SERVICE MANUAL

TD65F / TD75F / TD85F

Tractor

Part number 47913163
English
February 2016

NEW HOLLAND AGRICULTURE

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Torque Specification Tables

Standard Bolt Hardware & Hydraulic Connector Torques, Specifications and Information

This specification establishes general torque values to be used in bolted joints for metric and inch hardware. This specification is assumed to apply unless another specification (standard or specified requirement) is indicated in the repair manual.

NOTE: These Standards do not include electrical or hydraulic components, they are referred to in their specific charts or tables.

INCH 'NON-FLANGED' HARDWARE AND LOCKNUTS {MINIMUM HARDWARE TIGHTENING TORQUES}

IN NEWTON-METERS (FOOT-POUNDS) FOR NORMAL ASSEMBLY APPLICATIONS								
	SAE GRADE 2		SAE GRADE 5		SAE GRADE 8		LOCKNUTS	
Nominal Size	Unplated or Plated Silver	Plated w/ZnCr Gold	Unplated or Plated Silver	Plated w/ZnCr Gold	Unplated or Plated Silver	Plated w/ZnCr Gold	Gr.B w/Gr5 Bolt	Gr.C w/Gr8 Bolt
1/4	6.2 (55)*	8.1 (72)*	9.7 (86)*	13 (112)*	14 (121)*	18 (157)*	8.5 (75)*	12.2 (109)*
5/16	13 (115)*	17 (149)*	20 (178)*	26 (229)*	28 (21)	37 (27)	17.5 (155)*	25 (220)*
3/8	23 (17)	30 (22)	35 (26)	46 (34)	50 (37)	65 (48)	31 (23)	44 (33)
7/16	37 (27)	47 (35)	57 (42)	73 (54)	80 (59)	104 (77)	50 (37)	71 (53)
1/2	57 (42)	73 (54)	87 (64)	113 (83)	123 (91)	159 (117)	76 (56)	108 (80)
9/16	81 (60)	104 (77)	125 (92)	163 (120)	176 (130)	229 (169)	111 (82)	156 (115)
5/8	112 (83)	145 (107)	174 (128)	224 (165)	244 (180)	316 (233)	153 (113)	215 (159)
3/4	198 (146)	256 (189)	306 (226)	397 (293)	432 (319)	560 (413)	271 (200)	383 (282)
7/8	193 (142)	248 (183)	495 (365)	641 (473)	698 (515)	904 (667)	437 (323)	617 (455)
1	289 (213)	373 (275)	742 (547)	960 (708)	1048 (773)	1356 (1000)	654 (483)	924 (681)

NOTE: Torque values shown with * are inch pounds.

NOTICE: *Values shown on these charts are minimum hardware tightening torques unless otherwise stated.*

METRIC 'NON-FLANGED' HARDWARE AND LOCKNUTS {MINIMUM HARDWARE TIGHTENING TORQUES}

IN NEWTON-METERS (FOOT-POUNDS) FOR NORMAL ASSEMBLY APPLICATIONS							
	CLASS 5.8		CLASS 8.8		CLASS 10.9		LOCK-NUTS
Nominal Size	Unplated	Plated w/ZnCr	Unplated	Plated w/ZnCr	Unplated	Plated w/ZnCr	Cl.8 w/Cl8.8 Bolt
M4	1.7 (15)*	2.2 (19)*	2.6 (23)*	3.4 (30)*	3.7 (33)*	4.8 (42)*	2.3 (20)*
M6	5.8 (51)*	7.6 (67)*	8.9 (79)*	12 (102)*	13 (115)*	17 (150)*	7.8 (69)*
M8	14 (124)*	18 (159)*	22 (195)*	28 (21)	31 (23)	40 (30)	19 (169)*
M10	28 (21)	36 (27)	43 (32)	56 (41)	61 (45)	79 (58)	38 (28)
M12	49 (36)	63 (46)	75 (55)	97 (72)	107 (79)	138 (102)	66 (49)
M16	121 (89)	158 (117)	186 (137)	240 (177)	266 (196)	344 (254)	164 (121)
M20	237 (175)	307 (226)	375 (277)	485 (358)	519 (383)	671 (495)	330 (243)
M24	411 (303)	531 (392)	648 (478)	839 (619)	897 (662)	1160 (855)	572 (422)

