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 severe personal injury or death.

A

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. 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 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 supply hose to main shaft . **Do not** use rigid pipe at input connection.

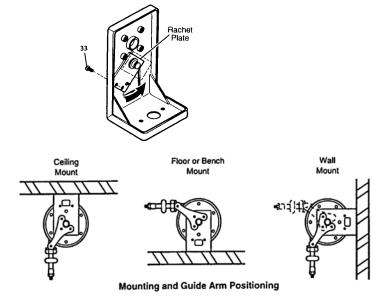
ADJUSTMENT

RATCHET LOCK

The Ratchet Lock works with reel mounted in any position and needs no adjustment. To disable ratchet, remove screw and slide ratchet plate in pivoting motion to opposite side. Re-install screw in new position



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 three 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 revolution 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. Prevent 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.

SERVICE



WARNING:

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

HOSE INSTALLATION AND REPLACEMENT

NOTE: When replacing hose make sure all hose fittings and clamps are secure.

Remove all tension from reel(see Tension Adjustment). Remove ball stop and disconnect hoses from swivels. Remove hose form reel. Place new hose through roller guide and connect to swivels making sure fittings and clamps are snug. Wind hose on to reel and re-tension.

NOTE: It is recommended that all fittings be sealed with thread sealer approved for use with technical oxygen.

SM5809-01C Page 2 of 5 © Aero-Motive Company Feb-02

MAINSPRING, CUP & RATCHET ASSEMBLY REPLACEMENT

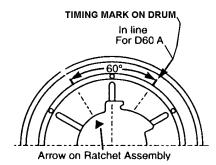


WARNING:

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.

NOTE: Mainspring is completely self-contained and safe to handle.

If reel will not develop tension or retract hose, the main spring, cup, and ratchet assembly will need to be replaced. To replace main spring, cup and ratchet assembly, loosen set screw and drum assembly complete with main shaft from stand. Remove nuts and mainspring, cup and ratchet assembly from drum and replace. To reassemble, reverse above procedure. Align arrow on ratchet plate with notch on drum assembly.



O-RING REPLACEMENT



CAUTION: Before servicing, cut off gas supply and remove all spring tension from reel.



WARNING:

Use of petroleum based lubricants on the swivel components or hose fittings can cause fire or explosion.

NOTE: There are two sets of O-rings (A) in this reel, inner set (0.897 inch OD) and outer set (1.005 inch OD). Both sets of o-rings should be replaced at the same time to prevent future down time.

Outer o-ring replacement

- · Disconnect the hoses from swivels.
- · Remove outer swivel from the reel by loosening nut on outer swivel and backing it out.
- Disassemble the outer swivel by removing the retaining ring and the washer.
- Slide the shaft out of the swivel body.
- Remove the old o-rings and any contamination from the shaft and swivel.
- Install the new o-rings 1.005 inch OD. A light coat of grease approved for oxygen use oxygen should be used on o-rings and shaft to ease assembly.



CAUTION: Only use lubricants that are approved for use with oxygen.

• Reverse the above procedure for reassembly.

Inner o-ring replacement

- Note the position of the swivel on drum. Swivel must be replaced in the same position for hose connections
- Remove spool swivel retaining ring, washer, and the three nuts holding swivel to drum.
- Carefully slide the swivel off shaft.
- Remove the old o-rings and any contamination from the shaft and swivel.
- Install the new o-rings (24), 0.897 inch OD. A light coat of special grease approved for use with oxygen should be used on the o-rings and shaft for ease of assembly.

