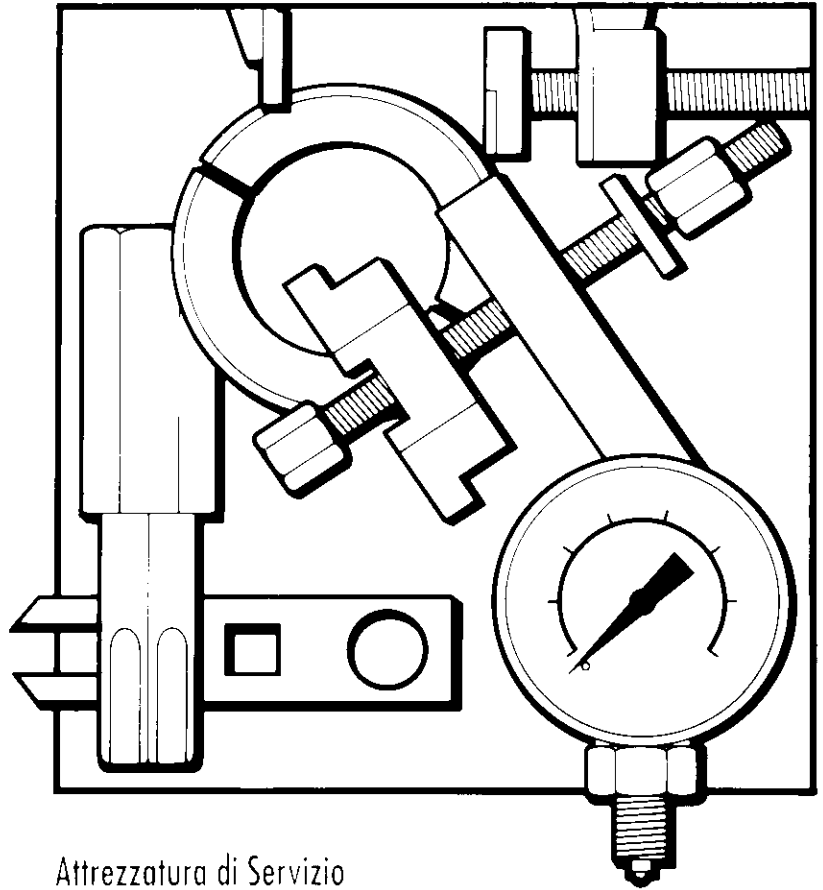


# Service tools

## V L CHURCHILL



Attrezzatura di Servizio

Onderhouds Gereedschappen

Spezialwerkzeuge

Outillage d'entretien

Herramientas de mantenimiento





## **RANGE ROVER DISCOVERY DEFENDER**

### **SPECIAL SERVICE TOOLS**

The importance of the use of approved special service tools can hardly be over emphasised. They are essential if service operations are to be carried out efficiently, and safely. The amount of time which they save can be considerable.

Every special tool is designed with the close co-operation of the vehicle manufacturers and no tool is put into production which has not been tested and approved by them. New tools are only introduced where an operation cannot be satisfactorily carried out using existing tools or standard equipment. The user is therefore assured that the tool is necessary and that it will perform accurately, efficiently and safely.

This catalogue gives details of the current range of special tools for the Range Rover, Discovery and Defender.

Special tools bulletins will be issued periodically giving details of new tools as they are introduced.

All orders and enquiries from the United Kingdom should be sent direct to V.L. Churchill. Overseas orders should be placed with the local V.L. Churchill distributor, where one exists. Countries where there is no distributor may order direct from V.L. Churchill Limited.

### **OUTLS D'ENTRETIEN SPÉCIAUX**

L'on ne saurait attacher trop d'importance à l'emploi d'outils spéciaux homologués pour l'entretien. De tels outils sont indispensables si l'on veut effectuer les opérations d'entretien efficacement et en toute sûreté. Ces outils permettent de réaliser des économies de temps considérables.

Chacun des outils spéciaux a été étudié en étroite coopération avec les constructeurs des véhicules et la fabrication d'un outil n'est jamais lancée avant que ces derniers ne l'aient essayé et homologué. Nous n'introduisons de nouveaux outils que lorsqu'une opération ne peut se faire au moyen des outils existants ou du matériel standard. L'utilisateur peut donc être certain que l'outil est nécessaire et qu'il fonctionnera avec précision et d'une manière efficace et sûre.

Vous trouverez dans le présent catalogue la gamme actuelle d'outils pour véhicules Range Rover, Discovery et Defender.

Des bulletins spéciaux publiés à intervalles réguliers vous tiendront au courant des nouveaux outils au fur et à mesure de leur introduction.

Les commandes et demandes de renseignements provenant du Royaume-Uni sont à adresser directement à V.L. Churchill. Les commandes provenant de pays d'outre-mer sont à passer au concessionnaire V.L. Churchill le plus proche, s'il en existe un. S'il n'existe aucun concessionnaire dans votre pays, adressez directement votre commande à V.L. Churchill Limited.

## **SPEZIAL-WERKZEUGE**

Die Bedeutung geprüfter Spezial-Werkzeuge kann gar nicht genug betont werden. Sie sind eine unerlässliche Voraussetzung für die richtige und sichere Ausführung von Reparaturarbeiten. Ausserdem können sie viel Zeit sparen.

Jedes einzelne Werkzeug wird in enger Zusammenarbeit mit dem jeweiligen Fahrzeugbauer konstruiert, und keines wird ohne seine Prüfung und Genehmigung hergestellt. Neue Werkzeuge werden nur dann eingesetzt, wenn bestehende oder Standard-Werkzeuge die Arbeit nicht zufriedenstellend ausführen können. Der Benutzer kann sich also darauf verlassen, dass das Werkzeug notwendig ist und seine Aufgabe genau, wirtschaftlich und sicher lösen kann.

Dieser Katalog führt die gegenwärtig lieferbaren Spezial-Werkzeuge für Range Rover, Discovery und Defender auf.

Es werden in regelmässigen Zeitabständen Bulletins über Spezial-Werkzeuge herausgegeben, in welchen neu eingeführte Werkzeuge beschrieben werden.

Bestellungen und Abfragen aus dem Vereinigten Königreich sind direkt an V.L. Churchill zu richten. Bestellungen aus dem Ausland sollen an die örtliche Vertriebsstelle abgegeben werden. Wenn jedoch im jeweiligen Land keine Vertriebsstelle zur Verfügung steht, kann ebenfalls direkt von V.L. Churchill bestellt werden.

## **HERRAMIENTAS ESPECIALES PARA MANTENIMIENTO**

No puede exagerarse la importancia de emplear las herramientas especiales aprobadas para el mantenimiento. Son esenciales para efectuar las operaciones eficientemente y sin peligro. Pueden ahorrar mucho tiempo.

Todas las herramientas especiales se diseñan en estricta colaboración con los fabricantes de los vehículos y antes de entrar en producción se prueban y certifican todas las herramientas por dichos fabricantes. Solamente se introducen nuevas herramientas cuando no puede ejecutarse satisfactoriamente el trabajo con las herramientas existentes o equipos normales. Por consiguiente, se asegura al usuario que la herramienta es realmente necesaria y que refaizará su cometido en forma eficiente, exacta y sin peligro.

Este catálogo da detalles de la gama actual de herramientas especiales para mantenimiento del Range Rover, Discovery y Defender.

Se publicarán periódicamente boletines de herramientas especiales dando detalles de las nuevas herramientas a medida que se vayan introduciendo.

Todos los pedidos y consultas del Reino Unido se enviarán directamente a V.L. Churchill. Los pedidos procedentes de otros países deben hacerse a través del Concesionario de V.L. Churchill más próximo. Los países donde no exista distribuidor pueden hacer pedidos directamente a V.L. Churchill Limited.

## ATTREZZI SPECIALI DI SERVIZIO

È sempre della massima importanza impiegare gli attrezzi di servizio prescritti. Questi, infatti, sono essenziali per potere effettuare tutti gli interventi di riparazione e manutenzione nel modo corretto e quanto più speditamente possibile. Gli attrezzi prescritti servono per fare risparmiare tempo!

Ogni attrezzo speciale è stato elaborato in stretta collaborazione con il costruttore delle vetture. Nessun attrezzo viene rilasciato senza previ controlli stringenti e l'approvazione del costruttore delle vetture. Nuovi attrezzi vengono presentati di tanto in tanto quando non è possibile effettuare un dato intervento di riparazione o manutenzione avvalendosi esclusivamente degli attrezzi o apparecchiature originali. Ciò garantisce all'Utente l'indispensabilità dell'attrezzo, che risulterà di valido aiuto per espletare le operazioni richieste nel modo più efficiente e sicuro possibile.

Il presente Catalogo riporta i particolari relativi alla serie attuale di attrezzi speciali per le vetture Range Rover, Discovery e Defender.

Verranno rilasciati di tanto in tanto alcuni Bollettini per gli Attrezzi Speciali che riportano i particolari di tutti i nuovi attrezzi a mano a mano che vengono presentati.

Tutte le ordinazioni e le richieste di informazione dal Regno Unito vanno inoltrate direttamente alla V.L. Churchill. Le ordinazioni dall'estero vanno inviate al locale Concessionario V.L. Churchill. Qualora non vi fosse un Concessionario Churchill nel Vs. Paese Vi preghiamo di contattare direttamente la V.L. Churchill Limited.

**V L CHURCHILL**








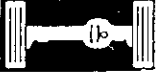






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**OVERSEAS DISTRIBUTORS  
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<b>Austria</b>	Hans Lohmann Goldschlagstrasse 5 1150 Wien Tel: 010 43 222 92 42 86 Tlx: 132037 Fax: 010 43 222 982 17 02	<b>Italy</b>	Raffaele Rimassa SPA Via Cecchi 13 I-16129 Genova Tel: 010 3910 54 32 68 Tlx: 270679 Fax: 010 3910 566261
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<b>Germany</b>	V. Lowener Industriestrasse 67 Postbus 2262 D-4018 Langenfeld Germany Tel: 010 49 2173 28090 Fax: 010 49 2173 280970	<b>Switzerland</b>	KAPP AG Industriestrasse 31 8112 Otelfingen Zurich Tel: 010 4118 463333 Tlx: 45827 Fax: 010 4118 442857
<b>Holland</b>	Frijdal Techniek BV Californiedreef 40 - 42 Postbus 9045 3506 GA Utrecht Tel: 010 3130 623306/623142 Fax: 010 3130 624844	<b>U.S.A.</b>	Owatonna Tool Co. 2013 - 4th Street North West Ind. Park P.O. Box 314 Owatonna Minnesota 55060 Tel: 0101 507 451 5310 Tlx: 20167 Fax: 0101 507 455 7106
<b>Ireland</b>	J.P. Bates Ltd. Carr's Lane Balgriffin Dublin 17 Ireland Tel: 010 3531 461178 Tlx: 33455 Fax: 010 3531 461178		

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**MANDATORY TOOLS BY MODEL****DEFENDER****RANGE ROVER****DISCOVERY****ENGINES**

LRT-12-001	LRT-12-001	LRT-12-001
LRT-12-002	LRT-12-004	LRT-12-007
LRT-12-003	LRT-12-005	LRT-12-008
LRT-12-005	LRT-12-006	LRT-12-010
LRT-12-007	LRT-12-007	LRT-12-011
LRT-12-008	LRT-12-009	LRT-12-013
LRT-12-009	LRT-12-010	LRT-12-014
LRT-12-010	LRT-12-011	LRT-12-015
LRT-12-013	LRT-12-012	LRT-12-028
LRT-12-014	LRT-12-013	LRT-12-031
LRT-12-015	LRT-12-014	LRT-12-032
LRT-12-028	LRT-12-016	LRT-12-034
LRT-12-029	LRT-12-017	LRT-12-035
LRT-12-030	LRT-12-018	LRT-12-036
LRT-12-031	LRT-12-019	LRT-12-037
LRT-12-032	LRT-12-020	LRT-12-038
LRT-12-034	LRT-12-021	LRT-12-040
LRT-12-035	LRT-12-022	LRT-12-041
LRT-12-036	LRT-12-023	LRT-12-043
LRT-12-037	LRT-12-024	LRT-12-044
LRT-12-038	LRT-12-025	LRT-12-045
LRT-12-039	LRT-12-026	LRT-12-046
LRT-12-040	LRT-12-027	LRT-12-047
LRT-12-041	LRT-12-034	LRT-12-048
LRT-12-042	LRT-12-037	LRT-12-049
LRT-12-043	LRT-12-038	LRT-12-052
LRT-12-044	LRT-12-041	
LRT-12-045	LRT-12-047	
LRT-12-046	LRT-12-050	
LRT-12-048	LRT-12-052	
LRT-12-049	LRT-12-054	
LRT-12-052		

**FUEL SYSTEM**

LRT-19-004	LRT-19-001	LRT-19-001
	LRT-19-002	LRT-19-002
	LRT-19-003	LRT-19-003
	LRT-19-004	LRT-19-004

**MANUAL GEARBOX**

LRT-37-001	LRT-37-001	LRT-37-001
LRT-37-002	LRT-37-002	LRT-37-002
LRT-37-003	LRT-37-004	LRT-37-004



**DEFENDER****RANGE ROVER****DISCOVERY****MANUAL GEARBOX**

LRT-37-004  
LRT-37-005  
LRT-37-006  
LRT-37-007  
LRT-37-008  
LRT-37-009  
LRT-37-010  
LRT-37-011  
LRT-37-012  
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LRT-37-012  
LRT-37-013  
LRT-37-014  
LRT-37-015  
LRT-37-017  
LRT-37-018  
LRT-37-019

**TRANSFER GEARBOX**

LRT-41-001  
LRT-41-002  
LRT-41-003  
LRT-41-004  
LRT-41-005  
LRT-41-006  
LRT-41-007  
LRT-41-008  
LRT-41-009

LRT-41-001  
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LRT-41-003  
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LRT-41-009  
LRT-41-010

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LRT-41-003  
LRT-41-004  
LRT-41-005  
LRT-41-006  
LRT-41-007  
LRT-41-008  
LRT-41-009

**AUTOMATIC GEARBOX**

LRT-44-001  
LRT-44-002  
LRT-44-003  
LRT-44-004  
LRT-44-005  
LRT-44-006  
LRT-44-007  
LRT-44-008  
LRT-44-009  
LRT-44-010

**REAR AXLE AND FINAL DRIVE**

LRT-51-001  
LRT-51-002  
LRT-51-003

LRT-51-001  
LRT-51-003  
LRT-51-004

LRT-51-001  
LRT-51-003

**MANDATORY TOOLS BY MODEL****DEFENDER****RANGE ROVER****DISCOVERY****FRONT AXLE AND FINAL DRIVE**

LRT-54-001  
LRT-54-002  
LRT-54-005

LRT-54-001  
LRT-54-002  
LRT-54-003  
LRT-54-004  
LRT-54-005

LRT-54-002  
LRT-54-005

**STEERING**

LRT-57-001  
LRT-57-002  
LRT-57-003  
LRT-57-004  
LRT-57-005  
LRT-57-006  
LRT-57-007  
LRT-57-008  
LRT-57-009  
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LRT-57-024

LRT-57-001  
LRT-57-002  
LRT-57-004  
LRT-57-005  
LRT-57-006  
LRT-57-007  
LRT-57-012  
LRT-57-017  
LRT-57-018  
LRT-57-019  
LRT-57-020  
LRT-57-021  
LRT-57-022  
LRT-57-023  
LRT-57-024

**FRONT SUSPENSION**

LRT-60-001  
LRT-60-002

**BRAKES**

LRT-70-001

**GENERAL PURPOSE**

LRT-99-001  
LRT-99-002  
LRT-99-003  
LRT-99-004  
LRT-99-006

LRT-99-001  
LRT-99-002  
LRT-99-003  
LRT-99-004  
LRT-99-006

LRT-99-001  
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LRT-99-006

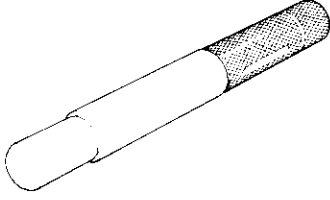
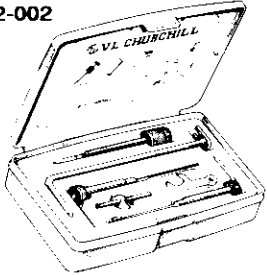
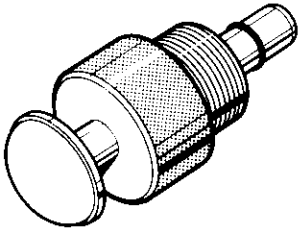
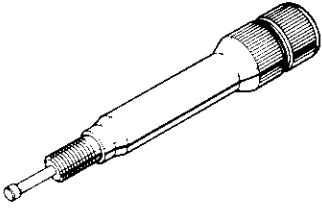
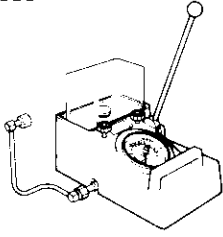
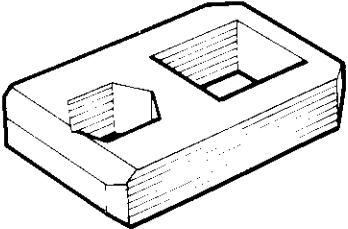
# **MANDATORY TOOLS**