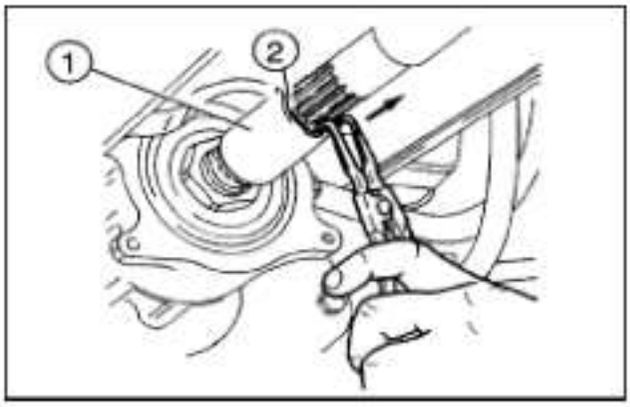
NOTE: *Torque values shown with * are inch pounds.*

SAE HARDWARE IDENTIFICATION CHART

Grade	1 or 2	5	8
SAE Markings for Bolts and Cap Screws			

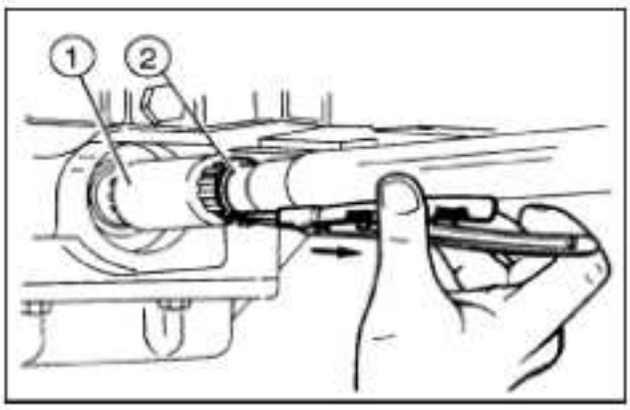
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5. Disassemble the front wheel drive prop shaft guard, removing the front central and rear bolts.
   Disassemble the lock ring **(2)** and remove the sleeve **(1)** from the front shaft pinion.



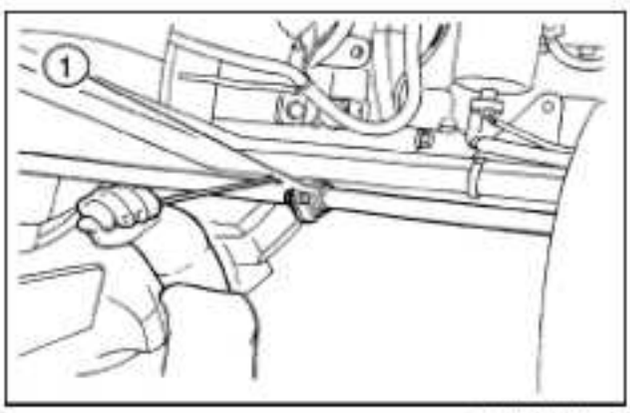
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6. Disassemble the lock ring **(2)** and remove the sleeve **(1)** from the transfer box.



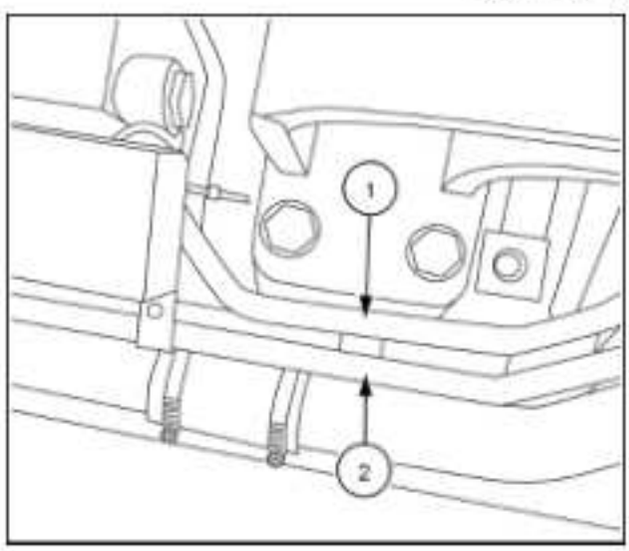
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7. Loosen the bolts securing the prop shaft central support **(1)** and remove the entire prop shaft with the support.



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8. Disconnect oil pump suction tubes **(1)** and **(2)** from the transmission/gear box.



