# Planned Maintenance & Adjustment Procedures



PMA 343 CTA 30/40/50D



Service Publications Department Battle Creek, Michigan 49016

# CLARK

# INDEX

| 1.  |                                   |   |   |   | • |   |   |   |   | ٠   | •    | •   |   | GROUP        | 12, | Section | 1 |
|-----|-----------------------------------|---|---|---|---|---|---|---|---|-----|------|-----|---|--------------|-----|---------|---|
| 2.  | Brake Bleeding                    |   |   | • |   | • |   |   |   |     | ٠    | •   |   | GROUP        | 23. | Section | 1 |
| 3.  | Brake Adjustment                  |   |   |   |   |   |   |   |   |     |      |     | ۰ | GROUP        | 23. | Section | 3 |
| 4.  | Brake Pedal Adjustment            |   |   | • | • |   |   |   |   |     |      |     | ۰ | GROUP        | 23. | Section | 2 |
| 5.  | Cooling System Maintenance        |   |   |   |   |   |   |   |   |     |      |     |   | GROUP        | 01. | Section | 2 |
| 6.  | Differential Draining             |   |   | • |   | • |   | • | • |     |      |     | ۰ | GROUP        | 20. | Section | 1 |
| 7.  | Engine Trouble Shooting           |   |   |   | • | • |   |   |   |     | •    |     |   | GROUP        | 00. | Section | 1 |
| 8.  | Engine Tune Up                    |   |   |   | • | • |   |   |   |     |      |     | ٠ | GROUP        | 00, | Section | 2 |
| 9.  | Fuel Nozzle Servicing             |   |   | • | ۰ | • |   | • |   |     |      |     |   | GROUP        | 00. | Section | 3 |
| 10. | Fuel System Priming               |   |   | • |   |   |   |   |   |     |      | •   |   | GROUP        | 00, | Section | 4 |
| 11. | Lubrication Charts                |   |   |   |   |   |   |   |   |     |      |     |   | GROUP        | 01, | Section | 1 |
| 12. | Lubrication Key                   |   |   |   |   |   |   |   |   |     |      |     |   | GROUP        | 40. | Section | 4 |
| 13. | Name Plates/Machine Stampings     |   |   |   |   | ۰ | ٥ |   |   |     |      |     |   | GROUP        | 40. | Section | 1 |
| 14. | Neutral Start Switch              |   |   |   |   | • | • | • |   |     |      | •   |   | GROUP        | 13, | Section | 1 |
| 15. | Parking Brake Adjustment          |   |   |   |   |   | • |   |   |     |      |     |   | GROUP        | 23. | Section | 4 |
| 16. | Safety/Inspection Forms           |   |   |   | • |   |   |   |   |     |      |     |   | GROUP        | 40, | Section | 3 |
| 17. | Specifications                    |   |   |   |   |   |   |   |   |     |      |     |   | <b>GROUP</b> | 40, | Section | 2 |
| 18. | Starter Maintenance               |   |   |   |   |   |   |   |   |     |      |     |   | <b>GROUP</b> | 11, | Section | 1 |
| 19. | Steering Adjustments              |   |   |   |   |   |   | • | • |     |      |     |   | GROUP        | 26. | Section | 1 |
| 20. | Steering Gear                     | ٠ | • | • |   |   |   | • | • |     |      |     |   | GROUP        | 25, | Section | 1 |
| 21. | Steer Wheel Bearings              |   | • | • |   |   |   |   |   | •   | •    |     |   | GROUP        | 26. | Section | 2 |
| 22. | Transmission Drain and Refill     |   |   | • |   |   |   |   |   | •   |      |     |   | GROUP        | 06. | Section | 4 |
| 23. | Transmission Fluid Aeration Check |   | • | • | • |   |   |   |   |     |      |     |   | GROUP        | 06. | Section | 2 |
| 4.  | Transmission Oil Cooler           |   | • | • | • |   |   |   | • |     |      | •   |   | GROUP        | 06, | Section | 3 |
| 25. | Transmission Pressure Checks      |   | • | • |   | • |   |   | ٠ | •   | •    | ٠   |   | GROUP        | 06, | Section | 1 |
| 6.  | Wheels & Tires                    | _ | _ |   |   |   | _ |   |   | 200 | 1220 | 124 | - | GROUP        | 22. | Section | 1 |

