

Group 15 CONTROL LINKAGE

THROTTLE CABLE

General Information

On stationary engines, the hand throttle is mounted on the instrument panel and is connected to the governor control lever on the injection pump.

Removal

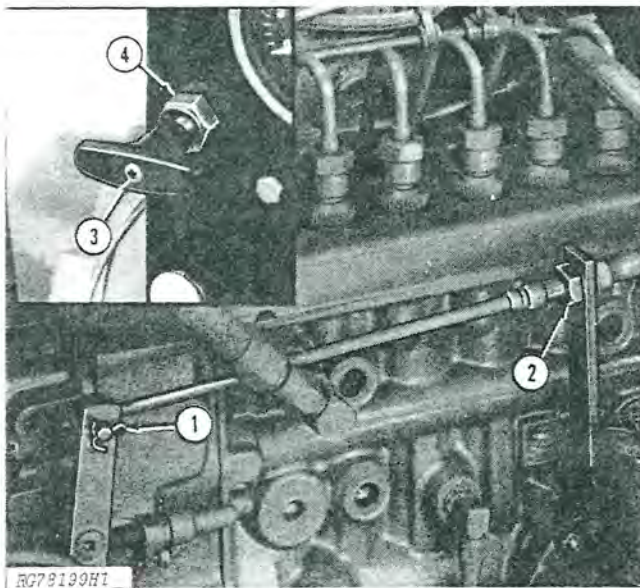


Fig. 1-Throttle Cable Removal Steps
(6466A Shown)

1. Disconnect throttle cable at governor control lever.
2. Remove nut and separate cable from bracket.
3. Remove screw and remove throttle handle.
4. Remove trim nut from cable assembly.
5. Remove cable assembly from panel (not shown).

Repair

The cable is not repairable and must be replaced if defective.

Installation

1. Reverse removal steps 2 through 5, tightening nuts securely.
2. Adjust throttle cable as directed in Section 230, Group 15.

STARTING FUEL CONTROL LINKAGE - 6404T AND A (INJECTION PUMPS EQUIPPED WITH ANEROID)

General Information

The starting fuel control linkage automatically engages the aneroid on engines not equipped with a hydraulic aneroid activator.

Two different starting fuel control linkage assemblies were used on early 6404T and A engines:

Early Linkage

| | |
|---------|----------|
| 6404T (| -390173) |
| 6404A (| -393346) |

Late Linkage

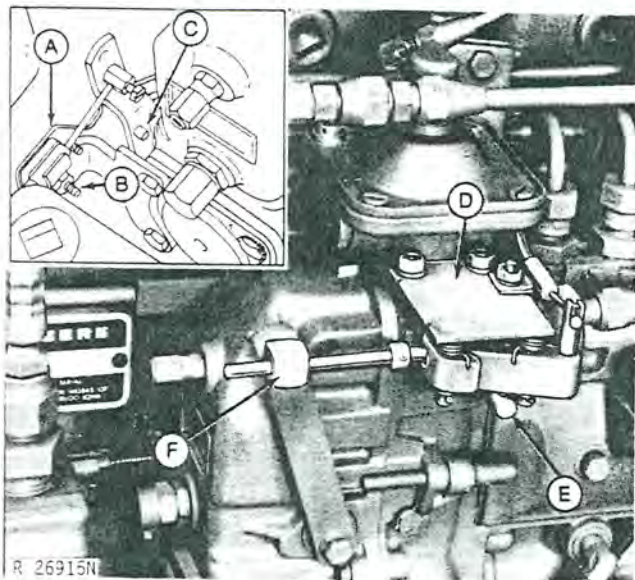
| |
|-----------------------|
| 6404T (390174-445569) |
| 6404A (393346-445947) |

Engines after the above serial numbers are fitted with a hydraulic aneroid activator instead of the starting fuel control linkage.

STARTING FUEL CONTROL LINKAGE - 6404T and A—Continued

Early Linkage

Removal



A—Cable Guide Bracket
B—Screw
C—Cable
D—Mounting Bracket
E—Control Shaft
F—Swivel

Fig. 2—Early Linkage Removal

1. To remove guide bracket and control cable from injection pump:

a. Remove screw (B, Fig. 2) which fastens guide bracket (A) and cable clamp to support bracket.

b. Disengage "L"-shaped end of control cable (C) from pump fuel shut-off lever.

2. Remove stud nuts from mounting bracket (D).

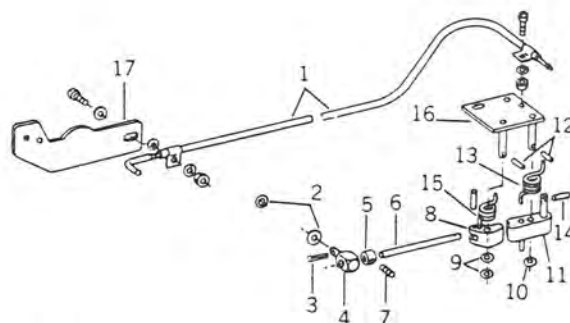
3. Remove cotter pin and washers from swivel (F) connection on governor control lever.

4. Remove linkage assembly from injection pump.

Disassembly and Repair

Disassemble linkage assembly using Fig. 3 as a guide.

Repair or replace any part that is excessively worn. Worn parts may prevent the linkage from engaging and disengaging the aneroid.



R 26916N

- | | |
|---------------|---------------------|
| 1—Cable | 9—Washers |
| 2—Washers | 10—Special Washer |
| 3—Cotter Pin | 11—Bell Crank |
| 4—Swivel | 12—Spring Pins |
| 5—Collar | 13—Spring (7 coils) |
| 6—Control Rod | 14—Spring Pin |
| 7—Set Screw | 15—Spring (9 coils) |
| 8—Latch | 16—Mounting Bracket |
| | 17—Guide Bracket |

Fig. 3—Exploded View of Early Linkage

Assembly and Installation

Referring to Fig. 3:

1. Apply a light film of grease to pivot pins on bracket (16).

2. Assemble bell crank (11) to bell crank bracket front pin, with 7-coil spring (13) positioned between the two. Retain with washer (10) and spring pin (12).

