



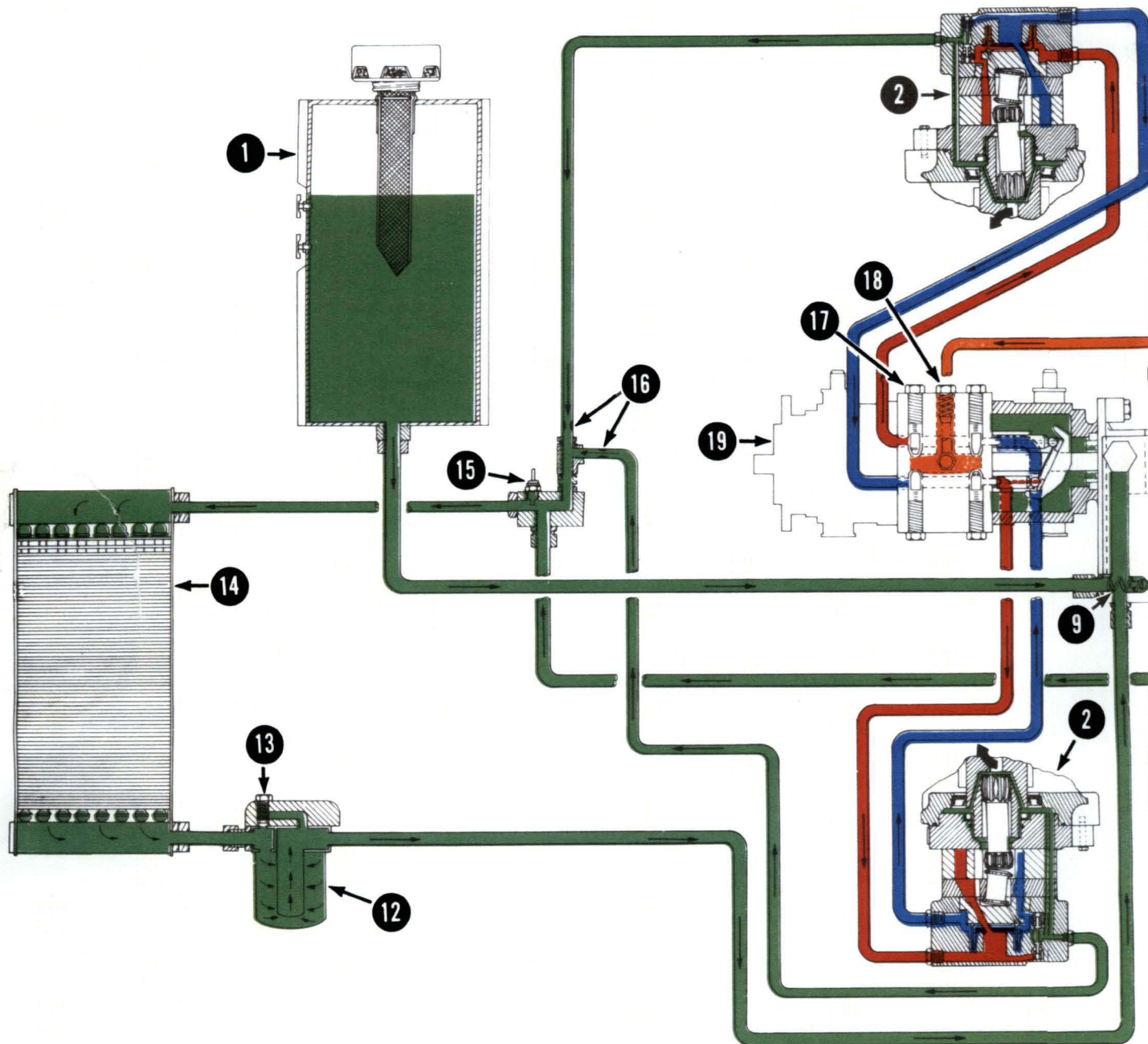
HYDRAULIC / HYDROSTATIC FLOW CHART

For Models

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

With Charge Line Filter and Melroe Valve

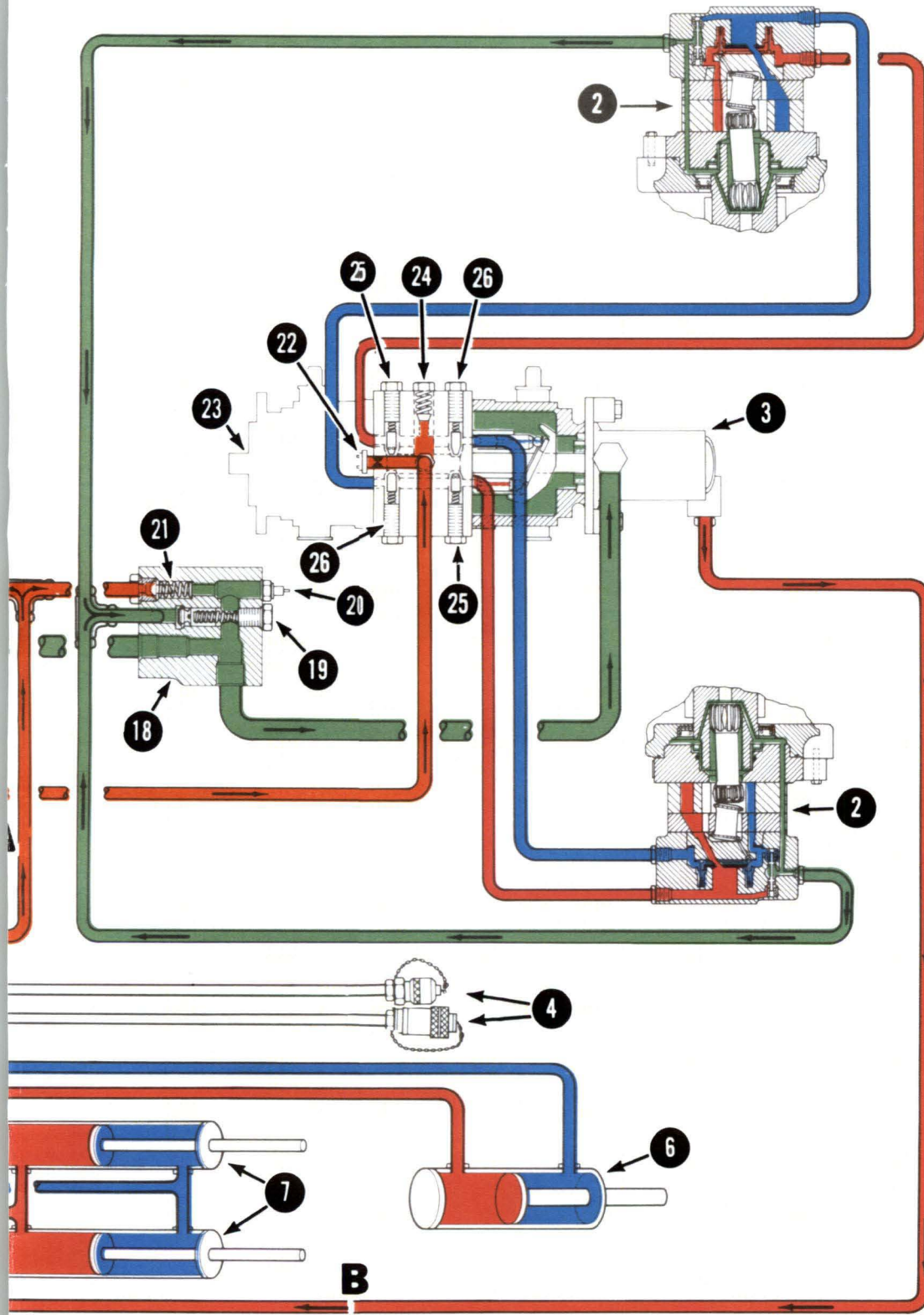
Chart # 6570767 (Printed April 1988)



