

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

NOTE: Engine repair information is not contained within this tractor Repair Manual. For engine repair, refer to publication number 87515682 for the 8.3 & 9.0L 6 Cylinder, 24 Valve CNH Engine with High Pressure Common Rail Fuel System.

STANDARD TORQUE SPECIFICATIONS	SECTION 00, CHAPTER 1
TORQUE SPECIFICATIONS - METRIC HARDWARE	00-1-4
TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS	00-1-5
TORQUE SPECIFICATIONS - STEEL HYDRAULIC FITTINGS	00-1-6
SAFETY, GENERAL INFORMATION, MAINTENANCE SCHEDULE	SECTION 00, CHAPTER 2
SAFETY	00-2-3
GENERAL INFORMATION	00-2-5
LUBRICATION/MAINTENANCE CHART	00-2-6
SYSTEM CAPACITIES	00-2-7
ENGINE REMOVAL AND INSTALLATION	SECTION 10, CHAPTER 1
ENGINE REMOVAL	10-1-3
ENGINE INSTALLATION	10-1-10
FUEL TANK / FUEL SENDER REMOVAL AND INSTALLATION	SECTION 10, CHAPTER 2
SPECIAL TORQUES	3001-3
FUEL TANK REMOVAL AND INSTALLATION	3001-3
FUEL LEVEL SENDER REMOVAL AND INSTALLATION.....	3001-10
HOOD REMOVAL	SECTION 10, CHAPTER 3
HOOD REMOVAL	10-3-3
HOOD INSTALLATION	10-3-5
COOLING SYSTEM MODULE REMOVAL AND INSTALLATION	SECTION 10, CHAPTER 4
COOLING MODULE REMOVAL	10-4-3
COOLING MODULE INSTALLATION	10-4-7
VISCOUS FAN DRIVE TEST	SECTION 10, CHAPTER 5
REQUIRED TOOLS	10-5-3
DIAGNOSTIC PROCEDURE	10-5-4
FAN SPEED TEST	10-5-7
POWERSHIFT TRANSMISSION SYSTEM - HOW IT WORKS AND TROUBLESHOOTING	SECTION 21, CHAPTER 1
TRANSMISSION SYSTEM INTRODUCTION	21-1-3
TRANSMISSION SYSTEM CONTROLS	21-1-5
TRANSMISSION SYSTEM COMPONENTS	21-1-6
TRANSMISSION LUBE AND DISTRIBUTION TUBES	21-1-8
POWERSHIFT TRANSMISSION CLUTCH LAYOUT	21-1-10
POWERSHIFT VALVE CLUTCH ENGAGEMENTS	21-1-11
POWER FLOW (FORWARD SPEEDS)	21-1-12
POWER FLOW (REVERSE SPEEDS)	21-1-30
POWER FLOW (FORWARD CREEPER DRIVE SPEEDS)	21-1-34
POWER FLOW (REVERSE CREEPER DRIVE SPEEDS)	21-1-40
INCHING VALVE OPERATION	21-1-42
INSTRUMENTATION CLUSTER - TRANSMISSION LEAKAGE CHECK	21-1-46
MASTER CLUTCH PRESSURE CHECK	21-1-49
FRONT FRAME TO SPEED TRANSMISSION SPLIT	SECTION 21, CHAPTER 2
SPECIAL TOOLS	21-2-3
SPECIAL TORQUES	21-2-3
FRONT FRAME TO SPEED TRANSMISSION SPLIT	21-2-4

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

SPEED TO RANGE TRANSMISSION SPLIT	SECTION 21, CHAPTER 3
SPECIAL TOOLS	21-3-3
SPECIAL TORQUES	21-3-3
SPEED TO RANGE TRANSMISSION SPLIT	21-3-4
Removal	21-3-4
Installation	21-3-7
SPEED TRANSMISSION	SECTION 21, CHAPTER 4
SPECIFICATIONS	21-4-4
SPECIAL TORQUES	21-4-4
TROUBLESHOOTING AFTER SPEED TRANSMISSION REPAIR	21-4-4
SPECIAL TOOLS	21-4-5
SPEED TRANSMISSION WITH CREEP OPTION	21-4-6
ASSEMBLING THE COUNTERSHAFT WITH CREEPER SPEED CLUTCH	21-4-14
TRANSMISSION ASSEMBLY WITH CREEP OPTION	21-4-78
TRANSMISSION ASSEMBLY WITHOUT CREEP OPTION	21-4-80
RANGE TRANSMISSION TO REAR FRAME SPLIT	SECTION 21, CHAPTER 5
SPECIAL TOOLS	21-5-3
SPECIAL TORQUES	21-5-3
RANGE TRANSMISSION TO REAR FRAME SPLIT	21-5-4
Disassembly	21-5-4
Assembly	21-5-7
RANGE TRANSMISSION INCLUDING FWD CLUTCH/PARK BRAKE	SECTION 21, CHAPTER 6
SPECIFICATIONS	21-6-3
TROUBLESHOOTING AFTER RANGE TRANSMISSION REPAIR	21-6-3
SPECIAL TORQUES	21-6-3
SPECIAL TOOLS	21-6-4
RANGE TRANSMISSION	21-6-5
Removing the Shaft Master Clutch	21-6-5
Removing the Input Shaft, Countershaft and Mechanical Front Drive (FWD) / Park Brake Assembly	21-6-7
Disassembly of the Master Clutch	21-6-12
Exploded View of the Master Clutch	21-6-14
Assembly of the Master Clutch	21-6-15
Disassembly of the Range Transmission Input Shaft	21-6-16
Exploded View of the Range Transmission Input Shaft	21-6-22
Assembly of the Range Transmission Input Shaft	21-6-23
Cross-Section of Input Shaft	21-6-32
Disassembly of the Range Transmission Countershaft	21-6-33
Exploded View of the Range Transmission Countershaft	21-6-37
Assembly of the Range Transmission Countershaft	21-6-38
Front Wheel Drive (FWD) - Emergency Brake Disassembly	21-6-45
Exploded View of FWD and Emergency Brake	21-6-51
Assembly of the FWD / Emergency Brake	21-6-52
Exploded View of the Range Transmission Countershaft, Input Shaft, and FWD Input Shaft	21-6-66
Installing the Range Transmission Countershaft, Input Shaft, and FWD Input Shaft into the Range Transmission Housing	21-6-67
SETTING THE END PLAY OF THE RANGE TRANSMISSION COUNTERSHAFT AND INPUT SHAFT	21-6-73
Installing the Range Input Master Clutch	21-6-75
TRANSMISSION CONTROL VALVES AND INCHING VALVE	SECTION 21, CHAPTER 7
SPECIAL TORQUES	21-7-3
POWERSHIFT TRANSMISSION CONTROL VALVES	21-7-3
TRANSMISSION CONTROL VALVE CONFIGURATION	21-7-4
INCHING VALVE	21-7-15

