

I **INSTALLATION INSTRUCTIONS**

THINLINE™ Hose Reel

Manual Number 673835-R3

**cascade®
corporation**

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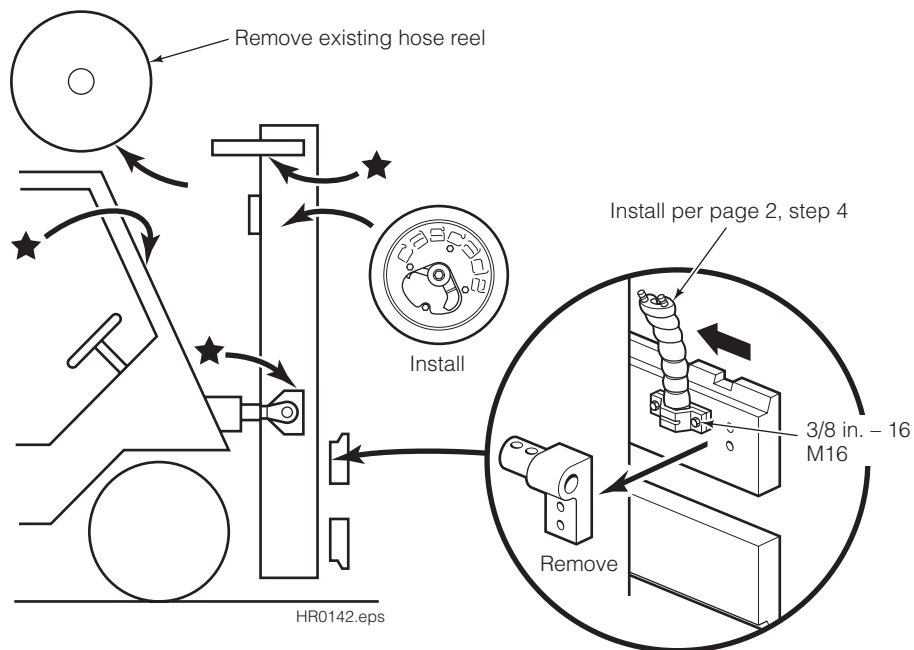
This Manual provides instructions for installing THINLINE™ Hose Reels.

Follow the suggested installation procedures for best results. If you have any questions or need more information, contact your nearest Cascade Service Department (see back cover).

Read the **WARNING** Statements placed throughout this Manual to emphasize safety during installation.

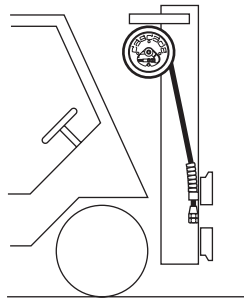
IMPORTANT: Field alterations may impair performance or capability and could result in loss of warranty. Consult Cascade for any required modifications.

E XISTING REEL REPLACEMENT

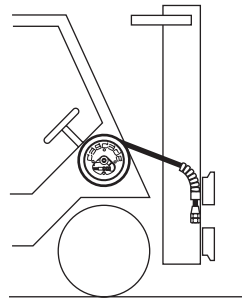


★ Check clearances

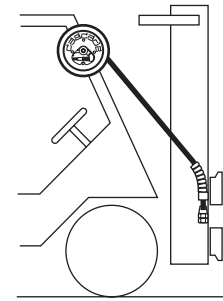
1 Select mount location



Preferred



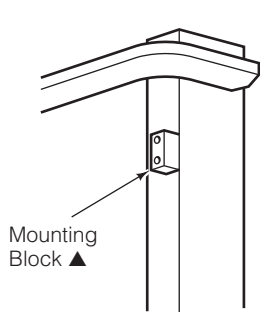
Good



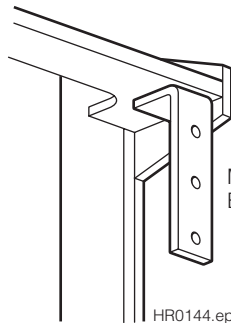
Good

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2 Install mounting bracket



Mounting Block ▲



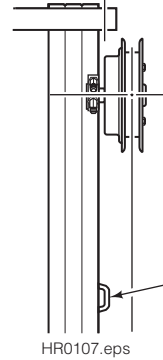
Mounting Bracket ▲

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Select location for necessary minimum clearances shown.

