

service bulletin

M91-4 Supersedes M85-8 Technical Portions Are FAA Approved

11 February 1991

SUBJECT: **PISTON IDENTIFICATION AND PISTON RING APPLICATION BULLETIN**MODELS
AFFECTED: ALL

INSTRUCTIONS

The objective of the Piston Identification and Piston Ring Application Bulletin is to simplify the task of correctly identifying pistons to enable the selection of the appropriate piston ring set for both steel, chrome and Cermicrome(TM).

WARNING...Refer to SB M90-5R1, or subsequent revision as applicable for proper cylinder choke dimensions.

HOW TO USE THE GUIDE

1. Select the engine model from the first column
2. Second column is the finished piston.
3. Third column is the casting or forging number cast into the piston. Do not utilize this casting number as the finished piston part number. Several finished pistons can be machined from one casting or forging.
4. Fourth column is the actual number of ring grooves in the piston.
5. Fifth column is the overall or total height of the piston.
6. Sixth column is the measurement from the top of the piston to the center line of the pin and plug hole.
7. Seventh column is piston ring set numbers for STEEL cylinders. (*Caution...Do Not use in chrome cylinders*).
8. Eighth column is individual piston ring part numbers, listed in order from top to bottom of piston in their order. This column is for steel cylinders.
9. Ninth column is piston ring set numbers for chrome and Cermicrome(TM) cylinders.
10. Tenth column is individual piston ring part numbers, listed in order from the top to bottom of piston in their order. This column is for chrome cylinders.
11. Sub-notes appearing after part numbers indicates a notation applicable to that individual part.
12. **Cast inserted. If it is not feasible to replace the forged pistons with cast inserted pistons as a complete engine set; it is mandatory that the cast inserted pistons be installed in opposing bays, e.g. 1,2; 3,4 etc.

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(continued)

ENGINE MODEL	PISTON				STEEL CYLINDER		CHROME CYLINDER		
	PISTON NUMBER	CASTING OR FORGING NO.	NO. OF RING GROOVES	OVERALL HEIGHT	HEIGHT CENTER OF PIN HOLE TO TOP	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
A65	40731	4557	3	2.984	1.796	640157A2P005	1) 640157P005* 2) 640158P005* 3) 640159P005*	N/A	N/A
	646295 Supersedes 40731	4557	3	2.984	1.796	640157A2P005	1) 640157P005* 2) 640158P005* 3) 640159P005*	N/A	N/A
A75	40577	4957	3	2.984	1.796	640157A2	1) 640157* 2) 640158* 3) 640159*	N/A	N/A
C15	646287 (Supersedes 40327)	4940	4	2.895 2.885	1.708 1.698	649632A1	1) 649632 2) 638110 3) 638110 4) 638111	652978	1) 638110 2) 638110 3) 638110 4) 640298
C90-16F O200A, B O300A, B C, D	646255 (Supersedes 530348)	530348	4	2.743 2.738	1.596 1.591	649632A1	1) 649632 2) 638110 3) 638110 4) 638111	652978	1) 638110 2) 638110 3) 638110 4) 640298
GO300A, C, D, E, F	646279 (Supersedes 626146)	530348	4	2.763 2.758	1.616 1.611	649632A1	1) 649632 2) 638110 3) 638110 4) 638111	652978	1) 638110 2) 638110 3) 638110 4) 640298
IO346A	646063**		4 (Top 2 Tapered)	3.350	1.752 1.748	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP	1) 648005 CP 2) 648006 CP 3) 648007 CP 4) 648008
	633109 (Superseded by 646063)	628909	4 (Top 2 Tapered)	3.55	1.752 1.748	646625A4	1) 648005 2) 648006 3) 632496 4) 648008	639744	1) 648005 CP 2) 648006 CP 3) 632496 4) 648008 CP
IO360, A, C, D, G, J, K	648049** (Supersedes 642647 & 630687)	649388 642619F 630687F	4 (Top 2 Tapered)	3.24	1.5954 1.5904	649225	1) 648039 2) 648040 3) 648041 4) 648042	649225 CP	1) 648039 CP 2) 648040 CP 3) 648041 CP 4) 648042

* Not SOLD SEPARATELY.

