

BRAKE EQUIPMENT

BR01-001

SERVICE BRAKE ASSEMBLY BR01-2

DESCRIPTION BR01-2

DIAGRAM BR01-3

TROUBLESHOOTING..... BR01-41

SERVICE BRAKE ASSEMBLY

DESCRIPTION

EN0680201C100001

Type of service brake	Drum-shoe type wheel brake activated by compressed air.
Air charging system	Air charging is from piston type air compressor and air flow is directed and controlled by a pressure regulator, the necessary valves, and lines as required. Pressure sensor and air pressure warning switch are used for indicating the pressure level in the system.
Service brake control system	Two independent lines for front and rear wheels with air flow controlled by a brake valve, and each line comprises a group of valve and brake chambers (one/ wheel). Stop lamp switch is used to operate the stop lamps.
Spring brake control system	Single line for all spring brake chambers. The line comprises a control valve which controls air flow, the other necessary valve and spring brake chambers. A stop lamp switch is used to turn on the stop lamps. A parking brake switch is used to turn off the warning buzzer and to turn on the parking brake warning lamp.
Wheel brake	Drum brake with internally expanding, leading-trailing shoes are operated by slack adjuster and cam shaft or expander in all wheels.

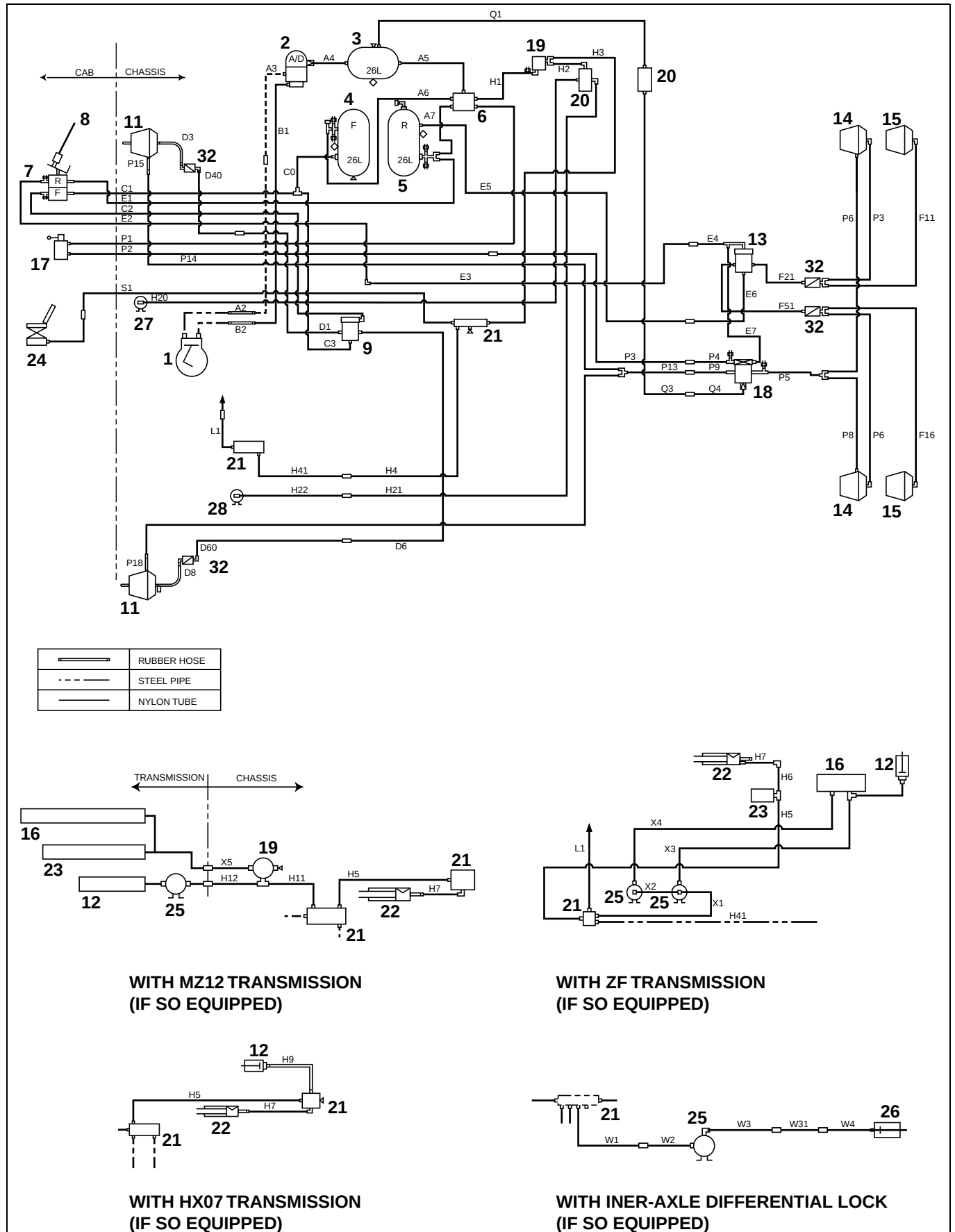
NOTICE

See "DIAGRAM" of the following page the component parts (Valves, Switches, etc.) used in easy system.

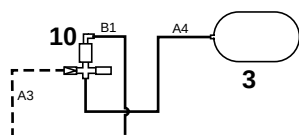
DIAGRAM

EN0680201J100001

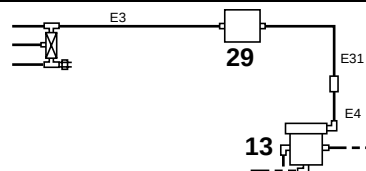
MODELS: FS (DUMP, MIXER AND CARGO TRUCK), ZS (DUMP AND CARGO TRUCK)
(For GENERAL COUNTRIES, CHILE, CHINA, G.C.C. COUNTRIES, HONG KONG, IRELAND, SOUTH AFRICA, TAIWAN)



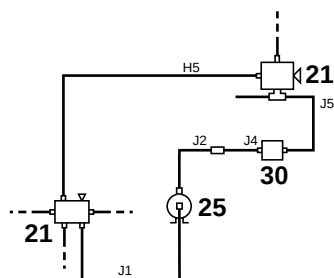
SHTS068020100001



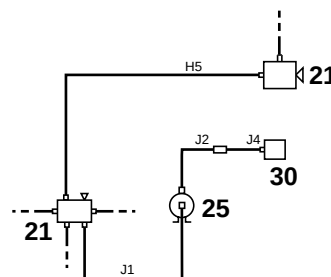
**WITHOUT AIR DRYER
(IF SO EQUIPPED)**



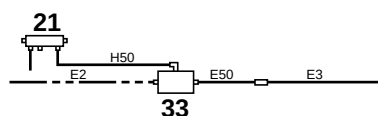
**WITH LOAD SENSING VALVE
(IF SO EQUIPPED)**



