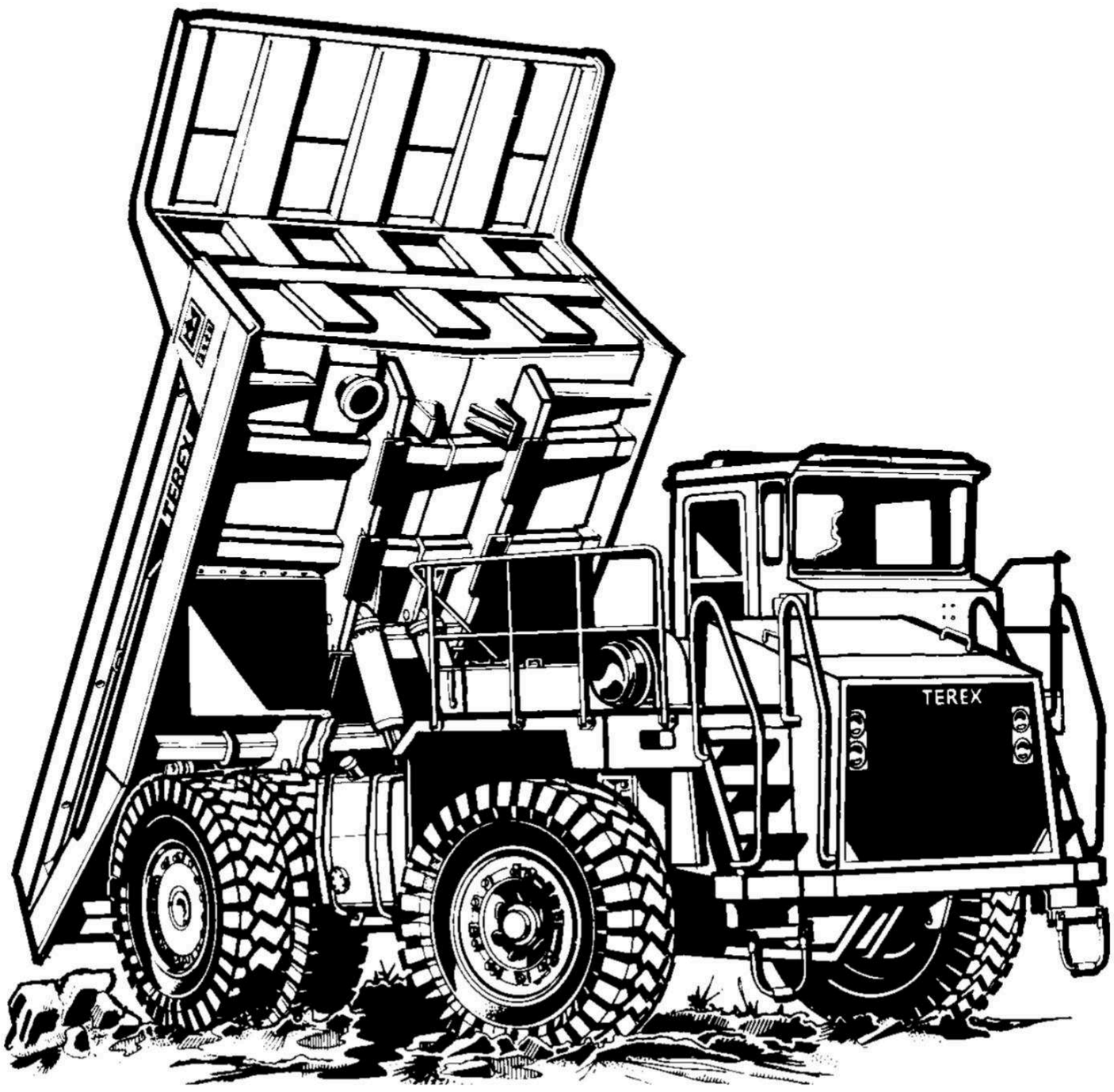
TEREX

3340 and 3345 Off-Highway Trucks Service Manual



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ELECTRICAL TROUBLESHOOTING - No Codes		TABLE167
CONDITION	REASON	REMEDY
No Check Trans light when battery master switch is turned on	Faulty light bulb	Replace light bulb
	Faulty Relay 4	Replace Relay 4
	Incorrect power to Relay 4	Check circuit from batteries to Relay 4
	Faulty wiring to ECU	Check J1A harness wiring, interface in control box and wiring from master switch to ECU
	Faulty ECU	Replace ECU
Check Trans light will not go out when engine is started	Faulty Relay 4. Note 2.	Replace Relay 4
	Faulty wiring in cab. Note 2.	Check J1A harness and interface in control box
	Light wired incorrectly. Note 2.	Check wiring
	Oil temperature too low. Note 1.	Run engine until oil warms above -23° C (-10°F). Refer to Codes 24 and 33 troubleshooting procedures.
	Faulty ECU. Notes 1 and 2.	Replace ECU
Check Trans light goes out only when drive 'D' is selected	Percent throttle is incorrect	Refer to Code 21 troubleshooting procedure
Shift selector not illuminated	Light bulb burned out. Note 3.	Replace light bulbs
	Shift selector lamp power or ground wiring faulty	Check wiring from interface to panel
	Instrument panel circuit breaker open. Note 4.	Check reason for circuit breaker being open. Reset when corrected.
Transmission stays in Neutral (will not shift), or will not make a selected shift	Extremely low oil level	Check transmission oil level, add if low
	Oil temperature too low	Run engine until oil warms above -23° C (-10°F). Refer to Codes 24 and 33 troubleshooting procedures.
	Voltage to ECU too low	Refer to Code 13 troubleshooting procedure
	Throttle sensor not functioning properly	Refer to Code 21 troubleshooting procedure
	Shift selector not functioning properly	Refer to Code 23 troubleshooting procedure

Note 1 - Transmission will not shift.
Note 2 - Shift system operates normally.
Note 3 - Other instrument panel lights operate.
Note 4 - Other instrument panel lights do not operate.

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INSTALLATION

Numbers in parentheses refer to Fig. 2.

⚠ WARNING
To prevent personal injury and property damage, be sure blocking or lifting equipment is of sufficient capacity and properly secured to do the job safely.

