

TJ AND T9000 MASTER TABLE OF CONTENTS

THIS MANUAL, 84257310, COVERS THE FOLLOWING TRACTORS:

TJ 280, 330, 380, 430, 480, and 530 Series

T9010, 9020, 9030, 9040, 9050, and 9060 Series

T9020, 9030, 9040, 9050, and 9060 Series After S/N Z7F204001

NOTE: *Engine repair information is not contained within this tractor Service Manual. For engine repair, refer to appropriate engine service manual as follows:*

87515682 - *For 8.3 & 9.0L 6 Cylinder, 24 Valve CNH Engine with High Pressure Common Rail Fuel System.*

87523643 - *For 12.9L 6 Cylinder, Engine.*

87737594 - *For 12.9L 6 Cylinder, Turbo Compound Engine.*

STANDARD TORQUE SPECIFICATION.....	SECTION 00, CHAPTER 1 (Book 1 - 87525642)
SAFETY.....	SECTION 00, CHAPTER 2 (Book 1 - 87525642)
LUBRICATION AND MAINTENANCE.....	SECTION 00, CHAPTER 3 (Book 1 - 87525642)
ENGINE LUBRICATION	00-3-3
Engine Oil Selection	00-3-3
Synthetic Lubricants	00-3-3
Engine Oil Viscosity/Temperature Usage Recommendation	00-3-3
Engine Coolant Solutions	00-3-4
LUBRICANTS AND CAPACITIES	00-3-5
LUBRICATION AND MAINTENANCE CHART	00-3-6
SPECIFICATIONS.....	SECTION 00, CHAPTER 4 (Book 1 - 87525642)
DIESEL ENGINE	00-4-3
ENGINE LUBRICATION SYSTEM	00-4-3
FUEL SYSTEM	00-4-3
AIR INTAKE SYSTEM	00-4-3
TRANSMISSION - POWER SHIFT	00-4-4
TRANSMISSION - MANUAL SHIFT	00-4-4
BRAKES	00-4-4
AXLE DIFFERENTIAL AAND FINAL DRIVES	00-4-4
POWER TAKEOFF (IF EQUIPPED)	00-4-4
HYDRAULIC SYSTEM	00-4-5
MEGAFLOW HYDRAULICS (IF EQUIPPED)	00-4-5
HITCH SYSTEM (IF EQUIPPED)	00-4-5
DRAWBAR	00-4-5
TRACTOR WEIGHTS	00-4-6
Approximate Base Shipping Weights	00-4-6
Approximate Component Weights	00-4-6
MAXIMUM TRACTOR OPERATING WEIGHT	00-4-6
ENGINE REMOVAL AND INSTALLATION -	
TJ380/430 TRACTORS.....	SECTION 10, CHAPTER 1 (Book 1 - 87525642)
SPECIAL TORQUE VALUES	10-1-3
RECOMMENDED TOOLS	10-1-3
ENGINE REMOVAL	10-1-4
ENGINE INSTALLATION	10-1-13

TJ AND T9000 MASTER TABLE OF CONTENTS

ENGINE REMOVAL AND INSTALLATION -

TJ280/330 TRACTORS.....	SECTION 10, CHAPTER 2 (Book 1 - 87525642)
SPECIAL TORQUE VALUES	10-2-2
SPECIAL TOOLS	10-2-2
ENGINE REMOVAL	10-2-3
ENGINE INSTALLATION	10-2-10

ENGINE REMOVAL AND INSTALLATION -

TJ480/530 TRACTORS.....	SECTION 10, CHAPTER 3 (Book 1 - 87525642)
SPECIAL TORQUE VALUES	10-3-2
RECOMMENDED TOOLS	10-3-2
ENGINE REMOVAL	10-3-3
ENGINE INSTALLATION	10-3-13

AIR INDUCTION SYSTEM - TJ380/430 TRACTORS.....

SECTION 10, CHAPTER 4 (Book 1 - 87525642)	
SPECIAL TORQUE VALUES	10-4-2
AIR INDUCTION SYSTEM	10-4-3
AIR INDUCTION SYSTEM DESCRIPTION	10-4-4
AIR INDUCTION SYSTEM	10-4-4
AIR FILTER ELEMENTS	10-4-4
PRIMARY AND SECONDARY FILTER ELEMENT REMOVAL	10-4-5
PRIMARY FILTER ELEMENT SERVICE	10-4-7
RESTRICTION INDICATOR SWITCH REMOVAL AND TEST	10-4-8
AIR CLEANER HOUSING REMOVAL	10-4-9
ASPIRATOR STRATA TUBE CLEANING	10-4-10
ASPIRATOR SAFETY CHECK VALVE REMOVAL AND TEST	10-4-11
ASPIRATOR SAFETY VALVE INSTALLATION	10-4-11
AIR CLEANER HOUSING INSTALLATION	10-4-12
RESTRICTION INDICATOR SWITCH INSTALLATION	10-4-13
SECONDARY AND PRIMARY FILTER ELEMENT INSTALLATION	10-4-13

AIR INDUCTION SYSTEM - TJ280/330 TRACTORS.....

SECTION 10, CHAPTER 5 (Book 1 - 87525642)	
SPECIAL TORQUE VALUES	10-5-3
AIR INDUCTION SYSTEM	10-5-4
AIR FILTER ELEMENTS	10-5-4
ENGINE AIR INDUCTION SYSTEM	10-5-5
Primary And Secondary Filter Element Removal	10-5-5
PRIMARY FILTER ELEMENT SERVICE	10-5-7
RESTRICTION INDICATOR SWITCH REMOVAL AND TEST	10-5-7
AIR CLEANER HOUSING REMOVAL	10-5-8
Aspirator Strata Tube Cleaning	10-5-10
ASPIRATOR SAFETY CHECK VALVE REMOVAL AND TEST	10-5-12
ASPIRATOR SAFETY CHECK VALVE INSTALLATION	10-5-13
AIR CLEANER HOUSING INSTALLATION	10-5-14
RESTRICTION INDICATOR SWITCH INSTALLATION	10-5-15
SECONDARY AND PRIMARY FILTER ELEMENT INSTALLATION	10-5-16

AIR INDUCTION SYSTEM - TJ480/530 TRACTORS.....

SECTION 10, CHAPTER 6 (Book 1 - 87525642)	
SPECIAL TORQUE VALUES	10-6-2
AIR INDUCTION SYSTEM	10-6-3
AIR FILTER ELEMENTS	10-6-4
Primary And Secondary Filter Element Removal	10-6-5
PRIMARY FILTER ELEMENT SERVICE	10-6-7
RESTRICTION INDICATOR SWITCH REMOVAL AND TEST	10-6-8
AIR CLEANER HOUSING REMOVAL	10-6-9
ASPIRATOR STRATA TUBE CLEANING	10-6-10
ASPIRATOR SAFETY CHECK VALVE REMOVAL AND TEST	10-6-11

TJ AND T9000 MASTER TABLE OF CONTENTS

ASPIRATOR SAFETY VALVE INSTALLATION	10-6-11
AIR CLEANER HOUSING INSTALLATION	10-6-12
RESTRICTION INDICATOR SWITCH INSTALLATION	10-6-13
SECONDARY AND PRIMARY FILTER ELEMENT INSTALLATION	10-6-13
VISCOUS FAN DRIVE - TJ280/330/380/430,	
HYD FAN DRIVE TEST - TJ480/530	SECTION 10, CHAPTER 7 (Book 1 - 87525642)
VISCOUS FAN DRIVE TEST - TJ280, TJ330, TJ380, TJ430	10-7-3
HYDRAULIC FAN DRIVE TEST - TJ480, TJ530	10-7-5
RADIATOR, COOLERS AND CONDENSER	
REMOVE/INSTALL - TJ280/330	SECTION 10, CHAPTER 8 (Book 1 - 87525642)
SPECIAL TORQUE VALUES	10-8-2
GENERAL INFORMATION	10-8-3
FUEL COOLER REMOVAL	10-8-3
FUEL COOLER INSTALLATION	10-8-4
ENGINE AIR TO AIR COOLER REMOVAL	10-8-6
AIR TO AIR COOLER INSTALLATION	10-8-9
A/C CONDENSER REMOVAL	10-8-12
A/C CONDENSER INSTALLATION	10-8-13
HYDRAULIC/TRANSMISSION OIL COOLER REMOVAL	10-8-15
HYDRAULIC/TRANSMISSION OIL COOLER INSTALLATION	10-8-17
RADIATOR AND COOLER ASSEMBLY REMOVAL	10-8-20
RADIATOR AND COOLER ASSEMBLY INSTALLATION	10-8-27
RADIATOR, COOLERS AND CONDENSER	
REMOVE/INSTALL - TJ480/530	SECTION 10, CHAPTER 9 (Book 1 - 87525642)
SPECIAL TORQUE VALUES	10-9-3
GENERAL INFORMATION	10-9-3
FUEL COOLER REMOVAL	10-9-4
FUEL COOLER INSTALLATION	10-9-4
ENGINE AIR TO AIR COOLER REMOVAL	10-9-5
ENGINE AIR TO AIR COOLER INSTALLATION	10-9-7
A/C CONDENSER AND HYDRAULIC FAN COOLER REMOVAL	10-9-9
A/C CONDENSER AND HYDRAULIC FAN COOLER INSTALLATION	10-9-10
RADIATOR AND COOLER ASSEMBLY REMOVAL	10-9-12
RADIATOR/COOLER DISASSEMBLY	10-9-19
RADIATOR, COOLERS AND CONDENSER	
REMOVE/INSTALL - TJ380/430	SECTION 10, CHAPTER 10 (Book 1 - 87525642)
SPECIAL TORQUE VALUES	10-10-2
GENERAL INFORMATION	10-10-3
ENGINE AIR TO AIR COOLER REMOVAL	10-10-4
AIR TO AIR COOLER INSTALLATION	10-10-6
A/C CONDENSER REMOVAL	10-10-7
A/C CONDENSER INSTALLATION	10-10-8
HYDRAULIC/TRANSMISSION OIL COOLER REMOVAL	10-10-10
HYDRAULIC/TRANSMISSION OIL COOLER INSTALLATION	10-10-12
RADIATOR AND COOLER ASSEMBLY REMOVAL	10-10-15

