

Liftall 1253/1202/1553/1554

Service Manual - Liftall 1253/1202/1553/1554

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Publication No.
9813/1650



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General Information

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General Information

Machine Identification

Machine Identification Plate

Your machine has an identification plate **X** mounted on the Chassis as shown. The serial numbers of the machine and its major units are stamped on the plate.

The serial number of each major unit is also stamped on the unit itself. If a major unit is replaced by a new one, the serial number on the identification 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 number being quoted when replacement parts are ordered.

The machine and engine serial numbers can help identify exactly the type of equipment you have → [Fig 1.](#) ([□ 1-1](#)).

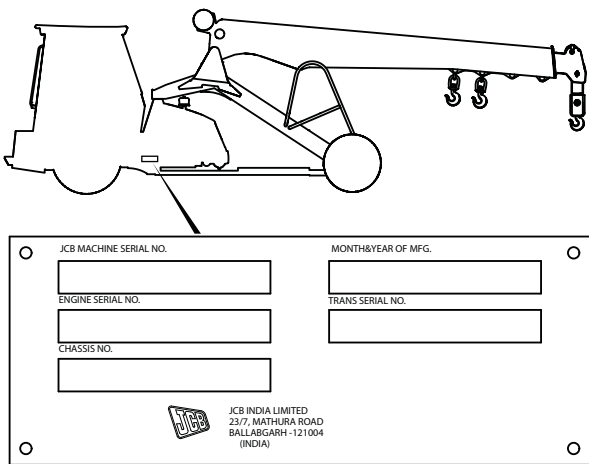


Fig 1.

P009450

Unit Identification

Engine Serial Plate

The engine serial number is stamped on a label which is fastened to the left side of the cylinder block (looking from the rear) → [Fig 2.](#) ([□ 1-1](#)).

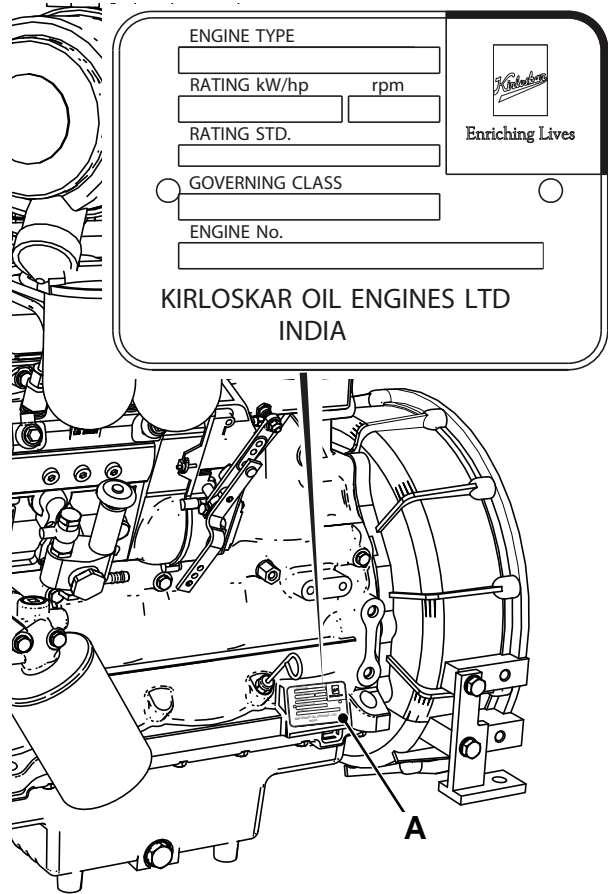


Fig 2.

D023815

Transmission Axle Serial Plate

The transmission axle serial number is stamped on a plate mounted to the front face of the axle, as shown → [Fig 3.](#) ([□ 1-2](#)).

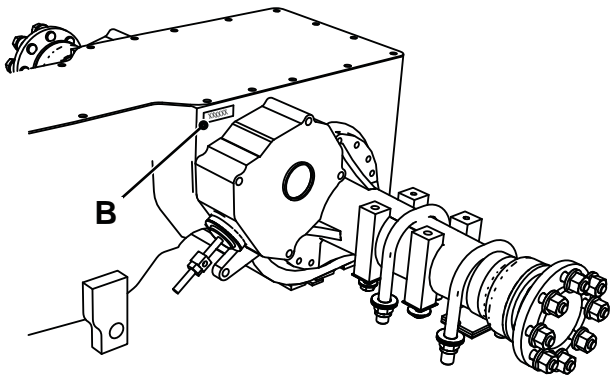


Fig 3.

D025810

Hydraulic Pump Serial Plate

The hydraulic pump serial number is stamped on a label which is mounted on the pump → Fig 4. (□ 1-2).

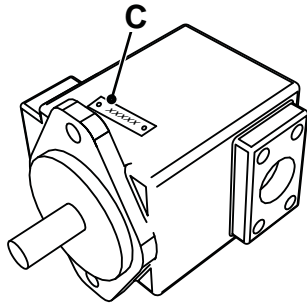


Fig 4.

D025820

Winch Motor Serial Plate

The winch motor serial number is stamped on a label D which is mounted on motor → Fig 5. (□ 1-2).

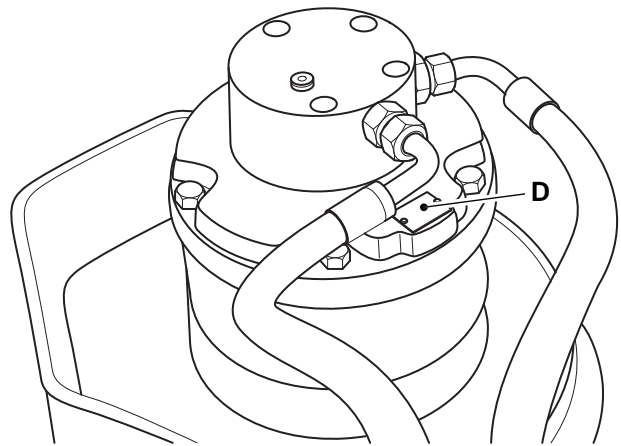
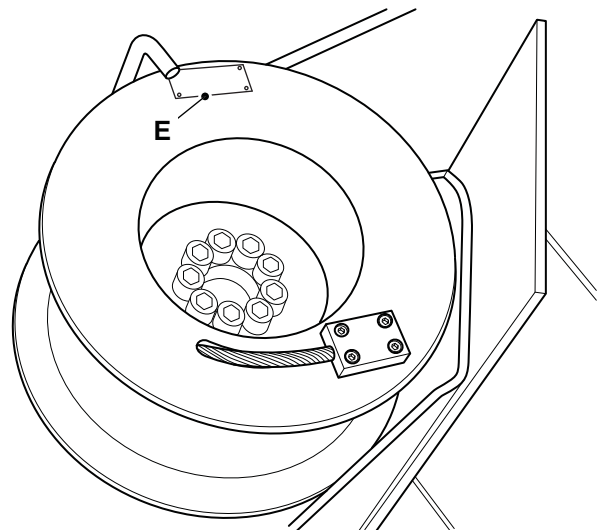


Fig 5.