CUSTOMER SERVICES GROUP

Then check drive tire inside turning diameters which should be about equal in forward left and right turns. While driving, listen for unusual drive train noise.

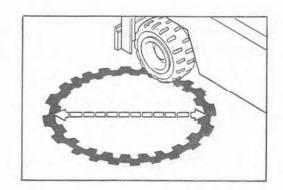


Fig. 9854

If the steer tires do not move soon after the hand wheel is moved, then some adjustment needs to be done to the steer gear or steer linkage. See GROUP 26, Section 1.

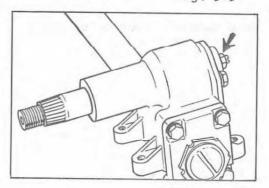


Fig. 9846

Make a visual check of the truck. Look for signs of obvious leaks under the transmission, engine and differential.



Fig. A0737

Check the filler screen to be sure it is in place and not damaged. Check 0-ring seal to be sure it is not damaged (must be located between cap screen and the filler neck).

### WARNING

DO NOT WELD IN THE VICINITY OF THE

FUEL TANK.



Fig. A0300

Remove the floorboard and ...



Fig. A0739

... expose the engine compartment by lifting the hood.



Fig. A0741

Then, using a two-foot extension on the air hose, blow through the radiator from the grill side and ...

## WARNING

DO NOT USE AIR PRESSURE GREATER THAN
30 PSI. WEAR GOGGLES WHEN CLEANING.



Fig. A0744

... blow through the radiator from the engine side. Blow off the engine ...



Fig. A0742

Code: PM-343, JUN 80 REV

CUSTOMER SERVICES GROUP

Now check the brake pedal for free play and the pedal pad for excessive wear. See GROUP 23, Section 2.

Check complete exhaust system for security and mounting.



Fig. A0770

Check the by-pass port operation by pushing sharply on the brake pedal. Fluid in the cylinder should bubble, indicating an open by-pass port, which prevents pressure build up in the hydraulic system. Clean off cap before removing.

Check the fluid level in the master cylinder and fill to within 1/40 of the top, if necessary.



Fig. A0733

Check the neutral starting switch. If the engine starts in gear, the switch must be adjusted or replaced. See GROUP 13, Section 1.

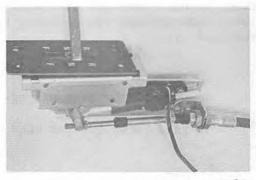


Fig. A0765

Now inspect the air cleaner hose and its connections, making sure they are tight.



Fig. A0779

CUSTOMER SERVICES GROUP

Check the alternator mounting bolts to make sure they are secure and ...

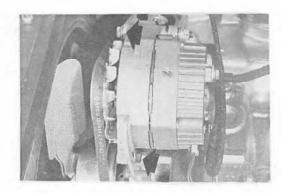


Fig. A0756

... adjust the drive belts for proper tension. If tension is low, belts will slip ... if high, bearing and seal damage can occur in generator and water pump.



Fig. A0749

Check the fan blades for looseness and damage. Make sure the fan is properly installed.



Fig. A0745

Pressure test the cooling system, eliminating any leaks which are found.

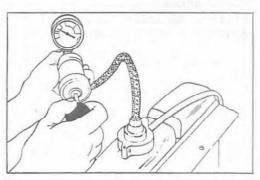


Fig. 16917

# CLARK

Pressure test the radiator cap, replacing it if necessary.

