

# D500A & DB500A Series Hose Reel Service Manual

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.



**DANGER:** Immediate hazards which **WILL** result in severe personal injury or death.



**WARNING:** Hazards or unsafe practices which **COULD** result in severe personal injury or death.



**CAUTION:** Hazards or unsafe practices which **MAY** result in *minor* personal injury or product or property damage.

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

## **INSTALLATION**



**WARNING:** Failure to read, understand, and follow these instructions may result in hazards or unsafe practices **COULD** result in severe 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 *minor* personal injury or product or property damage.

## **MOUNTING**

Some reels come complete with hose and are set at proper tension, ready to install. Reels can be mounted in any position, which allows main shaft to be horizontal. When mounted overhead, in base up position, add a secondary chain, bracket, or other safety device to prevent the reel from falling in case the mounting bolts are removed or become loosened from vibration. See **SECONDARY SUPPORT CHAIN** below. Reels should be mounted with centerline of drum in line with hose run and mounted reel on level surface.

## **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 secondary support point on 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. A secondary support is offered as an accessory item.

## **SUPPLY HOSE**

Assemble input hose into main shaft. **Do not** use rigid pipe in input connection.

## ADJUSTMENTS

### RATCHET LOCK

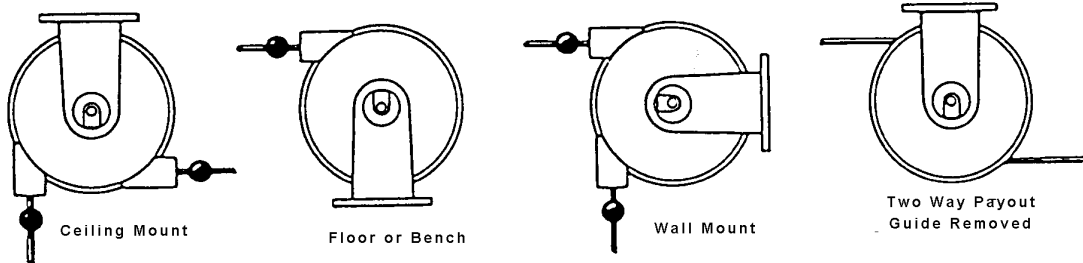
The Ratchet Lock works with reel mounted in any position and needs no adjustment. To disable ratchet, remove the ratchet spring, ratchet pawl, and shaft lever.

### HOSE GUIDE

**NOTE:** The guide must be set so the hose pays off reel in a straight line without bends.

Canopy guide may be set at any position around drum assembly. To adjust canopy guide, remove lock nut and clamp assembly. Rotate canopy guide to desired payout location. Removed for two way payout.

GUIDE MOUNTING POSITIONS



### SPRING TENSION

**NOTE:** Do not connect working end of hose until the reel is properly pretensioned.

Tension may be adjusted before or after final installation of reel and connection of hose has been made. To adjust tension, pull hose out to determine if more or less tension is desired. Place wrench flat ends of mainshaft. While holding wrench firmly, pull spring pin on cover until it allows mainshaft to rotate. Turn mainshaft counter-clockwise to decrease tension and clockwise to increase. Re-engage spring pin when desired tension has been set. (Pin will set every ½ turn).

## SERVICE

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

### HOSE REPLACEMENT

**NOTE:** When replacing hose, be sure all hose fittings are secure.

Remove screws, washers and nuts from base or swivel plate. Remove retaining ring and canopy guide. Remove stand cover-exposing swivel, then loosen clamp. Remove old hose from barb fitting. Install new hose. Reassemble by reversing above procedure.

### O-RING REPLACEMENT

**NOTE:** Take care not to damage or scratch the mainshaft or swivel during swivel removal.

Remove screws, washers and nuts from base or swivel plate. Remove retaining ring and canopy guide. Remove stand cover, four nuts and swivel. Remove old O-Rings and discard. Clean all contamination from mainshaft and swivel. Install new O-Rings and apply light coat of commercial grease to main shaft and swivel. Remove all excess grease. Reassemble by reversing above procedure.

