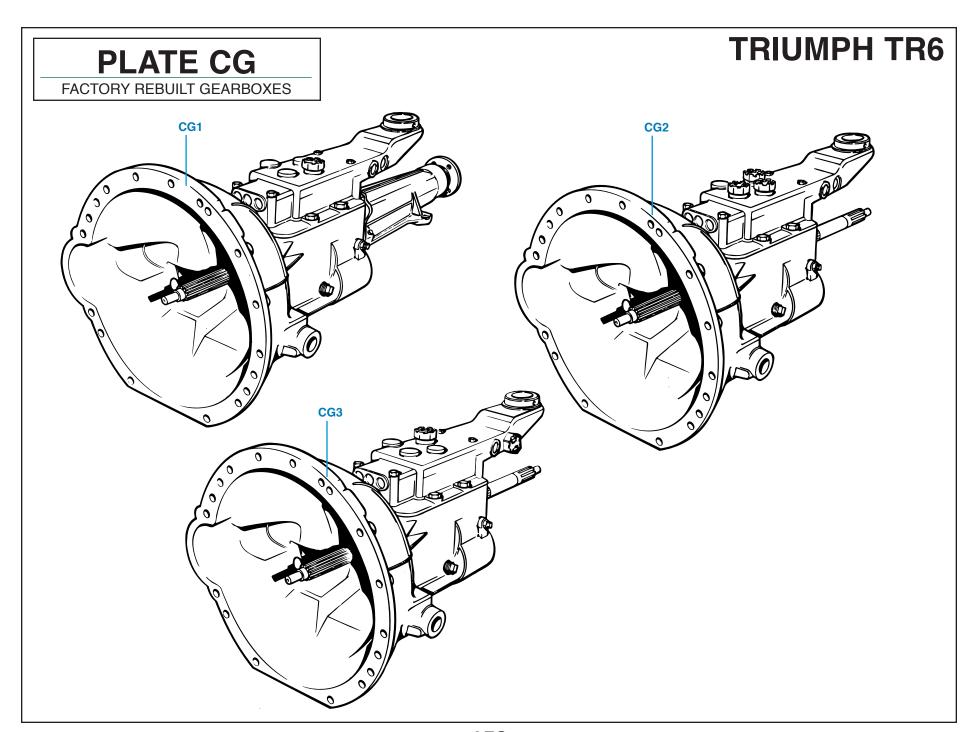


CLUTCH AND SLAVE CYLINDER

Plate No.	Part No.	Description	No. Off
		OEM CLUTCH COMPONENTS	
	RFK226	CLUTCH KIT, three piece	1
CF1	214321	Pressure Plate Assembly	1
CF2	148146	Driven Plate Assembly	1
	GRB211	Throw-Out Bearing Assembly	1
		LAYCOCK BRAND CLUTCH COMPONENTS	
	RFK116	CLUTCH KIT, three-piece	1
CF3	215422	Pressure Plate Assembly	1
CF4	148402	Driven Plate Assembly	1
	GRB211	Throw-Out Bearing Assembly	1
		HARDWARE, securing clutch to flywheel	
CF5	DP411	Dowel, fitted up to comm. no. CF12500/CR5000	3
	UKC1937	Dowel, fitted after comm. no. CF12500/CR5000	3
CF6	HU856	Screw, set	6
CF7	WL208	Washer, lock	6
CF8	KB33-19	Tool, clutch alignment	1
CF9	142465	Throw-Out Bearing Assembly	1
CF10	147858	Sleeve, throw-out bearing	1
CF11	106022	FORK, clutch operating	1
CF12	100164	Pin, fitted to fork	2
CF13	158777	Pin, taper, securing fork to clutch operating shaft	1
CF14	30047	Wire, locking, securing taper pin	1
CF15	136354	Clutch Operating Shaft Assembly	1
CF16	137651	Bush, clutch shaft, pressed into gearbox casing	2
CF17	144578	Spring, on clutch operating shaft	1
CF18	211060	CLUTCH SLAVE CYLINDER ASSEMBLY	1
CF19	513390	Repair Kit, clutch slave cylinder	1
CF20	501207	Screw, bleed	1
CF21	138572	Push Rod Assembly, clutch slave cylinder	1
CF22	136353	Bracket, slave cylinder mounting	1
		HARDWARE, securing mounting bracket to gearbox flange	
		and rear engine plate	
CF23	HB813	Bolt	2
CF24	WL208	Washer, lock	2
CF25	HN2008	Nut	2
		HARDWARE, securing slave cylinder to mounting bracket	
CF26	HB809	Bolt	2
CF27	WL208	Washer, lock	2
CF28	HN2008	Nut	2
		HARDWARE, securing push rod to clutch operating lever	
CF29	PJ8808	Pin, clavis	1
CF30	WP8	Washer, plain	1
CF31	PC9	Pin, cotter	1

Plate No. Part No. No. Off Description



FACTORY REBUILT GEARBOXES

Plate No. Part No. Description No. Off

The Roadster Factory offers rebuilt gearboxes on an exchange basis. If your old unit does not accompany your order, then you must pay the core charge which is listed, along with the price of the rebuilt unit, in our current price list. The core charge will be refunded upon receipt of a core unit that can be rebuilt.

Because shortages of many gears and other components are beginning to appear, we can no longer consider a gearbox full of broken gears to be rebuildable, and core units which are damaged beyond a certain point will not receive a full refund of the core deposit. Therefore, it will pay to have your gearbox rebuilt when it is beginning to show wear rather than after it has suffered a failure in service.

We shall be happy to rebuild your old gearbox in our shop if you prefer to keep your original serial number. This will be done at the price of a standard rebuilt unit, provided that your old unit has not been severely damaged. If you send your old unit for rebuilding, make sure that it is so marked. Your old unit will be evaluated upon receipt, and you will be contacted for further instructions based upon the results of our evaluation.

Our rebuilding process includes disassembly; thorough cleaning of all components; rigid checking of all dimensions and tolerances; replacement of all bearings, seals, circlips, countershaft, synchronizer cups, and all other worn or damaged components; reassembly to new specifications; and painting of finished units with silver paint to protect them against corrosion during future service.

Gearboxes rebuilt by The Roadster Factory are guaranteed for twelve-thousand miles or twelve months, whichever comes first. Guarantees are void if the vehicle is used in competition, if the unit is run without being filled with the specified oil, if the unit is incorrectly installed, or if the unit is completely or partially disassembled by anyone other than The Roadster Factory. In case of failure within the warranty period, please telephone for instructions on how to handle your claim. Failures are extremely rare, and you will be given priority treatment. Guarantee does not include removal or replacement, failure of related components, or any amount higher than the original purchase price.

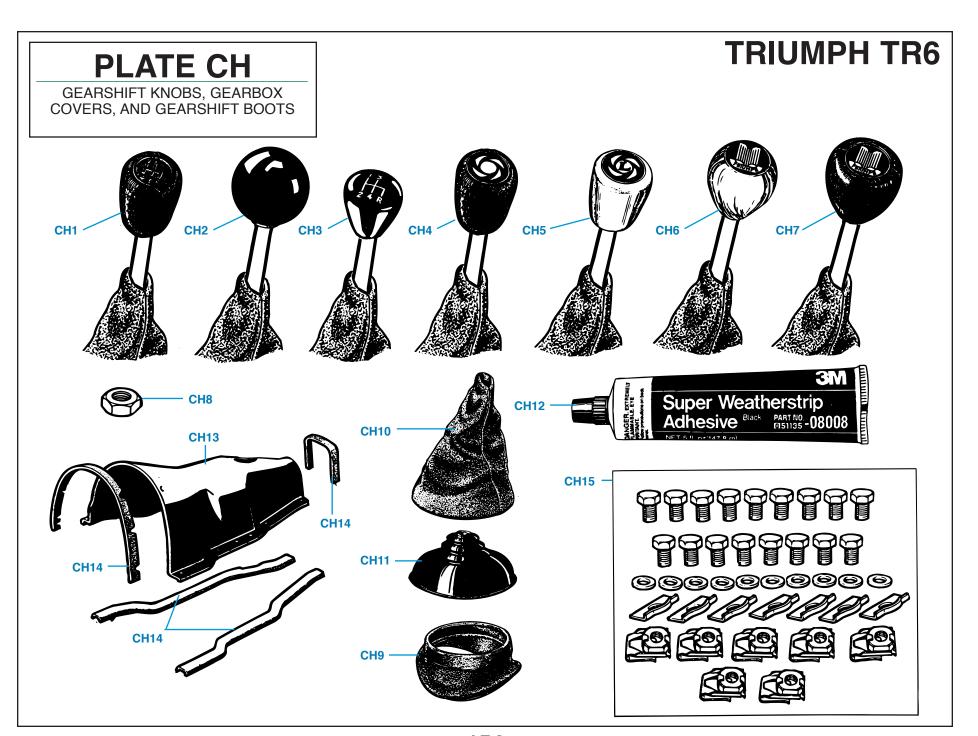
FACTORY DEPLIES CEARBOYES from avardative LLCA

		models only	
CG1	UKC5196R/1	GEARBOX ASSEMBLY, 1969 up to 1971 approx.	1
	516648	Top Cover Assembly (CL1), with provision for reverse lamp switch	1
	UKC5196R/2	GEARBOX ASSEMBLY, 1972 up to 1974 approx.	1
	520320	Top Cover Assembly (CL2), with provision for reverse lamp switch and seat belt interlock switch	1
	520556	 Top Cover Assembly (CL3), with provision for reverse lamp switch and seat belt interlock switch Please Note: UKC5196R/2 may be fitted with either top cover, as their functions are identical. 	1
	UKC5196R/3	GEARBOX ASSEMBLY, 1975 up to 1976	- 1
	UKC5114	Top Cover Assembly (CL4), with provision for reverse lamp switch	1

Plate No.	Part No.	Description !	No. Off
		FACTORY REBUILT GEARBOXES, non-overdrive,	
		all models except U.S.A.	
	UKC5196R/4	GEARBOX ASSEMBLY, 1969 up to 1974	1
	516259	Top Cover Assembly (CL9), with provision for	1
		reverse lamp switch	
	520319	Top Cover Assembly (CL10), with provision for	1
		reverse lamp switch	
		Please Note: UKC5196R/4 may be fitted with either	
		top cover, as their functions are identical.	
	UKC5196R/5	GEARBOX ASSEMBLY, 1975 up to 1976	1
	UKC5112	Top Cover Assembly (CL11), with provision for	1
		reverse lamp switch	
		FACTORY REBUILT GEARBOXES, for use with A-type	
		overdrive, U.S.A. models only	
CG2	UKC816R/1	GEARBOX ASSEMBLY, 1969 up to 1971 approx., models	1
		without seat belt interlock switch	
	516649	Top Cover Assembly (CL15), with provision for two	1
		overdrive interrupter switches and reverse lamp	
		switch	
	UKC816R/2	GEARBOX ASSEMBLY, 1971 approx. up to 1972	1
	520332	Top Cover Assembly (CL16), with provision for two	1
		overdrive interrupter switches, reverse lamp	
		switch, and seat belt interlock switch	
		FACTORY REBUILT GEARBOXES, for use with A-type	
		overdrive, all models except U.S.A.	
	UKC816R/3	GEARBOX ASSEMBLY, 1969 up to 1972	1
	516260	Top Cover Assembly (CL12), with provision for two	1
		overdrive interrupter switches and reverse lamp	
		switch	
		FACTORY REBUILT GEARBOXES, for use with J-type	
		overdrive, U.S.A. models only	
CG3	UKC5230R/1	GEARBOX ASSEMBLY, 1973 up to 1974	1
	520558	Top Cover Assembly (CL7), with provision for one	1
		overdrive interrupter switch, reverse lamp switch,	
		and seat belt interlock switch	
	UKC5230R/2	GEARBOX ASSEMBLY, 1975 up to 1976	1
	UKC5115	Top Cover Assembly (CL18), with provision for one	1
		overdrive interrupter switch and reverse lamp switch	
		FACTORY REBUILT GEARBOXES, for use with J-type	
		overdrive, all models except U.S.A.	
	UKC5230R/3	GEARBOX ASSEMBLY, 1973 up to 1976	1
	520331	Top Cover Assembly (CL13), with provision for one	1
		overdrive interrupter switch and reverse lamp switch	
	UKC5113	Top Cover Assembly (CL14), with provision for one	1
		overdrive interrupter switch and reverse lamp switch	
		Please Note: UKC5230R/3 may be fitted with either	
		top cover so their functions are identical	