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Fuse and relay box - Component identification

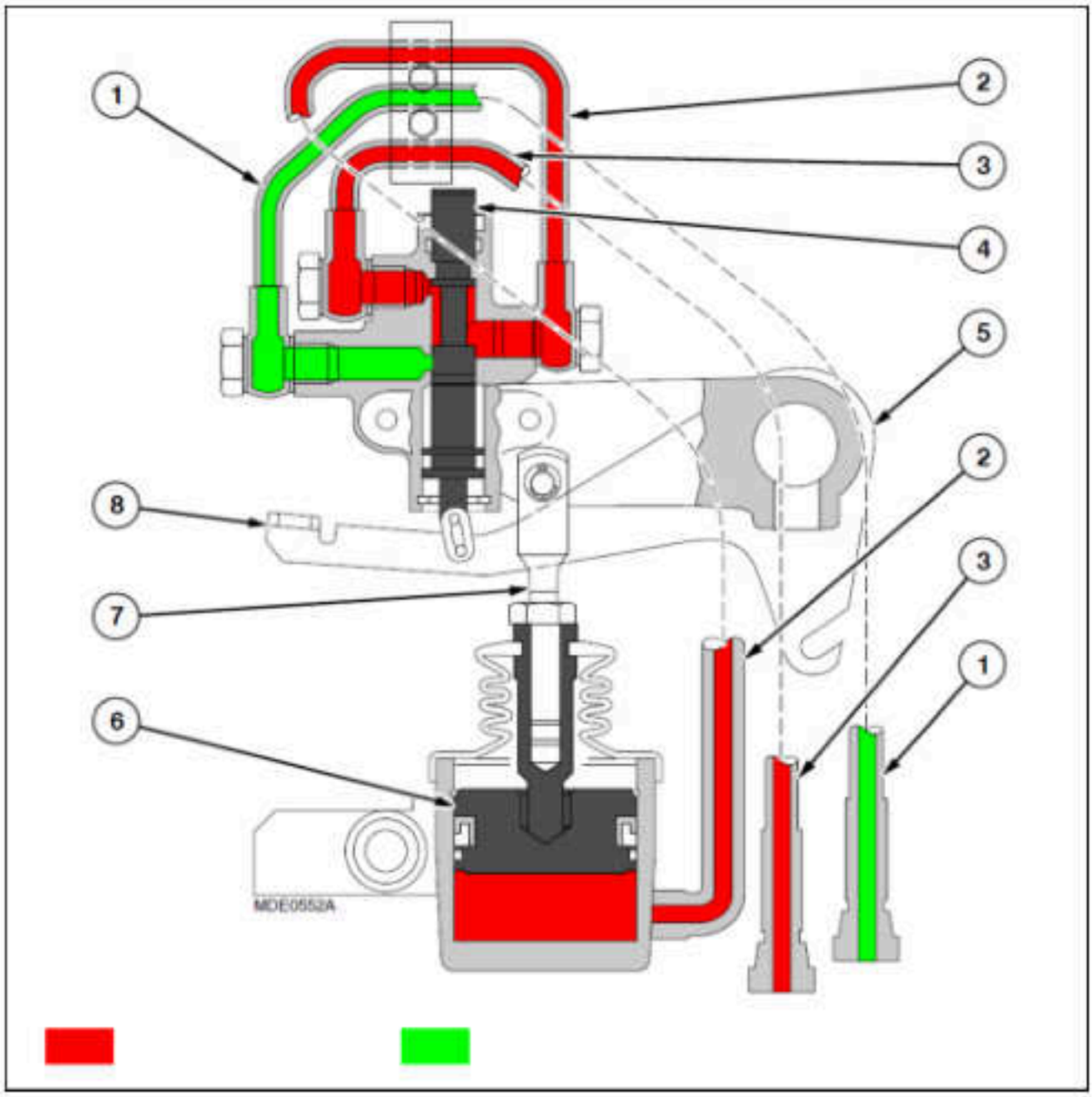
Fuses on models



Fuses	Protected circuits	Amp
1	Main beam headlights	**15 A**
2	Dipped beam headlights	**10 A**
3	Front right and rear left side lights	**10 A**
4	Front left and rear right side lights	**7.5 A**
5	Engine shut-down solenoid	**7.5 A**
6	Horn, turn signal switch	**10 A**
7	Hazard warming lights, residue in fuel	**10 A**
8	Lights system feeding (except beacon lamp, not used)	**40 A**
9	Hazard warning	**15 A**
10	Beacon	**15 A**
11	Signal switch	**20 A**
12	Brake lights	**15 A**
13	Relay	**7.5 A**
14	Electro-hydraulic 4WD / differential lock	**15 A**
15	Starter fuse	**30 A**
16	Thermostarter	**7.5 A**
I	Starter relay	—
II	High beam relay	—
III	Low beam relay	—

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Clutch - Sectional view ENGAGING THE PTO CONTROL CLUTCH



CLUTCPTO 1

DESCRIPTION AND OPERATION

The PTO clutch control system consists of a control lever (in the cab) and a cable connecting the lever to the servo control unit.