TJ AND T9000 MASTER TABLE OF CONTENTS

AIR INDUCTION SYSTEM, T9030, 9040 and 9050 Tractors, S/N Z7F204001 and After.....	SECTION 10, CHAPTER 11 (Book 1A - 87740915)
SPECIAL TORQUE VALUES	10-11-2
AIR INDUCTION SYSTEM	10-11-3
AIR INDUCTION SYSTEM DESCRIPTION	10-11-4
AIR INDUCTION SYSTEM	10-11-4
AIR FILTER ELEMENTS	10-11-4
PRIMARY AND SECONDARY FILTER ELEMENT REMOVAL	10-11-5
PRIMARY FILTER ELEMENT SERVICE	10-11-7
RESTRICTION INDICATOR SWITCH REMOVAL AND TEST	10-11-8
AIR CLEANER HOUSING REMOVAL	10-11-9
ASPIRATOR STRATA TUBE CLEANING	10-11-11
ASPIRATOR SAFETY CHECK VALVE REMOVAL AND TEST	10-11-12
ASPIRATOR SAFETY VALVE INSTALLATION	10-11-12
AIR CLEANER HOUSING INSTALLATION	10-11-13
RESTRICTION INDICATOR SWITCH INSTALLATION	10-11-14
SECONDARY AND PRIMARY FILTER ELEMENT INSTALLATION	10-11-15
ENGINE REMOVAL AND INSTALLATION, T9050 TRACTOR, S/N Z7F204001 AND AFTER	SECTION 10, CHAPTER 12 (Book 1A - 87740915)
SPECIAL TORQUE VALUES	10-12-3
RECOMMENDED TOOLS	10-12-3
ENGINE REMOVAL	10-12-4
ENGINE INSTALLATION	10-12-15
RADIATOR, COOLERS AND CONDENSER REMOVE AND INSTALL, T9050 TRACTOR	SECTION 10, CHAPTER 13 (Book 1A - 87740915)
SPECIAL TORQUE VALUES	10-13-3
ENGINE AIR TO AIR COOLER REMOVAL	10-13-4
ENGINE AIR TO AIR COOLER INSTALLATION	10-13-6
A/C CONDENSER AND HYDRAULIC FAN COOLER REMOVAL	10-13-8
A/C CONDENSER AND HYDRAULIC FAN COOLER INSTALLATION	10-13-9
RADIATOR AND COOLER ASSEMBLY REMOVAL	10-13-11
RADIATOR/COOLER DISASSEMBLY	10-13-18
POWERSHIFT TRANSMISSION REMOVE/INSTALL - TJ280/330.....	SECTION 21, CHAPTER 1 (Book 2 - 87525640)
SPECIAL TORQUE VALUES	21-1-2
SPECIAL TOOLS	21-1-2
TRANSMISSION REMOVAL	21-1-3
TRANSMISSION INSTALLATION	21-1-9
POWERSHIFT TRANSMISSION REMOVE/INSTALL - TJ380/430/480/530.....	SECTION 21, CHAPTER 2 (Book 2 - 87525640)
SPECIAL TORQUE VALUES	21-2-3
SPECIAL TOOLS	21-2-3
TRANSMISSION REMOVAL	21-2-4
TRANSMISSION INSTALLATION	21-2-10
ENGINE/TRANSMISSION DRIVE COUPLER REMOVE/INSTALL - TJ280/330	SECTION 21, CHAPTER 3 (Book 2 - 87525640)
SPECIAL TORQUE VALUES	21-3-2
DRIVE COUPLER REMOVAL	21-3-3
DRIVE COUPLER INSTALLATION	21-3-5

TJ AND T9000 MASTER TABLE OF CONTENTS

ENGINE/TRANSMISSION DRIVE COUPLER REMOVE/INSTALL - TJ480/530	SECTION 21, CHAPTER 4 (Book 2 - 87525640)
SPECIAL TORQUE VALUES	21-4-2
DRIVE COUPLER REMOVAL	21-4-3
DRIVE COUPLER INSTALLATION	21-4-6
16 SPEED POWERSHIFT TRANSMISSION REPAIR.....	SECTION 21, CHAPTER 5 (Book 2 - 87525640)
SPECIFICATIONS	21-5-3
SPECIAL TORQUE VALUES	21-5-3
SPECIAL TOOLS	21-5-4
TRANSMISSION DISASSEMBLY	21-5-7
INPUT (FIRST) SHAFT DISASSEMBLY	21-5-18
PUMP (SECOND) SHAFT DISASSEMBLY	21-5-27
MASTER CLUTCH (FOURTH) SHAFT DISASSEMBLY	21-5-33
OUTPUT (FIFTH) SHAFT DISASSEMBLY	21-5-41
COUNTER (THIRD) SHAFT DISASSEMBLY	21-5-48
CLEANING AND INSPECTION	21-5-50
CLUTCH PACK CLEARANCE AND CLUTCH PACK TRAVEL TEST	21-5-52
1F, 1R, 2F AND 2R CLUTCH GEAR BEARING PRELOAD TEST	21-5-55
INPUT (FIRST) SHAFT ASSEMBLY	21-5-58
PUMP (SECOND) SHAFT ASSEMBLY	21-5-72
MASTER CLUTCH (FOURTH) SHAFT ASSEMBLY	21-5-82
OUTPUT (FIFTH) SHAFT ASSEMBLY	21-5-96
COUNTER (THIRD) SHAFT BEARING ASSEMBLY	21-5-107
TRANSMISSION ASSEMBLY	21-5-110
16 SPEED POWERSHIFT TRANSMISSION - HOW IT WORKS ..	SECTION 21, CHAPTER 6 (Book 2 - 87525640)
GENERAL DESCRIPTION OF OPERATION	21-6-3
Regulator Valve	21-6-4
Lube Regulator Valve	21-6-5
Master Clutch Lube Valve	21-6-5
Range Selector Valve	21-6-6
MASTER CLUTCH CONTROL VALVE	21-6-7
Transmission Power Flow	21-6-8
Default Settings	21-6-8
Helical-cut Gears	21-6-8
Shifting The Powershift Transmission	21-6-9
REAR DRIVE LINE AND CARRIER BEARING.....	SECTION 21, CHAPTER 7 (Book 2 - 87525640)
SPECIAL TORQUE VALUES	21-7-2
REAR DRIVE LINE AND CARRIER BEARING REMOVAL	21-7-3
REAR DRIVE LINE AND CARRIER BEARING INSTALLATION	21-7-5
CHARGE PUMP REPAIR FOR 16-SPEED POWERSHIFT TRANSMISSION	SECTION 21, CHAPTER 8 (Book 2 - 87525640)
SPECIFICATIONS	21-8-3
SPECIAL TORQUE VALUES	21-8-3
PUMP DISASSEMBLY	21-8-4
PUMP ASSEMBLY	21-8-7

TJ AND T9000 MASTER TABLE OF CONTENTS

24 SPEED MANUAL TRANSMISSION REMOVAL

AND INSTALLATION	SECTION 21, CHAPTER 9 (Book 2 - 87525640)
SPECIAL TOOLS	21-9-3
SPECIAL TORQUE VALUES	21-9-3
24 SPEED TRANSMISSION REMOVAL	21-9-4
24 SPEED TRANSMISSION INSTALLATION	21-9-13
MASTER CLUTCH ADJUSTMENT	21-9-23
SHIFT LEVER LINKAGE ADJUSTMENT	21-9-24

