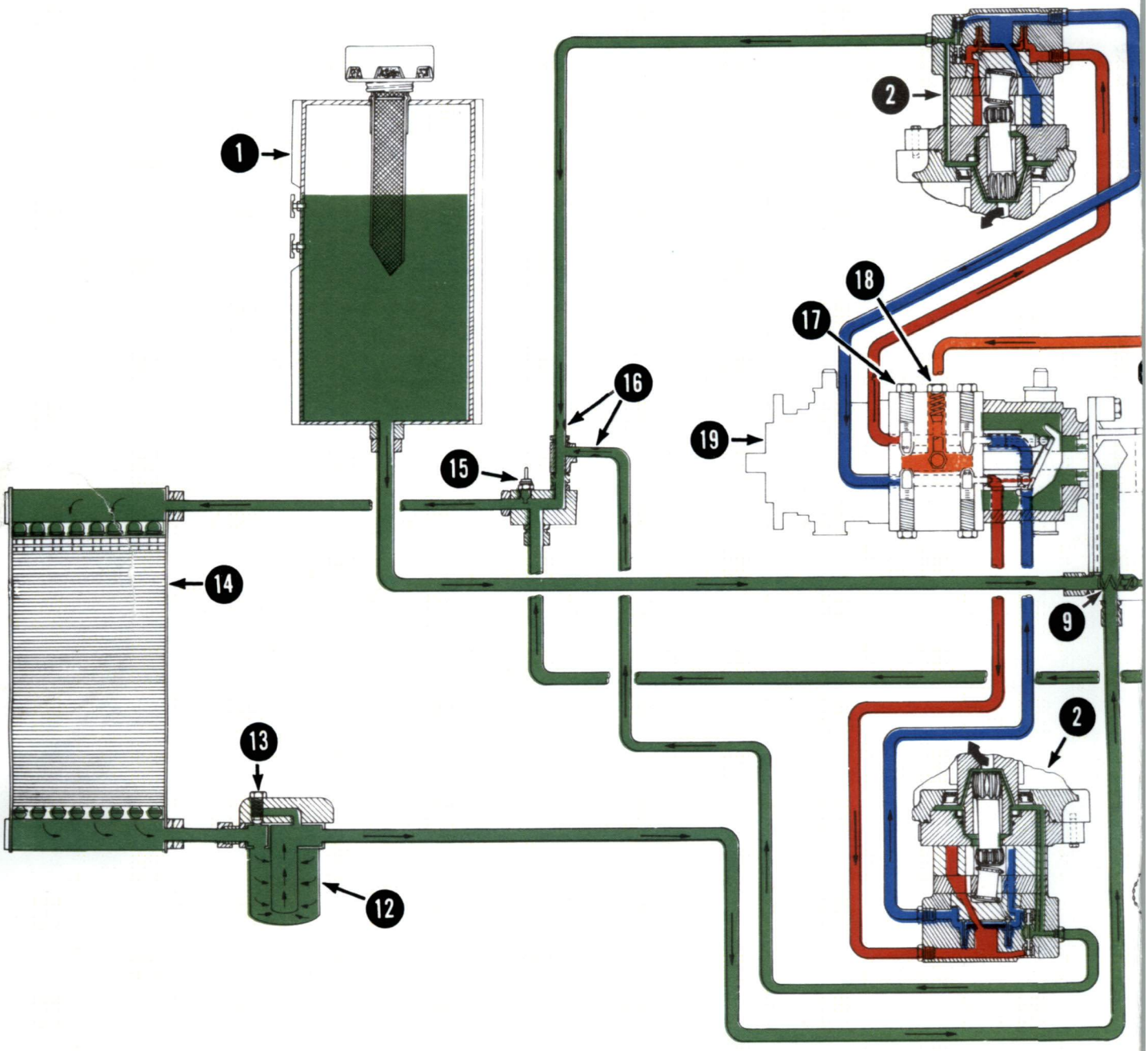
HYDRAULIC / HYDROSTATIC FLOW CHART

For Models

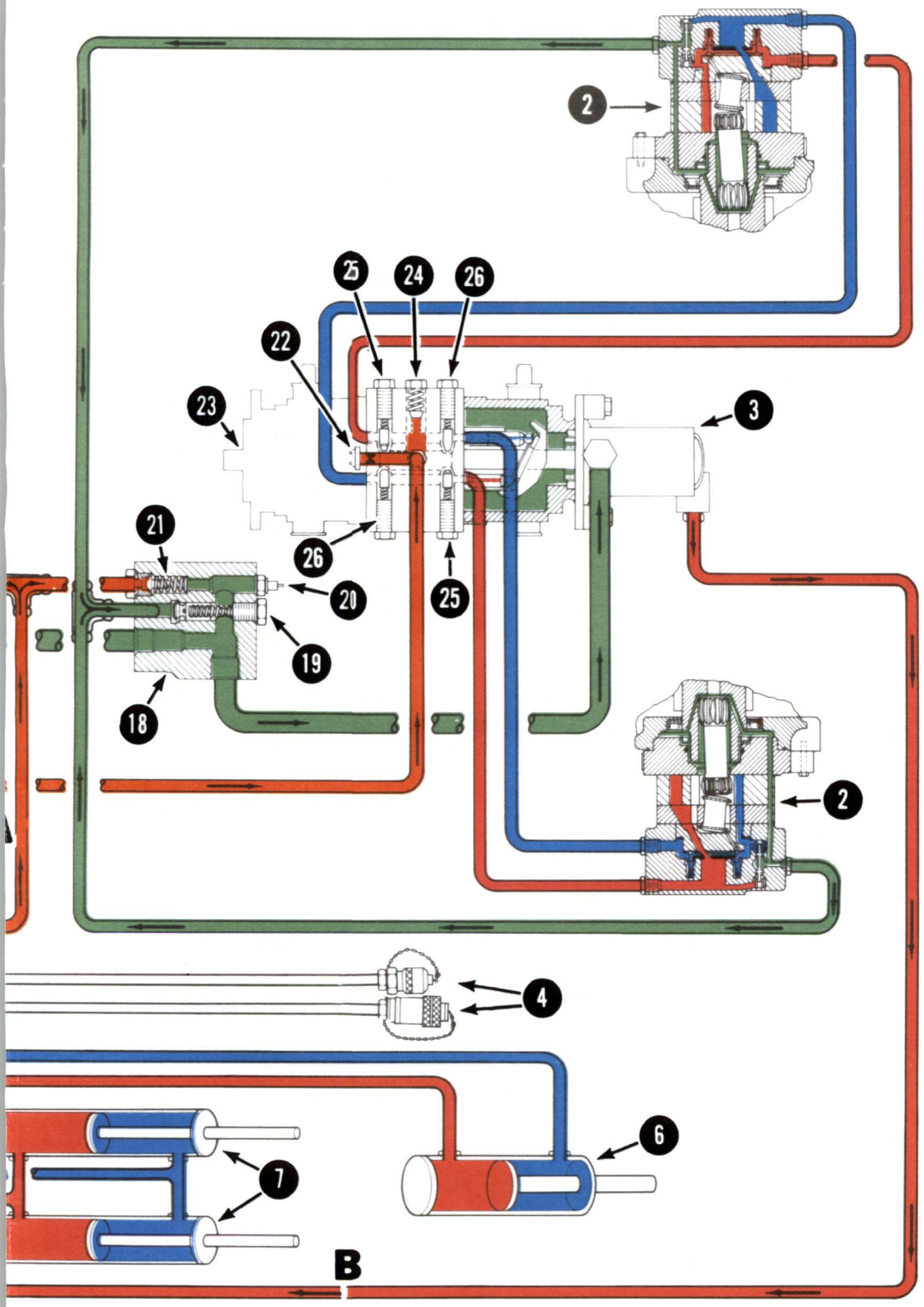
741, 742, 743, 743 DS (S/N 11001 Thru 14999)

With Charge Line Filter and Melroe Valve

Chart # 6570767 (Printed April 1988)



RED - - - - - - - - High Pressure
BLUE - - - - - - - Low Pressure
GREEN - - - - - - Case Drain & Reservoir
ORANGE - - - - - Charge Pressure



E-1751

HYDRAULIC / HYDROSTATIC FLOW CHART

For Models

741, 742, 743, 743 DS (Starting With S/N 15001)

With Charge Line Filter and Melroe Valve

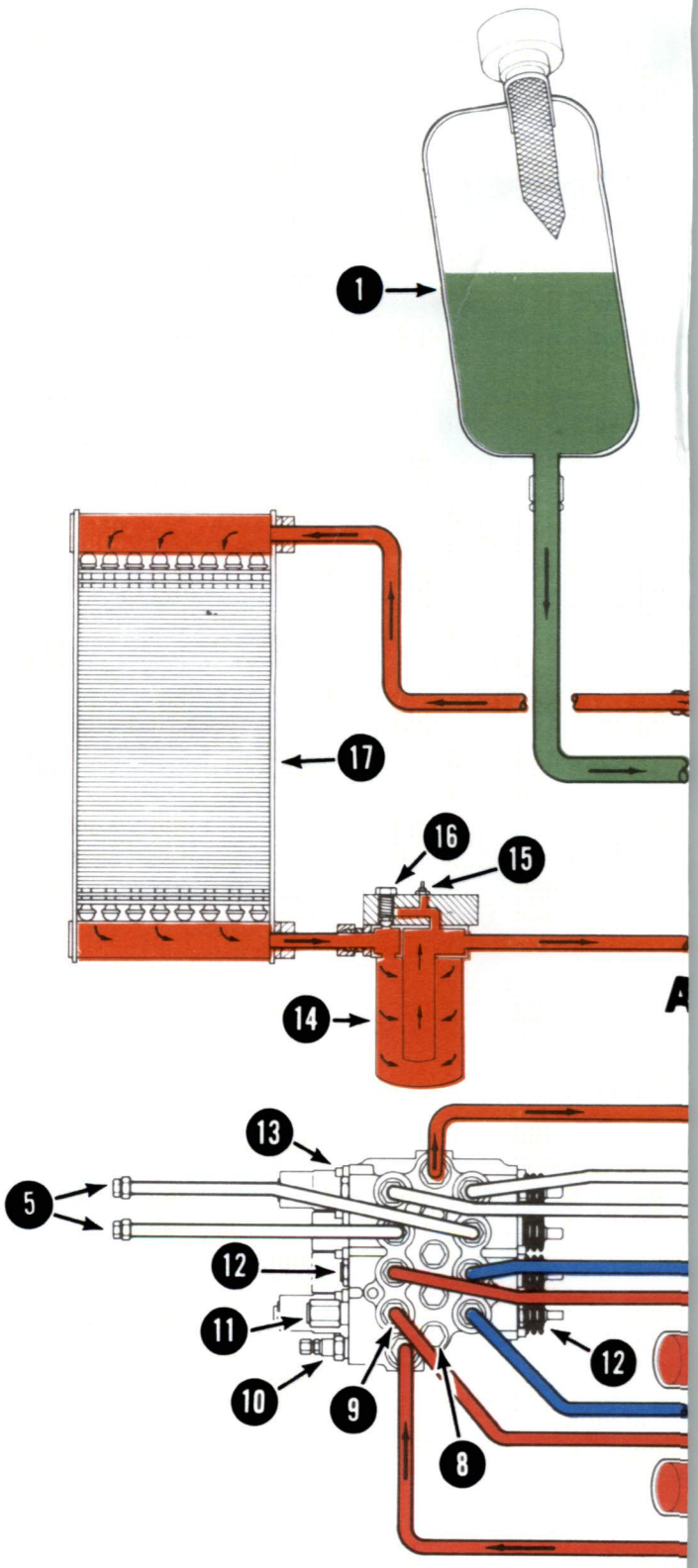
Chart # 6570293 (Printed July 1986)

NOTE

Chart shows oil flow in Forward Drive Position and with Hydraulic Cylinders Partially Extended. For Hydraulic/ Hydrostatic System Operation, refer to Sheet 2 of this publication.