## **SECTION 12 ENGINES**

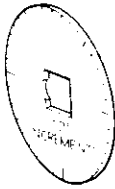

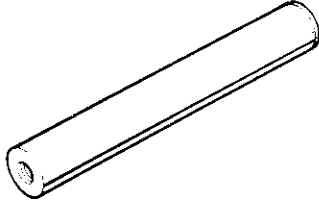

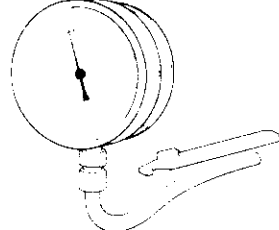
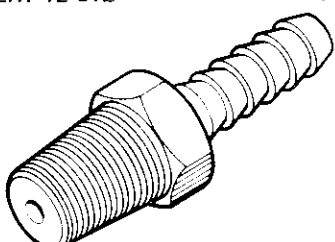


# MANDATORY TOOLS

# ENGINES 12

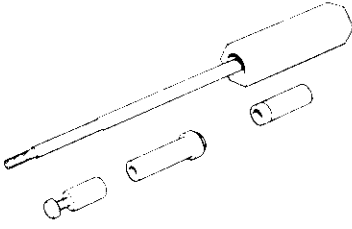
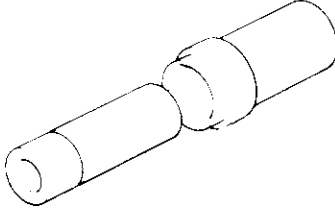
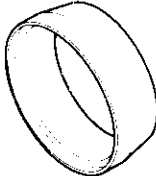
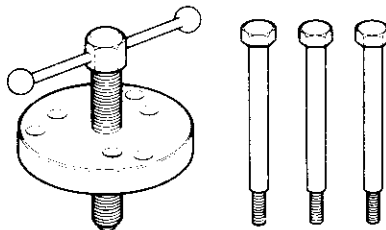
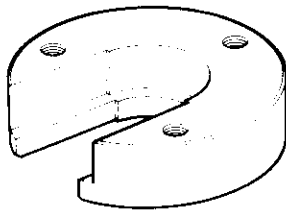
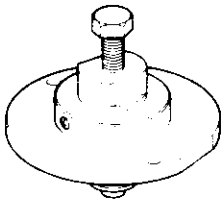
TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V6	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-001	18G.79	 <p>Clutch centralising tool                      Outil de centrage d'embrayage                      Zentriervorrichtung für Kupplung                      Herramienta centradora del embrague                      Attrezzo centraggio frizione</p>			●	●	
LRT-12-002	MS.95	 <p>Carburettor adjustment kit                      Trousse de réglage de carburateur                      Vergasereinstellsatz                      Equipo de ajuste del carburador                      Kit per la messa a punto del carburatore</p>			●		
LRT-12-003	LST.107	 <p>Flywheel timing pin                      Goupille de réglage du volant de moteur                      Schwungrad-Einstellstift                      Pasador de sincronización de volante                      Spina per la messa in fase del volante</p>			●		
LRT-12-004	MS.107	 <p>Adaptor timing injector fuel pump                      Adaptateur d'injecteur de réglage de la pompe de carburant                      Adapter für Einspritzpumpen-Einstellvorrichtung                      Adaptador de inyector de sincronización de la bomba de combustible                      Adattatore messa in fase pompa carburante/iniettori</p> <p>8mm thread</p>				●	
LRT-12-005	111	 <p>Injector tester                      Vérificateur d'injecteur                      Düsenprüfgerät                      Probador del inyector                      Attrezzo di bloccaggio per iniettori</p>			●	●	
LRT-12-006	LST.121	 <p>Adaptor cylinder head bolts                      Adaptateur pour boulons de culasse de cylindre                      Adapter für Zylinderkopfschrauben                      Adaptador de pernos de culata de cilindro                      Adattatore bulloni della testata</p>				●	



TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI	
NEW NUMBER	OLD NUMBER							
LRT-12-007	LST 122	 <p>Cylinder head bolt angle gauge                      Cale étalon d'angle des boulons de culasse de cylindre                      Messgerät für Zylinderkopfschrauben-Winkelendmass                      Calibrador de ángulo de perno de culata de cilindro                      Strumento angolo dei bulloni della testata</p>					●	●
LRT-12-008	18G.134-11	 <p>Adaptor replacer - crankshaft rear oil seal                      Adaptateur de remplacement de bague d'étanchéité arrière de vilebrequin                      Adapter für Einbauwerkzeug für hintere Kurbelwellen-Öldichtung                      Recolocador adaptador - obturador de aceite trasero del cigüeñal                      Adattatore/installatore paraolio posteriore albero motore</p> <p><b>Used with LRT-99-003 (18G.134 or MS.550)</b></p>	●	●			●	
LRT-12-009	LST 191-1	 <p>Adaptor, turbo charger spindle                      Adaptateur de l'axe de turbocompresseur à suralimentation                      Adapter für Turboladerspindel                      Adaptador de eje de turboalimentador                      Adattatore albero del turbocompressore</p> <p><b>Used with 18G.191</b></p>				●		
LRT-12-010	RC.1014	 <p>Crankshaft rear oil seal protection sleeve                      Manchon de protection de bague d'étanchéité arrière de vilebrequin                      Schutzhülse für hintere Kurbelwellen-Öldichtung                      Manguito protector de obturador de aceite del cigüeñal trasero                      Manicotto protezione paraolio posteriore albero motore</p>					●	
LRT-12-011	18G.1116	 <p>Gauge - Turbo boost pressure check                      Jauge - Contrôle de pression d'admission du turbo-compresseur                      Messgerät - Turboladedruckprüfung                      Calibrador - Comprobación de la presión de refuerzo de turbo                      Strumento controllo pressione sovralimentazione turbo</p> <p><b>Used with screen wash hose and tee piece</b></p>					●	●
LRT-12-012	18G.1116-1	 <p>Adaptor pressure test waste gate valve                      Adaptateur de vérification de pression de robinetvanne de décharge                      Adapter für Druckprüfung des Entleer-Absperrventils                      Adaptador de válvula de puerta de desecho de prueba de precisión                      Adattatore valvola wastegate controllo pressione</p>					●	

# MANDATORY TOOLS

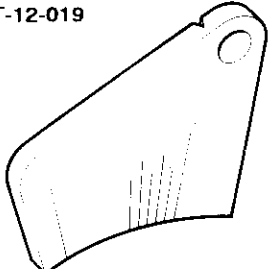
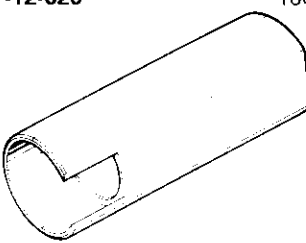
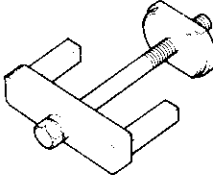
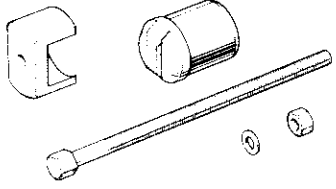
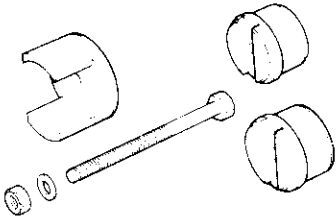

# ENGINES 12

TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-013	18G.1150	 <p>Remover/replacer gudgeon pin - Basic tool                      Outil de dépose/remplacement d'axe de piston - outil de base                      Ein/Ausbauwerkzeug für Kolbenbolzen-Grundwerkzeug                      Desmontador/recolocador de eje de pistón                      Estrettole/installatore per spinotti</p> <p><b>Used with LRT-12-014 (18G.1150E)</b></p>			●		
LRT-12-014	18G.1150E	 <p>Adaptor remover/replacer gudgeon pin                      Adapteur de dépose/remplacement d'axe de piston                      Adapter für Ein/Ausbauwerkzeug für Kolbenbolzen                      Desmontador/recolocador de adaptador de eje de pistón                      Adattatore/estrattore/installatore per spinotti</p> <p><b>Used with LRT-12-013 (18G.1150)</b></p>			●		
LRT-12-015	18G.1344	 <p>Crankshaft rear oil seal protection sleeve                      Manchon de protection de bague d'étanchéité arrière de vilebrequin                      Schutzhülse für hintere Kurbelwellen-Öldichtung                      Manguito de protección de obturador de aceite trasero del cigüeñal                      Manicotto protezione paraolio posteriore albero motore</p>	●	●			●
LRT-12-016	18G.1367	 <p>Remover crankshaft pulley                      Outil de dépose de poulie de vilebrequin                      Abzieher für Kurbelwellenscheibe                      Desmontador de patea de cigüeñal                      Estrattore per puleggia albero motore</p>				●	
LRT-12-017	18G.1367-1A	 <p>Adaptor crankshaft gear remover                      Adapteur de dépose de pignon de vilebrequin                      Adapter für Kurbelwellenscheiben-Abzieher                      Adaptador y desmontador de engranaje de cigüeñal                      Adattatore estrattore ingranaggio albero motore</p> <p><b>Used with LRT-12-016 (18G.1367)</b></p>				●	
LRT-12-018	18G.1368	 <p>Remover and holder injection pump drive gear                      Outil de dépose-retenu de pignon                      Abzieher und Halter für Einspritzpumpen-Antriebsrad                      Desmontador y sustentador de engranaje de mando de la bomba de inyección                      Estrattore e fermo ingranaggio comando pompa iniezione</p>				●	2.4 ONLY



# ENGINES 12

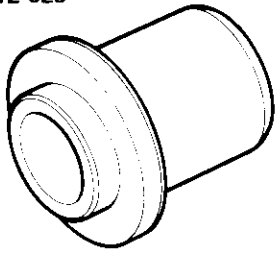
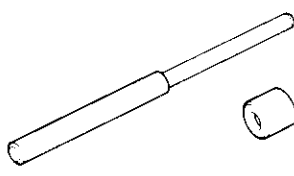
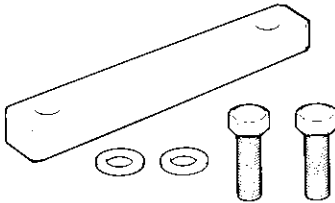
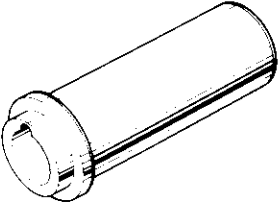
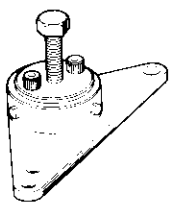
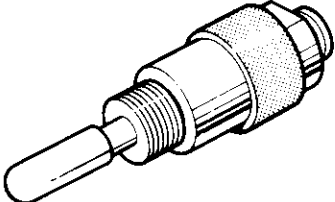
# MANDATORY TOOLS

TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	V6 DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-019	18G.1369A	 <p>Timing gauge Calibre de distribution Zündverstellungsmesser Calibrador de sincronización Atrezzo per la messa in fase</p>					●
LRT-12-020	18G.1370B	 <p>Remover/replacer sleeve and crankshaft Outil de dépose et de remplacement bague et vilebrequin Abzieher/Einsetzer für Hülse und Kurbelwelle Desmontador/recolocador de manguito y cigüeñal Estrattore/installatore manicotto e albero motore</p>					●
LRT-12-021	18G.1371	 <p>Remover cylinder liner Outil de dépose de chamise de cylindre Laufbüchsenabzieher Desmontador de camisa de cilindro Estrattore per canne cilindri</p>					●
LRT-12-022	18G.1372B	 <p>Remover/replacer camshaft bearings Outil de dépose-remplacement de roulements d'arbre à cames Abzieher/Einsetzer für Nockenwellenlager Desmontador/recolocador de cojinetes de cigüeñal Estrattore/installatore cuscinetto albero a camme</p>					●
LRT-12-023	18G.1373	 <p>Remover/replacer front and rear crankshaft bearings Outil de dépose-remplacement de paliers AV et AR du vilebrequin Abzieher/Einsetzer für vordere und hintere Kurbelwellenlager Desmontador/recolocador de cojinetes delanteros y traseros del cigüeñal Estrattore/installatore cuscinetti anteriori e posteriori albero motore</p>					●
LRT-12-024	18G.1374	 <p>Replacer crankshaft rear oil seal Outil de remplacement de bague d'étanchéité arrière de vilebrequin Einsetzer für hintere Kurbelwellen-Öldichtung Recolocador de obturador de aceite trasero del cigüeñal Installatore paraolio posteriore albero motore</p>					●

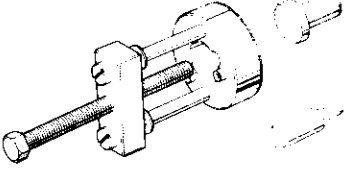
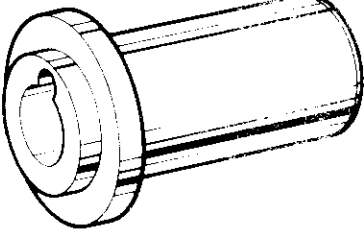
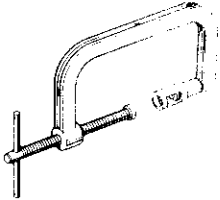
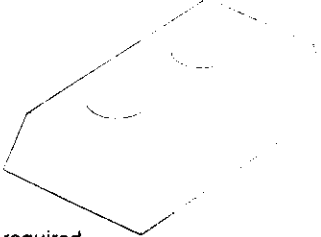
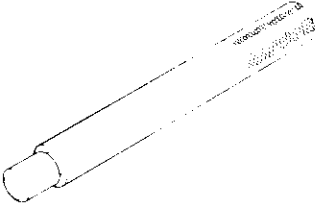
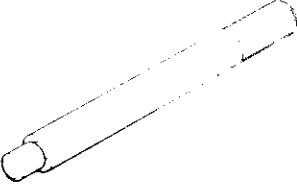


# MANDATORY TOOLS

# ENGINES 12

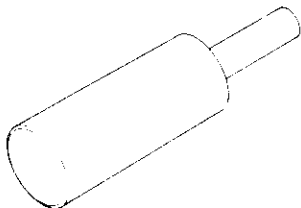
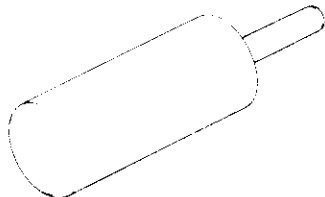
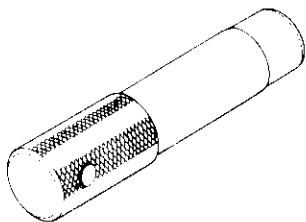
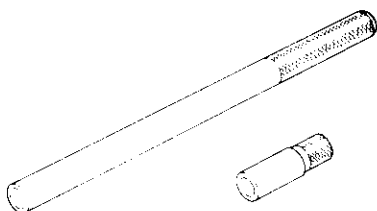
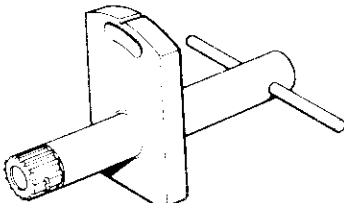
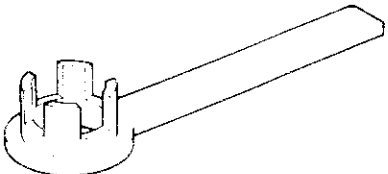
TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDi
NEW NUMBER	OLD NUMBER						
	LRT-12-025 18G.1375	Replacer timing cover oil seal Outil de remplacement de bague d'étanchéité du carter de distribution Einsetzer für Steuergehäusedeckel-Öldichtung Recolocador de obturador de aceite de cubierta de sincronización Installatore paraolio carter della distribuzione				●	
	LRT-12-026 18G.1377	Remove/replacer valve guide Adaptateur de remplacement de guide de soupape Abzieher/Einsetzer für Ventildführungen Desmontador/recolocador de guía de válvula Estrattore/installatore per guide valvole				●	
	LRT-12-027 18G.1378B	Retainer beam and gauge block cylinder liner Cage de bloc jauge et support de chamise de cylindre Haltestange und Einstellblock für Laufbüchse Viga retén y bloque interior de camisa de cilindro Fermo corpo e strumento per canne cilindri				●	
	LRT-12-028 18G.1456	Replacer - Crankshaft front oil seal Outil de remplacement de bague d'étanchéité avant du vilebrequin Einbauwerkzeug für vordere Kurbelwellen-Öldichtung Recolocador - Obturador de aceite delantero del cigüeñal Installatore paraolio anteriore albero motore	●				●
	LRT-12-029 18G.1457	Remove retainer fuel injection pump drive gear Outil de dépose support de pignon d'entraînement de pompe d'injection Ausbauwerkzeug für Klemme des Einspritzpumpen-Antriebsrades Desmontador retén del engranaje de accionamiento de la bomba de inyección de combustible Estrattore/installatore ingranaggio comando pompa iniezione carburante	●				
	LRT-12-030 18G.1458	Timing tool D.P.S. fuel injection pump Outil pour pompe d'injection D.P.S. Einstelwerkzeug D.P.S. Einspritzpumpe Bomba de sincronización de la bomba de inyección de combustible D.P.S. Atrezzo messa in fase pompa iniezione carburante - DPS	●				