ENGINE/TRANSMISSION DRIVE COUPLER

REMOVE/INSTALL - TJ380/430	SECTION 21, CHAPTER 10 (Book 2 - 87525640)
SPECIAL TORQUE VALUES	21-10-2
DRIVE COUPLER REMOVAL	21-10-3
DRIVE COUPLER INSTALLATION	21-10-6

24 SPEED MANUAL TRANS HOW IT WORKS/

PRESSURE TESTING/REPAIR.....	SECTION 21, CHAPTER 11 (Book 2 - 87525640)
SPECIFICATIONS	21-11-4
SPECIAL TORQUE VALUES	21-11-5
SPECIAL TOOLS	21-11-6
PRESSURE TESTING SPECIFICATIONS	21-11-8
GENERAL SETUP PROCEDURE	21-11-9
TRANSMISSION PRESSURE TEST PORT LOCATIONS	21-11-11
TESTING THE LUBRICATION PRESSURE	21-11-13
TRANSMISSION SERIAL NUMBER IDENTIFICATION	21-11-14
TRANSMISSION LUBRICATION CIRCUIT	21-11-15
TRANSMISSION OIL FLOW CHART	21-11-16
DESCRIPTION OF OPERATION	21-11-20
TRANSMISSION POWER FLOW	21-11-24
STARTING IN A FORWARD SPEED	21-11-26
STARTING IN A REVERSE SPEED	21-11-27
TROUBLESHOOTING GUIDE	21-11-35
NEUTRAL SAFETY SWITCH ADJUSTMENT	21-11-40
TRANSMISSION SPEED SENSOR ADJUSTMENT	21-11-40
TRANSMISSION DISASSEMBLY	21-11-41
SHIFT LEVER SEAL REPLACEMENT	21-11-53
INPUT SHAFT DISASSEMBLY	21-11-54
INPUT SHAFT ASSEMBLY	21-11-59
PUMP SHAFT DISASSEMBLY	21-11-72
PUMP SHAFT ASSEMBLY	21-11-75
SPEED SHAFT DISASSEMBLY	21-11-81
SPEED SHAFT ASSEMBLY	21-11-84
CENTER SHAFT DISASSEMBLY	21-11-88
CENTER SHAFT ASSEMBLY	21-11-90
RANGE SHAFT DISASSEMBLY	21-11-94
RANGE SHAFT ASSEMBLY	21-11-967
TRANSMISSION ASSEMBLY	21-11-100
HIGH-LOW CLUTCH CONTROL ASSEMBLY	21-11-118
HIGH-LOW CONTROL VALVE DISASSEMBLY	21-11-119
REGULATOR VALVE ASSEMBLY	21-11-121
REGULATOR VALVE DISASSEMBLY AND ASSEMBLY	21-11-122
MASTER CLUTCH CONTROL VALVE ASSEMBLY	21-11-123
MASTER CLUTCH CONTROL VALVE DISASSEMBLY AND ASSEMBLY	21-11-124
LOCKOUT VALVE ASSEMBLY	21-11-126
LOCKOUT VALVE DISASSEMBLY AND ASSEMBLY	21-11-127
MASTER CLUTCH CABLE ADJUSTMENT	21-11-128

TJ AND T9000 MASTER TABLE OF CONTENTS

16-SPEED POWERSHIFT TRANSMISSION - PRESSURE TESTING AND TROUBLESHOOTING	SECTION 21, CHAPTER 12 (Book 2A - 87740916)
RECOMMENDED TOOLS	21-12-3
SPECIAL TORQUE VALUES	21-12-4
TRANSMISSION TROUBLESHOOTING	21-12-5
Important General Information	21-12-5
Fault Code Retrieval	21-12-5
Fault Codes Recorded	21-12-6
No Fault Codes Recorded	21-12-7
Solenoid Swap Test	21-12-8
CLUTCH TEST PORT IDENTIFICATION	21-12-9
Transmission Clutch Pressure Test	21-12-10
TEST PORT IDENTIFICATION	21-12-15
PRESSURE TEST SPECIFICATIONS AND WORKSHEETS	21-12-16
LUBE TEST PORT IDENTIFICATION	21-12-19
LUBRICATION CIRCUIT PRESSURE TEST	21-12-20
MASTER CLUTCH LUBE TEST	21-12-22
PTO CLUTCH PRESSURE TEST	21-12-23
PTO AND TRANSMISSION PRESSURE TEST REASSEMBLY	21-12-25
16 SPEED POWERSHIFT TRANSMISSION, RANGE SELECTOR, PRESSURE REGULATOR AND MASTER CLUTCH VALVE REPAIR	SECTION 21, CHAPTER 13 (Book 2A - 87740916)
SPECIAL TORQUE VALUES	21-13-3
REGULATOR VALVE DISASSEMBLY	21-13-4
CLEANING, INSPECTION AND SOLENOID VALVE TEST	21-13-12
REGULATOR VALVE ASSEMBLY	21-13-15
RANGE SELECTOR VALVE DYNAMIC TEST	21-13-23
RANGE SELECTOR PWM VALVE TEST	21-13-26
RANGE SELECTOR VALVE DISASSEMBLY	21-13-29
RANGE SELECTOR VALVE ASSEMBLY	21-13-32
PTO SYSTEM HOW IT WORKS AND TROUBLESHOOTING	SECTION 31, CHAPTER 1 (Book 3 - 87525644)
POWER TAKE OFF, General Information	31-1-3
PTO LUBRICATION, General Information	31-1-4
PTO CONTROL	
PTO Control Switch	31-1-5
To Operate the PTO	31-1-5
To Stop the PTO	31-1-5
PTO Electrical Circuit	31-1-6
PTO Switch in the OFF Position	31-1-7
PTO Switch in the ON Position	31-1-8
Diode Suppressed PTO Coil	31-1-9
Neutral Start Feature	31-1-9
PTO VALVE	
Operational Modes	31-1-10
PTO Control Valve Operation	31-1-12
PTO Clutch Disengaged	31-1-13
PTO Modulated Engagement	31-1-14
PTO Fully Engaged	31-1-15
PTO Clutch Drive	31-1-16
PTO Clutch	31-1-17
PTO Brake	31-1-18
PTO Drop Box and Clutch	31-1-19
Engine RPM Speed Circuit	31-1-19

TJ AND T9000 MASTER TABLE OF CONTENTS

PTO SYSTEM TROUBLESHOOTING	
PTO Will Not Engage	31-1-20
PTO Will Not Disengage	31-1-21
PTO CLUTCH REMOVAL AND INSTALLATION -	
TJ380/430/480/530.....	SECTION 31, CHAPTER 2 (Book 3 - 87525644)
SPECIAL TORQUE VALUES	31-2-2
PTO CLUTCH ASSEMBLY REMOVAL	31-2-3
PTO CLUTCH ASSEMBLY INSTALLATION	31-2-9
PTO DRIVE UNIT (CLUTCH) REPAIR	
SECTION 31, CHAPTER 3 (Book 3 - 87525644)	
SPECIAL TORQUE VALUES	31-3-3
SPECIFICATIONS	31-3-3
PTO DRIVE UNIT DISASSEMBLY	31-3-4
PTO DRIVE UNIT ASSEMBLY (EXPLODED VIEW)	31-3-13
PTO CLUTCH AND BRAKE ASSEMBLY (EXPLODED VIEW)	31-3-14
PTO DRIVE UNIT ASSEMBLY	31-3-15
PTO CLUTCH REMOVAL AND INSTALLATION - TJ280/330.....	
SECTION 31, CHAPTER 4 (Book 3 - 87525644)	
SPECIAL TORQUE VALUES	31-4-2
PTO CLUTCH REMOVAL	31-4-3
PTO CLUTCH INSTALLATION	31-4-5
PTO TRANSFER CASE REMOVAL AND INSTALLATION	
SECTION 31, CHAPTER 5 (Book 3 - 87525644)	
SPECIAL TORQUE VALUES	31-5-2
SPECIAL TOOLS	31-5-2
TRANSFER CASE REMOVAL	31-5-3
TRANSFER CASE INSTALLATION	31-5-10
PTO DROPBOX REPAIR.....	
SECTION 31, CHAPTER 6 (Book 3 - 87525644)	
SPECIFICATIONS	31-6-2
SPECIAL TORQUE VALUES	31-6-2
PTO DROPBOX DISASSEMBLY	31-6-3
EXPLODED VIEW PTO DROPBOX ASSEMBLY	31-6-9
PTO DROPBOX ASSEMBLY	31-6-10
PTO DRIVELINE HANGER BEARING.....	
SECTION 31, CHAPTER (Book 3 - 87525644)	
SPECIAL TORQUE VALUES	31-7-2
PTO DRIVELINE HANGER BEARING REMOVAL	31-7-3
HANGER BEARING ASSEMBLY REPAIR (Exploded View)	31-7-5
HANGER BEARING DISASSEMBLY	31-7-6
HANGER BEARING ASSEMBLY	31-7-7
PTO DRIVELINE HANGER BEARING INSTALLATION	31-7-10
PTO CLUTCH VALVE.....	
SECTION 31, CHAPTER 8 (Book 3 - 87525644)	
SPECIAL TORQUE VALUES	31-8-2
PTO VALVE REMOVAL	31-8-3
PTO VALVE DISASSEMBLY	31-8-4
CLEANING AND INSPECTION	31-8-7
PTO VALVE SOLENOID TESTS	31-8-8
PTO VALVE SECTIONAL VIEW	31-8-9
PTO VALVE ASSEMBLY	31-8-10
PTO VALVE INSTALLATION	31-8-13