BestManuals.net

The ABSOLUTE BestManuals on the web

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





HYDRAULIC / HYDROSTATIC FLOW CHART

For Models

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

With Charge Line Filter and Melroe Valve

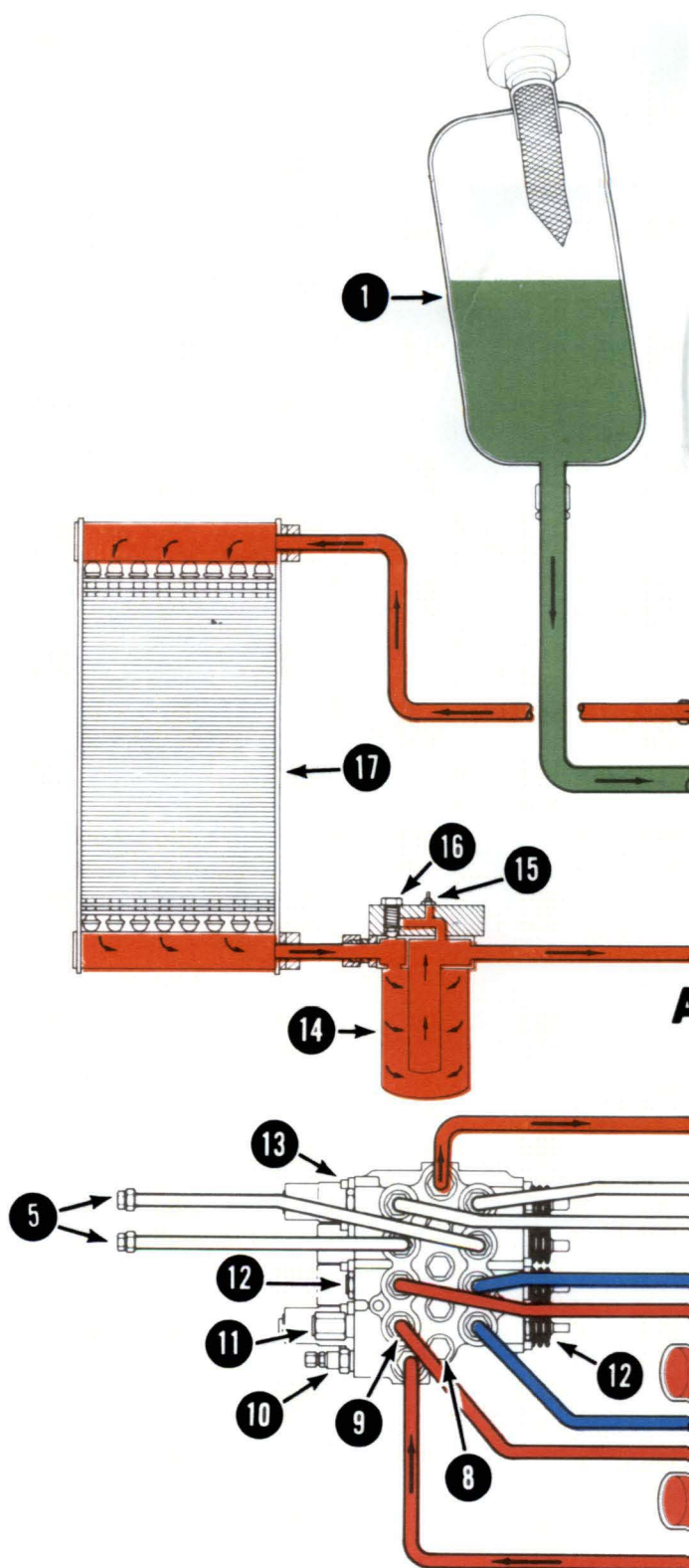
Chart # 6570293 (Printed July 1986)

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

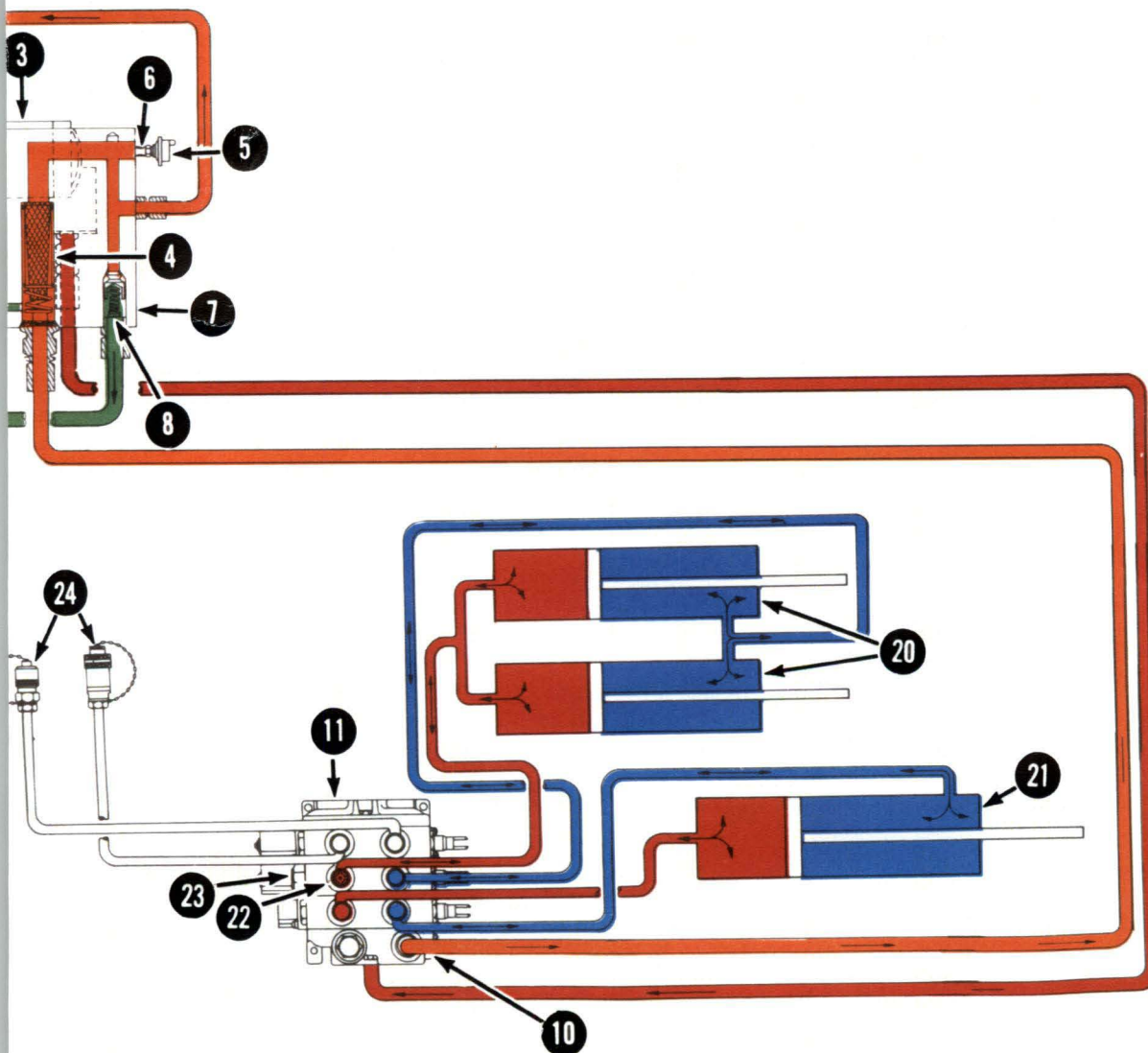
Refer to Chart # 6570281 for machines equipped with optional Bucket Positioning Valve. Reference "A" and "B" indicate location of hydraulic circuitry connection.



- 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.



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.

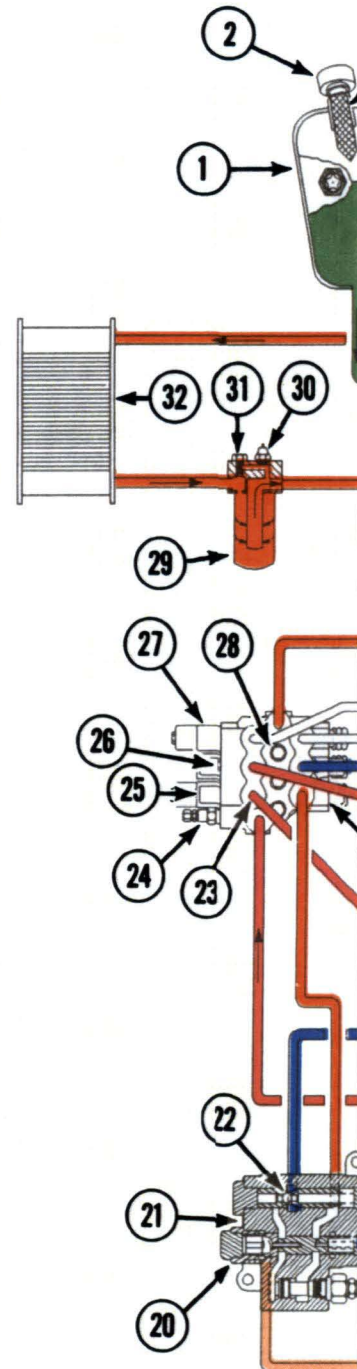


CHART LEGEND

- 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

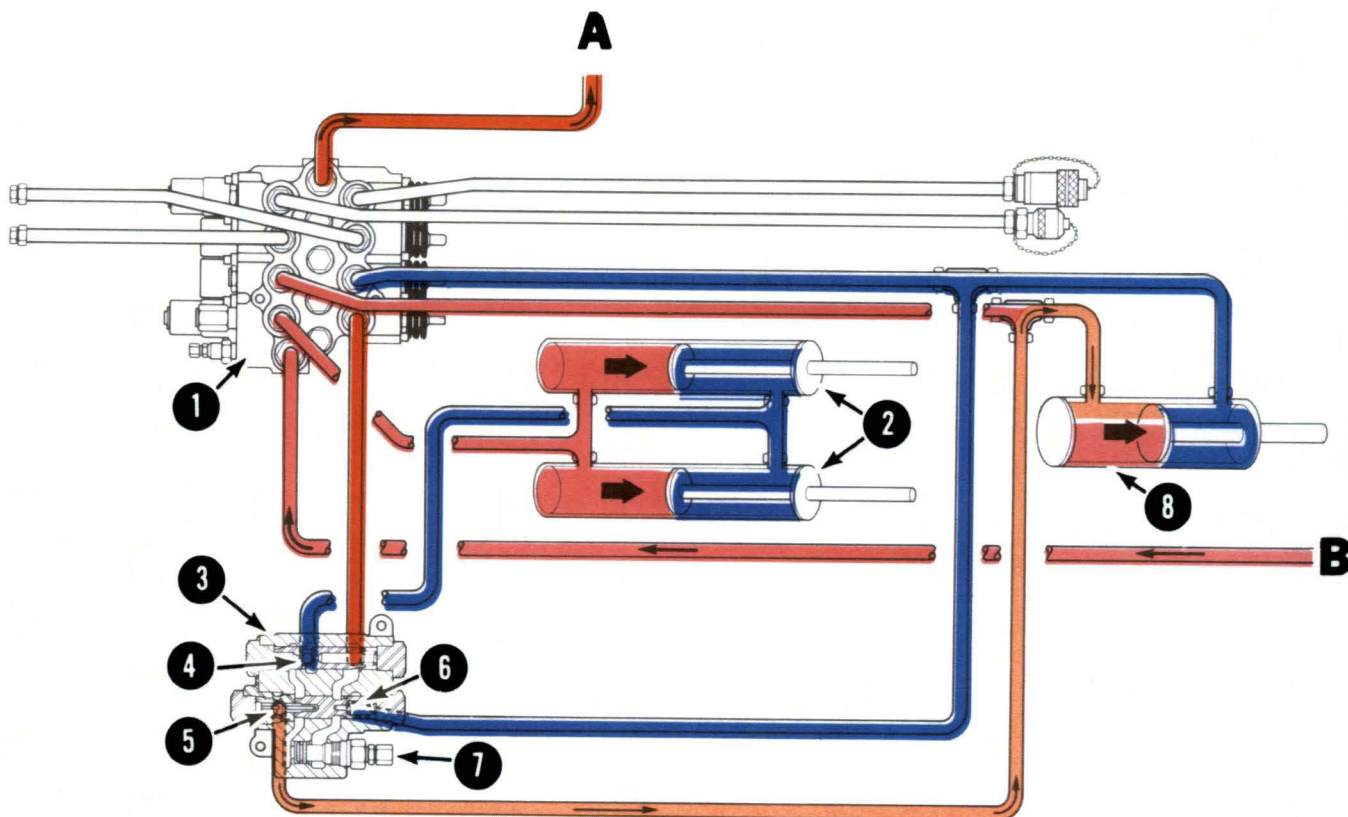
BUCKET POSITIONING SYSTEM OPERATION

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 raised. 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.