153 Web Page 73

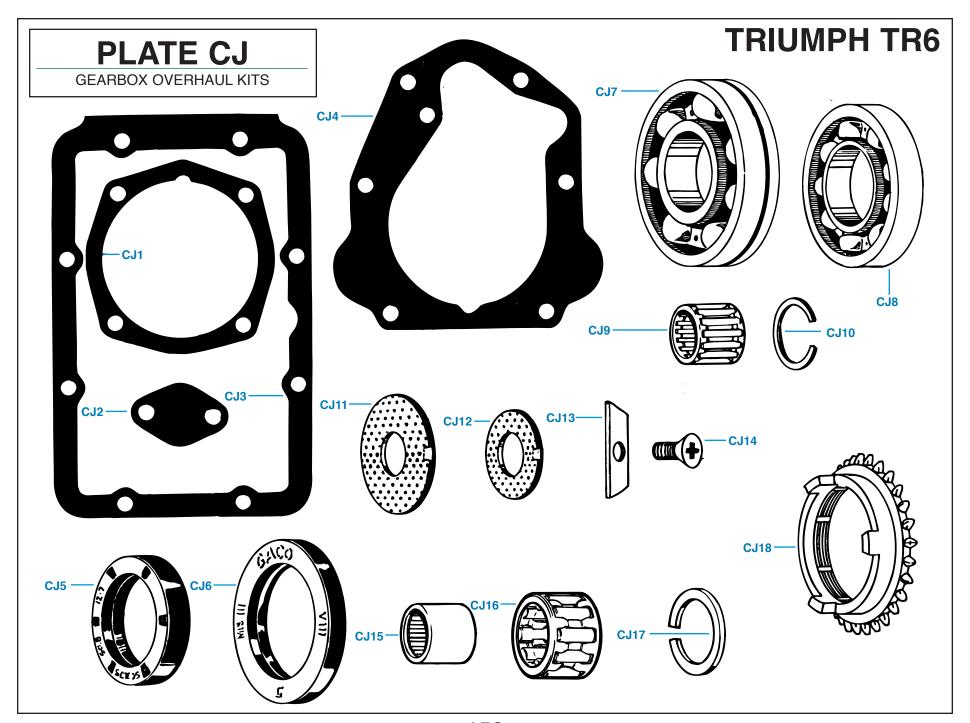
top cover, as their functions are identical



GEARSHIFT KNOBS, GEARBOX COVERS, AND GEARSHIFT BOOTS

Plate No.	Part No.	Description	No. Off
		GEARSHIFT KNOBS	
CH1	148870	Knob, gearshift, original-equipment for U.S.A. models (Black leather with silver shift emblem.)	1
CH2	131246	Knob, gearshift, original-equipment for all models except U.S.A., up to comm. no. CR1 (Black, hard rubber knob, spherical shape.)	1
CH3	156138	Knob, gearshift, original-equipment for all models except U.S.A., after comm. no. CR1 (Black hard rubber with white shift pattern.)	1
CH4	154238/L	Knob, gearshift, special issue (Black leather with enameled Leyland emblem.)	1
CH5	154238/W	Knob, gearshift, special issue (Wood with enameled Leyland emblem.)	1
CH6	TRF8226-7	Knob, gearshift, aftermarket (Walnut with enameled Triumph badge.)	1
CH7	TRF8326-7	Knob, gearshift, aftermarket (Black vinyl with Triumph badge.)	1
CH8	506157	Nut, jam, securing gearshift knob, U.S.A. models	1
	508422	Nut, jam, securing gearshift knob, all models except U.S.A.	1
		GEARSHIFT BOOTS	
CH9	709329	Grommet, rubber, lower	1
CH10	622381	GAUNTLET, black vinyl, early fine vinyl grain, used up to comm. no. CF/CR1) 1
	631881	GAUNTLET, black vinyl, later coarse vinyl grain, used after comm. no.CF/CR1	1
CH11	709328	Grommet, rubber, upper; included in gauntlet	1
CH12	TRFC102	Weatherstrip Adhesive, 3M brand, black (For best results, cement lower gearshift grommet to gearbox cover, and cement gauntlet to lower grommet. This adhesive is ideal for this application.) GEARBOX COVERS AND FITTINGS	A/R
CH13	FGP10	Gearbox Cover, indestructible vacuum-formed plastic, black (Perfect fit will save you hours of installation time.)	1
CH14 CH15	GCS6 RFK157	Seal Set, gearbox cover HARDWARE KIT, securing gearbox cover	1
	HU706	Screw, set	17
	WM57	Washer, plain	10
	612286	Plate Washer	7
	FQ3405/4	Nut and Retainer Assembly , (Clip nut for bulkhead fittings.)	7

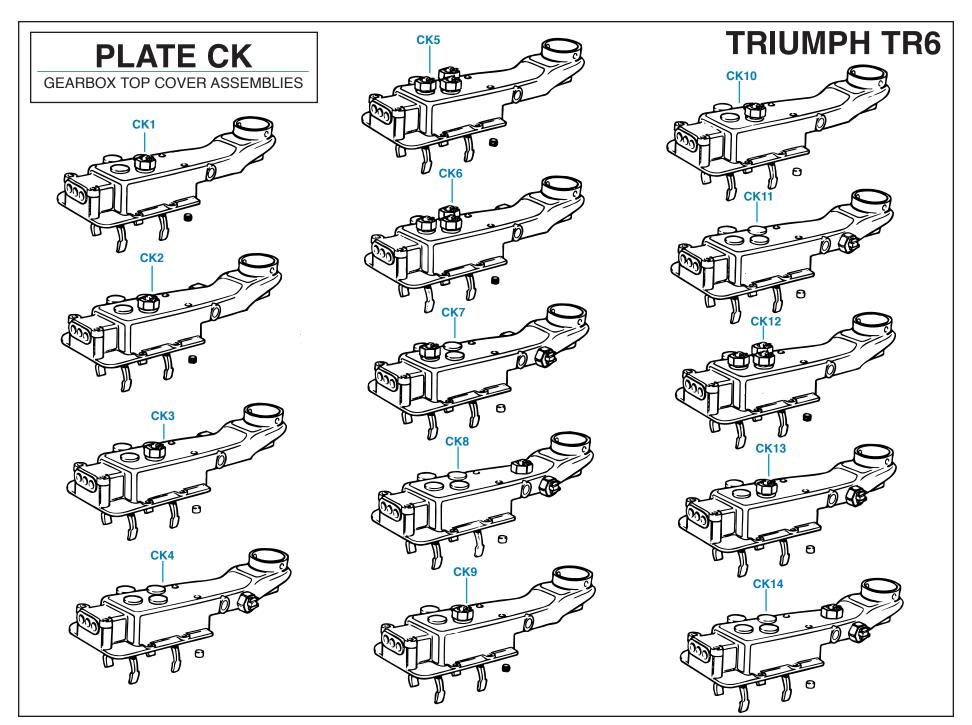
Plate No. Part No. Description No. Off



GEARBOX OVERHAUL KITS

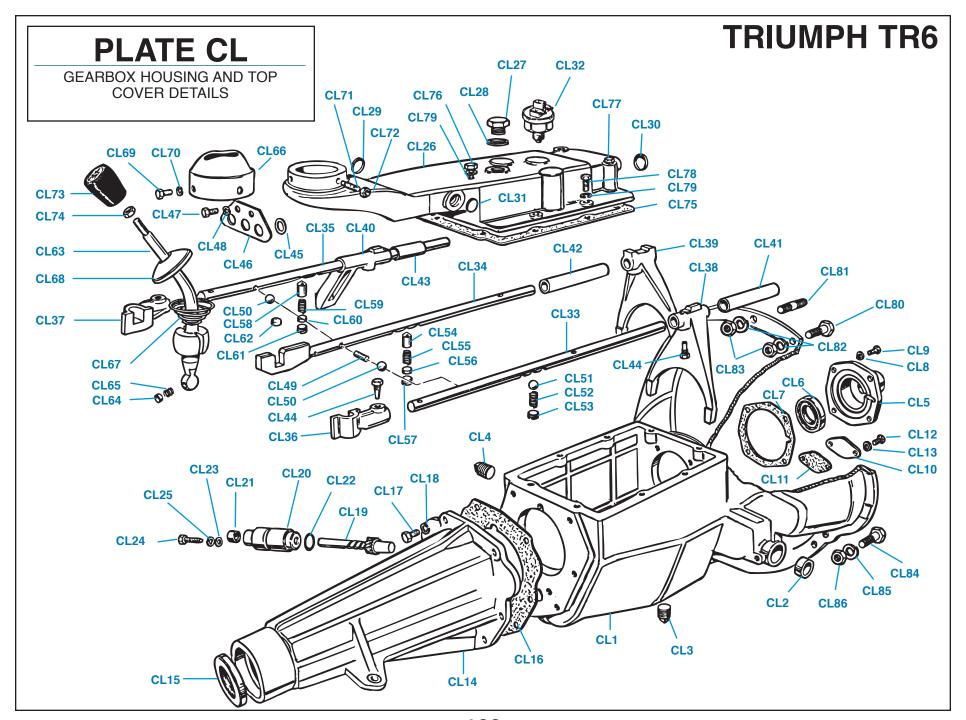
Plate No.	Part No.	Description	No. Off
		Note: This kit contains a list of parts that should be replaced, on a routine basis, every time a gearbox is disassembled for an overhaul. The parts in this kit will not solve every problem, but they will provide a good start. Periodic overhaul as preventive maintenance will reduce the odds to almost zero of ever having an expensive breakdown.	
	GRK1	GEARBOX OVERHAUL KIT, for use up to gbx. no. CD2028	1 1
	GRK2	GEARBOX OVERHAUL KIT, for use after gbx. no. CD20281	
	515121	GEARBOX GASKET SET	1
CJ1	59537	Gasket, front cover	1
CJ2	55774	Gasket, countershaft front cover	1
CJ3	105758	Gasket, top cover	1
CJ4	132465	Gasket, rear extension	1
CJ5	141756	Oil Seal, front	1
CJ6	146129	Oil Seal, rear	1
CJ7	58391	Bearing, mainshaft, front and center	2
CJ8	SP75G	Bearing, mainshaft, rear	1
CJ9	150339	Needle Bearing Assembly, countershaft	2
CJ10	147749	Circlip, retaining countershaft needle bearings in cluster gear	2
CJ11	129955	Washer, thrust, front of countershaft	1
CJ12	129956	Washer, thrust, rear of countershaft	1
CJ13	129938	Plate, locking, securing countershaft (and reverse shaft)	1
CJ14	129954	Screw, Wedglok, securing locking plate	1
CJ15	145008	Bearing, needle, fitted in constant pinion gear; not included in kit no. GRK2	1
CJ16	150989	Bearing, needle, fitted in constant pinion gear; not included in kit no. GRK1	1
CJ17	55707	Circlip, mainshaft, retaining third gear	1
CJ18	113431	Synchronizer Cup	4