D003150

Winch Serial Plate

The winch serial number is stamped on a lable E which is mounted on winch drum.



Load Chart

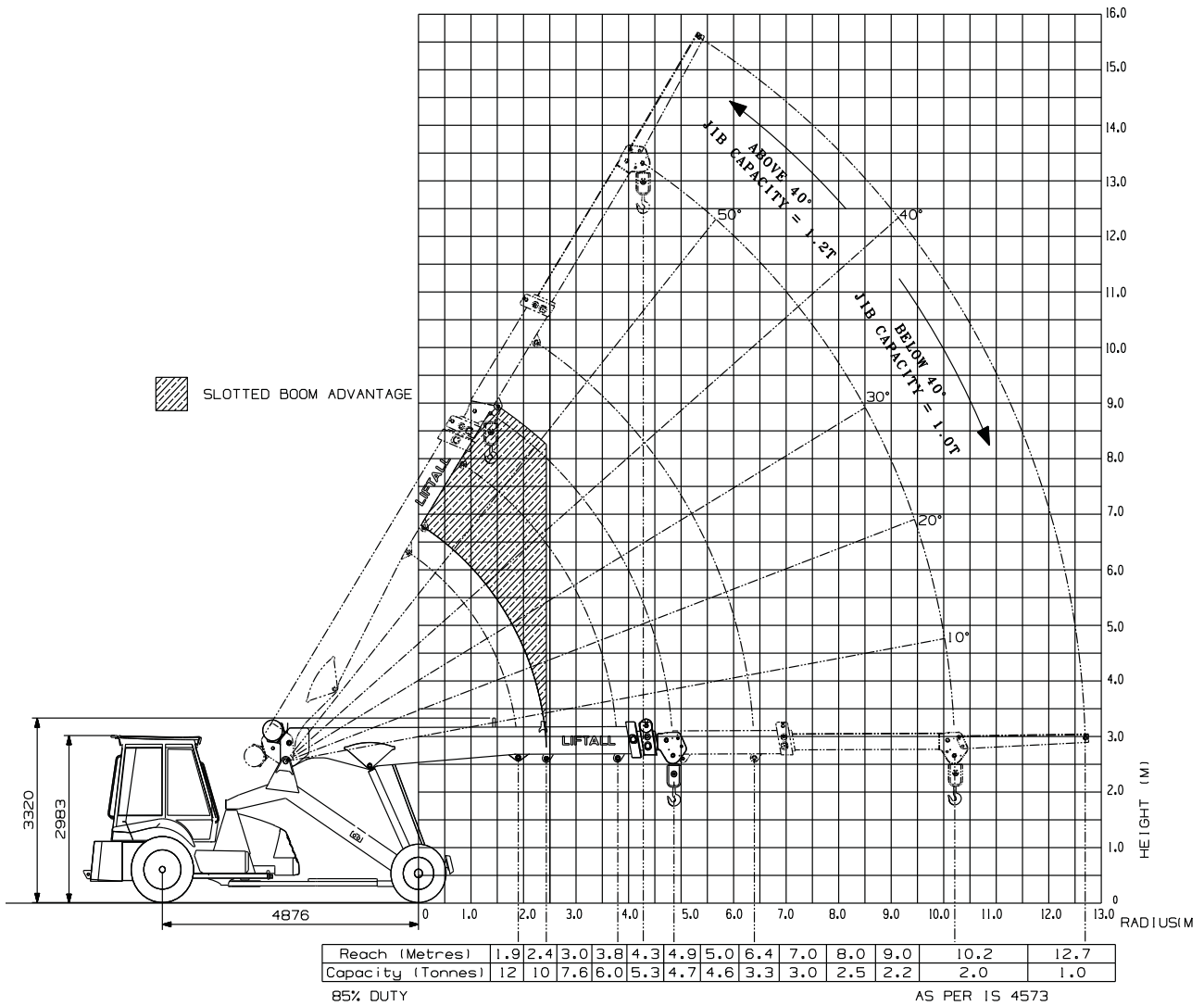