TJ AND T9000 MASTER TABLE OF CONTENTS

POWER BRAKES SYSTEM - HOW IT WORKS AND TROUBLESHOOTING	SECTION 33, CHAPTER 1 (Book 3 - 87525644)
BRAKE SYSTEM	33-1-3
General Information	33-1-3
General Description	33-1-4
Axle Pump	33-1-4
Axle Cooling Filter	33-1-5
Axle Lube Solenoid Valve	33-1-5
Pressure/Lube Control Valve	33-1-6
Brake Lubrication and Jet Pump	33-1-6
Pressure/Lube Control Valve	33-1-7
Regulated Pressure Spool	33-1-8
Park Brake/Tow Valve	33-1-10
Park Brake Applied	33-1-11
Park Brake Released	33-1-11
Tow Valve	33-1-11
BRAKE CIRCUIT COMPONENTS	33-1-12
Brake Pedal	33-1-12
Brake Control Valve	33-1-13
Brake Clutch Pack	33-1-13
Axle Brake Cylinders	33-1-13
HYDRAULIC BRAKE CONTROL	33-1-14
General Description	33-1-14
Brake Valve	33-1-14
Service Brake Circuit	33-1-15
Emergency Braking	33-1-18
BRAKE SYSTEM TROUBLESHOOTING	33-1-19
SERVICE BRAKE VALVE	SECTION 33, CHAPTER 2 (Book 3 - 87525644)
SPECIAL TORQUE VALUES	33-2-2
RECOMMENDED TOOLS	33-2-2
SERVICE BRAKE VALVE REMOVAL	33-2-3
SERVICE BRAKE VALVE DISASSEMBLY	33-2-6
INSPECTION AND CLEANING	33-2-8
BRAKE MAL-FUNCTION SWITCH TEST	33-2-8
SERVICE BRAKE VALVE EXPLODED VIEW	33-2-9
SERVICE BRAKE VALVE SECTIONAL VIEW	33-2-10
SERVICE BRAKE VALVE ASSEMBLY	33-2-11
SERVICE BRAKE VALVE INSTALLATION	33-2-13
2006 AND 2007 MODEL YEAR HYDRAULIC SCHEMATIC	POSTER 87522497
2008 MODEL YEAR HYDRAULIC SCHEMATIC	POSTER 87722947
HOW TO READ SYMBOLS IN A HYDRAULIC SCHEMATIC	SECTION 35, CHAPTER 1 (Book 4 - 87618159)
Introduction	35-1-3
Circuit Diagrams	35-1-3
Symbol Systems	35-1-3
Using Schematic Symbols	35-1-3
Reservoirs	35-1-3
Lines, Tubes and Hoses	35-1-4
Crossing or Joining Lines	35-1-5
Pump Symbols	35-1-5
Hydraulic Motor Symbols	35-1-6
Cylinder Symbols	35-1-6

TJ AND T9000 MASTER TABLE OF CONTENTS

Pressure Control Symbols	35-1-7
Normally Closed	35-1-7
Normally Open	35-1-7
Relief Valve	35-1-7
Pressure Reducing Valve	35-1-7
Sequence Valve	35-1-8
Directional Control Symbols	35-1-8
Simplified Symbols	35-1-8
One Way Valve	35-1-8
By Pass Valve	35-1-8
Composite Symbols	35-1-8
One Way Valves	35-1-8
Two Position Valves	35-1-8
Three Position Valves	35-1-9
Actuating Controls	35-1-9
Flow Control Symbols	35-1-9
Restrictors	35-1-9
Accessories	35-1-10
SIMPLE SCHEMATIC	35-1-12
COMMON SYMBOLS	35-1-14
Lines and Line Functions	35-1-14
Mechanical Devices	35-1-14
Pumps and Motors	35-1-14
Reservoirs	35-1-15
Cylinders	35-1-15
Valves	35-1-15
Valve Actuators	35-1-17
Accessories.....	35-1-17

HYDRAULIC SYSTEM HOW IT WORKS

WITH TROUBLESHOOTING	SECTION 35, CHAPTER 2 (Book 4 - 87618159)
GENERAL INTRODUCTION	35-2-3
SPECIFICATIONS	35-2-5
MODEL NUMBER LOCATION	35-2-7
STANDARD AND HIGH FLOW PFC PISTON PUMPS	35-2-8
Principle of Control	35-2-8
Engine Start Up	35-2-8
Operating Modes	35-2-8
Low Pressure Standby	35-2-8
Pressure and Flow Delivery and Compensation Principle	35-2-8
Increased Flow Demand	35-2-9
Decreased Flow Demand	35-2-9
High Pressure Standby	35-2-9
Return to Low Pressure Standby	35-2-9
Destroke Valve	35-2-9
Model 480 and 530 Tractor Hydraulic Fan Pump And Motor	35-2-10
PRESSURE/FLOW COMPENSATED PUMP	35-2-12
PFC CHARGE PRESSURE TEST	35-2-14
LOW PRESSURE AND HIGH PRESSURE STANDBY TESTS	35-2-16
PFC PISTON PUMP FLOW TEST AT REMOTE COUPLERS	35-2-17
MEGAFLOW PUMP LOW PRESSURE AND HIGH PRESSURE STANDBY TESTS	35-2-18
MEGAFLOW PFC PISTON PUMP FLOW TEST AT REMOTE COUPLERS	35-2-20
REGULATED PRESSURE TEST	35-2-21
REGULATED PRESSURE ADJUSTMENT PROCEDURE	35-2-22
REGULATED/LUBE PUMP TESTS	35-2-23

TJ AND T9000 MASTER TABLE OF CONTENTS

480 and 530 HYDRAULIC FAN PUMP LOW PRESSURE STANDBY, HIGH PRESSURE AND FLOW TESTS	35-2-25
480 and 530 HYDRAULIC FAN MOTOR TEST	35-2-27
REGULATED PRESSURE / LUBE CONTROL SYSTEM	35-2-28
REGULATOR VALVE	35-2-29
480 and 530 HYDRAULIC FAN CIRCUIT	35-2-30
480 and 530 HYDRAULIC FAN SYSTEM	35-2-31
STEERING PRIORITY VALVE	35-2-32
HYDRAULIC FAN/MOTOR REMOVAL AND FAN MOTOR/PUMP REPAIR - TJ480/530 SECTION 35, CHAPTER 3 (Book 4 - 87618159)	
SPECIAL TORQUE VALUES	35-3-3
HYDRAULIC FAN AND FAN MOTOR REMOVAL	35-3-4
HYDRAULIC FAN AND FAN MOTOR INSTALLATION	35-3-15
HYDRAULIC FAN PUMP REMOVAL	35-3-28
HYDRAULIC FAN PUMP INSTALLATION	35-3-31
HYDRAULIC FAN MOTOR DISASSEMBLY	35-3-35
HYDRAULIC FAN MOTOR ASSEMBLY	35-3-39
COMPENSATOR CONTROL VALVE REMOVAL AND DISASSEMBLY	35-3-42
COMPENSATOR CONTROL VALVE ASSEMBLY AND INSTALLATION	35-3-43
HYDRAULIC FAN PUMP DISASSEMBLY	35-3-44
PUMP CLEANING AND INSPECTION	35-3-51
PFC PISTON PUMP REMOVAL AND INSTALLATION - TJ380/430/480/530 SECTION 35, CHAPTER 4 (Book 4 - 87618159)	
SPECIAL TORQUE VALUES	35-4-2
SPECIAL TOOLS	35-4-2
PISTON PUMP REMOVAL	35-4-3
PISTON PUMP INSTALLATION	35-4-8
START-UP PROCEDURE	35-4-13
GEAR PUMP REMOVAL AND INSTALLATION - TJ380/430/480/530 SECTION 35, CHAPTER 5 (Book 4 - 87618159)	
SPECIAL TORQUE VALUES	35-5-2
SPECIAL TOOLS	35-5-2
GEAR PUMP REMOVAL	35-5-3
GEAR PUMP INSTALLATION	35-5-5
PFC AXIAL PISTON PUMP REPAIR SECTION 35, CHAPTER 6 (Book 4 - 87618159)	
SPECIFICATIONS	35-6-3
SPECIAL TORQUE VALUES	35-6-4
PISTON PUMP DISASSEMBLY	35-6-5
PRESSURE/FLOW COMPENSATOR DISASSEMBLY	35-6-12
PISTON PUMP CLEANING AND INSPECTION	35-6-16
PRESSURE/FLOW COMPENSATOR ASSEMBLY EXPLODED VIEW	35-6-20
PRESSURE/FLOW COMPENSATOR ASSEMBLY	35-6-21
PISTON PUMP ASSEMBLY EXPLODED VIEW	35-6-24
PISTON PUMP ASSEMBLY	35-6-25

