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Section 1010

GENERAL SPECIFICATIONS

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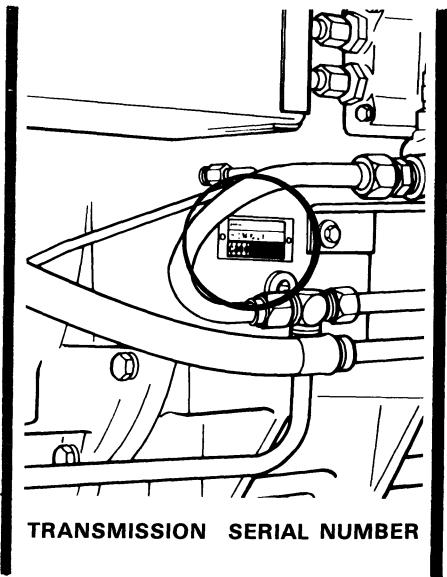
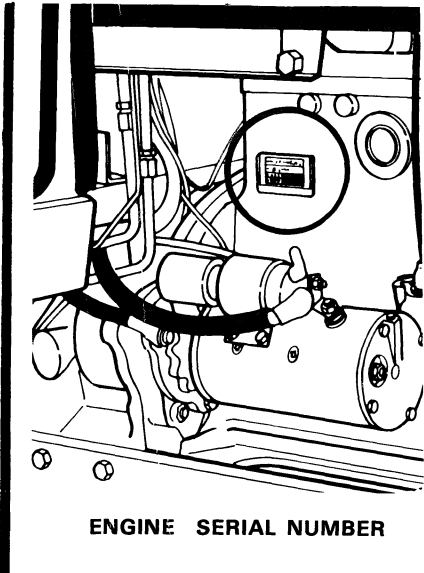
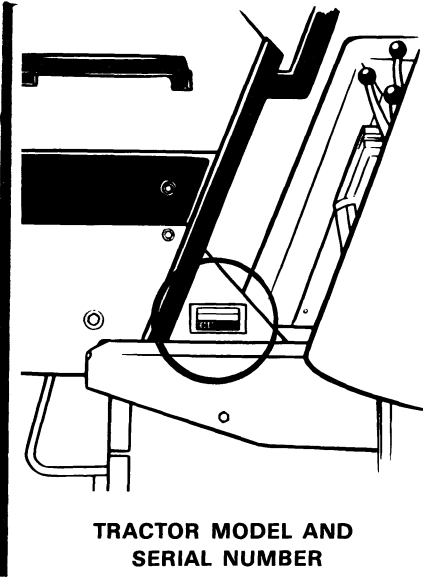
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SERIAL NUMBERS



DIESEL ENGINE

General

Type	6 Cylinder, 4 Stroke Cycle, Valve-in-Head Turbo-charged
Firing Order	1-5-3-6-2-4
Bore	4-5/8 Inches (117.5mm)
Stroke	5 Inches (127mm)
Piston Displacement	504 Cubic Inches (8 259cm ³)
Compression Ratio	15.8 to 1
Cylinder Sleeves	Removable Wet Type
No Load Governed Speed	2340 to 2380 RPM
Rated Engine Speed	2200 RPM
Engine Idling Speed	700 to 750 RPM
*Valve Tappet Clearance (Exhaust)	(Hot) .020 Inch (0.508mm)
	(Cold) .025 Inch (0.635mm)
(Intake)	(Hot and Cold) .015 Inch (0.381mm)

*Hot settings are made after the engine has operated at thermostat controlled temperature for at least fifteen minutes.

Piston and Connecting Rods

Rings per Piston	3
Number of Compression Rings	2
Number of Oil Rings	1
Type of Pins	Full Floating
Type of Bearings	Replaceable Precision, Steel Back, Aluminum or Copper-lead Alloy Liners

DIESEL ENGINE

Main Bearings

Number of Bearings 7
 Type of Bearings Replaceable Precision, Steel Back, Aluminum or Copper-lead Alloy Liners

Engine Lubricating System

Oil Pressure 45 to 60 PSI (310 to 414 kPa) with Engine
 Warm and Operating at Rated Speed.
 Type of System Pressure and Spray Circulation with
 Piston Oil Cooling
 Oil Pump Gear Type
 Oil Filter (2) Full Flow Spin-on Type,
 Pleated with Bypass Valve in Filter Base
 Oil Capacity With Filters, 22 U.S. Quarts (20.8 Litres)
 Without Filters, 18 U.S. Quarts (17.1 Litres)
 Oil Cooler Engine Oil