Plate No. Part No. Description No. Off



GEARBOX TOP COVER ASSEMBLIES

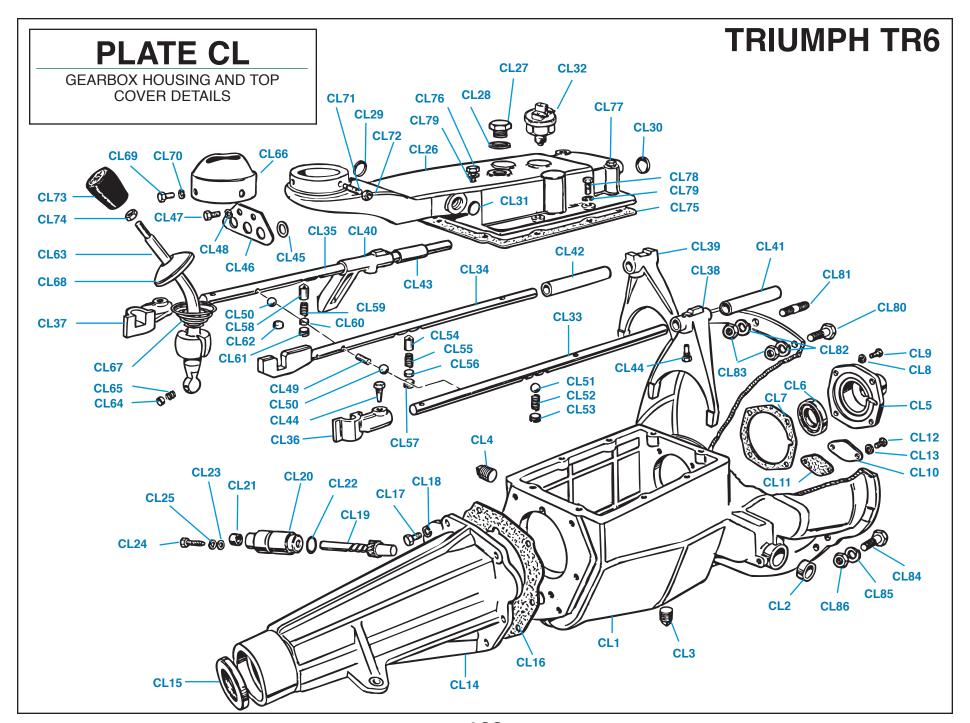
Plate No.	Part No.	Description No.	Off Plate	e No. Part No	. Description	No. Off
		TOP COVER ASSEMBLIES (There were a number of			TOP COVER ASSEMBLIES-Continued	
		different part numbers for the top covers fitted to the			TOP COVER ASSEMBLIES, U.S.AContinued	
		TR6 range of gearboxes, each part number indicating	CK7	7 520558		1
		some variation in the design of the component in question,			gearboxes for cars equipped with seat belt	
		and the factory literature is extremely vague about when			interlock, circa 1974 (Utilizes pressed-in "bucket"	
		changes were made. We shall tell you what we know about			plugs to retain selector shaft detent components;	
		each one as we list it below, but it should be noted that a			includes seat belt interlock switch mounted on	
		great deal of what we say is based upon educated guesses,			R.H. side of top cover, reverse lamp switch	
		as very few part numbers are currently available from the			mounted on L.H. side, and one overdrive	
		factory for examination. However, TRF can supply top cover			interrupter switch mounted over 3rd/4th	
		assemblies made up out of new components to any of the			selector shaft.)	
		specifications given below.	CK8	8 UKC51	,	1
		TOP COVER ASSEMBLIES, U.S.A. models			gearboxes, circa 1975-76, for cars not equipped	
CK1	516648	Top Cover Assembly, non-overdrive, early	1		with seat belt interlock (Utilizes pressed-in	
		gearboxes, circa 1969 (Utilizes screwed plugs to			"bucket" plugs to retain selector shaft detent	
		retain selector shaft detent components; includes			components; includes reverse lamp switch on	
		reverse lamp switch mounted on top cover.)			L.H. side of top cover and one overdrive	
CK2	520320	Top Cover Assembly, non-overdrive, earliest	1		interrupter switch mounted over 3rd/4th selector	
		gearboxes for cars equipped with seat belt			shaft; utilizes later reverse selector.)	
		interlock, possibly as early as 1972 or 1973			TOP COVER ASSEMBLIES, all markets except U.S.A.	
		(Utilizes screwed plugs to retain selector shaft	CKS	9 516259	Top Cover Assembly, non-overdrive, early	1
		detent components; includes seat belt interlock			gearboxes, probably up to 1972 (Virtually	
		switch mounted on R.H. side of top cover; also			identical to 516648 above.)	
		includes reverse lamp switch.)	CK1	10 520319	Top Cover Assembly, non-overdrive, circa	1
CK3	520556	Top Cover Assembly, non-overdrive, later	1		1973-1975 (Utilizes pressed-in"bucket" plugs	
		gearboxes for cars equipped with seat belt			to retain selector shaft detent components;	
		interlock, circa 1974 (Should be identical to			includes reverse lamp switch.)	
		previous listing except that pressed-in "bucket"	CK1	11 UKC51		1
		plugs are utilized instead of screwed plugs to			1975-1976 (Should be virtually identical to	
		retain selector shaft detent components.)			UKC5114 above.)	
CK4	UKC5114	Top Cover Assembly, non-overdrive, latest	1 CK1	12 516260	Top Cover Assembly, A-type overdrive, up to 1972,	1
		gearboxes, circa 1975-76, for cars not equipped			(Should be virtually identical to 516649 above.)	
		with seat belt interlock (Utilizes pressed-in "bucket"	CK1	13 52033	1 Top Cover Assembly, J-type overdrive, circa	
		plugs to retain selector shaft detent components;			1973-1974 (Utilizes pressed-in "bucket" plugs to	1
		includes reverse lamp switch on L.H. side of top			retain selector shaft detent components;	
		cover; utilizes later reverse selector			includes reverse lamp switch on L.H. side of top	
CK5	516649	Top Cover Assembly, A-type overdrive early	1		cover and one overdrive interrupter switch over	
		gearboxes (Utilizes screwed plugs to retain			3rd/4th selector shaft.)	
		selector shaft detent components; includes	CK1	14 UKC51	• • • • • • • • • • • • • • • • • • • •	1
		reverse lamp switch and two overdrive interrupter			1975-76 (Should be virtually identical to	
		switches, all mounted on top of cover.)			UKC5115 above.)	
CK6	520332	Top Cover Assembly, A-type overdrive, earliest	1			
		gearboxes for cars equipped with seat belt				
		interlock, possibly as early as 1972 or 1973				
		(Utilizes screwed plugs to retain selector shaft	1			
		detent components; includes seat belt interlock	1			
		switch mounted on R.H. side of top cover,				
		reverse lamp switch, and two overdrive	450			
		interrupter switches.)	159		Web Pa	ige 76



GEARBOX HOUSING AND TOP COVER DETAILS

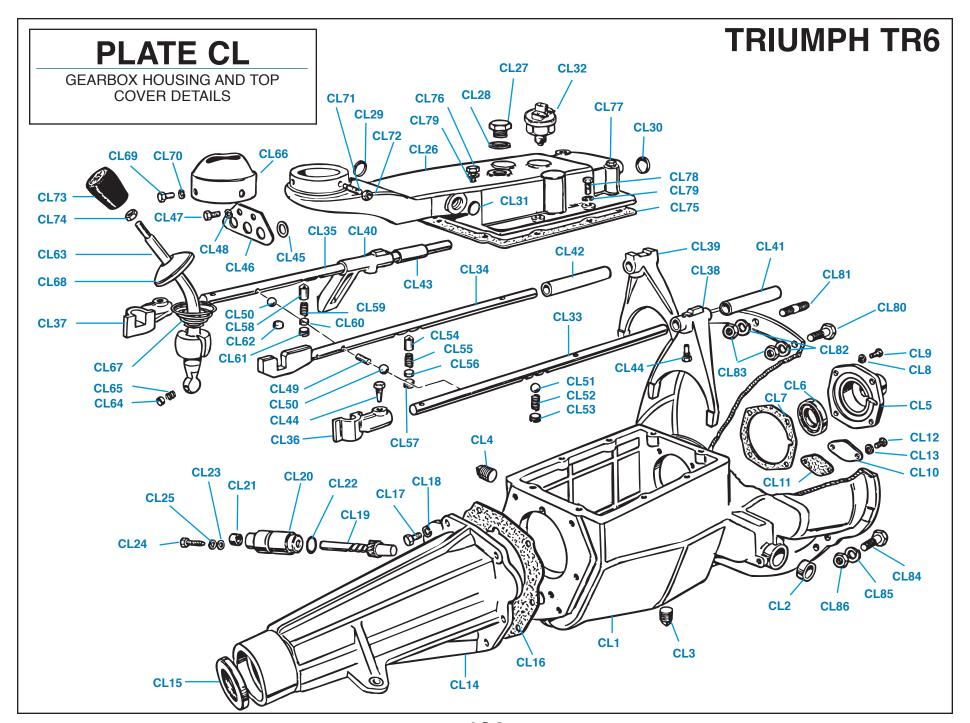
Plate No.	Part No.	Description	No. Off
CL1	210622	GEARBOX AND CLUTCH HOUSING ASSEMBLY	1
CL2	137651	Bush, clutch operating shaft	2
CL3	114774	Plug, drain, in bottom of gearbox	1
	155660	Plug, magnetic, drain, in bottom of gearbox; alternative to 114774	1
CL4	114774	Plug, oil filler and oil level, fitted to hole in L.H. side of gearbox housing	1
CL5	100157	Front End Cover	1
CL6	141756	Seal, oil, in front end cover GASKET AND HARDWARE, securing front end cover to gearbox housing	1
CL7	59537	Gasket	1
CL8	114034	Washer, copper	4
CL9	155541	Screw, set	4
CL10	55773	Cover, countershaft end	1
02.0	30770	GASKET AND HARDWARE, securing countershaft end cover to gearbox housing	·
CL11	55774	Gasket	1
CL12	155542	Screw, set	2
CL13	114034	Washer, copper	2
CL14	305048	Gearbox Extension	1
CL15	146129	Seal, oil, fitted in rear of extension GASKET AND HARDWARE, securing extension to gearbox housing	1
CL16	132465	Gasket	1
CL17	HU858	Screw, set	5
OLIT	155541	Screw, set; alternative to HU858	5
	HU866	Bolt	1
	UKC4801	Bolt, alternative to HU866	1
CL18	WL208	Washer, lock	6
		SPEEDOMETER DRIVEN GEAR AND BEARING DETAILS	
CL19	147965	Gear, speedometer driven, up to comm. no. CF1	1
02.0	UKC5933	Gear, speedometer driven, after comm. no. CF1	1
CL20	146542	Bearing, speedometer driven gear	1
CL21	108757	Seal, oil	1
CL22	147751	Ring, "O"	1
		HARDWARE, securing gear and bearing assembly to gearbox extension	
CL23	146541	Washer, plain	1
CL24	107746	Screw, locking	1
CL25	WL208	Washer, lock	1

		TOP COVER CASTINGS, fitted with three selector shaft	
		end plugs	
CL26	518362	Top Cover, fitted up to gearbox no. CD48491	1
	307109	Top Cover, fitted after gearbox no. CD48491	1
	158462	Top Cover, U.S.A. models, with seat belt interlock,	1
		non-overdrive gearboxes	
	158461	Top Cover, U.S.A. models, with seat belt interlock,	1
		overdrive gearboxes	
	TKC1000	Top Cover, fitted after comm. CF12500	1
		PLUGS, fitted in top cover	
CL27	108114	Plug, screwed, blanking threaded switch holes	A/R
CL28	501258	Seal, copper plug	A/R
CL29	104449	Plug, Welch, interlock access, side of top cover	1
CL30	104449	Plug, Welch, selector shafts, front of top cover	3
CL31	54505	Plug, Welch, sides of top cover	2
		ELECTRICAL SWITCHES , fitted to top cover, reverse	
		lamps, overdrive interrupter, seat belt interlock	
CL32	127380	Switch, electrical, fitted earlier	A/R
	UKC930	Switch, electrical, fitted later; alternative to 127380	A/R
	502146	Shim Washer, adjusting height of above switches for	A/R
		proper operation	
		SELECTOR SHAFTS	
CL33	128066	Selector Shaft, 1st and 2nd gears	1
	158464	Selector Shaft, 1st and 2nd gears, U.S.A. models with	1
		seat belt interlock only	
	105788	Plunger, interlock, fitted to 1st/2nd selector shaft, U.S.A.	1
		models with seat belt interlock only	
CL34	129986	Selector Shaft, 3rd and 4th gears, all non-overdrive	1
		gearboxes and overdrive gearboxes up to 1972	
	156373	Selector Shaft, 3rd and 4th gears, J-type overdrive	1
		gearboxes, with interrupter switch toward rear of	
0.0=		top cover	
CL35	132389	Selector Shaft, reverse, earlier top covers	1
	209902	Selector Shaft, reverse, later top covers, with reverse	1
		lamp switch on L.H. side of top cover	
		SELECTORS	
CL36	127386	Selector, 1st and 2nd gears	1
CL37	127385	Selector, reverse, narrow groove, fitted earlier	1
	UKC5098	Selector, reverse, wider groove, fitted later; alternative	1
		to 127385	
01.00	100007	SELECTOR FORKS	
CL38	128067	Fork, selector, 1st and 2nd gears	1
CL39	127387 129780	Fork, selector, 3rd and 4th gears	1
CL40		Actuator, reverse	



