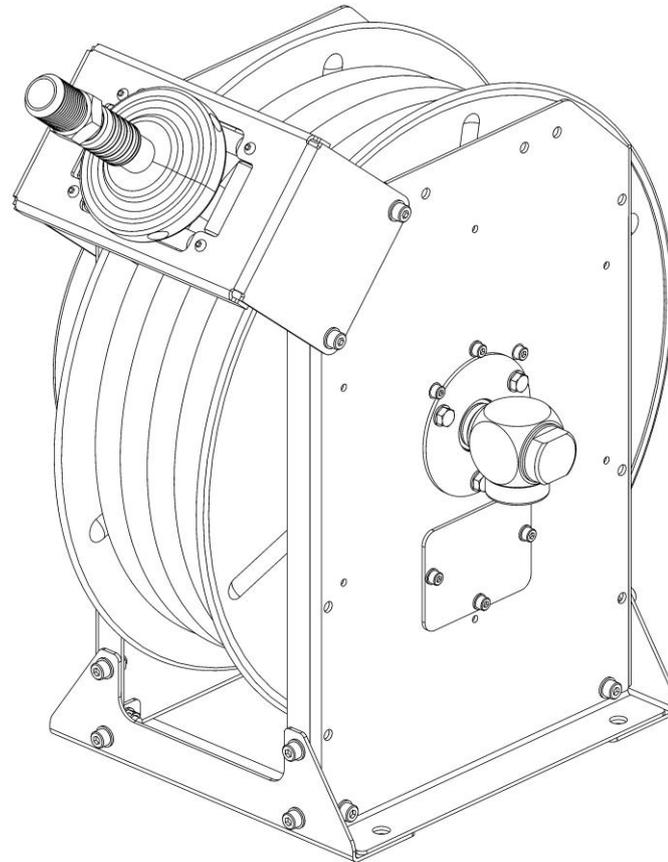


## Instructions – Parts List – Service Manual

# NS 200 Series Hose Reel

August 2012



Suitable for dispensing, transfer and evacuation of lubricants, fuels, air & other automotive & industrial products. To be used in general industry mining & heavy earth moving applications.

Special Features include:

- Long hose length capacity
- High strength / ridged frame and drum
- Compact width & height
- Capable of handling high pressure

# Index

- List of Models Pg 3
- Warning Pg 4
- Hose Guide Positioning Pg 5
- Hose Installation Pg 6
- NS 200 Hose Reel Exploded View Pg 7
- Parts List – NS200-AWL-15/08-0B  
NS200-HPG-15/06-0B Pg 8
- Dimension of Various Model Hose Reels Pg 9
- Dimension Drawing Pg 10
- Service & Maintenance Pg 11
- Trouble shooting Pg 12

# List of NS 200 Models

Model	Typical Application	Working Pressure Bare Hose Reel	Hose Length & Diameter
NS200-AWL-15/08-0B	<ul style="list-style-type: none"> <li>• General Industry</li> <li>• Mining &amp; Heavy Construction</li> <li>• Truck &amp; Bus Servicing</li> <li>• Marine Service Applications</li> </ul>	100 Bar Max For Lube Oils / Fuel Evacuation	1/2" x 15m
NS200-HPG-15/06-VC	<ul style="list-style-type: none"> <li>• General Industry</li> <li>• Mining &amp; Heavy Construction</li> <li>• Truck &amp; Bus Servicing</li> <li>• Marine Service Applications</li> </ul>	400 Bar Max For grease	3/8" x 15m

- Note:
1. All hose reel lengths stated include "hose hang down".
  2. All hose reel capabilities are based on using the hose specified.
  3. In some applications the retract ability will be effected when exceeding certain pressures or when different fluids are being transferred. In some cases the hose might need to be "walked in" to ensure retraction.

*The Reel People*



## Warning

- This equipment contains “Stored Energy”. Stored energy can cause injury & death if not handled in the correct and safe manner & with care.
- Read all instructions before operating equipment
- Use equipment within specified working range – pressure & hose lengths
- Use only with products compatible with flow path components
- If hose is fitted to equipment follow the instructions as detailed in this document
- Ensure all pressure is released from the hose reel before working on the reel or hose.
- Check that hose reel is suitably mounted before commencing with hose payout
- Only qualified personnel to handle this equipment

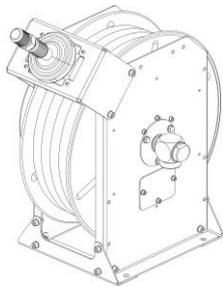


## Warning

Never allow the hose reel drum to spin freely under spring tension, this could cause damage to the hose reel and cause serious injury or death.