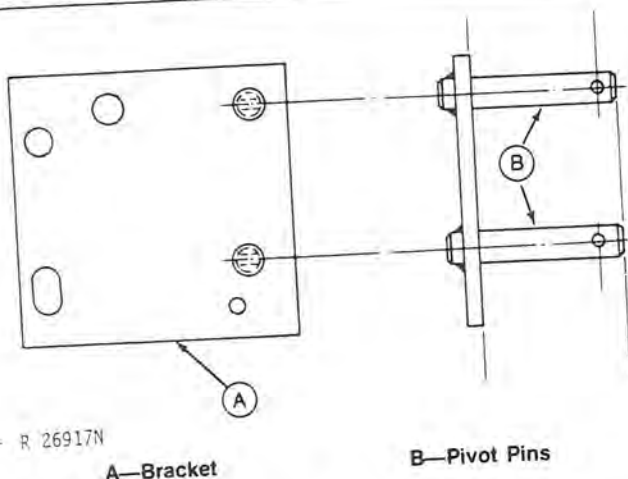
3. Secure ball end of control cable (1) in bell crank pin slot and retain with spring pin (14).

4. Attach cable clamp to mounting bracket (16). Attach rear cable clamp to guide bracket (17), placing star washer between bracket and cable clamp.

5. Assemble control rod (6) to latch (8), using spring pin (12).

6. Install 9-coil spring (15) and latch to the bell crank bracket pin. Retain with washers (9) and (12).

7. Install the bell crank bracket over aneroid studs, and at the same time, engage bell crank pin in the starting fuel control shaft hole. Secure bracket to aneroid housing with nuts and washers.



R 26917N

A—Bracket

B—Pivot Pins

Fig. 4-Bell Crank Bracket Pivot Pins

8. Check bell crank and latch engagement for binding. If binding occurs, loosen bracket slightly and retighten.

NOTE: Should binding persist, it may be necessary to remove the bracket (A, Fig. 4) and check alignment of pivot pins (B). Pins should be at right angles to the bracket and have a center-to-center spacing of 1.22 in. (31 mm). Realign pins if necessary.

Reinstall bracket on aneroid housing. Again, check bell crank for binding.

9. Place collar (5, Fig. 3) on control rod, leaving it loose on rod until linkage is adjusted (Section 230). Slip the swivel (4) on control rod and insert in governor control lever hole. Retain with washers (2) and cotter pin (3).

10. Insert "L"-shaped end of control cable in lower hole in fuel shut-off lever. Fasten guide bracket and shut-off cable clamp to support bracket (Fig. 2).

11. Adjust linkage as directed in Section 230, Group 15.

Late Linkage

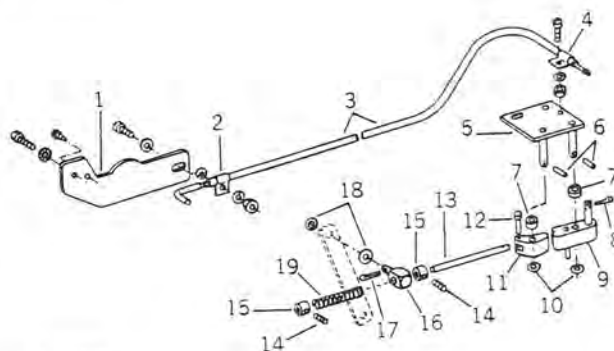
Removal

Refer to "Removal" under "Early Linkage" on facing page.

Disassembly and Repair

Disassemble the linkage assembly using Fig. 5 as a guide.

Repair or replace any linkage part that is worn beyond an acceptable limit. Excessive wear of parts may prevent linkage from disengaging and engaging the aneroid.



R 26920N

- 1—Guide Bracket
- 2—Rear Cable Clamp
- 3—Control Cable
- 4—Front Cable Clamp
- 5—Mounting Bracket
- 6—Spring Pin
- 7—Spacer
- 8—Cotter Pin
- 9—Bell Crank
- 10—Flat Washer

- 11—Latch
- 12—Steel Pin
- 13—Control Rod
- 14—Set Screw
- 15—Collar
- 16—Swivel
- 17—Cotter Pin
- 18—Flat Washer
- 19—Spring
- 20—Drive Screw

Fig. 5-Exploded View of Late Linkage

Assembly and Installation

Reassemble linkage, referring to Fig. 5. Use the following procedure:

1. Apply a very light film of grease on bracket (5) pivot pins.
2. Assemble spacer (7) and bell crank (9) to mounting bracket front pin. Spacer goes next to bracket. Retain with washer (10) and spring pin (6).
3. Attach control rod (13) to latch (11) with pin (12). Slide front collar (15) over control rod and leave loose until making linkage adjustment. See "Adjustment" or next page.
4. Slide swivel (16), spring (19), and rear collar (15) on control rod. Position rear collar so that rod protrude 1/10-in. (2.5 mm) from rear edge of collar.

Late Linkage—Continued

Assembly and Installation—Continued

5. Assemble spacer (7) and latch (11) to mounting bracket rear pivot pin. Spacer goes next to bracket. Retain with washer (10) and spring pin (6).
6. Fasten control cable front clamp to mounting bracket with screw (4), washer, and nut. Position clamp so that 2/3 of cable adjustment will be in a direction away from bell crank.
7. Attach cable "ball end" to slotted pin in bell crank and secure with cotter pin (8).
8. Be sure that drive screw (20) is installed in guide bracket (1). Head of screw must be on outside of bracket (toward engine block).
9. Fasten control cable rear clamp to guide bracket. Place flat washer on screw, and insert screw from side of bracket toward engine block. Assemble star washer, cable clamp, lock washer, and nut on screw as illustrated.
10. Install the bell crank bracket over the aneroid studs and at the same time engage the bell crank pin in the starting fuel control shaft hole. Secure bracket to aneroid housing with nuts and washers.
11. Slip one of two washers (18) on swivel and insert swivel in governor control lever. Install the other washer (18) on swivel and retain with cotter pin (17).