TJ AND T9000 MASTER TABLE OF CONTENTS

HITCH SYSTEM - HOW IT WORKS	SECTION 35, CHAPTER 7 (Book 4 - 87618159)
THREE POINT HITCH	35-7-3
ELECTRONIC HITCH CONTROL	35-7-4
Operator Controls and Settings	35-7-5
ELECTRONIC HITCH CONTROL SYSTEM FEATURES	35-7-7
HITCH CONTROL VALVE	35-7-14
General	35-7-14
Raise and Lower Solenoids	35-7-14
Raise and Lower Pilot Spools	35-7-14
Raise Spool	35-7-14
Lower Poppet	35-7-14
Load Check Ball	35-7-14
Manual Raise or Lower Control Pins	35-7-14
Overload Relief Valve	35-7-14
Neutral Function and Troubleshooting	35-7-16
Raise Function and Troubleshooting	35-7-18
Raise Function and Troubleshooting	35-7-19
Lower Function and Troubleshooting	35-7-20
Lower Function and Troubleshooting	35-7-21
THREE POINT HITCH VALVE.....	SECTION 35, CHAPTER 8 (Book 4 - 87618159)
SPECIAL TORQUE VALUES	35-8-2
TPH VALVE REMOVAL	35-8-3
TPH VALVE DISASSEMBLY	35-8-5
CLEANING AND INSPECTION	35-8-9
HITCH VALVE SOLENOID TEST	35-8-11
THREE POINT HITCH VALVE	35-8-13
TPH VALVE ASSEMBLY	35-8-14
TPH VALVE INSTALLATION	35-8-18
REMOTE ELECTRONIC HYD SYSTEMS - HOW IT WORKS/TROUBLESHOOTING.....	SECTION 35, CHAPTER 9 (Book 4 - 87618159)
REMOTE HYDRAULIC SYSTEM INTRODUCTION	35-9-3
REMOTE SYSTEM CONTROLS (ELECTRONIC)	35-9-5
Remote Function Control	35-9-6
Full Function Position	35-9-6
Neutral Lock Position	35-9-6
Float Lock-Out Position	35-9-7
Non-Detent Raise Position	35-9-7
Hydraulic Motor Position	35-9-7
Hydraulic Valve Timer Control	35-9-9
Variable Flow Control	35-9-9
Remote Valve Load Check Valves	35-9-10
REMOTE VALVE PROPORTIONAL CURRENT CONTROL (PCC) SOLENOID OPERATION	35-9-11
REMOTE VALVE OPERATION (ELECTRONIC)	35-9-12
REMOTE VALVE PROBLEMS AND WHERE TO LOOK	35-9-20
ELECTRONIC REMOTE VALVE SYSTEM TESTING	35-9-21
FAULT CODE RETRIEVAL	35-9-21
REGULATED PRESSURE CHECK	35-9-24
REMOTE VALVE HIGH PRESSURE TEST	35-9-24
REMOTE VALVE PROPORTIONAL SOLENOID CHECK	35-9-26
LOW PRESSURE AND HIGH PRESSURE STANDBY TESTS	35-9-27
REMOTE VALVE FLOW TEST	35-9-29
REMOTE VALVE SIGNAL CHECK AND HITCH SIGNAL CHECK TEST	35-9-31
REMOTE VALVE COUPLER TEST	35-9-32
LOAD CHECK INSPECTION	35-9-33

TJ AND T9000 MASTER TABLE OF CONTENTS

HYDRAULIC GEAR (CHARGE) PUMP REPAIR	SECTION 35, CHAPTER 10 (Book 4 - 87618159)
SPECIAL TORQUE VALUES	35-10-2
PUMP DISASSEMBLY	35-10-3
CLEANING AND INSPECTION	35-10-7
PUMP ASSEMBLY	35-10-8
HYDRAULIC FILTERS	SECTION 35, CHAPTER 11 (Book 4 - 87618159)
SPECIFICATIONS	35-11-2
SERVICING THE HYDRAULIC AND TRANSMISSION OIL FILTERS	35-11-3
REMOTE AUXILIARY VALVE AND COUPLER, REMOVAL/INSTALLATION/REPAIR	SECTION 35, CHAPTER 12 (Book 4 - 87618159)
SPECIAL TORQUE VALUES	35-12-3
REMOTE AUXILIARY VALVE MANIFOLD SEAL REPLACEMENT	35-12-4
REMOTE AUXILIARY VALVE SOLENOID TEST	35-12-9
REMOTE AUXILIARY VALVE SOLENOID REMOVAL AND DISASSEMBLY	35-12-9
REMOTE AUXILIARY VALVE SOLENOID ASSEMBLY AND INSTALLATION	35-12-12
REMOTE AUXILIARY VALVE CONTROL SPOOL REMOVAL	35-12-15
REMOTE AUXILIARY VALVE CONTROL SPOOL INSTALLATION	35-12-17
REMOTE AUXILIARY VALVE REMOVAL	35-12-19
REMOTE AUXILIARY VALVE SECTION DISASSEMBLY	35-12-20
LOAD CHECK VALVE DISASSEMBLY	35-12-25
REMOTE AUXILIARY VALVE SECTION ASSEMBLY	35-12-27
LOAD CHECK VALVE ASSEMBLY	35-12-29
REMOTE AUXILIARY VALVE SECTION ASSEMBLY	35-12-31
REMOTE AUXILIARY VALVE SECTION INSTALLATION	35-12-36
HYDRAULIC GEAR PUMP AND PISTON PUMP REMOVE/INSTALL - TJ280/330	SECTION 35, CHAPTER 13 (Book 4 - 87618159)
SPECIAL TORQUE VALUES	35-13-3
RECOMMENDED TOOLS	35-13-3
GEAR PUMP REMOVAL	35-13-4
GEAR PUMP INSTALLATION	35-13-7
PFC PISTON PUMP REMOVAL	35-13-9
PFC PISTON PUMP INSTALLATION	35-13-14
START-UP PROCEDURE	35-13-19
DRAWBAR REMOVAL AND INSTALLATION	SECTION 37, CHAPTER 1 (Book 4 - 87618159)
SPECIAL TORQUE VALUES	37-1-2
SPECIAL TOOLS	37-1-2
DRAWBAR REMOVAL	37-1-3
DRAWBAR INSTALLATION	37-1-7
CENTER HINGE BEARINGS AND CONNECTING LINK - TJ380/430/480/530	SECTION 39, CHAPTER 1 (Book 4 - 87618159)
SPECIAL TORQUE VALUES	39-1-3
SPECIAL TOOL	39-1-3
RECOMMENDED TOOLS	39-1-3
GENERAL INFORMATION	39-1-5
SEPARATING THE FRONT AND REAR FRAMES	39-1-5
BOTTOM HINGE BEARING REPLACEMENT	39-1-11
CONNECTING LINK FRONT BUSHING REPLACEMENT	39-1-19
CONNECTING LINK REMOVAL	39-1-21
CONNECTING LINK REAR BEARING REPLACEMENT	39-1-22
CONNECTING LINK INSTALLATION	39-1-23
CONNECTING THE FRONT AND REAR FRAMES	39-1-25

TJ AND T9000 MASTER TABLE OF CONTENTS

CENTER HINGE BEARINGS AND CONNECTING LINK -

TJ280/330.....	SECTION 39, CHAPTER 2 (Book 4 - 87618159)
SPECIAL TORQUE VALUES	39-2-3
SPECIAL TOOL	39-2-3
RECOMMENDED TOOLS	39-2-3
GENERAL INFORMATION	39-2-5
SEPARATING THE FRONT AND REAR FRAMES	39-2-5
BOTTOM HINGE BEARING REPLACEMENT	39-2-11
CONNECTING LINK FRONT BUSHING REPLACEMENT	39-2-19
CONNECTING LINK REMOVAL	39-2-21
CONNECTING LINK REAR BEARING REPLACEMENT	39-2-22
CONNECTING LINK INSTALLATION	39-2-23
CONNECTING THE FRONT AND REAR FRAMES	39-2-25