Fig 6. Liftall 1253

D029380

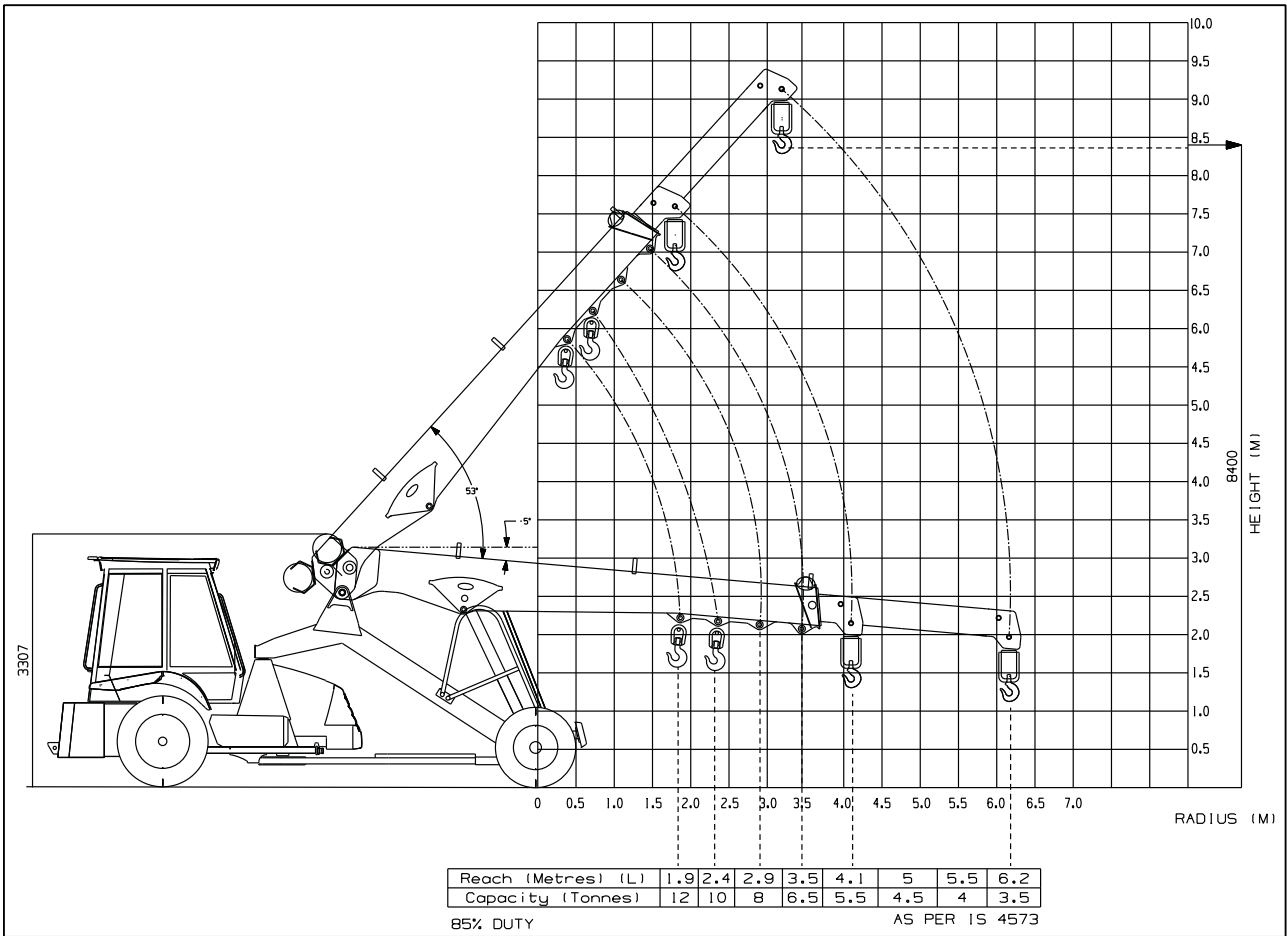


Fig 7. Liftall 1202

D029390

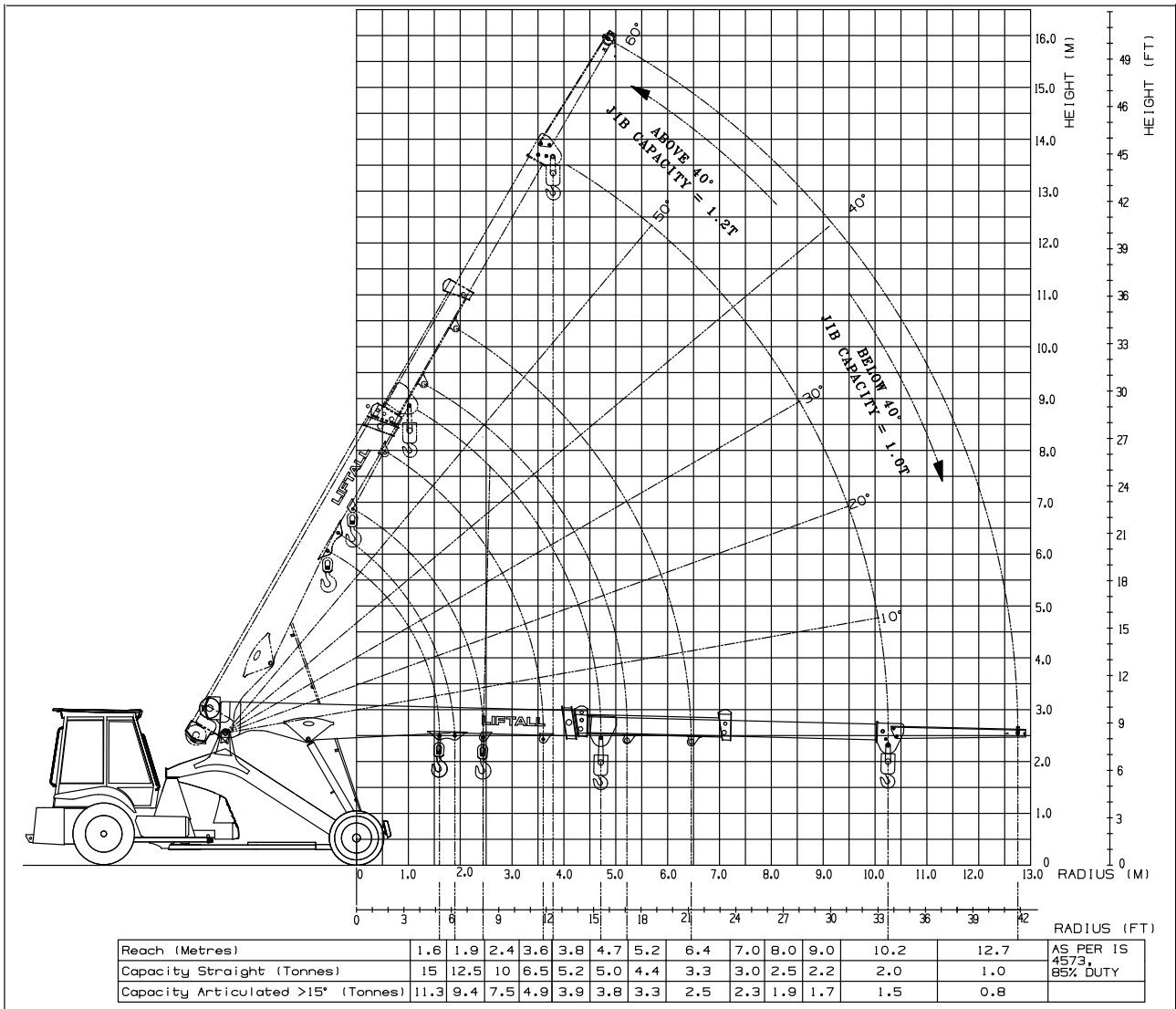
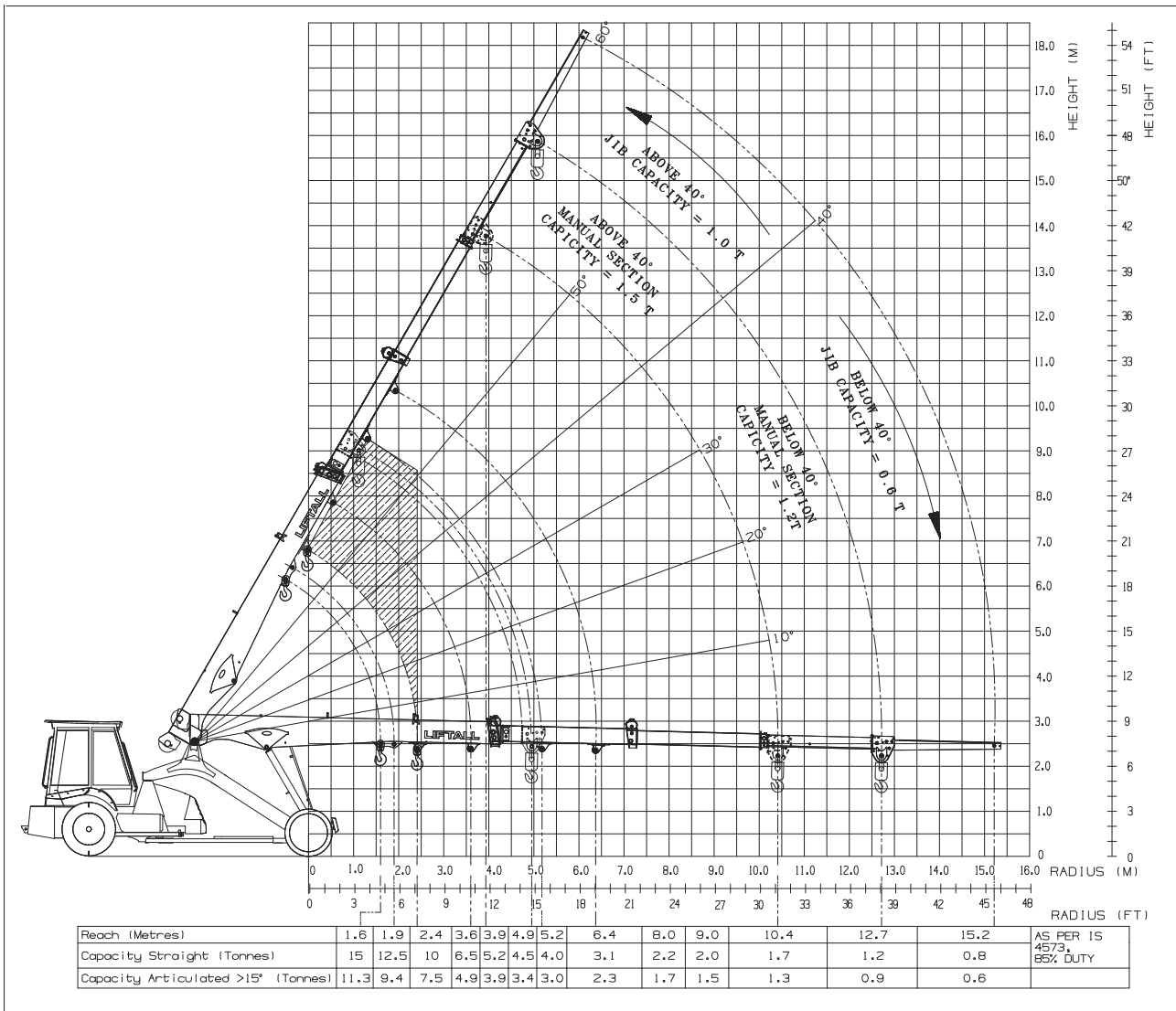