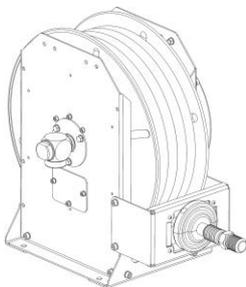
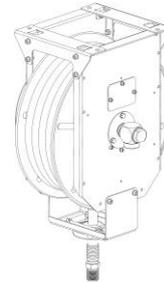
### Hose Guide Positioning:

The N.S. Series of hose reels (Version C) referred to in this document are able to be mounted in various positions to suit working applications. The hose guides need to be repositioned to suit the different mounting – see illustrations below.



Position A: Floor / Upright Mounting

Position B: Ceiling / Inverted Mounting



Position C: Rear Payout / Mid-Level Mounting

### Instructions to fit or reposition hose guide:-

- Ensure that the hose reel is always mounted securely before working with it.
- If the hose reel is not fitted with hose ensure the hose reel drum is not under spring tension – proceed by removing the hose guide
- If the hose reel is fitted with hose - latch the hose reel drum and fit a clamp to the drum sheath while hose is wrapped onto the drum. Remove the hose stop from the hose release all the tension from the drum. Carefully hold the hose on the drum.
- Remove the hose guide from the hose reel by loosening the four hex securing bolts.
- Attach the hose guide to the hose reel in the required position (see illustration) using the allocated holes.
- Replace the pre tension to the hose reel drum  $\pm 2 / 3$  Turns.
- Reroute the hose through the hose guide as shown in the illustration.
- Replace the hose stop and unlatch the drum

Note: Always ensure that the reel does not “Lock Out” on full hose payout – see details pg “Lockout”

*The Reel People*



## Warning

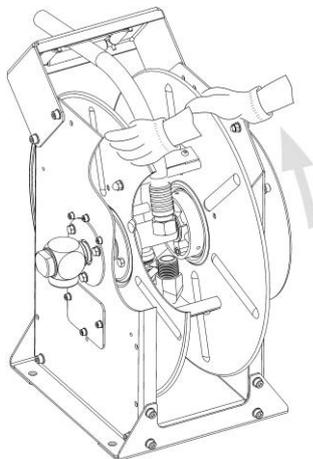
To avoid injury ensure that you always wear non slip heavy duty gloves when installing hose on a hose reel.