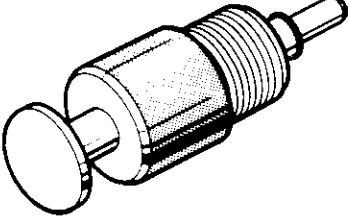
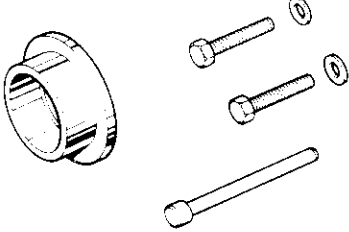
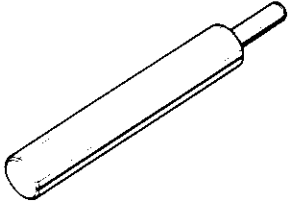
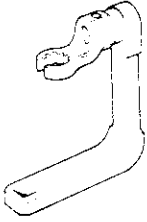
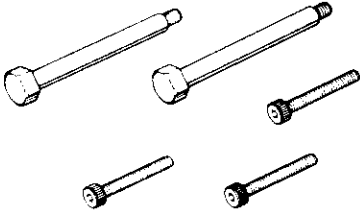
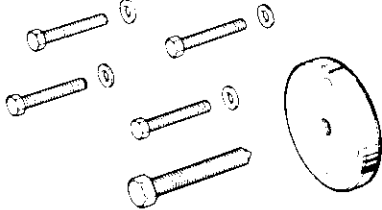
TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDi
NEW NUMBER	OLD NUMBER						
LRT-12-031	18G 1464	 <p>Crankshaft and camshaft gear remover                      Outil de dépose de pignon de vilebrequin et arbre à cames                      Ausbauwerkzeug für Kurbel- und Nockenwellenrad                      Desmontador de engranajes del cigüeñal y del árbol de levas                      Estrattore ingranaggi albero motore e albero a camme</p>		●			●
LRT-12-032	18G 1482	 <p>Camshaft oil seal replacer                      Outil de remplacement de bague d'étanchéité d'arbre à cames                      Einbauwerkzeug für Nockenwellen-Öldichtung                      Recolocador de obturador de aceite del árbol de levas                      Installatore per paraolio albero a camme</p>		●			●
LRT-12-034	AS 1119A	 <p>Valve spring compressor                      Compresseur de ressort de soupape                      Ventilfederzange                      Compressor de muelle de válvula                      Compresore per molle valvole</p>	●	●	●	●	●
LRT-12-035	QW 225RC44	 <p>Guide for fitting rear main bearing oil seal                      Guide de pose de bague d'étanchéité du roulement principal arrière                      Einbauführung für hintere Hauptlager-Öldichtung                      Guía para montar el obturador de aceite del cojinete principal trasero                      Guida per installazione paraolio posteriore cuscinetto di banco</p> <p>2 off required</p>	●	●			●
LRT-12-036	RC 274400	 <p>Drift for valve guide removal, inlet                      Broche de déchassage de guide de soupape d'admission                      Dorn für Ausbau der Einlassventilführung                      Mandril para demontar la guía de válvula, entrada                      Punzone per distacco guida valvola di aspirazione</p>	●	●			
LRT-12-037	RC 274401	 <p>Drift for valve guide removal, exhaust                      Broche de déchassage de guide de soupape d'échappement                      Dorn für Ausbau der Auslassventilführung                      Mandril para desmontar la guía de válvula, salida                      Punzone per distacco guida valvola di scarico</p>	●	●	●		

# MANDATORY TOOLS

# ENGINES 12

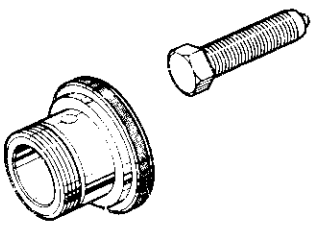
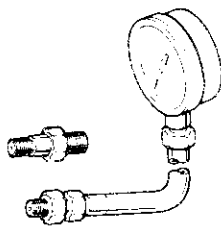
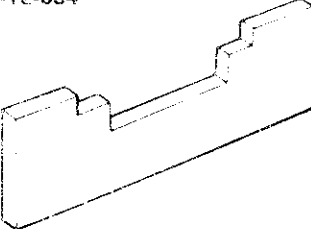
TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-038	RO.600959	 <p>Drift for valve guide replacement, exhaust Mandrin de remplacement de guide de soupape d'échappement Dorn für Einbau der Auslassventilführung Mandril para recolocar la guía de válvula de salida Punzone per montaggio guida valvola di scarico</p>	●	●	●		
LRT-12-039	RO.601508	 <p>Drift for valve guide replacement, inlet Mandrin de remplacement de guide de soupape d'admission Dorn für Einbau der Einlassventilführung Mandril para recolocar la guía de válvula de entrada Punzone per montaggio guida valvola di aspirazione</p>	●	●			
LRT-12-040	RO.605022	 <p>Clutch plate mandrel Mandrin de plateau d'embrayage Kupplungsscheibendorn Mandril para el plato de embrague Mandrino per disco frizione</p>	●	●			●
LRT-12-041	RO.605351	 <p>Connecting rod bolt guide tool Outil guide de boulons de bielle Werkzeug für Pleuelschraubenführung Herramienta para la guía del perno de la biela Atrezzo di guida per bulloni bielle</p>			●		
LRT-12-042	RO.605863	 <p>Distributor pump timing tool Outil de réglage de pompe de distributeur Verteilerpumpen-Einstellwerkzeug Herramienta para sincronización de la bomba del distribuidor Atrezzo messa in fase pompa del distributore</p> <p>Engine with DPA pump</p>		●			
LRT-12-043	LST.127	 <p>Crankshaft pulley holding tool Clé de fixation de poulie de vilebrequin Halteschlüssel für Kurbenwellenscheibe Llave para sostener de patea del cigüeñal Atrezzo bloccaggio puleggia dell'albero motore</p>		●			●

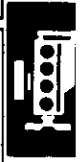


TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-044	LST.128	 <p>Flywheel timing pin 200 Tdi                      Pige de calage pour volant moteur, 200 Tdi                      Schwungradtaktstift, 200 Tdi                      Pasador de sincronización de volante, 200 Tdi                      Spina messa in fase del volante, 200 Tdi</p>					●
LRT-12-045	LST.129	 <p>Retainer fuel injection pump gear 200 Tdi                      Dispositif de retenue pour pignon de pompe d'injection de carburant                      Haltevorrichtung, Kraftstoffeinspritzpumpgetrieb 200 Tdi                      Retén, engranaje, bomba inyección combustible, 200 Tdi                      Fermo ingranaggio pompa iniezione carburante 200 Tdi</p>					●
LRT-12-046	LST.130	 <p>Valve guide drift                      Jet pour guide de soupape                      Ventilführungsdurchtreiber                      Extractor, guía de válvula                      Punzone per guide valvole</p>					●
LRT-12-047	LST.134	 <p>Torque adaptor lambda sensor                      Adaptateur de couple, capteur lambda                      Drehmomentenzwischenstück, Lambda Meßfühler                      Adaptador par, detector Lambda                      Adattatore coppia, sensore lambda</p>			●		
LRT-12-048	LST.135	 <p>Bolts - adaptor tool                      Outil d'adaptation pour boulons                      Bolzen - Spannwerkzeug                      Pernos - herramienta de adaptador                      Bulloni - attrezzo adattatore</p> <p>Used with LRT-12-031</p>					●
LRT-12-049	LST.136	 <p>Crank damper remover                      Outil de dépose pour amortisseur de vilebrequin                      Ausbauwerkzeug für Kurbeldämpfer                      Extractor, amortiguador acodado                      Estrattore ammortizzatore albero motore</p>					●

# MANDATORY TOOLS

# ENGINES 12

TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDi
NEW NUMBER	OLD NUMBER						
LRT-12-050	LST.139	 <p>injection pump tool                      Outil pour pompe d'injection                      Werkzeug für Einspritzpumpe                      Herramienta de bomba de inyección                      Attrezzo per pompa di iniezione</p>				●	2.5 LITRE ONLY
LRT-12-052		 <p>Engine Oil Pressure Test Equipment                      Matériel de mesure de pression d'huile moteur                      Druckprüfgerät für Motorenöl                      Equipo de prueba de presión, aceite del motor                      Attrezzatura di controllo pressione olio motore</p>	●	●	●	●	●
LRT-12-054		 <p>Cylinder head dimension gauge                      Jauge de dimension pour culasse                      Maßlehre für Zylinderkopf                      Calibrador de dimensión, culata de cilindro                      Calibro misuratore testata</p>				●	



**ENGINES 12**

**MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						

# **MANDATORY TOOLS**

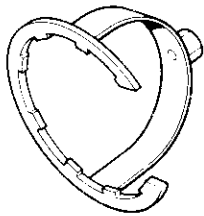
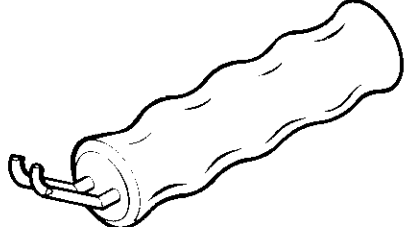
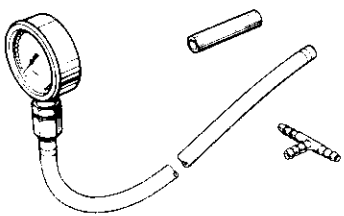
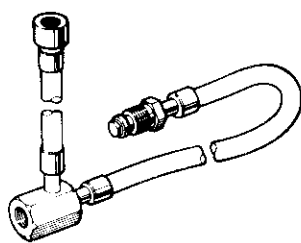
**SECTION 19  
FUEL SYSTEM**





**MANDATORY TOOLS**

**FUEL SYSTEM 19**

TOOL NUMBER		DESCRIPTION	RANGE ROVER	DISCOVERY	DEFENDER		
NEW NUMBER	OLD NUMBER						
LRT-19-001	LST.131	 <p>Fuel pump (in tank) remover (100")                      Outil de dépose pour pompe à carburant (à l'intérieur du réservoir) (100")                      Ausbauwerkzeug (100") für Kraftstoffpumpe (im Behälter)                      Extractor, bomba de combustible (dentro del depósito) (100 pulgs)                      Pompa carburante (nel serbatoio) - estrattore (100")</p>	●	●			
LRT-19-002	LST.144	 <p>Connector splitter (100")                      Séparateur de connecteur (100")                      Verbindungsspalter (100")                      Separador de conector (100 pulgs)                      Divaricatore per connettori (100")</p>	●	●			
LRT-19-004	18G.1500	 <p>Test equipment fuel pressure                      Matériel de contrôle pression carburant                      Prüfausrüstung für Kraftstoffdruck                      Manómetro                      Attrezzatura di controllo pressione carburante</p>	●	●			
LRT-19-003	LST.143	 <p>EFI pressure test adaptor                      Adaptateur de contrôle de pression pour injection électronique de carburant                      Zwischenstück für elektrische Kraftstoffeinspritzmessung                      Adaptador prueba de presión, inyección electrónica de combustible                      Adattatore controllo pressione EFI</p>	●	●			



**FUEL SYSTEM 19**

**MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION	RANGE ROVER	DISCOVERY	DEFENDER		
NEW NUMBER	OLD NUMBER						



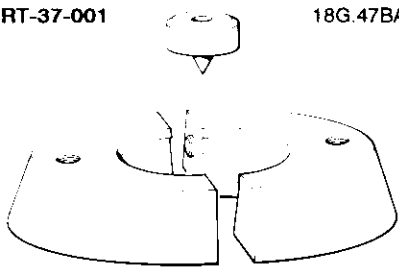

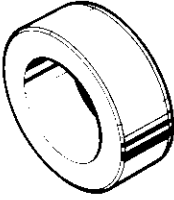
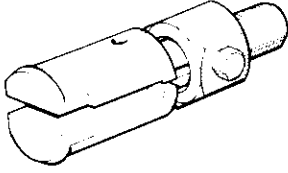
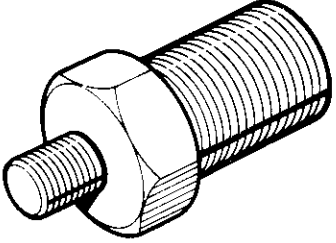
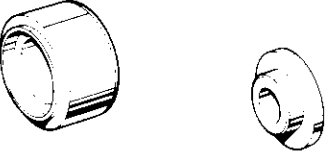
# **MANDATORY TOOLS**

**SECTION 37  
MANUAL GEARBOX**

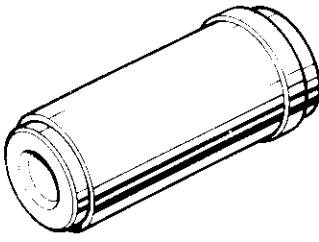
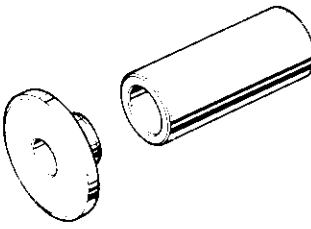
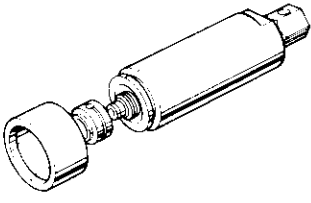
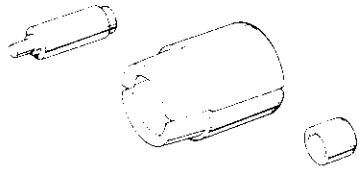
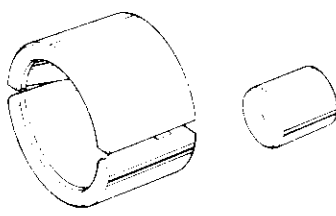
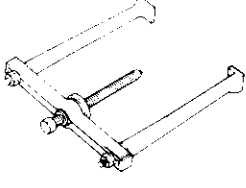


# MANDATORY TOOLS

# MANUAL GEARBOX 37

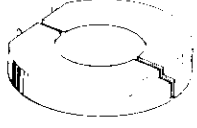
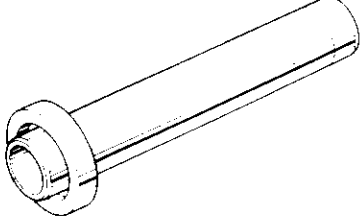
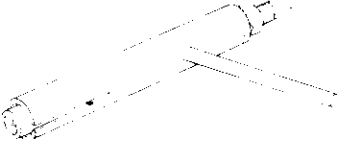
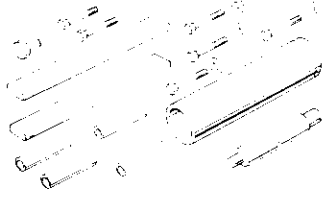
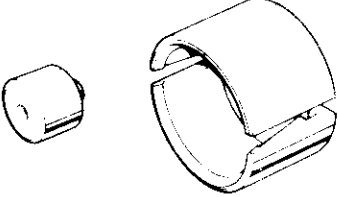

TOOL NUMBER		DESCRIPTION	LT76 4 SPEED	LT95 4 SPEED	LT77 5 SPEED	LT85 5 SPEED?
NEW NUMBER	OLD NUMBER					
LRT-37-001	18G.47BA	 <p>Layshaft bearing remover adaptor                      Adapteur de dépose de roulement d'arbre intermédiaire                      Adapter für Vorgelegewellenlager-Abzieher                      Adaptador/desmontador del cojinete del eje intermedio                      Estrattore/adattatore cuscinetto albero rinvio</p> <p><b>Used with LRT-99-002 (MS.47)</b></p>		●	●	
LRT-37-002	18G.47BAX	 <p>Conversion kit to update primary shaft bearing remover                      Trousse de conversion pour outil de dépose d'arbre primaire                      Umbauausrüstung für Primärwellen-Lagerabzieher                      Equipo de conversión para actualizar el desmontador del cojinete eje primario                      Kit conversione aggiornamento estrattore cuscinetto albero primario</p> <p><b>Used with LRT-99-002 (MS.47)</b></p>			●	
LRT-37-003	LST.101	 <p>Gauge 1st gear end float                      Jauge de flottement de première vitesse                      Längsspiellehre für den ersten Gang                      Calibrador de huelgo de la velocidad                      Strumento per misurare gioco assiale ingranaggio 1A</p>				●
LRT-37-004	18G.284AAH	 <p>Adaptor - removal input shaft pilot bearing track                      Adapteur de dépose de la voie intérieure de roulement pilote                      Adapter für Ausbau der Antriebswellen-Führungslagerbahn                      Adaptador - Desmontaje de la pista del cojinete guía del eje primario                      Adattatore/estrattore pista cuscinetto guida albero entrata</p> <p><b>Used with LRT-99-004 (18G.284)</b></p>			●	
LRT-37-005	LST.284-1	 <p>Reverse idler shaft remover adaptor                      Adapteur für Rücklaufachse-Ausbauwerkzeug                      Adapteur de dépose d'arbre de renvoi intermédiaire                      Adaptador de extractor de eje secundario de marcha atrás                      Adattatore/estrattore albero folle della retromarcia</p> <p><b>Used with LRT-99-004 (18G.284)</b></p>				●
LRT-37-006	LST.550-1	 <p>Layshaft front bearing remover/replacer                      Outil de dépose/remplacement de roulement avant d'arbre intermédiaire                      Ein/Wiederausbauwerkzeug für Vorderlager der Vorgelegewelle                      Desmontador/recolocador de cojinete delantero de árbol intermedio                      Estrattore/installatore cuscinetto anteriore albero di rinvio</p> <p><b>Used with LRT-99-003 (18G.134 or MS.550)</b></p>				●



