DATE OF REVISION	

MAINTENANCE
CONTROLLED SLACK COUPLERS

GENERAL INFORMATION: In the use of controlled slack couplers it is required to follow a closer contour maintenance procedure than than set up as A.A.R. Standard practice for E couplers, in order to retain as much as possible of the full slack control effectiveness of new couplers.

For such maintenance practice the following procedures are outlined, applicable to these couplers used on passenger cars.

Methods of checking, repair to restore contour, and gauges as follows.

METHOD OF CHECKING CONTOUR: In the maintenance of slack control feature the increase in distance from front face of coupler to pulling face of knuckle is of more importance than the distance from guard arm face to side of knuckle nose as checked by A.A.R. worn contour limit gauges.

Car Folio Page 105-E illustrates at A, B and C variations in dimension from front face to knuckle nose on new and worn couplers. Also illustrated is the A.A.R. method of checking for maximum opening, guard arm to knuckle of 5-1/8". The present A.A.R. combined wheel defect and worn contour limit gauge T-8/270 checks this 5-1/8" dimension but is not specified for Type E couplers as a special gauge is used for such couplers having a length of 5-5/16". Such gauge, illustrated in Fig. A of Rule 18 of interchange rules, is however, not applicable to the controlled slack coupler as plunger pocket prevents its being used with locating point seating on end of guard arm. The 5-5/16" length checking guard arm near end is the approximate equivalent of the standard 5-1/8" gauge used at right angles to guard arm face. This gauge shown in Fig. C of Rule 18.

Normally with a coupler of this type if the contour has loosened to the 5-1/8" limit the knuckle nose will have opened out to about 4-5/16" from front face, as indicated at B on Car Folio Page 105-E. Recommendation covers maintenance when this distance reaches 4" or more, as determined by gauge T-6/1149.

PROCEDURES:

1. With parts in locked position and knuckle pulled outward either by hand or by use of small screw jack, the coupler requires maintenance if 4" length of gauge T-6/1149 (No Go) side passes between knuckle pulling face and front face of coupler as shown on Car Folio Page 105-E. If checking does not pass the coupler may be continued in service. Such checking can be performed once a month or at desired intervals in keeping with other service inspections.

2. If gauge passes, the coupler should be dismantled and following reclamation procedures followed.

3. Either apply new knuckle, new lock or both, or re-apply the same knuckle and lock after they have been reclaimed, or apply another knuckle and lock which have previously been reclaimed.

RECLAMATION OF KNUCKLE:

a. Old knuckle may be used unless cushion face is loose or any cracks are evident, or distortion present which would make it unfit for further use.

b. Some wear or crushing may be apparent at lock contact face showing up as a bevel toward the rear of face. This beveled back portion may be built up by weld and ground straight with forward portion of face per Car Folio Page 105-E-1. These knuckles are heat treated by quenching and tempering and no heat treating should be attempted following the welding. Confining the welding to this location should not adversely affect the strength of knuckle. No welding should be done at other points such as pulling face, pulling lugs or pin protectors.

c. If face plate should be found loose it would indicate failure of the springs and new springs should be applied.

RECLAMATION OF LOCK: The high tensile E-40 locks supplied in these couplers are quenched and tempered for greater hardness than the standard H.T. locks supplied in E couplers. Reclamation by welding in accordance with Car Folio Page 105-E-1 may be performed without subsequent heat treatment. The standard H.T. E-40 normalized lock, can of course,

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6-11-65	

MAINTENANCE
CONTROLLED SLACK COUPLERS

RECLAMATION OF LOCK: (Cont'd)
also be used. All high tensile locks are identified by the letters "H.T." cast thereon. Locks not having H.T. markings should not be used as they are the softer Grade "B" steel. Hardened locks are identified by letter "S" stamped on front of lock fulcrum.

A.A.R. recommended practice for reclamation of E locks covers building up only worn depressions in face of lock. This was done to obtain a parallel lock without resorting to gauging and in view of uncertainty of satisfactory finishing in such general reclamation, if welding was permitted over entire surface.

In view of the small quantity of locks involved in case of controlled slack couplers and the added contour tightening to be obtained if locks are built up to full maximum gauge width, the practice per Car Folio Page 105-E-1 is recommended.

COUPLER BODY: Worn carrier bearing of shank may be built up in accordance with A.A.R. standard practice for Grade "C" steel or wear plates replaced.

Wear in plunger pocket permitting plunger to be looser than in new assembly is not detrimental to operation of coupler but should plunger be loose due to failure of springs, or loose due to wear and bending of retainer rivet, parts required should be replaced. Plunger springs should be replaced if they do not measure to the following height dimension 9-7/8" to 10-3/8" [illegible]

There will no doubt be wear at top and bottom aligning wings on knuckle side at points where they slide over the guard arm plunger pocket of the mated coupler. These surfaces may be built up by welding to the Grade "C" steel body in accordance with A.A.R. reclamation practices. Contours should be built up to original size. See Car Folio Page 105-E-2.

Coupler shank rear wall thickness should be tried with caliper to check wear at horizontal center line of coupler. If the spherical wall thickness measures 1-1/4" or less, the coupler body is worn beyond reclamation, and should be replaced. Note that measurement must be taken on center line as the wall narrows toward top and bottom.

It is recommended that the pin bearing be replaced as experience has shown this part subject to more rapid wear than the adjacent bearing surfaces. Replacement of this part will assist in restoring the screw wedge adjustment feature for slack elimination in coupler connection.

OTHER PARTS: Knuckle opener and lock lift assemblies should be visuall inspected and any such parts, excessively worn, bent or defective replaced.

When necessary to replace the lock lift assembly, the double articulated lock lift, E-25-B, should be applied.

REASSEMBLY: Reassembled coupler should be checked for proper contour, ing gauge T-6/1149. The go side should pass as a check to insure contour is not under minimum. If contour is not corrected to less than the 4" no go gauge, after all corrections recommended have been made to the parts or new parts applied, it is evident coupler body is worn too badly for effective reclamation and should be replaced with complete new coupler.

The closer knuckle can be tightened to the go gauge, the longer the service life before further reclamation is required. If tightening is only such as to closely approach the 4" no go gauge, only a short perio of further service should be expected before reaching the limit.

OPERATION: Reassembled coupler should be checked for operation i.e., lock set, full knuckle throw, trip off lock set, positive lock drop, anti-creep, and operating rod clearances.