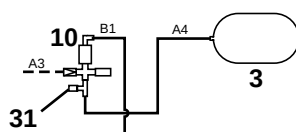
**WITH TRANSMISSION P.T.O.
(WITH HX07 AND MZ12 TRANSMISSION)
(IF SO EQUIPPED)**



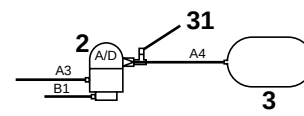
**WITH TRANSMISSION P.T.O.
(WITH ZF TRANSMISSION)
(IF SO EQUIPPED)**



**WITH ES START
(IF SO EQUIPPED)**



**WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)**

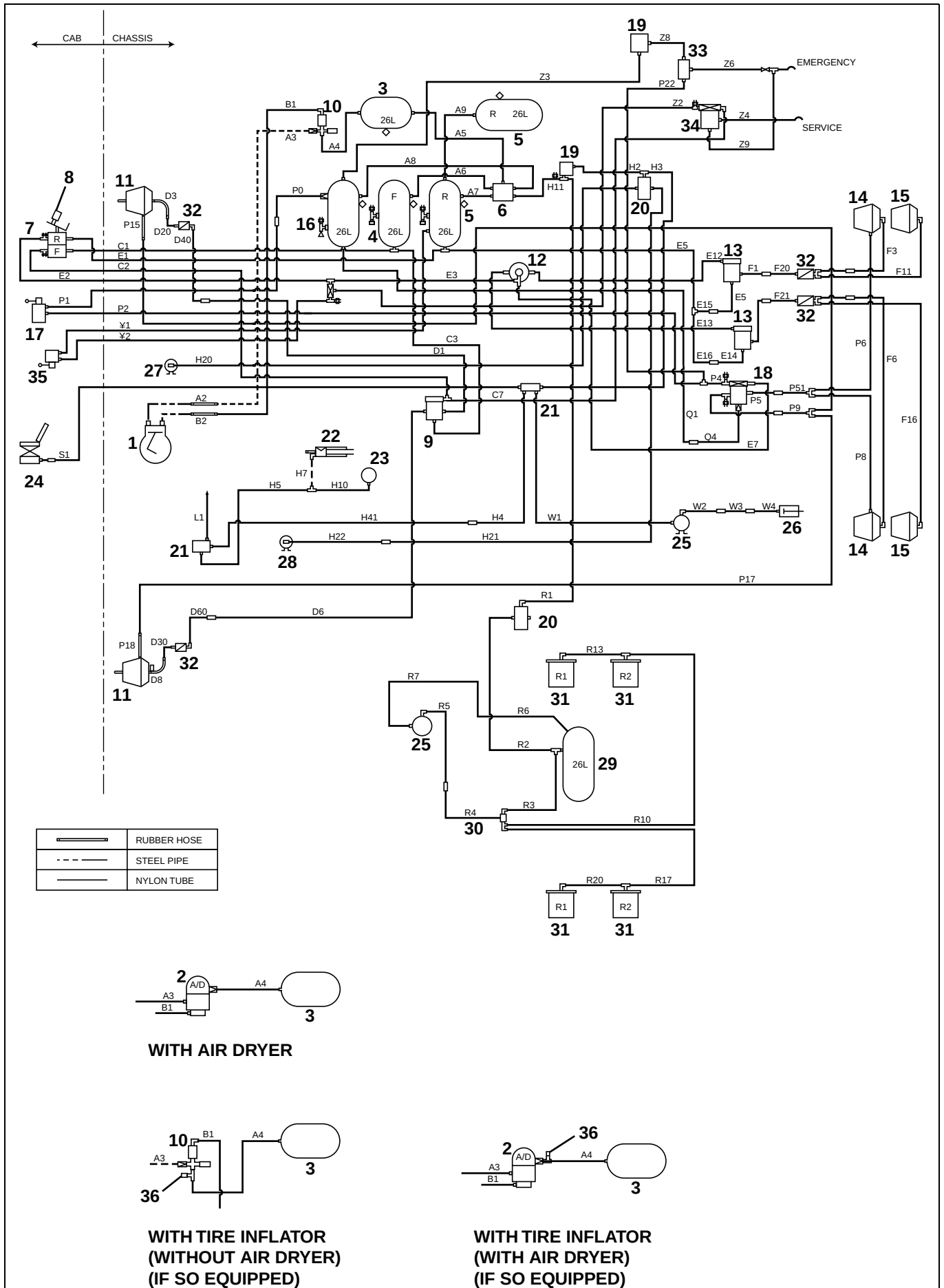


**WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)**

SHTS068020100002

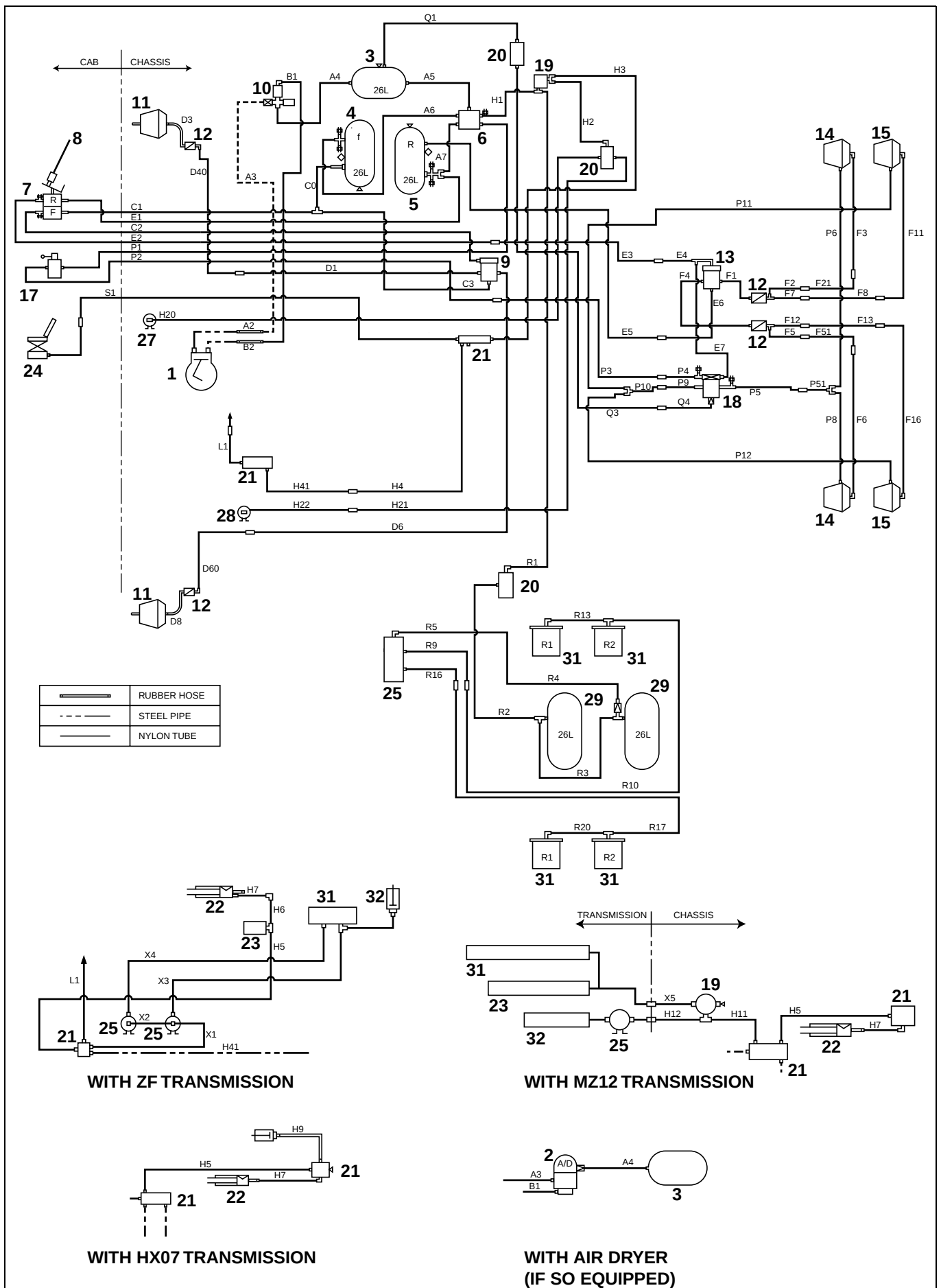
1	Air compressor	18	Relay valve-Spring brake
2	Air dryer (If so equipped)	19	Reducing valve
3	Air tank-Water separator	20	Protection valve
4	Air tank-Front brake	21	Multi joint
5	Air tank-Rear brake	22	Clutch booster
6	Protection valve	23	Range valve
7	Brake valve	24	Air suspension seat
8	Stop lamp switch	25	Magnetic valve
9	Relay valve-Front brake	26	Inter-axle differential lock control cylinder
10	Pressure regulator	27	Cab suspension-Front
11	Spring brake chamber-Front	28	Cab suspension-Rear
12	Power shift	29	Load sensing valve (If so equipped)
13	Release valve-Rear brake	30	Transmission P.T.O. (If so equipped)
14	Spring brake chamber-Rear	31	Tire inflator (If so equipped)
15	Brake chamber	32	ABS control valve (If so equipped)
16	Splitter valve	33	ES start control valve (If so equipped)
17	Spring brake control valve		

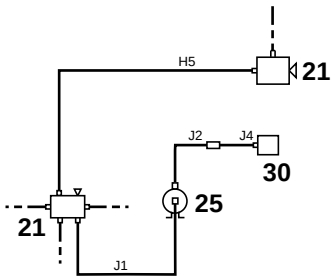
MODEL: FS (For AUSTRALIA)



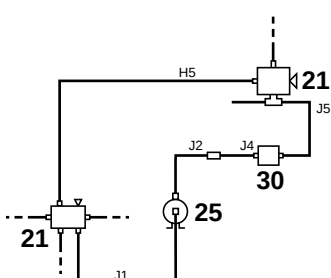
1	Air compressor	19	Reducing valve
2	Air dryer (If so equipped)	20	Protection valve
3	Air tank-Water separator	21	Multi joint
4	Air tank-Front brake	22	Clutch booster
5	Air tank-Rear brake	23	Range valve
6	Protection valve	24	Air suspension seat
7	Brake valve	25	Magnetic valve
8	Stop lamp switch	26	Inter-axle differential lock control cylinder
9	Relay valve-Front brake	27	Cab suspension-Front
10	Pressure regulator	28	Cab suspension-Rear
11	Spring brake chamber-Front	29	Air tank-Air suspension
12	Quick release valve	30	Leveling valve
13	Release valve-Rear brake	31	Air spring
14	Spring brake chamber-Rear	32	ABS control valve
15	Brake chamber	33	Cut valve
16	Air tank-Spring brake and trailer brake	34	Trailer control valve
17	Spring brake control valve	35	Trailer hand brake valve
18	Relay valve-Spring brake	36	Tire inflator (If so equipped)

MODEL: FS (CARGO TRUCK) (For HONG KONG, IRELAND, TAIWAN)

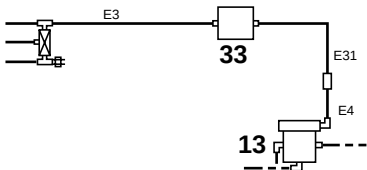




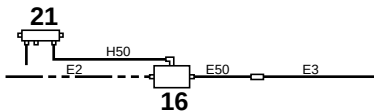
WITH TRANSMISSION P.T.O.
(WITH ZF TRANSMISSION)
(IF SO EQUIPPED)



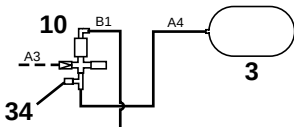
WITH TRANSMISSION P.T.O.
(WITH HX07, MZ12 TRANSMISSION)
(IF SO EQUIPPED)



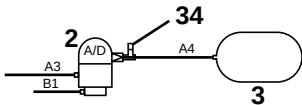
WITH LOADSENSING VALVE
(IF SO EQUIPPED)



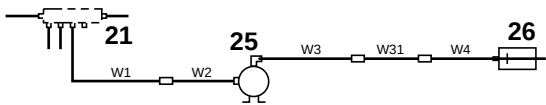
WITH ES START
(IF SO EQUIPPED)



WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)

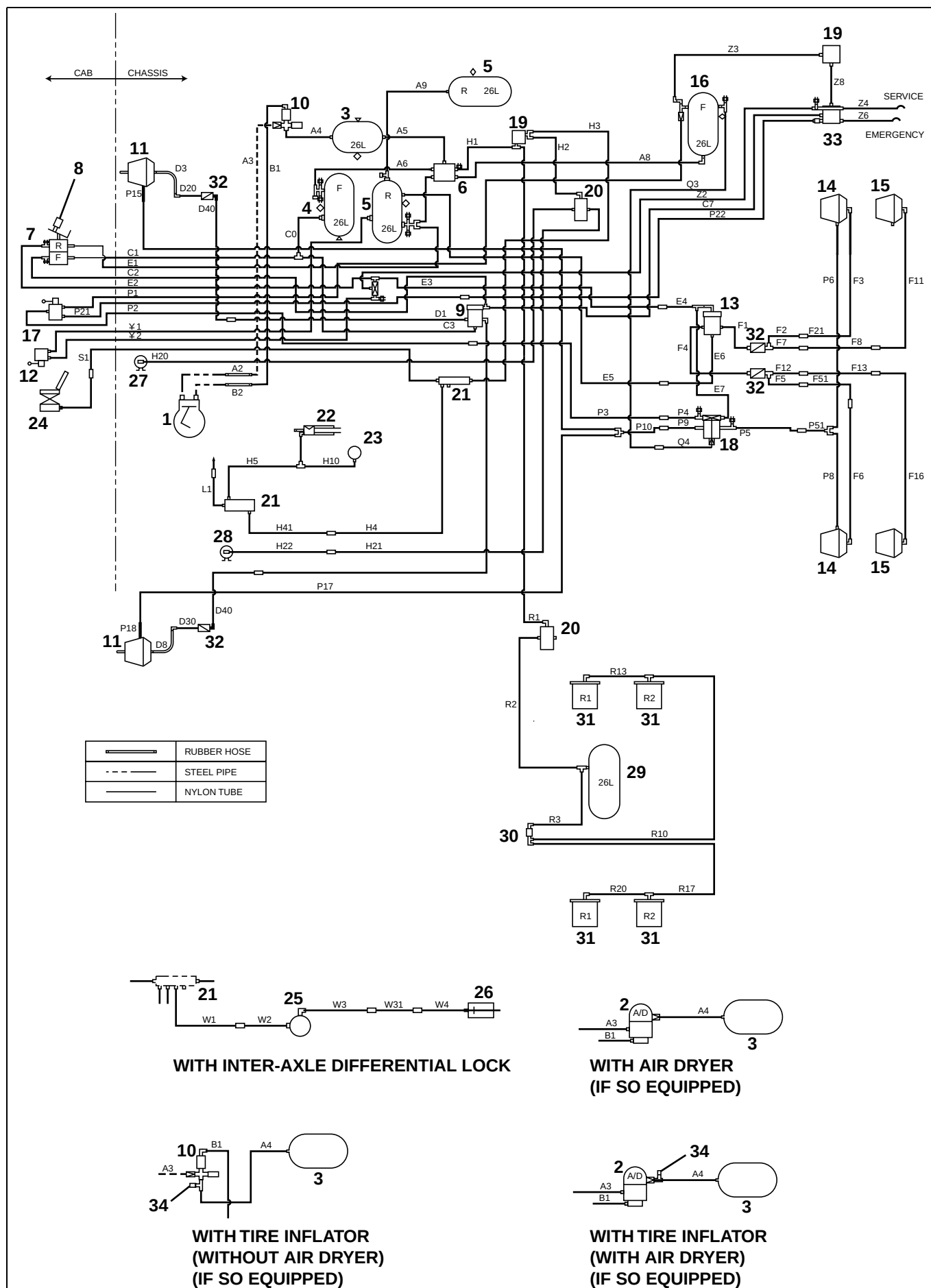


WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)



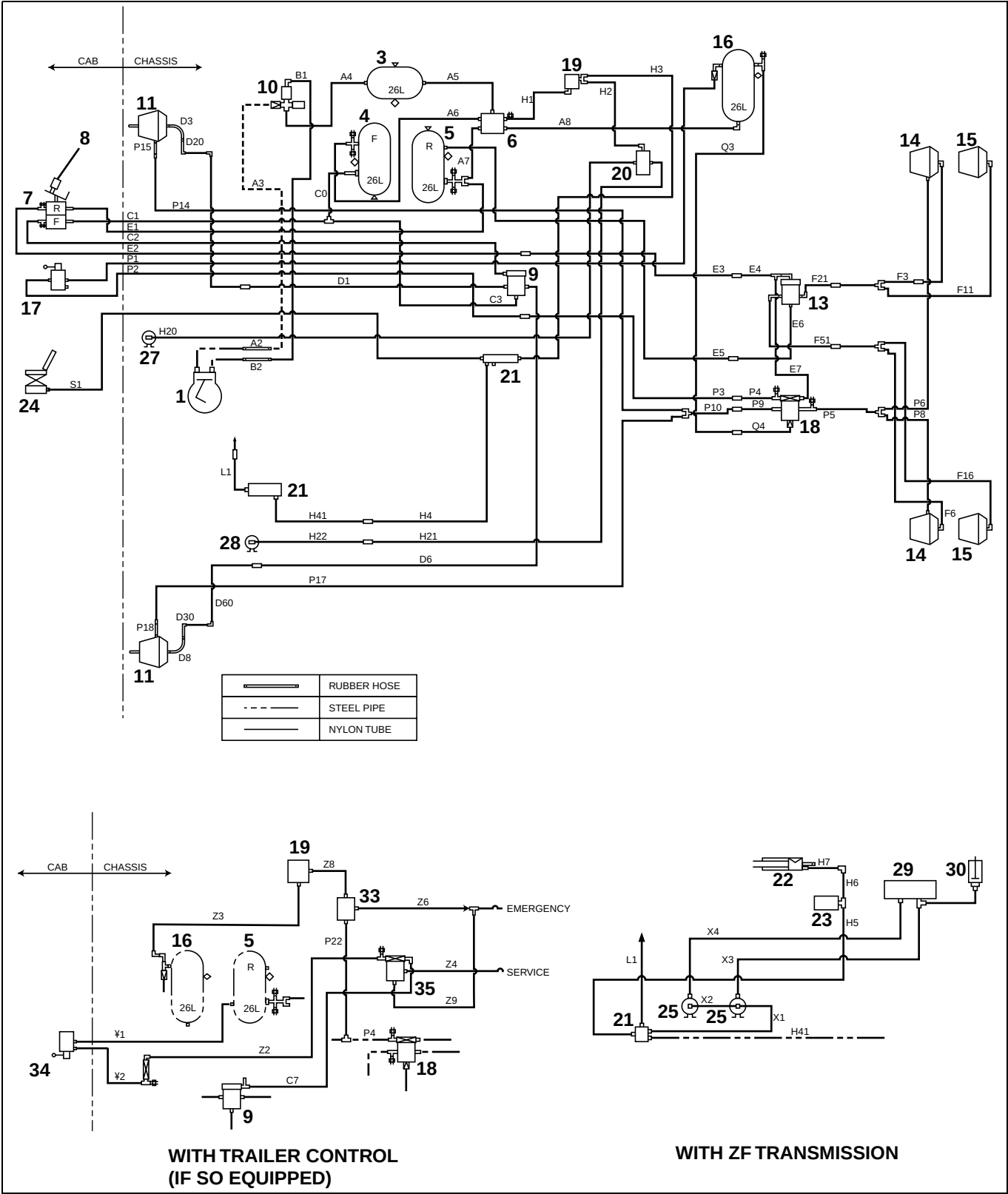
WITH INTER-AXLE DIFFERENTIAL LOCK
(MODEL: FS)