Fig 8. Liftall 1553

D031140



D064850

Fig 9. Liftall 1554

Torque

Torque Settings

Values are for dry threads and may be within three percent of the figures stated. For lubricated thread the values should be reduced by one third.

Use only where no torque setting is specified in the test.

Table 1.

Bolt Size	Hexagon (A/F)		Torque Setting		
	In	(mm)	In	Nm	Kgfm
1/4	(6.3)	7/16	14	1.4	10
5/18	(7.9)	1/2	28	2.8	20
3/8	(9.5)	9/16	49	5.0	36
7/16	(11.1)	5/8	78	8.0	58
1/2	(12.7)	3/4	117	12.0	87
9/10	(14.3)	13/16	170	17.3	125
5/8	(15.9)	15/16	238	24.3	175
3/4	(19.0)	11/8	407	41.5	300
7/8	(22.2)	15/16	650	66.3	480
1	(25.4)	11/2	970	99.0	715
11/4	(31.7)	17/8	1940	198.0	1430
11/2	(38.1)	21/4	3390	345.0	2500

Table 2. Metric Grade 8.8 Bolts

Bolt Size	Hexagon (A/F)		Torque Setting		
	M	(mm)	M	Nm	Kgfm
M5	(5)	8	7	0.7	5
M6	(8)	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
M20	(20)	30	476	48	352
M24	(24)	36	822	84	607
M30	(30)	46	1633	166	1205
M36	(36)	55	2854	291	2105

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



Tightening Torque Values for Metric Hardware

Condition I Un-Lubricated, zinc, and yellow plated fasteners

Condition II Lubricated, zinc, and yellow plated fasteners

Hardware	Torque (Nm)	
	Condition I	Condition II
M4 x 0.7	2.9	2.6
M5 x 0.8	5.8	5.2
M6 x 1	9.9	9
M8 x 1.25	24	22
M10 x 1.5	47	43
M12 x 1.75	83	74
M14 x 2	132	119
M16 x 2	205	184
M20 x 2.5	400	360
M24 x 3	690	621
M30 x 3.5	1372	1235
M36 x 4	2399	2159

Tightening Torque Values for Hydraulic Adaptor

Nominal Size of Nut	Tightening (Nm)
1/8" BSP	20
1/4" BSP	34
3/8" BSP	75
1/2" BSP	102
5/8" BSP	122
3/4" BSP	183
1" BSP	203
1-1/4" BSP	305
1-1/2" BSP	305

Tightening Torque Values for Hydraulic Hoses

Thread Size	Torque (Nm)	
	Hose connections with O-ring	Hose connections with bonded washers
1/8" BSP	14-16	20
1/4" BSP	24-27	34
3/8" BSP	33-40	75
1/2" BSP	44-50	102
5/8" BSP	58-65	122
3/4" BSP	84-92	183
1" BSP	115-126	203
1-1/4" BSP	189-200	305
1-1/2" BSP	244-260	305