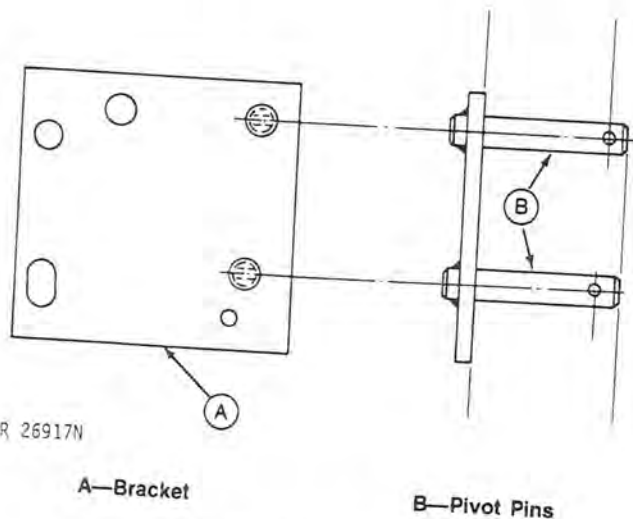


Fig. 6-Bell Crank Bracket Pivot Pins

12. Check bell crank and latch engagement for binding. If binding occurs, loosen bracket slightly, and retighten.

NOTE: Should binding persist, it may be necessary to remove the bracket (A, Fig. 6) and check alignment of the pivot pins (B). Pins should have a center-to-center spacing of 1.22 in. (31 mm) and be at right-angles to the bracket. Realign pins, if required.

Reinstall bracket on aneroid housing. Again, check bell crank for binding.

13. Insert "L"-shaped end of control cable in lower hole in fuel shut-off lever. Fasten guide bracket and shut-off cable clamp to support bracket (Fig. 2).
14. Adjust linkage as directed in Section 230, Group 15.

FUEL SHUT-OFF SOLENOID - "D" ENGINES

General Information

The fuel shut-off solenoid is an energize-to-run type, installed in the injection pump cover.

Testing

Disconnect fuel shut-off lead wire that runs from the instrument panel at injection pump.

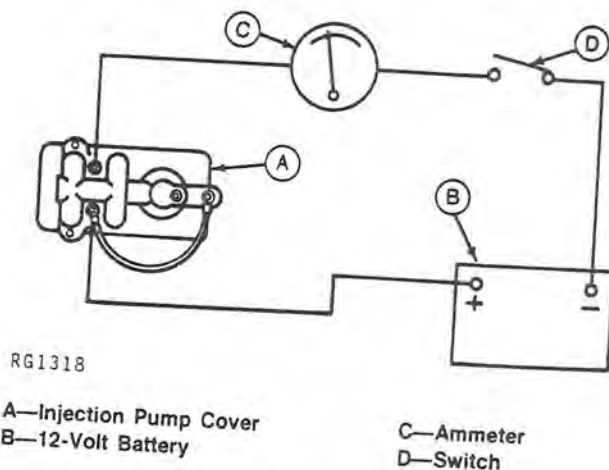


Fig. 7-Testing Fuel Shut-Off Solenoid

Make connections as shown in Fig. 7.

Close switch and observe ammeter reading.

FUEL SHUT-OFF SOLENOID SPECIFICATION

Current draw at 12 volts 2.5 amps

Repair

Solenoid must be replaced if found to be defective. Refer to TM-1064, "Fuel Injection Equipment - Roosa Master".

**RACK PULLER (Fuel Shut-Off Control)
"T" and "A" Engines**

Murphy RP-20 Rack Puller

Removal

NOTE: Rack puller assembly need not be removed from engine for service.

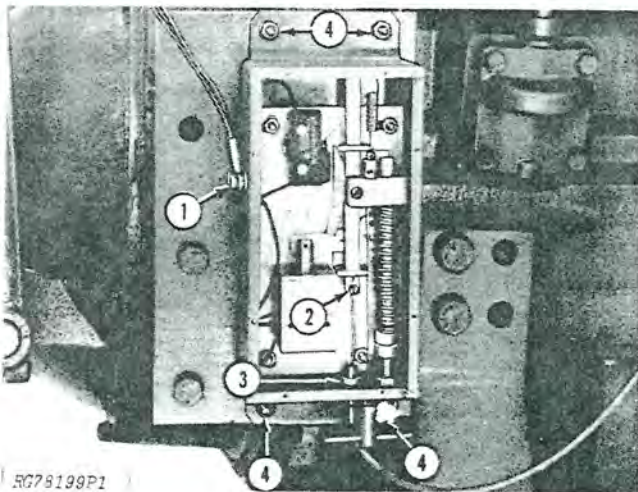


Fig. 8-Removing Rack Puller Assembly

1. Disconnect wiring and remove cover plate.
2. Loosen screw and disconnect cable.
3. Remove nut and remove cable from housing.
4. Remove mounting screws and separate housing from engine.

Disassembly

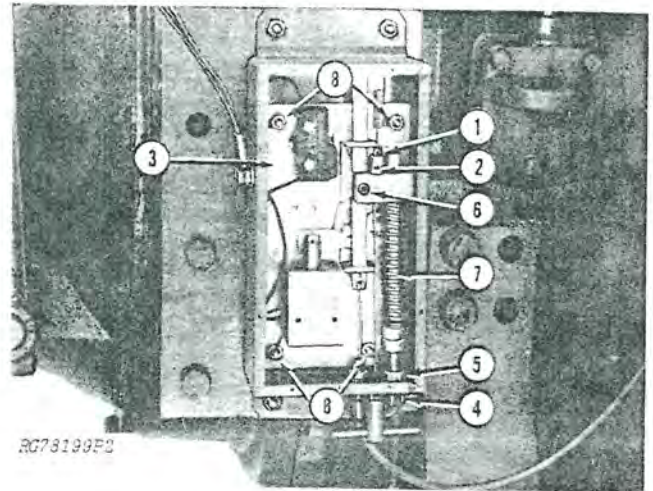


Fig. 9-Rack Puller Disassembly Steps

1. Unhook spring at reset bushing.
2. Loosen set screw. Remove bushing and reset handle.
3. Disconnect wiring at internal connections.
4. Remove lower guide rod nut.
5. Holding double nut with an open end wrench, turn lower inside nut until it contacts double nut. This will ease tension on guide rod spring.
6. Pressing on top surface of reset block, remove socket head screw and remove reset block.
7. Remove guide rod and spring.
8. Remove four nuts and remove latch plate assembly.

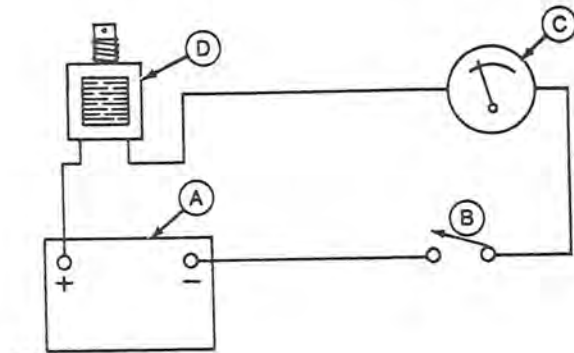
Inspection and Repair

Inspect large spring for distortion or damage. Spring should have a free length of 5.5 in. (140 mm). Replace as necessary.