For Models

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



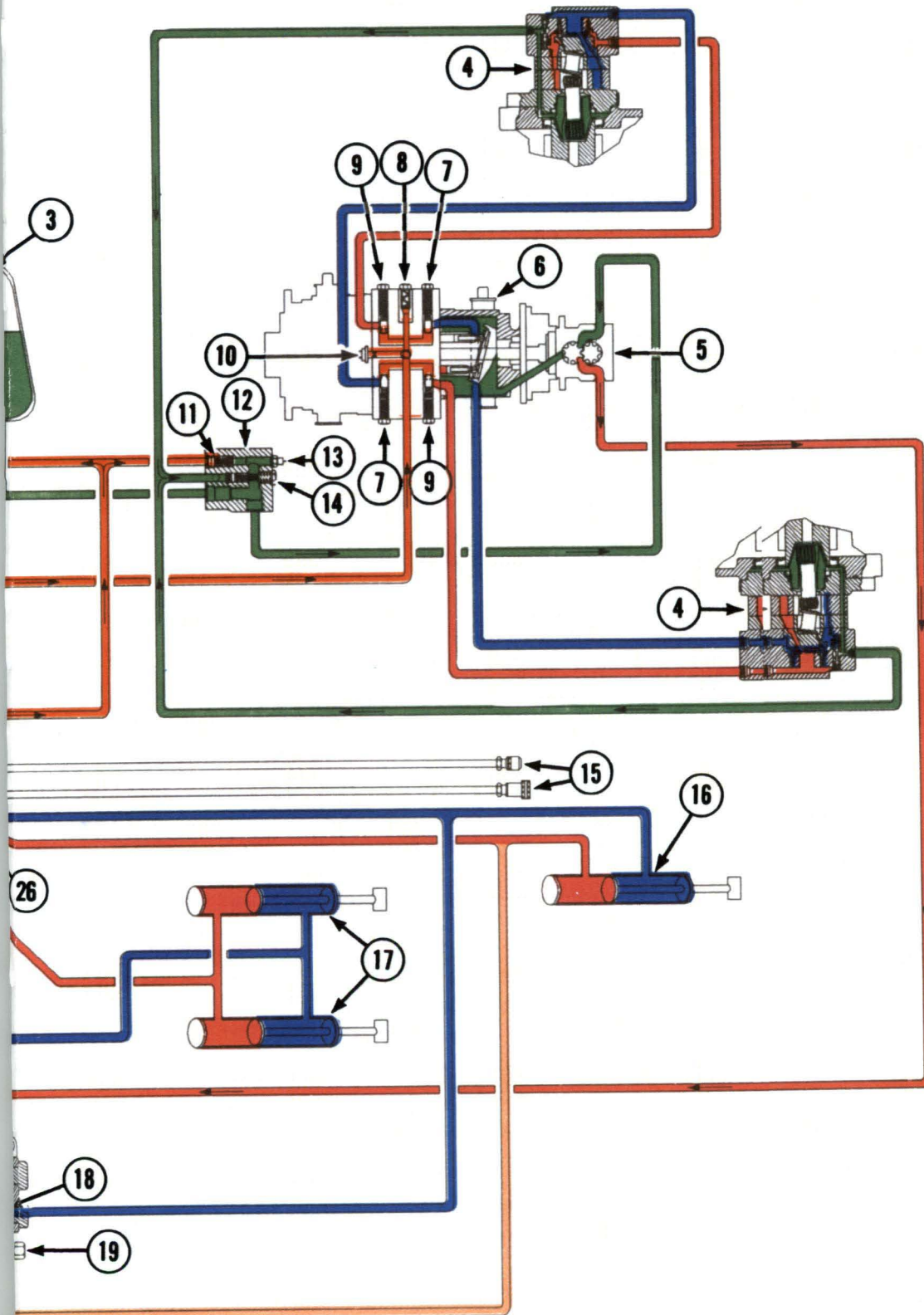
D-1690

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

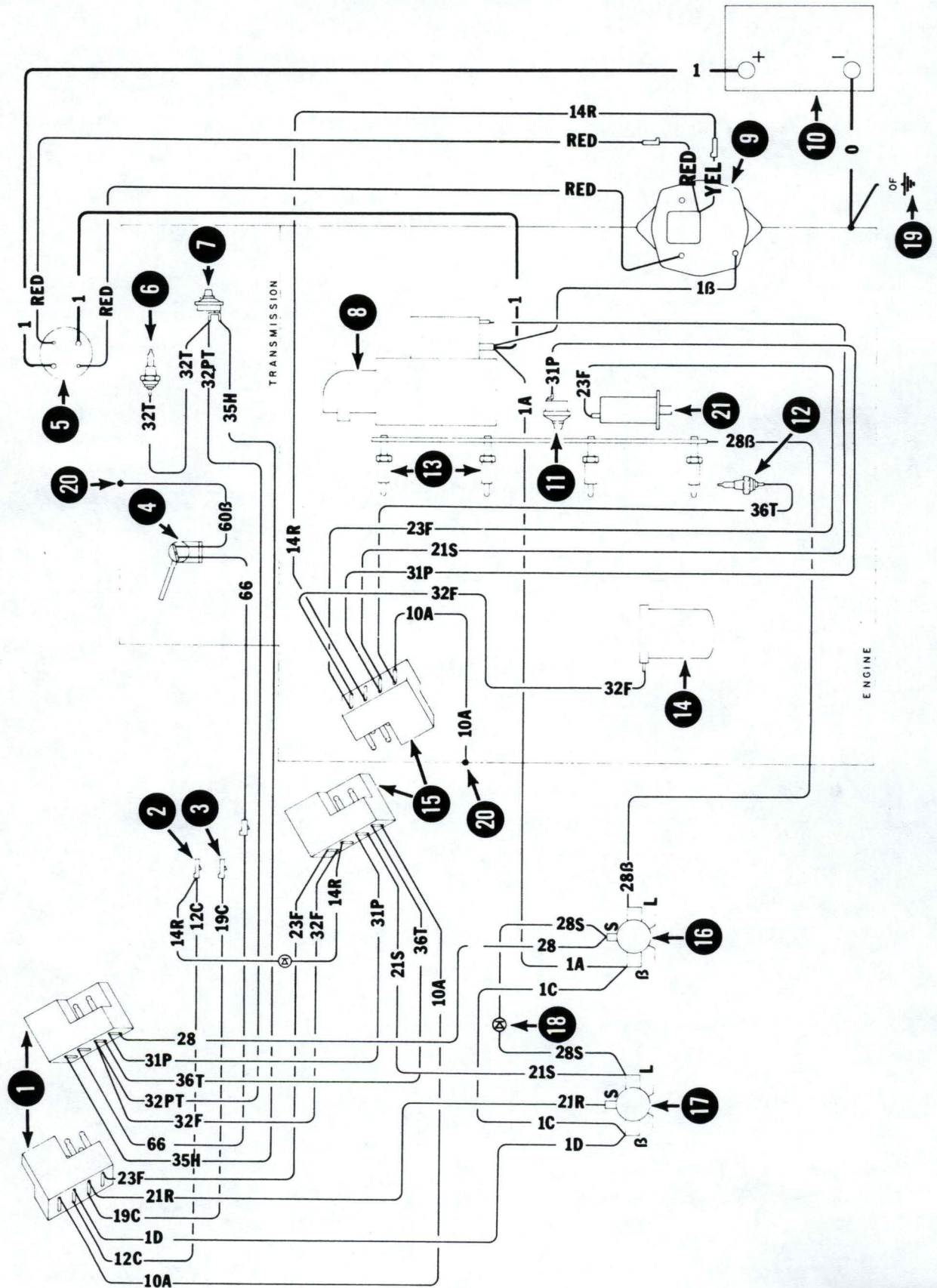
- | | | |
|---|-----------------|-----------------------|
|  | RED - - - - - | High Pressure |
|  | BLUE - - - - - | Low Pressure |
|  | ORANGE - - - - | Charge Pressure |
|  | LT. ORANGE- - - | Bucket Position Fluid |

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

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



(Printed September 1990)



ENGINE HARNESS

743DS (S/N 51378 & Above)

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 | 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 | | | |

