CYLINDERS, HEADS, PISTONS & VALVES

No.	Part No.	Description	Year	
1	1802001-S	Indian script spark plug (2)	34-53	
		02001-S plug is a real authentic Indian	the course of the theory of the second se	
spa		"Indian C" heat range marked on it. Spa in its own special Indian collector box.	ark plug	
1	1802001	Spark plug: Regular, genuine Autolite (2)	34-53	
1	1802001-L	Spark plug: Long reach Autolite (2)	34-53	
2	522001	Insert: Replacement, spark plug	35-53	
3 A	37216	Bolt: Heads, long, stainless steel (16)	35-53	
3B	35B85	Bolt: Heads, short, stainless steel (2)	35-23	
3C	37216-T	Head Bolt, Socket Set (pr)	35-23	
4	37618	Washer: Head bolt, heat treated, cad plated (18)	26-53	
5	38235	Bracket: Head to frame	32-53	
6	800019	1/8" spacer: Bracket to frame	32-53	
6	22B77	3/16" Spacer: Bracket to frame	32-53	
6A	40594	Strap: Loom tube mounting	36-53	
6B	207113	Bolt: Head bracket to frame	32-53	
6C	922007	lockwasher ⁵ / ₁₆ " S/S, 5 pk	32-53.	
7	92440	Heads: 74", pr.	35-38	
7	92882	Heads: 74", pr.	39	
	Note:	We can machine 35-38 and 39 heads to accept 80" pop up pistons		
7	93102/8	Heads: 74", 84" (no relief), pr.	40-53	
7	93106/12	Heads: Bonne 74" & 88" (1/ ₈ " relief), pr.	40-53	
7	350016	Heads: 80" & 92" upgrade cost (³ / ₁₆ " relief) pr.	40-53	
 Note: KIWI heads are designed with longer spark plug threads to accept our longer reach plugs for maximum performance. Heads have more material on the gasket surfaces in critical areas to reduce the chances of blown gaskets. We have paid close attention to the depth of the combustion chamber to eliminate any potential problems with detonation. Heads are made from high end aircraft grade A356 T6 (heat treated to T6) for increased strength over originals so as to not mush out under head bolt torque loads. Competitors heads are full of porosity and use recycled aluminum. While they are cheaper, they distort under heat and do not dissipate heat well or seal. KIWI heads are the finest heads available for your Indian. Note: 74" was the std engine displacement through to the end of 1948. 1950 was the introduction of the 80" engine. Any engine from 1940 can be upgraded to 80", hence, why we call out the head years from 1940-53. Note: Stock 74" engines had pistons that came up level with the top of the cylinder. Bonneville 74" pistons protrude ¹/₈" above the cyl. 80" pistons protrude ³/₁₆". 84" pistons are level. 				
		" protrude 1/8". 92" protrude 3/16".		
		Polishing service for heads/fins: pr.	35-53	
	88	* *	35-53 35-53	

93070/1 KIWI cylinders are sold in pairs and suit 74, 80, 84, 88 & 92" engines. We have taken great care to develop a superior set of cylinders in every single respect. Metal has been added between the intake manifold nipple and head gasket surface which results in the head gasket surface having more support which increases gasket sealing in this area, a typical Indian weak spot. KIWI cylinders have upgraded cast iron to meet the latest SAE automotive specifications which has resulted in KIWI cylinders being harder for greater cylinder wear resistance and higher overall tensile strength. 40-53 cylinders can be fitted to 35-39 models (fin size differs). Cylinder base strength has been increased by utilizing the square base design and thicker flange. Cylinder bores are finished slightly under size for final sizing. We will gladly finish cylinders any way you would like in our service dept, e.g. cylinders honed to size, valve guides installed, valve jobs, powder coating through to fully assembled for you to bolt to your engine, etc. There is no doubt that KIWI top end components are the best money can buy for your Indian.





Part No.	Description	Year
92865/6	Cylinders: Stock, pr. Fits 74" & 80" engines (will retrofit to earlier models)	38-39
93070/1	Stock cylinders: (pr.) 74" & 80" Bare - Includes valve guides	40-53
93070/1-K	Stock cylinders fully assembled: pr. Includes pistons, pins, rings, bores honed to size, rings gapped, pistons fitted to cylinders, valves and seats cut, valves installed. Assembled with chrome valve covers, springs, seals, collars, keys, powder coated & ready to fit to your engine. (Performance valve springs optional)	40-53 74"-80"
93072/3-K	Performance cylinders fully assembled: pr. Includes pistons, pins, rings, bores honed to size, rings gapped, pistons fitted to cylinders, valves and seats cut, valves installed. Assembled with chrome valve covers, performance springs, seals, collars, keys, powder coated & ready to fit to your engine.	40-53 74"-80"
93070-84	84" Upgrade price, pr.	40-53
93070-84-P	84" Upgrade price, pr.	40-53

