

**750**  
**Industrial**  
**Diesel Crawler**  
**Operators Manual**

9-1224

Reprinted





*This symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.** The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.*

SB001

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

BEFORE THE OPERATOR STARTS THE ENGINE:

1. GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE.
2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.



**IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.**

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR'S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE, CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance.

See your Authorized Case dealer for additional operator's manuals, parts catalogs, and service manuals.

## **NOTICE!**

At the time your Case Dealer delivers your new Crawler, he will acquaint you with its operation and maintenance as outlined in the "Delivery Procedure and Warranty Registration". When your Dealer has completed these instructions, he will ask you to sign the report and will then hand you a copy for your records.

**NOTE:** The "Delivery Procedure and Warranty Registration" also contains a record of the Pre-Delivery Checkup which your Dealer made on your Crawler.

### **AFTER DELIVERY CHECKUP**

The Authorized Case Dealer from whom you purchased your new Crawler will perform the "After Delivery Checkup" outlined on the following page, if you will arrange to bring your Crawler to his Service Shop within - - -

60 days after date of delivery or 200 hours of operation (whichever occurs first).

**NOTE:** The only charge your dealer will make for this inspection will be for oil, filters, or other accessories.



# AFTER DELIVERY CHECKUP

(Owner's Name)	(Date Checkup Performed)	
(Owner's Address)		
(Dealership)	(City)	(State)
Tractor has been operated _____ hours.		(Tractor Model Number) (Serial Number)

- |  |  |
|--|--|
| <input type="checkbox"/> Check air cleaner.<br><input type="checkbox"/> Check cooling system.<br><input type="checkbox"/> Check fuel system.<br><input type="checkbox"/> Check adjustment of fan belts.<br><input type="checkbox"/> Check track alignment.<br><input type="checkbox"/> Check track adjustment.<br><input type="checkbox"/> Check brake adjustment.<br><input type="checkbox"/> Check no load full governed engine speed.<br><input type="checkbox"/> Change crankcase oil and filter (if needed).<br><input type="checkbox"/> Lubricate all pressure fittings.<br><input type="checkbox"/> Clean transmission - torque converter oil filter and screen.<br><input type="checkbox"/> Check transmission oil level.<br><input type="checkbox"/> Check transmission - torque converter hydraulic system for leaks.<br><input type="checkbox"/> Tighten all bolts. | <input type="checkbox"/> Check equipment hydraulic system for leaks.<br><input type="checkbox"/> Check equipment hydraulic system oil level.<br><input type="checkbox"/> Clean equipment hydraulic system oil filter.<br><input type="checkbox"/> Check equipment control valve main and secondary relief valves.<br><input type="checkbox"/> Check track roller adjustment (prior to S/N 7071538 only).<br><input type="checkbox"/> Check final drive oil level.<br><input type="checkbox"/> Check track roller reservoir level (prior to S/N 7071538 only).<br><input type="checkbox"/> Check batteries, generator, starter, and lights.<br><input type="checkbox"/> Check operation of all instruments.<br><input type="checkbox"/> Check the action of transmission control valve.<br><input type="checkbox"/> Tighten cylinder head and adjust tappets. |
|--|--|

DEALER: Question purchaser carefully concerning his experience with the Crawler and answer any questions concerning maintenance or operation that are not clear to him.

Checkup \_\_\_\_\_  
Performed by

Signed \_\_\_\_\_  
Dealer

Original- Dealer  
 Duplicate- Leave in Operator's Manual for Customer

Signed \_\_\_\_\_  
Customer



# AFTER DELIVERY CHECKUP

(Owner's Name)	(Date Checkup Performed)	
(Owner's Address)		
(Dealership)	(City)	(State)
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Performed by

Signed \_\_\_\_\_  
Dealer

Original- Dealer  
 Duplicate- Leave in Operator's Manual for Customer

Signed \_\_\_\_\_  
Customer





## TO CASE INDUSTRIAL CRAWLER OWNERS

The care you give your Case Industrial Crawler will greatly determine the satisfaction and service life you will obtain from it. Use this manual as your guide. By observing the instructions and suggestions in this manual, your Case Crawler will serve you well for many years.