PARTS LEGEND

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



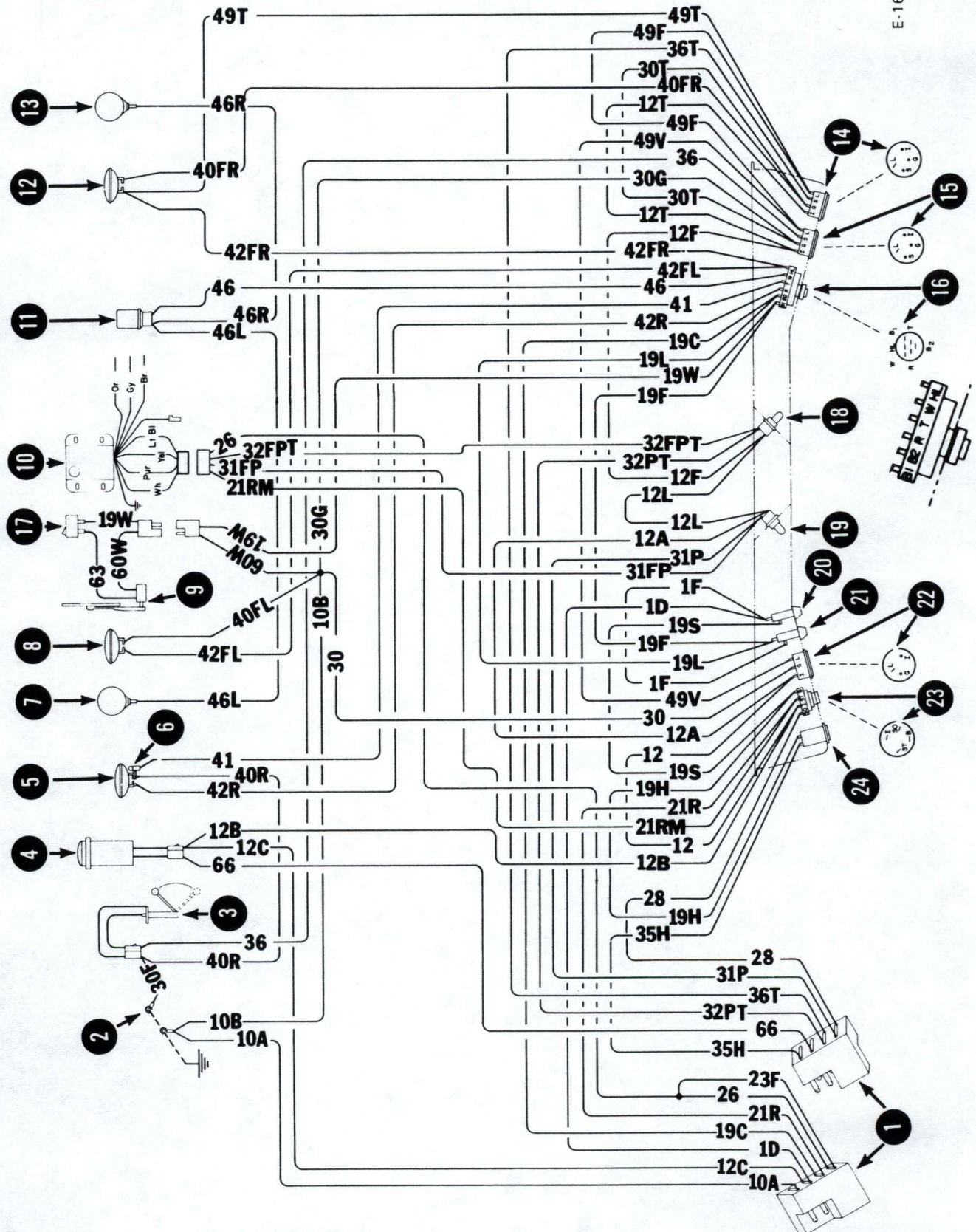
CAB WIRING DIAGRAM (P/N 6566807)

640, 740 Series

(Printed April 1988)

E-1630

CAB HARNESS





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 | NO.'s | COLOR | GAUGE |
|-------|----------------|-------|-------|----------------|-------|
| 1D | Red | 12 | 31FP | Yellow/Green | 18 |
| 1F | Red | 16 | 32FPT | Yellow | 18 |
| 10A | Black | 12 | 32PT | Yellow | 18 |
| 10B | Black | 12 | 35H | Yellow/Brown | 18 |
| 12 | Orange | 16 | 36 | Purple | 16 |
| 12A | Orange | 18 | 36T | Purple/White | 18 |
| 12B | Orange | 16 | 40FL | Black | 16 |
| 12C | Orange | 16 | 40FR | Black | 16 |
| 12F | Orange | 18 | 40R | Black | 16 |
| 12L | Orange | 18 | 41 | Pink | 16 |
| 12T | Orange | 18 | 42FL | Dk. Blue | 16 |
| 19C | Red/White | 16 | 42FR | Dk. Blue | 16 |
| 19F | Red/White | 16 | 42R | Dk. Blue/White | 16 |
| 19H | Red/White | 18 | 46 | Brown | 16 |
| 19L | Red/White | 16 | 46L | Brown | 16 |
| 19S | Red/White | 16 | 46R | Brown | 16 |
| 19W | Red/White | 16 | 49F | Gray | 16 |
| 21R | White | 16 | 49T | Gray | 16 |
| 21RM | White | 16 | 49V | Gray | 16 |
| 23F | White/Black | 16 | 60W | Black | 16 |
| 26 | Lt. Blue | 16 | 66 | Orange/Green | 16 |
| 28 | Lt. Blue/Black | 16 | | | |
| 30 | Black | 16 | | | |
| 30F | Black | 16 | | | |
| 30G | Black | 16 | | | |
| 30T | Black | 16 | | | |

PARTS LEGEND

| | | | |
|-----|-------------------------------|------|-------------------------|
| ① | Harness Connector | * ①⑥ | Light Switch |
| ② | Operator Cab Ground | * ①⑦ | Wiper Switch (Optional) |
| * ③ | Fuel Sender | ①⑧ | "Trans" Warning Light |
| * ④ | Back-Up Alarm (Optional) | ①⑨ | "Eng" Warning Light |
| * ⑤ | Rear Lamp | ②⑩ | Fuse-Ignition |
| * ⑥ | Tail Lamp | ②⑪ | Fuse-Accessory |
| * ⑦ | Left Flasher Lamp (Optional) | * ②⑫ | Voltmeter |
| * ⑧ | Left Front Lamp | ②⑬ | Ignition Switch |
| * ⑨ | Wiper (Optional) | ②⑭ | Hourmeter |
| * ⑩ | Shut Down Module (Optional) | | |
| * ⑪ | Flasher (Optional) | | |
| * ⑫ | Right Front Lamp | | |
| * ⑬ | Right Flasher Lamp (Optional) | | |
| * ⑭ | Engine Temp. Gauge | | |
| * ⑮ | Fuel Gauge | | |
| | | * ②⑮ | Optional for 642B Only |
| | | ● | Tee splice |
| | | ○ | Butt splice |

MC-1121



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)

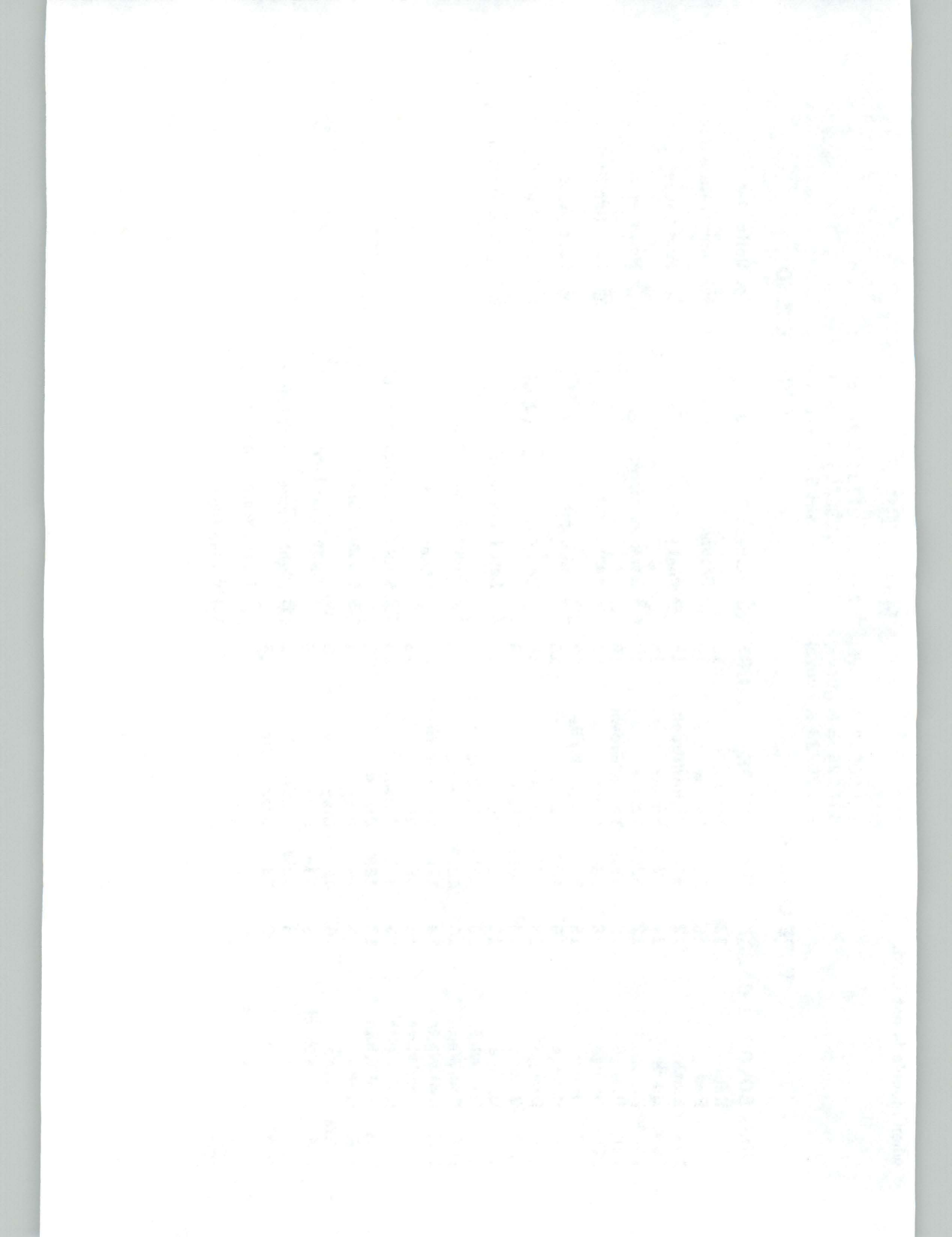
743 DS (S/N 51414 & Above)

