

# Service Manual

**FASTRAC**  
**125 135 145**  
**150 155 185**

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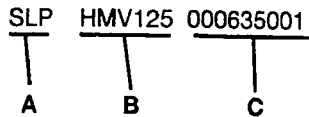
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**Serial Number Plate**

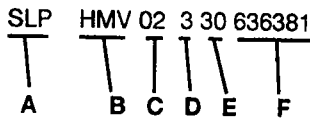
Each machine has a serial number plate located at either X or Y. Various designs of serial number plate have been used but in each case the Vehicle Identification Number (VIN), and the serial numbers of the engine and transmission are stamped on the plate.

**Typical Early Style Vehicle Identification No. (VIN)**



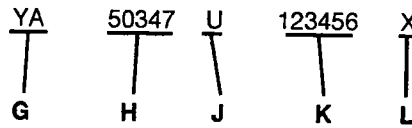
- A = Manufacturing Code
- B = Machine Model
- C = Serial Number

**Typical Later Style Vehicle Identification No. (VIN)**



- A = Manufacturing Code
- B = Machine Range
- C = Engine Type
  - 01 = 1006-6
  - 02 = 1006-6T
  - 03 = 145T
  - 04 = 160T
  - 05 = 1006-6
  - 06 = 1006-6THR5
  - 07 = 1006-6T4
  - 09 = 160TW
  - 10 = Cummins 6BTA
- D = Transmission Speed
  - 3 = 30 km/h
  - 4 = 40 km/h
  - 5 = 55 km/h
  - 6 = 65 km/h
  - 7 = 75 km/h
- E = Vehicle Max. Speed
  - 30 = 30 km/h
- F = Serial Number

**Typical Engine Identification Number**



- G = Engine Type:-
  - YA = Normally Aspirated
  - YB = Turbocharged
  - YD = Turbocharged/intercooled
- H = Build List Number  
(see **Engine Technical Data** for details)
- J = Country of Origin
- K = Engine Serial Number
- L = Year of Manufacture

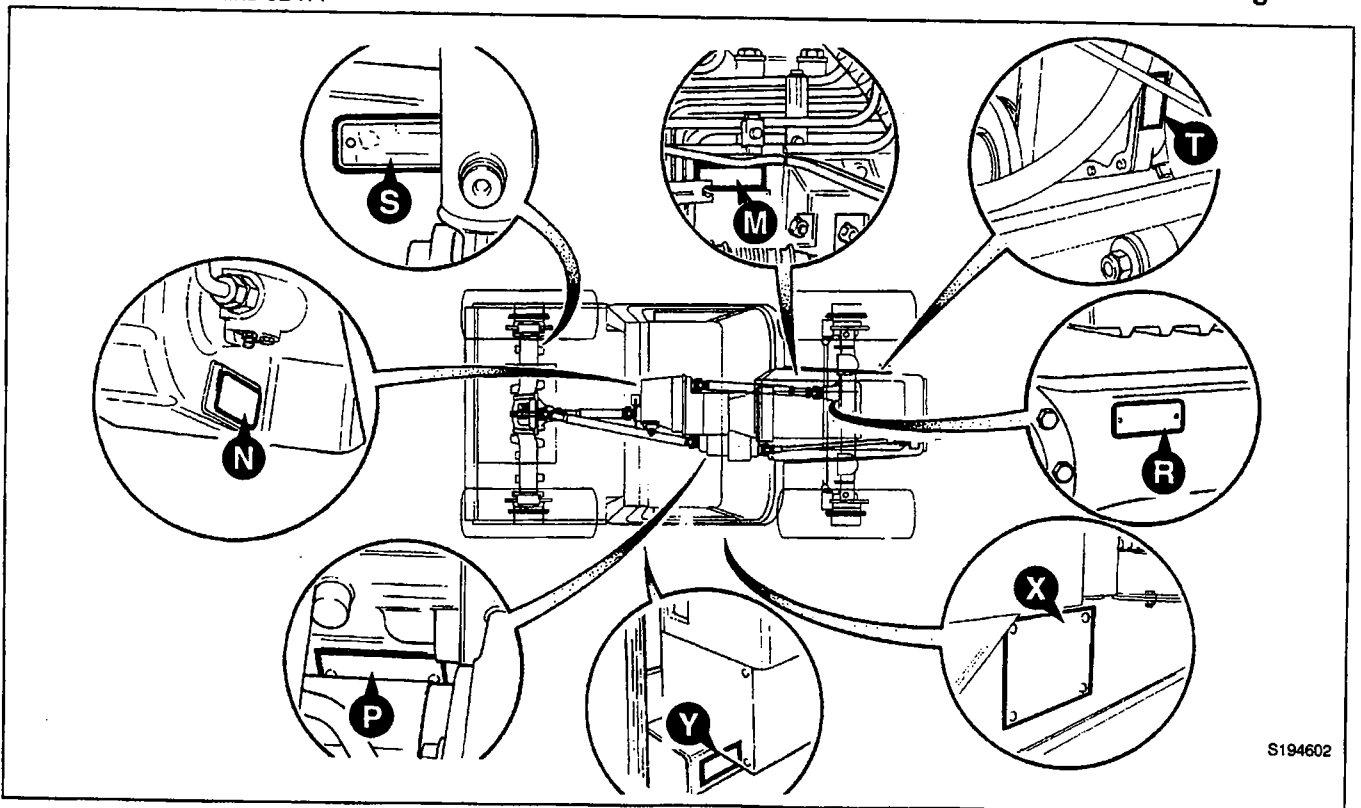
**Note:** Cummins engines are identified by the model number 6BTA and a separate engine serial number.