Service Tools

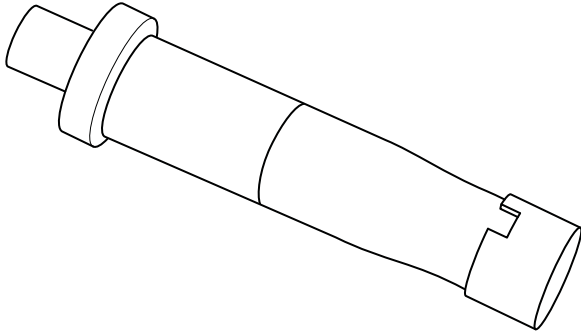


Fig 10. Needle Bush Pressing Tool (332/Y4023)

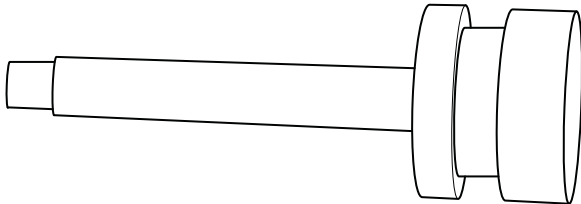


Fig 11. Box Spanner Nut

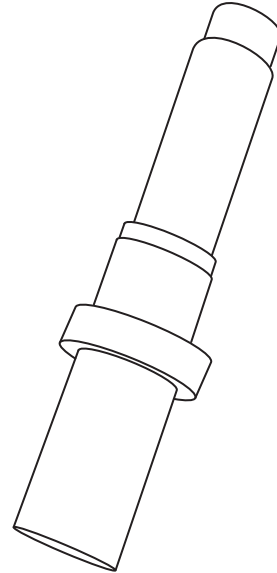


Fig 12. Needle Bush Pressing Tool (332/Y4026)

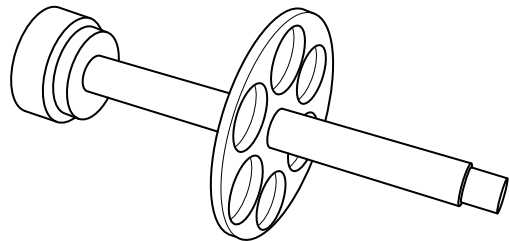


Fig 13. Box Spanner Nut (332/Y4024)

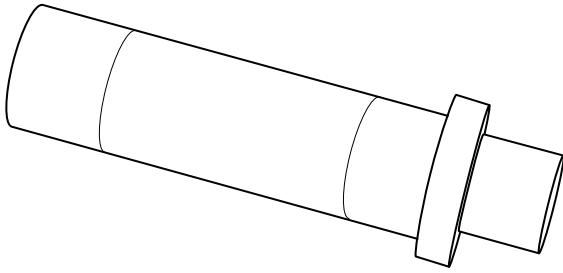


Fig 14. Oil Seal Pressing Tool (332/Y4025)

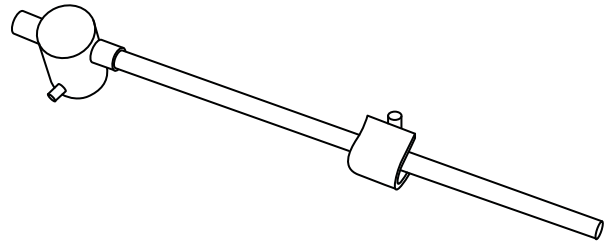


Fig 17. Pre-loading Bar (332/Y4031)

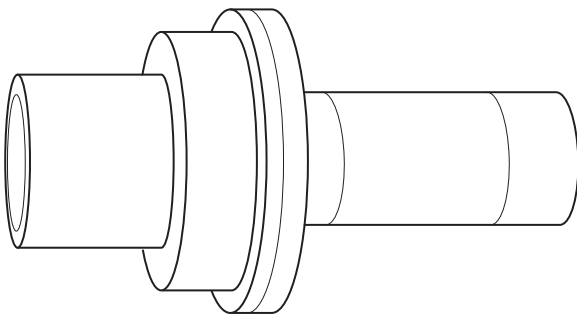


Fig 15. Oil Seal Pressing Tool (332/Y4027)

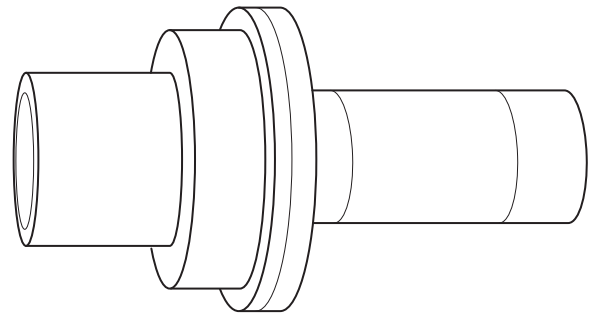


Fig 18. Cone Pressing Tool (332/Y4034)



Fig 16. Withdrawal Nut Fitting Tool (332/Y4028)

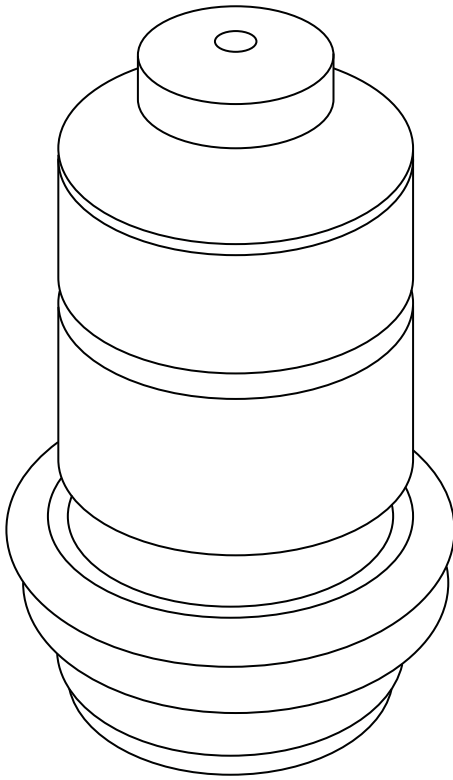


Fig 19. Oil Seal Pressing Tool (332/Y4029)