Check switch for correct operation. Depress switch lever and listen for a "click", indicating switch is operating properly.

Remove switch by removing two screws. Install new switch, making connections as shown in Fig. 11.

Inspect latch plate for worn or binding parts. Latch mechanism must be replaced if worn or defective.

RACK PULLER—Continued**Inspection and Repair—Continued**

RG1320

A—12-Volt Battery
B—Switch

C—Ammeter
D—Solenoid

Fig. 10-Testing Solenoid

To check solenoid, make connections as shown in Fig. 10. Close switch and observe ammeter reading.

RACK PULLER SOLENOID SPECIFICATION

Current Draw at 12 volts 2.4 amps

NOTE: Do not keep solenoid energized more than 10 seconds as coils may overheat.

To replace solenoid, remove two screws from rear of latch plate and separate solenoid from plate.

Install new solenoid, tightening screws securely. Be sure pin on solenoid plunger is positioned in hole in reset arm.

Assembly

Install plate assembly in housing. Tighten nuts securely.

Install spring over guide rod and install in housing.

Install reset block over rod and spring.

Connect internal wiring as shown in Fig. 11.

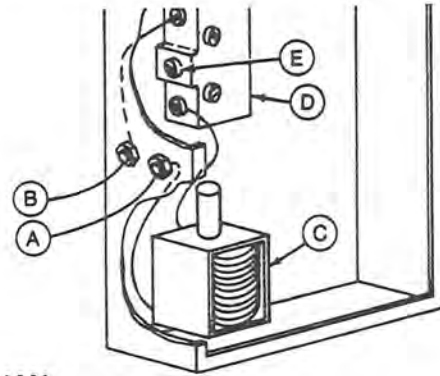
Hold double nut with an open end wrench. Turn lower inside nut until guide rod protrudes from bottom of housing 0.75 in. (19 mm).

Install lower outside nut with lock washer.

Install reset handle and reset bushing. Connect spring to reset bushing.

Installation

Install rack puller unit on engine with four bolts.



RG1321

A—To Ammeter (Lead with fuseholder)
B—To Stop Button

C—Solenoid
D—Switch
E—This Terminal Not Used

Fig. 11-Wiring Connections

Connect external wiring as shown in Fig. 11.

Install fuel shut-off cable. Connect cable core to rack puller rod, tightening screw securely.

Before installing cover, check operation of unit:

1. Reset rack puller by pulling down on reset handle until mechanism locks.
2. Start engine.
3. Press down on reset arm to release rack puller.
4. Engine should shut down. If not, loosen cable clamp on shut-off arm of injection pump. Move arm until engine shuts off. Tighten cable clamp.
5. Install cover.

Murphy RP-75 Rack Puller

Removal

NOTE: Rack puller need not be removed for testing.

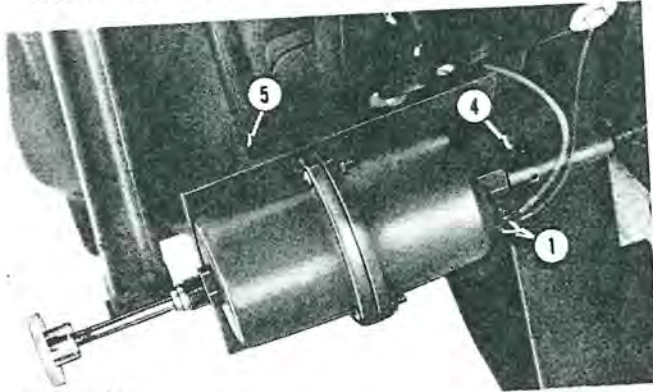
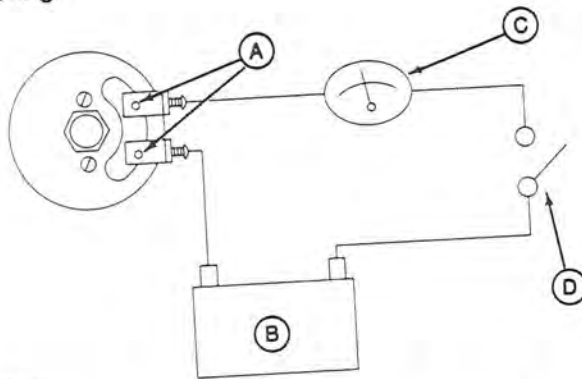


Fig. 12-Rack Puller Removal Steps

1. Disconnect wiring.
2. Disconnect cable at shut-off arm on injection pump (not shown).
3. Loosen cable clamp on mounting bracket and remove cable (not shown).
4. Remove cable from rack puller.
5. Remove four mounting nuts and remove rack puller from mounting plate.

Testing



RG1399

A—Rack Puller Terminals
B—12-Volt Battery

C—Ammeter
D—Switch

Fig. 13-Testing Rack Puller Solenoid

Make connections as shown in Fig. 13.

Close switch (D) and observe ammeter (C).

Rack puller should draw 0.4 amps at 12 volts. As an additional test, check resistance of the solenoid with an ohmmeter. A good coil should have about 30 ohms resistance.

Repair

The rack puller cannot be repaired and must be replaced if found to be defective.

Installation

Reverse removal steps to install rack puller, but do not tighten cable clamps (Steps 2 and 3).

Push fuel shut-off arm to full off position.

Tighten cable clamps securely.

Start engine. If engine will not start, loosen clamps and adjust cable length so engine will run.

Stop engine. If engine will not stop, loosen clamp on shut-off arm and move arm to full off position. Tighten clamp and test engine start and stop operation.