NOTE

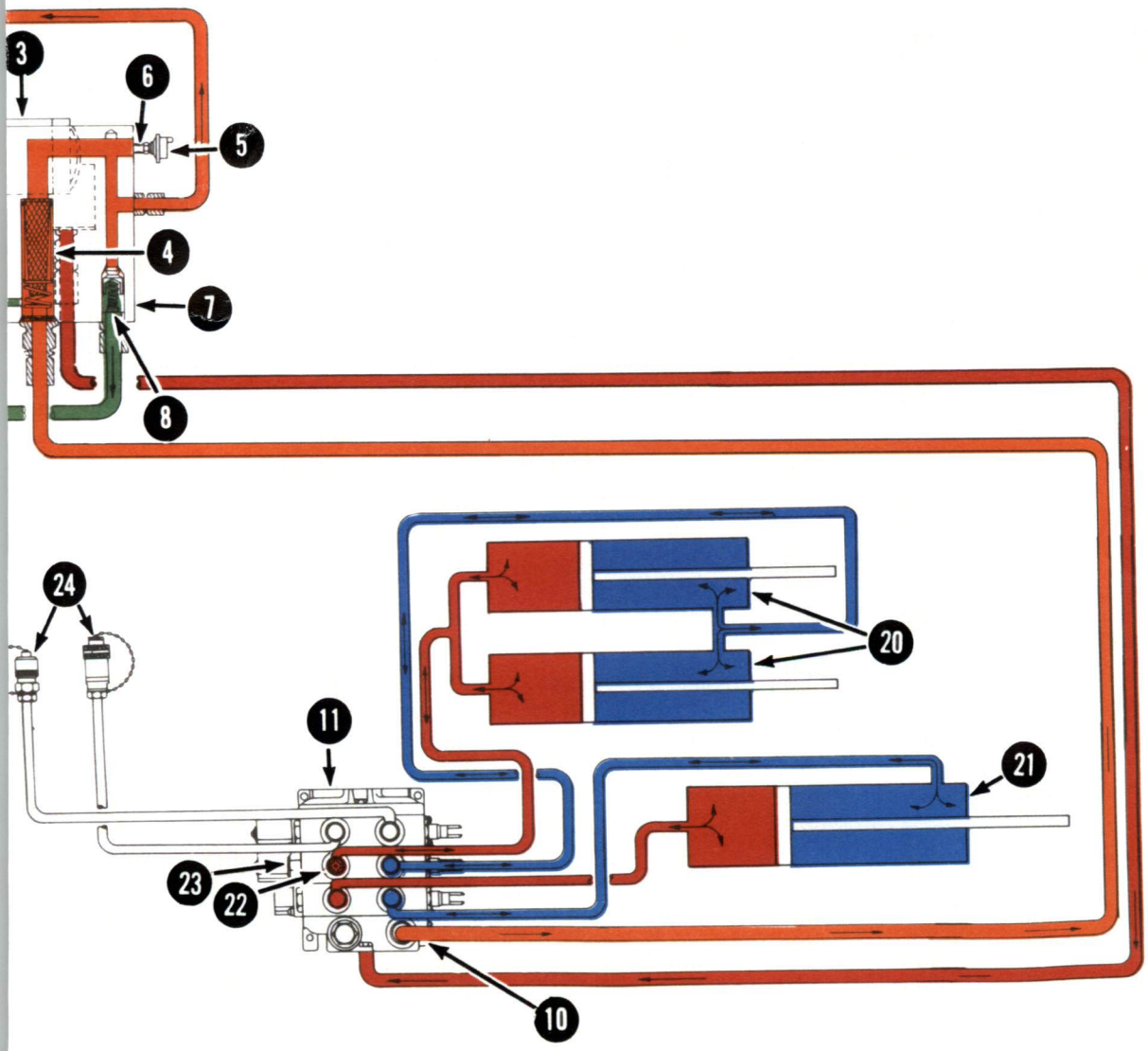
Refer to Chart # 6570281 for machines equipped with optional Bucket Positioning Valve. Reference "A" and "B" indicate location of hydraulic circuitry connection.



RED - - - - - - - - High Pressure
BLUE - - - - - - - Low Pressure
GREEN - - - - - - Case Drain & Reservoir
ORANGE - - - - - Charge Pressure

NOTE

Chart shows oil flow in Forward Drive Position and with Hydraulic Cylinders Partially Extended. For Hydraulic/ Hydrostatic System Operation, refer to Sheet 2 of this publication.



E 1340R

E 1337

HYDRAULIC / HYDROSTATIC FLOW CHART

For Models

742B, 743B

(With 3-Spool Melroe Control Valve)

Chart # 6722141 (Printed January 1992)

NOTE

Chart shows oil flow in Forward Drive Position and with Hydraulic Cylinders Partially Extended. For Hydraulic/ Hydrostatic System Operation, refer to Sheet 2 of this publication.

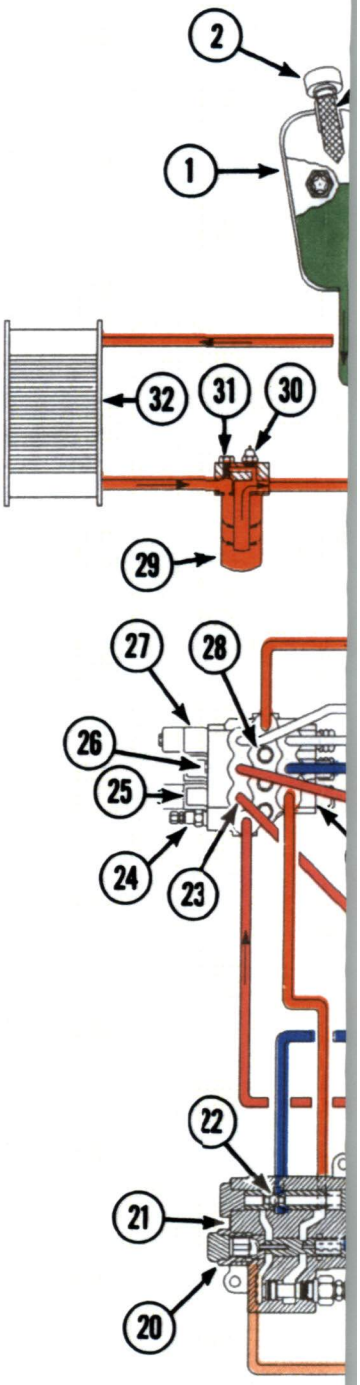


CHART LEGEND

1. HYDRAULIC CONTROL VALVE (Melroe)
2. LIFT CYLINDERS
3. BUCKET POSITION VALVE (Optional)
4. FLOW DIVIDER SPOOL
5. CHECK POPPET VALVE
6. FLOW RETURN SPOOL
7. RELIEF VALVE
8. TILT CYLINDER

OIL FLOW EXPLANATION

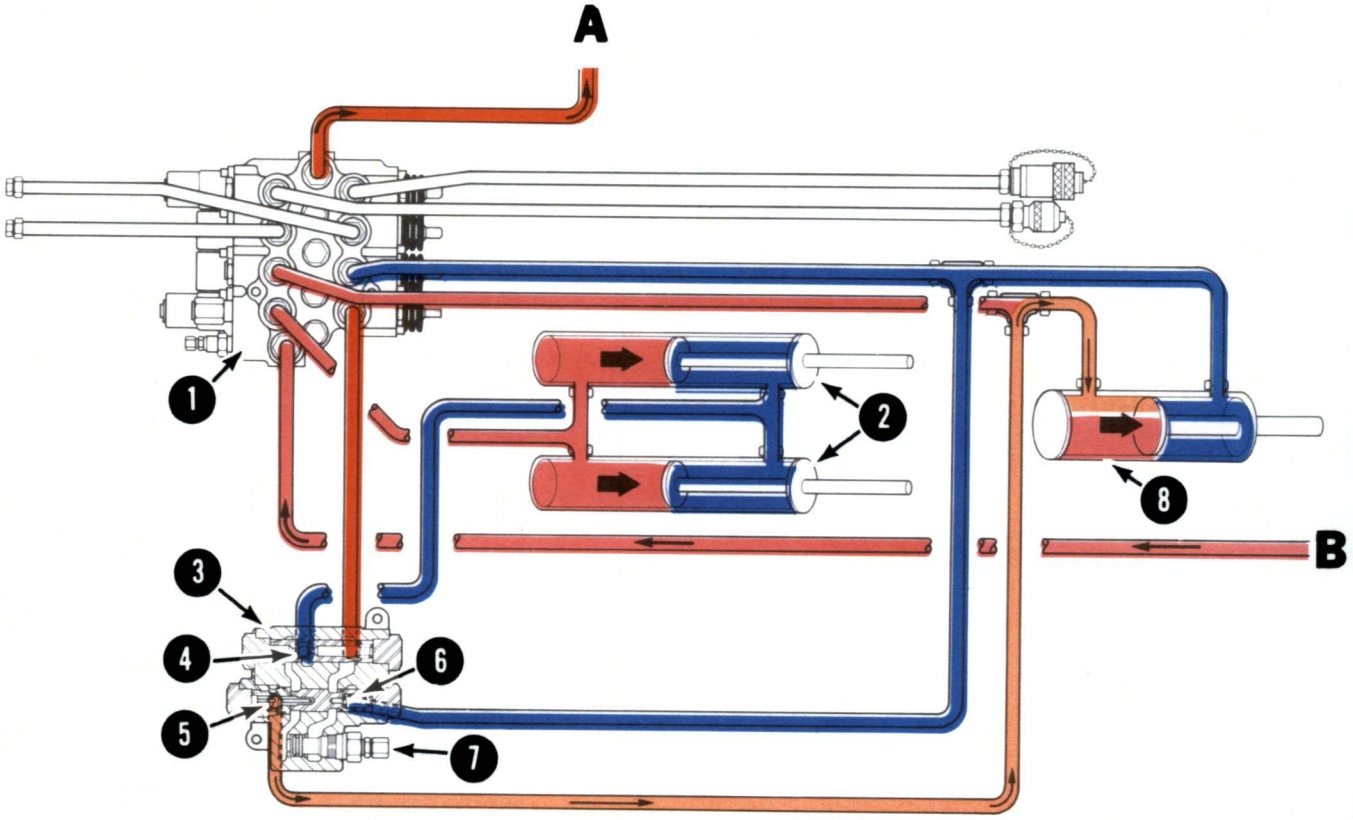
BUCKET POSITIONING SYSTEM OPERATION

When the lift spool of the control valve 1 is engaged to raise the lift arms, the fluid from the rod end of the lift cylinders 2 is directed through the bucket position valve 3 . The bucket position valve has a flow divider spool 4 which directs 20% of the returning fluid directly back to the lift section of the control valve 1 . The remaining 80% of the fluid goes through a check poppet valve 5 and to the base end of the tilt cylinder 8 . This forces the tilt cylinder rod out and adjusts the position of the bucket as the lift arms are raisedd. Since the fluid is trapped in the base end of the tilt cylinder (tilt pedal is in neutral), the pressure will increase and push the flow return spool 6 open and allow fluid from the rod end of the tilt cylinder 8 to the return to the lift section of the control valve 1 along with the 20% of the returning fluid from the rod end of the lift cylinders 2 . When the tilt cylinder is fully extended and the lift arms are still raising, fluid goes over the relief valve 7 and back to the lift section of the control valve 1

BUCKET POSITION FLOW CHART

For Models

741, 742, 743, 743DS W/Melroe Hydraulic Control Valve and Optionally Equipped W/Dukes Bucket Position Valve



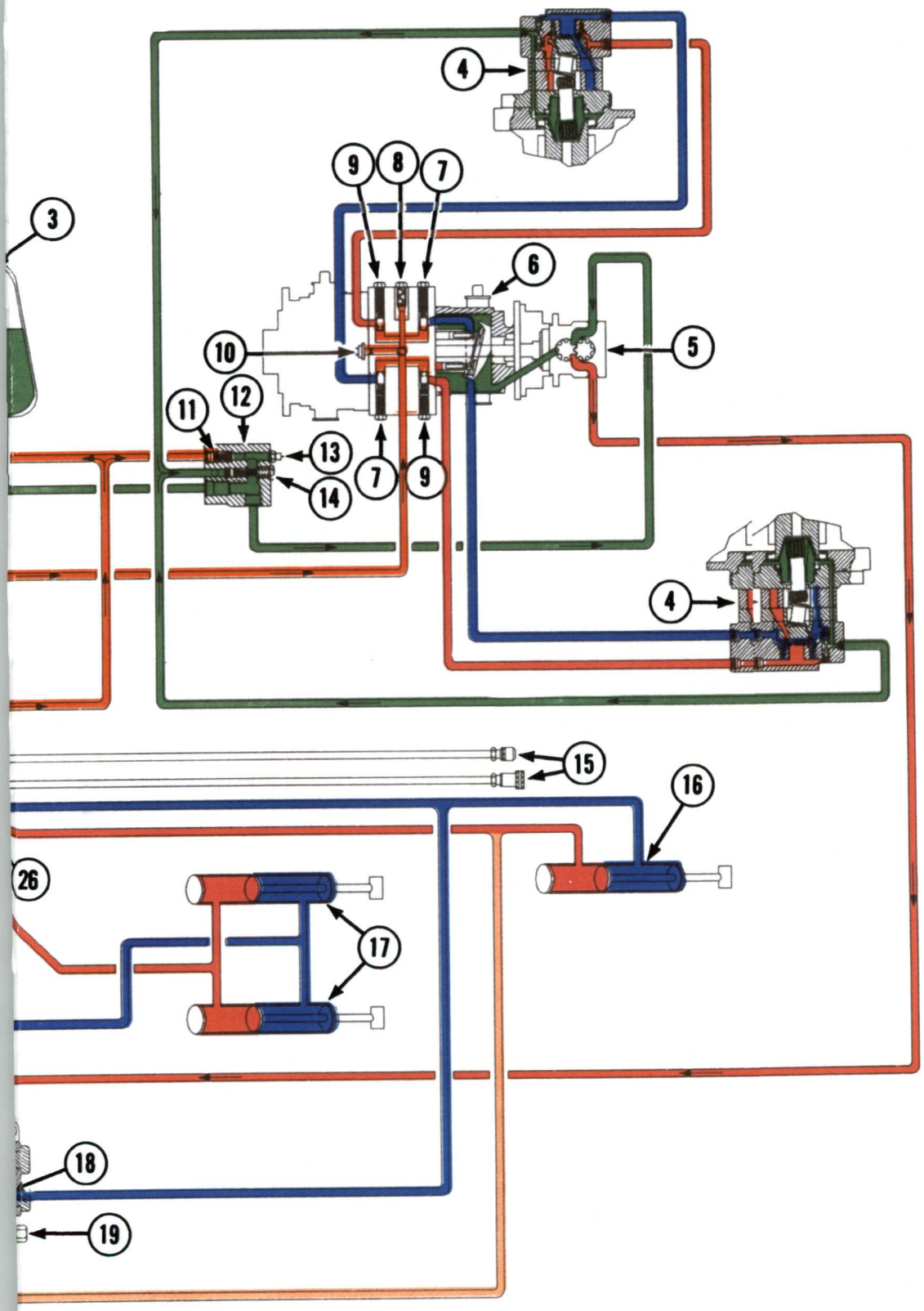
D-1690

NOTE
Chart shows fluid flow in the Lifting Position and with the Bucket Positioning Valve in operation.