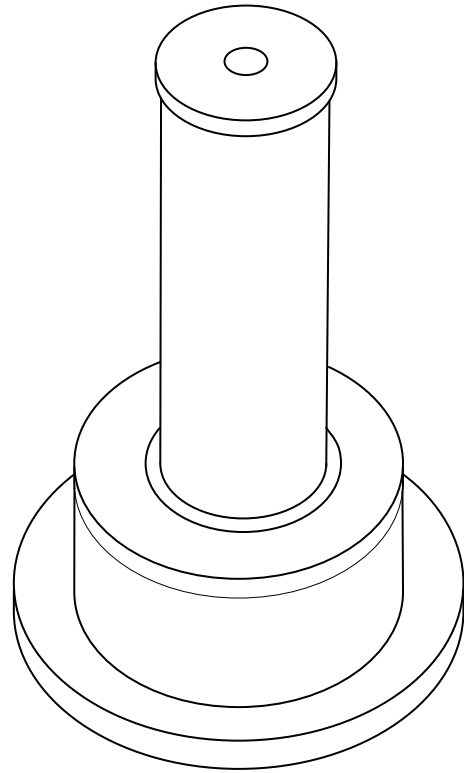


Fig 20. Oil Seal Pressing Tool (332/Y4033)

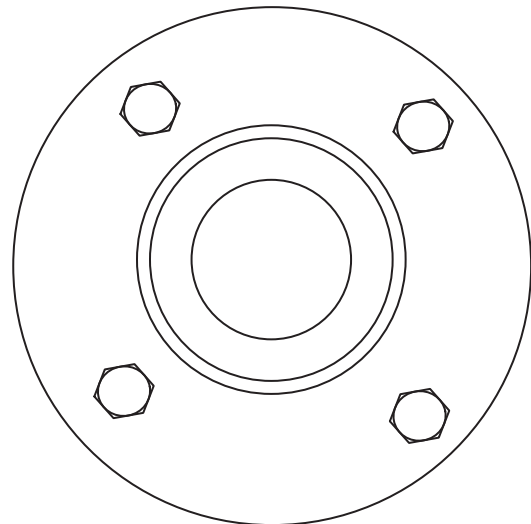


Fig 21. Bearing Puller (332/Y4036)

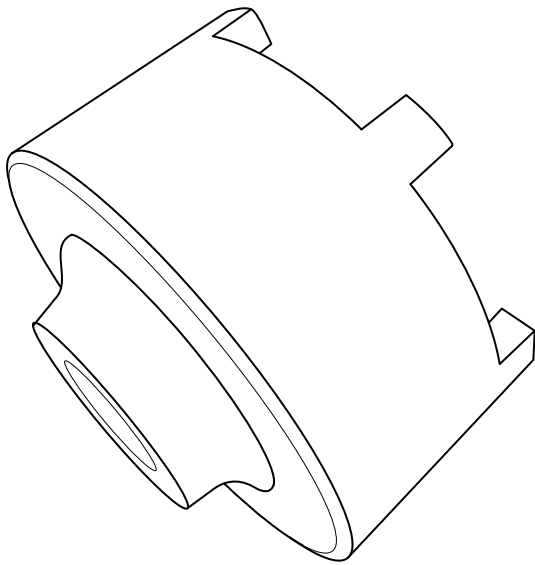


Fig 22.

Front Wheel Hub Lock Nut Adjusting Tool – 333/Y0761
[⇒ Fig 22. \(□ 1-12\)](#)

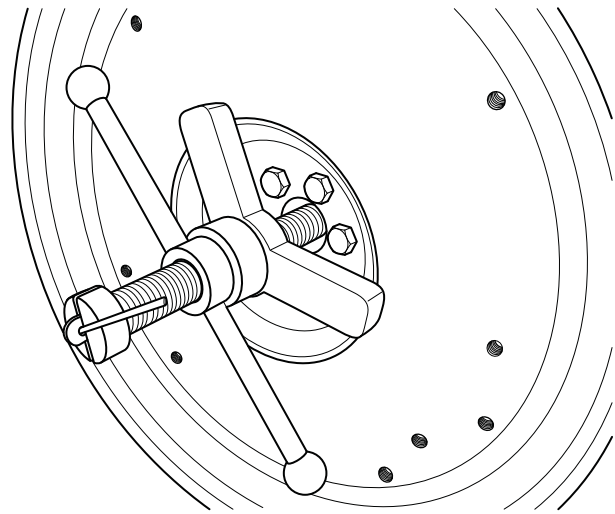


Fig 24.

Engine Pilot Bearing Puller – 333/Y7810.
[⇒ Fig 24. \(□ 1-12\)](#)

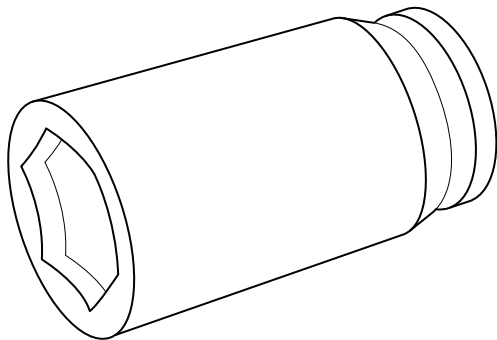


Fig 23.

Engine Foot Mounting Bolt Socket – 333/Y0290.
[⇒ Fig 23. \(□ 1-12\)](#)



Numerical List

The tools listed in the table are special tools required for carrying out the procedures described in this manual. These tools are available from JCB Service.

Some tools are available as kits or sets, the part numbers for parts within such kits or sets are not listed here. For full

details of all tools, including the content of kits and sets, refer to **Tool Detail Reference, Section 1**.

Note: Tools other than those listed will be required. It is expected that such general tools will be available in any well equipped workshop or be available locally from any good tool supplier.