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MAINTENANCE
CONTROLLED SLACK COUPLERS

YOKES FOR AAR ALTERNATE STANDARD CS-80 COUPLERS

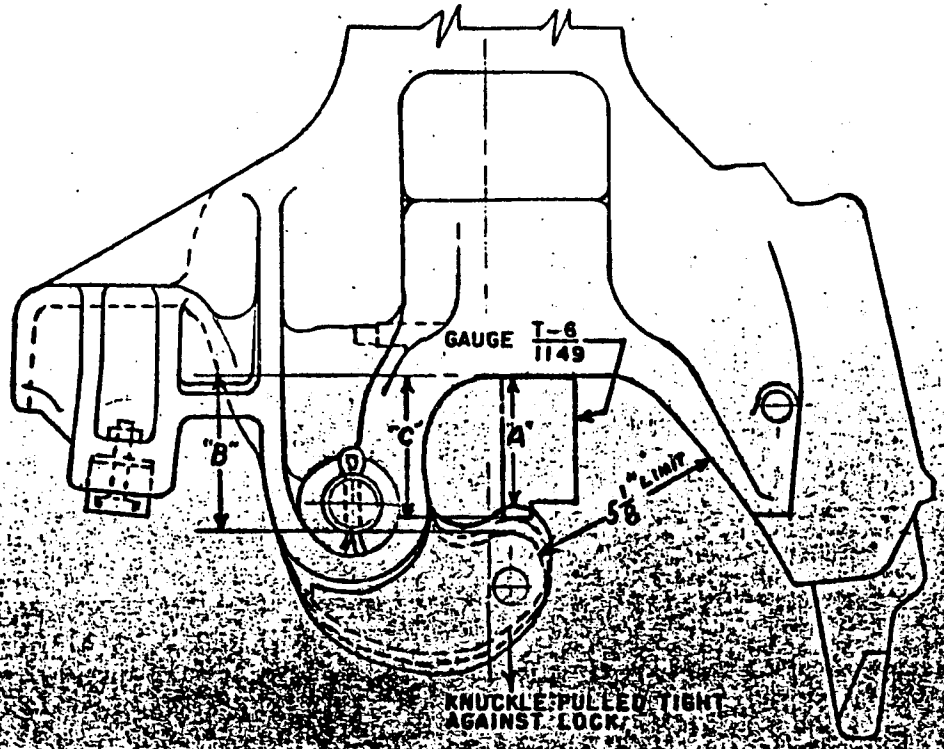
(a) Twin Cushion Yoke, Car Folio Page 105-E-3.

The yoke pin Y-52 if worn on back side by the coupler shank bearing block may be rotated 180° and re-applied or the pin may be replaced if otherwise unsuitable for continued service. Bushing of the pin hole should never be necessary. Shims applied for adjustment should be inspected periodically and replaced if pounded out to keep the connection tight.

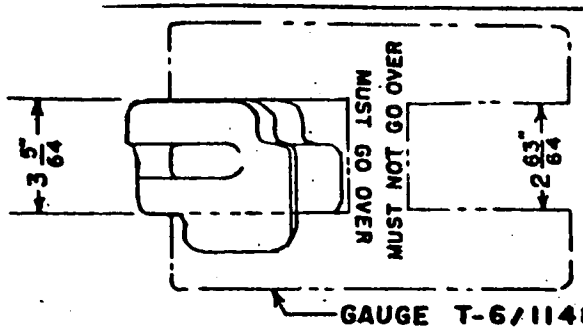
(b) Standard Pocket Yoke, Car Folio Page 105-E-4.

If after continued use there does not appear to be sufficient screw adjustment to take up all slack then a 1/4" plate may be welded to flat back surface of coupler bearing block Y-54.

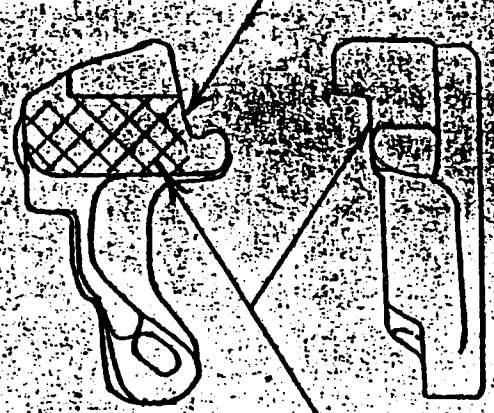
The pin Y-52 may also be turned 180° and if coupler shank has been properly checked and reconditioned there should be sufficient adjustment for continued service. Bushing the pin hole should never be necessary. Wear at any point of yoke strap should not exceed 1/8" depth on this Grade "C" yoke.



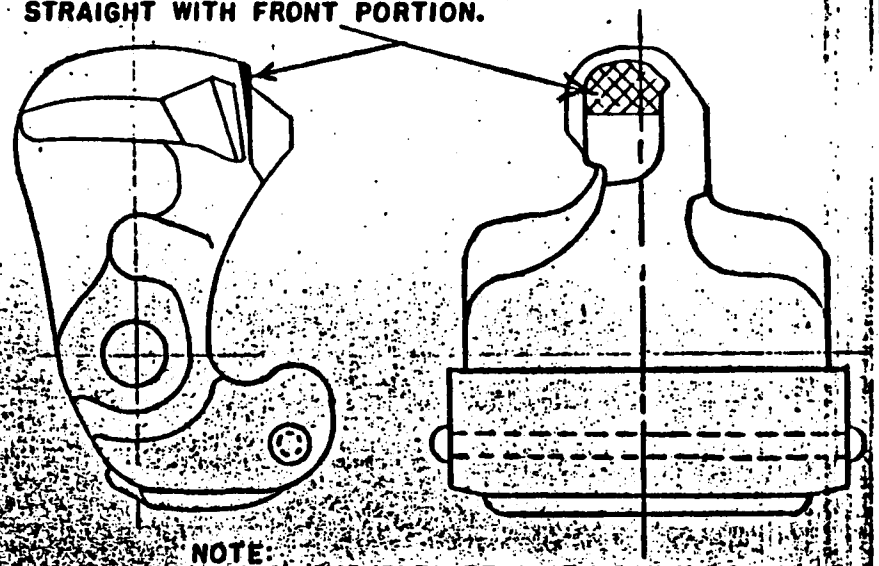
CONDITION OF COUPLER	DIMENSION	
NEW COUPLER	A	3-17/32" (GO) SIDE GAUGE T-6/1149
COUPLER WORN UNTIL 5-1/8" LIMIT GAUGE PASSES	B	GAUGE T-8/270 4-5/16"
LIMIT WHEN MAINTENANCE IS REQUIRED	C	4" (NO GO) SIDE GAUGE T-6/1149



NOTE:
SHADED AREA TO BE BUILT UP BY WELDING USING TYPE ROD TO PRODUCE A TOUGH WEARING SURFACE.
WELD TO BE GROUND OR FINISHED FLAT AND PARALLEL TO BACK OF LOCK TO CONFORM TO 3-5/64" "GO" GAUGE.