NOTE
Use with Hydraulic Chart #6570293. References "A" & "B" indicate location of hydraulic circuitry connection.

- RED - - - - - - - - High Pressure
- BLUE - - - - - - - Low Pressure
- ORANGE - - - - - Charge Pressure
- LT. ORANGE- - - Bucket Position Fluid

RED - - - - - - - - - High Pressure
BLUE - - - - - - - - Low Pressure
GREEN - - - - - - - Case Drain & Reservoir
ORANGE - - - - - - Charge Pressure
LT. ORANGE - - - Bucket Positioning Fluid

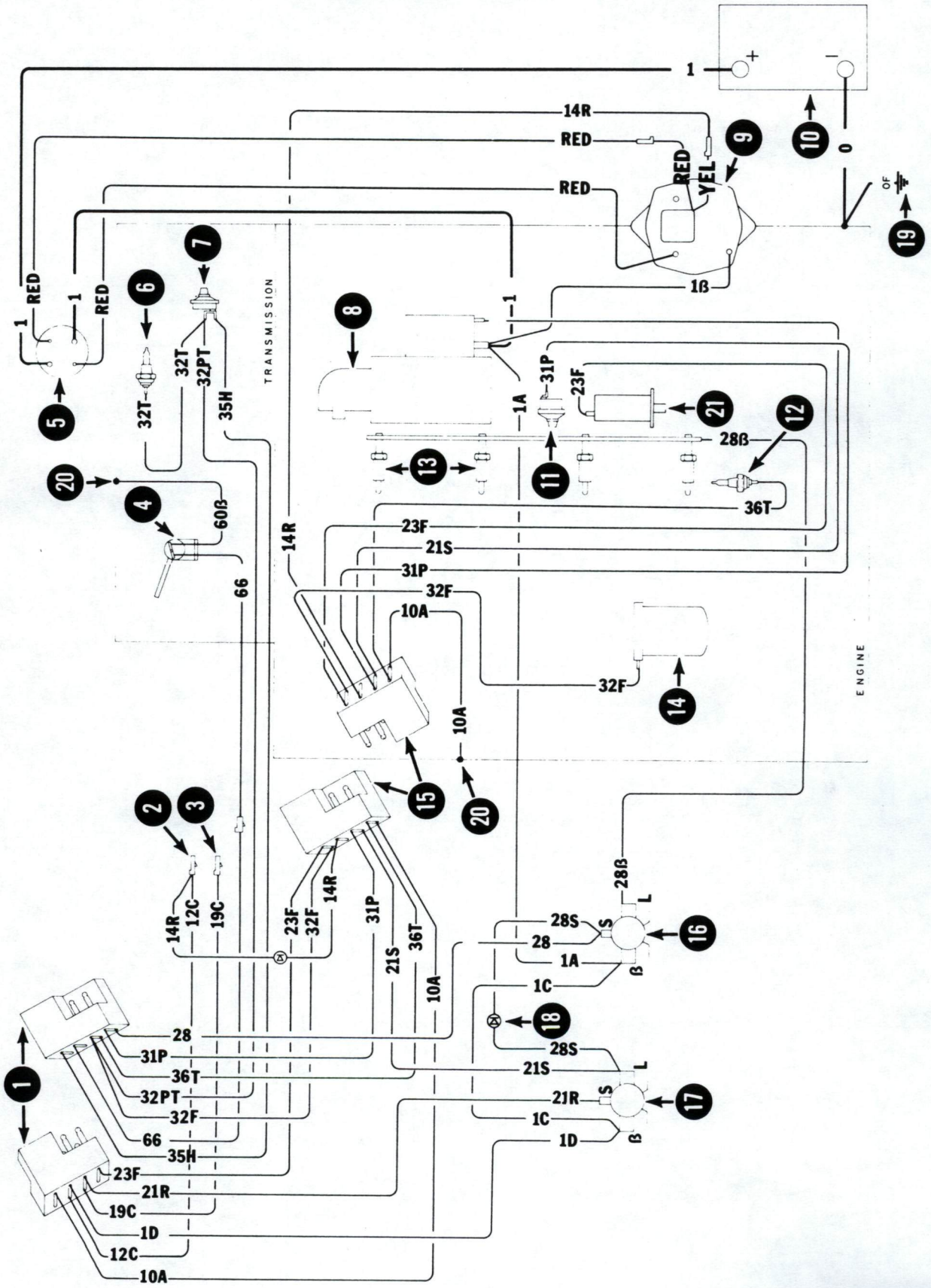


MC-1604

ENGINE WIRING DIAGRAM (P/N 6720564)

Model 743DS

(Printed September 1990)



ENGINE HARNESS

743DS (S/N 51378 & Above)

WIRE LEGEND

NO.'s	COLOR	GAUGE
0	Black	Cable
1	Red	Cable
1A	Red	8
1B	Red	12
1C	Red	12
1D	Red	12
10A	Black	12
12C	Orange	16
14F	Lt. Green	16
14R	Lt. Green/White	16
19C	Red/White	12
21R	White	16
21S	White/Lt. Green	12
23F	White/Black	16
28	Lt. Blue/Black	16
28B	Lt. Blue/Orange	10
28S	Lt. Blue/Yellow	16
31P	Yellow/Lt. Green	16
32F	Yellow/Dk. Blue	16
32PT	Yellow	16
32T	Yellow/Black	16
35H	Yellow/Brown	16
36T	Purple/White	16
60B	Black	16
66	Orange/Green	16

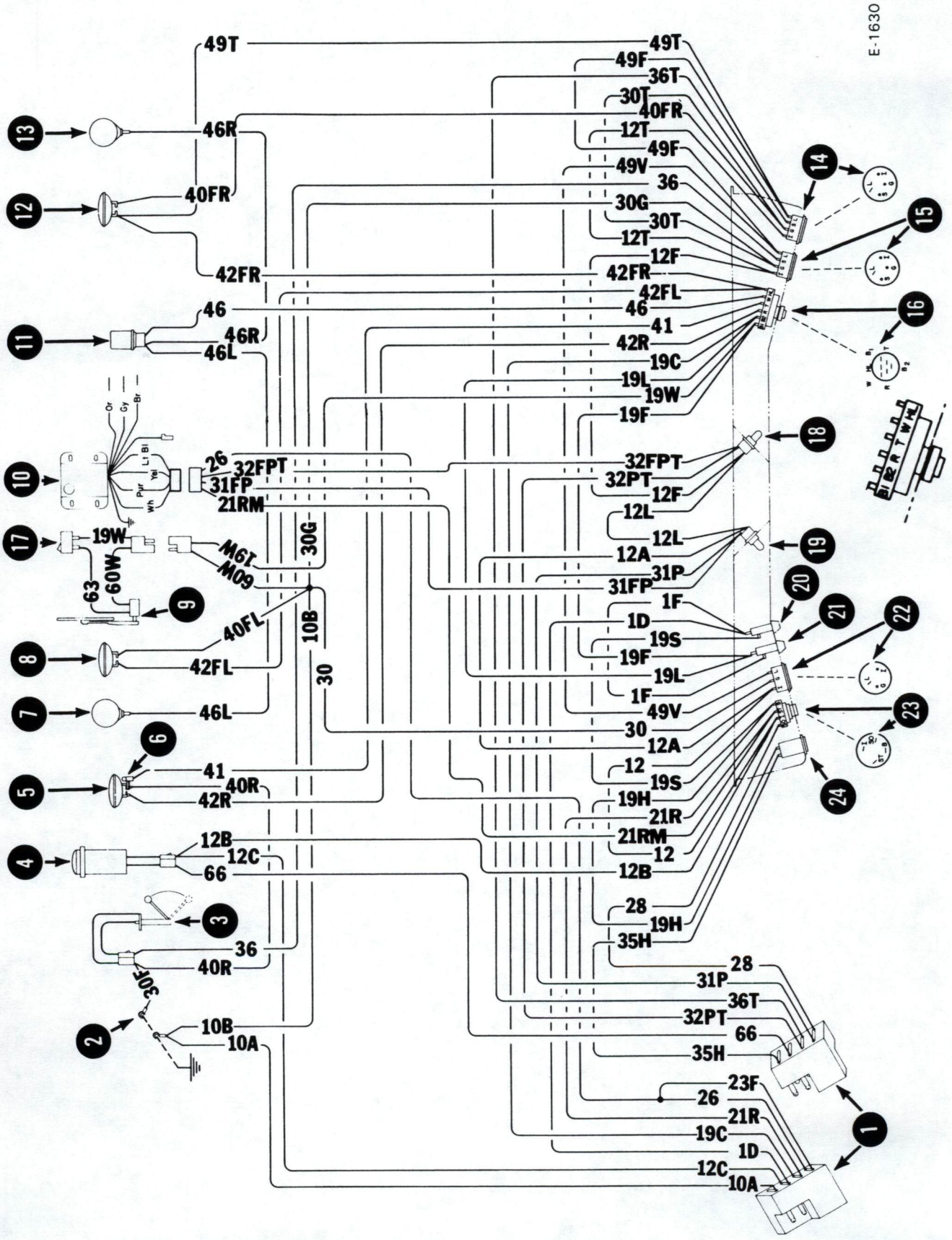
PARTS LEGEND

1. Operator Cab Harness Connector
2. Fused & Switch Accessory
3. Open, Fused & Live Accessory
4. Back-Up Alarm Switch (Optional)
5. Battery Disconnect Switch
6. Trans. Oil Temperature Switch
7. Trans. Charge Pressure Switch
8. Starter
9. Alternator
10. Battery
11. Engine Oil Pressure Switch
12. Engine Coolant Temp. Sender
13. Engine Glow Plugs
14. Hyd. Fluid Filter Condition Switch
15. Engine Connector
16. Pre-Heat Relay
17. Starter Relay
18. Diode
19. Frame Ground
20. Engine Ground
21. Fuel Shut-Off Solenoid (Optional)

CAB WIRING DIAGRAM (P/N 6566807)

640, 740 Series

(Printed April 1988)



CAB HARNESS

bobcat

CAB HARNESS

641 (S/N 20001 & Above)
642 (S/N 20001 & Above)
642B (S/N 11001 & Above)
643 (S/N 20001 & Above)
741 (S/N 20001 & Above)
742 (S/N 20001 & Above)
743 (S/N 20001 & Above)
743DS (S/N 51001 & Above)

WIRE LEGEND

NO.'s	COLOR	GAUGE
1D	Red	12
1F	Red	16
10A	Black	12
10B	Black	12
12	Orange	16
12A	Orange	18
12B	Orange	16
12C	Orange	16
12F	Orange	18
12L	Orange	18
12T	Orange	18
19C	Red/White	16
19F	Red/White	16
19H	Red/White	18
19L	Red/White	16
19S	Red/White	16
19W	Red/White	16
21R	White	16
21RM	White	16
23F	White/Black	16
26	Lt. Blue	16
28	Lt. Blue/Black	16
30	Black	16
30F	Black	16
30G	Black	16
30T	Black	16

NO.'s	COLOR	GAUGE
31FP	Yellow/Green	18
32FPT	Yellow	18
32PT	Yellow	18
35H	Yellow/Brown	18
36	Purple	16
36T	Purple/White	18
40FL	Black	16
40FR	Black	16
40R	Black	16
41	Pink	16
42FL	Dk. Blue	16
42FR	Dk. Blue	16
42R	Dk. Blue/White	16
46	Brown	16
46L	Brown	16
46R	Brown	16
49F	Gray	16
49T	Gray	16
49V	Gray	16
60W	Black	16
66	Orange/Green	16

