Service Manual

VM 115 - TIER III

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Section 2 - Care and Safety

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Section B - Body and Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

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Vibromax Specific Torque Settings

Where no special torque data is specified, the following standard torque figures should be applied.

Table 8. Standard Torque Specifications +/- 10%

	GRADE 8.8		GRADE 10.9		GRADE 12.9	
SIZE	Nm	lb/ft	Nm	lb/ft	Nm	lb/ft
5mm	5.5	4	7.5	5.5	9	6.6
6mm	9	6.6	12.5	9.2	15	11
8mm	22.5	16.5	31.5	23	36	26.5
10mm	44	32	62	45	75	55
12mm	77.5	57	110	81	130	95
14mm	120	88	170	125	210	155
16mm	190	140	265	195	320	236
18mm	260	192	365	269	435	320
20mm	370	273	520	383	620	457
22mm	500	369	700	516	840	619
24mm	640	471	900	665	1080	796
27mm	950	702	1350	996	1620	1195
30mm	1300	955	1800	1328	2160	1593

Table 9. Nuts for Tubes and Hoses

DIAMETER AND PITCH	Nm	lb/ft
16mm X 1.5	20	14.5
18mm X 1.5	35	26
20mmX 1.45	45	33.2
24mm X 1.5	60	44

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Fig 16. Harness 2 way gear control switch 332/L3279-1

Fig 17. Harness Emergency Off 332/L3274-1

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Articulation Joint

Disassembly and Assembly

Disassembly

⚠ WARNING

Raised Machine

NEVER position yourself or any part of your body under a raised machine which is not properly supported. If the machine moves unexpectedly you could become trapped and suffer serious injury or be killed.

INT-3-3-7_1

⚠ WARNING

Lifting Equipment

You can be injured if you use faulty lifting equipment. Make sure that lifting equipment is in good condition. Make sure that lifting tackle complies with all local regulations and is suitable for the job. Make sure that lifting equipment is strong enough for the job.

INT-1-3-7

1 Support the rear end of the machine's frame with jack stands.

2 Support the front part of the machine's rear frame with jack stands.

3 Support the machine's front roller frame with jack stands.

⚠ WARNING

Hydraulic Pressure

Hydraulic fluid at system pressure can injure you. Before connecting or removing any hydraulic hose, residual hydraulic pressure trapped in the service hose line must be vented. Make sure the hose service line has been vented before connecting or removing hoses. Make sure the engine cannot be started while the hoses are open.

INT-3-1-11_2

4 Remove the roller drum. Remember to tag and cap all hydraulic lines.

5 Remove the hose clamps and hoses from the front drum frame.

6 Remove the split pins ⇨ *Fig 1. (H-3)* **10** and washers **9** from the two steering cylinder pivot pins.

7 Remove the cylinder pivot pins **7.**

8 Sling the front roller frame in preparation for removal. The roller frame weight is (4910 Kg) 10,827 lbs.

9 Remove the 16mm capscrews **21** from the bearing cover **22.**

10 Remove the bearing cover **22,** spring washer **23,** and the thrust collar **24.**

11 Install a 12mm lifting eye bolt in the tapped hole provided in the link plate **28** and support the plate for removal.

12 Remove the ten 20mm capscrews **25** which secure the plate **28** to the steering link **31** and remove the link plate **28.**

13 Remove bearing cup **26** from the link plate **28** with an internal bearing puller.

14 Remove the machine's front roller frame from the steering link **31.**

15 Remove the sealing rings **14** and pull the bearing cones **27** from the roller frame lugs by use of an external bearing puller.

16 Remove capscrew **30** from the steering link and install a 16mm lifting eye bolt and support the link for removal. The steering link weight is 190 Kg (420 lbs).

17 Remove the lower bearing cover **19,** spring washer **18,** and thrust collar **17** by removing capscrews **20.**

18 Remove the bearing cover **3** by removing capscrews **1.**

19 Install the service bushing into the upper steering link bearing bore.

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Fig 59.

6 Insert sun gear, item 3 into internal teeth of planet carrier, item 7.



Fig 60.

7 Secure with snap ring, item 16.



Fig 61.

Assembly of Cylindrical Roller Bearing - Item 10 - Input Stage

1 Install snap ring, item 18.

2 Push cylindrical roller bearing, item 10 directly out of transport packing into the locating hole of the planet gear, item 2.

