

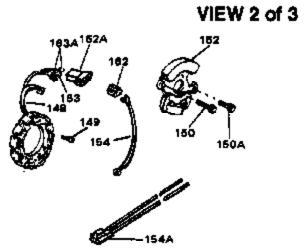
1 37077A 2 31927 2 28483 3 7927 4 1 2 31927 5 2 28483 5 1 2 2 28483 6 1 2 2 2 28483 7 2 2 2 28483 7 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Rof #	Part Number	Otv	Description
2 31927 Pipe Plug, 38-18 sq. head (Use as re quired) 2 28483 Pipe Plug (34-14 sq.hd.) (As req.) 2 9556 Pipe Plug (34-14 sq.hd.) (As req.) 2 9556 Pipe Plug (34-14 sq.hd.) (As req.) (Ebu y local) 2 28534 Pipe Plug (18-27 sq.hd.) (Use as re quired) 2 12 33420B Pipe Plug (18-27 sq.hd.) (Use as re quired) 2 12 33420B Pipe Plug (18-27 sq.hd.) (Use as re quired) 3 3420B Crankshaft (Incl. 6 ftm vg.) NOTE: When using this crankshaft to repair older units equippedwith straight out carn and governor gears stwill be necessary to order 34751 helical governor gear assembly and 34752 helical carnshaft in order to the complete the repair. 6 29783 Pin, Crankshaft gear 7 34692 Gear (Crankshaft (Helical) 8 31932 Bearing, Tapered roller 9 31928 Cup, Bearing 11 34511 Piston, Pin & Ring Set (Std.) (3-12° Bore) 11 34512 Piston, Pin & Ring Set (L02° OS) 114 34238 Piston & Pin Assy, (L03° Ass) 115 3224B Piston & Pin Assy, (L03° Ass) 116 3224B Piston & Pin Assy, (L01° Ass) 117 32241 Ring, Piston pin retaining 118 32242 Ring, Piston pin retaining 119 Ring Set (L02° OS) 119 332243 Ring Set (L02° OS) 119 33234 Connecting Rod Assy, (L01° US)(Incl. 12) 119 34934 Connecting Rod Assy, (L01° US)(Incl. 15, 16, 17) 119 3477 Connecting Rod Assy, (L01° US)(Incl. 15, 16, 17) 119 3477 Using Rod Assy, (L01° US)(Incl. 15, 16, 17) 119 3477 Using Rod Assy, (L01° US)(Incl. 15, 16, 17) 119 3477 Using Rod Assy, (L01° US)(Incl. 15, 16, 17) 119 3477 Using Rod Assy, (L01° US)(Incl. 15, 16, 17) 110 3264 Nut Assy 110 34410 Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 121 35506 Intake Valve (Std.) 121 35606 Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 122 35606 Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 123 35606 Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 126 263 Nut Assy 127 34751 Rod Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 127 34751 Rod Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 128 35606 Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 129 35606 Piston Rod Assy, (L01° US)(Incl. 15, 16, 17) 120 35479 Piston Rod			Qty	
2 28483 Pipe Plug (38-18 hex countersunk) (A s req.) 2 9566 Pipe Plug (38-18 hex countersunk) (A s req.) 2 9566 Pipe Plug (18-27 sq. hd.) (Use as re quired) 2 26534 Pipe Plug (18-27 sq. hd.) (Use as re quired) 4 27652 Pin, Dowel 5 33420B Crankshaft (nd. 6 htu 9) NOTE: When using this crankshaft to repair older units equippedwith straight cut arm and governor gears assembly and 34752 helical carnshaft in order to the complete the repair. 6 29783 Pin, Crankshaft gear 7 34692 Gear Crankshaft (Helical) 8 31932 Bearing, Tapered roller 13 34511 Piston, Pin & Ring Set (Gid.) (3-1/2" Bore) 11 34511 Piston, Pin & Ring Set (Gid.) (3-1/2" Bore) 11 34513 Piston, Pin & Ring Set (Gid.) (3-1/2" Bore) 11 34513 Piston, Pin & Ring Set (Gid.) (3-1/2" Diston Piston Pin Assy. (Gid.) (3-1/2" Diston Pin Assy. (Gid.) (Gid				
Pipe Plug (34-14 sq.hd,)/As rea,) (Eu y local)				
2 9566 2 28534 Pipe Plug (18-27 sc, hd.) (Use as re quired) 2 7652 Pipe Plug (18-27 sc, hd.) (Use as re quired) 4 27652 Pipe Plug (18-27 sc, hd.) (Use as re quired) 4 27652 Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as re quired) Pipe Plug (18-27 sc, hd.) (Use as required) Pipe Plug (18-27 sc, hd.) (Use and 34752 helical camshaft in order to the complete repair. Pipe Plug (18-27 sc, hd.) (Plug (18-27 sc) (Use as required) Pipe Plug (18-27 sc) (Use as required) Plug (18-27 sc) (Use as required) Plug (18-27 sc) (Use as required) Pipe Plug (18-27 sc) (Use as required) Plug (18-27 sc) (U		28483		
2 28534 Pipe Plugf (18-27) hex ossunk headeless) (As req) 4 27652 Pin. Dowel Fin. Dowel Grankshaft (Incl. 6 thru 9) NOTE: When using this crankshaft to repair older units equippowith straight out carn and governor gears sit will be necessary to order 34751 helical governor gear assembly and 34762 helical camshaft in order to the complete the repair. 6 29783 Pin. Crankshaft (Pelical) Geard orankshaft (Pelical) Geard oranks				
4 27652 5 33420B Crankshaft (not. 6 thru 9) NOTE: When using this crankshaft to repair older units equippedwith straight cut cam and governor generic will be necessary to order 34751 helical governor generic will be necessary to order 34751 helical governor generic will be necessary to order 34751 helical governor generic will be necessary to order 34751 helical governor generic assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 7 34692	2	9556		Pipe Plug (1/8-27 sq. hd.) (Use as re quired)