PARTS LEGEND

1. Harness Connector
2. Operator Cab Ground
3. * Fuel Sender
4. * Back-Up Alarm (Optional)
5. * Rear Lamp
6. * Tail Lamp
7. * Left Flasher Lamp (Optional)
8. * Left Front Lamp
9. * Wiper (Optional)
10. * Shut Down Module (Optional)
11. * Flasher (Optional)
12. * Right Front Lamp
13. * Right Flasher Lamp (Optional)
14. * Engine Temp. Gauge
15. * Fuel Gauge
16. * Light Switch
17. * Wiper Switch (Optional)
18. "Trans" Warning Light
19. "Eng" Warning Light
20. Fuse-Ignition
21. Fuse-Accessory
22. * Voltmeter
23. Ignition Switch
24. Hourmeter

* Optional for 642B Only

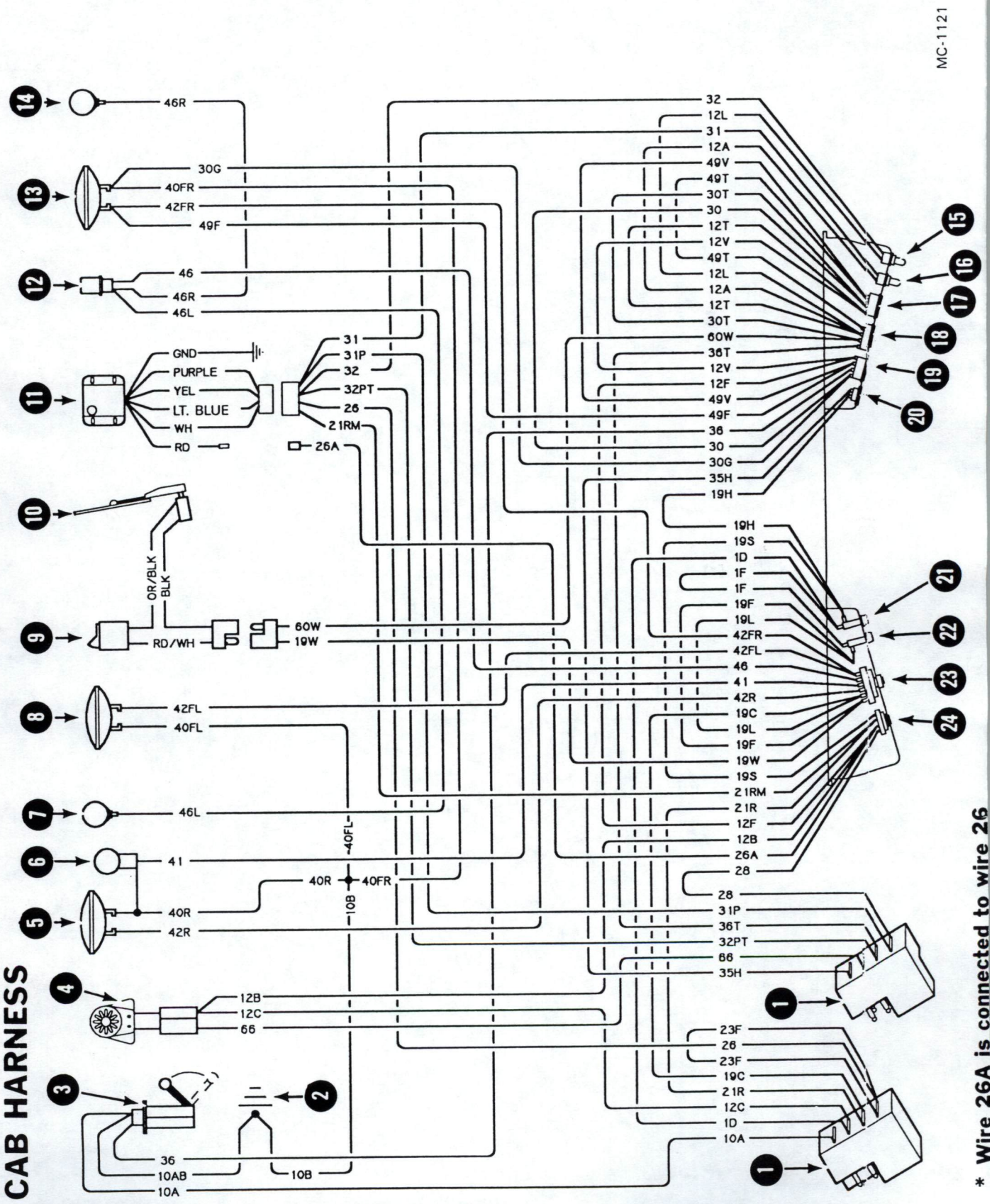
● Tee splice

○ Butt splice

CAB WIRING DIAGRAM (P/N 6720033)

640, 740

(Printed April 1989)



6720033 (4-89)

when module is not used.

CAB HARNESS

641 (S/N 20847 & Above)
643 (S/N 22556 & Above)
741 (S/N 20723 & Above)
742 (S/N 21734 & Above)
743 (S/N 38568 & Above)
743 DS (S/N 51414 & Above)

WIRE LEGEND

NO.'s	COLOR	GAUGE
1D	Red	12
1F	Red	16
10A	Black	12
10B	Black	14
10AB	Black	12
12A	Orange	18
12B	Orange	16
12C	Orange	16
12F	Orange	16
12L	Orange	18
12T	Orange	18
12V	Orange	18
19C	Red/White	16
19F	Red/White	16
19H	Red/White	18
19L	Red/White	16
19S	Red/White	16
19W	Red/White	16
21R	White	16
21RM	White	16
23F	White/Black	16
26	Lt. Blue	16
26A	Lt. Blue	16
28	Lt. Blue/Black	16
30	Black	16
30G	Black	16

NO.'s	COLOR	GAUGE
30T	Black	16
31	Yellow	18
31P	Yellow/Green	18
32	Yellow	18
32PT	Yellow	18
35H	Yellow/Brown	18
36	Purple	16
36T	Purple/White	18
40R	Black	16
40FL	Black	16
40FR	Black	16
41	Pink	16
42FL	Dk. Blue	16
42FR	Dk. Blue	16
42R	Dk. Blue/White	16
46	Brown	16
46L	Brown	16
46R	Brown	16
49F	Gray	18
49T	Gray	18
49V	Gray	18
60W	Black	16
66	Orange/Green	16

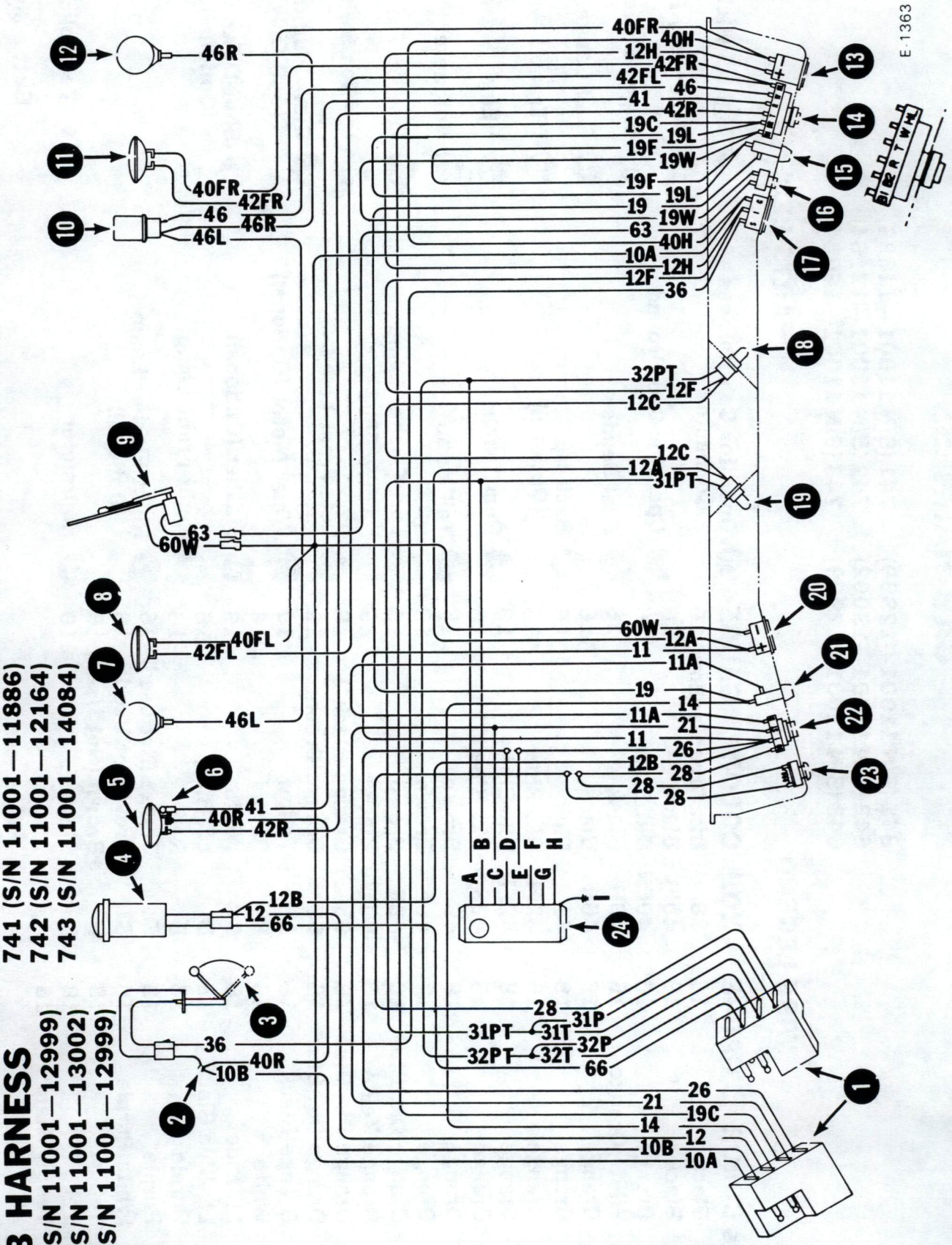
PARTS LEGEND

1. Harness Connectors
2. Ground
3. Fuel Sender
4. Back-Up Alarm
5. Rear Light
6. Tail Light
7. Left Flasher Light (Opt.)
8. Left Front Light
9. Wiper Switch (Opt.)
10. Wiper
11. Shut Down Module (Opt.)
12. Flasher (Opt.)
13. Right Front Light
14. Right Flasher Light (Opt.)
15. Trans. Warning Light
16. Engine Warning Light
17. Voltmeter
18. Temperature Gauge
19. Fuel Gauge
20. Hourmeter
21. Fuse (Ignition)
22. Fuse (Accessory)
23. Light Switch
24. Ignition Switch

CAB WIRING DIAGRAM (P/N 6566808)

640, 740 Series

(Printed April 1988)



CAB HARNESS

641 (S/N 11001—12999)
642 (S/N 11001—13002)
643 (S/N 11001—12999)

741 (S/N 11001—11886)
742 (S/N 11001—12164)
743 (S/N 11001—14084)

WIRE LEGEND

NO.'s	COLOR	GAUGE
10A	Black	16
10B	Black	16
11	Orange	16
11A	White/Orange	16
12	Orange	16
12A	Orange	18
12B	Orange	16
12C	Orange	18
12F	Orange	18
12H	Orange	18
14	Orange	12
19	Orange/Dk. Blue	16
19C	Orange/Yellow	16
19F	Orange/Dk. Blue	16
19L	Orange/Dk. Blue	16
19W	Orange/Black	16
21	White	16
26	Lt. Blue	16
28	Lt. Blue/Black	18
31P	Purple	18
31PT	Purple	18
31T	White/Purple	18
32P	Yellow	18
32PT	Yellow	18
32T	Yellow/Black	18

NO.'s	COLOR	GAUGE
36	Dk. Green/Yellow	16
40FL	Black	16
40FR	Dk. Blue	16
40H	Black	16
40R	Black	16
41	Pink	16
42FL	Dk. Blue	16
42FR	Dk. Blue	16
42R	Dk. Blue/White	16
46	Brown	16
46L	Brown	16
46R	Brown	16
60W	Black	16
63	Orange/Black	16
66	Orange/Green	16
A	Yellow	16
B	Purple	16
C	White	16
D	Lt. Blue	16
E	Red	16
F	Orange (Not Used)	16
G	Grey (Not Used)	16
H	Brown (Not Used)	16
I	Black	16