Fuel System

Fuel Injection Pump Robert Bosch, Type PES (Multiple Plunger)
 Pump Timing 30 Degrees Before Top Dead Center (Port Closing)
 Fuel Injectors Pencil Type (Opening Pressure 3200 PSI) (22 063 kPa)
 Fuel Transfer Pump Plunger Type, Integral Part of Injection Pump
 Governor Variable Speed, Fly-Weight Centrifugal Type,
 Integral Part of Injection Pump.
 1st Stage Fuel Filter Full Flow Spin-on Type
 2nd Stage Fuel Filter Full Flow Spin-on Type
 Fuel Tank Water Trap and Drain Located in Base of Fuel Tank
 Fuel Tank Capacity 80 U.S. Gallons (302.8 Litres)
 Fuel Level Gauge Electric, Located on Instrument Panel
 Hand Primer Pump Located on Top of Fuel Transfer Pump
 Preliminary Fuel Filter Located at the Bottom of the Fuel Transfer Pump

GENERAL SPECIFICATIONS

Cooling System

Capacity	42 U.S. Quarts (39.7 Litres)
Type of System	Pressurized Thermostat Controlled By-pass Type, Impeller Type Pump
Thermostat (2)	Starts to Open at Approximately 175°F. (79°C.) Fully Open at 202°F. (94°C.)
Pressure Cap Required	14 PSI Vented (97 kPa) or 10PSI Non-Vented (69 kPa)

Electrical System

Type of System - Diesel	12 Volt Negative Ground
Batteries	(2) 12 Volt Batteries Connected in Parallel Group Size 30H, Rated at 1.255 to 1.265 Specific Gravity. Discharge Rate 300 Amps. at 0°F. Voltage Drops to 9.2 After 10 Seconds. Voltage Drops 1.0 Volt Per Cell After 4 Minutes.
Alternator	12 Volt 55 Amp. Output, Negative Ground
Voltage Regulator	12 Volt, Solid State, Internal Component of Alternator
Starter Motor	12 Volt with Solenoid Switch
Head Lights (2)	12 Volt 40/40 Watt, Sealed Beam
Flood Light (2) (Optional)	12 Volt 35 Watt, Sealed Beam
R. Rear Flood Light (1) (Optional)	12 Volt 60 Watt, Sealed Beam
Flasher Lights with Directional Turn Signals (2)	12 Volt, Amber Lens
L. Rear Flood&Tail Light(1)..	12 Volt, 60 Watt Sealed Beam Combination Tail and Flood Lamp
Circuit Breaker System Overload Check	12 Volt Twin 40 Amp. Breakers Connected in Parallel, 80 Amp. Rating - 60 Amp. Minimum Continuous Capacity
Lights Circuit Breaker	40 Amp. Located on Light Switch
Parking Brake Warning Light	12 Volt, Red Flasher Type

Parking Brake

**Type Rod Actuated by Orscheln Type Handle - Adjustable From Operator's Seat
Double Wrap Steel Band on Differential**

Hydraulic Power Assist Brake

**Type Hydraulic, Power Assisted, Self-adjusting Multiple Plate
Wet Type Differential Brakes.**

Power Shift Transmission

Type 3 Speed Compound Planetary with Hydraulically Actuated Clutches and a 4 Speed Gear Range Section.

Gear Selection 12 Speeds Forward - 3 Speeds Reverse

Shifting Hydraulic Power Shifting Controlled by a Lever on Operator's Console. 4 Speed Range Controlled by a Mechanical Shifter from a Lever on Operator's Console.

Oil Cooler Transmission, Hydraulic, Steering and Brake Oil

Differential Lock

Type Hydraulically Actuated, Operated by Operator's Foot Pedal.

Hydrostatic Power Steering

Dual Pump Type (8 gal. section) Gear Type, Driven by the Engine

Pump Capacity at 2000 Engine RPM 8 GPM (30.3 l/mn)

HGA Hydrostatic Type Integral and Bi-directional Gerotor Metering Section, Actuated by the Steering Wheel.