Crankshaft (Incl. 6 thru 9) NOTE: When using this crankshaft to repair older units equipedwith straight cut carn and governor gears; will be necessary to order 34751 helical governor gear assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 Pin, Crankshaft (pear governor gear assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 Pin, Crankshaft (pear gear gear Crankshaft (Helical) 8 31932 Gear Crankshaft (Helical) 8 31932 Bearing, Tapered roller Cup, Bearing 11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (1010" OS) 11 34513 Piston, Pin & Ring Set (1010" OS) 11 34513 Piston, Pin & Ring Set (1020" OS) 11 32239B Piston & Pin Assy. (1010" OS) (Incl. 12) 11 31919 Piston & Pin Assy. (1010" OS) (Incl. 12) 11 31919 Ring Set (Std.) (3-1/2" Bore) 11 32241 Ring Set (1010" OS) 11 32242 Ring Set (1010" OS) 11 32242 Ring Set (1010" OS) 11 332243 Ring Set (1010" OS) 11 332243 Ring Set (1010" OS) 11 34333 Connecting Rod Assy.(Std.)(Ind.16, 1 6 & 17) 11 34334 Connecting Rod Assy.(Std.)(Ind.15, 1 6 & 17) 12 32077 Boll. Connecting Rod Assy.(Std.)(Ind.15, 1 6 & 17) 13 3247 Ring Set (1010" OS) 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33477 Uffer (1732" OS) 19 33477 Rod, Push 11 33506 Intake Valve (1732" OS) 23 3666 Exhaust Valve (Std.) 23 33667 Spring, Valve 23 33677 Spring, Valve 24 33508 Retairer & Cap Set, Keeper valve 25 33509 "Of Pin Retairer & Cap Set, Keeper valve 26 33509 "Of Pin Retairer & Cap Set, Keeper valve 27 34751 Cap, Valve 28 34849 Opologovern Gear Assy. (Incl.2,33,36,3 7 & 38) 28 560568 Saf479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat (Use with 35322 spool) 30 31948 Spoologovern Gear Assy. (Incl.2,33,36,3 7 & 38) 31950 Scorew, 14-20 x 2* 32 560 Scorew, 14-20 x	2	28534		Pipe Plug(1/8-27 hex c/sunk headless) (As req)
Crankshaft (Incl. 6 thru 9) NOTE: When using this crankshaft to repair older units equipedwith straight cut carn and governor gears; will be necessary to order 34751 helical governor gear assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 Pin, Crankshaft (pear governor gear assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 Pin, Crankshaft (pear gear gear Crankshaft (Helical) 8 31932 Gear Crankshaft (Helical) 8 31932 Bearing, Tapered roller Cup, Bearing 11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (1010" OS) 11 34513 Piston, Pin & Ring Set (1010" OS) 11 34513 Piston, Pin & Ring Set (1020" OS) 11 32239B Piston & Pin Assy. (1010" OS) (Incl. 12) 11 31919 Piston & Pin Assy. (1010" OS) (Incl. 12) 11 31919 Ring Set (Std.) (3-1/2" Bore) 11 32241 Ring Set (1010" OS) 11 32242 Ring Set (1010" OS) 11 32242 Ring Set (1010" OS) 11 332243 Ring Set (1010" OS) 11 332243 Ring Set (1010" OS) 11 34333 Connecting Rod Assy.(Std.)(Ind.16, 1 6 & 17) 11 34334 Connecting Rod Assy.(Std.)(Ind.15, 1 6 & 17) 12 32077 Boll. Connecting Rod Assy.(Std.)(Ind.15, 1 6 & 17) 13 3247 Ring Set (1010" OS) 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33477 Uffer (1732" OS) 19 33477 Rod, Push 11 33506 Intake Valve (1732" OS) 23 3666 Exhaust Valve (Std.) 23 33667 Spring, Valve 23 33677 Spring, Valve 24 33508 Retairer & Cap Set, Keeper valve 25 33509 "Of Pin Retairer & Cap Set, Keeper valve 26 33509 "Of Pin Retairer & Cap Set, Keeper valve 27 34751 Cap, Valve 28 34849 Opologovern Gear Assy. (Incl.2,33,36,3 7 & 38) 28 560568 Saf479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat (Use with 35322 spool) 30 31948 Spoologovern Gear Assy. (Incl.2,33,36,3 7 & 38) 31950 Scorew, 14-20 x 2* 32 560 Scorew, 14-20 x	4	27652		Pin, Dowel
crankshaft to repair older units ecupiopedwis fraight cut cam and growernor gears; will be necessary to order 34751 helical governor gears assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 Pin, Crankshaft gear Gear Crankshaft (Helical) 8 31932 Gear Crankshaft (Helical) 9 31928 Cup, Bearing 11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34513 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34513 Piston, Pin & Ring Set (1,02" OS) 11 34513 Piston, Pin & Ring Set (1,02" OS) 11 32239B Piston Pin & Ring Set (1,02" OS) 11 32239B Piston & Pin Assy. (1,010" OS) (Incl. 12) 11 32239B Piston & Pin Assy. (1,010" OS) (Incl. 12) 11 3 32240 Piston & Pin Assy. (1,010" OS) (Incl. 12) 12 31919 Ring Set (Std.) (3-1/2" Bore) 13 32241 Ring Set (Std.) (3-1/2" Bore) 13 32242 Ring Set (1,01" OS) 14 33393A Connecting Rod Assy. (1,02" OS) 14 33933A Connecting Rod Assy. (1,02" OS) 15 30077 Ring Set (1,02" OS) 16 28073 Washer, Connecting Rod Assy. (1,01" US)(Incl. 1,5,16,17) 16 28073 Washer, Connecting Rod Assy. (1,02" US)(Incl. 1,5,16,17) 17 28264 Nt Assy. 18 34752 Camshaft (MCR) (Helical) 18 34752 Camshaft (MCR) (Helical) 19 3471 Rod. 20 33471 Rod. 21 33505 Intake Valve (Std.) 21 33506 Exhaust Valve (132" OS) 23 33507 Spring, Valve 24 33508 Exhaust Valve (132" OS) 25 33508 Exhaust Valve (132" OS) 25 33509 "O' Ring (Intake only) (Also Incl. in 251) 26 33510 Cap. Valve 27 34751 Gaster, Flat (Use with 35322 spool) 28 36590 "O' Ring (Intake only) (Also Incl. in 251) 29 36590 "O' Ring (Intake only) (Also Incl. in 251) 29 36590 "O' Ring (Intake only) (Also Incl. in 251) 29 36590 "O' Ring (Palaster) (Also Ring) Ring Ref. (Also Ring) Ring	5	33420B		