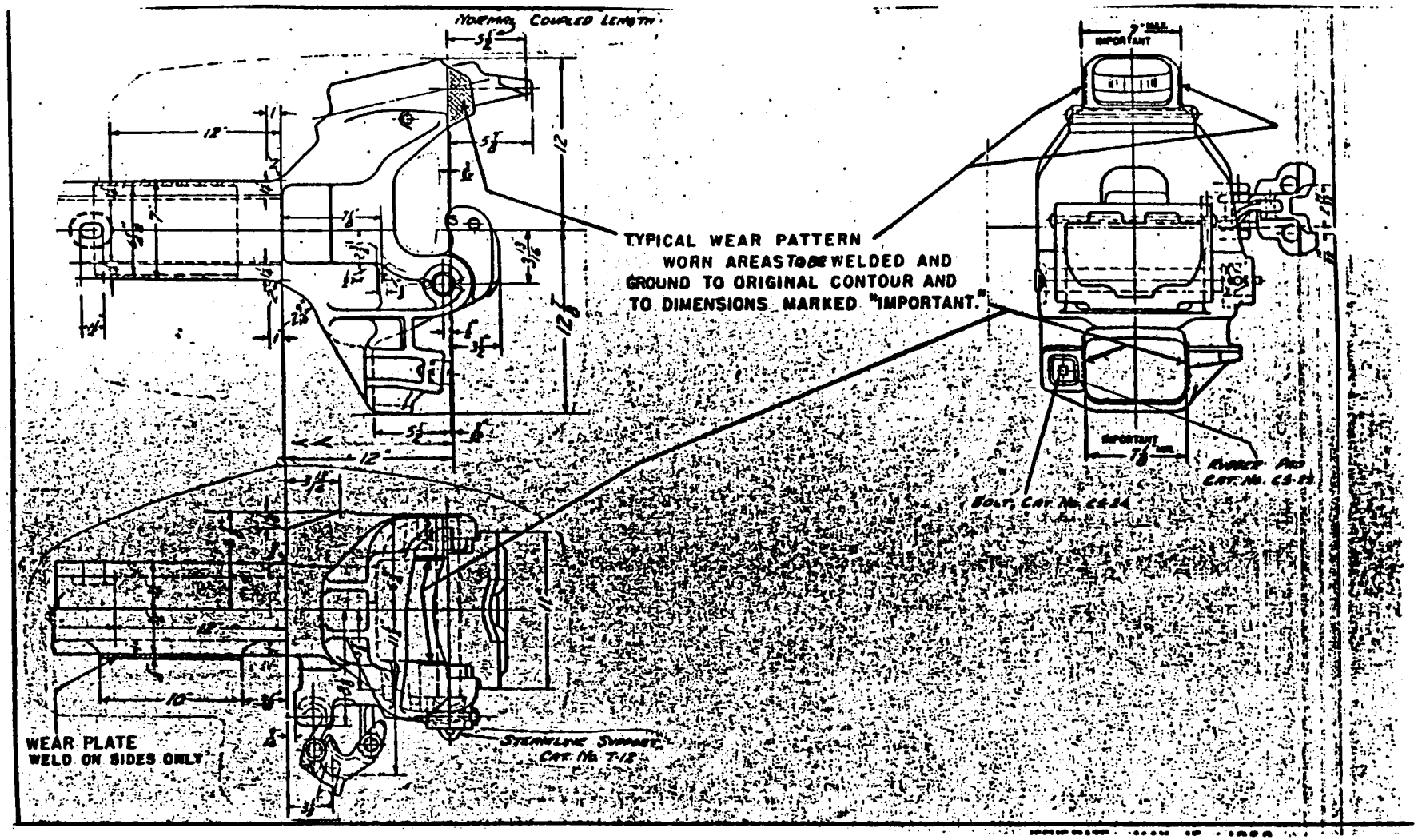
BUILD UP WORN REAR PORTION OF LOCKING FACE AS SHOWN AND GRIND STRAIGHT WITH FRONT PORTION.