### Hose Installation:

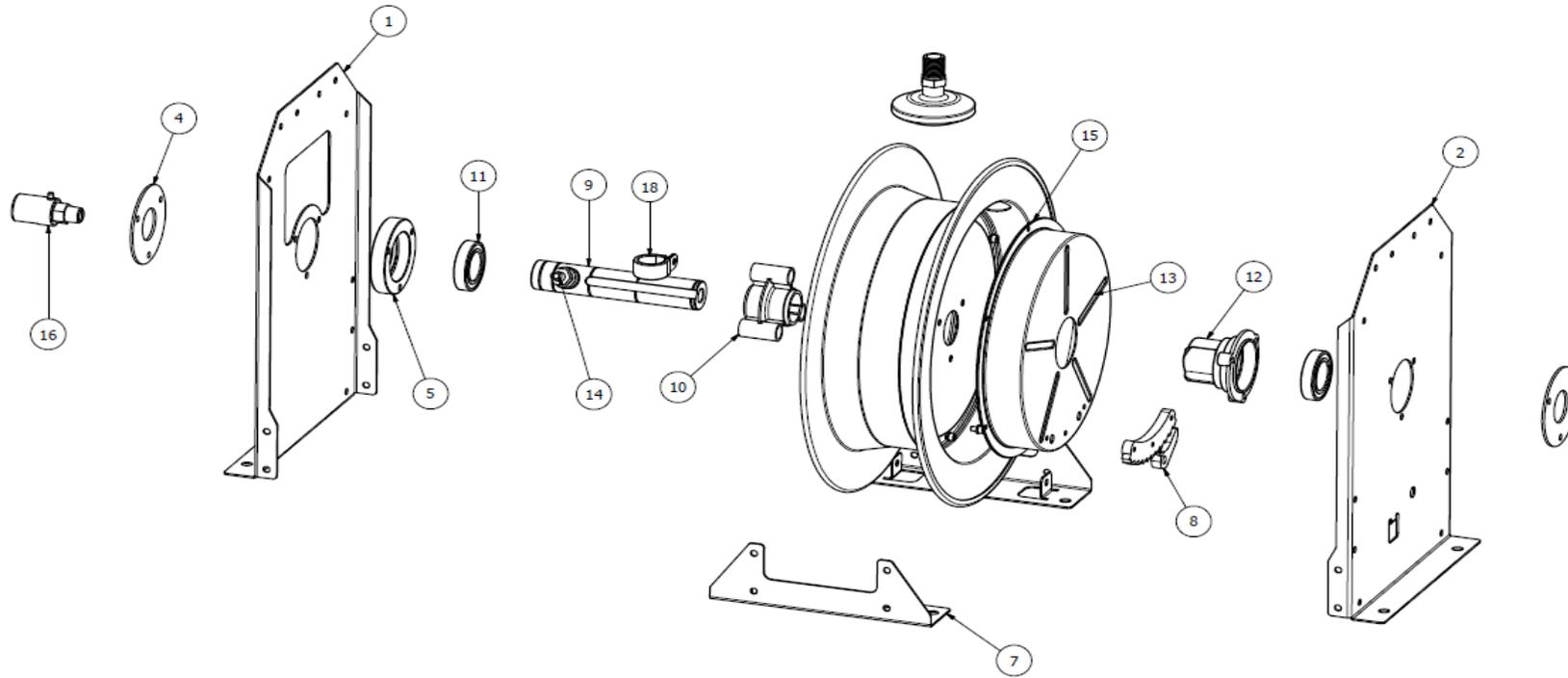
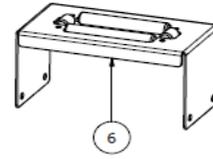
Note: It is extremely important to install hose on a hose reel with the correct amount of spring tension:-

- Ensure the hose reel is secured to a firm level surface
- Remove all the spring tension from hose reel drum
- Mark the drum with tape to easily control rotations.
- Rotate the drum in the direction of the arrow until the spring is firm. Latch the drum on the ratchet & fit the g-clamp as shown.
- Place the hose to be fitted in a straight line in front of the hose reel.
- Attach the hose to the fitting in the center of the hose reel drum.
- Use the p-clamp in the center of the drum to ensure the hose is indexed correctly to the ratchet. This means that when the hose is completely paid out the ratchet should not be latched. The P clamp has three on the center drum.
- Remove the G-clamp from the drum & release the ratchet to allow the spring to retract the hose.
- After fitment of the hose to the reel test the tension on the drum. Too much tension on the drum will cause the drum to “Lock Up” before all the hose has been retracted from the reel. If this happens remove tension from the drum by rerouting the hose from the hose guide & “relaxing” the drum by the required number of turns. If the spring tension is insufficient and does not retract all the hose, the hose should be rerouted out the hose guide & tension should be added to the drum.
- After the hose tension has been adjusted & tested the hose stop should be fitted in the appropriate place on the hose. The length of hose left outside of the hose reel should be suitable for the mounting application and the operator should be able to reach the dispensing valve with ease & safety.

Note: Do not force the drum in the direction of tension when pre tensioning the reel as this may damage the power spring.



*The Reel People*



### NS200-AWL-15/08-0B & NS200-HPG-15/06-0B

PARTS LIST – REFER EXPLODED VIEW

DRW NO	Part number	Description	Qty per reel
1	09-NS200-SPCO-0B	NS200 SIDE PLATE CUT-OUT	1
2	09-NS200-SPRS-0B	NS200 SIDE PLATE RATCHET SIDE	1
3	09-NS200-DA-0B	NS200 DRUM ASSEMBLY	1
4	09-NS200-BSC-0B	NS200 BEARING STOP	2
5	09-NSC00-BB-1B	NS BEARING BOSS BLACK NYLON	1
6	09-NS200-RBKC-0B	NS200 ROLLER BRACKET COMPLETE	1
7	09-NS200-BB-0B-250	NS200 BASE BRACKET 250MM	2
8	09-GP2000-RATST-1C	GP2000 RATCHET AND PAWL SET	1
9	09-GP2000-SFT-0P	GP2000 SHAFT ½"	1
10	09-GP2000-CBSH-1B	GP2000 CENTRE BUSH NYLON	1
11	09-NSC00-B-40	C6008-2RS BEARING 40MM ON SHAFT	2
12	09-GP2000-SPBSS-1B	GP2000 SPIDER BOSS	1
13	09-GP2000-SPBX-0B	GP2000 SPRING BOX	1
14	09-MCJN-0808	JIC-NPT MALE ADAPTOR	1
15	09-NS/GP-BPOS-0P	GP2000 OFFSET BACKING PLATE	1
16	09-111-2062	HST Swivel ½"	1
17	09-NS200-FK-ZP	NS200 FASTNER KIT	1
18	09-GP2000-PCL-00	P-CLAMP 22MM	1