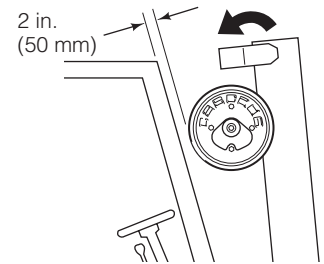
▲ Refer to page 5 for welding instructions

.25 in.
(6.5 mm)



HR0107.eps

2 in.
(50 mm)



HR0109.eps

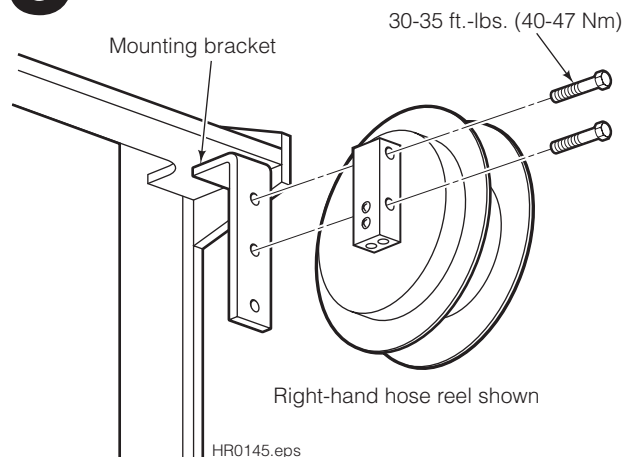
Note any interference

Hose Size Outer Diameter	Minimum Clearances
No. 6 / 13	2.5 in. (63.5 mm)
No. 6 / 16	2.5 in. (63.5 mm)
No. 8 / 16	3.0 in. (76 mm)



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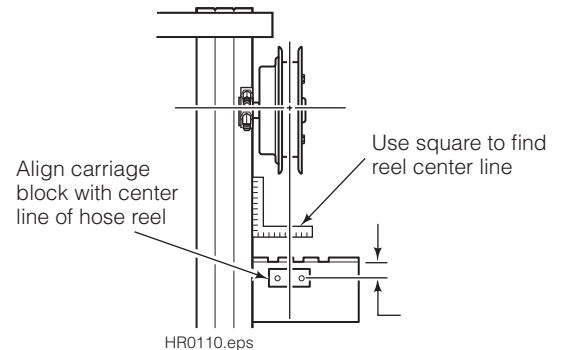
3 Mount hose reel



Right-hand hose reel shown

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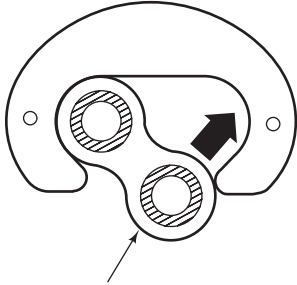
4 "Down" terminal connection block



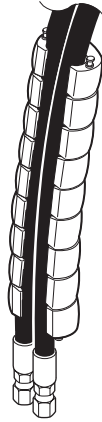
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NOTE: Refer to page 5 for welding instructions.

5 Install hose into restraint

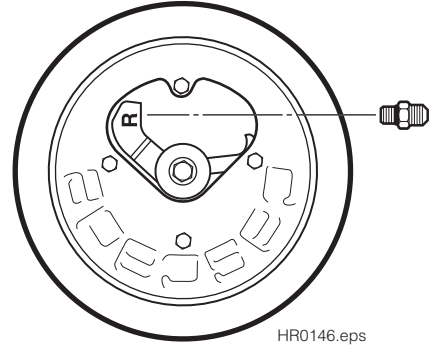


Press and twist hose into restraint



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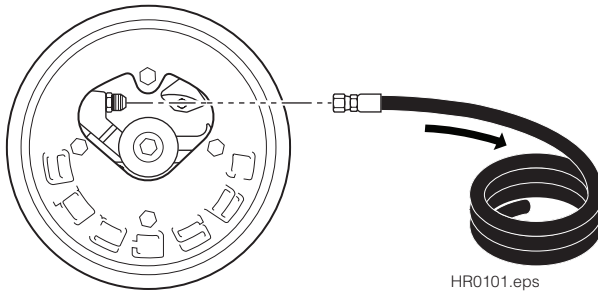
6 Install hose fittings