3 Install snap ring, item 18.

4 Install disk, item 49

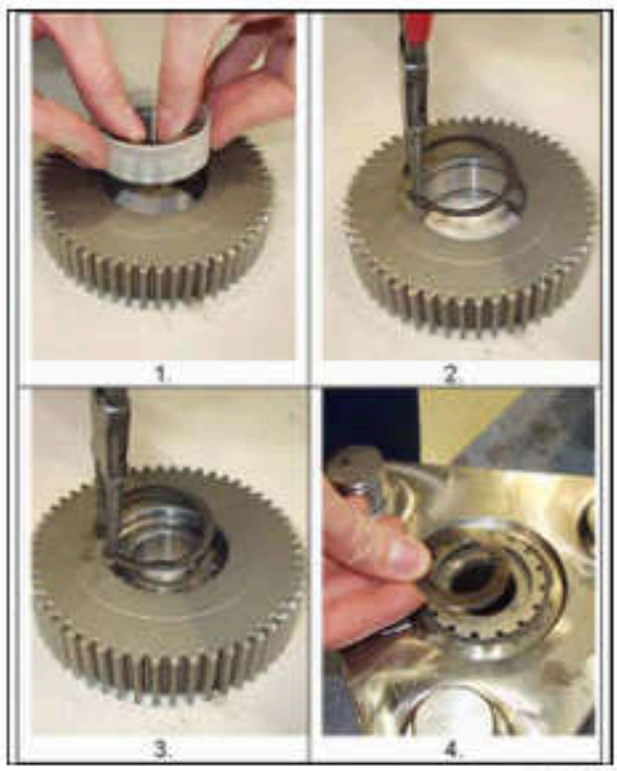


Fig 62.

5 Heat pre-assembled planet wheels, item 2 to approx. 120°C - 130°C and mount them onto the planetary bolts of planet carrier, item 89.

Important: *Wear suitable safety gloves.*

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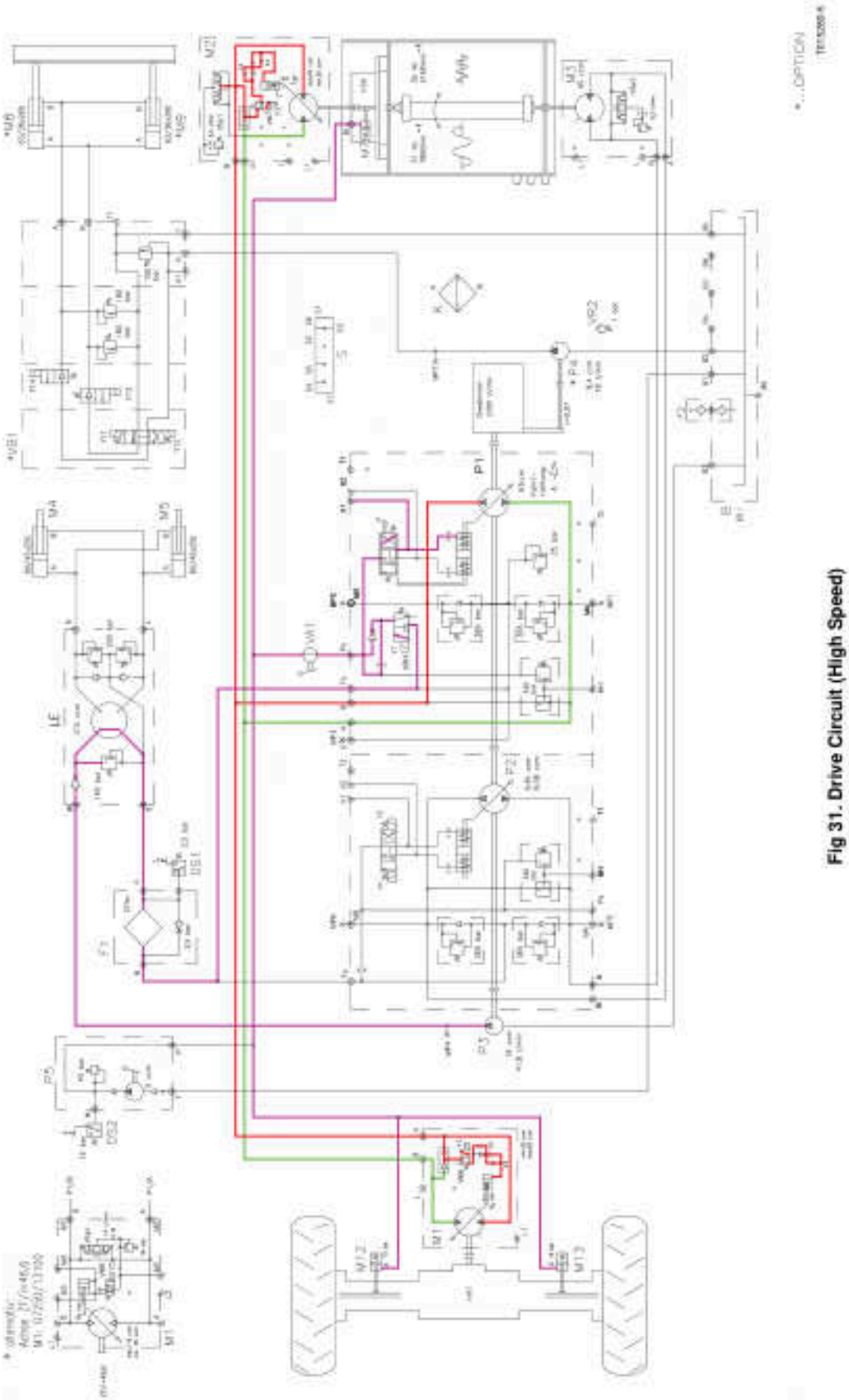


Fig 31. Drive Circuit (High Speed)

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