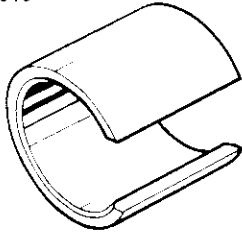
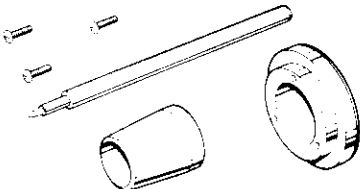
TOOL NUMBER		DESCRIPTION	LT76 4 SPEED	LT95 4 SPEED	LT77 5 SPEED	LT85 5 SPEED
NEW NUMBER	OLD NUMBER					
LRT-37-007	LST.550-2	 <p>Layshaft rear bearing remover/replacer                      Outil de dépose/remplacement de roulement arrière d'arbre intermédiaire                      Ein/Wiederausbauwerkzeug für Hinterlager der Vorgelegewelle                      Desmontador/recolocador de cojinete trasero de árbol intermedio                      Estrattore/installatore cuscinetto posteriore albero di rinvio</p> <p><b>Used with LRT-99-003 (18G.134 or MS.550)</b></p>				●
LRT-37-008	LST.550-3	 <p>Mainshaft front/rear bearing remover/replacer                      Outil de dépose/remplacement de roulement avant/arrière d'arbre primaire                      Ein/Wiederausbauwerkzeug für Vorder/Hinterlager der Hauptwelle                      Desmontador/recolocador de cojinete delantero/trasero de árbol de transmisión                      Estrattore/installatore cuscinetto anteriore/posteriore albero primario</p> <p><b>Used with LRT-99-003 (18G.134 or MS.550)</b></p>				●
LRT-37-009	18G.705	 <p>Remover bearing race centre - Main tool                      Outil de dépose de centre de voie de roulement - outil de base                      Ausbauwerkzeug für Lauftringmittelteil - Hauptwerkzeug                      Desmontador de la pista de rodaje del cojinete - herramienta principal                      Estrattore sede cuscinetto centrale - attrezzo principale</p>			●	
LRT-37-010	18G.705-1A	 <p>Adaptor - removal mainshaft oil seal track layshaft 5th gear                      Adapteur de dépose de voie de roulement d'arbre primaire, du joint et du pignon de 5ème vitesse                      Adapter für Ausbau der Hauptwellen-Öldichtungsbahn, Vorgelegewelle 5. Gang                      Adaptador - Desmontaje del eje intermedio de 5a. velocidad de la pista del obturador de aceite del eje principal                      Adattatore stacco ingranaggio 5A albero rinvio pista paraolio albero primario</p> <p><b>Used with LRT-37-009 (18G.705)</b></p>			●	
LRT-37-011	18G.705-5	 <p>Adaptor - removal layshaft bearings                      Adapteur de dépose des roulements d'arbre intermédiaire                      Adapter für Ausbau der Vorgelegewellenlager                      Adaptador - Desmontaje de los cojinetes del eje intermedio                      Adattatore/estrattore cuscinetti albero rinvio</p> <p><b>Used with LRT-37-009 (18G.705)</b></p>			●	EARLY TYPE
LRT-37-012	18G.1400	 <p>Remover 1st speed synchromesh hub and gear cluster - Main tool                      Outil de dépose moyeu de synchronisation 1ère vitesse et équipage de roulements                      Ausbauwerkzeug für Synchronnabe und Zahnradsatz des 1 Ganges - Hauptwerkzeug                      Desmontador del conjunto de engranajes y cubo de engrane sincronizado de 1a. velocidad - herramienta principal                      Estrattore ingranaggio/mozzo sincronizzazione 1A - attrezzo principale</p>			●	●

# MANDATORY TOOLS

# MANUAL GEARBOX 37

TOOL NUMBER		DESCRIPTION	LT76 4 SPEED	LT95 4 SPEED	LT77 5 SPEED	LT85 5 SPEED
NEW NUMBER	OLD NUMBER					
LRT-37-013	18G.1400-1	 <p>Adaptor - mainshaft 5th gear remover                      Adapteur de dépose 5ème vitesse arbre primaire                      Adapter für Ausbauwerkzeug für Hauptwelle, 5. Gang                      Adaptador - Dedsmontador del eje principal de 5a. velocidad                      Adattatore estrattore ingranaggio 5A albero primario</p> <p><b>Used with LRT-37-013 (18G.1400)</b></p>			●	
LRT-37-014	18G.1422	 <p>Mainshaft rear oil seal replacer                      Outil de remplacement des bagues d'étanchéité du pignon d'admission et de l'arbre de sortie                      Einbauwerkzeug für hintere Hauptwellen-Öldichtung                      Recolocador del obturador de aceite de engranajes de entrada y de los obturadores de aceite del eje de transmisión de salida                      Installatore paraolio posteriore albero primario</p>			●	
LRT-37-015	18G.1431	 <p>Mainshaft 5th gear and oil seal collar replacer                      Outil de remplacement collier 5ème vitesse et bague d'étanchéité                      Einbauwerkzeug für Hauptwelle, 5. Gang und Öldichtungshülse                      Recolocador del eje principal de 5a. velocidad y collarin del obturador de aceite                      Installatore collare paraolio e ingranaggio 5A albero primario</p>			●	●
LRT-37-016	LST.1431-1	 <p>Mainshaft and front plate remover/replacer                      Outil de dépose/remplacement d'arbre primaire et plateau frontal                      Ein/Wiederausbauwerkzeug für Hauptwelle und Frontplatte                      Desmontador/recolocador de árbol de transmisión y plato delantero                      Estrattore/installatore albero primario e chiusura anteriore</p> <p><b>Used with LRT-37-015 (18G.1431) and LRT-37-012 (18G.1400)</b></p>				●
LRT-37-017	18G.705-7	 <p>Layshaft bearing remover                      Outil de dépose pour roulement sur arbre intermédiaire                      Ausbauwerkzeug für Vorgelegwellenlager                      Extractor, cojinete de eje secundario                      Estrattore cuscinetto albero di rinvio</p> <p><b>Used with LRT-37-009</b></p>			●	
LRT-37-018		 <p>Dummy Bearing                      Faux roulement                      Blindlager                      Cojinete simulado                      Finto cuscinetto</p>			●	



TOOL NUMBER		DESCRIPTION	LT76 4 SPEED	LT95 4 SPEED	LT77 5 SPEED	LT85 5 SPEED
NEW NUMBER	OLD NUMBER					
LRT-37-019		 <p>Bearing centre remover centraliser                      Centreur pour extracteur de centre de roulement                      Lagermittene Entferner, Zentriergerät                      Centradora de extractora, centro de cojinete -remoción de centro                      Attrezzo di centraggio per estrattore centrocuscinetto</p>			●	
LRT-37-020	LST.102	 <p>Mainshaft oil seal remover/replacer                      Outil de dépose/remplacement de bague d'étanchéité d'arbre primaire                      Ein/Wiederausbauewerkzeug für Hauptwellenöldichtung                      Desmontador/recolocador de obturador de aceite de árbol de transmisión                      Estrattore/installatore per paraolio albero primario</p>			●	



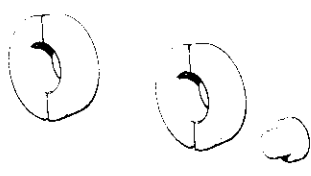
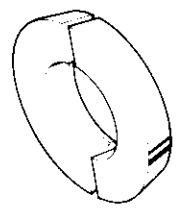
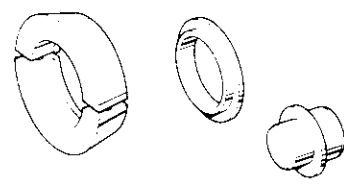
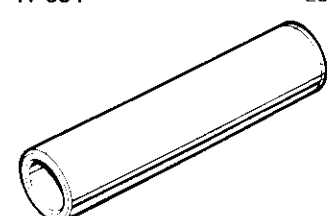
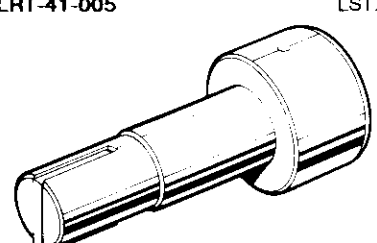
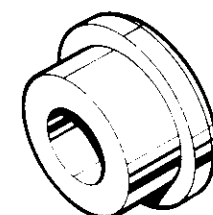
# **MANDATORY TOOLS**

## **SECTION 41 TRANSFER GEARBOX**

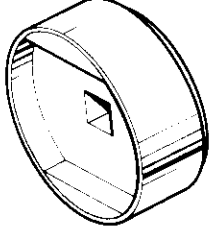
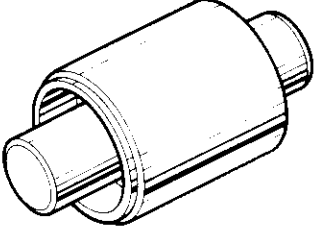
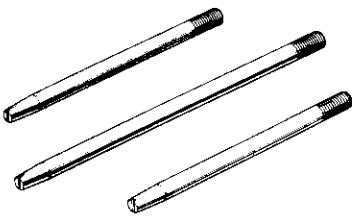
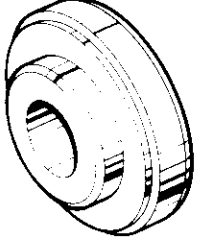


# MANDATORY TOOLS

# TRANSFER GEARBOX 41

TOOL NUMBER		DESCRIPTION										
NEW NUMBER	OLD NUMBER											
LRT-41-001	18G.47BB	 <p>Adaptor centre differential bearing remover                      Adapteur de dépose de roulements contraux de boîtier de différentiel                      Adapter für Ausbauwerkzeug für Differential-Mittellager                      Adaptador del desmontador del cojinete central del diferencial                      Adattatore estrattore cuscinetto centrale del differenziale</p> <p><b>Used with LRT-99-002 (MS.47)</b></p>						●	●			
LRT-41-002	LST.47-1	 <p>Adaptor centre differential bearing remover (front bearing only)                      Adapteur pour outil de dépose de roulement de boîtier différentiel central (Roulement avant seulement)                      Adapter für Ausbauwerkzeug des Differentialmittellagers (nur Vorderlager)                      Adaptador de desmontador de cojinete del diferencial (cojinete delantero sólo)                      Adattatore estrattore cuscinetto centrale differenziale (Solo anteriore)</p> <p><b>Used with LRT-99-002 (MS.47)</b></p>						●	●	23 ROLLER ONLY	23 ROLLER ONLY	
LRT-41-003	18G.47-7	 <p>Input gear cluster bearing cones remover/replacer                      Outil de dépose/remplacement de cônes de roulement des groupes d'engrenages d'admission                      Aus-Einbauwerkzeug für Lagerinnenringe des Antriebszahnradatzes                      Extractor Recolocador de conos de cojinetes del conjunto de engranajes de entrada                      Estrattore/installatore coni cuscinetto gruppo ingranaggio entrata</p> <p><b>Used with LRT-99-002 (MS.47)</b></p>						●	●			
LRT-41-004	LST.104	 <p>Intermediate gear dummy shaft                      Arbre de réglage de pignon intermédiaire                      Einstellwelle des Zwischengetriebes                      Eje simulado de engranaje intermedio                      Finto albero per ingranaggio intermedio</p>										●
LRT-41-005	LST.105	 <p>Input gear turning mandrel                      Mandrin tournant de pignon primaire                      Antriebsritzel-Drehdorn                      Mandril girador de engranaje de toma                      Mandrino rotazione ingranaggio di entrata</p> <p><b>Used with MS.103</b></p>										●
LRT-41-006	LST.550-4	 <p>Adaptor replacer intermediate gear bearing                      Adapteur d'outil de remplacement de roulement de pignon intermédiaire                      Adapter für Einbauwerkzeug des Zwischengetriebelagers                      Adaptador de recolocador de cojinete de engranaje intermedio                      Adattatore/installatore cuscinetto ingranaggio intermedio</p> <p><b>Used with LRT-99-003 (18G.134 or MS.550)</b></p>										●



TOOL NUMBER		DESCRIPTION							
NEW NUMBER	OLD NUMBER								
LRT-41-007	18G.1423	 <p>Adaptor/socket centre differential stake nut remover/replacer                      Adapteur pour outil de dépose/remplacement d'écrou de fixation central du boîtier de différentiel                      Adapter/Schlüsseleinsatz für Ein/Ausbauwerkzeug für mittlere Differential-Befestigungsmutter                      Adaptador/Desmontador-recolocador de la tuerca de encaste del entrante central del diferencial                      Adattatore/chave dado fermo centrale del differenziale stacco/attacco</p>							
LRT-41-008	18G.1424	 <p>Centre differential bearing replacer                      Outil de remplacement roulement central du boîtier de différentiel                      Einbauwerkzeug für Differential-Mittellager                      Recolocador del cojinete central del diferencial                      Installatore cuscinetto centrale del differenziale</p>							
LRT-41-009	18G.1425	 <p>Guide studs alignment of transfer box to main gearbox during removal/replacing                      Axes guides d'alignement boîtier de transfert/boîte de vitesses principale durant dépose/remplacement                      Führungsstifte zum Ausrichten des Verteilergetriebes am Hauptgetriebe während des Aus/Einbaus                      Espárragos guía Alineación de la caja de transmisión con la caja de cambios principal durante el desmontaje/recolocación                      Prigionieri guida allineamento scatole rinvio/primaria perstacco/riattacco</p>							
LRT-41-010	LST.550-6	 <p>Oil seal replacer                      Outil de remplacement pour joint d'huile                      Ausbauwerkzeug für Öldichtung                      Recolocador, sello de aceite                      Installatore per paraolio</p>							

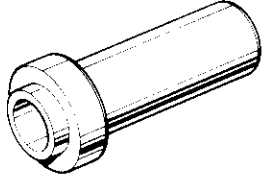
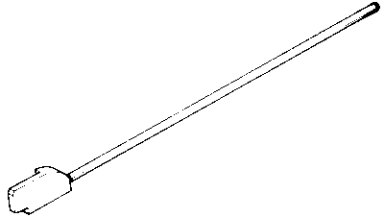
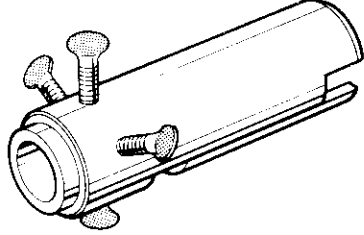
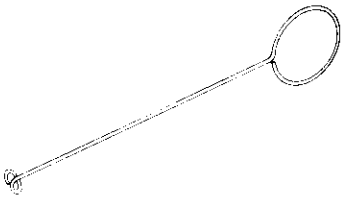
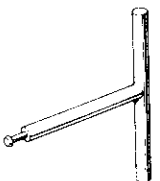
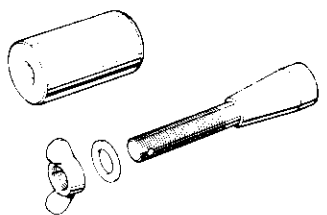
# **MANDATORY TOOLS**

## **SECTION 44 AUTOMATIC GEARBOX**



# MANDATORY TOOLS

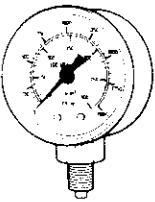
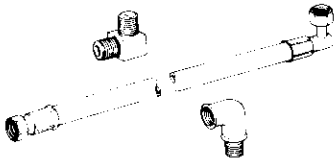
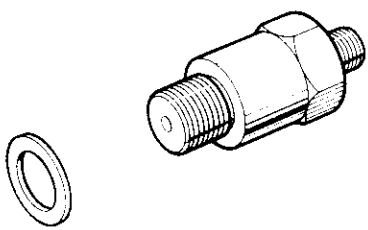
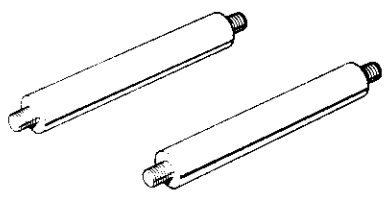
# AUTOMATIC GEARBOX 44

TOOL NUMBER		DESCRIPTION	CHRY. A727	ZF 4 SPEED		
NEW NUMBER	OLD NUMBER					
LRT-44-001	LST.108	 <p>Front and rear oil seal replacer                      Outil de remplacement joints d'huile avant et arrière                      Einbaugerät für vordere und hintere Oldichtung                      Remontador de obturador de aceite delantero y trasero                      Installatore paraolio anteriore e posteriore</p>		●		
LRT-44-002	LST.109	 <p>Selector linkage setting gauge                      Jauge de réglage trianglerie sélecteur                      Einstellehre für Gangwahlgestänge                      Calibrador de ajuste de articulación de selector                      Squadra di regolazione del leveraggio del selettore</p>		●		
LRT-44-003	LST.111	 <p>Oil pump rotation sleeve and end float gauge                      Manchon de rotation de pompe à huile et jauge de jeu axial                      Drehhülse und Längspiellehre für Ölpumpe                      Manguito de rotación de la bomba de aceite y calibrados de huelgo                      Misuratore gioco assiale e manicotto rotazione della pompa dell'olio</p>		●		
LRT-44-004	LST.112	 <p>Kickdown cable remover                      Outil de dépose de câble démultiplicateur                      Ausbaugerät für Kickdownkabel                      Desmontador de cable para velocidad inferior                      Estrattore per cavo del meccanismo del kickdown</p>		●		
LRT-44-005	LST.113	 <p>Control unit oil seal remover/replacer                      Outil de dépose/remplacement de joint d'huile de l'unité de commande                      Aus-/Einbaugerät für Regleröldichtung                      Desmontador/Remontador de obturador de aceite del control                      Estrattore/installatore paraolio dell'unità di comando</p>		●		
LRT-44-006	LST.114	 <p>Selector shaft oil seal replacer                      Outil de remplacement de bague d'étanchéité d'axe du levier de commande de changement de vitesse                      Wiedereinbauwerkzeug für Schaltwellenöldichtung                      Recolocador de obturador de aceite del eje selector                      Installatore per paraolio dell'albero selettore</p>		●		