CENTER HINGE BEARINGS AND CONNECTING LINK,

T9030, 9040, 9050, AND 9060 S/N Z7F204001 AND AFTER....	SECTION 39, CHAPTER 3 (Book 4A - 87740917)
SPECIAL TORQUE VALUES	39-3-3
SPECIAL TOOL	39-3-3
RECOMMENDED TOOLS	39-3-3
GENERAL INFORMATION	39-3-5
SEPARATING THE FRONT AND REAR FRAMES	39-3-5
BOTTOM HINGE BEARING REPLACEMENT	39-3-12
CONNECTING LINK FRONT BUSHING REPLACEMENT	39-3-20
CONNECTING LINK REMOVAL	39-3-22
CONNECTING LINK REAR BEARING REPLACEMENT	39-3-23
CONNECTING LINK INSTALLATION	39-3-24
CONNECTING THE FRONT AND REAR FRAMES	39-3-26

STEERING COLUMN REPAIR.....	SECTION 41, CHAPTER 1 (Book 5 - 87525646)
TILT STEERING COLUMN DISASSEMBLY	41-1-3
TILT STEERING COLUMN ASSEMBLY	41-1-5

CENTER CONSOLE, STEERING COLUMN,

PEDALS AND SWITCHES.....	SECTION 41, CHAPTER 2 (Book 5 - 87525646)
SPECIAL TOOLS	41-2-3
SPECIAL TORQUE VALUES	41-2-3
STEERING WHEEL REMOVAL	41-2-4
TRANSMISSION SHIFT LEVER REMOVAL	41-2-4
CENTER CONSOLE COVER REMOVAL	41-2-7
CENTER CONSOLE COVER INSTALLATION	41-2-9
TRANSMISSION SHIFT INSTALLATION	41-2-11
STEERING WHEEL INSTALLATION	41-2-14
STEERING COLUMN REMOVAL	41-2-15
STEERING COLUMN INSTALLATION	41-2-16
TILT STEERING COLUMN RELEASE CABLE REMOVAL	41-2-17
TILT STEERING COLUMN RELEASE CABLE INSTALLATION	41-2-18
CLUTCH AND BRAKE PEDAL ASSEMBLY REMOVAL	41-2-20
CLUTCH AND BRAKE PEDAL ASSEMBLY INSTALLATION	41-2-22
DECELERATION SWITCH REMOVAL	41-2-25
DECELERATION SWITCH INSTALLATION	41-2-26
CLUTCH POTENTIOMETER REMOVAL	41-2-27
CLUTCH POTENTIOMETER INSTALLATION	41-2-28
CLUTCH POTENTIOMETER CALIBRATION	41-2-29
CLUTCH POTENTIOMETER CALIBRATION	41-2-31
DIFFERENTIAL LOCK BRAKE SWITCH REMOVAL	41-2-34
DIFFERENTIAL LOCK BRAKE SWITCH INSTALLATION	41-2-34

TJ AND T9000 MASTER TABLE OF CONTENTS

HVAC PLENUM ACTUATOR MOTOR AND LOUVER REMOVAL	41-2-36
HVAC PLENUM ACTUATOR MOTOR AND LOUVER INSTALLATION	41-2-39
TRANSMISSION SHIFT LEVER DISASSEMBLY	41-2-42
TRANSMISSION SHIFT LEVER ASSEMBLY	41-2-49
STEERING HAND PUMP & PRIORITY/CONTROL VALVE REMOVE/INSTALL - TJ380/430/480/530 AND T9030/40/50/60 TRACTORS.....SECTION 41, CHAPTER 3 (Book 5 - 87525646)	
SPECIAL TOOLS	41-3-2
SPECIAL TORQUE VALUES	41-3-2
STEERING HAND PUMP REMOVAL	41-3-3
STEERING TUBE LINES REMOVAL	41-3-5
STEERING PRIORITY/CONTROL VALVE REMOVAL	41-3-7
STEERING PRIORITY/CONTROL VALVE INSTALLATION	41-3-8
STEERING TUBE LINES INSTALLATION	41-3-9
STEERING HAND PUMP INSTALLATION	41-3-11
STEERING HAND PUMP & PRIORITY/CONTROL VALVE REMOVE/INSTALL - TJ280/330 AND T9010/20 TRACTORS.....SECTION 41, CHAPTER 4 (Book 5 - 87525646)	
SPECIAL TOOLS	41-4-2
SPECIAL TORQUE VALUES	41-4-2
STEERING HAND PUMP REMOVAL	41-4-3
STEERING TUBE LINES REMOVAL	41-4-5
STEERING PRIORITY/CONTROL VALVE REMOVAL	41-4-7
STEERING PRIORITY/CONTROL VALVE INSTALLATION	41-4-10
STEERING TUBE LINES INSTALLATION	41-4-13
STEERING HAND PUMP INSTALLATION	41-4-15
STEERING SYSTEM HOW IT WORKS.....SECTION 41, CHAPTER 5 (Book 5 - 87525646)	
ELECTROHYDRAULIC STEERING SYSTEM (EHPS)	41-5-3
PRIORITY / STEERING CONTROL VALVE (EHPS)	41-5-4
EHPS STEERING SYSTEM	41-5-6
Engine Running Steering in Neutral Position	41-5-7
Engine Running, Turning Left	41-5-9
EHPS Steering System	41-5-11
280 AND 330 MODELS STEERING LAYOUT	41-5-12
380, 430, 480 AND 530 MODELS STEERING LAYOUT	41-5-13
FRONT AXLE REMOVAL AND INSTALLATION - TJ380/430/480/530.....SECTION 44, CHAPTER 1 (Book 5 - 87525646)	
SPECIAL TORQUE VALUES	44-1-3
SPECIAL TOOLS	44-1-3
RECOMMENDED TOOLS	44-1-3
FRONT AXLE REMOVAL	44-1-4
FRONT AXLE INSTALLATION	44-1-10
FRONT AXLE REMOVAL AND INSTALLATION - TJ280/330.....SECTION 44, CHAPTER 2 (Book 5 - 87525646)	
SPECIAL TORQUE VALUES	44-2-3
SPECIAL TOOLS	44-2-3
RECOMMENDED TOOLS	44-2-3
FRONT AXLE REMOVAL	44-2-4
FRONT AXLE INSTALLATION	44-2-10

TJ AND T9000 MASTER TABLE OF CONTENTS

REAR AXLE REMOVAL AND INSTALLATION -

TJ380/430/480/530.....	SECTION 44, CHAPTER 3 (Book 5 - 87525646)
SPECIAL TORQUE VALUES	44-3-3
SPECIAL TOOLS	44-3-3
RECOMMENDED TOOLS	44-3-3
REAR AXLE REMOVAL	44-3-4
REAR AXLE INSTALLATION	44-3-13

REAR AXLE REMOVAL AND INSTALLATION - TJ280/330 SECTION 44, CHAPTER 4 (Book 5 - 87525646)

SPECIAL TORQUE VALUES	44-4-3
SPECIAL TOOLS	44-4-3
RECOMMENDED TOOLS	44-4-3
REAR AXLE REMOVAL	44-4-4
REAR AXLE INSTALLATION	44-4-12

FRONT AND REAR AXLE REPAIR - 300 SERIES AXLES SECTION 44, CHAPTER 5 (Book 5 - 87525646)

AXLE SPECIFICATIONS	44-5-4
SPECIAL TORQUE VALUES	44-5-4
SPECIAL TOOLS	44-5-5
RECOMMENDED TOOLS	44-5-6
GENERAL INFORMATION	44-5-12
AXLE FINAL DRIVE REMOVAL	44-5-12
FINAL DRIVE DISASSEMBLY	44-5-14
PLANETARY CARRIER DISASSEMBLY	44-5-18
PLANETARY CARRIER ASSEMBLY	44-5-19
FINAL DRIVE HOUSING ASSEMBLY	44-5-21
FRONT COVER REMOVAL	44-5-26
FRONT COVER DISASSEMBLY	44-5-28
FRONT COVER ASSEMBLY	44-5-31
RH SIDE BRAKE CARRIER REMOVAL	44-5-37
BRAKE CARRIER/BEARING SUPPORT DISASSEMBLY	44-5-38
RH BRAKE CARRIER ASSEMBLY PROCEDURES	44-5-42
DIFFERENTIAL REMOVAL	44-5-47
DIFFERENTIAL CASE DISASSEMBLY PROCEDURES	44-5-48
DIFFERENTIAL CASE ASSEMBLY PROCEDURES	44-5-51
LH DIFFERENTIAL BEARING CARRIER DISASSEMBLY	44-5-57
LH DIFFERENTIAL BEARING CARRIER ASSEMBLY	44-5-58
ADJUSTING BEVEL PINION GEAR DEPTH	44-5-59
SETTING DIFFERENTIAL CARRIER BEARING PRELOAD	44-5-62
SETTING RING/PINION GEAR BACKLASH	44-5-65
RH BEARING CARRIER/BRAKE SUPPORT INSTALLATION	44-5-69
FRONT COVER INSTALLATION	44-5-70
LEAK TESTING THE SERVICE BRAKE	44-5-73
LEAK TESTING THE PARK BRAKE	44-5-74
LEAK TESTING THE DIFFERENTIAL LOCK	44-5-75
FINAL DRIVE INSTALLATION	44-5-77