PARTS LEGEND

1. Operator Cab Harness Connector
2. Operator Cab Ground
3. Fuel Sender
4. Back-Up Alarm (Optional)
5. Rear Lamp
6. Tail Lamp
7. Left Flasher Lamp (Optional)
8. Left Front Lamp
9. Wiper Motor (Optional)
10. Flasher (Optional)
11. Right Front Lamp
12. Right Flasher Lamp (Optional)
13. Hourmeter
14. Light Switch
15. Accessory Fuse
16. Wiper Switch (Optional)
17. Fuel Gauge
18. "Trans" Warning Lamp
19. "Eng" Warning Lamp
20. Voltmeter
21. Ignition Fuse
22. Ignition Switch
23. Glow Plug Indicator (543 Only)
24. Shut-Down Module (Optional)

● Tee splice

○ Butt splice

CAB HARNESS

641 (S/N 13001—19999)
642 (S/N 13003—19999)
643 (S/N 13001—19999)

741 (S/N 11887—19999)
742 (S/N 12165—19999)
743 (S/N 14085—19999)
743DS (S/N 50001—50999)

WIRE LEGEND

NO.'s	COLOR	GAUGE
1D	Red	12
1F	Red	16
10A	Black	12
10B	Black	12
12	Orange	16
12A	Orange	18
12B	Orange	16
12C	Orange	16
12F	Orange	18
12L	Orange	18
12T	Orange	18
19C	Red/White	16
19F	Red/White	16
19H	Red/White	18
19L	Red/White	16
19S	Red/White	16
19W	Red/White	16
21RM	White	16
23F	White/Black	16
26	Lt. Blue	16
28	Lt. Blue/Black	16
30	Black	16
30F	Black	16
30G	Black	16
30T	Black	16
31FP	Yellow/Green	18

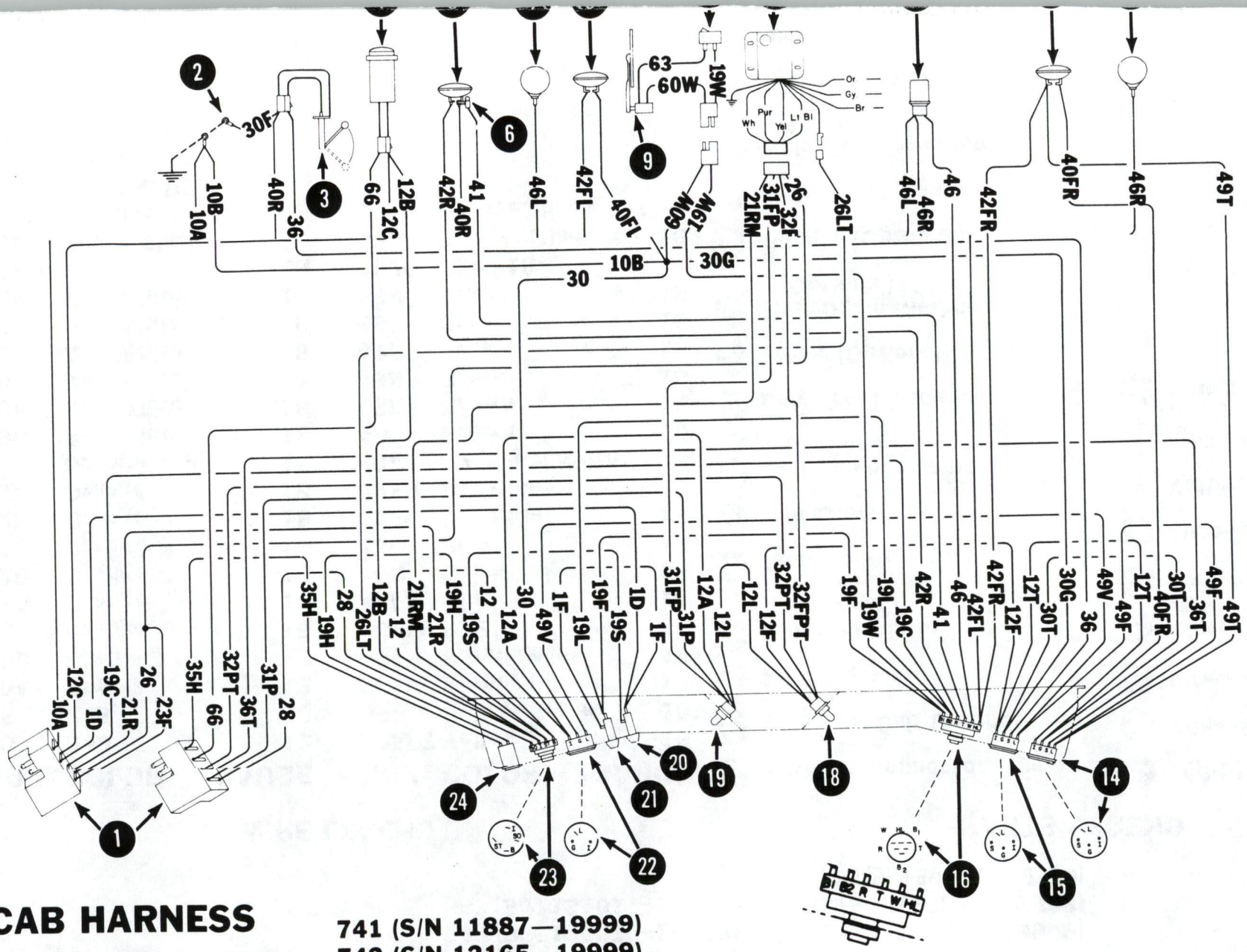
NO.'s	COLOR	GAUGE
32FPT	Yellow	18
35H	Yellow/Brown	18
36	Purple	16
36T	Purple/White	18
40FL	Black	16
40FR	Black	16
40R	Black	16
41	Pink	16
42FL	Dk. Blue	16
42FR	Dk. Blue	16
42R	Dk. Blue/White	16
46	Brown	16
46L	Brown	16
46R	Brown	16
49F	Gray	16
49T	Gray	16
49V	Gray	16
60W	Black16	
63	Orange/Black	16
66	Orange/Black	16

PARTS LEGEND

1. Harness Connector
2. Operator Cab Ground
3. Fuel Sender
4. Back-Up Alarm (Optional)
5. Rear Lamp
6. Tail Lamp
7. Left Flasher Lamp (Optional)
8. Left Front Lamp
9. Wiper (Optional)
10. Shut Down Module (Optional)
11. Flasher (Optional)
12. Right Front Lamp
13. Right Flasher Lamp (Optional)
14. Engine Temp. Gauge
15. Fuel Gauge
16. Light Switch
17. Wiper Switch (Optional)
18. "Trans" Warning Light
19. "Eng" Warning Light
20. Fuse-Ignition
21. Fuse-Accessory
22. Voltmeter
23. Ignition Switch
24. Hourmeter

● Tee splice

○ Butt splice



CAB HARNESS

641 (S/N 13001—19999)
642 (S/N 13003—19999)
643 (S/N 13001—19999)

741 (S/N 11887—19999)
742 (S/N 12165—19999)
743 (S/N 14085—19999)
743DS (S/N 50001—50999)

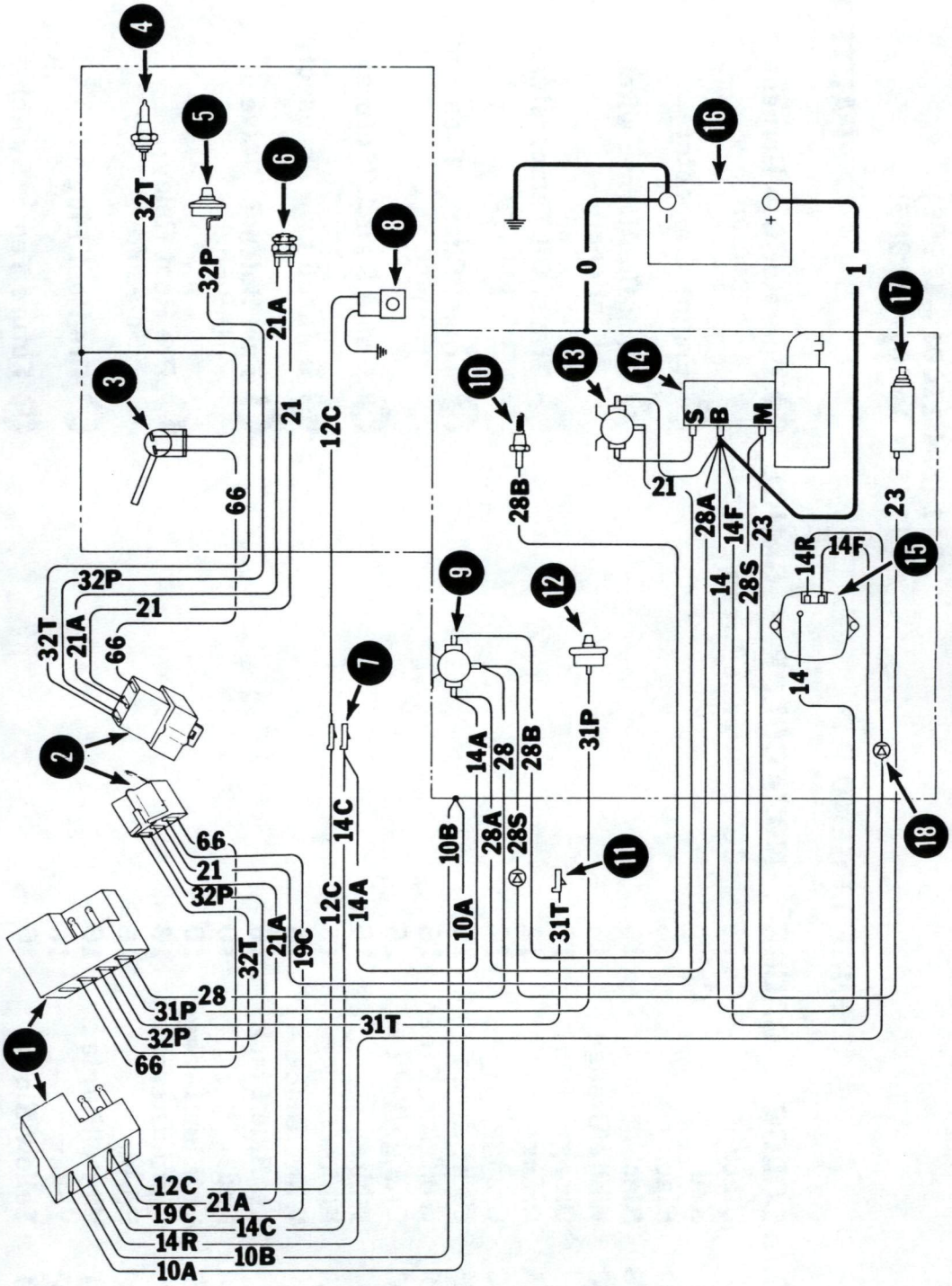
E-1630

ENGINE WIRING DIAGRAM (P/N 6566809)

Model 641, 741

(Printed April 1988)

E-1357



ENGINE HARNESS

641 (S/N 11001—12999)
741 (S/N 11001—11885)

ENGINE HARNESS

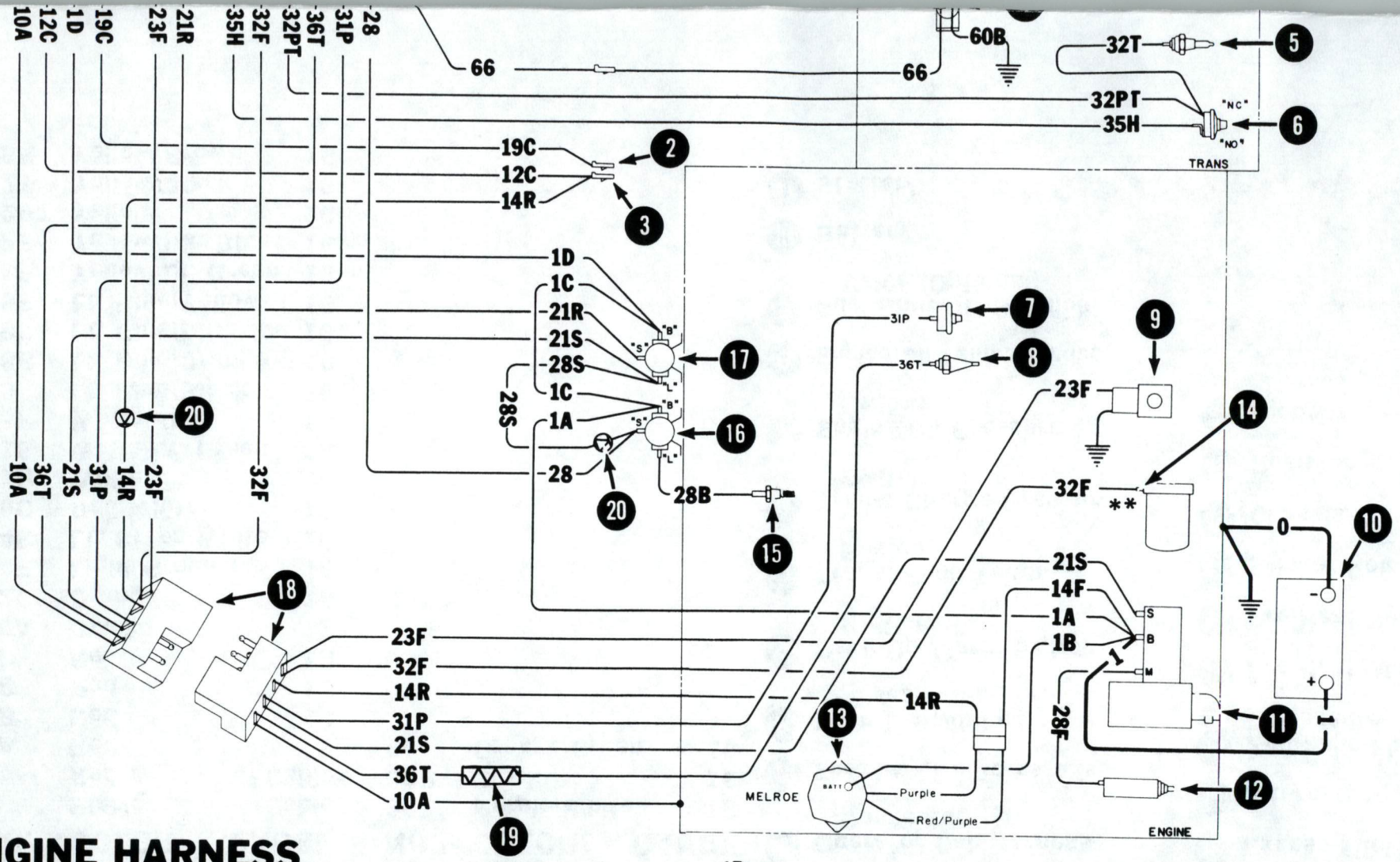
641 (S/N 11001—12999)
741 (S/N 11001—11885)

