Diesel Exhaust Fluid (DEF) Hose Reel

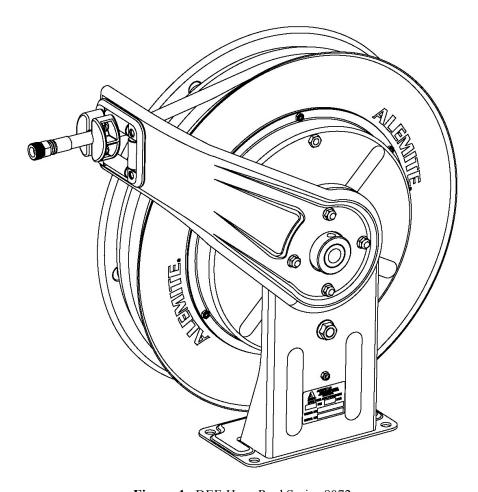


Figure 1 DEF Hose Reel Series 8072

Personal Safety

Personal injury and/or equipment damage may result if proper safety precautions are not observed.



WARNING

- Even low pressure can cause irreparable damage or death. Exercise extreme caution while operating or servicing this equipment.
- Do not use reel at higher pressures or temperatures than listed in specification table below.
- Ensure that reel is properly installed before connecting supply line (see instructions).
- Before connecting supply line to reel, ensure that supply line pressure does not exceed maximum rated working pressure of reel.
- Do not wear loose fitting clothing while operating reel.
- Be aware of other personnel/machinery in work area.
- If a leak occurs in hose or reel, remove supply line pressure immediately.
- Pull hose by grasping the hose itself not by the dispense nozzle.
- If reel ceases to unwind or rewind properly, remove power immediately. Do not pull or jerk on hose. Find and remedy problem before continuing.
- Treat and respect a hose reel as any other piece of machinery, observing all common safety practices.
- Release all pressure within the system prior to performing any maintenance procedure.

Specifications

MODEL	DEF HOSE	PRESSURE	TEMPERATURE
8072-A	½" ID X 30' [13mm X 9m]	300 psi	-15°F to 250°F [-26°C to 151°C]
8072-B	½" ID X 50' [13mm X 15m]	[21 bar]	

CONNECTION LOCATION	THREAD TYPE	
Hose Reel Inlet	½" BSPP (Female)	
Hose Outlet	½" BSPP (Male)	

Description

These reels are designed to dispense Diesel Exhaust Fluid (DEF) which is also known as aqueous urea solution 32 (AUS 32). DEF is a 32.5% solution of high-purity urea in demineralized water which is injected into diesel engine exhaust by a selective catalyst reduction (SCR) system to reduce nitrogen oxide emissions. DEF must be stored, transported and dispensed using approved materials which will not contaminate the fluid. The wetted parts of these reels, the reel shaft and swivel, are constructed from stainless steel and have flouroelastomer seals. The dispense hoses included with the reels feature an EPDM tube and cover with stainless steel fittings. All of these components are constructed of materials approved for use with DEF.

Installation

A flexible hose connection must be used between the hose reel inlet and the source of supply to prevent possible misalignment and binding. An inlet hose is not included with this reel and must be ordered separately. Alemite offers model 343143, a ½" ID x 2 ft. long DEF hose with ½" BSPP (Male) connector on each end.

Mounting

The hose reel is equipped with a universal mounting bracket so that it can be mounted on the floor, wall, or ceiling; whichever place is convenient. The hose guide arm can be moved to the position desired by removing the nuts fastening the guide bracket to the reel base. Shift the guide arm bracket so the hose comes off the reel at the desired position and replace the nuts. Refer to Figure 2 for dimensional drawing.

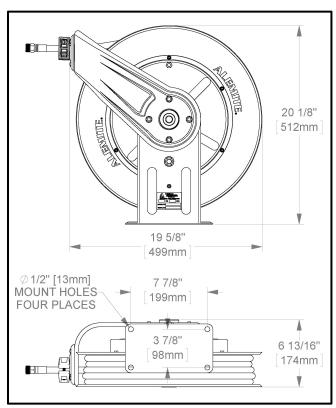


Figure 2 DEF Hose Reel Series 8072 - Mounting

Lubrication

Hose reel spring and bearings are factory lubricated and require no further lubrication.