Steering Cylinders Two Double Acting Cylinders

Remote Hydraulic System

Dual Pump (20 gal. section) Direct Drive Gear Type

Type Remote Valve (R.H. side) Dual Valve-individual Hand Lever Control

R.H. Portable Cylinder Coupling ASAE R366 Standard Quick Detachable Break-away Type

Pump Capacity at 2000 Engine RPM 20 GPM (75.7 l/mn)

Relief Valve Pressure 1900 to 2050 PSI (13 100 to 14 134 kPa)

Portable Cylinders Available

Variable Flow Remote Hydraulic System

Single Pump Gear Type, Direct Drive

Type Remote Valve (L.H. side) Dual Valve - Individual Hand Lever Control

Pump Capacity at 2000 Engine RPM 20 GPM (75.7 l/mn)

Relief Valve Pressure 1900 to 2050 PSI (13 100 to 14 134 kPa)

Variable Flow Control Valve Hand Operated From Console - Minimum 2.7 GPM (10.21 l/mn) to Maximum 20 GPM (75.7 l/mn)

Variable Flow Remote Hydraulic System (Continued)

Portable Cylinder Couplings (L.H. side) ASAE R366 Standard Quick Detachable
Break-away Type

Portable Cylinders Available

Power Take-Off

Type Clutch Hydraulically Operated

Rotation Clockwise

Spline Size 21 Splines, 1-3/8 in.(34.9mm) Dia.

Engine Speed 2000 RPM 1000 RPM Shaft Speed

Draft-O-Matic System

Type of Sensing Lower Link

Type Control Hand Lever

Type Valve 3 Positions - Raise - Hold - Lower

Type Draft Arms Swinging, with Manual Float Adjustment

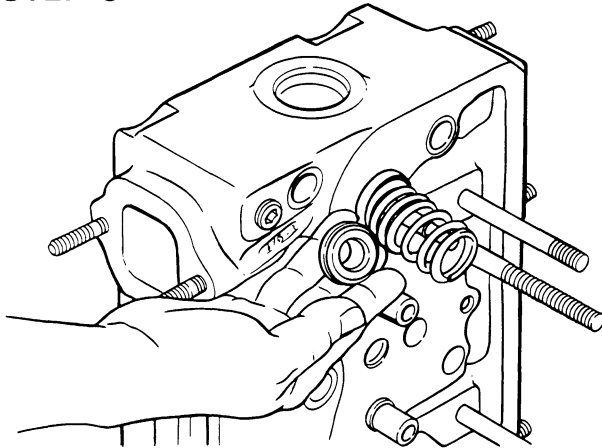
Type Hitch 3 Point Category III

Convertible Hitch Coupler (Available) Category III - II

Drawbars

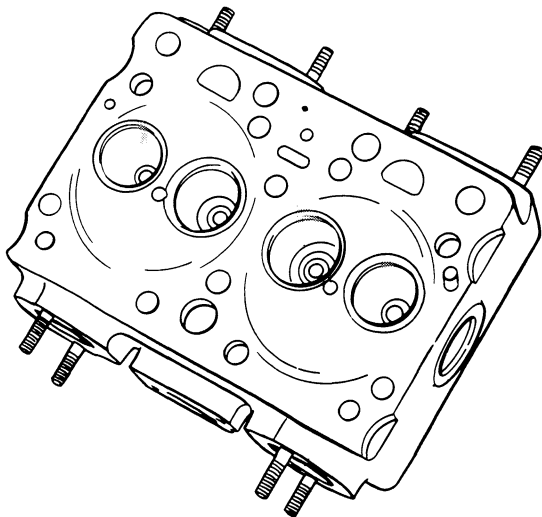
Standard or Yoke Type Full Swinging Roller Mounted
Will Accommodate a 1-1/2 Inch(38.1mm) Dia. Pin.

STEP 5



REMOVE VALVE ROTATORS OR SPRING RETAINERS, SPRINGS, SPRING SEATS AND VALVES.

STEP 6



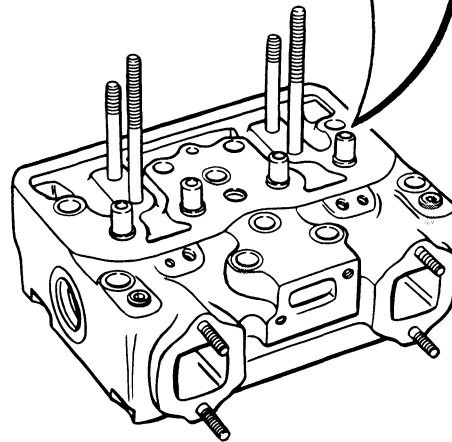
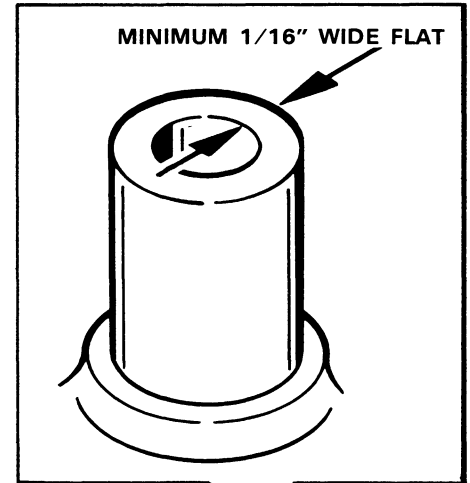
CLEAN CYLINDER HEAD COMPLETELY, REMOVING ALL TRACES OF CARBON AND OTHER DEPOSITS.