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Group 00

SPECIFICATIONS AND SPECIAL TOOLS

SPECIFICATIONS

| Item | Specification |
|---|---|
| General Information | |
| Battery Requirement | |
| Typical Starter Current Draw | 400 to 600 amps |
| Fuses | |
| Key switch circuit | MDL-25 |
| Magnetic switch circuit (Fuse mounted on magnetic switch) | SFE-14 |
| Rack puller circuit ("T" and "A" engines with RP-20 Rack Puller)... | SFE-20 |
| Magnetic Switch ("D" engines; "T" and "A" engines with RP-75 Rack Puller) | |
| Winding current draw | 1.6 to 1.8 amps at 12 volts |
| Gauges | |
| Coolant Temperature gauge switch | Closes at 220°F (104°C) |
| Oil pressure gauge switch | |
| "D" engines | Closes at 15 psi (1.03 bar) (1.05 kg/cm ²) |
| "T" and "A" engines | Closes at 10 psi (0.69 bar) (0.70 kg/cm ²) Lock-out releases at 15 psi (1.03 bar) (1.05 kg/cm ²) |
| Motorola Charging Circuit | |
| Stator winding connection | "Delta" |
| Minimum exposed brush length | 1/4 in. (6.4 mm) |
| Rotor winding resistance | 5 ohms |
| Rotor winding current draw at 75°F (24°C) | |
| 35 amp alternator | 1.9 to 2.6 amps at 10 volts |
| 55 amp alternator, 72 amp alternator | 1.85 to 2.25 amps at 10 volts |
| Output at 13 to 15 volts at 75°F (24°C) | |
| 35 amp alternator | |
| Minimum at 1660 rpm | 13 amps |
| Minimum at 3000 rpm | 25 amps |
| 55 amp alternator | |
| Minimum at 1660 rpm | 28 amps |
| Minimum at 3000 rpm | 45 amps |
| 72 amp alternator | |
| Minimum at 2288 rpm | 40 amp |
| Minimum at 4000 rpm | 65 amps |

Specification

Item

Motorola Charging Circuit—Continued

| | |
|---|--|
| Torques | 40-50 ft-lbs (54-68 Nm) (5.4-6.8 kgm) |
| Pulley nut | 50-60 in-lbs (5.6-6.8 Nm) (0.56-0.68 kgm) |
| Thru bolts | 16-20 in-lbs (1.8-2.3 Nm) (0.18 to 0.23 kgm) |
| Brush mounting screws | 33-40 in-lbs (3.7-4.5 Nm) (0.37-0.45 kgm) |
| Diode assembly nuts | 20-30 in-lbs (2.3-3.4 Nm) (0.23-0.34 kgm) |
| Isolation diode nuts | 20-30 in-lbs (2.3-3.4 Nm) (0.23-0.34 kgm) |
| Regulator mounting screws | 45 in-lbs (5.1 Nm) (0.51 kgm) |
| Slip ring retaining screw (72 amp alternator) | |

Delcotron Charging Circuit

| | |
|---|-----------------------------|
| Alternator stator winding connection | "Y" |
| 35 and 55 amp | "Delta" |
| 72 amp | 4.0 to 4.5 amps at 12 volts |
| Rotor winding current draw | |
| Minimum output at 1900 engine rpm | 30 amps |
| 35 amp alternator | 45 amps |
| 55 amp alternator | 60 amps |
| 72 amp alternator | |
| Regulator voltage after 15 minutes operation | |
| Air temperature 1 in. (25 mm) behind regulator case | Voltage |
| 85°F (29°C) | 13.8-14.9 volts |
| 105°F (41°C) | 13.6-14.7 volts |
| 125°F (52°C) | 13.4-14.6 volts |
| 145°F (63°C) | 13.2-14.4 volts |
| Alternator pulley nut torque | 50 ft-lbs (68 Nm) (6.8 kgm) |

Delco-Remy Starting Circuit

| | |
|---|----------------------------------|
| Solenoid Model 1115510 or 1115530 | 60 to 70 amps at 12 volts |
| Pull-in winding draw | 20 to 24 amps at 12 volts |
| Hold-in winding draw | |
| Starter Model 1113402, 1113672 or 1113391 | 130 to 160 amps at 9.0 volts |
| No-load current draw at 5000 to 7000 rpm | 0.562-0.563 in. (14.28-14.30 mm) |
| Overrunning clutch housing I.D. | 0.562-0.564 in. (14.28-14.33 mm) |
| Nose housing bushing I.D. | 0.562-0.564 in. (14.28-14.33 mm) |
| Commutator end frame bushing I.D. | 0.757-0.758 in. (19.23-19.25 mm) |
| Lever housing bushing I.D. | 0.50 in. (13 mm) |
| Minimum brush length | 80 oz. (22 N) |
| Minimum brush spring tension | 0.50 in. (1.27 mm) |
| Armature end play | 0.060 in. (1.52 mm) |
| Maximum serviceable | 0.010-0.140 in. (0.25-3.55 mm) |
| Pinion clearance | 80 oz. (22 N) Minimum |
| Brush spring tension | |

John Deere Starting Circuit

| | |
|---|--|
| Solenoid | 140-155 amps at 12 volts |
| Pull-in winding draw | 11-13 amps at 12 volts |
| Hold-in winding draw | |
| Starter Model 028000-3290-ND | 90 to 130 amps at 12 volts |
| No-load current draw at 4000 to 5000 rpm | 0.669-0.670 in. (17.00-17.03 mm) |
| Commutator and drive housing bushing I.D. | 1.182 to 1.184 in. (30.03 to 30.08 mm) |
| Center housing bushing I.D. | 5/8 in. (16 mm) |
| Minimum brush length | |

| Item | Specification |
|--|-----------------------------|
| John Deere Starting Circuit—Continued | |
| Minimum brush spring tension | 40 oz. (11 N) |
| Torques | |
| Center bearing housing-to-field frame | 6 ft-lbs (8 Nm) (0.8 kgm) |
| Commutator frame and drive housing | 10 ft-lbs (14 Nm) (1.4 kgm) |
| Field pole screw | 30 ft-lbs (41 Nm) (4.1 kgm) |
| Shift lever pivot | 30 ft-lbs (41 Nm) (4.1 kgm) |

SPECIAL TOOLS

| Tool | Number | Use |
|--|------------------------------|---|
|  | D-19001TT Volt-Ohm-Amp Meter | To test any electrical components for voltage, resistance or current draw |

R 28795N

Fig. 1-D-19001TT Volt-Ohm-Amp Meter

SPECIAL TOOLS—Continued

Tool

Number

Use

**JD-306 Pulley Nut
Remover**

**To remove pulley nut on Delco-
tron alternators**



R 26528N

Fig. 2-JD-306 Pulley Nut Remover

**JDE-80 Starter
Wrench**

**Remove and install bolt behind
starting motor.**



R 26547N

Fig. 3-JDE-80 Starter Wrench

Group 05 GENERAL INFORMATION

The electrical system is a 12 volt, negative ground system. The charging system has a 12 volt alternator with an attached transistorized regulator.

