# **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:** 

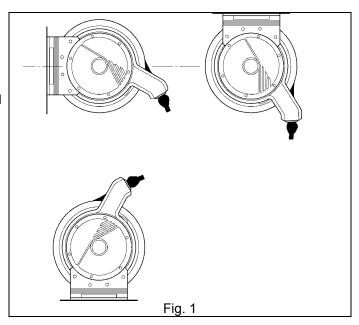
Hazards or unsafe practices which MAY result in *minor* personal injury or product or property damage.

# **INSTALLATION**

#### **MOUNTING**

(Fig. 1) The reel can be wall-, floor-, or ceiling mounted according to the illustrations.

- Choose a way of mounting to avoid excessive bending of the hose against the outlet rollers.
- Select a level surface to mount the reel and use the template to mark the holes.
- Ensure suitable fixing bolts are used and they are secure.
- When choosing a mounting place it should be noted the lifetime of the hose can be affected by chemicals and strong UV- or heat radiation.



#### **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.

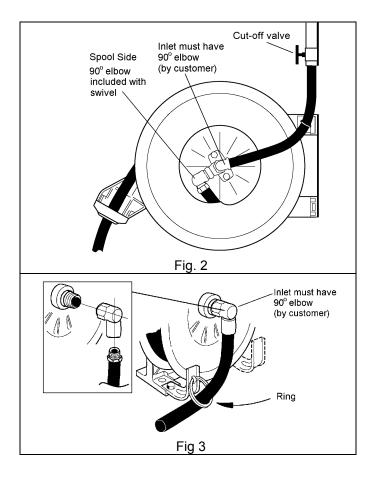
All reels mounted over head should have a secondary support chain to protect personnel in case of structure or mounting component failure. Attach one end of secondary support chain or cable to reel. Attach other end of secondary support chain or cable to a support component other than that which supports 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**

NOTE: A 90° female NPT elbow is included for spool side hose connection (fig. 2). Inlet connection is Male NPT and requires a 90° elbow (by customer) on inlet hose (fig. 3). An elbow with female NPT connections on both ends will allow a male NPT fitting on inlet hose.

(Fig. 2 & 3) The reel must be connected to the pipework system with flexible inlet hose only. [Do not use rigid pipe.] The hose should go through the ring connected to the bracket (see arrow) before connecting to swivel. Check that the inlet hose is not twisted or strained after connection. Install reducer bushings as necessary.

A cut-off valve should be fitted on the pipe system before the hose connection.



# **ADJUSTMENT**

#### **RATCHET LOCK**

Ratchet lock is included on every model and works with reel mounted in any position. If application requires constant tension instead, complete ratchet lock mechanism must be removed.

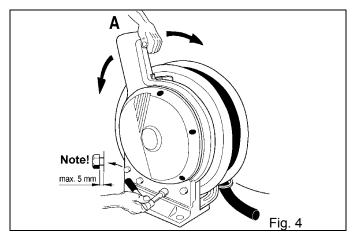
To remove ratchet lock:

- 1. Remove all reel tension.
- 2. Remove the plastic cover and spring hub (fig. 6).
- 3. Remove spool.
- 4. Remove ratchet and spring mechanism.
- Reassemble reel.

#### HOSE GUIDE ARM POSITION

(Fig. 4) The guide arm may be rotated and locked into multiple positions.

Select an angle to ensure a minimum bending angle for the hose against the outlet rollers.



#### 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 full length of hose out to insure enough spring revolutions remain for complete operation. 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 (you may have to remove the Hose Guide w/Ring). 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 media before attempting any service. Hazards or unsafe practices COULD result in severe personal injury or death.

#### HOSE INSTALLATION AND REPLACEMENT

NOTE: (Fig. 2) A 90° female NPT elbow is included for spool side connection with male NPT hose fitting. Inlet connection is Male NPT and requires a 90° elbow (by customer) on inlet hose (fig. 3). An elbow with female NPT connections on both ends will allow a male NPT fitting on inlet hose.

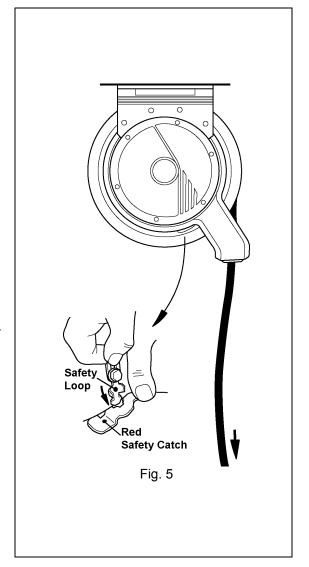
- 1. Turn off supply of input fluid media.
- 2. Pull out hose completely.
- 3. Engage the safety catch to the drum by disengaging the safety loop (fig 5).
- 4. Remove ball stop from hose.
- 5. Disconnect hose from swivel.
- 6. Remove hose from reel.
- 7. Lay new hose on floor, pull end though guide and attach to swivel.
- 8. Disengage safety catch and allow hose to slowly rewind (fig. 5).
- 9. Engage ratchet and install hose stop.
- 10. Recheck connections and turn on the supply of fluid.

## **SWIVEL REPLACEMENT**

- 1. Turn off supply of input fluid media.
- 2. Engage the safety loop (fig. 5).
- 3. Disconnect both input and output hose from swivel.
- 4. Remove swivel from reel.
- 5. Install new swivel.
- 6. Attach input and out hoses to swivel.
- 7. Disengage safety loop (fig. 5).
- Recheck connections and turn on the supply of fluid media.