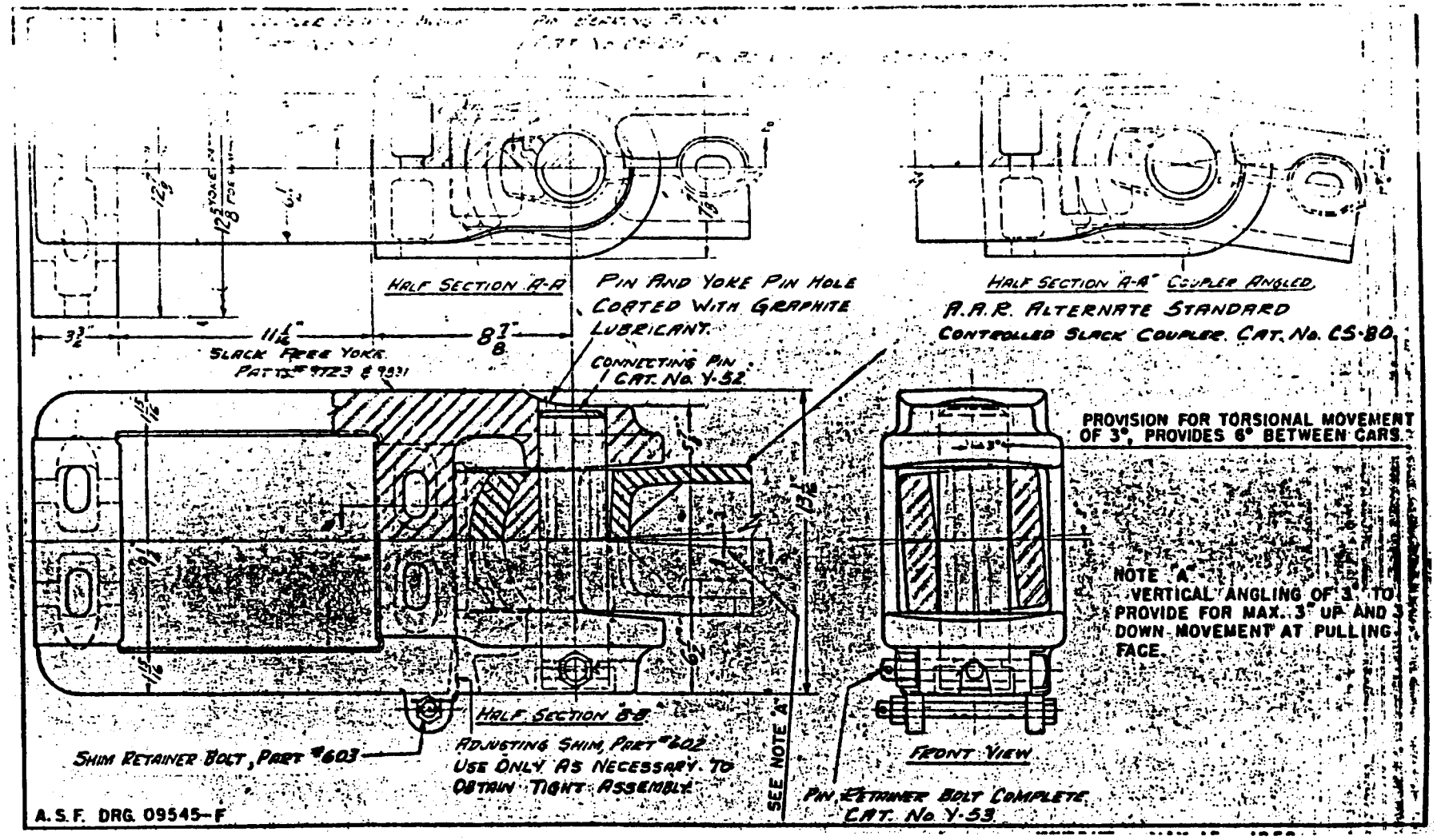


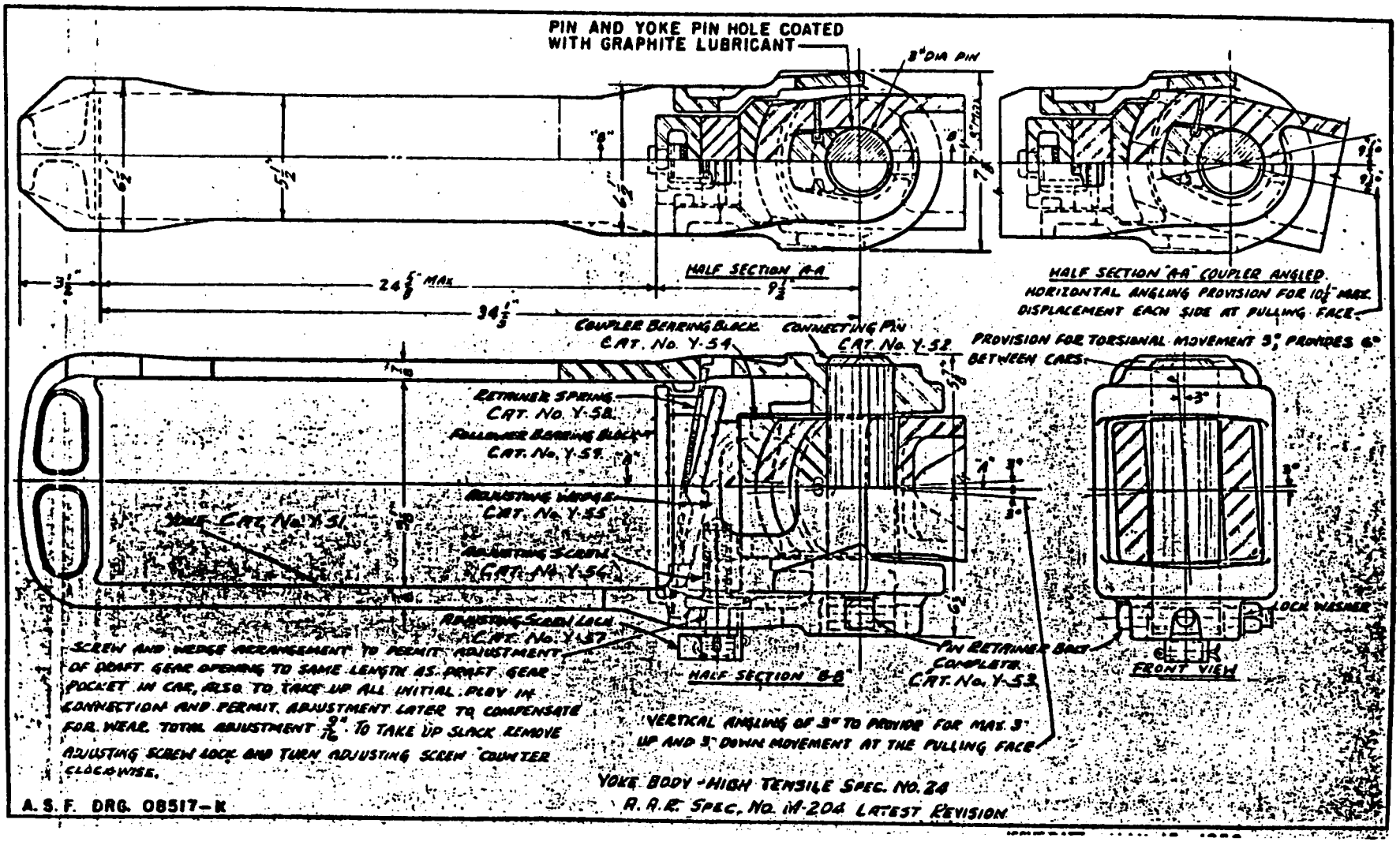
NOTE:
WELD IS PERMITTED AT LOCKING FACE AS SHOWN, BUT IS NOT PERMITTED AT ANY OTHER LOCATION ON KNUCKLE.

NOTE:
IF CONTOUR OF COUPLER WILL ALLOW 4" "NO GO" LEG OF STEP GAUGE T-6/1149 TO PASS, THEN REPLACEMENT OF PARTS SUCH AS WELDING AT KNUCKLE TAIL (AS SHOWN) AND WELDING OF LOCK ON LOCKING SURFACE WILL ATTRIBUTE TO REGAINING ACCEPTABLE CONTOUR CONDITION.

WELDING SHALL BE PERFORMED BY PREHEATING IN ACCORDANCE WITH A.A.R. RULE 23 SECTION "D" HOWEVER POST HEAT TREATMENT SHOULD BE OMITTED.