1. Use lift truck forks with blocking placed as shown in Fig. 3 to position front ride cylinder to frame mounting surface.

Note: It may be helpful to use two guide studs approximately 25 mm (1 in) in diameter and 200 mm (8 in) long to guide the front ride cylinder into position on the frame's horse collar.

2. Secure front ride cylinder (1) to frame with washers (2) and bolts (3). Alternately tighten bolts (3) to a torque of 900 - 980 Nm (660 - 730 lbf ft).

3. Remove equipment used to position front ride cylinder to frame mounting surface.

4. Attach steering cylinder and tie rod to steering arm with castle nuts and cotter pins. Tighten tie rod nut to a torque of 1 150 - 1 290 Nm (850 - 950 lbf ft) and steering cylinder nut to a torque of 1 560 - 1 630 Nm (1 150 - 1 200 lbf ft).

Note: If necessary, refer to Section 12-5, STEERING CYLINDER AND LINKAGE, for procedure in Step 4 above.

5. Connect brake hydraulic line to brake calliper and bleed braking system. Refer to Section 9-4, BRAKE PARTS.

6. Install front tyre and rim assembly as described in Section 9-3, WHEEL, RIM AND TYRE.

7. If the opposite ride cylinder was removed, follow steps 1 through 6 to install the cylinder.

8. Charge ride cylinders as described in 'Charging Instructions', in this section.

CHARGING RIDE CYLINDER

⚠ WARNING
To prevent personal injury and property damage, be sure blocking or lifting equipment is of sufficient capacity and properly secured to do the job safely.

Relieving Cylinder Pressure

Numbers in parentheses refer to Fig. 8.

⚠ WARNING
Pressurized cylinders. Release pressure as described below before removing valves or fittings. Accidental release of pressure will result in personal injury and property damage.

Note: Vehicle must be empty and on a level surface prior to relieving ride cylinder pressure.

1. Support the frame near the ride cylinder with blocking and/or a hydraulic jack with adequate capacity.

2. Remove the cap from nitrogen charging valve (4) at the top of the cylinder. Turn the hex nut on the valve 1/4 to 1/2 turn counter-clockwise and depress the valve core. If no gas escapes, continue to turn the hex nut in 1/4 turn increments until the nitrogen releases as the valve core is depressed.

3. Remove blocking or release pressure on the hydraulic jack and allow the vehicles weight to fully retract the ride cylinder rod.