# AUTOMATIC GEARBOX 44

# MANDATORY TOOLS

TOOL NUMBER		DESCRIPTION	CHRY. A7Z7	ZF 4 SPEED				
NEW NUMBER	OLD NUMBER							
LRT-44-007	18G.502A	 <p>Line pressure test equipment                      Mano de contrôle pression de ligne                      Leitungsdruck-Prüfgerät                      Equipo de comprobación de presión de línea                      Attrezzatura per il controllo della pressione del circuito</p> <p>0-300 P.S.I. Gauge</p> <p><b>Used with LRT-44-008 (18G.502K)</b></p>	●	●				
LRT-44-008	18G.502K	 <p>Hose and adaptor                      Tuyay et adaptateur                      Schlauch und Adapter                      Tubo flexible y adaptador                      Flessibile ed adattatore</p> <p><b>Used with LRT-44-007 (18G.502A)</b></p>	●	●				
LRT-44-009	LST.502-1	 <p>Adaptor pressure take off                      Adaptateur pour prise de pression                      Adapter für Abtriebswelle                      Adaptador de toma de fuerza de presión                      Adattatore punto presa della pressione</p> <p><b>Used with LRT-44-007 (18G.502A) and LRT-44-008 (18G.502K)</b></p>		●				
LRT-44-010	18G.1501	 <p>Converter lifting handles                      Hubgriffe für Wandler                      Poignées de levange convertisseur                      Ases de levantamiento de convertidor                      Prese sollevamento convertitore</p>		●				



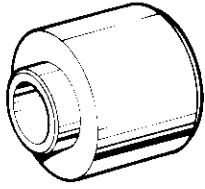
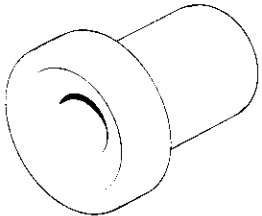
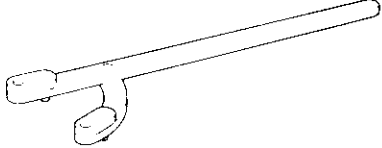
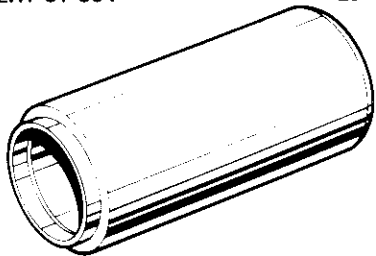

# **MANDATORY TOOLS**

**SECTION 51  
REAR AXLE & FINAL DRIVE**



**MANDATORY TOOLS**

**REAR AXLE AND FINAL DRIVE 51**

TOOL NUMBER		DESCRIPTION	ROVER TYPE	SALISBURY			
NEW NUMBER	OLD NUMBER						
LRT-51-001	LST.106	 <p>Pinion oil seal replacer                      Outil de remplacement de joint d'étanchéité de pignon                      Wiedereinbauwerkzeug für Ritzelöldichtung                      Recolocador de obturador de aceite de piñón                      Installatore per paraolio del pignone</p>	●				
LRT-51-002	RO.1008A	 <p>Pinion oil seal replacer                      Outil de remplacement de joint d'étanchéité de pignon                      Wiedereinbauwerkzeug für Ritzelöldichtung                      Recolocador de obturador de aceite del piñón                      Installatore per paraolio del pignone</p>		●			
LRT-51-003	18G.1205 (RG.421)	 <p>Adjustable flange holding wrench                      Clé de bride d'entraînement d'arbre de transmission                      Schlüssel für Kardanwellenflansch                      Llave fija para retener bridas, ajustable                      Chiave di fermo regolabile per flange</p> <p>Max. PCD 6"</p>	●	●			
LRT-51-004	LST.138	 <p>Oil seal installer - rear stub (ABS)                      Outil de pose pour joint d'huile, fusée arrière (ABS)                      Einbauwerkzeug für Öldichtung - Hinterachsschenkel (ABS)                      Instalador, sello de aceite - eje corto trasero (sistema de frenos antibloqueo)                      Installatore per paraolio - Fusello posteriore (ABS)</p>	●				
LRT-51-005	RO.1006	 <p>Self levelling unit ball joint remover                      Outil de dépose de rotule d'unité de nivellement automatique                      Ausbaugerät für Kugelgelenk der Niveauregulierung                      Desmontador de la junta de rótula del equipo autonivelador                      Estrattore giunto sferico unità autolivellatrice</p> <p>Jaw width 27 mm</p>	●	●			



**REAR AXLE AND FINAL DRIVE 51**

**MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION	ROVER TYPE	SALISBURY			
NEW NUMBER	OLD NUMBER						



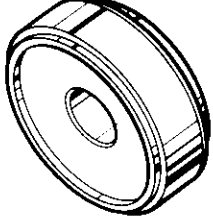
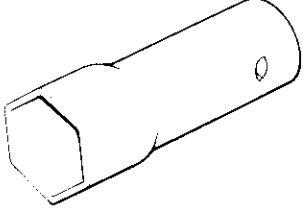
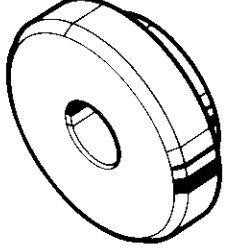
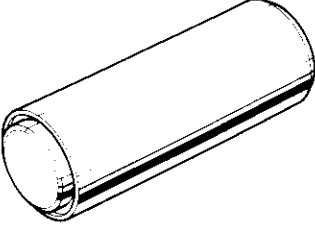
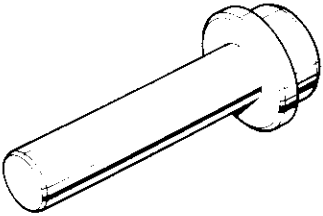
# **MANDATORY TOOLS**

**SECTION 54  
FRONT AXLE & FINAL DRIVE**



# MANDATORY TOOLS

# FRONT AXLE AND FINAL DRIVE 54

TOOL NUMBER		DESCRIPTION	LAND R. III	RANGE ROVER	DEFENDER	DISCOVERY
NEW NUMBER	OLD NUMBER					
LRT-54-001	LST.550-5	 <p>Adaptor replacer hub oil seals                      Adaptateur de l'outil de remplacement des joints d'étanchéité à l'huile du moyeu                      Austauschadapter für Nabenöldichtungen                      Adaptador recolocador de obturadores des aceite de cubo                      Adattatore/installatore paraolio del mozzo</p> <p><b>Used with LRT-99-003 (18G.134 or MS.550)</b></p>		●	●	●
LRT-54-002	RC 606435A	 <p>Spanner for hub adjustment                      Clé de réglage de moyeu                      Schlüssel für Nabeneinstellung                      Llave fija para ajuste del cubo                      Chiave per regolazione del mozzo</p> <p>2 1/16" A/flats</p>	●	●	●	●
LRT-54-003	LST.137	 <p>Oil seal installer front and rear (ABS)                      Outil de pose pour joint d'huile, fusée avant et arrière (ABS)                      Einbauwerkzeug, vorn und hinten (ABS)                      Instalador, sello de aceite, delantero y trasero (sistema de frenos antibloqueo)                      Installatore per paraolio anteriore e posteriore (ABS)</p>		●		
LRT-54-004	LST.133	 <p>Oil seal installer front stub (ABS)                      Outil de pose pour joint d'huile, fusée avant (ABS)                      Einbauwerkzeug für Vorderachsschenkel (ABS)                      Instalador, sello de aceite, eje corto delantero (sistema de frenos antibloqueo)                      Installatore per paraolio fusello anteriore (ABS)</p>		●		
LRT-54-005	LST.132	 <p>Needle roller bearing installer front stub axle (ABS)                      Outil de pose pour roulement à aiguille, fusée avant (ABS)                      Einbauwerkzeug für Nadelrollenlager, Vorderachsschenkel (ABS)                      Instalador, cojinete de rodillos de agujas, eje corto delantero (sistema de frenos antibloqueo)                      Installatore cuscinetto as aghi per fuso a snodo anteriore (ABS)</p>		●		



**FRONT AXLE AND FINAL DRIVE 54**

**MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION	LAND R. III	RANGE ROVER	DEFENDER	DISCOVERY
NEW NUMBER	OLD NUMBER					

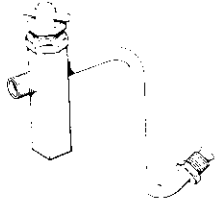
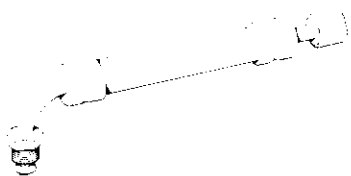
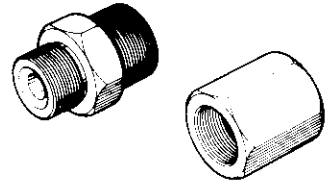
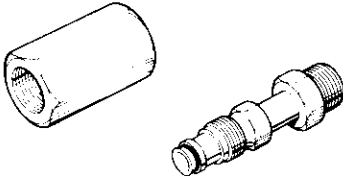

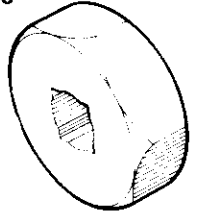




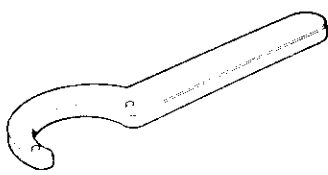
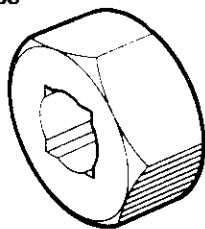
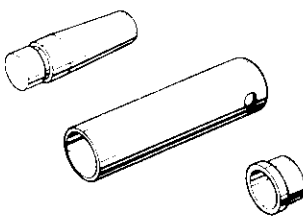
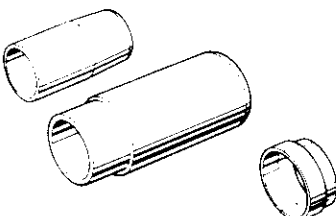
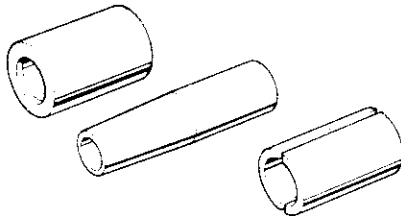
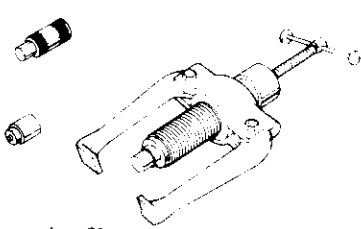
# **MANDATORY TOOLS**

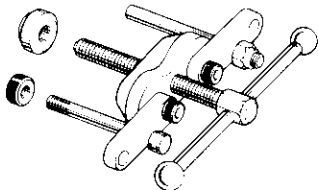
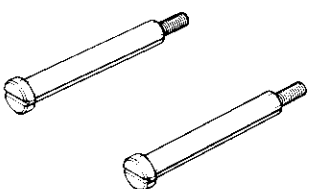
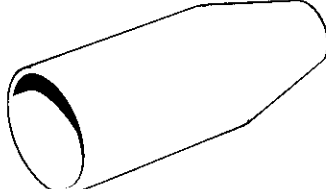
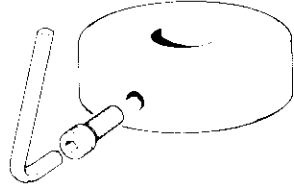
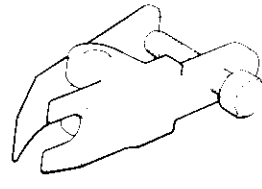
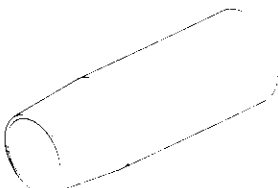
**SECTION 57  
STEERING**



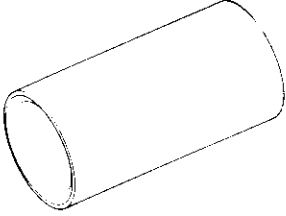
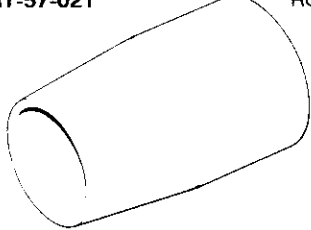
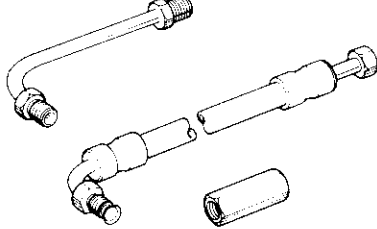
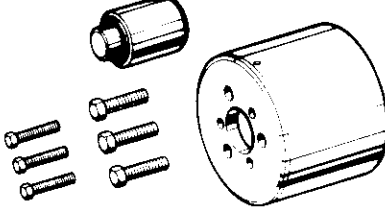
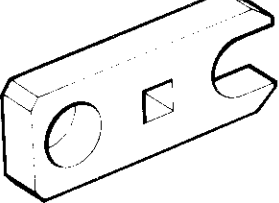
TOOL NUMBER		DESCRIPTION	ADWEST PS	GEMMER PS	MANUAL		
NEW NUMBER	OLD NUMBER						
LRT-57-001	JD.10-2	 <p>Power steering test set adaptor                      Adapteur de vérification du contrôle de pression hydraulique - servo direction                      Adapter für Prüfsatz für Servolenkung                      Adaptador del juego de comprobación de la servodirección                      Adattatore per serie controllo del servosterzo</p> <p>3/4" UNF thread</p> <p><b>Used with JD.10A or LRT-57-005 (HY.23)</b></p>	●	●			
LRT-57-002	JD.10-3A	 <p>Adaptor hose - hydraulic pressure test                      Tuyau adapteur - vérification de pression hydraulique                      Adapterschlauch für hydraulische Druckprüfung                      Tubo flexible adaptador - Comprobación de la presión hidráulica                      Adattatore per flessibili - controllo della pressione idraulica</p> <p><b>Used with LRT-57-001 (JD.10-2) and JD.10A or LRT-57-005 (HY.23)</b></p>	●	●			
LRT-57-003	JD.10-6	 <p>Thread adaptor - hydraulic pressure test                      Adapteur fileté pour vérification de pression hydraulique                      Gewindeadapter für hydraulische Druckprüfung                      Adaptador de roscado - Comprobación de la presión hidráulica                      Adattatore filettato - controllo della pressione idraulica</p> <p><b>Used with JD.10A or LRT-57-005 (HY.23)</b></p>	●				EARLY TYPE
LRT-57-004	LST.10-11	 <p>Thread adaptor (power steering test equipment)                      Adapteur fileté (matériel de test de direction assistée)                      Gewindepasstück (Servolenkungsprüfgerät)                      Adaptador de roscado (Equipo de Prueba de Servodirección)                      Adattatore filettato (Attrezzatura controllo del servosterzo)</p>	●	●			EARLY TYPE
LRT-57-005	HY.23	 <p>Power steering test set                      Mano de vérification de pression hydraulique - servo direction                      Prüfsatz für Servolenkung                      Equipo de comprobación de la servodirección                      Serie per il controllo del funzionamento del servosterzo</p> <p>Pressure range 1-2000 P.S.I.</p> <p><b>Used with LRT-57-001 (JD.10-2) and LRT-57-003 (JD.10-6)</b></p>	●	●			
LRT-57-006	LST.119A	 <p>Steering box adjusting screw wrench                      Clé pour vis de réglage de boîtier de direction                      Schlüssel für Lenkgehäuse-Einstellschraube                      Llave de tornillo de ajuste de la caja de dirección                      Chiave snodata per regolazione scatola guida</p>	●	●			



