CASE

PROFESSIONAL PARTNER

OPERATOR'S MANUAL

ROAD GRADER

885
TIER 3

87612153 NA

Issued 12-2006

MidWestTech | Case 885 Tier 3 Road Grader Operator's Manual | Publication 87612153NA

Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

TO THE OWNER **1**

OPERATOR MANUAL STORAGE COMPARTMENT 3
RIGHT, LEFT, FRONT AND REAR SIDES OF THE MACHINE 4
IDENTIFICATION NUMBERS 5
PRODUCT IDENTIFICATION NUMBER - P.I.N. 5
ENGINE 5
TRANSMISSION 6
REAR AXLE (DANA) 6
ROPS CAB AND CANOPY 6
MACHINE COMPONENTS 7

SAFETY/DECALS/HAND SIGNALS **9**

SAFETY RULES 9
UTILITY SAFETY 10
PERSONAL SAFETY 11
BEFORE OPERATION 12
MACHINE OPERATION 13
START UP 14
OPERATING 14
SHUT DOWN 14
ADDITIONAL SAFETY RULES 15
NEUTRAL START AND REVERSE WARNING CHECKS 15
TRANSMISSION OPERATING INSTRUCTIONS 16
BURN PREVENTION 17
PARKING THE MACHINE AND STOPPING THE ENGINE 17
FIRE EXTINGUISHER 18
FIRE OR EXPLOSION PREVENTION 18
MAINTENANCE 19
WHEEL AND TIRE MAINTENANCE 20
ROLL-OVER PROTECTIVE STRUCTURE 20
MAINTENANCE 21
GENERAL 21
STARTING 23
ENGINE 23
ELECTRICAL SYSTEM 23
HYDRAULIC SYSTEM 23
IMPLEMENTS 23
READ OPERATORS MANUAL 24
SAFETY DECALS 24
SYMBOLS 25
MAIN SYMBOLS USED IN THIS MANUAL 25
SAFETY RULES 27
DECALS 28
INTERIOR CAB VIEW 28
REAR VIEW 30
SIDE VIEW 31
UPPER VIEW 32
HAND SIGNALS 33

MidWestTech | Case 885 Tier 3 Road Grader Operator's Manual | Publication 87612153NA

Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

INSTRUMENTS/CONTROLS 37

OPERATOR'S COMPARTMENT 37
FRONT CONSOLE 38
INSTRUMENT PANEL INDICATORS 42
AIR CONDITIONER 50
OPERATORS SEAT 52
STANDARD SEAT 52
OPTIONAL AIR RIDE SEAT 53
SEAT BELT 55
PARKING BRAKE 55

OPERATING INSTRUCTIONS 59

BEFORE STARTING THE ENGINE 59
FIRST SERVICE INTERVALS 61
AFTER FIRST 100 HOURS OF OPERATION 61
SEAT BELT 61
RUN-IN 62
BOOSTER BATTERY CONNECTIONS TO MACHINE BATTERIES (JUMP START) 63
OPERATING TIPS 69
TYPICAL OPERATION 70

WHEELS/TIRES 73

ADDING AIR TO THE TIRES 75
TIRE OR RIM SERVICE 75
TIRE TREAD DIRECTION 75
WHEEL NUTS TORQUE AND TIRE PRESSURE 76
TANDEM WHEEL LUG NUTS 76
TIRE PRESSURE CHECK 76

LUBRICATION/FILTERS/FLUIDS 79

GENERAL SAFETY BEFORE YOU SERVICE 79
ENGINE HOURMETER 80
TRANSPORT/SERVICE PIN 81
ENVIRONMENT 81
SYSTEMGARD LUBRICATION ANALYSIS PROGRAM 82
PLASTIC AND RESIN PARTS 82
ENGINE HOOD 83
MAINTENANCE 83
GENERAL 83
FLUIDS AND LUBRICANTS 84
LUBRICATION & MAINTENANCE CHART 85
ACCESS DOORS 87
FLUID LEVELS EACH 10 HOURS OR DAILY SERVICES 88
FLUID LEVELS EACH 50 HOURS SERVICES 89
GREASE FITTINGS EACH 100 HOURS SERVICES 90
GREASE FITTINGS EACH 250 HOURS SERVICES 92
ENGINE LUBRICATION 95
ENGINE OIL SELECTION 95
OIL VISCOSITY AND TEMPERATURE RANGES 96
ENGINE SERVICE SPECIFICATIONS 97
ENGINE OIL LEVEL 97
ENGINE OIL CHANGE AND FILTER REPLACEMENT 97
SYSTEMGARD LUBRICATION ANALYSIS PROGRAM 98
AIR FILTER SYSTEM 99
SERVICE SPECIFICATIONS 99