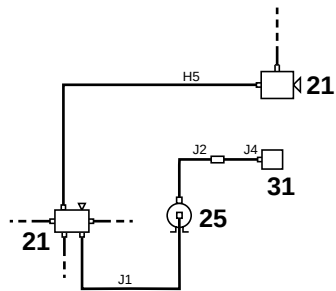
1	Air compressor	18	Relay valve-Spring brake
2	Air dryer (If so equipped)	19	Reducing valve
3	Air tank-Water separator	20	Protection valve
4	Air tank-Front brake	21	Multi joint
5	Air tank-Rear brake	22	Clutch booster
6	Protection valve	23	Range valve
7	Brake valve	24	Air suspension seat
8	Stop lamp switch	25	Magnetic valve
9	Relay valve-Front brake	26	Inter-axle differential lock control cylinder
10	Pressure regulator	27	Cab suspension-Front
11	Brake chamber	28	Cab suspension-Rear
12	ABS control valve (If so equipped)	29	Air tank-Air suspension
13	Relay valve-Rear	30	Transmission P.T.O.
14	Spring brake chamber-Rear, Frontward	31	Splitter valve
15	Spring brake chamber-Rear, Rearward	32	Power shift
16	ES start control valve (If so equipped)	33	Load sensing valve
17	Spring brake control valve	34	Tire inflator (If so equipped)

MODEL: FS (For NEW ZEALAND)

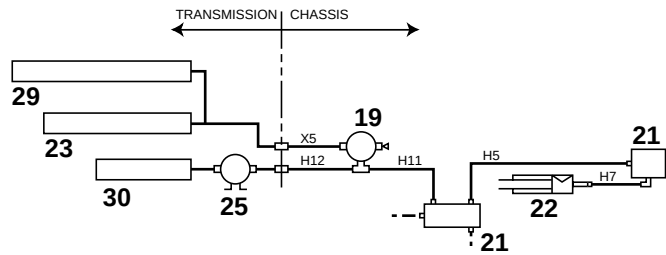
1	Air compressor	18	Relay valve-Spring brake
2	Air dryer (If so equipped)	19	Reducing valve
3	Air tank-Water separator	20	Protection valve
4	Air tank-Front brake	21	Multi joint
5	Air tank-Rear brake	22	Clutch booster
6	Protection valve	23	Range valve
7	Brake valve	24	Air suspension seat
8	Stop lamp switch	25	Magnetic valve
9	Relay valve-Front brake	26	Inter-axle differential lock control cylinder
10	Pressure regulator	27	Cab suspension-Front
11	Spring brake chamber-Front	28	Cab suspension-Rear
12	Trailer hand brake valve	29	Air tank-Air suspension
13	Release valve-Rear brake	30	Leveling valve
14	Spring brake chamber-Rear	31	Air spring
15	Brake chamber	32	ABS control valve
16	Air tank-Spring brake and trailer brake	33	Trailer control valve
17	Spring brake control valve	34	Tire inflator (If so equipped)

MODEL: FS (FULL TRACTOR) (For GENERAL COUNTRIES, CHILE, G.C.C. COUNTRIES)

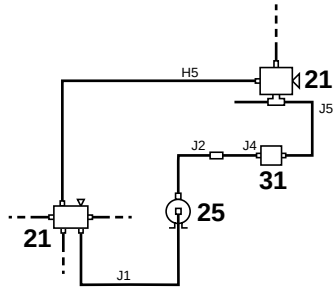




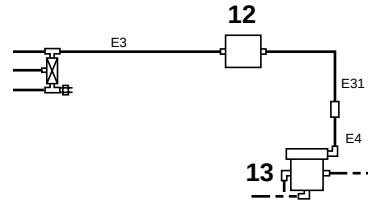
**WITH TRANSMISSION P.T.O.
(WITH ZF TRANSMISSION)
(IF SO EQUIPPED)**



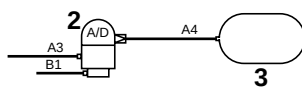
WITH MZ12 TRANSMISSION



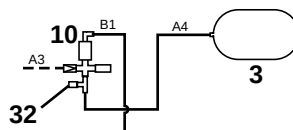
**WITH TRANSMISSION P.T.O.
(WITH MZ12 TRANSMISSION)
(IF SO EQUIPPED)**



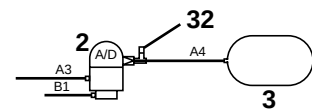
**WITH LOAD SENSING VALVE
(IF SO EQUIPPED)**



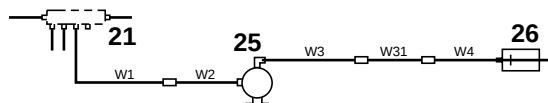
WITH AIR DRYER



**WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)**



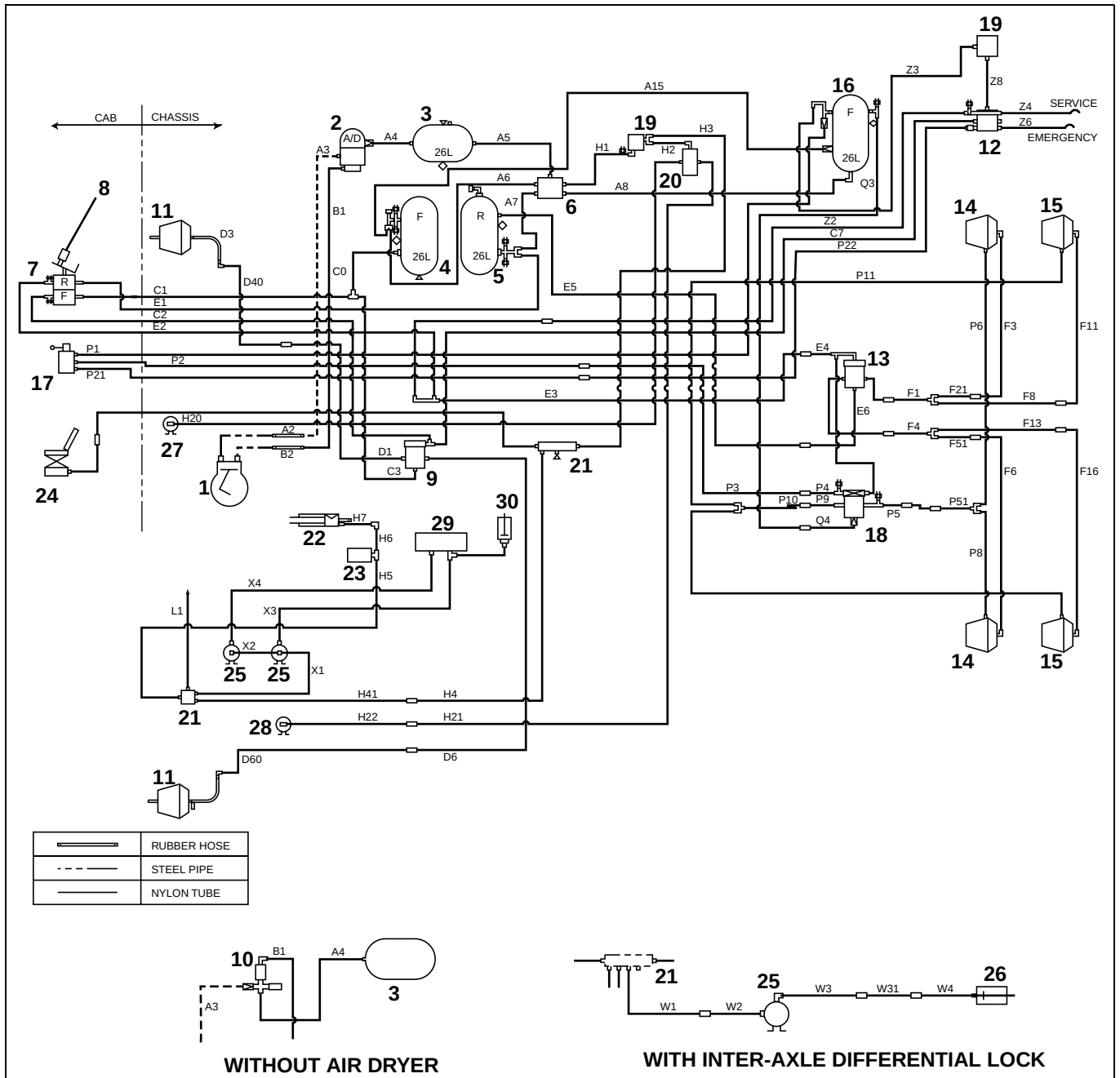
**WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)**



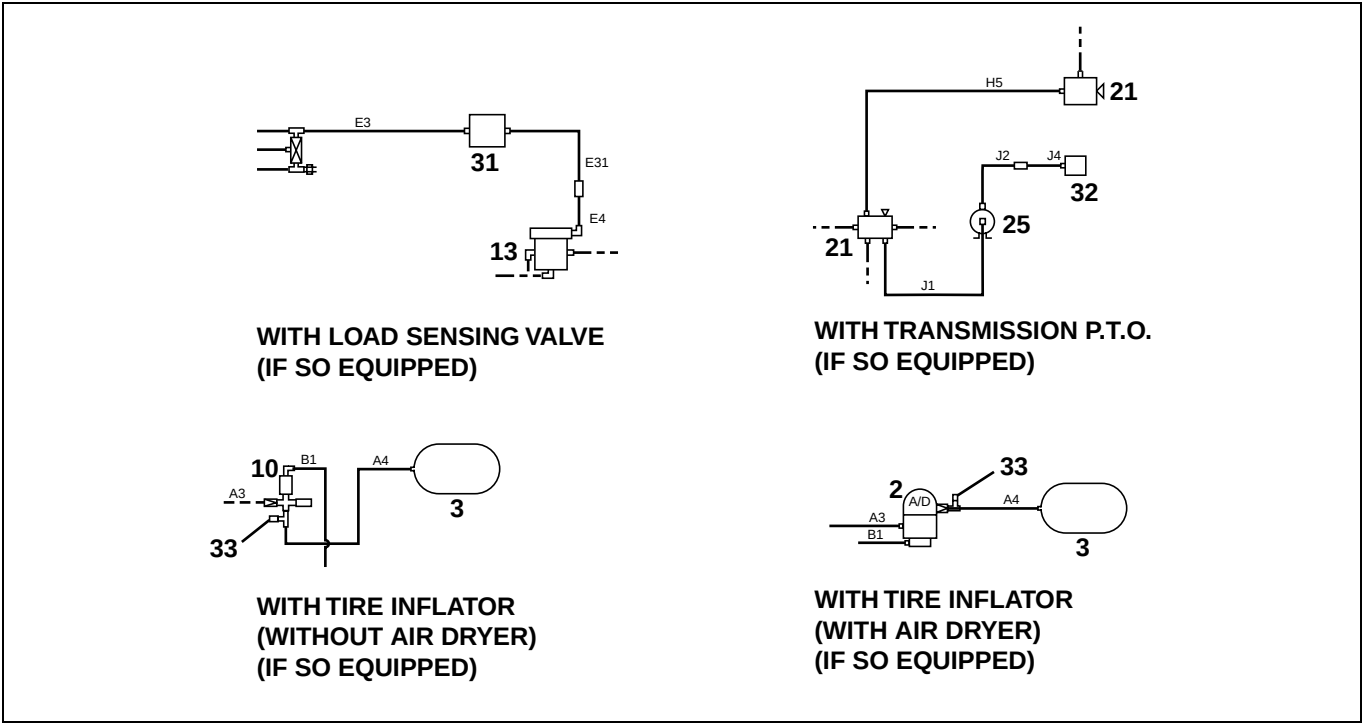
WITH INTER-AXLE DIFFERENTIAL LOCK

1	Air compressor	19	Reducing valve
2	Air dryer (If so equipped)	20	Protection valve
3	Air tank-Water separator	21	Multi joint
4	Air tank-Front brake	22	Clutch booster
5	Air tank-Rear brake	23	Range valve
6	Protection valve	24	Air suspension seat
7	Brake valve	25	Magnetic valve
8	Stop lamp switch	26	Inter-axle differential lock control cylinder
9	Relay valve-Front brake	27	Cab suspension-Front
10	Pressure regulator	28	Cab suspension-Rear
11	Spring brake chamber-Front	29	Splitter valve
12	Load sensing valve (If so equipped)	30	Power shift
13	Release valve-Rear brake	31	Transmission P.T.O. (If so equipped)
14	Spring brake chamber-Rear	32	Tire inflator (If so equipped)
15	Brake chamber	33	Cut valve (If so equipped)
16	Air tank-Spring brake and trailer brake	34	Trailer hand brake valve (If so equipped)
17	Spring brake control valve	35	Trailer control valve (If so equipped)
18	Relay valve-Spring brake		

MODEL: FS (FULL TRACTOR) (For SOUTH AFRICA)