WIRE LEGEND

NO.'s	COLOR	GAUGE
0	Black	Cable
1	Red	Cable
10A	Black	16
10B	Black	16
12C	White/Orange	16
14	Orange	12
14A	Orange	12
14C	Orange	12
14F	Light Green	16
14R	White/Lt. Green	16
19C	Orange/Yellow	16
21	White	16
21A	White	16
23	White/Black	16
28	Lt. Blue/Black	16
28A	Red	10
28B	Lt. Blue/Orange	10
28S	White/Green	16
31P	Purple	16
31T	White/Purple	16
32P	Yellow	16
32T	Yellow/Black	16
66	Orange/Green	16

PARTS LEGEND

1. Operator Cab Harness Connector
2. Engine Connector
3. Back-Up Alarm Switch (Optional)
4. Trans. Oil Temperature Sender
5. Trans. Charge Pressure Sender
6. Brake Switch (Future)
7. Unfused Live Accessory
8. Fuel Solenoid Valve (Optional)
9. Pre-Heat Relay Solenoid
10. Pre-Heat Plug
11. Future Temp. Switch
12. Engine Oil Pressure Sender
13. Starter Relay Solenoid
14. Starter
15. Alternator
16. Battery
17. Excess Fuel Solenoid
18. Diode



ENGINE HARNESS

* 641 (S/N 13001 — 20408) Delco
* 741 (S/N 11886 — 20320) Delco
641 (S/N 20409 & Above) Melroe
741 (S/N 20321 & Above) Melroe

** Hydraulic Fluid Filter Pressure Switch (Item 14, Wire #32F) was added at S/N 15001 for Model 741 and S/N 13209 for Model 641.

E-1517

32T Yellow/Black 16

11 Future Temp. Switch

ENGINE HARNESS

* 641 (S/N 13001 — 20408) Delco
* 741 (S/N 11886 — 20320) Delco
641 (S/N 20409 & Above) Melroe
741 (S/N 20321 & Above) Melroe

WIRE LEGEND

NO.'s	COLOR	GAUGE
0	Black	Cable
1	Red	Cable
1A	Red	8
1B	Red	10
1C	Red	12
1D	Red	12
10A	Black	12
12C	Orange	16
14F	Light Green	16
14R	Lt. Green/White	16
19C	Red/White	12
21R	White	16
21S	White/Lt. Green	12
23F	White/Blue	16
28	Lt. Blue/Black	16
28B	Lt. Blue/Orange	10
28F	Lt. Blue/Dk. Blue	16
28S	Lt. Blue/Yellow	16
31P	Yellow/Lt. Green	16
32F	Yellow/Dk. Blue	16
32PT	Yellow	16
32T	Yellow/Black	16
35H	Yellow/Brown	16

NO.'s	COLOR	GAUGE
36T	Purple/White	16
60B	Black	16
66	Orange/Green	16

PARTS LEGEND

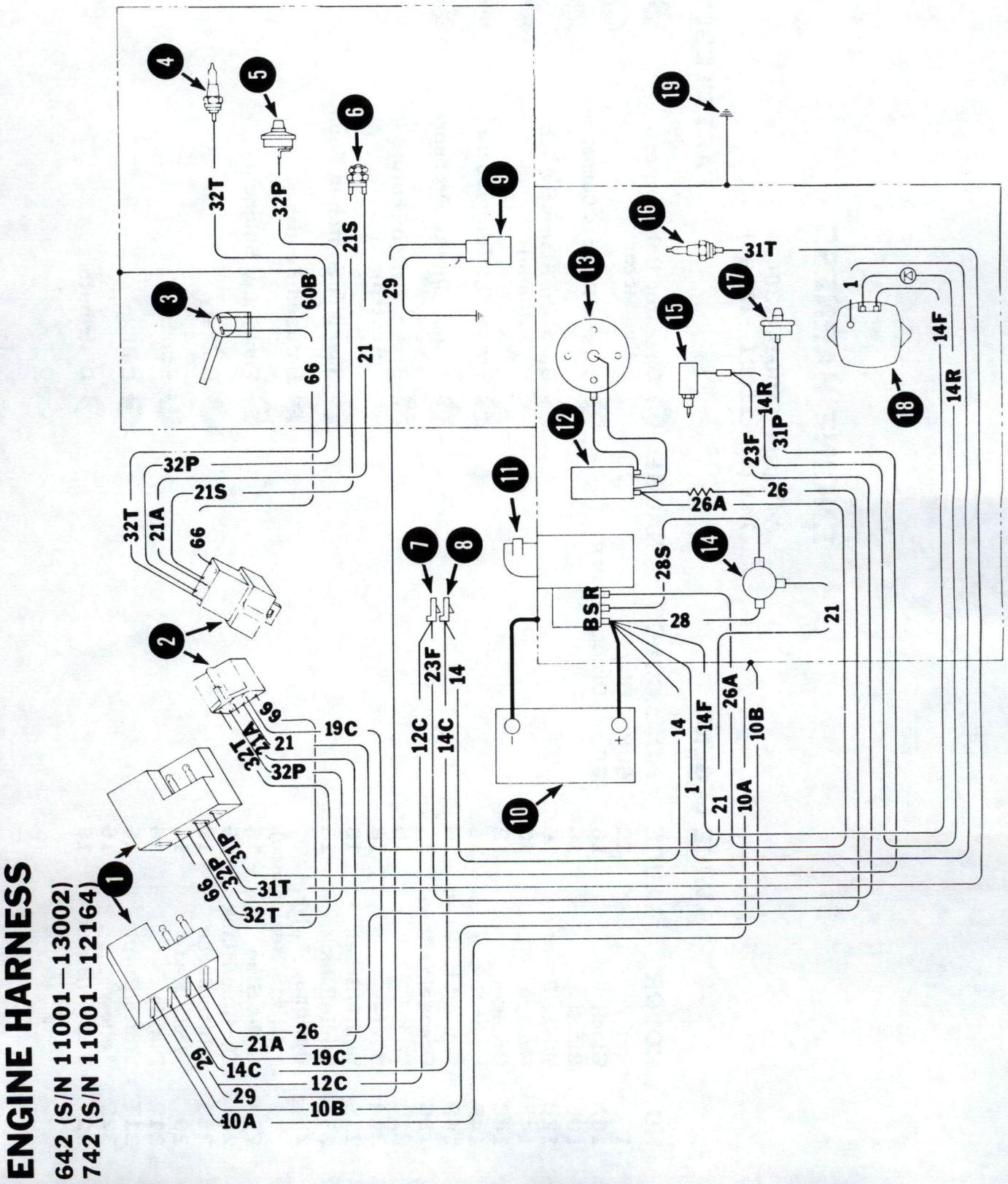
1. Operator Cab Harness Connector
2. Fused & Live Accessories
3. Fuse & Switched Accessories
4. Back-Up Alarm Switch (Optional)
5. Trans. Fluid Temp. Switch
6. Trans. Charge Pressure Switch
7. Engine Oil Pressure Switch
8. Engine Oil Temp. Sender
9. Fuel Shut-Off Solenoid Valve (Optional)
10. Battery
11. Starter
12. Excess Fuel Solenoid
13. Alternator
14. ** Hydraulic Fluid Filter Pressure Switch
15. Pre-Heat Glow Plug
16. Pre-Heat Relay
17. Starter Relay
18. Chassis Connector
19. Resistor
20. Diode

ENGINE WIRING DIAGRAM (P/N 6566810)

Models 642, 742

(Printed April 1988)

E-1358



ENGINE HARNESS

642 (S/N 11001—13002)
741 (S/N 11001—12164)

WIRE LEGEND

NO.'s	COLOR	GAUGE
1	Red	12
10A	Black	16
10B	Black	16
12C	White/Orange	16
14	Orange	12
14C	Orange	12
14F	Light Green	16
14R	White/Lt. Green	16
19C	Orange/Yellow	16
21	White	16
21A	White	16
21S	White/Green	16
23F	White/Black	16
26	Optional (1.3-1.4 OHMS Resistance)	
26A	Light Blue	16
28	Lt. Blue/Black	16
28S	White/Green	16
29	White/Red	18
31P	Purple	16
31T	White/Purple	16
32P	Yellow	16
32T	Yellow/Black	16

NO.'s	COLOR	GAUGE
60B	Black	16
66	Orange/Green	16

PARTS LEGEND

1. Operator Cab Harness Connector
2. Chassis Harness Connector
3. Back-Up Alarm Switch (Optional)
4. Trans. Oil Temperature
5. Trans. Charge Pressure
6. Brake Switch (Future Switch)
7. Fused & Switched Feed
8. Unfused Feed
9. Fuel Tank Solenoid
10. Battery
11. Starter
12. Coil
13. Distributor
14. Power Relay
15. Carburetor Fuel Solenoid
16. Engine Water Temp.
17. Engine Oil Pressure
18. Alternator
19. Engine to Frame Ground Diode (Keeps engine from running after ignition is turned off)

ENGINE HARNESS

* 642 (S/N 13003 — 20840) Delco
* 742 (S/N 12165 — 20881) Delco
742 (S/N 20882 & Above) Melroe