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

REAR FRAME	SECTION 21, CHAPTER 8
SPECIFICATIONS	21-8-3
SPECIAL TORQUES	21-8-3
SPECIAL TOOLS	21-8-3
DIFFERENTIAL	21-8-4
Removal	21-8-4
Disassembly	21-8-10
PINION SHAFT	21-8-14
Removal and Disassembly	21-8-14
Assembly and Installation	21-8-16
DIFFERENTIAL ASSEMBLY	21-8-24
DIFFERENTIAL INSTALLATION	21-8-29
ADJUSTING THE DIFFERENTIAL PRELOAD	21-8-35
ADJUSTING THE RING AND PINION BACKLASH	21-8-37
BEVEL PINION AND GEAR TOOTH CONTACT CHECK	21-8-38
HYDRAULIC PUMP DRIVE	SECTION 21, CHAPTER 9
SPECIAL TORQUES	21-9-3
SPECIFICATIONS	21-9-3
PUMP DRIVE	21-9-3
Removal	21-9-3
Disassembly	21-9-4
Assembly	21-9-7
Installation	21-9-12
FRONT WHEEL DRIVE CONTROL SYSTEM - HOW IT WORKS	SECTION 25, CHAPTER 1
FRONT WHEEL DRIVE (FWD)	25-1-3
ELECTRONIC FRONT WHEEL DRIVE (FWD) CONTROL	25-1-5
FRONT WHEEL DRIVE (FWD) CONTROL MODES	25-1-7
FRONT WHEEL DRIVE (FWD) FUNCTIONAL TESTS	25-1-8
TROUBLESHOOTING	25-1-10
DIFFERENTIAL LOCK CONTROL SYSTEM - HOW IT WORKS	SECTION 25, CHAPTER 2
DIFFERENTIAL LOCK	25-2-3
ELECTRONIC DIFFERENTIAL LOCK CONTROL	25-2-5
DIFFERENTIAL LOCK CONTROL MODES	25-2-7
DIFFERENTIAL LOCK CONTROL	25-2-8
DIFFERENTIAL LOCK FUNCTIONAL TESTS	25-2-9
TROUBLESHOOTING	25-2-12
TROUBLESHOOTING	25-2-14
PTO/DIFFERENTIAL LOCK VALVE CIRCUIT	25-2-15
FRONT WHEEL DRIVE OUTPUT SHAFT	SECTION 25, CHAPTER 3
SPECIAL TORQUES	25-3-3
FWD OUTPUT SHAFT	25-3-4
FWD Output Shaft Removal	25-3-4
FWD Output Shaft Disassembly	25-3-5
FWD Output Shaft Assembly	25-3-9
FRONT WHEEL DRIVE DRIVE SHAFT	SECTION 25, CHAPTER 4
SPECIAL TORQUES	25-4-3
FWD DRIVE SHAFT	25-4-4

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

SUSPENSION FWD AXLE SYSTEM - HOW IT WORKS AND TROUBLESHOOTING ..SECTION 25, CHAPTER 5	
SUSPENDED FWD AXLE OPERATION	25-5-3
SUSPENDED MFD AXLE- CALIBRATION MODE	25-5-9
ERROR TABLE	25-5-11
SUSPENDED FWD AXLE- MANUAL OPERATION MODE (TEST MODE)	25-5-13
SUSPENDED FWD AXLE- DEMONSTRATION MODE	25-5-16
SUSPENSION FWD AXLE REMOVAL	SECTION 25, CHAPTER 6
SUSPENDED FWD AXLE	25-6-3
Removal	25-6-3
Installation	25-6-5
SUPERSTEER AXLE REMOVAL AND INSTALLATION	SECTION 25, CHAPTER 7
SPECIAL TORQUES	25-7-3
SPECIAL TOOLS	25-7-3
FRONT AXLE REMOVAL	25-7-4
FRONT AXLE INSTALLATION	25-7-7
LIMITED SLIP FWD DIFFERENTIAL	SECTION 25, CHAPTER 8
SPECIFICATIONS	25-8-2
SPECIAL TORQUES	25-8-2
SPECIAL TOOLS	25-8-2
DIFFERENTIAL CARRIER ASSEMBLY REMOVAL	25-8-3
DIFFERENTIAL DISASSEMBLY	25-8-4
Pinion Disassembly	25-8-8
DIFFERENTIAL ASSEMBLY	25-8-11
DIFFERENTIAL CARRIER ASSEMBLY	25-8-15
Pinion Position and Assembly	25-8-15
Shim Pack Thickness Chart	25-8-16
Setting The Pinion Depth	25-8-17
Adjusting Bearing Preload	25-8-20
DIFFERENTIAL INSTALLATION	25-8-22
Checking Backlash	25-8-23
Ring Gear and Pinion Tooth Pattern Interpretation	25-8-25
Installation of Carrier Assembly to Axle Housing	25-8-27
LOCKING FWD DIFFERENTIAL	SECTION 25, CHAPTER 9
SPECIFICATIONS	25-9-3
SPECIAL TORQUES	25-9-3
SPECIAL TOOLS	25-9-3
REMOVAL OF THE FRONT DIFFERENTIAL CARRIER ASSEMBLY	25-9-4
REMOVAL OF THE FRONT DIFFERENTIAL FROM THE CARRIER HOUSING	25-9-5
DISASSEMBLY OF THE DIFFERENTIAL	25-9-7
PINION DISASSEMBLY	25-9-9
ASSEMBLY OF THE DIFFERENTIAL	25-9-12
DIFFERENTIAL CARRIER ASSEMBLY	25-9-16
SETTING THE PINION DEPTH	25-9-18
ADJUSTING BEARING PRELOAD	25-9-21
DIFFERENTIAL INSTALLATION	25-9-23