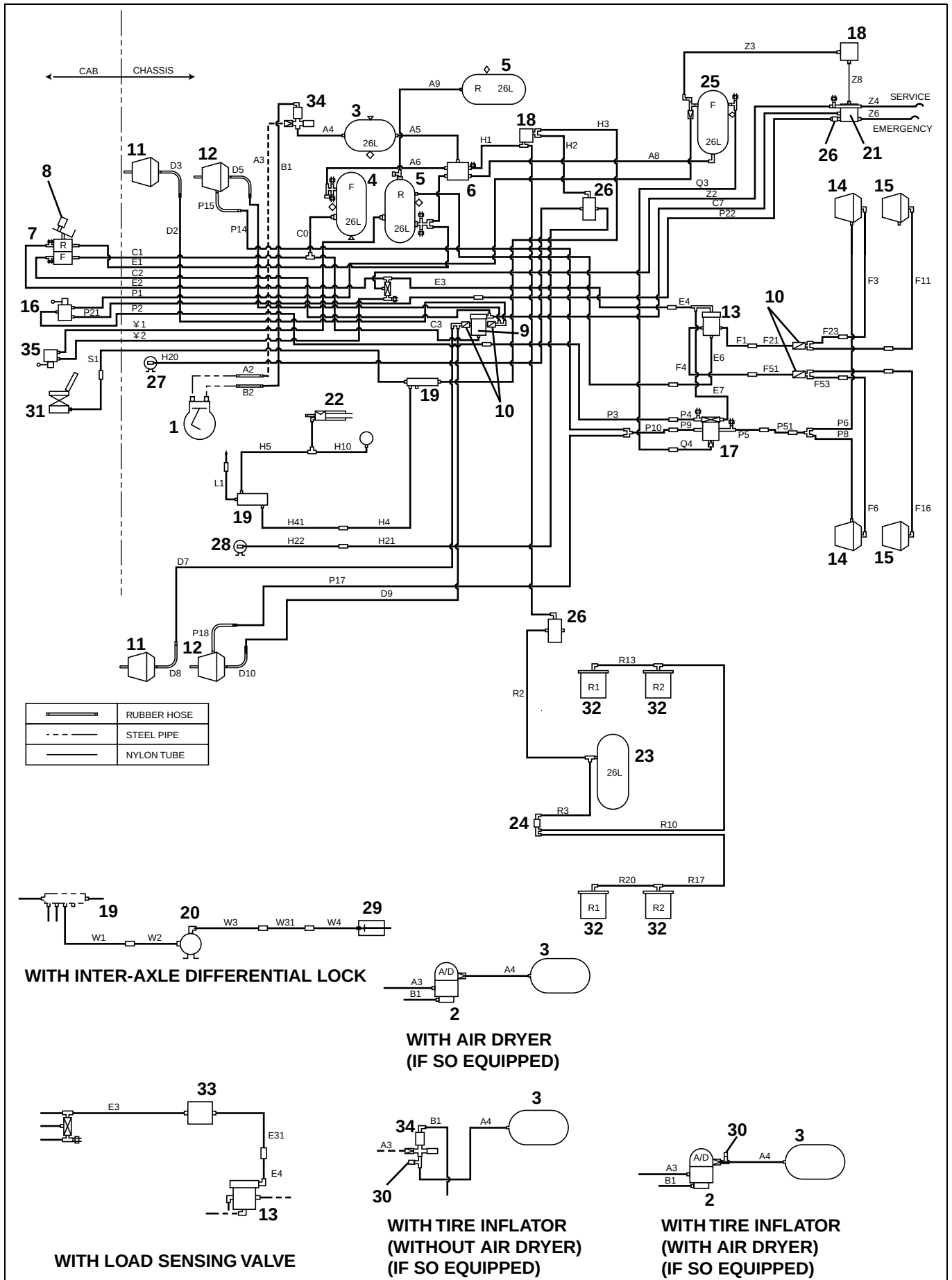
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1	Air compressor	18	Relay valve-Spring brake
2	Air dryer (If so equipped)	19	Reducing valve
3	Air tank-Water separator	20	Protection valve
4	Air tank-Front brake	21	Multi joint
5	Air tank-Rear brake	22	Clutch booster
6	Protection valve	23	Range valve
7	Brake valve	24	Air suspension seat
8	Stop lamp switch	25	Magnetic valve
9	Relay valve-Front brake	26	Inter-axle differential lock control cylinder
10	Pressure regulator	27	Cab suspension-Front
11	Brake chamber-Front	28	Cab suspension-Rear
12	Trailer control valve	29	Splitter valve
13	Release valve-Rear brake	30	Power shift
14	Spring brake chamber-Rear	31	Load sensing valve
15	Spring brake chamber-Rearward	32	Transmission P.T.O.
16	Air tank-Spring brake and trailer brake	33	Tire inflator
17	Spring brake control valve		

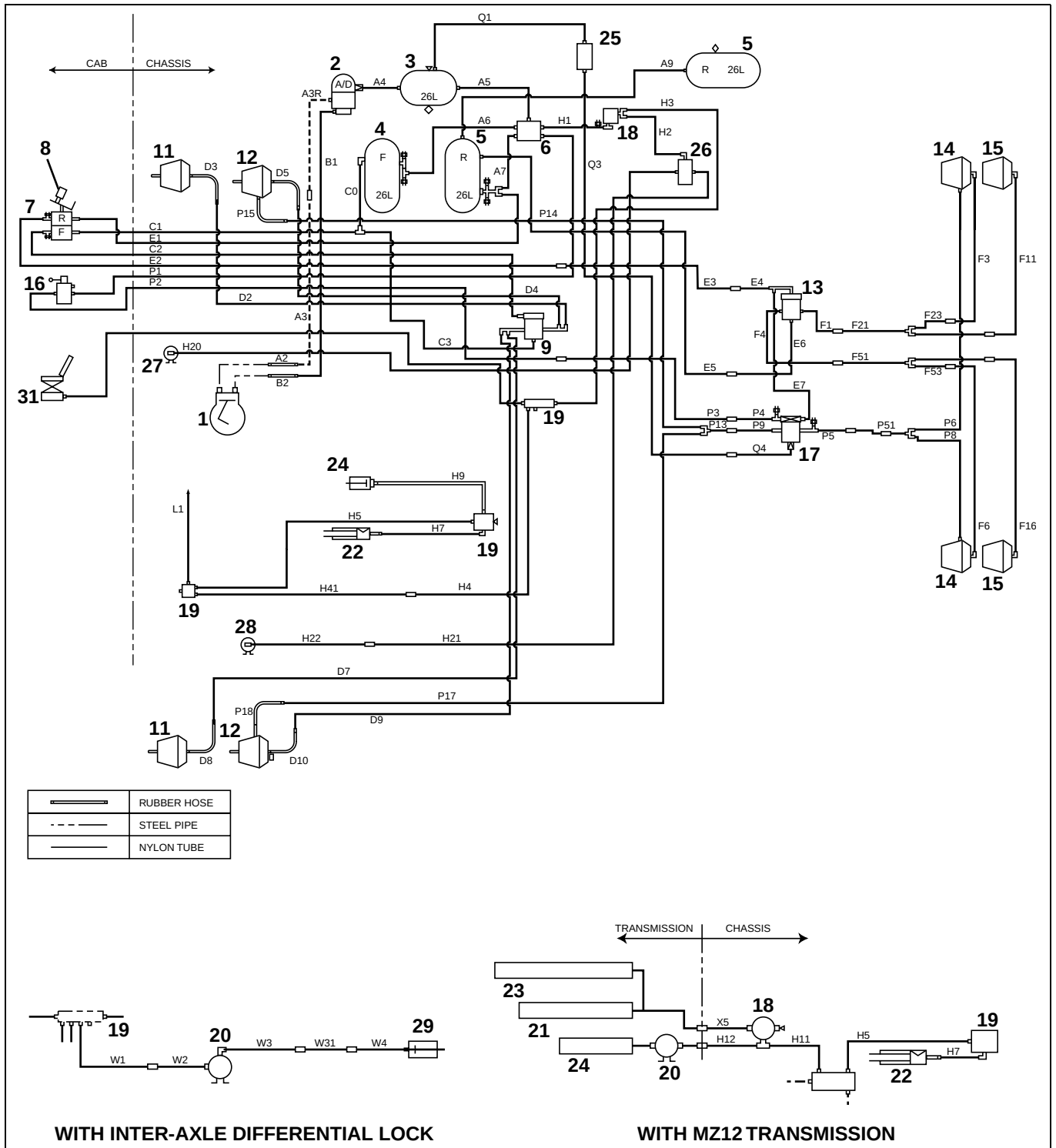
MODEL: FY (For GENERAL COUNTRIES, NEW ZEALAND)



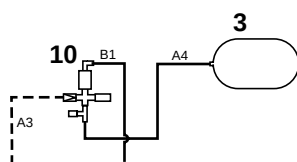
SHTS068020100011

1	Air compressor	19	Multi joint
2	Air dryer (If so equipped)	20	Magnetic valve
3	Air tank-Water separator	21	Trailer control valve (If so equipped)
4	Air tank-Front brake	22	Clutch booster
5	Air tank-Rear brake	23	Air tank-Air suspension (If so equipped)
6	Protection valve	24	Leveling valve (If so equipped)
7	Brake valve	25	Air tank-Spring brake and trailer brake (If so equipped)
8	Stop lamp switch	26	Protection valve
9	Relay valve-Front brake	27	Cab suspension-Front
10	ABS control valve	28	Cab suspension-Rear
11	Brake chamber-Front	29	Inter-axle differential lock control cylinder
12	Spring brake chamber-Front	30	Tire inflator (If so equipped)
13	Relay valve-Rear brake	31	Air suspension seat (If so equipped)
14	Spring brake chamber-Rear	32	Air spring (If so equipped)
15	Brake chamber-Rear	33	Load sensing valve (If so equipped)
16	Spring brake control valve	34	Pressure regulator
17	Relay valve-Spring brake	35	Trailer hand brake valve (If so equipped)
18	Reducing valve		

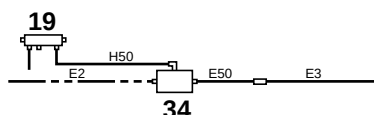
MODEL: FY (For CHINA, HONG KONG)



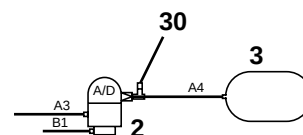
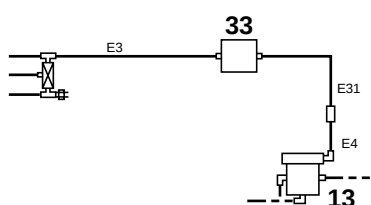
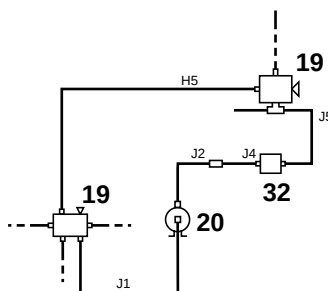
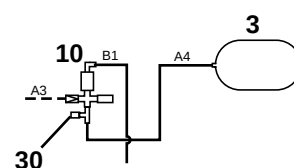
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WITHOUT AIR DRYER



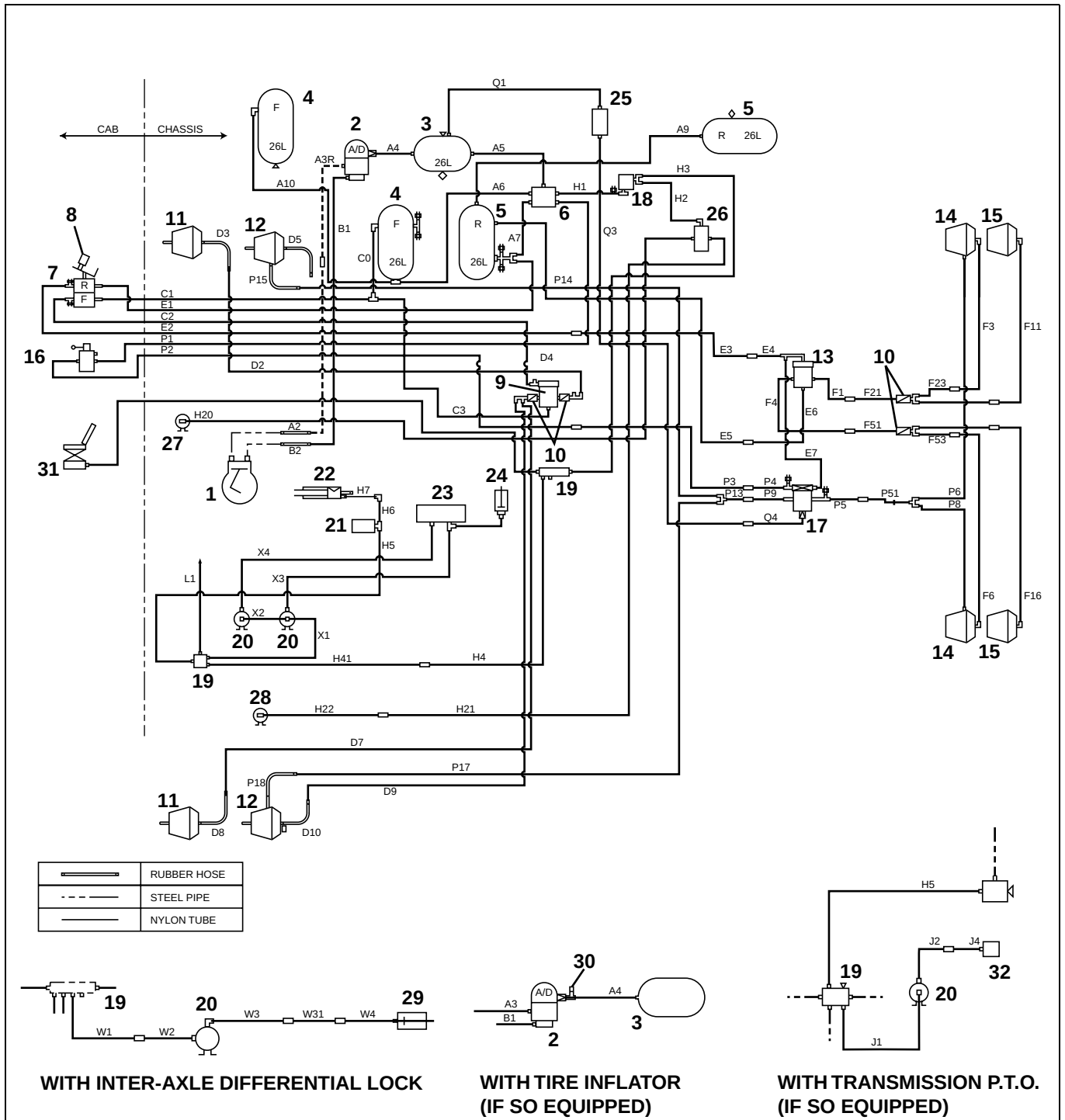
WITH ES START

WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)WITH LOAD SENSING VALVE
(IF SO EQUIPPED)WITH TRANSMISSION P.T.O.
(IF SO EQUIPPED)WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)

