reverse procedure to reassemble (use Teflon tape or thread sealant on hose connections)
- Re-tension reel as in "Tension Adjustment"



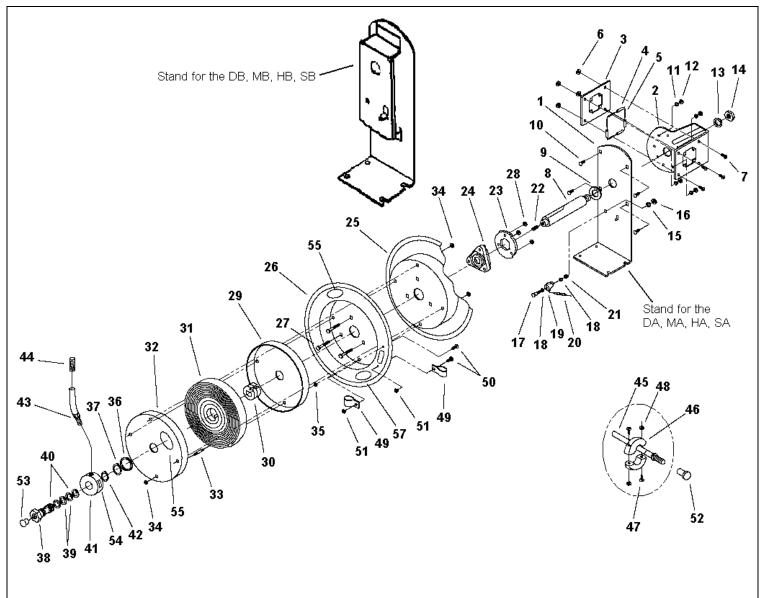
SWIVEL REPLACEMENT

NOTE: Swivel only sold as complete assembly. If o-rings are leaking, complete swivel must be replaced. You may test for leaks using soapy water.

To replace swivel:

- Turn off or lockout air/fluid supply to reel
- Remove all tension from reel (see Tension Adjustment)
- Disconnect supply hose to swivel
- Remove swivel by loosening its hex end
- Disconnect reel hose from swivel
- Reverse above procedure and install new swivel (use Teflon tape or thread sealant on connections)

REPLACEMENT PARTS



NOTE: The DA, DB, MA, MB, HA, HB, SA, and SB reels have common wearing components available as replacement parts. If the part you need is not found on this list, a new reel may be your best alternative.

Reference				
Items	Part Number	Qty.	Description	
29,30,31,32,	H41220132	1	Spring Assembly for DA Series	
33,34,35	H41220134		Spring Assembly for DB Series	
	H41220146		Spring Assembly for MA Series	
	H41220136		Spring Assembly for HB Series	
	H41220135		Spring Assembly for HA Series	
	H41220148		Spring Assembly for HB Series	
	H41220131		Spring Assembly for SA Series	
	H41220133		Spring Assembly for SB Series	
38,39,40,41,	H72320025	1	Swivel Assembly for DA2XX, MA2XX	
42	H72320024		Swivel Assembly for DA3XX, MA3XX	
	H72320035		Swivel Assembly for DB3XX, MB3XX	
	H72320036		Swivel Assembly for DB4XX, MB4XX	
	H72320037		Swivel Assembly for HA2XX, HB2XX	
	H72320028		Swivel Assembly for HA3XX, HB3XX	

	H72320030		Swivel Assembly for SA3XX
	H72320043		Swivel Assembly for SB4XX
43,45	H71130001	1	Hose Assembly for DA230; 30 ft, 1/4 in ID
	H71130002		Hose Assembly for DA330; 30 ft, 3/8 in ID
	H71130004		Hose Assembly for DB350; 50 ft, 3/8 in ID
	H71130005		Hose Assembly for DB430; 30 ft, 1/2 in ID
	H71130006		Hose Assembly for DB450; 50 ft, 1/2 in ID
	H71130020		Hose Assembly for MA230; 30 ft, 1/4 in ID
	H71130011		Hose Assembly for MA330; 30 ft, 3/8 in ID
	H71130012		Hose Assembly for MB350; 50 ft, 3/8 in ID
	H71130013		Hose Assembly for MB430; 30 ft, 1/2 in ID
	H71130014		Hose Assembly for MB450; 50 ft, 1/2 in ID
	H71130015		Hose Assembly for HA230; 30 ft, 1/4 in ID
	H71130019		Hose Assembly for HA325; 25 ft, 3/8 in ID
	H71130016		Hose Assembly for HB250; 50 ft, 1/4 in ID
	H71130017		Hose Assembly for HB330; 30 ft, 3/8 in ID
	H71130018		Hose Assembly for HB350; 50 ft, 3/8 in ID
15,16,17,18,	H46220002	1	Ratchet Kit for SA series
19,20,21	H46220001		Ratchet Kit for DA, MA, HA series
	H46220005		Ratchet Kit for SB series
	H46220004		Ratchet Kit for DB, MB, HB series
4,5,6,7	H44110027	1	Guide Roller Kit for SA series
	H44110024		Guide Roller Kit for DA, MA, HA series
	H44110028		Guide Roller Kit for SB series
	H44110025		Guide Roller Kit for DB, MB, HB series
44,46,47,48,	H73130006	1	Hose Stop Kit for 1/4" Hose & HA200
49,50,51	H73130007		Hose Stop Kit for 3/8" Hose
	H73130008		Hose Stop Kit for 1/2" Hose
	H73130036		Hose Stop Kit for DA300 (includes 3/8" to 1/4" reducer)
	H73130038		Hose Stop Kit for MA300, HA300, HB300 (includes 3/8" to 1/4" reducer)
	H73130037		Hose Stop Kit for DB400 (includes 1/2" to 3/8" reducer)
	H73130039		Hose Stop Kit for MB400 (includes 1/2" to 3/8" reducer)
	H73130040		Hose Stop Kit for SA300 (includes 3/8" to 1/4" reducer)
	H73130041		Hose Stop Kit for SB400 (includes 1/2" to 3/8" reducer)

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