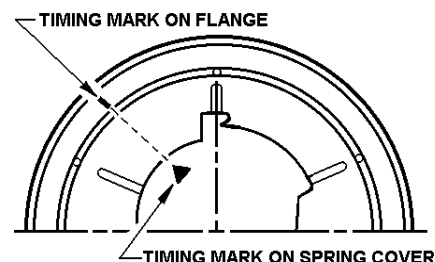
### RATCHET & SPRING ASSEMBLY REPLACEMENT

**NOTE:** When reassembling ratchet and spring assembly be sure arrow on ratchet aligns with alignment hole in drum.

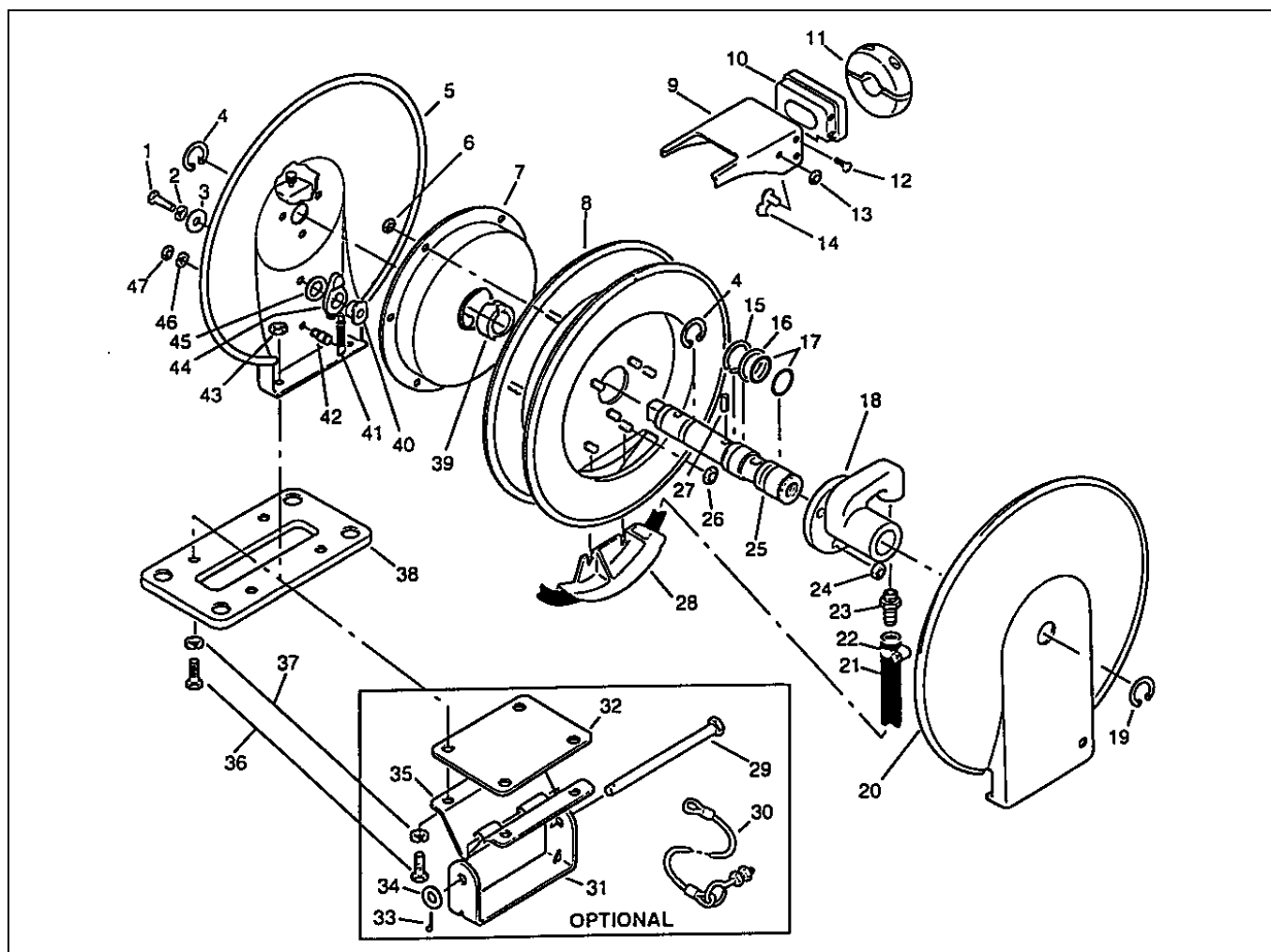
**WARNING:** Never, under any circumstances, remove spring from its spring pocket assembly. Replacement springs are assembled in a sealed assembly for safety and there is no need