TOOL NUMBER		DESCRIPTION	ADJUST PS	GEMMER PS	MANUAL		
NEW NUMBER	OLD NUMBER						
LRT-57-007	LST.120	 <p>'C' Spanner for adjustable screw locknut Clé 'C' pour contre-écrou de vis réglable 'C'-Schlüssel für Stellschrauben-Verschlussmutter Llave en 'C' para contratuerca de tornillo ajustable Chiave per controdamo della vite di regolazione</p>	●				
LRT-57-008	LST.123	 <p>Adaptor - wrench - end cover (early production steering boxes only) Adaptateur - Clé - couvercle d'embout (Boîtes de direction de production antérieure uniquement) Adapter - Schlüssel - Endplatte (nur für Frühherstellungs - Lenkgetriebe) Adaptor - Llave - Cubierta de extremo (Cajas de dirección de producción anterior solamente) Adattatore per chiave coperchio terminale (solo scatole precedenti)</p>		●			
LRT-57-009	LST.124A	 <p>Installer - oil seal - input shaft Outil d'installation de joint d'huile - Arbre d'entrée Einbauwerkzeug - Oldichtung - Eingangswelle Instalador - Obturador de aceite - Eje de toma Installatore paraolio albero di entrata</p>		●			
LRT-57-010	LST.125A	 <p>Installer - oil seal - sector shaft Outil d'installation de joint d'huile - Arbre de secteur Einbauwerkzeug - Oldichtung - Segmentwelle Instalador - Obturador de aceite - Eje de sector Installatore paraolio settore elicoidale di comando dello sterzo</p>	●	●			
LRT-57-011	LST.126	 <p>Installer - valve seals Outil d'installation des joints de soupape Einbauwerkzeug - Ventildichtungen Instalador - Obturadores de valvula Installatore paraolio valvole</p>		●			
LRT-57-012	MS.252A	 <p>Hydraulic steering arm remover Extracteur de levier de commande hydraulique Ausbauwerkzeug für hydraulischen Lenkhebel Desmontador de la palanca de ataque de la dirección hidráulica Estrattore braccio comando sul fuso a snodo idraulico</p> <p>Jaw opening 3"</p>	●	●	●		

TOOL NUMBER		DESCRIPTION	ADWEST PS	GEMMER PS	MANUAL		
NEW NUMBER	OLD NUMBER						
LRT-57-014	18G.1014	 <p>Steering wheel remover - Main tool                      Outil de dépose de volant - outil de base                      Lenkradabzieher - Hauptwerkzeug                      Desmontador del volante - herramienta principal                      Estrattore per volante - attrezzo principale</p>	●	●	●		
LRT-57-015	18G.1014-2	 <p>Adaptor pins - steering wheel remover                      Axes adapteurs - outil de dépose de volant                      Adapterstifte für Lenkradabzieher                      Ejes de adaptador - Desmontador del volante                      Spine adattatore - estrattore per volante</p> <p>Used with LRT-57-014 (18G.1014)</p>	●	●	●		
LRT-57-016	RO.1015	 <p>Oil seal protector input shaft                      Protecteur de bague d'étanchéité - arbre d'admission                      Öldichtungsschutz                      Protector de obturador de aceite del eje de entrada                      Elemento di protezione per paraolio albero di entrata</p>	●	●			
LRT-57-017	RO.1016	 <p>Torque setting tool                      Outil de réglage de couple                      Drehmomenteinstellwerkzeug                      Herramienta de reglaje de par                      Attrezzo regolazione della coppia</p>	●	●	●		
LRT-57-018	18G.1063A	 <p>Steering ball joint separator                      Outil séparateur de rotule de direction                      Lenkkugelgelenk-Abscheider                      Separador de junta de rótula de la dirección                      Separatore per giunti sferici dello sterzo</p>	●	●	●		
LRT-57-019	RO.606602	 <p>Ring expander for steering box valve and worm seals                      Mandrin de bague pour direction, soupape et joints à vis sans fin                      Ringdehner für Ventil und Scheckendichtungen des Lenkgetriebes                      Ensanchador de anillo para la válvula del cárter de la dirección y los obturadores sinfin                      Divaricatore paraolio valvola scatola guida e vite senza fine dello sterzo</p>	●	●			



TOOL NUMBER		DESCRIPTION	ADWEST PS	GEMMER PS	MANUAL			
NEW NUMBER	OLD NUMBER							
LRT-57-020	RO.606603	 <p>Ring compressor for steering box valve and worm seals                      Compresseur de bague pour direction, soupape et joints à vis sans fin                      Ringkompressor für Ventil und Scheckendichtungen des Lenkgetriebes                      Compresor de anillo para la válvula del carter de la dirección y los obturadores sinfin                      Compresore paraolio valvola scatola guida e vite senza fine dello sterzo</p>	●	●				
LRT-57-021	RO.606604	 <p>Sector shaft spline, seal protector                      Protecteur de joint, languette pour arbre de secteur denté                      Dichtungsschutz für Segmentwellen keilnut                      Protector de obturador, estría de eje sectorial                      Elemento protezione paraolio calettatura dell'albero comando sterzo</p>	●	●				
LRT-57-022	LST.10-12	 <p>P.A.S. pressure test adaptor                      Adaptateur de mesure de pression (Direction assistée)                      Druckprüfzwischensockel für Servolenkung                      Adaptador, prueba de presión, servodirección                      Adattatore per controllo pressione servosterzo</p>	●	●				
LRT-57-023	LST.142	 <p>P.A.S. pump cover remover                      Outil de dépose de couvercle de pompe (Direction assistée)                      Servolenkung Ausziehwerkzeug für Pumpendeckel                      Extractor, cubierta de la bomba, servodirección                      Estrattore chiusura della pompa del servosterzo</p>	●	●				
LRT-57-024	LST.141	 <p>Steering torque test adaptor                      Adaptateur de mesure de couple de direction                      Prüfzwischensockel für Lenkdrehmoment                      Adaptador, prueba de par, dirección                      Adattatore controllo della coppia della sterzo</p>	●	●	●			

# **MANDATORY TOOLS**

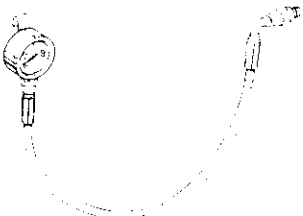
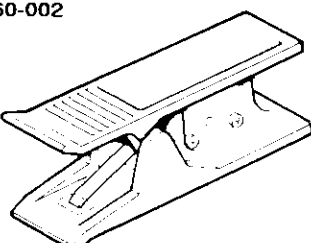
**SECTION 60  
FRONT SUSPENSION**





# MANDATORY TOOLS

# FRONT SUSPENSION 60

TOOL NUMBER		DESCRIPTION	LAND R. 111	RANGE ROVER	LAND R. 90/110		
NEW NUMBER	OLD NUMBER						
LRT-60-001		 <p>Test equipment, air suspension                      Matériel de contrôle pour suspension pneumatique                      Prüfeinrichtung für Luftlagerung                      Equipo de prueba, suspensión neumática                      Attrezzatura di controllo delle sospensionipneumatiche</p>		●			
			1993 ONWARD				
LRT-60-002		 <p>Tube cutter                      Coupe-tube                      Rohrschneider                      Cortadora de tubos                      Fresa per tubi</p>		●			
			1993 ONWARD				



**FRONT SUSPENSION 60**

**MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION	LAND R. 111	RANGE ROVER	LAND R. 90/110		
NEW NUMBER	OLD NUMBER						



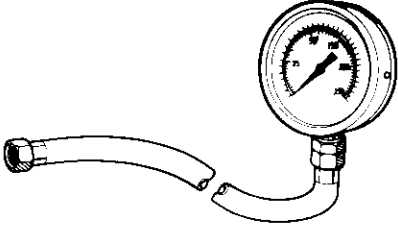
# **MANDATORY TOOLS**

**SECTION 70  
BRAKES**



# MANDATORY TOOLS

# BRAKES 70

TOOL NUMBER		DESCRIPTION	RANGE ROVER				
NEW NUMBER	OLD NUMBER						
LRT-70-001	LST.140	 <p>                     ABS pressure test adaptor                      Adaptateur de mesure de pression (ABS)                      ABS Druckprüfzwischensockel                      Adaptador, prueba de presión, sistema de frenos antibloqueo                      Adattatore controllo della pressione ABS                 </p>	●				



# BRAKES 70

# MANDATORY TOOLS

TOOL NUMBER		DESCRIPTION	RANGE ROVER					
NEW NUMBER	OLD NUMBER							



# **MANDATORY TOOLS**

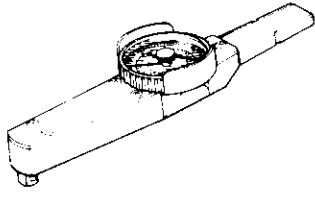
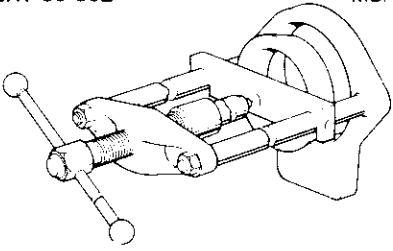
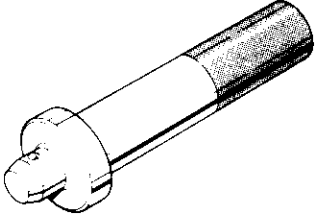
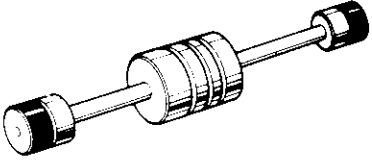
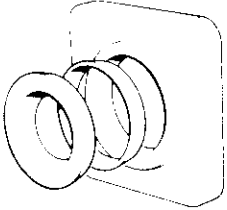
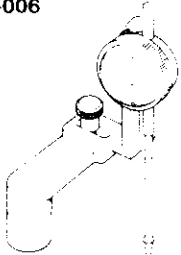
**SECTION 99  
GENERAL PURPOSE**





# MANDATORY TOOLS

# GENERAL PURPOSE 99

TOOL NUMBER		DESCRIPTION						
NEW NUMBER	OLD NUMBER							
LRT-99-001	LST.145	 <p>Torque spanner pre-load Clé dynamométrique à précharge réglable Drehmomentschlüsselvorlast Precarga, llave torsiométrica Prearico chiave misuratore della coppia</p>						
LRT-99-002	MS.47	 <p>Hand press Presse manuelle à utilisation multiple Handpresse Prensa manual Pressa a mano</p>						
LRT-99-003	18G.134 (MS.550)	 <p>Bearing and oil seal replacer - Main tool Outil de remplacement de bague d'étanchéité et de roulement (outil principal) Wiedereinbaugerät für Lager und Öldichtung Recolocador de cojinete y obturador de aceite - herramienta principal Installatore cuscinetto e paraolio - attrezzo principale</p>						
LRT-99-004	18G.284 (MS.284)	 <p>Impulse extractor - UNF - Main tool Extracteur d'impulsion - UNF. Outil de base Impulsauszieher - UNF - Hauptwerkzeug Extractor de impulsos - UNF - herramienta principal Estrattore ad urto - UNF - attrezzo principale</p> <p>5/8" UNF or 16mm</p>						
LRT-99-005	MS.370	 <p>Taper Base Base conique Konusbodenplatte Base ahusada Base conica</p>						
LRT-99-006	18G.191	 <p>Bevel pinion setting gauge Calibre de réglage de pignon d'angle Schrägritzelstellehre Antriebskegelrad-Kontrollehre Calibro taratura pignone conico</p>						



**GENERAL PURPOSE 99**

**MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION						
NEW NUMBER	OLD NUMBER							



# **NON-MANDATORY TOOLS**

**SECTION 12  
ENGINES**



**NON-MANDATORY TOOLS BY MODEL****DEFENDER****RANGE ROVER****DISCOVERY****ENGINES**

LRT-12-500  
LRT-12-501  
LRT-12-502  
LRT-12-503  
LRT-12-504  
LRT-12-505  
LRT-12-507  
LRT-12-508  
LRT-12-509  
LRT-12-510  
LRT-12-511  
LRT-12-512  
LRT-12-513  
LRT-12-514  
LRT-12-515  
LRT-12-516

LRT-12-501  
LRT-12-502  
LRT-12-504  
LRT-12-506  
LRT-12-507  
LRT-12-508  
LRT-12-510  
LRT-12-511  
LRT-12-513  
LRT-12-515

LRT-12-501  
LRT-12-502  
LRT-12-503  
LRT-12-504  
LRT-12-507  
LRT-12-511  
LRT-12-515

**FUEL SYSTEM**

LRT-19-500

LRT-19-500

LRT-19-500

**MANUAL GEARBOX**

LRT-37-501  
LRT-37-502  
LRT-37-503  
LRT-37-504  
LRT-37-505  
LRT-37-506  
LRT-37-507  
LRT-37-508  
LRT-37-509

**TRANSFER GEARBOX**

LRT-41-500  
LRT-41-501  
LRT-41-502

LRT-41-501  
LRT-41-502

LRT-41-501

**AUTOMATIC GEARBOX**

LRT-44-500  
LRT-44-501  
LRT-44-502  
LRT-44-503  
LRT-44-504

**DEFENDER****RANGE ROVER****DISCOVERY****AUTOMATIC GEARBOX**

LRT-44-505  
LRT-44-506  
LRT-44-507  
LRT-44-508  
LRT-44-509  
LRT-44-510  
LRT-44-511  
LRT-44-512  
LRT-44-513  
LRT-44-514  
LRT-44-515

**REAR AXLE AND FINAL DRIVE**

LRT-51-500  
LRT-51-501  
LRT-51-502  
LRT-51-503  
LRT-51-504  
LRT-51-505

**FRONT AXLE AND FINAL DRIVE**

LRT-54-500	LRT-54-501	LRT-54-502
LRT-54-501	LRT-54-502	LRT-54-503
LRT-54-502	LRT-54-503	LRT-54-504
LRT-54-503	LRT-54-504	LRT-54-505
LRT-54-504	LRT-54-505	LRT-54-506
LRT-54-505	LRT-54-506	LRT-54-507
LRT-54-506	LRT-54-507	LRT-54-508
LRT-54-507	LRT-54-508	
LRT-54-508		

**STEERING**

LRT-57-500	LRT-57-501
LRT-57-501	LRT-57-502
LRT-57-502	

**BRAKES**

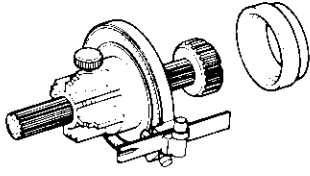
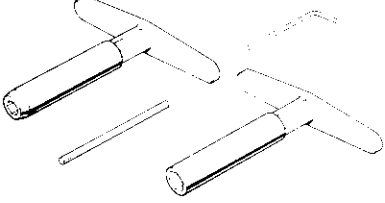
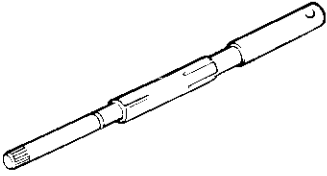
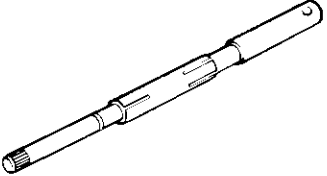
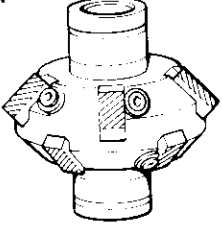
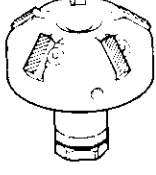
LRT-70-500	LRT-70-500	LRT-70-500
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**GENERAL PURPOSE**

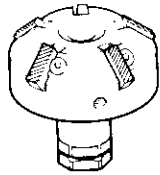
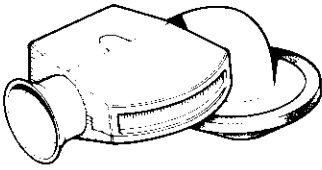
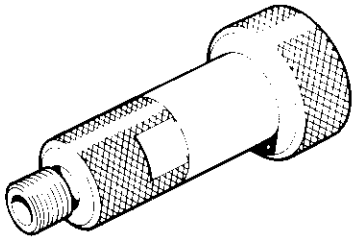
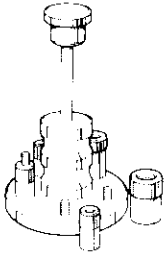
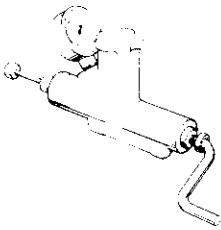
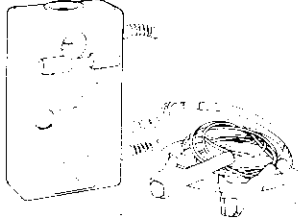
LRT-99-500	LRT-99-500	LRT-99-500
LRT-99-501	LRT-99-501	LRT-99-501
LRT-99-502	LRT-99-502	LRT-99-502
LRT-99-503	LRT-99-503	LRT-99-503

# NON-MANDATORY TOOLS

# ENGINES 12

TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-500	MS.67B	 <p>Universal timing gauge Calibre de distribution universel Universal Steuermessgerät Calibrador universal de sincronización Strumento universale per messa in fase</p> <p>Engines with D.P.A. Pumps</p>		●			
LRT-12-501	MS.76B	 <p>Basic handle set valve seat cutter Jeu ordinaire d'alesoirs de siège de soupape Griffsatz für Ventilsitzfräser - Grundwerkzeug Cortadora de asiento de válvulas, juego básico manual Serie impugnatura basilari per fresa per sedi valvole</p> <p>Used with appropriate cutter and pilot</p>	●	●	●	●	●
LRT-12-502	MS.150-8	 <p>Adjustable pilot Guide ajustable Einstellbarer Führungzapfen Guía ajustable Guida regolabile</p> <p>Dia. 7.9mm-8.5mm</p> <p>Used with LRT-12-501 (MS.76B)</p>	●	●		●	●
LRT-12-503	MS.150-8.5	 <p>Adjustable pilot Guide ajustable Einstellbarer Führungzapfen Guía ajustable Guida regolabile</p> <p>Dia. 8.4mm-9.0mm</p> <p>Used with LRT-12-501 (MS.76B)</p>	●	●	●		
LRT-12-504	MS.621	 <p>Adjustable valve seat cutter Alésoirs ajustables de siège de soupape Verstellbarer Ventilsitzfräser Cortador ajustable de asiento de válvula Fresa regolabile per sedi valvole</p> <p>Dia. range 28.5mm-44mm    15° and 45°</p> <p>Used with LRT-12-501 (MS.76B), LRT-12-502 (MS.150-8) and LRT-12-503 (MS.150-8.5)</p>	●	●	●	●	●
LRT-12-505	MS.627	 <p>Adjustable valve seat cutter Alésoirs ajustables de siège de soupape Verstellbarer Ventilsitzfräser Cortador ajustable de asiento de válvula Fresa regolabile per sedi valvole</p> <p>Dia. range 28.5mm-44mm    30°</p> <p>Used with LRT-12-501 (MS.76B) and LRT-12-502 (MS.150-8)</p>	●				●