** CAST INSERTED. See item # 12, cover page.

ENGINE MODEL	PISTON				STEEL CYLINDER		CHROME CYLINDER		
	PISTON NUMBER	CASTING OR FORGING NO.	NO. OF RING GROOVES	OVERALL HEIGHT	HEIGHT CENTER OF PIN HOLE TO TOP	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
IO360A, AB, C, CB, D, DB, G, GB, H, HB, J, JB, K, KB	626247 (Supersedes 642229)	642619F	4 (Top 2 Tapered)	3.24	1.5954 1.5904	649225	1) 648039 2) 648040 3) 648041 4) 648042	649225 CP	1) 648039 CP 2) 648040 CP 3) 648041 CP 4) 648042
TSIO360 A,B,C,D,E,F, G,H	648048 (Supersedes 646743**, 633428, 642230)	646743	4 (Top 2 Tapered)	3.41	1.68	649225	1) 648039 2) 648040 3) 648041 4) 648042	649225 CP	1) 648039 CP 2) 648040 CP 3) 648041 CP 4) 648042
L/TSIO360 ALL MODELS EXCEPT LB	648048 (Supersedes 646743**, 642230)	646743	4 (Top 2 Tapered)	3.41	1.68	649225	1) 648039 2) 648040 3) 648041 4) 648042	649225 CP	1) 648039 CP 2) 648040 CP 3) 648041 CP 4) 648042
TSIO360 LB & MB	648048 (Supersedes 646743**, 633428, 642230)	646743	4 (Top 2 Tapered)	3.41	1.68	649225	1) 648039 2) 648040 3) 648041 4) 648042	649225 CP	1) 648039 CP 2) 648040 CP 3) 648041 CP 4) 648042
	646710**/**** (Supersede by 646743)	646710	4	3.248	1.68	649225	1) 648039 2) 648040 3) 648041 4) 648042	649225 CP	1) 648039 CP 2) 648040 CP 3) 648041 CP 4) 648042
E-185-225 O470A, E, J, IO470J, K	649044** (Supersedes 534895)	649044	4	3.370	1.7709	649226	1) 648009 2) 648010 3) 648011 4) 648012	649226 CP	1) 648010 CP 2) 648010 CP 3) 648011 CP 4) 648012
	534895 (Superseded by 649044)	534895	3	3.370	1.7729 1.7689	639567A9	1) 639567 2) 639568 3) 639768	639723	1) 640299 2) 640299 3) 639768
O470-11 O470-7B	649044	649044	4	3.370	1.7709	649226	1) 648009 2) 648010 3) 648011 4) 648012	649226 CP	1) 648010 CP 2) 648010 CP 3) 648011 CP 4) 648012

** CAST INSERTED. See item #12, cover page.

*** WHEN REPLACING 646455 WITH 646743 PISTON, 6492285P005 RING SET MUST BE USED.

**** WHEN THE 646282 CYLINDER IS USED, THE 639570A7P005 RING SET IS USED WITH THE 646743 PISTON.

ENGINE MODEL	PISTON				HEIGHT CENTER OF PIN HOLE TO TOP		STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT	HEIGHT CENTER OF PIN HOLE TO TOP	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	
O470-11 O470-7B	534895 (Superseded by 649044)	534895	3	3.340	1.792	639567A9	1) 639567 2) 639567 3) 639768	639723	1) 640299 2) 640299 3) 639768	
	531510 (Superseded by 534895)	531510	3	2.824 2.814	1.792 1.788	639567A9	1) 639567 2) 639567 3) 639768	639723	1) 640299 2) 640299 3) 639768	
O470-4 -13/13A	646263	632932	4	3.79	1.981 1.977	649226	1) 648009 2) 648010 3) 648011 4) 648012	649226	1) 648009 CP 2) 648010 CP 3) 648011 CP 4) 648012	
	535133 (Superseded by 646263 in engine sets)	535133	3	3.544 3.540	1.999 1.995	639567A9	1) 639567 2) 639567 3) 639768	639723	1) 640299 2) 640299 3) 639768	
O470K,L,R, S,-4,-13,-13A	646263	632932	4	3.79	1.981 1.977	649226	1) 648009 2) 648010 3) 648011 4) 648012	649226	1) 648009 CP 2) 648010 CP 3) 648011 CP 4) 648012	
	Use: 649226 for steel barrels 649226 CP for chrome barrels.									
O470K,L	539614 (Superseded by 646263)	539614	3	3.552 3.542	2.004 2.000	639567A9	1) 639567 2) 639567 3) 639768	639723	1) 640299 2) 640299 3) 639768	