NORMAL COUPLED LENGTH
TYPICAL WEAR PATTERN
WORN AREAS TO BE WELDED AND
GROUND TO ORIGINAL CONTOUR AND
TO DIMENSIONS MARKED "IMPORTANT."
IMPORTANT
IMPORTANT
RIVET AND
CAT. NO. C5-53
BOLT, CAT. NO. C5-54
WEAR PLATE
WELD ON SIDES ONLY
STEAMLINE SHANK
CAT. NO. T-18


HALF SECTION A-A
PIN AND YOKE PIN HOLE COATED WITH GRAPHITE LUBRICANT.
HALF SECTION A-A' COUPLER ANGLED
A.A.R. ALTERNATE STANDARD CONTROLLED SLACK COUPLER. CAT. No. CS-80
11 1/16"
SLACK FREE YOKE PATENT 9123 & 9931
CONNECTING PIN CAT. No. Y-52
PROVISION FOR TORSIONAL MOVEMENT OF 3°, PROVIDES 6° BETWEEN CARS.
NOTE "A" VERTICAL ANGLING OF 3° TO PROVIDE FOR MAX. 3" UP AND DOWN MOVEMENT AT PULLING FACE.
HALF SECTION B-B
SHIM RETAINER BOLT, PART #603
ADJUSTING SHIM, PART #602 USE ONLY AS NECESSARY TO OBTAIN TIGHT ASSEMBLY
SEE NOTE "A"
FRONT VIEW
PIN, RETAINER BOLT COMPLETE CAT. No Y-53
A.S.F. DRG. 09545-F


PIN AND YOKE PIN HOLE COATED WITH GRAPHITE LUBRICANT
3" DIA PIN
HALF SECTION A-A
HALF SECTION "AA" COUPLER ANGLED
HORIZONTAL ANGLING PROVISION FOR 10° MAX. DISPLACEMENT EACH SIDE AT PULLING FACE
COUPLER BEARING BLOCK CAT. No. Y-54
CONNECTING PIN CAT. No. Y-52
PROVISION FOR TORSIONAL MOVEMENT 3° PROVIDES 6° BETWEEN CARS
RETAINER SPRING CAT. No. Y-58
FOLLOWER BEARING BLOCK CAT. No. Y-59
ADJUSTING WEDGE CAT. No. Y-55
ADJUSTING SCREW CAT. No. Y-56
YOKE CAT. No. Y-51
ADJUSTING SCREW LOCK CAT. No. Y-57
LOCK WASHER
PIN RETAINER BOLT COMPLETE CAT. No. Y-53
HALF SECTION B-B
FRONT VIEW
SCREW AND WEDGE ARRANGEMENT TO PERMIT ADJUSTMENT OF DRAFT GEAR OPENING TO SAME LENGTH AS DRAFT GEAR POCKET IN CAR, ALSO TO TAKE UP ALL INITIAL PLAY IN CONNECTION AND PERMIT ADJUSTMENT LATER TO COMPENSATE FOR WEAR. TOTAL ADJUSTMENT 2" TO TAKE UP SLACK REMOVE ADJUSTING SCREW LOCK AND TURN ADJUSTING SCREW COUNTER CLOCKWISE.
VERTICAL ANGLING OF 3" TO PROVIDE FOR MAX. 3" UP AND 3" DOWN MOVEMENT AT THE PULLING FACE
YOKE BODY - HIGH TENSILE SPEC. NO. 24
A.A.R. SPEC. NO. M-204 LATEST REVISION
A.S.F. DRG. 08517-K

MAINTENANCE RECOMMENDATIONS
ASF CONTROLLED SLACK COUPLERS
INCLUDING AAR ALT. STD. CONTROLLED SLACK COUPLER CS-80

AMERICAN STEEL FOUNDRIES
COUPLER SECTION
ALLIANCE, OHIO

Rev. June 19, 1968

CONTROLLED SLACK COUPLER
MAINTENANCE RECOMMENDATIONS

Users of this design of coupler will probably wish to follow a closer contour maintenance procedure than that set up as A.A.R. Standard practice for E couplers, in order to retain as much as possible of the full slack control effectiveness of new couplers.

For such maintenance practice the following procedures are recommended, applicable to these couplers used on either passenger cars or on Diesel locomotives. Such procedures would, of course, also be applicable to standard A.A.R. Type E couplers if desired.

Methods of checking, repair to restore contour, and gauges as follows.

METHOD OF CHECKING CONTOUR.

In the maintenance of slack control feature the increase in distance from front face of coupler to pulling face of knuckle is of more importance than the distance from guard arm face to side of knuckle nose as checked by A.A.R. worn contour limit gauges.

Sk-7416 illustrates at A, B and C variations in dimension from front face to knuckle nose on new and worn couplers. Also illustrated is the A.A.R. method of checking for maximum opening, guard arm to knuckle of 5 1/8". The present A.A.R. combined wheel defect and worn contour limit gauge checks this 5 1/8" dimension but is not specified for Type E couplers as a special gauge is used for such couplers having a length of 5 5/16". Such gauge, illustrated in Fig. A of Rule 18 of interchange rules, is however, not applicable to the controlled slack coupler as plunger pocket prevents its being used with locating point seating on end of guard arm. The 5 5/16" length checking guard arm near end is the approximate equivalent of the standard 5 1/8" gauge used at right angles to guard arm face. This gauge shown in Fig. C of Rule 18.

Normally with a coupler of this type if the contour has loosened to the 5 1/8" limit the knuckle nose will have opened out to about 4 5/16" from front face, as indicated at B on Sk-7416. Recommendation covers maintenance when this distance reaches 4" or more, as determined by gauge to Sk-7417.

PROCEDURES.

1. With parts in locked position and knuckle pulled outward either by hand or by use of small screw jack, the coupler requires maintenance if 4" length of gauge Sk-7417 passes between knuckle pulling face and front face of coupler as shown on Sk-7416. If gauge does not pass the coupler may be continued in service. Such checking can be performed once a month or at desired intervals in keeping with other service inspections.

COUPLER BODY

Worn carrier bearing of shank may be built up in accordance with AAR standard practice for Grade C steel or wear plates replaced.

Wear in plunger pocket permitting plunger to be looser than in new assembly is not detrimental to operation of coupler but should plunger be loose due to failure of springs, or loose due to wear and bending of retainer rivet, parts required should be replaced. Plunger springs should be replaced if they do not measure to the following height dimension 9 7/8" to 10 5/32".

There will no doubt be wear at top and bottom aligning wings on knuckle side at points where they slide over the guard arm plunger pocket of the mated coupler. These surfaces may be built up by welding to the Grade C steel body in accordance with AAR reclamation practices. Contours should be built up to drawing as shown on attached prints 010596-D, 010595-C and 010598-B.