Battery

The battery and cables should be of sufficient size to provide prompt starting. Sluggish starter operation will result in short starter life.

Normal starter draw is 400 to 600 amps. The draw will increase as outside temperatures fall or when attempting to start a hot engine.

Fuses

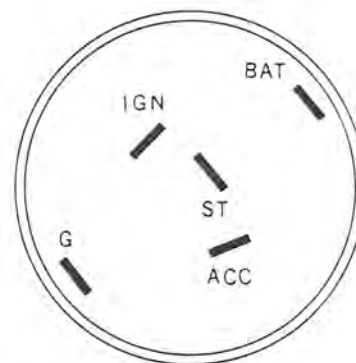
The electrical system controlled by the key switch is protected by an MDL-25 fuse in a fuse-holder between the ammeter and the key switch.

The ignition circuit connected to the magnetic switch on "D" engines and on "T" and "A" stationary engines with an RP-75 Rack Puller is protected by an SFE-14 fuse mounted at the battery terminal of the magnetic switch.

The RP-20 Rack Puller used on "T" and "A" stationary engines has a separate SFE-20 fuse mounted in-line between the rack puller and the ammeter.

Key Switch

To prevent unauthorized operation, a key is required to start the engine.



R 26543N

Fig. 1-Key Switch Terminals

There should be continuity between switch terminals as listed below:

| | |
|--------------------|--|
| Accessory position | - BAT to ACC |
| "On" position | - BAT to ACC - BAT to IGN |
| "Start" position | - BAT to IGN - BAT to ST - G to ground |

The "G" terminal is not used.

Periodically lubricate the key switch tumblers with powdered graphite.

Magnetic Switch (Stationary Engines)

A magnetic switch is provided on all "D" engines and "T" and "A" engines with a RP-75 Rack Puller to stop the engine if oil pressure drops below 15 psi (1.03 bar) (1.05 kg/cm²) or coolant temperature exceeds 220°F (104°C).

If oil pressure drops or coolant overheats to the specified levels, the switch opens the injection pump solenoid circuit ("D") or the rack puller circuit ("T" and "A") and shuts off the engine.

The magnetic switch coil should draw 1.6 to 1.8 amps at 12 volts.

The switch cannot be repaired and must be replaced if found to be defective.

Gauges

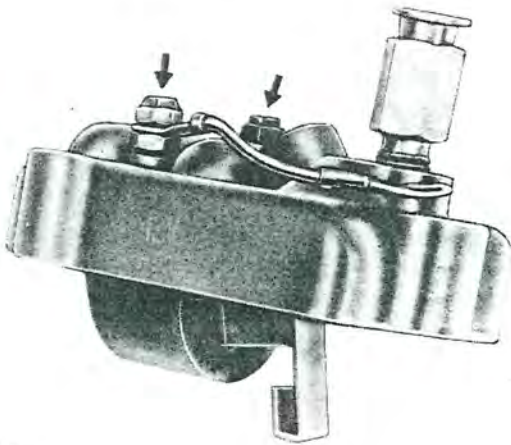
On "D" engines, the oil pressure gauge makes contact at 15 psi (1.03 bar) (1.05 kg/cm²).

On "T" and "A" engines, the oil pressure gauge makes contact at 10 psi (0.7 bar) (0.7 kg/cm²). The lockout for engine starting releases at 15 psi (1.03 bar) (1.05 kg/cm²).

On all engines, the coolant temperature gauge makes contact at 220°F (104°C).

An ammeter, tachometer and electric hourmeter also may be used.

Injection Pump Solenoid - "D" Engines



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Fig. 2-Injection Pump Solenoid

The injection pump solenoid is externally grounded by a grounding washer. The windings can be checked for resistance and current draw.

Refer to Section 30, Group 15 for repair instructions.

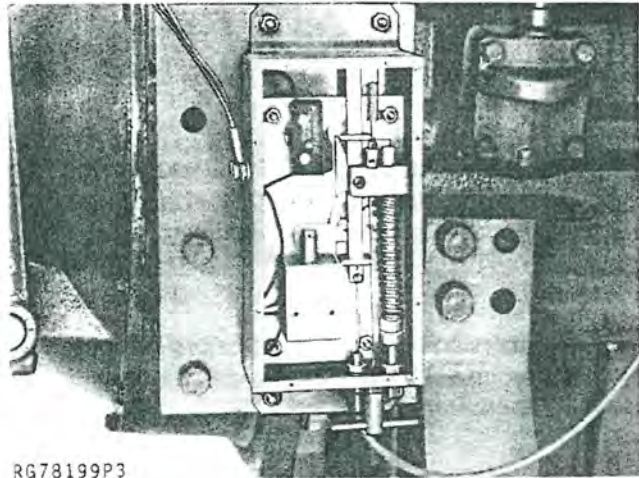
Injection Pump Rack Puller - "T" and "A" Stationary Engines

Murphy RP-20 Rack Puller

The Murphy RP-20 Rack Puller is used on 6404T and A, and early 6466T and A stationary engines.

The rack puller solenoid (Fig. 3) can be checked for current draw.

Refer to Section 30, Group 15 for repair instructions.

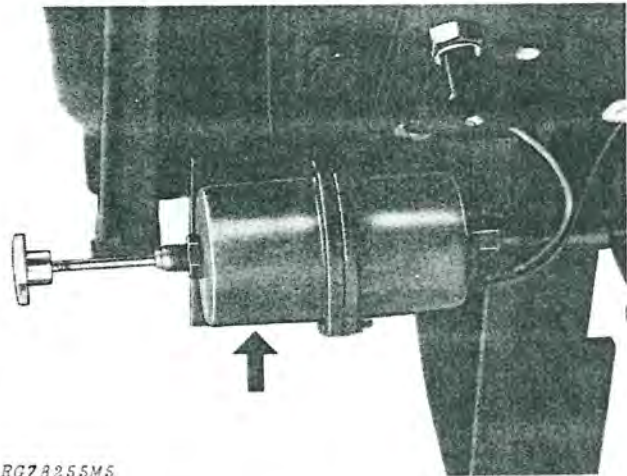


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Fig. 3-RP-20 Rack Puller (Cover removed)

Murphy RP-75 Rack Puller

The Murphy RP-75 Rack Puller (Fig. 4) is used on late 6466T and A engines and can be installed on any other engine equipped with a Murphy RP-20 Rack Puller.