ENGINE MODEL	PISTON					STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT	HEIGHT CENTER OF PIN HOLE TO TOP	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
O470K,L,R	626992	626992	4	3.52	1.981	639567A10	1) 639567 2) 639568 3) 639768 4) 648012	639734	1) 640299 2) 640299 3) 639768 4) 648012
	(Superseded by 646263)	632932			1.977				
	NOTE: Oil control groove is 5/32". Top 2 ring grooves are rectangular.								
O470K,L,R,S	632932	632932	4	3.79	1.981	649226	1) 648009 2) 648010 3) 648011 4) 648012	652433	1) 640299 2) 640299 3) 639768 CP 4) 648012
	(Superseded by 646263)				1.977				
	NOTE: Oil control groove is 3/16". Top 2 ring grooves are rectangular.								
O470B,G,M,P	640518	632932	4	3.79	1.981	649226	1) 648009 2) 648010 3) 648011 4) 648012	649226 CP	1) 648009CP ① 2) 648010CP ① 3) 648011CP 4) 648012
	(Superseded by 646263)				1.977				
	NOTE: Oil control groove is 3/16". Top 2 ring grooves are semi-keystone								
IO470C,G,P,R,T	648028	648028	4	3.6177	2.0157	649226	1) 648009 2) 648010 3) 648011 4) 648012	649226 CP	1) 648009CP ① 2) 648010CP ① 3) 648011CP 4) 648012
		(Top 2 Tapered)			2.0197				

① Ring set may contain 648009 rings.

ENGINE MODEL	PISTON				HEIGHT		STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT	CENTER OF PIN HOLE TO TOP	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	
L10470A, O470G,M, IO470C	539814 (Superseded BY 648028)	535133 537883	3 (Top 2 Tapered)	3.360 3.526	2.085 2.081	639566A1	1) 648010 2) 648010 3) 639768	639726	1) 648010CP ① 2) 648010CP ① 3) 639768	
	646772 Cast Insert (Superseded by 648028)	646772	4	3.6177	2.0177	649226	1) 648009 2) 648010 3) 648011 4) 648012	653433	1) 648010CP ① 2) 648010CP ① 3) 648011CP 4) 648012	
O470U IO470D,E,F,H,L,M, N,S,U,V	537883 (Superseded by 539814)	535133 537883	3	3.360 3.526	2.085 2.081	639567A9	1) 639567 2) 639568 3) 639768	639723	1) 640299 2) 640299 3) 639768	
	648029**	648029	4 (Top 2 Tapered)	3.823	2.146	649226	1) 648009 2) 648010 3) 648011 4) 648012	653433	1) 648010CP ① 2) 648010CP ① 3) 648011CP 4) 648012	
O470U IO470D,E,F,H,L,M, N,S,U,V	646280 (Superseded by 648029)	646280 Cast Insert	4 (Top 2 Tapered)	3.823	2.146	649226	1) 648009 2) 648010 3) 648011 4) 648012	653433	1) 648010CP ① 2) 648010CP ① 3) 648011CP 4) 648012	
	631481 (Superseded by 648029)	631481F	4 (Top 2 Tapered)	3.93	2.136 2.132	649226	1) 648009 2) 648010 3) 648011 4) 648012	653433	1) 648010CP ① 2) 648010CP ① 3) 648011CP 4) 648012	
NOTE: Oil Control Ring is 3/16										
O470U IO470D,E,F,H,L,M, N,S,U,V	627738 (Superseded by 648029)	627738F	4 (Top 2 Tapered)	3.682 3.678	2.137 2.133	639565A5	1) 648009 2) 648010 3) 648011 4) 648012	639729	1) 648010CP ① 2) 648010CP ① 3) 639768 4) 648012	

① Ring set may contain 648009 rings.