and governor gear assembly and 34752 helical governor gear assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 Pin, Crankshaft (Pelical) 8 31932 Gear Crankshaft (Helical) 9 31928 Cup, Bearing, Tapered roller Cup, Bearing, Tapered roller 11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34513 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34513 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34513 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 32238B Piston & Pin Assy. (101" O'S) (Incl. 12) 11 32240B Piston & Pin Assy. (101" O'S) (Incl. 12) 11 31919 Ring Set (Std.) (3-1/2" Bore) 12 31919 Ring Set (Std.) (3-1/2" Bore) 13 32241 Ring Set (Std.) (3-1/2" Bore) 13 32242 Ring Set (101" O'S) 14 33093A Contending Rod Assy.(Std.) (Incl. 15, 16 & 17) 15 32077 Ring Set (100" O'S) 16 28073 Washer, Connecting Rod Assy.(Jot.) (10" US) (Incl. 15, 16 & 17) 17 28264 Ntr Assy. 18 34752 Canshaft (MCR) (Helical) 19 33472 Uffer, Valve 20 33471 Rod, Push 11 33605 Intake Valve (Std.) 12 33606 Exhaust Valve (Std.) 12 33606 Exhaust Valve (Std.) 12 33607 Spring, Valve 12 33507 Spring, Valve 12 33508 Retainer & Cap Set, Keeper valve 12 33509 "O'R Ring (Incl. 10" Cap, Valve 13 31968 "Caps. (Incl. 10" Cap, Valve 13 31968 "Caps. (Incl. 10" Cap, Valve 14 31958 "Caps. (Incl. 10" Cap, Valve 15 32449 Oylinder cover 16 2446 Oylinder Cover Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33, 36, 3 7 & 38) 18 3450 Covernor Gear Assy. (Incl. 2, 33				
governor gear assembly and 34752 helical camshaft in order to the complete the repair. 6 29783 Pin, Crankshaft gear Gear Crankshaft (Helical) 8 31932 Bearing, Tapered roller 9 31928 Cup, Bearing 11 34511 Piston, Pin & Ring Set (3td.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (010" OS) 11 34513 Piston, Pin & Ring Set (010" OS) 11 34513 Piston, Pin & Ring Set (020" OS) 11 34513 Piston, Pin & Ring Set (020" OS) 11 34228B Piston & Pin Assy. (5td.)(3-1/2")(in cl.12) 11 32238B Piston & Pin Assy. (5td.)(3-1/2")(in cl.12) 11 32240B Piston & Pin Assy. (020" OS) (incl. 12) 12 31919 Ring Piston pin retaining 13 32241 Ring Set (3td.) (3-1/2" Bore) 13 32242 Ring Set (010" OS) 14 30093A Connecting Rod Assy. (100" US) (incl. 15, 1 6 & 17) 14 34383 Connecting Rod Assy. (101" US) (incl. 15, 1 6 & 17) 15 32077 Bott, Connecting Rod Assy. (100" US) (incl. 15, 16, 17) 16 26073 Washer, Connecting rod 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 20 33471 Rod, Push 11 33506 Intake Valve (132" OS) 21 33646 Exhaust Valve (132" OS) 23 35606 Exhaust Valve (162" OS) 25 33507 Spring, Valve 26 33509 Retainer & Cap Set, Keeper valve 26 33510 Cap, Valve 27 34751 Governor Gear Assy. (Helical) 28 660745 Washer, Flat 39 39479 Washer, Flat 39 39499 "Cap Rod Assy. (Helical) 39 39499 Washer, Flat 39 39590 "Cap Rod Assy. (Holical) 39 39479 Washer, Flat 39 30590A Washer, Flat 39 30590A Spring, Valve 39 30590A Spring, Valve 39 30590A Spring, Valve 39 30590A Washer, Flat 30 30590A Spring (Covernor Gear Assy. (Helical) 30 31948 Spool, Governor 30 32425 Rod Assy. (Order Cover 30 32426 Spacer, Governor rod				
6 29783 Pin, Crankshaft gear 7 34692 Gear Crankshaft (Helical) 8 31932 Bearing, Tapered roller 9 31928 Cup, Bearing 11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (U10" OS) 11 34513 Piston, Pin & Ring Set (U10" OS) 11 34513 Piston, Pin & Ring Set (U20" OS) 11 34229B Piston & Pin Assy. (O10" OS) (Incl. 12) 11 32239B Piston & Pin Assy. (O10" OS) (Incl. 12) 11 32240B Piston & Pin Assy. (O10" OS) (Incl. 12) 11 3 32241 Ring Set (Std.) (3-1/2" Bore) 11 3 32242 Ring Set (O20" OS) (Incl. 12) 12 31919 Ring, Piston pin retaining 13 32241 Ring Set (Std.) (3-1/2" Bore) 13 32242 Ring Set (O10" OS) 14 33093A Connecting Rod Assy. (O10" OS) (Incl. 15, 16, 17) 14 34384 Connecting Rod Assy. (O10" US) (Incl. 15, 16, 17) 15 30077 Connecting Rod Assy. (O10" US) (Incl. 15, 16, 17) 16 26073 Washer, Connecting Rod Assy. (O10" US) (Incl. 15, 16, 17) 17 28264 Nut Assy. 18 34752 Carmshaft (MCR) (Helical) 18 34772 Lifter, Valve 19 33477 Rod, Push 10 33645 Intake Valve (ISd.) 11 33645 Intake Valve (ISd.) 12 33646 Exhaust Valve (Std.) 12 33646 Exhaust Valve (Std.) 12 33646 Exhaust Valve (Std.) 12 33509 Retainer & Cap Set, Keeper valve 10 3510 Cap. Valve 11 3489 Spool, Governor 12 3489 Spool, Governor 13 3498 Spool, Governor 14 3489 Spool, Governor 15 360688 Screw, 1/4-20 x 2" 16 26078 Spoer, Governor rod				
6 29783 7 34692 8 31932 9 31928 1 34511 1 34512 1				,
7 34692 Gear Crankshaft (Helical) 8 31932 Bearing, Tapered roller 9 31928 Cup, Bearing 11 34511 Piston, Pin & Ring Set (J.010" OS) 11 34512 Piston, Pin & Ring Set (J.020" OS) 11 34513 Piston, Pin & Ring Set (J.020" OS) 11 34513 Piston, Pin & Ring Set (J.020" OS) 11 34513 Piston & Pin Assy, (J.010" OS) 11 32238 Piston & Pin Assy, (J.010" OS) (Incl. 12) 11 32239B Piston & Pin Assy, (J.010" OS) (Incl. 12) 11 32240B Piston & Pin Assy, (J.010" OS) (Incl. 12) 12 31919 Ring, Piston pin retaining 13 32241 Ring Set (J.010" OS) 13 32242 Ring Set (J.010" OS) 13 32242 Ring Set (J.020" OS) 14 33093A Connecting Rod Assy, (Std.)(Incl. 15, 16 & 17) 15 32077 Connecting Rod Assy, (J.010" US)(Incl. 1 5, 16, 17) 16 26073 Washer, Connecting rod 17 28264 Nut Assy 18 34752 Camshaft (MCR) (Helical) 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 20 33471 Rod, Push 21 33606 Exhaust Valve (Std.) 21 33606 Exhaust Valve (Std.) 22 33606 Exhaust Valve (Std.) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 Piston & Pin & Ring (Exhaust only) (Also Incl. in 251) 26 34410 "O' Ring (Exhaust only) (Also Incl. in 251) 27 34751 Governor Gear Assy, (Helical) 28 560745 Washer, Flat 29 35479 Washer, Flat 30 31948 Spool, Governor 37 32426 Space, Governor Assy, (Incl. 2,33,36,3 7 & 38) 3 31950 "Seal, Oil 3 Screw, 1/4-20 x 2" 3 660588 Screw, 1/4-20 x 2" 3 62426 Space, Governor of				to the complete the repair.