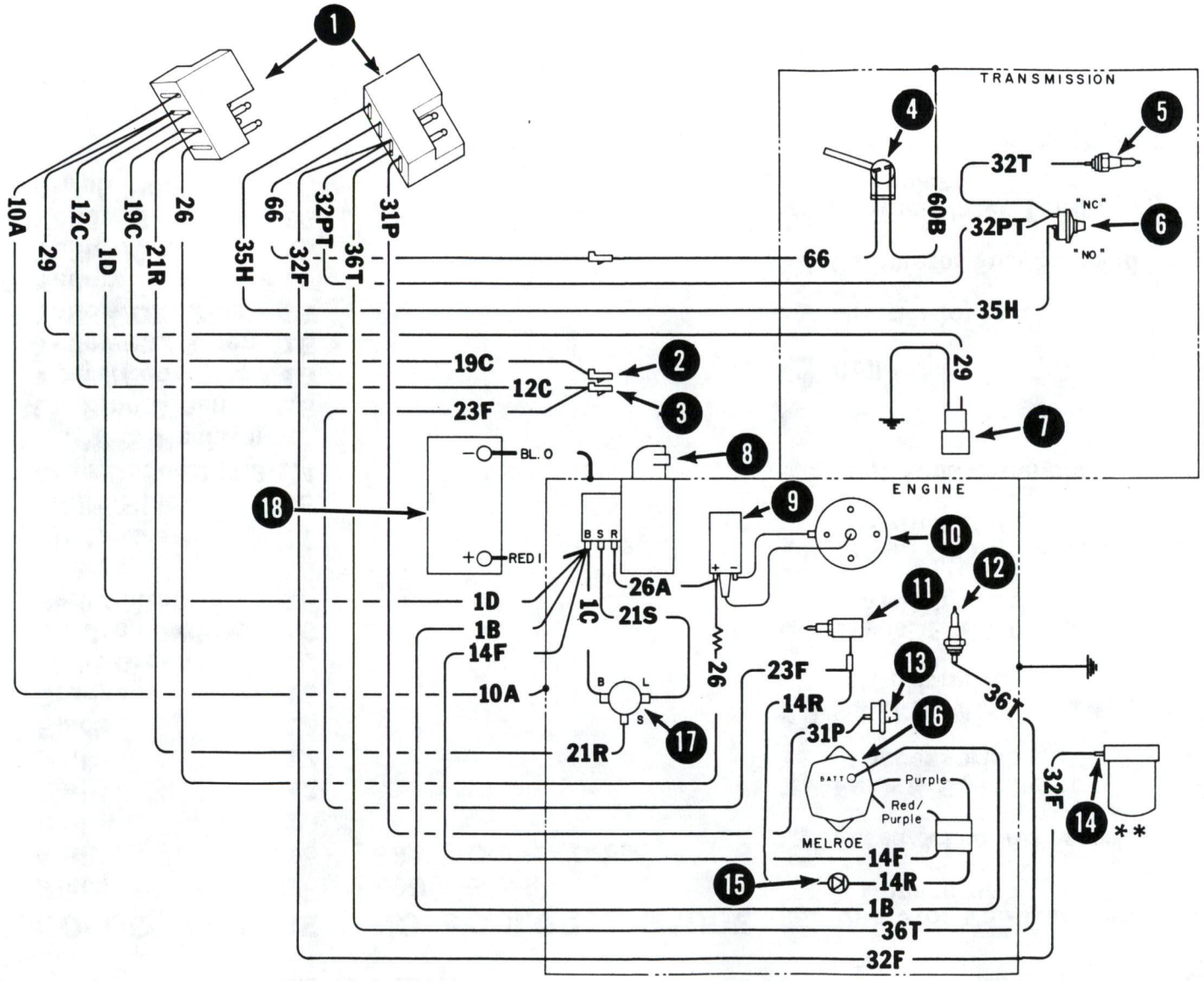
WIRE LEGEND

NO.'s	COLOR	GAUGE
0	Black	Cable
1	Red	Cable
1B	Red	10
1C	Red	12
1D	Red	12
10A	Black	12
12C	Orange	16
14F	Light Green	16
14R	Lt. Green/White	16
19C	Red/White	16
21R	White	16
21S	White/Green	12
23F	White/Black	16
26	Color Optional (1.3-1.4 OHMS Resistance)	
26A	Lt. Blue/Green	16
29	White/Red	18
31P	Yellow/Lt. Green	16
* 32F	Yellow/Dk. Blue	16
32PT	Yellow	16
32T	Yellow/Black	16
35H	Yellow/Brown	16
36T	Purple/White	16

NO.'s	COLOR	GAUGE
60B	Black	16
66	Orange/Green	16

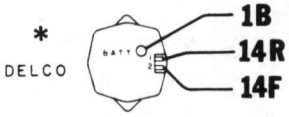
PARTS LEGEND

1. Operator Cab Harness Connector
2. Fused & Live Accessories
3. Fuse & Switched Accessories
4. Back-Up Alarm Switch (Optional)
5. Trans. Fluid Temp. Switch
6. Trans. Charge Pressure Switch
7. Fuel Tank Solenoid
8. Starter
9. Coil
10. Distributor
11. Carburetor Fuel Solenoid
12. Engine Water Temp. Sender
13. Engine Oil Pressure Switch
14. ** Hydraulic Fluid Filter Pressure Switch
15. Diode
16. Alternator
17. Starter Relay
18. Battery



ENGINE HARNESS

* 642 (S/N 13003 — 20840) Delco
* 742 (S/N 12165 — 20881) Delco
  742 (S/N 20882 & Above) Melroe



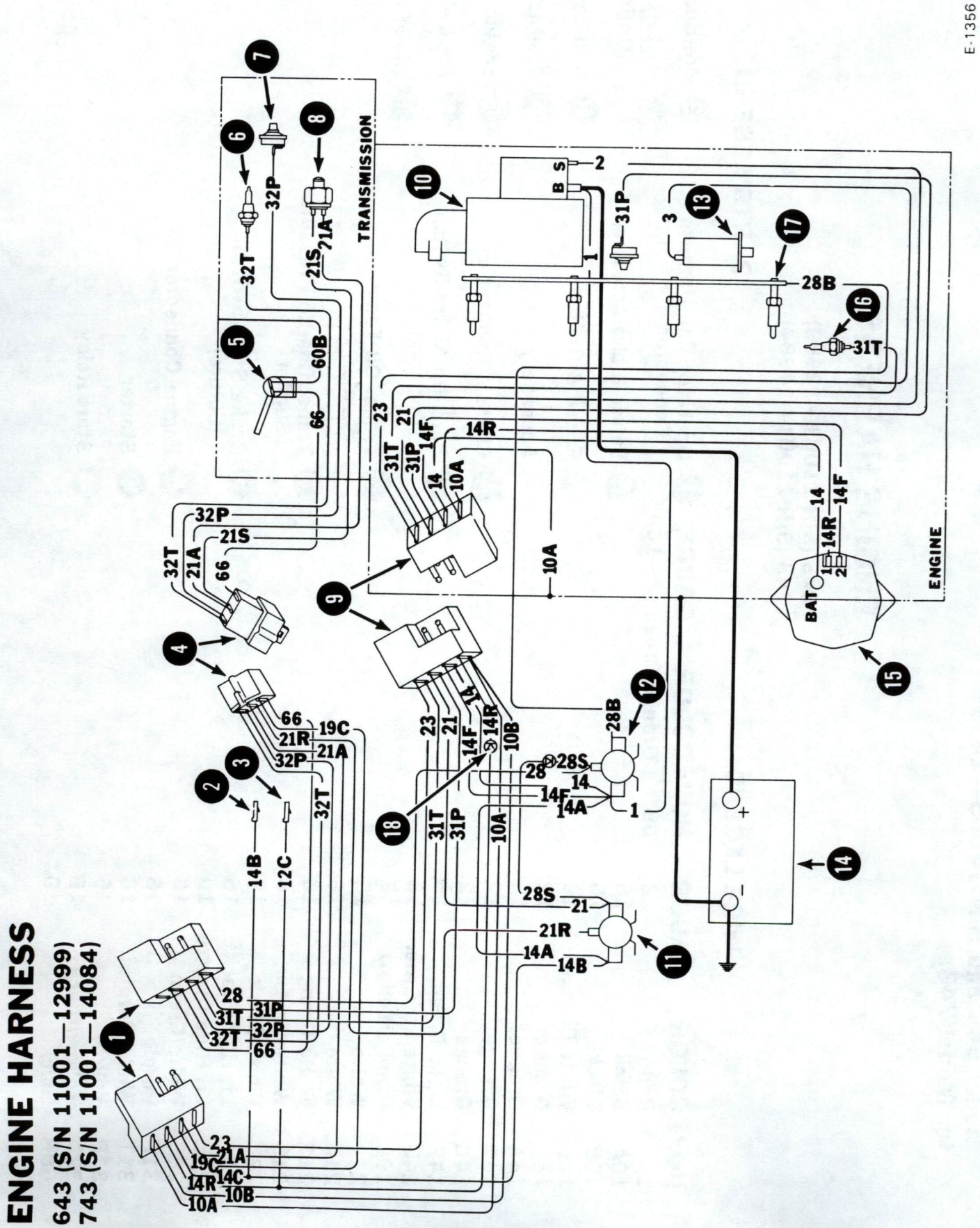
** Hydraulic Fluid Filter Pressure Switch (Item 14, Wire #32F) was added at S/N 15001 for Model 742 and S/N 13524 for Model 642.

E-1481

ENGINE WIRING DIAGRAM (P/N 6566811)

Models 643, 743

(Printed April 1988)



*** 16 gauge on S/N 13001—13383 for Model 643 and S/N 14085—14999 for Model 743.

ENGINE HARNESS

643 (S/N 11001—12999)
743 (S/N 11001—14084)

WIRE LEGEND

NO.'s	COLOR	GAUGE
1	Red	8
10A	Black	16
10B	Black	16
12C	White/Orange	16
14	Orange	12
14A	Orange	12
14B	Orange	12
14C	Orange	12
14F	Light Green	16
14R	White/Lt. Green	16
19C	Orange/Yellow	16
21	White	16
21A	White	16
21R	White/Orange	16
21S	White/Green	16
23	White/Black	16
28	Lt. Blue/Black	16
28B	Lt. Blue/Orange	10
28S	White/Green	16
31P	Purple	16
31T	White/Purple	16
32P	Yellow	16
32T	Yellow/Black	16
60B	Black	16
66	Orange/Green	16

PARTS LEGEND

1. Operator Cab Harness Connector
2. Unfuse & Live Accessory
3. Fused & Switch Accessory
4. Chassis Connector
5. Back-Up Alarm Switch (Optional)
6. Trans. Oil Temp. Sender
7. Trans. Charge Pressure Sender
8. Brake Start Switch (Future)
9. Engine Connector
10. Starter
11. Start Relay
12. Pre-Heat Relay
13. Fuel Shut-Off Solenoid (Optional)
14. Battery
15. Alternator
16. Engine Coolant Temp.
17. Engine Glow Plugs
18. Diode

ENGINE HARNESS

* 643 (S/N 13001 — 21230) Delco
* 743 (S/N 14085 — 27387) Delco
643 (S/N 21231 & Above) Melroe
743 (S/N 27388 & Above) Melroe

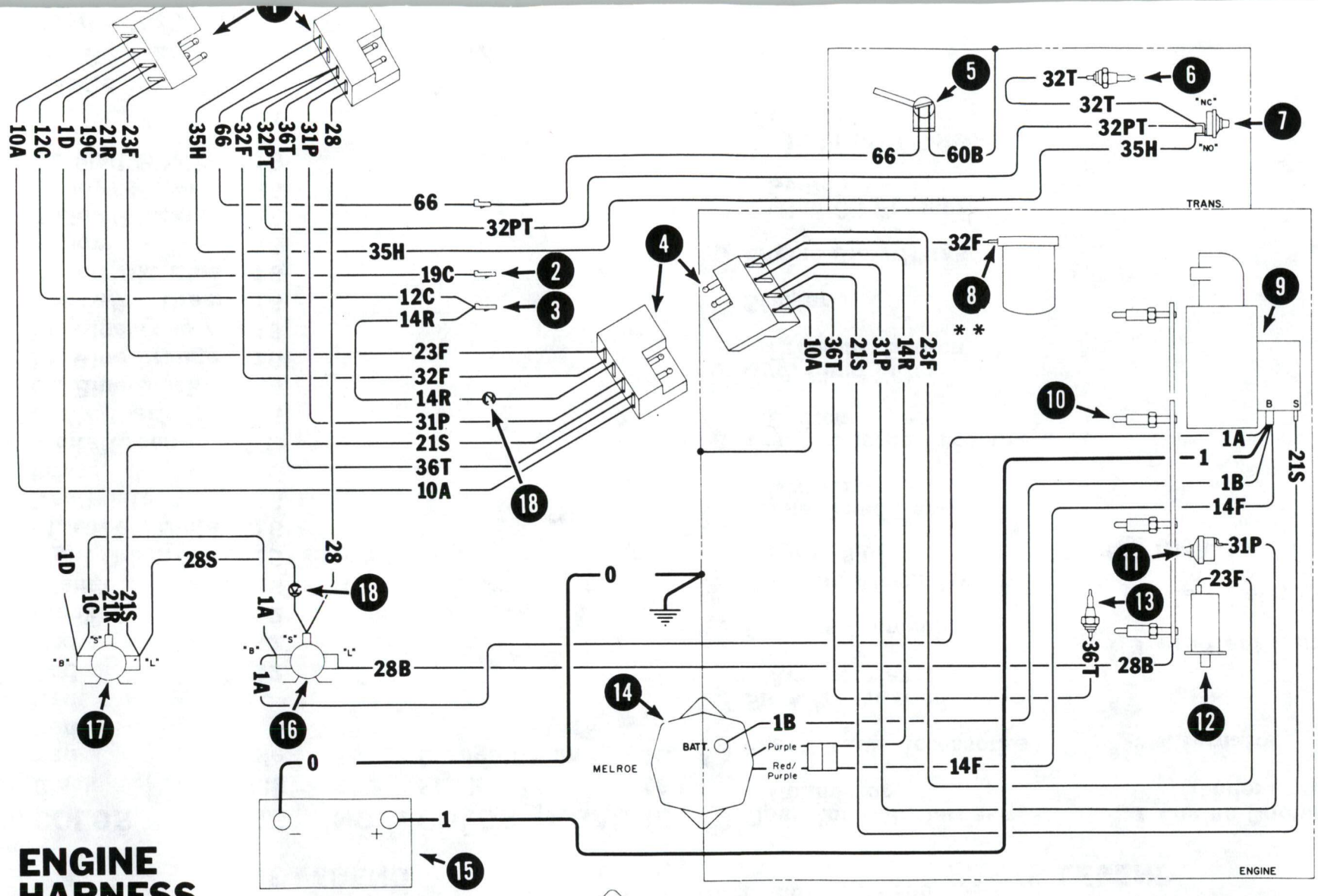
WIRE LEGEND

NO.'s	COLOR	GAUGE	NO.'s	COLOR	GAUGE
0	Black	Cable	60B	Black	16
1	Red	Cable	66	Orange/Green	16
1A	Red	8			
1B	Red	10**			
1C	Red	12			
1D	Red	12			
10A	Black	12			
12C	Orange	16			
14F	Light Green	16			
14R	Lt. Green/White	16			
19C	Red/White	16			
21R	White	16			
21S	White/Green	12***			
23F	White/Black	16			
28	Lt. Blue/Black	16			
28B	Lt. Blue/Orange	10			
28S	Lt. Blue/Yellow	16			
31P	Yellow/Lt. Green	16			
32F3	Yellow/Dk. Blue	16			
32PT	Yellow	16			
32T	Yellow/Black	16			
35H	Yellow/Brown	16			
36T	Purple/White	16			