FRONT AND REAR AXLE REPAIR - 500 SERIES AXLES SECTION 44, CHAPTER 6 (Book 5 - 87525646)

AXLE IDENTIFICATION	44-6-4
AXLE SPECIFICATIONS	44-6-5
SPECIAL TORQUE VALUES	44-6-5
SPECIAL TOOLS	44-6-6
RECOMMENDED TOOLS	44-6-8
GENERAL INFORMATION	44-6-13
AXLE FINAL DRIVE REMOVAL	44-6-13
FINAL DRIVE DISASSEMBLY	44-6-15

TJ AND T9000 MASTER TABLE OF CONTENTS

PLANETARY CARRIER DISASSEMBLY	44-6-19
PLANETARY CARRIER ASSEMBLY	44-6-20
FINAL DRIVE HOUSING ASSEMBLY	44-6-22
PINION CARRIER REMOVAL	44-6-28
PINION CARRIER DISASSEMBLY	44-6-32
PINION CARRIER ASSEMBLY	44-6-34
BRAKE CARRIER/BEARING SUPPORT REMOVAL	44-6-39
BRAKE CARRIER/BEARING SUPPORT DISASSEMBLY	44-6-40
RH BRAKE CARRIER ASSEMBLY PROCEDURES	44-6-44
DIFFERENTIAL REMOVAL AND DISASSEMBLY	44-6-49
DIFFERENTIAL CASE ASSEMBLY PROCEDURES	44-6-53
LH DIFFERENTIAL BEARING SUPPORT DISASSEMBLY	44-6-59
LH DIFFERENTIAL BEARING SUPPORT ASSEMBLY	44-6-60
ADJUSTING BEVEL PINION GEAR DEPTH	44-6-61
SETTING DIFFERENTIAL CARRIER BEARING PRELOAD	44-6-64
SETTING RING/PINION GEAR BACKLASH	44-6-67
CHECKING FOR CORRECT BEVEL PINION/GEAR TOOTH CONTACT	44-6-68
BRAKE CARRIER/BEARING SUPPORT INSTALLATION	44-6-70
PERFORMING THE BRAKE LEAK DOWN TEST	44-6-73
DIFFERENTIAL LOCK LEAK TEST	44-6-74
FINAL DRIVE INSTALLATION	44-6-77
FRONT AND REAR AXLE REPAIR - 400 SERIES AXLES	SECTION 44, CHAPTER 7 (Book 5 - 87525646)
AXLE IDENTIFICATION	44-7-4
AXLE SPECIFICATIONS	44-7-5
SPECIAL TORQUE VALUES	44-7-5
SPECIAL TOOLS	44-7-6
RECOMMENDED TOOLS	44-7-7
GENERAL INFORMATION	44-7-13
AXLE FINAL DRIVE REMOVAL	44-7-13
FINAL DRIVE DISASSEMBLY	44-7-15
PLANETARY CARRIER DISASSEMBLY	44-7-19
PLANETARY CARRIER ASSEMBLY	44-7-20
FINAL DRIVE HOUSING ASSEMBLY	44-7-22
FRONT COVER REMOVAL	44-7-28
FRONT COVER DISASSEMBLY	44-7-31
FRONT COVER ASSEMBLY	44-7-33
RH SIDE BRAKE CARRIER REMOVAL	44-7-39
BRAKE CARRIER/BEARING SUPPORT DISASSEMBLY	44-7-40
RH BRAKE CARRIER ASSEMBLY PROCEDURES	44-7-44
DIFFERENTIAL REMOVAL	44-7-49
DIFFERENTIAL CASE DISASSEMBLY PROCEDURES	44-7-50
DIFFERENTIAL CASE ASSEMBLY PROCEDURES	44-7-53
LH DIFFERENTIAL BEARING CARRIER DISASSEMBLY	44-7-59
LH DIFFERENTIAL BEARING CARRIER ASSEMBLY	44-7-60
ADJUSTING BEVEL PINION GEAR DEPTH	44-7-61
SETTING DIFFERENTIAL CARRIER BEARING PRELOAD	44-7-64
SETTING RING/PINION GEAR BACKLASH	44-7-67
RH BEARING CARRIER/BRAKE SUPPORT INSTALLATION	44-7-71
FRONT COVER INSTALLATION	44-7-72
LEAK TESTING THE SERVICE BRAKE	44-7-75
LEAK TESTING THE PARK BRAKE	44-7-76
LEAK TESTING THE DIFFERENTIAL LOCK	44-7-77
FINAL DRIVE INSTALLATION	44-7-79

TJ AND T9000 MASTER TABLE OF CONTENTS

AXLE COOLING AND LUBRICATION SYSTEM	SECTION 44, CHAPTER 8 (Book 5 - 87525646)
AXLE LUBRICATION CIRCUIT	44-8-3
TESTING THE AXLE LUBRICATION CIRCUIT	44-8-7
Visual Inspection	44-8-7
Axle Lubrication Pressure Test	44-8-7
Air Flow Test	44-8-7
Axle Pressure Test	44-8-7
300 SERIES AXLE LUBRICATION CIRCUIT	44-8-8
300 SERIES AXLE LUBRICATION CIRCUIT	44-8-9
400 SERIES AXLE LUBRICATION CIRCUIT	44-8-10
400 SERIES AXLE LUBRICATION CIRCUIT	44-8-11
500 SERIES AXLE LUBRICATION CIRCUIT	44-8-12
500 SERIES AXLE LUBRICATION CIRCUIT	44-8-13
AIR CONDITIONER SYSTEM SERVICE.....	SECTION 50, CHAPTER 1 (Book 6 - 87525647)
SPECIFICATIONS	50-1-4
SPECIAL TORQUES	50-1-4
SPECIAL TOOLS	50-1-4
SAFETY PROCEDURES	50-1-8
AIR CONDITIONER SYSTEM REFRIGERANT RECOVERY	50-1-9
RECOVERING PURE 134A REFRIGERANT	50-1-11
RECOVERING CONTAMINATED REFRIGERANT WITH OEM1691	50-1-15
Preparing the Tank	50-1-15
Recovery Process	50-1-17
AIR CONDITIONER SYSTEM EVACUATION AND RECHARGING	50-1-22
AIR CONDITIONING TEMPERATURE/PRESSURE CHART	50-1-27
LEAK DETECTION	50-1-28
Electronic Testing with OEM1437	50-1-29
Florescent Leak Detection	50-1-29
Fluorescent Dye Injection	50-1-30
Recovery Station Dye Injector Tool with a System in a Vacuum	50-1-30
Recovery Station Dye Injector Tool with a Charged System	50-1-31
Quick and Easy Dye Injector Tool with a Charged System	50-1-32
Compressor Oil Port	50-1-33
SP-20 PAG Oil Return Bottle	50-1-34
Fluorescent Leak Testing	50-1-35
A/C SYSTEM FLUSHING PROCEDURE	50-1-36
Required Tools	50-1-37
Precautions	50-1-38
Component Flushing Procedure with Power Flush 17550	50-1-39
Complete Circuit Flushing Procedure with Power Flush 17550	50-1-42
Back Flushing the Thermal Expansion Valve or Refrigerant Line	50-1-46
Post Flushing Procedures	50-1-48
Flushing Solvent Disposal	50-1-49
A/C SYSTEM COMPONENTS	50-1-50
Cab HVAC Box Components - Automatic Temperature Control	50-1-50
TJ280/330 and T9010/20 Chassis Components	50-1-51
TJ380/430/480/530 and T9030/40/50/60 Chassis Components	50-1-53
A/C COMPRESSOR CLUTCH	50-1-55
Clutch Removal	50-1-55
Exploded View of Clutch	50-1-58
Compressor Clutch Replacement	50-1-59