to remove them. Serious injury or death could result from removal of spring from its cartridge.

If reel will not develop tension or retract hose, ratchet and spring assembly will need to be replaced. Remove screws, washers and nuts from base or swivel plate. Remove retaining ring and canopy guide. Remove cover assembly. Remove six nuts and ratchet and spring assembly from drum assembly and replace. To reassemble reverse above procedure.



## REPLACEMENT PARTS



Reference Number	Part Number	Qty.	Description
1	00030P0115	1	Screw (1/4-20 x 1/2 inch Hex)
2	00101P0030	1	Washer (1/4 inch lock)
3	00126P0050	1	Washer (1/4)
4	00580P0045	1	Retaining Ring
5	61604000YE	1	Cover Assembly
6	00106P0077	6	Lock Nut (10-24)
7*	5784600002	1	Ratchet & Spring Assembly D513, D522, DB504
	5784600003		Ratchet & Spring Assembly DB508

8	5787500000	1	Drum Assembly
9	57812000YE	1	Guide Canopy
10	5781400000	1	Nose, Guide
11	ST-1	1	Hose Stop (5373200000)
12	01137P0062	4	Screw (#6-32 x 5/16, self-tap)
13	00160P0077	2	Lock Nut (10-24)
14	5785500000	2	Clamp Assembly
15	00576P0046	1	Retaining Ring
16	4301000000	1	Washer
17*	C47060120	2	O-ring
18	M72420031	1	Swivel
19	00576P0046	1	Retaining Ring
20	57803000YE	1	Cover ,Stand
21*	H71180049	1	Hose Assembly (D513)
	H71180029	1	Hose Assembly (D522)
	5382100026	1	Hose Assembly (DB504), (DB508)
22	00671P0010	1	Hose Clamp
23	00658P0049		Barb Fitting D522A, D522A, D522*GCA, D522*HEA
	00658P0035		Barb Fitting DB504-SA, DB508-SA, D513A, D504A, DB508A, D513-SA
24	00160P0050	4	Nut (10-24 Lock)
25	M27370006	1	Mainshaft
26	00160P0077	2	Lock Nut (10-24)
27	00230P0103	1	Self-Lock Pin
28	5872300000	1	Guide
29	2006000000	1	Pin, Mounting Bracket
30	6238800000	1	Cable, Safety (optional)
31	02009000YE	1	Mounting Bracket
32	57877000YE	1	Plate, Swivel
33	00228P0010	1	Cotter Pin
34	3036500000	1	Washer
35	57808000YE	1	Swivel
36	00030P0115	4	Screw (1/4-20 x 1/2 ")
37	00101P0030	4	Lock Washer (1/4")
38	57807000YE	1	Base Plate
39	1405800002	1	Hub, Spring Release
40	5784300000	1	Shaft Lever
41*	5772700000	1	Spring Ratchet
42	5785000000	1	Pin, Spring
43	00151P0020	4	Nut (1/4-20 x Hex Head)
44	5784100000	1	Lever, Ratchet
45	4737800000	1	Washer
46	00103P0020	1	Lock Washer (#6)
47	00151P0015	1	Nut (#6-32)
Optional	5797200000	1	Swing Mount

\*recommended spare parts

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