GEARBOX HOUSING AND TOP COVER DETAILS

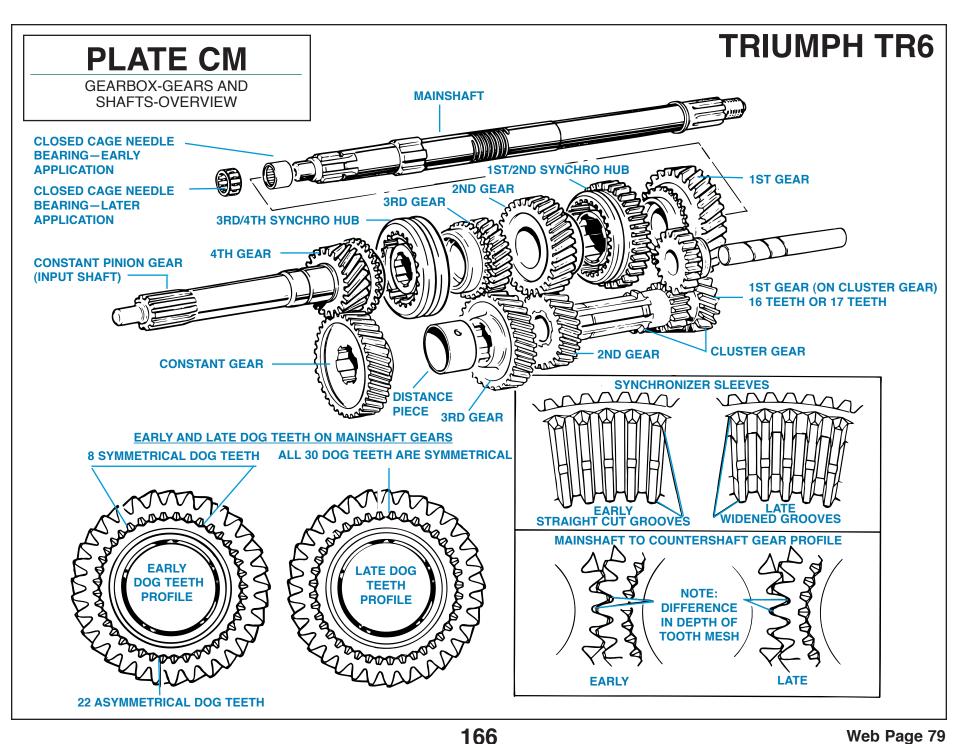
riale INO.	Part No.	Description	No. Off	Plate No.	Part No.	Description	No. Off
		SELECTOR SHAFT SLEEVES				DETENT DETAILS-Continued	
CL41	128063	Sleeve, 1st and 2nd selector shaft	1			REVERSE SELECTOR SHAFT	
CL42	117811	Sleeve, 3rd and 4th selector shaft	1	CL58	136990	Plunger, detent	1
CL43	129779	Sleeve, reverse selector shaft, earlier top covers	1	CL59	106489	Spring, detent	1
CL44	122653	Screw, taper, securing selectors and forks	5	CL60	109401	Piece, distance	1
		SELECTOR SHAFT SEALING DETAILS		CL61	108166	Plug, screwed, retaining plunger, spring, and	1
CL45	106050	Ring, sealing, selector shaft	3			distance piece, fitted earlier	
CL46	106051	Plate, cover, over sealing rings	1	CL62	156665	Plug, pressed-in, retaining plunger, spring, and	1
		HARDWARE, securing cover and rings to top cover				distance piece, fitted later	
CL47	HU704	Screw, set	2			GEARSHIFT LEVER DETAILS	
CL48	WL207	Washer, lock	2	CL63	148095	Gearshift Lever Assembly	1
		INTERLOCK DETAILS		CL64	112424	Plunger, anti-vibration, in ball end	1
CL49	105788	Plunger, interlock, fitted in center selector shaft	1	CL65	137988	Spring, loading plunger	1
CL50	BL24	Ball, interlock, fitted in top cover between selector	2	CL66	140816	Cap, gearshift lever, fitted up to comm. no. CF1	1
		shafts			156460	Cap, gearshift lever, fitted after comm. no. CF1	1
		DETENT DETAILS-Selector Shafts		CL67	145796	Spring, under cap, fitted up to early 1973	1
		1ST/2ND SELECTOR SHAFT , fitted up to gearbox no.			158914	Spring, under cap, fitted after early 1973	1
		CD23951		CL68	112442	Retainer, spring	1
CL51	BL24	Ball, detent	1	01.00		HARDWARE, securing gearshift lever cap to top cover	
CL52	101236	Spring, detent	1	CL69	HU703	Screw, set	1
CL53	108166	Plug, screwed, retaining ball and spring	1	CL70	WL207	Washer, lock	1
		1ST/2ND SELECTOR SHAFT , fitted after gearbox no.		CL71	141984	Pin, locating gearlever, fitted earlier	2
	DI 04	CD23951			156408	Pin, locating gearlever, fitted later	2
	BL24	Ball, detent	1		160190	Pin, locating gearlever, used with overdrive steady	2
	155632	Spring, detent	!	01.70	10100	bracket	
	108166	Plug, screwed, retaining ball and spring, fitted	1	CL72	JN2108	Nut, jam, locking pins	2
	150005	earlier				Please Note: A coating of grease between the	
	156665	Plug, pressed-in, retaining ball and spring, fitted	1			gearshift lever cap and the top cover will	
		later				control the corrosion caused by dissimilar metals, which can sometimes make the	
		3RD/4TH SELECTOR SHAFT, fitted up to gearbox no. CD22093					
CL54	106481	Plunger, detent	4	CL73	148870	gearshift lever cap hard to remove.	1
CL54 CL55	106489	Spring, detent	1	CL/3	140070	Knob, gearshift lever, U.S.A. (Black leather knob with silver shift emblem.)	ı
CL55	100469	Piece, distance	1		131246	Knob, gearshift lever, all markets except U.S.A. fitted up	1
CL50	108166	Plug, screwed, retaining plunger, spring and	4		131240	to commission no. CP53853	
OLST	100100	distance piece	'		156138	Knob, gearshift lever, all markets except U.S.A., fitted	1
		3RD/4TH SELECTOR SHAFT, fitted after gearbox no.			130130	after commission no. CP53853	
		CD22093		CL74	508422	Nut, jam, securing knob	- 1
	BL24	Ball, detent	1	OL/ T	506157	Nut, jam, securing knob, apparently an alternative to	1
	155632	Spring, detent	i		550107	508422	
	108166	Plug, screwed, retaining ball and spring, fitted	1			(Continued on nex	t page)
		earlier	·			(Softanded of flox	· pago.)
	156665	Plug, pressed-in, retaining ball and spring, fitted	1				
		later	·				



GEARBOX HOUSING AND TOP COVER DETAILS

Plate No.	Part No.	Description	No. Off
		GASKET AND HARDWARE, securing top cover to gearbox	(
01.75	105750	housing	
CL75	105758	Gasket	1
CL76	HB873	Bolt, 2 7/8-inches long	2
CL77	HB872	Bolt, 2 3/4-inches long	2
CL78	56370	Screw, set	4
CL79	WL208	Washer, lock	8
		HARDWARE, securing gearbox assembly to engine	
CL80	HB811	Bolt	8
CL81	139836	Stud	3
CL82	WL208	Washer, lock	11
CL83	HN2008	Nut	11
CL84	132872	Bolt, dowel	2
CL85	WL209	Washer, lock	2
CL86	HN2009	Nut	2
	515121	GEARBOX GASKET SET, comprising:	1
	59537	Front Cover Gasket	1
	55774	Countershaft Cover Plate Gasket	1
	105758	Top Cover Gasket	1
	132465	Rear Extension Gasket	1
	502556	Gasket between A-type overdrive unit and adaptor plate	1
	37H1901	Gasket, between J-type overdrive unit and adaptor housing	1
		REAR ENGINE (GEARBOX) MOUNTING DETAILS (See Section AG.)	

Plate No. Part No. Description No. Off



GEARBOX—GEARS AND SHAFTS—OVERVIEW

SOME THEORY AND BACKGROUND ON TRIUMPH GEARBOX DESIGN

A number of fairly major changes were made in the TR6 gearbox during its production run. Although the listings of gears and other components in the factory spare parts catalogues seem fairly complete, the points at which changes were made are not always well documented. This problem is further complicated when working on a particular gearbox since gearboxes are often switched from one car to another as replacement units, and replacements of worn or broken parts may not have been made according to "the book" by mechanics who worked on a particular gearbox in the past. For these reasons it is necessary to carefully examine the gearbox in hand in order to ascertain which components it contains before any attempt is made to repair it or to order parts for the repair. Things to look for include:

- 1. Discover whether the gearbox in hand has an early or a later mainshaft and input gear (constant pinion gear) combination. The bearing inside the rear of the input gear will determine this for you. The early combination has a pressed-in, closed-cage needle bearing which is very difficult to remove, while the later type has an open cage bearing which will slide out easily. Early and late mainshafts are not interchangeable, as the machined ends which fit inside the needle bearings are of different diameters. See illustration.
- 2. Discover whether the gearbox in hand has an early or a late first speed countershaft gear (cluster gear). The early gear will have sixteen teeth on the first gear portion, and the later gear will have seventeen teeth. See illustration.
- 3. Discover the type of dog teeth found on the first, second, third, and fourth speed mainshaft gears. There are thirty dog teeth on each gear, and later dog teeth are larger, stronger, and more symmetrical than earlier dog teeth. Earlier gears have only eight out of thirty symmetrical dog teeth, while all thirty dog teeth are symmetrical on later gears, which were actually taken from the Triumph Stag. For a better understanding of this concept, see the illustration above. Note that it is the dog teeth which take most of the stress of shifting and acceleration.
- 4. Discover whether the bushes inside first, second, and third speed main-shaft gears are bronze or steel. Steel bushes were used only on the very latest gearboxes, and the steel second gear bush is part of a redesign of the second speed mainshaft gear and spacer arrangement which was effected to solve the problem of the flange's sheering off of the bronze second gear bush, a common problem with earlier gearboxes, particularly if they are assembled without attention to proper clearances. Gearboxes with the latest second speed gear will also have a thicker shim washer between the rear of the gear and the shoulder on the mainshaft. In addition, the thicker washer is prevented from spinning on the mainshaft by fitment of a steel ball in a groove in the washer and in an indentation in the shaft.
- 5. Examine the two synchronizer hubs and sleeves to discover whether the grooves cut into the sleeves are straight-cut or if they are widened at each end to accommodate the larger dog teeth used on the later mainshaft gears. This is a fine point that requires a good eye, but it is worth checking since problems will result if the sleeves are not compatible with the gears that are used. Use the straight cut sleeves only with the early gears with asymmetrical dog teeth, and use the sleeves with widened grooves only with the later gears having symmetrical dog teeth.
- 6. A very fine point is that the profile of the meshing teeth of some of the mainshaft and countershaft gears changed during the production run of the late TR6. Earlier gears seem to have a blunter tooth profile and, perhaps, not so deep a mesh; later gear teeth appear a little more pointed and mesh, perhaps, a little more deeply.

However, even though new gears were introduced with the later tooth profile on their meshing teeth, some gears, notably third speed, were not changed through the end of production. We mention this point here because we have noted several gears with different part numbers which were indistinguishable from one another apart from this difference in tooth profile. See illustration.

A lot of games can be played with the gearboxes if you know enough about them. Gears can be interchanged between early and late gearboxes, and slight changes in gear ratios are possible. Very knowledgeable rebuilders can interchange components from different gearboxes, early and late, to produce units which function perfectly. Compatibility of the various components is the key, and the information provided in this section, along with that provided in the next four sections on Gears and Shafts, will give you the equivalent of an undergraduate degree in Triumph gearbox rebuilding if you study it carefully and add an appropriate amount of practical experience.

FORWARD GEARS

Our research has disclosed, essentially, four different sets of gears used during the production run of the TR6. Some gears are interchangeable between sets, and some are not. Most gears are interchangeable if both the mainshaft gear and the countershaft gear are interchanged together, although care must be taken to also match the internal teeth in synchronizer sleeves to the external dog teeth on the mainshaft gears. The latest second gear setup is not interchangeable with any other, however.