TJ AND T9000 MASTER TABLE OF CONTENTS

A/C COMPRESSOR	50-1-63
Oil Level Check or Adjustment	50-1-63
Injection Method	50-1-63
Dipstick Method	50-1-64
Compressor Removal - TJ280/330 and T9010/20	50-1-66
Compressor Installation - TJ280/330 and T9010/20	50-1-68
Compressor Removal - TJ380/430/480/530 and T9030/40/50/60	50-1-70
Compressor Installation - TJ380/430/480/530 and T9030/40/50/60	50-1-71
Compressor Belt Installation and Adjustment - TJ280/330 and T9010/20	50-1-72
THERMAL EXPANSION VALVE TESTING	50-1-73
THERMAL EXPANSION VALVE REPLACEMENT	50-1-74
CONDENSER AND RECEIVER-DRIER	50-1-75
ACCESSING THE HVAC BOX	50-1-76
EVAPORATOR TEMPERATURE SENSOR LOCATION	50-1-77
BLOWER MOTOR REPLACEMENT	50-1-78
HEATER CONTROL VALVE REPLACEMENT	50-1-78
EVAPORATOR/HEATER ASSEMBLY	50-1-79
Evaporator/Heater Assembly Removal	50-1-79
Evaporator/Heater Assembly Installation	50-1-82
Post Replacement Procedures	50-1-84
EVAPORATOR/HEATER ASSEMBLY SEALING AND CLEANING	50-1-85
BLOWER AND EVAPORATOR REFERENCE ILLUSTRATION	50-1-86
ATC CONTROLLER, BLOWER DRIVER & STANDARD A/C CONTROLLER REPLACEMENT	50-1-87
ACCESSING AND REPLACING THE MODE DOOR MOTOR	50-1-88
CAB INTAKE AIR FILTER SERVICE	50-1-91
CAB RECIRCULATION AIR FILTER SERVICE	50-1-92
CAB PRESSURIZATION TEST	50-1-93
CAB PRESSURIZER MOTOR REPLACEMENT	50-1-95
VISCOUS FAN DRIVE	50-1-95
AIR CONDITIONING SYSTEM -TROUBLESHOOTING	SECTION 50, CHAPTER 2 (Book 5 - 87525646)
SAFETY PROCEDURES	50-2-4
SPECIAL TOOLS	50-2-5
A/C THERMAL OPERATION	50-2-6
A/C SYSTEM COMPONENTS	50-2-8
Cab HVAC Box Components - Automatic Temperature Control	50-2-8
TJ280/330 and T9010/20 Chassis Components	50-2-10
TJ380/430/480/530 and T9030/40/50/60 Chassis Components	50-2-12
AUTOMATIC TEMPERATURE CONTROL (ATC) OPERATION	50-2-14
ATC FAULT CODES	50-2-21
ATC Fault Code 111	50-2-21
ATC Fault Code 112	50-2-22
ATC Fault Code 115	50-2-22
ATC Fault Code 116	50-2-23
ATC Fault Code 120	50-2-23
ATC Fault Code 121	50-2-24
ATC Fault Code 122	50-2-24
ATC Fault Code 125	50-2-25
ATC Fault Code 126	50-2-25
ATC Fault Code 127	50-2-26
ATC Fault Code 128	50-2-26
ATC Fault Code 129	50-2-27
ATC Fault Code 130	50-2-27
ATC Fault Code 131	50-2-28
ATC Fault Code 132	50-2-28
ATC Fault Code 133	50-2-29
ATC Fault Code 134	50-2-30

TJ AND T9000 MASTER TABLE OF CONTENTS

LOCATING SYSTEM PROBLEMS WITHOUT FAULT CODES	50-2-31
Controller-Based Resistance Tests	50-2-31
ATC CONTROLLER TEST (CONNECTOR J8 TEST POINTS)	50-2-33
FIELD REPORTED SYMPTOMS/CAUSES	50-2-36
COMPRESSOR AND CLUTCH	50-2-37
Operational Check	50-2-37
Electrical Test	50-2-41
Compressor Clutch Control Circuit Test Procedure	50-2-41
HIGH AND LOW PRESSURE SWITCH CLUTCH LATCHING CIRCUIT	50-2-44
Electrical Test	50-2-46
High Pressure Switch and Circuit Test	50-2-46
Low Pressure Switch and Circuit Test	50-2-47
HEATER CONTROL VALVE	50-2-48
Operational Check	50-2-48
Electrical Test	50-2-49
Heater Control Valve Power, Signal and Ground Test	50-2-49
BLOWER SPEED, TEMPERATURE CONTROL AND MODE DOOR POTS	50-2-50
Electrical Test	50-2-51
Common Control Potentiometer and Circuit Test Procedure	50-2-51
BLOWER AND BLOWER SPEED DRIVER	50-2-52
Blower Motor/Blower Driver Power, Signal and Ground Test	50-2-53
MODE DOOR CONTROL AND MOTOR	50-2-54
Electrical Test	50-2-55
Mode Door Motor and Circuit Test	50-2-55
CAB AND EVAPORATOR TEMPERATURE SENSORS	50-2-56
Electrical Test	50-2-57
Cab Temperature Sensor and Circuit Test	50-2-59
Evaporator Temperature Sensor and Circuit Test	50-2-60
CONTROLLER POWER AND GROUND, ATC SWITCH	50-2-62
Controller Power Supply and Ground Test	50-2-62
ATC Switch and Circuit Test	50-2-63
Defog/Defrost Switch and Circuit Test	50-2-63
CAB PRESSURIZER BLOWER	50-2-64
Cab Pressurizer Blower & Relay Power Supply and Ground Test	50-2-64
ACCESSING THE HVAC BOX	50-2-65
2006 MODEL YEAR POWERSHIFT NAO ELECTRICAL SCHEMATIC	POSTER 87517739
2007 MODEL YEAR POWERSHIFT NAO ELECTRICAL SCHEMATIC	POSTER 87710064
2008 MODEL YEAR POWERSHIFT NAO ELECTRICAL SCHEMATIC	POSTER 87708840

TJ AND T9000 MASTER TABLE OF CONTENTS

AIR CONDITIONING SYSTEM -TROUBLESHOOTING, MODELS T9020, 9030, 9040, 9050 AND 9060 AFTER SERIAL NUMBER Z7F204001	SECTION 50, CHAPTER 3 (Book 6A - 87740918)
SAFETY PROCEDURES	50-3-4
SPECIAL TOOLS	50-3-5
A/C THERMAL OPERATION	50-3-6
A/C SYSTEM COMPONENTS	50-3-8
Cab HVAC Box Components - Automatic Temperature Control	50-3-8
T9020 Chassis Components	50-3-10
T9030, 9040 and 9050 Chassis Components	50-3-12
T9060 Chassis Components	50-3-13
AUTOMATIC TEMPERATURE CONTROL (ATC) OPERATION	50-3-15
ATC FAULT CODES	50-3-22
ATC Fault Code 111	50-3-22
ATC Fault Code 112	50-3-23
ATC Fault Code 115	50-3-23
ATC Fault Code 116	50-3-24
ATC Fault Code 120	50-3-24
ATC Fault Code 121	50-3-25
ATC Fault Code 122	50-3-25
ATC Fault Code 125	50-3-26
ATC Fault Code 126	50-3-26
ATC Fault Code 127	50-3-27
ATC Fault Code 128	50-3-27
ATC Fault Code 129	50-3-28
ATC Fault Code 130	50-3-28
ATC Fault Code 131	50-3-29
ATC Fault Code 132	50-3-29
ATC Fault Code 133	50-3-30
ATC Fault Code 134	50-3-31
LOCATING SYSTEM PROBLEMS WITHOUT FAULT CODES	50-3-32
Controller-Based Resistance Tests	50-3-32
ATC CONTROLLER TEST (CONNECTOR J8 TEST POINTS)	50-3-34
FIELD REPORTED SYMPTOMS/CAUSES	50-3-37
COMPRESSOR AND CLUTCH	50-3-38
Operational Check	50-3-38
Electrical Test	50-3-43
Compressor Clutch Control Circuit Test Procedure	50-3-43
HIGH AND LOW PRESSURE SWITCH CLUTCH LATCHING CIRCUIT	50-3-46
Electrical Test	50-3-48
High Pressure Switch and Circuit Test	50-3-48
Low Pressure Switch and Circuit Test	50-3-49
HEATER CONTROL VALVE	50-3-50
Operational Check	50-3-50
Electrical Test	50-3-51
Heater Control Valve Power, Signal and Ground Test	50-3-51
BLOWER SPEED, TEMPERATURE CONTROL AND MODE DOOR POTS	50-3-52
Electrical Test	50-3-53
Common Control Potentiometer and Circuit Test Procedure	50-3-53
BLOWER AND BLOWER SPEED DRIVER	50-3-54
Blower Motor/Blower Driver Power, Signal and Ground Test	50-3-55
MODE DOOR CONTROL AND MOTOR	50-3-56
Electrical Test	50-3-57
Mode Door Motor and Circuit Test	50-3-57
CAB AND EVAPORATOR TEMPERATURE SENSORS	50-3-58
Electrical Test	50-3-59
Cab Temperature Sensor and Circuit Test	50-3-61

**Thanks very much for your reading,
Want to get more information,
Please click here, Then get the complete
manual**

JustClickHere 

NOTE:

**If there is no response to click on the link above,
please download the PDF document first, and then
click on it.**

**Have any questions please write to me:
admin@servicemanualperfect.com**