Continued on page 18



CYLINDERS, HEADS, PISTONS & VALVES

No.	Part No.	Description	Year
10	38136	Nipple: Manifold, in cylinder (2)	32-53
11	16A61	Nut: Cylinder base, special (8)	24-53
12	922008-K	Washer kit: Lock washers, cylinder base, set of 8	24-53
13	22B655	Gasket: Cylinder base (2)	24-53
13	22B655-R	Gasket: Composite, metal core, pr. (2) Cometic	24-53
13	22B655-RF	Gasket: Composite, fiber, pr. (2) Cometic	22-53
14	40056	Stud: Cylinder base (8)	24-53
15	86516	Piston kit: KIWI performance design (stronger, quieter) 74" & 80" Available in STD, .010, .020, .030, .040 & .060. State size. Order ring set separately 41711-R NOT included with pistons	
15	86516-R	Piston kit : KIWI design, 84, 88 & 92". Available in STD, .010, .020, .030 & 040. State size. Order ring set separately 41711-R NOT included with pistons	35-53

All KIWI pistons are made in the USA supplied with rings, pin and clips & are priced per piston (per cylinder). 84" pistons come level with top of the cylinder require the use of 93102 74" heads (no piston protrusion). 88" pistons protrude 1/8" above the cylinders (like Bonne 74") and require the use of 93106 heads. 92" pistons protrude 3/16" above the cylinders (like 80") and require the use of 350016 heads.

KIWI Indian 86516 and 86516-R pistons offer a superior design utilizing the latest engineering design. Never before has so much R&D been put into updating the old, dinosaur Indian pistons. (Diagram "A")

KIWI pistons feature:

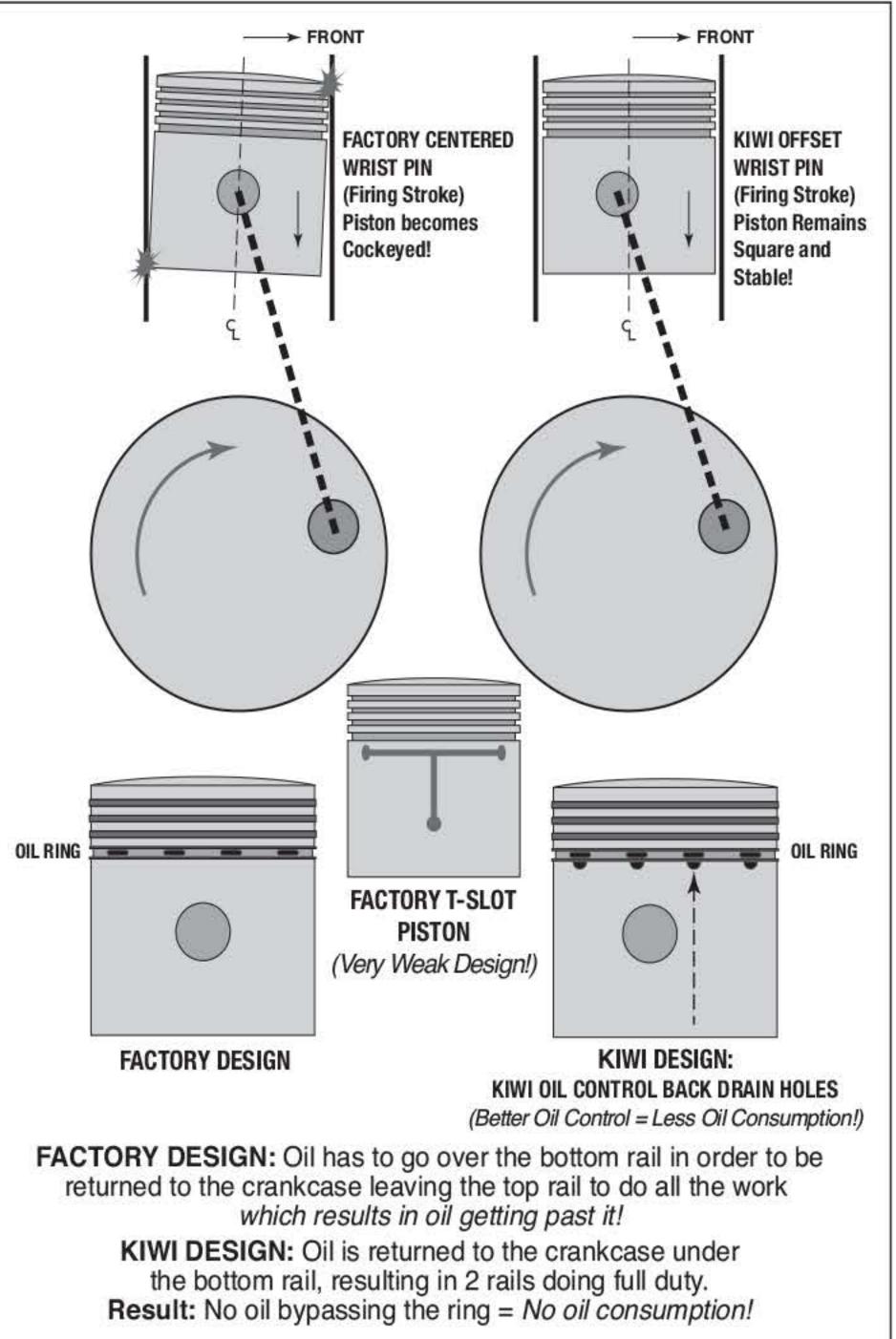
- Solid slipper skirt design increases skirt rigidity (less flexing & increased strength) which reduces piston noise.
- Skirts have a special cam grind for greater piston stability during all operating temperatures and engine rpm ranges. Also reduces noise.
- Pistons come TIN coated. TIN allows for easy break in, reduces the chances of seizing, reduces friction and noise.
- Wrist pin is offset from the center of the piston towards the thrust face (rear) for quieter operation throughout the whole rpm range.
- Wrist pin bosses have oil troughs for added pin lubrication and increased life.
- Low expansion alloy ideally suited for Indian air cooled engines.
- Top ring groove is farther down from the top of the piston to keep direct combustion temperatures away from the top ring especially for 80" engines