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

FWD PLANETARY HUB, STEERING KNUCKLE AND AXLE DRIVE SHAFT	SECTION 25, CHAPTER 10
SPECIFICATIONS	25-10-3
SPECIAL TORQUES	25-10-3
SPECIAL TOOLS	25-10-3
PLANETARY HUB DISASSEMBLY	25-10-4
STEERING KNUCKLE AND KINGPIN DISASSEMBLY	25-10-9
AXLE DRIVE SHAFT DISASSEMBLY	25-10-13
AXLE SHAFT ASSEMBLY	25-10-14
KINGPIN ASSEMBLY	25-10-16
STEERING KNUCKLE ASSEMBLY	25-10-20
PLANETARY HUB ASSEMBLY	25-10-25
Ten Bolt Axle Only	25-10-30
Twelve Bolt Axle Only	25-10-34
All Axles	25-10-39
SUSPENSION FWD AXLE.....	SECTION 25, CHAPTER 11
SPECIAL TORQUES	25-11-2
SUSPENSION FWD AXLE	25-11-3
Disassembly	25-11-3
Assembly	25-11-13
Position Sensor Adjustment	25-11-25
SUPERSTEER AXLE VERTICAL CONTROL LINKAGE	SECTION 25, CHAPTER 12
SPECIAL TORQUES	25-12-3
VERTICAL LINK DISASSEMBLY AND REPAIR	25-12-3
Vertical Link Removal	25-12-3
Roller Replacement	25-12-4
Articulation Bearing Removal and Installation	25-12-5
REAR AXLE AND PLANETARIES	SECTION 27, CHAPTER 1
SPECIAL TOOLS	27-1-3
SPECIAL TORQUES	27-1-5
SPECIFICATIONS	27-1-5
GENERAL INFORMATION	27-1-5
REAR AXLE	27-1-6
AXLE HOUSING DISASSEMBLY	27-1-9
PLANETARY DISASSEMBLY	27-1-11
DIFFERENTIAL CARRIER SEAL REPLACEMENT	27-1-13
PLANETARY ASSEMBLY - THREE PIN	27-1-14
PLANETARY ASSEMBLY - FOUR PIN	27-1-15
AXLE HOUSING ASSEMBLY	27-1-18
HOW TO DETERMINE RAM PRESSURE	27-1-23
AXLE INSTALLATION	27-1-26
AXLE SEAL WEAR SLEEVE INSTALLATION (4-Inch Axle Only)	27-1-30
POWER TAKE OFF CONTROL SYSTEM - HOW IT WORKS	SECTION 31, CHAPTER 1
POWER TAKE OFF	31-1-3
ELECTRONIC PTO CONTROL	31-1-4
PTO SYSTEM CONTROL	31-1-7
PTO CONTROL MODES	31-1-8
PTO VALVE OIL SUPPLY	31-1-10
PTO DIFFERENTIAL LOCK VALVE	31-1-11
TROUBLESHOOTING	31-1-12

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

PTO CLUTCH ASSEMBLY - SINGLE, REVERSIBLE AND DUAL SPEED	SECTION 31, CHAPTER 2
SPECIAL TOOLS	31-2-3
SPECIAL TORQUES	31-2-3
PTO CLUTCH ASSEMBLY	31-2-4
General	31-2-4
PTO CLUTCH SERVICE	31-2-4
Removal	31-2-4
Disassembly	31-2-6
Assembly	31-2-16
Exploded View of PTO Clutch	31-2-16
Cross Section of PTO Clutch and Output Shaft Assembly	31-2-31
SINGLE SPEED REVERSIBLE SHAFT PTO	31-2-32
Disassembly	31-2-32
Assembly	31-2-35
Exploded View of PTO Output Shaft and Driven Gear Assembly	31-2-35
SINGLE SPEED REVERSIBLE SHAFT PTO DRIVEN GEAR	31-2-39
Removal	31-2-39
Assembly	31-2-41
Reversible PTO Output Shaft Bearing Adjustment	31-2-43
SINGLE SPEED REVERSIBLE SHAFT PTO	31-2-45
Cross Section of PTO Output Shaft Assembly	31-2-45
 BRAKE VALVE	 SECTION 33, CHAPTER 1
SPECIAL TORQUES	33-2-2
BRAKE VALVE	33-2-3
Removal	33-2-3
Disassembly	33-2-4
Assembly	33-2-6
Installation	33-2-8
 BRAKE CYLINDERS	 SECTION 33, CHAPTER 2
SPECIAL TORQUES	33-2-3
SPECIFICATIONS	33-2-3
BRAKE CYLINDERS	33-2-3
Disassembly	33-2-3
Assembly	33-2-5
 HYDRAULIC SCHEMATIC POSTER - EUROPEAN	 87518877
 HOW TO READ SYMBOLS IN A HYDRAULIC SCHEMATIC	 SECTION 35, CHAPTER 1
HOW TO READ SYMBOLS IN A HYDRAULIC SCHEMATIC	35-1-3
SIMPLE SCHEMATIC	35-1-13
COMMON SYMBOLS	35-1-15