MidWestTech | Case 885 Tier 3 Road Grader Operator's Manual | Publication 87612153NA Order the manual at mid-west-tech.com >

CLEANING THE AIR FILTER ELEMENT 99
ENGINE COOLING SYSTEM 101
SERVICE SPECIFICATIONS 101
THERMOSTAT 101
COOLANT MIXTURE 101
DRAINING AND FLUSHING THE COOLING SYSTEM 102
RADIATOR CLEANING 103
DIESEL FUEL SYSTEM 104
SERVICE SPECIFICATIONS 104
FUEL CONDITIONER 104
FUEL FILLER CAP 104
DIESEL FUEL 105
FUEL STORAGE 105
SPECIFICATIONS FOR ACCEPTABLE NO. 2 DIESEL FUEL 105
FUEL TANK DRAIN COCK CLEAN 106
FUEL FIL TERS 106
FUEL SYSTEM AIR BLEED 107
VALVE CLEARANCE ADJUSTMENT 107
HYDRAULIC/BRAKE SYSTEM 108
SERVICE SPECIFICATIONS 108
HYDRAULIC/BRAKE SYSTEM FLUID CHART 108
HYDRAULIC/BRAKE SYSTEM - TEMPERATURE RANGES 108
HYDRAULIC SYSTEM OIL FILTER 109
CLEANING THE SUCTION LINE FILTER 109
HYDRAULIC/BRAKE OIL CHANGE 110
TRANSMISSION 111
SERVICE SPECIFICATIONS 111
TRANSMISSION OIL LEVEL CHECK 111
TRANSMISSION OIL FILTER CHANGE 112
TRANSMISSION OIL CHANGE AND SCREEN CLEANING 112
REAR AXLE 113
SERVICE SPECIFICATIONS 113
AXLE OIL LEVEL 113
REAR AXLE OIL CHANGE 113
REAR AXLE END COMPARTMENT OIL LEVEL 114
SWING/CIRCLE TURN GEAR BOX 115
SERVICE SPECIFICATIONS 115
CHECKING CIRCLE TURN GEAR BOX OIL 115
TANDEM 116
SERVICE SPECIFICATIONS 116
TANDEM DRIVE CASE OIL LEVEL CHECK 116
TANDEM DRIVE CASE OIL CHANGE 116
WINDSHIELD WASHER RESERVOIR (OPTIONAL) 117

MAINTENANCE/ADJUSTMENT 119

MidWestTech | Case 885 Tier 3 Road Grader Operator's Manual | Publication 87612153NA Order the manual at mid-west-tech.com >

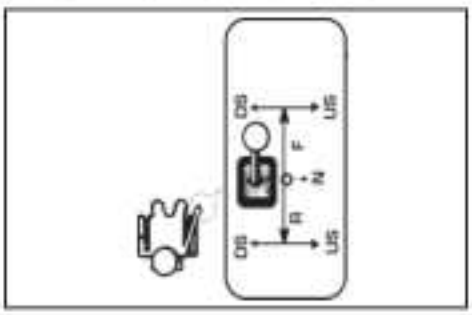
2. THROTTLE CONTROL LEVER



The engine will remain at low idle with the throttle control lever all the way forward and engine speed will increase as the lever is pulled back.

3. TRANSMISSION CONTROL LEVER





SHIFT PATTERN:
R • REVERSE
F • FORWARD
N • NEUTRAL
DS • DOWN SHIFT
US • UP SHIFT

The transmission control lever is used to select the desired forward or rearward speeds.

These machines are equipped with a 8 speed forward and 4 speed reverse transmission.

The gear speed change is done using a shift lever.

To obtain forward speeds place this lever to the front. To obtain reverse speeds place this lever to the rear.

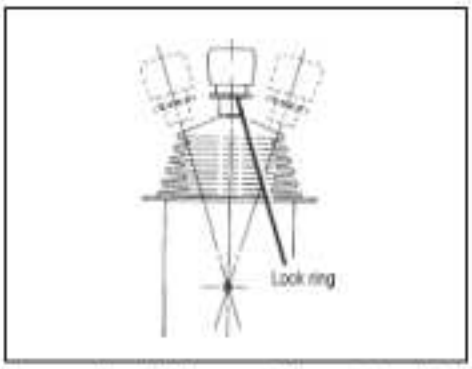
By using this lever the proper speed (1st, 2nd, etc.) can be selected. Observe the gear display readout for confirmation of the gear selected. If the display shows an "error code" it means that some fault has occurred in the transmission system. Therefore it is necessary to contact a Case dealer.