### NS200-HPG-15/06-0B

PARTS LIST – REFER EXPLODED VIEW

DRW NO	Part number	Description	Qty per reel
1	09-NS200-SPCO-0B	NS200 SIDE PLATE CUT-OUT	1
2	09-NS200-SPRS-0B	NS200 SIDE PLATE RATCHET SIDE	1
3	09-NS200-DA-0B	NS200 DRUM ASSEMBLY	1
4	09-NS200-BSC-0B	NS200 BEARING STOP	2
5	09-NSC00-BB-1B	NS BEARING BOSS BLACK NYLON	1
6	09-NS200-RBKC-0B	NS200 ROLLER BRACKET COMPLETE	1
7	09-NS200-BB-0B-250	NS200 BASE BRACKET 250MM	2
8	09-GP2000-RATST-1C	GP2000 RATCHET AND PAWL SET	1
9	09-GP2000-SFT-0P	GP2000 SHAFT ½"	1
10	09-GP2000-CBSH-1B	GP2000 CENTRE BUSH NYLON	1
11	09-NSC00-B-40	C6008-2RS BEARING 40MM ON SHAFT	2
12	09-GP2000-SPBSS-1B	GP2000 SPIDER BOSS	1
13	09-GP2000-SPBX-0B	GP2000 SPRING BOX	1
14	09-MCJN-0608	JIC-NPT MALE ADAPTOR	1
15	09-NS/GP-BPOS-0P	GP2000 OFFSET BACKING PLATE	1
16	09-9SS8MP50XFF50	SUPER SWIVEL ½"	1
17	09-NS200-FK-ZP	NS200 FASTNER KIT	1
18	09-GPE-PCL-00	P-CLAMP 20MM	1