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

HYDRAULIC SYSTEM - HOW IT WORKS WITH TROUBLESHOOTING	SECTION 35, CHAPTER 2
GENERAL INTRODUCTION	35-2-3
REAR CHARGE/LUBE PUMP PRESSURE TEST	35-2-19
REGULATED SYSTEM PRESSURE TEST AND ADJUSTMENT PROCEDURE	35-2-21
FRONT/REGULATED SYSTEM PUMP FLOW TEST	35-2-25
STEERING RELIEF PRESSURE TEST AND ADJUSTMENT PROCEDURE	35-2-27
STEERING SYSTEM PROBLEMS	35-2-29
PRIORITY AND REGULATOR VALVE	35-2-31
PFC AXIAL PISTON PUMP	35-2-34
PFC PUMP HIGH PRESSURE STANDBY CHECK AND ADJUSTMENT PROCEDURE	35-2-42
PFC PISTON PUMP FLOW TEST	35-2-43
PFC PISTON PUMP FLOW COMPENSATOR SETTING	35-2-44
STANDARD PUMP COMPENSATOR VALVE INSPECTION	35-2-46
PFC PUMP OPERATIONAL PROBLEMS	35-2-47
PTO AND DIFFERENTIAL LOCK VALVE.....	SECTION 35, CHAPTER 3
SPECIAL TORQUES	35-3-2
SPECIFICATIONS	35-3-2
PTO AND DIFFERENTIAL LOCK VALVE	35-3-3
REMOTE VALVE AND COUPLER SERVICE.....	SECTION 35, CHAPTER 4
SPECIAL TORQUES	35-4-2
REMOTE VALVE AND COUPLER SERVICE	35-4-3
REMOTE VALVE REMOVAL AND SERVICE	35-4-5
REMOTE COUPLERS	35-4-13
REMOTE HYDRAULIC SYSTEM - HOW IT WORKS AND TROUBLESHOOTING	SECTION 35, CHAPTER 5
REMOTE HYDRAULIC SYSTEM INTRODUCTION	35-5-3
REMOTE VALVE SYSTEM COMPONENTS	35-5-5
REMOTE VALVE SYSTEM CONTROLS	35-5-10
REMOTE VALVE OPERATION	35-5-14
REMOTE VALVE PROBLEMS AND WHERE TO LOOK	35-5-23
REMOTE VALVE PROPORTIONAL CURRENT CONTROL (PCC) SOLENOID OPERATION	35-5-25
REMOTE VALVE SYSTEM TESTING	35-5-26
REMOTE VALVE HIGH PRESSURE TEST	35-5-27
PFC PUMP HIGH PRESSURE STANDBY CHECK AND ADJUSTMENT PROCEDURE	35-5-28
PFC PISTON PUMP FLOW TEST	35-5-29
STANDARD PUMP COMPENSATOR VALVE INSPECTION	35-5-30
REMOTE VALVE SIGNAL CHECK AND HITCH SIGNAL CHECK	35-5-31
REMOTE VALVE COUPLER TEST	35-5-32
LOAD CHECK INSPECTION	35-5-33
OPERATIONAL PROBLEMS	35-5-34
PRIORITY AND REGULATOR VALVE	SECTION 35, CHAPTER 6
SPECIAL TORQUES	35-6-3
PRIORITY VALVE AND REGULATOR	35-6-4
Removal	35-6-4
Disassembly	35-6-6
Assembly	35-6-9
Installation	35-6-12
CROSS SECTION OF PRIORITY AND REGULATOR VALVE	35-6-14
CHARGE PUMP.....	SECTION 35, CHAPTER 7
Removal	35-7-3
Installation	35-7-4

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

PFC PISTON PUMP AND HYDRAULIC FILTER	SECTION 35, CHAPTER 8
SPECIAL TORQUES	35-8-3
PFC PISTON PUMP	35-8-3
Removal	35-8-3
Installation	35-8-4
HITCH SYSTEM - HOW IT WORKS	SECTION 35, CHAPTER 9
THREE POINT HITCH	35-9-3
ELECTRONIC HITCH CONTROL	35-9-4
ELECTRONIC HITCH CONTROL SYSTEM FEATURES	35-9-7
HITCH CONTROL VALVE	35-9-14
SETUP / ADJUSTMENT SEQUENCE	35-9-22
HITCH CONTROL VALVE	SECTION 35, CHAPTER 10
HITCH CONTROL VALVE	35-10-3
Removal	35-10-3
Disassembly	35-10-5
Assembly	35-10-7
Installation	35-10-9
HITCH CONTROL VALVE CROSS SECTION	35-10-11
TRACTOR HITCH	SECTION 35, CHAPTER 11
SPECIAL TORQUES	35-11-3
TRACTOR HITCH	35-11-3
EDC PIN ASSEMBLY	35-11-20
POTENTIOMETER (HITCH POSITION SENSOR)	35-11-21
CAM SWAY LIMITER	35-11-23
CAM BUMPERS FOR DRAFT ARM	35-11-25
DRAWBAR, HIGH VERTICAL CAPACITY	35-11-26
STEERING COLUMN AND STEERING HAND PUMP	SECTION 41, CHAPTER 1
SPECIAL TOOLS	41-1-2
SPECIAL TORQUES	41-1-3
STEERING COLUMN REMOVAL	41-1-3
STEERING HAND PUMP SERVICE	41-1-6
STEERING COLUMN ASSEMBLY	41-1-8
WHEEL TOE IN SETTING SUPERSTEER FWD AXLE	SECTION 41, CHAPTER 2
WHEEL TOE IN SETTING	41-2-3
WHEEL TOE IN SETTING DIAGRAM	41-2-9
SPECIAL TOOL LAYOUT DRAWINGS	41-2-10