When the machine is stopped, any gear lower than F3 or R2 may be selected to start again.

A single speed change is done with a single push and release of shift lever.

If the shift control lever is pushed and held to the right or left the gear speeds will change automatically.

NEUTRAL LOCK



To move the shift lever out of neutral position, release the "Neutral Lock" by raising the release ring located under the shift handle knob.

MidWestTech | Case 885 Tier 3 Road Grader Operator's Manual | Publication 87612153NA Order the manual at mid-west-tech.com >

AIR FILTER SYSTEM

Service Specifications

Air filter element service interval

Primary (Outer) Element	Service the element if the air filter restriction indicator is in the red area. Replace the element after three washings. Also, replace the element after 1000 hours of operation or each year, whichever occurs first.
Secondary (Inner) Element	Replace the element after the primary (outer) elementhas been cleaned three times, or after the primary element has been cleaned or replaced and the air filter restriction indicator is still in the red area with the engine running. Also, replace the element every 1000 hours or each year, whichever occurs first.

Cleaning the Air Filter Element

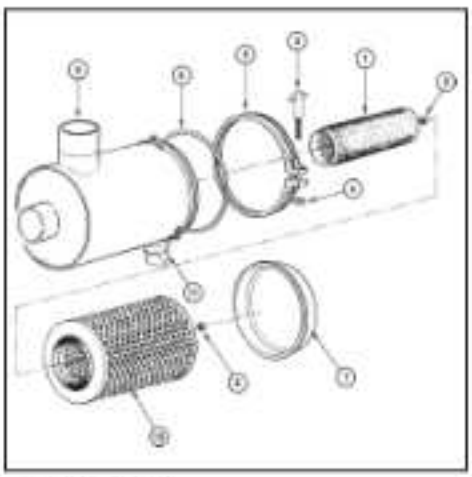
The outer element of the air cleaner should be disassembled only when the air restriction indicator is in the red area.

For correct maintenance of the air filter proceed as following:

1. Clean dirt and oil from air cleaner assembly.
2. Loosen clamp (5) attaching cup to air cleaner body.

   Remove cup (7) and o-ring (6).
3. Remove outer element (10) by loosening wing nut (8) and gasket.
4. The filter may be cleaned with compressed air.

NOTE: *Visually check inner element each time outer element is cleaned or replaced. Do not attempt to clean the inner element.*



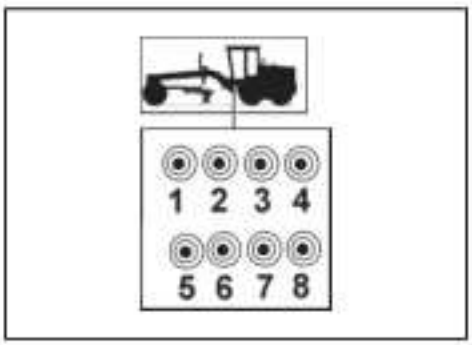
1. INNER ELEMENT
2. NUT
3. T-BOLT
4. NUT
5. CLAMP
6. O-RING
7. CUP
8. NUT
9. FILTER HOUSING
10. OUTER ELEMENT
11. DUST VALVE

MidWestTech | Case 885 Tier 3 Road Grader Operator's Manual | Publication 87612153NA Order the manual at mid-west-tech.com >

HYDRAULIC DIAGNOSTIC PANEL CHECK



1. DIAGNOSTIC TEST PANEL



When hydraulic system pressure failures occurs, pressure specifications are as follow:

1. Hydraulic System
(193 ±3,4bar; 2800±50PSI) *1

2. Steering Hydraulic System
(151bar; 2200PSI) *2

3. Brake Accumulators LH
(81-87bar; 1175-1262PSI) *1,3
(120-126bar; 1740-1827PSI) *1,4

4. Brake Accumulators RH
(81-87bar; 1175-1262PSI) *1,3
(120-126bar; 1740-1827PSI) *1,4

5. Brake System LH
(65 ± 3bar; 943±44PSI) *1

6. Brake System RH
(65 ± 3bar; 943±44PSI) *1

7. Blade Lift Cylinder RH
(98-113bar; 1420-1640PSI) *1

8. Blade Lift Cylinder LH
(98-113bar; 1420-1640PSI) *1

NOTE: *1 *Engine speed 2200 rpm*
*2 *Engine speed 900 rpm*
*3 *Minimum accumulator pressure*
*4 *Maximum accumulator pressure*

MidWestTech | Case 885 Tier 3 Road Grader Operator's Manual | Publication 87612153NA Order the manual at mid-west-tech.com >