Gear Crankshaft (Helical) 8 31932 Bearing, Tapered roller 9 31928 Cup, Bearing 11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (L020" OS) 11 34513 Piston, Pin & Ring Set (L020" OS) 11 34513 Piston, Pin & Ring Set (L020" OS) 11 34513 Piston & Pin Assy, (Std.) (3-1/2") Ind. 12 11 32238B Piston & Pin Assy, (Std.) (3-1/2") Ind. 12 11 32240B Piston & Pin Assy, (L010" OS) (Ind. 12) 12 31919 Ring, Piston pin retaining 13 32241 Ring Set (Std.) (3-1/2" Bore) 13 32242 Ring Set (Std.) (3-1/2" Bore) 13 32242 Ring Set (C00" OS) 13 32243 Ring Set (L020" OS) 14 34383 Connecting Rod Assy, (Std.) (Ind. 15, 16 & 17) 15 32077 Connecting Rod Assy, (L020" US) (Ind.1 5, 16, 17) 16 26073 Washer, Connecting rod 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 20 33471 Rod, Push 11 33805 Intake Valve (Std.) 21 33806 Exhaust Valve (Std.) 22 33646 Exhaust Valve (Std.) 23 33509 Retainer & Cap Set, Keeper valve 25 33509 Retainer & Cap Set, Keeper valve 26 33509 Retainer & Cap Set, Keeper valve 27 34751 Governor Gear Assy, (Helical) 28 560745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30580A Washer, Flat 31 31956B "Gasket, Cylinder cover 29 34849 Cylinder Cover 30 34225 Rod Assy, Governor 30 32425 Rod Assy, Governor 30 32426 Space, Governor 31 52426 Space, Governor 31 5260 Rod Assy, Governor	6	29783		Pin, Crankshaft gear
8 31932 9 31928 Cup, Bearing, Tapered roller Cup, Bearing, Tapered roller 11 34511 11 34512 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 34513 11 32239B Piston, Pin & Ring Set (L010" OS) 11 34513 11 32239B Piston & Pin Assy, (Std.)(3-1/2")(In cl. 12) 11 31 32240B Piston & Pin Assy, (L010" OS) (Incl. 12) 11 3 32241 11 3 32241 11 3 32241 12 31919 13 32241 13 32242 Ring Set (L010" OS) 14 33093A Connecting Rod Assy, (Std.)(Incl. 15, 1 6 & 17) 14 34383 Connecting Rod Assy, (L010" US)(Incl. 1 5, 16, 17) 15 32077 16 26073 17 28264 Nut Assy. 18 34752 Carnshaft (MCR) (Helical) 19 33472 10 33471 11 Rod, Push 11 11 11 11 11 11 11 11 11 11 11 11 11	7	34692		
9 31928 11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (1010" OS) 11 34513 Piston, Pin & Ring Set (1020" OS) 11 34513 Piston, Pin & Ring Set (1020" OS) 11 34513 Piston, Pin & Ring Set (1020" OS) 11 32238B Piston & Pin Assy. (Std.) (3-172" (Incl. 12) 11 32240B Piston & Pin Assy. (1010" OS) (Incl. 12) 12 31919 Piston & Pin Assy. (1010" OS) (Incl. 12) 13 32241 Ring Set (Std.) (3-1/2" Bore) 13 32242 Ring Set (Std.) (3-1/2" Bore) 13 32242 Ring Set (O20" OS) 13 32243 Ring Set (1020" OS) 14 34383 Connecting Red Assy. (1010" US) (Incl. 15, 16 & 17) 14 34383 Connecting Red Assy. (1010" US) (Incl. 15, 16, 17) 15 32077 Bolt, Connecting Red Assy. (1020" US) (Incl. 1 5, 16, 17) 16 26073 Washer, Connecting rod 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 20 33471 Rod. Push 11 133505 Intake Valve (Std.) 21 33506 Exhaust Valve (Std.) 22 33506 Exhaust Valve (Std.) 22 33506 Exhaust Valve (Std.) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 10 34751 Governor Gear Assy. (Helical) 27 34751 Governor Gear Assy. (Helical) 28 35479 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 31 31956B "Gasket, Cylinder cover 30 34849 Spool, Governor 31 32426 Space, Governor 31 32426 Space, Governor 32 32426 Space, Governor				
11 34511 Piston, Pin & Ring Set (Std.) (3-1/2" Bore) 11 34512 Piston, Pin & Ring Set (.010" OS) 11A 32239B Piston & Pin Assy. (Vid (20" OS) 11A 32239B Piston & Pin Assy. (Vid (3-1/2") (Dol (1-12) 11A 32240B Piston & Pin Assy. (Vid (3-1/2") (Dol (1-12) 11A 32240B Piston & Pin Assy. (Vid (3-1/2") (Dol (1-12) 11A 32240B Piston & Pin Assy. (Vid (3-1/2") (Dol (1-12) 11A 32241 Ring Set (Std.) (3-1/2" Bore) 11A 32241 Ring Set (Std.) (3-1/2" Bore) 11A 32242 Ring Set (O10" OS) 11A 32243 Ring Set (O20" OS) 12A 3303A Connecting Rod Assy. (Std.) (Incl. 15, 16 & 17) 13A 32243 Ring Set (O20" US) (Incl. 15, 16, 17) 14 34384 Connecting Rod Assy. (O20" US) (Incl. 15, 16, 17) 15 32077 Bolt. Connecting Rod Assy. (O20" US) (Incl. 15, 16, 17) 16 26073 Washer, Connecting rod 17 26264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 20 33471 Rod, Push 11 12 1 33505 Intake Valve (Std.) 12 1 33505 Pin Rative (Std.) 12 33506 Exhaust Valve (1/32" OS) 13 33508 Retainer & Cap Set, Keeper valve 10 33508 Retainer & Cap Set, Keeper valve 10 37 34751 Connecting Rod Assy. (Helical) 17 34751 Cap, Valve 18 3489 Spool, Governor Gear Assy. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590 Washer, Flat 30 31948 Spool, Governor 30 31948 Spool, Governor Gear Assy. (Incl.2,33,36,3 7 & 38) 31950 Seate, Vil-20 x 2" 30 52426 Space, Governor Gear Assy. (Incl.2,33,36,3 7 & 38)				9 .
11 34512 Piston, Pin & Ring Set (.010" OS) 11 34513 Piston, Pin & Ring Set (.020" OS) 11 32238B Piston & Pin Assy. (Std.)(3-1/2")(In cl.12) 11 4 32239B Piston & Pin Assy. (Std.)(3-1/2")(In cl.12) 11 4 32240B Piston & Pin Assy. (Std.)(3-1/2") (In cl. 12) 12 31919 Ring, Piston pin retaining 13 32241 Ring Set (.010" OS) 13 32242 Ring Set (.010" OS) 13 32242 Ring Set (.010" OS) 14 34383 Connecting Rod Assy. (Std.)(Incl.15, 1 6 & 17) 15 32077 Rod (.00 Connecting Rod Assy. (Std.)(Incl.15, 16, 17) 16 26073 Washer, Connecting rod 17 28264 Nut Assy. 18 34752 Carnshaft (MCR) (Helical) 19 33471 Rod, Push 11 33505 Intake Valve (Std.) 11 11 12 33506 Exhaust Valve (Std.) 22 33646 Exhaust Valve (Std.) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 Retainer & Cap Set, Keeper valve 26 33410 *"O" Ring (Exhaust only) (Also Incl. in 251) 27 34751 Governor Gear Assy. (Helical) 28 650745 Washer, Flat 29 34849 Spool, Governor 37 3426 Space, Governor rod				
11 34513 11A 32238B 11A 32228B 11A 32229B 11A 32229B 11A 32229B 11A 32229B 11A 322240B 11A 32240B 11B Piston & Pin Assy. (.010" OS) (Incl. 12) 11A 32240B 11A 32241 12 31919 13 32241 14 Ring Set (Std.) (3-1/2" Bore) 13 32242 14 Ring Set (Std.) (3-1/2" Bore) 14 33093A 15 Connecting Rod Assy. (Std.) (Incl. 15, 1 6 & 17) 16 26073 17 28264 18 34752 19 33472 19 33472 20 33471 21 33505 21 33645 22 33566 22 33566 23 33507 24 33508 25 Rod Assy. (3-1/2" OS) 25 A 34410 26 Say (Std.) (Incl. 15, 1 6 & 17) 27 Ring (Exhaust Valve (1/32" OS) 28 Sping, Valve 28 Say (10" OS) 29 30590A 30 Say (Relical) 31 Say (Pelical) 31 Say (Pelical) 31 Say (Pelical) 31 Say (Pelical) 32 Say (Pelical) 33 Say (Pelical) 34 Say (Pelical) 35 Say (Pelical) 35 Say (Pelical) 35 Say (Pelical) 36 Say (Pelical) 37 Say (Pelical) 38 Say (Pelical) 38 Say (Pelical) 39 Say (Pelical) 30 Say (Pe				