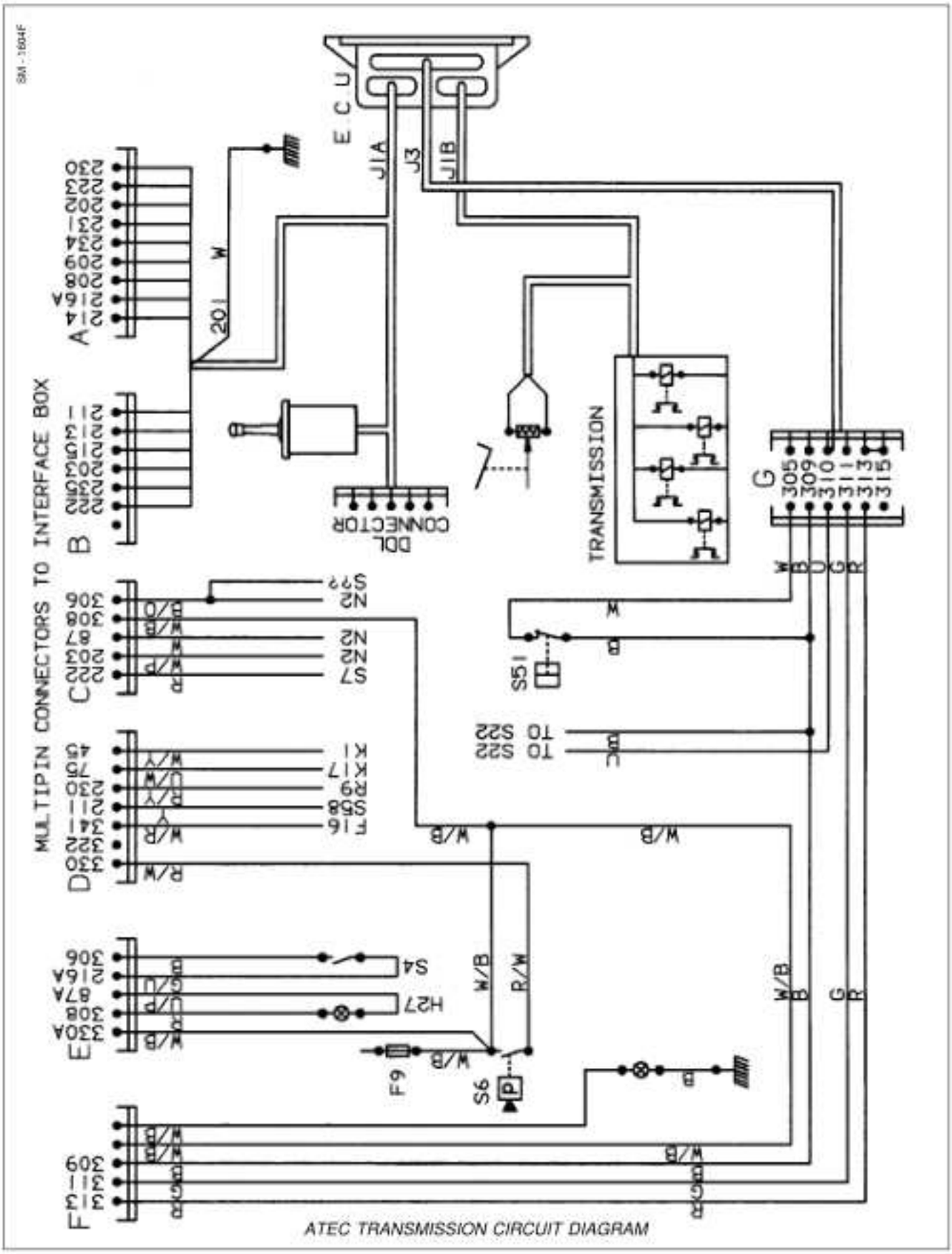
⚠ WARNING
Pressurised cylinders. Keep valve core depressed until all gas is bled from cylinder. Failure to release all pressure may result in personal injury or property damage.