Diagram "A"



No.	Part No.	Description	Year	
16	28B286	Wrist pin: State length, (2)	22-53	
17	38439	Snap ring: (4)	22-53	
18	41711-R	Ring set: Suits 86516 and 86516R pistons. Available in STD, .010, .020, .030, .040, .050 & .060 . State size. Sold per cyl	22-53	
18	41711	Ring set: Fits stock (& competitors) 4 ring pistons. Available in STD, .010, 020, .030, .040, .050 & .060. State size. Sold per cyl	22-53	
 Note: We only supply USA made Hastings & Total Seal[®] ring sets for guaranteed quality. While these do cost more, they are the best by far. We do not sell cheap import rings. Note: Stock Indian 74 & 80" pistons had 3 compression rings 3/₃₂" wide and 1 oil ring 5/₃₂" wide. Technology has changed so much that our 41711-R & 41711-RT rings (2 x 1/₁₆" wide compression & 1 x 5/₃₂" oil) does a far better job of combustion sealing while increasing cylinder bore life. 				
19	KI-10004	Sleeve: With correct ¹ / ₁₆ " wall section. 3.379 OD	44-53	
19	KI-10004-US	Sleeve: Suits 1942 and earlier round base cyls. 3.345 O.D.	34-42	
19	KI-10004-OS	Sleeve: .005 oversize OD, 3.384 O.D.	44-53	
Note: KIWI sleeves are special made for Indian motorcycles and are NOT off the shelf automotive sleeves. KIWI sleeves have a reduced diameter on the lower ⁷ / ₃₂ " that protrudes below the cylinder base flange. This allows this portion of the cylinder to fit the crankcases and align properly. Be aware all others do not have this stepped reduced diameter and may not fit your cases which will require you to remachine your cases. KIWI sleeves are manufactured with the correct ring lead in bevel on the bottom inside diameter. These sleeves are alloyed with nickel, chrome and molybdenum for superior wear resistance to competitors and have a hardness of up to 240 Brinell which means super long lasting. KIWI sleeves are made specifically for Indians and are the finest available. Another winning engine part by KIWI.				
20	27-B2	Bushing: Wrist pin (2)	22-53	
20	27B2-010	Bushing: Wrist pin, .010 oversize outside diameter (2)	22-53	
20	27B2-R	Bushing: Forged "H" beam rods (KIWI) (2)	22-53	
21	20B417	Valve: Intake & exhaust, stainless (4)	22-34	
21	42545/6	Valve: Intake & exhaust, stainless (4)	22-53	
22	42546-S	Seat: Valve seat insert, stock	28-53	
23	27B31/2	Valve guide: Intake and exhaust (4)	27-34	
23	40326	Valve guide: Intake and exhaust (4)	35-38	
23	43647	Valve guide: heat treated (4)	39-53	
23	43647-005	Valve guide: .005 o/s outside diameter, heat treated (4)	39-53	