11A 32238B Piston & Pin Assý, (Std.)(3-1/2")(In ct.12) 11A 32240B Piston & Pin Assý, (.0.10" OS) (Inct. 12) 11A 32240B Piston & Pin Assý, (.0.10" OS) (Inct. 12) 12 31919 Ring, Piston pin retaining 13 32241 Ring, Piston pin retaining 13 32242 Ring Set (.010" OS) 14 33093A Connecting Rod Assy, (Std.) (Incl.15, 1 6 & 17) 15 32077 Rod Assy, (.0.10" US)(Incl.1 5, 1 6, 17) 16 26073 Washer, Connecting Rod Assy, (.020" US)(Incl.1 5, 1 6, 17) 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 10 33471 Rod, Push 11 33505 Intake Valve (132" OS) 12 33506 Exhaust Valve (132" OS) 13 33507 Spring, Valve 14 33508 Retainer & Cap Set, Keeper valve 15 33509 Ping, Valve 16 33510 Cap, Valve 17 3475 Governor Gear Assy. (Helical) 18 4751 Cap, Valve 19 33471 Rod, Push 10 18 28 29 36479 Washer, Flat (Use with 35322 spool) 18 365045 Spring, Valve 19 365045 Washer, Flat (Use with 35322 spool) 18 365045 Spring, Valve (Sak) 19 365046 Spring, Valve 19 365046 Spring, Valve 20 334410 Ping (Exhaust only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Assy. (Helical) 28 650745 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat (Use with 35322 spool) 30 31948 Spool, Governor 31 31950 Spring, Valve Nater (Pal (Vinder Cover Assy.) (Incl.2,33,36,3 7 & 38) 31 31950 Spring, Valve Nater (Pal (Vinder Cover Assy.) (Incl.2,33,36,3 7 & 38) 31 31950 Spring, Valve Overnor Gear Assy. (Incl.2,33,36,3 7 & 38) 31 31950 Spring, Valve Overnor Gear Assy. (Incl.2,33,36,3 7 & 38) 32 3425 Rod Assy., Governor Gear Covernor Gear Cover				
11A 32230B 11A 32240B 11A 32240B 12 31919 13 32241 14 Ring, Piston B, Pin Assy, (.020 " OS) (Incl. 12) 13 32242 15 Ring, Piston B, Pisto				
Piston & Pin Assý. (D20 "OS) (Incl. 12) 12 31919 Ring, Piston pin retaining Ring Set (Std.) (3-12" Bore) Ring Set (Std.) (3-12" Bore) Ring Set (Std.) (3-12" Bore) Ring Set (O20" OS) Ring Set (D20" OS) Ring Set (D20" OS) Ring Set (D20" OS) Connecting Rod Assy. (Std.) (Incl.15, 1 6 & 17) Connecting Rod Assy. (Std.) (Incl.15, 16, 17) Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl.1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 5, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 12) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 15, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 15, 16, 17) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 12) Rot, Connecting Rod Assy. (D20" US) (Incl. 1 15, 16, 17) Rot				
12 31919 13 32241 Ring, Piston pin retaining 13 32242 Ring Set (0.10" OS) Ring Ring Set (0.10" OS) Ring Set (0.10" OS) Ring Set (0.10" OS) Ring Ring Set (0.20" OS) Ring Ring Set (0.20" OS) Ring Set (0.20" OS) Ring Set (0.20" OS) Ring Ring Set (0.				
13 32241 13 32242 18 Ring Set (Std.) (3-1/2" Böre) 13 32242 Ring Set (.010" OS) 14 33093A Connecting Rod Assy,(Std.) (Incl.15, 1 6 & 17) 14 34383 Connecting Rod Assy,(Jol" US) (Incl.1 5, 16, 17) 15 32077 Bolt, Connecting Rod Assy, (Jol" US) (Incl.1 5, 16, 17) 16 26073 Washer, Connecting rod Washer, Flat Washer, Flat Spool, Governor Spring, Valve Washer, Flat Washer, Flat Spool, Governor Space, Valve Washer, Flat Spool, Governor Space, Valve Cylinder cover Cylinder cover Space, Valve Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) Seal, Oil Screw, 1/4-20 x 2" Space, Governor rod				
13 32242 13 32243 14 33093A Connecting Rod Assy.(Std.)(Incl.15, 1 6 & 17) Connecting Rod Assy.(.010" US)(Incl.1 5, 16, 17) Connecting Rod Assy.(.020" US)(Incl.1 5, 16, 17) Connecting Rod Assy.(.020" US)(Incl.1 5, 16, 17) Bott. Connecting Rod Assy.(.020" US)(Incl.1 5, 16, 17) Bott. Connecting rod Washer, Connecting rod Washer, Connecting rod Nut Assy. 18 34752 Camshaft (MCR) (Helical) Lifter, Valve 20 33471 Rod, Push Intake Valve (Std.) 13 33645 Intake Valve (Std.) 13 33645 Exhaust Valve (Std.) 22 33506 Exhaust Valve (Std.) 23 33507 Spring, Valve Assy. Retainer & Cap Set, Keeper valve * "O" Ring (Intake only) (Also Incl. in 251) * "O" Ring (Intake only) (Also Incl. in 251) Cap, Valve 33 35479 Washer, Flat Soosoo Washer, Flat Washer, Flat Soosoo Washer, Flat Soosoo Washer, Flat Soosoo Washer, Flat Soosoo Washer, Flat Sooo, Governor * Gasket, Cylinder cover Assy. (Incl.2,33,36,3 7 & 38) * Seal, Oil * Screw, 1/4-20 x 2" * God Assy., Governor * Gasket, Cylinder Cover * Gasket, Cylinder * Gasket,				
13 32243 14 33093A Connecting Rod Assy.(Std.)(Incl.15, 1 6 & 17) Connecting Rod Assy.(.010" US)(Incl.1 5, 16.17) 14 34384 Connecting Rod Assy.(.020" US)(Incl.1 5, 16.17) 15 32077 Bolt, Connecting Rod Assy.(.020" US)(Incl.1 5, 16.17) 16 26073 Washer, Connecting rod Washer, Connecting rod Nut Assy. 18 34752 Camshaft (MCR) (Helical) Liffer, Valve 20 33471 Rod, Push 11 33505 Intake Valve (Std.) 12 33505 Intake Valve (1/32" OS) Exhaust Valve (Std.) 22 33506 Exhaust Valve (Std.) 23 33646 Exhaust Valve (1/32" OS) Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve *"O" Ring (Intake only) (Also Incl. in 251) 25A 34410 *"O" Ring (Exhaust only) (Also Incl. in 251) Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) Washer, Flat 29 35479 Washer, Flat 30 31948 Spool, Governor 3 31956 3 31956 5 Crew, 1/4-20 x 2" Connecting Rod Assy., Covernor rod Usl) (Incl.1 5, 1 6 & 17) Connecting Rod Assy., (Incl.2, 33, 36, 3 7 & 38) Server, 1/4-20 x 2" Rod Assy., Governor rod	13	32241		Ring Set (Std.) (3-1/2" Bore)
14 33093A Connecting Rod Assy.(Std.)(Incl.15, 1 6 & 17) 14 34383 Connecting Rod Assy.(.010" US)(Incl.1 5, 16,17) 15 32077 Bolt, Connecting rod Assy.(.020" US)(Incl.1 5,16,17) 16 26073 Washer, Connecting rod 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 20 33471 Rod, Push 21 33505 Intake Valve (Std.) 21 33645 Intake Valve (Std.) 22 33546 Exhaust Valve (I32" OS) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 "O' Ring (Exhaust only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Assy. (Helical) 28 650745 Washer, Flat 29 3479 Washer, Flat 30 31948 Spool, Governor 31 31956B "Gasket, Cylinder cover 31 31950 Screw, 1/4-20 x 2" 35 650588 Screw, 1/4-20 x 2" 36 Assy., Governor rod	13	32242		Ring Set (.010" OS)