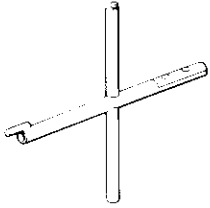
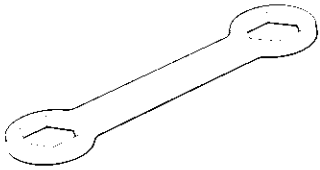
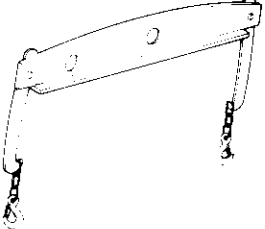
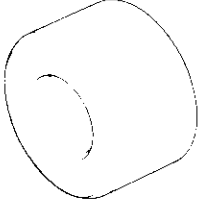



TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-506	MS.690	Adjustable cutter Verstellbarer Ventilsitzfräser Alésours ajustables de siège de soupape Tagliatori regolabile Fresa regolabile				●	
 Dia. range 52-42.5mm      35° <b>Used with LRT-12-501 (MS.76B) and appropriate pilot</b>						INLET ONLY	
LRT-12-507	B.89	Synchro check Vérificateur de synchro Synchronisierungs-Prüfeinrichtung Comprobación de sincronización Controllo del sincronizzatore			●		
							
LRT-12-508	18G.109E	Injector nozzle reverse flush adaptor Adaptateur lisse de changement de marche de tuyère d'injecteur Paßstück für Rückwärtsfluß der Einspritzdüse Adaptador de flujo inverso de la tobera del inyector Adattatore flusso di ritorno ugello polverizzatore		●		●	
 <b>Used with LRT-12-005 (111)</b>							
LRT-12-509	DX.700	Injector slide hammer Marteau à coulisse pour déchassage d'injecteur Schieberhammer für Düsenausbauwerkzeug Martillo corredizo desmontador de inyector Attrezzo a peso scorrevole per iniettori		●			
							
LRT-12-510	DX.710	Minitest diesel injector tester Vérificateur d'injecteur Diesel "Minitest" Minitest (Prüfgerät für Dieseleinspritzdüse) Minitest (Comprobador de inyector de diesel) Attrezzo controllo iniettori diesel "Minitest"		●		●	
							
LRT-12-511	DX.900	Glow plug and circuit tester Vérificateur de bougie de préchauffage et de circuit Glühkerzen - und Leitungsprüfer Bujía incandescente y probador de circuito Attrezzo controllo circuito e candlette ad incandescenza		●		●	●
							



# NON-MANDATORY TOOLS

# ENGINES 12

TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDI
NEW NUMBER	OLD NUMBER						
LRT-12-512	18G.1308	 <p>Ducellier distributor wrench Clé pour allumeur Ducellier Ducellier Verteilerschlüssel Llave para el distribuidor Ducellier Chiave per distributore ducellier</p>	●				
LRT-12-513	RO.530102A	 <p>Spanner for starting dog nut Clé pour écrou de démarrage Mutternschlüssel für Andrehklaue Llave fija para comenzar a aflojar la tuerca de uña Chiave per unità dente di innesto</p> <p>41mm A/flats and 42.5mm A/flats</p>	●	●		●	
LRT-12-514	RO.600963A	 <p>Engine sling Chaîne de suspension de moteur Motorschlinge Cadena de suspensión de motor Imbracatura per motore</p>	●	●			
LRT-12-515	RO.605774A	 <p>Distance piece for valve guide Entretoise pour guide se soupape Abstandstück für Ventilführung Pieza de separación para la guía de la válvula Elemento distanziatore per guide valvole</p>			●		●
LRT-12-516	RO.606445	 <p>Spanner for cylinder head bolts Clé pour boulons de culasses Schlüssel für Zylinderkopfschrauben Llave fija para los pernos de culata de cilindro Chiave per bulloni testata</p> <p>3/4" A/flats x 1/2" Sq. drive</p>		●			



# ENGINES 12

# NON-MANDATORY TOOLS

TOOL NUMBER		DESCRIPTION	4 CYL PETROL	4 CYL DIESEL	V8	VM DIESEL	TDi
NEW NUMBER	OLD NUMBER						

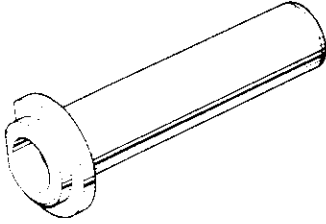
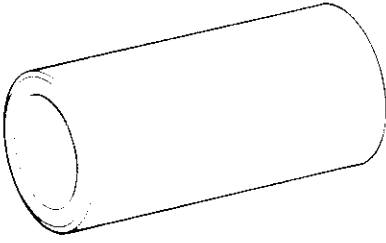
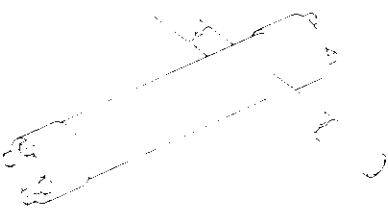
# **NON-MANDATORY TOOLS**

**SECTION 37  
MANUAL GEARBOX**



TOOL NUMBER		DESCRIPTION	LT76 4 SPEED	LT95 4 SPEED	LT77 5 SPEED	LT85 5 SPEED
NEW NUMBER	OLD NUMBER					
LRT-37-501	18G.284AR	Layshaft bearing cup remover adaptor Adapteur de dépose de cuvette de roulement d'arbre intermédiaire Adapter für Vorgelegewellenlager-Aussenring-Abzieher Adaptador del desmontador de la copa de cojinete del eje intermedio Estrattore/adattatore pista esterna cuscinetto dell'albero di rinvio <b>Used with LRT-99-004 (MS.284)</b>		●		
LRT-37-502	RO.1003	Dummy shaft, intermediate gears Pignons intermédiares, faux arbre Blindwelle, Zwischenschaltung Eje simulado, velocidades intermedias Finto albero per ingranaggi intermedi		●		
LRT-37-503	RO.1013	Torque adaptor Adapteur de couple Drehmomentadapter Adaptador de par Adattatore per convertitore di coppia  <b>Used with LRT-37-509 (RO.600300)</b>	●			
LRT-37-504	18G.1336	Remover synchro hub retaining circlip Outil de dépose de frein d'axe de moyeu de synchronisation Abzieher für Synchrohuben-Sicherungsring Desmontador de resorte circular de retén de cubo de sincronización Estrattore anello di fermo del mozzo sincronizzatore	●			
LRT-37-505	18G.1337	Replacer synchro hub retaining circlip Outil de remplacement de frein d'axe de moyeu de synchronisation Einsetzer für Synchrohuben-Sicherungsring Recolocador de resorte circular de retén de cubo de sincronización Installatore anello di fermo del mozzo sincronizzatore	●			
LRT-37-506	18G.1388	Extractor, mainshaft transfer gear and sleeve Extracteur pignon et manchon de transfert arbre primaire Auszieher für Hauptwellen-Verteilerrad und Hülse Extractor - Engranaje y manguito del árbol de transmisión principal Estrattore manicotto ed ingranaggio di rinvio dell'albero primario		●		



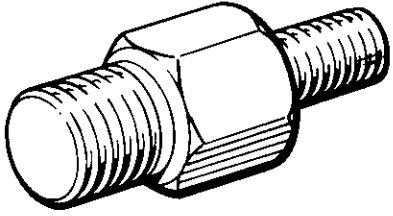
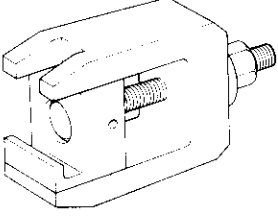
TOOL NUMBER		DESCRIPTION	LT76 4 SPEED	LT95 4 SPEED	LT77 5 SPEED	LT85 5 SPEED
NEW NUMBER	OLD NUMBER					
LRT-37-507	18G.1426	 <p>Mainshaft interbox oil seal replacer                      Outil de remplacement bague d'étanchéité intermédiaire d'arbre primaire                      Einbauwerkzeug für Hauptwellen-Zwischenöldichtung                      Recolocador del obturador de aceite de entrecaja del eje principal                      Installatore paraolio di interfaccia dell'albero primario</p>			●	
LRT-37-508	RO.243241	 <p>Protection cap for gearbox output shaft                      Chapeau de protection pour arbre de sortie de boîte de vitesses                      Schutzzappe für Getriebeabtriebswelle                      Capacete de protección para el eje de salida de la caja de cambios                      Cappello di protezione per albero di uscita della scatola cambio</p>	●			
LRT-37-509	RO.600300	 <p>Double ended spanner for gearbox mainshaft nut                      Clé double à fourches pour écrous d'arbre primaire de boîte de vitesses                      Doppelendiger Schlüssel für Hauptwellenmutter                      Llave fija de dos bocas para la tuerca del eje principal de la caja de cambios                      Chiave bifaccia per dado albero primario della scatola cambio</p>	●			

# **NON-MANDATORY TOOLS**

## **SECTION 41 TRANSFER GEARBOX**





TOOL NUMBER		DESCRIPTION	LT76	LT95	LT230R	LT230T
NEW NUMBER	OLD NUMBER					
LRT-41-500	18G.284AT	 <p>Intermediate shaft extractor adaptor                      Adapteur d'extraction d'arbre intermédiaire                      Adapter für Vorgelegewellen-Auszieher                      Adaptador del extractor del eje intermedio                      Adattatore estrattore per albero intermedio</p> <p>Used with LRT-99-004 (MS.284)</p>		●		
LRT-41-501	RO.605862	 <p>Extractor for transfer box intermediateshaft                      Extracteur pour arbre intermédiaire de boîte de transfert                      Auszieher für Zwischenwelle des Verteilergetriebes                      Extractor para el eje intermedio de la caja de transmisión                      Estrattore per scatola di rinvio albero intermedio</p>	●		●	



TOOL NUMBER		DESCRIPTION	LT76	LT95	LT230R	LT230T
NEW NUMBER	OLD NUMBER					



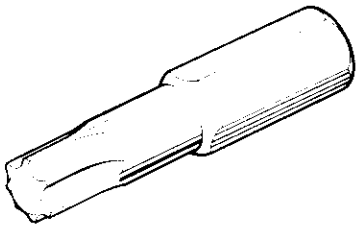
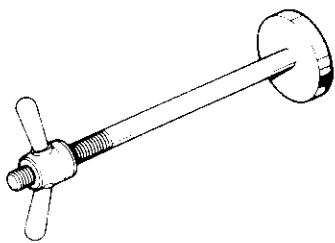
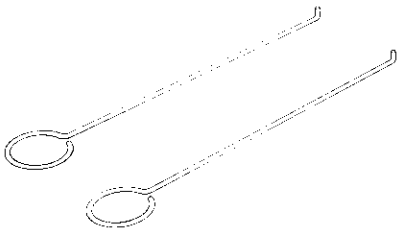
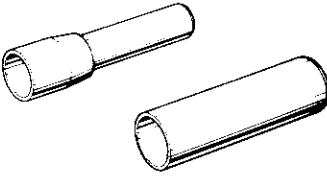
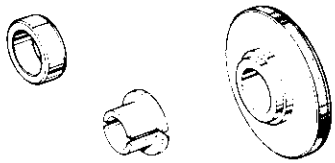
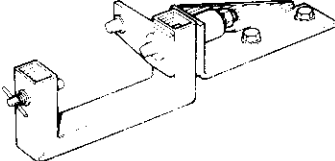
# **NON-MANDATORY TOOLS**

## **SECTION 44 AUTOMATIC GEARBOX**

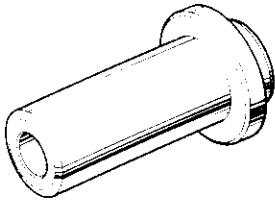
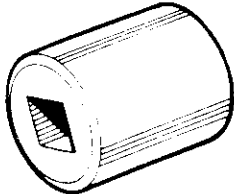
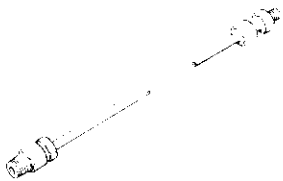
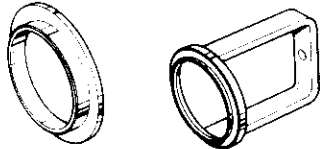
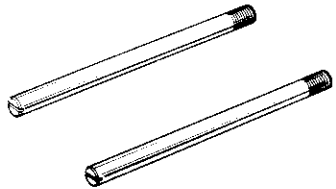
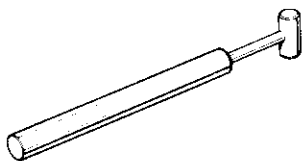


# NON-MANDATORY TOOLS

# AUTOMATIC GEARBOX 44

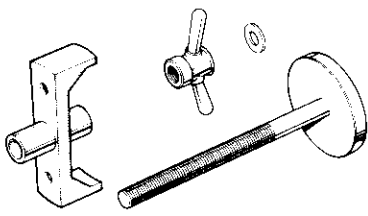
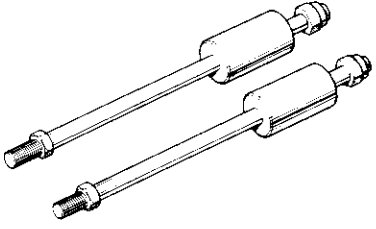
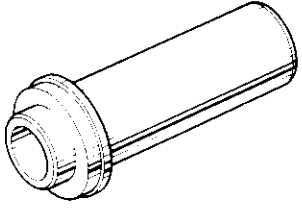
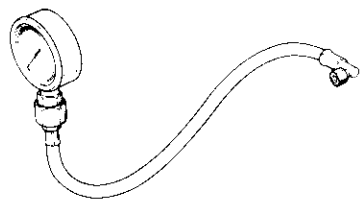
TOOL NUMBER		DESCRIPTION	CHRY. A727	ZF 4 SPEED			
NEW NUMBER	OLD NUMBER						
LRT-44-500	TX.27	 <p>Torx bit Mèche 'Torx' Torx-Spitze Berbiquí Torx Serie attrezzi torx</p>		●			
LRT-44-501	CWG.37	 <p>Clutch spring compressor - main tool Compresseur de ressort d'embrayage - outil de base Kupplungsfederkompressor - Hauptwerkzeug Compresor de muelle de embrague herramienta principal Compressor per molle della frizione - attrezzo principale</p>		●			
LRT-44-502	LST.115	 <p>'B' clutch assembly puller hooks Crochets de traction de l'ensemble d'embrayage 'B' Abziehhaken für 'B'-Kupplungsaufbau Ganchos de extractor de embrague 'B' Ganci estrattore complessivo della frizione "B"</p>		●			
LRT-44-503	LST.116	 <p>"O" ring and snap ring replacer Outil de remplacement de joint torique et circlip Einbaugerät für 'O' - und Sprengringe Remontador de junta tórica y junta de montaje instantáneo Installatore anelli torici ed anelli a scatto</p>		●			
LRT-44-504	LST.117	 <p>Gear train remover/replacer Outil de dépose/remplacement de train d'engrenages Aus-Einbaugerät für Zahnradvorgelege Desmontador/Remontador de tren de engranajes Installatore/estrattore treno ingranaggi</p>		●			
LRT-44-505	LST.118	 <p>Transmission holding fixture Dispositif de retenue de transmission Getriebehaltevorrichtung Dispositivo retén de transmisión Incastellatura di bloccaggio della trasmissione</p>		●			



TOOL NUMBER		DESCRIPTION	CHRY. A727	ZF 4 SPEED			
NEW NUMBER	OLD NUMBER						
LRT-44-506	18G.134-3	 <p>Pump housing oil seal replacer                      Outil de remplacement bague d'étanchéité carter de pompe                      Einbauwerkzeug für Pumpengehäuse-Öldichtung                      Recolocador del obturador de aceite del alojamiento de la bomba                      Installatore paraolio della scatola pompa</p> <p>Used with LRT-99-003 (MS.550)</p>	●				
LRT-44-507	CBW.547A-50-2A	 <p>Socket - front and rear brake band adjustment                      Douille - réglage de garniture freins AV et AR                      Schlüsseleinsatz zur Einstellung des vorderen und hinteren Bremsbandes                      Fnrtrante - Ajuste de bande de frenos delanteros y traseros                      Chiave - regolazione nastri freno anteriori e posteriori</p> <p>Used with CBW.547-30</p>	●				
LRT-44-508	18G.677-2	 <p>Adaptor - pressure take off                      Adapteur - prise de pression                      Druckablaß-Adapter                      Adaptador - Toma de presión                      Adattatore - punto presa pressione</p> <p>Used with LRT-44-007 (18G.502A) and LRT-44-008 (18G.502K)</p>	●				
LRT-44-509	LST.1016-1	 <p>Adaptor - clutch spring compressor                      Adapteur d'outil de compression de ressort d'embrayage                      Adapter für Zusammendrucker für Kupplungsfeder                      Adaptador de compresor del muelle de embrague                      Adattatore - compressore per molle della frizione</p> <p>Used with 18G.1016 or LRT-44-501 (CWG.37)</p>	●				
LRT-44-510	18G.1384	 <p>Pilot studs - front pump/output shaft                      Axes pilotes - pompe avant/arbre de sortie                      Führungsstifte für vordere Pumpen/Abtriebswelle                      Espárragos guía - Bomba delantera/eje de salida                      Prigionieri di guida - pompa anteriore/albero di uscita</p>	●				
LRT-44-511	18G.1385	 <p>Throttle pressure setting gauge block                      Bloc mano - réglage pression étrangleur                      Meßblock für Drosselklappen-Druckeinstellung                      Ajuste de presión de gases - bloque calibrador                      Blocco calibro di regolazione della pressione del gas</p>	●				