4. Depress nitrogen charging valve (4) core again to be sure all pressure has been relieved.

Note: Nitrogen leaving the cylinder will often carry oil with it. This results from foaming of the oil in the cylinder. The foaming takes place as nitrogen which was dissolved in the oil at high pressure expands at atmospheric pressure. The oil lost in this operation must be replaced in the charging operation. The

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CLICK HERE FOR HORIZONTAL DRAWING



ATEC TRANSMISSION CIRCUIT DIAGRAM

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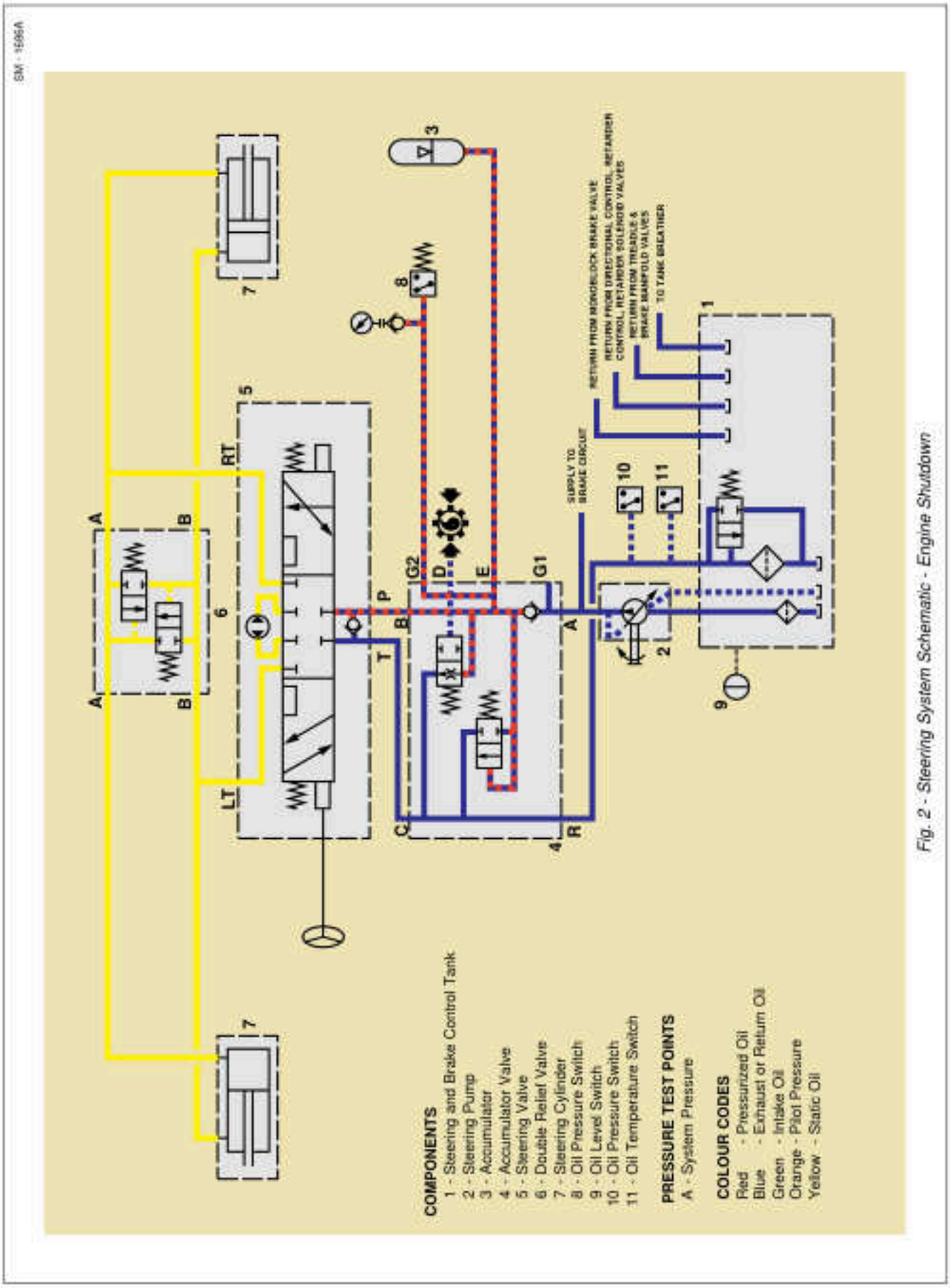
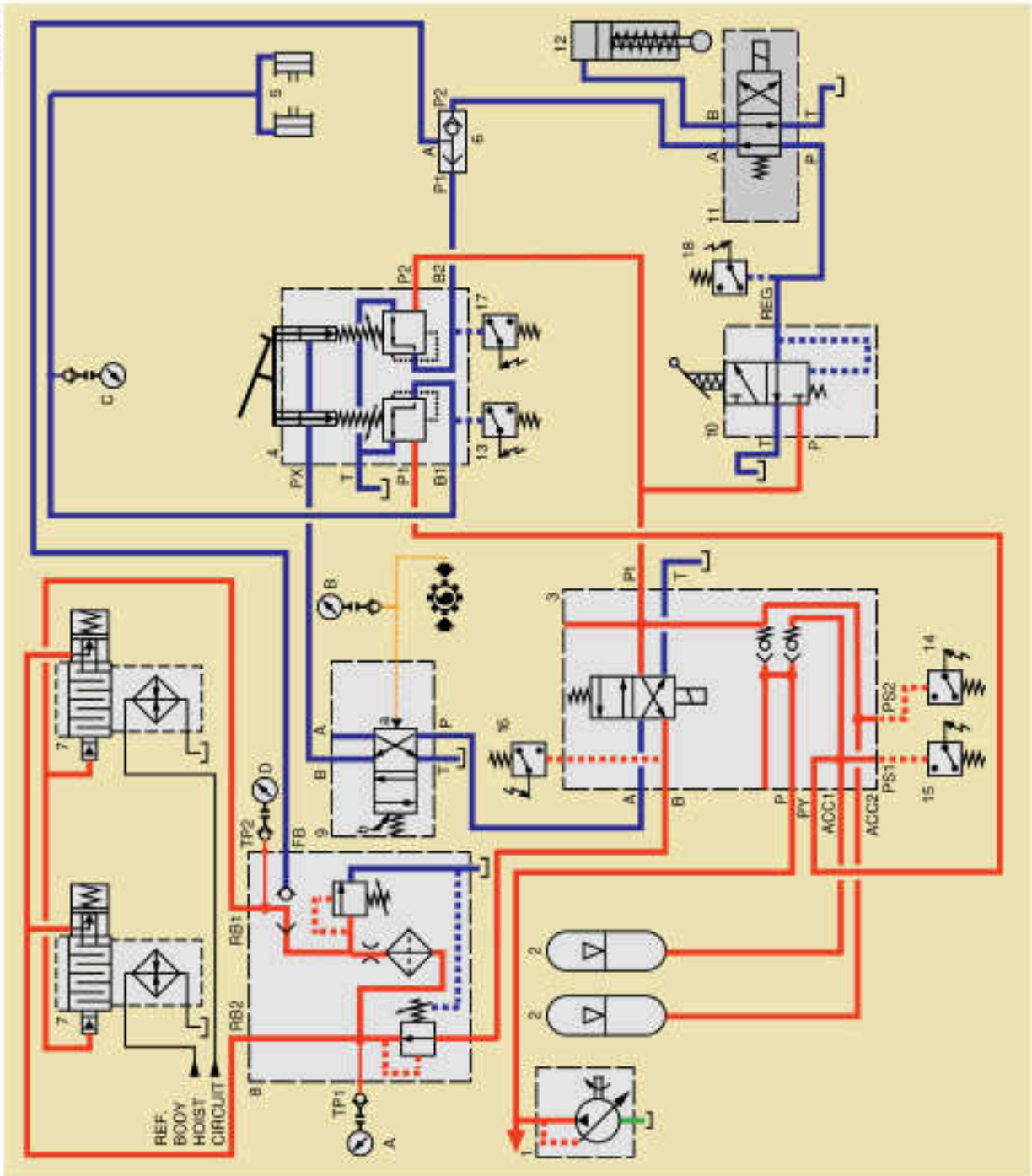