14 34383	13	32243		Ring Set (.020" OS)
14 34383	14	33093A		Connecting Rod Assy.(Std.)(Incl.15, 1 6 & 17)
14 34384 Connecting Rod Assy.(.020" US)(Incl.1 5,16.17) 15 32077 Bolt, Connecting rod 16 26073 Washer, Connecting rod Nut Assy. 18 34752 Camshaft (MCR) (Helical) 19 33472 Lifter, Valve 20 33471 Rod, Push 21 33505 Intake Valve (Std.) 21 33645 Intake Valve (1/32" OS) 22 33646 Exhaust Valve (1/32" OS) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 "'O' Ring (Intake only) (Also Incl. in 251) 25A 34410 ""O" Ring (Exhaust only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 30 31948 Spool, Governor 31 31956B "Gasket, Cylinder Cover 32 34245 Spacer, Governor rod	14	34383		
Bolt, Connecting rod				
16 26073 17 28264 Nut Assy. 18 34752 Camshaft (MCR) (Helical) Lifter, Valve 20 33471 Rod, Push Intake Valve (Std.) 21 33605 Intake Valve (McR) (Helical) Lifter, Valve 22 33506 Exhaust Valve (McR) 22 33646 Exhaust Valve (McR) 23 33507 Exhaust Valve (McR) 24 33508 Exhaust Valve (McR) Exh				
17 28264 18 34752 19 33472 Lifter, Valve 20 33471 Rod, Push 21 33505 Intake Valve (Std.) 21 33645 Exhaust Valve (Std.) 22 33666 Exhaust Valve (Std.) 23 33507 Spring, Valve 24 33508 Exhaust Valve (1/32" OS) Spring, Valve 25 33509 * "O" Ring (Intake only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) * Seal, Oil 36 32425 Rod Assy, Governor Spacer, Governor rod				· · · · · · · · · · · · · · · · · · ·
18 34752 Camshaft (MCR) (Helical) 19 334772 Lifter, Valve 20 33471 Rod, Push 11 33505 Intake Valve (Std.) 21 33645 Intake Valve (1/32" OS) 22 33506 Exhaust Valve (1/32" OS) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 * "O" Ring (Intake only) (Also Incl. in 251) 25A 34410 * "O" Ring (Exhaust only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat (Use with 35322 spool) 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy.				
19 33472 20 33471 21 33505 21 33505 21 33645 22 33506 23 33506 24 33506 25 33507 26 Exhaust Valve (1/32" OS) 27 33508 28 Retainer & Cap Set, Keeper valve 28 33509 29 30590 20 33510 21 33646 22 33646 23 33507 24 33508 25 Retainer & Cap Set, Keeper valve 26 33510 27 34751 28 650745 29 35479 29 30590A 31 31956B 31 31956B 32 34849 33 31950 34 650451 35 660588 36 32425 36 Assy., Governor Gas Assy. (Incl. 2,33,36,3 7 & 38) 36 32425 37 32426 38 Cap Set Aulv (1/32" OS) 28 Exhaust Valve (1/32" OS) 29 Spring, Valve 29 Spring, Valve 29 Spring, Valve 29 Retainer & Cap Set, Keeper valve 29 Spring, Valve 29 Retainer & Cap Set, Keeper valve 29 "O" Ring (Exhaust only) (Also Incl. in 251) 29 Cap, Valve 29 Governor Gear Ass'y. (Helical) 29 Washer, Flat 30 Spoucernor 31 Spoucernor 31 Spoucernor 32 Spoucernor 33 Spoucernor 34 Spoucernor 35 Seal, Oil 36 Screw, 1/4-20 x 1" 37 Screw, 1/4-20 x 2" 38 Spoucernor Governor rod				
20 33471 21 33505 21 33645 21 33645 22 33506 23 33506 23 33507 24 33508 25 33509 26 Exhaust Valve (Std.) 27 34751 28 650745 29 35479 20 30590A 21 31956B 22 34849 23 34849 25 34849 26 560588 27 34751 28 650588 28 650745 29 35479 29 30590A 20 30590A 20 30590A 21 31956B 22 34849 23 34849 24 349 3508 25 34849 26 360588 36 32425 36 32425 37 32426 38 600 Push Intake Valve (Std.) 28 (Std.) 28 (Std.) 29 (Std.) 29 (Std.) 20 (Std.) 21 (32" OS) 22" OS) 23 (Std.) 24 (1/32" OS) 25 (Std.) 26 (Std.) 27 (Std.) 28 (Std.) 29 (Std.) 20 (Std.) 20 (Std.) 21 (32" OS) 22 (Std.) 23 (Std.) 24 (Std.) 25 (Std.) 26 (Std.) 27 (OS) 28 (Std.) 29 (St				
21 33505 Intake Valve (Std.) 21 33645 Intake Valve (1/32" OS) 22 33506 Exhaust Valve (Std.) 22 33646 Exhaust Valve (1/32" OS) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 * "O" Ring (Intake only) (Also Incl. in 251) 25A 34410 * "O" Ring (Exhaust only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426				
21 33645				·
22 33506 Exhaust Valve (Std.) 22 33646 Exhaust Valve (1/32" OS) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 "O" Ring (Intake only) (Also Incl. in 251) 25A 34410 "O" Ring (Exhaust only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B "Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
22 33646 Exhaust Valve (1/32" OS) 23 33507 Spring, Valve 24 33508 Retainer & Cap Set, Keeper valve 25 33509 * "O" Ring (Intake only) (Also Incl. in 251) 25A 34410 * "O" Ring (Exhaust only) (Also Incl. in 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
23 33507 24 33508 25 Retainer & Cap Set, Keeper valve 25 33509 26 * "O" Ring (Intake only) (Also Incl. in 251) 25A 34410 26 33510 27 34751 28 650745 29 35479 29 30590A 30 31948 30 31948 31 31956B 31 31956B 32 34849 33 31950 34 650451 35 650588 36 32425 36 32425 37 32426 Spring, Valve Retainer & Cap Set, Keeper valve * "O" Ring (Exhaust only) (Also Incl. in 251) Cap, Valve Governor Gear Ass'y. (Helical) Washer, Flat (Use with 35322 spool) Washer, Flat (Use with 35322 spool) Washer, Flat Cylinder Covernor * Gasket, Cylinder cover Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) * Seal, Oil Screw, 1/4-20 x 1" Screw, 1/4-20 x 2" Rod Assy., Governor Spacer, Governor rod				
24 33508 Retainer & Cap Set, Keeper valve 25 33509 * "O" Ring (Intake only) (Also Incl. in 251) 25A 34410 * "O" Ring (Exhaust only) (Also Incl. i n 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
25 33509 * "O" Ring (Intake only) (Also Incl. in 251) 25A 34410 * "O" Ring (Exhaust only) (Also Incl. i n 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
25A 34410 * "O" Ring (Exhaust only) (Also Incl. i n 251) 26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
26 33510 Cap, Valve 27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod	25	33509		
27 34751 Governor Gear Ass'y. (Helical) 28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod	25A	34410		* "O" Ring (Exhaust only) (Also Incl. i n 251)