SHTS068020100013

1	Air compressor	18	Reducing valve
2	Air dryer (If so equipped)	19	Multi joint
3	Air tank-Water separator	20	Magnetic valve
4	Air tank-Front brake	21	Range valve (If so equipped)
5	Air tank-Rear brake	22	Clutch booster
6	Protection valve	23	Splitter valve (If so equipped)
7	Brake valve	24	Power shift
8	Stop lamp switch	25	Protection valve
9	Relay valve-Front brake	26	Protection valve
10	Pressure regulator (If so equipped)	27	Cab suspension-Front
11	Brake chamber-Front	28	Cab suspension-Rear
12	Spring brake chamber-Front	29	Inter-axle differential lock control cylinder
13	Relay valve-Rear brake	30	Tire inflator (If so equipped)
14	Spring brake chamber-Rear	31	Air suspension seat (If so equipped)
15	Brake chamber-Rear	32	Transmission P.T.O. (If so equipped)
16	Spring brake control valve	33	Load sensing valve (If so equipped)
17	Relay valve-Spring brake	34	ES start control valve (If so equipped)

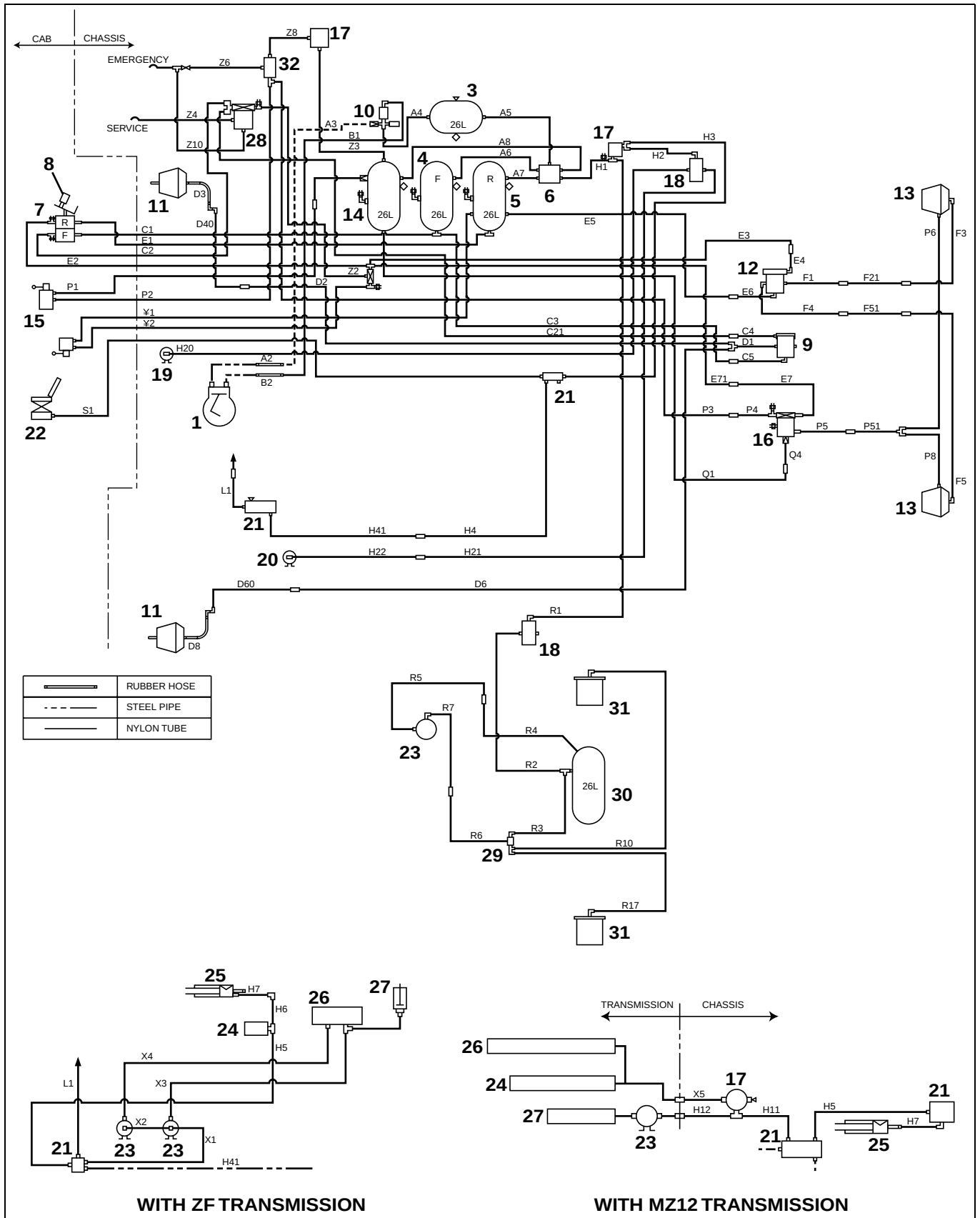
MODEL: FY (For IRELAND)

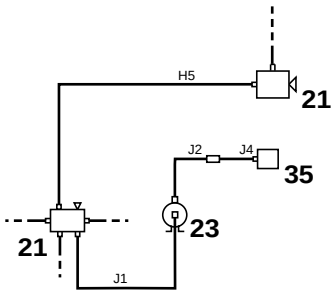


SHTS068020100014

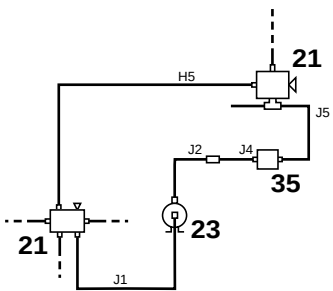
1	Air compressor	17	Relay valve-Spring brake
2	Air dryer	18	Reducing valve
3	Air tank-Water separator	19	Multi joint
4	Air tank-Front brake	20	Magnetic valve
5	Air tank-Rear brake	21	Range valve
6	Protection valve	22	Clutch booster
7	Brake valve	23	Splitter valve
8	Stop lamp switch	24	Power shift
9	Relay valve-Front brake	25	Protection valve
10	ABS control valve	26	Protection valve
11	Brake chamber-Front	27	Cab suspension-Front
12	Spring brake chamber-Front	28	Cab suspension-Rear
13	Relay valve-Rear brake	29	Inter-axle differential lock control cylinder
14	Spring brake chamber-Rear	30	Tire inflator (If so equipped)
15	Brake chamber-Rear	31	Air suspension seat (If so equipped)
16	Spring bake control valve	32	Transmission P.T.O. (If so equipped)

MODEL: SH (For CHILE, G.C.C. COUNTRIES)

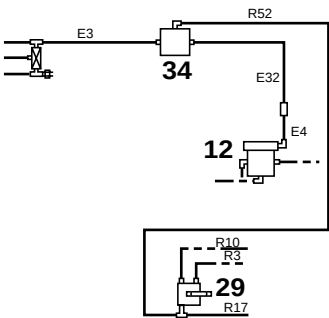




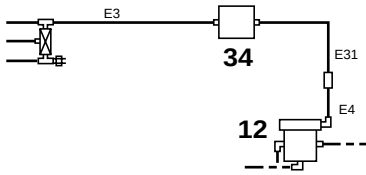
WITH TRANSMISSION P.T.O.
(WITH ZF TRANSMISSION)
(IF SO EQUIPPED)



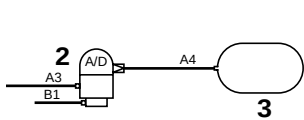
WITH TRANSMISSION P.T.O.
(WITH MZ12 TRANSMISSION)
(IF SO EQUIPPED)



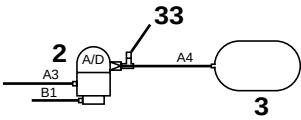
WITH LOAD SENSING VALVE
(WITH AIR SUSPENSION)
(IF SO EQUIPPED)



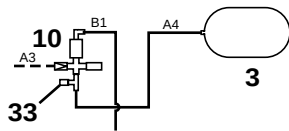
WITH LOAD SENSING VALVE
(WITH LEAF SUSPENSION)
(IF SO EQUIPPED)



WITH AIR DRYER
(IF SO EQUIPPED)



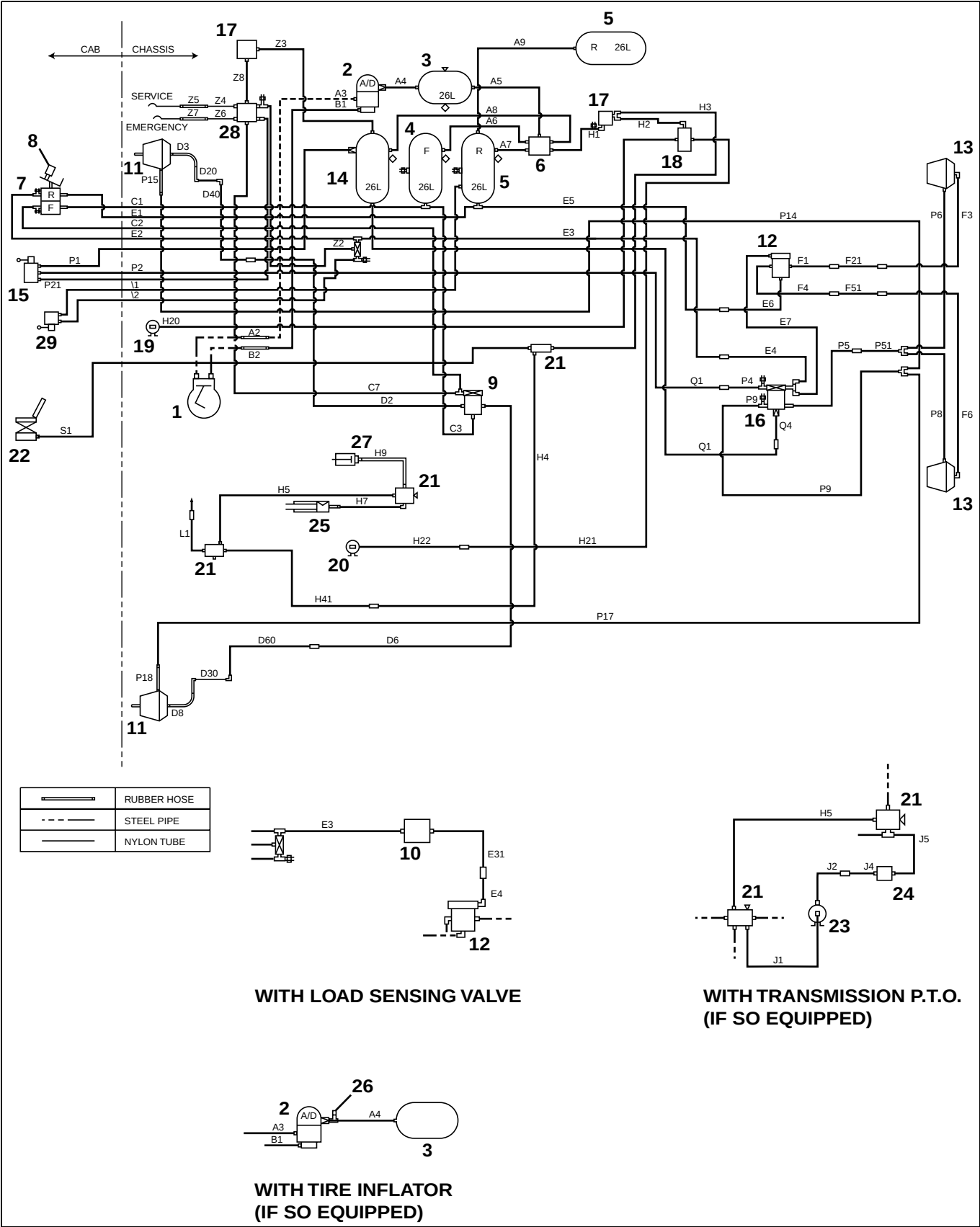
WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)



WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)