Coupler shank rear wall thickness gauge 011003 should be tried (or caliper used) to check wear at horizontal center line of coupler. If the spherical wall thickness measures 1 1/4" or takes this gauge the coupler body is worn beyond reclamation, and should be replaced. Note that measurement must be taken on center line as the wall narrows toward top and bottom.

It is recommended that the pin bearing block be replaced as experience has shown this part subject to more rapid wear than the adjacent bearing surfaces. Replacement of this part will assist in restoring the screw wedge adjustment feature for slack elimination in coupler connection.

OTHER PARTS.

Knuckle opener and lock lift assemblies should be visually inspected and any such parts, excessively worn, bent or defective, replaced.

REASSEMBLY.

Reassembled coupler should be checked for proper contour, using gauge per Sk-7416. The go side should pass as a check to insure contour is not under minimum. If contour is not corrected to less than the 4" no go gauge, after all corrections recommended have been made to the parts or new parts applied, it is evident coupler body is worn too badly for effective reclamation and should be replaced with complete new coupler.

The closer knuckle can be tightened to the go gauge, the longer the service life before further reclamation is required. If tightening is only such as to closely approach the 4" no go gauge, only a short period of further service would be expected before reaching the limit.

PROCEDURES - Cont'd.

2. If gauge passes, the coupler should be dismantled and following reclamation procedures followed.

3. Either apply new knuckle, new lock or both, or re-apply the same knuckle and lock after they have been reclaimed, or apply another knuckle and lock which have previously been reclaimed.

RECLAMATION OF KNUCKLE. - Refer To Assembly Drawing - 08594

a. Old knuckle may be used unless cushion face is loose or any cracks are evident, or distortion present which would make it unfit for further use.

b. Some wear or crushing may be apparent at lock contact face showing up as a bevel toward the rear of face. This beveled back portion may be built up by weld and ground straight with forward portion of face per Drg. 010939. These knuckles are heat treated by quenching and tempering and no heat treating should be attempted following the welding. Confining the welding to this location should not adversely affect the strength of knuckle. No welding should be done at other points such as pulling face, pulling lugs or pin protectors.

c. If face plate should be found loose it would indicate failure of the springs and new springs should be applied.

RECLAMATION OF LOCK.

The high tensile E-40 locks supplied in these couplers are quenched and tempered for greater hardness than the standard H.T. locks supplied in E couplers. Reclamation by welding in accordance with Sk-7418 may be performed without subsequent heat treatment. The standard H. T. E-40 normalized lock can, of course, also be used. All high tensile locks are identified by the letters "H.T." cast thereon. Locks not having H.T. markings should not be used as they are the softer Grade "B" steel. Hardened locks are identified by letter "S" stamped on front of lock fulcrum.

A.A.R. recommended practice for reclamation of E locks covers building up only worn depressions in face of lock. This was done to obtain a parallel lock without resorting to gauging and in view of uncertainty of satisfactory finishing in such general reclamation, if welding was permitted over entire surface.

In view of the small quantity of locks involved in case of controlled slack couplers and the added contour tightening to be obtained if locks are built up to full maximum gauge width, the practice per Sk-7418 is recommended.

OPERATION

Reassembled coupler should be checked for operation i.e. lock set, full knuckle throw, trip off lock set, positive lock drop, anti-creep, and operating rod clearances.

REPAIR PARTS

Catalog numbers of the various parts which may be needed for repair of Controlled Slack couplers are listed below for convenience in ordering, except for special controlled slack couplers other than AAR alternate standard.

PARTS REQUIRED FOR AAR ALT. STANDARD CONTROLLED SLACK PASSENGER COUPLER, CATALOG NO. CS-80, DRG. 09794 ATTACHED. (FORMERLY ASF STYLE NO. P-212, A & B.)

Knuckle complete AAR Cat. #CS-50 (Formerly ASF Patt. 9324-A)
Knuckle Face Plate AAR Cat. #CS-13 " " " 9239-A)
Springs (Knuckle) Outer, AAR Cat. #CS-15, 2 required per knuckle (Formerly ASF Part #93)
Inner, AAR Cat. #CS-14, 2 required per knuckle (Formerly ASF Part #94)
Lock, AAR Cat. #E-40, High Tensile steel, quenched and tempered to hardness of 269-311 Br. designated by stamped-on letter "S" on front of lock fulcrum.
Rivet, AAR Cat. #CS-16 (Formerly ASF part #17)
Knuckle Opener, AAR Cat E-30
Pivot pin, AAR Cat. #C-10 (Oversize pin ASF Part #137)
Rotary Locklift Assemblies. Use one of following to suit operating mechanism.
AAR Cat. #E-24-A, Single Articulated Locklift
AAR Cat. #E-25-A, Double Articulated Locklift
AAR Cat. #E-16 No. 1 Passenger Locklift
AAR Cat. #E-17 No. 2 Passenger Locklift
Plunger, AAR Cat. CS-20 (Formerly ASF Patt. #9533
Plunger Spring, AAR Cat. #CS-21, 2 Required per coupler (Formerly ASF Part #151)
Plunger Rivet, AAR Cat. #CS-22 (Formerly ASF Part #137)
Rubber Pad, AAR Cat. #CS-23)1 Pad only required on CS-80 coupler.
Rubber Pad Bolt " Cat. #CS-23)2 " required on earlier Style P-212
(Pad, formerly ASF Part 148, Bolt formerly ASF 147)
Pin Bearing Block, AAR Cat. CS-25, (Formerly ASF Patt. 9539)
Pin Bearing Block Retainer Pin, AAR Cat. CS-26
Steam Line Support if used, AAR Cat. #T-12
Retainer Pin, AAR Cat. #C-2

PARTS REQUIRED FOR VARIOUS STYLES OF CONTROLLED SLACK COUPLERS OTHER THAN AAR STANDARD CS-80 ARE SHOWN ON OUTLINE DRAWING OF COUPLER WHICH MAY BE OBTAINED FROM AMERICAN STEEL FOUNDRIES.

These miscellaneous styles are listed below.

Design 1-A (Locomotive Coupler)
ASF Coupler Style Nos. E-134-B, E-134-C and E-135-A.

Design 2-A (Passenger or Locomotive Coupler)
ASF Coupler Style Nos. E-136, E-139, E-147, P-220.

Design 2-B (Locomotive Coupler)
ASF Coupler Style Nos. E-144 and E-149.

Design 2-C (Locomotive Coupler)
ASF Coupler Style Nos. E-145.

YOKES FOR AAR ALTERNATE STANDARD CS-80 COUPLERS.