28 650745 Washer, Flat 29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod	26	33510		Cap, Valve
29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod	27	34751		Governor Gear Ass'y. (Helical)
29 35479 Washer, Flat (Use with 35322 spool) 29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod	28	650745		Washer, Flat
29 30590A Washer, Flat 30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
30 31948 Spool, Governor 31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				·
31 31956B * Gasket, Cylinder cover 32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
32 34849 Cylinder Cover Ass'y. (Incl.2,33,36,3 7 & 38) 33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				•
33 31950 * Seal, Oil 34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
34 650451 Screw, 1/4-20 x 1" 35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
35 650588 Screw, 1/4-20 x 2" 36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				·
36 32425 Rod Assy., Governor 37 32426 Spacer, Governor rod				
37 32426 Spacer, Governor rod				
· ·				
38 29193 Ring, Retaining				
	38	29193		King, Ketaining

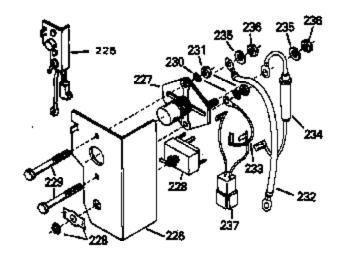
Ref #	Part Number	Otv	Description
	650736	Qty	Screw, 10-16 x 3/8"
	33495		Cover, Cylinder head
	34225A		* Gasket, Cylinder head
	34753		Head, Cylinder
	31980		Pulley, Starter
44	32046		Rope Assy., Starter
45	33657		Spark Plug (L-82C)
46A	650691		Washer, Flat
	650690		Washer, Belleville
	650746		Screw, 5/16-18 x 1-3/8"
	650692		Screw, 5/16-18 x 1-3/4"
	730218		Valve Guide Kit (Incl. 49)
	792035		Ring, Retaining
			•
	33515A		* Gasket, Intake pipe
	33475		Pipe, Intake
	650378		Screw, Torx T-30, 5/16-18 x 1-1/8"
	792028		Screw, 5/16-18 x 7/8"
	33476A		* Gasket, Carburetor
55	33477A		Baffle, Air cleaner
56	792075		Nut, Lock 5/16-24 (Used in early prod uction)
57	33478		Link, Governor lever-to-throttle leve r
58	31963		Lever, Governor
	31964		Clamp, Governor lever
	650518		Lockwasher, No. 10 E.T.
	30312		Screw, 10-32 x 1/2"
	650544		Screw, To-32 x 7/2" Screw, Torx T-25, 10-24 x 7/8"
	7975		Nut, 10-24
	31965		Plate, Governor spring
	31984A		Lever Assy., Control
	28558		Washer, Wave
	31966		Bushing, Governor lever
68	650597		Screw, 10-24 x 5/8"
69	31967		Spring, Governor
70	650591		Screw, 10-24 x 2"
	33099		Spring
	32599		"O" Ring (Incl. in 251)
	650666		Washer, Lock
	32579		Baffle, Blower housing
	650561		Screw, 1/4-20 x 5/8"
	650592		
			Key, Flywheel
	610967		Flywheel (w/ring gear) Trigger Dia Kit (Llee as required)
	730201		Trigger Pin Kit (Use as required)
	650594		Nut, Flywheel
	610906		Solid State Magneto (Incl. 158 thru 1 61)
	650661		Screw, 1/4-20 x 3/4"
81	33479		Extension, Blower housing
83	650751		Screw, 1/4-20 x 7/16"
84	33775A		Blower Hsg.(Incl.218A,219)(For elec.s tarter)
85	8274		Washer, Lock
	650595		Screw, 5/16-24 x 3/8"
	650624		Screw, 5/16-24 x 9/16"
	650752		Screw, 1/4-20 x 7/16"
	35475		Tube, Push rod
	33481		* "O" Ring (Also Incl. in 251)
			· · · · · · · · · · · · · · · · · · ·
	34754		Housing, Rocker arm
	33013		Cover, Starter bubble
	650701		Screw, 8-18 x 7/16"
94	33484		* "O" Ring (Also Incl. in 251)

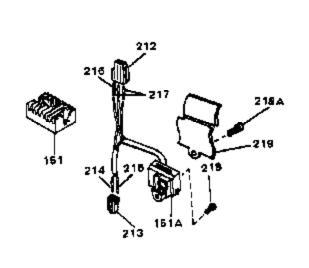
Ref #	Part Number Qty	Description
	650168	Washer, Flat
	32610A	Screw, 1/4-20 x 29/32"
	33485	Arm, Rocker
	33486	Ring, Retaining
	650755	Screw, 1/4-20 x 3/4"
100	650864	Nut, Hex, 1/4-20
101	650756	Stud, Rocker arm
	33487	* "O" Ring (Also Incl. in 251)
	33488	Cover, Rocker arm
	31958A	* Gasket, Breather (Also Incl. in 251)
	33489	Body Assy., Breather
	33490	Tube, Breather
	30102	* Screw, 10-32 x 5/8" (Also Incl. in 25 1)
	650738	Screw, 1/4-20 x 5/8"
111	35471	* Gasket, Air cleaner
114	650399	Screw, 10-32 x 5/8"
115	32008	Element, Air cleaner
	650513	Nut, Wing
	31992	Spacer, Screen
	33776	Screen, Pulley
	650680	Screw, 1/4-20 x 1-1/2"
		·
	27070	Washer, Lock
	650590	Nut, Conduit
	32043B	Muffler
127	32143	Nipple, Exhaust
146	32577	Cover, Cylinder NOTE: Determine the gap between the cover
		and the machined surface on the cylinder, which can be
		from .001" up to .007", in which case no shim gaskets will be
		required. Use of gaskets must be limited to a combined total
		of .010" thick. Steel spacersmust be used as required to eli
		of .010 tillion. Oteel spacersificatibe dised as required to eli
147	792028	Screw, 5/16-18 x 7/8"
150B	650399	Screw, 10-32 x 5/8"
	610965	Stator Plate Assy.
	31971	* Gasket, Shim (.004/.005 thick) NOTE: Determine the gap
100	31371	between the cover and the machined surface on the
		cylinder, which can be from .001" up to .007", in which case
		no shim gaskets will be required. Use of gaskets must be
		limited to a combined total of .010" thick. Steel
		spacersmust be used a
150	31972	* Cooket Chim (005/ 007 think) NOTE: Determine the gan
100	31972	* Gasket, Shim (.005/.007 thick) NOTE: Determine the gap
		between the cover and the machined surface on the
		cylinder, which can be from .001" up to .007", in which case
		no shim gaskets will be required. Use of gaskets must be
		limited to a combined total of .010" thick. Steel
		spacersmust be used a
457	00004	
15/	32031	* Spacer, Steel (.010 thick) NOTE: Determine the gap
		between the cover and the machined surface on the
		cylinder, which can be from .001" up to .007", in which case
		no shim gaskets will be required. Use of gaskets must be
		limited to a combined total of .010" thick. Steel
		spacersmust be used as re
		•
	610118	Cover, Spark plug
159	610750	Grommet, Lead wire
	610408	Nut, 8-32
	610908	Terminal, Female
	33356	Terminal
104		i Girriii IQI

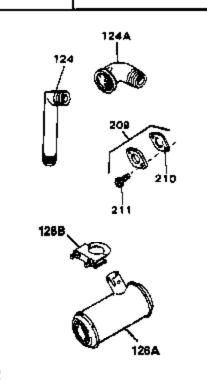
Ref #	Part Number	Qty	Description
165	650760	-	Screw, 8-32 x 3/8"
166	28545		Grommet, Plastic
167A	26073		Washer, Flat
167	650890		Washer, Lock
168	32039		Switch, Stop
169A	27793		Clip, Conduit
170	28942		Screw, 10-32 x 3/8"
189	33068		Dipstick (Incl. 190)
190	29985		"O" Ring
191	32352		Tube, Oil filler
192	29673		* Gasket, Oil filler tube
193	29443		Clip, Wire
244	34346		Decal, Instruction
244B	31752		Decal, Air cleaner
244A	34768		Decal, Name
246	631687		Valve, Seat & Spring Assy.