WIRE LEGEND

| NO.'s | COLOR | GAUGE | NO.'s | COLOR | GAUGE |
|-------|----------------|-------|-------|----------------|-------|
| 1D | Red | 12 | 30T | Black | 16 |
| 1F | Red | 16 | 31 | Yellow | 18 |
| 10A | Black | 12 | 31P | Yellow/Green | 18 |
| 10B | Black | 14 | 32 | Yellow | 18 |
| 10AB | Black | 12 | 32PT | Yellow | 18 |
| 12A | Orange | 18 | 35H | Yellow/Brown | 18 |
| 12B | Orange | 16 | 36 | Purple | 16 |
| 12C | Orange | 16 | 36T | Purple/White | 18 |
| 12F | Orange | 16 | 40R | Black | 16 |
| 12L | Orange | 18 | 40FL | Black | 16 |
| 12T | Orange | 18 | 40FR | Black | 16 |
| 12V | Orange | 18 | 41 | Pink | 16 |
| 19C | Red/White | 16 | 42FL | Dk. Blue | 16 |
| 19F | Red/White | 16 | 42FR | Dk. Blue | 16 |
| 19H | Red/White | 18 | 42R | Dk. Blue/White | 16 |
| 19L | Red/White | 16 | 46 | Brown | 16 |
| 19S | Red/White | 16 | 46L | Brown | 16 |
| 19W | Red/White | 16 | 46R | Brown | 16 |
| 21R | White | 16 | 49F | Gray | 18 |
| 21RM | White | 16 | 49T | Gray | 18 |
| 23F | White/Black | 16 | 49V | Gray | 18 |
| 26 | Lt. Blue | 16 | 60W | Black | 16 |
| 26A | Lt. Blue | 16 | 66 | Orange/Green | 16 |
| 28 | Lt. Blue/Black | 16 | | | |
| 30 | Black | 16 | | | |
| 30G | Black | 16 | | | |

PARTS LEGEND

- | | |
|------------------------------|----------------------|
| ① Harness Connectors | ①⑦ Voltmeter |
| ② Ground | ①⑧ Temperature Gauge |
| ③ Fuel Sender | ①⑨ Fuel Gauge |
| ④ Back-Up Alarm | ②⑦ Hourmeter |
| ⑤ Rear Light | ②① Fuse (Ignition) |
| ⑥ Tail Light | ②② Fuse (Accessory) |
| ⑦ Left Flasher Light (Opt.) | ②③ Light Switch |
| ⑧ Left Front Light | ②④ Ignition Switch |
| 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 | |



CAB WIRING DIAGRAM (P/N 6566808)

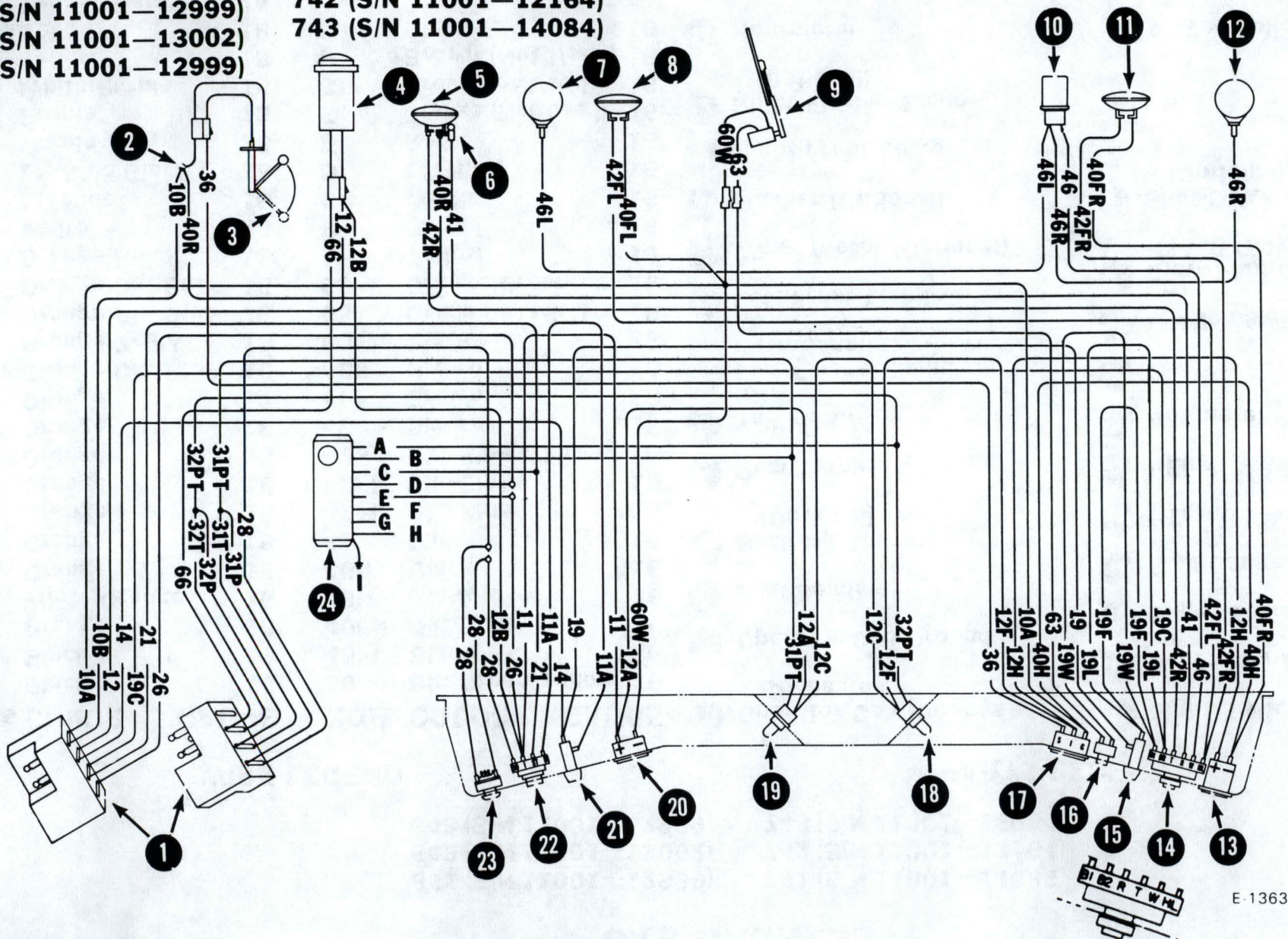
640, 740 Series

(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)



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 | NO.'s | COLOR | GAUGE |
|-------|-----------------|-------|-------|-------------------|-------|
| 10A | Black | 16 | 36 | Dk. Green/Yellow | 16 |
| 10B | Black | 16 | 40FL | Black | 16 |
| 11 | Orange | 16 | 40FR | Dk. Blue | 16 |
| 11A | White/Orange | 16 | 40H | Black | 16 |
| 12 | Orange | 16 | 40R | Black | 16 |
| 12A | Orange | 18 | 41 | Pink | 16 |
| 12B | Orange | 16 | 42FL | Dk. Blue | 16 |
| 12C | Orange | 18 | 42FR | Dk. Blue | 16 |
| 12F | Orange | 18 | 42R | Dk. Blue/White | 16 |
| 12H | Orange | 18 | 46 | Brown | 16 |
| 14 | Orange | 12 | 46L | Brown | 16 |
| 19 | Orange/Dk. Blue | 16 | 46R | Brown | 16 |
| 19C | Orange/Yellow | 16 | 60W | Black | 16 |
| 19F | Orange/Dk. Blue | 16 | 63 | Orange/Black | 16 |
| 19L | Orange/Dk. Blue | 16 | 66 | Orange/Green | 16 |
| 19W | Orange/Black | 16 | A | Yellow | 16 |
| 21 | White | 16 | B | Purple | 16 |
| 26 | Lt. Blue | 16 | C | White | 16 |
| 28 | Lt. Blue/Black | 18 | D | Lt. Blue | 16 |
| 31P | Purple | 18 | E | Red | 16 |
| 31PT | Purple | 18 | F | Orange (Not Used) | 16 |
| 31T | White/Purple | 18 | G | Grey (Not Used) | 16 |
| 32P | Yellow | 18 | H | Brown (Not Used) | 16 |
| 32PT | Yellow | 18 | I | Black | 16 |
| 32T | Yellow/Black | 18 | | | |