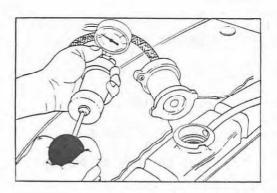


Fig. 16916

Check the specific gravity of the battery and recharge if necessary.

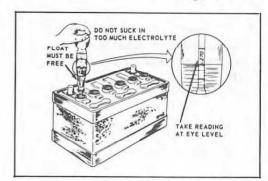


Fig. 6271

Check the tightness of battery cable connection.



Fig. A0736

Check the battery ground wire for condition and security of connection.



Fig. A0746

Code: PM-343, JUN 77

CUSTOMER SERVICES GROUP

Check the battery for damage and electrolite.

### WARNING

NEVER ALLOW FLAME OR SPARKS NEAR THE BATTERY FILLER HOLES BECAUSE EXPLO-SIVE GAS MAY BE PRESENT.

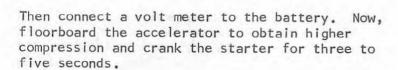




Fig. A0772

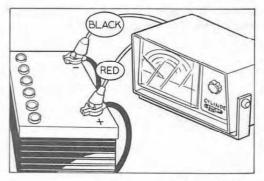


Fig. 16680

During cranking, voltage should exceed 9.6 volts. If it is low, there is trouble in the battery, cables or starter. Immediately after cranking, no-load voltage should be at least 12 volts. Now, remove the ground wire and connect the coil wire. Then ...

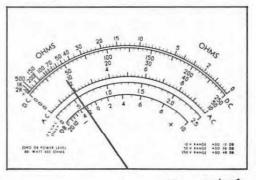


Fig. 13456

... start and accelerate the engine. Charging system output should exceed 12-1/2 volts. These simple, quick tests show whether charging and cranking systems are okay or in need of repair.

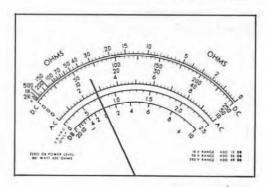


Fig. 13457

Check the engine mounts for tightness and condition.

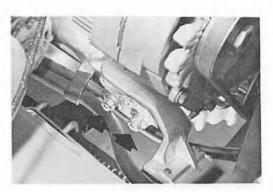


Fig. A0775

PM

Change the element in the primary filter and ...



Fig. A0759

... the two secondary filters. This should be done when the engine is cold.

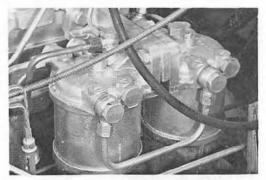


Fig. A0757

After changing elements, open a bleeder screw downstream from all three filters and ...



Fig. A0757

Code: PM-343, JUN 77

CUSTOMER SERVICES GROUP

... pump the priming lever until all air is bled from filters.

Check injector lines and fittings for looseness and leaks.

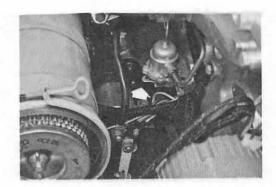


Fig. A0781

Check all wiring for fraying and looseness.

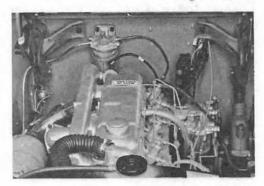


Fig. A0748

Slip a shallow pan (of sufficient capacity) under the truck, remove the crankcase drain plug and allow the crankcase to drain.

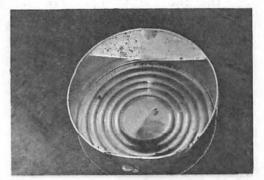


Fig. A0462

While the oil drains, clean and lubricate all grease fittings (see GROUP 01, Section 1). When you lubricate steer wheels ...

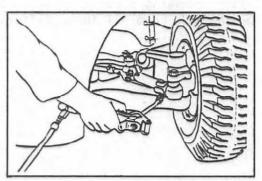


Fig. 17361