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7 Install hose on reel

Hold hose while tightening to prevent twisting



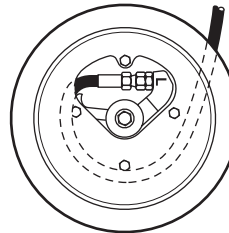
HR0101.eps

NOTE: Install hose with natural set in direction of wind

8 Wind hose on reel

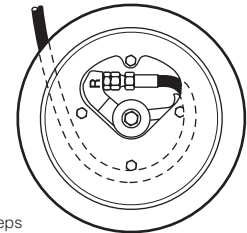
Left hand

Right hand



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Wind counterclockwise



Wind clockwise

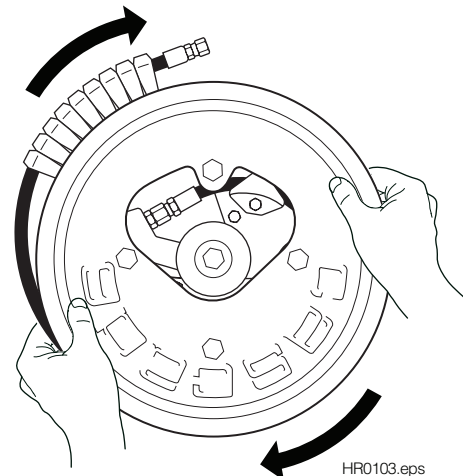
NOTE: See page 4 for spring reversal.

9 Prewind Hose Reel

NOTE: Hose reel mounted on mast

RH reel shown (Prewind LH reel in opposite direction)

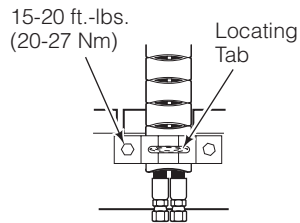
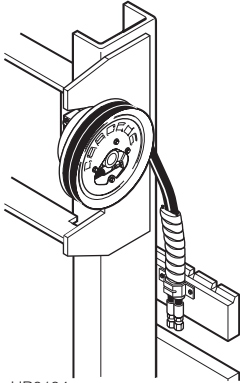
Hose Size	Prewinds	Maximum Turns
No. 4 / 11	5	11
No. 6 / 13	5	13
No. 6 / 16	5	13
No. 8 / 16	5	13



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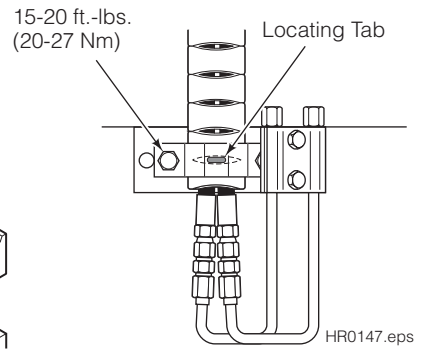
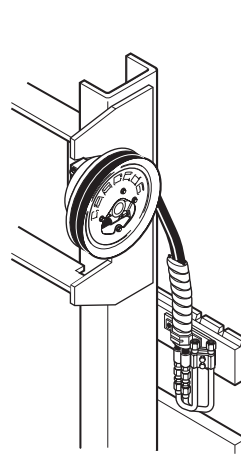
10 Mount hose connection terminal

Install clamp locating tab between first and second segments



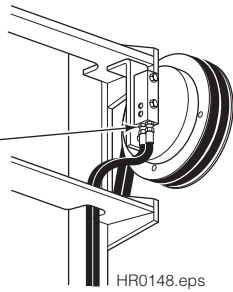
"UP" CONNECTION KITS

For attachment connect above carriage

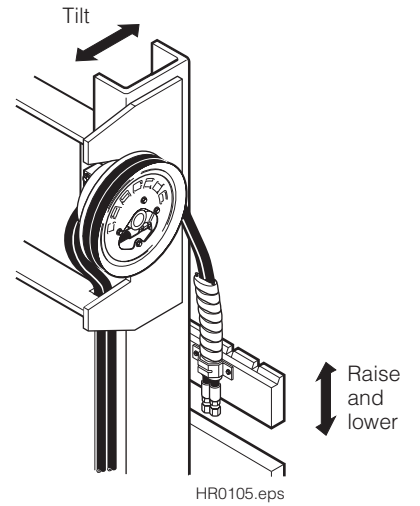


11 Connect truck hose

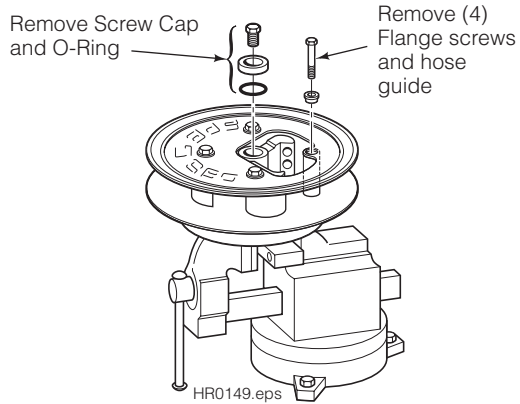
Install fittings and connect truck hoses