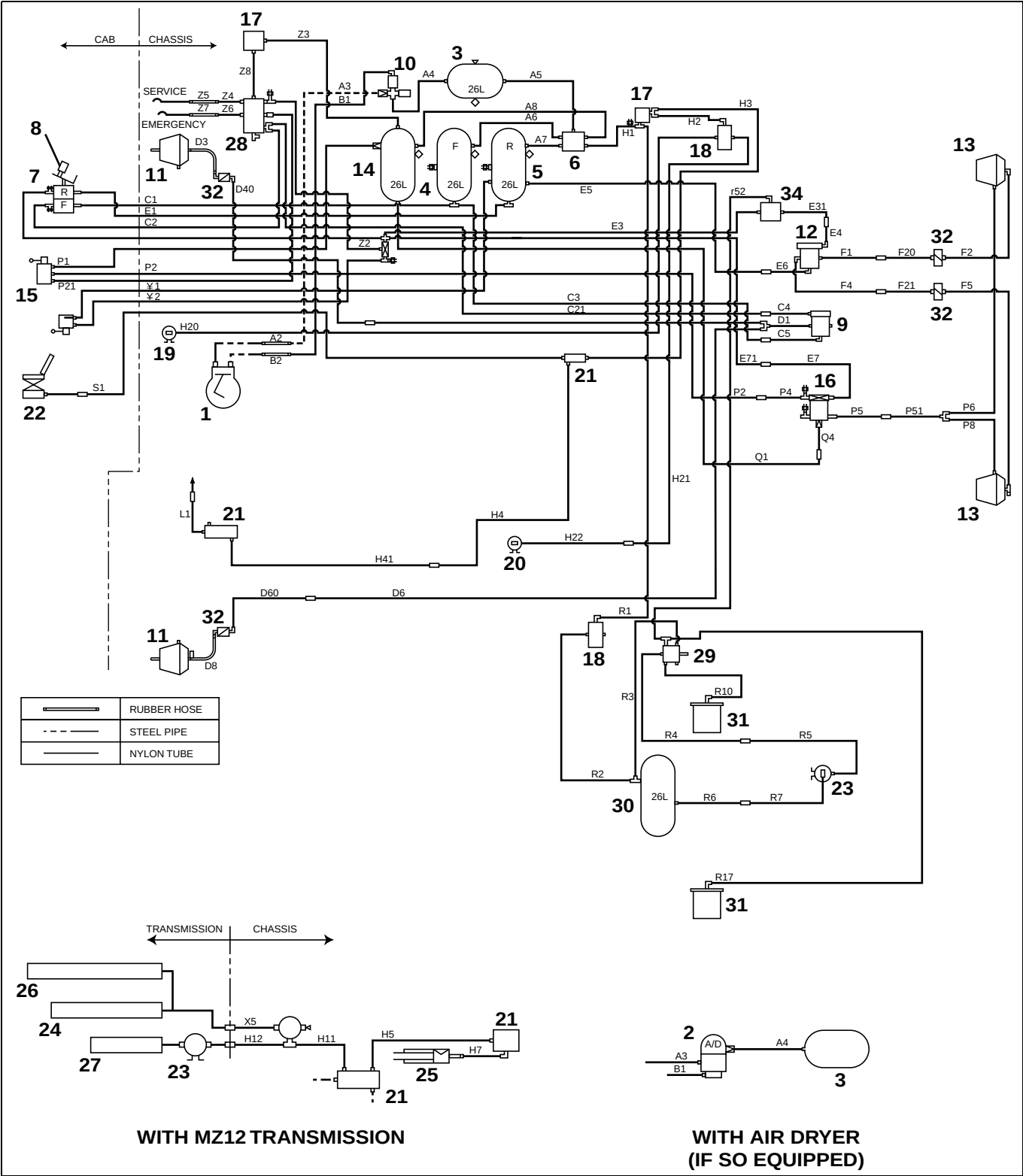
1	Air compressor	19	Cab suspension-Front
2	Air dryer	20	Cab suspension-Rear (If so equipped)
3	Air tank-Water separator	21	Multi joint
4	Air tank-Front brake	22	Air suspension seat (If so equipped)
5	Air tank-Rear brake	23	Magnetic valve
6	Protection valve	24	Range valve
7	Brake valve	25	Clutch booster
8	Stop lamp switch	26	Splitter valve
9	Relay valve-Front brake	27	Power shift
10	Pressure regulator	28	Trailer control valve
11	Brake chamber-Front	29	Leveling valve
12	Relay valve-Rear brake	30	Air tank-Air suspension
13	Spring brake chamber-Rear	31	Air spring
14	Air tank-Spring brake and trailer brake	32	Cut valve
15	Spring brake control valve	33	Tire inflator (If so equipped)
16	Relay valve-Spring brake	34	Load sensing valve (If so equipped)
17	Reducing valve	35	Transmission P.T.O. (If so equipped)
18	Protection valve		

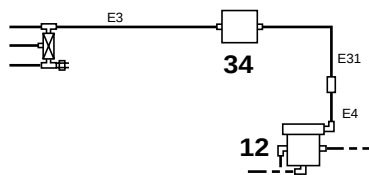
MODEL: SH (For CHINA)



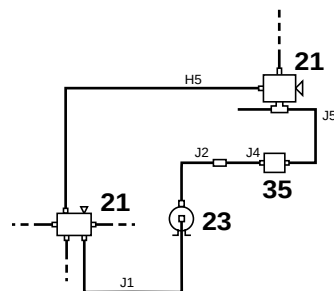
1	Air compressor	16	Relay valve-Spring brake
2	Air dryer	17	Reducing valve
3	Air tank-Water separator	18	Protection valve
4	Air tank-Front brake	19	Cab suspension-Front
5	Air tank-Rear brake	20	Cab suspension-Rear (If so equipped)
6	Protection valve	21	Multi joint
7	Brake valve	22	Air suspension seat (If so equipped)
8	Stop lamp switch	23	Magnetic valve
9	Relay valve-Front brake	24	Transmission P.T.O. (If so equipped)
10	Load sensing valve	25	Clutch booster
11	Brake chamber-Front	26	Tire inflator (If so equipped)
12	Relay valve-Rear brake	27	Power shift
13	Spring brake chamber-Rear	28	Trailer control valve
14	Air tank-Spring brake and trailer brake	29	Trailer hand brake valve
15	Spring brake control valve		

MODEL: SH (For HONG KONG, TAIWAN)

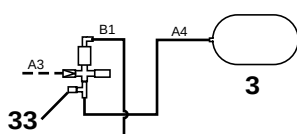




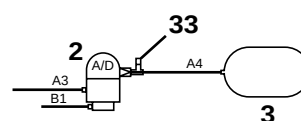
**WITH LOAD SENSING VALVE
(IF SO EQUIPPED)**



**WITH TRANSMISSION P.T.O.
(IF SO EQUIPPED)**



**WITH TIRE INFLATOR
(WITH AIR SUSPENSION)
(IF SO EQUIPPED)**

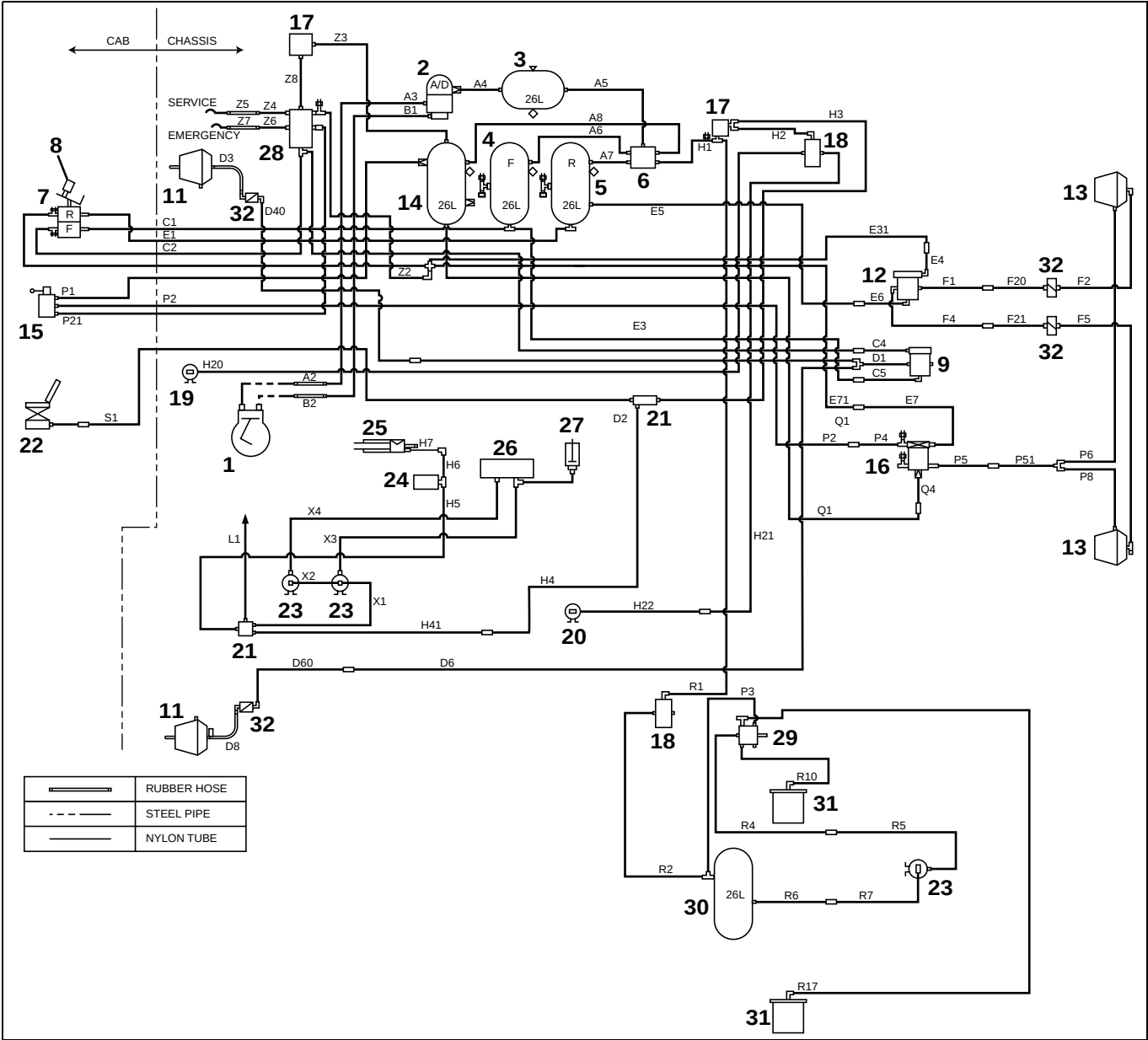


**WITH TIRE INFLATOR
(WITH LEAF SUSPENSION)
(IF SO EQUIPPED)**

SHTS068020100019

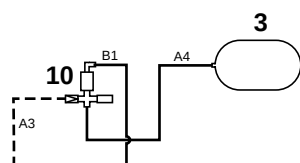
1	Air compressor	19	Cab suspension-Front
2	Air dryer	20	Cab suspension-Rear (If so equipped)
3	Air tank-Water separator	21	Multi joint
4	Air tank-Front brake	22	Air suspension seat (If so equipped)
5	Air tank-Rear brake	23	Magnetic valve
6	Protection valve	24	Range valve
7	Brake valve	25	Clutch booster
8	Stop lamp switch	26	Splitter valve
9	Relay valve-Front brake	27	Power shift
10	Pressure regulator	28	Trailer control valve
11	Brake chamber-Front	29	Leveling valve
12	Relay valve-Rear brake	30	Air tank-Air suspension
13	Spring brake chamber-Rear	31	Air spring
14	Air tank-Spring brake and trailer brake	32	ABS control valve (If so equipped)
15	Spring brake control valve	33	Tire inflator (If so equipped)
16	Relay valve-Spring brake	34	Load sensing valve (If so equipped)
17	Reducing valve	35	Transmission P.T.O. (If so equipped)
18	Protection valve		

MODEL: SH (For IRELAND, SOUTH AFRICA)

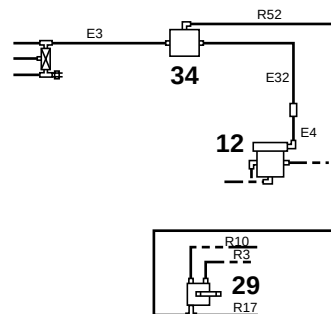


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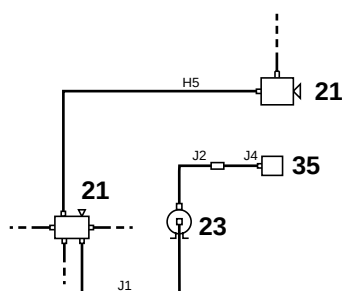
cardiagn.com



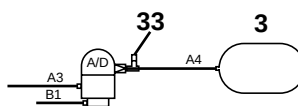
**WITHOUT AIR DRYER
(IF SO EQUIPPED)**



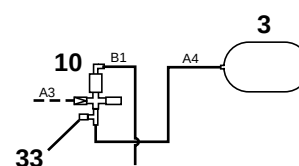
**WITH LOAD SENSING VALVE
(IF SO EQUIPPED)**