**Unit Identification**

The serial number of each major unit is also stamped on the unit itself as shown below. If a major unit is replaced by a new one, the serial number on the plate will be wrong. Either stamp the new number of the unit on the identification plate, or simply stamp out the old number. This will prevent the wrong unit number being quoted when replacement parts are ordered.

- Perkins Engine
- Cummins Engine
- Transmission (Assembly of all three gearboxes)
- Speed Gearbox
- Front Axle
- Rear Axle

- M
- T
- N
- P
- R
- S



S194602

## Torque Settings

Use only where no torque setting is specified in the text. Values are for dry threads and may be within three per cent of the figures stated. For lubricated threads the values should be REDUCED by one third.

**Note:** All bolts used on JCB machines are high tensile and must not be replaced by bolts of a lesser tensile specification.

### Metric Grade 8.8 Bolts

* Dia.	Bolt size (mm)	Hexagon (A/F) mm	Torque Settings		
			Nm	kgf m	lbf ft
M5	(5)	8	7	0.7	5
M6	(6)	10	12	1.2	9
M8	(8)	13	28	3.0	21
M10	(10)	17	56	5.7	42
M12	(12)	19	98	10	72
M16	(16)	24	244	25	180
M18	(18)	27	350	36	258
M20	(20)	30	476	48	352
M24	(24)	36	822	84	607
M30	(30)	46	1633	166	1205
M36	(36)	55	2854	291	2105

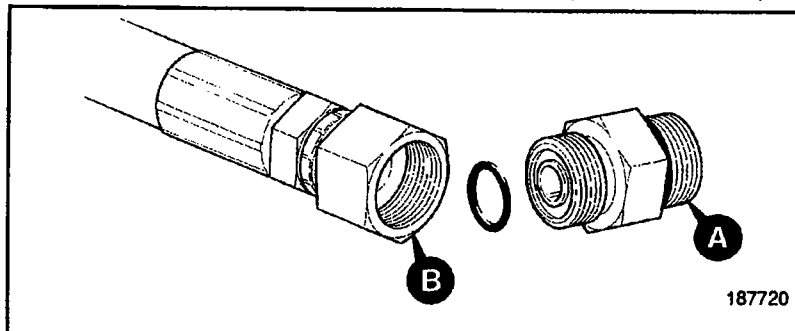
### Metric - All Internal Hexagon Headed Cap Screws

Diameter mm	Torque		
	Nm	kgf m	lbf ft
M3	2	0.2	1.5
M4	6	0.6	4.5
M5	11	1.1	8
M6	19	1.9	14
M8	46	4.7	34
M10	91	9.3	67
M12	159	16.2	117
M16	395	40	292
M18	550	56	406
M20	770	79	568
M24	1332	136	983

### Hose and Pipe Connections

\* All the hydraulic fittings on the Fastrac to machine number 636000 use the 'O' ring face seal system, with the 'O' ring located between the hose or pipe **B** and the adapter **A** as shown below. Adapters screwed into valve blocks etc. seal onto an 'O' ring which is compressed into a 45° seat machined in the face of the tapped port. Later machines have BSP hose connections without 'O' rings. Adapters are then sealed into components by means of bonded washers. See next page for torque settings.

\* **Note:** Adapters have a UNF thread for the ORFS hose connection **B** but the thread **A** on the opposite end of the adapter may be either UNF or metric. Measure the thread diameter carefully before choosing the relevant torque setting table.



**Torque Settings (continued)****'O' Ring Boss Adapters (Item A to machine number 636000)**

Nominal Diameter of UNF Thread (inches)	Torque Settings			Nominal Diameter of Metric Thread (mm)	Torque Settings		
	Nm	kgf m	lbf ft		Nm	kgf m	lbf ft
7/16	20	2.1	15	8	10	1.1	7
9/16	35	3.6	26	10	20	2.1	15
3/4	81	8.3	60	12	35	3.6	26
7/8	108	11.1	80	14	45	4.7	33
1 1/16	183	18.7	135	16	55	5.8	41
1 5/16	298	30.5	220	18	70	7.1	52
1 5/8	380	38.8	280	20	80	8.2	59
1 7/8	488	50	360	22	100	10.2	74
				27	170	17.3	125
				33	310	32	229
				42	330	34	243
				48	420	43	310
				60	500	51	369

**ORFS Hydraulic Hose Connections  
(Item B to machine number 636000)**

Nominal Thread Diameter (inches)	Torque Settings		
	Nm	kgf m	lbf ft
9/16	24	2.5	18
1 1/16	33	3.3	24
1 3/16	44	4.8	35
1	58	6.0	43
1 3/16	84	8.6	62
1 7/16	115	11.8	85
1 11/16	189	19.4	140
2	244	24.9	180

**Hydraulic Hose to Adapter Connections  
(from machine number 636001)**

BSP Size (inches)	Torque Settings		
	Nm	kgf m	lbf ft
1/8	14	1.4	10
1/4	24	2.5	18
3/8	33	3.3	24
1/2	44	4.8	35
5/8	58	6.0	43
3/4	84	8.6	62
1	115	11.8	85
1 1/2	244	24.9	180

**Hydraulic Adapter into Component Connections  
with bonded washers (from machine number 636001)**

BSP Size (inches)	Torque Settings		
	Nm	kgf m	lbf ft
1/8	20	2.1	15
1/4	34	3.4	25
3/8	75	7.6	55
1/2	102	10.3	75
5/8	122	12.4	90
3/4	183	18.7	135
1	203	20.7	150
1 1/2	305	31	225

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