(a) Twin cushion yoke is shown on attached outline drg. 09545. The yoke pin Y-52 if worn on back side by the coupler shank bearing block may be rotated 180° and re-applied or the pin may be replaced if otherwise unsuitable for continued service. Busning of the pin hole should never be necessary. Shims applied for adjustment should be inspected periodically and replaced if pounded out to keep the connection tight.

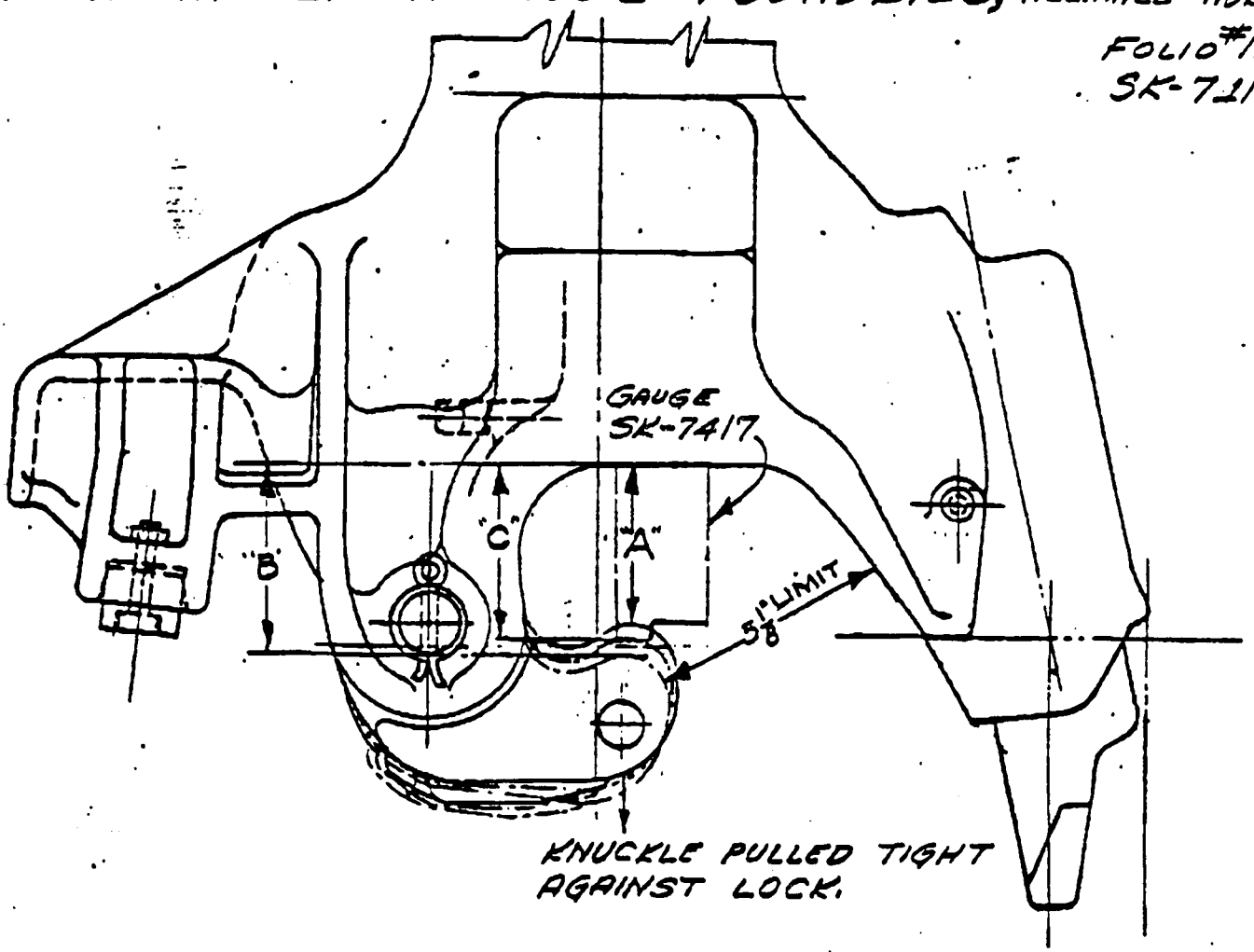
(b) Standard pocket yoke drawing 08517-J.
If after continued use there does not appear to be sufficient screw adjustment to take up all slack then a 1/4" plate may be welded to flat back surface of coupler bearing block Y-54.
The pin Y-52 may also be turned 180° and if coupler shank has been properly checked and reconditioned there should be sufficient adjustment for continued service. Bushing the pin hole should never be necessary. Wear at any point of yoke strap should not exceed 1/8" depth on this Grade "C" yoke. [illegible] yoke.

F. C. Kuliske
Mechanical Engineer

American Steel Foundries
Coupler Section
Alliance, Ohio
December 9, 1950
Rev. April 29, 1957
" Sept. 1, 1957
" June 19, 1968

PROPERTY OF AMERICAN STEEL FOUNDRIES, ALLIANCE WORKS.

FOLIO #173
SK-7216



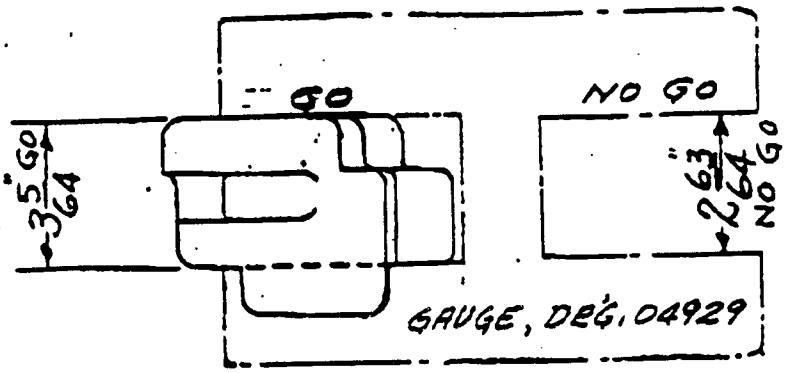
CONDITION OF COUPLER	DIMENSION	
NEW COUPLER	A	3 1/2" TO 3 5/8"
COUPLER WORN UNTIL 5 1/8" LIMIT GAUGE PASSES	B	4 5/16"
RECOMMENDED LIMIT WHEN MAINTENANCE IS REQUIRED PER THIS MEMORANDUM	C	4" GAUGE SK-7417

DIAGRAM OF VARIOUS CONDITIONS OF COUPLER CONTOUR SHOWING WHEN MAINTENANCE IS RECOMMENDED.
A.A.R. CONTROLLED SLACK COUPLER