The servo control unit consists of a hydraulic control valve and piston.

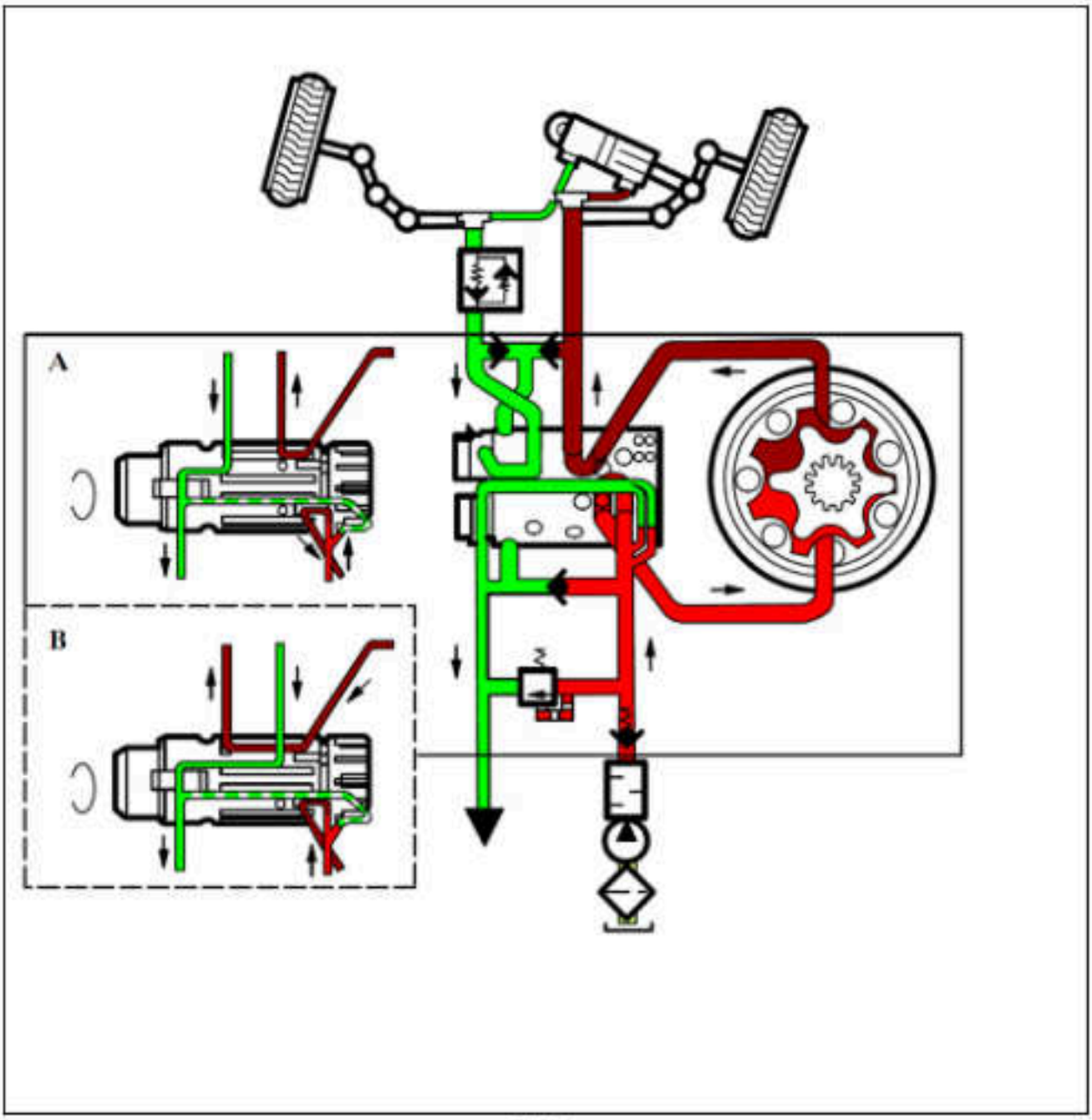
When the PTO clutch is engaged with the control lever in the cab, the connecting cable acts on the lever **(8)** which, as it moves, pushes up the control valve drive pin **(4)** .