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ENGINE MODEL	PISTON				HEIGHT CENTER OF PIN HOLE TO TOP	STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT		SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
TS10470 B,C,D	631540	631481F	4	3.84	2.046 2.042	649226	1) 648009 2) 648010 3) 648011 4) 648012	649226 CP	1) 648010CP ① 2) 648010CP ① 3) 648011 4) 648012
	629185 (Superseded BY 631540)	631481F	4 (Top 2 Tapered)	3.591 3.587	2.046 2.042	639565a5	1) 648009 2) 648010 3) 639768 4) 648012	639729	1) 648010CP ① 2) 648010CP ① 3) 640301 4) 648012
10520, ALL MODELS	648045**	648045	4 (Top 2 Tapered)	3.520	1.918 1.922	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP	1) 648005CP 2) 648006CP 3) 648007CP 4) 648008
	648013** (Superseded BY 648045)	646072	4 (Top 2 Tapered)	3.519	1.919	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP	1) 648005CP 2) 648006CP 3) 648007CP 4) 648008
	631475 (Superseded BY 648045)	631892	4 (Top 2 Tapered)	3.88	2.086 2.082	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP	1) 648005CP 2) 648006CP 3) 648007CP 4) 648008
	646072 (Superseded BY 648045)	646072	4	3.519	1.919	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP	1) 648005CP 2) 648006CP 3) 648007CP 4) 648008
TS10520 ALL MODELS Except T, UB, VB,WB,BE,AE	648044**		4 (Top 2 Tapered)	3.437	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP	1) 648005CP 2) 648006CP 3) 648007CP 4) 648008
	632585 (Superseded BY 648044)		4 (Top 2 Tapered)	3.73	1.929 1.925	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP	1) 648005CP 2) 648006CP 3) 648007CP 4) 648008

① Ring set may contain 648009 rings.

**CAST INSERTED. See item #12, cover page.

ENGINE MODEL	PISTON				HEIGHT CENTER OF PIN HOLE TO TOP	STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT		SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
TSIO520 ALL MODELS Except BE,AE	642761** Cast Insert (Superseded BY 648044)	642761	4 (Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008		
	646303** (Superseded BY 648044)	642761	4 (Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008		
	648033** (Superseded BY 648044)		4 (Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008		
L/TSIO520 ALL MODELS Except AE	648044**	648044	4 (Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008		
	648033** Cast Insert (Superseded BY 648044)	648033	4 (Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008		
	643619** Cast Insert (Superseded BY 648044)	642761	4 (Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008		
L/TSIO520 AE	648037**	648037	4 (Top 2 Tapered)	3.337	1.779 1.775	649227 1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008		
	Used in engine sets, 630046 pin must be used.								
	646311** (Superseded by 648037 in engine sets 630046 pin must be used.)	5122-N	3	3.337	1.779 1.775	640625A6 1) 648005 2) 648006 3) 641303*	648005CP 1) 648005CP 2) 648006CP 3) 636144		

*648007 and 648007 CP rings cannot be used on 646311 and 643735 piston.