No.	Part No.	Description	Ye			
fo ha W	Note: KIWI supplies the most longest lasting valve guides for Indians. They feature a special high wear resistant allo cast iron which have been heat treated for maximum hardness and a special surface coating for even more adde wear resistance. No other valve guide on the market even comes even close. Beware of many other guides on the market that are soft or made of a substandard material. Flathead Indians operate in a dry/no lube environment an under extreme heat therefore the valves and guides MUST be the absolute best. KIWI valve train components are the best, period!!! Our parts may cost a tad more but <i>NO one beats our quality</i> .					
24	43647-S	Seal: Valve guide (4)	35			
25	339003-C	Cover: Valve, chrome (4)	39			
25	339003	Cover: Valve, cad (4)	39			
	No	te: Valve covers are sold per valve				
26	763002-R	O-ring: Valve cover, silicone (4)	39			
 Note: KIWI designed O-ring valve covers are the best you of buy. Outer covers are made from solid material while the inners are drawn over a mandrel creating a very precision of Covers are supplied with silicone O-rings (rather than cheap black neoprene). Silicone is many times more expensive however it will not settle over time or deteriorate from heat of ated by the cylinders or acids from engine oils resulting in we free valve cover for the life of your Indian. Only KIWI valve covers remain leak free for the life of the engine. Note: Valve covers can be retrofitted to 35-38 models but the require the use of 41814 threaded (39-53) pushrod guides 						
27	40929/0	sures a completely leak free valve train. Cover: Valve, 3 pc, chrome (4)	35			

t No.	Description	Year			
KIWI supplies the most longest lasting valve guides ans. They feature a special high wear resistant alloy iron which have been heat treated for maximum s and a special surface coating for even more added esistance. No other valve guide on the market even s even close. Beware of many other guides on the et that are soft or made of a substandard material. d Indians operate in a dry/no lube environment and er extreme heat therefore the valves and guides be the absolute best. KIWI valve train components he best, period!!! Our parts may cost a tad more but NO one beats our quality .					
47-S	Seal: Valve guide (4)	35-53			
003-C	Cover: Valve, chrome (4)	39-53			
9003	Cover: Valve, cad (4)	39-53			
Not	Note: Valve covers are sold per valve				
002-R	O-ring: Valve cover, silicone (4)	39-53			
outer co re drav ire sup neopre it will n ne cylin	igned O-ring valve covers are the best y overs are made from solid material while on over a mandrel creating a very precis plied with silicone O-rings (rather than cl ene). Silicone is many times more expen- not settle over time or deteriorate from he oders or acids from engine oils resulting is cover for the life of your Indian. Only KIV	the ion fit. heaper sive eat cre- in weep			

covers can be retrofitted to 35-38 models but they e use of 41814 threaded (39-53) pushrod guides. ensures a completely leak free valve train.

27	40929/0	Cover: Valve, 3 pc, chrome (4)	35-53
28	39909	Spring: Valve (4)	35-53

CYLINDERS, HEADS, PISTONS & VALVES

No.	Part No.	Description	Year
	Note: KIW	I valve springs are shot peened for stre relieving and durability.	SS
30	41785	Collar: Valve spring (4), made from 4340 material	35-53
31	42550	Key: Valve collar, hardened. pr. (4)	35-53
32	KI-10123	Oil: 50 wt. Petroleum base	all yrs.
32	KI-10124-S	Oil: Synthetic 50 wt.	all yrs.
32	KI-10124-BR	Break in oil	all yrs.
33	101826	Pliers: Valve cover	35-53
34	35W242	Wrench: Tappet adjusting, (2)	22-53
35	43647-T	Valve Guide Removal/Installation	22-53

NOTE: We have tested many oils and the oils we sell are by far the best. Off the shelf auto parts store oil lacks the important additives Indians need for them to last. It is well worth the few extra (minor) bucks (like 1 hamburgers worth). We've done tens of thousands of miles of testing up to 130 deg F in Death Valley and torn down engines for inspection. Without any doubt these oils are the best for Indian motorcycles.





Rebuilding service: We offer boring, honing, valve



grinds, sleeving, welding, etc in our service dept. We have a specially made torque plate to simulate the cylinders being bolted to the crankcase. This torque plate method is important as it simulates the distortion when it is fitted to the engine.