As an authorized Case Industrial Dealer, we stock Genuine Case Parts, which are manufactured with the same precision and skill as the original equipment. Our factory trained staff is kept well informed on the best methods of servicing Case Industrial Equipment and is ready and able to help you.

Should you require additional aid or information, contact us.

*Your Authorized Case Industrial Dealer*

To insure efficient and prompt service, please furnish us with the Model and Serial Numbers of your Crawler (and Allied Equipment, if used) in all correspondence or contacts.

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# INTRODUCTION

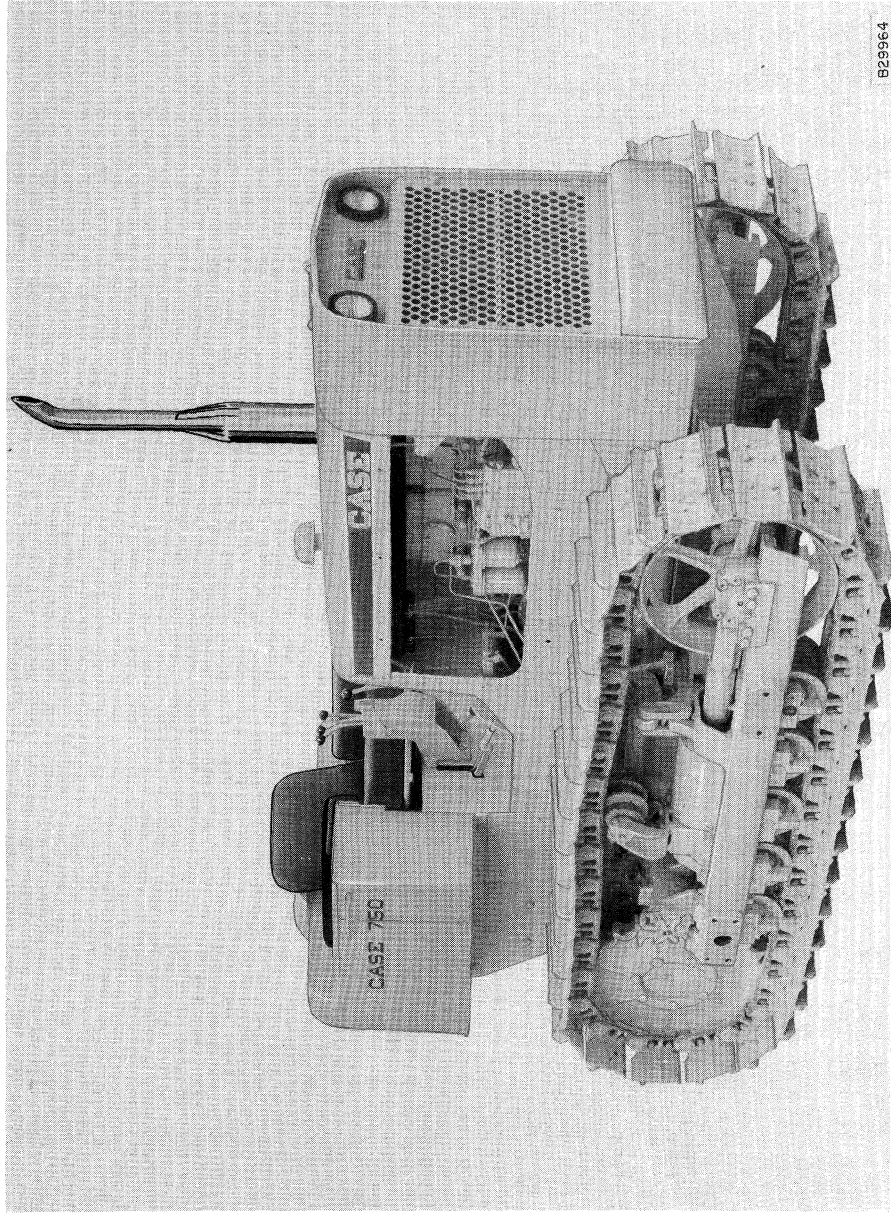


Figure 1 - Right Hand Front View of Drawbar Model

## CRAWLER


1. CASE "POWRCEL" ENGINE. A four cylinder, high compression, Diesel engine with a displacement of 267 cubic inches.
2. TORQUE CONVERTER. Matched to the engine. Regulates engine torque to meet varying load requirements, and absorbs shock loads before they are transmitted to the engine.
3. TRANSMISSION. Hydraulic power shift transmission provides both pivot and power steering. Provides the operator with a choice of four speeds forward and four speeds reverse.
4. SUSPENSION. Torsion bar suspension system provides greater traction by allowing a higher degree of track oscillation. Loader buckets can be kept level on uneven ground. Shock loads are absorbed by the suspension system providing a longer life for your crawler.