Although it may be a slight oversimplification, we have broken down the large number of production changes made during the manufacturing run of the TR6 gearbox into four different gear sets, which we list exhaustively in the next four sections of this catalogue. These break down as follows:

Section CN Up to Gearbox No. CD20281

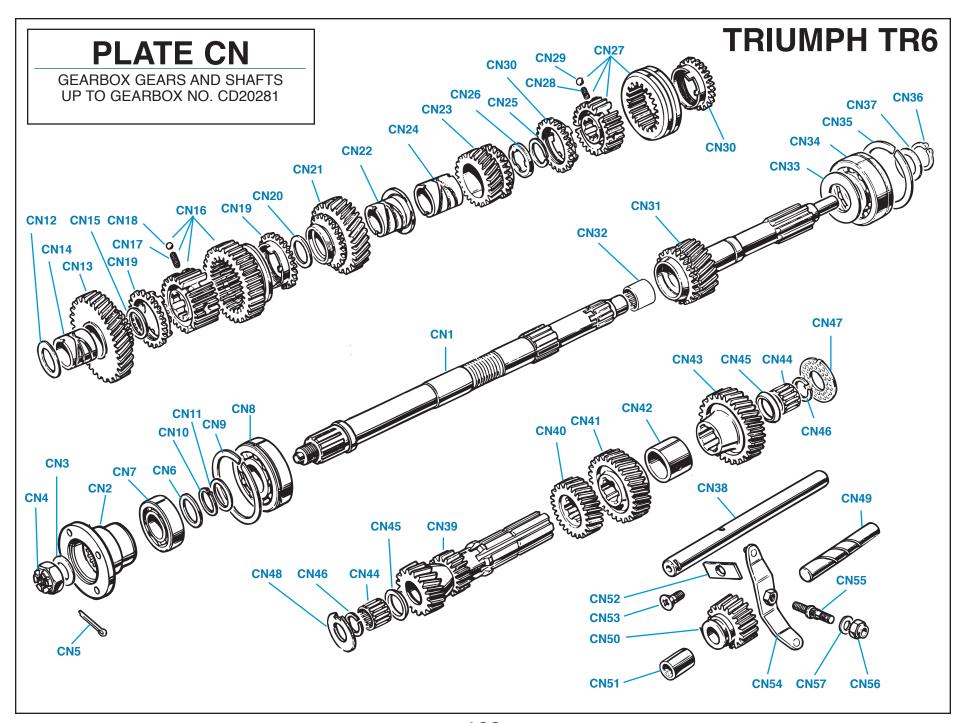
Section CP From Gearbox No. CD20282 up to CD21768

Section CQ From Gearbox No. CD21769 up to Comm. No. CF12500/CR5000

Section CR After Comm. No. CF12500/CR5000 (After 1973)

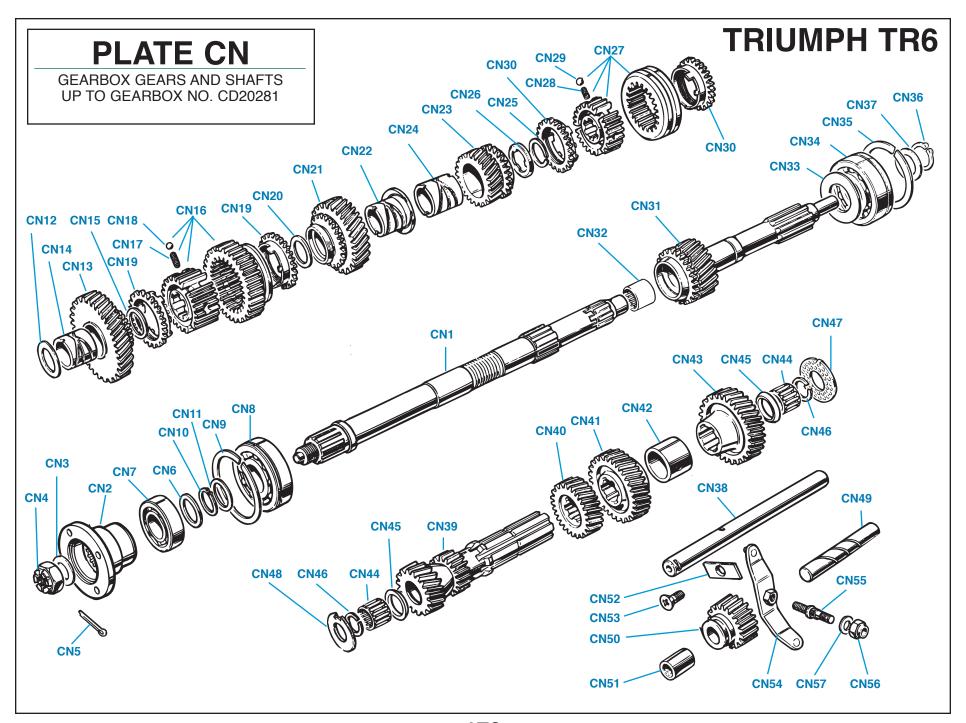
REVERSE GEARS

A reverse idler gear operates along with a reverse countershaft gear, which is integral with the first speed countershaft gear, and a mainshaft gear, which is integral with the first and second gear synchro sleeve. Although the first speed countershaft gear was changed once during the production run and the first and second gear synchro sleeve was also changed once, the reverse idler gear, shaft, and shifting details remained the same through the entire production run.



GEARBOX GEARS AND SHAFTS, UP TO GEARBOX NO. CD20281

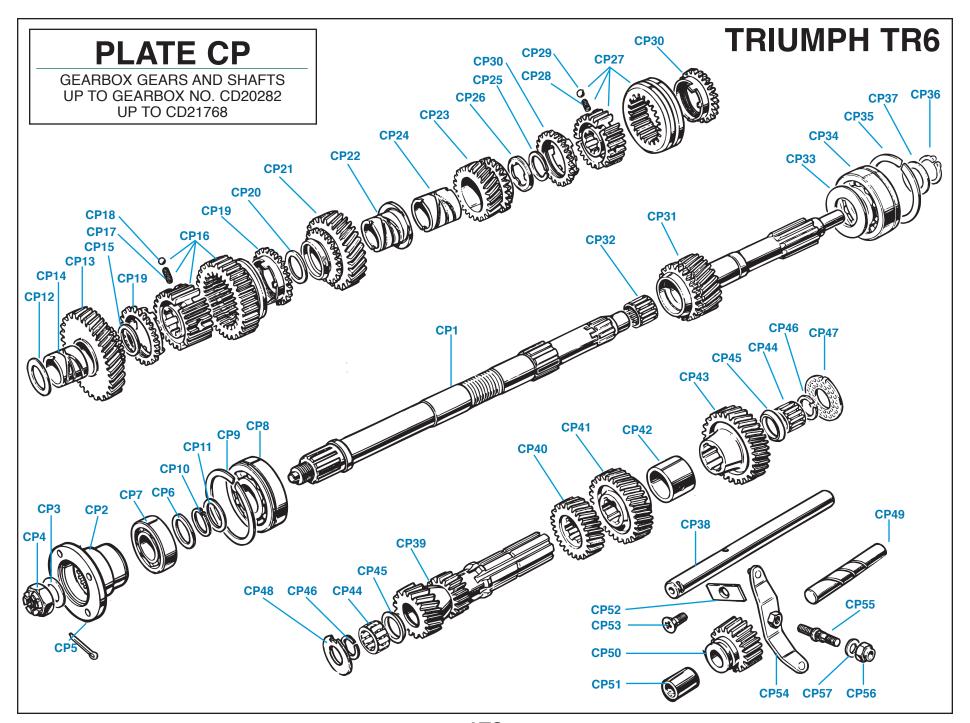
Plate No.	Part No.	Description	No. Off P	Plate No.	Part No.	Description	No. Off
		Please Note: The gear set used in the earliest type of TR6				FIRST/SECOND SYNCHRO DETAILS	
		gearbox may be identified by the following characteristics		CN16	515650	SYNCHRO HUB AND SLEEVE AND REVERSE	1
		See Section CM for a full discussion of these characteris	stics.			MAINSHAFT GEAR ASSEMBLY	
		 Input gear utilizes pressed-in needle bearing. 	C	CN17	122075	Spring, in hub	3
		First-speed countershaft gear has sixteen teeth.	C	CN18	BL16	Ball, steel, in hub	3
		All mainshaft gears have asymmetrical dog teeth.	C	CN19	113431	Synchro Cup, first and second gears	2
		Bushes inside first, second, and third gears are				SECOND SPEED MAINSHAFT GEAR DETAILS	
		bronze rather than steel.				ADJUSTING WASHERS, between rear of second gear	
		Both synchronizer sleeves will have straight grooves to				and shoulder on mainshaft	
		accommodate the smaller dog teeth on mainshaft g	,	CN20	129941	Washer, .118 inch thick, silver	A/R
		All gears have the earlier tooth profile on meshing teet	th.		129942	Washer, .121 inch thick, green	A/R
CN1	208051	Mainshaft, non-overdrive	1		129943	Washer, .124 inch thick, blue	A/R
	208052	Mainshaft, A-type overdrive	1		129944	Washer, .128 inch thick, orange	A/R
		REAR FLANGE DETAILS			155951	Washer, .131 inch thick, uncolored	A/R
CN2	58948	Flange, mainshaft	1		134670	Washer, .133 inch thick, yellow	A/R
		HARDWARE, securing flange to rear of mainshaft		CN21	105629	Second Speed Mainshaft Gear	1
CN3	WP24	Washer, plain		CN22	129939	Bush, bronze, top-hat, inside second gear	1
CN4	57868	Nut, slotted	1			THIRD SPEED MAINSHAFT GEAR DETAILS	
CN5	PC12	Pin, cotter		CN23	105630	Third Speed Mainshaft Gear	1
	157642	Nut, nyloc, alternative to slotted nut and cotter pin		CN24	129940	Bush, bronze, inside third gear	1
0110		REAR BEARING DETAILS		CN25	55707	Circlip, retaining third gear on mainshaft	1
CN6	58949	Washer, locating bearing		CN26	156136	Washer, splined, between circlip and third gear	1
CN7	SP75G	Bearing, mainshaft, rear	1		157054	Washer, splined, between circlip and third gear;	1
ONIO	E0004	CENTER BEARING DETAILS				alternative to 156136	
CN8	58391	Bearing, mainshaft, center	1	20107	500040	THIRD/FOURTH SYNCHRO DETAILS	
CN9	58955	Circlip, large, locating bearing in gearbox housing		CN27	509649	SYNCHRO HUB AND SLEEVE ASSEMBLY	1
CN10	58956	Circlip, small, locating bearing on mainshaft		CN28 CN29	122075 BL16	Spring, in hub	3
CN11	59443	Washer, between small circlip and bearing FIRST SPEED MAINSHAFT GEAR DETAILS			113431	Ball, in hub	2
CN12	116496	Washer, between first gear and center mainshaft	1	CN30	113431	Synchro Cup, third and fourth gears FOURTH SPEED GEAR (INPUT SHAFT) DETAILS	2
CIVIZ	110490	bearing		CN31	148949	Fourth Speed Gear (Input Shaft), comes with 142434	1
CN13	128100	First Speed Mainshaft Gear, 33 teeth	1	JINOT	140949	countershaft constant gear	
CN13	129940	Bush, bronze, inside first gear		CN32	145008	Needle Bearing Assembly, closed-cage type, pressed	1
CIVIT	123340	ADJUSTING WASHERS, between first gear and shoulde		JINUZ	143000	into fourth gear	'
		on mainshaft				FRONT BEARING DETAILS	
CN15	129941	Washer, .118 inch thick, silver	A/R C	CN33	60658	Oil Thrower	- 1
CIVIO	129942	Washer, .121 inch thick, green		N34	58391	Bearing, gearbox, front	1
	129943	Washer, .124 inch thick, blue		N35	58955	Circlip, large, locating bearing in gearbox housing	1
	129944	Washer, .128 inch thick, orange		N36	58956	Circlip, small, locating bearing on input shaft	1
	155951	Washer, .131 inch thick, uncolored		N37	60078	Washer, between bearing and circlip	1
	134670	Washer, .133 inch thick, yellow	A/R		230.0	(Continued on nex	kt page)
	134670	Washer, .133 inch thick, yellow	A/R			(Continued on nex	kt p