Delivery Hose Replacement

Disassembly

1. Extend the delivery hose completely from the reel.



WARNING

Precautions must be taken to ensure the Sheave Assembly remains engaged with the Power Spring's ratchet. To prevent movement either:

- Instruct an assistant to grip the Sheave Assembly securely with non-slip gloved hands or
- Install a clamp on the Sheave Assembly Personal injury can occur.
- 2. Remove the dispense nozzle and hose bumper.
- 3. Disconnect the delivery hose from union.
- 4. Remove Wing Nuts and Washers that secure U-Bolt to the hose.
- 5. Feed hose through the Hose Guide Assembly and remove the hose.

Assembly

- 1. Wind spool flange clockwise-facing swivel-until spring is tight.
- 2. Back off three turns and latch.
- 3. Feed the end of the new delivery hose through the Hose Guide Assembly.
- 4. Connect hose fitting to swivel joint (24).

Hint: Orient the hose to allow its natural curve to match the Sheave. This reduces torque load on the Power Spring Assembly.

- 5. Secure hose to spool using included U-bolts. *IMPORTANT: Allow some slack on the hose between the U-Bolt and Swivel Joint (24)*.
- 6. Install dispense nozzle (with thread sealant) and hose stop to the delivery hose.
- 7. Pressurize the system and check for leaks.
- 8. Carefully release the Sheave Assembly and retract the hose onto the reel.
- 9. Check Spring Tension.

Setting Spring Tension

To adjust spring tension, add or remove wraps of hose from the spool, one wrap at a time until desired tension is obtained.

When the hose is fully extended from the reel, the power spring should be a minimum of $\frac{1}{2}$ turn from a fully wound condition.

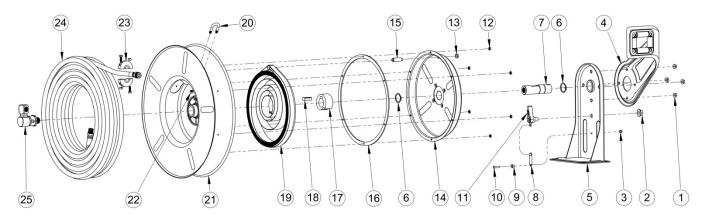
Repairs

Extensive repairs should be performed only by an authorized service center to avoid damage which may void warranty. Remove all spring tension before beginning disassembly process.



WARNING

 Failure to remove spring tension before disassembly can cause irreparable bodily damage or death.



ITEM	D. DE NG	QTY.		DECOMPTION	
NO. PA	PART NO.	8072-A	8072-B	DESCRIPTION	
1		4	4	Lock Nut, 5/16"-18	
2		1	1	Hex Flange Nut, 1/2"-20	
3		1	1	Nyloc Nut, #10-32	
4		1	1	Guide Arm Assembly	
5		1	1	Base Assembly	
6	393539-154	2	2	External Retaining Ring, 1-1/4"	
7		1	1	Main Shaft 3/4" BSPP X 1/2" BSPP 316 SS	
8	393539-91	1	1	Latch Spring	
9		1	1	Latch Bushing	
10		1	1	Machine Screw, #10-32 x 7/8" Long	
11	393539-74	1	1	Latch Paw Assembly	
12		6	6	Hex Lock Nut, #10-32	
13		1	1	Hex Jam Nut, 3/8"-24	
14		1	1	Spring Case & Ratchet Assembly	
15	393539-4	1	1	Spring Case Stud	
16		1	1	Spring Case Gasket	
17		1	1	Spring Arbor	
18		1	1	Arbor Key	
19	393539-155	1	1	Drive Spring Assembly	
20		1	1	U-Bolt, 1/2" I.D. 1/4-20 Threads	
21		1	1	Sheave Assembly	
22		2	2	Hex Lock Nut, 1/4"-20	
23	393539-156	1	1	Hose Bumper Assembly	
24	393539-157	1		DEF Hose; 1/2" ID x 30 Ft. Long, (2) 1/2" BSPP (Male)	
∠ 4	393539-158		1	DEF Hose; 1/2" ID x 50 Ft. Long, (2) 1/2" BSPP (Male)	
25	393539-159	1	1	Swivel Assembly	
		A	CCESSO	RIES AND REPAIR ITEMS	
	343143-2			1/2"ID x 2 Ft Long DEF Hose with 1/2" BSPP Male Ends	
	393539-160			Drive Spring Assembly & Gasket Replacement Kit	
	393539-161			Swivel Repair Kit	
	343196			Adapter, SS 3/4"BSPP (male) x 1/2" BSPP (female)	

Changes Since Last Printing

 $Referenced\ LOCTITE^{\circledast}\ 567^{\text{TM}}\ as\ Registered\ Trademark\\ and\ updated\ Swivel\ Assembly$

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