PARTS LEGEND

- | | |
|----------------------------------|---|
| 1 Operator Cab Harness Connector | 14 Light Switch |
| 2 Operator Cab Ground | 15 Accessory Fuse |
| 3 Fuel Sender | 16 Wiper Switch (Optional) |
| 4 Back-Up Alarm (Optional) | 17 Fuel Gauge |
| 5 Rear Lamp | 18 "Trans" Warning Lamp |
| 6 Tail Lamp | 19 "Eng" Warning Lamp |
| 7 Left Flasher Lamp (Optional) | 20 Voltmeter |
| 8 Left Front Lamp | 21 Ignition Fuse |
| 9 Wiper Motor (Optional) | 22 Ignition Switch |
| 10 Flasher (Optional) | 23 Glow Plug Indicator (543 Only) |
| 11 Right Front Lamp | 24 Shut-Down Module (Optional) |
| 12 Right Flasher Lamp (Optional) | |
| 13 Hourmeter | <ul style="list-style-type: none"> ● 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 | NO.'s COLOR | | GAUGE |
|-------------|----------------|-------|-------------|----------------|-------|
| 1D | Red | 12 | 32FPT | Yellow | 18 |
| 1F | Red | 16 | 35H | Yellow/Brown | 18 |
| 10A | Black | 12 | 36 | Purple | 16 |
| 10B | Black | 12 | 36T | Purple/White | 18 |
| 12 | Orange | 16 | 40FL | Black | 16 |
| 12A | Orange | 18 | 40FR | Black | 16 |
| 12B | Orange | 16 | 40R | Black | 16 |
| 12C | Orange | 16 | 41 | Pink | 16 |
| 12F | Orange | 18 | 42FL | Dk. Blue | 16 |
| 12L | Orange | 18 | 42FR | Dk. Blue | 16 |
| 12T | Orange | 18 | 42R | Dk. Blue/White | 16 |
| 19C | Red/White | 16 | 46 | Brown | 16 |
| 19F | Red/White | 16 | 46L | Brown | 16 |
| 19H | Red/White | 18 | 46R | Brown | 16 |
| 19L | Red/White | 16 | 49F | Gray | 16 |
| 19S | Red/White | 16 | 49T | Gray | 16 |
| 19W | Red/White | 16 | 49V | Gray | 16 |
| 21RM | White | 16 | 60W | Black | 16 |
| 23F | White/Black | 16 | 63 | Orange/Black | 16 |
| 26 | Lt. Blue | 16 | 66 | Orange/Black | 16 |
| 28 | Lt. Blue/Black | 16 | | | |
| 30 | Black | 16 | | | |
| 30F | Black | 16 | | | |
| 30G | Black | 16 | | | |
| 30T | Black | 16 | | | |
| 31FP | Yellow/Green | 18 | | | |

PARTS LEGEND

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

● Tee splice
○ Butt splice

ENGINE WIRING DIAGRAM (P/N 6566809)

Model 641, 741

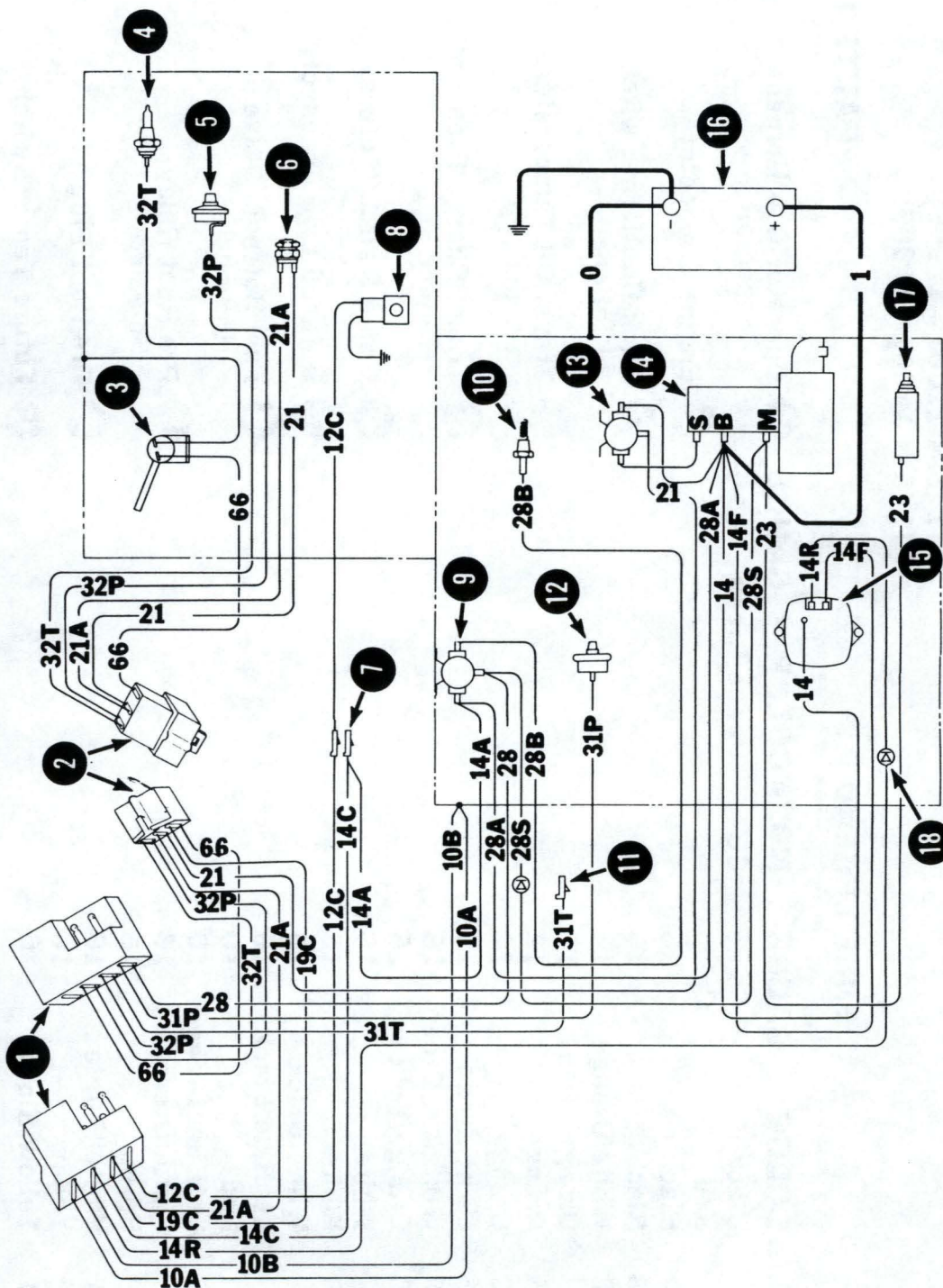
(Printed April 1988)

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 | NO.'s | COLOR | GAUGE |
|-------|-----------------|-------|-------|--------------|-------|
| 0 | Black | Cable | 66 | Orange/Green | 16 |
| 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 | | | |

PARTS LEGEND

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



- ** 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.**

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 | NO.'s | COLOR | GAUGE |
|-------|-------------------|-------|-------|--------------|-------|
| 0 | Black | Cable | 36T | Purple/White | 16 |
| 1 | Red | Cable | 60B | Black | 16 |
| 1A | Red | 8 | 66 | Orange/Green | 16 |
| 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 | | | |

PARTS LEGEND

- | | |
|--|---|
| <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> 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

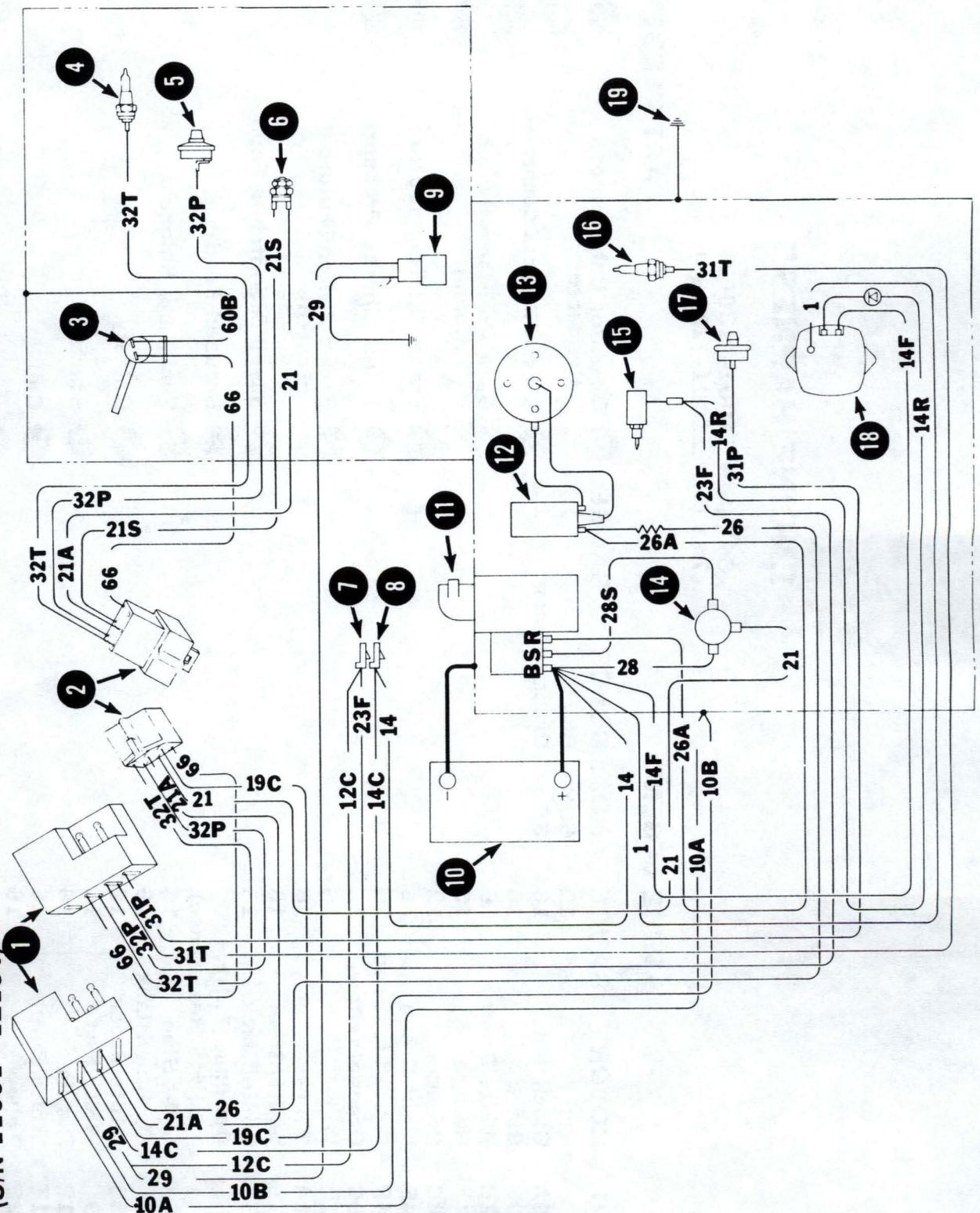
(Printed April 1988)