STEP 7



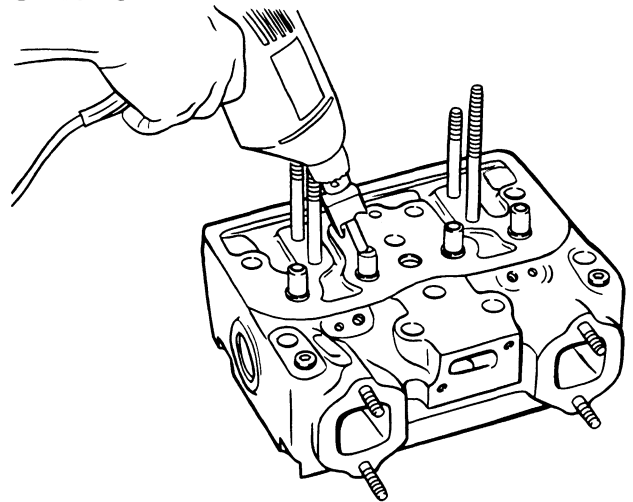
CLEAN VALVES WITH A FINE POWER DRIVEN WIRE BRUSH, REMOVING ALL CARBON AND VARNISH DEPOSITS. BE CAREFUL NOT TO SCRATCH VALVE STEMS.

STEP 8



CHECK VALVE GUIDE TOP SURFACE, THERE MUST BE A MINIMUM OF A 1/16\" WIDE FLAT AROUND ENTIRE TOP SURFACE.

STEP 9



USE M20617 TOOL IN A ELECTRIC DRILL (IF REQUIRED) TO PROVIDE NECESSARY FLAT AREA ON VALVE GUIDE. IMPORTANT: DO NOT EXCEED 450 RPM WHEN DRILLING



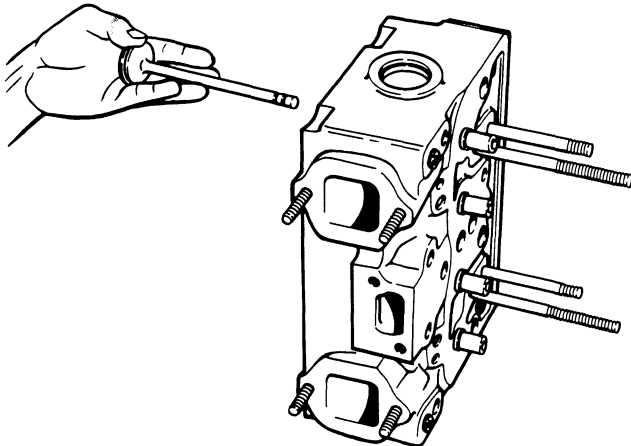
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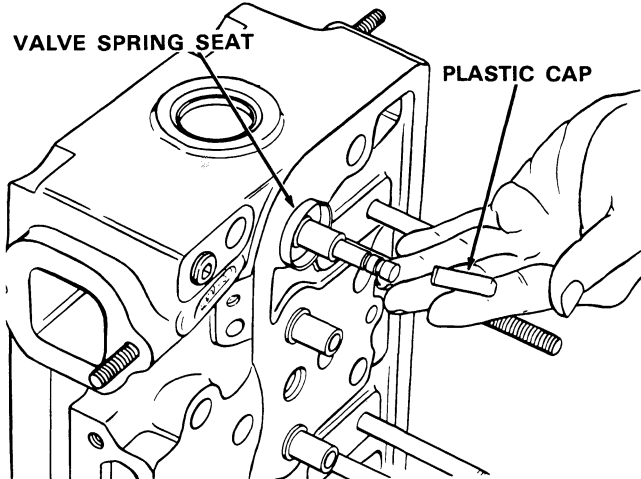
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STEP 10