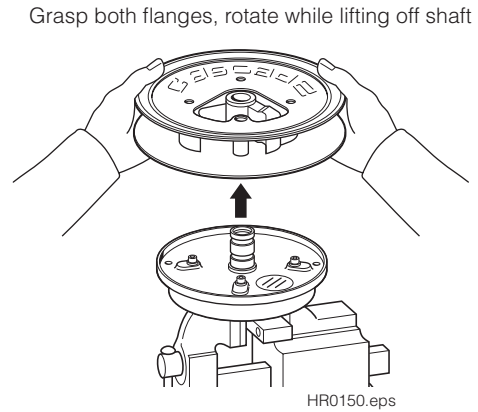
12 Recheck clearances



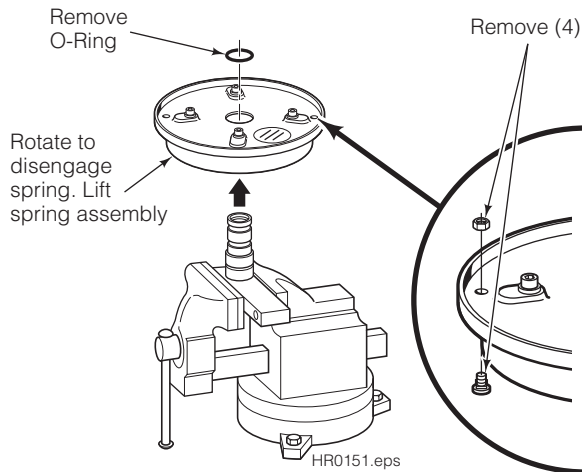
1 Place reel in vise



2 Remove flanges

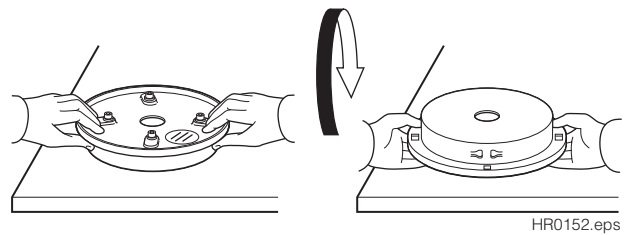


3 Remove spring assembly

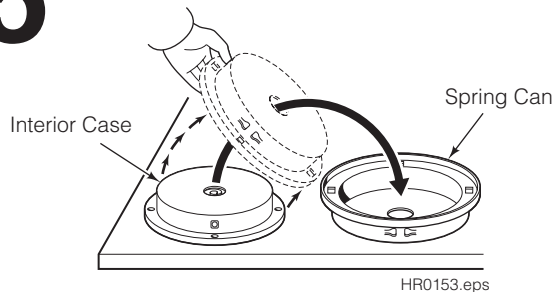


CAUTION: Do not damage shaft

4 Turn spring assembly

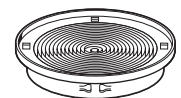
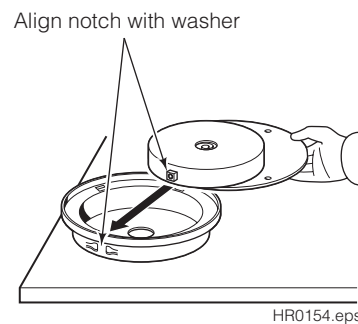


5 Lift off spring can



WARNING: Do not remove spring from inner can. **Spring is under tension.**

6 Slide spring into can



Right Hand Reel

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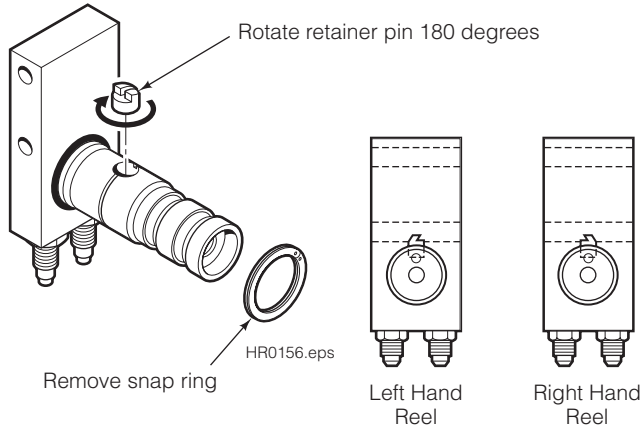