(Refer to supply hose installation as needed.)

NOTE: Install reducer bushing w/thread sealant when necessary.



#### MAINSPRING REPLACEMENT



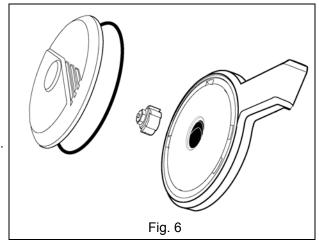
#### **WARNING:**

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.

Mainspring is completely self-contained and **safe** to handle. If reel will not develop tension or retract hose, the main spring, assembly will need to be replaced. See Replacement Parts for the appropriate replacement spring assembly.

To replace main spring (fig. 6):

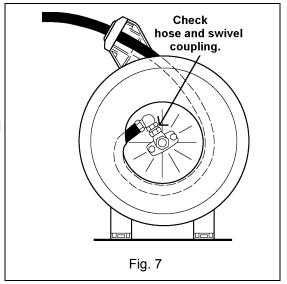
- 1. Remove four bolts connecting base to spring assembly (fig. 4).
- 2. Remove six screws to housing cover and remove.
- 3. Remove screw in hub. Pull spring assembly off drum assembly.
- Replace the spring assembly with the new spring assembly.
- 5. To reassemble, follow this procedure in reverse.



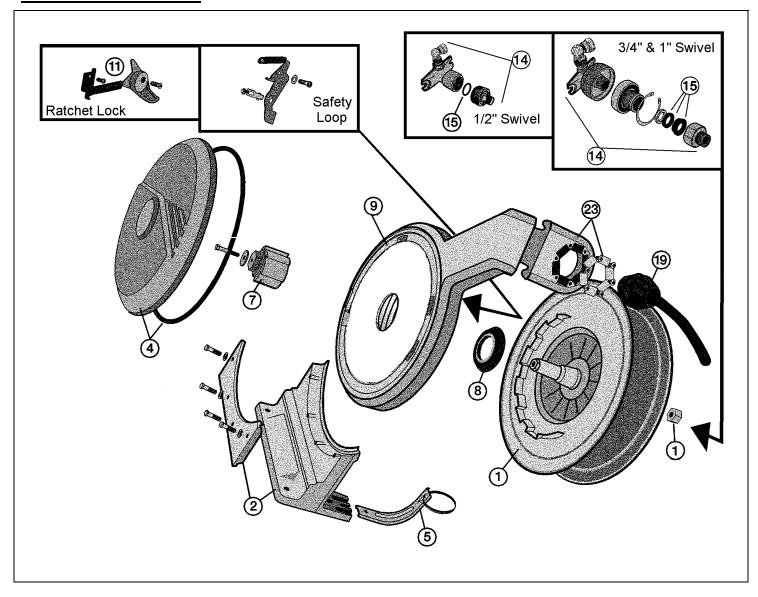
# **MAINTENANCE**

When performing regular maintenance on the reel, remember to check the following items:

- 1. Check the mainspring function by testing if the hose retracts properly.
- (Fig. 7)Check swivel and hose couplings for leaks.
   Change the seal(s) if required. Clean the swivel and couplings.
- 3. Check the reel's external seals. If any are cracked, all should be replaced.
- 4. Check hose for wear and tear. Replace if needed. Clean hose if dirty.
- 5. Check the ratchet mechanism.
- 6. Check the mounting of the reel on wall or ceiling.



# **REPLACEMENT PARTS**



Reference			
Number *	Part Number	Qty.	Description
1	H42330559	1	Drum/Insert
2	H22120030	1	Bracket/Clamp/Fasteners
4	H22710022	1	Cover w/Seal
5	H25410118	1	Hose Guide w/Ring
7	M04820001	1	Spring Hub w/Fasteners
8	M11100002	1	Bearing
9	H41220149		Spring Assembly with Outlet Arm/Bushing; D8814
	H41220150	1	Spring Assembly with Outlet Arm/Bushing; D8824
	H41220156		Spring Assembly with Outlet Arm/Bushing; D8816 & D8818
11	H46230020	1	Ratchet kit
14	H72320053		Swivel Assembly; 1/2"
	H72320054	1	Swivel Assembly; 3/4"
	H72320055		Swivel Assembly; 1"
15	H73130043	1	Seal and Backing Washer for all size swivels
	H33340010		Hose Stop; 1/4"
	H33340011		Hose Stop; 3/8"
19	H33340012	1	Hose Stop; 1/2"
	H33340013		Hose Stop; 3/4"
	H33340014		Hose Stop; 1"
23	H25410120	1	Outlet, complete with Rollers

## **Daniel Woodhead Company**

A Woodhead Industries Inc. Subsidiary Northbrook, IL USA 888-996-6343 Fax: (847) 272-8133 www.danielwoodhead.com wetechsup@danielwoodhead.com

# Woodhead Canada LTD.

M A Woodhead Industries Inc. Subsidiary
Mississauga Ontario Canada
(905) 624-1079 FAX: (905) 624-9151
www.woodhead.ca

## **Aero-Motive Company**

W A Woodhead Industries Inc. Subsidiary
Kalamazoo, MI USA
(269) 337-7700 FAX: (800) 333 6119
www.aeromotive.com
techhelp@aeromotive.com