Part Number	Description	See Section
993/68100	Slide Hammer Kit - see Tool Detail Reference (Section 1) for content	B
-	Rivet Nut Tool - see Tool Detail Reference (Section 1)	B
892/00842	Glass Lifter	B
892/00843	Folding Stand for Holding Glass	B
892/00845	Cartridge Gun	B
892/00846	Glass Extractor (Handles)	B
892/00847	Nylon Spatula	B
892/00848	Wire Starter	B
892/00849	Braided Cutting Wire	B
926/15500	Rubber Spacer Blocks	B
992/12300	12V Mobile Oven	B
992/12400	240V Static Oven (2 Cartridge)	B
992/12800	Cut-Out Knife	B
992/12801	'L' Blades	B
4104/1310	Hand Cleaner	B
892/00281	AVO Meter (not illustrated)	C
892/00298	Fluke Meter	C
892/00285	Hyd. Oil Temperature Probe	C
892/00284	Digital Tachometer	C
892/01174	DLA Kit	C
331/22966	Pump Drive Alignment Tool (not illustrated)	E
-	Male Adapters - BSP x BSP - see Tool Detail Reference (Section 1)	E
-	Male Adapters - BSP x NPT (USA only) - see Tool Detail Reference (Section 1)	E
-	Pressure Test Points - Adaptors - see Tool Detail Reference (Section 1)	E
-	Pressure Test Points - 'T' Adaptors - see Tool Detail Reference (Section 1)	E
-	'T' Adaptors - see Tool Detail Reference (Section 1)	E
-	Female Blanking Caps - see Tool Detail Reference (Section 1)	E
-	Male Cone Blanking Caps - see Tool Detail Reference (Section 1)	E
-	Female Connectors - see Tool Detail Reference (Section 1)	E



Section 1 - General Information

General Information

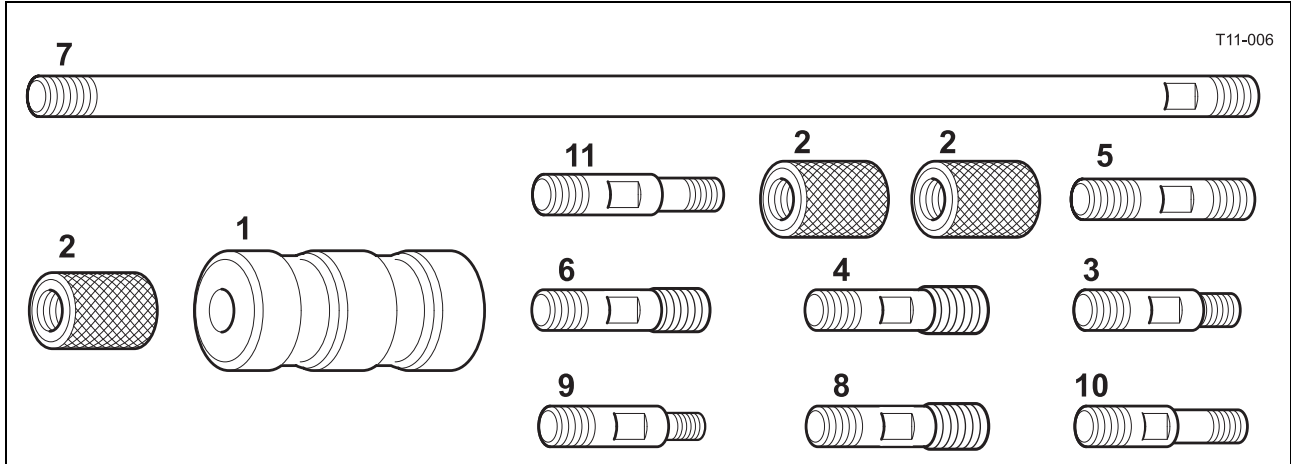
Numerical List

Part Number	Description	See Section
-	Bonded Washers - see <i>Tool Detail Reference (Section 1)</i>	E
-	Ram Protection Sleeves - see <i>Tool Detail Reference (Section 1)</i>	E
892/00334	Ram Seal Fitting Tool	E
	Hexagon Spanners - see <i>Tool Detail Reference (Section 1)</i>	E
892/01027	Piston Seal Assembly Tool	E
-	Hydraulic Flow Test Equipment - see <i>Tool Detail Reference (Section 1)</i>	E
-	Hydraulic Circuit Pressure Test Kit - see <i>Tool Detail Reference (Section 1)</i> for content	E
-	Hydraulic Hand Pump Equipment - see <i>Tool Detail Reference (Section 1)</i>	E
992/10100	Spool Clamp	E
892/00039	Spool Clamp	E
992/02800	ARV Extractor	E
331/31069	Test Block for A.R.V.	E
892/00891	Valve Spool Seal Fitting Tool	E
892/00346	Gauge	E
892/00279	Gauge	E
892/00280	Gauge	E
892/00347	Connector	E
892/00254	Hose	E
-	Ram Jigs - see <i>Tool Detail Reference (Section 1)</i>	E
-	Ram Piston Nut Spanners - see <i>Tool Detail Reference (Section 1)</i>	E
-	Socket Box Wrench	E
-	Nut Adapter	E
-	Seal Ring Tool	E
-	Stopper	E
-	Bearing Rig	E
-	Inserting Seal Ring and Correction Jig - see <i>Tool Detail Reference (Section 1)</i>	E
-	Jig for Pulling Out, Press-fitting Bushing - see <i>Tool Detail Reference (Section 1)</i>	E
-	Jig for Press-fitting Wiper Ring - see <i>Tool Detail Reference (Section 1)</i>	E
-	Jig for Inserting Cylinder Head - see <i>Tool Detail Reference (Section 1)</i>	E
-	Seal Ring and Connector Jig - see <i>Tool Detail Reference (Section 1)</i>	E
-	Bush Removal Jig - see <i>Tool Detail Reference (Section 1)</i>	E
-	Bush Fitting Jig - see <i>Tool Detail Reference (Section 1)</i>	E
-	Wiper Ring Fitting Jig - see <i>Tool Detail Reference (Section 1)</i>	E
-	Wiper Ring Fitting Jig - see <i>Tool Detail Reference (Section 1)</i>	E
892/00041	De-glazing Tool	K

Tool Detail Reference

Section B - Body and Framework

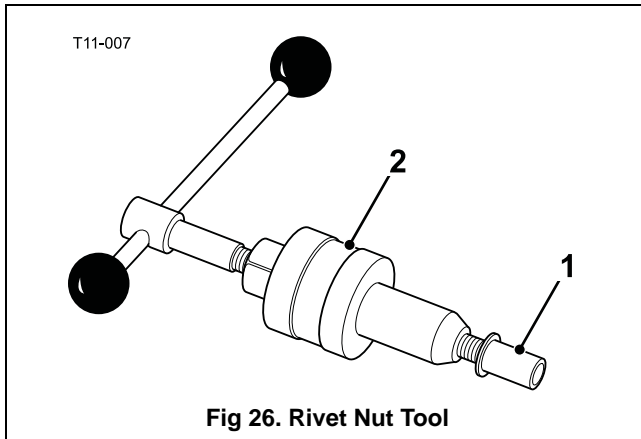
Note: Not all service tools are illustrated.