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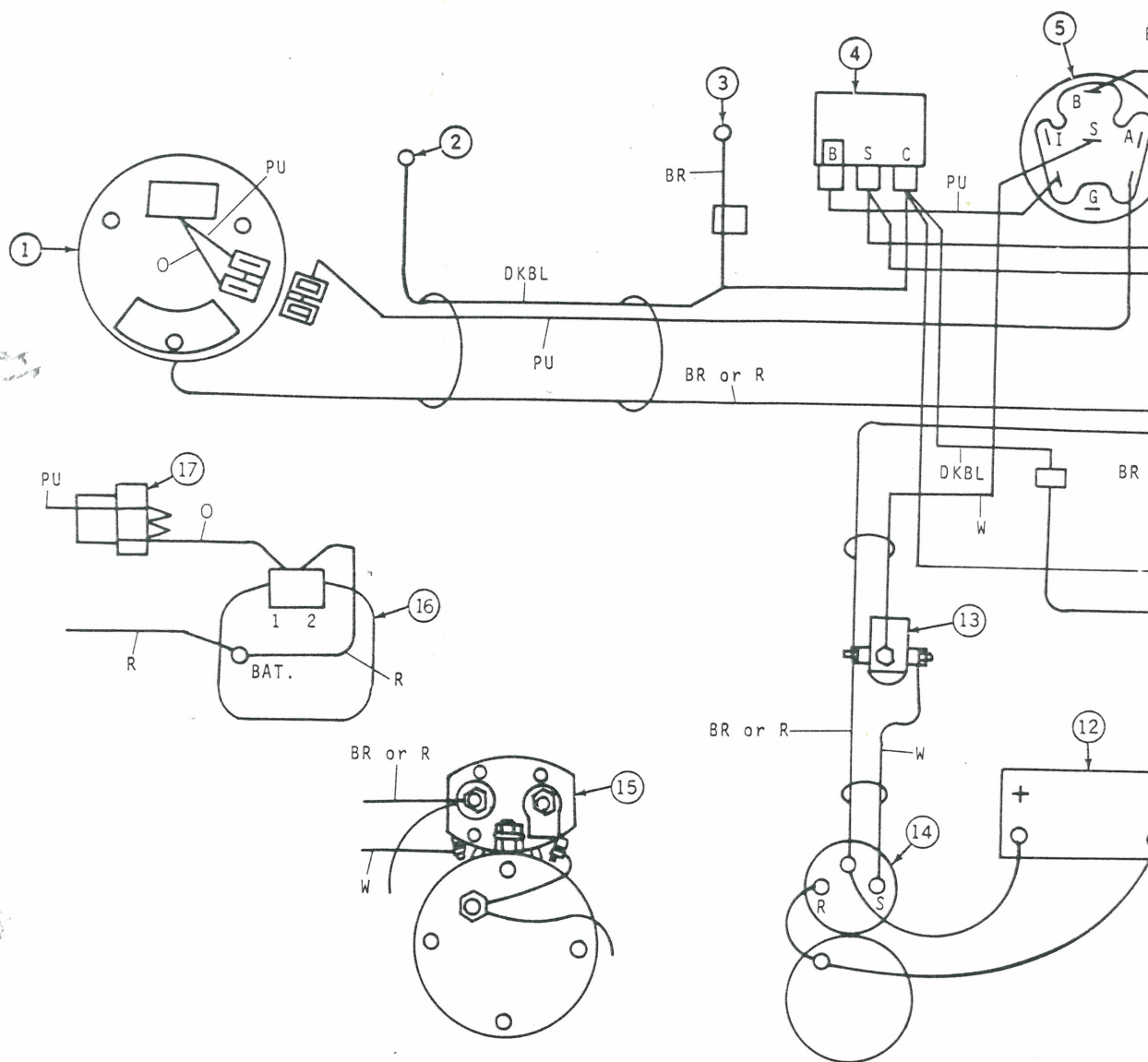
Fig. 4-RP-75 Rack Puller

The solenoid windings can be checked for resistance and current draw.

Refer to Section 30, Group 15 for repair instructions.

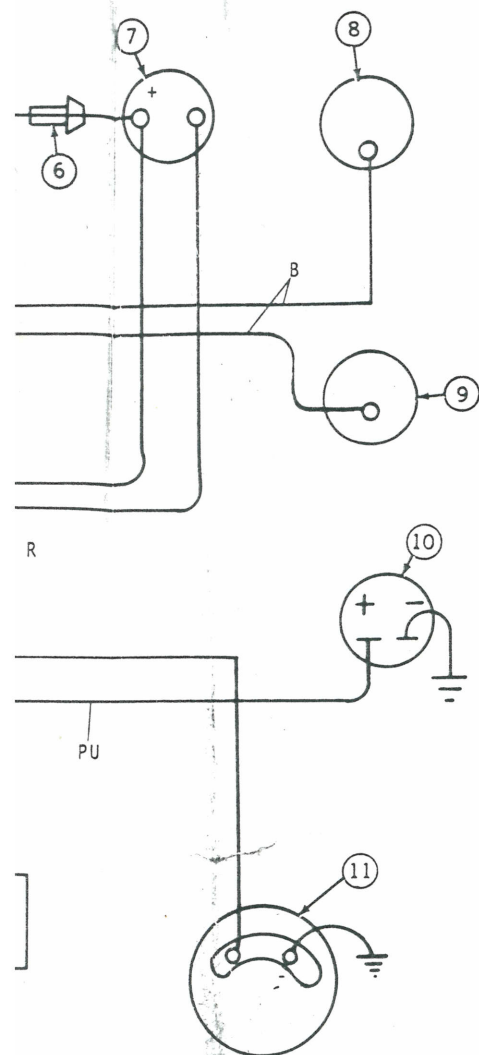
Wiring Diagrams

The wiring diagrams (Figs. 5 and 6) give the color of each wire, the points to which they attach and the routing of the wire within the wiring harness.