# NON-MANDATORY TOOLS

# AUTOMATIC GEARBOX 44

TOOL NUMBER		DESCRIPTION	CHRY. A727	ZF 4 SPEED			
NEW NUMBER	OLD NUMBER						
LRT-44-512	18G.1386	 <p>Compressor - front clutch spring                      Outil de compression pour ressort d'embrayage avant                      Federzange für vordere Kupplungsfeder                      Compresor - Muelle delantero de embrague                      Compressore molla frizione anteriore</p>	●				
LRT-44-513	18G.1387	 <p>Pump housing and reaction shaft support/removal                      Outil de dépose de support de carter de pompe et arbre de réaction                      Ausbauwerkzeug für Pumpengehäuse und Reaktionswellenträger                      Alojamiento de bomba y soporte del eje de reacción -                      Desmontaje                      Scatola della pompa ed albero di reazione - supporto/distacco</p>	●				
LRT-44-514	18G.1421	 <p>Rear extension housing oil seal replacer                      Outil de remplacement de bague d'étanchéité du carter d'extension arrière                      Einbauwerkzeug für Öldichtung des hinteren Verlängerungsgehäuses                      Recolocador del obturador de aceite del alojamiento de extensión trasera                      Installatore paraolio scatola di prolunga posteriore</p>	●				
LRT-44-515	18G.1427	 <p>Governor pressure test equipment                      Mano de contrôle de pression du gouverneur                      Prüfgerät für Regledruck                      Equipo de comprobación de presión de regulador                      Attrezzatura per il controllo della pressione del regolatore</p> <p>0-100 P.S.I. gauge</p>	●				



TOOL NUMBER		DESCRIPTION	CHRY. A727	ZF 4 SPEED				
NEW NUMBER	OLD NUMBER							

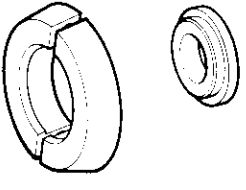
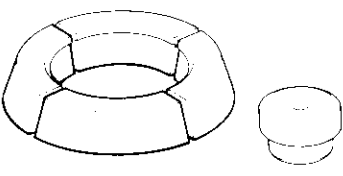
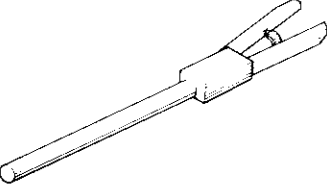
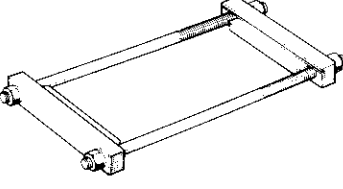

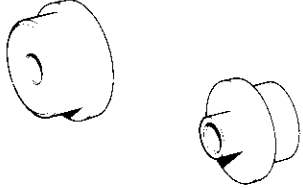




# **NON-MANDATORY TOOLS**

## **SECTION 51 REAR HUBS & FINAL DRIVE**



TOOL NUMBER		DESCRIPTION	ROVER TYPE	SALISBURY			
NEW NUMBER	OLD NUMBER						
LRT-51-500	18G.47BK	 <p>Pinion bearing cone remover/replacer                      Adapteur de dépose/remplacement de roulement de pignon d'attaque                      Abzieher/Einsetzer für Ritzellager-Innenring                      Desmontador-recolocador de cono de cojinete del piñón                      Estrattore/installatore cono cuscinetto pignone</p> <p>Used with LRT-99-002 (MS.47)</p>		●			
LRT-51-501	18G.47BL	 <p>Differential bearing cone adaptor/remover                      Adapteur de dépose de cône de roulement de boîtier de différentiel                      Paßstück/Ausbaugerät für Innenring des Differentiallagers                      Adaptador de desmontador de cono de cojinete del diferencial                      Estrattore/installatore cono cuscinetto del differenziale</p> <p>Used with LRT-99-002 (MS.47)</p>		●			
LRT-51-502	S.123A	 <p>Pinion bearing cup remover                      Outil de dépose de cuvette de roulement de pignon                      Abzieher für Ritzellager-Aussenring                      Desmontador de copa de cojinete del piñón                      Estrattore pista esterna del cuscinetto del pignone</p> <p>Leg width 1 7/8"-3 1/8"</p>		●			
LRT-51-503	GKN.131	 <p>Rear axle casing compressor                      Outil de compression de carter d'essieu arrière                      Pressvorrichtung für Hinterachsgehäuse                      Compresor de la caja del eje trasero                      Compressore per scatola ponte posteriore</p>		●			
LRT-51-504	18G.134DP	 <p>Differential bearing cone adaptor/replacer                      Adapteur de remplacement de cône de roulement de boîtier de différentiel                      Adapter für Einsetzer des Differentiallager-Innenrings                      Adaptador de recolocador de cono de cojinete del diferencial                      Installatore/adattatore cono cuscinetto del differenziale</p> <p>Used with LRT-99-003 (18G.134 or MS.550)</p>		●			
LRT-51-505	18G.1122G	 <p>Adaptor/replacer pinion bearing cups                      Adapteur de remplacement de cuvettes de roulement de pignon                      Paßstück/Wiedereinbaugerät für Aussenringe des Ritzellagers                      Adaptador recolocador de copas de cojinete de piñón                      Adattatore/installatore piste esterne cuscinetto pignone</p> <p>Used with LRT-99-502 (18G.1122)</p>		●			



TOOL NUMBER		DESCRIPTION	ROVER TYPE	SALISBURY			
NEW NUMBER	OLD NUMBER						

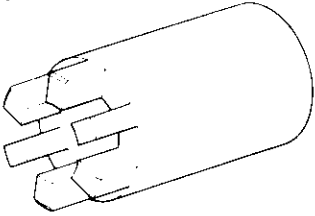
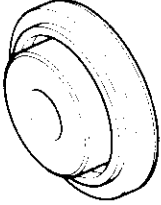
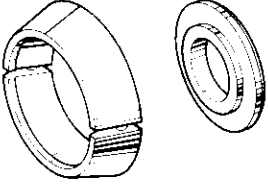
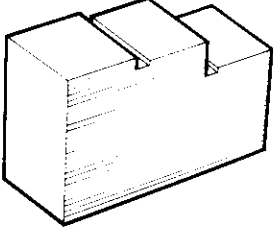
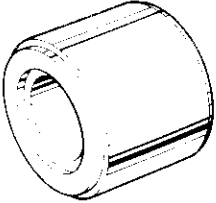



# **NON-MANDATORY TOOLS**

**SECTION 54  
FRONT HUBS & FINAL DRIVE**


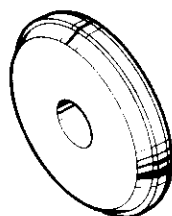
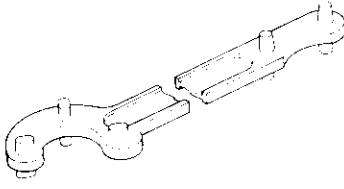


# NON-MANDATORY TOOLS FRONT HUBS & FINAL DRIVE 54

TOOL NUMBER		DESCRIPTION	LAND R. III	RANGE ROVER	LAND R. 90/110	ROVER TYPE	SALISBURY
NEW NUMBER	OLD NUMBER						
LRT-54-500	RO.1010	 <p>Hub nut socket                      Douille pour écrou de moyeu                      Steckschlüssel für Nabennutter                      Casquillo para la tuerca de cubo                      Chiave per dado mozzo</p>	●				
		1/2" Sq. drive	FRONT 109				
LRT-54-501	18G.1349	 <p>Hub oil seal replacer                      Outil de remplacement du joint d'étanchéité à l'huile du moyeu                      Austauschadapter für Öldichtungen                      Recolocador de obturador de aceite de cubo                      Installatore paraolio mozzo</p>	●	●	●		
			UP TO 1985	UP TO 1985	UP TO 1985		
LRT-54-502	18G.47-6	 <p>Pinion head bearing remover/replacer                      Outil de dépose/remplacement de roulement de tête de pignon                      Ausbau-Wiedereinbauwerkzeug für Ritzelkopflager                      Desmontador/recolocador de cojinete de cabeza de piñón                      Estrattore/installatore cuscinetto di entrata del pignone</p>				●	
LRT-54-503	18G.191-4	 <p>Universal setting block pinion height                      Bloc universel de réglage hauteur de pignon                      Universal-Einstellblock für Ritzelhöhe                      Bloque de reglaje universal para la altura del piñón                      Calibro universale di regolazione della quota del pignone</p>				●	●
		Sizes 30.93, 38.10, 39.50					
LRT-54-504	18G.1382	 <p>Drift pinion oil seal replacer                      Broche de déchassage/remplacement de bague d'étanchéité pignon                      Austreiber für Öldichtungs-Einbauwerkzeug                      Mandril recolocador de obturador de aceite del piñón                      Installatore per paraolio pignone</p>				●	
						EARLY TYPE	
LRT-54-505	RO.262757A	 <p>Extractor for pinion bearing cup                      Extracteur de cuvette de roulement de pignon                      Auszieher für Ritzellager-Aussenringe                      Extractor para copas de cojinete de piñón                      Estrattore per pista esterna cuscinetto del pignone</p>				●	



# FRONT HUBS & FINAL DRIVE 54 NON-MANDATORY TOOLS

TOOL NUMBER		DESCRIPTION	LAND R. III	RANGE ROVER	LAND R. 90/110	ROVER TYPE	SALISBURY
NEW NUMBER	OLD NUMBER						
LRT-54-506	RO.262757-1	 <p>Replacer adaptor pinion head bearing cup                      Adapteur de remplacement de cuvette de roulement de tête de pignon                      Adapter für Einbauwerkzeug für Ritzelkopflager-Außenring                      Recolocador adaptador de copa de cojinete de culata de piñón                      Installatore/adattatore pista esterna cuscinetto di entrata del pignone</p> <p><b>Used with LRT-54-505 (RO.262757A)</b></p>				●	
LRT-54-507	RO.262757-2	 <p>Adaptor pinion tail bearing cup replacer                      Adapteur de remplacement de cuvette de roulement de queue de pignon                      Adapter für Einbauwerkzeug für Ritzelfußlager-Außenring                      Adaptador de recolocador de copa de cojinete trasero del piñón                      Adattatore/installatore pista esterna cuscinetto di uscita del pignone</p> <p><b>Used with LRT-54-505 (RO.262757A)</b></p>				●	
LRT-54-508	RO.530105	 <p>Spanner for differential overhaul                      Clé pour réparation de différentiel                      Schlüssel für Überholung des Differentials                      Llave fija para revisión general del diferencial                      Chiave per revisione del differenziale</p>				●	



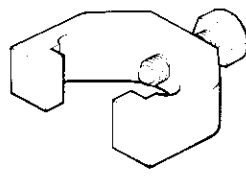
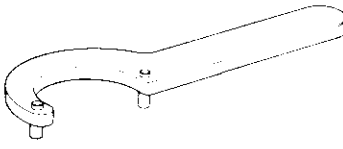
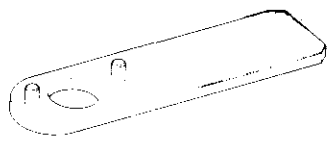
# **NON-MANDATORY TOOLS**

**SECTION 57  
STEERING**



# NON-MANDATORY TOOLS

# STEERING 57

TOOL NUMBER		DESCRIPTION	LAND R. 111	RANGE ROVER	90/110 4 CYL	90/110 V8
NEW NUMBER	OLD NUMBER					
LRT-57-500	RO.600000	 <p>Drop arm extractor                      Extracteur de levier de commande                      Lenkstockabzieher                      Extractor de la palanca de mando de la dirección                      Estrattore per braccio comando sterzo</p> <p>Jaw width 60mm</p>	●			
LRT-57-501	RO.606600	 <p>"C" spanner for adjustable screw locknut steering box                      Clé 'C' pour vis et contre-écrou de direction                      C-Schlüssel für einstellbare Gegenmutter am Lenkgetriebe                      Llave fija en 'C' para la contratuerca de tornillo ajustable del cárter de la dirección                      Chiave a "C" per controddado vite regolabile sulla scatola guida</p> <p>PCD 3.132" PIN dia                      3/16" Adwest early type</p>		●	●	●
LRT-57-502	RO.606601	 <p>Peg spanner for adjuster screw on steeringbox                      Clé à doigt pour vis de réglage de la direction                      Stopfenschlüssel für Verstellsschraube des Lenkgetriebes                      Llave fija de espiga para el tornillo ajustador del cárter de la dirección                      Chiave a dente per vite regolazione sulla scatola guida</p> <p>PCD 2" PIN dia. 1/4"                      Adwest early type</p>		●	●	●



TOOL NUMBER		DESCRIPTION	LAND R. 111	RANGE ROVER	90/110 4 CYL	90/110 V8
NEW NUMBER	OLD NUMBER					



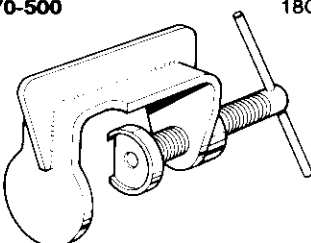
# **NON-MANDATORY TOOLS**

**SECTION 70  
BRAKES**



# NON-MANDATORY TOOLS

# BRAKES 70

TOOL NUMBER		DESCRIPTION	LAND R. 111	RANGE ROVER	LAND R. 90/110		
NEW NUMBER	OLD NUMBER						
LRT-70-500	18G.672	 <p>Disc brake piston compressor                      Outil de compression de piston de frein à disque                      Kompressionswerkzeug für Scheibenbremsenkolben                      Compresor de pistón de freno de disco                      Compressore per pistoncini freni a disco</p>		●	●		



**BRAKES 70**

**NON-MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION	LAND R. 111	RANGE ROVER	LAND R. 90/110		
NEW NUMBER	OLD NUMBER						





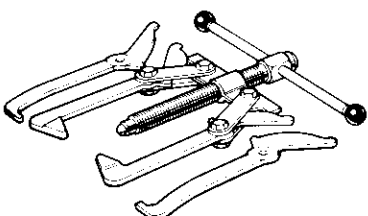
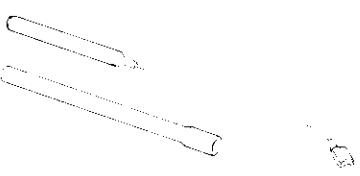
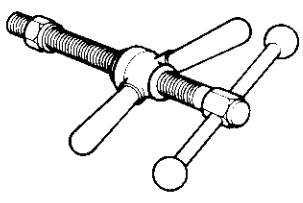
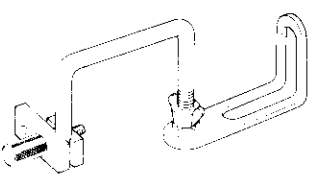
# **NON-MANDATORY TOOLS**

**SECTION 99  
GENERAL PURPOSE**



**NON-MANDATORY TOOLS**

**GENERAL PURPOSE 99**

TOOL NUMBER		DESCRIPTION						
NEW NUMBER	OLD NUMBER							
LRT-99-500	18G.2	 <p>General purpose puller                      Extracteur à usage général                      Allzweck-Abzieher                      Extractor para uso general                      Estrattore per impiego generico</p> <p>Jaw range 0-5"</p>						
LRT-99-501	DX.1010	 <p>Flexible inspection lamp                      Lampe de visite flexible                      Handlampe mit flexiblem Kabel                      Lámpara de inspección flexible                      Luce volante</p>						
LRT-99-502	18G.1122	 <p>Bearing cup replacer - main tool                      Outil de remplacement de cuvette de roulement (outil principal)                      Einsetzer für Lageraussenring (Hauptwerkzeug)                      Recolocador de la copa del cojinete - herramienta principal                      Installatore pista esterna cuscinetto - attrezzo principale</p>						
LRT-99-503	RO.530106	 <p>Dial gauge universal mounting bracket                      Support pour jauge à cadran indicateur                      Universal-Halterung für Meßanzeiger                      Ménsula universal del montaje de calibrador de esfera                      Staffa fissaggio universale per comparatore a quadrante</p>						



**GENERAL PURPOSE 99**

**NON-MANDATORY TOOLS**

TOOL NUMBER		DESCRIPTION							
NEW NUMBER	OLD NUMBER								



# **INDEX**

**TOOLS IN NUMERICAL ORDER  
NEW LAND ROVER NUMBERS FIRST**



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