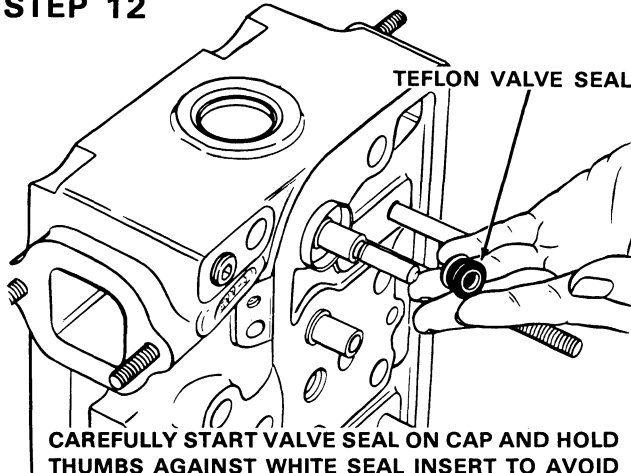
LUBRICATE VALVES WITH CLEAN ENGINE OIL BEFORE REINSTALLING INTO CYLINDER HEAD.

STEP 11



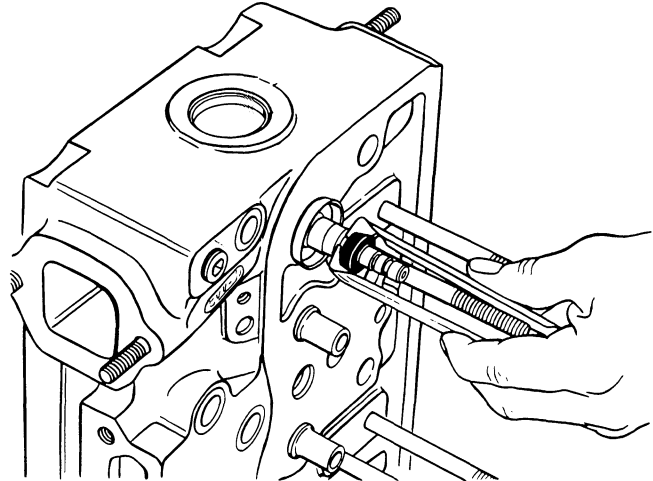
PLACE PLASTIC INSTALLATION CAP, PROVIDED IN KIT, ON THE END OF THE VALVE STEM. NOTE: CAP PREVENTS SHARP EDGES ON VALVE STEM GROOVES FROM CUTTING VALVE SEAL.

STEP 12



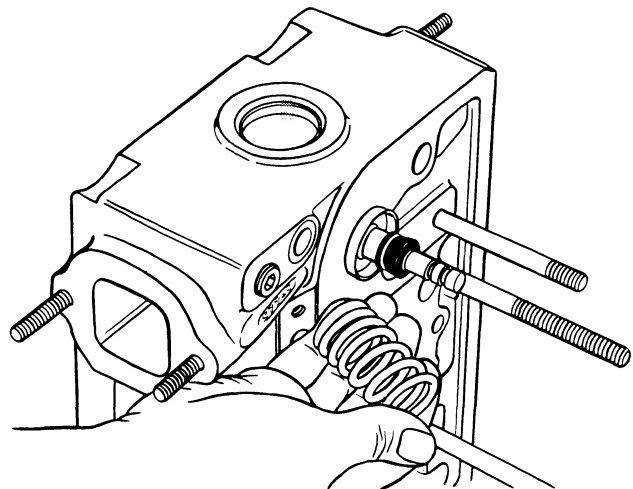
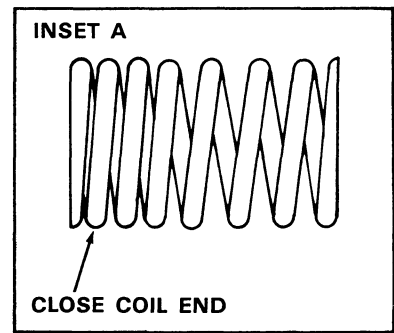
CAREFULLY START VALVE SEAL ON CAP AND HOLD THUMBS AGAINST WHITE SEAL INSERT TO AVOID DISLODGING IT, PUSH SEAL DOWN UNTIL SEAL JACKET TOUCHES TOP OF VALVE GUIDE. REMOVE INSTALLATION CAP AND SAVE, SINCE IT MUST BE REUSED.

STEP 13



USE M20624 TOOL AND PRESS SEAL DOWN OVER VALVE GUIDE UNTIL SEAL IS FLUSH WITH TOP OF GUIDE.

STEP 14



INSTALL THE VALVE SPRING. IMPORTANT: THE CLOSE COIL END OF THE SPRING MUST BE INSTALLED TOWARDS THE CYLINDER HEAD, SEE INSET A.

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