5. BRAKES. Hydraulically operated, controlled by foot pedals for pivot turns and stops. When one or both pedals are depressed, the transmission is neutralized, stopping the flow of power to the corresponding track or tracks. A hand brake is provided for parking and holding the crawler on grades.
6. TRACK. The heavy duty track is adjusted hydraulically using a grease gun. The lower track rollers and upper carrier rollers are designed for "lifetime" lubrication and a minimum of maintenance and parts replacement.
7. SEAT. Adjustable-type comfortable back; seat and arm rests of foam rubber covered with a durable synthetic leather.
8. LIGHTS. Sealed beam head and tail lights, in shock absorbing rubber mountings, are standard equipment on this crawler.
9. PRE-CLEANER (OPTIONAL). A pre-cleaner, with settling bowl, and 36 or 60 inch extensions, are available as optional equipment. These elevate the air intake level above the hood, and are recommended for use in dusty operating conditions.

## CRAWLER

# SERIAL NUMBER LOCATION

When ordering parts from your Authorized Case Dealer, always specify Serial Numbers and the Model Number of your Crawler.

As a means of ready reference, fill in the serial numbers of the Crawler in the spaces provided below.

MODEL	<input type="text"/>
NO.	<input type="text"/>
J. I. Case Co., Racine, Wis. 	

<input type="text"/>
Engine Serial Number

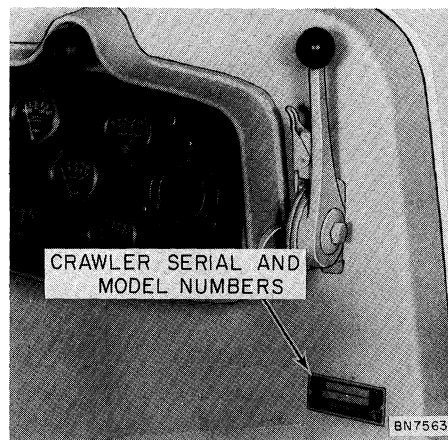


Figure 2  
Crawler Serial and Model Numbers

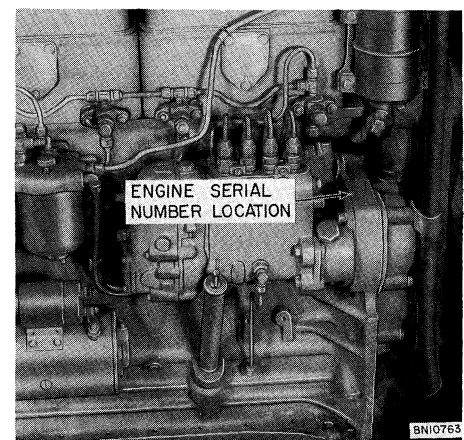


Figure 3  
Engine Serial Number

The crawler model and serial number plate is located on the engine cowl below and to the right of the instrument panel.