The Reel People

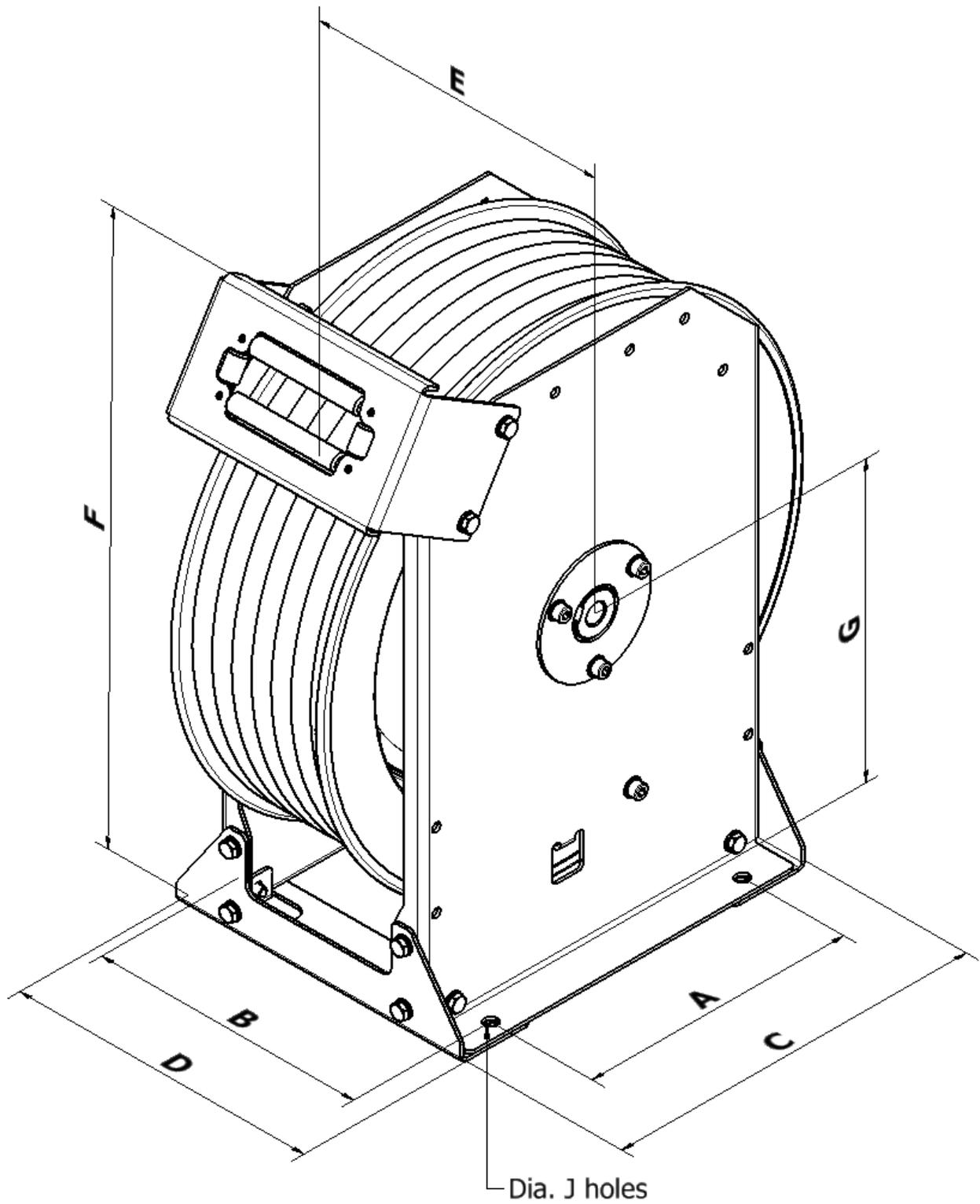
# Dimensions

Refer Drawing Pg 10

NS200-AWL-15/08-0B and NS200-HPG-15/06-0B

A	250mm
B	250mm
C	340mm
D	280mm
E	270mm
F	560mm
G	285mm
H	485mm

# NS 200 SERIES



## SERVICE & MAINTENANCE

### Swivel:



Warning – relieve all pressure from the hose reel before working on the equipment.

- All models in this range have removable swivels
- If the swivel needs replacing or repairing – i.e. leaking or seized up, the following procedure must be followed:-
  - Unscrew the swivel from the hose reel shaft by using a wrench on the two flats located on the rear of the swivel spindle
  - With non-slip gloves hold the drum of the hose reel & loosen & unscrew the swivel.
  - Replace the swivel with new swivel if necessary & screw back by holding the drum of the hose reel.

### Spring Canister:



Warning the spring canister should never be opened or worked on.  
The spring canister contains stored energy & may cause injury or death.

- To remove or replace the spring canister – ensure all the tension is removed from the spring motor.
- Remove the nuts which secure the spring canister to the side plate – see exploded view.
- Remove the spring canister as a unit – discard safely as a unit.
- The new canister will have a pre-formed spring – push the spring canister over the spiders on the end of the shaft and ensure the canister locates which are the studs on the side plate, secure with the securing nuts onto the side plate.
- Rotate the reel as per the arrow and the instruction to TENSION the hose reel.

### Hose Reel Drum Warning:



Warning the hose reel drum should never be allowed to spin out of control by spring power – bodily injury & damage to the hose reel could occur.

## Trouble Shooting Guide



Warning – relieve all pressure from the hose reel before working on the equipment.

Diagnosis	Likely Cause	Solution
Hose does not retract fully	Insufficient spring tension	Adjust spring tension by adding wraps of hose. Pull out approximately 2 meters of hose and latch, hand feed hose back up through the roller bracket assembly. Add two or three wraps until the desired tension is achieved. Do not exceed spring capacity.
Hose does not retract at all	Product supply piped to connect to swivel is not a flexible hose.	When a flexible connection hose to the swivel is not used excessive pressure is exerted on the shaft and bearing causing reel to bind. <b>This will also void the warranty.</b>
	Broken main spring	Fit new spring box assembly. Caution should be used to not split the spring box canister.
Reel does not latch	Broken pawl spring or damaged/bend pawl pin	Replace with new pawl pin assembly
Swivel leak	Wear and tear	Replace damaged Part.