Left Hand Reel

673835-R3

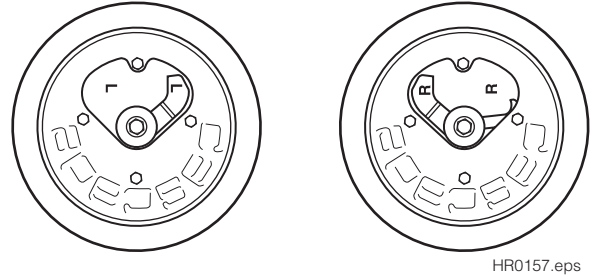
R EVERSING REEL

7 Reverse spring retainer pin



8 Reassembly

For reassembly, reverse steps 1 thru 3. Assemble with letter on hub and cover matching.



W ELDING SPECIFICATIONS

- 1 Use 0.188 in. (5 mm) fillet weld.
- 2 Use E60XX weld rod. No preheat or post heat required.
- 3 Disconnect truck alternator.
- 4 Ground mounting bracket on outer channel and terminal subplate on carriage.
- 5 Protect adjacent mast parts from weld splatter,

H OSE LENGTH CALCULATION

- L** = Required hose length
- H** = Total lift height
- D** = Distance from center line of reel to end of hose
- K** = Constant ♦ = 18 in. (457 mm) for No. 4 hose
28 in. (711 mm) for No. 6 hose
34 in. (864 mm) for No. 8 hose

NOTE: It is essential that the indicated length of hose (**K**) be prewrapped on the reel at all times. The amount is included when using this formula for calculating line length.

1 When **H** is equal to or greater than $2 \times D$, the correct hose length is:

$$L = H - D + K$$

2 When **H** is less than $2 \times D$, the correct hose length is:

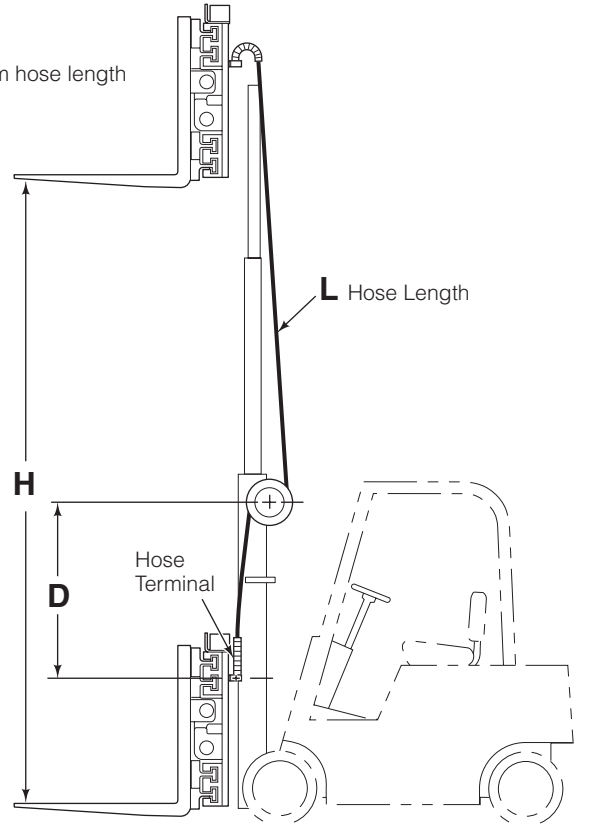
$$L = D + K$$

NOTE: Useable hose length = $L - K$

EXAMPLE:

K = 18 in.
H = 286 in.
D = 96 in.
 $2 \times 96 = 192$ in. (H is greater than $2 \times D$)
 $286 - 92$ in. = $190 + 18$ in. = 208 in.
Correct hose length

♦ Minimum hose length on reel.



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WORKSHEET

- 1** **K** = (Constant, see lengths above) _____
- 2** **H** = (Enter total lift height here) _____
- 3** **D** = (Enter distance from center line of reel to end of hose with truck carriage completely lowered) _____
- 4** Multiply **D** by 2 _____
- 5** If line 1 is less than line 4, the hose length should be:
 - D** (line 3) _____
 - + **K** (line 1) _____
 - Hose Length = _____
- 6** If line 1 is equal to or larger than line 4, the hose length should be:
 - H** (line 2) _____
 - **D** (line 3) _____
 - + **K** (line 1) _____
 - Hose Length = _____

Blank

Do you have questions you need answered right now? Call your nearest Cascade Service Department. Visit us online at www.cascorp.com

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