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Fi
"D" Engines; 6466

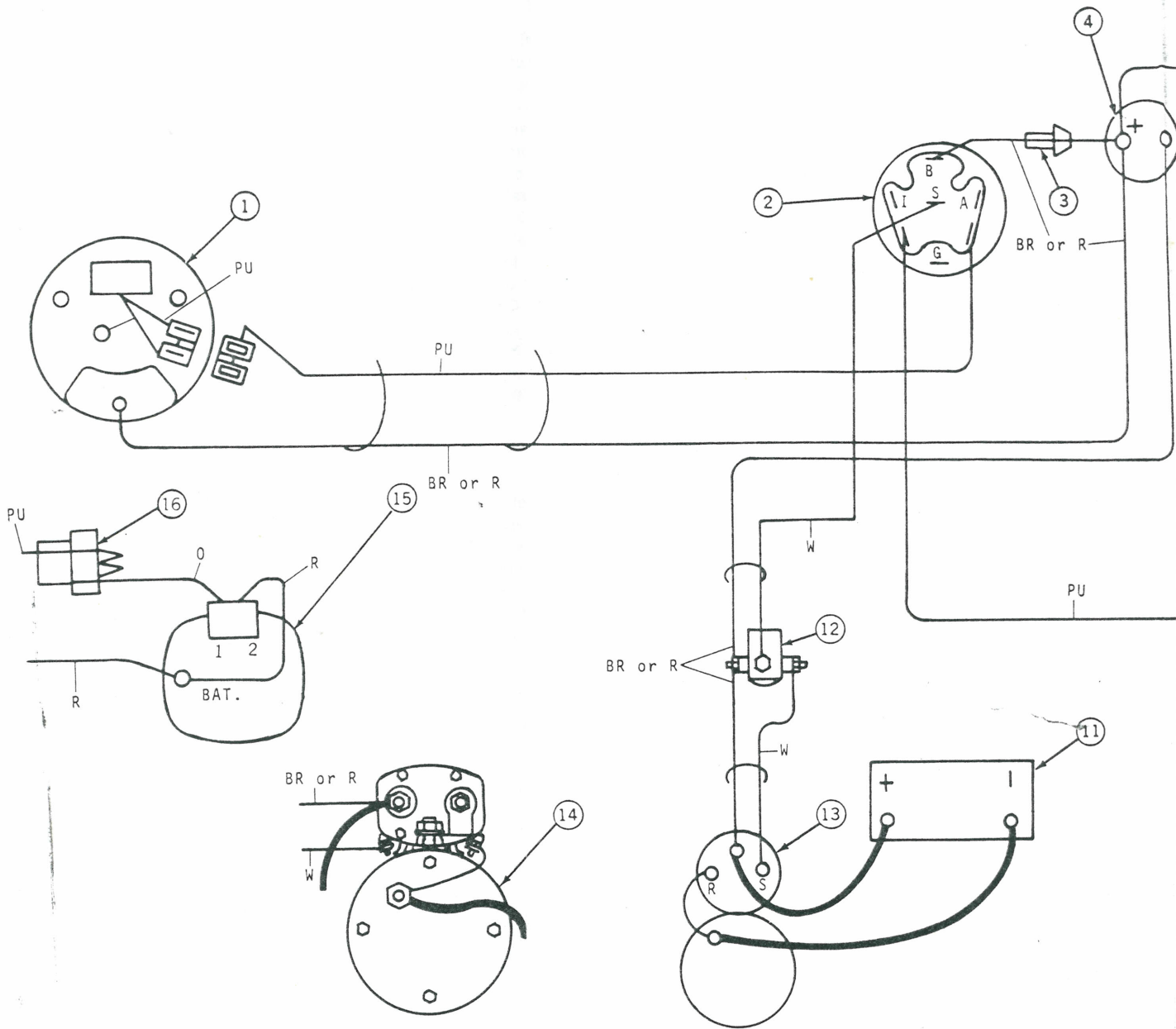


- 1—Motorola Alternator
- 2—To Injection Pump Solenoid (6404D; 6466D)
- 3—To Injection Pump Solenoid (4270D)
- 4—Magnetic Switch with SFE 14-amp Fuse
- 5—Key Switch
- 6—Fuseholder with MDL 25-amp Fuse
- 7—Ammeter
- 8—Temperature Gauge
- 9—Oil Pressure Gauge
- 10—Hourmeter
- 11—RP-75 Rack Puller ("T" and "A" engines only)
- 12—12-Volt Battery
- 13—Starter Circuit Relay
- 14—John Deere Starter
- 15—Delco-Remy Starter
- 16—Delcotron Alternator
- 17—Delcotron Harness

- B —Black
- BR —Brown
- DKBL—Dark Blue
- O —Orange
- PU —Purple
- R —Red
- W —White

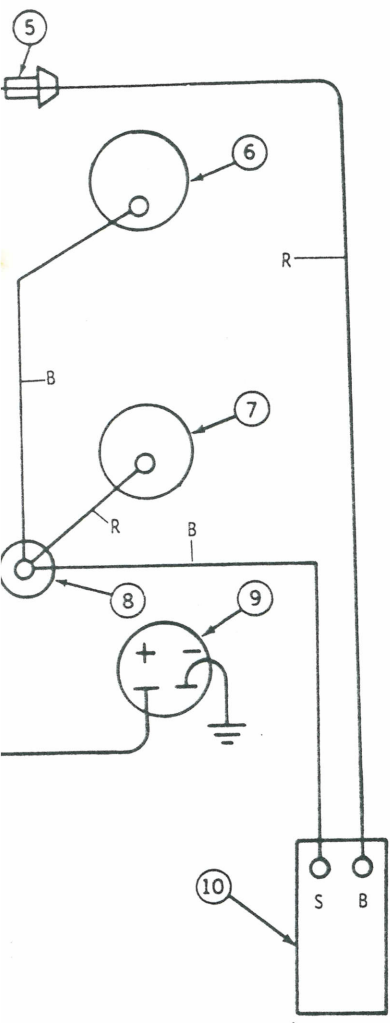
5-Electrical Wiring Diagram
 033055*- , 6466A (030293*-)
 *-approximate

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Fig. 6-Electrical Wiring Diagram
 6404T, A; 6466T (-033054*), 6466A (-030292*)
 *-approximate



- 1—Motorola Alternator
- 2—Key Switch
- 3—Fuseholder with MDL 25-amp Fuse
- 4—Ammeter
- 5—Fuseholder with MDL 25-amp Fuse
- 6—Temperature Gauge
- 7—Oil Pressure Gauge
- 8—Stop Button
- 9—Hourmeter
- 10—RP-20 Rack Puller
- 11—12-Volt Battery
- 12—Starter Circuit Relay
- 13—John Deere Starter
- 14—Delco-Remy Starter
- 15—Delcotron Alternator
- 16—Delcotron Harness

- B —Black
- BR —Brown
- DKBL—Dark Blue
- O —Orange
- PU —Purple
- R —Red
- W —White