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

A/C TROUBLESHOOTING	SECTION 50, CHAPTER 1
SAFETY PROCEDURES	50-1-5
SPECIAL TOOLS	50-1-6
A/C THERMAL OPERATION	50-1-7
A/C SYSTEM COMPONENTS	50-1-9
Cab HVAC Box Components - Automatic Temperature Control	50-1-9
Chassis Components	50-1-11
AUTOMATIC TEMPERATURE CONTROL (ATC) OPERATION	50-1-12
Operation Modes	50-1-15
Automatic Mode	50-1-15
Defog Mode	50-1-15
Automatic Operation Summary	50-1-16
Defog/Dehumidify Operation Summary	50-1-17
ATC Fault Codes	50-1-18
ATC Fault Code 111	50-1-18
ATC Fault Code 112	50-1-19
ATC Fault Code 115	50-1-19
ATC Fault Code 116	50-1-20
ATC Fault Code 120	50-1-20
ATC Fault Code 121	50-1-21
ATC Fault Code 122	50-1-21
ATC Fault Code 125	50-1-22
ATC Fault Code 126	50-1-22
ATC Fault Code 127	50-1-23
ATC Fault Code 128	50-1-23
ATC Fault Code 129	50-1-24
ATC Fault Code 130	50-1-24
ATC Fault Code 131	50-1-25
ATC Fault Code 132	50-1-25
ATC Fault Code 133	50-1-26
ATC Fault Code 134	50-1-26
Locating System Problems Without Fault Codes	50-1-27
Controller-Based Resistance Tests	50-1-27
ATC Controller Test (Connector J8 Test Points)	50-1-29
ATC Field Reported Symptoms/Causes	50-1-32
Compressor And Clutch	50-1-33
Operational Check	50-1-33
Electrical Test	50-1-36
Compressor Clutch Control Circuit Test Procedure	50-1-36
Service Note: Adjusting Clutch Air Gap	50-1-38
High And Low Pressure Switch Clutch Latching Circuit	50-1-39
Background	50-1-39
Possible Failure Modes - Fault Codes 129 and 134	50-1-40
Electrical Test	50-1-41
High Pressure Switch and Circuit Test	50-1-41
Low Pressure Switch and Circuit Test	50-1-42
Heater Control Valve	50-1-43
Operational Check	50-1-43
Electrical Test	50-1-44
Heater Control Valve Power, Signal and Ground Test	50-1-44
Blower Speed And Temperature Control Potentiometers	50-1-45
Background	50-1-45
Possible Failure Modes - Fault Codes 120, 121	50-1-45
Electrical Test	50-1-46
Common Control Potentiometer and Circuit Test Procedure	50-1-46

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

BLOWER AND BLOWER SPEED DRIVER	50-1-47
Background	50-1-47
Power, Signal and Ground Circuit	50-1-47
Possible Failure Modes	50-1-47
Blower Motor/Blower Driver Power, Signal and Ground Test	50-1-48
Cab And Evaporator Temperature Sensors	50-1-49
Background	50-1-49
Electrical Test	50-1-51
Power Circuit	50-1-51
Possible Failure Modes - Fault Codes 111, 115 and 116	50-1-52
Cab Temperature Sensor and Circuit Test	50-1-53
Evaporator Temperature Sensor and Circuit Test	50-1-54
Controller Power, Ground, And ATC Switch	50-1-56
Background	50-1-56
Power and Ground Circuit	50-1-56
Possible Failure Modes	50-1-56
Controller Power Supply and Ground Test	50-1-56
ATC Switch and Circuit Test	50-1-57
Defog/Defrost Switch and Circuit Test	50-1-57
Cab Pressurizer Blower	50-1-58
Background	50-1-58
Power and Ground	50-1-58
Cab Pressurizer Blower & Relay Power Supply and Ground Test	50-1-58
ACCESSING THE HVAC BOX	50-1-59
STANDARD AIR CONDITIONING (STD) TROUBLESHOOTING	50-1-60
Standard A/C Operation	50-1-61
Smart Pressure Switch Cycling System	50-1-61
Standard A/C Controls and Their Function	50-1-62
Symptom-Based Standard A/C Troubleshooting	50-1-63
Standard Controller Test	50-1-65
Compressor And Clutch	50-1-67
Operational Check	50-1-67
Electrical Test – Compressor Clutch	50-1-70
Clutch Relay Power Supply and Ground Test	50-1-71
Service Note: Adjusting Clutch Air Gap	50-1-72
High And Low Pressure Switch Clutch Latching Circuit	50-1-73
Background	50-1-73
Possible Failure Modes - Flashing Pressure Warning Lamp	50-1-74
Electrical Test – Pressure Switches	50-1-75
High Pressure Switch and Circuit Test	50-1-75
Low Pressure Switch and Circuit Test	50-1-76
Heater Control Valve	50-1-77
Operational Check	50-1-77
Electrical Test	50-1-78
Temperature Control Potentiometer	50-1-79
Background	50-1-79
Electrical Test	50-1-79
Blower Speed Switch And Blower Motor	50-1-80
Background	50-1-80
Power and Ground Circuit	50-1-80
Possible Failure Modes	50-1-80
Blower Speed Switch and Power Circuit Test	50-1-81
Blower Motor Power, and Control Circuit Test	50-1-81