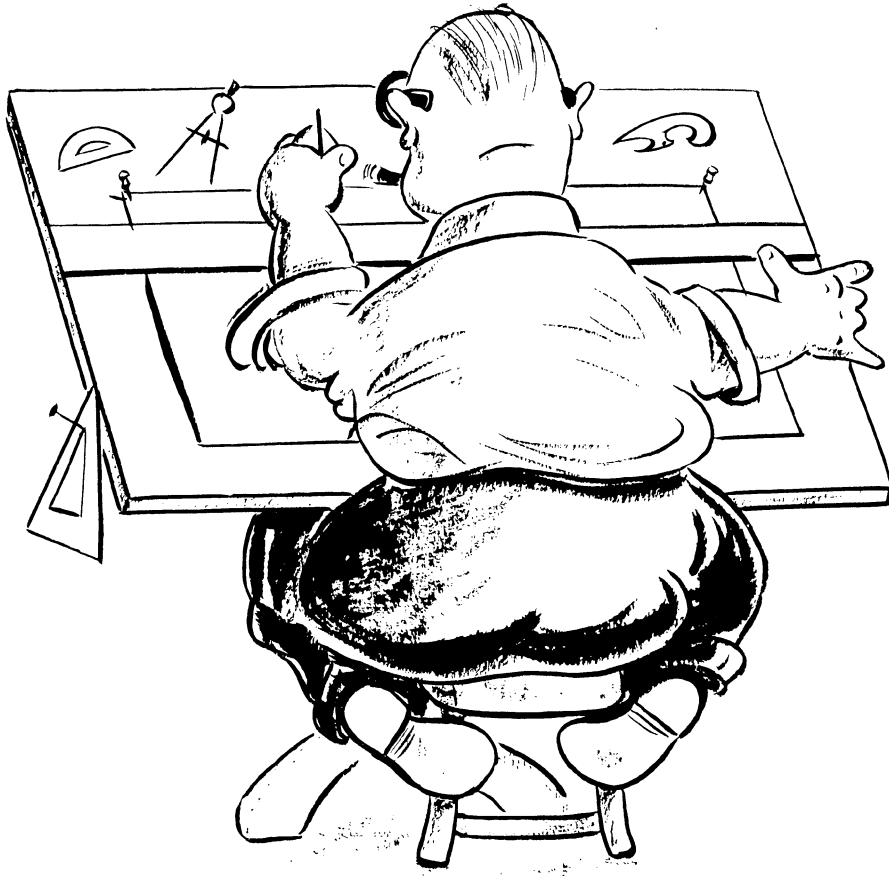
Use the engine Serial Number plate attached to the right side of the engine block just to the front of the fuel injection pump, when ordering engine parts.

The information compiled in this manual covers the operation and preventive maintenance of your Crawler. It is our hope that this manual will help you understand the correct care and use of this Crawler.

If you should require additional information or the services of a factory trained mechanic, be sure to see your Authorized Case Dealer.

NOTE: The terms "Right Hand" or "Left Hand" whenever used in this manual, are determined by standing at the rear of the Crawler and facing in the direction of forward travel of the Crawler.

CRAWLER



## SPECIFICATIONS

## SPECIFICATIONS

## ENGINE

Type (Case A267D) . . . . .	Four Cylinder; Four Cycle; Valve in Head
Horsepower, gross . . . . .	70
net . . . . .	61
Torque, maximum, lbs. ft. . . . .	215 @ 1300 R.P.M.
Firing Order . . . . .	1-3-4-2
Cylinder Bore . . . . .	4-1/8 Inches
Stroke . . . . .	5 Inches
Piston Displacement . . . . .	267 Cubic Inches
Compression Ratio . . . . .	15 to 1
Valve Guides . . . . .	Cast — Replaceable
Cylinder Sleeves . . . . .	Replaceable — Wet Type
Valve Tappet Clearance (intake) . . . . .	.025 Inch (cold)
(exhaust) . . . . .	.025 Inch (cold)
Full Governed Engine Speed at No Load . . . . .	1970 - 2050 R.P.M.
Full Governed Engine Speed at Full Load . . . . .	1900 R.P.M.
Engine Idling Speed . . . . .	750 - 800 R.P.M.

