



Heli-Wrapper Variable Speed Drive

Installation Instructions

The Reese Heli-Wrapper Variable Speed Drive unit (HWVS), has been designed as a permanent bolt on attachment that can be fitted to the Heli-Wrapper to expand its operating versatility. The standard Heli-Wrapper wraps bales with an average of 4 to 5 layers of film, but the HWVS drive unit gives the operator the option of wrapping from between 3 and 8 layers of film. It achieves this by using a chain drive and any combination of 3 gears. The HWVS drive unit uses the hydraulic motor currently installed on your machine, and the whole unit bolts to the same mounting holes.



Figure 1 - The installed Variable Speed Drive unit

1. Parts Identification

The pre-assembled unit as it arrives, including driven axle, bearings, housings, three sprockets, spacing plate, two hoses, cover + 2 times M8 bolts + washers. **NOTE ITEM (18) IS NOT SUPPLIED IN THIS KIT**, it is removed from the existing machine.

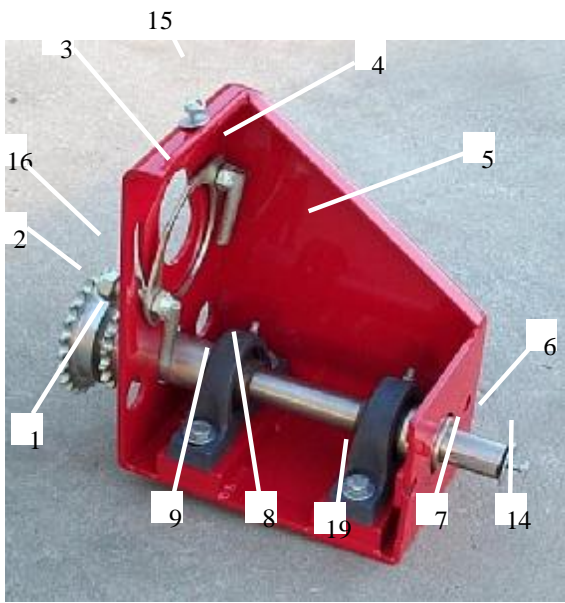
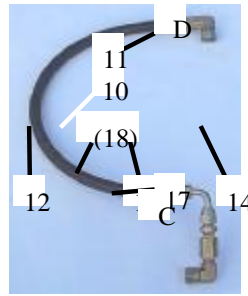


Figure 2 - Pre-assembled unit



<u>Item</u>	<u>Part No.</u>	<u>Description</u>
1	00174	Sprocket - 23T
2	00173	Sprocket - 17T
3	00178	Spacer
4	00182	Motor mounting bolt (x2)
5	00170	Frame
6	00171	Axle
Not shown	00180	Key - sprocket side, 51mm
7	00181	Key - wheel side, 32mm
8	9217	Bearing - YAR 205-100-2RF (x2)
9	9218	Bearing Pillow block - SKF SY 505M (x2)
10		Hose - Motor pressure, complete pre-assembled
11	H3205	Hose - BARE (used for both pressure and return lines)
12	00172	Sprocket - 15T
13	00177	Spacer
14	9190/9022	Securing bolt/washer - 1/4"UNC
15	8300/9031	Bolt/washer - cover, M8 (x2)
Not shown	00179	Plastic drive cover
16	9151	M12 Nyloc nut (x2)
17	H3211	90° elbow with running nut (3/8")
(18)		Tap and nipple - FROM OLD HOSES ON MACHINE
19	8402	Bolt - M10x35
	9042	Washer - 10x24x1.5

2. Installation

1. Release the tension spring (74) on top of the alloy hoop of the Heli-Wrapper. Lift the alloy hoop (75) to free the 14" drive wheel and support the hoop in this uplifted position.
2. Remove the drive wheel assembly (32) from the hydraulic motor shaft.
3. Remove the hoses from the motor to the control block, leaving the nipples at each end in place. Remove the tap and nipple unit from the existing motor return line shown below, as this is needed again. Package the rest for storage. If your machine is of the type with an external non-return valve fitted to the hydraulic control block, this should be left in place.



Figure 3 - Item (18) removed from existing hose.