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

Evaporator Temperature Sensor	50-1-83
Background	50-1-83
Electrical Test – Sensor	50-1-83
Power Circuit	50-1-84
Service Note: Too Little Cooling/Too Much Heating without Symptoms	50-1-84
Evaporator Temperature Sensor and Circuit Test	50-1-84
Controller Power, Ground And A/C Switch	50-1-86
Background	50-1-86
Power and Ground Circuit	50-1-86
Possible Failure Modes	50-1-86
Controller Power Supply and Ground Test	50-1-86
A/C Switch and Circuit Test	50-1-87
Cab Pressurizer Blower	50-1-88
Background	50-1-88
Power and Ground	50-1-88
Cab Pressurizer Blower & Relay Power Supply and Ground Test	50-1-89

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

AIR CONDITIONER SYSTEM SERVICE	SECTION 50, CHAPTER 2
SPECIFICATIONS	50-2-4
SPECIAL TORQUES	50-2-4
SPECIAL TOOLS	50-2-4
SAFETY PROCEDURES	50-2-9
AIR CONDITIONER SYSTEM REFRIGERANT RECOVERY	50-2-10
RECOVERING PURE 134A REFRIGERANT	50-2-12
RECOVERING CONTAMINATED REFRIGERANT WITH OEM1691	50-2-16
Preparing the Tank	50-2-16
Recovery Process	50-2-20
AIR CONDITIONER SYSTEM EVACUATION AND RECHARGING	50-2-26
AIR CONDITIONING TEMPERATURE/PRESSURE CHART	50-2-33
A/C SYSTEM FLUSHING PROCEDURE	50-2-34
Required Tools	50-2-35
Precautions	50-2-36
Component Flushing Procedure with Power Flush 17550	50-2-37
Complete Circuit Flushing Procedure with Power Flush 17550	50-2-41
Back Flushing the Thermal Expansion Valve or Refrigerant Line	50-2-46
Post Flushing Procedures	50-2-48
Flushing Solvent Disposal	50-2-50
LEAK DETECTION	50-2-51
Electronic Testing with OEM1437	50-2-52
Fluorescent Leak Detection	50-2-53
Fluorescent Dye Injection	50-2-53
Fluorescent Leak Testing	50-2-59
A/C SYSTEM COMPONENTS	50-2-60
Cab HVAC Box Components - Automatic Temperature Control	50-2-60
Cab HVAC Components - Standard Systems	50-2-62
Chassis Components	50-2-64
A/C COMPRESSOR CLUTCH	50-2-65
Clutch Removal	50-2-65
Exploded View of Clutch	50-2-71
Compressor Clutch Replacement	50-2-71
A/C COMPRESSOR	50-2-79
Oil Level Check or Adjustment	50-2-79
Compressor Removal	50-2-82
Compressor Installation	50-2-85
CONDENSER AND RECEIVER-DRIER	50-2-87
Condenser	50-2-87
Receiver-Drier	50-2-88
ACCESSING THE HVAC BOX	50-2-90
THERMAL EXPANSION VALVE TESTING	50-2-92
THERMAL EXPANSION VALVE REPLACEMENT	50-2-93
EVAPORATOR AND CAB TEMPERATURE SENSOR LOCATION	50-2-95
BLOWER MOTOR REPLACEMENT	50-2-96
HEATER CONTROL VALVE REPLACEMENT	50-2-97
EVAPORATOR/HEATER ASSEMBLY	50-2-98
Evaporator/Heater Assembly Removal	50-2-98
Evaporator/Heater Assembly Installation	50-2-101
Post Replacement Procedures	50-2-104
EVAPORATOR/HEATER ASSEMBLY SEALING AND CLEANING	50-2-105
BLOWER AND EVAPORATOR REFERENCE ILLUSTRATION	50-2-106
CONTROLLER AND BLOWER SPEED DRIVER REPLACEMENT	50-2-107
ATC Controller	50-2-107
Standard A/C Controller	50-2-107
Blower Speed Driver (ATC Units Only)	50-2-108
CAB AIR FILTER SERVICE	50-2-109

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

CAB RECIRCULATION AIR FILTER SERVICE	50-2-110
CAB PRESSURIZATION TEST	50-2-111
CAB PRESSURIZER MOTOR REPLACEMENT	50-2-113
VISCOUS FAN DRIVE	50-2-116
ELECTRICAL SCHEMATIC POSTER - EUROPEAN	87389711
ELECTRICAL SYSTEM - HOW IT WORKS AND TROUBLESHOOTING	SECTION 55, CHAPTER 1
SPECIAL TOOLS	55-1-4
FUSES AND RELAY IDENTIFICATION	55-1-5
Cab Fuses/Relay Location	55-1-5
Engine Compartment Fuse/Relay Identification (Power Distribution Box)	55-1-5
Fuse Identification	55-1-6
Relays	55-1-7
INSTRUMENTATION AND CONTROLS	55-1-8
CONNECTOR AND COMPONENT LOCATIONS	55-1-12
ELECTRICAL CONNECTORS	55-1-34
ELECTRICAL SYSTEMS SCHEMATICS AND DIAGNOSTICS	55-1-141
Power Distribution System Circuit Operation	55-1-141
Power Distribution Circuit Troubleshooting	55-1-141
Power Distribution Schematic	55-1-141
POWER DISTRIBUTION SYMPTOM CHART	55-1-142
Diagnostic Tests	55-1-143
AUDIO SYSTEM	55-1-145
Audio System Circuit Operation	55-1-145
Audio System Circuit Troubleshooting	55-1-145
Audio System Symptom Chart	55-1-145
Audio System Diagnostic Tests	55-1-147
CHARGING SYSTEM	55-1-151
Charging System Circuit Operation	55-1-151
Charging System Circuit Troubleshooting	55-1-151
Charging System Symptom Chart	55-1-152
Charging System Diagnostic Tests	55-1-153
EXTERIOR LIGHTING SYSTEM	55-1-157
Exterior Lighting System Circuit Operation	55-1-157
Exterior Lighting System Circuit Troubleshooting	55-1-157
Exterior Lighting System Symptom Chart	55-1-158
Exterior Lighting System Diagnostic Tests	55-1-158
INSTRUMENTATION AND WARNING SYSTEM	55-1-163
Instrumentation and Warning System Circuit Troubleshooting	55-1-163
Instrumentation and Warning System Symptom Chart	55-1-163
Instrumentation and Warning System Diagnostic Tests	55-1-164
INTERIOR LIGHTING AND HORN SYSTEM	55-1-167
Interior Lighting and Horn System Circuit Operation	55-1-167
Interior Lighting and Horn System Circuit Troubleshooting	55-1-167
Interior Lighting and Horn System Symptom Chart	55-1-168
Interior Lighting and Horn System Diagnostic Tests	55-1-168
POWER MIRROR SYSTEM	55-1-172
Power Mirror Circuit Operation	55-1-172
Power Mirror Circuit Troubleshooting	55-1-172
Power Mirror System Symptom Chart	55-1-173
Power Mirror System Diagnostic Tests	55-1-175