Pistons and Rods

Rings per Piston . . . . .	4
Compression Rings . . . . .	3
Oil Control Rings . . . . .	1
Piston Pins . . . . .	Full Floating
Piston Material . . . . .	Special Alloy Iron
Connecting Rod Bearings . . . . .	Replaceable, Precision, Steel Back, Copper-Lead Alloy Liners

Main Bearings

Number of Bearings . . . . .	5
Type of Bearings . . . . .	Replaceable, Precision, Steel Back, Copper-Lead Alloy Liners

Engine Lubrication System

Oil Pressure	
at 1900 R.P.M. . . . .	40 to 45 P.S.I.
at idle (approximate) . . . . .	15 P.S.I.
Type System . . . . .	Forced Circulation
Oil Pump . . . . .	Gear Type
Oil Filter . . . . .	Full Flow - Replaceable Element



FUEL SYSTEM

Fuel Injection Pump . . . . . Robert Bosch, Type PES (Multiple Plunger)  
 Pump Timing . . . . . 33° B.T.D.C. (Port Closing)  
 Fuel Injectors . . . . . Robert Bosch, Throttling Pintle Type  
 Nozzle Opening Pressure . . . . . 1950 to 2050 P.S.I.  
 Fuel Transfer Pump . . . . . Plunger Type, Integral Part of Injection Pump  
 Governor . . . . . Variable Speed, Fly-Weight Centrifugal Type;  
 Integral Part of Injection Pump  
 Fuel Filters . . . . . 3  
 1st Stage . . . . . Replaceable Element Type  
 2nd Stage . . . . . Replaceable Element Type  
 Final (3rd) Stage . . . . . Replaceable "Sealed Type" Filter  
 Fuel Tank Breather . . . . . Fuel Cap  
 Fuel Tank Water Trap and Drain . . . . . Bottom of Fuel Tank  
 Fuel Required . . . . . No. 2 Diesel Fuel

ELECTRICAL SYSTEM

Type of System . . . . . 24 Volt — Positive Ground  
 Batteries (dry charge type — 4 req.) . . . . . 6 Volt, 110 Amp. Hr., Group 3N  
 Generator . . . . . 24 Volt  
 Starter . . . . . 24 Volt  
 Lights . . . . . 12 Volt  
 Voltage Regulator . . . . . 24 Volt — Automatic Type

COOLING SYSTEM

Pressurized System . . . . . 7 lbs.  
 Radiator . . . . . Tube and Fin Construction  
 Temperature Control . . . . . Thermostat (opens 180-200° F.)

TORQUE CONVERTER

Make . . . . . Twin Disc  
 Model . . . . . MS280  
 Type . . . . . Single Stage  
 Diameter . . . . . 13"  
 Stall Speed . . . . . 1650 - 1750 R.P.M.  
 Torque Ratio Increase (at Stall) . . . . . 2.92  
 Oil Filter . . . . . Full Flow  
 Oil . . . . . Case Hi-Lo TCH

TRANSMISSION

Model . . . . . Case A601T  
 Type . . . . . Power Shift  
 Number of Speeds Forward . . . . . 4  
 Number of Speeds Reverse . . . . . 4  
 Oil Filter . . . . . Full Flow  
 Oil . . . . . Case Hi-Lo TCH

## CRAWLER

### APPROXIMATE CAPACITIES — U.S. Measure

Cooling System . . . . .	10 Gallons
Crankcase . . . . .	10 Quarts
(with filter change) . . . . .	12 Quarts
Fuel Tank . . . . .	36 Gallons
Master Brake Cylinders . . . . .	1-1/2 Pints
Track Roller Reservoirs (each side) (prior to S/N 7071538 only)	
Dozer and Drawbar Models . . . . .	13 Pints
Loader Models . . . . .	15 Pints
Final Drives (each side) . . . . .	7 Quarts
Transmission and Torque Converter . . . . .	32 Quarts
Oil Reservoir (equipment hydraulics). . . . .	8-1/2 Gallons