**WITH TRANSMISSION P.T.O.
(IF SO EQUIPPED)**



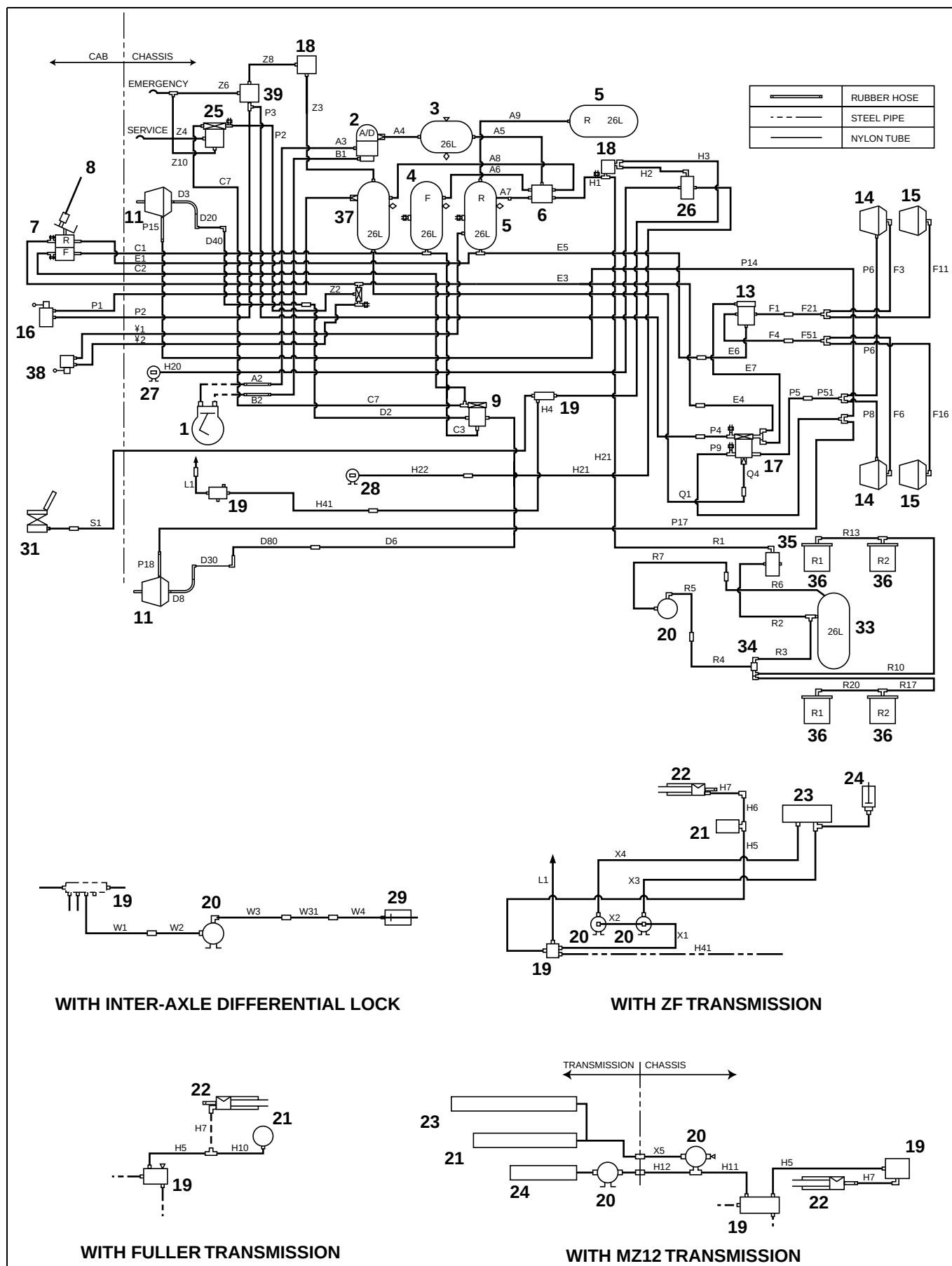
**WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)**

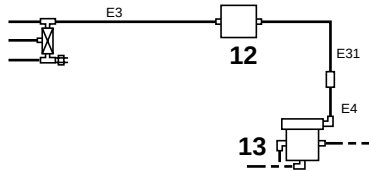


**WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)**

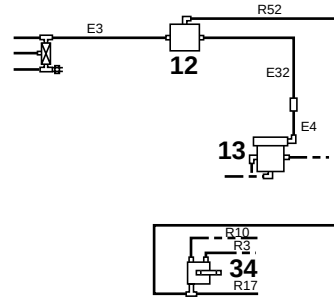
SHTS068020100021

1	Air compressor	19	Cab suspension-Front
2	Air dryer	20	Cab suspension-Rear (If so equipped)
3	Air tank-Water separator	21	Multi joint
4	Air tank-Front brake	22	Air suspension seat (If so equipped)
5	Air tank-Rear brake	23	Magnetic valve
6	Protection valve	24	Range valve
7	Brake valve	25	Clutch booster
8	Stop lamp switch	26	Splitter valve
9	Relay valve-Front brake	27	Power shift
10	Pressure regulator	28	Trailer control valve
11	Brake chamber-Front	29	Leveling valve
12	Relay valve-Rear brake	30	Air tank-Air suspension
13	Spring brake chamber-Rear	31	Air spring
14	Air tank-Spring brake and trailer brake	32	ABS control valve (If so equipped)
15	Spring brake control valve	33	Tire inflator (If so equipped)
16	Relay valve-Spring brake	34	Load sensing valve (If so equipped)
17	Reducing valve	35	Transmission P.T.O. (If so equipped)
18	Protection valve		

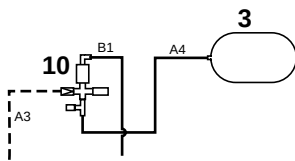
MODEL: SS (For GENERAL COUNTRIES, CHILE, G.C.C. COUNTRIES)



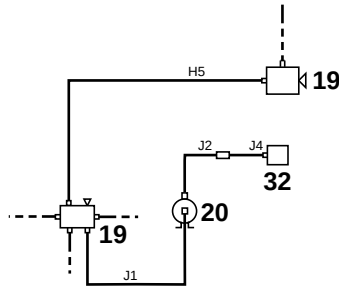
**WITH LOAD SENSING VALVE
(WITH LEAF SUSPENSION)
(IF SO EQUIPPED)**



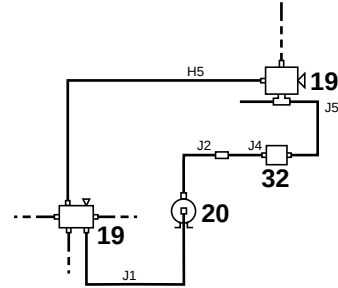
**WITH LOAD SENSING VALVE
(WITH AIR SUSPENSION)
(IF SO EQUIPPED)**



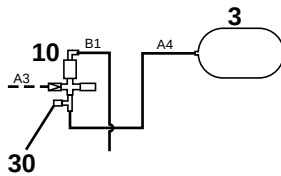
WITHOUT AIR DRYER



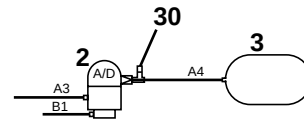
**WITH TRANSMISSION P.T.O.
(ZF TRANSMISSION)
(IF SO EQUIPPED)**



**WITH TRANSMISSION P.T.O.
(MZ12 TRANSMISSION)
(IF SO EQUIPPED)**



**WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)**

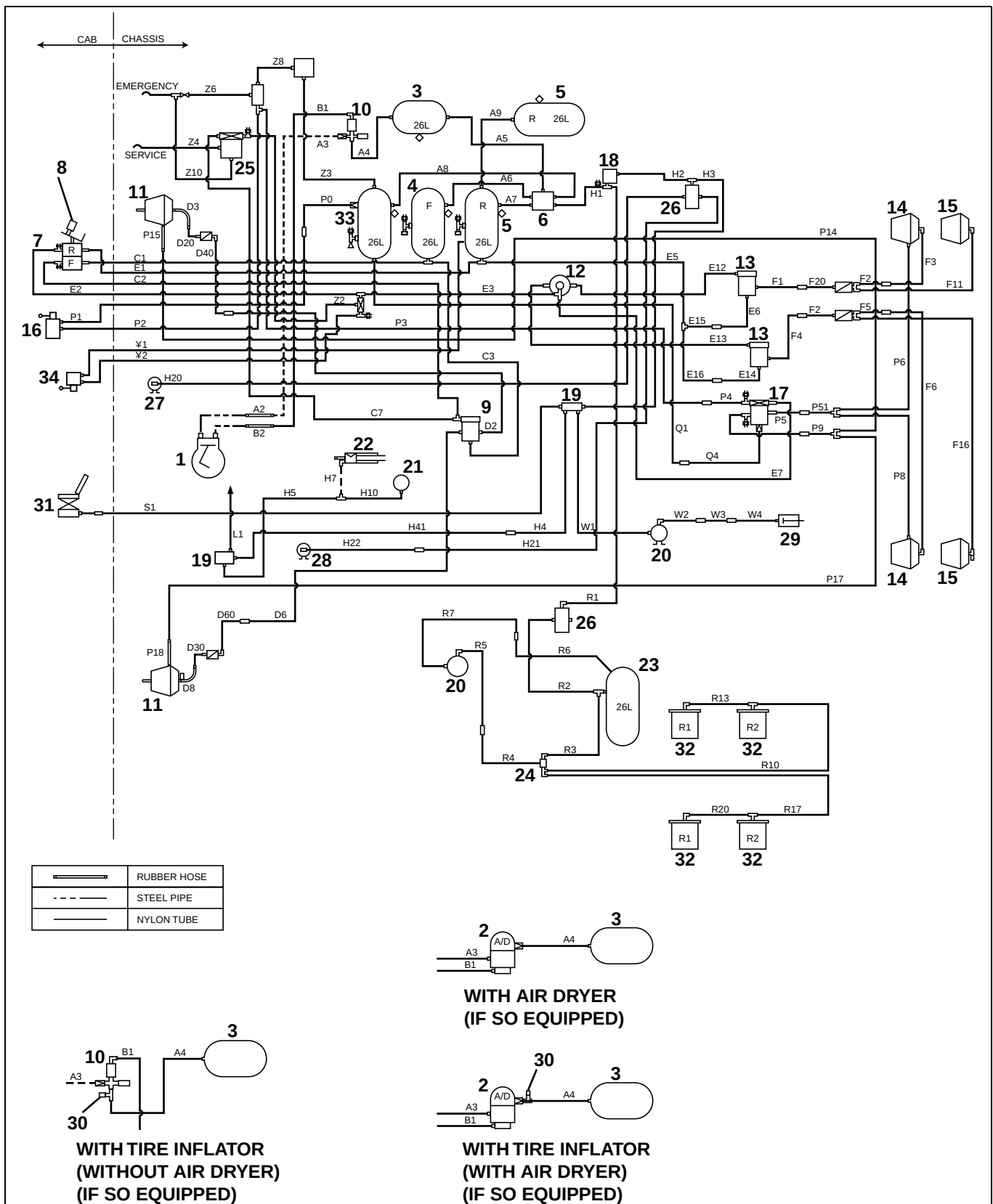


**WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)**

SHTS068020100023

1	Air compressor	21	Range valve
2	Air dryer	22	Clutch booster
3	Air tank-Water separator	23	Splitter valve
4	Air tank-Front brake	24	Power shift
5	Air tank-Rear brake	25	Trailer control valve
6	Protection valve	26	Protection valve
7	Brake valve	27	Cab suspension-Front
8	Stop lamp switch	28	Cab suspension-Rear
9	Relay valve-Front brake	29	Inter-axle differential lock control cylinder
10	Pressure regulator	30	Tire inflator (If so equipped)
11	Brake chamber-Front	31	Air suspension seat (If so equipped)
12	Load sensing valve	32	Transmission P.T.O. (If so equipped)
13	Relay valve-Rear brake	33	Air tank-Air suspension (If so equipped)
14	Spring brake chamber-Rear	34	Leveling valve (If so equipped)
15	Brake chamber-Rear	35	Protection valve (If so equipped)
16	Spring brake control valve	36	Air spring (If so equipped)
17	Relay valve-Spring brake	37	Air tank-Trailer brake
18	Reducing valve	38	Trailer hand brake valve
19	Multi joint	39	Cut valve
20	Magnetic valve		

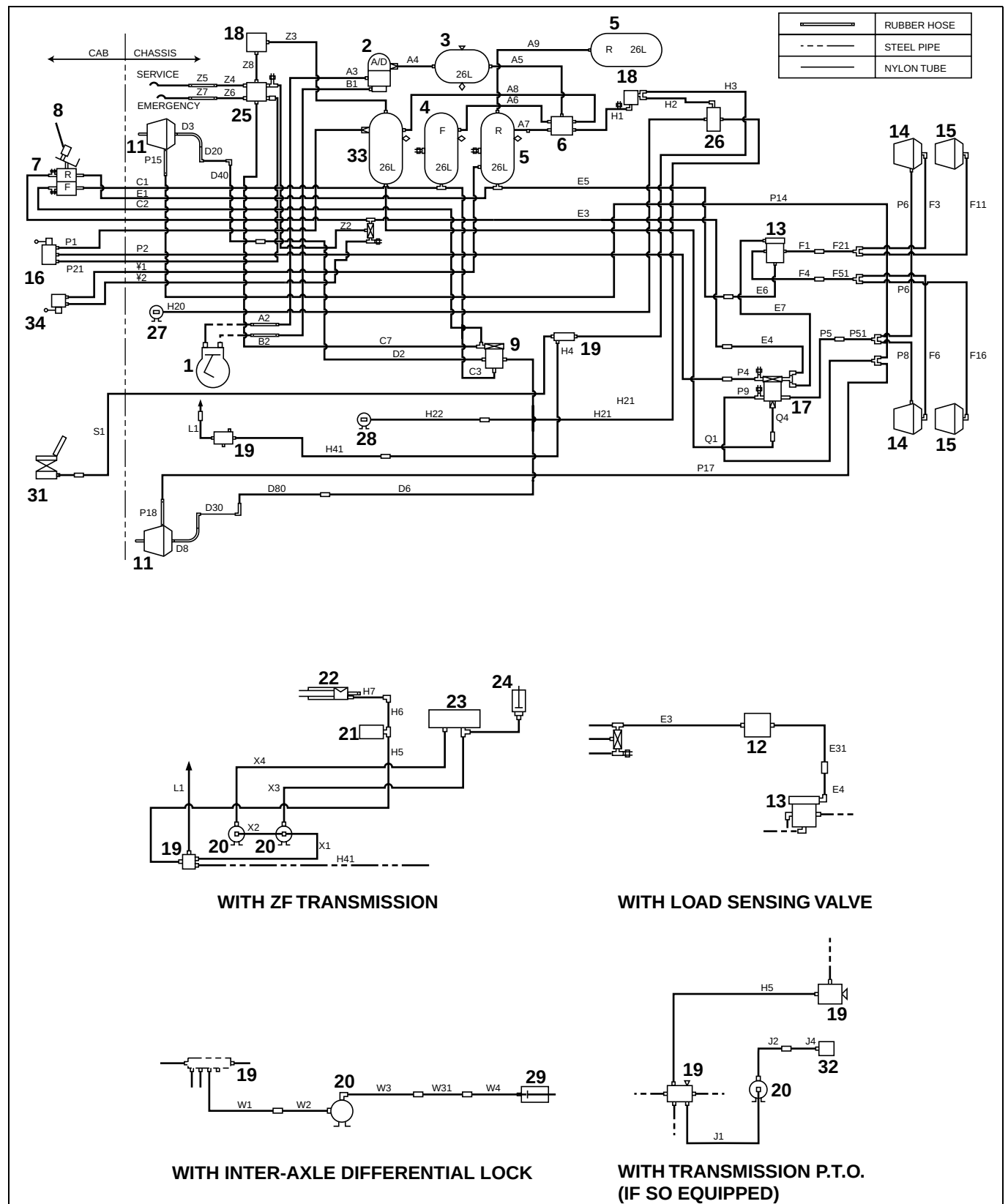
MODEL: SS (For AUSTRALIA)