247	632197		Carburetor (Incl. 54 & 246) (Refer to Division 5, Section A,
			page 160 for breakdown) (Refer to Division 5, Section D for breakdown)
			,
	33516G		* Gasket Set (Incl. items marked *)
251	35075		"O" Ring Kit (Incl. Nos. items marked +)

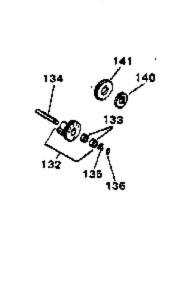
ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER. PARTS NOT LISTED ARE SUPPLIED BY CEM.

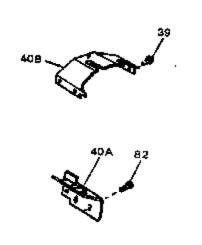


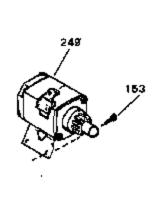


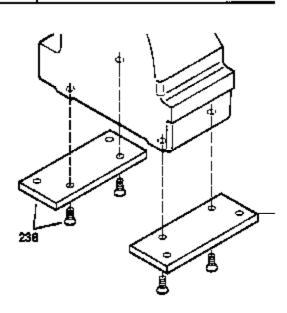






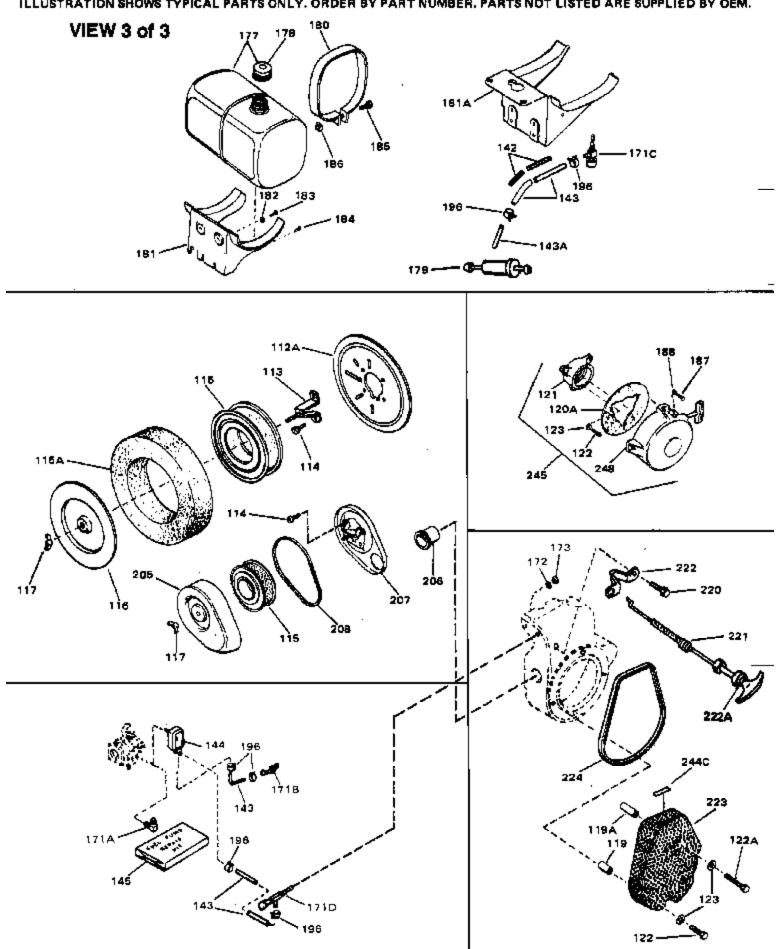






Ref #	Part Number Qty	Description
39	650736	Screw, 10-16 x 3/8"
126A	35731	Muffler (Incl. 126B)
141		Gear, Counterbalance weight (Straight teeth) (For replacement see Ref. 132. Order correct kit for your enginemodel number.)
153	792028	Screw, 5/16-18 x 7/8"(Use w/32817 str .motor)
153	650781	Screw,5/16-18 x 11/16"(Use w/33835 st r.motor)
209	730178	Ech.Adapter Kit (Incl.210 & 211)(As r equired)
210	34102B	Gasket, Exhaust (Use as required)
211	30196	Screw, 5/16-18 x 3/4" (Use as require d)
238	730212	Adapter Plate Kit (Optional) NOTE: If you are having mounting problems in using a HH100 thru0H180 inplace of a large frame competitivebrand, we would like to call your attention to 730212 adapter plate kit. The kit converts the bottom mounting system found on HH100 thru 0H180 to a top mounting sys

ILLUSTRATION SHOWS TYPICAL PARTS ONLY. ORDER BY PART NUMBER, PARTS NOT LISTED ARE SUPPLIED BY DEM.



Ref #	Part Number	Qty	Description
112A	33777		Bracket, Air cleaner
113	33778		Bracket, Air cleaner
114	650399		Screw, 10-32 x 5/8"
115A	32906		Filter, Pre Air
115	32008		Element, Air cleaner
116	32904		Cover, Air cleaner
117	650513		Nut, Wing
119	31992		Spacer, Screen
122	650680		Screw, 1/4-20 x 1-1/2"
123	27070		Washer, Lock
143	29774		Fuel Line (Braided 8.25")(21 cm)(As r equired)
143	30705		Fuel Line (Braided 16")(41 cm)(As req uired)
143	30962		Fuel Line (Braided 32")(81 cm)(As req uired)
144	33981		Pump, Impulse fuel
	33010		Repair Kit, Impulse fuel pump
	32958		Fitting, Fuel pump
171C	29683		Valve, Fuel strainer & shut-off
177	33979		Fuel Tank (Incl. 178)
	410144B		Fuel Cap (White Plastic)(Std)(As required)
178	34210		Fuel Cap (Red Plastic) (Spurt resistant, High profile) (Use as required)
180	33980		Strap, Fuel tank
	33978		Bracket, Fuel tank
	650787		Washer, Belleville
	650786		Screw, 1/4-20 x 5/8"
	650785		Screw, 5/16-18 x 5/8"
	650488		Screw, 1/4-20 x 1-1/4"
	650456		Nut, Lock
	26460		Clamp, Fuel line (Use as required)
	730134		Rewind Starter Kit (Incl.120A, 121, 122, 187, 188 & 248) (Use as required)