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

POWER SEAT SYSTEM	55-1-184
Power Seat System Circuit Operation	55-1-184
Power Seat System Circuit Troubleshooting	55-1-184
Power Seat System Symptom Chart	55-1-185
Power Seat System Diagnostic Tests	55-1-186
STARTING SYSTEM	55-1-190
Starting System Circuit Operation	55-1-190
Starter Motor Circuit Troubleshooting	55-1-190
Starting System Symptom Chart	55-1-190
Starting System Diagnostic Tests	55-1-192
WIPER/WASHER SYSTEM	55-1-197
Wiper/Washer System Circuit Operation	55-1-197
Wiper/Washer System Circuit Troubleshooting	55-1-197
Wiper/Washer System Symptom Chart	55-1-198
Wiper/Washer System Diagnostic Tests	55-1-199
INSTRUMENTATION CONTROLLER FAULT CODES	SECTION 55, CHAPTER 2
FAULT CODE INST 1015	55-2-4
FAULT CODE INST 3010	55-2-6
FAULT CODE INST 3020	55-2-7
FAULT CODE INST 3022	55-2-7
FAULT CODE INST 5010	55-2-7
FAULT CODE INST 5011	55-2-8
FAULT CODE INST 10031	55-2-9
FAULT CODE INST 10032	55-2-9
FAULT CODE INST 10033	55-2-9
FAULT CODE INST 10034	55-2-10
FAULT CODE INST 10035	55-2-10
FAULT CODE INST 10036	55-2-10
FAULT CODE INST 10037	55-2-11
FAULT CODE INST 10038	55-2-11
FAULT CODE INST 11011	55-2-12
FAULT CODE INST 12011	55-2-13
FAULT CODE INST 12043	55-2-15
FAULT CODE INST 12051	55-2-17
FAULT CODE INST 12071	55-2-19
FAULT CODE INST 12091	55-2-21
FAULT CODE INST 12111	55-2-23
FAULT CODE INST 13010	55-2-25
FAULT CODE INST 13011	55-2-26
FAULT CODE INST 13012	55-2-27
FAULT CODE INST 13021	55-2-28
FAULT CODE INST 13022	55-2-29
FAULT CODE INST 13040	55-2-30
FAULT CODE INST 13051	55-2-31
FAULT CODE INST 13052	55-2-32
FAULT CODE INST 53001	55-2-33
FAULT CODE INST 53005	55-2-33
FAULT CODE INST 65535	55-2-33

AUX/HITCH/PTO FAULT CODES -

TRACTOR MULTI-FUNCTION (TMF) CONTROLLER	SECTION 55, CHAPTER 3
AUX/HITCH/PTO FAULT CODE 2	55-3-7
AUX/HITCH/PTO FAULT CODE 4	55-3-8
AUX/HITCH/PTO FAULT CODE 5	55-3-9
AUX/HITCH/PTO FAULT CODE 7	55-3-10
AUX/HITCH/PTO FAULT CODE 11	55-3-11
AUX/HITCH/PTO FAULT CODE 12	55-3-13
AUX/HITCH/PTO FAULT CODE 14	55-3-14
AUX/HITCH/PTO FAULT CODE 15	55-3-15
AUX/HITCH/PTO FAULT CODE 17	55-3-16
AUX/HITCH/PTO FAULT CODE 18	55-3-17
AUX/HITCH/PTO FAULT CODE 19	55-3-18
AUX/HITCH/PTO FAULT CODE 21	55-3-18
AUX/HITCH/PTO FAULT CODE 22	55-3-19
AUX/HITCH/PTO FAULT CODE 23	55-3-20
AUX/HITCH/PTO FAULT CODE 24	55-3-21
AUX/HITCH/PTO FAULT CODE 25	55-3-22
AUX/HITCH/PTO FAULT CODE 26	55-3-23
AUX/HITCH/PTO FAULT CODE 28	55-3-24
AUX/HITCH/PTO FAULT CODE 29	55-3-24
AUX/HITCH/PTO FAULT CODE 30	55-3-25
AUX/HITCH/PTO FAULT CODE 31	55-3-26
AUX/HITCH/PTO FAULT CODE 32	55-3-28
AUX/HITCH/PTO FAULT CODE 33	55-3-29
AUX/HITCH/PTO FAULT CODE 34	55-3-29
AUX/HITCH/PTO FAULT CODE 35	55-3-30
AUX/HITCH/PTO FAULT CODE 37	55-3-31
AUX/HITCH/PTO FAULT CODE 41	55-3-31
AUX/HITCH/PTO FAULT CODE 42	55-3-32
AUX/HITCH/PTO FAULT CODE 43	55-3-32
AUX/HITCH/PTO FAULT CODE 44	55-3-32
AUX/HITCH/PTO FAULT CODE 45	55-3-32
AUX/HITCH/PTO FAULT CODE 47	55-3-33
AUX/HITCH/PTO FAULT CODE 48	55-3-33
AUX/HITCH/PTO FAULT CODE 50	55-3-34
AUX/HITCH/PTO FAULT CODE 51	55-3-34
AUX/HITCH/PTO FAULT CODE 52	55-3-35
AUX/HITCH/PTO FAULT CODE 53	55-3-35
AUX/HITCH/PTO FAULT CODE 54	55-3-36
AUX/HITCH/PTO FAULT CODE 55	55-3-37
AUX/HITCH/PTO FAULT CODE 56	55-3-38
AUX/HITCH/PTO FAULT CODE 57	55-3-39
AUX/HITCH/PTO FAULT CODE 58	55-3-40
AUX/HITCH/PTO FAULT CODE 59	55-3-41
AUX/HITCH/PTO FAULT CODE 60	55-3-41
AUX/HITCH/PTO FAULT CODE 61	55-3-42
AUX/HITCH/PTO FAULT CODE 62	55-3-42
AUX/HITCH/PTO FAULT CODE 63	55-3-42
AUX/HITCH/PTO FAULT CODE 64	55-3-43
AUX/HITCH/PTO FAULT CODE 65	55-3-43
AUX/HITCH/PTO FAULT CODE 66	55-3-44
AUX/HITCH/PTO FAULT CODE 80	55-3-44
AUX/HITCH/PTO FAULT CODE 81	55-3-45
AUX/HITCH/PTO FAULT CODE 82	55-3-46
AUX/HITCH/PTO FAULT CODE 83	55-3-47
AUX/HITCH/PTO FAULT CODE 86	55-3-48