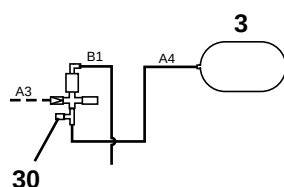
SHTS068020100024

1	Air compressor	18	Reducing valve
2	Air dryer	19	Multi joint
3	Air tank-Water separator	20	Magnetic valve
4	Air tank-Front brake	21	Range valve
5	Air tank-Rear brake	22	Clutch booster
6	Protection valve	23	Air tank-Air suspension
7	Brake valve	24	Leveling valve
8	Stop lamp switch	25	Trailer control valve
9	Relay valve-Front brake	26	Protection valve
10	Pressure regulator	27	Cab suspension-Front
11	Brake chamber-Front	28	Cab suspension-Rear
12	Quick release valve	29	Inter-axle differential lock control cylinder
13	Relay valve-Rear brake	30	Tire inflator (If so equipped)
14	Spring brake chamber-Rear	31	Air suspension seat (If so equipped)
15	Brake chamber-Rear	32	Air spring
16	Spring brake control valve	33	Air tank-Trailer brake
17	Relay valve-Spring brake	34	Trailer hand brake valve

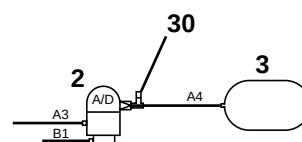
MODEL: SS (For CHINA)



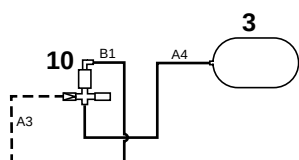
SHTS068020100025



**WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)**



**WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)**

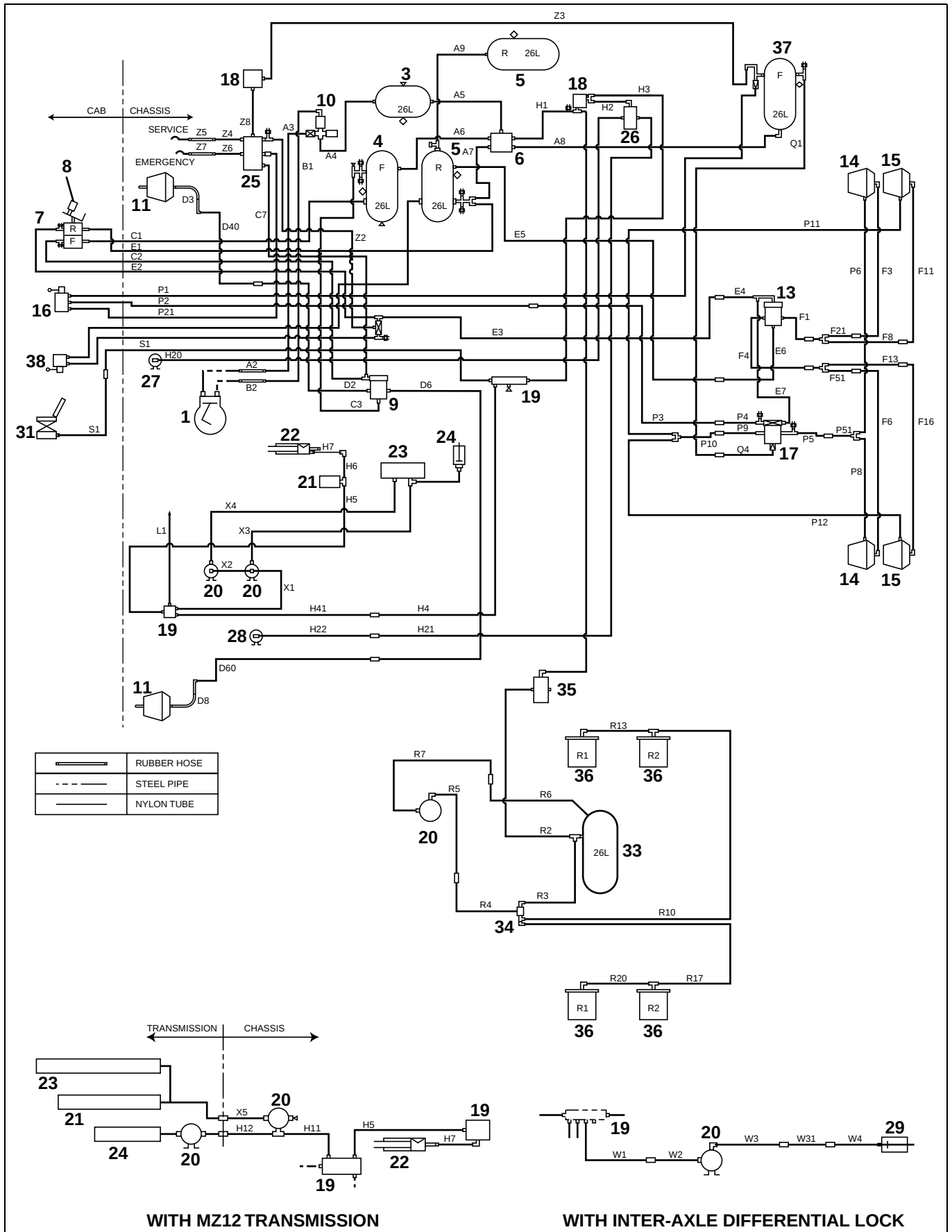


WITHOUT AIR DRYER

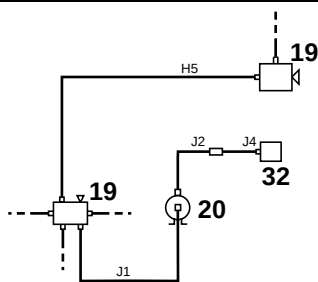
SHTS068020100026

1	Air compressor	18	Reducing valve
2	Air dryer	19	Multi joint
3	Air tank-Water separator	20	Magnetic valve
4	Air tank-Front brake	21	Range valve
5	Air tank-Rear brake	22	Clutch booster
6	Protection valve	23	Splitter valve
7	Brake valve	24	Power shift
8	Stop lamp switch	25	Trailer control valve
9	Relay valve-Front brake	26	Protection valve
10	Pressure regulator	27	Cab suspension-Front
11	Brake chamber-Front	28	Cab suspension-Rear
12	Load sensing valve	29	Inter-axle differential lock control cylinder
13	Relay valve-Rear brake	30	Tire inflator (If so equipped)
14	Spring brake chamber-Rear	31	Air suspension seat (If so equipped)
15	Brake chamber-Rear	32	Transmission P.T.O. (If so equipped)
16	Spring brake control valve	33	Air tank-Trailer brake
17	Relay valve-Spring brake	34	Trailer hand brake valve

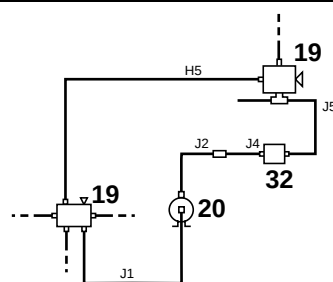
MODEL: SS (For HONG KONG, SOUTH AFRICA)



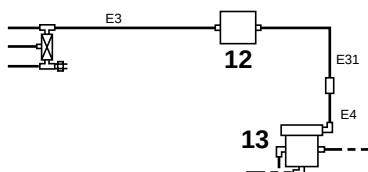
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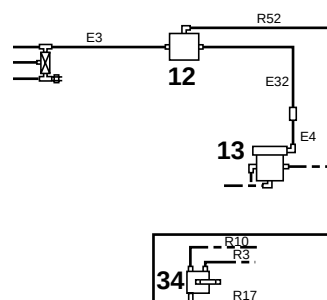
**WITH TRANSMISSION P.T.O.
(WITH ZF TRANSMISSION)
(IF SO EQUIPPED)**



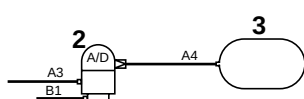
**WITH TRANSMISSION P.T.O.
(WITH MZ12 TRANSMISSION)
(IF SO EQUIPPED)**



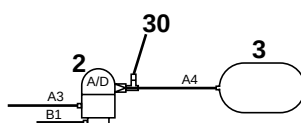
**WITH LOAD SENSING VALVE
(WITH LEAF SUSPENSION)
(IF SO EQUIPPED)**



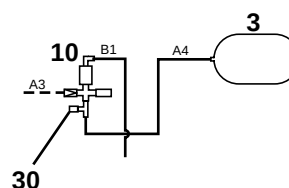
**WITH LOAD SENSING VALVE
(WITH AIR SUSPENSION)
(IF SO EQUIPPED)**



**WITH AIR DRYER
(IF SO EQUIPPED)**



**WITH TIRE INFLATOR
(WITH AIR DRYER)
(IF SO EQUIPPED)**



**WITH TIRE INFLATOR
(WITHOUT AIR DRYER)
(IF SO EQUIPPED)**

SHTS068020100028

1	Air compressor	20	Magnetic valve
2	Air dryer	21	Range valve
3	Air tank-Water separator	22	Clutch booster
4	Air tank-Front brake	23	Splitter valve
5	Air tank-Rear brake	24	Power shift
6	Protection valve	25	Trailer control valve
7	Brake valve	26	Protection valve
8	Stop lamp switch	27	Cab suspension-Front
9	Relay valve-Front brake	28	Cab suspension-Rear
10	Pressure regulator	29	Inter-axle differential lock control cylinder
11	Brake chamber-Front	30	Tire inflator (If so equipped)
12	Load sensing valve	31	Air suspension seat (If so equipped)
13	Relay valve-Rear brake	32	Transmission P.T.O. (If so equipped)
14	Spring brake chamber-Rear	33	Air tank-Air suspension (If so equipped)
15	Brake chamber-Rear	34	Leveling valve (If so equipped)
16	Spring brake control valve	35	Protection valve (If so equipped)
17	Relay valve-Spring brake	36	Air spring (If so equipped)
18	Reducing valve	37	Air tank-Trailer brake
19	Multi joint	38	Trailer hand brake valve

TROUBLESHOOTING

EN0680201F300001

Symptom	Possible cause	Remedy/Prevention
Not enough braking (Wheel brake and drum)	Lining is wet with grease or fluid	Replace the lining.
	Improper contact of drum and lining	Correct.
	Improper lining material or glazed lining	Correct.
	Deformation or hardening of drum	Correct or replace.
	Excessively worn lining	Replace.
Not enough braking (Control system)	Leakage of compressed air from brake system	Tighten further or replace gasket.
	Lack of compressed air pressure due to excessive use.	Use properly.
	Improper operation of air compressor	Repair or replace.
	Improper operation of brake valve	Repair or replace.
	Improper operation of relay valve and quick release valve	Repair or replace.
	Clogging of brake system	Replace pipe, hose, etc.
Unequal or unstable braking	Lining is wet with grease or fluid	Replace lining.
	Defective lining material (Improper combination)	Replace lining.
	Non-uniform lining contact	Correct.
	Improper adjustment of brake shoe	Adjust.
	Non-uniform shoe clearance	Adjust the clearance.
	Distorted drums	Correct or replace.
	Excessive abrasion of drums	Correct or replace.
	Loose hub bearing	Adjust or replace bearing.
	Improper or unequal pneumatic pressure of tire	Adjust to proper pneumatic pressure.
	Clogging of brake system	Replace pipe, hose, etc.
Brake drags or does not release (Wheel brake and drum)	Improper adjustment of shoe clearance	Adjust the clearance.
	Defective shoe return spring	Replace.
Brake drags or does not release (Control system)	Lack of pedal play	Adjust.
	Improper return of brake pedal	Repair or replace.
	Improper operation of brake valve	Repair or replace.
	Improper operation of relay valve and quick release valve	Repair or replace.
	Clogging of brake system	Replace pipe, hose, etc.
Brake squeal	Improper lining material or glazed lining	Replace lining.
	Loose lining rivets	Replace or tighten the rivet further.
	Lining rivet in contact with drum	Replace lining and rivet.
	Deformation or wear of drum	Repair or replace.
	Intrusion of foreign matter between drum and lining	Clean the surface of lining or replace
	Loose hub bearing	Adjust or replace bearing.