** 12 gauge on S/N 13001—21230 for Model 643 and S/N 14085—27387 for Model 743.

PARTS LEGEND

1. Operator Cab Harness Connector
2. Fused & Live Accessories
3. Fuse & Switched Accessories
4. Chassis Connector
5. Back-Up Alarm Switch (Optional)
6. Trans. Fluid Temp. Switch
7. Trans. Charge Pressure Switch
8. ** Hyd. Fluid Filter Pressure Switch
9. Starter
10. Engine Glow Plugs
11. Engine Oil Pressure Switch
12. Fuel Shut-Off Solenoid (Optional)
13. Engine Coolant Temp. Sender
14. Alternator
15. Battery
16. Pre-Heat Relay
17. Start Relay
18. Diode



ENGINE HARNESS

*** 643 (S/N 13001 — 21230) Delco**
*** 743 (S/N 14085 — 27387) Delco**
643 (S/N 21231 & Above) Melroe
743 (S/N 27388 & Above) Melroe

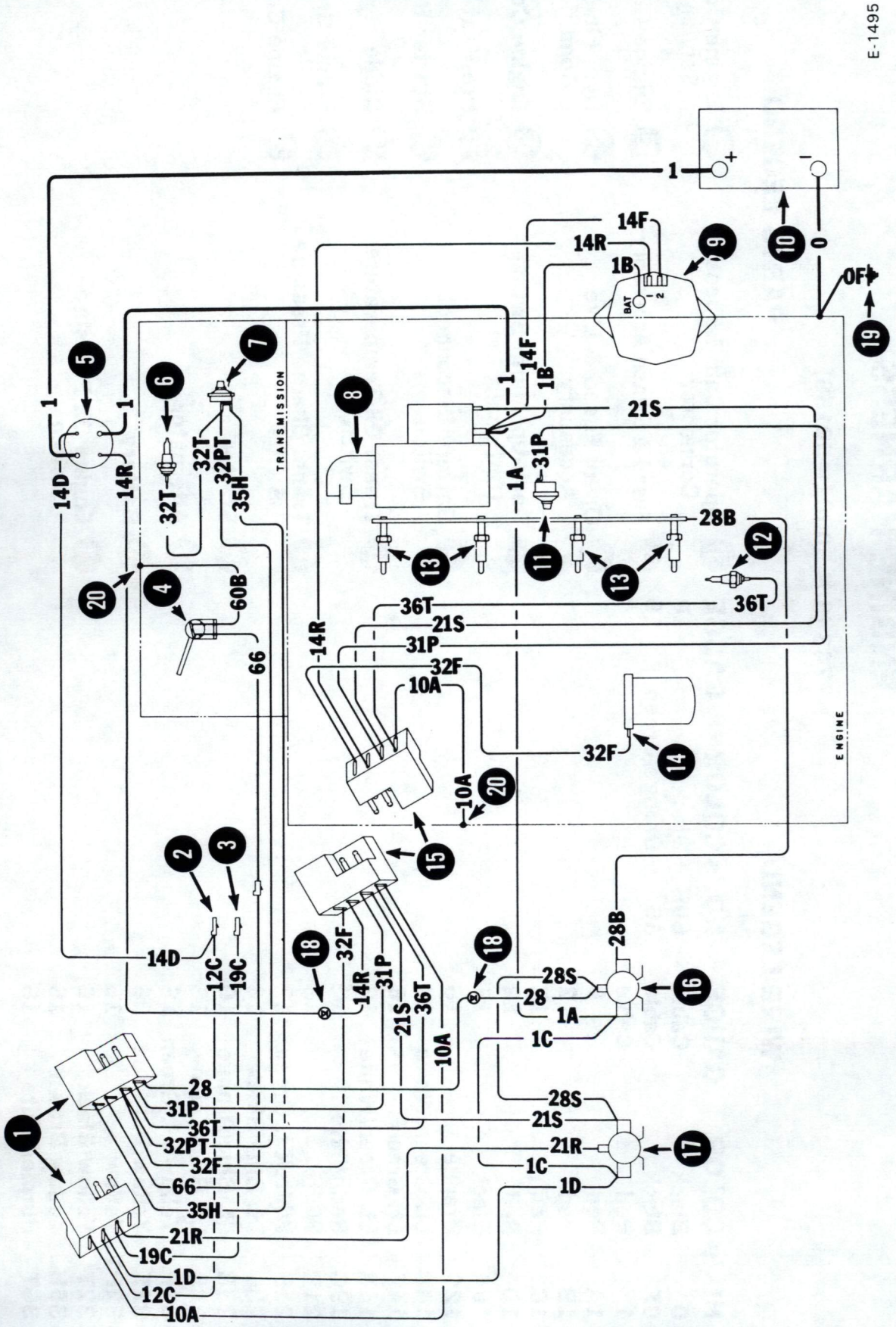
*** * Hydraulic fluid pressure switch (Item 8, Wire #32F) was added at S/N 13384 for Model 643 and S/N 15001 for Model 743.**

E-1513

ENGINE WIRING DIAGRAM (P/N 6570758)

Model 743DS

(Printed September 1990)



ENGINE HARNESS

743DS (S/N 50001—50156)

ENGINE HARNESS

743 (S/N 50001—50156)

WIRE LEGEND

NO.'s	COLOR	GAUGE
0	Black	Cable
0F	Black	Cable
1	Red	Cable
1A	Red	8
1B	Red	12
1C	Red	12
1D	Red	12
10A	Black	16
12C	Orange	16
14D	Lt. Green/White	16
14F	Lt. Green	16
14R	Lt. Green/White	16
19C	Red/White	12
21R	White	16
21S	White/Lt. Green	12
28	Lt. Blue/Black	16
28B	Lt. Blue/Orange	10
28S	Lt. Blue/Yellow	16
31P	Yellow/Lt. Green	16
32F	Yellow/Dk. Blue	16
32PT	Yellow	16
32T	Yellow/Black	16
35H	Yellow/Brown	16
36T	Purple/White	16

NO.'s	COLOR	GAUGE
60B	Black	16
66	Orange/Green	16

PARTS LEGEND

1. Operator Cab Harness Connector
2. Fused & Switch Accessory
3. Open, Fused & Live Accessory
4. Back-Up Alarm Switch (Optional)
5. Battery Disconnect Switch
6. Trans. Oil Temperature Switch
7. Trans. Charge Pressure Switch
8. Starter
9. Alternator
10. Battery
11. Engine Oil Pressure Switch
12. Engine Coolant Temp. Sender
13. Engine Glow Plugs
14. Hyd. Fluid Filter Condition Switch
15. Engine Connector
16. Pre-Heat Relay
17. Starter Relay
18. Diode
19. Frame Ground
20. Engine Ground

ENGINE HARNESS

743DS (S/N 50157 thru 51377)

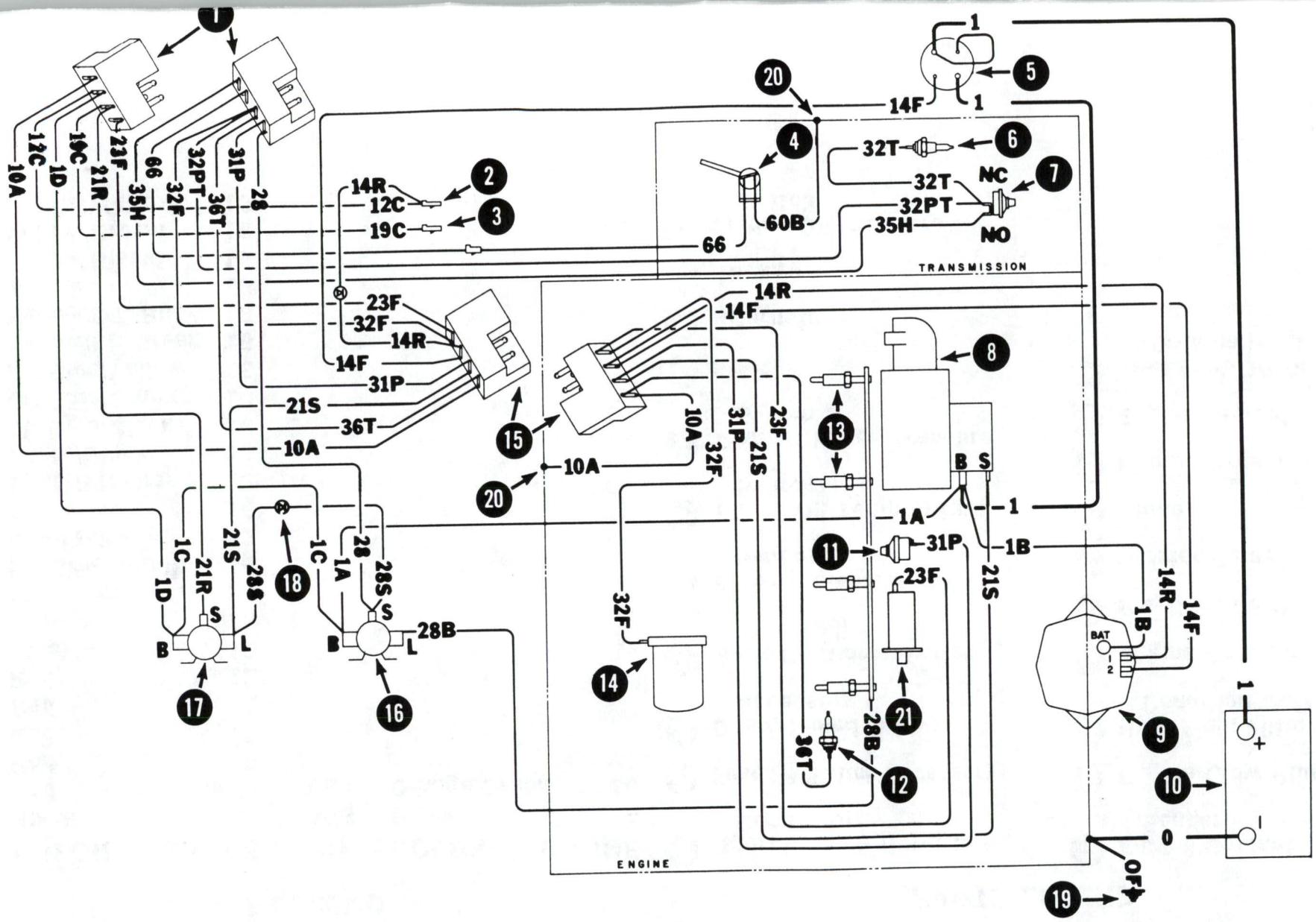
WIRE LEGEND

NO.'s	COLOR	GAUGE
0	Black	Cable
1	Red	Cable
1A	Red	8
1B	Red	12
1C	Red	12
1D	Red	12
10A	Black	12
12C	Orange	16
14F	Lt. Green	16
14R	Lt. Green/White	16
19C	Red/White	12
21R	White	16
21S	White/Lt. Green	12
23F	White/Black	16
28	Lt. Blue/Black	16
28B	Lt. Blue/Orange	10
28S	Lt. Blue/Yellow	16
31P	Yellow/Lt. Green	16
32F	Yellow/Dk. Blue	16
32PT	Yellow	16
32T	Yellow/Black	16
35H	Yellow/Brown	16
36T	Purple/White	16

NO.'s	COLOR	GAUGE
60B	Black	16
66	Orange/Green	16

PARTS LEGEND

1. Operator Cab Harness Connector
2. Fused & Switch Accessory
3. Open, Fused & Live Accessory
4. Back-Up Alarm Switch (Optional)
5. Battery Disconnect Switch
6. Trans. Oil Temperature Switch
7. Trans. Charge Pressure Switch
8. Starter
9. Alternator
10. Battery
11. Engine Oil Pressure Switch
12. Engine Coolant Temp. Sender
13. Engine Glow Plugs
14. Hyd. Fluid Filter Condition Switch
15. Engine Connector
16. Pre-Heat Relay
17. Starter Relay
18. Diode
19. Frame Ground
20. Engine Ground
21. Fuel Shut-Off Solenoid (Optional)



ENGINE HARNESS

743DS (S/N 50157 thru 51377)

E-1516