GEARBOX GEARS AND SHAFTS, UP TO GEARBOX NO. CD20281

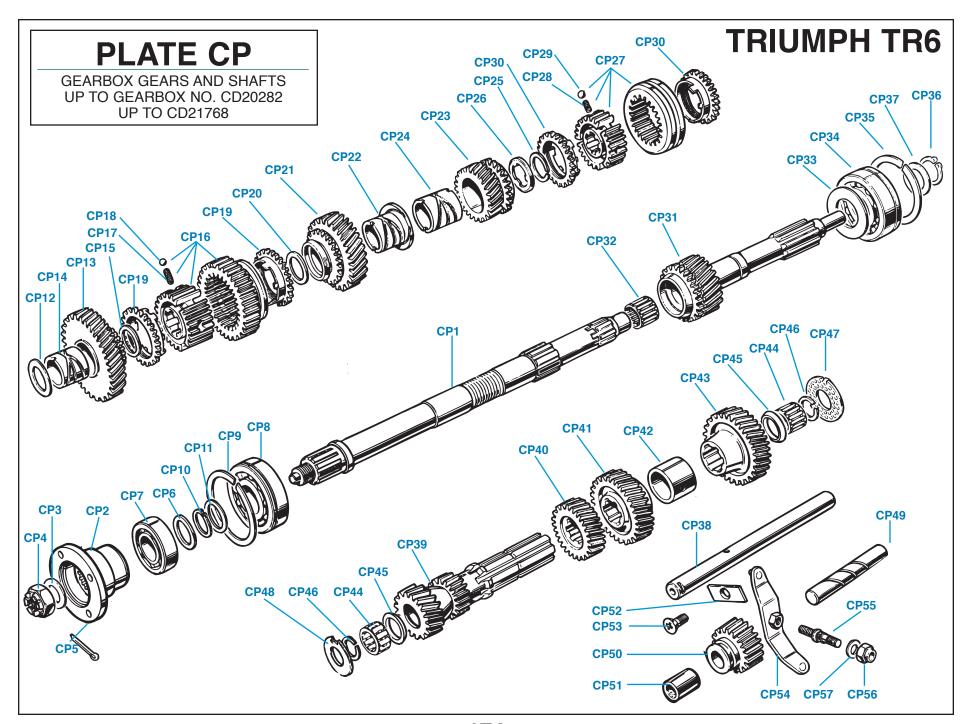
Plate No.	Part No.	Description	No. Off
		COUNTERSHAFT DETAILS	
CN38	128105	Countershaft	1
00		GEARS	•
CN39	128107	Reverse and First Speed Countershaft Gear, 16	1
		teeth on first gear portion	
CN40	140508	Second Speed Countershaft Gear	1
CN41	140509	Third Speed Countershaft Gear	1
CN42	59456	Distance Piece, between third gear and constant	1
ON 40	1.40404	gear	
CN43	142434	Constant Gear, countershaft; included with 148949	1
		fourth speed gear listed above COUNTERSHAFT BEARING DETAILS	
		ORIGINAL BEARING ARRANGEMENT	
CN44	150339	Bearing, needle (open cage, slide-in type)	2
CN45	154396	Washer, bevel, behind needle bearings (Fit	2
		with bevel away from bearing.)	_
CN46	147749	Circlip, retaining needle bearings in gear	2
		ALTERNATIVE BEARING ARRANGEMENT (Use the	se
		sleeve-type needle bearings to save a countershaft	
		gear with lightly pitted bearing surfaces. If your	
		bearing surfaces are heavily scored, you cannot	
		save the gear. Many Triumph experts also	
		consider these bearings to be more	
	126862	durable than the original configuration.)	0
	147749	Bearing, needle (sleeve-type, press-in bearing) Circlip, retaining needle bearings in counter-	2 2
	147743	shaft gear (Use these to insure that they stay in.)	_
		Please Note: Do not fit the bevel washers with	1
		the alternative bearings.	
		COUNTERSHAFT THRUST WASHERS	
CN47	129955	Washer, thrust, front of countershaft	1
CN48	129956	Washer, thrust, rear of countershaft	1
		REVERSE IDLER GEAR DETAILS (The idler works in	
		conjunction with teeth on the first speed countershaft	
		gear and teeth on the first/second synchro hub and	
		sleeve assembly to produce a reverse motion of the	
CNI40	120027	mainshaft.)	1
CN49 CN50	129937 128110	Shaft, reverse idler REVERSE IDLER GEAR ASSEMBLY	1
CN50	129862	Bush, reverse idler gear	1
51.151	120002	HARDWARE, securing countershaft and reverse idler shaft	
		to rear of gearbox housing	
CN52	129938	Plate, locking	1
CN53	129954	Screw, Wedglok	1
		-	

Plate No.	Part No.	Description	No. Off
		REVERSE OPERATING LEVER DETAILS	
CN54	129894	Reverse Operating Lever Assembly	1
CN55	106448	Pin, fulcrum, fitted to gearbox housing	1
		HARDWARE, securing fulcrum to gearbox housing	
CN56	TN3209	Nut, nyloc	1
CN57	WP36	Washer, plain	1



GEARBOX GEARS AND SHAFTS, GEARBOX NO. CD20282 TO CD21768

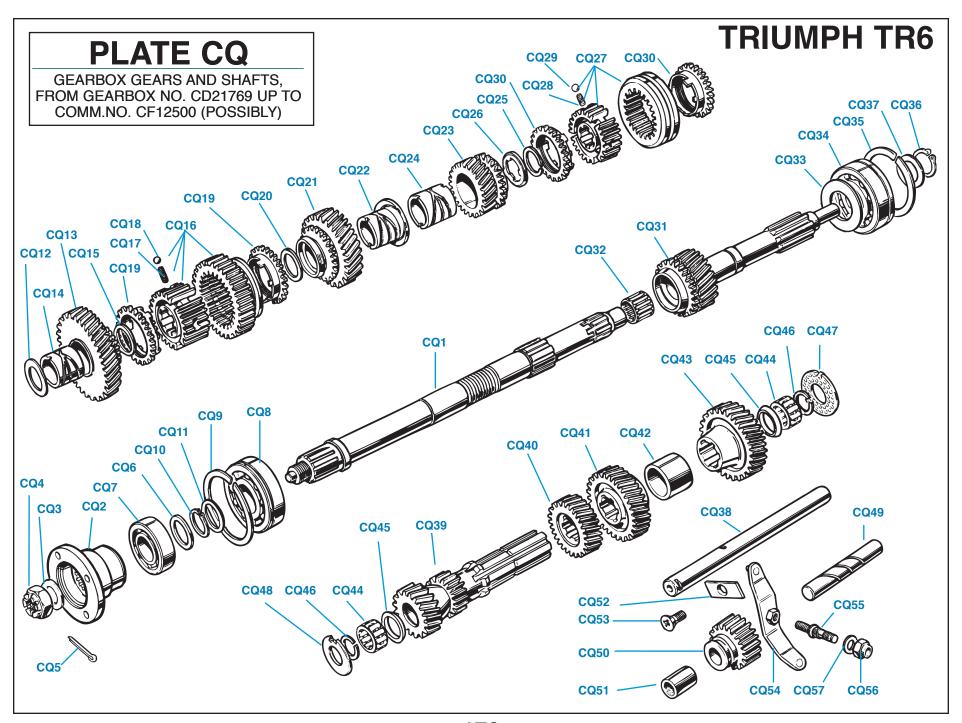
Plate No.	Part No.	Description No.	o. Off	Plate No.	Part No.	Description	No. Off
		Please Note: The gear set used in the range of gearboxes				FIRST SPEED MAINSHAFT GEAR DETAILS-Continued	I
		covered by this section may be identified by the following				ADJUSTING WASHERS, between first gear and shou	lder
		characteristics. See Section CM for a full discussion of the	se			on mainshaft	
		characteristics.		CP15	129941	Washer, .118 inch thick, silver	A/R
		 Input gear utilizes slide-in needle bearing. 			129942	Washer, .121 inch thick, green	A/R
		First-speed countershaft gear has sixteen teeth.			129943	Washer, .124 inch thick, blue	A/R
		All mainshaft gears have the later symmetrical			129944	Washer, .128 inch thick, orange	A/R
		dog teeth.			155951	Washer, .131 inch thick, uncolored	A/R
		4. Bushes inside first, second, and third gears are			134670	Washer, .133 inch thick, yellow	A/R
		bronze rather than steel; oil holes in gears do not				FIRST/SECOND SYNCHRO DETAILS	
		line up with grooves in bushes.		CP16	153843	SYNCHRO HUB AND SLEEVE AND REVERSE	1
		5. Both synchronizer sleeves will have grooves which		00.0	.===.	MAINSHAFT GEAR ASSEMBLY	
		are enlarged at each end to accommodate the larger		CP17	153318	Spring, in hub	3
		dog teeth on the mainshaft gears.		CP18	BL16	Ball, steel, in hub	3
		6. All gears have the earlier tooth profile on their meshing		CP19	113431	Synchro Cup, first and second gears	2
OD4	010000	teeth.				SECOND SPEED MAINSHAFT GEAR DETAILS	
CP1	216393	Mainshaft, non-overdrive	1			ADJUSTING WASHERS, between rear of second gea	ır
	208052	Mainshaft, A-type overdrive REAR FLANGE DETAILS	- 1	CDOO	100041	and shoulder on mainshaft	A /D
CP2	58948		1	CP20	129941 129942	Washer, 118 inch thick, silver	A/R A/R
CF2	30940	Flange, mainshaft HARDWARE, securing flange to rear of mainshaft	- 1		129942	Washer, .121 inch thick, green Washer, .124 inch thick, blue	A/R
CP3	WP24	Washer, plain	4		129943	Washer, .128 inch thick, orange	A/R
CP4	57868	Nut, slotted	1		155951	Washer, .131 inch thick, uncolored	A/R
CP5	PC12	Pin, cotter	1		134670	Washer, .133 inch thick, yellow	A/R
01 3	157642	Nut, nyloc, alternative to slotted nut and cotter pin	1	CP21	152771	Second Speed Mainshaft Gear	1
	107042	for undrilled main-shafts		CP22	129939	Bush, bronze, top-hat, inside second gear	1
		REAR BEARING DETAILS		01 22	120000	THIRD SPEED MAINSHAFT GEAR DETAILS	
CP6	58949	Washer, locating bearing	1	CP23	152772	Third Speed Mainshaft Gear	1
CP7	SP75G	Bearing, mainshaft, rear	1	CP24	129940	Bush, bronze, inside third gear	1
		CENTER BEARING DETAILS	•	CP25	55707	Circlip, retaining third gear on mainshaft	1
CP8	58391	Bearing, mainshaft, center	1	CP26	156136	Washer, splined, between circlip and third gear	1
CP9	58955	Circlip, large, locating bearing in gearbox housing	1		157054	Washer, splined, between circlip and third gear;	1
CP10	58956	Circlip, small, locating bearing on mainshaft	1			alternative to 156136	
CP11	59443	Washer, between small circlip and bearing	1			THIRD/FOURTH SYNCHRO DETAILS	
		FIRST SPEED MAINSHAFT GEAR DETAILS		CP27	153844	SYNCHRO HUB AND SLEEVE ASSEMBLY	1
CP12	116496	Washer, between first gear and center mainshaft	1	CP28	153318	Spring, in hub	3
		bearing		CP29	BL16	Ball, steel, in hub	3
CP13	152770	First Speed Mainshaft Gear, 33 teeth	1	CP30	113431	Synchro Cup, third and fourth gears	2
CP14	129940	Bush, bronze, inside first gear	1			(Continued on r	next page.)