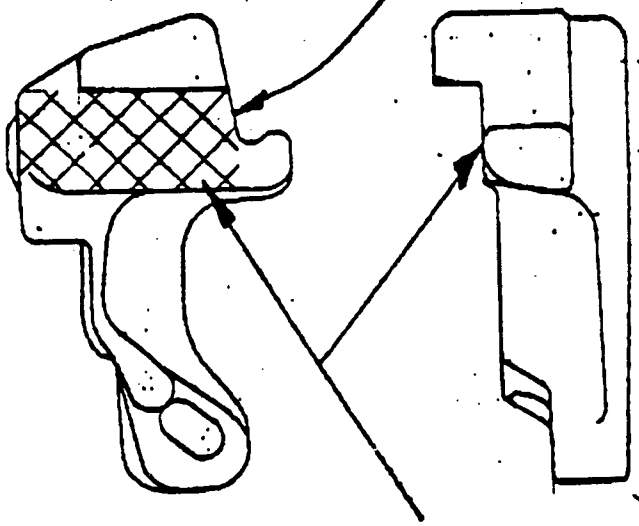
(ALSO APPLIES TO STYLE P-212)

PROPERTY OF AMERICAN STEEL FOUNDRIES, ALLIANCE WORKS

FOLIO #173
SK-7418



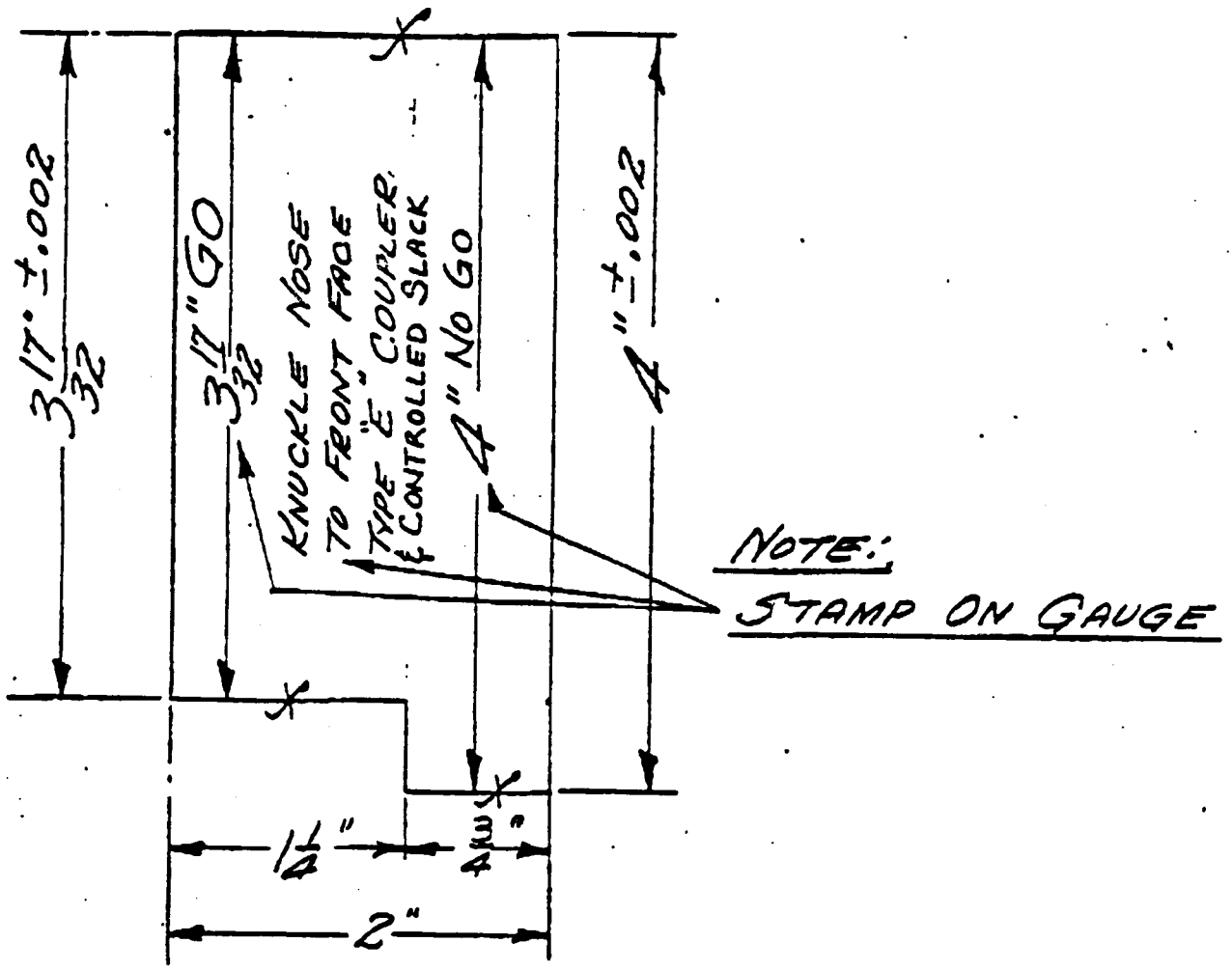
NOTE:
SHADED AREA TO BE BUILT UP BY WELDING USING TYPE 20D TO PRODUCE A TOUGH WEARING SURFACE. WELD TO BE GROUND OR FINISHED FLAT & PARALLEL TO BACK OF LOCK TO CONFORM TO $3\frac{5}{64}$" GO GAUGE.



WELD ON THIS SURFACE

METHOD OF RECLAIMING HIGH TENSILE TYPE "E" COUPLER LOCKS CAT. NO. E40 FOR MAXIMUM THICKNESS. FOR A.A.R. CONTROLLED SLACK COUPLERS.

FOLIO # 173
SK-7417



MAT'L. – 1/4" STEEL PL

NOTE: 1

GAUGE TO BE APPLIED BETWEEN KNUCKLE NOSE & FRONT FACE OF COUPLER.
$3\frac{17}{32}$"-REPRESENTS THE MINIMUM ALLOWABLE CONTOUR.
4"-RECOMMENDED CONDEMNING LIMIT WHEN MAINTENANCE IS REQUIRED, SEE SK-7416

NOTE: 2

THIS GAUGE ALSO SUITABLE FOR USE ON ST'D. "E" COUPLER WHERE CLOSER CONTOUR CONTROL THAN A.A.R. ST'D. WEAR LIMIT IS DESIRED.

CONTOUR WEAR LIMIT GAUGE FOR CONTROLLED SLACK COUPLERS.