E-1358

ENGINE HARNESS

642 (S/N 11001—13002)

742 (S/N 11001—12164)



ENGINE HARNESS

642 (S/N 11001—13002)

741 (S/N 11001—12164)

WIRE LEGEND

| NO.'s | COLOR | GAUGE | NO.'s | COLOR | GAUGE |
|-------|---------------------------------------|-------|-------|--------------|-------|
| 1 | Red | 12 | 60B | Black | 16 |
| 10A | Black | 16 | 66 | Orange/Green | 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 | | | |

PARTS LEGEND

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

ENGINE HARNESS

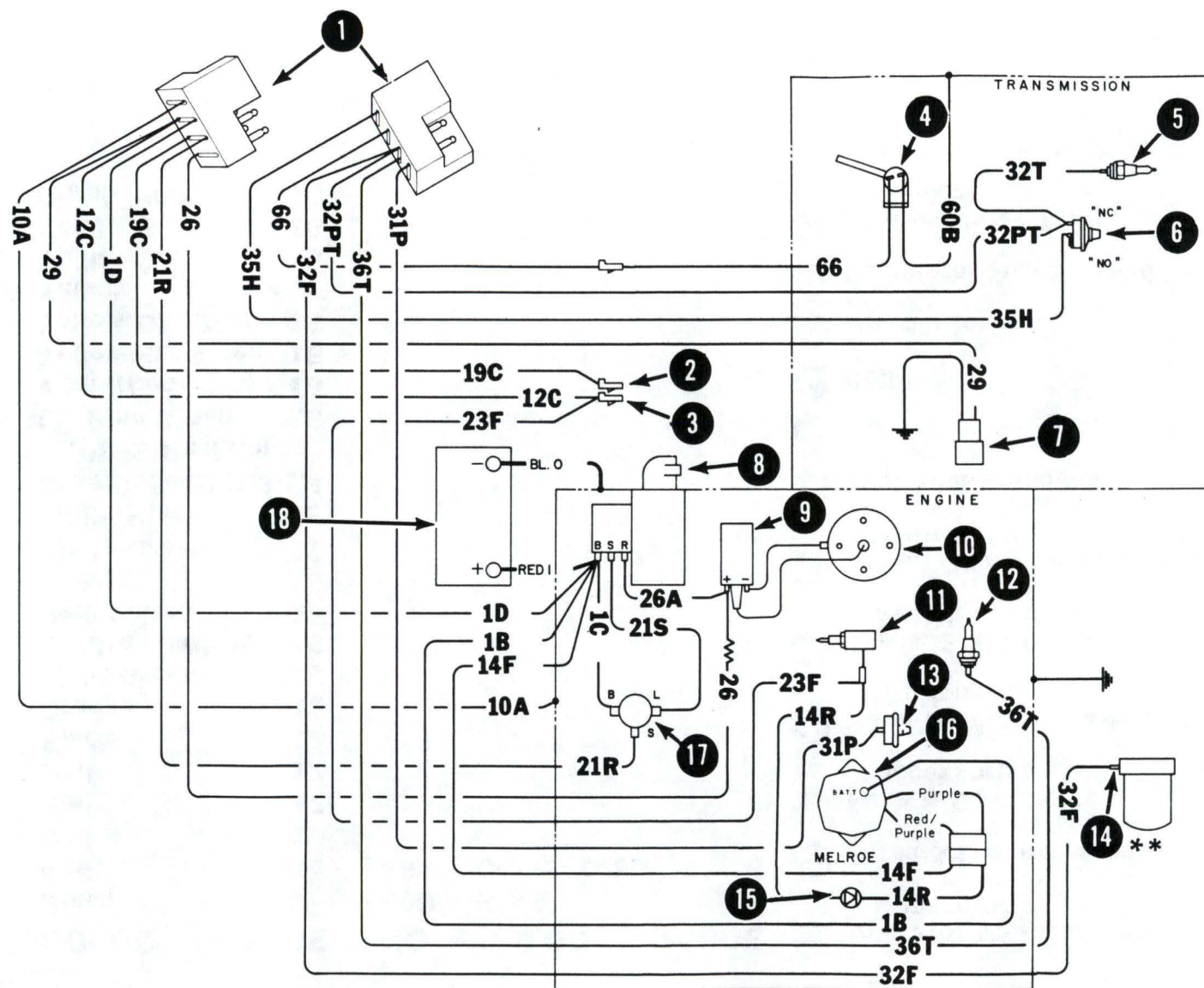
- * 642 (S/N 13003 — 20840) Delco
- * 742 (S/N 12165 — 20881) Delco
- 742 (S/N 20882 & Above) Melroe

WIRE LEGEND

| NO.'s | COLOR | GAUGE | NO.'s | COLOR | GAUGE |
|-------|---|-------|-------|--------------|-------|
| 0 | Black | Cable | 60B | Black | 16 |
| 1 | Red | Cable | 66 | Orange/Green | 16 |
| 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 | | | |

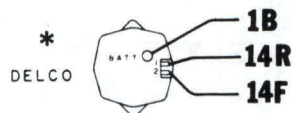
PARTS LEGEND

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



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.

ENGINE WIRING DIAGRAM (P/N 6566811)

Models 643, 743

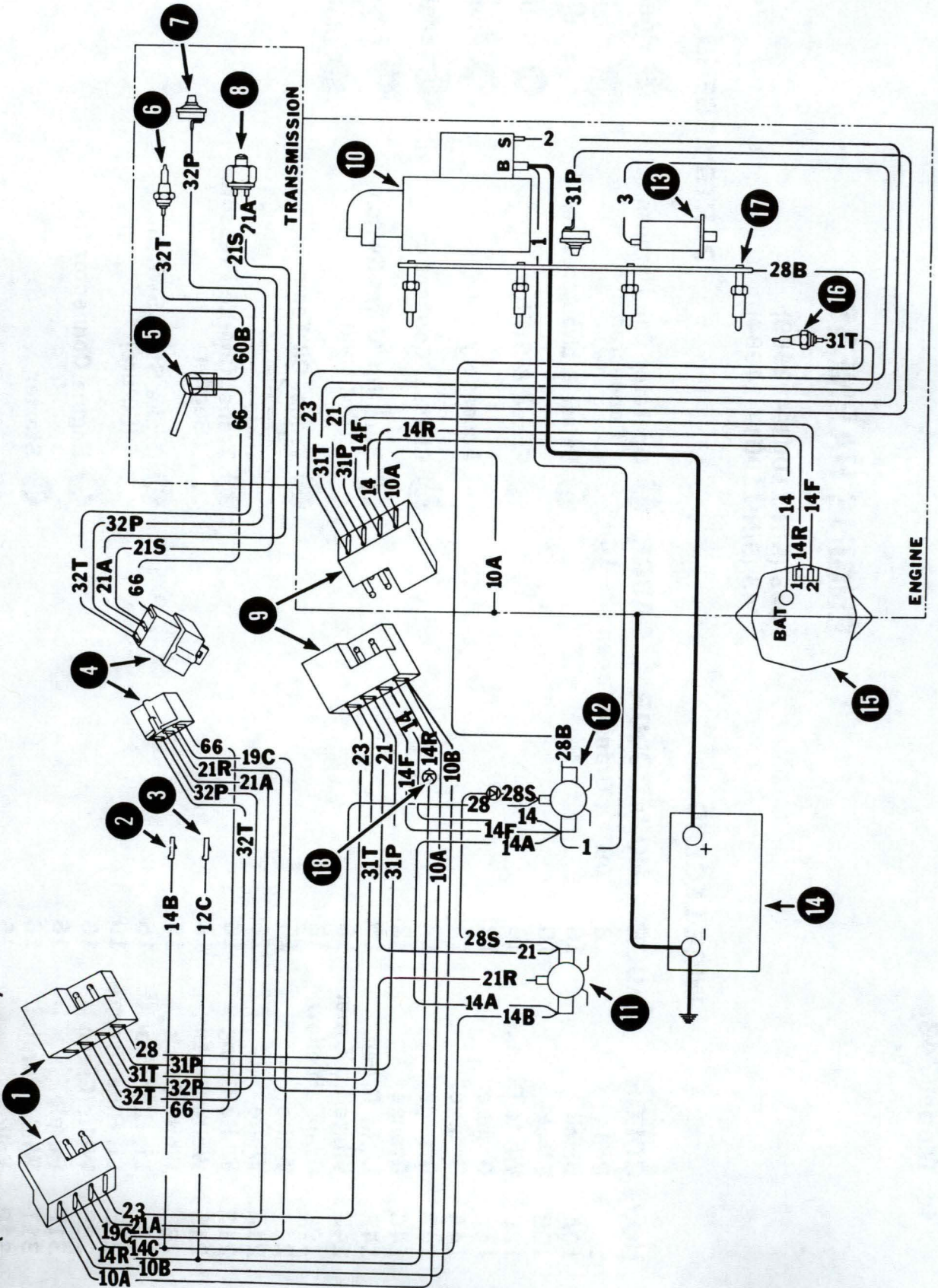
(Printed April 1988)