GEARBOX GEARS AND SHAFTS, GEARBOX NO. CD20282 TPO C21768

Plate No.	Part No.	Description	No. Off
		FOURTH SPEED GEAR (INPUT SHAFT) DETAILS	
CP31	216044	Fourth Speed Gear (Input Shaft)	1
CP32	150989	Needle Bearing Assembly, open cage type, slides into	1
		fourth gear	
		Please Note: At the time of writing, 216044 is	
		unavailable, but it can be replaced by 219126	
		(Fourth Gear) if Countershaft Constant Gear number	
		159621 is substituted for 142434.	
		FRONT BEARING DETAILS	
CP33	60658	Oil Thrower	1
CP34	58391	Bearing, gearbox, front	1
CP35	58955	Circlip, large, locating bearing in gearbox housing	1
CP36	58956	Circlip, small, locating bearing on input shaft	1
CP37	60078	Washer, between bearing and circlip	1
		COUNTERSHAFT DETAILS	
CP38	128105	Countershaft	1
		GEARS	
CP39	128107	Reverse and First Speed Countershaft Gear, 16	1
		teeth on first gear portion	
CP40	140508	Second Speed Countershaft Gear	1
CP41	140509	Third Speed Countershaft Gear	1
CP42	59456	Distance Piece, between third gear and constant	1
		gear	
CP43	142434	Constant Gear, countershaft	1
		COUNTERSHAFT BEARING DETAILS	
		ORIGINAL BEARING ARRANGEMENT	
CP44	150339	Bearing, needle (open cage, slide-in type)	2
CP45	154396	Washer, bevel, behind needle bearings (Fit	
0040	4.477.40	with bevel away from bearings.)	2
CP46	147749	Circlip, retaining needle bearings in gear	2
		ALTERNATIVE BEARING ARRANGEMENT (Use these	е
		sleeve-type needle bearings to save a countershaft	
		gear with lightly pitted bearing surfaces. If your bearing surfaces are heavily	
		scored, you cannot save the gear by ordinary	
		means. Many Triumph experts also consider	
		these alternative bearings to be more durable	
		than the original configuration.)	
	126862	Bearing, needle (sleeve-type, press-in bearing)	2
	147749	Circlip, retaining needle bearings in countershaft	2
	. 177 10	gear (Use these to insure that they stay in.)	_
		Please Note: Do not fit the bevel washers with	
		the alternative bearings	
		and anomalive bearings	

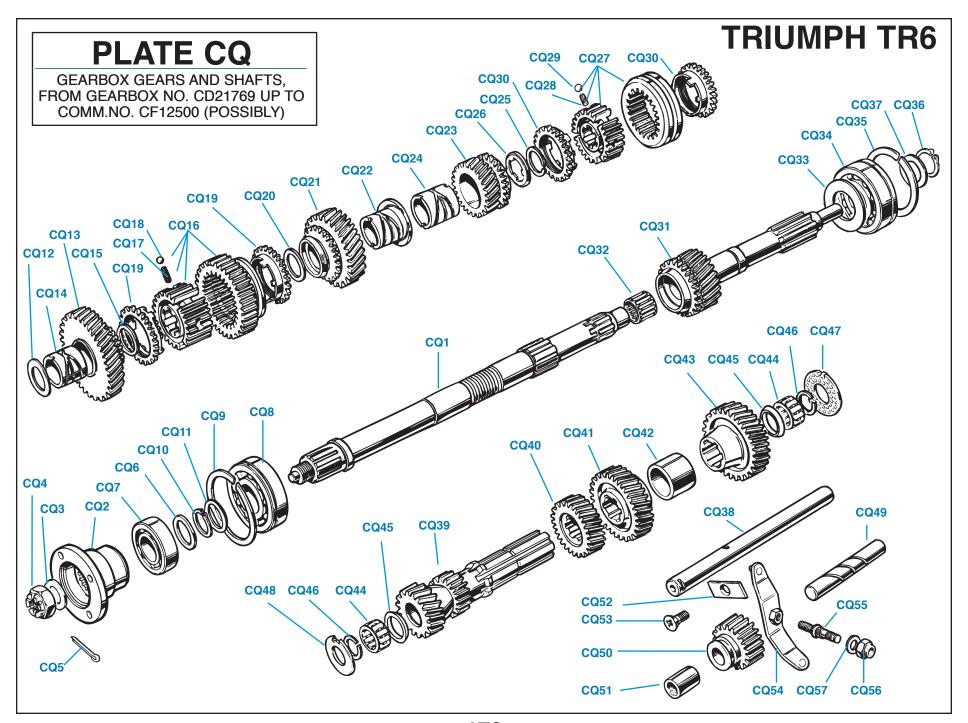
Plate No.	Part No.	Description	No. Off
		COUNTERSHAFT BEARING DETAILS-Continued COUNTERSHAFT THRUST WASHERS	
CP47	129955	Washer, thrust, front of countershaft	1
CP48	129956	Washer, thrust, rear of countershaft	1
		REVERSE IDLER GEAR DETAILS (The idler gear works in	1
		conjunction with teeth on the first speed countershaft gea	ar
		and teeth on the first/second synchro hub and sleeve	
		assembly to produce a reverse motion of the mainshaft.)	
CP49	129937	Shaft, reverse idler	1
CP50	128110	REVERSE IDLER GEAR ASSEMBLY	1
CP51	129862	Bush, reverse idler gear	1
		HARDWARE, securing countershaft and reverse idler	
		shaft to rear of gearbox housing	
CP52	129938	Plate, locking	1
CP53	129954	Screw, wedglok	1
		REVERSE OPERATING LEVER DETAILS	
CP54	129894	Reverse Operating Lever Assembly	1
CP55	106448	Pin, fulcrum, fitted to gearbox housing	1
		HARDWARE, securing fulcrum to gearbox housing	
CP56	TN3209	Nut, nyloc	1
CP57	WP36	Washer, plain	1



GEARBOX GEARS AND SHAFTS, GBX. NO. CD21769-TO END OF 1973

Plate No.	Part No.	Description No.	. Off
		Please Note: The gear set used in the range of gear	
		boxes covered by this section may be identified	
		by the following characteristics. See Section CM	
		for a full discussion of these characteristics.	
		Input gear utilizes slide-in needle bearing.	
		First-speed countershaft gear is the later type with	
		seventeen teeth.	
		3. All mainshaft gears have the later symmetrical dog teeth.	
		4. Bushes inside first, second, and third gears are bronze	
		rather than steel; oil holes in gears do not line up with	
		grooves in bushes.	
		5. Both synchronizer sleeves will have grooves which are	
		enlarged at each end to accommodate the larger	
		dog teeth on the mainshaft gears.	
		6. Gears with a new tooth profile on their meshed teeth	
		were introduced in this range of gearboxes. Gears	
		with the new tooth profile are first, second, and fourth	
		mainshaft gears and first, second, and constant	
		gears on the countershaft.	
CQ1	216866	Mainshaft, non-overdrive	1
	216868	Mainshaft, A-type overdrive	1
	218337	Mainshaft, J-type overdrive	1
		REAR FLANGE DETAILS	
CQ2	58948	Flange, mainshaft	1
		HARDWARE, securing flange to rear of mainshaft	
CQ3	WP24	Washer, plain	1
CQ4	57868	Nut, slotted	1
CQ5	PC12	Pin, cotter	1
	157642	Nut, nyloc, alternative to slotted nut and cotter pin	1
		for undrilled mainshafts	
		REAR BEARING DETAILS	
CQ6	58949	Washer, locating bearing	1
CQ7	SP75G	Bearing, mainshaft, rear	1
		CENTER BEARING DETAILS	
CQ8	58391	Bearing, mainshaft, center	1
CQ9	58955	Circlip, large, locating bearing in gearbox housing	1
CQ10	58956	Circlip, small, locating bearing on mainshaft	1
CQ11	59443	Washer, between small circlip and bearing	1

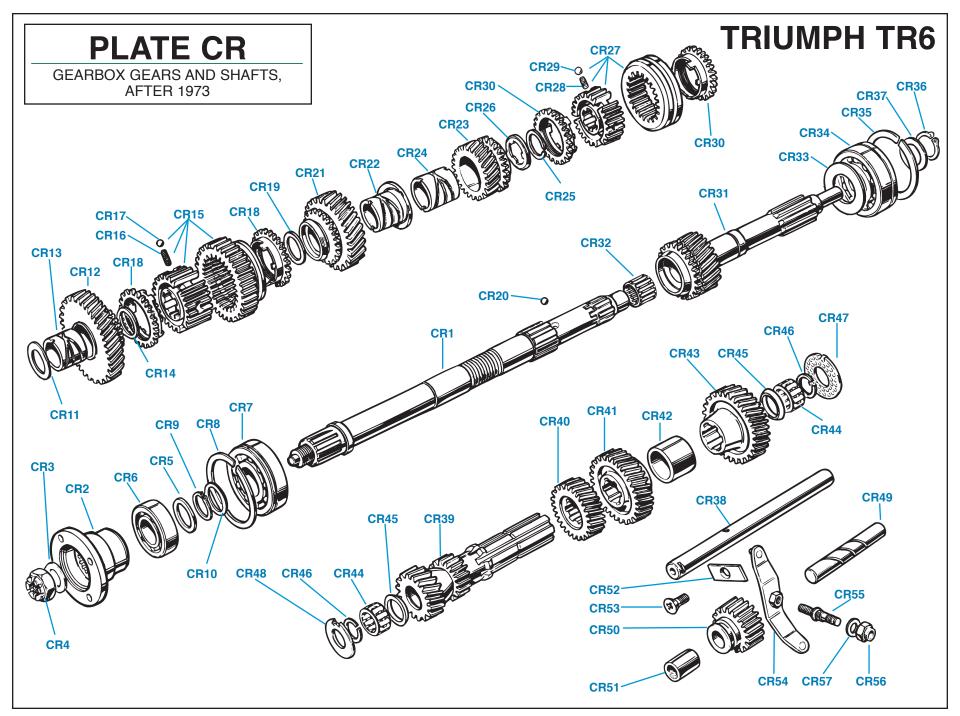
Plate No.	Part No.	Description	No. Off
		FIRST SPEED MAINSHAFT GEAR DETAILS	
CQ12	116496	Washer, between first gear and center mainshaft bearing	1
CQ13	152803	First Speed Mainshaft Gear, 32 teeth	1
CQ14	129940	Bush, bronze, inside first gear	1
		ADJUSTING WASHERS, between first gear and shou on mainshaft	lder
CQ15	129941	Washer, .118 inch thick, silver	A/R
	129942	Washer, .121 inch thick, green	A/R
	129943	Washer, .124 inch thick, blue	A/R
	129944	Washer, 128 inch thick, orange	A/R
	155951	Washer, .131 inch thick, uncolored	A/R
	134670	Washer, .133 inch thick, yellow	A/R
		FIRST/SECOND SYNCHRO DETAILS	
CQ16	153843	SYNCHRO HUB AND SLEEVE AND REVERSE	1
		MAINSHAFT GEAR ASSEMBLY	
CQ17	153318	Spring, in hub	3
CQ18	BL16	Ball, steel, in hub	3
CQ19	113431	Synchro Cup, first and second gears	2
		SECOND SPEED MAINSHAFT GEAR DETAILS	
		ADJUSTING WASHERS, between rear of second gea	r
		and shoulder on mainshaft	
CQ20	129941	Washer, .118 inch thick, silver	A/R
	129942	Washer, .121 inch thick, green	A/R
	129943	Washer, .124 inch thick, blue	A/R
	129944	Washer, .128 inch thick, orange	A/R
	155951	Washer, .131 inch thick, uncolored	A/R
	134670	Washer, .133 inch thick, yellow	A/R
CQ21	216802	Second Speed Mainshaft Gear	1
CQ22	129939	Bush, bronze, top-hat, inside second gear	1
0 422		THIRD SPEED MAINSHAFT GEAR DETAILS	·
CQ23	152772	Third Speed Mainshaft Gear	1
CQ24	129940	Bush, bronze, inside third gear	1
CQ25	55707	Circlip, retaining third gear on mainshaft	1
CQ26	156136	Washer, splined, between circlip and third gear	1
OQZO	157054	Washer, splined, between circlip and third gear;	1
	137034	alternative to 156136	'
		THIRD/FOURTH SYNCHRO DETAILS	
CQ27	153844	SYNCHRO HUB AND SLEEVE ASSEMBLY	1
CQ28	153318	Spring, in hub	3
CQ29	BL16	Ball, steel, in hub	3
CQ29	113431	Synchro Cup, third and fourth gears	2
CQJU	110401	(Continued on r	_



GEARBOX GEARS AND SHAFTS, GBX. NO. CD21769-TO END OF 1973

Plate No.	Part No.	Description No.	Off
		FOURTH SPEED GEAR (INPUT SHAFT) DETAILS	
CQ31	216871	Fourth Speed Gear (Input Shaft)	1
CQ32	150989	Needle Bearing Assembly, open cage type, slides into	1
		fourth gear	
		Please Note: At the time of writing, 216871 is	
		unavailable, but it can be replaced by 219126	
		(Fourth Gear) if Countershaft Constant Gear	
		number 159621 is substituted for 142434.	
		FRONT BEARING DETAILS	
CQ33	60658	Oil Thrower	1
CQ34	58391	Bearing, gearbox, front	1
CQ35	58955	Circlip, large, locating bearing in gearbox housing	1
CQ36	58956	Circlip, small, locating bearing on input shaft	1
CQ37	60078	Washer, between bearing and circlip	1
		COUNTERSHAFT DETAILS	
CQ38	128105	Countershaft	1
		GEARS	
CQ39	UKC662	Reverse and First Speed Countershaft Gear, 17	1
		teeth on first gear portion	
CQ40	155047	Second Speed Countershaft Gear	1
CQ41	140509	Third Speed Countershaft Gear	1
CQ42	59456	Distance Piece, between third gear and constant	1
		gear	
CQ43	142434	Constant Gear, countershaft	1
		COUNTERSHAFT BEARING DETAILS	
		ORIGINAL BEARING ARRANGEMENT	
CQ44	150339	Bearing, needle (open cage, slide-in type)	2
CQ45	154396	Washer, bevel, behind needle bearings (Fit with	2
		bevel away from bearings.)	
CQ46	147749	Circlip, retaining needle bearings in gear	2
		(Use these sleeve-type needle bearings to save a	
		counter-shaft gear with lightly pitted bearing surfaces	6.
		If your bearing surfaces are heavily scored, you	
		cannot save the gear by ordinary means. Many	
		Triumph experts also consider these alternative	
		bearings to be more durable than the	
		original configuration.)	
	126862	Bearing, needle (sleeve-type, press-in bearing)	2
	147749	Circlip, retaining needle bearings in countershaft	2
		gear (Use these to insure that they stay in.)	
		Please Note: Do not fit the bevel washers with	
		the alternative bearings	
0047	100055	COUNTERSHAFT THRUST WASHERS	4
CQ47	129955	Washer, thrust, front of countershaft	1
CQ48	129956	Washer, thrust, rear of countershaft	- 1