When the pin **(4)** moves up it closes the hole leading to the oil discharge pipe **(1)** .

The oil from the pump passes through line **(3)** , line **(2)** , and acts on the piston **(6)** .

The piston **(6)** , under an oil pressure of **15.7 bar** (**227.6 psi**) moves and, by means of tie—rod **(7)** ,move sleever **(5)** , engaging the PTO clutch.

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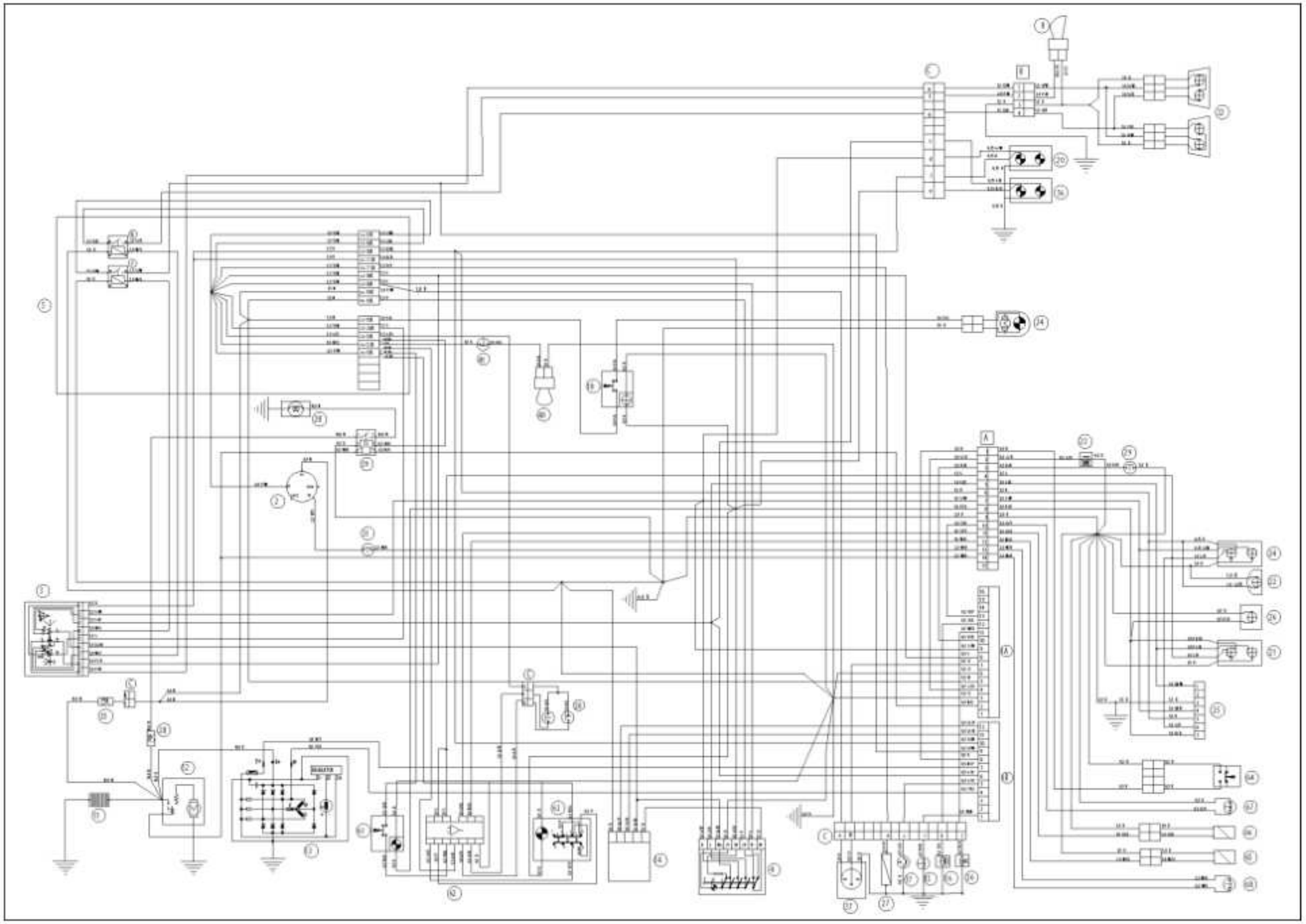


STEER 1

Diagram showing operation of the hydrostatic steering

A	Steering to the right		Oil in intake line
B	Steering to the left		Oil in delivery line from pump
			Oil in delivery line to hydraulic cylinder
			Oil returning to reservoir

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GENERALE 1

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