**CAST INSERTED. See item #12, cover page.

ENGINE MODEL	PISTON				HEIGHT CENTER OF PIN HOLE TO TOP	STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT		SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
L/T5IO520 AE	*643735** (Superseded by 648037 in engine sets)	5122-N	3	3.337	1.779 1.775	640625A6	1) 648005 2) 648006 3) 641302*	1) 648005CP 2) 648006CP 3) 636144	
IO550 B,C,D,E,F,I	648046**	648046	4 (Top 2 Tapered)	3.337	1.779 1.775	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008	
	646533** (Superseded by 648046)	646533	4 (Top 2 Tapered)	3.337	1.779 1.775	649227	1) 648005 2) 648006 3) 648007 4) 648008	649227CP 1) 648005CP 2) 648006CP 3) 648007CP 4) 648008	
GTSIO520 C,D,G,H	648044**		4 (Top 2 Tapered)	3.437	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008	TCM does not recommend chrome cylinder be used on GTSIO520.	
CAUTION: TCM does not recommend oversize boring of cylinders beyond 0.005 on GTSIO520's.	648033** (Superseded by 648044)	NONE	4 (Top 2 Tapered)	3.437	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008	TCM does not recommend chrome cylinder be used on GTSIO520.	
	632491 (Superseded by 648044)	632491F 631392	5 (Top 2 Tapered)	3.64	1.844 1.840	642602A3	1) 648005 2) 648006 3) 640627 4) 648007 5) 648008	TCM does not recommend chrome cylinder be used on GTSIO520.	
GTSIO520 F,K	648044**	648044	4 (Top 2 Tapered)	3.337	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008	TCM does not recommend chrome cylinder be used on GTSIO520.	
	648033** Cast Insert (Superseded by 648044)	NONE	4 (Top 2 Tapered)	3.437	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008	TCM does not recommend chrome cylinder be used on GTSIO520.	

*648007 and 648007 CP rings cannot be used on 646311 and 643735 pistons.

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ENGINE MODEL	PISTON				HEIGHT CENTER OF PIN HOLE TO TOP	STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT		SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
GTSIO520 F,K CAUTION: TCM does not recommend oversize boring of cylinders beyond 0.005 on GTSIO520's.	635141 (Superseded by 648044)	635141	5 (Top 2 Tapered)	3.64	1.844 1.840	642602A3	1) 648005 2) 648006 3) 640627 4) 648007 5) 648008		TCM does not recommend chrome cylinder be used on GTSIO520.
	641883 (Superseded by 648044)		4 (Top 2 Tapered)	3.64	1.844 1.840	649227	1) 648005 2) 648006 3) 648007 4) 648008		TCM does not recommend chrome cylinder be used on GTSIO520.
GTSIO520 C,D,FG,H,K	648044**		4 (Top 2 Tapered)	3.377	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008		TCM does not recommend chrome cylinder be used on GTSIO520.
	640945 (Superseded by 648044)	640945 632491F	4 (Top 2 Tapered)	3.64	1.844 1.840	649227	1) 648005 2) 648006 3) 648007 4) 648008		TCM does not recommend chrome cylinder be used on GTSIO520.
GTSIO520 C,D,FG,H,K,L,M	641350 (Superseded by 648044)	641350	4 (Top 2 Tapered)	3.63	1.844 1.840	649227	1) 648005 2) 648006 3) 648007 4) 648008		TCM does not recommend chrome cylinder be used on GTSIO520.
	641782** Cast Insert (Superseded by 648044)	641782	4 (Top 2 Tapered)	3.64	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008		TCM does not recommend chrome cylinder be used on GTSIO520.
GTSIO520 All Models	648044**		4 (Top 2 Tapered)	3.377	1.839 1.835	649227	1) 648005 2) 648006 3) 648007 4) 648008		TCM does not recommend chrome cylinder be used on GTSIO520.

****CAST INSERTED. See item #12, cover page.**

ENGINE MODEL	PISTON					STEEL CYLINDER		CHROME CYLINDER	
	PISTON NUMBER	CASTING OR FORGING NO	NO. OF RING GROOVES	OVERALL HEIGHT	HEIGHT CENTER OF PIN HOLE TO TOP	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM	SINGLE CYL. RING SETS	RING ORDER TOP TO BOTTOM
GTSIO520 All Models CAUTION: TCM does not recommend oversize boring of cylinders beyond 0.005 on GTSIO520's.	648033 (Superseded by 648044)		(Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 640627 4) 648007			TCM does not recommend chrome cylinder be used on GTSIO520.
	642761** Cast Insert (Superseded by 648044)	642761	(Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 640627 4) 648007			TCM does not recommend chrome cylinder be used on GTSIO520.
	646303** Cast Insert (Superseded by 648044)	646303	(Top 2 Tapered)	3.437	1.839 1.835	649227 1) 648005 2) 648006 3) 640627 4) 648007			TCM does not recommend chrome cylinder be used on GTSIO520.

****CAST INSERTED. See item #12, cover page.**