E-1356

ENGINE HARNESS

643 (S/N 11001-12999)

743 (S/N 11001-14084)



***** 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 | NO.'s | COLOR | GAUGE |
|--------------|-----------------|--------------|--------------|--------------|--------------|
| 1 | Red | 8 | 66 | Orange/Green | 16 |
| 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 | | | |

PARTS LEGEND

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

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 | | | |
| 32F ³ | 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 | ⑬ Engine Coolant Temp. Sender |
| ② Fused & Live Accessories | ⑭ Alternator |
| ③ Fuse & Switched Accessories | ⑮ Battery |
| ④ Chassis Connector | ⑯ Pre-Heat Relay |
| ⑤ Back-Up Alarm Switch (Optional) | ⑰ Start Relay |
| ⑥ Trans. Fluid Temp. Switch | ⑱ Diode |
| 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) | |

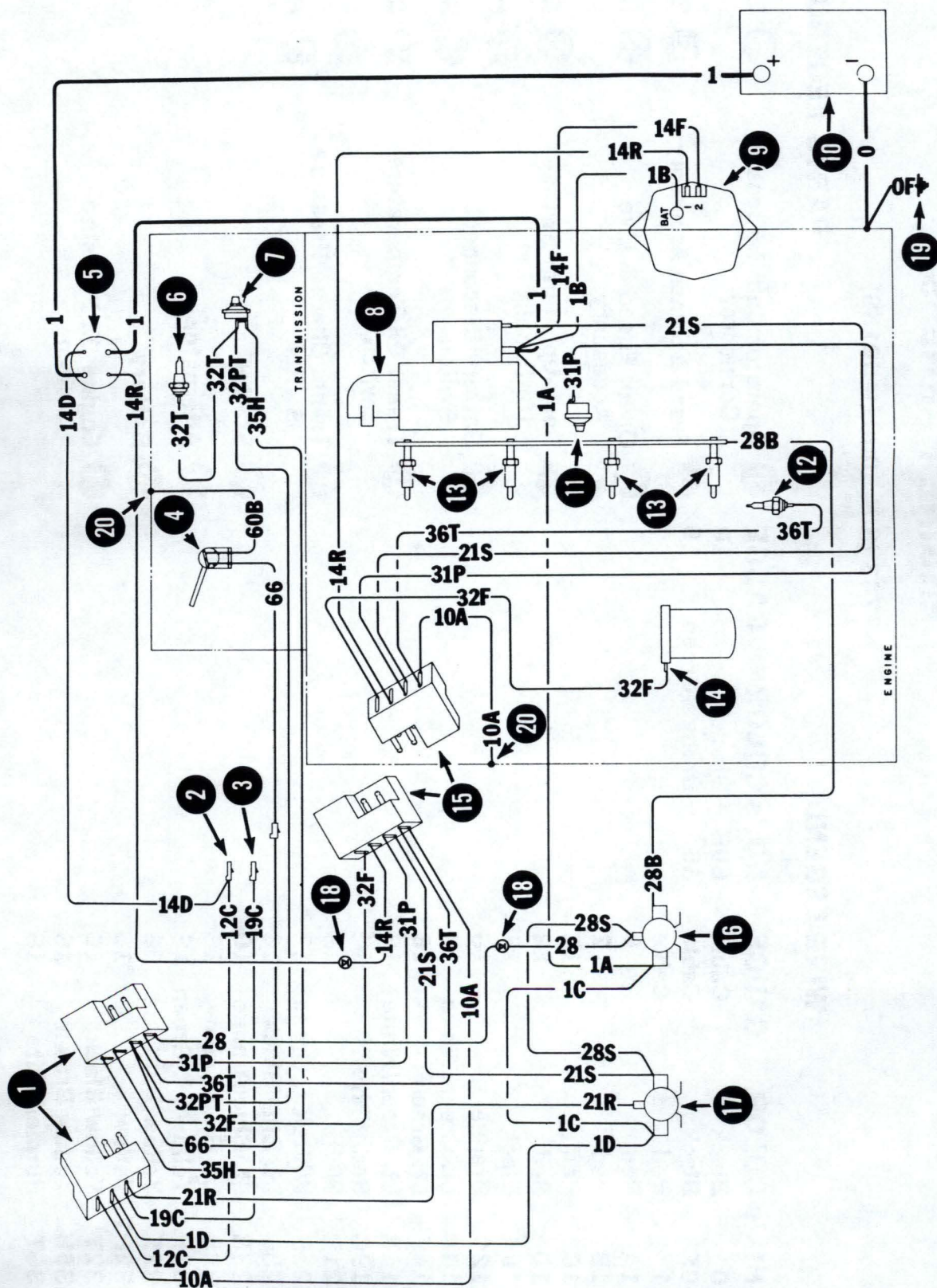


-
- * DELCO

E-1513

(Printed September 1990)

ENGINE HARNESS
743DS (S/N 50001—50156)



ENGINE HARNESS

743 (S/N 50001—50156)

WIRE LEGEND

| NO.'s | COLOR | GAUGE | NO.'s | COLOR | GAUGE |
|-------|------------------|-------|-------|--------------|-------|
| 0 | Black | Cable | 60B | Black | 16 |
| 0F | Black | Cable | 66 | Orange/Green | 16 |
| 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 | | | |

PARTS LEGEND

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

ENGINE HARNESS

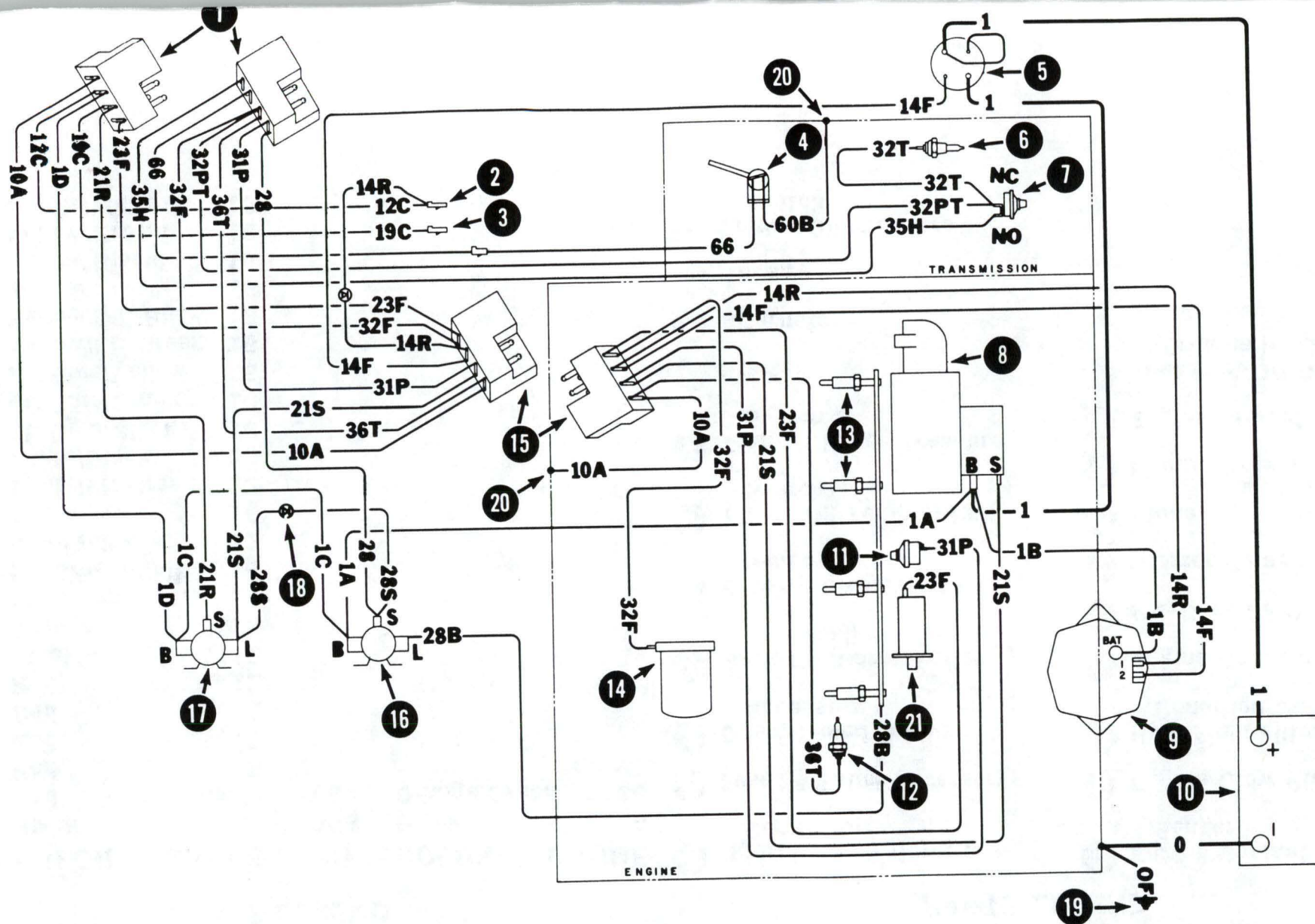
743DS (S/N 50157 thru 51377)

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 | 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 | | | |

PARTS LEGEND

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



ENGINE HARNESS

743DS (S/N 50157 thru 51377)