### PHYSICAL DIMENSIONS

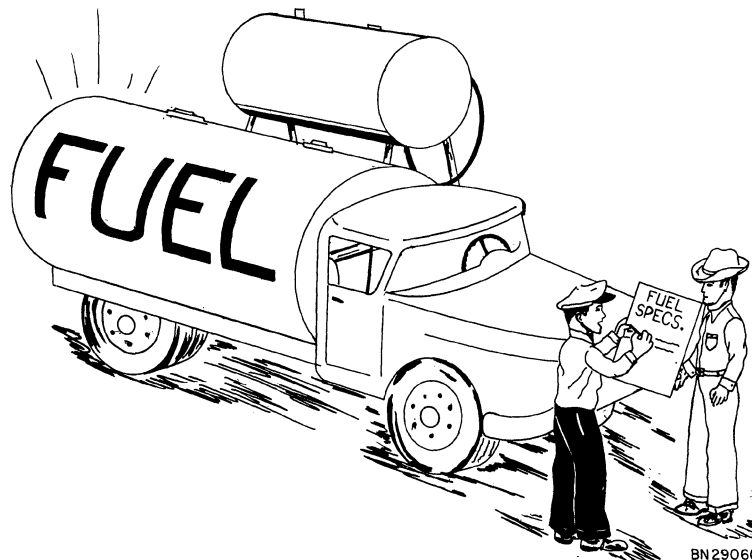
Gauge . . . . .	54 Inches
Shoe Width (standard):	
Loader Models . . . . .	12 Inches
Dozer and Drawbar Models . . . . .	14 Inches
Overall Width:	
Basic Tractor . . . . .	68 Inches
With Loader . . . . .	76-1/4 Inches
With Angling Dozer . . . . .	116 Inches
With Tilt Dozer . . . . .	88 Inches
Length of Track on Ground:	
Loader Models . . . . .	79 Inches
Dozer and Drawbar Models . . . . .	73 Inches
Total Area of Ground Contact (with standard shoes):	
Loader Models . . . . .	1899 Square Inches
Dozer and Drawbar Models . . . . .	2044 Square Inches
Ground Pressure on Level Footing:	
Basic Tractor . . . . .	5.2 PSI
With Loader . . . . .	9.79 PSI
With Angling Dozer . . . . .	7.5 PSI
With Tilt Dozer . . . . .	7.0 PSI
Height to Top of Fuel Cap . . . . .	67 Inches
Height to Top of Exhaust . . . . .	97-1/2 Inches
Ground Clearance (less drawbar):	
Loader Models . . . . .	13-5/8 Inches
Dozer and Drawbar Models . . . . .	14 Inches
Ground Clearance (with drawbar):	
Loader Models . . . . .	9-1/4 Inches
Dozer and Drawbar Models . . . . .	10-1/2 Inches
Loader Track Rollers:	
Loader Models . . . . .	6
Dozer and Drawbar Models . . . . .	5
Number of Shoes per Track:	
Loader Models . . . . .	38
Dozer and Drawbar Models . . . . .	36
Weight Drawbar Model (with fuel and operator) . . . . .	11,700 lbs.



## FUEL SPECIFICATIONS

**CRAWLER**

**FUEL SPECIFICATIONS**



This Case Diesel Engine is designed to operate most efficiently when using a NUMBER 2 DIESEL FUEL. Most well-known refiners and distributors market a good grade Diesel fuel and there should be no difficulty in obtaining it.

These are specifications for a suitable Diesel fuel:

A.P.I. Gravity . . . . .	32-39
POUR POINT . . . . .	A rating 10 Degrees Lower than the Lowest Anticipated Temperatures
Volatility	
Initial Boiling Point (minimum) . . . . .	320° F.
50° Condensed . . . . .	475° F.-555° F.
Final Boiling Point (maximum) . . . . .	675° F.
Distillation Recovery (minimum) . . . . .	97%
Flash Point . . . . .	Legal Minimum Limit or Higher
S.U. Viscosity at 100° F. . . . .	34-39 seconds
CETANE . . . . .	45 (45-55 for winter use)
Diesel Index . . . . .	43
Water and Sediment (maximum) . . . . .	0.05%
Ash (maximum) . . . . .	0.02%
TOTAL SULPHUR (maximum) . . . . .	0.4%
Conradson Carbon . . . . .	0.2%
Copper Strip Corrosion . . . . .	Pass
Alkali and Mineral Acid . . . . .	Neutral