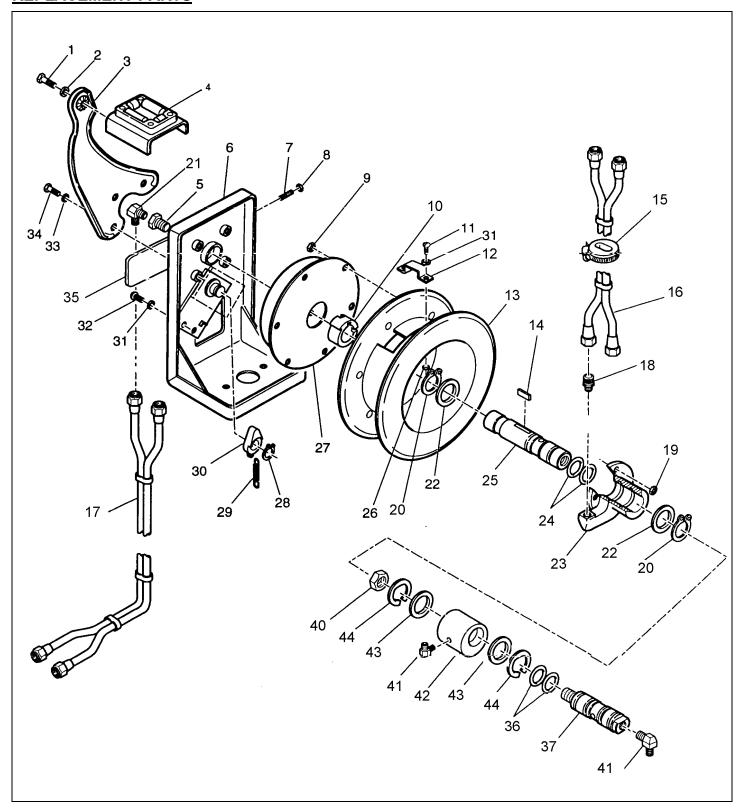


CAUTION: Only use lubricants that are approved for use with oxygen.

- Reverse above procedure to reassemble.
- Pretension the reel as described in section "Tension adjustment".

SM5809-01C Page 3 of 5 © Aero-Motive Company Feb-02

REPLACEMENT PARTS



Reference			
Number	Part Number	Qty.	Description
1	00031P0025	1	Screw 5/16-18x7/8
2	00101P0014	1	Lock washer 5/16
3	58784000YE	1	Guide arm
4.	1DF	1	Roller guide
5	00669P0041	1	Reducer
6	58788000YE	1	Stand assembly
7	4004500000	1	Set screw 5/16-19x3/8 round head
8	00151P0050	1	Jam nut 5/16-18
9	00160P0050	9	Lock nut #10-24
10	4031800003	1	Hub, spring
11	00005P0110	2	Screw #10-24x1/2 round head
12	01220P0002	1	Hose clamp
13	58786000YE	1	Drum assembly
14	4077300007	1	Key
15	ST-22	1	Hose stop assembly - 61653
16	4306600022	1	Dual weld hose assembly x15 feet
	4306600023	1	Dual weld hose assembly x25 feet
17	5503800000	1	Lead in hose
18	00750P0003	1	Adapter 9/16-18x3/8 NPT
19	00160P0050	1	Lock nut #10-24
20	00576P0046	2	Retaining ring
21	00746P0001	1	Adapter angle 9/16-18x1/4 NPT
22	4301000000	2	Washer 7/8
23	M72420031	1	Swivel
24	00700P0060	2	O-ring, inner 0.879 OD
25	M37700002	1	Main shaft
26	00151P0025	1	Hex nut #10-24
27	58771000YE	1	Main spring assembly
28	00580P0050	1	Retaining ring500
29	C60610118	1	Ratchet spring
30	5906100000	1	Ratchet lever
31	00101P0015	3	Lock washer #10
32	01137P0057	1	Screw #10-24x1/2 Philip head
33	00101P0030	3	Lock washer 1/4x.062
34	00030P0111	3	Screw, hex 1/4-20x5/8
35	M13060093	1	Name plate
36	00700P0076	2	O-ring, outer 1.005 OD
37	612620000	1	Shaft
40	01250P0001	1	Seal nut 1/4 NPT
41	00746P0002	2	Adapter, angle 9/16-18x1/4 NPT
42	5946100001	1	Swivel
43	5946300000	2	Washer
4.4	0050000400	0	Detaining vine 4,000

Aero-Motive Company

44

00580P0136

W A Woodhead Industries Inc. Subsidiary PO Box 2678 Kalamazoo, MI 49003-2678 (616) 337 7700 (800) 999 8559 FAX: (800) 333 6119 www.aeromotive.com

AKAPP Electro Industrie

2

N A Woodhead Industries Inc. Subsidiary Nijverheidsweg 14 Box 54 NL-3771 ME Barneveld NL-3771 AB Barneveld Holland (31) 34 241 4022 FAX: (31) 34 249 2384 www.akapp.com

Woodhead Connectivity LTD.

Retaining ring -- 1.000

W A Woodhead Industries Inc. Subsidiary
Factory No. 9
Rassau Industrial Estate
Ebbw Vale Gwent NP3 5SD
United Kingdom
(0495) 35 0436
FAX: (0495) 35 0877
sales@wdhd.co.uk

Woodhead Asia PTE LTD.

W A Woodhead Industries Inc. Subsidiary 401 Commonwealth Drive #04-04 Haw Par Technocentre Singapore 0314 (65) 261 6533 FAX: (65) 479 3588 sales@wasia.com.sg

Woodhead Canada LTD.

W A Woodhead Industries Inc. Subsidiary 1090 Brevik Place Mississauga Ontario L4W 3Y5 Canada (905) 624-6518 FAX: (905) 624-9151 www.woodhead.ca