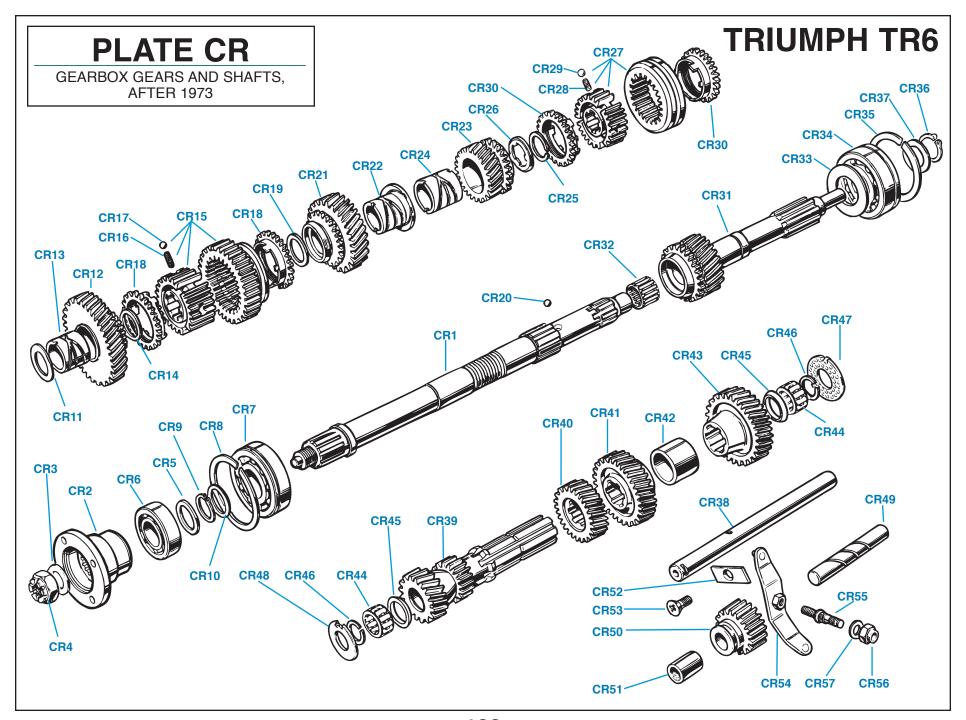
Plate No.	Part No.	Description	No. Off
0040	400007	REVERSE IDLER GEAR DETAILS (The idler gear works in conjunction with teeth on the first speed countershaft gea and teeth on the first/second synchro hub and sleeve assembly to produce a reverse motion of the mainshaft.)	
CQ49	129937	Shaft, reverse idler	1
CQ50	128110	REVERSE IDLER GEAR ASSEMBLY	1
CQ51	129862	Bush, reverse idler gear	1
		HARDWARE, securing countershaft and reverse idler shaft to rear of gearbox housing	
CQ52	129938	Plate, locking	1
CQ53	129954	Screw, wedglok	1
		REVERSE OPERATING LEVER DETAILS	
CQ54	129894	Reverse Operating Lever Assembly	1
CQ55	106448	Pin, fulcrum, fitted to gearbox housing HARDWARE, securing fulcrum to gearbox housing	1
CQ56	TN3209	Nut, nyloc	1
CQ57	WP36	Washer, plain	1



GEARBOX GEARS AND SHAFTS, AFTER1973

Plate No	o. Part No.	Description	No. Off	Plate No.	Part No.	Description	No. Off
		Please Note: This section covers gearboxes fitted to cars				CENTER BEARING DETAILS	
		with commission numbers after CF12500 and CR5000		CR7	58391	Bearing, mainshaft, center	1
		approx. The gear set used in this range of gearboxes		CR8	58955	Circlip, large, locating bearing in gearbox housing	1
		may be identified by the following characteristics. See		CR9	58956	Circlip, small, locating bearing on mainshaft	1
		Section CM for a full discussion of these characteristics.		CR10	59443	Washer, between small circlip and bearing	1
		 Input gear utilizes slide-in needle bearing. 				FIRST SPEED MAINSHAFT GEAR DETAILS	
		First speed countershaft gear is the later type with seventeen teeth.		CR11	116496	Washer, between first gear and center mainshaft bearing	1
		3. All mainshaft gears have symmetrical dog teeth.		CR12	152803	First Speed Mainshaft Gear, 32 teeth	- 1
		 Bushes made of bearing steel were fitted inside first; 		CR13	153238	Bush, steel, inside first gear	- 1
		second; and third mainshaft gears as opposed to		OTTIO	100200	ADJUSTING WASHERS, between first gear and shoulde	
		bronze bushes which had been fitted to earlier				on mainshaft	"
		gearboxes. The oil holes in the gears lined up with		CR14	129941	Washer, .118 inch thick, silver	A/R
		the grooves in the bushes.		OIII I	129942	Washer, .121 inch thick, green	A/R
		5. Both synchronizer sleeves will have grooves which are			129943	Washer, .124 inch thick, blue	A/R
		enlarged at each end to accommodate the large			129944	Washer, .128 inch thick, orange	A/R
		dog teeth on the mainshaft gears.			155951	Washer, .131 inch thick, uncolored	A/R
		6. All of the gears with the exceptions of the third			134670	Washer, .133 inch thick, yellow	A/R
		mainshaft gear and the third countershaft gear have			.0.0.0	FIRST/SECOND SYNCHRO DETAILS	,
		the late tooth profile on their meshed teeth.		CR15	153843	SYNCHRO HUB AND SLEEVE AND REVERSE	1
		7. The second gear adjusting washer is much thicker in				MAINSHAFT GEAR ASSEMBLY	
		this range of gearboxes, nearly one-tenth of an inch		CR16	153318	Spring, in hub	3
		thicker. The second gear bush is correspondingly		CR17	BL16	Ball, steel, in hub	3
		shorter to make up this difference and still fit inside		CR18	113431	Synchro Cup, first and second gears	2
		the same gearbox housing. In addition, the adjusting				SECOND SPEED MAINSHAFT GEAR DETAILS	
		washer is prevented from spinning on the mainshaft				ADJUSTING WASHERS, between rear of second gear	
		by a steel ball which fits into an indentation in the				and shoulder on mainshaft	
		mainshaft.		CR19	UKC958	Washer, .197199 inch thick	A/R
		8. The commission number sequence specified for this			UKC959	Washer, .200202 inch thick	A/R
		range of gearboxes should be considered			UKC960	Washer, .203205 inch thick	A/R
		approximate, but it is based upon the only sources			UKC961	Washer, .206208 inch thick	A/R
		available. It should be noted that an A-type overdrive		CR20	BL12	Ball, steel, locating adjustment washer	1
		mainshaft is included in this section, although the		CR21	TKC454	Second Speed Mainshaft Gear	1
CR1	TKC824	factory ended fitting of A-type overdrives in 1972! Mainshaft, non-overdrive	1	CR22	UKC956	Bush, steel, top hat, inside second gear THIRD SPEED MAINSHAFT GEAR DETAILS	1
OTT	UKC1933	Mainshaft, A-type overdrive	i	CR23	152772	Third Speed Mainshaft Gear	1
	TKC832	Mainshaft, J-type overdrive	1 1	CR24	153238	Bush, steel, inside third gear	1
		REAR FLANGE DETAILS	.	CR25	55707	Circlip, retaining third gear on mainshaft	1
CR2	58948	Flange, mainshaft	1	CR26	157054	Washer, splined, between circlip and third gear	1
0.12	000.0	HARDWARE, securing flange to rear of mainshaft	.	01.20	.0.00	THIRD/FOURTH SYNCHRO DETAILS	
CR3	WP24	Washer, plain	1	CR27	153844	SYNCHRO HUB AND SLEEVE ASSEMBLY	1
CR4	157642	Nut, nyloc	1	CR28	153318	Spring, in hub	3
		REAR BEARING DETAILS		CR29	BL16	Ball, steel, in hub	3
CR5	58949	Washer, locating bearing	1	CR30	113431	Synchro Cup, third and fourth gears	2
CR6	SP75G	Bearing, mainshaft rear	1			(Continued on nex	t page.)

Web Page 86 181



GEARBOX GEARS & SHAFTS, AFTER 1973

Plate No.	Part No.	Description	No. Off
		FOURTH SPEED GEAR (INPUT SHAFT) DETAILS	
CR31	219126	Fourth Speed Gear (Input Shaft)	1
CR32	150989	Needle Bearing Assembly, open cage type, slides into	1
		fourth gear	
		FRONT BEARING DETAILS	
CR33	60658	Oil Thrower	1
CR34	58391	Bearing, gearbox, front	1
CR35	58955	Circlip, large, locating bearing in gearbox housing	1
CR36	58956	Circlip, small, locating bearing on input shaft	1
CR37	60078	Washer, between bearing and circlip	1
		COUNTERSHAFT DETAILS	
CR38	128105	Countershaft	1
		GEARS	
CR39	UKC662	Reverse and First Speed Countershaft Gear, 17	1
OD 40	455047	teeth on first gear portion	
CR40	155047	Second Speed Countershaft Gear	1
CR41	140509	Third Speed Countershaft Gear	1
CR42	59456	Distance Piece, between third gear and constant	1
CR43	159621	gear	1
Ch43	159021	Constant Gear, countershaft COUNTERSHAFT BEARING DETAILS	
		ORIGINAL BEARING ARRANGEMENT	
CR44	150339	Bearing, needle (open cage, slide-in type)	2
CR45	154396	Washer, bevel, behind needle bearings	2
CR46	147749	Circlip, retaining needle bearings in gear	2
01140	147743	ALTERNATIVE BEARING ARRANGEMENT (Use thes	_
		sleeve-type needle bearings to save a countershaft	C
		gear with lightly pitted bearing surfaces. If	
		your bearing surfaces are heavily scored, you	
		cannot save the gear by ordinary means. Many	
		Triumph experts also consider these alternative	
		bearings to be more durable than the original	
		configuration.)	
	126862	Bearing, needle (sleeve-type, press-in bearing)	2
	147749	Circlip, retaining needle bearings in countershaft	2
		gear (Use these to insure that they stay in.)	
		Please Note: Do not fit the bevel washers with	
		the alternative bearings.	
		COUNTERSHAFT THRUST WASHERS	
CR47	129955	Washer, thrust, front of countershaft	1
CR48	129956	Washer, thrust, rear of countershaft	1

Plate No.	Part No.	Description	No. Off
		REVERSE IDLER GEAR DETAILS (The idler gear works in conjunction with teeth on the first speed countershaft gea and teeth on the first/second synchro hub and sleeve assembly to produce a reverse motion of the mainshaft.)	
CR49	129937	Shaft, reverse idler	1
CR50	128110	REVERSE IDLER GEAR ASSEMBLY	1
CR51	129862	Bush, reverse idler gear	1
		HARDWARE, securing countershaft and reverse idler shaft	
		to rear of gearbox housing	
CR52	129938	Plate, locking	1
CR53	129954	Screw, wedglok	1
		REVERSE OPERATING LEVER DETAILS	
CR54	129894	Reverse Operating Lever Assembly	1
CR55	106448	Pin, fulcrum, fitted to gearbox housing	1
		HARDWARE, securing fulcrum to gearbox housing	
CR56	TN3209	Nut, nyloc	1
CR57	WP36	Washer, plain	1