T11-006

Fig 25. 993/68100 Slide Hammer Kit

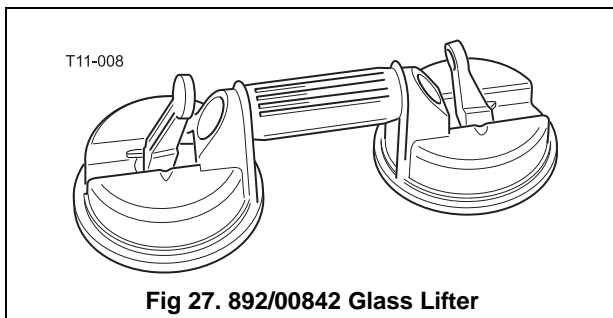
1	993/68101	Slide Hammer	7	993/68107	Bar - M20 x M20 X 800 mm
2	993/68102	End Stops	8	993/68108	Adaptor - M20 x 7/8" UNF
3	993/68103	Adaptor - M20 x 5/8" UNF	9	993/68109	Adaptor - M20 x M12
4	993/68104	Adaptor - M20 x 1" UNF	10	993/68110	Adaptor - M20 x 5/8" UNF (Shoulder)
5	993/68105	Adaptor - M20 x M20	11	993/68111	Adaptor - M20 x 1/2" UNF
6	993/68106	Adaptor - M20 x M24			



T11-007

Fig 26. Rivet Nut Tool

1	826/01099	M6 x 16 mm Rivet Nut
	826/01101	M6 x 19 mm Rivet Nut
	826/01102	M8 x 18 mm Rivet Nut
	826/01103	M8 x 21 mm Rivet Nut
	826/01104	M10 x 23 mm Rivet Nut
	826/01105A	M10 x 26 mm Rivet Nut
2	-	Installation Tool available from: Bollhoff Fastenings Ltd (www.bollhoff.com)



T11-008

Fig 27. 892/00842 Glass Lifter

Minimum 2 off - Essential for glass installation, 2 required to handle large panes of glass. Ensure suction cups are protected from damage during storage.

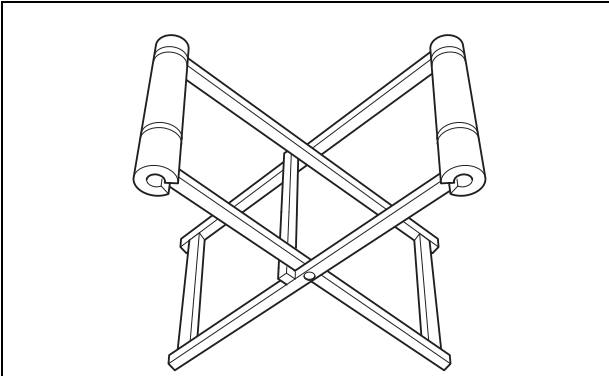
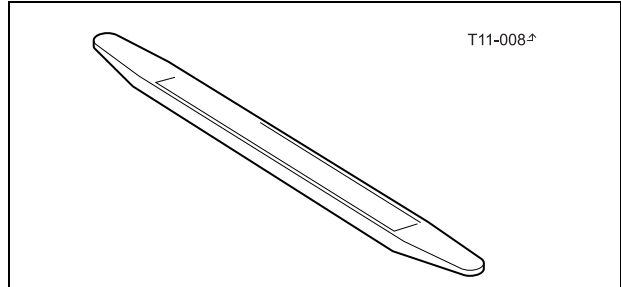


Fig 28. 892/00843 Folding Stand

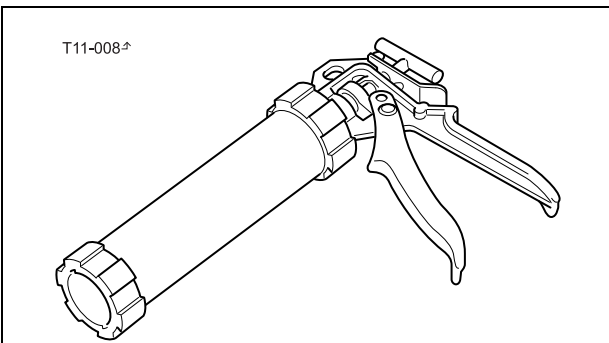
Essential for preparing new glass prior to installation.



T11-008-⁺

Fig 31. 892/00847 Nylon Spatula

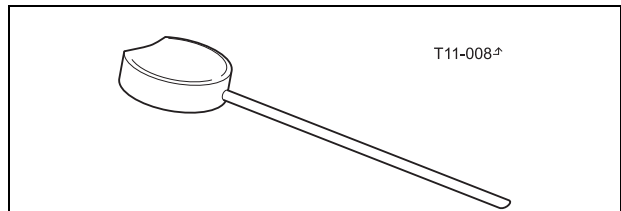
General tool used for smoothing sealants - also used to re-install glass in rubber glazing because metal tools will chip the glass edge.



T11-008-⁺

Fig 29. 892/00845 Cartridge Gun

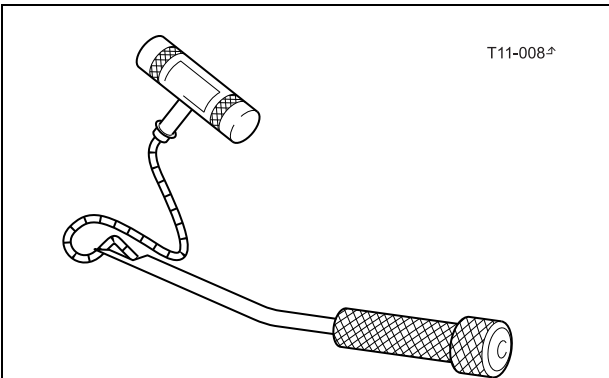
Hand operated. Essential for the application of sealants, polyurethane materials etc.



T11-008-⁺

Fig 32. 892/00848 Wire Starter

Used to access braided cutting wire through original polyurethane seal. → [Fig 33. \(□ 1-17\)](#).



T11-008-⁺

Fig 30. 892/00846 Glass Extractor (Handles)

Used with braided cutting wire to cut out broken glass. → [Fig 33. \(□ 1-17\)](#).

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