T8010/T8020/T8030/T8040 MASTER TABLE OF CONTENTS

AUX/HITCH/PTO FAULT CODE 87	55-3-49
AUX/HITCH/PTO FAULT CODE 88	55-3-50
AUX/HITCH/PTO FAULT CODE 89	55-3-50
AUX/HITCH/PTO FAULT CODE 90	55-3-51
AUX/HITCH/PTO FAULT CODE 92	55-3-51
AUX/HITCH/PTO FAULT CODE 93	55-3-52
AUX/HITCH/PTO FAULT CODE 94	55-3-52
AUX/HITCH/PTO FAULT CODE 98	55-3-53
AUX/HITCH/PTO FAULT CODE 99	55-3-53
AUX/HITCH/PTO FAULT CODE 106	55-3-54
AUX/HITCH/PTO FAULT CODE 107	55-3-54
AUX/HITCH/PTO FAULT CODE 108	55-3-55
AUX/HITCH/PTO FAULT CODE 109	55-3-55
AUX/HITCH/PTO FAULT CODE 110	55-3-56
AUX/HITCH/PTO FAULT CODE 111	55-3-56
AUX/HITCH/PTO FAULT CODE 112	55-3-57
AUX/HITCH/PTO FAULT CODE 113	55-3-58
AUX/HITCH/PTO FAULT CODE 114	55-3-59
AUX/HITCH/PTO FAULT CODE 115	55-3-60
AUX/HITCH/PTO FAULT CODE 116	55-3-61
AUX/HITCH/PTO FAULT CODE 120	55-3-62
AUX/HITCH/PTO FAULT CODE 123	55-3-62
AUX/HITCH/PTO FAULT CODE 124	55-3-63
AUX/HITCH/PTO FAULT CODE 125	55-3-64
AUX/HITCH/PTO FAULT CODE 126	55-3-65
AUX/HITCH/PTO FAULT CODE 127	55-3-66
AUX/HITCH/PTO FAULT CODE 128	55-3-67
AUX/HITCH/PTO FAULT CODE 129	55-3-68
AUX/HITCH/PTO FAULT CODE 130	55-3-69
AUX/HITCH/PTO FAULT CODE 131	55-3-70
AUX/HITCH/PTO FAULT CODE 132	55-3-71
AUX/HITCH/PTO FAULT CODE 133	55-3-72
AUX/HITCH/PTO FAULT CODE 134	55-3-73
AUX/HITCH/PTO FAULT CODE 135	55-3-74
AUX/HITCH/PTO FAULT CODE 136	55-3-75
AUX/HITCH/PTO FAULT CODE 137	55-3-76
AUX/HITCH/PTO FAULT CODE 138	55-3-77
AUX/HITCH/PTO FAULT CODE 139	55-3-78
AUX/HITCH/PTO FAULT CODE 140	55-3-79
AUX/HITCH/PTO FAULT CODE 141	55-3-80
AUX/HITCH/PTO FAULT CODE 142	55-3-81
AUX/HITCH/PTO FAULT CODE 147	55-3-82
AUX/HITCH/PTO FAULT CODE 148	55-3-82
AUX/HITCH/PTO FAULT CODE 149	55-3-83
AUX/HITCH/PTO FAULT CODE 150	55-3-83
AUX/HITCH/PTO FAULT CODE 151	55-3-84
AUX/HITCH/PTO FAULT CODE 152	55-3-86
AUX/HITCH/PTO FAULT CODE 153	55-3-86
AUX/HITCH/PTO FAULT CODE 154	55-3-87
AUX/HITCH/PTO FAULT CODE 155	55-3-87
AUX/HITCH/PTO FAULT CODE 156	55-3-88
AUX/HITCH/PTO FAULT CODE 157	55-3-88
AUX/HITCH/PTO FAULT CODE 158	55-3-89
AUX/HITCH/PTO FAULT CODE 159	55-3-89
AUX/HITCH/PTO FAULT CODE 160	55-3-90
AUX/HITCH/PTO FAULT CODE 161	55-3-91
AUX/HITCH/PTO FAULT CODE 162	55-3-92

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com