4. Remove the hydraulic motor (31) from the Wrapper frame. Clean the motor shaft and apply grease so in the future the sprockets may be easily interchanged. Keep the two M12 x 25 set screws securing the hydraulic motor, as they will be used later.
5. Remove the yellow safety cover from the new Variable Speed Drive assembly.
6. Secure the Variable Speed Drive Assembly as supplied onto the ring where the hydraulic motor was previously mounted. Use the same two M12 x 25 set screw from (4) above.
7. Fix the drive wheel onto the 1" shaft of the drive assembly, making sure that the 1/4" square key (item 7) is properly positioned into the key ways of wheel shaft and wheel. Secure the wheel using the 1/4" set screw and washer originally used.
8. With the drive wheel in place and secure, lower the alloy hoop back onto the drive wheel and re-connect the tension spring on top of the hoop.
9. Remove the spacer ring (item 3) from the inside of the Variable Speed Drive box, and place over the motor face. Mount the motor into the frame using the mounting bolt (item 4) and M12 Nyloc nut (item 16), with hydraulic ports pointing OUT. Make sure the bolts are in the same position as is shown in Figure 2. Do not tighten these yet.
10. From the table at the inside of the yellow safety cover, select the required amount of plastic wrapping layers for the bales and note the marking of the required sprockets and their position on the proper shaft. Three sprockets are provided (items 1,2,12) of which two are in use at any time. The third sprocket will be parked outside the chain onto the drive wheel shaft.

- MOTOR SPROCKETS

11. Remove the Woodruff key from the motor shaft.
12. Position the spacer ring (item 13) onto the motor shaft, WITH THE RECESSED SIDE FACING THE MOTOR. Reposition the Woodruff key.
13. Place the required sprocket onto the motor shaft, teeth outwards, and secure with the provided 1/4" set screw and washer (item 14).

- WHEEL SPROCKETS

14. This sprocket should be placed first, teeth outwards, onto the shaft adjacent to the bearing. Make sure the 1/4" square key (P/N 00180) is properly positioned into the key ways of drive wheel shaft and sprocket.

15. Place the last sprocket onto the same shaft, teeth outwards. Secure the two sprockets together with the provided ¼" set screw and washer (item 14).
16. Relax the entire hydraulic motor towards the drive wheel shaft and position the chain onto the sprockets. Because of the confined space for the drive unit, it may be necessary to place two sprockets and the chain simultaneously. Make sure the closed end of the connecting link clip is pointing in the indicated chain direction.
17. Pull the hydraulic motor backwards, and tension the chain until the sag is adjusted to 3-4mm. Tighten the two M12 nuts.

HOSES

18. Assemble the Return Line hose using items 11, 17 and (18) as shown in Figure 4 below.

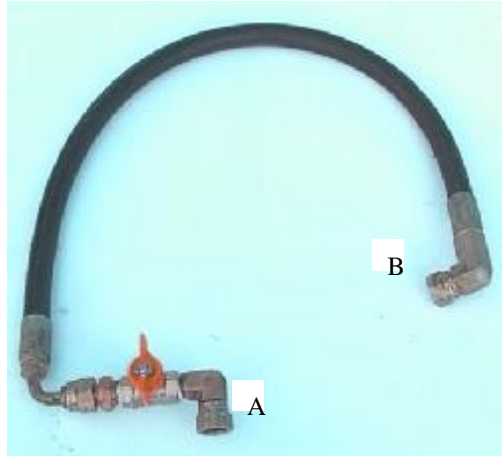


Figure 4 - Assembled Return Line

19. Fit end B of the motor return hose in Figure 4 to the port on the hydraulic valve block labeled "MOTOR RET".
20. Fit end A of the return hose in Figure 4 to the TOP port of the hydraulic motor. See Figure 5.



Figure 5 - Hoses fitted to motor

21. Fit end D of the motor pressure hose (item 10) to the port on the hydraulic valve block labeled "MOTOR PRES". If your machine is of the type with an external non-return valve fitted to the hydraulic control block, this hose should be connected to the end of this valve.
22. Fit end C of the motor pressure hose (item 10) to the bottom port of the hydraulic motor. See Figure 5.
23. Fit the plastic chain guard (P/N 00179) over the chain drive and secure with the supplied M8 set screw and washer (item 15).



Figure 6 - Installed unit (less yellow guard)