Fig. 2 - Steering System Schematic - Engine Shutdown

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COMPONENTS
1 - Steering Pump
2 - Accumulators
3 - Brake Manifold Valve
4 - Treadle Valve
5 - Front Brake Callipers
6 - Shuttle Valve
7 - Oil Cooled Disc Brakes
8 - Monoblock Brake Valve
9 - Directional Control Valve
10 - Retarder Control Valve
*11 - Directional Control Valve
*12 - Transmission Retarder Cylinder
13 - Stop Light Pressure Switch
14 - Rear Brake Accumulator Pressure Switch
15 - Front Brake Accumulator Pressure Switch
16 - Parking Brake Pressure Switch
17 - ATEC Lockup Drop Out Pressure Switch
18 - Retarder Light Pressure Switch
* - Optional Components

PRESSURE TEST POINTS
A - Park Brake Pressure
B - Transmission Pressure
C - Front Service Brake Pressure
D - Rear Service Brake Pressure. Residual Brake Pressure and Retarder Pressure.

COLOUR CODES
Red - Pressurized Oil
Blue - Exhaust or Return Oil
Green - Intake Oil
Orange - Pilot Pressure
Yellow - Static Oil

Fig. 3 - Braking System Schematic - Engine Running

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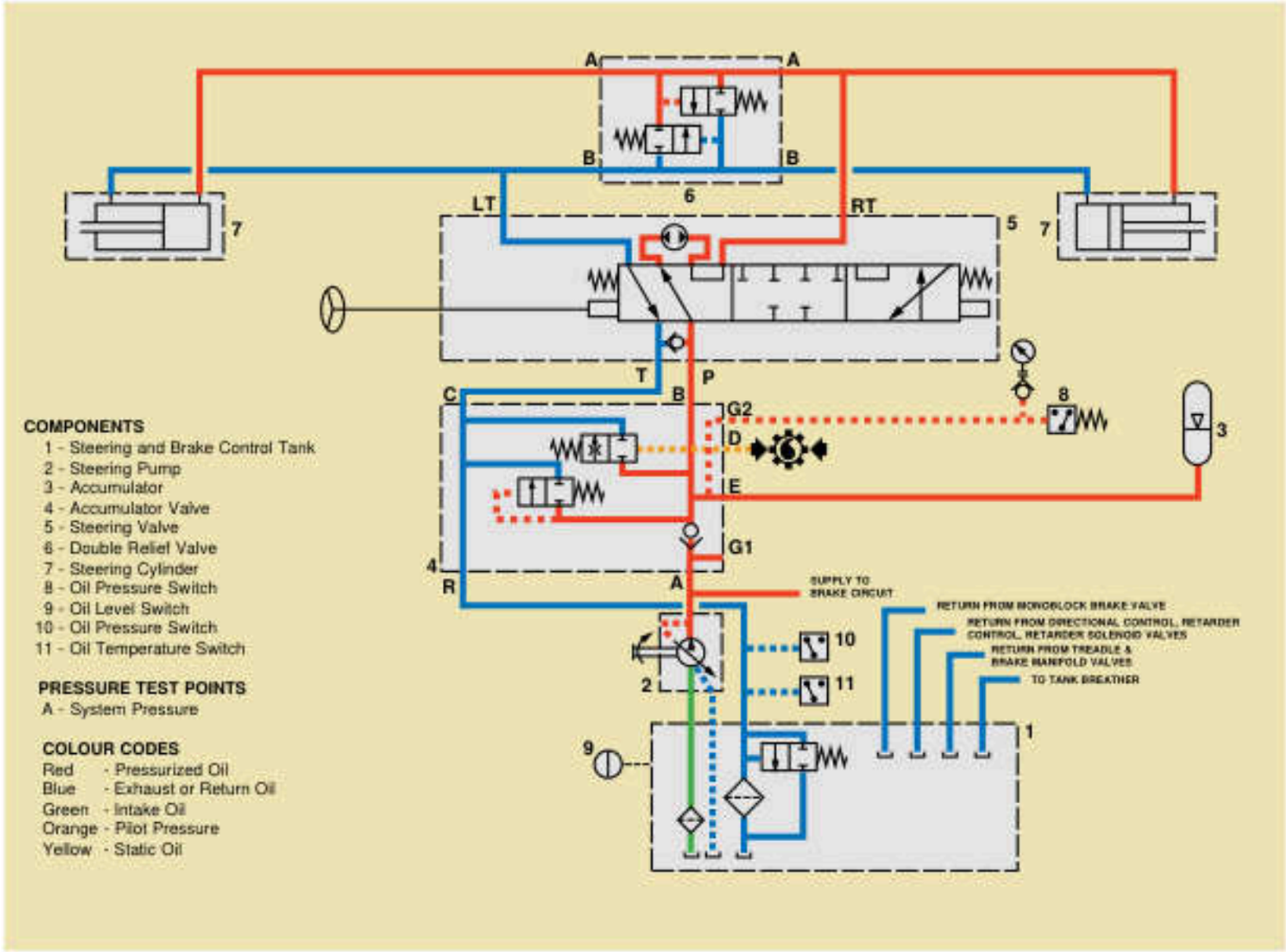


Fig. 5 - Steering System Schematic - Engine Running, Steering Valve Right Turn

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